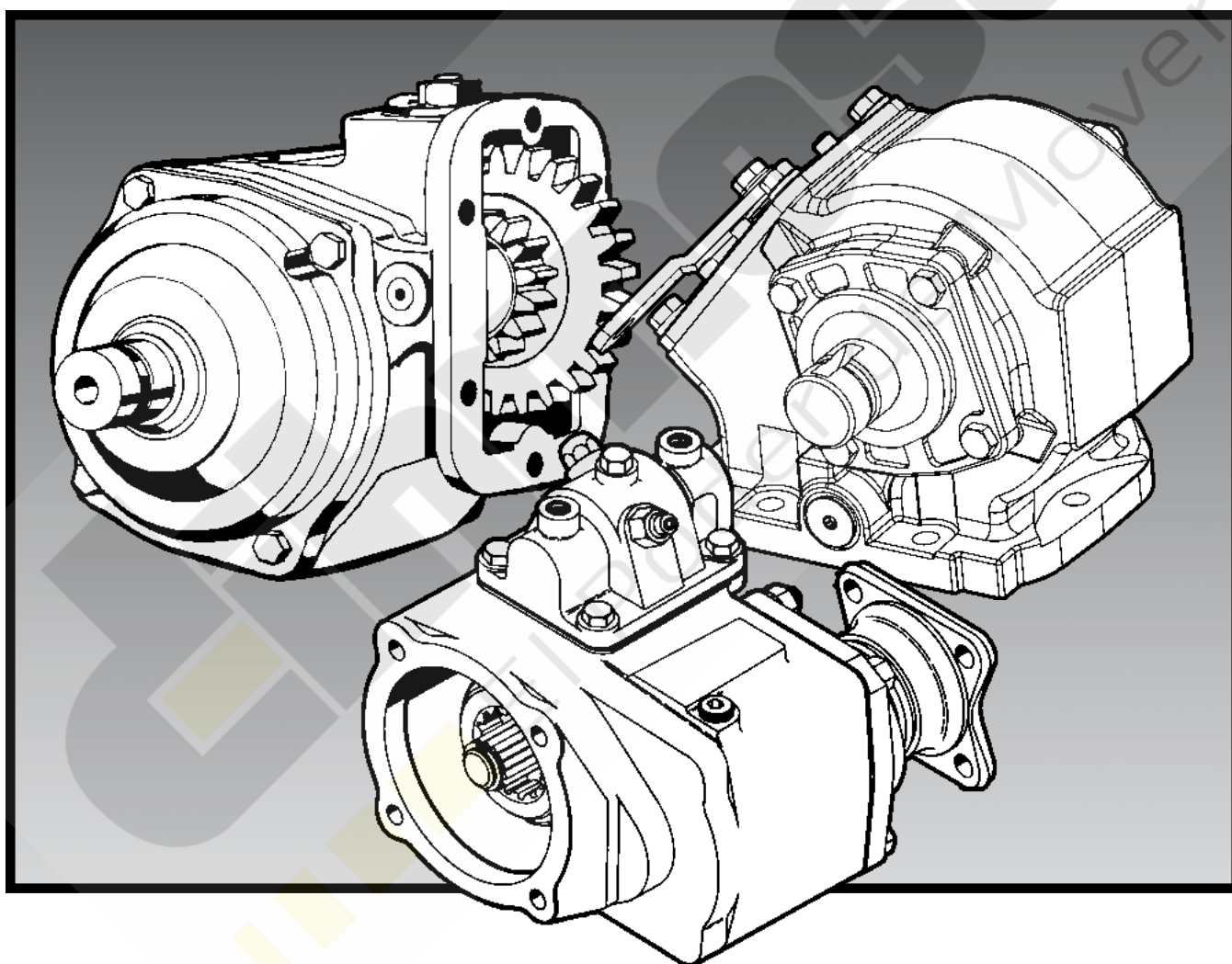


Parts List 522 Series

Effective: January 2004



 WARNING

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Exploded View 1

Bill of Materials 2

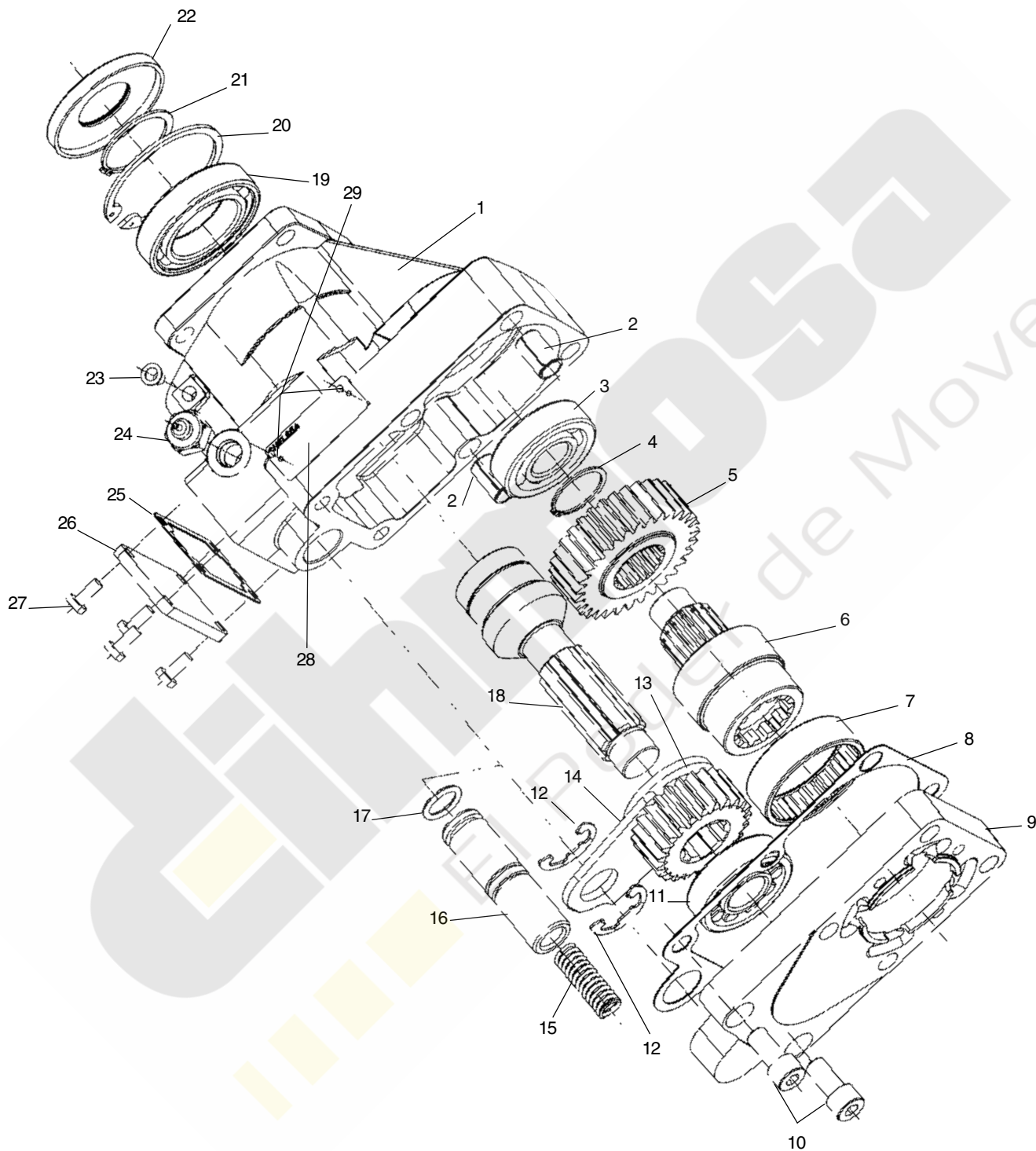
ZMTEC (“F” Designator) 3

Input Options 4-5

Output Options 6

Model Number Designation..... 7

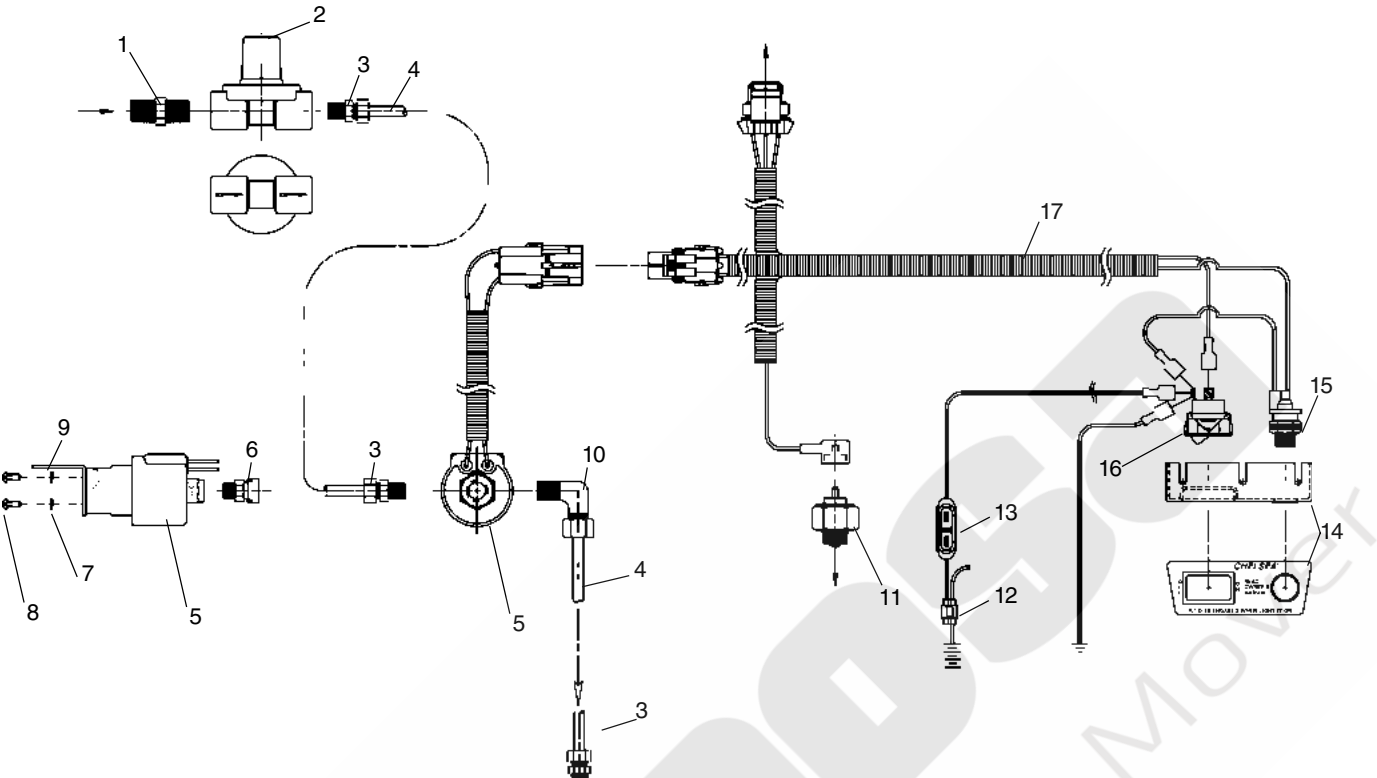
Offer of Sale 8



Bill of Materials**Power Take-Offs****522 Series**

Item	Part Number	Description	Quantity
1	1-P-599X	P.T.O. Housing w/ Dowel Pin	1
2	379920	Dowel Pin	2
3	560990	Ball Bearing, Input Shaft	1
4	378098	Snap Ring, Input Shaft	1
5	5-P-1388	Input Gear, "T" Ratio (31 Teeth)	1 or
	5-P-1389	Input Gear, "V" Ratio (34 Teeth)	1
6	3-P-967	Input Shaft, "AA" Input	1 or
	See Chart Pg. 4 & 5		1
7	561016	Input Bearing, Needle Roller, "AA" Input"	1 or
	See Chart Pg. 4 & 5		1
8	22-P-115	Gasket, Housing	1
9	21-P-664	Rear Mounting Plate, "AA" Input	1 or
	See Chart Pg. 4 & 5		1
10	379676-6	Hex Capscrew, (M12-1.5 x 25)	2
11	561017	Bearing, Cylindrical Roller	1
12	379918	Snap Ring, Shifter Rod	2
13	2-P-821	Output Gear, "T" Ratio (23 Teeth)	1 or
	2-P-822	Output Gear, "V" Ratio (20 Teeth)	1
14	32-P-183	Shifter Fork	1
15	37-P-21	Shifter Spring	1
16	11-P-155	Shifter Rod	1
17	28-P-41	O-Ring, Shifter Rod	1
18	3-P-959	Output Shaft, "XY"	1 or
	See Page 6		1
19	561018	Output Bearing	1
20	379919	Snap Ring, Internal	1
21	378477	Snap Ring, Output Shaft	1
22	28-P-278	Oil Seal	1
23	500897-3	Shipping Plug	1
24	379652	Indicator Switch, Normally Closed	1
25	35-P-93	Gasket, Cover Plate	1
26	34-P-133	Cover Plate	1
27	378429-6	Hex Capscrew, (.250"-20 x .625")	4
28	68-P-2	Name Plate	1
29	378422	Drive Screw	2
	Loose Parts		
	8000-18X	Mounting Kit	1
	328952-20X	Gasket and Caution Label Kit, ("AA", "AB" and "AM" Inputs)	1 or
	328952-21X	Gasket and Caution Label Kit, ("AC" Input)	1
	328388-37X	Installation Kit ("A" Shifter) North America	1 or
	328388-47X	Installation Kit ("P" Shifter) North America	1 or
	328388-48X	Installation Kit ("Q" Shifter) North America	1
	328388-82X	Installation Kit ("F" Shifter) North America	1
	328388-73X	Installation Kit ("A" Shifter) Europe	1 or
	328388-74X	Installation Kit ("P" Shifter) Europe	1 or
	328388-75X	Installation Kit ("Q" Shifter) Europe	1
	378414	Pressure Protection Valve ("V" Shift Only)	1
	379640	Booted Connector ("V" Shifter Only)	1

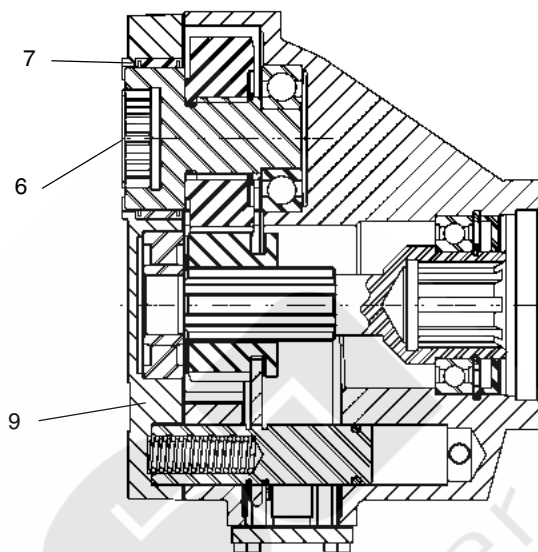
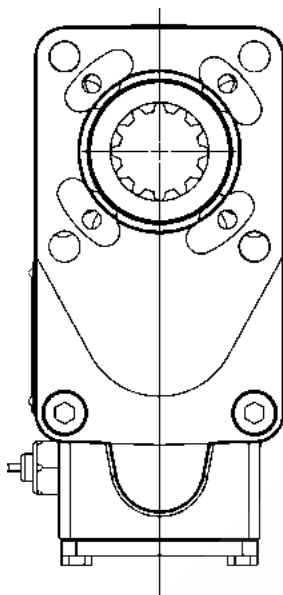
Parts List continued on next page.



Item	Part Number	Description	Quantity
	328388-82X	12v Electric/Air Installation Kit w/ ZMTEC Wire Harness	
1	378416	Hex Nipple, (.25 - 18 NPTF)	1
2	378414	Pressure Protection Valve	1
3	379042	Male Connector, 1/4" Tube to Male Pipe (.125" - 25 NPT)	3
4	379044-7	Plastic Tubing	1
5	75-P-10	Solenoid, 12v	1
6	379106	Atmospheric Breather (.125"-27 NPTF)	1
7	500357-7	Lock Washer	2
8	500457-6	Round Head Slotted Screw (.438" x .190" - 32 UNF- 2A)	2
9	379258	Bracket	1
10	379043	Male Elbow 90°, 1/4" Tube to Pipe (.125" - 27 NPTF)	1
12	379257	Connector	1
17	75-P-9	Wiring Harness (includes items 13, 14, 15 & 16)	1
13	379900	Fuse, 10 AMP	1
14	379336	Switch Bracket	1
15	378978	Indicator Light, 12v	1
16	75-P-11	Switch, P.T.O.	1

Input Options**522 Series****522**AM Input**

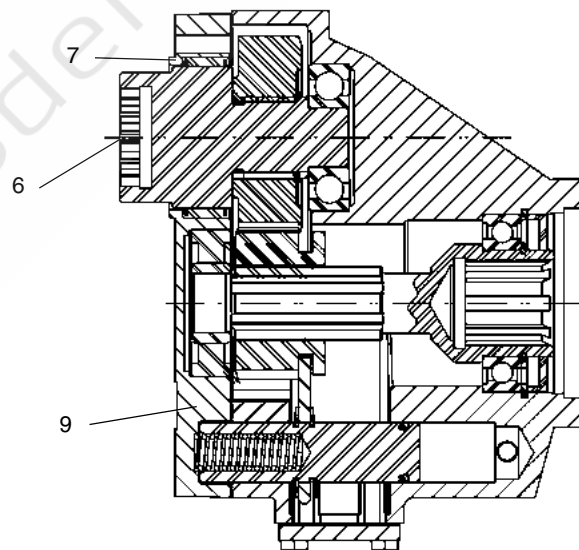
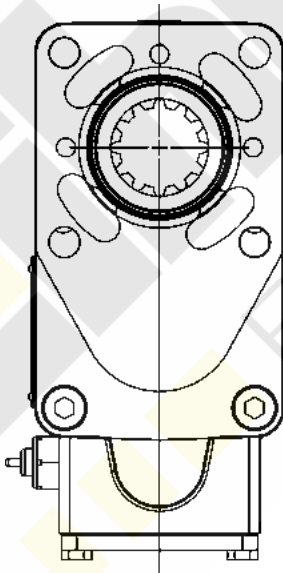
- Eaton FS-4106
- Eaton FS-5206



Item	Part Number	Description	Quantity
9	21-P-658	Mounting Plate	1
6	3-P-958	Input Shaft, (12Tooth - 40mm Internal Spline)	1
7	561016	Needle Roller Bearing	1
	8000-18X	P.T.O. Mounting Kit	1
	328952-20X	Gasket and Caution Label Kit	1
	22-P-117	Mounting Gasket	1

522AA Input**

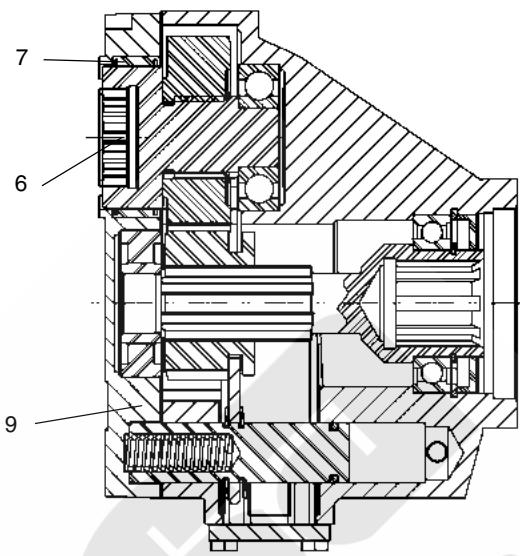
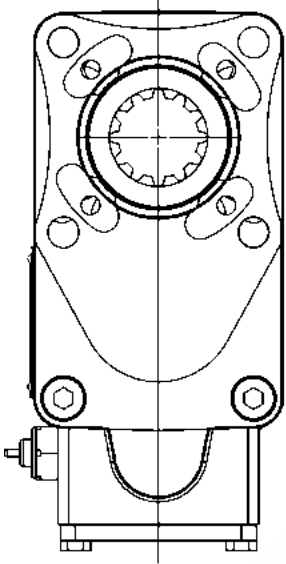
- ZF 6S-850
- ZF S6-36



Item	Part Number	Description	Quantity
9	21-P-664	Mounting Plate	1
6	3-P-967	Input Shaft, (12Tooth - 40mm Internal Spline)	1
7	561016	Needle Roller Bearing	1
	8000-18X	P.T.O. Mounting Kit	1
	328952-20X	Gasket and Caution Label Kit	1
	22-P-117	Mounting Gasket	1

522**AB Input

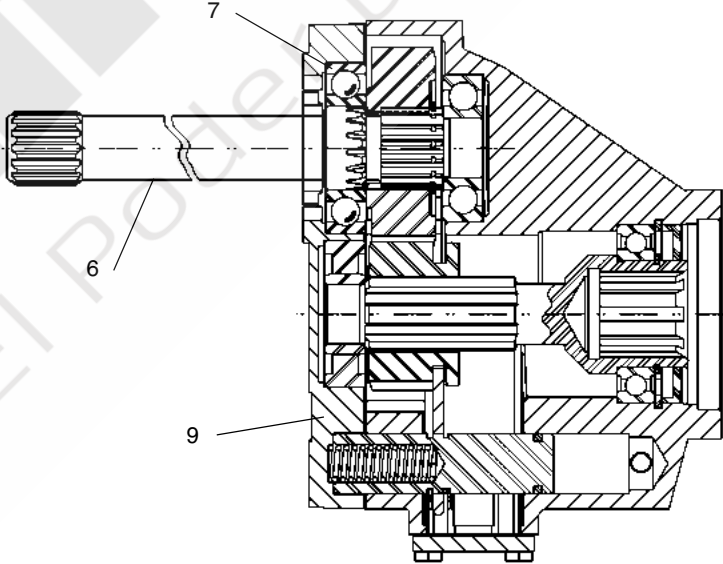
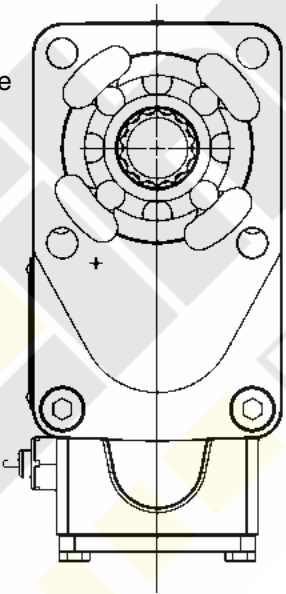
- Iveco 2845.6
- Iveco 2855.5



Item	Part Number	Description	Quantity
9	21-P-665	Mounting Plate	1
6	3-P-958	Input Shaft, (12Tooth - 40mm Internal Spline)	1
7	561016	Needle Roller Bearing	1
	8000-18X	P.T.O. Mounting Kit	1
	328952-20X	Gasket and Caution Label Kit	1
	22-P-117	Mounting Gasket	1

522**AC Input

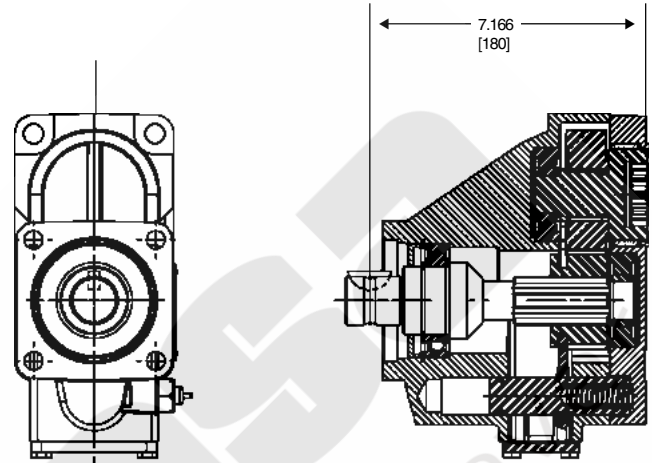
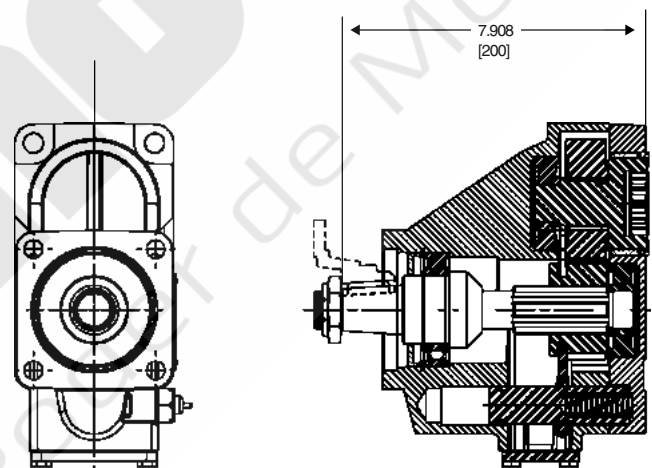
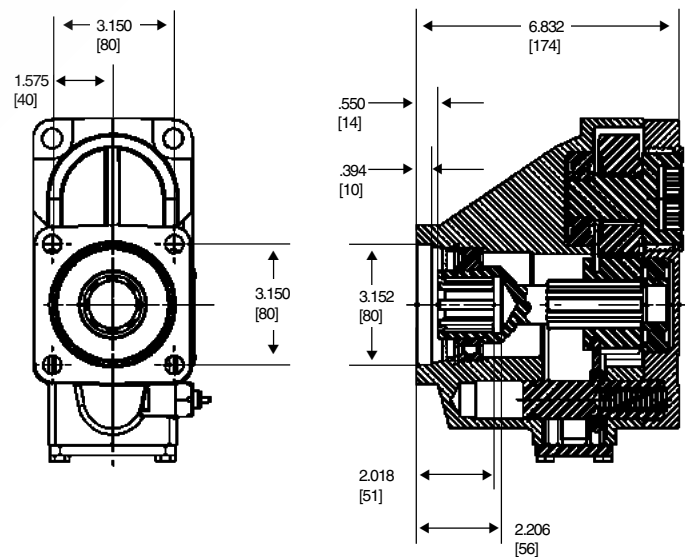
- ZF Meritor Freedomline
- ZF Astronic



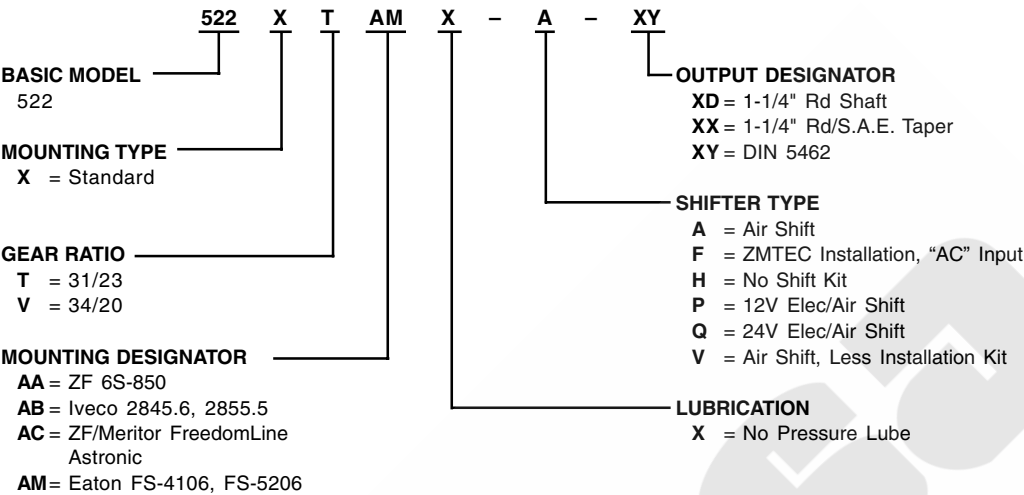
Item	Part Number	Description	Quantity
9	21-P-668	Mounting Plate	1
6	3-P-965	Input Shaft, (14Tooth - 32mm External Spline)	1
7	550010	Ball Bearing	1
	8000-18X	P.T.O. Mounting Kit	1
	328952-21X	Gasket and Caution Label Kit	1
	35-P-94	Mounting Gasket	1

Output Options**Power Take-Offs
522 Series**

Output	Shaft Part Number	Description
XD	3-P-960	1 -1/4" Round Shaft
XX	3-P-961	1 -1/4" Round Shaft S.A.E. Taper
XY	3-P-959	DIN 5462, 8 Tooth

XD Output**XX Output****XY Output**

Model Number Designation



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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.

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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.

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El Poder de Mover



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