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Pro Gear AND TRANSMISSION

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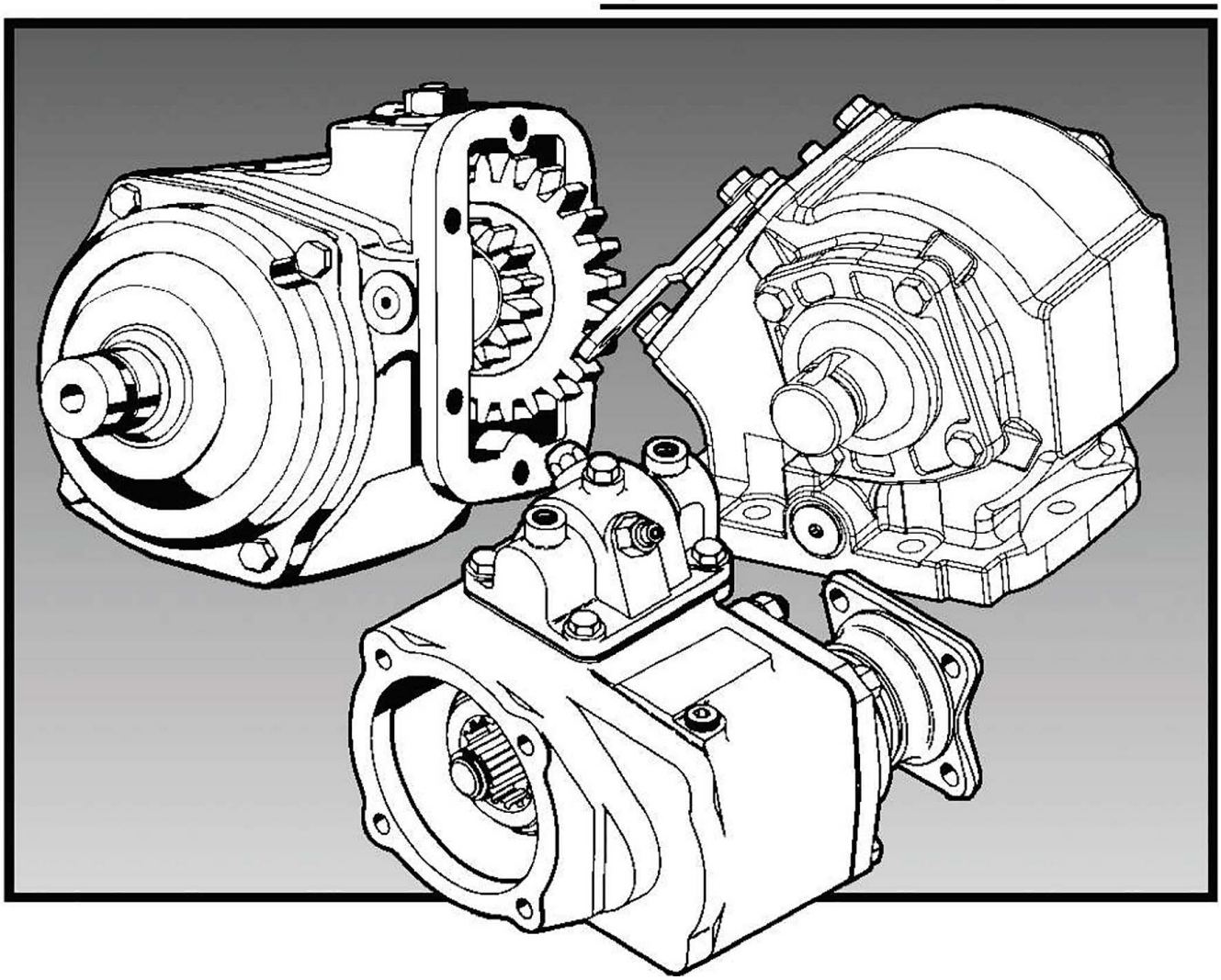
(877) 776-4600 or (407) 872-1901 parts@eprogear.com

Bulletin HY25-2438-M1/US

CHELSEA®
Replacement Parts List
438 Series Manual

Effective: December 15, 2001
Supersedes: P410-438 Dated July 1994



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This document and other information from Parker Hannifin Corporation, its subsidiaries and authorized distributors provide product and/or system options for further investigation by users having technical expertise. It is important that you analyze all aspects of your application and review the information concerning the product or system in the current product catalog. Due to the variety of operating conditions and applications for these products or systems, the user, through its own analysis and testing, is solely responsible for making the final selection of the products and systems and assuring that all performance, safety and warning requirements of the application are met.

The products described herein, including without limitation, product features, specifications, designs, availability and pricing, are subject to change by Parker Hannifin Corporation and its subsidiaries at any time without notice.

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Chelsea Products Division
Olive Branch, MS 38654 USA

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Cable Shift Control Assembly 3

Air Shift Control Assembly 4

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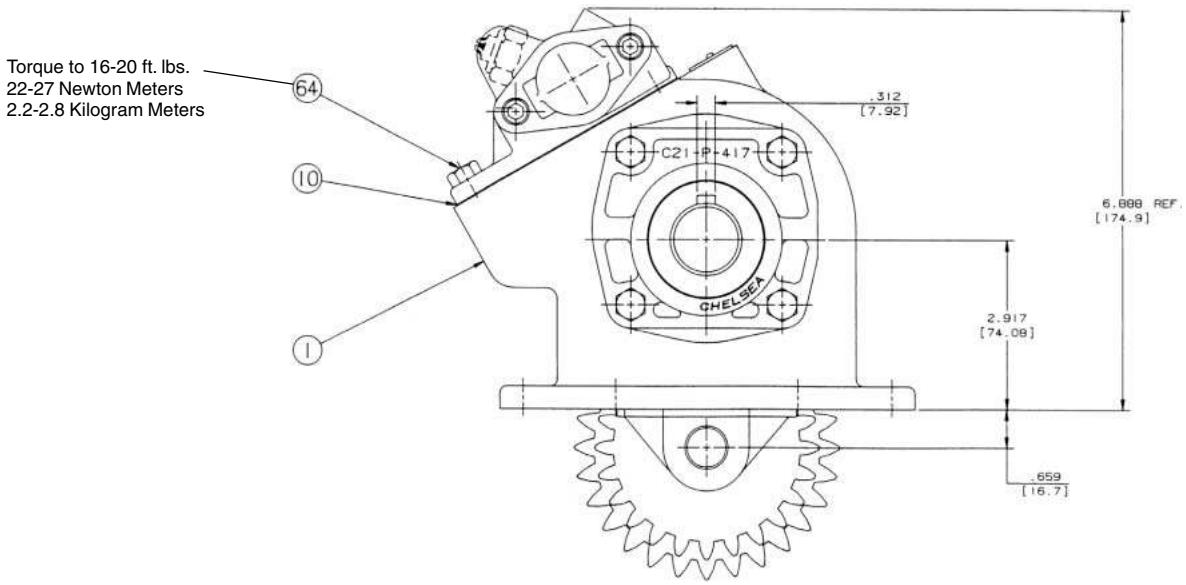

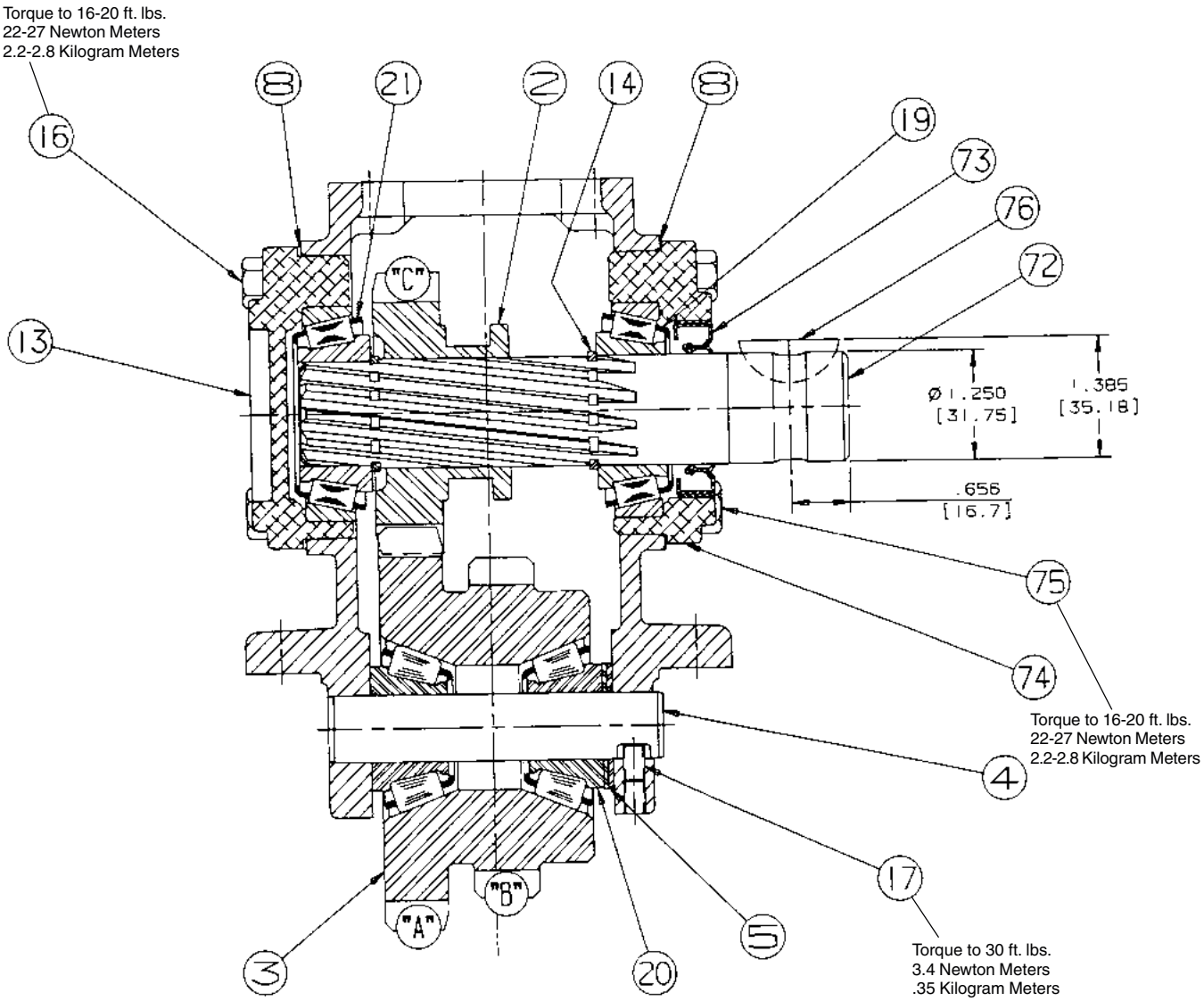

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Item		Part Number	Description	Quantity
1		**1-P-483**	Housing	1
2	▶	**2-P-699**	Gear, Output	1
3		**5-P-951**	Gear, Input	1
4	▶	**9-P-72**	Shaft, Idler	1
5	▶	**14-P-15**	Spacers, Input Gear	A/R
8		**22-P-24-1**	Gasket, Bearing Cap (.010)	A/R
		22-P-24-2	Gasket, Bearing Cap (.020)	A/R
		22-P-24-3	Gasket, Bearing Cap (.015)	A/R
10	▶	**35-P-8**	Gasket, Shifter Cover	1
11	▶	**68-P-2**	Name Plate (U.S.A.)	1
13	▶	**328274X**	Bearing Cap Assembly (Closed)	1
14	▶	**378391**	Lockring	2
15	▶	**378422**	Drive Screw	2
16	▶	**378430-10**	Capscrew, Hex Head (.312-18 x 1.000)	4
17	▶	**378452-7**	Set Screw (.250-20 x .500)	1
19	▶	**550397**	Bearing Cone	1
20	▶	**550439**	Bearing Cone	2
21	▶	**550532**	Bearing Cone	1
64	▶	**378430-8**	Capscrew, Hex Head (.312-18 x .750)	4
			"XR" OUTPUT	
66	▶	**3-P-283**	Shaft, Output	1
67	▶	**28-P-216**	Oil Seal	1
68	▶	**329194X**	Pump Flange Assembly (21-P-574)	1
69	▶	**379673**	Shoulder Stud (.312-24)	4
70	▶	**379063**	Flat Washer	4
			"XD" OUTPUT	
72	▶	**3-P-202**	Shaft, Output	1
73	▶	**28-P-216**	Oil Seal	1
74	▶	**328273X**	Bearing Cap Assembly (Open)	1
75	▶	**378430-10**	Capscrew, Hex Head (.312-18 x 1.000)	4
76	▶	**500007-29**	Woodruff Key	1
			"XQ" OUTPUT	
79	▶	**3-P-282**	Shaft, Output (Pump)	1
80	▶	**28-P-216**	Oil Seal	1
81	▶	**328589X**	Bearing Cap Assembly (21-P-269)	1
82	▶	**378447-8**	Capscrew, Socket Head (.312-18 x 1.500)	4
			"RA" OUTPUT	
83	▶	**3-P-283**	Output Shaft	1
84	▶	**28-P-216**	Oil Seal	1
85	▶	**329195X**	Pump Flange Assembly (21-P-574)	1
86	▶	**21-P-628**	Pump Flange 2-Bolt Rotating	1
87	▶	**378447-6**	Socket Head Capscrew (.312-18 X 1.000)	4
	▶	**328591-53X**	Pump Field Conversion Kit ("XR" TO "RA")	
	▶	**328591-55X**	Pump Field Conversion Kit ("XD" TO "RA")	
			"RA" OUTPUT	
88	▶	**3-P-283**	Output Shaft	1
89	▶	**28-P-216**	Oil Seal	1
90	▶	**329195X**	Pump Flange Assembly (21-P-574)	1
91	▶	**21-P-572**	Pump Flange 4-bolt Rotating	1
92	▶	**378447-6**	Socket Head Capscrew .312-18 X 1.000	4
	▶	**328591-54X**	Pump Field Conversion Kit ("XR" TO "RA")	
	▶	**328591-56X**	Pump Field Conversion Kit ("XD" TO "RA")	
			LOOSE PARTS	
		7170-72X	Stud Kit	1
		35-P-72	Gasket, Mounting	2
	▶	**328961-6X**	Gasket & Installation Instructions	1
95	▶	**328346-15X**	Cable Control Assembly	1
	▶	**328380X**	Cable Control Parts Bag	1
		328751X	Installation Kit	1
		328388-37X	Installation Kit, Air Shift	1
	▶	**328711X**	Installation Kit, "XR" Pump	1
		329166-12X	Installation Kit, E-Z Shift	

A.R. — As Required

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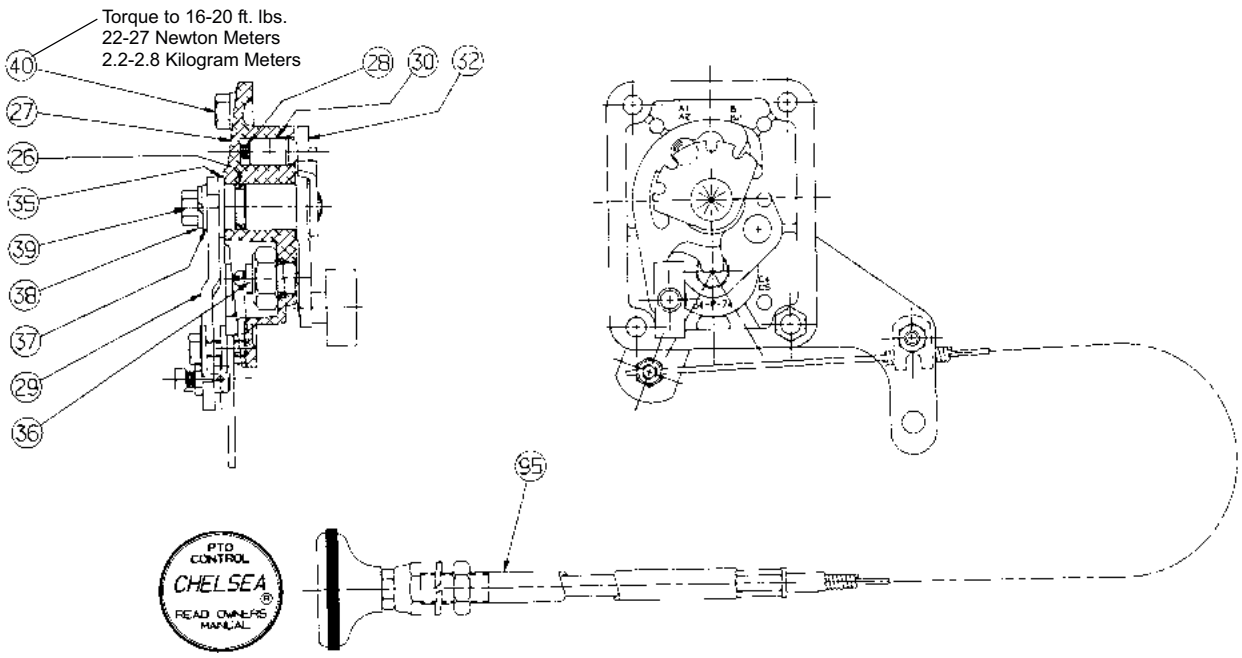
Assembly 4 & 6



Item	Part Number	Description	Quantity
		CABLE SHIFT	
	329038-1X	CABLE SHIFTER ASSEMBLY (3 & 6)	1 or
	329038-2X	CABLE SHIFTER ASSEMBLY (4 & 5)	1
26 ▶	**28-P-191**	O-Ring	1
27 ▶	**34-P-74**	Shifter Cover Gasket	1
28 ▶	**37-P-19**	Shifter Spring	1
29 ▶	**51-P-22**	Shifter Lever	1
30 ▶	**63-P-16**	Poppet Pin	1
32	**328813-1X**	Shifter Plate Ass'y (3 & 6)	1
	328813-2X	Shifter Plate Ass'y (4 & 5)	1 or
35 ▶	**378004**	Flat Washer	1
36	**379110**	Indicator Switch (Norm On)	1
37 ▶	**500365-22**	Flat Washer	1
38 ▶	**500356-10**	Lockwasher	1
39 ▶	**500409-6**	Capscrew, Hex Head	1
40 ▶	**378430-9**	Capscrew, Hex Head (.312-18 x .875)	4

N.S. - Not Shown

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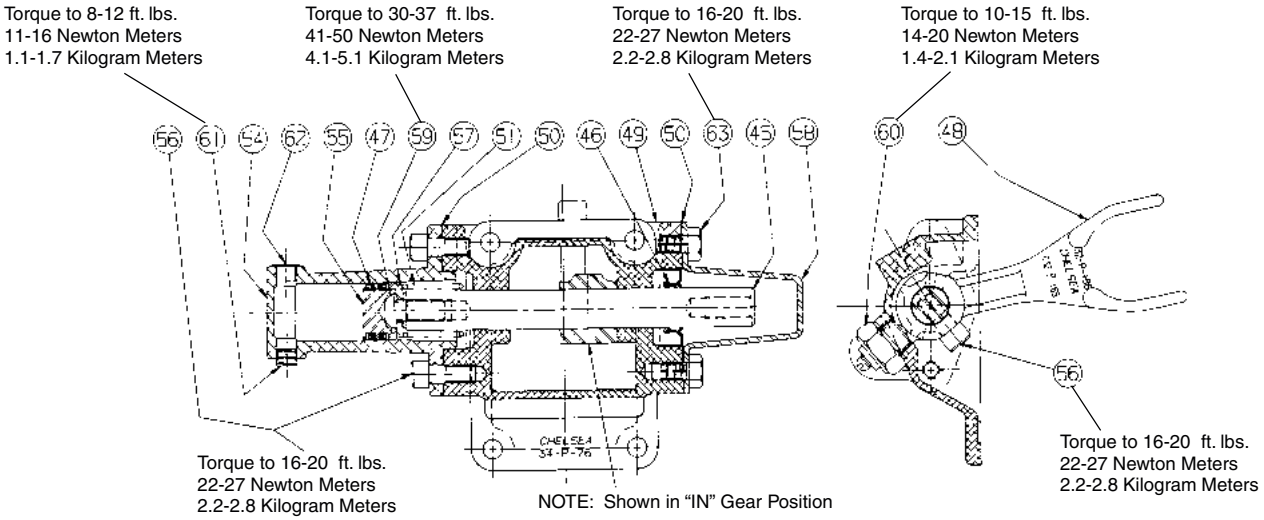
Assembly 4 & 6



Item		Part Number	Description	Quantity
			AIR SHIFT	
	▶	**329042-1X**	AIR SHIFT COVER ASSEMBLY (3 & 6)	1 or
		329042-2X	AIR SHIFT COVER ASSEMBLY (4 & 5)	1
45	▶	**11-P-112**	Shaft, Shifter	1
46	▶	**28-P-207**	Oil Seal	1
47	▶	**28-P-256**	Block Vee Ring	2
48	▶	**32-P-166**	Shifter Fork	1
			E-Z SHIFT™	
		329168-1X	E-Z SHIFT COVER ASSEMBLY (3 & 6)	1
		329168-2X	E-Z SHIFT COVER ASSEMBLY (4 & 5)	1
49		**34-P-76**	Shifter Cover	1
50	▶	**35-P-14**	Gasket	2
51	▶	**37-P-25**	Shifter Spring	1
54	▶	**65-P-14**	Cylinder Cap	1
55		**66-P-4**	Piston, Floating	1
56	▶	**378447-4**	Capscrew, Allen Head	3
57	▶	**378462**	Washer, Spring Retainer	1
58		**65-p-23**	Shifter Shaft Cover	1
59		**378908**	Capscrew, Button Head	1
60		**370110**	Indicator Switch (Norm On)	1
61	▶	**379231**	Pipe Plug .125-27 NPTF TH'D	1
62		**500897-3**	Shipping Plug	1
63	▶	**378430-4**	Capscrew, Hex Head (.312-18 x .500)	2

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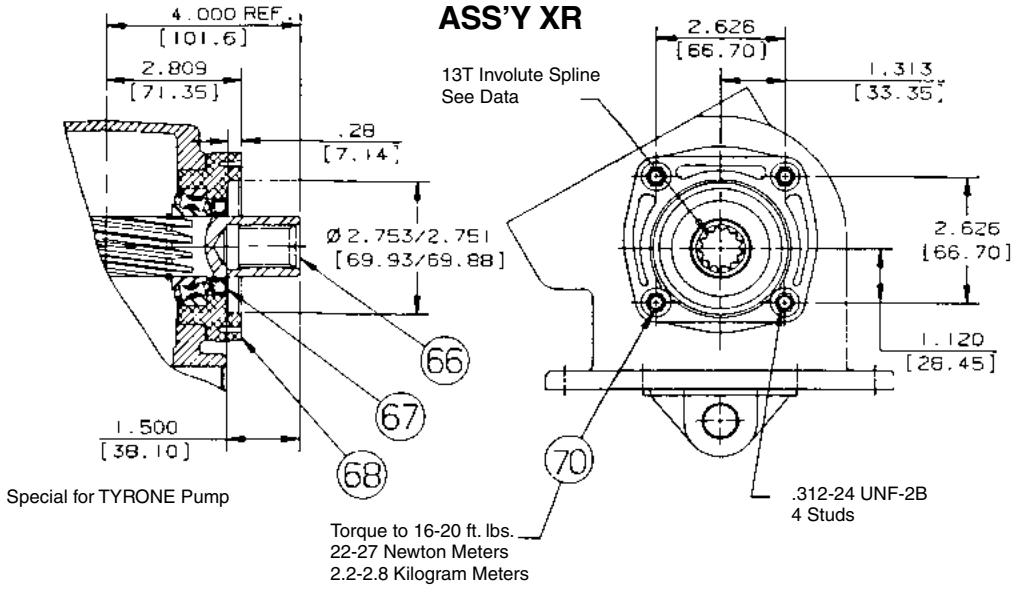
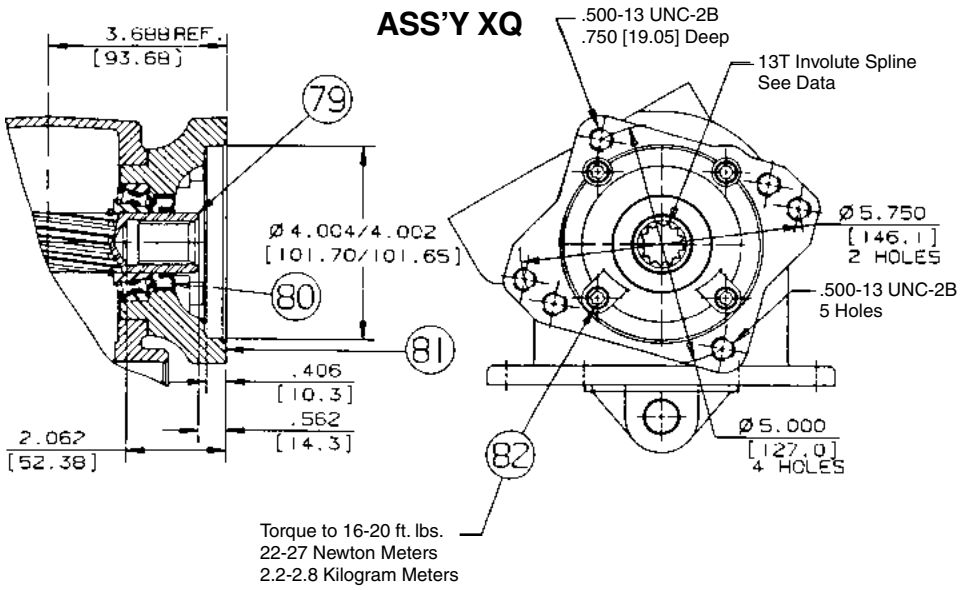
ASS'Y XR



ASS'Y XQ



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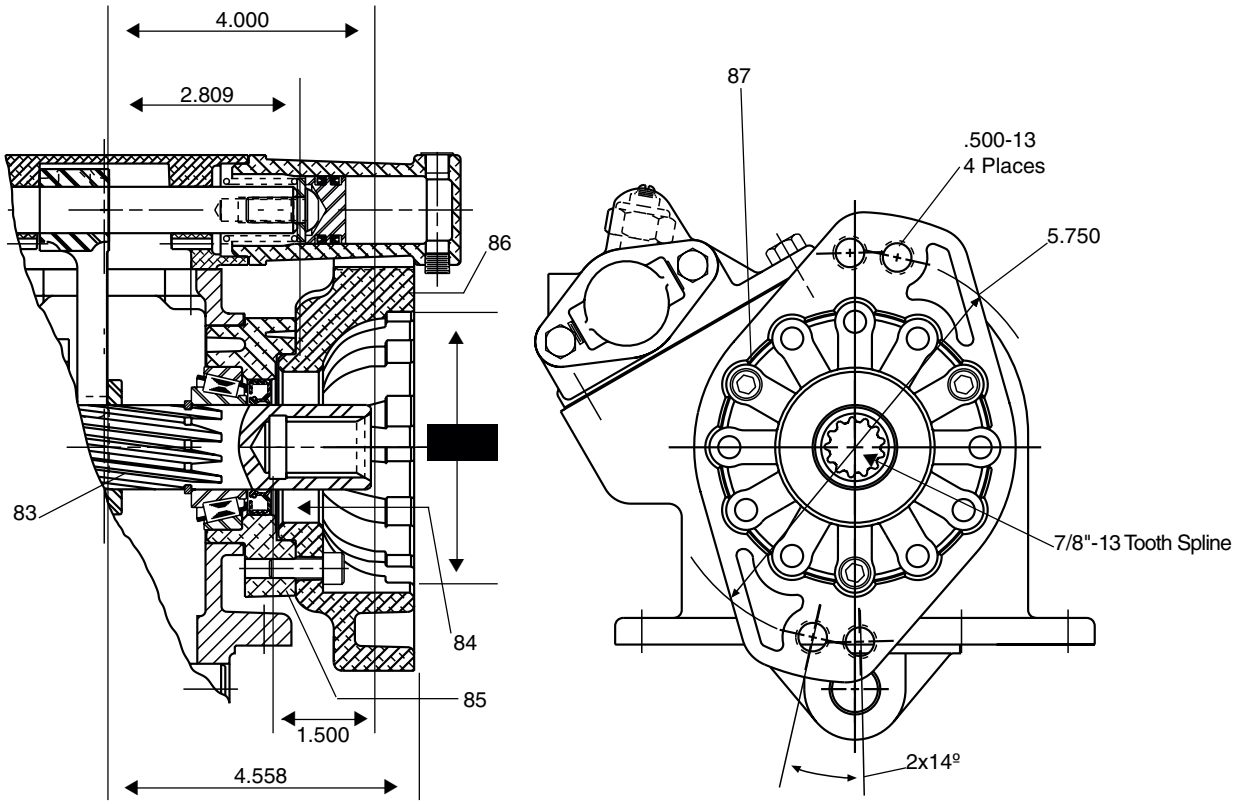
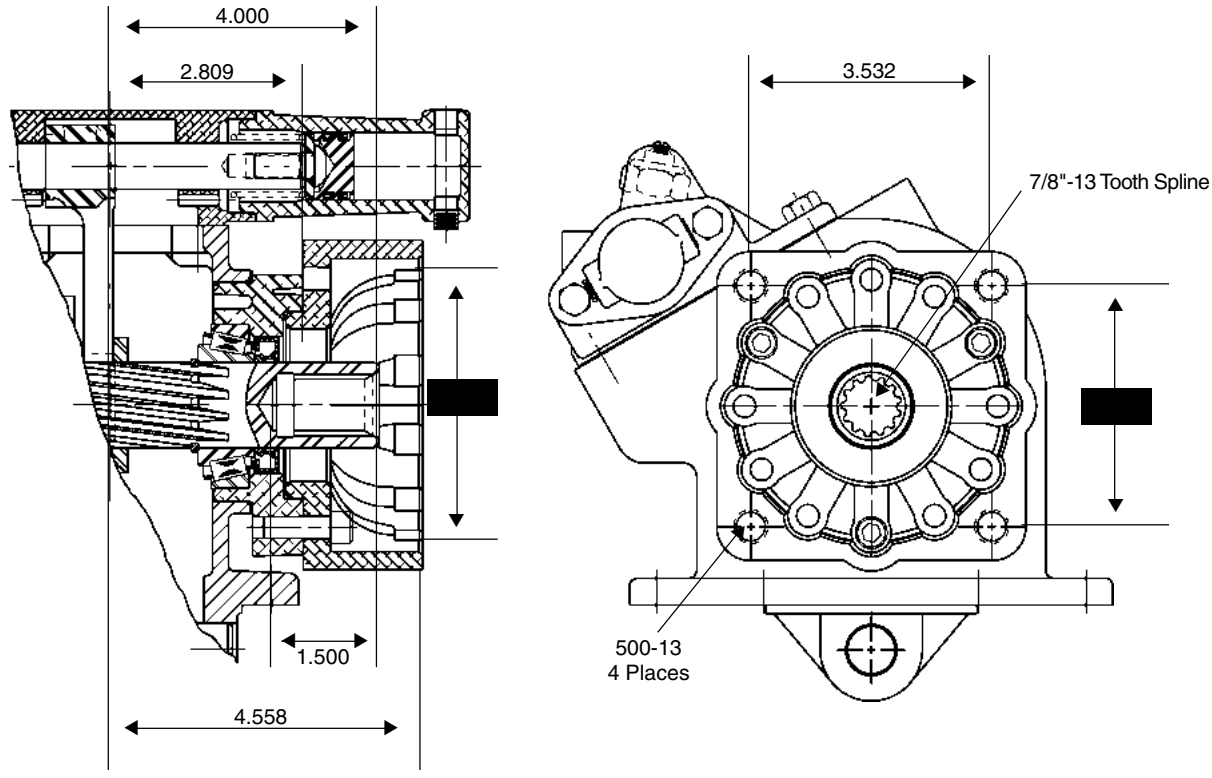
"RA" Output



"RB" Output



Note: "RA" and "RB" Flanges Rotate in 30º Increments

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Model Number Designation

438 Series

438 X U FT X - A 4 XR

BASIC MODEL
438 Series

MOUNTING TYPE
X = Standard

GEAR RATIO

INPUT GEAR DESIGNATOR

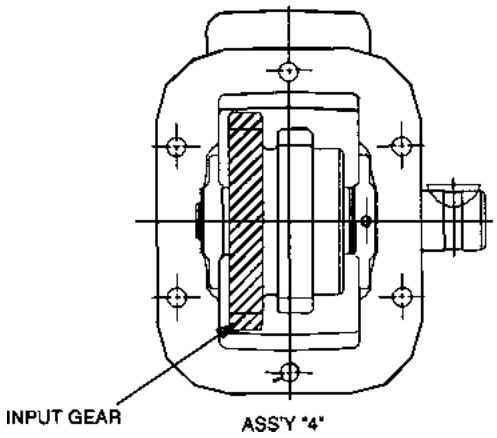
LUBRICATION
X = No Lubrication

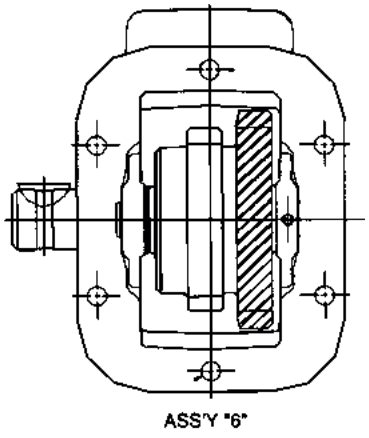
OUTPUT
XD = 1.25" Round
XQ = SAE "B" 2 or 4 Bolt
XR = CHELSEA Special
RA = Rotatable S.A.E. "B" 2 Bolt
RB = Rotatable S.A.E. "B" 4 Bolt

ASSEMBLY ARRANGEMENT
4, 6

SHIFTER TYPE
A = Air Shift
W = Cable Shift
Z = E-Z Shift

Assembly Arrangements





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2. Payment: Payment shall be made by Buyer net 30 days from the date of delivery of the items purchased hereunder. Amounts not timely paid shall bear interest at the maximum rate permitted by law for each month or portion thereof that the Buyer is late in making payment. Any claims by Buyer for omissions or shortages in a shipment shall be waived unless Seller receives notice thereof within 30 days after Buyer's receipt of the shipment.

3. Delivery: Unless otherwise provided on the face hereof, delivery shall be made F.O.B. Seller's plant. Regardless of the method of delivery, however, risk of loss shall pass to Buyer upon Seller's delivery to a carrier. Any delivery dates shown are approximate only and Seller shall have no liability for any delays in delivery.

4. Warranty: Seller warrants that the items sold hereunder shall be free from defects in material or workmanship for a period of:

(A) All Power Take-Off units one (1) year from date of installation.

(B) Except 267, 277, 278, 242, 244, 245, 250, 251 and 859 series two (2) years from date of installation. **THIS WARRANTY COMPRISES THE SOLE AND ENTIRE WARRANTY PERTAINING TO ITEMS PROVIDED HEREUNDER. SELLER MAKES NO OTHER WARRANTY, GUARANTEE, OR REPRESENTATION OF ANY KIND WHATSOEVER. ALL OTHER WARRANTIES, INCLUDING BUT NOT LIMITED TO, MERCHANTABILITY AND FITNESS FOR PURPOSE, WHETHER EXPRESS, IMPLIED, OR ARISING BY OPERATION OF LAW, TRADE USAGE, OR COURSE OF DEALING ARE HEREBY DISCLAIMED. NOTWITHSTANDING THE FOREGOING, THERE ARE NO WARRANTIES WHATSOEVER ON ITEMS BUILT OR ACQUIRED WHOLLY OR PARTIALLY, TO BUYER'S DESIGNS OR SPECIFICATIONS.**

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7. Special Tooling: A tooling charge may be imposed for any special tooling, including without limitation, dies, fixtures, molds and patterns, acquired to manufacture items sold pursuant to this contract. 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 items sold hereunder, 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.

8. 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, may be considered obsolete and may be destroyed by Seller after two (2) consecutive years have elapsed without Buyer placing an order for the items which are 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. Taxes: Unless otherwise indicated on the face hereof, all prices and charges are exclusive of excise, sales, use, property, occupational or like taxes which may be imposed by any taxing authority upon the manufacture, sale or delivery of the items sold hereunder. If any such taxes must be paid by Seller or if Seller is liable for the collection of such tax, the amount thereof shall be in addition to the amounts for the items sold. Buyer agrees to pay all such taxes or to reimburse Seller therefore upon receipt of its invoice. If Buyer claims exemption from any sales, use or other tax imposed by any taxing authority, Buyer shall save Seller harmless from and against any such tax, together with any interest or penalties thereon which may be assessed if the items are held to be taxable.

10. 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 Part 10. Seller will defend and indemnify Buyer against allegations of infringement of U.S. Patents, U.S. Trademarks, copyrights, trade dress and trade secrets (hereinafter '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 an item sold pursuant to this contract 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 an item sold hereunder 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 said item, replace or modify said item so as to make it noninfringing, or offer to accept return of said item 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 items 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 item sold hereunder. The foregoing provisions of this Part 10 shall constitute Seller's sole and exclusive liability and Buyer's sole and exclusive remedy for infringement of Intellectual Property Rights.

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11. Force Majeure: Seller does not assume the risk of 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, acts of God, strikes or labor disputes, acts, laws, rules or regulations of any government or government agency, fires, floods, delays or failures in delivery of carriers or suppliers, shortages of materials and any other cause beyond Seller's control.

12. Entire Agreement/Governing Law: The terms and conditions set forth herein, together with any amendments, modifications and any different terms or conditions expressly accepted by Seller in writing, shall constitute the entire Agreement concerning the items sold, and there are no oral or other representations or agreements which pertain there/to. This Agreement shall be governed in all respects by the law of the State of Ohio. No actions arising out of the sale of the items sold hereunder or this Agreement may be brought by either party more than two (2) years after the cause of action accrues.

9/01-P

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