

CARCO®

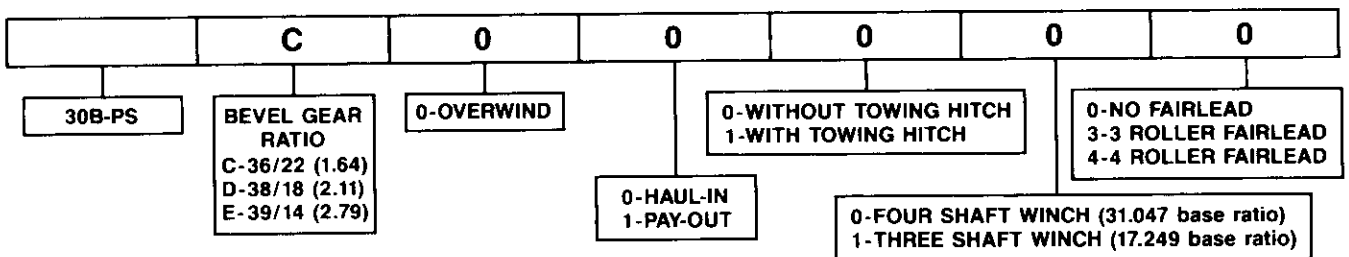
PARTS MANUAL MODEL 30B-PS WINCH FOR

KOMATSU D32, D38 & D39 TRACTORS

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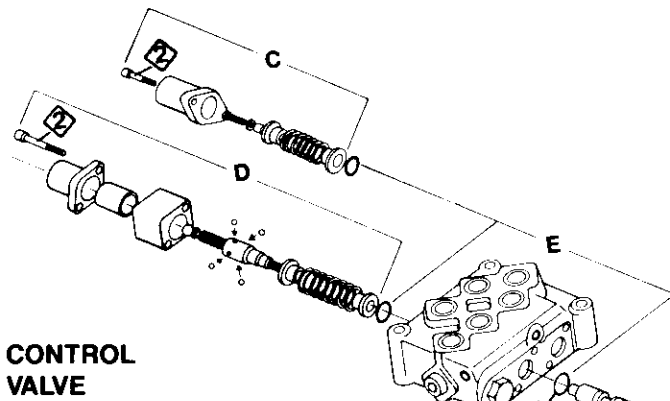
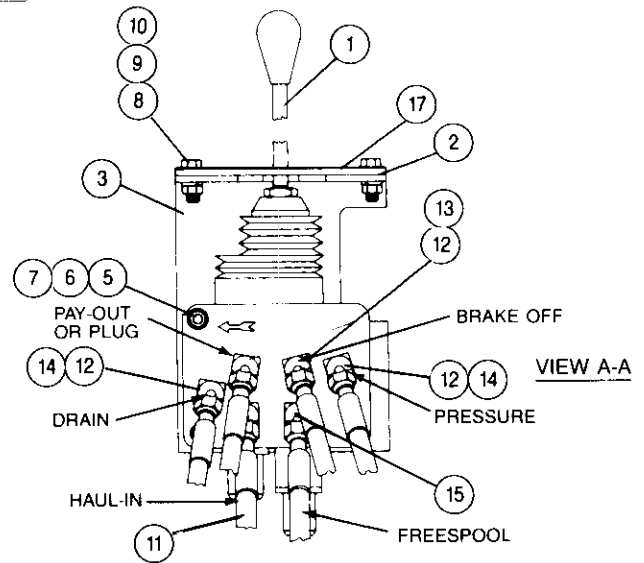
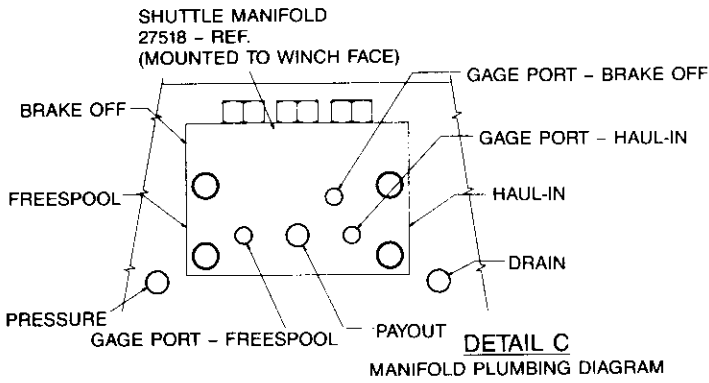
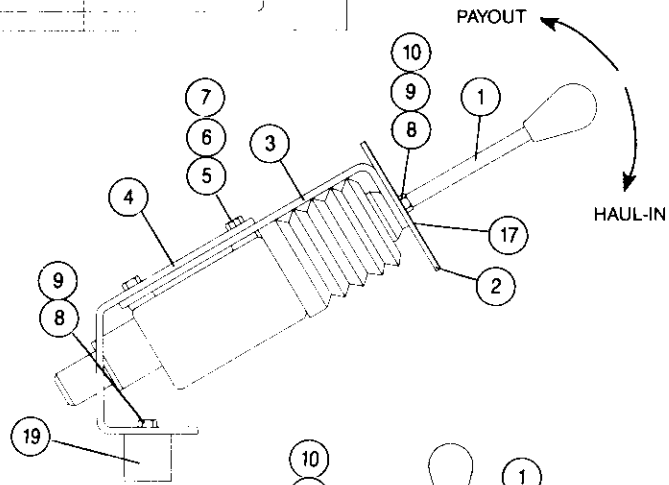
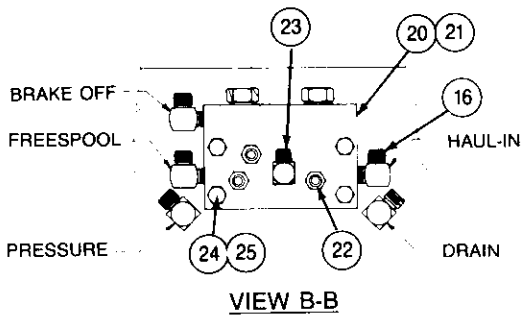
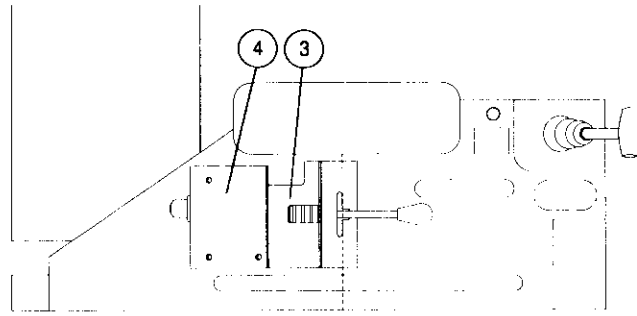
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MODEL NUMBER DESCRIPTION



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. Temporarily assemble the control valve, item 1, gate plate, item 2, and mounting brackets, items 3 and 4, into a single unit, using fasteners, items 5, 6, 7, 8, 9 and 10. Install the control stand assembly to the mounting block, item 19, using fasteners, items 8 and 9. Place the unit in a convenient location on top of the RH console between the armrest and grab handle (ROPS tractors) or cab wall (EROPS tractors). Weld the mounting block, item 19, to the console top plate in the desired location. Disassemble as needed to allow welding.
2. Attach hoses (6 with Payout, 5 without), item 11, to control valve, item 1, with adapters/elbows, items 12, 13, 14 and 15. See View A-A. (Note: On winches with Haul-In only, install a plug, item 18, in the Payout port of the control valve. On winches with Payout, use an adapter and elbow, items 12 and 13, in the Payout port.)
3. Identify the loose end of each hose with the proper port location. See "Valve Plumbing Diagram" for port identification.
4. Carefully route hoses from tractor RH console

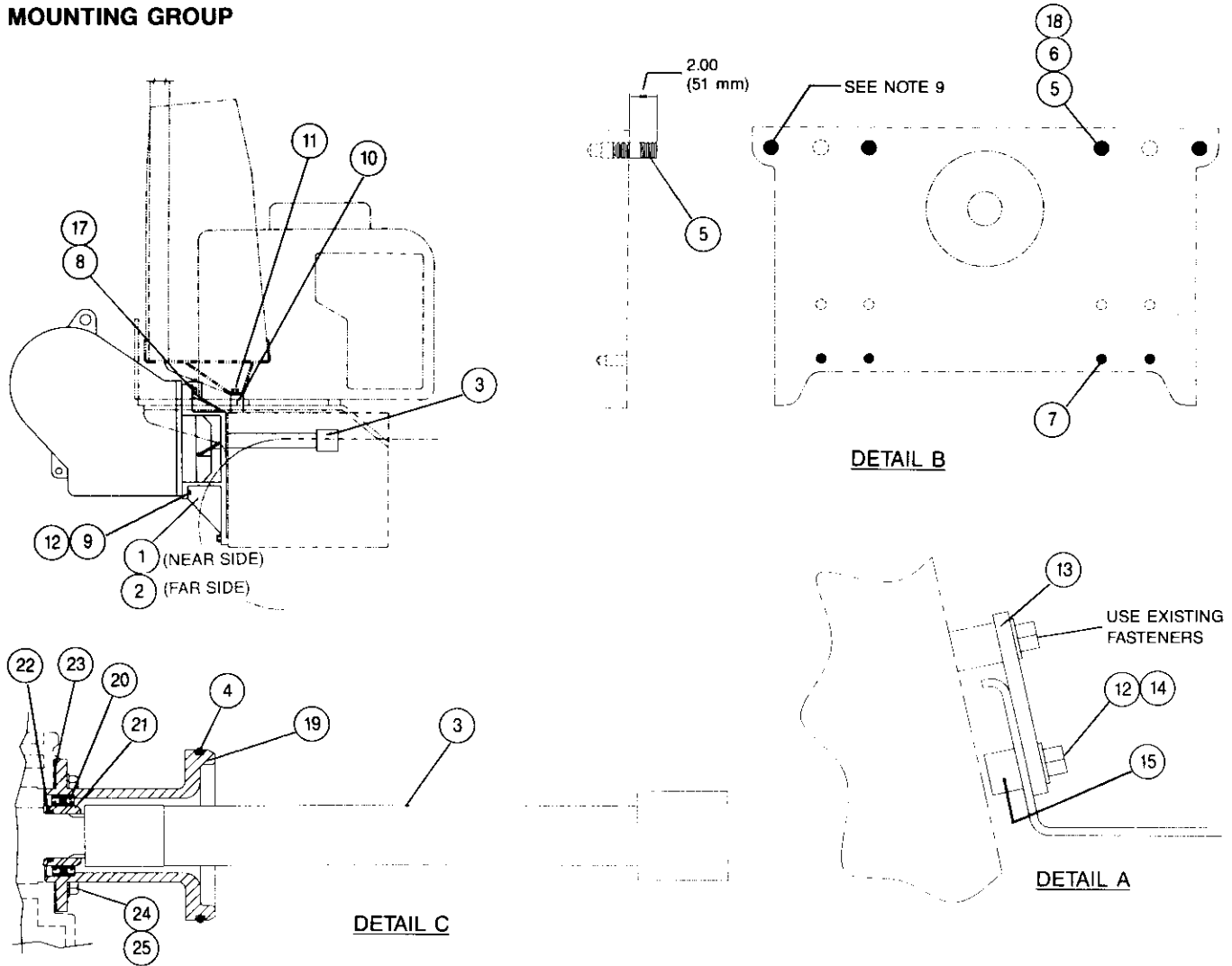
through tractor rear face. Route hoses to clear back-up alarm, battery and other tractor control components. Hoses may be routed through the RH console cavity, or behind the operator's seat then below the fuel tank.

5. If previously disassembled, reinstall the control valve assembly to bracket, item 3, using fasteners, items 5, 6 and 7.
6. Reinstall gate plate, item 2, and install control placard, item 17, to bracket using fasteners, items 8, 9 and 10.
7. Remove manifold, item 20, from winch. Take care to ensure O-rings behind manifold are not lost or damaged. Install elbows, item 16, into manifold. On winches with Payout, install elbow with orifice, item 23, into manifold as shown. See View B-B.
8. Install elbows, item 16, into Pressure and Drain ports in winch face. See View B-B.
9. Reinstall manifold to winch face using existing O-rings and fasteners. Take care to ensure the O-rings are not mis-located or damaged. Torque bolts to 31 lb-ft (42 N-m).
10. Attach hoses to manifold and winch port fittings.

Note that elbow, item 23, contains an orifice. Insure that it is installed in the correct location, as illustrated.

	DESCRIPTION	HAUL-IN ONLY		PAY-OUT	
		PART NO.	QTY.	PART NO.	QTY.
1	CONTROL VALVE	26214	1	26214	1
2	GATE PLATE	26410	1	26410	1
3	VALVE BRACKET	26833	1	26833	1
4	BRACKET	27102	1	27102	1
5	CAPSCREW (5/16-18 × 2 3/4 GD5, HEX)	27148	3	27148	3
6	LOCKWASHER (5/16)	69640	3	69640	3
7	HEX NUT (5/16-18)	69644	3	69644	3
8	CAPSCREW (3/8-16 UNC × 1 IN. GD5, HEX)	27151	4	27151	4
9	LOCKWASHER (3/8)	27152	4	27152	4
10	HEX NUT (3/8-16)	27153	2	27153	2
11	HOSE ASSEMBLY	26892	5	26892	6
12	45° ELBOW, -6 JIC / -6 JIC SWIVEL	27149	3	27149	4
13	CONNECTOR, -6 JIC / -6 ORB	79099	1	79099	2
14	ADAPTER, -6 JIC / -8 ORB	26891	2	26891	2
15	45° ELBOW, -6 JIC / -6 ORB	25868	2	25868	2
16	90° ELBOW, -6 JIC / -4 PIPE	31342	5	31342	5
17	CONTROL PLACARD	26609	1	26605	1
18	PLUG	26686	1	-	-
19	MOUNTING BLOCK	27427	1	27427	1
20	MANIFOLD BLOCK	27517	1	27518	1
20A	SHUTTLE VALVE SEAL KIT	29874	1	29874	1
21	O-RING, MANIFOLD TO CASE	72097	3	72097	4
22	PLUG	70120	3	70120	3
23	90° ELBOW W/ ORIFICE, -6 JIC / -4 PIPE	-	-	27746	1
24	CAPSCREW (3/8-16 UNC × 2 IN. GD5, HEX)	22704	4	22704	4
25	WASHER (3/8)	13929	4	13929	4

**MODEL 30B PS
MOUNTING GROUP**



ITEM	PART NO.	DESCRIPTION	QTY.
1	26501	RH MOUNTING BRACKET	1
2	26502	LH MOUNTING BRACKET	1
3	26268	PTO SHAFT ASSEMBLY	1
4	24229	O-RING	1
5	33453	STUD (1 $\frac{1}{8}$ UNC \times 3 $\frac{1}{4}$ LG, GD 8)	2
6	70768	HEX NUT (1 $\frac{1}{8}$ UNC)	2
7	70791	CAPSCREW (3 $\frac{1}{4}$ UNC \times 2 $\frac{1}{4}$ HEX HEAD, GD 8)	4
8	78453	CAPSCREW (3 $\frac{1}{4}$ UNC \times 2 $\frac{1}{2}$ HEX HEAD, GD 8)	4
9	27247	CAPSCREW (1 $\frac{1}{2}$ UNC \times 2 $\frac{1}{4}$ 12-POINT HEX HEAD, GD 8)	4
10	26615	SPACER, FUEL TANK	2
11	26967	CAPSCREW (3 $\frac{1}{4}$ UNC \times 3 $\frac{1}{2}$ HEX HEAD, GD 8)	2
12	27248	WASHER, HARD (1 $\frac{1}{2}$)	7
13	102252	PLATE, FUEL TANK SUPPORT	1
14	13938	CAPSCREW (1 $\frac{1}{2}$ UNC \times 1 $\frac{1}{4}$ HEX HEAD, GD 5)	3
15	102253	BAR, FASTENER	1
17	13824	WASHER (3 $\frac{1}{4}$)	4
18	27274	WASHER (1 $\frac{1}{8}$)	2
19	26514	PTO PILOT	1
20	26202	SEAL	2
21	100029	SEAL SLEEVE	1
22	13838	O-RING	1
23	26169	GASKET	1
24	13938	CAPSCREW (1 $\frac{1}{2}$ UNC \times 1 $\frac{1}{4}$ HEX HEAD, GD 5)	4
25	11026	LOCKWASHER (1 $\frac{1}{2}$)	4

INSTALLATION INSTRUCTIONS:

1. Use service methods and follow safety precautions as prescribed in the Komatsu tractor service manual.
2. Dimensions in inches (mm).
3. PTO rotation is CCW as viewed from the rear of the tractor.
4. Ensure the mounting surfaces on the winch, mounting brackets and rear face of the tractor are free of paint, clean and smooth.
5. Apply Loctite 242 or equivalent to threaded fasteners and torque to the values given.
6. If the tractor is to be equipped with an optional forestry package, the rear safety screen must be modified to provide clearance with the raised fuel tank.
7. Remove the PTO cover plate from the rear of the tractor.
8. Plug the PTO cover mounting holes with any suitable means for protection of the threads.
9. Remove hex nuts and spacers from the tie bolts in the upper corners of the tractor rear face. Retain the hex nuts and spacers for later reuse.
10. Ensure the tractor fuel line from the tank is closed.
11. Remove the fasteners from the tank mounting brackets at the top of the rear main frame and at the seat mounting plate. Retain the hardware.
12. Raise the fuel tank and install the fuel tank spacers, item 10, as shown. Fasten with capscrews, item 11, and existing washers. Torque to 350 lb-ft (475 N-m).
13. Install the fuel tank support plate, item 13, using the existing bolts and washers, new capscrews and washers, items 12 and 14, and fastener bar, item 15, as shown in Detail A. Torque upper fasteners (existing) per Komatsu specifications. Torque new fasteners to 75 lb-ft (102 N-m).
14. Install winch mounting brackets, items 1 and 2, to winch with capscrews, items 8 and 9, and washers, items 12 and 17. Torque $\frac{3}{4}$ in. fasteners to 350 lb-ft (475 N-m). Torque $\frac{1}{2}$ in. fasteners to 133 lb-ft (180 N-m).
15. Install studs, item 5, into rear face of tractor to the depth shown in Detail B.
16. Install O-ring, item 4, into the PTO pilot groove as shown in Detail C.
17. Coat the splines of the PTO shaft, item 3, with multi-purpose grease.
18. Install the PTO shaft onto the winch shaft.
19. Install the winch onto the studs and tractor tie bolts. It may be necessary to "bump" the tractor starter to aid alignment of the splines on the tractor and winch PTO shafts.
20. Reinstall the existing hex nuts onto the tractor tie bolts. Torque to 900 lb-ft (1220 N-m).
21. Install hex nuts and washers, items 6 and 18, onto the studs. Torque to 900 lb-ft (1220 N-m).
22. Install capscrews, item 7, into the lower mounting holes. Torque to 350 lb-ft (475 N-m).
23. Fill winch with oil prior to operating. See the Operator's Manual for the proper oil specifications and quantity.

CAUTION

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.

CAUTION

Failure to fill winch with recommended oil prior to starting the tractor may result in winch bearing and gear damage.

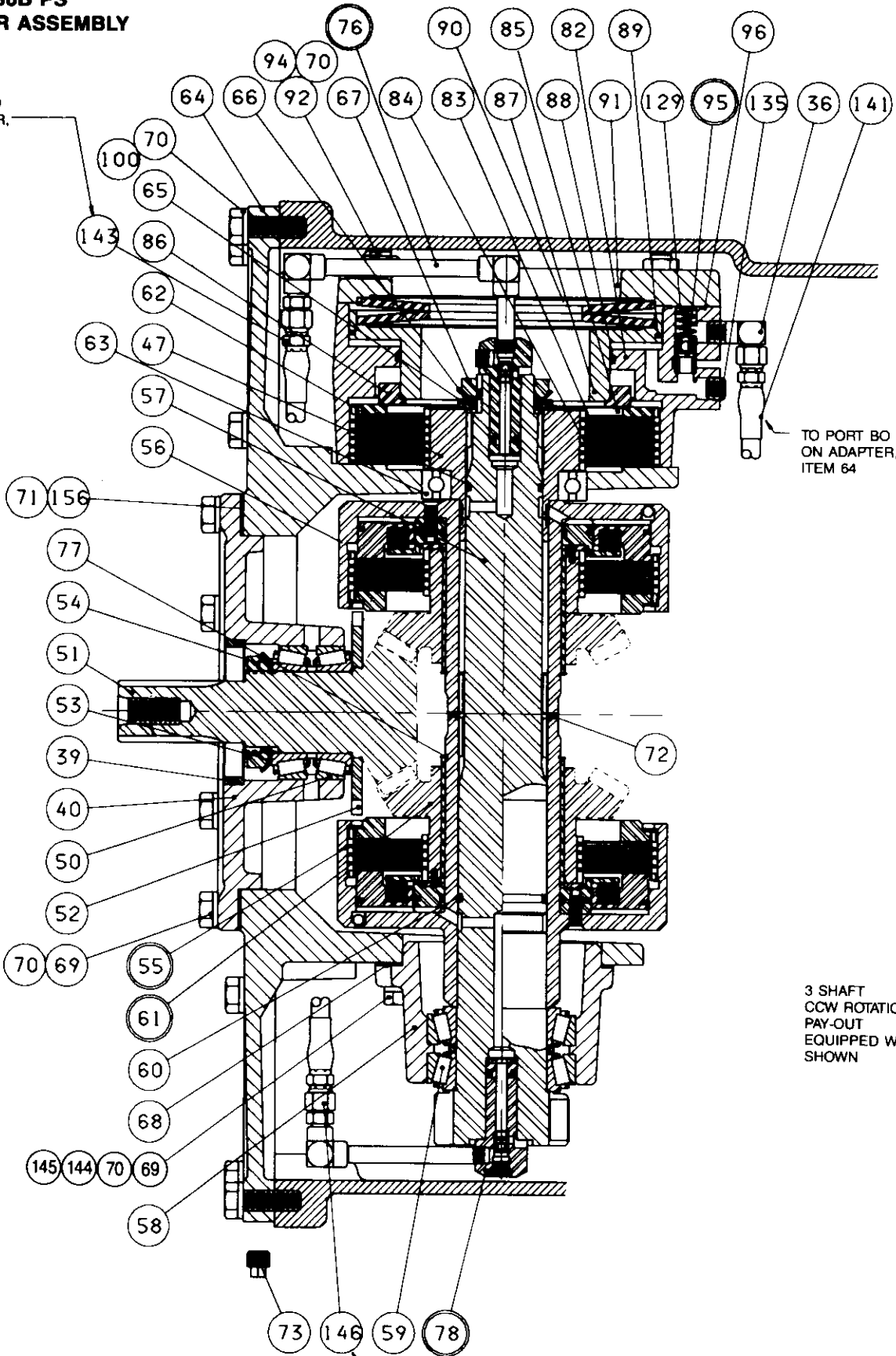
NOTE: Winch is delivered with PTO pilot installed. The following steps are included for reference:

Install O-ring, item 22, into the groove on the sleeve, item 21. Install the sleeve onto the pinion shaft. Install the seals, item 20, into the PTO pilot, item 19 — ensure the seals are oriented as shown in Detail C. Install the PTO pilot onto the winch with gasket, item 23. Install capscrews and lockwashers, items 24 and 25, and torque to 75 lb-ft (102 N-m).

Early winches are equipped with an early design seal sleeve and one oil seal, item 20, in the adapter group rather than two seals, as shown in the illustration. This improvement can be retrofitted into early units by installing the new sleeve, item 21, and a second seal, item 20.

**MODEL 30B PS
ADAPTER ASSEMBLY**

TO PORT PO
ON ADAPTER,
ITEM 64

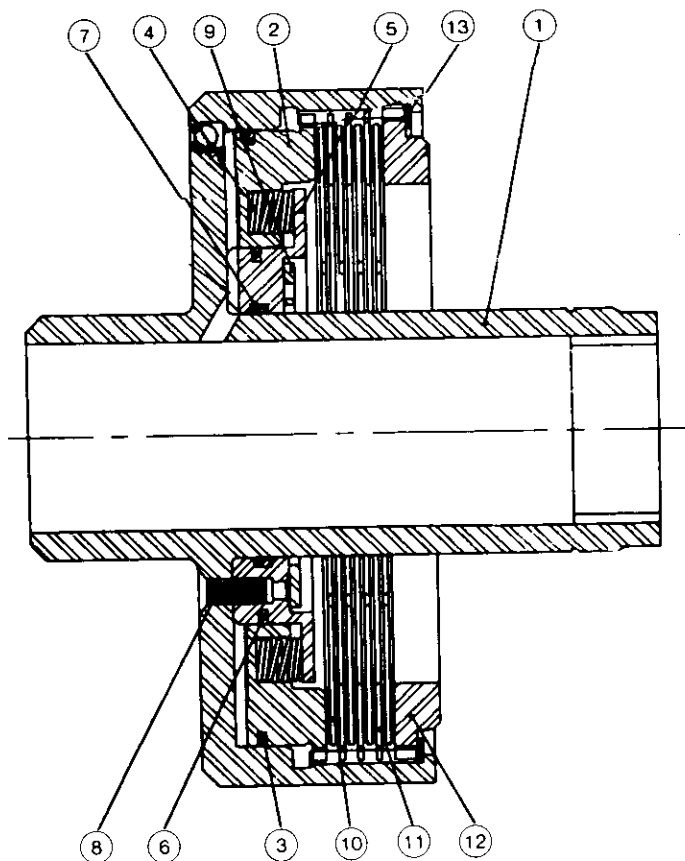


3 SHAFT
CCW ROTATION
PAY-OUT
EQUIPPED WINCH
SHOWN

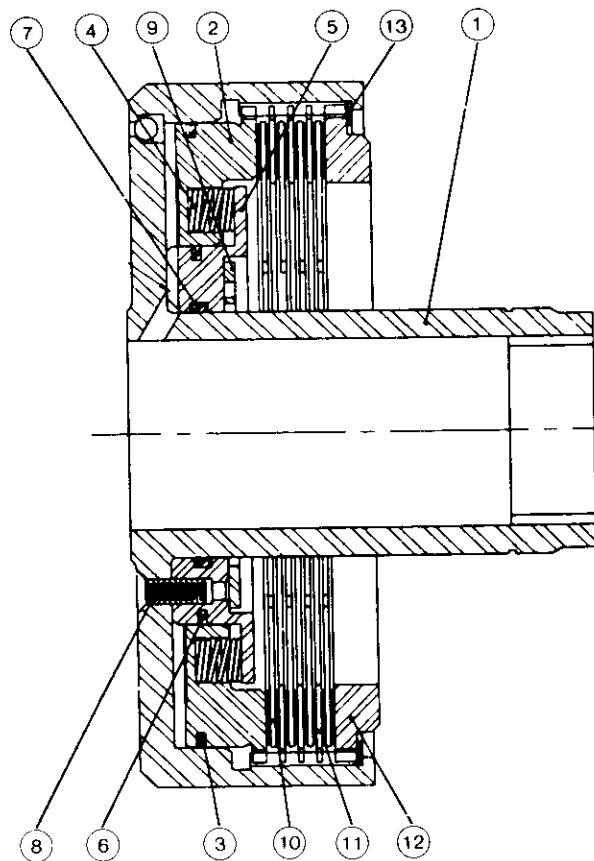
**MODEL 30B PS
ADAPTER ASSEMBLY
3-SHAFT STANDARD SPEED**

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	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) (NOT SHOWN)	1
57	27894	CLUTCH SHAFT - 3-SHAFT (SEE PAGE 16 FOR 4-SHAFT WINCHES)	1
58	27554	CLUTCH CARRIER - 3-SHAFT (SEE PAGE 16 FOR 4-SHAFT WINCHES)	1
*NOTE: For items 61, 61A, 61B and 77 — 2 each required for pay-out equipped winches. For haul-in only winches — 1 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	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 1/4, HEX GD5)	9
70	11026	LOCKWASHER (1/2)	20
71	26172	PTO CARRIER SHIM SET	1
72	26168	SPACER/SHIM SET	1
73	19034	PLUG	1
76	82059	TUBE ASSEMBLY (SEE PAGE 15 FOR DETAIL BREAKDOWN) (SEE PAGE 16 FOR 4-SHAFT WINCHES)	1
77	26596	SNAP RING	*
78	81824	TUBE ASSEMBLY (SEE PAGE 15 FOR DETAIL BREAKDOWN) (SEE PAGE 16 FOR 4-SHAFT WINCHES)	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 1/2 HEX GD5)	6
129	26329	SPRING	1
135	70120	PLUG	1
141	26414	HOSE ASSEMBLY	1
143	26414	HOSE ASSEMBLY, BRAKE SIDE, 3-SHAFT (15 in., 381 mm)	AR
	26415	HOSE ASSEMBLY, BRAKE SIDE, 4-SHAFT (17 in., 432 mm)	AR
144	26425	STUD, HYDRAULIC TUBE SUPPORT	1
145	11788	NUT, HEX (1/2 - 13 GD 5)	1
146	26414	HOSE ASSEMBLY, GEAR SIDE, 4-SHAFT (15 in., 381 mm)	AR
	26415	HOSE ASSEMBLY, GEAR SIDE, 3 & 4 SHAFT (17 in., 432 mm)	AR
156	26341	PTO CARRIER GASKET	1

**MODEL 30B PS
CLUTCH ASSEMBLY**



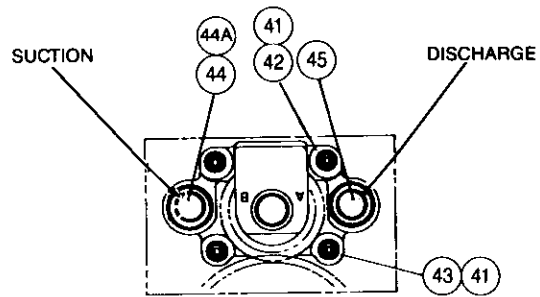
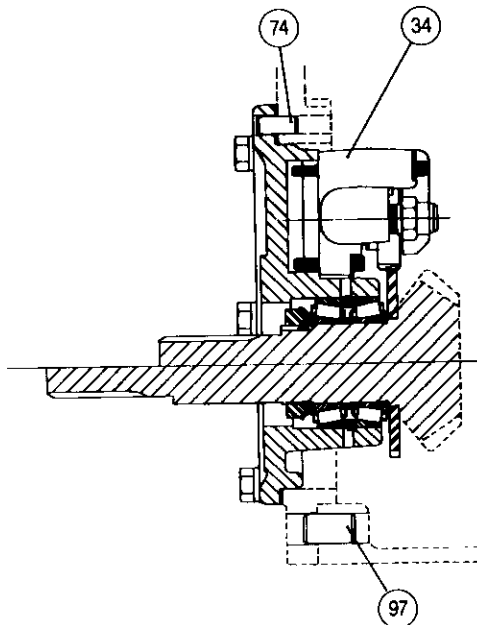
81778
ASSEMBLY



81779
ASSEMBLY

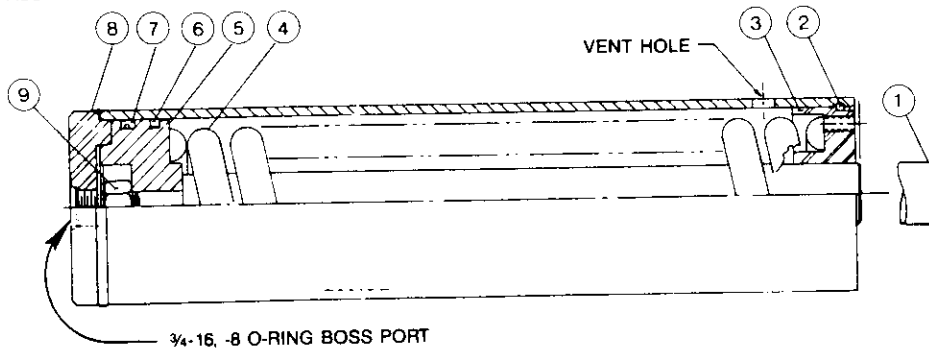
ITEM	PART NO.	DESCRIPTION	QTY.
1	26062	CLUTCH HOUSING (81778 ASSEMBLY)	1
	26063	CLUTCH HOUSING (81779 ASSEMBLY)	1
2	26065	CLUTCH PISTON	1
3	26103	LATHE CUT RING	1
4	26137	SPRING	8
5	26554	CLUTCH PILOT	1
6	26104	LATHE CUT RING	1
7	72103	O-RING	1
8	21333	CAPSCREW, HEX SOCKET, FLAT COUNTERSUNK (1/4 - 20 x 3/4 GD8)	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**



ITEM	PART NO.	DESCRIPTION	QTY.
34	68772	PUMP	1
41	11015	LOCKWASHER (1/4)	4
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
44A	72098	O-RING	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

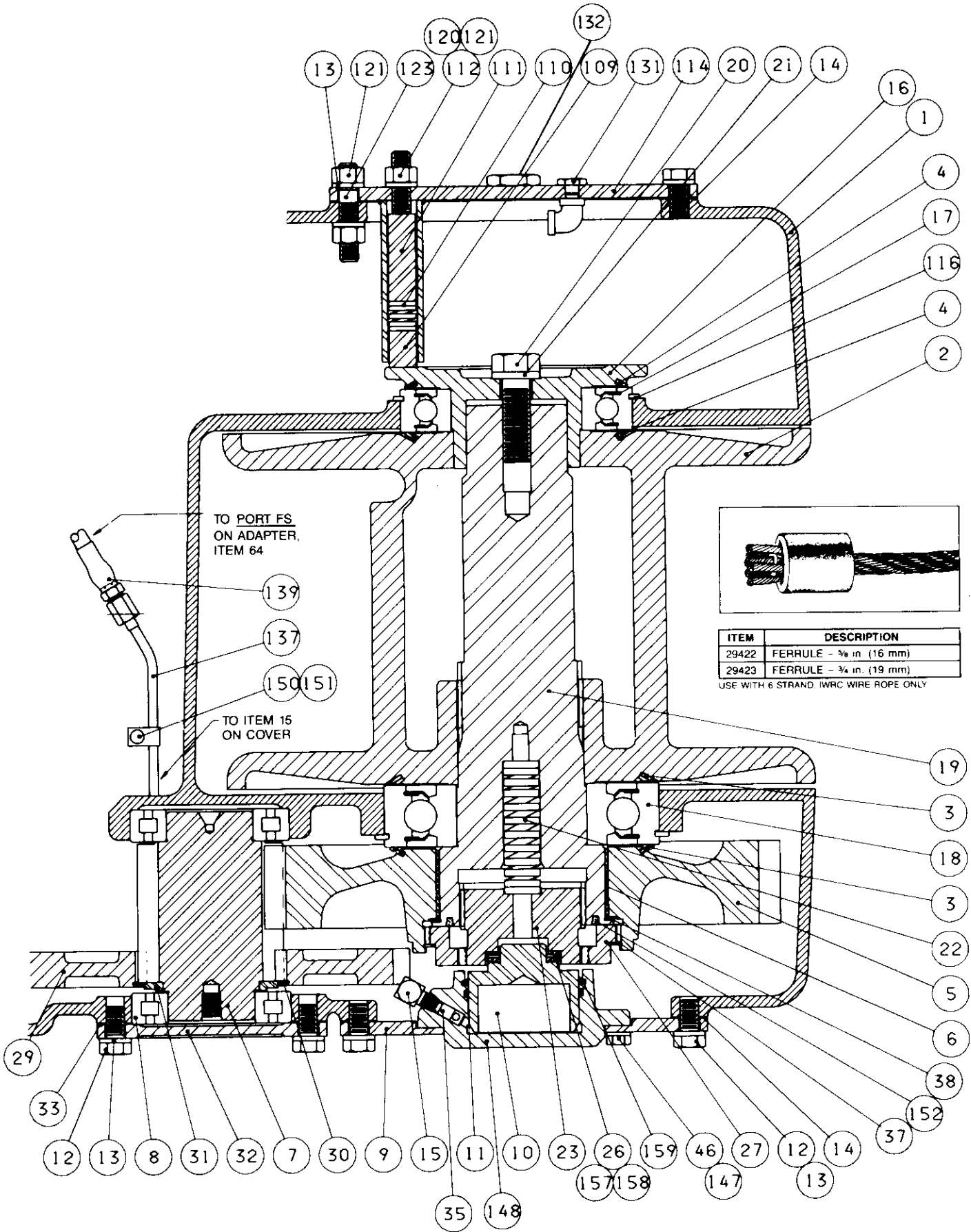
**MODEL 30B PS
HYDRAULIC GROUP**

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	1

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	NIPPLE	1
102	24429	O-RING	1
103	70189	STRAINER	1
104	21283	O-RING	1
105	26174	STRAINER COVER	1
106	22697	CAPSCREW (1/2 NC x 1 GD5, HEX)	4
107	11026	LOCKWASHER (1/2)	4
108	23095	PLUG	2
113	29650	UNION	1
115	29644	FILTER HEAD	1
117	29645	FILTER	1
118	29647	90° ELBOW	1
119	69325	PLUG	1
120	23583	NUT (1/2 NC)	2
122	29649	ACCUMULATOR BRACKET	1
124	31286	ADAPTER	1
125	31426	90° UNION	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	34 IN. HOSE ASSEMBLY	1
142	29657	23 IN. HOSE ASSEMBLY	1
153	13938	CAPSCREW (1/2 NC x 1/4 GD5, HEX)	1
155	72144	SEALING WASHER	1
160	31333	45° ELBOW	1
161	70109	90° ELBOW	1
162	11778	CAPSCREW (3/8 NC x 2 1/2 GD5, HEX)	2
163	11766	CAPSCREW (5/16 NC x 7/8 GD5, HEX)	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
186	70120	PLUG (HAUL-IN ONLY EQUIPPED WINCHES)	1

**MODEL 30B PS
DRUM GROUP**

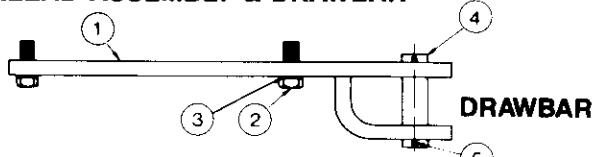


MODEL 30B PS DRUM GROUP

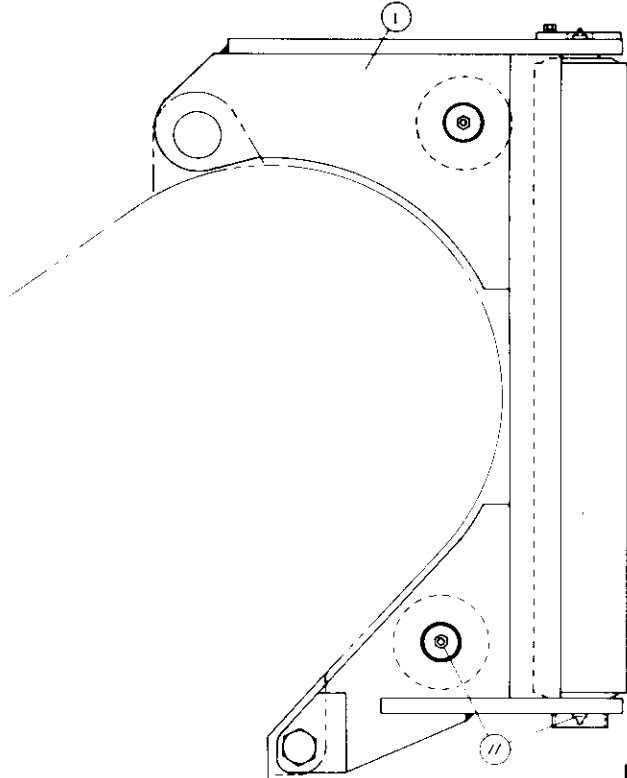
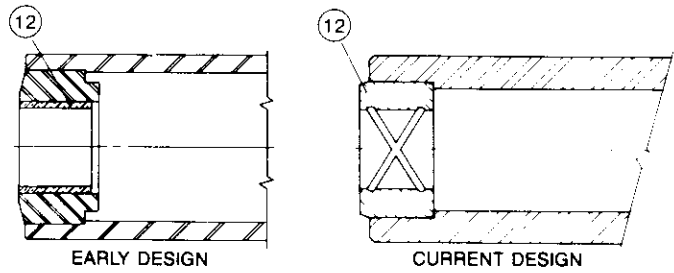
ITEM	PART NO.	DESCRIPTION	QTY.
1	27546	WINCH HOUSING	1
2	27520	CABLE DRUM	1
3	26100	LATHE CUT RING	2
4	26101	LATHE CUT RING	2
5	27383	BULL GEAR	1
6	27400	BUSHING	1
7	26779	INTERMEDIATE GEAR	1
8	26116	ROLLER BEARING	2
9	27379	GEAR SIDE COVER PLATE	1
10	27378	FREESPOOL PISTON	1
11	69858	O-RING	1
12	22697	CAPSCREW (1/2 NC x 1 GD5, HEX)	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 (3/4 NC x 2 1/2 GD8, HEX)	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	CAPSCREWEW (3/8 NC x 3/4 GD5, HEX)	3
109	27321	DRAG BRAKE DISC	1
110	26139	SPRING	1
111	26162	SPACER BAR	1
112	26151	SET SCREW	1
114	29660	BRAKE SIDE COVER	1
116	27476	BRAKE BEARING SHIM	1
120	25829	SEAL WASHER (USE 1/2 in. FLAT WASHER BETWEEN NUT, ITEM 121, AND SEAL WASHER)	1
121	11788	NUT (1/2 NC, HEX)	3
123	28805	STUD	1
131	69777	BREATHER BENT	1
132	70118	FILL PLUG	1
137	27326	FREESPOOL TUBE	1
139	26412	HOSE ASSEMBLY	1
147	72142	SEALING WASHER	1
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: Tie Bar P/N 26404 / Tie Bar Cotter Pins P/N 31948
13

**MODEL 30B PS
FAIRLEAD ASSEMBLY & DRAWBAR**



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



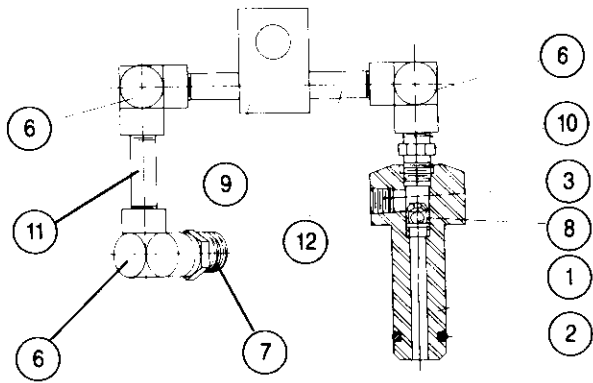
FAIRLEAD

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 1/4)	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
12	40249	BUSHING - CURRENT DESIGN 2.375 in. (60.3 mm) OD	6	8
—	63069	4TH ROLLER KIT (INCLUDES ITEMS 3, 5, 6, 7, 11)	OPT.	OPT.

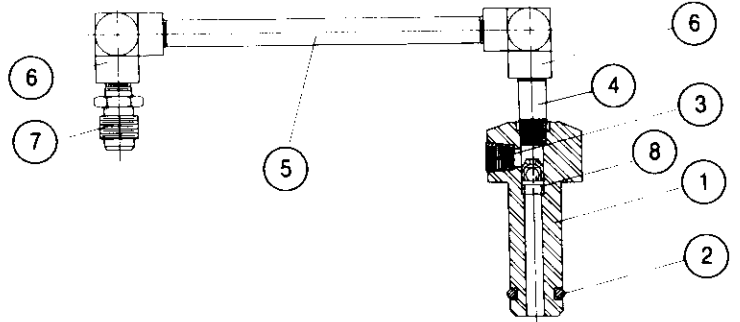
DRAWBAR KIT - 61926 (INCLUDES ITEMS 1-5)

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

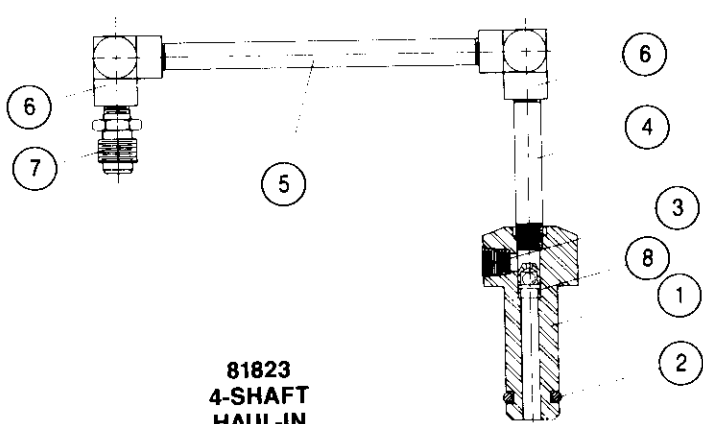
**MODEL 30B PS
TUBE ASSEMBLIES**



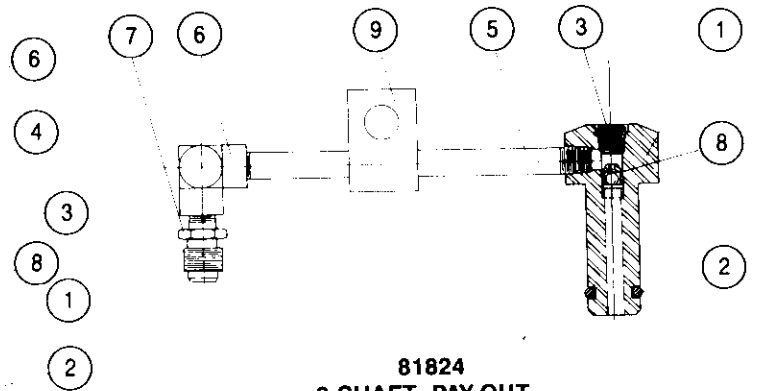
**81825
4-SHAFT, PAY-OUT**



**82059
3-SHAFT, HAUL-IN**



**81823
4-SHAFT
HAUL-IN**



**81824
3-SHAFT, PAY-OUT**

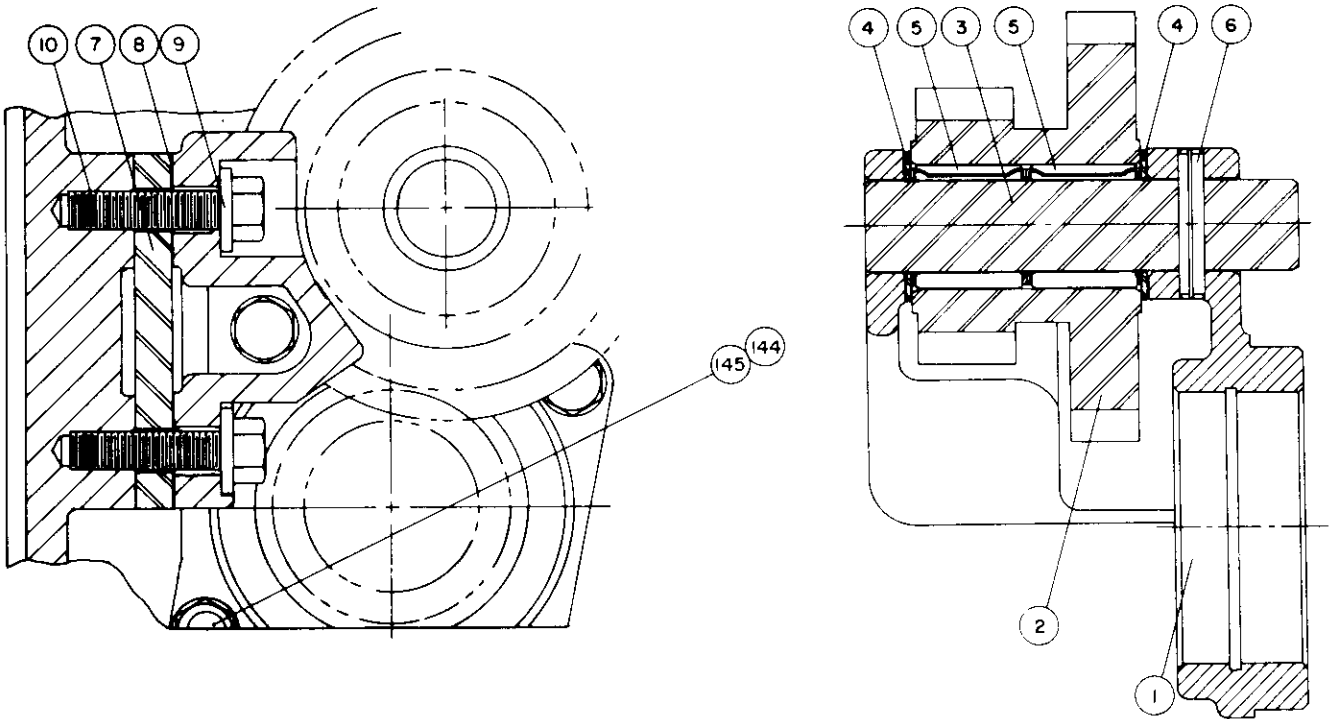
ITEM	PART NO.	DESCRIPTION	81823 QTY.	81825 QTY.	81824 QTY.	82059 QTY.
1	26163	HYDRAULIC TUBE	1	1	1	1
2	26201	O-RING	1	1	1	1
3	22374	PIPE PLUG	1	1	—	1
4	27898	PIPE NIPPLE	—	—	1	1
5	26246	PIPE NIPPLE	1	—	1	—
6	24524	FEMALE PIPE ELBOW	2	3	1	2
7	75956	MALE CONNECTOR	1	1	1	1
8	81913	DUMP VALVE SPOOL	1	1	1	1
9	26427	GUIDE BLOCK	—	1	1	—
10	24528	MALE CONNECTOR	—	1	—	—
11	76118	PIPE NIPPLE	—	1	—	—
12	26245	PIPE NIPPLE	—	1	—	—

**MODEL 30B PS
ADAPTER ASSEMBLY
4-SHAFT SLOW SPEED**

NOTES: The parts on this page are installed on slow speed 4-shaft winches only. Unless specified on this page, reference adapter assembly parts on pages 6 and 7.

On 4-shaft winches, the haul-in clutch is on the brake side of the clutch shaft and the pay-out clutch is on the gear side.

PAGE 6/7 ITEM NO.	PART NO.	DESCRIPTION	QTY.
57	27895	CLUTCH SHAFT	1
76	81823	TUBE ASSEMBLY (SEE PAGE 15)	1
78	81825	TUBE ASSEMBLY (SEE PAGE 15)	1



ITEM	PART NO.	DESCRIPTION	QTY.
1	26068	CLUTCH SHAFT CARRIER	1
2	26097	CLUSTER GEAR	1
3	26099	CLUSTER GEAR SHAFT	1
4	24306	THRUST WASHER	2
5	26120	BEARING	2
6	75310	ROLLPIN ($\frac{5}{16} \times 1$)	1
7	26578	SPACER	1
8	26570	SHIM SET (2 ea. — .005, .007)	2
9	32220	WASHER	2
10	13421	CAPSCREW ($\frac{1}{2} - 13 \text{ NC} \times 2 \text{ GR } 5$)	2
144	26425	STUD (WITH GEAR SIDE ONLY)	1
145	11788	NUT ($\frac{1}{2} - 13 \text{ NC}$) (WITH GEAR SIDE CLUTCH ONLY)	1

NOTES: Item 1 must be mounted in place prior to assembly of remaining parts group items.

When a gear side clutch is used with these parts, group items 144 and 145 are installed in location shown.