

ADAPTER SECTION

CARCO MODEL 28 WINCH

FOR
JOHN DEERE 450C AND
550 TRACTOR AND
450C AND 555 LOADER

PURPOSE OF YOUR MOUNTING INSTRUCTIONS

This adapter text is general information. Details for individual tractor models are located on the adapter drawing included in this section. Follow the instructions carefully.

NOTES: 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 Pacific Car and Foundry Company.

Be sure to give correct part number, part name, and complete serial number of winch when ordering; also name and model of tractor on which the winch is mounted.

CARCO
WINCH PRODUCTS

PACIFIC CAR AND FOUNDRY COMPANY • A DIVISION OF **PACCAR**

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CARCO MODEL 28 Installation Instructions

When the winch is supplied with the adapter installed, follow steps 7 thru 12.

When the winch is supplied without the adapter installed, follow steps 1 thru 12.

(See Figure 1)

1. Remove cotter key, nut and bushing (shipping purposes only) from the splined shaft of the winch. Install the pinion gear, washer and nut on the splined shaft. Torque nut to 300 lbs/ft. and install the cotter pin.

CAUTION; Before installing pinion gear be sure oil seal is installed in bearing housing with lip of seal facing pinion. See Figure 5, page 30 in Service Manual.

2. Press one needle bearing into each cluster gear bore. Install spacer and press in other needle bearing positioning so ends of the bearings are just below the face of the gears.

CAUTION: Press against numbered end of bearing only.

Install cluster gears in the adapter housing so the needle bearings line up with the idler pin holes.

3. Coat O-Rings with light grease and install in groove of idler pins. Install idler pins so they enter from the tractor side of the adapter housing with the O-Rings located away from the winch. Press the idler pins thru the housing and cluster gear bores far enough to allow the steel ball to be installed in the hole provided in the idler pins. Align the ball with the notch in the adapter housing and press the pins back into the housing until the pins are flush with the face of the housing.
4. Paint the winch face with gasket cement and place the largest gasket from the gasket set in position. Install cap screws in the winch housing and allow the cap screws to project sufficiently to locate the gasket and prevent it from moving. The smaller round gaskets should be positioned on the adapter housing and held in position with cap screws.
5. Assemble the adapter to the winch and secure it with cap screws, washers and nuts. Tighten all nuts and cap screws to the required torque.
6. Install oil seals in PTO housing, inner seal towards winch transmission, outer seal towards tractor transmission. Coat seals and splined end of PTO shaft with light grease and install splined end thru seals, being careful not to damage oil seals. Block PTO shaft and housing so seals won't be damaged and install bearing support washer and bearing on shaft and into housing. Secure bearing in housing with retaining ring. Install spacer and spur gear on splined end of shaft and secure gear to shaft with retaining ring.
7. Clean face of tractor transmission and remove all sharp edges from PTO opening and install PTO pilot ring in opening. Coat O-Ring with light grease and install in groove of housing. Place gasket on housing and install PTO thru pilot ring and into tractor coupling or drive. Secure housing with cap screws.
8. Install studs as shown and hoist winch in position on studs engaging winch drive with PTO drive. Secure winch with cap screws, washers and nuts. Torque as shown under note column for cap screws and nuts.
9. Mount the master control assembly P56098 according to the control group installation instructions shown in Figure 3, page 6.
10. Remove the filler and oil level plugs as shown from the ring gear end of the winch and the adapter assembly. Fill winch gear compartment to oil level plug (approx. 6 qts.) and the adapter compartment to oil level plug (approx. 7 qts.). Run the engine for 10 minutes with the PTO engaged. Check oil level and refill if necessary. Check oil level weekly. Use multipurpose type gear lubricant SAE 85W-90 (API-GL-5). See oil chart Figure B, page 7 under operating instructions in Service Manual.
11. After checking for leaks install hose guard as shown and secure with cap screws and washers.
12. At installation and after initial forty hours use, tighten winch mounting fasteners to specified torque values.

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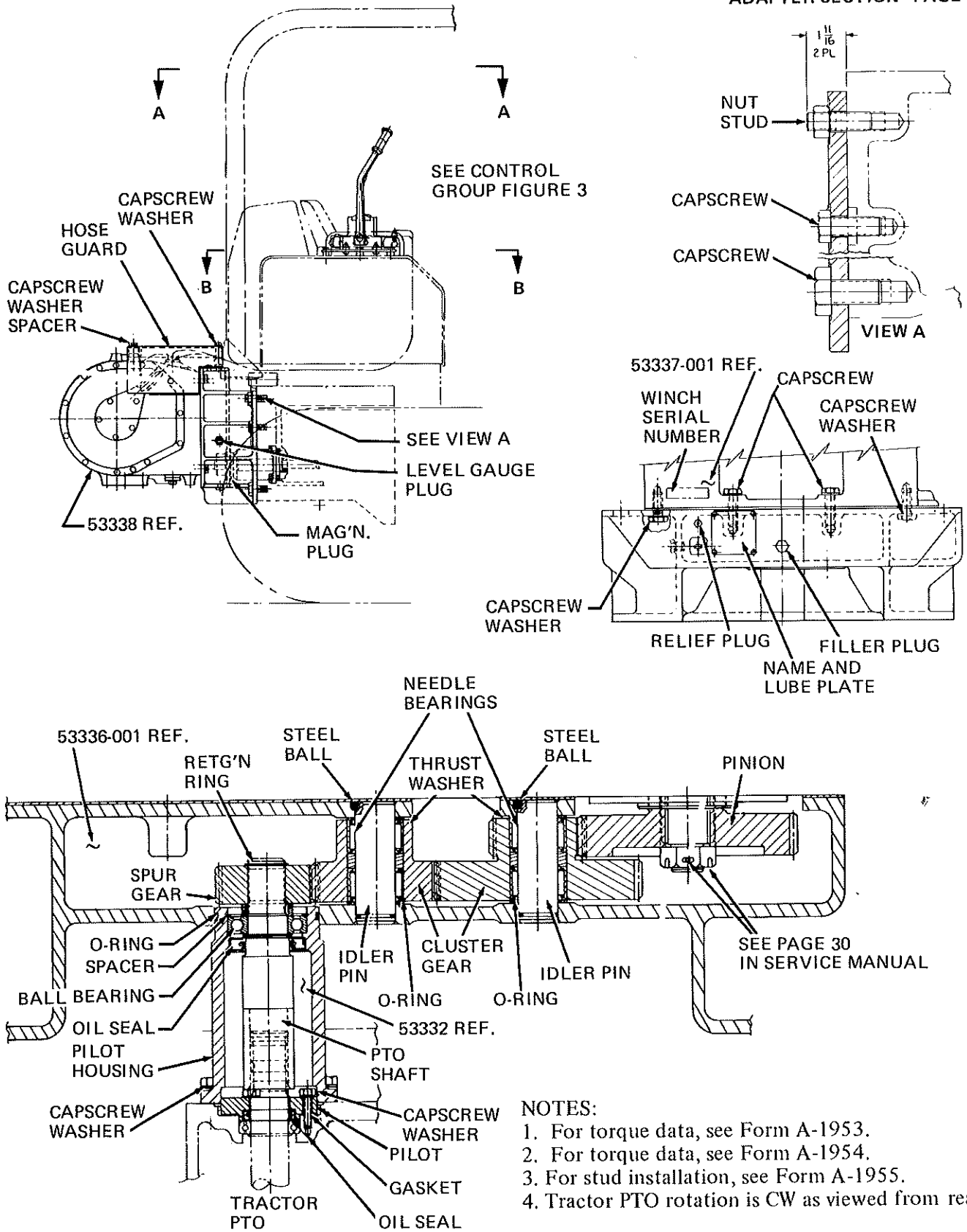


Figure 1

ADAPTER ASSEMBLY NO. 53332, 53338, 53336-001, 53337-001
 K/L 12103

NOTES:

1. For torque data, see Form A-1953.
2. For torque data, see Form A-1954.
3. For stud installation, see Form A-1955.
4. Tractor PTO rotation is CW as viewed from rear.

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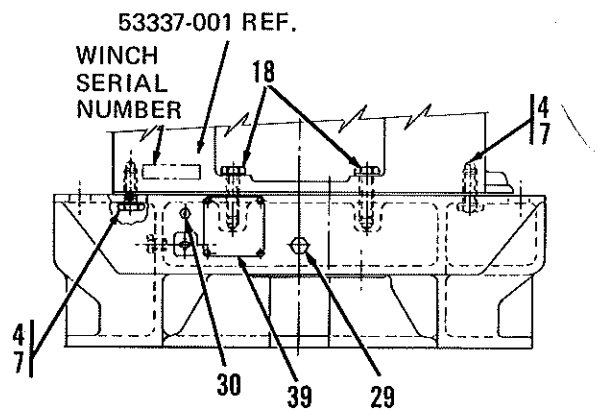
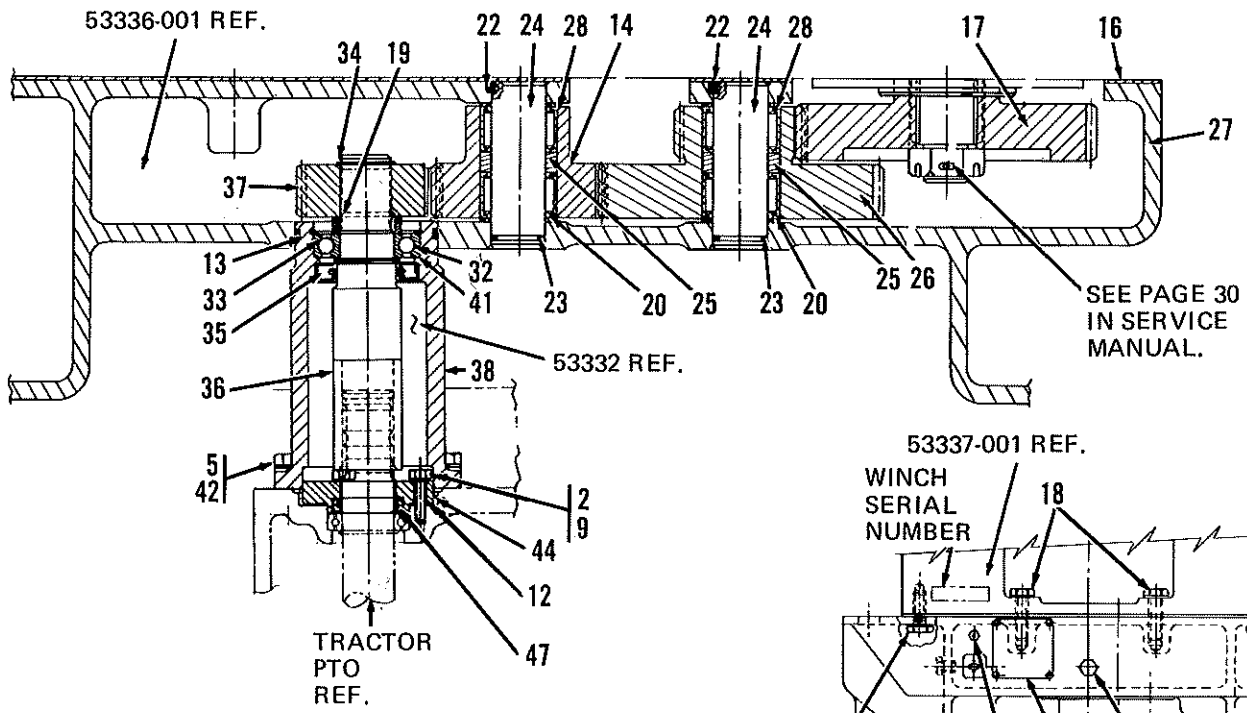
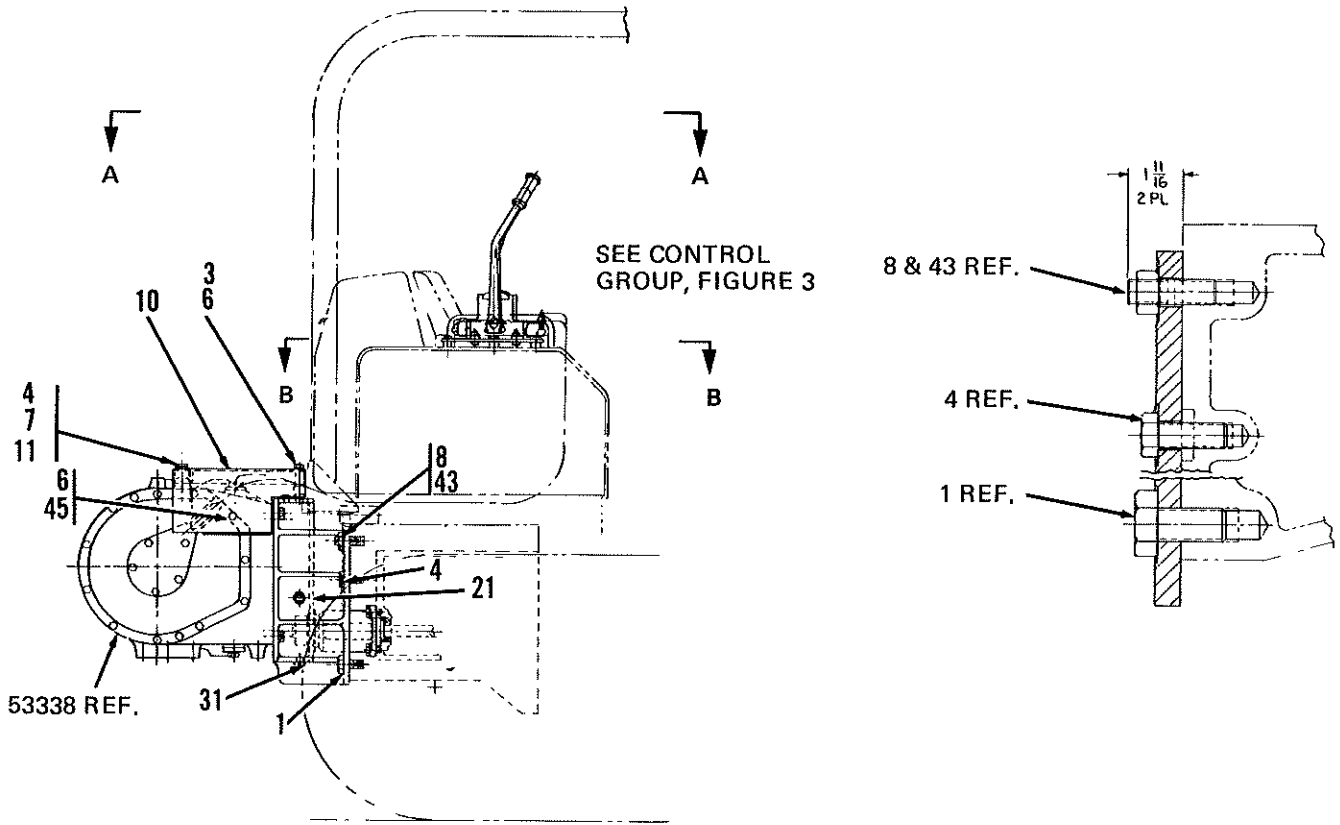


Figure 2

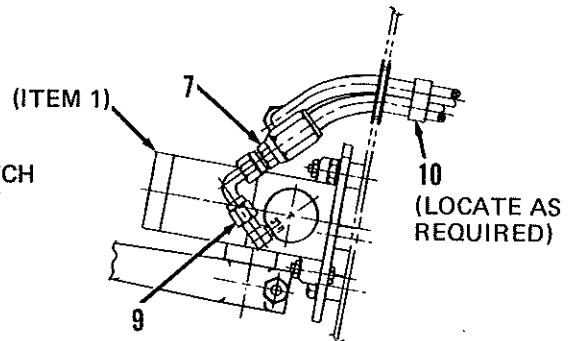
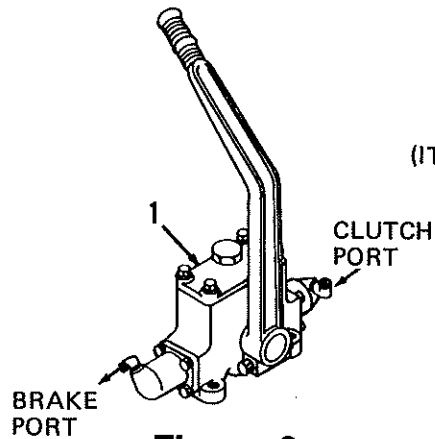
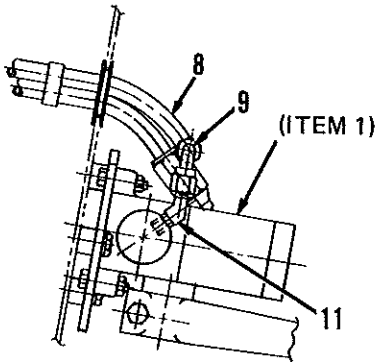
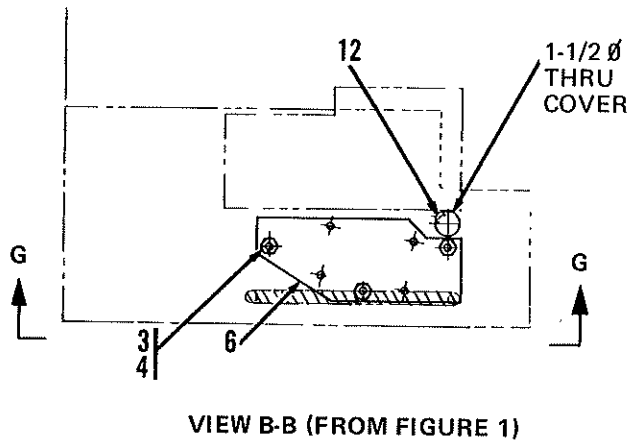
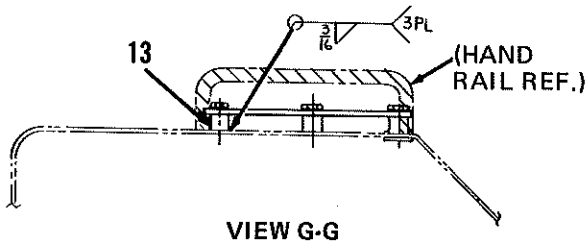
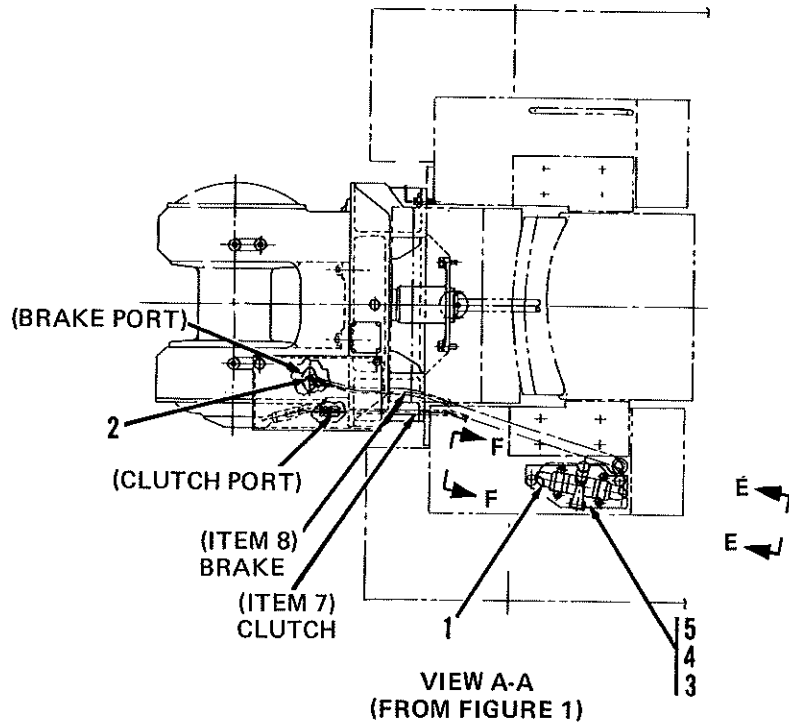
ADAPTER ASSEMBLY NO. 53332, 53338, 53336-001, 53337-001
 K/L 12103

Parts List

REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
1	16047-1618	Cap Screw, 1 UNC x 2-1/4 H.H.	2
2	16047-510	Cap Screw, 5/16 UNC x 1-1/4 H.H.	3
3	16047-830	Cap Screw, 1/2 UNC x 3-3/4 H.H.	1
4	16047-1216	Cap Screw, 3/4 UNC x 2 H.H.	7
5	16067-7	Lock Washer, 7/16	4
6	16064-8	Washer, 1/2	2
* 7	16064-12	Washer, 3/4	14
8	16400-12	Nut, 3/4 UNC Hex	8
9	16067-5	Lock Washer, 5/16	3
*10	51814-7	Hose Guard	1
11	51815	Spacer	1
(12)	53335	PTO Gasket	1
(13)	16262-344	O-Ring, NAT'L. 622747	1
14	52341	Idler Gear (30T)	1
16	PC-19512-A	Gasket Set	1
17	52109	Pinion (43T)	1
18	16047-1220	Cap Screw, 3/4 UNC x 2-1/2 H.H.	4
19	51729	Spacer	1
20	15310	Needle Bearing	4
21	16505-8	Level Gauge Plug, Lube Devices LS1-151-4R	1
22	16217-4	Steel Ball, 1/4	2
23	16262-220	O-Ring, NAT'L. 622725	2
24	PA-19521	Idler Pin	2
25	PA-19524	Spacer	2
26	52116	Cluster Gear (49T & 17T)	1
27	53334	Adapter Housing	1
28	51730	Thrust Washer	4
29	16169-12	Pipe Plug, 3/4 NPT	1
30	16249-1	Relief Plug, ALEMITE 317400	1
31	16168-8	Mag'n. Plug, LISLE 40229AQ1 Sq. Hd.	1
32	15008	Ball Bearing	1
33	16305-314	Retaining Ring, SPIROLOX RR-314	1
34	16318-150	Retaining Ring, SPIROLOX RSN-150	1
(35)	16343-8	Oil Seal, NAT'L. 450087	2
36	53329-1	PTO Shaft	1
37	52386	Spur Gear (23T)	1
38	53330	P.T.O. Pilot Housing	1
39	51742	Name and Lube Plate	1
40	16055-5	Tapping Screw, No. 10 x 3/8 Type U	4
41	16510-001	Washer, TRUARC 5900-157	1
42	16047-712	Cap Screw, 7/16 UNC x 1-1/2 H.H.	4
43	45050-1221	Stud	2
44	53331	PTO Pilot	1
45	16047-834	Cap Screw, 1/2 UNC x 4-1/2 H.H.	1
46	16220-12	Closure, Caplug 8 Type A	4
47	16493-63	Oil Seal, NAT'L. 473517	1

*Use quantity of six as required for shims, when installing item 10.

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CARCO MODEL 28 CONTROL GROUP Mounting Instructions

(See Figure 3)

1. Locate and drill 1-1/2 dia. hole thru tractor console and install trim as shown in view B-B. Remove hand rail.
2. Attach pads to control stand bracket as shown in views B-B and G-G.
3. Position control stand bracket and pads as shown in view B-B and weld pads to tractor console as shown in view G-G.
4. Install elbows on brake and clutch side fittings of master control as shown in views F-F and E-E.
5. Install master control on bracket and route hoses as shown.
6. Follow instructions for "Bleeding Hydraulic System" in the Model 28 manual, page 7 under Operating Instructions.

REF.	CARCO PART NO.	NAME AND DESCRIPTION	QUAN. PER UNIT
* 1	P56098	Master Control	1
2	16145-24	Elbow, WHTR'HD. C5405 x 4	1
3	16047-610	Cap Screw, 3/8 UNC x 1-1/4 H.H.	4
4	16067-6	Lock Washer, 3/8	7
5	16033-6	Nut, 1/2 UNC Hex	4
6	51854	Bracket	1
7	48429-11	Clutch Hose Assy.	1
8	48429-12	Brake Hose Assy.	1
9	16185-44	Elbow, WHTR'HD. C5506 x 4	2
10	16365-1	Retaining Strap, PANDUIT CORP. SST4H-CO	4
11	16144-44	Elbow, WHTR'HD. C5355 x 4 x 4	1
12	45418-6	Trim	1
13	48290	Tapping pads	3

*P56098 master control is same as PX 710C and 52412-1. They incorporate the updated control handle as shown in the parts section, page 32.

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10647-610.....	.5	16505-8.....	.5
16047-712.....	.5	16510-001.....	.5
16047-830.....	.5	PC-19512-A.....	.5
16047-834.....	.5	PA-19521.....	.5
16047-1010.....	.5	PA-19524.....	.5
16047-1216.....	.5	45050-1221.....	.5
16047-1220.....	.5	48429-11.....	.7
16047-1618.....	.5	48429-12.....	.7
16055-5.....	.5	45418-6.....	.7
16064-8.....	.5	48290.....	.7
16064-12.....	.5	51729.....	.5
16067-5.....	.5	51730.....	.5
16067-6.....	.7	51742.....	.5
16067-7.....	.5	51814-7.....	.5
16144-44.....	.7	51815.....	.5
16145-24.....	.7	51854.....	.7
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16220-12.....	.5	52412-1.....	.7
16248-1.....	.5	53329-1.....	.5
16249-1.....	.5	53330.....	.5
16262-220.....	.5	53331.....	.5
16262-344.....	.5	53334.....	.5
16305-314.....	.5	53335.....	.5
16318-150.....	.5	P56098.....	.7

