

# CARCO®

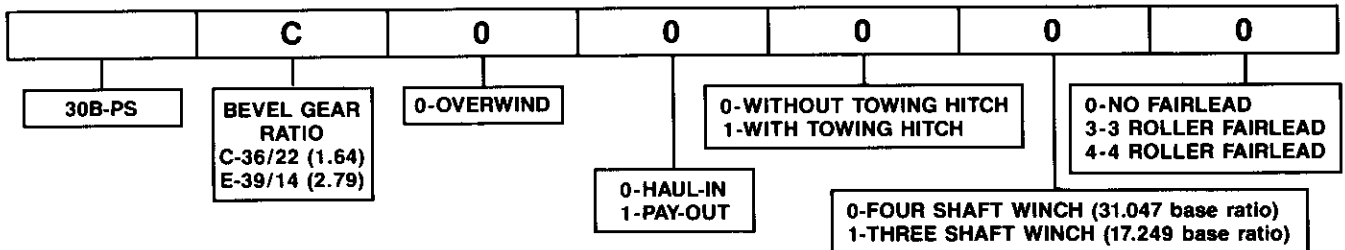
## PARTS MANUAL MODEL 30B-PS WINCH FOR

### CATERPILLAR D3B/C, D4B/C & D5C TRACTORS

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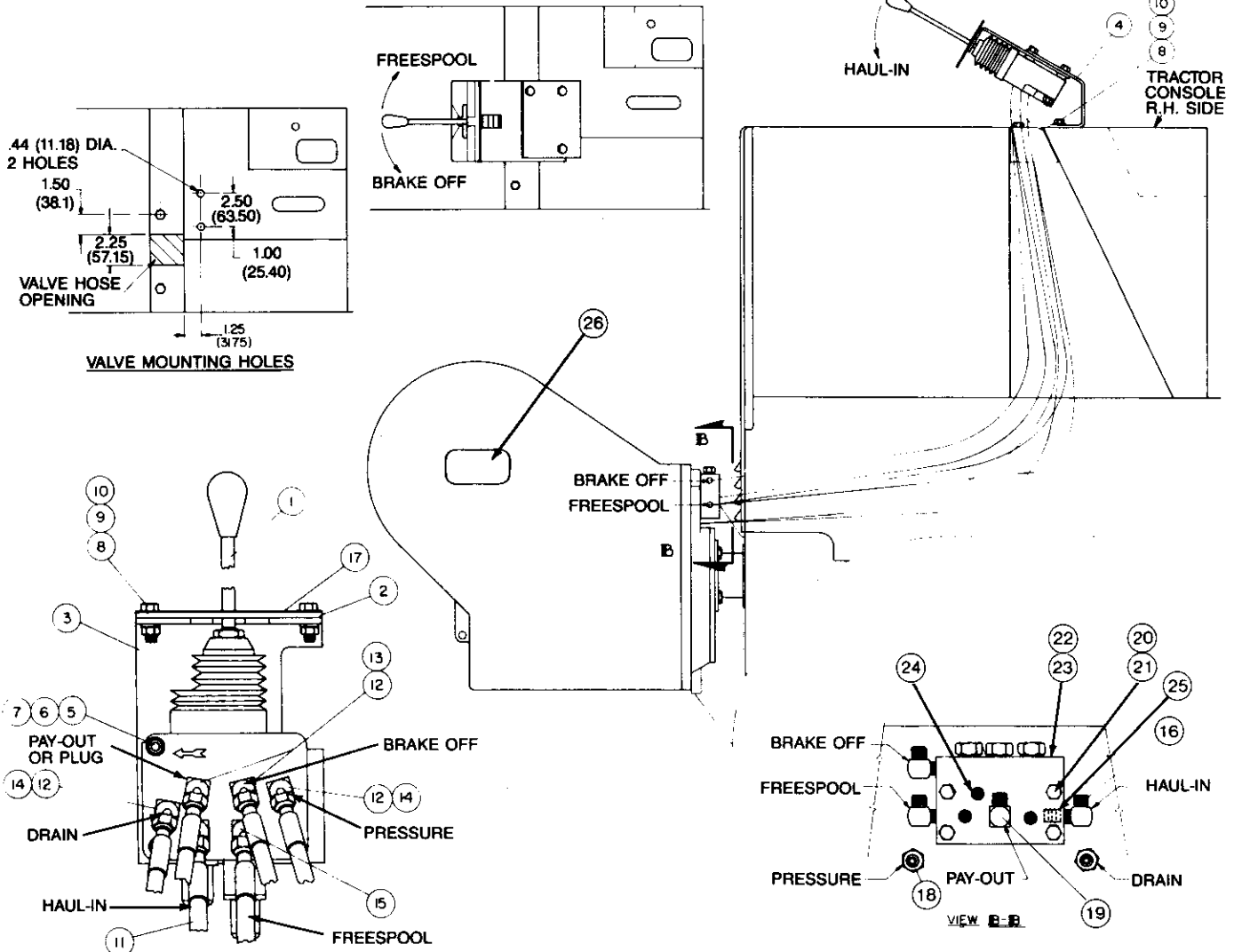
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#### MODEL NUMBER DESCRIPTION



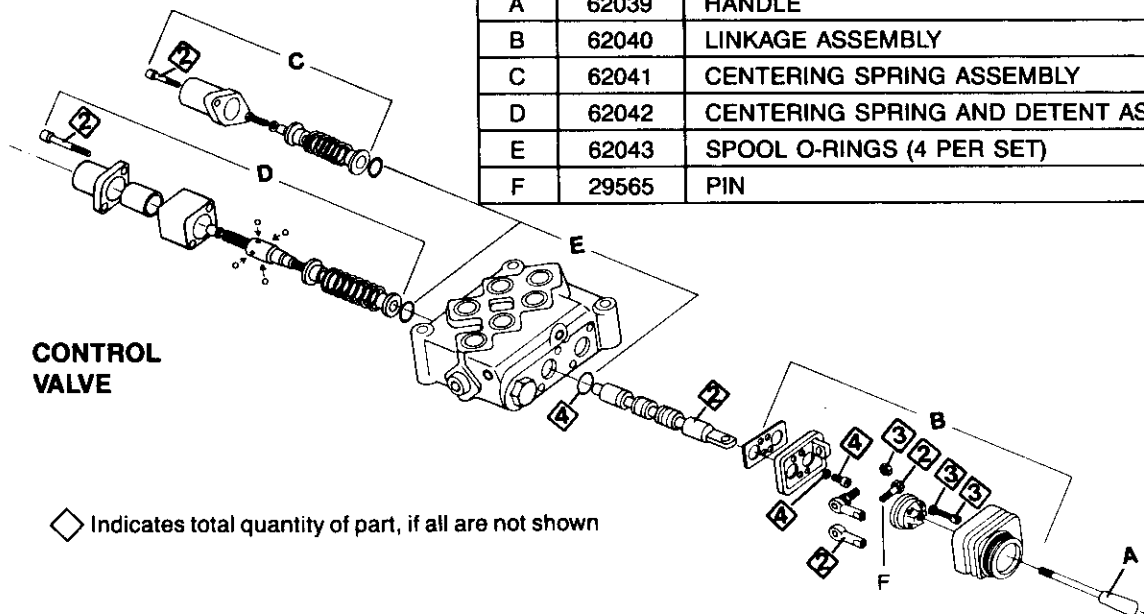
## **PACCAR WINCH DIVISIONS**

# MODEL 30B PS CONTROL GROUP



## CONTROL VALVE

| ITEM | PART NO. | DESCRIPTION                          | QTY. |
|------|----------|--------------------------------------|------|
| 1    | 26214    | VALVE                                | 1    |
| A    | 62039    | HANDLE                               | 1    |
| B    | 62040    | LINKAGE ASSEMBLY                     | 1    |
| C    | 62041    | CENTERING SPRING ASSEMBLY            | 1    |
| D    | 62042    | CENTERING SPRING AND DETENT ASSEMBLY | 1    |
| E    | 62043    | SPOOL O-RINGS (4 PER SET)            | 1    |
| F    | 29565    | PIN                                  | 2    |



◇ Indicates total quantity of part, if all are not shown

**CONTROL INSTALLATION INSTRUCTIONS**

NOTE: These instructions are provided as a general guide. Tractor options, application requirements or local regulations may require deviation from these recommendations.

1. Modify tractor right hand console and rear panel as shown.
2. Attach hoses (6 with payout, 5 without), item 11, to control valve, item 1, with adapters/elbows, items 12, 13, 14 and 15. Use view A-A for location of various adapters/elbows. Mark the end of each hose with masking tape and pen for port location; use valve plumbing diagram to determine port location.
3. Carefully route hoses from tractor RH console through tractor rear face. Route hoses to clear back-up alarm, battery, and other tractor control mechanisms.

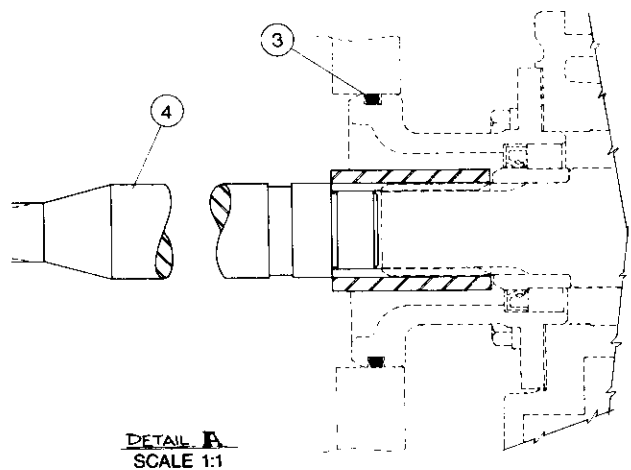
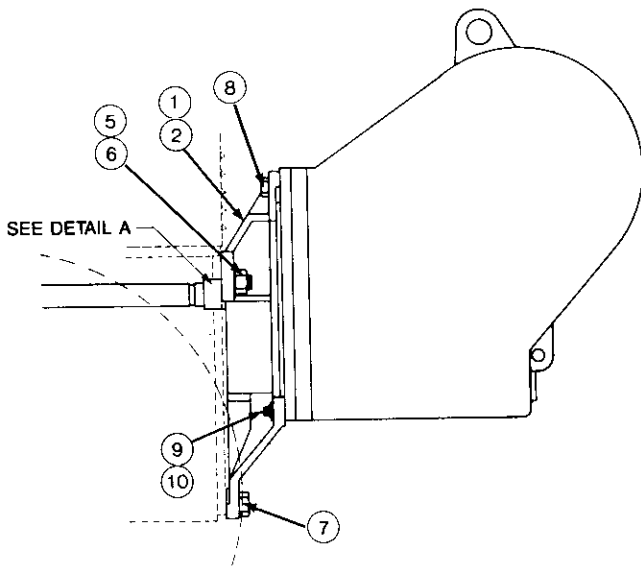
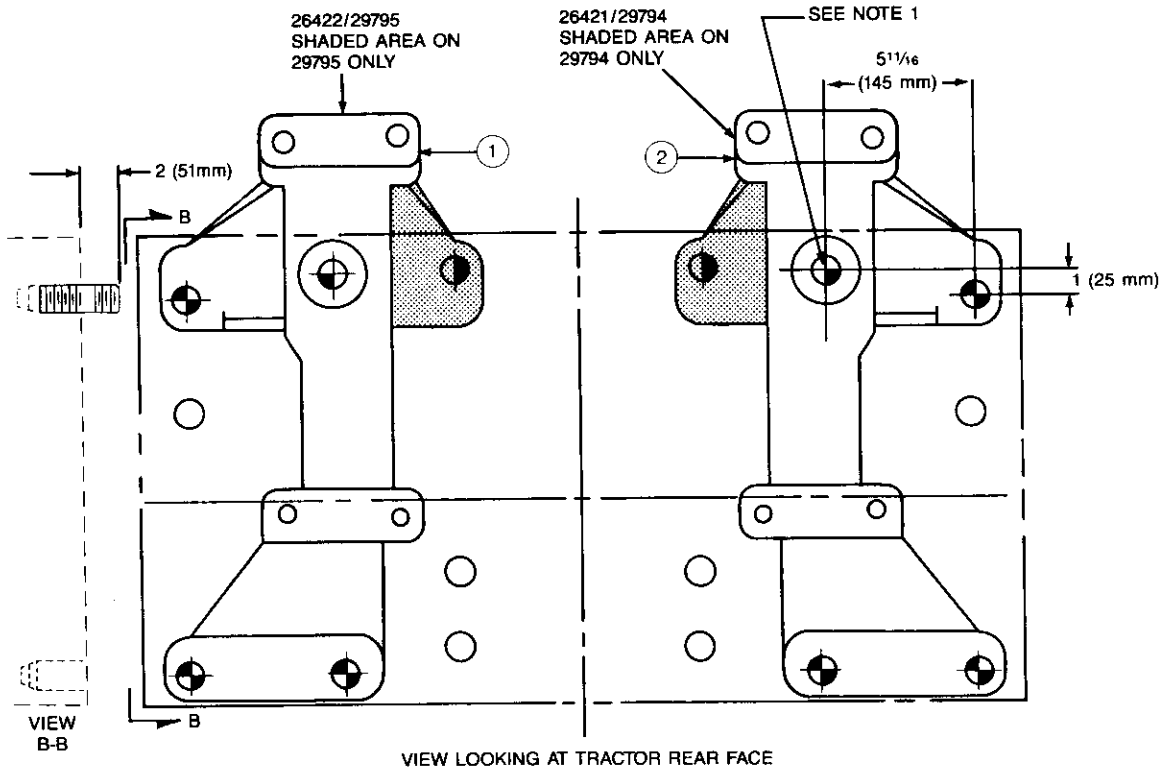
4. Mount bracket, item 4, to tractor console with fasteners, items 8, 9 and 10; torque to 31 lb•ft (42 N•m).
5. Attach control valve, item 1, to bracket, item 4, with fasteners, items 5, 6 and 7. Torque to 18 lb•ft (24 N•m).
6. Attach gater plate, item 2, and control placard, item 17, to bracket, item 4, with fasteners, items 8, 9 and 10; torque to 31 lb•ft (42 N•m).
7. Install elbows, items 16 and 19 and test port caps, item 24, on shuttle valve body, item 22. Install shuttle valve, item 22, onto winch with o-rings, item 23, and fasteners, items 20 and 21. Torque to 31 lb•ft (42 N•m). Install pressure and drain fittings, item 18, on winch.

Note that 90° elbow, item 19, contains an orifice. Insure that it is installed in the correct location, as illustrated.




| ITEM | DESCRIPTION                        | W/HAUL-IN ONLY |      | W/PAY-OUT |      |
|------|------------------------------------|----------------|------|-----------|------|
|      |                                    | PART NO.       | QTY. | PART NO.  | QTY. |
| 1    | CONTROL VALVE                      | 26214          | 1    | 26214     | 1    |
| 2    | GATER PLATE                        | 26409          | 1    | 26410     | 1    |
| 3    | VALVE BRACKET                      | 26833          | 1    | 26833     | 1    |
| 4    | MOUNTING BRACKET                   | 27102          | 1    | 27102     | 1    |
| 5    | CAPSCREW (5/16-18 × 2 3/4 G5, HEX) | 27148          | 3    | 27148     | 3    |
| 6    | WASHER, 5/16                       | 69640          | 3    | 69640     | 3    |
| 7    | HEX NUT (5/16-18 G2)               | 69644          | 3    | 69644     | 3    |
| 8    | CAPSCREW (3/8-16 × 1 G5, HEX)      | 27151          | 4    | 27151     | 4    |
| 9    | LOCKWASHER (3/8)                   | 27152          | 4    | 27152     | 4    |
| 10   | HEX NUT (3/8-16 G5)                | 27153          | 4    | 27153     | 4    |
| 11   | HOSE ASSEMBLY - 72"                | 27627          | 5    | 27627     | 6    |
| 12   | ELBOW, 45°                         | 27149          | 3    | 27149     | 4    |
| 13   | ADAPTER STRAIGHT                   | 79099          | 1    | 79099     | 2    |
| 14   | ADAPTER STRAIGHT                   | 26891          | 2    | 26891     | 2    |
| 15   | ELBOW, 45°                         | 25868          | 2    | 25868     | 2    |
| 16   | ELBOW, 90°                         | 31342          | 3    | 31342     | 3    |
| 17   | CONTROL PLACARD                    | 26609          | 1    | 26605     | 1    |
| 18   | ADAPTER, STRAIGHT                  | 31307          | 2    | 31307     | 2    |
| 19   | ELBOW, 90° W/ORIFICE               | ---            | ---  | 27746     | 1    |
| 20   | CAPSCREW (3/8-16 × 2 G5, HEX)      | 22704          | 4    | 22704     | 4    |
| 21   | WASHER (3/8)                       | 13929          | 4    | 13929     | 4    |
| 22   | MANIFOLD BLOCK                     | 27517          | 1    | 27518     | 1    |
| 22A  | SHUTTLE VALVE SEAL KIT             | 29874          | 2    | 29874     | 3    |
| 23   | O-RING, MANIFOLD TO CASE           | 72097          | 3    | 72097     | 4    |
| 24   | PLUG (1/8 NPT)                     | 22374          | 3    | 22374     | 3    |
| 25   | ORIFICE PLUG                       | 27748          | 1    | 27748     | 1    |
| 26   | RATING DECAL                       | 100098         | 1    | 100098    | 1    |

NOTE: On winches with haul-in only, a plug (part number 26686), is used in the pay-out port of the control valve.

**MODEL 30 PS  
MOUNTING GROUP**



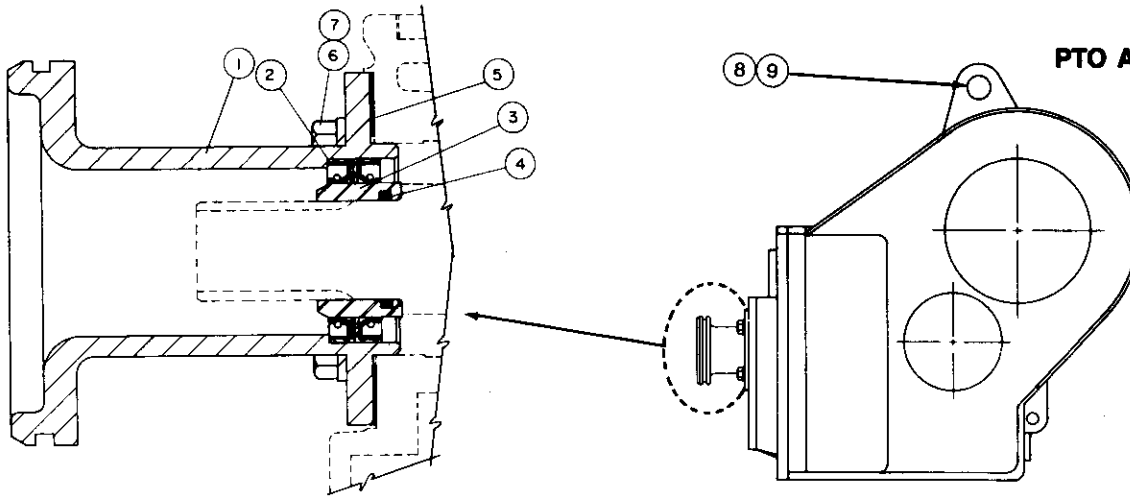
**LEGEND**

-  . . . mounting holes used on D3C, D4C, D5C with 26421/26422 and 29794/29795 brackets.
-  . . . mounting holes used on D3C, D4C, D5C with 29794/29795 brackets.
-  . . . mounting holes used on D3C, D4C, D5C with 26421/26422 brackets, see note 1.

**NOTE 1:** For mounting on D5C with 26421/26422 brackets, drill and tap 1"-8 UNC-2B x .88 deep. Use brackets as templates and match drill.

| ITEM | PART NO. | DESCRIPTION                            | QTY. |
|------|----------|--|------|
| 1    | 29794    | MOUNTING BRACKET, RIGHT                | 1    |
|      | 26421    | MOUNTING BRACKET, RIGHT (EARLY)        |      |
| 2    | 29795    | MOUNTING BRACKET, LEFT                 | 1    |
|      | 26422    | MOUNTING BRACKET, LEFT (EARLY)         |      |
| 3    | 70143    | O-RING                                 | 1    |
| 4    | 26420    | PTO SHAFT                              | 1    |
| 5    | 26827    | STUD                                   | 4    |
| 6    | 22887    | NUT (1-8 UNC HEAVY)                    | 4    |
| 7    | 70838    | CAPSCREW, HEX HEAD (1-8 x 2 G8)        | 4    |
| 8    | 78453    | CAPSCREW, HEX HEAD (3/4-10 x 2 1/2 G8) | 4    |
| 9    | 27247    | CAPSCREW, 12-PT (1/2-13 x 2 1/4)       | 4    |
| 10   | 27248    | WASHER, HARDENED                       | 4    |

**MODEL 30 PS  
PTO ADAPTER GROUP**



| ITEM | PART NO. | DESCRIPTION                   | QTY. |
|------|----------|-------------------------------|------|
| 1    | 26418    | PTO PILOT                     | 1    |
| 2    | 26202    | SEAL                          | 2    |
| 3    | 100029   | SLEEVE                        | 1    |
| 4    | 13838    | O-RING                        | 1    |
| 5    | 26169    | GASKET, PTO PILOT             | 1    |
| 6    | 13938    | CAPSCREW (1/2-13 x 1 1/4 GR5) | 4    |
| 7    | 11026    | LOCKWASHER (1/2)              | 4    |
| 8    | 26404    | CABLE GUARD PIN               | 1    |
| 9    | 31948    | COTTER PIN                    | 2    |

**INSTRUCTIONS**

1. PTO rotation is counterclockwise (CCW) as viewed from rear of tractor.
2. Remove and discard tractor PTO cover.
3. Remove paint, rust, dirt and grease from mounting surfaces of tractor, winch and mounting brackets.
4. Determine if part number 26421/26422 or 29794/29795 mounting brackets are being used. Refer to illustration.
5. For mounting on D5C with 26421/26422 brackets: Mark tractor rear face utilizing brackets as templates. Drill tractor rear face per Note 1. Clean newly drilled holes.
6. Install studs, item 5, into four upper holes of tractor rear face according to type of brackets being used (see illustration). Apply Loc-tite 271 to threads.
7. Install mounting brackets, items 1 and 2, onto winch. Apply Loc-tite 242 to threads and install cap screws and washers, items 8, 9 and 10. Torque as follows:  
 12 pt. 1/2-13 x 2 1/4 cap screws . . . 75 lb•ft (102 N•m)  
 Hexhead 3/4-10 x 2 1/2 cap screws . . . 265 lb•ft (359 N•m)
8. Install o-ring, item 3, into groove on PTO pilot and coat with multi-purpose grease.
9. Install PTO shaft, item 4, onto winch pinion. Coat splines at both ends of PTO shaft with multi-purpose grease before installation.

**⚠ WARNING**

Winch weighs approximately 1000 lb (454 kg) without oil, cable or tractor adapters. Make certain lifting equipment has adequate capacity. Failure to use adequate lifting equipment may result in property damage, personal injury or death.

10. Using PTO shaft and PTO pilot to aid alignment, install winch onto studs. It may be necessary to "bump" the tractor starter to rotate tractor PTO to properly align splines between PTO shaft and tractor PTO drive. Install nuts and cap screws, items 6 and 7, with Loc-tite 271 on threads and torque to 640 lb•ft (868 N•m).

**⚠ CAUTION**

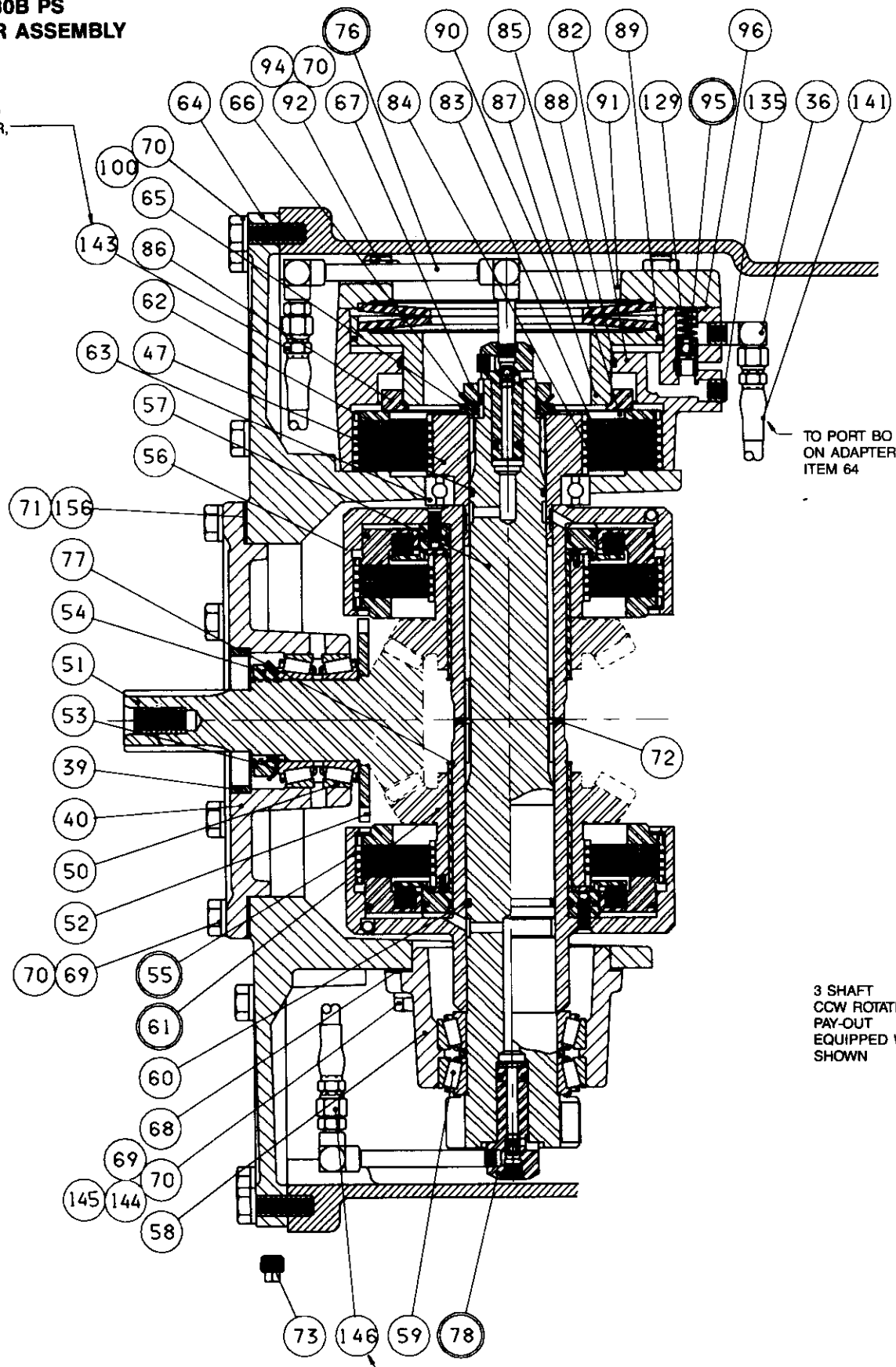
Fill winch to proper level with recommended oil BEFORE starting tractor. Bearing and gear damage may result if tractor or winch is run without oil.

NOTE: Winch is delivered with PTO pilot installed, the following step is included for reference:

11. Install o-ring, item 4, into groove on sleeve, item 3. Install sleeve, item 3, onto shaft. Install seals, item 2, into PTO pilot, item 1, back-to-back such that the seal nearest the tractor has the seal lip and spring toward the tractor and the seal nearest the winch has the seal lip spring toward the winch. Install the PTO pilot onto the winch with gasket, item 5. Install cap screws and lockwashers, items 5 and 6, and torque to 75 lb•ft (102 N•m).

**MODEL 30B PS  
ADAPTER ASSEMBLY**

TO PORT PO  
ON ADAPTER,  
ITEM 64



TO PORT BO  
ON ADAPTER,  
ITEM 64

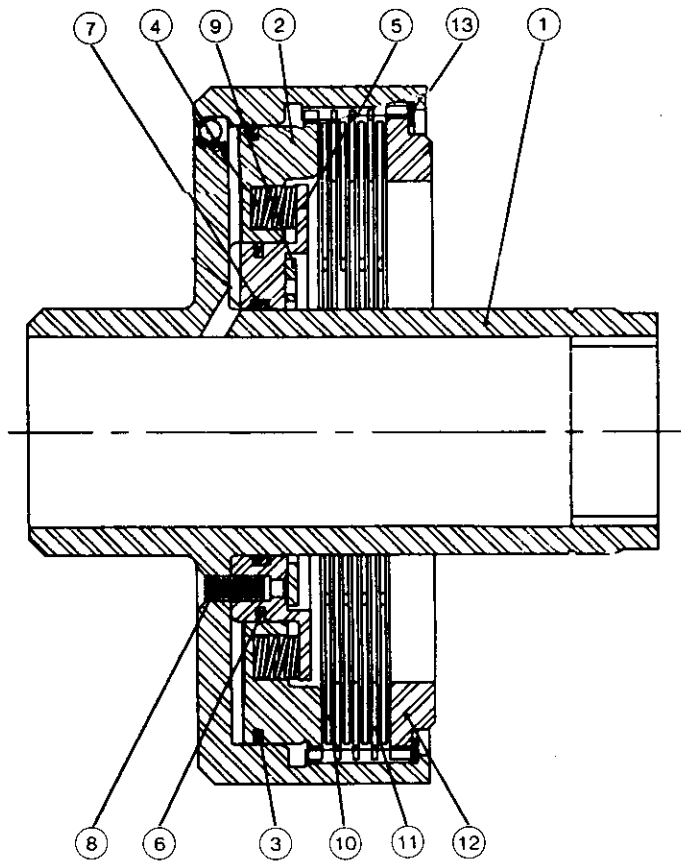
3 SHAFT  
CCW ROTATION  
PAY-OUT  
EQUIPPED WINCH  
SHOWN

TO PORT HI  
ON ADAPTER,  
ITEM 64

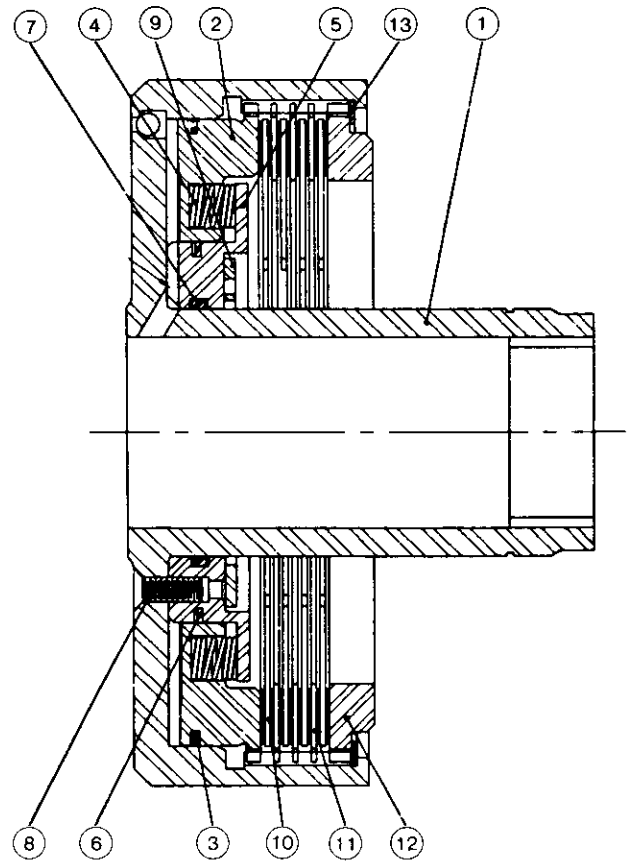
**MODEL 30B PS  
ADAPTER ASSEMBLY**

| ITEM | PART NUMBER  | DESCRIPTION  | QTY. |
|------|--|--|------|
| 36   | 31342  | ELBOW  | 1    |
| 39   | 27882  | PILOT RING   | 1    |
| 40   | 27881  | PTO CARRIER  | 1    |
| 47   | 13838  | O-RING   | 1    |
| 50   | 27893  | BEARING CONE SPACER  | 1    |
|      | 30952  | BEARING CUP  | 2    |
|      | 30953  | BEARING CONE   | 2    |
| 51   | 26156  | BEVEL PINION (STANDARD SPEED, C RATIO) 22T                       | 1    |
|      | 26160  | BEVEL PINION (E RATIO) 14T                                       | 1    |
| 52   | 69947  | PUMP PINION  | 1    |
| 53   | 26220  | BEARING LOCKWASHER   | 1    |
| 54   | 22366  | BEARING LOCKNUT  | 1    |
| 55   | 81778  | CLUTCH ASSEMBLY, HAUL-IN (SEE PAGE 8)                            | 1    |
| 56   | 81779  | CLUTCH ASSEMBLY, PAY-OUT (FOR WINCHES WITH PAY-OUT) (SEE PAGE 8) | 1    |
|      | 26060  | SPACER (FOR WINCHES WITHOUT PAY-OUT)                             | 1    |
| 57   | 27894  | CLUTCH SHAFT   | 1    |
| 58   | 27544  | CLUTCH CARRIER   | 1    |
| *    | * NOTE: For items 61, 61A, 61B and 77 — 4 each required for pay-out equipped winches.<br>For haul-in only winches — 2 each on gear side (opposite brake) of shaft. |  |      |
| 59   | 70080  | BEARING CUP  | 2    |
|      | 70081  | BEARING CONE   | 2    |
|      | 27626  | SPACER   | 1    |
| 60   | 72101  | O-RING   | 1    |
| 61   | 81783  | BEVEL GEAR (STANDARD SPEED, C RATIO) 36T                         | *    |
|      | 81782  | BEVEL GEAR (E RATIO) 39T   | *    |
| 61A  | 75297  | PIN (SUPPLIED WITH ITEM 61)                                      | *    |
| 61B  | 26118  | BUSHING (SUPPLIED WITH ITEM 61)                                  | *    |
| 62   | 27897  | BRAKE HUB  | 1    |
| 63   | 26122  | BEARING  | 1    |
| 64   | 26048  | ADAPTER  | 1    |
| 65   | 27899  | WASHER   | 1    |
| 66   | 26219  | BEARING LOCKWASHER   | 1    |
| 67   | 31073  | BEARING NUT  | 1    |
| 68   | 26173  | CLUTCH CARRIER SHIM SET  | 1    |
| 69   | 13938  | CAPSCREW (1/2 NC x 1 1/4, HEX GD5)                               | 9    |
| 70   | 11026  | LOCKWASHER (1/2)   | 20   |
| 71   | 26172  | PTO CARRIER SHIM SET   | 1    |
| 72   | 26168  | SHIM SET (REQUIRED FOR PAY-OUT EQUIPPED WINCHES)                 | 1    |
| 73   | 19034  | PLUG   | 1    |
| 76   | 82059  | TUBE ASSEMBLY (SEE PAGE 15 FOR DETAIL BREAKDOWN) (PAY-OUT ONLY)  | 1    |
| 77   | 26596  | SNAP RING  | *    |
| 78   | 81824  | TUBE ASSEMBLY (SEE PAGE 15 FOR DETAIL BREAKDOWN)                 | 1    |
| 82   | 26052  | BRAKE HOUSING  | 1    |
| 83   | 70636  | FRICTION DISC  | 6    |
| 84   | 69699  | WAVED DISC   | 6    |
| 85   | 70293  | PRESSURE PLATE   | 1    |
| 86   | 26059  | BRAKE SPACER   | 1    |
| 87   | 26054  | BRAKE PISTON   | 1    |
| 88   | 10330  | O-RING   | 1    |
| 89   | 26102  | LATHE CUT RING   | 1    |
| 90   | 70255  | BRAKE SPRING   | 2    |
| 91   | 26053  | BRAKE COVER HOUSING  | 1    |
| 92   | 26167  | STUD   | 4    |
| 94   | 26145  | NUT, HEX (1/2 - 13 GD8)  | 4    |
| 95   | 81765  | SPOOL ASSEMBLY   | 1    |
| 96   | 22454  | O-RING   | 1    |
| 100  | 13413  | CAPSCREW (1/2 NC x 1 1/2 HEX GD5)                                | 6    |
| 129  | 26329  | SPRING   | 1    |
| 135  | 70120  | PLUG   | 1    |
| 141  | 26414  | HOSE ASSEMBLY, BRAKE (15 in., 381 mm)                            | 1    |
| 143  | 26414  | HOSE ASSEMBLY, PAY-OUT (15 in., 381 mm)                          | 1    |
| 144  | 26425  | STUD, HYDRAULIC TUBE SUPPORT                                     | 1    |
| 145  | 11788  | NUT, HEX (1/2 - 13 GD5)  | 1    |
| 146  | 26415  | HOSE ASSEMBLY, HAUL-IN (17 in., 432 mm)                          | 1    |
| 156  | 26341  | PTO CARRIER GASKET   | 1    |

**MODEL 30B PS  
CLUTCH ASSEMBLY**



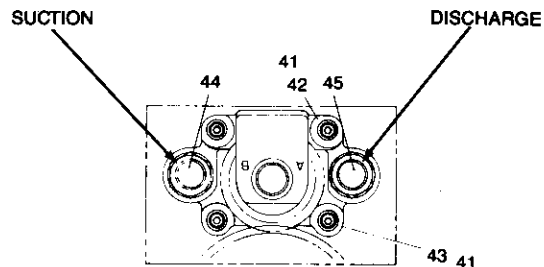
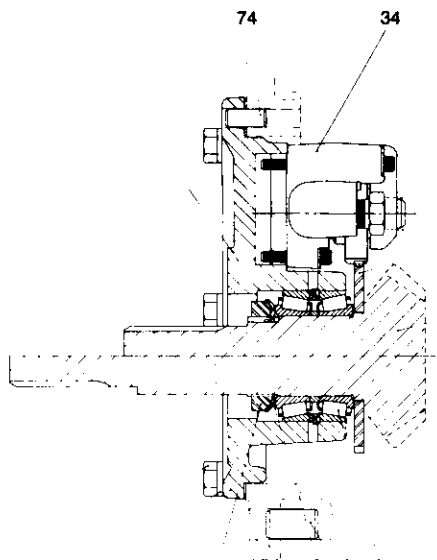
81778  
ASSEMBLY



81779  
ASSEMBLY

| ITEM | PART NO. | DESCRIPTION  | QTY. |
|------|----------|--|------|
| 1    | 26062    | CLUTCH HOUSING (81778 ASSEMBLY) HAUL-IN                    | 1    |
| 1    | 26063    | CLUTCH HOUSING (81779 ASSEMBLY) (PAY-OUT ONLY)             | 1    |
| 2    | 26065    | CLUTCH PISTON  | 1    |
| 3    | 26103    | LATHE CUT RING   | 1    |
| 4    | 26137    | SPRING   | 8    |
| 5    | 26554    | CLUTCH PILOT   | 1    |
| 6    | 26104    | LATHE CUT RING   | 1    |
| 7    | 72103    | O-RING   | 1    |
| 8    | 21333    | CAPSCREW, HEX SOCKET, FLAT COUNTERSUNK (1/4 - 20 x 3/4 G8) | 3    |
| 9    | 26117    | THRUST WASHER  | 1    |
| 10   | 70636    | FRICTION DISC  | 4    |
| 11   | 69699    | WAVED DISC   | 3    |
| 12   | 26755    | PRESSURE PLATE   | 1    |
| 13   | 26147    | RETAINING RING   | 1    |

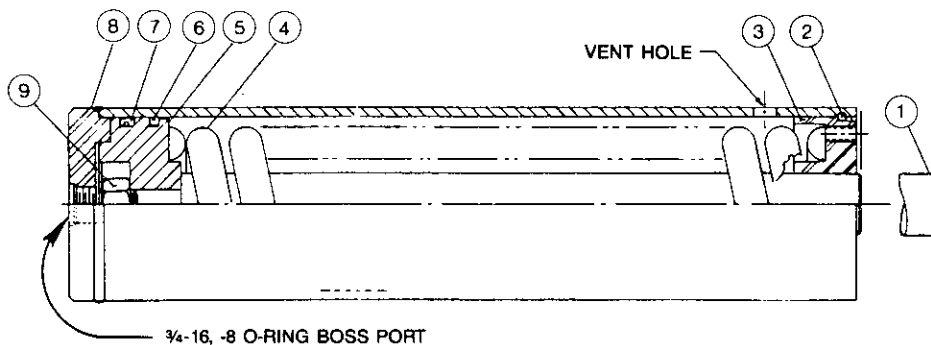
**MODEL 30B PS  
PUMP & ACCUMULATOR**



97

| ITEM | PART NO. | DESCRIPTION                               | QTY. |
|------|----------|---|------|
| 34   | 68772    | PUMP                                      | 1    |
| 41   | 11015    | LOCKWASHER (1/4)                          | 1    |
| 42   | 25866    | CAPSCREW (1/4 NC x 3 GD8, HEX SOCKET)     | 2    |
| 43   | 75231    | CAPSCREW (1/4 NC x 1 1/2 GD8, HEX SOCKET) | 2    |
| 44   | 26240    | MALE CONNECTOR                            | 1    |
| 45   | 26403    | 45° ELBOW                                 | 1    |
| 74   | 10318    | DOWEL PIN                                 | 1    |
| 97   | 26667    | DOWEL PIN                                 | 2    |

**ACCUMULATOR  
ASSEMBLY**



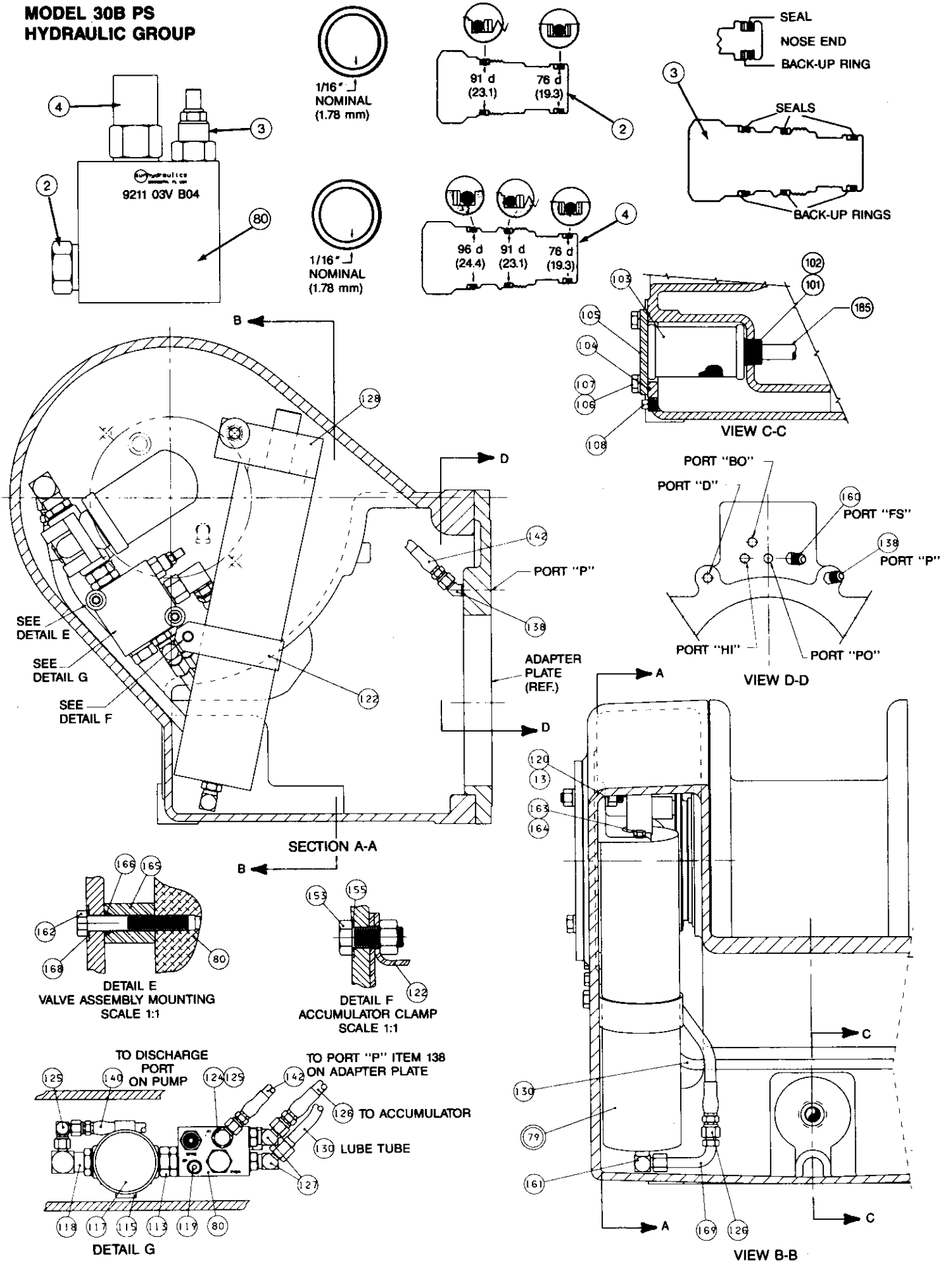
**! WARNING**

**2,000 LB. (900 Kg) SPRING  
PRELOAD—USE PRESS  
FOR DISASSEMBLY PER  
SERVICE INSTRUCTIONS  
IN SERVICE BULLETIN 95.  
PROPERTY DAMAGE,  
SEVERE PERSONAL  
INJURY OR DEATH MAY  
RESULT IF ROD GUIDE  
REMOVAL IS ATTEMPTED  
WITHOUT A PRESS.**

| ITEM | PART NO. | DESCRIPTION                        | QTY. |
|------|----------|------------------------------------|------|
| 1    | NSS      | ROD                                | 1    |
| 2    | 27836    | RETAINING RING                     | 1    |
| 3    | NSS      | ROD GUIDE                          | 1    |
| 4    | NSS      | SPRING                             | 1    |
| 5    | NSS      | PISTON                             | 1    |
| 6    | 27833    | CAST IRON PISTON RING              | 1    |
| 7    | 27832    | SEAL ASSEMBLY                      | 1    |
| 8    | NSS      | TUBE ASSEMBLY                      | 1    |
| 9    | NSS      | NUT                                | 1    |
| —    | 62131    | SEAL KIT (CONTAINS ITEMS 2, 6 & 7) |      |

NSS — Not Serviced Separately

**MODEL 30B PS  
HYDRAULIC GROUP**



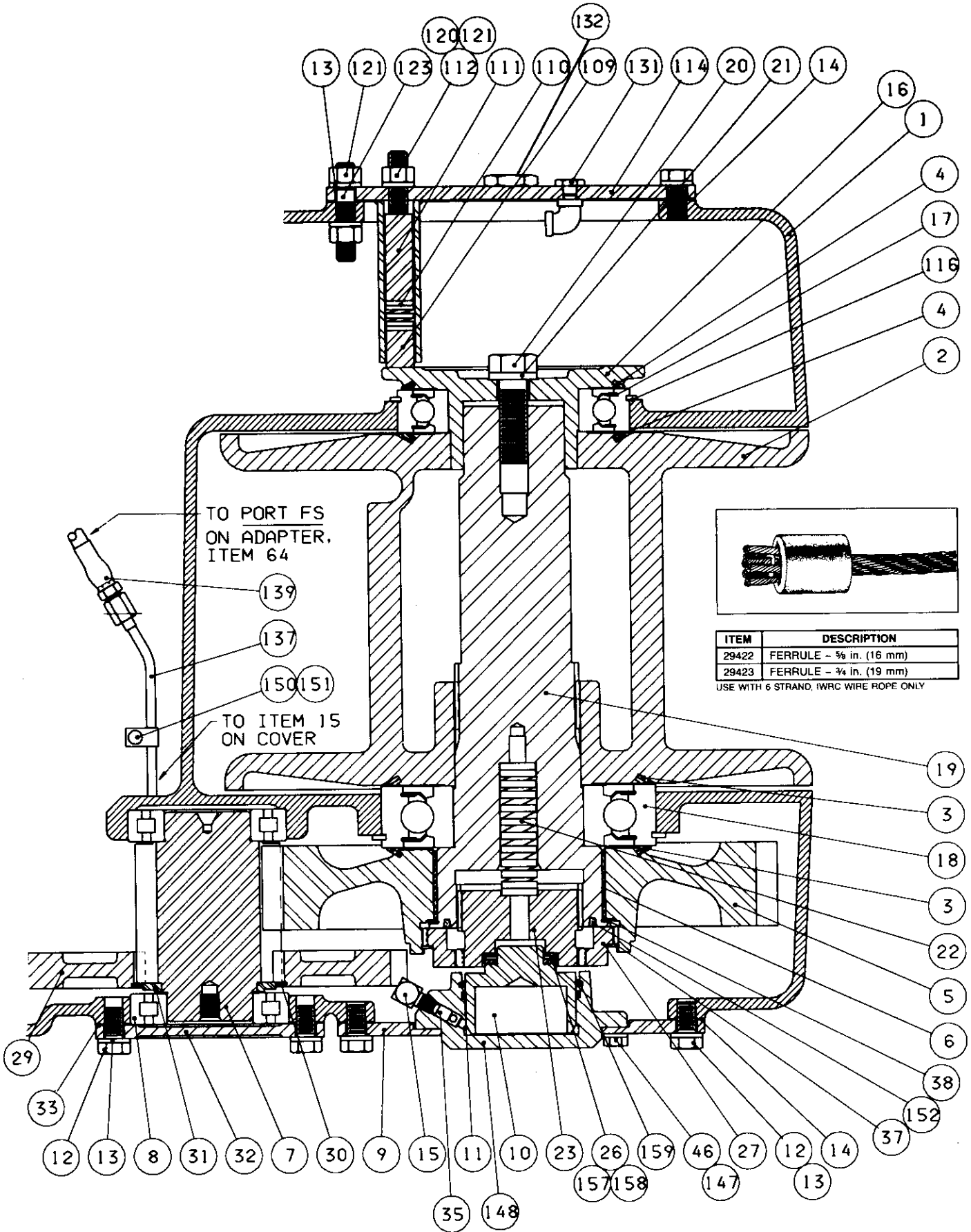
**MODEL 30B PS  
HYDRAULIC GROUP**

| ITEM | PART NO. | DESCRIPTION                        | QTY. |
|------|----------|------------------------------------|------|
| 80   | 29646    | UNLOADING VALVE ASSEMBLY           | 1    |
| 2    | 40165    | CHECK VALVE                        | 1    |
|      | 29873    | CHECK VALVE SEAL KIT               | 1    |
| 3    | 40166    | UNLOADING VALVE CARTRIDGE          | 1    |
|      | 29874    | UNLOADING VALVE CARTRIDGE SEAL KIT | 1    |
| 4    | 40167    | RELIEF VALVE                       | 1    |
|      | 29872    | RELIEF VALVE SEAL KIT              |      |

NOTE: Seal kits contain 2 sets of o-rings and back-up rings. Use 1/16 in. (1.59 mm) o-rings and back-up rings.

| ITEM | PART NO. | DESCRIPTION                               | QTY. |
|------|----------|---|------|
| 79   | 81959    | ACCUMULATOR ASSEMBLY (REFER TO PAGE 9)    | 1    |
| 80   | 29646    | UNLOADING VALVE                           | 1    |
| 101  | 26164    | ADAPTER, STRAINER                         | 1    |
| 102  | 24429    | O-RING                                    | 1    |
| 103  | 70189    | STRAINER                                  | 1    |
| 104  | 21283    | O-RING                                    | 1    |
| 105  | 26174    | STRAINER COVER                            | 1    |
| 106  | 22697    | CAPSCREW, HEX HEAD (1/2 NC x 1 GD5)       | 4    |
| 107  | 11026    | LOCKWASHER (1/2)                          | 4    |
| 108  | 23095    | PLUG (3/8 NPT)                            | 2    |
| 113  | 29650    | UNION                                     | 1    |
| 115  | 29644    | FILTER HEAD                               | 1    |
| 117  | 29645    | FILTER ELEMENT                            | 1    |
| 118  | 29647    | 90° ELBOW                                 | 1    |
| 119  | 69325    | PLUG (-4 ORB)                             | 1    |
| 120  | 23583    | NUT, JAM (1/2 NC)                         | 2    |
| 122  | 29649    | ACCUMULATOR BRACKET                       | 1    |
| 124  | 31286    | ADAPTER                                   | 1    |
| 125  | 31426    | 90° UNION (-6 JIC)                        | 2    |
| 126  | 29823    | HOSE ASSEMBLY                             | 1    |
| 127  | 69605    | ELBOW                                     | 2    |
| 128  | 28809    | ACCUMULATOR MOUNTING ANGLE                | 1    |
| 130  | 29651    | LUBE TUBE                                 | 1    |
| 138  | 31334    | 45° ELBOW                                 | 1    |
| 140  | 29648    | HOSE ASSEMBLY (34 in., 134 mm)            | 1    |
| 142  | 29657    | HOSE ASSEMBLY (23 in., 91 mm)             | 1    |
| 153  | 13938    | CAPSCREW (1/2 NC x 1 1/4 GD5, HEX)        |      |
| 155  | 72144    | SEALING WASHER                            | 1    |
| 160  | 31333    | 45° ELBOW                                 | 1    |
| 161  | 70109    | 90° ELBOW                                 | 1    |
| 162  | 11778    | CAPSCREW, HEX HEAD (3/8 - 16 x 2 1/2 GD5) | 2    |
| 163  | 11766    | CAPSCREW, HEX HEAD (5/16 - 18 x 7/8 GD5)  | 2    |
| 164  | 11024    | LOCKWASHER (5/16)                         | 2    |
| 165  | 29652    | STANDOFF SPACER                           | 2    |
| 166  | 25948    | O-RING                                    | 2    |
| 168  | 72142    | SEALING WASHER                            | 2    |
| 169  | 29817    | ELBOW                                     | 1    |
| 185  | 26231    | SUCTION TUBE                              | 1    |

**MODEL 30B PS  
DRUM GROUP**

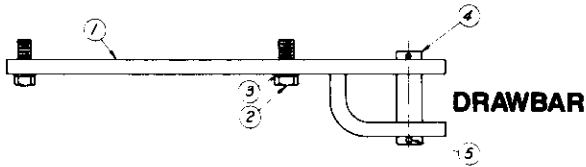


**MODEL 30B PS  
DRUM GROUP**

| ITEM | PART NO. | DESCRIPTION                             | QTY. |
|------|----------|---|------|
| 1    | 27546    | WINCH HOUSING                           | 1    |
| 2    | 27520    | CABLE DRUM                              | 1    |
| 3    | 26100    | LATHE CUT RING                          | 2    |
| 4    | 26101    | LATHE CUT RING                          | 2    |
| 5    | 27383    | BULL GEAR                               | 1    |
| 6    | 27400    | BUSHING                                 | 1    |
| 7    | 26779    | INTERMEDIATE GEAR                       | 1    |
| 8    | 26116    | ROLLER BEARING                          | 2    |
| 9    | 27379    | GEAR SIDE COVER PLATE                   | 1    |
| 10   | 27378    | FREESPOOL PISTON                        | 1    |
| 11   | 69858    | O-RING                                  | 1    |
| 12   | 22697    | CAPSCREW, HEX HEAD (1/2 - 13 x 1 GD5)   | 11   |
| 13   | 11073    | WASHER (1/2 in.)                        | 13   |
| 14   | 26171    | COVER GASKET                            | 2    |
| 15   | 21163    | ELBOW                                   | 1    |
| 16   | 27755    | DRAG BRAKE SPINDLE ADAPTER              | 1    |
| 17   | 26115    | BALL BEARING W/SNAP RING                | 1    |
| 18   | 26114    | BALL BEARING W/SNAP RING                | 1    |
| 19   | 26077    | DRUM SHAFT                              | 1    |
| 20   | 78453    | CAPSCREW, HEX HEAD (3/4 NC x 2 1/2 GD8) | 1    |
| 21   | 13435    | LOCKWASHER (3/4 in.)                    | 1    |
| 22   | 27387    | FREESPOOL SPRING                        | 1    |
| 23   | 27715    | SPOOL GEAR                              | 1    |
| 26   | 24305    | BEARING                                 | 1    |
| 27   | 27406    | COLLAR GEAR                             | 1    |
| 29   | 26777    | REDUCTION GEAR                          | 1    |
| 30   | 26775    | SNAP RING                               | 1    |
| 31   | 26776    | SPACER                                  | 1    |
| 32   | 26109    | COVER PLATE                             | 1    |
| 33   | 26170    | COVER GASKET                            | 1    |
| 35   | 81913    | DUMP VALVE SPOOL                        | 1    |
| 37   | 27391    | RETAINING RING                          | 1    |
| 38   | 27401    | THRUST WASHER                           | 1    |
| 46   | 22693    | CAPSCREW, HEX HEAD (3/8 - 16 x 3/4 GD5) | 3    |
| 109  | 27321    | DRAG BRAKE DISC                         | 1    |
| 110  | 26139    | SPRING                                  | 1    |
| 111  | 26162    | SPACER BAR                              | 1    |
| 112  | 26151    | SET SCREW (1/2 - 13 x 1 3/4)            | 1    |
| 114  | 29660    | BRAKE SIDE COVER                        | 1    |
| 116  | 27476    | BRAKE BEARING SHIM                      | 1    |
| 120  | 25829    | SEALING WASHER, 1/2                     | 1    |
| 121  | 11788    | NUT, HEX (1/2 - 13)                     | 3    |
| 123  | 28805    | STUD                                    | 1    |
| 131  | 69777    | BREATHER BENT                           | 1    |
| 132  | 70118    | FILL PLUG                               | 1    |
| 137  | 27326    | FREESPOOL TUBE                          | 1    |
| 139  | 26412    | HOSE ASSEMBLY (15 1/4 in., 387 mm)      | 1    |
| 147  | 72142    | SEALING WASHER, 3/8                     | 3    |
| 148  | 27561    | FREESPOOL CYLINDER                      | 1    |
| 150  | 30990    | CLIP                                    | 1    |
| 151  | 31218    | SCREW                                   | 1    |
| 152  | 27550    | FELT SEAL                               | 1    |
| 157  | 24306    | THRUST WASHER                           | 1    |
| 158  | 73294    | THRUST RACE                             | 1    |
| 159  | 27420    | ROD WIPER                               | 1    |

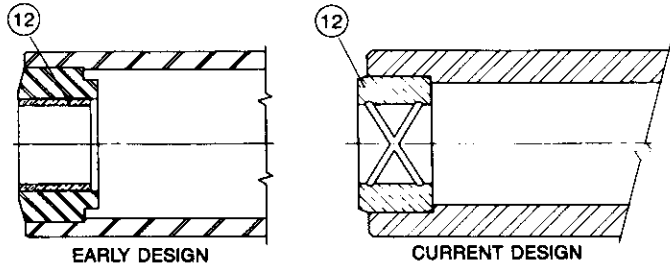
NOT SHOWN: Fill Plug P/N 70118 .

**MODEL 30 PS  
FAIRLEAD ASSEMBLY & DRAWBAR**



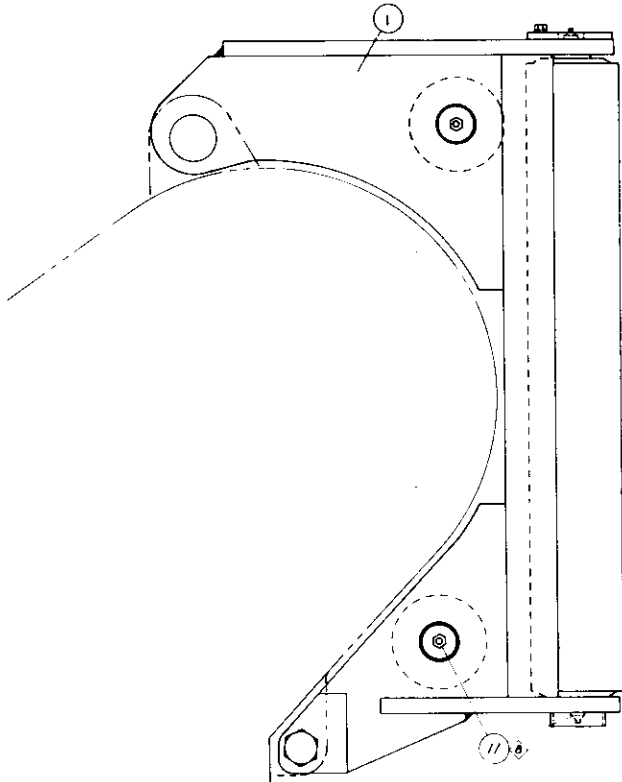
**DRAWBAR**

CLEAN TAPPED HOLES IN WINCH HOUSING BEFORE INSTALLING DRAWBAR. TORQUE CAPSCREWS TO 380 FT. LBS.

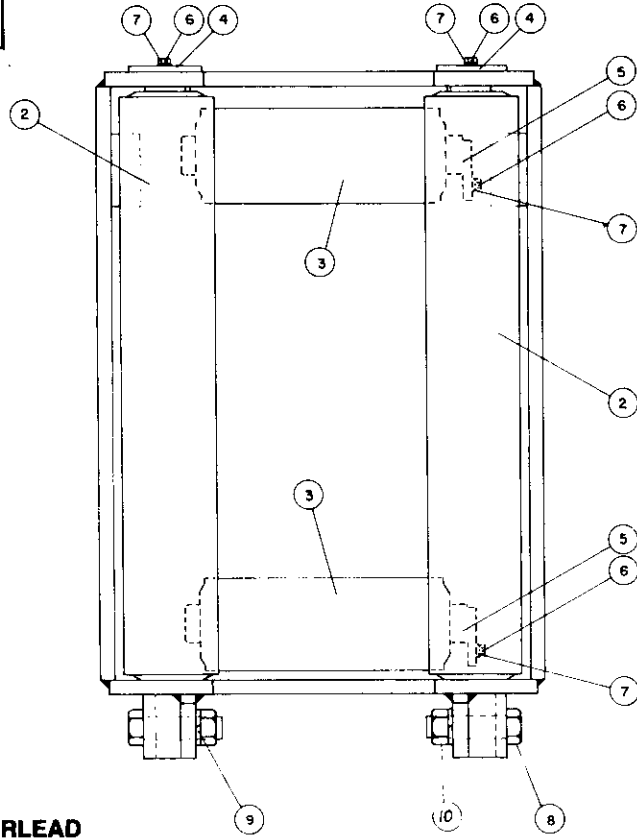


EARLY DESIGN

CURRENT DESIGN



**FAIRLEAD**

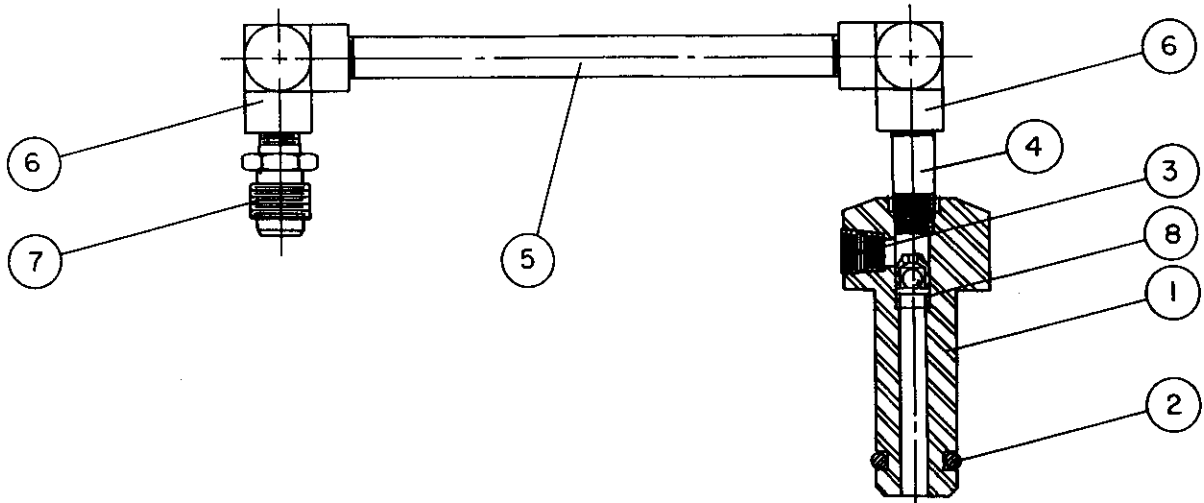


| ITEM | PART NO. | DESCRIPTION                                     | 3-ROLLER QTY. | 4-ROLLER QTY. |
|------|----------|---|---------------|---------------|
|      | 81820    | COMPLETE 4 ROLLER FAIRLEAD                      | —             | 1             |
|      | 81821    | COMPLETE 3 ROLLER FAIRLEAD                      | 1             | —             |
| 1    | 26665    | FAIRLEAD BODY                                   | 1             | 1             |
| 2    | 82189    | ROLLER ASSEMBLY (LONG, INCLUDES BUSHINGS)       | 2             | 2             |
| 3    | 82188    | ROLLER ASSEMBLY (SHORT, INCLUDES BUSHINGS)      | 1             | 2             |
| 4    | 81840    | ROLLER SHAFT (LONG)                             | 2             | 2             |
| 5    | 81837    | ROLLER SHAFT (SHORT)                            | 1             | 2             |
| 6    | 21961    | CAPSCREW (3/8 - 16 x 1 GR 5)                    | 3             | 4             |
| 7    | 18003    | LOCKWASHER (3/8)                                | 3             | 4             |
| 8    | 72366    | CAPSCREW (3/4 - 10 x 3/4)                       | 2             | 2             |
| 9    | 13435    | LOCKWASHER (3/4)                                | 2             | 2             |
| 10   | 13444    | HEX NUT (3/4 - 10)                              | 2             | 2             |
| 11   | 18047    | GREASE FITTING                                  | 6             | 8             |
| 12   | 77344    | BUSHING - EARLY DESIGN 1.625 in. (41.3 mm) OD   | 6             | 8             |
|      | 40249    | BUSHING - CURRENT DESIGN 2.375 in. (60.3 mm) OD | 6             | 8             |

**DRAWBAR KIT - 61926 (INCLUDES ITEMS 1-5)**

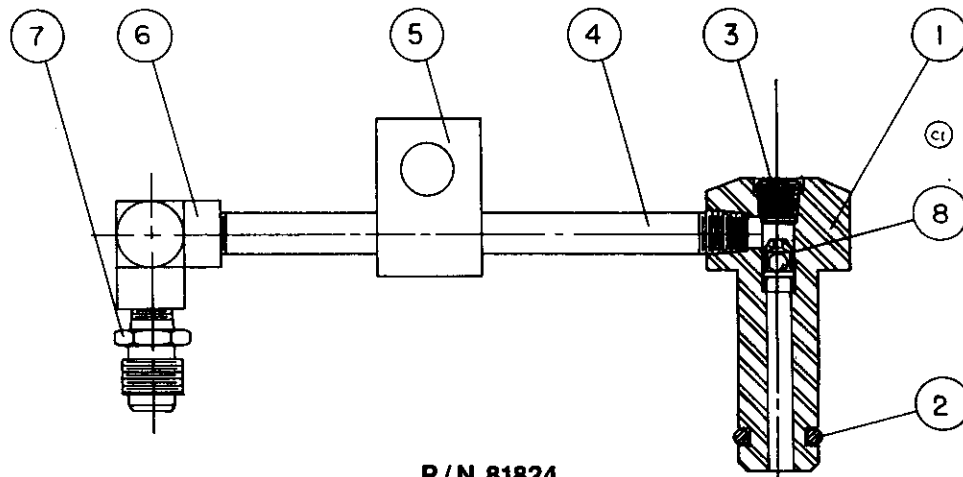
| ITEM | PART NO. | DESCRIPTION | QTY. |
|------|----------|-------------|------|
| 1    | 27087    | DRAWBAR     | 1    |
| 2    | 70691    | CAPSCREW    | 6    |
| 3    | 13435    | LOCKWASHER  | 6    |
| 4    | 27241    | DRAWBAR PIN | 1    |
| 5    | 27242    | COTTER PIN  | 2    |

**MODEL 30B PS  
TUBE ASSEMBLIES**



**P/N 82059**

| ITEM | PART NO. | DESCRIPTION       | QTY. |
|------|----------|-------------------|------|
| 1    | 26163    | HYDRAULIC TUBE    | 1    |
| 2    | 26201    | O-RING            | 1    |
| 3    | 22374    | PIPE PLUG         | 1    |
| 4    | 27898    | PIPE NIPPLE       | 1    |
| 5    | 26246    | PIPE NIPPLE       | 1    |
| 6    | 24524    | FEMALE PIPE ELBOW | 1    |
| 7    | 75956    | MALE CONNECTOR    | 1    |
| 8    | 81913    | DUMP VALVE SPOOL  | 1    |



**P/N 81824**

| ITEM | PART NO. | DESCRIPTION       | QTY. |
|------|----------|-------------------|------|
| 1    | 26163    | HYDRAULIC TUBE    | 1    |
| 2    | 26201    | O-RING            | 1    |
| 3    | 22374    | PIPE PLUG         | 1    |
| 4    | 26246    | PIPE NIPPLE       | 1    |
| 5    | 26427    | GUIDE BLOCK       | 1    |
| 6    | 24524    | FEMALE PIPE ELBOW | 1    |
| 7    | 75956    | MALE CONNECTOR    | 1    |
| 8    | 81913    | DUMP VALVE SPOOL  | 1    |