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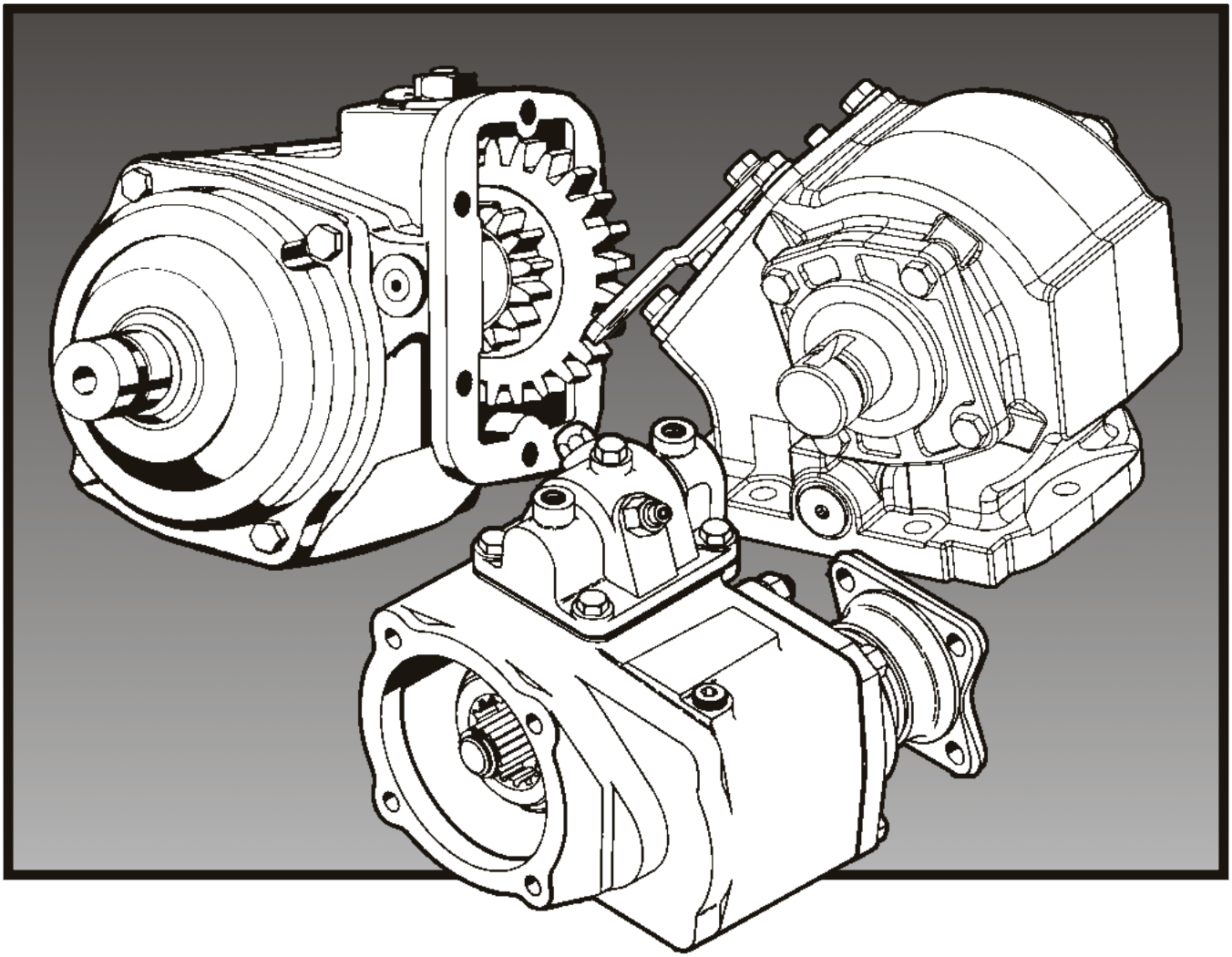
CHELSEA®

Bulletin HY25-2435-M1/US

Replacement Parts List
435 Series Manual

Effective: December 15, 2006
Supersedes: HY25-2435-M1/US Dated May 15, 2002



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Chelsea Products Division
Olive Branch, MS 38654 USA

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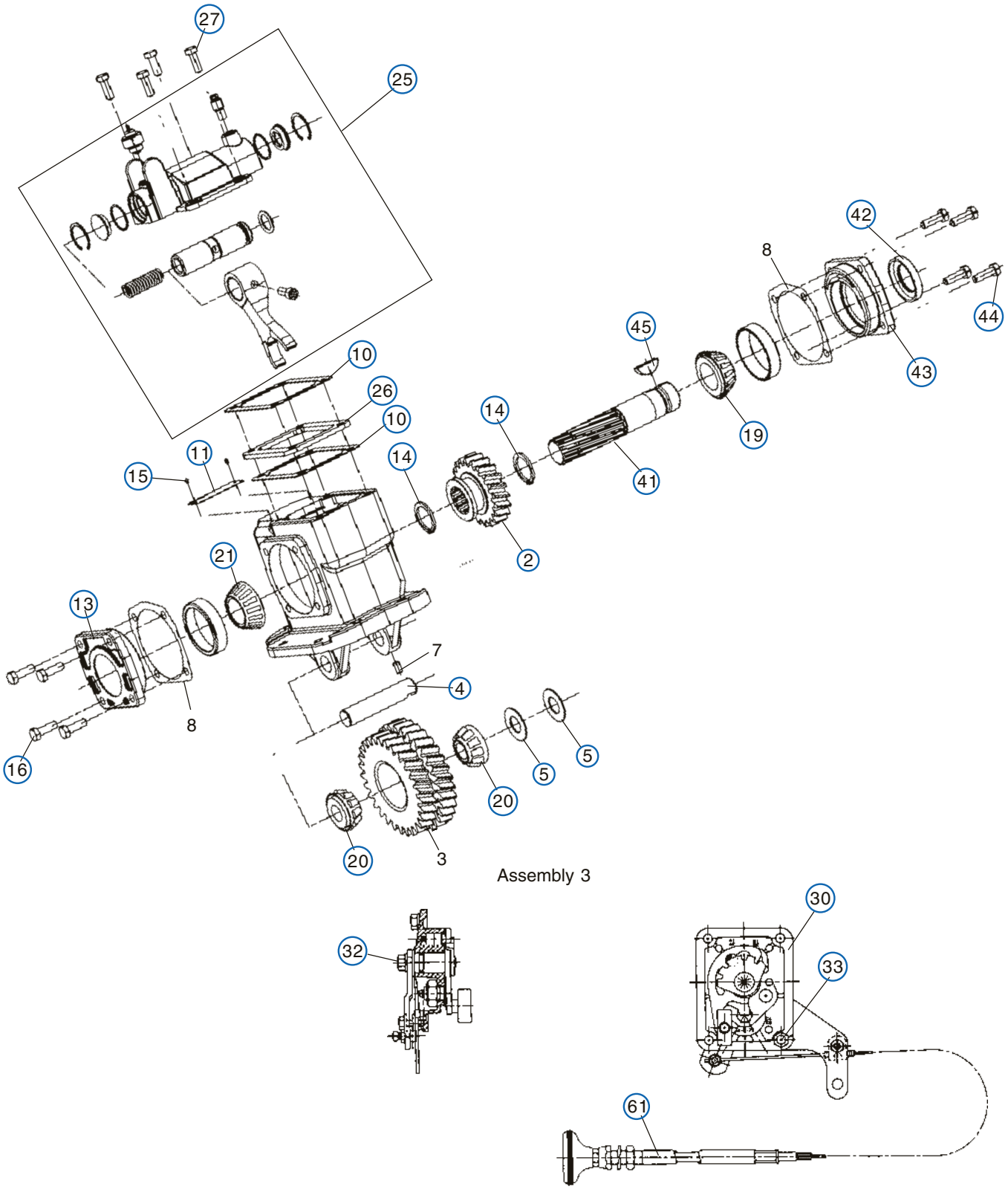

Assembly 3

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Item		Part Number	Description	Quantity
1		**1-P-486**	Housing	1
2	▶	**2-P-560**	Output Gear	1
3			Input Gear	
		5-P-952	435XUFSX	1 or
		5-P-984	435XUFZX	1 or
	▶	**5-P-986**	435XSFZX	1
4	▶	**9-P-64**	Idler Shaft	1
5	▶	**14-P-15**	Input Gear Spacers	A/R
8		**22-P-24-1**	Bearing Cap Gasket (.010")	A/R
		22-P-24-2	Bearing Cap Gasket (.020")	A/R
		22-P-24-3	Bearing Cap Gasket (.015")	A/R
10	▶	**35-P-8**	Shifter Cover Gasket	2
11		**68-P-37**	Name Plate	1
13	▶	**328274X**	Bearing Cap Assembly (Closed End)	1
14	▶	**378391**	Lockring	2
15	▶	**378422**	Drive Screw	2
16	▶	**378430-10**	Hex Capscrew (.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
			Air Shift	
25	▶	**329361X**	Air Shift Cover Assembly (3 & 6)	1
26	▶	**5-A-125**	Spacer, Shifter Cover	1
27	▶	**378430-9**	Hex Capscrew (.312"-18 x .750")	4
			Cable Shift	
30		**329038-1X**	Cable Shifter Assembly (3 & 6)	1
32	▶	**378430-10**	Hex Capscrew (.312"-18 x 1.000")	3
33	▶	**378430-11**	Hex Capscrew (.312"-18 x 1.125")	1
			"XR" Output	
N.S.		**3-P-283**	Output Shaft	1
42	▶	**28-P-216**	Oil Seal	1
N.S.		**329194X**	Pump Flange Assembly	1
N.S.		**379673**	Shoulder Stud	4
N.S.		**379063**	Flat Washer	4
			"XD" Output	
41	▶	**3-P-202**	Output Shaft	1
42	▶	**28-P-216**	Oil Seal	1
43	▶	**328273X**	Bearing Cap Assembly	1
44	▶	**378430-10**	Hex Capscrew (.312"-18 x 1.000")	4
45	▶	**500007-29**	Woodruff Key	1
			"XQ" Output	
N.S.		**3-P-282**	Output Shaft	1
42	▶	**28-P-219**	Oil Seal	1
N.S.		**328589X**	Pump Flange Assembly	1
N.S.		**378447-8**	Allen Head Capscrew	4
			LOOSE PARTS	
	▶	**328961-1X**	Gasket & Installation Instructions	1
61	▶	**328346-15X**	Cable Control Assembly	1
	▶	**328380X**	Cable Control Parts Bag	1
		328751X	Indicator Light Installation Kit	1
	▶	**68-P-18**	Name Plate	1
	▶	**378978**	12-V Indicator Light	1
	▶	**378884**	9-Amp Fuse Holder	1
		379319	Indicator Switch Boot	1
		328388-37X	Air Shift Installation Kit	1
	▶	**328711X**	Installation Kit ("XR" Pump)	1
	▶	**328170-207X**	Capscrew Bag Kit ("RA", "RB", "RF" Outputs)	
		329166-12X	E-Z Shift Installation Kit	

A.R. — As Required N.S. — Not Shown

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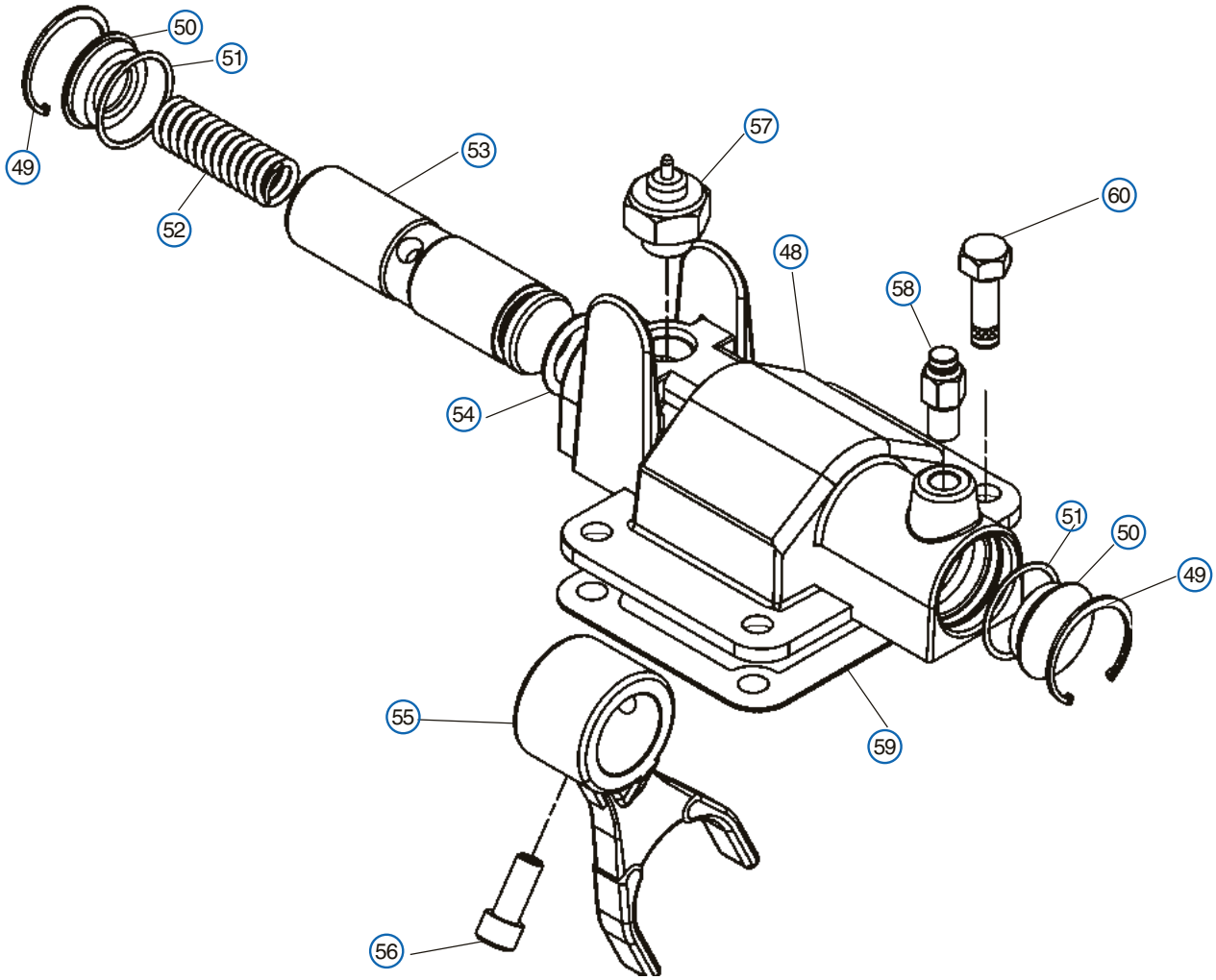

Item	Part Number	Description	Quantity
▶	329361X	Shifter Cover Assembly, Air Shift (Includes Items 48-57)	1
48 ▶	34-P-130	Shifter Cover	1
49 ▶	378316	Snap Ring	2
50 ▶	378315	Cover Plug	2
51 ▶	28-P-42	O-Ring	2
52 ▶	37-P-21	Shifter Spring	1
53 ▶	11-P-75	Shaft, Shifter	1
54 ▶	28-P-41	O-Ring	1
55 ▶	32-P-180	Shifter Fork	1
56 ▶	378447-4	Capscrew, Socket Head w/ lockpatch (.312"-18 x .750")	1
57	379639	Indicator Switch (Normally OFF)	1
58 ▶	379904	Push Connect, for 1/4" tubing	1
59 ▶	35-P-8	Gasket, Shifter Cover	1
60 ▶	378430-9	Capscrew, Hex Head (.312"-18 x .875")	4
		Air Shift Conversion Kits	
	328390-105X	Lever to Air 12V	1
	328390-106X	Lever to Air 24V	1
▶	328390-117X	Lever or Cable to Air	1
▶	328390-119X	Lever or Cable to Electric/Air, 12V	1
▶	328390-120X	Lever or Cable to Electric/Air, 24V	1

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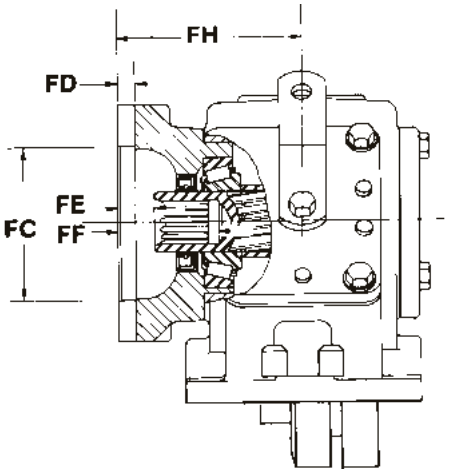
Pump Flange & Shaft Dimension

Pump Flange Suffix	Bolt Circle Dia.	Bolt Holes		FC	FD	FE	FF	FH	Output Shaft
		Tapered Hole	No. Equally Spaced	Female Pilot Dia.	Pilot Depth	Face to End of Shaft	Face thru Hole	Face to Center of P.T.O.	Spline Diameter
RA*, GA	5.75	.500"-13	2tt	4.003	0.406	0.558	2.058	4.588	7/8"-13 Spline
RB*, GB	5.00	.500"-13	4	4.003	0.406	0.558	2.058	4.588	7/8"-13 Spline
RF*, GH	5.75	.500"-13	2tt	4.003	0.406	0.501	1.969	4.569	1.0"-15 Spline
XR*, GR	3.71	.312"-24 (Studs)	4	2.752	0.281	n/a	n/a	2.809	7/8"-13 Spline
XQ	5.00	.500"-13	4	4.003	0.406	0.562	2.062	3.688	7/8"-13 Spline
	5.75	.500"-13	2						



Pump Conversion Kits Bill Of Material

Output	Conversion Kits	Front						Rear Cap Greaseable Option		
		Output Shaft Number	Output Bearing Cap Assembly	Socket Head	Capscrew Bag Kit	Output Oil Seal	Output Pump Flange	Bearing Cap Assembly	Socket Head	Oil Seal
RA ▶	328591-53X (XR to RA) ▶ 328591-55X (XD to RA)	3-P-283	329195X	378447-6	328170-207X	28-P-216	21-P-628			
RB ▶	328591-54X (XR to RB) ▶ 328591-56X (XD to RB)	3-P-283	329195X	378447-6	328170-207X	28-P-216	21-P-572			
RF	328591-78X (XD to RF) ▶	3-P-924	329264X	378447-6	328170-207X	28-P-219	21-P-626			
XR	328591-52X (XD to XR) ▶	3-P-283	329194X	379673		28-P-216				
XQ	378591-17X ▶	3-P-282	328589X	378447-8		28-P-282				
GA ▶	328591-72X (XD to GA) ▶ 328591-72X (XR to GA) 328591-106X (RA to GA)	3-P-923X ▶	328273X (Rear) 329195X (Output)	378447-6	328170-207X	28-P-268 (Rear) 28-P-216 (Output)	21-P-628	328273X	378430-10	28-P-268
GB ▶	328591-74X (XD to GB) ▶ 328591-75X (XR to GB) 328591-107X (RB to GB)	3-P-923X ▶	328273X (Rear) 329195X (Output)	378447-6	328170-207X	28-P-268 (Rear) 28-P-216 (Output)	21-P-572	328273X	378430-10	28-P-268
GH ▶	328591-114X (RF to GH) ▶ 328591-116X (XD to GH)	3-P-941X	329264X	378447-6	328170-207X ▶	28-P-268 (Rear) 28-P-216 (Output)	21-P-626	328273X	378430-10	28-P-268
GR	328591-76X (XD to GR) ▶	3-P-923X ▶	328273X (Rear) 329194X (Output)	379673		28-P-268 (Rear) 2-P-216 (Output)		328273X	378430-10	28-P-268

Model Number Designation

435 Series

435 X S FZ X – A 3 XR

Basic Model
435

Mounting Type
X = Standard Mounting

Gear Ratio
S = 1.20 = 1
U = 1.41 = 1

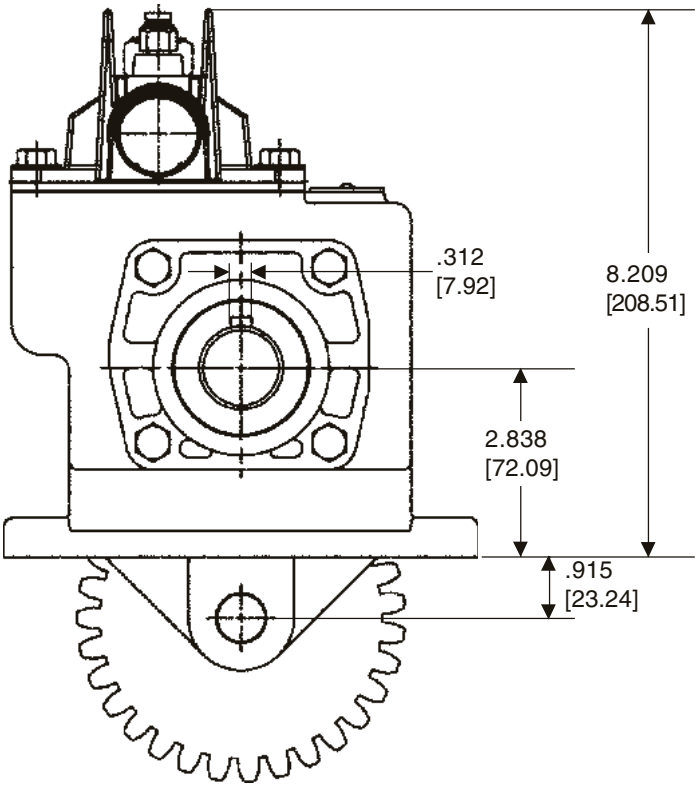
Input Gear Designator

Lubrication
X = No Option Available

Output Type
GA = Greaseable S.A.E. 2-Bolt Rotating Pump Flange
GB = Greaseable S.A.E. 4-Bolt Rotating Pump Flange
GH = Greaseable S.A.E. 2-Bolt Rotating Pump Flange
GR = Greaseable S.A.E. 4-Bolt Rotating Pump Flange
GQ = Greaseable S.A.E. 2 & 4-Bolt Rotating Pump Flange
RA = S.A.E. 2-Bolt Rotating Pump Flange
RB = S.A.E. 4-Bolt Rotating Pump Flange
RF = S.A.E. 2-Bolt Rotating Pump Flange
XD = 1.250" Rd.
XQ = S.A.E. "B" 2 or 4 Bolt
XR = CHELSEA Special

Assembly Arrangement
3 & 6

Shifter Type
A = Air
W = Cable



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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, 246, 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.

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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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