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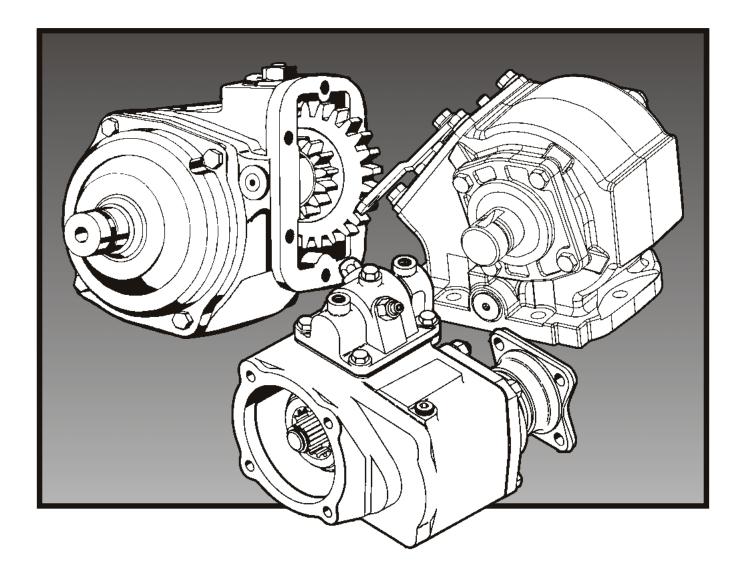
For parts or service call us Pro Gear & Transmission, Inc.(877) 776-4600 or (407) 872-1901 parts@eprogear.com

CHELSEA[®]

Bulletin HY25-2435-M1/US

Replacement Parts List 435 Series Manual

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





	WARNING
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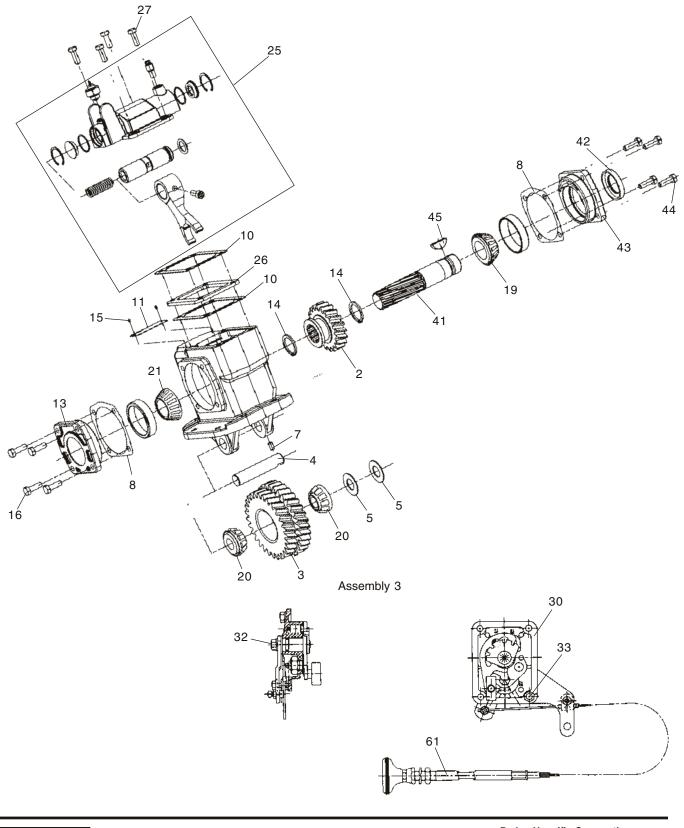
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Exploded View	1
Bill of Materials	
Air Shift	3
Gear Chart & Flanges	4
Model Number Designation	5
Offer of Sale	8



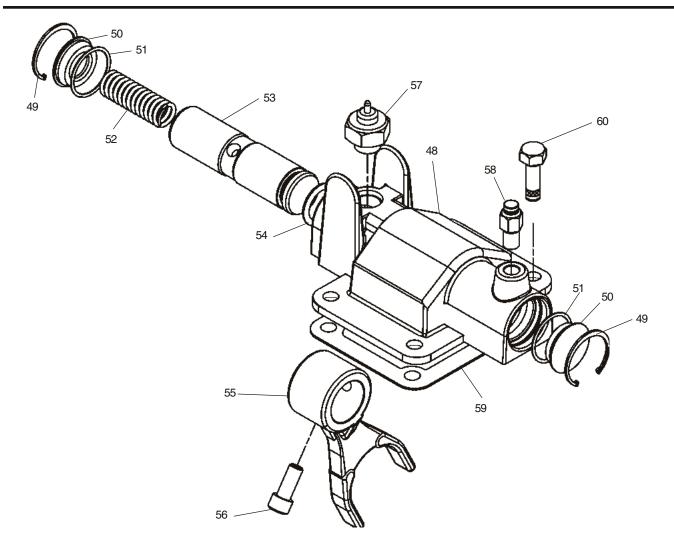
Parker Hannifin Corporation Chelsea Products Division Olive Branch, MS 38654 USA

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ltem	Part Number	Description	Quantit
1	1-P-486	Housing	1
2	2-P-560	Output Gear	
	21 300		1
3		Input Gear	
	5-P-952	435XUFSX	1 oi
	5-P-984	435XUFZX	1.0
	5-P-986	435XSFZX	1
4	9-P-64	Idler Shaft	1
5	14-P-15	Input Gear Spacers	
8	-		
8	22-P-24-1	Bearing Cap Gasket (.010")	
	22-P-24-2	Bearing Cap Gasket (.020")	A/F
	22-P-24-3	Bearing Cap Gasket (.015")	A/F
10	35-P-8	Shifter Cover Gasket	
-			
11	68-P-37	Name Plate	
13	328274X	Bearing Cap Assembly (Closed End)	
14	378391	Lockring	
15	378422	Drive Screw	
16	378430-10	Hex Capscrew (.312"-18 x 1.000")	
17	378452-7	Set Screw (.250"-20 x .500")	
19	550397	Bearing Cone	
-			
20	550439	Bearing Cone	
21	550532	Bearing Cone	1
		Air Shift	
25	329361X	Air Shift Cover Assembly (3 & 6)	1
26	5-A-125	Spacer, Shifter Cover	
-			
27	378430-9	Hex Capscrew (.312"-18 x .750")	
		Cable Shift	
20	200020 47		<u>د</u>
30	329038-1X	Cable Shifter Assembly (3 & 6)	
32	378430-10	Hex Capscrew (.312"-18 x 1.000")	3
33	378430-11	Hex Capscrew (.312"-18 x 1.125")	
00			1
		"XR" Output	
N.S.	3-P-283	Output Shaft	
42	28-P-216	Oil Seal	
N.S.	329194X	Pump Flange Assembly	1
N.S.	379673	Shoulder Stud	
N.S.	379063	Flat Washer	
		"XD" Output	
41	3-P-202	Output Shaft	
42	28-P-216	Oil Seal	
43	328273X	Bearing Cap Assembly	
44	378430-10	Hex Capscrew (.312"-18 x 1.000")	4
45	500007-29	Woodruff Key	
10	00001-EJ		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	
		LOOSE PARTS	<u>_</u>
	328961-1X	Gasket & Installation Instructions	1
61	328346-15X	Cable Control Assembly	
	328380X		
		Cable Control Parts Bag	
	328751X	Indicator Light Installation Kit	
	68-P-18	Name Plate	1
	378978	12-V Indicator Light	
	378884	9-Amp Fuse Holder	
	379319	Indicator Switch Boot	1
	328388-37X	Air Shift Installation Kit	
	328711X	Installation Kit ("XR" Pump)	I
	0001-00-00		
	328170-207X	Capscrew Bag Kit ("RA", "RB", "RF" Outputs)	

A.R. — As Required N.S. — Not Shown





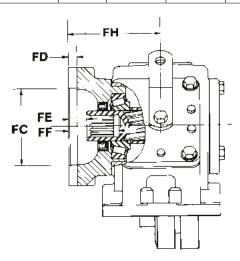
ltem	Part Number	Description	Quantity
	329361X	Shifter Cover Assembly, Air Shift (Includes Items 48-57)	
48	34-P-130	Shifter Cover	1
49	378316	Snap Ring	
50	378315	Cover Plug	
51	28-P-42	O-Ring	
52	37-P-21	Shifter Spring	
53	11-P-75	Shaft, Shifter	
54	28-P-41	O-Ring	1
55	32-P-180	Shifter Fork	
56	378447-4	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	
59	35-P-8	Gasket, Shifter Cover	
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	
	328390-117X	Lever or Cable to Air	
	328390-119X	Lever or Cable to Electric/Air, 12V	
	328390-120X	Lever or Cable to Electric/Air, 24V	



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Pump Flange & Shaft Dimension

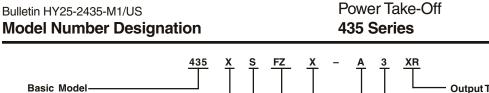
		Bolt Holes		FC	FD	FE	FF	FH	Output Shaft	
Pump Flange Suffix	Bolt Circle Dia.	Tapered Hole	No. Equally Spaced	Female Pilot Dia.	Pilot Depth	Face to End of Shaft	Face thru Hole	Face to Center of P.T.O.	Spline Diameter	
RA*, GA	5.75	.500"-13	2tt	4.003	0.406	0.558	2.058	4.588	7/8"-13 Spline	
RB*, GB	5.00	.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							



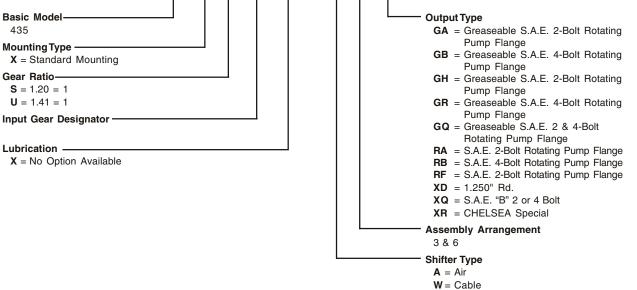
Pump Conversion Kits Bill Of Material

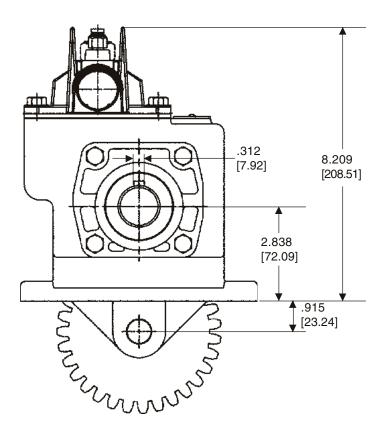
		Front						Rear Cap Greaseable Option		
Output	Conversion Kits	Output Shaft Number	Output Bearing Cap Assembly	Socket Head	Capscrew Bag Kit	Output Oil Seal	Output Pump Flange	Bearing Cap Assembly	Socket Head	Oil Seal
RA	328591-53X (XR to RA) 328591-55X (XD to RA)	3-P-283	329195X	378447-6	328170-207X	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)		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





435







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6. Changes, Reschedules and Cancellations: Buyer may request to modify the designs or specifications for the items sold hereunder as well as the quantities and delivery dates thereof, or may request to cancel all or part of this order, however, no such requested modification or cancellation shall become part of the contract between Buyer and Seller unless accepted by Seller in a written amendment to this Agreement. Acceptance of any such requested modification or cancellation shall be upon such terms and conditions as Seller may require.

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.

If a claim is based on information provided by Buyer or if the design for an item delivered hereunder is specified in whole or in part by Buyer, Buyer shall defend and indemnify Seller for all costs, expenses or judgments resulting from any claim that such item infringes any patent, trademark, copyright, trade dress, trade secret or any similar right.

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.

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TG 12/06