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Chelsea® Power Take-Off

2018 Applications Catalog

Parker Chelsea

ENGINEERING YOUR SUCCESS.

⚠ WARNING — User Responsibility

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Olive Branch, MS 38654 USA

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GENERAL SAFETY INFORMATION



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Safety

The following instructions are for your safety and the safety of the end user. Read them carefully and make sure you understand them thoroughly.

To Prevent Injury to Yourself and/or Damage to the Equipment:

- Read carefully all owner's manuals, service manuals, and/or other instructions.
- Always follow proper procedures, and use proper tools and safety equipment.
- Be sure to receive proper training.
- Never work alone while under a vehicle or while repairing or maintaining equipment.
- Always use proper components in applications for which they are approved.
- Be sure to assemble components properly.
- Never use worn-out or damaged components.
- Always block any raised or moving device that may injure a person working on or under a vehicle.
- Never operate the controls of the Power Take-Off (PTO) or other driven equipment from any position that could result in getting caught in the moving machinery.

Proper Matching of PTO

WARNING: A Power Take-Off must be properly matched to the vehicle transmission and to the auxiliary equipment being powered. An improperly matched Power Take-Off could cause severe damage to the vehicle transmission, the auxiliary driveshaft, and/or the auxiliary equipment being powered. Damaged components or equipment could malfunction causing serious personal injury to the vehicle operator or to others nearby.

To avoid personal injury and/or equipment damage:

- Always refer to Chelsea catalogs, literature, and owner's manuals and follow Chelsea recommendations when selecting, installing, repairing, or operating a Power Take-Off.
- Never attempt to use a Power Take-Off not specifically recommended by Chelsea for the vehicle transmission.
- Always match the Power Take-Offs specified output capabilities to the requirements of the equipment to be powered.
- Never use a Power Take-Off whose range of speed could exceed the maximum safe speed of the equipment to be powered.

Cold Weather Operation of PowerShift PTOs

WARNING: During extreme cold weather operation [32°F (0°C) and lower], a disengaged PowerShift Power Take-Off can momentarily transmit high torque that will cause unexpected output shaft rotation. This is caused by the high viscosity of the transmission oil when it is extremely cold. As slippage occurs between the Power Take-Off clutch plates, the oil will rapidly heat up and the viscous drag will quickly decrease.

The Power Take-Off output shaft rotation could cause unexpected movement of the driven equipment resulting in serious personal injury, death, or equipment damage.

To avoid personal injury and/or equipment damage:

- Driven equipment must have separate controls.
- The driven equipment must be left in the disengaged position when not in operation.
- Do not operate the driven equipment until the vehicle is allowed to warm up.

This symbol warns of possible personal injury.

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Safety

Rotating Auxiliary Driveshafts

WARNING: Rotating auxiliary driveshafts are dangerous. You can snag clothes, skin, hair, hands, etc. This can cause serious injury or death.

- Do not go under the vehicle when the engine is running.
- Do not work on or near an exposed shaft when the engine is running.
- Shut off the engine before working on the Power Take-Off or driven equipment.
- Exposed rotating driveshafts must be guarded.

Guarding Auxiliary Driveshafts

WARNING: We strongly recommend that a Power Take-Off and a directly mounted pump be used to eliminate the auxiliary driveshaft whenever possible. If an auxiliary driveshaft is used and remains exposed after installation, it is the responsibility of the vehicle designer and PTO installer to install a safety guard around the rotating shaft.

Using Set Screws

WARNING: Auxiliary driveshafts may be installed with either recessed or protruding set screws. If you choose a square head set screw, you should be aware that it will protrude above the hub of the yoke and may be a point where clothes, skin, hair, hands, etc. could be snagged. A socket head set screw, which may not protrude above the hub of the yoke, does not permit the same amount of torquing as does a square head set screw. Also a square head set screw, if used with a lock wire, will prevent loosening of the screw caused by vibration. Regardless of the choice made with respect to a set screw, an exposed rotating auxiliary driveshaft must be guarded.

Important: Safety Information and Owner's Manual

Chelsea Power Take-Offs are packaged with safety information decals, instructions, and an owner's manual. These items are located in the envelope with the PTO mounting gaskets. Also, safety information and installation instructions are packaged with some individual parts and kits. Be sure to read the owner's manual and safety information before installing or operating the PTO. Always install the safety information decals according to the instructions provided. Place the owner's manual in the vehicle glove compartment.

Operating the PTO with the Vehicle in Motion

WARNING: Some Power Take-Offs may be operated when the vehicle is in motion. To do so, the PTO must have been properly selected to operate at highway speeds and correctly matched to the vehicle transmission and the requirements of the driven equipment.

If in doubt about the PTOs specifications and capabilities, avoid operating the PTO when the vehicle is in motion. Improper application and/or operation can cause serious personal injury or premature failure of the vehicle, the driven equipment, and/or the PTO

Always remember to disengage the PTO when the driven equipment is not in operation.

This symbol warns of possible personal injury.

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Pump Installation Precautions

Use a bracket to support the pump to the transmission if:

- The combined weight of pump, fittings and hose exceed 40 pounds [18.14 kg].
- The combined length of the PTO and pump is **18 inches** or more from the PTO centerline to the end of the pump.

ALSO: It is the responsibility of the installer to ensure the PTO/Pump are properly supported. See pages 1.4 - 1.7 for more information.

Power Take-Off Maintenance

Due to the normal and sometime severe torsional vibrations that Power Take-Off units experience, operators should follow a set maintenance schedule for inspections. Failure to service loose bolts or Power Take-Off leaks could result in potential auxiliary Power Take-Off or transmission damage.

Periodic PTO MAINTENANCE is required by the owner/operator to ensure proper, safe, and trouble free operation.

Daily: Check all air, hydraulic and working mechanisms before operating PTO. Perform maintenance as required.

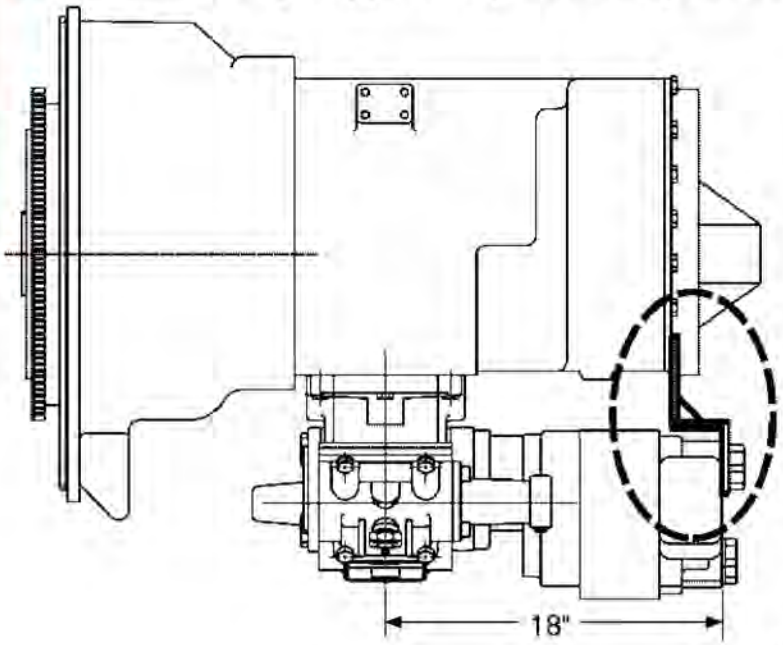
Monthly: Inspect for possible leaks and tighten all air, hydraulic, and mounting hardware, if necessary. Torque all bolts, nuts, etc. to Chelsea specifications. Ensure that splines are properly lubricated, if applicable. Perform maintenance as required.

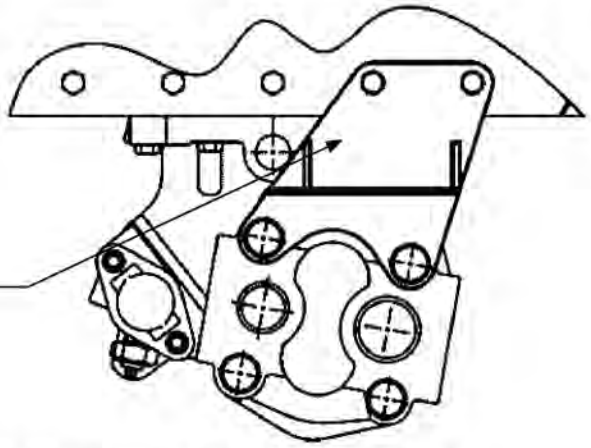
With regards to the direct mounted pump splines, the PTO requires the application of a specially formulated anti-fretting, high pressure, high temperature grease. The addition of the grease has been proven to reduce the effects of the torsional vibrations, which result in fretting corrosion on the PTO internal splines as well as the pump external splines. Fretting corrosion appears as a “rusting and wearing” of the pump shaft splines. Severe duty applications, which require long PTO running times and high torque may require more frequent regreasing. Applications such as Utility Trucks that run continuously and are lightly loaded also require frequent regreasing due to the sheer hours of running time. It is important to note that service intervals will vary for each and every application and is the responsibility of the end user of the product. Chelsea also recommends that you consult your pump owner’s manuals and technical services for their maintenance guidelines. Fretting corrosion is caused by many factors and without proper maintenance the anti-fretting grease can only reduce its effectiveness on components.

Chelsea offers the grease to our customers in two packages. The first is a 5/8 fluid ounce tube (379688), which is included with every applicable PTO, and the second is a 14-ounce grease cartridge (379831). Chelsea also offers greaseable shafts for most output option designators for select PTO Series.

Warranty: Failure to comply entirely with the provisions set forth in the appropriate Owner’s Manual will result in voiding of ALL Warranty consideration.

Direct Mount Pump Support Requirements (Universal)





NOTE:
For Proper Bracketing, Attach at 2 or More Transmission Bolt Locations and 2 or More Pump Locations. Contact Transmission Manufacturer for Proper Bracket Mounting Locations.

Use CAUTION to ensure the support bracket does not pre-load pump/PTO mounting. When mounting the pump, it should be fully supported by a jack until the support bracket is secured in place, then the jack can be released. This will make sure the PTO is not being stressed by the bracket.

Chelsea requires the use of pump supports (Support Brackets) in all applications to ensure the Maximum Bending Moment (MBM) of the PTO/Pump assembly is not exceeded. Exceeding the MBM can result in damage to PTO, transmission, driven equipment, and/or personnel. It is the responsibility of the installer to ensure that adequate support is implemented. All applications are unique and it is important to consider all parameters in designing a proper support bracket.

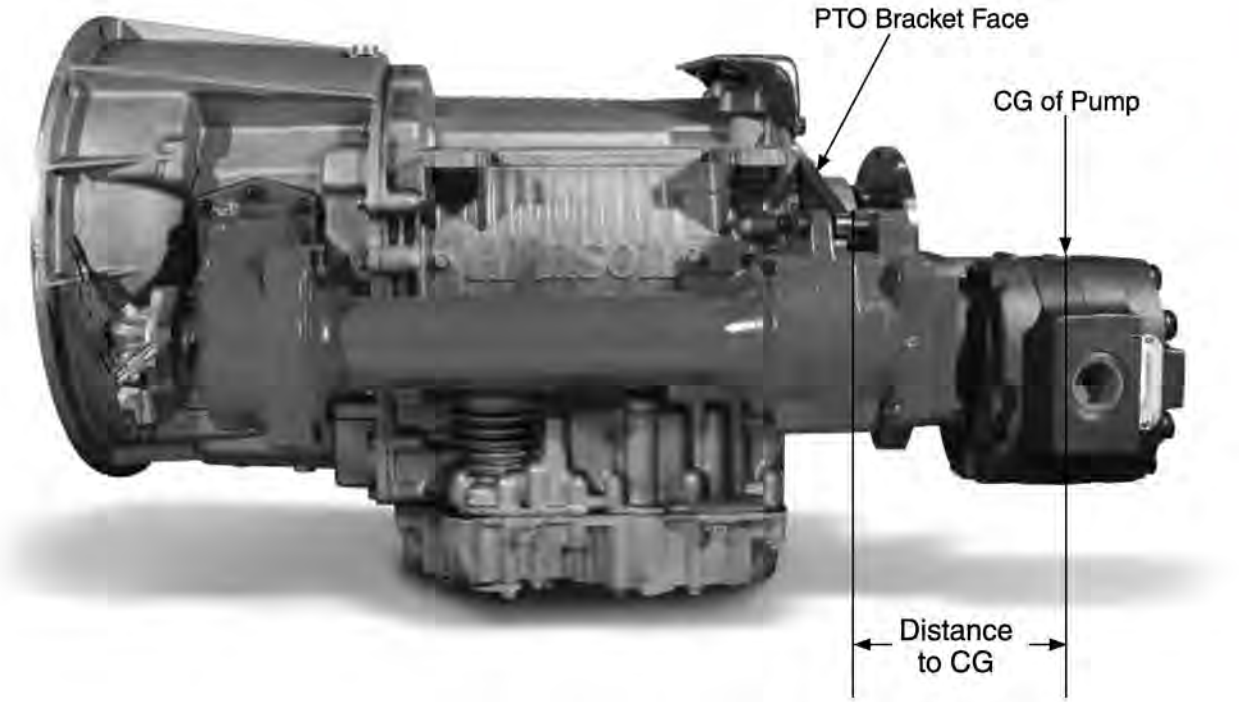
PTO warranty will be void if a pump bracket is not used when one of the following conditions are present:

1. The combined weight of pump, fittings and hose exceed 40 pounds [18.14 kg].

2. The combined length of the PTO and pump is 18 inches [45.72 cm] or more from the PTO centerline to the end of the pump.

This symbol warns of possible personal injury.

Direct Mount Pump Support Requirements (890 Series)



Use CAUTION to ensure that bracket does not pre-load pump/PTO mounting.

Chelsea requires the use of pump support brackets in all applications. PTO warranty will be void if a pump bracket is not used when:

1. Equivalent Bending Moment (EBM) from the pump exceeds 180 lbs-ft (2160 lbs-in).
2. Pump weight exceeds 120 lbs, unless approved by Chelsea Engineering.
3 A center of gravity that exceeds 24" and 2160 lbs-in.

   (Pump Weight [lbs]) x (Distance of CG of pump to PTO Bracket Face) = < 2160 lbs-in

   Example 1: 60 lbs x 18" = 1080 lbs-in (no bracket required)

   Example 2: 120 lbs x 17.9" = 2148 lbs-in (no bracket required)

   Example 3: 90 lbs x 25" = 2250 lbs-in (bracket required)

CG = Center of Gravity

Always refer to current Owners Manual for updated information.

This symbol warns of possible personal injury.

Safety

Direct Mount Pump Support Requirements - CX31/35 (590 Series)

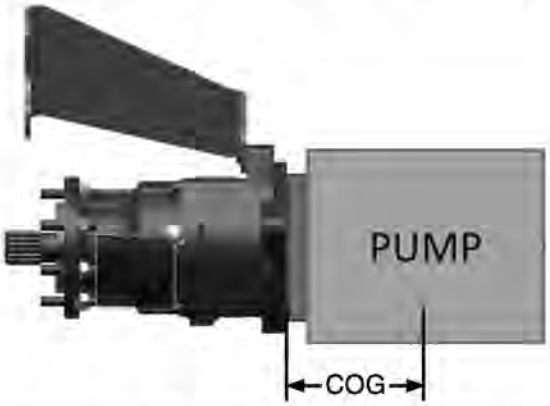
Chelsea requires the use of pump supports (Support Brackets) in all applications to ensure the Maximum Bending Moment (MBM) of the PTO/Pump assembly is not exceeded. Exceeding the MBM can result in damage to PTO, transmission, driven equipment, and/or personnel. It is the responsibility of the installer to ensure that adequate support is implemented. All applications are unique and it is important to consider all parameters in designing a proper support bracket.

A support bracket is furnished with the 590 Series to reduce the bending stress on the PTO/Transmission attaching points. Mount the bracket as seen in diagram below.

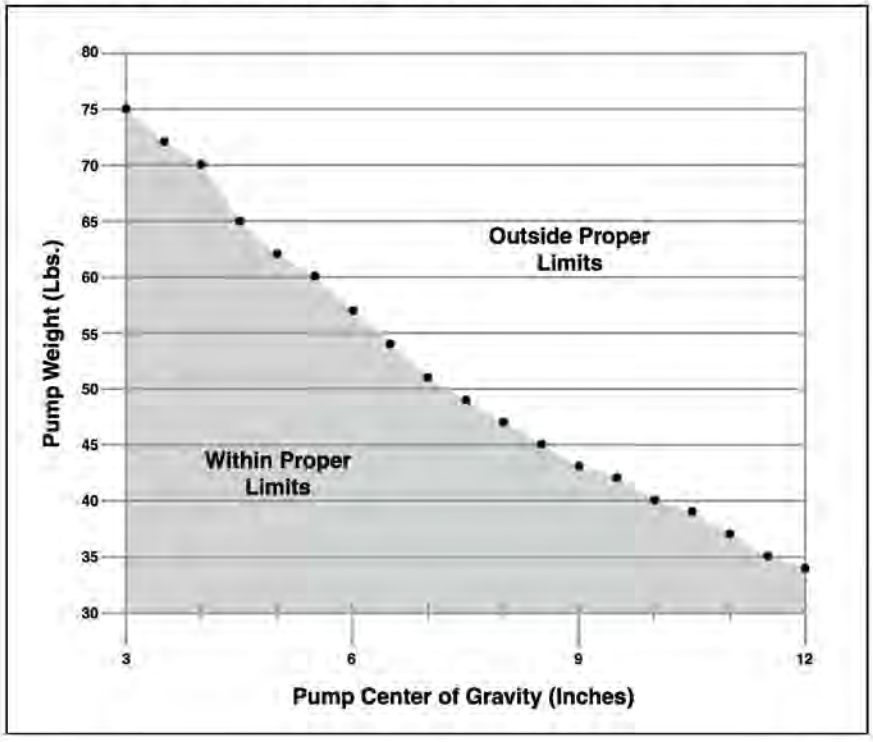
Caterpillar's maximum allowable bending moment without the PTO/Pump bracket is 80 Nm [60 lbs-ft] combined.

The Pump Weight vs Pump Center of Gravity (COG) chart will aid you in determining if your pump application exceeds the recommended pump weight/COG limits using the supplied bracket.

The chart range for pump weights is 30 to 80 pounds and the pump COG range is from 3 to 12 inches. To use the chart, find your pump weight along the vertical axis and your pump COG along the horizontal axis. As long as you stay within the gray shaded area, your pump weight/COG is within the proper limits. If you exceed the shaded area or are outside the limits of the chart, contact Chelsea Technical Services for assistance 1-662-895-1011.



Pump Weight vs Pump Center of Gravity Chart - 590 Series w/Bracket



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Direct Mount Pump Support Requirements (511/523 Series)

Pump Installation Pre-calculations – General Rules

⚠ Use CAUTION to ensure the support bracket does not pre-load pump/PTO mounting. When mounting the pump, it should be fully supported by a jack until the support bracket is secured in place, then the jack can be released. This will make sure the PTO is not being stressed by the bracket.

Chelsea requires the use of pump supports (Support Brackets) in all applications to ensure the Maximum Bending Moment (MBM) of the PTO/Pump assembly is not exceeded. Exceeding the MBM can result in damage to PTO, transmission, driven equipment, and/or personnel. It is the responsibility of the installer to ensure that adequate support is implemented. All applications are unique and it is important to consider all parameters in designing a proper support bracket.

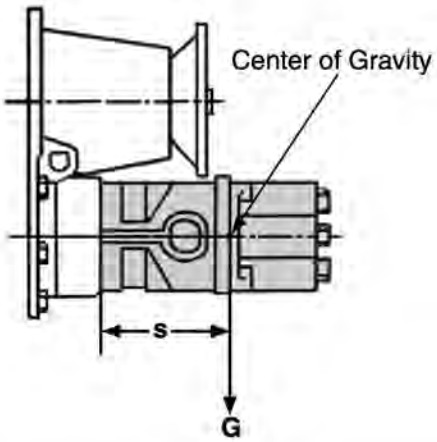
PTO warranty will be void if a pump bracket is not used when one of the following conditions are present:

1. The combined weight of pump, fittings and hose exceeds 18.1 Kg [40 pounds].
2. The combined length of the PTO and pump is 457 mm [18 inches] or more from the PTO centerline to the end of the pump.

Direct Mount Support Requirements (ZF Meritor FreedomLine™)

Limit - The FreedomLine™ transmission PTO flange will accommodate a maximum combined gravity torque of 37 foot-pound (50 Newton-meter), taking into account all accessories (i.e. PTO, pump, fittings, etc) attached directly to the transmission PTO flange.

PTO Driveshaft Angle – The PTO driveshaft angle must not exceed 7 degrees at the transmission.

Gravity Torque Equation	Parameters
M = s*G  	**G** = Combined weight of all accessories (i.e. PTO, pump, fittings, etc.)
	M = Gravity torque
	s = Distance between the center of gravity of all accessories (i.e. PTO, pump, fittings, etc.) and the flange mounting face

⚠ This symbol warns of possible personal injury.

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EATON FULLER FLR-58

FOM-16D313E-LEP	RTLC-16609E (Convertible 9 to 13 Speed)	RTLO-14918A-AS3
RTAO-10710C-AC	RTLO-12713A	RTLO-14918B
RTAO-10710C-AS	RTLO-13118-AMT	RTLO-14918B-AS
RTAO-12710C-AC	RTLO-14713A	RTLO-16713A
RTAO-12710C-AS	RTLO-14713A-T2	RTLO-16713A-T2
RTAO-14710C-AC	RTLO-14718B	RTLO-16718B
RTAO-14710C-AS	RTLO-14718B-T2	RTLO-16718B-T2
RTAO-16710C-AS	RTLO-14918A-AS2	RTLO-16913A

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
489XAAHX-*5 (11)	250 I	Opp	61				Furnished	221XCAHX-*3	250 I	Eng	66		7-A-032(P)(27)	329138X	Furnished
489XCAHX-*5 (12)	250 I	Opp	78				Furnished	221XEAHX-*3	250 I	Eng	76			329138X	Furnished
489XFAHX-*5 (2)	250 I	Opp	96				Furnished	221XPAHX-*3	200 I	Eng	124			329138X	Furnished
489XHAHX-*5 (14)	250 I	Opp	111				Furnished	442XAAHX-*3 (11)	250 I	Opp	58				Furnished
489XLAHX-*5 (1)	222 I	Opp	124				Furnished	442XBAHX-*3 (17)	250 I	Eng	58			REQUIRED	Furnished
489XQAHX-*5 (1)	206 I	Opp	134				Furnished	442XCAHX-*3 (12)	250 I	Opp	74				Furnished
489XRAHX-*5 (1)	178 I	Opp	155				Furnished	442XFAHX-*3 (2)	250 I	Opp	92				Furnished
489XSAHX-*5 (1)	150 I	Opp	184				Furnished	442XHAHX-*3 (14)	250 I	Opp	107				Furnished
680XFAHX-*3 (9)	288 I	Opp	96				Furnished	442XLAHX-*3 (1)	233 I	Opp	119				Furnished
680XHAHX-*3 (19)	249 I	Opp	111				Furnished	442XQAHX-*3 (1)	216 I	Opp	128				Furnished
680XQAHX-*3 (10)	206 I	Opp	134				Furnished	442XRAHX-*3 (1)	187 I	Opp	148				Furnished
680XRAHX-*3 (18)	178 I	Opp	155				Furnished	660XFAHX-*3 (9)	301 I	Opp	92				Furnished
680XSAHX-*3 (13)	150 I	Opp	184				Furnished	660XHAHX-*3 (19)	260 I	Opp	107				Furnished
823XBAHX-*3 (21)	423 I	Opp	65				Furnished	660XQAHX-*3 (10)	216 I	Opp	128				Furnished
823XDAHX-*3 (25)	357 I	Opp	77				Furnished	660XRAHX-*3 (18)	187 I	Opp	148				Furnished
823XGAHX-*3 (26)	329 I	Opp	84				Furnished								
823XJAHX-*3 (22)	279 I	Opp	99				Furnished								
823XMAHX-*3 (20)	238 I	Opp	116				Furnished								
823XRAHX-*3 (24)	172 I	Opp	160				Furnished								
823XTKTX-*3 (16)	142 I	Opp	194		8-A-165(T)(27)		Furnished								
880XBAHX-*3 (3)	423 I	Opp	65				Furnished								
880XDAHX-*3 (4)	357 I	Opp	77				Furnished								
880XGAHX-*3 (8)	329 I	Opp	84				Furnished								
880XJAHX-*3 (5)	279 I	Opp	99				Furnished								
880XMAHX-*3 (6)	238 I	Opp	116				Furnished								
880XQAHX-*3 (15)	203 I	Opp	136				Furnished								
880XRAHX-*3 (7)	172 I	Opp	160				Furnished								

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

272XAAJX-*3	300 C	Opp	54			328481X	Furnished	272XAAJX-*3	300 C	Opp	51				Furnished
272XAAJX-*3	300 C	Opp	53			328481X	Furnished	272XBAJX-*3	300 C	Opp	62				Furnished
282XBAJX-*3	300 C	Opp	65				Furnished	272XCAJX-*3	300 C	Opp	76				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1135
(9) Input Gear Part No. 5-P-1242
(10) Input Gear Part No. 5-P-1246
(11) Input Gear Part No. 5-P-1280
(12) Input Gear Part No. 5-P-1287
(13) Input Gear Part No. 5-P-1322
(14) Input Gear Part No. 5-P-1364
(15) Input Gear Part No. 5-P-1385
(16) Input Gear Part No. 5-P-1395
(17) Input Gear Part No. 5-P-1418
(18) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-1494
(20) Input Gear Part No. 5-P-283
(21) Input Gear Part No. 5-P-285
(22) Input Gear Part No. 5-P-325
(24) Input Gear Part No. 5-P-721
(25) Input Gear Part No. 5-P-971
(26) Input Gear Part No. 5-P-980
(27) Filler block furnished with PTO

1 Transmission Models

- Models that apply to this application page.

2 Transmission Gear Data

- Location of PTO opening on the transmission and opening size (SAE standard or non-standard).
- Gear position within the opening - either Gear to Rear of Centerline or Gear Forward of Centerline by 1/2 inch.



- Description of the PTO driver gear - tooth count of the gear and description of the cut of the gear teeth (Spur, Left Hand Helix, or Right Hand Helix).



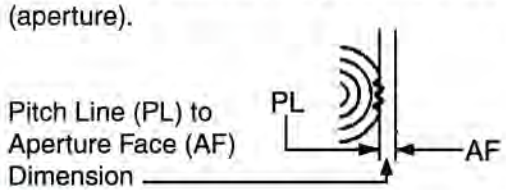
SPUR - teeth are cut straight across from its face from the side

LH HELIX - teeth slant upwards from left to right

RH HELIX - teeth slant upwards from right to left

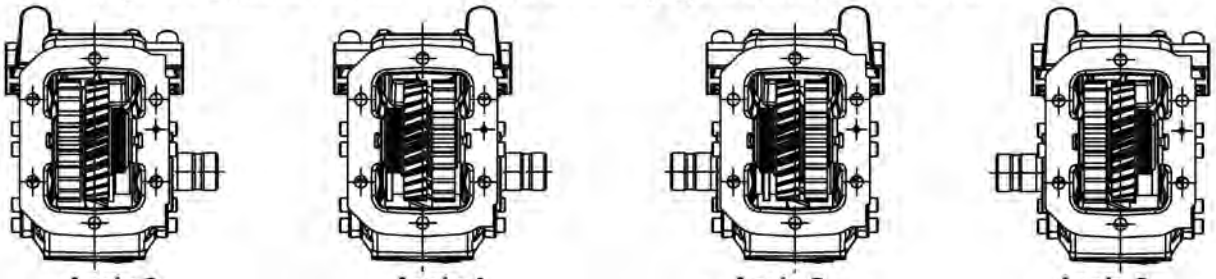
3 Pitch Line to Aperture Face

- The distance between the pitch line of the transmission PTO driver gear and the mounting face (aperture).



4 PTO Model

- The PTOs listed are normally mounted to the transmission with the output shaft toward the rear of the vehicle, with the shaft below the center of the opening.
- To complete the model number refer to the Assembly Options charts in section 4.



Ass'y 3 | Ass'y 4 | Ass'y 5 | Ass'y 6

⑤ PTO Torque Ratings (shown in lbs-ft)

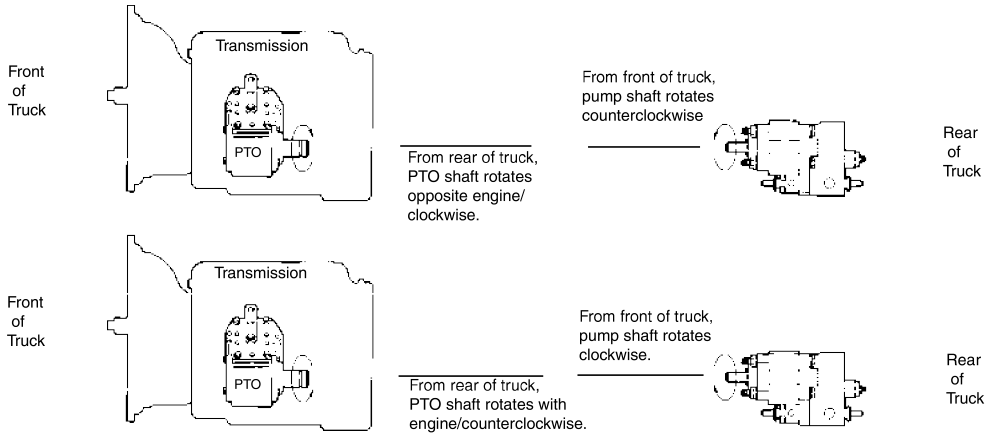
- Intermittent = Torque rating when the PTO operates only 5 minutes out of every 15. A PTO being used more than 5 minutes at a time is considered continuous duty and should have its torque rating reduced by 30%. To do this, multiply the given torque rating by .7. (i.e. 140 lbs-ft x .7 = 98 lbs-ft).
- Continuous = Some newer PTOs are designed with one torque rating for either Intermittent or Continuous operations. There is no need to de-rate the torque rating for PTOs that are rated as Continuous Duty.

⑥ PTO Direction of Rotation

- Viewed by standing at the rear of the vehicle, looking forward at the PTO shaft, with the PTO shaft pointing toward the rear of the vehicle.

PTO	Driven Equipment
OPP (looks “clockwise”)	Driven equipment must rotate counterclockwise (also called left-hand rotation, A for anti-clockwise or CCW for counterclockwise).
ENG (looks “counterclockwise”)	Driven equipment must rotate clockwise (also called right-hand rotation or C for clockwise).

- Remember that the PTO is specified looking from the rear of the truck to the front of the truck, and the driven equipment is specified looking from the front of the truck to the rear of the truck.



⑦ Output Shaft Speed Percentage

- The output shaft speed percentage is based upon engine RPM.
  Ex: If the engine speed is 1000 RPM and the PTO rating is 90% of engine speed, the PTO output shaft will turn 900 RPM (1000 x .90). If the engine speed is 1000 RPM and the PTO rating is 127% of engine speed, the PTO output shaft will turn 1270 RPM (1000 x 1.27).

NOTE: Output shaft speeds should not exceed 2500 RPM without application approval from Chelsea.

⑧ Filler Block

- If a filler block is required to properly mount the PTO or an adapter, the correct part number will be shown here. It must be ordered separately from the PTO.
- If a (T) is shown next to the part number, the filler block should be positioned next to the transmission.
- If a (P) is shown next to the part number, the filler block should be positioned next to the Power Take-Off.

⑨ Adapter Assembly

- An adapter or adapter plate listed in this column is required to mount the PTO to the transmission and must be ordered separately.
- Geared Adapters - used to change the rotation of the output shaft, clear an interference problem, or reach a drive gear that may be deep within the transmission.
- Adapter Plates - used to mount a six-bolt PTO to an eight-bolt opening.
- A geared adapter should not be mounted to an adapter plate.
- Do not mount two or more geared adapters together.
- A geared adapter should not be used on automatic transmissions.

⑩ Stud Kit

- When the word *Furnished* appears in this column, the stud kit is included with the PTO.
- A stud kit number listed in this column (i.e. 7170-1X) means that the stud kit must be ordered separately from the PTO.

⑪ PTO Header

- PTO headers with type of shift mechanism. This describes the type of PTO listed in the section below the header.
- Mechanical = Gear into Gear Shifting
- PowerShift (Air), PowerShift (Hydraulic) = Clutch type

⑫ Torque Rating Duty Type

- Footnote explaining the PTO torque type relating to Intermittent and Continuous Duty. See arrow #5 on page 1.10.

⑬ Safety Notes

- Caution & Warning notes that pertain to the safe operation of the transmission and PTO. Each application section has notes relating to each specific application page that are important to the application of a PTO. All notes must be read prior to specifying a PTO.
- The notes section can be found in the back of each transmission section.

⑭ Numbered Footnotes

- These footnotes provide input gear numbers and filler block information by PTO model number.

Information from the Customer:

1. Make and model of transmission.

   _____

2. Type of driven equipment.

   _____

3. Input horsepower required of driven equipment.

   _____

4. Desired operating speed of driven equipment.

   _____

5. Approximate engine speed desired during operation.

   Figure the equipment speed expressed as a percentage of the desired engine speed during the duty cycle.

   Driven equipment ÷ Engine speed = PTO%

   _____

6. Direction of driven equipment shaft rotation in relation to direction of engine rotation (check one).

   _____ Opposite Engine Rotation
   _____ Engine Rotation

7. Type of connection between PTO and driven equipment (check one).

   _____ Driveshaft
   _____ Direct mount pump flange
   _____ Pulleys and belts (requires eng. approval)

8. Mounting location (check all suitable locations).

   _____ Left
   _____ Right
   _____ Bottom
   _____ Top
   _____ Countershaft

9. Duty cycle (check one).

   _____ Intermittent
   _____ Continuous (Greater than 5 mins in a 15 min period)

10. Other PTO speeds or reverse gear requirements.

    _____

    _____

Using the HY25-3000/US, Find:

11. Application page number for make and model of transmission.

    _____

12. From items 3 and 4 determine the intermittent torque requirements of the driven equipment using this formula:

    (HP x 5252) ÷ RPM = lbs-ft

    T = _____ lbs-ft (intermittent)

13. If torque requirements are continuous (more than 5 minutes operation every 15 minutes) divide the torque figure by .7. The result will be the torque required for continuous operation.

    _____

14. Find the PTO in the HY25-3000/US catalog that meets the torque, rotation, and speed percentage requirements of the application. Note the PTO model number and all numbers for mounting parts on the lines below.

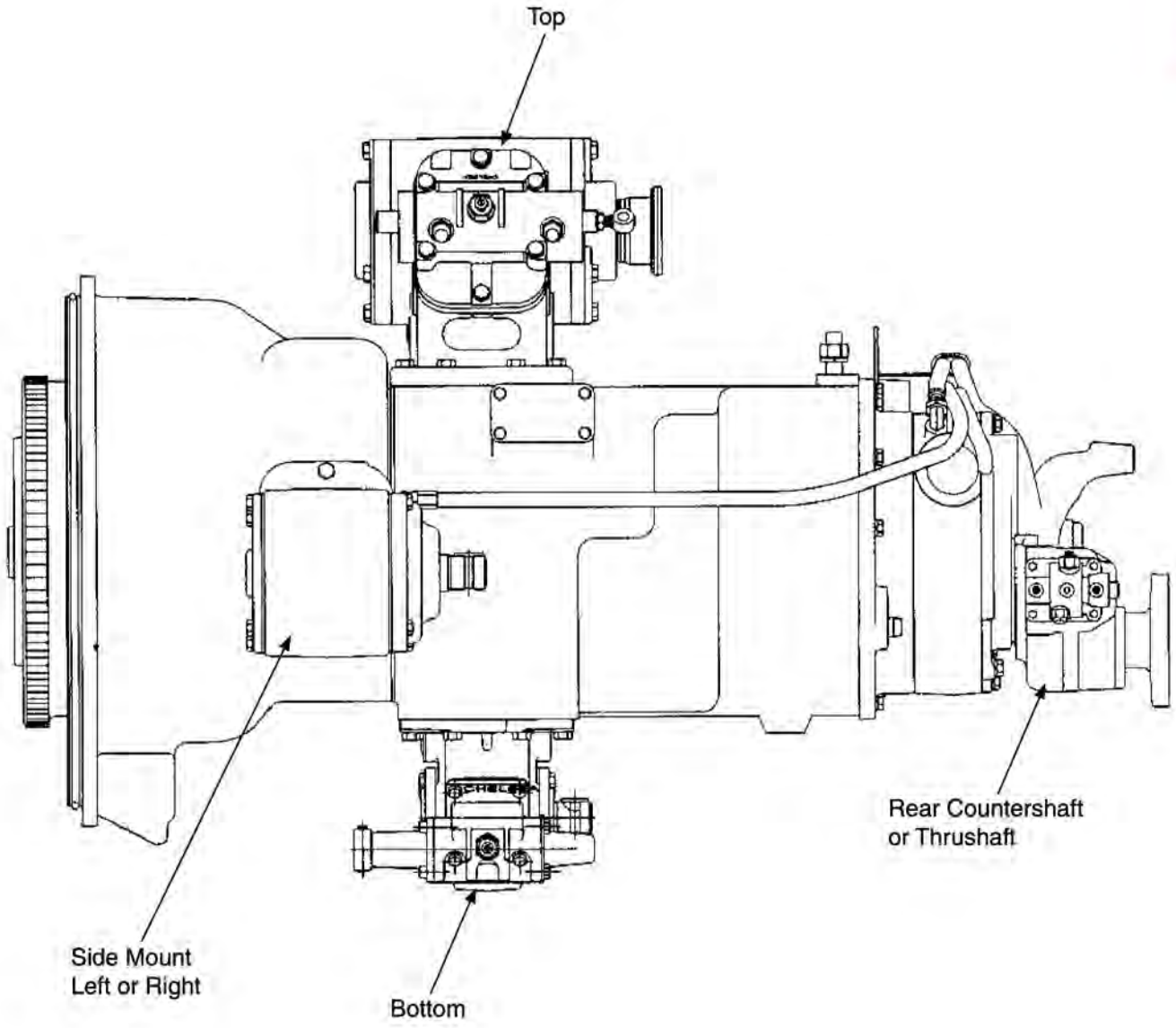
    _____

    _____

15. Determine what options are needed and change model number prefix and suffix to obtain correct options. (See Model Number Construction in section 4).

    _____

    _____



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AB	Universal
AC	Fiat
AD	Spicer
AG	Spicer
AH	Universal
AJ	Universal
AK	Universal
AL	Eaton Fuller
AP	Spicer
AQ	Spicer
AR	Spicer
AU	Chelsea
AW	New Process
AX	Eaton Fuller
BA	Navistar
BC	Eaton Fuller
BE	Chevy
BF	Warner
BG	Spicer
BH	Spicer
BJ	Chevy
BK	New Process
BL	New Process
BM	Eaton Fuller
BN	New Process
BP	Chevy/Spicer
BQ	Chevy/Spicer
BR	Hino
BS	New Process
BU	Eaton Fuller
BY	Warner
BZ	Warner
CB	New Process
CC	New Process
CD	Warner
CJ	Saab/Scania
CM	New Process
CR	Spicer
DA	Mack
DB	Eaton Fuller
DC	Hino/Nissan
DD	Spicer
DH	Renault
DJ	Renault
DK	Renault
DM	Eaton Fuller
DN	Eaton Fuller
DQ	Saab/Scania
DS	Warner
DU	Eaton Fuller
DX	Chevrolet
DY	Clark
EC	ZF
ED	ZF
EF	New Process
EL	Isuzu
EP	Warner
ER	Isuzu
ES	Eaton Fuller
ET	Eaton Fuller
EV	Eaton Fuller
EW	Eaton Fuller
FA	Jatco/Isuzu
FB	GM/Chevy
FC	Dodge
FE	Getrag
FJ	Allison
FL	ZF
FM	Nissan
FN	Spicer
FP	Mack/Renault
FQ	Mack/Renault
FR	Eaton Fuller
FS	Hino
FT	Mitsubishi
FV	Isuzu
FW	Eaton Fuller
FZ	Hino
GE	Eaton Fuller
GF	Eaton Fuller
GP	Eaton Fuller
GQ	Tremec
GR	ZF
GS	ZF
GW	Nissan
GX	Mitsubishi
GX	Adapter Gear
GY	Adapter Gear
GZ	Adapter Gear
GZ	Eaton Fuller
HA	Adapter Gear
HA	Mitsubishi
HB	Adapter Gear
HB	Mitsubishi
HC	Mitsubishi
HD	Adapter Gear
HD	Mitsubishi
HD	Ford
HE	Adapter Gear
HF	Adapter Gear
HG	Adapter Gear
HH	Adapter Gear
HJ	Adapter Gear
HK	Adapter Gear
HL	Adapter Gear
HM	Adapter Gear
HP	Adapter Gear
HQ	Adapter Gear
HR	Adapter Gear
HU	Mack
HV	Allison
HY	ZF
HZ	Eaton Fuller
JB	Adapter Gear
JD	Tremec
JE	Adapter Gear
JG	Mercedes
JH	Mercedes
JK	Eaton Fuller
JL	Adapter Gear
JM	Eaton Fuller
JN	Adapter Gear
JP	NVG
JQ	Adapter Gear
JR	Eaton Fuller
JS	Spicer
JT	Spicer
JU	Spicer
JV	Eaton Fuller
JW	Eaton Fuller
JX	Adapter Gear
JY	Adapter Gear
JZ	Adapter Gear
KA	Adapter Gear
KB	Adapter Gear
KH	Mercedes
KJ	ZF
KK	Adapter Gear
KL	ZF
KM	Adapter Gear
KN	TTC
KP	TTC
KR	Adapter Gear
KS	Ford
KT	Universal
KU	Aisin
KV	Caterpillar
KX	ZF
KY	ZF
KZ	Isuzu
LA	CAT
LB	ZF
LC	Eaton
LD	Eaton
LE	Eaton
LG	Eaton
LH	Eaton
LK	Eaton
LL	Ford
LM	Eaton
LP	Eaton
LQ	Eaton
LR	Eaton
LS	Mitsubishi
LT	Eaton
LU	Eaton
LV	Eaton
LX	Eaton
LY	Eaton
LZ	Eaton



PTO OPTIONS & KITS

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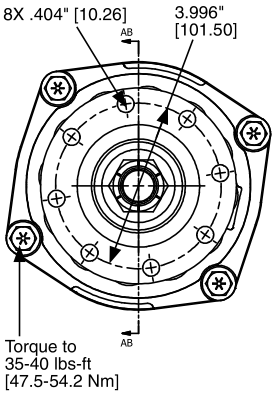
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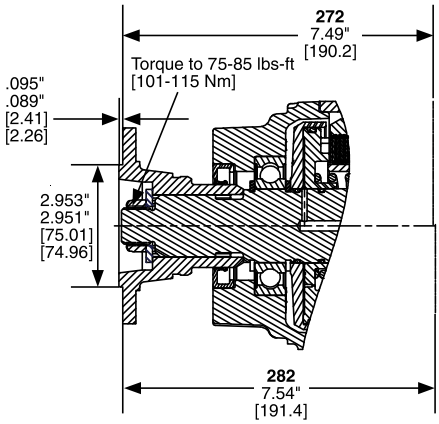
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AB ..... 3.1 thru 3.2
AC ..... 3.2 thru 3.4
AD 3.4
AF ..... 3.4 thru 3.5
AK 3.5
AZ ..... 3.5 thru 3.6
BB 3.6
BC, BD 3.7
BV 3.8
CF 3.9
CK ..... 3.9 thru 3.10
CS 3.10
CZ, DA 3.11
G, GA, GB 3.12
GF, GH, GK 3.13
GQ, GR 3.14
GS, GY, GZ ..... 3.14 thru 3.15
RA, RB ..... 3.15 thru 3.16
RC, RD, ... 3.17 thru 3.18
RE 3.18
RF ..... 3.18 thru 3.19
RK 3.20
RS 3.21
RY ..... 3.22 thru 3.23
RZ ..... 3.23 thru 3.24
SB 3.24
SC 3.25
SD ..... 3.25 thru 3.26
SV ..... 3.26 thru 3.27
SQ 3.27
XD, XE 3.28
XK ..... 3.29 thru 3.30
XP, XQ 3.31
XR ..... 3.31 thru 3.32
XS ..... 3.32 thru 3.33
XU 3.34
XV ..... 3.34 thru 3.37
XX 3.37
XY ..... 3.37 thru 3.39
ZS 3.39
21-P-525 ..... 3.40

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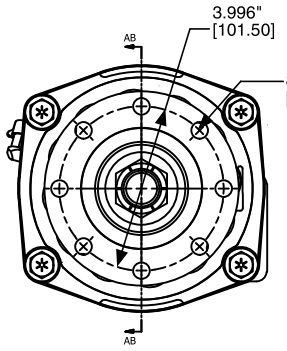
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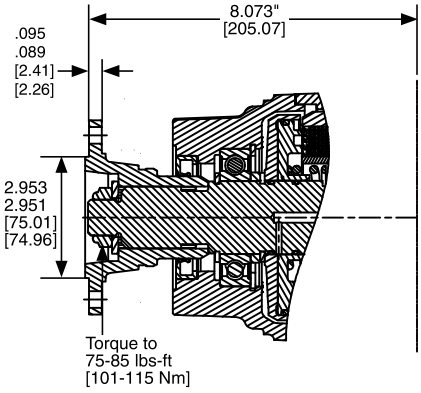
Option Code – AB	
Type	Remote Mount
Shaft	DIN 120 Flange
PTO Series: 272, 282	



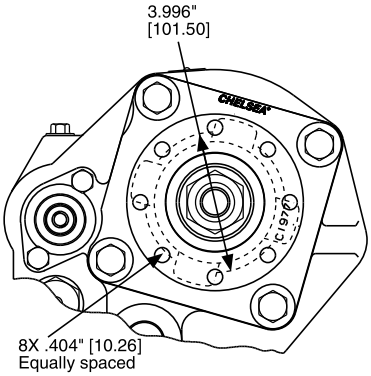


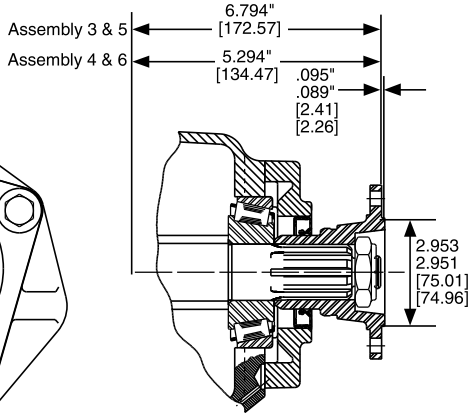
Option Code – AB	
Type	Remote Mount
Shaft	DIN 120 Flange
PTO Series: 280, 287	





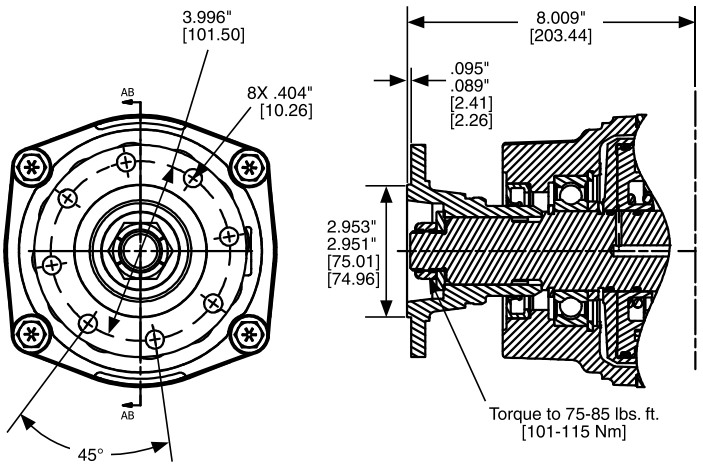
Option Code – AB	
Type	Remote Mount
Shaft	DIN 120 Flange
PTO Series: 823	



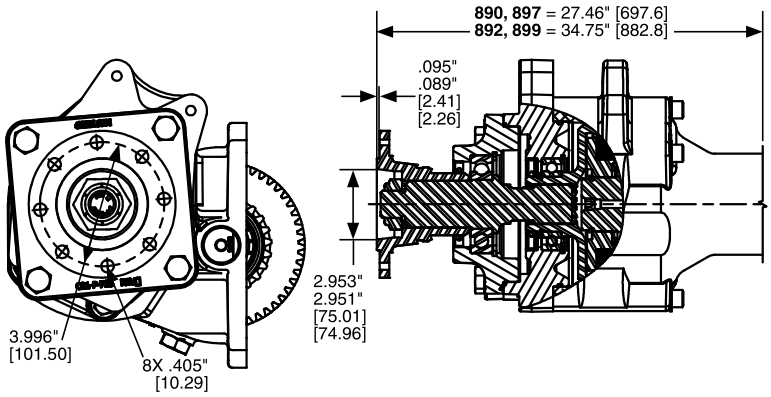


NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

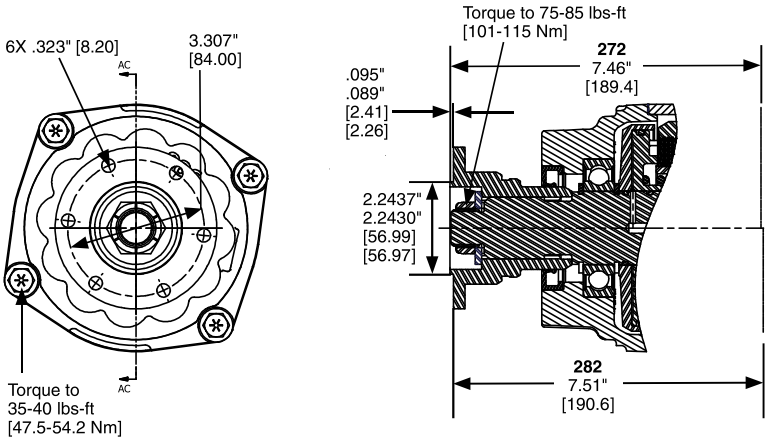
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Option Code – AB	
Type	Remote Mount
Shaft	DIN 120 Flange
PTO Series: 870, 877	



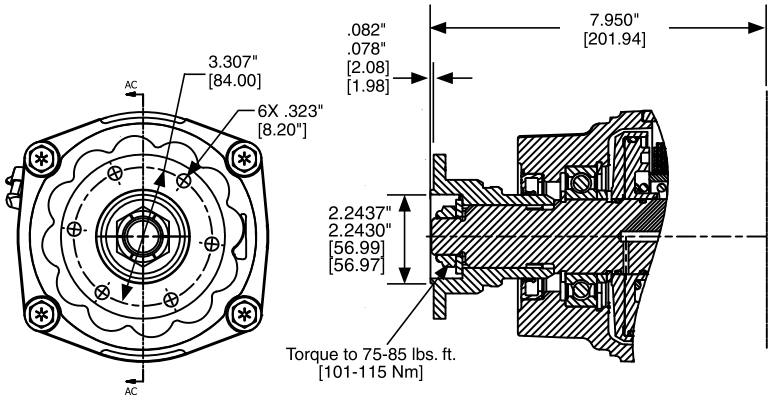
Option Code – AB	
Type	Remote Mount
Shaft	DIN 120 Companion Flange
PTO Series: 890, 892, 897, 899	



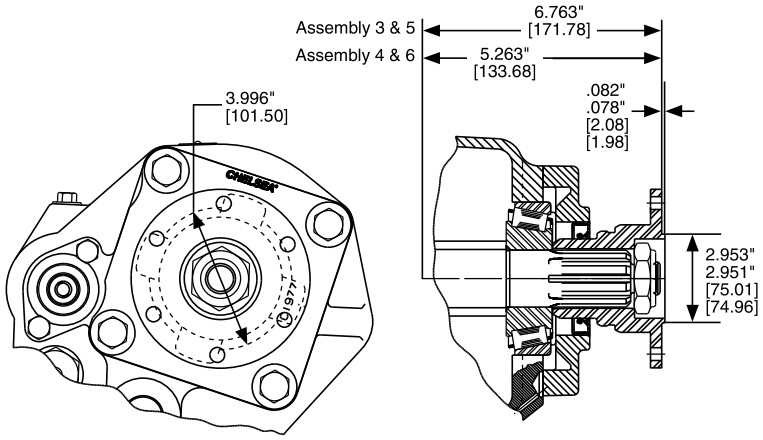
Option Code – AC	
Type	Remote Mount
Shaft	DIN 100 Flange
PTO Series: 272, 282	

NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

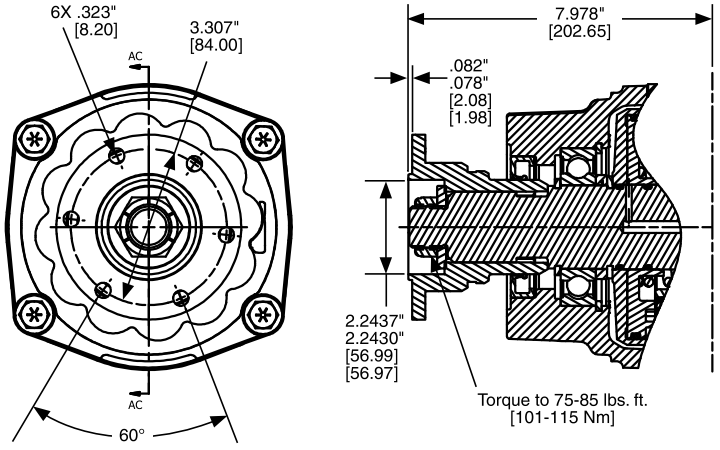
Option Code – AC	
Type	Remote Mount
Shaft	DIN 100 Flange
PTO Series: 280, 287	



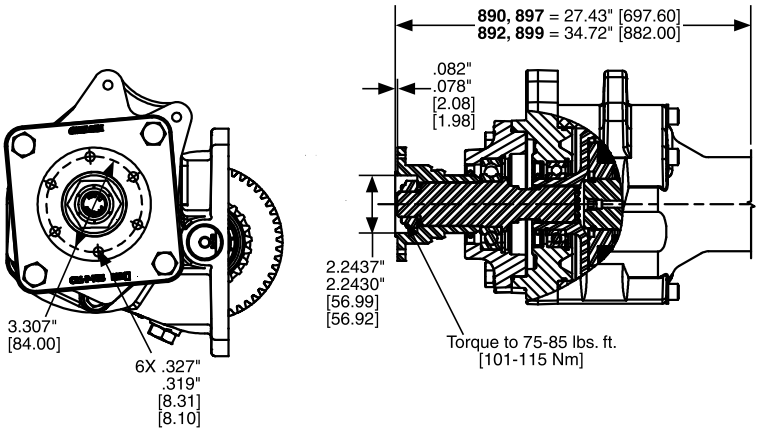
Option Code – AC	
Type	Remote Mount
Shaft	DIN 120 Flange
PTO Series: 823	



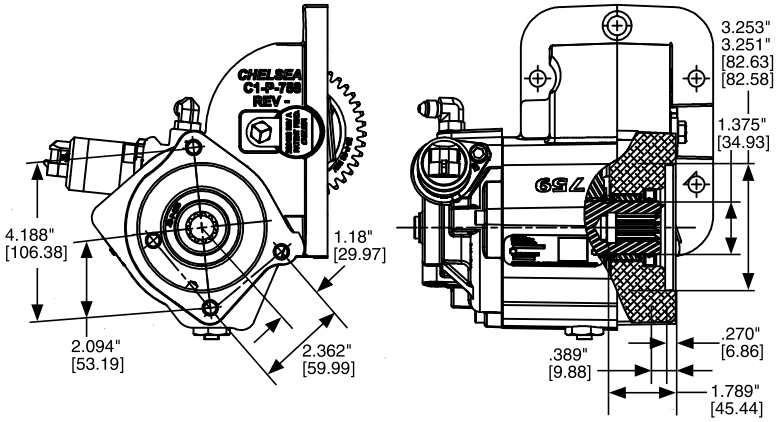
Option Code – AC	
Type	Remote Mount
Shaft	DIN 100 Flange
PTO Series: 870, 877	



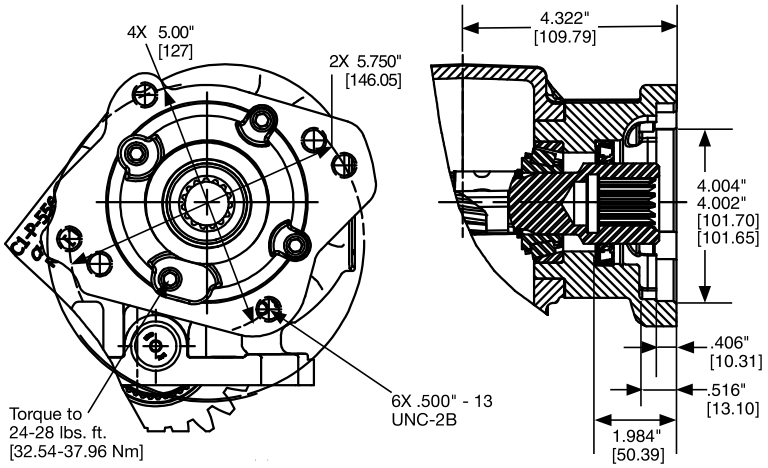
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – AC	
Type	Remote Mount
Shaft	DIN 100 Flange
PTO Series: 890, 892, 897, 899	



Option Code – AD	
Type	Direct Mount
Shaft	SAE 19-4 (3/4" - 11T)
Flange	SAE A 2-Bolt
PTO Series: 249	

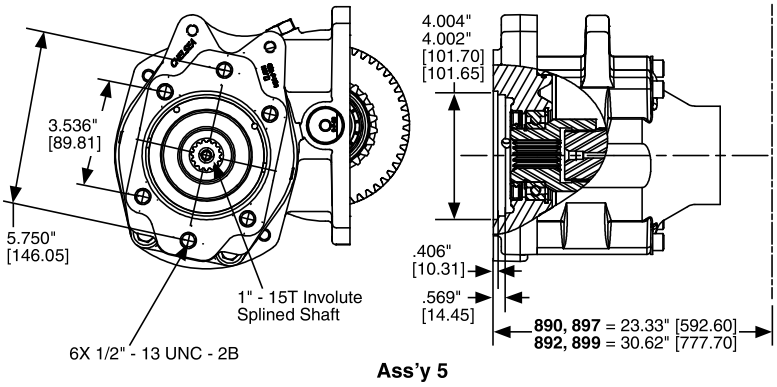


Option Code – AF	
Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 221, 267, 290, 442, 447, 489, 660, 680, 2442	

NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

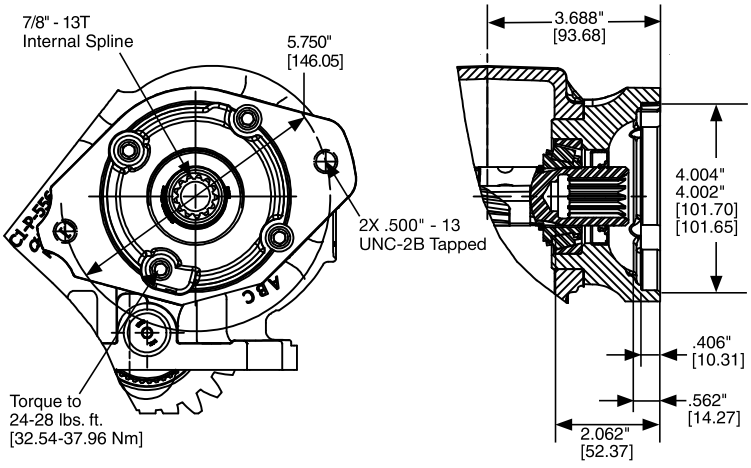
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Chelsea Products Division
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Option Code – AF	
Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 890, 892, 897, 899	

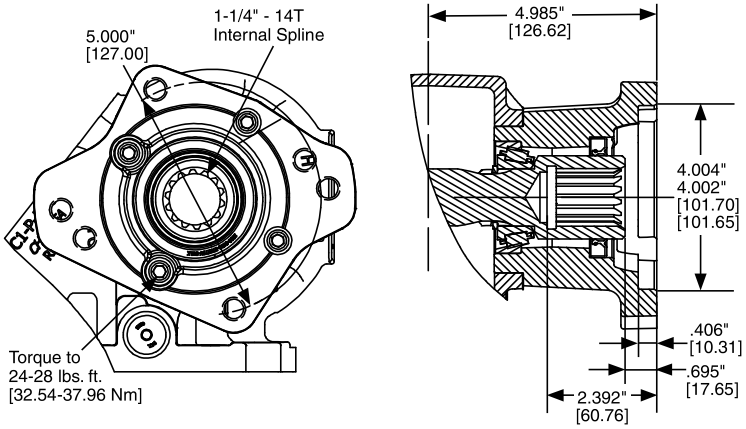


Ass'y 5

Option Code – AK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2-Bolt
PTO Series: 221, 267, 290, 442, 447, 489, 660, 680, 2442	

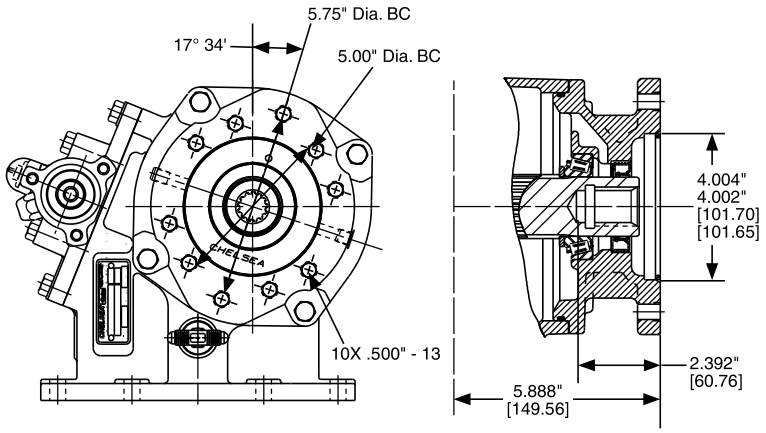


Option Code – AZ	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

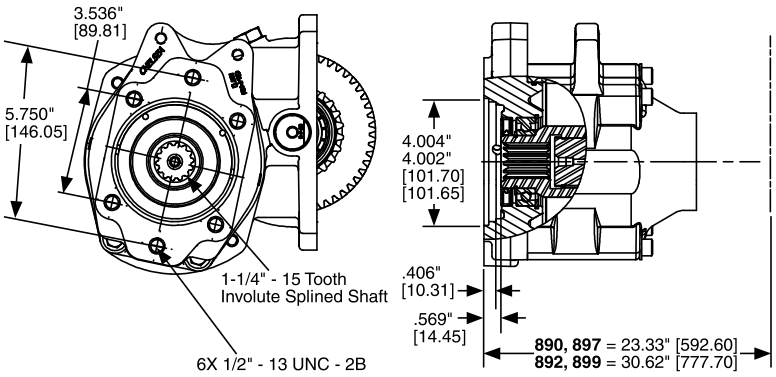


NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

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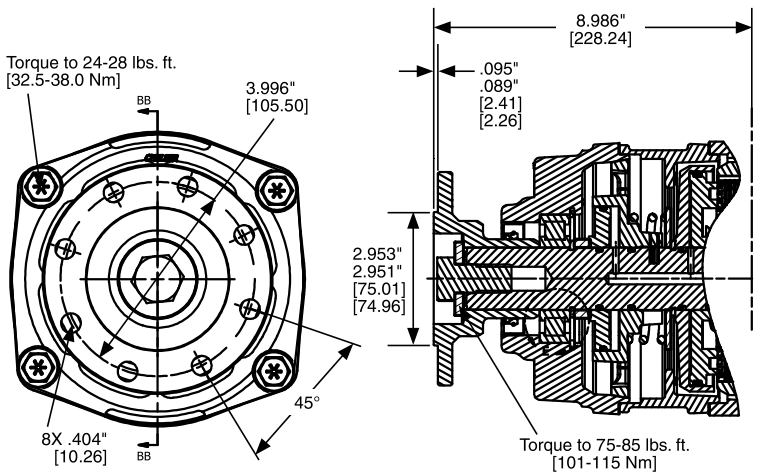


Option Code – AZ	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE B 2 & 4-Bolt
PTO Series: 880	



Ass'y 5

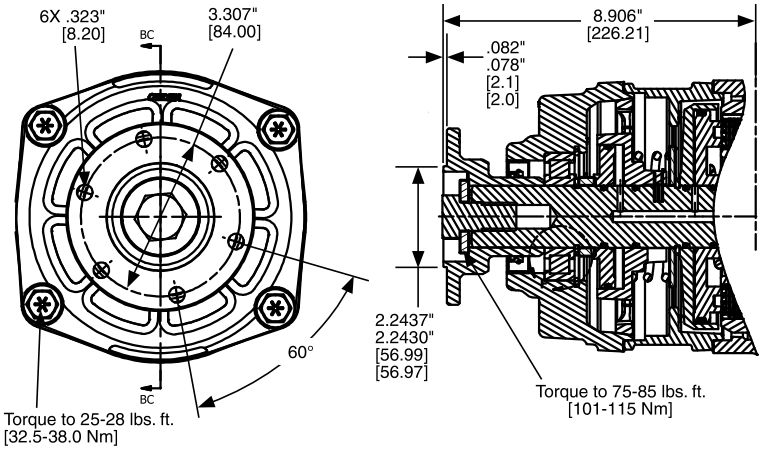
Option Code – AZ	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 890, 892, 897, 899	



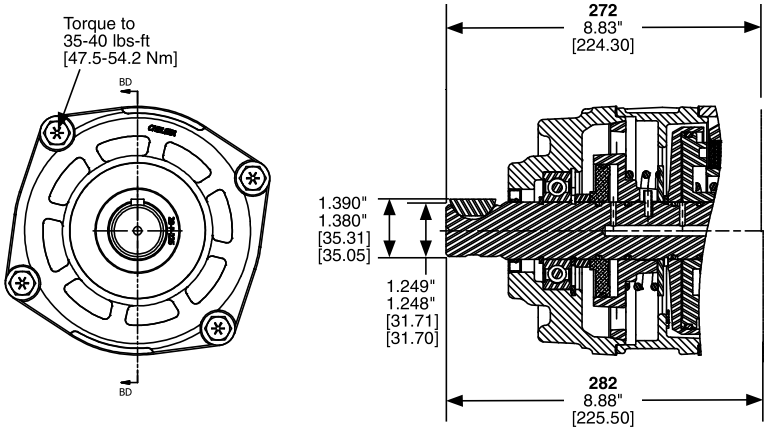
Option Code – BB	
Type	Remote Mount
Shaft	DIN 120 Flange w/ Shaft Brake
PTO Series: 870	

NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

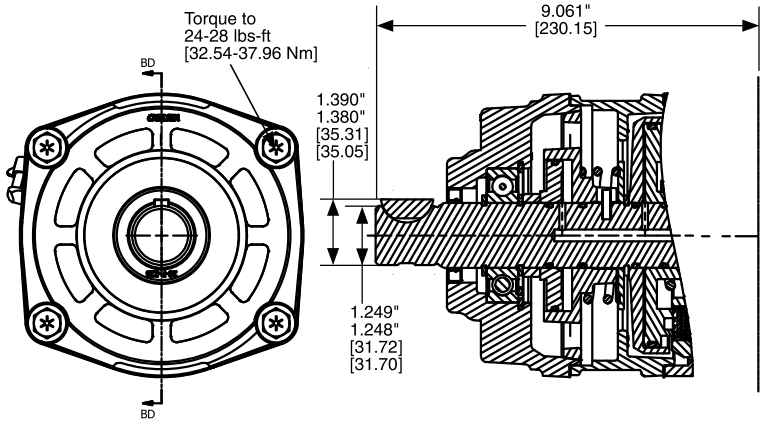
Option Code – BC	
Type	Remote Mount
Shaft	DIN 100 Flange w/ Shaft Brake
PTO Series: 870	



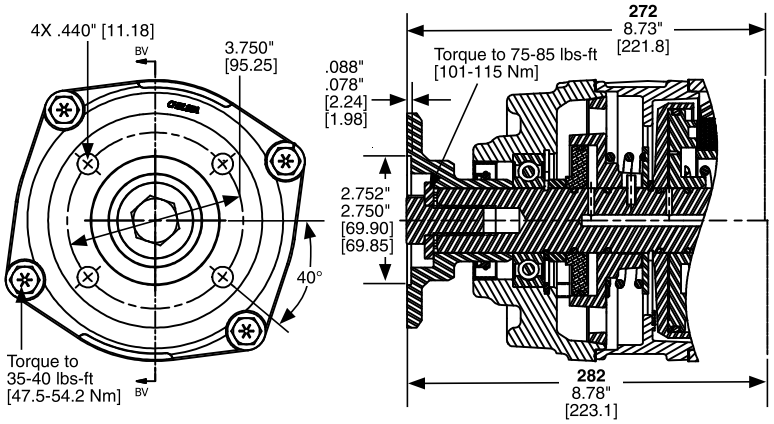
Option Code – BD	
Type	Remote Mount
Shaft	1-1/4" Keyed w/ Shaft Brake
PTO Series: 272, 282	



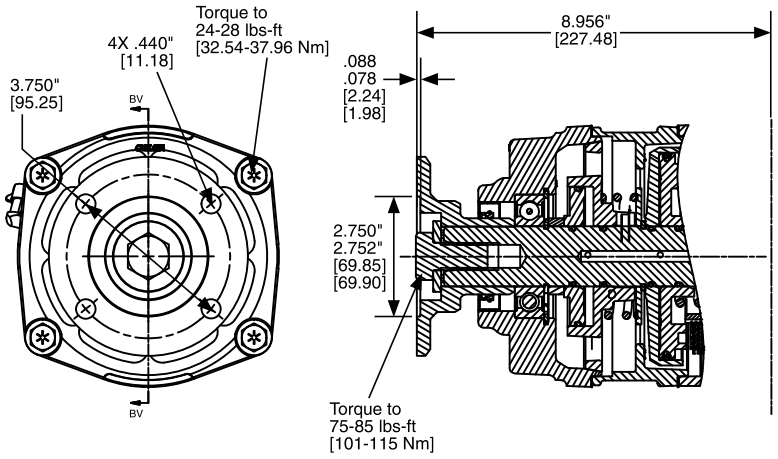
Option Code – BD	
Type	Remote Mount
Shaft	1-1/4" Rd. Keyed w/ Shaft Brake
PTO Series: 280, 287	



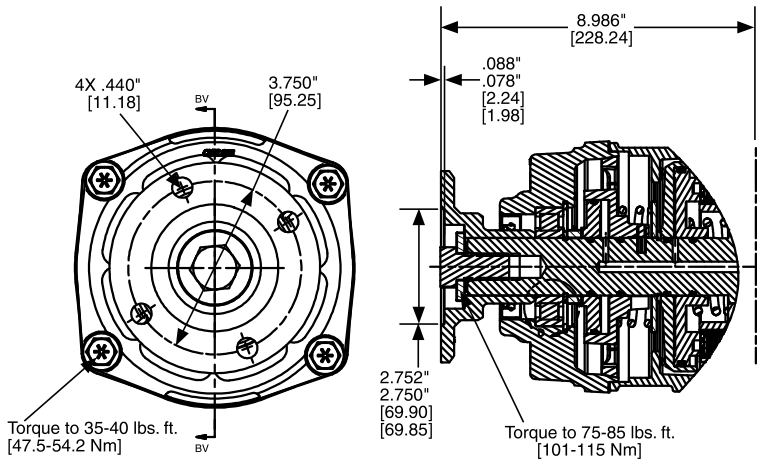
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – BV	
Type	Remote Mount
Shaft	1410 Companion Flange w/ Shaft Brake
PTO Series: 272, 282	



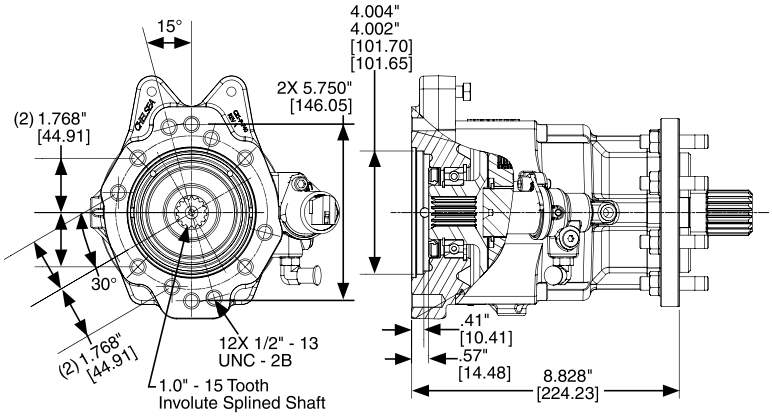
Option Code – BV	
Type	Remote Mount
Shaft	1410 Companion Flange w/ Shaft Brake
PTO Series: 280, 287	



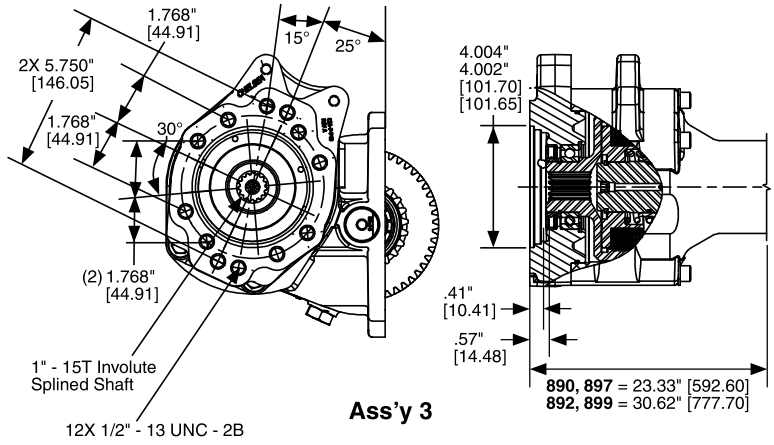
Option Code – BV	
Type	Remote Mount
Shaft	1-1/4" Rd. Keyed w/ Shaft Brake
PTO Series: 870	

NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

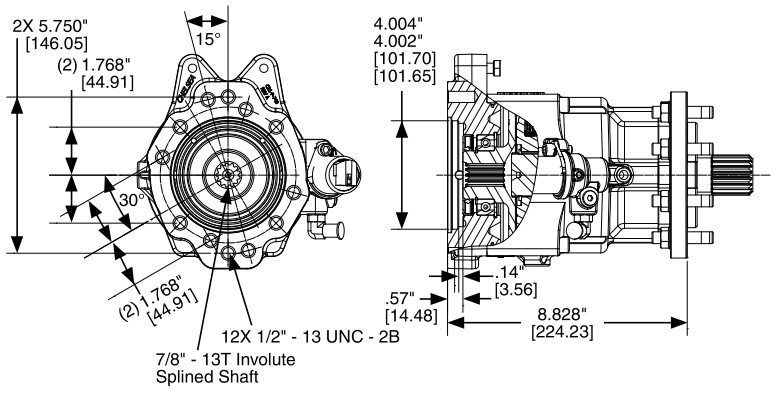
Option Code – CF	
Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 590	



Option Code – CF	
Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 890, 892, 897, 899	

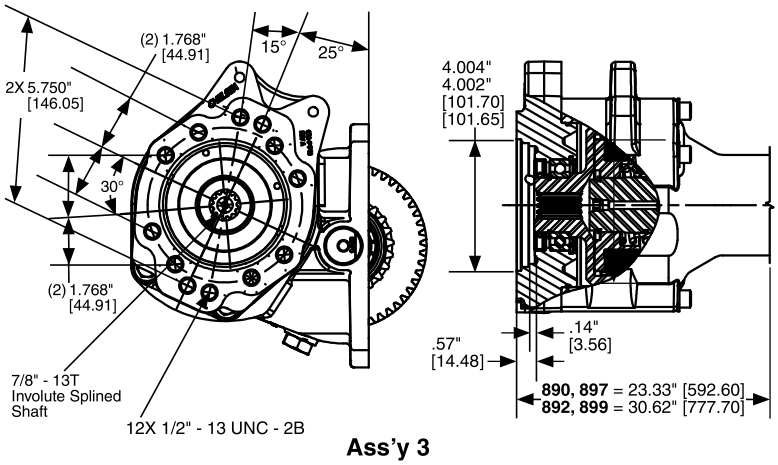


Option Code – CK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 590	



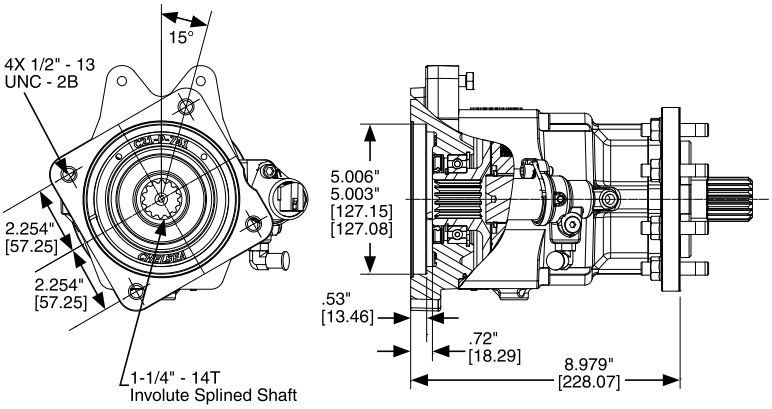
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

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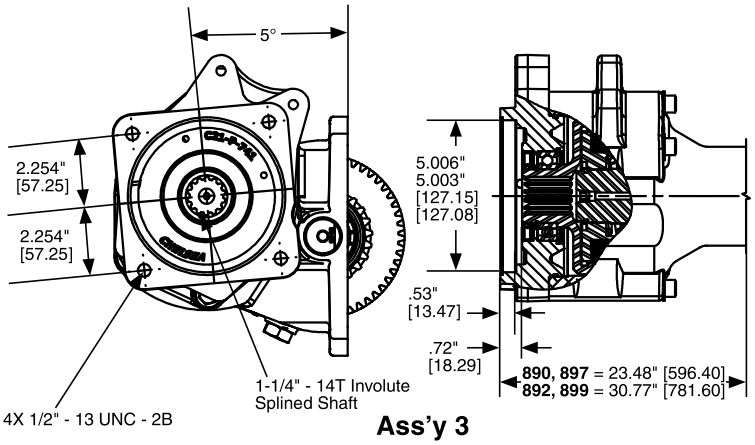


Ass'y 3

Option Code – CK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 890, 892, 897, 899	



Option Code – CS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 4-Bolt
PTO Series: 590	



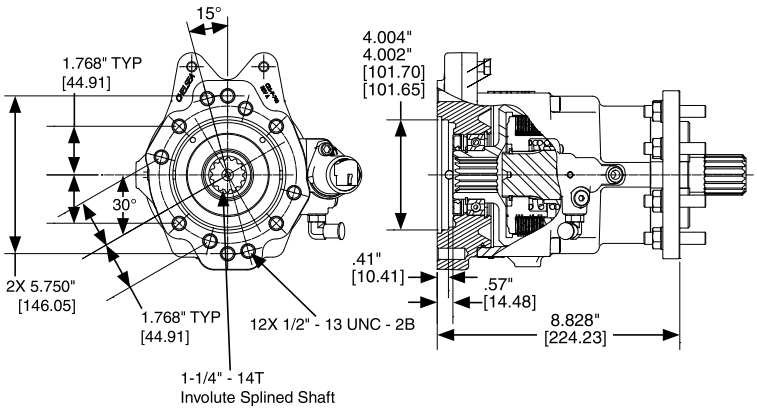
Ass'y 3

Option Code – CS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 4-Bolt
PTO Series: 890, 892, 897, 899	

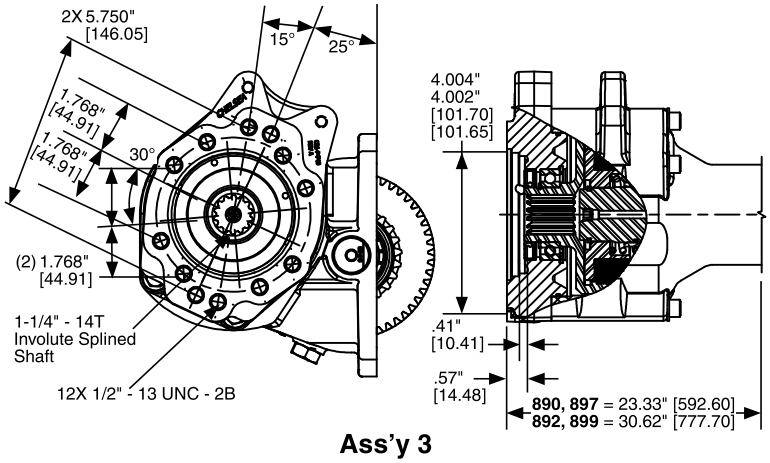
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

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Option Code – CZ	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 590	

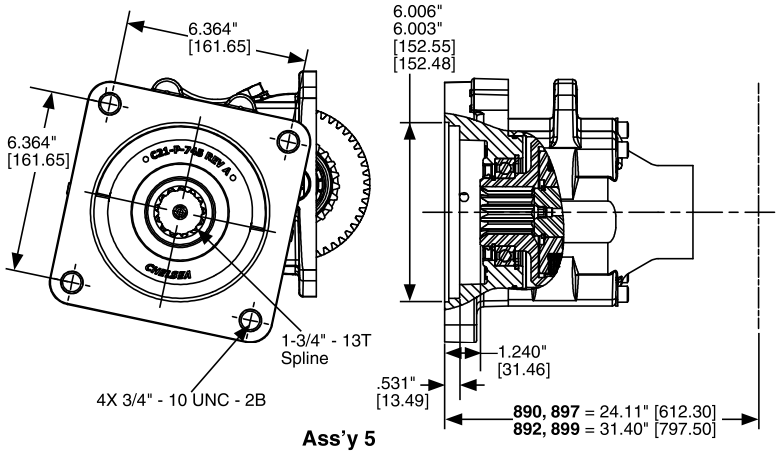


Option Code – CZ	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 890, 892, 897, 899	



Ass'y 3

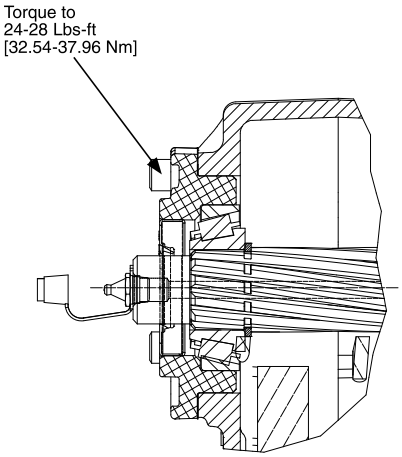
Option Code – DA	
Type	Direct Mount
Shaft	SAE D (1-3/4" - 13T)
Flange	SAE D 4-Bolt
PTO Series: 890, 892, 897, 899	



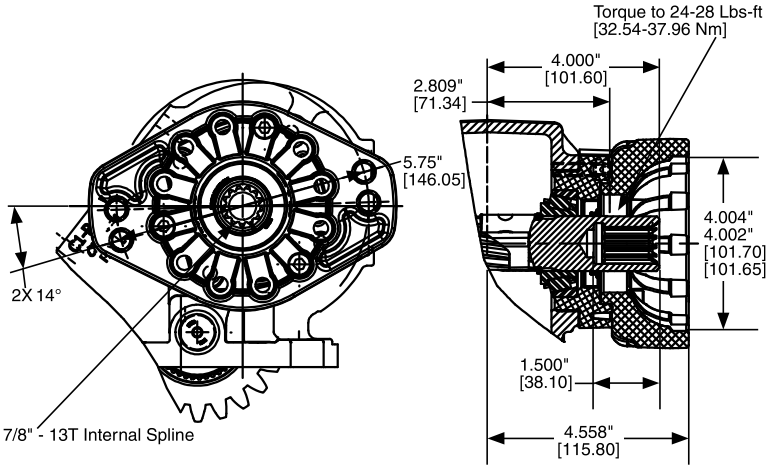
Ass'y 5

NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

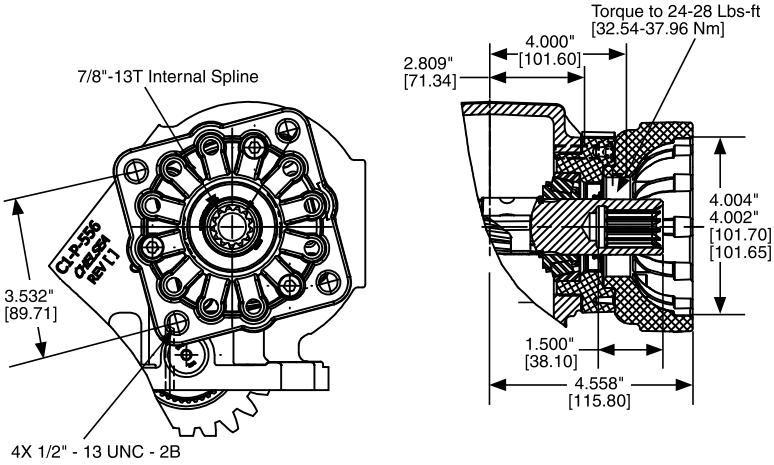
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Olive Branch, MS 38654 USA



Option Code – G	
Type	Direct Mount
NOTE	All greaseable output assemblies have this closed bearing cap configuration.
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



Option Code – GA	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 2-Bolt
Rotates in 30° Increments (*Greaseable)	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

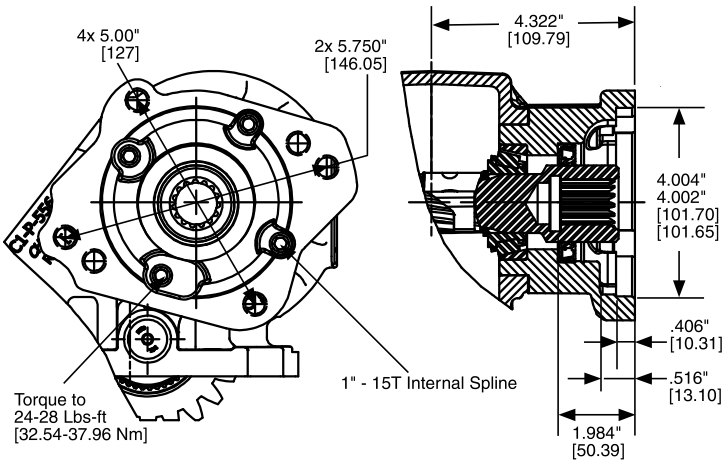


Option Code – GB	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 4-Bolt
Rotates in 30° Increments (*Greaseable)	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

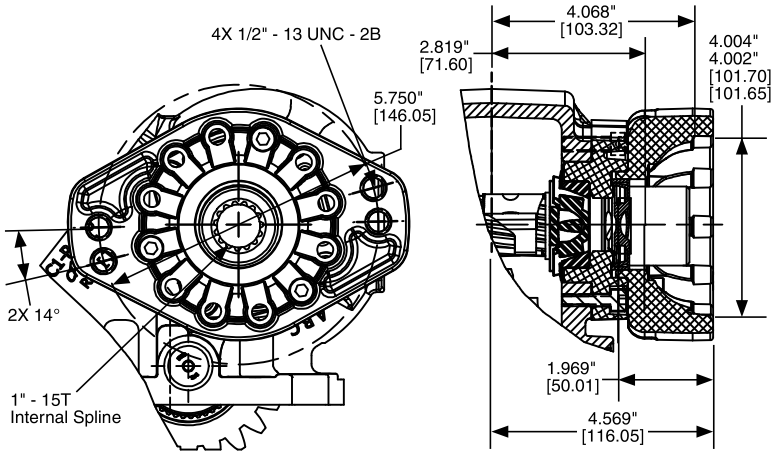
* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

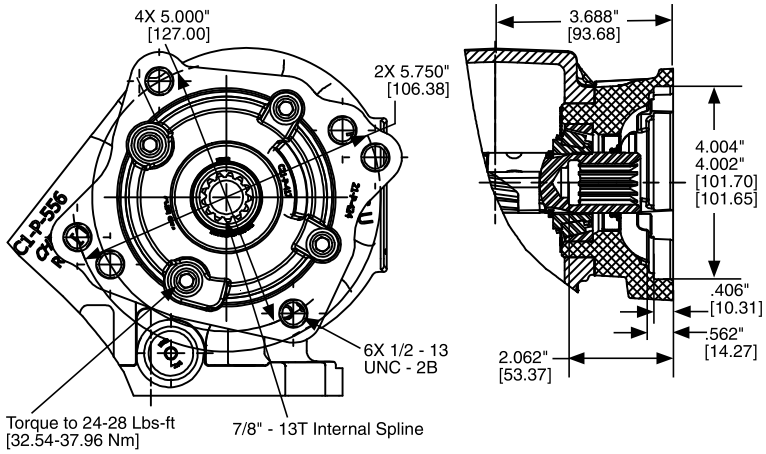
Option Code – GF	
Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	SAE B 2 or 4-Bolt
(*Greaseable)	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



Option Code – GH	
Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	SAE B 2-Bolt Rotatable
Rotates in 30° Increments (*Greaseable)	
PTO Series: 660, 680	

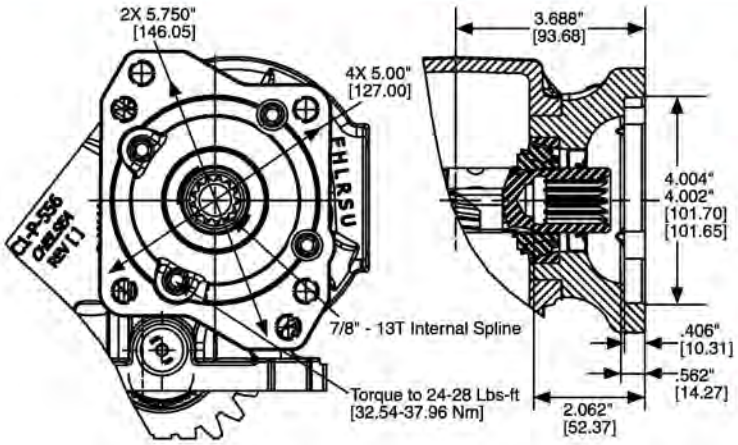


Option Code – GK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
(*Greaseable)	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

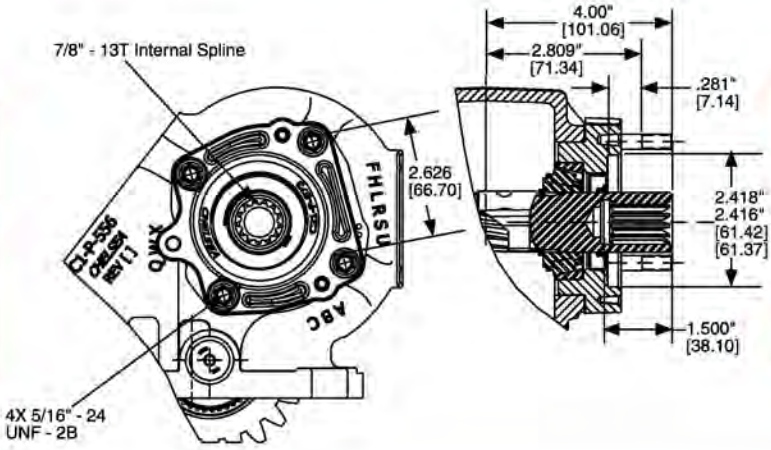


* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

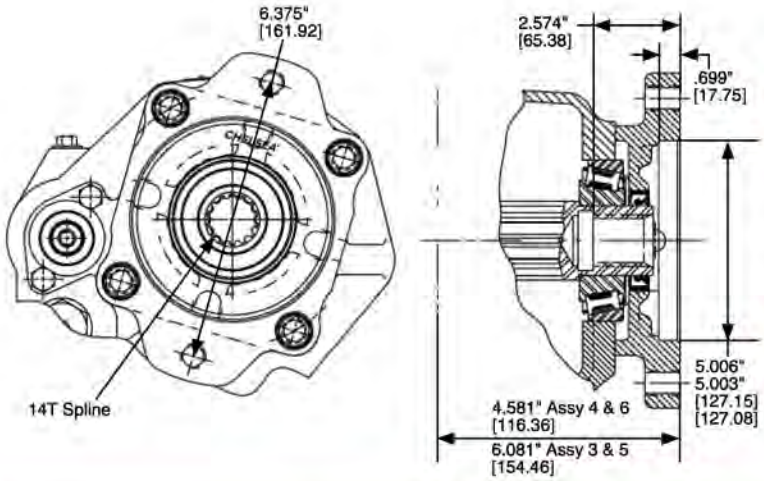
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – GQ	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
(*Greaseable)	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



Option Code – GR	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Chelsea Special (Cloverleaf)
(*Greaseable)	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

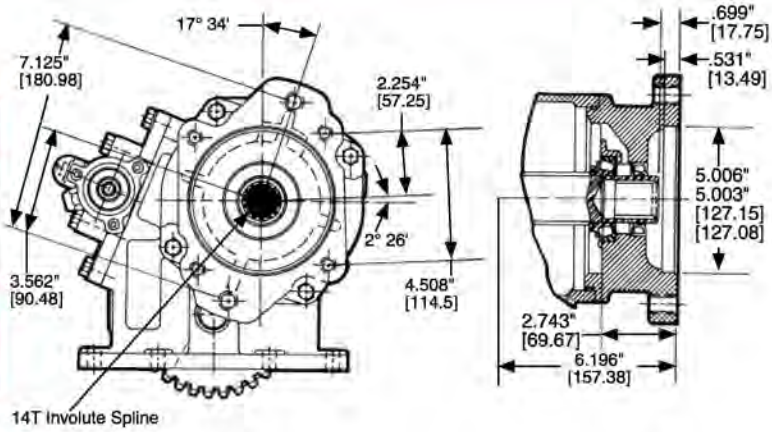


Option Code – GS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2 or 4-Bolt
(*Greaseable)	
PTO Series: 823	

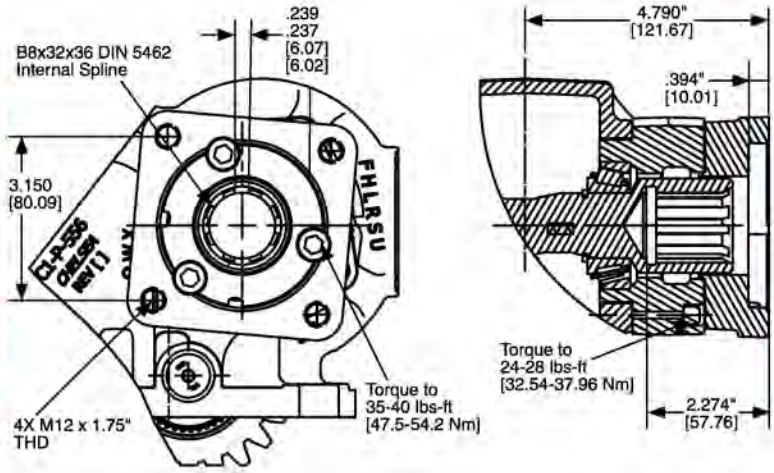
* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

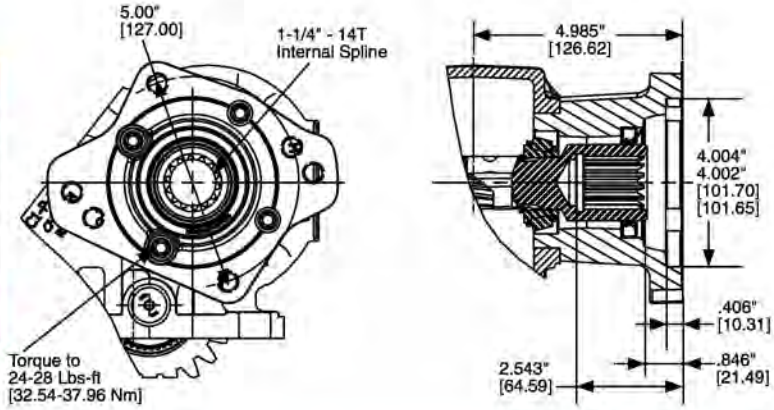
Option Code – GS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2 or 4-Bolt
(*Greaseable)	
PTO Series: 880	



Option Code – GY	
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	ISO 7653 Pump Mounting
(*Greaseable)	
PTO Series: 660, 680	

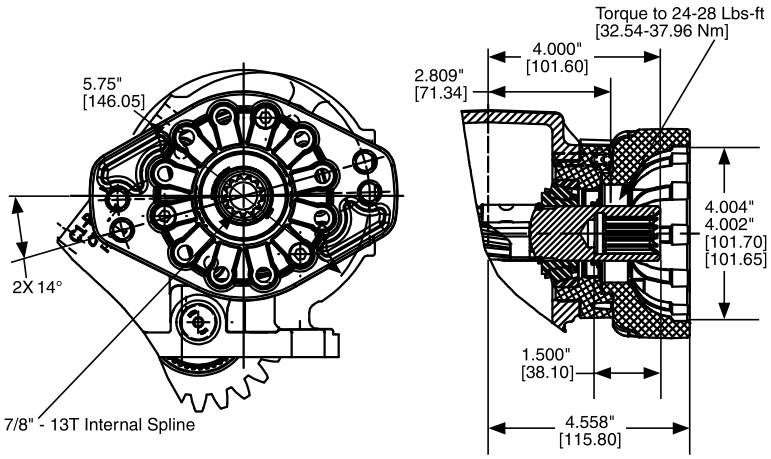


Option Code – GZ	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE B 2 or 4-Bolt
(*Greaseable)	
PTO Series: 660, 680	

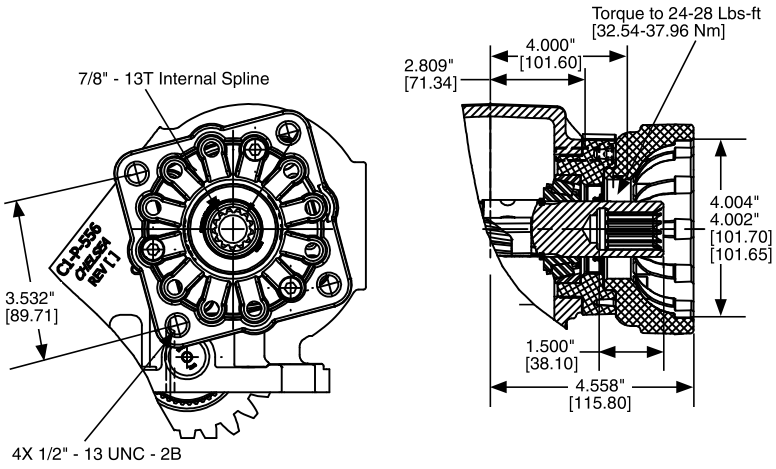


* Recommended Grease: Texaco Coupling Grease, Code 1912 or Equivalent

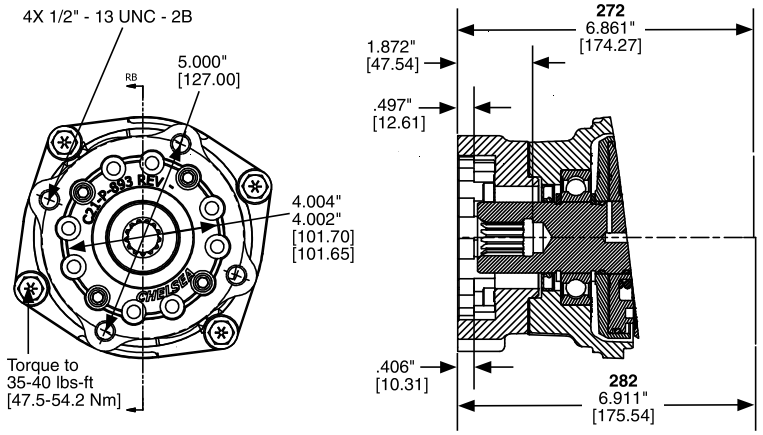
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – RA	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 2-Bolt
Rotates in 30° Increments	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



Option Code – RB	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 2-Bolt
Rotates in 30° Increments	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

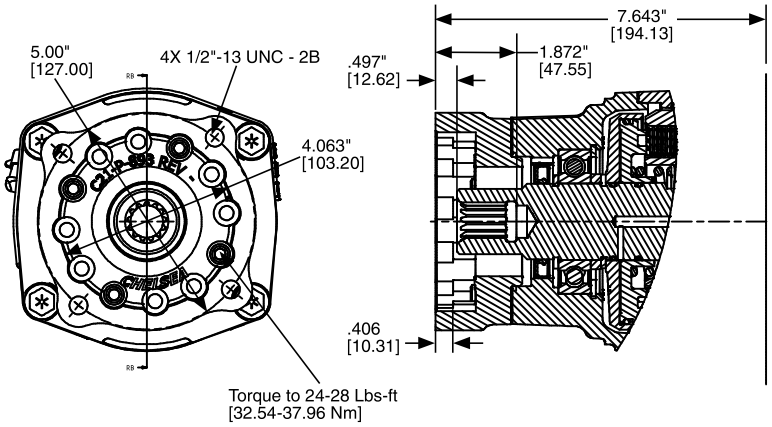


Option Code – RB	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 4-Bolt
Rotates in 30° Increments	
PTO Series: 272, 282	

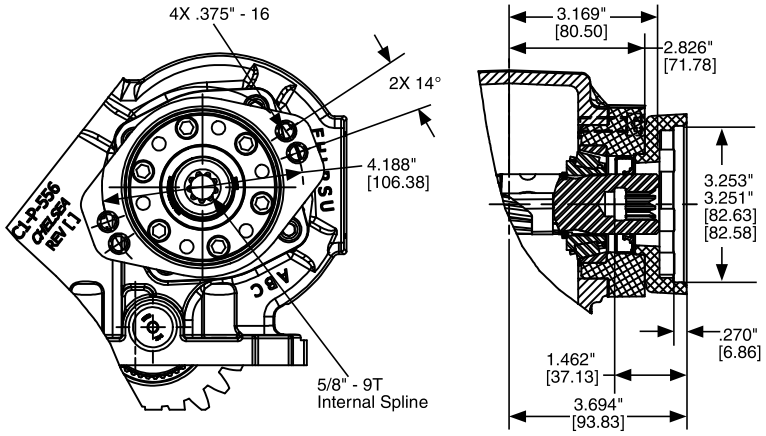
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

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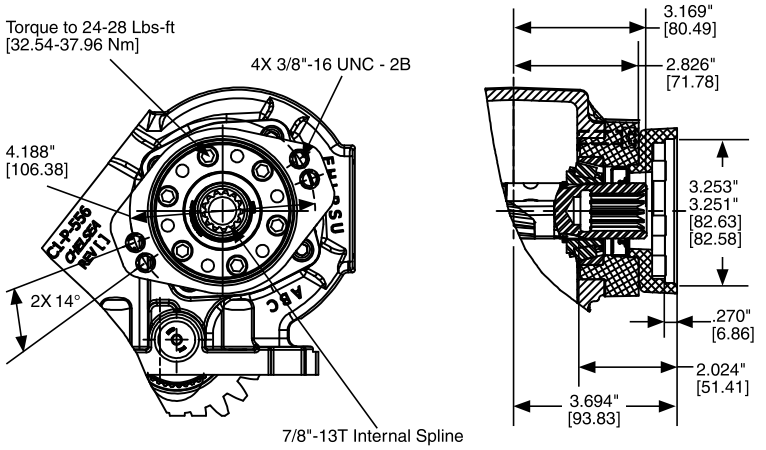
Option Code – RB	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 4-Bolt
Rotates in 30° Increments	
PTO Series: 280, 287	



Option Code – RC	
Type	Direct Mount
Shaft	SAE A (5/8" - 9T)
Flange	Rotatable SAE A 2-Bolt
Rotates in 30° Increments	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

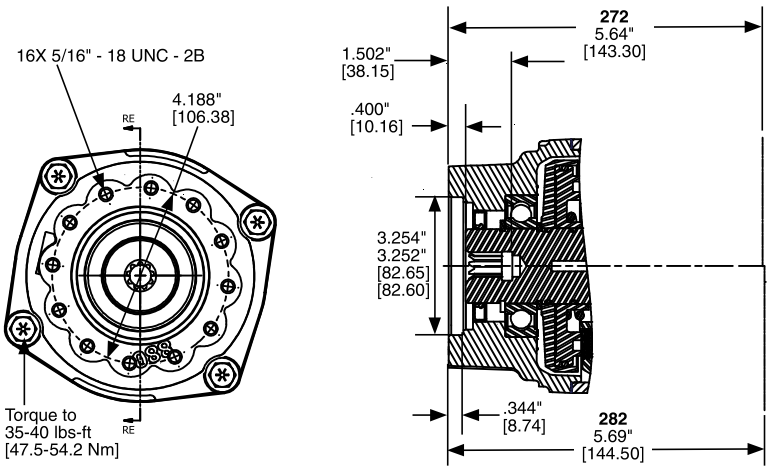


Option Code – RD	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE A 2-Bolt
Rotates in 30° Increments	
PTO Series: 442, 489, 660, 680, 2442	

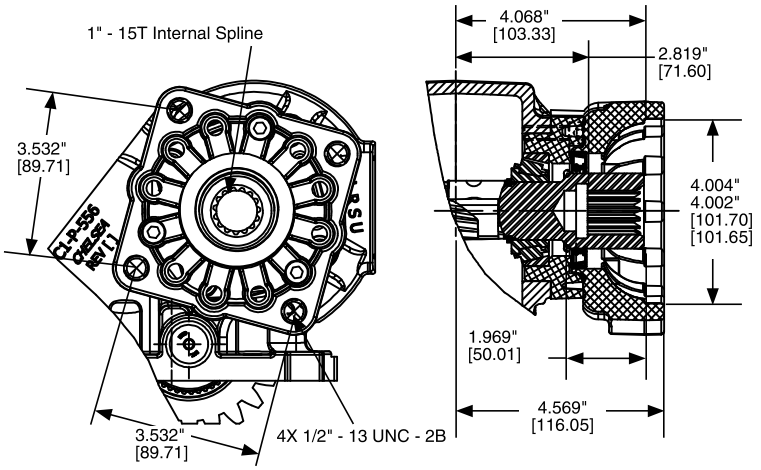


NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

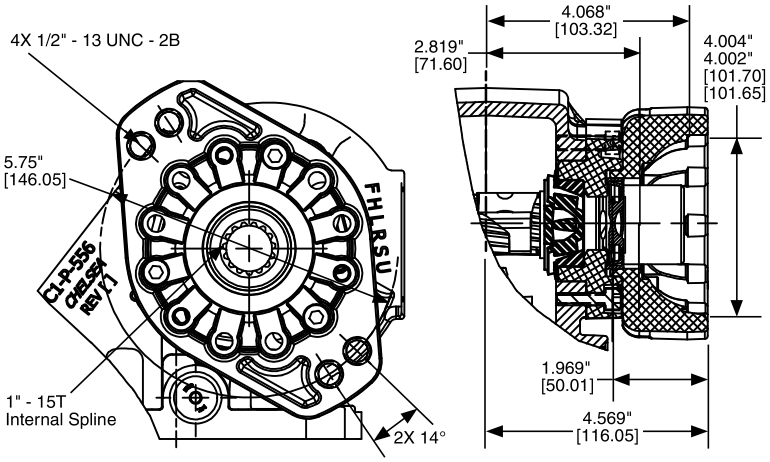
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Option Code – RE	
Type	Direct Mount
Shaft	SAE A (5/8" - 9T)
Flange	Rotatable SAE A 2-Bolt
Pump Rotates in 30° Increments	
PTO Series: 272, 282	



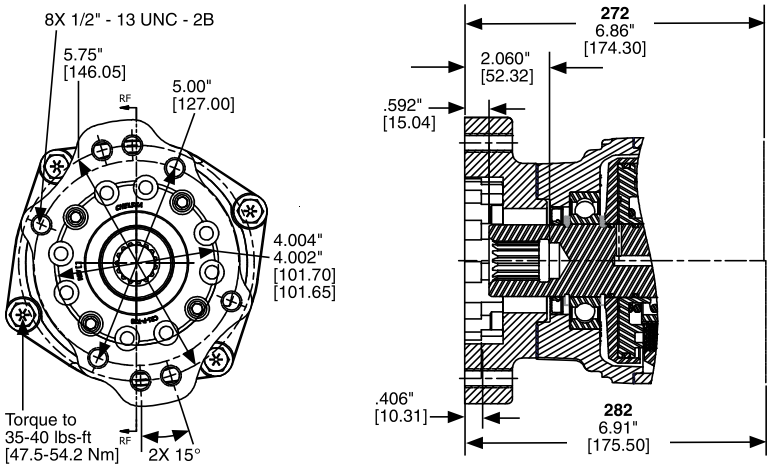
Option Code – RE	
Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	Rotatable SAE B 4-Bolt
Rotates in 30° Increments	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



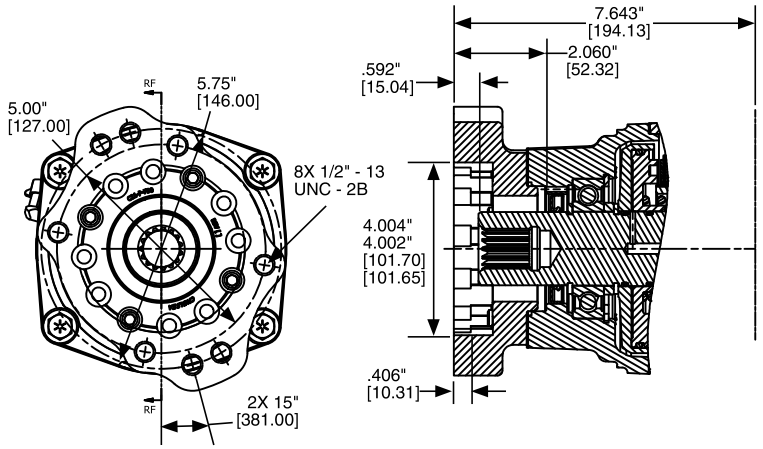
Option Code – RF	
Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	Rotatable SAE B 2-Bolt
Rotates in 30° Increments	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

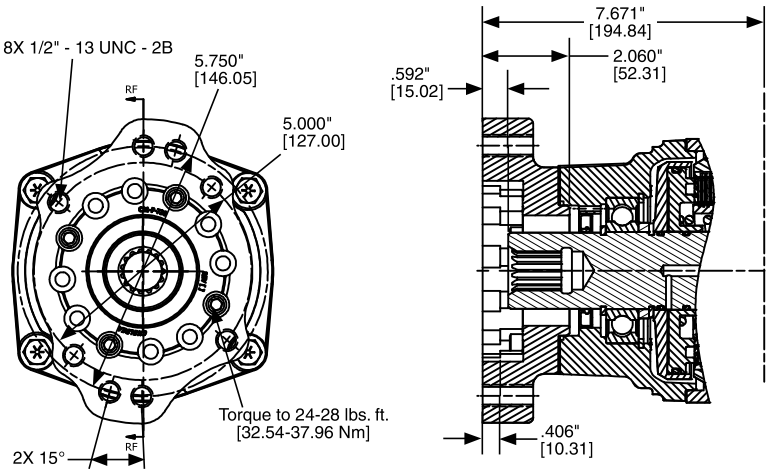
Option Code – RF	
Type	Direct Mount
Shaft	SAE BB Shaft (1" - 15T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 272, 282	



Option Code – RF	
Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 280, 287	

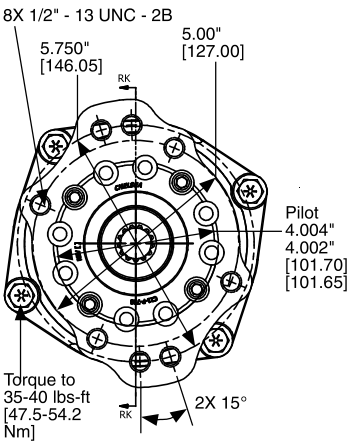


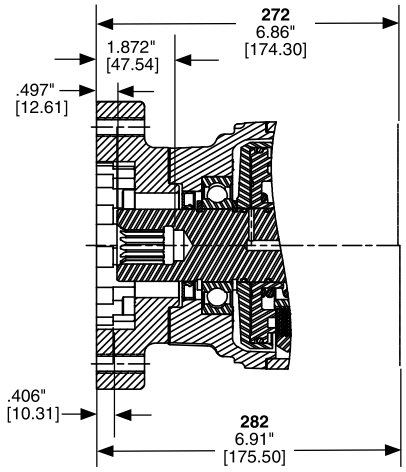
Option Code – RF	
Type	Direct Mount
Shaft	SAE BB (1" - 15T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 870, 877	



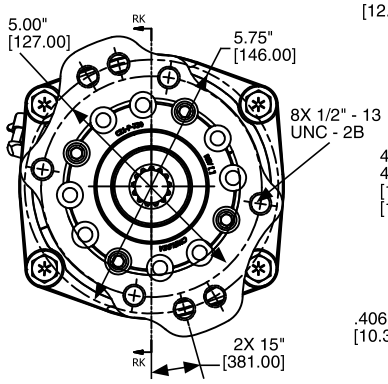
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

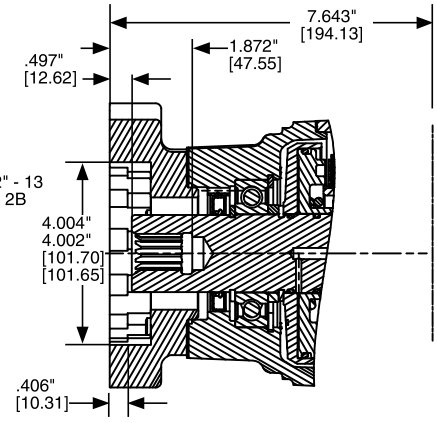
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Olive Branch, MS 38654 USA



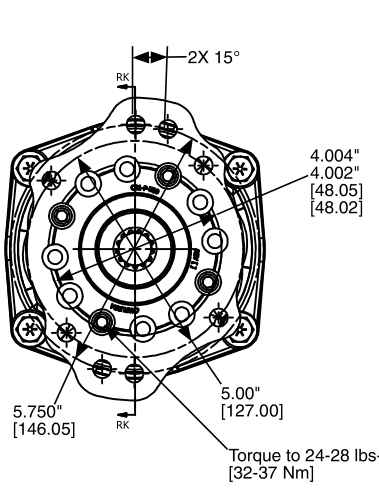


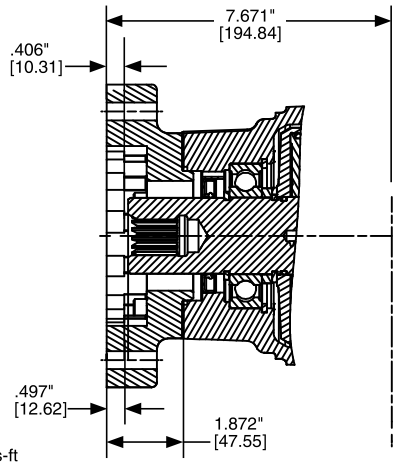
Option Code – RK	
Type	Direct Mount
Shaft	SAE B Shaft (7/8" - 13T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 272, 282	





Option Code – RK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 280, 287	

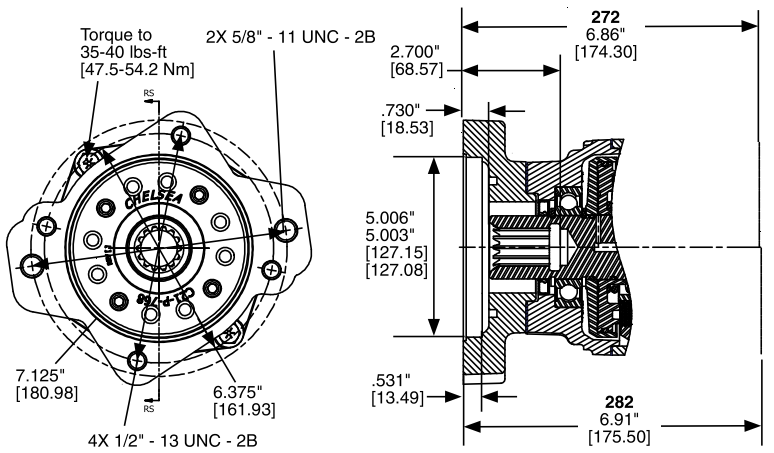




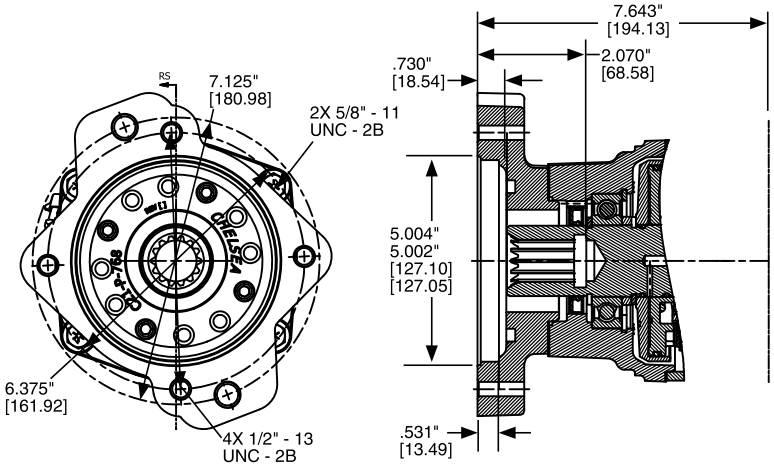
Option Code – RK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 870, 877	

NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

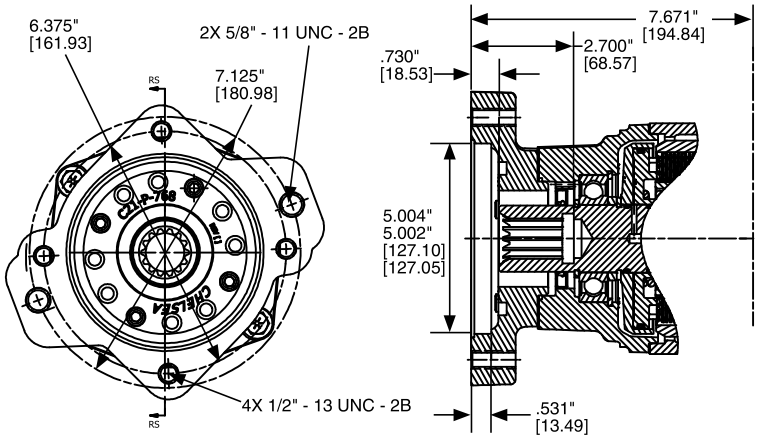
Option Code – RS	
Type	Direct Mount
Shaft	Rotatable SAE C Shaft (1-1/4" - 14T)
Flange	SAE C 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 272, 282	



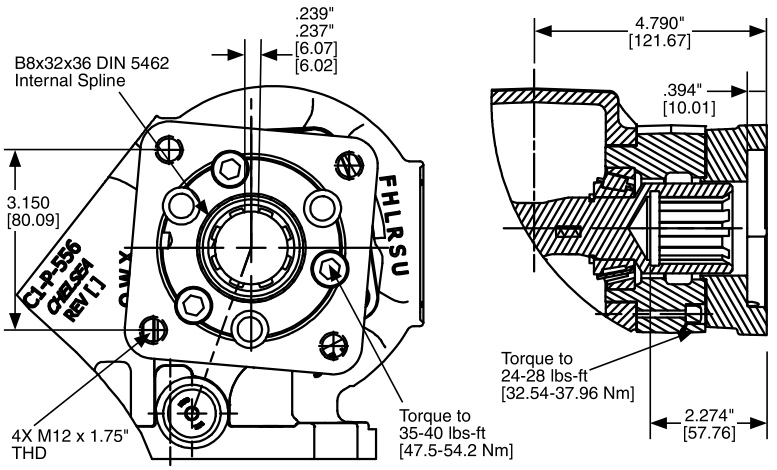
Option Code – RS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	Rotatable SAE C 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 280, 287	



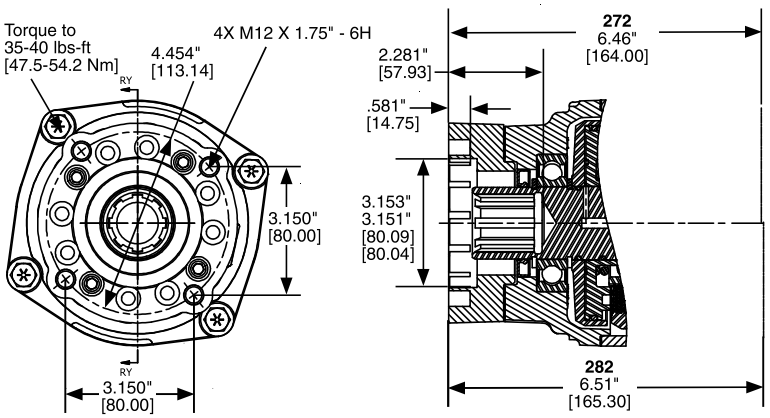
Option Code – RS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	Rotatable SAE C 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 870, 877	



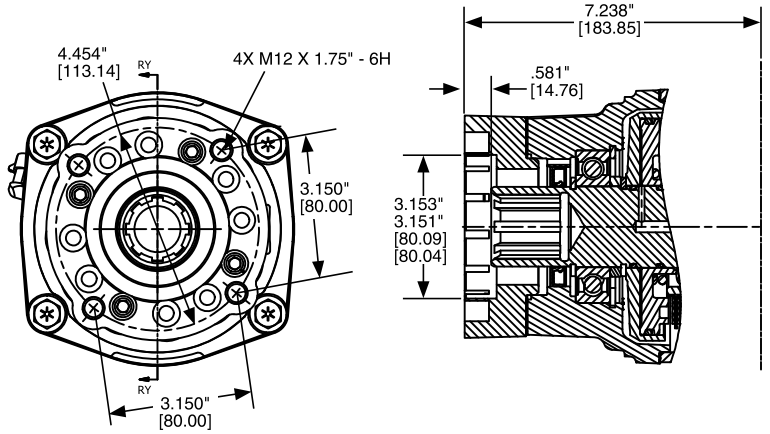
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – RY	
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	Rotatable ISO 7653 Pump Mount
Rotates in 120° Increments	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



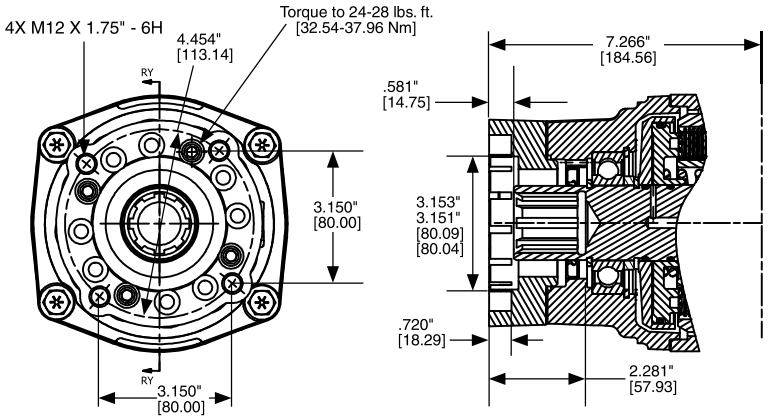
Option Code – RY	
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	Rotatable ISO 7653 Pump Mount
Rotates in 30° Increments	
PTO Series: 272, 282	



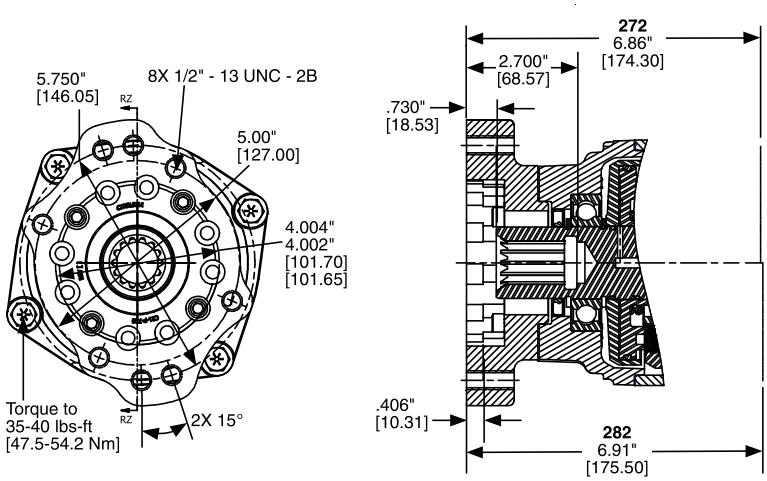
Option Code – RY	
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	Rotatable ISO 7653 Pump Mount
Rotates in 30° Increments	
PTO Series: 280, 287	

NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

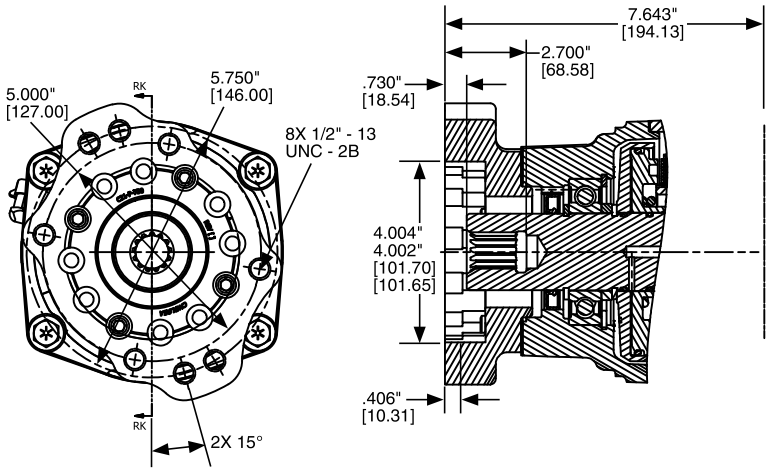
Option Code – RY	
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	Rotatable ISO 7653 Pump Mount
Rotates in 30° Increments	
PTO Series: 870, 877	



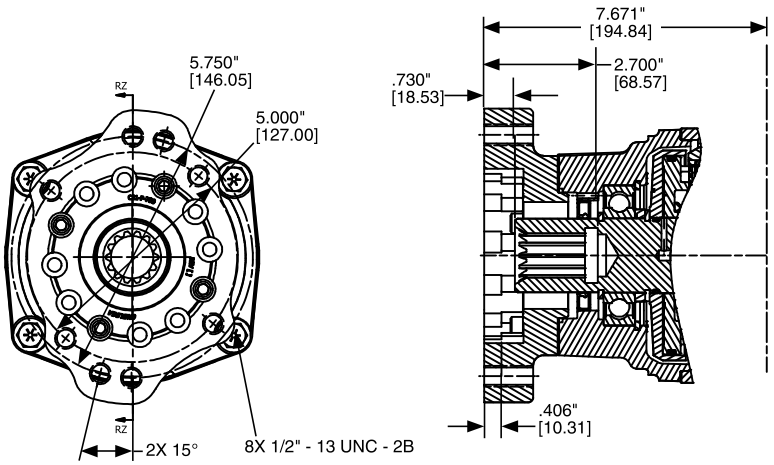
Option Code – RZ	
Type	Direct Mount
Shaft	SAE C Shaft (1-1/4" 14T)
Flange	Rotatable SAE B 2 or 4-Bolt Flange
Rotates in 30° Increments	
PTO Series: 272, 282	



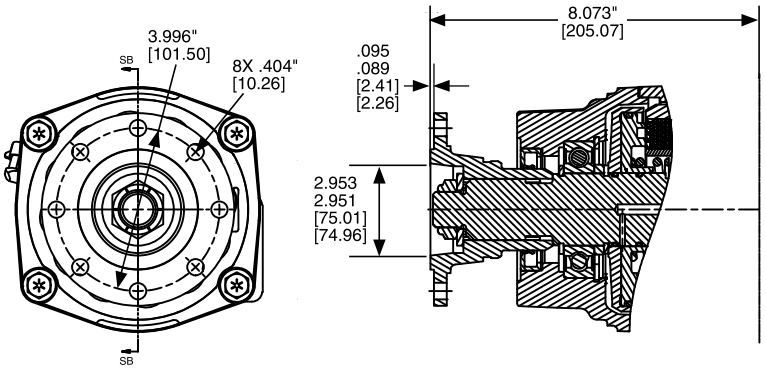
Option Code – RZ	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	Rotatable SAE B 2 & 4-Bolt
Rotates in 30° Increments	
PTO Series: 280, 287	



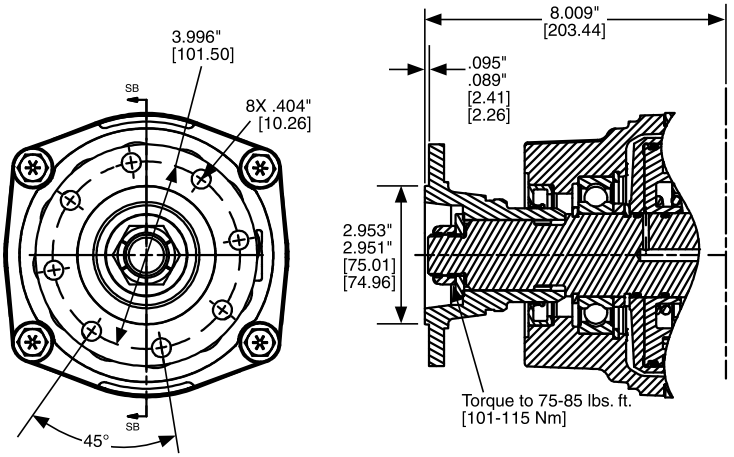
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – RZ	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	Rotatable SAE B 2 or 4-Bolt
Rotates in 30° Increments	
PTO Series: 870, 877	



Option Code – SB	
Type	Remote Mount
Shaft	Smart Start DIN 120 Flange
PTO Series: 280	

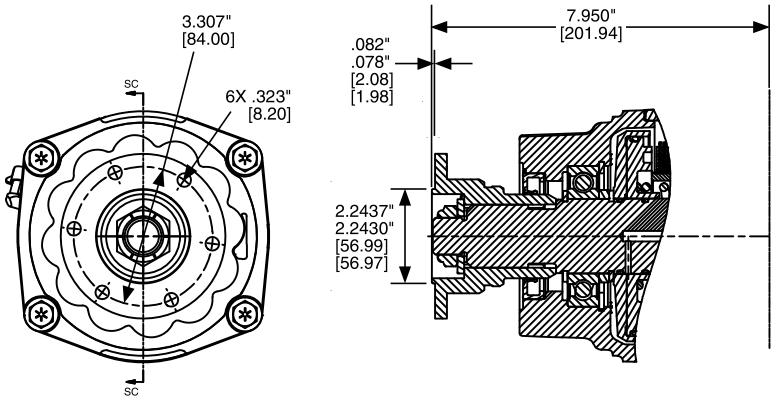


Option Code – SB	
Type	Remote Mount
Shaft	Smart Start DIN 120 Flange
PTO Series: 870	

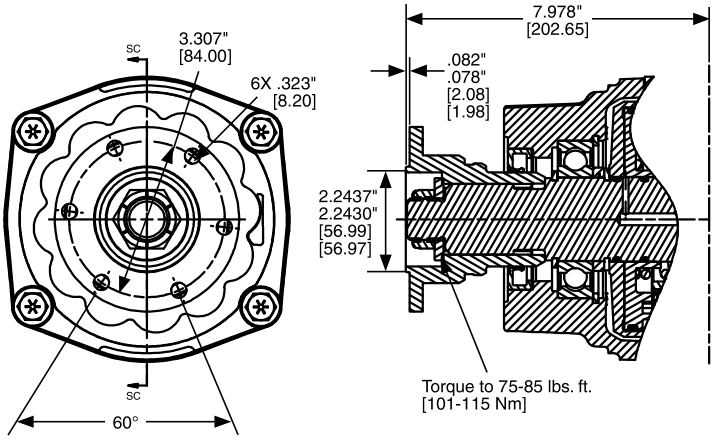
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

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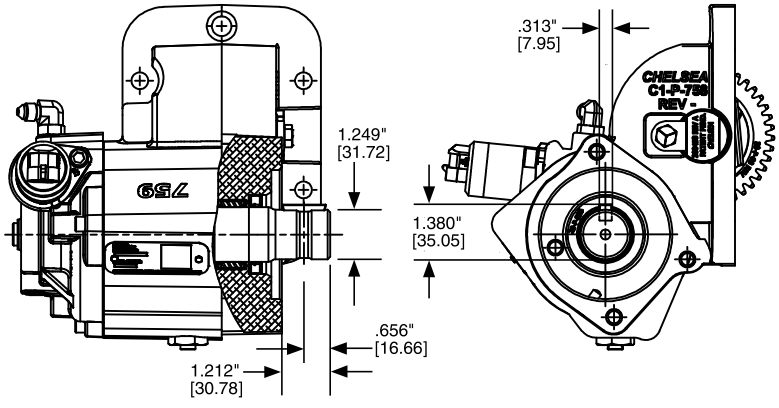
Option Code – SC	
Type	Remote Mount
Shaft	Smart Start DIN 100 Flange
PTO Series: 280	



Option Code – SC	
Type	Remote Mount
Shaft	Smart Start DIN 100 Flange
PTO Series: 870	

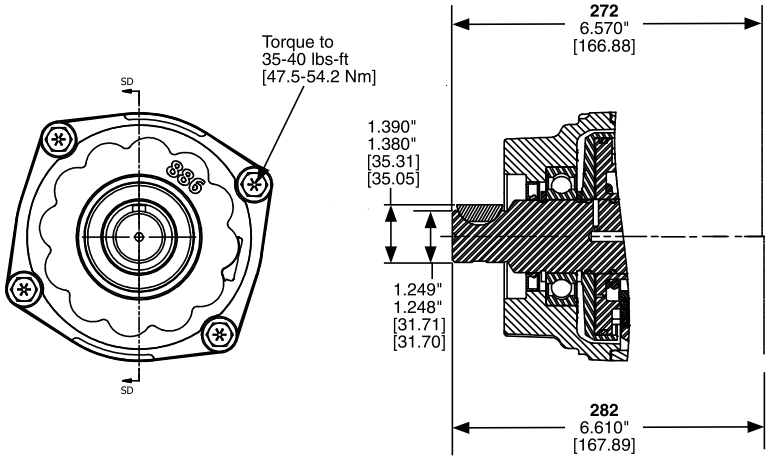


Option Code – SD	
Type	Remote Mount
Shaft	Smart Start (1-1/4" Rd. - 5/16" Key)
PTO Series: 249	

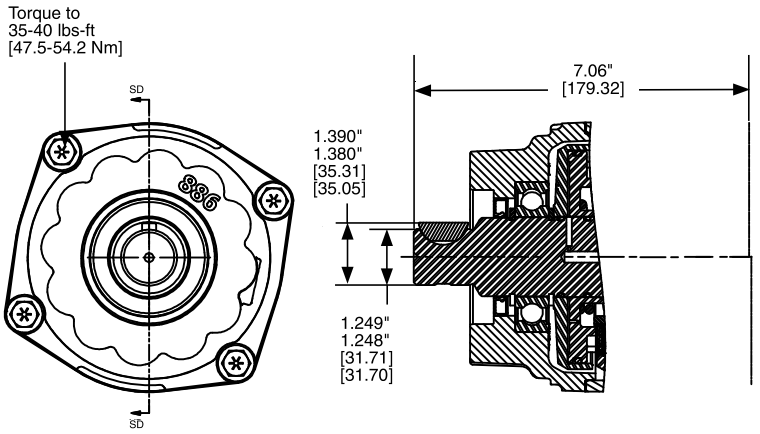


NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

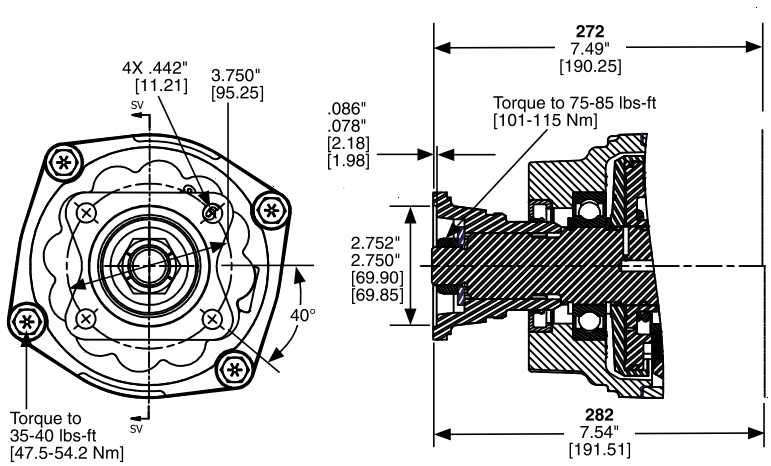
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Chelsea Products Division
Olive Branch, MS 38654 USA



Option Code – SD	
Type	Remote Mount
Shaft	Smart Start (1-1/4" Rd. - 5/16" Key)
PTO Series: 272, 282	



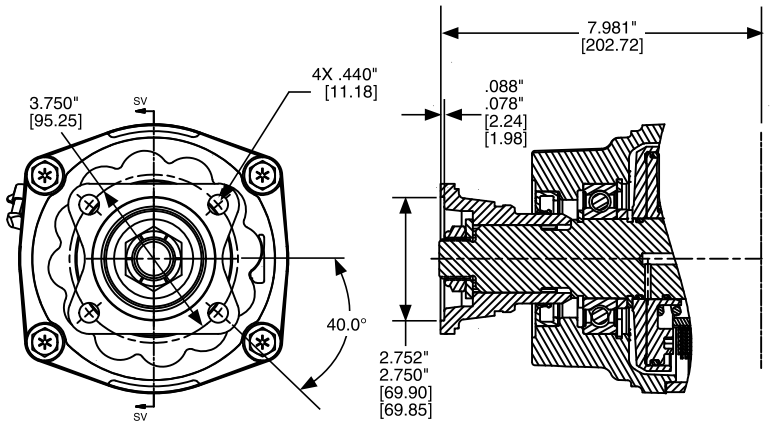
Option Code – SD	
Type	Remote Mount
Shaft	Smart Start (1-1/4" Rd. - 5/16" Key)
PTO Series: 280	



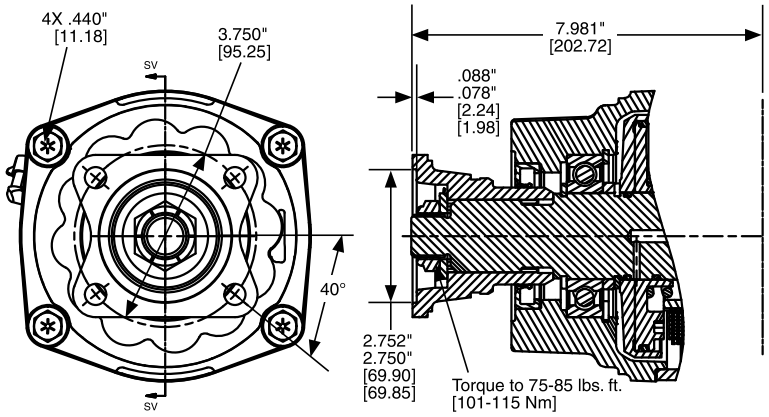
Option Code – SV	
Type	Remote Mount
Shaft	Smart Start 1410 Companion Flange
PTO Series: 272, 282	

NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

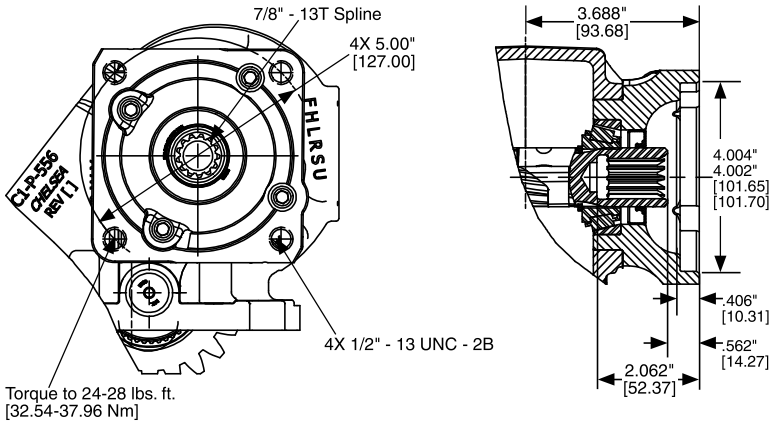
Option Code – SV	
Type	Remote Mount
Shaft	Smart Start 1410 Companion Flange
PTO Series: 280	



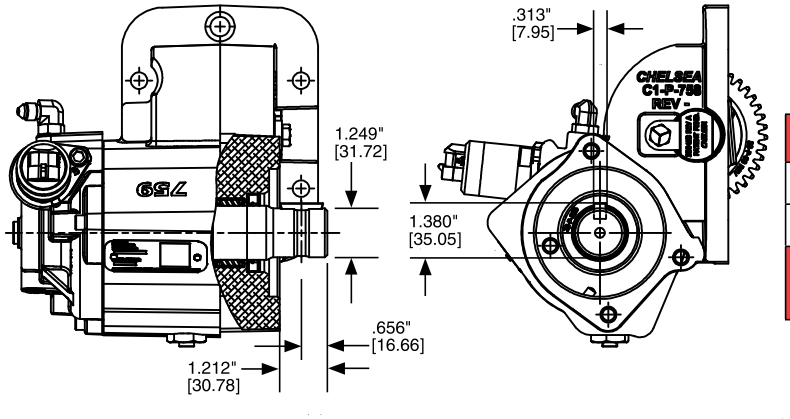
Option Code – SV	
Type	Remote Mount
Shaft	Smart Start 1410 Companion Flange
PTO Series: 870	



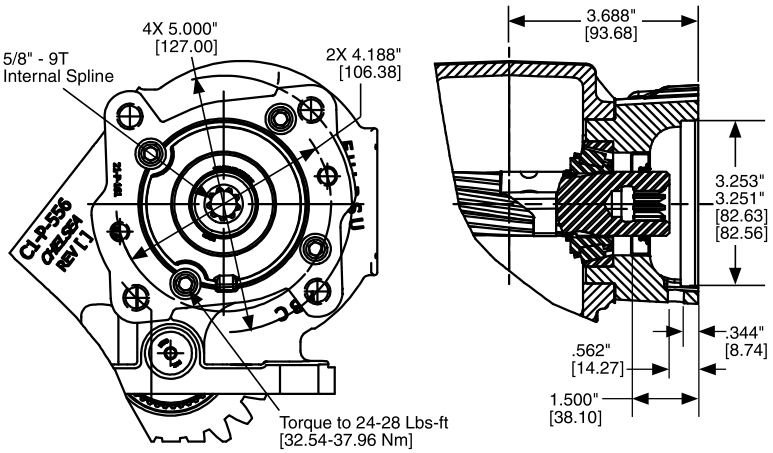
Option Code – SQ	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 4-Bolt
PTO Series: 221, 442, 489	



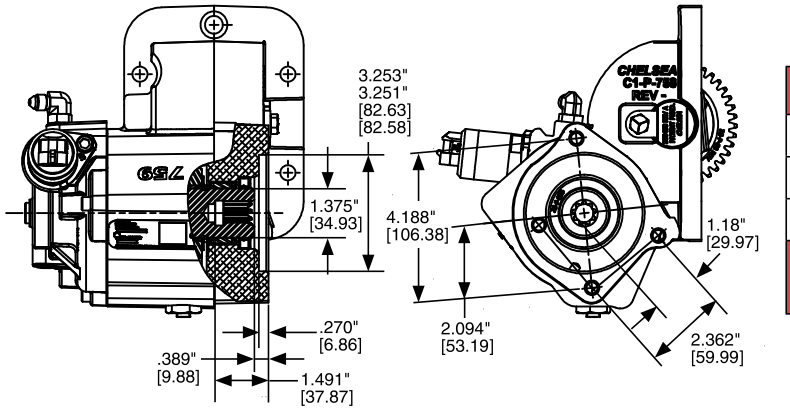
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – XD	
Type	Remote Mount
Shaft	1-1/4" Rd. w/ 5/16" Key
PTO Series: 249	



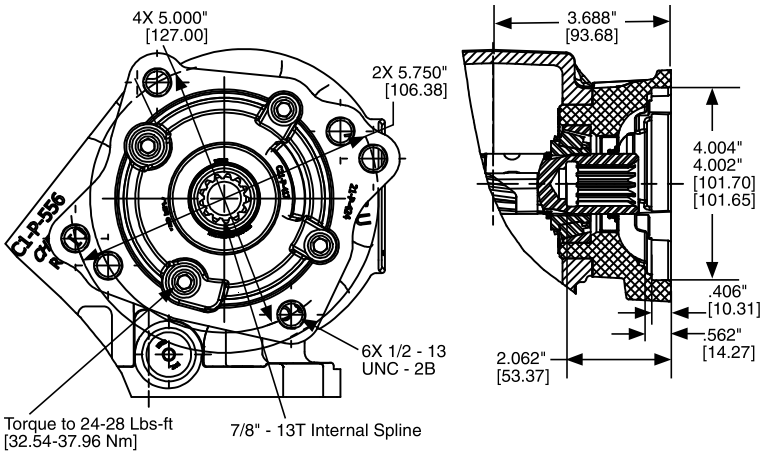
Option Code – XE	
Type	Direct Mount
Shaft	SAE A (5/8" - 9T)
Flange	SAE A 2 or 4-Bolt
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



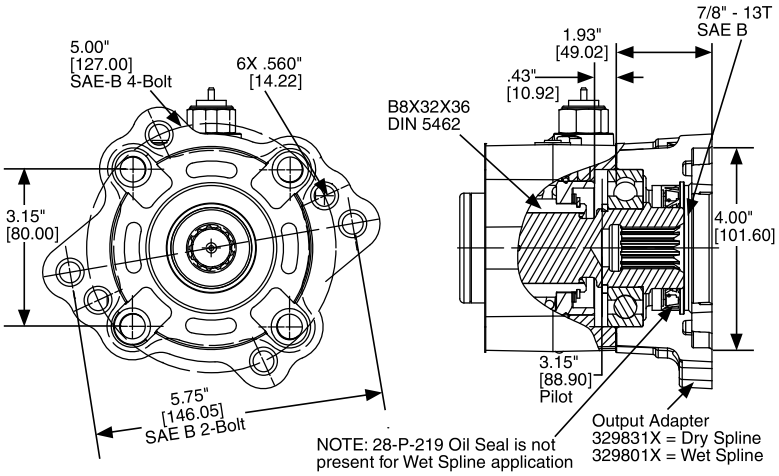
Option Code – XE	
Type	Direct Mount
Shaft	SAE A (5/8" - 9T)
Flange	SAE A 2 or 4-Bolt
PTO Series: 249	

NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

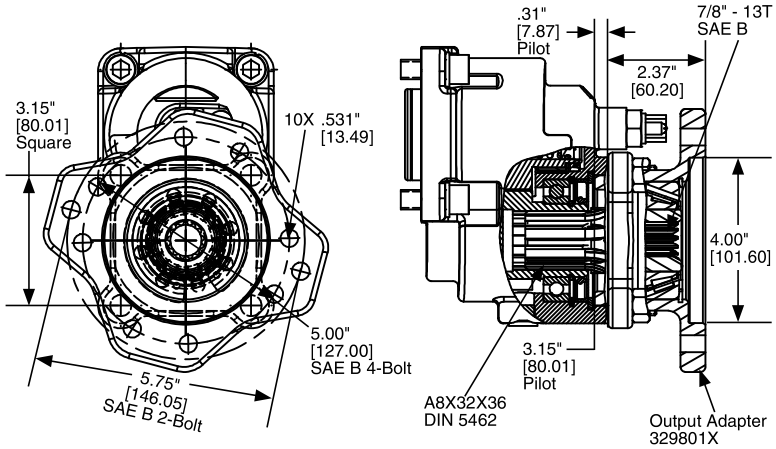
Option Code – XK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



Option Code – XK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 511	

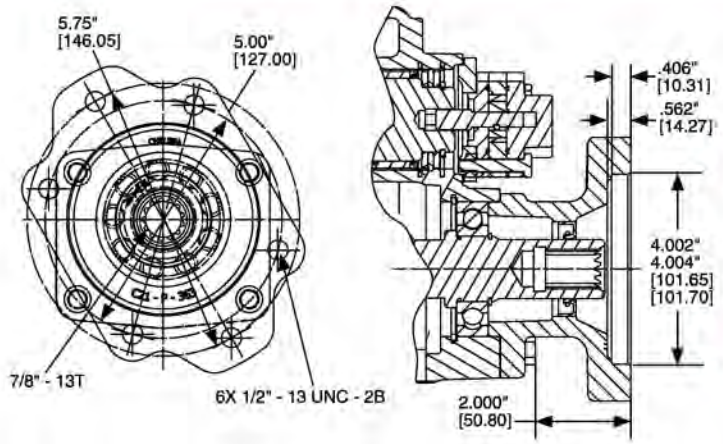


Option Code – XK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 523	

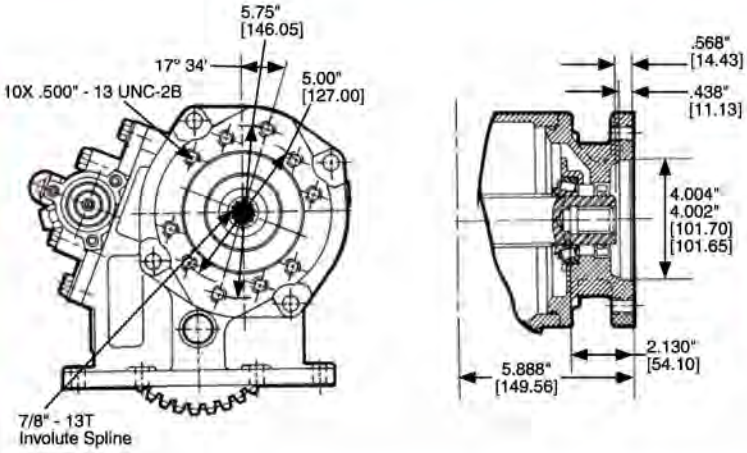


NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

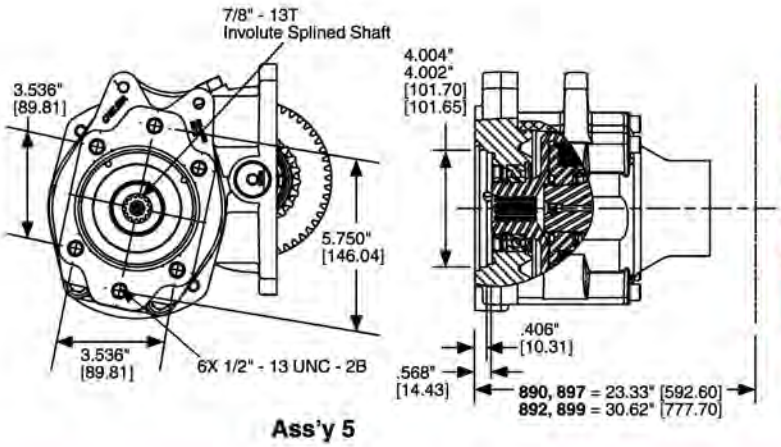
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Option Code – XK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 541	



Option Code – XK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 880	

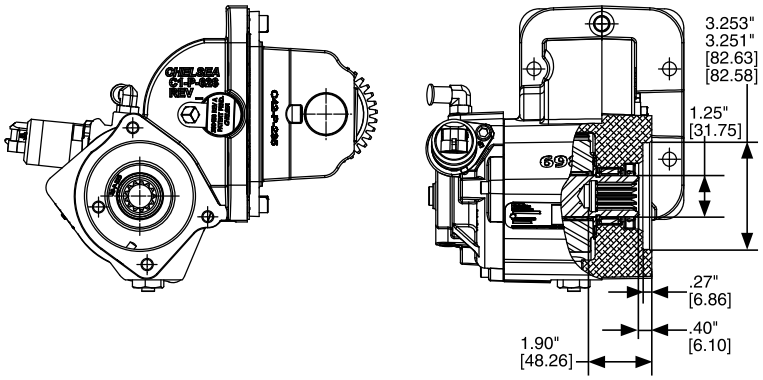


Ass'y 5

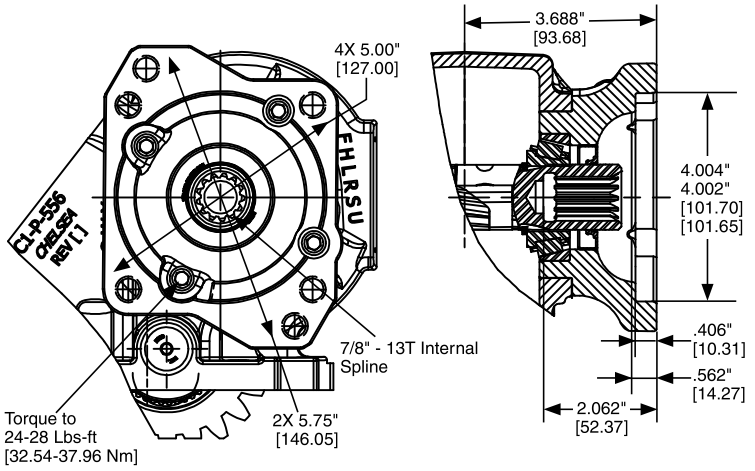
Option Code – XK	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 890, 892, 897, 899	

NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

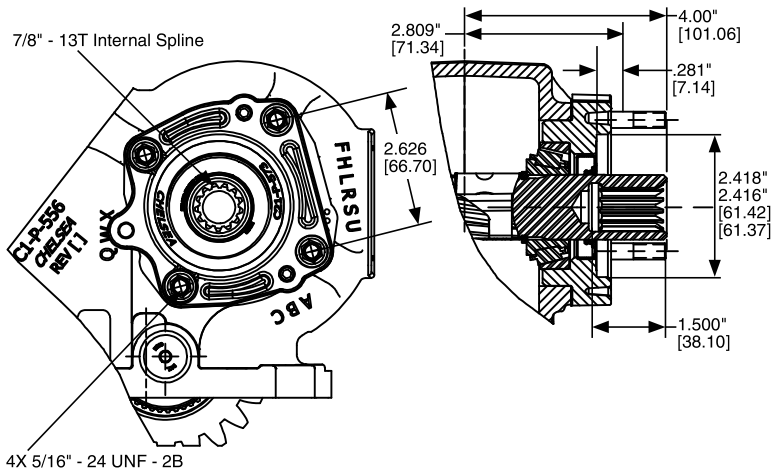
Option Code – XP	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 249	



Option Code – XQ	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	SAE B 2 or 4-Bolt
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

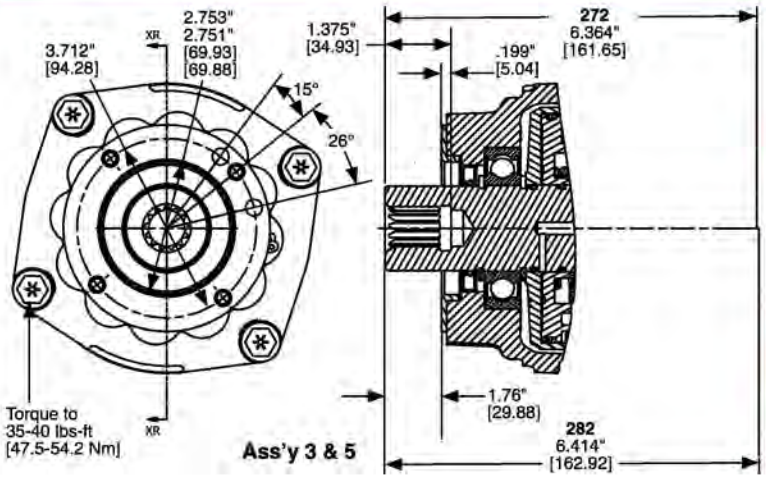


Option Code – XR	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Chelsea Special (Cloverleaf)
For Parker P16 S Flange Pumps	
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	

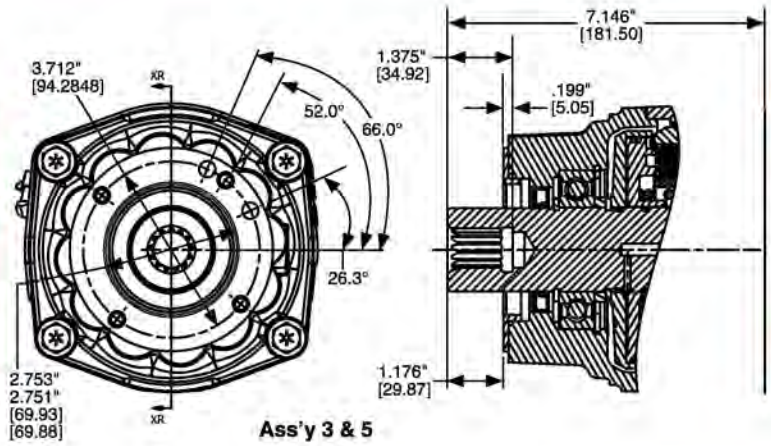


NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

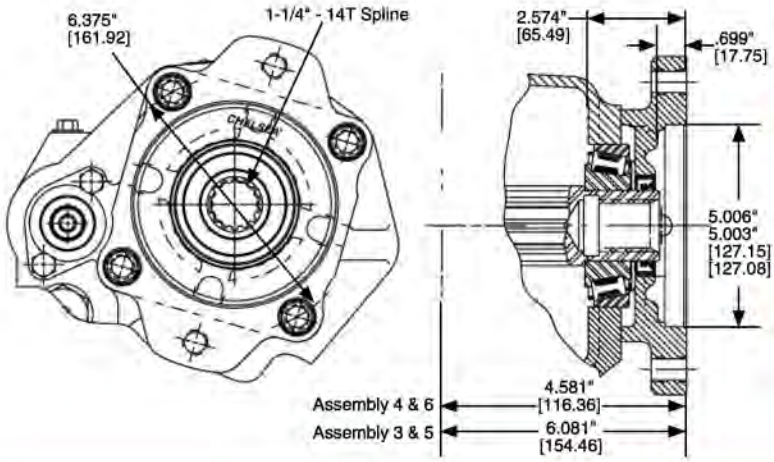
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Chelsea Products Division
Olive Branch, MS 38654 USA



Option Code – XR	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Chelsea Special (Cloverleaf)
For Parker P16 S Flange Pumps	
PTO Series: 272, 282	



Option Code – XR	
Type	Direct Mount
Shaft	SAE B (7/8" - 13T)
Flange	Chelsea Special (Cloverleaf)
For Parker P16 S Flange Pumps	
PTO Series: 280, 287	

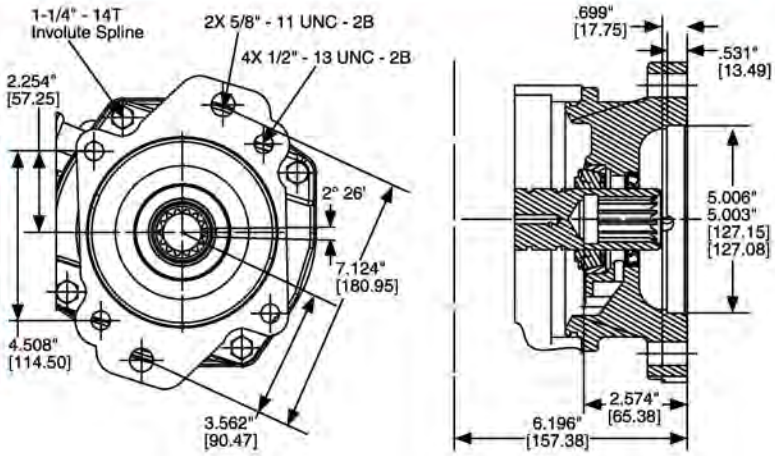


Option Code – XS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2 or 4-Bolt
PTO Series: 823	

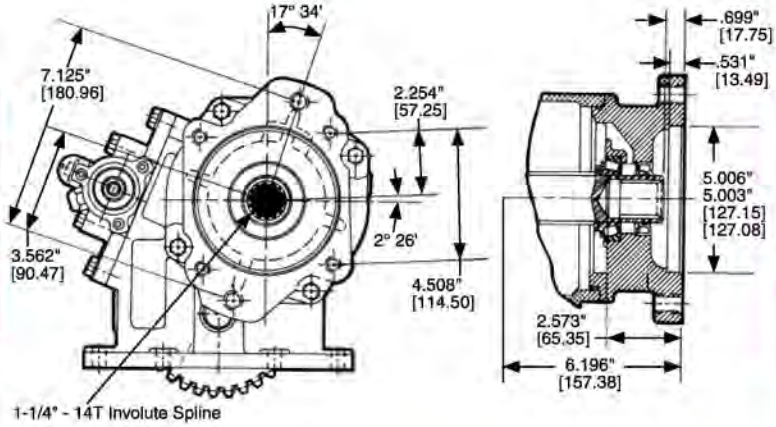
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

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Olive Branch, MS 38654 USA

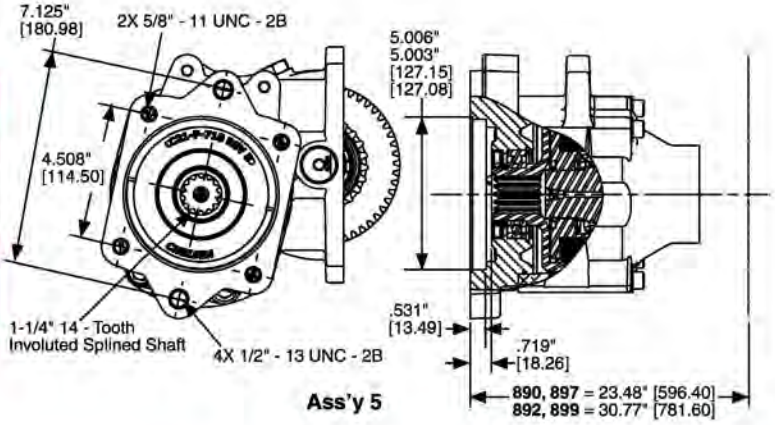
Option Code – XS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2 & 4-Bolt
PTO Series: 852, 885	



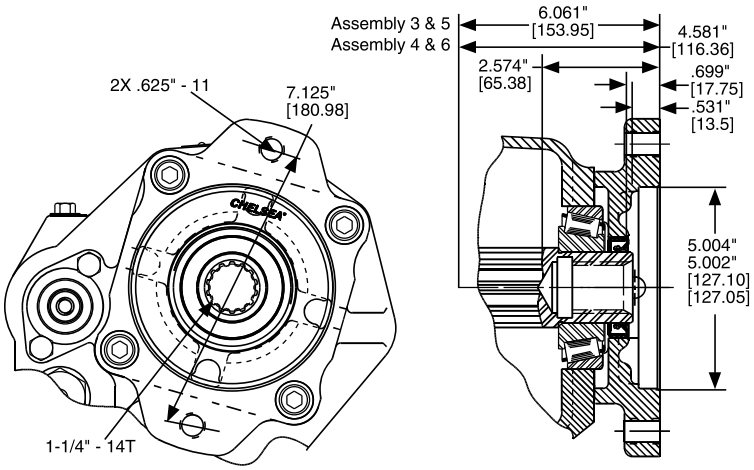
Option Code – XS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2 & 4-Bolt
PTO Series: 880	



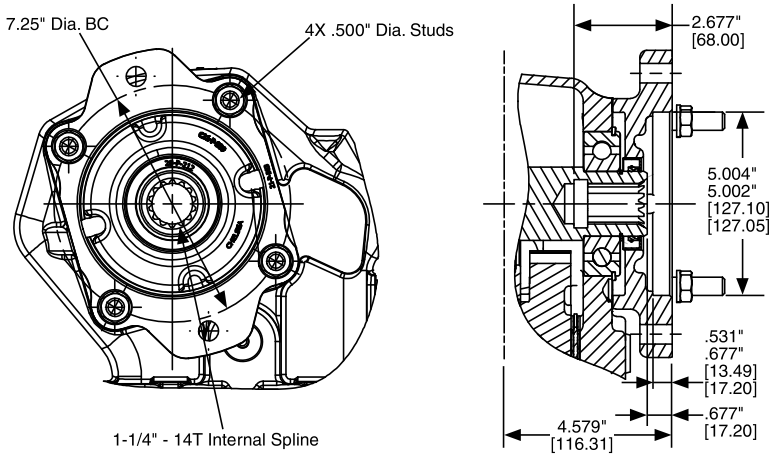
Option Code – XS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2 & 4-Bolt
PTO Series: 890, 892, 897, 899	



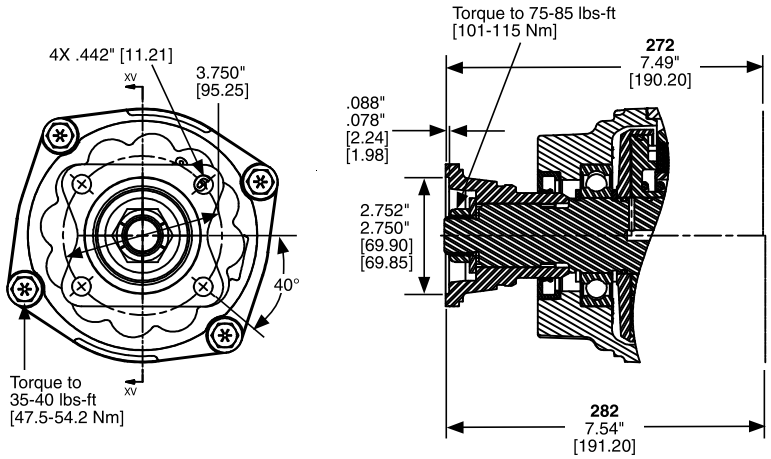
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – XU	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2-Bolt
PTO Series: 823	



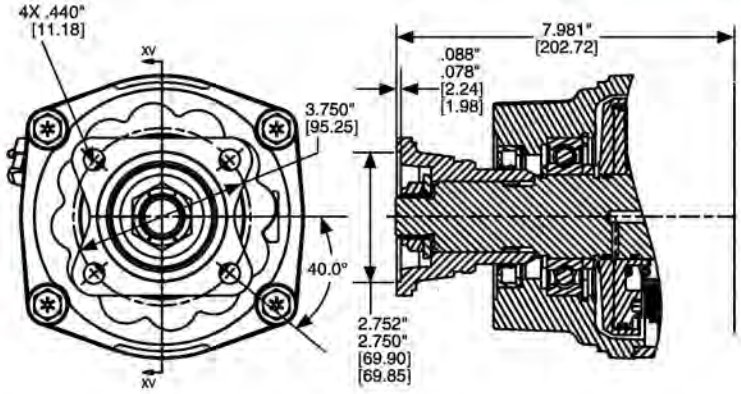
Option Code – XU	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 2-Bolt
PTO Series: 852	



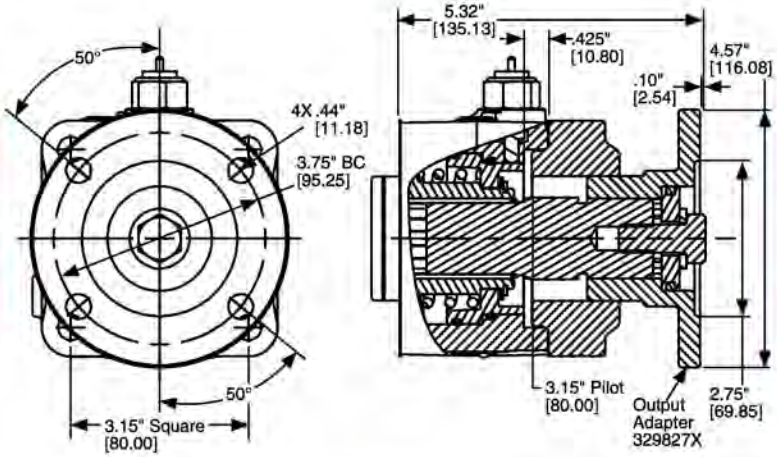
Option Code – XV	
Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 272, 282	

NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

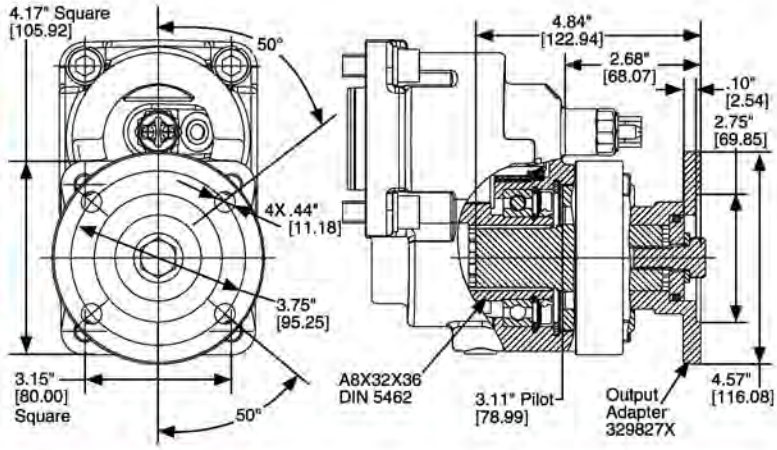
Option Code – XV	
Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 280, 287	



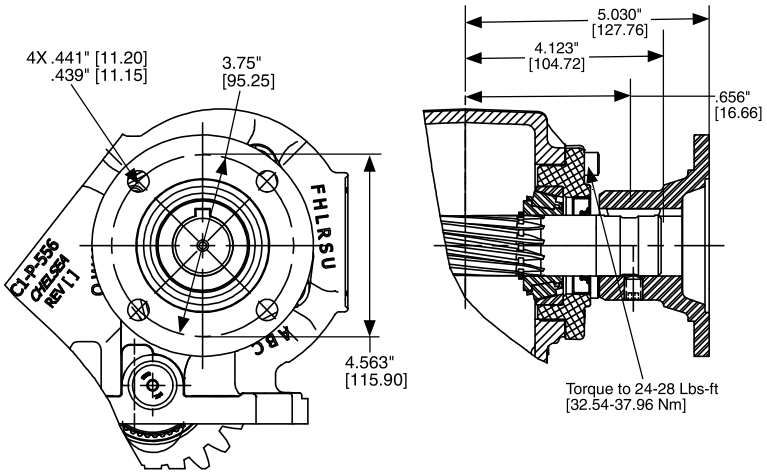
Option Code – XV	
Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 511	



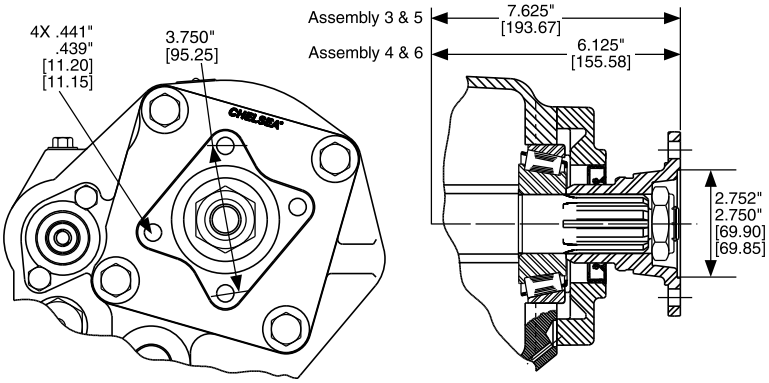
Option Code – XV	
Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 523	



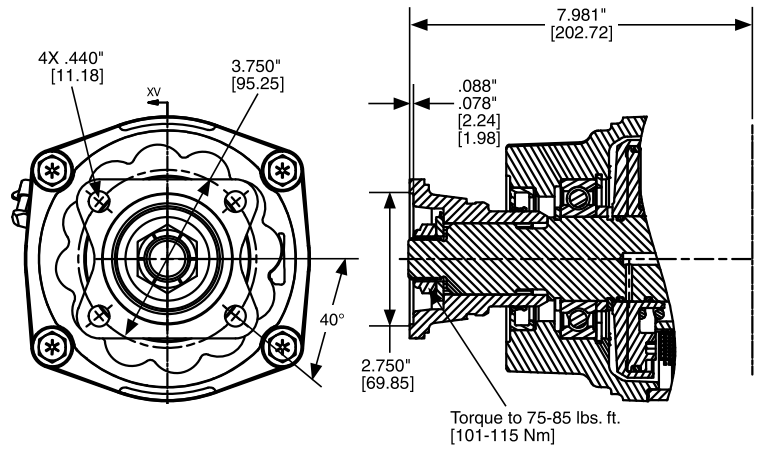
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – XV	
Type	Remote Mount
Shaft	1350/1410 Companion Flange
PTO Series: 660, 680	



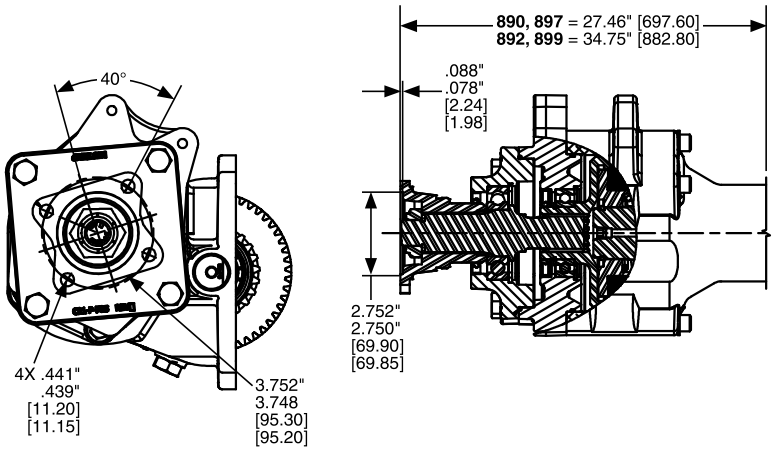
Option Code – XV	
Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 823, 863, 880	



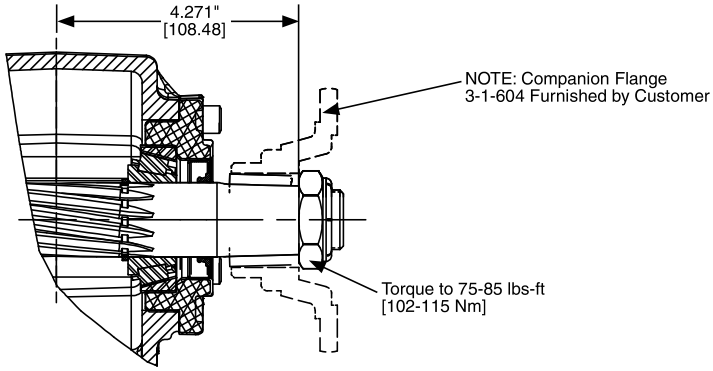
Option Code – XV	
Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 870, 877	

NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

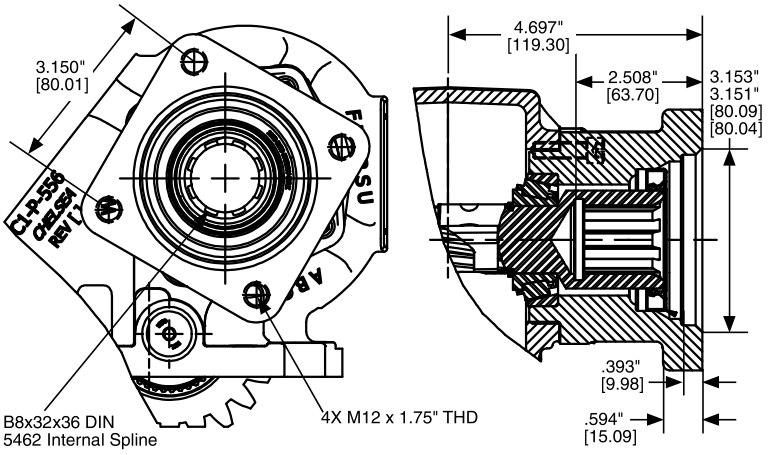
Option Code – XV	
Type	Remote Mount
Shaft	1410 Companion Flange
PTO Series: 890, 892, 897, 899	



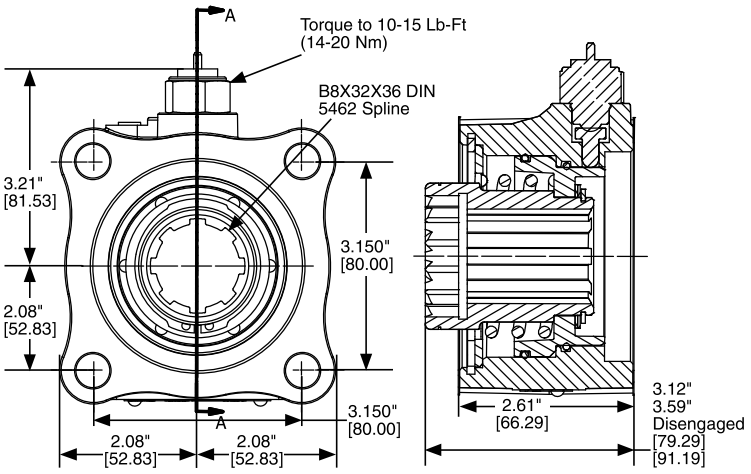
Option Code – XX	
Type	Remote Mount
Shaft	1-1/4" SAE Taper Shaft
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



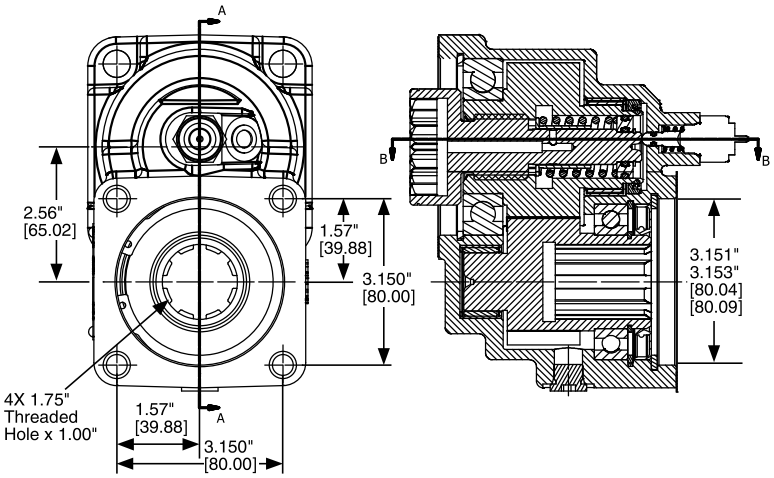
Option Code – XY	
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36 - 8T)
Flange	ISO 7653 Pump Mount
PTO Series: 221, 267, 442, 447, 489, 660, 680, 2442	



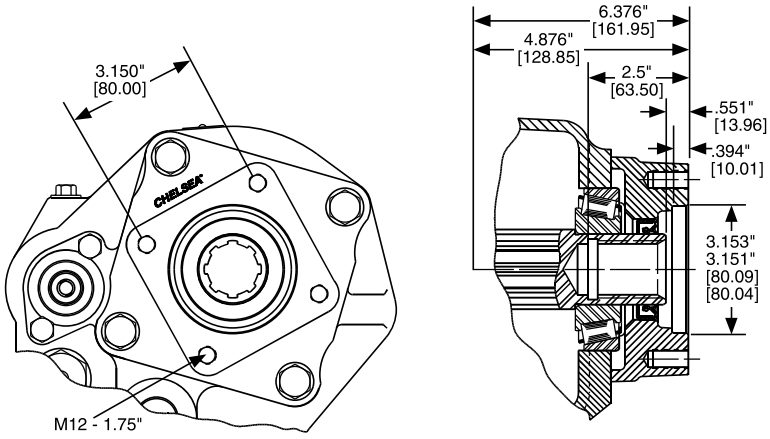
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.



Option Code – XY	
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	ISO 7653 Pump Mount
PTO Series: 511	



Option Code – XY	
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	ISO 7653 Pump Mount
PTO Series: 523	

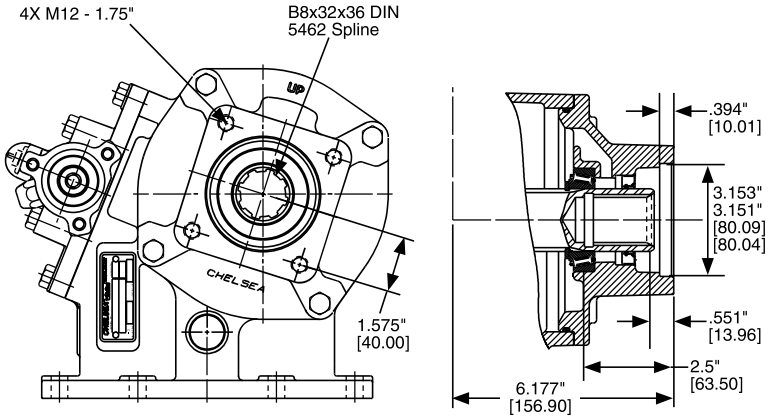


Option Code – XY	
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	ISO 7653 Pump Mount
PTO Series: 823	

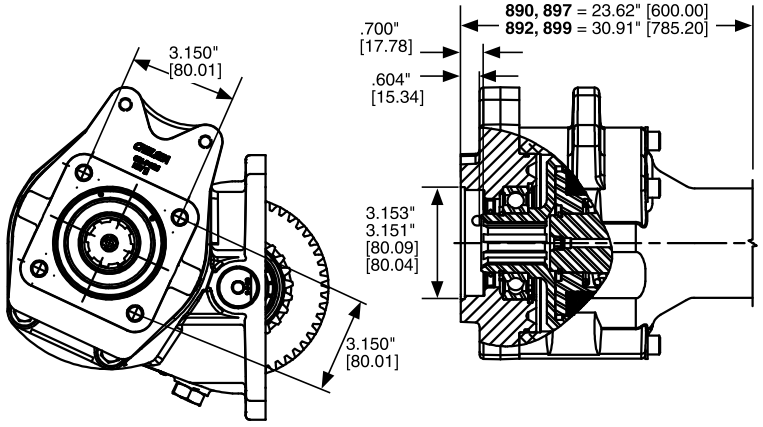
NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

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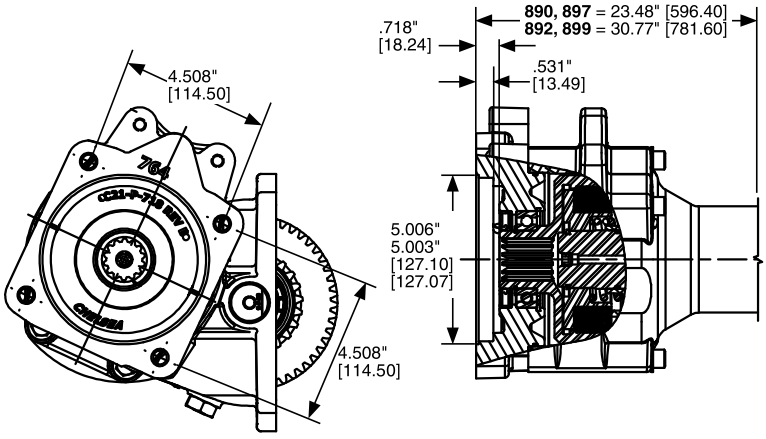
Option Code – XY	
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	ISO 7653 Pump Mount
PTO Series: 880	



Option Code – XY	
Type	Direct Mount
Shaft	DIN 5462 (B8x32x36-8T)
Flange	ISO 7653 Pump Mount
PTO Series: 890, 892, 897, 899	

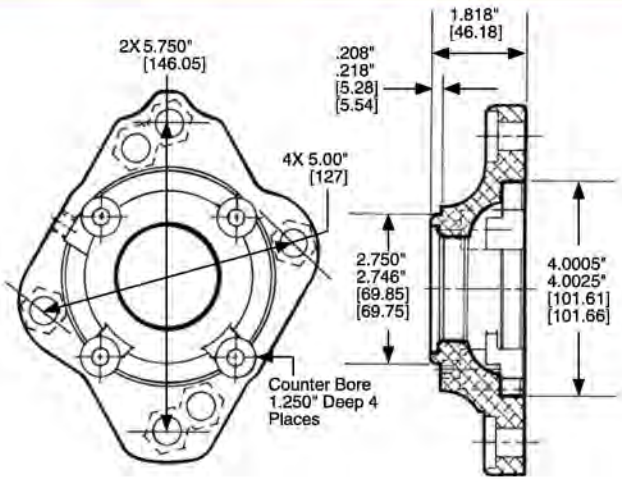


Option Code – ZS	
Type	Direct Mount
Shaft	SAE C (1-1/4" - 14T)
Flange	SAE C 4-Bolt
PTO Series: 890, 892, 897, 899	



NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

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Option Code – 21-P-525	
Flange	SAE B 2 or 4-Bolt
(XR to XK Conversion Flange)	

Flanges

NOTE: PUMP INSTALLATION PRECAUTIONS
Pump support brackets may be required - see General Safety information section for pump support bracket requirements.
Also remember to pack the female PTO shaft with grease before installing the pump to the PTO.

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Mechanical Shift 6-Bolt PTOs
- PTO Options Chart ..... 2.1 thru 2.2
- Flange Conversion Kits ..... 2.3 thru 2.4
- Shifter & Cover Kits 2.5
- Installation Kits & Filler Blocks 2.6

Mechanical Shift 8-Bolt PTOs
- PTO Options Chart ..... 2.7 thru 2.8
- Flange Conversion Kits ..... 2.9 thru 2.11
- Shifter & Cover Kits 2.12
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Mechanical Shift Rear Mount PTOs
- PTO Options Chart 2.14
- Installation Kits 2.14

PowerShift Hydraulic 6-Bolt PTOs
- PTO Options Chart 2.15
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PowerShift Pneumatic or Hydraulic 6/8-Bolt PTOs
- PTO Options Chart 2.17
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- PTO Options Chart 2.20

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- PTO Options Chart 2.21
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Constant Mesh 10-Bolt PTOs
- PTO Options Chart 2.23
- Flange Conversion Kits 2.24

PowerShift Rear Mount PTOs
- PTO Options Chart 2.25

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- PTO Options Chart 2.26
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Crankshaft Driven
- PTO Options Chart 2.27
- Flange Conversion Kits 2.28

Continued on next page

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Parker Chelsea
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Olive Branch, MS 38654 USA

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PTO Options Chart – Mechanical PTOs		221	290	340
Lubrication				
P	Pressure Lube	x		
X	No Pressure Lube	x	x	x
Shifting				
G	Air Shift (Opposite Output)			x
H	No Shift Assembly	x		
P	12V Elec/Air Shift	x	x	
C	Special Shift Control & Bracket Kit	x		
M	Constant Mesh	x		
A	Air Shift (Same Side as Output)			x
A	Air Shift	x	x	
S	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return	x	x	
T	Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return	x	x	
U	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/o Neutral Spring Return	x	x	
V	Air Shift w/o Installation Kit	x	x	x
W	Wire Shift	x		
X	Wire Shift w/o Cable & Knob	x		
Y	Lever Shift			x
Output				
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x	x	
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	x	
AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)	x		
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)	x	x	x
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)	x	x	
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	x	
XQ**	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x		
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)	x	x	
XX***	1-1/4" Tapered Output Shaft w/Keyway	x	x	
XY	ISO 7653 Pump Mount DIN 5462 Shaft	x	x	
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)	x	x	
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	x	
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x		
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)	x	x	
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	x	
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x	x	
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft	x	x	
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)	x		
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)	x		
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x		
GQ**	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x		
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x		
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)	x		

** XQ/GQ same as XK/GK except flange rotated 90°
*** Order companion (379824) separately
NOTE: Always check current price book for available options

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Options

PTO Options Chart – Mechanical PTOs		442	447	660
Lubrication				
P	Pressure Lube	x	x	x
X	No Pressure Lube	x	x	x
Shifting				
H	No Shift Assembly	x	x	x
P	12V Elec/Air Shift	x	x	x
C	Special Shift Control & Bracket Kit	x	x	x
M	Constant Mesh	x	x	x
A	Air Shift	x	x	x
S	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return	x	x	x
T	Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return	x	x	x
U	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/o Neutral Spring Return	x	x	x
V	Air Shift w/o Installation Kit	x	x	x
W	Wire Shift	x	x	x
X	Wire Shift less Cable & Knob	x	x	x
D	Eaton Procision 12V Elec/Air	x		
E	Hydraulic Shift (Eaton Procision)	x		
Output				
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x	x	x
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	x	x
AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)	x	x	x
SQ	SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x		
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)	x	x	x
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)	x	x	x
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	x	x
XQ**	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	x	x
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)	x	x	x
XV	1410 Series Companion Flange			x
XX***	1-1/4" Tapered Output Shaft w/ Keyway	x	x	x
XY	ISO 7653 Pump Mount DIN 5462 Shaft	x	x	x
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)	x	x	x
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	x	x
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	x	x
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)	x	x	x
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	x	x
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x	x	x
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft	x	x	x
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)	x	x	x
GH	Greaseable SAE B 2-Bolt Rotatable Flange, SAE BB Shaft (1" - 15T)			x
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)	x	x	x
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	x	x
GQ**	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	x	x
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x	x	x
GZ	Greaseable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)			x
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)	x	x	x
GY	Greaseable ISO 7653 Pump Mount DIN 5462 Shaft			x

** XQ/GQ same as XK/GK except flange rotated 90°
*** Order companion (379824) separately
NOTE: Always check current price book for available options

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

For converting the 221, 290, 442, 447, 660 Series Chelsea PTOs from a driveshaft output, or as listed, to a new pump flange output, use the following kits. Consult the Chelsea price book for availability by series.

Pump Suffix	Kit Number Suffix	Kit Number	Flange Type	Shaft Type (SAE)
AF	XD to AF	328591-30X	SAE B 2 or 4-Bolt	1" - 15 Tooth Splined (BB)
AF (Wet Spline 221)	XD to AF	328591-140X	SAE B 2 or 4-Bolt	1" - 15 Tooth Splined (BB)
AK	XD to AK	328591-28X	SAE B 2-Bolt	7/8" - 13 Tooth Splined (B)
AK (B Ratio)	XD to AK	329436-7X	SAE B 2-Bolt	7/8" - 13 Tooth Splined (B)
AZ	XD to AZ	328591-70X	SAE B 2 or 4-Bolt	1-1/4" - 14 Tooth Splined (C)
SQ	XD to SQ	328591-149X	SAE B 4-Bolt	7/8" - 13 Tooth Splined (B)
SQ (B Ratio)	XD to SQ	329436-9X	SAE B 4-Bolt	7/8" - 13 Tooth Splined (B)
XE	XD to XE	328591-27X	SAE A 2 or 4-Bolt	5/8" - 9 Tooth Splined (A)
XK	XD to XK	328591-16X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined (B)
XK (B Ratio)	XD to XK	329436-3X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined (B)
XQ	XD to XQ	328591-17X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined (B)
XQ (B Ratio)	XD ro XQ	329436-6X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined (B)
XR	XD to XR	328591-52X	Chelsea Special (Cloverleaf)	7/8" - 13 Tooth Splined (B)
XV	XD to XV	328591-130X	1410 Series Companion Flange	1-1/4" Output Shaft w/ Keyway
XX	XD to XX	328591-122X	Not Included	1-1/4" Tapered Output Shaft w/ Keyway
XY	XD to XY	328591-121X	Not Included	DIN 5462 (B8x32x36 - 8T)
RC (Rotatable)	XD to RC	328591-112X	SAE A 2-Bolt	5/8" - 9 Tooth Splined (A)
RD (Rotatable)	XD to RD	328591-113X	SAE A 2-Bolt	7/8" - 13 Tooth Splined (B)
RD (B Ratio) (Rotatable)	XD to RD	329436-8X	SAE A 2-Bolt	7/8" - 13 Tooth Splined (B)
RA (Rotatable)	XD to RA XR to RA	328591-55X 328591-53X	SAE B 2-Bolt SAE B 2-Bolt	7/8" - 13 Tooth Splined (B) 7/8" - 13 Tooth Splined (B)
RA (B Ratio) (Rotatable)	XD to RA	329436-1X	SAE B 2-Bolt	7/8" - 13 Tooth Splined (B)
RF (Rotatable)	XD to RF	328591-78X	SAE B 2-Bolt	1" - 15 Tooth Splined (BB)
RB (Rotatable)	XD to RB XR to RB	328591-56X 328591-54X	SAE B 4-Bolt SAE B 4-Bolt	7/8" - 13 Tooth Splined (B) 7/8" - 13 Tooth Splined (B)
RB (B Ratio) (Rotatable)	XD to RB	329436-2X	SAE B 4-Bolt	7/8" - 13 Tooth Splined (B)
RE (Rotatable)	XD to RE	328591-134X	SAE B 4-Bolt	1" - 15 Tooth Splined (BB)
RY (Rotatable)	XD to RY	328591-131X	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
GA (Greaseable)	XD to GA XR to GA RA to GA	328591-72X 328591-73X 328591-106X	SAE B 2-Bolt Rotatable	*7/8" - 13 Tooth Splined (B)
GH (Greaseable)	XD to GH RF to GH	328591-116X 328591-114X	SAE B 2-Bolt Rotatable	*1" - 15 Tooth Splined (BB)
GB (Greaseable)	XD to GB XR to GB RB to GB	328591-74X 328591-75X 328591-107X	SAE B 4-Bolt Rotatable	*7/8" - 13 Tooth Splined (B)
GK (Greaseable)	XD to GK XK to GK	328591-89X 328591-86X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Splined (B)
GQ (Greaseable)	XD to GQ XQ to GQ	328591-91X 328591-86X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Splined (B)
GF (Greaseable)	XD to GF AF to GF	328591-71X 328591-108X	SAE B 2 or 4-Bolt	*1" - 15 Tooth Splined (BB)
GZ (Greaseable)	XD to GZ AZ to GZ	328591-93X 328591-88X	SAE B 2 or 4-Bolt	*1-1/4" - 14 Tooth Splined (C)
GR (Greaseable)	XD to GR	328591-76X	Chelsea Special (Cloverleaf)	*7/8" - 13 Tooth Splined (B)
GY (Greaseable)	XD to GY XY to GY	328591-92X 328591-87X	ISO 7653 Pump Mount	*DIN 5462 (B8x32x36 - 8T)

*Grease fitting on end of shaft

Continued on Next Page

ASSEMBLY OPTIONS

Parker Chelsea

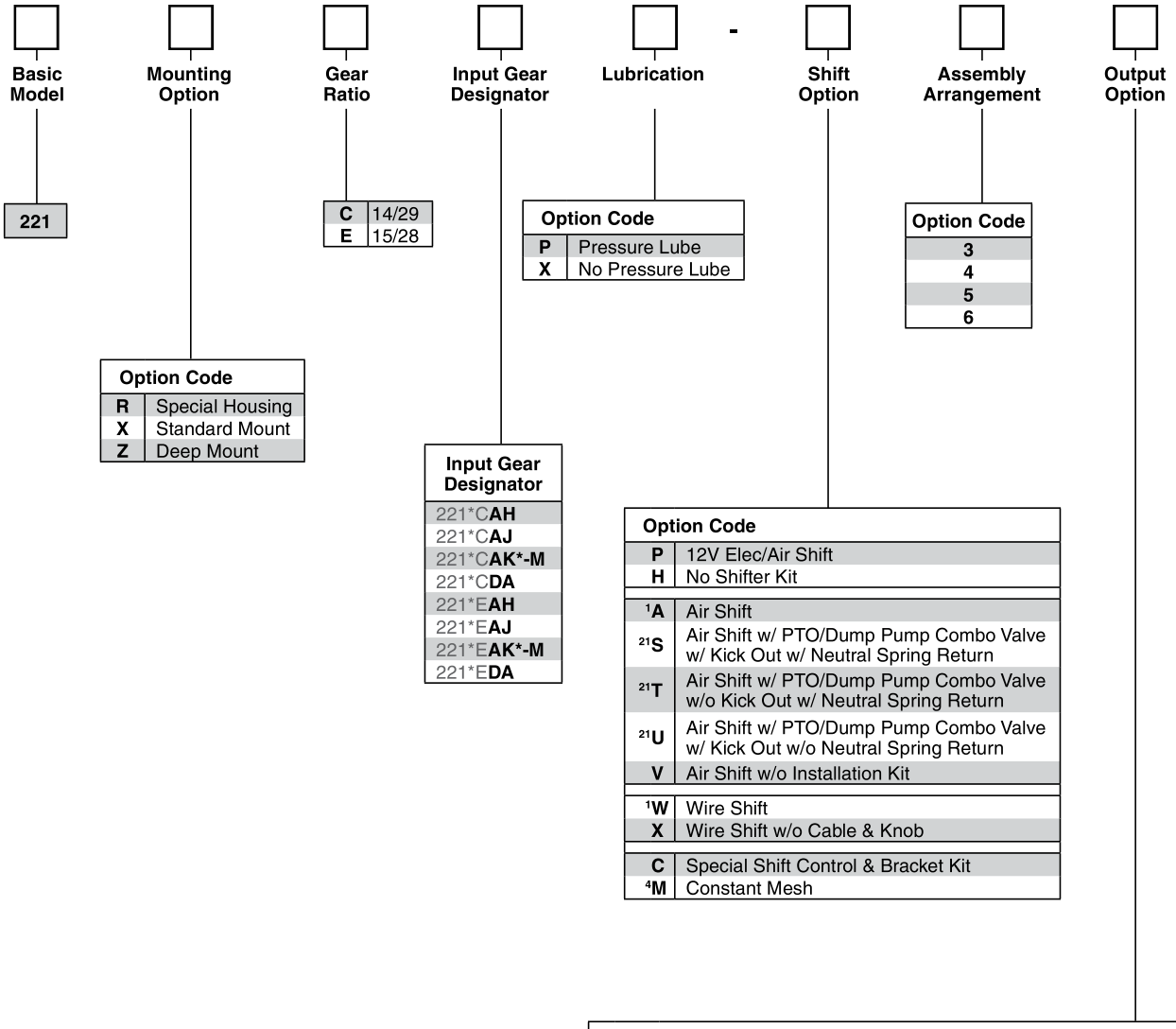
ENGINEERING YOUR SUCCESS.

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221 Series 4.1
249 Series 4.2
249V Series 4.3
252 Series 4.4
267 Series 4.5
272 Series 4.6
272-FORD Series 4.7
280 Series 4.8
282 Series 4.9
287 Series 4.10
290 Series 4.11
340 Series 4.12
348 Series 4.13
442 Series 4.14
447 Series 4.15
489 Series 4.16
511 Series 4.17
523 Series 4.18
541 Series 4.19
590 Series 4.20
660 Series 4.21
680 Series 4.22
823 Series 4.23
852 Series 4.24
863 Series 4.25
870 Series 4.26
877 Series 4.27
880 Series 4.28
885 Series 4.29
890 Series 4.30
892 Series 4.31
897 Series 4.32
899 Series 4.33
901 Series 4.34
912 Series 4.35
2442 Series 4.36
626, 628, 630 and 645 Series 4.37

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Basic Model

221

Mounting Option

Option Code	
R	Special Housing
X	Standard Mount
Z	Deep Mount

Gear Ratio

C	14/29
E	15/28

Input Gear Designator

Input Gear Designator
221*C**AH**
221*C**AJ**
221*C**AK*-M**
221*C**DA**
221*E**AH**
221*E**AJ**
221*E**AK*-M**
221*E**DA**

Lubrication

Option Code	
P	Pressure Lube
X	No Pressure Lube

Shift Option

Option Code	
P	12V Elec/Air Shift
H	No Shifter Kit
[1]A	Air Shift
[21]S	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return
[21]T	Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return
[21]U	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/o Neutral Spring Return
V	Air Shift w/o Installation Kit
[1]W	Wire Shift
X	Wire Shift w/o Cable & Knob
C	Special Shift Control & Bracket Kit
[4]M	Constant Mesh

Assembly Arrangement

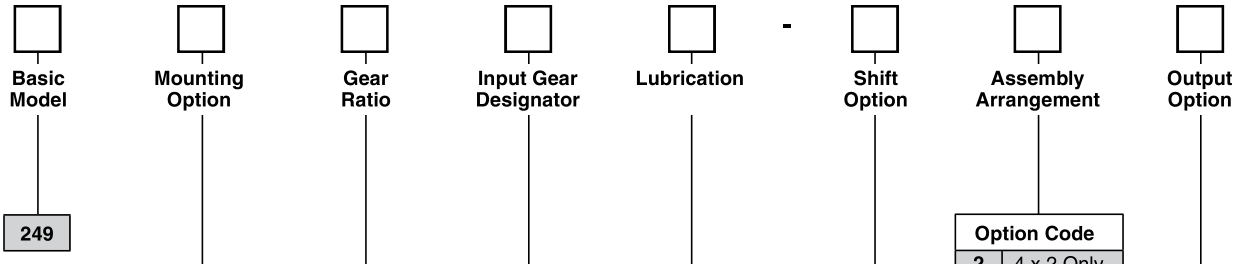
Option Code
3
4
5
6

Output Option

Option Code	
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[59]XQ	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
XX	1-1/4" Tapered Output Shaft w/ Keyway
XY	ISO 7653 Pump Mount DIN 5462 Shaft
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[59]GQ	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)

[1] Includes mounting parts
[4] Available only on 221*CAK and 221*EAK
[21] Includes installation kit, console sold separately
[59] Same as XK except rotated 90°

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Option Code	
2	4 x 2 Only
4	4 x 4 Only

Option Code	
[5]X	No Pressure Lube

Option Code	
F	F350-F550 Diesel MY2011-2018 F650/F750 Diesel MY2016-2018
[44]G	F650/F750 Gas 4 x 2 MY2013-MY2015
H	F650/F750 Gas MY2016-2018 F350-F550 Gas MY2017-MY2018

Option Code	
B	12V Elec/Hyd
K	12V Elec/Hyd w/ EOC

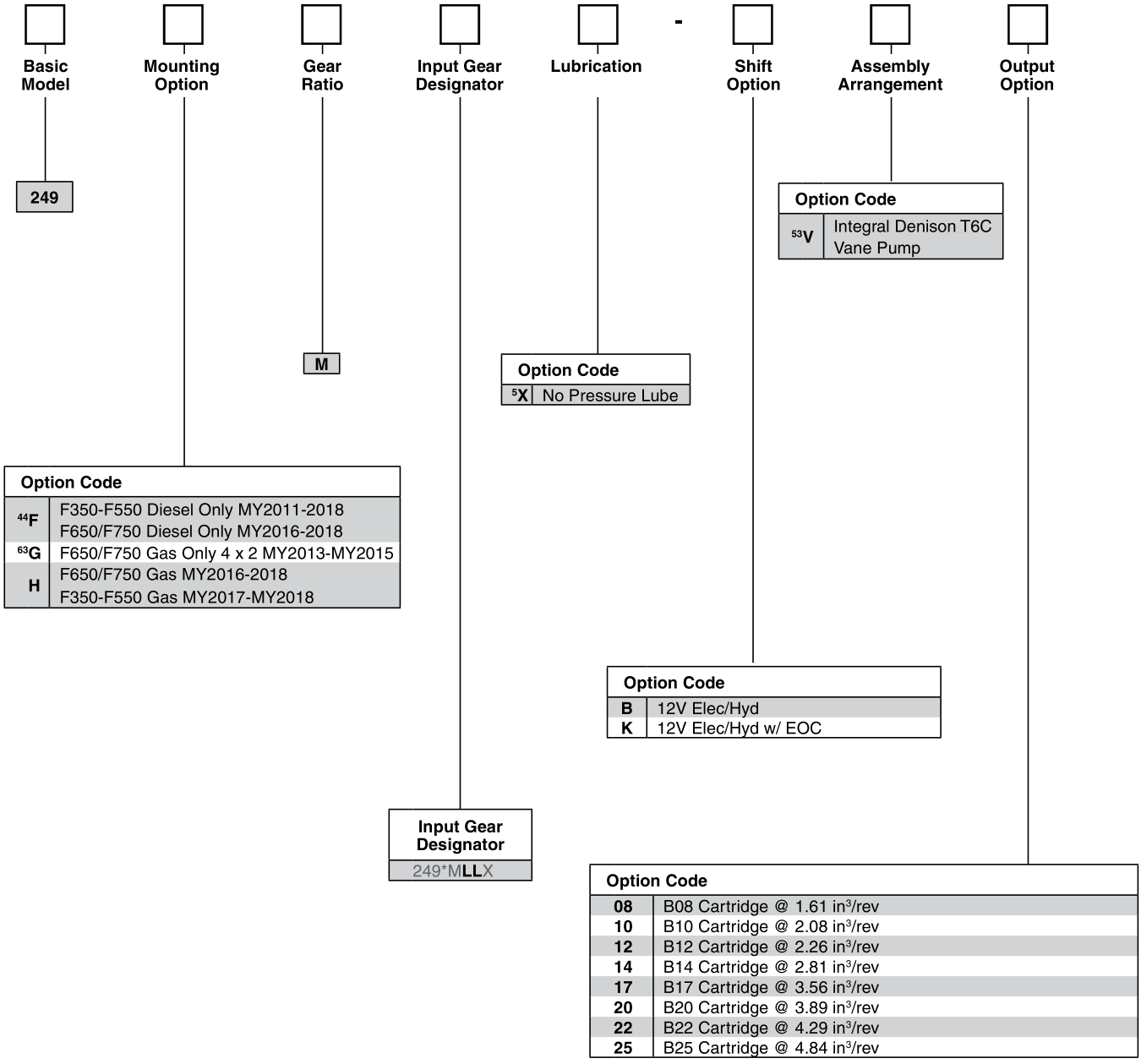
Input Gear Designator
249*M**LL**X

Option Code	
[38]08	Hyd. Pump 12.0 GPM @ 1200 Eng. RPM
[38]09	Hyd. Pump 14.0 GPM @ 1200 Eng. RPM
[38]11	Hyd. Pump 16.0 GPM @ 1200 Eng. RPM
[38]15	Hyd. Pump 18.9 GPM @ 1200 Eng. RPM
16	Hyd. Pump 2.4 GPM @ 1200 Eng. RPM
26	Hyd. Pump 3.9 GPM @ 1200 Eng. RPM
32	Hyd. Pump 4.7 GPM @ 1200 Eng. RPM
37	Hyd. Pump 5.5 GPM @ 1200 Eng. RPM
42	Hyd. Pump 6.3 GPM @ 1200 Eng. RPM
55	Hyd. Pump 8.2 GPM @ 1200 Eng. RPM
61	Hyd. Pump 9.0 GPM @ 1200 Eng. RPM
71	Hyd. Pump 10.6 GPM @ 1200 Eng. RPM
82	Hyd. Pump 12.2 GPM @ 1200 Eng. RPM
87	Hyd. Pump 12.9 GPM @ 1200 Eng. RPM
AD	SAE A 2-Bolt Flange (3/4" - 11T)
SD	Smart Start - Rd Standard Shaft (1-1/4" - 5/16" Key)
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XP	Special SAE A Pilot 2-Bolt Flange, SAE B Shaft (7/8" - 13T)

[5] Automatically pressure lubed
[38] 4 x 2 vehicles only
[44] Includes Heat Shield and Wiring Harness

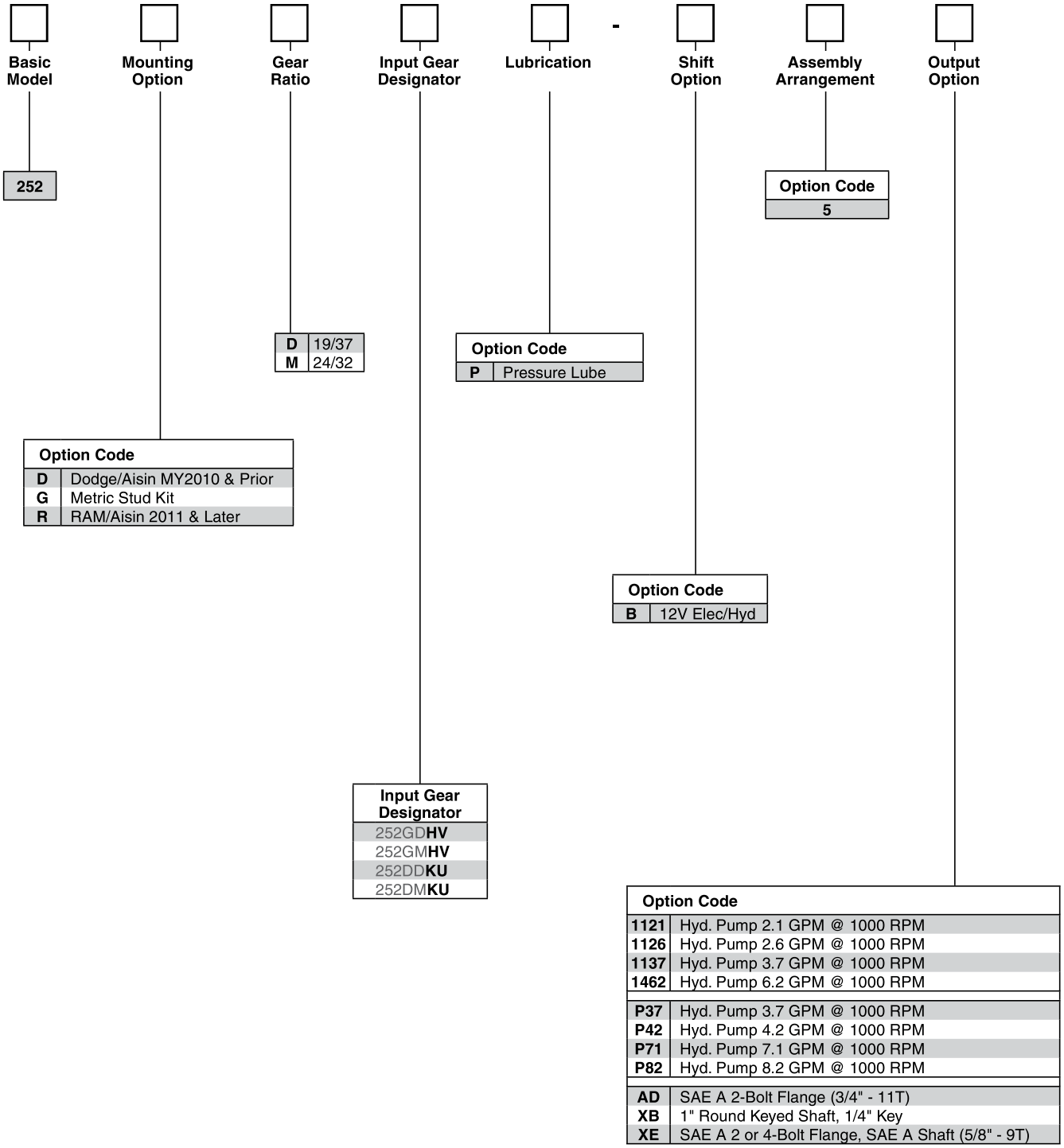
NOTE: Pump displacement is theoretical.

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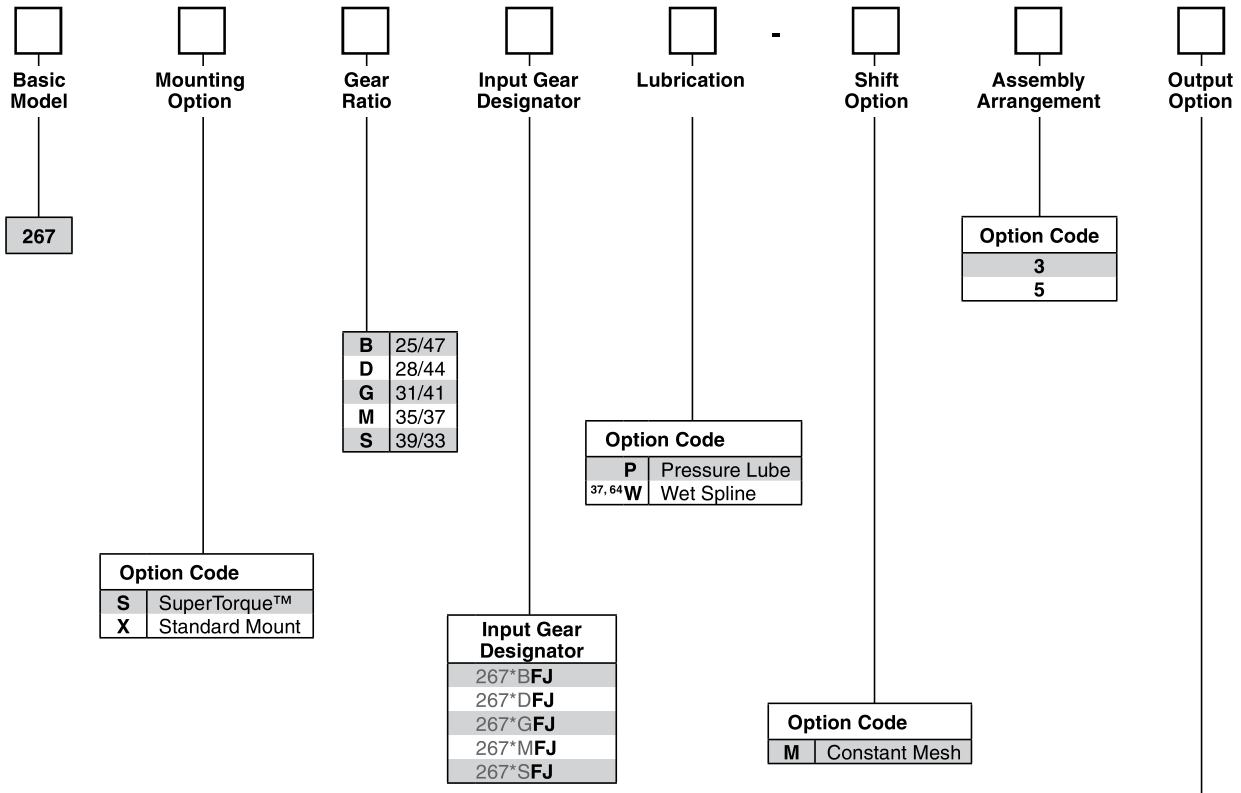
[5] Automatically pressure lubed
[44] Includes Heat Shield and Wiring Harness
[53] 4 x 2 and 4 x 4 applications
[63] Includes Wiring Harness with high temperature loom and Heat Shield

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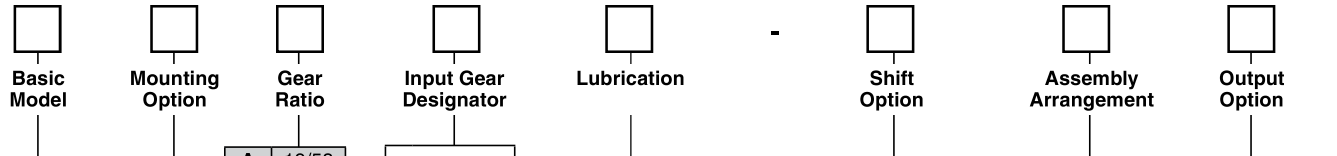
NOTE: Pump displacement is theoretical.

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Option Code	
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)
[13]**XK**	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[59]**XQ**	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
XX	1-1/4" Tapered Output Shaft w/ Keyway
XY	ISO 7653 Pump Mount DIN 5462 Shaft
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[23]**RY**	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
[13]**GK**	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[59]**GQ**	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)

[13] Available assembly 5 only
[23] Must be purchased with Wet Spline
[37] Automatically pressure lubed with Wet Spline
[59] Same as XK except rotated 90°
[64] Hydraulic shift PTOs only HV



Basic Model

272

Gear Ratio

A	19/53
B	22/50
C	25/47
D	28/44
G	31/41
K	33/39
M	35/37
P	37/35
S	39/33

Input Gear Designator

Input Gear Designator
272**AJ
272**AK
272**DA
272**ES
272**FN
272**HV
272**JK
272**JW
272**KN
272**KU
[71]272**IT

Mounting Option

Option Code	
X	Standard Mount
G	Standard Mount w/ Metric Studs
Z	Deep Mount
M	Low Profile
N	Low Profile w/ Metric Studs
A	Aisin Only (Non-Dodge/Ram)
D	Dodge/Aisin
R	RAM/Aisin

Lubrication

Option Code	
P	Pressure Lube
R	Valve Body Rotated 120 Degrees
S	Valve Body Rotated 240 Degrees
[5]W	Wet Spline
X	No Pressure Lube
[5]V	Valve Body Rotated 120 Degrees w/ Wet Spline
[5]Y	Valve Body Rotated 240 Degrees w/ Wet Spline

Shift Option

Option Code	
HYD	
B	12V Elec/Hyd
D	24V Elec/Hyd
E	12V Elec/Hyd w/o Installation Kit
N	24V Elec/Hyd w/o Installation Kit
K	12V Elec/Hyd w/ EOC
L	24V Elec/Hyd w/ EOC
G	12V Elec/Hyd Remote Valve w/o EOC
H	24V Elec/Hyd Remote Valve w/o EOC
AIR	
A	Manual Air Shift
V	Manual Air Shift w/o Installation Kit
1	12V Elec/Air
2	24V Elec/Air
J	12V Elec/Air w/ EOC
3	24V Elec/Air w/ EOC
P	12V Elec/Air Remote
Q	24V Elec/Air Remote
R	12V Elec/Air Remote w/ EOC
4	24V Elec/Air Remote w/ EOC

Assembly Arrangement

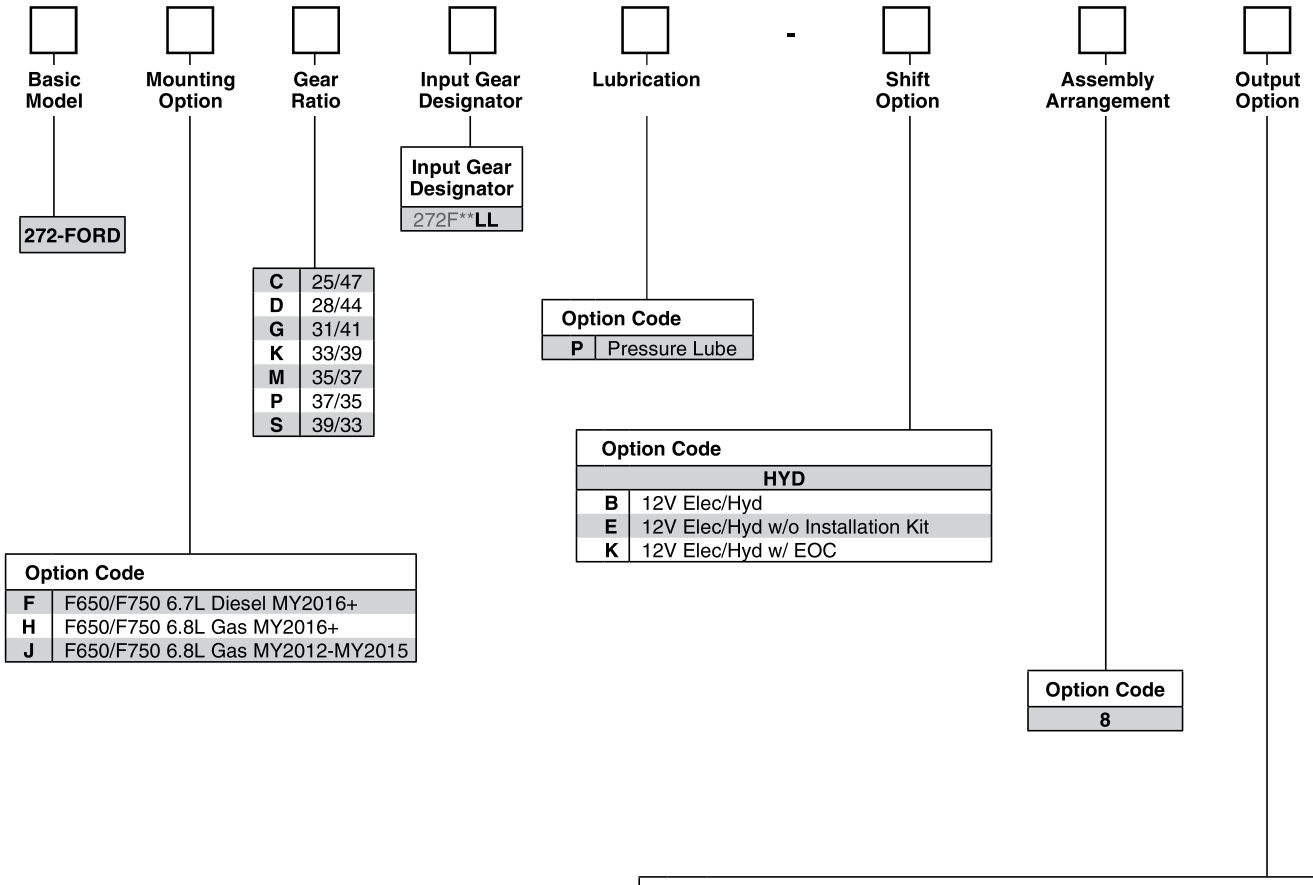
Option Code
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5

Output Option

Option Code	
AB	DIN 120 Flange
AC	DIN 100 Flange
BD	Shaft Brake - 1-1/4" Round Shaft w/ 5/16" Key
BV	Shaft Brake - 1410 Series Companion Flange
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
XV	1410 Series Companion Flange
RE	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)
[68]RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)
RK	Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RZ	Rotatable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
RS	Rotatable SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft
[64]SD	Smart Start - Rd Standard Shaft (1-1/4" - 5/16" Key)
[64]SV	Smart Start - 1410 Series Companion Flange

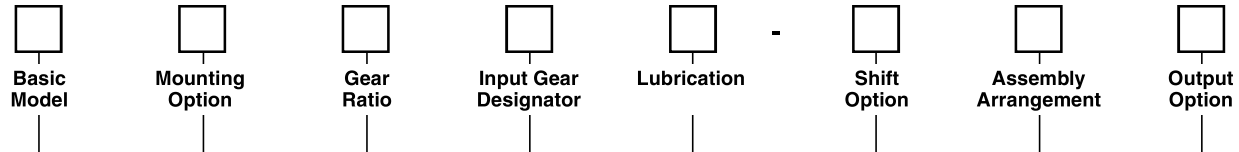
[5] Automatically pressure lubed
[64] Hydraulic shift PTOs only HV
[71] Input gear ordered separately

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Option Code	
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
XV	1410 Series Companion Flange
RE	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)
RK	Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RZ	Rotatable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
RS	Rotatable SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft
SD	Smart Start - Rd Standard Shaft (1-1/4" - 5/16" Key)
SV	Smart Start - 1410 Series Companion Flange

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Basic Model

280

Assembly Arrangement

Option Code
3
5
8

Gear Ratio

	3 & 5 Ass'y	8 Ass'y
B	22/50	22/53
C	25/47	25/50
D	28/44	28/47
G	31/41	31/44
K	33/39	–
M	35/37	35/40
P	37/35	37/38
S	39/33	39/36
T	41/31	42/33

Shift Option

Option Code	
[46]B	12V Elec/Hyd
[46]D	24V Elec/Hyd
[46]E	12V Elec/Hyd w/o Installation Kit
[46]N	24V Elec/Hyd w/o Installation Kit
[46]K	12V Elec/Hyd Remote Valve w/ EOC
[46]L	24V Elec/Hyd Remote Valve w/ EOC
[15]G	12V Elec/Hyd Remote Valve
[15]H	24V Elec/Hyd Remote Valve
[21,46]S	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return
[21,46]T	Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return

Mounting Option

Option Code	
G	Standard Mount 10-Bolt w/ Metric Studs

Lubrication

Option Code	
P	Pressure Lube
[45]R	Valve Body Rotated 120 Degrees
S	Valve Body Rotated 240 Degrees
W	Wet Spline
[45]V	Valve Body Rotated 120 Degrees w/ Wet Spline
Y	Valve Body Rotated 240 Degrees w/ Wet Spline

Input Gear Designator

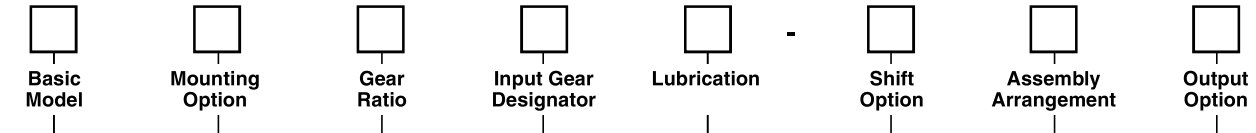
Input Gear Designator
[5]280**FJ
[5]280**KV

Output Option

Option Code	
AB	DIN 120 Flange
AC	DIN 100 Flange
BD	Shaft Brake - 1-1/4" Round w/ 5/16" Key
BV	Shaft Brake - 1410 Series Companion Flange
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
XV	1410 Series Companion Flange
[68]RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[47]RF	Rotatable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
[47]RK	Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[47]RZ	Rotatable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
[47]RS	Rotatable SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
[47]RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft
SB	Smart Start - DIN 120 Flange
SC	Smart Start - DIN 100 Flange
SD	Smart Start - Rd Standard Shaft (1-1/4" - 5/16" Key)
SV	Smart Start - 1410 Series Companion Flange

[5] Automatically pressured lubed
[15] The remote mount solenoid option cannot utilize the EOC option
[21] Includes installation kit, console sold separately
[45] Available on shift option B, D, K, L, M, N, S & T
[46] Available with Rotated Valve
[47] Available with Wet Spline
[68] Check for Wet Spline availability

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Basic Model
282

Gear Ratio	
B	22/50
C	25/47
D	28/44
G	31/41
K	33/39
M	35/37
P	37/35
S	39/33
T	41/31

Assembly Arrangement Option Code
3
5

Mounting Option Code	
X	Standard Mount
G	Standard Mount w/ Metric Studs
K	Standard Mount w/o Stud Kit
Z	Deep Mount

Input Gear Designator
282**AJ
282**AK
282**DA
282**ES
282**FN
[71] 282**IT

Lubrication Option Code	
P	Pressure Lube
X	No Pressure Lube
[5] R	Valve Body Rotated 120 Degrees
[5] S	Valve Body Rotated 240 Degrees
[5] W	Wet Spline
[5] V	Valve Body Rotated 120 Degrees w/ Wet Spline
[5] Y	Valve Body Rotated 240 Degrees w/ Wet Spline

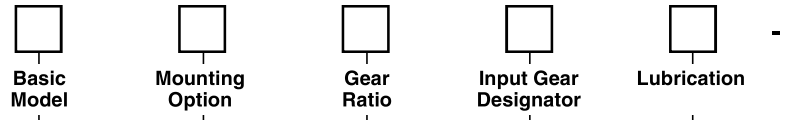
Shift Option Code	
HYD	
B	12V Elec/Hyd
D	24V Elec/Hyd
E	12V Elec/Hyd w/o Installation Kit
N	24V Elec/Hyd w/o Installation Kit
K	12V Elec/Hyd w/ EOC
L	24V Elec/Hyd w/ EOC
G	12V Elec/Hyd Remote Valve w/o EOC
H	24V Elec/Hyd Remote Valve w/o EOC
AIR	
A	Manual Air Shift
V	Manual Air Shift w/o Installation Kit
1	12V Elec/Air
2	24V Elec/Air
J	12V Elec/Air w/ EOC
3	24V Elec/Air w/ EOC
P	12V Elec/Air Remote
Q	24V Elec/Air Remote
R	12V Elec/Air Remote w/ EOC
4	24V Elec/Air Remote w/ EOC

Output Option Code	
AB	DIN 120 Flange
AC	DIN 100 Flange
BD	Shaft Brake - 1-1/4" Round Shaft w/ 5/16" Key
BV	Shaft Brake - 1410 Series Companion Flange
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
XV	1410 Series Companion Flange
RE	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)
[68] RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)
RK	Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RZ	Rotatable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
RS	Rotatable SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft
[64] SD	Smart Start - Rd Standard Shaft (1-1/4" - 5/16" Key)
[64] SV	Smart Start - 1410 Series Companion Flange

[5] Automatically pressured lubed
[64] Hydraulic shift PTOs only
[68] Check for Wet Spline availability
[71] Input gear ordered separately

Assembly

Parker Chelsea
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Basic Model

287

Assembly Arrangement

Option Code
3
5
8

Gear Ratio

	3 & 5 Ass'y	8 Ass'y
B	22/50	22/53
C	25/47	25/50
D	28/44	28/47
G	31/41	31/44
K	33/39	–
M	35/37	35/40
P	37/35	37/38
S	39/33	39/36
T	41/31	42/33

Shift Option

Option Code	
M	Constant Mesh

Lubrication

Option Code	
P	Pressure Lube
R	Valve Body Rotated 120 Degrees
S	Valve Body Rotated 240 Degrees
W	Wet Spline
V	Valve Body Rotated 120 Degrees w/ Wet Spline
Y	Valve Body Rotated 240 Degrees w/ Wet Spline

Mounting Option

Option Code	
G	Standard Mount w/ 10-Bolt Metric Studs

Input Gear Designator

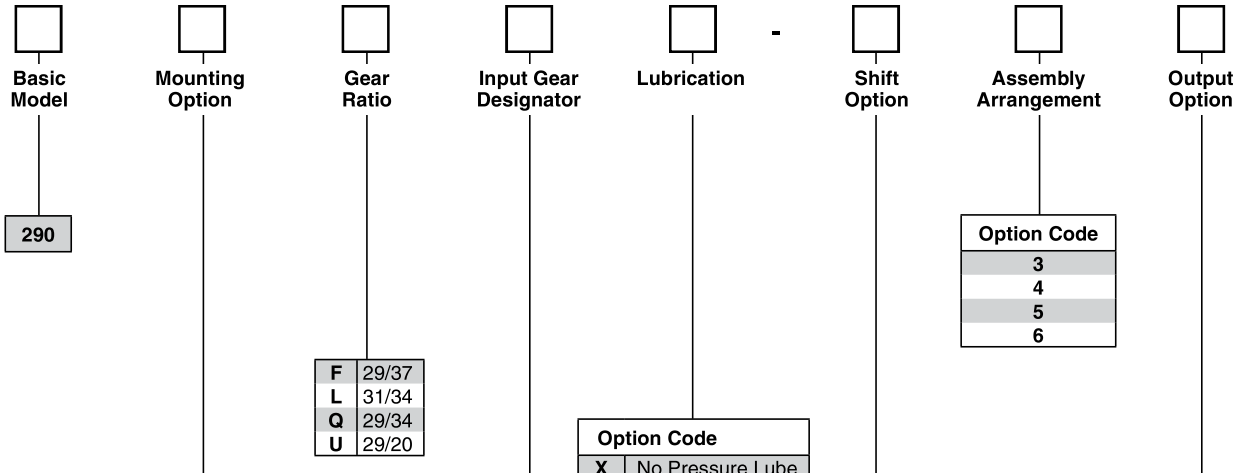
Input Gear Designator
287**FJ
287**KV

Output Option

Option Code	
AB	DIN 120 Flange
AC	DIN 100 Flange
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XV	1410 Series Companion Flange
[68]RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RF	Rotatable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
RK	Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RZ	Rotatable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
RS	Rotatable SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft

[68] Check for Wet Spline availability

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Option Code	
X	Standard Mount
K	Standard Mount w/o Stud Kit
G	Standard Mount w/ Metric Studs

F	29/37
L	31/34
Q	29/34
U	29/20

Option Code	
X	No Pressure Lube

Option Code
3
4
5
6

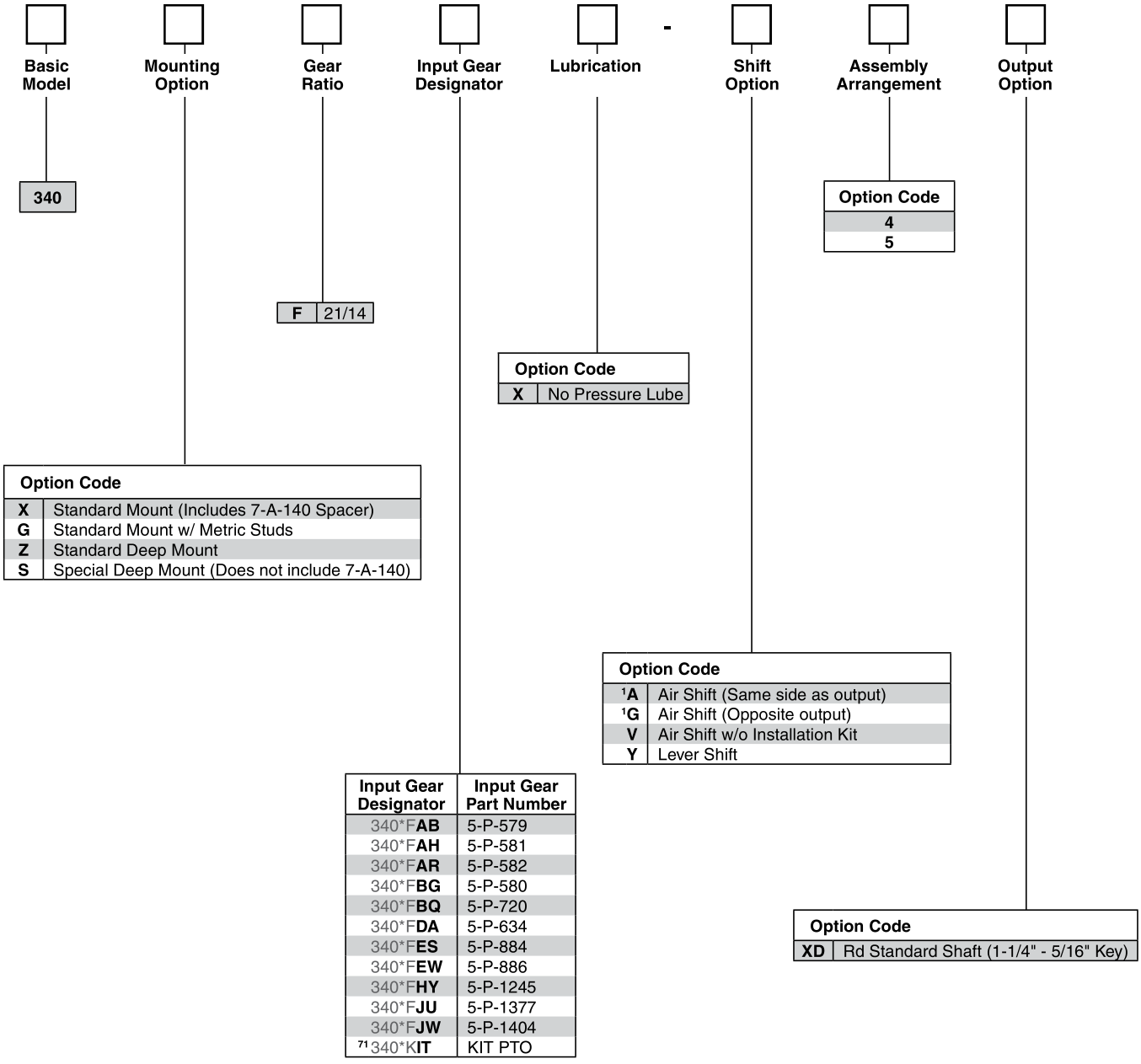
Option Code	
[1]A	Air Shift
[1]P	12V Elec/Air Shift
V	Air Shift w/o Installation Kit
[21]S	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return
[21]T	Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return
[21]U	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/o Neutral Spring Return

Input Gear Designator	Input Gear Part Number
290*FHU	5-P-1221
290*FHZ	5-P-1238
290*LHZ	5-P-1239
290*QGE	5-P-992
290*QGF	5-P-993
290*QHU	5-P-1223
290*QHZ	5-P-1240
290*QJJ	5-P-1258
290*UGE	5-P-1136
290*UHZ	5-P-1241
290*ULY	5-P-1570

Option Code	
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
XX	1-1/4" Tapered Output Shaft w/ Keyway
XY	ISO 7653 Pump Mount DIN 5462 Shaft
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft

[1] Includes mounting parts
[21] Includes installation kit, console sold separately

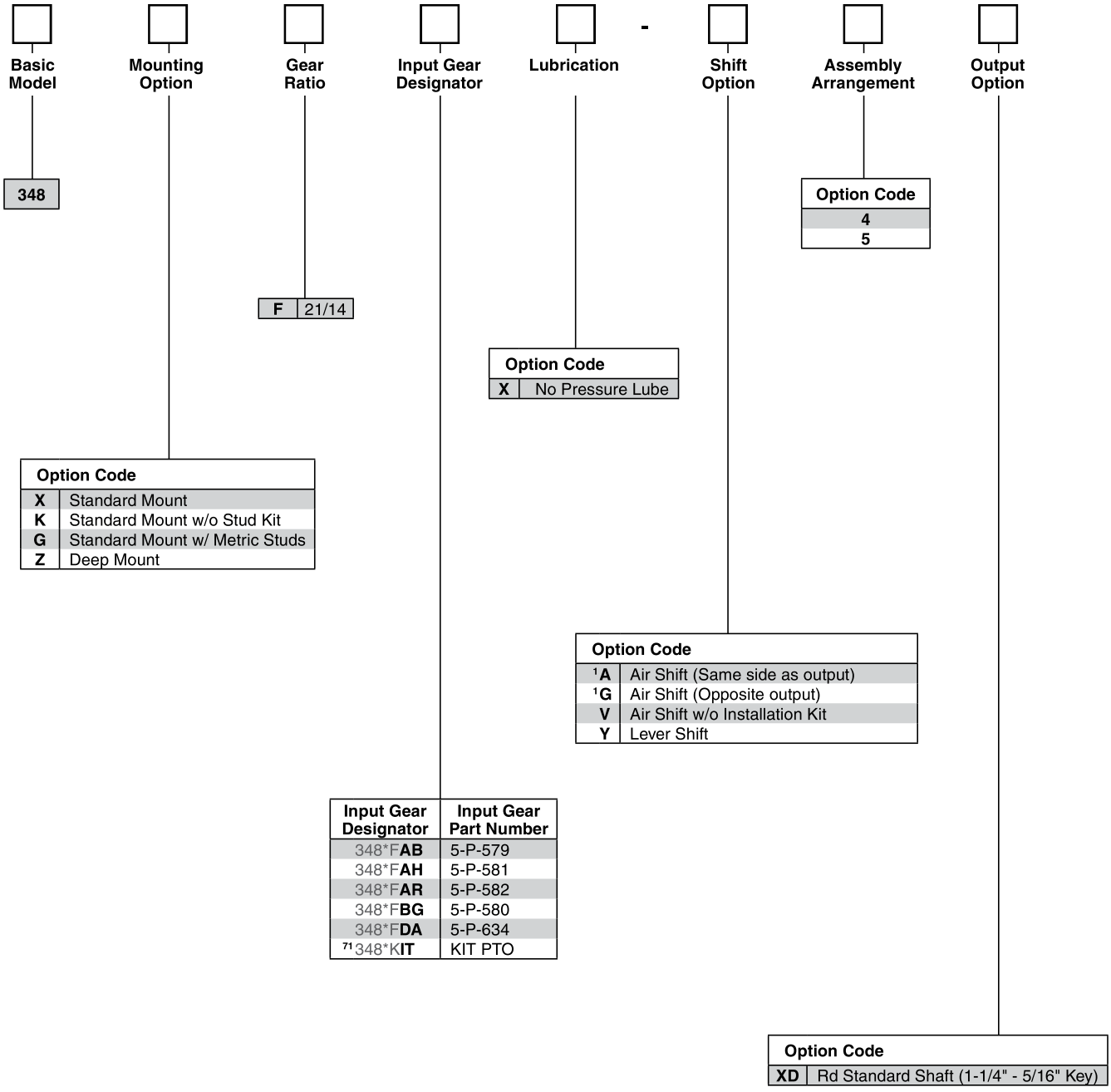
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Input Gear Designator	Input Gear Part Number
340*F**AB**	5-P-579
340*F**AH**	5-P-581
340*F**AR**	5-P-582
340*F**BG**	5-P-580
340*F**BQ**	5-P-720
340*F**DA**	5-P-634
340*F**ES**	5-P-884
340*F**EW**	5-P-886
340*F**HY**	5-P-1245
340*F**JU**	5-P-1377
340*F**JW**	5-P-1404
[71]340*K**IT**	KIT PTO

[1] Includes mounting parts
[71] Input gear ordered separately

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[1] Includes mounting parts
[71] Input gear ordered separately

Assembly

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Assembly

Basic Model	Mounting Option	Gear Ratio	Input Gear Designator	Lubrication		Shift Option	Assembly Arrangement	Output Option
442								

Gear Ratio	
A	14/39
B	14/39
C	17/37
F	21/37
H	23/35
L	25/34
Q	19/24
R	22/24
S	24/22
U	26/20
W	26/17
X	38/21

Lubrication Option Code	
P	Pressure Lube
X	No Pressure Lube

Assembly Arrangement Option Code
3
4
5
6

Mounting Option Code	
X	Standard Mount
K	Standard Mount w/o Stud Kit
G	Standard Mount w/ Metric Studs
Z	Deep Mount
L	Deep Mount w/o Stud Kit
Q	Eaton Procision

Shift Option Code	
[1]A	Air Shift
V	Air Shift w/o Installation Kit
[1]P	12V Elec/Air Shift
[21]S	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return
[21]T	Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return
[21]U	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/o Neutral Spring Return
[1]W	Wire Shift
X	Wire Shift w/o Cable & Knob
M	Constant Mesh
H	No Shift Assembly
C	Special Shift Control & Bracket Kit
[1]D	Eaton Procision 12V Elec/Air
E	Hydraulic Shift (Eaton Procision)

Input Gear Designator	Input Gear Part Number	Input Gear Designator	Input Gear Part Number
442**AB	5-P-1001	[69]442*CAH	5-P-1287
442**AH	5-P-1004	[69]442*CAR	5-P-1290
442**AR	5-P-1008	[69]442*CDA	5-P-1291
442**BG	5-P-1015	442*FAB	5-P-1076
442**BQ	5-P-1023	442*FAH	5-P-1077
442**DA	5-P-1037	442*FAR	5-P-1080
442**DU	5-P-1050	442*FBG	5-P-1082
442**ES	5-P-1059	442*FBQ	5-P-1084
442**EV	5-P-1060	442*FDA	5-P-1085
442**EW	5-P-1061	442*FDU	5-P-1088
442**FN	5-P-1070	442*FED	5-P-1090
442**GR	5-P-1157	442*FES	5-P-1092
442**GS	5-P-1152	442*FEV	5-P-1094
442**GZ	5-P-1185	442*FEW	5-P-1095
442**HH	5-P-1193	442*FFN	5-P-1097
442**HL	5-P-1196	442*FGS	5-P-1151
442**HQ	5-P-1200	442*FHV	5-P-1300
442**HY	5-P-1237	442*FJU	5-P-1317
442**JE	5-P-1249	442*FJW	5-P-1320
442**JG	5-P-1256	442*HAH	5-P-1364
442**JH	5-P-1257	442*HDA	5-P-1365
442**JK	5-P-1261	[71]442*AIT	KIT PTO
442**JU	5-P-1316	[71]442*BIT	KIT PTO
442**JW	5-P-1319	[71]442*CIT	KIT PTO
442**KH	5-P-1343	[71]442*FIT	KIT PTO
442**LP	5-P-1459	[71]442*HIT	KIT PTO
442**LQ	5-P-1460	[71]442*LIT	KIT PTO
442*AAB	5-P-1279	[71]442*QIT	KIT PTO
442*AAH	5-P-1280	[71]442*RIT	KIT PTO
442*AAR	5-P-1283	[71]442*SIT	KIT PTO
442*ADA	5-P-1284	[71]442*UIT	KIT PTO
442*AES	5-P-1285	[71]442*WIT	KIT PTO
442*BAH	5-P-1418	[71]442*XIT	KIT PTO
442*BHV	5-P-1358		
442*CAB	5-P-1286		

Output Option Code	
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
SQ	SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[59]XQ	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
XX	1-1/4" Tapered Output Shaft w/ Keyway
XY	ISO 7653 Pump Mount DIN 5462 Shaft
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[59]GQ	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)

[1] Includes mounting parts
[21] Includes installation kit, console sold separately
[59] Same as XK except rotated 90°
[69] Available with XD, XQ, RA and RB output options only
[71] Input gear ordered separately

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Basic Model | Mounting Option | Gear Ratio | Input Gear Designator | Lubrication | - | Shift Option | Assembly Arrangement | Output Option

Basic Model

447

Gear Ratio

Q	19/24
S	24/22
U	26/20
W	26/17

Lubrication

Option Code	
P	Pressure Lube
X	No Pressure Lube

Assembly Arrangement

Option Code
3
4
5
6

Mounting Option

Option Code	
X	Standard Mount
K	Standard Mount w/o Stud Kit
G	Standard Mount w/ Metric Studs
Z	Deep Mount
L	Deep Mount w/o Stud Kit

Shift Option

Option Code	
C	Special Shift Control & Bracket Kit
[1]A	Air Shift
V	Air Shift w/o Installation Kit
[1]P	12V Elec/Air Shift
[21]S	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return
[21]T	Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return
[21]U	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/o Neutral Spring Return
[1]W	Wire Shift
X	Wire Shift w/o Cable & Knob
H	No Shift Assembly
M	Constant Mesh

Input Gear Designator

Input Gear Designator	Input Gear Part Number
447*QES	5-P-869
447*QET	5-P-865
447*SES	5-P-870
447*SET	5-P-866
447*UES	5-P-871
447*UET	5-P-867
447*WES	5-P-872
447AWFY	5-P-976
447*WFY	5-P-976
447*WGP	5-P-1148
[71]447*QIT	KIT PTO
[71]447*SIT	KIT PTO
[71]447*UIT	KIT PTO
[71]447*WIT	KIT PTO

Output Option

Option Code	
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XE	SAE B 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[59]XQ	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
XX	1-1/4" Tapered Output Shaft w/ Keyway
XY	ISO 7653 Pump Mount DIN 5462 Shaft
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[59]GQ	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)

[1] Includes mounting parts
[21] Includes installation kit, console sold separately
[59] Same as XK except rotated 90°
[71] Input gear ordered separately

Assembly

Parker Chelsea
Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Assembly

Basic Model	Mounting Option	Gear Ratio	Input Gear Designator	Lubrication	-	Shift Option	Assembly Arrangement	Output Option
489								

Gear Ratio	
A	14/39
C	17/37
F	21/37
H	23/35
L	25/34
Q	19/24
R	22/24
S	24/22
U	26/20
W	26/17
X	38/21

Lubrication Option Code	
P	Pressure Lube
X	No Pressure Lube

Assembly Arrangement Option Code
3
4
5
6

Mounting Option Code	
X	Standard Mount
G	Standard Mount w/ Metric Stud Kit
K	Standard Mount w/o Stud Kit
Q	Eaton Endurant
Z	Deep Mount

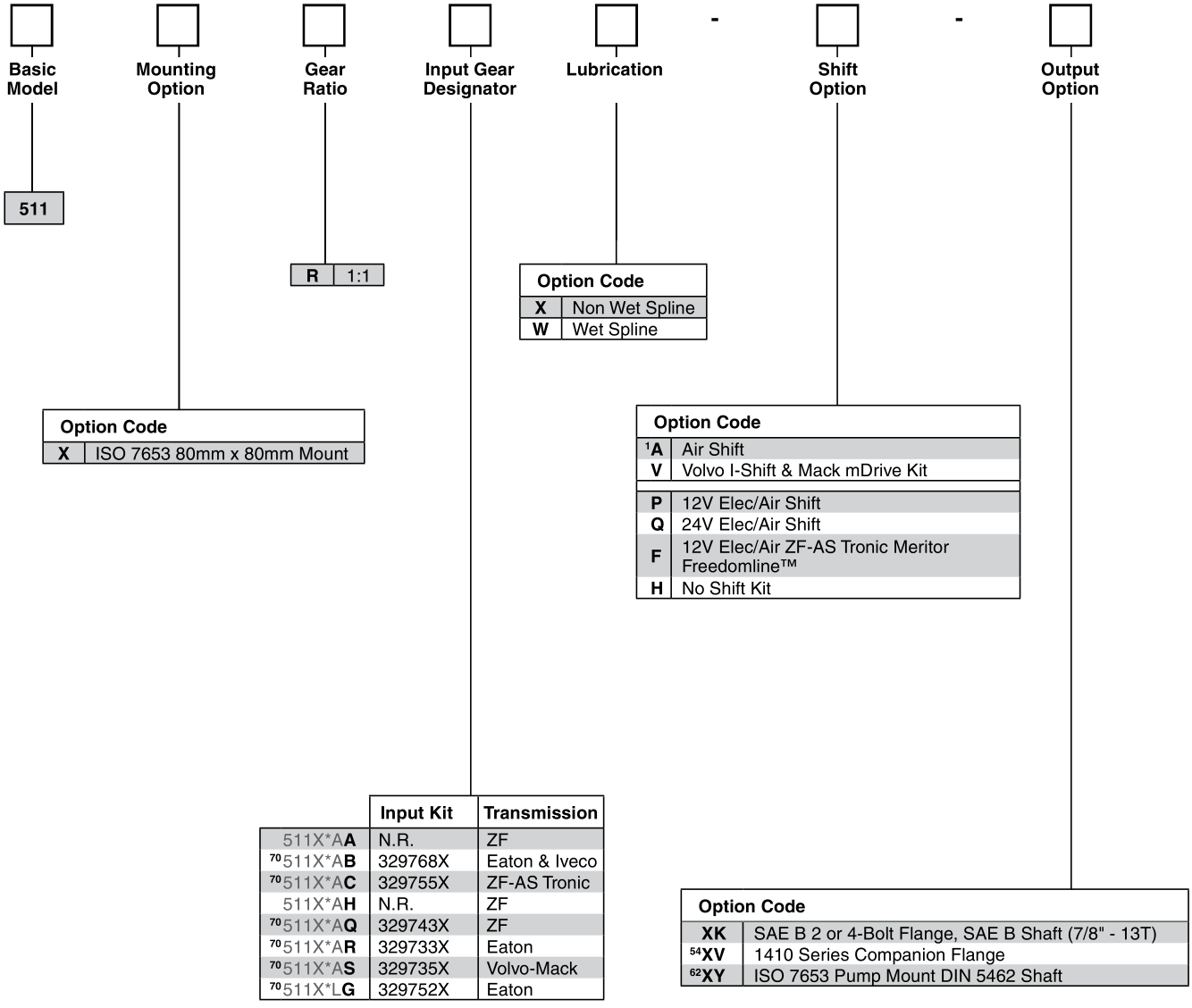
Input Gear Designator	Input Gear Part Number
489**AB	5-P-1001
489**AH	5-P-1004
489**AR	5-P-1008
489**BG	5-P-1015
489**DA	5-P-1037
489**DU	5-P-1050
489**EV	5-P-1060
489*AAB	5-P-1279
489*AAH	5-P-1280
489*AAR	5-P-1283
489*ADA	5-P-1284
[69]489*CAB	5-P-1286
[69]489*CAH	5-P-1287
[69]489*CAR	5-P-1290
[69]489*CDA	5-P-1291
489*FAB	5-P-1076
489*FAH	5-P-1077
489*FAR	5-P-1080
489*FBG	5-P-1082
489*FDA	5-P-1085
489*FDU	5-P-1088
489*FEV	5-P-1094
489*FLZ	5-P-1589
489*HAH	5-P-1364
489*HDA	5-P-1365
489*HLZ	5-P-1588
489*AIT	KIT PTO
[71]489*CIT	KIT PTO
[71]489*FIT	KIT PTO
[71]489*HIT	KIT PTO
[71]489*LIT	KIT PTO
[71]489*QIT	KIT PTO
[71]489*RIT	KIT PTO
[71]489*SIT	KIT PTO
[71]489*UIT	KIT PTO
[71]489*WIT	KIT PTO
[71]489*XIT	KIT PTO

Shift Option Code	
[1]A	Air Shift
[1]P	12V Elec/Air Shift
D	12V Elec/Air Shift Eaton Endurant
V	Air Shift w/o Installation Kit
[21]S	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return
[21]T	Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return
[21]U	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/o Neutral Spring Return
[1]W	Wire Shift
X	Wire Shift w/o Cable & Knob
M	Constant Mesh
H	No Shifter Kit
C	Special Shift Control & Bracket Kit
Q	24V Elec/Air Shift

Output Option Code	
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
SQ	SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[59]XQ	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
XX	1-1/4" Tapered Output Shaft w/ Keyway
XY	ISO 7653 Pump Mount DIN 5462 Shaft
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[59]GQ	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)

[1] Includes mounting parts
[21] Includes installation kit, console sold separately
[59] Same as XK except rotated 90°
[69] Available with XD, XQ, RA and RB output options only
[71] Input gear ordered separately

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	Input Kit	Transmission
511X*A**A**	N.R.	ZF
[70]511X*A**B**	329768X	Eaton & Iveco
[70]511X*A**C**	329755X	ZF-AS Tronic
511X*A**H**	N.R.	ZF
[70]511X*A**Q**	329743X	ZF
[70]511X*A**R**	329733X	Eaton
[70]511X*A**S**	329735X	Volvo-Mack
[70]511X*L**G**	329752X	Eaton

Assembly

N.R. = Not Required

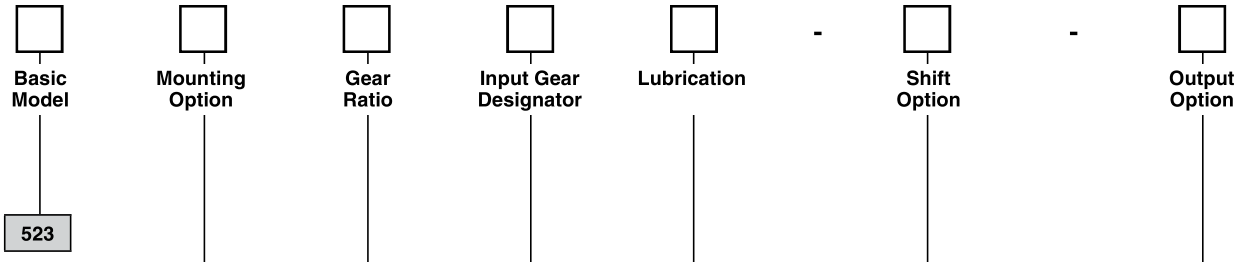
[1] Includes mounting parts

[54] X Lube option only

[62] Input kits are included with PTO assembly

[70] Wet Spline only

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T	29/21
V	23/14

Option Code	
X	Non Wet Spline
W	Wet Spline

Option Code	
X	ISO 7653 80mm x 80mm Mount

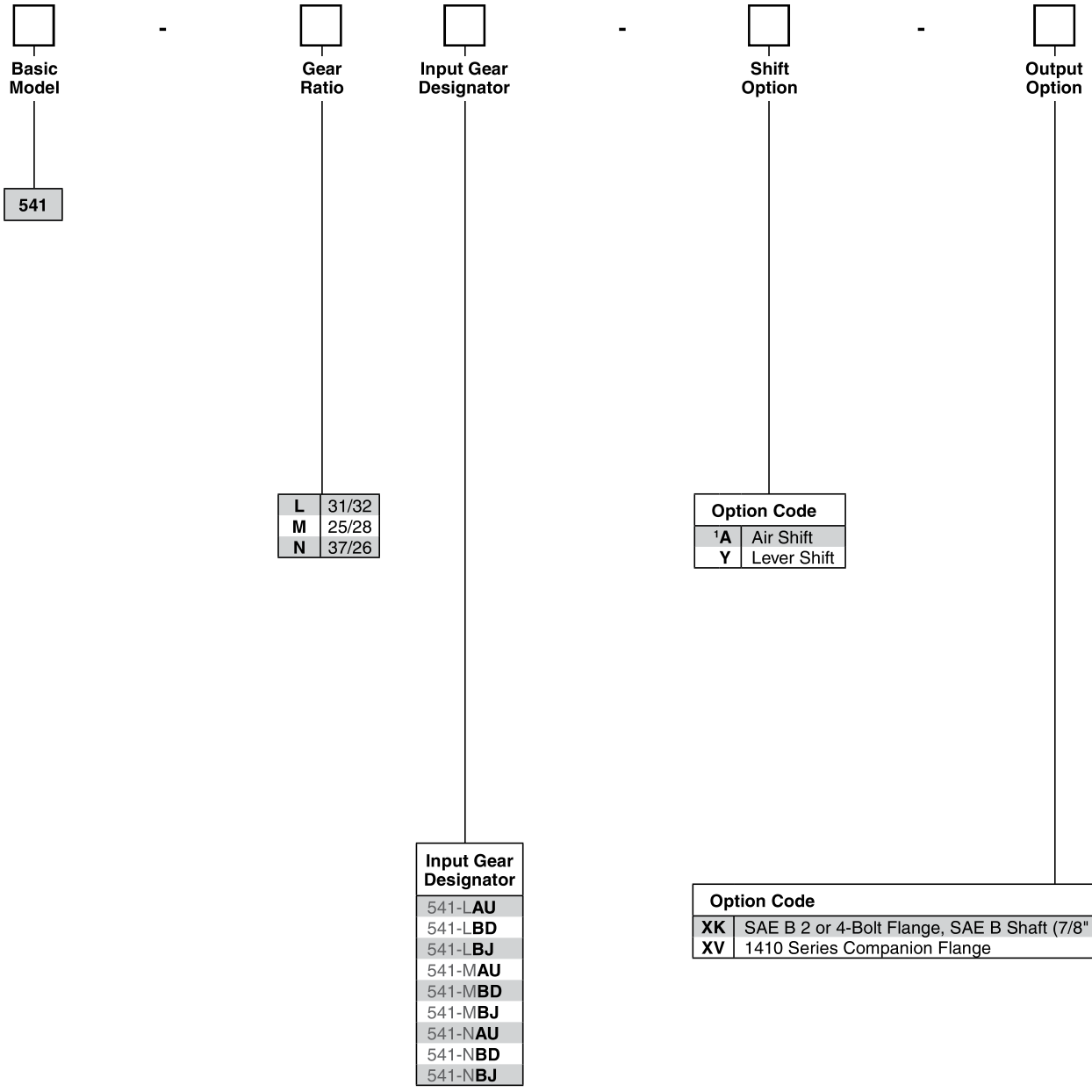
Option Code	
[1]**A**	Air Shift
V	Volvo I-Shift & Mack mDrive Kit
P	12V Elec/Air Shift
Q	24V Elec/Air Shift
F	12V Elec/Air ZF-As Tronic Meritor Freedomline™
H	No Shift Kit
[1]**D**	Eaton Procision

	Input Kit	Transmission
523X*A**A**	N.R.	ZF
[70]523X*A**B**	329768X	Eaton & Iveco
[70]523X*A**C**	329755X	ZF-AS Tronic
[70]523X*A**G**	329746X	Volvo V7
523X*A**H**	N.R.	ZF
[70]523X*A**Q**	329743X	ZF
[70]523X*A**R**	329733X	Eaton
[70]523X*A**S**	329735X	Volvo-Mack
[70]523X*L**G**	329752X	Eaton
[70]523X*L**Q**	329855	Eaton Procision

Option Code	
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[54]**XV**	1410 Series Companion Flange
[62]**XY**	ISO 7653 Pump Mount DIN 5462 Shaft

[1] Includes mounting parts
[54] X Lube option only
[62] Input kits are included with PTO assembly
[70] Wet Spline only

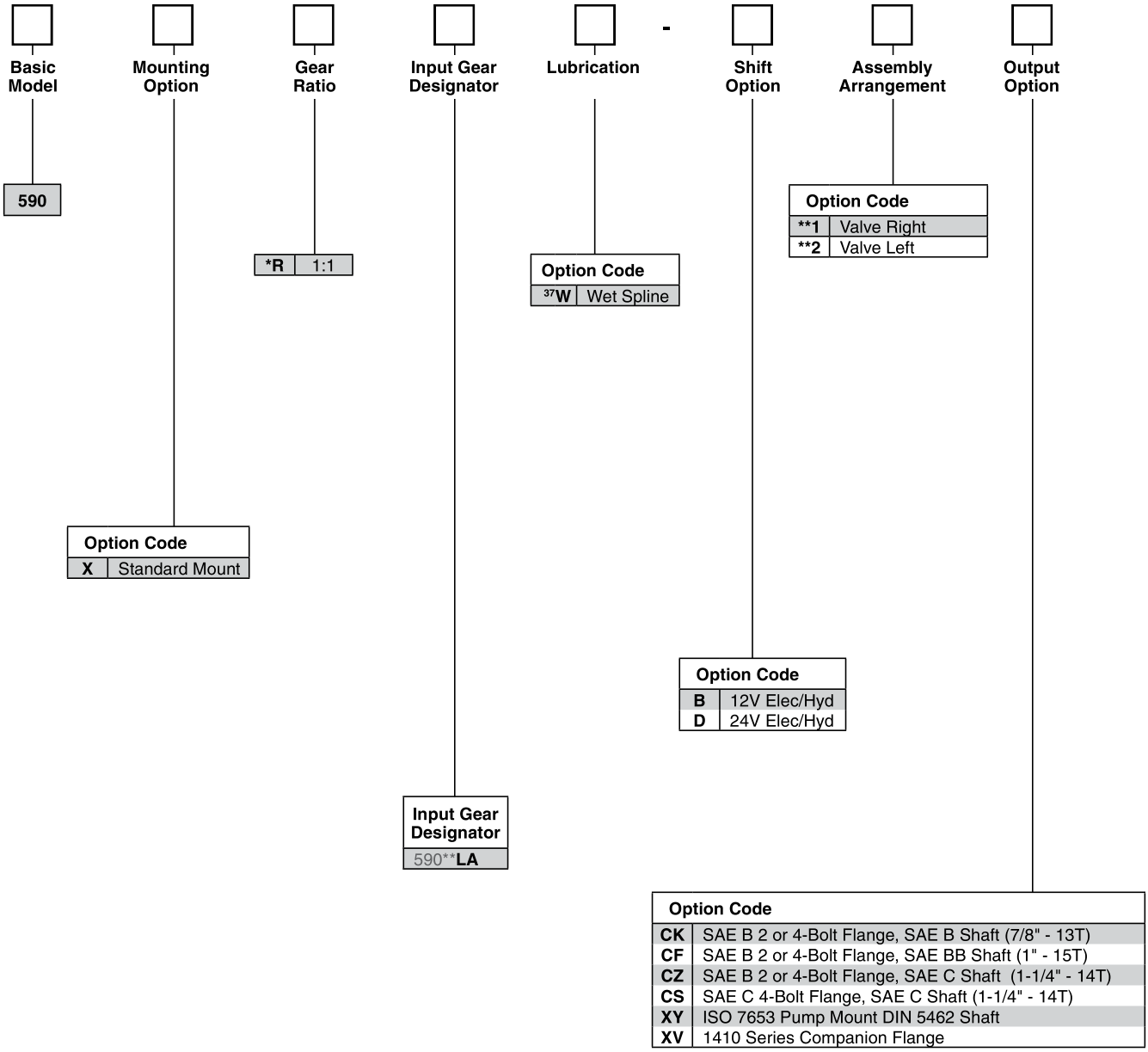
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Assembly

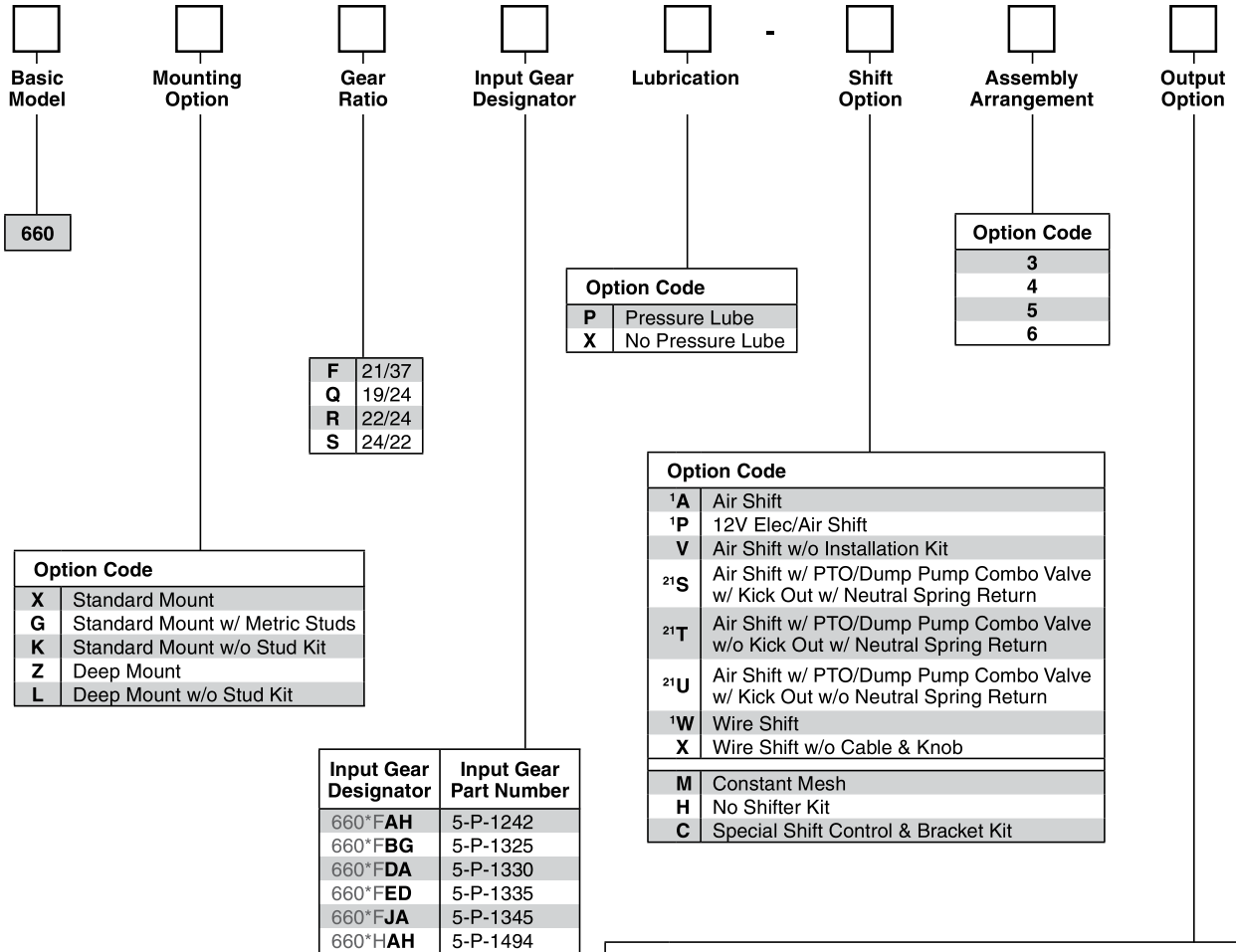
¹ Includes mounting parts

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*See Application Page for Final Ratio.
**Both are bracket up and viewed from the rear.
[37] Automatically Pressure Lubed with Wet Spline

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Option Code	
P	Pressure Lube
X	No Pressure Lube

Option Code
3
4
5
6

F	21/37
Q	19/24
R	22/24
S	24/22

Option Code	
X	Standard Mount
G	Standard Mount w/ Metric Studs
K	Standard Mount w/o Stud Kit
Z	Deep Mount
L	Deep Mount w/o Stud Kit

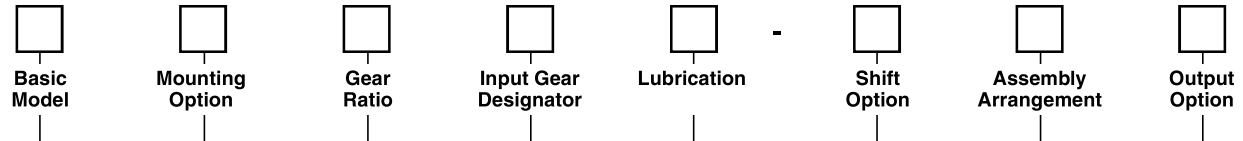
Option Code	
[1]A	Air Shift
[1]P	12V Elec/Air Shift
V	Air Shift w/o Installation Kit
[21]S	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return
[21]T	Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return
[21]U	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/o Neutral Spring Return
[1]W	Wire Shift
X	Wire Shift w/o Cable & Knob
M	Constant Mesh
H	No Shifter Kit
C	Special Shift Control & Bracket Kit

Input Gear Designator	Input Gear Part Number
660*F**AH**	5-P-1242
660*F**BG**	5-P-1325
660*F**DA**	5-P-1330
660*F**ED**	5-P-1335
660*F**JA**	5-P-1345
660*H**AH**	5-P-1494
660*Q**AH**	5-P-1246
660*Q**BG**	5-P-1326
660*Q**DA**	5-P-1331
660*Q**ED**	5-P-1336
660*Q**JA**	5-P-1346
660*R**AH**	5-P-1441
660*S**AH**	5-P-1322
660*S**BG**	5-P-1327
660*S**DA**	5-P-1332
660*S**ED**	5-P-1337
660*S**JA**	5-P-1347

Option Code	
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[59]XQ	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
XY	ISO 7653 Pump Mount DIN 5462 Shaft
XV	1410 Series Companion Flange
XX	1-1/4" Tapered Output Shaft w/ Keyway
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GH	Greaseable SAE B 2-Bolt Rotatable Flange, SAE BB Shaft (1" - 15T)
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[59]GQ	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
GZ	Greaseable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
GY	Greaseable ISO 7653 Pump Mount DIN 5462 Shaft

[1] Includes mounting parts
[21] Includes installation kit, console sold separately
[59] Same as XK except rotated 90°

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Basic Model

680

Gear Ratio

P	21/37
Q	19/24
R	22/24
S	24/22

Assembly Arrangement

Option Code
3
4
5
6

Mounting Option

Option Code	
X	Standard Mount
G	Standard Mount w/ Metric Studs
K	Standard Mount w/o Stud Kit
Z	Deep Mount

Lubrication

Option Code	
P	Pressure Lube
X	No Pressure Lube

Input Gear Designator

Input Gear Designator	Input Gear Part Number
680*F**AH**	5-P-1242
680*F**BG**	5-P-1325
680*F**DA**	5-P-1330
680*H**AH**	5-P-1494
680*Q**AH**	5-P-1246
680*Q**BG**	5-P-1326
680*Q**DA**	5-P-1331
680*R**AH**	5-P-1441
680*S**AH**	5-P-1322
680*S**BG**	5-P-1327
680*S**DA**	5-P-1332

Shift Option

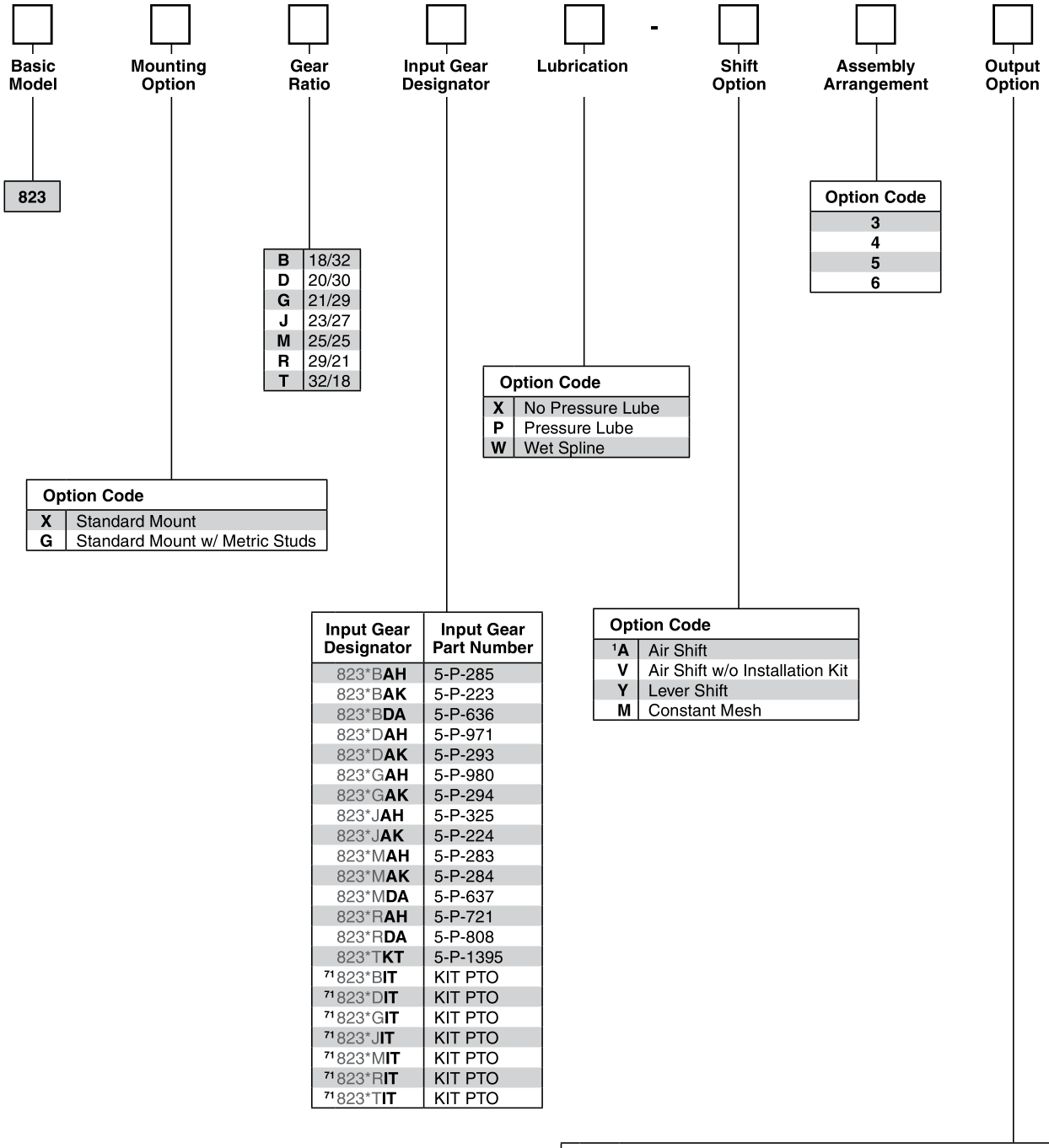
Option Code	
[1]A	Air Shift
[1]P	12V Elec/Air Shift
V	Air Shift w/o Installation Kit
[21]S	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return
[21]T	Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return
[21]U	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/o Neutral Spring Return
[1]W	Wire Shift
X	Wire Shift w/o Cable & Knob
M	Constant Mesh
H	No Shifter Kit
C	Special Shift Control & Bracket Kit

Output Option

Option Code	
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[59]XQ	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
XY	ISO 7653 Pump Mount DIN 5462 Shaft
XV	1410 Series Companion Flange
XX	1-1/4" Tapered Output Shaft w/ Keyway
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[59]GQ	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
GH	Greaseable SAE B 2-Bolt Rotatable Flange, SAE BB Shaft (1" - 15T)
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
GZ	Greaseable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
GY	Greaseable ISO 7653 Pump Mount DIN 5462 Shaft

[1] Includes mounting parts
[21] Includes installation kit, console sold separately
[59] Same as XK except rotated 90°

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Basic Model

823

Gear Ratio

B	18/32
D	20/30
G	21/29
J	23/27
M	25/25
R	29/21
T	32/18

Mounting Option

Option Code	
X	Standard Mount
G	Standard Mount w/ Metric Studs

Lubrication

Option Code	
X	No Pressure Lube
P	Pressure Lube
W	Wet Spline

Input Gear Designator

Input Gear Designator	Input Gear Part Number
823*B**AH**	5-P-285
823*B**AK**	5-P-223
823*B**DA**	5-P-636
823*D**AH**	5-P-971
823*D**AK**	5-P-293
823*G**AH**	5-P-980
823*G**AK**	5-P-294
823*J**AH**	5-P-325
823*J**AK**	5-P-224
823*M**AH**	5-P-283
823*M**AK**	5-P-284
823*M**DA**	5-P-637
823*R**AH**	5-P-721
823*R**DA**	5-P-808
823*T**KT**	5-P-1395
[71]823*B**IT**	KIT PTO
[71]823*D**IT**	KIT PTO
[71]823*G**IT**	KIT PTO
[71]823*J**IT**	KIT PTO
[71]823*M**IT**	KIT PTO
[71]823*R**IT**	KIT PTO
[71]823*T**IT**	KIT PTO

Shift Option

Option Code	
[1]A	Air Shift
V	Air Shift w/o Installation Kit
Y	Lever Shift
M	Constant Mesh

Assembly Arrangement

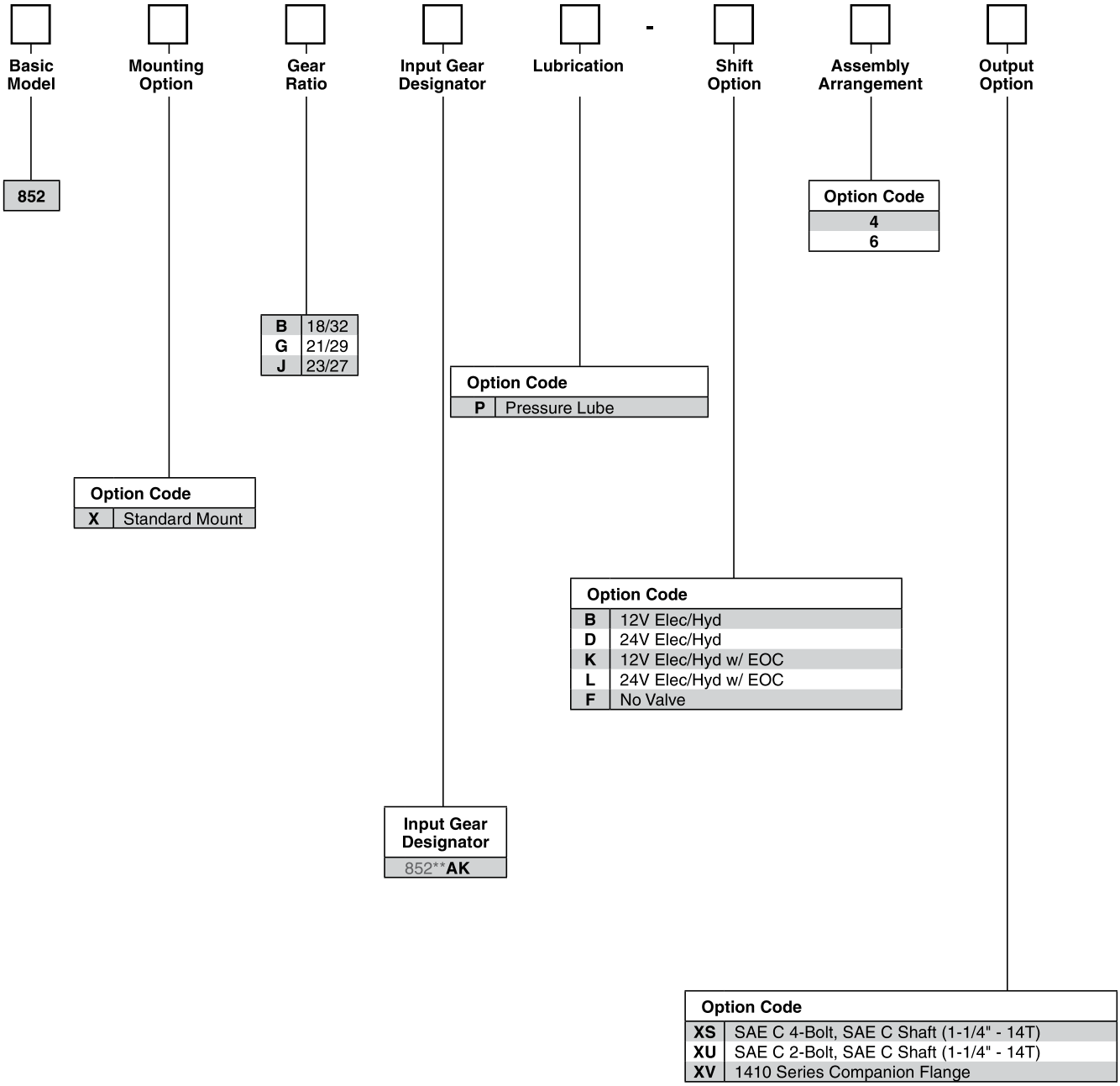
Option Code
3
4
5
6

Output Option

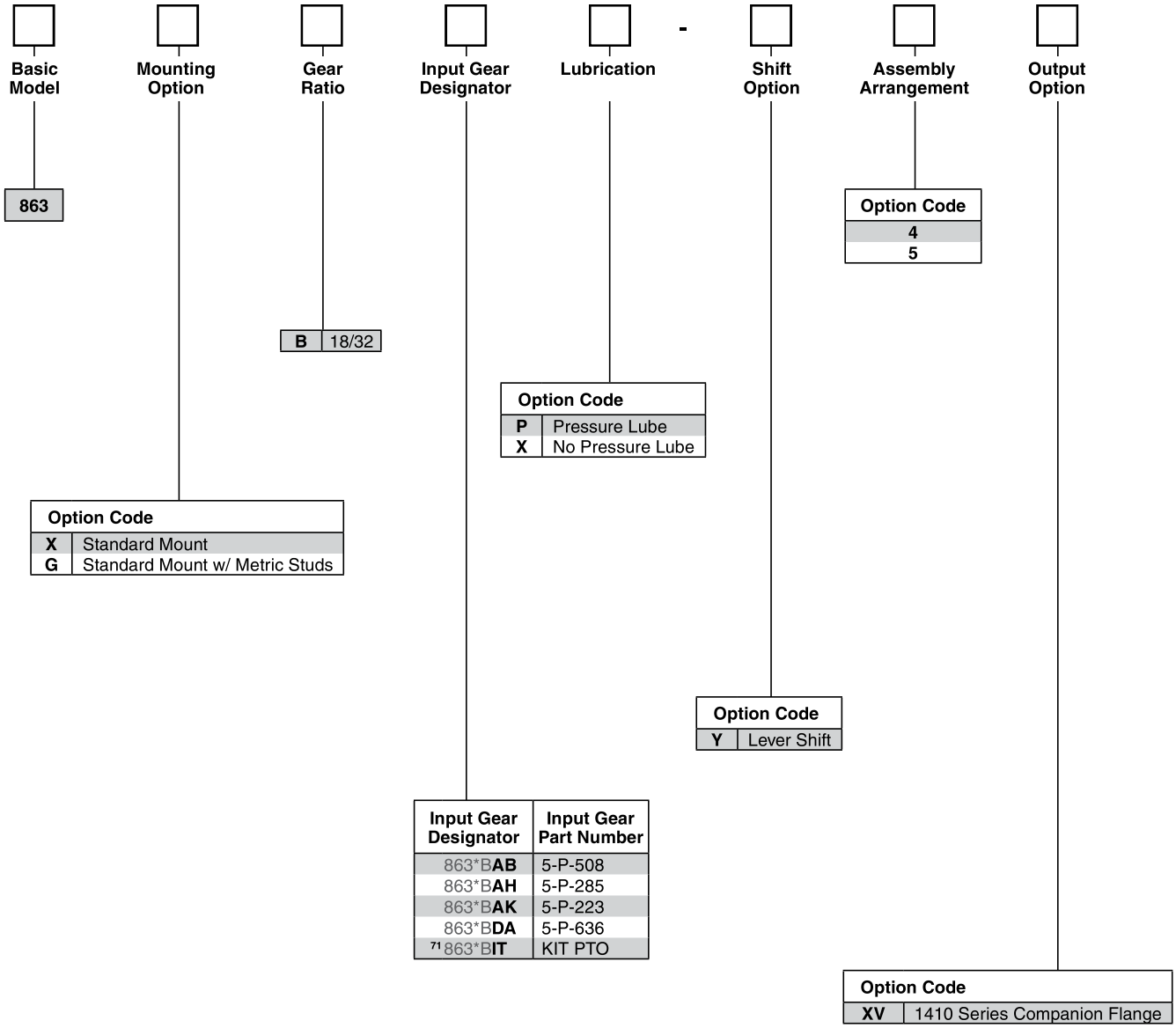
Option Code	
AB	DIN 120 Flange
AC	DIN 100 Flange
[47]XS	SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
[47]XU	SAE C 2-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
XV	1410 Series Companion Flange
GS	Greaseable SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
GU	Greaseable SAE C 2-Bolt Flange, SAE C Shaft (1-1/4" - 14T)

[1] Includes mounting parts
[47] Available with Wet Spline
[71] Input gear ordered separately

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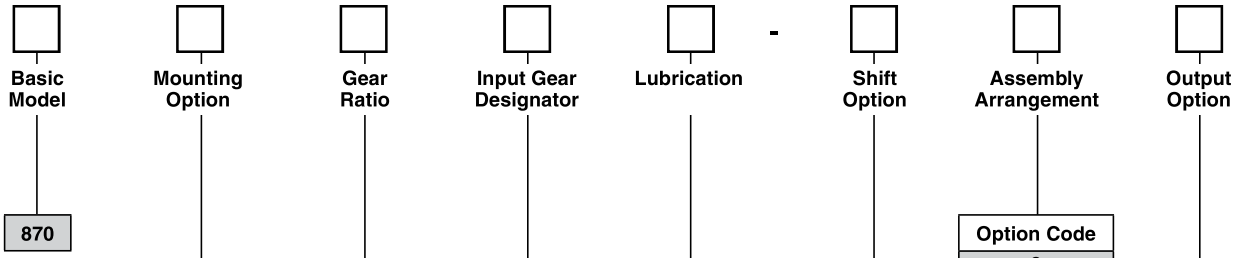


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[71] Input gear ordered separately

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Basic Model
870

Option Code
X — Standard Mount w/ Metric Studs

Gear Ratio	
A	24/40
B	25/39
C	26/38
D	27/37
E	29/35
F	31/33
G	33/31
H	34/30
J	35/29

Input Gear Designator
870**FJ

Option Code	
[5]P	Pressure Lube
[5]W	Wet Spline
[5]R	Valve Body Rotated 120 Degrees
[5]S	Valve Body Rotated 240 Degrees
[5]V	Valve Body Rotated 120 Degrees w/ Wet Spline
[5]Y	Valve Body Rotated 240 Degrees w/ Wet Spline

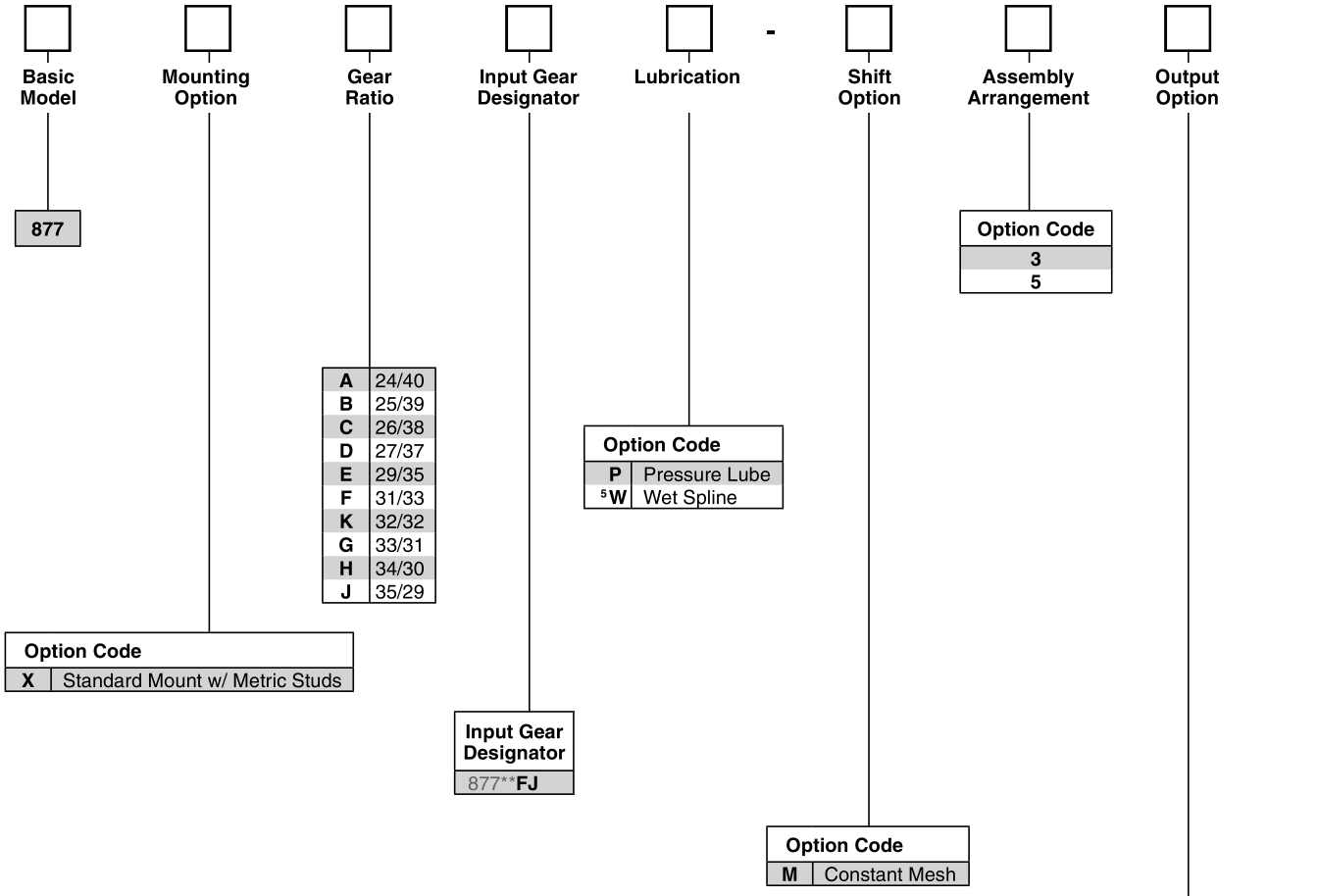
Option Code	
B	12V Elec/Hyd
D	24V Elec/Hyd
K	12V Elec/Hyd w/ EOC
L	24V Elec/Hyd w/ EOC
G	12V Elec/Hyd Valve w/o EOC - Remote
H	24V Elec/Hyd Valve w/o EOC - Remote
E	12V Elec/Hyd w/o Installation Kit
N	24V Elec/Hyd w/o Installation Kit

Option Code
3
5

Option Code	
AB	DIN 120 Flange
AC	DIN 100 Flange
XV	1410 Series Companion Flange
BB	Shaft Brake - DIN 120 Flange
BC	Shaft Brake - DIN 100 Flange
BV	Shaft Brake - 1410 Series Companion Flange
[47]RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)
[47]RZ	Rotatable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
[47]RS	Rotatable SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
[47]RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft
SB	Smart Start - DIN 120 Flange
SC	Smart Start - DIN 100 Flange
SV	Smart Start - 1410 Series Companion Flange

[5] Automatically pressure lubed
[47] Available with Wet Spline

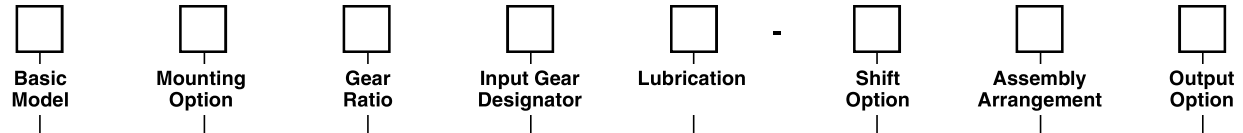
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Option Code	
AB	DIN 120 Flange
AC	DIN 100 Flange
XV	1410 Series Companion Flange
47RF	Rotatable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
47RZ	Rotatable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
47RS	Rotatable SAE C 2 or 4-Bolt Flange, SAE C (1-1/4" - 14T)
47RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft

[5] Automatically pressure lubed
[47] Available with Wet Spline

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880

Option Code
3
4
5
6

B	18/32
D	20/30
G	21/29
J	23/27
M	25/25
Q	27/23
R	29/21
T	32/18

Option Code	
P	Pressure Lube
X	No Pressure Lube

Option Code	
X	Standard Mount
K	Standard Mount w/o Stud Kit
G	Standard Mount w/ Metric Studs
Z	Deep Mount
L	Deep Mount w/o Stud Kit
Q	Eaton Endurant

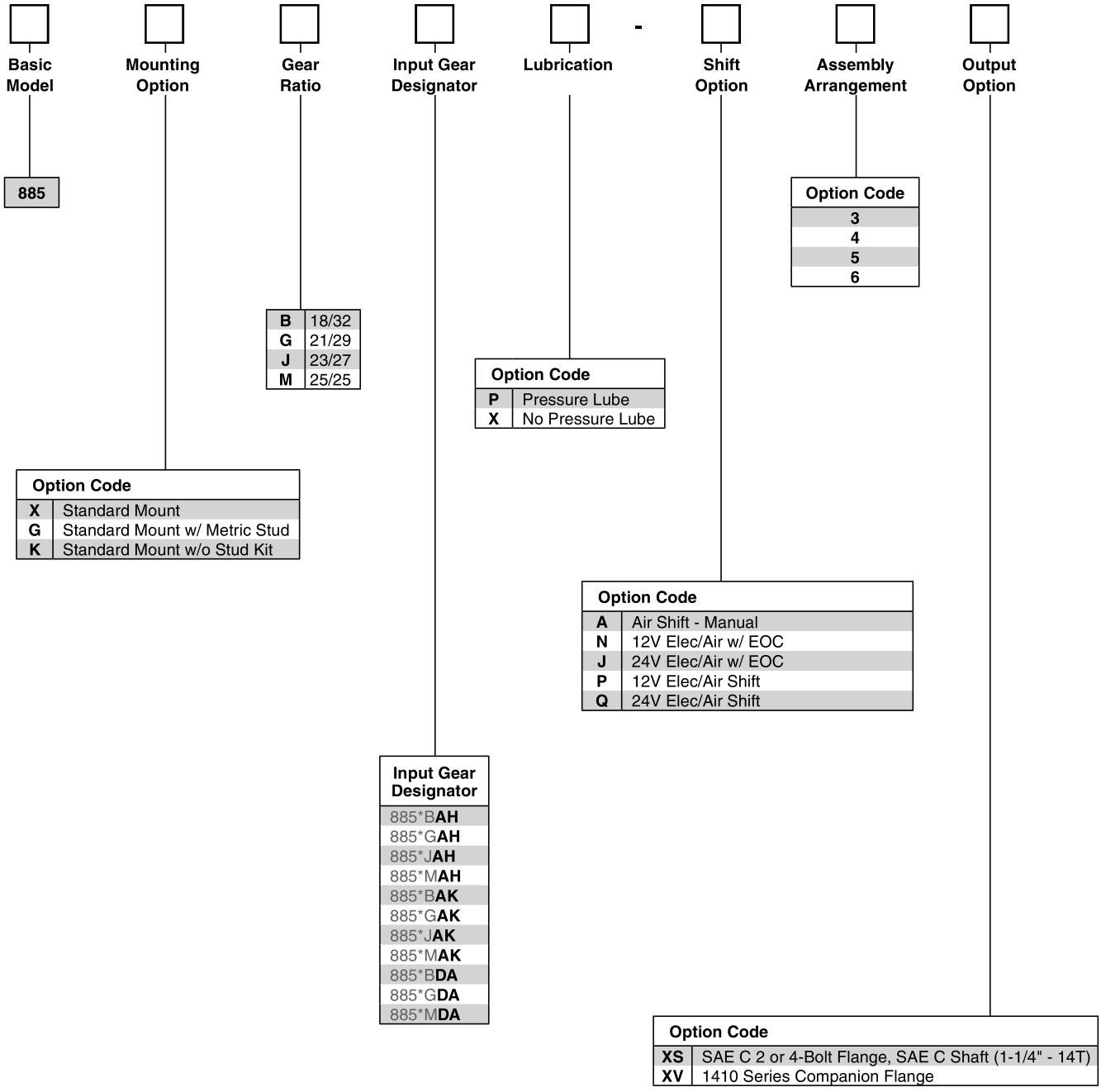
Input Gear Designator	Input Gear Part Number
880*BAH	5-P-1100
880*BAK	5-P-1106
880*BDA	5-P-1120
880*DAH	5-P-1101
880*DAK	5-P-1107
880*GAH	5-P-1135
880*GAK	5-P-1108
880*GDA	5-P-1174
880*GLZ	5-P-1574
880*JAH	5-P-1102
880*JAK	5-P-1109
880*JLZ	5-P-1575
880*MAH	5-P-1103
880*MAK	5-P-1110
880*MDA	5-P-1121
880*QAH	5-P-1385
880*QLZ	5-P-1577
880*RAH	5-P-1104
880*RDA	5-P-1122
880*TAH	5-P-1105
880*TBG	5-P-1177
880*TDA	5-P-1123
880*TDU	5-P-1131
[71] 880*BIT	KIT PTO
[71] 880*DIT	KIT PTO
[71] 880*GIT	KIT PTO
[71] 880*JIT	KIT PTO
[71] 880*MIT	KIT PTO
[71] 880*QIT	KIT PTO
[71] 880*RIT	KIT PTO
[71] 880*TIT	KIT PTO

Option Code	
[1] A	Air Shift
[1] P	12V Elec/Air Shift
D	12V Elec/Air Shift Eaton Endurant
V	Air Shift w/o Installation Kit
Y	Lever Shift
M	Constant Mesh
H	No Shifter Kit

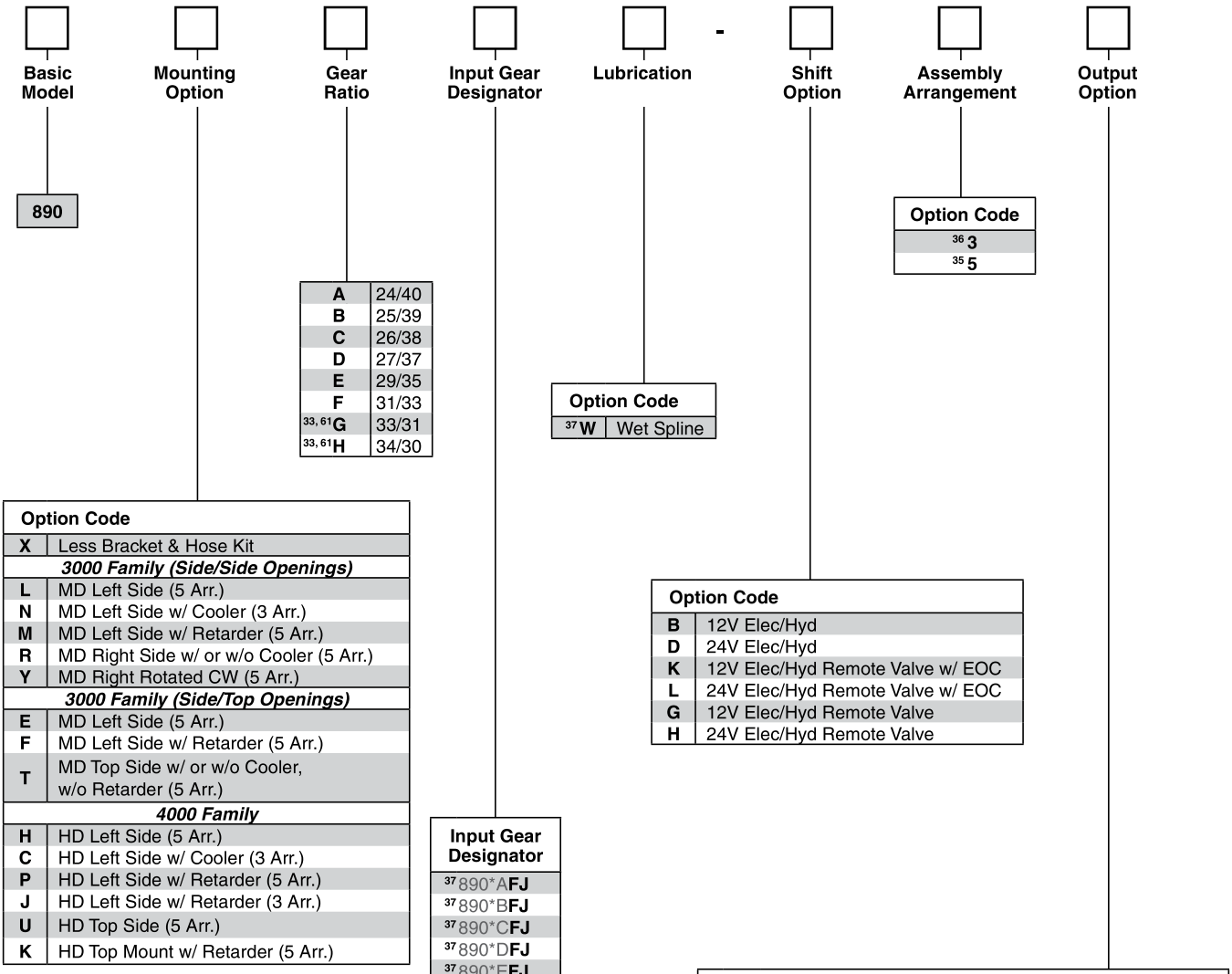
Option Code	
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
XS	SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
XY	ISO 7653 Pump Mount DIN 5462 Shaft
XV	1410 Series Companion Flange
[66] GS	Greaseable SAE C 2 or 4-Bolt, SAE C Shaft (1-1/4" - 14T)

[1] Includes mounting parts
[66] Not available with pressure lubrication
[47] Available with Wet Spline

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Gear Ratio	
A	24/40
B	25/39
C	26/38
D	27/37
E	29/35
F	31/33
[33, 61] G	33/31
[33, 61] H	34/30

Lubrication Option Code	
[37] W	Wet Spline

Assembly Arrangement Option Code
[36] 3
[35] 5

Mounting Option Code	
X	Less Bracket & Hose Kit
	3000 Family (Side/Side Openings)
L	MD Left Side (5 Arr.)
N	MD Left Side w/ Cooler (3 Arr.)
M	MD Left Side w/ Retarder (5 Arr.)
R	MD Right Side w/ or w/o Cooler (5 Arr.)
Y	MD Right Rotated CW (5 Arr.)
	3000 Family (Side/Top Openings)
E	MD Left Side (5 Arr.)
F	MD Left Side w/ Retarder (5 Arr.)
T	MD Top Side w/ or w/o Cooler, w/o Retarder (5 Arr.)
	4000 Family
H	HD Left Side (5 Arr.)
C	HD Left Side w/ Cooler (3 Arr.)
P	HD Left Side w/ Retarder (5 Arr.)
J	HD Left Side w/ Retarder (3 Arr.)
U	HD Top Side (5 Arr.)
K	HD Top Mount w/ Retarder (5 Arr.)

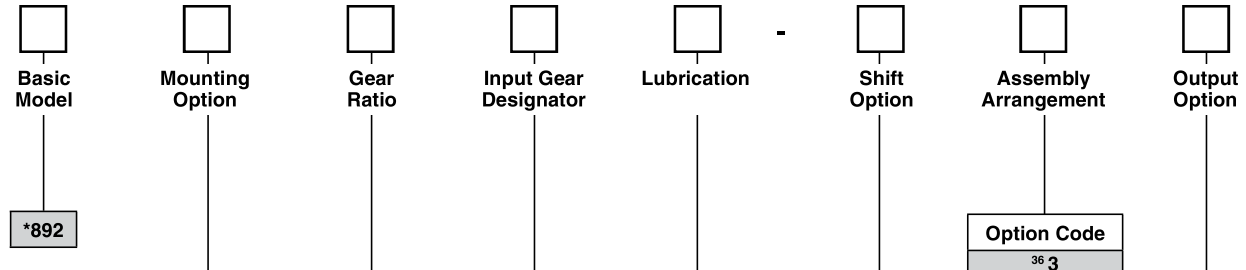
Input Gear Designator
[37] 890*A**FJ**
[37] 890*B**FJ**
[37] 890*C**FJ**
[37] 890*D**FJ**
[37] 890*E**FJ**
[37] 890*F**FJ**
[37] 890*G**FJ**
[37] 890*H**FJ**

Shift Option Code	
B	12V Elec/Hyd
D	24V Elec/Hyd
K	12V Elec/Hyd Remote Valve w/ EOC
L	24V Elec/Hyd Remote Valve w/ EOC
G	12V Elec/Hyd Remote Valve
H	24V Elec/Hyd Remote Valve

Output Option Code	
	3 Assembly Arrangement
AB	DIN 120 Flange
AC	DIN 100 Flange
[35] XY	ISO 7653 Pump Mount DIN 5462 Shaft
[36] CK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[36] CF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
[36] CZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
[36] CS	SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
ZS	SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
	5 Assembly Arrangement
AB	DIN 120 Flange
AC	DIN 100 Flange
XV	1410 Series Companion Flange
[35] XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[35] AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
[35] AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
[35] XS	SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
ZS	SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
[34] DA	SAE D 4-Bolt Flange, SAE D Shaft (1-3/4" - 13T)

[33] G & H ratio for Allison 3000 Series only
[34] DA output is not available for transmission with a retarder or cooler
[35] XS, XK, AF, AZ, XY, outputs available with 5 ass'y arrangement and all mtg options except C & J
[36] CS, CK, CF, CZ, outputs only available with 3 ass'y arrangement and C, J & P mtg options
[37] Automatically pressure lubed with Wet Spline
[61] For the Allison 4000 Series Engineering Approval required

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Option Code	
	4700/4800 Family
X	Less Bracket & Hose Kit
H	HD Left Side (5 Arr.)
C	HD Left Side w/ Cooler (3 Arr.)
P	HD Left Side w/ Retarder (5 Arr.)
J	HD Left Side w/ Retarder (3 Arr.)
U	HD Top Side (5 Arr.)
K	HD Top Side w/ Retarder (5 Arr.)

A	24/40
B	25/39
C	26/38
D	27/37
E	29/35
F	31/33

Option Code	
[37] W	Wet Spline

Option Code
[36] 3
[37] 5

Option Code	
B	12V Elec/Hyd
D	24V Elec/Hyd
K	12V Elec/Hyd Remote Valve w/ EOC
L	24V Elec/Hyd Remote Valve w/ EOC
G	12V Elec/Hyd Remote Valve
H	24V Elec/Hyd Remote Valve

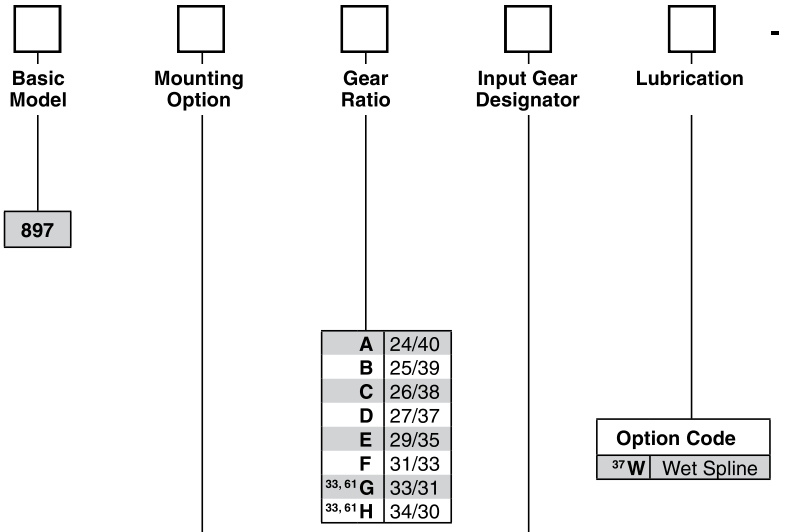
Input Gear Designator
892*A**FJ***
892*B**FJ***
892*C**FJ***
892*D**FJ***
892*E**FJ***
892*F**FJ***

Option Code	
	3 Assembly Arrangement
AB	DIN 120 Flange
AC	DIN 100 Flange
[35] XY	ISO 7653 Pump Mount DIN 5462 Shaft
[36] CK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[36] CF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
[36] CZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
[36] CS	SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
ZS	SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
	5 Assembly Arrangement
AB	DIN 120 Flange
AC	DIN 100 Flange
XV	1410 Series Companion Flange
[35] XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[35] AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
[35] AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
[35] XS	SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
ZS	SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
[34] DA	SAE D 4-Bolt Flange, SAE D Shaft (1-3/4" - 13T)

[34] DA output is not available for transmission with a retarder or cooler
[35] XS, XK, AF, AZ, XY, outputs available with 5 ass'y arrangement and all mtg options except C & J
[36] CS, CK, CF, CZ, outputs only available with 3 ass'y arrangement and C, J & P mtg options
[37] Automatically pressure lubed with Wet Spline

*** For 4700/4800 Series Transmissions**

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Option Code	
X	Less Bracket & Hose Kit
	3000 Family (Side/Side Openings)
L	MD Left Side (5 Arr.)
N	MD Left Side w/ Cooler (3 Arr.)
M	MD Left Side w/ Retarder (5 Arr.)
R	MD Right Side w/ or w/o Cooler (5 Arr.)
Y	MD Right Rotated CW (5 Arr.)
	3000 Family (Side/Top Openings)
E	MD Left Side (5 Arr.)
F	MD Left Side w/ Retarder (5 Arr.)
T	MD Top Side w/ or w/o Cooler, w/o Retarder (5 Arr.)
	4000 Family
H	HD Left Side (5 Arr.)
C	HD Left Side w/ Cooler (3 Arr.)
P	HD Left Side w/ Retarder (5 Arr.)
J	HD Left Side w/ Retarder (3 Arr.)
U	HD Top Side (5 Arr.)
K	HD Top Mount w/ Retarder (5 Arr.)

Gear Ratio	
A	24/40
B	25/39
C	26/38
D	27/37
E	29/35
F	31/33
[33, 61] G	33/31
[33, 61] H	34/30

Input Gear Designator
897*A**FJ***
897*B**FJ***
897*C**FJ***
897*D**FJ***
897*E**FJ***
897*F**FJ***
[33] 897*G**FJ***
[33] 897*H**FJ***

Option Code	
[37] W	Wet Spline

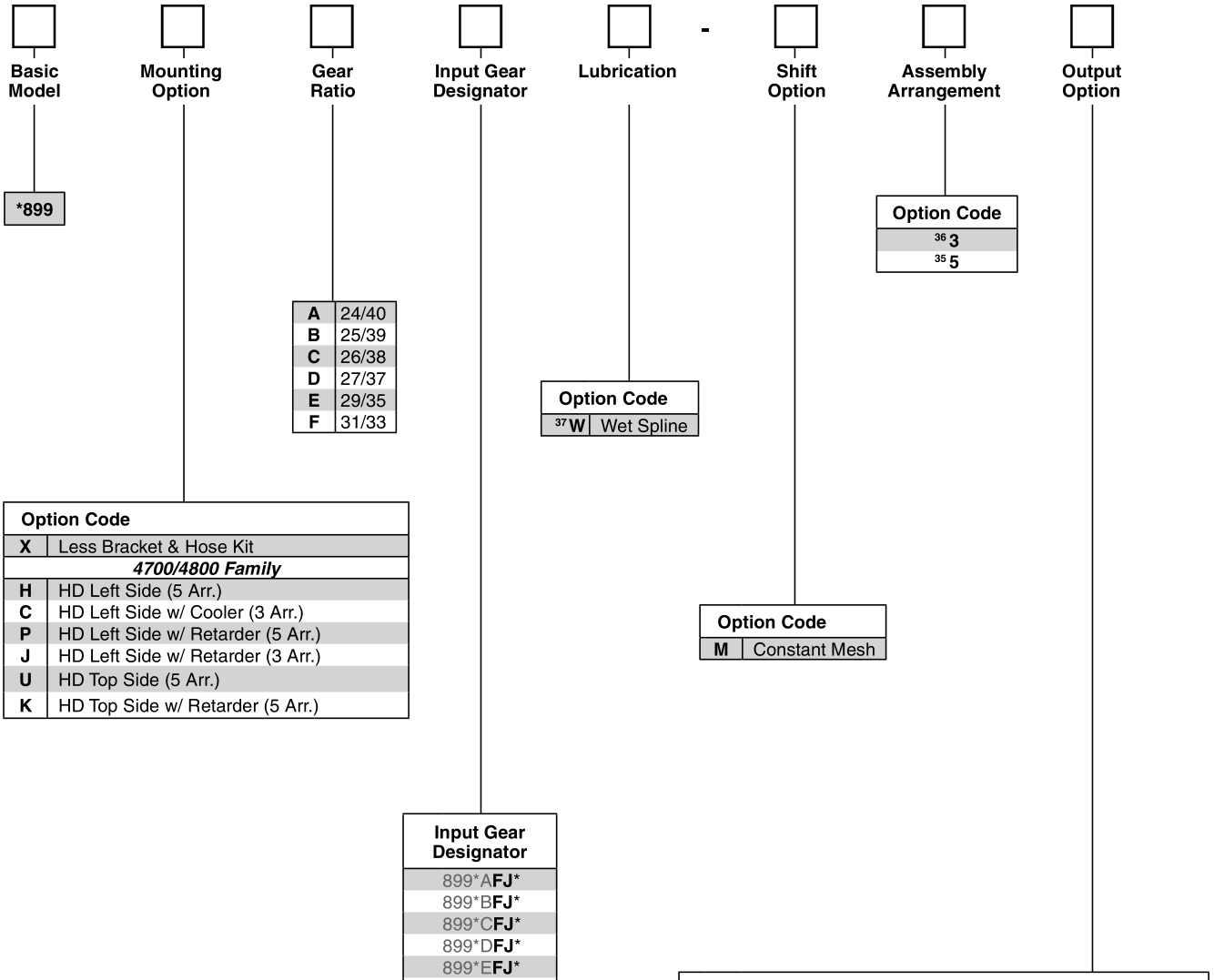
Option Code
M Constant Mesh

Option Code	
	3 Assembly Arrangement
AB	DIN 120 Flange
AC	DIN 100 Flange
[35] XY	ISO 7653 Pump Mount DIN 5462 Shaft
[36] CK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[36] CF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
[36] CZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
[36] CS	SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
ZS	SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
	5 Assembly Arrangement
AB	DIN 120 Flange
AC	DIN 100 Flange
XV	1410 Series Companion Flange
[35] XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[35] AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
[35] AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
[35] XS	SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
ZS	SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
[34] DA	SAE D 4-Bolt Flange, SAE D Shaft (1-3/4" - 13T)

Option Code
[36] 3
[35] 5

[33] G & H ratio for Allison 3000 Series only
[34] DA output is not available for transmission with a retarder or cooler
[35] XS, XK, AF, AZ, XY, outputs available with 5 ass'y arrangement and all mtg options except C & J
[36] CS, CK, CF, CZ, outputs only available with 3 ass'y arrangement and C, J & P mtg options
[37] Automatically pressure lubed with Wet Spline
[61] For the Allison 4000 Series Engineering Approval required

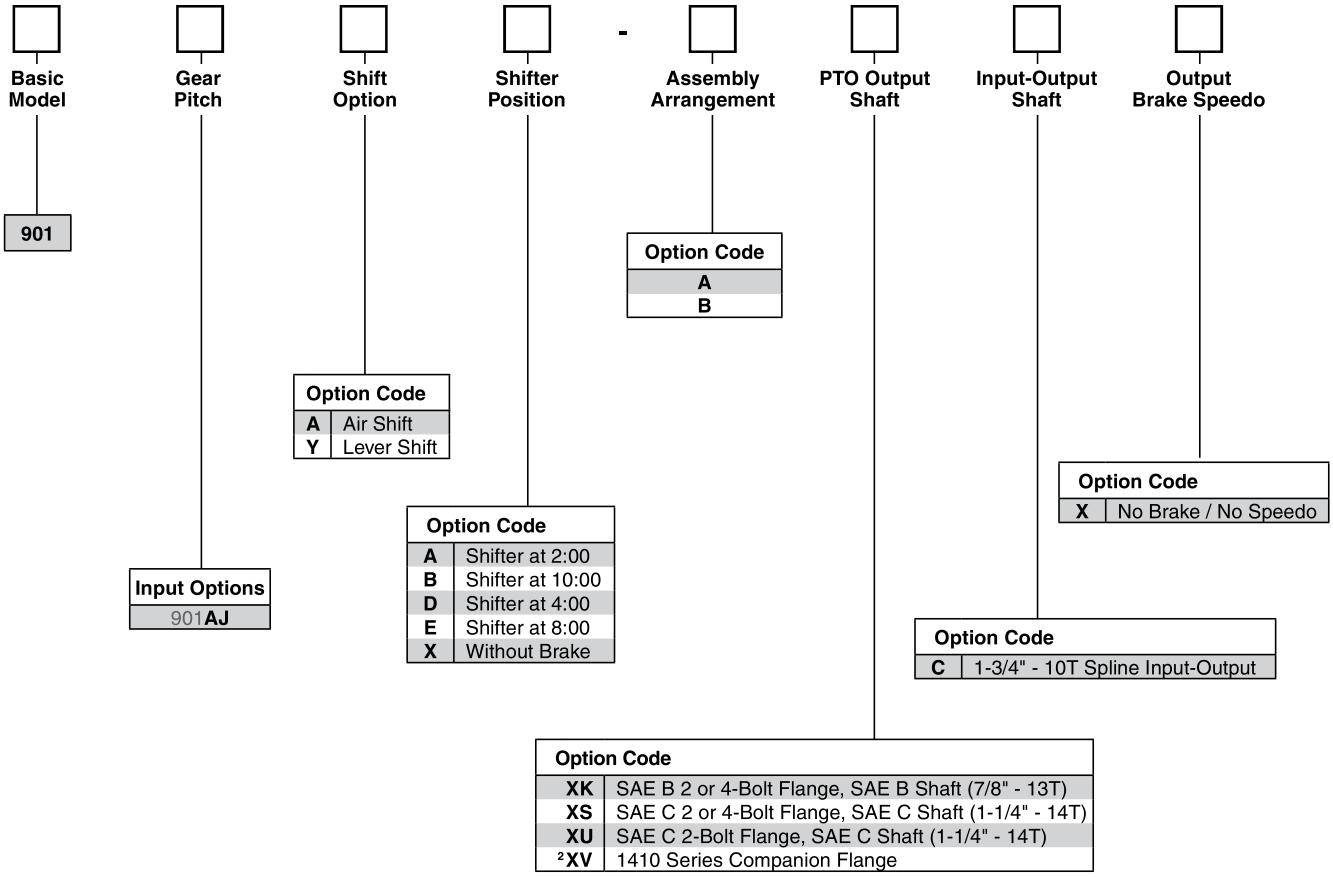
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[34] DA output is not available for transmission with a retarder or cooler
[35] XS, XK, AF, AZ, XY, outputs available with 5 ass'y arrangement and all mtg options except C & J
[36] CS, CK, CF, CZ, outputs only available with 3 ass'y arrangement and C, J & P mtg options
[37] Automatically pressure lubed with Wet Spline

*** For 4700/4800 Series Transmissions**

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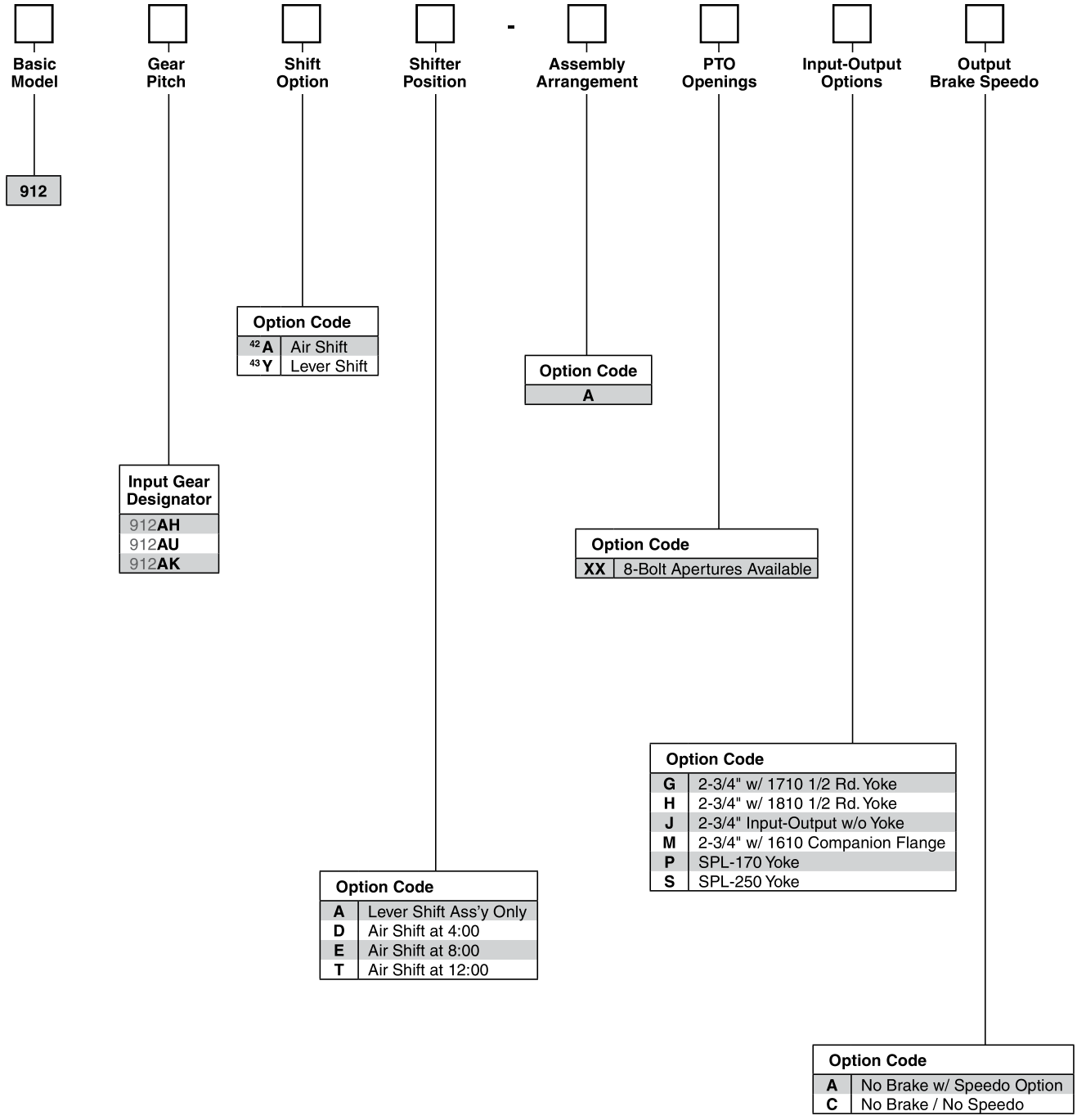
Assembly

[2] Standard shaft

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Assembly Options

912 Series



[42] Air Shift, two 8-Bolt opening available
[43] Lever Shift, three 8-Bolt opening available

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F	21/37
L	25/34
Q	19/24
S	24/22
U	26/20
W	26/17
X	38/21

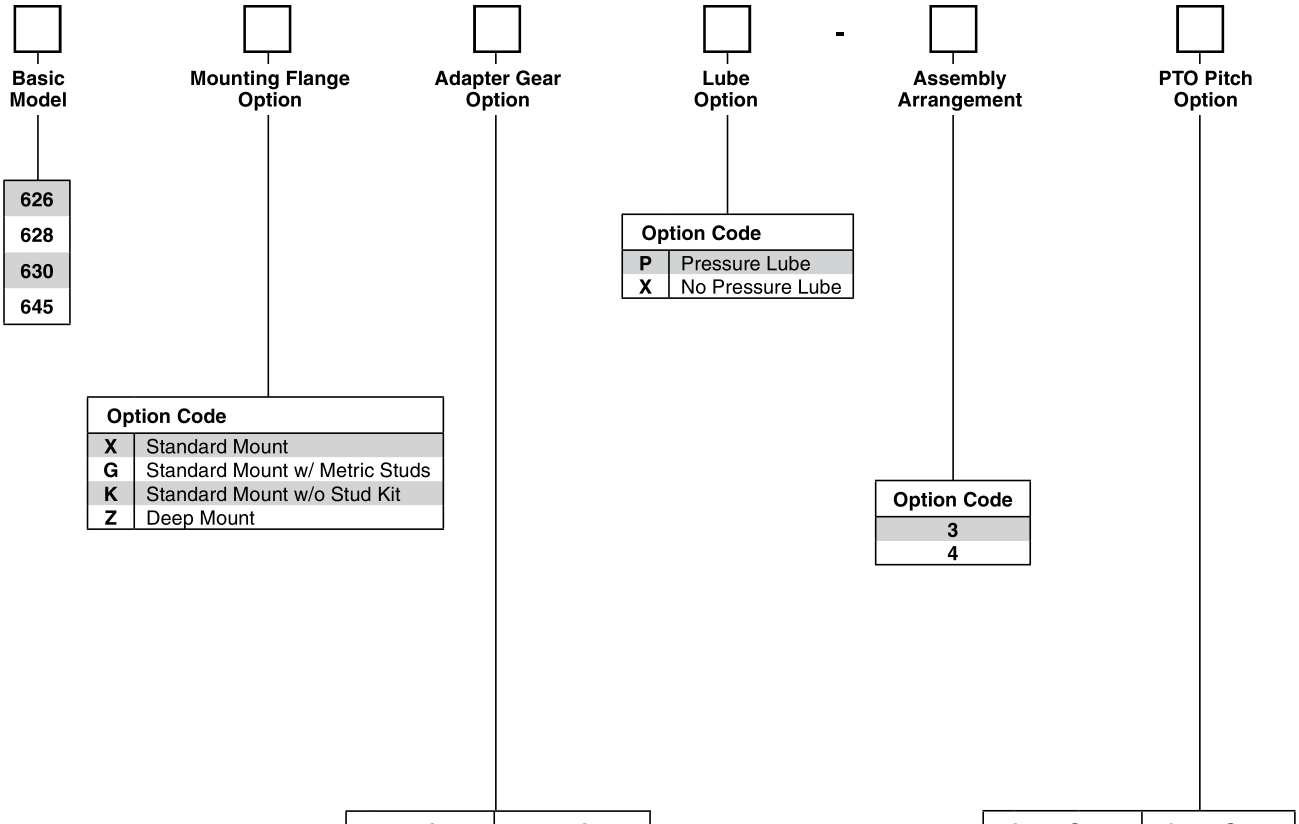
Option Code	
1	Output Opposite Input
2	Output Same Side as Input

Option Code	
[1]A	Air Shift
[1]P	12V Elec/Air Shift
[21]S	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return
[21]T	Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return
[21]U	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/o Neutral Spring Return
V	Air Shift w/o Installation Kit
[1]W	Wire Shift
X	Wire Shift w/o Cable & Knob
C	Heavy Duty Bracket Less Cable
H	No Shifter Kit
M	Constant Mesh

Option Code	
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)
SQ	SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[59]XQ	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)
XX	1-1/4" Tapered Output Shaft w/ Keyway
XY	ISO 7653 Pump Mount DIN 5462 Shaft
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
[59]GQ	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)

[1] Includes mounting parts
[21] Includes installation kit, console sold separately
[59] Same as XK except rotated 90°

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Basic Model
626
628
630
645

Option Code	
X	Standard Mount
G	Standard Mount w/ Metric Studs
K	Standard Mount w/o Stud Kit
Z	Deep Mount

Option Code	
P	Pressure Lube
X	No Pressure Lube

Option Code
3
4

Input Gear Designator	Input Gear Part Number
AB	5-P-1001
AH	5-P-1004
AR	5-P-1008
BG	5-P-1015
BQ	5-P-1023
DA	5-P-1037
DU	5-P-1050
ES	5-P-1059
EV	5-P-1060
EW	5-P-1061
FN	5-P-1070
HY	5-P-1237
JK	5-P-1261
JU	5-P-1316
JW	5-P-1319
[71] IT	KIT ADAPTER

Input Gear Designator		Input Gear Part Number
AB	-*AB	5-P-1001
AH	-*AH	5-P-1004
AR	-*GY	5-P-1184
BG	-*HB	5-P-1187
BQ	-*BP	5-P-1022
DA	-*DA	5-P-1037
DU	-*HH	5-P-1193
ES	-*HL	5-P-1196
EV	-*EV	5-P-1060
EW	-*HM	5-P-1197
FN	-*HR	5-P-1201
HY	-*JB	5-P-1244
JK	-*JL	5-P-1262
JU	-*KA	5-P-1318
JW	-*KB	5-P-1321
[71] XX		No PTO Gear

Assembly

[71] Input gear ordered separately

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NOTES



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For converting the 660 Series Chelsea PTOs from a driveshaft output, or as listed, to a new pump flange output, use the following kits. Consult the Chelsea price book for availability by series.

Pump Suffix	Kit Number Suffix	Kit Number	Flange Type	Shaft Type (SAE)
GA (660 Series) (Greaseable)	XD to GA RA to GA	328591-124X 328591-109X	SAE B 2-Bolt	*7/8" - 13 Tooth Splined (B)
GH (660 Series) (Greaseable)	XD to GH RF to GH	328591-117X 328591-115X	SAE B 2-Bolt Rotatable	*1" - 15 Tooth Splined (BB)
GB (660 Series) (Greaseable)	XD to GB RG to GB	328591-125X 328591-110X	SAE B 4-Bolt	*7/8" - 13 Tooth Splined (B)
GK (660 Series) (Greaseable)	XD to GK XK to GK	328591-99X 328591-96X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Splined (B)
GQ (660 Series) (Greaseable)	XD to GQ XQ to GQ	328591-101X 328591-96X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Splined (B)
GF (660 Series) (Greaseable)	XD to GF AF to GF	328591-123X 329591-111X	SAE B 2 or 4-Bolt	*1" - 15 Tooth Splined (BB)
GZ (660 Series) (Greaseable)	XD to GZ AZ to GZ	328591-103X 328591-98X	SAE B 2 or 4-Bolt	*1-1/4" - 14 Tooth Splined (C)
GR (660 Series) (Greaseable)	XD to GR	328591-126X	Chelsea Special (Cloverleaf)	*7/8" - 13 Tooth Splined (B)
GY (660 Series) (Greaseable)	XD to GY XY to GY	328591-102X 329591-97X	ISO 7653 Pump Mount	*DIN 5462 (B8x32x36 - 8T)

*Grease fitting on end of shaft

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PTO Shift Mechanisms Field Conversion Kits

Series/ Application	Assembly Arrangement	Wire to Air	Lever to Air	Wire to Elec. Over Air	Lever to Elec. Over Air
221	3, 4, 5 & 6	328390-88X	328390-89X	328390-109X (12V)	N/A
290	3, 4, 5 & 6	328390-123X	N/A	N/A	N/A
340	4 & 5	N/A	328390-92X	N/A	N/A
442	3, 4, 5 & 6	328390-117X	328390-117X	328390-119X (12V) 328390-120X (24V)	328390-119X (12V) 328390-120X (24V)
447	3, 4, 5 & 6	N/A	328390-117X	328390-127X (12V)	N/A
660	3, 4, 5 & 6	328390-117X	328390-117X	328390-119X (12V) 328390-120X (24V)	N/A

N/A – Non Applicable

6-Bolt Cover Assemblies

Series/ Application	Assembly Arrangement	Wire Control	Air Control
221 221	3 & 6 4 & 5	328805-1X 328805-2X	328723X 328723X
290	3, 4, 5 & 6		329363X
340	G4 & A5 A4 & G5	N/A	328911X 328912X
442 Q, W & X 442 Q, W & X	3 & 6 4 & 5	329119-1X 329119-2X	
442 F, L, R, S & U 442 F, L, R, S & U	3 & 6 4 & 5	329121-1X 329121-2X	
442 A, B & C 442 A, B & C	3 & 6 4 & 5	329271-1X 329271-2X	
442 (All Ratios)	All		329361X
447 Q & W 447 Q & W	3 & 6 4 & 5	329151-1X 329151-2X	
447 S, U & R 447 S, U & R	3 & 6 4 & 5	329152-1X 329152-2X	
447 (All Ratios)	All		329363X
660 Q & W 660 Q & W	3 & 6 4 & 5	329119-1X 329119-2X	
660 F, S & U 660 F, S & U	3 & 6 4 & 5	329121-1X 329121-2X	
660 (All Ratios)	All		329361X

Options

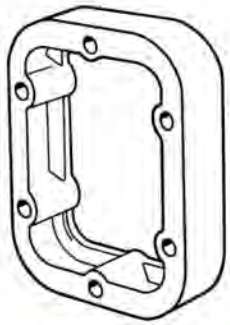
Installation Kits

Series/ Application	Assembly Arrangement	Wire Control	Air Control	Electric Over Air		Air Shift w/ Combo Valve Less Kick Out	Air Shift w/Combo Valve
				12 Volt	24 Volt		
221	3, 4, 5 & 6	328380X	328388-98X	328388-47X	328388-48X	N/A	328388-65X
290	3, 4, 5 & 6	N/A	328388-98X	328388-47X	328388-48X	N/A	328388-65X
340	N/A	N/A	N/A	N/A	N/A	N/A	N/A
442	3, 4, 5 & 6	328380X	328388-98X	328388-47X	328388-48X	328388-72X	328388-65X
447	3, 4, 5 & 6	328380X	328388-98X	328388-47X	328388-48X	N/A	328388-65X
660	3, 4, 5 & 6	328380X	328388-98X	328388-47X	328388-48X	328388-72X	328388-65X

N/A – Non Applicable

Filler Blocks

A filler block, or spacer, may be required on certain transmissions to properly space the PTO and get the correct backlash. The application page will call out the filler block as required.



Two filler blocks may be used in combination with one or more gaskets between the filler block surfaces to obtain the proper spacing.

In computing the total thickness of the filler block and gasket combination, use a factor of .012" (compressed thickness of a .020" gasket 35-P-9-2 or 35-P-15-2) for every .020" gasket required in the installation.

6-Bolt Filler Blocks

Part Number	A Thickness	Material	Part Number	A Thickness	Material
7-A-032	.032"	Fiber	7-A-500	.500"	Cast Iron
7-A-062	.062"	Fiber	7-A-500	.500"	Cast Iron
7-A-093	.093"	Steel	7-A-550	.550"	Cast Iron
7-A-125	.125"	Steel	7-A-562	.562"	Cast Iron
7-A-140	.140"	Steel	7-A-700	.700"	Cast Iron
7-A-165	.165"	Steel	7-A-800	.800"	Cast Iron
7-A-187	.187"	Steel	7-A-1000	1.000"	Cast Iron
7-A-200	.200"	Cast Iron	7-A-1180	1.180"	Cast Iron
7-A-240	.240"	Cast Iron	7-A-1250	1.250"	Cast Iron
7-A-270	.270"	Cast Iron	7-A-1468	1.468"	Cast Iron
7-A-300	.300"	Cast Iron	7-A-1520	1.520"	Cast Iron
7-A-350	.350"	Cast Iron	7-A-1640	1.640"	Cast Iron
7-A-400	.400"	Cast Iron	7-A-1875	1.875"	Cast Iron
7-A-450	.450"	Cast Iron	7-A-2000	2.000"	Cast Iron

PTO Options Chart – Mechanical PTOs		348	489	680	823	863	880
Lubrication							
P	Pressure Lube		x	x	x	x	x
X	No Pressure Lube	x	x	x	x	x	x
W	Wet Spline				x		
Shifting							
G	Air Shift (Opposite Output)	x					
P	12V Elec/Air Shift		x	x			x
C	Special Shift Control & Bracket Kit		x	x			
M	Constant Mesh		x	x	x		x
A	Air Shift		x	x	x		x
A	Air Shift (Same Side as Output)	x					
S	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return		x	x			
T	Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return		x	x			
U	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/o Neutral Spring Return		x	x			
V	Air Shift w/o Installation Kit	x	x	x	x		x
W	Wire Shift		x	x			
X	Wire Shift w/o Cable & Knob		x	x			
Y	Lever Shift	x			x	x	x
H	No Shift Assembly		x	x			x
Q	12V Elec/Air Shift Eaton Endurant		x				
Output							
AB	DIN 120				x		
AC	DIN 100				x		
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)		x	x			x
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)		x	x			
AZ	Non Standard Flange, SAE C Shaft (1-1/4" - 14T)		x	x			x
SQ	SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		x				
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)	x	x	x			
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)		x	x			
XG	Non Standard SAE A 2-Bolt Flange, Non Standard Shaft (3/4" - 3/16" Key) Long						
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		x	x			x
XQ**	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		x	x			
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)		x	x			
XS	SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)						x, w
XS	SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)				x, w		
XU	SAE C 2-Bolt Flange, SAE C Shaft (1-1/4" - 14T)				x		
XV	1410 Series Companion Flange			x	x	x	x
XX***	1-1/4" Tapered Output Shaft w/ Keyway		x	x			
XY	ISO 7653 Pump Mount DIN 5462 Shaft		x	x			x
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)		x	x			
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)		x	x			
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)		x	x			
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)		x	x			
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		x	x			
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)		x	x			
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft		x	x			

** XQ/GQ same as XK/GK except flange rotated 90°
*** Order companion (379824) separately
w = Wet Spline Option
NOTE: Always check current price book for available options

Continued on Next Page

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

PTO Options Chart – Mechanical PTOs		348	489	680	823	863	880
Output (Cont'd)							
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)		x	x			
GH	Greaseable SAE B 2-Bolt Rotatable Flange, SAE BB Shaft (1" - 15T)			x			
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)		x	x			
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		x	x			
GQ**	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)		x	x			
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)		x	x			
GS	Greaseable SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)				x		x
GZ	Greaseable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)			x			
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)		x	x			
GY	Greaseable ISO 7653 Pump Mount DIN 5462 Shaft			x			
GU	Greaseable SAE C 2-Bolt Flange, SAE C Shaft (1-1/4" - 14T)				x		
Self-Lube							
LG	1410 Series Companion Flange w/ Self Lube						x
LA	SAE B 2-Bolt w/Self Lube Pump, SAE B Shaft (7/8" - 13T)		x	x			
LB	SAE A 2-Bolt w/Self Lube Pump, SAE B Shaft (7/8" - 13T)		x	x			

** XQ/GQ same as XK/GK except flange rotated 90°
NOTE: Always check current price book for available options

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

For converting 8-Bolt Chelsea PTOs from a driveshaft output to a pump flange output, use the following kits.

489 Series

Pump Suffix	Kit Number Suffix	Kit Number	Flange Type	Shaft Type (SAE)
AF	XD to AF	328591-30X	SAE B 2 or 4-Bolt	1" - 15 Tooth Splined (BB)
AK	XD to AK	328591-28X	SAE B 2-Bolt	7/8" - 13 Tooth Splined (B)
AZ	XD to AZ	328591-70X	SAE B 2 or 4-Bolt	1-1/4" - 14 Tooth Splined (C)
SQ	XD to SQ	328591-149X	SAE B 4-Bolt	7/8" - 13 Tooth Splined (B)
XE	XD to XE	328591-27X	SAE A 2 or 4-Bolt	5/8" - 9 Tooth Splined (A)
XK	XD to XK	328591-16X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined (B)
XQ	XD to XQ	328591-17X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined (B)
XR	XD to XR	328591-52X	Chelsea Special (Cloverleaf)	7/8" - 13 Tooth Splined (B)
XX	XD to XX	328591-122X	Not Included	1-1/4" Tapered Output Shaft w/ Keyway
XY	XD to XY	328591-121X	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
RC (Rotatable)	XD to RC	328591-112X	SAE A 2-Bolt	5/8" - 9 Tooth Splined (A)
RD (Rotatable)	XD to RD	328591-113X	SAE A 2-Bolt	7/8" - 13 Tooth Splined (B)
RA (Rotatable)	XD to RA XR to RA	328591-55X 328591-53X	SAE B 2-Bolt	7/8" - 13 Tooth Internal Spline (B)
RF (Rotatable)	XD to RF	328591-78X	SAE B 2-Bolt	1" - 15 Tooth Splined (BB)
RB (Rotatable)	XD to RB XR to RB	328591-56X 328591-54X	SAE B 4-Bolt	7/8" - 13 Tooth Internal Spline (B)
RE (Rotatable)	XD to RE	328591-134X	SAE B 4-Bolt	1" - 15 Tooth Splined (BB)
RY (Rotatable)	XD to RY	328591-131X	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
GA (Greaseable)	XD to GA XR to GA RA to GA	328591-72X 328591-73X 328591-106X	SAE B 2-Bolt Rotatable	*7/8" - 13 Tooth Internal Spline (B)
GB (Greaseable)	XD to GB XR to GB RB to GB	328591-74X 328591-75X 328591-107X	SAE B 4-Bolt Rotatable	*7/8" - 13 Tooth Internal Spline (B)
GK (Greaseable)	XD to GK XK to GK	328591-89X 328591-86X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Internal Spline (B)
GQ (Greaseable)	XD to GQ XQ to GQ	328591-91X 328591-86X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Internal Spline (B)
GF (Greaseable)	XD to GF AF to GF	328591-71X 328591-108X	SAE B 2 or 4-Bolt	*1" - 15 Tooth Internal Spline (BB)
GR (Greaseable)	XD to GR	328591-76X	Chelsea Special (Cloverleaf)	*7/8" - 13 Tooth Internal Spline (B)

*Grease fitting on end of shaft
NOTE: Use 329097-1X to convert PTOs with AK, XP, XQ, XN, or XK output to the self-lube pump option.
NOTE: Contact Chelsea Customer Service for kits not listed.

Options

680 Series

Pump Suffix	Kit Number Suffix	Kit Number	Flange Type	Shaft Type (SAE)
AF	XD to AF	328591-30X	SAE B 2 or 4-Bolt	1" - 15 Tooth Internal Spline (BB)
AK	XD to AK	328591-28X	SAE B 2-Bolt	7/8" - 13 Tooth Internal Spline (B)
AZ	XD to AZ	328591-70X	SAE B 2 or 4-Bolt	1-1/4" - 14 Tooth Internal Spline (C)
XE	XD to XE	328591-27X	SAE A 2 or 4-Bolt	5/8" - 9 Tooth Internal Spline (A)
XK	XD to XK	328591-16X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Internal Spline (B)
XQ	XD to XQ	328591-26X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Internal Spline (B)
XR	XD to XR	328591-23X	Chelsea Special (Cloverleaf)	7/8" - 13 Tooth Internal Spline (B)
XV	XD to XV	328591-17X	1410 Series Companion Flange	1-1/4" Output Shaft w/ Keyway
XX	XD to XX	328591-52X	Not Included	1-1/4" Tapered Output Shaft w/ Keyway
XY	XD to XY	328591-121X	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
RC (Rotatable)	XD to RC	328591-112X	SAE A 2-Bolt	5/8" - 9 Tooth Internal Spline (A)
RA (Rotatable)	XD to RA XR to RA	328591-55X 328591-53X	SAE B 2-Bolt	7/8" - 13 Tooth Internal Spline (B)
RB (Rotatable)	XD to RB XR to RB	328591-56X 328591-54X	SAE B 4-Bolt	7/8" - 13 Tooth Internal Spline (B)
RE (Rotatable)	XD to RE	328591-134X	SAE B 4-Bolt	1" - 15 Tooth Splined (BB)
RY (Rotatable)	XD to RY	328591-131X	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
GA (Greaseable)	XD to GA RA to GA	328591-124X 328591-109X	SAE B 2-Bolt Rotatable	*7/8" - 13 Tooth Internal Spline (B)
GH (Greaseable)	XD to GH RF to GH	328591-117X 328591-115X	SAE B 2-Bolt Rotatable	*1" - 15 Tooth Internal Spline (BB)
GB (Greaseable)	XD to GB RB to GB	328591-125X 328591-110X	SAE B 4-Bolt Rotatable	*7/8" - 13 Tooth Internal Spline (B)
GK (Greaseable)	XD to GK XK to GK	328591-99X 328591-96X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Internal Spline (B)
GQ (Greaseable)	XD to GQ XQ to GQ	328591-101X 328591-96X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Internal Spline (B)
GF (Greaseable)	XD to GF AF to GF	328591-123X 328591-111X	SAE B 2 or 4-Bolt	*1" - 15 Tooth Internal Spline (BB)
GZ (Greaseable)	XD to GZ AZ to GZ	328591-103X 328591-98X	SAE B 2 or 4-Bolt	*1-1/4" - 14 Tooth Internal Spline (C)
GR (Greaseable)	XD to GR	328591-126X	Chelsea Special (Cloverleaf)	*7/8" - 13 Tooth Internal Spline

*Grease fitting on end of shaft
NOTE: Contact Chelsea Customer Service for kits not listed.

823 Series

Pump Suffix	Kit Number Suffix	Kit Number	Flange Type	Shaft Type (SAE)
GS (Greaseable)	XS to GS XV to GS	328591-136X 328591-137X	SAE C 2 or 4-Bolt Flange	1-1/4" - 14 Tooth Spline

880 Series

Pump Suffix	Kit Number Suffix	Kit Number	Flange Type	Shaft Type (SAE)
AZ (Splash Lube) AZ (Pressure Lube)	XV to AZ AV to AZ	328591-127X 328591-128X	SAE B 2 & 4-Bolt	1-1/4" - 14 Tooth Internal Spline
XK (Splash Lube) XK (Pressure Lube)	XV to XK XV to XK	328591-32X 328591-58X	SAE B 2 & 4-Bolt	7/8" - 13 Tooth Internal Spline
XS (Splash Lube) XS (Pressure Lube)	XV to XS XV to XS	328591-31X 328591-49X	SAE C 2 & 4-Bolt	1-1/4" - 14 Tooth Internal Spline
XY	XV to XY	328591-34X	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
GS (Greaseable)	XS to GS XV to GS	328591-133X 328591-135X	SAE C 2 & 4-Bolt	1-1/4" - 14 Tooth Internal Spline

Options

PTO Shift Mechanisms Field Conversion Kits

Series	Assembly Arrangement	Wire to Air	Lever to Air	Wire to Elec. Over Air	
				12 Volt	24 Volt
489	3, 4, 5 & 6	328390-117X	328390-117X	328390-119X	328390-120X
680	3, 4, 5 & 6	328390-117X	328390-117X	328390-119X	328390-120X
823	3, 4, 5 & 6		328390-154X		

Cover Assemblies

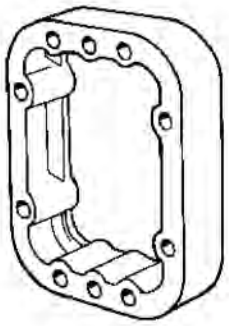
Series/ Application	Assembly Arrangement	Wire Control	Lever Control	Air Control
489 Q, W & X	3 & 6	329119-1X	No Longer Available	
489 Q, W, & X	4 & 5	329119-2X		
489 F,L,R,S & U	3 & 6	329121-1X		
489 F,L,R,S & U	4 & 5	329121-2X		
489 A & C	3 & 6	329271-1X		
489 A & C	4 & 5	329271-2X		
489 (All Ratios)	All			329361X
680 Q & W	3 & 6	329119-1X		
680 Q & W	4 & 5	329119-2X		
680 F, S & U	3 & 6	329121-1X		
680 F, S & U	4 & 5	329121-2X		
680 (All Ratios)	All			329361X
880	3, 4, 5 & 6		329125X	329126X

Installation Kits

Series/ Application	Assembly Arrangement	Wire Control	Air Control	Electric Over Air		Air Shift w/ Combo Valve PTO Kick Out	Air Shift w/ Valve Combo
				12 Volt	24 Volt		
489	3, 4, 5 & 6	*328380X	328388-98X	328388-47X	328388-48X	328388-72X	328388-65X
680	3, 4, 5 & 6	*328380X	328388-98X	328388-47X	328388-48X	328388-72X	328388-65X
823			328388-61X				
880			329216-3X				

* Control Cable & Knob not Included

Filler Blocks



A filler block, or spacer, may be required on certain transmissions to properly space the PTO and get the correct backlash. The application page will call out the filler block as required.

Two filler blocks may be used in combination with one or more gaskets between the filler block surfaces to obtain the proper spacing.

In computing the total thickness of the filler block and gasket combination, use the factor given in the chart below for each gasket being used.

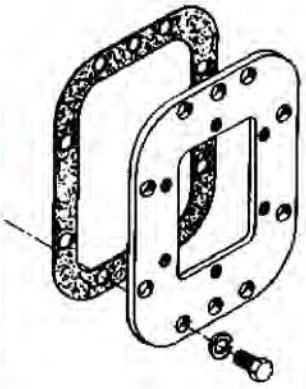
8-Bolt Gaskets

Part Number	Nominal Thickness	Crushed Thickness (Factor)
35-P-9-1	.010"	.006"
35-P-9-2	.020"	.012"
35-P-15-1	.010"	.006"
35-P-15-2	.020"	.012"

8-Bolt Filler Blocks

Part Number	A Thickness	Material	Part Number	A Thickness	Material
8-A-032	.032"	Fiber	8-A-295	.295"	Cast Iron
8-A-093	.093"	Steel	8-A-375	.375"	Cast Iron
8-A-062	.062"	Fiber or Steel	8-A-500	.500"	Cast Iron
8-A-165	.165"	Steel	8-A-600	.600"	Cast Iron
8-A-190	.190"	Steel	8-A-700	.700"	Cast Iron
8-A-248	.248"	Steel or Cast Iron			

8-Bolt Adapter Plates



8-Bolt adapter plates are used to convert an SAE 8-Bolt aperture or a non Standard opening to an SAE 6-Bolt aperture.

Adapter Plates

Adapter Kit Number	A Thickness or Angularity	Adapter Plate Part Number	Stud Kit Number
310778X	.375"	26-P-22	328170-127X
328787X	.460"	26-P-27	328170-129X
328564X	.460"	26-P-27	328170-127X
328481X	.248"	328453X	328170-128X

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Options

PTO Options Chart – Rear Mount PTOs		511	523	541
Input Gear Designator				
AA	ZF	x	x	
AB	Eaton & Iveco	x	x	
AC	ZF-As Tronic Meritor Freedomline™	x	x	
AG	Volvo V7		x	
AH	ZF	x	x	
AQ	ZF	x	x	
AR	Eaton	x	x	
AS	Volvo I-Shift/Mack mDrive	x	x	
AU	Fuller			x
BD	Fuller			x
BJ	Fuller			x
LG	Eaton	x	x	
LQ	Eaton Procision		x	
Lubrication				
X	Non Wet Spline	x	x	
W	Wet Spline	x	x	
Shifting				
H	No Shift Kit	x	x	
P	12V Elec/Air Shift	x	x	
Q	24V Elec/Air Shift	x	x	
F	12V Elec/Air ZF-AS Tronic Meritor Freedomline™	x	x	
A	Air Shift	x	x	x
V	Volvo I-Shift/Mack mDrive Kit	x	x	
Y	Lever Shift			x
D	Eaton Procision		x	
Output				
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	w	w	x
XV	1410 Series Companion Flange	w	w	x
XY	ISO 7653 Pump Mount DIN 5462 Shaft	w	x, w	

w = Wet Spline Option
NOTE: Always check current price book for available options

Installation Kits

Series/ Application	Air Shift	Electric Over Air		Volvo I-Shift Mack mDrive	Electric Over Air (ZF-AS Tronic) 12 Volt
		12 Volt	24 Volt		
511	328388-98X	328388-47X	328388-48X	329809X	N/A
523	328388-101X	328388-104X	328388-110X	329809X	328388-82X
541	328388-61X	N/A	N/A	N/A	N/A

N/A – Non Applicable

PTO Options Chart – PowerShift PTOs		249	249V	252
Lubrication				
P	Pressure Lube			x
X	No Pressure Lube	x	x	
Shifting				
B	12V Elec/Hyd	x	x	x
K	12V Elec/Hyd w/ EOC	x	x	
Output				
AD	SAE A 2-Bolt Flange (3/4" - 11T)	x		x
SD	Smart Start - Rd Standard Shaft (1-1/4" - 5/16" Key)	x		
XB	1" Round Shaft w/ 1/4" Key			x
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)	x		
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)			x
XP	Special SAE A Pilot 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x		
P37	Hyd. Pump 3.7 GPM @1000 RPM			x
P42	Hyd. Pump 4.2 GPM @1000 RPM			x
P71	Hyd. Pump 7.1 GPM @1000 RPM			x
P82	Hyd. Pump 8.2 GPM @1000 RPM			x
1121	Hyd. Pump 2.1 GPM @1000 RPM			x
1126	Hyd. Pump 2.6 GPM @1000 RPM			x
1137	Hyd. Pump 3.7 GPM @1000 RPM			x
1462	Hyd. Pump 6.2 GPM @1000 RPM			x
08	Hyd. Pump 12.0 GPM @1200 Eng. RPM	x		
09	Hyd. Pump 14.0 GPM @1200 Eng. RPM	x		
11	Hyd. Pump 16.0 GPM @1200 Eng. RPM	x		
15	Hyd. Pump 18.9 GPM @1200 Eng. RPM	x		
16	Hyd. Pump 2.4 GPM @1200 Eng. RPM	x		
26	Hyd. Pump 3.9 GPM @1200 Eng. RPM	x		
32	Hyd. Pump 4.7 GPM @1200 Eng. RPM	x		
37	Hyd. Pump 5.5 GPM @1200 Eng. RPM	x		
42	Hyd. Pump 6.3 GPM @1200 Eng. RPM	x		
55	Hyd. Pump 8.2 GPM @1200 Eng. RPM	x		
61	Hyd. Pump 9.0 GPM @1200 Eng. RPM	x		
71	Hyd. Pump 10.6 GPM @1200 Eng. RPM	x		
82	Hyd. Pump 12.2 GPM @1200 Eng. RPM	x		
87	Hyd. Pump 12.9 GPM @1200 Eng. RPM	x		
V	Integral Denison T6C Vane Pump		x	
V08	B08 Cartridge @ 1.61 in^3/rev		x	
V10	B10 Cartridge @ 2.08 in^3/rev		x	
V12	B12 Cartridge @ 2.26 in^3/rev		x	
V14	B14 Cartridge @ 2.81 in^3/rev		x	
V17	B17 Cartridge @ 3.56 in^3/rev		x	
V20	B20 Cartridge @ 3.89 in^3/rev		x	
V22	B22 Cartridge @ 4.29 in^3/rev		x	
V25	B25 Cartridge @ 4.84 in^3/rev		x	
VIT	Less Cartridge		x	

NOTE: Always check current price book for available options

Installation Kits			
Series Application	**Electric Over Hydraulic 12 Volt**		
	G - Metric Mount (Allison)	**D - Dodge/Aisin**	**R - Ram/Aisin**
252 w/o EOC	329296-8X	329296-9X	329669-12X

NOTE: Dodge/RAM Mounting Codes by Transmission Model Years
D: AS68RC (MY2010 & Prior)
R: AS66RC (MY2014 & Later Gas engine)
R: AS68RC (MY2011 & 2012)
R: AS69RC (MY2013 & Later Diesel engine)

Options

Installation Kits						
Series Application	**Electric Over Hydraulic 12 Volt**					
	B Shift Option w/ F Mount	**K Shift Option w/ G Mount**	**B Shift Option w/ F Mount V Arrangement**	**B Shift Option w/ G Mount V Arrangement**	**K Shift Option w/F Mount**	**K Shift Option w/ F Mount V Arrangement**
249 w/o EOC	329651X	329804X	N/A	N/A	N/A	N/A
249V w/o EOC	N/A	N/A	329836X	329838X	N/A	N/A
249 w/ EOC	N/A	N/A	N/A	N/A	329652X	N/A
249V w/ EOC	N/A	N/A	N/A	N/A	N/A	329837X

NOTE: Use 329650X - Speed Limiter Control Assembly for all EOC applications
N/A – Non Applicable

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PTO Options Chart – PowerShift PTOs		272	272F	282
Lubrication				
P	Pressure Lube	x	x	x
R	Pressure Lube Valve Body Rotated 120°	x		x
S	Pressure Lube Valve Body Rotated 240°	x		x
W	Wet Spline	x		x
X	No Pressure Lube	x		x
V	Wet Spline Valve Body Rotated 120°	x		x
Y	Wet Spline Valve Body Rotated 240°	x		x
Shifting				
B	12V Elec/Hyd	x	x	x
D	24V Elec/Hyd	x		x
E	12V Elec/Hyd w/o Installation Kit	x	x	x
N	24V Elec/Hyd w/o Installation Kit	x		x
K	12V Elec/Hyd w/ EOC	x	x	x
L	24V Elec/Hyd w/ EOC	x		x
G	12V Elec/Hyd Remote Valve w/o EOC	x		x
H	24V Elec/Hyd Remote Valve w/o EOC	x		x
R	12V Elec/Air Remote w/ EOC	x		x
4	24V Elec/Air Remote w/ EOC	x		x
J	12V Elec/Air w/ EOC	x		x
3	24V Elec/Air w/ EOC	x		x
P	12V Elec/Air Remote	x		x
Q	24V Elec/Air Remote	x		x
1	12V Elec/Air	x		x
2	24V Elec/Air	x		x
A	Manual Air Shift	x		x
V	Manual Air Shift w/o Installation Kit	x		x
Output				
AB	DIN 120 Flange	x		x
AC	DIN 100 Flange	x		x
BD	Shaft Brake - 1-1/4" Round w/ 5/16" Key	x		x
BV	Shaft Brake - 1410 Series Companion Flange	x		x
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)	x	x	x
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)	x	x	x
XV	1410 Series Companion Flange	x	x	x
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	x	x
RE	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)	x	x	x
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)	x	x	x
RZ	Rotatable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)	x	x	x
RK	Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	x	x
RS	Rotatable SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)	x	x	x
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft	x	x	x
SD	Smart Start - Rd Standard Shaft (1-1/4" - 5/16" Key)	x	x	x
SV	Smart Start - 1410 Series Companion Flange	x	x	x

Options

272 Series Installation Kits

Shift Option	Input Gear	Mounting Option	Hydraulic						
			Integral				Remote		
			12V		24V		12V		24V
			w/o EOC	w/ EOC	w/o EOC	w/ EOC	w/o EOC	w/ EOC	w/o EOC
B	HV		329882-12X						
	KU	D	329884-12X						
D	HV				329882-24X				
E			Excludes Installation Kit						
N					Excludes Installation Kit				
G	AJ						329885-12X		
	HV						329842-12X		
	KU	D					329888-12X		
		R					329887-12X		
H	AJ								329885-24X
	HV								329842-24X
K	HV			329883X					
	KU	D, R		329886X					
L	HV					329883X			
	KU	D, R				329886X			

Shift Option	Input Gear	Manual Air Valve	Air							
			Integral				Remote			
			12V		24V		12V		24V	
			w/o EOC	w/ EOC	w/o EOC	w/ EOC	w/o EOC	w/ EOC	w/o EOC	w/ EOC
A		328388-113X								
1			329893-12X							
2					329893-24X					
3						329894-24X				
4	AJ									329889-24X
	HV									329890-24X
J				329894-12X						
P							329891-12X			
Q									329891-24X	
R	AJ							329889-12X		
	HV							329890-12X		
V		Excludes Installation Kit					Excludes Installation Kit			

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282 Series Installation Kits

Shift Option	Hydraulic					
	Integral				Remote	
	12V		24V		12V	24V
	w/o EOC	w/ EOC	w/o EOC	w/ EOC	w/o EOC	w/o EOC
B	328892-12X					
D			328892-24X			
E	Excludes Installation Kit					
G					329885-12X	
H						329885-24X
K		329900X				
L				329900X		
N			Excludes Installation Kit			

Shift Option	Manual Air Valve	Air							
		Integral				Remote			
		12V		24V		12V		24V	
		w/o EOC	w/ EOC	w/o EOC	w/ EOC	w/o EOC	w/ EOC	w/o EOC	w/ EOC
A	328388-113X								
J			329894-12X						
P						329891-12X			
Q								329891-24X	
R							329889-12X		
1		329893-12X							
2				329893-24X					
3					329894-24X				
4									329889-24X
V	Excludes Installation Kit					Excludes Installation Kit			

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Options

PTO Options Chart – PowerShift PTO		852	885
Lubrication			
P	Pressure Lube	x	x
X	No Pressure Lube		x
Shifting			
A	Air Shift - Manual		x
B	12V Elec/Hyd	x	
D	24V Elec/Hyd	x	
N	12V Elec/Air w/ EOC		x
J	24V Elec/Air w/ EOC		x
K	12V Elec/Hyd w/ EOC	x	
L	24V Elec/Hyd w/ EOC	x	
F	No Valve	x	
P	12V Elec/Air Shift		x
Q	24V Elec/Air Shift		x
Output			
XS	SAE C 4-Bolt, SAE C Shaft (1-1/4" - 14T)	x	
XS	SAE C 2 or 4-Bolt, SAE C Shaft (1-1/4" - 14T)		x
XU	SAE C 2-Bolt, SAE C Shaft (1-1/4" - 14T)	x	
XV	1410 Series Companion Flange	x	x

NOTE: Always check current price book for available options

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PTO Options Chart – PowerShift PTOs	280	287	870	890	892
Lubrication					
P Pressure Lube	x	x	x		
R Pressure Lube Valve Body Rotated 120°	x	x	x		
S Pressure Lube Valve Body Rotated 240°	x	x	x		
V Wet Spline Valve Body Rotated 120°	x	x	x		
Y Wet Spline Valve Body Rotated 240°	x	x	x		
W Wet Spline	x	x	x	x	x
X No Pressure Lube	x	x			
Shifting					
B 12V Elec/Hyd	x		x	x	x
D 24V Elec/Hyd	x		x	x	x
E 12V Elec/Hyd w/o Installation Kit	x		x		
N 24V Elec/Hyd w/o Installation Kit	x		x		
K 12V Elec/Hyd Valve - Remote w/ EOC	x		x	x	x
L 24V Elec/Hyd Valve - Remote w/ EOC	x		x	x	x
G 12V Elec/Hyd - Remote w/o EOC	x		x	x	x
H 24V Elec/Hyd - Remote w/o EOC	x		x	x	x
M Constant Mesh		x			
S Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return	x				
T Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return	x				
Output					
AB DIN 120 Flange	x	x	x	x	x
AC DIN 100 Flange	x	x	x	x	x
AF SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)				w (5)	w (5)
AZ SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)				w (5)	w (5)
BD Shaft Brake - Rd Standard Shaft (1-1/4" - 5/16" Key)	x				
BV Shaft Brake - 1410 Series Companion Flange	x		x		
BB Shaft Brake - DIN 120 Flange			x		
BC Shaft Brake - DIN 100 Flange			x		
CF SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)				w (3)	w (3)
CK SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)				w (3)	w (3)
CS SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)				w (3)	w (3)
CZ SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)				w (3)	w (3)
DA SAE D 4-Bolt Flange, SAE D Shaft (1-3/4" - 13T)				w (5)	w (5)
XD Rd Standard Shaft (1-1/4" - 5/16" Key)	x	x			
XR Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)	x				
XK SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)				w (5)	w (5)
XS SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)				w (5)	w (5)
XV 1410 Series Companion Flange	x	x	x	x	x
XY ISO 7653 Pump Mount DIN 5462 Shaft				w	w
SB Smart Start - DIN 120	x		x		
SC Smart Start - DIN 100	x		x		
SD Smart Start - Rd Standard Shaft (1-1/4" - 5/16" Key)	x				
SV Smart Start - 1410 Series Companion Flange	x		x		
RB Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x, w	x, w			
RF Rotatable SAE B 2 or 4-Bolt Flange SAE BB Shaft (1" - 15T)	x	x	x, w		
RZ Rotatable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)	x, w	x, w	x, w		
RK Rotatable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	x			
RS Rotatable SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)	x, w	x, w	x, w		
RY Rotatable ISO 7653 Pump Mount DIN 5462 Shaft	x	x	x, w		
ZS SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)				x	x

(3) = 3 Assembly Arrangement
(5) = 5 Assembly Arrangement
w = Wet Spline Option
NOTE: Always check current price book for available options

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Options

Installation Kits

Series Applicaton	Electric Over Hydraulic w/ Remote Valve		Electric Over Hydraulic		PTO/Dump (S)	PTO/Dump (T)
	12 Volt	24 Volt	12 Volt	24 Volt		
Allison (FJ)						
280/870 w/o EOC 280/870 w/ EOC	329237-12X	329237-24X	329024-12X 329076X	329024-24X 329076X		
280 w/ PTO Dump Pump Valve					328388-65X	328388-86X
890/892 w/o EOC 890/892 w/ EOC	329653-12X	329653-24X	329024-12X 329076X	329024-24X 329076X		
Caterpillar (KV)						
280/870 w/o EOC 280/870 w/EOC	329445-12X	329445-24X	329443-12X 329444X	329443-24X 329444X		
280 w/ PTO Dump Pump Valve					328388-65X	328388-86X

NOTE: Controls for Electronic Overspeed Control (EOC) - 329650X

Conversion Kits

Series Application	Electric Over Hydraulic w/ Remote Valve		Electric Over Hydraulic	
	12 Volt	24 Volt	12 Volt	24 Volt
(FJ & KV)				
280/870 w/ EOC	329354-12X	329354-24X		
Allison (FJ)				
280/870 w/o EOC			329175-12X	329175-24X
Caterpillar (KV)				
280/870 w/ EOC			329448-12X	329448-24X

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PTO Options Chart – Constant Mesh PTOs		267*	877	897	899
Lubrication					
P	Pressure Lube	x	x		
W	Wet Spline	x	x	x	x
Shifting					
M	Constant Mesh	x	x	x	x
Output					
AB	DIN 120 Flange		x	x	x
AC	DIN 100 Flange		x	x	x
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x, w		w (5)	w (5)
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x, w			
AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)	x		w	w
CF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)			w (3)	w (3)
CK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)			w (3)	w (3)
CS	SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)			w (3)	w (3)
CZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)			w (3)	w (3)
DA	SAE D 4-Bolt Flange, SAE D Shaft (1-3/4" - 13T)			w	w
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)	x			
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)	x			
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x		w (5)	w (5)
XQ	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x			
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)	x			
XS	SAE C 2 or 4-Bolt, SAE C Shaft (1-1/4" - 14T)			w (5)	w (5)
XV	1410 Series Companion Flange		x	x	x
XX	1-1/4" Tapered Output Shaft w/ Keyway	x			
XY	ISO 7653 Pump Mount DIN 5462 Shaft	x		w	w
ZS	SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)			w	w
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)	x			
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x			
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x			
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x			
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)	x	x, w		
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x			
RZ	Rotatable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)		x, w		
RS	Rotatable SAE C 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)		x, w		
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft	x, w	x, w		
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)	x			
GH	Greaseable SAE B 2-Bolt Rotatable Flange, SAE BB Shaft (1" - 15T)	x			
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)	x			
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x			
GQ	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x			
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x			
GZ	Greaseable SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)	x			
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)	x			
GY	Greaseable ISO 7653 Pump Mount DIN 5462 Shaft	x			

* Any 267 Series using a 3 Arrangement requiring a SAE B Output must use the XQ or AK Output Option due to interference between the XK Flange and the Pressure Lube Fitting.
(3) = 3 Assembly Arrangement
(5) = 5 Assembly Arrangement
w = Wet Spline Option
NOTE: Always check current price book for available options

Options

For converting Chelsea PowerShift PTOs from a driveshaft output (XD or XV) to a pump flange output and/or a wet spline output.

267 Series

Pump Suffix	Kit Number	Assembly	Flange Type	Shaft Type (SAE)
AF	328591-129X	3, 4, 5 & 6	SAE B 2 or 4-Bolt	1" - 15 Tooth Spline (BB)
AK	328591-141X	3, 4, 5 & 6	SAE B 2-Bolt	7/8" - 13 Tooth Spline (B)
AZ	328591-70X	3, 4, 5 & 6	SAE B 2 or 4-Bolt	1-1/4" - 14 Tooth Spline (C)
XE	328591-27X	3, 4, 5 & 6	SAE A 2 or 4-Bolt	5/8" - 9 Tooth Spline (A)
XK	328591-16X	4, 5 & 6	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Spline (B)
XQ	328591-17X	3, 4, 5 & 6	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Spline (B)
XR	328591-52X	3, 4, 5 & 6	Chelsea Special (Cloverleaf)	7/8" - 13 Tooth Spline (B)
XX	328591-122X	3, 4, 5 & 6	Not Included	1-1/4" Tapered Output Shaft w/ Keyway
XY	328591-121X	3, 4, 5 & 6	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
RC (Rotatable)	328591-112X	3, 4, 5 & 6	SAE A 2-Bolt	5/8" - 9 Tooth Spline (A)
RA (XR to RA) (Rotatable)	328591-55X 328591-53X	3, 4, 5 & 6	SAE B 2-Bolt	7/8" - 13 Tooth Spline (B)
RF (Rotatable)	328591-78X	3, 4, 5 & 6	SAE B 2-Bolt	1" - 15 Tooth Spline (BB)
RB (XR to RB) (Rotatable)	328591-56X 328591-54X	3, 4, 5 & 6	SAE B 4-Bolt	7/8" - 13 Tooth Spline (B)
RY (Rotatable)	328591-132X	3, 4, 5 & 6	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
GA (Greaseable)	328591-72X	3, 4, 5 & 6	SAE B 2-Bolt Rotatable	7/8" - 13 Tooth Spline (B)
GB (Greaseable)	328591-74X	3, 4, 5 & 6	SAE B 4-Bolt Rotatable	7/8" - 13 Tooth Spline (B)
GK (Greaseable)	328591-89X	3, 4, 5 & 6	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Spline (B)
GQ (Greaseable)	328591-91X	3, 4, 5 & 6	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Spline (B)
GF (Greaseable)	328591-71X	3, 4, 5 & 6	SAE B 2 or 4-Bolt	1" - 15 Tooth Spline (BB)
GR (Greaseable)	328591-76X	3, 4, 5 & 6	Chelsea Special (Cloverleaf)	7/8" - 13 Tooth Spline (B)

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PTO Options Chart – Rear Mount PTOs		590
Mounting Designator		
FJ	Allison TC10	x
Lubrication		
W	Wet Spline	x
Shifting		
B	12V Elec/Hyd	x
D	24V Elec/Hyd	x
Output		
CF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x
CK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
CS	SAE C 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)	x
CZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)	x
XV	1410 Series Companion Flange	x
XY	ISO 7653 Pump Mount DIN 5462 Shaft	x

w = Wet Spline Option
NOTE: Always check current price book for available options

Options

PTO Options Chart – Split Shaft PTOs		901	912
Shifting			
A	Air Shift	x	x
Y	Lever Shift	x	x
Input-Output Shaft			
C	1-3/4" - 10T Spline Input-Output	x	
G	2-3/4" w/ 1710 1/2 Rd. Yoke		x
H	2-3/4" w/ 1810 1/2 Rd. Yoke		x
J	2-3/4" Input-Output w/o Yoke		x
M	2-3/4" w/ 1610 Companion Flange		x
P	SPL-170 Yoke		x
S	SPL-250 Yoke		x
PTO Output Shaft			
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x	
XS	SAE C 2-Bolt, SAE C Shaft (1-1/4" - 14T)	x	
XU	SAE C 2-Bolt Flange, SAE C Shaft (1-1/4" - 14T)	x	
XV	1410 Series Companion Flange	x	
XX	8-Bolt Apertures Available		x

Specifications Chart – 901 Series	
Standard Output Shaft Size	— 1-3/4" - 10 Tooth —
Intermittent Torque Rating (lbs-ft)	500
Intermittent Torque Rating (Nm)	678
Horsepower Rating for Intermittent Service	
At 500 RPM of the Output Shaft (HP)	48
At 1000 RPM of the Output Shaft (HP)	95
At 500 RPM of the Output Shaft (Kw)	36
At 1000 RPM of the Output Shaft (Kw)	75
Approximate Weight:	— 185 lbs. [84 kg] —

Specifications Chart – 912 Series		
Standard Output Shaft Size	— 2-3/4" - 10 Tooth —	
Max Thru Torque Capacity	lbs-ft	Nm
w/ Diesel Engine		
Automatic Transmission	13,000	17,625
Manual Transmission	12,000	16,270
w/ Gas Engine		
Automatic Transmission	16,000	21,693
Manual Transmission	15,000	20,337
Approximate Weight:	— 130 lbs. [59 kg] —	

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PTO Options Chart – Crank Shaft PTO		2442
Shifting		
H	No Shift Assembly	x
P	12V Elec/Air	x
C	Heavy Duty Bracket less Cable	x
M	Constant Mesh	x
A	Air Shift	x
S	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/ Neutral Spring Return	x
T	Air Shift w/ PTO/Dump Pump Combo Valve w/o Kick Out w/ Neutral Spring Return	x
U	Air Shift w/ PTO/Dump Pump Combo Valve w/ Kick Out w/o Neutral Spring Return	x
V	Air Shift less Installation Kit	x
W	Cable Shift	x
X	Less Cable & Knob	x
Output		
AF	SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x
AK	SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
AZ	SAE B 2 or 4-Bolt Flange, SAE C Shaft (1-1/4" - 14T)	x
XD	Rd Standard Shaft (1-1/4" - 5/16" Key)	x
XE	SAE A 2 or 4-Bolt Flange, SAE A Shaft (5/8" - 9T)	x
XK	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
XQ**	SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
XR	Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)	x
XX***	1-1/4" Tapered Output Shaft w/ Keyway	x
XY	ISO 7653 Pump Mount DIN 5462 Shaft	x
RC	Rotatable SAE A 2-Bolt Flange, SAE A Shaft (5/8" - 9T)	x
RD	Rotatable SAE A 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
RA	Rotatable SAE B 2-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
RF	Rotatable SAE B 2-Bolt Flange, SAE BB Shaft (1" - 15T)	x
RB	Rotatable SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
RE	Rotatable SAE B 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x
RY	Rotatable ISO 7653 Pump Mount DIN 5462 Shaft	x
SQ	SAE B 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
GA	Greaseable SAE B 2-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)	x
GH	Greaseable SAE B 2-Bolt Rotatable Flange, SAE BB Shaft (1" - 15T)	x
GB	Greaseable SAE B 4-Bolt Rotatable Flange, SAE B Shaft (7/8" - 13T)	x
GK	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
GQ**	Greaseable SAE B 2 or 4-Bolt Flange, SAE B Shaft (7/8" - 13T)	x
GF	Greaseable SAE B 2 or 4-Bolt Flange, SAE BB Shaft (1" - 15T)	x
GR	Greaseable Chelsea Special (Cloverleaf), SAE B Shaft (7/8" - 13T)	x

** XQ/GQ same as XK/GK except flange rotated 90°
*** Order companion (379824) separately

NOTE: Always check current price book for available options

For converting the 2442 Series Chelsea PTOs from a driveshaft output or as listed to a new pump flange output, use the following kits. Consult the Chelsea price book for availability by series.

Pump Suffix	Kit Number Suffix	Kit Number	Flange Type	Shaft Type
AF	XD to AF	328591-30X	SAE B 2 or 4-Bolt	1" - 15 Tooth Splined (BB)
AK	XD to AK	328591-28X	SAE B 2-Bolt	7/8" - 13 Tooth Splined (B)
AZ	XD to AZ	328591-70X	SAE B 2 or 4-Bolt	1-1/4" - 14 Tooth Splined (C)
XE	XD to XE	328591-27X	SAE A 2 or 4-Bolt	5/8" - 9 Tooth Splined (A)
XK	XK to GK	328591-86X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined
XQ	XD to XQ	328591-17X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined (B)
XR	XD to XR	328591-52X	Chelsea Special (Cloverleaf)	7/8" - 13 Tooth Splined (B)
XX	XD to XX	328591-122X	Not Included	1-1/4" Tapered Output Shaft w/ Keyway
XY	XD to XY	328591-121X	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
RC (Rotatable)	XD to RC	328591-112X	SAE A 2-Bolt	7/8" - 9 Tooth Splined (A)
RD (Rotatable)	XD to RD	328591-113X	SAE A 2-Bolt	7/8" - 13 Tooth Splined (B)
RA (Rotatable)	XD to RA	328591-55X	SAE B 2-Bolt	7/8" - 13 Tooth Splined (B)
RF (Rotatable)	XD to RF	328591-78X	SAE B 2-Bolt	1" - 15 Tooth Splined (BB)
RB (Rotatable)	XD to RB	328591-56X	SAE B 4-Bolt	7/8" - 13 Tooth Splined (B)
RE (Rotatable)	XD to RE	328591-134X	SAE B 4-Bolt	1" - 15 Tooth Splined (BB)
RY (Rotatable)	XD to RY	328591-131X	ISO 7653 Pump Mount	DIN 5462 (B8x32x36 - 8T)
GA (Greaseable)	XD to GA XR to GA RA to GA	328591-72X 328591-73X 328591-106X	SAE B 2-Bolt Rotatable	*7/8" - 13 Tooth Splined (B)
GB (Greaseable)	XD to GB XR to GB RB to GB	328591-74X 328591-75X 328591-107X	SAE B 4-Bolt Rotatable	*7/8" - 13 Tooth Splined (B)
GK (Greaseable)	XD to GK	328591-99X	SAE B 2 or 4-Bolt	7/8" - 13 Tooth Splined
GQ (Greaseable)	XD to GQ XQ to GQ	328591-91X 328591-86X	SAE B 2 or 4-Bolt	*7/8" - 13 Tooth Splined (B)
GF (Greaseable)	XD to GF AF to GF	328591-71X 328591-108X	SAE B 2 or 4-Bolt	*1" - 15 Tooth Splined (BB)
GR (Greaseable)	XD to GR	328591-76X	Chelsea Special (Cloverleaf)	*7/8" - 13 Tooth Splined (B)

*Grease fitting on end of shaft
NOTE: Contact Chelsea Customer Service for kits not listed.

A Guide to Specifying Chelsea Geared Adapters

When you need to change PTO output shaft rotation or clear a mounting obstacle, a geared adapter may be required. However, it is important to note the following:

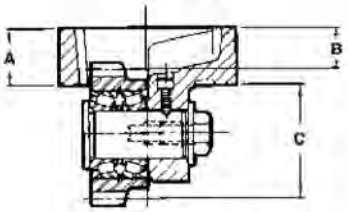
- Geared adapters will change the direction of PTO rotation. Consider this when specifying driven equipment.
- Not all applications can use geared adapters. These situations are called out on the bottom of the Chelsea applications catalog pages. Check there before you spend time trying to specify a geared adapter.
- If an application cannot use an adapter, consider changing the PTO assembly arrangement, moving the PTO to the other side of the transmission, or using a change rotation gear box.
- Adapters are not available for use with PTOs on automatic transmissions except the Allison 1000, 2000/2400 Series.
- Adapters are not available for use with 8-Bolt PTOs.
- Current model Chelsea adapters do not change the PTO speed.

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Options

Standard Geared Adapter Assemblies					
Assembly Number	**Figure Number**	**Number of Teeth**	**A Body Thickness or Degree of Angularity**	**B Pitch Line to Outer Face**	**C Pitch Line to Inner Face**
328530-1X	1	22	1.650"	1.085"	3.100"
328530-2X	1	18	1.650"	1.117"	3.067"
328554-1X	2	19	22°	1.085"	1.110"
329138X,-1X	3	24	49°	1.085"	1.085"

Figure 1

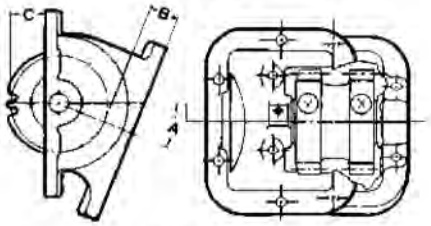


328530-1X
328530-2X

Where Used

328530-1X, -2X:
Use on either side, any assembly arrangement, where the transmission gear pitch and pressure angle allows. These adapters will move the PTO straight out from the transmission. These are deep reach geared adapters that generally require the use of extra spacers and special stud kits.

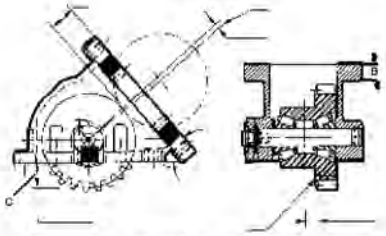
Figure 2



328554-1X

328554-1X:
Use on the R.H. side of transmissions with a 6 pitch 20° pressure angle PTO drive gear located towards the front of the opening. The adapter will move the PTO down and towards the rear of the truck. Use a PTO with a 3 assembly and an AH gear designator. This adapter requires the application to be derated by 30%.

Figure 3



329138X,-1X

329138X:
Use on the R.H. side of transmissions with a 6 pitch 20° pressure angle PTO drive gear located towards the **front** of the truck, or on the L.H. when the PTO drive gear is located towards the **rear** of the truck. The adapter will drop the PTO down at a 49° angle. Use PTOs with the same assembly arrangement and gear detail as shown in the application catalog.

329138-1X:
Use on the R.H. side of transmissions with a 6 pitch 20° pressure angle PTO drive gear located towards the **rear** of the truck, or on the L.H. when the PTO drive gear is located towards the **front** of the truck. The adapter will drop the PTO down at a 49° angle. Use PTOs with the same assembly arrangement and gear detail as shown in the application catalog.

When a geared adapter can be used, four steps will help you specify it correctly.

1. Identify the correct gear detail and gear location.
2. Select the style that will perform the necessary function.
3. Calculate the correct backlash/spacing.
4. Select the correct stud kit.

Step 1: Identify the Gear Detail and Gear Location

The first step is to find adapters that will fit your application.

At the top of each transmission application page, Chelsea lists gear data. For example, on FLR-34, on the right hand side, the transmission gear is a 6 pitch, 20° spur gear (AH Input Gear). The transmission gear is forward of the centerline of the PTO opening.

To select an adapter for this application, look only at adapters that have a 6 pitch, 20° spur gear (AH Input Gear) that is forward of the adapter body centerline when used on the right hand side of a transmission.

NOTE: If gear pitch unknown contact Chelsea Customer Service.

Step 2: Select the Style

The second step is to further narrow down your choices according to your application requirement.

If the purpose of specifying a geared adapter is simply to change rotation, look for the least expensive adapter available. Typically, this means an adapter that will bring the PTO straight out from the transmission. Also check whether the adapter requires you to derate the PTO torque rating. This occurs when the adapter contains needle bearings rather than roller bearings.

If the purpose of specifying a geared adapter is to clear mounting obstacles, determine whether moving the PTO away from the transmission is enough, or whether it is necessary to angle the PTO down to clear the object.

Always keep in mind how much room you have to work with and what mounting obstacles exist.

For our example, let's say we have 328530-1X on the shelf and it looks like it will work.

Step 3: Calculate the Backlash and Spacing.

Next, you must establish correct backlash between the transmission and the geared adapter. To do this, calculate the adapter P.L. (pitch line) to inner face dimension minus the transmission pitch line to aperture face dimension.

On page 2.30 of this booklet, we see that the adapter P.L. (pitch line) to inner face dimension for adapter 328530-1X is 3.100. On FLR-34 application page, for the right hand opening, we see that the P.L. (pitch line) to aperture face dimension for the transmission is 1.0850.

3.100 (adapter pitch line to inner face dimension)
- 1.085 (transmission P.L. to aperture face dimension)
2.015

In this example, we would need to back the adapter away from the transmission gear 2.015" to establish correct backlash. We would select a 7-A-2000 filler block (page 2.06 of this booklet), and use a thin gasket (.010") on each side of the filler block.

Our theoretical backlash is .003". We need to have between .006" and .012". Most likely, once the adapter is actually mounted and backlash is measured, it will fall between the accepted range. This is because the transmission case and the adapter may vary a few thousandths from the listed measurements.

NOTE: It is always the responsibility of the installer to measure and establish correct backlash. Follow the instructions given in the PTO Owner's Manual and the Adapter Gears Owner's Manual.

Options

Step 4: Select the Correct Stud Kit

To calculate the necessary length of the mounting studs for a PTO/adapter combination, add the following dimensions together:

	Transmission Thread Depth
+	Lock Nut Thickness
+	Body Thickness of Adapter
+	Spacer/Filler Block Thickness
+	PTO mounting flange Thickness
+	Crush Thickness of Gaskets between the transmission, adapter, and PTO collectively
+	1/16" Extra Length
	Required Stud Length

Example:

	.500" – Transmission Thread Depth (Example Only)
+	.380" – Lock Nut Thickness
+	1.650" – 328530-1X Body Thickness of Adapter
+	.240" – 7-A-240 Spacer/Filler Block Thickness
+	.793" – PTO Mounting Flange Thickness
+	.024" – (4) 35-P-9-1 Gaskets - Crush Thickness
+	.0625" – Extra Length
	3.6495" (3.65") – Total Stud Length

Stud kit 328170-168X contains studs that are 3.750" long. Stud kits are listed in Chelsea publication HY25-2002-M1/US.

Remember that each application is different. It is up to the installer to make sure backlash between the transmission and adapter, and between the adapter and the PTO, is correct.

The 626, 628, 630 and 645 family of adapters are designed to simplify your selection and installation of a geared adapter when you require a change in rotation or are trying to clear an obstacle.

These adapters use the same input gears as the 442 and 489 Series PTOs, and are available in kits. The 626 adapter fits a 6-Bolt opening and moves the PTO straight out from the transmission. The 630 fits a 6-Bolt opening and angles the PTO down at a 30° angle. The 645 fits a 6-Bolt opening and angles the PTO down at a 45° angle. The 628 adapter fits an 8-Bolt transmission opening and accommodates a 6-Bolt PTO.

The 626, 630 and 645 adapter assemblies have the same pitch line to mounting face dimensions as the 442 Series, while the 628 will have the same mounting dimensions as the 489 Series. This means the same mounting hardware and spacers you use to mount the PTO to a specific application will be the same hardware you use to mount the geared adapter to that application.

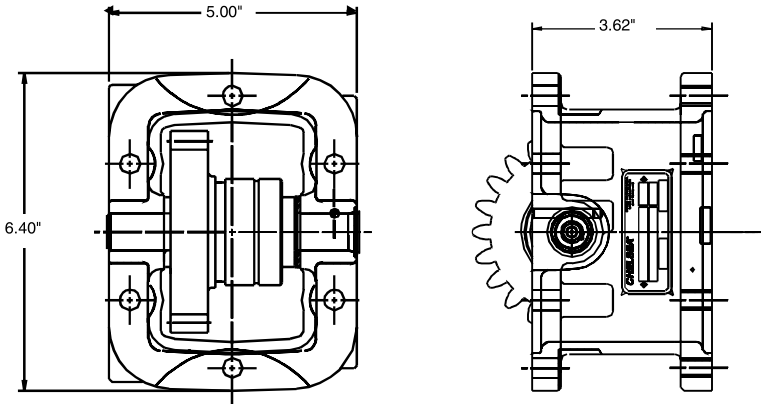
Using the 626, 628, 630 or 645 will change the direction of PTO rotation. It will not change the speed of the PTO.

* A .010" gasket will compress to .006" if the capscrews or nuts are torqued properly. A .020" will compress to .012".

626 Series

Six Bolt to Six Bolt Straight

- 6-Bolt PTO for a 6-Bolt Transmission Opening
- Moves the PTO straight out from the transmission
- Uses the same input gears as the 442 and 489 Series
- Uses the same mounting hardware and spacers used to mount a 442 Series to a specific application

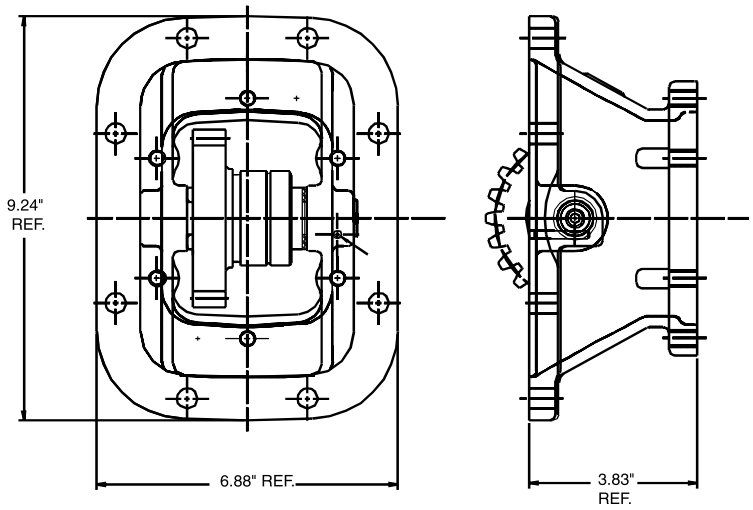


626 Series

628 Series

Eight Bolt to Six Bolt Straight

- 6-Bolt PTO for a 8-Bolt Transmission Opening
- Moves the PTO straight out from the transmission
- Uses the same input gears as the 442 and 489 Series
- Uses the same mounting hardware and spacers used to mount a 489 Series to a specific application



628 Series

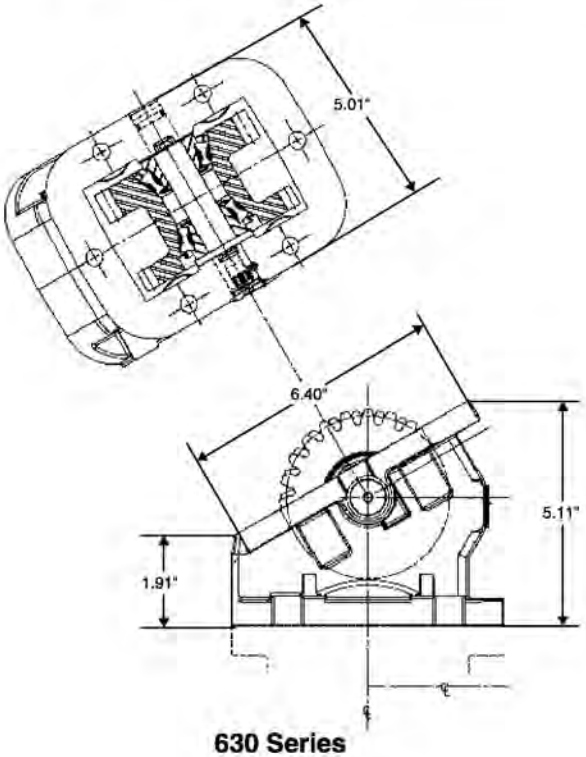
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Options

630 Series

Six Bolt to Six Bolt 30 Degrees

- 6-Bolt PTO for a 6-Bolt Transmission Opening
- Moves the PTO down at a 30° angle, helping to eliminate interference problems
- Uses the same input gears as the 442 and 489 Series

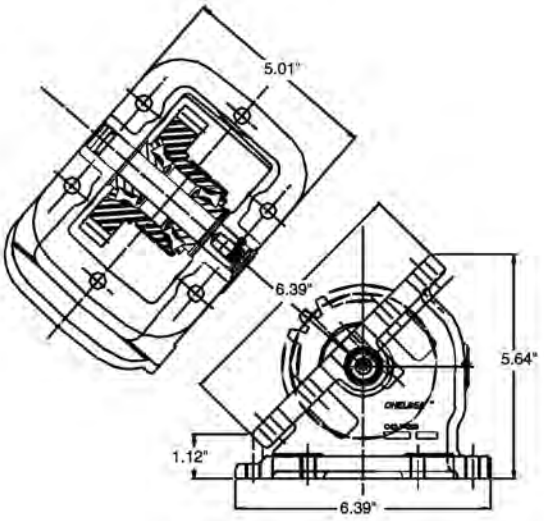


630 Series

645 Series

Six Bolt to Six Bolt 45 Degrees

- 6-Bolt PTO for a 6-Bolt Transmission Opening
- Moves the PTO down at a 45° angle, helping to eliminate interference problems
- Uses the same input gears as the 442 and 489 Series



645 Series

626 Gear Chart

Adapter Input Gear				Mounting Information PTO to Adapter		PTO Gear (Packaged Loose w/Adapter)			
Model No.	Part No.	Helix Angle	No. Teeth	Spacer Designator	Stud Kit	PTO Pitch	Part No.	Helix Angle	No. Teeth
626*AB	5-P-1001	Spur	19	7-A-140	7170-3X	—**AB	5-P-1001	Spur	19
626*AH	5-P-1004	Spur	22	7-A-140	7170-3X	—**AH	5-P-1004	Spur	22
626*AR	5-P-1008	Left Hand	21	7-A-187	7170-3X	—**GY	5-P-1184	Right Hand	21
626*BG	5-P-1015	Left Hand	23	7-A-140	7170-3X	—**HB	5-P-1187	Right Hand	23
626*BQ	5-P-1023	Left Hand	25	7-A-200	7170-4X	—**BP	5-P-1022	Right Hand	26
626*DA	5-P-1037	Spur	23	——	——	—**DA	5-P-1037	Spur	23
626*DU	5-P-1050	Left Hand	28	7-A-240	7170-4X	—**HH	5-P-1193	Right Hand	28
626*ES	5-P-1059	Left Hand	22	7-A-062	——	—**HL	5-P-1196	Right Hand	22
626*EV	5-P-1060	Spur	40	7-A-300	7170-4X	—**EV	5-P-1190	Right Hand	40
626*EW	5-P-1061	Left Hand	20	7-A-125	7170-3X	—**HM	5-P-1197	Right Hand	20
626*FN	5-P-1070	Left Hand	26	7-A-300	7170-4X	—**HR	5-P-1201	Right Hand	26
626*HY	5-P-1237	Left Hand	26	7-A-125	328170-94X	—**JB	5-P-1244	Right Hand	26
626*IT	KIT ADAPTER	——	——	——	——	——	——	——	——
626*JK	5-P-1261	Left Hand	24	7-A-187	7170-3X	—**JL	5-P-1262	Right Hand	24
626*JU	5-P-1316	Left Hand	25	7-A-200	7170-4X	—**KA	5-P-1318	Right Hand	25
626*JW	5-P-1319	Left Hand	23	7-A-093	7170-3X	—**KB	5-P-1321	Right Hand	23

628 Gear Chart

Adapter Input Gear				Mounting Information PTO to Adapter		PTO Gear (Packaged Loose w/Adapter)			
Model No.	Part No.	Helix Angle	No. Teeth	Spacer Designator	Stud Kit	PTO Pitch	Part No.	Helix Angle	No. Teeth
628*AB	5-P-1001	Spur	19	7-A-140	7170-3X	—**AB	5-P-1001	Spur	19
628*AH	5-P-1004	Spur	22	7-A-165	7170-3X	—**AH	5-P-1004	Spur	22
628*AR	5-P-1008	Left Hand	21	7-A-200	7170-3X	—**GY	5-P-1184	Right Hand	21
628*BG	5-P-1015	Left Hand	23	7-A-165	7170-3X	—**HB	5-P-1187	Right Hand	23
628*DA	5-P-1037	Spur	23	——	328170-76X	—**DA	5-P-1037	Spur	23
628*DU	5-P-1050	Left Hand	28	7-A-270	7170-5X	—**HH	5-P-1193	Right Hand	28
628*EV	5-P-1060	Spur	40	7-A-300	7170-5X	—**EV	5-P-1060	Spur	40
628*IT	KIT ADAPTER	——	——	——	——	——	——	——	——

630 Gear Chart

Adapter Input Gear				Mounting Information PTO to Adapter		PTO Gear (Packaged Loose w/Adapter)			
Model No.	Part No.	Helix Angle	No. Teeth	Spacer Designator	Stud Kit	PTO Pitch	Part No.	Helix Angle	No. Teeth
630*AB	5-P-1001	Spur	19	7-A-140	7170-3X	—**AB	5-P-1001	Spur	19
630*AH	5-P-1004	Spur	22	7-A-140	7170-3X	—**AH	5-P-1004	Spur	22
630*AR	5-P-1008	Left Hand	21	7-A-187	7170-3X	—**GY	5-P-1184	Right Hand	21
630*BG	5-P-1015	Left Hand	23	7-A-140	7170-3X	—**HB	5-P-1187	Right Hand	23
630*BQ	5-P-1023	Left Hand	25	7-A-200	7170-4X	—**BP	5-P-1022	Right Hand	26
630*DA	5-P-1037	Spur	23	——	——	—**DA	5-P-1037	Spur	23
630*DU	5-P-1050	Left Hand	28	7-A-240	7170-4X	—**HH	5-P-1193	Right Hand	28
630*ES	5-P-1059	Left Hand	22	7-A-062	——	—**HL	5-P-1196	Right Hand	22
630*EV	5-P-1060	Spur	40	7-A-300	7170-4X	—**EV	5-P-1060	Spur	40
630*EW	5-P-1061	Left Hand	20	7-A-125	7170-3X	—**HM	5-P-1197	Right Hand	20
630*FN	5-P-1070	Left Hand	26	7-A-300	7170-4X	—**HR	5-P-1201	Right Hand	26
630*HY	5-P-1237	Left Hand	26	7-A-125	7170-1X	—**JB	5-P-1244	Right Hand	26
630*IT	KIT ADAPTER	——	——	——	——	——	——	——	——
630*JK	5-P-1261	Left Hand	24	7-A-187	7170-3X	—**JL	5-P-1262	Right Hand	24
630*JU	5-P-1316	Left Hand	25	7-A-200	7170-4X	—**KA	5-P-1318	Right Hand	25
630*JW	5-P-1319	Left Hand	23	7-A-093	7170-3X	—**KB	5-P-1321	Right Hand	23

645 Gear Chart

Adapter Input Gear				Mounting Information PTO to Adapter		PTO Gear (Packaged Loose w/Adapter)			
Model No.	Part No.	Helix Angle	No. Teeth	Spacer Designator	Stud Kit	PTO Pitch	Part No.	Helix Angle	No. Teeth
645*AB	5-P-1001	Spur	19	7-A-140	7170-3X	—**AB	5-P-1001	Spur	19
645*AH	5-P-1004	Spur	22	7-A-140	7170-3X	—**AH	5-P-1004	Spur	22
645*AR	5-P-1008	Left Hand	21	7-A-187	7170-3X	—**GY	5-P-1184	Right Hand	21
645*BQ	5-P-1023	Left Hand	25	7-A-200	7170-4X	—**BP	5-P-1022	Right Hand	26
645*DA	5-P-1037	Spur	23	——	——	—**DA	5-P-1037	Spur	23
645*DU	5-P-1050	Left Hand	28	7-A-240	7170-4X	—**HH	5-P-1193	Right Hand	28
645*ES	5-P-1059	Left Hand	22	7-A-062	——	—**HL	5-P-1196	Right Hand	22
645*EV	5-P-1060	Spur	40	7-A-300	7170-4X	—**EV	5-P-1060	Spur	40
645*EW	5-P-1061	Left Hand	20	7-A-125	7170-3X	—**HM	5-P-1197	Right Hand	20
645*FN	5-P-1070	Left Hand	26	7-A-300	7170-4X	—**HR	5-P-1201	Right Hand	26
645*HY	5-P-1237	Left Hand	26	7-A-125	328170-94X	—**HY	5-P-1244	Right Hand	26
645*HV	5-p-1300	Spur	24	7-A-140	328170-94X	—**HV	5-P-1300	Spur	24
645*IT	KIT ADAPTER	——	——	——	——	——	——	——	——
645*JK	5-P-1261	Left Hand	24	7-A-187	7170-3X	—**JL	5-P-1262	Right Hand	24
645*JU	5-P-1316	Left Hand	25	7-A-200	7170-4X	—**KA	5-P-1318	Right Hand	25
645*JW	5-P-1319	Left Hand	23	7-A-093	7170-3X	—**KB	5-P-1321	Right Hand	23

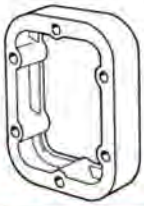
When these adapters or plates appear on a transmission application page or come with the PTO assembly, they MUST be used. There are no substitutes.

As with other Chelsea PTOs, these geared adapters will change PTO rotation, but they will not change PTO speed.

Geared Adapters and Plates for Import Transmissions		
Transmission	**Adapter Gear or Plate General Description**	**A Body Thickness or Degree of Angularity**
Mitsubishi		
328997X **(1)**	M4, M5, M6, M5S5 Models FH100 & FK415, M6S5 Models FK455 & FM555, M6S6 Model FM555	45°
42-P-211 **(2)**	MO35S5 & MO38S6 (included with 447C PTO)	1.470"
Nissan		
42-P-190 **(2)**	MLS-61A, MLS-61B UD3000SD (included with 447A PTO)	1.329"

(1) This geared adapter adapts a non-standard opening on the transmission to a standard 6-Bolt opening. It will move the PTO straight out from the transmission by approximately the amount indicated in column A.

(2) This is an adapter plate that converts the non-standard opening on the transmission to a standard 6-Bolt opening.



The lubricant in the transmission also lubricates the PTO. Therefore, one or more gaskets (as required) must always be used between the metal surfaces of the Power Take-Off, the adapter gear assembly, the adapter plate, and the filler block(s).

Mounting Gasket Kits

Gasket Kit Part Number	Quantity.	Gasket Part Number	Application
328570-1X	25	35-P-15-1 35-P-15-2	Standard 8 Bolt
328570-2X	10	35-P-15-1	Standard 8 Bolt
328570-3X	100	35-P-9-1	Standard 6 Bolt
328570-4X	100	35-P-9-2	Standard 6 Bolt
328570-6X	50	35-P-9-2	Standard 6 Bolt
329062-3X	25	35-P-56 329015X	328888X, 329011X, & Adapters
329062-5X	25	35-P-63-1 35-P-63-2	328957X Adapter
329062-7X	25	35-P-65	328962X & 328993X Adapters
329062-8X	25	35-P-67	328983X Adapter
329062-9X	25	35-P-68-1 35-P-68-2	328985X Adapter
329062-10X	25	35-P-72	328997X Adapter
329062-11X	25	35-P-73	329000-1X Adapter

Special Mounting Gaskets

Gasket Part Number	Application
35-P-41	272 X AAJ
35-P-69	272M Series Adapter Plate Mounting
35-P-74	267, 269, 280, 859, 870/877, 890/897
35-P-8	435, 437
35-P-84	231/271 Series PTO Mounting

Cable Controls Stainless Steel Vinyl Covered Wire

Assembly (Wire & Knob)	Wire Only	Knob Only
328346-10X*	378441-10 (10 Foot Length)	378502
328346-15X**	378441-15 (15 Foot Length)	378502
328346-20X	378441-20 (20 Foot Length)	378502
328346-25X	378441-25 (25 Foot Length)	378502
328346-30X	378441-30 (30 Foot Length)	378502

*This 10 foot cable and knob are standard on the following Chelsea PTOs with a W shifter type: 221, 260, 290, 352, 435, 442, 447, and 489.

** The 15 foot cable is standard on the 2442.

Gasket and Seal Kits

PTO Series Part Number	Gasket and Seal Kit	Shifter Cover Seal Kit Part Number		
		Cable Control	Lever Control	Air Control
221	328356-13X			
249	329248-1X			
267	329337-2X			
272/282	329071-62X			
280	329071-62X (All Except BA)			
290	328356-67X			328356-71X
442, 447, 660	328356-67X 328356-69X (A & C Ratio)	328356-15X	328356-26X	328356-17X
489, 680	328356-50X 328356-69X (A & C Ratio)	328356-15X	328356-26X	328356-17X
823 Standard Output (AB, AC & XV) 823 Direct Mount Output (XS & XU)			328356-2X 328356-4X	328356-2X 328356-4X
863	328356-39X			
870	329071-55X (XV, RS Output) 329071-55X (RZ, RY Output)			
880 Standard Output Pump Output	 328356-51X 328356-52X		 328356-53X 328356-53X	 328356-54X 328356-54X
890	329071-46X (XS, XK, AF, AZ) 329071-47X (XY)			
901	328267X			328356-40X
912 Speedometer w/o Speedometer	328356-65X 328356-63X 328356-64X		328356-62X	
2442 Top Unit Bottom Unit	 328356-15X 328356-13X	 328356-15X	 328356-26X	 328356-17X

* Seal, Gasket, Bearing, Clutch Pack Kit
** Seal, Gasket Bearing, Piston, Clutch Pack Kit
***Gasket, Seal, Bearing, Clutch Pack Kit w/Piston & Back-up Cylinder

Options

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The kits shown below are included for standard applications. Many applications require special stud kits. These are called out on the application pages in the Chelsea HY25-3000/US catalog. Therefore, always consult the application pages in the Chelsea HY25-3000/US before specifying stud kits.

Mounting Kits

Series	Standard (X*)	Deep Mount (Z*)	Metric (G*)	Miscellaneous
221	328170-1X	328170-26X		(R*) 328170-155X
249			8000-21X	(F) 8000-21X
249V			8000-45X	(F) 8000-45X
252			7170-102X (Allison)	7170-121X (RAM/Aisin)
267	7170-86X			(J*) 7170-87X
272	7170-129X	7170-131X	7170-72X	(M*) 7170-127X (A*, D*, R*) 7170-128X (E*) 7170-129X (N*) 7170-130X
280			7170-86X (FJ) 7170-117X (KV)	
282	328170-200X		328170-201X	(E*) 328170-200X
290	328170-76X		7170-72X	
340	328170-94X	328170-95X	7170-72X	(S*) 328170-95X
348	328170-209X	328170-209X	7170-120X	
352	328170-76X	328170-94X	7170-72X	
442	328170-76X	328170-77X	7170-72X	
447	328170-76X	328170-77X	7170-72X	
489	328170-200X	328170-200X	328170-201X	
541	328794-50X			
660	328170-76X	328170-77X	7170-72X	(D*) 7170-72X
680	328170-200X	328170-200X	7170-68X	
823	328170-8X		328170-185X	
852	328170-8X			
863	328170-8X		328170-185X	
870	7170-86X (FJ, LN), 7170-117X (KV)			
877	7170-86X (FJ, LN), 7170-117X (KV)			
880	328170-192X	328170-195X	328170-201X	
885	328170-192X			
890	7170-86X			
892	7170-86X			
897	7170-86X			
899	7170-86X			
626	328170-76X		7170-72X	7170-72X (626DJA*)
628	328170-209X	328170-209X	328170-201X	
630	328170-76X	328170-77X	7170-78X	7170-72X (630DJA*)
645	328170-76X	328170-77X	7170-78X	7170-72X (645DJA*)
329138X,-1X	328170-95X		7170-72X	
328481X	328170-128X			
328481G			8000-14X	
328564X	328170-127X			
328564G			8000-15X	

* This letter is the Mounting Type Designator found in the Model Number — Example: **442XSAHX-A3XK**

890 Family Bracket Kits						
Model	**Arr.**	**Bracket Kit and Hose Part Number**	**Mounting PTO Code**	**Backet Kit and Hose Description**	**Bracket**	**Pressure Hose**
3000 Series Side/Side Openings						
890/897	5	329897-1X	L	Left side	50-P-60	329130-5X
890/897	5	329897-2X	R	Right side w/ or w/o cooler	50-P-61	329130-11X
890/897	5	329897-24X	Y	Right side clocked right	50-P-156	329130-11X
890/897	3	329897-13X	N	Left side w/ cooler	50-P-151	329130-5X
890/897	5	329897-12X	M	Left side w/ retarder	50-P-146	329130-5X
3000 Series Side/Top Openings						
890/897	5	329897-4X	E	Left side	50-P-72	329130-5X
890/897	5	329897-5X	T	Right top side w/ or w/o cooler	50-P-67	329075-2X
890/897	5	329897-14X	F	Left side w/ retarder	50-P-129	329130-5X
4000 Series 6-Speed						
890/897	5	329897-3X	H	Left side	50-P-62	329130-4X
890/897	5	329897-6X	U	Right top side w/ or w/o cooler	50-P-73	329075-2X
890/897	3	329897-7X	C	Left side w/ cooler	50-P-74	329130-4X
890/897	5	329897-19X	P	Left side w/ retarder	50-P-130	329130-4X
890/897	3	329897-10X	J	Left side w/ retarder	50-P-126	329130-4X
890/897	5	329897-11X	K	Right top side w/ retarder	50-P-127	329075-2X
4700/4800 Series 7-Speed						
892/899	5	329897-3X	H	Left side	50-P-62	329130-4X
892/899	5	329897-6X	U	Right top side w/ or w/o cooler	50-P-73	329075-2X
892/899	3	329897-7X	C	Left side w/ cooler	50-P-74	329130-4X
892/899	5	329897-19X	P	Left side w/ retarder	50-P-130	329130-4X
892/899	3	329897-10X	J	Left side w/ retarder	50-P-126	329130-4X
892/899	5	329897-11X	K	Right top side w/ retarder	50-P-127	329075-2X

Arr. = Assembly Arrangement

NOTE: All kits include capscrews for mounting the bracket to the transmission and PTO.

Options

PTO/Dump Pump Combo Valve:

This shift option is designed to make PTO/dump pump air shift applications safer and easier. The compact design features a safety interlock to prevent accidental PTO engagement, automatic PTO disengagement when in the lower position to prevent the PTO from being accidentally left in gear, and controlled lowering (feathering) for smooth dump body descent. The controls are easily operated, even when the driver is wearing gloves. It is ideal for use in systems with Chelsea dump pumps, wet line reservoirs, and PTOs.



Features							
Part Number	**PTO Kick Out**	**Spring Return to Neutral on Dump Valve Control**	**Manual Return to Neutral on Dump Valve**	**Safety Lock on PTO**	**Detent Lock on Neutral**	**Smooth Descent**	**LED Light**
Air Shift PTOs							
329214X & -2X	x	x		x	x	x	x
329316X & -2X			x	x	x	x	x
329358X	x		x	x	x	x	x
Hydraulic Shift PTOs							
329214-1X	x	x		x	x	x	x
329216-1X			x	x	x	x	x

Order Code	PTO Models	Chelsea Part No.	Installation Kit	Description
Air Shift PTOs				
S	442 & 489	329214X	328388-65X	Feathering & PTO Kick-out in Lower position Spring return to Neutral in Raise position
T	442 & 489	329316X	328388-72X	Feathering & NO PTO Kick-out in Lower position Detent in Raise position
U	442 & 489	329358X	328388-79X	Feathering & PTO Kick-out in Lower position Detent in Raise position
Hydraulic Shift PTOs				
S	280	329214-1X	328388-85X	Hoist/PTO control valve that allows a smooth descent of the body in the lower position. Features automatic disengagement of the PTO in lower. Lever on the control valve returns to neutral from the raise position when released (dead man's handle).
S	272	329214-1X	328388-87X	
T	280	329216-1X	328388-86X	Hoist/PTO control valve that allows a smooth descent of the body in the lower position. Requires manual disengagement of the PTO in lower.
T	272	329216-1X	328388-88X	

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General Specifications						
Pump	**Gear Width**	**GPM US at 1000 RPM**	**Cubic Inch Displacement**	**Horsepower Input (at 2000 PSI) 1000 RPM**	**Maximum Pressure**	**Maximum Speed**
C101/102-20	2.000"	22	5.1	25.6	2500	2400 RPM
C101/102-25	2.500"	27.6	6.38	31	2500	2500 RPM
G101/102-1-0.7	.750"	6.4	1.48	6.2	2500	2500 RPM
G101/102-1-1.5	1.500"	12.8	2.96	13.7	2500	2500 RPM
G101/102-1-2.0	2.000"	17	3.94	18.8	2500	2500 RPM

All data based on SAE 10W oil at 150°F. Minimum pump speed at pressure is 800 RPM. US Gallons displacements are theoretical. They will vary depending on speed, pressure, and temperature.

Three-Line Installation (for intermittent or continuous operation)

With the internal sleeve installed in the pump and three-line installation, two advantages are provided:

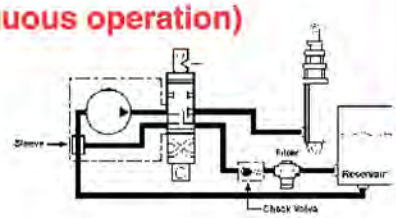
A. Minimizes the possibility of overheating

B. The filter keeps the system clean for prolonged trouble-free operation.*

*If filter is used, check valve must be added to prevent backflushing filter.

Dump Pump 3-Line System Shown in the Neutral Mode (Continuous operation)

In the neutral mode, all the flow goes across the spool to the Return Port and back to tank because the internal by-pass passage is blocked by the sleeve in the inlet port. Any pressure higher than the setting of the relief valve is relieved internally through the by-pass to the Return Port.

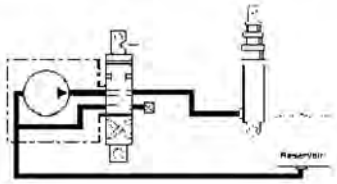


Two-Line Installation (for intermittent operation only)

With the internal sleeve removed a two-line hook-up can be arranged, however the oil circulates internally (within the pump). Continuous operation may result in overheating and damage to the pump.

Dump Pump 2-Line System Shown in the Neutral Mode

In the neutral mode, the flow goes across the spool to the Return Port and the integral by-pass passages. Because the Return Port is plugged, and the pressure drop through the by-pass is less than what is required to activate the cylinder, all flow goes through the by-pass back to the inlet side of the pump. Any pressure higher than the setting of the relief valve is relieved internally through the by-pass, back to the inlet port.



These pumps are shipped with an internal sleeve for three-line (continuous duty, filtered) systems. For two-line systems for intermittent duty cycles*, discard the sleeve.

*Pump/PTO operates 5 out of every 15 minutes. Note that three-line systems are always recommended to prolong the trouble-free operation of the hydraulic system.



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APPLICATIONS

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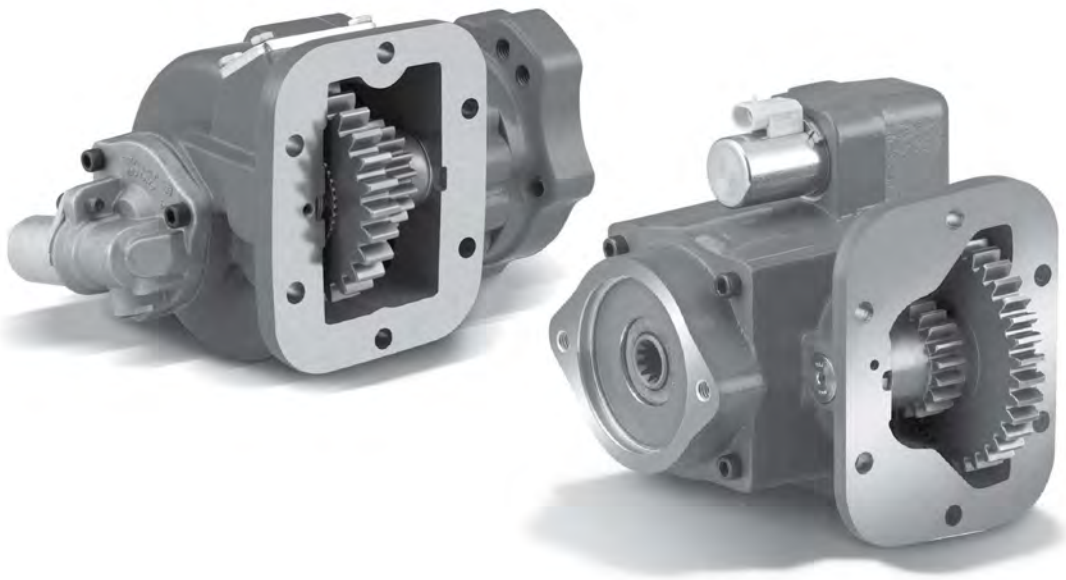
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Aisin ..... 5.1.1 thru 5.1.6
Allison ..... 5.2.1 thru 5.2.62
Caterpillar ..... 5.3.1 thru 5.3.18
Chelsea ..... 5.4.1 thru 5.4.6
Dodge/RAM ..... 5.5.1 thru 5.5.10
Eaton Fuller ..... 5.6.1 thru 5.6.90
Ford ..... 5.7.1 thru 5.7.12
GM ..... 5.8.1 thru 5.8.6
Hino ..... 5.9.1 thru 5.9.4
Isuzu ..... 5.10.1 thru 5.10.4
Mack ..... 5.11.1 thru 5.11.50
Mercedes/Daimler/Detroit ..... 5.12.1 thru 5.12.6
Meritor/Rockwell ..... 5.13.1 thru 5.13.22
Mitsubishi/Fuso ..... 5.14.1 thru 5.14.6
Paccar ..... 5.15.1 thru 5.15.4
Tremec/TTC/Spicer ..... 5.16.1 thru 5.16.16
Volvo ..... 5.17.1 thru 5.17.8
ZF ..... 5.18.1 thru 5.18.13

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AISIN





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Aisin

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Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
A443E	AIS-1	4	L58
A445	AIS-1	4	L58
A460 (Isuzu Number MY400)	AIS-4	6	L63
A465 (Isuzu Number for MY600)	AIS-2	6	L69
A860E (Hino Number for MY400)	AIS-4	6	L63
MO35A4 (Mitsubishi/Fuso)	AIS-1	4	L58
MO36A4 (Mitsubishi/Fuso Number for MY600)	AIS-2	6	L69
MY400	AIS-4	6	L63
MY600	AIS-2	6	L69

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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A443E
A445
MO35A4 (Mitsubishi/Fuso)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
58 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0880" (27.6352MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272AAKUP-*5	199 C	Eng	58			Furnished									
272ABKUP-*5	162 C	Eng	71			Furnished									
272ACKUP-*5	134 C	Eng	86			Furnished									
272ADKUP-*5	112 C	Eng	103			Furnished									

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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A465 (Isuzu Number for MY600)
MO36A4 (Mitsubishi/Fuso Number for MY600)
MY600

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0880" (27.6352MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)							
272AAKUP-*5	158 C	Eng	69				Furnished
272ABKUP-*5	129 C	Eng	84				Furnished
272ACKUP-*5	106 C	Eng	102				Furnished
272ADKUP-*5	89 C	Eng	122				Furnished

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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A460 (Isuzu Number MY400)
A860E (Hino Number for MY400)
MY400

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
63 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.1" (27.6MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272AAKUP-*5	173 C	Eng	63				Furnished								
272ABKUP-*5	141 C	Eng	77				Furnished								
272ACKUP-*5	117 C	Eng	93				Furnished								
272ADKUP-*5	111 C	Eng	97				Furnished								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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Aisin Notes

AIS-1

1. The torque ratings shown are based on the maximum allowable torque capacity of the PTO drive gear in the transmission.

AIS-2

1. The A465 (MY600) transmissions in Isuzu trucks started TCC Lock-up in PTO Mode in MY2010. The transmission build start dates were June 2010. The vehicle code for MY2010 is “VN60.”
2. The A460 (MY400) and A465 (MY600) share the same transmission housing and both have a “shelf” in the aperture that interferes with the ratio gear of the 272, starting with the K ratio. The older 270 series fit with higher ratios because the input ratio gear was not as wide.

AIS-4

1. The A460 (MY400) and A465 (MY600) share the same transmission housing and both have a “shelf” in the aperture that interferes with the ratio gear of the 272, starting with the K ratio. The older 270 series fit with higher ratios because the input ratio gear was not as wide.

NOTES



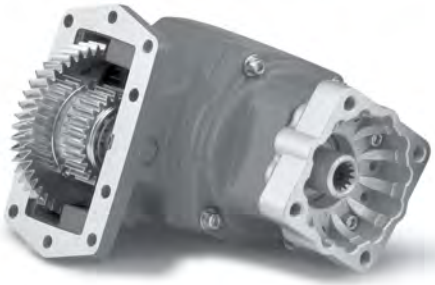
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ALLISON











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Allison

⚠ WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

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Chelsea Products Division
Olive Branch, MS 38654 USA

Allison Transmission Identification

In July 2005 Allison Transmission redesigned the transmission nameplates for all 1000/2000 and 3000/4000 Product Family transmissions. The new nameplate design contains only the information essential to the identification of the transmission. The transmission model number will no longer appear on the nameplate, it has been replaced by the serial number.

The transmission product family is identified by the first two digits of the transmission serial number:

Serial Number	Product Family
63xxxxxxxx	1000 and 2000 Product Family
65xxxxxxxx	3000 Product Family
66xxxxxxxx	4000 Product Family

"SP" models will contain additional information to accommodate military applications. The transmission E-number is embossed on the "SP" models and other models sold to the military. The model number will not be embossed for any other model. (Ref: Allison Watch #335 Rev. A)

For further assistance contact Allison Technical Assistance at (800) 252-5283.

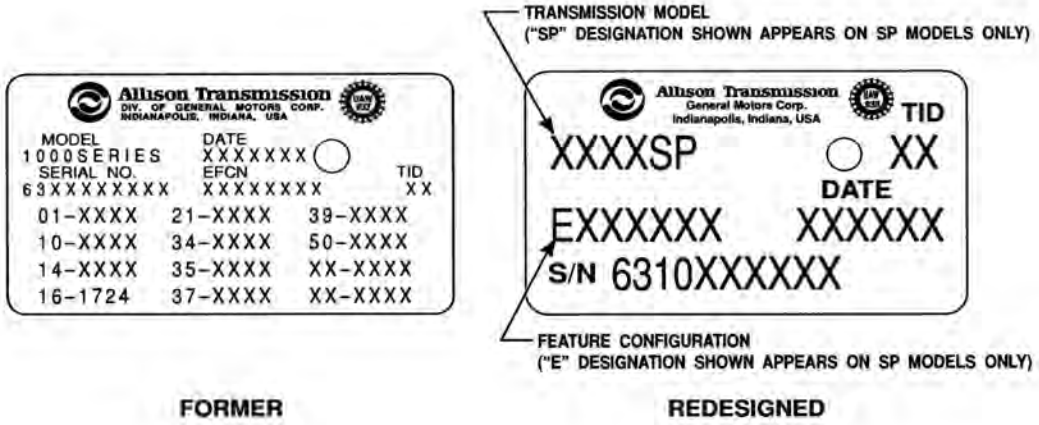


Figure 1. 1000 and 2000 Product Families Nameplates

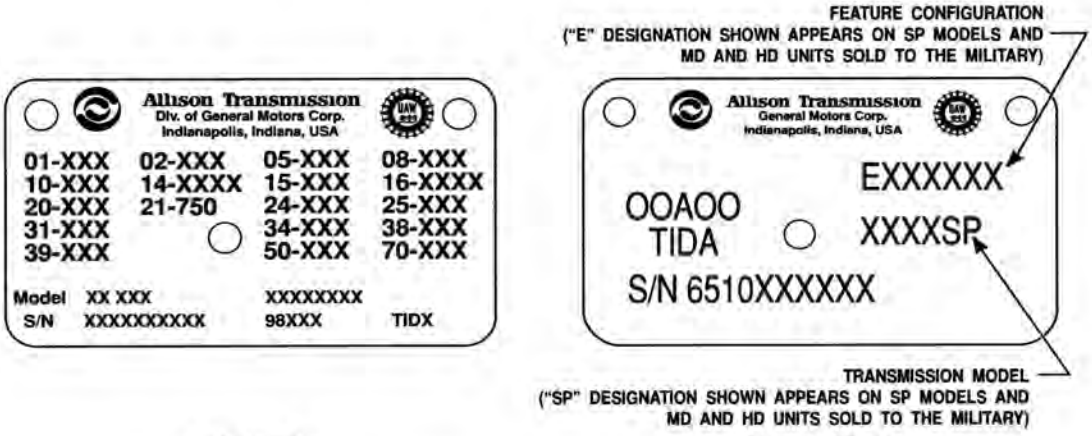


Figure 2. 3000 and 4000 Product Families Nameplates

890 Family Fitment to Transmission										
Application Page	Arr.	PTO Mounting Code	Transmission Location	Flange Options						
				XS/AS	XK/AF/AZ	XY	DA	ZS/TS	CS/ES	CK/CF/CZ
3000 Series Side/Side										
All-13	5	L	Left side	L	L	L	L	L		
All-13	5	R	Right side	R	R	R	R	R		
All-13	5	Y	Right side clocked right	Y	Y	Y	Y	Y		
All-13C	3	N	Left side w/ cooler			N		N	N	N
All-13C	5	R	Right side w/ cooler	R	R	R		R		
All-13R	5	M	Left side w/ retarder	M	M	M				
All-13R			Left side w/ retarder, & cooler							
All-13R			Right side w/ retarder							
3000 Series Side/Top										
All-16	5	E	Left side	E	E	E	E			
All-16	5	T	Right top side	T	T	T	T			
All-16EV	5	E	Left side w/o cooler or retarder	E	E	E	E			
All-16EV	5	T	Right top side w/o cooler or retarder	T	T	T	T			
All-16C			Left side w/ cooler							
All-16C	5	T	Right top side w/ cooler	T	T	T	T			
All-16R	5	F	Left side w/ retarder	F	F	F				
All-16R			Left side w/ retarder, & cooler							
All-16R			Right top side w/ retarder							
4000 Series 6-Speed										
All-14	5	H	Left side	H	H	H	H			
All-14	5	U	Right top side	U	U	U	U			
All-14C	3	C	Left side w/ cooler			C		C	C	C
All-14C	5	U	Right top side w/ cooler	U	U	U	U			
All-14R	5	P	Left side w/ retarder		P	P		P		
All-14R	3	J	Left side w/ retarder			J		J	J	J
All-14R	5	K	Right top side w/ retarder	K	K	K				
4000 Series 7-Speed										
All-19	5	H	Left side	H	H	H	H			
All-19	5	U	Right top side	U	U	U	U			
All-19C	3	C	Left side w/ cooler			C		C	C	C
All-19C	5	U	Right top side w/ cooler	U	U	U	U			
All-19R	5	P	Left side w/ retarder		P	P		P		
All-19R	3	J	Left side w/ retarder			J		J	J	J
All-19R	5	K	Right top side w/ retarder	K	K	K				

Arr. = Assembly Arrangement

NOTE: Boxes are intentionally left blank to fill in if option codes become available.

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
1000	ALL-15	5	L64-R64
1000 (GM 3600 Cab-Chassis)	ALL-17	5	R64
1000 EVS	ALL-15	5	L64-R64
1000 MH	ALL-15	5	L64-R64
1000 RDS	ALL-15	5	L64-R64
1350 (Available in 4,5 & 6 Speed)	ALL-15	6	L64-R64
1350 EVS (Available in 4,5 & 6 Speed)	ALL-15	6	L64-R64
1350 MH (Available in 4,5 & 6 Speed)	ALL-15	6	L64-R64
1350 RDS (Available in 4,5 & 6 Speed)	ALL-15	6	L64-R64
1350 SP (Available in 4,5 & 6 Speed)	ALL-15	6	L64-R64
2000	ALL-15	5	L64-R64
2100 EVS	ALL-15	5	L64-R64
2100 MH	ALL-15	5	L64-R64
2100 RDS	ALL-15	5	L64-R64
2200 EVS	ALL-15	5	L64-R64
2200 MH	ALL-15	5	L64-R64
2200 RDS	ALL-15	5	L64-R64
2300 RDS	ALL-15	6	L64-R64
2400	ALL-15	5	L64-R64
2500 EVS	ALL-15	5	L64-R64
2500 MH	ALL-15	5	L64-R64
2500 RDS	ALL-15	5	L64-R64
3000 (3000 Family - Side/Top PTO Provision w/ Retarder)	ALL-16R	6	L83-T83
3000 (3000 Family- Side/Side PTO Provision w/ Retarder)	ALL-13R	6	L68-R68
3000 (3000 Family Side/Top PTO Provision w/ Integral Cooler)	ALL-16C	6	L83-T83
3000 (3000 Family-Side / Side PTO Provision w/ Integral Cooler)	ALL-13C	6	L68-R68
3000 (International - Side/Side PTO Provision)	ALL-13	6	L68-R68
3000 (International - Side/Top PTO Provision)	ALL-16	6	L83-T83
3000 EVS (Emergency Vehicles Only Top / Side PTO Provisions)	ALL-16EV	6	L83-T83
3000 EVS (Side/Side Power Take-Off Provisions)	ALL-13	6	L68-R68
3000 MH	ALL-13	6	L68-R68
3000 ORS (Side/Side Power Take Off - Provisions)	ALL-13	6	L68-R68
3000 ORS (Side/Top PTO Provision)	ALL-16	6	L83-T83
3000 RDS	ALL-13	6	L68-R68
3000 RDS (Side/Top PTO Provision)	ALL-16	5	L83-T83
3000 SP (Side/Side PTO Option)	ALL-13	6	L68-R68

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

ALLISON TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
3000 SP (Side/Top PTO Provision)	ALL-16	6	L83-T83
3000 TRV	ALL-13	6	L68-R68
3200 (International - Side/Side PTO Provision)	ALL-13	6	L68-R68
3200 (International - Side/Top PTO Provision)	ALL-16	6	L83-T83
3200 ORS (Side/Side PTO Provision)	ALL-13	6	L68-R68
3200 ORS (Side/Top PTO Provision)	ALL-16	6	L83-T83
3200 SP (Side/Side PTO Provision)	ALL-13	6	L68-R68
3200 SP (Side/Top PTO Provision)	ALL-16	6	L83-T83
3200 TRV	ALL-13	6	L68-R68
3500 (International - Side/Side PTO Provision)	ALL-13	6	L68-R68
3500 (International - Side/Top PTO Provision)	ALL-16	6	L83-T83
3500 EVS (Emergency Vehicles Only Top / Side PTO Provisions)	ALL-16EV	6	L83-T83
3500 EVS (Side/Side Power Take-Off Provisions)	ALL-13	6	L68-R68
3500 OFS	ALL-13	6	L68-R68
3500 ORS (Side/Side PTO Provision)	ALL-13	6	L68-R68
3500 ORS (Side/Top PTO Provision)	ALL-16	6	L83-T83
3500 RDS	ALL-13	6	L68-R68
3500 RDS (Side/Top PTO Provision)	ALL-16	6	L83-T83
3500 SP (Side/Side PTO Provision)	ALL-13	6	L68-R68
3500 SP (Side/Top PTO Provision)	ALL-16	6	L83-T83
3700	ALL-18	7	L68-R68
3700 SP	ALL-18	7	L68-R68
4000 (4000 Family w/ Integral Cooler)	ALL-14C	6	L97-T97
4000 (4000 Family w/ Retarder)	ALL-14R	6	L97-T97
4000 EVS	ALL-14	6	L97-T97
4000 MH	ALL-14	6	L97-T97
4000 RDS	ALL-14	6	L97-T97
4000 TRV	ALL-14	6	L97-T97
4430	ALL-14	6	L97-T97
4430 ORS	ALL-14	6	L97-T97
4430 SP	ALL-14	6	L97-T97
4440	ALL-14	6	L97-T97
4500 EVS	ALL-14	6	L97-T97
4500 RDS	ALL-14	6	L97-T97
4700	ALL-19	7	L97-T97
4700 (4700 Family w/ Integral Cooler)	ALL-19C	7	L97-T97

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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Olive Branch, MS 38654 USA

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
4700 (4700 Family w/ Retarder)	ALL-19R	7	L97-T97
4700 EVS	ALL-19	7	L97-T97
4700 OFS	ALL-19	7	L97-T97
4700 RDS	ALL-19	7	L97-T97
4700 SP	ALL-19	7	L97-T97
4800	ALL-19	7	L97-T97
4800 (4800 Family w/ Integral Cooler)	ALL-19C	7	L97-T97
4800 (4800 Family w/ Retarder)	ALL-19R	7	L97-T97
4800 EVS	ALL-19	7	L97-T97
4800 SP	ALL-19	7	L97-T97
4850 EVS	ALL-19	7	L97-T97
6625 ORS	ALL-8	6	R46-T46
9817 OFS (Oil Field Service)	ALL-11	8	R59-T59
9823 OFS (Oil Field Service)	ALL-11	8	R59-T59
9826 OFS (Oil Field Service)	ALL-11	8	R59-T59
AT-1542	ALL-4	4	R55
AT-1545	ALL-4	4	R55
AT-540	ALL-4	4	R55
AT-542	ALL-4	4	R55
AT-543	ALL-4	4	R55
AT-545	ALL-4	4	R55
B 300	ALL-13	6	L68-R68
B 400	ALL-13	6	L68-R68
B 500	ALL-14	6	L97-T97
CLBT-750	ALL-6	5	L78
CLBT-750 (With Optional 8-Bolt Opening Ahead of Torque Converter)	ALL-12	5	L64-T40
CLBT-754	ALL-6	5	L78
CLBT-754 (With Optional 8-Bolt Opening Ahead of Torque Converter)	ALL-12	5	L64-T40
CLT-750	ALL-6	5	L78
CLT-750 (With Optional 8-Bolt Opening Ahead of Torque Converter)	ALL-12	5	L64-T40
CLT-754	ALL-6	5	L78
CLT-754 (With Optional 8-Bolt Opening Ahead of Torque Converter)	ALL-12	5	L64-T40
H8610 (H = Hauling Mode)	ALL-11	8	R59-T59
HD-4060P (Close Ratio)	ALL-14	6	L97-T97
HD-4070P	ALL-14	7	L97-T97
HD-4560P (Wide Ratio)	ALL-14	6	L97-T97

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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ALLISON TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
HT-740CRD	ALL-6	4	L78
HT-740D	ALL-6	4	L78
HT-740DRD	ALL-6	4	L78
HT-740T	ALL-6	4	L78
HT-750CRD	ALL-6	5	L78
HT-750CRD (W/Optional 8-Bolt Opening Ahead of Torque Converter)	ALL-12	5	L64-T40
HT-750D	ALL-6	5	L78
HT-750DP	ALL-6	5	L78
HT-750DRD	ALL-6	5	L78
HT-750DT	ALL-6	5	L78
HT-750HT	ALL-6	5	L78
HT-750T	ALL-6	5	L78
HT-754CR	ALL-6	5	L78
M5600 (M = Mobile Mode)	ALL-8	6	R46-T46
M5610 (M = Mobile Mode)	ALL-8	6	R46-T46
M5620 (M = Mobile Mode)	ALL-8	6	R46-T46
M6510 (M = Mobile Mode)	ALL-8	6	R46-T46
M6520 (M = Mobile Mode)	ALL-8	6	R46-T46
M6600 (M = Mobile Mode)	ALL-8	6	R46-T46
M8610 (M = Mobile Mode)	ALL-11	8	R59-T59
M9600 (M = Mobile Mode)	ALL-11	6	R59-T59
M9800 (M = Mobile Mode)	ALL-11	8	R59-T59
MD3050CR-P	ALL-13	5	L68-R68
MD-3060P (Close Ratio)	ALL-13	6	L68-R68
MD-3060PR (Close Ratio)	ALL-13	6	L68-R68
MD-3066P (Europe Only)	ALL-16	6	L83-T83
MD-3070P (Close Ratio)	ALL-18	7	L68-R68
MD-3560P (Wide Ratio)	ALL-13	6	L68-R68
MD-3560PR (Wide Ratio)	ALL-13	6	L68-R68
MT-640	ALL-5	4	R64
MT-643	ALL-5	4	R64
MT-644	ALL-5	4	R64
MT-650	ALL-5	5	R64
MT-653	ALL-5	5	R64
MT-654	ALL-5	5	R64
S5600 (S = Stationary Mode)	ALL-8	6	R46-T46

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
S5610 (S = Stationary Mode)	ALL-8	6	R46-T46
S5620 (S= Stationary Mode)	ALL-8	6	R46-T46
S6510 (S = Stationary Mode)	ALL-8	6	R46-T46
S6520 (S = Stationary Mode)	ALL-8	6	R46-T46
S6600 (S = Stationary Mode)	ALL-8	6	R46-T46
TC-10	ALL-20	10	CS

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

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AT-1542
AT-1545
AT-540
AT-542
AT-543
AT-545

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
55 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT							
221XCAJP-*3 (2)	235 I	Eng	106				Furnished
221XEAJP-*3 (2)	212 I	Eng	118				Furnished
442XBAHP-*3 (1)	250 I	Eng	90				Furnished
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)							
272MAAJP-*3	300 C	Eng	79				Furnished
272MBAJP-*3	258 C	Eng	97				Furnished
272MCAJP-*3	214 C	Eng	117				Furnished
272MDAJP-*3	179 C	Eng	140				Furnished
272MGAJP-*3	150 C	Eng	166				Furnished
272MKAJP-*3	134 C	Eng	186				Furnished
272XAAJP-*3	300 C	Eng	79				Furnished
272XBAJP-*3	258 C	Eng	97				Furnished
272XCAJP-*3	214 C	Eng	117				Furnished
272XDAJP-*3	179 C	Eng	140				Furnished
272XGAJP-*3	150 C	Eng	166				Furnished
272XKAJP-*3	134 C	Eng	186				Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: PTO output shaft torque ratings are based on the maximum intermittent torque rating of 250 lb-ft torque for the 55 tooth gear in the AT-540 series transmission.

(1) Input Gear Part No. 5-P-1418
(2) Input Gear Part No. 5-P-569

Allison

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MT-640
MT-643
MT-644
MT-650
MT-653
MT-654

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT							
221XCAJP-*3	250 I	Eng	124				Furnished
221XEAJP-*3	250 I	Eng	137				Furnished
442XBAHP-*5 (1)	250 I	Eng	104				Furnished
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)							
272MAAJP-*3	300 C	Eng	92				Furnished
272MBAJP-*3	266 C	Eng	113				Furnished
272MCAJP-*3	220 C	Eng	136				Furnished
272MDAJP-*3	184 C	Eng	164				Furnished
272MGAJP-*3	155 C	Eng	194				Furnished
272XAAJP-*3	300 C	Eng	92				Furnished
272XBAJP-*3	266 C	Eng	113				Furnished
272XCAJP-*3	220 C	Eng	136				Furnished
272XDAJP-*3	184 C	Eng	164				Furnished
272XGAJP-*3	155 C	Eng	194				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1418

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CLBT-750	HT-750D
CLT-750	HT-750DP
CLT-754	HT-750DRD
HT-740CRD	HT-750DT
HT-740D	HT-750HT
HT-740DRD	HT-750T
HT-740T	HT-754CR
HT-750CRD	CLBT-754

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
78 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT							
221XCAJP-*5	250 I	Eng	151				Furnished
221XEAJP-*5	250 I	Eng	167				Furnished
442XBAHP-*5 (1)	250 I	Eng	127				Furnished
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)							
272XAAJP-*5	300 C	Eng	112				Furnished
272XBAJP-*5	300 C	Eng	137				Furnished
272XCAJP-*5	300 C	Eng	166				Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-1418

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6625 ORS
M5600 (M = Mobile Mode)
M5610 (M = Mobile Mode)
M5620 (M = Mobile Mode)
M6510 (M = Mobile Mode)
M6520 (M = Mobile Mode)
M6600 (M = Mobile Mode)
S5600 (S = Stationary Mode)
S5610 (S = Stationary Mode)
S5620 (S= Stationary Mode)
S6510 (S = Stationary Mode)
S6520 (S = Stationary Mode)
S6600 (S = Stationary Mode)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 08-BOLT Opening Gear REAR of Centerline
46 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8020" (20.3708MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 08-BOLT Opening Gear REAR of Centerline
46 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8020" (20.3708MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
221ZCAKP-*6	250 I	Opp	89			328564X	Furnished	221ZCAKP-*4	250 I	Eng	89			328564X	Furnished
221ZEAKP-*6	250 I	Opp	99			328564X	Furnished	221ZEAKP-*4	250 I	Eng	99			328564X	Furnished
823XBAKP-*6 (6)	500 I	Opp	81				Furnished	823XBAKP-*4 (6)	500 I	Eng	81				Furnished
823XDAKP-*6 (9)	500 I	Opp	96				Furnished	823XDAKP-*4 (9)	500 I	Eng	96				Furnished
823XGAKP-*6 (10)	500 I	Opp	104				Furnished	823XGAKP-*4 (10)	500 I	Eng	104				Furnished
823XJAKP-*6 (7)	500 I	Opp	122				Furnished	880XBAKP-*4 (1)	500 I	Eng	81				Furnished
823XMAKP-*6 (8)	500 I	Opp	144				Furnished	880XDAKP-*4 (2)	500 I	Eng	96				Furnished
880XBAKP-*6 (1)	500 I	Opp	81				Furnished	880XGAKP-*4 (3)	500 I	Eng	104				Furnished
880XDAKP-*6 (2)	500 I	Opp	96				Furnished								
880XGAKP-*6 (3)	500 I	Opp	104				Furnished								
880XJAKP-*6 (4)	500 I	Opp	122				Furnished								
880XMAKP-*6 (5)	500 I	Opp	144				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAKP-*6 (1)	500 I	Opp	81				Furnished	885XBAKP-*4 (1)	500 I	Eng	81				Furnished
885XGAKP-*6 (3)	500 I	Opp	104				Furnished	885XGAKP-*4 (3)	500 I	Eng	104				Furnished
885XJAKP-*6 (4)	500 I	Opp	122				Furnished								
885XMAKP-*6 (5)	500 I	Opp	144				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
852XBAKP-*6	500 I	Opp	81				Furnished	852XBAKP-*4	500 I	Eng	81				Furnished
852XGAKP-*6	500 I	Opp	104				Furnished	852XGAKP-*4	500 I	Eng	104				Furnished
852XJAKP-*6	500 I	Opp	122				Furnished	852XJAKP-*4	500 I	Eng	122				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Maximum PTO Continuous torque allowed is 313 Ft.lbs [424 Nm] due to the transmission manufacturer PTO driver gear limit.

(1) Input Gear Part No. 5-P-1106
(2) Input Gear Part No. 5-P-1107
(3) Input Gear Part No. 5-P-1108
(4) Input Gear Part No. 5-P-1109
(5) Input Gear Part No. 5-P-1110
(6) Input Gear Part No. 5-P-223
(7) Input Gear Part No. 5-P-224
(8) Input Gear Part No. 5-P-284
(9) Input Gear Part No. 5-P-293
(10) Input Gear Part No. 5-P-294

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

9817 OFS (Oil Field Service)
9823 OFS (Oil Field Service)
9826 OFS (Oil Field Service)
H8610 (H = Hauling Mode)
M8610 (M = Mobile Mode)
M9600 (M = Mobile Mode)
M9800 (M = Mobile Mode)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 08-BOLT Opening Gear REAR of Centerline
59 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5740MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 08-BOLT Opening Gear REAR of Centerline
59 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5740MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
823XBAKP-*6 (6)	500 I	Opp	104				Furnished	823XBAKP-*4 (6)	500 I	Eng	104				Furnished
823XDAKP-*6 (9)	500 I	Opp	123				Furnished	823XDAKP-*4 (9)	500 I	Eng	123				Furnished
823XGAKP-*6 (10)	500 I	Opp	134				Furnished	880XBAKP-*4 (1)	500 I	Eng	104				Furnished
823XJAKP-*6 (7)	500 I	Opp	157				Furnished	880XDAKP-*4 (2)	500 I	Eng	123				Furnished
823XMAKP-*6 (8)	500 I	Opp	185				Furnished	880XGAKP-*4 (3)	500 I	Eng	134				Furnished
880XBAKP-*6 (1)	500 I	Opp	104				Furnished	880XJAKP-*4 (4)	500 I	Eng	157				Furnished
880XDAKP-*6 (2)	500 I	Opp	123				Furnished								
880XGAKP-*6 (3)	500 I	Opp	134				Furnished								
880XJAKP-*6 (4)	500 I	Opp	157				Furnished								
880XMAKP-*6 (5)	500 I	Opp	185				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
852XBAKP-*6	500 I	Opp	104				Furnished	852XBAKP-*4	500 I	Eng	104				Furnished
852XGAKP-*6	500 I	Opp	134				Furnished	852XGAKP-*4	500 I	Eng	134				Furnished
852XJAKP-*6	500 I	Opp	157				Furnished	852XJAKP-*4	500 I	Eng	157				Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1106
(2) Input Gear Part No. 5-P-1107
(3) Input Gear Part No. 5-P-1108
(4) Input Gear Part No. 5-P-1109
(5) Input Gear Part No. 5-P-1110
(6) Input Gear Part No. 5-P-223
(7) Input Gear Part No. 5-P-224
(8) Input Gear Part No. 5-P-284
(9) Input Gear Part No. 5-P-293
(10) Input Gear Part No. 5-P-294

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

CLT-750 (With Optional 8-Bolt Opening Ahead of Torque Converter)
CLT-754 (With Optional 8-Bolt Opening Ahead of Torque Converter)
HT-750CRD (W/Optional 8-Bolt Opening Ahead of Torque Converter)
CLBT-750 (With Optional 8-Bolt Opening Ahead of Torque Converter)
CLBT-754 (With Optional 8-Bolt Opening Ahead of Torque Converter)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear REAR of Centerline
64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5740MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 08-BOLT Opening Gear REAR of Centerline
40 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5740MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
221ZCAKX-*6	250 I	Opp	104			328564X	Furnished	221ZCAKP-*4	250 I	Opp	104			328564X	Furnished
221ZEAKX-*6	250 I	Opp	116			328564X	Furnished	221ZEAKP-*4	250 I	Opp	116			328564X	Furnished
823XBAKX-*6 (6)	500 I	Opp	95				Furnished	823XBAKP-*4 (6)	500 I	Opp	95				Furnished
823XDAKX-*6 (9)	500 I	Opp	113				Furnished	823XDAKP-*4 (9)	500 I	Opp	112				Furnished
823XGAKX-*6 (10)	500 I	Opp	122				Furnished	823XGAKP-*4 (10)	500 I	Opp	122				Furnished
823XJAKX-*6 (7)	500 I	Opp	144				Furnished	823XJAKP-*4 (7)	500 I	Opp	144				Furnished
823XMAKX-*6 (8)	500 I	Opp	169				Furnished	823XMAKP-*4 (8)	500 I	Opp	169				Furnished
880XBAKX-*6 (1)	500 I	Opp	95				Furnished	880XBAKP-*4 (1)	500 I	Opp	95				Furnished
880XDAKX-*6 (2)	500 I	Opp	113				Furnished	880XDAKP-*4 (2)	500 I	Opp	112				Furnished
880XGAKX-*6 (3)	500 I	Opp	122				Furnished	880XGAKP-*4 (3)	500 I	Opp	122				Furnished
880XJAKX-*6 (4)	500 I	Opp	144				Furnished	880XJAKP-*4 (4)	500 I	Opp	144				Furnished
880XMAKX-*6 (5)	500 I	Opp	169				Furnished	880XMAKP-*4 (5)	500 I	Opp	169				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAKX-*6 (1)	500 I	Opp	95				Furnished	885XBAKP-*4 (1)	500 I	Opp	95				Furnished
885XGAKX-*6 (3)	500 I	Opp	122				Furnished	885XGAKP-*4 (3)	500 I	Opp	122				Furnished
885XJAKX-*6 (4)	500 I	Opp	144				Furnished	885XJAKP-*4 (4)	500 I	Opp	144				Furnished
885XMAKX-*6 (5)	500 I	Opp	169				Furnished	885XMAKP-*4 (5)	500 I	Opp	169				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
852XBAKP-*6	500 I	Opp	95				Furnished	852XBAKP-*4	500 I	Opp	95				Furnished
852XGAKP-*6	500 I	Opp	122				Furnished	852XGAKP-*4	500 I	Opp	122				Furnished
852XJAKP-*6	500 I	Opp	144				Furnished	852XJAKP-*4	500 I	Opp	144				Furnished
ONE SPEED - FORWARD & REVERSE															
863XBAKX-*4	500 I	Opp	95	118			Furnished								

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1106
(2) Input Gear Part No. 5-P-1107
(3) Input Gear Part No. 5-P-1108
(4) Input Gear Part No. 5-P-1109
(5) Input Gear Part No. 5-P-1110
(6) Input Gear Part No. 5-P-223
(7) Input Gear Part No. 5-P-224
(8) Input Gear Part No. 5-P-284
(9) Input Gear Part No. 5-P-293
(10) Input Gear Part No. 5-P-294

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 (International - Side/Side PTO Provision)
3000 EVS (Side/Side Power Take-Off Provisions)
3000 MH
3000 ORS (Side/Side Power Take Off - Provisions)
3000 RDS
3000 SP (Side/Side PTO Option)
3000 TRV
3200 (International - Side/Side PTO Provision)
3200 ORS (Side/Side PTO Provision)
3200 SP (Side/Side PTO Provision)
3200 TRV
3500 (International - Side/Side PTO Provision)
3500 EVS (Side/Side Power Take-Off Provisions)
3500 OFS
3500 ORS (Side/Side PTO Provision)
3500 RDS
3500 SP (Side/Side PTO Provision)
B 300
B 400
MD-3060P (Close Ratio)
MD-3560P (Wide Ratio)
MD3050CR-P

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - CONSTANT MESH

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
267SBFJP-*5 (4)	402 I	Eng	72				Furnished	267SBFJP-*3 (4)	402 I	Eng	72				Furnished
267SDFJP-*5 (3)	390 I	Eng	87				Furnished	267SDFJP-*3 (3)	390 I	Eng	87				Furnished
267SGFJP-*5 (2)	360 I	Eng	103				Furnished	267SGFJP-*3 (2)	360 I	Eng	103				Furnished
267SMFJP-*5 (5)	318 I	Eng	129				Furnished	267SMFJP-*3 (5)	318 I	Eng	129				Furnished
267SSFJP-*5 (1)	265 I	Eng	161				Furnished	267SSFJP-*3 (1)	265 I	Eng	161				Furnished
267XBFJP-*5 (9)	335 I	Eng	72				Furnished	267XBFJP-*3 (9)	335 I	Eng	72				Furnished
267XDFJP-*5 (10)	325 I	Eng	87				Furnished	267XDFJP-*3 (10)	325 I	Eng	87				Furnished
267XGFJP-*5 (11)	300 I	Eng	103				Furnished	267XGFJP-*3 (11)	300 I	Eng	103				Furnished
267XMFJP-*5 (12)	265 I	Eng	129				Furnished	267XMFJP-*3 (12)	265 I	Eng	129				Furnished
267XSFJP-*5 (1)	250 I	Eng	161				Furnished	267XSFJP-*3 (1)	250 I	Eng	161				Furnished
287GBFJP-*5 (8)	300 C	Eng	60				Furnished	287GBFJP-*3 (8)	300 C	Eng	60				Furnished
287GBFJP-*8 (8)	300 C	Eng	56				Furnished	287GBFJP-*8 (8)	300 C	Eng	56				Furnished
287GCFJP-*5 (8)	390 C	Eng	72				Furnished	287GCFJP-*3 (8)	390 C	Eng	72				Furnished
287GCFJP-*8 (8)	390 C	Eng	68				Furnished	287GCFJP-*8 (8)	390 C	Eng	68				Furnished
287GDFJP-*5 (8)	390 C	Eng	87				Furnished	287GDFJP-*3 (8)	390 C	Eng	87				Furnished
287GDFJP-*8 (8)	390 C	Eng	81				Furnished	287GDFJP-*8 (8)	390 C	Eng	81				Furnished
287GGFJP-*5 (8)	360 C	Eng	103				Furnished	287GGFJP-*3 (8)	360 C	Eng	103				Furnished
287GGFJP-*8 (8)	360 C	Eng	96				Furnished	287GGFJP-*8 (8)	360 C	Eng	96				Furnished
287GKFJP-*5 (8)	340 C	Eng	115				Furnished	287GKFJP-*3 (8)	340 C	Eng	115				Furnished
287GMFJP-*5 (8)	318 C	Eng	129				Furnished	287GMFJP-*3 (8)	318 C	Eng	129				Furnished
287GMFJP-*8 (8)	318 C	Eng	119				Furnished	287GMFJP-*8 (8)	318 C	Eng	119				Furnished
287GPFJP-*5 (8)	290 C	Eng	144				Furnished	287GPFJP-*3 (8)	290 C	Eng	144				Furnished
287GPFJP-*8 (8)	290 C	Eng	132				Furnished	287GPFJP-*8 (8)	290 C	Eng	132				Furnished
287GSFJP-*5 (8)	265 C	Eng	161				Furnished	287GSFJP-*3 (8)	265 C	Eng	161				Furnished
287GSFJP-*8 (8)	265 C	Eng	147				Furnished	287GSFJP-*8 (8)	265 C	Eng	147				Furnished
287GTFJP-*5 (8)	240 C	Eng	180				Furnished	287GTFJP-*3 (8)	240 C	Eng	180				Furnished
287GTFJP-*8 (8)	240 C	Eng	173				Furnished	287GTFJP-*8 (8)	240 C	Eng	173				Furnished
877XAFJP-*5 (6)	591 C	Eng	82				Furnished	877XAFJP-*3 (6)	591 C	Eng	82				Furnished
877XBFJP-*5 (6)	557 C	Eng	87				Furnished	877XBFJP-*3 (6)	557 C	Eng	87				Furnished
877XCFJP-*5 (6)	522 C	Eng	93				Furnished	877XCFJP-*3 (6)	522 C	Eng	93				Furnished
877XDFJP-*5 (6)	490 C	Eng	99				Furnished	877XDFJP-*3 (6)	490 C	Eng	99				Furnished
877XEFJP-*5 (6)	429 C	Eng	113				Furnished	877XEFJP-*3 (6)	429 C	Eng	113				Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(3) Input Gear Part No. 5-P-1293
(4) Input Gear Part No. 5-P-1350
(5) Input Gear Part No. 5-P-1351
(6) Input Gear Part No. 5-P-1428
(8) Input Gear Part No. 5-P-1491
(9) Input Gear Part No. 5-P-912
(10) Input Gear Part No. 5-P-913
(11) Input Gear Part No. 5-P-914
(12) Input Gear Part No. 5-P-915

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 (International - Side/Side PTO Provision)
3000 EVS (Side/Side Power Take-Off Provisions)
3000 MH
3000 ORS (Side/Side Power Take Off - Provisions)
3000 RDS
3000 SP (Side/Side PTO Option)
3000 TRV
3200 (International - Side/Side PTO Provision)
3200 ORS (Side/Side PTO Provision)
3200 SP (Side/Side PTO Provision)
3200 TRV
3500 (International - Side/Side PTO Provision)
3500 EVS (Side/Side Power Take-Off Provisions)
3500 OFS
3500 ORS (Side/Side PTO Provision)
3500 RDS
3500 SP (Side/Side PTO Provision)
B 300
B 400
MD-3060P (Close Ratio)
MD-3560P (Wide Ratio)
MD3050CR-P

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - CONSTANT MESH															
877XFFJP-*5 (6)	379 C	Eng	128				Furnished	877XFFJP-*3 (6)	379 C	Eng	128				Furnished
877XGFJP-*5 (6)	334 C	Eng	145				Furnished	877XGFJP-*3 (6)	334 C	Eng	145				Furnished
877XHFJP-*5 (6)	315 C	Eng	154				Furnished	877XHFJP-*3 (6)	315 C	Eng	154				Furnished
877XJFJP-*5 (6)	295 C	Eng	164				Furnished	877XJFJP-*3 (6)	295 C	Eng	164				Furnished
877XKFJP-*5 (7)	357 C	Eng	136				Furnished	877XKFJP-*3 (7)	357 C	Eng	136				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
280GBFJP-*5 (8)	300 C	Eng	60				Furnished	280GBFJP-*3 (8)	300 C	Eng	60				Furnished
280GBFJP-*8 (8)	300 C	Eng	56				Furnished	280GBFJP-*8 (8)	300 C	Eng	56				Furnished
280GCFJP-*5 (8)	390 C	Eng	72				Furnished	280GCFJP-*3 (8)	390 C	Eng	72				Furnished
280GCFJP-*8 (8)	390 C	Eng	68				Furnished	280GCFJP-*8 (8)	390 C	Eng	68				Furnished
280GDFJP-*5 (8)	390 C	Eng	87				Furnished	280GDFJP-*3 (8)	390 C	Eng	87				Furnished
280GDFJP-*8 (8)	390 C	Eng	81				Furnished	280GDFJP-*8 (8)	390 C	Eng	81				Furnished
280GGFJP-*5 (8)	360 C	Eng	103				Furnished	280GGFJP-*3 (8)	360 C	Eng	103				Furnished
280GGFJP-*8 (8)	360 C	Eng	96				Furnished	280GGFJP-*8 (8)	360 C	Eng	96				Furnished
280GKFJP-*5 (8)	340 C	Eng	115				Furnished	280GKFJP-*3 (8)	340 C	Eng	115				Furnished
280GMFJP-*5 (8)	318 C	Eng	129				Furnished	280GMFJP-*3 (8)	318 C	Eng	129				Furnished
280GMFJP-*8 (8)	318 C	Eng	119				Furnished	280GMFJP-*8 (8)	318 C	Eng	119				Furnished
280GPFJP-*5 (8)	290 C	Eng	144				Furnished	280GPFJP-*3 (8)	290 C	Eng	144				Furnished
280GPFJP-*8 (8)	290 C	Eng	132				Furnished	280GPFJP-*8 (8)	290 C	Eng	132				Furnished
280GSFJP-*5 (8)	265 C	Eng	161				Furnished	280GSFJP-*3 (8)	265 C	Eng	161				Furnished
280GSFJP-*8 (8)	265 C	Eng	147				Furnished	280GSFJP-*8 (8)	265 C	Eng	147				Furnished
280GTFJP-*5 (8)	240 C	Eng	180				Furnished	280GTFJP-*3 (8)	240 C	Eng	180				Furnished
280GTFJP-*8 (8)	240 C	Eng	173				Furnished	280GTFJP-*8 (8)	240 C	Eng	173				Furnished
870XAFJP-*5 (6)	591 C	Eng	82				Furnished	870XAFJP-*3 (6)	591 C	Eng	82				Furnished
870XBFJP-*5 (6)	557 C	Eng	87				Furnished	870XBFJP-*3 (6)	557 C	Eng	87				Furnished
870XCFJP-*5 (6)	522 C	Eng	93				Furnished	870XCFJP-*3 (6)	522 C	Eng	93				Furnished
870XDFJP-*5 (6)	490 C	Eng	99				Furnished	870XDFJP-*3 (6)	490 C	Eng	99				Furnished
870XEFJP-*5 (6)	429 C	Eng	113				Furnished	870XEFJP-*3 (6)	429 C	Eng	113				Furnished
870XFFJP-*5 (6)	379 C	Eng	128				Furnished	870XFFJP-*3 (6)	379 C	Eng	128				Furnished
870XGFJP-*5 (6)	334 C	Eng	145				Furnished	870XGFJP-*3 (6)	334 C	Eng	145				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1482
(8) Input Gear Part No. 5-P-1491

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 (International - Side/Side PTO Provision)	3200 ORS (Side/Side PTO Provision)	3500 SP (Side/Side PTO Provision)
3000 EVS (Side/Side Power Take-Off Provisions)	3200 SP (Side/Side PTO Provision)	B 300
3000 MH	3200 TRV	B 400
3000 ORS (Side/Side Power Take Off - Provisions)	3500 (International - Side/Side PTO Provision)	MD-3060P (Close Ratio)
3000 RDS	3500 EVS (Side/Side Power Take-Off Provisions)	MD-3560P (Wide Ratio)
3000 SP (Side/Side PTO Option)	3500 OFS	MD3050CR-P
3000 TRV	3500 ORS (Side/Side PTO Provision)	
3200 (International - Side/Side PTO Provision)	3500 RDS	

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
870XHFJP-*5 (6)	315 C	Eng	154				Furnished	870XHFJP-*3 (6)	315 C	Eng	154				Furnished
870XJFJP-*5 (6)	295 C	Eng	164				Furnished	870XJFJP-*3 (6)	295 C	Eng	164				Furnished
ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT															
890LAFJW-*5 (6)	591 C	Eng	82				Furnished	890RAFJW-*5 (6)	591 C	Eng	82				Furnished
890LBFJW-*5 (6)	557 C	Eng	87				Furnished	890RBFJW-*5 (6)	557 C	Eng	87				Furnished
890LCFJW-*5 (6)	522 C	Eng	93				Furnished	890RCFJW-*5 (6)	522 C	Eng	93				Furnished
890LDFJW-*5 (6)	490 C	Eng	99				Furnished	890RDFJW-*5 (6)	490 C	Eng	99				Furnished
890LEFJW-*5 (6)	429 C	Eng	113				Furnished	890REFJW-*5 (6)	429 C	Eng	113				Furnished
890LFFJW-*5 (6)	379 C	Eng	128				Furnished	890RFFJW-*5 (6)	379 C	Eng	128				Furnished
890LGFJW-*5 (6)	334 C	Eng	145				Furnished	890RGFJW-*5 (6)	334 C	Eng	145				Furnished
890LHFJW-*5 (6)	315 C	Eng	154				Furnished	890RHFJW-*5 (6)	315 C	Eng	154				Furnished
ONE SPEED - CONSTANT MESH EXTENDED SHAFT															
897LAFJW-*5 (6)	591 C	Eng	82				Furnished	897RAFJW-*5 (6)	591 C	Eng	82				Furnished
897LBFJW-*5 (6)	557 C	Eng	87				Furnished	897RBFJW-*5 (6)	557 C	Eng	87				Furnished
897LCFJW-*5 (6)	522 C	Eng	93				Furnished	897RCFJW-*5 (6)	522 C	Eng	93				Furnished
897LDFJW-*5 (6)	490 C	Eng	99				Furnished	897RDFJW-*5 (6)	490 C	Eng	99				Furnished
897LEFJW-*5 (6)	429 C	Eng	113				Furnished	897REFJW-*5 (6)	429 C	Eng	113				Furnished
897LFFJW-*5 (6)	379 C	Eng	128				Furnished	897RFFJW-*5 (6)	379 C	Eng	128				Furnished
897LGFJW-*5 (6)	334 C	Eng	145				Furnished	897RGFJW-*5 (6)	334 C	Eng	145				Furnished
897LHFJW-*5 (6)	315 C	Eng	154				Furnished	897RHFJW-*5 (6)	315 C	Eng	154				Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(6) Input Gear Part No. 5-P-1428

Allison

3000 (3000 Family-Side / Side PTO Provision w/ Integral Cooler)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - CONSTANT MESH

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
267SBFJP-*5 (4)	402 I	Eng	72				Furnished	267SBFJP-*3 (4)	402 I	Eng	72				Furnished
267SDFJP-*5 (3)	390 I	Eng	87				Furnished	267SDFJP-*3 (3)	390 I	Eng	87				Furnished
267SGFJP-*5 (2)	360 I	Eng	103				Furnished	267SGFJP-*3 (2)	360 I	Eng	103				Furnished
267SMFJP-*5 (5)	318 I	Eng	129				Furnished	267SMFJP-*3 (5)	318 I	Eng	129				Furnished
267SSFJP-*5 (1)	265 I	Eng	161				Furnished	267SSFJP-*3 (1)	265 I	Eng	161				Furnished
267XBFJP-*5 (16)	335 I	Eng	72				Furnished	267XBFJP-*3 (16)	335 I	Eng	72				Furnished
267XDFJP-*5 (17)	325 I	Eng	87				Furnished	267XDFJP-*3 (17)	325 I	Eng	87				Furnished
267XGFJP-*5 (18)	300 I	Eng	103				Furnished	267XGFJP-*3 (18)	300 I	Eng	103				Furnished
267XMFJP-*5 (19)	265 I	Eng	129				Furnished	267XMFJP-*3 (19)	265 I	Eng	129				Furnished
267XSFJP-*5 (1)	250 I	Eng	161				Furnished	267XSFJP-*3 (1)	250 I	Eng	161				Furnished
287GBFJP-*5 (15)	300 C	Eng	60				Furnished	287GBFJP-*3 (15)	300 C	Eng	60				Furnished
287GBFJP-*8 (15)	300 C	Eng	56				Furnished	287GBFJP-*8 (15)	300 C	Eng	56				Furnished
287GCFJP-*5 (15)	390 C	Eng	72				Furnished	287GCFJP-*3 (15)	390 C	Eng	72				Furnished
287GCFJP-*8 (15)	390 C	Eng	68				Furnished	287GCFJP-*8 (15)	390 C	Eng	68				Furnished
287GDFJP-*5 (15)	390 C	Eng	87				Furnished	287GDFJP-*3 (15)	390 C	Eng	87				Furnished
287GDFJP-*8 (15)	390 C	Eng	81				Furnished	287GDFJP-*8 (15)	390 C	Eng	81				Furnished
287GGFJP-*5 (15)	360 C	Eng	103				Furnished	287GGFJP-*3 (15)	360 C	Eng	103				Furnished
287GGFJP-*8 (15)	360 C	Eng	96				Furnished	287GGFJP-*8 (15)	360 C	Eng	96				Furnished
287GKFJP-*5 (15)	340 C	Eng	115				Furnished	287GKFJP-*3 (15)	340 C	Eng	115				Furnished
287GMFJP-*5 (15)	318 C	Eng	129				Furnished	287GMFJP-*3 (15)	318 C	Eng	129				Furnished
287GMFJP-*8 (15)	318 C	Eng	119				Furnished	287GMFJP-*8 (15)	318 C	Eng	119				Furnished
287GPFJP-*5 (15)	290 C	Eng	144				Furnished	287GPFJP-*3 (15)	290 C	Eng	144				Furnished
287GPFJP-*8 (15)	290 C	Eng	132				Furnished	287GPFJP-*8 (15)	290 C	Eng	132				Furnished
287GSFJP-*5 (15)	265 C	Eng	161				Furnished	287GSFJP-*3 (15)	265 C	Eng	161				Furnished
287GSFJP-*8 (15)	265 C	Eng	147				Furnished	287GSFJP-*8 (15)	265 C	Eng	147				Furnished
287GTFJP-*5 (15)	240 C	Eng	180				Furnished	287GTFJP-*3 (15)	240 C	Eng	180				Furnished
287GTFJP-*8 (15)	240 C	Eng	173				Furnished	287GTFJP-*8 (15)	240 C	Eng	173				Furnished
877XAFJP-*5 (6)	591 C	Eng	82				Furnished	877XAFJP-*3 (6)	591 C	Eng	82				Furnished
877XBFJP-*5 (6)	557 C	Eng	87				Furnished	877XBFJP-*3 (6)	557 C	Eng	87				Furnished
877XCFJP-*5 (6)	522 C	Eng	93				Furnished	877XCFJP-*3 (6)	522 C	Eng	93				Furnished
877XDFJP-*5 (6)	490 C	Eng	99				Furnished	877XDFJP-*3 (6)	490 C	Eng	99				Furnished
877XEFJP-*5 (6)	429 C	Eng	113				Furnished	877XEFJP-*3 (6)	429 C	Eng	113				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(3) Input Gear Part No. 5-P-1293
(4) Input Gear Part No. 5-P-1350
(5) Input Gear Part No. 5-P-1351
(6) Input Gear Part No. 5-P-1428
(15) Input Gear Part No. 5-P-1491
(16) Input Gear Part No. 5-P-912
(17) Input Gear Part No. 5-P-913
(18) Input Gear Part No. 5-P-914
(19) Input Gear Part No. 5-P-915

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 (3000 Family-Side / Side PTO Provision w/ Integral Cooler)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - CONSTANT MESH															
877XFFJP-*5 (6)	379 C	Eng	128				Furnished	877XFFJP-*3 (6)	379 C	Eng	128				Furnished
877XGFJP-*5 (6)	334 C	Eng	145				Furnished	877XGFJP-*3 (6)	334 C	Eng	145				Furnished
877XHFJP-*5 (6)	315 C	Eng	154				Furnished	877XHFJP-*3 (6)	315 C	Eng	154				Furnished
877XJFJP-*5 (6)	295 C	Eng	164				Furnished	877XJFJP-*3 (6)	295 C	Eng	164				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
280GBFJP-*5 (15)	300 C	Eng	60				Furnished	280GBFJP-*3 (15)	300 C	Eng	60				Furnished
280GBFJP-*8 (15)	300 C	Eng	56				Furnished	280GBFJP-*8 (15)	300 C	Eng	56				Furnished
280GCFJP-*5 (15)	390 C	Eng	72				Furnished	280GCFJP-*3 (15)	390 C	Eng	72				Furnished
280GCFJP-*8 (15)	390 C	Eng	68				Furnished	280GCFJP-*8 (15)	390 C	Eng	68				Furnished
280GDFJP-*5 (15)	390 C	Eng	87				Furnished	280GDFJP-*3 (15)	390 C	Eng	87				Furnished
280GDFJP-*8 (15)	390 C	Eng	81				Furnished	280GDFJP-*8 (15)	390 C	Eng	81				Furnished
280GGFJP-*5 (15)	360 C	Eng	103				Furnished	280GGFJP-*3 (15)	360 C	Eng	103				Furnished
280GGFJP-*8 (15)	360 C	Eng	96				Furnished	280GGFJP-*8 (15)	360 C	Eng	96				Furnished
280GKFJP-*5 (15)	340 C	Eng	115				Furnished	280GKFJP-*3 (15)	340 C	Eng	115				Furnished
280GMFJP-*5 (15)	318 C	Eng	129				Furnished	280GMFJP-*3 (15)	318 C	Eng	129				Furnished
280GMFJP-*8 (15)	318 C	Eng	119				Furnished	280GMFJP-*8 (15)	318 C	Eng	119				Furnished
280GPFJP-*5 (15)	290 C	Eng	144				Furnished	280GPFJP-*3 (15)	290 C	Eng	144				Furnished
280GPFJP-*8 (15)	290 C	Eng	132				Furnished	280GPFJP-*8 (15)	290 C	Eng	132				Furnished
280GSFJP-*5 (15)	265 C	Eng	161				Furnished	280GSFJP-*3 (15)	265 C	Eng	161				Furnished
280GSFJP-*8 (15)	265 C	Eng	147				Furnished	280GSFJP-*8 (15)	265 C	Eng	147				Furnished
280GTFJP-*5 (15)	240 C	Eng	180				Furnished	280GTFJP-*3 (15)	240 C	Eng	180				Furnished
280GTFJP-*8 (15)	240 C	Eng	173				Furnished	280GTFJP-*8 (15)	240 C	Eng	173				Furnished
870XAFJP-*5 (6)	591 C	Eng	82				Furnished	870XAFJP-*3 (6)	591 C	Eng	82				Furnished
870XBFJP-*5 (6)	557 C	Eng	87				Furnished	870XBFJP-*3 (6)	557 C	Eng	87				Furnished
870XCFJP-*5 (6)	522 C	Eng	93				Furnished	870XCFJP-*3 (6)	522 C	Eng	93				Furnished
870XDFJP-*5 (6)	490 C	Eng	99				Furnished	870XDFJP-*3 (6)	490 C	Eng	99				Furnished
870XEFJP-*5 (6)	429 C	Eng	113				Furnished	870XEFJP-*3 (6)	429 C	Eng	113				Furnished
870XFFJP-*5 (6)	379 C	Eng	128				Furnished	870XFFJP-*3 (6)	379 C	Eng	128				Furnished
870XGFJP-*5 (6)	334 C	Eng	145				Furnished	870XGFJP-*3 (6)	334 C	Eng	145				Furnished
870XHFJP-*5 (6)	315 C	Eng	154				Furnished	870XHFJP-*3 (6)	315 C	Eng	154				Furnished
870XJFJP-*5 (6)	295 C	Eng	164				Furnished	870XJFJP-*3 (6)	295 C	Eng	164				Furnished

Continued on Next Page

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IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(6) Input Gear Part No. 5-P-1428
(15) Input Gear Part No. 5-P-1491

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 (3000 Family-Side / Side PTO Provision w/ Integral Cooler)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT															
890NAFJW-*3 (6)	591 C	Eng	82				Furnished	890RAFJW-*5 (6)	591 C	Eng	82				Furnished
890NBFJW-*3 (6)	557 C	Eng	87				Furnished	890RBFJW-*5 (6)	557 C	Eng	87				Furnished
890NCFJW-*3 (6)	522 C	Eng	93				Furnished	890RCFJW-*5 (6)	522 C	Eng	93				Furnished
890NDFJW-*3 (6)	490 C	Eng	99				Furnished	890RDFJW-*5 (6)	490 C	Eng	99				Furnished
890NEFJW-*3 (6)	429 C	Eng	113				Furnished	890REFJW-*5 (6)	429 C	Eng	113				Furnished
890NFFJW-*3 (6)	379 C	Eng	128				Furnished	890RFFJW-*5 (6)	379 C	Eng	128				Furnished
890NGFJW-*3 (6)	334 C	Eng	145				Furnished	890RGFJW-*5 (6)	334 C	Eng	145				Furnished
890NHFJW-*3 (6)	315 C	Eng	154				Furnished	890RHFJW-*5 (6)	315 C	Eng	154				Furnished
ONE SPEED - CONSTANT MESH EXTENDED SHAFT															
897NAFJW-*3 (7)	591 C	Eng	82				Furnished	897RAFJW-*5 (7)	591 C	Eng	82				Furnished
897NBFJW-*3 (8)	557 C	Eng	87				Furnished	897RBFJW-*5 (8)	557 C	Eng	87				Furnished
897NCFJW-*3 (9)	522 C	Eng	93				Furnished	897RCFJW-*5 (9)	522 C	Eng	93				Furnished
897NDFJW-*3 (10)	490 C	Eng	99				Furnished	897RDFJW-*5 (10)	490 C	Eng	99				Furnished
897NEFJW-*3 (11)	429 C	Eng	113				Furnished	897REFJW-*5 (11)	429 C	Eng	113				Furnished
897NFFJW-*3 (12)	379 C	Eng	128				Furnished	897RFFJW-*5 (12)	379 C	Eng	128				Furnished
897NGFJW-*3 (13)	334 C	Eng	145				Furnished	897RGFJW-*5 (13)	334 C	Eng	145				Furnished
897NHFJW-*3 (14)	315 C	Eng	154				Furnished	897RHFJW-*5 (14)	315 C	Eng	154				Furnished

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(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1428-1X
(8) Input Gear Part No. 5-P-1428-2X
(9) Input Gear Part No. 5-P-1428-3X
(10) Input Gear Part No. 5-P-1428-4X
(11) Input Gear Part No. 5-P-1428-5X
(12) Input Gear Part No. 5-P-1428-6X
(13) Input Gear Part No. 5-P-1428-7X
(14) Input Gear Part No. 5-P-1428-8X

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 (3000 Family- Side/Side PTO Provision w/ Retarder)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - CONSTANT MESH

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
267SBFJP-*5 (4)	402 I	Eng	72			Furnished		267SBFJP-*3 (4)	402 I	Eng	72			Furnished	
267SDFJP-*5 (3)	390 I	Eng	87			Furnished		267SDFJP-*3 (3)	390 I	Eng	87			Furnished	
267SGFJP-*5 (2)	360 I	Eng	103			Furnished		267SGFJP-*3 (2)	360 I	Eng	103			Furnished	
267SMFJP-*5 (5)	318 I	Eng	129			Furnished		267SMFJP-*3 (5)	318 I	Eng	129			Furnished	
267SSFJP-*5 (1)	265 I	Eng	161			Furnished		267SSFJP-*3 (1)	265 I	Eng	161			Furnished	
267XBFJP-*5 (8)	335 I	Eng	72			Furnished		267XBFJP-*3 (8)	335 I	Eng	72			Furnished	
267XDFJP-*5 (9)	325 I	Eng	87			Furnished		267XDFJP-*3 (9)	325 I	Eng	87			Furnished	
267XGFJP-*5 (10)	300 I	Eng	103			Furnished		267XGFJP-*3 (10)	300 I	Eng	103			Furnished	
267XMFJP-*5 (11)	265 I	Eng	129			Furnished		267XMFJP-*3 (11)	265 I	Eng	129			Furnished	
267XSFJP-*5 (1)	250 I	Eng	161			Furnished		267XSFJP-*3 (1)	250 I	Eng	161			Furnished	
287GBFJP-*5 (7)	300 C	Eng	60			Furnished		287GBFJP-*3 (7)	300 C	Eng	60			Furnished	
287GBFJP-*8 (7)	300 C	Eng	56			Furnished		287GBFJP-*8 (7)	300 C	Eng	56			Furnished	
287GCFJP-*5 (7)	390 C	Eng	72			Furnished		287GCFJP-*3 (7)	390 C	Eng	72			Furnished	
287GCFJP-*8 (7)	390 C	Eng	68			Furnished		287GCFJP-*8 (7)	390 C	Eng	68			Furnished	
287GDFJP-*5 (7)	390 C	Eng	87			Furnished		287GDFJP-*3 (7)	390 C	Eng	87			Furnished	
287GDFJP-*8 (7)	390 C	Eng	81			Furnished		287GDFJP-*8 (7)	390 C	Eng	81			Furnished	
287GGFJP-*5 (7)	360 C	Eng	103			Furnished		287GGFJP-*3 (7)	360 C	Eng	103			Furnished	
287GGFJP-*8 (7)	360 C	Eng	96			Furnished		287GGFJP-*8 (7)	360 C	Eng	96			Furnished	
287GKFJP-*5 (7)	340 C	Eng	115			Furnished		287GKFJP-*3 (7)	340 C	Eng	115			Furnished	
287GMFJP-*5 (7)	318 C	Eng	129			Furnished		287GMFJP-*3 (7)	318 C	Eng	129			Furnished	
287GMFJP-*8 (7)	318 C	Eng	119			Furnished		287GMFJP-*8 (7)	318 C	Eng	119			Furnished	
287GPFJP-*5 (7)	290 C	Eng	144			Furnished		287GPFJP-*3 (7)	290 C	Eng	144			Furnished	
287GPFJP-*8 (7)	290 C	Eng	132			Furnished		287GPFJP-*8 (7)	290 C	Eng	132			Furnished	
287GSFJP-*5 (7)	265 C	Eng	161			Furnished		287GSFJP-*3 (7)	265 C	Eng	161			Furnished	
287GSFJP-*8 (7)	265 C	Eng	147			Furnished		287GSFJP-*8 (7)	265 C	Eng	147			Furnished	
287GTFJP-*5 (7)	240 C	Eng	180			Furnished		287GTFJP-*3 (7)	240 C	Eng	180			Furnished	
287GTFJP-*8 (7)	240 C	Eng	173			Furnished		287GTFJP-*8 (7)	240 C	Eng	173			Furnished	
877XAFJP-*5 (6)	591 C	Eng	82			Furnished		877XAFJP-*3 (6)	591 C	Eng	82			Furnished	
877XBFJP-*5 (6)	557 C	Eng	87			Furnished		877XBFJP-*3 (6)	557 C	Eng	87			Furnished	
877XCFJP-*5 (6)	522 C	Eng	93			Furnished		877XCFJP-*3 (6)	522 C	Eng	93			Furnished	
877XDFJP-*5 (6)	490 C	Eng	99			Furnished		877XDFJP-*3 (6)	490 C	Eng	99			Furnished	
877XEFJP-*5 (6)	429 C	Eng	113			Furnished		877XEFJP-*3 (6)	429 C	Eng	113			Furnished	

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(3) Input Gear Part No. 5-P-1293
(4) Input Gear Part No. 5-P-1350
(5) Input Gear Part No. 5-P-1351
(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491
(8) Input Gear Part No. 5-P-912
(9) Input Gear Part No. 5-P-913
(10) Input Gear Part No. 5-P-914
(11) Input Gear Part No. 5-P-915

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 (3000 Family- Side/Side PTO Provision w/ Retarder)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - CONSTANT MESH															
877XFFJP-*5 (6)	379 C	Eng	128				Furnished	877XFFJP-*3 (6)	379 C	Eng	128				Furnished
877XGFJP-*5 (6)	334 C	Eng	145				Furnished	877XGFJP-*3 (6)	334 C	Eng	145				Furnished
877XHFJP-*5 (6)	315 C	Eng	154				Furnished	877XHFJP-*3 (6)	315 C	Eng	154				Furnished
877XJFJP-*5 (6)	295 C	Eng	164				Furnished	877XJFJP-*3 (6)	295 C	Eng	164				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
280GBFJP-*5 (7)	300 C	Eng	60				Furnished	280GBFJP-*3 (7)	300 C	Eng	60				Furnished
280GBFJP-*8 (7)	300 C	Eng	56				Furnished	280GBFJP-*8 (7)	300 C	Eng	56				Furnished
280GCFJP-*5 (7)	390 C	Eng	72				Furnished	280GCFJP-*3 (7)	390 C	Eng	72				Furnished
280GCFJP-*8 (7)	390 C	Eng	68				Furnished	280GCFJP-*8 (7)	390 C	Eng	68				Furnished
280GDFJP-*5 (7)	390 C	Eng	87				Furnished	280GDFJP-*3 (7)	390 C	Eng	87				Furnished
280GDFJP-*8 (7)	390 C	Eng	81				Furnished	280GDFJP-*8 (7)	390 C	Eng	81				Furnished
280GGFJP-*5 (7)	360 C	Eng	103				Furnished	280GGFJP-*3 (7)	360 C	Eng	103				Furnished
280GGFJP-*8 (7)	360 C	Eng	96				Furnished	280GGFJP-*8 (7)	360 C	Eng	96				Furnished
280GKFJP-*5 (7)	340 C	Eng	115				Furnished	280GKFJP-*3 (7)	340 C	Eng	115				Furnished
280GMFJP-*5 (7)	318 C	Eng	129				Furnished	280GMFJP-*3 (7)	318 C	Eng	129				Furnished
280GMFJP-*8 (7)	318 C	Eng	119				Furnished	280GMFJP-*8 (7)	318 C	Eng	119				Furnished
280GPFJP-*5 (7)	290 C	Eng	144				Furnished	280GPFJP-*3 (7)	290 C	Eng	144				Furnished
280GPFJP-*8 (7)	290 C	Eng	132				Furnished	280GPFJP-*8 (7)	290 C	Eng	132				Furnished
280GSFJP-*5 (7)	265 C	Eng	161				Furnished	280GSFJP-*3 (7)	265 C	Eng	161				Furnished
280GSFJP-*8 (7)	265 C	Eng	147				Furnished	280GSFJP-*8 (7)	265 C	Eng	147				Furnished
280GTFJP-*5 (7)	240 C	Eng	180				Furnished	280GTFJP-*3 (7)	240 C	Eng	180				Furnished
280GTFJP-*8 (7)	240 C	Eng	173				Furnished	280GTFJP-*8 (7)	240 C	Eng	173				Furnished
870XAFJP-*5 (6)	591 C	Eng	82				Furnished	870XAFJP-*3 (6)	591 C	Eng	82				Furnished
870XBFJP-*5 (6)	557 C	Eng	87				Furnished	870XBFJP-*3 (6)	557 C	Eng	87				Furnished
870XCFJP-*5 (6)	522 C	Eng	93				Furnished	870XCFJP-*3 (6)	522 C	Eng	93				Furnished
870XDFJP-*5 (6)	490 C	Eng	99				Furnished	870XDFJP-*3 (6)	490 C	Eng	99				Furnished
870XEFJP-*5 (6)	429 C	Eng	113				Furnished	870XEFJP-*3 (6)	429 C	Eng	113				Furnished
870XFFJP-*5 (6)	379 C	Eng	128				Furnished	870XFFJP-*3 (6)	379 C	Eng	128				Furnished
870XGFJP-*5 (6)	334 C	Eng	145				Furnished	870XGFJP-*3 (6)	334 C	Eng	145				Furnished
870XHFJP-*5 (6)	315 C	Eng	154				Furnished	870XHFJP-*3 (6)	315 C	Eng	154				Furnished
870XJFJP-*5 (6)	295 C	Eng	164				Furnished	870XJFJP-*3 (6)	295 C	Eng	164				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 (3000 Family- Side/Side PTO Provision w/ Retarder)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT															
890MAFJW-*5 (6)	591 C	Eng	82				Furnished								
890MBFJW-*5 (6)	557 C	Eng	87				Furnished								
890MCFJW-*5 (6)	522 C	Eng	93				Furnished								
890MDFJW-*5 (6)	490 C	Eng	99				Furnished								
890MEFJW-*5 (6)	429 C	Eng	113				Furnished								
890MFFJW-*5 (6)	379 C	Eng	128				Furnished								
890MGFJW-*5 (6)	334 C	Eng	145				Furnished								
890MHFJW-*5 (6)	315 C	Eng	154				Furnished								
ONE SPEED - CONSTANT MESH EXTENDED SHAFT															
897MAFJW-*5 (6)	591 C	Eng	82				Furnished								
897MBFJW-*5 (6)	557 C	Eng	87				Furnished								
897MCFJW-*5 (6)	522 C	Eng	93				Furnished								
897MDFJW-*5 (6)	490 C	Eng	99				Furnished								
897MEFJW-*5 (6)	429 C	Eng	113				Furnished								
897MFFJW-*5 (6)	379 C	Eng	128				Furnished								
897MGFJW-*5 (6)	334 C	Eng	145				Furnished								
897MHFJW-*5 (6)	315 C	Eng	154				Furnished								

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(6) Input Gear Part No. 5-P-1428

Allison

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4000 EVS
4000 MH
4000 RDS
4000 TRV
4430
4430 ORS
4430 SP
4440

4500 EVS
4500 RDS
B 500
HD-4060P (Close Ratio)
HD-4070P
HD-4560P (Wide Ratio)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - CONSTANT MESH

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
267SBFJP-*5 (4)	402 I	Eng	103				Furnished	267SBFJP-*3 (4)	402 I	Eng	103				Furnished
267SDFJP-*5 (3)	390 I	Eng	123				Furnished	267SDFJP-*3 (4)	390 I	Eng	123				Furnished
267SGFJP-*5 (2)	360 I	Eng	147				Furnished	267SGFJP-*3 (2)	360 I	Eng	147				Furnished
267SMFJP-*5 (5)	318 I	Eng	184				Furnished	267SMFJP-*3 (5)	318 I	Eng	184				Furnished
267SSFJP-*5 (1)	265 I	Eng	229				Furnished	267SSFJP-*3 (1)	265 I	Eng	229				Furnished
267XBFJP-*5 (8)	335 I	Eng	103				Furnished	267XBFJP-*3 (8)	335 I	Eng	103				Furnished
267XDFJP-*5 (9)	325 I	Eng	123				Furnished	267XDFJP-*3 (9)	325 I	Eng	123				Furnished
267XGFJP-*5 (10)	300 I	Eng	147				Furnished	267XGFJP-*3 (10)	300 I	Eng	147				Furnished
267XMFJP-*5 (11)	265 I	Eng	184				Furnished	267XMFJP-*3 (11)	265 I	Eng	184				Furnished
267XSFJP-*5 (1)	250 I	Eng	229				Furnished	267XSFJP-*3 (1)	250 I	Eng	229				Furnished
287GBFJP-*5 (7)	300 C	Eng	85				Furnished	287GBFJP-*5 (7)	300 C	Eng	85				Furnished
287GBFJP-*8 (7)	300 C	Eng	81				Furnished	287GBFJP-*8 (7)	300 C	Eng	81				Furnished
287GCFJP-*5 (7)	390 C	Eng	103				Furnished	287GCFJP-*5 (7)	390 C	Eng	103				Furnished
287GCFJP-*8 (7)	390 C	Eng	97				Furnished	287GCFJP-*8 (7)	390 C	Eng	97				Furnished
287GDFJP-*5 (7)	390 C	Eng	123				Furnished	287GDFJP-*5 (7)	390 C	Eng	123				Furnished
287GDFJP-*8 (7)	390 C	Eng	116				Furnished	287GDFJP-*8 (7)	390 C	Eng	116				Furnished
287GGFJP-*5 (7)	360 C	Eng	147				Furnished	287GGFJP-*5 (7)	360 C	Eng	147				Furnished
287GGFJP-*8 (7)	360 C	Eng	137				Furnished	287GGFJP-*8 (7)	360 C	Eng	137				Furnished
287GKFJP-*5 (7)	340 C	Eng	164				Furnished	287GKFJP-*5 (7)	340 C	Eng	164				Furnished
287GMFJP-*5 (7)	318 C	Eng	184				Furnished	287GMFJP-*5 (7)	318 C	Eng	184				Furnished
287GMFJP-*8 (7)	318 C	Eng	170				Furnished	287GMFJP-*8 (7)	318 C	Eng	170				Furnished
287GPFJP-*5 (7)	290 C	Eng	205				Furnished	287GPFJP-*5 (7)	290 C	Eng	205				Furnished
287GPFJP-*8 (7)	290 C	Eng	189				Furnished	287GPFJP-*8 (7)	290 C	Eng	189				Furnished
287GSFJP-*5 (7)	265 C	Eng	229				Furnished	287GSFJP-*5 (7)	265 C	Eng	229				Furnished
287GSFJP-*8 (7)	265 C	Eng	210				Furnished	287GSFJP-*8 (7)	265 C	Eng	210				Furnished
877XAFJP-*5 (6)	591 C	Eng	116				Furnished	877XAFJP-*3 (6)	591 C	Eng	116				Furnished
877XBFJP-*5 (6)	552 C	Eng	124				Furnished	877XBFJP-*3 (6)	552 C	Eng	124				Furnished
877XCFJP-*5 (6)	515 C	Eng	133				Furnished	877XCFJP-*3 (6)	515 C	Eng	133				Furnished
877XDFJP-*5 (6)	482 C	Eng	142				Furnished	877XDFJP-*3 (6)	482 C	Eng	142				Furnished
877XEFJP-*5 (6)	425 C	Eng	161				Furnished	877XEFJP-*3 (6)	425 C	Eng	161				Furnished
877XFFJP-*5 (6)	376 C	Eng	182				Furnished	877XFFJP-*3 (6)	376 C	Eng	182				Furnished
877XGFJP-*5 (6)	332 C	Eng	207				Furnished	877XGFJP-*3 (6)	332 C	Eng	207				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(3) Input Gear Part No. 5-P-1293
(4) Input Gear Part No. 5-P-1350
(5) Input Gear Part No. 5-P-1351
(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491
(8) Input Gear Part No. 5-P-912
(9) Input Gear Part No. 5-P-913
(10) Input Gear Part No. 5-P-914
(11) Input Gear Part No. 5-P-915

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4000 EVS	4500 EVS
4000 MH	4500 RDS
4000 RDS	B 500
4000 TRV	HD-4060P (Close Ratio)
4430	HD-4070P
4430 ORS	HD-4560P (Wide Ratio)
4430 SP	
4440	

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - CONSTANT MESH															
877XHFJP-*5 (6)	312 C	Eng	220				Furnished	877XHFJP-*3 (6)	312 C	Eng	220				Furnished
877XJFJP-*5 (6)	293 C	Eng	234				Furnished	877XJFJP-*3 (6)	293 C	Eng	234				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
280GBFJP-*5 (7)	300 C	Eng	85				Furnished	280GBFJP-*5 (7)	300 C	Eng	85				Furnished
280GBFJP-*8 (7)	300 C	Eng	81				Furnished	280GBFJP-*8 (7)	300 C	Eng	81				Furnished
280GCFJP-*5 (7)	390 C	Eng	103				Furnished	280GCFJP-*5 (7)	390 C	Eng	103				Furnished
280GCFJP-*8 (7)	390 C	Eng	97				Furnished	280GCFJP-*8 (7)	390 C	Eng	97				Furnished
280GDFJP-*5 (7)	390 C	Eng	123				Furnished	280GDFJP-*5 (7)	390 C	Eng	123				Furnished
280GDFJP-*8 (7)	390 C	Eng	116				Furnished	280GDFJP-*8 (7)	390 C	Eng	116				Furnished
280GGFJP-*5 (7)	360 C	Eng	147				Furnished	280GGFJP-*5 (7)	360 C	Eng	147				Furnished
280GGFJP-*8 (7)	360 C	Eng	137				Furnished	280GGFJP-*8 (7)	360 C	Eng	137				Furnished
280GKFJP-*5 (7)	340 C	Eng	164				Furnished	280GKFJP-*5 (7)	340 C	Eng	164				Furnished
280GMFJP-*5 (7)	318 C	Eng	184				Furnished	280GMFJP-*5 (7)	318 C	Eng	184				Furnished
280GMFJP-*8 (7)	318 C	Eng	170				Furnished	280GMFJP-*8 (7)	318 C	Eng	170				Furnished
280GPFJP-*5 (7)	290 C	Eng	205				Furnished	280GPFJP-*5 (7)	290 C	Eng	205				Furnished
280GPFJP-*8 (7)	290 C	Eng	189				Furnished	280GPFJP-*8 (7)	290 C	Eng	189				Furnished
280GSFJP-*5 (7)	265 C	Eng	229				Furnished	280GSFJP-*5 (7)	265 C	Eng	229				Furnished
280GSFJP-*8 (7)	265 C	Eng	210				Furnished	280GSFJP-*8 (7)	265 C	Eng	210				Furnished
870XAFJP-*5 (6)	591 C	Eng	116				Furnished	870XAFJP-*3 (6)	591 C	Eng	116				Furnished
870XBFJP-*5 (6)	552 C	Eng	124				Furnished	870XBFJP-*3 (6)	552 C	Eng	124				Furnished
870XCFJP-*5 (6)	515 C	Eng	133				Furnished	870XCFJP-*3 (6)	515 C	Eng	133				Furnished
870XDFJP-*5 (6)	482 C	Eng	142				Furnished	870XDFJP-*3 (6)	482 C	Eng	142				Furnished
870XEFJP-*5 (6)	425 C	Eng	161				Furnished	870XEFJP-*3 (6)	425 C	Eng	161				Furnished
870XFFJP-*5 (6)	376 C	Eng	182				Furnished	870XFFJP-*3 (6)	376 C	Eng	182				Furnished
870XGFJP-*5 (6)	332 C	Eng	207				Furnished	870XGFJP-*3 (6)	332 C	Eng	207				Furnished
870XHFJP-*5 (6)	312 C	Eng	220				Furnished	870XHFJP-*3 (6)	312 C	Eng	220				Furnished
870XJFJP-*5 (6)	293 C	Eng	234				Furnished	870XJFJP-*3 (6)	293 C	Eng	234				Furnished
ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT															
890HAFJW-*5 (6)	591 C	Eng	116				Furnished	890UAFJW-*5 (6)	591 C	Eng	116				Furnished
890HBFJW-*5 (6)	552 C	Eng	124				Furnished	890UBFJW-*5 (6)	552 C	Eng	124				Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4000 EVS	4500 EVS
4000 MH	4500 RDS
4000 RDS	B 500
4000 TRV	HD-4060P (Close Ratio)
4430	HD-4070P
4430 ORS	HD-4560P (Wide Ratio)
4430 SP	
4440	

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT															
890HCFJW-*5 (6)	515 C	Eng	133				Furnished	890UCFJW-*5 (6)	515 C	Eng	133				Furnished
890HDFJW-*5 (6)	482 C	Eng	142				Furnished	890UDFJW-*5 (6)	482 C	Eng	142				Furnished
890HEFJW-*5 (6)	425 C	Eng	161				Furnished	890UEFJW-*5 (6)	425 C	Eng	161				Furnished
890HFFJW-*5 (6)	376 C	Eng	182				Furnished	890UFFJW-*5 (6)	376 C	Eng	182				Furnished
ONE SPEED - CONSTANT MESH EXTENDED SHAFT															
897HAFJW-*5 (6)	591 C	Eng	116				Furnished	897UAFJW-*5 (6)	591 C	Eng	116				Furnished
897HBFJW-*5 (6)	552 C	Eng	124				Furnished	897UBFJW-*5 (6)	552 C	Eng	124				Furnished
897HCFJW-*5 (6)	515 C	Eng	133				Furnished	897UCFJW-*5 (6)	515 C	Eng	133				Furnished
897HDFJW-*5 (6)	482 C	Eng	142				Furnished	897UDFJW-*5 (6)	482 C	Eng	142				Furnished
897HEFJW-*5 (6)	425 C	Eng	161				Furnished	897UEFJW-*5 (6)	425 C	Eng	161				Furnished
897HFFJW-*5 (6)	376 C	Eng	182				Furnished	897UFFJW-*5 (6)	376 C	Eng	182				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(6) Input Gear Part No. 5-P-1428

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4000 (4000 Family w/ Integral Cooler)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - CONSTANT MESH

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
267SBFJP-*5 (4)	402 I	Eng	103			Furnished		267SBFJP-*3 (4)	402 I	Eng	103			Furnished	
267SDFJP-*5 (3)	390 I	Eng	123			Furnished		267SDFJP-*3 (4)	390 I	Eng	123			Furnished	
267SGFJP-*5 (2)	360 I	Eng	147			Furnished		267SGFJP-*3 (2)	360 I	Eng	147			Furnished	
267SMFJP-*5 (5)	318 I	Eng	184			Furnished		267SMFJP-*3 (5)	318 I	Eng	184			Furnished	
267SSFJP-*5 (1)	265 I	Eng	229			Furnished		267SSFJP-*3 (1)	265 I	Eng	229			Furnished	
267XBFJP-*5 (8)	335 I	Eng	103			Furnished		267XBFJP-*3 (8)	335 I	Eng	103			Furnished	
267XDFJP-*5 (9)	325 I	Eng	123			Furnished		267XDFJP-*3 (9)	325 I	Eng	123			Furnished	
267XGFJP-*5 (10)	300 I	Eng	147			Furnished		267XGFJP-*3 (10)	300 I	Eng	147			Furnished	
267XMFJP-*5 (11)	265 I	Eng	184			Furnished		267XMFJP-*3 (11)	265 I	Eng	184			Furnished	
267XSFJP-*5 (1)	250 I	Eng	229			Furnished		267XSFJP-*3 (1)	250 I	Eng	229			Furnished	
287GBFJP-*5 (7)	300 C	Eng	85			Furnished		287GBFJP-*5 (7)	300 C	Eng	85			Furnished	
287GBFJP-*8 (7)	300 C	Eng	81			Furnished		287GBFJP-*8 (7)	300 C	Eng	81			Furnished	
287GCFJP-*5 (7)	390 C	Eng	103			Furnished		287GCFJP-*5 (7)	390 C	Eng	103			Furnished	
287GCFJP-*8 (7)	390 C	Eng	97			Furnished		287GCFJP-*8 (7)	390 C	Eng	97			Furnished	
287GDFJP-*5 (7)	390 C	Eng	123			Furnished		287GDFJP-*5 (7)	390 C	Eng	123			Furnished	
287GDFJP-*8 (7)	390 C	Eng	116			Furnished		287GDFJP-*8 (7)	390 C	Eng	116			Furnished	
287GGFJP-*5 (7)	360 C	Eng	147			Furnished		287GGFJP-*5 (7)	360 C	Eng	147			Furnished	
287GGFJP-*8 (7)	360 C	Eng	137			Furnished		287GGFJP-*8 (7)	360 C	Eng	137			Furnished	
287GKFJP-*5 (7)	340 C	Eng	164			Furnished		287GKFJP-*5 (7)	340 C	Eng	164			Furnished	
287GMFJP-*5 (7)	318 C	Eng	184			Furnished		287GMFJP-*5 (7)	318 C	Eng	184			Furnished	
287GMFJP-*8 (7)	318 C	Eng	170			Furnished		287GMFJP-*8 (7)	318 C	Eng	170			Furnished	
287GPFJP-*5 (7)	290 C	Eng	205			Furnished		287GPFJP-*5 (7)	290 C	Eng	205			Furnished	
287GPFJP-*8 (7)	290 C	Eng	189			Furnished		287GPFJP-*8 (7)	290 C	Eng	189			Furnished	
287GSFJP-*5 (7)	265 C	Eng	229			Furnished		287GSFJP-*5 (7)	265 C	Eng	229			Furnished	
287GSFJP-*8 (7)	265 C	Eng	210			Furnished		287GSFJP-*8 (7)	265 C	Eng	210			Furnished	
877XAFJP-*5 (6)	591 C	Eng	116			Furnished		877XAFJP-*3 (6)	591 C	Eng	116			Furnished	
877XBFJP-*5 (6)	552 C	Eng	124			Furnished		877XBFJP-*3 (6)	552 C	Eng	124			Furnished	
877XCFJP-*5 (6)	515 C	Eng	133			Furnished		877XCFJP-*3 (6)	515 C	Eng	133			Furnished	
877XDFJP-*5 (6)	482 C	Eng	142			Furnished		877XDFJP-*3 (6)	482 C	Eng	142			Furnished	
877XEFJP-*5 (6)	425 C	Eng	161			Furnished		877XEFJP-*3 (6)	425 C	Eng	161			Furnished	
877XFFJP-*5 (6)	376 C	Eng	182			Furnished		877XFFJP-*3 (6)	376 C	Eng	182			Furnished	
877XGFJP-*5 (6)	332 C	Eng	207			Furnished		877XGFJP-*3 (6)	332 C	Eng	207			Furnished	

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

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(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(3) Input Gear Part No. 5-P-1293
(4) Input Gear Part No. 5-P-1350
(5) Input Gear Part No. 5-P-1351
(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491
(8) Input Gear Part No. 5-P-912
(9) Input Gear Part No. 5-P-913
(10) Input Gear Part No. 5-P-914
(11) Input Gear Part No. 5-P-915

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4000 (4000 Family w/ Integral Cooler)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - CONSTANT MESH															
877XHFJP-*5 (6)	312 C	Eng	220				Furnished	877XHFJP-*3 (6)	312 C	Eng	220				Furnished
877XJFJP-*5 (6)	293 C	Eng	234				Furnished	877XJFJP-*3 (6)	293 C	Eng	234				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
280GBFJP-*5 (7)	300 C	Eng	85				Furnished	280GBFJP-*5 (7)	300 C	Eng	85				Furnished
280GBFJP-*8 (7)	300 C	Eng	81				Furnished	280GBFJP-*8 (7)	300 C	Eng	81				Furnished
280GCFJP-*5 (7)	390 C	Eng	103				Furnished	280GCFJP-*5 (7)	390 C	Eng	103				Furnished
280GCFJP-*8 (7)	390 C	Eng	97				Furnished	280GCFJP-*8 (7)	390 C	Eng	97				Furnished
280GDFJP-*5 (7)	390 C	Eng	123				Furnished	280GDFJP-*5 (7)	390 C	Eng	123				Furnished
280GDFJP-*8 (7)	390 C	Eng	116				Furnished	280GDFJP-*8 (7)	390 C	Eng	116				Furnished
280GGFJP-*5 (7)	360 C	Eng	147				Furnished	280GGFJP-*5 (7)	360 C	Eng	147				Furnished
280GGFJP-*8 (7)	360 C	Eng	137				Furnished	280GGFJP-*8 (7)	360 C	Eng	137				Furnished
280GKFJP-*5 (7)	340 C	Eng	164				Furnished	280GKFJP-*5 (7)	340 C	Eng	164				Furnished
280GMFJP-*5 (7)	318 C	Eng	184				Furnished	280GMFJP-*5 (7)	318 C	Eng	184				Furnished
280GMFJP-*8 (7)	318 C	Eng	170				Furnished	280GMFJP-*8 (7)	318 C	Eng	170				Furnished
280GPFJP-*5 (7)	290 C	Eng	205				Furnished	280GPFJP-*5 (7)	290 C	Eng	205				Furnished
280GPFJP-*8 (7)	290 C	Eng	189				Furnished	280GPFJP-*8 (7)	290 C	Eng	189				Furnished
280GSFJP-*5 (7)	265 C	Eng	229				Furnished	280GSFJP-*5 (7)	265 C	Eng	229				Furnished
280GSFJP-*8 (7)	265 C	Eng	210				Furnished	280GSFJP-*8 (7)	265 C	Eng	210				Furnished
870XAFJP-*5 (6)	591 C	Eng	116				Furnished	870XAFJP-*3 (6)	591 C	Eng	116				Furnished
870XBFJP-*5 (6)	552 C	Eng	124				Furnished	870XBFJP-*3 (6)	552 C	Eng	124				Furnished
870XCFJP-*5 (6)	515 C	Eng	133				Furnished	870XCFJP-*3 (6)	515 C	Eng	133				Furnished
870XDFJP-*5 (6)	482 C	Eng	142				Furnished	870XDFJP-*3 (6)	482 C	Eng	142				Furnished
870XEFJP-*5 (6)	425 C	Eng	161				Furnished	870XEFJP-*3 (6)	425 C	Eng	161				Furnished
870XFFJP-*5 (6)	376 C	Eng	182				Furnished	870XFFJP-*3 (6)	376 C	Eng	182				Furnished
870XGFJP-*5 (6)	332 C	Eng	207				Furnished	870XGFJP-*3 (6)	332 C	Eng	207				Furnished
870XHFJP-*5 (6)	312 C	Eng	220				Furnished	870XHFJP-*3 (6)	312 C	Eng	220				Furnished
870XJFJP-*5 (6)	293 C	Eng	234				Furnished	870XJFJP-*3 (6)	293 C	Eng	234				Furnished
ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT															
890CAFJW-*3 (6)	591 C	Eng	116				Furnished	890UAFJW-*5 (6)	591 C	Eng	116				Furnished
890CBFJW-*3 (6)	552 C	Eng	124				Furnished	890UBFJW-*5 (6)	552 C	Eng	124				Furnished

Continued on Next Page

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(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4000 (4000 Family w/ Integral Cooler)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT															
890CCFJW-*3 (6)	515 C	Eng	133			Furnished		890UCFJW-*5 (6)	515 C	Eng	133			Furnished	
890CDFJW-*3 (6)	482 C	Eng	142			Furnished		890UDFJW-*5 (6)	482 C	Eng	142			Furnished	
890CEFJW-*3 (6)	425 C	Eng	161			Furnished		890UEFJW-*5 (6)	425 C	Eng	161			Furnished	
890CFFJW-*3 (6)	376 C	Eng	182			Furnished		890UFFJW-*5 (6)	376 C	Eng	182			Furnished	
ONE SPEED - CONSTANT MESH EXTENDED SHAFT															
897CAFJW-*3 (6)	591 C	Eng	116			Furnished		897UAFJW-*5 (6)	591 C	Eng	116			Furnished	
897CBFJW-*3 (6)	552 C	Eng	124			Furnished		897UBFJW-*5 (6)	552 C	Eng	124			Furnished	
897CCFJW-*3 (6)	515 C	Eng	133			Furnished		897UCFJW-*5 (6)	515 C	Eng	133			Furnished	
897CDFJW-*3 (6)	482 C	Eng	142			Furnished		897UDFJW-*5 (6)	482 C	Eng	142			Furnished	
897CEFJW-*3 (6)	425 C	Eng	161			Furnished		897UEFJW-*5 (6)	425 C	Eng	161			Furnished	
897CFFJW-*3 (6)	376 C	Eng	182			Furnished		897UFFJW-*5 (6)	376 C	Eng	182			Furnished	

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IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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(6) Input Gear Part No. 5-P-1428

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4000 (4000 Family w/ Retarder)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - CONSTANT MESH

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
267SBFJP-*5 (4)	402 I	Eng	103				Furnished	267SBFJP-*3 (4)	402 I	Eng	103				Furnished
267SDFJP-*5 (3)	390 I	Eng	123				Furnished	267SDFJP-*3 (4)	390 I	Eng	123				Furnished
267SGFJP-*5 (2)	360 I	Eng	147				Furnished	267SGFJP-*3 (2)	360 I	Eng	147				Furnished
267SMFJP-*5 (5)	318 I	Eng	184				Furnished	267SMFJP-*3 (5)	318 I	Eng	184				Furnished
267SSFJP-*5 (1)	265 I	Eng	229				Furnished	267SSFJP-*3 (1)	265 I	Eng	229				Furnished
267XBFJP-*5 (8)	335 I	Eng	103				Furnished	267XBFJP-*3 (8)	335 I	Eng	103				Furnished
267XDFJP-*5 (9)	325 I	Eng	123				Furnished	267XDFJP-*3 (9)	325 I	Eng	123				Furnished
267XGFJP-*5 (10)	300 I	Eng	147				Furnished	267XGFJP-*3 (10)	300 I	Eng	147				Furnished
267XMFJP-*5 (11)	265 I	Eng	184				Furnished	267XMFJP-*3 (11)	265 I	Eng	184				Furnished
267XSFJP-*5 (1)	250 I	Eng	229				Furnished	267XSFJP-*3 (1)	250 I	Eng	229				Furnished
287GBFJP-*5 (7)	300 C	Eng	85				Furnished	287GBFJP-*5 (7)	300 C	Eng	85				Furnished
287GBFJP-*8 (7)	300 C	Eng	81				Furnished	287GBFJP-*8 (7)	300 C	Eng	81				Furnished
287GCFJP-*5 (7)	390 C	Eng	103				Furnished	287GCFJP-*5 (7)	390 C	Eng	103				Furnished
287GCFJP-*8 (7)	390 C	Eng	97				Furnished	287GCFJP-*8 (7)	390 C	Eng	97				Furnished
287GDFJP-*5 (7)	390 C	Eng	123				Furnished	287GDFJP-*5 (7)	390 C	Eng	123				Furnished
287GDFJP-*8 (7)	390 C	Eng	116				Furnished	287GDFJP-*8 (7)	390 C	Eng	116				Furnished
287GGFJP-*5 (7)	360 C	Eng	147				Furnished	287GGFJP-*5 (7)	360 C	Eng	147				Furnished
287GGFJP-*8 (7)	360 C	Eng	137				Furnished	287GGFJP-*8 (7)	360 C	Eng	137				Furnished
287GKFJP-*5 (7)	340 C	Eng	164				Furnished	287GKFJP-*5 (7)	340 C	Eng	164				Furnished
287GMFJP-*5 (7)	318 C	Eng	184				Furnished	287GMFJP-*5 (7)	318 C	Eng	184				Furnished
287GMFJP-*8 (7)	318 C	Eng	170				Furnished	287GMFJP-*8 (7)	318 C	Eng	170				Furnished
287GPFJP-*5 (7)	290 C	Eng	205				Furnished	287GPFJP-*5 (7)	290 C	Eng	205				Furnished
287GPFJP-*8 (7)	290 C	Eng	189				Furnished	287GPFJP-*8 (7)	290 C	Eng	189				Furnished
287GSFJP-*5 (7)	265 C	Eng	229				Furnished	287GSFJP-*5 (7)	265 C	Eng	229				Furnished
287GSFJP-*8 (7)	265 C	Eng	210				Furnished	287GSFJP-*8 (7)	265 C	Eng	210				Furnished
877XAFJP-*5 (6)	591 C	Eng	116				Furnished	877XAFJP-*3 (6)	591 C	Eng	116				Furnished
877XBFJP-*5 (6)	552 C	Eng	124				Furnished	877XBFJP-*3 (6)	552 C	Eng	124				Furnished
877XCFJP-*5 (6)	515 C	Eng	133				Furnished	877XCFJP-*3 (6)	515 C	Eng	133				Furnished
877XDFJP-*5 (6)	482 C	Eng	142				Furnished	877XDFJP-*3 (6)	482 C	Eng	142				Furnished
877XEFJP-*5 (6)	425 C	Eng	161				Furnished	877XEFJP-*3 (6)	425 C	Eng	161				Furnished
877XFFJP-*5 (6)	376 C	Eng	182				Furnished	877XFFJP-*3 (6)	376 C	Eng	182				Furnished
877XGFJP-*5 (6)	332 C	Eng	207				Furnished	877XGFJP-*3 (6)	332 C	Eng	207				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(3) Input Gear Part No. 5-P-1293
(4) Input Gear Part No. 5-P-1350
(5) Input Gear Part No. 5-P-1351
(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491
(8) Input Gear Part No. 5-P-912
(9) Input Gear Part No. 5-P-913
(10) Input Gear Part No. 5-P-914
(11) Input Gear Part No. 5-P-915

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4000 (4000 Family w/ Retarder)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - CONSTANT MESH															
877XHFJP-*5 (6)	312 C	Eng	220				Furnished	877XHFJP-*3 (6)	312 C	Eng	220				Furnished
877XJFJP-*5 (6)	293 C	Eng	234				Furnished	877XJFJP-*3 (6)	293 C	Eng	234				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
280GBFJP-*5 (7)	300 C	Eng	85				Furnished	280GBFJP-*5 (7)	300 C	Eng	85				Furnished
280GBFJP-*8 (7)	300 C	Eng	81				Furnished	280GBFJP-*8 (7)	300 C	Eng	81				Furnished
280GCFJP-*5 (7)	390 C	Eng	103				Furnished	280GCFJP-*5 (7)	390 C	Eng	103				Furnished
280GCFJP-*8 (7)	390 C	Eng	97				Furnished	280GCFJP-*8 (7)	390 C	Eng	97				Furnished
280GDFJP-*5 (7)	390 C	Eng	123				Furnished	280GDFJP-*5 (7)	390 C	Eng	123				Furnished
280GDFJP-*8 (7)	390 C	Eng	116				Furnished	280GDFJP-*8 (7)	390 C	Eng	116				Furnished
280GGFJP-*5 (7)	360 C	Eng	147				Furnished	280GGFJP-*5 (7)	360 C	Eng	147				Furnished
280GGFJP-*8 (7)	360 C	Eng	137				Furnished	280GGFJP-*8 (7)	360 C	Eng	137				Furnished
280GKFJP-*5 (7)	340 C	Eng	164				Furnished	280GKFJP-*5 (7)	340 C	Eng	164				Furnished
280GMFJP-*5 (7)	318 C	Eng	184				Furnished	280GMFJP-*5 (7)	318 C	Eng	184				Furnished
280GMFJP-*8 (7)	318 C	Eng	170				Furnished	280GMFJP-*8 (7)	318 C	Eng	170				Furnished
280GPFJP-*5 (7)	290 C	Eng	205				Furnished	280GPFJP-*5 (7)	290 C	Eng	205				Furnished
280GPFJP-*8 (7)	290 C	Eng	189				Furnished	280GPFJP-*8 (7)	290 C	Eng	189				Furnished
280GSFJP-*5 (7)	265 C	Eng	229				Furnished	280GSFJP-*5 (7)	265 C	Eng	229				Furnished
280GSFJP-*8 (7)	265 C	Eng	210				Furnished	280GSFJP-*8 (7)	265 C	Eng	210				Furnished
870XAFJP-*5 (6)	591 C	Eng	116				Furnished	870XAFJP-*3 (6)	591 C	Eng	116				Furnished
870XBFJP-*5 (6)	552 C	Eng	124				Furnished	870XBFJP-*3 (6)	552 C	Eng	124				Furnished
870XCFJP-*5 (6)	515 C	Eng	133				Furnished	870XCFJP-*3 (6)	515 C	Eng	133				Furnished
870XDFJP-*5 (6)	482 C	Eng	142				Furnished	870XDFJP-*3 (6)	482 C	Eng	142				Furnished
870XEFJP-*5 (6)	425 C	Eng	161				Furnished	870XEFJP-*3 (6)	425 C	Eng	161				Furnished
870XFFJP-*5 (6)	376 C	Eng	182				Furnished	870XFFJP-*3 (6)	376 C	Eng	182				Furnished
870XGFJP-*5 (6)	332 C	Eng	207				Furnished	870XGFJP-*3 (6)	332 C	Eng	207				Furnished
870XHFJP-*5 (6)	312 C	Eng	220				Furnished	870XHFJP-*3 (6)	312 C	Eng	220				Furnished
870XJFJP-*5 (6)	293 C	Eng	234				Furnished	870XJFJP-*3 (6)	293 C	Eng	234				Furnished
ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT															
890JAFJW-*3 (6)	591 C	Eng	116				Furnished	890KAFJW-*5 (6)	591 C	Eng	116				Furnished
890JBFJW-*3 (6)	552 C	Eng	124				Furnished	890KBFJW-*5 (6)	552 C	Eng	124				Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4000 (4000 Family w/ Retarder)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT															
890JCFJW-*3 (6)	515 C	Eng	133				Furnished	890KCFJW-*5 (6)	515 C	Eng	133				Furnished
890JDFJW-*3 (6)	482 C	Eng	142				Furnished	890KDFJW-*5 (6)	482 C	Eng	142				Furnished
890JEFJW-*3 (6)	425 C	Eng	161				Furnished	890KEFJW-*5 (6)	425 C	Eng	161				Furnished
890JFFJW-*3 (6)	376 C	Eng	182				Furnished	890KFFJW-*5 (6)	376 C	Eng	182				Furnished
890PAFJW-*5 (6)	591 C	Eng	116				Furnished								
890PBFJW-*5 (6)	552 C	Eng	124				Furnished								
890PCFJW-*5 (6)	515 C	Eng	133				Furnished								
890PDFJW-*5 (6)	482 C	Eng	142				Furnished								
890PEFJW-*5 (6)	425 C	Eng	161				Furnished								
890PFFJW-*5 (6)	376 C	Eng	182				Furnished								
ONE SPEED - CONSTANT MESH EXTENDED SHAFT															
897JAFJW-*3 (6)	591 C	Eng	116				Furnished	897KAFJW-*5 (6)	591 C	Eng	116				Furnished
897JBFJW-*3 (6)	552 C	Eng	127				Furnished	897KBFJW-*5 (6)	552 C	Eng	124				Furnished
897JCFJW-*3 (6)	515 C	Eng	133				Furnished	897KCFJW-*5 (6)	515 C	Eng	133				Furnished
897JDFJW-*3 (6)	482 C	Eng	142				Furnished	897KDFJW-*5 (6)	482 C	Eng	142				Furnished
897JEFJW-*3 (6)	425 C	Eng	161				Furnished	897KEFJW-*5 (6)	425 C	Eng	161				Furnished
897JFFJW-*3 (6)	376 C	Eng	182				Furnished	897KFFJW-*5 (6)	376 C	Eng	182				Furnished
897PAFJW-*5 (6)	591 C	Eng	116				Furnished								
897PBFJW-*5 (6)	552 C	Eng	127				Furnished								
897PCFJW-*5 (6)	515 C	Eng	133				Furnished								
897PDFJW-*5 (6)	482 C	Eng	142				Furnished								
897PEFJW-*5 (6)	425 C	Eng	161				Furnished								
897PFFJW-*5 (6)	376 C	Eng	182				Furnished								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(6) Input Gear Part No. 5-P-1428

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

1000	1350 SP (Available in 4,5 & 6 Speed)	2300 RDS
1000 EVS	2000	2400
1000 MH	2100 EVS	2500 EVS
1000 RDS	2100 MH	2500 MH
1350 (Available in 4,5 & 6 Speed)	2100 RDS	2500 RDS
1350 EVS (Available in 4,5 & 6 Speed)	2200 EVS	
1350 MH (Available in 4,5 & 6 Speed)	2200 MH	
1350 RDS (Available in 4,5 & 6 Speed)	2200 RDS	

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0080" (25.6000MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0080" (25.6032MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
442GBHVP-*5 (3)	215 I	Eng	96				Furnished	442GBHVP-*3 (3)	215 I	Eng	96				Furnished
442GBHVX-*5 (3)	150 I	Eng	96				Furnished	442GBHVX-*3 (3)	150 I	Eng	96				Furnished
442GFHVP-*5 (2)	165 I	Eng	151				Furnished	442GFHVP-*3 (2)	165 I	Eng	151				Furnished
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272GAHVP-*5	294 C	Eng	85				Furnished	272GAHVP-*3	294 C	Eng	85				Furnished
272GBHVP-*5	240 C	Eng	104				Furnished	272GBHVP-*3	240 C	Eng	104				Furnished
272GCHVP-*5	198 C	Eng	126				Furnished	272GCHVP-*3	198 C	Eng	126				Furnished
272GDHVP-*5	166 C	Eng	151				Furnished	272GDHVP-*3	166 C	Eng	151				Furnished
272NAHVP-*3	294 C	Eng	85				Furnished	272NAHVP-*5	294 C	Eng	85				Furnished
272NBHVP-*3	240 C	Eng	104				Furnished	272NBHVP-*5	240 C	Eng	104				Furnished
272NCHVP-*3	198 C	Eng	126				Furnished	272NCHVP-*5	198 C	Eng	126				Furnished
272NDHVP-*3	166 C	Eng	151				Furnished	272NDHVP-*5	166 C	Eng	151				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
252GDHVP-*5 (1)	120 I	Eng	122				Furnished	252GDHVX-*5 (1)	120 I	Eng	122				Furnished
252GMHVP-*5 (4)	50 I	Eng	178				Furnished	252GMHVX-*5 (4)	50 I	Eng	178				Furnished
GEARED ADAPTERS															
626GHVX-4HV (2)	250 I	Opp			7-A-140(P)(5)		Furnished	626GHVX-3HV (2)	250 I	Opp			7-A-140(P)(5)		Furnished
630GHVX-4HV (2)	250 I	Opp			7-A-140(P)(5)		Furnished	630GHVX-3HV (2)	250 I	Opp			7-A-140(P)(5)		Furnished
645GHVX-4HV (2)	250 I	Opp			7-A-140(P)(5)		Furnished	645GHVX-3HV (2)	250 I	Opp			7-A-140(P)(5)		Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea requires PTO installation on the 1000/2000 series transmission to utilize Vehicle Interface Module, or Chassis Manufacturer's equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module(TCM) to maintain line pressure to the PTO Failure to provide this signal will activate the Variable Modulated Main Pressure and line pressure may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The PTO torque ratings shown are based on the maximum allowable torque of 250 lb/ft at the 64 tooth gear in the transmission with the PTO on one opening only. With PTOs mounted on both openings, the maximum allowable torque at the 64 tooth gear in the transmission is 200 lb/ft per PTO. Therefore, the 272 Series torque ratings will be adjusted as follows: "A" ratio = 235 lb/ft., "B" ratio = 192 lb/ft., "C" ratio = 159 lb/ft. and "D" ratio = 135 lbs/ft. The 442 Series w/Pressure Lube on both sides, PTO torque ratings will be as follows, "B" ratio = 208 lb/ft., "F" ratio = 135 lb/ft. For a more precise evaluation of your PTO application refer to the Allison Body Builders Book, Section F, PTO Systems Provisions.

(1) Input Gear Part No. 5-P-1294
(2) Input Gear Part No. 5-P-1300
(3) Input Gear Part No. 5-P-1358
(4) Input Gear Part No. 5-P-1386
(5) Filler block furnished with PTO

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Chelsea Products Division
Olive Branch, MS 38654 USA

MD-3066P (Europe Only)
3000 RDS (Side/Top PTO Provision)
3500 RDS (Side/Top PTO Provision)
3500 ORS (Side/Top PTO Provision)
3200 ORS (Side/Top PTO Provision)
3000 ORS (Side/Top PTO Provision)
3000 SP (Side/Top PTO Provision)
3200 SP (Side/Top PTO Provision)
3500 SP (Side/Top PTO Provision)
3000 (International - Side/Top PTO Provision)
3200 (International - Side/Top PTO Provision)
3500 (International - Side/Top PTO Provision)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - CONSTANT MESH

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
267SBFJP-*5 (5)	402 I	Eng	88				Furnished	267SBFJP-*3 (5)	402 I	Eng	88				Furnished
267SDFJP-*5 (4)	390 I	Eng	106				Furnished	267SDFJP-*3 (4)	390 I	Eng	106				Furnished
267SGFJP-*5 (2)	360 I	Eng	126				Furnished	267SGFJP-*3 (2)	360 I	Eng	126				Furnished
267SMFJP-*5 (6)	309 I	Eng	157				Furnished	267SMFJP-*3 (6)	309 I	Eng	157				Furnished
267SSFJP-*5 (1)	247 I	Eng	196				Furnished	267SSFJP-*3 (1)	247 I	Eng	196				Furnished
267XBFJP-*5 (9)	335 I	Eng	88				Furnished	267XBFJP-*3 (9)	335 I	Eng	88				Furnished
267XDFJP-*5 (10)	325 I	Eng	106				Furnished	267XDFJP-*3 (10)	325 I	Eng	106				Furnished
267XGFJP-*5 (11)	300 I	Eng	126				Furnished	267XGFJP-*3 (11)	300 I	Eng	126				Furnished
267XMFJP-*5 (12)	265 I	Eng	157				Furnished	267XMFJP-*3 (12)	265 I	Eng	157				Furnished
267XSFJP-*5 (1)	247 I	Eng	196				Furnished	267XSFJP-*3 (1)	247 I	Eng	196				Furnished
287GBFJP-*5 (8)	300 C	Eng	73				Furnished	287GBFJP-*3 (8)	300 C	Eng	73				Furnished
287GBFJP-*8 (8)	300 C	Eng	69				Furnished	287GBFJP-*8 (8)	300 C	Eng	69				Furnished
287GCFJP-*5 (8)	390 C	Eng	88				Furnished	287GCFJP-*3 (8)	390 C	Eng	88				Furnished
287GCFJP-*8 (8)	390 C	Eng	83				Furnished	287GCFJP-*8 (8)	390 C	Eng	83				Furnished
287GDFJP-*5 (8)	390 C	Eng	87				Furnished	287GDFJP-*3 (8)	390 C	Eng	87				Furnished
287GDFJP-*8 (8)	390 C	Eng	99				Furnished	287GDFJP-*8 (8)	390 C	Eng	99				Furnished
287GGFJP-*5 (8)	360 C	Eng	126				Furnished	287GGFJP-*3 (8)	360 C	Eng	126				Furnished
287GGFJP-*8 (8)	360 C	Eng	117				Furnished	287GGFJP-*8 (8)	360 C	Eng	117				Furnished
287GKFJP-*5 (8)	340 C	Eng	140				Furnished	287GKFJP-*3 (8)	340 C	Eng	140				Furnished
287GMFJP-*5 (8)	309 C	Eng	157				Furnished	287GMFJP-*3 (8)	309 C	Eng	157				Furnished
287GMFJP-*8 (8)	318 C	Eng	145				Furnished	287GMFJP-*8 (8)	318 C	Eng	145				Furnished
287GPFJP-*5 (8)	275 C	Eng	175				Furnished	287GPFJP-*3 (8)	275 C	Eng	175				Furnished
287GPFJP-*8 (8)	290 C	Eng	162				Furnished	287GPFJP-*8 (8)	290 C	Eng	162				Furnished
287GSFJP-*5 (8)	247 C	Eng	196				Furnished	287GSFJP-*3 (8)	247 C	Eng	196				Furnished
287GSFJP-*8 (8)	265 C	Eng	180				Furnished	287GSFJP-*8 (8)	265 C	Eng	180				Furnished
287GTFJP-*8 (8)	230 C	Eng	211				Furnished	287GTFJP-*8 (8)	230 C	Eng	211				Furnished
877XAFJP-*5 (7)	485 C	Eng	100				Furnished	877XAFJP-*3 (7)	485 C	Eng	100				Furnished
877XBFJP-*5 (7)	458 C	Eng	106				Furnished	877XBFJP-*3 (7)	458 C	Eng	106				Furnished
877XCFJP-*5 (7)	425 C	Eng	114				Furnished	877XCFJP-*3 (7)	425 C	Eng	114				Furnished
877XDFJP-*5 (7)	401 C	Eng	121				Furnished	877XDFJP-*3 (7)	401 C	Eng	121				Furnished
877XEFJP-*5 (7)	351 C	Eng	138				Furnished	877XEFJP-*3 (7)	351 C	Eng	138				Furnished
877XFFJP-*5 (7)	311 C	Eng	156				Furnished	877XFFJP-*3 (7)	311 C	Eng	156				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module(TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 485 Ft.lbs on their PTO Drive Gear.

(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(4) Input Gear Part No. 5-P-1293
(5) Input Gear Part No. 5-P-1350
(6) Input Gear Part No. 5-P-1351
(7) Input Gear Part No. 5-P-1428
(8) Input Gear Part No. 5-P-1491
(9) Input Gear Part No. 5-P-912
(10) Input Gear Part No. 5-P-913
(11) Input Gear Part No. 5-P-914
(12) Input Gear Part No. 5-P-915

Parker Hannifin Corporation
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Olive Branch, MS 38654 USA

MD-3066P (Europe Only)
3000 RDS (Side/Top PTO Provision)
3500 RDS (Side/Top PTO Provision)
3500 ORS (Side/Top PTO Provision)
3200 ORS (Side/Top PTO Provision)
3000 ORS (Side/Top PTO Provision)
3000 SP (Side/Top PTO Provision)
3200 SP (Side/Top PTO Provision)
3500 SP (Side/Top PTO Provision)
3000 (International - Side/Top PTO Provision)
3200 (International - Side/Top PTO Provision)
3500 (International - Side/Top PTO Provision)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - CONSTANT MESH															
877XGFJP-*5 (7)	274 C	Eng	177				Furnished	877XGFJP-*3 (7)	274 C	Eng	177				Furnished
877XHFJP-*5 (7)	258 C	Eng	188				Furnished	877XHFJP-*3 (7)	258 C	Eng	188				Furnished
877XJFJP-*5 (7)	242 C	Eng	200				Furnished	877XJFJP-*3 (7)	242 C	Eng	200				Furnished
877XKFJP-*5 (7)	292 C	Eng	166				Furnished	877XKFJP-*3 (7)	292 C	Eng	166				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
280GBFJP-*5 (8)	300 C	Eng	73				Furnished	280GBFJP-*3 (8)	300 C	Eng	73				Furnished
280GBFJP-*8 (8)	300 C	Eng	69				Furnished	280GBFJP-*8 (8)	300 C	Eng	69				Furnished
280GCFJP-*5 (8)	390 C	Eng	88				Furnished	280GCFJP-*3 (8)	390 C	Eng	88				Furnished
280GCFJP-*8 (8)	390 C	Eng	83				Furnished	280GCFJP-*8 (8)	390 C	Eng	83				Furnished
280GDFJP-*5 (8)	390 C	Eng	106				Furnished	280GDFJP-*3 (8)	390 C	Eng	106				Furnished
280GDFJP-*8 (8)	390 C	Eng	99				Furnished	280GDFJP-*8 (8)	390 C	Eng	99				Furnished
280GGFJP-*5 (8)	360 C	Eng	126				Furnished	280GGFJP-*3 (8)	360 C	Eng	126				Furnished
280GGFJP-*8 (8)	360 C	Eng	117				Furnished	280GGFJP-*8 (8)	360 C	Eng	117				Furnished
280GKFJP-*5 (8)	340 C	Eng	140				Furnished	280GKFJP-*3 (8)	340 C	Eng	140				Furnished
280GMFJP-*5 (8)	309 C	Eng	157				Furnished	280GMFJP-*3 (8)	309 C	Eng	157				Furnished
280GMFJP-*8 (8)	318 C	Eng	145				Furnished	280GMFJP-*8 (8)	318 C	Eng	145				Furnished
280GPFJP-*5 (8)	275 C	Eng	175				Furnished	280GPFJP-*3 (8)	275 C	Eng	175				Furnished
280GPFJP-*8 (8)	290 C	Eng	162				Furnished	280GPFJP-*8 (8)	290 C	Eng	162				Furnished
280GSFJP-*5 (8)	247 C	Eng	196				Furnished	280GSFJP-*3 (8)	247 C	Eng	196				Furnished
280GSFJP-*8 (8)	265 C	Eng	180				Furnished	280GSFJP-*8 (8)	265 C	Eng	180				Furnished
280GTFJP-*8 (8)	230 C	Eng	211				Furnished	280GTFJP-*8 (8)	230 C	Eng	211				Furnished
870XAFJP-*5 (7)	485 C	Eng	100				Furnished	870XAFJP-*3 (7)	485 C	Eng	100				Furnished
870XBFJP-*5 (7)	458 C	Eng	106				Furnished	870XBFJP-*3 (7)	458 C	Eng	106				Furnished
870XCFJP-*5 (7)	425 C	Eng	114				Furnished	870XCFJP-*3 (7)	425 C	Eng	114				Furnished
870XDFJP-*5 (7)	401 C	Eng	121				Furnished	870XDFJP-*3 (7)	401 C	Eng	121				Furnished
870XEFJP-*5 (7)	351 C	Eng	138				Furnished	870XEFJP-*3 (7)	351 C	Eng	138				Furnished
870XFFJP-*5 (7)	311 C	Eng	156				Furnished	870XFFJP-*3 (7)	311 C	Eng	156				Furnished
870XGFJP-*5 (7)	274 C	Eng	177				Furnished	870XGFJP-*3 (7)	274 C	Eng	177				Furnished
870XHFJP-*5 (7)	258 C	Eng	188				Furnished	870XHFJP-*3 (7)	258 C	Eng	188				Furnished
870XJFJP-*5 (7)	242 C	Eng	200				Furnished	870XJFJP-*3 (7)	242 C	Eng	200				Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module(TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 485 Ft.lbs on their PTO Drive Gear.

(7) Input Gear Part No. 5-P-1428
(8) Input Gear Part No. 5-P-1491

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

MD-3066P (Europe Only)
3000 RDS (Side/Top PTO Provision)
3500 RDS (Side/Top PTO Provision)
3500 ORS (Side/Top PTO Provision)
3200 ORS (Side/Top PTO Provision)
3000 ORS (Side/Top PTO Provision)
3000 SP (Side/Top PTO Provision)
3200 SP (Side/Top PTO Provision)
3500 SP (Side/Top PTO Provision)
3000 (International - Side/Top PTO Provision)
3200 (International - Side/Top PTO Provision)
3500 (International - Side/Top PTO Provision)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT															
890EAFJW-*5 (7)	485 C	Eng	100				Furnished	890TAFJW-*5 (7)	485 C	Eng	100				Furnished
890EBFJW-*5 (7)	458 C	Eng	106				Furnished	890TBFJW-*5 (7)	458 C	Eng	106				Furnished
890ECFJW-*5 (7)	425 C	Eng	114				Furnished	890TCFJW-*5 (7)	425 C	Eng	114				Furnished
890EDFJW-*5 (7)	401 C	Eng	121				Furnished	890TDFJW-*5 (7)	401 C	Eng	121				Furnished
890EEFJW-*5 (7)	351 C	Eng	138				Furnished	890TEFJW-*5 (7)	351 C	Eng	138				Furnished
890EFFJW-*5 (7)	311 C	Eng	156				Furnished	890TFFJW-*5 (7)	311 C	Eng	156				Furnished
890EGFJW-*5 (7)	274 C	Eng	177				Furnished	890TGFJW-*5 (7)	274 C	Eng	177				Furnished
890EHFJW-*5 (7)	258 C	Eng	188				Furnished	890THFJW-*5 (7)	258 C	Eng	188				Furnished
ONE SPEED - CONSTANT MESH EXTENDED SHAFT															
897EAFJW-*5 (7)	485 C	Eng	100				Furnished	897TAFJW-*5 (7)	485 C	Eng	100				Furnished
897EBFJW-*5 (7)	458 C	Eng	106				Furnished	897TBFJW-*5 (7)	458 C	Eng	106				Furnished
897ECFJW-*5 (7)	425 C	Eng	114				Furnished	897TCFJW-*5 (7)	425 C	Eng	114				Furnished
897EDFJW-*5 (7)	401 C	Eng	121				Furnished	897TDFJW-*5 (7)	401 C	Eng	121				Furnished
897EEFJW-*5 (7)	351 C	Eng	138				Furnished	897TEFJW-*5 (7)	351 C	Eng	138				Furnished
897EFFJW-*5 (7)	311 C	Eng	156				Furnished	897TFFJW-*5 (7)	311 C	Eng	156				Furnished
897EGFJW-*5 (3)	274 C	Eng	177				Furnished	897TGFJW-*5 (7)	274 C	Eng	177				Furnished
897EHFJW-*5 (7)	258 C	Eng	188				Furnished	897THFJW-*5 (7)	258 C	Eng	188				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module(TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 485 Ft.lbs on their PTO Drive Gear.

(3) Input Gear Part No. 5-P-1248
(7) Input Gear Part No. 5-P-1428

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 (3000 Family Side/Top PTO Provision w/ Integral Cooler)

LEFT SIDE ONLY	TOP SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 10-BOLT Opening Gear FORWARD of Centerline 83 Teeth - L.H. HELIX **PITCH LINE TO APERTURE FACE:** 1.7800" (45.2100MM)	**TRANSMISSION GEAR DATA:** TOP 10-BOLT Opening Gear FORWARD of Centerline 83 Teeth - L.H. HELIX **PITCH LINE TO APERTURE FACE:** 1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - CONSTANT MESH

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
267SBFJP-*5 (4)	402 I	Eng	88			Furnished		267SBFJP-*3 (4)	402 I	Eng	88			Furnished	
267SDFJP-*5 (3)	390 I	Eng	106			Furnished		267SDFJP-*3 (3)	390 I	Eng	106			Furnished	
267SGFJP-*5 (2)	360 I	Eng	126			Furnished		267SGFJP-*3 (2)	360 I	Eng	126			Furnished	
267SMFJP-*5 (5)	309 I	Eng	157			Furnished		267SMFJP-*3 (5)	309 I	Eng	157			Furnished	
267SSFJP-*5 (1)	247 I	Eng	196			Furnished		267SSFJP-*3 (1)	247 I	Eng	196			Furnished	
267XBFJP-*5 (8)	335 I	Eng	88			Furnished		267XBFJP-*3 (8)	335 I	Eng	88			Furnished	
267XDFJP-*5 (9)	325 I	Eng	106			Furnished		267XDFJP-*3 (9)	325 I	Eng	106			Furnished	
267XGFJP-*5 (10)	300 I	Eng	126			Furnished		267XGFJP-*3 (10)	300 I	Eng	126			Furnished	
267XMFJP-*5 (11)	265 I	Eng	157			Furnished		267XMFJP-*3 (11)	265 I	Eng	157			Furnished	
267XSFJP-*5 (1)	247 I	Eng	196			Furnished		267XSFJP-*3 (1)	247 I	Eng	196			Furnished	
287GBFJP-*5 (7)	300 C	Eng	73			Furnished		287GBFJP-*3 (7)	300 C	Eng	73			Furnished	
287GBFJP-*8 (7)	300 C	Eng	69			Furnished		287GBFJP-*8 (7)	300 C	Eng	69			Furnished	
287GCFJP-*5 (7)	390 C	Eng	88			Furnished		287GCFJP-*3 (7)	390 C	Eng	88			Furnished	
287GCFJP-*8 (7)	390 C	Eng	83			Furnished		287GCFJP-*8 (7)	390 C	Eng	83			Furnished	
287GDFJP-*5 (7)	390 C	Eng	87			Furnished		287GDFJP-*3 (7)	390 C	Eng	87			Furnished	
287GDFJP-*8 (7)	390 C	Eng	99			Furnished		287GDFJP-*8 (7)	390 C	Eng	99			Furnished	
287GGFJP-*5 (7)	360 C	Eng	126			Furnished		287GGFJP-*3 (7)	360 C	Eng	126			Furnished	
287GGFJP-*8 (7)	360 C	Eng	117			Furnished		287GGFJP-*8 (7)	360 C	Eng	117			Furnished	
287GKFJP-*5 (7)	340 C	Eng	140			Furnished		287GKFJP-*3 (7)	340 C	Eng	140			Furnished	
287GMFJP-*5 (7)	309 C	Eng	157			Furnished		287GMFJP-*3 (7)	309 C	Eng	157			Furnished	
287GMFJP-*8 (7)	318 C	Eng	145			Furnished		287GMFJP-*8 (7)	318 C	Eng	145			Furnished	
287GPFJP-*5 (7)	275 C	Eng	175			Furnished		287GPFJP-*3 (7)	275 C	Eng	175			Furnished	
287GPFJP-*8 (7)	290 C	Eng	162			Furnished		287GPFJP-*8 (7)	290 C	Eng	162			Furnished	
287GSFJP-*5 (7)	247 C	Eng	196			Furnished		287GSFJP-*3 (7)	247 C	Eng	196			Furnished	
287GSFJP-*8 (7)	265 C	Eng	180			Furnished		287GSFJP-*8 (7)	265 C	Eng	180			Furnished	
287GTFJP-*8 (7)	230 C	Eng	211			Furnished		287GTFJP-*8 (7)	230 C	Eng	211			Furnished	
877XAFJP-*5 (6)	485 C	Eng	100			Furnished		877XAFJP-*3 (6)	485 C	Eng	100			Furnished	
877XBFJP-*5 (6)	458 C	Eng	106			Furnished		877XBFJP-*3 (6)	458 C	Eng	106			Furnished	
877XCFJP-*5 (6)	425 C	Eng	114			Furnished		877XCFJP-*3 (6)	425 C	Eng	114			Furnished	
877XDFJP-*5 (6)	401 C	Eng	121			Furnished		877XDFJP-*3 (6)	401 C	Eng	121			Furnished	
877XEFJP-*5 (6)	351 C	Eng	138			Furnished		877XEFJP-*3 (6)	351 C	Eng	138			Furnished	
877XFFJP-*5 (6)	311 C	Eng	156			Furnished		877XFFJP-*3 (6)	311 C	Eng	156			Furnished	

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module(TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 485 Ft.lbs on their PTO Drive Gear.

(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(3) Input Gear Part No. 5-P-1293
(4) Input Gear Part No. 5-P-1350
(5) Input Gear Part No. 5-P-1351
(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491
(8) Input Gear Part No. 5-P-912
(9) Input Gear Part No. 5-P-913
(10) Input Gear Part No. 5-P-914
(11) Input Gear Part No. 5-P-915

Allison

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 (3000 Family Side/Top PTO Provision w/ Integral Cooler)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - CONSTANT MESH															
877XGFJP-*5 (6)	274 C	Eng	177				Furnished	877XGFJP-*3 (6)	274 C	Eng	177				Furnished
877XHFJP-*5 (6)	258 C	Eng	188				Furnished	877XHFJP-*3 (6)	258 C	Eng	188				Furnished
877XJFJP-*5 (6)	242 C	Eng	200				Furnished	877XJFJP-*3 (6)	242 C	Eng	200				Furnished
877XKFJP-*5 (6)	292 C	Eng	166				Furnished	877XKFJP-*3 (6)	292 C	Eng	166				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
280GBFJP-*5 (7)	300 C	Eng	73				Furnished	280GBFJP-*3 (7)	300 C	Eng	73				Furnished
280GBFJP-*8 (7)	300 C	Eng	69				Furnished	280GBFJP-*8 (7)	300 C	Eng	69				Furnished
280GCFJP-*5 (7)	390 C	Eng	88				Furnished	280GCFJP-*3 (7)	390 C	Eng	88				Furnished
280GCFJP-*8 (7)	390 C	Eng	83				Furnished	280GCFJP-*8 (7)	390 C	Eng	83				Furnished
280GDFJP-*5 (7)	390 C	Eng	106				Furnished	280GDFJP-*3 (7)	390 C	Eng	106				Furnished
280GDFJP-*8 (7)	390 C	Eng	99				Furnished	280GDFJP-*8 (7)	390 C	Eng	99				Furnished
280GGFJP-*5 (7)	360 C	Eng	126				Furnished	280GGFJP-*3 (7)	360 C	Eng	126				Furnished
280GGFJP-*8 (7)	360 C	Eng	117				Furnished	280GGFJP-*8 (7)	360 C	Eng	117				Furnished
280GKFJP-*5 (7)	340 C	Eng	140				Furnished	280GKFJP-*3 (7)	340 C	Eng	140				Furnished
280GMFJP-*5 (7)	309 C	Eng	157				Furnished	280GMFJP-*3 (7)	309 C	Eng	157				Furnished
280GMFJP-*8 (7)	318 C	Eng	145				Furnished	280GMFJP-*8 (7)	318 C	Eng	145				Furnished
280GPFJP-*5 (7)	275 C	Eng	175				Furnished	280GPFJP-*3 (7)	275 C	Eng	175				Furnished
280GPFJP-*8 (7)	290 C	Eng	162				Furnished	280GPFJP-*8 (7)	290 C	Eng	162				Furnished
280GSFJP-*5 (7)	247 C	Eng	196				Furnished	280GSFJP-*3 (7)	247 C	Eng	196				Furnished
280GSFJP-*8 (7)	265 C	Eng	180				Furnished	280GSFJP-*8 (7)	265 C	Eng	180				Furnished
280GTFJP-*8 (7)	230 C	Eng	211				Furnished	280GTFJP-*8 (7)	230 C	Eng	211				Furnished
870XAFJP-*5 (6)	485 C	Eng	100				Furnished	870XAFJP-*3 (6)	485 C	Eng	100				Furnished
870XBFJP-*5 (6)	458 C	Eng	106				Furnished	870XBFJP-*3 (6)	458 C	Eng	106				Furnished
870XCFJP-*5 (6)	425 C	Eng	114				Furnished	870XCFJP-*3 (6)	425 C	Eng	114				Furnished
870XDFJP-*5 (6)	401 C	Eng	121				Furnished	870XDFJP-*3 (6)	401 C	Eng	121				Furnished
870XEFJP-*5 (6)	351 C	Eng	138				Furnished	870XEFJP-*3 (6)	351 C	Eng	138				Furnished
870XFFJP-*5 (6)	311 C	Eng	156				Furnished	870XFFJP-*3 (6)	311 C	Eng	156				Furnished
870XGFJP-*5 (6)	274 C	Eng	177				Furnished	870XGFJP-*3 (6)	274 C	Eng	177				Furnished
870XHFJP-*5 (6)	258 C	Eng	188				Furnished	870XHFJP-*3 (6)	258 C	Eng	188				Furnished
870XJFJP-*5 (6)	242 C	Eng	200				Furnished	870XJFJP-*3 (6)	242 C	Eng	200				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module(TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 485 Ft.lbs on their PTO Drive Gear.

(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 (3000 Family Side/Top PTO Provision w/ Integral Cooler)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT							
890TAFJW-*5 (6)	485 C	Eng	100				Furnished
890TBFJW-*5 (6)	458 C	Eng	106				Furnished
890TCFJW-*5 (6)	425 C	Eng	114				Furnished
890TDFJW-*5 (6)	401 C	Eng	121				Furnished
890TEFJW-*5 (6)	351 C	Eng	138				Furnished
890TFFJW-*5 (6)	311 C	Eng	156				Furnished
890TGFJW-*5 (6)	274 C	Eng	177				Furnished
890THFJW-*5 (6)	258 C	Eng	188				Furnished
ONE SPEED - CONSTANT MESH EXTENDED SHAFT							
897TAFJW-*5 (6)	485 C	Eng	100				Furnished
897TBFJW-*5 (6)	458 C	Eng	106				Furnished
897TCFJW-*5 (6)	425 C	Eng	114				Furnished
897TDFJW-*5 (6)	401 C	Eng	121				Furnished
897TEFJW-*5 (6)	351 C	Eng	138				Furnished
897TFFJW-*5 (6)	311 C	Eng	156				Furnished
897TGFJW-*5 (6)	274 C	Eng	177				Furnished
897THFJW-*5 (6)	258 C	Eng	188				Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module(TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 485 Ft.lbs on their PTO Drive Gear.

(6) Input Gear Part No. 5-P-1428

Allison

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 EVS (Emergency Vehicles Only Top / Side PTO Provisions)
3500 EVS (Emergency Vehicles Only Top / Side PTO Provisions)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - CONSTANT MESH

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
267SBFJP-*5 (4)	402 I	Eng	88				Furnished	267SBFJP-*3 (4)	402 I	Eng	88				Furnished
267SDFJP-*5 (3)	390 I	Eng	106				Furnished	267SDFJP-*3 (3)	390 I	Eng	106				Furnished
267SGFJP-*5 (2)	360 I	Eng	126				Furnished	267SGFJP-*3 (2)	360 I	Eng	126				Furnished
267SMFJP-*5 (5)	309 I	Eng	157				Furnished	267SMFJP-*3 (5)	309 I	Eng	157				Furnished
267SSFJP-*5 (1)	247 I	Eng	196				Furnished	267SSFJP-*3 (1)	247 I	Eng	196				Furnished
267XBFJP-*5 (8)	335 I	Eng	88				Furnished	267XBFJP-*3 (8)	335 I	Eng	88				Furnished
267XDFJP-*5 (9)	325 I	Eng	106				Furnished	267XDFJP-*3 (9)	325 I	Eng	106				Furnished
267XGFJP-*5 (10)	300 I	Eng	126				Furnished	267XGFJP-*3 (10)	300 I	Eng	126				Furnished
267XMFJP-*5 (11)	265 I	Eng	157				Furnished	267XMFJP-*3 (11)	265 I	Eng	157				Furnished
267XSFJP-*5 (1)	247 I	Eng	196				Furnished	267XSFJP-*3 (1)	247 I	Eng	196				Furnished
287GBFJP-*5 (7)	300 C	Eng	73				Furnished	287GBFJP-*3 (7)	300 C	Eng	73				Furnished
287GBFJP-*8 (7)	300 C	Eng	69				Furnished	287GBFJP-*8 (7)	300 C	Eng	69				Furnished
287GCFJP-*5 (7)	390 C	Eng	88				Furnished	287GCFJP-*3 (7)	390 C	Eng	88				Furnished
287GCFJP-*8 (7)	390 C	Eng	83				Furnished	287GCFJP-*8 (7)	390 C	Eng	83				Furnished
287GDFJP-*5 (7)	390 C	Eng	87				Furnished	287GDFJP-*3 (7)	390 C	Eng	87				Furnished
287GDFJP-*8 (7)	390 C	Eng	99				Furnished	287GDFJP-*8 (7)	390 C	Eng	99				Furnished
287GGFJP-*5 (7)	360 C	Eng	126				Furnished	287GGFJP-*3 (7)	360 C	Eng	126				Furnished
287GGFJP-*8 (7)	360 C	Eng	117				Furnished	287GGFJP-*8 (7)	360 C	Eng	117				Furnished
287GKFJP-*5 (7)	340 C	Eng	140				Furnished	287GKFJP-*3 (7)	340 C	Eng	140				Furnished
287GMFJP-*5 (7)	318 C	Eng	157				Furnished	287GMFJP-*3 (7)	318 C	Eng	157				Furnished
287GMFJP-*8 (7)	318 C	Eng	145				Furnished	287GMFJP-*8 (7)	318 C	Eng	145				Furnished
287GPFJP-*5 (7)	290 C	Eng	175				Furnished	287GPFJP-*3 (7)	290 C	Eng	175				Furnished
287GPFJP-*8 (7)	290 C	Eng	162				Furnished	287GPFJP-*8 (7)	290 C	Eng	162				Furnished
287GSFJP-*5 (7)	265 C	Eng	196				Furnished	287GSFJP-*3 (7)	265 C	Eng	196				Furnished
287GSFJP-*8 (7)	265 C	Eng	180				Furnished	287GSFJP-*8 (7)	265 C	Eng	180				Furnished
287GTFJP-*8 (7)	230 C	Eng	211				Furnished	287GTFJP-*8 (7)	230 C	Eng	211				Furnished
877XAFJP-*5 (6)	670 C	Eng	100				Furnished	877XAFJP-*3 (6)	670 C	Eng	100				Furnished
877XBFJP-*5 (6)	632 C	Eng	106				Furnished	877XBFJP-*3 (6)	632 C	Eng	106				Furnished
877XCFJP-*5 (6)	588 C	Eng	114				Furnished	877XCFJP-*3 (6)	588 C	Eng	114				Furnished
877XDFJP-*5 (6)	554 C	Eng	121				Furnished	877XDFJP-*3 (6)	554 C	Eng	121				Furnished
877XEFJP-*5 (6)	486 C	Eng	138				Furnished	877XEFJP-*3 (6)	486 C	Eng	138				Furnished
877XFFJP-*5 (6)	429 C	Eng	156				Furnished	877XFFJP-*3 (6)	429 C	Eng	156				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module(TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(3) Input Gear Part No. 5-P-1293
(4) Input Gear Part No. 5-P-1350
(5) Input Gear Part No. 5-P-1351
(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491
(8) Input Gear Part No. 5-P-912
(9) Input Gear Part No. 5-P-913
(10) Input Gear Part No. 5-P-914
(11) Input Gear Part No. 5-P-915

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 EVS (Emergency Vehicles Only Top / Side PTO Provisions)
3500 EVS (Emergency Vehicles Only Top / Side PTO Provisions)

LEFT SIDE ONLY	TOP SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 10-BOLT Opening Gear FORWARD of Centerline 83 Teeth - L.H. HELIX **PITCH LINE TO APERTURE FACE:** 1.7800" (45.2100MM)	**TRANSMISSION GEAR DATA:** TOP 10-BOLT Opening Gear FORWARD of Centerline 83 Teeth - L.H. HELIX **PITCH LINE TO APERTURE FACE:** 1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - CONSTANT MESH															
877XGFJP-*5 (6)	379 C	Eng	177				Furnished	877XGFJP-*3 (6)	379 C	Eng	177				Furnished
877XHFJP-*5 (6)	356 C	Eng	188				Furnished	877XHFJP-*3 (6)	356 C	Eng	188				Furnished
877XJFJP-*5 (6)	334 C	Eng	200				Furnished	877XJFJP-*3 (6)	334 C	Eng	200				Furnished
877XKFJP-*5 (6)	404 C	Eng	166				Furnished	877XKFJP-*3 (6)	404 C	Eng	166				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
280GBFJP-*5 (7)	300 C	Eng	73				Furnished	280GBFJP-*3 (7)	300 C	Eng	73				Furnished
280GBFJP-*8 (7)	300 C	Eng	69				Furnished	280GBFJP-*8 (7)	300 C	Eng	69				Furnished
280GCFJP-*5 (7)	390 C	Eng	88				Furnished	280GCFJP-*3 (7)	390 C	Eng	88				Furnished
280GCFJP-*8 (7)	390 C	Eng	83				Furnished	280GCFJP-*8 (7)	390 C	Eng	83				Furnished
280GDFJP-*5 (7)	390 C	Eng	106				Furnished	280GDFJP-*3 (7)	390 C	Eng	106				Furnished
280GDFJP-*8 (7)	390 C	Eng	99				Furnished	280GDFJP-*8 (7)	390 C	Eng	99				Furnished
280GGFJP-*5 (7)	360 C	Eng	126				Furnished	280GGFJP-*3 (7)	360 C	Eng	126				Furnished
280GGFJP-*8 (7)	360 C	Eng	117				Furnished	280GGFJP-*8 (7)	360 C	Eng	117				Furnished
280GKFJP-*5 (7)	340 C	Eng	140				Furnished	280GKFJP-*3 (7)	340 C	Eng	140				Furnished
280GMFJP-*5 (7)	318 C	Eng	157				Furnished	280GMFJP-*3 (7)	318 C	Eng	157				Furnished
280GMFJP-*8 (7)	318 C	Eng	145				Furnished	280GMFJP-*8 (7)	318 C	Eng	145				Furnished
280GPFJP-*5 (7)	290 C	Eng	175				Furnished	280GPFJP-*3 (7)	290 C	Eng	175				Furnished
280GPFJP-*8 (7)	290 C	Eng	162				Furnished	280GPFJP-*8 (7)	290 C	Eng	162				Furnished
280GSFJP-*5 (7)	265 C	Eng	196				Furnished	280GSFJP-*3 (7)	265 C	Eng	196				Furnished
280GSFJP-*8 (7)	265 C	Eng	180				Furnished	280GSFJP-*8 (7)	265 C	Eng	180				Furnished
280GTFJP-*8 (7)	230 C	Eng	211				Furnished	280GTFJP-*8 (7)	230 C	Eng	211				Furnished
870XAFJP-*5 (6)	670 C	Eng	100				Furnished	870XAFJP-*3 (6)	670 C	Eng	100				Furnished
870XBFJP-*5 (6)	632 C	Eng	106				Furnished	870XBFJP-*3 (6)	632 C	Eng	106				Furnished
870XCFJP-*5 (6)	588 C	Eng	114				Furnished	870XCFJP-*3 (6)	588 C	Eng	114				Furnished
870XDFJP-*5 (6)	554 C	Eng	121				Furnished	870XDFJP-*3 (6)	554 C	Eng	121				Furnished
870XEFJP-*5 (6)	486 C	Eng	138				Furnished	870XEFJP-*3 (6)	486 C	Eng	138				Furnished
870XFFJP-*5 (6)	429 C	Eng	156				Furnished	870XFFJP-*3 (6)	429 C	Eng	156				Furnished
870XGFJP-*5 (6)	379 C	Eng	177				Furnished	870XGFJP-*3 (6)	379 C	Eng	177				Furnished
870XHFJP-*5 (6)	356 C	Eng	188				Furnished	870XHFJP-*3 (6)	356 C	Eng	188				Furnished
870XJFJP-*5 (6)	334 C	Eng	200				Furnished	870XJFJP-*3 (6)	334 C	Eng	200				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module(TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 EVS (Emergency Vehicles Only Top / Side PTO Provisions)
3500 EVS (Emergency Vehicles Only Top / Side PTO Provisions)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT															
890EAFJW-*5 (6)	670 C	Eng	100				Furnished	890TAFJW-*5 (6)	670 C	Eng	100				Furnished
890EBFJW-*5 (6)	632 C	Eng	106				Furnished	890TBFJW-*5 (6)	632 C	Eng	106				Furnished
890ECFJW-*5 (6)	588 C	Eng	114				Furnished	890TCFJW-*5 (6)	588 C	Eng	114				Furnished
890EDFJW-*5 (6)	554 C	Eng	121				Furnished	890TDFJW-*5 (6)	554 C	Eng	121				Furnished
890EEFJW-*5 (6)	486 C	Eng	138				Furnished	890TEFJW-*5 (6)	486 C	Eng	138				Furnished
890EFFJW-*5 (6)	429 C	Eng	156				Furnished	890TFFJW-*5 (6)	429 C	Eng	156				Furnished
890EGFJW-*5 (6)	378 C	Eng	177				Furnished	890TGFJW-*5 (6)	378 C	Eng	177				Furnished
890EHFJW-*5 (6)	356 C	Eng	188				Furnished	890THFJW-*5 (6)	356 C	Eng	188				Furnished
ONE SPEED - CONSTANT MESH EXTENDED SHAFT															
897EAFJW-*5 (6)	670 C	Eng	100				Furnished	897TAFJW-*5 (6)	670 C	Eng	100				Furnished
897EBFJW-*5 (6)	632 C	Eng	106				Furnished	897TBFJW-*5 (6)	632 C	Eng	106				Furnished
897ECFJW-*5 (6)	588 C	Eng	114				Furnished	897TCFJW-*5 (6)	588 C	Eng	114				Furnished
897EDFJW-*5 (6)	554 C	Eng	121				Furnished	897TDFJW-*5 (6)	554 C	Eng	121				Furnished
897EEFJW-*5 (6)	486 C	Eng	138				Furnished	897TEFJW-*5 (6)	486 C	Eng	138				Furnished
897EFFJW-*5 (6)	429 C	Eng	156				Furnished	897TFFJW-*5 (6)	429 C	Eng	156				Furnished
897EGFJW-*5 (6)	378 C	Eng	177				Furnished	897TGFJW-*5 (6)	378 C	Eng	177				Furnished
897EHFJW-*5 (6)	356 C	Eng	188				Furnished	897THFJW-*5 (6)	356 C	Eng	188				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module(TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

(6) Input Gear Part No. 5-P-1428

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 (3000 Family - Side/Top PTO Provision w/ Retarder)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - CONSTANT MESH

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
267SBFJP-*5 (4)	402 I	Eng	88			Furnished		267SBFJP-*3 (4)	402 I	Eng	88			Furnished	
267SDFJP-*5 (3)	390 I	Eng	106			Furnished		267SDFJP-*3 (3)	390 I	Eng	106			Furnished	
267SGFJP-*5 (2)	360 I	Eng	126			Furnished		267SGFJP-*3 (2)	360 I	Eng	126			Furnished	
267SMFJP-*5 (5)	309 I	Eng	157			Furnished		267SMFJP-*3 (5)	309 I	Eng	157			Furnished	
267SSFJP-*5 (1)	247 I	Eng	196			Furnished		267SSFJP-*3 (1)	247 I	Eng	196			Furnished	
267XBFJP-*5 (8)	335 I	Eng	88			Furnished		267XBFJP-*3 (8)	335 I	Eng	88			Furnished	
267XDFJP-*5 (9)	325 I	Eng	106			Furnished		267XDFJP-*3 (9)	325 I	Eng	106			Furnished	
267XGFJP-*5 (10)	300 I	Eng	126			Furnished		267XGFJP-*3 (10)	300 I	Eng	126			Furnished	
267XMFJP-*5 (11)	265 I	Eng	157			Furnished		267XMFJP-*3 (11)	265 I	Eng	157			Furnished	
267XSFJP-*5 (1)	247 I	Eng	196			Furnished		267XSFJP-*3 (1)	247 I	Eng	196			Furnished	
287GBFJP-*5 (7)	300 C	Eng	73			Furnished		287GBFJP-*3 (7)	300 C	Eng	73			Furnished	
287GBFJP-*8 (7)	300 C	Eng	69			Furnished		287GBFJP-*8 (7)	300 C	Eng	69			Furnished	
287GCFJP-*5 (7)	390 C	Eng	88			Furnished		287GCFJP-*3 (7)	390 C	Eng	88			Furnished	
287GCFJP-*8 (7)	390 C	Eng	83			Furnished		287GCFJP-*8 (7)	390 C	Eng	83			Furnished	
287GDFJP-*5 (7)	390 C	Eng	87			Furnished		287GDFJP-*3 (7)	390 C	Eng	87			Furnished	
287GDFJP-*8 (7)	390 C	Eng	99			Furnished		287GDFJP-*8 (7)	390 C	Eng	99			Furnished	
287GGFJP-*5 (7)	360 C	Eng	126			Furnished		287GGFJP-*3 (7)	360 C	Eng	126			Furnished	
287GGFJP-*8 (7)	360 C	Eng	117			Furnished		287GGFJP-*8 (7)	360 C	Eng	117			Furnished	
287GKFJP-*5 (7)	340 C	Eng	140			Furnished		287GKFJP-*3 (7)	340 C	Eng	140			Furnished	
287GMFJP-*5 (7)	309 C	Eng	157			Furnished		287GMFJP-*3 (7)	309 C	Eng	157			Furnished	
287GMFJP-*8 (7)	318 C	Eng	145			Furnished		287GMFJP-*8 (7)	318 C	Eng	145			Furnished	
287GPFJP-*5 (7)	275 C	Eng	175			Furnished		287GPFJP-*3 (7)	275 C	Eng	175			Furnished	
287GPFJP-*8 (7)	290 C	Eng	162			Furnished		287GPFJP-*8 (7)	290 C	Eng	162			Furnished	
287GSFJP-*5 (7)	247 C	Eng	196			Furnished		287GSFJP-*3 (7)	247 C	Eng	196			Furnished	
287GSFJP-*8 (7)	265 C	Eng	180			Furnished		287GSFJP-*8 (7)	265 C	Eng	180			Furnished	
287GTFJP-*8 (7)	230 C	Eng	211			Furnished		287GTFJP-*8 (7)	230 C	Eng	211			Furnished	
877XAFJP-*5 (6)	485 C	Eng	100			Furnished		877XAFJP-*3 (6)	485 C	Eng	100			Furnished	
877XBFJP-*5 (6)	458 C	Eng	106			Furnished		877XBFJP-*3 (6)	458 C	Eng	106			Furnished	
877XCFJP-*5 (6)	425 C	Eng	114			Furnished		877XCFJP-*3 (6)	425 C	Eng	114			Furnished	
877XDFJP-*5 (6)	401 C	Eng	121			Furnished		877XDFJP-*3 (6)	401 C	Eng	121			Furnished	
877XEFJP-*5 (6)	351 C	Eng	138			Furnished		877XEFJP-*3 (6)	351 C	Eng	138			Furnished	
877XFFJP-*5 (6)	311 C	Eng	156			Furnished		877XFFJP-*3 (6)	311 C	Eng	156			Furnished	

Continued on Next Page

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IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 485 Ft.lbs on their PTO Drive Gear.

(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(3) Input Gear Part No. 5-P-1293
(4) Input Gear Part No. 5-P-1350
(5) Input Gear Part No. 5-P-1351
(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491
(8) Input Gear Part No. 5-P-912
(9) Input Gear Part No. 5-P-913
(10) Input Gear Part No. 5-P-914
(11) Input Gear Part No. 5-P-915

Allison

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 (3000 Family - Side/Top PTO Provision w/ Retarder)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - CONSTANT MESH															
877XGFJP-*5 (6)	274 C	Eng	177				Furnished	877XGFJP-*3 (6)	274 C	Eng	177				Furnished
877XHFJP-*5 (6)	258 C	Eng	188				Furnished	877XHFJP-*3 (6)	258 C	Eng	188				Furnished
877XJFJP-*5 (6)	242 C	Eng	200				Furnished	877XJFJP-*3 (6)	242 C	Eng	200				Furnished
877XKFJP-*5 (6)	292 C	Eng	166				Furnished	877XKFJP-*3 (6)	292 C	Eng	166				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
280GBFJP-*5 (7)	300 C	Eng	73				Furnished	280GBFJP-*3 (7)	300 C	Eng	73				Furnished
280GBFJP-*8 (7)	300 C	Eng	69				Furnished	280GBFJP-*8 (7)	300 C	Eng	69				Furnished
280GCFJP-*5 (7)	390 C	Eng	88				Furnished	280GCFJP-*3 (7)	390 C	Eng	88				Furnished
280GCFJP-*8 (7)	390 C	Eng	83				Furnished	280GCFJP-*8 (7)	390 C	Eng	83				Furnished
280GDFJP-*5 (7)	390 C	Eng	106				Furnished	280GDFJP-*3 (7)	390 C	Eng	106				Furnished
280GDFJP-*8 (7)	390 C	Eng	99				Furnished	280GDFJP-*8 (7)	390 C	Eng	99				Furnished
280GGFJP-*5 (7)	360 C	Eng	126				Furnished	280GGFJP-*3 (7)	360 C	Eng	126				Furnished
280GGFJP-*8 (7)	360 C	Eng	117				Furnished	280GGFJP-*8 (7)	360 C	Eng	117				Furnished
280GKFJP-*5 (7)	340 C	Eng	140				Furnished	280GKFJP-*3 (7)	340 C	Eng	140				Furnished
280GMFJP-*5 (7)	309 C	Eng	157				Furnished	280GMFJP-*3 (7)	309 C	Eng	157				Furnished
280GMFJP-*8 (7)	318 C	Eng	145				Furnished	280GMFJP-*8 (7)	318 C	Eng	145				Furnished
280GPFJP-*5 (7)	275 C	Eng	175				Furnished	280GPFJP-*3 (7)	275 C	Eng	175				Furnished
280GPFJP-*8 (7)	290 C	Eng	162				Furnished	280GPFJP-*8 (7)	290 C	Eng	162				Furnished
280GSFJP-*5 (7)	247 C	Eng	196				Furnished	280GSFJP-*3 (7)	247 C	Eng	196				Furnished
280GSFJP-*8 (7)	265 C	Eng	180				Furnished	280GSFJP-*8 (7)	265 C	Eng	180				Furnished
870XAFJP-*5 (6)	485 C	Eng	100				Furnished	870XAFJP-*3 (6)	485 C	Eng	100				Furnished
870XBFJP-*5 (6)	458 C	Eng	106				Furnished	870XBFJP-*3 (6)	458 C	Eng	106				Furnished
870XCFJP-*5 (6)	425 C	Eng	114				Furnished	870XCFJP-*3 (6)	425 C	Eng	114				Furnished
870XDFJP-*5 (6)	401 C	Eng	121				Furnished	870XDFJP-*3 (6)	401 C	Eng	121				Furnished
870XEFJP-*5 (6)	351 C	Eng	138				Furnished	870XEFJP-*3 (6)	351 C	Eng	138				Furnished
870XFFJP-*5 (6)	311 C	Eng	156				Furnished	870XFFJP-*3 (6)	311 C	Eng	156				Furnished
870XGFJP-*5 (6)	274 C	Eng	177				Furnished	870XGFJP-*3 (6)	274 C	Eng	177				Furnished
870XHFJP-*5 (6)	258 C	Eng	188				Furnished	870XHFJP-*3 (6)	258 C	Eng	188				Furnished
870XJFJP-*5 (6)	242 C	Eng	200				Furnished	870XJFJP-*3 (6)	242 C	Eng	200				Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module(TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 485 Ft.lbs on their PTO Drive Gear.

(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3000 (3000 Family - Side/Top PTO Provision w/ Retarder)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
83 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT															
890FAFJW-*5 (6)	485 C	Eng	100				Furnished								
890FBFJW-*5 (6)	458 C	Eng	106				Furnished								
890FCFJW-*5 (6)	425 C	Eng	114				Furnished								
890FDFJW-*5 (6)	401 C	Eng	121				Furnished								
890FEFJW-*5 (6)	351 C	Eng	138				Furnished								
890FFFJW-*5 (6)	311 C	Eng	156				Furnished								
890FGFJW-*5 (6)	274 C	Eng	177				Furnished								
890FHFJW-*5 (6)	258 C	Eng	188				Furnished								
ONE SPEED - CONSTANT MESH EXTENDED SHAFT															
897FAFJW-*5 (6)	485 C	Eng	100				Furnished								
897FBFJW-*5 (6)	458 C	Eng	106				Furnished								
897FCFJW-*5 (6)	425 C	Eng	114				Furnished								
897FDFJW-*5 (6)	401 C	Eng	121				Furnished								
897FEFJW-*5 (6)	351 C	Eng	138				Furnished								
897FFFJW-*5 (6)	311 C	Eng	156				Furnished								
897FGFJW-*5 (6)	274 C	Eng	177				Furnished								
897FHFJW-*5 (6)	258 C	Eng	188				Furnished								

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module(TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 485 Ft.lbs on their PTO Drive Gear.

(6) Input Gear Part No. 5-P-1428

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

1000 (GM 3600 Cab-Chassis)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0080" (25.6032MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
252GDHVX-*5 (1)	120 I	Eng	122				Furnished
252GMHVX-*5 (2)	50 I	Eng	178				Furnished

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

252 Pumps offered in the PGP511 with 5/8" - 9T / SAE A Flange

Option Order Code	Chelsea Pump Model	Displacement in³/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size
1121	CGP-P11C021-1AC	0.49	0.002	3988	4000	5/8" - 9T
1126	CGP-P11C026-1AC	0.61	0.003	3988	3600	5/8" - 9T
1129	CGP-P11C029-1AC	0.67	0.003	3988	3600	5/8" - 9T
1137	CGP-P11C037-1AC	0.85	0.004	3988	3300	5/8" - 9T
1449	CGP-P31C054-1AE	1.24	0.005	3500	3000	5/8" - 9T
1462	CGP-P31C061-1AE	1.40	0.006	3500	3000	5/8" - 9T

252 Pumps offered in the PGP511 with 3/4" - 11T / SAE A Flange

Option Order Code	Chelsea Pump Model	Displacement in³/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size
P37	CGP-P11C037-5AC	0.85	0.004	3988	3300	3/4" - 11T
P42	CGP-P11C042-5AC	0.98	0.004	3988	3000	3/4" - 11T
P71	CGP-P11C071-5AC	1.65	0.007	2900	2400	3/4" - 11T

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: The "PTO Enable" circuit signals the Transmission Control Module(TCM) to maintain line pressure to the PTO. Failure to provide this signal will activate the Variable Modulated Main Pressure and line pressure may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission.

(1) Input Gear Part No. 5-P-1294
(2) Input Gear Part No. 5-P-1386

Allison

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3700
3700 SP
MD-3070P (Close Ratio)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - CONSTANT MESH

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
267SBFJP-*5 (4)	402 I	Eng	72			Furnished		267SBFJP-*3 (4)	402 I	Eng	72			Furnished	
267SDFJP-*5 (3)	390 I	Eng	87			Furnished		267SDFJP-*3 (3)	390 I	Eng	87			Furnished	
267SGFJP-*5 (2)	360 I	Eng	103			Furnished		267SGFJP-*3 (2)	360 I	Eng	103			Furnished	
267SMFJP-*5 (5)	318 I	Eng	129			Furnished		267SMFJP-*3 (5)	318 I	Eng	129			Furnished	
267SSFJP-*5 (1)	265 I	Eng	161			Furnished		267SSFJP-*3 (1)	265 I	Eng	161			Furnished	
267XBFJP-*5 (8)	335 I	Eng	72			Furnished		267XBFJP-*3 (8)	335 I	Eng	72			Furnished	
267XDFJP-*5 (9)	325 I	Eng	87			Furnished		267XDFJP-*3 (9)	325 I	Eng	87			Furnished	
267XGFJP-*5 (10)	300 I	Eng	103			Furnished		267XGFJP-*3 (10)	300 I	Eng	103			Furnished	
267XMFJP-*5 (11)	265 I	Eng	129			Furnished		267XMFJP-*3 (11)	265 I	Eng	129			Furnished	
267XSFJP-*5 (1)	250 I	Eng	161			Furnished		267XSFJP-*3 (1)	250 I	Eng	161			Furnished	
287GBFJP-*5 (7)	300 C	Eng	60			Furnished		287GBFJP-*3 (7)	300 C	Eng	60			Furnished	
287GBFJP-*8 (7)	300 C	Eng	56			Furnished		287GBFJP-*8 (7)	300 C	Eng	56			Furnished	
287GCFJP-*5 (7)	390 C	Eng	72			Furnished		287GCFJP-*3 (7)	390 C	Eng	72			Furnished	
287GCFJP-*8 (7)	390 C	Eng	68			Furnished		287GCFJP-*8 (7)	390 C	Eng	68			Furnished	
287GDFJP-*5 (7)	390 C	Eng	87			Furnished		287GDFJP-*3 (7)	390 C	Eng	87			Furnished	
287GDFJP-*8 (7)	390 C	Eng	81			Furnished		287GDFJP-*8 (7)	390 C	Eng	81			Furnished	
287GGFJP-*5 (7)	360 C	Eng	103			Furnished		287GGFJP-*3 (7)	360 C	Eng	103			Furnished	
287GGFJP-*8 (7)	360 C	Eng	96			Furnished		287GGFJP-*8 (7)	360 C	Eng	96			Furnished	
287GKFJP-*5 (7)	340 C	Eng	115			Furnished		287GKFJP-*3 (7)	340 C	Eng	115			Furnished	
287GMFJP-*5 (7)	318 C	Eng	129			Furnished		287GMFJP-*3 (7)	318 C	Eng	129			Furnished	
287GMFJP-*8 (7)	318 C	Eng	119			Furnished		287GMFJP-*8 (7)	318 C	Eng	119			Furnished	
287GPFJP-*5 (7)	290 C	Eng	144			Furnished		287GPFJP-*3 (7)	290 C	Eng	144			Furnished	
287GPFJP-*8 (7)	290 C	Eng	132			Furnished		287GPFJP-*8 (7)	290 C	Eng	132			Furnished	
287GSFJP-*5 (7)	265 C	Eng	161			Furnished		287GSFJP-*3 (7)	265 C	Eng	161			Furnished	
287GSFJP-*8 (7)	265 C	Eng	147			Furnished		287GSFJP-*8 (7)	265 C	Eng	147			Furnished	
287GTFJP-*5 (7)	240 C	Eng	180			Furnished		287GTFJP-*3 (7)	240 C	Eng	180			Furnished	
287GTFJP-*8 (7)	240 C	Eng	173			Furnished		287GTFJP-*8 (7)	240 C	Eng	173			Furnished	
877XAFJP-*5 (6)	591 C	Eng	82			Furnished		877XAFJP-*3 (6)	591 C	Eng	82			Furnished	
877XBFJP-*5 (6)	557 C	Eng	87			Furnished		877XBFJP-*3 (6)	557 C	Eng	87			Furnished	
877XCFJP-*5 (6)	522 C	Eng	93			Furnished		877XCFJP-*3 (6)	522 C	Eng	93			Furnished	
877XDFJP-*5 (6)	490 C	Eng	99			Furnished		877XDFJP-*3 (6)	490 C	Eng	99			Furnished	
877XEFJP-*5 (6)	429 C	Eng	113			Furnished		877XEFJP-*3 (6)	429 C	Eng	113			Furnished	

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(3) Input Gear Part No. 5-P-1293
(4) Input Gear Part No. 5-P-1350
(5) Input Gear Part No. 5-P-1351
(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491
(8) Input Gear Part No. 5-P-912
(9) Input Gear Part No. 5-P-913
(10) Input Gear Part No. 5-P-914
(11) Input Gear Part No. 5-P-915

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

3700
3700 SP
MD-3070P (Close Ratio)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 10-BOLT Opening Gear FORWARD of Centerline
68 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7800" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - CONSTANT MESH															
877XFFJP-*5 (6)	379 C	Eng	128				Furnished	877XFFJP-*3 (6)	379 C	Eng	128				Furnished
877XGFJP-*5 (6)	334 C	Eng	145				Furnished	877XGFJP-*3 (6)	334 C	Eng	145				Furnished
877XHFJP-*5 (6)	315 C	Eng	154				Furnished	877XHFJP-*3 (6)	315 C	Eng	154				Furnished
877XJFJP-*5 (6)	295 C	Eng	164				Furnished	877XHFJP-*3 (6)	295 C	Eng	164				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
280GBFJP-*5 (7)	300 C	Eng	60				Furnished	280GBFJP-*3 (7)	300 C	Eng	60				Furnished
280GBFJP-*8 (7)	300 C	Eng	56				Furnished	280GBFJP-*8 (7)	300 C	Eng	56				Furnished
280GCFJP-*5 (7)	390 C	Eng	72				Furnished	280GCFJP-*3 (7)	390 C	Eng	72				Furnished
280GCFJP-*8 (7)	390 C	Eng	68				Furnished	280GCFJP-*8 (7)	390 C	Eng	68				Furnished
280GDFJP-*5 (7)	390 C	Eng	87				Furnished	280GDFJP-*3 (7)	390 C	Eng	87				Furnished
280GDFJP-*8 (7)	390 C	Eng	81				Furnished	280GDFJP-*8 (7)	390 C	Eng	81				Furnished
280GGFJP-*5 (7)	360 C	Eng	103				Furnished	280GGFJP-*3 (7)	360 C	Eng	103				Furnished
280GGFJP-*8 (7)	360 C	Eng	96				Furnished	280GGFJP-*8 (7)	360 C	Eng	96				Furnished
280GKFJP-*5 (7)	340 C	Eng	115				Furnished	280GKFJP-*3 (7)	340 C	Eng	115				Furnished
280GMFJP-*5 (7)	318 C	Eng	129				Furnished	280GMFJP-*3 (7)	318 C	Eng	129				Furnished
280GMFJP-*8 (7)	318 C	Eng	119				Furnished	280GMFJP-*8 (7)	318 C	Eng	119				Furnished
280GPFJP-*5 (7)	290 C	Eng	144				Furnished	280GPFJP-*3 (7)	290 C	Eng	144				Furnished
280GPFJP-*8 (7)	290 C	Eng	132				Furnished	280GPFJP-*8 (7)	290 C	Eng	132				Furnished
280GSFJP-*5 (7)	265 C	Eng	161				Furnished	280GSFJP-*3 (7)	265 C	Eng	161				Furnished
280GSFJP-*8 (7)	265 C	Eng	147				Furnished	280GSFJP-*8 (7)	265 C	Eng	147				Furnished
280GTFJP-*5 (7)	240 C	Eng	180				Furnished	280GTFJP-*3 (7)	240 C	Eng	180				Furnished
280GTFJP-*8 (7)	240 C	Eng	173				Furnished	280GTFJP-*8 (7)	240 C	Eng	173				Furnished
870XAFJP-*5 (6)	591 C	Eng	82				Furnished	870XAFJP-*3 (6)	591 C	Eng	82				Furnished
870XBFJP-*5 (6)	557 C	Eng	87				Furnished	870XBFJP-*3 (6)	557 C	Eng	87				Furnished
870XCFJP-*5 (6)	522 C	Eng	93				Furnished	870XCFJP-*3 (6)	522 C	Eng	93				Furnished
870XDFJP-*5 (6)	490 C	Eng	99				Furnished	870XDFJP-*3 (6)	490 C	Eng	99				Furnished
870XEFJP-*5 (6)	429 C	Eng	113				Furnished	870XEFJP-*3 (6)	429 C	Eng	113				Furnished
870XFFJP-*5 (6)	379 C	Eng	128				Furnished	870XFFJP-*3 (6)	379 C	Eng	128				Furnished
870XGFJP-*5 (6)	334 C	Eng	145				Furnished	870XGFJP-*3 (6)	334 C	Eng	145				Furnished
870XHFJP-*5 (6)	315 C	Eng	154				Furnished	870XHFJP-*3 (6)	315 C	Eng	154				Furnished
870XJFJP-*5 (6)	295 C	Eng	164				Furnished	870XJFJP-*3 (6)	295 C	Eng	164				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4700
4700 EVS
4700 OFS
4700 RDS
4700 SP
4800
4800 EVS
4800 SP
4850 EVS

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - CONSTANT MESH

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
267SBFJP-*5 (4)	402 I	Eng	103			Furnished		267SBFJP-*3 (4)	402 I	Eng	103			Furnished	
267SDFJP-*5 (3)	390 I	Eng	123			Furnished		267SDFJP-*3 (4)	390 I	Eng	123			Furnished	
267SGFJP-*5 (2)	360 I	Eng	147			Furnished		267SGFJP-*3 (2)	360 I	Eng	147			Furnished	
267SMFJP-*5 (5)	318 I	Eng	184			Furnished		267SMFJP-*3 (5)	318 I	Eng	184			Furnished	
267SSFJP-*5 (1)	265 I	Eng	229			Furnished		267SSFJP-*3 (1)	265 I	Eng	229			Furnished	
267XBFJP-*5 (8)	335 I	Eng	103			Furnished		267XBFJP-*3 (8)	335 I	Eng	103			Furnished	
267XDFJP-*5 (9)	325 I	Eng	123			Furnished		267XDFJP-*3 (9)	325 I	Eng	123			Furnished	
267XGFJP-*5 (10)	300 I	Eng	147			Furnished		267XGFJP-*3 (10)	300 I	Eng	147			Furnished	
267XMFJP-*5 (11)	265 I	Eng	184			Furnished		267XMFJP-*3 (11)	265 I	Eng	184			Furnished	
267XSFJP-*5 (1)	250 I	Eng	229			Furnished		267XSFJP-*3 (1)	250 I	Eng	229			Furnished	
287GBFJP-*5 (7)	300 C	Eng	85			Furnished		287GBFJP-*3 (7)	300 C	Eng	85			Furnished	
287GBFJP-*8 (7)	300 C	Eng	81			Furnished		287GBFJP-*8 (7)	300 C	Eng	81			Furnished	
287GCFJP-*5 (7)	390 C	Eng	103			Furnished		287GCFJP-*3 (7)	390 C	Eng	103			Furnished	
287GCFJP-*8 (7)	390 C	Eng	97			Furnished		287GCFJP-*8 (7)	390 C	Eng	97			Furnished	
287GDFJP-*5 (7)	390 C	Eng	123			Furnished		287GDFJP-*3 (7)	390 C	Eng	123			Furnished	
287GDFJP-*8 (7)	390 C	Eng	116			Furnished		287GDFJP-*8 (7)	390 C	Eng	116			Furnished	
287GGFJP-*5 (7)	360 C	Eng	147			Furnished		287GGFJP-*3 (7)	360 C	Eng	147			Furnished	
287GGFJP-*8 (7)	360 C	Eng	137			Furnished		287GGFJP-*8 (7)	360 C	Eng	137			Furnished	
287GKFJP-*5 (7)	340 C	Eng	164			Furnished		287GKFJP-*3 (7)	340 C	Eng	164			Furnished	
287GMFJP-*5 (7)	318 C	Eng	184			Furnished		287GMFJP-*3 (7)	318 C	Eng	184			Furnished	
287GMFJP-*8 (7)	318 C	Eng	170			Furnished		287GMFJP-*8 (7)	318 C	Eng	170			Furnished	
287GPFJP-*5 (7)	290 C	Eng	205			Furnished		287GPFJP-*3 (7)	290 C	Eng	205			Furnished	
287GPFJP-*8 (7)	290 C	Eng	189			Furnished		287GPFJP-*8 (7)	290 C	Eng	189			Furnished	
287GSFJP-*5 (7)	265 C	Eng	229			Furnished		287GSFJP-*3 (7)	265 C	Eng	229			Furnished	
287GSFJP-*8 (7)	265 C	Eng	210			Furnished		287GSFJP-*8 (7)	265 C	Eng	210			Furnished	
877XAFJP-*5 (6)	591 C	Eng	116			Furnished		877XAFJP-*3 (6)	591 C	Eng	116			Furnished	
877XBFJP-*5 (6)	552 C	Eng	124			Furnished		877XBFJP-*3 (6)	552 C	Eng	124			Furnished	
877XCFJP-*5 (6)	515 C	Eng	133			Furnished		877XCFJP-*3 (6)	515 C	Eng	133			Furnished	
877XDFJP-*5 (6)	482 C	Eng	142			Furnished		877XDFJP-*3 (6)	482 C	Eng	142			Furnished	
877XEFJP-*5 (6)	425 C	Eng	161			Furnished		877XEFJP-*3 (6)	425 C	Eng	161			Furnished	
877XFFJP-*5 (6)	376 C	Eng	182			Furnished		877XFFJP-*3 (6)	376 C	Eng	182			Furnished	

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(3) Input Gear Part No. 5-P-1293
(4) Input Gear Part No. 5-P-1350
(5) Input Gear Part No. 5-P-1351
(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491
(8) Input Gear Part No. 5-P-912
(9) Input Gear Part No. 5-P-913
(10) Input Gear Part No. 5-P-914
(11) Input Gear Part No. 5-P-915

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4700
4700 EVS
4700 OFS
4700 RDS
4700 SP
4800
4800 EVS
4800 SP
4850 EVS

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
280GBFJP-*5 (7)	300 C	Eng	85				Furnished	280GBFJP-*5 (7)	300 C	Eng	85				Furnished
280GBFJP-*8 (7)	300 C	Eng	81				Furnished	280GBFJP-*8 (7)	300 C	Eng	81				Furnished
280GCFJP-*5 (7)	390 C	Eng	103				Furnished	280GCFJP-*5 (7)	390 C	Eng	103				Furnished
280GCFJP-*8 (7)	390 C	Eng	97				Furnished	280GCFJP-*8 (7)	390 C	Eng	97				Furnished
280GDFJP-*5 (7)	390 C	Eng	123				Furnished	280GDFJP-*5 (7)	390 C	Eng	123				Furnished
280GDFJP-*8 (7)	390 C	Eng	116				Furnished	280GDFJP-*8 (7)	390 C	Eng	116				Furnished
280GGFJP-*5 (7)	360 C	Eng	147				Furnished	280GGFJP-*5 (7)	360 C	Eng	147				Furnished
280GGFJP-*8 (7)	360 C	Eng	137				Furnished	280GGFJP-*8 (7)	360 C	Eng	137				Furnished
280GKFJP-*5 (7)	340 C	Eng	164				Furnished	280GKFJP-*5 (7)	340 C	Eng	164				Furnished
280GMFJP-*5 (7)	318 C	Eng	184				Furnished	280GMFJP-*5 (7)	318 C	Eng	184				Furnished
280GMFJP-*8 (7)	318 C	Eng	170				Furnished	280GMFJP-*8 (7)	318 C	Eng	170				Furnished
280GPFJP-*5 (7)	290 C	Eng	205				Furnished	280GPFJP-*5 (7)	290 C	Eng	205				Furnished
280GPFJP-*8 (7)	290 C	Eng	189				Furnished	280GPFJP-*8 (7)	290 C	Eng	189				Furnished
280GSFJP-*5 (7)	265 C	Eng	229				Furnished	280GSFJP-*5 (7)	265 C	Eng	229				Furnished
280GSFJP-*8 (7)	265 C	Eng	210				Furnished	280GSFJP-*8 (7)	265 C	Eng	210				Furnished
870XAFJP-*5 (6)	591 C	Eng	116				Furnished	870XAFJP-*3 (6)	591 C	Eng	116				Furnished
870XBFJP-*5 (6)	552 C	Eng	124				Furnished	870XBFJP-*3 (6)	552 C	Eng	124				Furnished
870XCFJP-*5 (6)	515 C	Eng	133				Furnished	870XCFJP-*3 (6)	515 C	Eng	133				Furnished
870XDFJP-*5 (6)	482 C	Eng	142				Furnished	870XDFJP-*3 (6)	482 C	Eng	142				Furnished
870XEFJP-*5 (6)	425 C	Eng	161				Furnished	870XEFJP-*3 (6)	425 C	Eng	161				Furnished
870XFFJP-*5 (6)	376 C	Eng	182				Furnished	870XFFJP-*3 (6)	376 C	Eng	182				Furnished
ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT															
892HAFJW-*5 (6)	591 C	Eng	116				Furnished	892UAFJW-*5 (6)	591 C	Eng	116				Furnished
892HBFJW-*5 (6)	552 C	Eng	124				Furnished	892UBFJW-*5 (6)	552 C	Eng	124				Furnished
892HCFJW-*5 (6)	515 C	Eng	133				Furnished	892UCFJW-*5 (6)	515 C	Eng	133				Furnished
892HDFJW-*5 (6)	482 C	Eng	142				Furnished	892UDFJW-*5 (6)	482 C	Eng	142				Furnished
892HEFJW-*5 (6)	425 C	Eng	161				Furnished	892UEFJW-*5 (6)	425 C	Eng	161				Furnished
892HFFJW-*5 (6)	376 C	Eng	182				Furnished	892UFFJW-*5 (6)	376 C	Eng	182				Furnished
ONE SPEED - CONSTANT MESH EXTENDED SHAFT															
899HAFJW-*5 (6)	591 C	Eng	116				Furnished	899UAFJW-*5 (6)	591 C	Eng	116				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4700
4700 EVS
4700 OFS
4700 RDS
4700 SP
4800
4800 EVS
4800 SP
4850 EVS

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
899HBFJW-*5 (6)	552 C	Eng	124			Furnished		899UBFJW-*5 (6)	552 C	Eng	124			Furnished	
899HCFJW-*5 (6)	515 C	Eng	133			Furnished		899UCFJW-*5 (6)	515 C	Eng	133			Furnished	
899HDFJW-*5 (6)	482 C	Eng	142			Furnished		899UDFJW-*5 (6)	482 C	Eng	142			Furnished	
899HEFJW-*5 (6)	425 C	Eng	161			Furnished		899UEFJW-*5 (6)	425 C	Eng	161			Furnished	
899HFFJW-*5 (6)	376 C	Eng	182			Furnished		899UFFJW-*5 (6)	376 C	Eng	182			Furnished	

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(6) Input Gear Part No. 5-P-1428

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4700 (4700 Family w/ Integral Cooler)
4800 (4800 Family w/ Integral Cooler)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - CONSTANT MESH

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
267SBFJP-*5 (4)	402 I	Eng	103				Furnished	267SBFJP-*3 (3)	402 I	Eng	103				Furnished
267SDFJP-*5 (3)	390 I	Eng	123				Furnished	267SDFJP-*3 (4)	390 I	Eng	123				Furnished
267SGFJP-*5 (2)	360 I	Eng	147				Furnished	267SGFJP-*3 (2)	360 I	Eng	147				Furnished
267SMFJP-*5 (5)	318 I	Eng	184				Furnished	267SMFJP-*3 (5)	318 I	Eng	184				Furnished
267SSFJP-*5 (1)	265 I	Eng	229				Furnished	267SSFJP-*3 (1)	265 I	Eng	229				Furnished
267XBFJP-*5 (8)	335 I	Eng	103				Furnished	267XBFJP-*3 (8)	335 I	Eng	103				Furnished
267XDFJP-*5 (9)	325 I	Eng	123				Furnished	267XDFJP-*3 (9)	325 I	Eng	123				Furnished
267XGFJP-*5 (10)	300 I	Eng	147				Furnished	267XGFJP-*3 (10)	300 I	Eng	147				Furnished
267XMFJP-*5 (11)	265 I	Eng	184				Furnished	267XMFJP-*3 (11)	265 I	Eng	184				Furnished
267XSFJP-*5 (1)	250 I	Eng	229				Furnished	267XSFJP-*3 (1)	250 I	Eng	229				Furnished
287GBFJP-*5 (7)	300 C	Eng	85				Furnished	287GBFJP-*3 (7)	300 C	Eng	85				Furnished
287GBFJP-*8 (7)	300 C	Eng	81				Furnished	287GBFJP-*8 (7)	300 C	Eng	81				Furnished
287GCFJP-*5 (7)	390 C	Eng	103				Furnished	287GCFJP-*3 (7)	390 C	Eng	103				Furnished
287GCFJP-*8 (7)	390 C	Eng	97				Furnished	287GCFJP-*8 (7)	390 C	Eng	97				Furnished
287GDFJP-*5 (7)	390 C	Eng	123				Furnished	287GDFJP-*3 (7)	390 C	Eng	123				Furnished
287GDFJP-*8 (7)	390 C	Eng	116				Furnished	287GDFJP-*8 (7)	390 C	Eng	116				Furnished
287GGFJP-*5 (7)	360 C	Eng	147				Furnished	287GGFJP-*3 (7)	360 C	Eng	147				Furnished
287GGFJP-*8 (7)	360 C	Eng	137				Furnished	287GGFJP-*8 (7)	360 C	Eng	137				Furnished
287GKFJP-*5 (7)	340 C	Eng	164				Furnished	287GKFJP-*3 (7)	340 C	Eng	164				Furnished
287GMFJP-*5 (7)	318 C	Eng	184				Furnished	287GMFJP-*3 (7)	318 C	Eng	184				Furnished
287GMFJP-*8 (7)	318 C	Eng	170				Furnished	287GMFJP-*8 (7)	318 C	Eng	170				Furnished
287GPFJP-*5 (7)	290 C	Eng	205				Furnished	287GPFJP-*3 (7)	290 C	Eng	205				Furnished
287GPFJP-*8 (7)	290 C	Eng	189				Furnished	287GPFJP-*8 (7)	290 C	Eng	189				Furnished
287GSFJP-*5 (7)	265 C	Eng	229				Furnished	287GSFJP-*3 (7)	265 C	Eng	229				Furnished
287GSFJP-*8 (7)	265 C	Eng	210				Furnished	287GSFJP-*8 (7)	265 C	Eng	210				Furnished
877XAFJP-*5 (6)	591 C	Eng	116				Furnished	877XAFJP-*3 (6)	591 C	Eng	116				Furnished
877XBFJP-*5 (6)	552 C	Eng	124				Furnished	877XBFJP-*3 (6)	552 C	Eng	124				Furnished
877XCFJP-*5 (6)	515 C	Eng	133				Furnished	877XCFJP-*3 (6)	515 C	Eng	133				Furnished
877XDFJP-*5 (6)	482 C	Eng	142				Furnished	877XDFJP-*3 (6)	482 C	Eng	142				Furnished
877XEFJP-*5 (6)	425 C	Eng	161				Furnished	877XEFJP-*3 (6)	425 C	Eng	161				Furnished
877XFFJP-*5 (6)	376 C	Eng	182				Furnished	877XFFJP-*3 (6)	376 C	Eng	182				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(3) Input Gear Part No. 5-P-1293
(4) Input Gear Part No. 5-P-1350
(5) Input Gear Part No. 5-P-1351
(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491
(8) Input Gear Part No. 5-P-912
(9) Input Gear Part No. 5-P-913
(10) Input Gear Part No. 5-P-914
(11) Input Gear Part No. 5-P-915

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4700 (4700 Family w/ Integral Cooler)
4800 (4800 Family w/ Integral Cooler)

LEFT SIDE ONLY	TOP SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 10-BOLT Opening Gear FORWARD of Centerline 97 Teeth - L.H. HELIX **PITCH LINE TO APERTURE FACE:** 1.7799" (45.2100MM)	**TRANSMISSION GEAR DATA:** TOP 10-BOLT Opening Gear FORWARD of Centerline 97 Teeth - L.H. HELIX **PITCH LINE TO APERTURE FACE:** 1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
280GBFJP-*5 (7)	300 C	Eng	85			Furnished		280GBFJP-*5 (7)	300 C	Eng	85			Furnished	
280GBFJP-*8 (7)	300 C	Eng	81			Furnished		280GBFJP-*8 (7)	300 C	Eng	81			Furnished	
280GCFJP-*5 (7)	390 C	Eng	103			Furnished		280GCFJP-*5 (7)	390 C	Eng	103			Furnished	
280GCFJP-*8 (7)	390 C	Eng	97			Furnished		280GCFJP-*8 (7)	390 C	Eng	97			Furnished	
280GDFJP-*5 (7)	390 C	Eng	123			Furnished		280GDFJP-*5 (7)	390 C	Eng	123			Furnished	
280GDFJP-*8 (7)	390 C	Eng	116			Furnished		280GDFJP-*8 (7)	390 C	Eng	116			Furnished	
280GGFJP-*5 (7)	360 C	Eng	147			Furnished		280GGFJP-*5 (7)	360 C	Eng	147			Furnished	
280GGFJP-*8 (7)	360 C	Eng	137			Furnished		280GGFJP-*8 (7)	360 C	Eng	137			Furnished	
280GKFJP-*5 (7)	340 C	Eng	164			Furnished		280GKFJP-*5 (7)	340 C	Eng	164			Furnished	
280GMFJP-*5 (7)	318 C	Eng	184			Furnished		280GMFJP-*5 (7)	318 C	Eng	184			Furnished	
280GMFJP-*8 (7)	318 C	Eng	170			Furnished		280GMFJP-*8 (7)	318 C	Eng	170			Furnished	
280GPFJP-*5 (7)	290 C	Eng	205			Furnished		280GPFJP-*5 (7)	290 C	Eng	205			Furnished	
280GPFJP-*8 (7)	290 C	Eng	189			Furnished		280GPFJP-*8 (7)	290 C	Eng	189			Furnished	
280GSFJP-*5 (7)	265 C	Eng	229			Furnished		280GSFJP-*5 (7)	265 C	Eng	229			Furnished	
280GSFJP-*8 (7)	265 C	Eng	210			Furnished		280GSFJP-*8 (7)	265 C	Eng	210			Furnished	
870XAFJP-*5 (6)	591 C	Eng	116			Furnished		870XAFJP-*3 (6)	591 C	Eng	116			Furnished	
870XBFJP-*5 (6)	552 C	Eng	124			Furnished		870XBFJP-*3 (6)	552 C	Eng	124			Furnished	
870XCFJP-*5 (6)	515 C	Eng	133			Furnished		870XCFJP-*3 (6)	515 C	Eng	133			Furnished	
870XDFJP-*5 (6)	482 C	Eng	142			Furnished		870XDFJP-*3 (6)	482 C	Eng	142			Furnished	
870XEFJP-*5 (6)	425 C	Eng	161			Furnished		870XEFJP-*3 (6)	425 C	Eng	161			Furnished	
870XFFJP-*5 (6)	376 C	Eng	182			Furnished		870XFFJP-*3 (6)	376 C	Eng	182			Furnished	
ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT															
892CAFJW-*3 (6)	591 C	Eng	116			Furnished		892UAFJW-*5 (6)	591 C	Eng	116			Furnished	
892CBFJW-*3 (6)	552 C	Eng	124			Furnished		892UBFJW-*5 (6)	552 C	Eng	124			Furnished	
892CCFJW-*3 (6)	515 C	Eng	133			Furnished		892UCFJW-*5 (6)	515 C	Eng	133			Furnished	
892CDFJW-*3 (6)	482 C	Eng	142			Furnished		892UDFJW-*5 (6)	482 C	Eng	142			Furnished	
892CEFJW-*3 (6)	425 C	Eng	161			Furnished		892UEFJW-*5 (6)	425 C	Eng	161			Furnished	
892CFFJW-*3 (6)	376 C	Eng	182			Furnished		892UFFJW-*5 (6)	376 C	Eng	182			Furnished	
ONE SPEED - CONSTANT MESH EXTENDED SHAFT															
899CAFJW-*3 (6)	591 C	Eng	116			Furnished		899UAFJW-*5 (6)	591 C	Eng	116			Furnished	

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4700 (4700 Family w/ Integral Cooler)
4800 (4800 Family w/ Integral Cooler)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
899CBFJW-*3 (6)	552 C	Eng	124				Furnished	899UBFJW-*5 (6)	552 C	Eng	124				Furnished
899CCFJW-*3 (6)	515 C	Eng	133				Furnished	899UCFJW-*5 (6)	515 C	Eng	133				Furnished
899CDFJW-*3 (6)	482 C	Eng	142				Furnished	899UDFJW-*5 (6)	482 C	Eng	142				Furnished
899CEFJW-*3 (6)	425 C	Eng	161				Furnished	899UEFJW-*5 (6)	425 C	Eng	161				Furnished
899CFFJW-*3 (6)	376 C	Eng	182				Furnished	899UFFJW-*5 (6)	376 C	Eng	182				Furnished

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CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(6) Input Gear Part No. 5-P-1428

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4700 (4700 Family w/ Retarder)
4800 (4800 Family w/ Retarder)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - CONSTANT MESH

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
267SBFJP-*5 (4)	402 I	Eng	103			Furnished		267SBFJP-*3 (4)	402 I	Eng	103			Furnished	
267SDFJP-*5 (3)	390 I	Eng	123			Furnished		267SDFJP-*3 (4)	402 I	Eng	103			Furnished	
267SGFJP-*5 (2)	360 I	Eng	147			Furnished		267SGFJP-*3 (2)	360 I	Eng	147			Furnished	
267SMFJP-*5 (5)	318 I	Eng	184			Furnished		267SMFJP-*3 (5)	318 I	Eng	184			Furnished	
267SSFJP-*5 (1)	265 I	Eng	229			Furnished		267SSFJP-*3 (1)	265 I	Eng	229			Furnished	
267XBFJP-*5 (8)	335 I	Eng	103			Furnished		267XBFJP-*3 (8)	335 I	Eng	103			Furnished	
267XDFJP-*5 (9)	325 I	Eng	123			Furnished		267XDFJP-*3 (9)	325 I	Eng	123			Furnished	
267XGFJP-*5 (10)	300 I	Eng	147			Furnished		267XGFJP-*3 (10)	300 I	Eng	147			Furnished	
267XMFJP-*5 (11)	265 I	Eng	184			Furnished		267XMFJP-*3 (11)	265 I	Eng	184			Furnished	
267XSFJP-*5 (1)	250 I	Eng	229			Furnished		267XSFJP-*3 (1)	250 I	Eng	229			Furnished	
287GBFJP-*5 (7)	300 C	Eng	85			Furnished		287GBFJP-*3 (7)	300 C	Eng	85			Furnished	
287GBFJP-*8 (7)	300 C	Eng	81			Furnished		287GBFJP-*8 (7)	300 C	Eng	81			Furnished	
287GCFJP-*5 (7)	390 C	Eng	103			Furnished		287GCFJP-*3 (7)	390 C	Eng	103			Furnished	
287GCFJP-*8 (7)	390 C	Eng	97			Furnished		287GCFJP-*8 (7)	390 C	Eng	97			Furnished	
287GDFJP-*5 (7)	390 C	Eng	123			Furnished		287GDFJP-*3 (7)	390 C	Eng	123			Furnished	
287GDFJP-*8 (7)	390 C	Eng	116			Furnished		287GDFJP-*8 (7)	390 C	Eng	116			Furnished	
287GGFJP-*5 (7)	360 C	Eng	147			Furnished		287GGFJP-*3 (7)	360 C	Eng	147			Furnished	
287GGFJP-*8 (7)	360 C	Eng	137			Furnished		287GGFJP-*8 (7)	360 C	Eng	137			Furnished	
287GKFJP-*5 (7)	340 C	Eng	164			Furnished		287GKFJP-*3 (7)	340 C	Eng	164			Furnished	
287GMFJP-*5 (7)	318 C	Eng	184			Furnished		287GMFJP-*3 (7)	318 C	Eng	184			Furnished	
287GMFJP-*8 (7)	318 C	Eng	170			Furnished		287GMFJP-*8 (7)	318 C	Eng	170			Furnished	
287GPFJP-*5 (7)	290 C	Eng	205			Furnished		287GPFJP-*3 (7)	290 C	Eng	205			Furnished	
287GPFJP-*8 (7)	290 C	Eng	189			Furnished		287GPFJP-*8 (7)	290 C	Eng	189			Furnished	
287GSFJP-*5 (7)	265 C	Eng	229			Furnished		287GSFJP-*3 (7)	265 C	Eng	229			Furnished	
287GSFJP-*8 (7)	265 C	Eng	210			Furnished		287GSFJP-*8 (7)	265 C	Eng	210			Furnished	
877XAFJP-*5 (6)	591 C	Eng	116			Furnished		877XAFJP-*3 (6)	591 C	Eng	116			Furnished	
877XBFJP-*5 (6)	552 C	Eng	124			Furnished		877XBFJP-*3 (6)	552 C	Eng	124			Furnished	
877XCFJP-*5 (6)	515 C	Eng	133			Furnished		877XCFJP-*3 (6)	515 C	Eng	133			Furnished	
877XDFJP-*5 (6)	482 C	Eng	142			Furnished		877XDFJP-*3 (6)	482 C	Eng	142			Furnished	
877XEFJP-*5 (6)	425 C	Eng	161			Furnished		877XEFJP-*3 (6)	425 C	Eng	161			Furnished	
877XFFJP-*5 (6)	376 C	Eng	182			Furnished		877XFFJP-*3 (6)	376 C	Eng	182			Furnished	

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(1) Input Gear Part No. 5-P-1173
(2) Input Gear Part No. 5-P-1225
(3) Input Gear Part No. 5-P-1293
(4) Input Gear Part No. 5-P-1350
(5) Input Gear Part No. 5-P-1351
(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491
(8) Input Gear Part No. 5-P-912
(9) Input Gear Part No. 5-P-913
(10) Input Gear Part No. 5-P-914
(11) Input Gear Part No. 5-P-915

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4700 (4700 Family w/ Retarder)
4800 (4800 Family w/ Retarder)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 10-BOLT Opening Gear FORWARD of Centerline
97 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
280GBFJP-*5 (7)	300 C	Eng	85				Furnished	280GBFJP-*5 (7)	300 C	Eng	85				Furnished
280GBFJP-*8 (7)	300 C	Eng	81				Furnished	280GBFJP-*8 (7)	300 C	Eng	81				Furnished
280GCFJP-*5 (7)	390 C	Eng	103				Furnished	280GCFJP-*5 (7)	390 C	Eng	103				Furnished
280GCFJP-*8 (7)	390 C	Eng	97				Furnished	280GCFJP-*8 (7)	390 C	Eng	97				Furnished
280GDFJP-*5 (7)	390 C	Eng	123				Furnished	280GDFJP-*5 (7)	390 C	Eng	123				Furnished
280GDFJP-*8 (7)	390 C	Eng	116				Furnished	280GDFJP-*8 (7)	390 C	Eng	116				Furnished
280GGFJP-*5 (7)	360 C	Eng	147				Furnished	280GGFJP-*5 (7)	360 C	Eng	147				Furnished
280GGFJP-*8 (7)	360 C	Eng	137				Furnished	280GGFJP-*8 (7)	360 C	Eng	137				Furnished
280GKFJP-*5 (7)	340 C	Eng	164				Furnished	280GKFJP-*5 (7)	340 C	Eng	164				Furnished
280GMFJP-*5 (7)	318 C	Eng	184				Furnished	280GMFJP-*5 (7)	318 C	Eng	184				Furnished
280GPFJP-*5 (7)	290 C	Eng	205				Furnished	280GPFJP-*5 (7)	290 C	Eng	205				Furnished
280GPFJP-*8 (7)	290 C	Eng	189				Furnished	280GPFJP-*8 (7)	290 C	Eng	189				Furnished
280GSFJP-*5 (7)	265 C	Eng	229				Furnished	280GSFJP-*5 (7)	265 C	Eng	229				Furnished
280GSFJP-*8 (7)	265 C	Eng	210				Furnished	280GSFJP-*8 (7)	265 C	Eng	210				Furnished
870XAFJP-*5 (6)	591 C	Eng	116				Furnished	870XAFJP-*3 (6)	591 C	Eng	116				Furnished
870XBFJP-*5 (6)	552 C	Eng	124				Furnished	870XBFJP-*3 (6)	552 C	Eng	124				Furnished
870XCFJP-*5 (6)	515 C	Eng	133				Furnished	870XCFJP-*3 (6)	515 C	Eng	133				Furnished
870XDFJP-*5 (6)	482 C	Eng	142				Furnished	870XDFJP-*3 (6)	482 C	Eng	142				Furnished
870XEFJP-*5 (6)	425 C	Eng	161				Furnished	870XEFJP-*3 (6)	425 C	Eng	161				Furnished
870XFFJP-*5 (6)	376 C	Eng	182				Furnished	870XFFJP-*3 (6)	376 C	Eng	182				Furnished
ONE SPEED - POWERSHIFT (HYDRAULIC) EXTENDED SHAFT															
892JAFJW-*3 (6)	591 C	Eng	116				Furnished	892KAFJW-*5 (6)	591 C	Eng	116				Furnished
892JBFJW-*3 (6)	552 C	Eng	124				Furnished	892KBFJW-*5 (6)	552 C	Eng	124				Furnished
892JCFJW-*3 (6)	515 C	Eng	133				Furnished	892KCFJW-*5 (6)	515 C	Eng	133				Furnished
892JDFJW-*3 (6)	482 C	Eng	142				Furnished	892KDFJW-*5 (6)	482 C	Eng	142				Furnished
892JEFJW-*3 (6)	425 C	Eng	161				Furnished	892KEFJW-*5 (6)	425 C	Eng	161				Furnished
892JFFJW-*3 (6)	376 C	Eng	182				Furnished	892KFFJW-*5 (6)	376 C	Eng	182				Furnished
ONE SPEED - CONSTANT MESH EXTENDED SHAFT															
899JAFJW-*3 (6)	591 C	Eng	116				Furnished	899KAFJW-*5 (6)	591 C	Eng	116				Furnished
899JBFJW-*3 (6)	552 C	Eng	124				Furnished	899KBFJW-*5 (6)	552 C	Eng	124				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Chelsea Recommends the Power Take-Off (PTO) installation on the 3000/4000 Series Transmissions to utilize a Vehicle Interface Module, or Chassis Manufacturers' equivalent controller to incorporate all the PTO control features available, this includes the "PTO Request" and "PTO Enable Output" feature. The "PTO Enable" circuit signals the Transmission Control Module (TCM) to maintain line pressure to the PTO Failure to provide this signal may not be sufficient to the PTO This may cause damage to the PTO and /or Transmission. Please see the Allison Transmission website and individual chassis manufacturer for installation details.

CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(6) Input Gear Part No. 5-P-1428
(7) Input Gear Part No. 5-P-1491

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

4700 (4700 Family w/ Retarder)
4800 (4800 Family w/ Retarder)

LEFT SIDE ONLY	TOP SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 10-BOLT Opening Gear FORWARD of Centerline 97 Teeth - L.H. HELIX **PITCH LINE TO APERTURE FACE:** 1.7799" (45.2100MM)	**TRANSMISSION GEAR DATA:** TOP 10-BOLT Opening Gear FORWARD of Centerline 97 Teeth - L.H. HELIX **PITCH LINE TO APERTURE FACE:** 1.7799" (45.2100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - CONSTANT MESH EXTENDED SHAFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
899JCFJW-*3 (6)	515 C	Eng	133			Furnished		899KCFJW-*5 (6)	515 C	Eng	133			Furnished	
899JDFJW-*3 (6)	482 C	Eng	142			Furnished		899KDFJW-*5 (6)	482 C	Eng	142			Furnished	
899JEFJW-*3 (6)	425 C	Eng	161			Furnished		899KEFJW-*5 (6)	425 C	Eng	161			Furnished	
899JFFJW-*3 (6)	376 C	Eng	182			Furnished		899KFFJW-*5 (6)	376 C	Eng	182			Furnished	

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CAUTION: The Torque Rating on Certain Ratios is Restricted by Allison Transmission to a Torque Limit of 685 Ft.lbs on their PTO Drive Gear.

(6) Input Gear Part No. 5-P-1428

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

TC-10

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - POWERSHIFT (HYDRAULIC)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
590XRFJW-*1**	650 C	Eng	128			Furnished	

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

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IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

Allison

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Allison Notes

ALL-4

1. Speeds shown are with engine RPM at or above torque converter lockup speed. If the PTO is going to be operated below torque converter lockup speeds, contact your CHELSEA distributor for specific speeds and torque requirements.
2. 378840 street tee required for pressure lube and must be purchased separately. Only the pressure lube line 328075X (line to the idler pin) is included with the PTO For 270/271 Series due to varying valve installation locations on the vehicle installer must supply the following hoses or order the following separately. One 329087X (line from tranny to valve) and two 328075X (valve dump back to PTO housing & valve to PTO clutch).
3. Do not use adapter gear assemblies on any Allison automatic transmissions.
4. 272 Series PTOs ordered with Pressure Lube and Hyd Shift will be supplied with (1) Lube Hose and (1) Shift Hose.

ALL-5

1. Do not use adapter gear assemblies on any Allison automatic transmissions.
2. Speeds shown are with engine RPM at, or above, torque converter lockup speed. If the PTO is going to be operated below torque converter lockup speeds, contact your CHELSEA distributor for specific speeds and torque requirements.
3. 378970 street tee required for pressure lube for 1975 and after, and must be purchased separately. 378880 street tee required for pressure lube prior to 1975. Only the pressure lube line 328075X (line to the idler pin) is included with the PTO For 270/271 Series due to varying valve installation locations on the vehicle installer must supply the following hoses or order the following separately. One 329087X (line from tranny to valve) and two 328075X (valve dump back to PTO housing & valve to PTO clutch).
4. The “AJ” input gear designator shown on this application, which is a full addendum 6-pitch gear, is recommended for use on these transmissions. The “AH” input gear designator, which is a 6/8-pitch gear, can also be used on these transmissions; however, you may notice some additional rattle between the meshing gears.
5. 442 SERIES - The 442 listed above is a bulge up arrangement and pump clearance must be verified by the installer. The 442*3 arrangement has interefernce issues with the idler pin lube fitting against the bell housing.

ALL-6

1. Do not use adapter gear assemblies on any Allison automatic transmissions.
2. Speeds shown are with engine RPM at, or above, torque converter lockup speed. If the PTO is going to be operated below torque converter lockup speeds, contact your CHELSEA distributor for specific speeds and torque requirements.
3. 378897 street tee required for pressure lube and must be purchased separately.
4. Aperture is located at 10 o’clock when viewed from rear of transmission.

ALL-8

1. CRT-5630 & 5631 have only RH openings.
2. Right Side opening is optional. Input gear interference prohibits use of any PTOs other than those shown.
3. Do not use geared adapter assemblies on any Allison Automatic Transmission.

ALL-11

1. RH opening is optional. Input gear interference prohibits use of any PTO other than those shown.
2. Do not use geared adapter assemblies on any Allison Automatic Transmission.
3. Use a 3/8” NPT to 1/4” NPT pipe reducer to adapt to the pressure lube hose supplied with the unit.
4. The “CLT or CLBT” prefix refers to an engine driven section mounted to the front of the transmission.
5. The 8000 and 9000 Series transmission models use all the same PTO models.
6. Only the pressure lube line 328075X (line to the idler pin) is included with the PTO.
7. The PTO input gear mates to a transmission PTO idler gear, the top opening will have 39 teeth and the side opening will have 52 teeth. These idler gears are driven from the 59 tooth PTO drive gear.

ALL-12

1. For SAE 6 -bolt aperture located 40° from vertical or approximately 10 o’clock when viewed from rear, see application number ALL-7 or contact your CHELSEA distributor for PTO applications prior to serial build number 32404. For applications after 32404 see application number ALL-6.
2. Engine must be stopped in order to engage/disengage Mechanical shift PTOs.
3. Left side opening located at approximately 7 o’clock, right side at 1 o’clock as viewed from rear of transmission.
4. Do not use geared adapter assemblies on any Allison Automatic Transmission.
5. Lube Tee Required - 378897 Street Tee is required for pressure lube PTOs and must be purchased separately. Only the pressure lube hose assembly 328075X (line to the idler pin) is included with the PTO. For 270/271 Series, due to varying valve installation locations on the vehicle, installer must supply the following hoses or order the following separately. One 329087X (line from tranny to valve) and two 328075X (valve dump back to PTO housing & valve to PTO clutch).

ALL-13

1. 890/897 Series - The Combined Weight of Pump, Fittings and Hoses Should Not Exceed 120 Lbs. Refer to Owner’s Manual (HY25-1890-M1/US) for Complete Details.
2. When direct mounting a Parker P2 060 piston pump to a 267 Series PTO on the left (drivers) side opening, the PTO must be ordered as a “3” assembly arrangement for pump clearance.
3. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280/287, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
4. The 267 Series is not available in the “3” arrangement with an “XK” output due to interference with the pressure lube fitting.
5. Wiring harness 379926 must be used in 2003 GM trucks for the 277, 278 and 859 Series PTOs if the GM provided in-dash PTO switch is used to control PTO operations.
6. Do not use adapter gear assemblies on Allison 3000/4000 Series Automatic Transmissions.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Allison Notes

ALL-13C

1. When direct mounting a Parker P2 060 piston pump to a 267 Series PTO on the left (drivers) side opening, the PTO must be ordered as a "3" assembly arrangement for pump clearance.
2. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. For the 269, 277, 278 and 867 Series, use 329130-5X for left side, 329075-2X for top right and 329075-1X for right side. If ordering shift options "R", "G" or "H" for 277, 278 or 859 Series use 329130-5X for left side, 329075-1X for right side THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 859, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
3. The 267 Series is not available in the "3" arrangement with an "XK" output due to interference with the pressure lube fitting.
4. 890/897 Series - The Combined Weight of Pump, Fittings and Hoses Should Not Exceed 120 Lbs. Refer to Owner's Manual (HY25-1890-M1/US) for Complete Details

ALL-13R

1. When direct mounting a Parker P2 060 piston pump to a 267 Series PTO on the left (drivers) side opening, the PTO must be ordered as a "3" assembly arrangement for pump clearance.
2. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
3. The 267 Series is not available in the "3" arrangement with an "XK" output due to interference with the pressure lube fitting.
4. Do not use adapter gear assemblies on Allison 3000/4000 Series Automatic Transmissions.
5. 890/897 Series - The Combined Weight of Pump, Fittings and Hoses Should Not Exceed 120 Lbs. Refer to Owner's Manual (HY25-1890-M1/US) for Complete Details

ALL-14

1. LEFT SIDE - 870/877/890/897 PTOs may encounter interference with leaf spring assembly when using the 3 or 5 arrangement on the Peterbilt 320 chassis.
2. The Right Side opening is located at approximately 1 o'clock when viewed from the rear. All PTOs mounted in this location require pressure lubrication.
3. Do not use Adapter Gear Assemblies on Allison 3000/4000 Series Automatic Transmissions.
4. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
5. The 267 Series is not available in the 3 arrangement with an "XK" output due to interference with the pressure lube fitting.
6. 890 Family - The Combined Weight of Pump, Fittings and Hoses Should Not Exceed 120 Lbs. Refer to Owner's Manual (HY25-1890-M1/US) for Complete Details.

ALL-14C

1. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
2. 890 Family - The Combined Weight of Pump, Fittings and Hoses Should Not Exceed 120 Lbs. Refer to Owner's Manual (HY25-1890-M1/US) for Complete Details.
3. The Right Side opening is located at approximately 1 o'clock when viewed from the rear. All PTOs mounted in this location require pressure lubrication.

ALL-14R

1. The Right Side opening is located at approximately 1 o'clock when veiwed from the rear. All PTOs mounted in this location require pressure lubrication.
2. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
3. 890 Family - The Combined Weight of Pump, Fittings and Hoses Should Not Exceed 120 Lbs. Refer to Owner's Manual (HY25-1890-M1/US) for Complete Details.
4. The 267 Series is not available in the 3 arrangement with an "XK" output due to interference with the pressure lube fitting.
5. Do not use Adapter Gear Assemblies on Allison 3000/4000 Series Automatic Transmissions.

ALL-15

1. There is torque converter lock up feature available with the 1000/2000/2400 series transmissions. The torque converter lock up feature comes on and is controlled by the Transmission Control Module (TCM) when a signal is provided to the "PTO Enable" circuit of the TCM by the PTO switch. Lock up will only come on in the "NEUTRAL" and "PARK" positions at 1100 RPM transmission turbine speed. This equates to 1200-1250 RPM or higher engine speed, depending on PTO load. The lock up clutch does not come on automatically in "DRIVE" at 1100 RPM. Refer to the appropriate owner's manual for wiring installation.
2. If the 442 Series is ordered with Pressure Lube, Hose 328075X is supplied with the PTO A Restrictor Orifice, 379896 (442*FHVP) or 379594 (442*BHVP) is required and is shipped with the PTO.
3. 442*B Ratio - DO NOT USE with Geared Adapter.
4. Geared Adapters - 626/630/645 listed on this application page are for the 442 (F Ratio Only) or 272. 442*F Ratio - Use 442ZFHV with (1) 7-A-140 filler block and (1) 328170-94X stud kit when mounting the PTO to one of the adapters listed. 272 - Use 272L*HV (deep mount) with (1) 7-A-140 and (1) 328170-94X. Use 35-P-41 gasket between transmission and adapter. Use filler block (1) 7-A-140 between the adapter and PTO with 35-P-1 or 2 shim gaskets to obtain .006-012" of backlash between the driver gears.
5. Pre-2005; To connect the Chelsea PTO switch to the "PTO Enable" circuit of the TCM, a wiring kit must be ordered depending on the type of shifter being used. For Shifter without EOC order 329336-1X, for Shifter with EOC order 329336-2X and for Shifter with Pilot Valve order 329336-3X. These kits will include wire and installation instructions. ORDER SEPARATELY
6. Limited Ratios - the K Ratio and above will not fit on this transmission due to adjacent interference with the input ratio gear. In some instances the D ratio will not fit either. There seems to be two variations of the transmission case that effect the D ratio, but we have no way to confirm which case is which.
7. A lube "T" fitting is required in the oil return cooling line to supply low pressure oil to the idler shaft of the 252(left side), 272, or 442 Series PTO. The 378840 "T" fitting is for transmission model 1000 with the SAE #3 bell housing, 378970 "T" fitting is for the transmission model 1000/2000/2400 with the SAE #2 bell housing, or the low pressure return line may be cut with a tube cutter and a compression "T" fitting may be installed.
8. MY2003 and after GM "C/K" Series 4500/5500/6500/7500/8500 Trucks - If using the GM provided in-dash switch, use wiring harness 379924 for the 230/231/270/271/272 Series PTOs. Use wiring harness 329619X for the 252 Series PTO if the torque converter lock-up is required for the application. The kits must be ORDERED SEPARATELY.

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Olive Branch, MS 38654 USA

Allison Notes

ALL-16

1. The Allison Model MD-3066 has two 10 bolt aperture openings located at 9 o'clock on the left side and 2 o'clock on the right side (Top Right). Every PTO mounted on this transmission must have the pressure lube option ("P").
2. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
3. The 267 Series is not available in the 3 arrangement with an "XK" output due to interference with the pressure lube fitting.
4. Do not use Geared Adapters Assemblies on Allison 3000/4000 Series Automatic Transmissions.
5. 890 SERIES - The combined weight of pump, fittings, and hoses should not exceed 120 Lbs. without required support brackets. Refer to Owner's Manual (HY25-1890-M1/US) for complete details.

ALL-16C

1. The 280, 870, and 890 will not fit in a '3' arrangement on the left side of this transmission with a cooler. The remote and integral valve cap assembly hits the transmission.
2. The Allison Model MD-3066 has two 10 bolt aperture openings located at 9 o'clock on the left side and 2 o'clock on the right side (Top Right). Every PTO mounted on this transmission must have the pressure lube option ("P").
3. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
4. The 267 Series is not available in the 3 arrangement with an "XK" output due to interference with the pressure lube fitting.
5. Do not use Geared Adapter Assemblies on Allison 3000/4000 Series Automatic Transmissions.
6. 890 SERIES - The combined weight of pump, fittings, and hoses should not exceed 120 Lbs. without required support brackets. Refer to Owner's Manual (HY25-1890-M1/US) for complete details.

ALL-16EV

1. "How to Calculate" Torque for two (2) PTO INTERMITTENT Applications. Combined Total = [Actual Torque of PTO#1] divided by [Per Cent of Engine] + [Actual Torque of PTO#2] divided by [Per Cent of Engine]. Application is OK if Combined Torque is less than 790 Lbs.ft for Intermittent use and the PTOs Torque Requirements are less than Stated PTO Torque Limits. For CONTINUOUS Applications = Application is OK if Combined Torque is less than 685 Lbs.ft and the PTOs Torque Requirements are less than Stated PTO Torque Limits x .80.
2. All Stated Torque Values on this page are for CONTINUOUS Duty Cycles for Fire & Emergency Applications with ONE (1) PTO Torque Values are as follows - Continuous/Intermittent (Lb.ft): "A" Ratio-670/793, "B" Ratio-632/742, "C" Ratio-588/696, "D" Ratio-554/652, "E" Ratio-486/574, "F" Ratio-429/507, "G" Ratio 379/447 and "J" Ratio-334/394. Refer to Allison Tech Data (Watch # 291) for more information on Fire & Emergency PTO Applications and Transmission Torque Ratings.
3. The Stated INTERMITTENT Torque Values on this Page are for Fire and Emergency Vehicle Applications with One PTO not to Exceed 790 Lbs.ft [1068 N.m] on the Transmission PTO Drive Gear. For Two PTO Applications the Combined Torque Valve Can Not Exceed 790 Lbs.ft [1068 N.m] at the Transmission PTO Drive Gear. See Example on "How to Calculate".
4. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280/287, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
5. The 267 Series is not available in the 3 arrangement with an "XK" output due to interference with the pressure lube fitting.
6. 890 SERIES - The combined weight of pump, fittings, and hoses should not exceed 120 Lbs. without required support brackets. Refer to Owner's Manual (HY25-1890-M1/US) for complete details.
7. Allison Transmission Maximum Power Capability of the Top Mount PTO Drive Gear on MD Series Transmissions used in the Fire and Emergency Vehicle Vocations has been Increased. The ratings on this page are valid only for the Side/Top Mount PTO Options. Refer to Allison Watch #291 for complete details.

ALL-16R

1. The Allison Model MD-3066 has two 10 bolt aperture openings located at 9 o'clock on the left side and 2 o'clock on the right side (Top Right). Every PTO mounted on this transmission must have the pressure lube option ("P").
2. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
3. The 267 Series is not available in the 3 arrangement with an "XK" output due to interference with the pressure lube fitting.
4. Do not use Adapter Gear Assemblies on Allison 3000/4000 Series Automatic Transmissions.
5. 890 SERIES - The combined weight of pump, fittings, and hoses should not exceed 120 Lbs. without required support brackets. Refer to Owner's Manual (HY25-1890-M1/US) for complete details.

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Allison Notes

ALL-17

1. For MY2015 GM has changed the engine exhaust design. The exhaust pipe can not be removed as in previous model years. This is causing issues with PTO installation. Contact GM Upfitter Integration for assistance on PTO installation.
2. There is torque converter lock up feature available with the 1000 series transmission. The torque converter lock up feature comes on and is controlled by the Transmission Control Module (TCM) at 1100 RPM transmission turbine speed when a signal is provided to the "PTO Enable" circuit of the TCM by the PTO switch. This equates to 1200-1250 RPM or higher engine speed, depending on PTO load. Lock up will only come on in the "PARK" position. The lock up clutch does not come on automatically in "DRIVE" at 1100 RPM. Refer to the appropriate owner's manual for wiring installation.
3. The PTO torque ratings shown are based on the maximum allowable torque of 250 lb-ft at the 64 tooth gear in the transmission with the PTO on one opening only. With PTOs mounted on both openings the maximum allowable torque at the 64 tooth gear in the transmission is 200 lb-ft. For a more precise evaluation of your PTO application refer to the Allison Body Builders Book, Section F, PTO Systems Provisions.
4. The 252 Series for MY2015 and later GM C/K series Cab/Chassis order wiring harness part number 75-P-33. For 2007-2014 order Chelsea part number 329620X. This harness must be ordered separately and is required for proper PTO to Engine interface operation. Refer to GM UI Bulletin #80.
5. Only the 12v "B" option shifter can be used on this application.
6. The left PTO aperture opening on this application is not usable due to engine fuel lines blocking the opening.

ALL-18

1. The Right Side opening is located at approximately 1 o'clock when viewed from the rear. All PTOs mounted in this location require pressure lubrication.
2. Do not use Geared Adapter Assemblies on Allison 3000/4000 Series Automatic Transmissions.
3. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
4. The 267 Series is not available in the 3 arrangement with an "XK" output due to interference with the pressure lube fitting.
5. The 3700 and MD3070 have PTO Availability on the Left-Side Only. The Right-Side is Utilized by OE Equipment. The Transfer Case is Integral to the Transmission

ALL-19

1. The Right Side opening is located at approximately 1 o'clock when viewed from the rear. All PTOs mounted in this location require pressure lubrication.
2. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
3. The 267 Series is not available in the 3 arrangement with an "XK" output due to interference with the pressure lube fitting.
4. 892/899 SERIES - The combined weight of pump, fittings, and hoses should not exceed 120 Lbs. without required support brackets. Refer to Owner's Manual (HY25-1890-M1/US) for complete details.
5. Do not use Geared Adapter Assemblies on Allison 3000/4000 Series Automatic Transmissions.

ALL-19C

1. The Right Side opening is located at approximately 1 o'clock when viewed from the rear. All PTOs mounted in this location require pressure lubrication.
2. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
3. The 267 Series is not available in the 3 arrangement with an "XK" output due to interference with the pressure lube fitting.
4. 892/899 SERIES - The combined weight of pump, fittings, and hoses should not exceed 120 Lbs. without required support brackets. Refer to Owner's Manual (HY25-1890-M1/US) for complete details.
5. Do not use Geared Adapter Assemblies on Allison 3000/4000 Series Automatic Transmissions.

ALL-19R

1. The Right Side opening is located at approximately 1 o'clock when viewed from the rear. All PTOs mounted in this location require pressure lubrication.
2. All models require a hose assembly. For the 267 Series, use 329130-1X for left side, 329130-6X for top right and 329130-4X for right side. THESE HOSE ASSEMBLIES MUST BE ORDERED SEPARATELY. For 280, 870/877 and 890/897 Series - All Mounting Hardware and Hose Assemblies are Included with the Unit.
3. The 267 Series is not available in the 3 arrangement with an "XK" output due to interference with the pressure lube fitting.
4. 892/899 SERIES - The combined weight of pump, fittings, and hoses should not exceed 120 Lbs. without required support brackets. Refer to Owner's Manual (HY25-1890-M1/US) for complete details.
5. Do not use Geared Adapter Assemblies on Allison 3000/4000 Series Automatic Transmissions.

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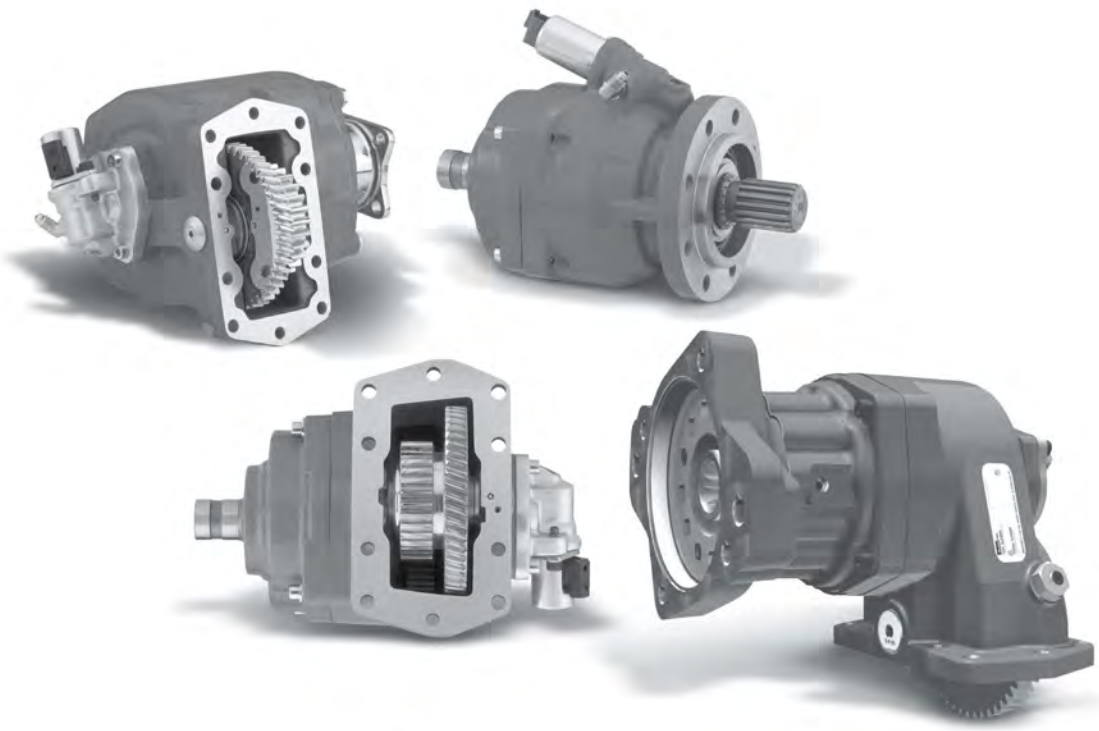
Allison Notes

ALL-20

1. The PTO Provision is optional for the TC10. All TC10 Transmissions have a PTO pad and cover located on the rear cover. The TC10 includes the PTO drive shaft if the PTO option is ordered with the transmission. If the transmission does not have optional PTO provision, the PTO adapter can be added (Contact Allison)
2. For all PTO installations, the Allison 5th Generation Controls' PTO Drive Interface must be integrated into the installation of the PTO control.

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Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
CX28	CAT-2	6	L79-CS-R79
CX31	CAT-1	6	L88-CS-R88
CX35	CAT-3	8	L100-CS-R100
TH48FT-E70 (OFF Highway Automatic)	CAT-4	5	L57-R57-B56
TH48FT-E80 (OFF Highway Automatic)	CAT-5	5	L57-R57-B51

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

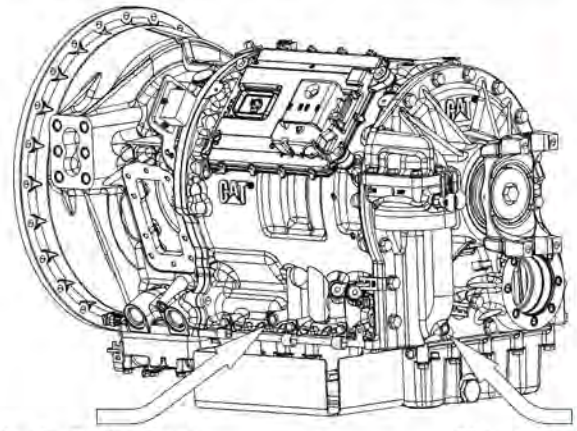
Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

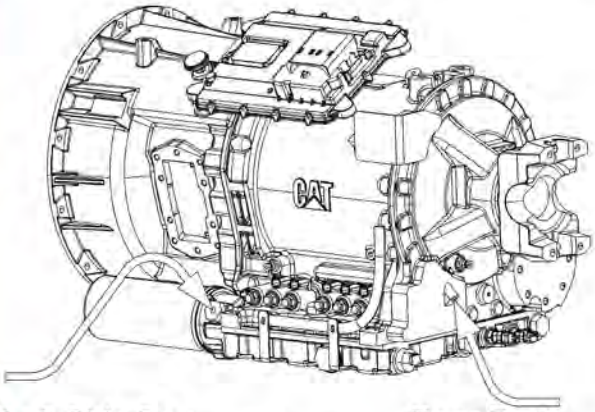
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Pressure Port Locations & Hose Chart (SK-414 Rev B)



Left Side Port **CX31** Rear Port

(Filter Removed for Clarity)



Left Side Port **CX28** Rear Port

Both High Pressure Connections are -4 O-Ring Boss

HOSE CHART							
Trans.	**PTO**	**PTO Location**	**High Oil Pressure Location**	**PTO Valve Location**	**PTO Fitting**	**Trans. Fitting**	**Trans.-PTO Valve Hose #**
CX31 CX28	280, 287, 870	Driver (LHS)	LHS	Attached	379486	379812	329075-1X
		Driver (LHS)	Rear				329075-5X
		Pass. (RHS)	LHS				329075-2X
		Pass. (RHS)	Rear			379486	329075-5X
		Driver (LHS)	LHS	Remote	379486	379812	329130-6X
		Driver (LHS)	Rear				329130-6X
		Pass. (RHS)	LHS				329130-6X
		Pass. (RHS)	Rear				329130-6X
	267	Driver (LHS)	LHS	N/A	379486	379812	329130-3X
		Driver (LHS)	Rear			379486	329075-5X
		Pass. (RHS)	LHS			379812	329075-2X
		Pass. (RHS)	Rear			379812	329075-5X
	877	Driver (LHS)	LHS	N/A	379486	379812	329130-3X
		Driver (LHS)	Rear				329075-5X
		Pass. (RHS)	LHS				329075-2X
		Pass. (RHS)	Rear			379486	329075-5X

LHS = Left Hand Side of Transmission, 8 o'clock position

RHS = Right Hand Side of Transmission, 1 o'clock position

NOTES:

1. PTO fitting 379486 and transmission fitting 379812 included with the PTO unit. If using 379486 in transmission it must be purchased separately.
2. Hose for the 267 Series needs to be purchased separately - see application page.
3. 379486 elbow will not install on left hand (driver) side oil port due to transmission interference.
4. If 379486 is listed as transmission fitting for rear location, route hose along right hand (passenger) side of transmission and under transmission output yoke.

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CX31

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
88 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7207" (43.7060MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 10-BOLT Opening Gear FORWARD of Centerline
88 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7207" (43.7060MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - CONSTANT MESH

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
267SBKVP-*5 (6)	402 I	Eng	104				Furnished	267SBKVP-*3 (6)	402 I	Eng	104				Furnished
267SDKVP-*5 (7)	390 I	Eng	124				Furnished	267SDKVP-*3 (7)	390 I	Eng	124				Furnished
267SGKVP-*5 (8)	360 I	Eng	148				Furnished	267SGKVP-*3 (8)	360 I	Eng	148				Furnished
267SMKVP-*5 (9)	318 I	Eng	185				Furnished	267SMKVP-*3 (9)	318 I	Eng	185				Furnished
267SSKVP-*5 (10)	265 I	Eng	231				Furnished	267SSKVP-*3 (10)	265 I	Eng	231				Furnished
267XBKVP-*5 (1)	335 I	Eng	104				Furnished	267XBKVP-*3 (1)	335 I	Eng	104				Furnished
267XCKVP-*5 (11)	330 I	Eng	111				Furnished	267XCKVP-*3 (11)	330 I	Eng	111				Furnished
267XDKVP-*5 (2)	325 I	Eng	124				Furnished	267XDKVP-*3 (2)	325 I	Eng	124				Furnished
267XGKVP-*5 (3)	300 I	Eng	148				Furnished	267XGKVP-*3 (3)	300 I	Eng	148				Furnished
267XMKVP-*5 (4)	265 I	Eng	185				Furnished	267XMKVP-*3 (4)	265 I	Eng	185				Furnished
267XSKVP-*5 (5)	250 I	Eng	231				Furnished	267XSKVP-*3 (5)	250 I	Eng	231				Furnished
287GBKVP-*5 (13)	300 C	Eng	86				Furnished	287GBKVP-*5 (13)	300 C	Eng	86				Furnished
287GBKVP-*8 (13)	300 C	Eng	81				Furnished	287GBKVP-*8 (13)	300 C	Eng	81				Furnished
287GCKVP-*5 (13)	390 C	Eng	104				Furnished	287GCKVP-*5 (13)	390 C	Eng	104				Furnished
287GCKVP-*8 (13)	390 C	Eng	98				Furnished	287GCKVP-*8 (13)	390 C	Eng	98				Furnished
287GDKVP-*5 (13)	390 C	Eng	124				Furnished	287GDKVP-*5 (13)	390 C	Eng	124				Furnished
287GDKVP-*8 (13)	390 C	Eng	117				Furnished	287GDKVP-*8 (13)	390 C	Eng	117				Furnished
287GGKVP-*5 (13)	360 C	Eng	148				Furnished	287GGKVP-*5 (13)	360 C	Eng	148				Furnished
287GGKVP-*8 (13)	360 C	Eng	146				Furnished	287GGKVP-*8 (13)	360 C	Eng	146				Furnished
287GKKVP-*5 (13)	340 C	Eng	165				Furnished	287GKKVP-*5 (13)	340 C	Eng	165				Furnished
287GMKVP-*5 (13)	318 C	Eng	185				Furnished	287GMKVP-*5 (13)	318 C	Eng	185				Furnished
287GMKVP-*8 (13)	318 C	Eng	171				Furnished	287GMKVP-*8 (13)	318 C	Eng	171				Furnished
287GPKVP-*5 (13)	290 C	Eng	207				Furnished	287GPKVP-*5 (13)	290 C	Eng	207				Furnished
287GPKVP-*8 (13)	290 C	Eng	190				Furnished	287GPKVP-*8 (13)	290 C	Eng	190				Furnished
287GSKVP-*8 (13)	265 C	Eng	212				Furnished	287GSKVP-*8 (13)	265 C	Eng	212				Furnished
877XAKVP-*5 (12)	598 C	Eng	117				Furnished	877XAKVP-*3 (12)	598 C	Eng	117				Furnished
877XBKVP-*5 (12)	560 C	Eng	125				Furnished	877XBKVP-*3 (12)	560 C	Eng	125				Furnished
877XCKVP-*5 (12)	522 C	Eng	134				Furnished	877XCKVP-*3 (12)	522 C	Eng	134				Furnished
877XDKVP-*5 (12)	490 C	Eng	143				Furnished	877XDKVP-*3 (12)	490 C	Eng	143				Furnished
877XEKVP-*5 (12)	432 C	Eng	162				Furnished	877XEKVP-*3 (12)	432 C	Eng	162				Furnished
877XFKVP-*5 (12)	380 C	Eng	184				Furnished	877XFKVP-*3 (12)	380 C	Eng	184				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1361
(2) Input Gear Part No. 5-P-1362
(3) Input Gear Part No. 5-P-1363
(4) Input Gear Part No. 5-P-1367
(5) Input Gear Part No. 5-P-1368
(6) Input Gear Part No. 5-P-1402
(7) Input Gear Part No. 5-P-1413
(8) Input Gear Part No. 5-P-1414
(9) Input Gear Part No. 5-P-1415
(10) Input Gear Part No. 5-P-1416
(11) Input Gear Part No. 5-P-1419
(12) Input Gear Part No. 5-P-1468
(13) Input Gear Part No. 5-P-1493

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

CX31

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
88 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7207" (43.7060MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 10-BOLT Opening Gear FORWARD of Centerline
88 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7207" (43.7060MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
280GBKVP-*5 (13)	300 C	Eng	86		Furnished			280GBKVP-*5 (13)	300 C	Eng	86		Furnished		
280GBKVP-*8 (13)	300 C	Eng	81		Furnished			280GBKVP-*8 (13)	300 C	Eng	81		Furnished		
280GCKVP-*5 (13)	390 C	Eng	104		Furnished			280GCKVP-*5 (13)	390 C	Eng	104		Furnished		
280GCKVP-*8 (13)	390 C	Eng	98		Furnished			280GCKVP-*8 (13)	390 C	Eng	98		Furnished		
280GDKVP-*5 (13)	390 C	Eng	124		Furnished			280GDKVP-*5 (13)	390 C	Eng	124		Furnished		
280GDKVP-*8 (13)	390 C	Eng	117		Furnished			280GDKVP-*8 (13)	390 C	Eng	117		Furnished		
280GGKVP-*5 (13)	360 C	Eng	148		Furnished			280GGKVP-*5 (13)	360 C	Eng	148		Furnished		
280GGKVP-*8 (13)	360 C	Eng	146		Furnished			280GGKVP-*8 (13)	360 C	Eng	146		Furnished		
280GKKVP-*5 (13)	340 C	Eng	165		Furnished			280GKKVP-*5 (13)	340 C	Eng	165		Furnished		
280GMKVP-*5 (13)	318 C	Eng	185		Furnished			280GMKVP-*5 (13)	318 C	Eng	185		Furnished		
280GMKVP-*8 (13)	318 C	Eng	171		Furnished			280GMKVP-*8 (13)	318 C	Eng	171		Furnished		
280GPKVP-*5 (13)	290 C	Eng	207		Furnished			280GPKVP-*5 (13)	290 C	Eng	207		Furnished		
280GPKVP-*8 (13)	290 C	Eng	190		Furnished			280GPKVP-*8 (13)	290 C	Eng	190		Furnished		
280GSKVP-*8 (13)	265 C	Eng	212		Furnished			280GSKVP-*8 (13)	265 C	Eng	212		Furnished		
870XAKVP-*5 (12)	598 C	Eng	117		Furnished			870XAKVP-*3 (12)	598 C	Eng	117		Furnished		
870XBKVP-*5 (12)	560 C	Eng	125		Furnished			870XBKVP-*3 (12)	560 C	Eng	125		Furnished		
870XCKVP-*5 (12)	522 C	Eng	134		Furnished			870XCKVP-*3 (12)	522 C	Eng	134		Furnished		
870XDKVP-*5 (12)	490 C	Eng	143		Furnished			870XDKVP-*3 (12)	490 C	Eng	143		Furnished		
870XEKVP-*5 (12)	432 C	Eng	162		Furnished			870XEKVP-*3 (12)	432 C	Eng	162		Furnished		
870XFKVP-*5 (12)	380 C	Eng	184		Furnished			870XFKVP-*3 (12)	380 C	Eng	184		Furnished		

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(12) Input Gear Part No. 5-P-1468
(13) Input Gear Part No. 5-P-1493

Caterpillar

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

CX31

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 08-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - POWERSHIFT (HYDRAULIC)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
590XRLAW-*1**	650 C	Opp	125			Furnished	

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

Caterpillar

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

CX28

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
79 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7207" (43.7060MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 10-BOLT Opening Gear FORWARD of Centerline
79 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7207" (43.7060MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - CONSTANT MESH

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
267SBKVP-*5 (6)	402 I	Eng	94			Furnished		267SBKVP-*3 (6)	402 I	Eng	94			Furnished	
267SDKVP-*5 (7)	390 I	Eng	112			Furnished		267SDKVP-*3 (7)	390 I	Eng	112			Furnished	
267SGKVP-*5 (8)	360 I	Eng	133			Furnished		267SGKVP-*3 (8)	360 I	Eng	133			Furnished	
267SMKVP-*5 (9)	318 I	Eng	167			Furnished		267SMKVP-*3 (9)	318 I	Eng	167			Furnished	
267SSKVP-*5 (10)	265 I	Eng	207			Furnished		267SSKVP-*3 (10)	265 I	Eng	207			Furnished	
267XBKVP-*5 (1)	335 I	Eng	94			Furnished		267XBKVP-*3 (1)	335 I	Eng	94			Furnished	
267XCKVP-*5 (11)	330 I	Eng	99			Furnished		267XCKVP-*3 (11)	330 I	Eng	99			Furnished	
267XDKVP-*5 (2)	325 I	Eng	112			Furnished		267XDKVP-*3 (2)	325 I	Eng	112			Furnished	
267XGKVP-*5 (3)	300 I	Eng	133			Furnished		267XGKVP-*3 (3)	300 I	Eng	133			Furnished	
267XMKVP-*5 (4)	265 I	Eng	167			Furnished		267XMKVP-*3 (4)	265 I	Eng	166			Furnished	
267XSKVP-*5 (5)	250 I	Eng	207			Furnished		267XSKVP-*3 (5)	250 I	Eng	207			Furnished	
287GBKVP-*5 (13)	300 C	Eng	77			Furnished		287GBKVP-*3 (13)	300 C	Eng	77			Furnished	
287GBKVP-*8 (13)	300 C	Eng	73			Furnished		287GBKVP-*8 (13)	300 C	Eng	73			Furnished	
287GCKVP-*5 (13)	390 C	Eng	93			Furnished		287GCKVP-*3 (13)	390 C	Eng	93			Furnished	
287GCKVP-*8 (13)	390 C	Eng	88			Furnished		287GCKVP-*8 (13)	390 C	Eng	88			Furnished	
287GDKVP-*5 (13)	390 C	Eng	112			Furnished		287GDKVP-*3 (13)	390 C	Eng	112			Furnished	
287GDKVP-*8 (13)	390 C	Eng	105			Furnished		287GDKVP-*8 (13)	390 C	Eng	105			Furnished	
287GGKVP-*5 (13)	360 C	Eng	133			Furnished		287GGKVP-*3 (13)	360 C	Eng	133			Furnished	
287GGKVP-*8 (13)	360 C	Eng	131			Furnished		287GGKVP-*8 (13)	360 C	Eng	131			Furnished	
287GKKVP-*5 (13)	340 C	Eng	149			Furnished		287GKKVP-*3 (13)	340 C	Eng	149			Furnished	
287GMKVP-*5 (13)	318 C	Eng	166			Furnished		287GMKVP-*3 (13)	318 C	Eng	185			Furnished	
287GMKVP-*8 (13)	318 C	Eng	154			Furnished		287GMKVP-*8 (13)	318 C	Eng	154			Furnished	
287GPKVP-*5 (13)	290 C	Eng	186			Furnished		287GPKVP-*3 (13)	290 C	Eng	186			Furnished	
287GPKVP-*8 (13)	290 C	Eng	171			Furnished		287GPKVP-*8 (13)	290 C	Eng	171			Furnished	
287GSKVP-*5 (13)	265 C	Eng	207			Furnished		287GSKVP-*3 (13)	265 C	Eng	207			Furnished	
287GSKVP-*8 (13)	265 C	Eng	190			Furnished		287GSKVP-*8 (13)	265 C	Eng	190			Furnished	
877XAKVP-*5 (12)	476 C	Eng	105			Furnished		877XAKVP-*3 (12)	476 C	Eng	105			Furnished	
877XBKVP-*5 (12)	476 C	Eng	105			Furnished		877XBKVP-*3 (12)	442 C	Eng	113			Furnished	
877XCKVP-*5 (12)	417 C	Eng	120			Furnished		877XCKVP-*3 (12)	417 C	Eng	120			Furnished	
877XDKVP-*5 (12)	391 C	Eng	128			Furnished		877XDKVP-*3 (12)	391 C	Eng	128			Furnished	
877XEKVP-*5 (12)	345 C	Eng	145			Furnished		877XEKVP-*3 (12)	345 C	Eng	145			Furnished	
877XFKVP-*5 (12)	303 C	Eng	165			Furnished		877XFKVP-*3 (12)	303 C	Eng	165			Furnished	

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1361
(2) Input Gear Part No. 5-P-1362
(3) Input Gear Part No. 5-P-1363
(4) Input Gear Part No. 5-P-1367
(5) Input Gear Part No. 5-P-1368
(6) Input Gear Part No. 5-P-1402
(7) Input Gear Part No. 5-P-1413
(8) Input Gear Part No. 5-P-1414
(9) Input Gear Part No. 5-P-1415
(10) Input Gear Part No. 5-P-1416
(11) Input Gear Part No. 5-P-1419
(12) Input Gear Part No. 5-P-1468
(13) Input Gear Part No. 5-P-1493

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

CX28

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 10-BOLT Opening Gear FORWARD of Centerline
79 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7207" (43.7060MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 10-BOLT Opening Gear FORWARD of Centerline
79 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.7207" (43.7060MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - CONSTANT MESH															
877XGFJP-*5 (12)	267 C	Eng	187				Furnished	877XGFJP-*3 (12)	267 C	Eng	187				Furnished
877XHKVP-*5 (12)	251 C	Eng	199				Furnished	877XHKVP-*3 (12)	251 C	Eng	199				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
280GBKVP-*5 (13)	300 C	Eng	77				Furnished	280GBKVP-*3 (13)	300 C	Eng	77				Furnished
280GBKVP-*8 (13)	300 C	Eng	73				Furnished	280GBKVP-*8 (13)	300 C	Eng	73				Furnished
280GCKVP-*5 (13)	390 C	Eng	93				Furnished	280GCKVP-*3 (13)	390 C	Eng	93				Furnished
280GCKVP-*8 (13)	390 C	Eng	88				Furnished	280GCKVP-*8 (13)	390 C	Eng	88				Furnished
280GDKVP-*5 (13)	390 C	Eng	112				Furnished	280GDKVP-*3 (13)	390 C	Eng	112				Furnished
280GDKVP-*8 (13)	390 C	Eng	105				Furnished	280GDKVP-*8 (13)	390 C	Eng	105				Furnished
280GGKVP-*5 (13)	360 C	Eng	133				Furnished	280GGKVP-*3 (13)	360 C	Eng	133				Furnished
280GGKVP-*8 (13)	360 C	Eng	131				Furnished	280GGKVP-*8 (13)	360 C	Eng	131				Furnished
280GKKVP-*5 (13)	340 C	Eng	149				Furnished	280GKKVP-*3 (13)	340 C	Eng	149				Furnished
280GMKVP-*5 (13)	318 C	Eng	166				Furnished	280GMKVP-*3 (13)	318 C	Eng	185				Furnished
280GMKVP-*8 (13)	318 C	Eng	154				Furnished	280GMKVP-*8 (13)	318 C	Eng	154				Furnished
280GPKVP-*5 (13)	290 C	Eng	186				Furnished	280GPKVP-*3 (13)	290 C	Eng	186				Furnished
280GPKVP-*8 (13)	290 C	Eng	171				Furnished	280GPKVP-*8 (13)	290 C	Eng	171				Furnished
280GSKVP-*5 (13)	265 C	Eng	207				Furnished	280GSKVP-*3 (13)	265 C	Eng	207				Furnished
280GSKVP-*8 (13)	265 C	Eng	190				Furnished	280GSKVP-*8 (13)	265 C	Eng	190				Furnished
870XAKVP-*5 (12)	476 C	Eng	105				Furnished	870XAKVP-*3 (12)	476 C	Eng	105				Furnished
870XBKVP-*5 (12)	442 C	Eng	113				Furnished	870XBKVP-*3 (12)	442 C	Eng	113				Furnished
870XCKVP-*5 (12)	417 C	Eng	120				Furnished	870XCKVP-*3 (12)	417 C	Eng	120				Furnished
870XDKVP-*5 (12)	391 C	Eng	128				Furnished	870XDKVP-*3 (12)	391 C	Eng	128				Furnished
870XEKVP-*5 (12)	345 C	Eng	145				Furnished	870XEKVP-*3 (12)	345 C	Eng	145				Furnished
870XFKVP-*5 (12)	267 C	Eng	187				Furnished	870XFKVP-*3 (12)	303 C	Eng	165				Furnished
870XGKVP-*5 (12)	267 C	Eng	187				Furnished	870XGKVP-*3 (12)	267 C	Eng	187				Furnished
870XHKVP-*5 (12)	251 C	Eng	199				Furnished	870XHKVP-*3 (12)	251 C	Eng	199				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(12) Input Gear Part No. 5-P-1468
(13) Input Gear Part No. 5-P-1493

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

CX28

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 08-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - POWERSHIFT (HYDRAULIC)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
590XRLAW-*1**	650 C	Opp	125			Furnished	

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

Caterpillar

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

CX35

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 10-BOLT Opening Gear FORWARD of Centerline 100 Teeth - R.H. HELIX **PITCH LINE TO APERTURE FACE:** 1.7207" (43.7060MM)	**TRANSMISSION GEAR DATA:** R.S. 10-BOLT Opening Gear FORWARD of Centerline 100 Teeth - R.H. HELIX **PITCH LINE TO APERTURE FACE:** 1.7207" (43.7060MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - CONSTANT MESH															
267SBKVP-*5 (5)	402 I	Eng	118				Furnished	267SBKVP-*3 (5)	402 I	Eng	118				Furnished
267SDKVP-*5 (6)	390 I	Eng	141				Furnished	267SDKVP-*3 (6)	390 I	Eng	141				Furnished
267SGKVP-*5 (7)	360 I	Eng	168				Furnished	267SGKVP-*3 (7)	360 I	Eng	168				Furnished
267SMKVP-*5 (8)	318 I	Eng	210				Furnished	267SMKVP-*3 (8)	318 I	Eng	210				Furnished
267XBKVP-*5 (1)	335 I	Eng	118				Furnished	267XBKVP-*3 (1)	335 I	Eng	118				Furnished
267XCKVP-*5 (9)	330 I	Eng	126				Furnished	267XCKVP-*3 (9)	330 I	Eng	126				Furnished
267XDKVP-*5 (2)	325 I	Eng	141				Furnished	267XDKVP-*3 (2)	325 I	Eng	141				Furnished
267XGKVP-*5 (3)	300 I	Eng	168				Furnished	267XGKVP-*3 (3)	300 I	Eng	168				Furnished
267XMKVP-*5 (4)	265 I	Eng	210				Furnished	267XMKVP-*3 (4)	265 I	Eng	210				Furnished
287GBKVP-*5 (11)	300 C	Eng	98				Furnished	287GBKVP-*3 (11)	300 C	Eng	98				Furnished
287GBKVP-*8 (11)	300 C	Eng	92				Furnished	287GBKVP-*8 (11)	300 C	Eng	92				Furnished
287GCKVP-*5 (11)	390 C	Eng	118				Furnished	287GCKVP-*3 (11)	390 C	Eng	118				Furnished
287GCKVP-*8 (11)	390 C	Eng	111				Furnished	287GCKVP-*8 (11)	390 C	Eng	111				Furnished
287GDKVP-*5 (11)	390 C	Eng	141				Furnished	287GDKVP-*3 (11)	390 C	Eng	141				Furnished
287GDKVP-*8 (11)	390 C	Eng	132				Furnished	287GDKVP-*8 (11)	390 C	Eng	132				Furnished
287GGKVP-*5 (11)	360 C	Eng	168				Furnished	287GGKVP-*3 (11)	360 C	Eng	168				Furnished
287GGKVP-*8 (11)	360 C	Eng	165				Furnished	287GGKVP-*8 (11)	360 C	Eng	165				Furnished
287GKKVP-*5 (11)	340 C	Eng	188				Furnished	287GKKVP-*3 (11)	340 C	Eng	188				Furnished
287GMKVP-*5 (11)	318 C	Eng	210				Furnished	287GMKVP-*3 (11)	318 C	Eng	210				Furnished
287GMKVP-*8 (11)	318 C	Eng	194				Furnished	287GMKVP-*8 (11)	318 C	Eng	194				Furnished
287GPKVP-*8 (11)	290 C	Eng	216				Furnished	287GPKVP-*8 (11)	290 C	Eng	216				Furnished
877XAKVP-*5 (10)	526 C	Eng	133				Furnished	877XAKVP-*3 (10)	526 C	Eng	133				Furnished
877XBKVP-*5 (10)	493 C	Eng	142				Furnished	877XBKVP-*3 (10)	493 C	Eng	142				Furnished
877XCKVP-*5 (10)	461 C	Eng	152				Furnished	877XCKVP-*3 (10)	461 C	Eng	152				Furnished
877XDKVP-*5 (10)	432 C	Eng	162				Furnished	877XDKVP-*3 (10)	432 C	Eng	162				Furnished
877XEKVP-*5 (10)	380 C	Eng	184				Furnished	877XEKVP-*3 (10)	380 C	Eng	184				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
280GBKVP-*5 (11)	300 C	Eng	98				Furnished	280GBKVP-*3 (11)	300 C	Eng	98				Furnished
280GBKVP-*8 (11)	300 C	Eng	92				Furnished	280GBKVP-*8 (11)	300 C	Eng	92				Furnished
280GCKVP-*5 (11)	390 C	Eng	118				Furnished	280GCKVP-*3 (11)	390 C	Eng	118				Furnished
280GCKVP-*8 (11)	390 C	Eng	111				Furnished	280GCKVP-*8 (11)	390 C	Eng	111				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1361
(2) Input Gear Part No. 5-P-1362
(3) Input Gear Part No. 5-P-1363
(4) Input Gear Part No. 5-P-1367
(5) Input Gear Part No. 5-P-1402
(6) Input Gear Part No. 5-P-1413
(7) Input Gear Part No. 5-P-1414
(8) Input Gear Part No. 5-P-1415
(9) Input Gear Part No. 5-P-1419
(10) Input Gear Part No. 5-P-1468
(11) Input Gear Part No. 5-P-1493

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

CX35

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 10-BOLT Opening Gear FORWARD of Centerline 100 Teeth - R.H. HELIX **PITCH LINE TO APERTURE FACE:** 1.7207" (43.7060MM)	**TRANSMISSION GEAR DATA:** R.S. 10-BOLT Opening Gear FORWARD of Centerline 100 Teeth - R.H. HELIX **PITCH LINE TO APERTURE FACE:** 1.7207" (43.7060MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
280GDKVP-*5 (11)	390 C	Eng	141		Furnished			280GDKVP-*3 (11)	390 C	Eng	141		Furnished		
280GDKVP-*8 (11)	390 C	Eng	132		Furnished			280GDKVP-*8 (11)	390 C	Eng	132		Furnished		
280GGKVP-*5 (11)	360 C	Eng	168		Furnished			280GGKVP-*3 (11)	360 C	Eng	168		Furnished		
280GGKVP-*8 (11)	360 C	Eng	165		Furnished			280GGKVP-*8 (11)	360 C	Eng	165		Furnished		
280GKKVP-*5 (11)	340 C	Eng	188		Furnished			280GKKVP-*3 (11)	340 C	Eng	188		Furnished		
280GMKVP-*5 (11)	318 C	Eng	210		Furnished			280GMKVP-*3 (11)	318 C	Eng	210		Furnished		
280GMKVP-*8 (11)	318 C	Eng	194		Furnished			280GMKVP-*8 (11)	318 C	Eng	194		Furnished		
280GPKVP-*8 (11)	290 C	Eng	216		Furnished			280GPKVP-*8 (11)	290 C	Eng	216		Furnished		
870XAKVP-*5 (10)	526 C	Eng	133		Furnished			870XAKVP-*3 (10)	526 C	Eng	133		Furnished		
870XBKVP-*5 (10)	493 C	Eng	142		Furnished			870XBKVP-*3 (10)	493 C	Eng	142		Furnished		
870XCKVP-*5 (10)	461 C	Eng	152		Furnished			870XCKVP-*3 (10)	461 C	Eng	152		Furnished		
870XDKVP-*5 (10)	432 C	Eng	162		Furnished			870XDKVP-*3 (10)	432 C	Eng	162		Furnished		
870XEKVP-*5 (10)	380 C	Eng	184		Furnished			870XEKVP-*3 (10)	380 C	Eng	184		Furnished		

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(10) Input Gear Part No. 5-P-1468
(11) Input Gear Part No. 5-P-1493

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

CX35

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 08-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - POWERSHIFT (HYDRAULIC)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
590XRLAW-*1**	650 C	Opp	125			Furnished	

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

Caterpillar

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

TH48FT-E70 (OFF Highway Automatic)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
57 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7850" (19.9300MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 08-BOLT Opening Gear FORWARD of Centerline
57 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7850" (19.9300MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
823XBAHX-*5 (8)	500 I	Opp	109				Furnished	823XBAHX-*3 (8)	500 I	Opp	109				Furnished
823XDAHX-*5 (10)	500 I	Opp	129				Furnished	823XDAHX-*3 (8)	500 I	Opp	109				Furnished
823XGAHX-*5 (11)	500 I	Opp	141				Furnished	823XGAHX-*3 (11)	500 I	Opp	141				Furnished
823XJAHX-*5 (9)	500 I	Opp	165				Furnished	823XJAHX-*3 (9)	500 I	Opp	165				Furnished
823XMAHX-*5 (7)	500 I	Opp	194				Furnished	823XMAHX-*3 (7)	500 I	Opp	194				Furnished
880XBAHX-*5 (1)	500 I	Opp	109				Furnished	880XBAHX-*3 (1)	500 I	Opp	109				Furnished
880XDAHX-*5 (2)	500 I	Opp	129				Furnished	880XDAHX-*3 (2)	500 I	Opp	129				Furnished
880XGAHX-*5 (5)	500 I	Opp	141				Furnished	880XGAHX-*3 (5)	500 I	Opp	141				Furnished
880XJAHX-*5 (3)	500 I	Opp	165				Furnished	880XJAHX-*3 (3)	500 I	Opp	165				Furnished
880XMAHX-*5 (4)	500 I	Opp	194				Furnished	880XMAHX-*3 (4)	500 I	Opp	194				Furnished
880XQAHX-*5 (6)	450 I	Opp	227				Furnished	880XQAHX-*3 (6)	450 I	Opp	227				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*5 (1)	500 I	Opp	109				Furnished	885XBAHX-*3 (1)	500 I	Opp	109				Furnished
885XGAHX-*5 (5)	500 I	Opp	141				Furnished	885XGAHX-*3 (5)	500 I	Opp	141				Furnished
885XJAHX-*5 (3)	500 I	Opp	165				Furnished	885XJAHX-*3 (3)	500 I	Opp	165				Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1100
(2) Input Gear Part No. 5-P-1101
(3) Input Gear Part No. 5-P-1102
(4) Input Gear Part No. 5-P-1103
(5) Input Gear Part No. 5-P-1135
(6) Input Gear Part No. 5-P-1385
(7) Input Gear Part No. 5-P-283
(8) Input Gear Part No. 5-P-285
(9) Input Gear Part No. 5-P-325
(10) Input Gear Part No. 5-P-971
(11) Input Gear Part No. 5-P-980

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

TH48FT-E70 (OFF Highway Automatic)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
56 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7677" (19.5000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
823XBAHX-*3 (8)	500 I	Eng	109				Furnished								
823XDAHX-*3 (10)	500 I	Eng	129				Furnished								
823XGAHX-*3 (11)	500 I	Eng	141				Furnished								
823XJAHX-*3 (9)	500 I	Eng	165				Furnished								
823XMAHX-*3 (7)	500 I	Eng	194				Furnished								
880XBAHX-*3 (1)	500 I	Eng	109				Furnished								
880XDAHX-*3 (2)	500 I	Eng	129				Furnished								
880XGAHX-*3 (5)	500 I	Eng	141				Furnished								
880XJAHX-*3 (3)	500 I	Eng	165				Furnished								
880XMAHX-*3 (4)	500 I	Eng	194				Furnished								
880XQAHX-*3 (6)	450 I	Eng	227				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (1)	500 I	Eng	109				Furnished								
885XGAHX-*3 (5)	500 I	Eng	141				Furnished								
885XJAHX-*3 (3)	500 I	Eng	165				Furnished								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1100
(2) Input Gear Part No. 5-P-1101
(3) Input Gear Part No. 5-P-1102
(4) Input Gear Part No. 5-P-1103
(5) Input Gear Part No. 5-P-1135
(6) Input Gear Part No. 5-P-1385
(7) Input Gear Part No. 5-P-283
(8) Input Gear Part No. 5-P-285
(9) Input Gear Part No. 5-P-325
(10) Input Gear Part No. 5-P-971
(11) Input Gear Part No. 5-P-980

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TH48FT-E80 (OFF Highway Automatic)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
57 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7850" (19.9300MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 08-BOLT Opening Gear FORWARD of Centerline
57 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7850" (19.9300MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
823XBAHX-*5 (8)	500 I	Opp	109				Furnished	823XBAHX-*3 (8)	500 I	Opp	109				Furnished
823XDAHX-*5 (10)	500 I	Opp	129				Furnished	823XDAHX-*3 (10)	500 I	Opp	129				Furnished
823XGAHX-*5 (11)	500 I	Opp	141				Furnished	823XGAHX-*3 (11)	500 I	Opp	141				Furnished
823XJAHX-*5 (9)	500 I	Opp	165				Furnished	823XJAHX-*3 (9)	500 I	Opp	165				Furnished
823XMAHX-*5 (7)	500 I	Opp	194				Furnished	823XMAHX-*3 (7)	500 I	Opp	194				Furnished
880XBAHX-*5 (1)	500 I	Opp	109				Furnished	880XBAHX-*3 (1)	500 I	Opp	109				Furnished
880XDAHX-*5 (2)	500 I	Opp	129				Furnished	880XDAHX-*3 (2)	500 I	Opp	129				Furnished
880XGAHX-*5 (5)	500 I	Opp	141				Furnished	880XGAHX-*3 (5)	500 I	Opp	141				Furnished
880XJAHX-*5 (3)	500 I	Opp	165				Furnished	880XJAHX-*3 (3)	500 I	Opp	165				Furnished
880XMAHX-*5 (4)	500 I	Opp	194				Furnished	880XMAHX-*3 (4)	500 I	Opp	194				Furnished
880XQAHX-*5 (6)	450 I	Opp	227				Furnished	880XQAHX-*3 (6)	450 I	Opp	227				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*5 (1)	500 I	Opp	109				Furnished	885XBAHX-*3 (1)	500 I	Opp	109				Furnished
885XGAHX-*5 (5)	500 I	Opp	141				Furnished	885XGAHX-*3 (5)	500 I	Opp	141				Furnished
885XJAHX-*5 (3)	500 I	Opp	165				Furnished	885XJAHX-*3 (3)	500 I	Opp	165				Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1100
(2) Input Gear Part No. 5-P-1101
(3) Input Gear Part No. 5-P-1102
(4) Input Gear Part No. 5-P-1103
(5) Input Gear Part No. 5-P-1135
(6) Input Gear Part No. 5-P-1385
(7) Input Gear Part No. 5-P-283
(8) Input Gear Part No. 5-P-285
(9) Input Gear Part No. 5-P-325
(10) Input Gear Part No. 5-P-971
(11) Input Gear Part No. 5-P-980

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Chelsea Products Division
Olive Branch, MS 38654 USA

TH48FT-E80 (OFF Highway Automatic)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
51 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7846" (19.9000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
823XBAHX-*3 (8)	500 I	Eng	109				Furnished								
823XDAHX-*3 (10)	500 I	Eng	129				Furnished								
823XGAHX-*3 (11)	500 I	Eng	141				Furnished								
823XJAHX-*3 (9)	500 I	Eng	165				Furnished								
823XMAHX-*3 (7)	500 I	Eng	194				Furnished								
880XBAHX-*3 (1)	500 I	Eng	109				Furnished								
880XDAHX-*3 (2)	500 I	Eng	129				Furnished								
880XGAHX-*3 (5)	500 I	Eng	141				Furnished								
880XJAHX-*3 (3)	500 I	Eng	165				Furnished								
880XMAHX-*3 (4)	500 I	Eng	194				Furnished								
880XQAHX-*3 (6)	450 I	Eng	227				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (1)	500 I	Eng	109				Furnished								
885XGAHX-*3 (5)	500 I	Eng	141				Furnished								
885XJAHX-*3 (3)	500 I	Eng	165				Furnished								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1100
(2) Input Gear Part No. 5-P-1101
(3) Input Gear Part No. 5-P-1102
(4) Input Gear Part No. 5-P-1103
(5) Input Gear Part No. 5-P-1135
(6) Input Gear Part No. 5-P-1385
(7) Input Gear Part No. 5-P-283
(8) Input Gear Part No. 5-P-285
(9) Input Gear Part No. 5-P-325
(10) Input Gear Part No. 5-P-971
(11) Input Gear Part No. 5-P-980

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Caterpillar Notes

CAT-1

1. See Front Section of Caterpillar Index for Pressure Hose Chart Requirements (SK-414) for Side Mount Applications. Rear Mounts come with the Hose Supplied.
2. Powershift PTO Units Require a Pressure Regulating Solenoid and are Shipped with Units Ordered for this Transmission (”LA” or “KV” input gear).
3. The Internal Drive Shaft for the Rear Mount Opening is Optional from Caterpillar and Must be Specified when the Transmission is Ordered.
4. The “XV” Output for the CAT-D Rear Mount is Rated at Both 800 Lbs.ft Intermittent and 800 Lbs.ft Continuous. This Output is not Derated for Continuous Operation.
5. The Transmission Filter may Interfere with Large Pumps Mounted to PTOs at the 8 o’clock (Left Side) Position. A Remote Mount Filter Kit can be ordered from Caterpillar if this Option is Required. Large Pumps will also Require the Use of the Rear Pressure Port for Oil Supply Requirements. (See Front Section for Location and Hose Requirements, SK-414)
6. The 267 Series in the “5” Arrangement may have possible interference between the lube fitting and torque converter housing. Make sure the fitting is screwed in completely before the PTO is torqued to proper specifications. Verify that the fitting is not making contact with the transmission housing. A “3” arrangement with SAE “B” output must either be “XQ” or “AK” in order to be used. The “XK” output can not be used due to interference between flange and pressure lube fitting.

CAT-2

1. See Front Section of Caterpillar Index for Pressure Hose Chart Requirements (SK-414) for Side Mount Applications. Rear Mount Units come with Hose Supplied.
2. Powershift PTO Units Require a Pressure Regulating Solenoid and are Shipped with Units Ordered for this Transmission (”LA” or “KV” input gear).
3. The Internal Drive Shaft for the Rear Mount Opening is Optional from Caterpillar and Must be Specified when the Transmission is Ordered.
4. The “XV” Output for the CAT-D Rear Mount is Limited to 667 Lbs.ft Intermittent Torque Due to Transmission Load Limits. All Other Output Options are Limited by the Hydraulic Pump Output Shaft Spline.
5. Large Pumps on the Left Hand Side (LHS) may Require the Use of the Rear Pressure Port for Oil Supply Requirements. If the Left Hand Side (LHS) PTO opening is used, the transmission dipstick should be relocated to the Right Hand Side (RHS).
6. The “3” Arrangement with SAE “B” Output Must Either be “XQ” or “AK”. The “XK” Output can Not be Used Due to Interference Between Flange and Pressure Lube Fitting. On the LHS, if the 267 Series “5” arrangement is used, pump clearance is severely limited due to position of the transmission valve bank, the “3” arrangement offers much more clearance.
7. 859, 867, 277, and 280 Series will not fit and/or allow pump clearance on the Left Hand Side (LHS).

CAT-3

1. See Front Section of Caterpillar Index for Pressure Hose Chart Requirements (SK-414) for Side Mount Applications. Rear Mounts come with the Hose Supplied.
2. Powershift PTO Units Require a Pressure Regulating Solenoid and are Shipped with Units Ordered for this Transmission (”LA” or “KV” input gear).
3. The Internal Drive Shaft for the Rear Mount Opening is Optional from Caterpillar and Must be Specified when the Transmission is Ordered.
4. The “XV” Output for the CAT-D Rear Mount is Rated at Both 800 Lbs.ft Intermittent and 800 Lbs.ft Continuous. This Output is not Derated for Continuous Operation.
5. The Transmission Filter may Interfere with Large Pumps Mounted to PTOs at the 8 o’clock (Left Side) Position. A Remote Mount Filter Kit can be ordered from Caterpillar if this Option is Required. Large Pumps will also Require the Use of the Rear Pressure Port for Oil Supply Requirements. (See Front Section for Location and Hose Requirements, SK-414)
6. The 267 Series in the “5” Arrangement may have possible interference between the lube fitting and torque converter housing. Make sure the fitting is screwed in completely before the PTO is torqued to proper specifications. Verify that the fitting is not making contact with the transmission housing. A “3” arrangement with SAE “B” output must either be “XQ” or “AK” in order to be used. The “XK” output can not be used due to interference between flange and pressure lube fitting.

CAT-4

1. Left PTO drive gear inside the transmission is not installed as a standard item, Must be present to install PTO to this opening.
2. The “BOTTOM” PTO aperture is located on the RIGHT side at the 5 O’clock position. The “RIGHT” PTO aperture is located at the 3 O’clock position. And the “LEFT” PTO aperture is located at the 9 O’clock position.
3. This Transmission is Not a True Automatic but the 56 and 57 Tooth PTO Drive Gears are Turning All the Time, Therefore Powershift PTO Models and Non-Shifting or Constant Mesh PTO Models are Recommended.
4. The 56 and 57 Tooth PTO Drive Gears in this Transmission are Idler Gears, Therefore the PTO Output Speeds are the Same on All Three (3) Openings.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Caterpillar Notes

CAT-5

1. This Transmission is Not a True Automatic but the 51 and 57 Tooth PTO Drive Gears are Turning All the Time, Therefore Powershift PTO Models and Non-Shifting or Constant Mesh PTO Models are Recommended.
2. The 51 and 57 Tooth PTO Drive Gears in this Transmission are Idler Gears, Therefore the PTO Output Speeds are the Same on All Three (3) Openings.
3. Left PTO drive gear inside the transmission is not installed as a standard item, and must be present to install PTO to this opening.

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Olive Branch, MS 38654 USA

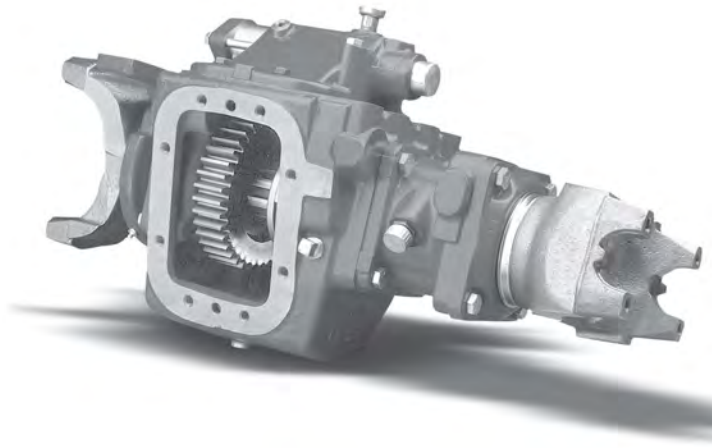
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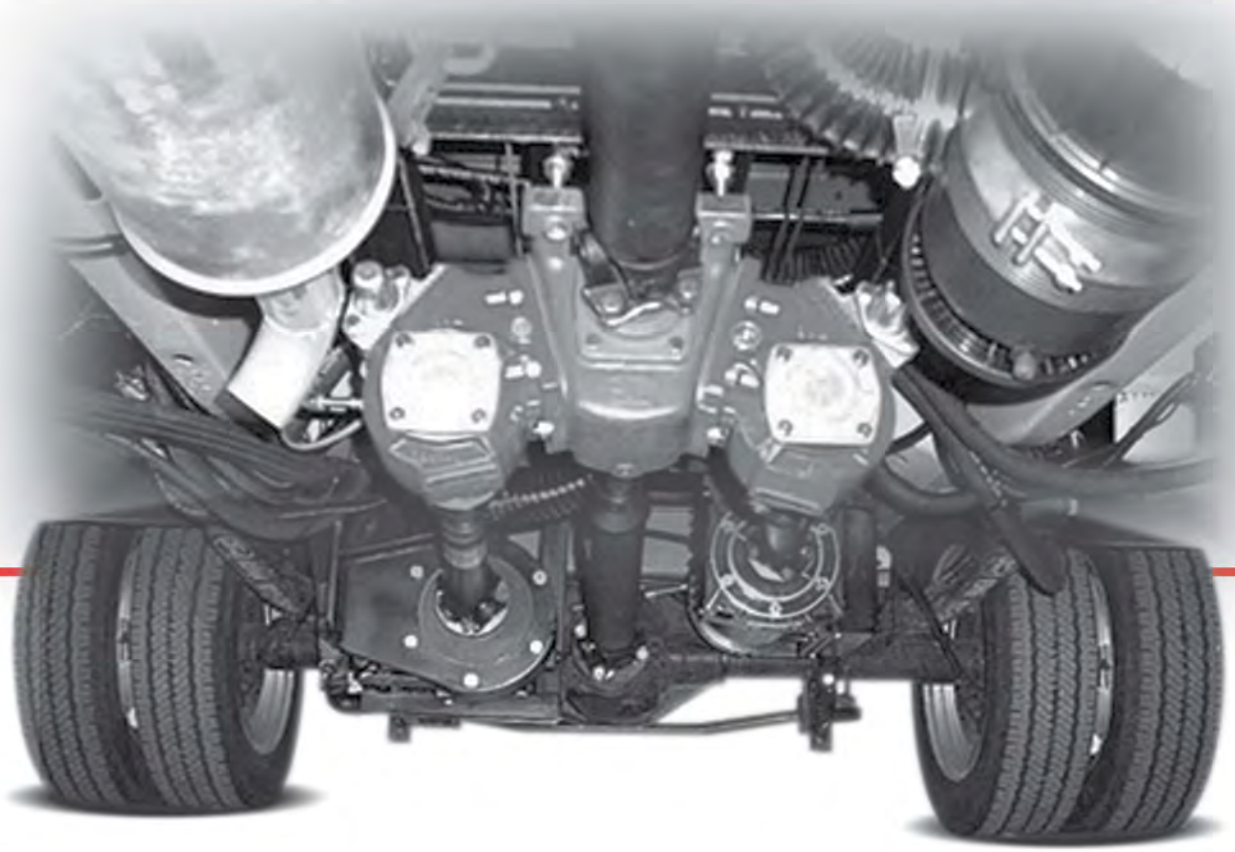


Caterpillar

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Chelsea Products Division
Olive Branch, MS 38654 USA

CHELSEA





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Chelsea Products Division
Olive Branch, MS 38654 USA

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
912 AH (Uses 8-Bolt PTOs)	CHL-3	1	L39-R39
912 AH (Uses 8-Bolt PTOs)(Top)	CHL-3A	1	T39

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

912 AH (Uses 8-Bolt PTOs)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
39 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 08-BOLT Opening Gear FORWARD of Centerline
39 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5700MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*5	250 I	Eng	72		7-A-032(P)(26)	328564X	Furnished	221ZCAHX-*3	250 I	Eng	72		7-A-032(P)(26)	328564X	Furnished
221ZEAHX-*5	250 I	Eng	84			328564X	Furnished	221ZEAHX-*3	250 I	Eng	84			328564X	Furnished
221ZPAHX-*5	200 I	Eng	136			328564X	Furnished	221ZPAHX-*3	200 I	Eng	136			328564X	Furnished
489XFAHX-*5 (2)	250 I	Eng	101				Furnished	489XFAHX-*3 (2)	250 I	Eng	101				Furnished
489XHAHX-*5 (13)	250 I	Eng	117				Furnished	489XHAHX-*3 (13)	250 I	Eng	117				Furnished
489XLAHX-*5 (1)	250 I	Eng	130				Furnished	489XLAHX-*3 (1)	250 I	Eng	130				Furnished
489XQAHX-*5 (1)	225 I	Eng	140				Furnished	489XQAHX-*3 (1)	225 I	Eng	140				Furnished
489XRAHX-*5 (1)	225 I	Eng	162				Furnished	489XRAHX-*3 (1)	225 I	Eng	162				Furnished
489XSAHX-*5 (1)	200 I	Eng	193				Furnished	489XSAHX-*3 (1)	200 I	Eng	193				Furnished
489XUAHX-*5 (1)	195 I	Eng	230				Furnished	489XUAHX-*3 (1)	195 I	Eng	230				Furnished
489XWAHX-*5 (1)	175 I	Eng	271				Furnished	489XWAHX-*3 (1)	175 I	Eng	271				Furnished
489XXAHX-*5 (1)	140 I	Eng	321				Furnished	489XXAHX-*3 (1)	140 I	Eng	321				Furnished
680XFAHX-*5 (10)	375 I	Eng	101				Furnished	680XFAHX-*3 (10)	375 I	Eng	101				Furnished
680XHAHX-*5 (17)	375 I	Eng	117				Furnished	680XHAHX-*3 (17)	375 I	Eng	117				Furnished
680XQAHX-*5 (11)	375 I	Eng	140				Furnished	680XQAHX-*3 (11)	375 I	Eng	140				Furnished
680XRAHX-*5 (16)	350 I	Eng	162				Furnished	680XRAHX-*3 (16)	350 I	Eng	162				Furnished
680XSAHX-*5 (12)	325 I	Eng	193				Furnished	680XSAHX-*3 (12)	325 I	Eng	193				Furnished
823XBAHX-*5 (20)	750 I	Eng	69				Furnished	823XBAHX-*3 (20)	750 I	Eng	69				Furnished
823XDAHX-*5 (24)	750 I	Eng	81				Furnished	823XDAHX-*3 (24)	750 I	Eng	81				Furnished
823XGAHX-*5 (25)	750 I	Eng	88				Furnished	823XGAHX-*3 (25)	750 I	Eng	88				Furnished
823XJAHX-*5 (21)	750 I	Eng	104				Furnished	823XJAHX-*3 (21)	750 I	Eng	104				Furnished
823XMAHX-*5 (19)	650 I	Eng	122				Furnished	823XMAHX-*3 (19)	650 I	Eng	122				Furnished
823XRAHX-*5 (23)	400 I	Eng	168				Furnished	823XRAHX-*3 (23)	400 I	Eng	168				Furnished
823XTKTX-*5 (15)	350 I	Eng	204		8-A-165(26)		Furnished	823XTKTX-*3 (15)	350 I	Eng	204		8-A-165(26)		Furnished
880XBAHX-*5 (3)	500 I	Eng	69				Furnished	880XBAHX-*3 (3)	500 I	Eng	69				Furnished
880XDAHX-*5 (4)	500 I	Eng	81				Furnished	880XDAHX-*3 (4)	500 I	Eng	81				Furnished
880XGAHX-*5 (9)	500 I	Eng	88				Furnished	880XGAHX-*3 (9)	500 I	Eng	88				Furnished
880XJAHX-*5 (5)	500 I	Eng	104				Furnished	880XJAHX-*3 (5)	500 I	Eng	104				Furnished
880XMAHX-*5 (6)	500 I	Eng	122				Furnished	880XMAHX-*3 (6)	500 I	Eng	122				Furnished
880XQAHX-*5 (14)	450 I	Eng	142				Furnished	880XQAHX-*3 (14)	450 I	Eng	142				Furnished
880XRAHX-*5 (7)	400 I	Eng	168				Furnished	880XRAHX-*3 (7)	400 I	Eng	168				Furnished
880XTAHX-*5 (8)	350 I	Eng	217				Furnished	880XTAHX-*3 (8)	350 I	Eng	217				Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use 442/489 "A" or "C" ratios on Chelsea split shafts if final rotation is "ENG".

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1322
(13) Input Gear Part No. 5-P-1364
(14) Input Gear Part No. 5-P-1385
(15) Input Gear Part No. 5-P-1395
(16) Input Gear Part No. 5-P-1441
(17) Input Gear Part No. 5-P-1494
(19) Input Gear Part No. 5-P-283
(20) Input Gear Part No. 5-P-285
(21) Input Gear Part No. 5-P-325
(23) Input Gear Part No. 5-P-721
(24) Input Gear Part No. 5-P-971
(25) Input Gear Part No. 5-P-980
(26) Filler block furnished with PTO

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Olive Branch, MS 38654 USA

912 AH (Uses 8-Bolt PTOs)

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 08-BOLT Opening Gear FORWARD of Centerline 39 Teeth - SPUR **PITCH LINE TO APERTURE FACE:** 0.8100" (20.5700MM)	**TRANSMISSION GEAR DATA:** R.S. 08-BOLT Opening Gear FORWARD of Centerline 39 Teeth - SPUR **PITCH LINE TO APERTURE FACE:** 0.8100" (20.5700MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBAJX-*5 (18)	250 C	Eng	69				Furnished	282XBAJX-*3 (18)	250 C	Eng	69				Furnished
282XCAJX-*5 (18)	250 C	Eng	83				Furnished	282XCAJX-*3 (18)	250 C	Eng	83				Furnished
282XDAJX-*5 (18)	250 C	Eng	99				Furnished	282XDAJX-*3 (18)	250 C	Eng	99				Furnished
282XGAJX-*5 (18)	250 C	Eng	118				Furnished	282XGAJX-*3 (18)	250 C	Eng	118				Furnished
282XKAJX-*5 (18)	250 C	Eng	132				Furnished	282XKAJX-*3 (18)	250 C	Eng	132				Furnished
282XMAJX-*5 (18)	250 C	Eng	148				Furnished	282XMAJX-*3 (18)	250 C	Eng	148				Furnished
282XPAJX-*5 (18)	250 C	Eng	165				Furnished	282XPAJX-*3 (18)	250 C	Eng	165				Furnished
282XSAJX-*5 (18)	225 C	Eng	184				Furnished	282XSAJX-*3 (18)	225 C	Eng	184				Furnished
282XTAJX-*5 (18)	225 C	Eng	206				Furnished	282XTAJX-*3 (18)	225 C	Eng	206				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*5 (3)	500 I	Eng	69				Furnished	885XBAHX-*3 (3)	500 I	Eng	69				Furnished
885XGAHX-*5 (9)	500 I	Eng	88				Furnished	885XGAHX-*3 (9)	500 I	Eng	88				Furnished
885XJAHX-*5 (5)	500 I	Eng	104				Furnished	885XJAHX-*3 (5)	500 I	Eng	104				Furnished
885XMAHX-*5 (6)	500 I	Eng	122				Furnished	885XMAHX-*3 (6)	500 I	Eng	122				Furnished
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (22)	200 I	Eng	88	92			Furnished	348XFAHX-*5 (22)	200 I	Eng	88	92			Furnished
863XBAHX-*5	500 I	Eng	69	85			Furnished	863XBAHX-*5	500 I	Eng	69	85			Furnished
GEARED ADAPTERS															
628XAHX-4AH	250 I	Opp					Furnished	628XAHX-3AH	250 I	Opp					Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use 442/489 "A" or "C" ratios on Chelsea split shafts if final rotation is "ENG".

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(18) Input Gear Part No. 5-P-1510
(22) Input Gear Part No. 5-P-581

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

912 AH (Uses 8-Bolt PTOs)(Top)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 08-BOLT Opening Gear FORWARD of Centerline
39 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5700MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
489XFAHP-*3 (2)	250 I	Eng	101				Furnished
489XHAHP-*3 (13)	250 I	Eng	117				Furnished
489XLAHP-*3 (1)	250 I	Eng	130				Furnished
489XQAHP-*3 (1)	225 I	Eng	140				Furnished
489XRAHP-*3 (1)	225 I	Eng	162				Furnished
489XSAHP-*3 (1)	200 I	Eng	193				Furnished
489XUAHP-*3 (1)	195 I	Eng	230				Furnished
489XWAHP-*3 (1)	175 I	Eng	271				Furnished
489XXAHP-*3 (1)	140 I	Eng	321				Furnished
680XFAHP-*3 (10)	375 I	Eng	101				Furnished
680XHAHP-*3 (16)	375 I	Eng	117				Furnished
680XQAHP-*3 (11)	375 I	Eng	140				Furnished
680XRAHP-*3 (15)	350 I	Eng	350				Furnished
680XSAHP-*3 (12)	325 I	Eng	193				Furnished
880XBAHP-*3 (3)	500 I	Eng	69				Furnished
880XDAHP-*3 (4)	500 I	Eng	81				Furnished
880XGAHP-*3 (9)	500 I	Eng	88				Furnished
880XJAHP-*3 (5)	500 I	Eng	104				Furnished
880XMAHP-*3 (6)	500 I	Eng	122				Furnished
880XQAHP-*3 (14)	450 I	Eng	142				Furnished
880XRAHP-*3 (7)	400 I	Eng	168				Furnished
880XTAHP-*3 (8)	350 I	Eng	217				Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use 442/489 "A" or "C" ratios on Chelsea split shafts if final rotation is "ENG".

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1322
(13) Input Gear Part No. 5-P-1364
(14) Input Gear Part No. 5-P-1385
(15) Input Gear Part No. 5-P-1441
(16) Input Gear Part No. 5-P-1494

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Olive Branch, MS 38654 USA

Chelsea Notes

CHL-3

1. If two or three 8 bolt PTOs are to be mounted on split shaft use stud kit 328170-190X to prevent thread interference.
2. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

CHL-3A

1. PTOs for this application must be ordered with “L” output designator for self lube option. EX: 442XFAHP-W3LD for self lube with a 1.25” std. output.
2. Pressure lube installation kits must be ordered separately. 880 Series PTOs use kit 329110-1X, all other models use 329110X.
3. If two or three 8 bolt PTOs are to be mounted on split shaft, use stud kit 328170-190X to prevent thread interference.
4. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

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NOTES

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DODGE/RAM





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⚠ WARNING — User Responsibility

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Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
AS66RC (MY2014 & Later) Gas	DDG-3	6	L69-R69
AS68RC (MY2010 & Prior)	DDG-1	6	R69
AS68RC (MY2011 & 2012)	DDG-1A	6	R69
AS69RC (MY2013 and Later) Diesel	DDG-3	6	L69-R69
G56 Dodge/RAM/Sterling Cab Chassis (Manual) - 4X2 ONLY	DDG-2	6	L52-R52

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Parker Hannifin Corporation
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Olive Branch, MS 38654 USA

AS68RC (MY2010 & Prior)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.1200" (28.4480MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)							
272DAKUP-*3	196 C	Eng	69				Furnished
272DBKUP-*3	160 C	Eng	84				Furnished
272DCKUP-*3	132 C	Eng	102				Furnished
272DDKUP-*3	111 C	Eng	122				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)							
252DDKUX-*5 (1)	85 I	Eng	99				Furnished
252DMKUX-*5 (2)	50 I	Eng	144				Furnished

See next page for more pump options.

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: It is Required that Chelsea Wiring Harness (329457X) is used for the 270D & 272D and (329621X) is used for the 252D (Model Year 2010 and Prior). This will Allow the OBD II Monitoring System to be Disabled while the PTO System is being Operated. This will Prevent "False" Lighting of the "Check Engine" Lamp due to the Engine-PTO Driven Accessories

(1) Input Gear Part No. 5-P-1427
(2) Input Gear Part No. 5-P-1437

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Olive Branch, MS 38654 USA

AS68RC (MY2010 & Prior)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.1200" (28.4480MM)

Pump Option Charts

252 Pumps offered in the PGP511 with 5/8" - 9T / SAE A Flange

Option Order Code	Chelsea Pump Model	Displacement in^3/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size
1121	CGP-P11C021-1AC	0.49	0.002	3988	4000	5/8" - 9T
1126	CGP-P11C026-1AC	0.61	0.003	3988	3600	5/8" - 9T
1129	CGP-P11C029-1AC	0.67	0.003	3988	3600	5/8" - 9T
1137	CGP-P11C037-1AC	0.85	0.004	3988	3300	5/8" - 9T
1449	CGP-P31C054-1AE	1.24	0.005	3500	3000	5/8" - 9T
1462	CGP-P31C061-1AE	1.40	0.006	3500	3000	5/8" - 9T

252 Pumps offered in the PGP511 with 3/4" - 11T / SAE A Flange

Option Order Code	Chelsea Pump Model	Displacement in^3/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size
P37	CGP-P11C037-5AC	0.85	0.004	3988	3300	3/4" - 11T
P42	CGP-P11C042-5AC	0.98	0.004	3988	3000	3/4" - 11T
P71	CGP-P11C071-5AC	1.65	0.007	2900	2400	3/4" - 11T
P82	CGP-P11C082-5AC	1.89	0.008	2465	2300	3/4" - 11T

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AS68RC (MY2011 & 2012)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.1200" (28.4480MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)							
272RAKUP-*3	196 C	Eng	69				Furnished
272RBKUP-*3	160 C	Eng	84				Furnished
272RCKUP-*3	132 C	Eng	102				Furnished
272RDKUP-*3	111 C	Eng	122				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)							
252RDKUX-*5 (1)	85 I	Eng	99				Furnished
252RMKUX-*5 (2)	50 I	Eng	144				Furnished

See next page for more pump options.

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: It is Required for MY2011/12 Trucks, the 252R & 272R use Wiring Harness (329663X) and the 270R use (329664X). This will Allow the OBD II Monitoring System to be Disabled while the PTO System is being Operated. This will Prevent "False" Lighting of the "Check Engine" Lamp due to the Engine-PTO Driven Accessories.

(1) Input Gear Part No. 5-P-1427
(2) Input Gear Part No. 5-P-1437

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AS68RC (MY2011 & 2012)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.1200" (28.4480MM)

Pump Option Charts

252 Pumps offered in the PGP511 with 5/8" - 9T / SAE A Flange						
Option Order Code	Chelsea Pump Model	Displacement in^3/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size
1121	CGP-P11C021-1AC	0.49	0.002	3988	4000	5/8" - 9T
1126	CGP-P11C026-1AC	0.61	0.003	3988	3600	5/8" - 9T
1129	CGP-P11C029-1AC	0.67	0.003	3988	3600	5/8" - 9T
1137	CGP-P11C037-1AC	0.85	0.004	3988	3300	5/8" - 9T
1449	CGP-P31C054-1AE	1.24	0.005	3500	3000	5/8" - 9T
1462	CGP-P31C061-1AE	1.40	0.006	3500	3000	5/8" - 9T

252 Pumps offered in the PGP511 with 3/4" - 11T / SAE A Flange						
Option Order Code	Chelsea Pump Model	Displacement in^3/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size
P37	CGP-P11C037-5AC	0.85	0.004	3988	3300	3/4" - 11T
P42	CGP-P11C042-5AC	0.98	0.004	3988	3000	3/4" - 11T
P71	CGP-P11C071-5AC	1.65	0.007	2900	2400	3/4" - 11T
P82	CGP-P11C082-5AC	1.89	0.008	2465	2300	3/4" - 11T

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G56 Dodge/RAM/Sterling Cab Chassis (Manual) - 4X2 ONLY

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear REAR of Centerline
52 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.3760" (35.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
442LLKHX-*6 (1)	250 I	Opp	67				7170-72X
442LQKHX-*6 (1)	225 I	Opp	72				7170-72X
442LRKHX-*6 (1)	225 I	Opp	84				7170-72X
442LSKHX-*6 (1)	200 I	Opp	100				7170-72X
442LUKHX-*6 (1)	195 I	Opp	119				7170-72X
442LWKHX-*6 (1)	175 I	Opp	140				7170-72X
442LXKHX-*6 (1)	140 I	Opp	165				7170-72X

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: For Dodge Model Years 2007-2010 Chelsea Wiring Harness 329460X and for RAM Model Years 2011 and Later Chelsea Wiring Harness 329749X Must be Used to Complete the Installation (Order Separately). This will Allow the ODB II Monitoring System to be Disabled While the PTO System is being Operated.

(1) Input Gear Part No. 5-P-1343

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AS66RC (MY2014 & Later) Gas
AS69RC (MY2013 and Later) Diesel

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.1200" (28.4480MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)							
272RAKUP-*3	300 C	Eng	69				Furnished
272RBKUP-*3	296 C	Eng	84				Furnished
272RCKUP-*3	245 C	Eng	102				Furnished
272RDKUP-*3	205 C	Eng	122				Furnished
272RGKUP-*3	173 C	Eng	145				Furnished
272RKKUP-*3	154 C	Eng	162				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)							
252RDKUX-*5 (1)	85 I	Eng	99				Furnished
252RMKUX-*5 (2)	50 I	Eng	144				Furnished

See next page for more pump options.

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

WARNING: RATIO LIMITATIONS - Due to gear interference in the aperture of the transmissions, RAM applications are limited to A thru K.

CAUTION: It is Required for MY2011/12 Trucks, the 252R & 272R use Wiring Harness (329663X) and the 270R use (329664X). This will Allow the ODB II Monitoring System to be Disabled while the PTO System is being Operated. This will Prevent "False" Lighting of the "Check Engine" Lamp due to the Engine-PTO Driven Accessories.

(1) Input Gear Part No. 5-P-1427
(2) Input Gear Part No. 5-P-1437

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AS66RC (MY2014 & Later) Gas
AS69RC (MY2013 and Later) Diesel

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.1200" (28.4480MM)

Pump Option Charts

252 Pumps offered in the PGP511 with 5/8" - 9T / SAE A Flange

Option Order Code	Chelsea Pump Model	Displacement in³/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size
1121	CGP-P11C021-1AC	0.49	0.002	3988	4000	5/8" - 9T
1126	CGP-P11C026-1AC	0.61	0.003	3988	3600	5/8" - 9T
1129	CGP-P11C029-1AC	0.67	0.003	3988	3600	5/8" - 9T
1137	CGP-P11C037-1AC	0.85	0.004	3988	3300	5/8" - 9T
1449	CGP-P31C054-1AE	1.24	0.005	3500	3000	5/8" - 9T
1462	CGP-P31C061-1AE	1.40	0.006	3500	3000	5/8" - 9T

252 Pumps offered in the PGP511 with 3/4" - 11T / SAE A Flange

Option Order Code	Chelsea Pump Model	Displacement in³/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size
P37	CGP-P11C037-5AC	0.85	0.004	3988	3300	3/4" - 11T
P42	CGP-P11C042-5AC	0.98	0.004	3988	3000	3/4" - 11T
P71	CGP-P11C071-5AC	1.65	0.007	2900	2400	3/4" - 11T
P82	CGP-P11C082-5AC	1.89	0.008	2465	2300	3/4" - 11T

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Dodge/RAM Notes

DDG-1

1. The PTO output shaft torque ratings are based on the maximum allowable torque at the 69 tooth transmission gear of 135 lbs-ft.
2. Limited Ratios - The 272*D Ratio is the fastest ratio available due to adjacent gear interference in the transmission.
3. When ordering one of the listed PTOs, Hose Kit, Wire Harness Kit and Metric Stud Kit are furnished with the PTO. The hose, wire harness and metric stud kits are required for completing the PTO installation.
4. To install one of the listed PTOs on this truck the exhaust pipe and transmission support must be dropped. Or installed through the passenger side floor “cut out”. An OEM installed passenger side floor pan modification “Bulge” cut out must be installed. Order Mopar #82211579 “Patch Panel” Installation Kit if not Installed. Refer to Dodge Body Builders web site for complete details under “Chassis cab PTO Operation & Installation Guide-PTO Installation Alternative”.

DDG-1A

1. For MY2011/12 and later RAM Cab Chassis Trucks, the torque converter locks up at an ENGINE Speed of 1200 RPM and stays on for PTO function to a maximum ENGINE Speed of 2000 RPM. The torque converter will unlock at an ENGINE Speed below 1000 RPM. The default PTO operation ENGINE speed is 900 RPM. Refer to Dodge Body Builders web site for details on raising the ENGINE speeds for PTO operation.
2. The PTO output shaft torque ratings are based on the maximum allowable torque at the 69 tooth transmission gear of 135 lbs-ft.
3. To install the one of the listed PTOs on this truck the exhaust pipe and transmission support must be dropped. Or installed through the passenger side floor “cut out”. An OEM installed passenger side floor pan modification “Bulge” cut out must be installed. Order Mopar #82211579 “Patch Panel” Installation Kit if not Installed. Refer to Dodge Body Builders web site for complete details under “Chassis cab PTO Operation & Installation Guide-PTO Installation Alternative”.
4. When ordering one of the listed PTOs; Hose Kit, Wire Harness Kit and Metric Stud Kit are furnished with the PTO. The hose, wire harness and metric stud kits are required for completing the PTO installation.

DDG-2

1. PTOs will not fit on 4 x 4 Dodge/Sterling 3500/4500/5500 Series Vehicles.
2. PTOs are shown in the Standard Arrangements with the PTO Housing “Bulge” Down and the Output Shaft to the rear of the vehicle. Other arrangements may be needed to install PTO/Pump applications due to the transmission cross member support interfering with pump installations to the rear of the vehicle.

DDG-3

1. The PTO Output shaft torque ratings are based on the maximum allowable torque at the 69 tooth transmission gear of 250 lbs-ft.
2. To install one of the listed PTOs on the RIGHT SIDE, the truck exhaust pipe and transmission support must be dropped or installed through the passenger side floor “cut out.” An OEM installed passenger side floor pan modification “Bulge” cut out must be installed. Order Mopar #82211579 “Patch Panel” Installation Kit if not Installed. Refer to Dodge Body Builders web site for complete details under “Chassis cab PTO Operation & Installation Guide-PTO Installation Alternative.”
3. For MY2013 and later RAM Cab Chassis Trucks, the torque converter locks up at an ENGINE Speed of 1200 RPM and stays on for PTO function to a maximum ENGINE Speed of 2000 RPM. The torque converter will unlock at an ENGINE Speed below 1000 RPM. The default PTO operation ENGINE speed is 900 RPM. Refer to Dodge Body Builders web site for details on raising the ENGINE speeds for PTO operation.
4. When ordering one of the PTOs listed above, the Hose Kit, Wire Harness Kit, and Metric Stud Kit are furnished with the PTO. All of these components are required for completing the PTO installation.

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NOTES



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⚠ WARNING — User Responsibility

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Transmission/Chelsea Power Take-Offs Torque Capacities

Eaton Transmissions has recently reviewed the maximum allowable torque ratings on the heavy duty transmissions PTO driver gear. These limits are the maximum allowable torque ratings that are not to be exceeded under any operating conditions. The following Eaton transmissions are affected by this new torque limit, all FA/FO, FR/FRO and all RT/RTO/RTLO.

1. FA/FO, FR/FRO Transmissions have the HD main shaft bearing factory installed. The maximum torque ratings for the transmission PTO gear is 750 ft-lbs intermittent and 500 ft-lbs continuous.

FR/FRO Application Pages		
FLR-88	FLR-90	FLR-91

FA/FO Application Pages				
FLR-105	FLR-106	FLR-107	FLR-111	FLR-112

2. RT/RTO/RTLO Transmissions can come with a Standard (350 ft-lbs) Main Shaft Bearing or a Heavy Duty (750 ft-lbs) Main Shaft Bearing. The Standard Bearing is capable of 350 ft-lbs Intermittent or Continuous Duty. The Heavy Duty Bearing is rated for 750 ft-lbs Intermittent or 500 ft-lbs Continuous Duty.

NOTE: It is the responsibility of the installer to verify which main shaft bearing is installed in the transmission.

RT/RTO/RTLO Application Pages								
FLR-34	FLR-37	FLR-43	FLR-46	FLR-49	FLR-59	FLR-80	FLR-85	FLR-99
FLR-35	FLR-38	FLR-44	FLR-47	FLR-57	FLR-61	FLR-81	FLR-87	
FLR-36	FLR-39	FLR-45	FLR-48	FLR-58	FLR-64	FLR-82	FLR-98	

Using the Torque Limit Charts

- The torque charts on the following pages will help you determine the correct torque limits for your application. Listed are the standard Chelsea torque values for each series/speed ratio and the new values under the Eaton guidelines for the FA/FO, FR/FRO and RT/RTO/RTLO HD transmissions.
- If you have a RT/RTO/RTLO transmission with the roller type heavy duty input bearing (Eaton part number 4301417) the charts on the following pages will provide you with the torque values for each PTO Series/speed ratio.
- Continuous torque ratings are also listed for series and PTO speed ratios. In some cases these values will be the same as the intermittent value, which is because the new continuous rating is still below the Chelsea standard continuous rating for the PTO and does not exceed the transmission drive gear rating.
- Refer to the Input Shaft Bearing Matrix on page 5.6.4 to determine which type of bearing is available in each series or model of transmission. For any series not listed in the chart, contact your local OE Chassis manufacturer or EATON Fuller representative.

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EATON FULLER Transmission Gear Load Chart

				RIGHT Side – 6-Bolt 45 Teeth Driver Gear					BOTTOM – 8-Bolt 47 Teeth Driver Gear			
				Standard Bearing		HD Bearing			Standard Bearing		HD Bearing	
		PTO RATING		Transmission Application Rating								
PTO Series	Ratio	Intermittent	Continuous	Int	Cont	Int	Cont	Ratio	Int	Cont	Int	Cont
272	A	300	300	300	300	300	300	A	N/A	N/A	N/A	N/A
272/282	B	300	300	300	300	300	300	B	300	300	300	300
	C	300	300	300	300	300	300	C	300	300	300	300
	D	300	300	300	300	300	300	D	293	293	300	300
	G	300	300	257	257	300	300	G	246	246	300	300
	K	300	300	230	230	300	300	K	220	220	300	300
	M	300	300	206	206	300	294	M	197	197	300	281
	P	300	300	184	184	300	263	P	176	176	300	252
	S	300	300	165	165	300	235	S	158	158	300	225
282	T	300	300	N/A	N/A	N/A	N/A	T	141	141	300	201
442/489	A	250	175	250	175	250	175	A	250	175	250	175
	B	250	175	250	175	250	175	B	250	175	250	175
	C	250	175	250	175	250	175	C	250	175	250	175
	F	250	175	250	175	250	175	F	250	175	250	175
	H	250	175	250	175	250	175	H	249	175	250	175
	L	250	175	233	175	250	175	L	223	175	250	175
	Q	225	158	216	158	225	158	Q	207	158	225	158
	R	225	158	187	158	225	158	R	179	158	225	158
	S	200	140	157	140	200	140	S	150	140	200	140
	U	195	137	132	132	195	137	U	126	126	195	137
	W	175	123	112	112	175	123	W	107	107	175	123
	X	140	98	95	95	140	98	X	91	91	140	98
660/680	F	375	263	301	263	375	263	F	289	263	375	263
	H	375	263	260	260	375	263	H	249	249	375	263
	Q	375	263	216	216	375	263	Q	207	207	375	263
	R	350	245	187	187	350	245	R	179	179	350	245
	S	350	245	157	157	336	224	S	150	150	322	215

NOTES:

1. STANDARD BEARING (STD) = 350 ft-lbs CONTINUOUS DUTY
2. HEAVY DUTY BEARING (HD) = 750 ft-lbs INTERMITTENT, 500 ft-lbs CONTINUOUS DUTY
3. RT/RTL/RTO/RTLO Transmissions can come from the factory with either the standard or HD bearing. See chart on page 5.6.4 for guidance.
4. All FR/FRO and FA/FO Transmissions have the HD Bearing factory installed and the HD Bearing chart should be used for these applications.

Gray area denotes the **Transmission Application Rating** is LOWER than the **PTO Rating** alone.

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EATON FULLER Transmission Gear Load Chart

				RIGHT Side – 6-Bolt 45 Teeth Driver Gear					BOTTOM – 8-Bolt 47 Teeth Driver Gear			
				Standard Bearing		HD Bearing			Standard Bearing		HD Bearing	
		PTO RATING		Transmission Application Rating								
PTO Series	Ratio	Intermittent	Continuous	Int	Cont	Int	Cont	Ratio	Int	Cont	Int	Cont
880	B	500	350	N/A		N/A		B	424	350	500	350
	D	500	350					D	357	350	500	350
	G	500	350					G	329	329	500	350
	J	500	350					J	280	280	500	350
	M	500	350					M	238	238	500	340
	Q	450	315					Q	203	203	435	290
	R	400	280					R	173	173	370	247
	T	350	245					T	134	134	287	191
823	B	750	500	N/A		N/A		B	424	424	750	500
	D	750	500					D	357	357	750	500
	G	750	500					G	329	329	705	470
	J	750	500					J	280	280	599	400
	M	650	450					M	238	238	511	340
	R	550	400					R	173	173	370	247
	T	500	350					T	142	142	305	203
885	B	500	350	N/A		N/A		B	424	350	500	350
	G	500	350					G	329	329	500	350
	J	500	350					J	280	280	500	350
	M	500	350					M	238	238	500	340

NOTES:

1. STANDARD BEARING (STD) = 350 ft-lbs CONTINUOUS DUTY
2. HEAVY DUTY BEARING (HD) = 750 ft-lbs INTERMITTENT, 500 ft-lbs CONTINUOUS DUTY
3. RT/RTL/RTO/RTLO Transmissions can come from the factory with either the standard or HD bearing. See chart on page 5.6.4 for guidance.
4. All FR/FRO and FA/FO Transmissions have the HD Bearing factory installed and the HD Bearing chart should be used for these applications.

Gray area denotes the **Transmission Application Rating** is LOWER than the **PTO Rating** alone.

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Input Shaft Bearing Matrix for Fuller

FOR REFERENCE ONLY

Transmission Model	INPUT SHAFT BEARING	
	Standard Duty 81504	Heavy Duty 4301417
F-14E316B-LSE, 15E316B-LSE, 17E316B-LSE	N/A	✓
FM-1XD310B-LST	✓	OPTION
FM-14E310B-LAS, FM-15E310B-LAS, 15E316B-LSE	N/A	✓
FO-14E310C-LAS, 16E310C-LAS	N/A	✓
FO(M)-16D313E-LEP	✓	OPTION
FOM-15E310C-LAS, 16E310C-LAS	N/A	✓
FR/FRO-xx210B/C	N/A	✓
RT-6609A	4301863	N/A
RT-8608L	✓	OPTION
RT-8709B	N/A	✓
RTX-xx609B	✓	OPTION
RT-xx709H	✓	OPTION
RTOC-16909A (T2)	✓	OPTION
RTOC-18909A (T2)	N/A	✓
RT/O-xx908LL	N/A	✓
RTO-xx909ALL	N/A	✓
RTLO-xx913A	✓	OPTION
RT/O-xx915	N/A	✓
RTLO-xx918B (except 22918B)	✓	OPTION
RTLO-22918B	N/A	✓
RTO-xx910B/C-AS/DM	✓	OPTION
RTLO(M)-16913L-DM	✓	OPTION
RTLO-xx918A-AS2 (except 22918A-AS)	✓	OPTION
RTLO-22918A-AS	N/A	✓
T/TX-14607A/B	✓	OPTION

HD Bearing Part Number - 4301417

NOTE: Eaton recommends the use of a heavy duty input shaft bearing for transmissions that will be equipped with a transmission mounted 6 or 8-Bolt PTO.

Maximum total* PTO output cannot exceed :

750 ft-lbs intermittent load when using the heavy duty bearing - 500 ft-lbs continuous

350 ft-lbs when using the standard duty bearing

*Total = the sum of all PTOs that can be used at the same time.

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
AT-1202	FLR-60	2	T30-B30
EDCO-6F107A-P (Procision Series w/ Park Paw)	FLR-114	7	L23-CS-R47
EDCO-6F107A-X (Procision Series)	FLR-114	7	L23-CS-R47
EDCO-9N107A-P (Procision Series w/ Park Paw)	FLR-114	7	L23-CS-R47
EDCO-9N107A-X (Procision Series)	FLR-114	7	L23-CS-R47
EEO-14F112C (Endurant)	FLR-116	12	B42
EEO-15F112C (Endurant)	FLR-116	12	B42
EEO-16F112C (Endurant)	FLR-116	12	B42
EEO-17F112C (Endurant)	FLR-116	12	B42
EEO-18F112C (Endurant)	FLR-116	12	B42
EH-6E706B-CD (Hybrid Electric System)	FLR-92Hy	6	L48
EH-6E706B-P (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E306A-CD (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E306A-UP (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E306A-UPG (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E406A-CD (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E406A-CDR (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E406A-P (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E406A-T (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E406A-UP (Hybrid Electric System)	FLR-92Hy	6	L48
EH-8E406A-UPG (Hybrid Electric System)	FLR-92Hy	6	L48
ES-11109 (Left Side Forward Opening)	FLR-84LF	9	LF32-CS
F-14E16B-LSE (UltraShift Plus)	FLR-107	16	CS-R45-B47
F-15E16B-LSE (UltraShift Plus)	FLR-107	16	CS-R45-B47
F-17E16B-LSE (UltraShift Plus)	FLR-107	16	CS-R45-B47
F-5405B-DM3 (UltraShift HV)	FLR-92	5	L48-R48
F-5405-DM3	FLR-97	5	L39-R39
F-6405B-DM3 (UltraShift HV)	FLR-92	5	L48-R48
F-6406N-ASW	FLR-97	6	L39-R39
F-6406N-ASX	FLR-97	6	L39-R39
F-6406N-AW3	FLR-97	6	L39-R39
F-8406N-ASW	FLR-97	6	L39-R39
FA-11810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FA-12810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FA-13810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FA-14810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47

IMPORTANT: See Safety Information in Section I of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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EATON FULLER TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
FA-15810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FA-9810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FAF-11810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FAF-12810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FAF-13810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FAF-14810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FAF-15810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FAF-9810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FAM-14810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FAM-14810B-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FAM-15810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FAM-15810B-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FAMF-14810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FAMF-15810B (Advantage Series) ThruShaft use AV mounting	FLR-105	10	CS-R45-B47
FAO-11810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAO-12810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAO-13810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAO-14810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAO-14810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAO-15810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAO-16810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAO-16810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAO-16810S-EN3 (Advanatge Series Automated) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAO-16810S-EP3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOF-11810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOF-12810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOF-13810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOF-14810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOF-15810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOF-16810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOM-14810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOM-14810S-EC3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOM-15810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOM-15810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOM-15810S-EC3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOM-15810S-EN3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47

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IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
FAOM-15810S-EP3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOM-16810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOM-16810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOMF-14810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOMF-15810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FAOMF-16810C (Advantage Series) ThruShaft use AV mounting	FLR-112	10	CS-R45-B47
FM-14E310B-LAS (UltraShift Plus) Thrushaft use AT mounting	FLR-111	10	CS-R45-B47
FM-15E16B-LSE (UltraShift Plus)	FLR-107	16	CS-R45-B47
FM-15E310B-LAS (UltraShift Plus) Thrushaft use AT mounting	FLR-111	10	CS-R45-B47
FO-10E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting	FLR-106	8+2	CS-R45-B47
FO-10E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting	FLR-107	9+2	CS-R45-B47
FO-10E310C-VAS (UltraShift Plus)Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FO-11E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting	FLR-106	8	CS-R45-B47
FO-11E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting	FLR-107	9+2	CS-R45-B47
FO-12E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting	FLR-106	8+2	CS-R45-B47
FO-12E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting	FLR-107	9+2	CS-R45-B47
FO-12E310C-VAS (UltraShift Plus)Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FO-14E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting	FLR-106	8+2	CS-R45-B47
FO-14E309ALL-VMS (UltraShift Plus)Thrushaft use BD mounting	FLR-107	9+2	CS-R45-B47
FO-14E310C-LAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FO-14E310C-VAS (UltraShift Plus)Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FO-14E313A-MHP (UltraShift Plus)	FLR-107	13	CS-R45-B47
FO-14E313A-VHP (UltraShift Plus)	FLR-107	13	CS-R45-B47
FO-14E318B-MXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-14E318B-VXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-16D313E-LEP (UltraShift)	FLR-113	13	R45-B47
FO-16E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting	FLR-106	8+2	CS-R45-B47
FO-16E309ALL-VMS (UltraShift Plus)Thrushaft use BD mounting	FLR-107	9+2	CS-R45-B47
FO-16E310C-LAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FO-16E310C-VAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FO-16E313A-MHP (UltraShift Plus)	FLR-107	13	CS-R45-B47
FO-16E313A-VHP (UltraShift Plus)	FLR-107	13	CS-R45-B47
FO-16E318B-MXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-16E318B-VXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-17E308LL-VCS (UltraShift Plus) Thrushaft use BD Mounting	FLR-106	8+2	CS-R45-B47
FO-17E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting	FLR-107	9+2	CS-R45-B47

IMPORTANT: See Safety Information in Section I of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

EATON FULLER TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
FO-18E310C-LAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FO-18E313A-MHP (UltraShift Plus)	FLR-107	13	CS-R45-B47
FO-18E313A-VHP (UltraShift Plus)	FLR-107	13	CS-R45-B47
FO-18E318B-MXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-18E318B-VXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-20E313A-MHP (UltraShift Plus)	FLR-107	13	CS-R45-B47
FO-20E313A-VHP (UltraShift Plus)	FLR-107	13	CS-R45-B47
FO-20E318B-MXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-20E318B-VXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-22E318B-MXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-22E318B-VXP (UltraShift Plus)	FLR-107	18	CS-R45-B47
FO-5406B-DM3 (UltraShift HV)	FLR-92	6	L48-R48
FO-6406A-ASW	FLR-92	6	L48-R48
FO-6406A-ASX	FLR-92	6	L48-R48
FO-6406A-AW3	FLR-92	6	L48-R48
FO-6406B-DM3 (UltraShift HV)	FLR-92	6	L48-R48
FO-6406N-AW3	FLR-97	6	L39-R39
FO-8406A-ASW	FLR-92	6	L48-R48
FO-8406A-ASX	FLR-92	6	L48-R48
FO-8406A-AW3	FLR-92	6	L48-R48
FOM-14E310C-LAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FOM-14E310C-VAS (UltraShift Plus)Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FOM-15E310C-LAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FOM-15E310C-VAS (UltraShift Plus)Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FOM-16D313E-LEP	FLR-58	13	CS-R45-B47
FOM-16D313E-LEP (UltraShift)	FLR-113	13	R45-B47
FOM-16E310C-LAS (UltraShift Plus) Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FOM-16E310C-VAS (UltraShift Plus)Thrushaft use AT mounting	FLR-107	10	CS-R45-B47
FR-11210B	FLR-90	10	CS-R45-B47
FR-12210B	FLR-90	10	CS-R45-B47
FR-13210B	FLR-90	10	CS-R45-B47
FR-14210B	FLR-90	10	CS-R45-B47
FR-15210B	FLR-90	10	CS-R45-B47
FR-9210	FLR-90	10	CS-R45-B47
FR-9210B	FLR-90	10	CS-R45-B47
FRF-9210B	FLR-90	10	CS-R45-B47

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IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

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Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
FRLO-14410C	FLR-95	10	L51-R51
FRLO-14410C-T2	FLR-95	10	L51-R51
FRLO-15410C	FLR-95	10	L51-R51
FRLO-15410C-T2	FLR-95	10	L51-R51
FRLO-16410C	FLR-95	10	L51-R51
FRLO-16410C-T2	FLR-95	10	L51-R51
FRM-15210B (Thrushaft use BJ mounting)	FLR-90	10	CS-R45-B47
FRO-11210B	FLR-91	10	CS-R45-B47
FRO-11210C	FLR-88	10	CS-R45-B47
FRO-12210B	FLR-91	10	CS-R45-B47
FRO-12210C	FLR-88	10	CS-R45-B47
FRO-13210B	FLR-91	10	CS-R45-B47
FRO-13210C	FLR-88	10	CS-R45-B47
FRO-14210B	FLR-91	10	CS-R45-B47
FRO-14210C	FLR-88	10	CS-R45-B47
FRO-15210B	FLR-91	10	CS-R45-B47
FRO-15210C	FLR-88	10	CS-R45-B47
FRO-16210B	FLR-91	10	CS-R45-B47
FRO-16210C	FLR-88	10	CS-R45-B47
FRO-16210R	FLR-88	10	CS-R45-B47
FRO-17210C	FLR-88	10	CS-R45-B47
FRO-18210C	FLR-88	10	CS-R45-B47
FROF-15210C	FLR-88	10	CS-R45-B47
FRW-15210B	FLR-90	10	CS-R45-B47
FS-4205A	FLR-78	5	L28-R28
FS-4205B	FLR-79	5	L28-R28
FS-5306A	FLR-68	6	L38-CS-R38
FS-5406A	FLR-68	6	L38-CS-R38
FS-5406N	FLR-97	6	L39-R39
FS-6106A	FLR-67	6	L50-R50
FS-6109A (Left Side Forward Opening)	FLR-84LF	9	LF32-CS
FS-6205A	FLR-69	5	L39-R39
FS-6205B	FLR-70	5	L41-R41
FS-6206	FLR-68	6	L38-CS-R38
FS-6206A	FLR-68	6	L38-CS-R38
FS-6209A (Left Side Forward Opening)	FLR-84LF	9	LF32-CS

IMPORTANT: See Safety Information in Section I of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

EATON FULLER TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
FS-6305A	FLR-69	5	L39-R39
FS-6305B	FLR-70	5	L41-R41
FS-6306	FLR-68	6	L38-CS-R38
FS-6306A	FLR-68	6	L38-CS-R38
FS-6309A (Left Side Forward Opening)	FLR-84LF	9	LF32-CS
FS-6406	FLR-68	6	L38-CS-R38
FS-6406A	FLR-68	6	L38-CS-R38
FS-6406N	FLR-97	6	L39-R39
FS-7206A	FLR-67	6	L50-R50
FS-8206A	FLR-67	6	L50-R50
FS-8209A (ES11109)(Left Side Forward Opening)	FLR-84LF	9	LF32-CS
FS-8309 (Left Side Forward Opening)	FLR-84LF	9	LF32-CS
FS-8406A	FLR-67	6	L50-R50
FSB-5406B	FLR-94	6	L38-R38
FSB-6206A	FLR-94	6	L38-R38
FSB-6406B	FLR-94	6	L38-R38
FSO-5206 (B)	FLR-87	6	L47-CS
FSO-5406A	FLR-92	6	L48-R48
FSO-6109A (Left Forward)	FLR-96LF	9	LF43
FSO-6406A (Eaton Brazil)	FLR-92	6	L48-R48
FSO-8209A (Left Side Forward Opening)	FLR-96LF	9	LF43
FSO-8406A (Eaton Brazil)	FLR-92	6	L48-R48
RT-11609A (Thrushaft option use “AT” mounting)	FLR-34	8+1	CS-R45-B47
RT-11709H (Thrushaft option use “AU” mounting)	FLR-34	9	CS-R45-B47
RT-12609A (Thrushaft option use “AT” mounting)	FLR-34	9	CS-R45-B47
RT-12709A	FLR-34	9	CS-R45-B47
RT-12710B (Thrushaft option use “AU” mounting)	FLR-34	10	CS-R45-B47
RT-13609A (Thrushaft option use “AT” mounting)	FLR-34	9	CS-R45-B47
RT-13709H (Thrushaft option use “AU” mounting)	FLR-34	9	CS-R45-B47
RT-13710B (Thrushaft option use “AU” mounting)	FLR-34	10	CS-R45-B47
RT-14609A (Thrushaft option use “AU” mounting)	FLR-34	8+1	CS-R45-B47
RT-14709A	FLR-34	9	CS-R45-B47
RT-14710B (Thrushaft option use “AU” mounting)	FLR-34	10	CS-R45-B47
RT-14710B-AS2	FLR-34	10	CS-R45-B47
RT-14715 (Thrushaft option use “BD” mounting)	FLR-34	15	CS-R45-B47
RT-14910B-AS2	FLR-34	10	CS-R45-B47

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IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

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Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
RT-14915	FLR-34	15	CS-R45-B47
RT-15715	FLR-34	15	CS-R45-B47
RT-6609A	FLR-66	9	R33-B33
RT-6610	FLR-40	10	R33-B33
RT-6613	FLR-40	13	R33-B33
RT-7608LL	FLR-66	8+2	R33-B33
RT-8608L	FLR-64	8	R45-B47
RT-8609	FLR-66	9	R33-B33
RT-8709B	FLR-34	9	CS-R45-B47
RT-8908LL	FLR-34	8+2	CS-R45-B47
RT-9710B (Thrushaft option use “AU” mounting)	FLR-34	10	CS-R45-B47
RTA-14710B-AS	FLR-34	10	CS-R45-B47
RTAO-10710B-AC	FLR-57	10	CS-R45-B47
RTAO-10710B-AS	FLR-57	10	CS-R45-B47
RTAO-10710C-AC	FLR-58	10	CS-R45-B47
RTAO-10710C-AS	FLR-58	10	CS-R45-B47
RTAO-12710B-AC	FLR-57	10	CS-R45-B47
RTAO-12710B-AS	FLR-57	10	CS-R45-B47
RTAO-12710C-AC	FLR-58	10	CS-R45-B47
RTAO-12710C-AS	FLR-58	10	CS-R45-B47
RTAO-14710B-AC	FLR-57	10	CS-R45-B47
RTAO-14710B-AS	FLR-57	10	CS-R45-B47
RTAO-14710C-AC	FLR-58	10	CS-R45-B47
RTAO-14710C-AS	FLR-58	10	CS-R45-B47
RTAO-16710B-AC	FLR-57	10	CS-R45-B47
RTAO-16710B-AS	FLR-57	10	CS-R45-B47
RTAO-16710C-AS	FLR-58	10	CS-R45-B47
RTF-11609A	FLR-34	9	CS-R45-B47
RTF-12609A	FLR-34	9	CS-R45-B47
RTF-12709H	FLR-34	9	CS-R45-B47
RTF-12710B	FLR-34	10	CS-R45-B47
RTF-13609A	FLR-34	9	CS-R45-B47
RTF-13709H	FLR-34	9	CS-R45-B47
RTF-13710B	FLR-34	10	CS-R45-B47
RTF-14609A	FLR-34	9	CS-R45-B47
RTF-14709H	FLR-34	9	CS-R45-B47

IMPORTANT: See Safety Information in Section I of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

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Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
RTF-14710B	FLR-34	10	CS-R45-B47
RTF-14715	FLR-34	15	CS-R45-B47
RTF-14915	FLR-34	15	CS-R45-B47
RTF-15715	FLR-34	15	CS-R45-B47
RTL-13710B	FLR-34	10	CS-R45-B47
RTL-14710B	FLR-34	10	CS-R45-B47
RTLC-16609E (Convertible 9 to 13 Speed)	FLR-58	9	CS-R45-B47
RTLO-11610B-T2	FLR-34	10	CS-R45-B47
RTLO-12610B	FLR-34	10	CS-R45-B47
RTLO-12610B-T2	FLR-34	10	CS-R45-B47
RTLO-12713A	FLR-58	13	CS-R45-B47
RTLO-13118-AMT	FLR-58	13	CS-R45-B47
RTLO-13610B	FLR-34	10	CS-R45-B47
RTLO-13610B-T2	FLR-34	10	CS-R45-B47
RTLO-14610A	FLR-34	10	CS-R45-B47
RTLO-14610B	FLR-34	10	CS-R45-B47
RTLO-14610B-T2	FLR-34	10	CS-R45-B47
RTLO-14613B	FLR-34	13	CS-R45-B47
RTLO-14713A	FLR-58	13	CS-R45-B47
RTLO-14713A-T2	FLR-58	13	CS-R45-B47
RTLO-14718B	FLR-58	18	CS-R45-B47
RTLO-14718B-T2	FLR-58	18	CS-R45-B47
RTLO-14918A-AS2	FLR-58	18	CS-R45-B47
RTLO-14918A-AS3	FLR-58	18	CS-R45-B47
RTLO-14918B	FLR-58	18	CS-R45-B47
RTLO-14918B-AS	FLR-58	18	CS-R45-B47
RTLO-15610B-T2	FLR-34	10	CS-R45-B47
RTLO-16610B	FLR-34	10	CS-R45-B47
RTLO-16610B-T2	FLR-34	10	CS-R45-B47
RTLO-16713A	FLR-58	13	CS-R45-B47
RTLO-16713A-T2	FLR-58	13	CS-R45-B47
RTLO-16718B	FLR-58	18	CS-R45-B47
RTLO-16718B-T2	FLR-58	18	CS-R45-B47
RTLO-16913A	FLR-58	13	CS-R45-B47
RTLO-16913L-DM3 (UltraShift)	FLR-113	13	R45-B47
RTLO-16913L-LHP	FLR-58	13	CS-R45-B47

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IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

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Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
RTLO-16918A-AS2	FLR-58	18	CS-R45-B47
RTLO-16918A-AS3	FLR-58	18	CS-R45-B47
RTLO-16918B	FLR-58	18	CS-R45-B47
RTLO-16918B-AS	FLR-58	18	CS-R45-B47
RTLO-17610B	FLR-34	10	CS-R45-B47
RTLO-17610B-T2	FLR-34	10	CS-R45-B47
RTLO-18610B	FLR-34	10	CS-R45-B47
RTLO-18718B	FLR-58	18	CS-R45-B47
RTLO-18718B-T2	FLR-58	18	CS-R45-B47
RTLO-18913A	FLR-58	13	CS-R45-B47
RTLO-18913A-T2	FLR-58	13	CS-R45-B47
RTLO-18918A-AS2	FLR-58	18	CS-R45-B47
RTLO-18918B	FLR-58	18	CS-R45-B47
RTLO-18918B-AS	FLR-58	18	CS-R45-B47
RTLO-20913A	FLR-58	13	CS-R45-B47
RTLO-20918A-AS2	FLR-58	18	CS-R45-B47
RTLO-20918B	FLR-58	18	CS-R45-B47
RTLO-20918B-AS	FLR-58	18	CS-R45-B47
RTLO-22918A-AS2	FLR-58	18	CS-R45-B47
RTLO-22918A-AS3	FLR-58	18	CS-R45-B47
RTLO-22918B	FLR-58	18	CS-R45-B47
RTLOM-16913L-DM3 (UltraShift)	FLR-113	13	R45-B47
RTLOM-16913L-LHP	FLR-58	13	CS-R45-B47
RTO-10710B-AS2	FLR-57	10	CS-R45-B47
RTO-10910B-AS2	FLR-57	10	CS-R45-B47
RTO-10910B-AS3	FLR-57	10	CS-R45-B47
RTO-10910B-DM2 (UltraShift)	FLR-100	10	CS-R45-B47
RTO-10910B-DM3 (UltraShift)	FLR-100	10	CS-R45-B47
RTO-11709MLL	FLR-58	9+2	CS-R45-B47
RTO-11908LL	FLR-57	8+2	CS-R45-B47
RTO-11909ALL	FLR-58	11	CS-R45-B47
RTO-11909MLL	FLR-58	9	CS-R45-B47
RTO-12710B-AS2	FLR-57	10	CS-R45-B47
RTO-12910B-AS2 (Thrushaft option use AT mounting)	FLR-57	10	CS-R45-B47
RTO-12910B-AS3 (Thrushaft option use AT mounting)	FLR-57	10	CS-R45-B47
RTO-12910B-DM2 (UltraShift)	FLR-100	10	CS-R45-B47

IMPORTANT: See Safety Information in Section I of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

EATON FULLER TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
RTO-12910B-DM3 (UltraShift)	FLR-100	10	CS-R45-B47
RTO-14609B (Thrushaft option use “AU” mounting)	FLR-58	9	CS-R45-B47
RTO-14613	FLR-34	13	CS-R45-B47
RTO-14709MLL	FLR-58	9+2	CS-R45-B47
RTO-14710B-AS2	FLR-57	10	CS-R45-B47
RTO-14908LL	FLR-57	8+2	CS-R45-B47
RTO-14909ALL	FLR-58	11	CS-R45-B47
RTO-14910B-AS2	FLR-57	10	CS-R45-B47
RTO-14910B-AS3	FLR-57	10	CS-R45-B47
RTO-14910B-DM2 (UltraShift)	FLR-100	10	CS-R45-B47
RTO-14910B-DM3 (UltraShift)	FLR-100	10	CS-R45-B47
RTO-14910C-AS2	FLR-58	10	CS-R45-B47
RTO-14910C-AS3	FLR-58	10	CS-R45-B47
RTO-14915	FLR-59	15	CS-R45-B47
RTO-16710B	FLR-57	10	CS-R45-B47
RTO-16710B-AS2	FLR-57	10	CS-R45-B47
RTO-16710C-AS2	FLR-58	10	CS-R45-B47
RTO-16908LL (Thrushaft use BD mounting)	FLR-57	8+2	CS-R45-B47
RTO-16909ALL (Thrushaft use BD mounting)	FLR-58	11	CS-R45-B47
RTO-16910B-AS2	FLR-57	10	CS-R45-B47
RTO-16910B-AS3	FLR-57	10	CS-R45-B47
RTO-16910B-DM2 (UltraShift)	FLR-100	10	CS-R45-B47
RTO-16910B-DM3 (UltraShift)	FLR-100	10	CS-R45-B47
RTO-16910C-AS2	FLR-58	10	CS-R45-B47
RTO-16910C-AS3	FLR-58	10	CS-R45-B47
RTO-16915	FLR-59	15	CS-R45-B47
RTO-18910B-AS2	FLR-58	10	CS-R45-B47
RTO-18910B-AS3	FLR-58	10	CS-R45-B47
RTO-6610	FLR-41	10	R33-B33
RTO-6613	FLR-41	13	R33-B33
RTO-7613	FLR-40	13	R33-B33
RTO-909B	FLR-58	8+1	CS-R45-B47
RTO-9513	FLR-34	13	CS-R45-B47
RTOC-16909A (Convertible 9 to 13 Speed)	FLR-58	9	CS-R45-B47
RTOC-18909A	FLR-58	9	CS-R45-B47
RTOCM-16909A (Convertible 9 to 13 Speed)	FLR-58	13	CS-R45-B47

Eaton Fuller

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
RTOM-16910B-DM3 (UltraShift)	FLR-100	10	CS-R45-B47
RTX-11609B	FLR-58	9	CS-R45-B47
RTX-11609P	FLR-57	9	CS-R45-B47
RTX-11609R (Thrushaft option use “AT” mounting)	FLR-57	8+1	CS-R45-B47
RTX-12609B (Thrushaft option use “AT” mounting)	FLR-58	9	CS-R45-B47
RTX-12609P	FLR-57	9	CS-R45-B47
RTX-12609R	FLR-57	9	CS-R45-B47
RTX-12709H	FLR-58	9	CS-R45-B47
RTX-12710C (Thrushaft option use “AU” mounting)	FLR-58	10	CS-R45-B47
RTX-13609B	FLR-58	9	CS-R45-B47
RTX-13609B (Thrushaft option use “AT” mounting)	FLR-58	9	CS-R45-B47
RTX-13709H	FLR-58	9	CS-R45-B47
RTX-13710B	FLR-57	10	CS-R45-B47
RTX-13710C (Thrushaft option use “AU” mounting)	FLR-58	10	CS-R45-B47
RTX-14609B	FLR-58	9	CS-R45-B47
RTX-14609R (Thrushaft option use “AU” mounting)	FLR-57	8+1	CS-R45-B47
RTX-14708LL	FLR-57	8	CS-R45-B47
RTX-14709H	FLR-58	9	CS-R45-B47
RTX-14710B (Thrushaft option use “AU” mounting)	FLR-57	10	CS-R45-B47
RTX-14710C (Thrushaft option use “AU” mounting)	FLR-58	10	CS-R45-B47
RTX-14715	FLR-59	15	CS-R45-B47
RTX-15715	FLR-59	15	CS-R45-B47
RTX-16709B	FLR-58	9	CS-R45-B47
RTX-16709H	FLR-58	9	CS-R45-B47
RTX-16710B	FLR-57	10	CS-R45-B47
RTX-16710X	FLR-58	10	CS-R45-B47
T-14607A	FLR-75	7	L78-R78
T-14607B	FLR-75	7	L78-R78
TX-14607B	FLR-77	7	L78-R78

Eaton Fuller

IMPORTANT: See Safety Information in Section I of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RT-11609A (Thrushaft option use "AT" mounting)
RT-11709H (Thrushaft option use "AU" mounting)
RT-12609A (Thrushaft option use "AT" mounting)
RT-12709A
RT-12710B (Thrushaft option use "AU" mounting)
RT-13609A (Thrushaft option use "AT" mounting)
RT-13709H (Thrushaft option use "AU" mounting)
RT-13710B (Thrushaft option use "AU" mounting)
RT-14609A (Thrushaft option use "AU" mounting)
RT-14709A
RT-14710B (Thrushaft option use "AU" mounting)
RT-14710B-AS2
RT-14715 (Thrushaft option use "BD" mounting)
RT-14910B-AS2
RT-14915
RT-15715
RT-8709B
RT-8908LL
RT-9710B (Thrushaft option use "AU" mounting)
RTA-14710B-AS
RTF-11609A
RTF-12609A
RTF-12709H
RTF-12710B

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*3	250 I	Opp	61		7-A-032(P)(28)	328564X	Furnished	221XCAHX-*3	250 I	Opp	58		7-A-032(28)		Furnished
221ZEAHX-*3	250 I	Opp	70			328564X	Furnished	221XEAHX-*3	250 I	Opp	67				Furnished
221ZPAHX-*3	200 I	Opp	114			328564X	Furnished	221XPAHX-*3	200 I	Opp	110				Furnished
489XAAHX-*5 (12)	250 I	Opp	54				Furnished	442XAAHX-*3 (12)	250 I	Opp	51				Furnished
489XCAHX-*5 (13)	250 I	Opp	69				Furnished	442XBAHX-*3 (18)	250 I	Eng	51			REQUIRED	Furnished
489XFAHX-*5 (2)	250 I	Opp	85				Furnished	442XCAHX-*3 (13)	250 I	Opp	66				Furnished
489XHAHX-*5 (15)	250 I	Opp	99				Furnished	442XFAHX-*3 (2)	250 I	Opp	81				Furnished
489XLAHX-*5 (1)	222 I	Opp	110				Furnished	442XHAHX-*3 (15)	250 I	Opp	94				Furnished
489XQAHX-*5 (1)	206 I	Opp	118				Furnished	442XLAHX-*3 (1)	233 I	Opp	105				Furnished
489XRAHX-*5 (1)	178 I	Opp	137				Furnished	442XQAHX-*3 (1)	216 I	Opp	113				Furnished
489XSAHX-*5 (1)	150 I	Opp	163				Furnished	442XRAHX-*3 (1)	187 I	Opp	131				Furnished
489XUAHX-*5 (1)	126 I	Opp	194				Furnished	442XSAHX-*3 (1)	156 I	Opp	156				Furnished
489XWAHX-*5 (1)	107 I	Opp	229				Furnished	442XUAHX-*3 (1)	132 I	Opp	186				Furnished
489XXAHX-*5 (1)	91 I	Opp	271				Furnished	442XWAHX-*3 (1)	112 I	Opp	219				Furnished
680XFAHX-*3 (10)	288 I	Opp	85				Furnished	442XXAHX-*3 (1)	94 I	Opp	259				Furnished
680XHAHX-*3 (20)	249 I	Opp	99				Furnished	660XFAHX-*3 (10)	301 I	Opp	81				Furnished
680XQAHX-*3 (11)	206 I	Opp	118				Furnished	660XHAHX-*3 (15)	260 I	Opp	94				Furnished
680XRAHX-*3 (19)	178 I	Opp	137				Furnished	660XQAHX-*3 (11)	216 I	Opp	113				Furnished
680XSAHX-*3 (14)	150 I	Opp	163				Furnished	660XRAHX-*3 (19)	187 I	Opp	131				Furnished
823XBAHX-*3 (22)	423 I	Opp	58				Furnished	660XSAHX-*3 (14)	156 I	Opp	156				Furnished
823XDAHX-*3 (26)	357 I	Opp	69				Furnished								
823XGAHX-*3 (27)	329 I	Opp	74				Furnished								
823XJAHX-*3 (23)	279 I	Opp	88				Furnished								
823XMAHX-*3 (21)	238 I	Opp	103				Furnished								
823XRAHX-*3 (25)	172 I	Opp	142				Furnished								
823XTKTX-*3 (17)	142 I	Opp	172		8-A-165(28)		Furnished								
880XBAHX-*3 (3)	423 I	Opp	58				Furnished								
880XDAHX-*3 (4)	357 I	Opp	69				Furnished								
880XGAHX-*3 (9)	329 I	Opp	74				Furnished								
880XJAHX-*3 (5)	279 I	Opp	88				Furnished								
880XMAHX-*3 (6)	238 I	Opp	103				Furnished								
880XQAHX-*3 (16)	203 I	Opp	120				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1418
(19) Input Gear Part No. 5-P-1441
(20) Input Gear Part No. 5-P-1494
(21) Input Gear Part No. 5-P-283
(22) Input Gear Part No. 5-P-285
(23) Input Gear Part No. 5-P-325
(25) Input Gear Part No. 5-P-721
(26) Input Gear Part No. 5-P-971
(27) Input Gear Part No. 5-P-980
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RT-11609A (Thrushaft option use "AT" mounting)
RT-11709H (Thrushaft option use "AU" mounting)
RT-12609A (Thrushaft option use "AT" mounting)
RT-12709A
RT-12710B (Thrushaft option use "AU" mounting)
RT-13609A (Thrushaft option use "AT" mounting)
RT-13709H (Thrushaft option use "AU" mounting)
RT-13710B (Thrushaft option use "AU" mounting)
RT-14609A (Thrushaft option use "AU" mounting)
RT-14709A
RT-14710B (Thrushaft option use "AU" mounting)
RT-14710B-AS2
RT-14715 (Thrushaft option use "BD" mounting)
RT-14910B-AS2
RT-14915
RT-15715
RT-8709B
RT-8908LL
RT-9710B (Thrushaft option use "AU" mounting)
RTA-14710B-AS
RTF-11609A
RTF-12609A
RTF-12709H
RTF-12710B

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
880XRAHX-*3 (7)	172 I	Opp	142				Furnished								
880XTAHX-*3 (8)	134 I	Opp	183				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAAJX-*3	300 C	Opp	47			328481X	Furnished	272XAAJX-*3	300 C	Opp	45				Furnished
282XBAJX-*3	300 C	Opp	58				Furnished	272XBAJX-*3	300 C	Opp	55				Furnished
282XCAJX-*3	300 C	Opp	70				Furnished	272XCAJX-*3	300 C	Opp	67				Furnished
282XDAJX-*3	293 C	Opp	84				Furnished	272XDAJX-*3	325 C	Opp	79				Furnished
282XGAJX-*3	257 C	Opp	95				Furnished	272XGAJX-*3	300 C	Opp	95				Furnished
282XKAJX-*3	220 C	Opp	112				Furnished	272XKAJX-*3	300 C	Opp	106				Furnished
282XMAJX-*3	206 C	Opp	119				Furnished	272XMAJX-*3	300 C	Opp	119				Furnished
282XPAJX-*3	184 C	Opp	133				Furnished	272XPAJX-*3	300 C	Opp	133				Furnished
282XSAJX-*3	158 C	Opp	156				Furnished	272XSAJX-*3	300 C	Opp	149				Furnished
282XTAJX-*3	147 C	Opp	166				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	423 I	Opp	58				Furnished								
885XGAHX-*3 (9)	329 I	Opp	74				Furnished								
885XJAHX-*3 (5)	279 I	Opp	88				Furnished								
885XMAHX-*3 (6)	238 I	Opp	103				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (24)	200 I	Opp	74	78			Furnished	340XFAHX-*5 (24)	200 I	Opp	71	75	7-A-140(28)		Furnished
863XBAHX-*5	423 I	Opp	58	72			Furnished								
GEARED ADAPTERS															
628XAHX-4AH	250 I	Eng			8-A-032		Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(24) Input Gear Part No. 5-P-581
(28) Filler block furnished with PTO

RT-11609A (Thrushaft option use "AT" mounting)	RT-14609A (Thrushaft option use "AU" mounting)	RT-8709B
RT-11709H (Thrushaft option use "AU" mounting)	RT-14709A	RT-8908LL
RT-12609A (Thrushaft option use "AT" mounting)	RT-14710B (Thrushaft option use "AU" mounting)	RT-9710B (Thrushaft option use "AU" mounting)
RT-12709A	RT-14710B-AS2	RTA-14710B-AS
RT-12710B (Thrushaft option use "AU" mounting)	RT-14715 (Thrushaft option use "BD" mounting)	RTF-11609A
RT-13609A (Thrushaft option use "AT" mounting)	RT-14910B-AS2	RTF-12609A
RT-13709H (Thrushaft option use "AU" mounting)	RT-14915	RTF-12709H
RT-13710B (Thrushaft option use "AU" mounting)	RT-15715	RTF-12710B

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 03-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
REAR MOUNT - "AT" MOUNTING OPTION							
541-LAT-*-*	400 I	Eng	67				Furnished
REAR MOUNT - "AU" MOUNTING OPTION							
541-LAU-*-*	400 I	Eng	67				Furnished
541-MAU-*-*	350 I	Eng	87				Furnished
541-NAU-*-*	300 I	Eng	99				Furnished
REAR MOUNT - "BD" MOUNTING OPTION							
541-LBD-*-*	400 I	Eng	67				Furnished
541-MBD-*-*	350 I	Eng	87				Furnished
541-NBD-*-*	300 I	Eng	99				Furnished

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RT-6610
RT-6613
RTO-7613

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear REAR of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*6	250 I	Opp	44		7-A-032(P)(27)	328564X	Furnished	221XCAHX-*6	250 I	Opp	44		7-A-032(27)		Furnished
221ZEAHX-*6	250 I	Opp	51			328564X	Furnished	221XEAHX-*6	250 I	Opp	51				Furnished
221ZPAHX-*6	140 I	Opp	83			328564X	Furnished	221XPAHX-*6	200 I	Opp	83				Furnished
489XAAHX-*6 (12)	250 I	Opp	41				Furnished	442XFAHX-*6 (2)	250 I	Opp	62				Furnished
489XCAHX-*6 (13)	250 I	Opp	50				Furnished	442XHAHX-*6 (15)	250 I	Opp	72				Furnished
489XFAHX-*6 (2)	250 I	Opp	62				Furnished	442XLAHX-*6 (1)	250 I	Opp	80				Furnished
489XHAHX-*6 (15)	250 I	Opp	72				Furnished	442XQAHX-*6 (1)	225 I	Opp	86				Furnished
489XLAHX-*6 (1)	250 I	Opp	80				Furnished	442XRAHX-*6 (1)	225 I	Opp	99				Furnished
489XQAHX-*6 (1)	225 I	Opp	86				Furnished	442XSAHX-*6 (1)	200 I	Opp	118				Furnished
489XRAHX-*6 (1)	225 I	Opp	99				Furnished	442XUAHX-*6 (1)	195 I	Opp	141				Furnished
489XSAHX-*6 (1)	200 I	Opp	118				Furnished	442XWAHX-*6 (1)	175 I	Opp	166				Furnished
489XUAHX-*6 (1)	195 I	Opp	141				Furnished	442XXAHX-*6 (1)	140 I	Opp	196				Furnished
489XWAHX-*6 (1)	175 I	Opp	166				Furnished	660XFAHX-*6 (10)	375 I	Opp	62				Furnished
489XXAHX-*6 (1)	140 I	Opp	196				Furnished	660XHAHX-*6 (15)	375 I	Opp	72				Furnished
680XFAHX-*6 (10)	375 I	Opp	62				Furnished	660XQAHX-*6 (11)	375 I	Opp	86				Furnished
680XHAHX-*6 (19)	375 I	Opp	72				Furnished	660XRAHX-*6 (18)	350 I	Opp	99				Furnished
680XQAHX-*6 (11)	375 I	Opp	86				Furnished	660XSAHX-*6 (14)	325 I	Opp	118				Furnished
680XRAHX-*6 (18)	350 I	Opp	99				Furnished								
680XSAHX-*6 (14)	325 I	Opp	118				Furnished								
823XBAHX-*6 (21)	500 I	Opp	42				Furnished								
823XDAHX-*6 (25)	500 I	Opp	50				Furnished								
823XGAHX-*6 (26)	500 I	Opp	54				Furnished								
823XJAHX-*6 (22)	500 I	Opp	64				Furnished								
823XMAHX-*6 (20)	500 I	Opp	75				Furnished								
823XRAHX-*6 (24)	400 I	Opp	103				Furnished								
823XTKTX-*6 (17)	372 I	Opp	125		8-A-165(27)		Furnished								
880XBAHX-*6 (3)	500 I	Opp	42				Furnished								
880XDAHX-*6 (4)	500 I	Opp	50				Furnished								
880XGAHX-*6 (9)	500 I	Opp	54				Furnished								
880XJAHX-*6 (5)	500 I	Opp	64				Furnished								
880XMAHX-*6 (6)	500 I	Opp	75				Furnished								
880XQAHX-*6 (16)	450 I	Opp	87				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-1494
(20) Input Gear Part No. 5-P-283
(21) Input Gear Part No. 5-P-285
(22) Input Gear Part No. 5-P-325
(24) Input Gear Part No. 5-P-721
(25) Input Gear Part No. 5-P-971
(26) Input Gear Part No. 5-P-980
(27) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RT-6610
RT-6613
RTO-7613

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear REAR of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
880XRAHX-*6 (7)	400 I	Opp	103				Furnished								
880XTAHX-*6 (8)	350 I	Opp	133				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*6 (3)	500 I	Opp	42				Furnished								
885XGAHX-*6 (9)	500 I	Opp	54				Furnished								
885XJAHX-*6 (5)	500 I	Opp	64				Furnished								
885XMAHX-*6 (6)	500 I	Opp	75				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*4 (23)	200 I	Opp	54	56			Furnished	340XFAHX-*4 (23)	200 I	Opp	54	56	7-A-140(27)		Furnished
863XBAHX-*4	500 I	Opp	42	52			Furnished								
GEARED ADAPTERS															
628XAHX-4AH	250 I	Eng			8-A-032		Furnished	626XAHX-4AH	250 I	Eng					Furnished
								630XAHX-4AH	250 I	Eng					Furnished
								645XAHX-4AH	250 I	Eng					Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(23) Input Gear Part No. 5-P-581
(27) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RTO-6610
RTO-6613

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear REAR of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*6	250 I	Opp	55		7-A-032(P)(25)	328564X	Furnished	221XCAHX-*6	250 I	Opp	55		7-A-032(25)		Furnished
221ZEAHX-*6	250 I	Opp	63			328564X	Furnished	221XEAHX-*6	250 I	Opp	63				Furnished
221ZPAHX-*6	140 I	Opp	103			328564X	Furnished	221XPAHX-*6	200 I	Opp	103				Furnished
489XFAHX-*6 (2)	250 I	Opp	76				Furnished	442XFAHX-*6 (2)	250 I	Opp	76				Furnished
489XHAHX-*6 (13)	250 I	Opp	88				Furnished	442XHAHX-*6 (13)	250 I	Opp	88				Furnished
489XLAHX-*6 (1)	250 I	Opp	99				Furnished	442XLAHX-*6 (1)	250 I	Opp	99				Furnished
489XQAHX-*6 (1)	225 I	Opp	106				Furnished	442XQAHX-*6 (1)	225 I	Opp	106				Furnished
489XRAHX-*6 (1)	225 I	Opp	123				Furnished	442XRAHX-*6 (1)	225 I	Opp	123				Furnished
489XSAHX-*6 (1)	200 I	Opp	147				Furnished	442XSAHX-*6 (1)	200 I	Opp	147				Furnished
489XUAHX-*6 (1)	195 I	Opp	175				Furnished	442XUAHX-*6 (1)	195 I	Opp	175				Furnished
489XWAHX-*6 (1)	175 I	Opp	206				Furnished	442XWAHX-*6 (1)	175 I	Opp	206				Furnished
489XXAHX-*6 (1)	140 I	Opp	243				Furnished	442XXAHX-*6 (1)	140 I	Opp	243				Furnished
680XFAHX-*6 (10)	375 I	Opp	76				Furnished	660XFAHX-*6 (10)	375 I	Opp	76				Furnished
680XHAHX-*6 (17)	375 I	Opp	88				Furnished	660XHAHX-*6 (13)	375 I	Opp	88				Furnished
680XQAHX-*6 (11)	375 I	Opp	106				Furnished	660XQAHX-*6 (11)	375 I	Opp	106				Furnished
680XRAHX-*6 (16)	350 I	Opp	123				Furnished	660XRAHX-*6 (16)	350 I	Opp	123				Furnished
680XSAHX-*6 (12)	325 I	Opp	147				Furnished	660XSAHX-*6 (12)	325 I	Opp	147				Furnished
823XBAHX-*6 (19)	500 I	Opp	52				Furnished								
823XDAHX-*6 (23)	500 I	Opp	62				Furnished								
823XGAHX-*6 (24)	500 I	Opp	67				Furnished								
823XJAHX-*6 (20)	500 I	Opp	79				Furnished								
823XMAHX-*6 (18)	500 I	Opp	92				Furnished								
823XRAHX-*6 (22)	400 I	Opp	128				Furnished								
823XTKTX-*6 (15)	372 I	Opp	154		8-A-165(25)		Furnished								
880XBAHX-*6 (3)	500 I	Opp	52				Furnished								
880XDAHX-*6 (4)	500 I	Opp	62				Furnished								
880XGAHX-*6 (9)	500 I	Opp	67				Furnished								
880XJAHX-*6 (5)	500 I	Opp	79				Furnished								
880XMAHX-*6 (6)	500 I	Opp	92				Furnished								
880XQAHX-*6 (14)	450 I	Opp	109				Furnished								
880XRAHX-*6 (7)	400 I	Opp	128				Furnished								
880XTAHX-*6 (8)	350 I	Opp	164				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1322
(13) Input Gear Part No. 5-P-1364
(14) Input Gear Part No. 5-P-1385
(15) Input Gear Part No. 5-P-1395
(16) Input Gear Part No. 5-P-1441
(17) Input Gear Part No. 5-P-1494
(18) Input Gear Part No. 5-P-283
(19) Input Gear Part No. 5-P-285
(20) Input Gear Part No. 5-P-325
(22) Input Gear Part No. 5-P-721
(23) Input Gear Part No. 5-P-971
(24) Input Gear Part No. 5-P-980
(25) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RTO-6610
RTO-6613

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear REAR of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*6 (3)	500 I	Opp	52				Furnished								
885XGAHX-*6 (9)	500 I	Opp	67				Furnished								
885XJAHX-*6 (5)	500 I	Opp	79				Furnished								
885XMAHX-*6 (6)	500 I	Opp	92				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*4 (21)	200 I	Opp	67	70			Furnished	340XFAHX-*4 (21)	200 I	Opp	67	70	7-A-140(25)		Furnished
863XBAHX-*4	500 I	Opp	52	64			Furnished								
GEARED ADAPTERS															
628XAHX-4AH	250 I	Eng					Furnished	626XAHX-4AH	250 I	Eng					Furnished
								630XAHX-4AH	250 I	Eng					Furnished
								645XAHX-4AH	250 I	Eng					Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(21) Input Gear Part No. 5-P-581
(25) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RTAO-10710B-AC	RTAO-16710B-AS	RTO-14710B-AS2
RTAO-10710B-AS	RTO-10710B-AS2	RTO-14908LL
RTAO-12710B-AC	RTO-10910B-AS2	RTO-14910B-AS2
RTAO-12710B-AS	RTO-10910B-AS3	RTO-14910B-AS3
RTAO-14710B-AC	RTO-11908LL	RTO-16710B
RTAO-14710B-AC	RTO-12710B-AS2	RTO-16710B-AS2
RTAO-14710B-AS	RTO-12910B-AS2 (Thrushaft option use AT mounting)	RTO-16908LL (Thrushaft use BD mounting)
RTAO-16710B-AC	RTO-12910B-AS3 (Thrushaft option use AT mounting)	RTO-16910B-AS2

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*3	250 I	Opp	82		7-A-032(P)(28)	328564X	Furnished	221XCAHX-*3	250 I	Opp	79		7-A-032(28)		Furnished
221ZEAHX-*3	250 I	Opp	95			328564X	Furnished	221XEAHX-*3	250 I	Opp	91				Furnished
221ZPAHX-*3	200 I	Opp	154			328564X	Furnished	221XPAHX-*3	200 I	Opp	148				Furnished
489XAAHX-*5 (12)	250 I	Opp	72				Furnished	442XAAHX-*3 (12)	250 I	Opp	69				Furnished
489XCAHX-*5 (13)	250 I	Opp	93				Furnished	442XBAHX-*3 (18)	250 I	Eng	69			REQUIRED	Furnished
489XFAHX-*5 (2)	250 I	Opp	114				Furnished	442XCAHX-*3 (13)	250 I	Opp	89				Furnished
489XHAHX-*5 (15)	250 I	Opp	132				Furnished	442XFAHX-*3 (2)	250 I	Opp	110				Furnished
489XLAHX-*5 (1)	222 I	Opp	148				Furnished	442XHAHX-*3 (15)	250 I	Opp	127				Furnished
489XQAHX-*5 (1)	206 I	Opp	160				Furnished	442XLAHX-*3 (1)	233 I	Opp	142				Furnished
489XRAHX-*5 (1)	178 I	Opp	185				Furnished	442XQAHX-*3 (1)	216 I	Opp	153				Furnished
489XSAHX-*5 (1)	150 I	Opp	220				Furnished	442XRAHX-*3 (1)	187 I	Opp	177				Furnished
489XUAHX-*5 (1)	126 I	Opp	262				Furnished	442XSAHX-*3 (1)	156 I	Opp	211				Furnished
489XWAHX-*5 (1)	107 I	Opp	308				Furnished	442XUAHX-*3 (1)	132 I	Opp	251				Furnished
489XXAHX-*5 (1)	91 I	Opp	365				Furnished	442XWAHX-*3 (1)	112 I	Opp	295				Furnished
680XFAHX-*3 (10)	288 I	Opp	114				Furnished	442XXAHX-*3 (1)	94 I	Opp	349				Furnished
680XHAHX-*3 (20)	249 I	Opp	132				Furnished	660XFAHX-*3 (10)	301 I	Opp	110				Furnished
680XQAHX-*3 (11)	206 I	Opp	160				Furnished	660XHAHX-*3 (15)	260 I	Opp	127				Furnished
680XRAHX-*3 (19)	178 I	Opp	185				Furnished	660XQAHX-*3 (11)	216 I	Opp	153				Furnished
680XSAHX-*3 (14)	150 I	Opp	220				Furnished	660XRAHX-*3 (19)	187 I	Opp	177				Furnished
823XBAHX-*3 (22)	423 I	Opp	78				Furnished	660XSAHX-*3 (14)	156 I	Opp	211				Furnished
823XDAHX-*3 (26)	357 I	Opp	92				Furnished								
823XGAHX-*3 (27)	329 I	Opp	100				Furnished								
823XJAHX-*3 (23)	279 I	Opp	118				Furnished								
823XMAHX-*3 (21)	238 I	Opp	139				Furnished								
823XRAHX-*3 (25)	172 I	Opp	191				Furnished								
823XTKTX-*3 (17)	142 I	Opp	231		8-A-165(28)		Furnished								
880XBAHX-*3 (3)	423 I	Opp	78				Furnished								
880XDAHX-*3 (4)	357 I	Opp	92				Furnished								
880XGAHX-*3 (9)	329 I	Opp	100				Furnished								
880XJAHX-*3 (5)	279 I	Opp	118				Furnished								
880XMAHX-*3 (6)	238 I	Opp	139				Furnished								
880XQAHX-*3 (16)	203 I	Opp	162				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do Not Use Geared Adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1418
(19) Input Gear Part No. 5-P-1441
(20) Input Gear Part No. 5-P-1494
(21) Input Gear Part No. 5-P-283
(22) Input Gear Part No. 5-P-285
(23) Input Gear Part No. 5-P-325
(25) Input Gear Part No. 5-P-721
(26) Input Gear Part No. 5-P-971
(27) Input Gear Part No. 5-P-980
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RTAO-10710B-AC	RTAO-16710B-AS	RTO-14710B-AS2
RTAO-10710B-AS	RTO-10710B-AS2	RTO-14908LL
RTAO-12710B-AC	RTO-10910B-AS2	RTO-14910B-AS2
RTAO-12710B-AS	RTO-10910B-AS3	RTO-14910B-AS3
RTAO-14710B-AC	RTO-11908LL	RTO-16710B
RTAO-14710B-AC	RTO-12710B-AS2	RTO-16710B-AS2
RTAO-14710B-AS	RTO-12910B-AS2 (Thrushaft option use AT mounting)	RTO-16908LL (Thrushaft use BD mounting)
RTAO-16710B-AC	RTO-12910B-AS3 (Thrushaft option use AT mounting)	RTO-16910B-AS2

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
880XRAHX-*3 (7)	172 I	Opp	191				Furnished								
880XTAHX-*3 (8)	134 I	Opp	246				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAAJX-*3	300 C	Opp	63			328481X	Furnished	272XAAJX-*3	300 C	Opp	61				Furnished
282XBAJX-*3	300 C	Opp	78				Furnished	272XBAJX-*3	300 C	Opp	75				Furnished
282XCAJX-*3	300 C	Opp	94				Furnished	272XCAJX-*3	300 C	Opp	90				Furnished
282XDAJX-*3	293 C	Opp	113				Furnished	272XDAJX-*3	325 C	Opp	107				Furnished
282XGAJX-*3	246 C	Opp	134				Furnished	272XGAJX-*3	300 C	Opp	128				Furnished
282XKAJX-*3	220 C	Opp	150				Furnished	272XKAJX-*3	300 C	Opp	144				Furnished
282XMAJX-*3	197 C	Opp	168				Furnished	272XMAJX-*3	300 C	Opp	161				Furnished
282XPAJX-*3	176 C	Opp	187				Furnished	272XPAJX-*3	300 C	Opp	180				Furnished
282XSAJX-*3	158 C	Opp	209				Furnished	272XSAJX-*3	300 C	Opp	201				Furnished
282XTAJX-*3	141 C	Opp	234				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	423 I	Opp	78				Furnished								
885XGAHX-*3 (9)	329 I	Opp	100				Furnished								
885XJAHX-*3 (5)	279 I	Opp	118				Furnished								
885XMAHX-*3 (6)	238 I	Opp	139				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (24)	200 I	Opp	100	105			Furnished	340XFAHX-*5 (24)	200 I	Opp	96	101	7-A-140(28)		Furnished
863XBAHX-*5	423 I	Opp	78	97			Furnished								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng			8-A-032		Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do Not Use Geared Adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(24) Input Gear Part No. 5-P-581
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RTAO-10710B-AC	RTAO-16710B-AS	RTO-14710B-AS2
RTAO-10710B-AS	RTO-10710B-AS2	RTO-14908LL
RTAO-12710B-AC	RTO-10910B-AS2	RTO-14910B-AS2
RTAO-12710B-AS	RTO-10910B-AS3	RTO-14910B-AS3
RTAO-14710B-AC	RTO-11908LL	RTO-16710B
RTAO-14710B-AC	RTO-12710B-AS2	RTO-16710B-AS2
RTAO-14710B-AS	RTO-12910B-AS2 (Thrushaft option use AT mounting)	RTO-16908LL (Thrushaft use BD mounting)
RTAO-16710B-AC	RTO-12910B-AS3 (Thrushaft option use AT mounting)	RTO-16910B-AS2

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
REAR MOUNT - "AU" MOUNTING OPTION															
541-LAU-*-*	400 I	Eng	91				Furnished								
541-MAU-*-*	350 I	Eng	117				Furnished								
541-NAU-*-*	300 I	Eng	133				Furnished								
REAR MOUNT - "BD" MOUNTING OPTION															
541-LBD-*-*	400 I	Eng	91				Furnished								
541-MBD-*-*	350 I	Eng	117				Furnished								
541-NBD-*-*	300 I	Eng	133				Furnished								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do Not Use Geared Adapters with 442 "A" and "C" ratios.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FOM-16D313E-LEP	RTLC-16609E (Convertible 9 to 13 Speed)	RTLO-14918A-AS3
RTAO-10710C-AC	RTLO-12713A	RTLO-14918B
RTAO-10710C-AS	RTLO-13118-AMT	RTLO-14918B-AS
RTAO-12710C-AC	RTLO-14713A	RTLO-16713A
RTAO-12710C-AS	RTLO-14713A-T2	RTLO-16713A-T2
RTAO-14710C-AC	RTLO-14718B	RTLO-16718B
RTAO-14710C-AS	RTLO-14718B-T2	RTLO-16718B-T2
RTAO-16710C-AS	RTLO-14918A-AS2	RTLO-16913A

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
489XAAHX-*5 (11)	250 I	Opp	61				Furnished	221XCAHX-*3	250 I	Eng	66		7-A-032(P)(27)	329138X	Furnished
489XCAHX-*5 (12)	250 I	Opp	78				Furnished	221XEAHX-*3	250 I	Eng	76			329138X	Furnished
489XFAHX-*5 (2)	250 I	Opp	96				Furnished	221XPAHX-*3	200 I	Eng	124			329138X	Furnished
489XHAHX-*5 (14)	250 I	Opp	111				Furnished	442XAAHX-*3 (11)	250 I	Opp	58				Furnished
489XLAHX-*5 (1)	222 I	Opp	124				Furnished	442XBAHX-*3 (17)	250 I	Eng	58			REQUIRED	Furnished
489XQAHX-*5 (1)	206 I	Opp	134				Furnished	442XCAHX-*3 (12)	250 I	Opp	74				Furnished
489XRAHX-*5 (1)	178 I	Opp	155				Furnished	442XFAHX-*3 (2)	250 I	Opp	92				Furnished
489XSAHX-*5 (1)	150 I	Opp	184				Furnished	442XHAHX-*3 (14)	250 I	Opp	107				Furnished
680XFAHX-*3 (9)	288 I	Opp	96				Furnished	442XLAHX-*3 (1)	233 I	Opp	119				Furnished
680XHAHX-*3 (19)	249 I	Opp	111				Furnished	442XQAHX-*3 (1)	216 I	Opp	128				Furnished
680XQAHX-*3 (10)	206 I	Opp	134				Furnished	442XRAHX-*3 (1)	187 I	Opp	148				Furnished
680XRAHX-*3 (18)	178 I	Opp	155				Furnished	660XFAHX-*3 (9)	301 I	Opp	92				Furnished
680XSAHX-*3 (13)	150 I	Opp	184				Furnished	660XHAHX-*3 (19)	260 I	Opp	107				Furnished
823XBAHX-*3 (21)	423 I	Opp	65				Furnished	660XQAHX-*3 (10)	216 I	Opp	128				Furnished
823XDAHX-*3 (25)	357 I	Opp	77				Furnished	660XRAHX-*3 (18)	187 I	Opp	148				Furnished
823XGAHX-*3 (26)	329 I	Opp	84				Furnished								
823XJAHX-*3 (22)	279 I	Opp	99				Furnished								
823XMAHX-*3 (20)	238 I	Opp	116				Furnished								
823XRAHX-*3 (24)	172 I	Opp	160				Furnished								
823XTKTX-*3 (16)	142 I	Opp	194		8-A-165(T)(27)		Furnished								
880XBAHX-*3 (3)	423 I	Opp	65				Furnished								
880XDAHX-*3 (4)	357 I	Opp	77				Furnished								
880XGAHX-*3 (8)	329 I	Opp	84				Furnished								
880XJAHX-*3 (5)	279 I	Opp	99				Furnished								
880XMAHX-*3 (6)	238 I	Opp	116				Furnished								
880XQAHX-*3 (15)	203 I	Opp	136				Furnished								
880XRAHX-*3 (7)	172 I	Opp	160				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAAJX-*3	300 C	Opp	54			328481X	Furnished	272XAAJX-*3	300 C	Opp	51				Furnished
282XBAJX-*3	300 C	Opp	65				Furnished	272XBAJX-*3	300 C	Opp	62				Furnished
282XCAJX-*3	300 C	Opp	79				Furnished	272XCAJX-*3	300 C	Opp	76				Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1135
(9) Input Gear Part No. 5-P-1242
(10) Input Gear Part No. 5-P-1246
(11) Input Gear Part No. 5-P-1280
(12) Input Gear Part No. 5-P-1287
(13) Input Gear Part No. 5-P-1322
(14) Input Gear Part No. 5-P-1364
(15) Input Gear Part No. 5-P-1385
(16) Input Gear Part No. 5-P-1395
(17) Input Gear Part No. 5-P-1418
(18) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-1494
(20) Input Gear Part No. 5-P-283
(21) Input Gear Part No. 5-P-285
(22) Input Gear Part No. 5-P-325
(24) Input Gear Part No. 5-P-721
(25) Input Gear Part No. 5-P-971
(26) Input Gear Part No. 5-P-980
(27) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FOM-16D313E-LEP	RTLC-16609E (Convertible 9 to 13 Speed)	RTLO-14918A-AS3
RTAO-10710C-AC	RTLO-12713A	RTLO-14918B
RTAO-10710C-AS	RTLO-13118-AMT	RTLO-14918B-AS
RTAO-12710C-AC	RTLO-14713A	RTLO-16713A
RTAO-12710C-AS	RTLO-14713A-T2	RTLO-16713A-T2
RTAO-14710C-AC	RTLO-14718B	RTLO-16718B
RTAO-14710C-AS	RTLO-14718B-T2	RTLO-16718B-T2
RTAO-16710C-AS	RTLO-14918A-AS2	RTLO-16913A

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XDAJX-*3	293 C	Opp	93				Furnished	272XDAJX-*3	300 C	Opp	90				Furnished
282XGAJX-*3	246 C	Opp	112				Furnished	272XGAJX-*3	257 C	Opp	107				Furnished
282XKAJX-*3	220 C	Opp	125				Furnished	272XKAJX-*3	230 C	Opp	120				Furnished
282XMAJX-*3	197 C	Opp	140				Furnished	272XMAJX-*3	206 C	Opp	134				Furnished
282XPAJX-*3	176 C	Opp	156				Furnished	272XPAJX-*3	184 C	Opp	150				Furnished
282XSAJX-*3	158 C	Opp	174				Furnished	272XSAJX-*3	165 C	Opp	168				Furnished
282XTAJX-*3	141 C	Opp	195				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	423 I	Opp	65				Furnished								
885XGAHX-*3 (8)	329 I	Opp	84				Furnished								
885XJAHX-*3 (5)	279 I	Opp	99				Furnished								
885XMAHX-*3 (6)	238 I	Opp	116				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (23)	200 I	Opp	84	88			Furnished	340XFAHX-*5 (23)	200 I	Opp	80	84	7-A-140(27)		Furnished
863XBAHX-*5	423 I	Opp	65	81			Furnished								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng				8-A-032	Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(8) Input Gear Part No. 5-P-1135
(23) Input Gear Part No. 5-P-581
(27) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FOM-16D313E-LEP	RTLC-16609E (Convertible 9 to 13 Speed)	RTLO-14918A-AS3
RTAO-10710C-AC	RTLO-12713A	RTLO-14918B
RTAO-10710C-AS	RTLO-13118-AMT	RTLO-14918B-AS
RTAO-12710C-AC	RTLO-14713A	RTLO-16713A
RTAO-12710C-AS	RTLO-14713A-T2	RTLO-16713A-T2
RTAO-14710C-AC	RTLO-14718B	RTLO-16718B
RTAO-14710C-AS	RTLO-14718B-T2	RTLO-16718B-T2
RTAO-16710C-AS	RTLO-14918A-AS2	RTLO-16913A

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 03-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
REAR MOUNT - "AU" MOUNTING OPTION															
541-LAU-*-*	400 I	Eng	76				Furnished								
541-MAU-*-*	350 I	Eng	98				Furnished								
541-NAU-*-*	300 I	Eng	112				Furnished								
REAR MOUNT - "BD" MOUNTING OPTION															
541-LBD-*-*	400 I	Eng	76				Furnished								
541-MBD-*-*	350 I	Eng	98				Furnished								
541-NBD-*-*	300 I	Eng	112				Furnished								

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IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RTO-14915
RTO-16915
RTX-14715
RTX-15715

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.5700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*3	250 I	Opp	77		7-A-032(P)(28)	328564X	Furnished	221XCAHX-*3	250 I	Opp	74		7-A-032(28)		Furnished
221ZEAHX-*3	250 I	Opp	89			328564X	Furnished	221XEAHX-*3	250 I	Opp	86				Furnished
221ZPAHX-*3	200 I	Opp	145			328564X	Furnished	221XPAHX-*3	200 I	Opp	139				Furnished
489XAAHX-*5 (12)	250 I	Opp	68				Furnished	442XAAHX-*3 (12)	250 I	Opp	65				Furnished
489XCAHX-*5 (13)	250 I	Opp	87				Furnished	442XBAHX-*3 (18)	250 I	Eng	65			REQUIRED	Furnished
489XFAHX-*5 (2)	250 I	Opp	108				Furnished	442XCAHX-*3 (13)	250 I	Opp	83				Furnished
489XHAHX-*5 (15)	250 I	Opp	125				Furnished	442XFAHX-*3 (2)	250 I	Opp	103				Furnished
489XLAHX-*5 (1)	222 I	Opp	139				Furnished	442XHAHX-*3 (15)	250 I	Opp	119				Furnished
489XQAHX-*5 (1)	206 I	Opp	150				Furnished	442XLAHX-*3 (1)	233 I	Opp	134				Furnished
489XRAHX-*5 (1)	178 I	Opp	174				Furnished	442XQAHX-*3 (1)	216 I	Opp	144				Furnished
489XSAHX-*5 (1)	150 I	Opp	207				Furnished	442XRAHX-*3 (1)	187 I	Opp	166				Furnished
489XUAHX-*5 (1)	126 I	Opp	247				Furnished	442XSAHX-*3 (1)	156 I	Opp	198				Furnished
489XWAHX-*5 (1)	107 I	Opp	290				Furnished	442XUAHX-*3 (1)	132 I	Opp	236				Furnished
489XXAHX-*5 (1)	91 I	Opp	343				Furnished	442XWAHX-*3 (1)	112 I	Opp	278				Furnished
680XFAHX-*3 (10)	288 I	Opp	108				Furnished	442XXAHX-*3 (1)	94 I	Opp	329				Furnished
680XHAHX-*3 (20)	249 I	Opp	125				Furnished	660XFAHX-*3 (10)	301 I	Opp	103				Furnished
680XQAHX-*3 (11)	206 I	Opp	150				Furnished	660XHAHX-*3 (15)	260 I	Opp	119				Furnished
680XRAHX-*3 (19)	178 I	Opp	174				Furnished	660XQAHX-*3 (11)	216 I	Opp	144				Furnished
680XSAHX-*3 (14)	150 I	Opp	207				Furnished	660XRAHX-*3 (19)	187 I	Opp	166				Furnished
823XBAHX-*3 (22)	423 I	Opp	73				Furnished	660XSAHX-*3 (14)	156 I	Opp	198				Furnished
823XDAHX-*3 (26)	357 I	Opp	87				Furnished								
823XGAHX-*3 (27)	329 I	Opp	87				Furnished								
823XJAHX-*3 (23)	279 I	Opp	111				Furnished								
823XMAHX-*3 (21)	238 I	Opp	130				Furnished								
823XRAHX-*3 (25)	172 I	Opp	180				Furnished								
823XTKTX-*3 (17)	142 I	Opp	218		8-A-165(28)		Furnished								
880XBAHX-*3 (3)	423 I	Opp	73				Furnished								
880XDAHX-*3 (4)	357 I	Opp	87				Furnished								
880XGAHX-*3 (9)	329 I	Opp	94				Furnished								
880XJAHX-*3 (5)	279 I	Opp	111				Furnished								
880XMAHX-*3 (6)	238 I	Opp	130				Furnished								
880XQAHX-*3 (16)	203 I	Opp	153				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1418
(19) Input Gear Part No. 5-P-1441
(20) Input Gear Part No. 5-P-1494
(21) Input Gear Part No. 5-P-283
(22) Input Gear Part No. 5-P-285
(23) Input Gear Part No. 5-P-325
(25) Input Gear Part No. 5-P-721
(26) Input Gear Part No. 5-P-971
(27) Input Gear Part No. 5-P-980
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RTO-14915
RTO-16915
RTX-14715
RTX-15715

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.5700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
880XRAHX-*3 (7)	172 I	Opp	180				Furnished								
880XTAHX-*3 (8)	134 I	Opp	232				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAAJX-*3	300 C	Opp	60			328481X	Furnished	272XAAJX-*3	300 C	Opp	57				Furnished
282XBAJX-*3	300 C	Opp	73				Furnished	272XBAJX-*3	300 C	Opp	70				Furnished
282XCAJX-*3	300 C	Opp	89				Furnished	272XCAJX-*3	300 C	Opp	85				Furnished
282XDAJX-*3	293 C	Opp	106				Furnished	272XDAJX-*3	300 C	Opp	101				Furnished
282XGAJX-*3	246 C	Opp	126				Furnished	272XGAJX-*3	257 C	Opp	121				Furnished
282XKAJX-*3	220 C	Opp	141				Furnished	272XKAJX-*3	230 C	Opp	135				Furnished
282XMAJX-*3	197 C	Opp	158				Furnished	272XMAJX-*3	206 C	Opp	151				Furnished
282XPAJX-*3	176 C	Opp	176				Furnished	272XPAJX-*3	184 C	Opp	169				Furnished
282XSAJX-*3	158 C	Opp	197				Furnished	272XSAJX-*3	165 C	Opp	189				Furnished
282XTAJX-*3	141 C	Opp	221				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	423 I	Opp	73				Furnished								
885XGAHX-*3 (9)	329 I	Opp	94				Furnished								
885XJAHX-*3 (5)	279 I	Opp	111				Furnished								
885XMAHX-*3 (6)	238 I	Opp	130				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (24)	200 I	Opp	94	99			Furnished	340XFAHX-*5 (24)	200 I	Opp	90	95	7-A-140(28)		Furnished
863XBAHX-*5	423 I	Opp	73	91			Furnished								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng			8-A-032		Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(24) Input Gear Part No. 5-P-581
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RTO-14915
RTO-16915
RTX-14715
RTX-15715

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - "BD" MOUNTING OPTION

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
541-LBD-*-*	400 I	Eng	86				Furnished
541-MBD-*-*	350 I	Eng	111				Furnished
541-NBD-*-*	300 I	Eng	126				Furnished

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

AT-1202

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 06-BOLT Opening Gear FORWARD of Centerline
30 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0500" (26.6700MM)

TOP SIDE ONLY

TRANSMISSION GEAR DATA:
TOP 08-BOLT Opening Gear FORWARD of Centerline
30 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7750" (19.6900MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
221XCABX-*3	250 I	Opp	64		7-A-032		Furnished	221ZCABX-*5	250 I	Opp	64		7-A-032(P)	328564X	Furnished
221XEABX-*3	250 I	Opp	71		7-A-032		Furnished	221ZEABX-*5	250 I	Opp	71		7-A-032(P)	328564X	Furnished
221XPABX-*3	200 I	Opp	116		7-A-032		Furnished	221ZPABX-*5	200 I	Opp	116		7-A-032(P)	328564X	Furnished
442XAABX-*3 (4)	250 I	Opp	53		7-A-032		Furnished	489XAABX-*5 (4)	250 I	Opp	53				Furnished
442XCABX-*3 (5)	250 I	Opp	68		7-A-032		Furnished	489XCABX-*5 (5)	250 I	Opp	68				Furnished
442XFABX-*3 (2)	250 I	Opp	84		7-A-032		Furnished	489XFABX-*5 (2)	250 I	Opp	84				Furnished
442XLABX-*3 (1)	250 I	Opp	108		7-A-032		Furnished	489XLABX-*5 (1)	250 I	Opp	108				Furnished
442XQABX-*3 (1)	225 I	Opp	117		7-A-032		Furnished	489XQABX-*5 (1)	225 I	Opp	117				Furnished
442XRABX-*3 (1)	225 I	Opp	135		7-A-032		Furnished	489XRABX-*5 (1)	225 I	Opp	135				Furnished
442XSABX-*3 (1)	200 I	Opp	161		7-A-032		Furnished	489XSABX-*5 (1)	200 I	Opp	161				Furnished
442XUABX-*3 (1)	195 I	Opp	192		7-A-032		Furnished	489XUABX-*5 (1)	195 I	Opp	192				Furnished
442XWABX-*3 (1)	175 I	Opp	225		7-A-032		Furnished	489XWABX-*5 (1)	175 I	Opp	225				Furnished
442XXABX-*3 (1)	140 I	Opp	267		7-A-032		Furnished	489XXABX-*5 (1)	140 I	Opp	267				Furnished
								880XBABX-*5 (3)	500 I	Opp	58				Furnished
ONE SPEED - FORWARD & REVERSE															
								340SFABX-*5 (6)	200 I	Opp	76	80	7-A-032(P)	310778X	Furnished
								348XFABX-*5 (6)	200 I	Opp	76	80	8-A-093		Furnished
								863XBABX-*5	500 I	Opp	58	72			Furnished
GEARED ADAPTERS															
626XABX-3AB	250 I	Eng			7-A-032		Furnished	628XABX-3AB	250 I	Eng					Furnished
630XABX-3AB	250 I	Eng			7-A-032		Furnished								
645XABX-3AB	250 I	Eng			7-A-032		Furnished								

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1001
(2) Input Gear Part No. 5-P-1076
(3) Input Gear Part No. 5-P-1099
(4) Input Gear Part No. 5-P-1279
(5) Input Gear Part No. 5-P-1286
(6) Input Gear Part No. 5-P-579

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RT-8608L

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*3	250 I	Opp	50		7-A-032(P)(28)	328564X	Furnished	221XCAHX-*3	250 I	Opp	48		7-A-032(28)		Furnished
221ZEAHX-*3	250 I	Opp	58			328564X	Furnished	221XEAHX-*3	250 I	Opp	56				Furnished
221ZPAHX-*3	200 I	Opp	94			328564X	Furnished	221XPAHX-*3	200 I	Opp	90				Furnished
489XAAHX-*5 (12)	250 I	Opp	44				Furnished	442XAAHX-*3 (12)	250 I	Opp	42				Furnished
489XCAHX-*5 (13)	250 I	Opp	57				Furnished	442XBAHX-*3 (18)	250 I	Eng	42			REQUIRED	Furnished
489XFAHX-*5 (2)	250 I	Opp	70				Furnished	442XCAHX-*3 (13)	250 I	Opp	54				Furnished
489XHAHX-*5 (15)	250 I	Opp	81				Furnished	442XFAHX-*3 (2)	250 I	Opp	67				Furnished
489XLAHX-*5 (1)	222 I	Opp	91				Furnished	442XHAHX-*3 (15)	250 I	Opp	78				Furnished
489XQAHX-*5 (1)	206 I	Opp	98				Furnished	442XLAHX-*3 (1)	233 I	Opp	87				Furnished
489XRAHX-*5 (1)	178 I	Opp	113				Furnished	442XQAHX-*3 (1)	216 I	Opp	94				Furnished
489XSAHX-*5 (1)	150 I	Opp	135				Furnished	442XRAHX-*3 (1)	187 I	Opp	108				Furnished
489XUAHX-*5 (1)	126 I	Opp	161				Furnished	442XSAHX-*3 (1)	156 I	Opp	129				Furnished
489XWAHX-*5 (1)	107 I	Opp	189				Furnished	442XUAHX-*3 (1)	132 I	Opp	154				Furnished
489XXAHX-*5 (1)	91 I	Opp	223				Furnished	442XWAHX-*3 (1)	112 I	Opp	181				Furnished
680XFAHX-*3 (10)	288 I	Opp	70				Furnished	442XXAHX-*3 (1)	94 I	Opp	214				Furnished
680XHAHX-*3 (20)	375 I	Opp	81				Furnished	660XFAHX-*3 (10)	301 I	Opp	67				Furnished
680XQAHX-*3 (11)	206 I	Opp	98				Furnished	660XHAHX-*3 (15)	260 I	Opp	78				Furnished
680XRAHX-*3 (19)	178 I	Opp	113				Furnished	660XQAHX-*3 (11)	216 I	Opp	94				Furnished
680XSAHX-*3 (14)	150 I	Opp	135				Furnished	660XRAHX-*3 (19)	187 I	Opp	108				Furnished
823XBAHX-*3 (22)	423 I	Opp	48				Furnished	660XSAHX-*3 (14)	156 I	Opp	129				Furnished
823XDAHX-*3 (27)	357 I	Opp	57				Furnished								
823XGAHX-*3 (25)	329 I	Opp	61				Furnished								
823XJAHX-*3 (23)	279 I	Opp	72				Furnished								
823XMAHX-*3 (21)	238 I	Opp	85				Furnished								
823XRAHX-*3 (26)	172 I	Opp	117				Furnished								
823XTKTX-*3 (17)	142 I	Opp	142		8-A-165(28)		Furnished								
880XBAHX-*3 (3)	423 I	Opp	48				Furnished								
880XDAHX-*3 (4)	357 I	Opp	57				Furnished								
880XGAHX-*3 (9)	329 I	Opp	61				Furnished								
880XJAHX-*3 (5)	279 I	Opp	72				Furnished								
880XMAHX-*3 (6)	238 I	Opp	85				Furnished								
880XQAHX-*3 (16)	203 I	Opp	99				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear.Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1418
(19) Input Gear Part No. 5-P-1441
(20) Input Gear Part No. 5-P-1494
(21) Input Gear Part No. 5-P-283
(22) Input Gear Part No. 5-P-285
(23) Input Gear Part No. 5-P-325
(25) Input Gear Part No. 5-P-590
(26) Input Gear Part No. 5-P-721
(27) Input Gear Part No. 5-P-971
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RT-8608L

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
880XRAHX-*3 (7)	172 I	Opp	117				Furnished								
880XTAHX-*3 (8)	134 I	Opp	151				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAAJX-*3	300 C	Opp	39			328481X	Furnished	272XAAJX-*3	300 C	Opp	37				Furnished
282XBAJX-*3	300 C	Opp	48				Furnished	272XBAJX-*3	300 C	Opp	46				Furnished
282XCAJX-*3	300 C	Opp	58				Furnished	272XCAJX-*3	300 C	Opp	55				Furnished
282XDAJX-*3	293 C	Opp	69				Furnished	272XDAJX-*3	300 C	Opp	65				Furnished
282XGAJX-*3	246 C	Opp	82				Furnished	272XGAJX-*3	257 C	Opp	78				Furnished
282XKAJX-*3	220 C	Opp	92				Furnished	272XKAJX-*3	230 C	Opp	88				Furnished
282XMAJX-*3	197 C	Opp	102				Furnished	272XMAJX-*3	206 C	Opp	98				Furnished
282XPAJX-*3	176 C	Opp	176				Furnished	272XPAJX-*3	184 C	Opp	109				Furnished
282XSAJX-*3	158 C	Opp	197				Furnished	272XSAJX-*3	165 C	Opp	122				Furnished
282XTAJX-*3	141 C	Opp	143				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	423 I	Opp	48				Furnished								
885XGAHX-*3 (9)	329 I	Opp	61				Furnished								
885XJAHX-*3 (5)	279 I	Opp	72				Furnished								
885XMAHX-*3 (6)	238 I	Opp	85				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (24)	200 I	Opp	61	64			Furnished	340XFAHX-*5 (24)	200 I	Opp	59	62	7-A-140(28)		Furnished
863XBAHX-*5	423 I	Opp	48	59			Furnished								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng			8-A-032		Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(24) Input Gear Part No. 5-P-581
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RT-6609A
RT-7608LL
RT-8609

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0900" (27.6900MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221XCAHX-*3	250 I	Opp	44		7-A-032(P)(28)	328481X	Furnished	221XCAHX-*3	250 I	Opp	44		7-A-032(28)		Furnished
221XEAHX-*3	250 I	Opp	51		7-A-032(P)	328481X	Furnished	221XEAHX-*3	250 I	Opp	51				Furnished
221XPAHX-*3	200 I	Opp	83		7-A-032(P)	328481X	Furnished	221XPAHX-*3	200 I	Opp	83				Furnished
489XAAHX-*5 (12)	250 I	Opp	39				Furnished	442XAAHX-*3 (12)	250 I	Opp	39				Furnished
489XCAHX-*5 (13)	250 I	Opp	50				Furnished	442XBAHX-*3 (18)	250 I	Eng	39			REQUIRED	Furnished
489XFAHX-*5 (2)	250 I	Opp	61				Furnished	442XCAHX-*3 (13)	250 I	Opp	50				Furnished
489XHAHX-*5 (15)	250 I	Opp	71				Furnished	442XFAHX-*3 (2)	250 I	Opp	61				Furnished
489XLAHX-*5 (1)	250 I	Opp	79				Furnished	442XHAHX-*3 (15)	250 I	Opp	71				Furnished
489XQAHX-*5 (1)	225 I	Opp	85				Furnished	442XLAHX-*3 (1)	250 I	Opp	79				Furnished
489XRAHX-*5 (1)	225 I	Opp	99				Furnished	442XQAHX-*3 (1)	225 I	Opp	85				Furnished
489XSAHX-*5 (1)	200 I	Opp	118				Furnished	442XRAHX-*3 (1)	225 I	Opp	99				Furnished
489XUAHX-*5 (1)	195 I	Opp	140				Furnished	442XSAHX-*3 (1)	200 I	Opp	118				Furnished
489XWAHX-*5 (1)	175 I	Opp	165				Furnished	442XUAHX-*3 (1)	195 I	Opp	140				Furnished
489XXAHX-*5 (1)	140 I	Opp	195				Furnished	442XWAHX-*3 (1)	175 I	Opp	165				Furnished
680XFAHX-*3 (10)	375 I	Opp	61				Furnished	442XXAHX-*3 (1)	140 I	Opp	195				Furnished
680XHAHX-*3 (20)	375 I	Opp	71				Furnished	660XFAHX-*3 (10)	375 I	Opp	61				Furnished
680XQAHX-*3 (11)	375 I	Opp	85				Furnished	660XHAHX-*3 (15)	375 I	Opp	71				Furnished
680XRAHX-*3 (19)	350 I	Opp	99				Furnished	660XQAHX-*3 (11)	375 I	Opp	85				Furnished
680XSAHX-*3 (14)	325 I	Opp	118				Furnished	660XRAHX-*3 (19)	350 I	Opp	99				Furnished
823XBAHX-*3 (22)	500 I	Opp	42				Furnished	660XSAHX-*3 (14)	325 I	Opp	118				Furnished
823XDAHX-*3 (26)	500 I	Opp	50				Furnished								
823XGAHX-*3 (27)	500 I	Opp	54				Furnished								
823XJAHX-*3 (23)	500 I	Opp	63				Furnished								
823XMAHX-*3 (21)	500 I	Opp	74				Furnished								
823XRAHX-*3 (25)	400 I	Opp	103				Furnished								
823XTKTX-*3 (17)	500 I	Opp	124		8-A-165(28)		Furnished								
880XBAHX-*3 (3)	500 I	Opp	42				Furnished								
880XDAHX-*3 (4)	500 I	Opp	49				Furnished								
880XGAHX-*3 (9)	500 I	Opp	54				Furnished								
880XJAHX-*3 (5)	500 I	Opp	63				Furnished								
880XMAHX-*3 (6)	500 I	Opp	74				Furnished								
880XQAHX-*3 (16)	450 I	Opp	87				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1418
(19) Input Gear Part No. 5-P-1441
(20) Input Gear Part No. 5-P-1494
(21) Input Gear Part No. 5-P-283
(22) Input Gear Part No. 5-P-285
(23) Input Gear Part No. 5-P-325
(25) Input Gear Part No. 5-P-721
(26) Input Gear Part No. 5-P-971
(27) Input Gear Part No. 5-P-980
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RT-6609A
RT-7608LL
RT-8609

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
33 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0900" (27.6900MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
880XRAHX-*3 (7)	400 I	Opp	103				Furnished								
880XTAHX-*3 (8)	500 I	Opp	132				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAAJX-*3	300 C	Opp	34			328481X	Furnished	272XAAJX-*3	300 C	Opp	34				Furnished
282XBAJX-*3	300 C	Opp	42				Furnished	272XBAJX-*3	300 C	Opp	42				Furnished
282XCAJX-*3	300 C	Opp	51				Furnished	272XCAJX-*3	300 C	Opp	51				Furnished
282XDAJX-*3	293 C	Opp	60				Furnished	272XDAJX-*3	293 C	Opp	60				Furnished
282XGAJX-*3	246 C	Opp	72				Furnished	272XGAJX-*3	246 C	Opp	72				Furnished
282XKAJX-*3	220 C	Opp	80				Furnished	272XKAJX-*3	220 C	Opp	80				Furnished
282XMAJX-*3	197 C	Opp	90				Furnished	272XMAJX-*3	197 C	Opp	90				Furnished
282XPAJX-*3	176 C	Opp	100				Furnished	272XPAJX-*3	176 C	Opp	100				Furnished
282XSAJX-*3	158 C	Opp	112				Furnished	272XSAJX-*3	158 C	Opp	112				Furnished
282XTAJX-*3	141 C	Opp	126				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	42				Furnished								
885XGAHX-*3 (9)	500 I	Opp	54				Furnished								
885XJAHX-*3 (5)	500 I	Opp	63				Furnished								
885XMAHX-*3 (6)	500 I	Opp	74				Furnished								
ONE SPEED - FORWARD & REVERSE															
348ZFAHX-* (24)	200 I	Opp	54	56	8-A-032(28)		Furnished	340XFAHX-*5 (24)	200 I	Opp	54	56	7-A-140(28)		Furnished
863XBAHX-*5	500 I	Opp	42	52			Furnished								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng			8-A-032		Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(24) Input Gear Part No. 5-P-581
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FS-6106A
FS-7206A
FS-8206A
FS-8406A

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
50 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.1800" (29.9720MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 08-BOLT Opening Gear FORWARD of Centerline
50 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
0.9100" (23.1140MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
442XFDUX-*5 (2)	250 I	Opp	46				Furnished	489XFDUX-*3 (2)	250 I	Opp	55				Furnished
442XLDUX-*5 (1)	250 I	Opp	60				Furnished	489XLDUX-*3 (1)	250 I	Opp	60				Furnished
442XQDUX-*5 (1)	225 I	Opp	64				Furnished	489XQDUX-*3 (1)	225 I	Opp	64				Furnished
442XRDUX-*5 (1)	225 I	Opp	74				Furnished	489XRDUX-*3 (1)	225 I	Opp	74				Furnished
442XSDUX-*5 (1)	200 I	Opp	89				Furnished	489XSDUX-*3 (1)	200 I	Opp	89				Furnished
442XUDUX-*5 (1)	195 I	Opp	106				Furnished	489XUDUX-*3 (1)	195 I	Opp	106				Furnished
442XWDUX-*5 (1)	175 I	Opp	124				Furnished	489XWDUX-*3 (1)	175 I	Opp	124				Furnished
442XXDUX-*5 (1)	140 I	Opp	147				Furnished	489XXDUX-*3 (1)	140 I	Opp	147				Furnished
								880XMDUX-*3 (3)	500 I	Opp	58				Furnished
								880XRDUX-*3 (5)	400 I	Opp	81				Furnished
								880XTDUX-*3 (4)	350 I	Opp	108				Furnished
ONE SPEED - FORWARD & REVERSE															
340XFDUX-*5 (6)	200 I	Opp	42	44	7-A-140(7)		Furnished	340XFDUX-*3 (6)	200 I	Opp	42	44	7-A-140(7)	328481X	Furnished
								348XFDUX-*3 (6)	200 I	Opp	42	44			Furnished
GEARED ADAPTERS															
626XDUX-4HH	250 I	Eng					Furnished	628XDUX-3HH	250 I	Eng					Furnished
630XDUX-4HH	250 I	Eng					Furnished								
645XDUX-4HH	250 I	Eng					Furnished								

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IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1050
(2) Input Gear Part No. 5-P-1088
(3) Input Gear Part No. 5-P-1130
(4) Input Gear Part No. 5-P-1131
(5) Input Gear Part No. 5-P-1176
(6) Input Gear Part No. 5-P-883
(7) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FS-5306A
FS-5406A
FS-6206A
FS-6306A
FS-6406A
FS-6206
FS-6306
FS-6406

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
38 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.0850" (27.5590MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
38 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.0850" (27.5590MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
442XAESX-*5 (3)	250 I	Opp	32		7-A-062		Furnished	442XAESX-*3 (3)	250 I	Opp	32		7-A-062		Furnished
442XCESX-*5 (4)	250 I	Opp	41		7-A-062		Furnished	442XCESX-*3 (4)	250 I	Opp	41		7-A-062		Furnished
442XFESX-*5 (2)	250 I	Opp	51		7-A-062		Furnished	442XFESX-*3 (2)	250 I	Opp	51		7-A-062		Furnished
442XLESX-*5 (1)	250 I	Opp	66		7-A-062		Furnished	442XLESX-*3 (1)	250 I	Opp	66		7-A-062		Furnished
442XQESX-*5 (1)	225 I	Opp	71		7-A-062		Furnished	442XQESX-*3 (1)	225 I	Opp	71		7-A-062		Furnished
442XRESX-*5 (1)	225 I	Opp	82		7-A-062		Furnished	442XRESX-*3 (1)	225 I	Opp	82		7-A-062		Furnished
442XSESX-*5 (1)	200 I	Opp	98		7-A-062		Furnished	442XSESX-*3 (1)	200 I	Opp	98		7-A-062		Furnished
442XUESX-*5 (1)	195 I	Opp	117		7-A-062		Furnished	442XUESX-*3 (1)	195 I	Opp	117		7-A-062		Furnished
442XWESX-*5 (1)	175 I	Opp	138		7-A-062		Furnished	442XWESX-*3 (1)	175 I	Opp	138		7-A-062		Furnished
442XXESX-*5 (1)	140 I	Opp	163		7-A-062		Furnished	442XXESX-*3 (1)	140 I	Opp	163		7-A-062		Furnished
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAESX-*5	300 C	Opp	31				Furnished	272XAESX-*3	300 C	Opp	31				Furnished
272XBESX-*5	300 C	Opp	38				Furnished	272XBESX-*3	300 C	Opp	38				Furnished
272XCESX-*5	300 C	Opp	46				Furnished	272XCESX-*3	300 C	Opp	46				Furnished
272XDESX-*5	300 C	Opp	55				Furnished	272XDESX-*3	300 C	Opp	55				Furnished
272XGESX-*5	300 C	Opp	65				Furnished	272XGESX-*3	300 C	Opp	65				Furnished
272XKESX-*5	300 C	Opp	73				Furnished	272XKESX-*3	300 C	Opp	73				Furnished
272XMESX-*5	300 C	Opp	82				Furnished	272XMESX-*3	300 C	Opp	82				Furnished
272XPESX-*5	286 C	Opp	91				Furnished	272XPESX-*3	286 C	Opp	91				Furnished
272XSESX-*5	256 C	Opp	102				Furnished	272XSESX-*3	256 C	Opp	102				Furnished
ONE SPEED - FORWARD & REVERSE															
340XFESX-*5 (5)	200 I	Opp	47	49	7-A-140(6) 7-A-093	328170-76X		340XFESX-*5 (5)	200 I	Opp	47	49	7-A-140(6) 7-A-093	328170-76X	
352XSESX-*5 (1)	140 I	Opp	99	129	7-A-062		Furnished	352XSESX-*3 (1)	140 I	Opp	99	129	7-A-062		Furnished
GEARED ADAPTERS															
626XESX-4HL	250 I	Eng			7-A-062		Furnished	626XESX-3HL	250 I	Eng			7-A-062		Furnished
630XESX-4HL	250 I	Eng			7-A-062		Furnished	630XESX-3HL	250 I	Eng			7-A-062		Furnished
645XESX-4HL	250 I	Eng			7-A-062		Furnished	645XESX-3HL	250 I	Eng			7-A-062		Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1059
(2) Input Gear Part No. 5-P-1092
(3) Input Gear Part No. 5-P-1285
(4) Input Gear Part No. 5-P-1292
(5) Input Gear Part No. 5-P-884
(6) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FS-5306A
FS-5406A
FS-6206A
FS-6306A
FS-6406A
FS-6206
FS-6306
FS-6406

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (6 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRALW-*-*	590 C	Opp	52				Furnished
523XTALX-*-*	258 C	Eng	72				Furnished
523XVALX-*-*	258 C	Eng	86				Furnished

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IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

Eaton Fuller

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FS-6205A
FS-6305A

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
39 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.0000" (25.4000MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
39 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.0000" (25.4000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
442KAESX-*5 (3)	250 I	Opp	30		7-A-165		7170-3X	442KAESX-*3 (3)	250 I	Opp	30		7-A-165		7170-3X
442KCESX-*5 (4)	250 I	Opp	39		7-A-165		7170-3X	442KCESX-*3 (4)	250 I	Opp	39		7-A-165		7170-3X
442KFESX-*5 (2)	250 I	Opp	48		7-A-165		7170-3X	442KFESX-*3 (2)	250 I	Opp	48		7-A-165		7170-3X
442KLESX-*5 (1)	250 I	Opp	62		7-A-165		7170-3X	442KLESX-*3 (1)	250 I	Opp	62		7-A-165		7170-3X
442KQESX-*5 (1)	225 I	Opp	67		7-A-165		7170-3X	442KQESX-*3 (1)	225 I	Opp	67		7-A-165		7170-3X
447KQESX-*5 (5)	225 I	Opp	67		7-A-165		7170-3X	447KQESX-*3 (5)	225 I	Opp	67		7-A-165		7170-3X
447KSESX-*5 (6)	200 I	Opp	93		7-A-165		7170-3X	447KSESX-*3 (6)	200 I	Opp	93		7-A-165		7170-3X
447KUESX-*5 (7)	195 I	Opp	110		7-A-165		7170-3X	447KUESX-*3 (7)	195 I	Opp	110		7-A-165		7170-3X
447KWESX-*5 (8)	175 I	Opp	130		7-A-165		7170-3X	447KWESX-*3 (8)	175 I	Opp	130		7-A-165		7170-3X
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAESX-*5	300 C	Opp	29		7-A-063		Furnished	272XAESX-*3	300 C	Opp	29		7-A-063		Furnished
272XBESX-*5	300 C	Opp	36		7-A-063		Furnished	272XBESX-*3	300 C	Opp	36		7-A-063		Furnished
272XCESX-*5	300 C	Opp	43		7-A-063		Furnished	272XCESX-*3	300 C	Opp	43		7-A-063		Furnished
272XDESX-*5	300 C	Opp	52		7-A-063		Furnished	272XDESX-*3	300 C	Opp	52		7-A-063		Furnished
272XGESX-*5	300 C	Opp	61		7-A-063		Furnished	272XGESX-*3	300 C	Opp	61		7-A-063		Furnished
ONE SPEED - FORWARD & REVERSE															
340XFESX-*5 (9)	200 I	Opp	44	46	7-A-140(10) 7-A-200		328170-76X	340XFESX-*5 (9)	200 I	Opp	44	46	7-A-140(10) 7-A-200		328170-76X

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1059
(2) Input Gear Part No. 5-P-1092
(3) Input Gear Part No. 5-P-1285
(4) Input Gear Part No. 5-P-1292
(5) Input Gear Part No. 5-P-869
(6) Input Gear Part No. 5-P-870
(7) Input Gear Part No. 5-P-871
(8) Input Gear Part No. 5-P-872
(9) Input Gear Part No. 5-P-884
(10) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FS-6205B
FS-6305B

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
41 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
0.8860" (22.5044MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
41 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
0.8660" (22.5044MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
447XQETX-*5 (1)	200 I	Opp	82				Furnished	447XQETX-*3 (1)	200 I	Opp	82				Furnished
447XSETX-*5 (2)	200 I	Opp	113				Furnished	447XSETX-*3 (2)	200 I	Opp	113				Furnished
447XUETX-*5 (3)	195 I	Opp	134				Furnished	447XUETX-*3 (3)	195 I	Opp	134				Furnished
447XWETX-*5 (4)	175 I	Opp	158				Furnished	447XWETX-*3 (4)	175 I	Opp	158				Furnished
ONE SPEED - FORWARD & REVERSE															
340XFETX-*5 (5)	200 I	Opp	44	46	7-A-140(6) 7-A-300		7170-3X	340XFETX-*5 (5)	200 I	Opp	44	46	7-A-140(6) 7-A-300		7170-3X

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-865
(2) Input Gear Part No. 5-P-866
(3) Input Gear Part No. 5-P-867
(4) Input Gear Part No. 5-P-868
(5) Input Gear Part No. 5-P-948
(6) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T-14607A
T-14607B

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
78 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8650" (21.9710MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
78 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.9740" (24.7400MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
489XFEVX-*5 (2)	250 I	Opp	57		8-A-062		Furnished	442KFEVX-*5 (2)	250 I	Opp	57		7-A-187		7170-3X
489XLEVX-*5 (1)	250 I	Opp	73		8-A-062		Furnished	442KLEVX-*5 (1)	250 I	Opp	73		7-A-187		7170-3X
489XQEVX-*5 (1)	225 I	Opp	79		8-A-062		Furnished	442KQEVX-*5 (1)	225 I	Opp	79		7-A-187		7170-3X
489XREVX-*5 (1)	225 I	Opp	92		8-A-062		Furnished	442KREVX-*5 (1)	225 I	Opp	92		7-A-187		7170-3X
489XSEVX-*5 (1)	200 I	Opp	109		8-A-062		Furnished	442KSEVX-*5 (1)	200 I	Opp	109		7-A-187		7170-3X
489XUEVX-*5 (1)	195 I	Opp	130		8-A-062		Furnished	442KUEVX-*5 (1)	195 I	Opp	130		7-A-187		7170-3X
489XWEVX-*5 (1)	175 I	Opp	153		8-A-062		Furnished	442KWEVX-*5 (1)	175 I	Opp	153		7-A-187		7170-3X
489XXEVX-*5 (1)	140 I	Opp	181		8-A-062		Furnished	442KXEVX-*5 (1)	140 I	Opp	181		7-A-187		7170-3X
GEARED ADAPTERS															
628XEVX-4EV	250 I	Eng			8-A-062		Furnished	626KEVX-3EV	250 I	Eng			7-A-187		7170-3X
								630KEVX-3EV	250 I	Eng			7-A-187		7170-3X
								645KEVX-3EV	250 I	Eng			7-A-187		7170-3X

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1060
(2) Input Gear Part No. 5-P-1094

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

TX-14607B

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear REAR of Centerline
78 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8650" (21.9710MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
78 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.9740" (24.7400MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
489XFEVX-*4 (2)	250 I	Opp	76		8-A-032		Furnished	442KFEVX-*4 (2)	250 I	Opp	76		7-A-187		7170-3X
489XLEVX-*4 (1)	250 I	Opp	98		8-A-032		Furnished	442KLEVX-*4 (1)	250 I	Opp	98		7-A-187		7170-3X
489XQEVX-*4 (1)	225 I	Opp	106		8-A-032		Furnished	442KQEVX-*4 (1)	225 I	Opp	106		7-A-187		7170-3X
489XREVX-*4 (1)	225 I	Opp	122		8-A-032		Furnished	442KREVX-*4 (1)	225 I	Opp	122		7-A-187		7170-3X
								447KQEVX-*4 (3)	225 I	Opp	106		7-A-187		7171-3X
								447KREVX-*4 (7)	225 I	Opp	122		7-A-187		7170-3X
								447KSEVX-*4 (4)	200 I	Opp	146		7-A-187		7170-3X
								447KUEVX-*4 (5)	195 I	Opp	174		7-A-187		7170-3X
								447KWEVX-*4 (6)	175 I	Opp	204		7-A-187		7170-3X
GEARED ADAPTERS															
628XEVX-3EV	250 I	Eng			8-A-062		Furnished	626KEVX-4EV	250 I	Eng			7-A-187		7170-3X
								630KEVX-4EV	250 I	Eng			7-A-187		7170-3X
								645KEVX-4EV	250 I	Eng			7-A-187		7170-3X

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1060
(2) Input Gear Part No. 5-P-1094
(3) Input Gear Part No. 5-P-1205
(4) Input Gear Part No. 5-P-1206
(5) Input Gear Part No. 5-P-1207
(6) Input Gear Part No. 5-P-1208
(7) Input Gear Part No. 5-P-1219

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FS-4205A

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
28 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.1469" (29.1313MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
28 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.1469" (29.1313MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
442XFEWX-*5 (2)	250 I	Opp	36				Furnished	442XFEWX-*3 (2)	250 I	Opp	36				Furnished
442XLEWX-*5 (1)	250 I	Opp	47				Furnished	442XLEWX-*3 (1)	250 I	Opp	47				Furnished
442XQEWX-*5 (1)	225 I	Opp	51				Furnished	442XQEWX-*3 (1)	225 I	Opp	51				Furnished
442XREWX-*5 (1)	225 I	Opp	59				Furnished	442XREWX-*3 (1)	225 I	Opp	59				Furnished
442XSEWX-*5 (1)	200 I	Opp	70				Furnished	442XSEWX-*3 (1)	200 I	Opp	70				Furnished
442XUEWX-*5 (1)	195 I	Opp	84				Furnished	442XUEWX-*3 (1)	195 I	Opp	84				Furnished
442XWEWX-*5 (1)	175 I	Opp	98				Furnished	442XWEWX-*3 (1)	175 I	Opp	98				Furnished
442XXEWX-*5 (1)	140 I	Opp	116				Furnished	442XXEWX-*3 (1)	140 I	Opp	116				Furnished
ONE SPEED - FORWARD & REVERSE															
340XFEWX-*5 (3)	200 I	Opp	33	35	7-A-140(4) -		Furnished	340XFEWX-*5 (3)	200 I	Opp	33	35	7-A-140(4) -		Furnished
GEARED ADAPTERS															
626XEWX-4HM	250 I	Eng					Furnished	626XEWX-3HM	250 I	Eng					Furnished
630XEWX-4HM	250 I	Eng					Furnished	630XEWX-3HM	250 I	Eng					Furnished
645XEWX-4HM	250 I	Eng					Furnished	645XEWX-3HM	250 I	Eng					Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1061
(2) Input Gear Part No. 5-P-1095
(3) Input Gear Part No. 5-P-886
(4) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FS-4205B

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
28 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.1469" (29.1313MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
28 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.1469" (29.1313MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
442XFEWX-*5 (2)	250 I	Opp	42				Furnished	442XFEWX-*3 (2)	250 I	Opp	42				Furnished
442XLEWX-*5 (1)	250 I	Opp	54				Furnished	442XLEWX-*3 (1)	250 I	Opp	54				Furnished
442XQEWX-*5 (1)	225 I	Opp	59				Furnished	442XQEWX-*3 (1)	225 I	Opp	59				Furnished
442XREWX-*5 (1)	225 I	Opp	68				Furnished	442XREWX-*3 (1)	225 I	Opp	68				Furnished
442XSEWX-*5 (1)	200 I	Opp	81				Furnished	442XSEWX-*3 (1)	200 I	Opp	81				Furnished
442XUEWX-*5 (1)	195 I	Opp	96				Furnished	442XUEWX-*3 (1)	195 I	Opp	96				Furnished
442XWEWX-*5 (1)	175 I	Opp	113				Furnished	442XWEWX-*3 (1)	175 I	Opp	113				Furnished
442XXEWX-*5 (1)	140 I	Opp	134				Furnished	442XXEWX-*3 (1)	140 I	Opp	134				Furnished
ONE SPEED - FORWARD & REVERSE															
340XFEWX-*5 (3)	200 I	Opp	38	40	7-A-140(4)	-	Furnished	340XFEWX-*5 (3)	200 I	Opp	38	40	7-A-140(4)	-	Furnished
GEARED ADAPTERS															
626XEWX-4HM	250 I	Eng					Furnished	626XEWX-3HM	250 I	Eng					Furnished
630XEWX-4HM	250 I	Eng					Furnished	630XEWX-3HM	250 I	Eng					Furnished
645XEWX-4HM	250 I	Eng					Furnished	645XEWX-3HM	250 I	Eng					Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1061
(2) Input Gear Part No. 5-P-1095
(3) Input Gear Part No. 5-P-886
(4) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

ES-11109 (Left Side Forward Opening)
FS-6109A (Left Side Forward Opening)
FS-8209A (ES11109)(Left Side Forward Opening)
FS-6309A (Left Side Forward Opening)
FS-8309 (Left Side Forward Opening)
FS-6209A (Left Side Forward Opening)

LEFT FRONT SIDE ONLY

TRANSMISSION GEAR DATA:
L.F. 06-BOLT Opening Gear NON-STANDARD of Centerline
32 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
2.9730" (75.5142MM)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT							
442XFAHX-*5 (2)	250 I	Eng	84		329182-1X	Furnished	
442XHAHX-*5 (3)	250 I	Eng	97		329182-1X	Furnished	
442XLAHX-*5 (1)	250 I	Eng	109		329182-1X	Furnished	
442XQAHX-*5 (1)	225 I	Eng	118		329182-1X	Furnished	
442XRAHX-*5 (1)	225 I	Eng	136		329182-1X	Furnished	
442XSAHX-*5 (1)	200 I	Eng	162		329182-1X	Furnished	
442XUAHX-*5 (1)	195 I	Eng	193		329182-1X	Furnished	
442XWAHX-*5 (1)	175 I	Eng	228		329182-1X	Furnished	
442XXAHX-*5 (1)	140 I	Eng	269		329182-1X	Furnished	
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)							
272XAAJX-*5	300 C	Eng	47		329182-1X	Furnished	
272XBAJX-*5	300 C	Eng	58		329182-1X	Furnished	
272XCAJX-*5	300 C	Eng	70		329182-1X	Furnished	
272XDAJX-*5	300 C	Eng	84		329182-1X	Furnished	
272XGAJX-*5	300 C	Eng	99		329182-1X	Furnished	
272XKAJX-*5	300 C	Eng	111		329182-1X	Furnished	
272XMAJX-*5	300 C	Eng	124		329182-1X	Furnished	
272XPAJX-*5	300 C	Eng	138		329182-1X	Furnished	
272XSAJX-*5	300 C	Eng	155		329182-1X	Furnished	
REAR MOUNT & THRUSHAFT							
511XRARW-*-*	590 C	Opp	77			Furnished	
523XTARX-*-*	258 C	Eng	106			Furnished	
523XVARX-*-*	258 C	Eng	126			Furnished	

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1364

Eaton Fuller

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FSO-5206 (B)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear REAR of Centerline
47 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
2.1970" (55.8038MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
290GQGFX-*6 (1)	175 I	Opp	140				Furnished								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-993

Eaton Fuller

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FRO-11210C
FRO-12210C
FRO-13210C
FRO-14210C
FRO-15210C
FRO-16210C
FRO-16210R
FRO-17210C
FRO-18210C
FROF-15210C

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4470MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
489GAAHX-*5 (12)	250 I	Opp	64				Furnished	442GAAHX-*3 (12)	250 I	Opp	62				Furnished
489GCAHX-*5 (13)	250 I	Opp	82				Furnished	442GCAHX-*3 (13)	250 I	Opp	79				Furnished
489GFAHX-*5 (2)	250 I	Opp	102				Furnished	442GFAHX-*3 (2)	250 I	Opp	97				Furnished
489GHAHX-*5 (15)	250 I	Opp	118				Furnished	442GHAHX-*3 (15)	250 I	Opp	112				Furnished
489GLAHX-*5 (1)	250 I	Opp	132				Furnished	442GLAHX-*3 (1)	250 I	Opp	126				Furnished
489GQAHX-*5 (1)	225 I	Opp	142				Furnished	442GQAHX-*3 (1)	225 I	Opp	136				Furnished
489GRAHX-*5 (1)	225 I	Opp	164				Furnished	442GRAHX-*3 (1)	225 I	Opp	157				Furnished
489GSAHX-*5 (1)	200 I	Opp	195				Furnished	442GSAHX-*3 (1)	200 I	Opp	187				Furnished
489GUAHX-*5 (1)	195 I	Opp	233				Furnished	660GFAHX-*3 (10)	375 I	Opp	97				Furnished
489GWAHX-*5 (1)	175 I	Opp	274				Furnished	660GHAHX-*3 (15)	375 I	Opp	112				Furnished
680GFAHX-*3 (10)	375 I	Opp	102				Furnished	660GQAHX-*3 (11)	375 I	Opp	136				Furnished
680GHAHX-*3 (19)	375 I	Opp	118				Furnished	660GRAHX-*3 (18)	350 I	Opp	157				Furnished
680GQAHX-*3 (11)	375 I	Opp	142				Furnished	660GSAHX-*3 (14)	336 I	Opp	187				Furnished
680GRAHX-*3 (18)	350 I	Opp	164				Furnished								
680GSAHX-*3 (14)	322 I	Opp	195				Furnished								
823GBAHX-*3 (21)	750 I	Opp	69				Furnished								
823GDAHX-*3 (25)	750 I	Opp	82				Furnished								
823GGAHX-*3 (26)	705 I	Opp	89				Furnished								
823GJAHX-*3 (22)	599 I	Opp	105				Furnished								
823GMAHX-*3 (20)	511 I	Opp	123				Furnished								
823GRAHX-*3 (24)	370 I	Opp	170				Furnished								
823GTKTX-*3 (17)	305 I	Opp	206		8-A-165(27)		Furnished								
880GBAHX-*3 (3)	500 I	Opp	69				Furnished								
880GDAHX-*3 (4)	500 I	Opp	82				Furnished								
880GGAHX-*3 (9)	500 I	Opp	89				Furnished								
880GJAHX-*3 (5)	500 I	Opp	105				Furnished								
880GMAHX-*3 (6)	500 I	Opp	123				Furnished								
880GQAHX-*3 (16)	435 I	Opp	144				Furnished								
880GRAHX-*3 (7)	370 I	Opp	170				Furnished								
880GTAHX-*3 (8)	287 I	Opp	219				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 Ft-lbs [1017 N.m]. All torque limits on this application page reflect the 750 Ft-lbs [1017 N.m] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-1494
(20) Input Gear Part No. 5-P-283
(21) Input Gear Part No. 5-P-285
(22) Input Gear Part No. 5-P-325
(24) Input Gear Part No. 5-P-721
(25) Input Gear Part No. 5-P-971
(26) Input Gear Part No. 5-P-980
(27) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FRO-11210C
FRO-12210C
FRO-13210C
FRO-14210C
FRO-15210C
FRO-16210C
FRO-16210R
FRO-17210C
FRO-18210C
FROF-15210C

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4470MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAAJX-*3	300 C	Opp	56			328481G	Furnished	272GAAJX-*3	300 C	Opp	54				Furnished
282GBAJX-*3	300 C	Opp	69				Furnished	272GBAJX-*3	300 C	Opp	67				Furnished
282GCAJX-*3	300 C	Opp	83				Furnished	272GCAJX-*3	300 C	Opp	81				Furnished
282GDAJX-*3	300 C	Opp	100				Furnished	272GDAJX-*3	300 C	Opp	97				Furnished
282GGAJX-*3	300 C	Opp	119				Furnished	272GGAJX-*3	300 C	Opp	115				Furnished
282GKAJX-*3	300 C	Opp	133				Furnished	272GKAJX-*3	300 C	Opp	128				Furnished
282GMAJX-*3	300 C	Opp	148				Furnished	272GMAJX-*3	300 C	Opp	143				Furnished
282GPAJX-*3	300 C	Opp	166				Furnished	272GPAJX-*3	300 C	Opp	160				Furnished
282GSAJX-*3	300 C	Opp	185				Furnished	272GSAJX-*3	300 C	Opp	179				Furnished
282GTAJX-*3	300 C	Opp	208				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885GBAHX-*3 (3)	500 I	Opp	69				Furnished								
885GGAHX-*3 (9)	500 I	Opp	89				Furnished								
885GJAHX-*3 (5)	500 I	Opp	105				Furnished								
885GMAHX-*3 (6)	500 I	Opp	123				Furnished								
ONE SPEED - FORWARD & REVERSE															
348GFAHX-*5 (23)	200 I	Opp	89	93			Furnished	340GFAHX-*5 (23)	200 I	Opp	85	89	7-A-140(27)		Furnished
863GBAHX-*5	500 I	Opp	69	86			Furnished								
GEARED ADAPTERS															
628GAHX-3AH	250 I	Eng					Furnished	626GAHX-3AH	250 I	Eng					Furnished
								630GAHX-3AH	250 I	Eng					Furnished
								645GAHX-3AH	250 I	Eng					Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 Ft-lbs [1017 N.m]. All torque limits on this application page reflect the 750 Ft-lbs [1017 N.m] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(23) Input Gear Part No. 5-P-581
(27) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FRO-11210C
FRO-12210C
FRO-13210C
FRO-14210C
FRO-15210C
FRO-16210C
FRO-16210R
FRO-17210C
FRO-18210C
FROF-15210C

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (10 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
541-LBJ-*-*	400 I	Eng	81			Furnished	
541-MBJ-*-*	350 I	Eng	113			Furnished	
541-NBJ-*-*	300 I	Eng	129			Furnished	

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 Ft-lbs [1017 N.m]. All torque limits on this application page reflect the 750 Ft-lbs [1017 N.m] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FR-11210B
FR-12210B
FR-13210B
FR-14210B
FR-15210B
FR-9210
FR-9210B
FRF-9210B

FRM-15210B (Thrushaft use BJ mounting)
FRW-15210B

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4470MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*3	250 I	Opp	57		7-A-032(30)	328564G	Furnished	442GAAHX-*3 (12)	250 I	Opp	48				Furnished
221ZEAHX-*3	250 I	Opp	65			328564G	Furnished	442GCAHX-*3 (13)	250 I	Opp	61				Furnished
221ZPAHX-*3	200 I	Opp	106			328564G	Furnished	442GFAHX-*3 (2)	250 I	Opp	75				Furnished
489GAAHX-*5 (12)	250 I	Eng	50				Furnished	442GHAHX-*3 (15)	250 I	Opp	87				Furnished
489GCAHX-*5 (13)	250 I	Eng	64				Furnished	442GLAHX-*3 (1)	250 I	Opp	97				Furnished
489GFAHX-*5 (2)	250 I	Opp	79				Furnished	442GQAHX-*3 (1)	225 I	Opp	105				Furnished
489GHAHX-*5 (15)	250 I	Opp	92				Furnished	442GRAHX-*3 (1)	225 I	Opp	121				Furnished
489GLAHX-*5 (1)	250 I	Opp	102				Furnished	442GSAHX-*3 (1)	200 I	Opp	145				Furnished
489GQAHX-*5 (1)	225 I	Opp	110				Furnished	442GUAHX-*3 (1)	195 I	Opp	171				Furnished
489GRAHX-*5 (1)	225 I	Opp	127				Furnished	442GWAHX-*3 (1)	175 I	Opp	208				Furnished
489GSAHX-*5 (1)	200 I	Opp	151				Furnished	442GXAHX-*3 (1)	140 I	Opp	242				Furnished
489GUAHX-*5 (1)	195 I	Opp	180				Furnished	660GFAHX-*3 (10)	375 I	Opp	75				Furnished
489GWAHX-*5 (1)	175 I	Opp	212				Furnished	660GHAHX-*3 (15)	375 I	Opp	87				Furnished
680GFAHX-*3 (10)	375 I	Opp	79				Furnished	660GQAHX-*3 (11)	375 I	Opp	105				Furnished
680GHAHX-*3 (19)	375 I	Opp	92				Furnished	660GRAHX-*3 (18)	350 I	Opp	121				Furnished
680GQAHX-*3 (11)	375 I	Opp	110				Furnished	660GSAHX-*3 (14)	336 I	Opp	145				Furnished
680GRAHX-*3 (18)	350 I	Opp	127				Furnished								
680GSAHX-*3 (14)	322 I	Opp	151				Furnished								
823GBAHX-*3 (21)	750 I	Opp	53				Furnished								
823GDAHX-*3 (28)	750 I	Opp	63				Furnished								
823GGAHX-*3 (29)	705 I	Opp	69				Furnished								
823GJAHX-*3 (22)	599 I	Opp	81				Furnished								
823GMAHX-*3 (20)	511 I	Opp	95				Furnished								
823GRAHX-*3 (27)	370 I	Opp	131				Furnished								
823GTKTX-*3 (17)	305 I	Opp	159		8-A-165(30)		Furnished								
880GBAHX-*3 (3)	500 I	Opp	54				Furnished								
880GDAHX-*3 (4)	500 I	Opp	63				Furnished								
880GGAHX-*3 (9)	500 I	Opp	69				Furnished								
880GJAHX-*3 (5)	500 I	Opp	81				Furnished								
880GMAHX-*3 (6)	500 I	Opp	95				Furnished								
880GQAHX-*3 (16)	435 I	Opp	111				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 Ft-lbs [1017 N.m]. All torque limits on this application page reflect the 750 Ft-lbs [1017 N.m] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-1494
(20) Input Gear Part No. 5-P-283
(21) Input Gear Part No. 5-P-285
(22) Input Gear Part No. 5-P-325
(27) Input Gear Part No. 5-P-721
(28) Input Gear Part No. 5-P-971
(29) Input Gear Part No. 5-P-980
(30) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FR-11210B
FR-12210B
FR-13210B
FR-14210B
FR-15210B
FR-9210
FR-9210B
FRF-9210B

FRM-15210B (Thrushaft use BJ mounting)
FRW-15210B

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4470MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
880GRAHX-*3 (7)	370 I	Opp	131				Furnished								
880GTAHX-*3 (8)	287 I	Opp	169				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAAJX-*3	300 C	Opp	44			328481G	Furnished	272GAAJX-*3	300 C	Opp	42				Furnished
282GBAJX-*3	300 C	Opp	54				Furnished	272GBAJX-*3	300 C	Opp	51				Furnished
282GCAJX-*3	300 C	Opp	65				Furnished	272GCAJX-*3	300 C	Opp	62				Furnished
282GDAJX-*3	300 C	Opp	78				Furnished	272GDAJX-*3	300 C	Opp	74				Furnished
282GGAJX-*3	300 C	Opp	92				Furnished	272GGAJX-*3	300 C	Opp	88				Furnished
282GKAJX-*3	300 C	Opp	103				Furnished	272GKAJX-*3	300 C	Opp	99				Furnished
282GMAJX-*3	300 C	Opp	115				Furnished	272GMAJX-*3	300 C	Opp	110				Furnished
282GPAJX-*3	300 C	Opp	129				Furnished	272GPAJX-*3	300 C	Opp	123				Furnished
282GSAJX-*3	300 C	Opp	144				Furnished	272GSAJX-*3	300 C	Opp	138				Furnished
282GTAJX-*3	300 C	Opp	161				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885GBAHX-*3 (3)	500 I	Opp	54				Furnished								
885GGAHX-*3 (9)	500 I	Opp	69				Furnished								
885GJAHX-*3 (5)	500 I	Opp	81				Furnished								
885GMAHX-*3 (6)	500 I	Opp	95				Furnished								
ONE SPEED - FORWARD & REVERSE															
348GFAHX-*5 (23)	200 I	Opp	69	72			Furnished	340GFAHX-*5 (23)	200 I	Opp	66	69	7-A-140(30)		Furnished
863GBAHX-*5	500 I	Opp	54	66			Furnished								
GEARED ADAPTERS															
628GAHX-3AH	250 I	Eng					Furnished	626GAHX-3AH	250 I	Eng					Furnished
								630GAHX-3AH	250 I	Eng					Furnished
								645GAHX-3AH	250 I	Eng					Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 Ft-lbs [1017 N.m]. All torque limits on this application page reflect the 750 Ft-lbs [1017 N.m] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(23) Input Gear Part No. 5-P-581
(30) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FR-11210B
FR-12210B
FR-13210B
FR-14210B
FR-15210B
FR-9210
FR-9210B
FRF-9210B

FRM-15210B (Thrushaft use BJ mounting)
FRW-15210B

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (10 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
541-LBJ-*-* (26)	400 I	Eng	63				Furnished
541-MBJ-*-* (25)	350 I	Eng	81				Furnished
541-NBJ-*-* (24)	300 I	Eng	92				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 Ft-lbs [1017 N.m]. All torque limits on this application page reflect the 750 Ft-lbs [1017 N.m] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(24) Input Gear Part No. 5-P-716
(25) Input Gear Part No. 5-P-717
(26) Input Gear Part No. 5-P-718

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FRO-11210B
FRO-12210B
FRO-13210B
FRO-14210B
FRO-15210B
FRO-16210B

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4470MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5590MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*3	250 I	Opp	76		7-A-032(31)	328564G	Furnished	442GAAHX-*3 (12)	250 I	Opp	64				Furnished
221ZEAHX-*3	250 I	Opp	87			328564G	Furnished	442GCAHX-*3 (13)	250 I	Opp	81				Furnished
221ZPAHX-*3	200 I	Opp	142			328564G	Furnished	442GFAHX-*3 (2)	250 I	Opp	101				Furnished
489GAAHX-*5 (12)	250 I	Opp	66				Furnished	442GHAHX-*3 (15)	250 I	Opp	117				Furnished
489GCAHX-*5 (13)	250 I	Opp	85				Furnished	442GLAHX-*3 (1)	250 I	Opp	130				Furnished
489GFAHX-*5 (2)	250 I	Opp	105				Furnished	442GQAHX-*3 (1)	225 I	Opp	140				Furnished
489GHAHX-*5 (15)	250 I	Opp	122				Furnished	442GRAHX-*3 (1)	225 I	Opp	162				Furnished
489GLAHX-*5 (1)	250 I	Opp	136				Furnished	442GSAHX-*3 (1)	200 I	Opp	193				Furnished
489GQAHX-*5 (1)	225 I	Opp	146				Furnished	660GFAHX-*3 (10)	375 I	Opp	101				Furnished
489GRAHX-*5 (1)	225 I	Opp	170				Furnished	660GHAHX-*3 (15)	375 I	Opp	117				Furnished
489GSAHX-*5 (1)	200 I	Opp	202				Furnished	660GQAHX-*3 (11)	375 I	Opp	140				Furnished
489GUAHX-*5 (1)	195 I	Opp	241				Furnished	660GRAHX-*3 (18)	350 I	Opp	162				Furnished
489GWAHX-*5 (1)	175 I	Opp	283				Furnished	660GSAHX-*3 (14)	336 I	Opp	193				Furnished
680GFAHX-*3 (10)	375 I	Opp	105				Furnished								
680GHAHX-*3 (19)	375 I	Opp	122				Furnished								
680GQAHX-*3 (11)	375 I	Opp	146				Furnished								
680GRAHX-*3 (18)	350 I	Opp	170				Furnished								
680GSAHX-*3 (14)	322 I	Opp	202				Furnished								
823GBAHX-*3 (21)	750 I	Opp	71				Furnished								
823GDAHX-*3 (28)	750 I	Opp	85				Furnished								
823GGAHX-*3 (29)	705 I	Opp	92				Furnished								
823GJAHX-*3 (22)	599 I	Opp	108				Furnished								
823GMAHX-*3 (20)	511 I	Opp	127				Furnished								
823GRAHX-*3 (27)	370 I	Opp	176				Furnished								
823GTKTX-*3 (17)	305 I	Opp	213		8-A-165(30)		Furnished								
880GBAHX-*3 (3)	500 I	Opp	72				Furnished								
880GDAHX-*3 (4)	500 I	Opp	85				Furnished								
880GGAHX-*3 (9)	500 I	Opp	92				Furnished								
880GJAHX-*3 (5)	500 I	Opp	108				Furnished								
880GMAHX-*3 (6)	500 I	Opp	127				Furnished								
880GQAHX-*3 (16)	435 I	Opp	149				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 Ft-lbs [1017 N.m]. All torque limits on this application page reflect the 750 Ft-lbs [1017 N.m] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-1494
(20) Input Gear Part No. 5-P-283
(21) Input Gear Part No. 5-P-285
(22) Input Gear Part No. 5-P-325
(27) Input Gear Part No. 5-P-721
(28) Input Gear Part No. 5-P-971
(29) Input Gear Part No. 5-P-980
(30) Filler block furnished with PTO
(31) Furnished, but not required

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FRO-11210B
FRO-12210B
FRO-13210B
FRO-14210B
FRO-15210B
FRO-16210B

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4470MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5590MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
880GRAHX-*3 (7)	370 I	Opp	176				Furnished								
880GTAHX-*3 (8)	287 I	Opp	226				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAAJX-*3	300 C	Opp	58			328481G	Furnished	272GAAJX-*3	300 C	Opp	56				Furnished
282GBAJX-*3	300 C	Opp	72				Furnished	272GBAJX-*3	300 C	Opp	69				Furnished
282GCAJX-*3	300 C	Opp	87				Furnished	272GCAJX-*3	300 C	Opp	83				Furnished
282GDAJX-*3	300 C	Opp	104				Furnished	272GDAJX-*3	300 C	Opp	99				Furnished
282GGAJX-*3	300 C	Opp	123				Furnished	272GGAJX-*3	300 C	Opp	118				Furnished
282GKAJX-*3	300 C	Opp	138				Furnished	272GKAJX-*3	300 C	Opp	132				Furnished
282GMAJX-*3	300 C	Opp	154				Furnished	272GMAJX-*3	300 C	Opp	148				Furnished
282GPAJX-*3	300 C	Opp	172				Furnished	272GPAJX-*3	300 C	Opp	165				Furnished
282GSAJX-*3	300 C	Opp	193				Furnished	272GSAJX-*3	300 C	Opp	184				Furnished
282GTAJX-*3	300 C	Opp	215				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885GBAHX-*3 (3)	500 I	Opp	72				Furnished								
885GGAHX-*3 (9)	500 I	Opp	92				Furnished								
885GJAHX-*3 (5)	500 I	Opp	108				Furnished								
885GMAHX-*3 (6)	500 I	Opp	127				Furnished								
ONE SPEED - FORWARD & REVERSE															
348GFAHX-*5 (23)	200 I	Opp	92	96			Furnished	340GFAHX-*5 (23)	200 I	Opp	88	92	7-A-140(31)		Furnished
863GBAHX-*5	500 I	Opp	72	89			Furnished								
GEARED ADAPTERS															
628GAHX-3AH	250 I	Eng					Furnished	626GAHX-3AH	250 I	Eng					Furnished
								630GAHX-3AH	250 I	Eng					Furnished
								645GAHX-3AH	250 I	Eng					Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 Ft-lbs [1017 N.m]. All torque limits on this application page reflect the 750 Ft-lbs [1017 N.m] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(23) Input Gear Part No. 5-P-581
(31) Furnished, but not required

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FRO-11210B
FRO-12210B
FRO-13210B
FRO-14210B
FRO-15210B
FRO-16210B

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (10 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
541-LBJ-*-* (26)	400 I	Eng	84			Furnished	
541-MBJ-*-* (25)	350 I	Eng	108			Furnished	
541-NBJ-*-* (24)	300 I	Eng	123			Furnished	

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 Ft-lbs [1017 N.m]. All torque limits on this application page reflect the 750 Ft-lbs [1017 N.m] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(24) Input Gear Part No. 5-P-716
(25) Input Gear Part No. 5-P-717
(26) Input Gear Part No. 5-P-718

Eaton Fuller

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

F-5405B-DM3 (UltraShift HV)
F-6405B-DM3 (UltraShift HV)
FO-5406B-DM3 (UltraShift HV)
FO-6406A-ASW
FO-6406A-ASX
FO-6406A-AW3
FO-6406B-DM3 (UltraShift HV)
FO-8406A-ASW
FO-8406A-ASX
FO-8406A-AW3
FSO-5406A
FSO-6406A (Eaton Brazil)
FSO-8406A (Eaton Brazil)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
48 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
0.4900" (12.4460MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
48 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
0.4900" (12.4460MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
442KLJKX-*5 (1)	250 I	Opp	99		7-A-500		7170-5X	442KLJKX-*3 (1)	250 I	Opp	99		7-A-500		7170-5X
442KQJKX-*5 (1)	225 I	Opp	106		7-A-500		7170-5X	442KQJKX-*3 (1)	225 I	Opp	106		7-A-500		7170-5X
442KRJKX-*5 (1)	225 I	Opp	123		7-A-500		7170-5X	442KRJKX-*3 (1)	225 I	Opp	123		7-A-500		7170-5X
442KSJKX-*5 (1)	200 I	Opp	146		7-A-500		7170-5X	442KSJKX-*3 (1)	200 I	Opp	146		7-A-500		7170-5X
442KUJKX-*5 (1)	195 I	Opp	174		7-A-500		7170-5X	442KUJKX-*3 (1)	195 I	Opp	174		7-A-500		7170-5X
442KWJKX-*5 (1)	175 I	Opp	205		7-A-500		7170-5X	442KWJKX-*3 (1)	175 I	Opp	205		7-A-500		7170-5X
442KXJKX-*5 (1)	140 I	Opp	242		7-A-500		7170-5X	442KXJKX-*3 (1)	140 I	Opp	242		7-A-500		7170-5X
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272KAJKX-*5	300 C	Opp	50		7-A-240		7170-3X	272KAJKX-*3	300 C	Opp	50		7-A-240		7170-3X
272KBJKX-*5	300 C	Opp	62		7-A-240		7170-3X	272KBJKX-*3	300 C	Opp	62		7-A-240		7170-3X
272KCJKX-*5	300 C	Opp	74		7-A-240		7170-3X	272KCJKX-*3	300 C	Opp	74		7-A-240		7170-3X
272KDJKX-*5	300 C	Opp	89		7-A-240		7170-3X	272KDJKX-*3	300 C	Opp	89		7-A-240		7170-3X
272KGJKX-*5	276 C	Opp	106		7-A-240		7170-3X	272KGJKX-*3	276 C	Opp	106		7-A-240		7170-3X
272KKJKX-*5	246 C	Opp	118		7-A-240		7170-3X	272KKJKX-*3	246 C	Opp	118		7-A-240		7170-3X
272KMJKX-*5	220 C	Opp	132		7-A-240		7170-3X	272KMJKX-*3	220 C	Opp	132		7-A-240		7170-3X
272KPJKX-*5	197 C	Opp	148		7-A-240		7170-3X	272KPJKX-*3	197 C	Opp	148		7-A-240		7170-3X
272KSJKX-*5	176 C	Opp	165		7-A-240		7170-3X	272KSJKX-*3	176 C	Opp	165		7-A-240		7170-3X
GEARED ADAPTERS															
626KJKX-4JL (2)	250 I	Eng			7-A-500		7170-5X	626KJKX-3JL (2)	250 I	Eng			7-A-500		7170-5X
630KJKX-4JL (2)	250 I	Eng			7-A-500		7170-5X	630KJKX-3JL (2)	250 I	Eng			7-A-500		7170-5X
645KJKX-4JL (2)	250 I	Eng			7-A-500		7170-5X	645KJKX-3JL (2)	250 I	Eng			7-A-500		7170-5X

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED - The Eaton ASW, AW3, ASX & DM transmissions must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft. Minimum engine/transmission speed required for PTO operation is 1000 RPM, REFER to Eaton publication "TRIG-2600" for complete wiring information. INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

(1) Input Gear Part No. 5-P-1261
(2) Input Gear Part No. 5-P-1262

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

EH-8E306A-UP (Hybrid Electric System)
EH-8E306A-CD (Hybrid Electric System)
EH-8E306A-UPG (Hybrid Electric System)
EH-8E406A-CDR (Hybrid Electric System)
EH-8E406A-P (Hybrid Electric System)
EH-8E406A-T (Hybrid Electric System)
EH-8E406A-UP (Hybrid Electric System)
EH-8E406A-UPG (Hybrid Electric System)
EH-6E706B-CD (Hybrid Electric System)
EH-6E706B-P (Hybrid Electric System)
EH-8E406A-CD (Hybrid Electric System)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
48 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
0.4900" (12.4460MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
442KLJKX-*5 (1)	250 I	Opp	99		7-A-500		7170-5X								
442KQJKX-*5 (1)	225 I	Opp	106		7-A-500		7170-5X								
442KRJKX-*5 (1)	225 I	Opp	123		7-A-500		7170-5X								
442KSJKX-*5 (1)	200 I	Opp	146		7-A-500		7170-5X								
442KUJKX-*5 (1)	195 I	Opp	174		7-A-500		7170-5X								
442KWJKX-*5 (1)	175 I	Opp	205		7-A-500		7170-5X								
442KXJKX-*5 (1)	140 I	Opp	242		7-A-500		7170-5X								
GEARED ADAPTERS															
626KJKX-4JL (2)	250 I	Eng			7-A-500		7170-5X								
630KJKX-4JL (2)	250 I	Eng			7-A-500		7170-5X								
645KJKX-4JL (2)	250 I	Eng			7-A-500		7170-5X								

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1261
(2) Input Gear Part No. 5-P-1262

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FSB-5406B
FSB-6406B
FSB-6206A

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
38 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.0850" (27.5590MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
38 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.0850" (27.5590MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
442XFESX-*5 (2)	250 I	Opp	53		7-A-062		Furnished	442XFESX-*3 (2)	250 I	Opp	53		7-A-062		Furnished
442XLESX-*5 (1)	250 I	Opp	69		7-A-062		Furnished	442XLESX-*3 (1)	250 I	Opp	69		7-A-062		Furnished
442XQESX-*5 (1)	225 I	Opp	74		7-A-062		Furnished	442XQESX-*3 (1)	225 I	Opp	74		7-A-062		Furnished
442XRESX-*5 (1)	225 I	Opp	85		7-A-062		Furnished	442XRESX-*3 (1)	225 I	Opp	85		7-A-062		Furnished
442XSESX-*5 (1)	200 I	Opp	102		7-A-062		Furnished	442XSESX-*3 (1)	200 I	Opp	102		7-A-062		Furnished
442XUESX-*5 (1)	195 I	Opp	121		7-A-062		Furnished	442XUESX-*3 (1)	195 I	Opp	121		7-A-062		Furnished
442XWESX-*5 (1)	175 I	Opp	143		7-A-062		Furnished	442XWESX-*3 (1)	175 I	Opp	143		7-A-062		Furnished
442XXESX-*5 (1)	140 I	Opp	169		7-A-062		Furnished	442XXESX-*3 (1)	140 I	Opp	169		7-A-062		Furnished
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAESX-*5	300 C	Opp	32				Furnished	272XAESX-*3	300 C	Opp	32				Furnished
272XBESX-*5	300 C	Opp	39				Furnished	272XBESX-*3	300 C	Opp	39				Furnished
272XCESX-*5	300 C	Opp	47				Furnished	272XCESX-*3	300 C	Opp	47				Furnished
272XDESX-*5	300 C	Opp	57				Furnished	272XDESX-*3	300 C	Opp	57				Furnished
272XGESX-*5	300 C	Opp	67				Furnished	272XGESX-*3	300 C	Opp	67				Furnished
272XKESX-*5	300 C	Opp	75				Furnished	272XKESX-*3	300 C	Opp	75				Furnished
272XMESX-*5	300 C	Opp	84				Furnished	272XMESX-*3	300 C	Opp	84				Furnished
272XPESX-*5	286 C	Opp	94				Furnished	272XPESX-*3	286 C	Opp	94				Furnished
272XSESX-*5	256 C	Opp	105				Furnished	272XSESX-*3	256 C	Opp	105				Furnished
272XTESX-*5	229 C	Opp	118				Furnished	272XTESX-*3	229 C	Opp	118				Furnished
ONE SPEED - FORWARD & REVERSE															
340XFESX-*5 (3)	200 I	Opp	48	51	7-A-093 7-A-140(4)		328170-76X	340XFESX-*5 (3)	200 I	Opp	48	51	7-A-093 7-A-140(4)		328170-76X
GEARED ADAPTERS															
626XESX-4HL	250 I	Eng			7-A-062		Furnished	626XESX-3HL	250 I	Eng			7-A-062		Furnished
630XESX-4HL	250 I	Eng			7-A-062		Furnished	630XESX-3HL	250 I	Eng			7-A-062		Furnished
645XESX-4HL	250 I	Eng			7-A-062		Furnished	645XESX-3HL	250 I	Eng			7-A-062		Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1059
(2) Input Gear Part No. 5-P-1092
(3) Input Gear Part No. 5-P-884
(4) Furnished, but not required

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FRLO-16410C-T2
FRLO-14410C-T2
FRLO-15410C-T2
FRLO-14410C
FRLO-15410C
FRLO-16410C

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
51 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.0850" (27.5590MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
51 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.0850" (27.5590MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
442GAJAX*5 (1)	250 I	Opp	43				Furnished	442GAJAX*3 (1)	250 I	Opp	43				Furnished
442GCJAX-*5 (8)	250 I	Opp	54				Furnished	442GCJAX-*3 (8)	250 I	Opp	54				Furnished
442GFJAX-*5 (3)	250 I	Opp	67				Furnished	442GFJAX-*3 (3)	250 I	Opp	67				Furnished
442GHJAX-*5 (4)	250 I	Opp	78				Furnished	442GHJAX-*3 (4)	250 I	Opp	78				Furnished
442GLJAX-*5 (1)	250 I	Opp	87				Furnished	442GLJAX-*3 (1)	250 I	Opp	87				Furnished
442GQJAX-*5 (1)	225 I	Opp	94				Furnished	442GQJAX-*3 (1)	225 I	Opp	94				Furnished
442GRJAX-*5 (1)	225 I	Opp	109				Furnished	442GRJAX-*3 (1)	225 I	Opp	109				Furnished
442GSJAX-*5 (1)	200 I	Opp	130				Furnished	442GSJAX-*3 (1)	200 I	Opp	130				Furnished
442GUJAX-*5 (1)	195 I	Opp	155				Furnished	442GUJAX-*3 (1)	195 I	Opp	155				Furnished
442GWJAX-*5 (1)	175 I	Opp	182				Furnished	442GWJAX-*3 (1)	175 I	Opp	182				Furnished
442GXJAX-*5 (1)	140 I	Opp	215				Furnished	442GXJAX-*3 (1)	140 I	Opp	215				Furnished
660GFJAX-*5 (5)	375 I	Opp	67				Furnished	660GFJAX-*3 (5)	375 I	Opp	67				Furnished
660GQJAX-*5 (6)	330 I	Opp	94				Furnished	660GQJAX-*3 (6)	330 I	Opp	94				Furnished
660GSJAX-*5 (7)	240 I	Opp	130				Furnished	660GSJAX-*3 (7)	240 I	Opp	130				Furnished
GEARED ADAPTERS															
626GJAX-4JC (2)	250 I	Eng					Furnished	626GJAX-3JC (2)	250 I	Eng					Furnished
630GJAX-4JC (2)	250 I	Eng					Furnished	630GJAX-3JC (2)	250 I	Eng					Furnished
								645GJAX-3JC (2)	250 I	Eng					Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a MAXIMUM torque limit for the Transmission PTO driver gear. For all FR, FRO & FRLO transmissions the MAXIMUM torque limit for the transmission PTO driver gear is 750 Ft-lbs [678 Nm]. All torque limits on this application page reflect the 750 Ft-lbs [678 Nm] limit at the Transmission PTO driver gear. Refer to the Chelsea PTO Torque Limit Chart in the front section of this catalog for complete torque limit information.

CAUTION: Do not use geared adapters with 442 “A” and “C” ratios.

(1) Input Gear Part No. 5-P-1243
(2) Input Gear Part No. 5-P-1247
(3) Input Gear Part No. 5-P-1340
(4) Input Gear Part No. 5-P-1342
(5) Input Gear Part No. 5-P-1345
(6) Input Gear Part No. 5-P-1346
(7) Input Gear Part No. 5-P-1347
(8) Input Gear Part No. 5-P-1368

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FSO-8209A (Left Side Forward Opening)
FSO-6109A (Left Forward)

LEFT FRONT SIDE ONLY

TRANSMISSION GEAR DATA:
L.F. 06-BOLT Opening Gear NON-STANDARD of Centerline
43 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
2.9730" (75.5142MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT							
442XFAHX-*5 (2)	250 I	Eng	113		329182-1X	Furnished	
442XHAHX-*5 (3)	250 I	Eng	131		329182-1X	Furnished	
442XLAHX-*5 (1)	250 I	Eng	146		329182-1X	Furnished	
442XQAHX-*5 (1)	225 I	Eng	157		329182-1X	Furnished	
442XRAHX-*5 (1)	225 I	Eng	182		329182-1X	Furnished	
442XSAHX-*5 (1)	200 I	Eng	217		329182-1X	Furnished	
442XUAHX-*5 (1)	195 I	Eng	258		329182-1X	Furnished	
442XWAHX-*5 (1)	175 I	Eng	304		329182-1X	Furnished	
442XXAHX-*5 (1)	140 I	Eng	359		329182-1X	Furnished	
660XHAHX-*5 (3)	375 I	Eng	131		329182-1X	Furnished	
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)							
272XAAJX-*5	300 C	Eng	84		329182X	Furnished	
272XBAJX-*5	300 C	Eng	104		329182X	Furnished	
272XCAJX-*5	300 C	Eng	125		329182X	Furnished	
272XGAJX-*5	300 C	Eng	178		329182X	Furnished	
272XKAJX-*5	300 C	Eng	199		329182X	Furnished	

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1364

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FS-6406N
FS-5406N
F-5405-DM3
F-8406N-ASW
F-6406N-ASW
F-6406N-AW3
FO-6406N-AW3
F-6406N-ASX

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
39 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.1600" (29.4640MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
39 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.1600" (29.4640MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
442XFJWX-*5 (2)	250 I	Opp	51				Furnished	442XFJWX-*3 (2)	250 I	Opp	51				Furnished
442XLJWX-*5 (1)	250 I	Opp	66				Furnished	442XLJWX-*3 (1)	250 I	Opp	66				Furnished
442XQJWX-*5 (1)	225 I	Opp	71				Furnished	442XQJWX-*3 (1)	225 I	Opp	71				Furnished
442XRJWX-*5 (1)	225 I	Opp	83				Furnished	442XRJWX-*3 (1)	225 I	Opp	83				Furnished
442XSJWX-*5 (1)	200 I	Opp	98				Furnished	442XSJWX-*3 (1)	200 I	Opp	98				Furnished
442XUJWX-*5 (1)	195 I	Opp	117				Furnished	442XUJWX-*3 (1)	195 I	Opp	117				Furnished
442XWJWX-*5 (1)	175 I	Opp	138				Furnished	442XWJWX-*3 (1)	175 I	Opp	138				Furnished
442XXJWX-*5 (1)	140 I	Opp	163				Furnished	442XXJWX-*3 (1)	140 I	Opp	163				Furnished
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272ZAJWX-*5	300 C	Opp	32				Furnished	272ZAJWX-*3	300 C	Opp	32				Furnished
272ZBJWX-*5	300 C	Opp	40				Furnished	272ZBJWX-*3	300 C	Opp	40				Furnished
272ZCJWX-*5	300 C	Opp	48				Furnished	272ZCJWX-*3	300 C	Opp	48				Furnished
272ZDJWX-*5	300 C	Opp	57				Furnished	272ZDJWX-*3	300 C	Opp	57				Furnished
272ZGJWX-*5	300 C	Opp	68				Furnished	272ZGJWX-*3	300 C	Opp	68				Furnished
272ZKJWX-*5	300 C	Opp	85				Furnished	272ZKJWX-*3	300 C	Opp	76				Furnished
272ZMJWX-*5	300 C	Opp	78				Furnished	272ZMJWX-*3	300 C	Opp	85				Furnished
272ZPJWX-*5	279 C	Opp	95				Furnished	272ZPJWX-*3	279 C	Opp	95				Furnished
272ZSJWX-*5	250 C	Opp	107				Furnished	272ZSJWX-*3	250 C	Opp	107				Furnished
ONE SPEED - FORWARD & REVERSE															
340XFJWX-*5 (3)	200 I	Opp	46	49			Furnished	340XFJWX-*5 (3)	200 I	Opp	46	49			Furnished
GEARED ADAPTERS															
626XJWX-4KB	250 I	Eng					Furnished	626XJWX-3KB	250 I	Eng					Furnished
630XJWX-4KB	250 I	Eng					Furnished	630XJWX-3KB	250 I	Eng					Furnished
645XJWX-4KB	250 I	Eng					Furnished	645XJWX-3KB	250 I	Eng					Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: The Eaton ASW, AW3, ASX & DM transmissions must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft. Minimum engine/transmission speed required for PTO operation is 1000 RPM, REFER to Eaton publication "TRIG-2600" for complete wiring information. INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

(1) Input Gear Part No. 5-P-1319
(2) Input Gear Part No. 5-P-1320
(3) Input Gear Part No. 5-P-1404

Eaton Fuller

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RTO-10910B-DM2 (UltraShift)
RTO-12910B-DM2 (UltraShift)
RTO-14910B-DM2 (UltraShift)
RTO-16910B-DM2 (UltraShift)
RTO-10910B-DM3 (UltraShift)
RTO-12910B-DM3 (UltraShift)
RTO-14910B-DM3 (UltraShift)
RTO-16910B-DM3 (UltraShift)

RTOM-16910B-DM3 (UltraShift)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*3	250 I	Opp	82		7-A-032(P)(28)	328564X	Furnished	221XCAHX-*3	250 I	Opp	79		7-A-032(28)		Furnished
221ZEAHX-*3	250 I	Opp	95			328564X	Furnished	221XEAHX-*3	250 I	Opp	91				Furnished
221ZPAHX-*3	200 I	Opp	154			328564X	Furnished	221XPAHX-*3	200 I	Opp	148				Furnished
489XAAHX-*5 (12)	250 I	Opp	72				Furnished	442XAAHX-*3 (12)	250 I	Opp	69				Furnished
489XCAHX-*5 (13)	250 I	Opp	93				Furnished	442XBAHX-*3 (18)	250 I	Eng	69			REQUIRED	Furnished
489XFAHX-*5 (2)	250 I	Opp	114				Furnished	442XCAHX-*3 (13)	250 I	Opp	89				Furnished
489XHAHX-*5 (15)	250 I	Opp	132				Furnished	442XFAHX-*3 (2)	250 I	Opp	110				Furnished
489XLAHX-*5 (1)	222 I	Opp	148				Furnished	442XHAHX-*3 (15)	250 I	Opp	127				Furnished
489XQAHX-*5 (1)	206 I	Opp	160				Furnished	442XLAHX-*3 (1)	233 I	Opp	142				Furnished
489XRAHX-*5 (1)	178 I	Opp	185				Furnished	442XQAHX-*3 (1)	216 I	Opp	153				Furnished
489XSAHX-*5 (1)	150 I	Opp	220				Furnished	442XRAHX-*3 (1)	187 I	Opp	177				Furnished
489XUAHX-*5 (1)	126 I	Opp	262				Furnished	442XSAHX-*3 (1)	156 I	Opp	211				Furnished
489XWAHX-*5 (1)	107 I	Opp	308				Furnished	442XUAHX-*3 (1)	132 I	Opp	251				Furnished
489XXAHX-*5 (1)	91 I	Opp	365				Furnished	442XWAHX-*3 (1)	112 I	Opp	295				Furnished
680XFAHX-*3 (10)	288 I	Opp	114				Furnished	442XXAHX-*3 (1)	94 I	Opp	349				Furnished
680XHAHX-*3 (20)	249 I	Opp	132				Furnished	660XFAHX-*3 (10)	301 I	Opp	110				Furnished
680XQAHX-*3 (11)	206 I	Opp	160				Furnished	660XHAHX-*3 (15)	260 I	Opp	127				Furnished
680XRAHX-*3 (19)	178 I	Opp	185				Furnished	660XQAHX-*3 (11)	216 I	Opp	153				Furnished
680XSAHX-*3 (14)	150 I	Opp	220				Furnished	660XRAHX-*3 (19)	187 I	Opp	177				Furnished
823XBAHX-*3 (22)	423 I	Opp	78				Furnished	660XSAHX-*3 (14)	156 I	Opp	211				Furnished
823XDAHX-*3 (26)	357 I	Opp	78				Furnished								
823XGAHX-*3 (27)	329 I	Opp	100				Furnished								
823XJAHX-*3 (23)	279 I	Opp	118				Furnished								
823XMAHX-*3 (21)	238 I	Opp	139				Furnished								
823XRAHX-*3 (25)	172 I	Opp	191				Furnished								
823XTKTX-*3 (17)	142 I	Opp	231		8-A-165(28)		Furnished								
880XBAHX-*3 (3)	423 I	Opp	78				Furnished								
880XDAHX-*3 (4)	357 I	Opp	92				Furnished								
880XGAHX-*3 (9)	329 I	Opp	100				Furnished								
880XJAHX-*3 (5)	279 I	Opp	118				Furnished								
880XMAHX-*3 (6)	238 I	Opp	139				Furnished								
880XQAHX-*3 (16)	203 I	Opp	162				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear.Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift DM transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft. Minimum engine/transmission speed required for PTO operation is 1000 RPM, per Eaton spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1418
(19) Input Gear Part No. 5-P-1441
(20) Input Gear Part No. 5-P-1494
(21) Input Gear Part No. 5-P-283
(22) Input Gear Part No. 5-P-285
(23) Input Gear Part No. 5-P-325
(25) Input Gear Part No. 5-P-721
(26) Input Gear Part No. 5-P-971
(27) Input Gear Part No. 5-P-980
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RTO-10910B-DM2 (UltraShift)
RTO-12910B-DM2 (UltraShift)
RTO-14910B-DM2 (UltraShift)
RTO-16910B-DM2 (UltraShift)
RTO-10910B-DM3 (UltraShift)
RTO-12910B-DM3 (UltraShift)
RTO-14910B-DM3 (UltraShift)
RTO-16910B-DM3 (UltraShift)

RTOM-16910B-DM3 (UltraShift)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
880XRAHX-*3 (7)	172 I	Opp	191				Furnished								
880XTAHX-*3 (8)	134 I	Opp	246				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAAJX-*3	300 C	Opp	64			328481X	Furnished	272XAAJX-*3	300 C	Opp	61				Furnished
282XBAJX-*3	300 C	Opp	78				Furnished	272XBAJX-*3	300 C	Opp	75				Furnished
282XCAJX-*3	300 C	Opp	94				Furnished	272XCAJX-*3	300 C	Opp	90				Furnished
282XDAJX-*3	293 C	Opp	113				Furnished	272XDAJX-*3	300 C	Opp	108				Furnished
282XGAJX-*3	246 C	Opp	134				Furnished	272XGAJX-*3	257 C	Opp	128				Furnished
282XKAJX-*3	220 C	Opp	150				Furnished	272XKAJX-*3	230 C	Opp	144				Furnished
282XMAJX-*3	197 C	Opp	168				Furnished	272XMAJX-*3	206 C	Opp	161				Furnished
282XPAJX-*3	176 C	Opp	180				Furnished	272XPAJX-*3	184 C	Opp	180				Furnished
282XSAJX-*3	158 C	Opp	210				Furnished	272XSAJX-*3	165 C	Opp	201				Furnished
282XTAJX-*3	141 C	Opp	235				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	423 I	Opp	78				Furnished								
885XGAHX-*3 (9)	329 I	Opp	100				Furnished								
885XJAHX-*3 (5)	279 I	Opp	118				Furnished								
885XMAHX-*3 (6)	238 I	Opp	139				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (24)	200 I	Opp	100	105			Furnished	340XFAHX-*5 (24)	200 I	Opp	96	101	7-A-140(28)		Furnished
863XBAHX-*5	423 I	Opp	78	97			Furnished								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng			8-A-032		Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630-02	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear.Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift DM transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft. Minimum engine/transmission speed required for PTO operation is 1000 RPM, per Eaton spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(24) Input Gear Part No. 5-P-581
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

RTO-10910B-DM2 (UltraShift)
RTO-12910B-DM2 (UltraShift)
RTO-14910B-DM2 (UltraShift)
RTO-16910B-DM2 (UltraShift)
RTO-10910B-DM3 (UltraShift)
RTO-12910B-DM3 (UltraShift)
RTO-14910B-DM3 (UltraShift)
RTO-16910B-DM3 (UltraShift)

RTOM-16910B-DM3 (UltraShift)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - "AU" MOUNTING OPTION

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
541-LAU-*-*	400 I	Eng	91				Furnished
541-MAU-*-*	350 I	Eng	117				Furnished
541-NAU-*-*	300 I	Eng	133				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Eaton Transmission Division has established a Maximum Torque Limit for the Transmission PTO Driver Gear. For all RT/RTO/RTLO transmissions the torque limit is 350 Ft-lbs [475 N.m] unless the transmission has been upgraded to a roller type input shaft bearing, Eaton part number 4301417, then 750 Ft-lbs [1017 N.m] torque becomes the Maximum limit. All torque limits on this application page reflect the 350 Ft-lbs [475 N.m] limit at the Transmission PTO Drive Gear.Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift DM transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft. Minimum engine/transmission speed required for PTO operation is 1000 RPM, per Eaton spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FA-11810B (Advantage Series) ThruShaft use AV mounting
FA-12810B (Advantage Series) ThruShaft use AV mounting
FA-13810B (Advantage Series) ThruShaft use AV mounting
FA-14810B (Advantage Series) ThruShaft use AV mounting
FA-15810B (Advantage Series) ThruShaft use AV mounting
FA-9810B (Advantage Series) ThruShaft use AV mounting
FAF-11810B (Advantage Series) ThruShaft use AV mounting
FAF-12810B (Advantage Series) ThruShaft use AV mounting
FAF-13810B (Advantage Series) ThruShaft use AV mounting
FAF-14810B (Advantage Series) ThruShaft use AV mounting
FAF-15810B (Advantage Series) ThruShaft use AV mounting
FAF-9810B (Advantage Series) ThruShaft use AV mounting
FAM-14810B (Advantage Series) ThruShaft use AV mounting
FAM-14810B-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAM-15810B (Advantage Series) ThruShaft use AV mounting
FAM-15810B-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAMF-14810B (Advantage Series) ThruShaft use AV mounting
FAMF-15810B (Advantage Series) ThruShaft use AV mounting

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*3	250 I	Opp	61		7-A-032(P)(28)	328564X	Furnished	221XCAHX-*3	250 I	Opp	58		7-A-032(28)		Furnished
221ZEAHX-*3	250 I	Opp	70			328564X	Furnished	221XEAHX-*3	250 I	Opp	67				Furnished
221ZPAHX-*3	200 I	Opp	114			328564X	Furnished	221XPAHX-*3	200 I	Opp	110				Furnished
489XAAHX-*5 (12)	250 I	Opp	54				Furnished	442XAAHX-*3 (12)	250 I	Opp	51				Furnished
489XCAHX-*5 (13)	250 I	Opp	69				Furnished	442XBAHX-*3 (18)	250 I	Eng	51			REQUIRED	Furnished
489XFAHX-*5 (2)	250 I	Opp	85				Furnished	442XCAHX-*3 (13)	250 I	Opp	66				Furnished
489XHAHX-*5 (15)	250 I	Opp	99				Furnished	442XFAHX-*3 (2)	250 I	Opp	81				Furnished
489XLAHX-*5 (1)	250 I	Opp	110				Furnished	442XHAHX-*3 (15)	250 I	Opp	94				Furnished
489XQAHX-*5 (1)	225 I	Opp	118				Furnished	442XLAHX-*3 (1)	250 I	Opp	105				Furnished
489XRAHX-*5 (1)	225 I	Opp	137				Furnished	442XQAHX-*3 (1)	225 I	Opp	113				Furnished
489XSAHX-*5 (1)	200 I	Opp	163				Furnished	442XRAHX-*3 (1)	225 I	Opp	131				Furnished
489XUAHX-*5 (1)	195 I	Opp	194				Furnished	442XSAHX-*3 (1)	200 I	Opp	156				Furnished
489XWAHX-*5 (1)	175 I	Opp	229				Furnished	442XUAHX-*3 (1)	195 I	Opp	186				Furnished
489XXAHX-*5 (1)	140 I	Opp	271				Furnished	442XWAHX-*3 (1)	175 I	Opp	219				Furnished
680XFAHX-*3 (10)	375 I	Opp	85				Furnished	442XXAHX-*3 (1)	140 I	Opp	259				Furnished
680XHAHX-*3 (20)	375 I	Opp	99				Furnished	660XFAHX-*3 (10)	375 I	Opp	81				Furnished
680XQAHX-*3 (11)	375 I	Opp	118				Furnished	660XHAHX-*3 (15)	375 I	Opp	94				Furnished
680XRAHX-*3 (19)	350 I	Opp	137				Furnished	660XQAHX-*3 (11)	375 I	Opp	113				Furnished
680XSAHX-*3 (14)	322 I	Opp	163				Furnished	660XRAHX-*3 (19)	350 I	Opp	131				Furnished
823XBAHX-*3 (26)	750 I	Opp	69				Furnished	660XSAHX-*3 (14)	336 I	Opp	156				Furnished
823XDAHX-*3 (22)	750 I	Opp	58				Furnished								
823XGAHX-*3 (27)	705 I	Opp	74				Furnished								
823XJAHX-*3 (23)	599 I	Opp	88				Furnished								
823XMAHX-*3 (21)	511 I	Opp	103				Furnished								
823XRAHX-*3 (25)	370 I	Opp	142				Furnished								
823XTKTX-*3 (17)	305 I	Opp	172		8-A-165(28)		Furnished								
880XBAHX-*3 (3)	500 I	Opp	58				Furnished								
880XDAHX-*3 (4)	500 I	Opp	69				Furnished								
880XGAHX-*3 (9)	500 I	Opp	74				Furnished								
880XJAHX-*3 (5)	500 I	Opp	88				Furnished								
880XMAHX-*3 (6)	500 I	Opp	103				Furnished								
880XQAHX-*3 (16)	435 I	Opp	120				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED: In any case a PTO is used, regardless of PTO style, the transmission must have an input signal from the PTO when it is active. Eaton requires the OEM to provide a "PTO Active" input connection to the transmission ECU. Refer to the Vehicle OEM for wire connection information and to EATON TRIG2600 for Transmission/PTO Operations.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1418
(19) Input Gear Part No. 5-P-1441
(20) Input Gear Part No. 5-P-1494
(21) Input Gear Part No. 5-P-283
(22) Input Gear Part No. 5-P-285
(23) Input Gear Part No. 5-P-325
(25) Input Gear Part No. 5-P-721
(26) Input Gear Part No. 5-P-971
(27) Input Gear Part No. 5-P-980
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FA-11810B (Advantage Series) ThruShaft use AV mounting
FA-12810B (Advantage Series) ThruShaft use AV mounting
FA-13810B (Advantage Series) ThruShaft use AV mounting
FA-14810B (Advantage Series) ThruShaft use AV mounting
FA-15810B (Advantage Series) ThruShaft use AV mounting
FA-9810B (Advantage Series) ThruShaft use AV mounting
FAF-11810B (Advantage Series) ThruShaft use AV mounting
FAF-12810B (Advantage Series) ThruShaft use AV mounting
FAF-13810B (Advantage Series) ThruShaft use AV mounting
FAF-14810B (Advantage Series) ThruShaft use AV mounting
FAF-15810B (Advantage Series) ThruShaft use AV mounting
FAF-9810B (Advantage Series) ThruShaft use AV mounting
FAM-14810B (Advantage Series) ThruShaft use AV mounting
FAM-14810B-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAM-15810B (Advantage Series) ThruShaft use AV mounting
FAM-15810B-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAMF-14810B (Advantage Series) ThruShaft use AV mounting
FAMF-15810B (Advantage Series) ThruShaft use AV mounting

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
880XRAHX-*3 (7)	370 I	Opp	142				Furnished								
880XTAHX-*3 (8)	287 I	Opp	183				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAAJX-*3	300 C	Opp	47			328481X	Furnished	272XAAJX-*3	300 C	Opp	45				Furnished
282XBAJX-*3	300 C	Opp	58				Furnished	272XBAJX-*3	300 C	Opp	55				Furnished
282XCAJX-*3	300 C	Opp	70				Furnished	272XCAJX-*3	300 C	Opp	67				Furnished
282XDAJX-*3	300 C	Opp	84				Furnished	272XDAJX-*3	300 C	Opp	80				Furnished
282XGAJX-*3	300 C	Opp	100				Furnished	272XGAJX-*3	300 C	Opp	95				Furnished
282XKAJX-*3	300 C	Opp	111				Furnished	272XKAJX-*3	300 C	Opp	107				Furnished
282XMAJX-*3	300 C	Opp	124				Furnished	272XMAJX-*3	300 C	Opp	119				Furnished
282XPAJX-*3	300 C	Opp	156				Furnished	272XPAJX-*3	300 C	Opp	133				Furnished
282XSAJX-*3	300 C	Opp	149				Furnished	272XSAJX-*3	300 C	Opp	149				Furnished
282XTAJX-*3	300 C	Opp	174				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	58				Furnished								
885XGAHX-*3 (9)	500 I	Opp	74				Furnished								
885XJAHX-*3 (5)	500 I	Opp	88				Furnished								
885XMAHX-*3 (6)	500 I	Opp	103				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (24)	200 I	Opp	74	78			Furnished	340XFAHX-*5 (24)	200 I	Opp	71	75	7-A-140(28)		Furnished
352ZSAHX-*3 (1)	140 I	Opp	165	214		328564X	Furnished	352XSAHX-*3 (1)	140 I	Opp	158	205			Furnished
863XBAHX-*5	423 I	Opp	58	72			Furnished								
GEARED ADAPTERS															
628XAHX-4AH	250 I	Eng			8-A-032		Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630-02	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED: In any case a PTO is used, regardless of PTO style, the transmission must have an input signal from the PTO when it is active. Eaton requires the OEM to provide a "PTO Active" input connection to the transmission ECU. Refer to the Vehicle OEM for wire connection information and to EATON TRIG2600 for Transmission/PTO Operations.

(1) Input Gear Part No. 5-P-1004
(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(24) Input Gear Part No. 5-P-581
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FA-11810B (Advantage Series) ThruShaft use AV mounting
FA-12810B (Advantage Series) ThruShaft use AV mounting
FA-13810B (Advantage Series) ThruShaft use AV mounting
FA-14810B (Advantage Series) ThruShaft use AV mounting
FA-15810B (Advantage Series) ThruShaft use AV mounting
FA-9810B (Advantage Series) ThruShaft use AV mounting
FAF-11810B (Advantage Series) ThruShaft use AV mounting
FAF-12810B (Advantage Series) ThruShaft use AV mounting
FAF-13810B (Advantage Series) ThruShaft use AV mounting
FAF-14810B (Advantage Series) ThruShaft use AV mounting
FAF-15810B (Advantage Series) ThruShaft use AV mounting
FAF-9810B (Advantage Series) ThruShaft use AV mounting
FAM-14810B (Advantage Series) ThruShaft use AV mounting
FAM-14810B-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAM-15810B (Advantage Series) ThruShaft use AV mounting
FAM-15810B-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAMF-14810B (Advantage Series) ThruShaft use AV mounting
FAMF-15810B (Advantage Series) ThruShaft use AV mounting

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (10 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
541-LAV-*-*	400 I	Eng	67				Furnished
541-MAV-*-*	350 I	Eng	87				Furnished
541-NAV-*-*	300 I	Eng	99				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED: In any case a PTO is used, regardless of PTO style, the transmission must have an input signal from the PTO when it is active. Eaton requires the OEM to provide a "PTO Active" input connection to the transmission ECU. Refer to the Vehicle OEM for wire connection information and to EATON TRIG2600 for Transmission/PTO Operations.

Eaton Fuller

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FO-10E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
FO-11E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
FO-12E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
FO-14E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
FO-16E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
FO-17E308LL-VCS (UltraShift Plus) Thrushaft use BD Mounting

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*3	250 I	Opp	82		7-A-032(P)(27)	328564X	Furnished	221XCAHX-*3	250 I	Opp	79		7-A-032(27)		Furnished
221ZEAHX-*3	250 I	Opp	95			328564X	Furnished	221XEAHX-*3	250 I	Opp	91				Furnished
221ZPAHX-*3	200 I	Opp	154			328564X	Furnished	221XPAHX-*3	200 I	Opp	148				Furnished
489XAAHX-*5 (11)	250 I	Opp	72				Furnished	442XAAHX-*3 (11)	250 I	Opp	69				Furnished
489XCAHX-*5 (12)	250 I	Opp	93				Furnished	442XBAHX-*3 (17)	250 I	Eng	69			REQUIRED	Furnished
489XFAHX-*5 (2)	250 I	Opp	114				Furnished	442XCAHX-*3 (12)	250 I	Opp	89				Furnished
489XHAHX-*5 (14)	250 I	Opp	132				Furnished	442XFAHX-*3 (2)	250 I	Opp	110				Furnished
489XLAHX-*5 (1)	250 I	Opp	148				Furnished	442XHAHX-*3 (14)	250 I	Opp	127				Furnished
489XQAHX-*5 (1)	225 I	Opp	160				Furnished	442XLAHX-*3 (1)	250 I	Opp	142				Furnished
489XRAHX-*5 (1)	220 I	Opp	185				Furnished	442XQAHX-*3 (1)	225 I	Opp	153				Furnished
489XSAHX-*5 (1)	155 I	Opp	220				Furnished	442XRAHX-*3 (1)	225 I	Opp	177				Furnished
489XUAHX-*5 (1)	110 I	Opp	262				Furnished	442XSAHX-*3 (1)	170 I	Opp	211				Furnished
489XWAHX-*5 (1)	80 I	Opp	308				Furnished	442XUAHX-*3 (1)	120 I	Opp	251				Furnished
489XXAHX-*5 (1)	55 I	Opp	365				Furnished	442XWAHX-*3 (1)	87 I	Opp	295				Furnished
680XFAHX-*3 (9)	375 I	Opp	114				Furnished	442XXAHX-*3 (1)	62 I	Opp	349				Furnished
680XHAHX-*3 (19)	375 I	Opp	132				Furnished	660XFAHX-*3 (9)	375 I	Opp	110				Furnished
680XQAHX-*3 (10)	295 I	Opp	160				Furnished	660XHAHX-*3 (14)	375 I	Opp	127				Furnished
680XRAHX-*3 (18)	220 I	Opp	185				Furnished	660XQAHX-*3 (10)	320 I	Opp	153				Furnished
680XSAHX-*3 (13)	155 I	Opp	220				Furnished	660XRAHX-*3 (18)	240 I	Opp	177				Furnished
823XBAHX-*3 (21)	500 I	Opp	78				Furnished	660XSAHX-*3 (13)	170 I	Opp	211				Furnished
823XDAHX-*3 (25)	500 I	Opp	92				Furnished								
823XGAHX-*3 (26)	500 I	Opp	100				Furnished								
823XJAHX-*3 (22)	500 I	Opp	118				Furnished								
823XMAHX-*3 (20)	511 I	Opp	139				Furnished								
823XRAHX-*3 (24)	205 I	Opp	191				Furnished								
823XTKTX-*3 (16)	140 I	Opp	231		8-A-165(27)		Furnished								
880XBAHX-*3 (3)	500 I	Opp	78				Furnished								
880XDAHX-*3 (4)	500 I	Opp	92				Furnished								
880XGAHX-*3 (8)	500 I	Opp	100				Furnished								
880XJAHX-*3 (5)	500 I	Opp	118				Furnished								
880XMAHX-*3 (6)	340 I	Opp	139				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift Plus transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft. per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(8) Input Gear Part No. 5-P-1135
(9) Input Gear Part No. 5-P-1242
(10) Input Gear Part No. 5-P-1246
(11) Input Gear Part No. 5-P-1280
(12) Input Gear Part No. 5-P-1287
(13) Input Gear Part No. 5-P-1322
(14) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1395
(17) Input Gear Part No. 5-P-1418
(18) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-1494
(20) Input Gear Part No. 5-P-283
(21) Input Gear Part No. 5-P-285
(22) Input Gear Part No. 5-P-325
(24) Input Gear Part No. 5-P-721
(25) Input Gear Part No. 5-P-971
(26) Input Gear Part No. 5-P-980
(27) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FO-10E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
FO-11E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
FO-12E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
FO-14E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
FO-16E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
FO-17E308LL-VCS (UltraShift Plus) Thrushaft use BD Mounting

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
880XQAHX-*3 (15)	280 I	Opp	162				Furnished								
880XRAHX-*3 (7)	205 I	Opp	191				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAAJX-*3	300 C	Opp	64			328481X	Furnished	272XAAJX-*3	300 C	Opp	61				Furnished
282XBAJX-*3	300 C	Opp	78				Furnished	272XBAJX-*3	300 C	Opp	75				Furnished
282XCAJX-*3	300 C	Opp	94				Furnished	272XCAJX-*3	300 C	Opp	90				Furnished
282XDAJX-*3	300 C	Opp	113				Furnished	272XDAJX-*3	300 C	Opp	108				Furnished
282XGAJX-*3	300 C	Opp	134				Furnished	272XGAJX-*3	300 C	Opp	128				Furnished
282XKAJX-*3	300 C	Opp	144				Furnished	272XKAJX-*3	300 C	Opp	150				Furnished
282XMAJX-*3	281 C	Opp	168				Furnished	272XMAJX-*3	300 C	Opp	161				Furnished
282XPAJX-*3	252 C	Opp	188				Furnished	272XPAJX-*3	300 C	Opp	180				Furnished
282XSAJX-*3	225 C	Opp	210				Furnished	272XSAJX-*3	300 C	Opp	201				Furnished
282XTAJX-*3	201 C	Opp	235				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	78				Furnished								
885XGAHX-*3 (8)	500 I	Opp	100				Furnished								
885XJAHX-*3 (5)	500 I	Opp	118				Furnished								
885XMAHX-*3 (6)	395 I	Opp	139				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (23)	200 I	Opp	100	105			Furnished	340XFAHX-*5 (23)	200 I	Opp	96	101	7-A-140(27)		Furnished
352ZSAHX-*3 (1)	140 I	Opp	223	288		328564X	Furnished	352XSAHX-*3 (1)	140 I	Opp	213	276			Furnished
863XBAHX-*5	423 I	Opp	78	97			Furnished								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng			8-A-032		Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

Continued on Next Page

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IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift Plus transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft. per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

(1) Input Gear Part No. 5-P-1004
(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1135
(15) Input Gear Part No. 5-P-1385
(23) Input Gear Part No. 5-P-581
(27) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FO-10E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
FO-11E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
FO-12E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
FO-14E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
FO-16E308LL-VCS (UltraShift Plus) Thrushaft use BD mounting
FO-17E308LL-VCS (UltraShift Plus) Thrushaft use BD Mounting

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (10 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
541-LBD-*-*	400 I	Eng	91				Furnished
541-MBD-*-*	350 I	Eng	117				Furnished
541-NBD-*-*	300 I	Eng	133				Furnished

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F-14E16B-LSE (UltraShift Plus)
F-15E16B-LSE (UltraShift Plus)
F-17E16B-LSE (UltraShift Plus)
FM-15E16B-LSE (UltraShift Plus)
FO-10E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting
FO-10E310C-VAS (UltraShift Plus)Thrushaft use AT mounting
FO-11E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting
FO-12E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting
FO-12E310C-VAS (UltraShift Plus)Thrushaft use AT mounting
FO-14E309ALL-VMS (UltraShift Plus)Thrushaft use BD mounting
FO-14E310C-LAS (UltraShift Plus) Thrushaft use AT mounting
FO-14E310C-VAS (UltraShift Plus)Thrushaft use AT mounting
FO-14E313A-MHP (UltraShift Plus)
FO-14E313A-VHP (UltraShift Plus)
FO-14E318B-MXP (UltraShift Plus)
FO-14E318B-VXP (UltraShift Plus)
FO-16E309ALL-VMS (UltraShift Plus)Thrushaft use BD mounting
FO-16E310C-LAS (UltraShift Plus) Thrushaft use AT mounting
FO-16E310C-VAS (UltraShift Plus) Thrushaft use AT mounting
FO-16E313A-MHP (UltraShift Plus)
FO-16E313A-VHP (UltraShift Plus)
FO-16E318B-MXP (UltraShift Plus)
FO-16E318B-VXP (UltraShift Plus)
FO-16E318B-VXP (UltraShift Plus)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
489XAAHX-*5 (11)	250 I	Opp	61				Furnished	221XCAHX-*3	250 I	Eng	66		7-A-032(P)(27)	329138X	Furnished
489XCAHX-*5 (12)	250 I	Opp	78				Furnished	221XEAHX-*3	250 I	Eng	76			329138X	Furnished
489XFAHX-*5 (2)	250 I	Opp	96				Furnished	221XPAHX-*3	200 I	Eng	124			329138X	Furnished
489XHAHX-*5 (14)	250 I	Opp	111				Furnished	442XAAHX-*3 (11)	250 I	Opp	58				Furnished
489XLAHX-*5 (1)	250 I	Opp	124				Furnished	442XBAHX-*3 (17)	250 I	Eng	58			REQUIRED	Furnished
489XQAHX-*5 (1)	225 I	Opp	134				Furnished	442XCAHX-*3 (12)	250 I	Opp	74				Furnished
489XRAHX-*5 (1)	225 I	Opp	155				Furnished	442XFAHX-*3 (2)	250 I	Opp	92				Furnished
489XSAHX-*5 (1)	200 I	Opp	184				Furnished	442XHAHX-*3 (14)	250 I	Opp	107				Furnished
680XFAHX-*3 (9)	375 I	Opp	96				Furnished	442XLAHX-*3 (1)	250 I	Opp	119				Furnished
680XHAHX-*3 (19)	375 I	Opp	111				Furnished	442XQAHX-*3 (1)	225 I	Opp	128				Furnished
680XQAHX-*3 (10)	375 I	Opp	134				Furnished	442XRAHX-*3 (1)	225 I	Opp	148				Furnished
680XRAHX-*3 (18)	310 I	Opp	155				Furnished	660XFAHX-*3 (9)	375 I	Opp	92				Furnished
680XSAHX-*3 (13)	220 I	Opp	184				Furnished	660XHAHX-*3 (14)	375 I	Opp	107				Furnished
823XBAHX-*3 (21)	750 I	Opp	65				Furnished	660XQAHX-*3 (10)	375 I	Opp	128				Furnished
823XDAHX-*3 (25)	750 I	Opp	77				Furnished	660XRAHX-*3 (18)	340 I	Opp	148				Furnished
823XGAHX-*3 (26)	705 I	Opp	84				Furnished								
823XJAHX-*3 (22)	599 I	Opp	99				Furnished								
823XMAHX-*3 (20)	511 I	Opp	116				Furnished								
823XRAHX-*3 (24)	370 I	Opp	160				Furnished								
823XTKTX-*3 (16)	305 I	Opp	194		8-A-165(T)(27)		Furnished								
880XBAHX-*3 (3)	500 I	Opp	65				Furnished								
880XDAHX-*3 (4)	500 I	Opp	77				Furnished								
880XGAHX-*3 (8)	500 I	Opp	84				Furnished								
880XJAHX-*3 (5)	500 I	Opp	99				Furnished								
880XMAHX-*3 (6)	500 I	Opp	116				Furnished								
880XQAHX-*3 (15)	435 I	Opp	136				Furnished								
880XRAHX-*3 (7)	370 I	Opp	160				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAAJX-*3	300 C	Opp	53			328481X	Furnished	272XAAJX-*3	300 C	Opp	51				Furnished
282XBAJX-*3	300 C	Opp	65		8-A-032		Furnished	272XBAJX-*3	300 C	Opp	63				Furnished
282XCAJX-*3	300 C	Opp	79		8-A-032		Furnished	272XCAJX-*3	300 C	Opp	76				Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift Plus Transmissions must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1135
(9) Input Gear Part No. 5-P-1242
(10) Input Gear Part No. 5-P-1246
(11) Input Gear Part No. 5-P-1280
(12) Input Gear Part No. 5-P-1287
(13) Input Gear Part No. 5-P-1322
(14) Input Gear Part No. 5-P-1364
(15) Input Gear Part No. 5-P-1385
(16) Input Gear Part No. 5-P-1395
(17) Input Gear Part No. 5-P-1418
(18) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-1494
(20) Input Gear Part No. 5-P-283
(21) Input Gear Part No. 5-P-285
(22) Input Gear Part No. 5-P-325
(24) Input Gear Part No. 5-P-721
(25) Input Gear Part No. 5-P-971
(26) Input Gear Part No. 5-P-980
(27) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

F-14E16B-LSE (UltraShift Plus)
F-15E16B-LSE (UltraShift Plus)
F-17E16B-LSE (UltraShift Plus)
FM-15E16B-LSE (UltraShift Plus)
FO-10E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting
FO-10E310C-VAS (UltraShift Plus)Thrushaft use AT mounting
FO-11E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting
FO-12E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting
FO-12E310C-VAS (UltraShift Plus)Thrushaft use AT mounting
FO-14E309ALL-VMS (UltraShift Plus)Thrushaft use BD mounting
FO-14E310C-LAS (UltraShift Plus) Thrushaft use AT mounting
FO-14E310C-VAS (UltraShift Plus)Thrushaft use AT mounting
FO-14E313A-MHP (UltraShift Plus)
FO-14E313A-VHP (UltraShift Plus)
FO-14E318B-MXP (UltraShift Plus)
FO-14E318B-VXP (UltraShift Plus)
FO-16E309ALL-VMS (UltraShift Plus)Thrushaft use BD mounting
FO-16E310C-LAS (UltraShift Plus) Thrushaft use AT mounting
FO-16E310C-VAS (UltraShift Plus) Thrushaft use AT mounting
FO-16E313A-MHP (UltraShift Plus)
FO-16E313A-VHP (UltraShift Plus)
FO-16E318B-MXP (UltraShift Plus)
FO-16E318B-VXP (UltraShift Plus)
FO-16E318B-VXP (UltraShift Plus)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XDAJX-*3	300 C	Opp	95		8-A-032		Furnished	272XDAJX-*3	300 C	Opp	90				
282XGAJX-*3	300 C	Opp	112		8-A-032		Furnished	272XGAJX-*3	300 C	Opp	108				Furnished
282XKAJX-*3	314 C	Opp	126		8-A-032		Furnished	272XKAJX-*3	300 C	Opp	120				Furnished
282XMAJX-*3	281 C	Opp	140		8-A-032		Furnished	272XMAJX-*3	300 C	Opp	135				Furnished
282XPAJX-*3	252 C	Opp	157		8-A-032		Furnished	272XPAJX-*3	300 C	Opp	150				Furnished
282XSAJX-*3	201 C	Opp	176		8-A-032		Furnished	272XSAJX-*3	300 C	Opp	168				Furnished
282XTAJX-*3	210 C	Opp	188		8-A-032		Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	65				Furnished								
885XGAHX-*3 (8)	500 I	Opp	84				Furnished								
885XJAHX-*3 (5)	500 I	Opp	99				Furnished								
885XMAHX-*3 (6)	500 I	Opp	116				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (23)	200 I	Opp	84	88			Furnished	340XFAHX-*5 (23)	200 I	Opp	80	84	7-A-140(27)		Furnished
352ZSAHX-*3 (1)	140 I	Opp	187	241		328564X	Furnished	352XSAHX-*3 (1)	140 I	Opp	179	231			Furnished
863XBAHX-*5	423 I	Opp	65	81			Furnished								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng			8-A-032		Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

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† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift Plus Transmissions must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

(1) Input Gear Part No. 5-P-1004
(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(8) Input Gear Part No. 5-P-1135
(23) Input Gear Part No. 5-P-581
(27) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

F-14E16B-LSE (UltraShift Plus)
F-15E16B-LSE (UltraShift Plus)
F-17E16B-LSE (UltraShift Plus)
FM-15E16B-LSE (UltraShift Plus)
FO-10E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting
FO-10E310C-VAS (UltraShift Plus)Thrushaft use AT mounting
FO-11E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting
FO-12E309ALL-VMS (UltraShift Plus) Thrushaft use BD mounting
FO-12E310C-VAS (UltraShift Plus)Thrushaft use AT mounting
FO-14E309ALL-VMS (UltraShift Plus)Thrushaft use BD mounting
FO-14E310C-LAS (UltraShift Plus) Thrushaft use AT mounting
FO-14E310C-VAS (UltraShift Plus)Thrushaft use AT mounting
FO-14E313A-MHP (UltraShift Plus)
FO-14E313A-VHP (UltraShift Plus)
FO-14E318B-MXP (UltraShift Plus)
FO-14E318B-VXP (UltraShift Plus)
FO-16E309ALL-VMS (UltraShift Plus)Thrushaft use BD mounting
FO-16E310C-LAS (UltraShift Plus) Thrushaft use AT mounting
FO-16E310C-VAS (UltraShift Plus) Thrushaft use AT mounting
FO-16E313A-MHP (UltraShift Plus)
FO-16E313A-VHP (UltraShift Plus)
FO-16E318B-MXP (UltraShift Plus)
FO-16E318B-VXP (UltraShift Plus)
FO-16E318B-VXP (UltraShift Plus)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (9 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
541-LBD-*-*	400 I	Eng	76				Furnished
541-MBD-*-*	350 I	Eng	98				Furnished
541-NBD-*-*	300 I	Eng	112				Furnished

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift Plus Transmissions must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

Eaton Fuller

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FM-14E310B-LAS (UltraShift Plus) Thrushaft use AT mounting
FM-15E310B-LAS (UltraShift Plus) Thrushaft use AT mounting

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*3	250 I	Opp	61		7-A-032(P)(28)	328564X	Furnished	221XCAHX-*3	250 I	Opp	58		7-A-032(28)		Furnished
221ZEAHX-*3	250 I	Opp	70			328564X	Furnished	221XEAHX-*3	250 I	Opp	67				Furnished
221ZPAHX-*3	200 I	Opp	114			328564X	Furnished	221XPAHX-*3	200 I	Opp	110				Furnished
489XAAHX-*5 (12)	250 I	Opp	54				Furnished	442XAAHX-*3 (12)	250 I	Opp	51				Furnished
489XCAHX-*5 (13)	250 I	Opp	69				Furnished	442XBAHX-*3 (18)	250 I	Eng	51			REQUIRED	Furnished
489XFAHX-*5 (2)	250 I	Opp	85				Furnished	442XCAHX-*3 (13)	250 I	Opp	66				Furnished
489XHAHX-*5 (15)	250 I	Opp	99				Furnished	442XFAHX-*3 (2)	250 I	Opp	81				Furnished
489XLAHX-*5 (1)	250 I	Opp	110				Furnished	442XHAHX-*3 (15)	250 I	Opp	94				Furnished
489XQAHX-*5 (1)	225 I	Opp	118				Furnished	442XLAHX-*3 (1)	250 I	Opp	105				Furnished
489XRAHX-*5 (1)	225 I	Opp	137				Furnished	442XQAHX-*3 (1)	225 I	Opp	113				Furnished
489XSAHX-*5 (1)	200 I	Opp	163				Furnished	442XRAHX-*3 (1)	225 I	Opp	131				Furnished
489XUAHX-*5 (1)	195 I	Opp	194				Furnished	442XSAHX-*3 (1)	200 I	Opp	156				Furnished
489XWAHX-*5 (1)	175 I	Opp	229				Furnished	442XUAHX-*3 (1)	195 I	Opp	186				Furnished
489XXAHX-*5 (1)	140 I	Opp	271				Furnished	442XWAHX-*3 (1)	175 I	Opp	219				Furnished
680XFAHX-*3 (10)	375 I	Opp	85				Furnished	442XXAHX-*3 (1)	140 I	Opp	259				Furnished
680XHAHX-*3 (20)	375 I	Opp	99				Furnished	660XFAHX-*3 (10)	375 I	Opp	81				Furnished
680XQAHX-*3 (11)	375 I	Opp	118				Furnished	660XHAHX-*3 (15)	375 I	Opp	94				Furnished
680XRAHX-*3 (19)	350 I	Opp	118				Furnished	660XQAHX-*3 (11)	375 I	Opp	113				Furnished
680XSAHX-*3 (14)	322 I	Opp	163				Furnished	660XRAHX-*3 (19)	350 I	Opp	131				Furnished
823XBAHX-*3 (26)	750 I	Opp	69				Furnished	660XSAHX-*3 (14)	336 I	Opp	156				Furnished
823XDAHX-*3 (22)	750 I	Opp	58				Furnished								
823XGAHX-*3 (27)	705 I	Opp	74				Furnished								
823XJAHX-*3 (23)	599 I	Opp	88				Furnished								
823XMAHX-*3 (21)	511 I	Opp	103				Furnished								
823XRAHX-*3 (25)	370 I	Opp	142				Furnished								
823XTKTX-*3 (17)	305 I	Opp	172		8-A-165(28)		Furnished								
880XBAHX-*3 (3)	500 I	Opp	58				Furnished								
880XDAHX-*3 (4)	500 I	Opp	69				Furnished								
880XGAHX-*3 (9)	500 I	Opp	74				Furnished								
880XJAHX-*3 (5)	500 I	Opp	88				Furnished								
880XMAHX-*3 (6)	500 I	Opp	103				Furnished								
880XQAHX-*3 (16)	435 I	Opp	120				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft. Minimum engine/transmission speed required for PTO operation is 1000 RPM, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1418
(19) Input Gear Part No. 5-P-1441
(20) Input Gear Part No. 5-P-1494
(21) Input Gear Part No. 5-P-283
(22) Input Gear Part No. 5-P-285
(23) Input Gear Part No. 5-P-325
(25) Input Gear Part No. 5-P-721
(26) Input Gear Part No. 5-P-971
(27) Input Gear Part No. 5-P-980
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FM-14E310B-LAS (UltraShift Plus) Thrushaft use AT mounting
FM-15E310B-LAS (UltraShift Plus) Thrushaft use AT mounting

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
880XRAHX-*3 (7)	370 I	Opp	142				Furnished								
880XTAHX-*3 (8)	287 I	Opp	183				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAAJX-*3	300 C	Opp	47			328481X	Furnished	272XAAJX-*3	300 C	Opp	45				Furnished
282XBAJX-*3	300 C	Opp	58				Furnished	272XBAJX-*3	300 C	Opp	55				Furnished
282XCAJX-*3	300 C	Opp	70				Furnished	272XCAJX-*3	300 C	Opp	67				Furnished
282XDAJX-*3	300 C	Opp	84				Furnished	272XDAJX-*3	300 C	Opp	80				Furnished
282XGAJX-*3	300 C	Opp	100				Furnished	272XGAJX-*3	300 C	Opp	95				Furnished
282XKAJX-*3	300 C	Opp	111				Furnished	272XKAJX-*3	300 C	Opp	107				Furnished
282XMAJX-*3	300 C	Opp	124				Furnished	272XMAJX-*3	300 C	Opp	119				Furnished
282XPAJX-*3	300 C	Opp	139				Furnished	272XPAJX-*3	300 C	Opp	133				Furnished
282XSAJX-*3	300 C	Opp	156				Furnished	272XSAJX-*3	300 C	Opp	149				Furnished
282XTAJX-*3	300 C	Opp	174				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	58				Furnished								
885XGAHX-*3 (9)	500 I	Opp	74				Furnished								
885XJAHX-*3 (5)	500 I	Opp	88				Furnished								
885XMAHX-*3 (6)	500 I	Opp	103				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (24)	200 I	Opp	74	78			Furnished	340XFAHX-*5 (24)	200 I	Opp	71	75	7-A-140(28)		Furnished
863XBAHX-*5	423 I	Opp	58	72			Furnished								
GEARED ADAPTERS															
628XAHX-4AH	250 I	Eng			8-A-032		Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630-02	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft. Minimum engine/transmission speed required for PTO operation is 1000 RPM, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(24) Input Gear Part No. 5-P-581
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FM-14E310B-LAS (UltraShift Plus) Thrushaft use AT mounting
FM-15E310B-LAS (UltraShift Plus) Thrushaft use AT mounting

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (10 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
541-LAT-*-*	400 I	Eng	67				Furnished								
541-MAT-*-*	350 I	Eng	87				Furnished								
541-NAT-*-*	300 I	Eng	99				Furnished								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift transmission must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft. Minimum engine/transmission speed required for PTO operation is 1000 RPM, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

Eaton Fuller

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FAO-11810C (Advantage Series) ThruShaft use AV mounting
FAO-12810C (Advantage Series) ThruShaft use AV mounting
FAO-13810C (Advantage Series) ThruShaft use AV mounting
FAO-14810C (Advantage Series) ThruShaft use AV mounting
FAO-14810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAO-15810C (Advantage Series) ThruShaft use AV mounting
FAO-16810C (Advantage Series) ThruShaft use AV mounting
FAO-16810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAO-16810S-EN3 (Advanatge Series Automated) ThruShaft use AV mounting
FAO-16810S-EP3 (Advantage Series Automated) ThruShaft use AV mounting
FAOF-11810C (Advantage Series) ThruShaft use AV mounting
FAOF-12810C (Advantage Series) ThruShaft use AV mounting
FAOF-13810C (Advantage Series) ThruShaft use AV mounting
FAOF-14810C (Advantage Series) ThruShaft use AV mounting
FAOF-15810C (Advantage Series) ThruShaft use AV mounting
FAOF-16810C (Advantage Series) ThruShaft use AV mounting
FAOM-14810C (Advantage Series) ThruShaft use AV mounting
FAOM-14810S-EC3 (Advantage Series Automated) ThruShaft use AV mounting
FAOM-15810C (Advantage Series) ThruShaft use AV mounting
FAOM-15810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAOM-15810S-EC3 (Advantage Series Automated) ThruShaft use AV mounting
FAOM-15810S-EN3 (Advantage Series Automated) ThruShaft use AV mounting
FAOM-15810S-EP3 (Advantage Series Automated) ThruShaft use AV mounting
FAOM-16810C (Advantage Series) ThruShaft use AV mounting

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
489XAAHX-*5 (11)	250 I	Opp	61				Furnished	221XCAHX-*3	250 I	Eng	66		7-A-032(P)(27)	329138X	Furnished
489XCAHX-*5 (12)	250 I	Opp	78				Furnished	221XEAHX-*3	250 I	Eng	76			329138X	Furnished
489XFAHX-*5 (2)	250 I	Opp	96				Furnished	221XPAHX-*3	200 I	Eng	124			329138X	Furnished
489XHAHX-*5 (14)	250 I	Opp	111				Furnished	442XAAHX-*3 (11)	250 I	Opp	58				Furnished
489XLAHX-*5 (1)	250 I	Opp	124				Furnished	442XBAHX-*3 (17)	250 I	Eng	58			REQUIRED	Furnished
489XQAHX-*5 (1)	225 I	Opp	134				Furnished	442XCAHX-*3 (12)	250 I	Opp	74				Furnished
489XRAHX-*5 (1)	225 I	Opp	155				Furnished	442XFAHX-*3 (2)	250 I	Opp	92				Furnished
489XSAHX-*5 (1)	200 I	Opp	184				Furnished	442XHAHX-*3 (14)	250 I	Opp	107				Furnished
680XFAHX-*3 (9)	375 I	Opp	96				Furnished	442XLAHX-*3 (1)	250 I	Opp	119				Furnished
680XHAHX-*3 (19)	375 I	Opp	111				Furnished	442XQAHX-*3 (1)	225 I	Opp	128				Furnished
680XQAHX-*3 (10)	375 I	Opp	134				Furnished	442XRAHX-*3 (1)	225 I	Opp	148				Furnished
680XRAHX-*3 (18)	350 I	Opp	155				Furnished	660XFAHX-*3 (9)	375 I	Opp	92				Furnished
680XSAHX-*3 (13)	322 I	Opp	184				Furnished	660XHAHX-*3 (14)	375 I	Opp	107				Furnished
823XBAHX-*3 (21)	750 I	Opp	65				Furnished	660XQAHX-*3 (10)	375 I	Opp	128				Furnished
823XDAHX-*3 (25)	750 I	Opp	98				Furnished	660XRAHX-*3 (18)	350 I	Opp	148				Furnished
823XGAHX-*3 (26)	705 I	Opp	106				Furnished								
823XJAHX-*3 (22)	599 I	Opp	99				Furnished								
823XMAHX-*3 (20)	511 I	Opp	116				Furnished								
823XRAHX-*3 (24)	370 I	Opp	160				Furnished								
823XTKTX-*3 (16)	305 I	Opp	194		8-A-165(T)(27)		Furnished								
880XBAHX-*3 (3)	500 I	Opp	65				Furnished								
880XDAHX-*3 (4)	500 I	Opp	77				Furnished								
880XGAHX-*3 (8)	500 I	Opp	84				Furnished								
880XJAHX-*3 (5)	500 I	Opp	99				Furnished								
880XMAHX-*3 (6)	500 I	Opp	116				Furnished								
880XQAHX-*3 (15)	435 I	Opp	136				Furnished								
880XRAHX-*3 (7)	370 I	Opp	160				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAAJX-*3	300 C	Opp	53			328481X	Furnished	272XAAJX-*3	300 C	Opp	51				Furnished
282XBAJX-*3	300 C	Opp	65				Furnished	272XBAJX-*3	300 C	Opp	63				Furnished
282XCAJX-*3	300 C	Opp	79				Furnished	272XCAJX-*3	300 C	Opp	76				Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED - In any case a PTO is used, regardless of PTO style, the transmission must have an input signal from the PTO when it is active. EATON requires the OEM to provide a "PTO Active" input connection to the transmission ECU. Refer to the Vehicle OEM for wire connection information and to Eaton TRIG2600 for Transmission/PTO Operations.

CAUTION: There is adjacent gear interference in the transmission that prevents the 489*U,W,X ratios from being used. 880*T is also affected.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1135
(9) Input Gear Part No. 5-P-1242
(10) Input Gear Part No. 5-P-1246
(11) Input Gear Part No. 5-P-1280
(12) Input Gear Part No. 5-P-1287
(13) Input Gear Part No. 5-P-1322
(14) Input Gear Part No. 5-P-1364
(15) Input Gear Part No. 5-P-1385
(16) Input Gear Part No. 5-P-1395
(17) Input Gear Part No. 5-P-1418
(18) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-1494
(20) Input Gear Part No. 5-P-283
(21) Input Gear Part No. 5-P-285
(22) Input Gear Part No. 5-P-325
(24) Input Gear Part No. 5-P-721
(25) Input Gear Part No. 5-P-971
(26) Input Gear Part No. 5-P-980
(27) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FAO-11810C (Advantage Series) ThruShaft use AV mounting
FAO-12810C (Advantage Series) ThruShaft use AV mounting
FAO-13810C (Advantage Series) ThruShaft use AV mounting
FAO-14810C (Advantage Series) ThruShaft use AV mounting
FAO-14810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAO-15810C (Advantage Series) ThruShaft use AV mounting
FAO-16810C (Advantage Series) ThruShaft use AV mounting
FAO-16810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAO-16810S-EN3 (Advanatge Series Automated) ThruShaft use AV mounting
FAO-16810S-EP3 (Advantage Series Automated) ThruShaft use AV mounting
FAOF-11810C (Advantage Series) ThruShaft use AV mounting
FAOF-12810C (Advantage Series) ThruShaft use AV mounting
FAOF-13810C (Advantage Series) ThruShaft use AV mounting
FAOF-14810C (Advantage Series) ThruShaft use AV mounting
FAOF-15810C (Advantage Series) ThruShaft use AV mounting
FAOF-16810C (Advantage Series) ThruShaft use AV mounting
FAOM-14810C (Advantage Series) ThruShaft use AV mounting
FAOM-14810S-EC3 (Advantage Series Automated) ThruShaft use AV mounting
FAOM-15810C (Advantage Series) ThruShaft use AV mounting
FAOM-15810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAOM-15810S-EC3 (Advantage Series Automated) ThruShaft use AV mounting
FAOM-15810S-EN3 (Advantage Series Automated) ThruShaft use AV mounting
FAOM-15810S-EP3 (Advantage Series Automated) ThruShaft use AV mounting
FAOM-16810C (Advantage Series) ThruShaft use AV mounting

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XDAJX-*3	300 C	Opp	95				Furnished	272XDAJX-*3	300 C	Opp	90				Furnished
282XGAJX-*3	300 C	Opp	112				Furnished	272XGAJX-*3	300 C	Opp	108				Furnished
282XKAJX-*3	300 C	Opp	126				Furnished	272XKAJX-*3	300 C	Opp	120				Furnished
282XMAJX-*3	300 C	Opp	140				Furnished	272XMAJX-*3	300 C	Opp	135				Furnished
282XPAJX-*3	300 C	Opp	157				Furnished	272XPAJX-*3	300 C	Opp	150				Furnished
282XSAJX-*3	300 C	Opp	176				Furnished	272XSAJX-*3	300 C	Opp	168				Furnished
282XTAJX-*3	300 C	Opp	196				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	65				Furnished								
885XGAHX-*3 (8)	500 I	Opp	84				Furnished								
885XJAHX-*3 (5)	500 I	Opp	99				Furnished								
885XMAHX-*3 (6)	500 I	Opp	116				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (23)	200 I	Opp	84	88			Furnished	340XFAHX-*5 (23)	200 I	Opp	80	84	7-A-140(27)		Furnished
863XBAHX-*5	423 I	Opp	65	81			Furnished								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng			8-A-032		Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED - In any case a PTO is used, regardless of PTO style, the transmission must have an input signal from the PTO when it is active. EATON requires the OEM to provide a "PTO Active" input connection to the transmission ECU. Refer to the Vehicle OEM for wire connection information and to Eaton TRIG2600 for Transmission/PTO Operations.

CAUTION: There is adjacent gear interference in the transmission that prevents the 489*U,W,X ratios from being used. 880*T is also affected.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(8) Input Gear Part No. 5-P-1135
(23) Input Gear Part No. 5-P-581
(27) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

FAO-11810C (Advantage Series) ThruShaft use AV mounting
FAO-12810C (Advantage Series) ThruShaft use AV mounting
FAO-13810C (Advantage Series) ThruShaft use AV mounting
FAO-14810C (Advantage Series) ThruShaft use AV mounting
FAO-14810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAO-15810C (Advantage Series) ThruShaft use AV mounting
FAO-16810C (Advantage Series) ThruShaft use AV mounting
FAO-16810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAO-16810S-EN3 (Advanatge Series Automated) ThruShaft use AV mounting
FAO-16810S-EP3 (Advantage Series Automated) ThruShaft use AV mounting
FAOF-11810C (Advantage Series) ThruShaft use AV mounting
FAOF-12810C (Advantage Series) ThruShaft use AV mounting
FAOF-13810C (Advantage Series) ThruShaft use AV mounting
FAOF-14810C (Advantage Series) ThruShaft use AV mounting
FAOF-15810C (Advantage Series) ThruShaft use AV mounting
FAOF-16810C (Advantage Series) ThruShaft use AV mounting
FAOM-14810C (Advantage Series) ThruShaft use AV mounting
FAOM-14810S-EC3 (Advantage Series Automated) ThruShaft use AV mounting
FAOM-15810C (Advantage Series) ThruShaft use AV mounting
FAOM-15810C-EA3 (Advantage Series Automated) ThruShaft use AV mounting
FAOM-15810S-EC3 (Advantage Series Automated) ThruShaft use AV mounting
FAOM-15810S-EN3 (Advantage Series Automated) ThruShaft use AV mounting
FAOM-15810S-EP3 (Advantage Series Automated) ThruShaft use AV mounting
FAOM-16810C (Advantage Series) ThruShaft use AV mounting

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (10 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
541-LAV-*-*	400 I	Eng	76				Furnished
541-MAV-*-*	350 I	Eng	98				Furnished
541-NAV-*-*	300 I	Eng	112				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED - In any case a PTO is used, regardless of PTO style, the transmission must have an input signal from the PTO when it is active. EATON requires the OEM to provide a “PTO Active” input connection to the transmission ECU. Refer to the Vehicle OEM for wire connection information and to Eaton TRIG2600 for Transmission/PTO Operations.

CAUTION: There is adjacent gear interference in the transmission that prevents the 489*U,W,X ratios from being used. 880*T is also affected.

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FO-16D313E-LEP (UltraShift)
FOM-16D313E-LEP (UltraShift)
RTLO-16913L-DM3 (UltraShift)
RTLOM-16913L-DM3 (UltraShift)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.805" (20.447MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
489XAAHX-*5 (11)	250 I	Opp	61				Furnished	221XCAHX-*3	250 I	Eng	66		7-A-032(P)(27)	329138X	Furnished
489XCAHX-*5 (12)	250 I	Opp	78				Furnished	221XEAHX-*3	250 I	Eng	76			329138X	Furnished
489XFAHX-*5 (2)	250 I	Opp	96				Furnished	221XLAHX-*3	200 I	Eng	102			329138X	Furnished
489XHAHX-*5 (14)	250 I	Opp	111				Furnished	221XPAHX-*3	200 I	Eng	124			329138X	Furnished
489XLAHX-*5 (1)	250 I	Opp	124				Furnished	442XAAHX-*3 (11)	250 I	Opp	58				Furnished
489XQAHX-*5 (1)	225 I	Opp	134				Furnished	442XBAHX-*3 (17)	250 I	Eng	58			REQUIRED	Furnished
489XRAHX-*5 (1)	225 I	Opp	155				Furnished	442XCAHX-*3 (12)	250 I	Opp	74				Furnished
489XSAHX-*5 (1)	200 I	Opp	184				Furnished	442XFAHX-*3 (2)	250 I	Opp	92				Furnished
680XFAHX-*3 (9)	375 I	Opp	96				Furnished	442XHAHX-*3 (14)	250 I	Opp	107				Furnished
680XHAHX-*3 (19)	375 I	Opp	111				Furnished	442XLAHX-*3 (1)	250 I	Opp	119				Furnished
680XQAHX-*3 (10)	375 I	Opp	134				Furnished	442XQAHX-*3 (1)	225 I	Opp	128				Furnished
680XRAHX-*3 (18)	310 I	Opp	155				Furnished	442XRAHX-*3 (1)	225 I	Opp	148				Furnished
680XSAHX-*3 (13)	220 I	Opp	184				Furnished	660XFAHX-*3 (9)	375 I	Opp	92				Furnished
823XBAHX-*3 (21)	500 I	Opp	65				Furnished	660XHAHX-*3 (14)	330 I	Opp	107				Furnished
823XDAHX-*3 (25)	500 I	Opp	98				Furnished	660XQAHX-*3 (10)	280 I	Opp	128				Furnished
823XGAHX-*3 (26)	500 I	Opp	106				Furnished	660XRAHX-*3 (18)	235 I	Opp	148				Furnished
823XJAHX-*3 (22)	500 I	Opp	99				Furnished								
823XMAHX-*3 (20)	650 I	Opp	116				Furnished								
823XRAHX-*3 (24)	290 I	Opp	160				Furnished								
823XTKTX-*3 (16)	190 I	Opp	194		8-A-165(T)(27)		Furnished								
880XBAHX-*3 (3)	500 I	Opp	65				Furnished								
880XDAHX-*3 (4)	500 I	Opp	77				Furnished								
880XGAHX-*3 (8)	500 I	Opp	84				Furnished								
880XJAHX-*3 (5)	500 I	Opp	99				Furnished								
880XMAHX-*3 (6)	500 I	Opp	116				Furnished								
880XQAHX-*3 (15)	450 I	Opp	136				Furnished								
880XRAHX-*3 (7)	290 I	Opp	160				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272XAAJX-*3	300 C	Opp	53			328481X	Furnished	272XAAJX-*3	300 C	Opp	51				Furnished
282XBAJX-*3	300 C	Opp	65				Furnished	272XBAJX-*3	300 C	Opp	63				Furnished
282XCAJX-*3	300 C	Opp	79				Furnished	272XCAJX-*3	300 C	Opp	76				Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift Transmissions must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1135
(9) Input Gear Part No. 5-P-1242
(10) Input Gear Part No. 5-P-1246
(11) Input Gear Part No. 5-P-1280
(12) Input Gear Part No. 5-P-1287
(13) Input Gear Part No. 5-P-1322
(14) Input Gear Part No. 5-P-1364
(15) Input Gear Part No. 5-P-1385
(16) Input Gear Part No. 5-P-1395
(17) Input Gear Part No. 5-P-1418
(18) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-1494
(20) Input Gear Part No. 5-P-283
(21) Input Gear Part No. 5-P-285
(22) Input Gear Part No. 5-P-325
(24) Input Gear Part No. 5-P-721
(25) Input Gear Part No. 5-P-971
(26) Input Gear Part No. 5-P-980
(27) Filler block furnished with PTO

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FO-16D313E-LEP (UltraShift)
FOM-16D313E-LEP (UltraShift)
RTLO-16913L-DM3 (UltraShift)
RTLOM-16913L-DM3 (UltraShift)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
47 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.805" (20.447MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XDAJX-*3	300 C	Opp	95				Furnished	272XDAJX-*3	300 C	Opp	90				Furnished
282XGAJX-*3	300 C	Opp	112				Furnished	272XGAJX-*3	300 C	Opp	108				Furnished
282XKAJX-*3	314 C	Opp	126				Furnished	272XKAJX-*3	300 C	Opp	120				Furnished
282XMAJX-*3	281 C	Opp	140				Furnished	272XMAJX-*3	300 C	Opp	135				Furnished
282XPAJX-*3	252 C	Opp	157				Furnished	272XPAJX-*3	300 C	Opp	150				Furnished
282XSAJX-*3	225 C	Opp	176				Furnished	272XSAJX-*3	300 C	Opp	168				Furnished
282XTAJX-*3	201 C	Opp	196				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	65				Furnished								
885XGAHX-*3 (8)	500 I	Opp	84				Furnished								
885XJAHX-*3 (5)	500 I	Opp	99				Furnished								
885XMAHX-*3 (6)	500 I	Opp	116				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (23)	200 I	Opp	84	88	8-A-093(T)(28) 8-A-032(P)(28)		Furnished	340XFAHX-*5 (23)	200 I	Opp	80	84	7-A-140(27)		Furnished
863XBAHX-*5	423 I	Opp	65	81			Furnished								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng				8-A-032	Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: INPUT SIGNAL REQUIRED - The Eaton UltraShift Transmissions must have an input signal from the Power Take-Off when it is active. In this active state, the clutch engagement is controlled when the operator raises the engine speed to engage the clutch and drive the transmission main box countershaft, per EATON spec. "TRIG-2600". INCORRECT or NO PTO interface signal to the transmission will result in uncontrolled engagement of the clutch during PTO operation.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(8) Input Gear Part No. 5-P-1135
(23) Input Gear Part No. 5-P-581
(27) Filler block furnished with PTO
(28) Furnished, but not required

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EDCO-6F107A-P (Procision Series w/ Park Paw)
EDCO-6F107A-X (Procision Series)
EDCO-9N107A-P (Procision Series w/ Park Paw)
EDCO-9N107A-X (Procision Series)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
23 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
0.963" (24.4602MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
47 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.099" (27.9146MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
442QLLPP-*5 (1)	250 I	Eng	42				Furnished	442GLLQP-*3 (2)	250 I	Opp	99				Furnished
442QQLPP-*5 (1)	225 I	Eng	45				Furnished	442GQLQP-*3 (2)	225 I	Opp	106				Furnished
442QRLPP-*5 (1)	225 I	Eng	52				Furnished	442GRLQP-*3 (2)	225 I	Opp	123				Furnished
442QSLPP-*5 (1)	200 I	Eng	62				Furnished	442GSLQP-*3 (2)	200 I	Opp	147				Furnished
442QULPP-*5 (1)	195 I	Eng	74				Furnished	442GULQP-*3 (2)	195 I	Opp	175				Furnished
442QWLPP-*5 (1)	175 I	Eng	87				Furnished	442GWLQP-*3 (2)	175 I	Opp	205				Furnished
442QXLPP-*5 (1)	140 I	Eng	103				Furnished	442GXLQP-*3 (2)	140 I	Opp	243				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

WARNING: PTO SHIFT OPTIONS - Only one PTO shift option available for the Procision, (D) 12V Elec/Air. Shift type required to interface with the TCM. The necessary 12VDC wiring harness is provided with PTO.

(1) Input Gear Part No. 5-P-1459
(2) Input Gear Part No. 5-P-1460

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EDCO-6F107A-P (Procision Series w/ Park Paw)
EDCO-6F107A-X (Procision Series)
EDCO-9N107A-P (Procision Series w/ Park Paw)
EDCO-9N107A-X (Procision Series)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:
0" (0MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
523XTLQX-*-*	258 C	Opp	114			Furnished	
523XVLQX-*-*	250 C	Opp	136			Furnished	

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

WARNING: PTO SHIFT OPTIONS - Only one PTO shift option available for the Procision, (D) 12V Elec/Air. Shift type required to interface with the TCM. The necessary 12VDC wiring harness is provided with PTO.

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EEO-14F112C (Endurant)
EEO-15F112C (Endurant)
EEO-16F112C (Endurant)
EEO-17F112C (Endurant)
EEO-18F112C (Endurant)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
42 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.125" (28.575MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
489QCLZX-*3 (4)	200 I	Opp	94				Furnished
489QFLZX-*3 (5)	250 I	Opp	116				Furnished
489QHLZX-*3 (6)	250 I	Opp	135				Furnished
880QGLZX-*3 (1)	500 I	Opp	107				Furnished
880QJLZX-*3 (2)	500 I	Opp	125				Furnished
880QQLZX-*3 (3)	450 I	Opp	173				Furnished

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

WARNING: SHIFT OPTIONS - Only one shift option available for the Endurant, (D) 12V Elec/Air. Shift type required to interface with the TCM. The necessary 12VDC wiring harness is provided with PTO.

(1) Input Gear Part No. 5-P-1574
(2) Input Gear Part No. 5-P-1575
(3) Input Gear Part No. 5-P-1577
(4) Input Gear Part No. 5-P-1587
(5) Input Gear Part No. 5-P-1588
(6) Input Gear Part No. 5-P-1589

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Eaton Fuller Notes

FLR-34

1. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. The 442XBAH must use one of the GEARED ADAPTERS listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.

FLR-40

1. All PTOs on RH side require assembly arrangement “6” to put output shaft above center. This will clear the bulge in the transmission. A direct mount pump will interfere with the bulge.
2. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

FLR-41

1. All PTOs on R.H. side require assembly arrangement “6” to put output shaft above center. This will clear the bulge in the transmission. A direct mount pump will interfere with the bulge.
2. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

FLR-57

1. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.

FLR-58

1. The 880 Series “T” ratio will interfere with the adjacent gear in the transmission on the bottom opening.
2. The 489 Series ratios “U”,”W”,&”X” will interfere with the adjacent gear in the transmission on the bottom opening. The 442 Series ratios “S”,”U”,”W” and “X” will interfere with the adjacent gear in the transmission on the right opening.
3. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
4. The 442XBAH Must Use One of the Geared Adapters Listed on the Application Page. Direction of Rotation Shown is the Final Output Shaft Rotation w/ Geared Adapter.

FLR-59

1. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.

FLR-60

1. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTO due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

FLR-64

1. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.

FLR-66

1. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.

FLR-68

1. 511/523 Rear Mounts-The adapter 329748X is furnished with the PTO and does not need to be ordered separately.

FLR-69

1. Do not use PTOs that have a sliding Input Driver Gear (i.e. 221, 260)

FLR-75

1. Do not use PTOs that have a sliding Input Driver Gear (i.e. 221, 260)
2. RECOMMENDATION - Use assembly arrangement “5” on RH side. With assembly arrangement “3”, there may be interference with the output shaft of the PTO and the rear cover on the transmission.

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Eaton Fuller Notes

FLR-77

1. The 442/489 S, U, W, and X ratio gears interfere with the outside diameter of the 78 tooth transmission gear.

FLR-78

1. This application is for model FS-3005A AFTER September, 1988. For applications PRIOR to September, 1988, use application no. FLR-74.
2. Do not use PTOs that have a sliding Input Driver Gear (i.e. 221, 260)

FLR-79

1. This application is for model FS-3005B AFTER September, 1988. For applications PRIOR to September, 1988, use application no. FLR-76.

FLR-84LF

1. 511/523 Rear Mounts-The adapter 329733X is furnished with the PTO
2. There are two SAE 6 bolt pads on the left side of this transmission.
3. The 272 and 442 Series will mount with the 329182-1X adapter on the front opening only.

FLR-87

1. PTO apertures on these transmissions may be on the left side (vertical installation) or the bottom right (horizontal installation), depending on how the transmission is mounted in the truck. These transmissions have two apertures, the 290 Series will only mount on the front aperture.
2. 511/523 Rear Mounts-The adapter 329768X is furnished with the PTO and does not need to be ordered separately

FLR-88

1. The 442 “U”,”W” and “X” ratios will not mount on the right side and the 489 “X” ratio will not mount on the bottom opening because the O.D. of the ratio gear hits the O.D. of the adjacent gear in the transmission.
2. 328564G comes with a metric stud kit. The PTO must be fastened to the adapter plate with the standard stud kit that comes with the PTO.

FLR-90

1. The Fuller C2000 Series (FR Series) transmissions have M10-1.5 threads for the 6 bolt opening and M12-1.75 threads for the 8 bolt opening.

FLR-91

1. The Fuller C2000 Series (FR Series) transmissions have M10-1.5 threads for the 6 bolt opening and M12-1.75 threads for the 8 bolt opening.

FLR-92

1. The “EH” Series Transmissions (Hybrid Electric) for Medium-Duty Utility, Telecom and Municipal Applications are Limited by Eaton to only ONE (1) PTO per application. The Right (Curb Side) Transmission PTO Aperture Cover Plate has a Speed Sensor mounted to the plate and can be moved to the Left (Street Side)Transmission PTO Aperture if using the Right Side PTO Aperture. SEE FLR-92Hy.
2. FO-8406A-ASX, FO-6406A-ASX and FO-6406A-ASW Left Side not usable due to Inertia Brake mounted to the 6-Bolt opening.
3. The 7-A-187 spacer and 7170-3X stud kit are required to mount the 442 Series to the adapter.
4. 511/523 Rear Mounts - The adapter 329748X is furnished with the PTO and does not need to be ordered separately

FLR-92HY

1. ePTO (Battery Driven) Only Available with EH-8E306A-UP and Can Not Be Used In Combination with the Mechanical PTO.
2. Motor RPM During ePTO Operation is 1000-1100 RPM Standard. Configurable to 1500 RPM in 100 RPM Increments.
3. Maximum ePTO Output Must Not Exceed 13 HP Continuous or 26 HP Peak at 1100 RPM for Maximum Efficiency.
4. All ePTO Application Duty Cycles Must be Evaluated for Optimum Efficiency.
5. Mechanical (Engine/Transmission Driven) PTO is Available with EH-8E306A-CD, EH-8E306A-UP, EH8E306A-UPG.
6. Remote Throttle, Remote Transmission, and Start/Stop Controls are Not Approved.
7. The “EH” Series Transmissions (Hybrid Electric) for Medium-Duty Utility, Telecom and Municipal Applications are Limited by Eaton to only ONE (1) PTO per application. The Right (Curb Side) Transmission PTO Aperture Cover Plate has a Speed Sensor mounted to the plate and can be moved to the Left (Street Side)Transmission PTO Aperture if using the Right Side PTO Aperture.

FLR-94

1. 7-A-062 is required to mount the PTO at standard mounting depth of 1.085” due to the transmission gear tooth thickness that is 0.065” oversize.

FLR-95

1. When using a 626G/630G or 645G adapter on this transmission, put 5-P-1243 gear in the adapter and the 5-P-1247 gear in the 442 Series PTO 7-A-165 spacer is required between the adapter and the 442 Series. Normal backlash will need to be checked between the PTO and the adapter. Use stud kit 7170-3X to mount the 442 Series to the Adapter.

FLR-96LF

1. There are two SAE 6 bolt pads on the left side of this transmission.
2. The 230 and 442 series will mount with the 329182-1X adapter on the front opening only. The 272 Series will mount with the 329182X adapter on the front opening only.
3. 511/523 Rear Mounts-The adapter 329733X is furnished with the PTO and does not need to be ordered separately

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Eaton Fuller Notes

FLR-97

1. The 626 and 645 Series adapters can not be used with the 442 Series “F” ratio.
2. The 626/645 Series adapters can be mounted on this transmission by replacing the 5-P-1319 gear in the 442 Series with the 5-P-1321 and putting the 5-P-1319 gear in the adapter assembly. A 7-A-093 spacer is required between the adapter and the PTO to get proper backlash. Use 7170-3X stud kit to mount the PTO to the adapter. Use the stud kit supplied with the adapter to mount it to the transmission.

FLR-100

1. 630-02 - The Eaton Inertia Brake comes standard mounted on the bottom 8 bolt opening. If the 8 bolt opening is required for a PTO the Interia Brake can be relocated to the right side 6 bolt opening. If there is any interference (frame rails, etc.) on the right side when mounting the Inertia Brake, a 630-02 adapter can be used to move the I-Brake away from the interference.
2. Refer to Eaton Installation Guide “TRIG-2600” for proper wiring diagram showing the interface connections between the PTO indicator switch and the terminal connection on the transmission.
3. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.

FLR-105

1. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.
2. Optional front mount oil filter will interfere with 6-Bolt P.T.O installations. Rear or remote mount filter must be used.
3. All PTO Torque Values Reflect the Higher Torque 750 Ft-lb [1017 Nm] Main Transmission Input Bearing for Intermittent Duty Cycles as Standard from Eaton for the Transmissions Listed for this Page. For Continuous Duty Cycles do not exceed 500 Ft-lb [678 Nm.] . Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.
4. Rear Mount ThruShaft option must be ordered at the time the transmission is ordered.

FLR-106

1. All PTO Torque Values Reflect the Higher Torque 750 Ft-lb [1017 Nm] Main Transmission Input Bearing for Intermittent Duty Cycles as Standard from Eaton for the Transmissions Listed for this Page. For Continuous Duty Cycles do not exceed 500 Ft-lb [678 Nm.] . Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.
2. The Eaton Inertia Brake comes standard and is internal to the transmission.
3. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.
4. Eaton Fuller will provide a dump pump bracket (Eaton Part#4306528) as standard on -VCS,-VMS and -VXP transmission models for the bottom 8-Bolt opening and optional on -LAS,-MHP and -MXP model transmissions.

FLR-107

1. All PTO Torque Values Reflect the Higher Torque 750 Ft-lb [1017 Nm] Main Transmission Input Bearing for Intermittent Duty Cycles as Standard from Eaton for the Transmissions Listed for this Page. For Continuous Duty Cycles do not exceed 500 Ft-lb [678 Nm.] . Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.
2. The Eaton UltraShift Plus Transmission Inertia Brake comes standard and is internal to the transmission.
3. Eaton Automated 13 and 18 speeds cannot accept the Thrushaft Power Take-Offs. The bottom left countershaft opening is used for the splitter cylinder and the top right countershaft opening is used for the range.
4. 6-Bolt PTO will interfere with front mount oil filter. Rear or remote mount filter must be used
5. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.
6. Eaton Fuller will provide a dump pump bracket (Eaton Part#4306528) as standard on -VCS,-VMS, and -VXP transmission models for the bottom 8-Bolt opening and optional on -LAS,-MHP, and -MXP model transmissions. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.

FLR-111

1. All PTO Torque Values Reflect the Higher Torque 750 Ft-lb [1017 Nm] Main Transmission Input Bearing for Intermittent Duty Cycles as Standard from Eaton for the Transmissions Listed for this Page. For Continuous Duty Cycles do not exceed 500 Ft-lb [678 Nm.] refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.
2. Refer to Eaton Installation Guide “TRIG-2600” for proper wiring diagram showing the interface connections between the PTO indicator switch and the terminal connection on the transmission.
3. 630-02 - The Eaton Inertia Brake comes standard mounted on the bottom 8 bolt opening. If the 8 bolt opening is required for a PTO, the Inertia Brake can be relocated to the right side 6 bolt opening. If there is any interference (frame rails, etc.) on the right side when mounting the Inertia Brake, a 630-02 adapter can be used to move the I-Brake away from the interference.
4. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.
5. 6-Bolt PTO will interfere with front mount oil filter. Rear or remote mount filter must be used

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Eaton Fuller Notes

FLR-112

1. All PTO Torque Values Reflect the Higher Torque 750 Ft-lb [1017 Nm] Main Transmission Input Bearing for Intermittent Duty Cycles as Standard from Eaton for the Transmissions Listed for this Page. For Continuous Duty Cycles do not exceed 500 Ft-lb [678 Nm.]. Refer to the Chelsea PTO Torque Limit Chart in the front of this section for complete torque limit information.
2. Eaton Automated 13 and 18 speeds cannot accept the Thrushaft Power Take-Offs. The bottom left countershaft opening is used for the splitter cylinder and the top right countershaft opening is used for the range.
3. Optional front mount oil filter will interfere with 6-Bolt P.T.O installations. Rear or remote mount filter must be used.
4. The 442XBAH must use one of the geared adapters listed on the application page. The direction of rotation shown is the final output shaft rotation w/ geared adapter.
5. Rear Mount ThruShaft option must be ordered at the time the transmission is ordered.

FLR-113

1. UltraShift 13-Speeds DM3, LHP & LEP: Inertia brake is installed on the 8-Bolt Opening. Interia brake cannot be moved to the 6-Bolt Opening due to gear interference.
2. Eaton Automated 13 and 18 speeds cannot accept the Thrushaft Power Take-Offs. The bottom left countershaft opening is used for the splitter cylinder and the top right countershaft opening is used for the range.
3. 6-Bolt PTO will interfere with front mount oil filter. Rear or remote mount filter must be used
4. The 422XBAH Must Use One of the Geared Adapters Listed on the Application Page. Direction of Rotation Shown is the Final Output Shaft Rotation w/ Geared Adapter.

FLR-114

1. Percent (%) of Engine Speed shown on page applies to Stationary Mode and Mobile Mode when transmission is in 2nd Gear.
2. Multiply Speed Shown by 0.64 for “Low” Range Values, Low Range applies to Mobile Mode ONLY when transmission is in Reverse or 1st gear.
3. Lube hose and fittings included with PTO.
4. Pressure lubrication of the 442 Series in this application is recommended by Eaton, but not required. Chelsea recommends and encourages the use of pressure lubrication to provide the best performance and service life. Therefore, this application is specified as “P” lube and the hoses are included with the PTO. The 523 MUST be pressure lubricated.
5. PUMP OUTPUT OPTIONS: Chelsea recommends rotatable SAE B options (RA/RB)for the left side opening. An XK will work for a 2-Bolt pump with a modification to the flange. The right side appears to be open.
6. 522 Rear Mount - Adapter 329855X is furnished with the PTO

FLR-116

1. Gaskets are replaced by a custom molded o-ring. No backlash setting required. Special piloting studs are included in lieu of dowel pins.

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Chelsea Products Division
Olive Branch, MS 38654 USA

NOTES



Eaton Fuller

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THE WORK TRUCK SHOW
INNOVATION AWARD
2015



FORD



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⚠ WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

Offer of Sale

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Ford

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Chelsea Products Division
Olive Branch, MS 38654 USA

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
5R110 Diesel F350-550; MY2003-2010 (Stationary ONLY)	FRD-9	5	L121
5R110 Gas F350-550; MY2003-2016 (Stationary ONLY)	FRD-9	5	L121
5R110WOJ233 (Ford Mexico)	FRD-9	5	L121
6R140 Diesel F250-550; MY2011-Current	FRD-10	6	L52
6R140 Diesel F650/750; MY2016-Current	FRD-10	6	L52
6R140 Gas F250-550; MY2017-Current	FRD-12	6	L52
6R140 Gas F650/750; MY2013-2015	FRD-11	6	L52
6R140 Gas F650/750; MY2016-Current	FRD-12	6	L52

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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Chelsea Products Division
Olive Branch, MS 38654 USA

5R110WOJ233 (Ford Mexico)
5R110 Diesel F350-550; MY2003-2010 (Stationary ONLY)
5R110 Gas F350-550; MY2003-2016 (Stationary ONLY)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear REAR of Centerline
121 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.3390" (33.7800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)															
247FMKSP-*2 (1)	120 I	Opp	154				Furnished								
247FMKSP-*4 (1)	120 I	Opp	154				Furnished								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

WARNING: To guarantee full torque capability at the automatic transmission PTO gear, and the PTO, the TorqShift transmission torque converter must be locked (Engine RPM @ 1200 RPM), and hydraulic line pressure to the PTO clutch must be elevated to a minimum of 110 psi. On both Diesel and Gas engines, the Stationary Elevated Idle Control (SEIC) strategy is 1200 RPM. Therefore, for stationary operations, a discrete signal, which is supplied with Chelsea 247 wire harness 329598X, must be used to elevate engine idle to a minimum of 1200 RPM. Battery voltage must be applied to the PTO circuit to begin SEIC strategy for both mobile and stationary applications. Failure to follow these procedures may lead to PTO clutch wear and internal damage to the PTO/Transmission. See Chelsea Owner's/Installation Manual HY25-1715-M1/US or Contact Chelsea Technical Services (662-895-1052) for complete details.

(1) Input Gear Part No. 5-P-1387

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

6R140 Diesel F250-550; MY2011-Current
6R140 Diesel F650/750; MY2016-Current

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.4550" (87.7640MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
249FMLLX-*2 (1)	200 I	Opp	124				Furnished
249FMLLX-*4 (1)	200 I	Opp	124				Furnished
249FMLLX-*V (1)	200 I	Opp	124				Furnished
272FCLLP-*8	300 I	Opp	61				Furnished
272FDLLP-*8	300 I	Opp	74				Furnished
272FGLLP-*8	300 I	Opp	87				Furnished
272FKLLP-*8	300 I	Opp	98				Furnished
272FMLLP-*8	274 I	Opp	109				Furnished
272FPLLP-*8	246 I	Opp	122				Furnished
272FSLLP-*8	220 I	Opp	137				Furnished

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

See next page for more pump options.

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: FORD PTO Driver Gear Torque ratings and HP vary by platform (F250-550 or F650/750), fuel type (Gas or Diesel), and operating mode (Mobile or Stationary). Consult FORD BBAS for the current ratings. The applications on this page are rated for Stationary Mode.

CAUTION: 272 will only fit F650/750 chassis, not for use on F550 and below.

(1) Input Gear Part No. 5-P-1436

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

6R140 Diesel F250-550; MY2011-Current
6R140 Diesel F650/750; MY2016-Current

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.4550" (87.7640MM)

Pump Option Charts

249 Series Gear Pump Options

Chelsea CGP-P11 Series Pump Specifications for 4 x 2 and 4 x 4 Vehicles (3/4" - 11 Tooth Pump Spline - AD Output)

Order Code w/ PTO (C)	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) ft-lbs	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
16	CGP-P11A016-5GC	0.37	2.15	4.5	16.0	3990	3625	4000	3226	6.41
26	CGP-P11A026-5GC	0.61	3.54	7.5	26.4	3990	3625	3600	2903	9.51
32	CGP-P11A032-5GC	0.73	4.23	9.0	31.6	3990	3625	3500	2823	11.06
37	CGP-P11A037-5GC	0.85	4.93	10.4	36.8	3990	3625	3300	2661	12.14
42	CGP-P11A042-5GC	0.98	5.68	12.0	42.4	3990	3625	3000	2419	12.73
55	CGP-P11A055-5GC	1.28	7.42	14.8	52.1	3480	3410	2800	2258	15.52
61	CGP-P11A061-5GE	1.40	8.12	15.5	54.6	3410	3265	2800	2258	16.97
71	CGP-P11A071-5GE	1.65	9.57	15.4	54.3	2900	2755	2400	1935	17.14
82	CGP-P11A082-5GE	1.89	10.96	15.3	54.0	2465	2395	2300	1855	18.82
87	CGP-P11A087-5GE	2.01	11.65	15.3	54.0	2320	2250	2000	1613	17.40

Chelsea PGP-315 Series Pump Specifications for 4 x 2 Vehicles Only (3/4" - 11 Tooth Pump Spline - AD Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) ft-lbs	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
08	CGP-P31B081-5AG	1.86	10.78	20.8	73.3	3300	3300	3000	2419	24.16
09	CGP-P31B094-5AG	2.17	12.58	21.3	75.1	2900	2900	3000	2419	28.18
11	CGP-P31B107-5AG	2.48	14.38	21.0	74.0	2500	2500	3000	2419	32.21

Chelsea P16 Series Pump Specifications for 4 x 2 Vehicles Only (7/8" - 13 Tooth Pump Spline - XP Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) ft-lbs	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
15	P16-150A-2D1	2.93	16.99	29.7	104.9	3000	3000	2800	2258	35.52

(A) GPM & Pump Input HP @ **1200 Engine RPM (1488 PTO Output RPM - 124% Ratio)** & Continuous Pressure Rating with **90% efficiency rating** considered.
(B) Max Engine Speed = (Max Pump Speed) / (1.24) for PTO Ratio Increase. Max Speed determined by Max PTO output speed of 2500.
(C) For Pump Codes 61, 71, 82 & 87 - 45 degree fittings are required to connect hydraulic hoses for clearance. Order Kit number 329667X

CAUTION: 249 Gear Pump Options: The PTO drive gear delivers up to 250 Lbs. ft. torque to the aftermarket PTO, and can manage the heat of 60 HP continuously. Higher horsepower can be delivered, but for shorter durations depending on the amount of power required. Ref: Ford Body Builders Manual; TorqShift Automatic Transmission.

FORMULAS:
GPM = Cu. In. x .004329 = G/Rev x 1488 RPMs x .90 efficiency
HP = (GPM x Max PSI) / 1714
Torque = (HP x 5252) / 1488 RPMs

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Chelsea Products Division
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6R140 Diesel F250-550; MY2011-Current
6R140 Diesel F650/750; MY2016-Current

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.4550" (87.7640MM)

Pump Option Charts

249 Series Vane Pump Options

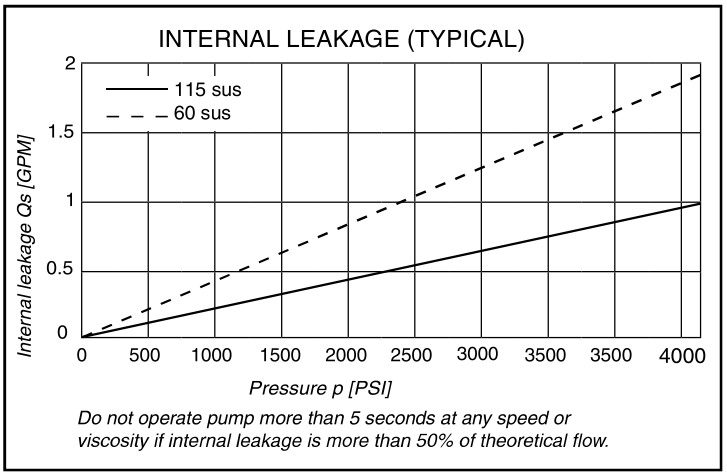
Chelsea 249V Integral Vane Pump Data for 4 x 2 or 4 x 4 Vehicles

Order Code w/ PTO	Chelsea Pump Cartridge Number	Displacement in³/rev	GPM (D)	Pump (D) HP	Torque (D) ft-lbs	Pressure PSI		Pump Speed RPM		Max Speed RPM
						Intermittent	Continuous	Min.	Max	Engine (B)
08	380418-08	1.61	9.33	11	38	4000	3500	400	2800	2015
10	380418-10	2.08	12.06	14	50	4000	3500	400	2800	2015
12	380418-12	2.26	13.10	15	54	4000	3500	400	2800	2015
14	380418-14	2.81	16.29	19	67	4000	3500	400	2800	2015
17	380418-17	3.56	20.64	24	85	4000	3500	400	2800	2015
20	380418-20	3.89	22.55	26	93	4000	3500	400	2800	2015
22	380418-22	4.29	24.87	29	102	4000	3500	400	2800	2015
25	380418-25	4.84	28.06	33	116	4000	3500	400	2800	2015

(A) GPM & Pump Input HP @ **1200 Engine RPM (1488 PTO Output RPM - 124% Ratio)** & Continuous Pressure Rating with **90% efficiency rating** considered.
(B) Max Engine Speed = (Max Pump Speed) / (1.24) for PTO Ratio Increase. Max Speed determined by Max PTO output speed of 2500.
(D) GPM & Pump Input HP @ **1200 Engine RPM (1488 PTO Output RPM - 124% Ratio)** & 2000 PSI Continuous Pressure Rating.
See leakage chart for additional flow losses at other pressures.

CAUTION: 249V Pump Options: The PTO drive gear delivers up to 250 Lbs. ft. torque to the aftermarket PTO, and can manage the heat of 60 HP continuously. Higher horsepower can be delivered, but for shorter durations depending on the amount of power required. Ref: Ford Body Builders Manual; TorqShift Automatic Transmission.
NOTE: Refer to Chelsea Owner's Manual HY25-1FRD-M1/US for complete vane pump information.

FORMULAS:
GPM = Cu. In. x .004329 = G/Rev x 1488 RPMs x .90 efficiency
HP = (GPM x Max PSI) / 1714
Torque = (HP x 5252) / 1488 RPMs



Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow.

Ford

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

6R140 Gas F650/750; MY2013-2015

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.4550" (87.7640MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)							
249GMLLX-*2 (1)	200 I	Opp	124			Furnished	
249GMLLX-*V (1)	200 I	Opp	124			Furnished	
272JCLLP-*8	300 I	Opp	61			Furnished	
272JDLLP-*8	300 I	Opp	74			Furnished	
272JGLLP-*8	300 I	Opp	87			Furnished	
272JKLLP-*8	300 I	Opp	98			Furnished	
272JMLLP-*8	274 I	Opp	109			Furnished	
272JPLLP-*8	246 I	Opp	122			Furnished	
272JSLLP-*8	220 I	Opp	137			Furnished	

See next page for more pump options.

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: FORD PTO Driver Gear Torque ratings and HP vary by platform (F250-550 or F650/750), fuel type (Gas or Diesel), and operating mode (Mobile or Stationary). Consult FORD BBAS for the current ratings. The applications on this page are rated for Stationary Mode.

CAUTION: 272 will only fit F650/750 chassis, not for use on F550 and below.

(1) Input Gear Part No. 5-P-1436

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

6R140 Gas F650/750; MY2013-2015

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.4550" (87.7640MM)

Pump Option Charts

249 Series Gear Pump Options

Chelsea CGP-P11 Series Pump Specifications for 4 x 2 and 4 x 4 Vehicles (3/4" - 11 Tooth Pump Spline - AD Output)

Order Code w/ PTO (C)	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) ft-lbs	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
16	CGP-P11A016-5GC	0.37	2.15	4.5	16.0	3990	3625	4000	3226	6.41
26	CGP-P11A026-5GC	0.61	3.54	7.5	26.4	3990	3625	3600	2903	9.51
32	CGP-P11A032-5GC	0.73	4.23	9.0	31.6	3990	3625	3500	2823	11.06
37	CGP-P11A037-5GC	0.85	4.93	10.4	36.8	3990	3625	3300	2661	12.14
42	CGP-P11A042-5GC	0.98	5.68	12.0	42.4	3990	3625	3000	2419	12.73
55	CGP-P11A055-5GC	1.28	7.42	14.8	52.1	3480	3410	2800	2258	15.52
61	CGP-P11A061-5GE	1.40	8.12	15.5	54.6	3410	3265	2800	2258	16.97
71	CGP-P11A071-5GE	1.65	9.57	15.4	54.3	2900	2755	2400	1935	17.14
82	CGP-P11A082-5GE	1.89	10.96	15.3	54.0	2465	2395	2300	1855	18.82
87	CGP-P11A087-5GE	2.01	11.65	15.3	54.0	2320	2250	2000	1613	17.40

Chelsea PGP-315 Series Pump Specifications for 4 x 2 Vehicles Only (3/4" - 11 Tooth Pump Spline - AD Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) ft-lbs	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
08	CGP-P31B081-5AG	1.86	10.78	20.8	73.3	3300	3300	3000	2419	24.16
09	CGP-P31B094-5AG	2.17	12.58	21.3	75.1	2900	2900	3000	2419	28.18
11	CGP-P31B107-5AG	2.48	14.38	21.0	74.0	2500	2500	3000	2419	32.21

Chelsea P16 Series Pump Specifications for 4 x 2 Vehicles Only (7/8" - 13 Tooth Pump Spline - XP Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) ft-lbs	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
15	P16-150A-2D1	2.93	16.99	29.7	104.9	3000	3000	2800	2258	35.52

(A) GPM & Pump Input HP @ **1200 Engine RPM (1488 PTO Output RPM - 124% Ratio)** & Continuous Pressure Rating with **90% efficiency rating** considered.
(B) Max Engine Speed = (Max Pump Speed) / (1.24) for PTO Ratio Increase. Max Speed determined by Max PTO output speed of 2500.
(C) For Pump Codes 61, 71, 82 & 87 - 45 degree fittings are required to connect hydraulic hoses for clearance. Order Kit number 329667X

CAUTION: 249 Gear Pump Options: The PTO drive gear delivers up to 250 Lbs. ft. torque to the aftermarket PTO, and can manage the heat of 60 HP continuously. Higher horsepower can be delivered, but for shorter durations depending on the amount of power required. Ref: Ford Body Builders Manual; TorqShift Automatic Transmission.

FORMULAS:
GPM = Cu. In. x .004329 = G/Rev x 1488 RPMs x .90 efficiency
HP = (GPM x Max PSI) / 1714
Torque = (HP x 5252) / 1488 RPMs

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

6R140 Gas F650/750; MY2013-2015

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.4550" (87.7640MM)

Pump Option Charts

249 Series Vane Pump Options

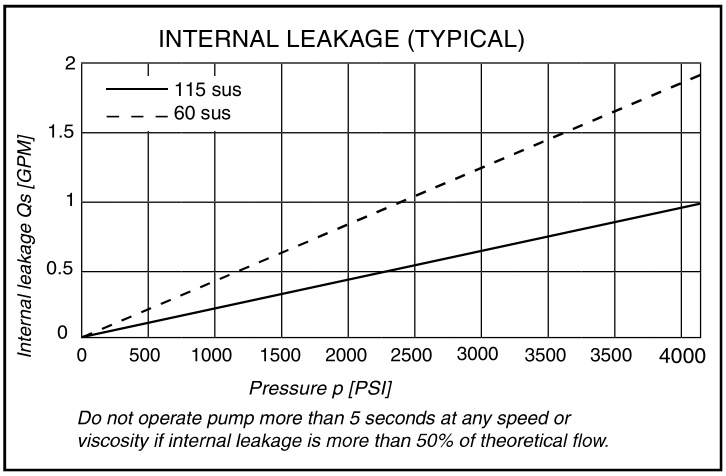
Chelsea 249V Integral Vane Pump Data for 4 x 2 or 4 x 4 Vehicles

Order Code w/ PTO	Chelsea Pump Cartridge Number	Displacement in³/rev	GPM (D)	Pump (D) HP	Torque (D) ft-lbs	Pressure PSI		Pump Speed RPM		Max Speed RPM
						Intermittent	Continuous	Min.	Max	Engine (B)
08	380418-08	1.61	9.33	11	38	4000	3500	400	2800	2015
10	380418-10	2.08	12.06	14	50	4000	3500	400	2800	2015
12	380418-12	2.26	13.10	15	54	4000	3500	400	2800	2015
14	380418-14	2.81	16.29	19	67	4000	3500	400	2800	2015
17	380418-17	3.56	20.64	24	85	4000	3500	400	2800	2015
20	380418-20	3.89	22.55	26	93	4000	3500	400	2800	2015
22	380418-22	4.29	24.87	29	102	4000	3500	400	2800	2015
25	380418-25	4.84	28.06	33	116	4000	3500	400	2800	2015

(A) GPM & Pump Input HP @ **1200 Engine RPM (1488 PTO Output RPM - 124% Ratio)** & Continuous Pressure Rating with **90% efficiency rating** considered.
(B) Max Engine Speed = (Max Pump Speed) / (1.24) for PTO Ratio Increase. Max Speed determined by Max PTO output speed of 2500.
(D) GPM & Pump Input HP @ **1200 Engine RPM (1488 PTO Output RPM - 124% Ratio)** & 2000 PSI Continuous Pressure Rating.
See leakage chart for additional flow losses at other pressures.

CAUTION: 249V Pump Options: The PTO drive gear delivers up to 250 Lbs. ft. torque to the aftermarket PTO, and can manage the heat of 60 HP continuously. Higher horsepower can be delivered, but for shorter durations depending on the amount of power required. Ref: Ford Body Builders Manual; TorqShift Automatic Transmission.
NOTE: Refer to Chelsea Owner's Manual HY25-1FRD-M1/US for complete vane pump information.

FORMULAS:
GPM = Cu. In. x .004329 = G/Rev x 1488 RPMs x .90 efficiency
HP = (GPM x Max PSI) / 1714
Torque = (HP x 5252) / 1488 RPMs



Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow.

Ford

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

6R140 Gas F250-550; MY2017-Current
6R140 Gas F650/750; MY2016-Current

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.4550" (87.7640MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)							
249HMLLX-*2 (1)	200 I	Opp	124				Furnished
249HMLLX-*4 (1)	200 I	Opp	124				Furnished
249HMLLX-*V (1)	200 I	Opp	124				Furnished
272HCLLP-*8	300 I	Opp	61				Furnished
272HDLLP-*8	300 I	Opp	74				Furnished
272HGLLP-*8	300 I	Opp	87				Furnished
272HKLLP-*8	300 I	Opp	98				Furnished
272HMLLP-*8	274 I	Opp	109				Furnished
272HPLLP-*8	246 I	Opp	122				Furnished
272HSLLP-*8	220 I	Opp	137				Furnished

See next page for more pump options.

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: FORD PTO Driver Gear Torque ratings and HP vary by platform (F250-550 or F650/750), fuel type (Gas or Diesel), and operating mode (Mobile or Stationary). Consult FORD BBAS for the current ratings. The applications on this page are rated for Stationary Mode.

CAUTION: 272 will only fit F650/750 chassis, not for use on F550 and below.

(1) Input Gear Part No. 5-P-1436

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Chelsea Products Division
Olive Branch, MS 38654 USA

6R140 Gas F250-550; MY2017-Current
6R140 Gas F650/750; MY2016-Current

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.4550" (87.7640MM)

Pump Option Charts

249 Series Gear Pump Options

Chelsea CGP-P11 Series Pump Specifications for 4 x 2 and 4 x 4 Vehicles (3/4" - 11 Tooth Pump Spline - AD Output)

Order Code w/ PTO (C)	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) ft-lbs	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
16	CGP-P11A016-5GC	0.37	2.15	4.5	16.0	3990	3625	4000	3226	6.41
26	CGP-P11A026-5GC	0.61	3.54	7.5	26.4	3990	3625	3600	2903	9.51
32	CGP-P11A032-5GC	0.73	4.23	9.0	31.6	3990	3625	3500	2823	11.06
37	CGP-P11A037-5GC	0.85	4.93	10.4	36.8	3990	3625	3300	2661	12.14
42	CGP-P11A042-5GC	0.98	5.68	12.0	42.4	3990	3625	3000	2419	12.73
55	CGP-P11A055-5GC	1.28	7.42	14.8	52.1	3480	3410	2800	2258	15.52
61	CGP-P11A061-5GE	1.40	8.12	15.5	54.6	3410	3265	2800	2258	16.97
71	CGP-P11A071-5GE	1.65	9.57	15.4	54.3	2900	2755	2400	1935	17.14
82	CGP-P11A082-5GE	1.89	10.96	15.3	54.0	2465	2395	2300	1855	18.82
87	CGP-P11A087-5GE	2.01	11.65	15.3	54.0	2320	2250	2000	1613	17.40

Chelsea PGP-315 Series Pump Specifications for 4 x 2 Vehicles Only (3/4" - 11 Tooth Pump Spline - AD Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) ft-lbs	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
08	CGP-P31B081-5AG	1.86	10.78	20.8	73.3	3300	3300	3000	2419	24.16
09	CGP-P31B094-5AG	2.17	12.58	21.3	75.1	2900	2900	3000	2419	28.18
11	CGP-P31B107-5AG	2.48	14.38	21.0	74.0	2500	2500	3000	2419	32.21

Chelsea P16 Series Pump Specifications for 4 x 2 Vehicles Only (7/8" - 13 Tooth Pump Spline - XP Output)

Order Code w/ PTO	Chelsea Pump Model	Displacement in³/rev	GPM (A)	Pump (A) HP	Torque (A) ft-lbs	Pressure PSI		Max Speed RPM		Max Pump Flow GPM
						Intermittent	Continuous	Pump	Engine (B)	
15	P16-150A-2D1	2.93	16.99	29.7	104.9	3000	3000	2800	2258	35.52

(A) GPM & Pump Input HP @ **1200 Engine RPM (1488 PTO Output RPM - 124% Ratio)** & Continuous Pressure Rating with **90% efficiency rating** considered.
(B) Max Engine Speed = (Max Pump Speed) / (1.24) for PTO Ratio Increase. Max Speed determined by Max PTO output speed of 2500.
(C) For Pump Codes 61, 71, 82 & 87 - 45 degree fittings are required to connect hydraulic hoses for clearance. Order Kit number 329667X

CAUTION: 249 Gear Pump Options: The PTO drive gear delivers up to 250 Lbs. ft. torque to the aftermarket PTO, and can manage the heat of 60 HP continuously. Higher horsepower can be delivered, but for shorter durations depending on the amount of power required. Ref: Ford Body Builders Manual; TorqShift Automatic Transmission.

FORMULAS:
GPM = Cu. In. x .004329 = G/Rev x 1488 RPMs x .90 efficiency
HP = (GPM x Max PSI) / 1714
Torque = (HP x 5252) / 1488 RPMs

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6R140 Gas F250-550; MY2017-Current
6R140 Gas F650/750; MY2016-Current

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.4550" (87.7640MM)

Pump Option Charts

249 Series Vane Pump Options

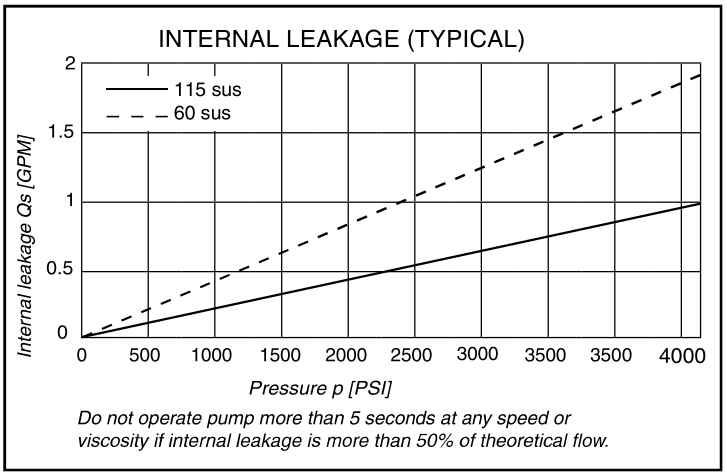
Chelsea 249V Integral Vane Pump Data for 4 x 2 or 4 x 4 Vehicles

Order Code w/ PTO	Chelsea Pump Cartridge Number	Displacement in³/rev	GPM (D)	Pump (D) HP	Torque (D) ft-lbs	Pressure PSI		Pump Speed RPM		Max Speed RPM
						Intermittent	Continuous	Min.	Max	Engine (B)
08	380418-08	1.61	9.33	11	38	4000	3500	400	2800	2015
10	380418-10	2.08	12.06	14	50	4000	3500	400	2800	2015
12	380418-12	2.26	13.10	15	54	4000	3500	400	2800	2015
14	380418-14	2.81	16.29	19	67	4000	3500	400	2800	2015
17	380418-17	3.56	20.64	24	85	4000	3500	400	2800	2015
20	380418-20	3.89	22.55	26	93	4000	3500	400	2800	2015
22	380418-22	4.29	24.87	29	102	4000	3500	400	2800	2015
25	380418-25	4.84	28.06	33	116	4000	3500	400	2800	2015

(A) GPM & Pump Input HP @ **1200 Engine RPM (1488 PTO Output RPM - 124% Ratio)** & Continuous Pressure Rating with **90% efficiency rating** considered.
(B) Max Engine Speed = (Max Pump Speed) / (1.24) for PTO Ratio Increase. Max Speed determined by Max PTO output speed of 2500.
(D) GPM & Pump Input HP @ **1200 Engine RPM (1488 PTO Output RPM - 124% Ratio)** & 2000 PSI Continuous Pressure Rating.
See leakage chart for additional flow losses at other pressures.

CAUTION: 249V Pump Options: The PTO drive gear delivers up to 250 Lbs. ft. torque to the aftermarket PTO, and can manage the heat of 60 HP continuously. Higher horsepower can be delivered, but for shorter durations depending on the amount of power required. Ref: Ford Body Builders Manual; TorqShift Automatic Transmission.
NOTE: Refer to Chelsea Owner's Manual HY25-1FRD-M1/US for complete vane pump information.

FORMULAS:
GPM = Cu. In. x .004329 = G/Rev x 1488 RPMs x .90 efficiency
HP = (GPM x Max PSI) / 1714
Torque = (HP x 5252) / 1488 RPMs



Do not operate pump more than 5 seconds at any speed or viscosity if internal leakage is more than 50% of theoretical flow.

Ford

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Olive Branch, MS 38654 USA

Ford Notes

FRD-9

1. Standard Parker PGP-P17 pumps may interfere with the transmission shift lever, order Chelsea FGP-P17 Series pumps to assure shifter clearance.
2. The PTO mounting gasket (22-P-120) is supplied with the PTO. It is the correct thickness and material so that the customer does not have to set backlash. DO NOT use gasket supplied with the transmission under the 6-bolt cover plate.
3. 247FMKSP-*2 -- 4 x 2 applications: all output options and all pumps listed in the pump chart are available.
4. 247FMKSP-*4 -- 4 x 4 applications will only work with a modified PGP-P11 (CGP-P11) pump. Use one of the following output option codes when ordering: 16, 26, 37, 42, 55, 61, 71, 82, 86 (See Pump Chart).
5. Ford provides an option for the use of one of the “Upfitter” Switches to be used as a PTO switch. Chelsea does not recommend the use of the UNPROTECTED switch for PTO function, but if required, contact Chelsea Technical Services for assistance.(662-895-1052)

FRD-10

1. Mobile and Stationary Mode Operations are supported. The maximum load (Torque) allowable for Mobile Mode is 150 Ft.lbs at the transmission PTO driver gear. If the PTO feature is used for extended periods of time without vehicle movement it is recommended to switch to Stationary Mode. In Stationary Mode maximum load (Torque) is 250 Ft.lbs at the transmission PTO driver gear.
2. Ford provides an option for the use of one of the “Upfitter” Switches to be used as a PTO switch. Chelsea does not recommend the use of the UNPROTECTED switch for PTO function, but if required, contact Chelsea Technical Services for assistance.(662-895-1052)
3. 249FMLLX-*2 -- 4 x 2 applications, all output options and all gear pumps listed in the pump chart are available.
4. 249FMLLX-*4 -- 4 x 4 applications only and will come with a modified PGP-P11 (CGP-P11) gear pump with the PTO from the factory when one of the following output option codes is ordered; 16,26,32,37,42,55,61,71,82,87 (See Pump Chart). Or one of the following output shafts “XD”,”XP” or “AD”.
5. For Pump Codes 61, 71, 82 & 87 - 45 degree fittings are required to connect hydraulic hoses for clearance. Order Kit number 329667X in addition to the PTO.
6. 249FMLLX-*V-- Both 4 x 2 and 4 x 4 applications. 249 Series with integral vane pump options (See Pump Chart).

FRD-11

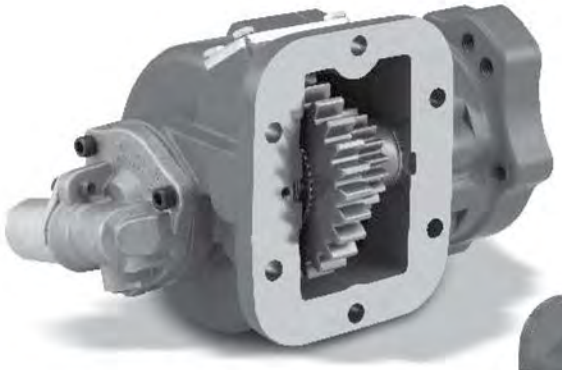
1. Only Stationary Mode Operations are supported for this application page. The Maximum Load (Torque) in Stationary Mode is 250 Ft.lbs at the transmission PTO driver gear and 200 Ft.lbs at the PTO output.
2. Ford Does Not Recommend PTO Operation At or Below 900 rpm for the 6.8L Gas Engine. Minimum Engine Speed 910 rpm and Maximum 2400 rpm. Reference Ford Bulletin Q-215 for Latest Information.
3. For MY2013 Ford F-650 4 x 2 w/Gas engine will come with a 6R140 transmission. This will require a heat shield (329931X) to protect the PTO from the exhaust. Also a new Chelsea wiring harness (329789X) will be required. These are included with the PTO when ordering the 249”G” mounting option.
4. 249GMLLX-*2 -- 4 x 2 applications, all output options and all pumps listed in the pump chart are available.
5. Ford provides an option for the use of one of the “Upfitter” Switches to be used as a PTO switch. Chelsea does not recommend the use of the UNPROTECTED switch for PTO function, but if required, contact Chelsea Technical Services for assistance.(662-895-1052)
6. For Pump Codes 61, 71, 82 & 87 - 45 degree fittings are required to connect hydraulic hoses for clearance. Order Kit number 329667X in addition to the PTO.
7. PTO Pressure Switch - if the PTO pressure switch needs to be re-indexed due to interference, use P/N 380451 90 degree fitting.

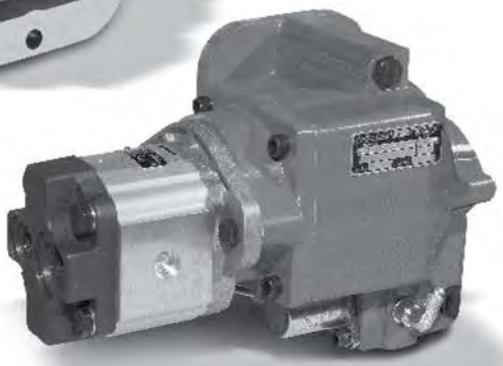
FRD-12

1. MY2016 F650/750 is only operable in Stationary Mode. Mobile Mode is supported for 2017 F250-750 and the Torque to the Transmission gear is reduced to 125 ft-lbs and 100 ft lbs to the PTO output.
2. 249HMLLX-*2 -- 4 x 2 applications, all output options and all gear pumps listed in the pump chart are available.
3. Ford Does Not Recommend PTO Operation At or Below 900 rpm for the 6.8L Gas Engine. Minimum Engine Speed 910 rpm and Maximum 2400 rpm. Reference Ford Bulletin Q-215 for Latest Information.
4. FORD Gas applications require a Heat Shield Kit (329931X) that will be provided with the PTO to protect the PTO and its related components from the extreme temperatures near the exhaust pipes.
5. Ford provides Upfitter Switches that can be used as a PTO switch. Chelsea only recommends the use of protected circuits for PTO operations. Ensure the switch is protected by a fuse before use.
6. For Pump Codes 61, 71, 82 & 87 - 45 degree fittings are required to connect hydraulic hoses for clearance. Order Kit number 329667X in addition to the PTO.
7. PTO Pressure Switch - if the PTO pressure switch needs to be re-indexed due to interference, use P/N 380451 90 degree fitting.

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GM







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GM

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Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
GM 3600 Cab-Chassis	ALL-17	5	R64
CH-465 (Code MM4 1968 to 1990)	CHV-2	4	L36-R36
GM-20	CHV-2	4	L36-R36
M-20	CHV-2	4	L36-R36
SM-465 (GMC) (Code MM4 1968 to 1990)	CHV-2	4	L36-R36
A465 (Low cab forward)	AIS-2	6	L69

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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1000 (GM 3600 Cab-Chassis)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
64 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0080" (25.6032MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
252GDHVX-*5 (1)	120 I	Eng	122				Furnished								
252GMHVX-*5 (2)	50 I	Eng	178				Furnished								

ONE SPEED - TWO GEAR - POWERSHIFT (HYDRAULIC)

252 Pumps offered in the PGP511 with 5/8" - 9T / SAE A Flange

Option Order Code	Chelsea Pump Model	Displacement in³/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size
1121	CGP-P11C021-1AC	0.49	0.002	3988	4000	5/8" - 9T
1126	CGP-P11C026-1AC	0.61	0.003	3988	3600	5/8" - 9T
1129	CGP-P11C029-1AC	0.67	0.003	3988	3600	5/8" - 9T
1137	CGP-P11C037-1AC	0.85	0.004	3988	3300	5/8" - 9T
1449	CGP-P31C054-1AE	1.24	0.005	3500	3000	5/8" - 9T
1462	CGP-P31C061-1AE	1.40	0.006	3500	3000	5/8" - 9T

252 Pumps offered in the PGP511 with 3/4" - 11T / SAE A Flange

Option Order Code	Chelsea Pump Model	Displacement in³/rev	Displacement Gal/rev	Max Pressure PSI	Max Speed RPM	Shaft Size
P37	CGP-P11C037-5AC	0.85	0.004	3988	3300	3/4" - 11T
P42	CGP-P11C042-5AC	0.98	0.004	3988	3000	3/4" - 11T
P71	CGP-P11C071-5AC	1.65	0.007	2900	2400	3/4" - 11T

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: The "PTO Enable" circuit signals the Transmission Control Module(TCM) to maintain line pressure to the PTO. Failure to provide this signal will activate the Variable Modulated Main Pressure and line pressure may not be sufficient to the PTO. This may cause damage to the PTO and /or Transmission.

(1) Input Gear Part No. 5-P-1294
(2) Input Gear Part No. 5-P-1386

CH-465 (Code MM4 1968 to 1990)
GM-20
M-20
SM-465 (GMC) (Code MM4 1968 to 1990)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear REAR of Centerline
36 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
36 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
442KFBQX-*6 (2)	250 I	Opp	35				7170-89X	442KFBQX-*4 (2)	250 I	Opp	35				7170-89X
442KLBQX-*6 (1)	250 I	Opp	45				7170-89X	442KLBQX-*4 (1)	250 I	Opp	45				7170-89X
442KQBQX-*6 (1)	225 I	Opp	48				7170-89X	442KQBQX-*4 (1)	225 I	Opp	48				7170-89X
442KRBQX-*6 (1)	225 I	Opp	56				7170-89X	442KRBQX-*4 (1)	225 I	Opp	56				7170-89X
442KSBQX-*6 (1)	200 I	Opp	67				7170-89X	442KSBQX-*4 (1)	200 I	Opp	67				7170-89X
442KUBQX-*6 (1)	195 I	Opp	80				7170-89X	442KUBQX-*4 (1)	195 I	Opp	80				7170-89X
442KWBQX-*6 (1)	175 I	Opp	94				7170-89X	442KWBQX-*4 (1)	175 I	Opp	94				7170-89X
442KXBQX-*6 (1)	140 I	Opp	111				7170-89X	442KXBQX-*4 (1)	140 I	Opp	111				7170-89X
ONE SPEED - FORWARD & REVERSE															
340XFBQX-*4 (3)	200 I	Opp	32	33	7-A-140(4)		328170-76X	340XFBQX-*4 (3)	200 I	Opp	32	33	7-A-140(4)		328170-76X
GEARED ADAPTERS															
626KBQX-3BP	250 I	Eng					7170-89X	626KBQX-4BP	250 I	Eng					7170-89X
630KBQX-3BP	250 I	Eng					7170-89X	630KBQX-4BP	250 I	Eng					7170-89X
645KBQX-3BP	250 I	Eng					7170-89X	645KBQX-4BP	250 I	Eng					7170-89X

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1023
(2) Input Gear Part No. 5-P-1084
(3) Input Gear Part No. 5-P-720
(4) Filler block furnished with PTO

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A465 (Isuzu Number for MY600)
MO36A4 (Mitsubishi/Fuso Number for MY600)
MY600

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0880" (27.6352MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272AAKUP-*5	158 C	Eng	69				Furnished								
272ABKUP-*5	129 C	Eng	84				Furnished								
272ACKUP-*5	106 C	Eng	102				Furnished								
272ADKUP-*5	89 C	Eng	122				Furnished								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

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GM Notes

ALL-17

1. For MY2015 GM has changed the engine exhaust design. The exhaust pipe can not be removed as in previous model years. This is causing issues with PTO installation. Contact GM Upfitter Integration for assistance on PTO installation.
2. There is torque converter lock up feature available with the 1000 series transmission. The torque converter lock up feature comes on and is controlled by the Transmission Control Module (TCM) at 1100 RPM transmission turbine speed when a signal is provided to the "PTO Enable" circuit of the TCM by the PTO switch. This equates to 1200-1250 RPM or higher engine speed, depending on PTO load. Lock up will only come on in the "PARK" position. The lock up clutch does not come on automatically in "DRIVE" at 1100 RPM. Refer to the appropriate owner's manual for wiring installation.
3. The PTO torque ratings shown are based on the maximum allowable torque of 250 lb-ft at the 64 tooth gear in the transmission with the PTO on one opening only. With PTOs mounted on both openings the maximum allowable torque at the 64 tooth gear in the transmission is 200 lb-ft. For a more precise evaluation of your PTO application refer to the Allison Body Builders Book, Section F, PTO Systems Provisions.
4. The 252 Series for MY2015 and later GM C/K series Cab/Chassis order wiring harness part number 75-P-33. For 2007-2014 order Chelsea part number 329620X. This harness must be ordered separately and is required for proper PTO to Engine interface operation. Refer to GM UI Bulletin #80.
5. Only the 12v "B" option shifter can be used on this application.
6. The left PTO aperture opening on this application is not usable due to engine fuel lines blocking the opening.

AIS-2

1. The A465 (MY600) transmissions in Isuzu trucks started TCC Lock-up in PTO Mode in MY2010. The transmission build start dates were June 2010. The vehicle code for MY2010 is "VN60."
2. The A460 (MY400) and A465 (MY600) share the same transmission housing and both have a "shelf" in the aperture that interferes with the ratio gear of the 272, starting with the K ratio. The older 270 series fit with higher ratios because the input ratio gear was not as wide.

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NOTES



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Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
A465 (Isuzu Number for MY600)	AIS-2	6	L69

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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Olive Branch, MS 38654 USA

A465 (Isuzu Number for MY600)
MO36A4 (Mitsubishi/Fuso Number for MY600)
MY600

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0880" (27.6352MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272AAKUP-*5	158 C	Eng	69				Furnished								
272ABKUP-*5	129 C	Eng	84				Furnished								
272ACKUP-*5	106 C	Eng	102				Furnished								
272ADKUP-*5	89 C	Eng	122				Furnished								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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AIS-2

1. The A465 (MY600) transmissions in Isuzu trucks started TCC Lock-up in PTO Mode in MY2010. The transmission build start dates were June 2010. The vehicle code for MY2010 is “VN60.”
2. The A460 (MY400) and A465 (MY600) share the same transmission housing and both have a “shelf” in the aperture that interferes with the ratio gear of the 272, starting with the K ratio. The older 270 series fit with higher ratios because the input ratio gear was not as wide.

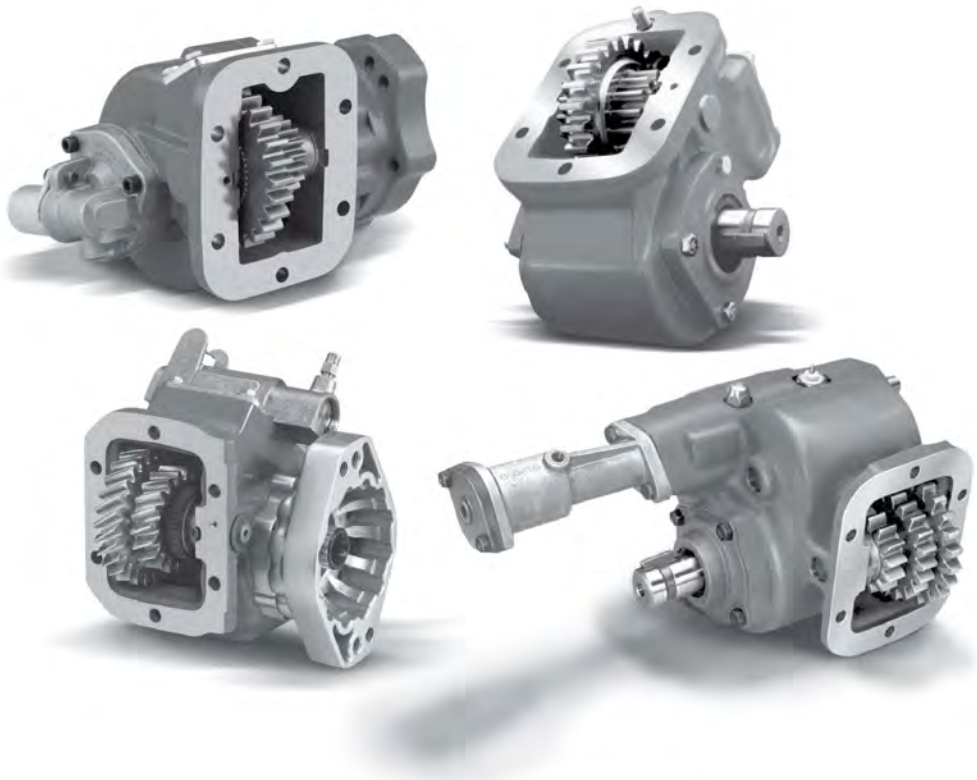
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NOTES



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ISUZU





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Isuzu

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Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
450-43LE (Case Serial # 8D3394 and Later)	IZU-12	4	L58
A450-43L	IZU-12	5	L58
A450-43LE	IZU-12	4	L58
A465 (Low cab forward)	AIS-2	6	L69

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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Olive Branch, MS 38654 USA

450-43LE (Case Serial # 8D3394 and Later)
A450-43L

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
58 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0880" (27.6352MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)							
272AAKUP-*5 (1)	199 C	Eng	58			Furnished	
272ABKUP-*5 (2)	162 C	Eng	71			Furnished	
272ACKUP-*5 (3)	134 C	Eng	86			Furnished	

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1515-1X
(2) Input Gear Part No. 5-P-1515-2X
(3) Input Gear Part No. 5-P-1515-3X

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Olive Branch, MS 38654 USA

A465 (Isuzu Number for MY600)
MO36A4 (Mitsubishi/Fuso Number for MY600)
MY600

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
69 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0880" (27.6352MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)							
272AAKUP-*5	158 C	Eng	69				Furnished
272ABKUP-*5	129 C	Eng	84				Furnished
272ACKUP-*5	106 C	Eng	102				Furnished
272ADKUP-*5	89 C	Eng	122				Furnished

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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Isuzu Notes

IZU-12

1. The torque ratings shown for the 272 Series are based on the maximum allowable torque capacity of the PTO drive gear in the transmission.
2. The PTOs shown on this application page will fit Isuzu NQR model trucks with serial number X7901741 and later only.
3. The PTOs shown on this application page will fit Isuzu NPR model trucks with wheel bases of 109" or 132" and a serial number of X7006763 and later.
4. The PTOs shown on this application page will also fit the same NPR model trucks with wheel bases of 150" and 176" after August of 1998 and serial number of X7006763 and later.
5. The serial number is the last eight digits found on the VIN plate which is located in the cab behind the driver.

AIS-2

1. The A465 (MY600) transmissions in Isuzu trucks started TCC Lock-up in PTO Mode in MY2010. The transmission build start dates were June 2010. The vehicle code for MY2010 is "VN60."
2. The A460 (MY400) and A465 (MY600) share the same transmission housing and both have a "shelf" in the aperture that interferes with the ratio gear of the 272, starting with the K ratio. The older 270 series fit with higher ratios because the input ratio gear was not as wide.

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MACK





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To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

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Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
D107	MAK-18	10	L37-R37
D1070	MAK-19	10	L37-R37
DX1070	MAK-16	6	L34-R34
DX1071	MAK-16	6	L34-R34
DX1078	MAK-16	6	L34-R34
DX10780	MAK-16	6	L34-R34
DX10781	MAK-16	6	L34-R34
G1070	MAK-19	7	L37-R37
QL7220	MAK-17	20	L38-R38
T107	MAK-18	6	L37-R37
T1070	MAK-19	12	L37-R37
T1070-B	MAK-19	12	L37-R37
T2050	MAK-25	5	L54-R54
T2050-C	MAK-29	5	L48-R48
T2060	MAK-25	6	L54-R54
T2060-A	MAK-30	6	L40-R40
T2060-C	MAK-29	6	L48-R48
T2070	MAK-25	7	L54-R54
T2070-A (Front Box)	MAK-25	7	L54-R54
T2070-A (Rear Box)	MAK-26	7	L49-R49
T2070-B (Front Box)	MAK-25	7	L54-R54
T2070-B (Rear Box)	MAK-26	7	L49-R49
T2070-C	MAK-29	7	L48-R48
T2070-D (Front Box)	MAK-29	7	L48-R48
T2070-D (Rear Box)	MAK-26	7	L49-R49
T2070-F	MAK-25	7	L54-R54
T2080	MAK-25	8	L54-R54
T2080-B (Front Box)	MAK-25	8	L54-R54
T2080-B (Rear Box)	MAK-26	8	L49-R49
T2080-C	MAK-29	8	L48-R48
T2080-D (Front Box)	MAK-29	8	L48-R48
T2080-D (Rear Box)	MAK-26	8	L49-R49
T2090	MAK-23	9	L54-R54
T2090-L	MAK-23	9	L54-R54
T2100	MAK-24	10	L54-R54
T2110-B (FRONT BOX FOR T2110B)	MAK-24	11	L54-R54

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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MACK TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
T2110-B (REAR BOX FOR T2110B)	MAK-31	11	L49-R49
T2130 (Front Box)	MAK-23	13	L54-R54
T2130 (Rear Box)	MAK-28	13	L49-R49
T2130-B (Front Box)	MAK-23	13	L54-R54
T2130-B (Rear Box)	MAK-28	12	L49-R49
T2180 (Front Box)	MAK-23	18	L54-R54
T2180 (Rear Box)	MAK-27	18	L49-R49
T2180-B (Front Box)	MAK-23	18	L54-R54
T2180-B (Rear Box)	MAK-27	18	L49-R49
T305	MAK-25	5	L54-R54
T306	MAK-25	6	L54-R54
T306G	MAK-30	6	L40-R40
T307	MAK-25	7	L54-R54
T307M (Front Box)	MAK-25	7	L54-R54
T307M (Rear Box)	MAK-26	7	L49-R49
T308	MAK-25	8	L54-R54
T308M (Front Box)	MAK-25	8	L54-R54
T308M (Rear Box)	MAK-26	8	L49-R49
T309	MAK-23	9	L54-R54
T309L	MAK-23	9	L54-R54
T309LR	MAK-23	9	L54-R54
T310 (T310 is a standard 10 speed with no rear box)	MAK-32	10	L53-R53
T310-M (Front Box)	MAK-32	10	L53-R53
T310-M (Rear Box)	MAK-27	10	L49-R49
T310ME (Front box, same as T-310M, output flange extended for rear mount PTO)	MAK-32	10	L53-R53
T310ME (Rear box, same as T310M, output flange extended for rear mount PTO)	MAK-27	10	L49-R49
T310-MLR (Front Box)	MAK-23	10	L54-R54
T310-MLR (Rear Box)	MAK-27	10	L49-R49
T313H (Front Box)	MAK-23	13	L54-R54
T313H (Rear Box)	MAK-28	13	L49-R49
T313L (Front Box)	MAK-23	13	L54-R54
T313L (Rear Box)	MAK-28	13	L49-R49
T313L21 (Front Box)	MAK-23	13	L54-R54
T313L21 (Rear Box)	MAK-28	13	L49-R49
T313LR (Front Box)	MAK-23	13	L54-R54
T313LR (Rear Box)	MAK-28	13	L49-R49

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
T313LR21 (Front Box)	MAK-23	13	L54-R54
T313LR21 (Rear Box)	MAK-28	13	L49-R49
T318 (Front Box)	MAK-23	18	L54-R54
T318 (Rear Box)	MAK-27	18	L49-R49
T318L (Front Box)	MAK-23	18	L54-R54
T318L (Rear Box)	MAK-27	18	L49-R49
T318L21 (Front Box)	MAK-23	18	L54-R54
T318L21 (Rear Box)	MAK-27	18	L49-R49
T318LR (Front Box)	MAK-23	18	L54-R54
T318LR (Rear Box)	MAK-27	18	L49-R49
T318LR21 (Front Box)	MAK-23	18	L54-R54
T318LR21 (Rear Box)	MAK-27	18	L49-R49
TM308	MAK-33	8	L54-R54
TM308M (Front box)	MAK-23	8	L54-R54
TM308M (Rear Box)	MAK-26	8	L49-R49
TM309	MAK-33	9	L54-R54
TM309M (Front Box)	MAK-23	9	L54-R54
TM309M (Rear Box)	MAK-26	9	L49-R49
TMD12AD (HD also) (MDrive) High Split Ratio	MAK-34H	12	CS
TMD12AD (HD also) (MDrive) Low Ratio	MAK-34	12	CS
TMD12AO (HD also) (MDrive) High Split Range	MAK-35H	12	CS
TMD12AO (HD also) (MDrive) Low Ratio	MAK-35	12	CS
TMD13AD (MDrive) High Split Ratio	MAK-34H	13	CS
TMD13AD (MDrive) Low Ratio	MAK-34	13	CS
TMD13AFO-HD (MDrive) High Split Range	MAK-35H	13	CS
TMD13AFO-HD (MDrive) Low Ratio	MAK-35	13	CS
TMD13AO (MDrive) High Split Range	MAK-35H	13	CS
TMD13AO (MDrive) Low Ratio	MAK-35	13	CS
TMD14AFO-HD (MDrive) High Split Range	MAK-35H	14	CS
TMD14AFO-HD (MDrive) Low Ratio	MAK-35	14	CS
TMD14AO (MDrive) High Split Range	MAK-35H	14	CS
TMD14AO (MDrive) Low Ratio	MAK-35	14	CS
TR720-7220	MAK-17	5	L38-R38
TRD7250	MAK-17	10	L38-R38
TRDL107	MAK-18	10	L37-R37
TRDL1070	MAK-19	10	L37-R37

IMPORTANT: See Safety Information in Section I of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

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MACK TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
TRDL720-7220	MAK-17	10	L38-R38
TRDLG1070	MAK-19	7	L37-R37
TRDX720-7220	MAK-17	10	L38-R38
TRDXL107	MAK-16	6	L34-R34
TRDXL1070	MAK-16	6	L34-R34
TRDXL1071	MAK-16	6	L34-R34
TRDXL1078	MAK-16	6	L34-R34
TRDXL10780	MAK-16	6	L34-R34
TRDXL10781	MAK-16	6	L34-R34
TRDXT720-7220	MAK-17	10	L38-R38
TRL107	MAK-22	5	L34-R34
TRL1076	MAK-16	5	L34-R34
TRL10760	MAK-20	5	L34-R34
TRL1078	MAK-16	5	L34-R34
TRL10780	MAK-20	5	L34-R34
TRQL7220	MAK-17	20	L38-R38
TRT720-7220	MAK-17	15	L38-R38
TRTL720-7220	MAK-17	15	L38-R38
TRTXL107	MAK-18	12	L37-R37
TRTXL1070	MAK-19	12	L37-R37
TRTXL1070-B	MAK-19	12	L37-R37
TRXL107	MAK-18	6	L37-R37
TRXL1070	MAK-21	6	L37-R37
TRXL1070-A	MAK-21	6	L37-R37
TRXL1071	MAK-18	6	L37-R37
TRXL10710	MAK-21	6	L37-R37
TRXL1071-A	MAK-18	6	L37-R37
TRXL1076	MAK-16	6	L34-R34
TRXL107-A	MAK-18	6	L37-R37
TX2060	MAK-25	7	L54-R54
X107	MAK-18	5	L37-R37
X1070	MAK-21	6	L37-R37
X1070-A	MAK-21	6	L37-R37
X1071	MAK-18	5	L37-R37
X10710	MAK-21	6	L37-R37
X10710-A	MAK-21	6	L37-R37

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
X1071-A	MAK-18	6	L37-R37
X107-A	MAK-18	6	L37-R37
X2060	MAK-25	7	L54-R54

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

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DX1070
DX1071
DX1078
DX10780
DX10781
TRDXL107
TRDXL1070
TRDXL1071
TRDXL1078
TRDXL10780
TRDXL10781
TRL1076
TRL1078
TRXL1076

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.0850" (78.3600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*5	250 I	Opp	32		7-A-032(28)	328564X	Furnished	221XCAHX-*3	250 I	Eng	32		7-A-032(28)	328530-1X	328170-83X
221ZEAHX-*5	250 I	Opp	37			328564X	Furnished	221XEAHX-*3	250 I	Eng	37			328530-1X	328170-83X
221ZPAHX-*5	200 I	Opp	60			328564X	Furnished	221XPAHX-*3	200 I	Eng	60			328530-1X	328170-83X
489XAAHX-*5 (12)	250 I	Opp	28				Furnished	442KFAHX-*3 (2)	250 I	Eng	45			328530-1X	7170-16X
489XCAHX-*5 (13)	250 I	Opp	36				Furnished	442KHAHX-*3 (15)	250 I	Eng	52			328530-1X	7170-16X
489XFAHX-*5 (2)	250 I	Opp	45				Furnished	442KLAHX-*3 (1)	250 I	Eng	58			328530-1X	7170-16X
489XHAHX-*5 (15)	250 I	Opp	52				Furnished	442KQAHX-*3 (1)	225 I	Eng	62			328530-1X	7170-16X
489XLAHX-*5 (1)	250 I	Opp	58				Furnished	442KRAHX-*3 (1)	225 I	Eng	72			328530-1X	7170-16X
489XQAHX-*5 (1)	225 I	Opp	62				Furnished	442KSAHX-*3 (1)	200 I	Eng	86			328530-1X	7170-16X
489XRAHX-*5 (1)	225 I	Opp	72				Furnished	442KUAHX-*3 (1)	195 I	Eng	102			328530-1X	7170-16X
489XSAHX-*5 (1)	200 I	Opp	86				Furnished	442KWAHX-*3 (1)	175 I	Eng	121			328530-1X	7170-16X
489XUAHX-*5 (1)	195 I	Opp	102				Furnished	442KXAHX-*3 (1)	140 I	Eng	143			328530-1X	7170-16X
489XWAHX-*5 (1)	175 I	Opp	121				Furnished	660KHAHX-*3 (15)	375 I	Eng	52			328530-1X	7170-16X
489XXAHX-*5 (1)	140 I	Opp	143				Furnished								
680XFAHX-*5 (10)	375 I	Opp	45				Furnished								
680XHAHX-*5 (19)	375 I	Opp	52				Furnished								
680XQAHX-*5 (11)	375 I	Opp	62				Furnished								
680XRAHX-*5 (18)	350 I	Opp	72				Furnished								
680XSAHX-*5 (14)	325 I	Opp	86				Furnished								
823XBAHX-*3 (21)	500 I	Opp	30				Furnished								
823XDAHX-*3 (25)	500 I	Opp	36				Furnished								
823XGAHX-*3 (26)	500 I	Opp	36				Furnished								
823XJAHX-*3 (22)	500 I	Opp	46				Furnished								
823XMAHX-*3 (20)	500 I	Opp	54				Furnished								
823XRAHX-*3 (24)	400 I	Opp	75				Furnished								
823XTKTX-*3 (17)	372 I	Opp	90		8-A-165		7170-116X								
880XBAHX-*3 (3)	500 I	Opp	30				Furnished								
880XDAHX-*3 (4)	500 I	Opp	36				Furnished								
880XGAHX-*3 (9)	500 I	Opp	39				Furnished								
880XJAHX-*3 (5)	500 I	Opp	46				Furnished								
880XMAHX-*3 (6)	500 I	Opp	54				Furnished								
880XQAHX-*3 (16)	450 I	Opp	64				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-1494
(20) Input Gear Part No. 5-P-283
(21) Input Gear Part No. 5-P-285
(22) Input Gear Part No. 5-P-325
(24) Input Gear Part No. 5-P-721
(25) Input Gear Part No. 5-P-971
(26) Input Gear Part No. 5-P-980
(28) Furnished, but not required

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

DX1070
DX1071
DX1078
DX10780
DX10781
TRDXL107
TRDXL1070
TRDXL1071
TRDXL1078
TRDXL10780
TRDXL10781
TRL1076
TRL1078
TRXL1076

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.0850" (78.3600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
880XRAHX-*3 (7)	400 I	Opp	75				Furnished								
880XTAHX-*3 (8)	350 I	Opp	96				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBAJX-*5	300 C	Opp	31				Furnished	272KAAJX-*3	300 C	Eng	25			328530-1X	7170-16X
282XCAJX-*5	300 C	Opp	37				Furnished	272KBAJX-*3	300 C	Eng	31			328530-1X	7170-16X
282XDAJX-*5	300 C	Opp	44				Furnished	272KCAJX-*3	300 C	Eng	37			328530-1X	7170-16X
282XGAJX-*5	300 C	Opp	52				Furnished	272KDAJX-*3	325 C	Eng	42			328530-1X	7170-16X
282XKAJX-*5	300 C	Opp	59				Furnished	272KGAJX-*3	300 C	Eng	52			328530-1X	7170-16X
282XMAJX-*5	300 C	Opp	66				Furnished	272KKAJX-*3	300 C	Eng	59			328530-1X	7170-16X
282XPAJX-*5	300 C	Opp	73				Furnished	272KMAJX-*3	300 C	Eng	66			328530-1X	7170-16X
282XSAJX-*5	300 C	Opp	82				Furnished	272KPAJX-*3	300 C	Eng	73			328530-1X	7170-16X
282XTAJX-*5	300 C	Opp	92				Furnished	272KSAJX-*3	300 C	Eng	82			328530-1X	7170-16X
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	30				Furnished								
885XGAHX-*3 (9)	500 I	Opp	39				Furnished								
885XJAHX-*3 (5)	500 I	Opp	46				Furnished								
885XMAHX-*3 (6)	500 I	Opp	54				Furnished								
ONE SPEED - FORWARD & REVERSE															
348ZFAHX-*5 (23)	200 I	Opp	39	41	8-A-093(T) 8-A-032(P)		Furnished	340XFAHX-*5 (23)	200 I	Eng	39	41	7-A-140(P)(27)	328530-1X	7170-16X
863XBAHX-*5	500 I	Opp	30	38			Furnished								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng					Furnished								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(23) Input Gear Part No. 5-P-581
(27) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

QL7220
TRDL720-7220
TRDXT720-7220
TRDX720-7220
TRD7250
TRQL7220
TRTL720-7220
TRT720-7220
TR720-7220

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear REAR of Centerline
38 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.0500" (77.4700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
38 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.0500" (77.4700MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
442KFABX-*6 (2)	250 I	Eng	75		7-A-032(T)	328530-2X	7170-16X	442KFABX-*4 (2)	250 I	Eng	75		7-A-032(T)	328530-2X	7170-16X
442KLABX-*6 (1)	250 I	Eng	97		7-A-032(T)	328530-2X	7170-16X	442KLABX-*4 (1)	250 I	Eng	97		7-A-032(T)	328530-2X	7170-16X
442KQABX-*6 (1)	225 I	Eng	104		7-A-032(T)	328530-2X	7170-16X	442KQABX-*4 (1)	225 I	Eng	104		7-A-032(T)	328530-2X	7170-16X
442KRABX-*6 (1)	225 I	Eng	121		7-A-032(T)	328530-2X	7170-16X	442KRABX-*4 (1)	225 I	Eng	121		7-A-032(T)	328530-2X	7170-16X
442KSABX-*6 (1)	200 I	Eng	144		7-A-032(T)	328530-2X	7170-16X	442KSABX-*4 (1)	200 I	Eng	144		7-A-032(T)	328530-2X	7170-16X
442KUABX-*6 (1)	195 I	Eng	172		7-A-032(T)	328530-2X	7170-16X	442KUABX-*4 (1)	195 I	Eng	172		7-A-032(T)	328530-2X	7170-16X
442KWABX-*6 (1)	175 I	Eng	202		7-A-032(T)	328530-2X	7170-16X	442KWABX-*4 (1)	175 I	Eng	202		7-A-032(T)	328530-2X	7170-16X
442KXABX-*6 (1)	140 I	Eng	239		7-A-032(T)	328530-2X	7170-16X	442KXABX-*4 (1)	140 I	Eng	239		7-A-032(T)	328530-2X	7170-16X
ONE SPEED - FORWARD & REVERSE															
340XFABX-*4 (3)	200 I	Eng	68	72	7-A-140(P)(4) 7-A-032(T)	328530-2X	7170-16X	340XFABX-*4 (3)	200 I	Eng	68	72	7-A-140(P)(4) 7-A-032(T)	328530-2X	7170-16X

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1001
(2) Input Gear Part No. 5-P-1076
(3) Input Gear Part No. 5-P-579
(4) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

D107
TRDL107
TRTXL107
TRXL107
TRXL107-A
TRXL1071
TRXL1071-A
T107
X107
X107-A
X1071
X1071-A

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.5700" (14.4800MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
2.8340" (71.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
489KAAHX-*5 (12)	250 I	Opp	64		8-A-062 8-A-093	328170-8X		442KFAHX-*3 (2)	250 I	Eng	101		7-A-240(T)	328530-1X	328170-168X
489KCAHX-*5 (13)	250 I	Opp	81		8-A-062 8-A-093	328170-8X		442KHAHX-*3 (15)	250 I	Eng	117		7-A-240(T)	328530-1X	328170-168X
489KFAHX-*5 (2)	250 I	Opp	101		8-A-062 8-A-093	328170-8X		442KLAHX-*3 (1)	250 I	Eng	130		7-A-240(T)	328530-1X	328170-168X
489KHAHX-*5 (15)	250 I	Opp	117		8-A-062 8-A-093	328170-8X		442KQAHX-*3 (1)	225 I	Eng	140		7-A-240(T)	328530-1X	328170-168X
489KLAHX-*5 (1)	250 I	Opp	130		8-A-062 8-A-093	328170-8X		442KRAHX-*3 (1)	225 I	Eng	162		7-A-240(T)	328530-1X	328170-168X
489KQAHX-*5 (1)	225 I	Opp	140		8-A-062 8-A-093	328170-8X		442KSAHX-*3 (1)	200 I	Eng	193		7-A-240(T)	328530-1X	328170-168X
489KRAHX-*5 (1)	225 I	Opp	162		8-A-062 8-A-093	328170-8X		442KUAHX-*3 (1)	195 I	Eng	230		7-A-240(T)	328530-1X	328170-168X
489KSAHX-*5 (1)	200 I	Opp	193		8-A-062 8-A-093	328170-8X		442KWAHX-*3 (1)	175 I	Eng	271		7-A-240(T)	328530-1X	328170-168X
489KUAHX-*5 (1)	195 I	Opp	230		8-A-062 8-A-093	328170-8X		442KXAHX-*3 (1)	140 I	Eng	321		7-A-240(T)	328530-1X	328170-168X
489KWAHX-*5 (1)	175 I	Opp	271		8-A-062 8-A-093	328170-8X		660KHAHX-*3 (15)	375 I	Eng	117		7-A-240(T)	328530-1X	328170-168X
489KXAHX-*5 (1)	140 I	Opp	321		8-A-062 8-A-093	328170-8X									
680KFAHX-*5 (10)	375 I	Opp	101		8-A-062 8-A-093	328170-8X									
680KHAHX-*5 (18)	375 I	Opp	117		8-A-062 8-A-093	328170-8X									
680KQAHX-*5 (11)	375 I	Opp	140		8-A-062 8-A-093	328170-8X									
680KRAHX-*5 (17)	350 I	Opp	162		8-A-062 8-A-093	328170-8X									
680KSAHX-*5 (14)	325 I	Opp	193		8-A-062 8-A-093	328170-8X									

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† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(17) Input Gear Part No. 5-P-1441
(18) Input Gear Part No. 5-P-1494

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

D107
TRDL107
TRTXL107
TRXL107
TRXL107-A
TRXL1071
TRXL1071-A
T107
X107
X107-A
X1071
X1071-A

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.5700" (14.4800MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
2.8340" (71.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
823XBAHX-*5 (20)	500 I	Opp	69		8-A-190	328170-14X	
823XDAHX-*5 (24)	500 I	Opp	81		8-A-190	328170-14X	
823XGAHX-*5 (25)	500 I	Opp	88		8-A-190	328170-14X	
823XJAHX-*5 (21)	500 I	Opp	104		8-A-190	328170-14X	
823XMAHX-*5 (19)	500 I	Opp	122		8-A-190	328170-14X	
823XRAHX-*5 (23)	400 I	Opp	168		8-A-190	328170-14X	
880KBAHX-*5 (3)	500 I	Opp	69		8-A-190	328170-14X	
880KDAHX-*5 (4)	500 I	Opp	81		8-A-190	328170-14X	
880KGAHX-*5 (9)	500 I	Opp	88		8-A-190	328170-14X	
880KJAHX-*5 (5)	500 I	Opp	104		8-A-190	328170-14X	
880KMAHX-*5 (6)	500 I	Opp	122		8-A-190	328170-14X	
880KQAHX-*5 (16)	450 I	Opp	142		8-A-190	328170-14X	
880KRAHX-*5 (7)	400 I	Opp	168		8-A-190	328170-14X	
880KTAHX-*5 (8)	350 I	Opp	217		8-A-190	328170-14X	

ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
282KBAJX-*5	300 C	Opp	69		8-A-093(P) 8-A-062(T)	328170-8X		272KAAJX-*3	300 C	Eng	56		7-A-240(T)	328530-1X	328170-168X
282KCAJX-*5	300 C	Opp	83		8-A-093(P) 8-A-062(T)	328170-8X		272KBAJX-*3	300 C	Eng	69		7-A-240(T)	328530-1X	328170-168X
282KDAJX-*5	300 C	Opp	99		8-A-093(P) 8-A-062(T)	328170-8X		272KCAJX-*3	300 C	Eng	83		7-A-240(T)	328530-1X	328170-168X
282KGAJX-*5	300 C	Opp	118		8-A-093(P) 8-A-062(T)	328170-8X		272KDAJX-*3	325 C	Eng	94		7-A-240(T)	328530-1X	328170-168X
282KKAJX-*5	300 C	Opp	132		8-A-093(P) 8-A-062(T)	328170-8X		272KGAJX-*3	300 C	Eng	118		7-A-240(T)	328530-1X	328170-168X
282KMAJX-*5	300 C	Opp	148		8-A-093(P) 8-A-062(T)	328170-8X		272KKAJX-*3	300 C	Eng	132		7-A-240(T)	328530-1X	328170-168X
282KPAJX-*5	300 C	Opp	165		8-A-093(P) 8-A-062(T)	328170-8X		272KMAJX-*3	300 C	Eng	148		7-A-240(T)	328530-1X	328170-168X

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(16) Input Gear Part No. 5-P-1385
(19) Input Gear Part No. 5-P-283
(20) Input Gear Part No. 5-P-285
(21) Input Gear Part No. 5-P-325
(23) Input Gear Part No. 5-P-721
(24) Input Gear Part No. 5-P-971
(25) Input Gear Part No. 5-P-980

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

D107
TRDL107
TRTXL107
TRXL107
TRXL107-A
TRXL1071
TRXL1071-A
T107

X107
X107-A
X1071
X1071-A

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.5700" (14.4800MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
2.8340" (71.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282KSAJX-*5	271 C	Opp	184		8-A-093(P) 8-A-062(T)		328170-8X	272KPAJX-*3	300 C	Eng	165		7-A-240(T)	328530-1X	328170-168X
282KTAJX-*5	242 C	Opp	206		8-A-093(P) 8-A-062(T)		328170-8X	272KSAJX-*3	271 C	Eng	184		7-A-240(T)	328530-1X	328170-168X
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*5 (3)	500 I	Opp	69		8-A-190		328170-14X								
885XGAHX-*5 (9)	500 I	Opp	88		8-A-190		328170-14X								
885XJAHX-*5 (5)	500 I	Opp	104		8-A-190		328170-14X								
885XMAHX-*5 (6)	500 I	Opp	122		8-A-190		328170-14X								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (22)	200 I	Opp	88	92	8-A-190(T)		328170-8X	340XFAHX-*5 (22)	200 I	Eng	88	92	7-A-140(P)(26) 7-A-240(T)	328530-1X	328170-168X
863XBAHX-*5	500 I	Opp	69	85	8-A-190		328170-15X								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng			8-A-190		328170-8X								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(22) Input Gear Part No. 5-P-581
(26) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

D1070
G1070
TRDLG1070
TRDL1070
TRTXL1070
TRTXL1070-B
T1070
T1070-B

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear REAR of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.3750" (9.5200MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
2.8340" (71.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
489KFAHX-*6 (2)	250 I	Opp	129		8-A-062 8-A-093	328170-8X		442KFAHX-*4 (2)	250 I	Eng	129		7-A-240(T)	328530-1X	328170-168X
489KHAHX-*6 (13)	250 I	Opp	150		8-A-062 8-A-093	328170-8X		442KHAHX-*4 (13)	250 I	Eng	150		7-A-240(T)	328530-1X	328170-168X
489KLAHX-*6 (1)	250 I	Opp	168		8-A-062 8-A-093	328170-8X		442KLAHX-*4 (1)	250 I	Eng	168		7-A-240(T)	328530-1X	328170-168X
489KQAHX-*6 (1)	225 I	Opp	180		8-A-062 8-A-093	328170-8X		442KQAHX-*4 (1)	225 I	Eng	180		7-A-240(T)	328530-1X	328170-168X
489KRAHX-*6 (1)	225 I	Opp	209		8-A-062 8-A-093	328170-8X		442KRAHX-*4 (1)	225 I	Eng	209		7-A-240(T)	328530-1X	328170-168X
489KSAHX-*6 (1)	200 I	Opp	249		8-A-062 8-A-093	328170-8X		442KSAHX-*4 (1)	200 I	Eng	249		7-A-240(T)	328530-1X	328170-168X
489KUAHX-*6 (1)	195 I	Opp	296		8-A-062 8-A-093	328170-8X		442KUAHX-*4 (1)	195 I	Eng	296		7-A-240(T)	328530-1X	328170-168X
489KWAHX-*6 (1)	175 I	Opp	349		8-A-062 8-A-093	328170-8X		442KWAHX-*4 (1)	175 I	Eng	349		7-A-240(T)	328530-1X	328170-168X
489KXAHX-*6 (1)	140 I	Opp	412		8-A-062 8-A-093	328170-8X		442KXAHX-*4 (1)	140 I	Eng	412		7-A-240(T)	328530-1X	328170-168X
680KHAHX-*6 (16)	375 I	Opp	150		8-A-062 8-A-093	328170-8X		660KHAHX-*4 (13)	375 I	Eng	150		7-A-240(T)	328530-1X	328170-168X
680XFAHX-*6 (10)	375 I	Opp	129		8-A-062 8-A-093	328170-8X									
680XQAHX-*6 (11)	375 I	Opp	180		8-A-062 8-A-093	328170-8X									
680XRAHX-*6 (15)	350 I	Opp	209		8-A-062 8-A-093	328170-8X									
680XSAHX-*6 (12)	325 I	Opp	249		8-A-062 8-A-093	328170-8X									
823XBAHX-*6 (18)	500 I	Opp	88		8-A-190	328170-14X									
823XDAHX-*6 (22)	500 I	Opp	104		8-A-190	328170-14X									
823XGAHX-*6 (23)	500 I	Opp	113		8-A-190	328170-14X									
823XJAHX-*6 (19)	500 I	Opp	133		8-A-190	328170-14X									

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1322
(13) Input Gear Part No. 5-P-1364
(15) Input Gear Part No. 5-P-1441
(16) Input Gear Part No. 5-P-1494
(18) Input Gear Part No. 5-P-285
(19) Input Gear Part No. 5-P-325
(22) Input Gear Part No. 5-P-971
(23) Input Gear Part No. 5-P-980

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

D1070
G1070
TRDLG1070
TRDL1070
TRTXL1070
TRTXL1070-B
T1070
T1070-B

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear REAR of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.3750" (9.5200MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
2.8340" (71.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
823XMAHX-*6 (17)	500 I	Opp	157		8-A-190		328170-14X								
823XRAHX-*6 (21)	400 I	Opp	216		8-A-190		328170-14X								
880XBAHX-*6 (3)	500 I	Opp	88		8-A-190		328170-14X								
880XDAHX-*6 (4)	500 I	Opp	104		8-A-190		328170-14X								
880XGAHX-*6 (9)	500 I	Opp	113		8-A-190		328170-14X								
880XJAHX-*6 (5)	500 I	Opp	133		8-A-190		328170-14X								
880XMAHX-*6 (6)	500 I	Opp	157		8-A-190		328170-14X								
880XQAHX-*6 (14)	450 I	Opp	183		8-A-190		328170-14X								
880XRAHX-*6 (7)	400 I	Opp	216		8-A-190		328170-14X								
880XTAHX-*6 (8)	350 I	Opp	279		8-A-190		328170-14X								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XGAHX-*6 (9)	500 I	Opp	113		8-A-190		328170-14X								
885XJAHX-*6 (5)	500 I	Opp	133		8-A-190		328170-14X								
885XMAHX-*6 (6)	500 I	Opp	157		8-A-190		328170-14X								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*4 (20)	200 I	Opp	113	119	8-A-190(T)		328170-8X	340XFAHX-*4 (20)	200 I	Eng	113	119	7-A-140(P)(24) 7-A-240(T)	328530-1X	328170-168X
863XBAHX-*4	500 I	Opp	88	109	8-A-190		328170-15X								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng			8-A-190		328170-8X								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(14) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-283
(20) Input Gear Part No. 5-P-581
(21) Input Gear Part No. 5-P-721
(24) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

TRL10760
TRL10780

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.0850" (78.3600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
489XAAHX-*5 (12)	250 I	Opp	46				Furnished	442KFAHX-*3 (2)	250 I	Eng	73			328530-1X	7170-16X
489XCAHX-*5 (13)	250 I	Opp	59				Furnished	442KHAHX-*3 (15)	250 I	Eng	85			328530-1X	7170-16X
489XFAHX-*5 (2)	250 I	Opp	73				Furnished	442KLAHX-*3 (1)	250 I	Eng	95			328530-1X	7170-16X
489XHAHX-*5 (15)	250 I	Opp	85				Furnished	442KQAHX-*3 (1)	225 I	Eng	102			328530-1X	7170-16X
489XLAHX-*5 (1)	250 I	Opp	95				Furnished	442KRAHX-*3 (1)	225 I	Eng	119			328530-1X	7170-16X
489XQAHX-*5 (1)	225 I	Opp	102				Furnished	442KSAHX-*3 (1)	200 I	Eng	141			328530-1X	7170-16X
489XRAHX-*5 (1)	225 I	Opp	119				Furnished	442KUAHX-*3 (1)	195 I	Eng	168			328530-1X	7170-16X
489XSAHX-*5 (1)	200 I	Opp	141				Furnished	442KWAHX-*3 (1)	175 I	Eng	198			328530-1X	7170-16X
489XUAHX-*5 (1)	195 I	Opp	168				Furnished	442KXAHX-*3 (1)	140 I	Eng	234			328530-1X	7170-16X
489XWAHX-*5 (1)	175 I	Opp	198				Furnished	660KHAHX-*3 (15)	375 I	Eng	85			328530-1X	7170-16X
489XXAHX-*5 (1)	140 I	Opp	234				Furnished								
680XFAHX-*5 (10)	375 I	Opp	73				Furnished								
680XHAHX-*5 (19)	375 I	Opp	85				Furnished								
680XQAHX-*5 (11)	375 I	Opp	102				Furnished								
680XRAHX-*5 (18)	350 I	Opp	119				Furnished								
680XSAHX-*5 (14)	325 I	Opp	141				Furnished								
823XBAHX-*3 (21)	500 I	Opp	50				Furnished								
823XDAHX-*3 (25)	500 I	Opp	60				Furnished								
823XGAHX-*3 (26)	500 I	Opp	65				Furnished								
823XJAHX-*3 (22)	500 I	Opp	76				Furnished								
823XMAHX-*3 (20)	500 I	Opp	89				Furnished								
823XRAHX-*3 (24)	400 I	Opp	123				Furnished								
823XTKTX-*5 (17)	350 I	Opp	149		8-A-165(27)		Furnished								
880XBAHX-*5 (3)	500 I	Opp	50				Furnished								
880XDAHX-*5 (4)	500 I	Opp	59				Furnished								
880XGAHX-*5 (9)	500 I	Opp	64				Furnished								
880XJAHX-*5 (5)	500 I	Opp	76				Furnished								
880XMAHX-*5 (6)	500 I	Opp	89				Furnished								
880XQAHX-*5 (16)	450 I	Opp	104				Furnished								
880XRAHX-*5 (7)	400 I	Opp	123				Furnished								
880XTAHX-*5 (8)	350 I	Opp	158				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-1494
(20) Input Gear Part No. 5-P-283
(21) Input Gear Part No. 5-P-285
(22) Input Gear Part No. 5-P-325
(24) Input Gear Part No. 5-P-721
(25) Input Gear Part No. 5-P-971
(26) Input Gear Part No. 5-P-980
(27) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

TRL10760
TRL10780

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8050" (20.4500MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.0850" (78.3600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBAJX-*5	300 C	Opp	50				Furnished	272KAAJX-*3	300 C	Eng	41			328530-1X	7170-16X
282XCAJX-*5	300 C	Opp	61				Furnished	272KBAJX-*3	300 C	Eng	50			328530-1X	7170-16X
282XDAJX-*5	300 C	Opp	72				Furnished	272KCAJX-*3	300 C	Eng	61			328530-1X	7170-16X
282XGAJX-*5	300 C	Opp	86				Furnished	272KDAJX-*3	300 C	Eng	72			328530-1X	7170-16X
282XKAJX-*5	300 C	Opp	96				Furnished	272KGAJX-*3	300 C	Eng	86			328530-1X	7170-16X
282XMAJX-*5	300 C	Opp	108				Furnished	272KKAJX-*3	300 C	Eng	96			328530-1X	7170-16X
282XPAJX-*5	300 C	Opp	120				Furnished	272KMAJX-*3	300 C	Eng	108			328530-1X	7170-16X
282XSAJX-*5	300 C	Opp	135				Furnished	272KPAJX-*3	300 C	Eng	120			328530-1X	7170-16X
282XTAJX-*5	300 C	Opp	151				Furnished	272KSAJX-*3	300 C	Eng	135			328530-1X	7170-16X
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	50				Furnished								
885XGAHX-*5 (9)	500 I	Opp	64				Furnished								
885XJAHX-*3 (5)	500 I	Opp	76				Furnished								
885XMAHX-*3 (6)	500 I	Opp	89				Furnished								
ONE SPEED - FORWARD & REVERSE															
340SFAHX-*5 (23)	200 I	Opp	64	67		310778X	Furnished	340XFAHX-*5 (23)	200 I	Eng	64	67	7-A-140(P)(27)	328530-1X	7170-16X
863XBAHX-*5	500 I	Opp	50	62			Furnished								
GEARED ADAPTERS															
628XAHX-4AH	250 I	Eng					Furnished								

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IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(23) Input Gear Part No. 5-P-581
(27) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

TRXL1070
TRXL1070-A
TRXL10710
X1070
X1070-A
X10710
X10710-A

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.5700" (14.4800MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
2.8340" (71.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221XCAHX-*5	250 I	Opp	72		7-A-032(P)(26)	328564X	Furnished	221XCAHX-*3	250 I	Eng	72		7-A-032(P)(26) 7-A-240(T)	328530-1X	328170-32X
221XEAHX-*5	250 I	Opp	84			328564X	Furnished	221XEAHX-*3	250 I	Eng	84		7-A-240(T)	328530-1X	328170-32X
221XPAHX-*5	200 I	Opp	136			328564X	Furnished	221XPAHX-*3	200 I	Eng	136		7-A-240(T)	328530-1X	328170-32X
489KAAHX-*5 (12)	250 I	Opp	64		8-A-062 8-A-093		328170-8X	442KFAHX-*3 (2)	250 I	Eng	101		7-A-240(T)	328530-1X	328170-168X
489KCAHX-*5 (13)	250 I	Opp	81		8-A-062 8-A-093		328170-8X	442KHAHX-*3 (15)	250 I	Eng	117		7-A-240(T)	328530-1X	328170-168X
489KFAHX-*5 (2)	250 I	Opp	101		8-A-062 8-A-093		328170-8X	442KLAHX-*3 (1)	250 I	Eng	130		7-A-240(T)	328530-1X	328170-168X
489KHAHX-*5 (15)	250 I	Opp	117		8-A-062 8-A-093		328170-8X	442KQAHX-*3 (1)	225 I	Eng	140		7-A-240(T)	328530-1X	328170-168X
489KLAHX-*5 (1)	250 I	Opp	130		8-A-062 8-A-093		328170-8X	442KRAHX-*3 (1)	225 I	Eng	162		7-A-240(T)	328530-1X	328170-168X
489KQAHX-*5 (1)	225 I	Opp	140		8-A-062 8-A-093		328170-8X	442KSAHX-*3 (1)	200 I	Eng	193		7-A-240(T)	328530-1X	328170-168X
489KRAHX-*5 (1)	225 I	Opp	162		8-A-062 8-A-093		328170-8X	442KUAHX-*3 (1)	195 I	Eng	230		7-A-240(T)	328530-1X	328170-168X
489KSAHX-*5 (1)	200 I	Opp	193		8-A-062 8-A-093		328170-8X	442KWAHX-*3 (1)	175 I	Eng	271		7-A-240(T)	328530-1X	328170-168X
489KUAHX-*5 (1)	195 I	Opp	230		8-A-062 8-A-093		328170-8X	442KXAHX-*3 (1)	140 I	Eng	321		7-A-240(T)	328530-1X	328170-168X
489KWAHX-*5 (1)	175 I	Opp	271		8-A-062 8-A-093		328170-8X	660KHAHX-*3 (15)	375 I	Eng	117		7-A-240(T)	328530-1X	328170-168X
489KXAHX-*5 (1)	140 I	Opp	321		8-A-062 8-A-093		328170-8X								
680KHAHX-*5 (18)	375 I	Opp	117		8-A-062 8-A-093		328170-8X								
680XFAHX-*5 (10)	375 I	Opp	101		8-A-062 8-A-093		328170-8X								
680XQAHX-*5 (11)	375 I	Opp	140		8-A-062 8-A-093		328170-8X								

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(15) Input Gear Part No. 5-P-1364
(18) Input Gear Part No. 5-P-1494
(26) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

TRXL1070
TRXL1070-A
TRXL10710
X1070
X1070-A
X10710
X10710-A

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.5700" (14.4800MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
2.8340" (71.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT							
680XRAHX-*5 (17)	350 I	Opp	162		8-A-062 8-A-093	328170-8X	
680XSAHX-*5 (14)	325 I	Opp	193		8-A-062 8-A-093	328170-8X	
823XBAHX-*3 (20)	500 I	Opp	69		8-A-190	328170-14X	
823XDAHX-*3 (24)	500 I	Opp	81		8-A-190	328170-14X	
823XGAHX-*3 (25)	500 I	Opp	88		8-A-190	328170-14X	
823XJAHX-*3 (21)	500 I	Opp	104		8-A-190	328170-14X	
823XMAHX-*3 (19)	500 I	Opp	122		8-A-190	328170-14X	
823XRAHX-*3 (23)	400 I	Opp	168		8-A-190	328170-14X	
880XBAHX-*3 (3)	500 I	Opp	69		8-A-190	328170-14X	
880XDAHX-*3 (4)	500 I	Opp	81		8-A-190	328170-14X	
880XGAHX-*3 (9)	500 I	Opp	88		8-A-190	328170-14X	
880XJAHX-*3 (5)	500 I	Opp	104		8-A-190	328170-14X	
880XMAHX-*3 (6)	500 I	Opp	122		8-A-190	328170-14X	
880XQAHX-*3 (16)	450 I	Opp	142		8-A-190	328170-14X	
880XRAHX-*3 (7)	400 I	Opp	168		8-A-190	328170-14X	
880XTAHX-*3 (8)	350 I	Opp	217		8-A-190	328170-14X	
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)							
282KBAJX-*5	300 C	Opp	69		8-A-062(T) 8-A-093	328170-8X	
282KCAJX-*5	300 C	Opp	83		8-A-062(T) 8-A-093	328170-8X	
282KDAJX-*5	300 C	Opp	99		8-A-062(T) 8-A-093	328170-8X	
282KGAJX-*5	300 C	Opp	118		8-A-062(T) 8-A-093	328170-8X	
282KKAJX-*5	300 C	Opp	132		8-A-062(T) 8-A-093	328170-8X	
282KMAJX-*5	300 C	Opp	148		8-A-062(T) 8-A-093	328170-8X	

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
272KAAJX-*3	300 C	Eng	56		7-A-240(T)	328530-1X	328170-168X
272KBAJX-*3	300 C	Eng	69		7-A-240(T)	328530-1X	328170-168X
272KCAJX-*3	300 C	Eng	83		7-A-240(T)	328530-1X	328170-168X
272KDAJX-*3	300 C	Eng	99		7-A-240(T)	328530-1X	328170-168X
272KGAJX-*3	300 C	Eng	118		7-A-240(T)	328530-1X	328170-168X
272KKAJX-*3	300 C	Eng	132		7-A-240(T)	328530-1X	328170-168X

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(14) Input Gear Part No. 5-P-1322
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-283
(20) Input Gear Part No. 5-P-285
(21) Input Gear Part No. 5-P-325
(23) Input Gear Part No. 5-P-721
(24) Input Gear Part No. 5-P-971
(25) Input Gear Part No. 5-P-980

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

TRXL1070
TRXL1070-A
TRXL10710
X1070
X1070-A
X10710
X10710-A

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.5700" (14.4800MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
37 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
2.8340" (71.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282KPAJX-*5	300 C	Opp	165		8-A-062(T) 8-A-093		328170-8X	272KMAJX-*3	300 C	Eng	148		7-A-240(T)	328530-1X	328170-168X
282KSAJX-*5	271 C	Opp	184		8-A-062(T) 8-A-093		328170-8X	272KPAJX-*3	300 C	Eng	165		7-A-240(T)	328530-1X	328170-168X
282KTAJX-*5	242 C	Opp	206		8-A-062(T) 8-A-093		328170-8X	272KSAJX-*3	271 C	Eng	184		7-A-240(T)	328530-1X	328170-168X
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	69		8-A-190		328170-14X								
885XGAHX-*3 (9)	500 I	Opp	88		8-A-190		328170-14X								
885XJAHX-*3 (5)	500 I	Opp	104		8-A-190		328170-14X								
885XMAHX-*3 (6)	500 I	Opp	122		8-A-190		328170-14X								
ONE SPEED - FORWARD & REVERSE															
340XFAHX-*5 (22)	200 I	Opp	88	92	7-A-140(P)(26)	328564X	Furnished	340XFAHX-*5 (22)	200 I	Eng	88	92	7-A-140(P)(26) 7-A-240(T)	328530-1X	328170-168X
863XBAHX-*5	500 I	Opp	69	85	8-A-190		328170-15X								
GEARED ADAPTERS															
628XAHX-4AH	250 I	Eng			8-A-190		328170-8X								

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(22) Input Gear Part No. 5-P-581
(26) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

TRL107

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.6250" (15.8800MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
34 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
3.0850" (78.3600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*5	250 I	Opp	32		7-A-032(P)(25)	328564X	Furnished	221XCAHX-*3	250 I	Eng	32		7-A-032(P)(25)	328530-1X	328170-83X
221ZEAHX-*5	250 I	Opp	37			328564X	Furnished	221XEAHX-*3	250 I	Eng	37			328530-1X	328170-83X
221ZPAHX-*5	200 I	Opp	60			328564X	Furnished	221XPAHX-*3	200 I	Eng	60			328530-1X	328170-83X
489XAAHX-*5 (10)	250 I	Opp	28				Furnished	442KFAHX-*3 (2)	250 I	Eng	45			328530-1X	7170-16X
489XCAHX-*5 (11)	250 I	Opp	36				Furnished	442KHAHX-*3 (13)	250 I	Eng	72			328530-1X	7170-16X
489XFAHX-*5 (2)	250 I	Opp	45				Furnished	442KLAHX-*3 (1)	250 I	Eng	58			328530-1X	7170-16X
489XHAHX-*5 (13)	250 I	Opp	72				Furnished	442KQAHX-*3 (1)	225 I	Eng	62			328530-1X	7170-16X
489XLAHX-*5 (1)	250 I	Opp	58				Furnished	442KRAHX-*3 (1)	225 I	Eng	72			328530-1X	7170-16X
489XQAHX-*5 (1)	225 I	Opp	62				Furnished	442KSAHX-*3 (1)	200 I	Eng	86			328530-1X	7170-16X
489XRAHX-*5 (1)	225 I	Opp	72				Furnished	442KUAHX-*3 (1)	195 I	Eng	102			328530-1X	7170-16X
489XSAHX-*5 (1)	200 I	Opp	86				Furnished	442KWAHX-*3 (1)	175 I	Eng	121			328530-1X	7170-16X
489XUAHX-*5 (1)	195 I	Opp	102				Furnished	442KXAHX-*3 (1)	140 I	Eng	143			328530-1X	7170-16X
489XWAHX-*5 (1)	175 I	Opp	121				Furnished	660KHAHX-*3 (13)	375 I	Eng	72			328530-1X	7170-16X
489XXAHX-*5 (1)	140 I	Opp	143				Furnished								
680XFAHX-*5 (8)	375 I	Opp	45				Furnished								
680XHAHX-*5 (17)	375 I	Opp	72				Furnished								
680XQAHX-*5 (9)	375 I	Opp	62				Furnished								
680XRAHX-*5 (16)	350 I	Opp	72				Furnished								
680XSAHX-*5 (12)	325 I	Opp	86				Furnished								
823XBAHX-*3 (19)	500 I	Opp	30				Furnished								
823XDAHX-*3 (23)	500 I	Opp	36				Furnished								
823XGAHX-*3 (24)	500 I	Opp	39				Furnished								
823XJAHX-*3 (20)	500 I	Opp	46				Furnished								
823XMAHX-*3 (18)	500 I	Opp	54				Furnished								
823XRAHX-*3 (22)	400 I	Opp	75				Furnished								
823XTKTX-*3 (15)	350 I	Opp	90		8-A-165(25)		Furnished								
880XBAHX-*3 (3)	500 I	Opp	30				Furnished								
880XJAHX-*3 (4)	500 I	Opp	46				Furnished								
880XMAHX-*3 (5)	500 I	Opp	54				Furnished								
880XQAHX-*3 (14)	450 I	Opp	64				Furnished								
880XRAHX-*3 (6)	400 I	Opp	75				Furnished								
880XTAHX-*3 (7)	350 I	Opp	96				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1102
(5) Input Gear Part No. 5-P-1103
(6) Input Gear Part No. 5-P-1104
(7) Input Gear Part No. 5-P-1105
(8) Input Gear Part No. 5-P-1242
(9) Input Gear Part No. 5-P-1246
(10) Input Gear Part No. 5-P-1280
(11) Input Gear Part No. 5-P-1287
(12) Input Gear Part No. 5-P-1322
(13) Input Gear Part No. 5-P-1364
(14) Input Gear Part No. 5-P-1385
(15) Input Gear Part No. 5-P-1395
(16) Input Gear Part No. 5-P-1441
(17) Input Gear Part No. 5-P-1494
(18) Input Gear Part No. 5-P-283
(19) Input Gear Part No. 5-P-285
(20) Input Gear Part No. 5-P-325
(22) Input Gear Part No. 5-P-721
(23) Input Gear Part No. 5-P-971
(24) Input Gear Part No. 5-P-980
(25) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

TRL107

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 08-BOLT Opening Gear FORWARD of Centerline 34 Teeth - SPUR **PITCH LINE TO APERTURE FACE:** 0.6250" (15.8800MM)	**TRANSMISSION GEAR DATA:** R.S. 06-BOLT Opening Gear FORWARD of Centerline 34 Teeth - SPUR **PITCH LINE TO APERTURE FACE:** 3.0850" (78.3600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBAJX-*5	300 C	Opp	31				Furnished	272KAAJX-*3	300 C	Eng	25			328530-1X	7170-16X
282XCAJX-*5	300 C	Opp	37				Furnished	272KBAJX-*3	300 C	Eng	31			328530-1X	7170-16X
282XDAJX-*5	300 C	Opp	44				Furnished	272KCAJX-*3	300 C	Eng	37			328530-1X	7170-16X
282XGAJX-*5	300 C	Opp	52				Furnished	272KDAJX-*3	300 C	Eng	44			328530-1X	7170-16X
282XKAJX-*5	300 C	Opp	59				Furnished	272KGAJX-*3	300 C	Eng	52			328530-1X	7170-16X
282XMAJX-*5	300 C	Opp	66				Furnished	272KKAJX-*3	300 C	Eng	59			328530-1X	7170-16X
282XPAJX-*5	300 C	Opp	73				Furnished	272KMAJX-*3	300 C	Eng	66			328530-1X	7170-16X
282XSAJX-*5	300 C	Opp	82				Furnished	272KPAJX-*3	300 C	Eng	73			328530-1X	7170-16X
282XTAJX-*5	300 C	Opp	92				Furnished	272KSAJX-*3	300 C	Eng	82			328530-1X	7170-16X
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	30				Furnished								
885XJAHX-*3 (4)	500 I	Opp	46				Furnished								
885XMAHX-*3 (5)	500 I	Opp	54				Furnished								
ONE SPEED - FORWARD & REVERSE															
340SFAHX-*5 (21)	200 I	Opp	39	41		310778X	Furnished	340XFAHX-*5 (21)	200 I	Eng	39	41	7-A-140(P)(25)	328530-1X	7170-16X
863XBAHX-*5	500 I	Opp	30	38			Furnished								
GEARED ADAPTERS															
628XAHX-4AH	250 I	Eng					Furnished								

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1102
(5) Input Gear Part No. 5-P-1103
(21) Input Gear Part No. 5-P-581
(25) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2090
T2090-L
T2130 (Front Box)
T2130-B (Front Box)
T2180 (Front Box)
T2180-B (Front Box)
T309
T309L
T309LR
T310-MLR (Front Box)
T313H (Front Box)
T313L (Front Box)
T313L21 (Front Box)
T313LR (Front Box)
T313LR21 (Front Box)
T318 (Front Box)
T318L (Front Box)
T318L21 (Front Box)
T318LR (Front Box)
T318LR21 (Front Box)
TM308M (Front box)
TM309M (Front Box)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCDAX-*5	250 I	Opp	68			328564X	Furnished	221XCAHX-*3	250 I	Eng	67		7-A-032(P)(20)	328554-2X	Furnished
221ZEDAX-*5	250 I	Opp	75			328564X	Furnished	221XCDAX-*3	250 I	Opp	68				Furnished
221ZPDAX-*5	200 I	Opp	122			328564X	Furnished	221XEAHX-*3	250 I	Eng	77			328554-2X	Furnished
489ZADAX-*5 (10)	250 I	Opp	59				Furnished	221XEDAX-*3	250 I	Opp	75				Furnished
489ZCDAX-*5 (11)	250 I	Opp	76				Furnished	221XPAHX-*3	200 I	Eng	125			328554-2X	Furnished
489ZFDAX-*5 (4)	250 I	Opp	94				Furnished	221XPDAX-*3	200 I	Opp	122				Furnished
489ZHDAX-*5 (15)	250 I	Opp	109				Furnished	442XFAHX-*3 (3)	250 I	Eng	93			328554-2X	Furnished
489ZLDAX-*5 (2)	250 I	Opp	121				Furnished	442XHAHX-*3 (15)	250 I	Eng	109			328554-2X	Furnished
489ZQDAX-*5 (2)	225 I	Opp	130				Furnished	442XLAHX-*3 (1)	250 I	Eng	120			328554-2X	Furnished
489ZRDAX-*5 (2)	225 I	Opp	151				Furnished	442XQAHX-*3 (1)	225 I	Eng	130			328554-2X	Furnished
489ZSDAX-*5 (2)	200 I	Opp	180				Furnished	442XRAHX-*3 (1)	225 I	Eng	150			328554-2X	Furnished
489ZUDAX-*5 (2)	195 I	Opp	214				Furnished	442XSAHX-*3 (1)	200 I	Eng	179			328554-2X	Furnished
489ZWDAX-*5 (2)	175 I	Opp	252				Furnished	442XUAHX-*3 (1)	195 I	Eng	213			328554-2X	Furnished
489ZXDAX-*5 (2)	140 I	Opp	298				Furnished	442XWAHX-*3 (1)	175 I	Eng	250			328554-2X	Furnished
680ZFDAX-*5 (12)	375 I	Opp	94				Furnished	442XXAHX-*3 (1)	140 I	Eng	296			328554-2X	Furnished
680ZQDAX-*5 (13)	375 I	Opp	130				Furnished	442ZADAX-*3 (10)	250 I	Opp	59		7-A-062		Furnished
680ZSDAX-*5 (14)	325 I	Opp	180				Furnished	442ZCDAX-*3 (11)	250 I	Opp	76		7-A-062		Furnished
823XBDAX-*5 (17)	500 I	Opp	61				Furnished	442ZFDAX-*3 (4)	250 I	Opp	94		7-A-062		Furnished
823XMDAX-*5 (18)	500 I	Opp	108				Furnished	442ZHDAX-*3 (15)	250 I	Opp	109		7-A-062		Furnished
823XRDAX-*5 (19)	400 I	Opp	150				Furnished	442ZLDAX-*3 (2)	250 I	Opp	121		7-A-062		Furnished
880XBDAX-*5 (5)	500 I	Opp	61				Furnished	442ZQDAX-*3 (2)	225 I	Opp	130		7-A-062		Furnished
880XGDAX-*5 (9)	500 I	Opp	78				Furnished	442ZRDAX-*3 (2)	225 I	Opp	151		7-A-062		Furnished
880XMDAX-*5 (6)	500 I	Opp	108				Furnished	442ZSDAX-*3 (2)	200 I	Opp	180		7-A-062		Furnished
880XRDAX-*5 (7)	400 I	Opp	150				Furnished	442ZUDAX-*3 (2)	195 I	Opp	214		7-A-062		Furnished
880XTDAX-*5 (8)	350 I	Opp	193				Furnished	442ZWDAX-*3 (2)	175 I	Opp	252		7-A-062		Furnished
								442ZXDAX-*3 (2)	140 I	Opp	298		7-A-062		Furnished
								660XHAHX-*3 (15)	375 I	Eng	109			328554-2X	Furnished
								660ZFDAX-*3 (12)	375 I	Opp	94		7-A-062		Furnished
								660ZQDAX-*3 (13)	375 I	Opp	130		7-A-062		Furnished
								660ZSDAX-*3 (14)	325 I	Opp	180		7-A-062		Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1037
(3) Input Gear Part No. 5-P-1077
(4) Input Gear Part No. 5-P-1085
(5) Input Gear Part No. 5-P-1120
(6) Input Gear Part No. 5-P-1121
(7) Input Gear Part No. 5-P-1122
(8) Input Gear Part No. 5-P-1123
(9) Input Gear Part No. 5-P-1174
(10) Input Gear Part No. 5-P-1284
(11) Input Gear Part No. 5-P-1291
(12) Input Gear Part No. 5-P-1330
(13) Input Gear Part No. 5-P-1331
(14) Input Gear Part No. 5-P-1332
(15) Input Gear Part No. 5-P-1365
(17) Input Gear Part No. 5-P-636
(18) Input Gear Part No. 5-P-637
(19) Input Gear Part No. 5-P-808
(20) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2090
T2090-L
T2130 (Front Box)
T2130-B (Front Box)
T2180 (Front Box)
T2180-B (Front Box)
T309
T309L
T309LR
T310-MLR (Front Box)
T313H (Front Box)
T313L (Front Box)
T313L21 (Front Box)
T313LR (Front Box)
T313LR21 (Front Box)
T318 (Front Box)
T318L (Front Box)
T318L21 (Front Box)
T318LR (Front Box)
T318LR21 (Front Box)
TM308M (Front box)
TM309M (Front Box)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBDAX-*5	300 C	Opp	62				Furnished	272XADAX-*3	300 C	Opp	50				Furnished
282XCDAX-*5	300 C	Opp	75				Furnished	272XBDAX-*3	300 C	Opp	62				Furnished
282XDDAX-*5	300 C	Opp	89				Furnished	272XCDAX-*3	300 C	Opp	75				Furnished
282XGDAX-*5	300 C	Opp	106				Furnished	272XDDAX-*3	300 C	Opp	89				Furnished
282XKDAX-*5	300 C	Opp	119				Furnished	272XGDAX-*3	300 C	Opp	106				Furnished
282XMDAX-*5	300 C	Opp	133				Furnished	272XKDAX-*3	300 C	Opp	119				Furnished
282XPDAX-*5	300 C	Opp	148				Furnished	272XMDAX-*3	300 C	Opp	133				Furnished
282XSDAX-*5	300 C	Opp	166				Furnished	272XPDAX-*3	300 C	Opp	148				Furnished
282XTDAX-*5	269 C	Opp	186				Furnished	272XSDAX-*3	300 C	Opp	166				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBDAX-*5 (5)	500 I	Opp	61				Furnished								
885XGDAX-*5 (9)	500 I	Opp	78				Furnished								
885XMDAX-*5 (6)	500 I	Opp	108				Furnished								
ONE SPEED - FORWARD & REVERSE															
348ZFDAX-*5 (16)	200 I	Opp	85	90			Furnished	340SFDAX-*5 (16)	200 I	Opp	85	90			Furnished
863XBDAX-*5	500 I	Opp	61	75			Furnished								
GEARED ADAPTERS															
628ZDAX-3DA	250 I	Eng					Furnished	626ZDAX-3DA	250 I	Eng				7-A-062	Furnished
								630ZDAX-3DA	250 I	Eng				7-A-062	Furnished
								645ZDAX-3DA	250 I	Eng				7-A-062	Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(5) Input Gear Part No. 5-P-1120
(6) Input Gear Part No. 5-P-1121
(9) Input Gear Part No. 5-P-1174
(16) Input Gear Part No. 5-P-634

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2100
T2110-B (FRONT BOX FOR T2110B)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCDAX-*5	250 I	Opp	63			328564X	Furnished	221XCAHX-*3	250 I	Eng	62		7-A-032(P)(20)	328554-2X	Furnished
221ZEDAX-*5	250 I	Opp	70			328564X	Furnished	221XCDAX-*3	250 I	Opp	63				Furnished
221ZPDAX-*5	200 I	Opp	113			328564X	Furnished	221XEAHX-*3	250 I	Eng	72			328554-2X	Furnished
489ZADAX-*5 (10)	250 I	Opp	55				Furnished	221XEDAX-*3	250 I	Opp	70				Furnished
489ZCDAX-*5 (11)	250 I	Opp	70				Furnished	221XPAHX-*3	200 I	Eng	116			328554-2X	Furnished
489ZFDAX-*5 (4)	250 I	Opp	87				Furnished	221XPDAX-*3	200 I	Opp	113				Furnished
489ZHDAX-*5 (15)	250 I	Opp	101				Furnished	442XFAHX-*3 (3)	250 I	Eng	86			328554-2X	Furnished
489ZLDAX-*5 (2)	250 I	Opp	113				Furnished	442XHAHX-*3 (15)	250 I	Eng	101			328554-2X	Furnished
489ZQDAX-*5 (2)	225 I	Opp	121				Furnished	442XLAHX-*3 (1)	250 I	Eng	112			328554-2X	Furnished
489ZRDAX-*5 (2)	225 I	Opp	140				Furnished	442XQAHX-*3 (1)	225 I	Eng	120			328554-2X	Furnished
489ZSDAX-*5 (2)	200 I	Opp	167				Furnished	442XRAHX-*3 (1)	225 I	Eng	139			328554-2X	Furnished
489ZUDAX-*5 (2)	195 I	Opp	199				Furnished	442XSAHX-*3 (1)	200 I	Eng	166			328554-2X	Furnished
489ZWDAX-*5 (2)	175 I	Opp	234				Furnished	442XUAHX-*3 (1)	195 I	Eng	198			328554-2X	Furnished
489ZXDAX-*5 (2)	140 I	Opp	277				Furnished	442XWAHX-*3 (1)	175 I	Eng	233			328554-2X	Furnished
680ZFDAX-*5 (12)	375 I	Opp	87				Furnished	442XXAHX-*3 (1)	140 I	Eng	275			328554-2X	Furnished
680ZQDAX-*5 (13)	375 I	Opp	121				Furnished	442ZADAX-*3 (10)	250 I	Opp	55		7-A-062		Furnished
680ZSDAX-*5 (14)	325 I	Opp	167				Furnished	442ZCDAX-*3 (11)	250 I	Opp	70		7-A-062		Furnished
823XBDAX-*5 (17)	500 I	Opp	57				Furnished	442ZFDAX-*3 (4)	250 I	Opp	87		7-A-062		Furnished
823XMDAX-*5 (18)	500 I	Opp	101				Furnished	442ZHDAX-*3 (15)	250 I	Opp	101		7-A-062		Furnished
823XRDAX-*5 (19)	400 I	Opp	139				Furnished	442ZLDAX-*3 (2)	250 I	Opp	113		7-A-062		Furnished
880XBDAX-*5 (5)	500 I	Opp	57				Furnished	442ZQDAX-*3 (2)	225 I	Opp	121		7-A-062		Furnished
880XGDAX-*5 (9)	500 I	Opp	73				Furnished	442ZRDAX-*3 (2)	225 I	Opp	140		7-A-062		Furnished
880XMDAX-*5 (6)	500 I	Opp	101				Furnished	442ZSDAX-*3 (2)	200 I	Opp	167		7-A-062		Furnished
880XRDAX-*5 (7)	400 I	Opp	139				Furnished	442ZUDAX-*3 (2)	195 I	Opp	199		7-A-062		Furnished
880XTDAX-*5 (8)	350 I	Opp	179				Furnished	442ZWDAX-*3 (2)	175 I	Opp	234		7-A-062		Furnished
								442ZXDAX-*3 (2)	140 I	Opp	277		7-A-062		Furnished
								660XHAHX-*3 (15)	375 I	Eng	101			328554-2X	Furnished
								660ZFDAX-*3 (12)	375 I	Opp	87		7-A-062		Furnished
								660ZQDAX-*3 (13)	375 I	Opp	121		7-A-062		Furnished
								660ZSDAX-*3 (14)	325 I	Opp	167		7-A-062		Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1037
(3) Input Gear Part No. 5-P-1077
(4) Input Gear Part No. 5-P-1085
(5) Input Gear Part No. 5-P-1120
(6) Input Gear Part No. 5-P-1121
(7) Input Gear Part No. 5-P-1122
(8) Input Gear Part No. 5-P-1123
(9) Input Gear Part No. 5-P-1174
(10) Input Gear Part No. 5-P-1284
(11) Input Gear Part No. 5-P-1291
(12) Input Gear Part No. 5-P-1330
(13) Input Gear Part No. 5-P-1331
(14) Input Gear Part No. 5-P-1332
(15) Input Gear Part No. 5-P-1365
(17) Input Gear Part No. 5-P-636
(18) Input Gear Part No. 5-P-637
(19) Input Gear Part No. 5-P-808
(20) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2100
T2110-B (FRONT BOX FOR T2110B)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBDAX-*5	300 C	Opp	57				Furnished	272XADAX-*3	300 C	Opp	47				Furnished
282XCDAX-*5	300 C	Opp	69				Furnished	272XBDAX-*3	300 C	Opp	57				Furnished
282XDDAX-*5	300 C	Opp	83				Furnished	272XCDAX-*3	300 C	Opp	69				Furnished
282XGDAX-*5	300 C	Opp	99				Furnished	272XDDAX-*3	300 C	Opp	83				Furnished
282XKDAX-*5	300 C	Opp	110				Furnished	272XGDAX-*3	300 C	Opp	99				Furnished
282XMDAX-*5	300 C	Opp	123				Furnished	272XKDAX-*3	300 C	Opp	110				Furnished
282XPDAX-*5	300 C	Opp	138				Furnished	272XMDAX-*3	300 C	Opp	123				Furnished
282XSDAX-*5	300 C	Opp	154				Furnished	272XPDAX-*3	300 C	Opp	138				Furnished
282XTDAX-*5	290 C	Opp	172				Furnished	272XSDAX-*3	300 C	Opp	154				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBDAX-*5 (5)	500 I	Opp	57				Furnished								
885XGDAX-*5 (9)	500 I	Opp	73				Furnished								
885XMDAX-*5 (6)	500 I	Opp	101				Furnished								
ONE SPEED - FORWARD & REVERSE															
348ZFDAX-*5 (16)	200 I	Opp	79	83			Furnished	340SFDAX-*5 (16)	200 I	Opp	79	83			Furnished
863XBDAX-*5	500 I	Opp	57	70			Furnished								
GEARED ADAPTERS															
628ZDAX-5DA	250 I	Eng					Furnished	626ZDAX-3DA	250 I	Eng				7-A-062	Furnished
								630ZDAX-3DA	250 I	Eng				7-A-062	Furnished
								645ZDAX-3DA	250 I	Eng				7-A-062	Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(5) Input Gear Part No. 5-P-1120
(6) Input Gear Part No. 5-P-1121
(9) Input Gear Part No. 5-P-1174
(16) Input Gear Part No. 5-P-634

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2050	T305
T2060	T306
T2070	T307
T2070-A (Front Box)	T307M (Front Box)
T2070-B (Front Box)	T308
T2070-F	T308M (Front Box)
T2080	TX2060
T2080-B (Front Box)	X2060

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
221ZCDAX-*5	250 I	Opp	81			328564X	Furnished	221XCDAX-*3	250 I	Opp	81				Furnished
221ZEDAX-*5	250 I	Opp	90			328564X	Furnished	221XEDAX-*3	250 I	Opp	90				Furnished
221ZPDAX-*5	200 I	Opp	146			328564X	Furnished	221XPDAX-*3	200 I	Opp	146				Furnished
489ZADAX-*5 (8)	250 I	Opp	71				Furnished	442ZADAX-*3 (8)	250 I	Opp	71		7-A-062		Furnished
489ZCDAX-*5 (9)	250 I	Opp	90				Furnished	442ZCDAX-*3 (9)	250 I	Opp	90		7-A-062		Furnished
489ZFDAX-*5 (2)	250 I	Opp	112				Furnished	442ZFDAX-*3 (2)	250 I	Opp	112		7-A-062		Furnished
489ZHDAX-*5 (13)	250 I	Opp	130				Furnished	442ZHDAX-*3 (13)	250 I	Opp	130		7-A-062		Furnished
489ZLDAX-*5 (1)	250 I	Opp	144				Furnished	442ZLDAX-*3 (1)	250 I	Opp	144		7-A-062		Furnished
489ZQDAX-*5 (1)	225 I	Opp	156				Furnished	442ZQDAX-*3 (1)	225 I	Opp	156		7-A-062		Furnished
489ZRDAX-*5 (1)	225 I	Opp	180				Furnished	442ZRDAX-*3 (1)	225 I	Opp	180		7-A-062		Furnished
489ZSDAX-*5 (1)	200 I	Opp	214				Furnished	442ZSDAX-*3 (1)	200 I	Opp	214		7-A-062		Furnished
489ZUDAX-*5 (1)	195 I	Opp	255				Furnished	442ZUDAX-*3 (1)	195 I	Opp	255		7-A-062		Furnished
489ZWDAX-*5 (1)	175 I	Opp	301				Furnished	442ZWDAX-*3 (1)	175 I	Opp	301		7-A-062		Furnished
489ZXDAX-*5 (1)	140 I	Opp	356				Furnished	442ZXDAX-*3 (1)	140 I	Opp	356		7-A-062		Furnished
680ZFDAX-*5 (10)	375 I	Opp	112				Furnished	660ZFDAX-*3 (10)	375 I	Opp	112		7-A-062		Furnished
680ZQDAX-*5 (11)	375 I	Opp	156				Furnished	660ZQDAX-*3 (11)	375 I	Opp	156		7-A-062		Furnished
680ZSDAX-*5 (12)	325 I	Opp	214				Furnished	660ZSDAX-*3 (12)	325 I	Opp	214		7-A-062		Furnished
823XBDAX-*5 (15)	500 I	Opp	73				Furnished								
823XMDAX-*5 (16)	500 I	Opp	129				Furnished								
823XRDAX-*5 (17)	400 I	Opp	178				Furnished								
880XBDAX-*5 (3)	500 I	Opp	73				Furnished								
880XGDAX-*5 (7)	500 I	Opp	94				Furnished								
880XMDAX-*5 (4)	500 I	Opp	129				Furnished								
880XRDAX-*5 (5)	400 I	Opp	178				Furnished								
880XTDAX-*5 (6)	350 I	Opp	230				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBDAX-*5	300 C	Opp	74				Furnished	272XADAX-*3	300 C	Opp	60				Furnished
282XCDAX-*5	300 C	Opp	89				Furnished	272XBDAX-*3	300 C	Opp	74				Furnished
282XDDAX-*5	300 C	Opp	107				Furnished	272XCDAX-*3	300 C	Opp	89				Furnished
282XGDAX-*5	300 C	Opp	127				Furnished	272XDAJX-*3	300 C	Opp	107				Furnished
282XKDAX-*5	300 C	Opp	142				Furnished	272XGDAX-*3	300 C	Opp	127				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: 272*S Ratio - Contact Chelsea Engineering for Application approval for continuous duty applications.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1037
(2) Input Gear Part No. 5-P-1085
(3) Input Gear Part No. 5-P-1120
(4) Input Gear Part No. 5-P-1121
(5) Input Gear Part No. 5-P-1122
(6) Input Gear Part No. 5-P-1123
(7) Input Gear Part No. 5-P-1174
(8) Input Gear Part No. 5-P-1284
(9) Input Gear Part No. 5-P-1291
(10) Input Gear Part No. 5-P-1330
(11) Input Gear Part No. 5-P-1331
(12) Input Gear Part No. 5-P-1332
(13) Input Gear Part No. 5-P-1365
(15) Input Gear Part No. 5-P-636
(16) Input Gear Part No. 5-P-637
(17) Input Gear Part No. 5-P-808

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2050	T305
T2060	T306
T2070	T307
T2070-A (Front Box)	T307M (Front Box)
T2070-B (Front Box)	T308
T2070-F	T308M (Front Box)
T2080	TX2060
T2080-B (Front Box)	X2060

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XMDAX-*5	300 C	Opp	158				Furnished	272XKDAX-*3	300 C	Opp	142				Furnished
282XPDAX-*5	283 C	Opp	177				Furnished	272XMDAX-*3	300 C	Opp	158				Furnished
282XSDAX-*5	253 C	Opp	198				Furnished	272XPDAX-*3	283 C	Opp	177				Furnished
282XTDAX-*5	226 C	Opp	221				Furnished	272XSDAX-*3	253 C	Opp	198				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBDAX-*5 (3)	500 I	Opp	73				Furnished								
885XGDAX-*5 (7)	500 I	Opp	94				Furnished								
885XMDAX-*5 (4)	500 I	Opp	129				Furnished								
ONE SPEED - FORWARD & REVERSE															
348ZFDAX-*5 (14)	200 I	Opp	102	107			Furnished	340SFDAX-*5 (14)	200 I	Opp	102	107			Furnished
863XBDAX-*5	500 I	Opp	73	90			Furnished								
GEARED ADAPTERS															
628ZDAX-3DA	250 I	Eng					Furnished	626ZDAX-3DA	250 I	Eng				7-A-062	Furnished
								630ZDAX-3DA	250 I	Eng				7-A-062	Furnished
								645ZDAX-3DA	250 I	Eng				7-A-062	Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: 272*S Ratio - Contact Chelsea Engineering for Application approval for continuous duty applications.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1120
(4) Input Gear Part No. 5-P-1121
(7) Input Gear Part No. 5-P-1174
(14) Input Gear Part No. 5-P-634

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2070-A (Rear Box)
T2070-B (Rear Box)
T2070-D (Rear Box)
T2080-B (Rear Box)
T2080-D (Rear Box)
T307M (Rear Box)
T308M (Rear Box)
TM308M (Rear Box)
TM309M (Rear Box)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.6670" (16.9400MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0550" (26.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
221ZCDAX-*5	250 I	Opp	90		7-A-062(P)	328564X	Furnished	221XCDAX-*3	250 I	Opp	90		7-A-032		Furnished
221ZEDAX-*5	250 I	Opp	100		7-A-062(P)	328564X	Furnished	221XEDAX-*3	250 I	Opp	100		7-A-032		Furnished
221ZPDAX-*5	200 I	Opp	162		7-A-062(P)	328564X	Furnished	221XPDAX-*3	200 I	Opp	162		7-A-032		Furnished
489ZADAX-*5 (8)	250 I	Opp	78		8-A-062		328170-190X	442ZADAX-*3 (8)	250 I	Opp	78		7-A-140		Furnished
489ZCDAX-*5 (9)	250 I	Opp	100		8-A-062		328170-190X	442ZCDAX-*3 (9)	250 I	Opp	100		7-A-140		Furnished
489ZFDAX-*5 (2)	250 I	Opp	124		8-A-062		328170-190X	442ZFDAX-*3 (2)	250 I	Opp	124		7-A-140		Furnished
489ZHDAX-*5 (13)	250 I	Opp	144		8-A-062		328170-190X	442ZHDAX-*3 (13)	250 I	Opp	144		7-A-140		Furnished
489ZLDAX-*5 (1)	250 I	Opp	161		8-A-062		328170-190X	442ZLDAX-*3 (1)	250 I	Opp	161		7-A-140		Furnished
489ZQDAX-*5 (1)	225 I	Opp	173		8-A-062		328170-190X	442ZQDAX-*3 (1)	225 I	Opp	173		7-A-140		Furnished
489ZRDAX-*5 (1)	225 I	Opp	200		8-A-062		328170-190X	442ZRDAX-*3 (1)	225 I	Opp	200		7-A-140		Furnished
489ZSDAX-*5 (1)	200 I	Opp	238		8-A-062		328170-190X	442ZSDAX-*3 (1)	200 I	Opp	238		7-A-140		Furnished
489ZUDAX-*5 (1)	195 I	Opp	284		8-A-062		328170-190X	442ZUDAX-*3 (1)	195 I	Opp	284		7-A-140		Furnished
489ZWDAX-*5 (1)	175 I	Opp	334		8-A-062		328170-190X	442ZWDAX-*3 (1)	175 I	Opp	334		7-A-140		Furnished
489ZXDAX-*5 (1)	140 I	Opp	395		8-A-062		328170-190X	442ZXDAX-*3 (1)	140 I	Opp	395		7-A-140		Furnished
680ZFDAX-*5 (10)	375 I	Opp	124		8-A-062		328170-190X	660ZFDAX-*3 (10)	375 I	Opp	124		7-A-140		Furnished
680ZQDAX-*5 (11)	375 I	Opp	173		8-A-062		328170-190X	660ZQDAX-*3 (11)	375 I	Opp	173		7-A-140		Furnished
680ZSDAX-*5 (12)	325 I	Opp	238		8-A-062		328170-190X	660ZSDAX-*3 (12)	325 I	Opp	238		7-A-140		Furnished
823XBDAX-*5 (15)	500 I	Opp	81				Furnished								
823XMDAX-*5 (16)	500 I	Opp	143				Furnished								
823XRDAX-*5 (17)	400 I	Opp	198				Furnished								
880XBDAX-*5 (3)	500 I	Opp	81				Furnished								
880XGDAX-*5 (7)	500 I	Opp	104				Furnished								
880XMDAX-*5 (4)	500 I	Opp	143				Furnished								
880XRDAX-*5 (5)	400 I	Opp	198				Furnished								
880XTDAX-*5 (6)	350 I	Opp	255				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBDAX-*5	300 C	Opp	82		8-A-062		328170-190X	272XADAX-*3	300 C	Opp	67		7-A-032		Furnished
282XCDAX-*5	300 C	Opp	99		8-A-062		328170-190X	272XBDAX-*3	300 C	Opp	82		7-A-032		Furnished
282XDDAX-*5	300 C	Opp	118		8-A-062		328170-190X	272XCDAX-*3	300 C	Opp	99		7-A-032		Furnished
282XGDAX-*5	300 C	Opp	141		8-A-062		328170-190X	272XGDAX-*3	300 C	Opp	141		7-A-032		Furnished
282XKDAX-*5	300 C	Opp	157		8-A-062		328170-190X	272XKDAX-*3	300 C	Opp	157		7-A-032		Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: 272*S Ratio - Contact Chelsea Engineering for application approval for continuous duty applications.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1037
(2) Input Gear Part No. 5-P-1085
(3) Input Gear Part No. 5-P-1120
(4) Input Gear Part No. 5-P-1121
(5) Input Gear Part No. 5-P-1122
(6) Input Gear Part No. 5-P-1123
(7) Input Gear Part No. 5-P-1174
(8) Input Gear Part No. 5-P-1284
(9) Input Gear Part No. 5-P-1291
(10) Input Gear Part No. 5-P-1330
(11) Input Gear Part No. 5-P-1331
(12) Input Gear Part No. 5-P-1332
(13) Input Gear Part No. 5-P-1365
(15) Input Gear Part No. 5-P-636
(16) Input Gear Part No. 5-P-637
(17) Input Gear Part No. 5-P-808

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2070-A (Rear Box)
T2070-B (Rear Box)
T2070-D (Rear Box)
T2080-B (Rear Box)
T2080-D (Rear Box)
T307M (Rear Box)
T308M (Rear Box)
TM308M (Rear Box)

TM309M (Rear Box)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.6670" (16.9400MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0550" (26.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XMDAX-*5	284 C	Opp	176		8-A-062		328170-190X	272XMDAX-*3	284 C	Opp	176		7-A-032		Furnished
282XPDAX-*5	254 C	Opp	197		8-A-062		328170-190X	272XPDAX-*3	254 C	Opp	197		7-A-032		Furnished
282XSDAX-*5	227 C	Opp	220		8-A-062		328170-190X	272XSDAX-*3	227 C	Opp	220		7-A-032		Furnished
282XTDAX-*5	203 C	Opp	246		8-A-062		328170-190X								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBDAX-*5 (3)	500 I	Opp	81				Furnished								
885XGDAX-*5 (7)	500 I	Opp	104				Furnished								
885XMDAX-*5 (4)	500 I	Opp	143				Furnished								
ONE SPEED - FORWARD & REVERSE															
348ZFDAX-*5 (14)	200 I	Opp	113	119	8-A-062		328170-190X	340SFDAX-*5 (14)	200 I	Opp	113	119	7-A-062		Furnished
863XBDAX-*5	500 I	Opp	81	100			Furnished								
GEARED ADAPTERS															
628ZDAX-5DA	250 I	Eng					Furnished	626ZDAX-3DA	250 I	Eng			7-A-062		Furnished
645ZDAX-3DA	250 I	Eng			7-A-062		Furnished	630ZDAX-3DA	250 I	Eng			7-A-062		Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: 272*S Ratio - Contact Chelsea Engineering for application approval for continuous duty applications.

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1120
(4) Input Gear Part No. 5-P-1121
(7) Input Gear Part No. 5-P-1174
(14) Input Gear Part No. 5-P-634

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2180 (Rear Box)
T2180-B (Rear Box)
T318LR (Rear Box)
T318L (Rear Box)
T318LR21 (Rear Box)
T318L21 (Rear Box)
T310-M (Rear Box)
T310-MLR (Rear Box)

T310ME (Rear box, same as T310M, output flange extended for rear mount PTO)
T318 (Rear Box)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.6670" (16.9400MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0550" (26.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
221ZCDAX-*5	250 I	Opp	54		7-A-062(P)	328564X	Furnished	221XCDAX-*3	250 I	Opp	54		7-A-032		Furnished
221ZEDAX-*5	250 I	Opp	59		7-A-062(P)	328564X	Furnished	221XEDAX-*3	250 I	Opp	59		7-A-032		Furnished
221ZPDAX-*5	200 I	Opp	97		7-A-062(P)	328564X	Furnished	221XPDAX-*3	200 I	Opp	97		7-A-032		Furnished
489ZADAX-*5 (8)	250 I	Opp	47		8-A-062		328170-190X	442ZADAX-*3 (8)	250 I	Opp	47		7-A-140		Furnished
489ZCDAX-*5 (9)	250 I	Opp	60		8-A-062		328170-190X	442ZCDAX-*3 (9)	250 I	Opp	60		7-A-140		Furnished
489ZFDAX-*5 (2)	250 I	Opp	74		8-A-062		328170-190X	442ZFDAX-*3 (2)	250 I	Opp	74		7-A-140		Furnished
489ZHDAX-*5 (13)	250 I	Opp	86		8-A-062		328170-190X	442ZHDAX-*3 (13)	250 I	Opp	86		7-A-140		Furnished
489ZLDAX-*5 (1)	250 I	Opp	96		8-A-062		328170-190X	442ZLDAX-*3 (1)	250 I	Opp	96		7-A-140		Furnished
489ZQDAX-*5 (1)	225 I	Opp	103		8-A-062		328170-190X	442ZQDAX-*3 (1)	225 I	Opp	103		7-A-140		Furnished
489ZRDAX-*5 (1)	225 I	Opp	120		8-A-062		328170-190X	442ZRDAX-*3 (1)	225 I	Opp	120		7-A-140		Furnished
489ZSDAX-*5 (1)	200 I	Opp	142		8-A-062		328170-190X	442ZSDAX-*3 (1)	200 I	Opp	142		7-A-140		Furnished
489ZUDAX-*5 (1)	195 I	Opp	169		8-A-062		328170-190X	442ZUDAX-*3 (1)	195 I	Opp	169		7-A-140		Furnished
489ZWDAX-*5 (1)	175 I	Opp	199		8-A-062		328170-190X	442ZWDAX-*3 (1)	175 I	Opp	199		7-A-140		Furnished
489ZXDAX-*5 (1)	140 I	Opp	236		8-A-062		328170-190X	442ZXDAX-*3 (1)	140 I	Opp	236		7-A-140		Furnished
680ZFDAX-*5 (10)	375 I	Opp	74		8-A-062		328170-190X	660ZFDAX-*3 (10)	375 I	Opp	74		7-A-140		Furnished
680ZQDAX-*5 (11)	375 I	Opp	103		8-A-062		328170-190X	660ZQDAX-*3 (11)	375 I	Opp	103		7-A-140		Furnished
680ZSDAX-*5 (12)	325 I	Opp	142		8-A-062		328170-190X	660ZSDAX-*3 (12)	325 I	Opp	142		7-A-140		Furnished
823XBDAX-*5	500 I	Opp	48				Furnished								
823XMDAX-*5 (15)	500 I	Opp	86				Furnished								
823XRDAX-*5 (16)	400 I	Opp	118				Furnished								
880XBDAX-*5 (3)	500 I	Opp	48				Furnished								
880XGDAX-*5 (7)	500 I	Opp	62				Furnished								
880XMDAX-*5 (4)	500 I	Opp	86				Furnished								
880XRDAX-*5 (5)	400 I	Opp	118				Furnished								
880XTDAX-*5 (6)	350 I	Opp	152				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBDAX-*5	300 C	Opp	49		8-A-062		Furnished	272XADAX-*3	300 C	Opp	40		7-A-032		Furnished
282XCDAX-*5	300 C	Opp	59		8-A-062		Furnished	272XBDAX-*3	300 C	Opp	49		7-A-032		Furnished
282XDDAX-*5	300 C	Opp	71		8-A-062		Furnished	272XCDAX-*3	300 C	Opp	59		7-A-032		Furnished
282XGDAX-*5	300 C	Opp	84		8-A-062		Furnished	272XDAJX-*3	300 C	Opp	71		7-A-032		Furnished
282XKDAX-*5	300 C	Opp	94		8-A-062		Furnished	272XGDAX-*3	300 C	Opp	84		7-A-032		Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

CAUTION: Mack Does Not approve PTO operations with the Range Selector in the "HI" position. Damage to the transmission synchronizers may occur. Refer to Mack operator's manual for correct PTO operation.

(1) Input Gear Part No. 5-P-1037
(2) Input Gear Part No. 5-P-1085
(3) Input Gear Part No. 5-P-1120
(4) Input Gear Part No. 5-P-1121
(5) Input Gear Part No. 5-P-1122
(6) Input Gear Part No. 5-P-1123
(7) Input Gear Part No. 5-P-1174
(8) Input Gear Part No. 5-P-1284
(9) Input Gear Part No. 5-P-1291
(10) Input Gear Part No. 5-P-1330
(11) Input Gear Part No. 5-P-1331
(12) Input Gear Part No. 5-P-1332
(13) Input Gear Part No. 5-P-1365
(15) Input Gear Part No. 5-P-637
(16) Input Gear Part No. 5-P-808

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2180 (Rear Box)
T2180-B (Rear Box)
T318LR (Rear Box)
T318L (Rear Box)
T318LR21 (Rear Box)
T318L21 (Rear Box)
T310-M (Rear Box)
T310-MLR (Rear Box)
T310ME (Rear box, same as T310M, output flange extended for rear mount PTO)
T318 (Rear Box)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.6670" (16.9400MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0550" (26.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XMDAX-*5	300 C	Opp	105		8-A-062		Furnished	272XKDAX-*3	300 C	Opp	94		7-A-032		Furnished
282XPDAX-*5	300 C	Opp	117		8-A-062		Furnished	272XMDAX-*3	300 C	Opp	105		7-A-032		Furnished
282XSDAX-*5	300 C	Opp	131		8-A-062		Furnished	272XPDAX-*3	300 C	Opp	117		7-A-032		Furnished
282XTDAX-*5	300 C	Opp	147		8-A-062		Furnished	272XSDAX-*3	300 C	Opp	131		7-A-032		Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBDAX-*5 (3)	500 I	Opp	48				Furnished								
885XGDAX-*5 (7)	500 I	Opp	62				Furnished								
885XMDAX-*5 (4)	500 I	Opp	86				Furnished								
ONE SPEED - FORWARD & REVERSE															
348ZFDAX-*5 (14)	200 I	Opp	68	71	8-A-062		328170-190X	340SFDAX-*5 (14)	200 I	Opp	68	71	7-A-062		Furnished
863XBDAX-*5	500 I	Opp	48	60			Furnished								

Continued on Next Page

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IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

CAUTION: Mack Does Not approve PTO operations with the Range Selector in the "HI" position. Damage to the transmission synchronizers may occur. Refer to Mack operator's manual for correct PTO operation.

(3) Input Gear Part No. 5-P-1120
(4) Input Gear Part No. 5-P-1121
(7) Input Gear Part No. 5-P-1174
(14) Input Gear Part No. 5-P-634

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2180 (Rear Box)
T2180-B (Rear Box)
T318LR (Rear Box)
T318L (Rear Box)
T318LR21 (Rear Box)
T318L21 (Rear Box)
T310-M (Rear Box)
T310-MLR (Rear Box)
T310ME (Rear box, same as T310M, output flange extended for rear mount PTO)
T318 (Rear Box)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.6670" (16.9400MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0550" (26.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

GEARED ADAPTERS

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
628ZDAX-5DA	250 I	Eng			8-A-062	328170-190X	
626ZDAX-3DA	250 I	Eng			7-A-140		Furnished
645ZDAX-3DA	250 I	Eng			7-A-140		Furnished

Available PTO Output Shaft Speeds with Rear Box in Neutral

Transmission Shifter & Selection Location			Multiplication Factor	Transmission Shifter & Selection Location			Multiplication Factor
LO	LO	LO	0.2755	5	HI	HI	0.5146
LO	HI	LO	0.3250	6	LO	HI	0.6097
1	LO	LO	0.4363	6	HI	HI	0.7197
1	HI	LO	0.5146	7	LO	HI	0.8482
2	LO	LO	0.6097	7	HI	HI	1.0000
2	HI	LO	0.7197	8	LO	HI	1.1910
3	LO	LO	0.8482	8	HI	HI	1.4040
3	HI	LO	1.0000	REV	HI	HI	0.1547
4	LO	LO	1.1910	REV	LO	HI	0.1305
4	HI	LO	1.4040	REV	LO	LO	0.1547
5	LO	HI	0.4363	REV	HI	LO	0.1305

EXAMPLE: Main Box in 4 HI LO with 442ZQDAX on Rear Box with output speed of 103% x 1.404 = 144.6%
CAUTION: PTO operations not permitted by Mack in "HI" selector range (shaded area)

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IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

CAUTION: Mack Does Not approve PTO operations with the Range Selector in the "HI" position. Damage to the transmission synchronizers may occur. Refer to Mack operator's manual for correct PTO operation.

Mack

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2130 (Rear Box)
T2130-B (Rear Box)
T313LR (Rear Box)
T313L (Rear Box)
T313L21 (Rear Box)
T313LR21 (Rear Box)
T313H (Rear Box)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.6670" (16.9400MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0550" (26.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
221ZCDAX-*5	250 I	Opp	45		7-A-062(P)	328564X	Furnished	221XCDAX-*3	250 I	Opp	45		7-A-032		Furnished
221ZEDAX-*5	250 I	Opp	50		7-A-062(P)	328564X	Furnished	221XEDAX-*3	250 I	Opp	50		7-A-032		Furnished
221ZPDAX-*5	200 I	Opp	82		7-A-062(P)	328564X	Furnished	221XPDAX-*3	200 I	Opp	82		7-A-032		Furnished
489ZADAX-*5 (8)	250 I	Opp	40		8-A-062		328170-190X	442ZADAX-*3 (8)	250 I	Opp	40		7-A-140		Furnished
489ZCDAX-*5 (9)	250 I	Opp	51		8-A-062		328170-190X	442ZCDAX-*3 (9)	250 I	Opp	51		7-A-140		Furnished
489ZFDAX-*5 (2)	250 I	Opp	63		8-A-062		328170-190X	442ZFDAX-*3 (2)	250 I	Opp	63		7-A-140		Furnished
489ZHDAX-*5 (13)	250 I	Opp	73		8-A-062		328170-190X	442ZHDAX-*3 (13)	250 I	Opp	73		7-A-140		Furnished
489ZLDAX-*5 (1)	250 I	Opp	81		8-A-062		328170-190X	442ZLDAX-*3 (1)	250 I	Opp	81		7-A-140		Furnished
489ZQDAX-*5 (1)	225 I	Opp	88		8-A-062		328170-190X	442ZQDAX-*3 (1)	225 I	Opp	88		7-A-140		Furnished
489ZRDAX-*5 (1)	225 I	Opp	101		8-A-062		328170-190X	442ZRDAX-*3 (1)	225 I	Opp	101		7-A-140		Furnished
489ZSDAX-*5 (1)	200 I	Opp	121		8-A-062		328170-190X	442ZSDAX-*3 (1)	200 I	Opp	121		7-A-140		Furnished
489ZUDAX-*5 (1)	195 I	Opp	144		8-A-062		328170-190X	442ZUDAX-*3 (1)	195 I	Opp	144		7-A-140		Furnished
489ZWDAX-*5 (1)	175 I	Opp	169		8-A-062		328170-190X	442ZWDAX-*3 (1)	175 I	Opp	169		7-A-140		Furnished
489ZXDAX-*5 (1)	140 I	Opp	200		8-A-062		328170-190X	442ZXDAX-*3 (1)	140 I	Opp	200		7-A-140		Furnished
680ZFDAX-*5 (10)	375 I	Opp	63		8-A-062		328170-190X	660ZFDAX-*3 (10)	375 I	Opp	63		7-A-140		Furnished
680ZQDAX-*5 (11)	375 I	Opp	88		8-A-062		328170-190X	660ZQDAX-*3 (11)	375 I	Opp	88		7-A-140		Furnished
680ZSDAX-*5 (12)	325 I	Opp	121		8-A-062		328170-190X	660ZSDAX-*3 (12)	325 I	Opp	121		7-A-140		Furnished
823XBDAX-*5 (15)	500 I	Opp	41				Furnished								
823XMDAX-*5 (16)	500 I	Opp	73				Furnished								
823XRDAX-*5 (17)	400 I	Opp	100				Furnished								
880XBDAX-*5 (3)	500 I	Opp	41				Furnished								
880XGDAX-*5 (7)	500 I	Opp	53				Furnished								
880XMDAX-*5 (4)	500 I	Opp	73				Furnished								
880XRDAX-*5 (5)	400 I	Opp	100				Furnished								
880XTDAX-*5 (6)	350 I	Opp	129				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282KBDAX-*5	300 C	Opp	41		8-A-062		Furnished	272XADAX-*3	300 C	Opp	34		7-A-032		Furnished
282KCDAX-*5	300 C	Opp	50		8-A-062		Furnished	272XBDAX-*3	300 C	Opp	41		7-A-032		Furnished
282KDDAX-*5	300 C	Opp	60		8-A-062		Furnished	272XCDAX-*3	300 C	Opp	50		7-A-032		Furnished
282KGDAX-*5	300 C	Opp	71		8-A-062		Furnished	272XDAJX-*3	300 C	Opp	60		7-A-032		Furnished
282KKDAX-*5	300 C	Opp	80		8-A-062		Furnished	272XGDAX-*3	300 C	Opp	71		7-A-032		Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1037
(2) Input Gear Part No. 5-P-1085
(3) Input Gear Part No. 5-P-1120
(4) Input Gear Part No. 5-P-1121
(5) Input Gear Part No. 5-P-1122
(6) Input Gear Part No. 5-P-1123
(7) Input Gear Part No. 5-P-1174
(8) Input Gear Part No. 5-P-1284
(9) Input Gear Part No. 5-P-1291
(10) Input Gear Part No. 5-P-1330
(11) Input Gear Part No. 5-P-1331
(12) Input Gear Part No. 5-P-1332
(13) Input Gear Part No. 5-P-1365
(15) Input Gear Part No. 5-P-636
(16) Input Gear Part No. 5-P-637
(17) Input Gear Part No. 5-P-808

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2130 (Rear Box)
T2130-B (Rear Box)
T313LR (Rear Box)
T313L (Rear Box)
T313L21 (Rear Box)
T313LR21 (Rear Box)
T313H (Rear Box)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.6670" (16.9400MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0550" (26.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282KMDAX-*5	300 C	Opp	89		8-A-062		Furnished	272XKDAX-*3	300 C	Opp	80		7-A-032		Furnished
282KPDAX-*5	300 C	Opp	100		8-A-062		Furnished	272XMDAX-*3	300 C	Opp	89		7-A-032		Furnished
282KSDAX-*5	300 C	Opp	111		8-A-062		Furnished	272XPDAX-*3	300 C	Opp	100		7-A-032		Furnished
282KTDAX-*5	300 C	Opp	125		8-A-062		Furnished	272XSDAX-*3	300 C	Opp	111		7-A-032		Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBDAX-*5 (3)	500 I	Opp	41				Furnished								
885XGDAX-*5 (7)	500 I	Opp	53				Furnished								
885XMDAX-*5 (4)	500 I	Opp	73				Furnished								
ONE SPEED - FORWARD & REVERSE															
348ZFDAX-*5 (14)	200 I	Opp	57	60	8-A-032		328170-190X	340SFDAX-*5 (14)	200 I	Opp	57	60	7-A-062		Furnished
863XBDAX-*5	500 I	Opp	41	51			Furnished								
GEARED ADAPTERS															
628ZDAX-5DA	250 I	Eng			8-A-062		328170-190X	626ZDAX-3DA	250 I	Eng			7-A-140		Furnished
								645ZDAX-3DA	250 I	Eng			7-A-140		Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1120
(4) Input Gear Part No. 5-P-1121
(7) Input Gear Part No. 5-P-1174
(14) Input Gear Part No. 5-P-634

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2050-C
T2060-C
T2070-D (Front Box)
T2070-C
T2080-D (Front Box)
T2080-C

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
48 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.9770" (24.8200MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
48 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.2520" (31.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
823ZBAHX-*3 (19)	500 I	Opp	71		8-A-700		328170-133X	221ZCAHX-*3	250 I	Opp	75		7-A-062 7-A-032(24)		Furnished
823ZDAHX-*3 (22)	500 I	Opp	84		8-A-700		328170-133X	221ZEAHX-*3	250 I	Opp	86		7-A-032		Furnished
823ZGAHX-*3 (23)	500 I	Opp	91		8-A-700		328170-133X	221ZPAHX-*3	200 I	Opp	140		7-A-032		Furnished
823ZJAHX-*3 (20)	500 I	Opp	107		8-A-700		328170-133X	442ZAAHX-*3 (12)	250 I	Opp	66		7-A-032		Furnished
823ZMAHX-*3 (18)	500 I	Opp	126		8-A-700		328170-133X	442ZCAHX-*3 (13)	250 I	Opp	84		7-A-032		Furnished
823ZRAHX-*3 (21)	400 I	Opp	173		8-A-700		328170-133X	442ZFAHX-*3 (2)	250 I	Opp	104		7-A-032		Furnished
880ZBAHX-*3 (3)	500 I	Opp	71		8-A-700		328170-133X	442ZHAHX-*3 (15)	250 I	Opp	121		7-A-032		Furnished
880ZDAHX-*3 (4)	500 I	Opp	84		8-A-700		328170-133X	442ZLAHX-*3 (1)	250 I	Opp	134		7-A-032		Furnished
880ZGAHX-*3 (9)	500 I	Opp	91		8-A-700		328170-133X	442ZQAHX-*3 (1)	225 I	Opp	145		7-A-032		Furnished
880ZJAHX-*3 (5)	500 I	Opp	107		8-A-700		328170-133X	442ZRAHX-*3 (1)	225 I	Opp	167		7-A-032		Furnished
880ZMAHX-*3 (6)	500 I	Opp	126		8-A-700		328170-133X	442ZSAHX-*3 (1)	200 I	Opp	199		7-A-032		Furnished
880ZQAHX-*3 (16)	450 I	Opp	147		8-A-700		328170-133X	442ZUAHX-*3 (1)	195 I	Opp	237		7-A-032		Furnished
880ZRAHX-*3 (7)	400 I	Opp	173		8-A-700		328170-133X	442ZWAHX-*3 (1)	175 I	Opp	279		7-A-032		Furnished
880ZTAHX-*3 (8)	350 I	Opp	223		8-A-700		328170-133X	442ZXAHX-*3 (1)	140 I	Opp	330		7-A-032		Furnished
								660ZFAHX-*3 (10)	375 I	Opp	104		7-A-032		Furnished
								660ZHAHX-*3 (15)	375 I	Opp	121		7-A-032		Furnished
								660ZQAHX-*3 (11)	375 I	Opp	145		7-A-032		Furnished
								660ZRAHX-*3 (17)	350 I	Opp	167		7-A-032		Furnished
								660ZSAHX-*3 (14)	325 I	Opp	199		7-A-032		Furnished
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
272ZAAJX-*5	300 C	Opp	53		7-A-032	328481X	Furnished	272ZAAJX-*3	300 C	Opp	53		7-A-032		Furnished
272ZBAJX-*5	300 C	Opp	65		7-A-032	328481X	Furnished	272ZBAJX-*3	300 C	Opp	65		7-A-032		Furnished
272ZCAJX-*5	300 C	Opp	79		7-A-032	328481X	Furnished	272ZCAJX-*3	300 C	Opp	79		7-A-032		Furnished
272ZDAJX-*5	300 C	Opp	95		7-A-032	328481X	Furnished	272ZDAJX-*3	300 C	Opp	95		7-A-032		Furnished
272ZGAJX-*5	300 C	Opp	113		7-A-032	328481X	Furnished	272ZGAJX-*3	300 C	Opp	113		7-A-032		Furnished
272ZKAJX-*5	300 C	Opp	126		7-A-032	328481X	Furnished	272ZKAJX-*3	300 C	Opp	126		7-A-032		Furnished
272ZMAJX-*5	300 C	Opp	141		7-A-032	328481X	Furnished	272ZMAJX-*3	300 C	Opp	141		7-A-032		Furnished
272ZPAJX-*5	300 C	Opp	157		7-A-032	328481X	Furnished	272ZPAJX-*3	300 C	Opp	157		7-A-032		Furnished
272ZSAJX-*5	284 C	Opp	176		7-A-032	328481X	Furnished	272ZSAJX-*3	284 C	Opp	176		7-A-032		Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1441
(18) Input Gear Part No. 5-P-283
(19) Input Gear Part No. 5-P-285
(20) Input Gear Part No. 5-P-325
(21) Input Gear Part No. 5-P-721
(22) Input Gear Part No. 5-P-971
(23) Input Gear Part No. 5-P-980
(24) Furnished, but not required

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2050-C
T2060-C
T2070-D (Front Box)
T2070-C
T2080-D (Front Box)
T2080-C

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 08-BOLT Opening Gear FORWARD of Centerline 48 Teeth - SPUR **PITCH LINE TO APERTURE FACE:** 0.9770" (24.8200MM)	**TRANSMISSION GEAR DATA:** R.S. 06-BOLT Opening Gear FORWARD of Centerline 48 Teeth - SPUR **PITCH LINE TO APERTURE FACE:** 1.2520" (31.8000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)							
885ZBAHX-*3 (3)	500 I	Opp	71		8-A-700		328170-133X
885ZGAHX-*3 (9)	500 I	Opp	91		8-A-700		328170-133X
885ZJAHX-*3 (5)	500 I	Opp	107		8-A-700		328170-133X
885ZMAHX-*3 (6)	500 I	Opp	126		8-A-700		328170-133X
GEARED ADAPTERS							
626ZDAX-3DA	250 I	Eng			7-A-032		Furnished
630ZDAX-3DA	250 I	Eng			7-A-032		Furnished
645ZDAX-3DA	250 I	Eng			7-A-062		Furnished

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IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2060-A
T306G

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 08-BOLT Opening Gear FORWARD of Centerline 40 Teeth - SPUR **PITCH LINE TO APERTURE FACE:** 1.9280" (48.9700MM)	**TRANSMISSION GEAR DATA:** R.S. 06-BOLT Opening Gear FORWARD of Centerline 40 Teeth - SPUR **PITCH LINE TO APERTURE FACE:** 2.2040" (55.9800MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
290KFHUX-*5 (1)	180 I	Opp	80		7-A-093(5)	328564X	7170-3X	290KFHUX-*3 (1)	180 I	Opp	80		7-A-270		7170-4X
290KLHUX-*5 (2)	180 I	Opp	94		7-A-093	328564X	7170-3X	290KLHUX-*3 (2)	180 I	Opp	94		7-A-270		7170-4X
290KQHUX-*5 (3)	180 I	Opp	124		7-A-093	328564X	7170-3X	290KQHUX-*3 (3)	180 I	Opp	124		7-A-270		7170-4X
290KUHUX-*5 (4)	180 I	Opp	149		7-A-093	328564X	7170-3X	290KUHUX-*3 (4)	180 I	Opp	149		7-A-270		7170-4X

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1221
(2) Input Gear Part No. 5-P-1222
(3) Input Gear Part No. 5-P-1223
(4) Input Gear Part No. 5-P-1224
(5) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2110-B (REAR BOX FOR T2110B)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.6670" (16.9400MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0550" (26.7970MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
221ZCDAX-*5 (14)	250 I	Opp	54		7-A-062(P)	328564X	Furnished	221XCDAX-*3 (14)	250 I	Opp	54		7-A-032		Furnished
221ZEDAX-*5 (14)	250 I	Opp	59		7-A-062(P)	328564X	Furnished	221XEDAX-*3 (14)	250 I	Opp	59		7-A-032		Furnished
221ZPDAX-*5 (14)	200 I	Opp	97		7-A-062(P)	328564X	Furnished	221XPDAX-*3 (14)	200 I	Opp	97		7-A-032		Furnished
489ZFDAX-*5 (2)	250 I	Opp	74		8-A-062		328170-190X	442ZADAX-*3 (8)	250 I	Opp	47		7-A-140		Furnished
489ZHDAX-*5 (13)	250 I	Opp	86		8-A-062		328170-190X	442ZCDAX-*3 (9)	250 I	Opp	60		7-A-140		Furnished
489ZLDAX-*5 (1)	250 I	Opp	96		8-A-062		328170-190X	442ZFDAX-*3 (2)	250 I	Opp	74		7-A-140		Furnished
489ZQDAX-*5 (1)	225 I	Opp	103		8-A-062		328170-190X	442ZHDAX-*3 (13)	250 I	Opp	86		7-A-140		Furnished
489ZRDAX-*5 (1)	225 I	Opp	120		8-A-062		328170-190X	442ZLDAX-*3 (1)	250 I	Opp	96		7-A-140		Furnished
489ZSDAX-*5 (1)	200 I	Opp	142		8-A-062		328170-190X	442ZQDAX-*3 (1)	225 I	Opp	103		7-A-140		Furnished
489ZUDAX-*5 (1)	195 I	Opp	169		8-A-062		328170-190X	442ZRDAX-*3 (1)	225 I	Opp	120		7-A-140		Furnished
489ZWDAX-*5 (1)	175 I	Opp	199		8-A-062		328170-190X	442ZSDAX-*3 (1)	200 I	Opp	142		7-A-140		Furnished
489ZXDAX-*5 (1)	140 I	Opp	236		8-A-062		328170-190X	442ZUDAX-*3 (1)	195 I	Opp	169		7-A-140		Furnished
680ZFDAX-*5 (10)	375 I	Opp	74		8-A-062		328170-190X	442ZWDAX-*3 (1)	175 I	Opp	199		7-A-140		Furnished
680ZQDAX-*5 (11)	375 I	Opp	103		8-A-062		328170-190X	442ZXDAX-*3 (1)	140 I	Opp	236		7-A-140		Furnished
680ZSDAX-*5 (12)	325 I	Opp	142		8-A-062		328170-190X	660ZFDAX-*3 (10)	375 I	Opp	74		7-A-140		Furnished
823XBDAX-*5	500 I	Opp	48				Furnished	660ZQDAX-*3 (11)	375 I	Opp	103		7-A-140		Furnished
823XMDAX-*5 (16)	500 I	Opp	86				Furnished	660ZSDAX-*3 (12)	325 I	Opp	142		7-A-140		Furnished
823XRDAX-*5 (17)	400 I	Opp	118				Furnished								
880XBDAX-*5 (3)	500 I	Opp	48				Furnished								
880XGDAX-*5 (7)	500 I	Opp	62				Furnished								
880XMDAX-*5 (4)	500 I	Opp	86				Furnished								
880XRDAX-*5 (5)	400 I	Opp	118				Furnished								
880XTDAX-*5 (6)	350 I	Opp	152				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBDAX-*5	300 C	Opp	49		8-A-062		Furnished	272XADAX-*3	300 C	Opp	40		7-A-032		Furnished
282XCDAX-*5	300 C	Opp	59		8-A-062		Furnished	272XBDAX-*3	300 C	Opp	49		7-A-032		Furnished
282XDDAX-*5	300 C	Opp	71		8-A-062		Furnished	272XCDAX-*3	300 C	Opp	59		7-A-032		Furnished
282XGDAX-*5	300 C	Opp	84		8-A-062		Furnished	272XDDAX-*3	300 C	Opp	71		7-A-032		Furnished
282XKDAX-*5	300 C	Opp	94		8-A-062		Furnished	272XGDAX-*3	300 C	Opp	84		7-A-032		Furnished
282XMDAX-*5	300 C	Opp	105		8-A-062		Furnished	272XKDAX-*3	300 C	Opp	94		7-A-032		Furnished
282XPDAX-*5	300 C	Opp	117		8-A-062		Furnished	272XMDAX-*3	300 C	Opp	105		7-A-032		Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1037
(2) Input Gear Part No. 5-P-1085
(3) Input Gear Part No. 5-P-1120
(4) Input Gear Part No. 5-P-1121
(5) Input Gear Part No. 5-P-1122
(6) Input Gear Part No. 5-P-1123
(7) Input Gear Part No. 5-P-1174
(8) Input Gear Part No. 5-P-1284
(9) Input Gear Part No. 5-P-1291
(10) Input Gear Part No. 5-P-1330
(11) Input Gear Part No. 5-P-1331
(12) Input Gear Part No. 5-P-1332
(13) Input Gear Part No. 5-P-1365
(14) Input Gear Part No. 5-P-633
(16) Input Gear Part No. 5-P-637
(17) Input Gear Part No. 5-P-808

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

T2110-B (REAR BOX FOR T2110B)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.6670" (16.9400MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
49 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0550" (26.7970MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XSDAX-*5	300 C	Opp	131		8-A-062		Furnished	272XPDAX-*3	300 C	Opp	117		7-A-032		Furnished
282XTDAX-*5	300 C	Opp	147		8-A-062		Furnished	272XSDAX-*3	300 C	Opp	131		7-A-032		Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBDAX-*5 (3)	500 I	Opp	48				Furnished								
885XGDAX-*5 (7)	500 I	Opp	62				Furnished								
885XMDAX-*5 (4)	500 I	Opp	86				Furnished								
ONE SPEED - FORWARD & REVERSE															
348ZFDAX-*5 (15)	200 I	Eng	68	71	8-A-062		328170-190X	340SFDAX-*3 (15)	200 I	Opp	68	71	7-A-062		Furnished
863XBDAX-*5	500 I	Opp	48	60			Furnished								
GEARED ADAPTERS															
628ZDAX-5DA	250 I	Eng			8-A-062		328170-190X	626ZDAX-3DA	250 I	Eng			7-A-140		Furnished
								630ZDAX-3DA	250 I	Eng			7-A-140		Furnished
								645ZDAX-3DA	250 I	Eng			7-A-140		Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(3) Input Gear Part No. 5-P-1120
(4) Input Gear Part No. 5-P-1121
(7) Input Gear Part No. 5-P-1174
(15) Input Gear Part No. 5-P-634

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Chelsea Products Division
Olive Branch, MS 38654 USA

T310 (T310 is a standard 10 speed with no rear box)
T310-M (Front Box)
T310ME (Front box, same as T-310M, output flange extended for rear mount PTO)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
53 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
53 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0800" (27.4320MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
221ZCDAX-*5	250 I	Opp	66			328564X	Furnished	221XCAHX-*3	250 I	Eng	65		7-A-032(P)(17)	328554-2X	Furnished
221ZEDAX-*5	250 I	Opp	73			328564X	Furnished	221XCDAX-*3	250 I	Opp	66				Furnished
221ZPDAX-*5	200 I	Opp	120			328564X	Furnished	221XEAHX-*3	250 I	Eng	75			328554-2X	Furnished
489ZADAX-*5 (8)	250 I	Opp	57				Furnished	221XEDAX-*3	250 I	Opp	73				Furnished
489ZCDAX-*5 (9)	250 I	Opp	74				Furnished	221XPAHX-*3	200 I	Eng	123			328554-2X	Furnished
489ZFDAX-*5 (2)	250 I	Opp	92				Furnished	221XPDAX-*3	200 I	Opp	120				Furnished
489ZHDAX-*5 (13)	250 I	Opp	107				Furnished	442ZADAX-*3 (8)	250 I	Opp	57		7-A-093		Furnished
489ZLDAX-*5 (1)	250 I	Opp	119				Furnished	442ZCDAX-*3 (9)	250 I	Opp	74		7-A-093		Furnished
489ZQDAX-*5 (1)	225 I	Opp	128				Furnished	442ZFDAX-*3 (2)	250 I	Opp	92		7-A-093		Furnished
489ZRDAX-*5 (1)	225 I	Opp	149				Furnished	442ZHDAX-*3 (13)	250 I	Opp	107		7-A-093		Furnished
489ZSDAX-*5 (1)	200 I	Opp	178				Furnished	442ZLDAX-*3 (1)	250 I	Opp	119		7-A-093		Furnished
489ZUDAX-*5 (1)	195 I	Opp	212				Furnished	442ZQDAX-*3 (1)	225 I	Opp	128		7-A-093		Furnished
489ZWDAX-*5 (1)	175 I	Opp	250				Furnished	442ZRDAX-*3 (1)	225 I	Opp	149		7-A-093		Furnished
489ZXDAX-*5 (1)	140 I	Opp	296				Furnished	442ZSDAX-*3 (1)	200 I	Opp	178		7-A-093		Furnished
680ZFDAX-*5 (10)	375 I	Opp	92				Furnished	442ZUDAX-*3 (1)	195 I	Opp	212		7-A-093		Furnished
680ZQDAX-*5 (11)	375 I	Opp	128				Furnished	442ZWDAX-*3 (1)	175 I	Opp	250		7-A-093		Furnished
680ZSDAX-*5 (12)	325 I	Opp	178				Furnished	442ZXDAX-*3 (1)	140 I	Opp	296		7-A-093		Furnished
823XBDAX-*5	500 I	Opp	59				Furnished	660ZFDAX-*3 (10)	375 I	Opp	92		7-A-062		Furnished
823XMDAX-*5 (15)	500 I	Opp	106				Furnished	660ZQDAX-*3 (11)	375 I	Opp	128		7-A-062		Furnished
823XRDAX-*5 (16)	400 I	Opp	148				Furnished	660ZSDAX-*3 (12)	325 I	Opp	178		7-A-062		Furnished
880XBDAX-*5 (3)	500 I	Opp	59				Furnished								
880XGDAX-*5 (7)	500 I	Opp	76				Furnished								
880XMDAX-*5 (4)	500 I	Opp	106				Furnished								
880XRDAX-*5 (5)	400 I	Opp	148				Furnished								
880XTDAX-*5 (6)	350 I	Opp	191				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBDAX-*5 (3)	500 I	Opp	59				Furnished								
885XGDAX-*5 (7)	500 I	Opp	76				Furnished								
885XMDAX-*5 (4)	500 I	Opp	106				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1037
(2) Input Gear Part No. 5-P-1085
(3) Input Gear Part No. 5-P-1120
(4) Input Gear Part No. 5-P-1121
(5) Input Gear Part No. 5-P-1122
(6) Input Gear Part No. 5-P-1123
(7) Input Gear Part No. 5-P-1174
(8) Input Gear Part No. 5-P-1284
(9) Input Gear Part No. 5-P-1291
(10) Input Gear Part No. 5-P-1330
(11) Input Gear Part No. 5-P-1331
(12) Input Gear Part No. 5-P-1332
(13) Input Gear Part No. 5-P-1365
(15) Input Gear Part No. 5-P-637
(16) Input Gear Part No. 5-P-808
(17) Filler block furnished with PTO

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T310 (T310 is a standard 10 speed with no rear box)
T310-M (Front Box)
T310ME (Front box, same as T-310M, output flange extended for rear mount PTO)

LEFT SIDE ONLY	RIGHT SIDE ONLY
TRANSMISSION GEAR DATA: L.S. 08-BOLT Opening Gear FORWARD of Centerline 53 Teeth - SPUR **PITCH LINE TO APERTURE FACE:** 0.8100" (20.5700MM)	**TRANSMISSION GEAR DATA:** R.S. 06-BOLT Opening Gear FORWARD of Centerline 53 Teeth - SPUR **PITCH LINE TO APERTURE FACE:** 1.0800" (27.4320MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - FORWARD & REVERSE															
348ZFDAX-*5 (14)	200 I	Opp	83	90			Furnished	340SFDAX-*5 (14)	200 I	Opp	83	90			Furnished
863XBDAX-*5	500 I	Opp	59	75			Furnished								
GEARED ADAPTERS															
628ZDAX-5DA	250 I	Eng					Furnished	626ZDAX-3DA	250 I	Eng			7-A-062		Furnished
								630ZDAX-3DA	250 I	Eng			7-A-062		Furnished
								645ZDAX-3DA	250 I	Eng			7-A-062		Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(14) Input Gear Part No. 5-P-634

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TM308
TM309

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear REAR of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
442ZFDAX-*6 (2)	250 I	Opp	94		7-A-062(P)	328481X	Furnished	442ZFDAX-*4 (2)	250 I	Opp	94		7-A-062		Furnished
442ZHDAX-*6 (10)	250 I	Opp	109		7-A-062(P)	328481X	Furnished	442ZHDAX-*4 (10)	250 I	Opp	109		7-A-062		Furnished
442ZLDAX-*6 (1)	250 I	Opp	121		7-A-062(P)	328481X	Furnished	442ZLDAX-*4 (1)	250 I	Opp	121		7-A-062		Furnished
442ZQDAX-*6 (1)	225 I	Opp	130		7-A-062(P)	328481X	Furnished	442ZQDAX-*4 (1)	225 I	Opp	130		7-A-062		Furnished
489ZFDAX-*6 (2)	250 I	Opp	94				Furnished	660ZFDAX-*4 (8)	375 I	Opp	94		7-A-062		Furnished
489ZHDAX-*6 (10)	250 I	Opp	109				Furnished	660ZQDAX-*4 (9)	375 I	Opp	130		7-A-062		Furnished
489ZLDAX-*6 (1)	250 I	Opp	121				Furnished								
489ZQDAX-*6 (1)	225 I	Opp	130				Furnished								
680ZFDAX-*6 (8)	375 I	Opp	94				Furnished								
680ZQDAX-*6 (9)	375 I	Opp	130				Furnished								
880XBDAX-*6 (3)	500 I	Opp	61				Furnished								
880XGDAX-*6 (7)	500 I	Opp	78				Furnished								
880XMDAX-*6 (4)	500 I	Opp	108				Furnished								
880XRDAX-*6 (5)	400 I	Opp	150				Furnished								
880XTDAX-*6 (6)	350 I	Opp	193				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBDAX-*6 (3)	500 I	Opp	61				Furnished								
885XGDAX-*6 (7)	500 I	Opp	78				Furnished								
885XMDAX-*6 (4)	500 I	Opp	108				Furnished								
ONE SPEED - FORWARD & REVERSE															
348ZFDAX-*4 (11)	200 I	Opp	85	90			Furnished	340SFDAX-*4 (11)	200 I	Opp	85	90			Furnished
863XBDAX-*4 (12)	500 I	Opp	61	75			Furnished								
GEARED ADAPTERS															
628ZDAX-6DA	250 I	Eng					Furnished	626ZDAX-4DA	250 I	Eng			7-A-062		Furnished
								630ZDAX-4DA	250 I	Eng			7-A-062		Furnished
								645ZDAX-4DA	250 I	Eng			7-A-062		Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

CAUTION: Do not install any PTO models with a sliding input gear, the input gear will not shift completely out of mesh.

(1) Input Gear Part No. 5-P-1037
(2) Input Gear Part No. 5-P-1085
(3) Input Gear Part No. 5-P-1120
(4) Input Gear Part No. 5-P-1121
(5) Input Gear Part No. 5-P-1122
(6) Input Gear Part No. 5-P-1123
(7) Input Gear Part No. 5-P-1174
(8) Input Gear Part No. 5-P-1330
(9) Input Gear Part No. 5-P-1331
(10) Input Gear Part No. 5-P-1365
(11) Input Gear Part No. 5-P-634
(12) Input Gear Part No. 5-P-636

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TMD12AD (HD also) (MDrive) Low Ratio
TMD13AD (MDrive) Low Ratio

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRASW-V-*	590 C	Opp	70				Furnished
523XTASX-V-*	258 C	Eng	97				Furnished
523XVASX-V-*	258 C	Eng	115				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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TMD12AD (HD also) (MDrive) High Split Ratio
TMD13AD (MDrive) High Split Ratio

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRASW-V-*	590 C	Opp	90				Furnished
523XTASX-V-*	258 C	Eng	124				Furnished
523XVASX-V-*	258 C	Eng	147				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

Mack

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TMD12AO (HD also) (MDrive) Low Ratio
TMD13AFO-HD (MDrive) Low Ratio
TMD13AO (MDrive) Low Ratio
TMD14AFO-HD (MDrive) Low Ratio
TMD14AO (MDrive) Low Ratio

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRASW-V-*	590 C	Opp	90				Furnished
523XTASX-V-*	258 C	Eng	124				Furnished
523XVASX-V-*	258 C	Eng	148				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

Mack

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TMD12AO (HD also) (MDrive) High Split Range
TMD13AFO-HD (MDrive) High Split Range
TMD13AO (MDrive) High Split Range
TMD14AFO-HD (MDrive) High Split Range
TMD14AO (MDrive) High Split Range

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRASW-V-*	590 C	Opp	115				Furnished
523XTASX-V-*	258 C	Eng	159				Furnished
523XVASX-V-*	258 C	Eng	189				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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Mack Notes

MAK-16

1. With gear selector lever in low range for the front portion of compound transmissions, multiply speeds shown by the factor listed for the transmission: TRDXL-107, DX-107 multiply by .595; TRDXL-1071, DX-1071 multiply by .350. This feature can cause insufficient PTO speed, particularly in spreading applications.
2. With gear selector lever in high range for the front portion of compound transmissions, multiply speed shown by the factor listed for the transmission: TRDXL-1070, DX-1070, TRDXL-10780, DX-10780 multiply by 1.62. This feature can cause excessive PTO speeds.
3. The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

MAK-18

1. All speeds shown are with transmission in 5th speed. For PTO speeds with the main transmission in all other gears, multiply speeds shown by the following: for 1st - .116, 2nd - .200, 3rd - .353, 4th - .603.
2. The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

MAK-19

1. All speeds shown are with the transmission in 5th speed. For PTO speeds with the main transmission in all others, multiply speed shown by the following: 1st - .116, 2nd - .200, 3rd - .353,4th - .603.
2. The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
3. The 812 Series PTO will not mount on this transmission because the output shaft interferes with the reverse idler buldge.

MAK-20

1. The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

MAK-21

1. All speeds figured with transmission in 4th speed direct. For PTO speeds in other transmission gears, multiply speeds shown by following: 1st. = .1907, 2nd. = .3282, 3rd. = .5780, 5th. = 1.6744.
2. 489 Series - The AK & XK output flanges can not be used with the "A" & "C" ratios due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

MAK-22

1. The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

MAK-23

1. Using the 328554-2X adapter will permit PTO installation on trucks with set back front axle.
2. The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

MAK-24

1. Using the 328554-2X adapter will permit PTO installation on trucks with set back front axle.
2. The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

MAK-25

1. Using the 328554-2X adapter will permit PTO installation on trucks with set back front axle.
2. All the applications shown are for the front box.
3. The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

MAK-26

1. On the R.H. side the 328554-2X adapter can be used with an "AH" PTO to change rotation.
2. All speeds shown are with the main transmission in 5th speed. For PTO speeds with the main transmission in all other gears, divide the speeds shown by the following percentages: 1st. = 8.76, 2nd. = 5.995, 3rd. = 2.895, 4th. = 1.674, Reverse = 8.99
3. The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

MAK-27

1. This application is for the rear box only. For front box applications, see application no. MAK-23.
2. With main box in reverse, the direction of rotation on the PTO output shaft will change.
3. The AK & XK output flanges can not be used with the "A" & "C" ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
4. All speeds shown are with the transmission in 7th speed, or direct, and rear box in neutral. For speeds with main box in all the gear positions available, see the PTO speed chart on last MAK-27 page.

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Mack Notes

MAK-28

1. All speeds shown are with the main transmission in 4th.,10th.,or 11th speed, and rear box in neutral. For speeds with main transmission in other gears, multiply speeds shown as follows: 1st. = .323; 2nd.,6th. & 7th. = .515; 3rd.,8th., & 9th. = .720; 5th.,12th., & 13th = 1.405.
2. With main box in reverse the direction of rotation on the PTO output shaft will change.
3. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

MAK-30

1. The “XK” flange cannot be used with the “L” and “U” ratio because of interference with the transmission.

MAK-31

1. For PTO output speeds on the T2110B Main Section, see Mack application MAK-24.
2. The Rear Section PTO speeds are shown with the Main Section in 5th gear or Direct and the Rear Section in Neutral.
3. For all other Main Section gear shift positions use the following multiplication factors to determine your PTO output speeds: 1st gear = .255, 2nd & 7th gear = .450, 3rd & 8th gear = .590, 4th & 9th gear = .629 and 6th & 11th gear = 1.067.

MAK-32

1. Using the 328554-2X adapter will permit PTO installation on trucks with set back front axle.
2. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

MAK-33

1. The 54 tooth gear in the transmission is located rearward of the vertical center line by .320.
2. The 442/489 “R”, “S”,”U”,”W”, “X” ratios and 880 “R” and “T” ratios cannot be mounted on this transmission because the OD of the ratio gear will interfere with the OD of the 54 tooth PTO drive gear in the transmission.

MAK-34

1. Connection to Volvo/Mack system required for Volvo I-Shift or Mack M-Drive, the vehicle needs to be ordered with PTO prep package. Vehicle ECU must be programmed by dealer for PTO operation.
2. PTO must be ordered with the “V” shift option and use the OE factory supplied in-dash PTO switch.
3. 511/523 Rear Mount - The Adapter 329735X is furnished with the PTO.

MAK-34H

1. Connection to Volvo/Mack system required for Volvo I-Shift or Mack M-Drive, the vehicle needs to be ordered with PTO prep package. Vehicle ECU must be programmed by dealer for PTO operation.
2. PTO must be ordered with the “V” shift option and use the OE factory supplied in-dash PTO switch.
3. 511/523 Rear Mount - The Adapter 329735X is furnished with the PTO.

MAK-35

1. Connection to Volvo/Mack system required for Volvo I-Shift or Mack M-Drive, the vehicle needs to be ordered with PTO prep package. Vehicle ECU must be programmed by dealer for PTO operation.
2. PTO must be ordered with the “V” shift option and use the OE factory supplied in dash PTO switch.
3. 511/523 Rear Mounts - The adapter 329735X is furnished with the PTO

MAK-35H

1. Connection to Volvo/Mack system required for Volvo I-Shift or Mack M-Drive, the vehicle needs to be ordered with PTO prep package. Vehicle ECU must be programmed by dealer for PTO operation.
2. PTO must be ordered with the “V” shift option and use the OE factory supplied in dash PTO switch.
3. 511/523 Rear Mount - The adapter 329735X is furnished with the PTO.

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Chelsea Products Division
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NOTES



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MERCEDES/DAIMLER/DETROIT





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⚠ WARNING — User Responsibility

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

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Olive Branch, MS 38654 USA

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
AMT3-660-60A (Automated Manual)	M/B-6	6	R53
ATM3-520-6DA (Automated Manual)	M/B-5	6	R45
G33	M/B-7	5	R43
G56 (See DDG-2 for Dodge/Sterling/RAM Trucks)	M/B-8	6	L52
G85••	M/B-6	6	R53
MBT520-6DA (AGS - Automated Gear Shift)	M/B-5	6	R45
MBT520S-6D	M/B-5	6	R45
MBT660-60A (AGS - Automated Gear Shift)	M/B-6	6	R53
MBT660S-60	M/B-6	6	R53

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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ATM3-520-6DA (Automated Manual)
MBT520-6DA (AGS - Automated Gear Shift)
MBT520S-6D

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
45 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.4240" (36.1696MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
442ZLJGX-*4 (1)	250 I	Opp	54				7170-72X
442ZQJGX-*4 (1)	225 I	Opp	58				7170-72X
442ZRJGX-*4 (1)	225 I	Opp	67				7170-72X
442ZSJGX-*4 (1)	200 I	Opp	79				7170-72X
442ZUJGX-*4 (1)	195 I	Opp	95				7170-72X
442ZWJGX-*4 (1)	175 I	Opp	111				7170-72X
442ZXJGX-*4 (1)	140 I	Opp	132				7170-72X

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-1256

Parker Hannifin Corporation
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AMT3-660-60A (Automated Manual)
G85
MBT660-60A (AGS - Automated Gear Shift)
MBT660S-60

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
53 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.3380" (33.9852MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT							
442GLJHX-*4 (1)	250 I	Opp	84				Furnished
442GQJHX-*4 (1)	225 I	Opp	90				Furnished
442GRJHX-*4 (1)	225 I	Opp	104				Furnished
442GSJHX-*4 (1)	200 I	Opp	124				Furnished
442GUJHX-*4 (1)	195 I	Opp	148				Furnished
442GWJHX-*4 (1)	175 I	Opp	174				Furnished
442GXJHX-*4 (1)	140 I	Opp	206				Furnished
ONE SPEED - FORWARD & REVERSE							
352GSJHX-*4 (1)	140 I	Opp	126	163			Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1257

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G33

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
43 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
0.9589" (24.3600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
442KLKCX-*3 (1)	250 I	Opp	56		7-A-165(T)		7170-79X
442KQKCX-*3 (1)	225 I	Opp	60		7-A-165(T)		7170-79X
442KRKCX-*3 (1)	225 I	Opp	69		7-A-165(T)		7170-79X
442KSKCX-*3 (1)	200 I	Opp	83		7-A-165(T)		7170-79X
442KUKCX-*3 (1)	195 I	Opp	98		7-A-165(T)		7170-79X
442KWKCX-*3 (1)	175 I	Opp	116		7-A-165(T)		7170-79X
442KXKCX-*3 (1)	140 I	Opp	137		7-A-165(T)		7170-79X

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-1341

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G56 (See DDG-2 for Dodge/Sterling/RAM Trucks)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear REAR of Centerline
52 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.3760" (35.0000MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
442LLKHX-*6 (1)	250 I	Opp	67				7170-72X
442LQKHX-*6 (1)	225 I	Opp	72				7170-72X
442LRKHX-*6 (1)	225 I	Opp	84				7170-72X
442LSKHX-*6 (1)	200 I	Opp	100				7170-72X
442LUKHX-*6 (1)	195 I	Opp	119				7170-72X
442LWKHX-*6 (1)	175 I	Opp	140				7170-72X
442LXKHX-*6 (1)	140 I	Opp	165				7170-72X

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1343

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Mercedes/Daimler/Detroit Notes

M/B-5

1. PTO Rear Mount Only for G60-6. No Right Side Option.
2. PTO Right Side Only for transmission models AMT3-520-6DA, MBT520-6DA and MBT520-6D. No Rear Mount Option.

M/B-6

1. PTO Rear Mount Only for G85-6. No Right Side Option.
2. PTO Right Side Only for transmission models AMT3-660-6OA, MBTT660-6OA and MBT660S-6O. No Rear Mount Option.

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MERITOR/ROCKWELL TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
M-13Z12A-A13 (Rear Mount PTO)	ZFM-5	12	CS
M-13Z12A-A14 (Rear Mount PTO)	ZFM-5	12	CS
M-14F10A-E14	RKW-1	10	R45-B45
M-14F10A-M16	RKW-1	10	R45-B45
M-14F10A-S14	RKW-1	10	R45-B45
M-14F10A-S15	RKW-1	10	R45-B45
M-14F9A-E14	RKW-1	9	R45-B45
M-14F9A-S14	RKW-1	9	R45-B45
M-14G10A-D14	RKW-1	10	R45-B45
M-14G10A-E14	RKW-1	10	R45-B45
M-14G10A-E16	RKW-1	10	R45-B45
M-14G10A-M14	RKW-1	10	R45-B45
M-14G10A-M16	RKW-1	10	R45-B45
M-14G10A-S14	RKW-1	10	R45-B45
M-14G9A-D14	RKW-1	9	R45-B45
M-14G9A-E14	RKW-1	9	R45-B45
M-14G9A-M14	RKW-1	9	R45-B45
M-14G9A-S14	RKW-1	9	R45-B45
M-14Z12A-A14 (Rear Mount PTO)	ZFM-5	12	CS
M-15F10A-E15	RKW-1	10	R45-B45
M-15F10A-S15	RKW-1	10	R45-B45
M-15G10A-D15	RKW-1	10	R45-B45
M-15G10A-E15	RKW-1	10	R45-B45
M-15G10A-M15	RKW-1	10	R45-B45
M-15G10A-S15	RKW-1	10	R45-B45
MO-11F10A-S11	RKW-2	10	R45-B45
MO-11F10C-E11	RKW-4	10	R45-B45
MO-11F10C-S11	RKW-4	10	R45-B45
MO-11F9B-E11	RKW-3	9	R45-B45
MO-11F9B-S11	RKW-3	9	R45-B45
MO-11G10A-D11	RKW-2	10	R45-B45
MO-11G10A-E11	RKW-2	10	R45-B45
MO-11G10A-M11	RKW-2	10	R45-B45
MO-11G10A-S11	RKW-2	10	R45-B45
MO-11G10C-D11	RKW-4	10	R45-B45
MO-11G10C-E11	RKW-4	10	R45-B45

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

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Parker Hannifin Corporation
Chelsea Products Division
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Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
MO-11G10C-M11	RKW-4	10	R45-B45
MO-11G10C-S11	RKW-4	10	R45-B45
MO-11G9B-D11	RKW-3	9	R45-B45
MO-11G9B-E11	RKW-3	9	R45-B45
MO-11G9B-M11	RKW-3	9	R45-B45
MO-11G9B-S11	RKW-3	9	R45-B45
MO-12F10A-E12	RKW-2	10	R45-B45
MO-12F10A-S12	RKW-2	10	R45-B45
MO-12F10C-E12	RKW-4	10	R45-B45
MO-12F10C-S12	RKW-4	10	R45-B45
MO-12F9A-E12	RKW-2	9	R45-B45
MO-12F9A-S12	RKW-2	9	R45-B45
MO-12F9B-E12	RKW-3	9	R45-B45
MO-12F9B-S12	RKW-3	9	R45-B45
MO-12G10A-D12	RKW-2	10	R45-B45
MO-12G10A-E12	RKW-2	10	R45-B45
MO-12G10A-M12	RKW-2	10	R45-B45
MO-12G10A-S12	RKW-2	10	R45-B45
MO-12G10C-D12	RKW-4	10	R45-B45
MO-12G10C-E12	RKW-4	10	R45-B45
MO-12G10C-M12	RKW-4	10	R45-B45
MO-12G10C-S12	RKW-4	10	R45-B45
MO-12G9A-D12	RKW-2	9	R45-B45
MO-12G9A-E12	RKW-2	9	R45-B45
MO-12G9A-M12	RKW-2	9	R45-B45
MO-12G9A-S12	RKW-2	9	R45-B45
MO-12G9B-D12	RKW-3	9	R45-B45
MO-12G9B-E12	RKW-3	9	R45-B45
MO-12G9B-M12	RKW-3	9	R45-B45
MO-12G9B-S12	RKW-3	9	R45-B45
MO-13F10A-E13	RKW-2	10	R45-B45
MO-13F10A-S13	RKW-2	10	R45-B45
MO-13F10C-E13	RKW-4	10	R45-B45
MO-13F10C-S13	RKW-4	10	R45-B45
MO-13F9A-E13	RKW-2	9	R45-B45
MO-13F9A-S13	RKW-2	9	R45-B45

IMPORTANT: See Safety Information in Section I of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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MERITOR/ROCKWELL TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
MO-13F9B-E13	RKW-3	9	R45-B45
MO-13F9B-S13	RKW-3	9	R45-B45
MO-13G10A-D13	RKW-2	10	R45-B45
MO-13G10A-E13	RKW-2	10	R45-B45
MO-13G10A-M13	RKW-2	10	R45-B45
MO-13G10A-S13	RKW-2	10	R45-B45
MO-13G10C-D13	RKW-4	10	R45-B45
MO-13G10C-E13	RKW-4	10	R45-B45
MO-13G10C-M13	RKW-4	10	R45-B45
MO-13G10C-S13	RKW-4	10	R45-B45
MO-13G9A-D13	RKW-2	9	R45-B45
MO-13G9A-E13	RKW-2	9	R45-B45
MO-13G9A-M13	RKW-2	9	R45-B45
MO-13G9A-S13	RKW-2	9	R45-B45
MO-13G9B-D13	RKW-3	9	R45-B45
MO-13G9B-E13	RKW-3	9	R45-B45
MO-13G9B-M13	RKW-3	9	R45-B45
MO-13G9B-S13	RKW-3	9	R45-B45
MO-13Z12A-A13 (Rear Mount PTO)	ZFM-6	12	CS
MO-13Z12A-A14 (Rear Mount PTO)	ZFM-6	12	CS
MO-13Z16A-A13 (Rear Mount PTO)	ZFM-7	16	CS
MO-13Z16A-A14 (Rear Mount PTO)	ZFM-7	16	CS
MO-14F10A-E14	RKW-2	10	R45-B45
MO-14F10A-E16	RKW-2	10	R45-B45
MO-14F10A-M16	RKW-2	10	R45-B45
MO-14F10A-S14	RKW-2	10	R45-B45
MO-14F10A-S16	RKW-2	10	R45-B45
MO-14F10C-E14	RKW-4	10	R45-B45
MO-14F10C-E16	RKW-4	10	R45-B45
MO-14F10C-M16	RKW-4	10	R45-B45
MO-14F10C-S14	RKW-4	10	R45-B45
MO-14F10C-S16	RKW-4	10	R45-B45
MO-14F9A-E14	RKW-2	9	R45-B45
MO-14F9A-S14	RKW-2	9	R45-B45
MO-14F9B-E14	RKW-3	9	R45-B45
MO-14F9B-S14	RKW-3	9	R45-B45

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
MO-14G10A-D14	RKW-2	10	R45-B45
MO-14G10A-E14	RKW-2	10	R45-B45
MO-14G10A-E16	RKW-2	10	R45-B45
MO-14G10A-M14	RKW-2	10	R45-B45
MO-14G10A-M16	RKW-2	10	R45-B45
MO-14G10A-S14	RKW-2	10	R45-B45
MO-14G10A-S16	RKW-2	10	R45-B45
MO-14G10C-D14	RKW-4	10	R45-B45
MO-14G10C-E14	RKW-4	10	R45-B45
MO-14G10C-E16	RKW-4	10	R45-B45
MO-14G10C-M14	RKW-4	10	R45-B45
MO-14G10C-M16	RKW-4	10	R45-B45
MO-14G10C-S14	RKW-4	10	R45-B45
MO-14G10C-S16	RKW-4	10	R45-B45
MO-14G9A-D14	RKW-2	9	R45-B45
MO-14G9A-E14	RKW-2	9	R45-B45
MO-14G9A-M14	RKW-2	9	R45-B45
MO-14G9A-S14	RKW-2	9	R45-B45
MO-14G9B-D14	RKW-3	9	R45-B45
MO-14G9B-E14	RKW-3	9	R45-B45
MO-14G9B-M14	RKW-3	9	R45-B45
MO-14G9B-S14	RKW-3	9	R45-B45
MO-14Z12A-A14 (Rear Mount PTO)	ZFM-6	12	CS
MO-14Z12A-A16 (Rear Mount PTO)	ZFM-6	12	CS
MO-14Z16A-A14 (Rear Mount PTO)	ZFM-7	16	CS
MO-14Z16A-A16 (Rear Mount PTO)	ZFM-7	16	CS
MO-15F10A-E15	RKW-2	10	R45-B45
MO-15F10A-S15	RKW-2	10	R45-B45
MO-15F10C-E15	RKW-4	10	R45-B45
MO-15F10C-S15	RKW-4	10	R45-B45
MO-15F9B-E15	RKW-3	9	R45-B45
MO-15F9B-S15	RKW-3	9	R45-B45
MO-15G10A-D15	RKW-2	10	R45-B45
MO-15G10A-E15	RKW-2	10	R45-B45
MO-15G10A-M15	RKW-2	10	R45-B45
MO-15G10A-S15	RKW-2	10	R45-B45

IMPORTANT: See Safety Information in Section I of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

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Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

MERITOR/ROCKWELL TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
MO-15G10C-D15	RKW-4	10	R45-B45
MO-15G10C-E15	RKW-4	10	R45-B45
MO-15G10C-M15	RKW-4	10	R45-B45
MO-15G10C-S15	RKW-4	10	R45-B45
MO-15G9B-D15	RKW-3	9	R45-B45
MO-15G9B-E15	RKW-3	9	R45-B45
MO-15G9B-M15	RKW-3	9	R45-B45
MO-15G9B-S15	RKW-3	9	R45-B45
MO-15Z12A-A15 (Rear Mount PTO)	ZFM-6	12	CS
MO-15Z12A-A16 (Rear Mount PTO)	ZFM-6	12	CS
MO-15Z16A-A15 (Rear Mount PTO)	ZFM-7	16	CS
MO-15Z16A-A16 (Rear Mount PTO)	ZFM-7	16	CS
MO-16F10A-E16	RKW-2	10	R45-B45
MO-16F10A-S16	RKW-2	10	R45-B45
MO-16F10C-E16	RKW-4	10	R45-B45
MO-16F10C-E18	RKW-4	10	R45-B45
MO-16F10C-M18	RKW-4	10	R45-B45
MO-16F10C-S16	RKW-4	10	R45-B45
MO-16F10C-S18	RKW-4	10	R45-B45
MO-16G10A-D16	RKW-2	10	R45-B45
MO-16G10A-E16	RKW-2	10	R45-B45
MO-16G10A-M16	RKW-2	10	R45-B45
MO-16G10A-S16	RKW-2	10	R45-B45
MO-16G10C-D16	RKW-4	10	R45-B45
MO-16G10C-E16	RKW-4	10	R45-B45
MO-16G10C-E18	RKW-4	10	R45-B45
MO-16G10C-M16	RKW-4	10	R45-B45
MO-16G10C-M18	RKW-4	10	R45-B45
MO-16G10C-S16	RKW-4	10	R45-B45
MO-16G10C-S18	RKW-4	10	R45-B45
MO-16Z12A-A16 (Rear Mount PTO)	ZFM-6	12	CS
MO-16Z16A-A16 (Rear Mount PTO)	ZFM-7	16	CS
RD10-145A	RKW-1	10	R45-B45
RE10-115A	RKW-1	10	R45-B45
RE10-125A	RKW-1	10	R45-B45
RE10-135A	RKW-1	10	R45-B45

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
RE10-145A	RKW-1	10	R45-B45
RE10-155A	RKW-1	10	R45-B45
RE9-115A	RKW-1	9	R45-B45
RE9-125A	RKW-1	9	R45-B45
RE9-135A	RKW-1	9	R45-B45
RE9-145A	RKW-1	9	R45-B45
RE9-155A	RKW-1	9	R45-B45
REO9-115B	RKW-3	9	R45-B45
REO9-125A	RKW-2	9	R45-B45
REO9-125B	RKW-3	9	R45-B45
REO9-135A	RKW-2	9	R45-B45
REO9-135B	RKW-3	9	R45-B45
REO9-145A	RKW-2	9	R45-B45
REO9-145B	RKW-3	9	R45-B45
REO9-155B	RKW-3	9	R45-B45
REX10-115A	RKW-2	10	R45-B45
REX10-115C	RKW-4	10	R45-B45
REX10-125A	RKW-2	10	R45-B45
REX10-125C	RKW-4	10	R45-B45
REX10-135A	RKW-2	10	R45-B45
REX10-135C	RKW-4	10	R45-B45
REX10-145A	RKW-2	10	R45-B45
REX10-145C	RKW-4	10	R45-B45
REX10-155A	RKW-2	10	R45-B45
REX10-155C	RKW-4	10	R45-B45
REX10-165A	RKW-2	10	R45-B45
REX10-165C	RKW-4	10	R45-B45
REX9-115B	RKW-3	9	R45-B45
REX9-115R	RKW-3	9	R45-B45
REX9-125A	RKW-2	9	R45-B45
REX9-125B	RKW-3	9	R45-B45
REX9-125R	RKW-3	9	R45-B45
REX9-135A	RKW-2	9	R45-B45
REX9-135B	RKW-3	9	R45-B45
REX9-135R	RKW-3	9	R45-B45
REX9-145A	RKW-2	9	R45-B45

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

MERITOR/ROCKWELL TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
REX9-145B	RKW-3	9	R45-B45
REX9-145R	RKW-3	9	R45-B45
REX9-155B	RKW-3	9	R45-B45
RM10-115A	RKW-1	10	R45-B45
RM10-125A	RKW-1	10	R45-B45
RM10-135A	RKW-1	10	R45-B45
RM10-145A	RKW-1	10	R45-B45
RM10-155A	RKW-1	10	R45-B45
RM9-115A	RKW-1	9	R45-B45
RM9-125A	RKW-1	9	R45-B45
RM9-135A	RKW-1	9	R45-B45
RM9-145A	RKW-1	9	R45-B45
RM9-155A	RKW-1	9	R45-B45
RMO13-145A	RKW-1	13	R45-B45
RMO9-115A	RKW-2	9	R45-B45
RMO9-115B	RKW-3	9	R45-B45
RMO9-125A	RKW-2	9	R45-B45
RMO9-125B	RKW-3	9	R45-B45
RMO9-135A	RKW-2	9	R45-B45
RMO9-135B	RKW-3	9	R45-B45
RMO9-145A	RKW-2	9	R45-B45
RMO9-145B	RKW-3	9	R45-B45
RMO9-155B	RKW-3	9	R45-B45
RMX10-115A	RKW-2	10	R45-B45
RMX10-115C	RKW-4	10	R45-B45
RMX10-125A	RKW-2	10	R45-B45
RMX10-125C	RKW-4	10	R45-B45
RMX10-135A	RKW-2	10	R45-B45
RMX10-135C	RKW-4	10	R45-B45
RMX10-145A	RKW-2	10	R45-B45
RMX10-145C	RKW-4	10	R45-B45
RMX10-155A	RKW-2	10	R45-B45
RMX10-155C	RKW-4	10	R45-B45
RMX10-165A	RKW-2	10	R45-B45
RMX10-165C	RKW-4	10	R45-B45
RMX9-115B	RKW-3	9	R45-B45

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
RMX9-115R	RKW-2	9	R45-B45
RMX9-125A	RKW-2	9	R45-B45
RMX9-125B	RKW-3	9	R45-B45
RMX9-125R	RKW-2	9	R45-B45
RMX9-135A	RKW-2	9	R45-B45
RMX9-135B	RKW-3	9	R45-B45
RMX9-135R	RKW-2	9	R45-B45
RMX9-145A	RKW-2	9	R45-B45
RMX9-145B	RKW-3	9	R45-B45
RMX9-145R	RKW-2	9	R45-B45
RMX9-155B	RKW-3	9	R45-B45
RS10-115A	RKW-1	10	R45-B45
RS10-125A	RKW-1	10	R45-B45
RS10-135A	RKW-1	10	R45-B45
RS10-145A	RKW-1	10	R45-B45
RS10-155A	RKW-1	10	R45-B45
RS9-115A	RKW-1	9	R45-B45
RS9-125A	RKW-1	9	R45-B45
RS9-135A	RKW-1	9	R45-B45
RS9-145A	RKW-1	9	R45-B45
RS9-155A	RKW-1	9	R45-B45
RSO9-115B	RKW-3	9	R45-B45
RSO9-125B	RKW-3	9	R45-B45
RSO9-135B	RKW-3	9	R45-B45
RSO9-145B	RKW-3	9	R45-B45
RSO9-155B	RKW-3	9	R45-B45
RSX10-115A	RKW-2	10	R45-B45
RSX10-115C	RKW-4	10	R45-B45
RSX10-125A	RKW-2	10	R45-B45
RSX10-125C	RKW-4	10	R45-B45
RSX10-135A	RKW-2	10	R45-B45
RSX10-135C	RKW-4	10	R45-B45
RSX10-145A	RKW-2	10	R45-B45
RSX10-145C	RKW-4	10	R45-B45
RSX10-155A	RKW-2	10	R45-B45
RSX10-155C	RKW-4	10	R45-B45

IMPORTANT: See Safety Information in Section I of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

MERITOR/ROCKWELL TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
RSX10-165A	RKW-2	10	R45-B45
RSX10-165C	RKW-4	10	R45-B45
RSX9-115B	RKW-3	9	R45-B45
RSX9-115C	RKW-3	9	R45-B45
RSX9-115R	RKW-3	9	R45-B45
RSX9-125A	RKW-2	9	R45-B45
RSX9-125B	RKW-3	9	R45-B45
RSX9-125C	RKW-3	9	R45-B45
RSX9-125R	RKW-2	9	R45-B45
RSX9-135A	RKW-2	9	R45-B45
RSX9-135B	RKW-3	9	R45-B45
RSX9-135C	RKW-3	9	R45-B45
RSX9-135R	RKW-2	9	R45-B45
RSX9-145A	RKW-2	9	R45-B45
RSX9-145B	RKW-3	9	R45-B45
RSX9-145C	RKW-3	9	R45-B45
RSX9-145R	RKW-2	9	R45-B45
RSX9-155B	RKW-3	9	R45-B45
RSX9-155C	RKW-3	9	R45-B45
RSX9-165C	RKW-3	9	R45-B45

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

M-11F10A-E11	M-11G9A-D11	M-12G10A-D12
M-11F10A-S11	M-11G9A-E11	M-12G10A-E12
M-11F9A-E11	M-11G9A-M11	M-12G10A-M12
M-11F9A-S11	M-11G9A-S11	M-12G10A-S12
M-11G10A-D11	M-12F10A-E12	M-12G9A-D12
M-11G10A-E11	M-12F10A-S12	M-12G9A-E12
M-11G10A-M11	M-12F9A-E12	M-12G9A-M12
M-11G10A-S11	M-12F9A-S12	M-12G9A-S12

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5740MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*3	250 I	Opp	63		7-A-032(P)(28)	328564X	Furnished	221XCAHX-*3	250 I	Opp	63		7-A-032(28)		Furnished
221ZEAHX-*3	250 I	Opp	73			328564X	Furnished	221XEAHX-*3	250 I	Opp	73				Furnished
221ZPAHX-*3	200 I	Opp	119			328564X	Furnished	221XPAHX-*3	200 I	Opp	118				Furnished
489XAAHX-*5 (12)	250 I	Opp	56				Furnished	442XAAHX-*3 (12)	250 I	Opp	56				Furnished
489XCAHX-*5 (13)	250 I	Opp	71				Furnished	442XBAHX-*3 (18)	250 I	Eng	56			REQUIRED	Furnished
489XFAHX-*5 (2)	250 I	Opp	88				Furnished	442XCAHX-*3 (13)	250 I	Opp	71				Furnished
489XHAHX-*5 (15)	250 I	Opp	102				Furnished	442XFAHX-*3 (2)	250 I	Opp	88				Furnished
489XLAHX-*5 (1)	250 I	Opp	114				Furnished	442XHAHX-*3 (15)	250 I	Opp	102				Furnished
489XQAHX-*5 (1)	225 I	Opp	123				Furnished	442XLAHX-*3 (1)	250 I	Opp	114				Furnished
489XRAHX-*5 (1)	225 I	Opp	142				Furnished	442XQAHX-*3 (1)	225 I	Opp	123				Furnished
489XSAHX-*5 (1)	200 I	Opp	169				Furnished	442XRAHX-*3 (1)	225 I	Opp	142				Furnished
489XUAHX-*5 (1)	195 I	Opp	202				Furnished	442XSAHX-*3 (1)	200 I	Opp	169				Furnished
489XWAHX-*5 (1)	175 I	Opp	237				Furnished	442XUAHX-*3 (1)	195 I	Opp	201				Furnished
489XXAHX-*5 (1)	140 I	Opp	281				Furnished	442XWAHX-*3 (1)	175 I	Opp	237				Furnished
680XFAHX-*3 (10)	375 I	Opp	88				Furnished	442XXAHX-*3 (1)	140 I	Opp	280				Furnished
680XHAHX-*3 (20)	375 I	Opp	102				Furnished	660XFAHX-*3 (10)	375 I	Opp	88				Furnished
680XQAHX-*3 (11)	375 I	Opp	123				Furnished	660XHAHX-*3 (15)	375 I	Opp	102				Furnished
680XRAHX-*3 (19)	350 I	Opp	142				Furnished	660XQAHX-*3 (11)	375 I	Opp	123				Furnished
680XSAHX-*3 (14)	325 I	Opp	169				Furnished	660XRAHX-*3 (19)	350 I	Opp	142				Furnished
823XBAHX-*3 (22)	500 I	Opp	60				Furnished	660XSAHX-*3 (14)	325 I	Opp	169				Furnished
823XDAHX-*3 (26)	500 I	Opp	71				Furnished								
823XGAHX-*3 (27)	500 I	Opp	77				Furnished								
823XJAHX-*3 (23)	500 I	Opp	91				Furnished								
823XMAHX-*3 (21)	500 I	Opp	107				Furnished								
823XRAHX-*3 (25)	400 I	Opp	147				Furnished								
823XTKTX-*3 (17)	350 I	Opp	177		8-A-165(28)		Furnished								
880XBAHX-*3 (3)	500 I	Opp	60				Furnished								
880XDAHX-*3 (4)	500 I	Opp	71				Furnished								
880XGAHX-*3 (9)	500 I	Opp	77				Furnished								
880XJAHX-*3 (5)	500 I	Opp	91				Furnished								
880XMAHX-*3 (6)	500 I	Opp	107				Furnished								
880XQAHX-*3 (16)	450 I	Opp	125				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1418
(19) Input Gear Part No. 5-P-1441
(20) Input Gear Part No. 5-P-1494
(21) Input Gear Part No. 5-P-283
(22) Input Gear Part No. 5-P-285
(23) Input Gear Part No. 5-P-325
(25) Input Gear Part No. 5-P-721
(26) Input Gear Part No. 5-P-971
(27) Input Gear Part No. 5-P-980
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

M-11F10A-E11	M-11G9A-D11	M-12G10A-D12
M-11F10A-S11	M-11G9A-E11	M-12G10A-E12
M-11F9A-E11	M-11G9A-M11	M-12G10A-M12
M-11F9A-S11	M-11G9A-S11	M-12G10A-S12
M-11G10A-D11	M-12F10A-E12	M-12G9A-D12
M-11G10A-E11	M-12F10A-S12	M-12G9A-E12
M-11G10A-M11	M-12F9A-E12	M-12G9A-M12
M-11G10A-S11	M-12F9A-S12	M-12G9A-S12

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5740MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
880XRAHX-*3 (7)	400 I	Opp	147				Furnished								
880XTAHX-*3 (8)	350 I	Opp	189				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBAJX-*3	250 C	Opp	60				Furnished	272XBAJX-*3	250 C	Opp	60				Furnished
282XCAJX-*3	250 C	Opp	73				Furnished	272XCAJX-*3	250 C	Opp	73				Furnished
282XDAJX-*3	250 C	Opp	87				Furnished	272XDAJX-*3	250 C	Opp	87				Furnished
282XGAJX-*3	250 C	Opp	103				Furnished	272XGAJX-*3	250 C	Opp	103				Furnished
282XKAJX-*3	250 C	Opp	115				Furnished	272XKAJX-*3	250 C	Opp	115				Furnished
282XMAJX-*3	250 C	Opp	129				Furnished	272XMAJX-*3	250 C	Opp	129				Furnished
282XPAJX-*3	250 C	Opp	144				Furnished	272XPAJX-*3	250 C	Opp	144				Furnished
282XSAJX-*3	225 C	Opp	161				Furnished	272XSAJX-*3	225 C	Opp	161				Furnished
282XTAJX-*3	225 C	Opp	180				Furnished	272XTAJX-*3	225 C	Opp	180				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	60				Furnished								
885XGAHX-*3 (9)	500 I	Opp	77				Furnished								
885XJAHX-*3 (5)	500 I	Opp	91				Furnished								
885XMAHX-*3 (6)	500 I	Opp	107				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (24)	200 I	Opp	77	81			Furnished	340XFAHX-*5 (24)	200 I	Opp	77	81	7-A-140(28)		Furnished
863XBAHX-*5	500 I	Opp	60	74			Furnished								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng					Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(24) Input Gear Part No. 5-P-581
(28) Filler block furnished with PTO

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MO-11F10A-S11	MO-12F9A-S12	MO-12G9A-S12
MO-11G10A-D11	MO-12G10A-D12	MO-13F10A-E13
MO-11G10A-E11	MO-12G10A-E12	MO-13F10A-S13
MO-11G10A-M11	MO-12G10A-M12	MO-13F9A-E13
MO-11G10A-S11	MO-12G10A-S12	MO-13F9A-S13
MO-12F10A-E12	MO-12G9A-D12	MO-13G10A-D13
MO-12F10A-S12	MO-12G9A-E12	MO-13G10A-E13
MO-12F9A-E12	MO-12G9A-M12	MO-13G10A-M13

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5740MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*3	250 I	Opp	85		7-A-032(P)(28)	328564X	Furnished	221XCAHX-*3	250 I	Opp	85		7-A-032(28)		Furnished
221ZEAHX-*3	250 I	Opp	98			328564X	Furnished	221XEAHX-*3	250 I	Opp	98				Furnished
221ZPAHX-*3	200 I	Opp	159			328564X	Furnished	221XPAHX-*3	200 I	Opp	159				Furnished
489XAAHX-*5 (12)	250 I	Opp	75				Furnished	442XAAHX-*3 (12)	250 I	Opp	75				Furnished
489XCAHX-*5 (13)	250 I	Opp	96				Furnished	442XBAHX-*3 (18)	250 I	Eng	75			REQUIRED	Furnished
489XFAHX-*5 (2)	250 I	Opp	118				Furnished	442XCAHX-*3 (13)	250 I	Opp	96				Furnished
489XHAHX-*5 (15)	250 I	Opp	137				Furnished	442XFAHX-*3 (2)	250 I	Opp	118				Furnished
489XLAHX-*5 (1)	250 I	Opp	153				Furnished	442XHAHX-*3 (15)	250 I	Opp	137				Furnished
489XQAHX-*5 (1)	225 I	Opp	165				Furnished	442XLAHX-*3 (1)	250 I	Opp	153				Furnished
489XRAHX-*5 (1)	225 I	Opp	191				Furnished	442XQAHX-*3 (1)	225 I	Opp	165				Furnished
489XSAHX-*5 (1)	200 I	Opp	227				Furnished	442XRAHX-*3 (1)	225 I	Opp	191				Furnished
489XUAHX-*5 (1)	195 I	Opp	270				Furnished	442XSAHX-*3 (1)	200 I	Opp	227				Furnished
489XWAHX-*5 (1)	175 I	Opp	318				Furnished	442XUAHX-*3 (1)	195 I	Opp	270				Furnished
489XXAHX-*5 (1)	140 I	Opp	376				Furnished	442XWAHX-*3 (1)	175 I	Opp	318				Furnished
680XFAHX-*3 (10)	375 I	Opp	118				Furnished	442XXAHX-*3 (1)	140 I	Opp	376				Furnished
680XHAHX-*3 (20)	375 I	Opp	137				Furnished	660XFAHX-*3 (10)	375 I	Opp	118				Furnished
680XQAHX-*3 (11)	375 I	Opp	165				Furnished	660XHAHX-*3 (15)	375 I	Opp	137				Furnished
680XRAHX-*3 (19)	350 I	Opp	191				Furnished	660XQAHX-*3 (11)	375 I	Opp	165				Furnished
680XSAHX-*3 (14)	325 I	Opp	227				Furnished	660XRAHX-*3 (19)	350 I	Opp	191				Furnished
823XBAHX-*3 (22)	500 I	Opp	80				Furnished	660XSAHX-*3 (14)	325 I	Opp	227				Furnished
823XDAHX-*3 (26)	500 I	Opp	95				Furnished								
823XGAHX-*3 (27)	500 I	Opp	103				Furnished								
823XJAHX-*3 (23)	500 I	Opp	122				Furnished								
823XMAHX-*3 (21)	500 I	Opp	143				Furnished								
823XRAHX-*3 (25)	400 I	Opp	197				Furnished								
823XTKTX-*3 (17)	350 I	Opp	239		8-A-165(28)		Furnished								
880XBAHX-*3 (3)	500 I	Opp	80				Furnished								
880XDAHX-*3 (4)	500 I	Opp	95				Furnished								
880XGAHX-*3 (9)	500 I	Opp	104				Furnished								
880XJAHX-*3 (5)	500 I	Opp	122				Furnished								
880XMAHX-*3 (6)	500 I	Opp	143				Furnished								
880XQAHX-*3 (16)	450 I	Opp	167				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1418
(19) Input Gear Part No. 5-P-1441
(20) Input Gear Part No. 5-P-1494
(21) Input Gear Part No. 5-P-283
(22) Input Gear Part No. 5-P-285
(23) Input Gear Part No. 5-P-325
(25) Input Gear Part No. 5-P-721
(26) Input Gear Part No. 5-P-971
(27) Input Gear Part No. 5-P-980
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

MO-11F10A-S11	MO-12F9A-S12	MO-12G9A-S12
MO-11G10A-D11	MO-12G10A-D12	MO-13F10A-E13
MO-11G10A-E11	MO-12G10A-E12	MO-13F10A-S13
MO-11G10A-M11	MO-12G10A-M12	MO-13F9A-E13
MO-11G10A-S11	MO-12G10A-S12	MO-13F9A-S13
MO-12F10A-E12	MO-12G9A-D12	MO-13G10A-D13
MO-12F10A-S12	MO-12G9A-E12	MO-13G10A-E13
MO-12F9A-E12	MO-12G9A-M12	MO-13G10A-M13

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5740MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
880XRAHX-*3 (7)	400 I	Opp	197				Furnished								
880XTAHX-*3 (8)	350 I	Opp	254				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBAJX-*3	250 C	Opp	80				Furnished	272XBAJX-*3	250 C	Opp	80				Furnished
282XCAJX-*3	250 C	Opp	97				Furnished	272XCAJX-*3	250 C	Opp	97				Furnished
282XDAJX-*3	250 C	Opp	116				Furnished	272XDAJX-*3	250 C	Opp	116				Furnished
282XGAJX-*3	250 C	Opp	138				Furnished	272XGAJX-*3	250 C	Opp	138				Furnished
282XKAJX-*3	250 C	Opp	155				Furnished	272XKAJX-*3	250 C	Opp	155				Furnished
282XMAJX-*3	250 C	Opp	173				Furnished	272XMAJX-*3	250 C	Opp	173				Furnished
282XPAJX-*3	250 C	Opp	193				Furnished	272XPAJX-*3	250 C	Opp	193				Furnished
282XSAJX-*3	225 C	Opp	216				Furnished	272XSAJX-*3	225 C	Opp	216				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	80				Furnished								
885XGAHX-*3 (9)	500 I	Opp	104				Furnished								
885XJAHX-*3 (5)	500 I	Opp	122				Furnished								
885XMAHX-*3 (6)	500 I	Opp	143				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (24)	200 I	Opp	103	108			Furnished	340XFAHX-*5 (24)	200 I	Opp	103	108	7-A-140(28)		Furnished
863XBAHX-*5	500 I	Opp	80	100			Furnished								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng					Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(24) Input Gear Part No. 5-P-581
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

MO-11F9B-E11	MO-12G9B-D12	MO-13G9B-M13
MO-11F9B-S11	MO-12G9B-E12	MO-13G9B-S13
MO-11G9B-D11	MO-12G9B-M12	MO-14F9B-E14
MO-11G9B-E11	MO-12G9B-S12	MO-14F9B-S14
MO-11G9B-M11	MO-13F9B-E13	MO-14G9B-D14
MO-11G9B-S11	MO-13F9B-S13	MO-14G9B-E14
MO-12F9B-E12	MO-13G9B-D13	MO-14G9B-M14
MO-12F9B-S12	MO-13G9B-E13	MO-14G9B-S14

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5740MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
489XAAHX-*5 (12)	250 I	Opp	64				Furnished	221XCAHX-*3	250 I	Eng	73		7-A-032(P)(28)	329138X	Furnished
489XCAHX-*5 (13)	250 I	Opp	82				Furnished	221XEAHX-*3	250 I	Eng	84			329138X	Furnished
489XFAHX-*5 (2)	250 I	Opp	101				Furnished	221XPAHX-*3	200 I	Eng	136			329138X	Furnished
489XHAHX-*5 (15)	250 I	Opp	117				Furnished	442XAAHX-*3 (12)	250 I	Opp	64				Furnished
489XLAHX-*5 (1)	250 I	Opp	131				Furnished	442XBAHX-*3 (18)	250 I	Eng	64			REQUIRED	Furnished
489XQAHX-*5 (1)	225 I	Opp	141				Furnished	442XCAHX-*3 (13)	250 I	Opp	82				Furnished
489XRAHX-*5 (1)	225 I	Opp	163				Furnished	442XFAHX-*3 (2)	250 I	Opp	101				Furnished
489XSAHX-*5 (1)	200 I	Opp	194				Furnished	442XHAHX-*3 (15)	250 I	Opp	117				Furnished
680XFAHX-*3 (10)	375 I	Opp	101				Furnished	442XLAHX-*3 (1)	250 I	Opp	131				Furnished
680XHAHX-*3 (20)	375 I	Opp	117				Furnished	442XQAHX-*3 (1)	225 I	Opp	141				Furnished
680XQAHX-*3 (11)	375 I	Opp	141				Furnished	442XRAHX-*3 (1)	225 I	Opp	163				Furnished
680XRAHX-*3 (19)	350 I	Opp	163				Furnished	442XSAHX-*3 (1)	200 I	Opp	194				Furnished
680XSAHX-*3 (14)	325 I	Opp	194				Furnished	660XFAHX-*3 (10)	375 I	Opp	101				Furnished
823XBAHX-*3 (22)	500 I	Opp	69				Furnished	660XHAHX-*3 (15)	375 I	Opp	117				Furnished
823XDAHX-*3 (26)	500 I	Opp	81				Furnished	660XQAHX-*3 (11)	375 I	Opp	141				Furnished
823XGAHX-*3 (27)	500 I	Opp	88				Furnished	660XRAHX-*3 (19)	350 I	Opp	163				Furnished
823XJAHX-*3 (23)	500 I	Opp	104				Furnished	660XSAHX-*3 (14)	325 I	Opp	194				Furnished
823XMAHX-*3 (21)	500 I	Opp	122				Furnished								
823XRAHX-*3 (25)	400 I	Opp	169				Furnished								
823XTKTX-*3 (17)	350 I	Opp	205		8-A-165(P)(28)		Furnished								
880XBAHX-*3 (3)	500 I	Opp	69				Furnished								
880XDAHX-*3 (4)	500 I	Opp	82				Furnished								
880XGAHX-*3 (9)	500 I	Opp	89				Furnished								
880XJAHX-*3 (5)	500 I	Opp	104				Furnished								
880XMAHX-*3 (6)	500 I	Opp	122				Furnished								
880XQAHX-*3 (16)	450 I	Opp	143				Furnished								
880XRAHX-*3 (7)	400 I	Opp	169				Furnished								
880XTAHX-*3 (8)	350 I	Opp	218				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBAJX-*3	250 C	Opp	69				Furnished	272XBAJX-*3	250 C	Opp	69				Furnished
282XCAJX-*3	250 C	Opp	83				Furnished	272XCAJX-*3	250 C	Opp	83				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1418
(19) Input Gear Part No. 5-P-1441
(20) Input Gear Part No. 5-P-1494
(21) Input Gear Part No. 5-P-283
(22) Input Gear Part No. 5-P-285
(23) Input Gear Part No. 5-P-325
(25) Input Gear Part No. 5-P-721
(26) Input Gear Part No. 5-P-971
(27) Input Gear Part No. 5-P-980
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

MO-11F9B-E11	MO-12G9B-D12	MO-13G9B-M13
MO-11F9B-S11	MO-12G9B-E12	MO-13G9B-S13
MO-11G9B-D11	MO-12G9B-M12	MO-14F9B-E14
MO-11G9B-E11	MO-12G9B-S12	MO-14F9B-S14
MO-11G9B-M11	MO-13F9B-E13	MO-14G9B-D14
MO-11G9B-S11	MO-13F9B-S13	MO-14G9B-E14
MO-12F9B-E12	MO-13G9B-D13	MO-14G9B-M14
MO-12F9B-S12	MO-13G9B-E13	MO-14G9B-S14

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5740MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XDAJX-*3	250 C	Opp	100				Furnished	272XDAJX-*3	250 C	Opp	100				Furnished
282XGAJX-*3	250 C	Opp	118				Furnished	272XGAJX-*3	250 C	Opp	118				Furnished
282XKAJX-*3	250 C	Opp	132				Furnished	272XKAJX-*3	250 C	Opp	132				Furnished
282XMAJX-*3	250 C	Opp	148				Furnished	272XMAJX-*3	250 C	Opp	148				Furnished
282XPAJX-*3	250 C	Opp	165				Furnished	272XPAJX-*3	250 C	Opp	165				Furnished
282XSAJX-*3	225 C	Opp	185				Furnished	272XSAJX-*3	225 C	Opp	185				Furnished
282XTAJX-*3	225 C	Opp	207				Furnished	272XTAJX-*3	225 C	Opp	207				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	69				Furnished								
885XGAHX-*3 (9)	500 I	Opp	89				Furnished								
885XJAHX-*3 (5)	500 I	Opp	104				Furnished								
885XMAHX-*3 (6)	500 I	Opp	122				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (24)	200 I	Opp	88	93			Furnished	340XFAHX-*5 (24)	200 I	Opp	88	93	7-A-140(28)		Furnished
863XBAHX-*5	500 I	Opp	69	85			Furnished								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng					Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(24) Input Gear Part No. 5-P-581
(28) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

MO-11F10C-E11
MO-11F10C-S11
MO-11G10C-D11
MO-11G10C-E11
MO-11G10C-M11
MO-11G10C-S11
MO-12F10C-E12
MO-12F10C-S12
MO-12G10C-D12
MO-12G10C-E12
MO-12G10C-M12
MO-12G10C-S12
MO-13F10C-E13
MO-13F10C-S13
MO-13G10C-D13
MO-13G10C-E13
MO-13G10C-M13
MO-13G10C-S13
MO-14F10C-E14
MO-14F10C-E16
MO-14F10C-M16
MO-14F10C-S14
MO-14F10C-S16
MO-14G10C-D14

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5740MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
221ZCAHX-*3	250 I	Opp	82		7-A-032(P)(22)	328564X	Furnished	221XCAHX-*3	250 I	Opp	82		7-A-032(22)		Furnished
221ZEAHX-*3	250 I	Opp	95			328564X	Furnished	221XEAHX-*3	250 I	Opp	95				Furnished
221ZPAHX-*3	200 I	Opp	154			328564X	Furnished	221XPAHX-*3	200 I	Opp	154				Furnished
489XAAHX-*5 (12)	250 I	Opp	72				Furnished	442XAAHX-*3 (12)	250 I	Opp	72				Furnished
489XCAHX-*5 (13)	250 I	Opp	92				Furnished	442XBAHX-*3 (18)	250 I	Eng	72			REQUIRED	Furnished
489XFAHX-*5 (2)	250 I	Opp	114				Furnished	442XCAHX-*3 (13)	250 I	Opp	92				Furnished
489XHAHX-*5 (15)	250 I	Opp	132				Furnished	442XFAHX-*3 (2)	250 I	Opp	114				Furnished
489XLAHX-*5 (1)	250 I	Opp	148				Furnished	442XHAHX-*3 (15)	250 I	Opp	132				Furnished
489XQAHX-*5 (1)	225 I	Opp	159				Furnished	442XLAHX-*3 (1)	250 I	Opp	148				Furnished
489XRAHX-*5 (1)	225 I	Opp	184				Furnished	442XQAHX-*3 (1)	225 I	Opp	159				Furnished
489XSAHX-*5 (1)	200 I	Opp	219				Furnished	442XRAHX-*3 (1)	225 I	Opp	184				Furnished
489XUAHX-*5 (1)	195 I	Opp	261				Furnished	442XSAHX-*3 (1)	200 I	Opp	219				Furnished
489XWAHX-*5 (1)	175 I	Opp	307				Furnished	442XUAHX-*3 (1)	195 I	Opp	261				Furnished
489XXAHX-*5 (1)	140 I	Opp	363				Furnished	442XWAHX-*3 (1)	175 I	Opp	307				Furnished
680XFAHX-*3 (10)	375 I	Opp	114				Furnished	442XXAHX-*3 (1)	140 I	Opp	363				Furnished
680XHAHX-*3 (20)	375 I	Opp	132				Furnished	660XFAHX-*3 (10)	375 I	Opp	114				Furnished
680XQAHX-*3 (11)	375 I	Opp	159				Furnished	660XHAHX-*3 (15)	375 I	Opp	132				Furnished
680XRAHX-*3 (19)	350 I	Opp	184				Furnished	660XQAHX-*3 (11)	375 I	Opp	159				Furnished
680XSAHX-*3 (14)	325 I	Opp	219				Furnished	660XRAHX-*3 (19)	350 I	Opp	184				Furnished
823XTKTX-*3 (17)	350 I	Opp	230		8-A-165(22)		Furnished	660XSAHX-*3 (14)	325 I	Opp	219				Furnished
880XBAHX-*3 (3)	500 I	Opp	78				Furnished								
880XDAHX-*3 (4)	500 I	Opp	92				Furnished								
880XGAHX-*3 (9)	500 I	Opp	100				Furnished								
880XJAHX-*3 (5)	500 I	Opp	118				Furnished								
880XMAHX-*3 (6)	500 I	Opp	138				Furnished								
880XQAHX-*3 (16)	450 I	Opp	162				Furnished								
880XRAHX-*3 (7)	400 I	Opp	191				Furnished								
880XTAHX-*3 (8)	350 I	Opp	245				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBAJX-*3	250 C	Opp	78				Furnished	272XBAJX-*3	250 C	Opp	78				Furnished
282XCAJX-*3	250 C	Opp	94				Furnished	272XCAJX-*3	250 C	Opp	94				Furnished

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1418
(19) Input Gear Part No. 5-P-1441
(20) Input Gear Part No. 5-P-1494
(22) Filler block furnished with PTO

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MO-11F10C-E11	MO-12G10C-D12	MO-13G10C-M13
MO-11F10C-S11	MO-12G10C-E12	MO-13G10C-S13
MO-11G10C-D11	MO-12G10C-M12	MO-14F10C-E14
MO-11G10C-E11	MO-12G10C-S12	MO-14F10C-E16
MO-11G10C-M11	MO-13F10C-E13	MO-14F10C-M16
MO-11G10C-S11	MO-13F10C-S13	MO-14F10C-S14
MO-12F10C-E12	MO-13G10C-D13	MO-14F10C-S16
MO-12F10C-S12	MO-13G10C-E13	MO-14G10C-D14

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.8100" (20.5740MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0850" (27.5600MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XDAJX-*3	250 C	Opp	112				Furnished	272XDAJX-*3	250 C	Opp	112				Furnished
282XGAJX-*3	250 C	Opp	134				Furnished	272XGAJX-*3	250 C	Opp	134				Furnished
282XKAJX-*3	250 C	Opp	149				Furnished	272XKAJX-*3	250 C	Opp	149				Furnished
282XMAJX-*3	250 C	Opp	167				Furnished	272XMAJX-*3	250 C	Opp	167				Furnished
282XPAJX-*3	250 C	Opp	187				Furnished	272XPAJX-*3	250 C	Opp	187				Furnished
282XSAJX-*3	225 C	Opp	209				Furnished	272XSAJX-*3	225 C	Opp	209				Furnished
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	78				Furnished								
885XGAHX-*3 (9)	500 I	Opp	100				Furnished								
885XJAHX-*3 (5)	500 I	Opp	118				Furnished								
885XMAHX-*3 (6)	500 I	Opp	138				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (21)	200 I	Opp	100	105			Furnished	340XFAHX-*5 (21)	200 I	Opp	100	105	7-A-140(22)		Furnished
863XBAHX-*5	500 I	Opp	78	96			Furnished								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng					Furnished	626XAHX-3AH	250 I	Eng					Furnished
								630XAHX-3AH	250 I	Eng					Furnished
								645XAHX-3AH	250 I	Eng					Furnished

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(21) Input Gear Part No. 5-P-581
(22) Filler block furnished with PTO

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M-13Z12A-A14 (Rear Mount PTO)
M-13Z12A-A13 (Rear Mount PTO)
M-14Z12A-A14 (Rear Mount PTO)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening Gear NON-STANDARD of Centerline

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRACW-*-*	590 C	Opp	82				Furnished
523XTACX-*-*	258 C	Eng	113				Furnished
523XVACX-*-*	258 C	Eng	134				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

WARNING: Any attempt to bypass transmission control may result in damage to Freedomline Transmissions.

WARNING: 511 Rear Mount - The XV and XK PTO outputs will not work on this transmission. The XY PTO output may work depending on the transmission driveline size and flange type and the pump to be mounted to the PTO. A 523 is recommended because of its offset design.

CAUTION: PTO installers must ensure that PTOs are integrated in a manner that permits proper transmission control of PTO engagement and disengagement.

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MO-14Z12A-A16 (Rear Mount PTO)
MO-15Z12A-A16 (Rear Mount PTO)
MO-14Z12A-A14 (Rear Mount PTO)
MO-13Z12A-A13 (Rear Mount PTO)
MO-15Z12A-A15 (Rear Mount PTO)
MO-16Z12A-A16 (Rear Mount PTO)
MO-13Z12A-A14 (Rear Mount PTO)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening Gear NON-STANDARD of Centerline

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRACW-*-*	590 C	Opp	135				Furnished
523XTACX-*-*	258 C	Eng	186				Furnished
523XVACX-*-*	258 C	Eng	221				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

WARNING: Any attempt to bypass transmission control may result in damage to Freedomline Transmissions.

WARNING: 511 Rear Mount - The XV and XK PTO outputs will not work on this transmission. The XY PTO output may work depending on the transmission driveline size and flange type and the pump to be mounted to the PTO. A 523 is recommended because of its offset design.

CAUTION: PTO installers must ensure that PTOs are integrated in a manner that permits proper transmission control of PTO engagement and disengagement.

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MO-15Z16A-A15 (Rear Mount PTO)
MO-15Z16A-A16 (Rear Mount PTO)
MO-13Z16A-A13 (Rear Mount PTO)
MO-14Z16A-A14 (Rear Mount PTO)
MO-16Z16A-A16 (Rear Mount PTO)
MO-13Z16A-A14 (Rear Mount PTO)
MO-14Z16A-A16 (Rear Mount PTO)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening Gear NON-STANDARD of Centerline

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (16 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRACW-*-*	590 C	Opp	111				Furnished
523XTACX-*-*	258 C	Eng	153				Furnished
523XVACX-*-*	258 C	Eng	182				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

WARNING: Any attempt to bypass transmission control may result in damage to Freedomline Transmissions.

WARNING: 511 Rear Mount - The XV and XK PTO outputs will not work on this transmission. The XY PTO output may work depending on the transmission driveline size and flange type and the pump to be mounted to the PTO. A 523 is recommended because of its offset design.

CAUTION: PTO installers must ensure that PTOs are integrated in a manner that permits proper transmission control of PTO engagement and disengagement.

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Meritor/Rockwell Notes

RKW-1

1. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. Two Gear PTOs with Direct Mount Pumps may Not Clear the Transmission Bulge on the Right Side. Check for Clearance Before Mounting the PTO and Pump.
3. The 422XBAH MUST be used with one of the Geared Adapters Listed on the Application Page. Direction of rotation shown is the final output shaft rotation w/ Geared Adapter.

RKW-2

1. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. Two Gear PTOs with Direct Mount Pumps may Not Clear the Transmission Bulge on the Right Side. Check for Clearance Before Mounting the PTO and Pump.
3. The 422XBAH MUST be used with one of the Geared Adapters Listed on the Application Page. Direction of rotation shown is the final output shaft rotation w/ Geared Adapter.

RKW-3

1. Use constant mesh PTOs only on this application.
2. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
3. Two gear PTOs with direct mount pumps may not clear the transmission bulge on the right side. Check for clearance before mounting the PTO and pump.
4. The 422XBAH MUST be used with one of the Geared Adapters Listed on the Application Page. Direction of rotation shown is the final output shaft rotation w/ Geared Adapter.

RKW-4

1. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.
2. The 422XBAH MUST be used with one of the Geared Adapters Listed on the Application Page. Direction of rotation shown is the final output shaft rotation w/ Geared Adapter.

ZFM-5

1. Freedomline Transmissions must control PTO engagement. The “F” shift option provides a ZF Meritor approved 12v / Air Shift Kit and wiring harness to connect to the transmission (ZMTEC) controller.
2. Use installation kit 328388-82X (12v / Air w/ wiring harness) to connect a 523 Series, or contact ZF Meritor (800-535-5560) for other wiring considerations or ZMTEC software questions.
3. 511/523 Rear Mounts - The Adapter Assembly 329755X is furnished with the PTO and does not need to be ordered separately.

ZFM-6

1. Freedomline Transmissions must control PTO engagement. The “F” shift option provides a ZF Meritor approved 12v / Air Shift Kit and wiring harness to connect to the transmission (ZMTEC) controller.
2. Use installation kit 328388-82X (12v / Air w/ wiring harness) to connect a 523 Series, or contact ZF Meritor (800-535-5560) for other wiring considerations or ZMTEC software questions.
3. 511/523 Rear Mounts -The Adapter Assembly 329755X is furnished with the PTO and does not need to be ordered separately.

ZFM-7

1. Freedomline Transmissions must control PTO engagement. The “F” shift option provides a ZF Meritor approved 12v / Air Shift Kit and wiring harness to connect to the transmission (ZMTEC) controller.
2. Use installation kit 328388-82X (12v / Air w/ wiring harness) to connect a 523 Series, or contact ZF Meritor (800-535-5560) for other wiring considerations or ZMTEC software questions.
3. 511/523 Rear Mounts-The Adapter Assembly 329755X is furnished with the PTO. It does not need to be ordered separately.

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Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
MO35S5 (FE Model)	MTB-6	5	L35
MO35S6 (Same as MO35S5 except counter shaft speed is faster)	MTB-11	5	L35
MO36S5	MTB-10	5	L40
MO36S6	MTB-10	6	L40
MO38S6 (DUONIC AMT)	MTB-12	6	L44

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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MO35S5 (FE Model)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear REAR of Centerline
35 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
-0.9820" (-24.9428MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
447CXHAX-*4 (1)	140 I	Eng	57		42-P-211(P)(2)		Furnished

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1220
(2) Filler block furnished with PTO

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MO36S6
MO36S5

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear REAR of Centerline
40 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
-1.4720" (-37.3880MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
447CXHAX-*4 (1)	140 I	Eng	72		7-A-500(P)		7170-6X								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1220

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MO35S6 (Same as MO35S5 except counter shaft speed is faster)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear REAR of Centerline
35 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
-0.9820" (-24.9428MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
447CXHAX-*4 (1)	140 I	Eng	69		42-P-211(P)(2)		Furnished								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-1220
(2) Filler block furnished with PTO

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MO38S6 (DUONIC AMT)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear REAR of Centerline
44 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
-1.5960" (-40.5384MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
447CXLSX-*6 (1)	145 I	Eng	70		7-A-450(P)(2)	42-P-211	Furnished								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1471
(2) Filler block furnished with PTO

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Mitsubishi/Fuso Notes

MTB-6

1. This is a non-standard 6-Bolt PTO aperture. The PTO driver gear protrudes above the opening by .982” and requires the filler block listed to mount the 447 PTO.

MTB-10

1. This is a non-standard 6-Bolt PTO aperture. The PTO driver gear protrudes above the opening by 1.472” and requires the filler block listed to mount the 447 PTO.
2. The 7-A-500 spacer and 7170-6X stud kit do not come with the 447C Series and must be ordered separately. The spacer is required to go between the PTO and the adapter that is furnished with the PTO, and the stud kit is required to mount the PTO thru the spacer to the adapter.

MTB-11

1. This is a non-standard 6-Bolt PTO aperture. The PTO driver gear protrudes above the opening by .982” and requires the filler block listed to mount the 447 PTO.

MTB-12

1. This is a non-standard 6-Bolt PTO aperture. The PTO drive gear in this transmission protrudes above the PTO aperture face by 1.596” [40.5384mm].
2. The Adapter, Spacers, and Stud Kits are Furnished with the 442C Order Option. Use (7170-98X) for the Adapter and Filler Block to the transmission and (7170-6X) for the PTO to Adapter.

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The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.

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Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
PO-14F112C (Eaton EEO-14F112C)	PAC-1	12	B42
PO-15F112C (Eaton EEO-15F112C)	PAC-1	12	B42
PO-16F112C (Eaton EEO-16F112C)	PAC-1	12	B42
PO-17F112C (Eaton EEO-17F112C)	PAC-1	12	B42
PO-18F112C (Eaton EEO-18F112C)	PAC-1	12	B42

IMPORTANT: See Safety Information in Section I of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

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PO-14F112C (Eaton EEO-14F112C)
PO-15F112C (Eaton EEO-15F112C)
PO-16F112C (Eaton EEO-16F112C)
PO-17F112C (Eaton EEO-17F112C)
PO-18F112C (Eaton EEO-18F112C)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
42 Teeth - L.H. HELIX

PITCH LINE TO APERTURE FACE:
1.036" (26.3144MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
489QCLZX-*3 (4)	200 I	Opp	94			Furnished	
489QFLZX-*3 (5)	250 I	Opp	116			Furnished	
489QHLZX-*3 (6)	250 I	Opp	135			Furnished	
880QGLZX-*3 (1)	500 I	Opp	107			Furnished	
880QJLZX-*3 (2)	500 I	Opp	125			Furnished	
880QQLZX-*3 (3)	450 I	Opp	173			Furnished	

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

WARNING: SHIFT OPTIONS - Only one shift option is available for this transmission, (D) 12V Elec/Air. PTO is required to interface with the TCM to signal operation. The necessary 12VDC wiring harness is provided with PTO.

(1) Input Gear Part No. 5-P-1574
(2) Input Gear Part No. 5-P-1575
(3) Input Gear Part No. 5-P-1577
(4) Input Gear Part No. 5-P-1587
(5) Input Gear Part No. 5-P-1588
(6) Input Gear Part No. 5-P-1589

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Paccar Notes

PAC-1

1. Gaskets are replaced by a custom molded o-ring. No backlash setting required. Special piloting studs are included in lieu of dowel pins.

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NOTES



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TREMEC/TTC/SPICER





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⚠ WARNING — User Responsibility

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The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

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Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
1010-3B (BM#301115 and Later)	SPR-105	10	R48-B48
1020-3A (BM#301125 and Later)	SPR-105	20	R48-B48
1020-5A (BM#301126 and Later)	SPR-105	20	R48-B48
1214-3A (BM#301212 & 301130 and Later)	SPR-104	14	R54-B54
1214-5A (BM#301213 & 301131 and Later)	SPR-104	14	R54-B54
1410-3B (BM#301165)	SPR-105	10	R48-B48
ASO100-10S	SPR-140	10	L45-R45
ASO10-ESP	SPR-140	10	L45-R45
ASO10-VP10	SPR-140	10	L45-R45
ASO125-10S (BM#301579)	SPR-140	10	L45-R45
ASO140-10S (BM#301580)	SPR-140	10	L45-R45
ASO150-10S (BM#301578)	SPR-140	10	L45-R45
ASO160-10S	SPR-140	10	L45-R45
ASO165-10S (BM#301581)	SPR-140	10	L45-R45
LASO125-10S (BM#301620)	SPR-140	10	L45-R45
LASO140-10S (BM#301621)	SPR-140	10	L45-R45
LASO150-10S (BM#301622)	SPR-140	10	L45-R45
LLASO125-10S	SPR-140	10	L45-R45
LLASO140-10S	SPR-140	10	L45-R45
LLASO150-10S	SPR-140	10	L45-R45
LLPSO100-10S	SPR-140	10	L45-R45
LLPSO10-VPD	SPR-140	10	L45-R45
LLPSO125-10S	SPR-140	10	L45-R45
LLPSO140-10S	SPR-140	10	L45-R45
LLPSO150-10S	SPR-140	10	L45-R45
LLPSO165-10S	SPR-140	10	L45-R45
LPSO100-10S	SPR-140	10	L45-R45
LPSO125-10S (BM#301572)	SPR-140	10	L45-R45
LPSO140-10S (BM#301573)	SPR-140	10	L45-R45
LPSO150-10S (BM#301574)	SPR-140	10	L45-R45
LPSO165-10S	SPR-140	10	L45-R45
PS86-10V (BM#301587)	SPR-144	10	L45-R45
PSDO165-18A (Released for Mexico Market)	TTC-151	18	R52-B52
PSDO185-18A (Released for Mexico Market)	TTC-151	18	R52-B52
PSDO205-18A (Released for Mexico Market)	TTC-151	18	R52-B52
PSO100-10S (BM#301560)	SPR-140	10	L45-R45

IMPORTANT: See Safety Information in Section I of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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Chelsea Products Division
Olive Branch, MS 38654 USA

TREMEC/TTC/SPICER TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
PSO10-ESP	SPR-140	10	L45-R45
PSO10-VPD	SPR-140	10	L45-R45
PSO115-10V (BM#301588)	SPR-140	10	L45-R45
PSO125-10S (BM#301561)	SPR-140	10	L45-R45
PSO125-10V (BM#301589)	SPR-140	10	L45-R45
PSO140-10S (BM#301562)	SPR-140	10	L45-R45
PSO145-10V (BM#301582)	SPR-140	10	L45-R45
PSO145-9R (BM#301625)	SPR-140	9	L45-R45
PSO150-10S (BM#301563)	SPR-140	10	L45-R45
PSO160-10S	SPR-140	10	L45-R45
PSO165-10S (BM#301564)	SPR-140	10	L45-R45
PSX150-9S (BM#301521)	SPR-140	9	L45-R45
TDET0880 (Same as TR-4050, Dodge Mexico)	TTC-150	5	R32
TDET1015 (Same as TR-4050 w/ special ratio-Ford Mexico)	TTC-150	5	R32
TDET1361 (Same as TR-4050, Chev/GMC)	TTC-150	5	R32
TDET1664 (Same as TR-4050, Ford Mexico)	TTC-150	5	R32
TR-4050 (Transmission made in Mexico)	TTC-150	5	R32

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

1214-3A (BM#301212 & 301130 and Later)
1214-5A (BM#301213 & 301131 and Later)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.5660" (14.3700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7210" (18.3100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221XCAHX-*3	250 I	Opp	57		7-A-032(27)	328564X	Furnished	221XCAHX-*3	250 I	Opp	57		7-A-350 7-A-032(27)		328170-35X
221XEAHX-*3	250 I	Opp	66		7-A-062(P)	310778X	Furnished	221XEAHX-*3	250 I	Opp	66		7-A-300		328170-35X
221XPAHX-*3	200 I	Opp	107		7-A-062(P)	310778X	Furnished	221XPAHX-*3	200 I	Opp	107		7-A-300		328170-35X
489XAAHX-*5 (12)	250 I	Opp	50		8-A-062 8-A-093		328170-8X	442KAAHX-*3 (12)	250 I	Opp	50		7-A-300		7170-5X
489XCAHX-*5 (13)	250 I	Opp	64		8-A-062 8-A-093		328170-8X	442KCAHX-*3 (13)	250 I	Opp	64		7-A-300		7170-5X
489XFAHX-*5 (2)	250 I	Opp	80		8-A-062 8-A-093		328170-8X	442KFAHX-*3 (2)	250 I	Opp	80		7-A-300		7170-5X
489XHAHX-*5 (15)	250 I	Opp	93		8-A-062 8-A-093		328170-8X	442KHAHX-*3 (15)	250 I	Opp	93		7-A-300		7170-5X
489XLAHX-*5 (1)	250 I	Opp	103		8-A-062 8-A-093		328170-8X	442KLAHX-*3 (1)	250 I	Opp	103		7-A-300		7170-5X
489XQAHX-*5 (1)	225 I	Opp	111		8-A-062 8-A-093		328170-8X	442KQAHX-*3 (1)	225 I	Opp	111		7-A-300		7170-5X
489XRAHX-*5 (1)	225 I	Opp	128		8-A-062 8-A-093		328170-8X	442KRAHX-*3 (1)	225 I	Opp	128		7-A-300		7170-5X
489XSAHX-*5 (1)	200 I	Opp	153		8-A-062 8-A-093		328170-8X	442KSAHX-*3 (1)	200 I	Opp	153		7-A-300		7170-5X
489XUAHX-*5 (1)	195 I	Opp	182		8-A-062 8-A-093		328170-8X	442KWAHX-*3 (1)	175 I	Opp	214		7-A-300		7170-5X
489XWAHX-*5 (1)	175 I	Opp	214		8-A-062 8-A-093		328170-8X	442KXAHX-*3 (1)	140 I	Opp	254		7-A-300		7170-5X
489XXAHX-*5 (1)	140 I	Opp	254		8-A-062 8-A-093		328170-8X	660KFAHX-*3 (10)	375 I	Opp	80		7-A-300		7170-5X
680XFAHX-*3 (10)	375 I	Opp	80		8-A-062 8-A-093		328170-8X	660KHAHX-*3 (15)	375 I	Opp	93		7-A-300		7170-5X
680XHAHX-*3 (18)	375 I	Opp	93		8-A-062 8-A-093		328170-8X	660KQAHX-*3 (11)	375 I	Opp	111		7-A-300		7170-5X
680XQAHX-*3 (11)	375 I	Opp	111		8-A-062 8-A-093		328170-8X	660KRAHX-*3 (17)	350 I	Opp	128		7-A-300		7170-5X

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(15) Input Gear Part No. 5-P-1364
(17) Input Gear Part No. 5-P-1441
(18) Input Gear Part No. 5-P-1494
(27) Furnished, but not required

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

1214-3A (BM#301212 & 301130 and Later)
1214-5A (BM#301213 & 301131 and Later)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.5660" (14.3700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7210" (18.3100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
680XRAHX-*3 (17)	350 I	Opp	128		8-A-062 8-A-093	328170-8X		660KSAHX-*3 (14)	325 I	Opp	153		7-A-300		7170-5X
680XSAHX-*3 (14)	325 I	Opp	153		8-A-062 8-A-093	328170-8X									
823XBAHX-*3 (20)	500 I	Opp	54		8-A-165	328170-14X									
823XDAHX-*3 (24)	500 I	Opp	64		8-A-165	328170-14X									
823XGAHX-*3 (25)	500 I	Opp	70		8-A-165	328170-14X									
823XJAHX-*3 (21)	500 I	Opp	82		8-A-165	328170-14X									
823XMAHX-*3 (19)	500 I	Opp	96		8-A-165	328170-14X									
823XRAHX-*3 (23)	400 I	Opp	133		8-A-165	328170-14X									
880XBAHX-*3 (3)	500 I	Opp	54		8-A-165	328170-14X									
880XDAHX-*3 (4)	500 I	Opp	64		8-A-165	328170-14X									
880XGAHX-*3 (9)	500 I	Opp	70		8-A-165	328170-14X									
880XJAHX-*3 (5)	500 I	Opp	82		8-A-165	328170-14X									
880XMAHX-*3 (6)	500 I	Opp	96		8-A-165	328170-14X									
880XQAHX-*3 (16)	450 I	Opp	113		8-A-165	328170-14X									
880XRAHX-*3 (7)	400 I	Opp	133		8-A-165	328170-14X									
880XTAHX-*3 (8)	350 I	Opp	171		8-A-165	328170-14X									
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBAJX-*3	300 C	Opp	54		8-A-248	328170-8X		272XAAJX-*3	300 C	Opp	44		7-A-300		328170-172X
282XCAJX-*3	300 C	Opp	66		8-A-248	328170-8X		272XBAJX-*3	300 C	Opp	54		7-A-300		328170-172X
282XDAJX-*3	300 C	Opp	78		8-A-248	328170-8X		272XCAJX-*3	300 C	Opp	66		7-A-300		328170-172X
282XGAJX-*3	300 C	Opp	93		8-A-248	328170-8X		272XDAJX-*3	300 C	Opp	78		7-A-300		328170-172X
282XKAJX-*3	274 C	Opp	104		8-A-248	328170-8X		272XGAJX-*3	300 C	Opp	93		7-A-300		328170-172X
282XMAJX-*3	245 C	Opp	117		8-A-248	328170-8X		272XKAJX-*3	300 C	Opp	104		7-A-300		328170-172X
282XPAJX-*3	219 C	Opp	130		8-A-248	328170-8X		272XMAJX-*3	300 C	Opp	117		7-A-300		328170-172X
282XSAJX-*3	196 C	Opp	146		8-A-248	328170-8X		272XPAJX-*3	300 C	Opp	130		7-A-300		328170-172X
282XTAJX-*3	175 C	Opp	163		8-A-248	328170-8X		272XSAJX-*3	300 C	Opp	146		7-A-300		328170-172X
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	54		8-A-165	328170-14X									

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(14) Input Gear Part No. 5-P-1322
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-283
(20) Input Gear Part No. 5-P-285
(21) Input Gear Part No. 5-P-325
(23) Input Gear Part No. 5-P-721
(24) Input Gear Part No. 5-P-971
(25) Input Gear Part No. 5-P-980

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1214-3A (BM#301212 & 301130 and Later)
1214-5A (BM#301213 & 301131 and Later)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.5660" (14.3700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
54 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7210" (18.3100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XGAHX-*3 (9)	500 I	Opp	70		8-A-165		328170-14X								
885XJAHX-*3 (5)	500 I	Opp	82		8-A-165		328170-14X								
885XMAHX-*3 (6)	500 I	Opp	96		8-A-165		328170-14X								
ONE SPEED - FORWARD & REVERSE															
348KFAHX-*5 (22)	200 I	Opp	70	73	8-A-190		328170-8X	340XFAHX-*5 (22)	200 I	Opp	70	73	7-A-140(26) 7-A-270		7170-5X
863XBAHX-*5	500 I	Opp	54	67	8-A-165		328170-14X								
GEARED ADAPTERS															
628XAHX-3AH	250 I	Eng			8-A-190		328170-8X	626KAHX-4AH	250 I	Eng			7-A-300		7170-5X
								630KAHX-3AH	250 I	Eng			7-A-300		7170-5X
								645KAHX-3AH	250 I	Eng			7-A-300		7170-5X

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(22) Input Gear Part No. 5-P-581
(26) Filler block furnished with PTO

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1010-3B (BM#301115 and Later)
1020-3A (BM#301125 and Later)
1020-5A (BM#301126 and Later)
1410-3B (BM#301165)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
48 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0660" (27.0800MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
48 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.2210" (31.0100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
221ZCAHX-*3	250 I	Opp	56		7-A-062(P) 7-A-032(24)	328481X	Furnished	221ZCAHX-*3	250 I	Opp	56		7-A-165 7-A-032(24)		328170-1X
221ZEAHX-*3	250 I	Opp	64		7-A-032(P)	328481X	Furnished	221ZEAHX-*3	250 I	Opp	64		7-A-140		328170-1X
221ZPAHX-*3	200 I	Opp	104		7-A-032(P)	328481X	Furnished	221ZPAHX-*3	200 I	Opp	104		7-A-140		328170-1X
823ZBAHX-*3 (18)	500 I	Opp	53		8-A-700		328170-133X	442LAAHX-*3 (11)	250 I	Opp	49		7-A-140		328170-76X
823ZDAHX-*3 (22)	500 I	Opp	62		8-A-700		328170-133X	442LCAHX-*3 (12)	250 I	Opp	63		7-A-140		328170-76X
823ZGAHX-*3 (23)	500 I	Opp	68		8-A-700		328170-133X	442LFAHX-*3 (2)	250 I	Opp	77		7-A-140		328170-76X
823ZJAHX-*3 (19)	500 I	Opp	80		8-A-700		328170-133X	442LHAHX-*3 (14)	250 I	Opp	89		7-A-140		328170-76X
823ZMAHX-*3 (17)	500 I	Opp	94		8-A-700		328170-133X	442LLAHX-*3 (1)	250 I	Opp	100		7-A-140		328170-76X
823ZRAHX-*3 (21)	400 I	Opp	129		8-A-700		328170-133X	442LQAHX-*3 (1)	225 I	Opp	108		7-A-140		328170-76X
880ZBAHX-*3 (3)	500 I	Opp	53		8-A-700		328170-133X	442LRAHX-*3 (1)	225 I	Opp	125		7-A-140		328170-76X
880ZDAHX-*3 (4)	500 I	Opp	62		8-A-700		328170-133X	442LSAHX-*3 (1)	200 I	Opp	149		7-A-140		328170-76X
880ZGAHX-*3 (8)	500 I	Opp	68		8-A-700		328170-133X	442LUAHX-*3 (1)	195 I	Opp	177		7-A-140		328170-76X
880ZJAHX-*3 (5)	500 I	Opp	80		8-A-700		328170-133X	442LWAHX-*3 (1)	175 I	Opp	209		7-A-140		328170-76X
880ZMAHX-*3 (6)	500 I	Opp	94		8-A-700		328170-133X	442LXAHX-*3 (1)	140 I	Opp	247		7-A-140		328170-76X
880ZQAHX-*3 (15)	450 I	Opp	109		8-A-700		328170-133X	660LFAHX-*3 (9)	375 I	Opp	77		7-A-140		328170-76X
880ZRAHX-*3 (7)	400 I	Opp	129		8-A-700		328170-133X	660LHAHX-*3 (14)	375 I	Opp	89		7-A-140		328170-76X
								660LQAHX-*3 (10)	375 I	Opp	108		7-A-140		328170-76X
								660LRAHX-*3 (16)	350 I	Opp	125		7-A-140		328170-76X
								660LSAHX-*3 (13)	325 I	Opp	149		7-A-140		328170-76X
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBAJX-*3	300 C	Opp	53				Furnished	272XAAJX-*3	300 C	Opp	43				Furnished
282XCAJX-*3	300 C	Opp	64				Furnished	272XBAJX-*3	300 C	Opp	53				Furnished
282XDAJX-*3	300 C	Opp	76				Furnished	272XCAJX-*3	300 C	Opp	64				Furnished
282XGAJX-*3	300 C	Opp	91				Furnished	272XDAJX-*3	300 C	Opp	76				Furnished
282XKAJX-*3	300 C	Opp	102				Furnished	272XGAJX-*3	300 C	Opp	91				Furnished
282XMAJX-*3	275 C	Opp	114				Furnished	272XKAJX-*3	300 C	Opp	102				Furnished
282XPAJX-*3	246 C	Opp	246				Furnished	272XMAJX-*3	300 C	Opp	114				Furnished
282XSAJX-*3	220 C	Opp	142				Furnished	272XPAJX-*3	300 C	Opp	246				Furnished
282XTAJX-*3	197 C	Opp	159				Furnished	272XSAJX-*3	300 C	Opp	142				Furnished

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1135
(9) Input Gear Part No. 5-P-1242
(10) Input Gear Part No. 5-P-1246
(11) Input Gear Part No. 5-P-1280
(12) Input Gear Part No. 5-P-1287
(13) Input Gear Part No. 5-P-1322
(14) Input Gear Part No. 5-P-1364
(15) Input Gear Part No. 5-P-1385
(16) Input Gear Part No. 5-P-1441
(17) Input Gear Part No. 5-P-283
(18) Input Gear Part No. 5-P-285
(19) Input Gear Part No. 5-P-325
(21) Input Gear Part No. 5-P-721
(22) Input Gear Part No. 5-P-971
(23) Input Gear Part No. 5-P-980
(24) Furnished, but not required

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

1010-3B (BM#301115 and Later)
1020-3A (BM#301125 and Later)
1020-5A (BM#301126 and Later)
1410-3B (BM#301165)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
48 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0660" (27.0800MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
48 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.2210" (31.0100MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)							
885ZBAHX-*3 (3)	500 I	Opp	53		8-A-700		328170-133X
885ZGAHX-*3 (8)	500 I	Opp	68		8-A-700		328170-133X
885ZJAHX-*3 (5)	500 I	Opp	80		8-A-700		328170-133X
885ZMAHX-*3 (6)	500 I	Opp	94		8-A-700		328170-133X
ONE SPEED - FORWARD & REVERSE							
340SFAHX-*5 (20)	200 I	Opp	68	71	7-A-062		328170-94X

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(8) Input Gear Part No. 5-P-1135
(20) Input Gear Part No. 5-P-581

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

ASO10-ESP	LASO125-10S (BM#301620)	LLPSO125-10S
ASO10-VP10	LASO140-10S (BM#301621)	LLPSO140-10S
ASO100-10S	LASO150-10S (BM#301622)	LLPSO150-10S
ASO125-10S (BM#301579)	LLASO125-10S	LLPSO165-10S
ASO140-10S (BM#301580)	LLASO140-10S	LPSO100-10S
ASO150-10S (BM#301578)	LLASO150-10S	LPSO125-10S (BM#301572)
ASO160-10S	LLPSO10-VPD	LPSO140-10S (BM#301573)
ASO165-10S (BM#301581)	LLPSO100-10S	LPSO150-10S (BM#301574)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7300" (18.5420MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0750" (27.3050MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221XCAHX-*5	250 I	Opp	71		7-A-062 7-A-032(28)	328481X	Furnished	221XCAHX-*4	250 I	Opp	71		7-A-062 7-A-032(28)		Furnished
221XEAHX-*5	250 I	Opp	82			328481X	Furnished	221XEAHX-*4	250 I	Opp	82				Furnished
221XPAHX-*5	200 I	Opp	133			328481X	Furnished	221XPAHX-*4	200 I	Opp	133				Furnished
489XAAHX-*5 (12)	250 I	Opp	62				Furnished	442XFAHX-*4 (2)	250 I	Opp	98				Furnished
489XCAHX-*5 (13)	250 I	Opp	80				Furnished	442XHAHX-*4 (15)	250 I	Opp	114				Furnished
489XFAHX-*5 (2)	250 I	Opp	98				Furnished	442XLAHX-*4 (1)	250 I	Opp	127				Furnished
489XHAHX-*5 (15)	250 I	Opp	114				Furnished	442XQAHX-*4 (1)	225 I	Opp	137				Furnished
489XLAHX-*5 (1)	250 I	Opp	127				Furnished	442XRAHX-*4 (1)	225 I	Opp	159				Furnished
489XQAHX-*5 (1)	225 I	Opp	137				Furnished	442XSAHX-*4 (1)	200 I	Opp	189				Furnished
489XRAHX-*5 (1)	225 I	Opp	159				Furnished	442XUAHX-*4 (1)	195 I	Opp	225				Furnished
489XSAHX-*5 (1)	200 I	Opp	189				Furnished	442XWAHX-*4 (1)	175 I	Opp	265				Furnished
489XUAHX-*5 (1)	195 I	Opp	225				Furnished	442XXAHX-*4 (1)	140 I	Opp	313				Furnished
489XWAHX-*5 (1)	175 I	Opp	265				Furnished	660XFAHX-*4 (10)	375 I	Opp	98				Furnished
489XXAHX-*5 (1)	140 I	Opp	313				Furnished	660XHAHX-*4 (15)	375 I	Opp	114				Furnished
680XFAHX-*5 (10)	375 I	Opp	98				Furnished	660XQAHX-*4 (11)	375 I	Opp	137				Furnished
680XHAHX-*5 (19)	375 I	Opp	114				Furnished	660XRAHX-*4 (18)	350 I	Opp	159				Furnished
680XQAHX-*5 (11)	375 I	Opp	137				Furnished	660XSAHX-*4 (14)	325 I	Opp	189				Furnished
680XRAHX-*5 (18)	350 I	Opp	159				Furnished								
680XSAHX-*5 (14)	325 I	Opp	189				Furnished								
823XBAHX-*5 (21)	500 I	Opp	67				Furnished								
823XDAHX-*5 (25)	500 I	Opp	79				Furnished								
823XGAHX-*5 (26)	500 I	Opp	86				Furnished								
823XJAHX-*5 (22)	500 I	Opp	101				Furnished								
823XMAHX-*5 (20)	500 I	Opp	119				Furnished								
823XRAHX-*5 (24)	400 I	Opp	164				Furnished								
823XTKTX-*5 (17)	350 I	Opp	199		8-A-165(27)		Furnished								
880XBAHX-*5 (3)	500 I	Opp	67				Furnished								
880XDAHX-*5 (4)	500 I	Opp	79				Furnished								
880XGAHX-*5 (9)	500 I	Opp	86				Furnished								
880XJAHX-*5 (5)	500 I	Opp	101				Furnished								
880XMAHX-*5 (6)	500 I	Opp	119				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-1494
(20) Input Gear Part No. 5-P-283
(21) Input Gear Part No. 5-P-285
(22) Input Gear Part No. 5-P-325
(24) Input Gear Part No. 5-P-721
(25) Input Gear Part No. 5-P-971
(26) Input Gear Part No. 5-P-980
(27) Filler block furnished with PTO
(28) Furnished, but not required

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

ASO10-ESP
ASO10-VP10
ASO100-10S
ASO125-10S (BM#301579)
ASO140-10S (BM#301580)
ASO150-10S (BM#301578)
ASO160-10S
ASO165-10S (BM#301581)
LASO125-10S (BM#301620)
LASO140-10S (BM#301621)
LASO150-10S (BM#301622)
LLASO125-10S
LLASO140-10S
LLASO150-10S
LLPSO10-VPD
LLPSO100-10S
LLPSO125-10S
LLPSO140-10S
LLPSO150-10S
LLPSO165-10S
LPSO100-10S
LPSO125-10S (BM#301572)
LPSO140-10S (BM#301573)
LPSO150-10S (BM#301574)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7300" (18.5420MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0750" (27.3050MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
880XQAHX-*5 (16)	450 I	Opp	139				Furnished								
880XRAHX-*5 (7)	400 I	Opp	164				Furnished								
880XTAHX-*5 (8)	350 I	Opp	212				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBAJX-*5	300 C	Opp	67		7-A-093		Furnished								
282XCAJX-*5	300 C	Opp	81		7-A-093		Furnished								
282XDAJX-*5	300 C	Opp	97		7-A-093		Furnished								
282XGAJX-*5	300 C	Opp	115		7-A-093		Furnished								
282XKAJX-*5	300 C	Opp	129		7-A-093		Furnished								
282XMAJX-*5	300 C	Opp	144		7-A-093		Furnished								
282XPAJX-*5	300 C	Opp	161		7-A-093		Furnished								
282XSAJX-*5	278 C	Opp	180		7-A-093		Furnished								
282XTAJX-*5	248 C	Opp	202		7-A-093		Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*5 (3)	500 I	Opp	67				Furnished								
885XGAHX-*5 (9)	500 I	Opp	86				Furnished								
885XJAHX-*5 (5)	500 I	Opp	101				Furnished								
885XMAHX-*5 (6)	500 I	Opp	119				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*5 (23)	200 I	Opp	86	90			Furnished	340XFAHX-*4 (23)	200 I	Opp	86	90	7-A-140(27)		Furnished
348ZFAHX-*5 (23)	200 I	Opp	86	90	8-A-093(T) 8-A-032(P)		Furnished								
863XBAHX-*5	500 I	Opp	67	83			Furnished								
GEARED ADAPTERS															
628XAHX-4AH	250 I	Eng			8-A-032		Furnished	626XAHX-4AH	250 I	Eng					Furnished
								630XAHX-4AH	250 I	Eng					Furnished
								645XAHX-4AH	250 I	Eng					Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: Do not use geared adapters with 442 "A" and "C" ratios.

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(16) Input Gear Part No. 5-P-1385
(23) Input Gear Part No. 5-P-581
(27) Filler block furnished with PTO

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

PS86-10V (BM#301587)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7300" (17.8550MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0750" (27.3050MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
221XEAHX-*5	250 I	Opp	58			328481X	Furnished	221XCAHX-*4	250 I	Opp	51		7-A-062 7-A-032(22)		Furnished
489XAAHX-*5 (12)	250 I	Opp	44				Furnished	221XEAHX-*4	250 I	Opp	58				Furnished
489XCAHX-*5 (13)	250 I	Opp	57				Furnished	221XPAHX-*4	200 I	Opp	95				Furnished
489XFAHX-*5 (2)	250 I	Opp	70				Furnished	442XFAHX-*4 (2)	250 I	Opp	70				Furnished
489XHAHX-*5 (15)	250 I	Opp	81				Furnished	442XHAHX-*4 (15)	250 I	Opp	81				Furnished
489XLAHX-*5 (1)	250 I	Opp	91				Furnished	442XLAHX-*4 (1)	250 I	Opp	91				Furnished
489XQAHX-*5 (1)	225 I	Opp	98				Furnished	442XQAHX-*4 (1)	225 I	Opp	98				Furnished
489XRAHX-*5 (1)	225 I	Opp	113				Furnished	442XRAHX-*4 (1)	225 I	Opp	113				Furnished
489XSAHX-*5 (1)	200 I	Opp	135				Furnished	442XSAHX-*4 (1)	200 I	Opp	135				Furnished
489XUAHX-*5 (1)	195 I	Opp	161				Furnished	442XUAHX-*4 (1)	195 I	Opp	161				Furnished
489XWAHX-*5 (1)	175 I	Opp	189				Furnished	442XWAHX-*4 (1)	175 I	Opp	189				Furnished
489XXAHX-*5 (1)	140 I	Opp	224				Furnished	442XXAHX-*4 (1)	140 I	Opp	224				Furnished
680XFAHX-*5 (10)	375 I	Opp	70				Furnished	660XFAHX-*4 (10)	375 I	Opp	70				Furnished
680XHAHX-*5 (19)	375 I	Opp	81				Furnished	660XHAHX-*4 (15)	375 I	Opp	81				Furnished
680XQAHX-*5 (11)	375 I	Opp	98				Furnished	660XQAHX-*4 (11)	375 I	Opp	98				Furnished
680XRAHX-*5 (18)	350 I	Opp	113				Furnished	660XRAHX-*4 (18)	350 I	Opp	113				Furnished
680XSAHX-*5 (14)	325 I	Opp	135				Furnished	660XSAHX-*4 (14)	325 I	Opp	135				Furnished
823XTKTX-*3 (17)	350 I	Opp	142		8-A-165(21)		Furnished								
880XBAHX-*3 (3)	500 I	Opp	48				Furnished								
880XDAHX-*3 (4)	500 I	Opp	57				Furnished								
880XGAHX-*3 (9)	500 I	Opp	62				Furnished								
880XJAHX-*3 (5)	500 I	Opp	72				Furnished								
880XMAHX-*3 (6)	500 I	Opp	85				Furnished								
880XQAHX-*3 (16)	450 I	Opp	99				Furnished								
880XRAHX-*3 (7)	400 I	Opp	117				Furnished								
880XTAHX-*3 (8)	350 I	Opp	151				Furnished								
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBAJX-*5	300 C	Opp	48				Furnished								
282XCAJX-*5	300 C	Opp	58				Furnished								
282XDAJX-*5	300 C	Opp	69				Furnished								

Continued on Next Page

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1395
(18) Input Gear Part No. 5-P-1441
(19) Input Gear Part No. 5-P-1494
(21) Filler block furnished with PTO
(22) Furnished, but not required

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

PS86-10V (BM#301587)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 08-BOLT Opening Gear FORWARD of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.7300" (17.8550MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
45 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.0750" (27.3050MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XGAJX-*5	300 C	Opp	82				Furnished								
282XKAJX-*5	300 C	Opp	92				Furnished								
282XMAJX-*5	300 C	Opp	103				Furnished								
282XPAJX-*5	300 C	Opp	115				Furnished								
282XSAJX-*5	300 C	Opp	129				Furnished								
282XTAJX-*5	300 C	Opp	144				Furnished								
ONE SPEED - TWO GEAR - POWERSHIFT (AIR)															
885XBAHX-*3 (3)	500 I	Opp	48				Furnished								
885XGAHX-*3 (9)	500 I	Opp	62				Furnished								
885XJAHX-*3 (5)	500 I	Opp	72				Furnished								
885XMAHX-*3 (6)	500 I	Opp	85				Furnished								
ONE SPEED - FORWARD & REVERSE															
348XFAHX-*4 (20)	200 I	Opp	61	64			Furnished	340XFAHX-*4 (20)	200 I	Opp	61	64	7-A-140(22)		Furnished
863XBAHX-*5	500 I	Opp	48	59			Furnished								

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(3) Input Gear Part No. 5-P-1100
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(9) Input Gear Part No. 5-P-1135
(20) Input Gear Part No. 5-P-581
(22) Furnished, but not required

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TDET0880 (Same as TR-4050, Dodge Mexico)
TDET1015 (Same as TR-4050 w/ special ratio-Ford Mexico)
TDET1361 (Same as TR-4050, Chev/GMC)
TDET1664 (Same as TR-4050, Ford Mexico)
TR-4050 (Transmission made in Mexico)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
32 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.1400" (28.9342MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT							
442XLKNX-*3 (1)	250 I	Opp	49				Furnished
442XQKNX-*3 (1)	225 I	Opp	53				Furnished
442XRKNX-*3 (1)	225 I	Opp	61				Furnished
442XSKNX-*3 (1)	200 I	Opp	73				Furnished
442XUKNX-*3 (1)	195 I	Opp	87				Furnished
442XWKNX-*3 (1)	175 I	Opp	102				Furnished
442XXKNX-*3 (1)	140 I	Opp	121				Furnished
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)							
272XAKNX-*3	300 C	Opp	24				Furnished
272XBKNX-*3	300 C	Opp	29				Furnished
272XCKNX-*3	300 C	Opp	35				Furnished
272XDKNX-*3	300 C	Opp	42				Furnished
272XGKNX-*3	279 C	Opp	50				Furnished
272XKKNX-*3	249 C	Opp	56				Furnished
272XMKNX-*3	223 C	Opp	63				Furnished
272XPKNX-*3	200 C	Opp	71				Furnished
272XSKNX-*3	178 C	Opp	79				Furnished
GEARED ADAPTERS							
626XKNX-3KP	250 I	Eng					7170-4X
630XKNX-3KP	250 I	Eng					7170-4X
645XKNX-3KP	250 I	Eng					7170-4X

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1383

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Olive Branch, MS 38654 USA

PSDO165-18A (Released for Mexico Market)
PSDO185-18A (Released for Mexico Market)
PSDO205-18A (Released for Mexico Market)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.9280" (23.5700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.2280" (31.1900MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

ONE SPEED - TWO GEAR - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
221ZCAHX-*3 (19)	250 I	Opp	68		8-A-032(T)	310778X	Furnished	221ZCAHX-*4 (19)	250 I	Opp	68		7-A-093(T)		328170-96X
221ZEAHX-*3 (18)	250 I	Opp	75			310778X	Furnished	221ZEAHX-*4 (18)	250 I	Opp	75		7-A-062(T)		328170-96X
221ZPAHX-*3 (18)	200 I	Opp	122			310778X	Furnished	221ZPAHX-*4 (18)	200 I	Opp	122		7-A-062(T)		328170-96X
489ZAAHX-*5 (12)	250 I	Opp	59		8-A-032(P)		Furnished	442LAAHX-*4 (12)	250 I	Opp	59		7-A-062(P)		328170-94X
489ZCAHX-*5 (13)	250 I	Opp	76		8-A-032(P)		Furnished	442LCAHX-*4 (13)	250 I	Opp	76		7-A-062(P)		328170-94X
489ZFAHX-*5 (2)	250 I	Opp	94		8-A-032(P)		Furnished	442LFAHX-*4 (2)	250 I	Opp	94		7-A-062(P)		328170-94X
489ZHAHX-*5 (15)	250 I	Opp	108		8-A-032(P)		Furnished	442LHAHX-*4 (15)	250 I	Opp	108		7-A-062(P)		328170-94X
489ZLAHX-*5 (1)	250 I	Opp	122		8-A-032(P)		Furnished	442LLAHX-*4 (1)	250 I	Opp	121		7-A-062(P)		328170-94X
489ZQAHX-*5 (1)	225 I	Opp	131		8-A-032(P)		Furnished	442LQAHX-*4 (1)	225 I	Opp	131		7-A-062(P)		328170-94X
489ZRAHX-*5 (1)	225 I	Opp	152		8-A-032(P)		Furnished	442LRAHX-*4 (1)	225 I	Opp	152		7-A-062(P)		328170-94X
489ZSAHX-*5 (1)	200 I	Opp	181		8-A-032(P)		Furnished	442LSAHX-*4 (1)	200 I	Opp	181		7-A-062(P)		328170-94X
489ZUAHX-*5 (1)	195 I	Opp	215		8-A-032(P)		Furnished	442LUAHX-*4 (1)	195 I	Opp	216		7-A-062(P)		328170-94X
489ZWAHX-*5 (1)	175 I	Opp	254		8-A-032(P)		Furnished	442LWAHX-*4 (1)	175 I	Opp	254		7-A-062(P)		328170-94X
489ZXAHX-*5 (1)	140 I	Opp	300		8-A-032(P)		Furnished	442LXAHX-*4 (1)	140 I	Opp	301		7-A-062(P)		328170-94X
880ZBAHX-*3 (3)	500 I	Opp	64		8-A-248(P) 8-A-500		328170-179X	660LFAHX-*4 (10)	375 I	Opp	94		7-A-062(P)		328170-94X
880ZDAHX-*3 (4)	500 I	Opp	76		8-A-245(P) 8-A-500		328170-179X	660LHAHX-*4 (15)	375 I	Opp	108		7-A-062(P)		328170-94X
880ZGAHX-*3 (9)	500 I	Opp	85		8-A-248(P) 8-A-500		328170-179X	660LQAHX-*4 (11)	375 I	Opp	131		7-A-062(P)		328170-94X
880ZJAHX-*3 (5)	500 I	Opp	97		8-A-248(P) 8-A-500		328170-179X	660LRAHX-*4 (17)	350 I	Opp	152		7-A-062(P)		328170-94X
880ZMAHX-*3 (6)	500 I	Opp	113		8-A-248(P) 8-A-500		328170-179X	660LSAHX-*4 (14)	325 I	Opp	181		7-A-062(P)		328170-94X
880ZQAHX-*3 (16)	450 I	Opp	134		8-A-248(P) 8-A-500		328170-179X								
880ZRAHX-*3 (7)	400 I	Opp	158		8-A-248(P) 8-A-500		328170-179X								
880ZTAHX-*3 (8)	350 I	Opp	203		8-A-248(P) 8-A-500		328170-179X								

Continued on Next Page

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1004
(2) Input Gear Part No. 5-P-1077
(3) Input Gear Part No. 5-P-1100
(4) Input Gear Part No. 5-P-1101
(5) Input Gear Part No. 5-P-1102
(6) Input Gear Part No. 5-P-1103
(7) Input Gear Part No. 5-P-1104
(8) Input Gear Part No. 5-P-1105
(9) Input Gear Part No. 5-P-1135
(10) Input Gear Part No. 5-P-1242
(11) Input Gear Part No. 5-P-1246
(12) Input Gear Part No. 5-P-1280
(13) Input Gear Part No. 5-P-1287
(14) Input Gear Part No. 5-P-1322
(15) Input Gear Part No. 5-P-1364
(16) Input Gear Part No. 5-P-1385
(17) Input Gear Part No. 5-P-1441
(18) Input Gear Part No. 5-P-202
(19) Input Gear Part No. 5-P-319

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

PSDO165-18A (Released for Mexico Market)
PSDO185-18A (Released for Mexico Market)
PSDO205-18A (Released for Mexico Market)

BOTTOM SIDE ONLY

TRANSMISSION GEAR DATA:
BOT 08-BOLT Opening Gear FORWARD of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
0.9280" (23.5700MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear REAR of Centerline
52 Teeth - SPUR

PITCH LINE TO APERTURE FACE:
1.2280" (31.1900MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR POWERSHIFT (AIR OR HYDRAULIC)															
282XBAJX-*5	300 C	Opp	64		8-A-032		Furnished								
282XCAJX-*5	300 C	Opp	78		8-A-032		Furnished								
282XDAJX-*5	300 C	Opp	93		8-A-032		Furnished								
282XGAJX-*5	300 C	Opp	111		8-A-032		Furnished								
282XKAJX-*5	300 C	Opp	124		8-A-032		Furnished								
282XMAJX-*5	300 C	Opp	139		8-A-032		Furnished								
282XPAJX-*5	300 C	Opp	155		8-A-032		Furnished								
282XSAJX-*5	289 C	Opp	173		8-A-032		Furnished								
282XTAJX-*5	258 C	Opp	194		8-A-032		Furnished								
ONE SPEED - FORWARD & REVERSE															
348ZFAHX-*5 (20)	200 I	Opp	82	86	8-A-032		Furnished	340ZFAHX-*4 (20)	200 I	Opp	82	86	7-A-062(P)		Furnished
GEARED ADAPTERS															
628ZAHX-3XX (1)	250 I	Eng			8-A-032(T)		Furnished	626KAHX-4XX (1)	250 I	Eng			7-A-062(T)		328170-94X
								630KAHX-4XX (1)	250 I	Eng			7-A-062(T)		328170-94X
								645KAHX-4XX (1)	250 I	Eng			7-A-062(T)		328170-94X

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1004
(20) Input Gear Part No. 5-P-581

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Olive Branch, MS 38654 USA

Tremec/TTC/Spicer Notes

SPR-104

1. Speeds shown are with transmission in high range. For speeds in low range, multiply speed shown by .84.
2. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

SPR-105

1. PTO speeds shown are with transmission in low range - for speeds in high range multiply speeds shown by 1.28.

SPR-140

1. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

SPR-144

1. The AK & XK output flanges can not be used with the “A” & “C” ratios on the 489 Series PTOs due to mounting stud interference. Use a RA or RB rotatable flange for the XK and the RA for the AK flange.

TTC-151

1. The PTO output speeds shown are with the transmission in High Range, for PTO output speeds with the transmission in low range, multiply speeds shown by .82

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NOTES



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VOLVO





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⚠ WARNING — User Responsibility

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Olive Branch, MS 38654 USA

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
AT2412 (I-Shift) High Split Ratio	VLV-10H	12	CS
AT2412 (I-Shift) Low Ratio	VLV-10	12	CS
AT2512 (I-Shift) High Split Ratio	VLV-10H	12	CS
AT2512 (I-Shift) Low Ratio	VLV-10	12	CS
AT2512C (I-Shift) High Split Ratio	VLV-10H	12	CS
AT2512C (I-Shift) Low Ratio	VLV-10	12	CS
AT2612 (I-Shift) High Split Ratio	VLV-10H	12	CS
AT2612 (I-Shift) Low Ratio	VLV-10	12	CS
AT2612D (I-Shift) High Split Ratio	VLV-10H	12	CS
AT2612D (I-Shift) Low Ratio	VLV-10	12	CS
AT2812 (I-Shift) High Split Ratio	VLV-10H	12	CS
AT2812 (I-Shift) Low Ratio	VLV-10	12	CS
AT2812C (I-Shift) High Split Ratio	VLV-10H	12	CS
AT2812C (I-Shift) Low Ratio	VLV-10	12	CS
ATO1109TO	VLV-15	9	CS
ATO2512 (I-Shift) High Split Range	VLV-13H	12	CS
ATO2512 (I-Shift) Low Ratio	VLV-13	12	CS
ATO2512C (I-Shift) High Split Range	VLV-13H	12	CS
ATO2512C (I-Shift) Low Ratio	VLV-13	12	CS
ATO2612 (I-Shift) High Split Range	VLV-13H	12	CS
ATO2612 (I-Shift) Low Ratio	VLV-13	12	CS
ATO2612C (I-Shift) High Split Range	VLV-13H	12	CS
ATO2612C (I-Shift) Low Ratio	VLV-13	12	CS
ATO2612D (I-Shift) High Split Range	VLV-13H	12	CS
ATO2612D (I-Shift) Low Ratio	VLV-13	12	CS
ATO2613F (I-Shift) High Split Range	VLV-13H	12	CS
ATO2613F (I-Shift) Low Ratio	VLV-13	12	CS
ATO3112 (I-Shift) High Split Range	VLV-13H	12	CS
ATO3112 (I-Shift) Low Ratio	VLV-13	12	CS
ATO3112C (I-Shift) High Split Range	VLV-13H	12	CS
ATO3112C (I-Shift) Low Ratio	VLV-13	12	CS
ATO3112D (I-Shift) High Split Range	VLV-13H	12	CS
ATO3112D (I-Shift) Low Ratio	VLV-13	12	CS
V2412AT (I-Shift) High Split Ratio	VLV-10H	12	CS
V2412AT (I-Shift) Low Ratio	VLV-10	12	CS
V2512AT (I-Shift) High Split Ratio	VLV-10H	12	CS

IMPORTANT: See Safety Information in Section I of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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VOLVO TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
V2512AT (I-Shift) Low Ratio	VLV-10	12	CS
V2812AT (I-Shift) High Split Ratio	VLV-10H	12	CS
V2812AT (I-Shift) Low Ratio	VLV-10	12	CS
VO2512AT (I-Shift) High Split Range	VLV-13H	12	CS
VO2512AT (I-Shift) Low Ratio	VLV-13	12	CS
VO3112AT (I-Shift) High Split Range	VLV-13H	12	CS
VO3112AT (I-Shift) Low Ratio	VLV-13	12	CS

Volvo

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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AT2412 (I-Shift) Low Ratio
AT2512 (I-Shift) Low Ratio
AT2512C (I-Shift) Low Ratio
AT2612 (I-Shift) Low Ratio
AT2612D (I-Shift) Low Ratio
AT2812 (I-Shift) Low Ratio
AT2812C (I-Shift) Low Ratio
V2412AT (I-Shift) Low Ratio
V2512AT (I-Shift) Low Ratio
V2812AT (I-Shift) Low Ratio

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRASW-V-*	590 C	Opp	70				Furnished
523XTASX-V-*	258 C	Eng	97				Furnished
523XVASX-V-*	258 C	Eng	115				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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AT2412 (I-Shift) High Split Ratio
AT2512 (I-Shift) High Split Ratio
AT2512C (I-Shift) High Split Ratio
AT2612 (I-Shift) High Split Ratio
AT2612D (I-Shift) High Split Ratio
AT2812 (I-Shift) High Split Ratio
AT2812C (I-Shift) High Split Ratio
V2412AT (I-Shift) High Split Ratio
V2512AT (I-Shift) High Split Ratio
V2812AT (I-Shift) High Split Ratio

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRASW-V-*	590 C	Opp	90				Furnished
523XTASX-V-*	258 C	Eng	124				Furnished
523XVASX-V-*	258 C	Eng	147				Furnished

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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ATO2512 (I-Shift) Low Ratio
ATO2512C (I-Shift) Low Ratio
ATO2612 (I-Shift) Low Ratio
ATO2612C (I-Shift) Low Ratio
ATO2612D (I-Shift) Low Ratio
ATO2613F (I-Shift) Low Ratio
ATO3112 (I-Shift) Low Ratio
ATO3112C (I-Shift) Low Ratio
ATO3112D (I-Shift) Low Ratio
VO2512AT (I-Shift) Low Ratio
VO3112AT (I-Shift) Low Ratio

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRASW-V-*	590 C	Opp	90				Furnished
523XTASX-V-*	258 C	Eng	124				Furnished
523XVASX-V-*	258 C	Eng	148				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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ATO2512 (I-Shift) High Split Range
ATO2512C (I-Shift) High Split Range
ATO2612 (I-Shift) High Split Range
ATO2612C (I-Shift) High Split Range
ATO2612D (I-Shift) High Split Range
ATO2613F (I-Shift) High Split Range
ATO3112 (I-Shift) High Split Range
ATO3112C (I-Shift) High Split Range
ATO3112D (I-Shift) High Split Range
VO2512AT (I-Shift) High Split Range
VO3112AT (I-Shift) High Split Range

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRASW-V-*	590 C	Opp	115				Furnished
523XTASX-V-*	258 C	Eng	159				Furnished
523XVASX-V-*	258 C	Eng	189				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

Volvo

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ATO1109TO

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRAQW-*-*	590 C	Opp	97				Furnished
523XTAQX-*-*	258 C	Eng	134				Furnished
523XVAQX-*-*	258 C	Eng	159				Furnished

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

Volvo

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Olive Branch, MS 38654 USA

Volvo Notes

VLV-10

1. Connection to Volvo system required for Volvo I-Shift or Mack M-Drive, the vehicle needs to be ordered with PTO prep package. Vehicle ECU must be programmed by dealer for PTO operation.
2. PTO must be ordered with the “V” shift option and use the OE factory supplied in dash PTO switch.
3. 511/523 Rear Mounts-The adapter 329735X is furnished with the PTO

VLV-10H

1. Connection to Volvo system required for Volvo I-Shift or Mack M-Drive, the vehicle needs to be ordered with PTO prep package. Vehicle ECU must be programmed by dealer for PTO operation.
2. PTO must be ordered with the “V” shift option and use the OE factory supplied in dash PTO switch.
3. 511/523 Rear Mounts-The adapter 329735X is furnished with the PTO

VLV-13

1. Connection to Volvo system required for Volvo I-Shift or Mack M-Drive, the vehicle needs to be ordered with PTO prep package. Vehicle ECU must be programmed by dealer for PTO operation.
2. PTO must be ordered with the “V” shift option and use the OE factory supplied in dash PTO switch.
3. 511/523 Rear Mounts-The adapter 329735X is furnished with the PTO

VLV-13H

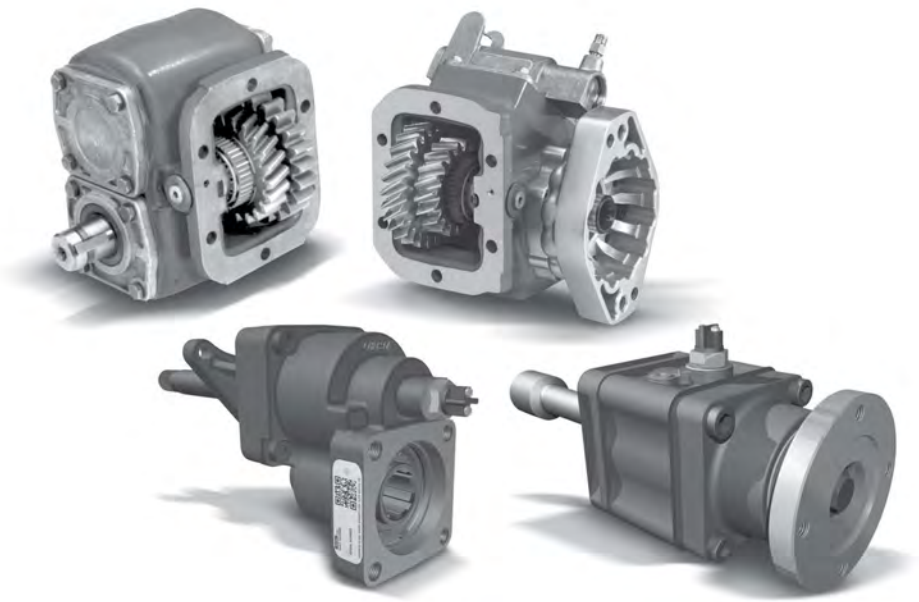
1. Connection to Volvo system required for Volvo I-Shift or Mack M-Drive, the vehicle needs to be ordered with PTO prep package. Vehicle ECU must be programmed by dealer for PTO operation.
2. PTO must be ordered with the “V” shift option and use the OE factory supplied in dash PTO switch.
3. 511/523 Rear Mounts-The adapter 329735X is furnished with the PTO

VLV-15

1. 511/523 Rear Mounts-The adapter 329743X is furnished with the PTO

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ZF





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ZF

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Chelsea Products Division
Olive Branch, MS 38654 USA

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
12AS-1630TD (AS-Tronic)	ZF-66	12	CS
12AS-1930TD (AS-Tronic)	ZF-66	12	CS
12AS-1930TO (AS-Tronic)	ZF-64	12	CS
12AS-2130TD (AS-Tronic)	ZF-66	12	CS
12AS-2130TO (AS-Tronic)	ZF-64	12	CS
12AS-2140TD (AS-Tronic)	ZF-66	12	CS
12AS-2301 (AS-Tronic - 12.33/0.78 Ratio)	ZF-64	12	CS
12AS-2301 (AS-Tronic - 15.86/1.0 Ratio)	ZF-66	12	CS
12AS-2330TD (AS-Tronic)	ZF-66	12	CS
12AS-2330TO (AS-Tronic)	ZF-64	12	CS
12AS-2340TD (AS-Tronic)	ZF-66	12	CS
12AS-2530TD (AS-Tronic)	ZF-66	12	CS
12AS-2530TO (AS-Tronic)	ZF-64	12	CS
12AS-2540TD (AS-Tronic)	ZF-66	12	CS
12AS-2540TO (AS-Tronic)	ZF-64	12	CS
12AS-2740TO (AS-Tronic)	ZF-64	12	CS
12AS-2940TO (AS-Tronic)	ZF-64	12	CS
16AS-2601 (AS-Tronic - 14.12/0.83 Ratio)	ZF-65	16	CS
16AS-2630TO (AS-Tronic)	ZF-65	16	CS
6AS-700 (AS-Tronic Lite)	ZF-46	6	CS
6AS-850 (AS-Tronic Lite)	ZF-46	6	CS
6S-650 (Ford Only Prior to January 2007)	ZF-45	6	L39
6S-700	ZF-46	6	CS
6S-750 (Ford Only Prior to January 2007)	ZF-45	6	L39
6S-850 (6.72/0.78)	ZF-46	6	CS
6S-850 (ZF-ECOLITE, SYNCHROMESH, 6.72/0.78 Ratio)	ZF-46	6	CS
9S-1110 TD (12.72/1:00 Ratio)	ZF-7	9	CS
9S-1110 TO (9.48/0.75 Ratio)	ZF-7	9	CS
9S-1310 TD (12.72/1.00 Ratio)	ZF-7	9	CS
9S-1310 TO (9.48/0.75 Ratio)	ZF-7	9	CS
9S-1510 TO (9.48/0.75 Ratio)	ZF-7	9	CS
9S-910 TD (12.73/1.00 Ratio)	ZF-7	9	CS
S5-42 (7.5 Gas Wide Ratio)	ZF-4	5	L45-R45
S5-47 (Gas Wide Ratio 5.72/0.76)	ZF-4	5	L45-R45
S6-36 (6.93/0.80 Ratio)	ZF-2	6	CS
S6-650 (Ford Truck Models Prior to January 2007)	ZF-45	6	L39

IMPORTANT: See Safety Information in Section I of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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ZF TRANSMISSION INDEX

Transmission Make and Model	PTO Appl. Number	Number Forward Speeds	Teeth in PTO Driver
S6-650 (GM 3600 Cab/Chassis - Order Code ML6)	ZF-47	6	L39-R39
S6-850 (6.72/0.79 Ratio)	ZF-46	6	CS

ZF

IMPORTANT: See Safety Information in Section 1 of the Chelsea Applications catalog HY25-3000/US.

Transmission PTO Driver & Apertures (Viewed from Rear of Transmission)

L-Left Side R-Right Side B-Bottom Side T-Top Side CS-Countershaft

For transmissions not listed, contact your authorized Chelsea Distributor.

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S6-36 (6.93/0.80 Ratio)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT & THRUSHAFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRAAW-*-*	590 C	Opp	51				Furnished
523XTAAX-*-*	258 C	Eng	70				Furnished
523XVAAX-*-*	258 C	Eng	84				Furnished

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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S5-42 (7.5 Gas Wide Ratio)
S5-47 (Gas Wide Ratio 5.72/0.76)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.1953" (30.3606MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
45 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
1.1953" (30.3606MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
442XFGSX-*5 (1)	250 I	Opp	53				Furnished	442XFGSX-*3 (1)	250 I	Opp	53				Furnished
442XLGSX-*5 (2)	250 I	Opp	68				Furnished	442XLGSX-*3 (2)	250 I	Opp	68				Furnished
442XQGSX-*5 (2)	225 I	Opp	74				Furnished	442XQGSX-*3 (2)	225 I	Opp	74				Furnished
442XRGSX-*5 (2)	225 I	Opp	85				Furnished	442XRGSX-*3 (2)	225 I	Opp	85				Furnished
442XSGSX-*5 (2)	200 I	Opp	102				Furnished	442XSGSX-*3 (2)	200 I	Opp	102				Furnished
442XUGSX-*5 (2)	195 I	Opp	121				Furnished	442XUGSX-*3 (2)	195 I	Opp	121				Furnished
442XWGSX-*5 (2)	175 I	Opp	142				Furnished	442XWGSX-*3 (2)	175 I	Opp	142				Furnished
442XXGSX-*5 (2)	140 I	Opp	168				Furnished	442XXGSX-*3 (2)	140 I	Opp	168				Furnished
ONE SPEED - FORWARD & REVERSE															
340XFEDX-*5 (3)	200 I	Opp	41	43	7-A-140 7-A-270		7170-4X	340XFEDX-*5 (3)	200 I	Opp	41	43	7-A-140 7-A-270		7170-4X

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

(1) Input Gear Part No. 5-P-1151
(2) Input Gear Part No. 5-P-1152
(3) Input Gear Part No. 5-P-897

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9S-1110 TD (12.72/1:00 Ratio)
9S-1110 TO (9.48/0.75 Ratio)
9S-1310 TD (12.72/1.00 Ratio)
9S-1310 TO (9.48/0.75 Ratio)
9S-1510 TO (9.48/0.75 Ratio)
9S-910 TD (12.73/1.00 Ratio)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT & THRUSHAFT

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRAQW-*-*	590 C	Opp	97				Furnished
523XTAQX-*-*	258 C	Eng	134				Furnished
523XVAQX-*-*	258 C	Eng	159				Furnished

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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6S-650 (Ford Only Prior to January 2007)
6S-750 (Ford Only Prior to January 2007)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
39 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
0.9330" (23.6982MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT							
442XLHYX-*5 (1)	250 I	Opp	65				Furnished
442XQHYX-*5 (1)	225 I	Opp	70				Furnished
442XRHYX-*5 (1)	225 I	Opp	81				Furnished
442XSHYX-*5 (1)	200 I	Opp	96				Furnished
442XUHYX-*5 (1)	195 I	Opp	115				Furnished
442XWHYX-*5 (1)	175 I	Opp	135				Furnished
442XXHYX-*5 (1)	140 I	Opp	160				Furnished
ONE SPEED - FORWARD & REVERSE							
340XFHYX-*5 (2)	200 I	Opp	46	48			Furnished
GEARED ADAPTERS							
626XHYX-4JB	250 I	Eng					Furnished
630XHYX-4JB	250 I	Eng					Furnished
645XHYX-4JB	250 I	Eng					Furnished

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.

(1) Input Gear Part No. 5-P-1237
(2) Input Gear Part No. 5-P-1245

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6AS-700 (AS-Tronic Lite)
6AS-850 (AS-Tronic Lite)
6S-700
6S-850 (ZF-ECOLITE, SYNCHROMESH, 6.72/0.78 Ratio)
6S-850 (6.72/0.78)
S6-850 (6.72/0.79 Ratio)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 04-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (6 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRAAW-*-*	590 C	Opp	53				Furnished
523XTAAX-*-*	258 C	Eng	79				Furnished
523XVAAX-*-*	258 C	Eng	93				Furnished

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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S6-650 (GM 3600 Cab/Chassis - Order Code ML6)

LEFT SIDE ONLY

TRANSMISSION GEAR DATA:
L.S. 06-BOLT Opening Gear FORWARD of Centerline
39 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
0.9330" (23.6982MM)

RIGHT SIDE ONLY

TRANSMISSION GEAR DATA:
R.S. 06-BOLT Opening Gear FORWARD of Centerline
39 Teeth - R.H. HELIX

PITCH LINE TO APERTURE FACE:
0.9330" (23.6982MM)

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit	PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
ONE SPEED - TWO GEAR - MECHANICAL SHIFT															
442XLHYX-*5 (1)	250 I	Opp	65				Furnished	442XLHYX-*5 (1)	250 I	Opp	65				Furnished
442XQHYX-*5 (1)	225 I	Opp	70				Furnished	442XQHYX-*5 (1)	225 I	Opp	70				Furnished
442XRHYX-*5 (1)	225 I	Opp	81				Furnished	442XRHYX-*5 (1)	225 I	Opp	81				Furnished
442XSHYX-*5 (1)	200 I	Opp	96				Furnished	442XSHYX-*5 (1)	200 I	Opp	96				Furnished
442XUHYX-*5 (1)	195 I	Opp	115				Furnished	442XUHYX-*5 (1)	195 I	Opp	115				Furnished
442XWHYX-*5 (1)	175 I	Opp	135				Furnished	442XWHYX-*5 (1)	175 I	Opp	135				Furnished
442XXHYX-*5 (1)	140 I	Opp	160				Furnished	442XXHYX-*5 (1)	140 I	Opp	160				Furnished
ONE SPEED - FORWARD & REVERSE															
340XFHYX-*5 (2)	200 I	Opp	46	48			Furnished								
GEARED ADAPTERS															
626XHYX-4JB (1)	250 I	Eng					Furnished								
630XHYX-4JB (1)	250 I	Eng					Furnished								
645XHYX-4JB (1)	250 I	Eng					Furnished								

† **I = Intermittent Torque Only** - De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque** - No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

CAUTION: It is required by GM Truck that the 442 Series when mounted on the right side of the transmission must have the direct mount pump, with hard tubing coming out of the rear of the pump, up and over the transmission output shaft, and a heat shield must be installed to cover the PTO and the pump. Order Kit number 329333X for complete pump and heat shield installation parts.

(1) Input Gear Part No. 5-P-1237
(2) Input Gear Part No. 5-P-1245

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12AS-1930TO (AS-Tronic)
12AS-2130TO (AS-Tronic)
12AS-2301 (AS-Tronic - 12.33/0.78 Ratio)
12AS-2330TO (AS-Tronic)
12AS-2530TO (AS-Tronic)
12AS-2540TO (AS-Tronic)
12AS-2740TO (AS-Tronic)
12AS-2940TO (AS-Tronic)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRACW-*-*	590 C	Opp	135				Furnished
523XTACX-*-*	258 C	Eng	186				Furnished
523XVACX-*-*	258 C	Eng	221				Furnished

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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16AS-2601 (AS-Tronic - 14.12/0.83 Ratio)
16AS-2630TO (AS-Tronic)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (16 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRACW-*-*	590 C	Opp	111				Furnished
523XTACX-*-*	258 C	Eng	153				Furnished
523XVACX-*-*	258 C	Eng	182				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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12AS-1630TD (AS-Tronic)
12AS-1930TD (AS-Tronic)
12AS-2130TD (AS-Tronic)
12AS-2140TD (AS-Tronic)
12AS-2301 (AS-Tronic - 15.86/1.0 Ratio)
12AS-2330TD (AS-Tronic)
12AS-2340TD (AS-Tronic)
12AS-2530TD (AS-Tronic)
12AS-2540TD (AS-Tronic)

REAR SIDE ONLY

TRANSMISSION GEAR DATA:
REAR 00-BOLT Opening

PITCH LINE TO APERTURE FACE:

CAUTION: Application Approval Required for PTO Output Shaft Speeds Above 2500 RPM

REAR MOUNT - MECHANICAL SHIFT (12 SPEED TRANSMISSIONS)

PTO Model	Torq I / C †	Dir Rot	Engine % Fwd	Engine % Rev	Filler Block	Adapter Assy	Stud Kit
511XRACW-*-*	590 C	Opp	82				Furnished
523XTACX-*-*	258 C	Eng	113				Furnished
523XVACX-*-*	258 C	Eng	134				Furnished

† **I = Intermittent Torque Only -** De-Rate Torque Rating 30% for Continuous Duty. **C = Continuous or Intermittent Torque -** No need to De-Rate Torque Rating.

IMPORTANT: **Refer to the back of this transmission section and read all notes associated with this application page. Some notes may affect the proper PTO selection.**

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ZF Notes

ZF-2

1. 511/523 Rear Mounts - Use adapter ring 45-P-21 with the 511 Series and 45-P-20 for the 523 Series.

ZF-4

1. No adapters available for this application.
2. The 100 Series will not mount on the left side due to interference with the reverse idler bulge.
3. Gas tank may prohibit the remote mounting of a hydraulic pump on the Left Hand side.
4. If there is interference with the exhaust system at the right hand aperture, use assembly arrangement “5”.
5. Chelsea pump model P16-45 thru-85 can be direct mounted to PTOs. Larger pumps can not be direct mounted due to interference with the transmission.

ZF-7

1. 511/523 Rear Mounts-The adapter 329743X is furnished with the PTO

ZF-45

1. A “5” assembly is shown here, but other assembly arrangements may work better depending on the chassis setup, whether or not a direct mount pump is to be used, and whether or not a geared adapter is to be used. Chelsea P16-45 and -65 pumps can be direct mounted rearward if the PTO is a “3” assembly (bulge up), uses the XK pump flange, and is the L,R,S or U ratio. All other combinations will have interference problems. Chelsea P16-45 and -65 pumps can be direct mounted forward if a “4” assembly is used (bulge down), an XK pump flange is used, and is the L,R,S, or U ratio. All other combinations will have interference problems. Other ratios, assemblies, pump flanges and pumps may work if a geared adapter is used, but the PTO may be the lowest component on the truck. It would be vulnerable to damage.
2. The 236 series cannot be used on this transmission unless the truck is equipped with an auxiliary air supply.
3. If a 626, 630 or 645 series geared adapter is used, the PTO input gear is the 5-P-1244 JB gear, and the HY gear is used in the adapter. If a 626XHY, 630XHY or 645XHY Series geared adapter is going to be used, the PTO must be a deep mount (ex: 442Z*JB). Use a 7-A-125 filler block, gaskets to establish .006” -.012” backlash, and a 328170-76X stud kit to mount the PTO to the adapter. Be aware that using a geared adapter will change the direction of PTO rotation, but will not affect the speeds shown above.
4. Refer to Ford Body Builders Book (Power Take-Off Applications SEIC/PTO) for information on removal of a tab on the M60D transmission case. This will help in direct mount pump installations.
5. Ford Super Duty MY 2005 applications with the 6.8L gas engine may have PTO to engine exhaust pipe interference problems. It is recommended that you use an assembly arrangement “3”. This still leaves the PTO close to the engine exhaust pipe. Route cable and wiring away from the exhaust pipe. Heat may be an issue for PTO operation due to the proximity of the engine exhaust pipe.

ZF-46

1. 511/523 Rear Mounts - Use adapter ring 45-P-21 with the 511 Series and 45-P-20 for the 523 Series.

ZF-47

1. Only 442 Series with the CABLE SHIFT option “ W “ and a SAE “A” 2 bolt output flange “RC” must be used on right side applications. The 442 Series must be “Shaft High” #5 assembly arrangement due to exhaust pipe interference. “RC” field conversion kit number 328591-112X (”XD” to “RC”)
2. There is a left and right PTO opening for GM/ ZF S6-650, the LEFT side aperture can be used in 4 x 2 vehicles. There is a interference on the 4 x 4 vehicles due to the front wheel driveshaft on the LEFT side.
3. The 626 and 645 Series adapters will mount to this transmission (LEFT Side Only) with the 5-P-1237 gear in the adapter and the 5-P-1244 gear in the 442 Series. The 442 Series must use a deep mount housing, stud kit 328170-76X and 7-A-125 spacer to mount to the adapter.
4. Parker P16-45/65 pumps can be mounted rearward and direct to the 442 series on the LEFT side if the PTO is a 3 assembly, (bulge up), has the XK or RC flange, and is the F, L, R, S, or U ratio.
5. Wiring harness assembly number 329333-4X can be used on all applications to control engine speed. See owner’s manual HY25-1135-M1/US for complete instructions.

ZF-64

1. 511/523 Rear Mounts-The adapter 329755X is furnished with the PTO

ZF-65

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Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

NOTES

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Offer of Sale

The items described in this document and other documents and descriptions provided by Parker Hannifin Corporation, its subsidiaries and its authorized distributors ("Seller") are hereby offered for sale at prices to be established by Seller. This offer and its acceptance by any customer ("Buyer") shall be governed by all of the following Terms and Conditions. Buyer's order for any item described in its document, when communicated to Seller verbally, or in writing, shall constitute acceptance of this offer. All goods, services or work described will be referred to as "Products".

1. Terms and Conditions. Seller's willingness to offer Products, or accept an order for Products, to or from Buyer is subject to these Terms and Conditions or any newer version of the terms and conditions found on-line at www.parker.com/saleterms/. Seller objects to any contrary or additional terms or conditions of Buyer's order or any other document issued by Buyer.

2. Price Adjustments; Payments. Prices stated on Seller's quote or other documentation offered by Seller are valid for 30 days, and do not include any sales, use, or other taxes unless specifically stated. Unless otherwise specified by Seller, all prices are F.C.A. Seller's facility (INCOTERMS 2010). Payment is subject to credit approval and is due 30 days from the date of invoice or such other term as required by Seller's Credit Department, after which Buyer shall pay interest on any unpaid invoices at the rate of 1.5% per month or the maximum allowable rate under applicable law.

3. Delivery Dates; Title and Risk; Shipment. All delivery dates are approximate and Seller shall not be responsible for any damages resulting from any delay. Regardless of the manner of shipment, title to any products and risk of loss or damage shall pass to Buyer upon placement of the products with the shipment carrier at Seller's facility. Unless otherwise stated, Seller may exercise its judgment in choosing the carrier and means of delivery. No deferment of shipment at Buyers' request beyond the respective dates indicated will be made except on terms that will indemnify, defend and hold Seller harmless against all loss and additional expense. Buyer shall be responsible for any additional shipping charges incurred by Seller due to Buyer's acts or omissions.

4. Warranty. Seller warrants that all products sold, other than the 590 Series, conform to the applicable Parker Chelsea standard specification for the lesser period of 2 years (24 Months) from date of service or 2-1/2 years (30 Months) from date of build (as marked on the product name plate). Seller warrants that the 590 Series will conform to the applicable Seller standard specification for the lesser period of 2 years (24 Months) from date of service or 2000 hours of usage. The prices charged for Seller's products are based upon the exclusive limited warranty stated above, and upon the following disclaimer: **DISCLAIMER OF WARRANTY: THIS WARRANTY COMPRISES THE SOLE AND ENTIRE WARRANTY PERTAINING TO PRODUCTS PROVIDED HEREUNDER. SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESS AND IMPLIED, INCLUDING DESIGN, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

5. Claims; Commencement of Actions. Buyer shall promptly inspect all Products upon delivery. No claims for shortages will be allowed unless reported to the Seller within 10 days of delivery. No other claims against Seller will be allowed unless asserted in writing within 30 days after delivery. Buyer shall notify Seller of any alleged breach of warranty within 30 days after the date the defect is or should have been discovered by Buyer. Any action based upon breach of this agreement or upon any other claim arising out of this sale (other than an action by Seller for an amount due on any invoice) must be commenced within 12 months from the date of the breach without regard to the date breach is discovered.

6. LIMITATION OF LIABILITY. UPON NOTIFICATION, SELLER WILL, AT ITS OPTION, REPAIR OR REPLACE A DEFECTIVE PRODUCT, OR REFUND THE PURCHASE PRICE. IN NO EVENT SHALL SELLER BE LIABLE TO BUYER FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF, OR AS THE RESULT OF, THE SALE, DELIVERY, NON-DELIVERY, SERVICING, USE OR LOSS OF USE OF THE PRODUCTS OR ANY PART THEREOF, OR FOR ANY CHARGES OR EXPENSES OF ANY NATURE INCURRED WITHOUT SELLER'S WRITTEN CONSENT, EVEN IF SELLER HAS BEEN NEGLIGENT, WHETHER IN CONTRACT, TORT OR OTHER LEGAL THEORY. IN NO EVENT SHALL SELLER'S LIABILITY UNDER ANY CLAIM MADE BY BUYER EXCEED THE PURCHASE PRICE OF THE PRODUCTS.

7. User Responsibility. The user, through its own analysis and testing, is solely responsible for making the final selection of the system and Product and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application and follow applicable industry standards and Product information. If Seller provides Product or system options, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the Products or systems.

8. Loss to Buyer's Property. Any designs, tools, patterns, materials, drawings, confidential information or equipment furnished by Buyer or any other items which become Buyer's property, will be considered obsolete and may be destroyed by Seller after two consecutive years have elapsed without Buyer ordering the items manufactured using such property. Seller shall not be responsible for any loss or damage to such property while it is in Seller's possession or control.

9. Special Tooling. A tooling charge may be imposed for any special tooling, including without limitation, dies, fixtures, molds and patterns, acquired to manufacture Products. Such special tooling shall be and remain Seller's property notwithstanding payment of any charges by Buyer. In no event will Buyer acquire any interest in apparatus belonging to Seller which is utilized in the manufacture of the Products, even if such apparatus has been specially converted or adapted for such manufacture and notwithstanding any charges paid by Buyer. Unless otherwise agreed, Seller shall have the right to alter, discard or otherwise dispose of any special tooling or other property in its sole discretion at any time.

10. Buyer's Obligation; Rights of Seller. To secure payment of all sums due or otherwise, Seller shall retain a security interest in the goods delivered and this agreement shall be deemed a Security Agreement under the Uniform Commercial Code. Buyer authorizes Seller as its attorney to execute and file on Buyer's behalf all documents Seller deems necessary to perfect its security interest.

11. Improper use and Indemnity. Buyer shall indemnify, defend, and hold Seller harmless from any claim, liability, damages, lawsuits, and costs (including attorney fees), whether for personal injury, property damage, patent, trademark or copyright infringement or any other claim, brought by or incurred by Buyer, Buyer's employees, or any other person, arising out of: (a) improper selection, improper application or other misuse of Products purchased by Buyer from Seller; (b) any act or omission, negligent or otherwise, of Buyer; (c) Seller's use of patterns, plans, drawings, or specifications furnished by Buyer to manufacture Product; or (d) Buyer's failure to comply with these terms and conditions. Seller shall not indemnify Buyer under any circumstance except as otherwise provided.

12. Cancellations and Changes. Orders shall not be subject to cancellation or change by Buyer for any reason, except with Seller's written consent and upon terms that will indemnify, defend and hold Seller harmless against all direct, incidental and consequential loss or damage. Seller may change product features, specifications, designs and availability with notice to Buyer.

13. Limitation on Assignment. Buyer may not assign its rights or obligations under this agreement without the prior written consent of Seller.

14. Force Majeure. Seller does not assume the risk and shall not be liable for delay or failure to perform any of Seller's obligations by reason of circumstances beyond the reasonable control of Seller (hereinafter "Events of Force Majeure"). Events of Force Majeure shall include without limitation: accidents, strikes or labor disputes, acts of any government or government agency, acts of nature, delays or failures in delivery from carriers or suppliers, shortages of materials, or any other cause beyond Seller's reasonable control.

15. Waiver and Severability. Failure to enforce any provision of this agreement will not waive that provision nor will any such failure prejudice Seller's right to enforce that provision in the future. Invalidation of any provision of this agreement by legislation or other rule of law shall not invalidate any other provision herein. The remaining provisions of this agreement will remain in full force and effect.

16. Termination. Seller may terminate this agreement for any reason and at any time by giving Buyer thirty (30) days written notice of termination. Seller may immediately terminate this agreement, in writing, if Buyer: (a) commits a breach of any provision of this agreement (b) appointments a trustee, receiver or custodian for all or any part of Buyer's property (c) files a petition for relief in bankruptcy on its own behalf, or by a third party (d) makes an assignment for the benefit of creditors, or (e) dissolves or liquidates all or a majority of its assets.

17. Governing Law. This agreement and the sale and delivery of all Products hereunder shall be deemed to have taken place in and shall be governed and construed in accordance with the laws of the State of Ohio, as applicable to contracts executed and wholly performed therein and without regard to conflicts of laws principles. Buyer irrevocably agrees and consents to the exclusive jurisdiction and venue of the courts of Cuyahoga County, Ohio with respect to any dispute, controversy or claim arising out of or relating to this agreement.

18. Indemnity for Infringement of Intellectual Property Rights. Seller shall have no liability for infringement of any patents, trademarks, copyrights, trade dress, trade secrets or similar rights except as provided in this Section. Seller will defend and indemnify Buyer against allegations of infringement of U.S. patents, U.S. trademarks, copyrights, trade dress and trade secrets ("Intellectual Property Rights"). Seller will defend at its expense and will pay the cost of any settlement or damages awarded in an action brought against Buyer based on an allegation that a Product sold pursuant to this Agreement infringes the Intellectual Property Rights of a third party. Seller's obligation to defend and indemnify Buyer is contingent on Buyer notifying Seller within ten (10) days after Buyer becomes aware of such allegations of infringement, and Seller having sole control over the defense of any allegations or actions including all negotiations for settlement or compromise. If a Product is subject to a claim that it infringes the Intellectual Property Rights of a third party, Seller may, at its sole expense and option, procure for Buyer the right to continue using the Product, replace or modify the Product so as to make it noninfringing, or offer to accept return of the Product and return the purchase price less a reasonable allowance for depreciation. Notwithstanding the foregoing, Seller shall have no liability for claims of infringement based on information provided by Buyer, or directed to Products delivered hereunder for which the designs are specified in whole or part by Buyer, or infringements resulting from the modification, combination or use in a system of any Product sold hereunder. The foregoing provisions of this Section shall constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for infringement of Intellectual Property Rights.

19. Entire Agreement. This agreement contains the entire agreement between the Buyer and Seller and constitutes the final, complete and exclusive expression of the terms of sale. All prior or contemporaneous written or oral agreements or negotiations with respect to the subject matter are herein merged.

20. Compliance with Law, U. K. Bribery Act and U.S. ForeignCorrupt Practices Act. Buyer agrees to comply with all applicable laws and regulations, including both those of the United Kingdom and the United States of America, and of the country or countries of the Territory in which Buyer may operate, including without limitation the U. K. Bribery Act, the U.S. Foreign Corrupt Practices Act ("FCPA") and the U.S. Anti-Kickback Act (the "Anti-Kickback Act"), and agrees to indemnify and hold harmless Seller from the consequences of any violation of such provisions by Buyer, its employees or agents. Buyer acknowledges that they are familiar with the provisions of the U. K. Bribery Act, the FCPA and the Anti-Kickback Act, and certifies that Buyer will adhere to the requirements thereof. In particular, Buyer represents and agrees that Buyer shall not make any payment or give anything of value, directly or indirectly to any governmental official, any foreign political party or official thereof, any candidate for foreign political office, or any commercial entity or person, for the purpose of influencing such person to purchase products or otherwise benefit the business of Seller.

07/14

Parker Hannifin Corporation
Chelsea Products Division
Olive Branch, MS 38654 USA

Chelsea Products

Mechanical Shift 6/8-Bolt



PowerShift 6/8-Bolt



PowerShift 10-Bolt



Rear Mount



Split Shaft Gear Boxes



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