

PARTS LIST SECTION

CARCO MODEL 80-PS, PSM AND PSC WINCH

FOR

CATERPILLAR D7H POWERSHIFT TRACTOR

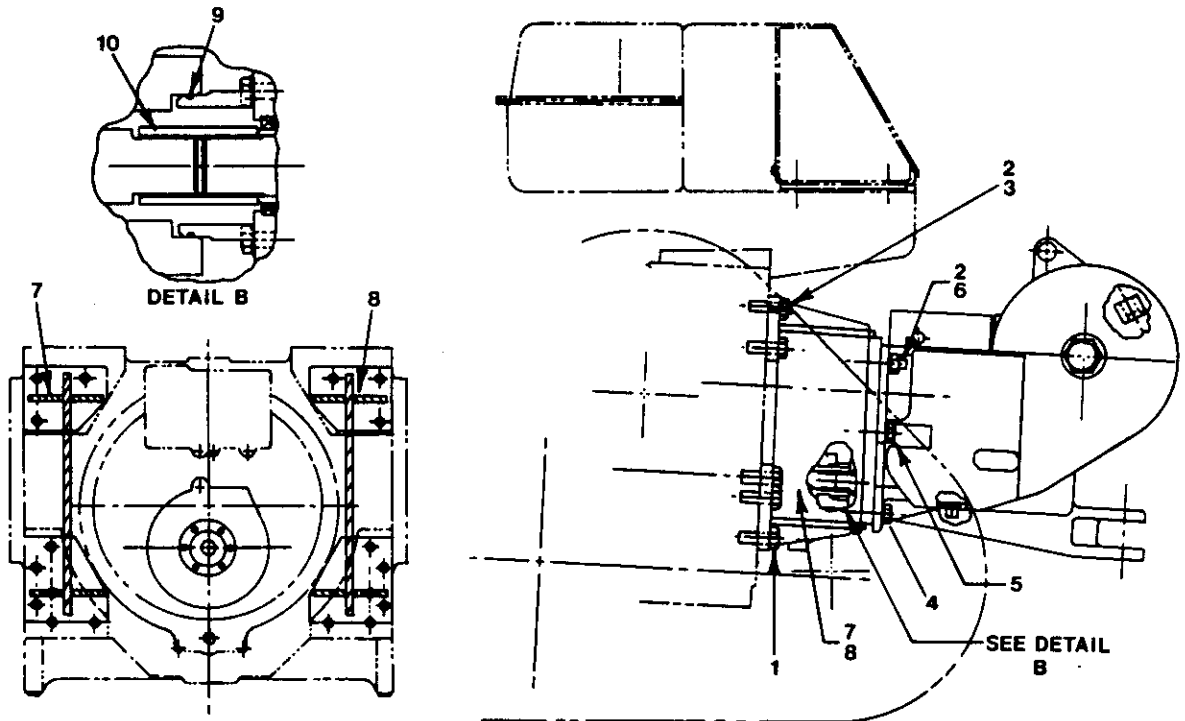
	Page
BEVEL GEAR SHAFT	18,19
BEVEL GEAR AND BEVEL PINION LOW PTO CARRIER GROUP	8,9
BRAKE CONTROL (PS, SPRING APPLIED)	26
BRAKE CONTROL (PSM AND PSC, MANUAL)	27
BRAKE CYLINDER	28
BRAKE SHAFT, BRAKE BAND AND LINING	21
CLUTCH	20
CONTROL GROUP (CONTROL STANDS, CONTROL CABLES, PRESSURE GAUGES)	4,5,6,7
CONTROL STAND COMPONENTS (POWER SHIFT)	29
CONTROL STAND COMPONENTS (PSM AND PSC, MANUAL)	31
CONTROL STAND COMPONENTS (FREE SPOOL)	30
CONTROL VALVE	12,13
DRUM SHAFT STANDARD (NO FREE SPOOL)	23
DRUM SHAFT (WITH FREE SPOOL)	24,25
FAIRLEAD	33
HYDRAULIC TUBING AND FITTINGS	14,15
IDLER SHAFT (NO FREE SPOOL)	22
IDLER SHAFT (WITH FREE SPOOL)	24,25
MOUNTING GROUP (PTO SHAFT, STUDS, CAP SCREWS)	3
PUMP GROUP (PUMP, TUBING, FILTER)	16,17
PRESSURE GAUGE KIT COMPONENTS	32
WINCH CASE	10,11

Note: Purchased parts, such as bearings and oil seals may be substituted with parts of equal quality on the manufacturer's recommendation, and with the approval of Braden Carco Gearmatic.

ATTENTION: Please provide correct winch model and serial number when placing parts order.

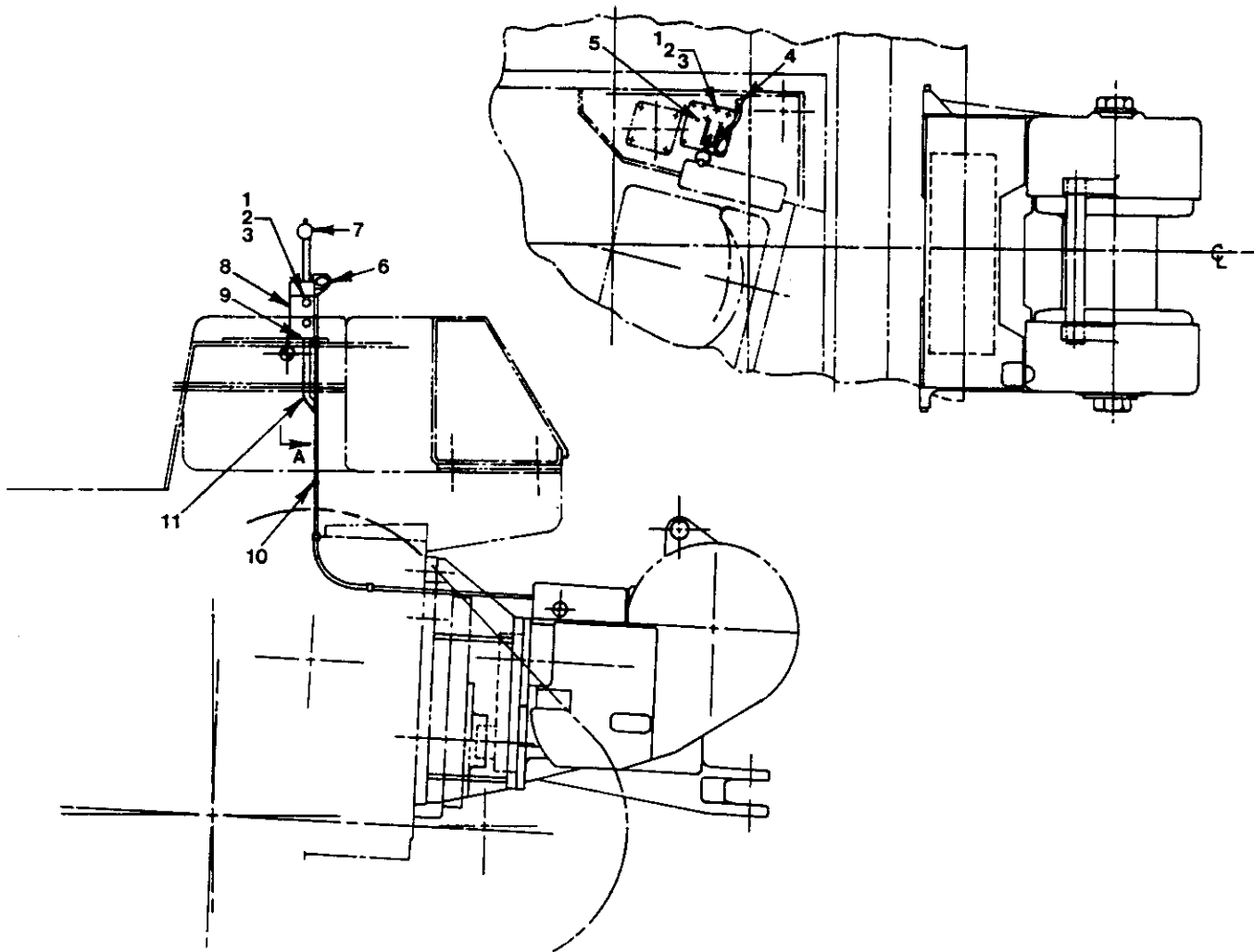
PACCAR WINCH DIVISIONS

P.O. BOX 547 • BROKEN ARROW, OK 74013
PHONE: (918) 251-8511 • FAX: (918) 258-4822



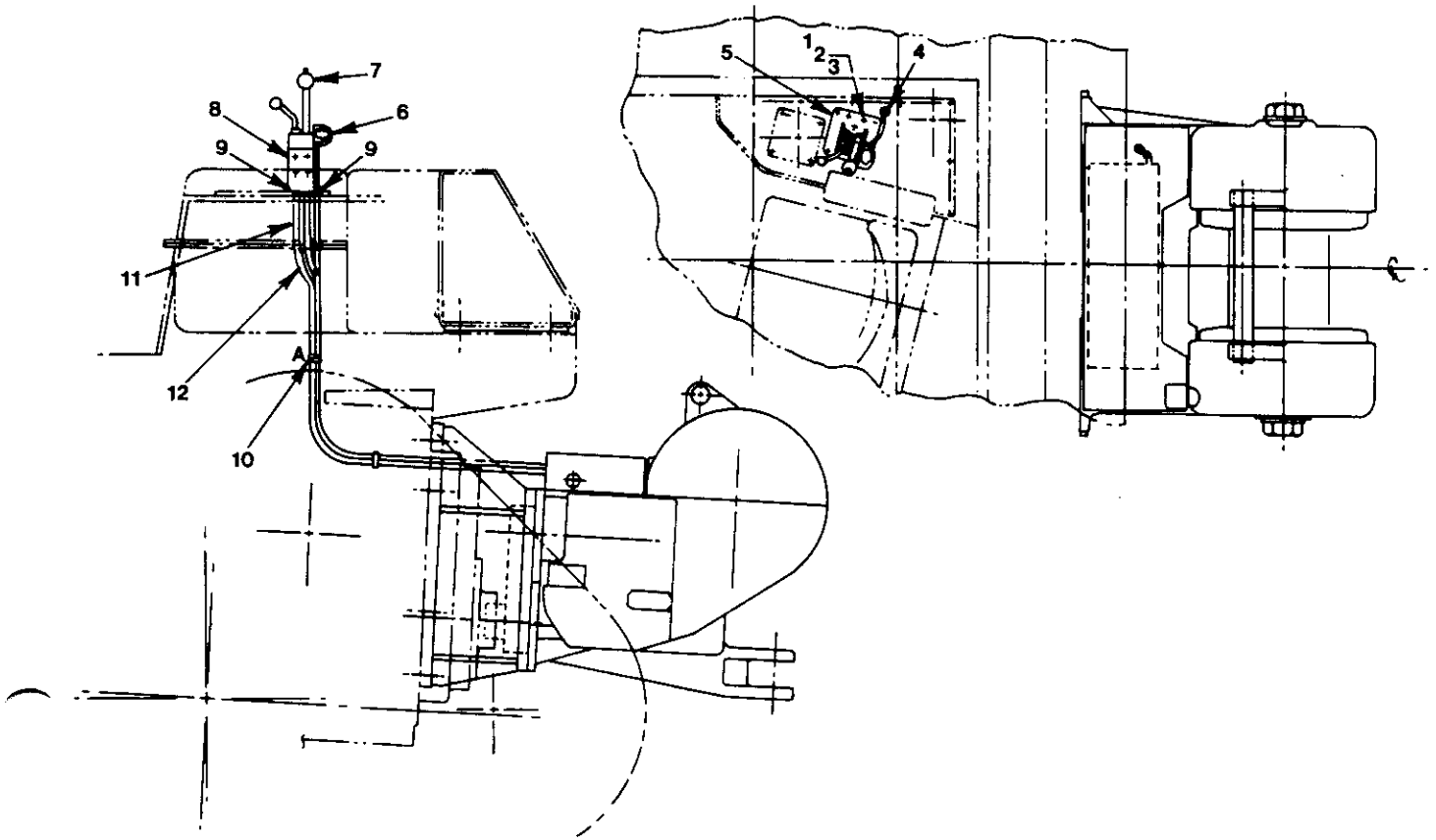
MOUNTING GROUP 69139/69141

REF.	PART NO.	CARCO NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	31039	31039	Screw, Hex Hd. Cap	8
2	70176	16400-20	Nut, 1/4" UNC(GR8)	7
3	33457	45050-2033	Stud	4
4	70688	16027-2018	Screw, Hex Hd. Cap	4
5	31189	16049-2020	Screw, Soc. Hd. Cap	1
6	33456	45050-2032	Stud	3
7	69100	69100	Adapter, LH	1
8	69101	69101	Adapter, RH	1
9	69850	16262-244	O-Ring	1
10	69106	69106	Coupling	1



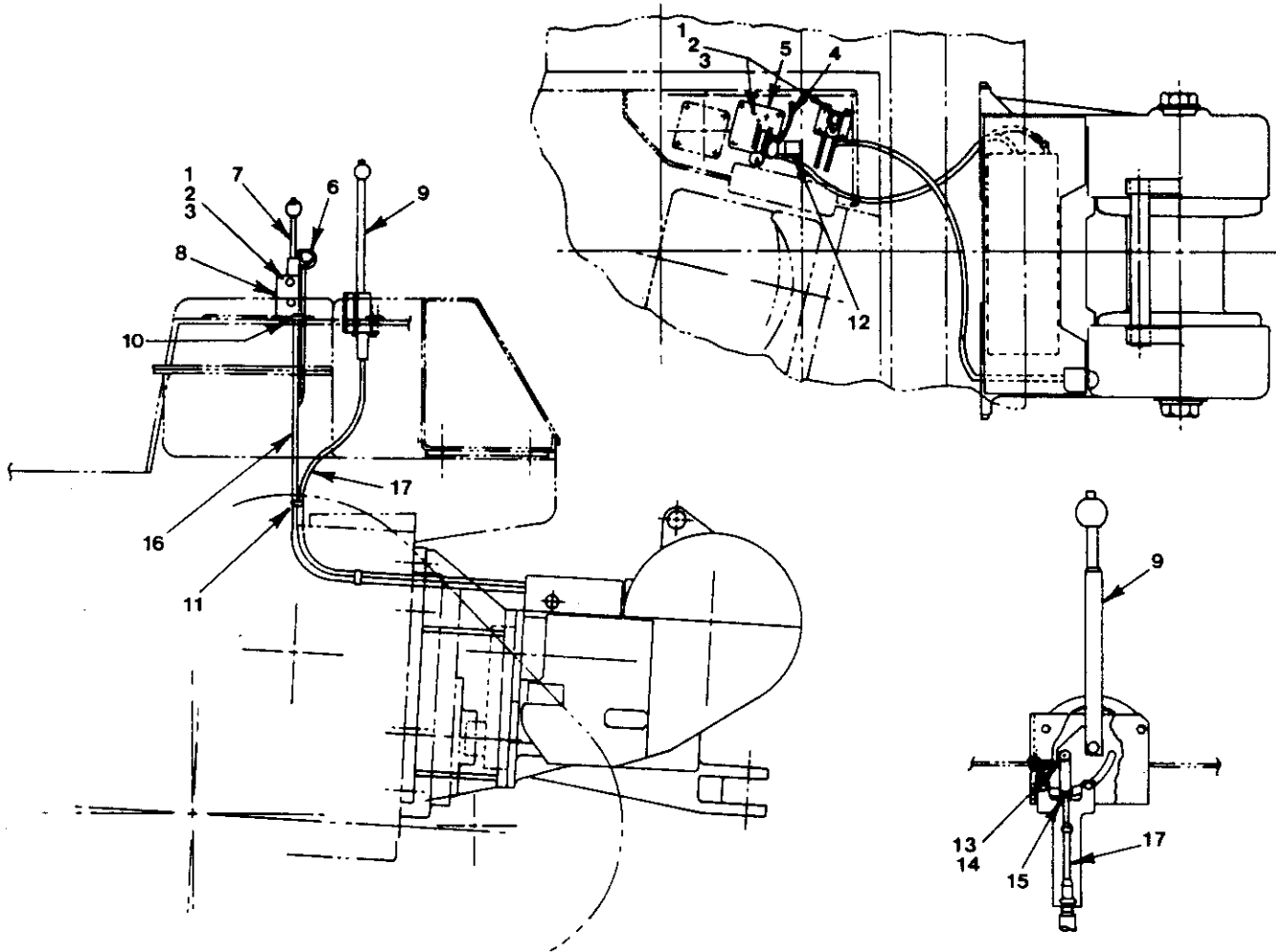
POWERSHIFT
 CONTROL GROUP 69154

REF.	PART NO.	CARCO NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	11780	16033-6	Nut, Hex	5
2	21961	16047-608	Screw, Hex Hd. Cap	5
3	18003	16067-6	Washer, Lock	5
4	70441	16528-0004	Grommet	1
5	69146	69146	Plate, Control Mtg.	1
6	70442	48700-120	Kit, Pressure Gauge (See Page 32)	1
7	34429	49001-1	Stand, Control (See Page 29)	1
8	37349	37349	Bracket, Control Stand	1
9	70727	16528-0003	Grommet	1
10	32235	16365-1	Strap, Retaining	3
11	70231	52000-084	Cable, Powershift (84")	1



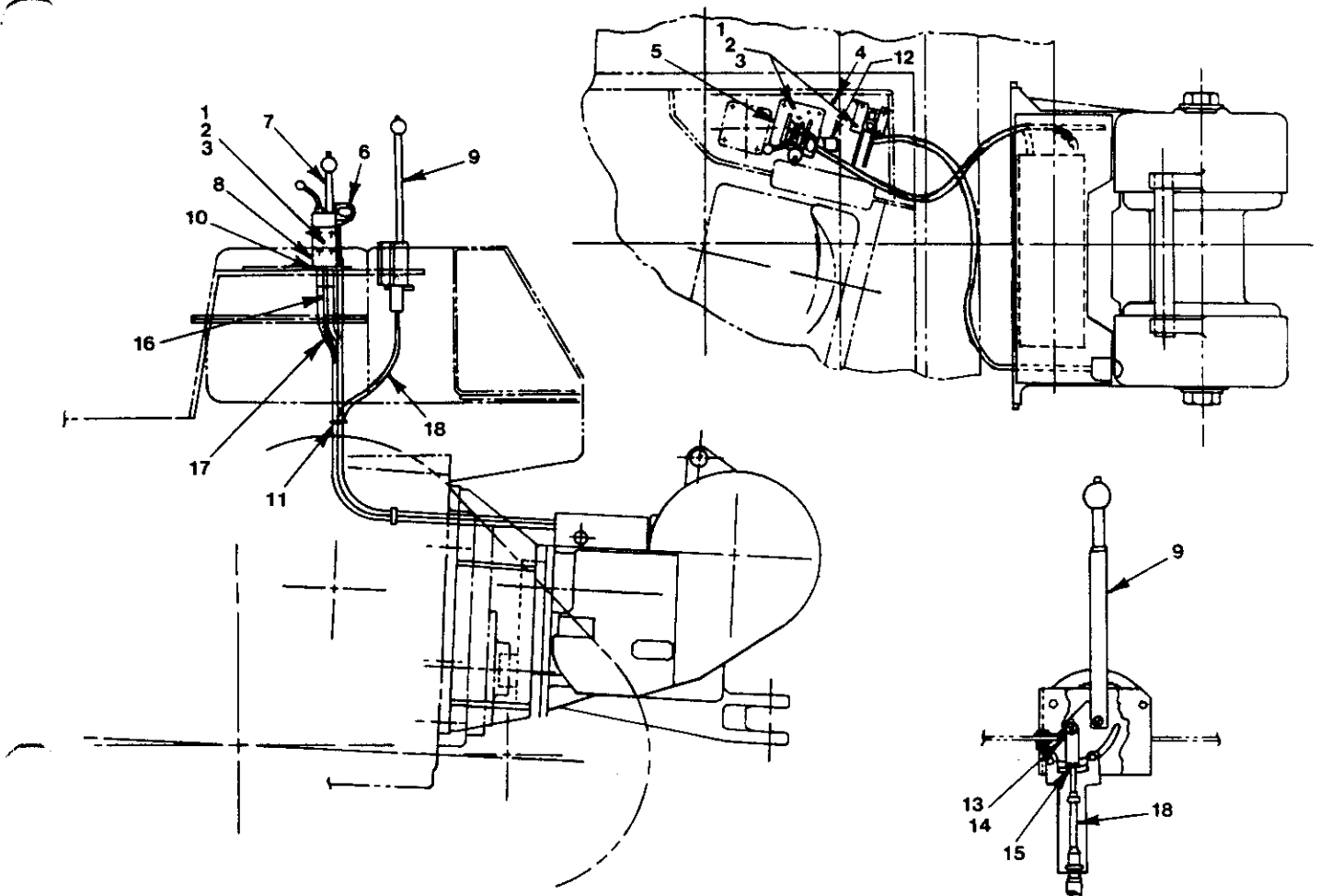
POWERSHIFT W/FREE SPOOL
 CONTROL GROUP 69152

REF.	PART NO.	CARCO NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	11780	16033-6	Nut, Hex	7
2	21951	21951	Screw, Hex Hd. Cap	7
3	18003	16067-6	Washer, Lock	7
4	70441	16528-0004	Grommet	1
5	69146	69146	Plate, Control Mtg.	1
6	70442	48700-120	Kit, Pressure Gauge (See Page 32)	1
7	70731	49805-1	Stand, Control (See Page 30)	1
8	37349	37349	Bracket, Control Stand	1
9	70727	16528-0003	Grommet	2
10	32235	16365-1	Strap, Retaining	3
11	70681	52000-090	Cable, Free spool (90")	1
12	70231	52000-084	Cable, Powershift (84")	1



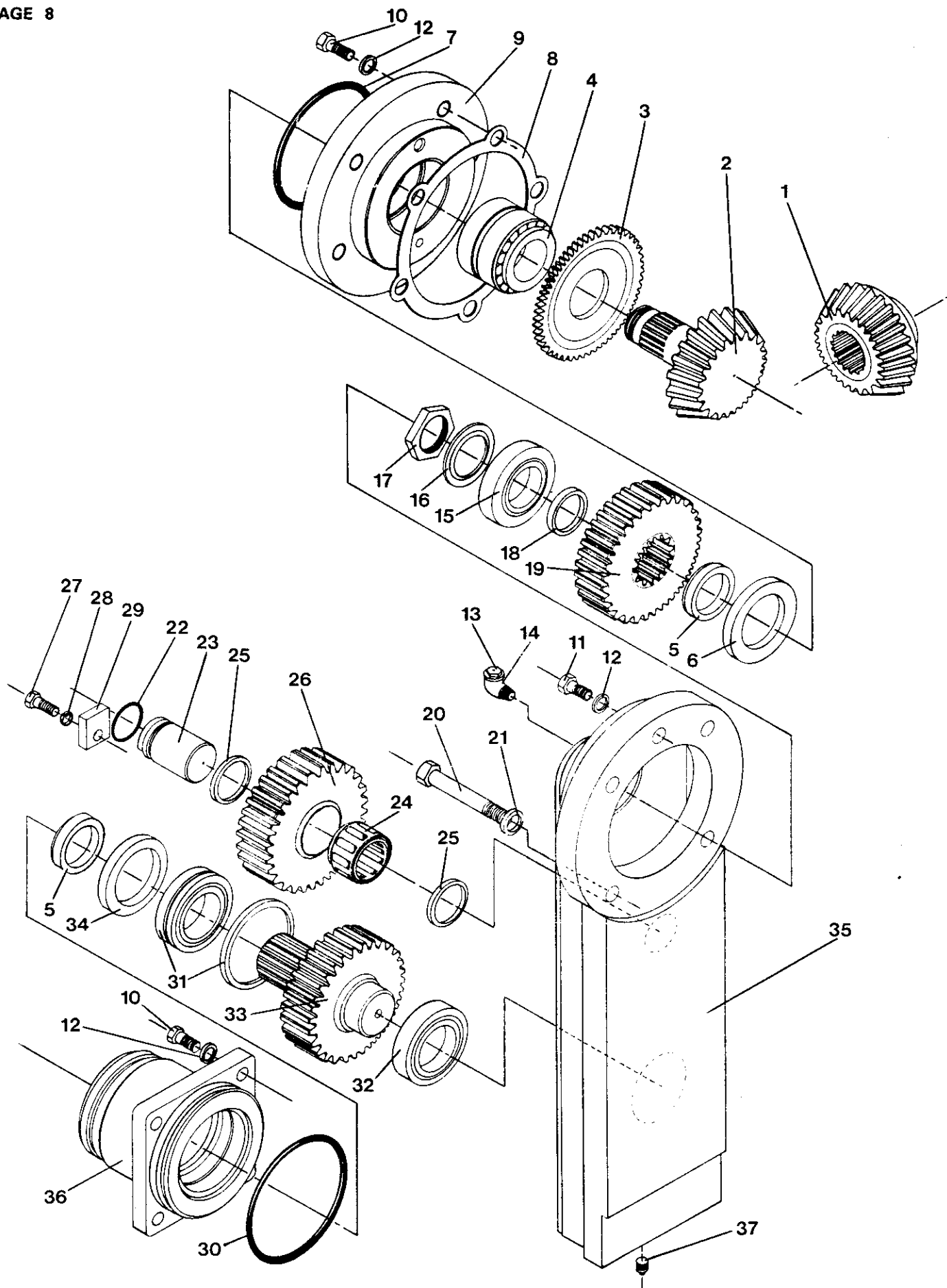
POWERSHIFT W/MANUAL BRAKE
 CONTROL GROUP 69150

REF.	PART NO.	CARCO NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	11780	16033-6	Nut, Hex	9
2	21961	16047-608	Screw, Hex Hd. Cap	9
3	18003	16067-6	Washer, Lock	9
4	70441	16528-0004	Grommet	1
5	69146	69146	Plate, Control Mtg.	1
6	70442	48700-120	Kit, Pressure Gauge (See Page 32)	1
7	36350	36350	Stand, Powershift Control (See Page 30)	1
8	37349	37349	Bracket, Control Stand	1
9	34639	49434-7	Stand, Brake Control (See Page 31)	1
10	70727	16528-0003	Grommet	1
11	32235	16365-1	Strap, Retaining	3
12	34259	34259	Plate, Warning	1
13	31538	16245-6	Yoke, Machined	1
14	31541	16246-6	Pin Assembly, Yoke	1
15	11050	16044-6	Nut, Hex Jam	1
16	70231	52000-084	Cable, Powershift (84")	1
17	34354	48850-102	Cable, Brake (102")	1



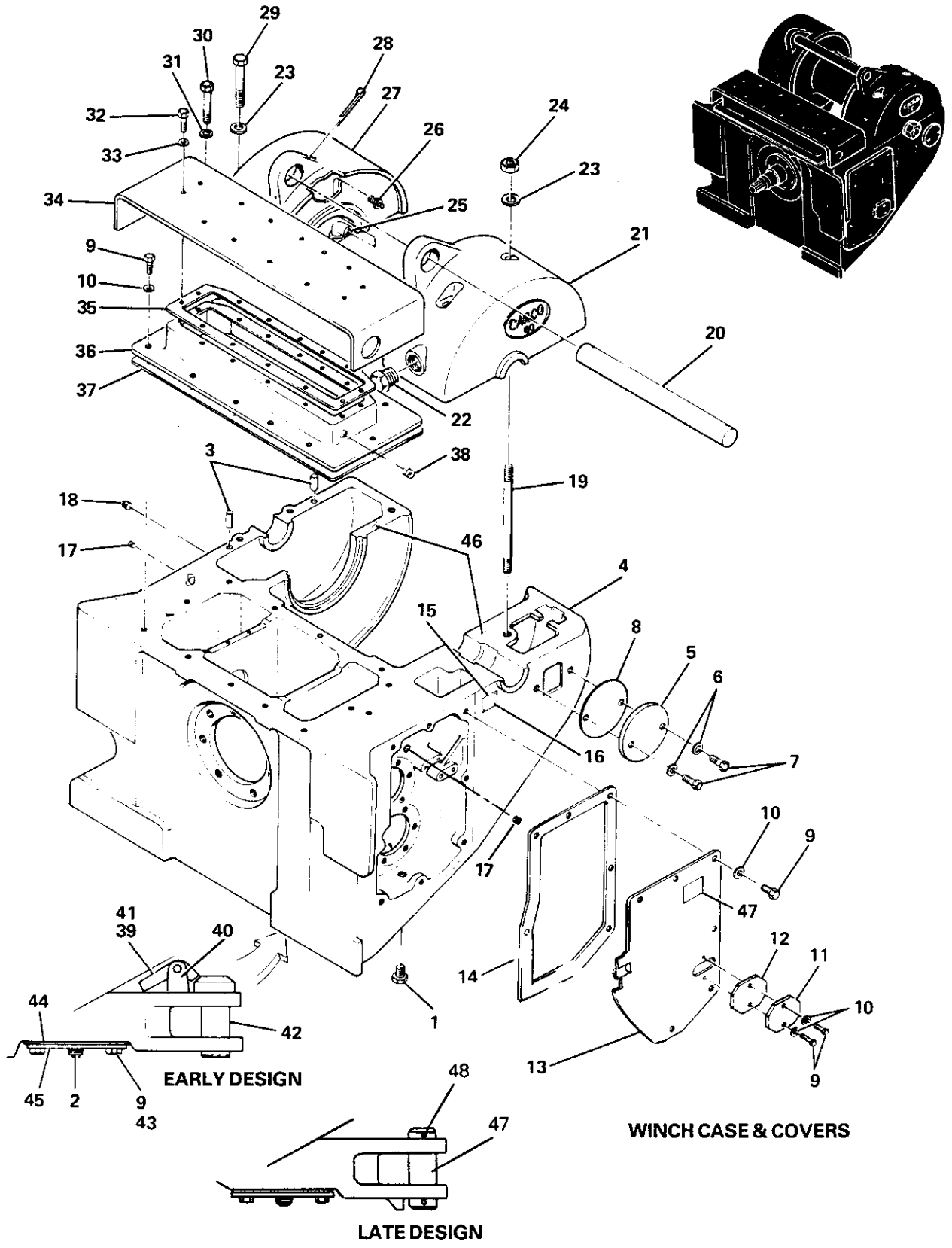
POWERSHIFT W/FREE SPOOL AND MANUAL BRAKE
 CONTROL GROUP 69148

REF.	PART NO.	CARCO NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	11780	16033-6	Nut, Hex	11
2	21961	16047-608	Screw, Hex Hd. Cap	11
3	18003	16067-6	Washer, Lock	11
4	70441	16528	Grommet	1
5	69146	69146	Plate, Control Mtg.	1
6	70442	48700-120	Kit, Pressure Gauge (See Page 32)	1
7	37015	53599-01	Stand, Powershift w/Freespool (See Page 30)	1
8	37349	37349	Bracket, Control Stand	1
9	34639	49434-7	Stand, Brake Control (See Page 31)	1
10	70727	16528-0003	Grommet	2
11	32235	16365-1	Strap, Retaining	3
12	34259	34259	Plate, Warning	1
13	31538	16245-6	Yoke, Machined	1
14	31541	16246-6	Pin Assembly, Yoke	1
15	11050	16044-6	Nut, Hex Jam	1
16	70231	52000-084	Cable, Powershift (84")	1
17	70681	52000-090	Cable, Free spool (90")	1
18	34354	48850-102	Cable, Brake (102")	1



LOW PTO CARRIER GROUP 69138

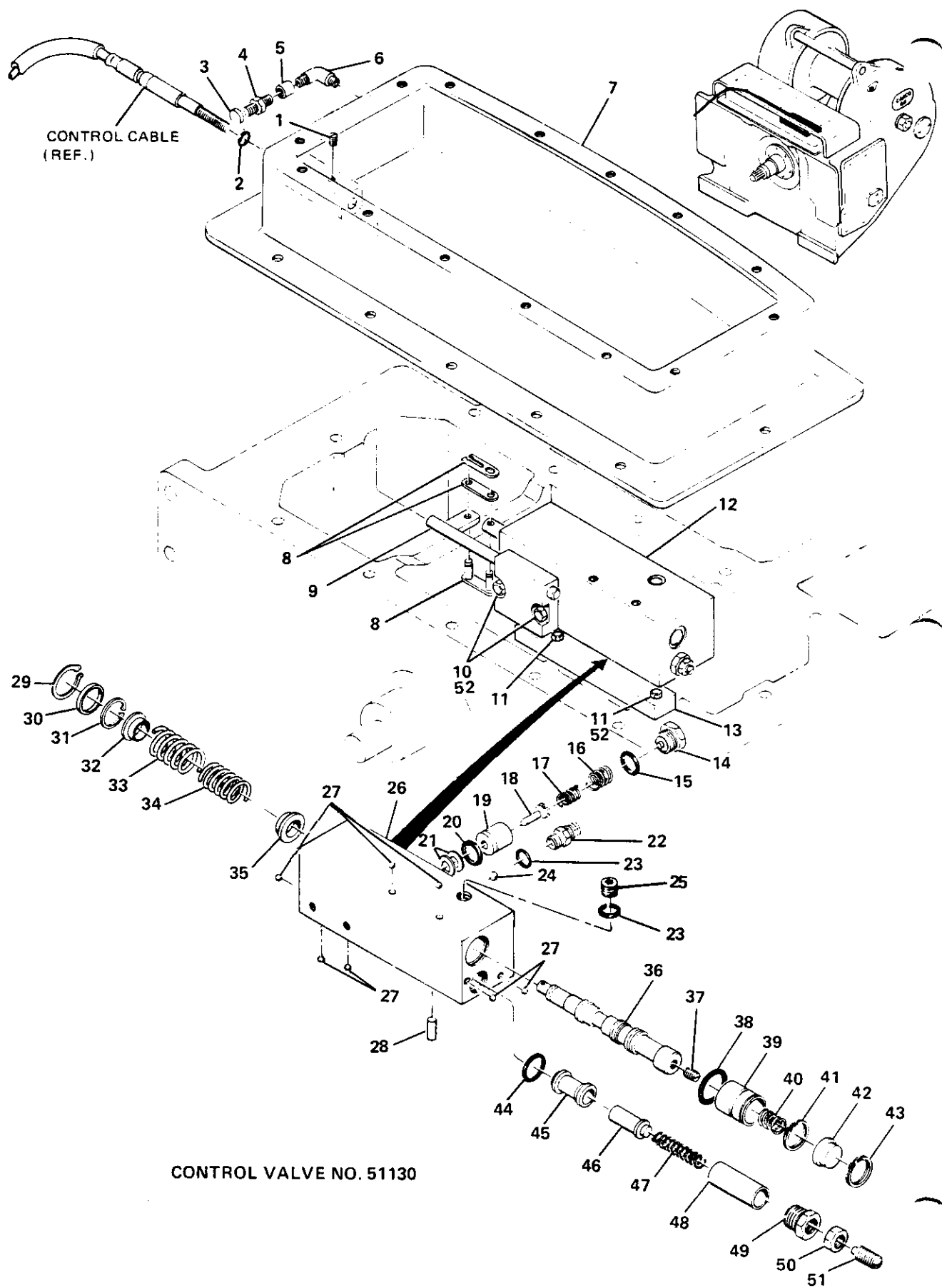
REF.	PART NO.	CARCO NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	35104	50842	Gear, Bevel (37T), STD SPEED	1
	35999	52288	Gear, Bevel (40T), SLOW SPEED	1
2	69134	69134	Pinion, Bevel (23T), STD. SPEED	1
	69136	69136	Pinion, Bevel (13T), SLOW SPEED	1
3	69362	69362	Pinion, Pump Drive	1
4	69108	69108	Bearing Assembly	1
5	69110	69110	Sleeve, Seal	2
6	69109	69109	Seal, Oil	1
7	70856	16262-260	O-Ring	1
8	31509	16237	Shim Set	1
9	69107	69107	Carrier, Bevel Pinion	1
10	69629	16047-812	Screw, Hex Hd. Cap	10
11	13421	16047-816	Screw, Hex Hd. Cap	3
12	31247	16063-8	Washer, Plain	13
13	70172	16378-0004	Vent, Breather	1
14	69105	69105	Elbow, 90°, 1/4"NPT	1
15	69112	69112	Bearing, Ball	1
16	69073	69073	Washer, Bearing Lock	1
17	69072	69072	Locknut, Bearing	1
18	69111	69111	Spacer, Tube	1
19	69129	69129	Gear, Pinion Drive (29T)	1
20	23560	16047-834	Screw, Hex Hd. Cap	2
21	69104	69104	Washer, Seal	2
22	13838	16262-222	O-Ring	1
23	69584	69584	Pin, Idler	1
24	70648	15331	Bearing, Caged Needle	1
25	69125	69125	Washer, Thrust	2
26	69130	69130	Gear, Idler (31T)	1
27	21961	16047-608	Screw, Hex Hd. Cap	1
28	18003	16067-6	Washer, Lock	1
29	69126	69126	Keeper	1
30	10467	16262-254	O-Ring	1
31	72251	72251	Bearing, Ball w/Ret. Ring	1
32	69128	69128	Bearing, Ball	1
33	69131	69131	Gear, Input Pinion	1
34	69127	69127	Seal, Oil	1
35	69120	69120	Gearbox, Mach	1
36	69124	69124	PTO Pilot	1
37	31392	16168-12	Plug, Sq. Hd., 3/4"NPT	2
—	69828	69828	Carrier Group Assembly w/23T Bevel Pinion, STD SPEED	1
—	69829	69829	Carrier Group Assembly w/13T Bevel Pinion, SLOW SPEED	1



REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	16169-8	Plug, 1/2 NPT Sq. Hd.	1
2	16168-16	Plug, 1 NPTF Mag. Sq. Hd.	1
3	16290-2016	Dowel Pin, 5/8 x 1	2
4	51902	Case Complete (Includes items 21 and 27)	1
5	42048	Cover	1
6	16064-10	Washer, 5/8	1
7	16047-1008	Cap Screw, 5/8 UNC x 1 H.H.	2
8	44833	Gasket	1
9	16047-810	Cap Screw, 1/2 UNC x 1-1/4 H.H.	25
10	16064-8	Washer, 1/2"	25
11	44810	Cover	1
12	44814	Gasket	1
13	52685-1	Brake Side Cover	1
14	16453-3	Sealant (Silastic #732 RTV, 3 oz)	1
15	52126	Name Plate	1
16	16055-5	Drive Screw, #10 x 3/8 Type U	1
17	16167-6	Plug, 3/8 NPT Hex Soc.	2
18	16169-20	Plug, 1-1/4 NPT Sq. Hd.	1
19	45050-1856	Stud	2
20	49043-2	Cable Guard (includes item 28)	1
* 21	NSS	Cover, Brake Case	1
22	16220-38	Plug	1
23	16064-18	Washer, 1-1/8	4
24	16400-18	Nut, 1-1/8 UNC Hex	1
25	16150-2	Elbow, 1/8 NPT 90° Street	1
26	16249-1	Relief Plug	1
27	NSS	Cover, Gear Case	1
28	16288-1272	Cotter Pin, 3/8 x 4-1/2	1
29	16047-1834	Cap Screw, 1-1/8 UNC x 4-1/2 H.H.	2
30	16047-1232	Cap Screw, 3/4 UNC x 4 H.H.	4
31	16064-12	Washer, 3/4	4
32	16047-608	Cap Screw, 3/8 UNC x 1 H.H.	14
33	16064-6	Washer, 3/8	14
34	51166	Valve Housing Cover	1
35	51535	Gasket	1
36	Ref. Only	Housing (see page 12 item 7)	1
37	51145	Gasket	1
38	16525-0024	Pipe Plug, Sq. Hd. Slotted	1
39	16246-8	Yoke Pin Assembly	1
40	52084	Support Bracket	1
41	52085	Latch	1
42	52037	Drawbar Pin, Early Design	1
43	16067-8	Lock Washer, 1/2	14
44	51949	Filter Cover Gasket	1
45	51950	Filter Cover	1
46	[49044 48684	[Instruction Plate, PS Winch Instruction Plate, PSM & PSC Winch	1
47	53101-0002	Pin, Drawbar (Late Design)	1
48	16288-1248	Pin, Cotter (3/8 x 3)	2

* NSS Not Serviced Separately.

MODEL 80-PS, PSM & PSC
CONTROL VALVE
PAGE 12



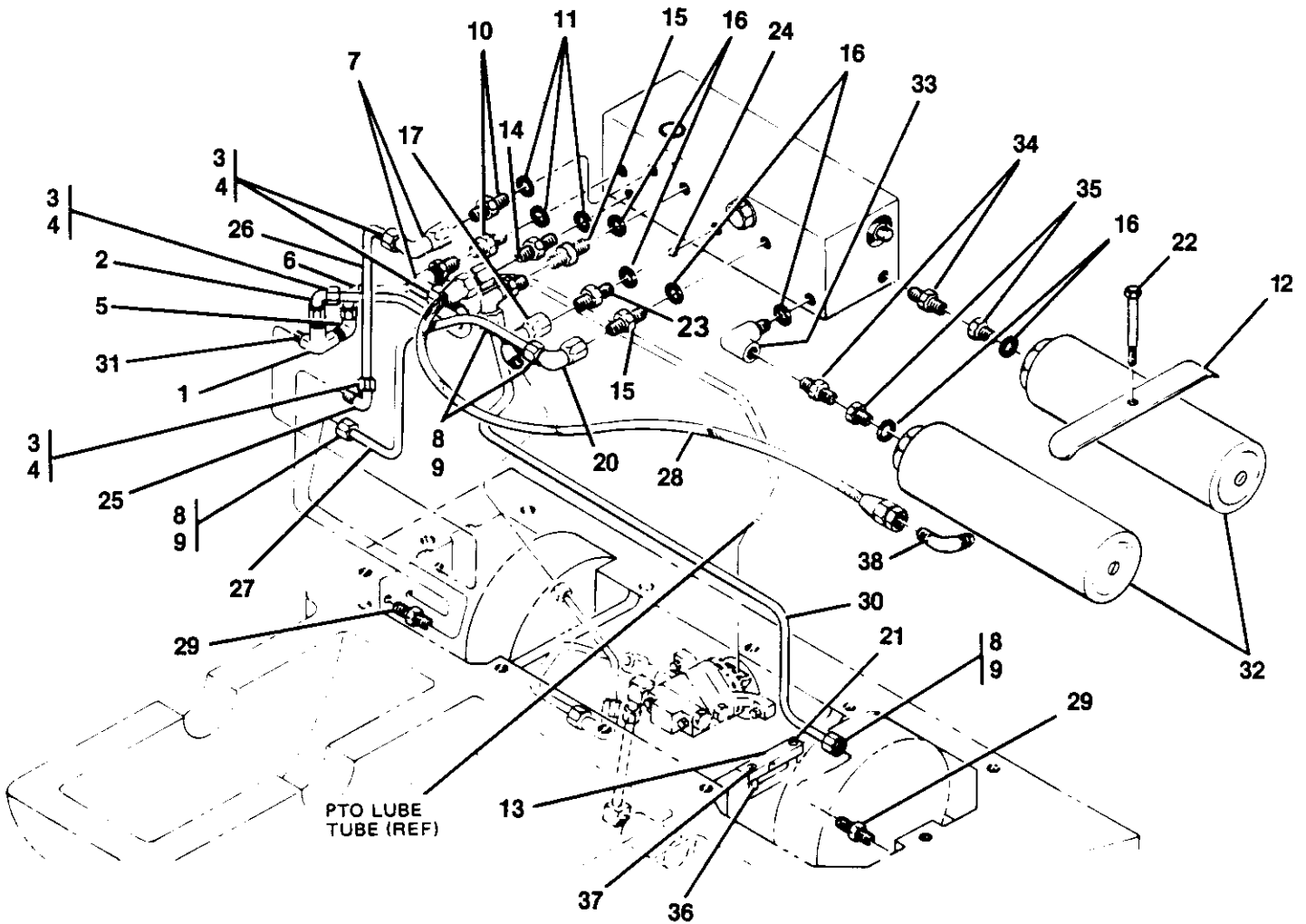
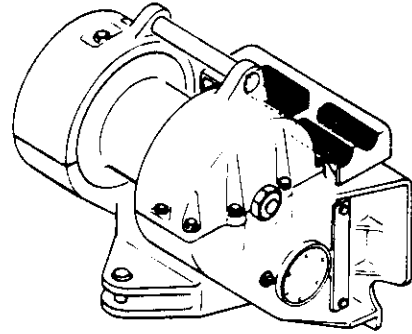
REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	16056-612	Set Screw, 3/8 UNC x 3/4 Hex Soc. Cup Pt.	1
2	16262-115	O-Ring	1
3	16445-4	Cap Nut	1
4	16129-44	Connector	1
5	16362-44	Snubber	1
6	16171-44	Elbow	1
7	51125-080	Valve Housing	1
8	16364-2040	Connecting Link	1
9	51865	Cable Guide	1
10	16047-610	Cap Screw, 3/8 UNC x 1-1/4 H.H.	2
11	16047-612	Cap Screw, 3/8 UNC x 1-1/2 H.H.	2
12	51130	Control Valve Assembly	1
13	51698-1	Support Assembly	1
14	51883-1	Retainer Assembly	1
15	16262-912	O-Ring,	1
16	51894	Spring	1
17	52392	Spring	1
18	51164	Accumulator Check Piston	1
19	51886	Seat	1
20	16262-116	O-Ring	1
21	51881-10	Shim Set	1
22	53065	Connector (Also shown on page 14)	1
23	16262-908	O-Ring, (Also shown on page 14)	2
24	16471-8	Ball Check, Nylon (Shown on page 14)	1
25	16496-8	Plug	1
26	NSS	Valve Body (Order Valve 51130)	1
27	16217-8	Steel Ball, 1/2	7
28	16290-814	Dowel Pin, 1/4 x 7/8	1
29	16314-150	Retaining Ring	1
30	45622	Washer	1
31	16313-75	Retaining Ring	1
32	45623	Spring Stop	1
33	45549	Outer Spring	1
34	45548	Inner Spring	1
35	44259-1	Spring Stop	1
36	NSS	Valve Spool (Order Valve 51130)	1
37	16057-608	Set Screw, 3/8 UNF x 1/2 Hex Soc. Cup Pt.	1
38	16262-215	O-Ring	1
39	NSS	Piston (Order Valve 51130)	1
40	45857	Spring	1
41	16308-131	Retaining Ring	1
42	51154	Spring Stop	1
43	16305-157	Retaining Ring	1
44	16262-210	O-Ring	1
* 45	51131	Relief Valve Seat	1
* 46	51134	Relief Valve Piston	1
47	52719	Spring	1
* 48	51132	Relief Valve Tube	1
49	51133	Retaining Screw	1
50	16044-12	Jam Nut, 3/4 UNF Hex	1
51	51135	Adjusting Screw	1
52	16064-6	Washer, 3/8	2

*Available in kit only. See No. 52652 kit below.

NOTE: To service valve spool, order repair kit No. 52651 consisting of items 24, 29, 31, 33, 34, 37, 38, 40, 41 and 43.

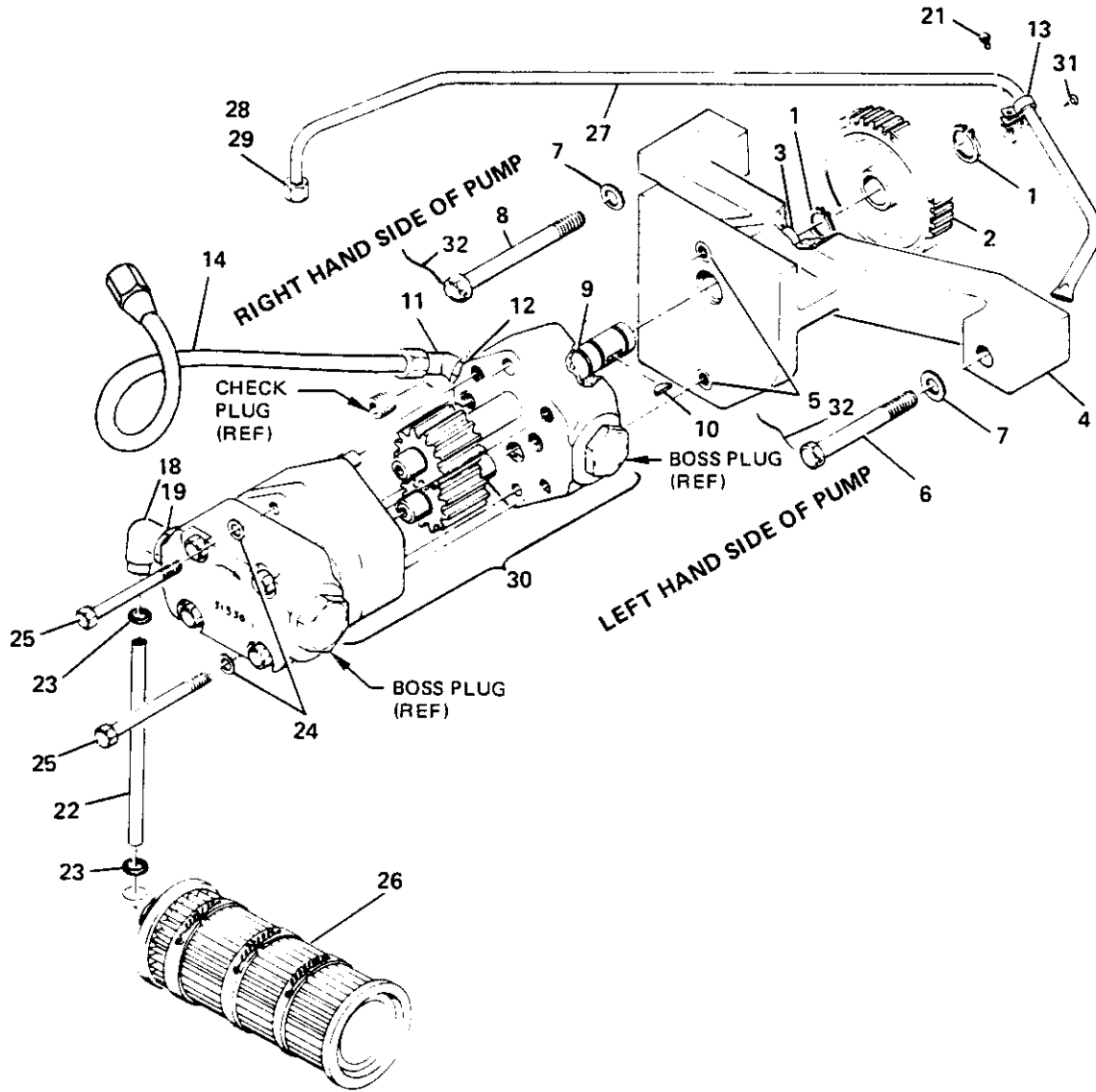
To service relief valve, order repair kit No. 52652 consisting of items 44, 45, 46, 47 and 48.

To service accumulator check valve, order repair kit No. 52653 consisting of items 15, 16, 17, 18, 19, 20 and 21.



HYDRAULIC TUBING AND FITTINGS 51267

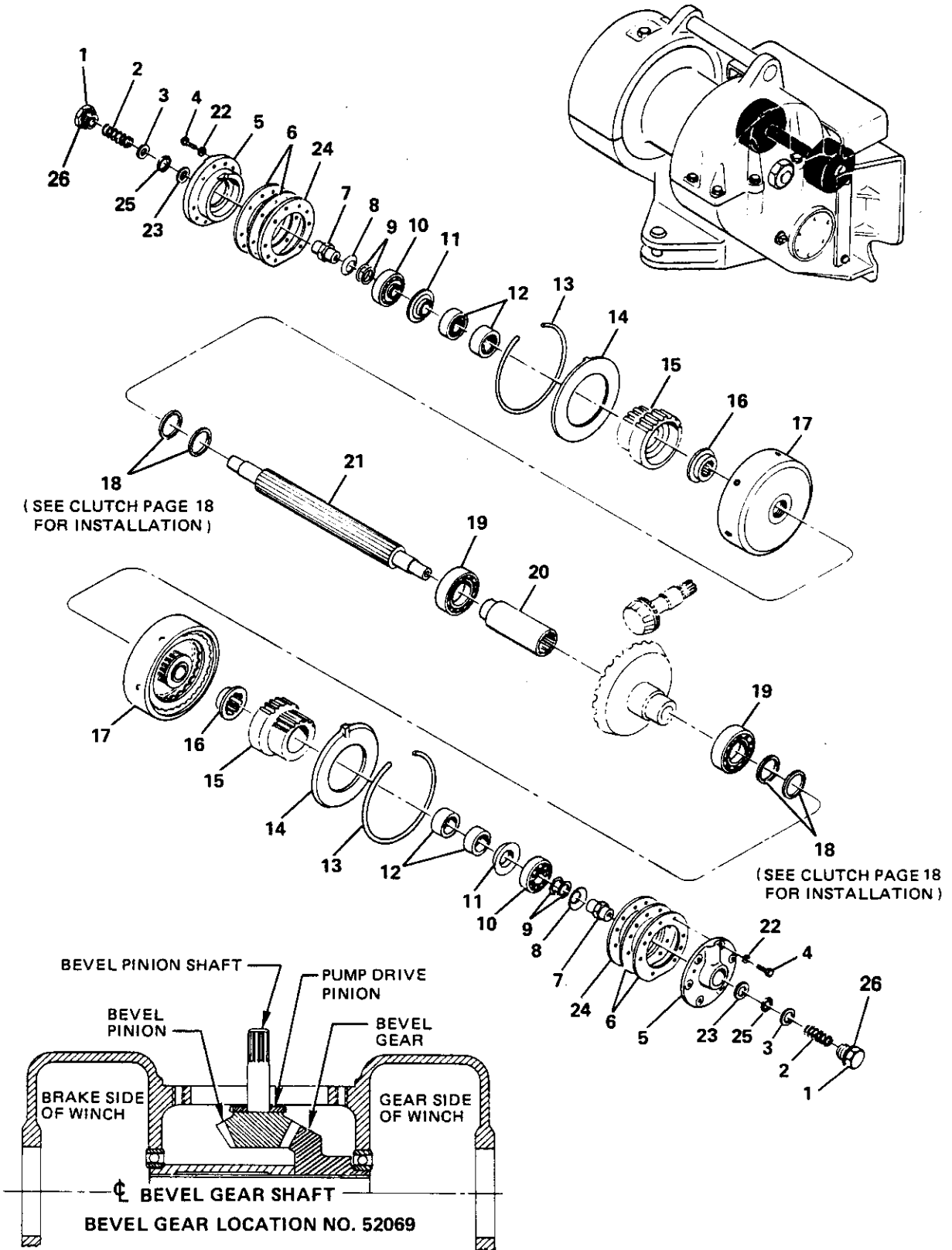
REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	16497-0004	Elbow	1
2	16137-0064	Elbow	1
3	16521-06	Nut	4
4	16522-06	Sleeve	4
5	16137-44	Elbow	1
6	51957-04	Brake Return Tube	1
7	16485-0006	Elbow	2
8	16521-08	Nut	4
9	16522-08	Sleeve	4
10	16481-0006	Connector	2
11	16262-906	O-Ring	3
12	51869	Clamp	1
13	51868	Plate	1
14	16113-46	Connector	1
15	16481-8	Connector	2
16	16262-908	O-Ring	6
17	16185-88	Union 90° Male	1
20	16485-0008	Elbow	2
21	16047-407	Cap Screw (1/4 UNC x 7/8 H.H.)	1
22	16357-0820	Shoulder Screw (1/2 UNC x 2-1/2 Hex. Soc. Hd.)	1
23	53065	Ball Check	1
24	16471-8	Ball Check	1
25	16137-0066	Elbow	1
26	51957-02	Brake Pressure Tube	1
27	51958-08	Forward Clutch Tube	1
28	53841-0001	Hose Assembly	1
29	16482-0086	Connector	2
30	51958-11	Reverse Clutch Tube	1
31	16158-407	Nipple (1/4 NPT x 7/8)	1
32	16475-6	Accumulator, Nitrogen	2
33	16498-0086	Elbow	1
34	16160-06	Nipple	2
35	16114-0086	Adapter	2
36	46126-407	Spacer	1
37	16047-414	Cap Screw (1/4 UNC x 1-3/4 H.H.)	1
38	16144-44	Connector	1



NOTE: ROTATION C.C.W. AS VIEWED FROM SHAFT END OF PUMP.
 PORT LOCATIONS, RIGHT HAND SIDE.
 CHECK PLUG AND END CAP LOCATION, RIGHT HAND SIDE.
 BEVEL GEAR INSTALLED ON GEAR SIDE OF BEVEL PINION.

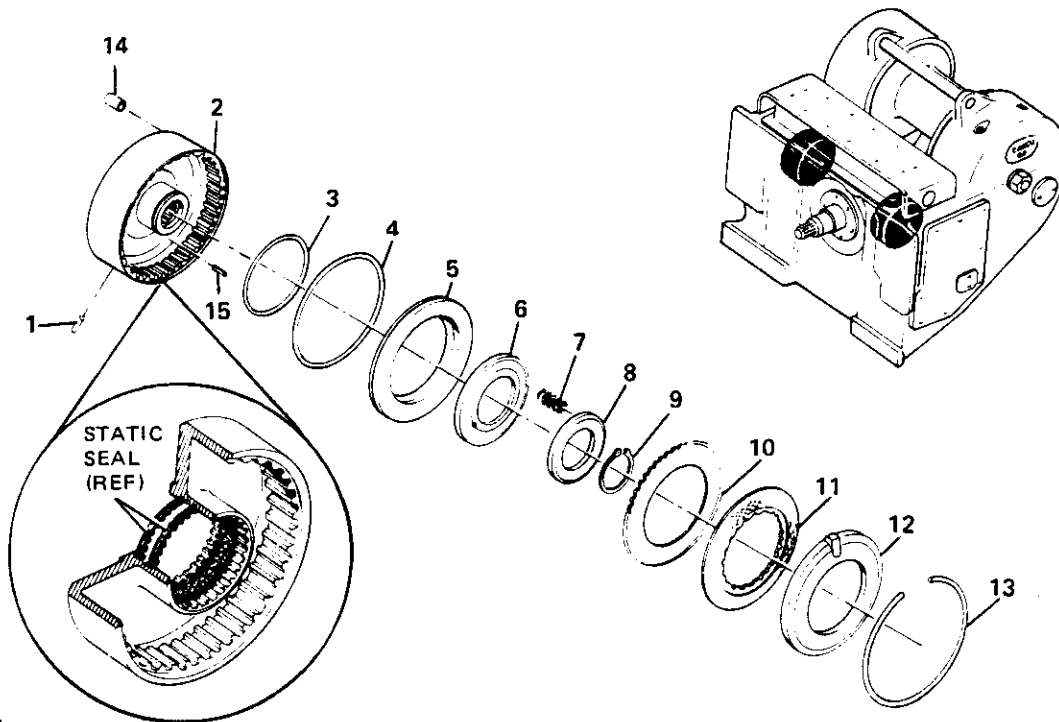
REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	16313-62	Retaining Ring	2
2	51056	Gear	1
3	15305	Needle Bearing	1
4	51525-1	Mount Assembly (Includes Items 3 and 5)	1
5	16507-0003	Threaded Insert	2
6	16024-15	Cap Screw, 3/8 UNC x 1-3/4 Dr. Hd.	1
7	16348-1	Washer	2
8	16024-16	Cap Screw, 3/8 UNC x 2-1/4 Dr. Hd.	1
9	16284-95	Pump Shaft Seal	1
10	16226-7	Key	1
11	16146-88	Elbow	1
12	16262-908	O-Ring	1
13	16520-01	Swivel Clamp,	1
14	69526	Hose Assembly	1
18	16474-12	Elbow	1
19	16262-912	O-Ring	1
20	16511-08	Union	1
21	16021-3	Screw, 10-24 UNC x 5/8 Rd. Hd.	1
22	51959-54	Suction Tube	1
23	16262-116	O-Ring	2
24	16069-4	Lock Washer, 1/4 Ext. Tooth	2
25	16047-428	Cap Screw, 1/4 UNC x 3-1/2 H.H.	2
26	16473	Filter	1
27	51956-09	PTO Lube Tube	1
28	16521-4	Nut	1
29	16522-4	Sleeve	1
30	53140-0001	Pump (Replaces 51530-1)	1
31	16055-12	Tapping Screw, 1/4 x 3/4 Type F Fl. Hd.	1
32	48125-2	Wire, 16 Ga. x 18"	1
—	69527	Hose Kit, Pump Pressure (Consists of items 11, 14, and items 17, 23, 24 page 15)	

**MODEL 80-PS, PSM & PSC
BEVEL GEAR SHAFT
PAGE 18**



BEVEL GEAR SHAFT GROUP NO. 52188

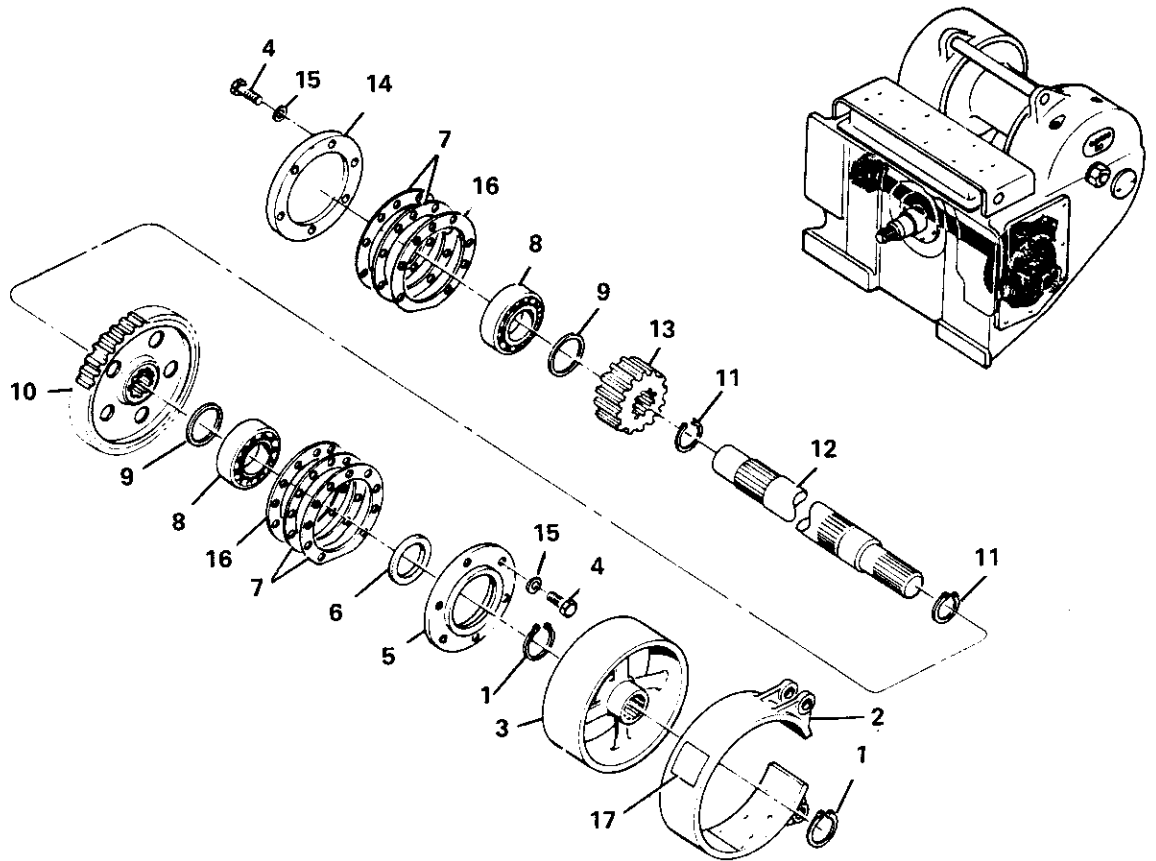
REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	16166-20	Plug	2
2	44753	Spring	2
3	69374	Seal (includes item 25) Replaces P/N 44949	2
4	16047-810	Cap Screw, 1/2 UNC x 1-1/4 H.H.	12
5	44165	Retainer	2
6	44185	Shim Set	2
7	[41742 53221	[Shaft, S.N. 8-1228 & Below [Shaft, S.N. 8-1229 & Up	2
8	44198	Clamp Ring	2
9	44336	Shim Set	2
10	[15150 15152	[Bearing Cup [Bearing Cone	2
11	44851	Thrust Washer	2
12	15254	Bearing Set (Matched)	2
13	44173	Retaining Ring	2
14	44858	Retaining Ring	2
15	48861	Pinion	2
16	44825	Thrust Washer	2
17	51273-1	Clutch (See Page 18 for clutch parts, includes items 13 and 14.)	2
18	44167	Static Seal	4
19	15037	Ball Bearing	2
20	44245	Spacer	1
21	[44164 53626	[Shaft, S.N. 8-1228 & Below [Shaft, S.N. 8-1229 & Up	1
22	16064-8	Washer, 1/2	12
23	44940	Washer	2
24	44185-4	Gasket	2
25	16262-121	O-Ring	2
26	16262-920	O-Ring	2



NOTE:
 ALL RELATED CLUTCH PARTS
 NOT SHOWN MUST BE ORDERED
 FROM PAGE 17.

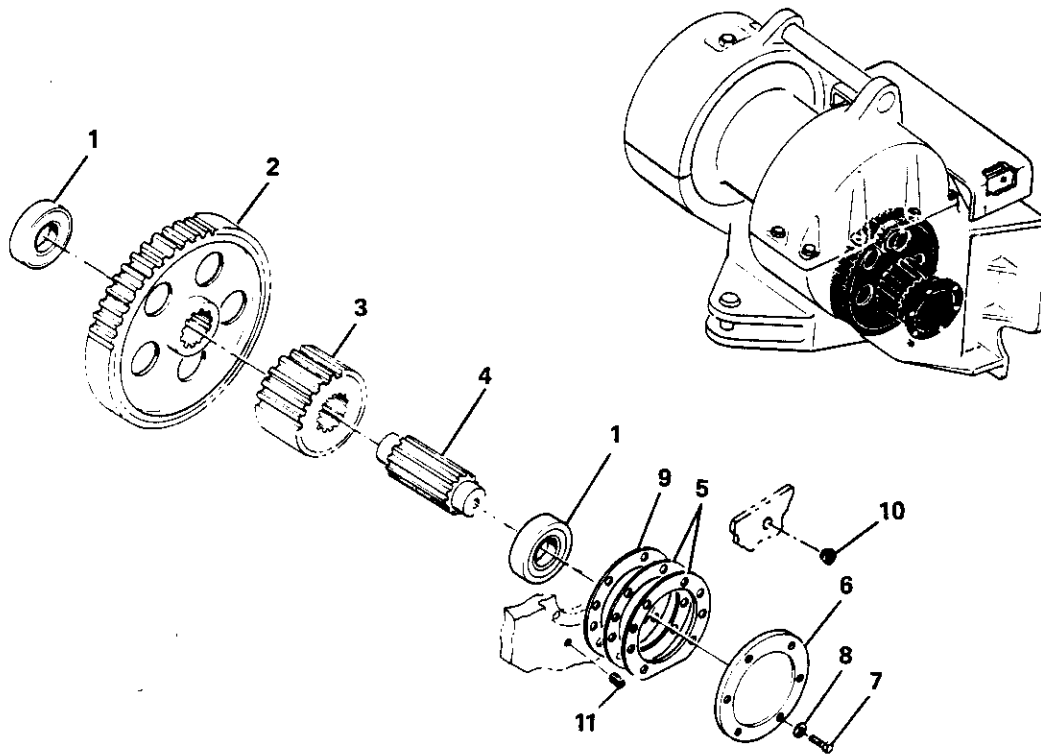
CLUTCH NO. 51273-1

REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER CLUTCH
1	16290-1208	Dowel, 3/8 x 1/2	1
2	51272-1	Housing (includes items 1 and 14)	1
3	46244	Seal	1
4	46245	Seal	1
5	44855	Piston	1
6	44861	Return Ring	1
7	44859	Spring	16
8	44172	Retainer	1
9	16313-325	Retaining Ring	1
10	46132	Steel Disc (External splines)	5
11	46131	Friction Disc (Internal splines)	4
12	44858	Retaining Ring	1
13	44173	Retaining Ring	1
14	52592	Seat Assembly	1
15	16295-1432	Pin	1
-	51273-1	Clutch Assembly (Consists of all above items)	1



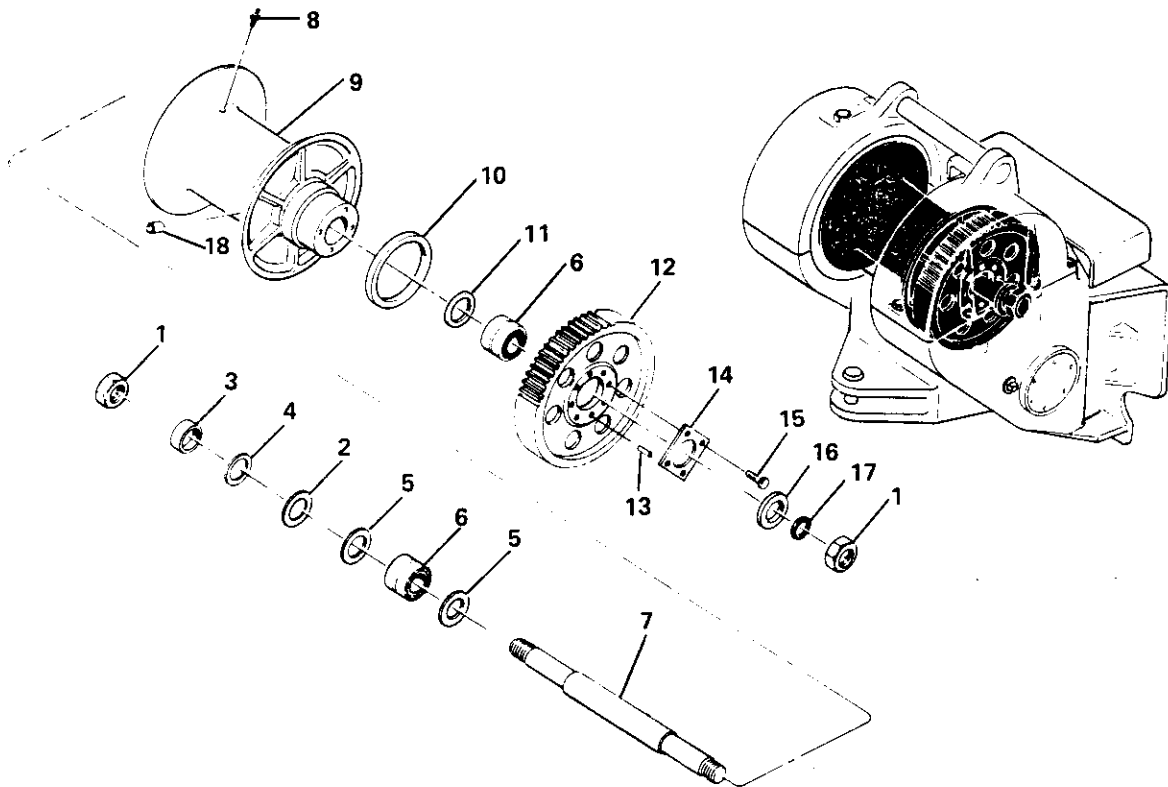
GROUP NO. 52195

REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	16313-231	Retaining Ring	2
2	46604 69372	Brake Band Assembly (includes following) Brake Lining Repair Kit, includes (3) Block Linings and (32) Rivets	1
3	44182	Brake Drum	1
4	16047-810	Cap Screw, 1/2 UNC x 1-1/4 H.H.	12
5	44158	Carrier	1
6	16342-2	Oil Seal	1
7	44184	Shim Set	2
8	15077	Ball Bearing	2
9	44186	Spacer	2
10	44159	Gear	1
11	16313-300	Retaining Ring	2
12	44163	Brake Shaft	1
13	44160	Pinion	1
14	44183	Cover	1
15	16064-8	Washer, 1/2	12
16	46229	Gasket	2
17	51955	Asbestos Warning Plate	1



IDLER SHAFT GROUP (NO FREE SPOOL) NO. 52066

REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	15284	Roller Bearing	2
2	44161	Gear	1
3	44162	Pinion	1
4	44157	Shaft	1
5	44184	Shim Set	1
6	44183	Cover	1
7	16047-810	Cap Screw, 1/2 UNC x 1-1/4 H.H.	6
8	16064-8	Washer, 1/2	6
9	46229	Gasket	1
10	50476	Rubber Plug	1
11	50475	Threaded Plug	1



DRUM SHAFT (STANDARD) NO. 44153
 (PSC) NO. 44681

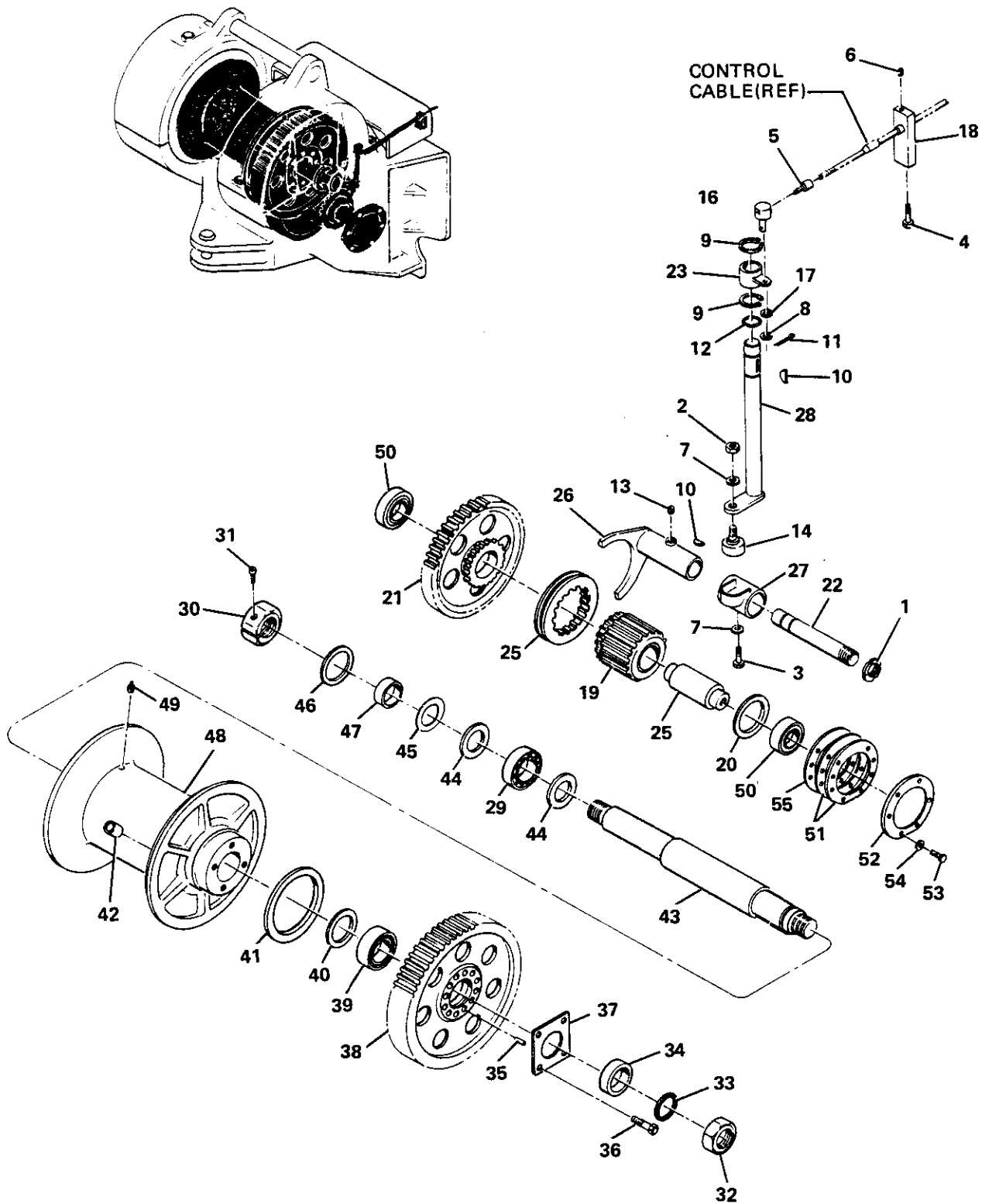
REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
** 1	16044-44	Nut, 2-3/4 UN Hex Jam	2
2	44880	Shim	2
3	16343-32	Oil Seal	1
4	44180-3	Spacer	1
5	44179	Seal	2
6	15199	Bearing Set	2
** 7	44154	Shaft	1
8	16222-2	Fitting	1
9	44153 44681	Standard Drum High Capacity Drum	1 1
10	16342-11	Oil Seal	1
11	16343-26	Oil Seal	1
12	44166	Gear	1
* 13	45081-2	Dowel Pin	6
14	Y1646	Lock	1
15	16048-1420	Cap Screw, 7/8 UNF x 2-1/2 H.H.	6
16	44155-2	Spacer	1
17	16262-340	O-Ring	1
18	25459-2	Ferrule for 1-1/8 Wire Rope	1
	25459-1	Ferrule for 3/4, 7/8 or 1 Wire Rope	1

NOTES:

* When bull gear or cable drum is replaced, dowel holes must be drilled 5/64" and reamed .9057/9077" to accommodate oversize 45081-2 dowels.

** For extended drum shaft order 46926 shaft and 2 each 16041-19 nut

MODEL 80-PS, PSM & PSC
DRUM SHAFT & IDLER FREE SPOOL ASSY.
PAGE 24



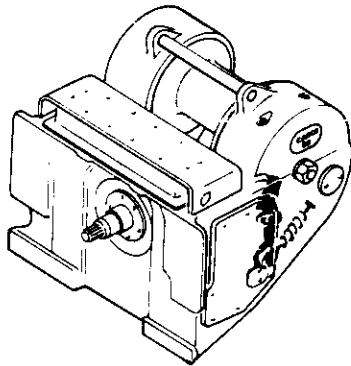
DRUM SHAFT AND IDLER SHAFT FREE SPOOL ASSY. NO. 52067

REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	16041-6	Lock Nut	1
2	16044-6	Nut, 3/8 UNF Hex Jam	1
3	16047-608	Cap Screw, 3/8 UNC x 1 H.H.	1
4	16047-812	Cap Screw, 1/2 UNC x 1-1/2 H.H.	1
5	52399	Cable Adapter	1
6	16056-606	Set Screw, 3/8 UNC x 3/8 Hex Soc. Cup Pt.	1
7	16067-6	Washer, 3/8	2
8	16064-8	Washer, 1/2	1
9	16313-62	Retaining Ring	2
10	16226-1	Key	2
11	16292-616	Spring Pin	1
12	16342-19	Oil Seal	1
13	16403-2	Ball Plunger	1
14	16404-14	Cam Follower	1
*	See Note Below	Control Cable (Ref.)	1
16	49332	Control Cable Pin	1
17	49333-1	Disc Spring	1
18	49932	Cable Anchor	1
19	53533	Bull Pinion Assy.	1
20	49938-1	Thrust Washer	1
21	49939-1	Idler Shaft Gear	1
22	49940-80	Guide	1
23	49941-80	Control Lever	1
24	49942-1	Idler Shaft	1
25	49943	Pinion Coupling	1
26	49944-80	Shift Flange Assembly	1
27	49947	Shift Cam	1
28	49948	Shifter Shaft	1
29	15298	Bearing Set	1
30	49957-44	Split Lock Nut	1
31	16045-712	Screw, Self Locking 7/16 UNF x 1-1/2 Hex Soc. Hd.	1
32	16044-44	Nut, 2-3/4 UNF Hex Jam	1
33	16262-340	O-Ring	1
34	44155-2	Spacer	1
**	45081-2	Dowel Pin	6
36	16048-1420	Cap Screw, 7/8 UNF x 2-1/2 H.H.	6
37	Y1646	Lock	1
38	44166	Gear	1
39	15199	Bearing Set	1
40	16343-26	Oil Seal	1
41	16342-11	Oil Seal	1
42	25459-2	Ferrule for 1-1/8 Wire Rope	1
	25459-1	Ferrule for 3/4, 7/8 or 1 Wire Rope	1
43	44154	Shaft	1
44	44179	Seal	2
45	44880	Shim	2
46	16343-32	Oil Seal	1
47	44180-3	Spacer	1
48	44153	Standard Drum	1
	44681	High Capacity Drum	1
49	16222-2	Fitting	1
50	15284	Roller Bearing	2
51	44184	Shim Set	1
52	44183	Cover	1
53	16047-810	Cap Screw, 1/2 UNC x 1-1/4 H.H.	6
54	16064-8	Washer, 1/2	6
55	46229	Gasket	1

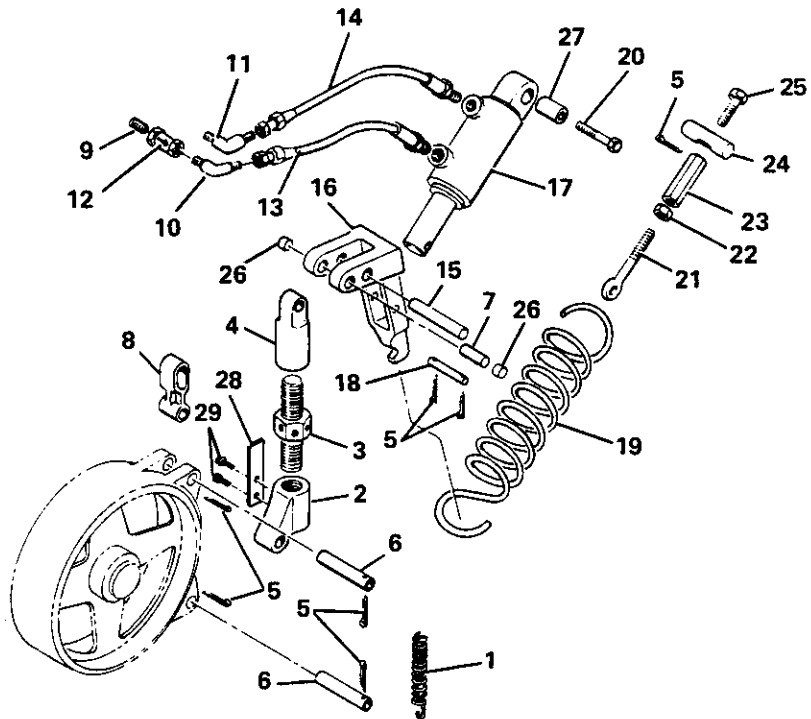
* Use 52000 series cables. For length, see listings under control group page in service manual.

** When bull gear or cable drum is replaced, dowel holes must be drilled 57/64" and reamed .9057/.9077" to accommodate oversize 45081-2 dowels.

**MODEL 80-PS, PSM & PSC
BRAKE CONTROL (SPRING APPLIED)
PAGE 26**



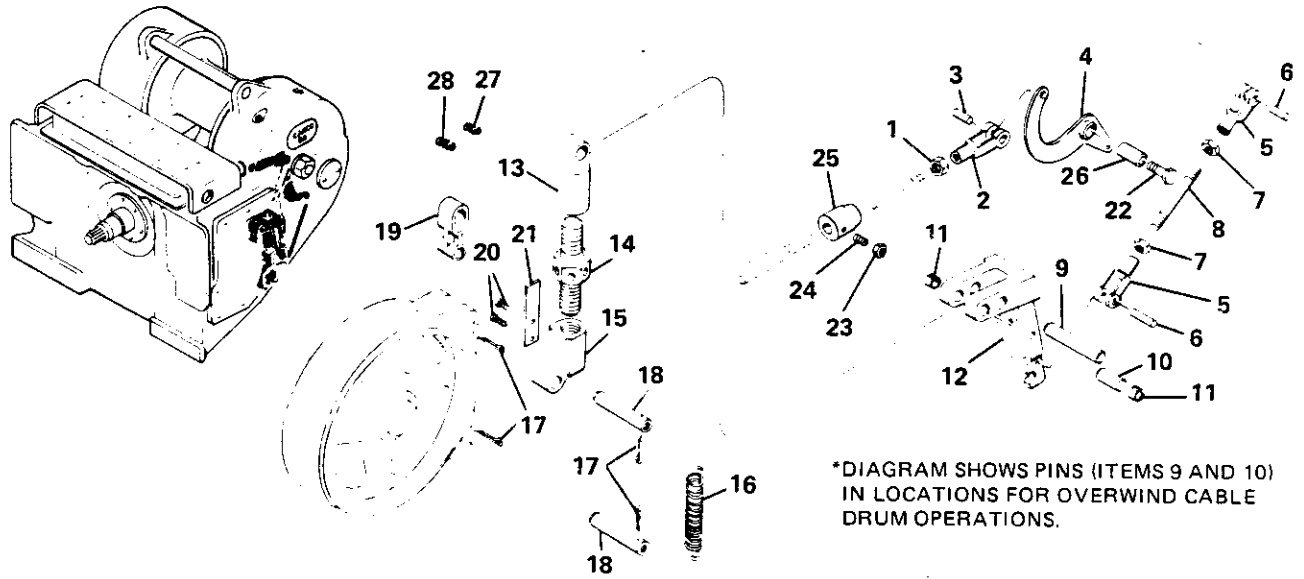
* DIAGRAM SHOWS PINS (ITEMS 7 AND 15)
IN LOCATIONS FOR OVERWIND
CABLE DRUM OPERATIONS.



P.S. BRAKE CONTROL GROUP (SPRING APPLIED) NO. 52074

REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	44107	Spring	1
2	40159-1	Rod Nut	1
3	40157	Rod	1
4	40156-1	Rod Nut	1
5	16288-420	Cotter Pin, 1/8 x 1-1/4	7
6	44114	Pin	2
* 7	53448	Pin	1
8	40119	Link	1
9	16158-412	Nipple, 1/4 NPT x 1-1/2	1
10	16145-46	Elbow	1
11	16145-66	Elbow	1
12	51278	Flow Control Valve	1
13	44118-17	Hose	1
14	44118-13	Hose	1
* 15	32919	Pin	1
16	44195	Arm	1
17	51279	Cylinder (See Page 30.)	1
18	40134	Pin	1
19	40155	Spring	1
20	16047-1236	Cap Screw, 3/4 UNC x 5 H.H.	1
21	44206	Eye Bolt	1
22	16043-8	Nut, 1/2 UNC Hex Jam	1
23	40174	Nut	1
24	40175	Pin	1
25	42023	Screw	1
26	44687-1	Spacer	2
27	46077-2	Sleeve	1
28	44806	Spring	1
29	16055-5	Drive Screw, #10 x 3/8 Type U	2

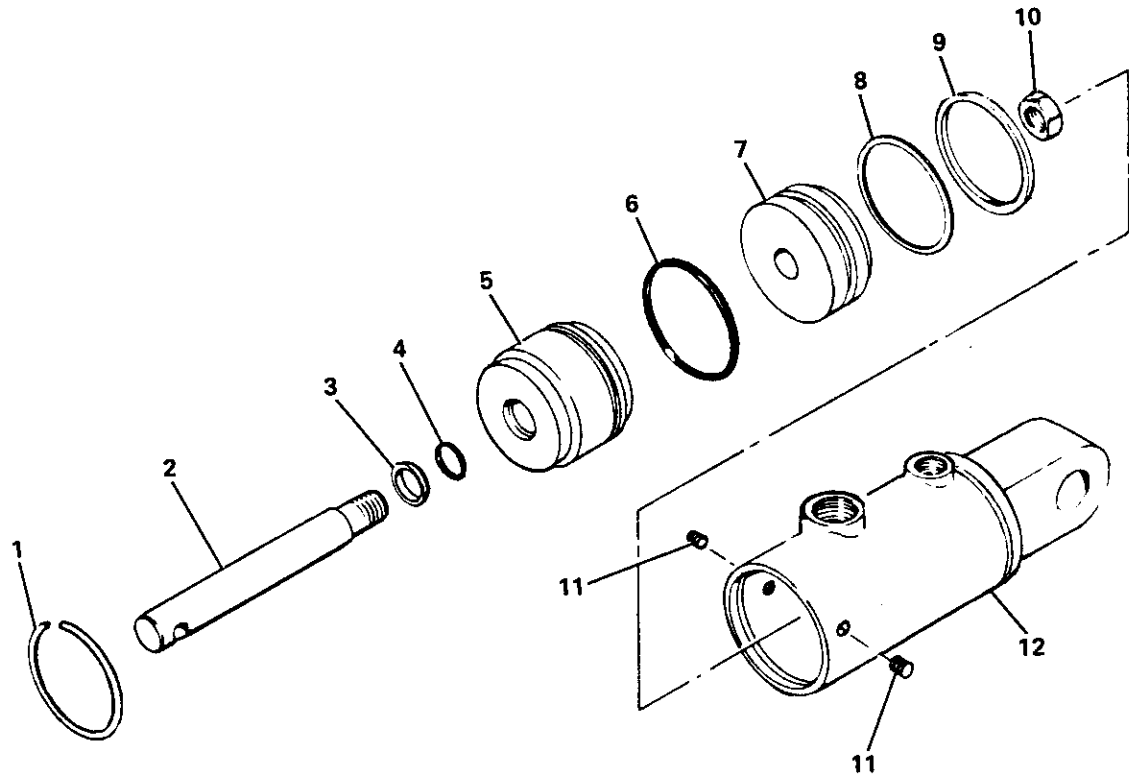
NOTE: See Page 4 and 5 for Control Stand Group.



MANUAL BRAKE CONTROL GROUP NO. 52075

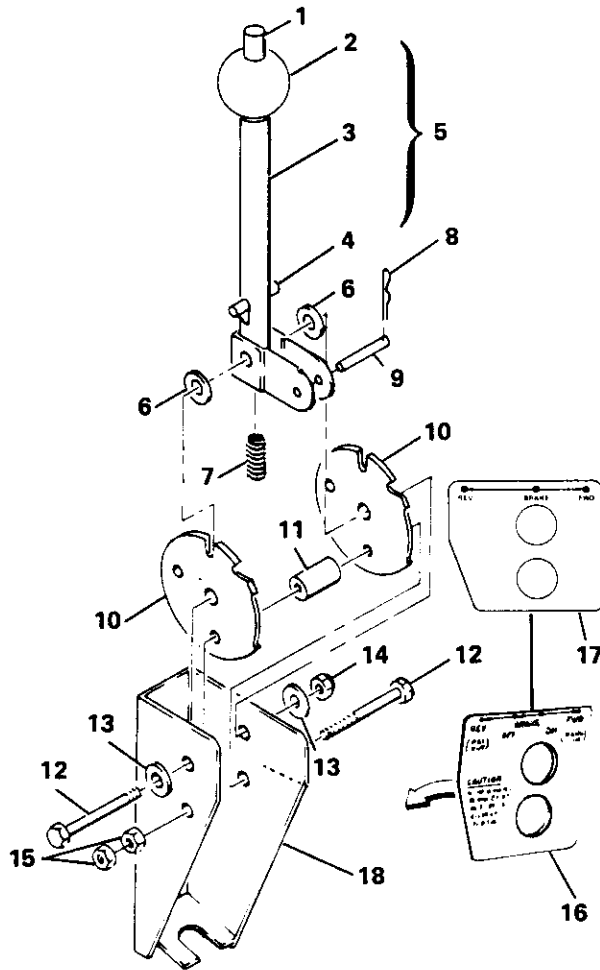
REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	16044-6	Nut, 3/8 UNF Hex Jam	1
2	16245-6	Yoke	1
3	16246-6	Pin	1
4	44978	Lever	1
5	16245-8	Yoke	2
6	16246-8	Pin	2
7	16044-8	Nut, 1/2 UNF Hex Jam	2
8	37629-4	Stud	1
* 9	32919	Pin	1
* 10	53448	Pin	1
11	44687-1	Spacer	2
12	44195	Arm	1
13	40156-1	Rod Nut	1
14	40157	Rod	1
15	40159-1	Rod Nut	1
16	44107	Spring	1
17	16288-420	Cotter Pin, 1/8 x 1-1/4	4
18	44114	Pin	2
19	40119	Link	1
20	16055-5	Drive Screw, #10 x 3/8 Type U	2
21	44806	Spring	1
22	16047-1236	Cap Screw, 3/4 UNC x 5 H.H.	1
23	16043-6	Nut, 3/8 UNC Hex Jam	1
24	16056-620	Set Screw, 3/8 UNC x 1-1/4 Hex Soc.	1
25	45351-2	Control Cable Anchor	1
26	46077-2	Sleeve	1
27	16169-6	Plug, 3/8 NPT Sq. Hd.	1
28	16169-4	Plug, 1/4 NPT Sq. Hd.	1

NOTE: See pages 6 and 7 for control stand group.



BRAKE CYLINDER ASSEMBLY

REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	16280-6	Retaining Ring	1
2	16280-4	Rod, Piston	1
3	16280-7	Wiper	1
4	16262-214	O-Ring	1
5	16280-2	Head	1
6	16262-228	O-Ring	1
7	16280-15	Piston	1
8	16301-1	Washer, Back-up	1
9	16334-1	Seal	1
10	16280-5	Nut	1
11	16054-404	Set Screw (1/4 UNC x 1/4)	2
12	NSS	Tube Assy (Order 51279 Brake Cylinder)	1
--	46241	Repair Kit, Seal (Consists of Items 3, 4, 6, 8, 9)	1
--	51279	Brake Cylinder Assembly	1



CONTROL STAND (POWERSHIFT)
49001-01 THROUGH 49001-08*

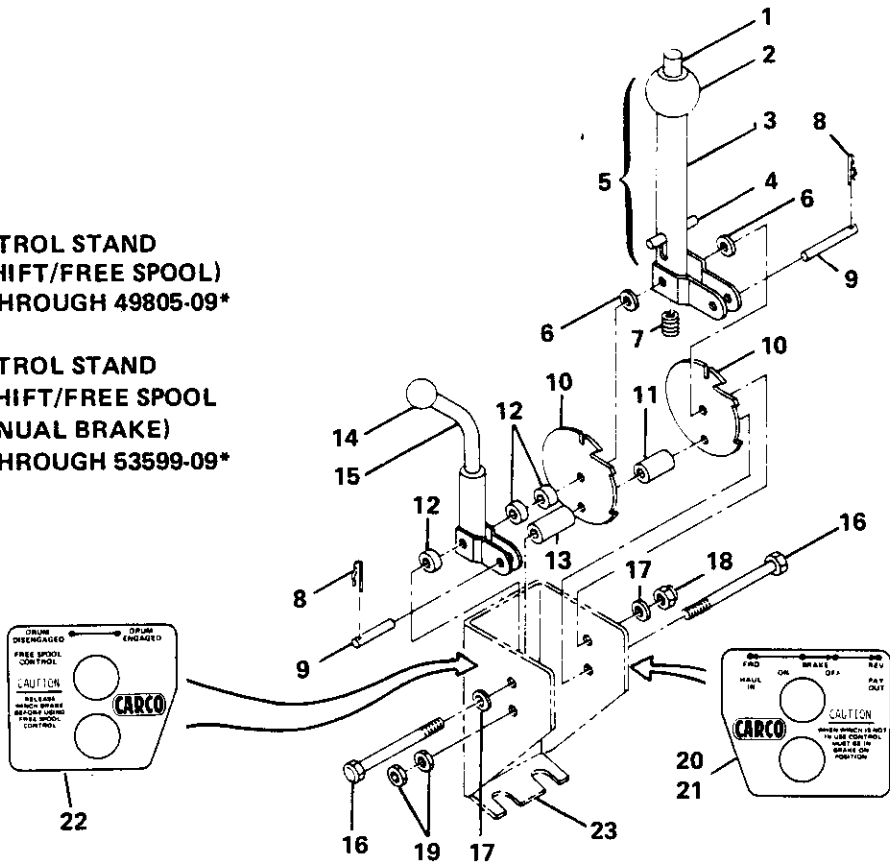
CONTROL STAND
(POWER SHIFT W/MANUAL BRAKE)
53598-01 THROUGH 53598-08*

REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	49004	Push Rod	1
2	41404	Ball	1
3	49005	Handle	1
4	16294-824	Pin, Spring (1/4 x 1-1/2)	1
5	49003	Lever Assy (Consists of Items 1, 2, 3, 4)	1
6	16009-6	Bearing, Thrust	2
7	41403	Spring	1
8	16381-13	Pin, Hitch	1
9	49010	Pin	1
10	49007	Plate, Lock	2
11	49804-3	Spacer	1
12	16047-620	Cap Screw (3/8 UNC x 2-1/2)	2
13	16064-6	Washer (3/8)	2
14	16039-66	Nut, Lock (3/8)	1
15	16033-6	Nut (3/8 Hex)	2
16	49314	Plate, Instruction, Powershift	1
17	53362-2	Plate, Instruction, Powershift w/Manual Brake	1
18	NSS	* Housing, Powershift (Order Control Stand Assembly)	1

*Refer to Control Group, pages 4 and 6 for part number of complete Control Stand Assembly.

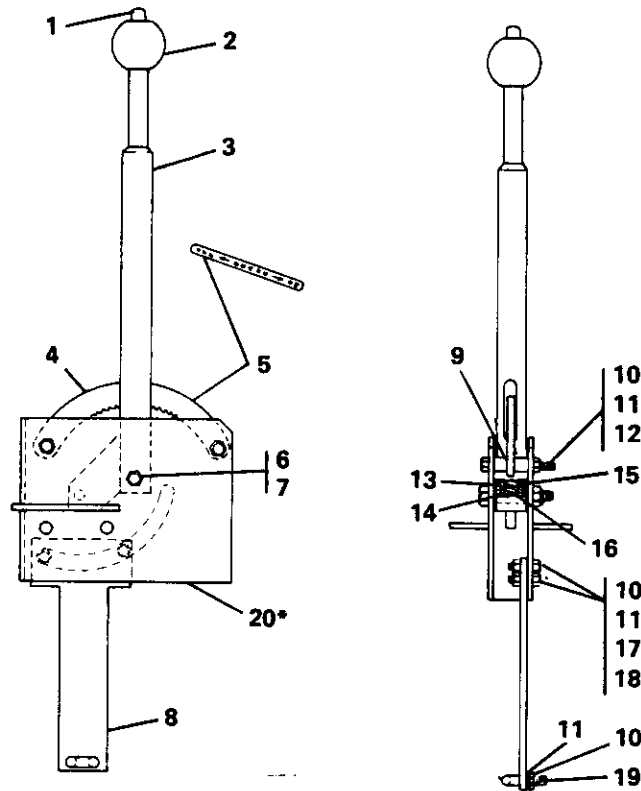
CONTROL STAND
 (POWERSHIFT/FREE SPOOL)
 49805-01 THROUGH 49805-09*

CONTROL STAND
 (POWERSHIFT/FREE SPOOL
 W/MANUAL BRAKE)
 53599-01 THROUGH 53599-09*



REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	49004	Push Rod	1
2	41404	Ball	1
3	49005	Handle	1
4	16294-824	Pin, Spring (1/4 x 1-1/2)	1
5	49003	Lever Assy (Consists of Items 1, 2, 3, 4)	1
6	16009-6	Bearing, Thrust	2
7	41403	Spring	1
8	16381-13	Pin, Hitch	2
9	49010	Pin	2
10	49007	Plate, Lock	2
11	49804-3	Spacer	1
12	49804-2	Spacer	3
13	49804-1	Spacer	1
14	16236-4	Knob	1
15	49802-1	Lever Assy, Free Spool	1
16	16047-632	Cap Screw (3/8 UNC x 4)	2
17	16064-6	Washer (3/8)	2
18	16039-66	Lock Nut (3/8)	1
19	16033-6	Nut (3/8 Hex)	2
20	49314	Plate, Instruction, Powershift	1
21	53362-2	Plate, Instruction, Powershift w/Manual Brake	1
22	49807-2	Plate, Instruction, Free Spool	1
23	NSS	* Housing, Powershift w/Free Spool (Order Control Stand Assembly)	1

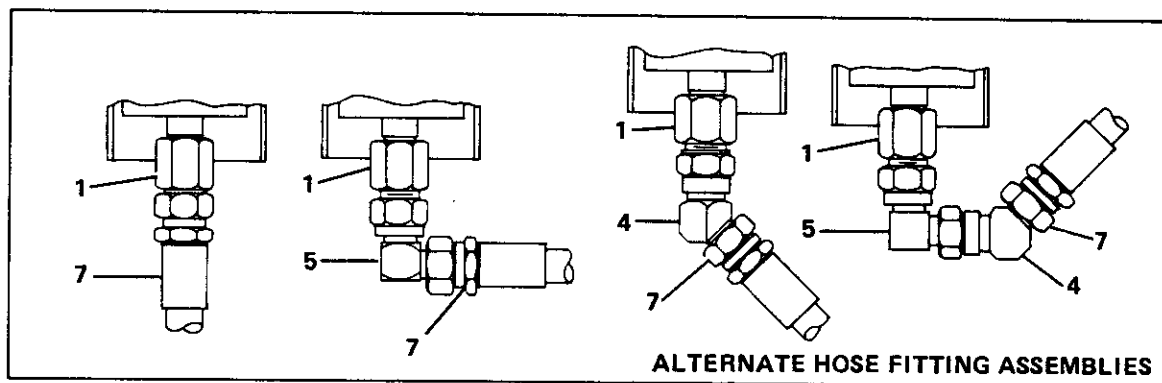
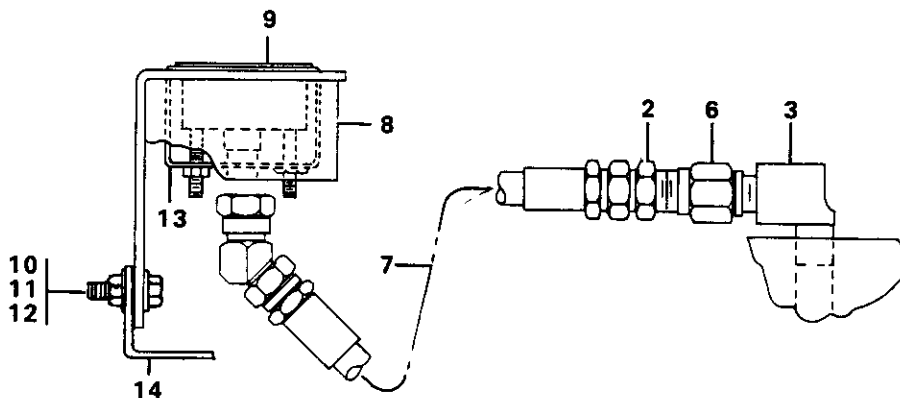
*Refer to Control Group, pages 5 and 7 for part number of complete Control Stand Assembly.



MANUAL BRAKE CONTROL STAND ASSEMBLY NO. 49434*

REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	50629	Rod	1
2	41404	Ball	1
3	49435	Handle	1
4	50627	Sector	1
5	49446	Plate, Instruction	1
6	16039-83	Nut, Lock	1
7	16047-818	Cap Screw (1/2 UNC x 2-1/4)	1
8	50099	Arm	1
9	49438	Spacer	4
10	16033-6	Nut (3/8)	6
11	16067-6	Washer, Lock (3/8)	6
12	16047-620	Cap Screw (3/8 UNC x 2-1/2)	2
13	49437	Bushing	1
14	49436	Washer	2
15	49445	Spring	1
16	16064-3	Washer, Plain	1
17	16047-608	Cap Screw (3/8 UNC x 1)	2
18	16064-6	Washer, Plain	2
19	16398-4	U-Bolt (3/8)	1
20	NSS	* Housing (Order complete Control Stand Assembly)	

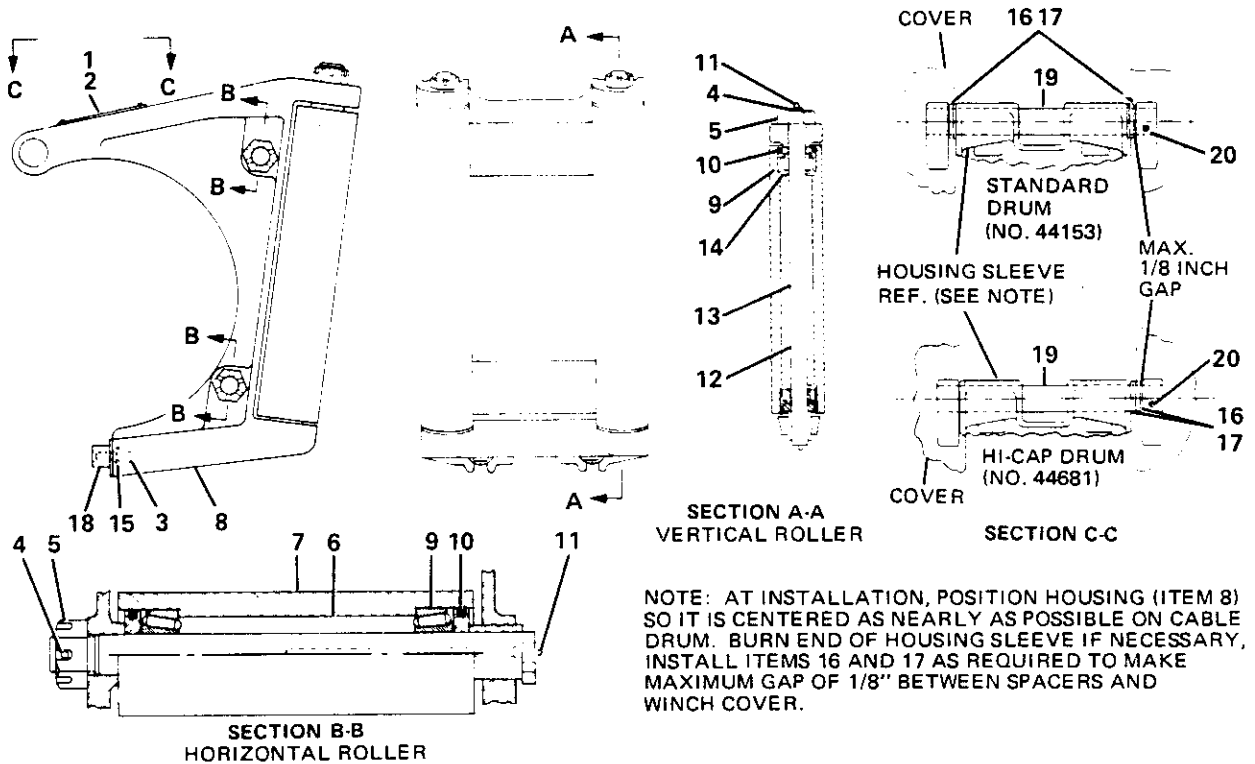
*Refer to Control Group, pages 6 and 7 for part number of complete Control Stand Assembly.



REF.	CARCO PART NO.	NAME AND DESCRIPTION	KIT NUMBER		
			48944-120	48700-120	51480-1
			QUAN. PER UNIT	QUAN. PER UNIT	QUAN. PER UNIT
1	16116-44	Adapter	1	1	1
2	16129-44	* Connector	1	1	1
3	16171-44	* Elbow	1	1	1
4	16184-44	Union	1	1	-
5	16185-44	Union	1	1	-
6	16362-44	* Snubber	1	1	1
7	44921-120	Hose Assembly	1	1	1
8	48687	Bracket	1	1	-
9	48693-1	Gauge	1	1	1
10	16047-608	Screw, Hex Hd Cap (3/8 x 1 UNC)	1	-	-
11	16033-6	Nut, Hex (3/8 UNC)	1	-	-
12	16063-6	Washer (3/8)	1	-	-
13	16385	Bracket	1	1	1
14	49343-2	Bracket	1	-	-

*Items 2, 3, and 6 are also shown in hydraulic control section.

THIS FAIRLEAD IS NORMALLY FURNISHED AS A 3-ROLLER UNIT, WITH HORIZONTAL ROLLER IN TOP POSITION — IF A 4-ROLLER UNIT IS REQUIRED, AN ADDITIONAL ROLLER CAN BE SUPPLIED CONSISTING OF ITEMS LISTED IN COLUMN "A" IN PARTS LIST.



FAIRLEAD—PART NO. { 40416-30 (3 ROLLER, USE WITH STD. OR HI CAP DRUM.)
40416-40 (4 ROLLER, USE WITH STD. OR HI CAP DRUM.)

REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT	"A"
1	26248	Name Plate	1	
2	16055-5	Drive Screw, #10 x 3/8 Type U	4	
3	16047-2018	Cap Screw, 1-1/4 UNC x 2-1/4 H.H.	2	
4	16288-1240	Cotter Pin, 3/8 x 2-1/2	3	1
5	16036-24	Nut	3	1
6	35016	Shaft	1	1
7	30706	Roller	1	1
8	40415	Housing	1	
9	15235	Bearing Cup	6	2
	15178	Bearing Cone	6	2
10	30044	Dust Guard	6	2
11	16222-2	Fitting	5	1
12	30705	Roller	2	
13	30701	Shaft	2	
14	30045	Retainer	4	
15	16063-20	Washer, 1-1/4	2	
16	49879-1	Spacer	2	
17	49879-2	Spacer	2	
18	42184	Attaching Lug	2	
*	19	Cable Guard	1	
	20	Cotter Pin, 3/8 x 4-1/2	1	

*Welds to winch case.