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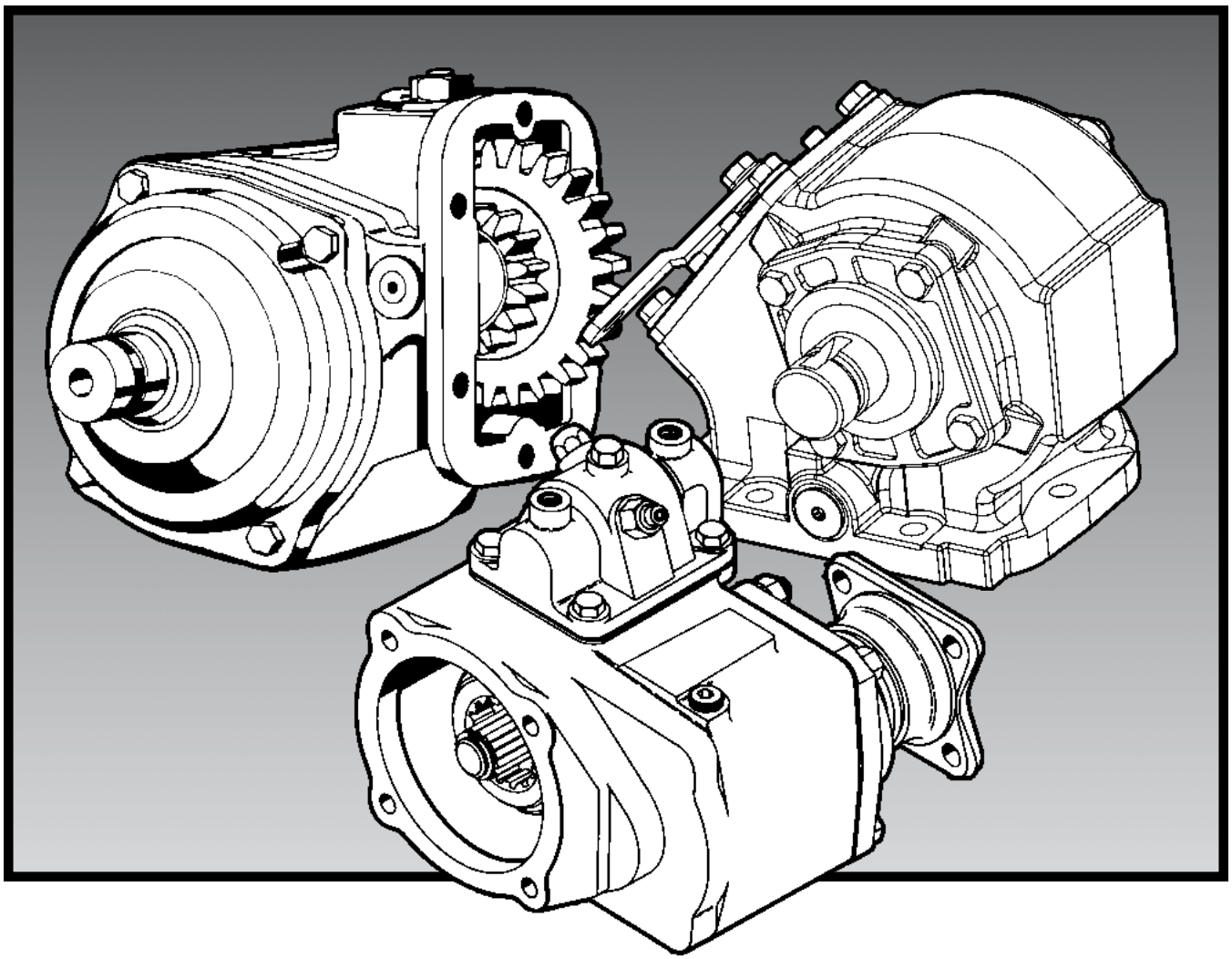
(877) 776-4600 or (407) 872-1901 parts@eprogear.com

CHELSEA®

Replacement Parts List
436 Series Manual

Bulletin HY25-2436-M1/US

Effective: November 15, 2001
Supersedes: P410-436 Dated July 1994



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⚠ WARNING

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

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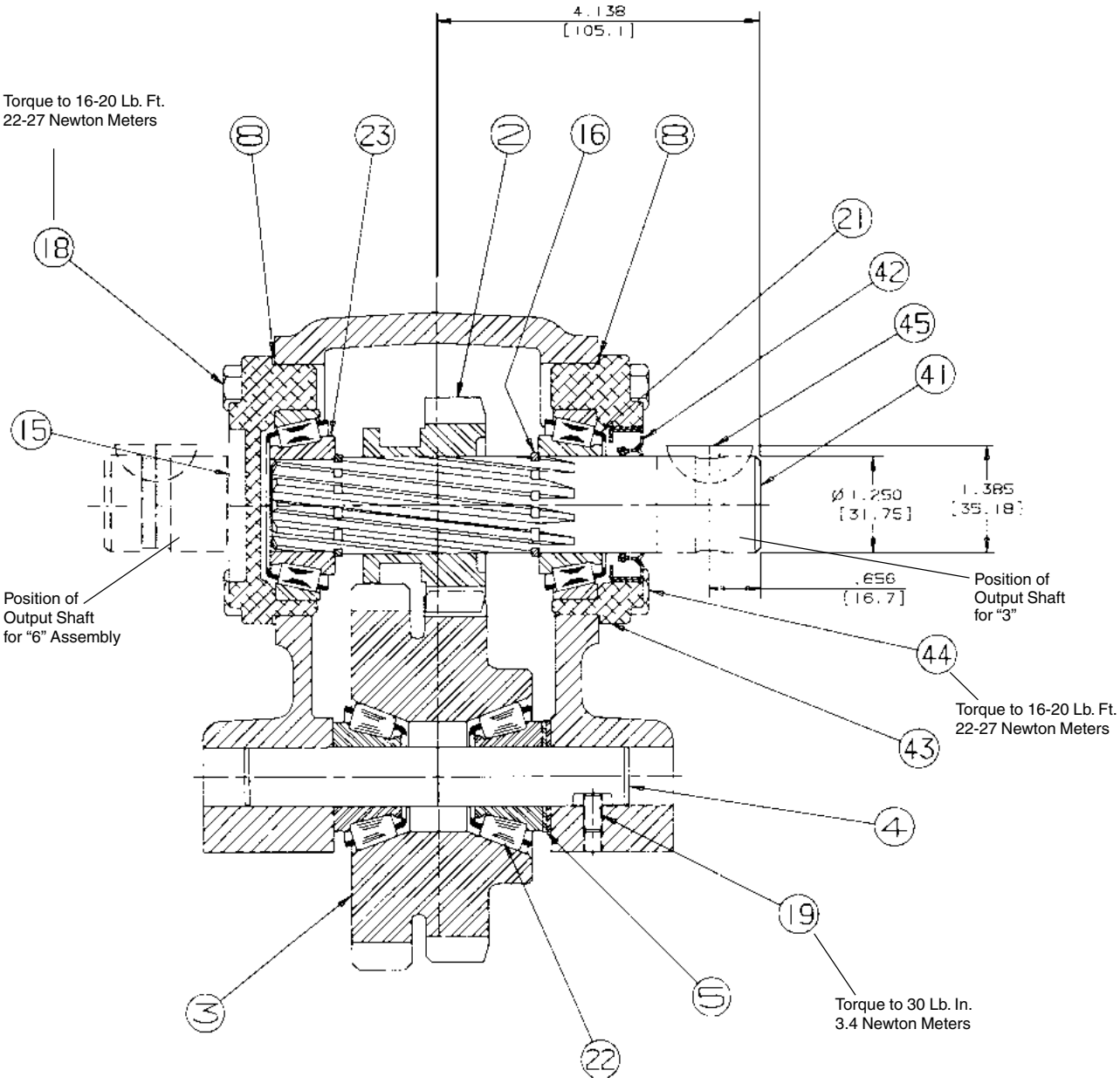

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Item		Part Number	Description	Quantity
1		**1-P-472**	Housing	1
2	▶	**2-P-561**	Gear, Output	1
3		**5-P-930**	Gear, Input	1
4	▶	**9-P-60**	Shaft, Idler	1
5	▶	**14-P-15**	Spacers, Input Gear	A.R.
8		**22-P-24-1**	Gasket, Bearing Cap (.010")	A.R.
		22-P-24-2	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	▶	**5-A-250**	Spacer, Shifter Cover (.250")	1
12	▶	**68-P-2**	Name Plate	1 or
		68-P-37	Name Plate, Australia only	1
15	▶	**328274X**	Bearing Cap Assembly	1
16	▶	**378391**	Lockring	2
17	▶	**378422**	Drive Screw	2
18	▶	**378430-10**	Capscrew, Hex Head (.312"-18 x 1.000")	4
19	▶	**378452-7**	Set Screw (.250"-20 x .500")	1
21	▶	**550397**	Bearing Cone	1
22	▶	**550439**	Bearing Cone	2
23	▶	**550532**	Bearing Cone	1
			AIR SHIFT	
25		**329036-2X**	Air Shift Cover Assembly (Ass'y 4 & 5)	1
27	▶	**378430-8**	Capscrew, Hex Head (.312"-18 x .750")	4
			CABLE SHIFT	
30		**328816-2X**	Cable Shifter Assembly (Ass'y 4 & 5)	1
32	▶	**378430-9**	Capscrew, Hex Head (.312"-18 x .875")	4
			E-Z SHIFT™	
		329165-2X	E-z Shift Cover Assembly (Ass'y 4 & 5)	1
			"XR" OUTPUT	
35	▶	**3-P-283**	Shaft, Output	1
36	▶	**28-P-216**	Oil Seal	1
37		**328710X**	Pump Flange Assembly	1
38		**379483**	Shoulder Stud, Hex (.312"-24)	4
	▶	**379063**	Flat Washer	4
			"XD" OUTPUT	
41	▶	**3-P-202**	Shaft, Output	1
42	▶	**28-P-216**	Oil Seal	1
43	▶	**328273X**	Bearing Cap Assembly	1
44	▶	**378430-10**	Capscrew, Hex Head (.312"-18 x 1.000")	4
45	▶	**500007-29**	Woodruff Key	1
			"XK" OUTPUT	
48	▶	**3-P-282**	Shaft, Output	1
49	▶	**28-P-216**	Oil Seal	1
50	▶	**328333X**	Bearing Cap Assembly	1
51	▶	**378447-8**	Capscrew, Socket Head (.312"-18 x 1.500")	4
			LOOSE PARTS	
	▶	**328170-197X**	Stud Kit	1
	▶	**328961-3X**	Gasket & Installation Instructions	1
	▶	**328170-207X**	CAPSCREW BAG KIT (“RA”, “RB”, “RF”)	
	▶	**328346-15X**	Cable Control Assembly	1
	▶	**328380X**	Cable Control Parts Bag	1
		328751X	Installation KiT	1
		328388-37X	Air Shift Installation Kit	1
	▶	**328711X**	Installation Kit ("XR" PUMP)	1
		329166-12X	E-z Shift Installation Kit	1

A.R. — As Required

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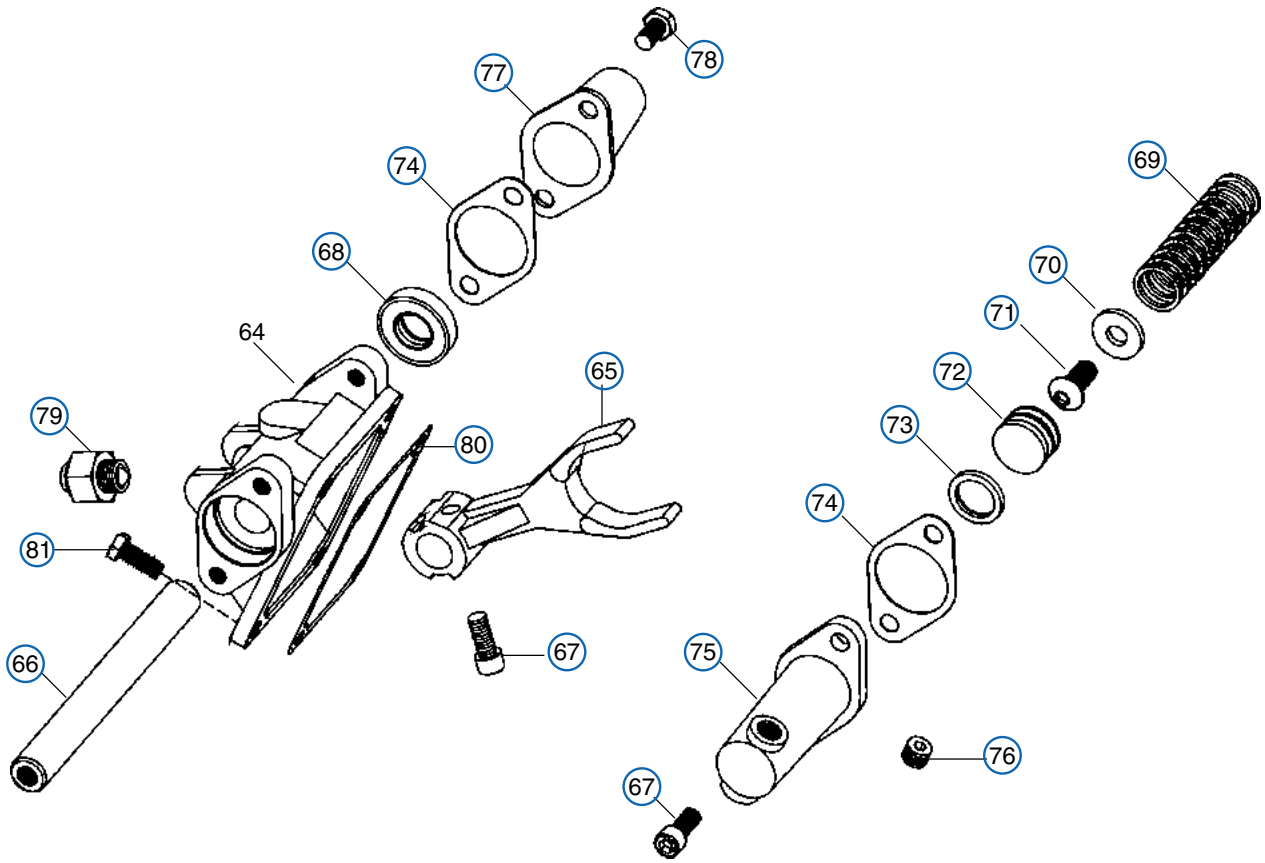

Item		Part Number	Description	Quantity
		329036-2X	SHIFTER COVER ASSEMBLY, Air Shift (Ass'y 4 & 5)	1
			(All assemblies shown above include items 64 thru 80)	
64		**34-P-76**	Shifter Cover	1
65	▶	**32-P-166**	Shifter Fork	1
66	▶	**11-P-112**	Shaft, Shifter	1
67	▶	**378447-4**	Cap Screw, Socket Head (.312"-18 x .750")	3
68	▶	**28-P-207**	Oil Seal	1
69	▶	**37-P-25**	Return Spring	1
70	▶	**378462**	Washer	1
71		**378908**	Cap Screw, Button Head	1
72		**66-P-4**	Piston	1
73	▶	**28-P-41**	O-Ring	2
74	▶	**35-P-14**	Gasket, Shifter Shaft Cover	1
75	▶	**65-P-14**	Cylinder	1
76	▶	**379231**	Plug, Pipe	1
77	▶	**65-P-23**	Shifter Shaft Cover	1
78	▶	**378430-4**	Cap Screw, Hex Head (.312"-18 x .500")	2
79		**379639**	Indicator SWITCH	1
80	▶	**35-P-8**	Gasket, Shifter Cover	1
81	▶	**378430-8**	Cap Screw, Hex Head (.312"-18 x .750")	4
			AIR SHIFT CONVERSION KITS	
	▶	**328390-118X**	Cable to Air (Ass'y 4 & 5)	1
		328390-121X	Cable to Electric/Air, 12V (Ass'y 4 & 5)	1
		328390-122X	Cable to Electric/Air, 24V (Ass'y 4 & 5)	1

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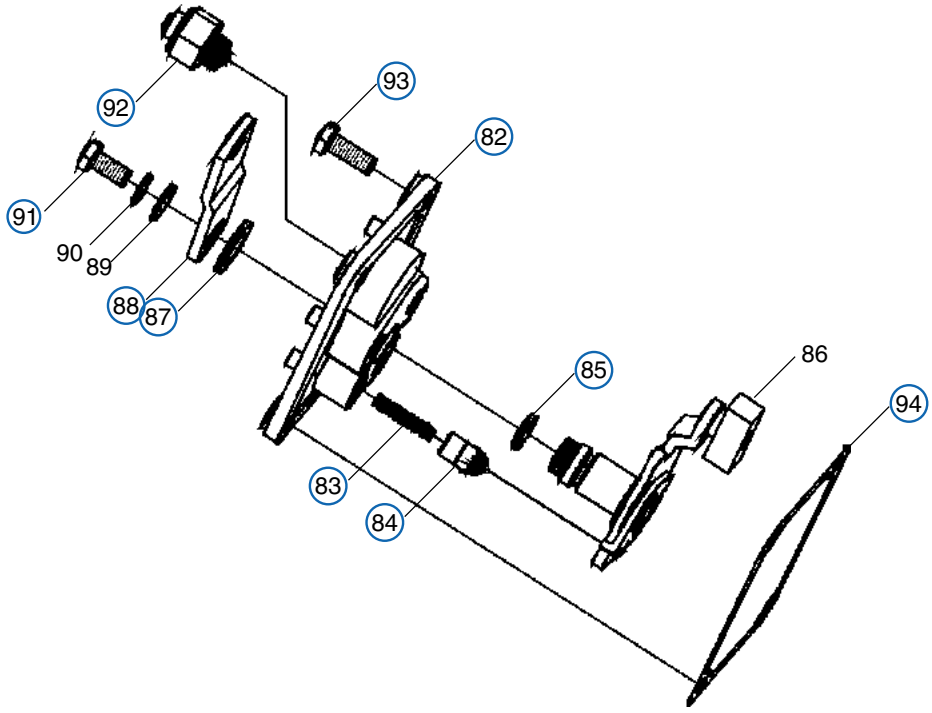
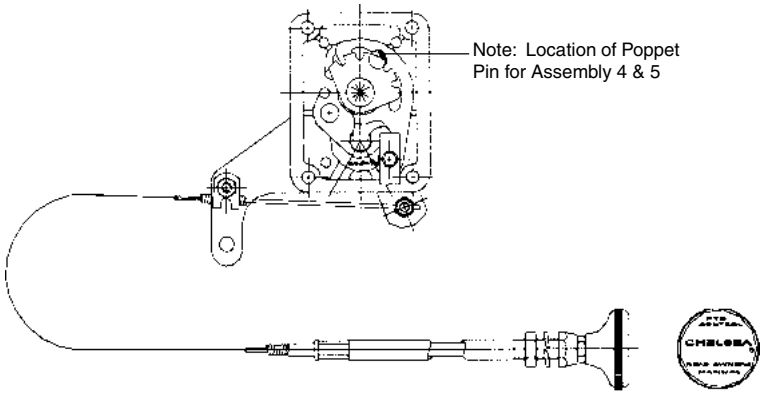


Item	Part Number	Description	Quantity
▶	329119-2X	**CABLE SHIFTER ASSEMBLY** (Ass'y 4 & 5), (Includes items 82 thru 92)	1
82 ▶	34-P-74	Cover Plate, Shifter	1
83 ▶	37-P-19	Spring	1
84 ▶	63-P-16	Poppet Pin	1
85 ▶	28-P-191	O-Ring	1
86	328818-2X	Post & Plate for Ass'y 4& 5	1
87 ▶	378004	Flat Washer	1
88 ▶	51-P-22	Shifter Lever	1
89 ▶	500365-22	Flat Washer	1
90 ▶	500356-10	Lock Washer	1
91 ▶	500409-6	Cap Screw, Hex Head (.312"-24 X .625")	1
92 ▶	379652	Indicator Switch, Pin Style (Normally On)	1
93 ▶	378430-9	Capscrew, Hex Head (.312"-18 x .875")	4
94 ▶	35-P-8	Gasket, Shifter Cover	1



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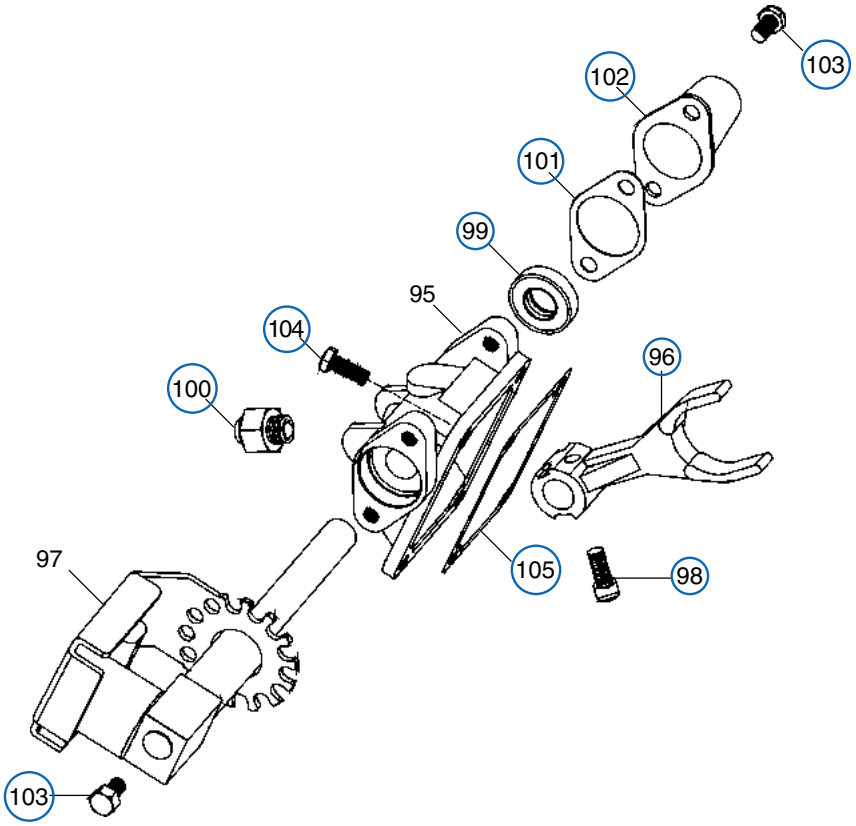

Item		Part Number	Description	Quantity
		329169-2X	**SHIFTER COVER ASSEMBLY**, 12V (Ass'y 4 & 5)	1
			(All assemblies shown above include items 95 thru 103)	
95		**34-P-76**	Shifter Cover	1
96	▶	**32-P-166**	Shifter Fork	1
97		**329225-12X**	Electric Shift Assembly	1
98	▶	**378447-4**	Cap Screw, Socket Head (.312"-18 x .750")	1
99	▶	**28-P-207**	Oil Seal	1
100		**379639**	Indicator Switch	1
101	▶	**35-P-14**	Gasket, Shifter Shaft Cover	1
102	▶	**65-P-23**	Shifter Shaft Cover	1
103	▶	**378430-4**	Cap Screw, Hex Head (.312"-18 x .500")	4
104	▶	**378430-8**	Cap Screw, Hex Head (.312"-18 x .750")	4
105	▶	**35-P-8**	Gasket, Shifter Cover	1
			E-Z SHIFT CONVERSION KIT	
		328390-142X	Cable To E-Z Shift, "W" Ratio Only (Ass'y 4 & 5)	1

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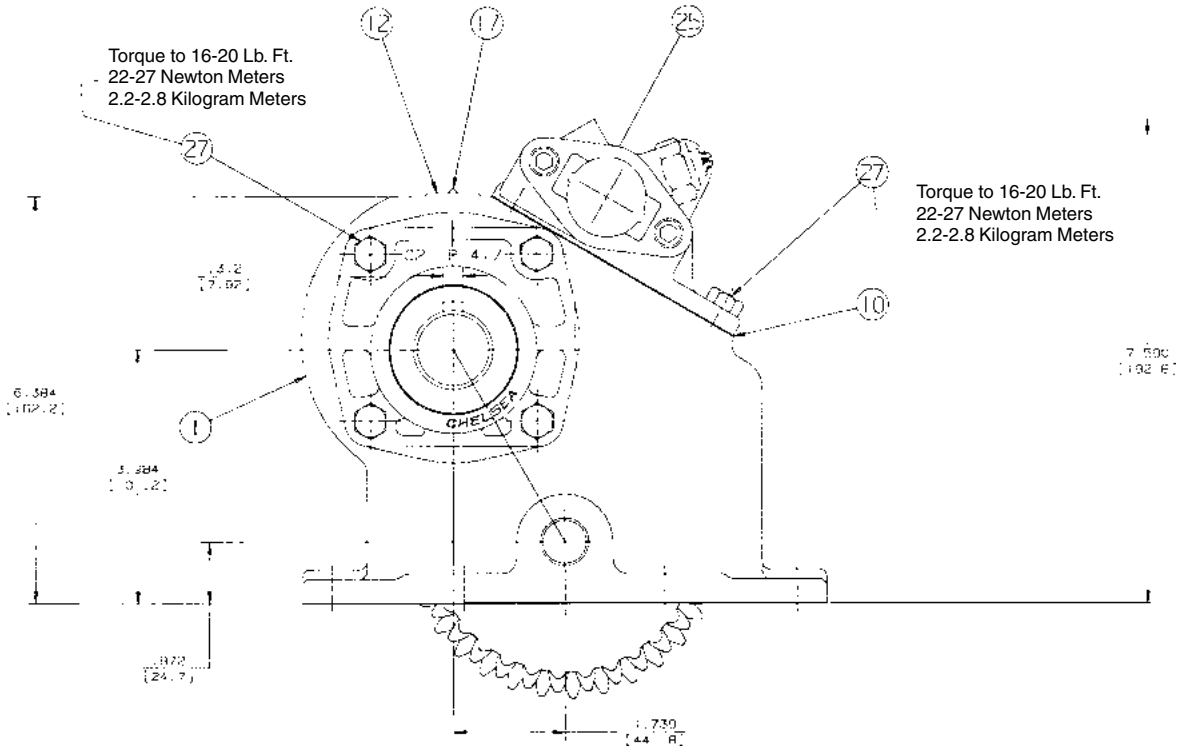

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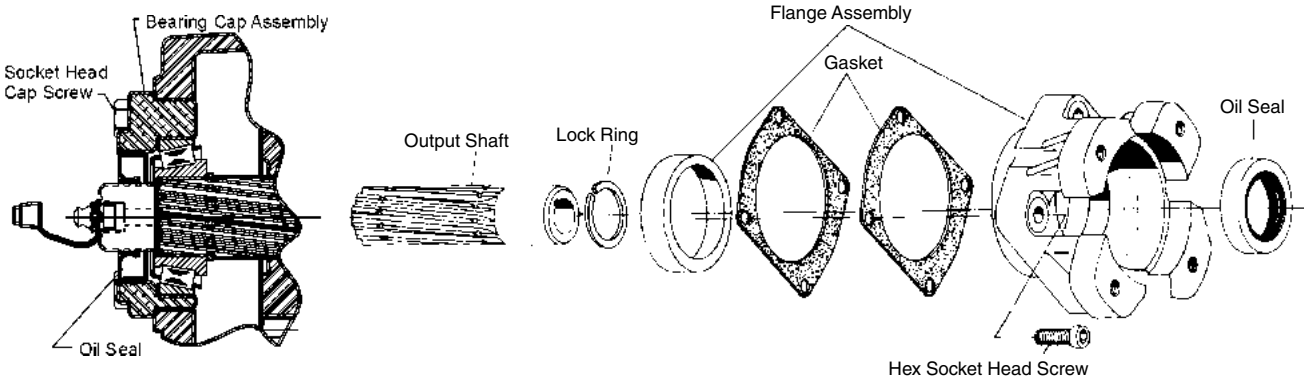
Flange Suffix	Flange Type	Shaft Type	Conversion Kit*
XK	S.A.E. “B” 2 or 4 Bolt	7/8"-13 Spline	328591-16X
XR	Chelsea Special 4 Bolt	7/8"-13 Spline	328591-52X
RA	Rotatable S.A.E. “B” 2 Bolt	7/8"-13 Spline	328591-55X
RB	Rotatable S.A.E. “B” 4 Bolt	7/8"-13 Spline	328591-56X
RF	Rotatable S.A.E. “BB” 2 Bolt	1.0"-15 Spline	328591-78X
GA	Rotatable S.A.E. “B” 2 Bolt	7/8"-13 Spline	**328591-72X
GB	Rotatable S.A.E. “B” 4 Bolt	7/8"-13 Spline	**328591-74X
GH	Rotatable S.A.E. “BB” 2 Bolt	1.0"-15 Spline	**328591-116X
GK	S.A.E. “B” 2 or 4 Bolt	7/8"-13 Spline	**328591-89X
GR	Chelsea Special 4 Bolt	7/8"-13 Spline	**328591-76X

** Shaft with Grease Fitting

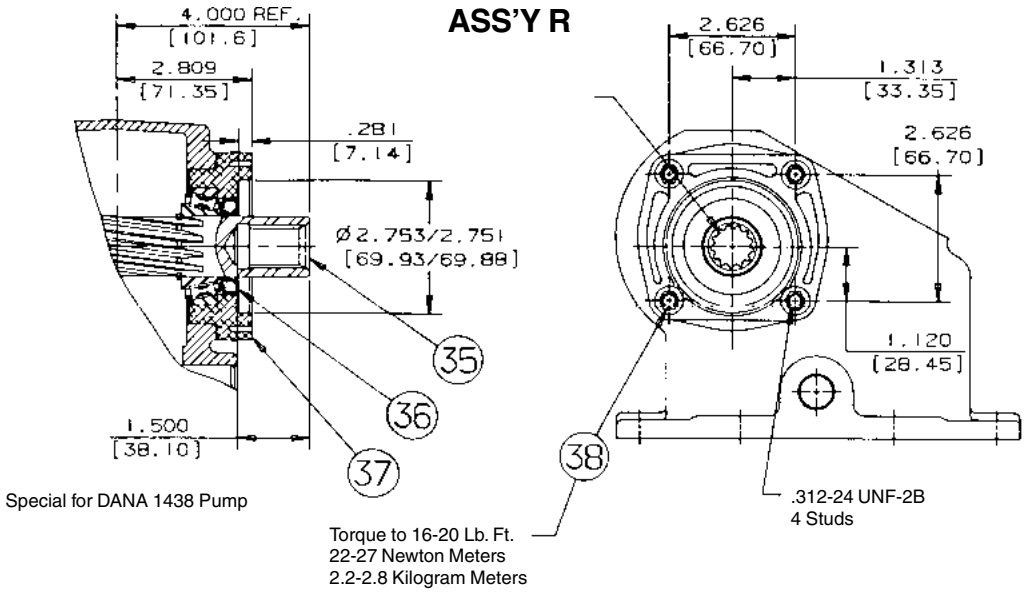
Pump Conversion Kit Bill of Material

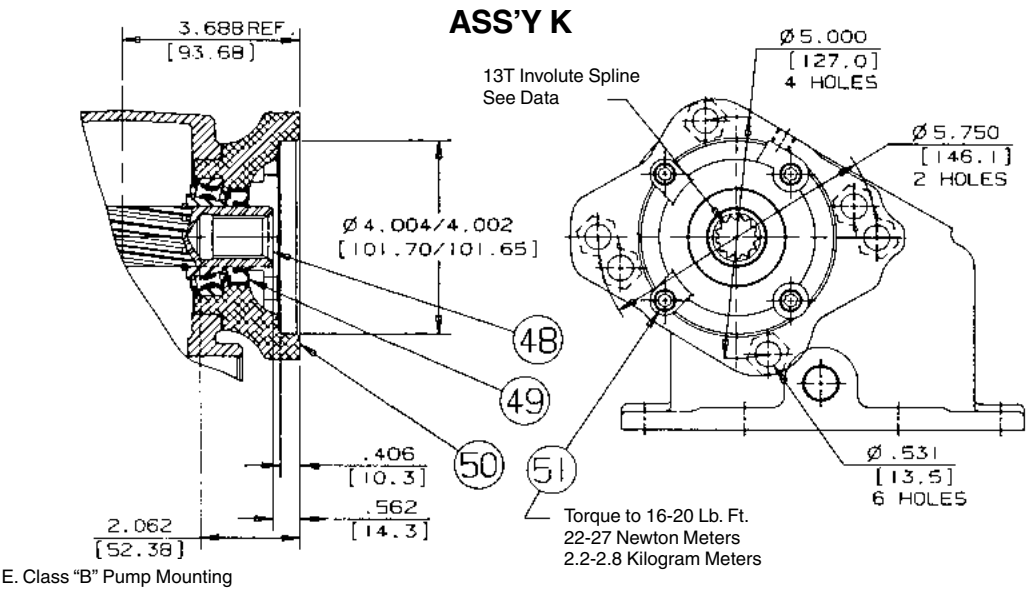


Flange Suffix	Conversion Kit *	Front				Rear Cap Greasable Option		
		Flange Assembly	Output Shaft	Socket Head	Oil Seal	Bearing Cap Assembly	Socket Head	Oil Seal
GA	328591-72X	329195X & 21-P-628	3-P-923X	378447-6 tt	28-P-216	328273X	378430-10	28-P-268
GB	328591-74X	329195X & 21-P-572	3-P-923X	378447-6 tt	28-P-216	328273X	378430-10	28-P-268
GH	328591-116X	329264X & 21-P-626	3-P-941X	378447-6 tt	28-P-216	328273X	378430-10	28-P-268
GK	328591-89X	328333X	3-P-933X	378447-8	28-P-216	328273X	378430-10	28-P-268
GR	328591-76X	329194X	3-P-923X	379673 t	28-P-216	328273X	378430-10	28-P-268
RA	328591-55X	329195X & 21-P-628	3-P-283	378447-6 tt	28-P-216			
RB	328591-56X	329195X & 21-P-572	3-P-283	348447-6 tt	28-P-216			
RF	328591-78X	329264X & 21-P-626	3-P-924	378447-6 tt	28-P-219			
XK	328591-16X	329333X	3-P-282	348447-8	28-P-216			
XR	328591-52X	329194X	3-P-283	379673 t	28-P-216			

* Consists of all items shown in the illustration, plus Lock Ring (item 5) and Bearing Cap Gasket (item 8)
t Special shoulder stud.
tt Seven required; four (4) to fasten the Flange Assembly 328195X to housing and three (3) to fasten the rotatable flange to the flange assembly.

P.T.O. Housing, Pump Flange & Shaft Dimensions





Standard S.A.E. Class "B" Pump Mounting

Pump Flange & Shaft Dimensions

Pump Flange Suffix	Bolt Circle Dia.	Bolt Holes		FC	FD	FE	FF	FH	Output Shaft
		Tapped Hole	No. Equally Spaced	Female Pilot Dia.	Pilot Depth	Face to End of Shaft	Face thru Hole	Face to Center of P.T.O.	Hole Diameter
RA*, GA	5.750	.500"-13	2 tt	4.003	0.406	0.558	2.058	4.588	7/8"-13 Spline
RB*, GB	5.000	.500"-13	4	4.003	0.406	0.558	2.058	4.588	7/8"-13 Spline
RF*, GH	5.750	.500"-13	2 tt	4.003	0.406	0.501	1.969	4.569	1"-15 Spline
XK, GK	5.750	.500"-13 ttt	2	4.003	0.406	0.562	2.062	3.688	7/8"-13 Spline
XR, GR	3.710	.312"-24(Studs)	4	2.752	0.281	N/A	N/A	2.809	7/8"-13 Spline

* Rotatable Flange Rotates in 30° Increments
tt Two Set of Holes Spaced 14° Apart
ttt Not Tapped

436 X W ER X - A 5 XR

BASIC MODEL
436 Series

MOUNTING TYPE
X = Standard

GEAR RATIO

INPUT GEAR DESIGNATOR

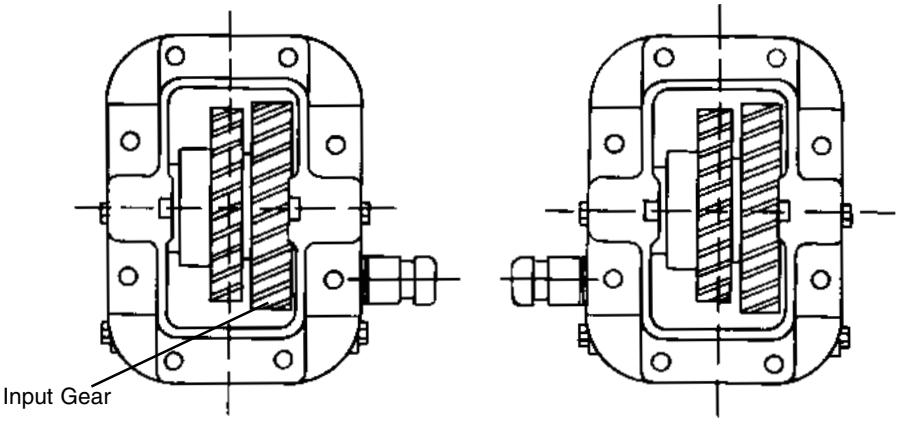
LUBRICATION
X = No Option Available

OUTPUT
XD = 1.25" Round
XK = S.A.E. “B” 2 or 4 Bolt
XR = CHELSEA Special
RA = Rotatable S.A.E. “B” 2 Bolt
RB = Rotatable S.A.E. “B” 4 Bolt
RF = Rotatable S.A.E. “BB” 2 Bolt
GA = Greasable Rotatable S.A.E. “B” 2 Bolt
GB = Greasable Rotatable S.A.E. “B” 4 Bolt
GH = Greasable Rotatable S.A.E. “BB” 2 Bolt
GK = Greasable S.A.E. “B” 2 or 4 Bolt
GR = Greasable Chelsea Special

ASSEMBLY ARRANGEMENT
4, 5

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

Assembly Arrangements



ASS’Y “4” ASS’Y “5”

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Notes

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Notes

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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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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 at Seller's discretion, and 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.

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.

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