Chelsea PTO 540 Parts Manual

Pro Gear Chelsea 540 Series PTO parts manual to assist in identifying the parts for your Chelsea Power Take Off unit.

If you need any assistance identifying the correct Power Take Off unit for your truck and equipment, contact your Chelsea replacement part specialists at Pro Gear and Transmission.

Pro Gear stocks every part for your Parker Chelsea PTO including: PTO housings, mounts, driveshafts, gears, bearings, gaskets, cable shift cover assembly, post and plate assembly, brackets, stud kits, seal kits, lever control assembly, air shift cover assembly, direct mount pump conversion kits, stud kits including English and metric references, CAT D&H parts and much more.

Pro Gear Transmission has same day shipping and 1000’s of products in stock and ready to ship internationally for your next project.

For parts or service contact the Chelsea specialists at Pro Gear & Transmission, Inc.

1 (877) 776-4600
(407) 872-1901
parts@eprogear.com

CHELSEA®

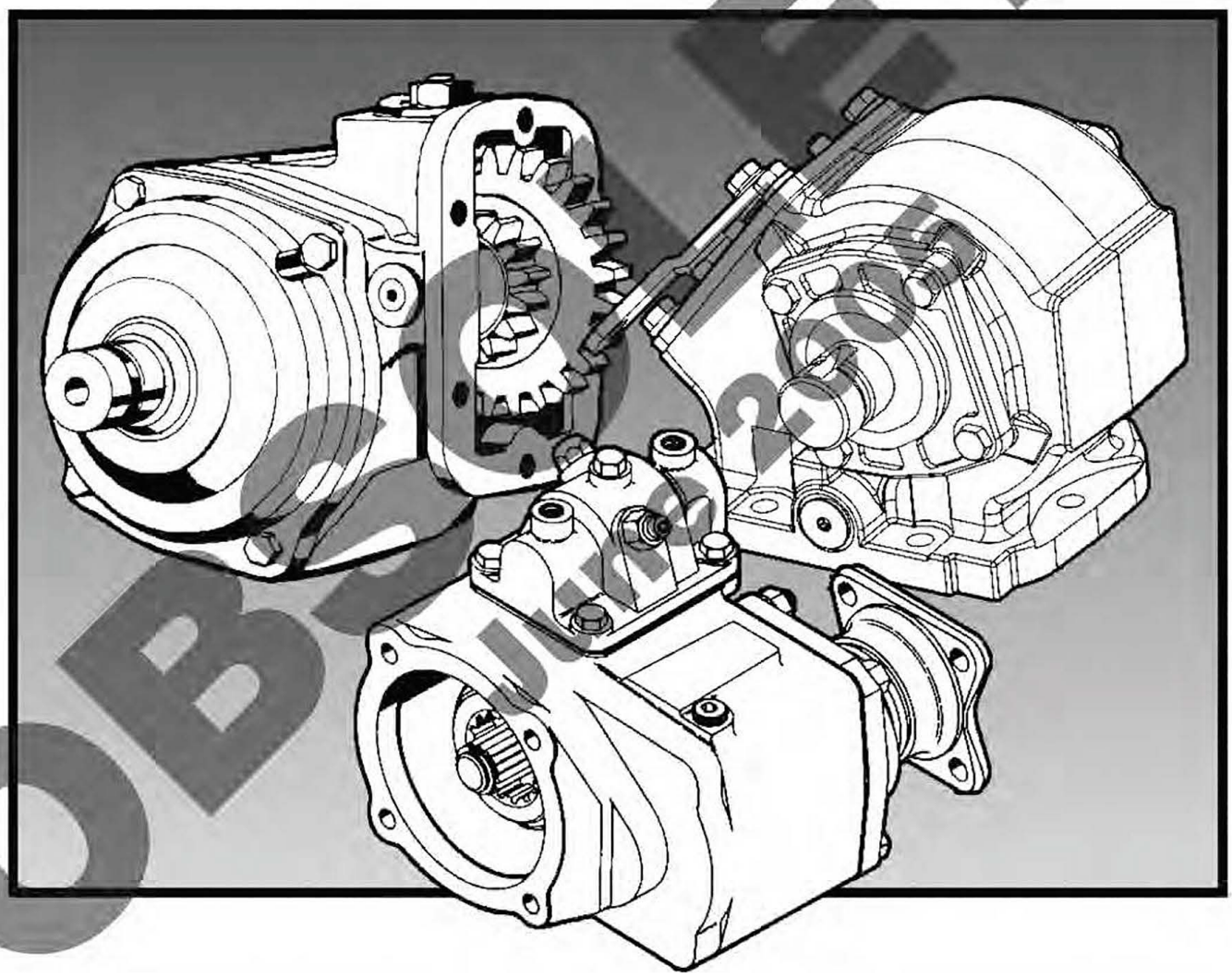
Bulletin HY25-2540-M1/US

CLICK TO RETURN TO SITE

Effective: November 15, 2001

Supersedes: P410-540 Dated August, 1979

Replacement Parts List
540 Series Manual



OBSOLETE
Bulletin 2500

Parker

⚠ WARNING

FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS AND/OR SYSTEMS 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 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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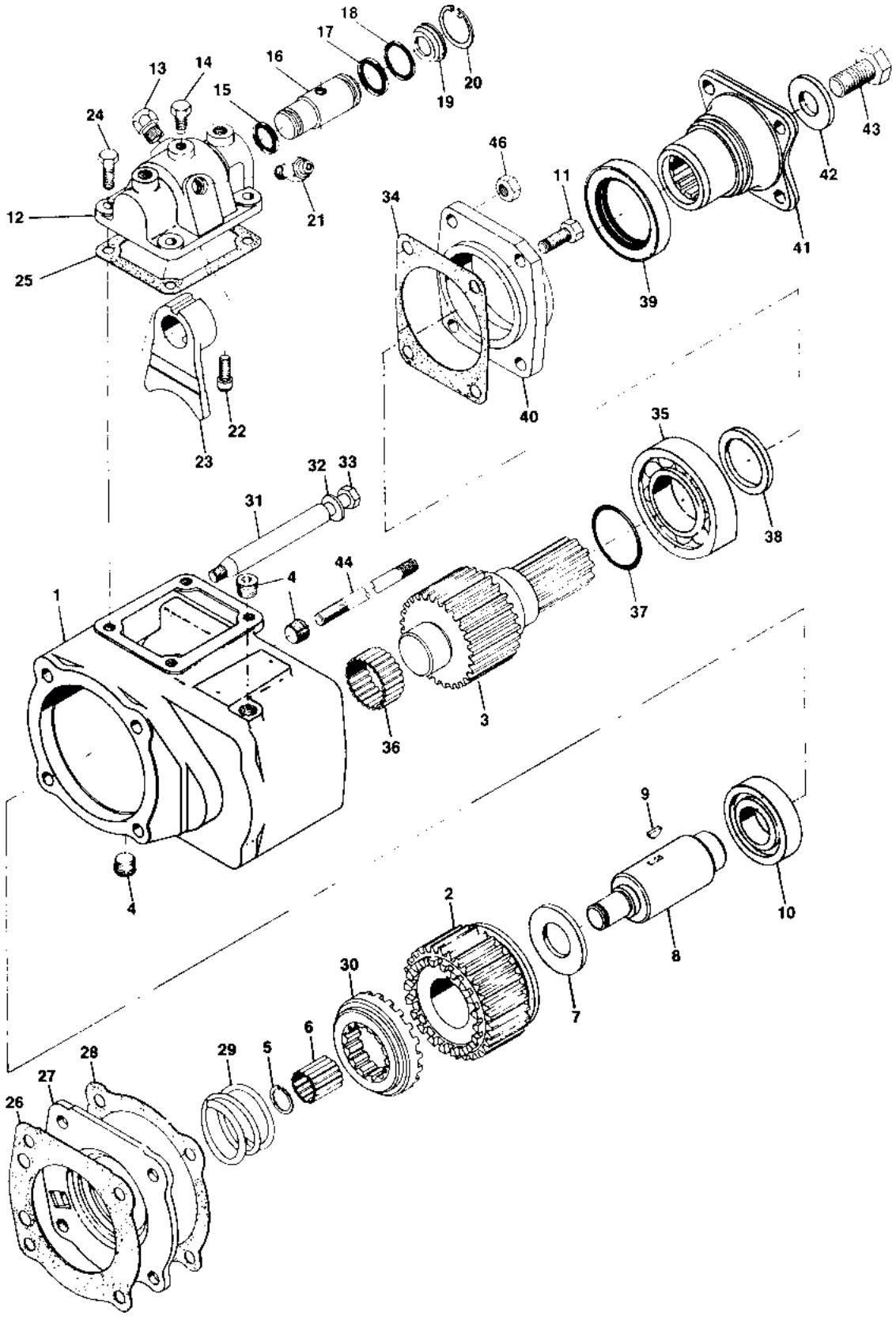
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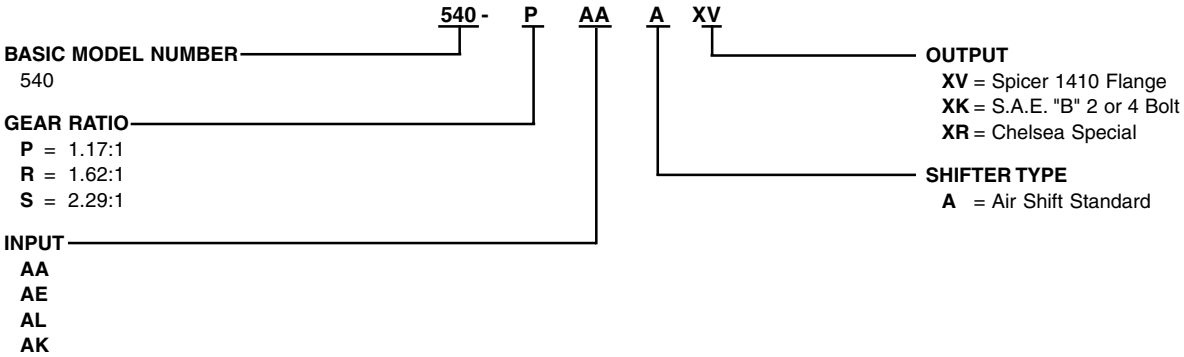
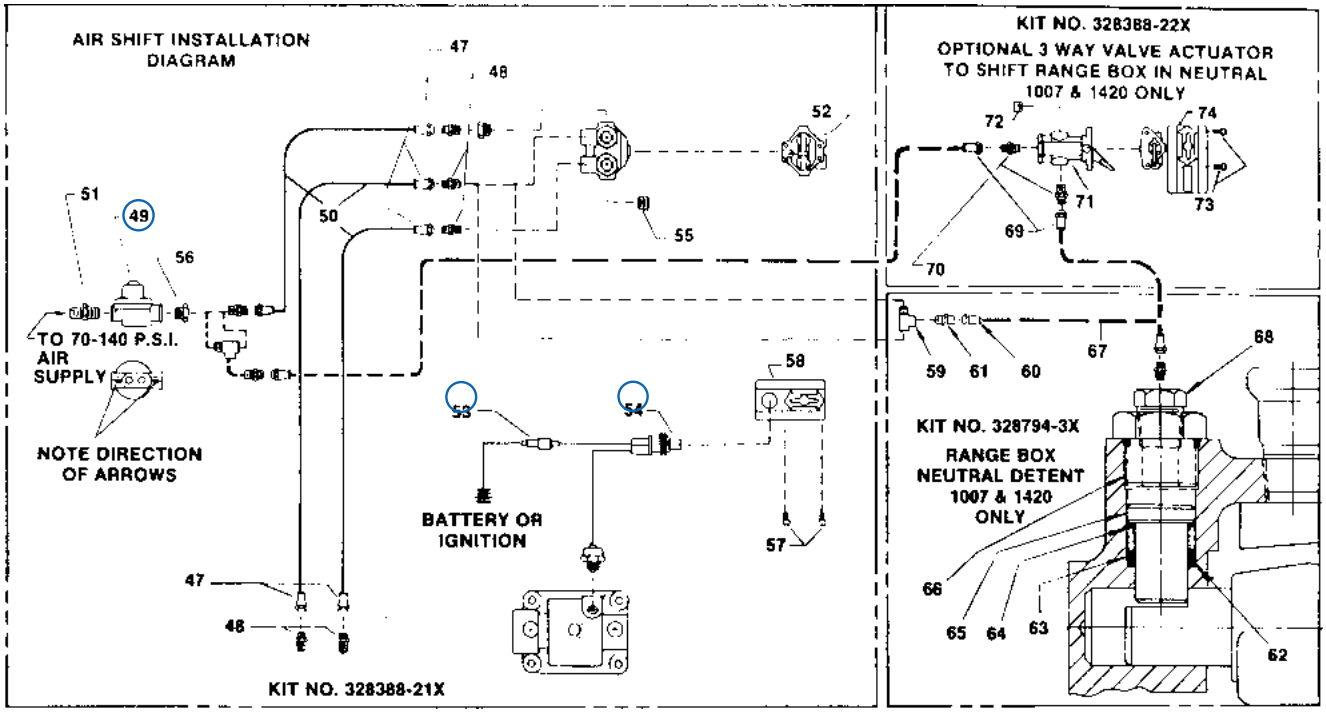
Item		Part Number	Description	Quantity
1			Housing, P.T.O.	1
	▶	1-P-369	For 540-P or 540-R Ratios	
		1-P-371	For 540-S Ratio	
2		See Chart Pg. 5	Input Gear	1
3		See Chart Pg. 5	Output Gear & Shaft	1
4	▶	378888	Pipe Plug (.250"-18)	3
5	▶	379071	Retainer Ring	1
6	▶	550890	Roller Bearing Assembly	1
7	▶	31-P-76	Thrust Washer	1
8	▶	3-P-751	Input Bearing Shaft	1
9	▶	378210	Pro Key	1
10	▶	550697	Ball Bearing	1
11	▶	378431-10	Screw, Hex Head (.375"-16 x 1.00")	2
	▶	328793X	**AIR SHIFT ASSEMBLY** (Includes items 12 thru 23)	1
12		34-P-72	Shifter Cover	1
13	▶	378554	Cap	1
14	▶	378285-1	Guide Screw (.312"-24)	1
15	▶	28-P-71	O-ring	1
16	▶	11-P-120	Shift Shaft	1
17	▶	28-P-41	O-ring	1
18	▶	28-P-42	O-ring	1
19	▶	378315	Cover Plug	1
20	▶	378316	Retainer Ring	1
N.S.		5008997-3	Shipping Plug	2
21		378969	Indicator Switch	1
22	▶	378447-4	Screw, Socket Head (.312"-18 x .750")	1
23		32-P-137	Shift FORK	1
24	▶	378430-8	Screw, Hex Head (.312"-18 X .750")	4
25	▶	35-P-40	Gasket, Shift Cover	1
			MOUNTING KITS	
		328794-4X	MOUNTING KITS for Spicer 1007 & 1420 Transmission (Includes items 26 thru 33)	1
		328794-5X	MOUNTING KITS for Spicer 1107 Transmission (Includes items 26 thru 33)	1
26		22-P-61	Gasket, Adaptor Cover	1
27			Adaptor Cover	1
		21-P-351	For 540-*AB, Spicer 1007 & 1420 Transmissions	
		21-P-352	For 540-*AC, Spicer 1107 Transmissions	
28		22-P-62	Gasket, P.T.O. Mounting	1
29			Spring	1
	▶	37-P-45	For 540-*AB, Spicer 1007 & 1420 Transmissions	
		37-P-46	For 540-*AC, Spicer 1107 Transmissions	
30	▶	57-P-17	Clutch	1
31		379077	Cone Lock Sleeve	2
32	▶	500365-26	Flat Washer	2
33	▶	379433-14	Screw, Hex Hd. (.375"-16 x 3.00")	2

N.S. — Not Shown

Item		Part Number	Description	Quantity
34			GASKET, Pump Flange & Bearing Cap	1
	▶	**22-P-63**	For 540-P or 540-R	
	▶	**22-P-64**	For 540-S	
35			BALL BEARING	1
	▶	**550311**	For 540-P or 540-R	
	▶	**550010**	For 540-S	
36			NEEDLE BEARING ASSEMBLY	1
	▶	**560959**	For 540-P or 540-R	
	▶	**560961**	For 540-S	
37		**28-P-156**	O-RING, For Standard Output Only on a 540-S	
38			RETAINER RING	1
	▶	**4-P-76**	For Standard Output Only on a 540-P or 540-R	
	▶	**378477**	For Pump Output Only on a 540-P or 540-R	
	▶	**378748**	For Pump Output Only on a 540-S	
39			OIL SEAL	1
		28-P-35	For 540-P or 540-R Standard Output	
	▶	**28-P-77**	For 540-S Standard Output	
		28-P-52	For All Pump Outputs	
40			PUMP FLANGES & BEARING CAPS	1
		21-P-354	Bearing Cap for 540-P or 540-R Standard Output	
	▶	**21-P-356**	Bearing Cap for 540-S Standard Output	
		21-P-360	Pump Flange for 540-P or 540-R with 113 Pump Suffix	
	▶	**21-P-364**	Pump Flange for 540-S with 113 Pump Suffix	
		21-P-358	Pump Flange for 540-P or 540-R with 225 Pump Suffix	
		21-P-362	Pump Flange for 540-S with 225 Pump Suffix	
41			1410 SERIES FLANGE	1
		3-1-3431	For 540-P or 540-R	
		3-1-3881	For 540-S	
42	▶	**4-P-130**	Retainer Washer	1
43		**378345-7**	Screw, Hex Head (.625"-11 x 1.125")	1
	▶	**328794-7X**	MOUNTING STUD KIT (Includes items 44 thru 46)	1
44	▶	**379423-100**	Stud (.375"-16 x .375"-24 x 7.125")	2
46		**379794**	Flange Nut (.375"-24)	2

Model Number Designation





Item	Part Number	Description	Quantity
	328388-21X	AIR SHIFT INSTALLATION KIT (Includes items 47-58)	1
47	**378356**	Tube Nut	6
48	**378360**	Male Connector	6
49 ▶	**378414**	Pressure Protection Valve	1
50	**378415-7**	Nylon Tubing (35 Ft. Coil)	1
51 ▶	**378416**	Hex Nipple ($^1/_4$" NPT)	1
52	**378504**	Control Valve	1
53 ▶	**378884**	Fuse Holder	1
54 ▶	**378978**	Indicator Light (12 volt)	1
55	**500133-3**	Pipe Plug ($^1/_4$" NPT)	1
56	**500714-1**	Reducer ($^1/_4$" to $^1/_8$" NPT)	2
57	**500796-4**	Screw	2
58	**68-P-19**	Control Plate	1

WARNING: The vehicle may start to move during this P.T.O. operation unless neutral is maintained in the range box and the brakes are set.

NOTE: The 1420-3A also must be shifted to its “on highway” mode for stationary operation. See transmission shifting instructions.

– – – – – – – – – Follow these lines only when hooking up the 328790-3X Detnet Kit, for stationary applications only.

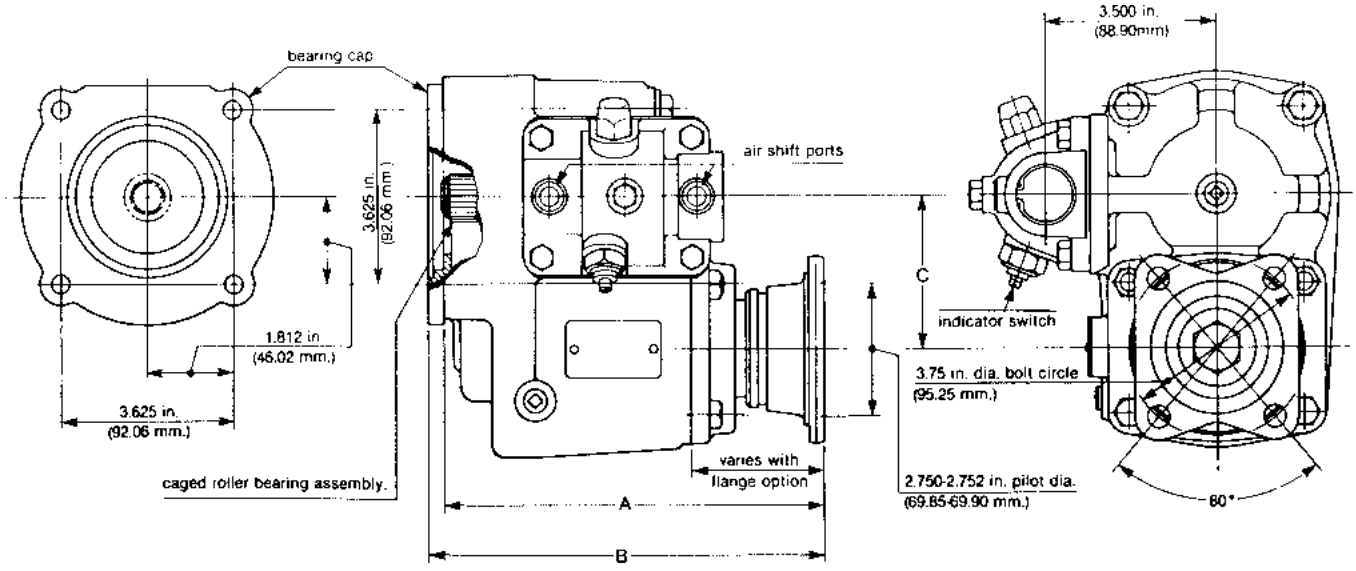
— — — — — Follow these lines only when hooking up the 328790-3X Detent Kit, and the 328388-22X Air Shift Kit, for both mobile and stationary applications.

Item	Part Number	Description	Quantity
	▲ 328794-3X	NEUTRAL DETENT INSTALLATION KIT (Includes items 59 thru 68)	1
59	500750-1	Street Tee (1/8" NPT)	1
60	378356	Tube Nut	2
61	378360	Male Connector	2
62	28-P-154	O-Ring	1
63	379072	Washer	1
64	37-P-44	Spring	1
65	66-P-10	Piston	1
66	379073	Adaptor	1
67	378415-7	Nylon Tubing (35 Ft. Coil)	1
68	500714-1	Pipe Reducer (1/4" to 1/8" NPT)	1
	* 328388-22X	AIR SHIFT INSTALLATION KIT FOR NEUTRAL DETENT (Includes items 69 thru 74)	1
69	328356	Tube Nut	2
70	379360	Male Connector	2
71	378463	Control Valve	1
72	500132-3	Pipe Plug (1/8" NPT)	1
73	500796-4	Screw	2
74	68-P-23	Control Plate	1

▲ The Spicer 1007 & 1420-3A Transmission has a “range box” mounted to the rear of the main box. This range box must be kept in neutral, for stationary operation of the countershaft P.T.O. Detent Kit 329794-3X must be purchased separately and installed in the range box for stationary operation of the countershaft P.T.O.

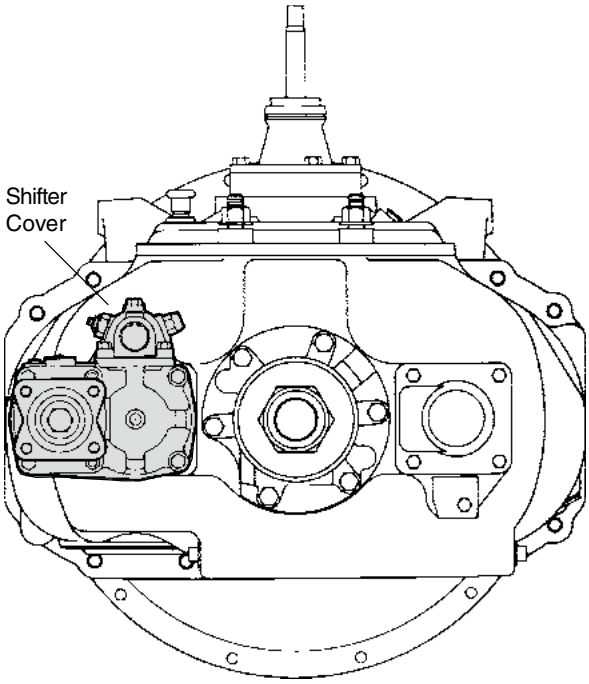
* ThisAir Shift Kit must be installed when the P.T.O. is to be used in both mobile and stationary applications.

540 Counter Shaft P.T.O. Dimensional Drawings

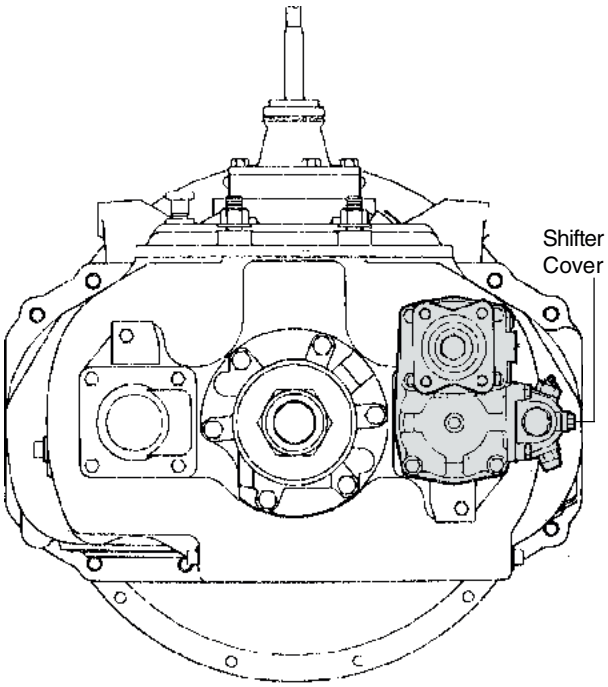


Gear Data

Model No.	Input Gear Item 2		Standard Output Shaft Spicer® 1410 Item 3		Pump Output Shaft XK and XR Item 3	
	Part Number	No. of Teeth	Part Number	No. of Teeth	Part Number	No. of Teeth
540-P	5-P-573	34	3-P-749	29	3-P-753	29
540-R	5-P-572	39	3-P-748	24	3-P-752	24
540-S	5-P-572	39	3-P-750	17	3-P-574	17



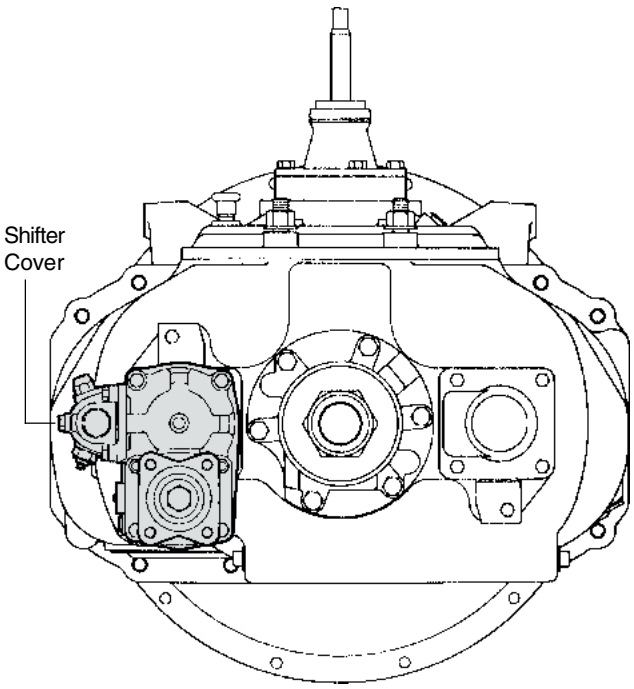
Standard position for left hand side of transmission, with shifter cover in top position.



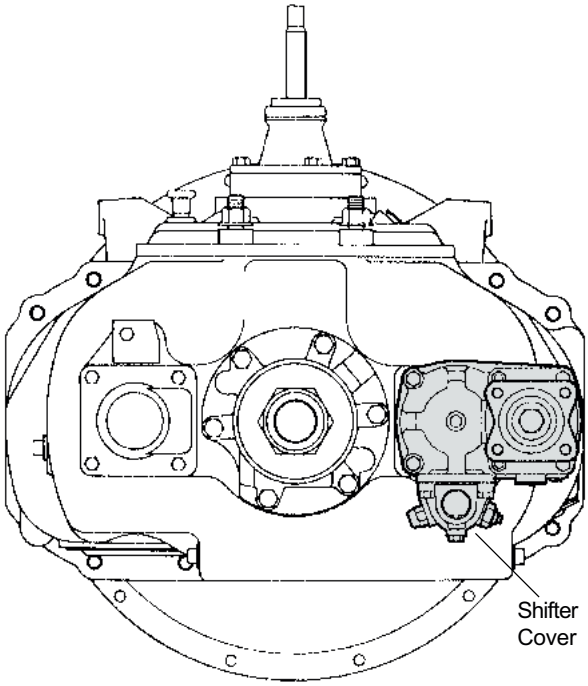
Standard position for right hand side of transmission, with shifter cover in side position.

Optional Mounting Positions

Use optional positions when interference prevents standard position mounting.



Optional position for left hand side of transmission, with shifter cover in side position.



Optional position for right hand side of transmission, with shifter cover in bottom position.

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, 246, 250, 251 and 859 series two (2) years from date of installation.

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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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