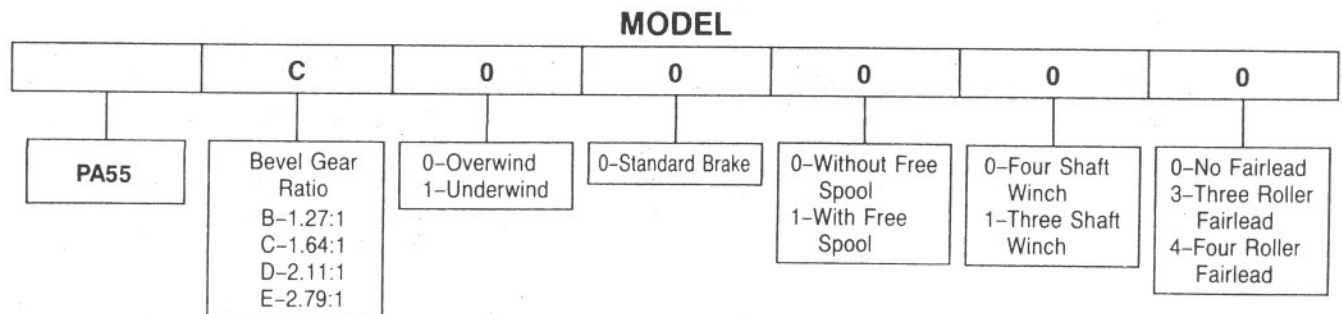


INSTALLATION AND PARTS MANUAL

MODEL PA55 FOR D5M & D6M PS TRACTORS

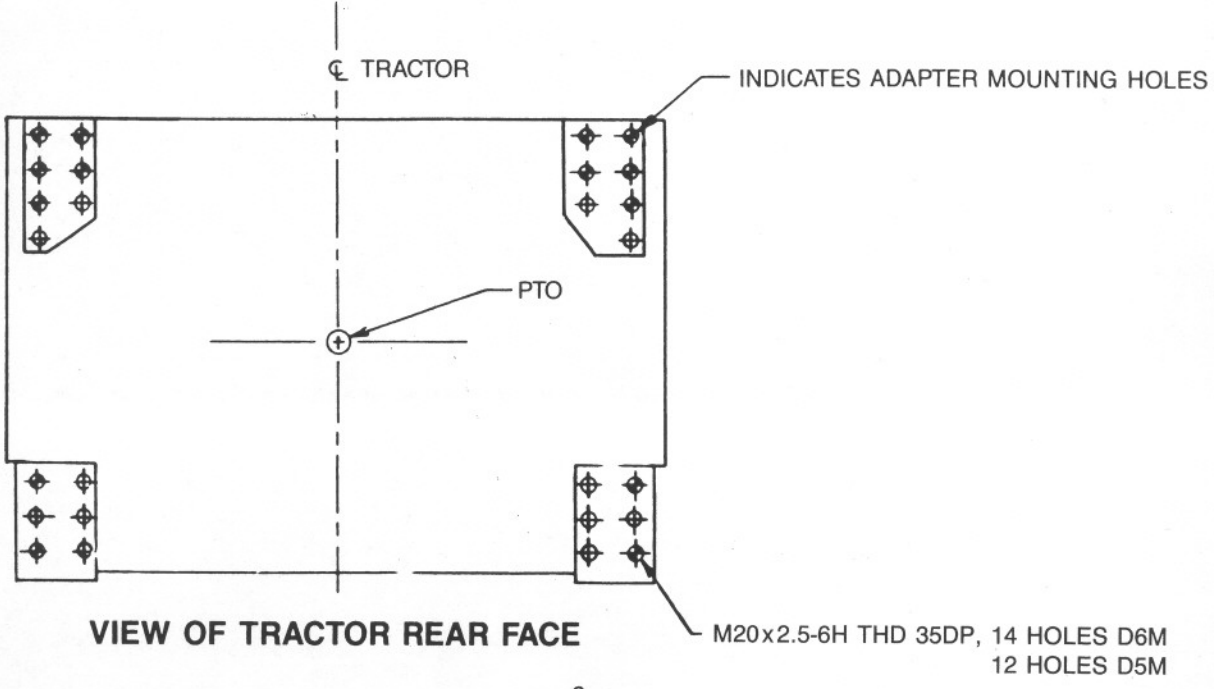
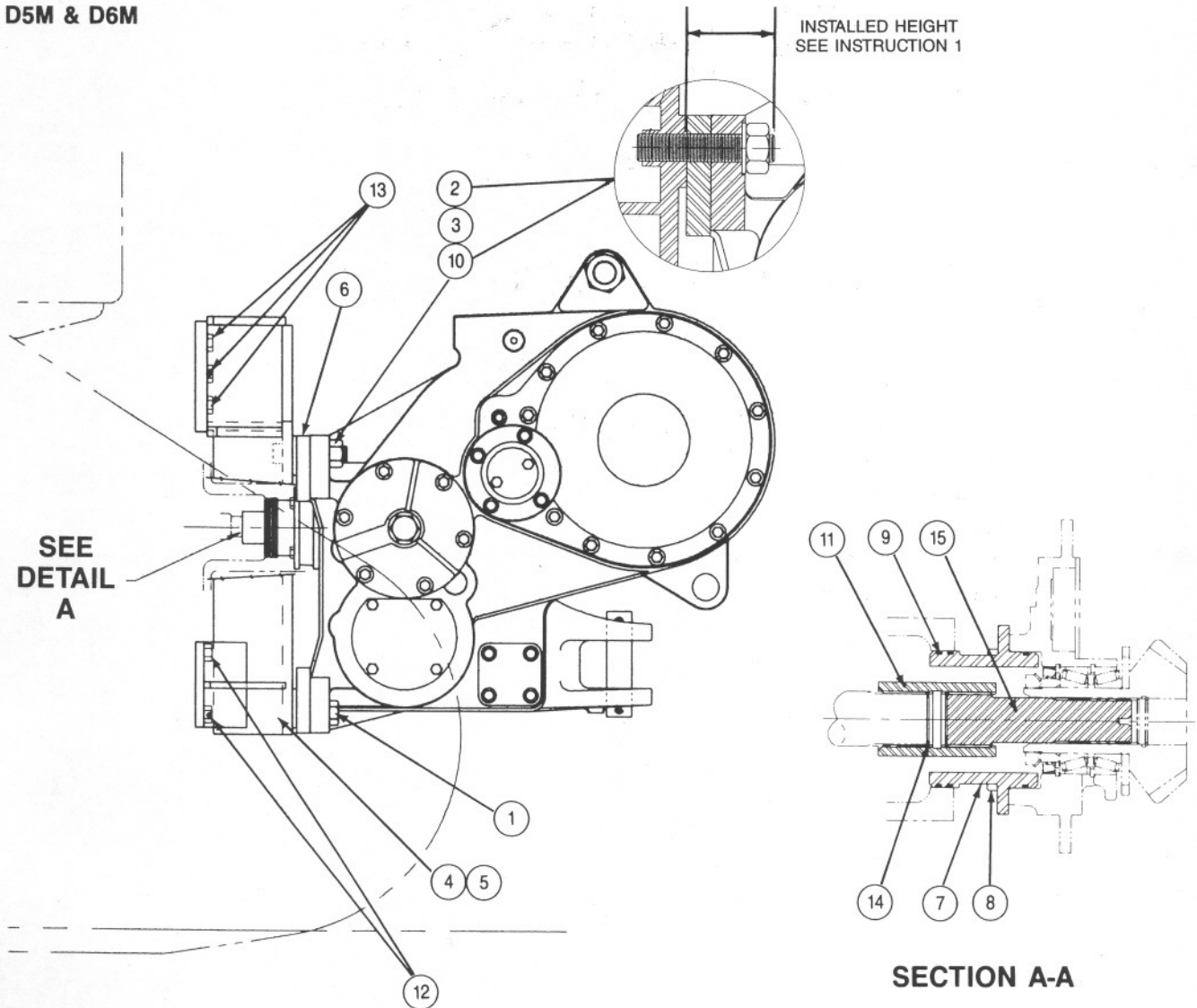
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PACCAR WINCH DIVISIONS

**MODEL PA55
MOUNTING GROUP
D5M & D6M**



INSTRUCTIONS

1. Apply Loctite 271 to threads of studs, item 3, and install into winch adapter brackets, items 4 and 5, to the height of 3.68 in. (94 mm).
2. PTO rotation is counterclockwise (CCW) as viewed from rear of tractor.
Remove and discard tractor PTO cover.
3. Remove paint, rust, dirt and grease from mounting surfaces of tractor, winch and winch adapters.
4. Coat splines of PTO shaft, Item 15, with multi-purpose grease and install into bevel pinion gear of winch.
5. Install retaining rings, Item 14, in coupling, Item 11. Place coupling over PTO shaft with beveled end away from winch.
6. Install o-rings, Item 9, onto PTO pilot Item 7. Note: As the same PTO pilot may be used on several adaptations, usually only one o-ring groove will engage and seal in the tractor PTO opening.
7. Remove winch top cover to gain access to the bevel gears.
8. Coat PTO pilot o-rings and splines of tractor PTO with multi-purpose grease and install winch on tractor while moving winch bevel gears to align the splines.
9. Apply Loc-tite 242 to threads of studs, Item 3 and capscrews, Items 1, 12 & 13 and tighten as follows:
 - A) Tighten nuts, item 2, to 986 lb•ft (1300 N•m).
 - B) Capscrews, Item 1, to be tightened to 680 lb•ft (900 N•m) torque.
 - C) Capscrews, Items 12 & 13 to be tightened to 340 lb•ft (460 N•m).

⚠ CAUTION

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

⚠ WARNING

Winch and adapters weigh approximately 2,500 lb (1,135 kg). Make certain that lifting equipment has adequate capacity. Failure to use adequate lifting equipment may result in property damage, personal injury or death.

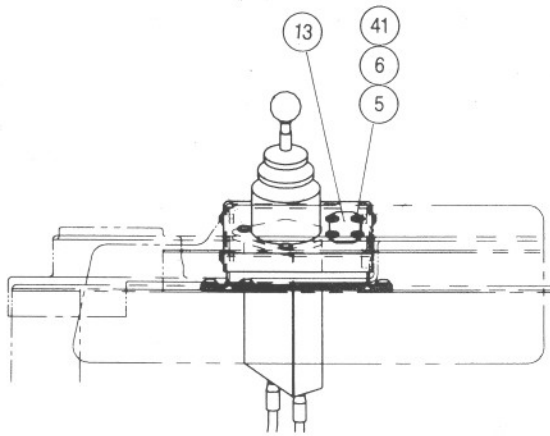
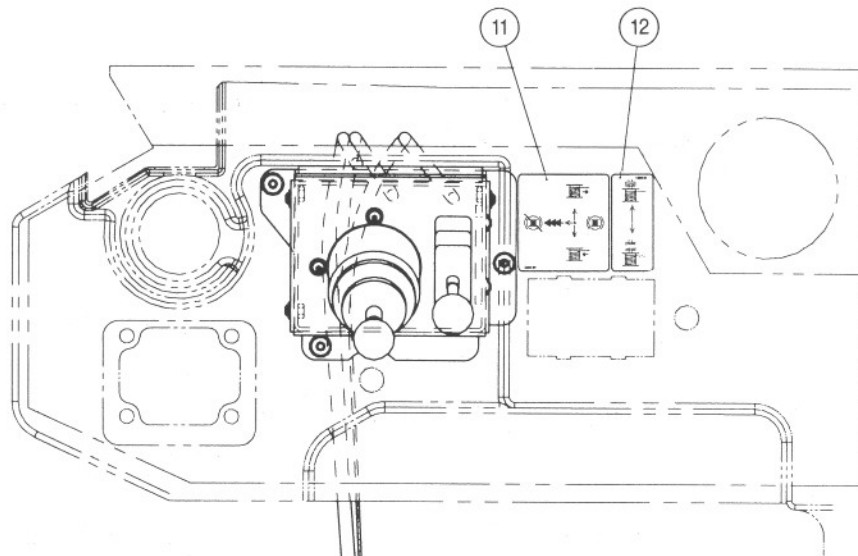
ITEM	PART NO.	DESCRIPTION	QTY.
			D5M & D6M POWERSHIFT
1	7X-0408	CAPSCREW, HEX HEAD (1 - 8 × 3½ G8)	4
2	7X-0450	NUT (1½ - 7)	4
3	133-9225	STUD (1½ - 7 × 5¾ G8)	4
4	173-6190	ADAPTER - RH	1
5	173-6191	ADAPTER - LH	1
6	118-6553	SPACER	4
7	118-6537	PILOT, PTO	1
8	5P-2228	CAPSCREW, HEX HEAD (½ - 13 × 1)	4
9	8S-5654	O-RING	3
10	119-1551	WASHER (1½ HARDENED)	4
11	118-6539	COUPLING	1
12	7X-2562	CAPSCREW, HEX HEAD (HM20 - 2.5 × 45 mm G8)	4
13	6V-3531	CAPSCREW, HEX HEAD (HM20 - 2.5 × 50 mm, G8)	10
14	120-7671	RETAINING RING	2
15	118-6559	PTO SHAFT	1

**MODEL PA55
CONTROL GROUP
D5M & D6M**

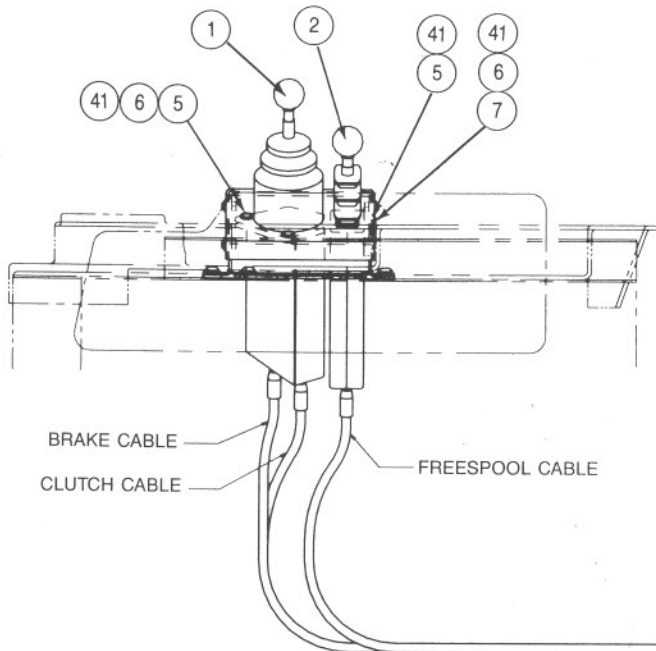
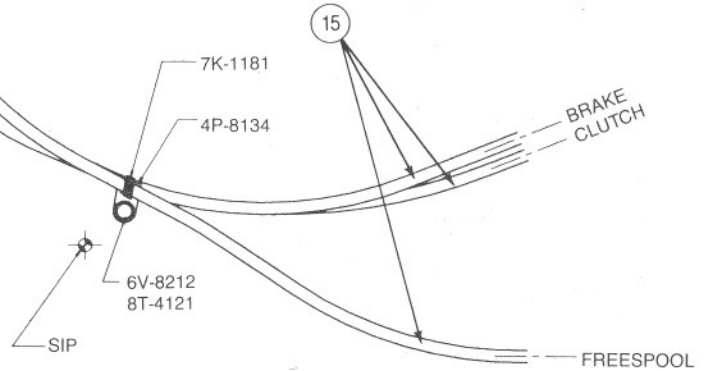
D5M

CAB ASSEMBLY — (SHOWN)
COVER GROUP 134-0514

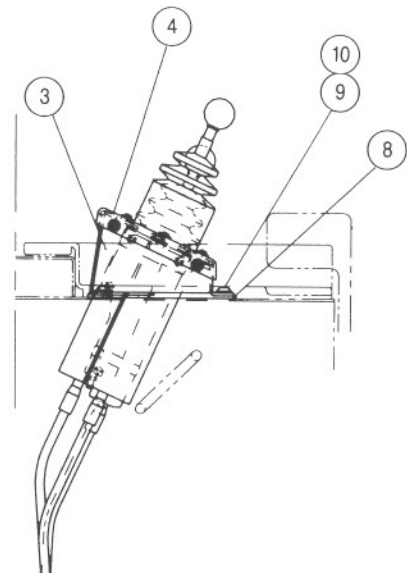
PLATFORM ASSEMBLY —
113-3358 (NOT SHOWN)
RH SIDE ONLY



WITHOUT FREESPOOL



WITH FREESPOOL



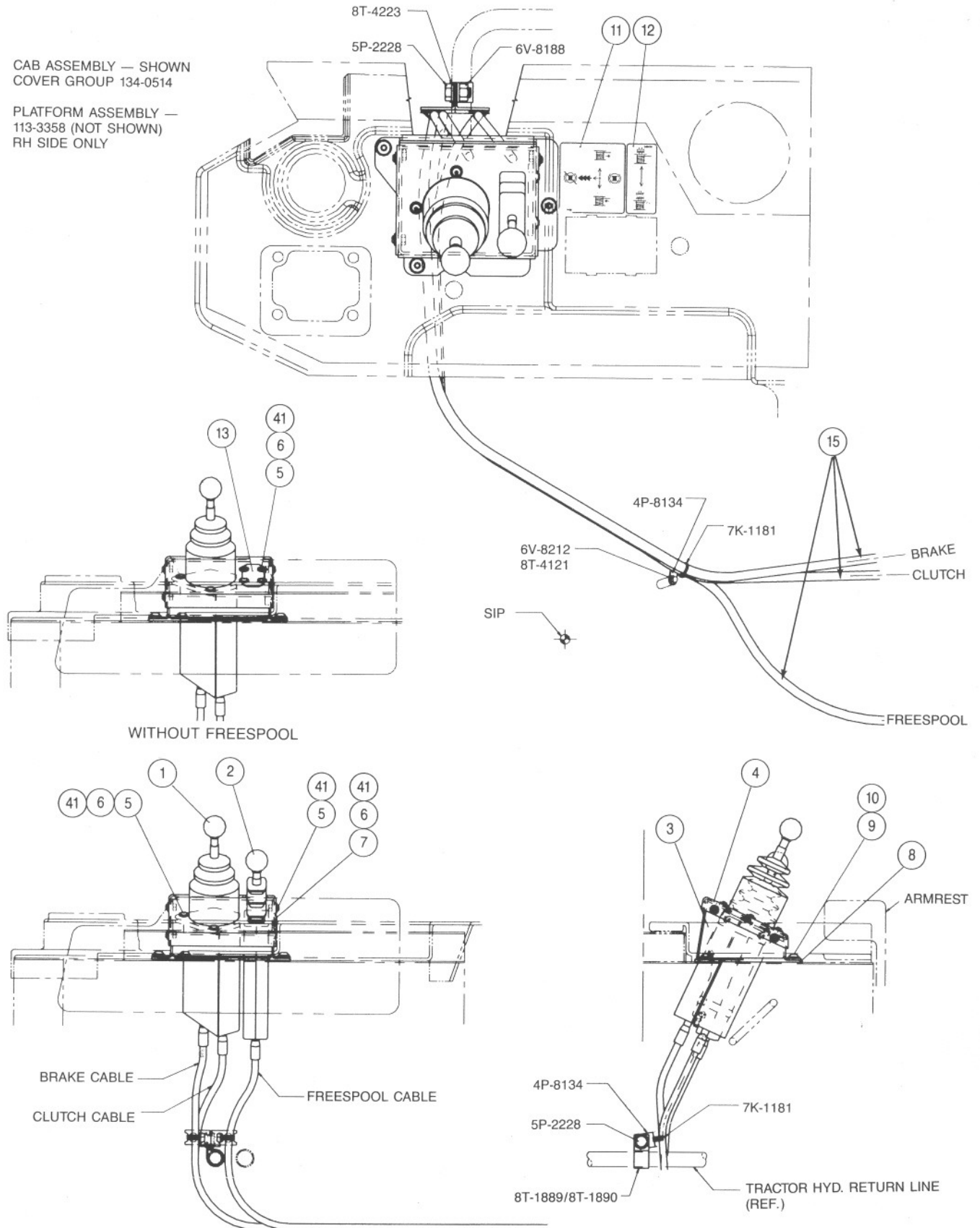
SECURE CABLES PER CAT 137-5831 INSTALLATION GROUP - WINCH.

**MODEL PA55
CONTROL GROUP
D5M & D6M**

D6M

CAB ASSEMBLY — SHOWN
COVER GROUP 134-0514

PLATFORM ASSEMBLY —
113-3358 (NOT SHOWN)
RH SIDE ONLY



WITHOUT FREESPOOL

WITH FREESPOOL

SECURE CABLES PER CAT 137-5832, INSTALLATION GROUP - WINCH.

**MODEL PA55
CONTROL GROUP
D5M & D6M**

CONTROL INSTALLATION INSTRUCTION

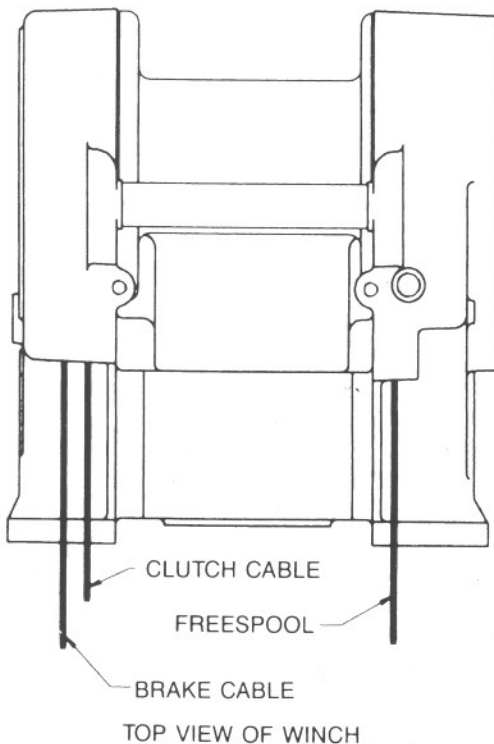
Note: These instructions are provided as a general guide. Tractor options, application requirements or local regulations may require deviation from these recommendations.

1. Install the gasket, item 8, to the bottom of the control bracket, item 3.
2. Install the control bracket onto the right hand console using existing button head capscrews.
3. Carefully route control cables from winch to underside of right hand console.

⚠ CAUTION

Avoid routing cables near moving shafts or linkage which may cause damage to cables or restrict free movement of tractor components.

4. Route the control cables up through the opening of the control bracket and install cables into controllers as follows:



Power Shift Control – Dual Axis

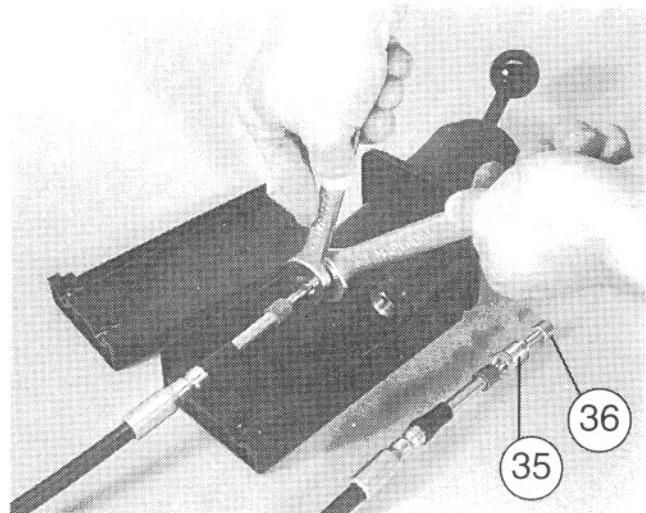
1. Remove the six through-bolts, item 34, from the control stand and separate the two cable support

housings, items 37 & 38. From each plunger, remove the sliding lock screw and threaded bushing, items 35 & 36. Refer to page 8 for part number description.

2. Install the sliding lock screw, item 35, onto the control cables. Apply two drops of Loctite 242 to the cable threads and install the threaded bushing, item 36, onto the cable core until the end of the cable core is level with the end of the bushing.
3. Hold the controller in your left hand with the knob end up and the mounting bolts located at 6, 9 and 12 o'clock positions. Mark the plunger closest to the 6 o'clock position as the "clutch" control. Mark the plunger closest to the 12 o'clock position as the "brake" control. The "clipped" corner of the control will be installed toward the rear of the tractor.
4. Install the brake cable to the "brake" control plunger and the clutch cable into "clutch" control plunger. Move the control lever to extend the plungers far enough to expose the wrench flats. With a wrench, hold the plunger as you tighten the sliding lock screw to 50 lb•ft (68 N•m) torque. Photo 1

⚠ CAUTION

Tightening the sliding lock screw without holding the plunger with a wrench will result in damage to the control assembly.

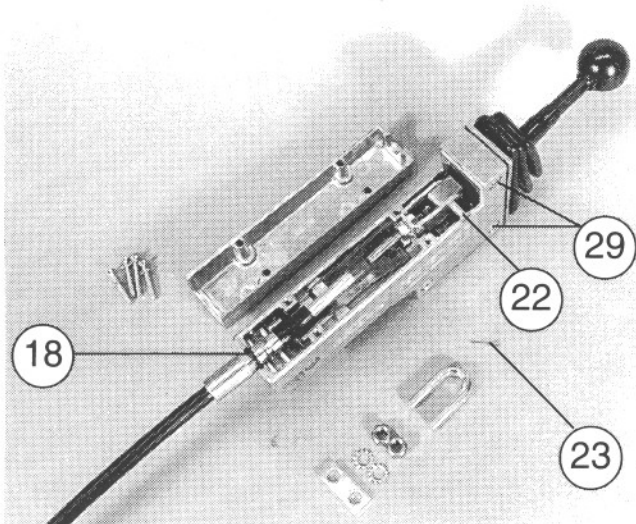


5. Install the cable support housings, items 37 & 38, onto the controller. Place the groove of the control cable housings into the saddle of the cable anchors, items 39 & 40. Install the six through-bolts, washers, lockwashers and nuts, items 31, 33, 34 & 41. Evenly tighten the bolts to 85 lb•in. (10 N•m) torque.

6. Insert the controller/cables sub-assembly from the bottom into the opening of the control bracket cover, item 4, and secure with three button, socket-head capscrews, washers and nuts, items 5, 6 & 41. If the winch is equipped with freespool, install the freespool controller/cable sub-assembly at this time. If not equipped with freespool, install the control bracket cover/controllers sub-assembly onto the control bracket using three button, socket-head capscrews, and washers, items 5 and 41.

Freespool Control Lever

1. Remove the knob, item 32, and the four oval head machine screws and lockwashers, items 16 & 17, from the long lever housing cover and remove the cover.
2. Prepare the control cable for installation by installing the o-ring, item 18, over the control lever end of the cable. The control lever end is identified by the u-bolt groove in the cable housing.
3. Install one nut, item 19, onto the cable core followed by the lockwasher, item 31.
4. Install the clevis, item 21, and one more nut, item 19, onto the cable. The cable core end must extend beyond the nut by $\frac{7}{32}$ in. (5.5 mm). Tighten the first nut to secure the clevis in this position.
5. Slip the clevis over the bellcrank of the lever and install the clevis pin, item 22, and secure in place with cotter pin, item 23. Photo 2



6. Remove the u-bolt, item 24, from the housing.
7. Position the o-ring, item 18, on the control cable housing so that when the cable is lowered into place, the o-ring fits in the groove in the housing.
8. Install the u-bolt, item 24, over the cable and

through the housing. Install the spacer, item 25, over the u-bolt followed by the lockwashers and nuts, items 20 & 26. Tighten the u-bolt nuts to 90 lb•in. (10 N•m) torque.

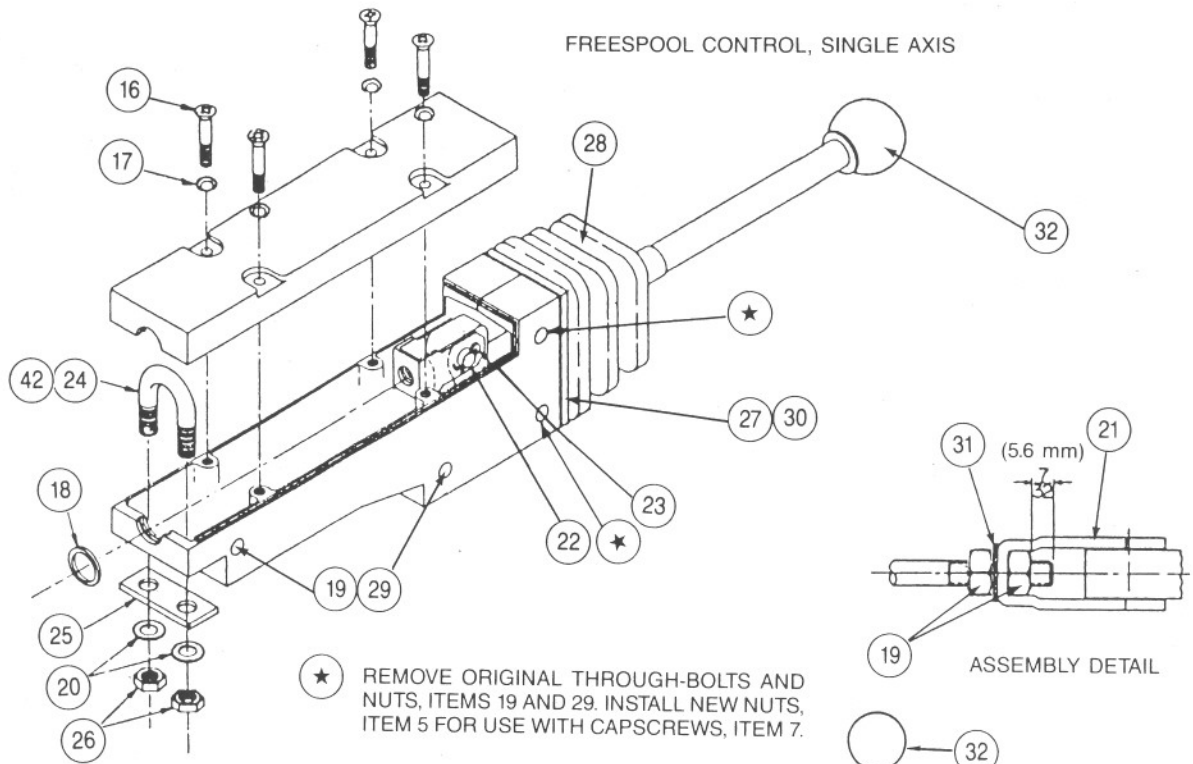
9. Install the cover onto the housing with the four oval head machine screws and lockwashers, items 16 & 17.
10. Remove the two through-bolts and nuts, items 29 and 19, from the top two mounting holes of the lever housing.
11. Secure the lever to the control bracket with capscrews, washers and nuts, items 6, 7 and 41. The long cover of the lever housing must face toward the operator.
12. Install the control bracket cover/controller sub-assembly onto the control bracket base using three button, socket-head capscrews and washers, items 5 and 41. Install the knob, item 32, onto the lever.

General Instructions

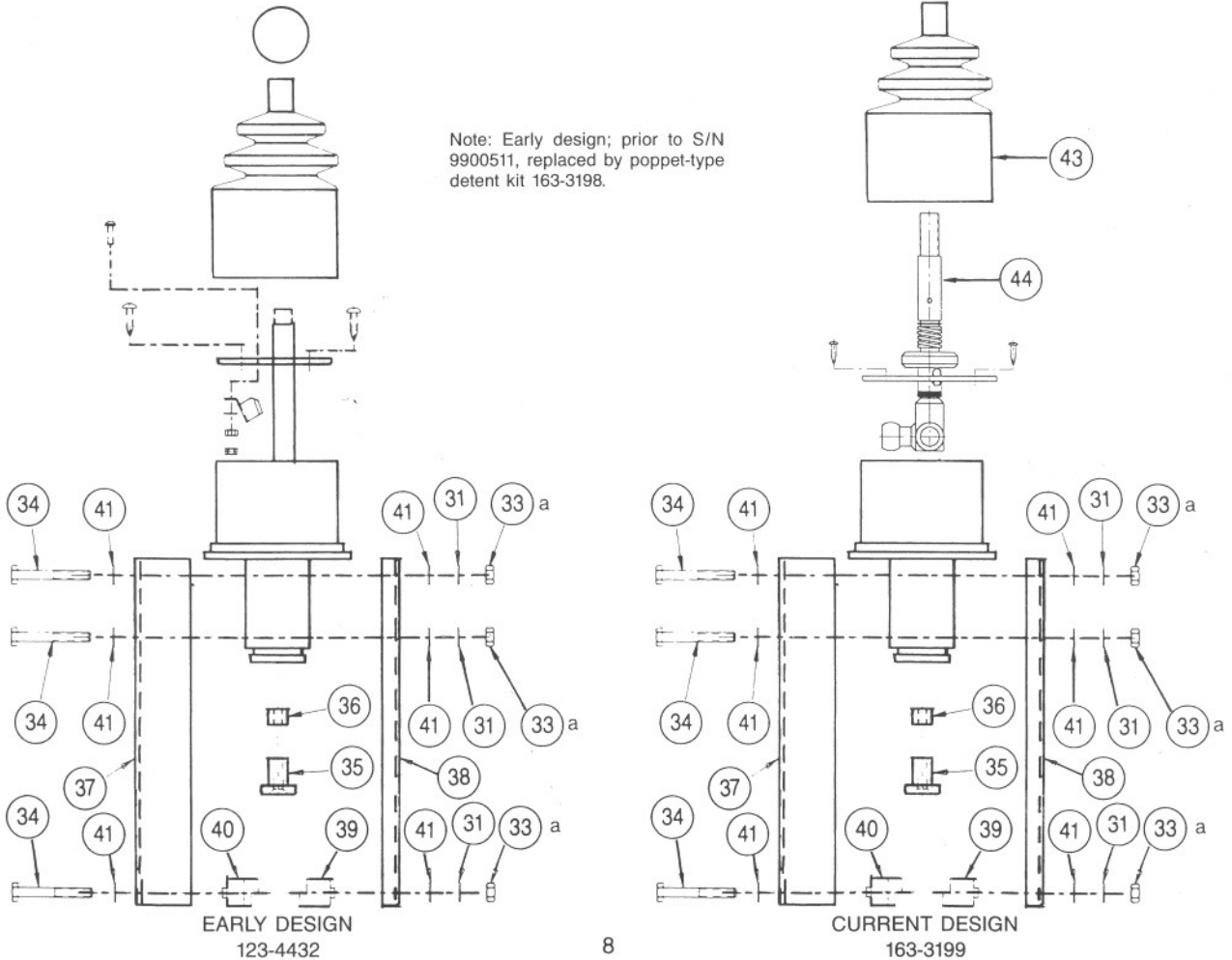
1. Install the control instruction self-adhesive decal(s), items 11 and 12, onto the console cover to the rear of the control bracket.
2. Fill winch to proper level with recommended oil. Refer to oil specifications found in the Operation and Preventive Maintenance Manual, publication SEBU 6884 (Paccar Winch PC-209).
3. Verify proper control cable and operating pressure adjustment by following the procedures found in the Operation and Preventive Maintenance Manual, publication SEBU 6884 (Paccar Winch PC-209) or the service manual, publication SENR 5358 (Paccar Winch PC-210).

**MODEL PA55
CONTROL GROUP
D5M & D6M**

FREESPOOL CONTROL, SINGLE AXIS



Note: Early design; prior to S/N 9900511, replaced by poppet-type detent kit 163-3198.

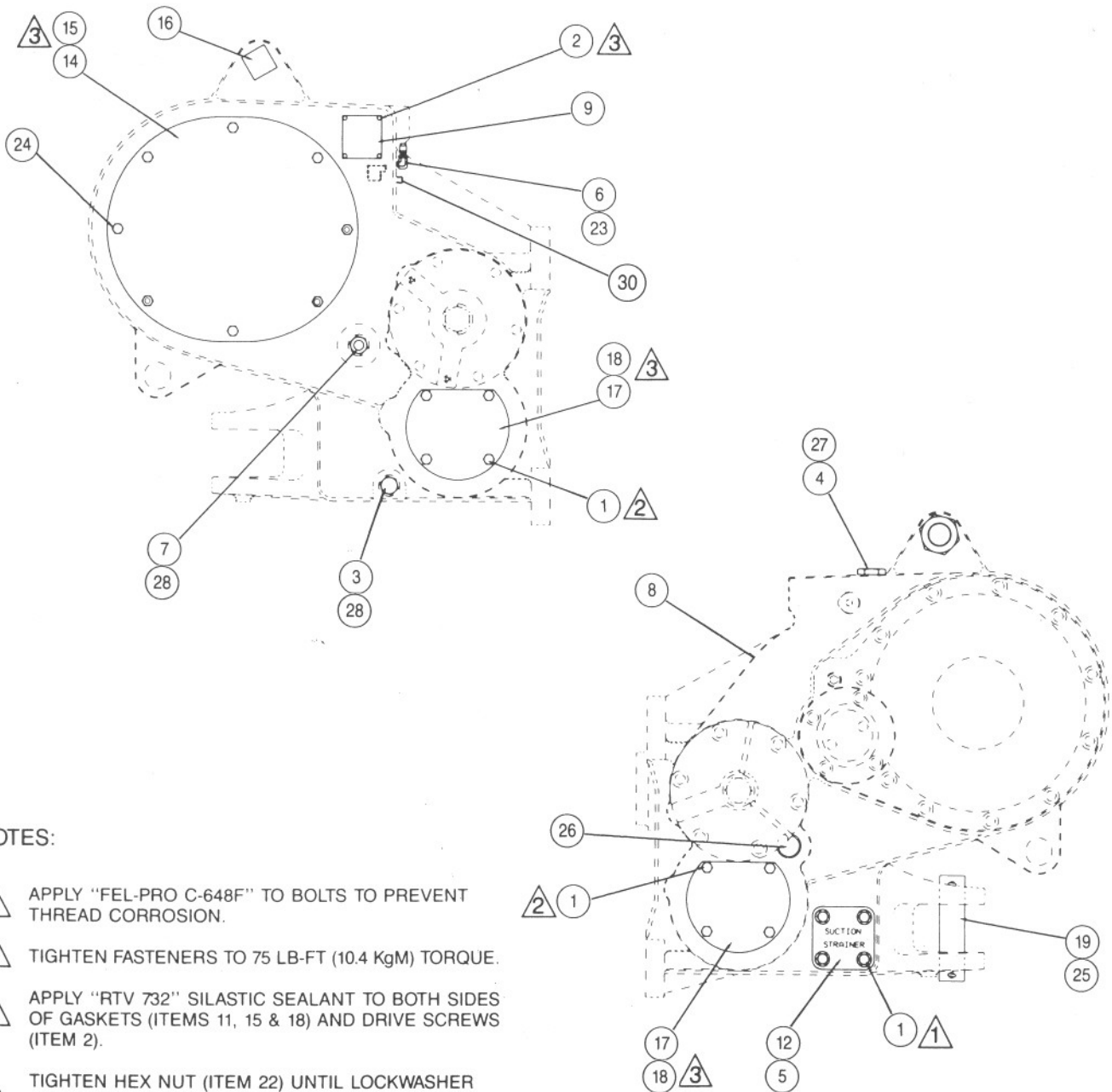
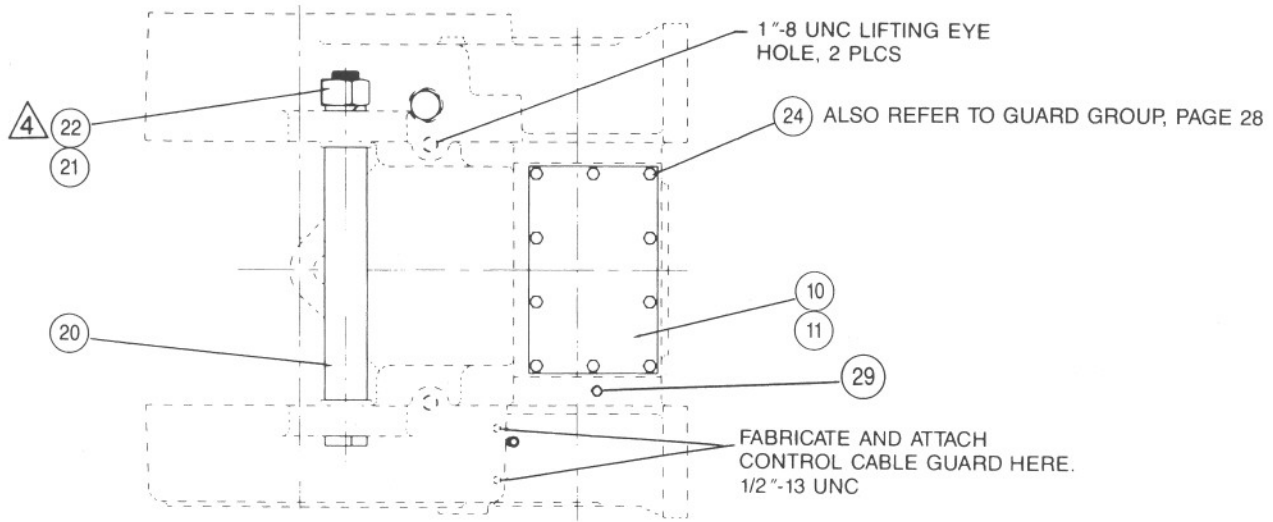


**MODEL PA55
CONTROL GROUP
D5M & D6M**

ITEM	PART NO.	DESCRIPTION	QTY.	
			W/FREESPOOL	W/O FREESPOOL
1	123-4432	CONTROL, DUAL AXIS - EARLY DESIGN *	1	1
	163-3199	CONTROL, DUAL AXIS - NEW DESIGN	1	1
2	123-4433	CONTROL, FREESPOOL, SINGLE AXIS	1	—
3	138-9293	CONTROL BRACKET BASE	1	1
4	136-7451	CONTROL BRACKET COVER	1	1
5	137-4398	CAPSCREW, BUTTON HEAD (M6 - 1.0 x 25 mm)	6	12
6	5C-2890	NUT, HEX (M6 - 1.0)	5	9
7	138-9289	CAPSCREW, BUTTON HEAD (M6 - 1.0 x 50 mm)	2	—
8	137-4401	GASKET	1	1
9	137-4402	CAPSCREW, BUTTON HEAD (M10 - 1.5 x 25 mm)	3	3
10	8T-4896	FLATWASHER (3/8 NARROW)	3	3
11	123-4439	DECAL, POWERSHIFT CONTROL	1	1
12	123-4440	DECAL, FREESPOOL	1	—
13	138-9292	COVER	—	1
15	123-4424	CONTROL CABLE - 90 in. (2286 mm)	3	2
16	126-5992	MACHINE SCREW, CSK, OVAL HEAD (8-32 x 1 1/4)	4	—
17	9F-5602	LOCKWASHER, CSK (8)	4	—
18	8F-9206	O-RING	1	—
19	9S-8748	NUT (1/4-28)	6	—
20	7H-3937	LOCKWASHER, EXTERNAL TOOTH (5/16)	2	—
21	126-2799	CLEVIS	1	—
22	126-2800	CLEVIS PIN	1	—
23	3B-4604	COTTER PIN (1/16 x 1/2)	1	—
24	126-2798	U-BOLT	1	—
25	126-2801	U-BOLT SPACER	1	—
26	6V-8186	NUT (5/16-24)	2	—
27	126-5990	MACHINE SCREW, CSK, OVAL HEAD (8-32 x 1/2)	4	—
28	126-2825	BOOT, FREESPOOL LEVER	1	—
29	126-5991	MACHINE SCREW, FLSTR HEAD (1/4-28 x 17/16)	4	—
30	126-2802	BOOT RETAINER PLATE	1	—
31	1H-3338	LOCKWASHER, EXTERNAL TOOTH (1/4)	7	6
32	7R-5874	KNOB	2	1
33	6V-8185	NUT (1/4-20)	6	6
34	8T-9367	CAPSCREW, HEX HEAD (1/4-20 x 2 G5)	6	6
35	126-2821	SLIDING LOCKSCREW	2	2
36	126-2822	CABLE BUSHING	2	2
37	126-2823	CABLE SUPPORT HOUSING, OUTER	1	1
38	126-2824	CABLE SUPPORT HOUSING, INNER	1	1
39	126-2818	CABLE ANCHOR, OUTER	1	1
40	126-2820	CABLE ANCHOR, INNER	1	1
41	8T-4205	WASHER, FLAT-THIN (1/4)	20	24
42	126-2803	CABLE CLAMP	1	—
43	163-3201	BOOT	1	1
44	163-3198	BRAKE-OFF DETENT KIT*	1	1

*Note: Early design; prior to S/N 9900511, replaced by poppet-type detent kit 163-3198. Kit replaces early design spring clip design with poppet-type detent mechanism for better retention in BRAKE-OFF position. Kit includes boot, spring, restrictor plate, poppet latch, jam nut screws and washers. Control lever shaft NOT included in kit and NOT available separately.

WINCH CASE & COVERS



NOTES:

- 1 APPLY "FEL-PRO C-648F" TO BOLTS TO PREVENT THREAD CORROSION.
- 2 TIGHTEN FASTENERS TO 75 LB-FT (10.4 KgM) TORQUE.
- 3 APPLY "RTV 732" SILASTIC SEALANT TO BOTH SIDES OF GASKETS (ITEMS 11, 15 & 18) AND DRIVE SCREWS (ITEM 2).
- 4 TIGHTEN HEX NUT (ITEM 22) UNTIL LOCKWASHER (ITEM 21) IS FLATTENED AND THEN TURN ONE FLAT.

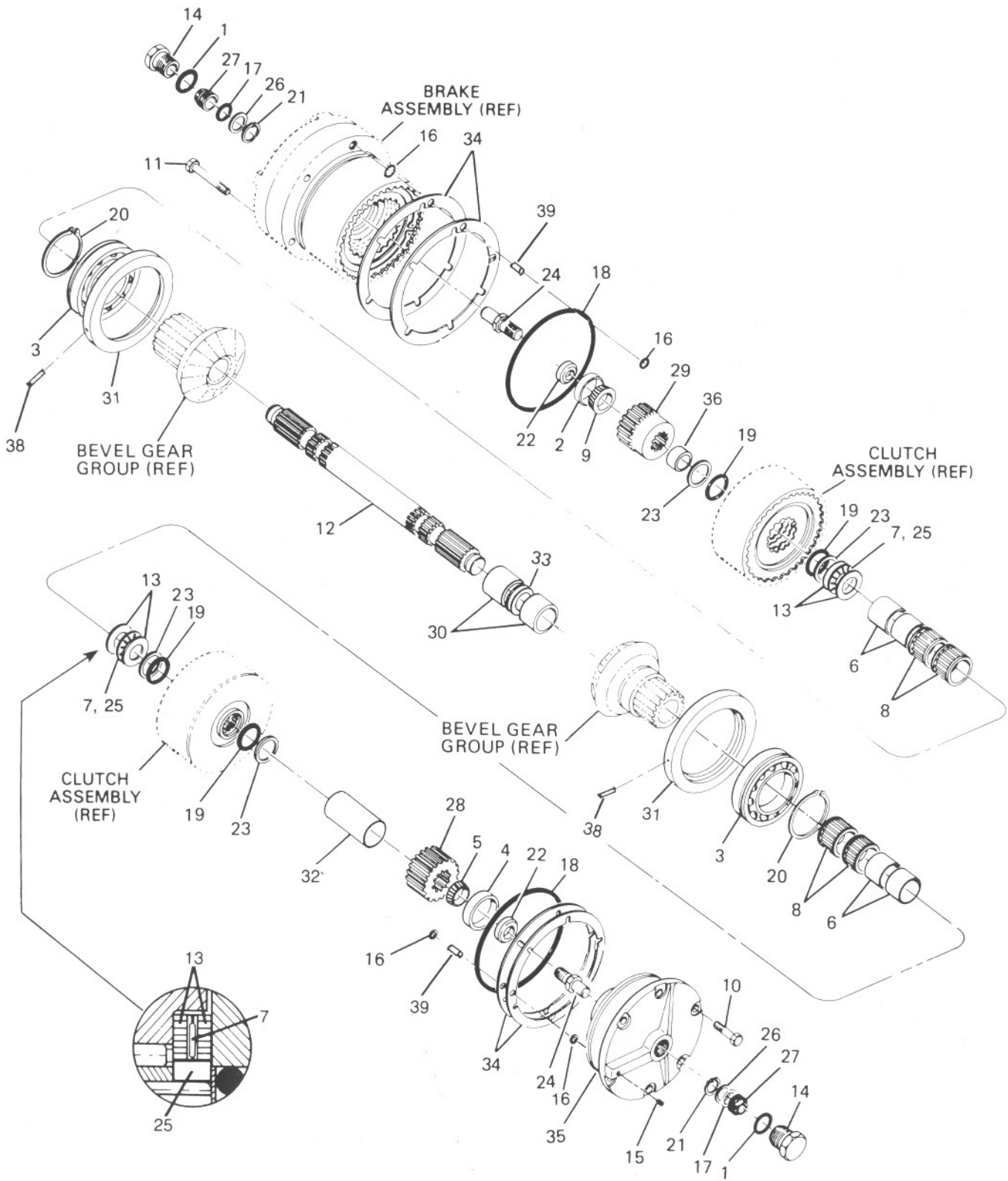
WINCH CASE & COVERS

ITEM	PART NO.	DESCRIPTION	QTY
1	5P-2228	CAPSCREW, HEX HEAD (1/2 - 13 NC x 1)	12
2	7H-4543	DRIVE SCREW	4
3	5P-9436	PLUG, DRAIN (MAY BE SUBSTITUTED FOR ITEM 7)	1
4	5P-1403	PLUG, OIL FILL (INCLUDES ITEM 27)	1
5	6L-9965	O-RING **	2
6	5F-5434	VENT PLUG	1
7	118-5783	SIGHT GAUGE (INCLUDES ITEM 28)	1
8	118-6973	WINCH CASE - STANDARD PTO - SHOWN	1
9	123-4417	SERIAL NUMBER DATA PLATE	1
10	118-6598	COVER, TOP ACCESS	1
11	118-6316	GASKET	1
12	120-7541	STRAINER COVER	1
14	118-6588	COVER, SIDE ACCESS	1
15	120-7543	GASKET	1
16	118-6298	TIE BOLT	1
17	118-6597	COVER, LOWER ACCESS	2
18	118-6317	GASKET	2
19	118-8382	DRAW BAR PIN	1
20	118-6314	SPACER TUBE	1
21	119-1623	LOCKWASHER (1 3/4)	1
22	2B-2673	NUT, HEX HEAD (1 3/4 NC)	1
23	3B-8822	ELBOW	2
24	6K-7917	CAPSCREW, HEX HEAD (1/2 - 13 NC x 1 SS)*	15
25	3B-5320	COTTER PIN (3/8 x 3 in.)	2
26	119-2165	EXPANSION PLUG - 3 SHAFT WINCH ONLY	1
27	6V-5065	O-RING - FOR OIL FILL PLUG	1
28	3D-2824	O-RING - FOR OIL DRAIN & LEVEL PLUG (ITEMS 3 & 7)	2
29	2B-7547	PLUG (3/8 NPT SQ HD)	1
30	5M-6214	PLUG (1/4 NPT SQ HD)	1

*SS = SELF SEALING MATERIAL PREAPPLIED TO THREADS

** = EARLY COVERS USE ONE O-RING, 6L-9965.

CLUTCH SHAFT GROUP

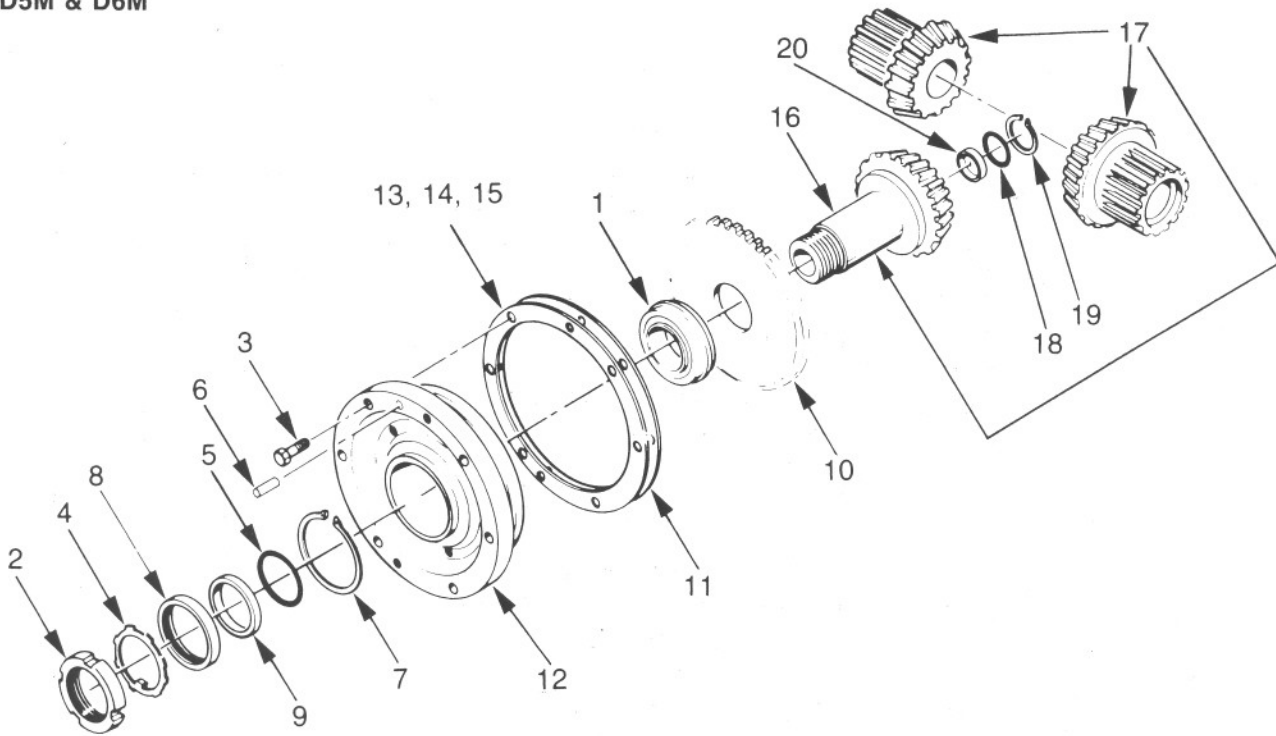


CLUTCH SHAFT GROUP

ITEM	PART NO.	DESCRIPTION	QTY
1	2S-4078	O-RING (PART OF ITEM 14)	2
2	120-7630	BEARING CUP	1
3	119-2138	BALL BEARING — STD PTO	2
4	119-2140	BEARING CUP	1
5	120-7635	BEARING CONE	1
6	119-2206	NEEDLE BEARING — INNER RACE	4
7	119-1606	THRUST BEARING	2
8	119-2208	NEEDLE BEARING	4
9	119-1593	BEARING CONE	1
10	5P-2228	CAPSCREW, HEX HEAD (1/2 - 13 x 1)	6
11	7X-0326	CAPSCREW, HEX HEAD (1/2 - 13 x 3)	6
12	118-7225	CLUTCH SHAFT — 4 SHAFT WINCH	1
	118-7217	CLUTCH SHAFT — 3 SHAFT WINCH	1
13	120-7633	THRUST BEARING RACE	4
14	5P-1403	PLUG (CONTAINS ITEM 1)	2
15	102-0883	PLUG (1/4 NPT) (EARLY)	1
	148-8407	PLUG, -6 ORB HEX -6 (CURRENT)	1
16	8M-4437	O-RING	8
17	120-7629	O-RING	2
18	119-1590	O-RING	2
19	119-1549	O-RING	4
20	119-1616	RETAINING RING	2
21	2D-6398	RETAINING RING	2
22	119-2171	BEARING RETAINER	2
23	119-1550	BACK-UP RING	4
24	147-2728	ROTARY SEAL SHAFT	2
25	118-5817	THRUST BEARING SPACER	2
26	119-1628	BACK-UP WASHER	2
27	119-2193	ROTARY SEAL	2
28	118-6582	PINION GEAR — 18 TEETH - 4 SHAFT WINCH	1
	118-6560	PINION GEAR — 15 TEETH - 3 SHAFT WINCH	1
29	118-6568	BRAKE HUB	1
30	118-5858	BEVEL GEAR SPACER	2
31	118-5844	BEARING CARRIER	2
32	118-5852	PINION SPACER — 4 SHAFT WINCH	1
	118-5864	PINION SPACER — 3 SHAFT WINCH	1
33	118-5848	SHIM SET	1
34	118-6647	SHIM .005 in. (.13 mm)	AR
	118-6599	SHIM .007 in. (.18 mm)	AR
	118-6600	SHIM .020 in. (.51 mm)	AR
35	118-6951	CLUTCH SHAFT BEARING CAR. — 4 SHAFT WINCH	1
	118-6969	CLUTCH SHAFT BEARING CAR. — 3 SHAFT WINCH	1
36	118-5864	BRAKE HUB SPACER	1
38	4H-1440	ROLLPIN	2
39	120-7663	SLEEVE	4

AR — AS REQUIRED

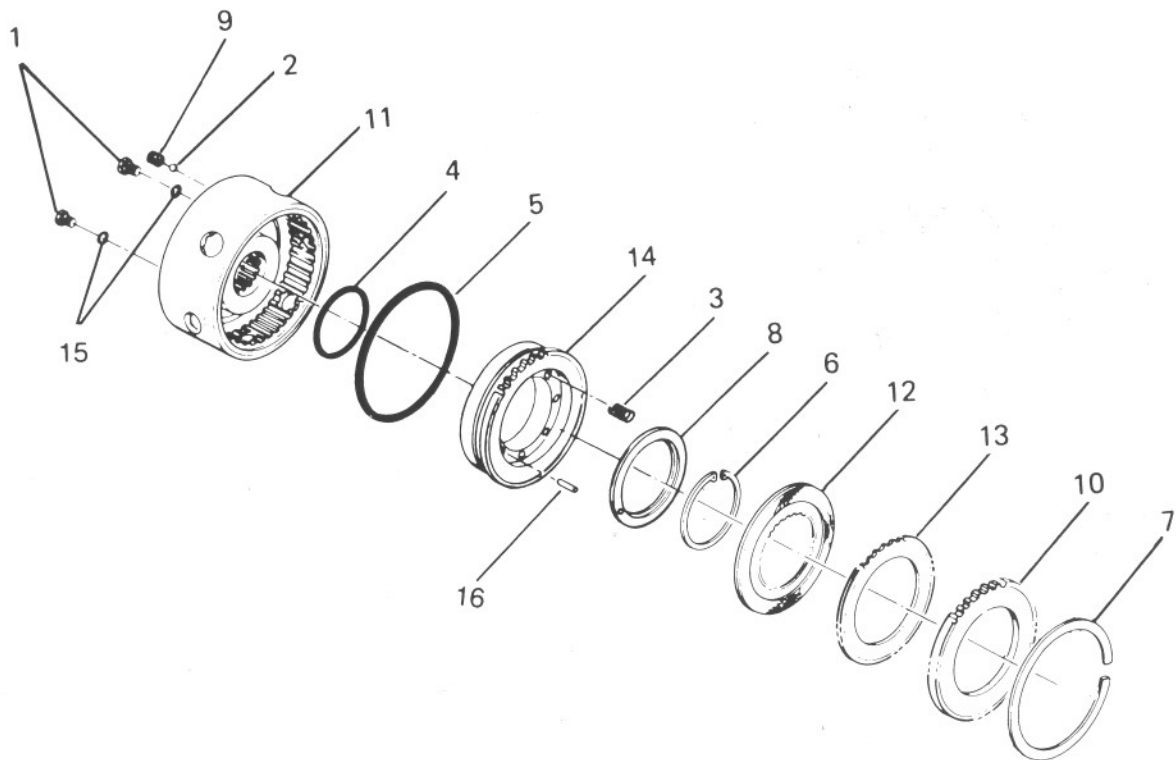
**MODEL PA55
BEVEL GEAR GROUP
D5M & D6M**



ITEM	PART NO.	DESCRIPTION	QTY.
1	119-2141	BEARING ASSEMBLY	1
2	119-1617	BEARING, LOCK NUT	1
3	5P-2228	CAPSCREW, HEX HEAD (1/2 - 13 x 1)	6
4	119-1618	LOCKWASHER	1
5	118-5804	O-RING	1
6	123-4403	DOWEL PIN	1
7	119-2157	RETAINING RING	1
8	120-7638	OIL SEAL	1
9	118-8381	SEAL SPACER	1
10	118-6589	PUMP DRIVE PINION	1
11	118-5854	SHIM GASKET	1
12	118-7222	CARRIER	1
13	118-5855	SHIM .005 in. (.13 mm)	2-AR
14	118-5856	SHIM .007 in. (.18 mm)	2-AR
15	118-5857	SHIM .020 in. (.51 mm)	2-AR
16	118-6971	BEVEL PINION - 18T STANDARD SPEED - 3 SHAFT PS TRACTORS	1
	119-0536	BEVEL PINION - 14T SLOW SPEED - 4 SHAFT PS TRACTORS OR STANDARD SPEED 3 SHAFT DD TRACTORS	1
17	119-2218	BEVEL GEAR SET - 18/38T *	1
	119-2219	BEVEL GEAR SET - 14/39T *	1
18	9X-7545	O-RING	1
19	1L-3768	RETAINING RING	1
20	119-2190	PLUG, BEVEL PINION	1

*BEVEL GEAR SET INCLUDES ONE BEVEL PINION AND TWO BEVEL GEARS.

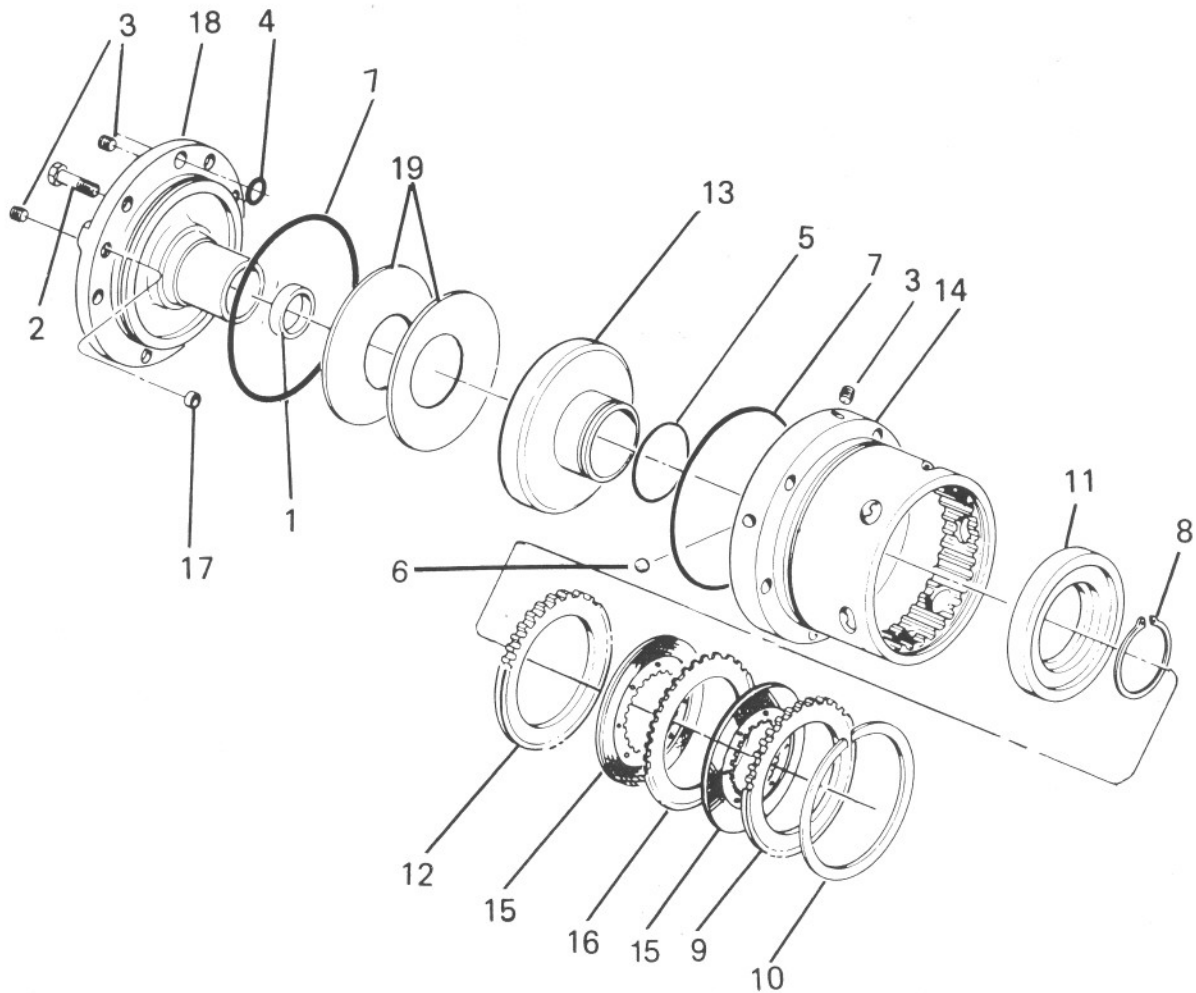
CLUTCH ASSEMBLY



ITEM	PART NO.	DESCRIPTION	QTY
—	118-7210	CLUTCH ASSEMBLY — INCLUDES ITEMS 1-16	
1	9S-8007	PLUG, O-RING FLUSH — INCLUDES ITEM 15	2
2	3Y-9267	STEEL BALL	1
3	118-5851	SPRING	8
4	5S-3676	O-RING	1
5	120-7669	O-RING	1
6	119-2195	RETAINING RING	1
7	119-1534	RETAINING RING	1
8	118-6566	SPRING RETAINER	1
9	118-5849	CHECK VALVE SEAT	1
10	118-6323	PRESSURE PLATE	1
11	118-8385	CLUTCH HOUSING*	1
12	118-6547	DISC — FRICTION, BRONZE	5
13	118-6302	DISC — STEEL .093 in. (2.36 mm)	4
14	118-6594	CLUTCH PISTON	1
15	119-2189	O-RING	2
16	5H-3182	PIN	1

*Part No. 118-8385 includes Housing 120-7697 with two (2) steel balls 3Y-9267 driven into drilled passages.

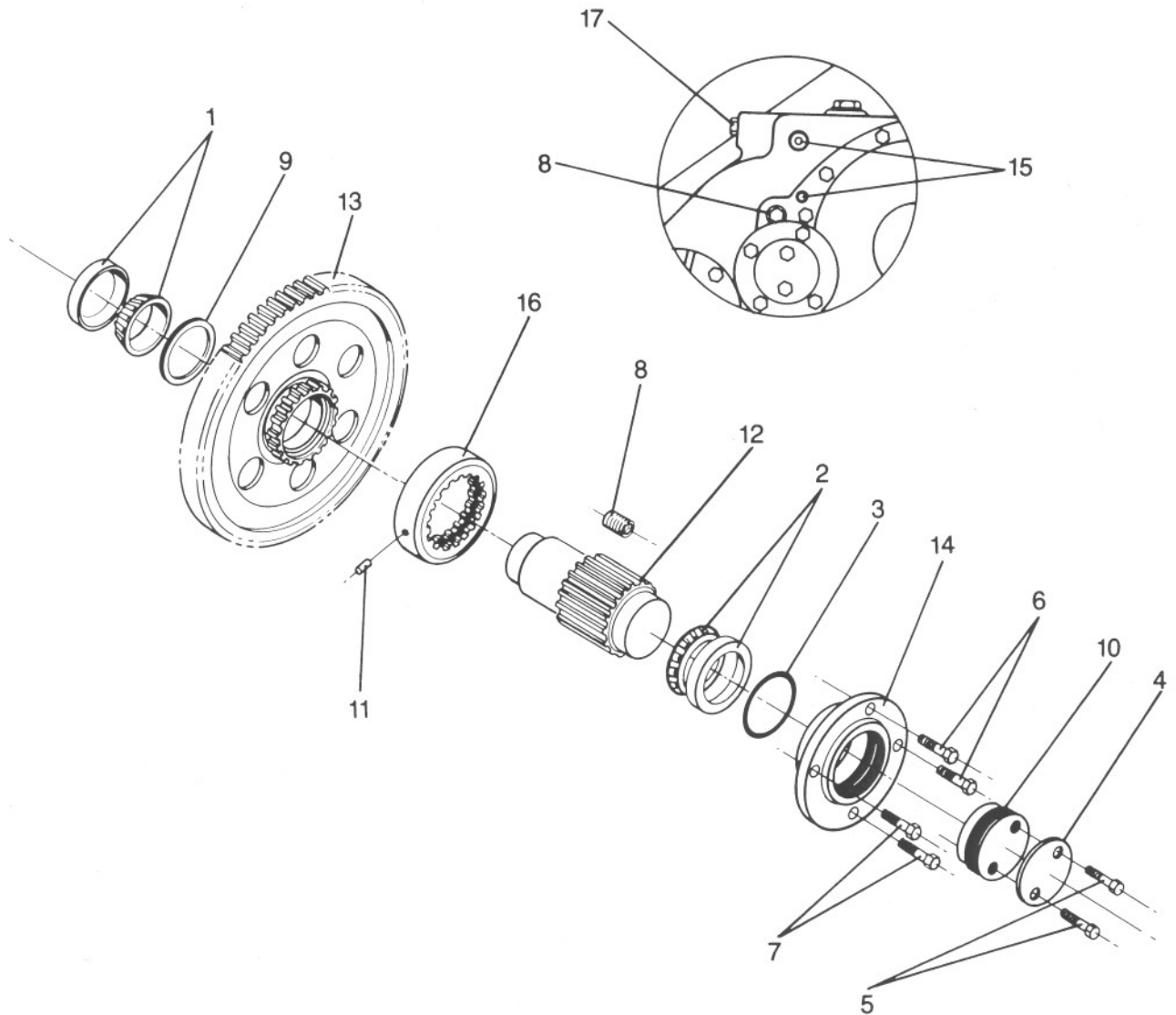
BRAKE ASSEMBLY - STANDARD



ITEM	PART NO.	DESCRIPTION	QTY
—	120-7698	BRAKE ASSEMBLY, STD — INCLUDES ITEMS 1-20	
1	120-7630	BEARING CUP	1
2	4L-6454	CAPSCREW, HEX HEAD (3/8 - 16 x 1)	2
3	102-0883	PLUG, HEX SOCKET (1/4 NPT - EARLY)*	4
	148-8407	PLUG, HEX HEAD (-6 ORB - CURRENT)*	3
4	119-1577	O-RING	3
5	4S-5898	O-RING	1
6	3Y-9267	STEEL BALL	2
7	119-1586	O-RING	2
8	123-4415	RETAINING RING	1
9	118-6323	PRESSURE PLATE — OUTER	1
10	119-1534	RETAINING RING	1
11	118-6587	PISTON RETAINER	1
12	118-5846	PRESSURE PLATE — INNER	1
13	118-6593	BRAKE PISTON	1
14	118-6949	BRAKE HOUSING EARLY (REQUIRES 2 OF ITEM 6)*	1
		CURRENT (REQUIRES 1 OF ITEM 6)*	1
15	118-6547	DISC — FRICTION BRONZE	8
16	118-6302	DISC STEEL — .093 in. (2.36 mm)	7
17	118-0550	INSERT — NOT USED IN CURRENT HOUSING*	1
18	118-7223	BRAKE CARRIER	1
19	119-2167	BRAKE SPRING	2

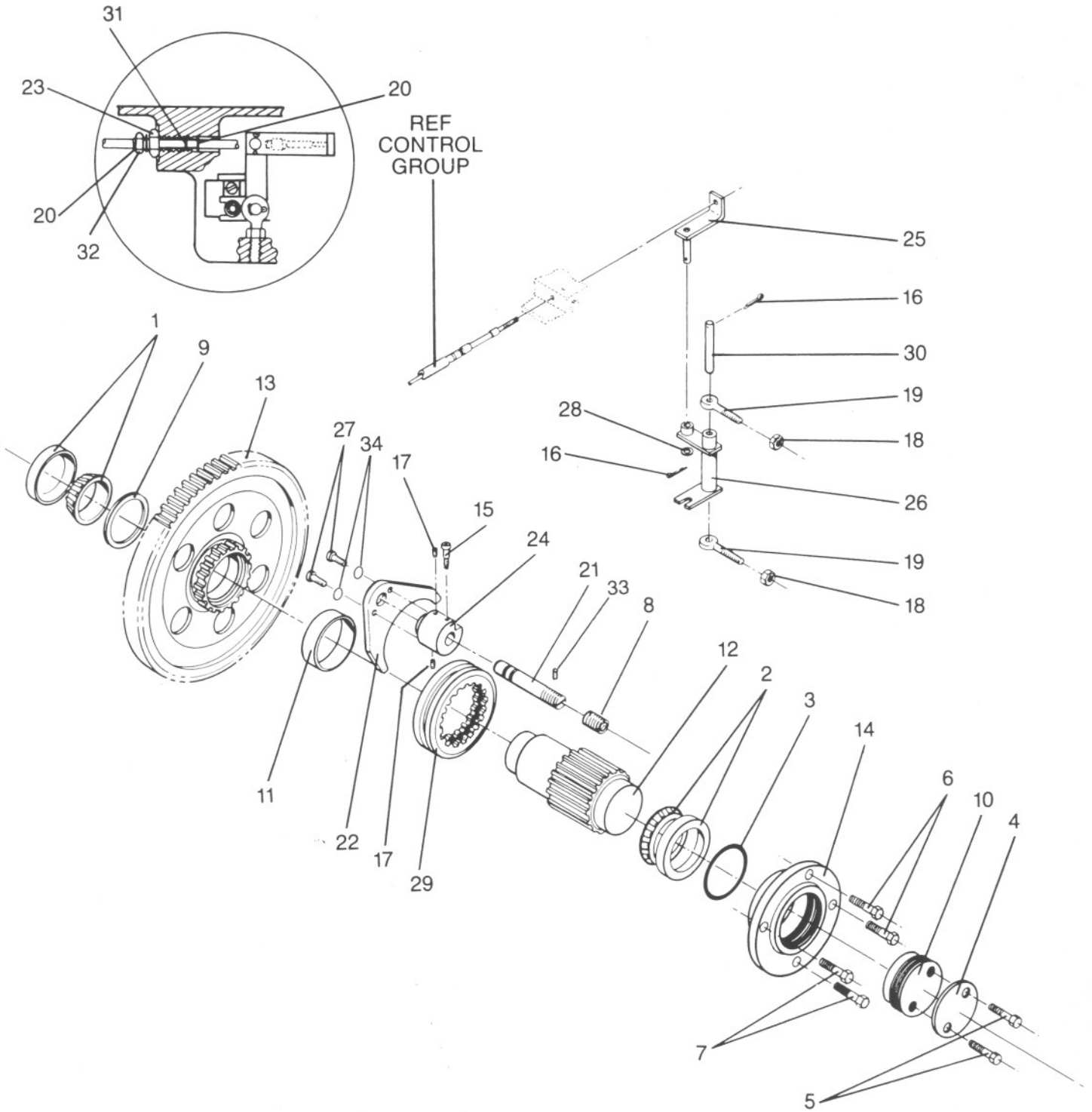
* Current brake housing may be visually distinguished from the early design by locating the -6 ORB plug in the "B" brake pressure port. The early design used a hex-socket head 1/4 NPT plug.

**IDLER SHAFT GROUP
WITHOUT FREESPOOL**



ITEM	PART NO.	DESCRIPTION	QTY.
1	119-0160	BEARING ASSEMBLY — INNER	1
2	119-0162	BEARING ASSEMBLY — OUTER	1
3	119-1547	O-RING	1
4	118-5859	LOCK PLATE	1
5	8T-9383	CAPSCREW, HEX HEAD (1/2 - 13 × 3/4)	2
6	8T-8917	CAPSCREW, HEX HEAD (1/2 - 13 × 1 1/4)	2
7	8T-4835	CAPSCREW, HEX HEAD (1/2 - 13 × 2)	2
8	038-7338	PLUG, SOCKET HEAD	1
9	120-7633	THRUST WASHER	1
10	118-6535	ADJUSTER	1
11	5H-3193	ROLLPIN	1
12	118-6584	PINION, SECOND REDUCTION	1
13	118-6976	GEAR, FIRST REDUCTION	1
14	118-6917	CARRIER, IDLER SHAFT	1
15	064-1609	SCREW, SOCKET HEAD	2
16	118-6586	COLLAR	1
17	2H-3740	CAPSCREW HEX HEAD (3/4 - 16 × 1 1/4)	1

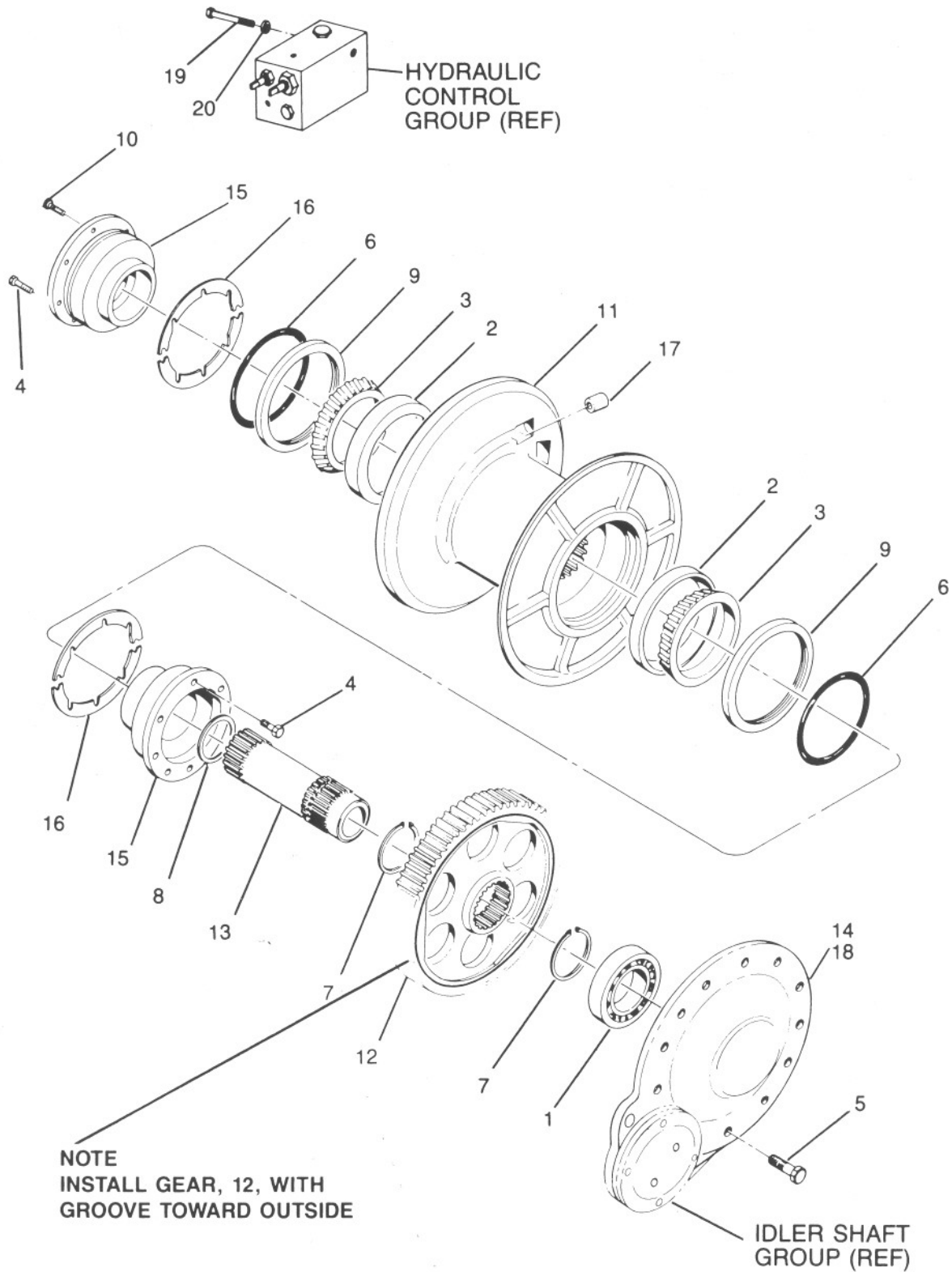
IDLER SHAFT GROUP WITH FREESPOOL



**IDLER SHAFT GROUP
WITH FREESPOOL**

ITEM	PART NO.	DESCRIPTION	QTY.
1	119-0160	BEARING ASSEMBLY — INNER	1
2	119-0162	BEARING ASSEMBLY — OUTER	1
3	119-1547	O-RING	1
4	118-5859	LOCK PLATE	1
5	8T-9383	CAPSCREW, HEX HEAD (1/2 - 13 x 3/4)	2
6	8T-8917	CAPSCREW, HEX HEAD (1/2 - 13 x 1 1/4)	2
7	8T-4835	CAPSCREW, HEX HEAD (1/2 - 13 x 2)	2
8	038-7338	PLUG, SOCKET HEAD	1
9	120-7633	THRUST WASHER	1
10	118-6535	ADJUSTER	1
11	119-2170	BUSHING	1
12	118-6584	PINION, SECOND REDUCTION	1
13	118-7224	GEAR, FIRST REDUCTION	1
14	118-6917	CARRIER, IDLER SHAFT	1
15	039-2676	SHOULDER SCREW	1
16	9L-7469	COTTER PIN	2
17	119-1626	BALL PLUNGER	2
18	1B-4430	JAM NUT	2
19	2J-5038	ROD END	2
20	3K-9042	RETAINING RING	2
21	119-2184	SHIFT RAIL, INCLUDES ITEM 33	1
22	118-6567	YOKE	1
23	1D-5120	JAM NUT	1
24	118-5862	SHIFT COLLAR	1
25	118-6658	CABLE CONNECTOR	1
26	118-5785	BELLCRANK WELDMENT	1
27	0S-1594	CAPSCREW, HEX HEAD (3/8 - 16 x 1 G5)	2
28	4B-4280	WASHER (1/2)	1
29	118-6585	COLLAR	1
30	119-2210	PIN	1
31	5H-8853	O-RING	1
32	119-2209	CONTROL CABLE ADJUSTER	1
33	119-0570	NYLON PELLETT	1
34	3B-4506	LOCKWASHER (3/8)	2

CABLE DRUM GROUP



CABLE DRUM GROUP

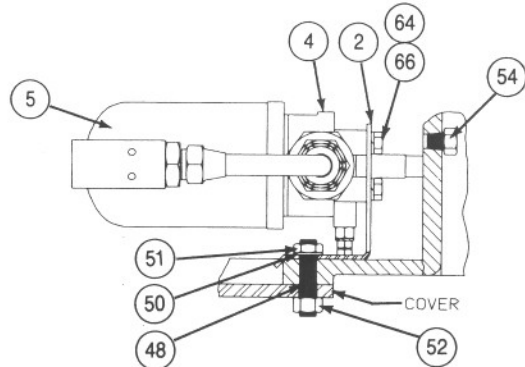
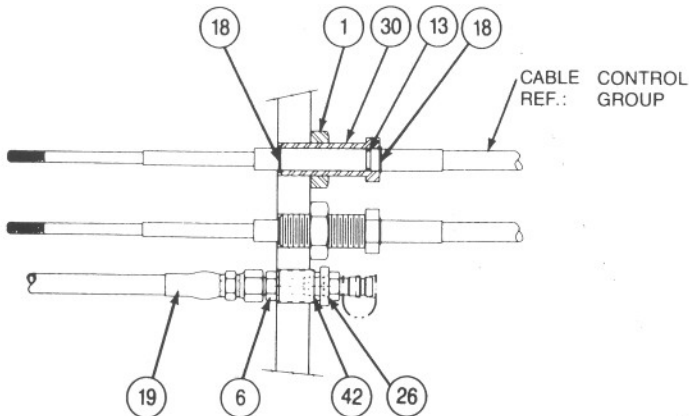
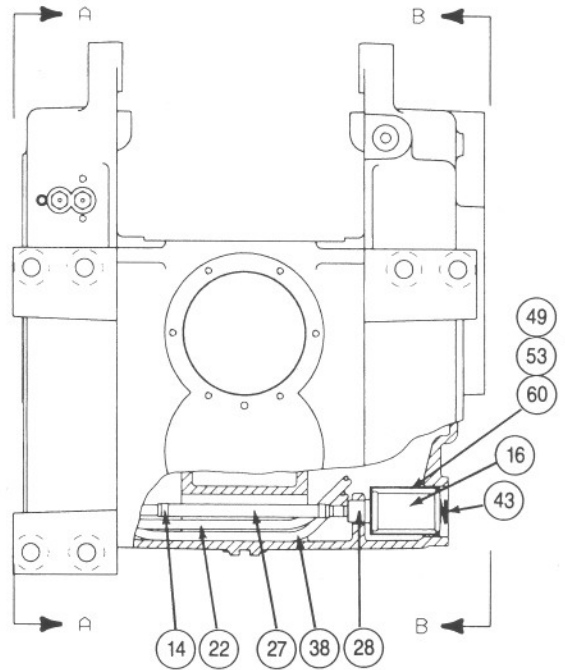
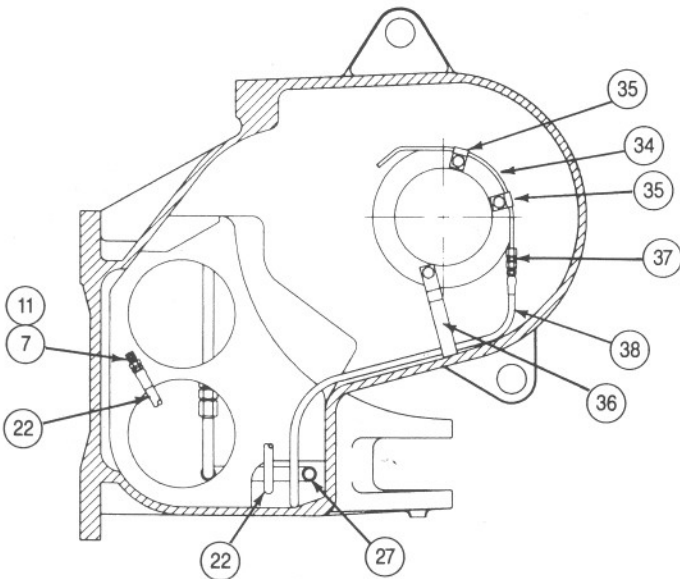
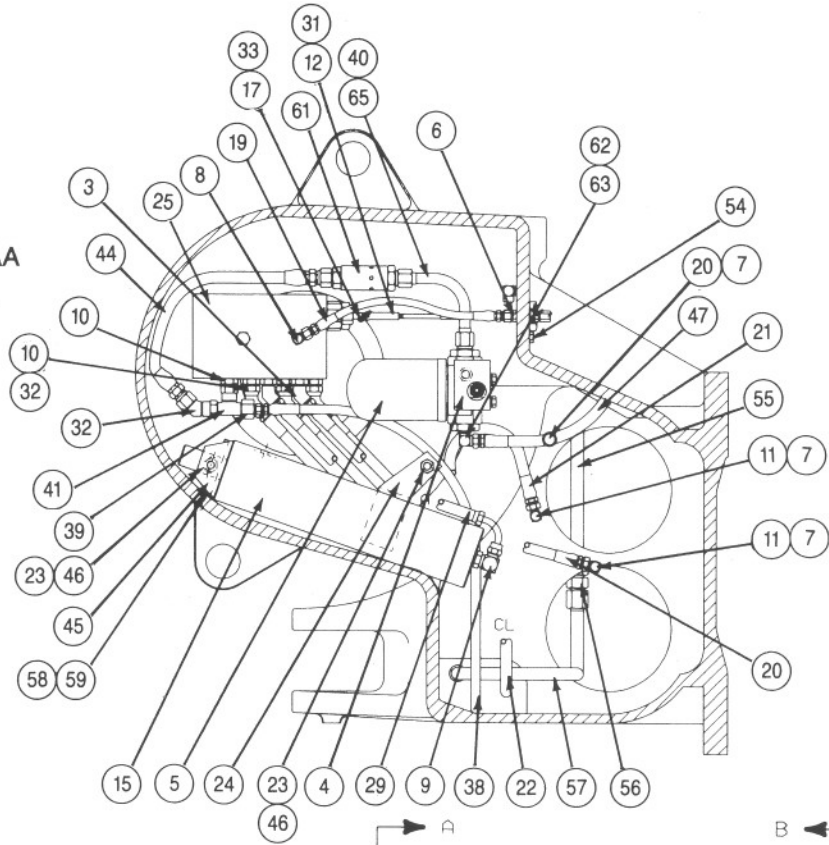
CABLE DRUM GROUP

ITEM	PART NO.	DESCRIPTION	QTY.
1	119-2137	BALL BEARING	1
2	119-2203	BEARING CUP	2
3	119-2204	BEARING CONE	2
4	6K-7917	CAPSCREW, HEX HEAD (1/2 - 13 x 1 - SS)	10
5	8T-8917	CAPSCREW, HEX HEAD (1/2 - 13 x 1 1/4)	11
6	1S-6119	O-RING	2
7	123-4416	RETAINING RING	2
8	7M-2275	RETAINING RING	1
9	118-5866	OIL SEAL	2
10	119-0561	CAPSCREW, SOCKET HEAD (1/2 - 13 x 1 - SS)	1
11	118-7229	CABLE DRUM	1
12	118-7215	GEAR, 2ND REDUCTION	1
13	118-6583	SHAFT, 2ND REDUCTION	1
14	118-6968	BEARING CARRIER, COVER	1
15	118-6975	BEARING CARRIER, DRUM	2
16	118-5847	SHIM SET - 1 pair ea., .005 in., .007 in., .020 in. (.13 mm, .18 mm, .51 mm)	1-2
17	118-6273	FERRULE — 3/4 in. (19 mm) WIRE ROPE	1
	118-6275	FERRULE — 7/8 in. (22 mm) WIRE ROPE	1
18	—	NO GASKET, USE DOW RTV 732 OR EQUIVALENT	—
19	119-0562	CAPSCREW, HEX HEAD (1/2 - 13 x 5 - SS)	1
20	4B-4280	WASHER (1/2)	1

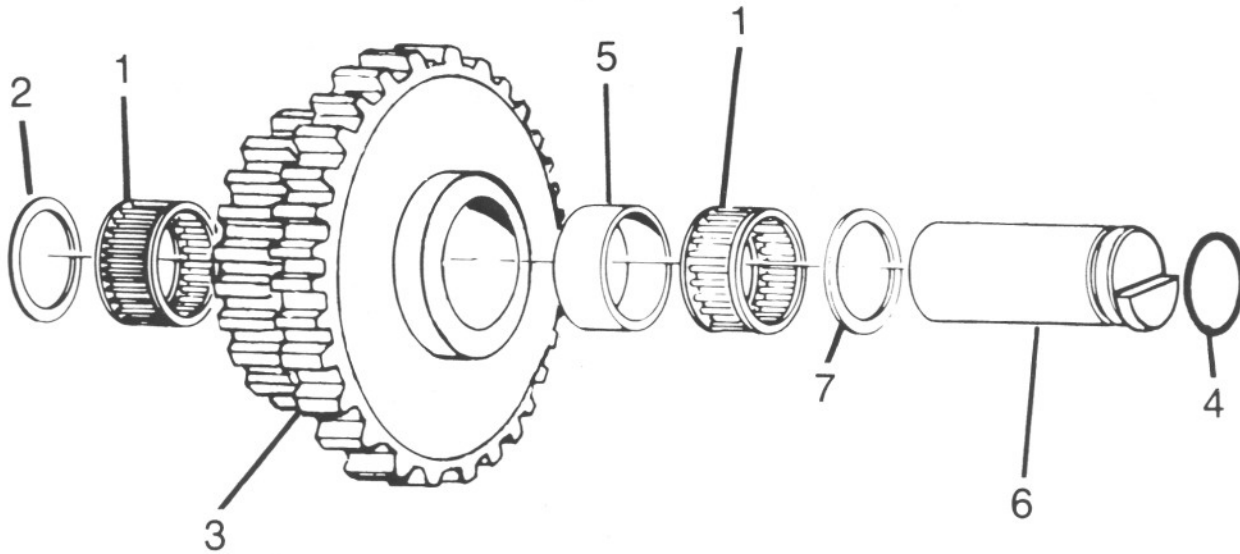
SS = Self Sealing

**HYDRAULIC CONTROL GROUP
STANDARD PTO**

SECTION AA

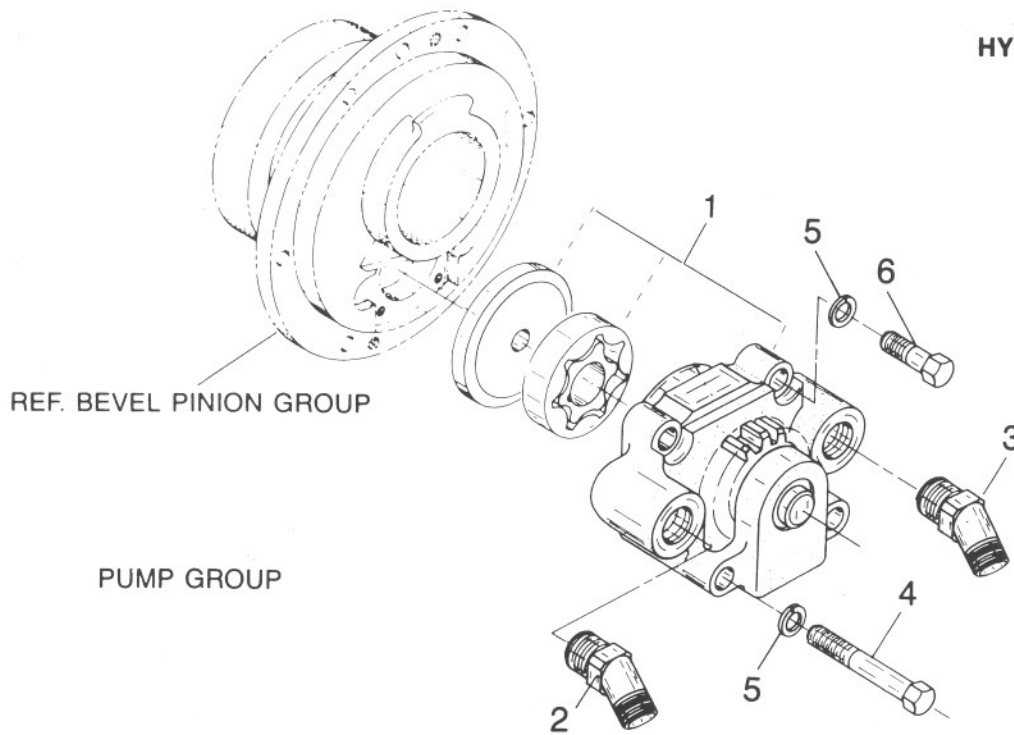


FOURTH SHAFT GROUP



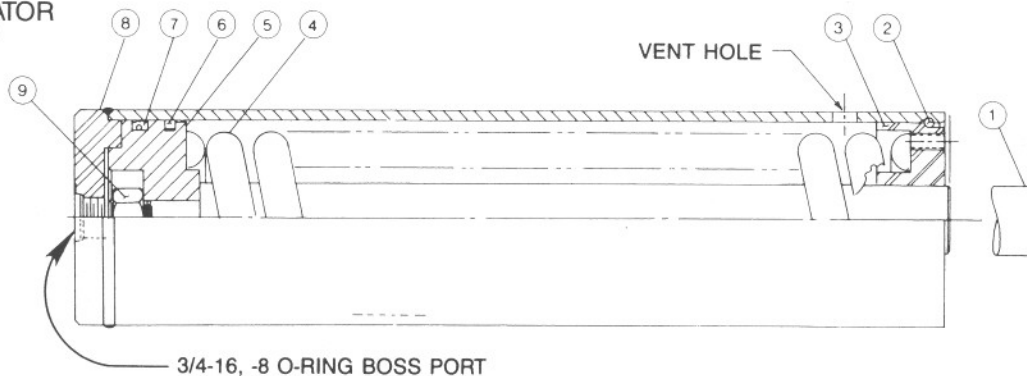
ITEM	PART NO.	DESCRIPTION	QTY
1	119-2173	ROLLER BEARING	2
2	119-1572	THRUST WASHER .062 in. (1.58 mm)	1
3	118-6651	CLUSTER GEAR 37/17 TEETH	1
4	8M-4986	O-RING	2
5	118-6297	SPACER	1
6	118-6533	COUNTERSHAFT PIN	1
7	118-6287	THRUST WASHER .217 in. (5.5 mm)	1

HYDRAULIC COMPONENTS



ITEM	PART NO.	DESCRIPTION	QTY
1	118-6979	PUMP ASSEMBLY	1
2	123-4411	ELBOW, 45° — 8 PRESSURE SIDE	1
3	031-6303	ELBOW, 45° SUCTION — STD PTO	1
4	4B-9365	CAPSCREW, HEX HEAD (1/4 - 20 x 3 G8)	2
5	3B-4504	LOCKWASHER — 1/4	4
6	9F-7022	CAPSCREW, HEX HEAD (1/4 - 20 x 1 1/2 G8)	2

ACCUMULATOR ASSEMBLY



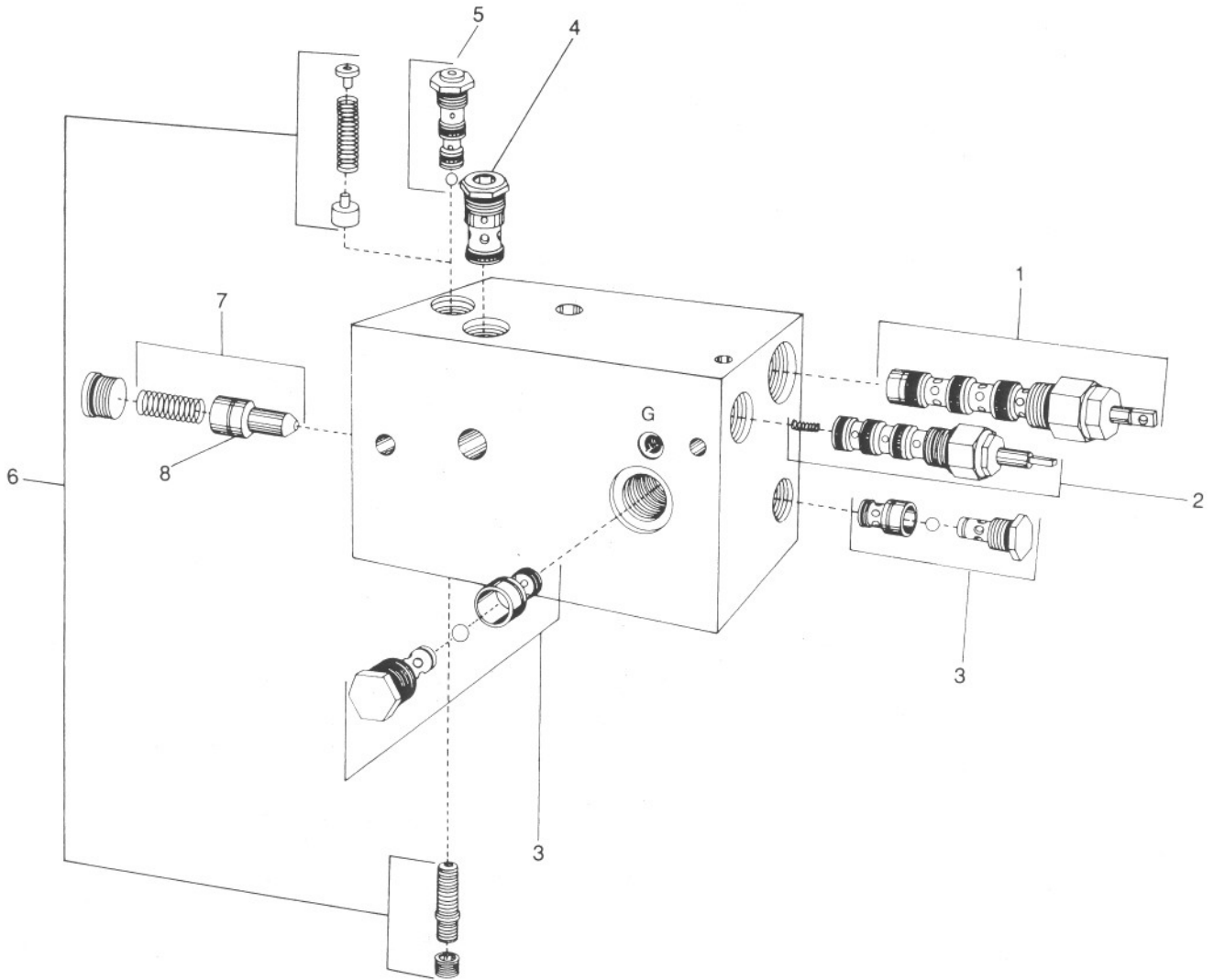
ITEM	PART NO.	DESCRIPTION	QTY
1	NSS	ROD	1
2	096-8139	RETAINING RING	1
3	NSS	ROD GUIDE	1
4	NSS	SPRING	1
5	NSS	PISTON	1
6	119-0554	CAST IRON PISTON RING	1
7	118-0552	SEAL ASSEMBLY	1
8	NSS	TUBE ASSEMBLY	1
9	NSS	NUT	1
—	123-4413	SEAL KIT (CONTAINS ITEMS 2, 6 & 7)	

NSS — Not Serviced Separately.

⚠ DANGER

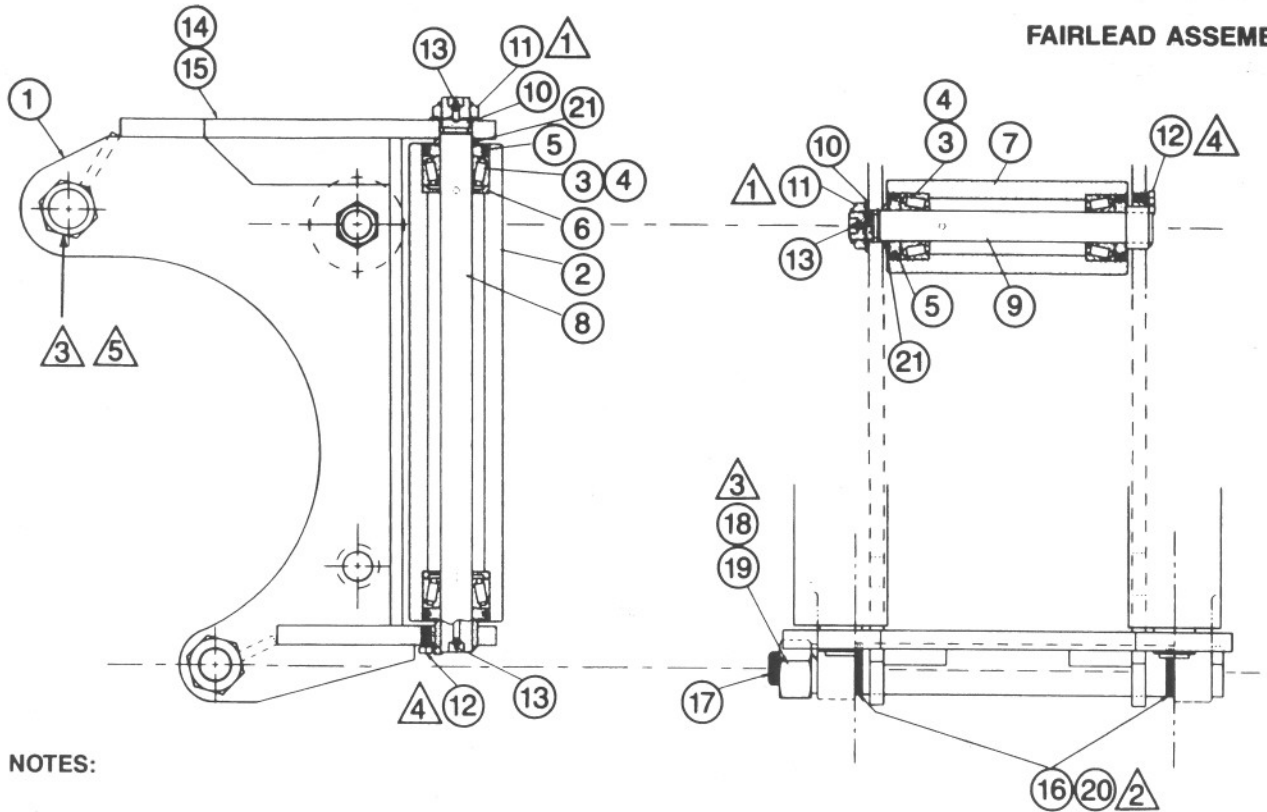
2,000 LB. (900 Kg) SPRING PRELOAD — USE PRESS FOR DISASSEMBLY PER SERVICE INSTRUCTIONS IN SERVICE MANUAL. PROPERTY DAMAGE, SEVERE PERSONAL INJURY OR DEATH MAY RESULT IF ROD GUIDE REMOVAL IS ATTEMPTED WITHOUT A PRESS.

CONTROL VALVE ASSEMBLY
118-6978



ITEM	PART NO.	DESCRIPTION	QTY.
—	118-6978	CONTROL VALVE ASSEMBLY	1
1	119-1522	DIRECTIONAL CONTROL CARTRIDGE	1
	119-2129	SEAL KIT FOR ITEM 1	1
2	119-1523	BRAKE CONTROL CARTRIDGE	1
	119-2127	SEAL KIT FOR ITEM 2	1
3	119-1525	SHUTTLE VALVE ASSEMBLY	2
	119-1631	SEAL KIT FOR ITEM 3	2
4	119-0564	CHECK VALVE CARTRIDGE	1
	119-2126	SEAL KIT FOR ITEM 4	1
5	119-1527	DIFFERENTIAL UNLOADING PILOT VALVE CARTRIDGE	1
	119-1630	SEAL KIT FOR ITEM 5	1
6	119-0170	DIF. UNLOADING VALVE REPAIR KIT, INCLUDES ITEM 5	1
7	119-0169	UNLOADING POPPET ASSEMBLY	1
8	119-1577	O-RING	1

FAIRLEAD ASSEMBLY



NOTES:

- 1** WHILE TURNING ROLLER, TIGHTEN NUT. WHEN ROLLER WILL TURN NO LONGER, BACK NUT OFF 1/8 TURN.

2 SHIM BOTH SIDES AS REQUIRED TO REDUCE END PLAY TO LESS THAN .030 in. (.8 mm).

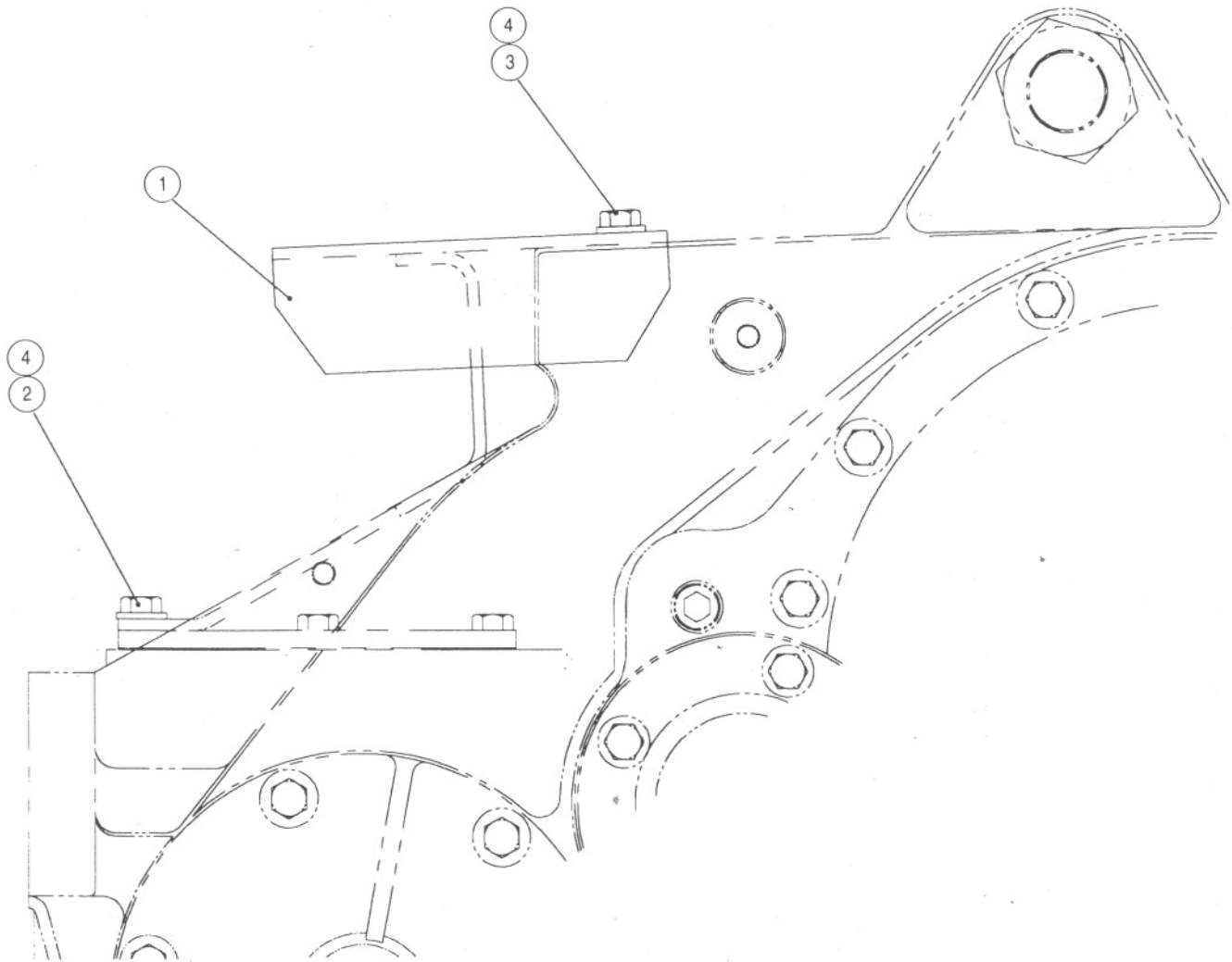
3 TIGHTEN UNTIL WASHER IS FLATTENED. THEN TURN 1 FLAT.
- 4** APPLY "LOCTITE 242" AND INSTALL WITH FLAT TANGENT TO HOLE PRIOR TO INSTALLATION OF SHAFT.

5 WHEN INSTALLING FAIRLEAD ON WINCH IN FIELD, REMOVE ORIGINAL CABLE GUARD SPACER TUBE AND REUSE UPPER TIE BOLT 118-6298, LOCK-WASHER 119-1623 AND NUT 2B-2673.

ITEM	PART NO.	DESCRIPTION	QUANTITY	
			3 ROLLER	4 ROLLER
	118-7211	3 ROLLER FAIRLEAD ASSEMBLY		
	118-7213	4 ROLLER FAIRLEAD ASSEMBLY		
1	118-6935	FAIRLEAD FRAME	1	1
2	118-6649	ROLLER — VERTICAL	2	2
3	119-2174	BEARING CONE	6	8
4	119-2175	BEARING CUP	6	8
5	118-5803	DUST GUARD ASSEMBLY	6	8
6	119-2186	GREASE RETAINER	4	4
7	124-0763	ROLLER — HORIZONTAL	1	2
8	118-6648	SHAFT — VERTICAL	2	2
9	118-6604	SHAFT — HORIZONTAL	1	2
10	119-2211	WASHER	3	4
11	5M-6667	LOCK NUT	3	4
12	8T-9383	CAPSCREW, HEXHEAD (1/2 NC x 3/4)	3	4
13	3B-8489	GREASE FITTING	5	6
16	120-7634	WASHER .030 in. (.8 mm)	4-AR	4-AR
17	118-6298	TIE BOLT	1	1
18	119-1623	LOCK WASHER	1	1
19	2B-2673	NUT, HEX HEAD	1	1
20	123-4410	WASHER .125 in. (3.18 mm)	6-AR	6-AR
21	120-7536	SPACER	3	4
	174-4770	4TH ROLLER KIT, CONTAINS ONE EACH 7, 9, 10, 11, 12, 13, 21 AND TWO EACH 3, 4 & 5	1	-

AR - AS REQUIRED

MODEL PA55
CONTROL CABLE
GUARD GROUP



ITEM	PART NO.	DESCRIPTION	QTY.
1	138-9294	CABLE GUARD	1
2	8T-8917	CAPSCREW, HEX HEAD (1/2 - 13 x 1 1/4)	4
3	5P-2228	CAPSCREW, HEX HEAD (1/2 - 13 x 1)	3
4	8M-4791	WASHER, HARDENED (1/2)	7

*SS - SELF SEALING MATERIAL PREAPPLIED TO THREADS