

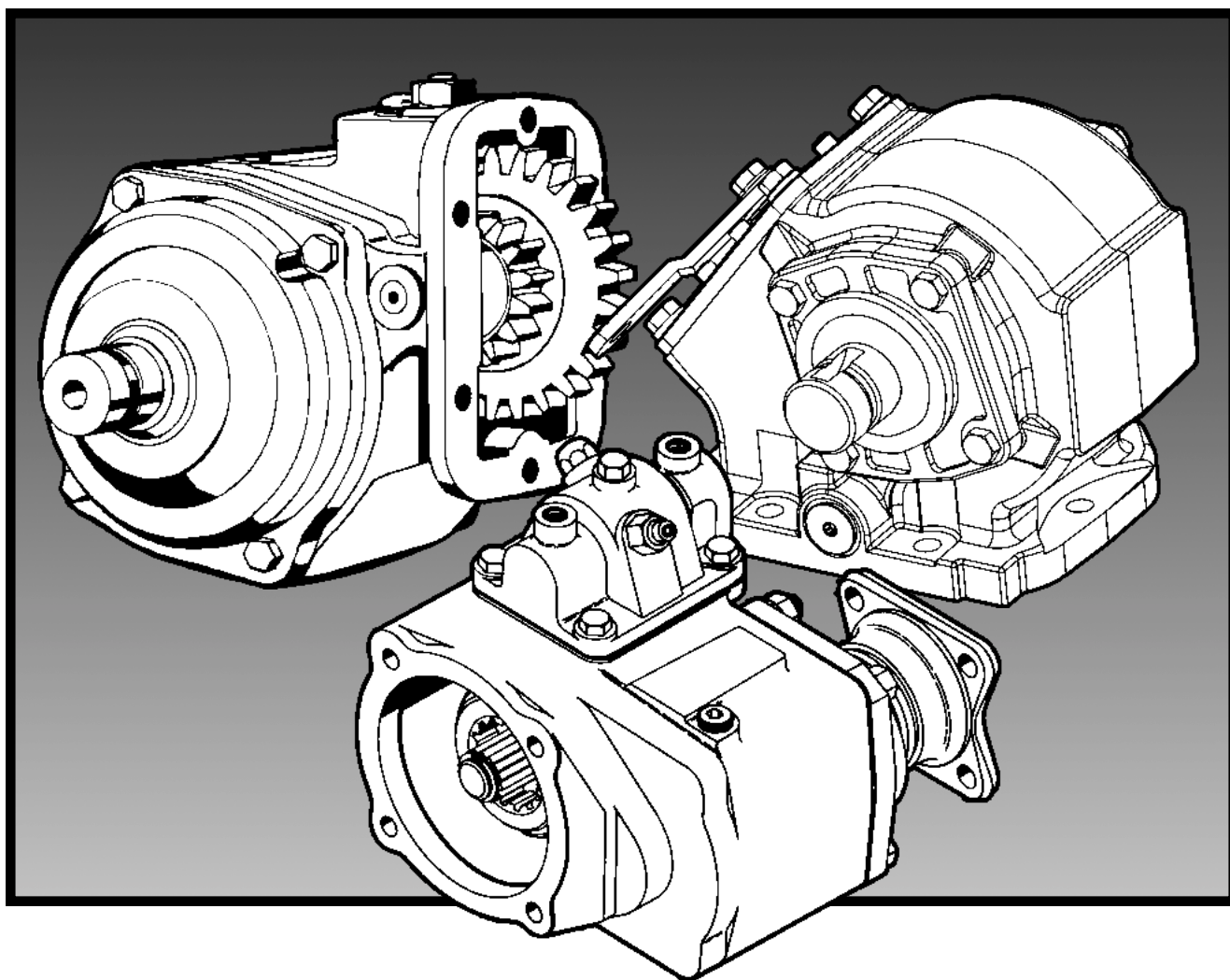
**CHELSEA®**

Bulletin HY25-2270-M1/US

## Parts List 270/271 Series

Effective: November 15, 2001  
Supersedes: P410-270/271 Dated April 2000

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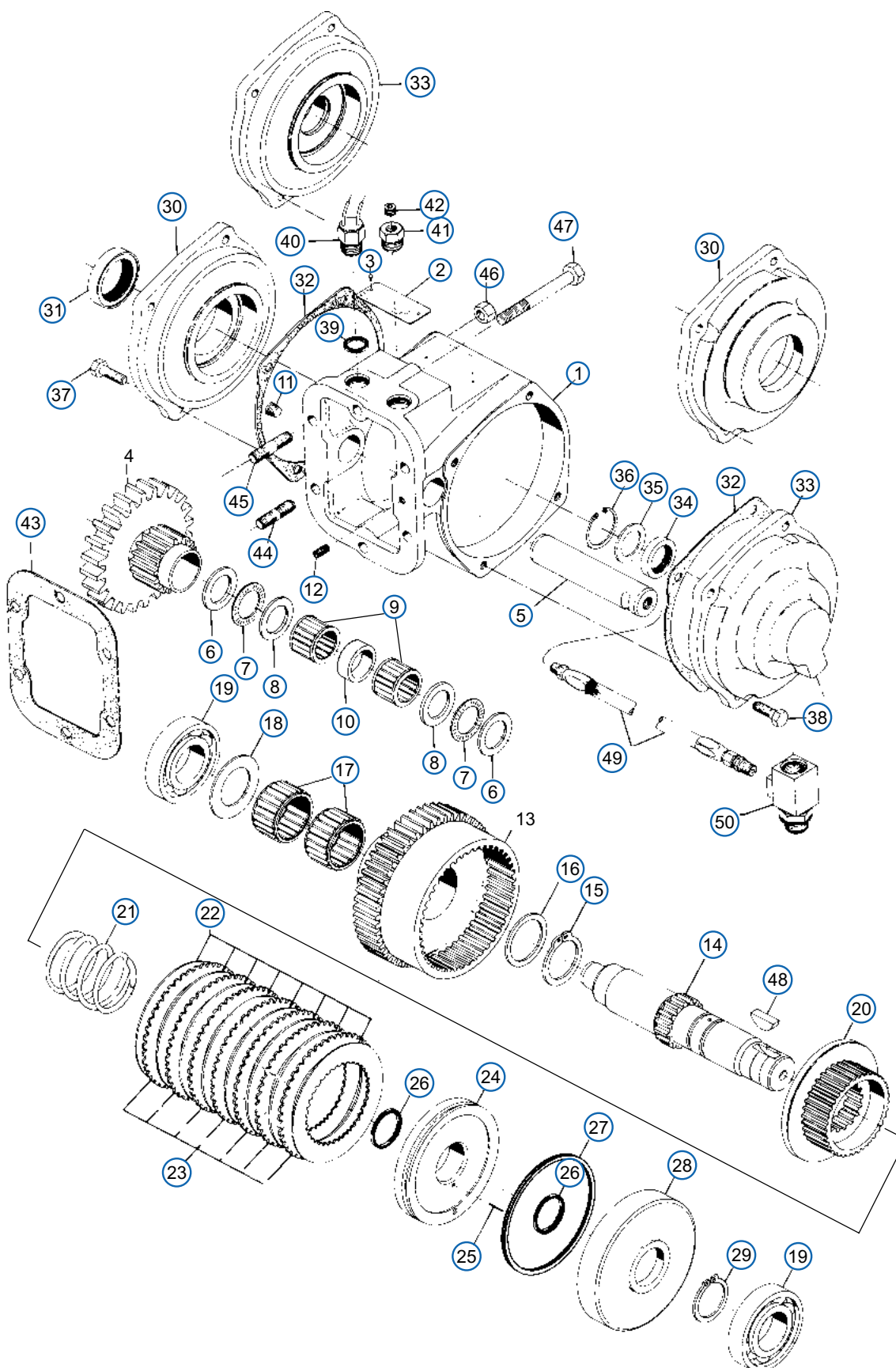
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**270 Bill of Materials****Power Take-Offs****270/271 Series**

| Item | Part Number                     | Description                                                                               | Quantity |
|------|---------------------------------|-------------------------------------------------------------------------------------------|----------|
| 1 ►  | <a href="#">1-P-437</a>         | Housing, Standard Mount .....                                                             | 1        |
| ►    | <a href="#">1-P-460</a>         | Housing, Special Mount for Jatco .....                                                    | 1        |
| 2 ►  | <a href="#">68-P-2</a>          | Name Plate .....                                                                          | 1        |
| 3 ►  | <a href="#">378422</a>          | Drive Screw .....                                                                         | 2        |
| 4    | <a href="#">See Chart Pg. 4</a> | Gear, Input .....                                                                         | 1        |
| 5 ►  | <a href="#">9-P-54</a>          | Shaft, Input Idler (Pressure Lube) .....                                                  | 1        |
| ►    | <a href="#">9-P-55</a>          | Shaft, Input Idler (No Pressure Lube) .....                                               | 1        |
| 6 ►  | <a href="#">31-P-61</a>         | Thrust Washer (0.031" Thick) .....                                                        | 2        |
| 7 ►  | <a href="#">560920</a>          | Bearing, Needle Thrust .....                                                              | 2        |
| 8 ►  | <a href="#">31-P-62</a>         | Thrust Washer (0.125" Thick) .....                                                        | 2        |
| 9 ►  | <a href="#">550886</a>          | Roller Bearing (Idler Pin) .....                                                          | 2        |
| 10 ► | <a href="#">14-P-54</a>         | Spacer, Needle Bearing (Idler Shaft) .....                                                | 1        |
| 11 ► | <a href="#">379231</a>          | Pipe Plug (0.125"-27 N.P.T.F.) .....                                                      | 1        |
| 12 ► | <a href="#">378452-7</a>        | Set Screw (0.250"-20 x 0.312") .....                                                      | 1        |
| 13   | <a href="#">See Chart Pg. 4</a> | Gear, Output .....                                                                        | 1        |
| 14 ► | <a href="#">3-P-679</a>         | Output Shaft, Standard Output 1-.250" Rd. (Assemblies 3 & 5) .....                        | 1        |
| N.S. | <a href="#">3-P-677</a>         | Output Shaft, Standard Output 1-.250" Rd. (Assemblies 4 & 6) .....                        | 1        |
| N.S. | <a href="#">3-P-678</a>         | Shaft, Output 0.875" 13 Tooth Internal Spline ("XK" & "XP" Assemblies 4 & 6) .....        | 1        |
| N.S. | <a href="#">3-P-686</a>         | Shaft, Output 0.875" 13 Tooth Internal Spline ("XK" & "XP" Assemblies 3 & 5) .....        | 1        |
| N.S. | <a href="#">3-P-703</a>         | Shaft, Output 0.875" 13 Tooth Internal Spline ("RA" & "RB" & "XR" Assemblies 3 & 5) ..... | 1        |
| N.S. | <a href="#">3-P-787</a>         | Shaft, Output 1.250 Tapered -.312 key way ("XX" Assemblies 3 & 5) .....                   | 1        |
| N.S. | <a href="#">3-P-788</a>         | Shaft, Output 1.250 Tapered -.312 key way ("XX" Assemblies 4 & 6) .....                   | 1        |
| N.S. | <a href="#">3-P-896</a>         | Shaft, Output 1" 15 Tooth Internal Spline ("AF" Assemblies 3 & 5) .....                   | 1        |
| N.S. | <a href="#">3-P-895</a>         | Shaft, Output 1" 15 Tooth Internal Spline ("AF" Assemblies 4 & 6) .....                   | 1        |
| 15 ► | <a href="#">378608</a>          | Snap Ring .....                                                                           | 1        |
| 16 ► | <a href="#">14-P-49</a>         | Spacer, Needle Bearing (Drive Shaft) .....                                                | 1        |
| 17 ► | <a href="#">560918</a>          | Roller Bearing (Output Shaft) .....                                                       | 2        |
| 18 ► | <a href="#">31-P-57</a>         | Thrust Washer (Output Shaft) .....                                                        | 1        |
| 19 ► | <a href="#">550010</a>          | Ball Bearing (Output Shaft) .....                                                         | 2        |
| 20 ► | <a href="#">2-P-458</a>         | Inner Clutch Gear .....                                                                   | 1        |
| 21 ► | <a href="#">37-P-39</a>         | Clutch Spring .....                                                                       | 1        |
| 22 ► | <a href="#">379485</a>          | Friction Disc .....                                                                       | 8        |
| 23 ► | <a href="#">379595</a>          | Clutch Plate .....                                                                        | 7        |
| ►    | <a href="#">328676X</a>         | Clutch Piston & Ball Assembly .....                                                       | 1        |
| 24   | <a href="#">379133</a>          | Piston .....                                                                              | 1        |
| 25 ► | <a href="#">378856</a>          | Wiggler Wire (.012" Diameter) .....                                                       | 1        |
| 26 ► | <a href="#">28-P-244</a>        | O-Ring .....                                                                              | 2        |
| 27 ► | <a href="#">28-P-121</a>        | Block Vee Ring .....                                                                      | 1        |
| 28 ► | <a href="#">378760</a>          | Clutch Back-up Cylinder .....                                                             | 1        |
| 29 ► | <a href="#">378576</a>          | Snap Ring .....                                                                           | 1        |
| 30 ► | <a href="#">21-P-451</a>        | Bearing Cover, Open End (Assemblies 3 & 5) .....                                          | 1        |
| ►    | <a href="#">21-P-297</a>        | Bearing Cover, Open End (Assemblies 4 & 6) .....                                          | 1        |
| 31 ► | <a href="#">28-P-119</a>        | Oil Seal .....                                                                            | 1        |
| 32 ► | <a href="#">22-P-53</a>         | Gasket, Bearing Cover .....                                                               | 2        |
| ►    | <a href="#">328806X</a>         | Bearing Cover Assembly, Closed End (Assemblies 3 & 5) .....                               | 1        |
| ►    | <a href="#">328988X</a>         | Bearing Cover Assembly, Closed End (Assemblies 4 & 6) .....                               | 1        |
|      |                                 | (Includes items 33 thru 36)                                                               |          |
| 33 ► | <a href="#">21-P-295</a>        | Bearing Cover, Closed End (Assemblies 3 & 5) .....                                        | 1        |
| ►    | <a href="#">21-P-449</a>        | Bearing Cover, Closed End (Assemblies 4 & 6) .....                                        | 1        |
| 34 ► | <a href="#">28-P-119</a>        | Oil Seal .....                                                                            | 1        |
| 35 ► | <a href="#">378811</a>          | Back-up Plate .....                                                                       | 1        |
| 36 ► | <a href="#">378849</a>          | Snap Ring .....                                                                           | 1        |
| 37 ► | <a href="#">378430-10</a>       | Capscrew, Hex Head (.312"-18 x 1") Assemblies 4 & 6, Open End .....                       | 4        |
| ►    | <a href="#">378430-12</a>       | Capscrew, Hex Head (.312"-18 x 1.250") Assemblies 3 & 5, Closed End .....                 | 4        |
| 38 ► | <a href="#">378430-10</a>       | Capscrew, Hex Head (.312"-18 x 1") Assemblies 3 & 5, Open End .....                       | 4        |
| ►    | <a href="#">378430-12</a>       | Capscrew, Hex Head (.312"-18 x 1.250") Assemblies 4 & 6, Closed End .....                 | 4        |
| 39 ► | <a href="#">28-P-171</a>        | O-Ring, Speed Sensor .....                                                                | 1        |
| 40 ► | <a href="#">379243</a>          | Speed Sensor (Transducer) Included w/Electronic Overspeed Control .....                   | 1        |
| 41 ► | <a href="#">379242</a>          | Adapter Plug with E.O.C. ....                                                             | 1 or     |
|      |                                 | Adapter Plug without E.O.C. ....                                                          | 2        |

Parts List continued on next page.

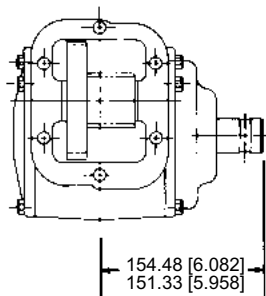
Bulletin HY25-2270-M1/US  
**270 Bill of Materials**

**Power Take-Offs**  
**270/271 Series**

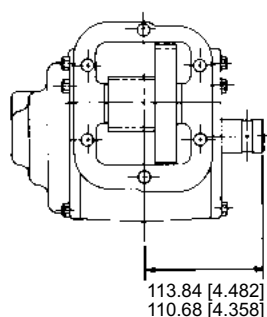
| Item                | Part Number                 | Description                                                                                                                  | Quantity |
|---------------------|-----------------------------|------------------------------------------------------------------------------------------------------------------------------|----------|
| 42 ►                | <a href="#">379231</a>      | Pipe Plug (.125"-27 N.P.T.F.) with E.O.C. ....                                                                               | 1 or     |
| ►                   | <a href="#">328951-6X</a>   | Pipe Plug (.125"-27 N.P.T.F.) without E.O.C. ....                                                                            | 2        |
| 43 ►                | <a href="#">35-P-41</a>     | Mounting Gasket & Installation Instructions .....                                                                            | 1        |
| ►                   |                             | Gasket, Mounting .....                                                                                                       | 1        |
| <b>LOOSE PARTS</b>  |                             |                                                                                                                              |          |
| ►                   | <a href="#">328170-101X</a> | Mounting Parts Kit (Items 44 thru 47) .....                                                                                  | 1 or     |
| 44 ►                | <a href="#">379457-13</a>   | Shoulder Stud (.375"-16 & .375"-24—1.75") .....                                                                              | 1        |
| N.S.                | <a href="#">379423-14</a>   | Stud (.375"-16 & .375"-24—1.75") .....                                                                                       | 2        |
| 45                  | <a href="#">379423-16</a>   | Stud (.375"-16 & .375"-24—1.875") .....                                                                                      | 2        |
| N.S.                | <a href="#">379224</a>      | Tab-lock Washer .....                                                                                                        | 1        |
| 46                  | <a href="#">379774</a>      | Flange Nut (.375"-24) .....                                                                                                  | 5        |
| 47 ►                | <a href="#">378935</a>      | Capscrew (.375"-16 x 3 .250") .....                                                                                          | 1        |
|                     | <a href="#">328170-205X</a> | Mounting Parts Kit, Aisin A445 Only .....                                                                                    | 1 or     |
|                     | <a href="#">7170-87X</a>    | Mounting Parts Kit, Jatco 270J .....                                                                                         | 1 or     |
|                     | <a href="#">7170-103X</a>   | Mounting Parts Kit, Allison 1000, 2000/2400 .....                                                                            | 1        |
| N.S.                | <a href="#">379111</a>      | Square Key ("XX" Output) .....                                                                                               | 1 or     |
| 48 ►                | <a href="#">500007-29</a>   | Woodruff Key .....                                                                                                           | 1        |
| 49 ►                | <a href="#">328075X</a>     | Pressure Lube Hose, Allison .....                                                                                            | 1        |
| ►                   | <a href="#">329087X</a>     | Pressure Lube Hose, Jatco 270J .....                                                                                         | 1        |
| 50 ►                | <a href="#">378840</a>      | Street Tee, Allison AT Series .....                                                                                          | 1        |
| ►                   | <a href="#">378970</a>      | Street Tee, Allison MT Series 1975 & After .....                                                                             | 1        |
| ►                   | <a href="#">378880</a>      | Street Tee, Allison MT Series 1974 & Before .....                                                                            | 1        |
| ►                   | <a href="#">378897</a>      | Street Tee, Allison CLT, CLBT & HT Series .....                                                                              | 1        |
| N.S.                | <a href="#">329049X</a>     | Fitting Kit, Jatco .....                                                                                                     | 1        |
| N.S.                | <a href="#">329297X</a>     | Fitting Kit, Allison 1000, 2000/2400 (High Pressure Port) .....                                                              | 1        |
| N.S.                | <a href="#">329246X</a>     | Fitting Kit, Aisin .....                                                                                                     | 1        |
| ►                   | <a href="#">328748X</a>     | <b>For Item 50 or Fitting Kits, see application pages for correct fittings</b><br>Pump Mounting Kit ("XR" Output Only) ..... | 1        |
| <b>SERVICE KITS</b> |                             |                                                                                                                              |          |
| N.S.                | <a href="#">328356-21X</a>  | Gasket & Seal Kit .....                                                                                                      | 1        |
| N.S.                | <a href="#">328970X</a>     | Service Kit, Clutch Pack .....                                                                                               | 1        |
| N.S.                | <a href="#">328971X</a>     | Service Kit, Clutch Pack & Back-Up Piston .....                                                                              | 1        |
| N.S.                | <a href="#">328992X</a>     | Hose Kit, For Solenoid Valve Plumbing .....                                                                                  | 1        |
| N.S.                | <a href="#">328933-12X</a>  | Housing Conversion Kit (With E.O.C.) 12 Volt .....                                                                           | 1        |
| N.S.                | <a href="#">328933-24X</a>  | Housing Conversion Kit (With E.O.C.) 24 Volt .....                                                                           | 1        |
| N.S.                | <a href="#">328935-12X</a>  | Field Conversion Kit / 12 volt .....                                                                                         | 1        |

N.S. — Not Shown

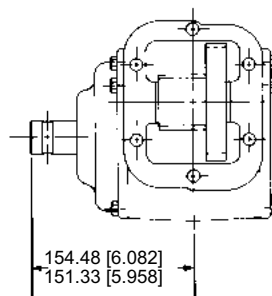
### Assembly Arrangements - 270 Series



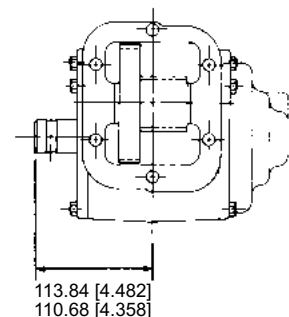
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4



5



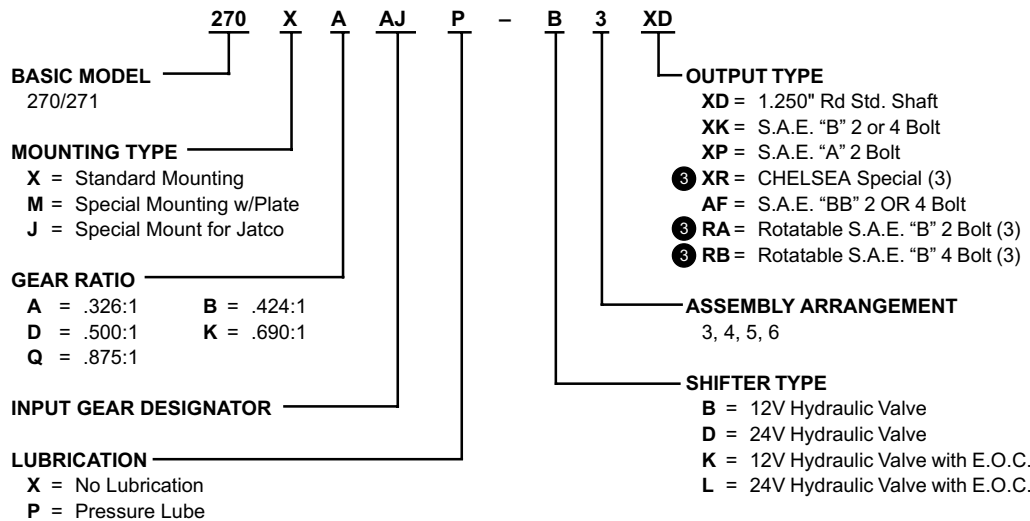
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N.S. - Not Shown

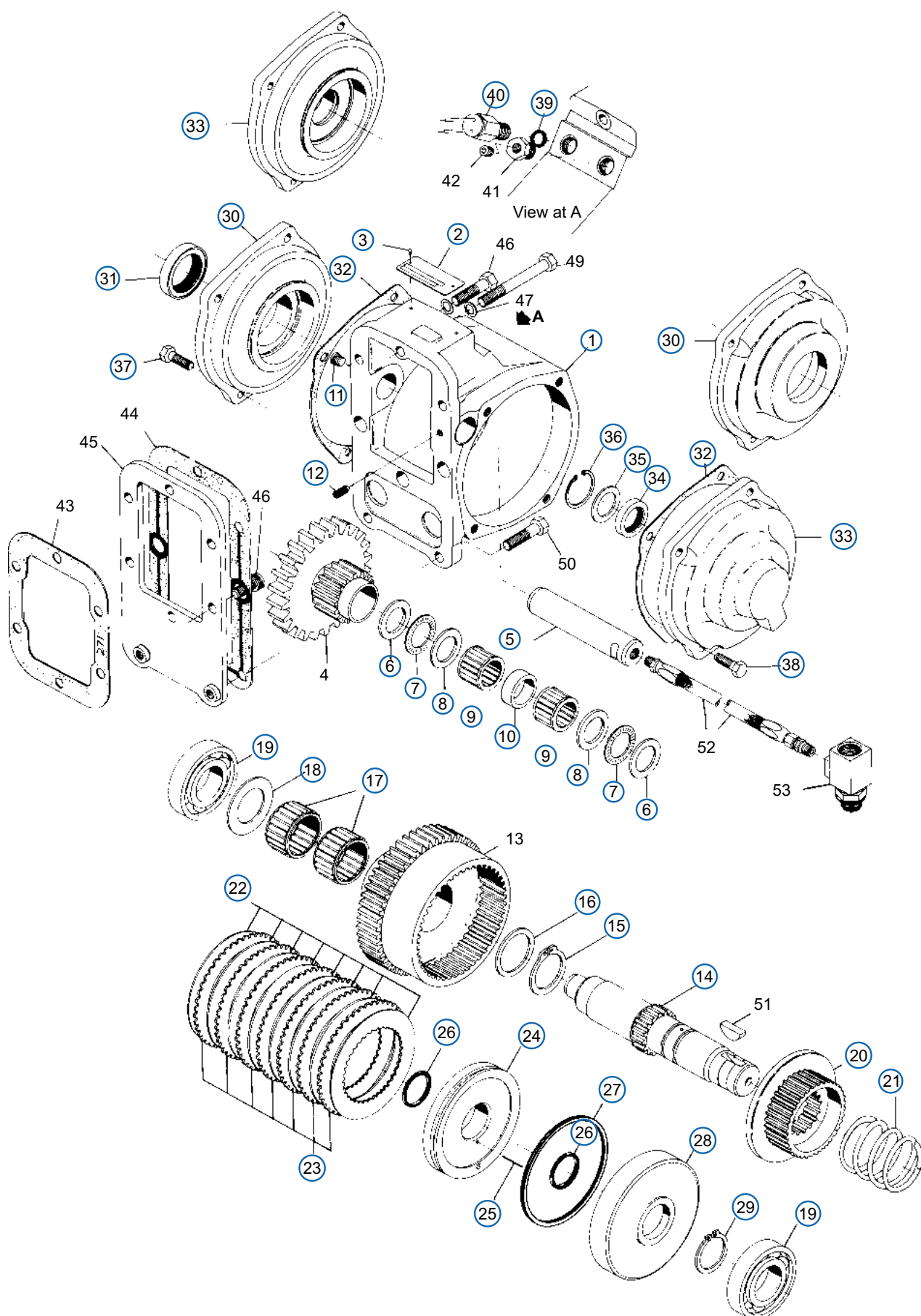
## Gear Chart

| P.T.O.<br>MODEL NO     | PART<br>NUMBER | NO TEETH<br>IN CLUSTER<br>(Lg)-(Sm) | APPLICATION<br>& GEAR TYPE    | OUTPUT GEAR ITEM 13 |           |
|------------------------|----------------|-------------------------------------|-------------------------------|---------------------|-----------|
|                        |                |                                     |                               | PART NO.            | NO. TEETH |
| 270XAAJ }<br>271MAAJ } | ► 5-P-567      | 25-18                               | Allison, Spur                 | 2-P-473             | 53        |
| 270XAAK                | 5-P-548        | 25-18                               | Allison, Spur                 | 2-P-473             | 53        |
| 270XBAJ }<br>271MBAJ } | ► 5-P-568      | 25-15                               | Allison, Spur                 | 2-P-481             | 34        |
| 270XDAJ }<br>271MDAJ } | ► 5-P-695      | 25-24                               | Allison, Spur                 | 2-P-606             | 47        |
| 270XDAK                | 5-P-807        | 25-24                               | Allison, Spur                 | 2-P-606             | 47        |
| 270XDFR                | 5-P-960        | 35-24                               | Fuller, Spur                  | 2-P-606             | 47        |
| 270JGFA                | 5-P-882        | 36-19                               | Jatco, Spur                   | 2-P-481             | 34        |
| 270XKAJ }<br>271MKAJ } | ► 5-P-769      | 25-29                               | Allison, Spur                 | 2-P-638             | 42        |
| 271MKAK                | 5-P-881        | 25-29                               | Allison, Spur                 | 2-P-638             | 42        |
| 270XKFR                | 5-P-949        | 35-29                               | Fuller, Spur                  | 2-P-638             | 42        |
| 270XKGR                | 5-P-1159       | 25-29                               | Z/F, Spur                     | 2-P-638             | 42        |
| 270XQGR                | 5-P-1158       | 25-34                               | Z/F, Spur                     | 2-P-639             | 37        |
| 270XAJF                | 5-P-1251       | 36-18                               | Aisin A445, Spur              | 2-P-473             | 53        |
| 270XBJF                | 5-P-1252       | 36-15                               | Aisin A445, Spur              | 2-P-481             | 53        |
| 270XDJF                | 5-P-1253       | 36-24                               | Aisin A445, Spur              | 2-P-606             | 47        |
| 270XKJF                | 5-P-1254       | 36-29                               | Aisin A445, Spur              | 2-P-638             | 42        |
| 270XQJF                | 5-P-1255       | 36-34                               | Aisin A445, Spur              | 2-P-639             | 37        |
| 270GAHV }<br>271GAHV } | ► 5-P-1295     | 27-18                               | Allison 1000, 2000/2400, Spur | 2-P-473             | 53        |
| 270GBHV }<br>271GBHV } | ► 5-P-1296     | 27-15                               | Allison 1000, 2000/2400, Spur | 2-P-481             | 34        |
| 270GDHV }<br>271GDHV } | ► 5-P-1297     | 27-24                               | Allison 1000, 2000/2400, Spur | 2-P-606             | 47        |

## Model Number Designation



③ Available assembly 3 &amp; 5 only

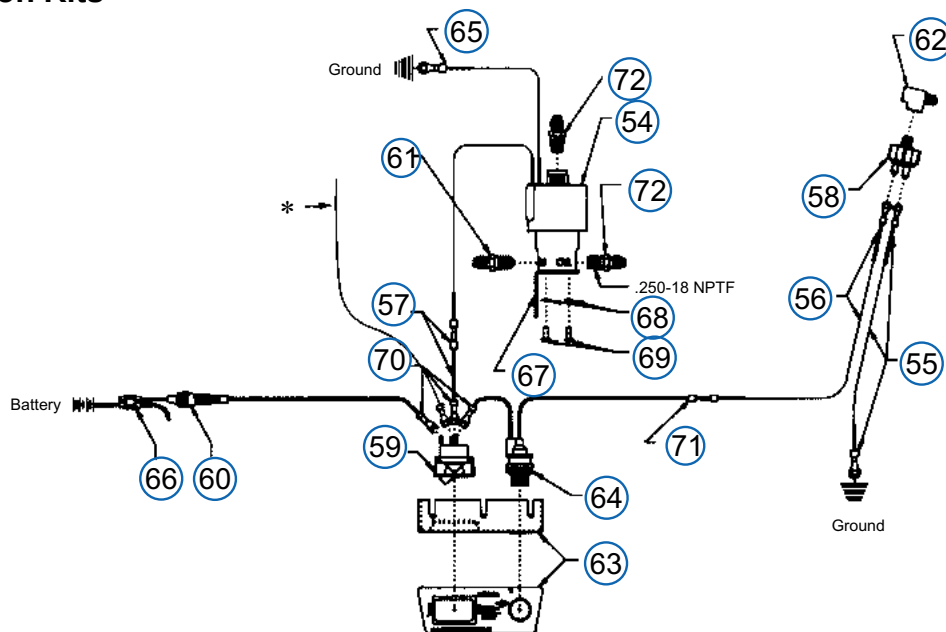


**271 Bill of Materials****Power Take-Offs****270/271 Series**

| Item | Part Number                     | Description                                                                           | Quantity |
|------|---------------------------------|---------------------------------------------------------------------------------------|----------|
| 1 ►  | <a href="#">1-P-436</a>         | Housing, Standard Mount .....                                                         | 1        |
| 2 ►  | <a href="#">68-P-2</a>          | Name Plate .....                                                                      | 1        |
| 3 ►  | <a href="#">378422</a>          | Drive Screw .....                                                                     | 2        |
| 4 ►  | <a href="#">See Chart Pg. 4</a> | Gear, Input .....                                                                     | 1        |
| 5 ►  | <a href="#">9-P-54</a>          | Shaft, Input Idler (Pressure Lube) .....                                              | 1        |
| 6 ►  | <a href="#">9-P-55</a>          | Shaft, Input Idler (No Pressure Lube) .....                                           | 1        |
| 7 ►  | <a href="#">31-P-61</a>         | Thrust Washer (Idler Shaft 0.031" Thick) .....                                        | 2        |
| 8 ►  | <a href="#">560920</a>          | Bearing, Needle Thrust .....                                                          | 2        |
| 9 ►  | <a href="#">31-P-62</a>         | Thrust Race (Idler shaft 0.125" Thick) .....                                          | 2        |
| 10 ► | <a href="#">550886</a>          | Roller Bearing (Idler Pin) .....                                                      | 2        |
| 11 ► | <a href="#">14-P-54</a>         | Spacer, Needle Bearing (Idler Shaft) .....                                            | 1        |
| 12 ► | <a href="#">379231</a>          | Pipe Plug (0.125"-27 N.P.T.F.) .....                                                  | 1        |
| 13 ► | <a href="#">378452-7</a>        | Setscrew (0.250"-20 x 0.312") .....                                                   | 1        |
| 14 ► | <a href="#">See Chart Pg. 4</a> | Gear, Output .....                                                                    | 1        |
| N.S. | <a href="#">3-P-679</a>         | Shaft, Output 1.250" Rd. ("XD" Assemblies 3 & 5) .....                                | 1 or     |
| N.S. | <a href="#">3-P-677</a>         | Shaft, Output 1.250" Rd. ("XD" Assemblies 4 & 6) .....                                | 1        |
| N.S. | <a href="#">3-P-678</a>         | Shaft, Output 0.875" 13 Tooth Internal Spline ("XK & XP" Assemblies 4 & 6) .....      | 1        |
| N.S. | <a href="#">3-P-686</a>         | Shaft, Output 0.875" 13 Tooth Internal Spline ("XK & XP" Assemblies 3 & 5) .....      | 1        |
| N.S. | <a href="#">3-P-703</a>         | Shaft, Output 0.875" 13 Tooth Internal Spline ("RA & RB & XR" Assemblies 3 & 5) ..... | 1        |
| N.S. | <a href="#">3-P-787</a>         | Shaft, Output 1.250 Tapered -.312 key way ("XX" Assemblies 3 & 5) .....               | 1        |
| N.S. | <a href="#">3-P-788</a>         | Shaft, Output 1.250 Tapered -.312 key way ("XX" Assemblies 4 & 6) .....               | 1        |
| N.S. | <a href="#">3-P-896</a>         | Shaft, Output 1" 15 Tooth Internal Spline ("AF" Assemblies 3 & 5) .....               | 1        |
| N.S. | <a href="#">3-P-895</a>         | Shaft, Output 1" 15 Tooth Internal Spline ("AF" Assemblies 4 & 6) .....               | 1        |
| 15 ► | <a href="#">378608</a>          | Snap Ring .....                                                                       | 1        |
| 16 ► | <a href="#">14-P-49</a>         | Spacer .....                                                                          | 1        |
| 17 ► | <a href="#">560918</a>          | Roller Bearing .....                                                                  | 2        |
| 18 ► | <a href="#">31-P-57</a>         | Thrust Washer .....                                                                   | 1        |
| 19 ► | <a href="#">550010</a>          | Ball bearing .....                                                                    | 2        |
| 20 ► | <a href="#">2-P-458</a>         | Inner Clutch Gear .....                                                               | 1        |
| 21 ► | <a href="#">37-P-39</a>         | Clutch Spring .....                                                                   | 1        |
| 22 ► | <a href="#">379485</a>          | Friction Disc .....                                                                   | 8        |
| 23 ► | <a href="#">378684</a>          | Clutch Plate .....                                                                    | 7        |
| 24 ► | <a href="#">328676X</a>         | Clutch Piston & Ball Assembly .....                                                   | 1        |
| 25 ► | <a href="#">379133</a>          | Piston .....                                                                          | 1        |
| 26 ► | <a href="#">378856</a>          | Wiggler Wire (.012" Diameter) .....                                                   | 1        |
| 27 ► | <a href="#">28-P-244</a>        | O-Ring .....                                                                          | 2        |
| 28 ► | <a href="#">28-P-121</a>        | Block Vee Ring .....                                                                  | 1        |
| 29 ► | <a href="#">378760</a>          | Clutch Back-up Cylinder .....                                                         | 1        |
| 30 ► | <a href="#">378576</a>          | Snap Ring .....                                                                       | 1        |
| 31 ► | <a href="#">21-P-451</a>        | Bearing Cover, Open End (Assemblies 3 & 5) .....                                      | 1        |
| 32 ► | <a href="#">21-P-297</a>        | Bearing Cover, Open End (Assemblies 4 & 6) .....                                      | 1        |
| 33 ► | <a href="#">28-P-225</a>        | Oil Seal .....                                                                        | 1        |
| 34 ► | <a href="#">22-P-53</a>         | Gasket, Bearing Cover .....                                                           | 2        |
| 35 ► | <a href="#">328806X</a>         | Bearing Cover Assembly, Closed End (Assemblies 3 & 5) .....                           | 1        |
| 36 ► | <a href="#">328988X</a>         | Bearing Cover Assembly, Closed End (Assemblies 4 & 6) .....                           | 1        |
| 37 ► | <a href="#">21-P-295</a>        | (Includes items 33 thru 36)                                                           |          |
| 38 ► | <a href="#">21-P-449</a>        | Bearing Cover, Closed End (Assemblies 3 & 5) .....                                    | 1        |
| 39 ► | <a href="#">28-P-119</a>        | Bearing Cover, Closed End (Assemblies 4 & 6) .....                                    | 1        |
| 40 ► | <a href="#">378811</a>          | Oil Seal .....                                                                        | 1        |
| 41 ► | <a href="#">378849</a>          | Back-Up Plate .....                                                                   | 1        |
| 42 ► | <a href="#">378430-10</a>       | Snap Ring .....                                                                       | 1        |
| 43 ► | <a href="#">378430-12</a>       | Capscrew, Hex Head (0.312"-18 x 1") Assemblies 4 & 6, Open End .....                  | 4        |
| 44 ► | <a href="#">378430-10</a>       | Capscrew, Hex Head (0.312"-18 x 1.250") Assemblies 3 & 5, Closed End .....            | 4        |
| 45 ► | <a href="#">378430-12</a>       | Capscrew, Hex Head (0.312"-18 x 1") Assemblies 3 & 5, Open End .....                  | 4        |
| 46 ► | <a href="#">378430-12</a>       | Capscrew, Hex Head (0.312"-18 x 1.250") Assemblies 4 & 6, Closed End .....            | 4        |
| 47 ► | <a href="#">28-P-171</a>        | O-Ring, Speed Sensor .....                                                            | 1        |
| 48 ► | <a href="#">379243</a>          | Speed Sensor (Transducer) Included w/Electronic Overspeed Control .....               | 1        |

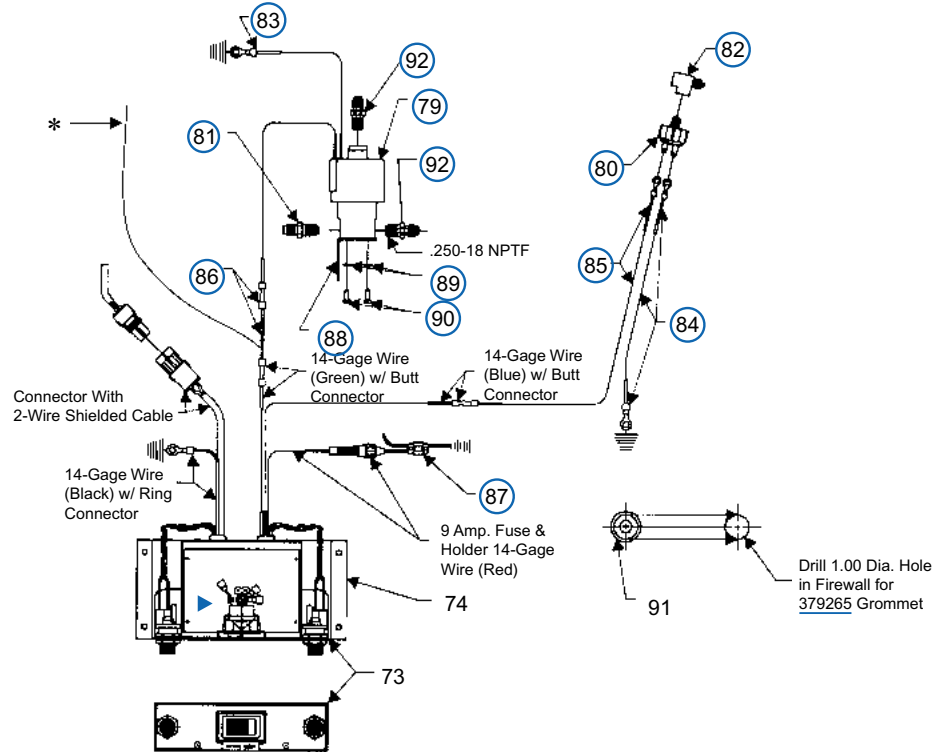
Parts List continued on next page.

## Shift Installation Kits



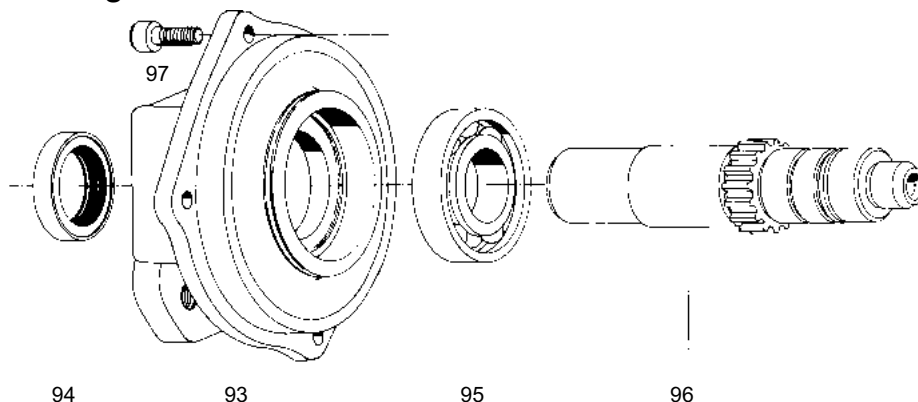
| Item | Part Number                      | Description                                                     | Quantity |
|------|----------------------------------|-----------------------------------------------------------------|----------|
| ▶    | <a href="#"><u>328715X</u></a>   | 12V SHIFT INSTALLATION KIT .....<br>(Includes items 54 thru 72) | 1        |
| ▶    | <a href="#"><u>328749X</u></a>   | 24V SHIFT INSTALLATION KIT .....<br>(Includes items 54 thru 72) | 1        |
| 54 ▶ | <a href="#"><u>379686-1</u></a>  | Solenoid Valve, 12 Volt for 328715X Kit .....                   | 1        |
| ▶    | <a href="#"><u>379686-2</u></a>  | Solenoid Valve, 24 Volt for 328749X Kit .....                   | 1        |
| 55 ▶ | <a href="#"><u>379254-14</u></a> | Wire, Black w/Two Ring Connectors .....                         | 1        |
| 56 ▶ | <a href="#"><u>379254-13</u></a> | Wire, Blue w/One Ring Connector .....                           | 1        |
| 57 ▶ | <a href="#"><u>379254-3</u></a>  | Wire, Green w/One Butt Connector .....                          | 1        |
| ▶    | <a href="#"><u>328963X</u></a>   | Parts Bag, 12 Volt Kit (328715X) .....                          | 1        |
| ▶    | <a href="#"><u>328964X</u></a>   | Parts Bag, 24 Volt Kit (328749X) .....                          | 1        |
| 58   | <a href="#"><u>379547</u></a>    | Pressure Switch .....                                           | 1        |
| 59 ▶ | <a href="#"><u>378881</u></a>    | Rocker Switch .....                                             | 1        |
| 60 ▶ | <a href="#"><u>378884</u></a>    | Fuse Holder, 9 Amp .....                                        | 1        |
| 61 ▶ | <a href="#"><u>379449</u></a>    | Screened Adaptor, 1/4-18 NPT .....                              | 1        |
| 62 ▶ | <a href="#"><u>378966</u></a>    | Street Tee, Screened .....                                      | 1        |
| 63 ▶ | <a href="#"><u>379336</u></a>    | Bracket .....                                                   | 1        |
| 64 ▶ | <a href="#"><u>378978</u></a>    | Indicator Light, 12V (Kits 328963X & 328715X) .....             | 1        |
|      | <a href="#"><u>379005</u></a>    | Indicator Light, 24V (Kits 328964X & 328749X) .....             | 1        |
| 65 ▶ | <a href="#"><u>379253</u></a>    | Ring Connector .....                                            | 2        |
| N.S. | <a href="#"><u>379061</u></a>    | Wire Ties .....                                                 | 6        |
| 66 ▶ | <a href="#"><u>379257</u></a>    | Splice Connector.....                                           | 1        |
| 67 ▶ | <a href="#"><u>379258</u></a>    | Bracket, Solenoid Mounting .....                                | 1        |
| 68 ▶ | <a href="#"><u>500357-7</u></a>  | Lock Washer .188 I.D. ....                                      | 2        |
| 69 ▶ | <a href="#"><u>500457-6</u></a>  | Screw, Mounting .190-32 x .438 .....                            | 2        |
| 70 ▶ | <a href="#"><u>379306</u></a>    | Fork Connector .....                                            | 3        |
| 71 ▶ | <a href="#"><u>379252</u></a>    | Butt Connector .....                                            | 1        |
| 72 ▶ | <a href="#"><u>379280</u></a>    | Adaptor Fitting .....                                           | 2        |
| *    | <a href="#"><u>329336-1X</u></a> |                                                                 |          |
|      | <a href="#"><u>379254-17</u></a> |                                                                 |          |

## Electronic Overspeed Control



| Item | Part Number       | Description                                                     | Quantity |
|------|-------------------|-----------------------------------------------------------------|----------|
|      | <u>328924-12X</u> | ▶ 12V E.O.C. (Includes Items 73 thru 78) .....                  | 1        |
|      | <u>328924-24X</u> | 24V E.O.C. (Includes Items 73 thru 78) .....                    | 1        |
| 73   | <u>328922-12X</u> | Control Box E.O.C. 12 volt .....                                | 1        |
|      | <u>328922-24X</u> | Control Box E.O.C. 24 volt .....                                | 1        |
| 74   | <u>379244</u>     | Bracket, E.O.C. Mounting .....                                  | 1        |
| 75   | <u>328923-10X</u> | Connector Cable, 10 ft. Standard .....                          | 1        |
|      | <u>328923-5X</u>  | Connector Cable, 5 ft. Optional .....                           | 1        |
|      | <u>328931X</u>    | ▶ Mounting Parts, E.O.C. Bracket .....                          | 1        |
| 76   | <u>500448-9</u>   | ▶ Screw, 10-24 .....                                            | 4        |
| 77   | <u>500357-7</u>   | ▶ Lockwasher .....                                              | 4        |
| 78   | <u>500376-6</u>   | Nut, Hex 10-24 .....                                            | 4        |
|      | <u>328929-12X</u> | ▶ 12V E.O.C. Installation Kit (Includes Items 79 thru 92) ..... | 1        |
|      | <u>328929-24X</u> | ▶ 24V E.O.C. Installation Kit (Includes Items 79 thru 92) ..... | 1        |
| 79   | <u>379686-1</u>   | ▶ Solenoid Valve, 12 Volt (for 328929-12X) .....                | 1        |
|      | <u>379686-2</u>   | ▶ Solenoid Valve, 24 Volt (for 328929-24X) .....                | 1        |
| 80   | <u>379547</u>     | Pressure Switch .....                                           | 1        |
| 81   | <u>379449</u>     | ▶ Screened Adaptor, 1/4-18 NPT .....                            | 1        |
| 82   | <u>378966</u>     | ▶ Street Tee, Screened .....                                    | 1        |
| 83   | <u>379253</u>     | ▶ Ring Connector .....                                          | 1        |
| 84   | <u>379254-14</u>  | ▶ Wire, Black w/Two Ring Connectors .....                       | 1        |
| 85   | <u>379254-13</u>  | ▶ Wire, Blue w/One Ring Connector .....                         | 1        |
| 86   | <u>379254-3</u>   | ▶ Wire, Green w/One Butt Connector .....                        | 1        |
| 87   | <u>379257</u>     | ▶ Splice Connector .....                                        | 1        |
| 88   | <u>379258</u>     | ▶ Bracket, Solenoid Mounting .....                              | 1        |
| 89   | <u>500357-7</u>   | ▶ Lockwasher .188 I.D. ....                                     | 2        |
| 90   | <u>500457-6</u>   | ▶ Screw, Mounting .190-32 x .438 .....                          | 2        |
| 91   | <u>379265</u>     | ▶ Grommet .....                                                 | 1        |
| 92   | <u>379280</u>     | ▶ Adaptor Fitting .....                                         | 2        |
| *    | <u>329336-24</u>  |                                                                 |          |
|      | <u>379254-8</u>   |                                                                 |          |

## Pump Shafts & Flanges



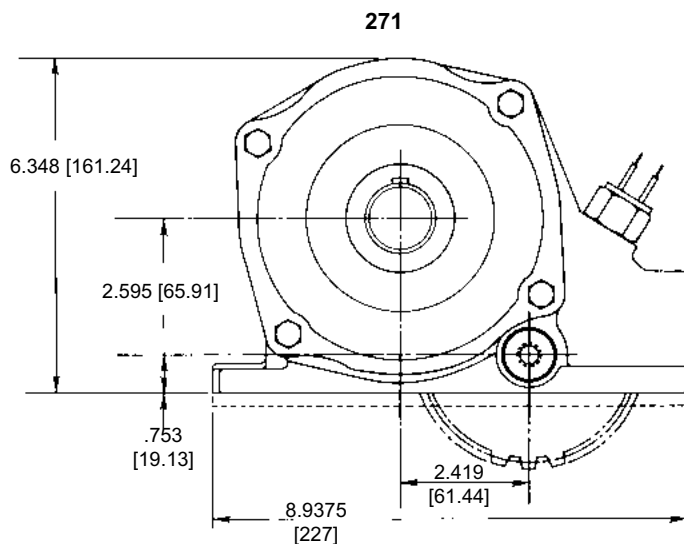
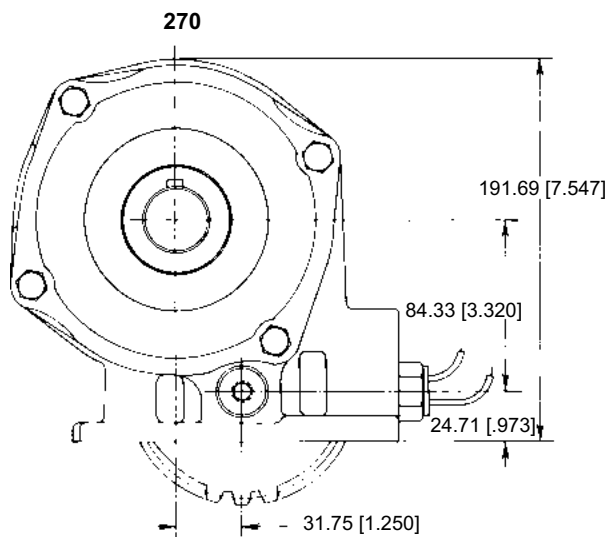
| Pump Mounting Suffix<br>(See Note)   | Flange<br>Item 93                                    | Seal<br>Item 94                                      | Bearing<br>Item 95                               | Output Shaft<br>Item 96                            | Hex Socket Head<br>Screw Item 97                     | Output<br>Type                             |
|--------------------------------------|------------------------------------------------------|------------------------------------------------------|--------------------------------------------------|----------------------------------------------------|------------------------------------------------------|--------------------------------------------|
| XK- Assembly 3 & 5<br>Assembly 4 & 6 | <a href="#">21-P-445</a><br><a href="#">21-P-303</a> | <a href="#">28-P-225</a><br><a href="#">28-P-225</a> | <a href="#">550010</a><br><a href="#">550010</a> | <a href="#">3-P-686</a><br><a href="#">3-P-678</a> | <a href="#">378447-7</a><br><a href="#">378447-6</a> | S.A.E. "B" 2 & 4 Bolt .875"-13T Pump Mount |
| XP- Assembly 3 & 5<br>Assembly 4 & 6 | <a href="#">21-P-313</a><br><a href="#">21-P-301</a> | <a href="#">28-P-225</a><br><a href="#">28-P-225</a> | <a href="#">550010</a><br><a href="#">550010</a> | <a href="#">3-P-686</a><br><a href="#">3-P-678</a> | <a href="#">378447-7</a><br><a href="#">378447-6</a> | S.A.E. "A" 2 Bolt .875"-13T Pump Mount     |
| XR- Assembly 3 & 5 (Only)*           | <a href="#">21-P-333</a>                             | <a href="#">28-P-225</a>                             | <a href="#">550010</a>                           | <a href="#">3-P-703</a>                            | <a href="#">378447-7</a>                             | Special Chelsea .875"-13T Pump Mount       |
| XY- Assembly 3 & 5<br>Assembly 4 & 6 | <a href="#">21-P-468</a><br><a href="#">21-P-468</a> | <a href="#">28-P-230</a><br><a href="#">28-P-230</a> | <a href="#">550010</a><br><a href="#">550010</a> | <a href="#">3-P-787</a><br><a href="#">3-P-788</a> | <a href="#">378447-7</a><br><a href="#">378447-7</a> | DIN 5462 Pump Mount                        |
| AF- Assembly 3 & 5<br>Assembly 4 & 6 | <a href="#">21-P-445</a><br><a href="#">21-P-303</a> | <a href="#">28-P-225</a><br><a href="#">28-P-225</a> | <a href="#">550010</a><br><a href="#">550010</a> | <a href="#">3-P-896</a><br><a href="#">3-P-895</a> | <a href="#">378447-7</a><br><a href="#">378447-6</a> | S.A.E. "BB" 2 & 4 Bolt 1"-13T Pump Mount   |

The Rotatable Flanges attach to the "XR" Flange.

|      | Flange**                 | Hex Head<br>Capcrew      | Output Type                                      |
|------|--------------------------|--------------------------|--------------------------------------------------|
| RA – | <a href="#">21-P-628</a> | <a href="#">378447-6</a> | Rotatable S.A.E. "B" 2 Bolt .875"-13T Pump Mount |
| RB – | <a href="#">21-P-572</a> | <a href="#">378447-6</a> | Rotatable S.A.E. "B" 4 Bolt .875"-13T Pump Mount |

\* 328748X Pump to Flange Mounting Kit must Be Used with "R" Suffix  
 Kit Contains: (4) 378430-11 Hex Head Cap Screws (.312"-18 x 1.125)  
 (4) 378919 Washers (Special)  
 (4) 45-P-11 Bushing Guide

## Case Dimensions



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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.

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**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, 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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**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.

9/01-P

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