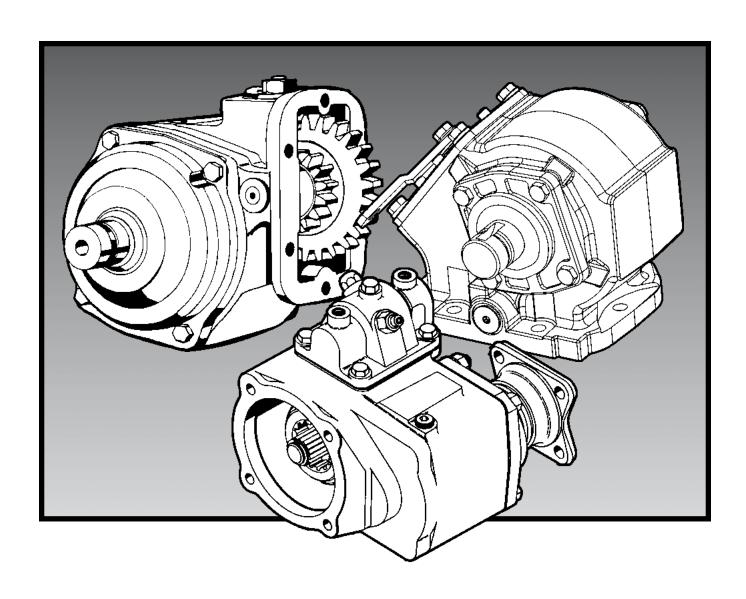


# Parts List 823 Series

Effective: December 15, 2003

Supersedes: HY25-2823-M1/US April 15, 2002







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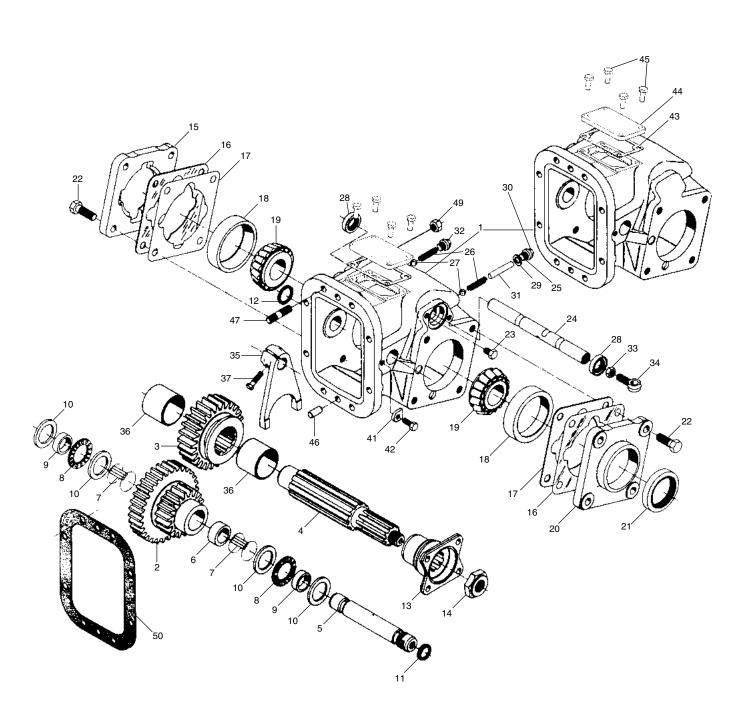
# Power Take-Off **823 Series**

#### Bulletin HY25-2823-M1/US

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# **Bill of Materials**

Item Part Number		Part Number Description			
1	1-P-323	P.T.O. Housing for Ass'y 3 & 6		1	
	1-P-324	P.T.O. Housing for Ass'y 4 & 5			
	1-P-321	P.T.O. Housing for Ass'y 3 & 6 (Constant Mesh Only)	1	'	
	1-P-322	P.T.O. Housing for Ass'y 4 & 5 (Constant Mesh Only)	1		
	1-P-322	P. I.O. Housing for Ass y 4 & 5 (Constant Mesh Only)	1		
2	See Chart Page 5	Gear, Input	1	1	
3	See Chart Page 5	Gear, Output	1	1	
4	3-P-364	Shaft, Output ("AB", "AC" & "XV" Output)	1	1	
5	9-P-28	Shaft, Idler - No Pressure Lube (Standard)	1 or	1 or	
Ū	9-P-37	Shaft, Idler - Pressure Lube	1 or	1 or	
	9-P-82	Shaft, Idler - Self Lube	1	1	
N.S.	379231	Pipe Plug, (.125" -27 N.P.T.) for Pressure Lube Idler Shaft (Opt.)	1	1	
N.S.	328075X	Hose, Pressure Lube (Optional)	1	1	
6	14-P-27	Spacer, Needle Bearing	1	1	
	328297-3X	Needle Roller Replacement Kit	1	1	
7	378389	Needle Rollers (21 per set)	2 sets	2 sets	
8	1/11/37	Thrust Bearing	2	2	
9	14-P-48	Spacer, Needle Bearing	2	2	
10	31-P-90	Thrust Washer	4	4	
11	28-P-239	O-Ring	1	1	
12	28-P-240	O-Ring	1	1	
13	3-1-3431	Spicer 1410 Companion Flange ("XV" Output)	1	1	
	379558	DIN 120 Companion Flange ("AB")	•		
	379742	DIN 100 Companion Flange ("AC")			
14	378382	Nut, Hex (.875"-14) (AB, AC & XV)	1	1	
15	21-P-66	Bearing Cover, Closed End (AB, AC, XS, XU, XV & XY)	1	1	
16	55-P-19	Gasket, Shim	2	2	
17	55-P-6-1	Shim, Plastic	A.R.	A.R.	
	55-P-6-2	Shim, Plastic	A.R.	A.R.	
18	560946	Bearing Cup	2	2	
19	560945	Cone Bearing, Standard Shaft (AB, AC, XS, XU, XY & XV)	2	2	
20	21-P-65	Bearing Cover, Open End (AB, AC, XV)	1	1	
21	28-P-211	Oil Seal, Standard Shaft	i	i i	
22	378433-14	Capscrew, Hex head (.500"-13 x 1.50")	4	4	
23	378431-4	Screw, Hex Head (.305 -16 x .500")	4	4	
24	11-P-135	Shaft, Shifter	4	1	
2 <del>4</del> 25	379614	Fitting Indicator Switch	-		
	37-P-51		-	2	
26		Shifter Spring	-		
27	378008	Shifter Ball	-	2	
28	28-P-218	Oil Seal, Shifter Shaft	-	2	
29	379613	Copper Gasket	-	1	
30	379639	Indicator Switch	-	1	
31	379612	Plunger	-	1	
32	38-P-8	Poppet Cap	-	1	
33	500381-3	Jam Nut, Hex (.438"-20)	-	1	
34	36-P-1	Eye Bolt (.438"-20)	-	1	
35	32-P-122	Shift Fork, Assy. 3 & 6	-	1	
	32-P-121	Shift Fork, Assy. 4 & 5	-	1	
36	4-P-110	Driveshaft Spacer (Constant Mesh Only)	2	-	
37	378916	Capscrew, Shift fork (.375"-24 x 1.375")	-	1	
41	27-P-9	Retaining Plate	1	1	
42	378430-8	Capscrew, Hex Head (.312"-18 x .750")	1		
			1		
43	35-P-93	Gasket, Cover Plate	ا آ		
44	34-P-133	Cover Plate	1 4	1 4	
45	378429-6				







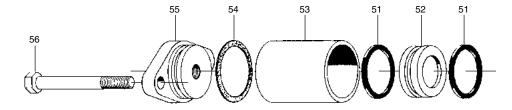
# Power Take-Off **823 Series**

Item	Part Number	Description	823-M	823-A & \
		LOOSE PARTS		
	328170-8X	Mounting Stud Kit	1	1
46	378054	Dowel Pin	2	2
47	379424-21	Stud (.438"-14 & .438"-20 x 2.250")	8	8
49	379745	Flange Nut (.438"-20)	8	8
	328170-185X	Mounting Stud Kit		
	378054	Dowel Pin		
	379429-22	Stud, Metric (.438" - 20 & M12125" x 2.250")		
	379745	Flange Nut (.438"-20)		
	328948-8X	Gasket & Installation Kit		
50	35-P-15-1	Gasket (.010")	2	2
	35-P-15-2	Gasket (.020")	2	2
	328751-1X	Lever Control Indicator Light Installation Kit ("Y" Shift)		
	328388-61X	Air Shift Installation Kit ("A" Shift)		
	329218X	Indicator Switch Service Kit ( "V" Shift)		
	378414	Pressure Protection Valve ("V" Shift)		
		SERVICE KITS		
	328368-2X	Needle Rollers Field Replacement Kit	1	1
	328356-2X	Gasket & Seal Kit	-	1
	328356-3X	Gasket & Seal Kit, w/ Shifter Seal (AB, AC, XV Output)	1	1
	328356-4X	Gasket, O-Ring & Seal Kit		
	328356-5X	Gasket & Seal Kit	1	-
	328356-6X	O-Ring & Gasket Mounting Kit	1	-
	328390-152X	Air Shift Conversion Kit		

N.S. — Not Shown

A.R. — As Required

### **Air Control**



Item	Part Number	Description	Quantity
		AIR SHIFT PARTS	
51	28-P-61	O-Ring	4
52	66-P-5	Floating Piston	2
53	65-P-16	Air Cylinder Body	
54	35-P-16	Gasket	2
55	379027	Air Cylinder Cap	
56	378431-28	Capscrew, Hex Head (.375"-16 x 3.50")	

# **Output Options Bill of Materials**

### 823 Series

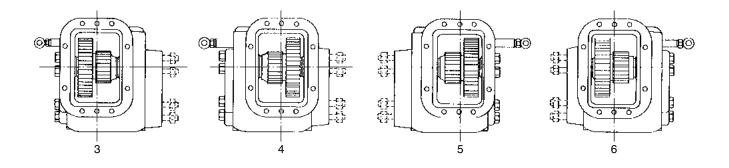
P.T.O. Output Options	Description	Qty.	P.T.O. Output Options	Description	Qty.
AB Output 3-P-364 21-P-65 28-P-211 378382 378433-14 560945	DIN 120 Companion Flange Output Shaft Bearing Cap, Open Oil Seal Hex Nut (.875" - 14) Hex Head Capscrew (.500" - 13 x 1.500") Tapered Bearing Cone	1	XU Option 3-P-726 21-P-382 28-P-212 378450-8 560944 Y-Y Option	S.A.E. Class "C" 2 Bolt Output Shaft, Pump Pump Flange, Outpump Oil Seal Allen Hex Head Capscrew (.500" -13 x 1.500) Tapered Bearing Cone Double "XY" Pump Mount Mount	1 1 1 4
379558  AC Output 3-P-364 21-P-65 28-P-211 378382	Companion Flange (DIN 120)  DIN 100 Companion Flange Output Shaft Bearing Cap, Open Oil Seal Hex Nut (.875" - 14)	1 1 1 1 1	3-P-946 21-P-648 28-P-212 378433-14 560944	Output Shaft, Pump Pump Flange Oil Seal Hex Head Capscrew (.500"- 13 x 1.500) Tapered Bearing Cone	1 2 2 8 2
378433-14 560945 379742	Hex Nut (.573 - 14)  Hex Head Capscrew (.500" - 13 x 1.500")  Tapered Bearing Cone  Companion Flange (DIN 100)		XW Option 329174X 21-P-340 379616	Wet Spline Pump Flange & Instructions Tag Pump Flange "XW" Only Instruction Tag	1
XV Output 3-P-364 21-P-65 28-P-211 378382 378433-14 560945 3-1-3431	Spicer 1410 Companion Flange Output Shaft Bearing Cap, Open Oil Seal Hex Nut (.875" - 14) Hex Head Capscrew (.500" - 13 x 1.500") Tapered Bearing Cone Companion Flange	1 1 1 1 4 1	3-P-726 28-P-212 379231 28-P-245 560944 <b>GS Option</b> 3-P-950X	Pump Shaft Oil Seal Pipe Plug O'Ring (Furnished by Customer) Tapered Bearing Cone  Greasable Shaft Output Shaft, Greabable	1 1 1 1 1
XS Output 3-P-726 21-P-382 28-P-212 379442	S.A.E. Class "C" 2 or 4 Bolt Output Shaft, Pump Bearing Cap, Open Oil Seal Shoulder Stud (.500"-13-20 x 3.750")	1 1 1 4		Bearing Cap, Rear Shaft Seal Cap Screw SocketHead (.312" - 18 x .375) Conversion Kit "XS" to "GS" Conversion Kit "XV" to "GS"	1 1 3 1 or
500356-13 500381-5 500365-37 560944	Lockwasher Nut, Hex (.500"-20) Flat Washer Tapered Bearing Cone	4 4 4 1	L* <b>Option</b> 3-P-863 3-P-864 9-P-82	Self Lube Option (LG, LH, LJ) Output Shaft, Self Lub (LG) Output Shaft, Self Lub (LH, LJ) Idler Shaft (Processel)	1 or 1 1
3-P-826 21-P-470 28-P-212 378433-14 560944	DIN 5462 / ISO 14 Output Shaft, Pump Pump Flange Oil Seal Hex Head Capscrew (.500"- 13 x 1.500) Tapered Bearing Cone	1 1 1 4 1	329105X 378450-8 379231 500841-1 329092X	Self Lube Assembly Allen Hex Head Capscrew (.500" -13 x 1.500) Pipe Plug (.125-27 NPTF) Pressure Lube Only 90° Street Elbow Pressure Lube Hose Assembly	1 4 y 1 1



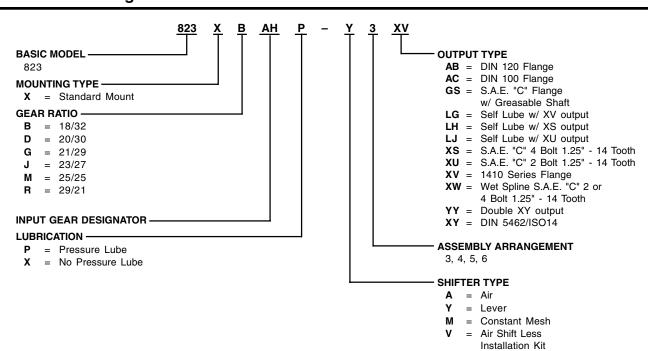
#### P.T.O. Gear Data

Item 2 Input Cluster Gear					Item 3 Output Gea	r
P.T.O. Number	Part Number	No. Teeth	Helix Angle	No. Teeth	Part Number	No. Teeth
823*BAB	5-P-508	27	Spur	18	2-P-312	32
823*BAH	5-P-285	32	Spur	18	2-P-312	32
823*BAK	5-P-223	32	Spur	18	2-P-312	32
823*BDA	5-P-636	35	Spur	18	2-P-312	32
823*DAH	5-P-971	32	Spur	20	2-P-315	30
823*DAK	5-P-293	32	Spur	20	2-P-315	30
823*GAH	5-P-980	32	Spur	21	2-P-308	29
823*GAK	5-P-294	32	Spur	21	2-P-308	29
823*JAH	5-P-325	32	Spur	23	2-P-311	27
823*JAK	5-P-224	32	Spur	23	2-P-311	27
823*MAH	5-P-283	32	Spur	25	2-P-309	25
823*MAK	5-P-284	32	Spur	25	2-P-309	25
823*MDA	5-P-637	35	Spur	25	2-P-309	25
823*RAH	5-P-721	32	Spur	29	2-P-630	21
823*RDA	5-P-808	35	Spur	29	2-P-630	21

# **Assembly Arrangements**



# **Model Number Designation**





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.

9/01-P





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