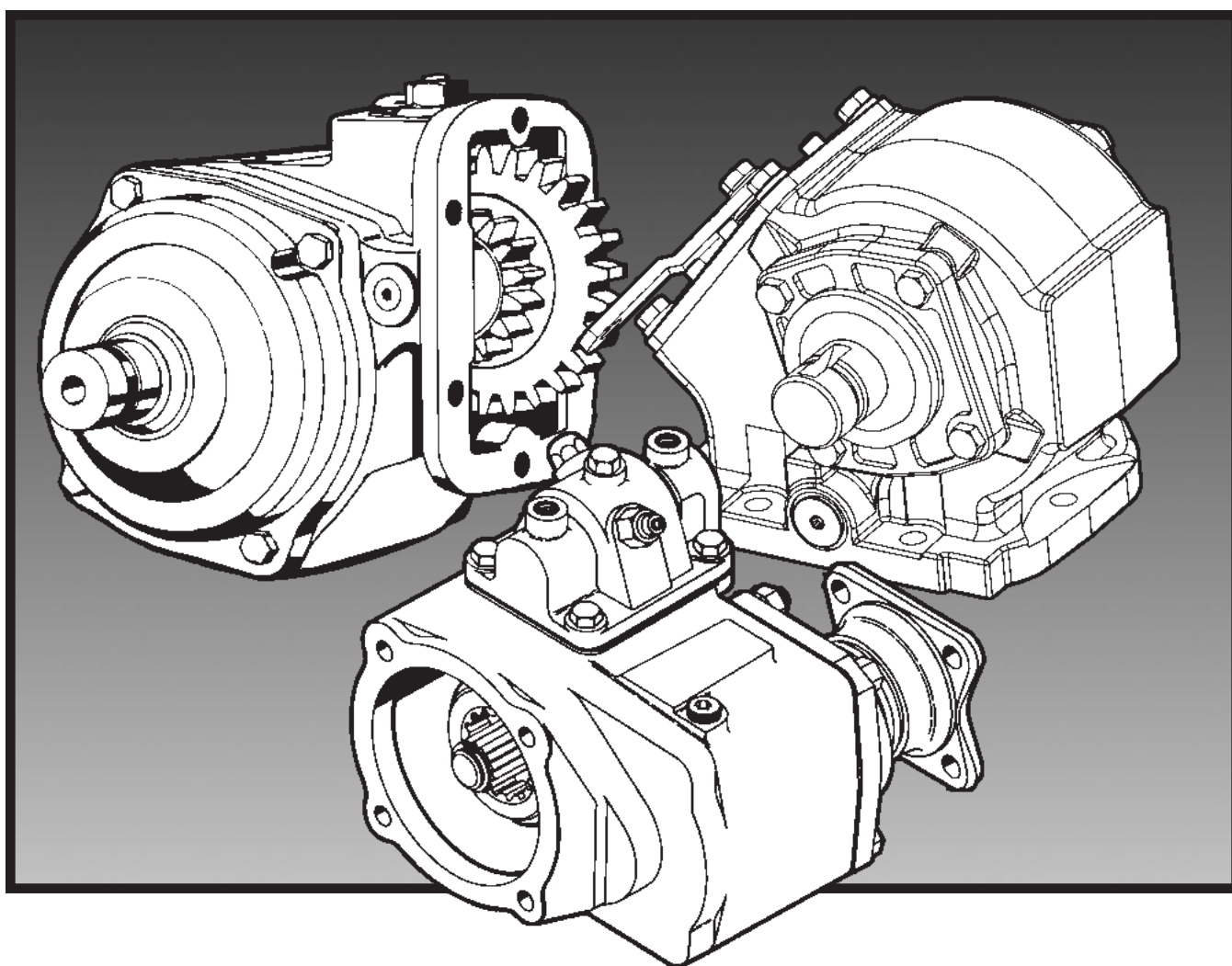


Parts List 870/877 Series

Effective: December 15, 2011





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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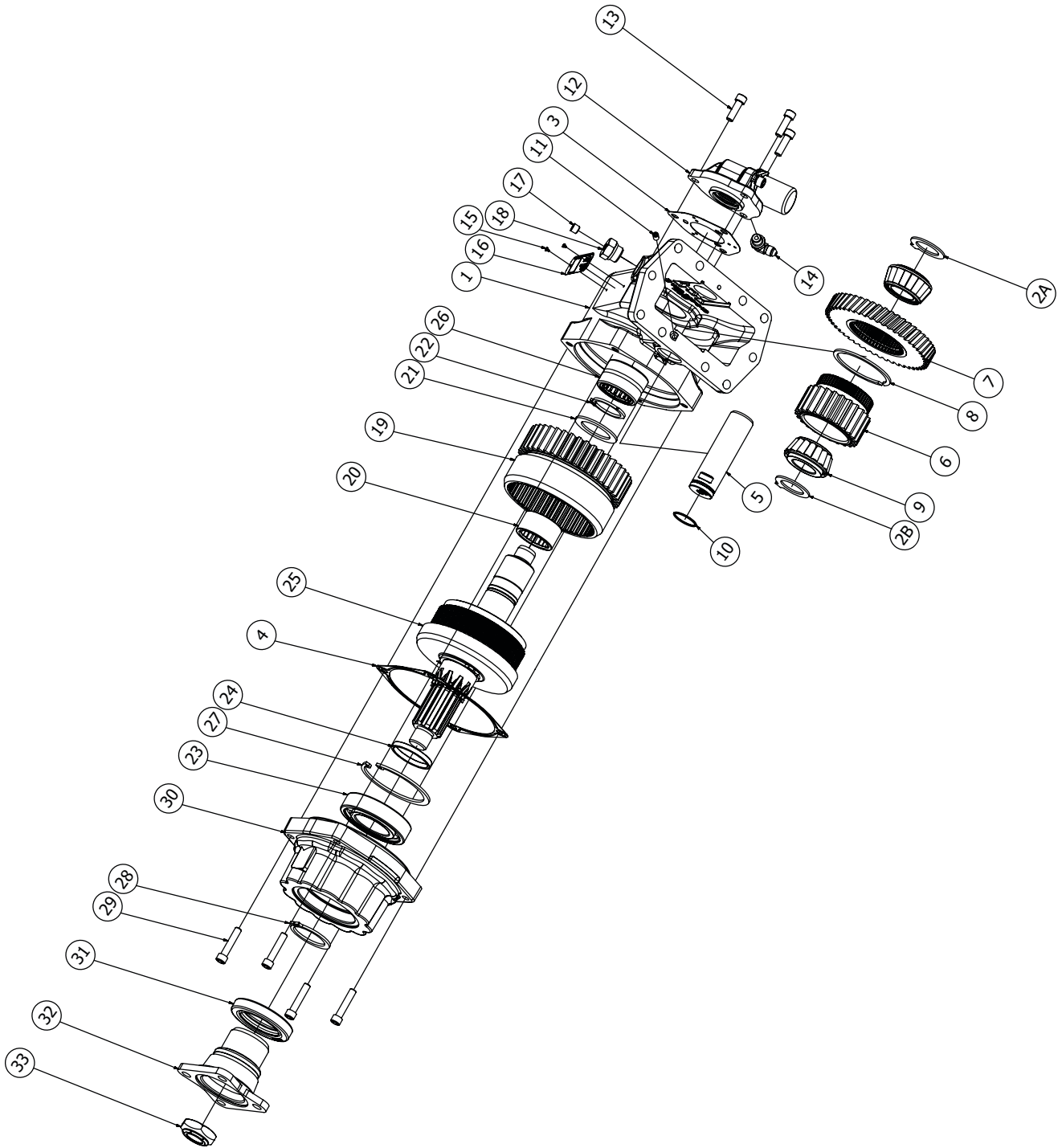
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Bill of Materials

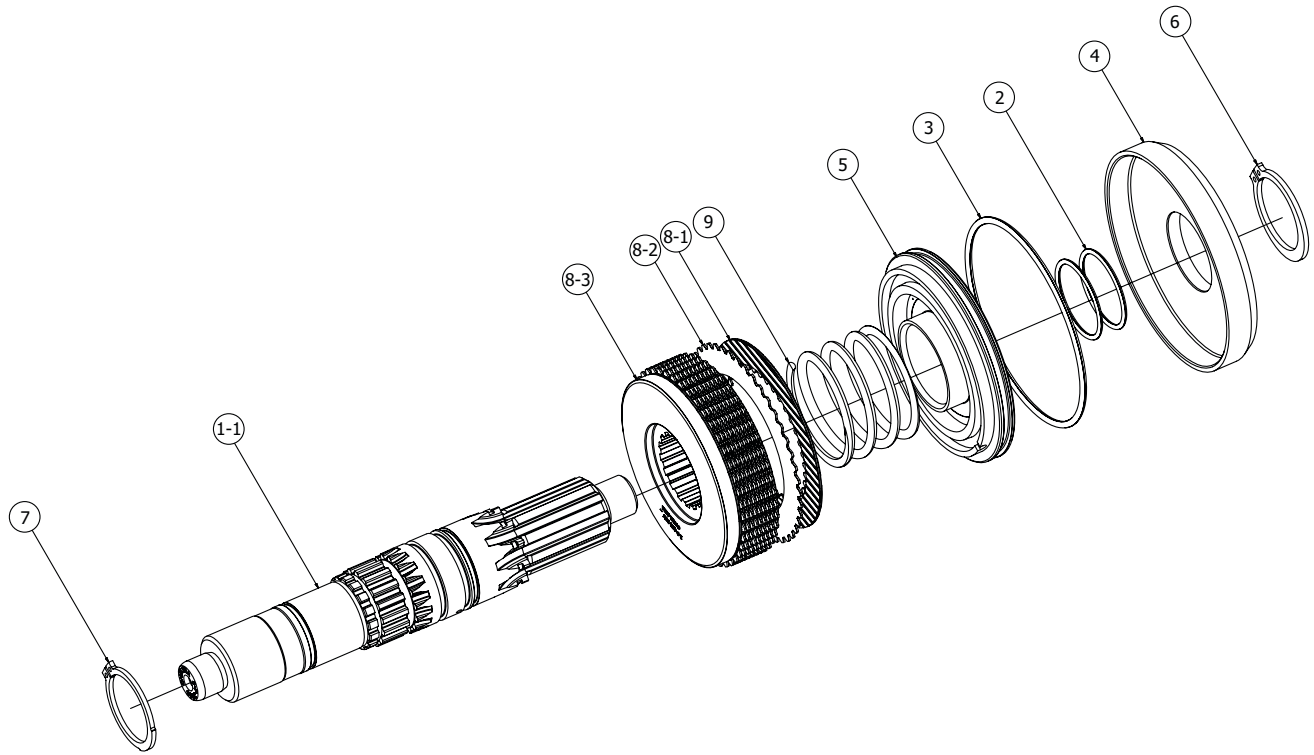
Item	Part Number	Description	Qty.
1	1-P-665	Housing Machined ("5" Arrangement).....	1
	1-P-667	Housing Machined ("3" Arrangement).....	1
2A	14-P-82-1	Spacer (1.191" x 1.75" x .080").....	1
	14-P-82-1	Spacer (1.191" x 1.75" x .080") Thickness As Required.....	1
	14-P-82-2	Spacer (1.191" x 1.75" x .085").....	1
	14-P-82-3	Spacer (1.191" x 1.75" x .090").....	1
2B	14-P-82-4	Spacer (1.191" x 1.75" x .094").....	1
3	22-P-112	Gasket	1
4	22-P-101	Gasket	1
5	9-P-99	Shaft Idler (1.18").....	1
6	See Gear Chart	Gear, Ratio.....	1
7	See Gear Chart	Gear, Input.....	1
8	380064	Lockring	1
9	561026	Bearing Tapered Cone (1.181" x .9843")	2
10	28-P-42	O-Ring (1.051" x .070").....	1
11	378452-7	Set Screw SH (.250" - 20" - .500").....	1
12	329463-12X	Ass'y Valve Cap 12V ("FJ", "LN" Pitch)	1
	329463-24X	Ass'y Valve Cap 24V ("FJ", "LN" Pitch)	1
	329442-12X	Ass'y Valve Cap 12V ("KV" Pitch)	1
	329442-24X	Ass'y Valve Cap 24V ("KV" Pitch)	1
13	378447-6	Capscrew SH (.312" - 18" - 1.000")	3
14	379486	Elbow 90° (.438" - 20")	1
15	378422	Screw Drive	2
16	68-P-51	Plate Name	1
17	379231	Plug Pipe (.125" - 27") (w/o E.O.C. only)	1
18	379242	Adapter Straight (.125" - 27" x .750" - 16") (w/o E.O.C. only)	1
19	See Gear Chart	Clutch Gear.....	1
20	560972	Bearing Needle Roller Ass'y (1.500" x 1.875" x 1.000")	1
21	31-P-70	Washer Thrust (1.507" x 2.167" x .094").....	1
22	379746	Lockring	1
23	550311	Bearing Ball (1.77" x 3.346" x .748")	1
24	4-P-187	Spacer (1.776" x 2.200" x .239").....	1
25	329724-1X	Ass'y Drive Shaft & Clutch (3-P-1065 Shaft)	1
26	561047	Bearing Needle Roller (1.500" x 2.062" x 1.250").....	1
27	378263	Lockring	1
28	379555	Lockring	1
29	378447-8	Capscrew SH (.312" - 18" - 1.000")	4
30	21-P-766	Cap Bearing ("XV" Output Only)	1
31	28-P-211	Oil Seal (3.001" x 2.00" x .375") ("XV" Output Only).....	1
32	3-1-3431	Companion Flange 1410 ("XV" Output Only).....	1
33	378382	Nut Stop (.875" -14") ("XV" Output Only).....	1

Continued on Next Page

Bill of Materials

Item	Part Number	Description	Qty.
34	379243	Sensor Speed (w/o E.O.C. only)	1
35	28-P-171	O-Ring (.644" x .087") (w/o E.O.C. only).....	1
36	379564-2	Cap Thread (.438")	1
37	500897-5	Plug Shipping.....	1
38	329403X	Ass'y Seal Cap ("G" & "H" Shift Only)	1
LOOSE PARTS			
	328948-9X	Kit Gasket & Installation Instructions (All)	
	7170-86X	Kit Mounting ("FJ", "LN" Pitch)	
	7170-117X	Kit Mounting ("KV" Pitch)	
	See Below	Installation Kit	
	329024-12X	Kit Installation 12V ("FJ" Pitch, "B" Shift)	
	329024-24X	Kit Installation 24V ("FJ" Pitch, "D" Shift)	
	329237-12X	Kit Installation 12V Remote Valve w/o E.O.C. ("FJ" Pitch, "G" Shift)	
	329237-24X	Kit Installation 24V Remote Valve w/o E.O.C. ("FJ" Pitch, "H" Shift)	
	329076X	Kit Installation E.O.C. ("FJ" Pitch, "K", "L" Shift)	
	329650X	Controls Electronic Overspeed ("K", "L" Shift)	
	329443-12X	Kit Installation 12V ("KV" Pitch, "B" Shift)	
	329443-24X	Kit Installation 24V ("KV" Pitch, "D" Shift)	
	329444X	Kit Installation 12V & 24V E.O.C. ("KV" Pitch, "K", "L" Shift)	
	329445-12X	Kit Installation 12V Remote Valve w/o E.O.C. ("KV" Pitch, "G" Shift)	
	329445-24X	Kit Installation 24V Remote Valve w/o E.O.C. ("KV" Pitch, "H" Shift)	
SERVICE PARTS			
	329071-55X	Kit Gasket & Seal ("XV", "RS", "RZ", "RY" Outputs)	
	329354-12X	Conversion Kit 12V Remote Valve	
	329354-24X	Conversion Kit 24V Remote Valve	

Shaft & Clutch 329724X

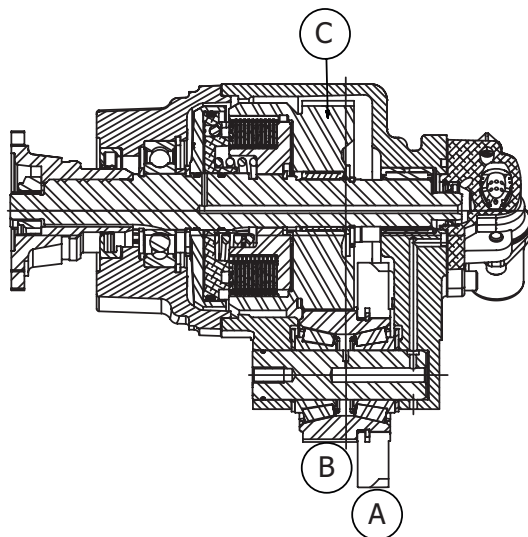


Item	Part Number	Description	Qty.
1-1	3-P-1065	Shaft Output 10T Straight (329724-1X)	1 or
1-2	3-P-1066	Shaft Output 1-1/4" - 14T (329724-2X).....	1 or
1-3	3-P-1067	Shaft Output DIN 8T (329724-3X)	1
2	28-P-285	O-Ring 1.597" x .103"	2
3	28-P-178	O-Ring 4.484" x .138"	1
4	380051	Cylinder Clutch Back up	1
5	380110X	Piston Clutch Assembly w/Ball	1
N.S.	500566-7	.250" Ball	1
5	380110	Piston Clutch	1
6	379555	Lockring	1
7	380069	Lockring	1
8	329678X	Kit Gear & Plates	1
8-1	379485	Disc Friction.....	11
8-2	380065	Plate Clutch.....	10
8-3	2-P-858	Gear Output 36T	1
9	37-P-62	Spring 2.14" x 1.729"	1

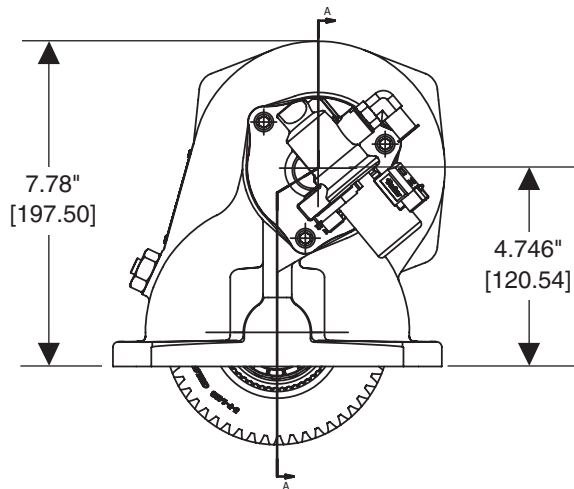
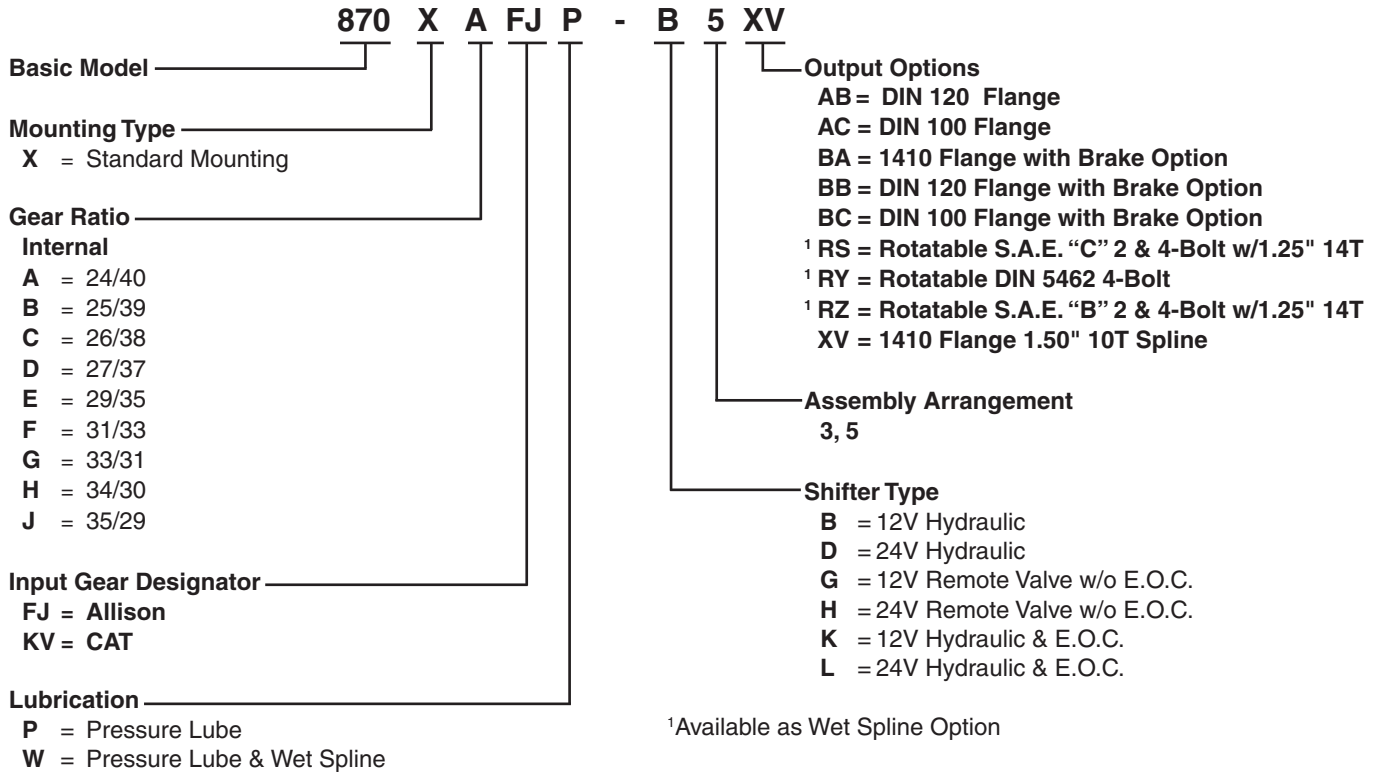
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Gear Chart

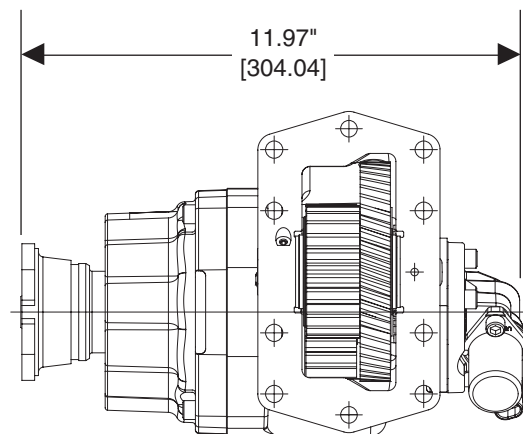
Gear Designator	Input Gear (7)	No. Teeth "A"	Ratio Gear (6)	No. Teeth "B"	Output Gear (19)	No. Teeth "C"
870*AFJ	5-P-1428	50	5-P-1429	24	2-P-891	40
870*BFJ	5-P-1428	50	5-P-1438	25	2-P-892	39
870*CFJ	5-P-1428	50	5-P-1439	26	2-P-893	38
870*DFJ	5-P-1428	50	5-P-1440	27	2-P-894	37
870*EFJ	5-P-1428	50	5-P-1432	29	2-P-895	35
870*FFJ	5-P-1428	50	5-P-1433	31	2-P-896	33
870*GFJ	5-P-1428	50	5-P-1457	33	2-P-897	31
870*HFJ	5-P-1428	50	5-P-1455	34	2-P-898	30
870*JFJ	5-P-1428	50	5-P-1474	35	2-P-901	29
870*AKV	5-P-1468	45	5-P-1429	24	2-P-891	40
870*BKV	5-P-1468	45	5-P-1438	25	2-P-892	39
870*CKV	5-P-1468	45	5-P-1439	26	2-P-893	38
870*DKV	5-P-1468	45	5-P-1440	27	2-P-894	37
870*EKV	5-P-1468	45	5-P-1432	29	2-P-895	35
870*FKV	5-P-1468	45	5-P-1433	31	2-P-896	33
870*GKV	5-P-1468	45	5-P-1457	33	2-P-897	31
870*HKV	5-P-1468	45	5-P-1455	34	2-P-898	30
870*JKV	5-P-1468	45	5-P-1474	35	2-P-901	29
870*ALN	5-P-1470	32	5-P-1429	24	2-P-891	40

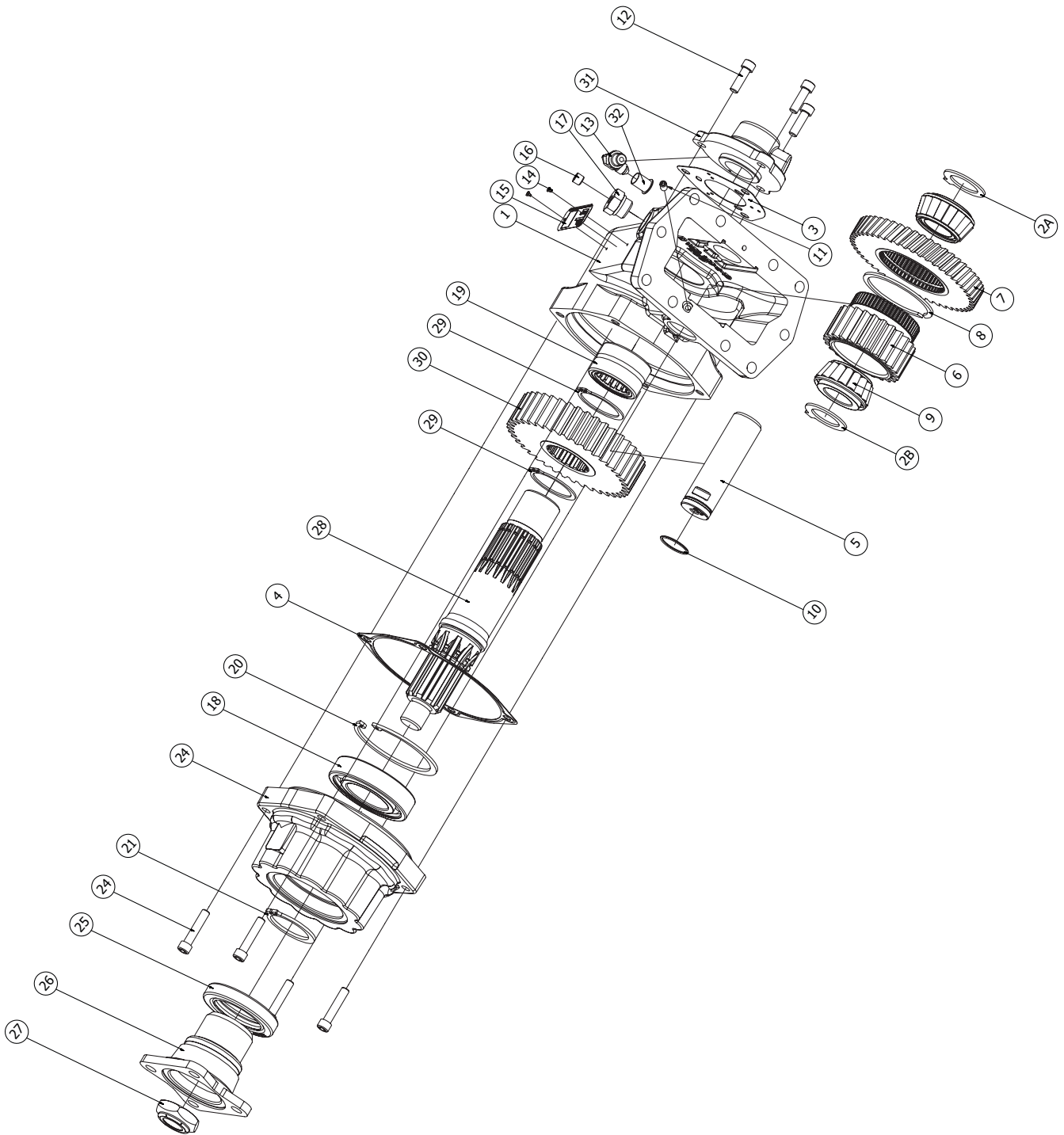


Model Number Designation



"5" Arrangement



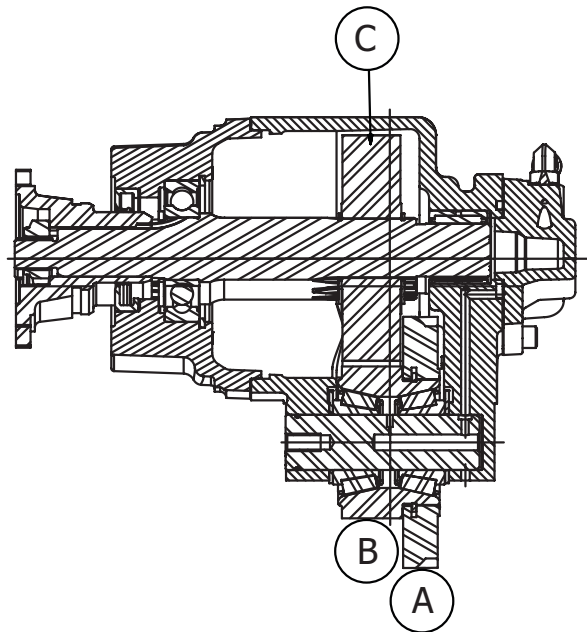


Bill of Materials

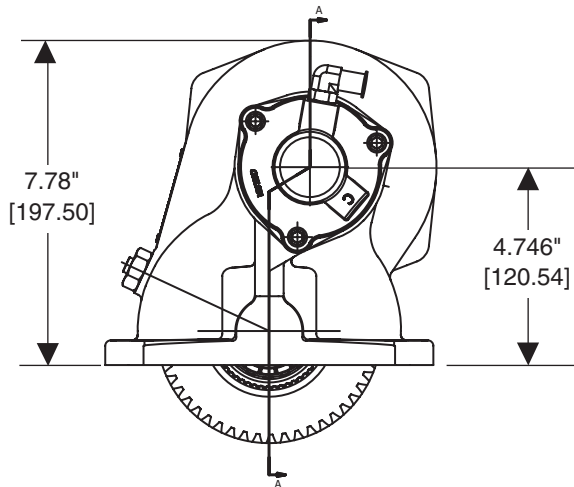
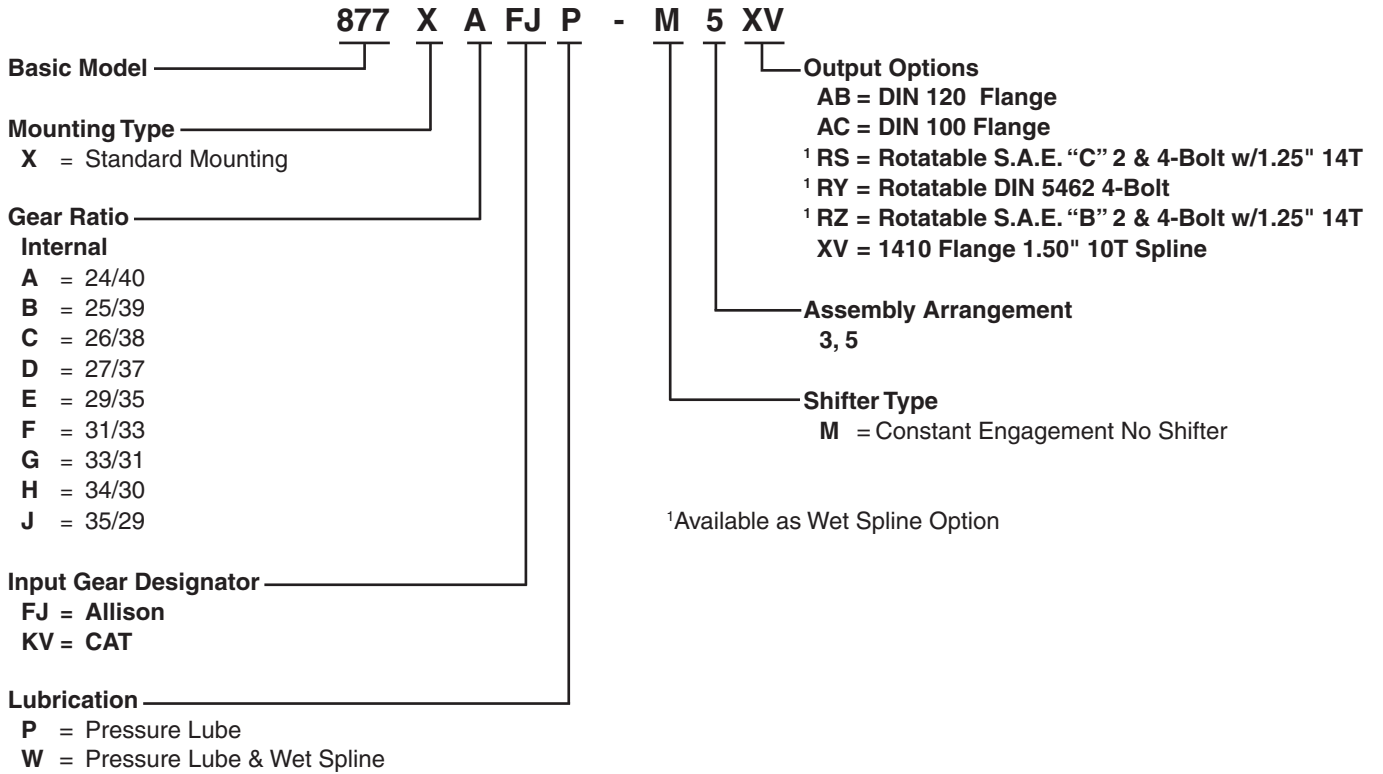
Item	Part Number	Description	Qty.
1	1-P-665	Housing Machined ("5" Arrangement).....	1
1	1-P-667	Housing Machined ("3" Arrangement).....	1
2A	14-P-82-1	Spacer (1.191" x 1.75" x .080")	1
	14-P-82-1	Spacer (1.191" x 1.75" x .080") Thickness as Required	1
	14-P-82-2	Spacer (1.191" x 1.75" x .085").....	1
	14-P-82-3	Spacer (1.191" x 1.75" x .090").....	1
2B	14-P-82-4	Spacer (1.191" x 1.75" x .094").....	1
3	22-P-112	Gasket	1
4	22-P-101	Gasket	1
5	9-P-99	Shaft Idler (1.18").....	1
6	See Gear Chart	Gear, Ratio.....	
7	See Gear Chart	Gear, Input.....	1
8	380064	Lockring	1
9	561026	Bearing Tapered Cone (1.181" x .9843").....	2
10	28-P-42	O-Ring (1.05" x .070").....	1
11	378452-7	Set Screw SH (.250" - 20 - .500").....	1
12	378447-6	Capscrew SH (.312" - 18 - 1.000")	3
13	379486	Elbow 90° (.438" - 20).....	1
14	378422	Screw Drive	2
15	68-P-51	Plate Name	1
16	379231	Plug Pipe (.125" - 27)	1
17	379242	Adapter Straight (.125" - 27 x .750" - 16).....	1
18	550311	Bearing Ball (1.77" x 3.346" x .748")	1
19	561047	Bearing Needle Roller (1.500" x 2.062" x 1.250").....	1
20	378263	Lockring	1
21	379555	Lockring.....	1
22	378447-8	Capscrew SH (.312" - 18" - 1.000").....	4
24	21-P-766	Cap Bearing ("XV" Output Only).....	1
25	28-P-211	Oil Seal (3.001" x 2.00" x .375") ("XV" Output Only)	1
26	3-1-3431	Companion Flange 1410 ("XV" Output Only)	1
27	378382	Nut Stop (.875" - 14) ("XV" Output Only).....	1
28	3-P-1068	Shaft Output 10T Straight.....	1
29	379668	Lockring.....	2
30	See Gear Chart	Gear, Output.....	1
31	21-P-690	Cap Seal.....	1
32	379564-2	Cap Thread (.438").....	1
		LOOSE PARTS	
	328948-9X	Kit Gasket & Installation Instructions (All)	1
	7170-86X	Kit Mounting ("FJ" Pitch).....	1
	7170-117X	Kit Mounting ("KV" Pitch).....	1

Gear Chart

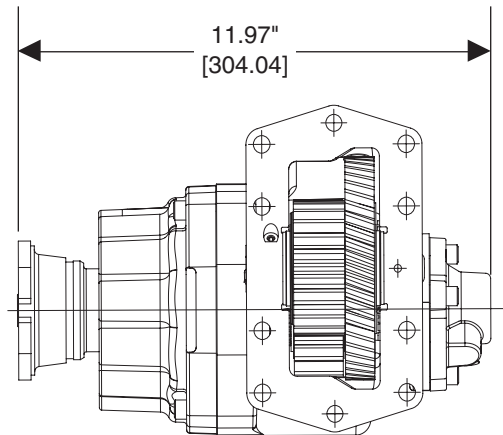
Gear Designator	Input Gear (7)	No. Teeth "A"	Ratio Gear (6)	No. Teeth "B"	Output Gear (30)	No. Teeth "C"
877*AFJ	5-P-1428	50	5-P-1429	24	2-P-862	40
877*BFJ	5-P-1428	50	5-P-1438	25	2-P-872	39
877*CFJ	5-P-1428	50	5-P-1439	26	2-P-873	38
877*DFJ	5-P-1428	50	5-P-1440	27	2-P-874	37
877*EFJ	5-P-1428	50	5-P-1432	29	2-P-865	35
877*FFJ	5-P-1428	50	5-P-1433	31	2-P-866	33
877*GFJ	5-P-1428	50	5-P-1457	33	2-P-888	31
877*HFJ	5-P-1428	50	5-P-1455	34	2-P-881	30
877*JFJ	5-P-1428	50	5-P-1474	35	2-P-902	29
877*AKV	5-P-1468	45	5-P-1429	24	2-P-862	40
877*BKV	5-P-1468	45	5-P-1438	25	2-P-872	39
877*CKV	5-P-1468	45	5-P-1439	26	2-P-873	38
877*DKV	5-P-1468	45	5-P-1440	27	2-P-874	37
877*EKV	5-P-1468	45	5-P-1432	29	2-P-865	35
877*FKV	5-P-1468	45	5-P-1433	31	2-P-866	33
877*GKV	5-P-1468	45	5-P-1457	33	2-P-888	31
877*HKV	5-P-1468	45	5-P-1455	34	2-P-881	30
877*JKV	5-P-1468	45	5-P-1474	35	2-P-902	29



Model Number Designation



"5" Arrangement



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1. Terms and Conditions of Sale: All descriptions, quotations, proposals, offers, acknowledgments, acceptances and sales of Seller's products are subject to and shall be governed exclusively by the terms and conditions stated herein. Buyer's acceptance of any offer to sell is limited to these terms and conditions. Any terms or conditions in addition to, or inconsistent with those stated herein, proposed by Buyer in any acceptance of an offer by Seller, are hereby objected to. No such additional, different or inconsistent terms and conditions shall become part of the contract between Buyer and Seller unless expressly accepted in writing by Seller. Seller's acceptance of any offer to purchase by Buyer is expressly conditional upon Buyer's assent to all the terms and conditions stated herein, including any terms in addition to, or inconsistent with those contained in Buyer's offer. Acceptance of Seller's products shall in all events constitute such assent.

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 certain Products, namely PTOs, SEMs, and Wet Line Kits sold hereunder shall be free from defects in material or workmanship for a period of twenty four months from the date of delivery to Buyer. Seller warrants that certain Products namely Pumps, and Hydraulic Accessories shall be free from defects in material or workmanship for a period of eighteen months from the date of delivery to the Buyer. 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 MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

5. Limitation Of Remedy: SELLER'S LIABILITY ARISING FROM OR IN ANYWAY CONNECTED WITH THE ITEMS SOLD OR THIS CONTRACT SHALL BE LIMITED EXCLUSIVELY TO REPAIR OR REPLACEMENT OF THE ITEMS SOLD OR REFUND OF THE PURCHASE PRICE PAID BY BUYER, AT SELLER'S SOLE OPTION. IN NO EVENT SHALL SELLER BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES OF ANY KIND OR NATURE WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOST PROFITS ARISING FROM OR IN ANYWAY CONNECTED WITH THIS AGREEMENT OR ITEMS SOLD HEREUNDER, WHETHER ALLEGED TO ARISE FROM BREACH OF CONTRACT, EXPRESS OR IMPLIED WARRANTY, OR IN TORT, INCLUDING WITHOUT LIMITATION, NEGLIGENCE, FAILURE TO WARN OR STRICT LIABILITY.

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 thereto. 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.

10/09-P



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