



## **ILLUSTRATED PARTS**

# **Models 40HT**

**3120244**

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## SECTION 1 — RECOMMENDED SERVICE PARTS STOCK

### MODEL 40HT LIFT

The following list will service each Model 40HT Lift with the most commonly used parts. For further information, contact the JLG Industries Parts Department at Area Code (717) 485-5161.

**Note:** The following Parts are Integral of Section 2 — Illustrated Parts List.

DESCRIPTION	JLG PART NO.	QTY.
<b>STANDARD PARTS</b>		
Limit Switch (Figure 2-1)	4360057	1
Wear Pad Carrier (Figure 2-2, 2-4)	3340453	1
Valve Counterbalance (Figure 2-3)	4640414	1
Valve, Lift Cylinder (Figure 2-7)	4640181	1
Seal Kit Lift Cylinder (Figure 2-7)	2900385	1
Door Latch Basket (Figure 2-11)	2940006	1
Footswitch (Figure 2-11)	4360031	1
Contact Block, Footswitch (Figure 2-11)	7000625	2
Brake Disc (Figure 2-11)	1760068	1
Switch, Emergency, Stop Lights, Drive, Speed (Figure 2-13, 2-14, 2-15)	4360071	4
Switch, Start, Horn (Figure 2-13, 2-14, 2-15)	4360016	2
Valve, Needle (Figure 2-16, 2-17)	4640005	2
Auxiliary Pump (Figure 2-26, 2-29)	3600141	1
Relay Prestolite (Figure 2-29)	3740067	1
Solenoid Hi-Engine (Figure 2-26, 2-29)	3740048	1
Hydraulic Filter Return (Figure 2-35)	2120107	4
Sensor, Level Indicator (Figure 2-36)	4360171	1
Seal Kit, Rotary Oil Coupling (Figure 2-38)	2901146	1
Seal Kit, Swing Motor (Figure 2-42)	3160094	1
Repair Kit, Swing Hub (Figure 2-43)	2900034	1
Bearing Cup (Figure 2-44)	0440018	2
Bearing Cone (Figure 2-44)	0440019	2
Seal Kit Drive Motor (Figure 2-48)	2900449	2
Disconnect Cap Drive Hub (Figure 2-52)	7000211	2
Disconnect Rod Drive Hub (Figure 2-52)	7000212	2
<b>OPTIONAL/VARIABLE</b>		
Wear Pad, 1/2" Hardware (Figure 2-2) 2 Section Boom	3340172	2
Wear Pad, 3/8" Hardware, 3 Mounting Holes (Figure 2-2) 2 Section Boom	3340403	4
Wear Pad 3 1/2" Length (Figure 2-2) 2 Section Boom	3340166	4
Wear Pad 5 1/2" Length (Figure 2-2) 2 Section Boom	3340394	6
Wear Pad 3/8" Thick (Figure 2-2) 2 Section Boom	3340306	2
Wear Pad 7/8" Thick (Figure 2-2) 2 Section Boom	3340399	2
Wear Pad, 8" Length, 2 Mounting Holes (Figure 2-2) 2 Section Boom	3340378	6
Wear Pad, 3 Mounting Holes (Figure 2-2) 2 Section Boom	3340401	2
Carrier Power Track (Figure 2-2) 2 Section Boom	1180103	1
Seal Kit, Telescope Cylinder 1681510 (Figure 2-3)	2900347	1
Seal Kit, Telescope Cylinder 1681583 (Figure 2-3)	2900350	1
Wear Pad, Base Front Bottom (Figure 2-4) 3 Section Boom	3340261	2
Wear Pad, Base Front Side (Figure 2-4) 3 Section Boom	3340404	6
Wear Pad, Base Front Top (Figure 2-4) 3 Section Boom	3340263	6
Retract Chain (Figure 2-4) 3 Section Boom	1260164	1 Set
Extend Chain (Figure 2-4) 3 Section Boom	1260165	1 Set
Carrier Power Track (Figure 2-4) 3 Section Boom	1180140	1
Wear Pad, Mid Front Bottom (Figure 2-4) 3 Section Boom	3340446	2
Wear Pad, Mid Front Side (Figure 2-4) 3 Section Boom	3340450	6
Wear Pad, Fly Rear Top (Figure 2-4) 3 Section Boom	3340453	2

**SECTION 1 — RECOMMENDED SERVICE PARTS STOCK (CONTINUED)**

DESCRIPTION	PART NO.	QTY.
<b>OPTIONAL/VARIABLE (CONTINUED)</b>		
Seal Kit, Telescope Cylinder (Figure 2-5) 3 Section Boom	2900347	1
Valve Telescope Cylinder (Figure 2-5) 3 Section Boom	4640212	1
Seal Kit, Slave Cylinder 1681518 (Figure 2-6) 3 Section Boom	2901119	1
Seal Kit, Slave Cylinder 1681722, 1681548 (Figure 2-6) 3 Section Boom	2900381	1
Valve, Slave Cylinder 1681518 (Figure 2-6) 3 Section Boom	4640269	1
Valve, Slave Cylinder 1681548 (Figure 2-6) 3 Section Boom	4640495	2
Valve, Slave Cylinder 1681722 (Figure 2-6) 3 Section Boom	4640509	2
Seal Kit Master Cylinder (Figure 2-8) 1681519, 1681547	2901119	1
Seal Kit Master Cylinder (Figure 2-8) 1681580	2901120	1
Brake Pad, Shaft With Internal Threads (Figure 2-11)	3340454	2
Brake Pad, Shaft With External Threads (Figure 2-11)	3340287	2
Sleeve Bearing (Figure 2-11)	0440134	2
Needle Bearing (Figure 2-11)	0440120	2
Seal Kit Rotator Motor, (Figure 2-12)	2900455	1
Cable Capacity Indicator (Figure 2-13)	1060138	1
Cable Capacity Indicator (Figure 2-14, 2-15)	1060168	1
Controller PQ (Figure 2-13, 2-14)	1600094	2
Knob PQ Tele (Figure 2-13, 2-14)	2560039	1
Knob PQ Swing (Figure 2-13, 2-14)	2560040	1
Knob PQ Lift (Figure 2-13, 2-14)	2560038	1
Knob PQ Drive (Figure 2-13, 2-14)	2560041	1
Switch, Emergency Stop, Engine Speed (Figure 2-14, 2-15, 2-16, 2-17)	4360199	2
Switch, Aux. Power Racine (Figure 2-14, 2-15, 2-16, 2-17)	4360204	2
Switch Aux. Power Vickers, Choke (Figure 2-14, 2-15, 2-16, 2-17)	4360200	2
Switch, Rotate, Steer, Tele, Platform (Figure 2-14, 2-15, 2-16, 2-17)	4360202	4
Circuit Breaker 20A (Figure 2-14)	4360209	1
Controller OEM (Figure 2-15) Swing, Drive, Tele	1600092	2
Controller OEM (Figure 2-15) Tele	1600093	1
Switch Level, Tele, Rot., Steer (Figure 2-13)	4360077	4
Switch Aux. Power (Figure 2-13, 2-16)	4360084	1
Switch Horn, Glow Plug, Choke (Figure 2-13)	4360114	1
Relay SPDT (Figure 2-16, 2-17)	3740049	10
Relay PB (Figure 2-16, 2-17)	3740016	2
Circuit Breaker 35A (Figure 2-16, 2-17)	4360186	1
Circuit Breaker 3A (Figure 2-16, 2-17)	4360212	1
Circuit Breaker 10A (Figure 2-16, 2-17)	4360069	3
Switch, Master (Figure 2-16, 2-17)	4360003	1
Switch, Toggle DPDT (Figure 2-16, 2-17)	4360073	1
Switch Toggle DPST (Figure 2-16, 2-17) Lift, Swing, Tele	4360074	1
Coil 12VDC Racine (Figure 2-18, 2-23, 2-24)	7000418	3
Coil FPS (Figure 2-18, 2-24)	7000558	1
Coil Hydroforce (Figure 2-18, 2-24)	7004368	1
Coil Modular Controls (Figure 2-18, 2-24)	7009745	1
Element Hydraulic Filter (Figure 2-18)	2120079	4
Coil 12VDC Racine (Figure 2-21, 2-23)	7000417	1
Coil 7.5 VDC Racine (Figure 2-22)	1420003	1
Coil Modular Controls (Figure 2-24)	7003640	1
Coil, Vickers (Figure 2-25)	7009315	1
Switch, Vacuum (Figure 2-26)	4360067	1
Solenoid, Racine Valves (Figure 2-26, 2-29)	3740002	2
Solenoid, Vickers Valves (Figure 2-26)	3740067	1
Actuator, Single Speed, Wisconsin (Figure 2-26, 2-29)	0060020	1
Actuator, Two Speed, Wisconsin (Figure 2-26, 2-29)	0060024	1

**SECTION 1 — RECOMMENDED SERVICE PARTS STOCK (CONTINUED)**

DESCRIPTION	PART NO.	QTY.
<b>OPTIONAL/VARIABLE (CONTINUED)</b>		
Filter Inline (Figure 2-26)	2120042	4
Solenoid Start (Figure 2-29)	3740027	1
Relay Adlo (Figure 2-29)	3740030	1
Relay Motorcraft (Figure 2-29)	3740059	1
Adeco Module (Figure 2-29)	0060021	1
Repair Kit 3600078 (Figure 2-32)	2900467	1
Seal Kit 3600126 Piston Pump (Figure 2-33)	2900699	1
Seal Kit 3600126 Tandem Pump (Figure 2-33)	2900626	1
Cap, Hydraulic Tank (Figure 2-35)	1120287	1
Cap and Dipstick Hydraulic Tank (Figure 2-35)	1120266	1
Breather Hydraulic Tank (Figure 2-35)	1340021	1
Breather With Ears Hydraulic Tank (Figure 2-35)	1340046	1
Mechanical Fuel Gauge (Figure 2-35)	2420052	1
Cap, Fuel (Figure 2-35)	1120314	1
Seal Kit, Ausco Swing Brake (Figure 2-41)	2900131	1
Seal Kit ,Mico Swing Brake (Figure 2-41)	2900642	1
Seal Kit Steer Cylinder Double Acting (Figure 2-45)	2900348	1
Seal Kit Steer Cylinder Single Acting 3" Bore (Figure 2-47)	2901148	1
Seal Kit Steer Cylinder Single Acting 2 1/2" Bore (Figure 2-47)	2901119	1
Seal Kit Drive Brake 0920072 (Figure 2-49)	2900662	2
Seal Kit Drive Brake 0920027 Ausco (Figure 2-50)	2900131	2
Seal Kit Drive Brake 0920027 Mico (Figure 2-51)	2900641	2





**SECTION 2**  
**ILLUSTRATED PARTS LIST**

SECTION 2 — ILLUSTRATED PARTS LIST

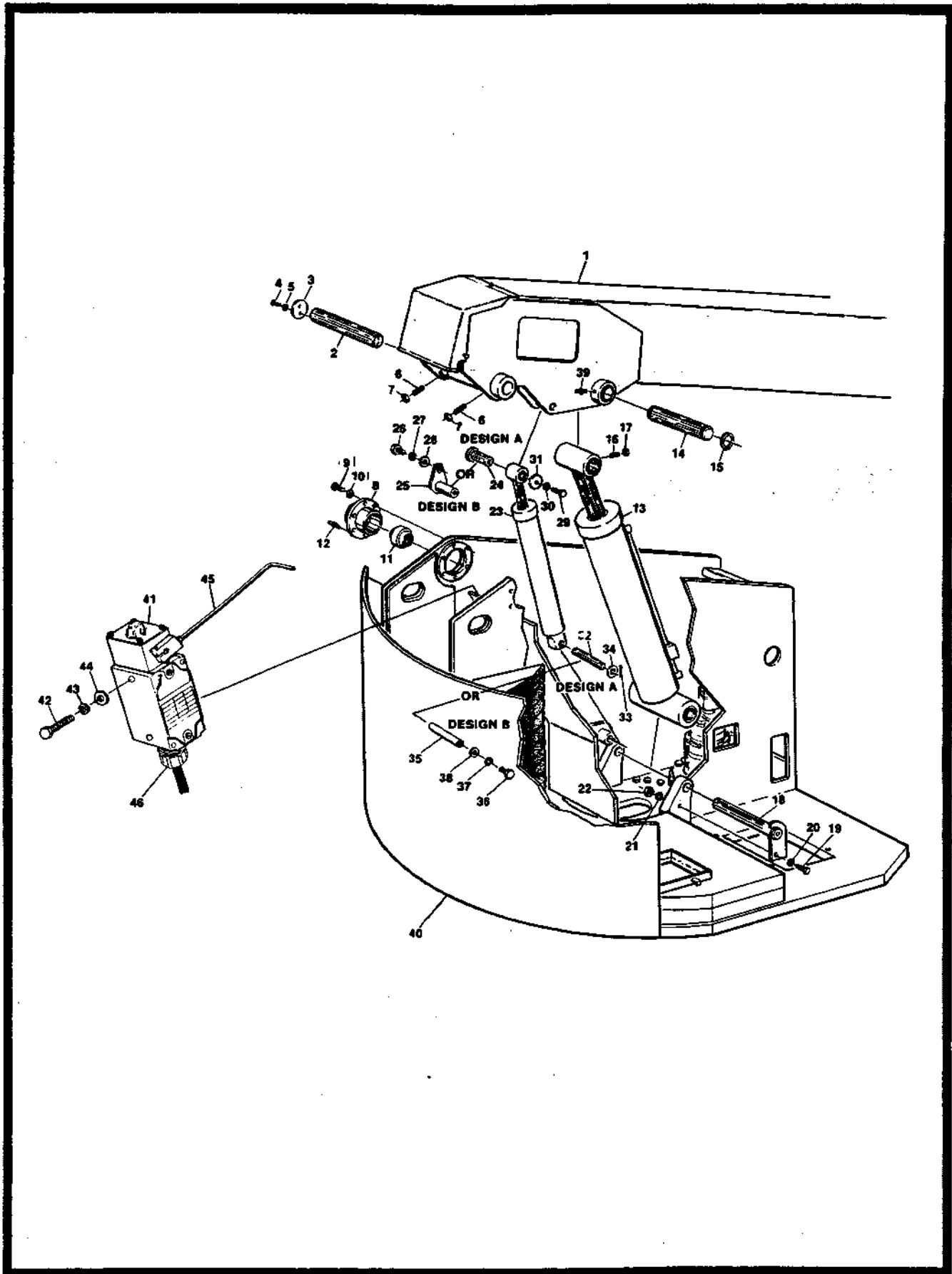


Figure 2-1. Boom, Turntable and Horizontal Cutout Switch Installations.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-1		<b>BOOM, TURNTABLE AND HORIZONTAL CUTOUT SWITCH INSTALLATIONS</b>	Ref.	
	0236200	<b>BOOM INSTALLATION (2 SECTION) (GAS AND DIESEL)</b>	Ref.	O
	0237594	<b>BOOM INSTALLATION (2 SECTION) (ELECTRIC)</b>	Ref.	B
	0236530	<b>BOOM INSTALLATION (3 SECTION)</b>	Ref.	H
-1	0800379	Boom Assembly (2 Section) (See Figure 2-2 For Breakdown)	1	
	0800400	Boom Assembly (3 Section) (See Figure 2-4 For Breakdown)	1	
-2	3420643	Pin, Boom Pivot (Attaching Parts)	1	
-3	1120198	Cap, Boom Pivot	2	
-4	0681812	Bolt, 1/2"-13NC x 1 1/2" (Grade 8)	4	
-5	4740171	Washer, Hardened	4	
-6	3952020	Setscrew 5/8"-11NC x 2 1/2"	2	
-7	3312002	Nut, Jam 5/8"-11NC	2	
	0100019	Loctite	A/R	
-8	4840596	Boom Pivot Weldment (Attaching Parts)	2	
-9	0681612	Bolt 3/8"-16NC x 1 1/2" (Grade 8)	6	
-10	4740185	Washer, Hardened	6	
-11	0440084	Bearing	2	
-12	2160006	Fitting, Grease	2	
-13	1680365	Lift Cylinder Assembly (See Figure 2-7 For Breakdown) (Attaching Parts)	1	
-14	3420656	Pin, Lift Cylinder (Upper)	1	
-15	3760104	Ring, Retaining	2	
-16	3951812	Bolt, Socket Head 1/2"-13NC x 1 1/2"	1	
-17	3311802	Nut, Jam 1/2"-13NC	1	
-18	3421083	Pin, Lift Cylinder (Lower)	1	
-19	0630399	Bolt, Special	1	
-20	4751600	Flatwasher 3/8"	1	
-21	4761600	Lockwasher 3/8"	1	
-22	3311605	Locknut 3/8"-16NC	1	
-23	1681519	Master Cylinder Assembly (See Figure 2-8 For Breakdown)	1	
	1681547	Master Cylinder Assembly (See Figure 2-8 For Breakdown)	1	
	1681580	Master Cylinder Assembly (See Figure 2-8 For Breakdown)	1	
		<b>Note: Refer to Number Stamped on Barrel For Identification.</b>		
		(Attaching Parts)		
-24	0233449	Pin, Master Cylinder (Upper - Design A)	1	
-25	0236548	Pin, Master Cylinder (Upper - Design B)	1	
-26	3311501	Nut 5/16"-18NC (Design B Only)	1	
-27	4761500	Lockwasher 5/16" (Design B Only)	1	
-28	4751500	Flatwasher 5/16" (Design B Only)	1	
	4300038	Stud (Welded On Part) (Design B Only)	1	
-29	0651608	Bolt 3/8"-24NF x 1"	1	
-30	4761600	Lockwasher 3/8"	1	
-31	4740006	Flatwasher, Special	1	
	0100019	Loctite	A/R	
-32	3420531	Pin, Master Cylinder (Lower - Design A)	1	
-33	3450609	Pin, Cotter (Design A)	2	
-34	4740040	Flatwasher, Special (Design A)	2	



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-1		<b>BOOM, TURNTABLE AND HORIZONTAL CUTOUT SWITCH INSTALLATIONS (CONTINUED)</b>	Ref.
-35	3421706	Pin, Master Cylinder (Lower - Design B) (Gas and Diesel)	1
	3421353	Pin, Master Cylinder (Lower - Design B) (Electric)	1
-36	0651608	Bolt 3/8"-24NF x 1" (Design B)	2
-37	4761600	Lockwasher 3/8" (Design B)	2
-38	4740006	Flatwasher, Special (Design B)	2
-39	2160002	Fitting, Grease	2
-40	4620069	Turntable (Domestic Gas and Diesel)	1
	4620058	Turntable (CSA Gas and Diesel)	1
	4620023	Turntable (Domestic Electric)	1
	0236287	<b>HORIZONTAL CUT-OUT SWITCH INSTALLATION</b>	Ref. C
-41	4360057	Switch, Limit (Attaching Parts)	1
-42	0731005	Screw, Machine #10-32NF x 5/8"	2
-43	4761000	Lockwasher #10	2
-44	4751000	Flatwasher #10	2
-45	0200048	Arm, Activator	1
-46	4460049	Connector, Strain Relief	1
	0236442	<b>TURNTABLE SHIELD INSTALLATION (OPTIONAL NOT SHOWN)</b>	Ref. A
	4060584	Shield (Attaching Parts)	1
	3900022	Screw, Self-Tapping 1/4" x 3/4"	4

SECTION 2 — ILLUSTRATED PARTS LIST

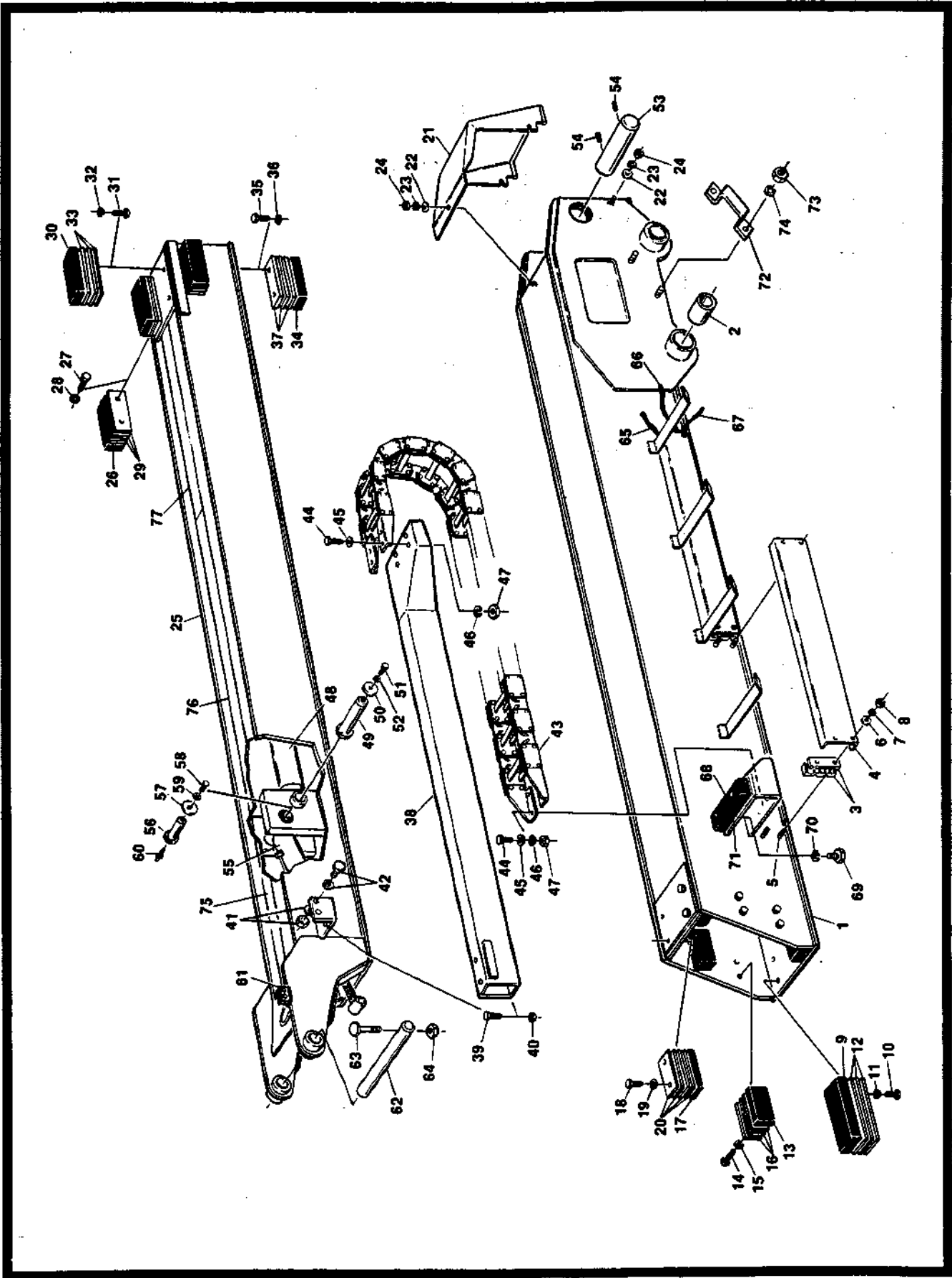


Figure 2-2. Boom Assembly (2 Section).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-2	0800379	<b>BOOM ASSEMBLY (2 SECTION)</b>	Ref.
-1	0800378	Base Section	1
-2	0960957	Bushing, Bronze	2
-3	4340413	Support, Hydraulic Lines	3
-4	4060568	Shield (Attaching Parts)	2
-5	4300042	Stud (Welded-On Part)	4
-6	4751400	Flatwasher 1/4"	4
-7	4761400	Lockwasher 1/4"	4
-8	3311401	Nut 1/4"-20NC	4
-9	3340172	Pad, Wear (1/2" Hardware) (Base Front Bottom)	2
	3340403	Pad, Wear (3/8" Hardware) (Base Front Bottom) (Attaching Parts)	2
-10	0641818	Bolt 1/2"-13NC x 2 1/4"	6
	0641610	Bolt 3/8"-16NC x 1 1/4"	6
-11	4761800	Lockwasher 1/2"	6
	4761600	Lockwasher 3/8"	6
	0100011	Loctite	A/R
-12	4070070	Shim 1/16" (Use With 1/2" Hardware)	A/R
	4070090	Shim 11/64" (Use With 1/2" Hardware)	A/R
	4070131	Shim 3/4" (Use With 1/2" Hardware)	A/R
	4070132	Shim 1/2" (Use With 1/2" Hardware)	A/R
	4070508	Shim 1/16" (Use With 3/8" Hardware)	A/R
	4070507	Shim 1/8" (Use With 3/8" Hardware)	A/R
	4070505	Shim 11/64" (Use With 3/8" Hardware)	A/R
-13	3340166	Pad, Wear (3 1/2" Length) (Base Front Side)	4
	3340394	Pad, Wear (5 1/2" Length) (Base Front Side) (Attaching Parts)	4
-14	0641606	Bolt 3/8"-16NC x 3/4"	8
-15	4761600	Lockwasher 3/8"	8
	0100011	Loctite	A/R
-16	4070069	Shim 1/16" (3 1/2" Pad)	A/R
	4070502	Shim 1/16" (5 1/2" Pad)	A/R
	4070501	Shim 1/8" (5 1/2" Pad)	A/R
	4070089	Shim 11/64" (3 1/2" Pad)	A/R
-17	3340306	Pad, Wear (Originally 3/8" Thick) (Base Front Top)	2
	3340399	Pad, Wear (Originally 7/8" Thick) (Base Front Top) (Attaching Parts)	2
-18	0641610	Bolt 3/8"-16NC x 1 1/4"	4
-19	4761600	Lockwasher 3/8"	4
	0100011	Loctite	A/R
-20	4070497	Shim 1/8"	A/R
	4070498	Shim 1/16"	A/R
	4070499	Shim 11/32"	A/R
	4070500	Shim 1/4"	A/R
-21	4060567	Cover, Boom - Rear (Attaching Parts)	1
-22	4751400	Flatwasher 1/4"	3
-23	4761400	Lockwasher 1/4"	3
-24	3311401	Nut 1/4"-20NC	3
	4300032	Stud (Welded-On Part)	3
-25	0800377	Fly Section (Shown)	1
	0800415	Fly Section (Not Shown)	1

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**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-2	0800379	<b>BOOM ASSEMBLY (2 SECTION) (CONTINUED)</b>	Ref.
-26	3340378 3340394	Pad, Wear (8" Length) (Fly Rear Side) Pad, Wear (5 1/2" Length) (Fly Rear Side) (Attaching Parts)	2 2
-27	0641606	Bolt 3/8"-16NC x 3/4"	4
-28	4761600 0100011	Lockwasher 3/8" Loctite	4 A/R
-29	4070437 4070502 4070438 4070501	Shim 1/16" (8" Length) Shim 1/16" (6 1/2" Length) Shim 1/8" (8" Length) Shim 1/8" (6 1/2" Length)	A/R A/R A/R A/R
-30	3340378 3340401	Pad, Wear (2 Mounting Holes) (Fly Rear Top) Pad, Wear (3 Mounting Holes) (Fly Rear Top) (Attaching Parts)	2 2
-31	0641610	Bolt 3/8"-16NC x 1 1/4"	4/6
-32	4761600 0100011	Lockwasher 3/8" Loctite	4/6 A/R
-33	4070504 4070503 1380124 4920986	Shim 1/16" Shim 1/8" Clip, Retainer Wire, mechanics	A/R A/R 4/6 A/R
-34	3340378 3340403	Pad, Wear (2 Mounting Holes) (Fly Rear Bottom) Pad, Wear (3 Mounting Holes) (Fly Rear Bottom) (Attaching Parts)	2 2
-35	0641614	Bolt	4/6
-36	4761600 0100011	Lockwasher Loctite	4/6 A/R
-37	4070508 4070507 4070506 4070505	Shim 1/16" Shim 1/8" Shim 1/4" Shim 11/64"	A/R A/R A/R A/R
-38	1180152	Tube, Carrier (Attaching Parts)	1
-39	0641610	Bolt 3/8"-16NC x 1 1/4"	2
-40	3311605	Locknut 3/8"-16NC	2
-41	0641510 4751500	Bolt 5/16"-18NC x 1 1/4" Flatwasher 5/16"	2 A/R
-42	4761500 3311501 4280242	Lockwasher 5/16" Nut 5/16"-18NC Strip, Reinforcement	2 2 1
-43	1180103	Carrier (Attaching Parts)	1
-44	0641406	Bolt 1/4"-20NC x 3/4"	8
-45	4751400	Flatwasher 1/4"	8
-46	4761400	Lockwasher 1/4"	8
-47	3311401	Nut 1/4"-20NC	8
-48	1681510 1681583	Telescope Cylinder Assembly (See Figure 2-3 For Breakdown) Telescope Cylinder Assembly (See Figure 2-3 For Breakdown)	1 1
<p><b>Note: Refer to Number Stamped on Barrel for Identification</b></p>			



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-2	0800379	<b>BOOM ASSEMBLY (2 SECTION) (CONTINUED)</b>	Ref.
		(Attaching Parts)	
-49	4841836	Pin, Telescope (Front)	1
-50	4740263	Washer, Special	1
-51	0651608	Bolt 3/8" - 24NF x 1"	1
-52	4761600	Lockwasher 3/8"	1
-53	3421052	Pin, Telescope (Rear)	1
-54	3951608	Setscrew 3/8"-16NC x 1"	2
	0100011	Loctite	A/R
-55	1681518	Slave Cylinder Assembly (See Figure 2-6 For Breakdown)	1
	1681548	Slave Cylinder Assembly (See Figure 2-6 For Breakdown)	1
	1681722	Slave Cylinder Assembly (See Figure 2-6 For Breakdown)	1
		<b>Note: Refer to Number Stamped on Barrel for Identification.</b>	
		(Attaching Parts)	
-56	3421069	Pin, Slave Cylinder	1
-57	4740006	Washer, Hardened	1
-58	0651608	Bolt 3/8"-24NF x 1"	1
-59	4761600	Lockwasher 3/8"	1
	0100011	Loctite	A/R
-60	2160002	Fitting, Grease	1
-61	1320052	Clamp, Hose (Welded-On Part)	1
-62	3421089	Pin	1
		(Attaching Parts)	
-63	0641622	Bolt 3/8"-16NC x 2 3/4"	1
-64	3311605	Locknut 3/8"-16NC	1
-65	1060229	Cable - 16/30	56.5 Ft.
-66	1060012	Cable - 12/4	57.3 Ft.
-67	4920415	Harness - 110 Volt	1
-68	3340453	Pad, Wear (Carrier)	1
		(Attaching Parts)	
-69	0641608	Bolt 3/8"-16NC x 1"	2
-70	4761600	Lockwasher 3/8"	2
-71	4070508	Shim 1/16"	A/R
	4070507	Shim 1/8"	A/R
-72	0361758	Bar, Hose Clamp	1
		(Attaching Parts)	
-73	3311401	Nut 1/4"	2
-74	4761400	Lockwasher 1/4"	2
	4430031	Stud (Welded on Part)	2
	4420037	Tape, Insulation	6 in.
	0100001	Adhesive	A/R
	0236490	<b>STEERING WHEEL TUBES SUPPORT INSTALLATION (NOT SHOWN)</b>	Ref.
	4340447	Clamp, Tube Support	3
	4060568	Shield	2
		(Attaching Parts)	



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-2	0800379	<b>BOOM ASSEMBLY (2 SECTION) (CONTINUED)</b>	Ref.	
	3311401	Nut 1/4"-20NC	6	
	4751400	Flatwasher 1/4"	6	
	4751400	Lockwasher 1/4"	6	
	4300036	Stud (Welded on Part)	6	
	4842025	Boom Hose Weldment	1	
	0236316	<b>BOOM TAPE INSTALLATION (DOMESTIC)</b>	Ref.	B
	0237164	<b>BOOM TAPE INSTALLATION (CSA)</b>	Ref.	A
-75	4420018	Tape - Blue (Domestic)	63.25"	
	4420018	Tape - Blue (CSA)	51.88"	
-76	4420016	Tape - Yellow (Domestic)	46.25"	
	4420016	Tape - Yellow (CSA)	49.5"	
-77	4420017	Tape - Red (Domestic)	70.75"	
	4420017	Tape - Red (CSA)	78.13"	

SECTION 2 — ILLUSTRATED PARTS LIST

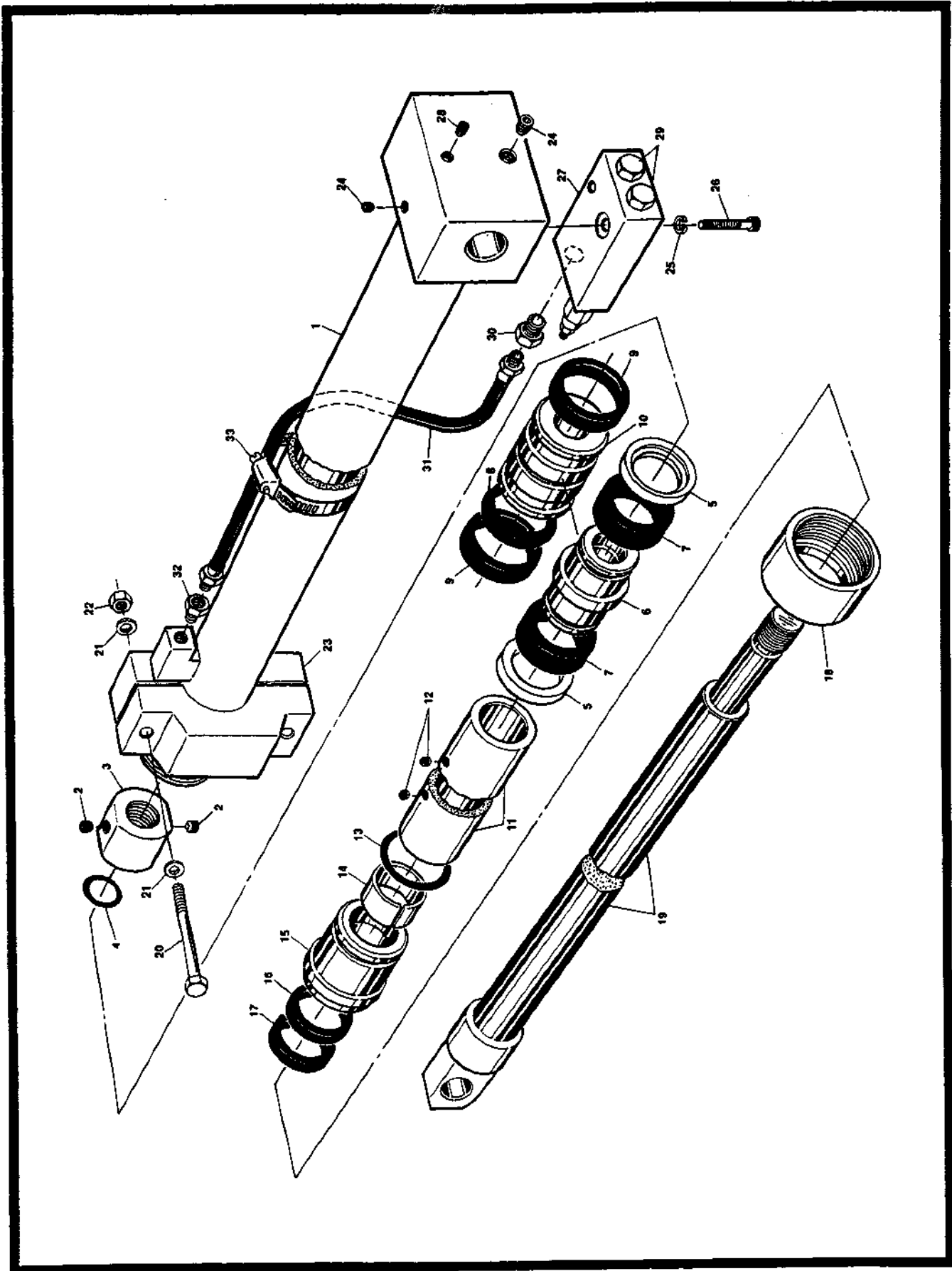


Figure 2-3. Telescope Cylinder Assembly (2 Section Boom).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-3	1681510	<b>TELESCOPE CYLINDER ASSEMBLY (2 SECTION BOOM)</b>	Ref. I
	1681583	<b>TELESCOPE CYLINDER ASSEMBLY (2 SECTION BOOM)</b>	Ref. C
		<b>Note: Refer to Number Stamped on Barrel for Identification.</b>	
-1	1680717	Barrel Assembly	1
-2	3900141	Screw, Set Nylon	2
-3	3300198	Nut	1
-4	Kit	T-Seal	1
-5	Kit	Ring, Guidelock (1681510 Cylinder)	2
-6	3480092	Piston (1681510 Cylinder)	1
-7	Kit	Seal, Piston (1681510 Cylinder)	2
-8	Kit	T-Seal (1681583 Cylinder)	1
-9	Kit	Band, Wear (1681583 Cylinder)	2
-10	3480054	Piston (1681583 Cylinder)	1
-11	1440220	Collar	1
-12	3951603	Setscrew 3/8"-16NC x 3/8"	2
-13	Kit	O-Ring	1
-14	Kit	Ring, Wear	1
-15	1681283	Head, Cylinder	1
-16	Kit	Seal, Rod	1
-17	Kit	Seal, Rod Wiper	1
-18	1120108	End Cap Head	1
-19	1681306	Cylinder Rod	1
-20	0641628	Bolt 3/8"-16NC x 3 1/2"	2
-21	4751600	Flatwasher 3/8"	4
-22	3311605	Locknut 3/8"-16NC	2
-23	0560563	Block, Cylinder Support	1
-24	2200102	Plug, Pipe	1
-25	4740056	Washer, High Collar	2
-26	3931628	Screw, Socket Head 3/8"-16NC x 1 3/4"	2
-27	4640414	Valve, Counterbalance	1
-28	2200201	Plug, Bleeder (1681583 Cylinder)	1
-29	2220238	Plug, O-Ring	2
-30	2220372	Fitting, Straight	1
-31	2751150	Hose	1
-32	2220343	Fitting, Straight	1
-33	1320037	Clamp	2
	4280018	Strip, Rubber	A/R
	2900347	Seal Kit - 1681510 Cylinder (Includes Items 4,5,7,13,14,16 and 17)	
	2900350	Seal Kit - 1681583 Cylinder (Includes Items 4,8,9,13,14,16 and 17)	

## SECTION 2 — ILLUSTRATED PARTS LIST

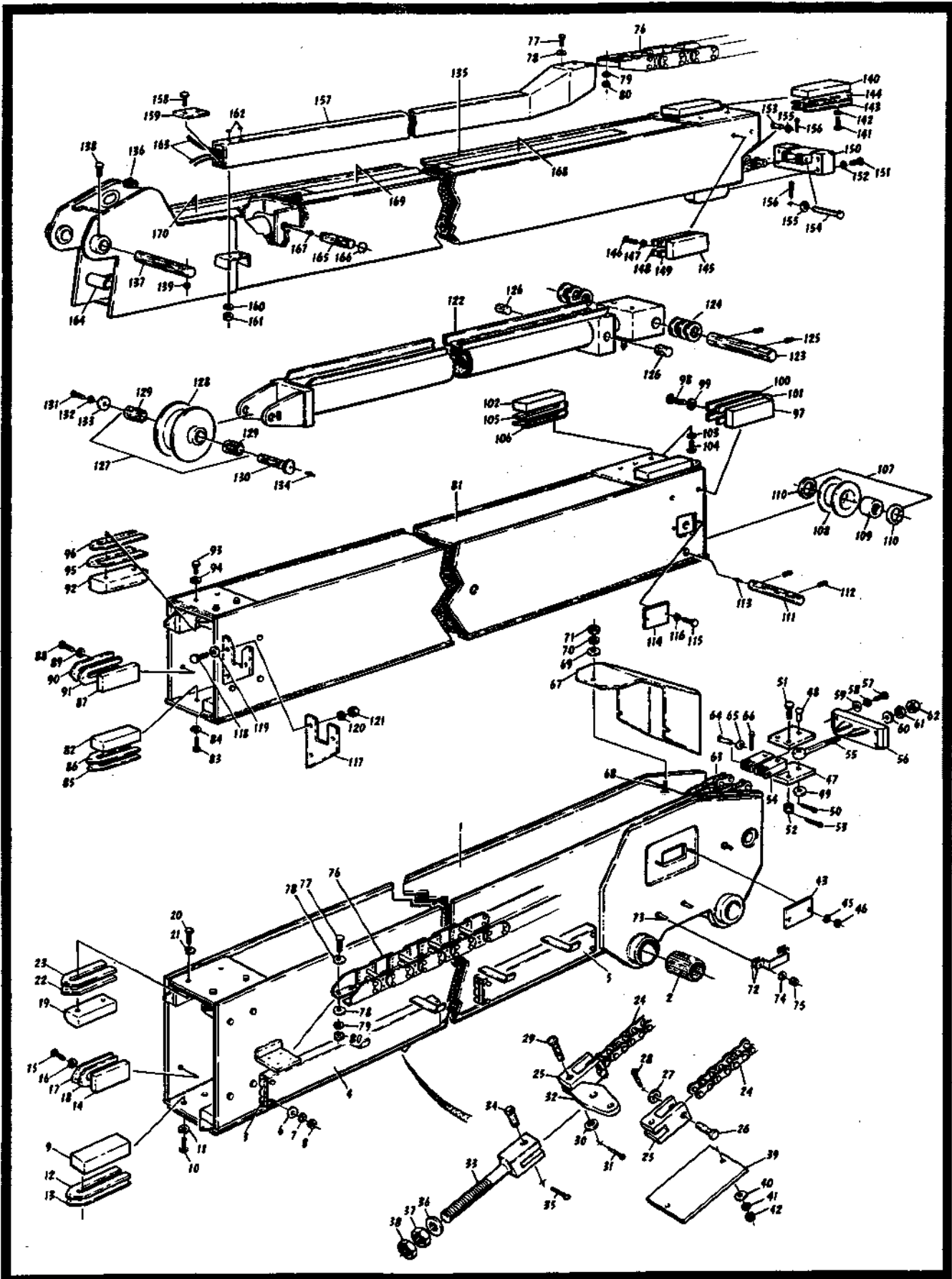


Figure 2-4. Boom Assembly (3 Section).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-4	0800400	<b>BOOM ASSEMBLY (3 SECTION)</b>	Ref.
-1	0800401	Base Section	1
-2	0960651	Bushing, Bronze	2
-3	4340413	Support, Hydraulic Lines	4
-4	4060595	Shield, Hydraulic - Front - 63"	1
-5	4060623	Shield, Hydraulic - Rear - 36"	1
		(Attaching Parts)	
-6	4751400	Flatwasher 1/4"	8
-7	4761400	Lockwasher 1/4"	8
-8	3311401	Nut 1/4"-20NC	8
	4300042	Stud (Welded On Part)	8
		-----	
-9	3340261	Pad, Wear (Base Front Bottom) (Attaching Parts)	2
-10	0641608	Bolt 3/8"-16NC x 1"	4
-11	4761600	Lockwasher 3/8"	4
-12	4070544	Shim 1/16"	A/R
-13	4070545	Shim 1/8"	A/R
		-----	
-14	3340404	Pad, Wear (Base Front Side) (Attaching Parts)	4
-15	0641605	Bolt 3/8"-16NC x 5/8"	8
-16	4761600	Lockwasher 3/8"	8
-17	4070546	Shim 1/32"	A/R
-18	4070547	Shim 1/16"	A/R
		-----	
-19	3340263	Pad, Wear (Base Front Top) (Attaching Parts)	2
-20	0651605	Bolt 3/8"-16NC x 5/8"	4
-21	4761600	Lockwasher 3/8"	4
-22	4070546	Shim 1/32"	A/R
-23	4070547	Shim 1/16"	A/R
		-----	
-24	1260164	Chain, Retract	1 set
-25	1360160	Clevis, Chain Attach	2
-26	3420414	Pin, Clevis	2
-27	4741000	Flatwasher, Special	2
-28	3450203	Pin, Cotter	2
-29	3420867	Pin, Clevis Chain Adjust	2
-30	4751500	Flatwasher	2
-31	3450403	Pin, Cotter	2
-32	3509928	Plate, Clevis Attach	1
-33	1360100	Clevis, Chain Adjust	1
-34	3420865	Pin, Clevis Chain Adjust	1
-35	3450403	Pin, Cotter	1
-36	4740057	Washer, Hardened	1
-37	3312202	Nut, Jam 3/4"-10NC	1
-38	3300241	Locknut 3/4"-10NC	1
-39	1670319	Cover Plate (Attaching Parts)	1
-40	4751400	Flatwasher 1/4"	2
-41	4761400	Lockwasher 1/4"	2
-42	3311401	Nut 1/4"-20NC	2
		-----	
-43	1670321	Cover, Base Boom Side (Attaching Parts)	2

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-4	0800400	<b>BOOM ASSEMBLY (3 SECTION) (CONTINUED)</b>	Ref.
-44	4300031	Stud (Welded On Part)	4
-45	4761400	Lockwasher 1/4"	4
-46	3311401	Nut 1/4"-20NC	4
	0236044	Chain Adjuster Assembly	1
-47	3509182	Plate, Chain Adjuster	2
-48	3421142	Pin, Clevis	1
-49	4740276	Flatwasher, Special	1
-50	3450505	Pin, Cotter	2
-51	0630347	Bolt 1/2"-13NC x 2 1/4" (Grade 8)	2
-52	3311803	Nut, Slotted 1/2"-13NC	2
-53	3450505	Pin, Cotter	2
-54	0560554	Block, Chain Attach	1
-55	0630374	Eyebolt	1
-56	4842043	Chain Attach Block (Attaching Parts)	1
-57	0641616	Bolt 3/8"-16NC x 2"	4
-58	4761600	Lockwasher 3/8"	4
-59	4751600	Flatwasher 3/8"	4
-60	4740057	Washer, Hardened	1
-61	3300241	Locknut 3/4"-10NC	1
-62	3312202	Nut, Jam 3/4"-10NC	1
-63	1260165	Chain, Extend (Attaching Parts)	1 set
-64	3420414	Pin, Clevis	2
-65	4741000	Flatwasher, Special	2
-66	3450203	Pin, Cotter	2
-67	4840627	Shield, Rear Boom (Attaching Parts)	1
-68	4300031	Stud (Welded On Part)	3
-69	4751400	Flatwasher 1/4"	3
-70	4761400	Lockwasher 1/4"	3
-71	3311401	Nut 1/4"-20NC	3
-72	1320137	Clamp, Hose	1
	4280033	Weather Seal (Attaching Parts)	.88
-73	4300031	Stud (Welded on Part)	2
-74	4761400	Lockwasher 1/4"	2
-75	3311401	Nut 1/4"-20NC	2
-76	1180140	Carrier (Attaching Parts)	1
-77	0641407	Bolt 1/4"-20NC x 7/8"	4
-78	4751400	Flatwasher 1/4"	8
-79	4761400	Lockwasher 1/4"	4
-80	3311401	Nut 1/4"-20NC	4
-81	0800399	Mid Section	1
-82	3340446	Pad, Wear (Mid Front Bottom) (Attaching Parts)	2
-83	0641609	Bolt 3/8"-16NC x 1 1/8"	4
-84	4761600	Lockwasher 3/8"	4
-85	4070544	Shim 1/16"	A/R
-86	4070545	Shim 1/8"	A/R

A



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-4	0800400	<b>BOOM ASSEMBLY (3 SECTION) (CONTINUED)</b>	Ref.
-87	3340450	Pad, Wear (Mid Front Side) (Attaching Parts)	4
-88	0641607	Bolt 3/8"-16NC x 7/8"	8
-89	4761600	Lockwasher 3/8"	8
-90	4070546	Shim 1/32"	A/R
-91	4070547	Shim 1/16"	A/R
-92	3340263	Pad, Wear (Mid Front Top) (Attaching Parts)	2
-93	0641605	Bolt 3/8"-16NC x 5/8"	4
-94	4761600	Lockwasher 3/8"	4
-95	4070544	Shim 1/16"	A/R
-96	4070545	Shim 1/8"	A/R
-97	3340404	Pad, Wear (Mid Rear Side) (Attaching Parts)	2
-98	0641608	Bolt 3/8"-16NC x 1"	4
-99	4761600	Lockwasher 3/8"	4
-100	4070546	Shim 1/32"	A/R
-101	4070547	Shim 1/16"	A/R
-102	3340263	Pad, Wear (Mid Rear Top) (Attaching Parts)	2
-103	0641608	Bolt 3/8"-16NC x 1"	4
-104	4761600	Lockwasher 3/8"	4
-105	4070544	Shim 1/16"	A/R
-106	4070545	Shim 1/8"	A/R
	1320124	Clip, Retainer	4
	4920986	Wire, Mechanics	A/R
-107	0233389	Sheave Assembly	1
-108		Sheave	1
-109	0440082	Bearing, Needle	1
-110	3960212	Seal	2
-111	3421145	Pin, Sheave (Attaching Parts)	1
-112	3951608	Setscrew 3/8"-16NC x 1"	2
	0100011	Loctite	A/R
-113	2160002	Fitting, Grease	1
-114	0360372	Bar (Attaching Parts)	2
-115	0641608	Bolt 3/8"-16NC x 1"	4
-116	4761600	Lockwasher 3/8"	4
	0100011	Loctite	A/R
-117	4340454	Support, Mid Boom (Attaching Parts)	1
-118	0641506	Bolt 5/16"-18NC x 3/4"	3
-119	4751500	Flatwasher 5/16"	3
-120	4761500	Lockwasher 5/16"	3
-121	3311501	Nut 5/16"-18NC	3
-122	1681543	Telescope Cylinder Assembly (See Figure 2-5 for Breakdown) (Attaching Parts)	1

B

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-4	0800400	<b>BOOM ASSEMBLY (3 SECTION) (CONTINUED)</b>	Ref.
-123	3420420	Pin (Rear)	1
-124	4740102	Washer, Spacer 1/4"	A/R
	4740136	Washer, Spacer 5/16"	A/R
	4740137	Washer, Spacer 3/8"	A/R
	4740138	Washer, Spacer 3/8"	4
-125	3951608	Setscrew 3/8"-16NC x 1"	2
	0100011	Loctite	A/R
-126	3420645	Pin	2
-127	0237564	Sheave Assembly	1
	0236867	Sheave Assembly	1
-128	0236867	Sheave	1
-129	0960406	Bushing	2
	0440173	Bearing, Needle	2
	3960212	Seal	2
-130	3421348	Pin (Sheave With Bushings)	1
	3421214	Pin (Sheave With Needle Bearings) (Attaching Parts)	1
-131	0651808	Bolt 1/2"-20NF x 1"	1
-132	4761800	Lockwasher 1/2"	1
-133	4751500	Flatwasher 1/2"	1
	0100011	Loctite	A/R
-134	2160002	Fitting, Grease	1
-135	0800416	Fly Section	1
-136	1320052	Clamp (Welded On Part)	1
-137	3421089	Pin, Boom Nose (Attaching Parts)	1
-138	0641622	Bolt 3/8"-16NC x 2 3/4"	1
-139	3311605	Locknut 3/8"-16NC	1
	0100011	Loctite	A/R
-140	3340453	Pad, Wear (Fly Rear Top) (Attaching Parts)	2
-141	0641606	Bolt 3/8"-16NC x 3/4"	4
-142	4761600	Lockwasher 3/8"	4
-143	4070507	Shim 1/8"	A/R
-144	4070508	Shim 1/16"	A/R
	1320124	Clip, Retainer	4
	4920986	Wire, Mechanics	4
-145	3340450	Pad, Wear (Fly Rear Side) (Attaching Parts)	2
-146	0641607	Bolt 3/8"-16NC x 7/8"	4
-147	4761600	Lockwasher 3/8"	4
-148	4070546	Shim 1/32"	A/R
-149	4070547	Shim 1/16"	A/R
-150	0236521	Chain Attach Assembly (Attaching Parts)	1
-151	0641613	Bolt 3/8"-16NC x 1 5/8"	4
-152	4761600	Lockwasher 3/8"	4
	1260165	Chain, Extend (Attaching Parts)	1

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-4	0800400	<b>BOOM ASSEMBLY (3 SECTION) (CONTINUED)</b>	Ref.
-153	3420650	Pin, Clevis	2
-154	3421029	Pin, Clevis	1
-155	4741000	Flatwasher, Special	3
-156	3450203	Pin, Cotter	3
-157	1180139	Carrier Tube (Attaching Parts)	1
-158	0641608	Bolt 3/8"-16NC x 1"	2
-159	4280242	Strip, Reinforcing	1
-160	4751600	Flatwasher 3/8"	2
-161	3311605	Locknut 3/8"-16NC	2
-162	3520029	Plug, Hole	2
-163	1060229	Cable (16/30)	56.5 ft.
	1060012	Cable (12/4)	57.3 ft.
	4920618	Harness, 110 volt	1
-164	1681722	Slave Cylinder Assembly (See Figure 2-6 for Breakdown)	1
	1681548	Slave Cylinder Assembly (See Figure 2-6 for Breakdown)	1
	1681518	Slave Cylinder Assembly (See Figure 2-6 for Breakdown)	1
		<b>Note: Refer to Number Stamped on Barre for Identification.</b>	
		(Attaching Parts)	
-165	3421207	Pin, Slave Cylinder	1
-166	3760133	Ring, Retainer	2
-167	2160002	Fitting, Grease	1
	0236743	<b>BOOM TAPE INSTALLATION</b>	Ref. C
-168	4420017	Tape, Red	36"
-169	4420016	Tape, Yellow	23"
-170	4420018	Tape, Blue	56 1/4"
	0236534	<b>STEERING WHEEL TUBE SUPPORT INSTALLATION (OPTIONAL - NOT SHOWN)</b>	Ref. A
	4340447	Clamp, Tube Support	3
	4060595	Shield, Tube (Attaching Parts)	2
	3311401	Nut 1/4"-20NC	6
	4761400	Lockwasher 1/4"	6
	4751400	Flatwasher 1/4"	6
	4300036	Stud (Welded on Part)	6
	4842047	Boom Hose Weldment	1

SECTION 2 — ILLUSTRATED PARTS LIST

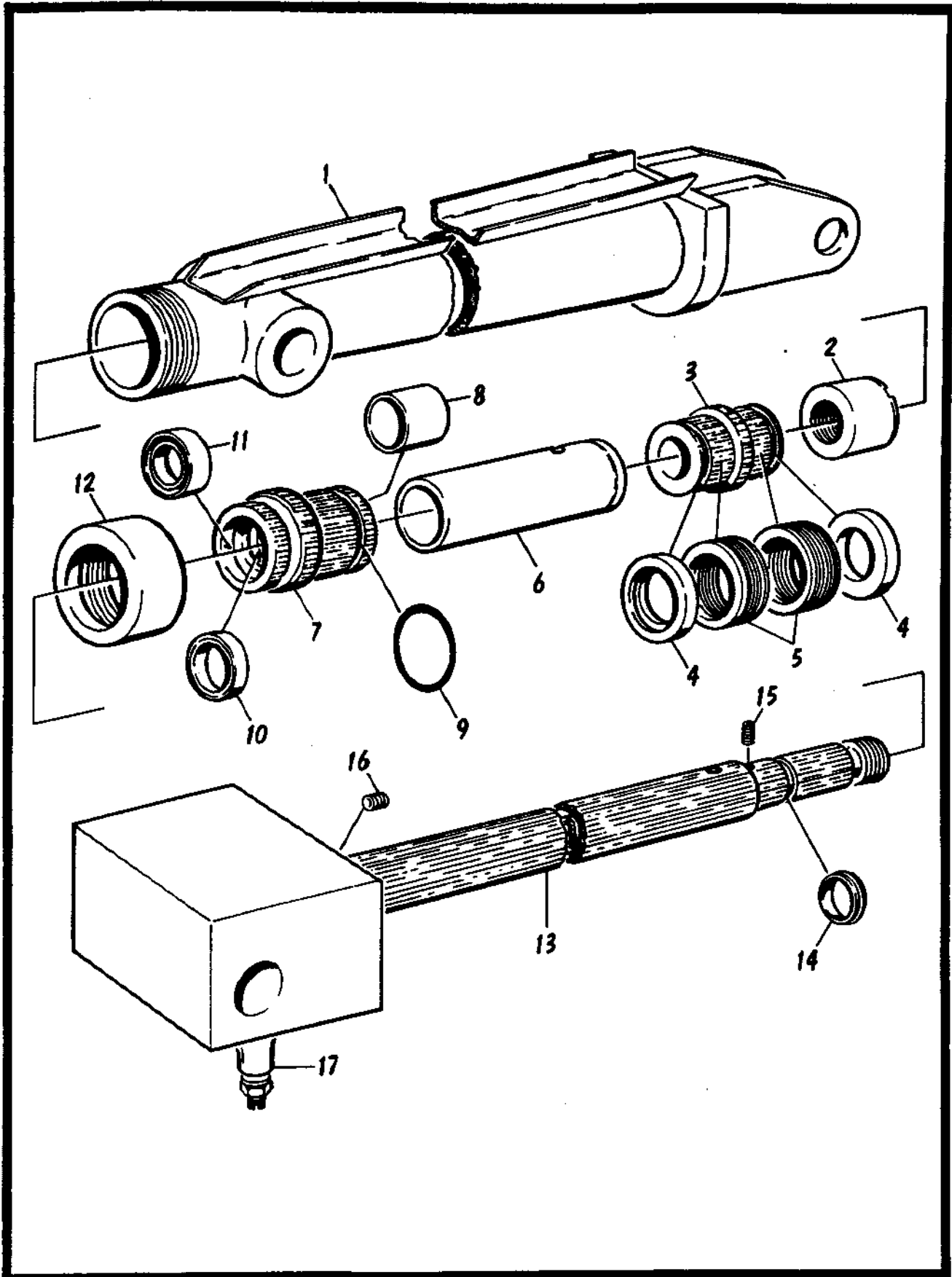


Figure 2-5. Telescope Cylinder Assembly (3 Section Boom).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-5	1681543	<b>TELESCOPE CYLINDER ASSEMBLY (3-SECTION BOOM)</b>	Ref. E
-1	1680749	Barrel	1
-2	3300086	Nut, Special	1
	0100011	Loctite	A/R
-3	3480092	Piston	1
-4	Kit	Ring, Piston	2
-5	Kit	Seal, Piston	2
-6	4562756	Spacer	1
-7	1681283	Head	1
-8	Kit	Band, Wear	1
-9	Kit	O-Ring	1
-10	Kit	Seal, Rod	1
-11	Kit	Wiper, Rod	1
-12	1120108	End Cap	1
-13	1681391	Rod	1
-14	Kit	Seal	1
-15	3961405	Setscrew 1/4"-20NC x 5/8"	1
	0100011	Loctite	A/R
-16	2200222	Plug, Pipe	1
-17	4640212	Valve	1
	2900347	Kit, Seal (Includes Items 4, 5, 8, 9, 10, 11 and 14)	1

SECTION 2 — ILLUSTRATED PARTS LIST

NOTE: THIS PISTON/SEAL CONFIGURATION NO LONGER AVAILABLE. IF EQUIPPED, NEW PISTON AND SEAL KIT MUST BE ORDERED FOR REPAIR.

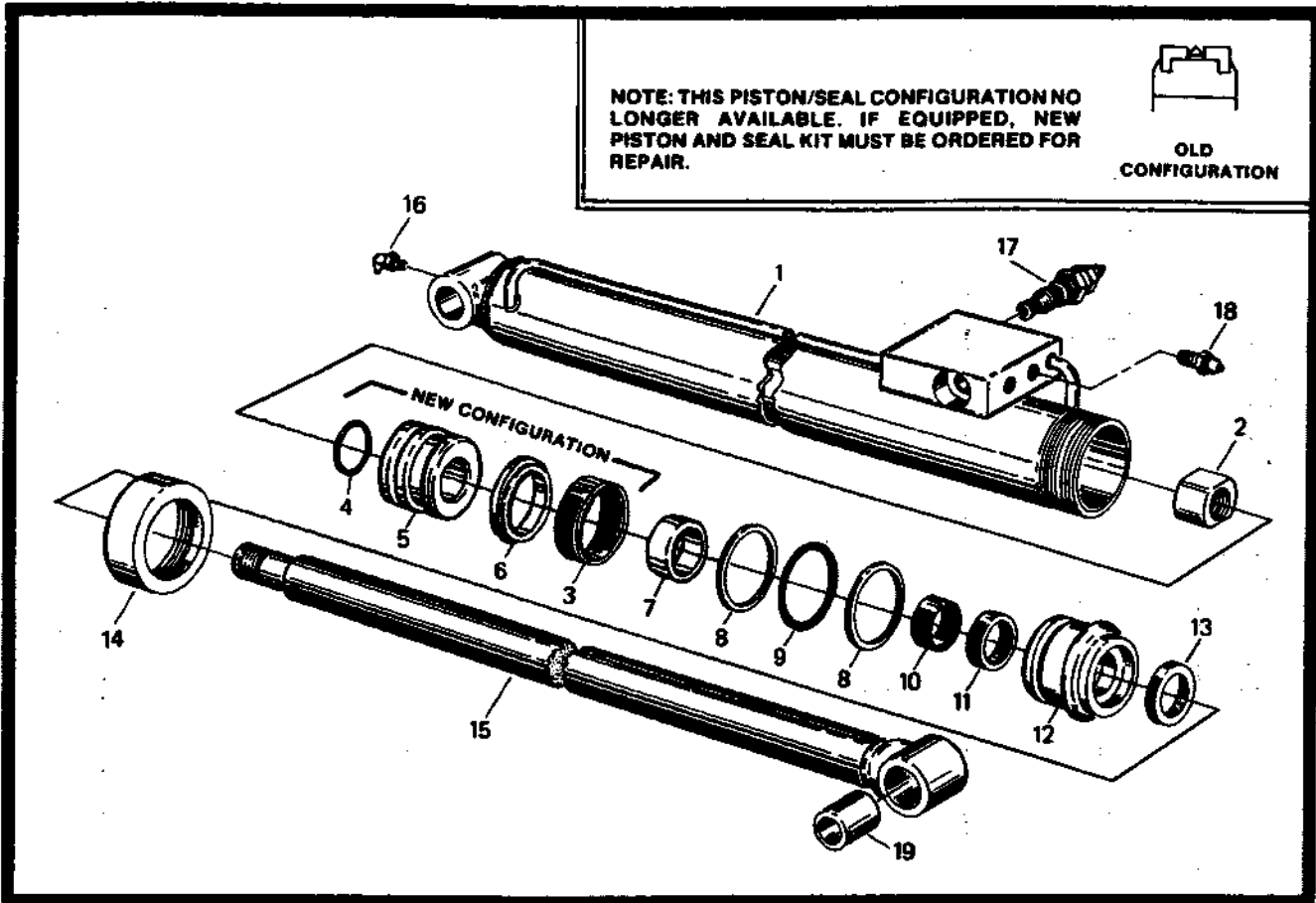


Figure 2-6. Slave Cylinder Assembly.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-6	1681518 1681548 1681722	<b>SLAVE CYLINDER ASSEMBLY</b> <b>SLAVE CYLINDER ASSEMBLY</b> <b>SLAVE CYLINDER ASSEMBLY</b>	Ref. Ref. Ref.
		<b>Note: Refer to P/N Stamped on Barrel for Identification.</b>	
-1	1680722 1680751 1681721	Barrel (1681518 Cylinder) Barrel (1681548 Cylinder) Barrel (1681722 Cylinder)	1 1 1
-2	3300101	Nut	1
-3	Kit	Ring, Wear	2
-4	Kit	O-Ring	1
-5	3480120	Piston	1
		<b>Note: All 1681722 Cylinders have 3480120 Piston From First Day of Production.</b>	
-6	Kit	Seal, Piston	1
-7	1440142	Spacer	1
-8	Kit	Ring, Back-Up	2
-9	Kit	O-Ring	1
-10	Kit	Ring, Wear	1
-11	Kit	Seal, Rod	1

C  
F  
B

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-6		<b>SLAVE CYLINDER ASSEMBLY (CONTINUED)</b>	Ref.
-12	1681635	Head (1681548 Cylinder)	1
	1680892	Head (1681722 and 1681518 Cylinders)	1
-13	Kit	Wiper, Rod	1
-14	1120179	Head, Retainer	1
-15	1681331	Rod Assembly	1
-16	2160001	Fitting	1
-17	4640269	Valve (1681518 Cylinder)	1
	4640495	Valve (1681548 Cylinder)	2
	4640509	Valve (1681722 Cylinder)	2
-18	2200213	Fitting (1681548 Cylinder)	2
	2200202	Plug (1681722 Cylinder)	2
	0100011	Loctite	A/R
	0100020	Sealant, Pipe	A/R
-19	0960097	Bushing	1
	2901119	Kit, Seal - 1681518 Cylinder (Includes Items 3,4,6 8,9,10,11 and 13)	1
	2900381	Kit Seal - 1681722 and 1681548 Cylinders (Includes Items 3,4,6,8,9,10,11 and 13)	1
	0460058	Bellows (Optional - Not Shown)	1





SECTION 2 — ILLUSTRATED PARTS LIST

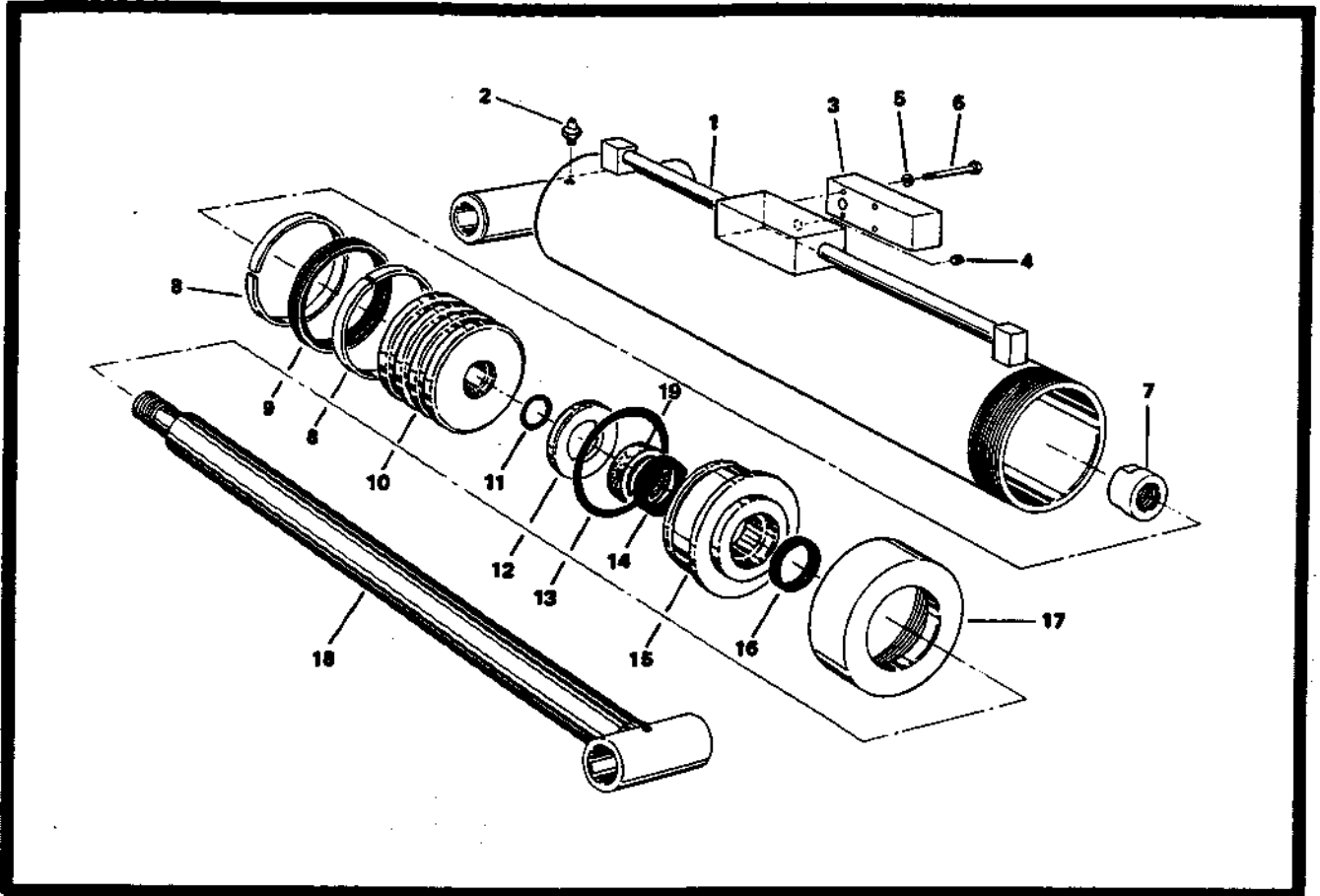


Figure 2-7. Lift Cylinder Assembly.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-7	1680365	<b>LIFT CYLINDER ASSEMBLY</b>	Ref.
-1	1680758	Barrel, Cylinder	1
-2	2160002	Fitting, Grease	1
-3	4640181	Valve	1
-4	3900035	Orifice	1
-5	4751400	Washer 1/4"	4
-6	0641412	Bolt 1/4"-20NC x 1 1/2"	4
-7	3300061	Nut, Special	1
-8	Kit	Ring, Wear	2
-9	Kit	T-Seal	1
-10	3480070	Piston	1
-11	Kit	O-Ring	1
-12	1440159	Collar	1
-13	Kit	O-Ring	1
-14	Kit	Seal, Polypak	1
-15	1680872	Head	1
-16	Kit	Seal, Canned	1
-17	1120196	Cap End	1
-18	1681222	Rod	1
-19	Kit	Ring, Wear	1
	2900385	Kit, Seal (Includes Items 8,9,11,13,14,16 and 19)	1
	0460059	Bellows (Optional)	1

SECTION 2 — ILLUSTRATED PARTS LIST

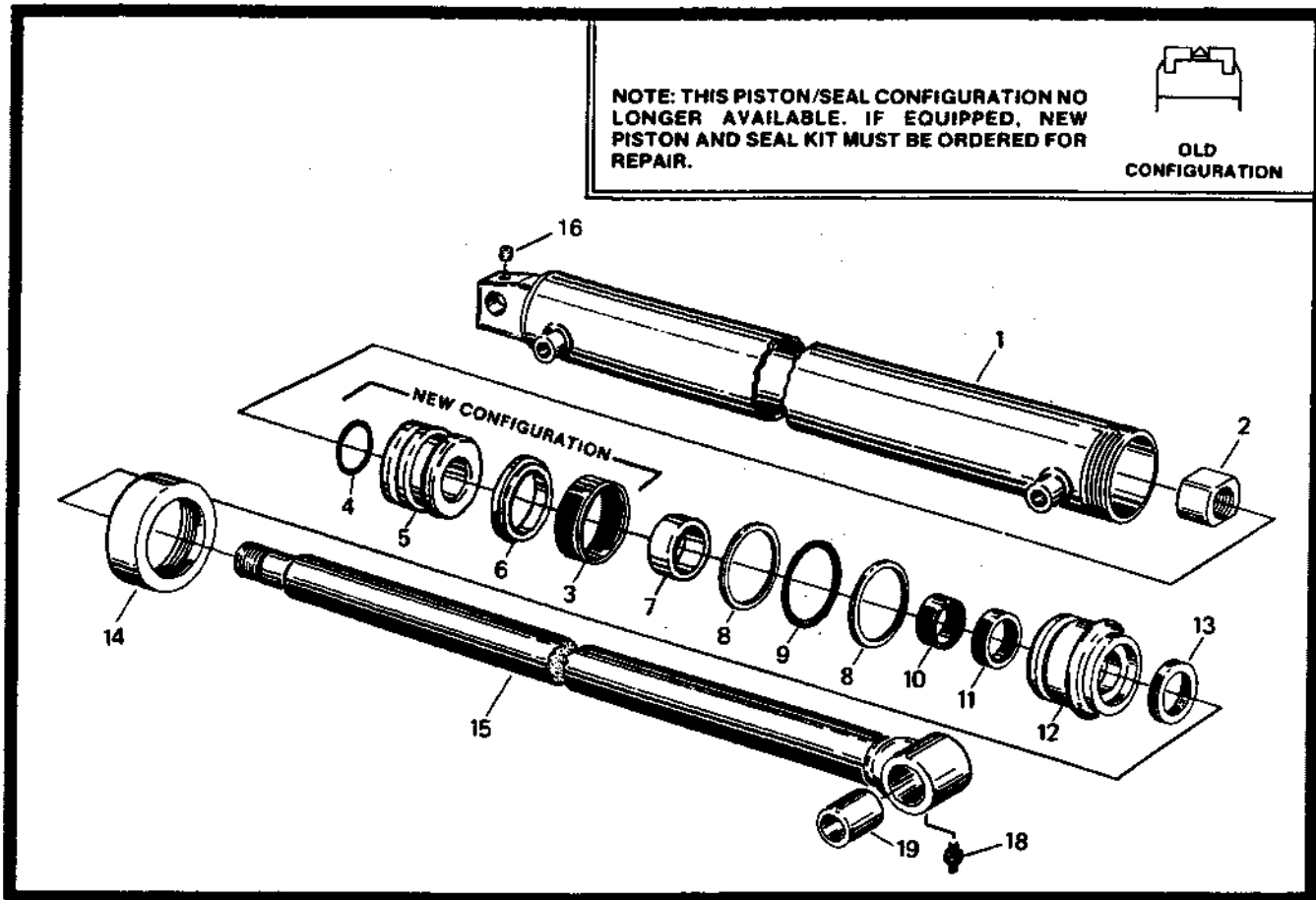


Figure 2-8. Master Cylinder Assembly.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY..
2-8	1681519 1681547 1681580	<b>MASTER CYLINDER ASSEMBLY</b> <b>MASTER CYLINDER ASSEMBLY</b> <b>MASTER CYLINDER ASSEMBLY</b>	Ref. Ref. Ref.
		<b>Note: Refer to Number Stamped on Barrel for Identification.</b>	
-1	1680723 1681490	Barrel (1681519 and 1681547 Cylinders) Barrel (1681580 Cylinder)	1 1
-2	3300101	Nut	1
-3	Kit	Ring, Wear	1
-4	Kit	O-Ring	1
-5	3480120	Piston	1
-6	Kit	Seal, Piston	1
-7	1440142 4563031	Spacer (1681519 and 1681547 Cylinders) Spacer (1681580 Cylinder)	1 1
-8	Kit	Ring, Back-Up	2
-9	Kit	O-Ring	1
-10	Kit	Ring, Wear	1
-11	Kit	Seal, Rod	1
-12	1680892	Head	1
-13	Kit	Wiper, Rod	1
-14	1120179	Head, Retainer	1

C  
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D

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-8		<b>MASTER CYLINDER ASSEMBLY (CONTINUED)</b>	Ref.
-15	1681333	Rod (1681519 Cylinder)	1
	1681401	Rod (1681547 Cylinder)	1
	1681488	Rod (1681580 Cylinder)	1
-16	2200201	Fitting, Plug	1
-17	Not Used		
-18	2160002	Fitting, Grease	1
-19	0960097	Bushing	1
	2901119	Kit, Seal - 1681519 and 1681547 Cylinders (Includes Items 3,4,6,8,9,10,11 and 13)	1
	2901120	Kit, Seal - 1681580 Cylinder (Includes Items 3,4,6,8,9,10,11 and 13)	1
	0460058	Bellows (Optional - Not Shown)	1

SECTION 2 — ILLUSTRATED PARTS LIST

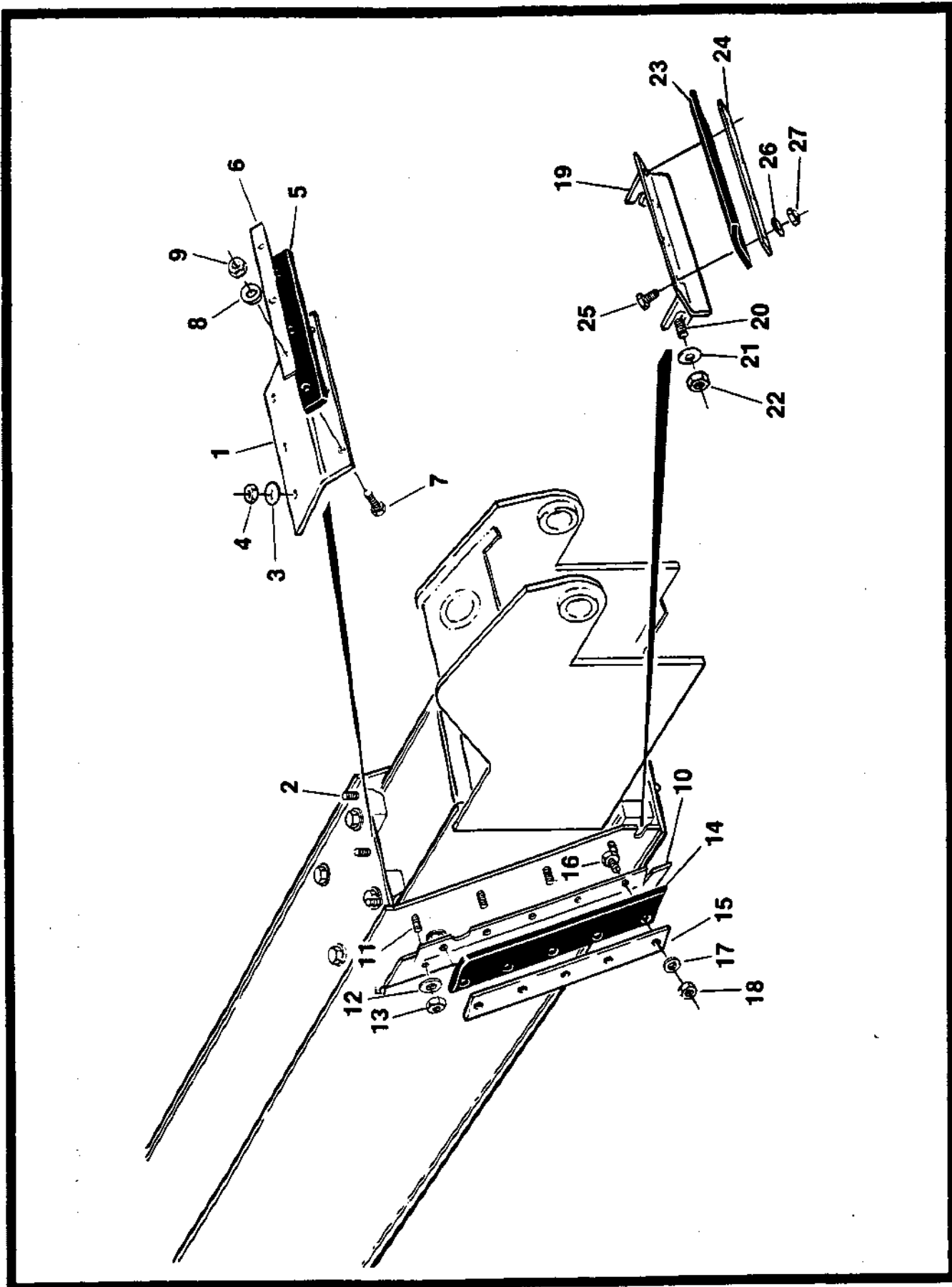


Figure 2-9. Boom Wipers Installation (2 Section).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-9	0236440	<b>BOOM WIPERS INSTALLATION (2 SECTION)</b>	Ref.
-1	2660014	Holder, Boom Wiper (Attaching Parts)	1
-2	4300031	Stud (Welded On Part)	3
-3	4751400	Flatwasher 1/4"	3
-4	3311401	Nut 1/4"-20NC	3
-5	0540045	Blade, Wiper (Attaching Parts)	1
-6	4280195	Strip, Wiper Retainer	1
-7	0641407	Bolt 1/4"-20NC x 7/8"	3
-8	4751400	Flatwasher 1/4"	3
-9	3311401	Nut 1/4"-20NC	3
-10	2660064	Holder, Boom Wiper - Left Side (Shown)	1
	2660063	Holder, Boom Wiper - Right Side (Not Shown) (Attaching Parts)	1
-11	4300031	Stud (Welded On Part)	4
-12	4751400	Flatwasher 1/4"	4
-13	3311401	Nut 1/4"-20NC	4
-14	0540046	Blade, Wiper (Attaching Parts)	2
-15	4280196	Strip, Wiper Retainer	2
-16	0641407	Bolt 1/4"-20NC x 7/8"	10
-17	4751400	Flatwasher 1/4"	10
-18	3311401	Nut 1/4"-20NC	10
-19	2660061	Holder (Attaching Parts)	1
-20	4300034	Stud (Welded On Part)	4
-21	4751600	Flatwasher 3/8"	4
-22	3311601	Nut 3/8"-16NC	4
-23	0540047	Blade, Wiper (Attaching Parts)	1
-24	4280197	Strip, Wiper Retainer	1
-25	0641407	Bolt 1/4"-20NC x 7/8"	4
-26	4751400	Flatwasher 1/4"	4
-27	3311401	Nut 1/4"-20NC	4

B

SECTION 2 — ILLUSTRATED PARTS LIST

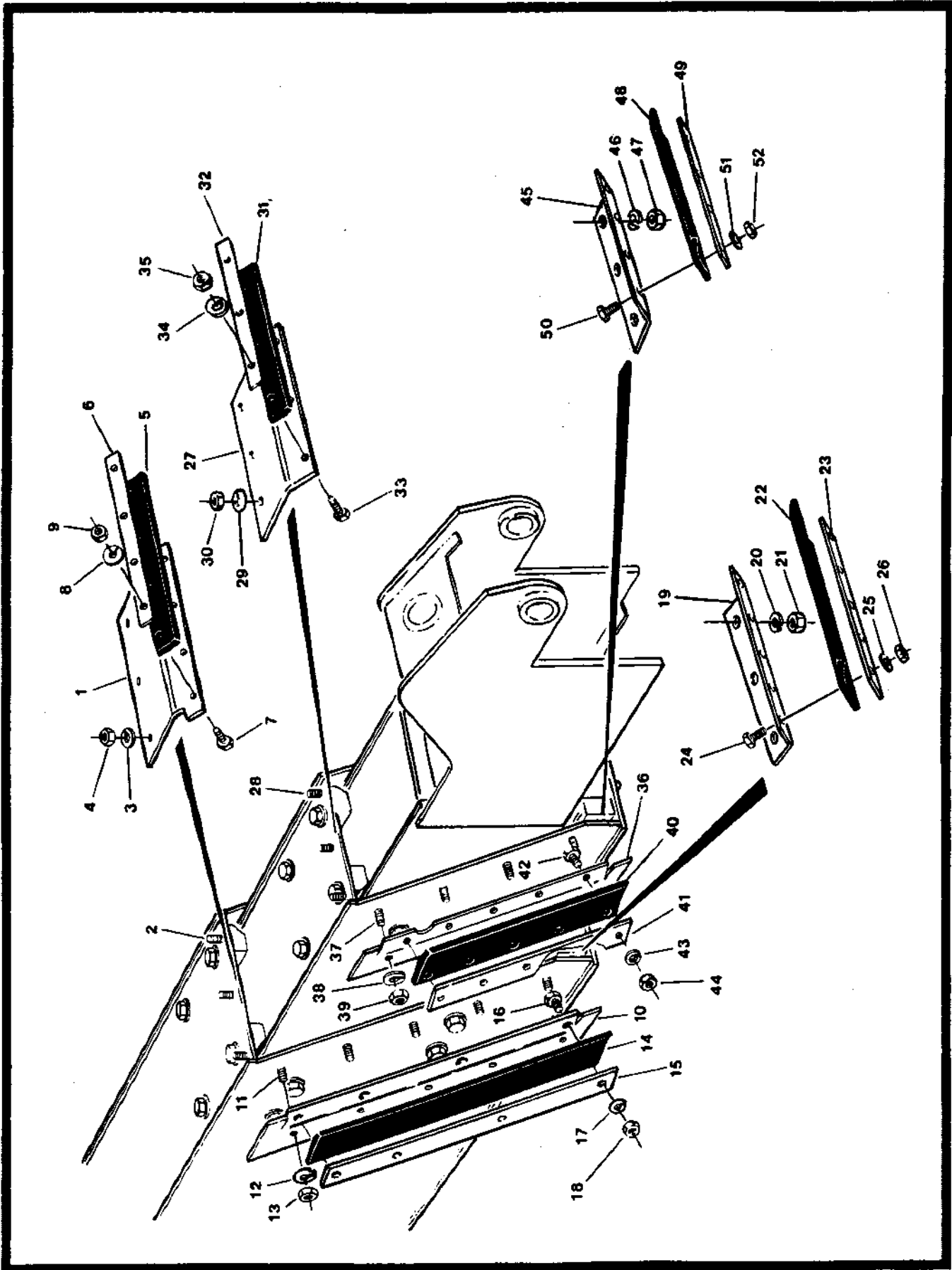


Figure 2-10. Boom Wipers Installation (3 Section).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-10	0235306	<b>BOOM WIPERS INSTALLATION (3 SECTION BOOM)</b>	Ref.
-1	2660021	Holder, Boom Wiper (Top-Base Section) (Attaching Parts)	1
-2	4300031	Stud (Welded On Part)	3
-3	4761400	Lockwasher 1/4"	3
-4	3311401	Nut 1/4"-20NC	3
-5	0540054	Blade, Wiper (Attaching Parts)	1
-6	4280210	Strip, Wiper Retainer	1
-7	0641407	Bolt 1/4"-20NC x 7/8"	5
-8	4751400	Flatwasher 1/4"	5
-9	3311401	Nut 1/4"-20NC	5
-10	2660025	Holder, Boom Wiper (Right Side Base Section - Not Shown)	1
	2660026	Holder, Boom Wiper (Left Side Base Section - Shown) (Attaching Parts)	1
-11	4300031	Stud (Welded On Part)	8
-12	4761400	Lockwasher 1/4"	8
-13	3311401	Nut 1/4"-20NC	8
-14	0540055	Blade, Wiper (Attaching Parts)	2
-15	4280211	Strip, Wiper Retainer	2
-16	0641407	Bolt 1/4"-20NC x 7/8"	10
-17	4751400	Flatwasher 1/4"	10
-18	3311401	Nut 1/4"-20NC	10
-19	2660020	Holder, Boom Wiper (Bottom Side Section) (Attaching Parts)	1
	4300031	Stud (Welded On Part)	3
-20	4761400	Lockwasher 1/4"	3
-21	3311401	Nut 1/4"-20NC	3
-22	0540053	Blade, Wiper (Attaching Parts)	1
-23	4280209	Strip, Wiper Retainer	1
-24	0641407	Bolt 1/4"-20NC x 7/8"	5
-25	4751400	Flatwasher 1/4"	5
-26	3311401	Nut 1/4"-20NC	5
-27	2660022	Holder, Boom Wiper (Top-Mid Section) (Attaching Parts)	1
-28	4300031	Stud (Welded On Part)	3
-29	4761400	Lockwasher 1/4"	3
-30	3311401	Nut 1/4"-20NC	3
-31	0540052	Blade, Wiper (Attaching Parts)	1
-32	4280208	Strip, Wiper Retainer	1
-33	0641407	Bolt 1/4"-20NC x 7/8"	5
-34	4751400	Flatwasher 1/4"	5
-35	3311401	Nut 1/4"-20NC	5
-36	2660023	Holder, Boom Wiper (Right Side Mid-Section - Not Shown)	1
	2660024	Holder, Boom Wiper (Left Side Mid-Section - Shown) (Attaching Parts)	1





**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2—10	0235306	<b>BOOM WIPERS INSTALLATION (3 SECTION BOOM) (CONTINUED)</b>	Ref.
—37	4300031	Stud (Welded On Part)	8
—38	4761400	Lockwasher 1/4"	8
—39	3311401	Nut 1/4"-20NC	8
—40	0540056	----- Blade, Wiper	2
—41	4280212	(Attaching Parts)	
—42	0641407	Strip, Wear Retainer	2
—43	4751400	Bolt 1/4"-20NC x 7/8"	10
—44	3311401	Flatwasher 1/4"	10
—44	3311401	Nut 1/4"-20NC	10
—45	2660019	----- Holder, Boom Wiper (Bottom Mid-Section)	1
—45	2660019	(Attaching Parts)	
—46	4300031	Stud (Welded On Part)	3
—46	4761400	Lockwasher 1/4"	3
—47	3311401	Nut 1/4"-20NC	3
—48	0540052	----- Blade, Wiper	1
—48	0540052	(Attaching Parts)	
—49	4280208	Strip, Wiper Retainer	1
—50	0641407	Bolt 1/4"-20NC x 7/8"	5
—51	4751400	Flatwasher 1/4"	5
—52	3311401	Nut 1/4"-20NC	5
—52	3311401	-----	

SECTION 2 — ILLUSTRATED PARTS LIST

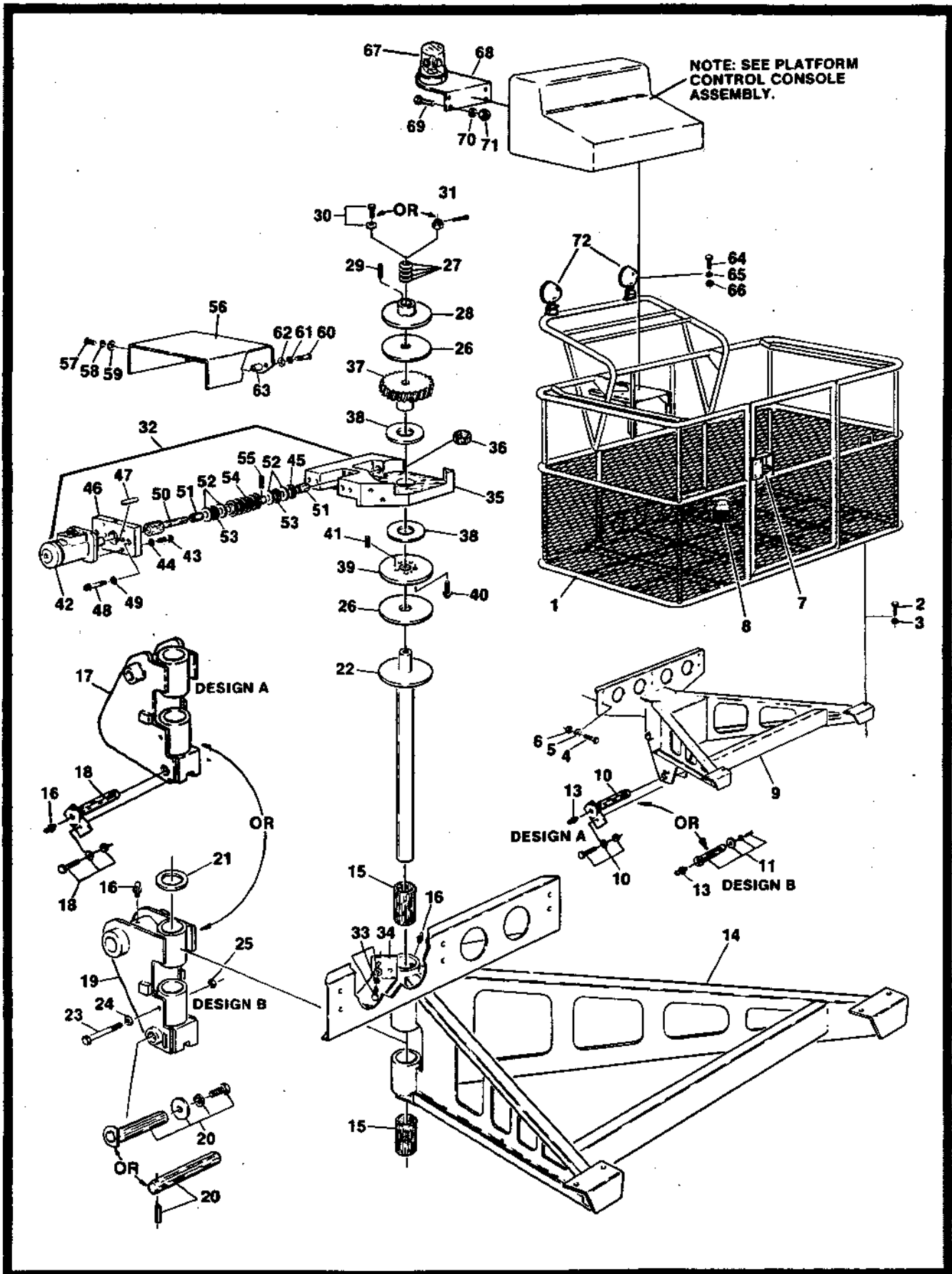


Figure 2-11. Platform and Control Stands Assemblies and Installations.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-11		<b>PLATFORMS AND CONTROL STANDS ASSEMBLIES AND INSTALLATIONS</b>	Ref.	
-1	3510138 Consult Factory	Platform - 3' x 4' (P/Q Controls)	1	
	3510141	Platform - 3' x 4' (OEM Controls)	1	
	3510194	Platform - 3' x 5' (Standard) (P/Q Controls)	1	
	3510231	Platform - 3' x 5' (Low Mount with Rotator) (P/Q Controls)	1	
	3510148	Platform - 3' x 5' (Low Mount without Rotator) (P/Q Controls)	1	
	3510161	Platform - 3' x 6' (P/Q Controls)	1	
		Platform - 3' x 6' (OEM Controls) (Attaching Parts)	1	
-2	0681610	Bolt 3/8"-16NC x 1 1/4" (Grade 8)	4	
-3	3300143	Locknut 3/8"-16NC (Grade 8)	4	
-4	0681610	Bolt 3/8"-16NC x 1 1/4" (Grade 8)	6	
-5	4751600	Flatwasher 3/8"	12	
-6	3300143	Locknut 3/8"-16NC (Grade 8)	6	
-7	2580010	Handle, Latch	1	
	2940006	Latch, Door (Attaching Parts)	1	
	3911012	Screw, Round Head #10-24NC x 1 1/2"	4	
	4751000	Flatwasher #10	4	
	4761000	Lockwasher #10	4	
	3311001	Nut #10-24NC	4	
	0233861	<b>FOOTSWITCH INSTALLATION (RACINE VALVES)</b>	Ref.	B
	0237963	<b>FOOTSWITCH INSTALLATION (VICKERS VALVES)</b>	Ref.	C
-8	4360031	Footswitch (Attaching Parts)	1	
	0641510	Bolt 5/16"-18NC x 1 1/4"	3	
	4751500	Flatwasher 5/16"	3	
	4761500	Lockwasher 5/16"	3	
	3311501	Nut 5/16"-18NC	3	
	7000625	Block, Contact	2	
	4460071	Connector, Terminal	1	
	0236331	<b>FIXED SUPPORT INSTALLATION (STANDARD)</b>	Ref.	A
	0236830	<b>FIXED SUPPORT INSTALLATION (STANDARD)</b>	Ref.	A
	0250248	<b>FIXED SUPPORT INSTALLATION (LOW MOUNT)</b>	Ref.	A
-9	4842403	Support, Fixed (Design A - Has Bolt through Plate Welded to Pin)	1	
	4841912	Support, Fixed (Design B - Has Bolt Screwed into End of Pin)	1	
-10	3421176	Pin (Design A)	1	
	0641608	Bolt 3/8"-16NC x 1" (Design A)	1	
	4761600	Lockwasher 3/8" (Design A)	1	
	3311601	Nut 3/8"-16NC (Design A)	1	
-11	4841956	Pin (Design B)	1	
	0651608	Bolt 3/8"-24NF x 1" (Design B)	1	
	4761600	Lockwasher 3/8" (Design B)	1	
	4740006	Flatwasher, Special (Design B)	1	
-12	Not Used			
-13	2160002	Fitting, Grease	2	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-11		<b>PLATFORMS AND CONTROL STANDS ASSEMBLIES AND INSTALLATIONS (CONTINUED)</b>	Ref.	
	0236327	<b>SUPPORT AND ROTATOR INSTALLATION (STANDARD)</b>	Ref.	C
	0236533	<b>SUPPORT AND ROTATOR INSTALLATION (STANDARD)</b>	Ref.	A
	0236831	<b>SUPPORT AND ROTATOR INSTALLATION (STANDARD)</b>	Ref.	C
	0239341	<b>SUPPORT AND ROTATOR INSTALLATION (LOW MOUNT)</b>	Ref.	A
-14	0236261	Support, Rotating	1	
-15	0960564	Bushing, Bronze	2	
-16	2160002	Fitting, Grease	3	
-17	0236741	Pivot, Attachment (Design A)	1	
	0961024	Bushing, Bronze (Design A) (Attaching Parts)	2	
-18	3421176	Pin (Design A)	1	
	0641608	Bolt 3/8"-16NC x 1" (Design A)	1	
	4761600	Lockwasher 3/8" (Design A)	1	
	3311601	Nut 3/8"-16NC (Design A)	1	
-19	0240014	Pivot Attachment (Design B) (Attaching Parts)	1	
-20	4841956	Pin (With Bolt) (Design B)	1	
	3421121	Pin (With Rollpin) (Design B)	1	
	0651608	Bolt 3/8"-24NF x 1"	1	
	4761600	Lockwasher 3/8"	1	
	4740006	Washer, Special	1	
	3440828	Rollpin	1	
-21	4740158	Washer, Thrust	1	
-22	4842046	Shaft (Top End Threaded Internally)	1	
	4841830	Shaft (Top End Threaded Externally) (Not Shown) (Attaching Parts)	1	
-23	0641836	Bolt	1	
	0641634	Bolt 3/8"-16NC x 4 1/4"	1	
-24	4751800	Flatwasher	1	
	4751600	Flatwasher 3/8"	1	
-25	3311805	Locknut 1/2"-13NC	1	
	3311605	Locknut 3/8"-16NC	1	
-26	3340454	Pad, Brake (Shaft With Internal Threads)	2	
	3340287	Pad, Brake (Shaft With External Threads)	2	
-27	4160026	Washer, Belleville (Shaft With Internal Threads)	8	
	4160027	Washer, Belleville (Shaft With External Threads)	6	
-28	1120299	Cap (Shaft With Internal Threads)	1	
	1120239	Cap (Shaft With External Threads)	1	
-29	2880404	Key Stock, Square (Shaft With Internal Threads Only)	1	
-30	0652014	Bolt 5/8"-18NF x 1 7/8" (Shaft With Internal Threads)	1	
	4752000	Flatwasher 5/8"	1	
-31	3312003	Nut, Slotted 5/8"-11NC	1	
	3450307	Pin, Cotter	1	
-32		Rotator Assembly (Attaching Parts)	1	
-33	0641811	Bolt 1/2"-13NC x 1 3/8"	2	
	4761800	Lockwasher 1/2"	2	
	4751800	Flatwasher 1/2"	2	
-34	3200194	Mount	1	
-35	2760064	Housing, Gear	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-11		<b>PLATFORMS AND CONTROL STANDS ASSEMBLIES AND INSTALLATIONS (CONTINUED)</b>	Ref.
-36	0440135	Bearing, Sleeve	1
-37	2440044	Gear	1
-38	4740256	Washer, Thrust	2
-39	1760068	Disc, Brake	1
		-----	
		(Attaching Parts)	
-40	3931010	Bolt, Socket Head #10-24NC x 1 1/4"	5
	0100019	Loctite	A/R
-41	3440616	Pin, Roll	1
		-----	
-42	3160083	Rotator Motor Assembly (See Figure 2-12 For Breakdown)	1
		(Attaching Parts)	
-43	3931612	Bolt, Socket Head 3/8"-16NC x 1 1/2"	4
-44	4761600	Lockwasher 3/8"	4
		-----	
-45	4070585	Shim .010	A/R
	4070586	Shim .005	A/R
	4070587	Shim .002	A/R
-46	0080099	Adapter, Motor (Attaching Parts)	1
-47	3441228	Pin, Roll	2
-48	3931620	Bolt, Socket Head 3/8"-16NC x 2 1/2"	2
-49	4761600	Lockwasher 3/8"	2
		-----	
-50	0080098	Shaft, Adapter	1
-51	0440134	Bearing, Sleeve	2
-52	4740199	Washer, Thrust	4
-53	0440120	Bearing, Needle	2
-54	2440043	Gear, Worm (Attaching Parts)	1
-55	3440816	Pin, Roll	1
		-----	
-56	1670322	Cover (Shaft With Internal Threads)	1
	1670195	Cover (Shaft With External Threads) (Attaching Parts)	1
-57	0641404	Bolt 1/4"-20NC x 1/2"	1
-58	4761400	Lockwasher 1/4"	1
-59	4751400	Flatwasher 1/4"	1
-60	0641408	Bolt 1/4"-20NC x 1"	1
-61	4761400	Lockwasher 1/4"	1
-62	4751400	Flatwasher 1/4"	1
-63	4562083	Spacer	1
		-----	
		<b>CONSOLE INSTALLATION</b>	Ref.
-64	0641407	Bolt 1/4"-20NC x 7/8"	4
-65	4751400	Lockwasher 1/4"	8
-66	3311405	Locknut 1/4"-20NC	4
		-----	
	0239259	<b>CONSOLE COVER INSTALLATION (OPTIONAL - NOT SHOWN)</b>	Ref.
	1670482	Cover	1

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-11		<b>PLATFORMS AND CONTROL STANDS ASSEMBLIES AND INSTALLATIONS (CONTINUED)</b>	Ref.	
	3900022 4751400	(Attaching Parts) Screw, Self-Tapping 1/4" Flatwasher 1/4"	8 8	
	0235980 0235981	<b>ROTATING BEACON LIGHT INSTALLATION (RED) ROTATING BEACON LIGHT INSTALLATION (AMBER)</b>	Ref. Ref.	A A
-67	2920009 2920018	Light, Beacon (Red) Light, Beacon (Amber)	1 1	
		(Attaching Parts)		
-68	0900383	Bracket	1	
-69	0641606	Bolt 3/8"-16NC x 3/4"	4	
-70	4761600	Lockwasher 3/8"	4	
-71	3311601	Nut 3/8"-16NC	4	
	2900068	<b>FLOODLIGHT INSTALLATION</b>	Ref.	D
-72	2920013	Floodlight	2	

SECTION 2 — ILLUSTRATED PARTS LIST

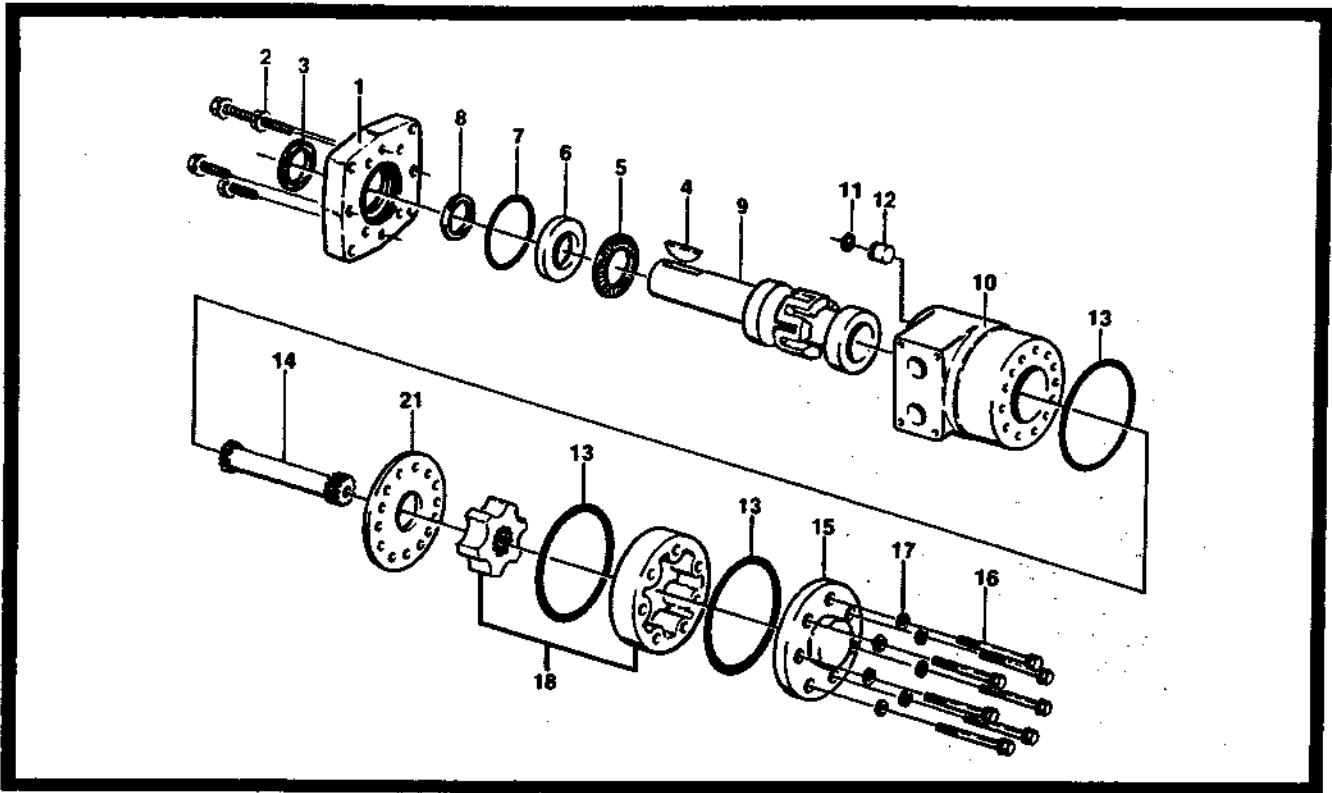


Figure 2-12. Rotator Motor Assembly.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-12	3160083	<b>ROTATOR MOTOR ASSEMBLY</b>	Ref.
-1	7002105	Flange, Mounting (Attaching Parts)	1
-2	7002123	Screw, Cap	4
-3	Kit	Seal, Dust	1
-4	7002104	Key, Woodruff	1
-5	7002111	Bearing, Thrust Needle	1
-6	7002117	Thrust, Bearing Race	1
-7	Kit	Seal, O-Ring	1
-8	Kit	Seal, Pressure	1
-9	7002116	Shaft, Output	1
-10	7002103	Housing	1
-11	Kit	Seal	1
-12	7002114	Plug, Housing	1
-13	Kit	Seal, O-Ring	3
-14	7002112	Drive	1
-15	7002107	Cap, End (Attaching Parts)	1
-16	7002100	Screw, Cap	7
-17	7000166	Lockwasher	7
-18	7002125	Gerotor Sub-Assembly	1
-19	Not Used		
-20	Not Used		
-21	7002110	Plate, Spacer	1
	2900455	Seal Kit (Includes Items 3, 7, 8, 11 and 13)	1

A

SECTION 2 — ILLUSTRATED PARTS LIST

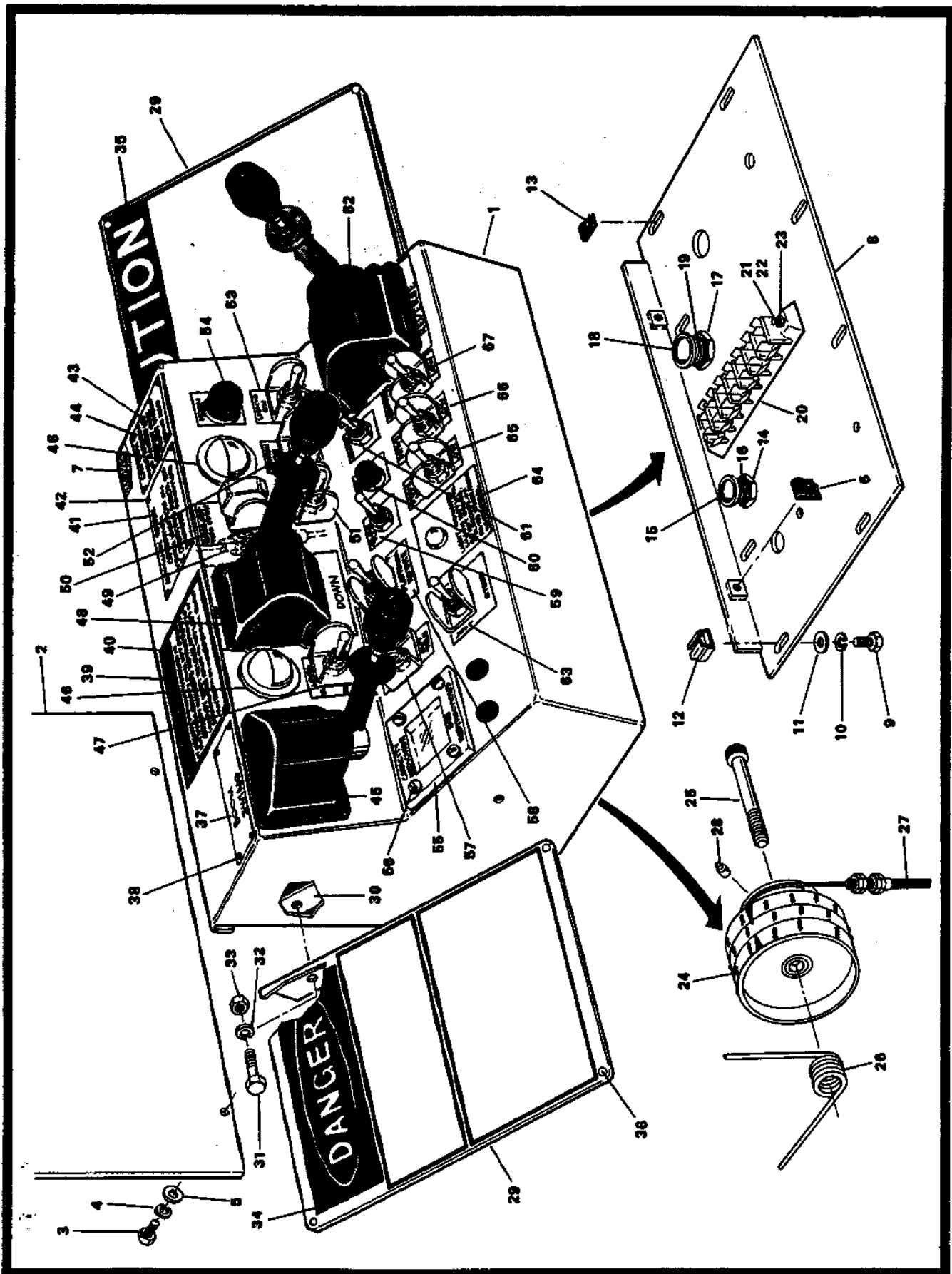


Figure 2-13. Platform Control Box Assemblies - PQ Controllers (Circa 1983-1984).



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2—13		<b>PLATFORM CONTROL BOX ASSEMBLIES - PQ CONTROLLERS (WITH INDIVIDUAL FUNCTION NAMEPLATES) (CIRCA 1983-1984)</b>	Ref.	
	0236161	<b>CONTROL BOX INSTALLATION (WITH CAPACITY INDICATOR AND WITHOUT PROP TELE) (RACINE VALVES)</b>	Ref.	C
	0236162	<b>CONTROL BOX INSTALLATION (WITHOUT CAPACITY INDICATOR AND WITHOUT PROP TELE) (RACINE VALVES)</b>	Ref.	C
	0860464	<b>CONTROL BOX ASSEMBLY (WITH CAPACITY INDICATOR)</b>	Ref.	A
	0860466	<b>CONTROL BOX ASSEMBLY (WITHOUT CAPACITY INDICATOR)</b>	Ref.	A
—1	0860284	Control Box Weldment	1	
—2	1670109	Panel, Rear Cover (Attaching Parts)	1	
—3	0651404	Bolt 1/4"-28NF x 1/2"	6	
—4	4761400	Lockwasher 1/4"	6	
—5	4751400	Flatwasher 1/4"	6	
—6	3300181	Nut, Retainer	2	
	3960250	Seal, Foam	1	
—7	0100001	Weatherstrip, Dual	A/R	
—8	3509562	Plate Bottom Cover (Attaching Parts)	1	
—9	0651404	Bolt 1/4"-28NF x 1/2"	3	
—10	4761400	Lockwasher 1/4"	4	
—11	4751400	Flatwasher 1/4"	4	
—12	3300182	Nut, Retainer	2	
—13	3300181	Nut, Retainer	2	
—14	3300047	Lock Ring	1	
—15	0960239	Cap	1	
—16	4460049	Strain Relief	1	
—17	3300048	Lock Ring	1	
—18	0760238	Cap	1	
—19	4460051	Strain, Relief	1	
—20	4460122	Strip, Terminal - 7 Pole (Attaching Parts)	1	
—21	3921012	Screw #10-24NC x 3/4"	2	
—22	4761000	Lockwasher #10	2	
—23	3311001	Nut #10-24NC	2	
—24	2420050	Gauge, Capacity Indicator - Cable Type Boxes Only	1	
—25	3900111	Screw, Shoulder	1	
	0100011	Locktite	A/R	
	2420057	Housing, Capacity Indicator	1	
	0440042	Bearing, Ball	2	
	4561774	Tube, Bearing Spacer	2	
	1700503	Nameplate, Capacity	1	
—26	4160058	Spring	1	
—27	1060138	Cable, Capacity Indicator	1	
—28	4220044	Throttle Stop	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-13		<b>PLATFORM CONTROL BOX ASSEMBLIES (CONTINUED)</b>	Ref.
-29	3504118	Plate, Placard Mounting (Attaching Parts)	2
-30	3506244	Plate	2
-31	0641406	Bolt 1/4"-20NC x 3/4"	8
-32	4761400	Lockwasher 1/4"	8
-33	3311401	Nut 1/4"-20NC	8
-34	3250887	Nameplate, Danger	1
-35	3251380	Nameplate, Caution	1
-36	3820011	Rivet, Pop	8
-37	3251010	Nameplate, Boom Swing (Attaching Parts)	1
-38	3820011	Rivet, Pop	4
-39	3251136	Nameplate, Caution (Attaching Parts)	1
-40	3820011	Rivet, Pop	4
-41	3251012	Nameplate, Auxiliary Power Operation	1
-42	3820011	Rivet, Pop	4
-43	3251011	Nameplate, Drive Instruction (Attaching Parts)	1
-44	3820011	Rivet, Pop	4
-45	1600040	Controller, P.Q. - Swing (Attaching Parts)	1
	0640803	Bolt #8-32NC x 3/8"	4
	4760800	Lockwasher #8	4
	7003703	Gasket	1
-46	2920024	Light Panel - Signal Start	2
	2920029	Bulb, 12 V.D.C.	2
-47	4360077	Switch, Level	1
	4060087	Shield, Toggle Switch	1
	3251018	Nameplate, Level	1
-48	1600040	Controller, P.Q. - Lift (Attaching Parts)	1
	0640803	Bolt #8-32NC x 3/8"	4
	4760800	Lockwasher #8	4
	7003703	Gasket	1
-49	2400001	Fuse, 10 Amp	1
-50	4360071	Switch, Emergency Stop	1
	4360141	Guard, Spring Loaded	1
	4060087	Shield	1
	3251017	Nameplate, Emergency Stop	1
-51	4360084	Switch, Auxiliary Power	1
	4060087	Shield	1
	3251021	Nameplate, Auxiliary Power	1
-52	4360071	Switch, Beacon	1
	4060087	Shield	1
	3251020	Nameplate, Beacon On	1

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-13		<b>PLATFORM CONTROL BOX ASSEMBLIES (CONTINUED)</b>	Ref.
-53	4360071	Switch, Lights	1
	4060087	Shield	1
	3251019	Nameplate, Lights	1
		-----	
-54	4360114	Switch, Horn	1
	3250995	Nameplate, Horn	1
		-----	
-55	2960006	Lens, Capacity Indicator, Cable Type	1
	3507501	Plate, Cover (Without Capacity Indicator) (Attaching Parts)	1
-56	3900127	Screw Special	4
	4771000	Starwasher #10	4
	3300180	Nut, Retainer	4
	3960251	Gasket (With Capacity Indicator)	1
	3960254	Gasket (Without Capacity Indicator)	1
		-----	
-57	4360077	Switch, Telescope	1
	4060087	Shield	1
	3250592	Nameplate, Telescope	1
		-----	
-58	4360077	Switch, Rotate	1
	4060087	Shield	1
	3251022	Nameplate, Rotate	1
		-----	
-59	4360114	Switch, Glow Plug	1
	3251025	Nameplate, Glow Plug	1
		-----	
-60	4360016	Switch, Start Push Button	1
	3250996	Nameplate, Start	1
		-----	
-61	4360114	Switch, Choke	1
	3251026	Nameplate, Choke	1
		-----	
-62	1600041	Controller, P.Q. - Drive (Attaching Parts)	1
	0640803	Bolt #8-32NC x 3/8"	4
	4760800	Lockwasher #8	4
	7003703	Gasket	1
		-----	
-63	4360077	Switch, Steer	1
	4060087	Shield	1
	3250591	Nameplate, Steer	1
-64	2920015	Light, Red, Tilt Indicator	1
	2920029	Bulb, 12 V.D.C.	1
	3251250	Nameplate, Tilt Indicator	1
		-----	
-65	4360071	Switch, Drive, Motor	1
	4060087	Shield	1
	3251244	Nameplate, Drive Motor	1
		-----	
-66	4360071	Switch, Drive Speed	1
	4060087	Shield	1
	3251024	Nameplate, Drive Speed	1
		-----	
-67	4360071	Switch, Engine Speed	1
	4060087	Shield	1
	3251023	Nameplate, Drive Speed	1
		-----	
	2900453	Nameplate, Kit	1

SECTION 2 — ILLUSTRATED PARTS LIST

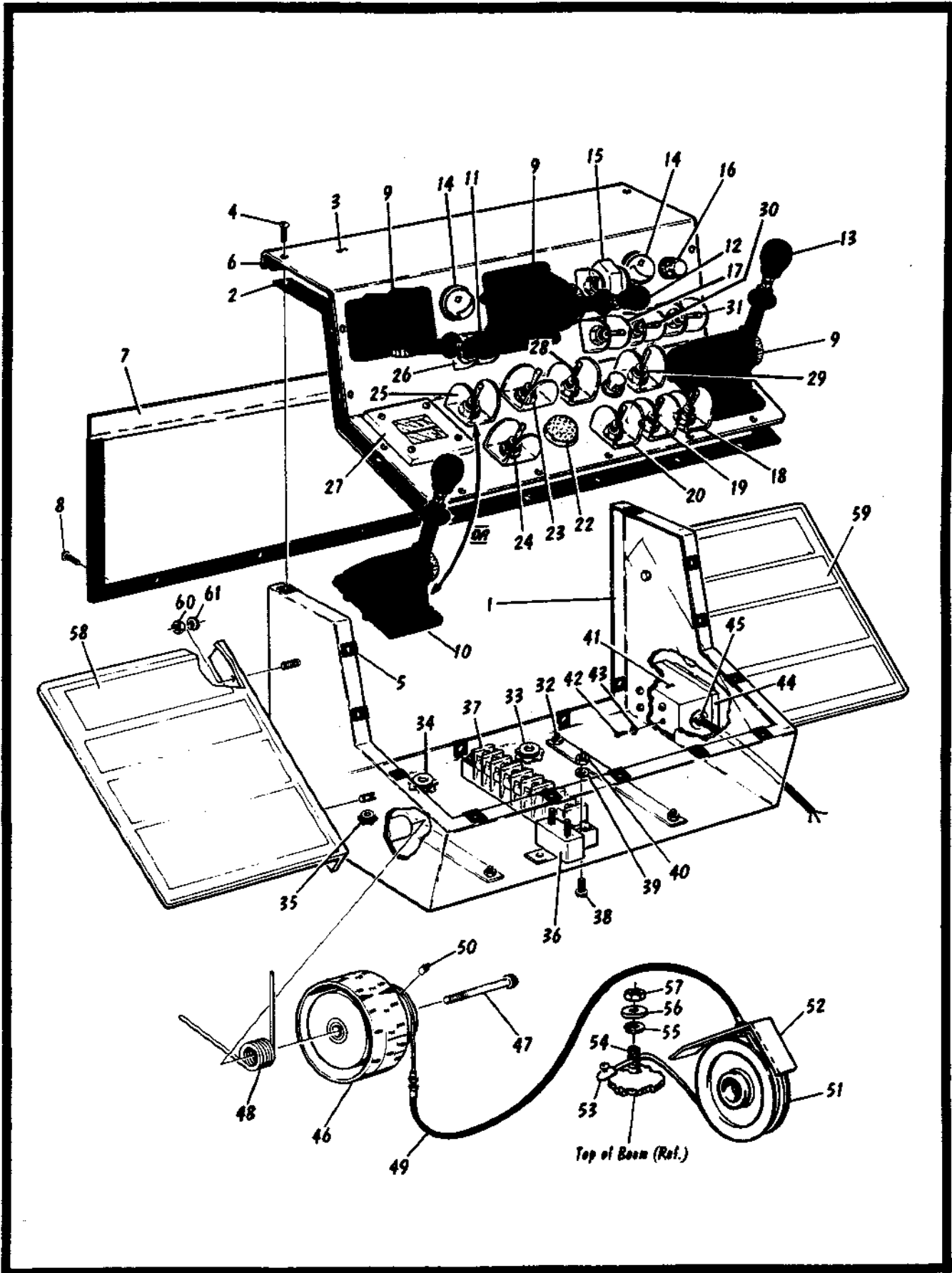


Figure 2-14. Platform Control Box Assemblies - PQ Controllers (Circa 1984 and Newer).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2—14		<b>PLATFORM CONTROL BOX ASSEMBLIES - PQ CONTROLLERS (WITH FUNCTIONS PRINTED ON LID) (CIRCA 1984 AND NEWER)</b>	Ref.
	0236497	<b>PLATFORM CONTROL BOX ASSEMBLY (WITHOUT CAPACITY INDICATOR AND WITHOUT PROP TELE) (GAS/DIESEL WITH RACINE VALVES)</b>	Ref. F
	0237041	<b>PLATFORM CONTROL BOX ASSEMBLY (WITHOUT CAPACITY INDICATOR AND WITHOUT PROP TELE) (GAS/DIESEL WITH ADECO THROTTLE AND RACINE VALVES)</b>	Ref. C
	0237943	<b>PLATFORM CONTROL BOX ASSEMBLY (WITHOUT CAPACITY INDICATOR AND WITHOUT PROP TELE) (GAS/DIESEL WITH VICKERS VALVES)</b>	Ref. C
	0236522	<b>PLATFORM CONTROL BOX ASSEMBLY (WITH CAPACITY INDICATOR AND WITHOUT PROP TELE) (GAS/DIESEL WITH RACINE VALVES)</b>	Ref. F
	0237042	<b>PLATFORM CONTROL BOX ASSEMBLY (WITH CAPACITY INDICATOR AND WITHOUT PROP TELE) (GAS/DIESEL WITH ADECO THROTTLE AND RACINE VALVES)</b>	Ref. F
	0238266	<b>PLATFORM CONTROL BOX ASSEMBLY (WITH CAPACITY INDICATOR AND WITHOUT PROP TELE) (GAS/DIESEL WITH VICKERS VALVES)</b>	Ref. A
	0237944	<b>PLATFORM CONTROL BOX ASSEMBLY (WITH CAPACITY INDICATOR AND WITHOUT PROP TELE) (GAS/DIESEL WITH VICKERS VALVES)</b>	Ref. C
	0237595	<b>PLATFORM CONTROL BOX ASSEMBLY (WITH CAPACITY INDICATOR AND WITHOUT PROP TELE) (ELECTRIC WITH RACINE/VICKERS VALVES)</b>	Ref. —
	02337057	<b>PLATFORM CONTROL BOX ASSEMBLY (WITH CAPACITY INDICATOR AND WITH PROP TELE) (GAS/DIESEL WITH RACINE/VICKERS VALVES)</b>	Ref. F
	0237058	<b>PLATFORM CONTROL BOX ASSEMBLY (WITHOUT CAPACITY INDICATOR AND WITH PROP TELE) (GAS/DIESEL WITH RACINE/VICKER VALVES)</b>	Ref. E
—1	0860472	Box, Console	1
—2	4420038	Tape, Insulation	A/R
—3	3251537	Decal, Console (Racine Valves and Without Prop Tele)	1
	3251741	Decal, Console (Vickers Valves and Without Prop Tele)	1
	3251620	Decal, Console (With Prop Tele) (Attaching Parts)	1
—4	0751006	Screw, Pan Head #10-24NC x 3/4"	13
—5	3300177	Nut, Tinnerman	13
—6	3960250	Weatherstrip	1
	0100001	Adhesive	A/R
—7	3509858	Plate (Attaching Parts)	1
—8	0751006	Screw, Pan Head #10-24NC x 3/4"	2
	3300177	Nut, Tinnerman	2
—9	1600094	Controller, PQ (Attaching Parts)	3
	0640803	Bolt #8-32NC x 3/8"	4
	4760800	Lockwasher #8	8

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-14		<b>PLATFORM CONTROL BOX ASSEMBLY - PQ CONTROLLERS (CONTINUED)</b>	Ref.
-10	1600094	Controller, PQ (Prop Tele Only)	1
	0720803	(Attaching Parts)	
	4760800	Screw #8-32NC x 3/8"	4
		Lockwasher #8	4
	2560039	----- Knob, Tele	1
-11	2560040	Knob, Swing	1
-12	2560038	Knob, Lift	1
-13	2560041	Knob, Drive	1
-14	2920024	Panel Lights (Optional)	2
-15	4360199	Switch, Emergency Stop - SPST	1
	4360141	Guard, Switch	1
	3790012	O-Ring	1
	4060087	Shield, Toggle Switch	1
-16	4360016	Switch, Horn	1
-17	4360204	Switch, Auxiliary Power - DPST/MC (Racine)	1
	4360200	Switch, Auxiliary Power - SPST/MC (Vickers)	1
	3790012	O-Ring	1
	4060087	Shield, Toggle Switch	1
-18	4360199	Switch, Engine Speed - SPST	1
	3790012	O-Ring	1
	4060087	Guard, Toggle Switch	1
-19	4360199	Switch, Drive Speed - SPST	1
	3790012	O-Ring	1
	4060087	Guard, Toggle Switch	1
-20	4360199	Switch, Drive Motor - SPST	1
	3790012	O-Ring	1
	4060087	Guard, Toggle Switch	1
	3251244	Nametag, Drive Motor (Vickers)	1
-21	4360016	Switch, Start	1
-22	2920015	Lamp, Not Level	1
-23	4360202	Switch, Platform Rotate - DPDT/MC/C.OFF	1
	3790012	O-Ring	1
	4060087	Guard, Toggle Switch	1
-24	4360202	Switch, Steer - DPDT/MC/C.OFF	1
	3790012	O-Ring	1
	4060087	Guard, Toggle Switch	1
-25	4360202	Switch, Telescope - DPDT/MC/C.OFF (Without prop Tele)	1
	3790012	O-Ring	1
	4060087	Guard, Toggle Switch	1
-26	4360202	Switch, Platform - DPDT/MC/C.OFF	1
	3790012	O-Ring	1
	4060087	Guard, Toggle Switch	1
-27	2960006	Lens, Capacity Indicator	1
		(Attaching Parts)	
	3960251	Gasket	4
	3911014	Screw #10-24NC x 7/8"	4
	4771000	Starwasher #10	4
	3311001	Nut #10-24NC	4
	3251551	----- Decal - 500 Lb. Capacity - Used only on consoles without capacity indicator. (Not Shown)	1
-28	4360200	Switch, Choke or Glow Plug - SPST/MC	1
	3790012	O-Ring	1
	4060087	Guard, Toggle Switch	1

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-14		<b>PLATFORM CONTROL BOX ASSEMBLY - PQ CONTROLLERS (CONTINUED)</b>	Ref.
-29	4360199	Switch, 2WD/4WD Select - SPST	1
	3790012	O-Ring	1
	4060087	Guard, Toggle Switch	1
-30	4360199	Switch, Beacon Light - SPST	1
	3790012	O-Ring	1
	4060087	Guard, Toggle Switch	1
-31	4360199	Switch, Light - SPST	1
	3790012	O-Ring	1
	4060087	Guard, Toggle Switch	1
-32	0641407	Bolt 1/4"-20NC x 7/8"	4
	4751400	Flatwasher 1/4"	8
	3311405	Locknut 1/4"-20NC	4
-33	4460071	Connector	1
	3300048	Nut	1
-34	4460051	Connector	1
	3300048	Nut	1
-35	4460052	Connector	1
	3300047	Nut	1
-36	4360209	Circuit Breaker - 20 Amp	1
	3321001	Nut #10-32NF	2
	4751000	Flatwasher #10	2
-37	4460263	Terminal Strip (Attaching Parts)	1
-38	3911016	Screw #10-24NC x 1"	2
-39	4761000	Lockwasher #10	2
-40	3311001	Nut #10-24NC	2
-41	0860036	Box, Switch (Attaching Parts)	1
-42	3911008	Screw #10-24NC x 1/2"	4
-43	4761000	Lockwasher #10	4
-44	4060092	Shield, Weatherproof	1
	4460190	Terminal, Receptacle (Not Shown)	1
-45	4460049	Connector	1
	0960407	Bushing, Reducer	1
-46	2420050	Gauge, Capacity Indicator (Uses Decal P/N 1700502)	1
	2420055	Gauge, Capacity Indicator (Uses Decal P/N 1700503) (Attaching Parts)	1
-47	3900111	Bolt, Special	1
	0100011	Loctite	A/R
	1700502	Nameplate	1
	1700503	Nameplate	1
	4561774	Space, Tube	1
	0440042	Bearing, Ball	2
	2420057	Gauge, Indicator	1
-48	4160058	Spring, Torsion	1
-49	1060168	Cable, Push Pull	1
-50	4220044	Throttle Stop	2
	0236834	<b>CAPACITY INDICATOR INSTALLATION</b>	Ref. B
-51	3580092	Pulley	1
-52	1670340	Cover, Pulley	1





**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-14		<b>PLATFORM CONTROL BOX ASSEMBLY - PQ CONTROLLERS (CONTINUED)</b>	Ref.
-53	4220044	Stop, Throttle (Attaching Parts)	1
-54	4300041	Stud (Welded On Part) (When Equipped)	1
-55	1320109	Clamp (Not Shown - When Equipped)	1
-56	4761600	Lockwasher 3/8"	1
-57	4751600	Flatwasher 3/8"	1
-57	3311605	Locknut 3/8"-16NC	1
-57	3321601	Nut 3/8"-24NF	1
		<b>DECAL INSTALLATION - CAUTION AND DANGER</b>	Ref.
-58	3251548	Decal - Caution (Standard)	1
-58	3251607	Decal - Caution (CSA)	1
-59	3251549	Decal - Danger (Attaching Parts)	1
-60	3311401	Nut 1/4"-20NC	2
-61	4761400	Lockwasher 1/4"	2

SECTION 2 — ILLUSTRATED PARTS LIST

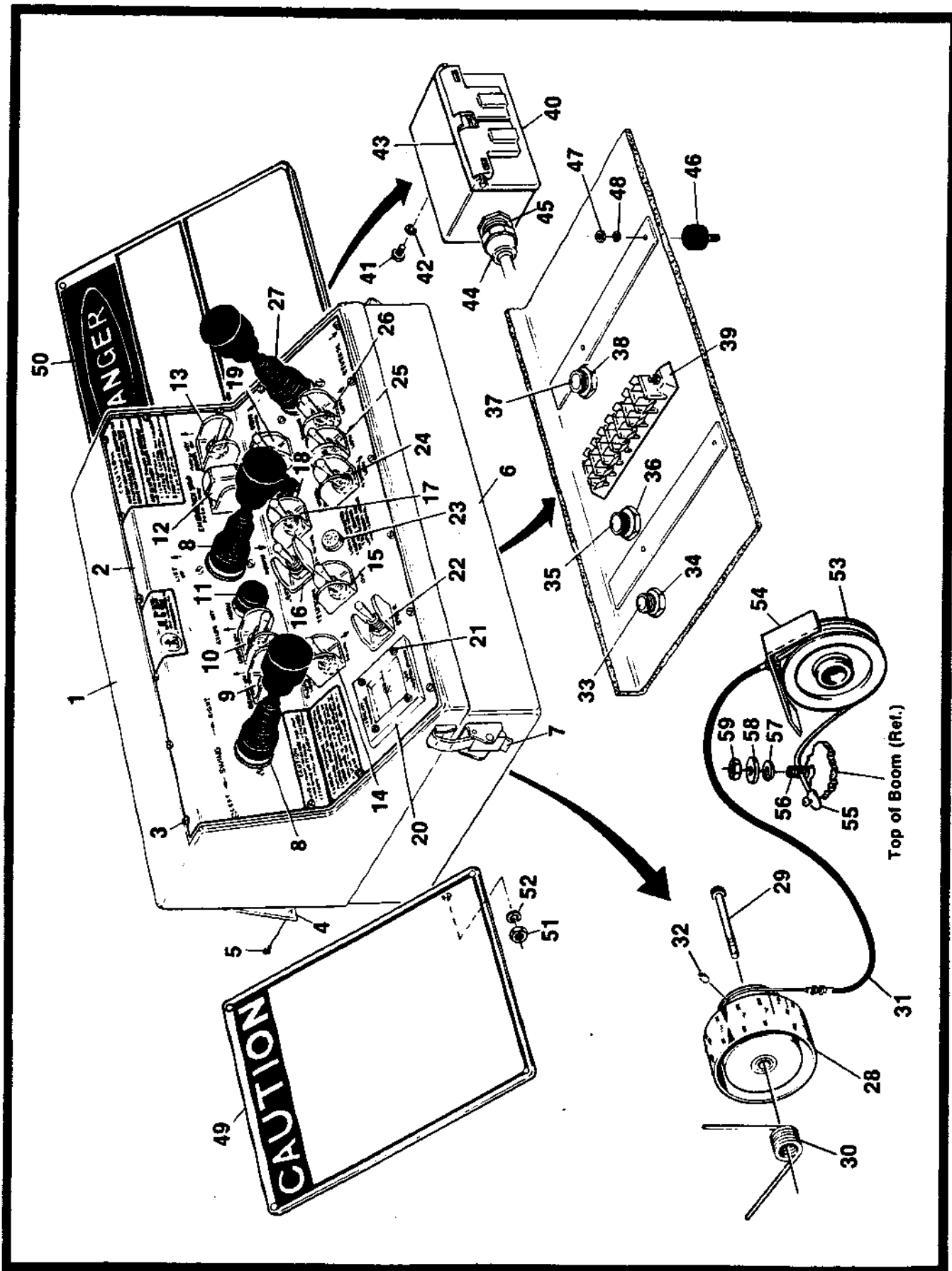


Figure 2-15. Platform Control Box Assemblies - OEM Controllers.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-15		<b>PLATFORM CONTROL BOX ASSEMBLY - OEM CONTROLLERS</b>	Ref.	
	0238264	<b>PLATFORM CONTROL BOX ASSEMBLY (WITHOUT CAPACITY INDICATOR AND WITHOUT PROP TELE)</b>	Ref.	C
	0237315	<b>PLATFORM CONTROL BOX ASSEMBLY (WITH CAPACITY INDICATOR AND WITHOUT PROP TELE)</b>	Ref.	C
	0238179	<b>PLATFORM CONTROL BOX ASSEMBLY (WITH CAPACITY INDICATOR AND WITHOUT PROP TELE)</b>	Ref.	C
	0238263	<b>PLATFORM CONTROL BOX ASSEMBLY (WITHOUT CAPACITY INDICATOR AND WITH PROP TELE)</b>	Ref.	C
	0238180	<b>PLATFORM CONTROL BOX ASSEMBLY (WITH CAPACITY INDICATOR AND WITH PROP TELE)</b>	Ref.	C
	0238318	<b>PLATFORM CONTROL BOX ASSEMBLY (WITH CAPACITY INDICATOR AND WITH PROP TELE)</b>	Ref.	D
-1	0860538 4420038 0100001	Control Box Insulation Tape Adhesive, Weatherstrip	Ref. A/R A/R	
-2	3251678	Nameplate	1	
-3	0751006	Screw, Pan Head #10 x 3/4"	18	
	3300177	Nut, Tinnerman	18	
-4	3531023	Plate, Backing (Attaching Parts)	1	
-5	0751006	Screw, Panhead #10 x 3/4"	3	
	3300177	Nut, Tinnerman	3	
-6	0860535	Box, Bottom (Attaching Parts)	1	
-7	2940052	Latch	2	
-8	1600092	Controller, OEM (Swing) (Drive) (Attaching Parts)	2	
	4740120	Flatwasher, Nylon	8	
	3900127	Screw, Round Head #10-32NF x 7/8"	5	
	3900157	Screw #10-32NF x 1 1/4" (Grade 2)	3	
	4070589	Shim	A/R	
	4070588	Shim	A/R	
-9	4360071	Switch - SPST	1	
	3790012	O-Ring	1	
	4060087	Shield	1	
-10	4360199	Switch, Lights - SPST	1	
	3790012	O-Ring	1	
	4060087	Shield	1	
-11	4360016	Switch, Horn	1	
-12	4360199	Switch, Emergency Stop - SPST	1	
	3790012	O-Ring	1	
	4060087	Shield	1	
	4360141	Guard	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-15		<b>PLATFORM CONTROL BOX ASSEMBLY - OEM CONTROLLERS (CONTINUED)</b>	Ref.
-13	4360200	Switch, Auxiliary Power - SPST/MC	1
	4360204	Switch, Auxiliary Power - DPST/MC	1
	3790012	O-Ring	1
	4060087	Shield	1
-14	4360202	Switch, Platform Level - DPDT	1
	3790012	O-Ring	1
	4060087	Shield	1
-15	4360202	Switch, Tele - DPDT (Optional)	1
	1600092	Controller, OEM - Prop Telescope (OEM P/N EMS4M4508) (Optional)	1
	1600093	Controller, OEM - Prop Telescope (OEM P/N EMS4M4509) (Optional)	1
	3790012	O-Ring	1
	4060087	Shield	1
-16	4360202	Switch, Platform Rotate - DPDT	1
	3790012	O-Ring	1
	4060087	Shield	1
-17	4360199	Switch, 2 Wheel Drive - 4 Wheel Drive (Optional)	1
	3790012	O-Ring	1
	4060087	Shield	1
-18	4360016	Switch, Start	1
-19	4360199	Switch, Creep On - SPST	1
	3790012	O-Ring	1
	4060087	Shield	1
-20	2960006	Lens, Capacity Indicator (Attaching Parts)	1
-21	3911014	Screw #10-24NC x 7/8"	4
	4771000	Starwasher	4
	3311001	Nut #10-24NC	4
	3960251	Gasket	1
	3251551	Decal - 500 LBS Capacity - Use On Console Without Capacity Indicator (Not Shown)	1
-22	4360202	Switch, Steer - DPDT	1
	3790012	O-Ring	1
	4060087	Shield	1
-23	2920015	Lamp	1
-24	4360199	Switch, Drive Motor Hi-Low - SPST	1
	3790012	O-Ring	1
	4060087	Shield	1
-25	4360199	Switch, Drive Speed Hi-Low - SPST	1
	3790012	O-Ring	1
	4060087	Shield	1
-26	4360199	Shield, Engine Speed Hi-Low - SPST	1
	3790012	O-Ring	1
	4060087	Shield	1
-27	1060092	Controller, OEM (Forward-Reverse) (Attaching Parts)	1
	4740120	Flatwasher, Nylon	8
	3900127	Screw, Round Head #10-32NF x 7/8"	5
	3900157	Screw #10-32NF x 1 1/4" (Grade 2)	3
	4070588	Shim	A/R
-28	2420055	Gauge, Capacity Indicator (Uses Decal P/N 1700503)	1
	2420050	Gauge, Capacity Indicator (Uses Decal P/N 1700502) (Attaching Parts)	1

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-15		<b>PLATFORM CONTROL BOX ASSEMBLY - OEM CONTROLLERS (CONTINUED)</b>	Ref.
-29	3900111	Bolt	1
	0100011	Loctite	A/R
	1700502	Nameplate	1
	1700503	Nameplate	1
	4561774	Spacer, Tube	1
	0440042	Bearing, Ball	2
	2420057	Gauge, Indicator	1
-30	4160058	Spring, Torsion	1
-31	1060168	Cable	1
-32	4220044	Cable Stop	2
-33	4460052	Connector	1
-34	3300047	Nut	1
-35	4460051	Connector	1
-36	3300048	Nut	1
-37	4460071	Connector	1
-38	3300048	Nut	1
-39	4460263	Terminal Strip (Attaching Parts)	1
	0721008	Screw, #10-24NC x 1/2"	2
	4761000	Lockwasher #10	2
	3311001	Nut #10-24NC	2
-40	0860038	Box, Switch (Attaching Parts)	1
-41	3911008	Screw, #10-24NC x 1/2"	4
-42	4761000	Lockwasher #10	4
-43	4060092	Shield, Weatherproof	1
	4460190	Terminal, Receptacle (Not Shown)	1
-44	4460049	Connector	1
-45	0960407	Bushing, Reducer	1
-46	4320002	Stud	4
-47	3311505	Locknut 5/16"-18NC	8
-48	4751500	Flatwasher 5/16"	8
-49	3251548	Decal, Caution (Standard) (LH Side of Box - Shown)	1
-50	3251549	Decal, Danger (RH Side of Box - Shown) (Attaching Parts)	1
-51	3311405	Locknut 1/4"-20NC	4
-52	4751400	Flatwasher 1/4"	8
	3251775	Decal, Caution/Danger (Standard) (Located in Front of Box - Not Shown)	1
	3251671	Decal, Caution/Danger (CSA) (Located in Front of Box - Not Shown) (Attaching Parts)	1
	3820001	Rivet	6
	2920024	Light, Panel (Optional - Not Shown)	2
	0236834	<b>CAPACITY INDICATOR INSTALLATION</b>	Ref.
-53	3580092	Pulley	1
-54	1670340	Cover, Pulley	1

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**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2—15		<b>PLATFORM CONTROL BOX ASSEMBLY - OEM CONTROLLERS (CONTINUED)</b>	Ref.
—55	4220044	Stop, Throttle (Attaching Parts)	1
—56	4300041	Stud (Welded On Part) (When Equipped)	1
—57	1320109	Clamp (Not Shown - When Equipped)	1
—58	4761600	Lockwasher 3/8"	1
—59	4751600	Flatwasher 3/8"	1
	3311605	Locknut 3/8"-16NC	1
	3321601	Nut 3/8"-24NF	1
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SECTION 2 — ILLUSTRATED PARTS LIST

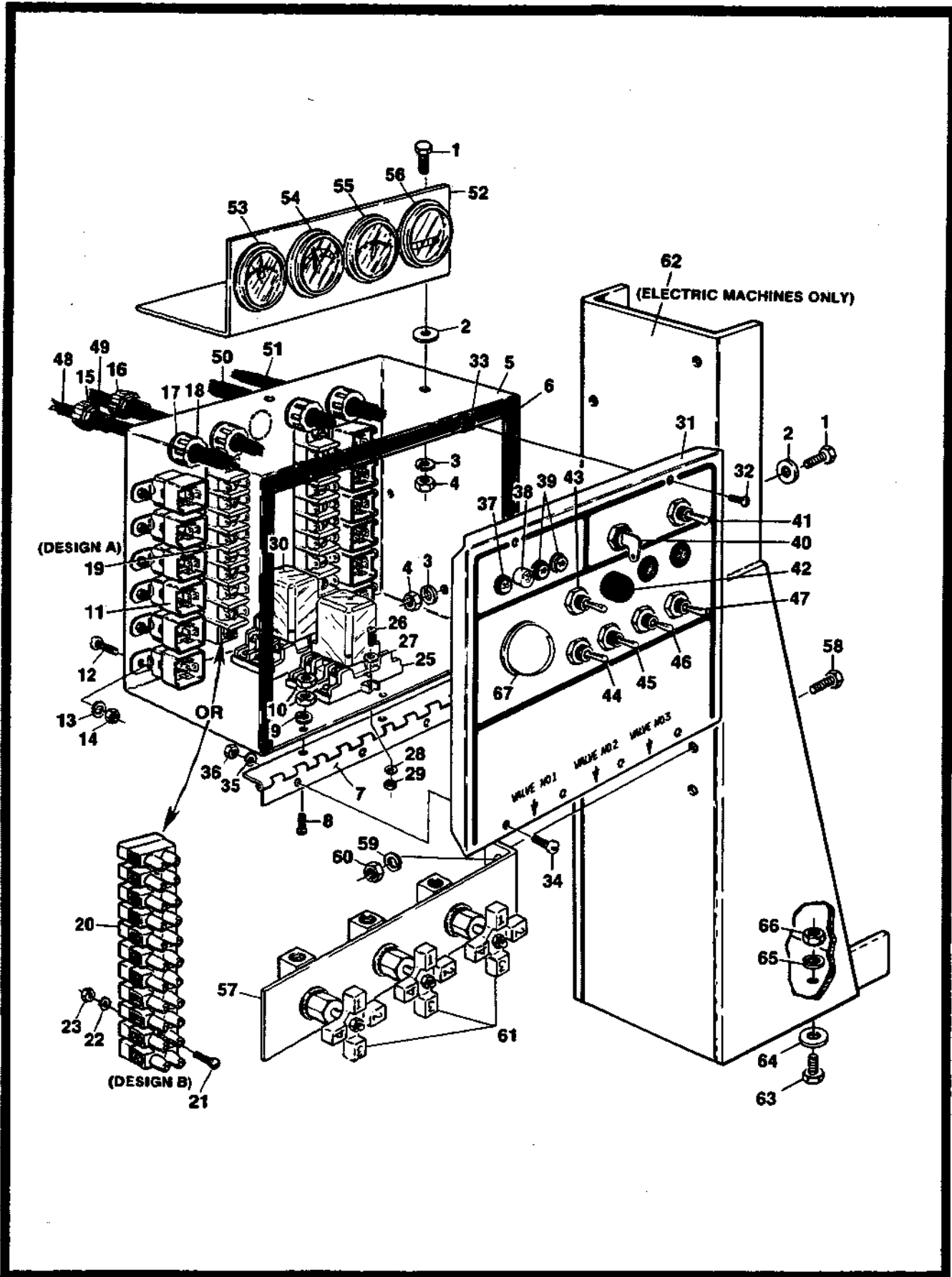


Figure 2-16. Ground Control Box Assemblies (Racine Valves).



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.		
2-16	0236332	<b>GROUND CONTROL BOX INSTALLATION (GAS WITH RACINE VALVES)</b>	Ref.	C	
	0236500	<b>GROUND CONTROL BOX INSTALLATION (GAS WITH RACINE VALVES)</b>	Ref.	F	
	0236501	<b>GROUND CONTROL BOX INSTALLATION (DIESEL WITH RACINE VALVES)</b>	Ref.	F	
	0237567	<b>GROUND CONTROL BOX INSTALLATION (ELECTRIC WITH RACINE VALVES)</b>	Ref.	C	
	0860469	Box and Harness Assembly (Gas with Ammeter on Engine Cowl and Bolt-On Wiring)	1	A	
	0860478	Box and Harness Assembly (Gas/Diesel with Ammeter on Ground Control Box and Bolt-On Wiring)	1	—	
	0860490	Box and Harness Assembly (Gas/Diesel with Slip-On Terminals)	1	C	
	0860509	Box and Harness Assembly (Gas with Adeco Throttle)	1	—	
	0860516	Box and Harness Assembly/Gas/Diesel with Adeco Throttle and Ignition/Start Relays) (3 Stack Racine Valve)	1	—	
	0860517	Box and Harness Assembly (Gas/Diesel with Adeco Throttle and Ignition/Start Relays) (4 Stack Racine Valve)	1	—	
	0860470	Box and Harness Assembly (Electric) (Attaching Parts)	1	B	
	-1	0641408	Bolt 1/4"-20NC x 1"	3	
	-2	4751400	Flatwasher 1/4"	3	
	-3	4761400	Lockwasher 1/4"	3	
-4	3311401	Nut 1/4"	3		
	0236172	Box Assembly (Gas/Diesel with Bolt-On Wiring)	1	C	
	0236506	Box Assembly (Gas/Diesel with Slip-On Terminals)	1	B	
	0237067	Box Assembly (Gas/Diesel with Adeco Throttle and All Electric Machines)	1	C	
<b>Note: For Best Reference Order Complete Ground Control Box Assembly by Model and Serial Number of Machine.</b>					
-5	0860467	Box (Use with Bolt-On Wiring)	1		
	0860487	Box (Use with Slip-On Terminals)	1		
-6	4280237	Strip, Rubber	1		
	0100001	Adhesive	A/R		
-7	2600093	Hinge (Attaching Parts)	1		
-8	3911012	Screw #10-24NC x 3/4"	3		
-9	4761000	Lockwasher 3/8"	3		
-10	3311001	Nut #10-24NC	6		
-11	3740049	Relay - SPDT (Mounted on Side of Box) (Not Shown)	7		
	3740049	Relay - SPDT (Mounted on Back of Box) (Shown) (Attaching Parts)	12		
-12	3911008	Screw, Round Head #10-24NC x 1/2"	7/12		
-13	4761000	Lockwasher #10	7/12		
-14	3311001	Nut #10-24NC	7/12		
-15	4460051	Connector	3		
-16	4460071	Connector	1		

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-16		<b>GROUND CONTROL BOX INSTALLATION (RACINE VALVES) (CONTINUED)</b>	Ref.
-17	3300048	Locknut, Conduit	4
-18	0960238	Bushing	4
-19	4460263	Terminal Strip (Use with Slip-On Terminals) (Design A)	2
-20	4460053	Terminal Strip (Use with Bolt-On Wiring) (Design B) (Attaching Parts)	2
-21	3910612	Screw, Round head #6-32NC x 5/8"	4
-22	4760600	Lockwasher #6	4
-23	3310601	Nut #6-32NC	4
-24	Not Used		
-25	4120002	Relay, Socket (Attaching Parts)	2
-26	3910610	Screw, Round Head #6-32NC x 5/8"	4
-27	4751000	Flatwasher #10	4
-28	4760600	Lockwasher #6	4
-29	3310601	Nut #6-32NC	4
-30	3740016	Relay	2
-31	3251522	Lid (P/N Printed on Bottom Edge)	1
	3251650	Lid (P/N Printed on Bottom Edge) (Attaching Parts)	1
-32	0750806	Screw #8 x 3/4" (Top)	2
-33	3300177	Nut, Tinnerman (Top)	2
-34	3911006	Screw #10-24NC x 3/8"	4
-35	4761000	Lockwasher #10	4
-36	3311001	Nut #10-24NC	4
-37	4360186	Circuit Breaker (35 AMP)	1
-38	4360212	Circuit Breaker (3 AMP)	1
	4360069	Circuit Breaker (10 AMP)	1
-39	4360069	Circuit Breaker (10 AMP)	2
-40	4360003	Switch, Master	1
-41	4360073	Switch, Toggle - DPDT (Select)	1
	3790012	O-Ring	1
-42	4360016	Switch, Pushbutton (Start)	1
-43	4360199	Switch, Toggle-SPST (Ignition) (Used with Slip-On Terminals)	1
	4360071	Switch, Toggle-SPST (Ignition) (Used with Bolt-On Wiring)	1
	3790012	O-Ring	1
-44	4360204	Switch, Toggle - DPST/MC (Aux. Power) (Used with Slip-ON Terminals)	1
	4360084	Switch, Toggle - DPST (Aux. Power) (Used with Bolt-On Wiring)	1
	4360089	Flasher (When Equipped) (Not Shown)	1
	1320060	Clamp (Used with Above Flasher) (Not Shown)	1
	3790012	O-Ring	1
-45	4360202	Switch, Toggle - DPDT/MC Center Off (Lift) (Used with Slip-On Terminals)	1
	4360074	Switch, Toggle - DPST (Lift) (Used with Bolt-On Wiring)	1
	3790012	O-Ring	1
-46	4360202	Switch, Toggle - DPDT/MC Center Off (Swing) (Used with Slip-On Terminals)	1
	4360074	Switch, Toggle - DPST (Swing) (Used with Bolt-On Wiring)	1
	3790012	O-Ring	1

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-16		<b>GROUND CONTROL BOX INSTALLATION (RACINE VALVES) (CONTINUED)</b>	Ref.
-47	4360202	Switch, Toggle - DPDT/MC Center Off (Telescope) (Used with Slip-On Terminals)	1
	4360074	Switch, Toggle - DPST (Telescope) (Used with Bolt-On Wiring)	1
	3790012	O-Ring	1
-48	4920402	Harness, Wiring (16/24 to Boom) (Bolt-On Wiring and all Electric Machines)	1
	4920454	Harness, Wiring (16/24 to Boom) (Slip-On Terminals)	1
-49	4920403	Harness, Wiring (12/4 to Boom) (Bolt-On Wiring and all Electric Machines)	1
	4920455	Harness, Wiring (12/4 to Boom) (Slip-On Terminals)	1
-50	4920408	Harness, Wiring (Engine) (Gas with Ammeter on Engine Cowl and Bolt-On Wiring)	1
	4920417	Harness, Wiring (Engine) (Gas/Diesel with Ammeter on Ground Control Box and Bolt-On Wiring)	1
	4920464	Harness, Wiring (Engine) (Gas/Diesel with Slip-On Terminals)	1
	4920527	Harness, Wiring (Engine) (Gas/Diesel with Slip-On Terminals and Adeco Throttle)	1
	4920413	Harness, Wiring (Motor) (Electric Machines)	1
-51	4920409	Harness, Wiring (Valve) (Bolt-On Wiring)	1
	4920465	Harness, Wiring (Valve) (Slip-On Terminals)	1
		Harness, Wiring (Valve) (Slip-On Terminals with 3 Stack Valve)	1
	4920466	Harness, Wiring (Valve) (Slip-On Terminals with 4 Stack Valve)	1
	4920407	Harness, Wiring (Valve) (All Electric Machines)	1
-52	3380309	Bracket, Mounting - Gauge (4 Gauge)	1
	0901212	Bracket, Mounting - Gauge (3 Gauge)	1
	0901213	Bracket, Mounting - Gauge (2 Gauge)	1
	0901372	Bracket, Mounting - Gauge (Single Gauge)	1
		<b>Note: (Location May Vary).</b>	
-53	2420006	Gauge, Ammeter	1
	2420059	Gauge, Battery Capacity (Electric)	1
-54	2420035	Gauge, Oil Pressure - Gas	1
	2420030	Gauge, Oil Pressure - Diesel	1
-55	2420019	Gauge, Water Temperature	1
-56	2420009	Gauge, Hourmeter	1
-57	0901192	Bracket, Manual Descent (Electric Machines Only) (Attaching Parts)	1
-58	0641608	Bolt	2
-59	4761600	Lockwasher	2
-60	3311601	Nut	2
-61	4640005	Valve, Needle	3
	2900062	Kit, Panel Mounting	3
-62	4841978	Bracket, Box Mounting (Electric Machines Only) (Attaching Parts)	1
-63	0641609	Bolt	4
-64	4751600	Flatwasher	4
-65	4761600	Lockwasher	4
-66	3311601	Nut	4
-67	2920024	Light, Panel (Optional)	1

SECTION 2 — ILLUSTRATED PARTS LIST

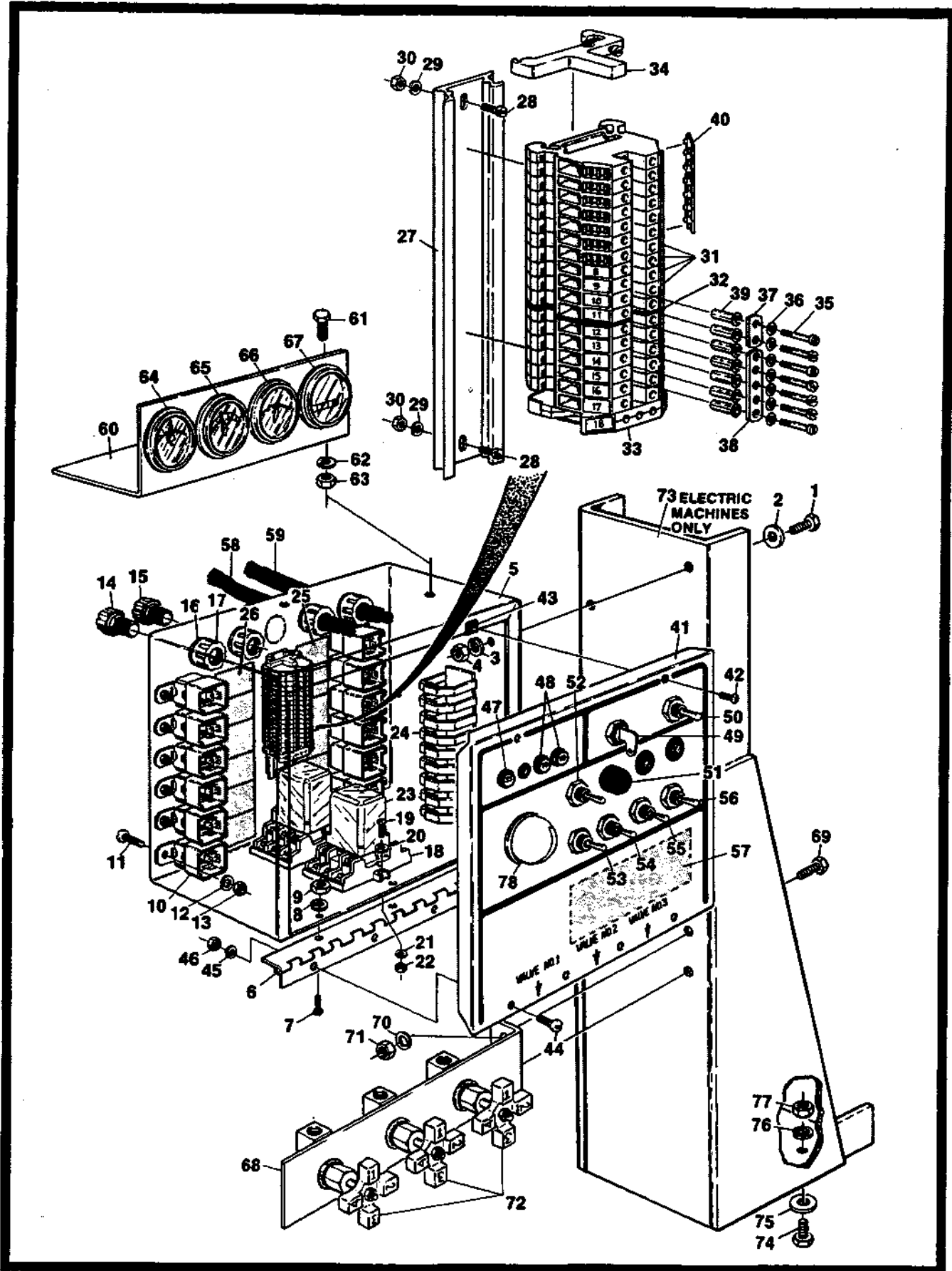


Figure 2-17. Ground Control Box Assemblies (Vickers Valves).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-17	0238060	<b>GROUND CONTROL BOX INSTALLATION (GAS WITH VICKERS VALVES)</b>	Ref.	A
	0238061	<b>GROUND CONTROL BOX INSTALLATION (DIESEL WITH VICKERS VALVES)</b>	Ref.	A
	0238250	<b>GROUND CONTROL BOX INSTALLATION (ELECTRIC WITH VICKERS VALVES)</b>	Ref.	—
	0860548	Box and Wiring Assembly (Gas/Diesel)	1	—
	0860521	Box and Wiring Assembly (Electric) (Attaching Parts)	1	—
-1	0641406	Bolt 1/4"-20NC x 3/4" (Electric)	3	
-2	4751400	Flatwasher 1/4"	3/2	
-3	4761400	Lockwasher 1/4"	3/2	
-4	3311401	Nut 1/4"-20NC	3/2	
	4300031	Stud (Welded on Part) (Not Shown) (Gas/Diesel)	2	
	0237855	Box Assembly (Gas/Diesel)	1	E
	0238369	Box Assembly (Electric)	1	—
-5	0860547	Box	1	
	4420037	Strip, Rubber	2.75 ft.	
-6	2600093	Hinge (Attaching Parts)	1	
-7	3911012	Screw #10-24NC x 3/4"	3	
-8	4761000	Lockwasher #10	3	
-9	3911006	Nut #10-24NC	6	
-10	3740049	Relay - SPST (Gas/Diesel) Relay - SPST (Electric) (Attaching Parts)	12 7	
-11	3911008	Screw #10-24NC x 1/2"	12/7	
-12	4761000	Lockwasher #10	12/7	
-13	3311001	Nut #10-24NC	12/7	
-14	4460051	Connector	3	
-15	4460071	Connector	1	
-16	3300048	Conduit Locknut	4	
-17	0960238	Bushing	4	
-18	4120002	Relay, Socket (Attaching Parts)	2	
-19	3910610	Screw, Round Head #6-32NC x 5/8"	3	
-20	4751000	Flatwasher #10	3	
-21	4760600	Lockwasher #6	3	
-22	3310601	Nut #6-32NC	3	
-23	3740016	Relay	2	
-24	1840002	Duct, Wire (1 Each Side) (Attaching Parts)	897 ft.	
	3911008	Screw, Round Head #10-24NC x 1 1/2"	4	
	4761000	Lockwasher #10	4	
	3311001	Nut #10-24NC	4	
	4460234	Clamp, Cable (Not Shown)	5	
-25	1700789	Decal, Relay Functions (Gas/Diesel Only)	1	
-26	1700788	Decal, Relay Functions (Gas/Diesel Only)	1	
-27	3640492	Rail (Attaching Parts)	1	
-28	3910606	Screw, Round Head #6-32NC x 3/8"	2	
-29	4760600	Lockwasher #6	2	
-30	3310601	Nut #6-32NC	2	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-17		<b>GROUND CONTROL BOX INSTALLATION (VICKERS VALVES) (CONTINUED)</b>	Ref.
-31	4460298	Terminal, Strip	17
-32	4460300	Terminal, Barrier	1
-33	4460303	Terminal, Ground Block	1
-34	4460229	Terminal, Stop	1
-35	4460305	Screw	7
-36	4460306	Washer	7
-37	4460308	Terminal, Bus Bar (2 Position)	1
-38	4460311	Terminal, Bus Bar (5 Position)	1
-39	4460307	Sleeve	7
-40	4460301	Terminal, Marker Strip	2
-41	3251650	Lid	1
		(Attaching Parts)	
-42	0750806	Screw, Self-Tapping #8 x 3/4" (Top)	2
-43	3300177	Nut, Tinnerman	2
-44	3911006	Screw #10-24NC x 3/8" (Bottom)	3
-45	4761000	Lockwasher #10	3
-46	3311001	Nut #10-24NC	3
-47	4360186	Circuit Breaker (35 Amp)	1
-48	4360069	Circuit Breaker (10 Amp)	2
-49	4360003	Switch, Master	1
-50	4360073	Switch, Toggle - DPDT (Select)	1
	3790012	O-Ring	1
-51	4360016	Switch, Push Button - SPST/MC (Start)	1
-52	4360199	Switch, Toggle - SPST (Ignition)	1
	3790012	O-Ring	1
-53	4360200	Switch, Toggle - SPST/MC (Aux. Power)	1
	3790012	O-Ring	1
-54	4360202	Switch, Toggle DPDT/MC Center Off (Lift)	1
	3790012	O-Ring	1
-55	4360202	Switch, Toggle - DPDT/MC Center Off (Swing)	1
	3790012	O-Ring	1
-56	4360202	Switch, Toggle - DPDT/MC Center Off (Telescope)	1
	3790012	O-Ring	1
-57	1700790	Decal, Relay Schematic	1
-58	4920845	Harness, Wiring - Engine (Gas/Diesel)	1
	4921001	Harness, Wiring - Engine (Electric)	1
-59	4920842	Harness, Wiring - Valve (Gas/Diesel)	1
	4921000	Harness, Wiring - Valve (Electric)	1
-60	3380309	Bracket, Mounting - Gauge (4 Gauge)	1
	0901212	Bracket, Mounting - Gauge (3 Gauge)	1
	0901213	Bracket, Mounting - Gauge (2 Gauge)	1
	0901372	Bracket, Mounting - Gauge (Single Gauge)	1
		<b>Note: (Location May Vary).</b>	
		(Attaching Parts)	
-61	0641406	Bolt 1/4"-20NC x 3/4"	3
-62	4761400	Lockwasher	3
-63	3311401	Nut 1/4"-20NC	3
-64	2420091	Gauge, Voltmeter	1
	2420059	Gauge, Battery Capacity (Electric)	1

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-17		<b>GROUND CONTROL BOX INSTALLATION (VICKERS VALVES) (CONTINUED)</b>	Ref.
-65	2420035	Gauge, Oil Pressure (Gas)	1
	2420030	Gauge, Oil Pressure (Diesel)	1
	2220574	Fitting (Deutz) - (Not Shown)	1
	2220295	Fitting, Coupling (Deutz) - (Not Shown)	1
	0100020	Loctite (Diesel)	A/R
-66	2420019	Gauge, Water Temperature (Gas)	1
-67	2420009	Gauge, Hourmeter	1
-68	0901192	Bracket, Manual Descent (Electric machines Only) (Attaching Parts)	1
-69	0641608	Bolt 3/8"-16NC x 1"	2
-70	4761600	Lockwasher 3/8"	2
-71	3311601	Nut 3/8"-16NC	2
-72	4640005	Valve, Needle	3
	2900062	Kit, Panel Mounting	3
-73	4841978	Bracket, Box Mounting (Electric Machines Only) (Attaching Parts)	1
-74	0641609	Bolt 3/8"-16NC x 1 1/8"	4
-75	4751600	Flatwasher 3/8"	4
-76	4761600	Lockwasher 3/8"	4
-77	3311601	Nut 3/8"-16NC	4
-78	2920024	Light, Panel (Optional)	1

SECTION 2 — ILLUSTRATED PARTS LIST

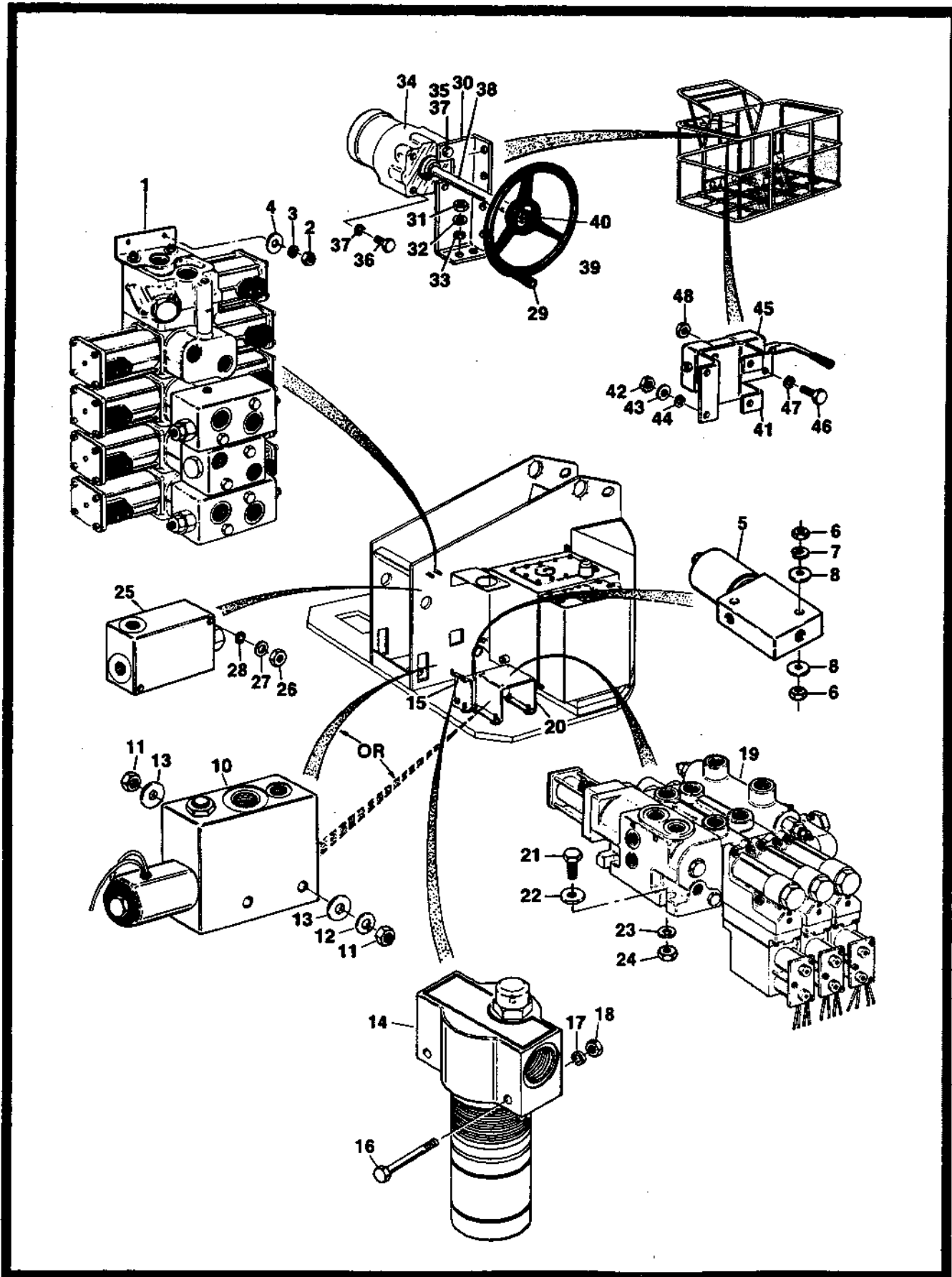


Figure 2-18. Control Valves Installation (Racine Valves).



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-18		<b>CONTROL VALVES INSTALLATIONS (RACINE VALVES)</b>	Ref.
	0236192	<b>CONTROL VAVLES INSTALLATION (GAS/DIESEL WITHOUT ROTATOR, PROP TELE AND STEERING WHEEL)</b>	Ref. I
	0236191	<b>CONTROL VALVES INSTALLATION (GAS/DIESEL WITH ROTATOR AND WITHOUT PROP TELE AND STEERING WHEEL)</b>	Ref. I
	0237567	<b>CONTROL VALVES INSTALLATION (ELECTRIC WITH ROTATOR AND WITHOUT PROP TELE AND STEERING WHEEL)</b>	Ref. C
	0237060	<b>CONTROL VALVES INSTALLATION (GAS/ DIESEL WITHOUT ROTATOR AND STEERING WHEEL AND WITH PROP TELE)</b>	Ref. —
	0237059	<b>CONTROL VALVES INSTALLATION (GAS/ DIESEL WITH ROTATOR AND PROP TELE AND WITHOUT STEERING WHEEL)</b>	Ref. —
	0236884	<b>CONTROL VALVES INSTALLATION (GAS/ DIESEL WITHOUT ROTATOR AND PROP TELE AND WITH STEERING WHEEL)</b>	Ref. A
	0236885	<b>CONTROL VALVES INSTALLATION (GAS/ DIESEL WITH ROTATOR AND STEERING WHEEL AND WITHOUT PROP TELE)</b>	Ref. B
-1	4640447 7002254 7000446 7002257 7000418 7002265 4640246	Control Valve Assembly - 2 Section Racine Complete Relief Inlet Section Complete Working Section (Telescope) Complete Working Section (Level) Coil - 12 VDC (2 Per Section) Stacking Kit Control Valve Assembly - 3 Section Racine (See Figure 2-23 For Breakdown)	1 1 1 1 4 1 1
	4640247	Control Valve Assembly - 4 Section Racine (See Figure 2-23 For Breakdown) (Attaching Parts)	1
-2	3311501	Nut 5/16"-18NC	4
-3	4761500	Lockwasher 5/16"	4
-4	4751500	Flatwasher 5/16"	4
	4300038	Stud (Welded On Part)	4
-5	4640123	Valve - 2 Speed (Mounted on T/T Floor Plate for Gas/Diesel and on Bracket for Electric) (Attaching Parts)	1
-6	3311501	Nut 5/16"-18NC	4
-7	4761500	Lockwasher 5/16"	2
-8	4751500	Flatwasher 5/16"	4
	4300033	Stud (Welded on Part)	2
	7000558	Coil (FPS Version)	1
	7004368	Coil (Hydroforce Version)	1
-9	Not Used		
-10	4640360	Valve, Combination (Mounted on T/T Side Plate or on Valve Bracket Item 20 for Gas/Diesel and on Motor Side for Electric Machines) (Qty 2 Required with Steering Wheel Option) (Attaching Parts)	1

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2—18		<b>CONTROL VALVES INSTALLATIONS (RACINE VALVES) (CONTINUED)</b>	Ref.
—11	3311501	Nut 5/16"-18NC	4
—12	4761500	Lockwasher 5/16"	2
—13	4751500	Flatwasher 5/16"	4
	4300038	Stud (Welded on Parts)	2
	7004368	Coil (Hydroforce Version)	1
	7009745	Coil (Modular Controls Version)	1
—14	2120078	Filter, Hi Pressure (Attaching Parts)	1
—15	0900617	Bracket, Filter Mounting	1
—16	0641420	Bolt 1/4"-20NC x 2 1/2"	2
—17	4761400	Lockwasher 1/4"	5
—18	3311401	Nut 1/4"-20NC	5
	2120079	Element	1
—19	4640367	Proportional Control Valve Assembly - Racine 3 Section (See Figures 2-19 thru 2-22 For Breakdown)	1
	4640456	Proportional Control Valve Assembly - Racine 4 Section (See Figures 2-19 thru 2-22 For Breakdown) (Attaching Parts)	1
—20	0901117	Bracket, Valve Mounting	1
—21	0641612	Bolt 3/8"-16NC x 1 1/2"	3
—22	4751600	Flatwasher 3/8"	3
—23	4751600	Lockwasher 3/8"	3
—24	3311601	Nut 3/8"-16NC	3
—25	4640151	Valve, Flow Divider (With Steering Wheel Only) (Attaching Parts)	1
—26	3311501	Nut 5/16"-18NC	4
—27	4751500	Flatwasher 5/16"	4
—28	4761500	Lockwasher 5/16"	2
	4300033	Stud (Welded On Part)	2
—29	2560066	Handle, Steering Wheel	1
	3900060	Screw	1
	0100011	Loctite	A/R
—30	0901255	Bracket, Steering Valve Mounting (Attaching Parts)	1
—31	3311401	Nut 1/4"-20NC	4
—32	4751400	Flatwasher 1/4"	4
—33	4761400	Lockwasher 1/4"	4
	4300031	Stud (Welded On Part)	4
—34	4640408	Valve, Steering (Attaching Parts)	1
—35	0641608	Bolt 3/8"-16NC x 1"	2
—36	0641606	Bolt 3/8"-16NC x 3/4"	2
—37	4761600	Lockwasher 3/8"	4
—38	1460005	Column, Steering	1
—39	4860097	Wheel, Steering	1
—40	3300073	Nut, Steering Wheel	1
—41	0901201	Bracket, Manual Rotator Valve (With Steering Wheel and Rotating Platform Only) (Attaching Parts)	1

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2—18		<b>CONTROL VALVES INSTALLATIONS (RACINE VALVES) (CONTINUED)</b>	Ref.
—42	3311401	Nut 1/4"-20NC	4
—43	4751400	Flatwasher 1/4"	4
—44	4761400	Lockwasher 1/4"	4
	4300031	Stud (Welded On Part)	4
—45	4640434	Valve, Manual Rotator (With Steering Wheel and Rotating Platform Only) (Attaching Parts)	1 1
—46	0641416	Bolt 1/4"-20NC x 2"	2
—47	4761400	Lockwasher 1/4"	2
—48	3311401	Nut 1/4"-20NC	2

SECTION 2 — ILLUSTRATED PARTS LIST

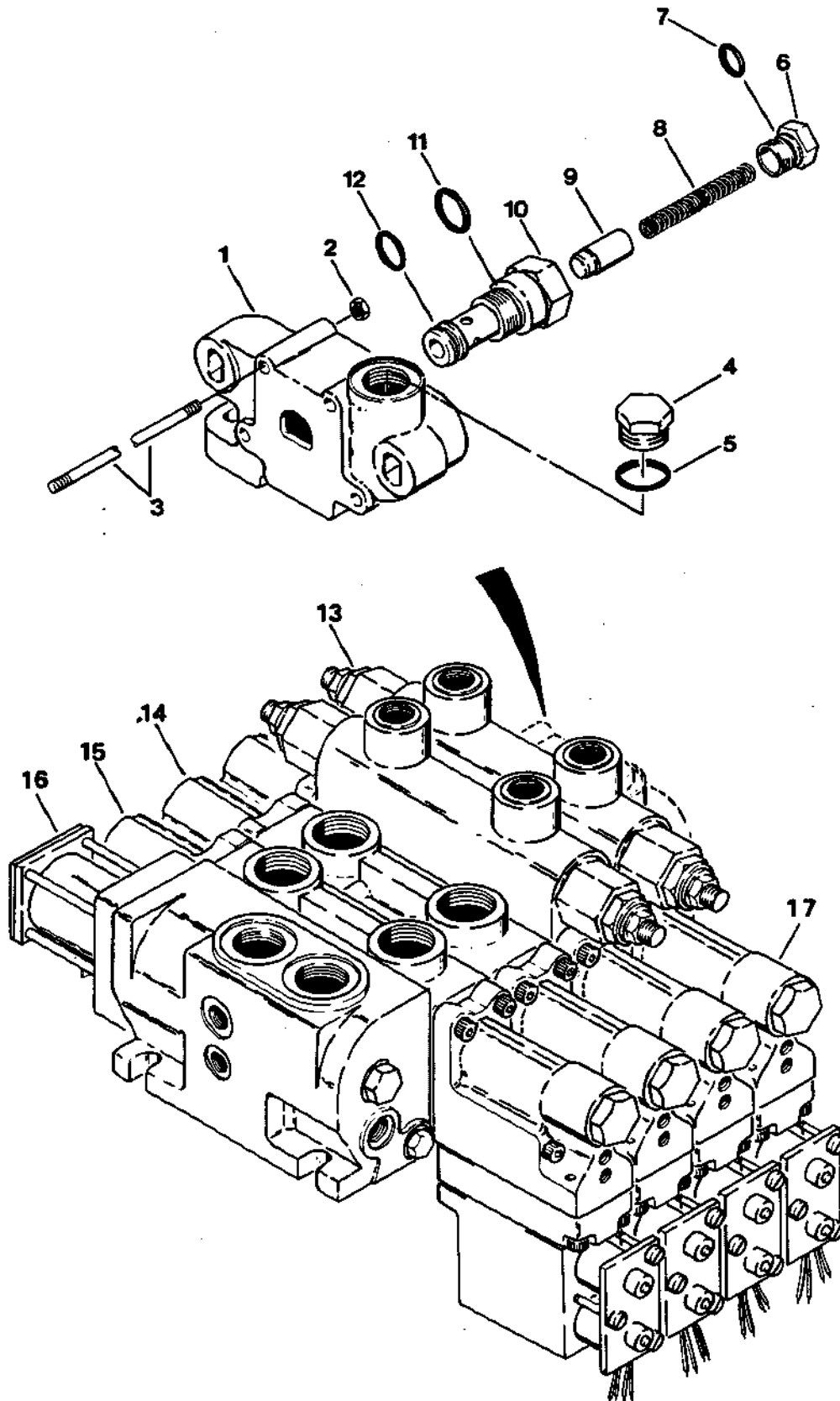


Figure 2-19. Proportional Control Valve Assembly - Outlet Setion.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2—19	4640367	<b>PROPORTIONAL CONTROL VALVE ASSEMBLY - OUTLET SECTION</b>	Ref. —
	4640456	<b>PROPORTIONAL CONTROL VALVE ASSEMBLY - OUTLET SECTION</b>	Ref. —
—1	7002368	Outlet Section	1
—2	7004869	Nut	4
—3	7004870	Stud	4
—4	7004871	Plug	1
—5	Kit	O-Ring	1
	7004872	Cartridge Assembly, Pilot Pressure	1
	7002288	Plug and O-Ring Assembly	1
—6	7004873	Plug	1
—7	Kit	O-Ring	1
—8	7004874	Spring	1
—9	7002287	Poppet	1
—10	7004875	Housing	1
—11	Kit	O-Ring	1
—12	Kit	O-Ring	1
—13	7004886	Swing Valve Section (3 Section Valve)(See Figure 2-20 For Breakdown)	1
	7004891	Swing and Telescope Valve Sections (4 Section Valve) (See Figure 2-20 For Breakdown)	2
—14	7004888	Lift Valve Section (See Figure 2-20 For Breakdown)	1
—15	7004890	Drive Valve Section (See Figure 2-20 For Breakdown)	1
—16	7002364	Inlet Manifold (See Figure 2-21 For Breakdown)	1
—17	7004884	Servo Assembly (See Figure 2-22 For Breakdown)	1
	7004833	Seal Kit for 7002368 (Includes 5,7,11 and 12)	1

SECTION 2 — ILLUSTRATED PARTS LIST

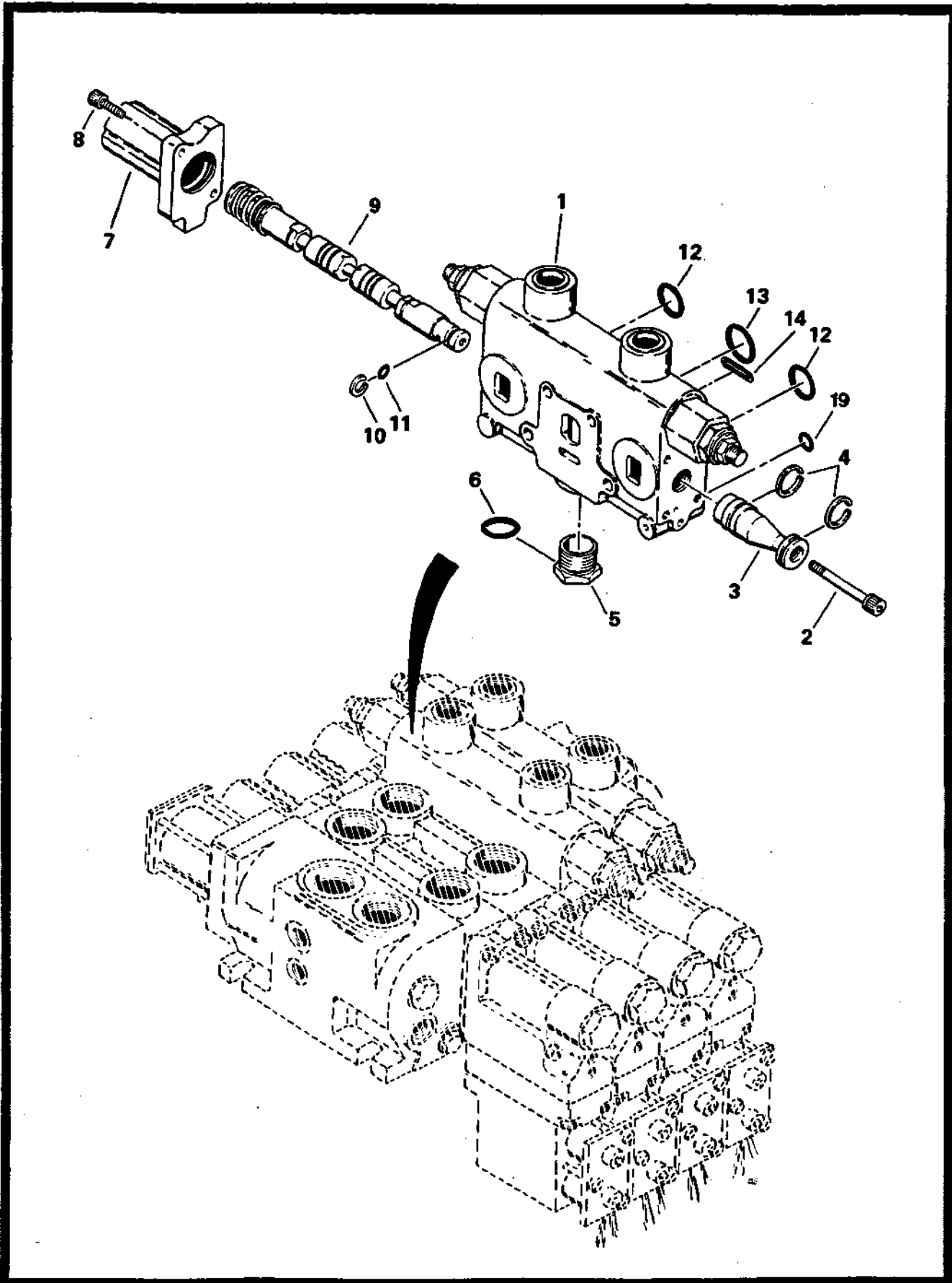


Figure 2-20. Proportional Control Valve Assembly - Working Sections.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-20		<b>PROPORTIONAL CONTROL VALVE ASSEMBLY</b>	Ref.
	7004888	<b>LIFT VALVE SECTION (INCLUDING SERVO ASSEMBLY)</b>	Ref.
	7004886	<b>SWING VALVE SECTION (INCLUDING SERVO ASSEMBLY) (3 SECTION VALVE)</b>	Ref.
	7004891	<b>SWING VALVE SECTION (INCLUDING SERVO ASSEMBLY) (4 SECTION VALVE)</b>	Ref.
	7004891	<b>TELESCOPE VALVE SECTION (INCLUDING SERVO ASSEMBLY) (4 SECTION VALVE)</b>	Ref.
	7004890	<b>DRIVE VALVE SECTION (INCLUDING SERVO ASSEMBLY)</b>	Ref.
-1		Valve Body (Not Serviced - Purchase Complete Assembly)	1
-2	7002391	Screw, Socket Head	1
-3	7004808	Ramp (Supplied With Servo)	Ref.
-4	7002233	Ring (Supplied With Servo)	Ref.
-5	7004802	Plug Assembly	1
-6	Kit	O-Ring	1
-7	7002398	Cap End (Attaching Parts)	1
-8	7002231	Screw, Socket Head	2
-9		----- Spool, (Not Serviced - Purchase Complete Assembly)	1
-10	Kit	Piston Ring	1
-11	Kit	O-Ring	1
-12	Kit	O-Ring	2
-13	Kit	O-Ring	1
-14	Kit	O-Ring	1
-15	7002378	O-Ring	1
	7004832	Seal Kit	4

SECTION 2 — ILLUSTRATED PARTS LIST

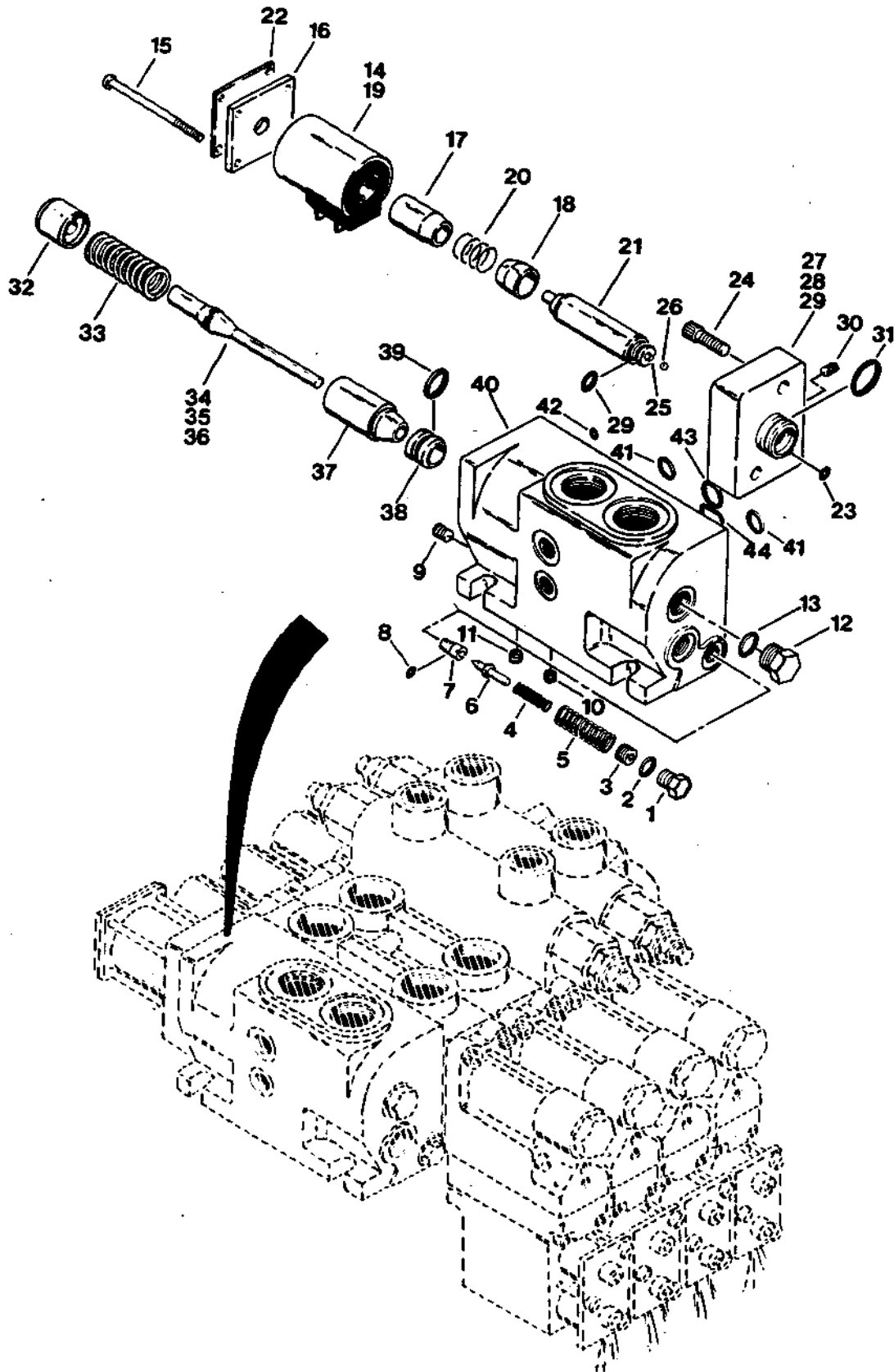


Figure 2-21. Proportional Control Valve Assembly - Inlet (Dump) Section.



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-21	7002364	<b>PROPORTIONAL CONTROL VALVE ASSEMBLY INLET (DUMP) SECTION</b>	Ref.
	7002385	Plug Assembly	1
-1	7004848	Plug	1
-2	Kit	O-Ring	1
-3	7002384	Screw, Socket Set	1
-4	7002377	Spring Compression, Helical	1
-5	7002376	Spring Compression, Helical	1
-6	7002371	Poppet	1
	7004850	Seat Assembly	1
-7	7004851	Seat	1
-8	Kit	O-Ring	1
-9	7002324	Plug	4
-10	7002326	Orifice, 0.040	1
-11	7002375	Orifice, 0.062	1
	7002386	Plug Assembly	1
-12	7004853	Plug	1
-13	Kit	O-Ring	1
-14	7000417	Coil, 12 Volt DC	1
	7004854	Solenoid Assembly	1
-15	7004837	Screw, Slotted, Pan Head	4
-16	7002338	Plate	1
-17	7004824	Sleeve	1
-18	7004835	Sleeve	1
-19	7004836	Case	1
-20	7002334	Spring	1
-21	7004855	Guide, Tube Assembly	1
	7004838	Tube	1
	7004839	Plunger	1
	7004856	Pin and Guide Assembly	1
	7002340	Guide	1
	Kit	Packing, Preformed, O-Ring	1
	7004857	Pin and Quad Ring Assembly	1
	7004841	Pin	1
	Kit	Quad Ring	1
	7004858	Cone and O-Ring Assembly	1
	7004822	Cone	1
	Kit	Packing, Preformed, O-Ring	1
	Kit	Packing, Preformed, O-Ring	1
-22	7002327	Nameplate	1
-23	Kit	O-Ring	1
-24	7002374	Screw, Socket Recessed	2
-25	7002319	Pin	1
-26	7002229	Ball	1
	7002330	Seat Assembly	1
-27	7004823	Seat, Ball	1
-28	Kit	O-Ring	1
	7004860	End Cap Assembly	1
-29	7004861	Cap	1
-30	7002223	Plug	1
-31	Kit	O-Ring	1
-32	7002373	Spacer	1
-33	7002379	Spring	1
	7004863	Stem Assembly	1
-34	7004864	Stem	1
-35	Kit	O-Ring	1
-36	Kit	Glyd Ring	1



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2—21		<b>PROPORTIONAL CONTROL VALVE ASSEMBLY - INLET (DUMP) SECTION (CONTINUED)</b>	Ref.
—37	7002372	Poppet	1
—38	7002370	Seat	1
—39	Kit	O-Ring	1
—40	7002360	Housing, Inlet Manifold	1
—41	Kit	O-Ring	2
—42	Kit	O-Ring	1
—43	Kit	O-Ring	1
—44	Kit	O-Ring	1
	7004833	Seal Kit (1 Per Section)	4

SECTION 2 — ILLUSTRATED PARTS LIST

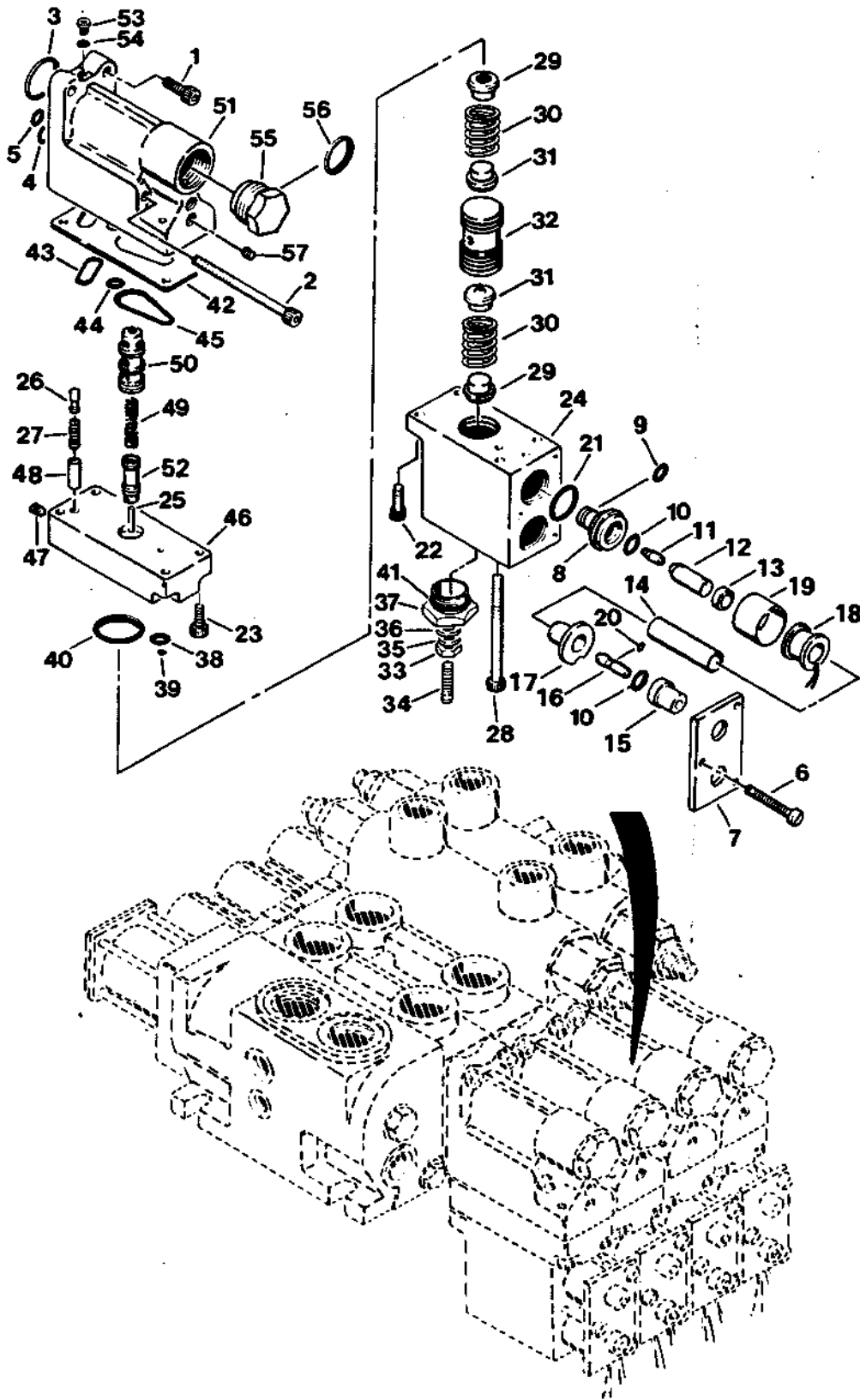


Figure 2-22. Proportional Control Valve Assembly - Servo Assembly.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2—22		<b>PROPORTIONAL CONTROL VALVE ASSEMBLY - SERVO ASSEMBLY</b>	Ref.
	7004884	Servo Assembly (Attaching Parts)	3
—1	7002231	Screw, Socket Head	2
—2	7004878	Screw, Socket Head	2
—3	Kit	O-Ring	1
—4	Kit	O-Ring	1
—5	Kit	O-Ring	1
	0100011	Loctite	A/R
	7004883	Nose Cone Assembly (Includes Items 8 thru 14) (Attaching Parts)	2
—6	7002240	Screw, Slotted	3
—7	7002218	Plate	1
—8	7002210	Nose	1
—9	Kit	O-Ring	1
—10	Kit	O-Ring	2
—11	7000423	Poppet	1
—12	7002212	Plunger	1
—13	7002216	Sleeve	1
—14	7002215	Tube	1
—15	7002214	Retainer	1
—16	7002213	Pin	2
—17	7002211	Cover	1
—18	1420003	Coil, 7.5 Volt	2
—19	7002242	Case	2
—20	Kit	O-Ring	2
—21	Kit	Packing, Preformed, O-Ring	2
—22	7002222	Screw, Socket Head (Short)	2
—23	7002228	Screw, Socket Head (Long)	2
—24	8004818	Body, Control	1
—25	7002238	Pin	1
—26	7002220	Spool	1
—27	7002241	Spring, Compression, Helical	1
—28	7002228	Screw, Socket Head	2
—29	7004880	Spring Seat and Ball	2
—30	7002237	Spring, Contour	2
—31	7004881	Spring Seat and Ball	2
—32	7002206	Control Pilot Piston	1
—33	7002224	Nut, Jam	1
—34	7004813	Screw, Cup Point	1
—35	7004812	Washer	1
—36	Kit	Seal	1
—37	7002209	Plug	1
—38	Kit	Packing, Preformed, O-Ring	1
—39	Kit	Packing, Preformed, O-Ring	1
—40	Kit	Packing, Preformed, O-Ring	1
—41	Kit	Packing, Preformed, O-Ring	1
—42	Kit	Seal Plate	1
—43	Kit	Packing, Preformed, O-Ring	1
—44	Kit	Packing, Preformed, O-Ring	1
—45	Kit	Packing, Preformed, O-Ring	1
—46	7004816	Plate, Adapter	1
—47	7004882	Screw, Socket Set	1



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-22		<b>PROPORTIONAL CONTROL VALVE ASSEMBLY - SERVO ASSEMBLY (CONTINUED)</b>	Ref.
-48	7002217	Spool Stop	1
-49	7002234	Spring, Sleeve and Spool	1
-50	7002203	Sleeve Assembly	1
-51	7004817	Body, Servo	1
-52	7002205	Spool	1
-53	7004814	Plug	1
-54	Kit	O-Ring	1
-55	7002704	Plug	1
-56	Kit	O-Ring	1
	7004808	Ramp (Shown on Working Section - Item 3)	1
	Kit	Ring (Shown on Working Section - Item 4)	2
-57	7002223	Plug	2
	7004831	Seal Kit	1

SECTION 2 — ILLUSTRATED PARTS LIST

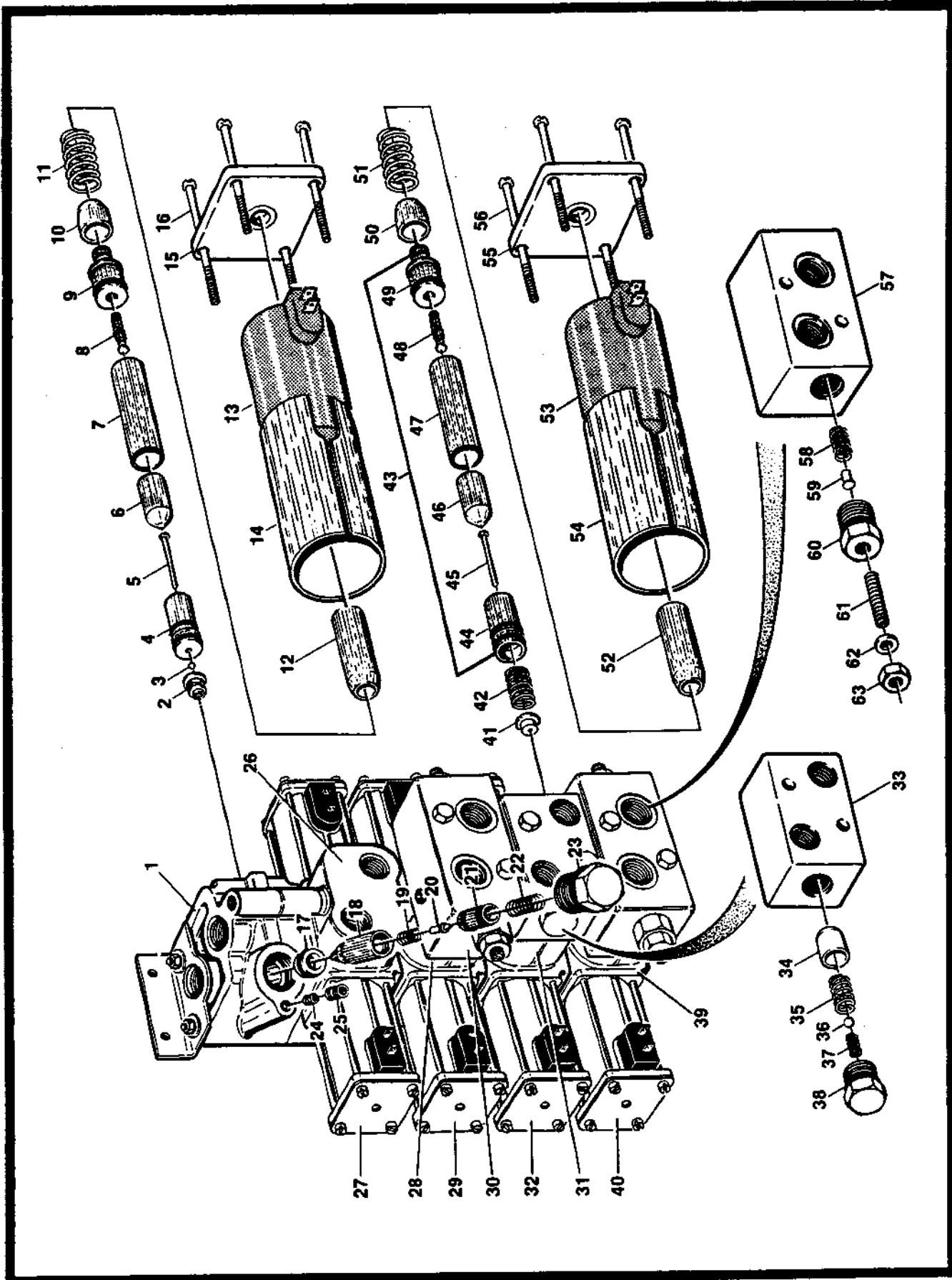


Figure 2-23. Control Valve Assembly - Racine Bang-Bang.



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-23	4640247	<b>CONTROL VALVE ASSEMBLY - 4 SECTION RACINE BANG-BANG</b>	Ref.	A
	4640246	<b>CONTROL VALVE ASSEMBLY - 3 SECTION RACINE BANG-BANG</b>	Ref.	A
-1	7002304	Dump Section - Complete	1	
		Solenoid Assembly	1	
-2	7004823	Seat	1	
		Kit	1	
-3	7002229	O-Ring	1	
		Ball	1	
		Guide Tube Assembly	1	
-4	7004822	Cone, Female	1	
		Kit	1	
		O-Ring	1	
-5	7002346	Pin, Push	1	
-6	7004839	Plunger	1	
-7	7004838	Tube, Guide	1	
-8	7004841	Pin, Push	1	
		Kit	1	
		O-Ring	1	
-9	7002340	Guide, External Push Pin	1	
		Kit	1	
		O-Ring	1	
-10	7004834	Sleeve, Inner Flux	1	
-11	7002334	Spring	1	
-12	7004835	Sleeve, Outer Flux	1	
-13	7000417	Coil	1	
-14	7004836	Case, Solenoid	1	
-15	7002338	Plate, End	1	
		7002327	Nameplate	1
-16	7004837	Screw	4	
-17	7002322	Seat	1	
		Kit	1	
		O-Ring	1	
		Main Relief (Poppet) Valve	1	
-18	7002321	Case, Poppet	1	
-19	7002328	Spring	1	
-20	7002294	Poppet	1	
-21	7002320	Seat, Adjustable	1	
		Kit	1	
		O-Ring	1	
-22	7002329	Spring	1	
-23	7002323	Plug	1	
		Kit	1	
		O-Ring	1	
-24	7002326	Orifice	1	
-25	7002324	Plug	1	
-26	7002317	Rotate Section - Complete (4 Section Only)	1	
-27	7004859	Solenoid Assembly (Refer To Items 41-56 For Serviced Parts)	2	
-28	7002315	Telescope Section - Complete	1	
-29	7004859	Solenoid Assembly (Refer To Items 41-56 For Serviced Parts)	2	
-30	7000468	Relief Valve Block Assembly (Refer To Items 58-63 For Serviced Parts)	1	
-31	7002316	Level Section - Complete	1	
-32	7004859	Solenoid Assembly (Refer To Items 41-56 For Serviced Parts)	2	
-33	7002262	Relief Valve Block Assembly	1	
-34	7002359	Poppet	2	
-35	7002356	Spring	2	
-36	7002225	Ball	2	
-37	7002358	Spring	2	
-38	7002357	Plug	2	
		Kit	2	
		O-Ring	2	



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-23	4640247	<b>CONTROL VALVE ASSEMBLY - 4 SECTION RACINE BANG-BANG (CONTINUED)</b>	Ref.
	4640246	<b>CONTROL VALVE ASSEMBLY - 3 SECTION RACINE BANG-BANG (CONTINUED)</b>	Ref.
-39	7002315	Steer Section - Complete	1
-40	7004859	Solenoid Assembly	2
-41	7002274	Washer	1
-42	7002348	Spring	1
-43	7002305	Guide Tube Assembly	1
-44	7002345	Cone, Female	1
	Kit	O-Ring	1
	Kit	O-Ring	1
-45	7002346	Pin, Push	1
-46	7002344	Plunger	1
-47	7000470	Tube, Guide	1
-48	7002341	Pin, Actuator	1
	Kit	Ring, Quad	1
-49	7002340	Guide, External Push Pin	1
	Kit	O-Ring	1
-50	7002333	Sleeve, Inner Flux	1
-51	7002334	Spring	1
-52	7002336	Sleeve, Outer Flux	1
-53	7000418	Coil	1
-54	7002335	Case, Solenoid	1
-55	7002338	Plate, End	1
	7002327	Nameplate	1
-56	7002339	Screw	4
-57	7000468	Relief Valve Block Assembly	1
-58	7002355	Spring	2
-59	7000116	Rivet	2
-60	7002350	Plug	2
	Kit	O-Ring	2
-61	7000113	Screw, Adjusting	2
-62	Kit	Seal, Thread	2
-63	7000114	Nut	2
	7000414	Seal Kit - Working Section	4
	7000413	Seal Kit - Dump Section	1
	7000439	Seal Kit - Relief Valve Block (Telescope and Steer)	2
	7000440	Seal Kit - Relief Valve Block (Level)	1

SECTION 2 — ILLUSTRATED PARTS LIST

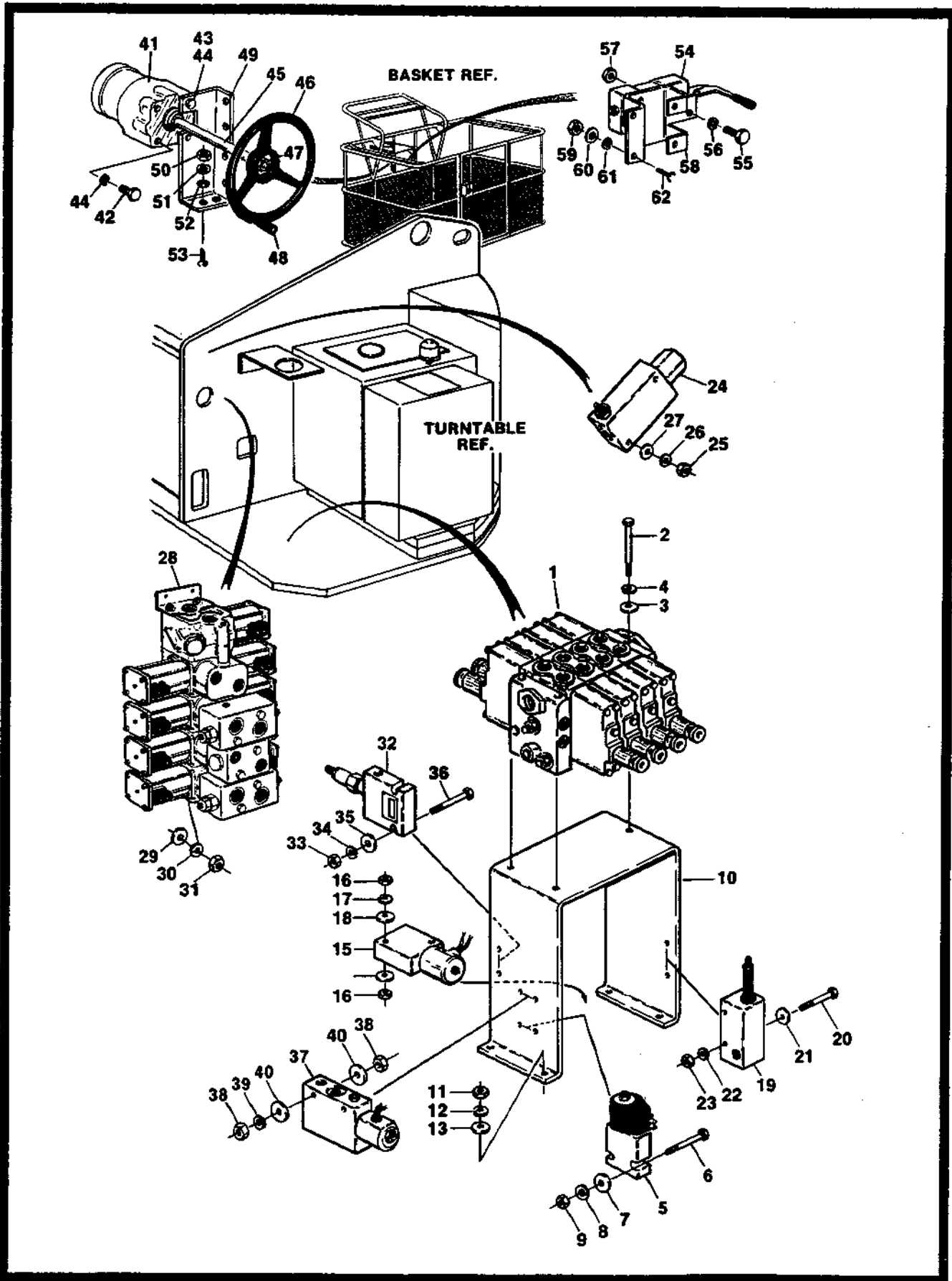


Figure 2-24. Control Valves Installation (Vickers Valves).

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	
2-24		<b>CONTROL VALVES INSTALLATION (VICKERS VALVES)</b>	Ref.	
	0237733	VALVE INSTALLATION, WITH ROTATOR, WITHOUT PROPORTIONAL TELE AND WITH STEERING WHEEL	Ref.	—
	0237732	VALVE INSTALLATION, WITH ROTATOR, WITHOUT PROPORTIONAL TELE AND WITHOUT STEERING WHEEL (GAS/DIESEL)	Ref.	A
	0238250	VALVE INSTALLATION, WITH ROTATOR, WITHOUT PROPORTIONAL TELE AND WITHOUT STEERING WHEEL (ELECTRIC)	Ref.	—
	0237731	VALVE INSTALLATION, WITHOUT ROTATOR, WITHOUT PROPORTIONAL TELE AND WITHOUT STEERING WHEEL	Ref.	—
	0237734	VALVE INSTALLATION, WITHOUT ROTATOR, WITHOUT PROPORTIONAL TELE AND WITH STEERING WHEEL	Ref.	—
	0238226	VALVE INSTALLATION, WITH ROTATOR, WITH PROPORTIONAL TELE AND WITH STEERING WHEEL	Ref.	—
	0238224	VALVE INSTALLATION, WITH ROTATOR, WITH PROPORTIONAL TELE AND WITHOUT STEERING WHEEL	Ref.	—
	0238223	VALVE INSTALLATION, WITHOUT ROTATOR, WITH PROPORTIONAL TELE AND WITHOUT STEERING WHEEL	Ref.	—
	0238225	VALVE INSTALLATION, WITHOUT ROTATOR, WITH PROPORTIONAL TELE AND WITH STEERING WHEEL	Ref.	—
—1	4640514	Control Valve Assembly - 3 Section Vickers (See Figure 2-25 For Breakdown)	1	
	4640524	Control Valve Assembly - 4 Section Vickers See Figure 2-25 For Breakdown (Attaching Parts)	1	
—2	0641708	Bolt 7/16"-14NC x 1"	3	
—3	4751700	Flatwasher 7/16"	3	
—4	4761700	Lockwasher 7/16"	3	
—5	4640513	Valve, Dump (Attaching Parts)	1	
—6	0641418	Bolt 1/4"-20NC x 2 1/4"	2	
—7	4751400	Flatwasher 1/4"	2	
—8	4761400	Lockwasher 1/4"	2	
—9	3311401	Nut 1/4"-20NC	2	
	7003640	Coil (Modular Controls)	1	
	2900503	Seal Kit (Modular Controls)	1	
—10	0901399	Bracket, Control Valve Mounting (Attaching Parts)	1	
—11	3311501	Nut 5/16"-18NC	4	
—12	4761500	Lockwasher 5/16"	4	
—13	4751500	Flatwasher 5/16"	4	
	4300038	Stud (Welded on Part)	4	
—14	Not Used			

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-24		<b>CONTROL VALVES INSTALLATION (VICKERS VALVES) (CONTINUED)</b>	Ref.
-15	4640123	Valve - 2 Speed (Mounted on T/T Floor Plate for Gas/ Diesel and on Bracket for Electric) (Attaching Parts)	1
-16	3311501	Nut 5/16"-18NC	4
-17	4761500	Lockwasher 5/16"	2
-18	4751500	Flatwasher 5/16"	2
	4300033	Stud (Welded on Part)	2
	7000558	Coil (FPS Version)	1
	7004368	Coil (Hydroforce Version)	1
-19	4640512	Valve, Sequence (Attaching Parts)	1
-20	0641522	Bolt 5/16"-18NC x 2 3/4"	2
-21	4751500	Flatwasher 5/16"	2
-22	4761500	Lockwasher 5/16"	2
-23	3311501	Nut 5/16"-18NC	2
-24	4640151	Divider, Flow (With Steering Wheel) (Attaching Parts)	1
-25	3311501	Nut 5/16"-18NC	2
-26	4761500	Lockwasher 5/16"	2
-27	4751500	Flatwasher 5/16"	2
	4300033	Stud (Welded On Part)	2
-28	4640461	Control Valve Assembly - Single Section Racine	1
	7002254	Complete Relief Inlet Section	1
	7002257	Complete Working Section (Level)	1
	7000418	Coil - 12 VDC (2 Per Section)	2
	4640447	Control Valve Assembly - 2 Section Racine	1
	7002254	Complete Relief Inlet Section	1
	7000446	Complete Working Section (Telescope)	1
	7002257	Complete Working Section (Level)	1
	7000418	Coil - 12 VDC (2 Per Section)	4
	7002265	Stacking Kit	1
	4640246	Control Valve Assembly - 3 Section Racine (See Figure 2-23 For Breakdown)	1
	4640247	Control Valve Assembly - 4 Section Racine (See Figure 2-23 For Breakdown) (Attaching Parts)	1
-29	3311501	Nut 5/16"-18NC	4
-30	4761500	Lockwasher 5/16"	4
-31	4751500	Flatwasher 5/16"	4
	4300038	Stud (Welded On Part)	4
-32	4640522	Valve, Pressure Reducing (Attaching Parts)	1
-33	3311401	Nut 1/4"-20NC	2
-34	4761400	Lockwasher 1/4"	2
-35	4751400	Flatwasher 1/4"	2
-36	0641418	Bolt 1/4"-20NC x 2 1/4"	2
-37	4640360	Valve, Combination (Mounted on T/T Side Plate or on Valve Bracket Item 10 for Gas/Diesel and on Motor Side for Electric Machines) (Qty 2 Required with Steering Wheel Option) (Attaching Parts)	1

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-24		<b>CONTROL VALVES INSTALLATION (VICKERS VALVES) (CONTINUED)</b>	Ref.
-38	3311501	Nut 5/16"-18NC	4
-39	4761500	Lockwasher 5/16"	2
-40	4751500	Flatwasher 5/16"	4
	4300033	Stud (Welded On Part)	2
	7004368	Coil (Hydroforce Version)	1
	7009745	Coil (Modular Control Version)	1
-41	4640408	Valve, Steer (Attaching Parts)	1
-42	0641606	Bolt 3/8"-16NC x 3/4"	2
-43	0641609	Bolt 3/8"-16NC x 1 1/8"	2
-44	4761600	Lockwasher 3/8"	4
-45	1460005	Column, Steering	1
-46	4860097	Wheel, Steering (Attaching Parts)	1
-47	3300073	Nut, Special	1
-48	2560066	Handle, Steering Wheel (Attaching Parts)	1
	3900060	Bolt, Shoulder	1
	0100011	Loctite	A/R
-49	0901255	Bracket, Steering Valve (Attaching Parts)	1
-50	3311401	Nut 1/4"-20NC	5
-51	4761400	Lockwasher 1/4"	5
-52	4751400	Flatwasher 1/4"	5
-53	4300031	Stud (Welded On Part)	5
-54	4640434	Valve, Rotator (With Steering Wheel and Rotating Platform) (Attaching Parts)	1
-55	0641416	Bolt 1/4"-20NC x 2"	2
-56	4761400	Lockwasher 1/4"	2
-57	3311401	Nut 1/4"-20NC	2
-58	0901201	Bracket, Rotator Valve (Attaching Parts)	1
-59	3311401	Nut 1/4"-20NC	4
-60	4761400	Lockwasher 1/4"	4
-61	4751400	Flatwasher 1/4"	4
-62	4300031	Stud (Welded On Part)	4

SECTION 2 — ILLUSTRATED PARTS LIST

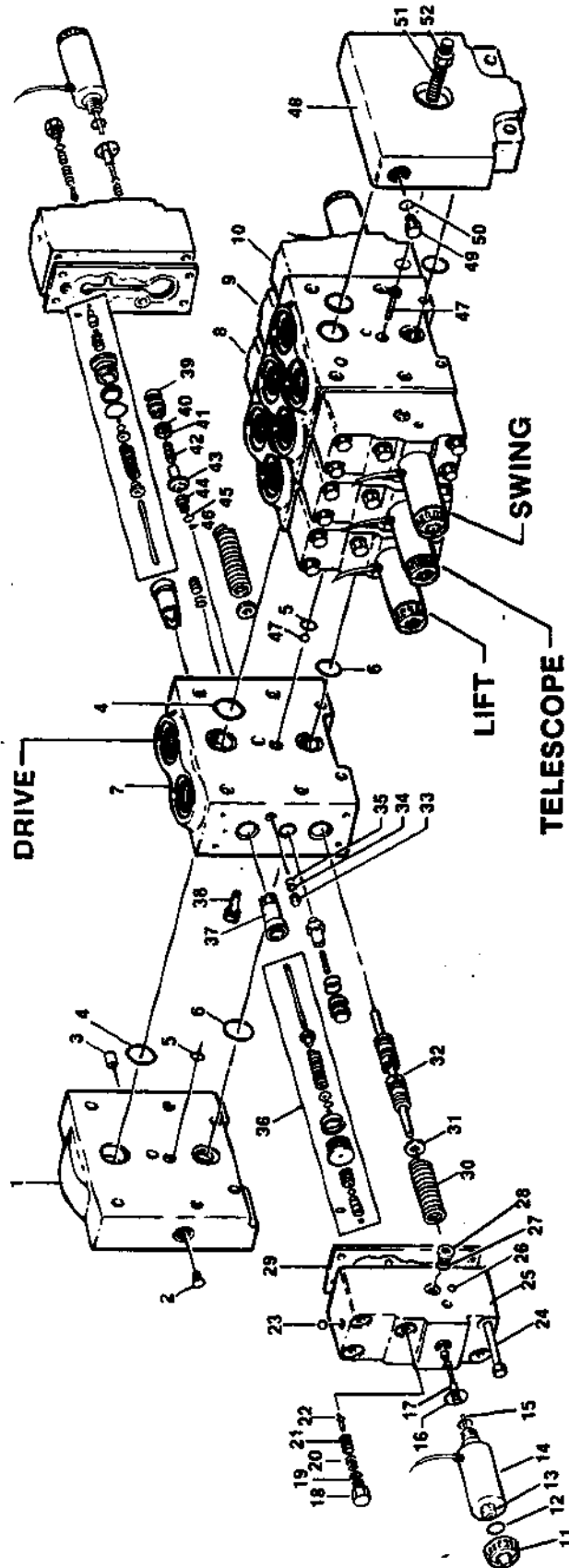


Figure 2-25. Control Valve Assembly - Vickers.



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2—25	4640524	<b>CONTROL VALVE ASSEMBLY (VICKERS 4 SECTION)</b>	Ref. —
	4640514	<b>CONTROL VALVE ASSEMBLY (VICKERS 3 SECTION)</b>	Ref. —
—1	7006747	Inlet Body	1
—2	7006725	Setscrew	1
—3	7006733	Plug	1
—4	Kit	O-Ring	5
—5	Kit	O-Ring	5
—6	Kit	O-Ring	5
—7	7009350	Working Section - Complete (Drive) (4 Section)	1
	7006760	Working Section - Complete (Drive) (3 Section)	1
—8	7006762	Working Section - Complete (Lift)	1
—9	7009351	Working Section - Complete (Telescope) (4 Section Only)	1
—10	7006763	Working Section - Complete (Swing)	1
—11	7009317	Nut, Retaining	2
—12	Kit	O-Ring	2
—13	7009318	Core Tube (Includes O-Ring)	2
—14	7009315	Coil and Frame (Round)	2
	7009360	Adaptor Kit (Required if changing from square coils to round coils. Square coils no longer available)	2
—15	7009319	Pin	2
—16	Kit	O-Ring	2
—17	7006744	Spool	2
—18	7006726	Plug, Torque	2
—19	Kit	O-Ring	2
—20	7006728	Shim Kit	2
—21	7006729	Spring	2
—22	7006730	Poppet	2
—23	7006731	Ball	2
—24	7006745	Screw	8
—25		Cap, End (Not Sold Separately)	2
—26	7006746	Ball	2
—27	Kit	O-Ring	2
—28	7009323	Plug	2
—29	Kit	Gasket	2
—30	7009324	Spring	2
—31	7009325	Retainer	2
—32		Spool (Not Sold Separately)	2
—33	7006757	Seat	2
—34	Kit	Ring, Back Ring	2
—35	Kit	O-Ring	2
—36	7006732	Servo Stem Assembly	2
—37	7006737	Poppet	2
—38	7009321	Retainer	2
—39	7006752	Retainer	2
—40	Kit	Ring, Back-Up	2
—41	Kit	O-Ring	2
—42	7006773	Spring	2
—43	7006756	Poppet	2
—44	7006771	Plug, Torque	2
—45	Kit	O-Ring	2
—46	7006761	Ball	2
—47	7006761	Ball - Drive Tele. and Lift (2) Per Section	2
		Swing Section (1)	
	7006777	Pin (Swing Section)	2
—48	7006780	Cover End	1
—49	7006778	Plug, Torque	1
—50	Kit	O-Ring	1

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**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-25		<b>CONTROL VALVE ASSEMBLY (VICKERS) (CONTINUED)</b>	Ref.
—51	7009329	Rod, Tie (4 Section)	3
	7009361	Tie Rod Kit (3 Section) (Includes Item 52)	1
—52	7006782	Nut	6
	7009330	Seal Kit (Includes Items 4,5,6,12,16,27,34,35,40,41 45,50 and Servo Stem O-Rings)	3

SECTION 2 — ILLUSTRATED PARTS LIST

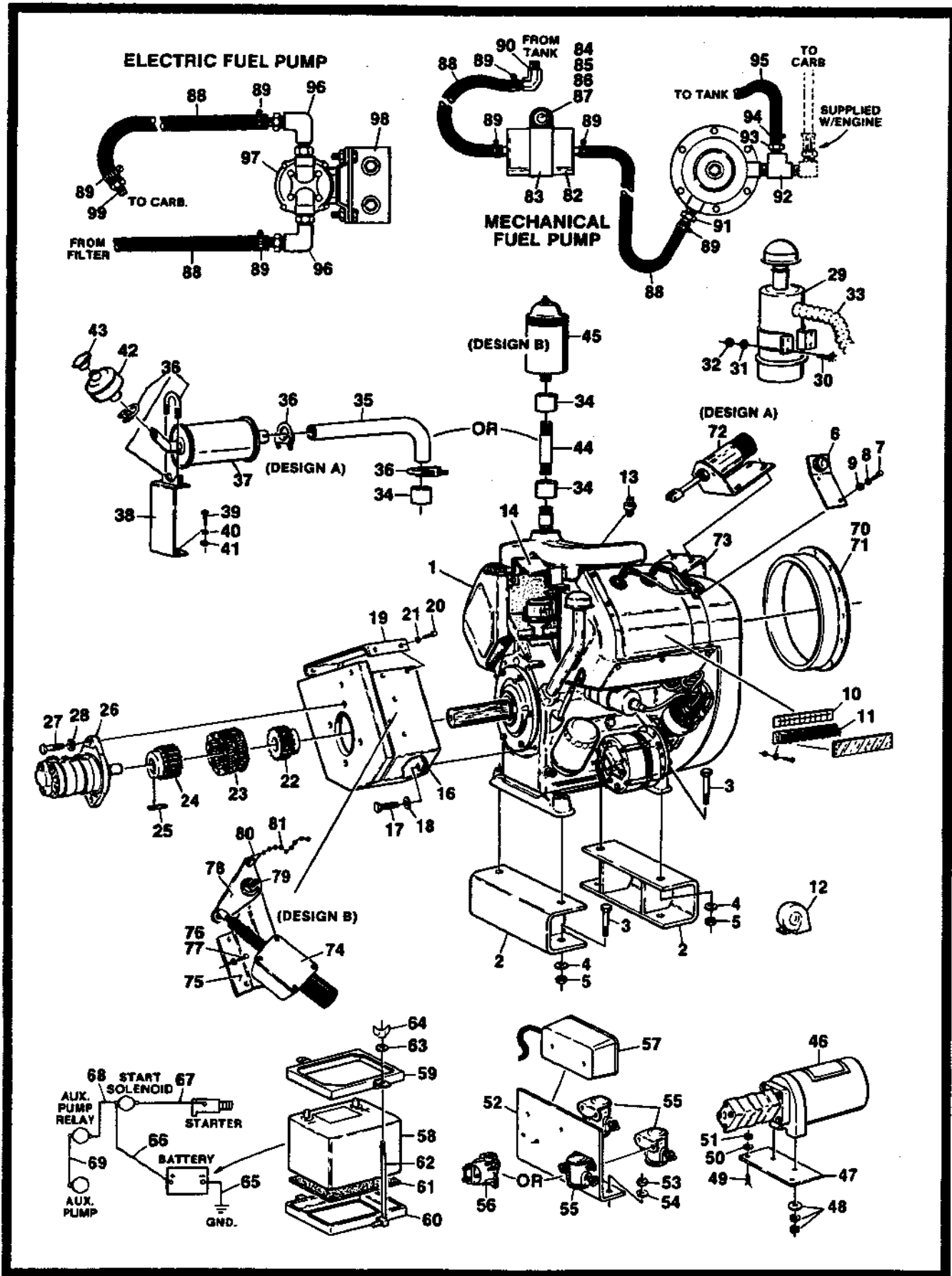


Figure 2-26. Engine Components, Assemblies and Installations - Wisconsin VH4D Gas.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2—26		<b>ENGINE COMPONENTS, ASSEMBLIES AND INSTALLATIONS - WISCONSIN VH4D GAS</b>	Ref.	
	0236178	ENGINE ASSEMBLY AND INSTALLATION - STANDARD GAS (RACINE VALVES)	Ref.	N
	0237895	ENGINE ASSEMBLY AND INSTALLATION - STANDARD GAS (VICKERS VALVES)	Ref.	E
	0236182	ENGINE ASSEMBLY AND INSTALLATION - VAPOR WITHDRAWAL DUAL FUEL - RACINE VALVES)	Ref.	L
	0237899	ENGINE ASSEMBLY AND INSTALLATION - VAPOR WITHDRAWAL DUAL FUEL (VICKERS VALVES)	Ref.	F
	0238307	ENGINE ASSEMBLY AND INSTALLATION - VAPOR WITHDRAWAL DUAL FUEL (VICKERS VALVES WITH PISTON PUMP)	Ref.	C
	0236671	ENGINE ASSEMBLY AND INSTALLATION - LIQUID WITHDRAWAL DUAL FUEL (RACINE VALVES)	Ref.	C
	0237901	ENGINE ASSEMBLY AND INSTALLATION - LIQUID WITHDRAWAL DUAL FUEL (VICKERS VALVES)	Ref.	E
	0236184	ENGINE ASSEMBLY AND INSTALLATION - LP GAS (RACINE VALVES)	Ref.	I
	0237897	ENGINE ASSEMBLY AND INSTALLATION - LP GAS (VICKERS VALVES)	Ref.	E
—1	2000024	Engine, Wisconsin VH4D (Standard and Dual Fuel)	1	
	2000043	Engine, Wisconsin VH4D (LP) (Attaching Parts)	1	
—2	4841899	Channel	2	
—3	0641820	Bolt 1/2"-13NC x 2 1/2"	4	
	0641822	Bolt 1/2"-13NC x 2 3/4"	4	
—4	4751800	Flatwasher 1/2"	8	
—5	3311805	Locknut 1/2"-13NC	8	
—6	0900047	Bracket, Ammeter (When Equipped) (Attaching Parts)	1	
—7	0641406	Bolt 1/4"-20NC x 3/4"	2	
—8	4761400	Lockwasher 1/4"	2	
—9	4751400	Flatwasher 1/4"	2	
	2420006	Ammeter (Supplied With Engine)	1	
—10	1700820	Decal - Terminal Strip (Vickers Machines Only)	1	
—11	4460277	Strip, Terminal (Vickers Machines Only) (Attaching Parts)	1	
	3910812	Screw, Round Head #8-32NC x 3/4"	2	
	4770800	Starwasher #8	2	
	3300233	Nut, Special	2	
—12	1670414	Cover	1	
	0140001	Horn (Location May Vary) (Attaching Parts)	1	
	4751400	Flatwasher 1/4"	4	
	4761400	Lockwasher 1/4"	4	
	3311401	Nut 1/4"-20NC	4	
—13	4360067	Switch, Vacuum (When Equipped)	1	
—14	4060558	Heat Shield (Attaching Parts)	1	
	3941406	Screw, Self-Tapper 1/4"-20NC x 3/4"	1	
	0641406	Bolt 1/4"-20NC x 3/4"	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-26		<b>ENGINE COMPONENTS ASSEMBLIES AND INSTALLATIONS (CONTINUED)</b>	Ref.
	4761400	Lockwasher 1/4"	1
	4751400	Flatwasher 1/4"	1
-15	Not Used		
-16	0080064	Adapter, Pump (Attaching Parts)	1
-17	0641710	Bolt 7/16"-14NC x 1 1/4"	4
-18	4761700	Lockwasher 7/16"	4
-19	4060474	Shield, Adapter (Attaching Parts)	1
-20	0641406	Bolt 1/4"-20NC x 3/4"	4
-21	4761400	Lockwasher 1/4"	4
-22	1660063	Coupling - Half	1
-23	1260025	Chain	1
-24	1660062	Coupling - Half (Attaching Parts)	1
-25	2880614	Keystock	1
-26	3600078	Pump Assembly - Gear (See Figure 2-32 for Breakdown)	1
	3600126	Pump Assembly - Piston (See Figure 2-33 for Breakdown) (Attaching Parts)	1
-27	0641810	Bolt 1/2"-13NC x 1 1/4"	2
-28	4761800	Lockwasher 1/2"	2
-29		Air Cleaner (Supplied With Engine) (Attaching Parts)	1
-30	4300031	Stud (Welded On Part)	4
-31	4761400	Lockwasher 1/4"	4
-32	3311401	Nut 1/4"-20NC	4
-33	2720158	Hose (2 Section Boom)	1
	2720048	Hose (3 Section Boom) (Not Shown)	1
	4561818	Tube (3 Section Boom) (Not Shown)	1
	1320031	Clamp (3 Section Boom) (Not Shown)	3
	2420047	Indicator, Service (Optional - Not Shown)	1
-34	2200267	Coupling (Design A)	1
	2200267	Coupling (Design B)	2
-35	4562575	Tube Exhaust (Design A)	1
-36	1320019	Clamp (Design A)	4
-37	3220012	Muffler (Design A)	1
-38	0901147	Bracket, Muffler (Design A) (Attaching Parts)	1
-39	0641408	Bolt 1/4"-20NC x 1"	2
-40	4751400	Flatwasher 1/4"	2
-41	3311401	Nut 1/4"-20NS	2
-42	3220036	Spark Arrestor (Optional) (Design A)	1
-43	1120067	Rain Cap (Design A Without Spark Arrestor)	1
-44	2180644	Nipple, Fitting (2 1/2" Length)	1
	2180412	Nipple, Fitting (4 1/2" Length)	1
-45	3220050	Muffler	1
	1120169	Rain Cap (Design A With Spark Arrestor)	1

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2—26		<b>ENGINE COMPONENTS ASSEMBLIES AND INSTALLATIONS (CONTINUED)</b>	Ref.
—46	3600141	Auxiliary Pump Assembly (Use In Place of Stone Industries Models DC00164B and DC00164C) (Recommend Selling complete Pump as Parts Are Not Interchangable Between Old and New Pump Assemblies)	1
	3600050	Auxiliary Pump Assembly (Stone Industries Model DB00108B and John Barnes Model 1210402)	1
	7004414	Pump (Stone)	1
	7010923	Pump (Barnes)	1
	7004412	Coupling (Stone)	1
	7004249	Coupling (Barnes)	1
	7000482	Motor (Stone)	1
	7004248	Motor (Barnes)	1
	3600052	Auxiliary Pump Assembly (Stone Industries Model DB00119B)	1
	7004416	Pump	1
	7004412	Coupling	1
	7000483	Motor (Includes Coupling) (Attaching Parts)	1
—47	3505609	Plate, Mounting (Required When Mounted on Counterweight Only)	1
—48	0641618	Bolt 3/8"-16NC x 2 1/4"	2
	4761600	Lockwasher 3/8"	2
	4711600	Flatwasher 3/8"	2
—49	4300038	Stud (Welded On Part)	2
—50	4761500	Lockwasher 5/16"	2
—51	3311501	Nut 5/16"-16NC	2
-----			
<p><b>Note: For Machines Without Electric Panel Assembly (Before 1986) Refer to Electric Panel Assembly for serviced solenoid relays.</b></p>			
—52	0237297	Electric Panel Assembly (Racine Valves)	1
	0237874	Electric Panel Assembly (Vickers Valves) (Not Shown) (Attaching Parts)	1
—53	3311401	Nut 1/4"-20NC	2
—54	4761400	Lockwasher 1/4"	2
	4300031	Stud (Welded On Part)	2
-----			
	3530425	Plate, Mounting	1
—55	3740002	Solenoid (Racine Valves)	3
—56	3740067	Solenoid (Vickers Valves)	2
—57	0060021	Module, Actuator (Adeco)	1
—58	0400003	Battery	1
—59	0400002	Battery Hold-down	1
—60	0860003	Battery Box (Welded On Part)	1
—61	3980006	Battery Seat (Attaching Parts)	1
—62	0630003	Bolt, Hold-down	2
—63	4751600	Flatwasher 3/8"	2
—64	3300029	Nut, Wing 3/8"-16NC	2
-----			
—65	1060146	Cable, Battery (Negative Terminal to Ground)	1
—66	1060270	Cable, Battery (Positive Terminal to Start Solenoid)	1
—67	0400008	Cable Battery (Start Solenoid to Starter)	1
—68	1060221	Cable, Battery (Start Solenoid to Aux. Pump Relay)	1

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-26		<b>ENGINE COMPONENTS ASSEMBLIES AND INSTALLATIONS (CONTINUED)</b>	Ref.
-69	0400008	Cable, Battery - 28" Length (Aux. Relay to Aux. Pump)	1
	1060093	Cable, Battery - 18" Length (Aux. Relay to Aux. Pump)	1
-70	4842028	Shroud, Cooling	1
-71	4280180	Strip, Shroud	1
		(Attaching Parts)	
	3820001	Rivet	6
	4750600	Flatwasher #6	6
-72	3740048	Solenoid, Throttle Control (Design A)	1
	1360061	Yoke, Clevis	1
-73	0230445	Bracket, Hi-Engine (Design A)	1
		-----	
	0236992	Throttle Installation (Single Speed) (Design B)	1
	0237687	Throttle Installation (Two Speed) (Design B)	1
-74	0060020	Actuator (Single Speed)	1
	0060024	Actuator (Two Speed)	1
-75	4842288	Bracket	1
		(Attaching Parts)	
-76	0641406	Bolt 1/4"-20NC x 3/4"	3
-77	4761400	Lockwasher 1/4"	3
		-----	
-78	0200291	Arm	1
		(Attaching Parts)	
-79	3311605	Locknut 3/8"-16NC	1
	4751700	Flatwasher 7/16"	2
		-----	
-80	1260082	Chain	1 ft.
		(Attaching Parts)	
-81	1660083	Coupling	2
	3430304	Pin, Clevis	1
	3450203	Pin, Cotter	1
		-----	
-82	2120042	Filter, In-Line	1
		(Attaching Parts)	
-83	1320131	Clamp	1
-84	0641406	Bolt 1/4"-20NC x 3/4"	1
-85	4751400	Flatwasher 1/4"	1
-86	4761400	Lockwasher 1/4"	1
-87	3311401	Nut 1/4"-20NC	1
		-----	
-88	2720015	Hose (Supply)	A/R
-89	1320022	Clamp	2
-90	2220296	Fitting, 90° Barbed	1
-91	2220315	Fitting, Straight Barbed (With Mechanical Fuel Pump)	1
	2220063	Fitting, 90° (When Equipped)	1
-92	2180360	Fitting, Tee (When Equipped With Return Line and Mechanical Fuel Pump)	1
-93	2220296	Fitting, 90° Barbed (When Equipped With Return Line and Mechanical Fuel Pump)	2
-94	1320022	Clamp (When Equipped With Return Line)	2
-95	2720015	Hose (When Equipped With Return Line)	100 in.
-96	2220296	Fitting, 90° Barbed (When Equipped With Electric Fuel Pump)	2
-97	3600094	Pump, Fuel - Electric (Facet Version) (When Equipped)	1
	3600151	Pump, Fuel - Electric (Stewart - Warner Version) (When Equipped)	1

A



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-26		<b>ENGINE COMPONENTS ASSEMBLIES AND INSTALLATIONS (CONTINUED)</b>	Ref.
		(Attaching Parts)	
	0641408	Bolt 1/4"-20NC x 1"	2
	0641405	Bolt 1/4"-20NC x 5/8"	4
	4761400	Lockwasher 1/4"	4
	3311401	Nut 1/4"-20NC	4
		-----	
	-98	0901607	
		Bracket, Mounting - Fuel Pump	1
		(Attaching Parts)	
	3311401	Nut 1/4"-20NC	2
	4761400	Lockwasher 1/4"	2
	4751400	Flatwasher 1/4"	2
	4300031	Stud (Welded On Part)	2
		-----	
	-99	2220315	
		Fitting, Straight Barbed	1
	2580001	Heater, Battery (Optional - Not Shown)	1
	2580005	Element, Heater - Crankcase (Optional - Not Shown)	1
	1600022	Controller, Thermostat - Crankcase (Optional - Not Shown)	1

SECTION 2 — ILLUSTRATED PARTS LIST

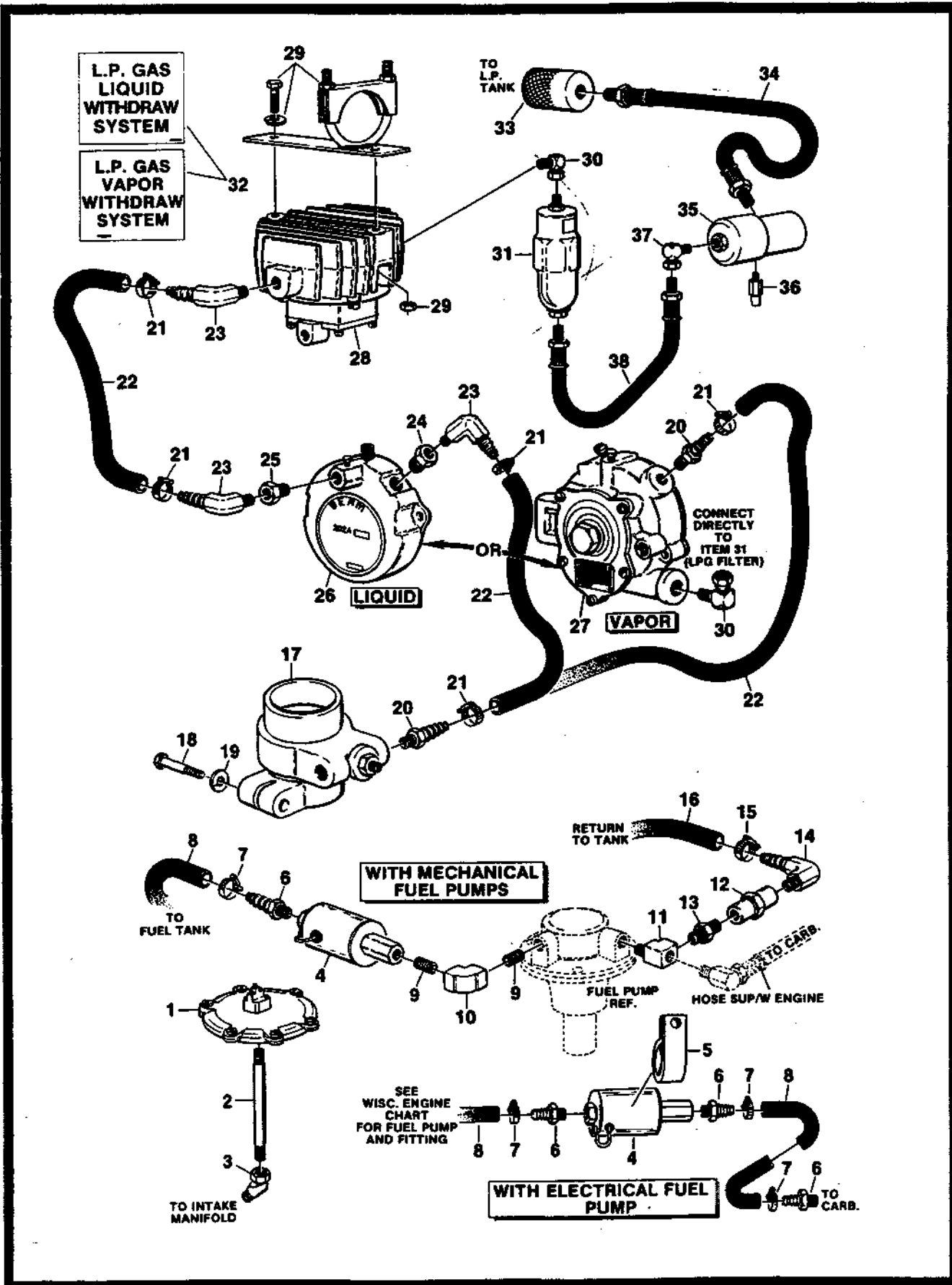


Figure 2-27. Dual Fuel and LPG Components Installation - Wisconsin.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-27		<b>DUAL FUEL AND LPG COMPONENTS INSTALLATION</b>	Ref.
		<b>-WISCONSIN</b>	
-1	4360188	Switch, Vacuum	1
-2	3460132	Fitting, Nipple	1
-3	2220124	Fitting	1
-4	4640391	Fuel-Lock, Gasoline (Attaching Parts)	1
-5	1320060	Clamp (When Equipped With Electric Fuel Pump Only)	1
	0641406	Bolt 1/4"-20NC x 3/4"	1
	4751400	Flatwasher 1/4"	1
	4761400	Lockwasher 1/4"	1
	3311401	Nut 1/4"-20NC	1
-6	2220315	Fitting, Straight Barbed	3
-7	1320022	Clamp	2
-8	2720015	Hose (Supply)	A/R
-9	2180537	Fitting, Nipple (When Equipped With Mechanical Fuel Pump)	2
-10	2220318	Fitting, 90° (When Equipped With Mechanical Fuel Pump)	1
-11	2180360	Fitting, Tee (When Equipped With Mechanical Fuel Pump)	1
-12	4640444	Valve, Check (When Equipped With Mechanical Fuel Pump and RETURN Line)	1
-13	2220261	Fitting, Coupling (When Equipped With Mechanical Fuel Pump and Return Line)	1
-14	2220296	Fitting, 90° Barbed (When Equipped With Mechanical Fuel Pump and Return Line)	2
-15	1320022	Clamp (When Equipped With Mechanical Fuel Pump and Return Line)	2
-16	2720015	Hose (Return) (When Equipped With Mechanical Fuel Pump and Return Line)	A/R
-17	0080103	Adapter, Carburetor (Attaching Parts)	1
-18	0641408	Bolt 1/4"-20NC x 1"	1
-19	4761400	Lockwasher 1/4"	1
-20	2180535	Fitting (Vapor Withdrawal Requires Qty. 2)	1
-21	1320022	Clamp	4
-22	2720112	Hose	A/R
-23	2220675	Fitting, 90° (Liquid Withdrawal Only)	3
-24	2220269	Fitting, Reducer (Liquid Withdrawal Only)	1
-25	2220257	Fitting, Reducer (Liquid Withdrawal Only)	1
-26	3720014	Regulator (Liquid Withdrawal)	1
	0901268	Bracket (Liquid Withdrawal)	1
-27	3720012	Regulator (Vapor Withdrawal)	1
	0900919	Bracket (Vapor Withdrawal)	1
-28	4700006	Vaporizer (Liquid Withdrawal Only) (Attaching Parts)	1
-29	0901267	Bracket, Mounting - Vaporizer (Liquid Withdrawal Only)	1
	0641414	Bolt 1/4"-20NC x 1 3/4"	4
	4761400	Lockwasher 1/4"	4
	3311401	Nut 1/4"-20NC	4
-30	2220064	Fitting, Swivel	2
-31	2120077	Filter, LPG	1
-32	1700819	Decal (Vapor Withdrawal)	1
	1700818	Decal (Liquid Withdrawal)	1



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-27		<b>DUAL FUEL AND LPG COMPONENTS INSTALLATION -WISCONSIN (CONTINUED)</b>	Ref.
	0238916 0236410	<b>LP TANK LINES INSTALLATION LP TANK LINES INSTALLATION</b>	Ref. Ref.
-33	2180387	Fitting, Tank	1
-34	2720104	Hose - 36" Length	1
	2720117	Hose - 24" Length	2
-35	2180388	Fitting, Bulkhead	1
-36	2180389	Valve, Relief	1
-37	2180125	Fitting, 90°	1
-38	2720249	Hose	1

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SECTION 2 — ILLUSTRATED PARTS LIST

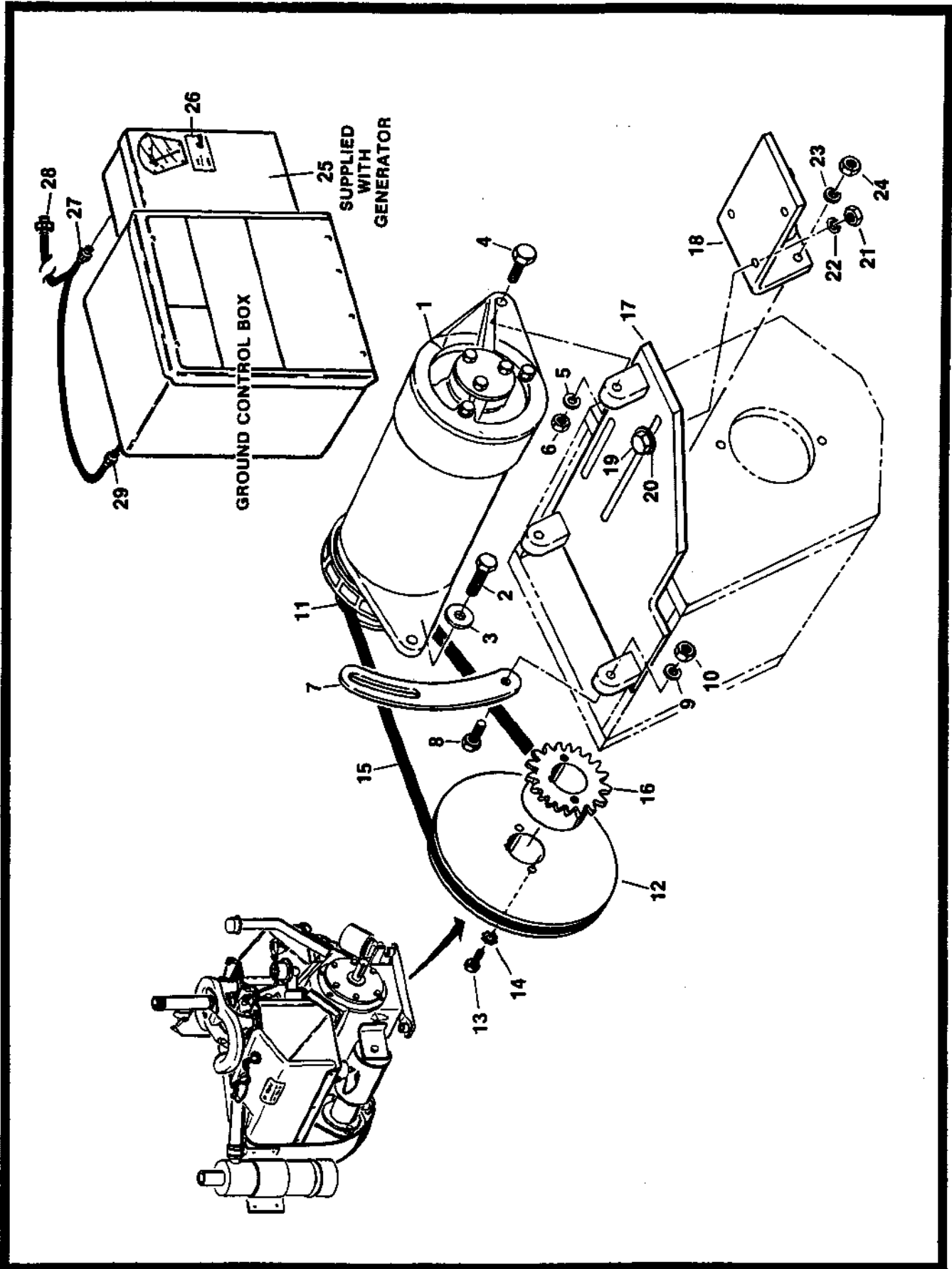


Figure 2-28. 110 Volt Generator Installation - Wisconsin.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-28	0236329	<b>110 VOLT GENERATOR INSTALLATION -WISCONSIN (RACINE VALVES)</b>	Ref.	E
	0238893	<b>110 VOLT GENERATOR INSTALLATION -WISCONSIN (VICKERS VALVES)</b>	Ref.	B
-1	2460011	Generator (Attaching Parts)	1	
-2	0641508	Bolt 5/16"-18NC x 1"	1	
-3	4751500	Flatwasher 5/16"	1	
-4	0641512	Bolt 5/16"-18NC x 1 1/2"	2	
-5	4761500	Lockwasher 5/16"	2	
-6	3311501	Nut 5/16"-18NC	2	
-7	0901037	Adjusting Bracket (Attaching Parts)	1	
-8	0641510	Bolt 5/16"-18NC x 1 1/4"	1	
-9	4761500	Lockwasher 5/16"	1	
-10	3311501	Nut 5/16"-18NC	1	
-11	3580072	Pulley	1	
	1440217	Collar (Not Shown)	1	
	2860012	Key, Woodruff (Not Shown)	1	
	0100011	Loctite #242	A/R	
-12	3580077	Pulley (Attaching Parts)	1	
-13	0641412	Bolt 1/4"-20NC x 1 1/2"	2	
-14	4771400	Starwasher 1/4"	2	
-15	0480035	V-Belt	1	
-16	1660089	Coupling	1	
-17	0235776	Bracket	1	
-18	0235777	Bracket (Attaching Parts)	1	
-19	0641410	Bolt 1/4"-20NC x 1 1/4"	3	
-20	4751400	Flatwasher 1/4"	3	
-21	3311401	Nut 1/4"-20NC	3	
-22	4761400	Lockwasher 1/4"	3	
-23	0641612	Bolt 3/8"-16NC x 1 1/2" (Not Shown)	2	
-24	4761600	Lockwasher 3/8"	2	
-24	3311601	Nut 3/8"-16NC	2	
-25		Box, Electrical (Supplid With Engine) (Attaching Parts)	1	
	4300062	Stud (Welded On Part)	2	
	4751400	Flatwasher 1/4"	4	
	4761400	Lockwasher 1/4"	2	
	3311401	Nut 1/4"-20NC	2	
-26	3251476	Nameplate	1	
-27	4460023	Connector	1	
-28	4460134	Connector	1	
	1060012	Cable, Control	1	
-29	4460071	Connector	1	
	3300048	Locknut, Conduit	1	
	0960238	Bushing	1	

SECTION 2 — ILLUSTRATED PARTS LIST

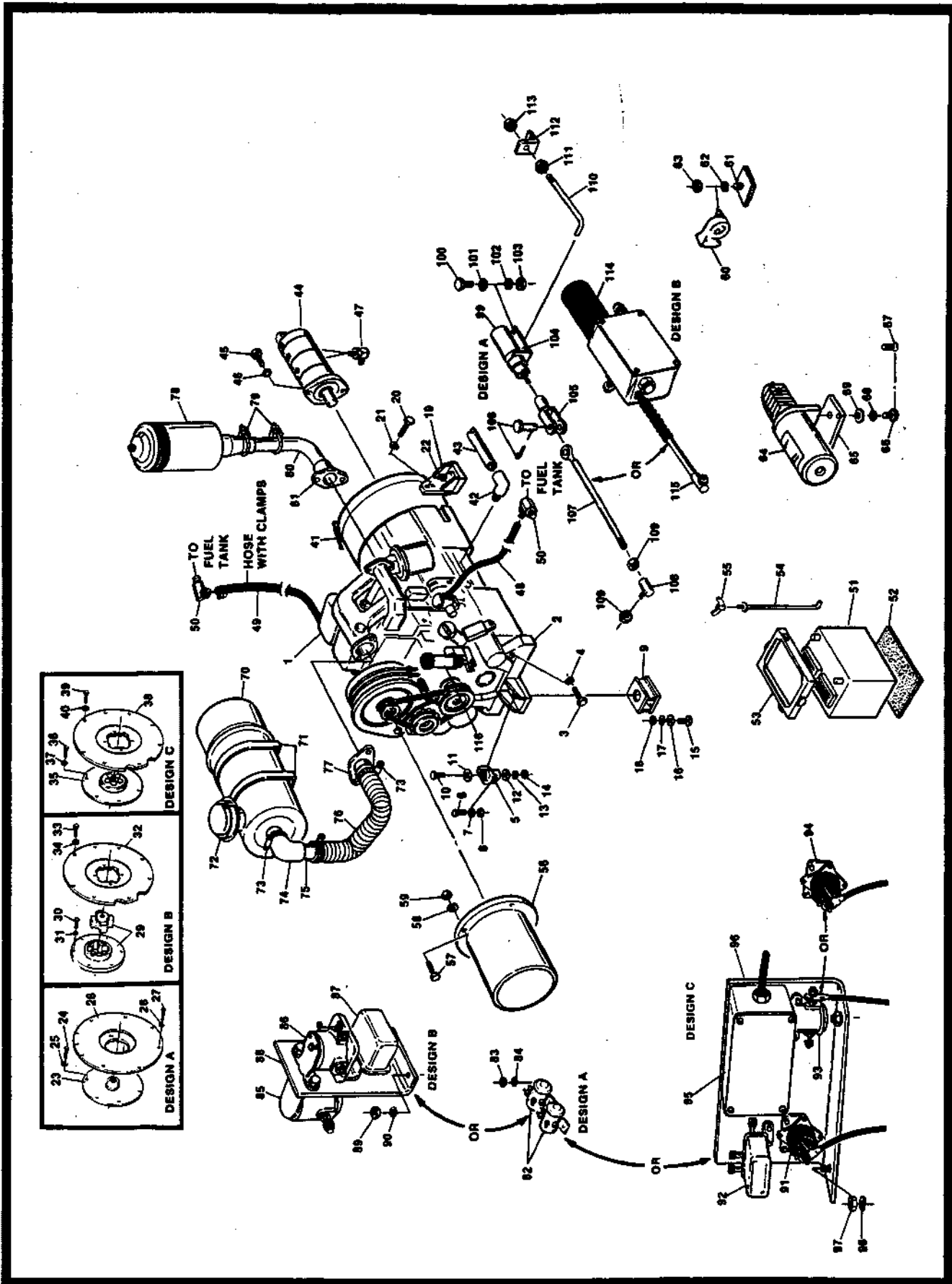


Figure 2-29. Engine Components, Assemblies and Installations - Deutz F2L511.



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-29		<b>ENGINE COMPONENTS, ASSEMBLIES AND INSTALLATIONS - DEUTZ F2L511</b>	Ref.	
	0236409	<b>ENGINE INSTALLATION - DEUTZ F2L511D (RACINE VALVES)</b>	Ref.	G
	0237914	<b>ENGINE INSTALLATION - DEUTZ F2L511D (VICKERS VALVES)</b>	Ref.	C
	0236480	<b>ENGINE INSTALLATION - DEUTZ F2L511W (RACINE VALVES)</b>	Ref.	E
	0237916	<b>ENGINE INSTALLATION - DEUTZ F2L511W (VICKERS VALVES)</b>	Ref.	D
-1	2000054	Engine, Deutz Diesel F2L511D	1	
	2000058	Engine, Deutz Diesel F2L511W	1	
-2	4841965	Mount, Front Engine (Attaching Parts)	1	
-3	0701420	Bolt 14MM x 60MM	2	
-4	4740191	Lockwasher, Metric 14MM	2	
-5	3200201	Mount, Engine (Attaching Parts)	1	
-6	0641610	Bolt 3/8"-16NC x 1 1/4"	2	
-7	4761600	Lockwasher 3/8"	2	
-8	3311601	Nut 3/8"-16NC	2	
-9	3410003	Pedestal, Engine Mount (Attaching Parts)	1	
-10	0641832	Bolt 1/2"-13NC x 4"	1	
-11	4740274	Shim, Washer	A/R	
-12	4751800	Flatwasher 1/2"	1	
	4070524	Shim, Mounting (Not Shown)	A/R	
-13	4761800	Lockwasher 1/2"	1	
-14	3311801	Nut 1/2"-13NC	1	
-15	0641622	Bolt 3/8"-16NC x 2 3/4"	4	
-16	4751600	Flatwasher 3/8"	4	
-17	4761600	Lockwasher 3/8"	4	
-18	3311601	Nut 3/8"-16NC	4	
-19	4841970	Engine Mount (Left Rear - Shown)	1	
	4841966	Engine Mount (Right Rear - Not Shown) (Attaching Parts)	1	
-20	0711014	Bolt 10MM x 30MM	2	
-21	4740116	Lockwasher, Metric 10MM	2	
-22	3200202	Mount, Rear Engine (Attaching Parts)	2	
	0641610	Bolt 3/8"-16NC x 1 1/4"	2	
	4761600	Lockwasher 3/8"	2	
	3311601	Nut 3/8"-16NC	2	
	0641724	Bolt 7/16"-14NC x 3"	1	
	4740273	Shim Washer	1	
	4751700	Flatwasher 7/16"	1	
	4761700	Lockwasher 7/16"	1	
	3311701	Nut 7/16"-14NC	1	
-23	1760075	Disc, Pump Drive (Design A) (Attaching Parts)	1	
-24	0630136	Bolt, Metric 8MM x 20MM	6	
-25	4740118	Lockwasher, Metric 8MM	6	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-29		<b>ENGINE COMPONENTS, ASSEMBLIES AND INSTALLATIONS - DEUTZ F2L511 (CONTINUED)</b>	Ref.
-26	0080031	Adaptor, Pump (Design A) (Attaching Parts)	1
-27	0701014	Bolt, metric 10MM x 30MM	8
-28	4740116	Lockwasher, metric 10MM	8
-29	0250619 1660169	Lovejoy Coupling Installation (Design B) Coupling (Design B) (Attaching Parts)	1 1
-30	0700812	Bolt, Metric 8MM x 25MM	6
-31	4831900	Lockwasher, Metric 8MM	6
-32	1660173 1660172 0080163	Disc, Coupling Hub, Coupling Adaptor, Pump (Design B) (Attaching Parts)	1 1 1
-33	0701014	Bolt, Metric 10MM x 30MM	8
-34	4832000	Lockwasher, Metric 10MM	8
		<b>NOTE: PUMP MOUNTING ADAPTER P/N 0080163 MUST BE USED WITH COUPLING P/N 1660169.</b>	
	1281089	<b>LOVE JOY COUPLING AND PUMP MOUNTING PLATE ASSEMBLY PROCEDURES</b>  1. Separate Coupling Disc and Hub, Align Plastic Disc on Flywheel and torque to 19 ft. lbs. (Important) Coupling Webbing must face pump. 2. Attach Pump Mounting Plate Adaptor to Bell Housing of Engine. 3. Slide Coupling Hub onto Pump Shaft until Pump Shaft bottoms out on Roll Pin (Located inside Hub). Torque Hub onto Shaft to 22 ft. lbs. 4. Insert Coupling Hub, (Now affixed to Pump Shaft), through the Pilot Bore in the Pump Mounting Plate, align Coupling Hub and Disc, push Pump into position and secure.	Ref. C
-35	0250620 1660184	Hayes Coupling Installation (Design C) Coupling (Design C) (Attaching Parts)	1 1
-36	0700808	Bolt, Metric 8MM x 16MM	6
-37	4831900	Lockwasher, Metric 8MM	6
-38	0080163	Adapter, Pump Mounting (Design C) (Attaching Parts)	1
-39	0701014	Bolt, metric 10MM x 30MM	8
-40	4832000	Lockwasher, Metric 10MM	8
		<b>NOTE: PUMP MOUNTING ADAPTER P/N 0080163 - MUST BE USED WITH COUPLING P/N 1660184</b>	
	1281089	<b>HAYES COUPLING AND PUMP MOUNTING PLATE ASSEMBLY PROCEDURES</b>  1. Align Disc Assembly on flywheel and Torque to 19 ft. lbs. 2. Attach Pump Mounting Plate Adapter to Bell Housing of Engine.	Ref. C

**SECTION 2 — ILLUSTRATED PARTS LIST**

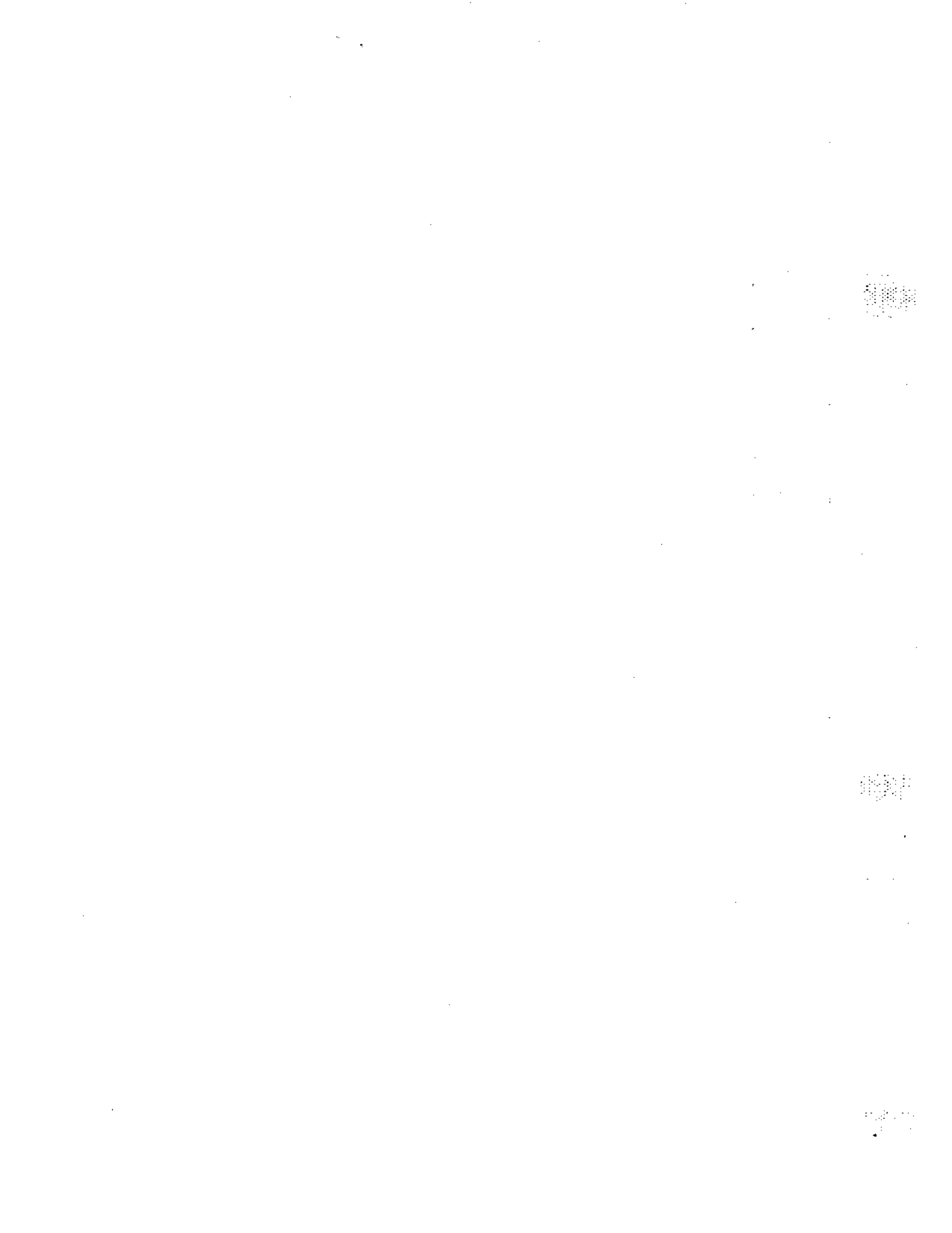
FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-29		<b>ENGINE COMPONENTS, ASSEMBLIES AND INSTALLATIONS - DEUTZ F2L511 (CONTINUED)</b>	Ref.
		3. Apply Texaco #1912 Grease or Equivalent to Internal Splines of Coupling and External Splines of Pump.	
		4. Position and Secure Pump.	
-41	4460277	Strip, Terminal (Attaching Parts)	1
	0901401	Bracket	1
	3910812	Screw, Machine #8-32NC x 3/4"	2
	4770800	Starwasher #8	2
	3310801	Nut #8-32NC	2
	1700821	Decal - Wire ID	1
	1670414	Cover, Terminal Strip	1
-42	2200461	Fitting	1
-43	2720145	Hose (To Oil Pressure Gauge)	1
-44	3300078	Main Pump Assembly (See Figure 2-32 For Breakdown) (Attaching Parts)	1
-45	0641814	Bolt 1/2"-13NC x 1 3/4"	2
	0641610	Bolt 3/8"-16NC x 1 1/4"	2
-46	4761800	Lockwasher	2
	4761600	Lockwasher 3/8"	2
-47	2220592	Fitting	2
-48	2720015	Hose (Supply)	A/R
	1320022	Clamp	2
-49	2720271	Hose (Return)	A/R
	1320022	Clamp	2
-50	2220296	Fitting, 90° Barbed	2
-51	0400003	Battery	1
-52	3980003	Seat, Battery	1
-53	0420002	Holddown, Battery (Attaching Parts)	1
-54	0630003	Seat, Battery (Attaching Parts)	1
-55	3300029	Wingnut 3/8"-16NC	2
	4751600	Flatwasher 3/8"	2
	1060146	Cable, Battery (Negative to Frame Ground)	1
	1060093	Cable, Battery (Engine to Ground)	1
	1060074	Cable, Battery (Positive to Start Solenoid)	1
	1060093	Cable, Battery (Starter to Start Solenoid)	1
	1060093	Cable, Battery (Aux Pump to Aux Relay)	1
	0400008	Cable, Battery (Aux Relay to Start Solenoid)	1
-56	4840878	Air Intake (Attaching Parts)	1
-57	0641408	Bolt 1/4"-20NC x 1"	3
-58	4761400	Lockwasher 1/4"	3
-59	3311401	Nut 1/4"-20NC	3
	3960225	Seal, Air Intake (Not Shown)	1
-60	0140001	Horn (Attaching Parts)	1
-61	4300032	Stud (Welded on Part)	1
-62	4761500	Lockwasher 5/16"	1
-63	3311501	Nut 5/16"-18NC	1

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-29		<b>ENGINE COMPONENTS, ASSEMBLIES AND INSTALLATIONS - DEUTZ F2L511 (CONTINUED)</b>	Ref.
-64	3600141	Auxiliary Pump Assembly (Use in place of Stone Industries Model DC00164C) (Recommend purchasing complete pump as parts are not interchangeable between old and new pump assemblies.)	1
	3600052	Auxiliary Pump Assembly (Stone Industries Model DB00119B)	1
	7004416	Pump	1
	7004412	Coupling	1
	7000483	Motor (Includes Coupling)	1
		(Attaching Parts)	1
-65	3500609	Plate, Mounting (Required when mounted on counterweight only)	1
-66	3900031	Screw, Countersunk	2
-67	0641618	Bolt 3/8"-16NC x 2 1/4"	2
-68	4761600	Lockwasher 3/8"	2
-69	4751600	Flatwasher 3/8"	2
	0236448	<b>AIR CLEANER INSTALLATION</b>	Ref.
-70	1340020	Air Cleaner Assembly (Attaching Parts)	1
-71	0340002	Band, Mounting	2
	3311401	Nut 1/4"-20NC	4
	4761400	Lockwasher 1/4"	4
	4751400	Flatwasher 1/4"	4
	4300032	Stud (Welded on Part)	4
	7004214	Element	1
-72	1120161	Cap, Air	1
-73	1320031	Clamp	4
-74	0080039	Elbow, Rubber Adapter	1
-75	4651815	Tube	1
-76	2720178	Hose, Air Duct	A/R
-77	4840979	Flange	
	2420047	Gage, Indicator - Service (Optional) (Not Shown)	1
	0236445	<b>EXHAUST INSTALLATION</b>	Ref.
-78	3220052	Muffler	1
-79	1320019	Clamp	3
-80	4562691	Tube, Exhaust	1
-81	4842017	Flange	1
	0901226	Bracket, Support (Not Shown)	1
		<b>SOLENOID INSTALLATION (RACINE VALVES) (DESIGN A)</b>	Ref.
-82	3740002	Solenoid (Essex P/N 70-111225-5) (Attaching Parts)	2
-83	3311401	Nut 1/4"-20NC	3
-84	4761400	Lockwasher 1/4"	3
	4300032	Stud (Welded on Part)	3

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-29		<b>ENGINE COMPONENTS, ASSEMBLIES AND INSTALLATIONS - DEUTZ F2L511 (CONTINUED)</b>	Ref.	
		<b>SOLENOID INSTALLATION (RACINE VALVES) (DESIGN B)</b>	Ref.	
-85	3740002	Solenoid (Essex P/N 70-111225-5)	1	
-86	3740027	Solenoid, Start (Motorcraft P/N B6AZ-11450-A)	1	
-87	3740030	Relay, Adio (Delco P/N 115834)	1	
-88	0901194	Bracket (Attaching Parts)	1	
-89	3311401	Nut 1/4"-20NC	2	
-90	4761400	Lockwasher 1/4"	2	
	4300032	Stud (Welded on Part)	2	
	0237627	<b>SOLENOID (ELECTRICAL PANEL) INSTALLATION (VICKERS VALVES)</b>	Ref.	D
	0236850	<b>SOLENOID (ELECTRICAL PANEL) INSTALLATION (RACINE VALVES)</b>	Ref.	E
-91	3740059	Relay (Motorcraft)	1	
-92	3740030	Relay, Adio (Delco)	1	
-93	3740002	Solenoid (Essex)	2	
-94	3740067	Relay (Prestolite)	2	
-95	0060021	Module, Adeco (When Equipped)	1	
-96	3530425	Panel, Mounting (Attaching Parts)	1	
-97	3311401	Nut 1/4"-20NC	2	
-98	4761400	Lockwasher 1/4"	2	
		<b>THROTTLE INSTALLATION - SOLENOID (RACINE VALVES) (DESIGN A)</b>	Ref.	
-99	3740048	Solenoid - Hi-Engine (Attaching Parts)	1	
-100	0641406	Bolt 1/4"-20NC x 3/4"	4	
-101	4751400	Flatwasher 1/4"	4	
-102	4761400	Lockwasher 1/4"	4	
-103	3311401	Nut 1/4"-20NC	4	
-104	0900708	Bracket, Solenoid Mounting (Attaching Parts)	1	
	0641616	Bolt 3/8"-16NC x 2"	1	
	4761600	Lockwasher 3/8"	1	
	0641408	Bolt 1/4"-20NC x 1"	1	
	4751400	Flatwasher 1/4"	1	
	4761400	Lockwasher	1	
	3311401	Nut 1/4"-20NC	1	
-105	1360112	Clevis	1	
	3321401	Nut 1/4"-28NF	1	
-106	3430406	Pin, Clevis	1	
	3450203	Pin, Cotter	1	
-107	4840833	Throttle Arm	1	
-108	1660070	Connector, Ball Joint (Attaching Parts)	1	



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2—29		<b>ENGINE COMPONENTS, ASSEMBLIES AND INSTALLATIONS - DEUTZ F2L511 (CONTINUED)</b>	Ref.	
—109	3321401 4761400	Nut 1/4"-28NF Lockwasher 1/4"	2 2	
—110	3840765	Rod, Stop (When Equipped) (Attaching Parts)	1	
—111	3311401	Nut 1/4"-20NC	1	
—112	3509872	Bracket	1	
—113	3311405	Locknut 1/4"-20NC	1	
	0237047 0237868	<b>THROTTLE INSTALLATION - ADECO (RACINE VALVES) THROTTLE INSTALLATION - ADECO (VICKERS VALVES)</b>	Ref. Ref.	A —
—114	0060020 0060024 0901317	Actuator (Racine Valves) Actuator (Vickers Valves) Bracket (Attaching Parts)	1 1 1	
	0641408 4751400 4761400 3311401	Bolt 1/4"-20NC x 1" Flatwasher 1/4" Lockwasher 1/4" Nut 1/4"-20NC	1 2 1 1	
—115	3840829 3321401	Extension Nut	1 1	
	0236526	<b>SHUTDOWN KIT INSTALLATION</b>	Ref.	
—116	2900359	Shutdown Kit	1	

SECTION 2 — ILLUSTRATED PARTS LIST

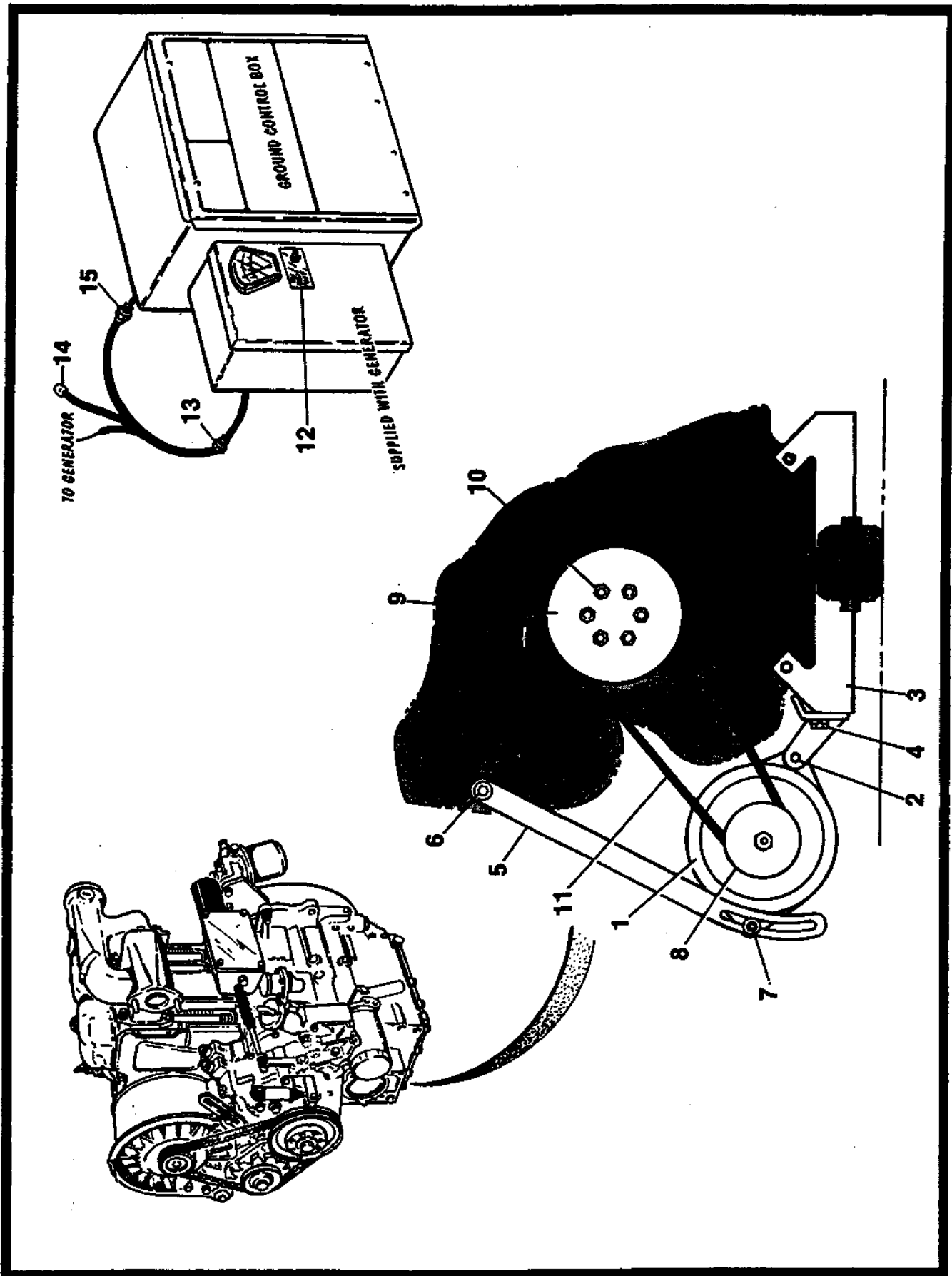


Figure 2-30. 110 Volt Generator Installation - Deutz.



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2—30	0236418	<b>110 VOLT GENERATOR INSTALLATION - (DEUTZ)</b>	Ref.
—1	2460011	Generator (Attaching Parts)	1
—2	0641508	Bolt 5/16"-18NC x 1"	2
	4761500	Lockwasher 5/16"	2
	3311501	Nut 5/16"-18NC	2
—3	4340442	Support, Generator (Attaching Parts)	1
—4	0630365	Bolt, Metric 12MMx 65MM (Grade 8.8)	1
	4740117	Lockwasher 12MM	1
—5	4340444	Support Adjuster, Generator (Attaching Parts)	1
—6	0641540	Bolt 5/16" - 18NC x 5"	1
	4761500	Lockwasher 5/16"	1
	3311501	Nut 5/16"-18NC	1
—7	0641508	Bolt 5/16"-18NC x 1"	1
	4751500	Flatwasher 5/16"	1
	4761500	Lockwasher 5/16"	1
—8	3580100	Pulley, Generator	1
	2860012	Key, Woodruff	1
—9	3580101	Pulley (Attaching Parts)	1
—10	0630190	Bolt, Metric 8MM	8
	4740118	Lockwasher 8MM	8
—11	0480038	Belt Box, Electrical (Supplied with Engine) (Attaching Parts)	1
	3910808	Screw #8-32NC x 1/2"	2
	4751000	Flatwasher #8	4
	4760800	Lockwasher #8	2
	3310801	Nut #8-32NC	2
—12	3251476	Nameplate	1
—13	4460023	Connector	1
—14	4460134	Connector	1
	1060012	Cable, Control	1
—15	4460071	Connector	1
	3300048	Locknut, Conduit	1
	0960238	Bushing	1
	3740049	Relay (Located in Ground Control Box)	2

C

SECTION 2 — ILLUSTRATED PARTS LIST

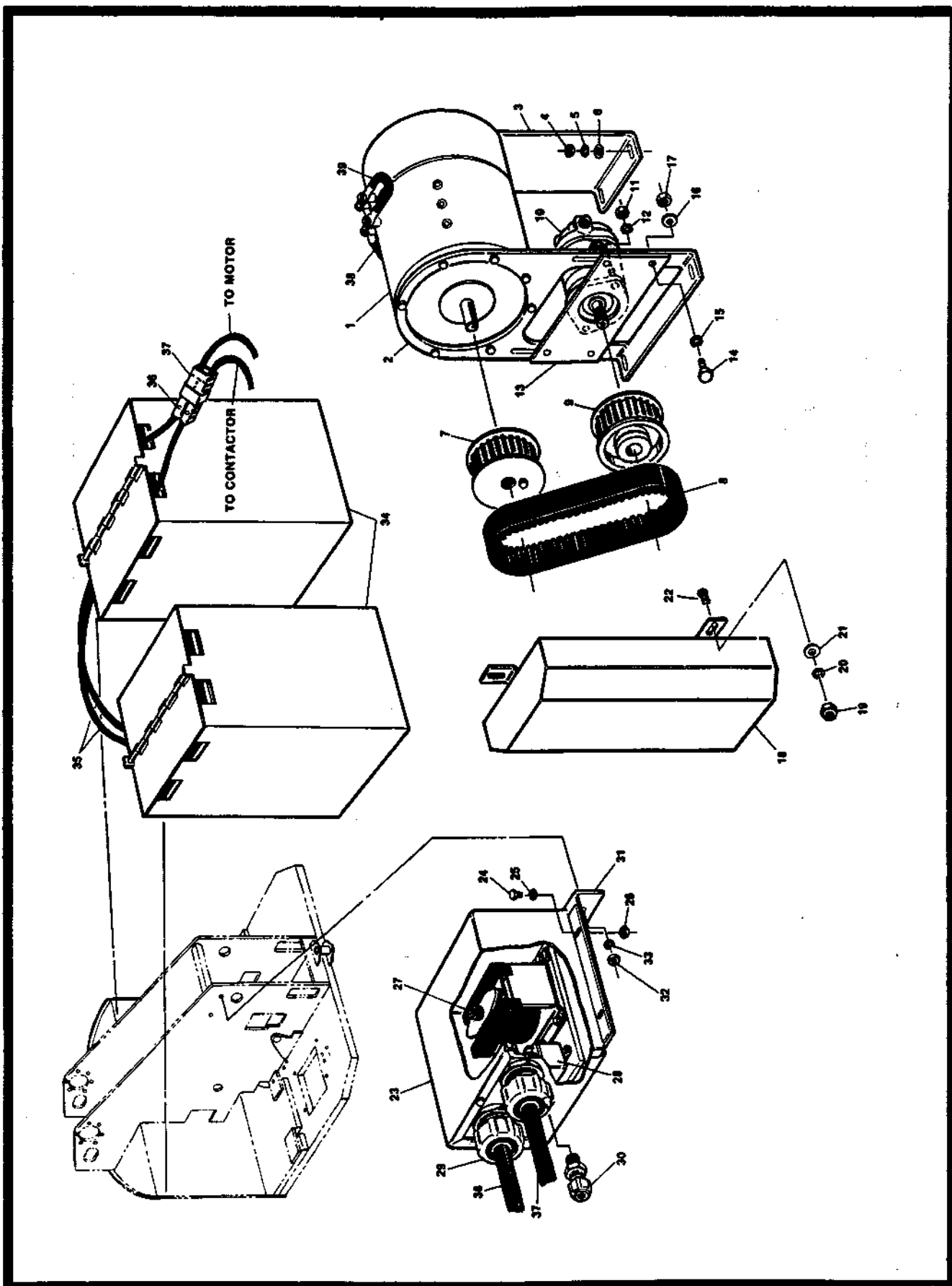


Figure 2-31. Motor Components, Assemblies and Installations - Electric.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-31	0237575	<b>MOTOR COMPONENTS, ASSEMBLIES AND INSTALLATION - ELECTRIC</b>	Ref.	A
-1	3160069	Motor, Electric - 10.3 HP/36 VDC (Attaching Parts)	1	
-2	0901377	Bracket (Front)	1	
-3	0900984	Bracket (Rear)	1	
-4	3311601	Nut 3/8"-16NC	4	
-5	4761600	Lockwasher 3/8"	4	
-6	4751600	Flatwasher 3/8"	4	
	4300034	Stud (Welded on Part)	4	
-7	4180071	Sprocket (Motor)	1	
	2880510	Key	1	
-8	0480029	Belt, Drive	1	
-9	4180070	Sprocket (Pump)	1	
	1440182	Adapter, Collar	1	
	2880510	Key	1	
-10	3600078	Pump Assembly (See Figure 2-32 for Breakdown) (Attaching Parts)	2	
-11	3311801	Nut 1/2"-13NC	2	
-12	3311801	Nut 1/2"-13NC	2	
-13	0900985	Bracket, Mounting - Pump (Attaching Parts)	1	
-14	0641610	Bolt 3/8"-16NC x 1 1/4"	4	
-15	4751600	Flatwasher 3/8"	4	
-16	4761600	Lockwasher 3/8"	4	
-17	3311601	Nut 3/8"-16NC	4	
-18	1670395	Cover, Pump Drive (Attaching Parts)	1	
-19	3311401	Nut 1/4"-20NC	3	
-20	4761400	Lockwasher 1/4"	3	
-21	4751400	Flatwasher 1/4"	3	
-22	4300031	Stud (Welded on Part)	2	
-23	0234648	Contactor Box Assembly (Attaching Parts)	1	
-24	0641406	Bolt 1/4"-20NC x 3/4"	4	
-25	4761400	Lockwasher 1/4"	4	
-26	3311401	Nut 1/4"-20NC	4	
-27	4360149	Contactor	1	
-28	3740047	Relay - SPDT	1	
-29	4460163	Connector, Strain Relief	2	
	0960776	Bushing	2	
	3300128	Nut, Conduit	2	
-30	4460049	Connector, Strain Relief	1	
	0960239	Bushing	1	
	3300047	Nut, Conduit	1	
-31	0901374	Bracket, Mounting - Contactor Box (Attaching Parts)	1	
-32	3311601	Nut 3/8"-16NC	2	
-33	4761600	Lockwasher 3/8"	2	
	4300034	Stud (Welded on Part)	2	
-34	0400047	Battery	2	



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-31		<b>MOTOR COMPONENTS, ASSEMBLIES AND INSTALLATION - ELECTRIC (CONTINUED)</b>	Ref.
—35	1060214	Cable (Negative to Positive)	2
—36	1060260	Cable (Battery Harness)	1
—37	1060259	Cable (Contactor/Motor Harness)	1
—38	1060180	Cable (Motor to Contactor Box)	1
—39	1060258	Cable (Motor to Case)	1

SECTION 2 — ILLUSTRATED PARTS LIST

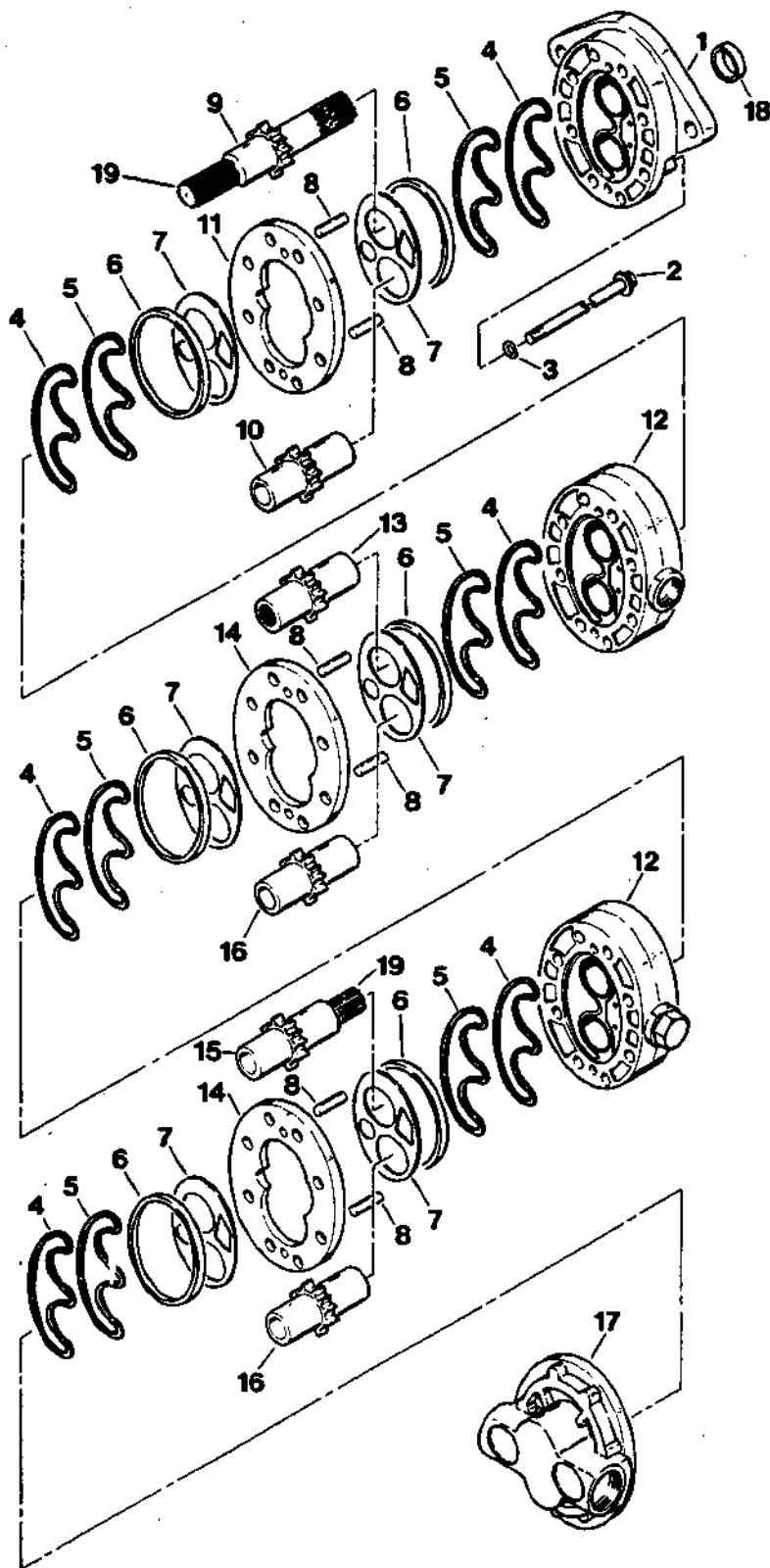


Figure 2-32. Gear Pump Assembly.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-32	3600078	<b>GEAR PUMP ASSEMBLY</b>	Ref.
-1	7002724	Body Assembly, R.H.	1
	7002728	Bushing	2
-2	7002705	Nut, Stud	8
-3	7002706	Washer, Lock	8
-4	Kit	Seal, Preload	6
-5	Kit	Seal, Load	6
-6	Kit	Ring, Sealing	6
-7	Kit	Plate, Wear	6
-8	7002711	Pin, Dowel	4
	7002701	Pin, Dowel	2
-9	7002725	Gear Shaft, Drive	1
-10	7002726	Gear, Idler	1
-11	7002700	Plate, Gear	1
-12	7002729	Plate, Bearing	2
	7002728	Bushing	8
-13	7002722	Gear, Shaft Drive	1
-14	7002713	Plate, Gear	2
-15	7002721	Gear, Drive	1
-16	7002720	Gear, Idler	2
-17	7002730	Cover Assembly	1
	7002728	Bushing	2
-18	Kit	Seal, Oil	1
	7002715	Caplug	3
	7002716	Caplug	2
	Kit	O-Ring	1
	7002717	Plug	1
-19	7002723	Coupling	2
	2900467	Kit, Repair (Includes items 4,5,6,7 and 18)	1

SECTION 2 — ILLUSTRATED PARTS LIST

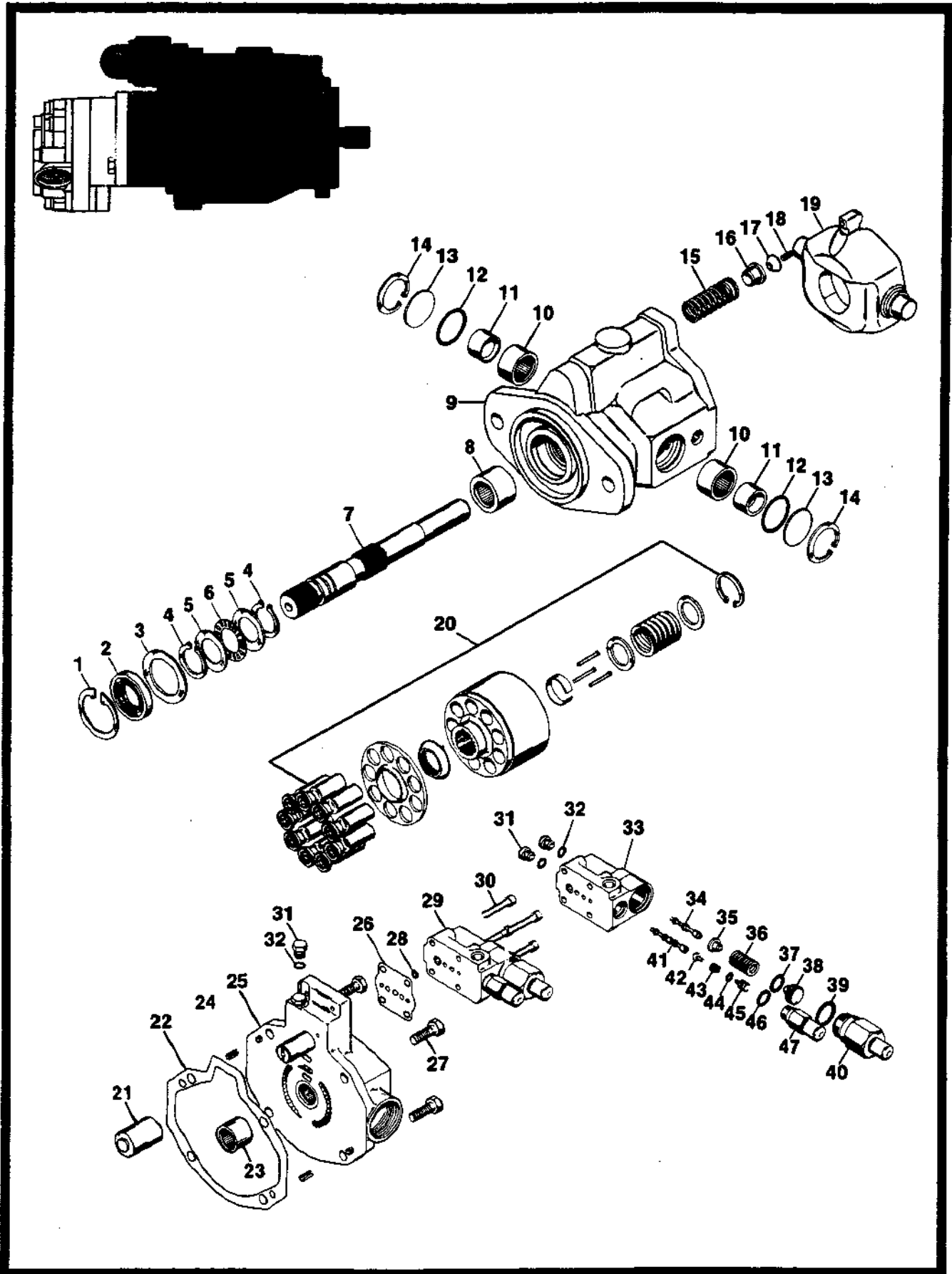


Figure 2-33. Tandem Pump Assembly (Piston Pump Section).



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-33	3600126	<b>TANDEM PUMP ASSEMBLY</b>	Ref.
	7007872	Piston Pump Section	1
-1	Kit	Ring, Retaining	1
-2	Kit	Seal, Shaft	1
-3	7004906	Washer	1
-4	Kit	Ring, Retaining	2
-5	7004907	Race, Thrust	2
-6	7004908	Bearing, Thrust	1
-7	7004901	Shaft, Drive (Splined)	1
-8	7004910	Bearing	1
-9	Non-Serviceable	Housing	1
-10	7004914	Bearing	2
-11	7004911	Race, Inner	2
-12	Kit	O-Ring	2
-13	7004913	Cover, Trunion	2
-14	Kit	Ring, Retaining	2
-15	7004962	Spring	1
-16	7004963	Collar, Spring	1
-17	7004964	Button, Pivot	1
-18	7004965	Pin, Roll	1
-19	7004966	Plate, Cam	1
-20	7004971	Rotating Kit Assembly	1
-21	7004972	Piston, Control	1
-22	Kit	Gasket, Housing	1
-23	7004917	Bearing	1
-24	7004960	Pin, Roll	2
-25	7007856	Back Plate Assembly	1
-26	Kit	Gasket, Compensator	1
-27	7004933	Bolt	4
-28	Kit	O-Ring	1
-29	7007858	Compensator Assembly	1
-30	7004977	Bolt	4
-31	7004942	Plug Assembly	3
-32	Kit	O-Ring	3
-33	Non-Serviceable	Body, Compensator	1
-34	Non-Serviceable	Spool, Pressure	1
-35	7007859	Cap, Spring Pivot	1
-36	7004981	Spring	1
-37	Kit	O-Ring	1
-38	7007861	Follower, Pressure Spring	1
-39	Kit	O-Ring	1
-40	7007862	Cap, Pressure Adjustment	1
-41	Non-Serviceable	Spool, Flow	1
-42	7007866	Pivot, Spring	1
-43	7007867	Spring	1
-44	Kit	O-Ring	1
-45	7007869	Follower, Flow Spring	1
-46	Kit	O-Ring	1
-47	7007871	Cap, Flow Adjustment	1
	2900699	Kit, Seal (Includes Items 1,2,4,12,14,22,26,28,32,37,39,44 and 46)	1



SECTION 2 — ILLUSTRATED PARTS LIST

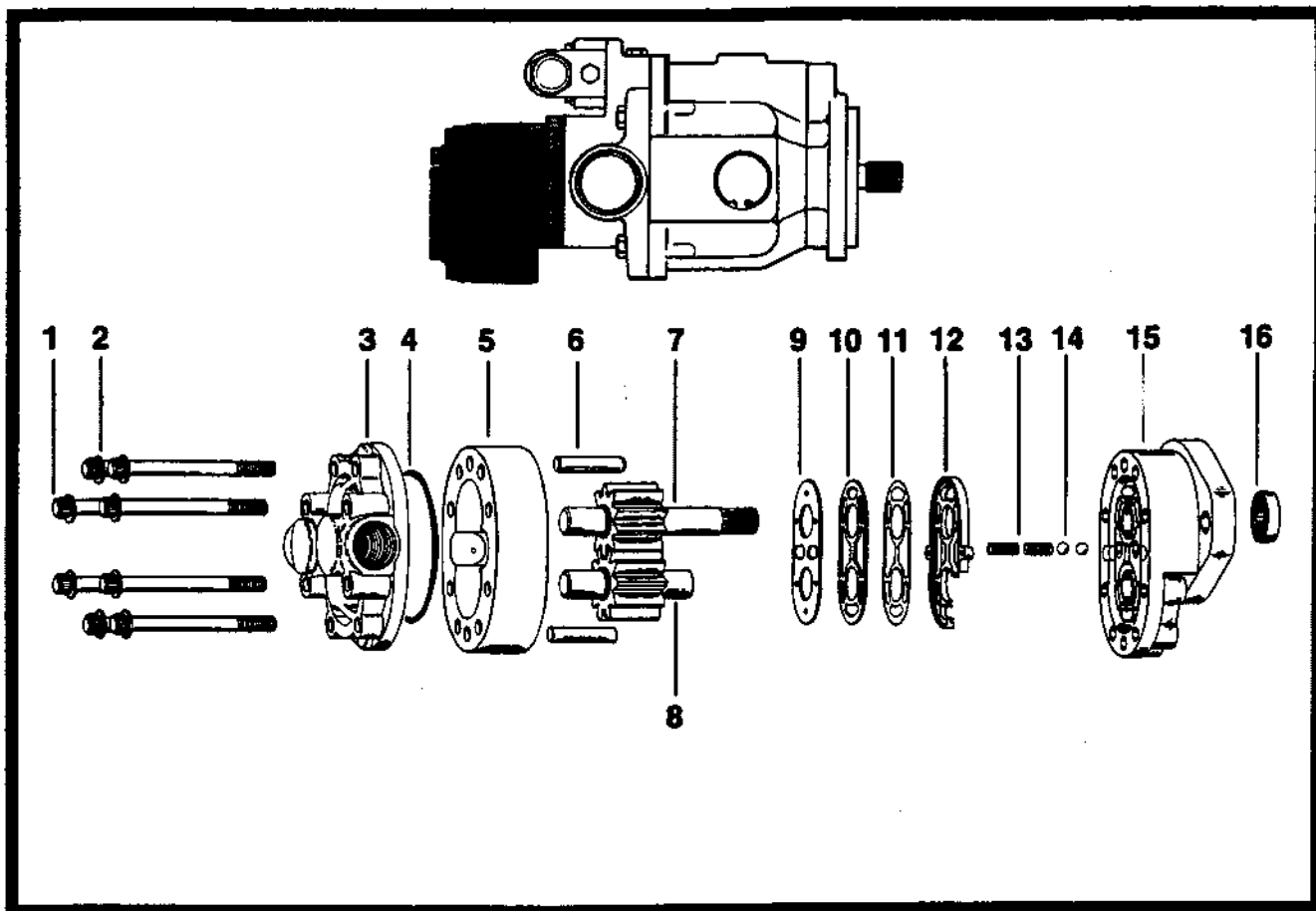


Figure 2-34. Tandem Pump Assembly (Gear Pump Section).

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-34	3600126	<b>TANDEM PUMP ASSEMBLY</b>	Ref.
	7007873	Gear Pump Section	1
-1	7007840	Bolt	4
-2	7007841	Bolt	4
-3	7004996	Back Plate Assembly	1
-4	Kit	O-Ring	1
-5	7007855	Body Assembly (Includes Item 6)	1
-6		Pin, Dowel	2
-7	7007853	Drive Gear Assembly	1
-8	7007854	Idler Gear Assembly	1
-9	Kit	Diaphragm	1
-10	Kit	Gasket, Back-Up	1
-11	Kit	Gasket, Protector	1
-12	Kit	Seal, Diaphragm	1
-13	Kit	Spring	2
-14	Kit	Ball, Steel	2
-15	7007561	Front Plate Assembly	1
-16	Kit	Seal Shaft	1
	2900626	Kit, Seal and Repair (Includes Items 4,9,10,11,12,13,14 and 16)	1

SECTION 2 — ILLUSTRATED PARTS LIST

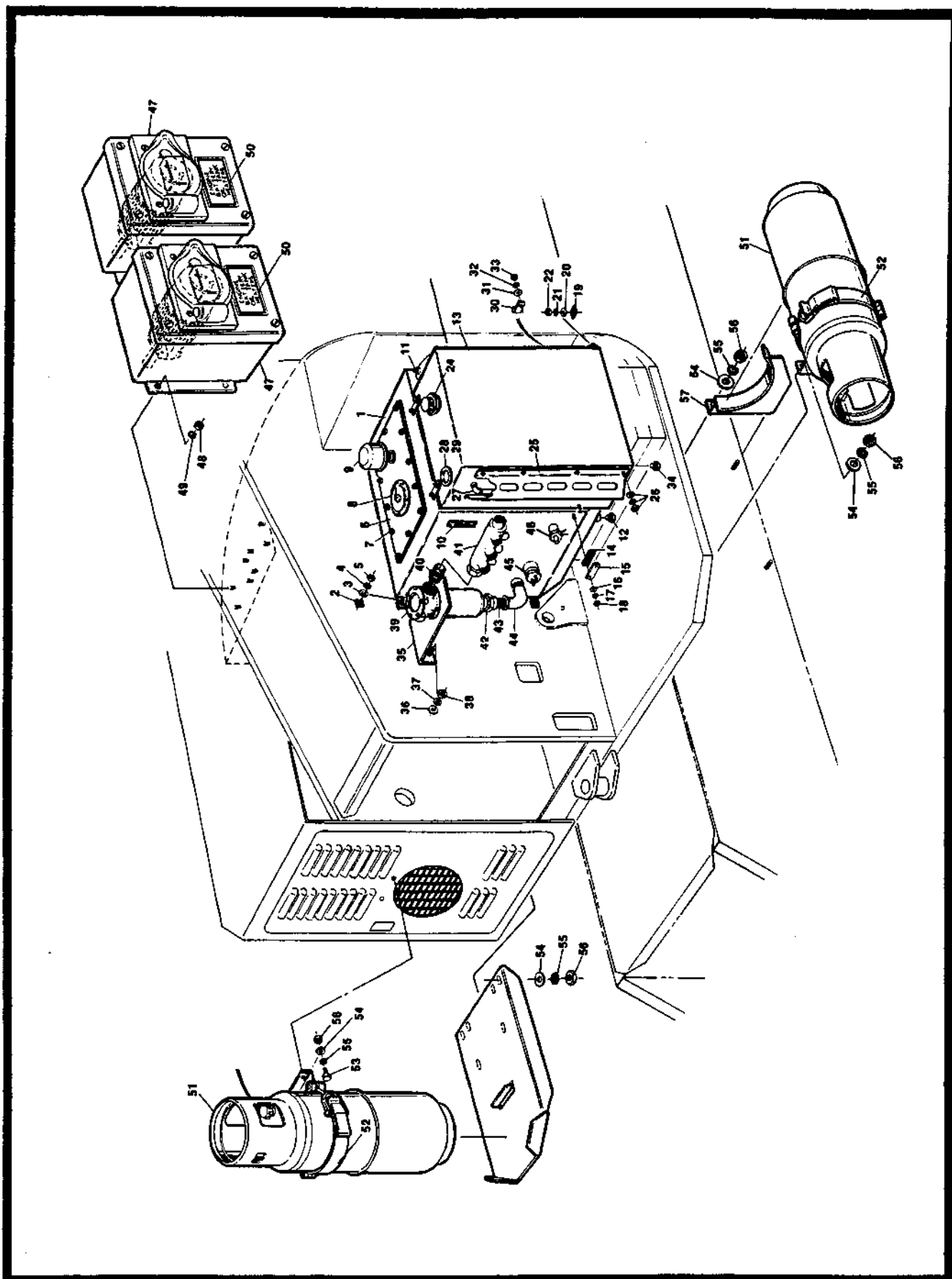


Figure 2-35. Tanks installation.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-35		<b>TANKS INSTALLATION</b>	Ref.	
	0236201	<b>HYDRAULIC OIL AND FUEL TANKS INSTALLATION</b>	Ref.	E
	0239634	<b>HYDRAULIC OIL AND FUEL TANKS INSTALLATION</b>	Ref.	A
-1	4400219	Hydraulic Oil Tank Assembly (Gas and Diesel)	1	C
	4400212	Hydraulic Oil Tank Assembly (Electric) (Not Shown) (Attaching Parts)	1	A
-2	4280234	Strip, Rubber	1	
-3	4751500	Flatwasher 5/16"	1	
-4	4761500	Lockwasher 5/16"	1	
-5	3311501	Nut 5/16"-18NC	1	
	4300038	Stud (Welded on Part)	1	
-6	3532219	Lid (1 Hole for Filler/Breather)	1	
	4841863	Lid (2 Holes for Separate Filler and Breather)	1	
	1670393	Lid (Electric) (Attaching Parts)	1	
-7	4761400	Lockwasher 1/4"-20NC	12	
	3311401	Nut 1/4"-20NC	12	
	3960370	Gasket (Use for 3532219 Lid)	1	
	3960310	Gasket (Use for 4841863 Lid)	1	
	3960359	Gasket (Electric)	1	
-8	1120287	Cap (When Equipped)	1	
	1120266	Cap and Dipstick (Electric Only - Not Shown)	1	
-9	1340021	Breather (With Screw Threads)	1	
	0100020	Loctite, Pipe Sealant	A/R	
	1340046	Breather (With Ears)	1	
	1340045	Basket, Strainer (Includes Hardware)	1	
	4740338	Washer, Sealing	6	
-10	2420080	Gauge, Oil Level	1	
-11	2200102	Plug, Pipe	1	
	0100020	Loctite, Pipe Sealant	A/R	
	2120106	Filter, Magnetic Screen (Not Shown - Inside Tank)	1	
	0100020	Loctite, Pipe Sealant	A/R	
-12	3520022	Plug, Magnetic	1	
	0100020	Loctite, Pipe Sealant	A/R	
-13	4400181	Fuel Tank Assembly (With Sight Gauge)	1	D
	4400271	Fuel Tank Assembly (With Mechanical Gauge) (Attaching Parts)	1	-
-14	4280234	Strip, Rubber	3	
-15	3509431	Plate, Tank Connector	3	
-16	4751500	Flatwasher 5/16"	6	
-17	4761500	Lockwasher 5/16"	6	
-18	3311501	Nut 5/16"-18NC	6	
	4300038	Stud (Welded on Part)	6	
-19	4280234	Strip, Rubber	1	
-20	4751500	Flatwasher 5/16"	1	
-21	4761500	Lockwasher 5/16"	1	
-22	3311501	Nut 5/16"-18NC	1	
	4300038	Stud	1	
-23	Not Used			
-24	2420052	Gauge, Mechanical Fuel	1	
-25	4060575	Shield, Fuel Gauge (Attaching Parts)	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-35		<b>TANKS INSTALLATION (CONTINUED)</b>	Ref.
-26	4751400	Flatwasher 1/4"	1
	4761400	Lockwasher 1/4"	1
	3311401	Nut 1/4"-20NC	1
-27	4562632	----- Tube, Sight Gauge (Attaching Parts)	1
	2180607	Fitting	2
	1320022	Clamp, Hose	2
-28	1120314	----- Cap, Fuel	1
-29	4562535	Tube, Fuel Tank Vent (Attaching Parts)	1
	2180607	Fitting	1
	1320022	Clamp	1
-30	1320041	Clamp, Conduit	1
-31	4751400	Flatwasher 1/4"	1
-32	4761400	Lockwasher 1/4"	1
-33	3311401	Nut 1/4"-20NC	1
-34	2200204	----- Plug, Magnetic	1
-35	0901141	Bracket, Oil Filter (Attaching Parts)	1
-36	4751600	Flatwasher 3/8"	2
-37	4761600	Lockwasher 3/8"	2
-38	3311601	Nut 3/8"-16NC	2
	4300034	Stud (Welded on Part)	2
-39	2120103	----- Filter (Return) (Attaching Parts)	1
	06441608	Bolt 3/8"-16NC x 1"	4
	4761600	Lockwasher 3/8"	4
	3311601	Nut 3/8"-16NC	4
	2120107	----- Element	1
-40	2220765	Fitting	1
-41	3100045	Manifold	1
-42	2180619	Fitting	1
-43	2180101	Nipple	1
-44	2200448	Fitting, Elbow	1
	0100020	Loctite, Pipe Sealant	A/R
	0250657	<b>HEATERS INSTALLATIONS (OPTIONAL)</b>	Ref.
	4420026	Tape, Heat - Manifold (Not Shown)	1
-45	2580018	Heater, Immersion (Hydraulic Tank)	1
-46	1600043	Controller, Thermostat (Hydraulic Tank)	1
	0100020	Sealant	A/R
-47	0231756	Junction Box Assembly (Attaching Parts)	2
-48	3311401	Nut 1/4"-20NC	4
-49	4761400	Lockwasher 1/4"	4
	4300031	Stud (Welded on Part)	4
	1670199	----- Cover	1
	4460049	Connector, Strain Relief	3
-50	3251271	Nameplate - Engine, Battery, Manifold Heaters	1
	3251272	Nameplate - Hydraulic Tank Heaters	1

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2—35		<b>TANKS INSTALLATION (CONTINUED)</b>	Ref.	
	0236410	<b>LP TANKS INSTALLATION - STANDARD MOUNTING</b>	Ref.	H
	0238916	<b>LP TANKS INSTALLATION - OPTIONAL MOUNTING</b>	Ref.	—
—51	4400275	Tank, LP (43.5 Lb. Liquid Withdrawal)	2	
	4400038	Tank, LP (43.5 Lb. Vapor Withdrawal)	2	
	4400040	Tank, LP (33.5 Lb.) (Attaching Parts)	2	
	1320023	Clamp (Set of 2 - 1 for Each Tank)	1 Set	
	0641610	Bolt 3/8"-16NC x 1 1/4" (T/T Tank)	2	
	4751600	Flatwasher 3/8"	6	
	4761600	Lockwasher 3/8"	6	
	3311601	Nut 3/8"-16NC	6	
	4300034	Stud (Welded on Part) (Frame Tank)	4	
—57	0900935	Bracket (Frame Mounting Only)	1	

SECTION 2 -- ILLUSTRATED PARTS LIST

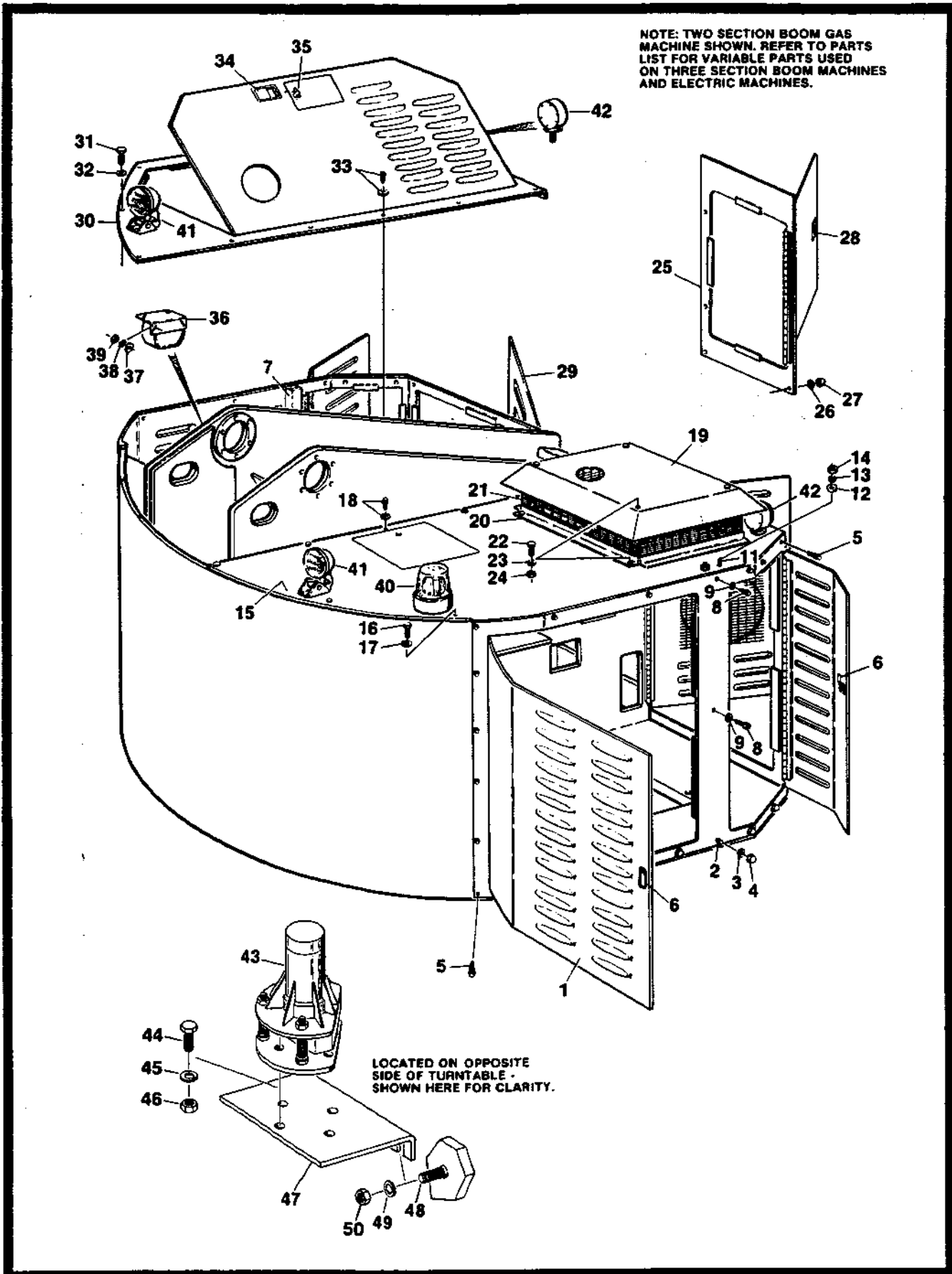


Figure 2-36. Hoods Installation.



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-36	0236289	<b>HOODS INSTALLATION (2 SECTION BOOM WITH GAS ENGINE)</b>	Ref.	F
	0236380	<b>HOODS INSTALLATION (2 SECTION BOOM WITH DIESEL ENGINE)</b>	Ref.	G
	0237583	<b>HOODS INSTALLATION (2 SECTION BOOM WITH ELECTRIC MOTOR)</b>	Ref.	D
	0237110	<b>HOODS INSTALLATION (3 SECTION BOOM WITH GAS ENGINE)</b>	Ref.	B
	0237111	<b>HOODS INSTALLATION (3 SECTION BOOM WITH DIESEL ENGINES)</b>	Ref.	A
-1	4841948	Hood Panel - Engine Side (Gas)	1	
	4841980	Hood Panel - Engine Side (Diesel)	1	
	2680352	Hood Panel - Motor Side (Electric - Not Shown) (Attaching Parts)	1	
-2	4300031	Stud (Welded on Part)	10	
-3	4761400	Lockwasher 1/4"	10	
-4	3300151	Nut, Acorn 1/4"-20NC	10	
-5	3900022	Screw, Self-Tapping 1/4" x 7/8"	12	
	4751400	Flatwasher 1/4"	12	
-6	2940042	Latch (Mounting Hardware Included)	3	
-7	1270992	Channel, Support (Attaching Parts)	2	
-8	3900022	Screw, Self-Tapping 1/4" x 7/8"	2	
-9	4751400	Flatwasher 1/4"	2	
-10	Not Used			
-11	4300031	Stud (Welded on Part)	4	
-12	4751400	Flatwasher 1/4"	4	
-13	4761400	Lockwasher 1/4"	4	
-14	3311401	Nut 1/4"-20NC	4	
-15	2680390	Hood Panel - Engine Side (Top) (Gas)	1	
	2680320	Hood Panel - Engine Side (Top) (Diesel)	1	
	2680359	Hood Panel - Motor Side (Top Counterweight Cover) (Electric - Not Shown)	1	
	2680349	Hood Panel - Motor Side (Top Cover Over Motor) (Electric - Not Shown) (Attaching Parts)	1	
-16	3941404	Screw, Hex 1/4" - 20NC x 1/2"	4	
-17	4751400	Flatwasher 1/4"	4	
-18	3900022	Screw, Self-Tapping 1/4" x 7/8"	4	
	4751400	Flatwasher 1/4"	4	
-19	1670283	Cover, Hood Vent	1	
-20	4841844	Mount, Hood Vent (Attaching Parts)	1	
-21	0901128	Bracket, Hood Vent	4	
-22	0641406	Bolt 1/4"-20NC x 3/4"	8	
-23	4761400	Lockwasher 1/4"	8	
-24	3311401	Nut 1/4"-20NC	8	
-25	4841920	Hood Panel - Center (2 Section Boom)	1	
	4842338	Hood Panel - Center (3 Section Boom) (Attaching Parts)	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-36		<b>HOODS INSTALLATION (CONTINUED)</b>	Ref.
	4300032	Stud (Welded on Part) (Not Shown)	6
-26	4761400	Lockwasher 1/4"	6
-27	3300151	Nut, Acorn 1/4"-20NC	6
	4070410	Shim 1/16" (Not Shown)	A/R
	4070411	Shim 1/8" (Not Shown)	A/R
	4070412	Shim 3/16" (Not Shown)	A/R
		-----	
-28	2940044	Latch (Hardware Included)	1
-29	4841947	Hood Panel - Valve Side (2 Section Boom)	1
	4842340	Hood Panel - Valve Side (3 Section Boom)	1
	2680362	Hood Panel - Valve Side (Electric - Not Shown) (Attaching Parts)	1
	4300068	Stud (Welded on Part)	10
	4751400	Flatwasher 1/4"	22
	4761400	Lockwasher 1/4"	10
	3300151	Nut, Acorn	10
	4070410	Shim 1/16"	A/R
	4070411	Shim 1/8"	A/R
	4070412	Shim 3/16"	A/R
	3900022	Screw, Self-Tapping	12
		-----	
	2940042	Latch (Hardware Included) (Not Shown)	2
-30	4841930	Hood Panel - Valve Side (Top) (2 Section Boom)	1
	4842339	Hood Panel - Valve Side (Top) (3 Section Boom)	1
	2680359	Hood Panel - Valve Side (Top Counterweight Cover) (Electric - Not Shown)	1
	2680350	Hood Panel - Valve Side (Top Cover Over Valves) (Electric - Not Shown) (Attaching Parts)	1
-31	3941404	Screw, Hex 1/4"- 20NC x 1/2"	4
-32	4751400	Flatwasher 1/4"	4
-33	3900022	Screw, Self-Tapping 1/4"x 7/8"	4
	4751400	Flatwasher 1/4"	4
		-----	
-34	2940045	Latch (Hardware Included)	1
-35	2940050	Latch (3 Section Boom Only)	1
	3820012	Rivet	2
	0237726	<b>TRAVEL ALARM INSTALLATION</b>	Ref.
	0239055	<b>MOTION ALARM INSTALLATION</b>	Ref.
-36	0140024	Alarm (Weatherproof - Use in Place of Alarm Requiring Cover) (Attaching Parts)	1
	4300031	Stud (Welded on Part)	2
-37	4751400	Flatwasher 1/4"	2
-38	4761400	Lockwasher 1/4"	2
-39	3311401	Nut 1/4"-20NC	2
		-----	
	0236550	<b>ROTATING BEACON LIGHT INSTALLATION (AMBER) (WITH AMMETER)</b>	Ref. A
	0236551	<b>ROTATING BEACON LIGHT INSTALLATION (RED) (WITH AMMETER)</b>	Ref. A
	0239189	<b>ROTATING BEACON LIGHT INSTALLATION (AMBER) (WITH VOLTMETER)</b>	Ref. —

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-36		<b>HOODS INSTALLATIONS (CONTINUED)</b>	Ref.	
	0239190	<b>ROTATING BEACON LIGHT INSTALLATION (RED) (WITH VOLTMETER)</b>	Ref.	—
—40	2920018	Beacon, Rotating (Amber)	1	
	2920009	Beacon, Rotating (Red)	1	
	0236606	<b>HEADLIGHTS AND TAILLIGHTS INSTALLATIONS</b>	Ref.	B
—41	2920001	Headlight	2	
—42	2920019	Taillight	2	
	3740002	Solenoid (Not Shown)	1	
	4360070	Breaker, Circuit (Not Shown)	1	
	0235631	<b>TILT INDICATOR INSTALLATION</b>	Ref.	—
—43	4360171	Sensor, Level Indicator (Attaching Parts)	1	
—44	0641406	Bolt 1/4"-20NC x 3/4"	4	
—45	4761400	Lockwasher 1/4"	4	
—46	3311401	Nut 1/4"-20NC	4	
—47	3508393	Plate, Mounting (Attaching Parts)	1	
—48	4300032	Stud (Weldment Part)	2	
—49	4761400	Lockwasher 1/4"	2	
—50	3311401	Nut 1/4"-20NC	2	



SECTION 2 — ILLUSTRATED PARTS LIST

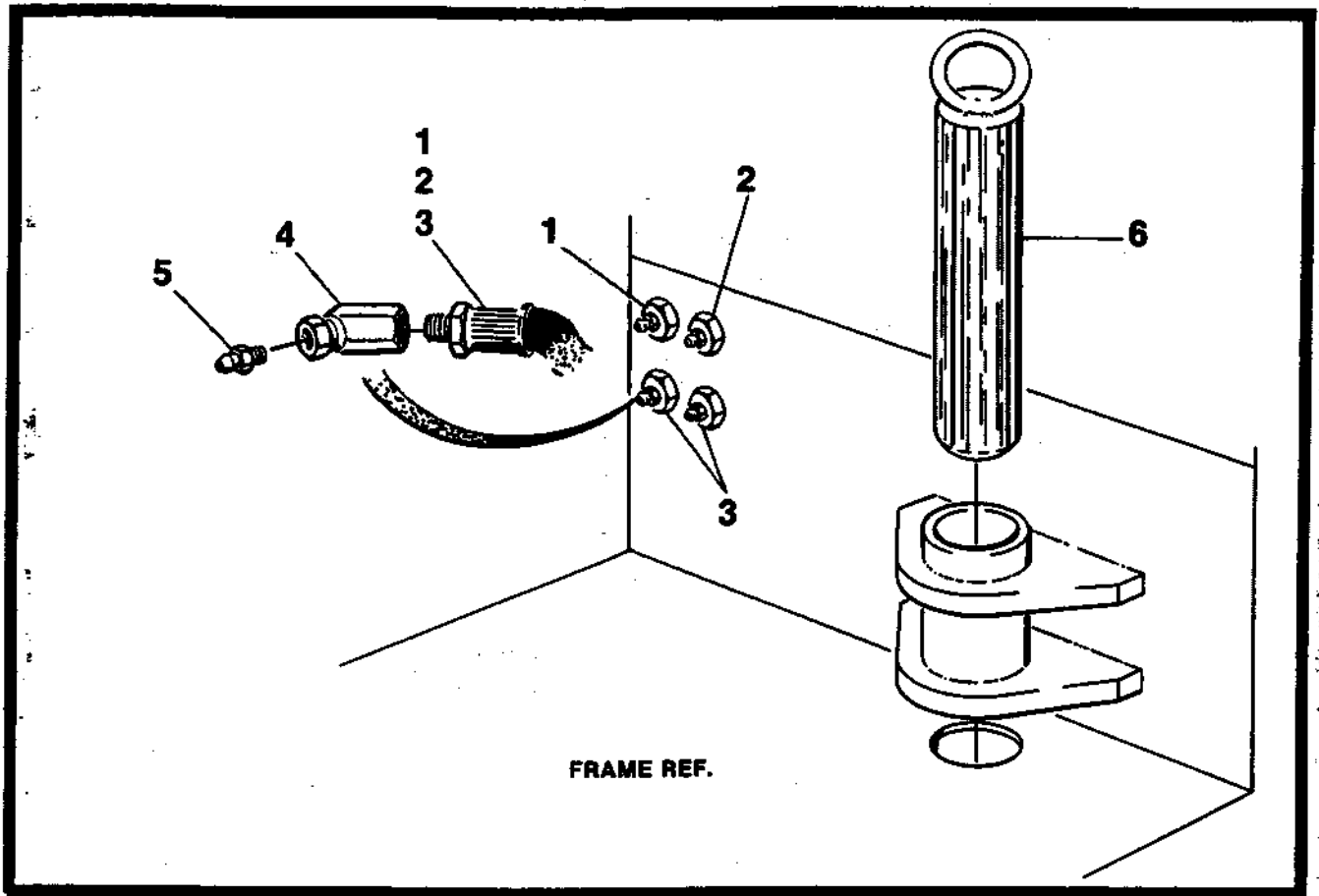


Figure 2-37. Remote Lubrication and Turntable Locking Pin Installation.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-37		<b>REMOTE LUBRICATION AND TURNTABLE LOCKING PIN INSTALLATION</b>	Ref.
	0236214	<b>LIFT CYLINDER, BEARING AND MASTER CYLINDER LUBE</b>	Ref. D
-1	2751032	Hose	1
	2220063	Fitting (Not Shown)	1
-2	2750807	Hose	1
-3	2751095	Hose	2
-4	2220124	Fitting	4
-5	2160002	Fitting, Grease	4
	0237195	<b>LOCK PIN INSTALLATION - TURNTABLE</b>	Ref. —
-6	3421086	Pin (Fall 1985 to Present)	1
	4841973	Pin (1983 to Fall 1985)	1

SECTION 2 — ILLUSTRATED PARTS LIST

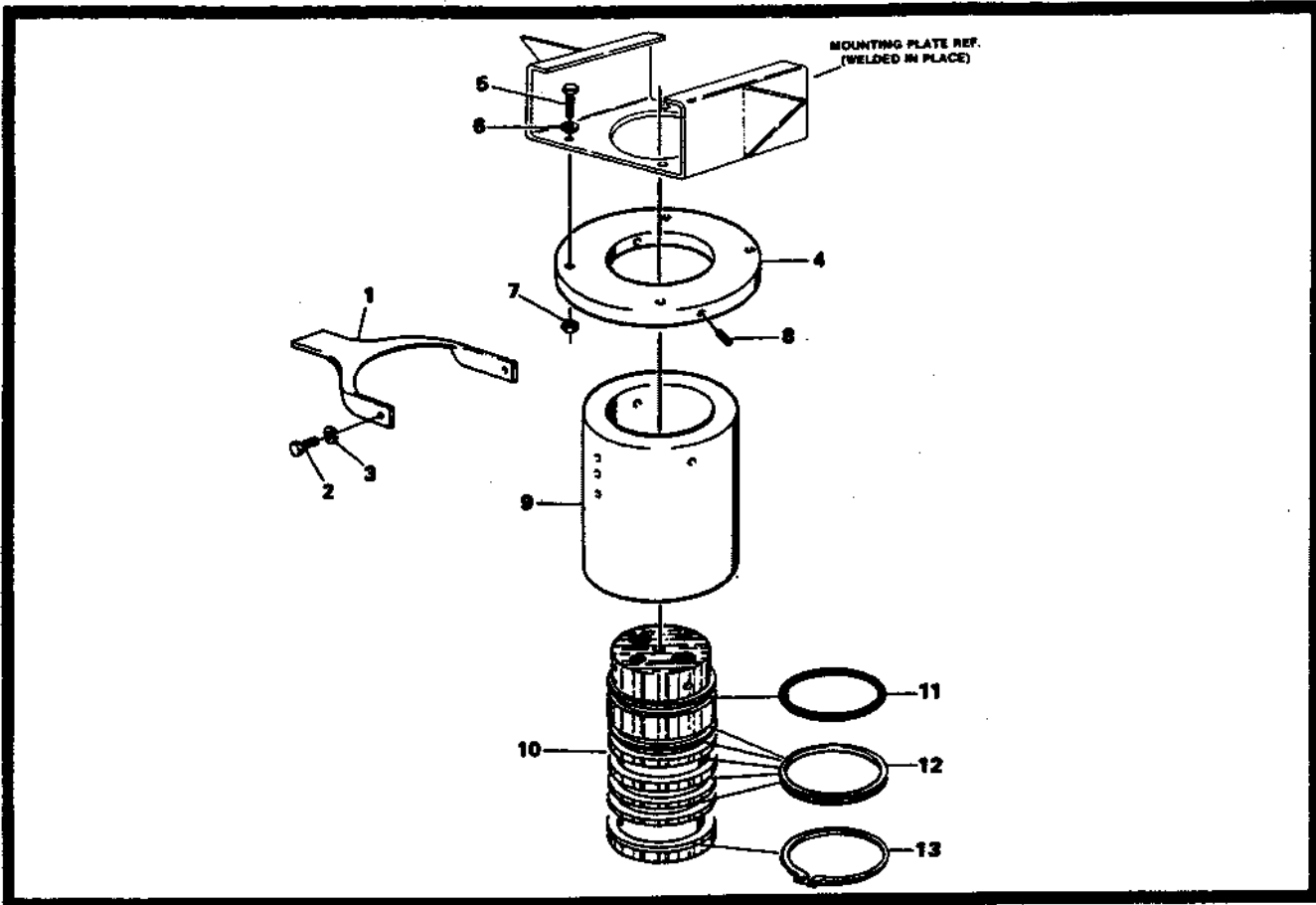


Figure 2-38. Rotary Oil Coupling Installation.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-38	0236349	<b>ROTARY OIL COUPLING INSTALLATION (SINGLE SPEED - RACINE VALVES)</b>	Ref.
	0234479	<b>ROTARY OIL COUPLING INSTALLATION (TWO SPEED - RACINE VALVES)</b>	Ref.
	0238033	<b>ROTARY OIL COUPLING INSTALLATION (VICKERS VALVES)</b>	Ref.
-1	3500403	Plate, Retaining (Attaching Parts)	1
-2	0641807	Bolt 1/2" -13NC x 7/8"	2
-3	4761800	Lockwasher 1/2"	2
	0100003	Sealant	A/R
-4	1440026	Collar (Attaching Parts)	1
-5	0641512	Bolt 5/16"-18NC x 1 1/2"	4
-6	4761500	Lockwasher 5/16"	4
-7	3311501	Nut 5/16"-18NC	4
	1660154	Coupling, Rotary (Racine Valves)	1
	1660160	Coupling, Rotary (Vickers Valves) (Attaching Parts)	1
-8	3951820	Setscrew 1/2"-13NC x 2 1/2"	2
	0100011	Nylock	A/R

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-38		<b>ROTARY OIL COUPLING INSTALLATION (CONTINUED)</b>	Ref.
-9	2760025	Housing, Swivel (5 Port)	1
	2760091	Housing, Swivel (6 Port)	1
-10	0620055	Body, Swivel (5 Port)	1
	0620058	Body, Swivel (6 Port)	1
-11	Kit	O-Ring	1
-12	Kit	Seal	7
-13	3760004	Ring, Retaining	1
	2901146	Seal Kit (Includes Items 11 and 12)	1

SECTION 2 — ILLUSTRATED PARTS LIST

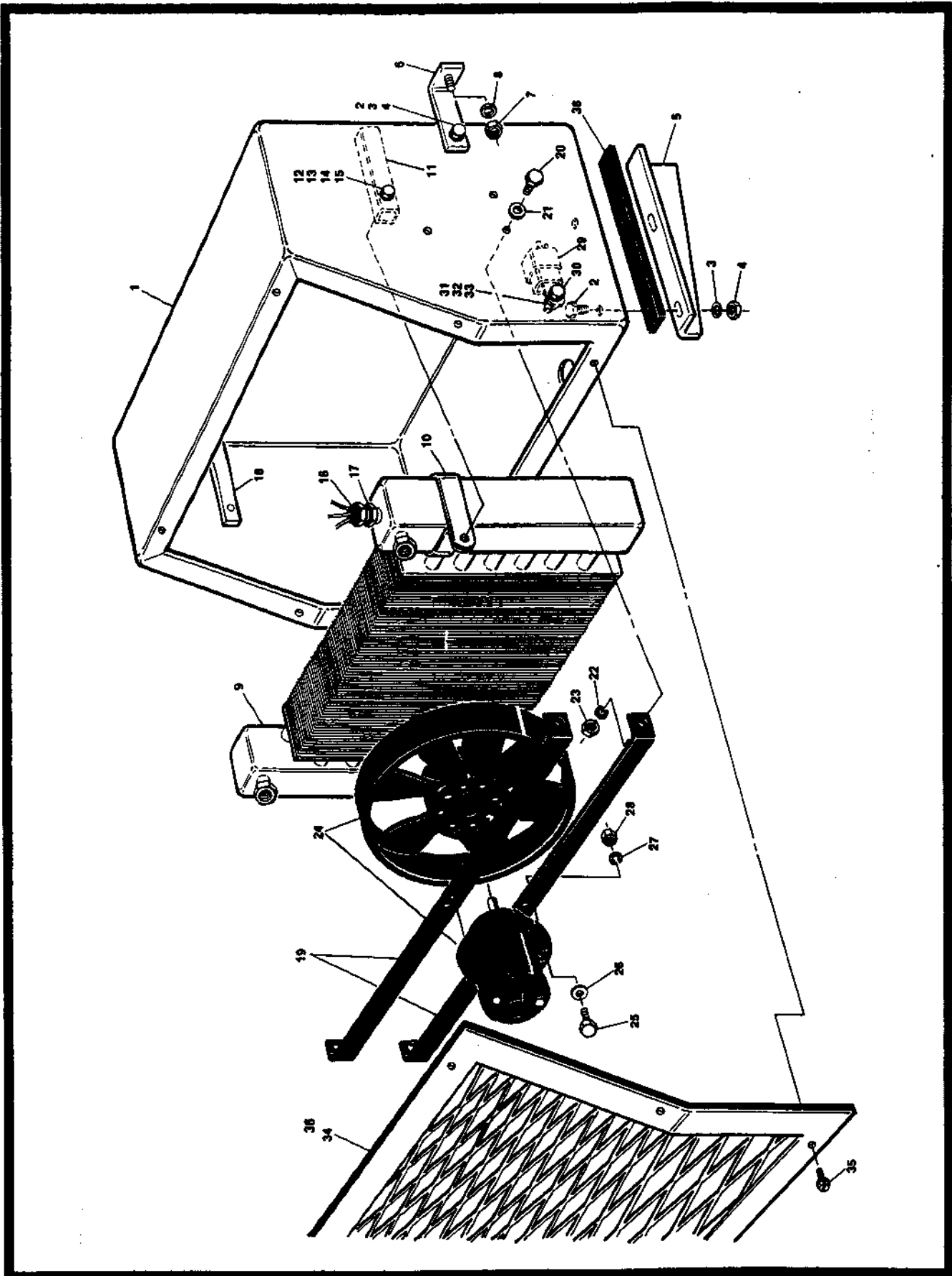


Figure 2-39. Oil Cooler Installation.



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-39	0236589	<b>OIL COOLER INSTALLATION</b>	Ref. A
-1	0860365	Box (Attaching Parts)	1
-2	0641607	Bolt 3/8"-16NC x 7/8"	6
-3	4761600	Lockwasher 3/8"	6
-4	3311601	Nut 3/8"-16NC	6
-5	3530062	Bracket, Support - Box (Bottom) (Welded on Part)	2
-6	0361156	Bar, Support - Box (Side) (Attaching Parts)	2
-7	3311601	Nut 3/8"-16NC	1
-8	4761600	Lockwasher 3/8"	1
	4300034	Stud (Welded On Part)	1
-9	3620016	Radiator (Attaching Parts)	1
-10	1320060	Clamp	4
-11	4561947	Tube	2
-12	0641412	Bolt 1/4"-20NC x 1 1/2"	4
-13	4751400	Flatwasher 1/4"	4
-14	4761400	Lockwasher 1/4"	4
-15	3311401	Nut 1/4"-20NC	4
-16	4360181	Switch, Temperature	1
-17	2220282	Fitting, Reducer	1
	0100020	Sealant	A/R
-18	0360819	Bar	2
-19	0901123	Bracket, Support - Fan Motor (Attaching Parts)	2
-20	0641708	Bolt 5/16"-18NC x 1"	2
-21	4751700	Flatwasher 5/16"	2
-22	4761700	Lockwasher 5/16"	2
-23	3311701	Nut 5/16"-18NC	2
-24	2060012	Motor With Fan (Attaching Parts)	1
-25	0641008	Bolt #10-24NC x 1"	4
-26	4751000	Flatwasher #10	4
-27	4761000	Lockwasher #10	4
-28	3311001	Nut #10-24NC	4
-29	3740049	Relay (Attaching Parts)	1
-30	0641008	Bolt #10-24NC x 1"	1
-31	4751000	Flatwasher #10	1
-32	4761000	Lockwasher #10	1
-33	3311001	Nut #10-24NC	1
-34	2520071	Grill (Attaching Parts)	1
-35	3941403	Screw, Self-Tapping 1/4" x 3/8"	6
-36	4280059	Strip, Rubber	40 in.
	0100001	Adhesive	A/R

SECTION 2 — ILLUSTRATED PARTS LIST

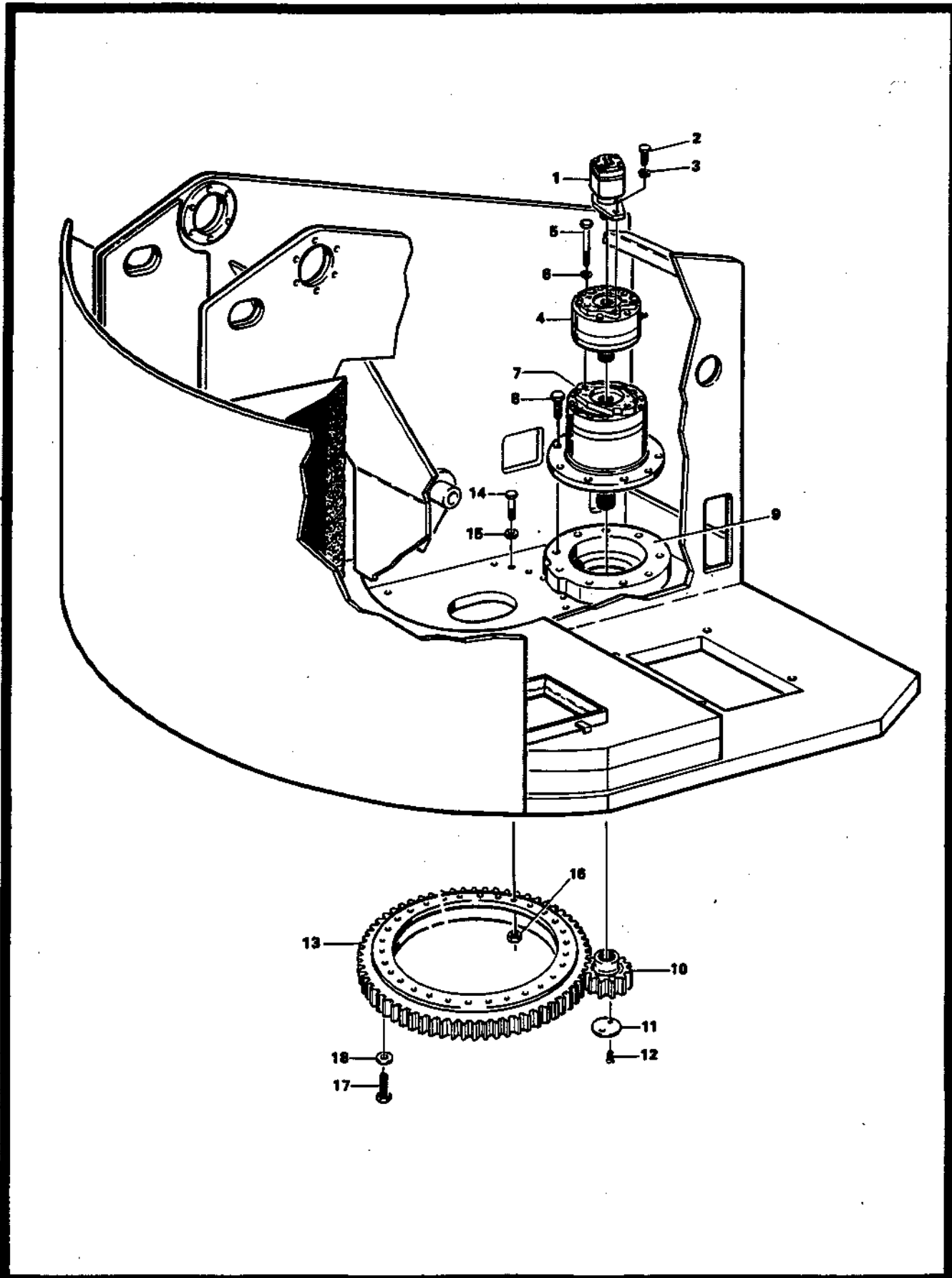


Figure 2-40. Swing Drive and Swing Bearing Installations.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-40		<b>SWING DRIVE AND SWING BEARING INSTALLATIONS</b>	Ref.	
	0236266	<b>SWING DRIVE ASSEMBLY</b>	Ref.	D
-1	3160094	Motor, Swing (See Figure 2-42 For Breakdown) (Attaching Parts)	1	
-2	0641810	Bolt 1/2"-13NC x 1 1/4"	2	
-3	4761800	Lockwasher 1/2"	2	
-4	0920032	Swing Brake Assembly (See Figure 2-41 For Breakdown) (Attaching Parts)	1	
-5	3931872	Bolt, Socket Head 1/2"-13NC x 4 1/2"	2	
-6	4740189	Washer, Special	2	
	4070142	Shim - 1/8"	A/R	
	4070143	Shim - 1/16"	A/R	
	0100009	Sealant	A/R	
-7	2780055	Swing Hub Assembly (See Figure 2-43 For Breakdown) (Attaching Parts)	1	
-8	0641912	Bolt 9/16"-12NC x 1 1/2"	9	
	0100019	Loctite	A/R	
-9	3200197	Plate, Drive Hub Mounting (Welded-On Part)	1	
-10	2440022	Gear, Pinion (Attaching Parts)	1	
-11	3501916	Plate, Retaining	1	
-12	3900031	Screw, Flathead 3/8"-16NC x 3/4"	2	
	0100003	Loctite	A/R	
	0236145	<b>TURNTABLE BEARING INSTALLATION</b>	Ref.	E
-13	0440067	Turntable Bearing (Attaching Parts)	1	
-14	0630139	Bolt 5/8"-11NC x 3" (Grade 8)	23	
-15	4740004	Washer, Hardened	19	
	4740048	Washer, Special	4	
-16	3300183	Nut, 5/8"-11NC (Grade 8)	23	
	0100019	Loctite	A/R	
-17	0630160	Bolt 1/2"-13NC x 2" (Grade 8)	23	
-18	4740003	Washer, Hardened	19	
	4740144	Washer, Special	4	
	0100004	Devcon	A/R	
	0100019	Loctite	A/R	

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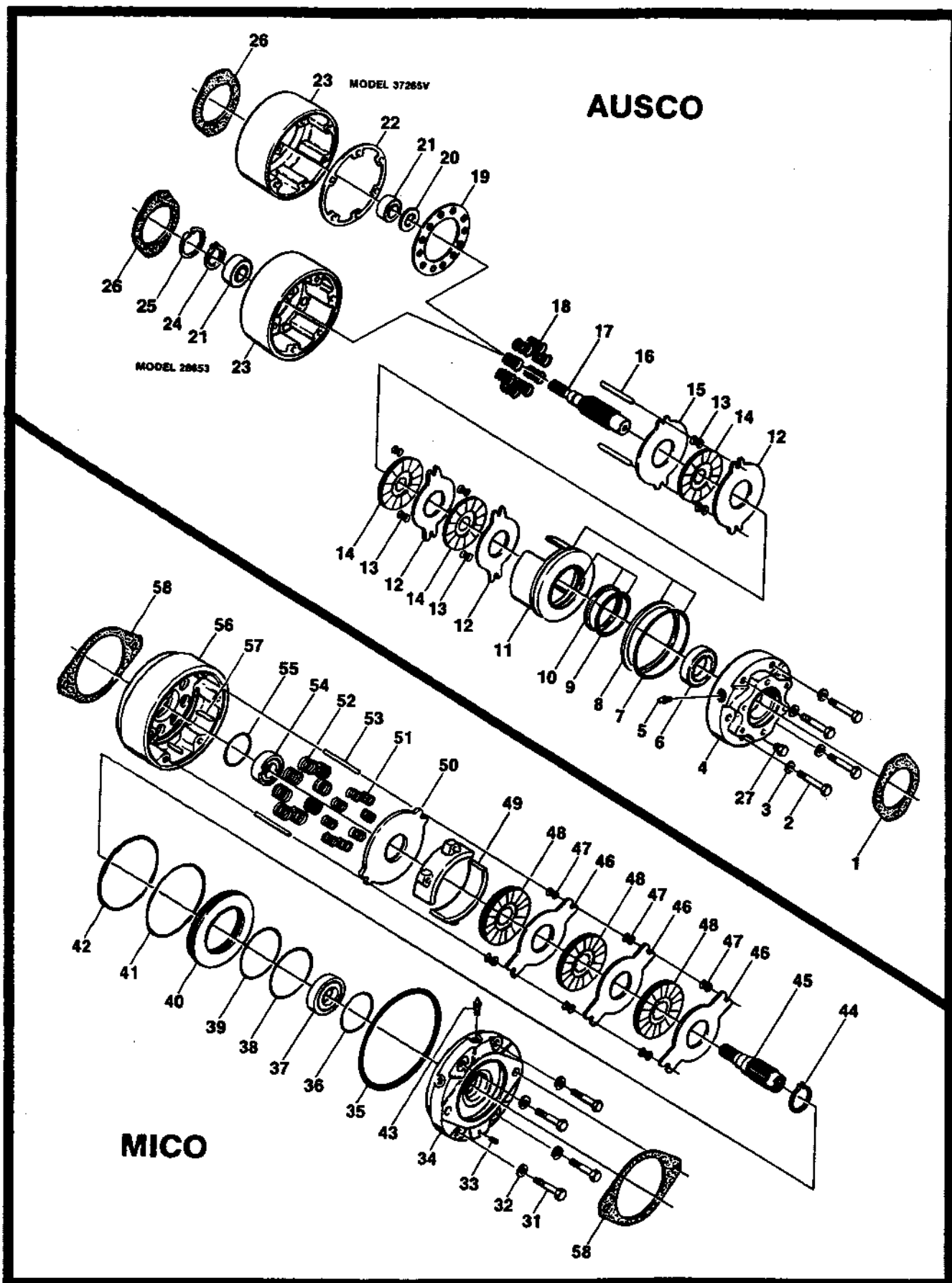


Figure 2-41. Swing Brakes Assembly.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-41	0920032	<b>SWING BRAKE ASSEMBLY - AUSCO (MODEL 28653)</b>	Ref.	—
	0920032	<b>SWING BRAKE ASSEMBLY - AUSCO (MODEL 37265V)</b>	Ref.	C
		<b>Note: Refer to Model Number stamped on the front of the Housing Item 23.</b>		
-1	Kit	Gasket	1	
-2	7000730	Bolt (Model 28653)	4	
	7003007	Bolt, Flanged (Model 37265V)	4	
-3	7000729	Lockwasher (Model 28653 Only)	4	
-4	7003012	Plate, Power (Model 28653)	1	
	7003091	Plate, Power (Model 37265V)	1	
-5	7000796	Bleeder	1	
-6	7000760	Bearing, Ball (Model 37265V Only)	1	
-7	Kit	O-Ring	1	
-8	Kit	Ring, Back-Up	1	
-9	Kit	O-Ring	1	
-10	Kit	Ring, Back-Up	1	
-11	7000721	Piston (Model 28653)	1	
	7003057	Piston (Model 37265V)	1	
-12	7000720	Disc, Stationary (Model 28653)	3	
	7003056	Disc, Stationary (Model 37265V)	3	
-13	7003006	Spring, Compression	6	
-14	7000732	Disc, Rotating (Model 28653)	3	
	7003055	Disc, Rotating (Model 37265V)	3	
-15	7000718	Disc, Primary (Model 28653)	1	
	7003054	Disc, Primary (Model 37265V)	1	
-16	7000717	Pin, Torque	2	
-17	7003013	Shaft, Splined (Model 28653)	1	
	7003053	Shaft, Splined (Model 37265V)	1	
-18	7000798	Spring, Compression (Model 28653)	8	
	7003052	Spring, Compression (Model 37265V)	8	
-19	7003051	Retainer, Spring (Model 37265V Only)	1	
-20	Kit	Seal, Oil	1	
-21	7000713	Bearing, Ball (Model 28653)	1	
	7003049	Bearing, Ball (Model 37265V)	1	
-22	Kit	Gasket (Model 37265V Only)	1	
-23	7000714	Housing (Model 28653)	1	
	7003090	Housing (Model 37265V)	1	
-24	7000712	Ring, Retaining (Model 28653 Only)	1	
-25	7000711	Ring, Retaining (Model 28653 Only)	1	
-26	Kit	Gasket	1	
-27	7003059	Valve, Pressure Relief (Model 37265V Only)	1	
-28	Not Used			
-29	Not Used			
-30	Not Used			
	2900131	Seal Kit (Includes Items 1,7,8,9,10,20,22 and 26)	1	
	0920032	<b>SWING BRAKE ASSEMBLY - MICO</b>	Ref.	B
-31	7007913	Capscrew	4	
-32	7007912	Lockwasher	4	
-33	7007924	Plug	1	
-34	7007928	Cover	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-41	0920032	<b>SWING BRAKE ASSEMBLIES (CONTINUED)</b>	Ref.
-35	Kit	Ring, Square	1
-36	Kit	O-Ring	1
-37	Kit	Bearing	1
-38	Kit	O-Ring	1
-39	Kit	Ring, Back-Up	1
-40	7007923	Piston	1
-41	Kit	O-Ring	1
-42	Kit	Ring, Back-Up	1
-43	7007914	Bleeder	1
-44	Kit	Ring, Retaining	1
-45	7007926	Shaft	1
-46	7007908	Disc	3
-47	7007916	Spring	6
-48	7007909	Disc, Friction	3
-49	7007902	Separator	2
-50	7007907	Disc	1
-51	7007906	Spring	8
-52	7007905	Spring	8
-53	7007915	Pin, Dowel	2
-54	Kit	Bearing	1
-55	Kit	O-Ring	1
-56	7007930	Housing	1
-57	7007901	Pin, Spiral	4
-58	7007933	Gasket	1
	7007934	Gasket	1
	2900642	Seal Kit (Includes Items 35, 36, 38, 39, 41, 42, 55 and 58 Gaskets)	1
	7007927	Bearing Kit (Includes Items 36, 37, 44, 54, 55 and 58 Gaskets)	1

SECTION 2 — ILLUSTRATED PARTS LIST

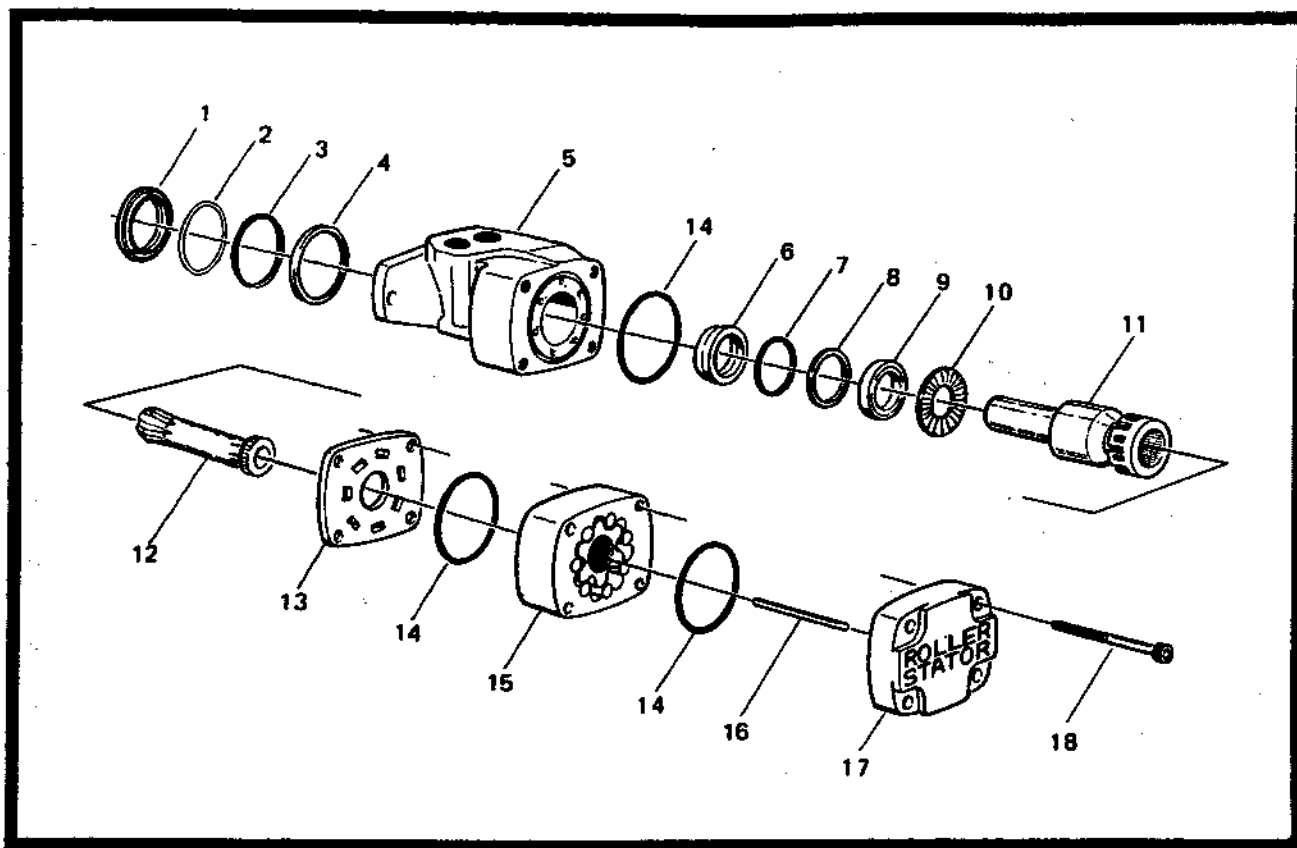


Figure 2-42. Swing Motor Assembly.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-42	3160094	<b>SWING MOTOR ASSEMBLY</b>	Ref.
-1	Kit	Seal, Dust	1
-2	Kit	Ring, Wire	1
-3	Kit	Shim	1
-4	Kit	Seal	1
-5	7005818	Housing	1
-6	Kit	Carrier, Seal	1
-7	Kit	Shim	1
-8	Kit	Back-up, Leather	1
-9	Kit	Seal, Shaft	1
-10	7005809	Bearing, Thrust	1
-11	7005810	Shaft	1
-12	7005811	Link, Drive	1
-13	7005812	Plate, Wear	1
-14	Kit	Seal	3
-15	7005823	Stator, Roller	1
-16	7005820	Pin, Dowel	1
-17	7005816	Cover, End	1
-18	7005821	Bolt	4
	2900477	Seal Kit (Consists of Items 1,2,3,4,6,7,8,9 and 14)	1

SECTION 2 - ILLUSTRATED PARTS LIST

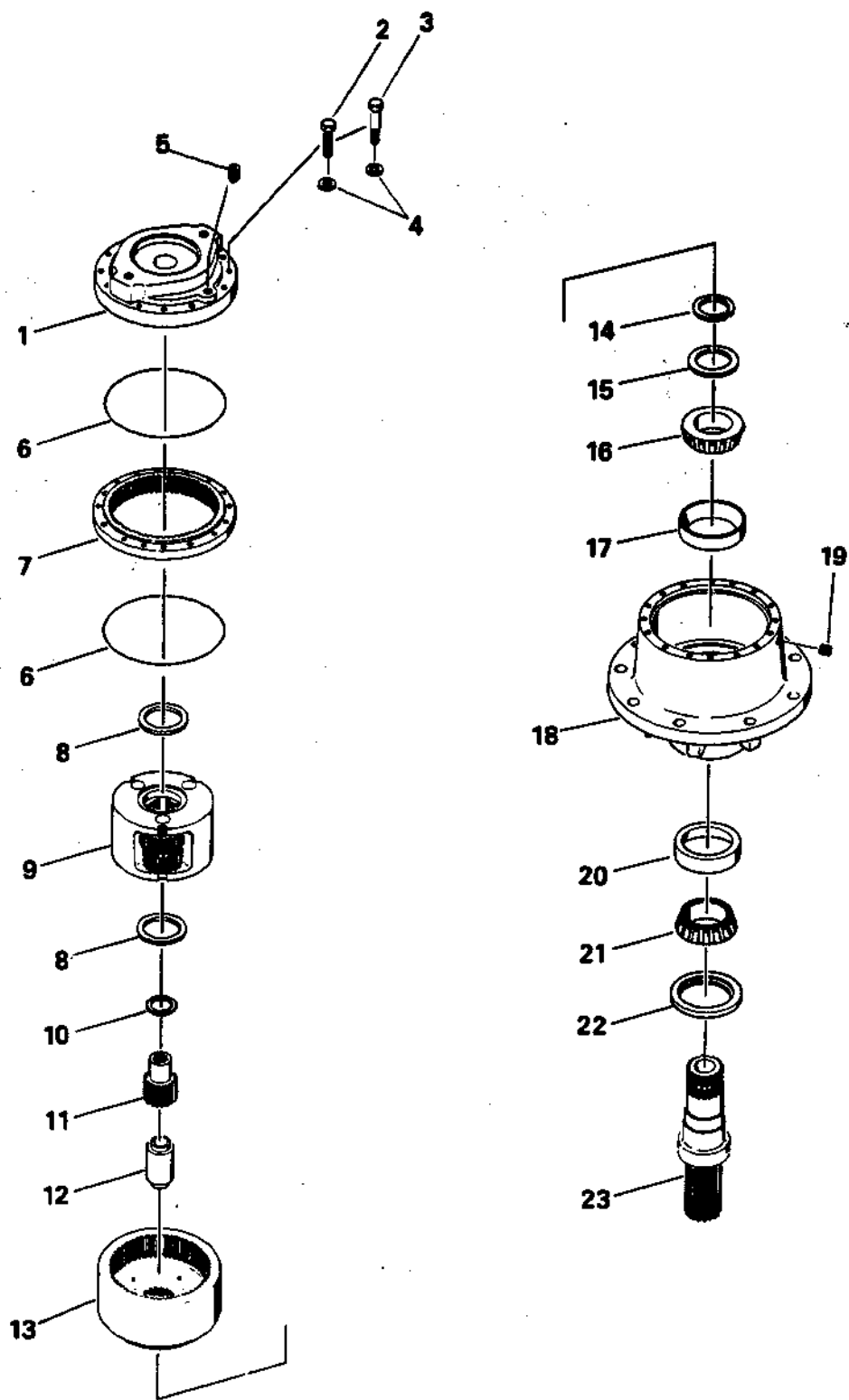


Figure 2-43. Swing Hub Assembly.



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-43	2780055	<b>SWING HUB ASSEMBLY</b>	Ref.
-1	7000209	Cover (Attaching Parts)	1
-2	7000217	Bolt, Hex Head	8
-3	7000214	Bolt, Hex Head, Shoulder	4
-4	4751500	Flatwasher	12
-5	7000242	Plug, Pipe	1
-6	Kit	O-Ring	2
-7	7000208	Gear, Ring	1
-8	7000253	Washer, Thrust	2
-9	7000207	Planet Carrier Assembly (No Service Breakdown Parts Purchase Entire Assembly)	1
-10	7000270	Washer, Thrust	1
-11	7000268	Gear, Sun-Input	1
-12	7000269	Spacer, Sun Gear	1
-13	7000246	Gear, Internal	1
	7000271	<b>HUB ASSEMBLY</b>	Ref.
-14	Kit	Ring, Retaining	1
-15	Kit	Spacer	1
-16	7000258	Bearing, Tapered Roller	1
-17	7000257	Cup, Bearing	1
-18	7000210	Hub	1
-19	7000242	Plug, Pipe	1
-20	7000255	Cup, Bearing	1
-21	7000256	Bearing, Tapered Roller	1
-22	Kit	Seal	1
-23	7000233	Shaft, Output	1
	2900034	Kit, Repair (Includes Items 6, 14, 15 and 22).	1

SECTION 2 — ILLUSTRATED PARTS LIST

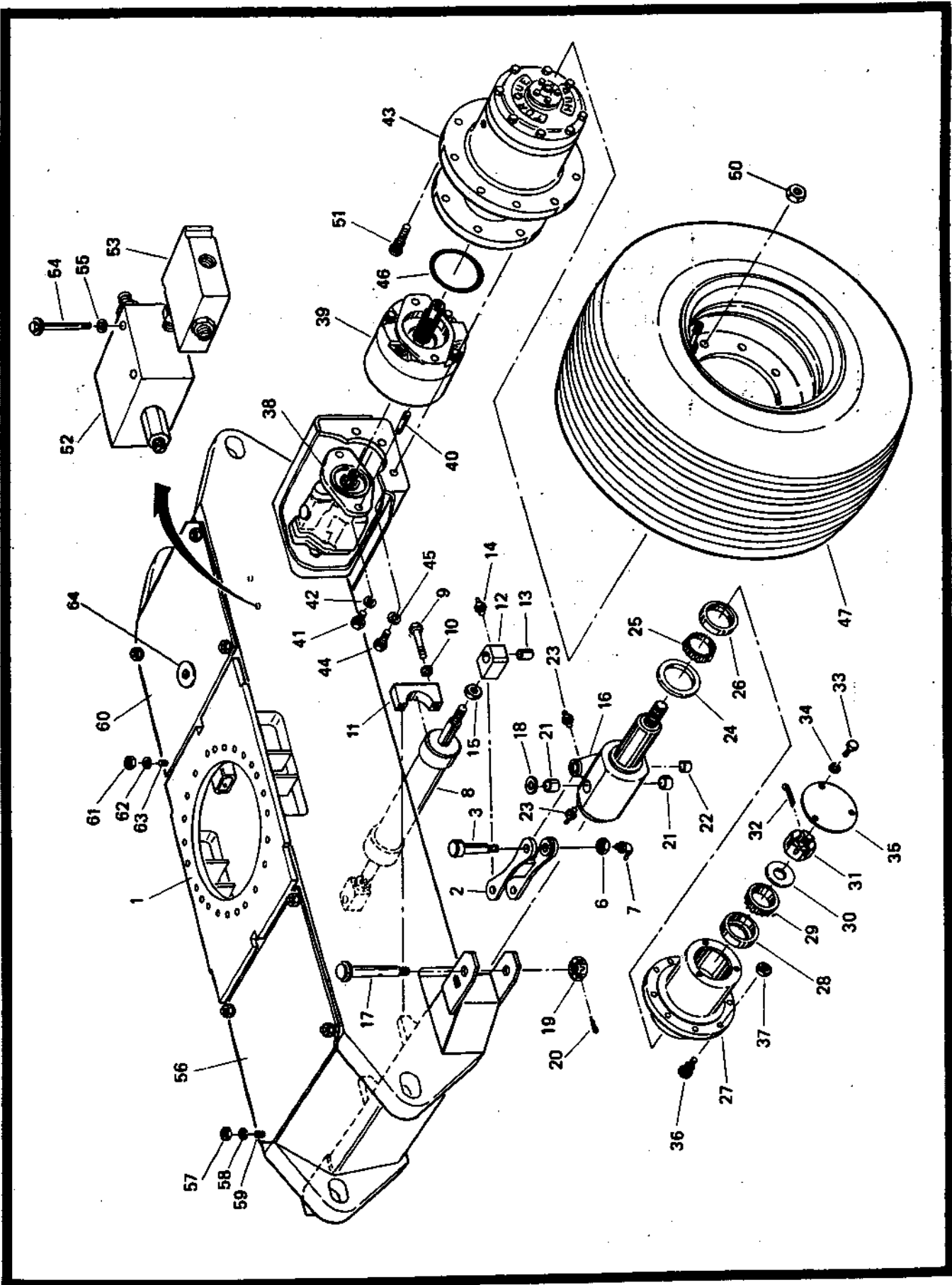


Figure 2-44. Frame, Steering and Drive Components Installation (Double Acting Steer Cylinder).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-44		<b>FRAME, STEERING AND DRIVE COMPONENTS INSTALLATIONS (DOUBLE ACTING STEER CYLINDER)</b>	Ref.	
-1	2360224	<b>FRAME WELDMENT</b>	Ref.	D
	0236144	<b>STEERING INSTALLATION</b>	Ref.	G
-2	4841838	Steering Link (Attaching Parts)	2	
-3	0630354	Bolt, Special	2	
-4	Not Used			
-5	Not used			
-6	3312605	Locknut 1"-8NC	2	
-7	2160001	Fitting, Grease	2	
-8	1681511	Steer Cylinder Assembly (Coarse Thread Rod) (See Figure 2-45 For Breakdown)	1	
	1681534	Steer Cylinder Assembly (Fine Thread Rod) (See Figure 2-45 For Breakdown) (Attaching Parts)	1	
-9	3931868	Bolt, Socket Head 1/2"-13NC x 4 1/4"	4	
-10	4761800	Lockwasher 1/2"	4	
-11	1320115	Clamp	2	
-12	1360128	Clevis (Coarse Thread)	2	
	1360158	Clevis (Fine Thread)	2	
-13	0960981	Bushing	2	
-14	2160002	Fitting, Grease	2	
-15	3312802	Nut, Jam 1 1/8"-7NC	2	
	3323002	Nut, Jam 1 1/4"-12NF	2	
-16	4130133	Spindle, Steer (Attaching Parts)	2	
-17	3420871	Pin, King	2	
-18	4740247	Washer, Thrust	2	
-19	3313003	Nut, Slotted 1 1/4"-7NC	2	
-20	3450608	Pin, Cotter	2	
-21	0960839	Bushing, Oilite	4	
-22	0960275	Bushing, Oilite	2	
-23	2160002	Fitting, Grease	4	
-24	3960098	Seal	2	
-25	0440019	Bearing, Cone	2	
-26	0440018	Bearing, Cup	2	
-27	2780091	Hub Weldment (Attaching Parts)	2	
-28	0440018	Bearing, Cup	2	
-29	0440019	Bearing, Cone	2	
-30	4740016	Washer, Hardened	2	
-31	3300208	Nut, Slotted 1 1/2"-12NF	2	
-32	3450408	Pin, Cotter	2	
-33	0641003	Bolt #10-24NC x 3/8"	12	
-34	4761000	Lockwasher 3/8"	12	
-35	1120032	Cap, Hub	2	
	0235126	Front Tire Wheel Assembly (Not Shown) (Attaching Parts)	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-44		<b>FRAME, STEERING AND DRIVE COMPONENTS INSTALLATIONS (CONTINUED)</b>	Ref.
-36	0630137	Bolt, Wheel Stud	18
-37	3300012	Nut, Wheel	18
	0236243	<b>WHEEL DRIVE ASSEMBLY</b>	Ref.
-38	3160118	Drive Motor Assembly (See Figure 2-48 For Breakdown)	2
-39	0920072	Drive Brake Assembly (Housing Length - 3 3/4") See Figure 2-49 For Breakdown)	2
	0920027	Drive Brake Assembly (Housing Length - 4") (See Figures 2-51 and 2-50 For Breakdowns) (Attaching Parts)	2
-40	4320008	Stud	4
-41	3311801	Nut 1/2"-13NC	4
-42	4761800	Lockwasher 1/2"	4
-43	2780106	Drive Hub Assembly (See Figure 2-52 For Breakdown) (Attaching Parts)	2
-44	0642016	Bolt, Hex 5/8"-11NC x 2"	12
-45	4762000	Lockwasher 5/8"	12
-46	3790152	O-Ring (When Equipped)	2
	0236246	<b>TIRE AND WHEEL INSTALLATION - POLYURETHANE FILLED TIRES</b> Note: Polyurethane Filled Tires Serviced Only As An Assembly	Ref.
-47	0236247	Tire and Wheel Assembly (LH Rear)	1
	0236248	Tire and Wheel Assembly (RH Rear - Not Shown) (Attaching Parts)	1
-48	Not Used		
-49	Not Used		
-50	3300106	Nut, Wheel	18
-51	7000265	Bolt, Wheel Stud	18
	0236150	<b>FLOW DIVIDER AND OVERCENTER VALVE INSTALLATION</b>	Ref. B
-52	4640161	Valve, Overcenter (Use When Bolted Directly to Axle Housing As Shown)	1
	4640259	Valve, Overcenter (Use When Bolted to a Bracket Welded on the Axle Housing - Not Shown)	1
-53	4640260	Valve, Flow Divider (Attaching Parts)	1
-54	0641540	Bolt 5/16"-18NC x 5"	2
-55	4761500	Lockwasher 5/16"	2
	4751500	Flatwasher 5/16" (When Required)	2
	3311501	Nut 5/16"-18NC (When Required)	2
	0236189	<b>FRAME SHIELDS INSTALLATION</b>	Ref. B
-56	4060564	Shield Front (Attaching Parts)	1

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-44		<b>FRAME, STEERING AND DRIVE COMPONENTS INSTALLATIONS (CONTINUED)</b>	Ref.
-57	3300151	Nut, Acorn 1/4"-20NC	6
-58	4751400	Flatwasher 1/4"	6
-59	4300031	Stud (Welded on Part)	6
-60	4060565	Shield Rear (Attaching Parts)	1
-61	3300151	Nut, Acorn 1/4"-20NC	6
-62	4761400	Flatwasher 1/4"	6
-63	4300031	Stud (Welded on Part)	6
-64	1670297	Shield, Cover (Attaching Parts)	1
	3911020	Screw, Machine #10-24NC x 1 1/4"	1
	4761000	Lockwasher #10	1
	4751000	Flatwasher #10	1
	0361077	Bar	1



SECTION 2 — ILLUSTRATED PARTS LIST

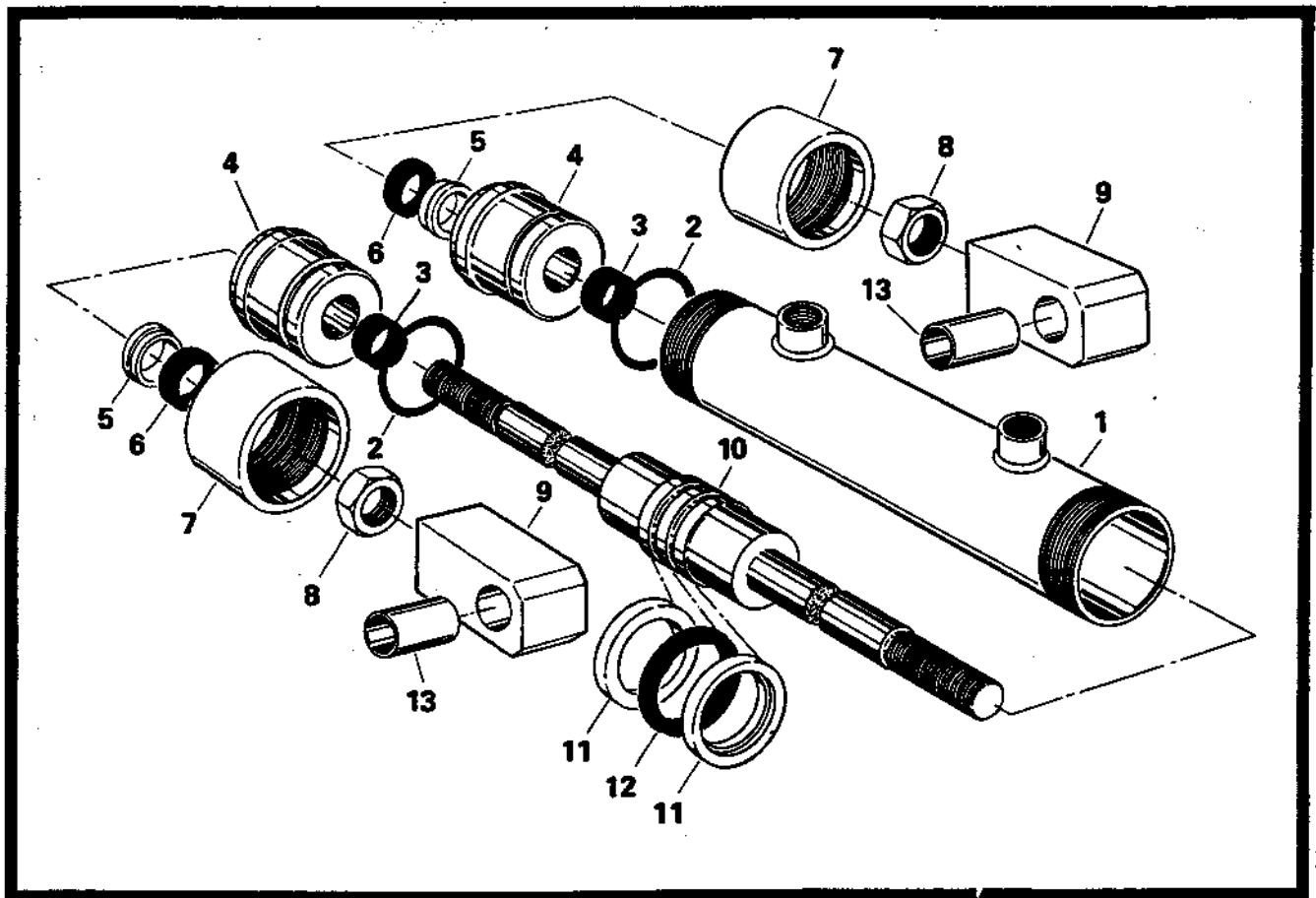


Figure 2-45. Steer Cylinder Assembly (Double Acting).

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-45	1681511	<b>STEER CYLINDER ASSEMBLY (DOUBLE ACTING WITH COARSE THREAD ROD)</b>	Ref. C
	1681534	<b>STEER CYLINDER ASSEMBLY (DOUBLE ACTING WITH FINE THREAD ROD)</b>	Ref. —
—1	1680720	Barrel	1
—2	Kit	O-Ring	2
—3	Kit	Wear Ring	2
—4	1681322	Head	2
—5	Kit	Rod Seal	2
—6	Kit	Rod Wiper	2
—7	1120108	Head Retainer	2
—8	3312802	Nut, Jam 1 1/8"-7NC	2
	3323002	Nut, Jam 1 1/4"-12NF	2
—9	1360128	Clevis (Coarse Thread)	2
	1360158	Clevis (Fine Thread)	2
—10	1681319	Piston-Rod Assembly (1681511 Cylinder)	1
	3480112	Piston (1681534 Cylinder)	1
	1681380	Rod (1681534 Cylinder)	2
—11	Kit	Ring, Guideloc	2
—12	Kit	Seal, Piston	2
—13	0960981	Bushing	2
	2900348	Kit, Seal (Includes items 2,3,5,6,11 and 12)	1
	0460043	Bellows (Optional - Not Shown)	2

SECTION 2 — ILLUSTRATED PARTS LIST

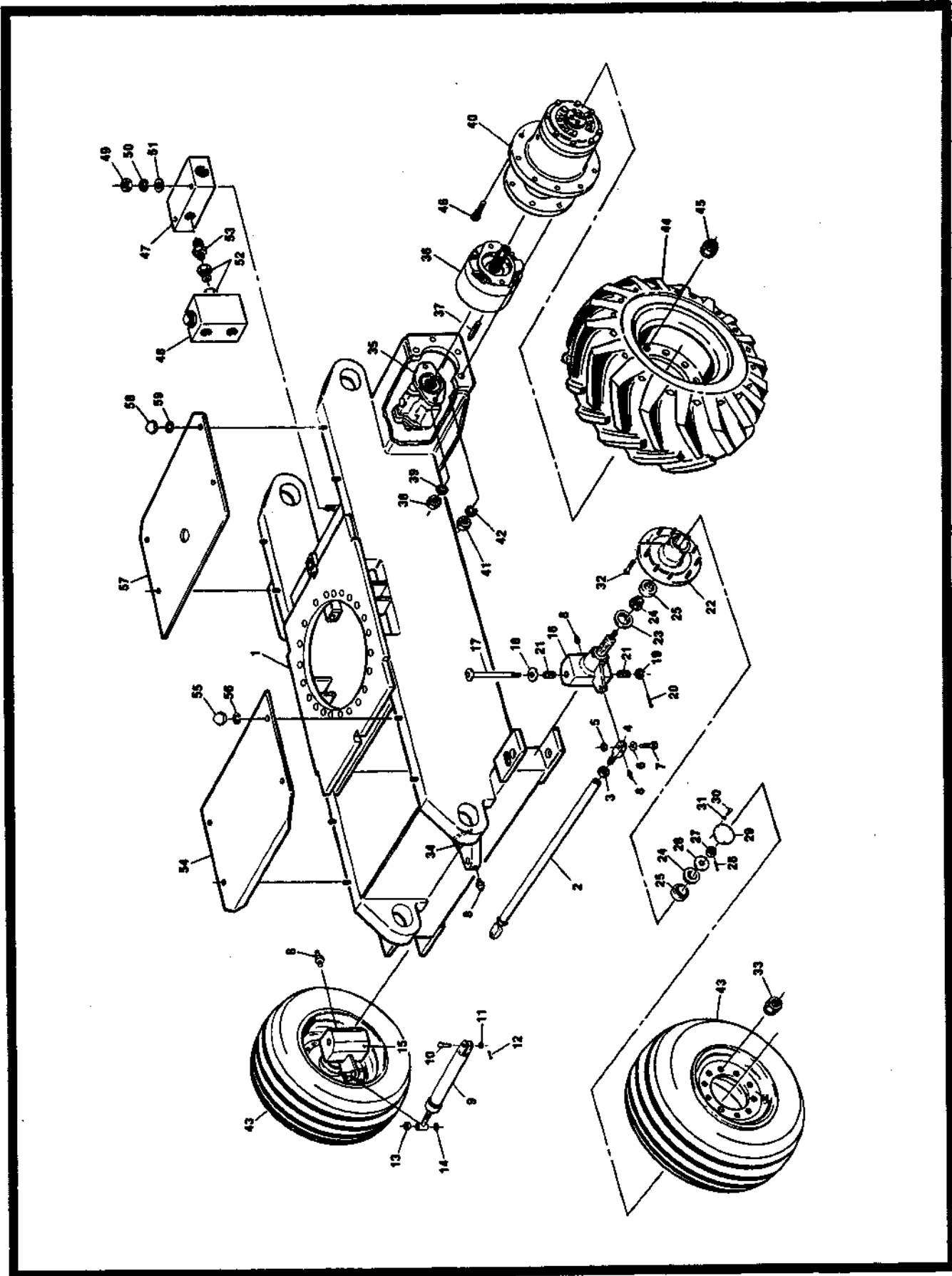


Figure 2-46. Frame, Steering and Drive Components Installation (Single Acting Steer Cylinder).



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-46		<b>FRAME, STEERING AND DRIVE COMPONENTS INSTALLATIONS (SINGLE ACTING CYLINDER)</b>	Ref.	
-1	2360240	<b>FRAME WELDMENT</b>	Ref.	C
	0236468	<b>STEERING INSTALLATION</b>	Ref.	F
-2	3840864	Tie-Rod (LH/RH Threads on Opposite Ends) (May 1986 to Present)	1	
	3840764	Tie-Rod (RH Threads on Both Ends) (1984 to April 1986) (Attaching Parts)	1	
-3	3300023	Nut 1 1/4"-12NF (RH Threads)	2/1	
	3300229	Nut 1 1/4"-12NF (LH Threads)	1	
-4	0560605	End, Tie-Rod (RH Threads)	2/1	
	0560714	End, Tie-Rod (LH Threads)	1	
-5	3312602	Nut, Jam 1"-8NC	2	
-6	0440091	Washer, Thrust	2	
-7	0642628	Bolt 1"-8NC x 3 1/2"	2	
-8	2160002	Fitting, Grease	5	
-9	1681533	Steer Cylinder Assembly (2 1/2" Bore) (See Figure 2-47 For Breakdown)	1	
	1681562	Steer Cylinder Assembly (3" Bore) (See Figure 2-47 For Breakdown) (Attaching Parts)	1	
-10	3431622	Pin, Clevis	1	
-11	4752600	Flatwasher 1"	1	
-12	3450606	Pin, Cotter	1	
-13	3300175	Locknut, Special	1	
-14	0440091	Washer, Thrust	1	
-15	4130160	Spindle - RH (1 1/2" Dia. King Pin)	1	
	4130142	Spindle - RH (1 1/4" Dia. King Pin)	1	
-16	4130161	Spindle - LH (1 1/2" Dia. King Pin)	1	
	4130143	Spindle - LH (1 1/4" Dia. King Pin) (Attaching Parts)	1	
-17	3421243	King Pin (1 1/2" Dia.)	1	
	3421127	King Pin (1 1/4" Dia.)	1	
-18	0440183	Washer, Thrust (1 1/2" I.D.)	1	
	0440162	Washer, Thrust (1 1/4" I.D.)	1	
-19	3300208	Nut, Slotted 1 1/2"-12NF	1	
	3313003	Nut, Slotted 1 1/4"-7NC	1	
-20	3451012	Pin, Cotter 5/16" x 3"	1	
	3450608	Pin, Cotter 3/16" x 2"	1	
-21	0960523	Bushing, Bronze (1 1/2" Dia.)	4	
	0960839	Bushing, Bronze (1 1/4" Dia.)	4	
-22	2780091	Hub Assembly (Attaching Parts)	2	
-23	3960098	Seal, Hub	1	
-24	0440019	Cone, Bearing	2	
-25	0440018	Cup, Bearing	2	
-26	4740016	Washer, Hardened	1	
-27	3300208	Nut, Slotted 1 1/2"-12NF	1	
-28	3450810	Pin, Cotter	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-46		<b>FRAME, STEERING AND DRIVE COMPONENTS INSTALLATIONS (SINGLE ACTING CYLINDER) (CONTINUED)</b>	Ref.	
-29	1120032	Cap, Hub (Attaching Parts)	2	
-30	0641003	Bolt #10-24NC x 3/8"	3	
-31	4761000	Lockwasher #10	3	
-32	0630137	Stud, Wheel	18	
-33	3300012	Lug Nut 1/2"-20NF	18	
-34	2540002	Grommet, Nylon	7 in.	
	0236243	<b>WHEEL DRIVE ASSEMBLY (ALL WISCONSIN AND ELECTRIC/DEUTZ FROM 1984-1985)</b>	Ref.	C
	0237316	<b>WHEEL DRIVE ASSEMBLY (DEUTZ FROM 1986 TO PRESENT)</b>	Ref.	A
-35	3160118	Drive Motor Assembly (All Wisconsin, Electric and 1984-85 Deutz) (See Figure 2-48 For Breakdown)	2	
	3160130	Drive Motor Assembly (1986 to Present Deutz) (See Figure 2-48 For Breakdown)	2	
-36	0920072	Drive Brake Assembly (Housing Length - 3 3/4") See Figure 2-49 For Breakdown	2	
	0920027	Drive Brake Assembly (Housing Length - 4") (See Figures 2-51 and 2-50 For Breakdowns) (Attaching Parts)	2	
-37	4320008	Stud	2	
-38	3311801	Nut 1/2"-13NC	2	
-39	4761800	Lockwasher 1/2"	2	
-40	2780106	Drive Hub Assembly (See Figure 2-52 For Breakdown) (Attaching Parts)	2	
-41	0642016	Bolt, Hex 5/8"-11NC x 2"	6	
-42	4762000	Lockwasher 5/8"	6	
	0236246	<b>TIRE AND WHEEL INSTALLATION - POLYURETHANE FILLED TIRES</b> Note: Polyurethane Filled Tires Serviced Only As An Assembly	Ref.	
-43	0235126	Tire and Wheel Assembly (Front)	2	
-44	0236247	Tire and Wheel Assembly (LH Rear)	1	
	0236248	Tire and Wheel Assembly (RH Rear - Not Shown) (Attaching Parts)	1	
-45	3300106	Nut, Wheel (Rear)	9	
-46	7000265	Bolt, Wheel Stud (Rear)	9	
	0237436	<b>FLOW DIVIDER AND OVERCENTER VALVE INSTALLATION (JUNE 1986 TO PRESENT)</b>	Ref.	D
	0236150	<b>FLOW DIVIDER AND OVERCENTER VALVE INSTALLATION (1984 TO MAY 1986)</b>	Ref.	B
-47	4640454	Valve, Overcenter (Use When Bolted Directly to Axle Housing As Shown)	1	
	4640259	Valve, Overcenter (Use When Bolted to a Bracket Welded on the Axle Housing - Not Shown)	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2—46		<b>FRAME, STEERING AND DRIVE COMPONENTS INSTALLATIONS (SINGLE ACTING CYLINDER) (CONTINUED)</b>	Ref.
—48	4640260	Valve, Flow Divider (Attaching Parts)	1
	4300033	Stud (Welded on Part)	2
	0641540	Bolt 5/16"-18NC x 5"	2
—49	4761500	Lockwasher 5/16"	2
—50	4751500	Flatwasher 5/16"	2
—51	3311501	Nut 5/16"-18NC	2
		-----	
—52	2220435	Fitting	1
—53	2220594	Fitting	1
	0236471	<b>FRAME SHIELDS INSTALLATION</b>	Ref.
			A
—54	4060587	Shield (Front) (Attaching Parts)	1
—55	3300151	Nut, Acorn 1/4"-20NC	6
—56	4751400	Flatwasher 1/4"	6
	4300031	Stud (Welded on Part)	6
		-----	
—57	4060588	Shield (Rear) (Attaching Parts)	1
—58	3300151	Nut, Acorn 1/4"-20NC	6
—59	4761400	Flatwasher 1/4"	6
	4300031	Stud (Welded on Part)	6
		-----	

SECTION 2 — ILLUSTRATED PARTS LIST

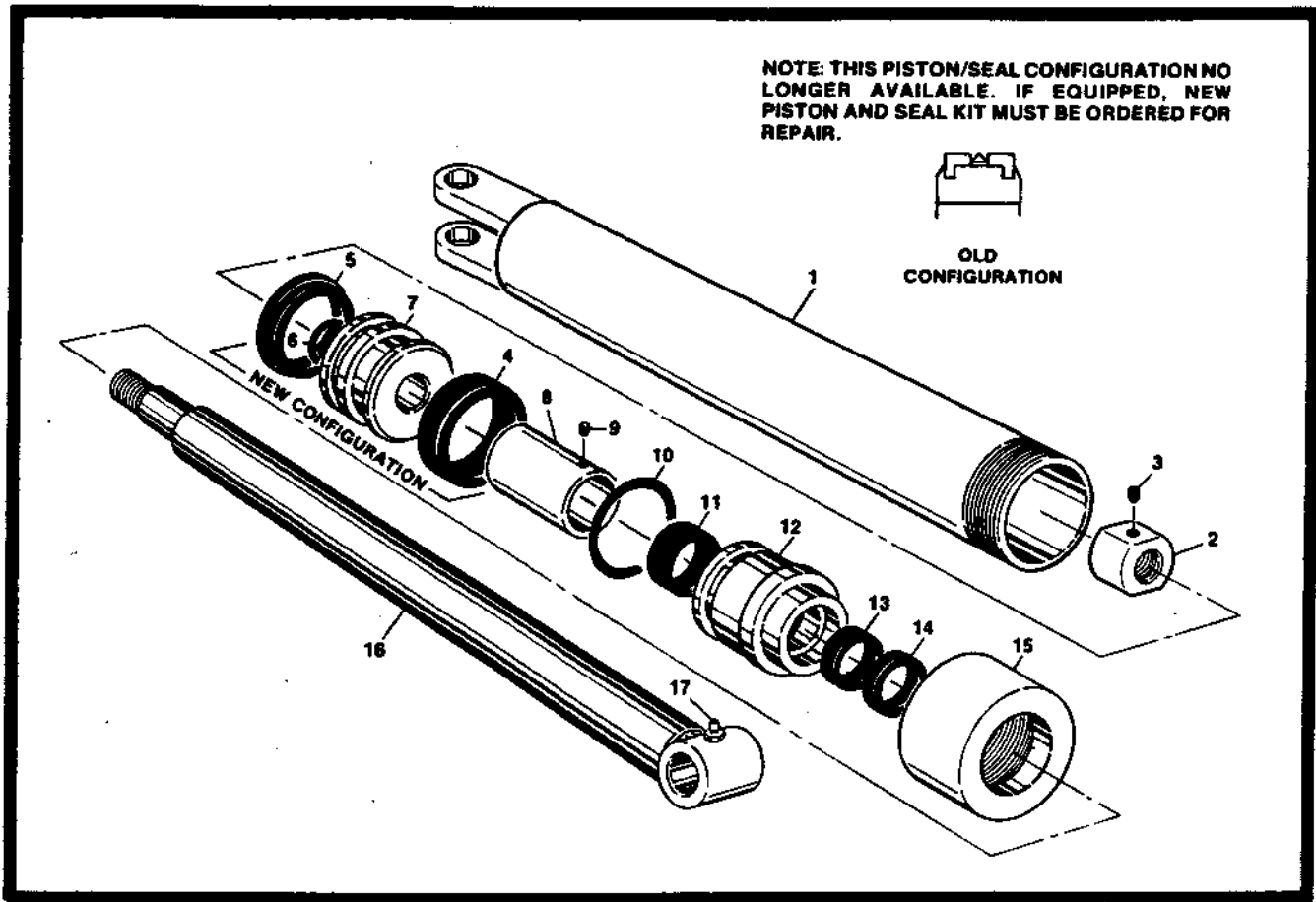


Figure 2-47. Steer Cylinder Assembly (Single Acting).

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-47	1681562	<b>STEER CYLINDER ASSEMBLY (SINGLE ACTING) (3" BORE)</b>	Ref. E
	1681533	<b>STEER CYLINDER ASSEMBLY (SINGLE ACTING) (2 1/2" BORE)</b>	Ref. D
		<b>Note: Refer to P/N Stamped on Barrel for Identification.</b>	
-1	1681433	Barrel (1681562 Cylinder)	1
	1680740	Barrel (1681533 Cylinder)	1
-2	3300187	Nut	1
	0100011	Nyloc	A/R
-3	3900141	Setscrew	1
	0100011	Nyloc	A/R
-4	Kit	Ring, Wear	2
-5	Kit	Seal	1
-6	Kit	O-Ring	1
-7	3480134	Piston (1681562 Cylinder)	1
	3480120	Piston (1681533 Cylinder)	1
-8	4562687	Spacer	1
-9	3900141	Setscrew	1
	0100011	Nyloc	1
-10	Kit	O-Ring	1
	Kit	Ring, Back-up (1681533 Cylinder Only)	2

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2—47		<b>STEER CYLINDER ASSEMBLY (SINGLE ACTING) (CONTINUED)</b>	Ref.
—11	Kit	Ring, Wear	1
—12	1681322	Head, Cylinder (1681562 Cylinder)	1
	1680892	Head, Cylinder (1681533 Cylinder)	1
—13	Kit	Seal, Rod	1
—14	Kit	Wiper, Rod	1
—15	1120108	Cap (1681562 Cylinder)	1
	1120179	Cap (1681533 Cylinder)	1
—16	1681435	Rod (1681562 Cylinder)	1
	1680739	Rod (1681533 Cylinder)	1
—17	2160002	Fitting, Grease (2WD)	1
	2901148	Kit, Seal (1681562 Cylinder) (Includes Items 4,5,6,10,11,13 and 14)	1
	2901119	Kit, Seal (1681533 Cylinder) (Includes Items 4,5,6,10,11,13 and 14)	1
	0460043	Bellows, Steer Cylinder (Optional - Not Shown)	1

SECTION 2 — ILLUSTRATED PARTS LIST

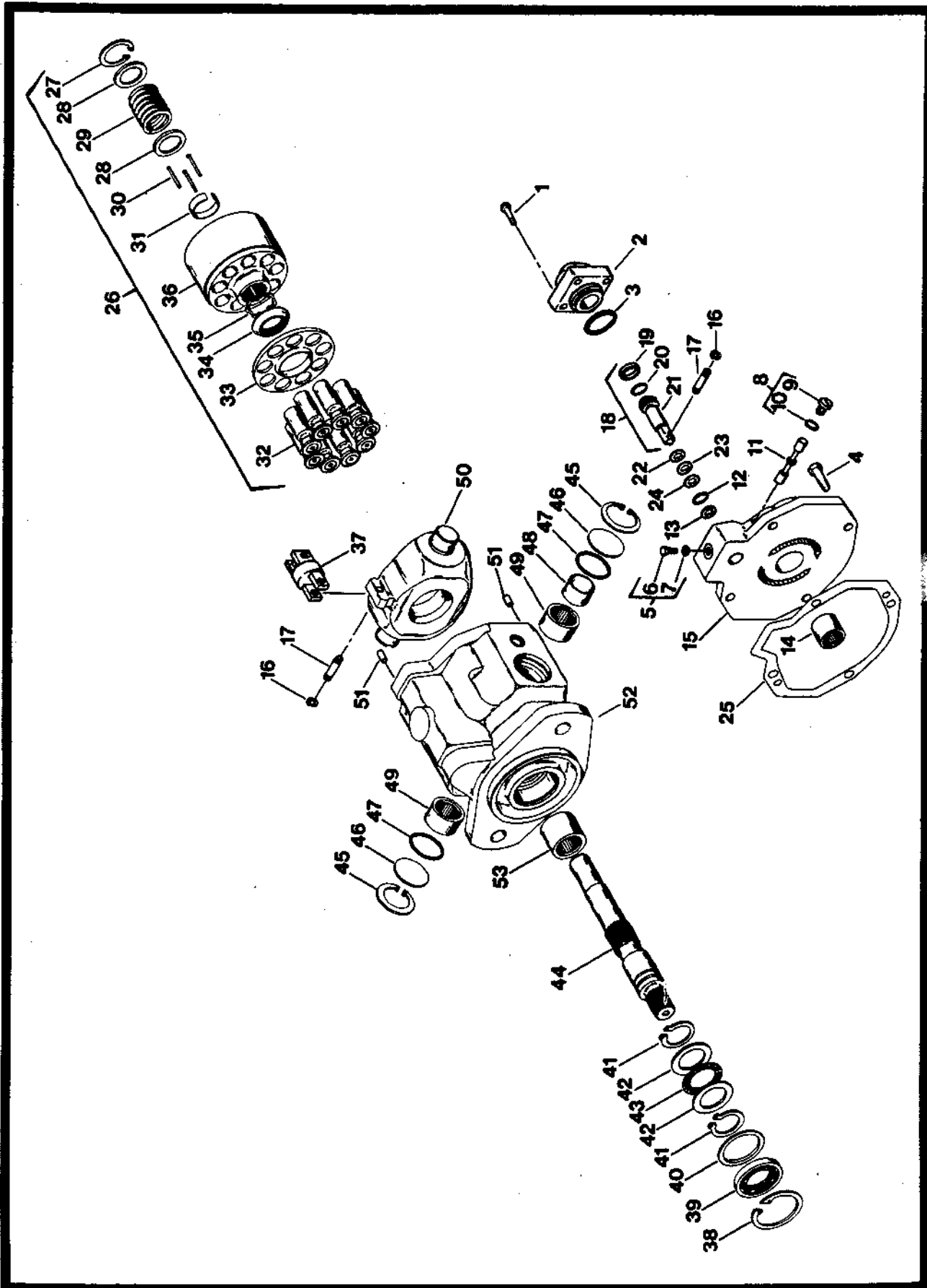


Figure 2-48. Drive Motor Assembly.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2—48	3160118	<b>DRIVE MOTOR ASSEMBLY (ALL WISCONSIN, ELECTRIC AND 1984-1985 DEUTZ)</b>	Ref.	A
	3160130	<b>DRIVE MOTOR ASSEMBLY (1986 TO PRESENT DEUTZ)</b>	Ref.	A
	7004939	Control Piston Housing Assembly (Attaching Parts)	1	
—1	7004938	Screw, Cap, Socket Head	4	
—2	7004940	Housing, Control Piston	1	
—3	Kit	O-Ring	1	
	7004941	Backplate Assembly (Attaching Parts)	1	
—4	7004933	Screw, Cap, Hex Head	4	
—5	7004942	Plug Assembly	1	
—6	7004943	Plug	1	
—7	Kit	O-Ring	1	
—8	7004944	Plug Assembly (Shuttle Spool)	2	
—9	7004945	Plug	1	
—10	Kit	O-Ring	1	
—11	7004946	Spool, Shuttle	1	
—12	Kit	O-Ring	1	
—13	7004918	Washer, Backup	1	
—14	7004917	Bearing, Needle	1	
—15	7004947	Backplate	1	
—16	7004937	Ring, Retaining	4	
—17	7004929	Pin, Connector	2	
—18	7004948	Control Piston Assembly	1	
—19	Kit	Ring, Slippery	1	
—20	Kit	O-Ring	1	
—21	7004949	Piston, Control	1	
—22	4100027	Spacer, Piston - .092"	A/R	
—23	4100028	Spacer, Piston - .105"	A/R	
—24	4100029	Spacer, Piston - .110"	A/R	
—25	Kit	Gasket, Housing	1	
—26	7004916	Rotating Kit Assembly	1	
—27	7004936	Ring, Retaining	1	
—28	7004950	Washer, Machined	2	
—29	7004951	Spring, Compression	1	
—30	7004952	Pin, Loading	3	
—31	7004953	Keeper, Pin	1	
—32	7004954	Piston, Assembly	9	
—33	7004955	Spider	1	
—34	7004956	Pivot	1	
—35	7004957	Washer, Wave	1	
—36	7004958	Block, Piston	1	
—37	7004928	Connector, Camplate	1	
—38	Kit	Ring, Retaining	1	
—39	Kit	Seal, Shaft	1	
—40	7004906	Washer	1	
—41	Kit	Ring, Retaining	2	
—42	7004907	Race, Thrust	2	
—43	7004908	Bearing, Thrust	1	
—44	7004912	Shaft, Drive	1	
—45	Kit	Ring, Retaining	2	
—46	7004913	Cover, Trunnion	2	
—47	Kit	O-Ring	2	





**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-48		<b>DRIVE MOTOR ASSEMBLY (CONTINUED)</b>	Ref.
-48	7004911	Race, Inner	1
-49	7004914	Bearing	2
-50	7004927	Camplate	1
	7004959	Housing Assembly	1
-51	7004960	Pin, Rol (1/4" Dia. x 1/2" Long)	2
-52	7004961	Housing	1
-53	7004910	Bearing	1
-54	4100027	Shim	2
	2900449	Seal Repair Kit (Includes Items 3,7,10,12,19 20,25,38,39,41,45,47).	Ref.

SECTION 2 — ILLUSTRATED PARTS LIST

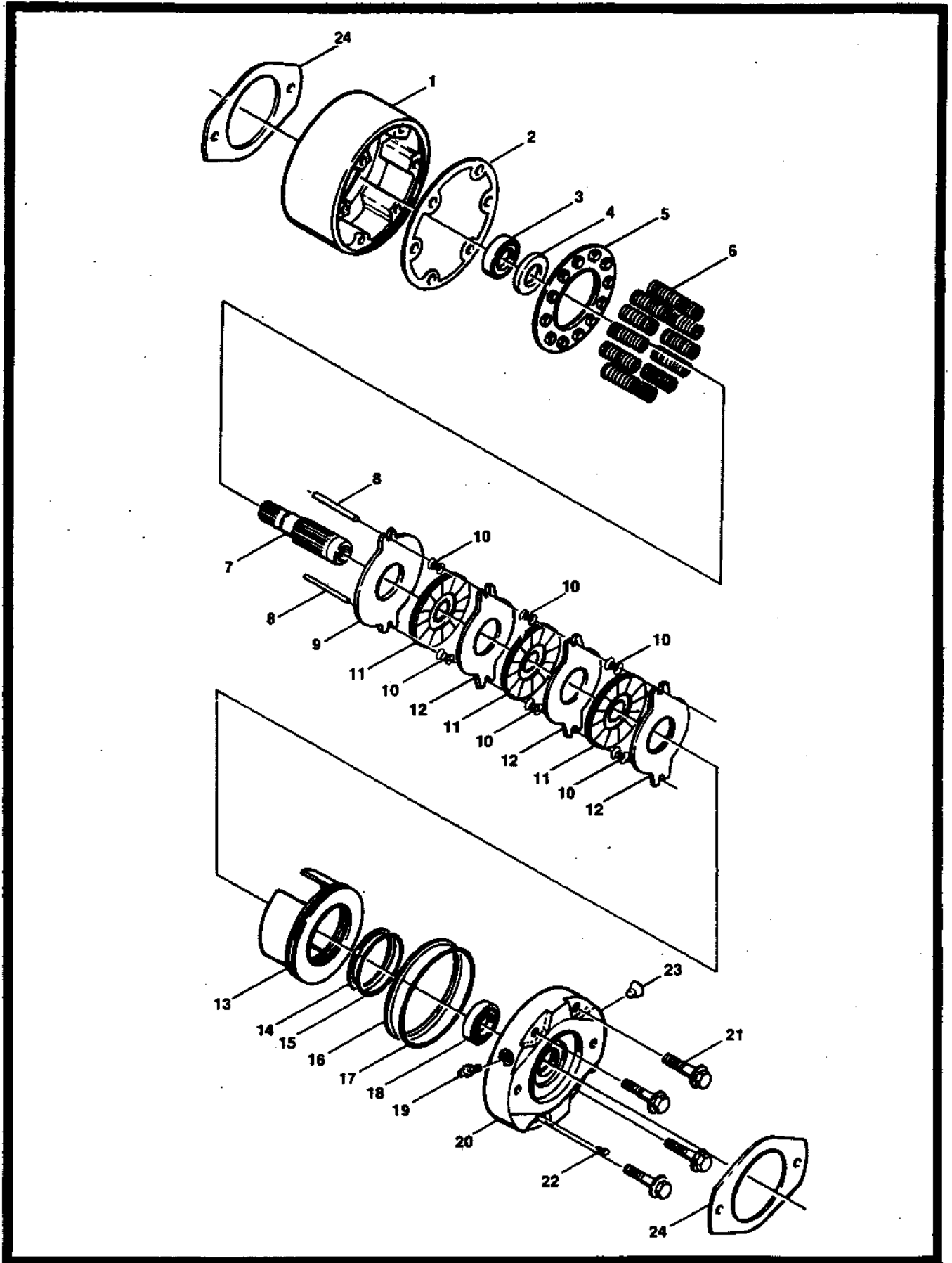


Figure 2-49. Drive Brake Assembly (Housing Length - 3 3/4").

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-49	0920072	<b>DRIVE BRAKE ASSEMBLY (HOUSING LENGTH - 3 3/4")</b>	Ref. D
-1	7003047	Housing	1
-2	Kit	Gasket	1
-3	7003049	Bearing	1
-4	Kit	Seal, Oil	1
-5	7003051	Retainer, Spring	1
-6	7003052	Spring, Compression	12
-7	7003070	Shaft, Splined	1
-8	7000717	Pin, Torque	2
-9	7003054	Disc, Primary	1
-10	7003006	Spring, Separator	6
-11	7003055	Disc, Rotating	3
-12	7003056	Disc, Stationary	3
-13	7003057	Piston	1
-14	Kit	Ring, Backup	1
-15	Kit	O-Ring	1
-16	Kit	Ring, Backup	1
-17	Kit	O-Ring	1
-18	7000760	Bearing	1
-19	2000796	Screw, Bleeder	1
-20	7003071	Plate, Power	1
-21	7003007	Screw	4
-22	7003059	Valve, Pressure	1
-23	7000728	Plug	1
-24	Kit	Gasket	2
	2900662	Kit, Seal (Includes Items 2,4,14,15,16,17 and 24)	1

SECTION 2 — ILLUSTRATED PARTS LIST

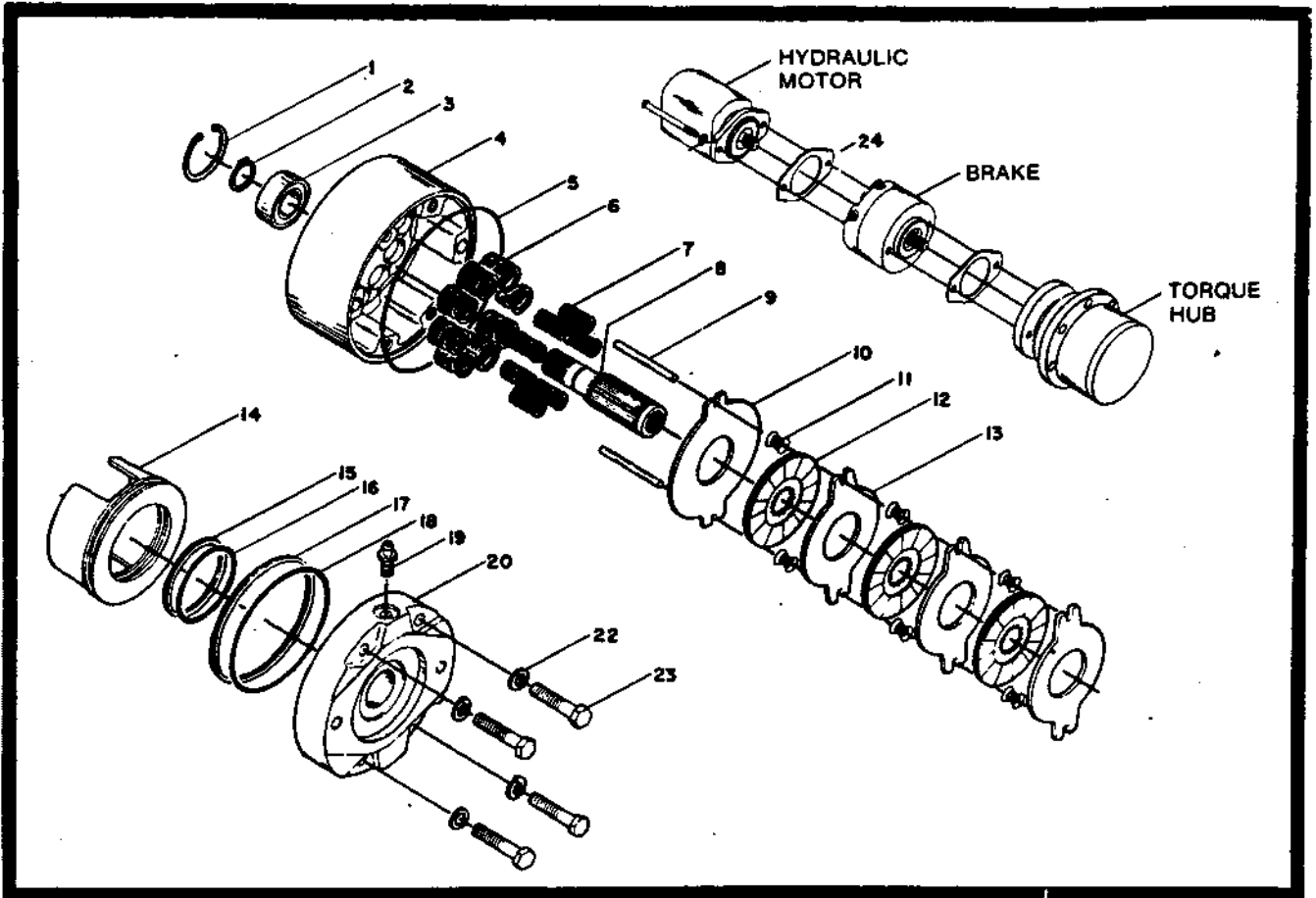


Figure 2-50. Drive Brake Assembly - Ausco (Housing Length - 4").

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-50	0920027	<b>DRIVE BRAKE ASSEMBLY - AUSCO (4" HOUSING)</b>	Ref.
-1	Kit	Ring, Retaining	1
-2	Kit	Ring, Retaining	1
-3	7000713	Bearing, Ball	1
-4	7000714	Housing	1
	7003010	Retainer, Spring	1
-5	7000759	O-Ring	1
-6	7000782	Spring, Compression	8
-7	7000798	Spring, Compression	8
-8	7000716	Shaft	1
-9	7000717	Pin, Torque	2
-10	7000718	Disc, Primary	1
-11	7003006	Spring, Compression	6
-12	7000732	Disc, Rotating	3
-13	7000720	Disc, Stationary	3
-14	7000721	Piston	1
-15	Kit	Ring, Back-Up	1
-16	Kit	O-Ring	1
-17	Kit	Ring, Back-Up	1
-18	Kit	O-Ring	1
-19	7000796	Bleeder	1
-20	7000727	Plate, Power	1
-21	Not Used		
-22	7000729	Lockwasher	4
-23	7000730	Bolt	4
	7003007	Bolt, Flanged	4
-24	Kit	Gasket	2
	2900131	Kit, Seal (Includes Items 1, 2, 15, 16, 17, 18 and 24)	1

SECTION 2 — ILLUSTRATED PARTS LIST

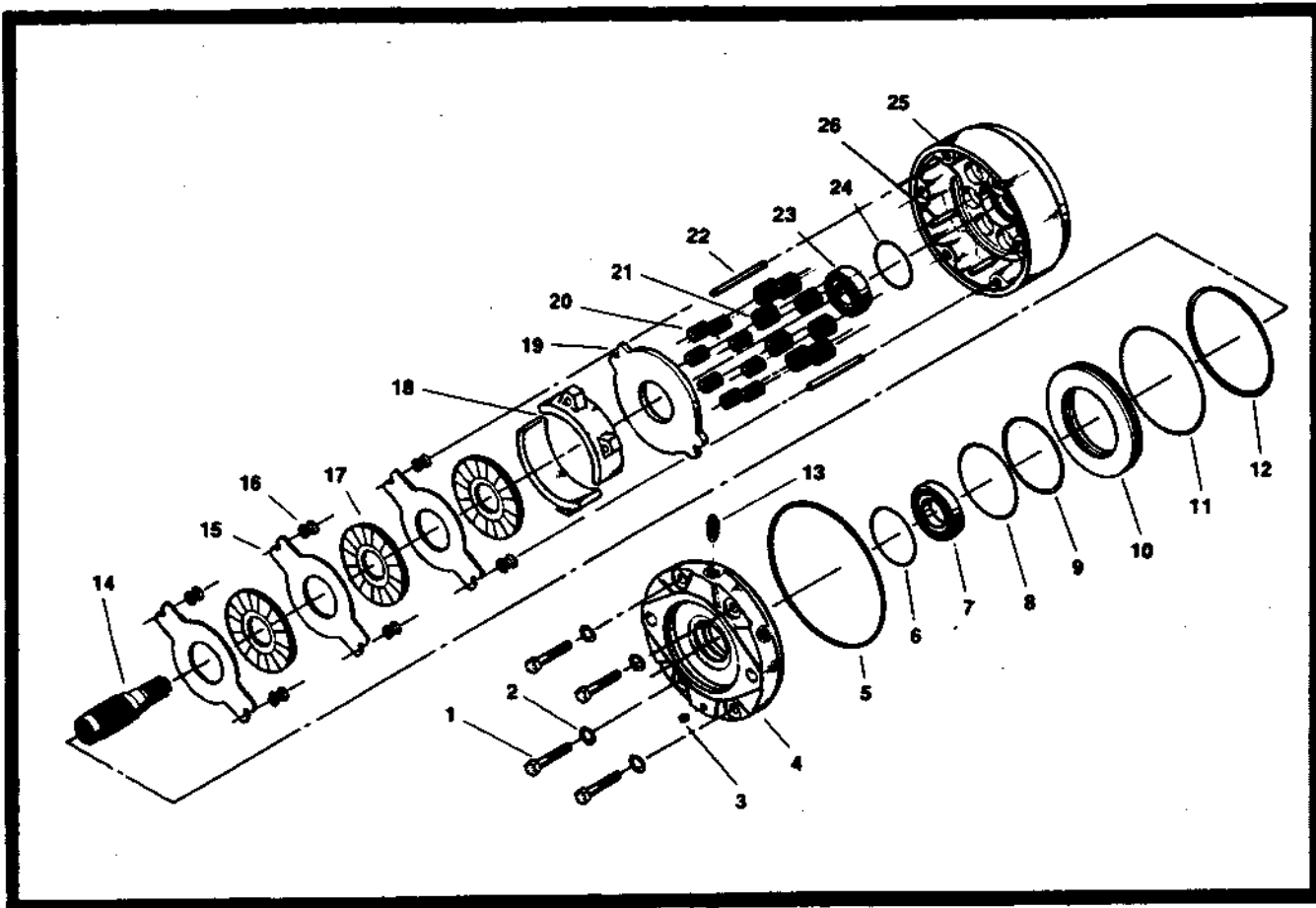


Figure 2-51. Drive Brake Assembly - Mico (Housing Length - 4").

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-51	0920027	<b>DRIVE BRAKE ASSEMBLY, MICO (4" HOUSING)</b>	Ref.
-1	7007913	Cap. Screw	4
-2	7007912	Lockwasher	4
-3	7007924	Pipe Plug	1
-4	7007911	Cover	1
-5	Kit	Square Ring	1
-6	Kit	O-Ring	1
-7	7007920	Bearing	1
-8	Kit	O-Ring	1
-9	Kit	Back-Up Ring	1
-10	7007923	Piston	1
-11	Kit	O-Ring	1
-12	Kit	Back-Up Ring	1
-13	7007914	Bleeder Screw	1
-14	7007903	Shaft	1
-15	7007908	Disc	3
-16	7007916	Spring	6
-17	7007909	Friction Disc	3
-18	7007902	Separator	2
-19	7007907	Disc (Large Diameter)	1
-20	7007906	Spring	8
-21	7007905	Spring	8



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2—51	0920027	<b>DRIVE BRAKE ASSEMBLY, MICO (CONTINUED)</b>	Ref.
—22	7007915	Pin, Dowel	2
—23	7007904	Bearing	1
—24	Kit	Oil Seal	1
—25	7007919	Housing	1
—26	7007901	Spirol Pin	4
	7007933	Mounting Gasket (Not Shown)	1
	2900641	Kit, Seal (Includes Items 5, 6, 8, 9, 11, 12 and 24)	1

SECTION 2 — ILLUSTRATED PARTS LIST

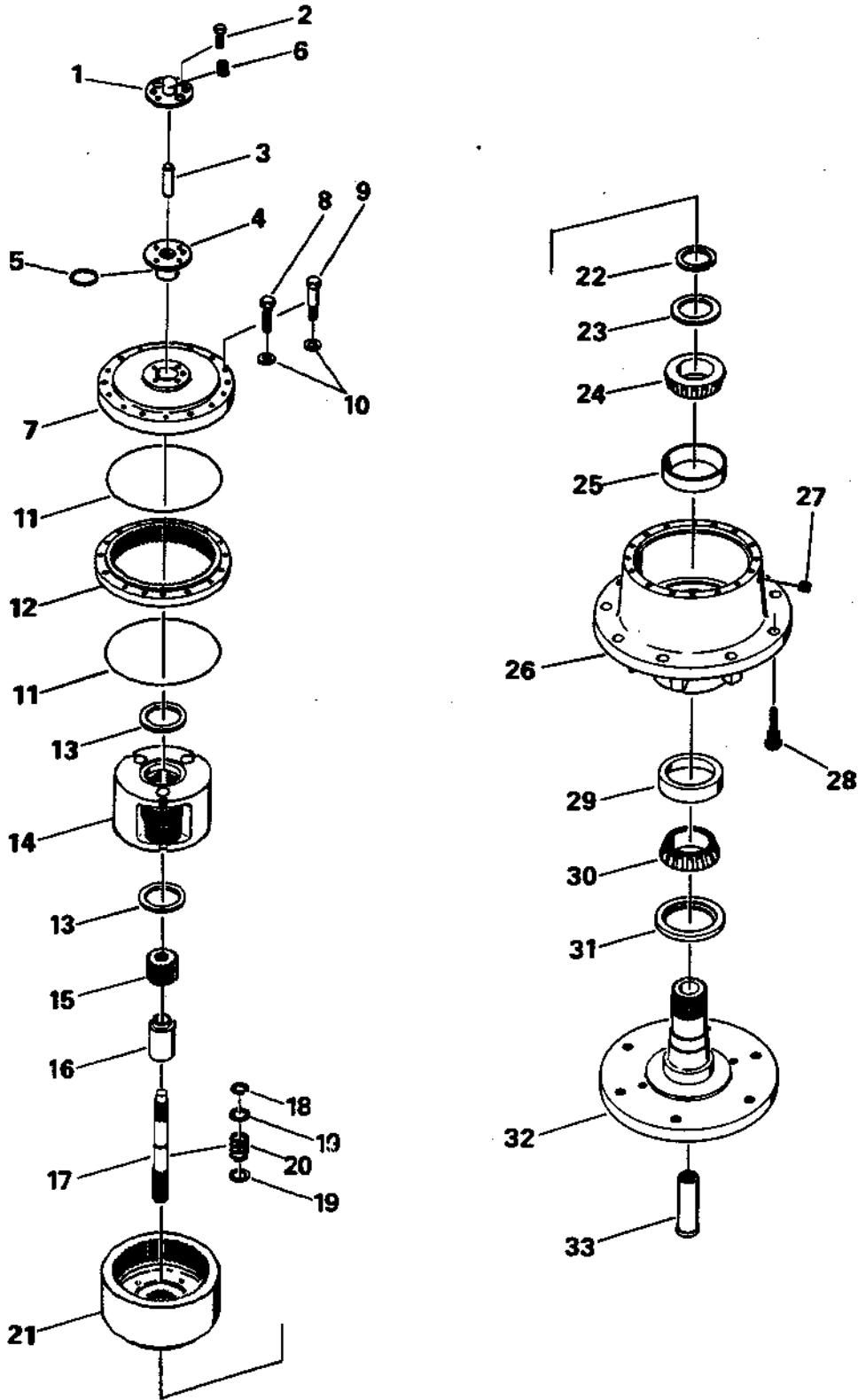


Figure 2-52. Drive Hub Assembly.



**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>
2-52	2780106	<b>DRIVE HUB ASSEMBLY</b>	Ref.
	7000249	<b>COVER ASSEMBLY</b>	1
-1	7000211	Cap, Disconnect (Attaching Parts)	1
-2	7000220	Bolt, Hex Head	4
-3	7000212	Rod, Disconnect	1
-4	7000227	Cap, Cover	1
-5	7000215	O-Ring	1
-6	7000243	Plug, Pipe	1
-7	7000226	Cover (Attaching Parts)	1
-8	7000217	Bolt, Hex Head	12
-9	7000214	Bolt, Hex Head	4
-10	4751500	Flatwasher	16
-11	7000230	O-Ring	2
-12	7000208	Gear, Ring	1
-13	7000253	Washer, Thrust	2
-14	7000207	Planet Carrier Assembly (No Service Breakdown Parts - Purchase Entire Assembly)	1
-15	7007602	Gear, Sun	1
-16	7000252	Spacer, Sun Gear	1
	7000250	<b>INPUT SHAFT ASSEMBLY</b>	1
-17	7000260	Shaft, Input	1
-18	7000261	Ring, Retaining	1
-19	7000263	Spacer	2
-20	7000262	Spring	1
-21	7000246	Gear, Stationary Internal	1
		<b>HUB ASSEMBLY</b>	1
-22	7000229	Ring, Retaining	1
-23	7000232	Spacer	1
-24	7000257	Bearing, Tapered Roller	1
-25	7000258	Cup, Bearing	1
-26	7007601	Hub	1
-27	7000242	Plug, Pipe	1
-28	7007640	Stud, Wheel	9
-29	Kit	Cup, Bearing	1
-30	Kit	Bearing, Tapered Roller	1
-31	7001998	Seal	1
-32	7001997	Spindle	1
-33	7000206	Coupling, Input	1
	7010429	Bearing Kit (Includes Items 29 and 30)	1

SECTION 2 — ILLUSTRATED PARTS LIST

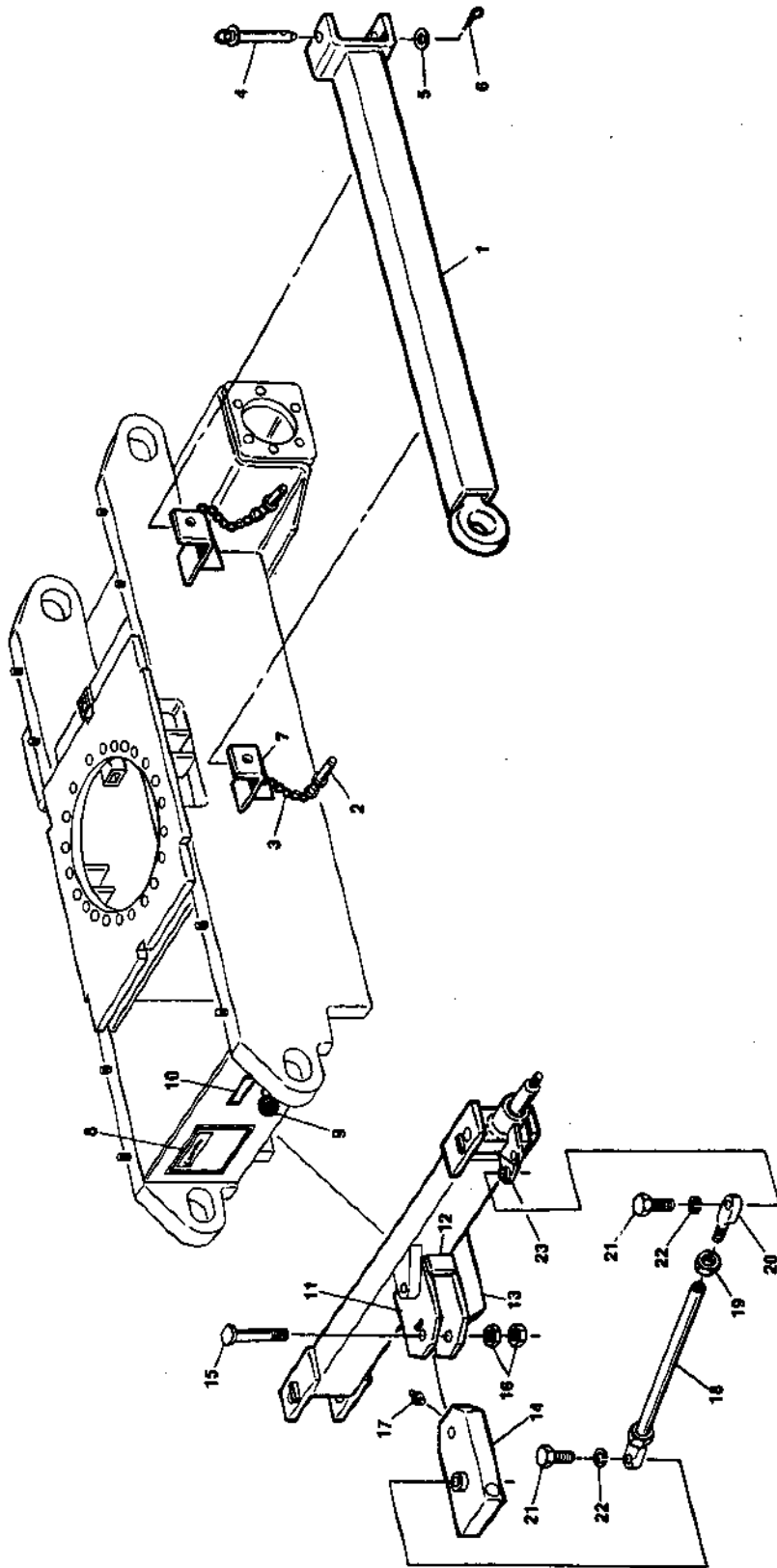


Figure 2-53. Tow Package (Single Acting Steer Cylinder Machines).

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	
2-53	0236856	<b>TOW PACKAGE (SINGLE ACTING STEER CYLINDER MACHINES)</b>	Ref.	—
	0236862	<b>TOW BAR STOWAGE INSTALLATION</b>	Ref.	A
—1	0236893	Tow Bar Assembly (Attaching Parts)	1	
—2	3420292	Pin, Quick Release	2	
—3	1260017	Chain	2	
—4	3420447	Pin, Tow	1	
—5	4740036	Flatwasher, Special	1	
—6	3420372	Hairpin	1	
—7	4841055	Mount, Stowage	2	
	0236855	<b>TOW HITCH INSTALLATION</b>	Ref.	A
—8	3250840	Nameplate, Caution (Attaching Parts)	1	
	3820001	Rivet, Pop	4	
—9	4640261	Valve, Selector (Attaching Parts)	1	
	0641507	Bolt 5/16"-18NC x 7/8"	2	
	4751500	Flatwasher 5/16"	2	
	4761500	Lockwasher 5/16"	2	
	0900479	Bracket	1	
—10	3250872	Nameplate - Tow Select (Attaching Parts)	1	
	3820005	Rivet, Pop	4	
—11	3530451	Plate (Top)	2	
	2880410	Key	1	
—12	2551050	Gusset, Side	2	
—13	3530452	Plate (Bottom)	1	
	2551084	Gusset	2	
—14	2620026	Hitch (Attaching Parts)	1	
—15	3420860	Pin	1	
—16	3300023	Nut 1 1/4"-12NF	2	
—17	2160003	Fitting, Grease	1	
—18	3840807	Tie Rod (Attaching Parts)	1	
—19	3300023	Nut, Jam 1 1/4"-12NF	2	
—20	1660114	End, Rod	2	
—21	0642622	Bolt 1"-8NC x 2 3/4"	2	
—22	4762600	Lockwasher 1"	2	
—23	3040314	Lug	1	

SECTION 2 — ILLUSTRATED PARTS LIST

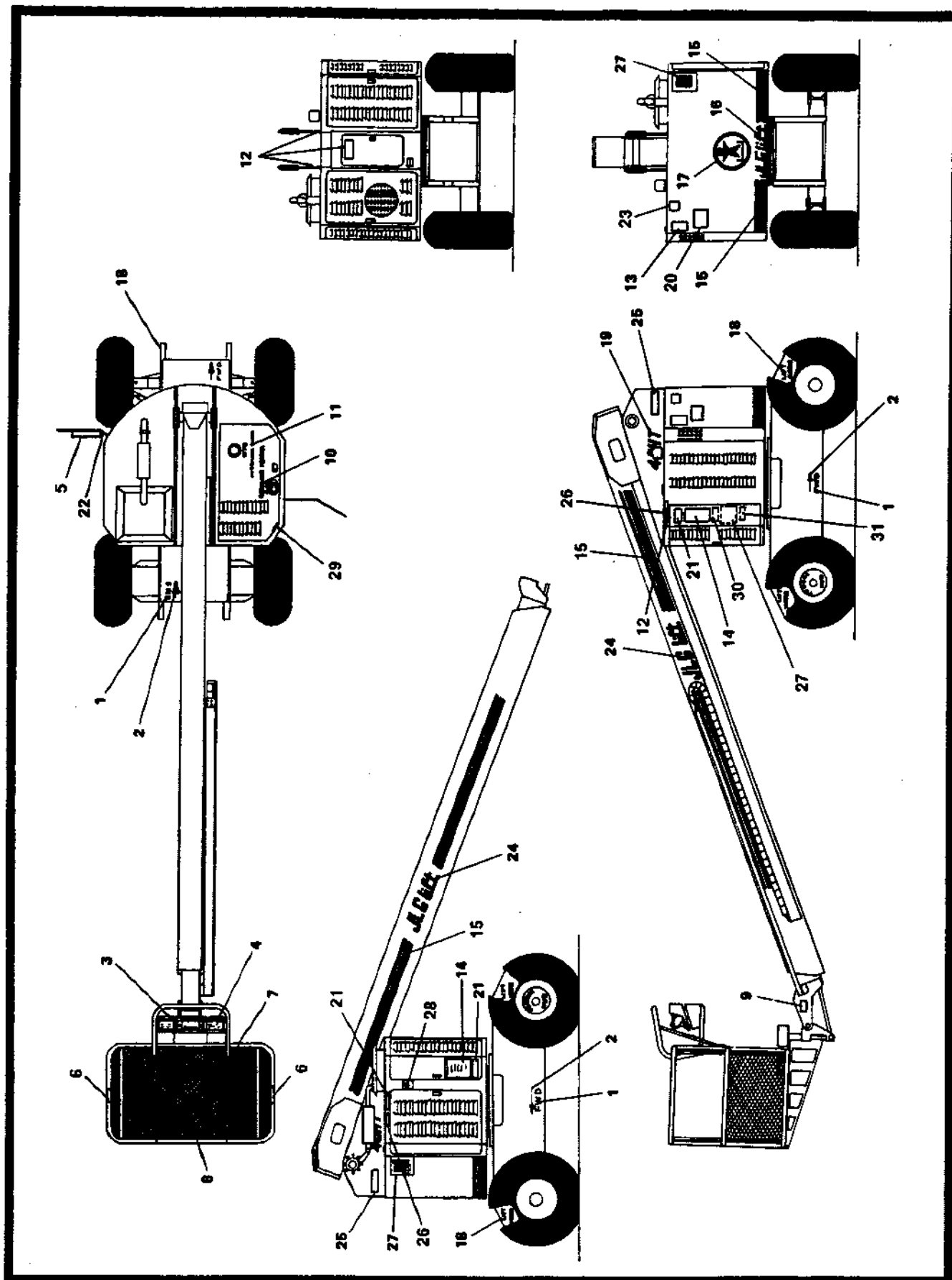
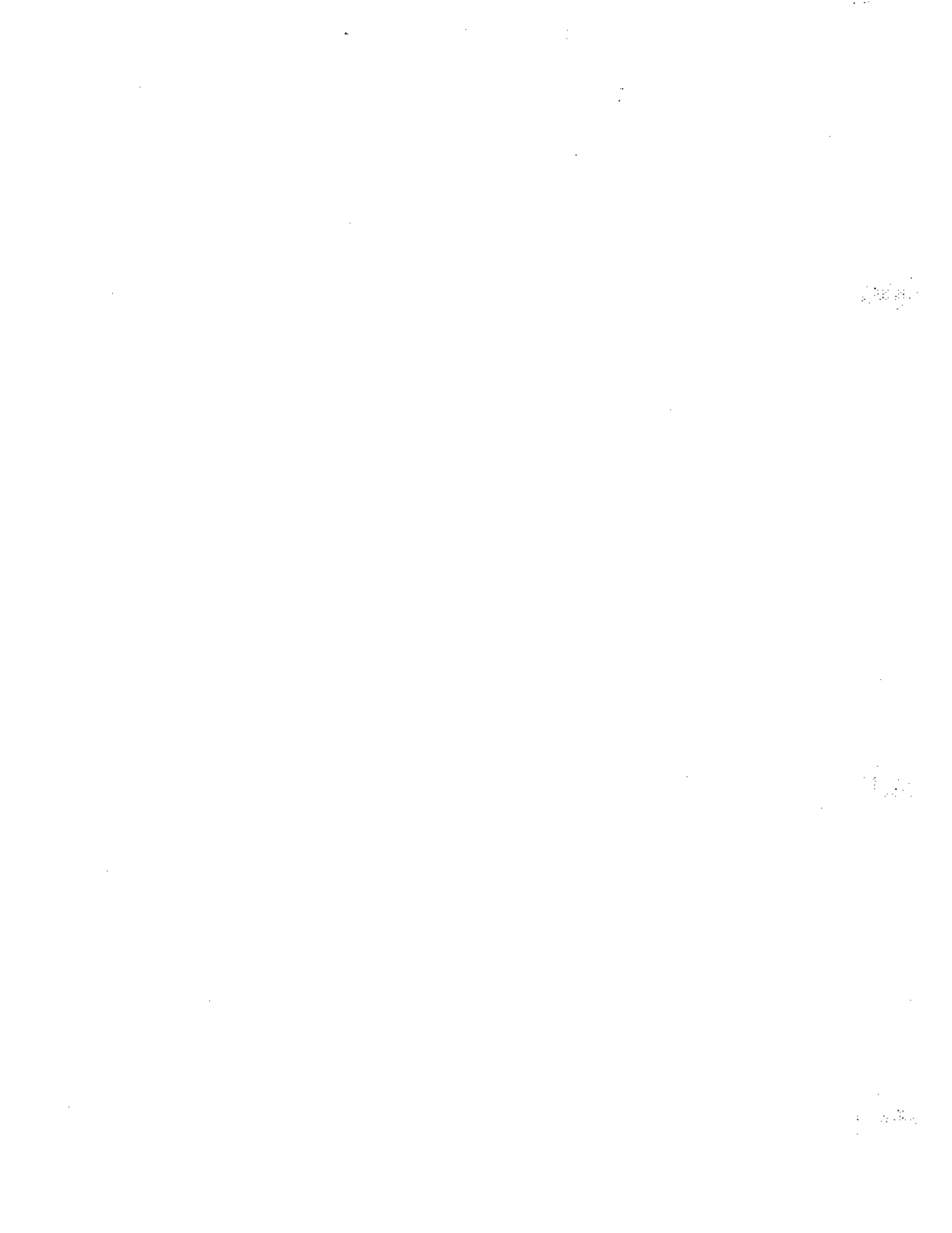


Figure 2-54. Placards and Decals Installation - Model 40HT.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-54		<b>PLACARDS AND DECALS INSTALLATIONS MODEL 40HT</b>	Ref.	
	0236274	<b>PLACARDS AND DECALS INSTALLATIONS (GAS)</b>	Ref.	J
	0236276	<b>PLACARDS AND DECALS INSTALLATIONS (DIESEL)</b>	Ref.	J
	0236277	<b>PLACARDS AND DECALS INSTALLATIONS (L.P. GAS)</b>	Ref.	J
	0236278	<b>PLACARDS AND DECALS INSTALLATIONS (DUAL FUEL)</b>	Ref.	J
	0237593	<b>PLACARDS AND DECALS INSTALLATIONS (ELECTRIC)</b>	Ref.	B
-1	1700423	Decal - FWD (Brown)	4	
	1700977	Decal - FWD (Cream)	4	
-2	1700568	Decal - Arrow (Brown)	4	
	1700978	Decal - Arrow (Cream)	4	
-3	3251549	Nameplate - Danger (Attaching Parts)	1	
	3311401	Nut 1/4"-20NC	2	
	4761400	Lockwasher 1/4"	2	
-4	3251548	Nameplate - Caution (Gas, Diesel LP Dual Fuel) Nameplate - Caution (Electric) (Attaching Parts)	1 1	
	3311401	Nut 1/4"-20NC	2	
	4761400	Lockwasher 1/4"	2	
-5	1700157	Decal - Manual	1	
	0860520	Box, Manual Storage (Attaching Parts)	1	
	3311405	Locknut 1/4"-20NC	4	
	4751400	Flatwasher 1/4"	4	
	1060279	Cable, Lanyard (Attaching Parts)	1	
	0641408	Bolt 1/4"-20NC x 1"	1	
	3311405	Locknut 1/4"-20NC	1	
-6	1700476	Decal - No Hands	2	
-7	1700477	Decal - Attach Belt	1	
-8	3251766	Nameplate - Footswitch	1	
	3820001	Rivet	4	
-9	1700640	Decal - Danger	2	
-10	1700430	Decal - Gas-Gasoline-Petrol	1	
	1700428	Decal - Diesel Fuel	1	
-11	1700419	Decal - Hydraulic Fluid	1	
-12	1700585	Decal - Danger (Location May Vary)	3	
-13	1700584	Decal - Patent	1	
-14	1700643	Decal - Caution (Location May Vary)	1	
-15	1700431	Decal - Brown and Orange Stripe	A/R	
-16	1700422	Decal - JLG Lift (Shown) (Used 1983 - Fall 1989)	1	
	1700981	Decal - JLG (Not Shown) (Fall 1989 to Present)	1	
-17	1700427	Decal - Company Logo (Shown) (1983 - Fall 1989)	1	
	3251813	Decal USA (Not Shown) (Fall 1989 to Present)	1	
-18	1700377	Decal - Lift Here (Brown)	4	
	1700975	Decal - Lift Here (Cream)	4	
	1700575	Decal - Tie Down Lug (Brown)	4	
	1700976	Decal - Tie Down Lug (Cream)	4	
-19	1700557	Decal - 40HT	2	
-20	1700593	Decal - Inspection	1	
-21	3251569	Nameplate - Operator Handbook (Location May Vary)	1	



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2—54		<b>PLACARDS AND DECALS INSTALLATIONS MODEL 40HT (CONTINUED)</b>	Ref.
—22	1700582	Nameplate - Ground Control Instructions	1
—23	Consult Factory	Nameplate - Manufacturer's Serial Number	1
	3820001	Rivet	4
—24	1700426	Decal - JLG Lift	2
—25	1700580	Nameplate - Danger	2
—26	1700583	Nameplate - Ground Control (Location May Vary)	1
—27	3251543	Nameplate - Reach (2-Section Boom - Domestic)	1
	3251613	Nameplate - Reach (3-Section Boom)	1
	3251510	Nameplate - Reach (2-Section Boom - CSA) (Location May Vary)	1
—28	3251028	Nameplate - Caution (LP and Dual Fuel Only)	1
—29	1700756	Decal - Full/Add	1
—30	1700717	Decal - Ground (Electric Only)	1
—31	3251045	Nameplate - Danger (Electric Only)	1
	2901030	----- Decal Kit (40HT Without Capacity Indicator)	1

SECTION 2 — ILLUSTRATED PARTS LIST

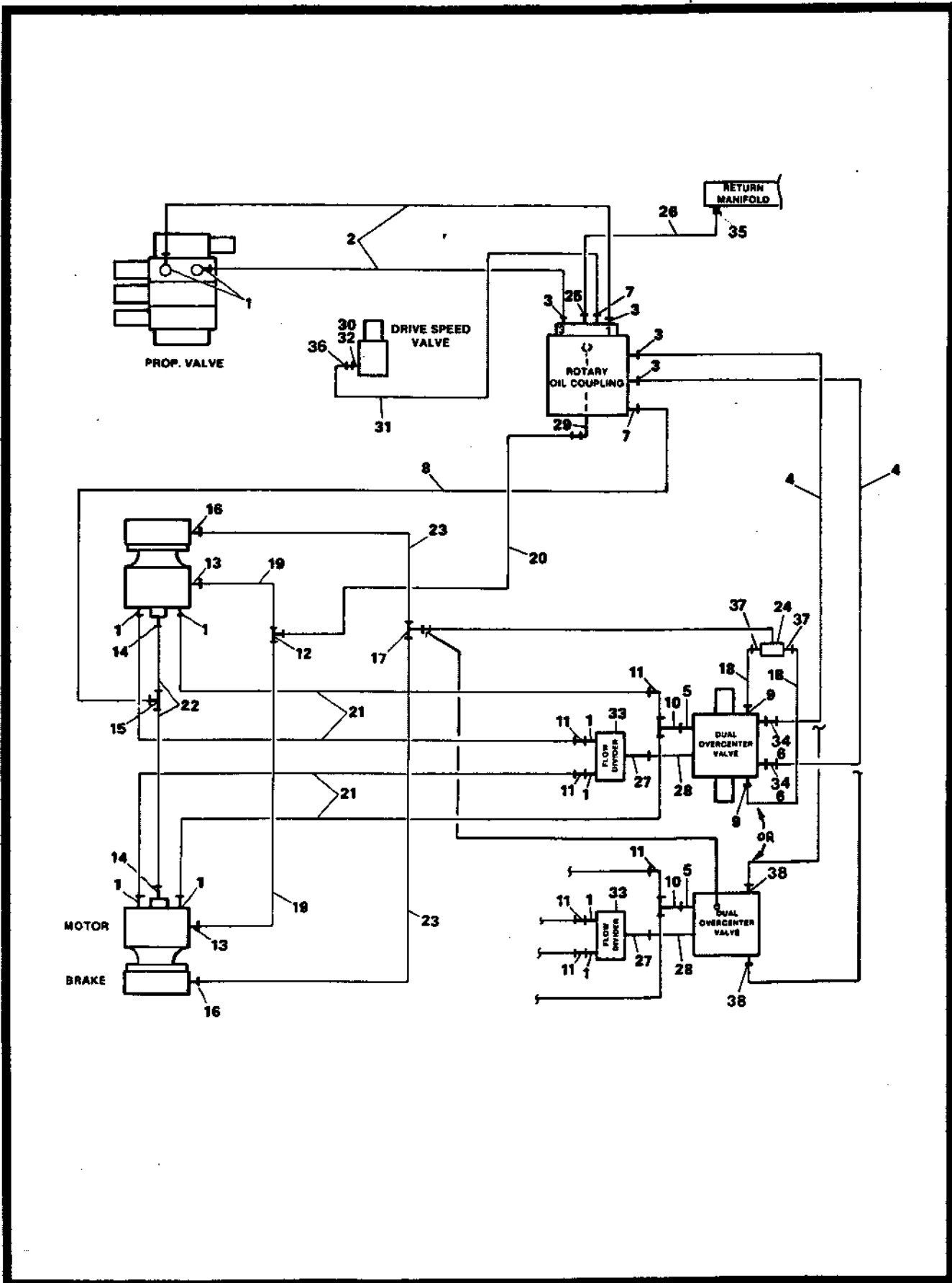


Figure 2-55. Hydraulic Diagram - Drive



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-55	2790890	<b>HYDRAULIC DIAGRAM DRIVE (1984-1986 With Separate Shuttle Valve)</b>	Ref.	F
	2791320	<b>HYDRAULIC DIAGRAM DRIVE (1986-Present With Built-in Shuttle Valve)</b>	Ref.	B
-1	2220375	Fitting	8	
-2	2750979	Hose	2	
-3	2220346	Fitting	4	
-4	2750757	Hose	2	
-5	2220435	Fitting (2790890)	1	
	2220622	Fitting (2790890)	1	
	2220375	Fitting (2791320)	1	
-6	2220622	Fitting (2790890 Only)	2	
-7	2220414	Fitting	2	
-8	2751013	Hose	1	
-9	2220416	Fitting (2790890 Only)	2	
-10	2220385	Fitting	1	
-11	2220386	Fitting	3	
-12	2220490	Fitting (2790890)	1	
	2220362	Fitting (2791320)	1	
-13	2220473	Fitting (2790890)	2	
	2220596	Fitting (2791320)	2	
-14	2220415	Fitting	2	
-15	2220504	Fitting	1	
-16	2220466	Fitting	2	
-17	2220584	Fitting (2790890)	1	
	2220711	Fitting (2791320)	1	
-18	2750908	Hose (2790890 Only)	2	
-19	2750778	Hose (2790890)	2	
	2750976	Hose (2791320)	2	
-20	2750785	Hose (2790890)	1	
	2750773	Hose (2791320)	1	
-21	2750929	Hose	4	
-22	2751019	Hose	2	
-23	2750760	Hose	2	
-24	4640013	Valve (2790890 Only)	1	
-25	2220399	Fitting (2790890)	1	
	2220345	Fitting (2791320)	1	
-26	2750785	Hose (2790890)	1	
	2220763	Hose (2791320)	1	
-27	2180134	Fitting	1	
-28	2220061	Fitting	1	
-29	2180125	Fitting (2790390)	1	
	2220399	Fitting (2790890)	1	
	2220355	Fitting (2791320)	1	
-30	2180217	Fitting (2790890)	1	
	2220822	Fitting, Orifice (2791320)	1	
-31	2751021	Hose	1	
-32	2220250	Fitting	1	
-33	4640260	Flow Divider	1	
-34	2180343	Fitting, Modified 90° (2790890 Only)	2	
-35	2220703	Fitting, 90° (2790890)	1	
	2220659	Fitting, 90° (2791320)	1	
-36	2180651	Fitting, Modified (2790890)	1	
	2220417	Fitting (2791320)	1	
-37	2220414	Fitting (2790980 Only)	2	
-38	2220366	Fitting (2791320 Only)	2	

SECTION 2 — ILLUSTRATED PARTS LIST

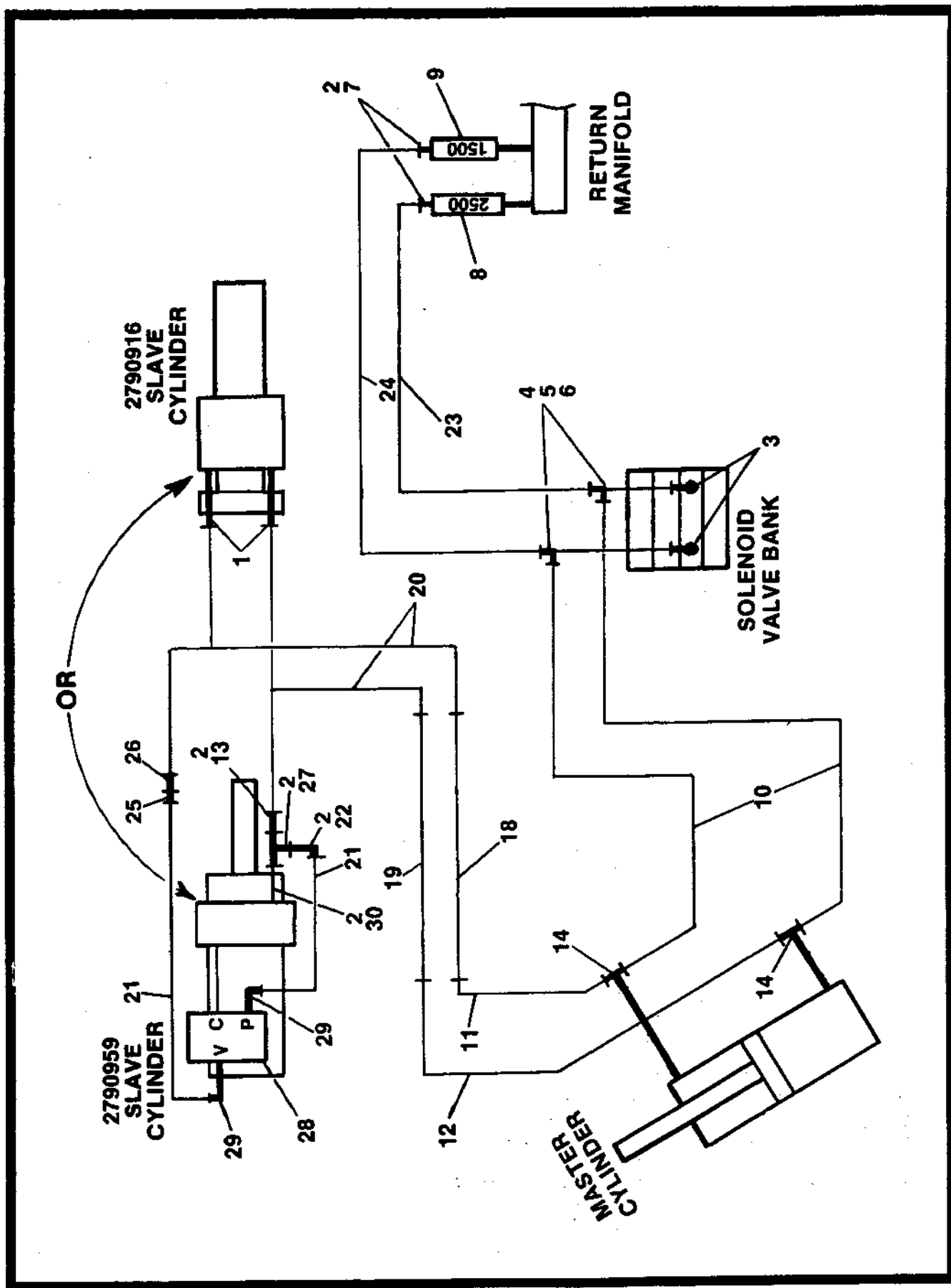


Figure 2-56. Hydraulic Diagram - Level.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2—56	2790959	<b>HYDRAULIC DIAGRAM LEVEL (WITH ADD-ON PILOT CHECK VALVE)</b>	Ref.
	2790916	<b>HYDRAULIC DIAGRAM LEVEL (PILOT CHECK VALVE IS PART OF SLAVE CYLINDER)</b>	Ref. A
—1	2220343	Fitting (2790916 Only)	2
—2	0100020	Loctite	A/R
—3	2220591	Fitting, O-Ring Reducer	2
—4	2180379	Fitting, Tee	2
—5	2180621	Fitting, Plug	2
—6	0100011	Loctite	A/R
—7	2220607	Fitting, Pipe	2
—8	4640165	Valve, Relief	1
—9	4640012	Valve, Relief	1
—10	2750999	Hose	2
—11	2751147	Hose	1
—12	2751146	Hose	1
—13	2220343	Fitting, Pipe (2790959 Only)	1
—14	2220608	Fitting, Tee	2
—15	Not Used		
—16	Not Used		
—17	Not Used		
—18	4562533	Tube	1
—19	4562534	Tube	1
—20	2751148	Hose	2
—21	2751018	Hose (2790959 Only)	2
—22	2220585	Fitting, Pipe (2790959 Only)	1
—23	2750920	Hose (2790959)	1
	2750919	Hose (2790916)	1
—24	2750920	Hose (2790959)	1
	2751002	Hose (2790916)	1
—25	2220609	Fitting, Reducer (2790959 Only)	1
—26	2220511	Fitting (2790959 Only)	1
—27	2220444	Fitting, Tee (2790959 Only)	1
—28	4640450	Valve, P.O. Check	1
—29	2220416	Fitting, 90° Pipe	2
—30	2220006	Fitting, Pipe	1

SECTION 2 — ILLUSTRATED PARTS LIST

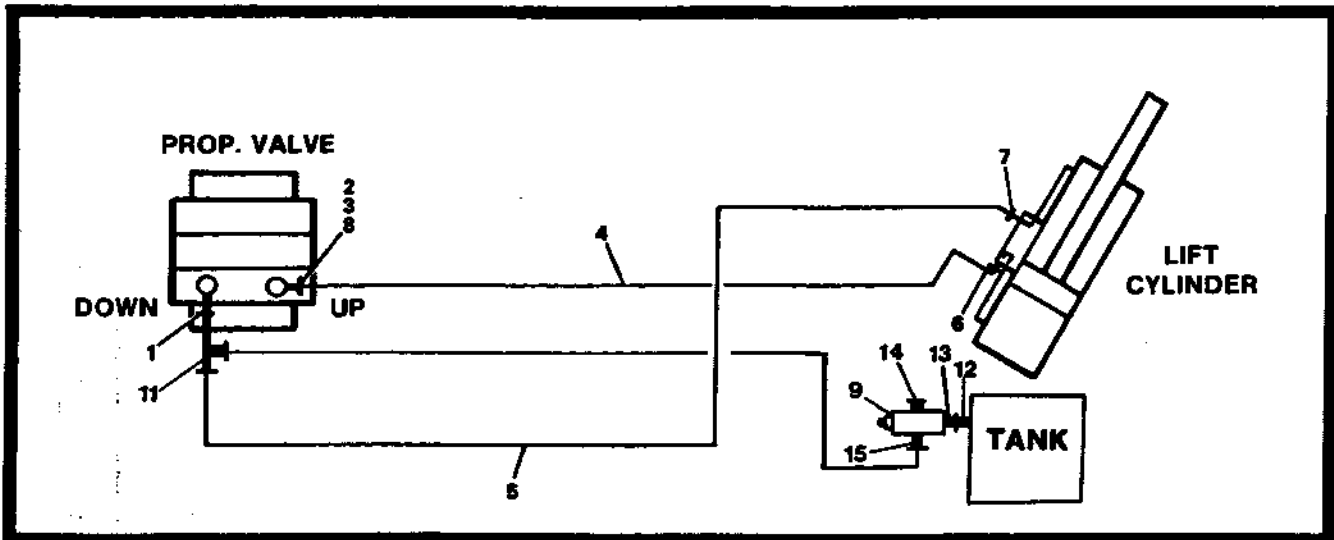


Figure 2-57. Hydraulic Diagram - Lift.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-57	2790884 2791228	<b>HYDRAULIC DIAGRAM - LIFT (RACINE VALVES)</b> <b>HYDRAULIC DIAGRAM - LIFT (VICKERS VALVES)</b>	Ref. Ref.
-1	2220497	Fitting	1
-2	2180377	Fitting	1
-3	2180494	Fitting	1
-4	2750990	Hose	1
-5	2750990	Hose	1
-6	2220343	Fitting	1
-7	2220495	Fitting	1
-8	0100011	Loctite	A/R
-9	4640047	Valve, Relief (1986 - Present - Machines With Racine Valves Only)	1
-10	2750919	Hose (1986 - Present - Machines With Racine Valves Only)	1
-11	2220635	Fitting, Tee (1986 - Present - Machines With Racine Valves Only)	1
-12	2220280	Fitting, Nipple (1986 - Present - Machines With Racine Valves Only)	1
-13	2180267	Fitting, Modified (1986 - Present - Machines With Racine Valves Only)	1
-14	2220239	Fitting, Plug (1986 - Present - Machines With Racine Valves Only)	1
-15	2220497	Fitting, Straight (1986 - Present - Machines With Racine Valves Only)	1

SECTION 2 — ILLUSTRATED PARTS LIST

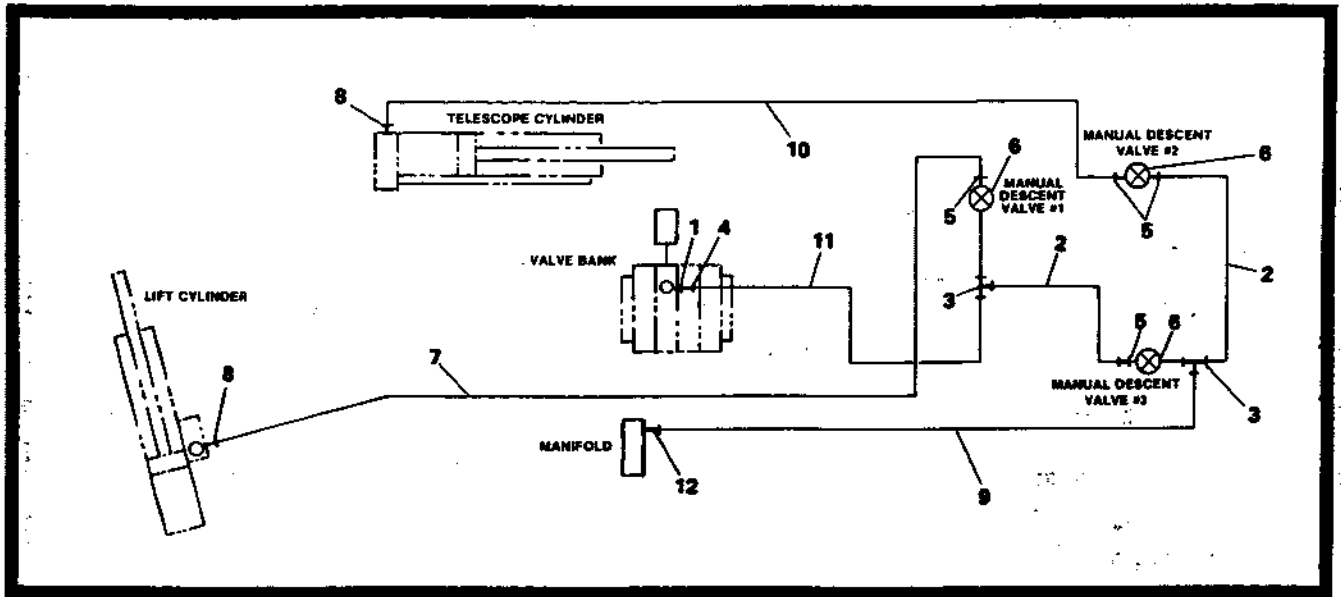


Figure 2-58. Hydraulic Diagram - Manual Descent.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-58	2790888	HYDRAULIC DIAGRAM - MANUAL DESCENT	Ref. D
-1	2220609	Fitting	1
-2	2750902	Hose	2
-3	2220684	Fitting, Tee	2
-4	2220462	Fitting	1
-5	2220416	Fitting, 90°	4
-6	4640005	Valve, Needle	3
-7	2750904	Hose	1
-8	2220416	Fitting	2
-9	2750904	Hose	1
-10	2751432	Hose	1
-11	2750904	Hose	1
-12	2220417	Fitting	1

SECTION 2 — ILLUSTRATED PARTS LIST

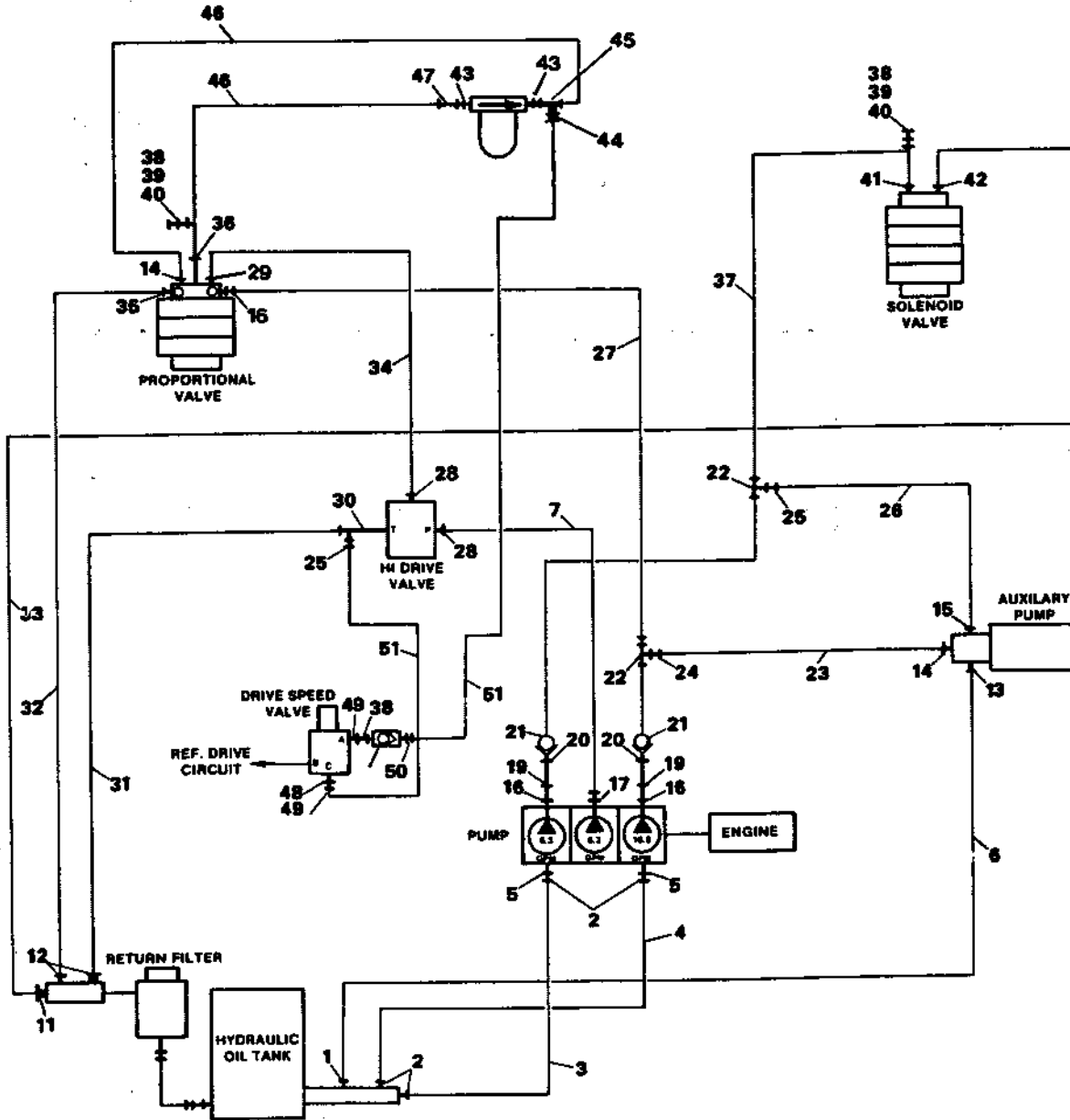


Figure 2-59. Hydraulic Diagram - Pump (Racine Valves Without Steering Wheel).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2—59	2790881	<b>HYDRAULIC DIAGRAM - PUMP (RACINE VALVES WITHOUT STEERING WHEEL)</b>	Ref.	H
—1	2220009	Fitting	1	
—2	1320012	Clamp	8	
—3	2720077	Hose	1	
—4	2720076	Hose	1	
—5	2220592	Fitting	2	
—6	2180651	Fitting, Modified	1	
—7	2750759	Hose	1	
—8	4640197	Valve, Check	1	
—9	Not Used			
—10	Not Used			
—11	2220347	Fitting	1	
—12	2220407	Fitting, 90°	1	
	2220345	Fitting, Straight	2	
—13	2220057	Fitting	1	
—14	2220473	Fitting	2	
—15	2220466	Fitting	1	
—16	2220366	Fitting	3	
—17	2220375	Fitting	1	
—18	Not Used			
—19	2220670	Fitting	2	
—20	2220252	Fitting	2	
—21	4640009	Valve, Check	2	
—22	2220679	Fitting	2	
—23	2750998	Hose	1	
—24	2220619	Fitting	1	
—25	2220618	Fitting	2	
—26	2751013	Hose	1	
—27	2750771	Hose	1	
—28	2220596	Fitting	2	
—29	2220373	Fitting	1	
—30	2220602	Fitting	1	
—31	2750774	Hose	1	
—32	2751327	Hose	1	
—33	2750762	Hose (Both Ends Straight)	1	
	2751478	Hose (90° End - Straight End)	1	
—34	2750929	Hose (24" Length)	2	
	2750968	Hose (18" Length)	1	
—35	2220451	Fitting	1	
—36	2180516	Fitting	1	
—37	2751489	Hose (Both Ends Straight)	1	
	2751466	Hose (90° End - Straight)	1	
—38	2220261	Fitting	3	
—39	2220428	Fitting	2	
—40	2220429	Fitting	2	
—41	2180357	Fitting	1	
	2220386	Fitting, 90°	1	
—42	2220373	Fitting	1	
—43	2220577	Fitting	2	
—44	2220609	Fitting	1	
—45	2220635	Fitting	1	
—46	2751002	Hose (15" Length)	2	
	2750911	Hose (12" Length)	1	
—47	2220507	Fitting	1	
—48	2180217	Fitting	1	
—49	2220250	Fitting	2	
—50	2220414	Fitting	2	
—51	2751018	Hose (15" Length)	2	
	2750902	Hose (12" Length)	1	

SECTION 2 — ILLUSTRATED PARTS LIST

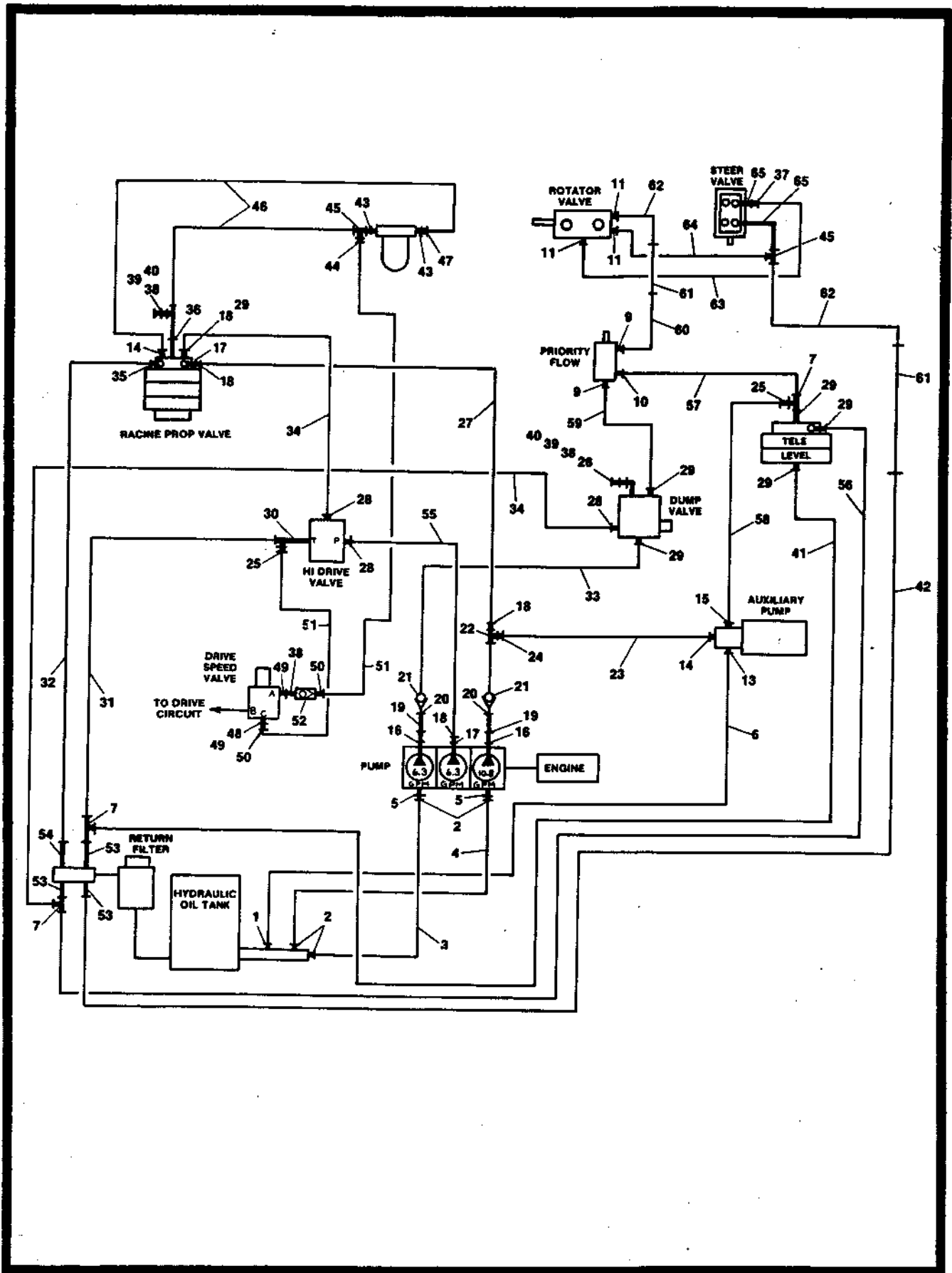


Figure 2-60. Hydraulic Diagram - Pump (Racine Valves With Steering Wheel).



## SECTION 2 — ILLUSTRATED PARTS LIST

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-60	2791027	<b>HYDRAULIC DIAGRAM - PUMP (RACINE VALVES WITH STEERING WHEEL)</b>	Ref.
-1	2220009	Fitting, Straight	1
-2	1320017	Clamp, Hose	8
-3	2720077	Hose, Suction	1
-4	2720076	Hose, Suction	1
-5	2220592	Fitting, 90°	2
-6	2750122	Hose	1
-7	2220385	Fitting, Tee	3
-8	Not Used		
-9	2220345	Fitting, Straight	2
-10	2220659	Fitting, 90°	1
-11	2220371	Fitting, Straight	3
-12	2220407	Fitting, 90°	1
-13	2220057	Fitting, Straight	1
-14	2220473	Fitting, 90°	2
-15	2220466	Fitting, 90°	1
-16	2220366	Fitting, 90°	2
-17	2220375	Fitting, Straight	2
-18	2220386	Fitting, 90°	5
-19	2220670	Fitting, Straight	2
-20	2220252	Fitting, Nipple	2
-21	4640009	Valve, Check	2
-22	2220679	Fitting, Tee	1
-23	2750998	Hose	1
-24	2220619	Fitting, Straight Reducer	1
-25	2220618	Fitting, Straight Reducer	2
-26	2220111	Fitting, 90°	1
-27	2750776	Hose	1
-28	2220596	Fitting, 90°	3
-29	2220373	Fitting, Straight	6
-30	2220602	Fitting, Tee	1
-31	2750774	Hose	1
-32	2751327	Hose	1
-33	2751489	Hose	1
-34	2750929	Hose	2
-35	2220451	Fitting, Straight	1
-36	2180516	Fitting, Modified 90°	1
-37	2220657	Fitting, 45°	1
-38	2220261	Fitting, Nipple	3
-39	2220428	Fitting, Quick Disconnect	2
-40	2220429	Cap, Disconnect	2
-41	2750974	Hose	1
-42	2751154	Hose	1
-43	2220577	Fitting, Straight	2
-44	2220609	Fitting, Reducer	1
-45	2220635	Fitting, Tee	2
-46	2750920	Hose	2
-47	2220507	Fitting, 90°	1
-48	2180217	Orifice	1
-49	2220250	Fitting, Reducer	2
-50	2220414	Fitting	2
-51	2751018	Hose	2
-52	4640197	Valve, Check	1
-53	2220345	Fitting, Straight	3
-54	2220347	Fitting, Straight	1
-55	2750759	Hose	1



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-60	2791027	<b>HYDRAULIC DIAGRAM - PUMP (RACINE VALVES WITH STEERING WHEEL) (CONTINUED)</b>	Ref.
-56	2750969	Hose	1
-57	2750775	Hose	1
-58	2750905	Hose	1
-59	2750968	Hose	1
-60	2751153	Hose	1
-61	4562719	Tube	2
-62	2751152	Hose	2
-63	2751004	Hose	1
-64	2750926	Hose	1
-65	2220372	Fitting, Straight	2
	0100020	----- Sealant	A/R

SECTION 2 — ILLUSTRATED PARTS LIST

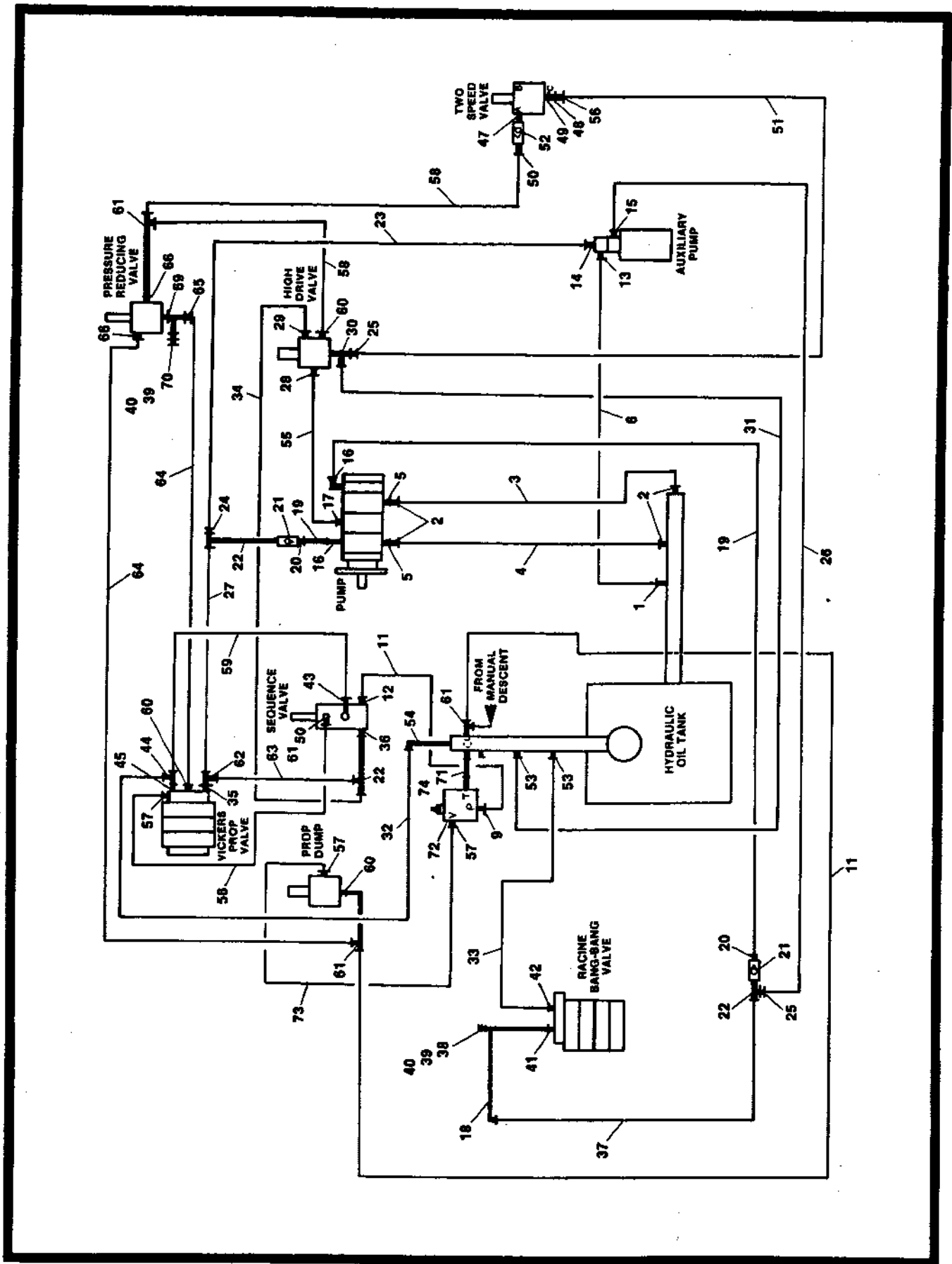


Figure 2-51. Hydraulic Diagram - Pump (Vickers Valves Without Steering Wheel).

## SECTION 2 — ILLUSTRATED PARTS LIST

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-61	2791226	<b>HYDRAULIC DIAGRAM - PUMP (VICKERS VALVES WITHOUT STEERING WHEEL)</b>	Ref. <span style="float: right;">C</span>
-1	2220009	Fitting, Straight	1
-2	1320012	Clamp, Hose	8
-3	2720077	Hose, Suction	1
-4	2720076	Hose, Suction	1
-5	2220592	Fitting, 90°	2
-6	2750122	Hose	1
-7	Not Used		
-8	Not Used		
-9	2220374	Fitting, Straight	1
-10	2220239	Fitting, Plug	1
-11	2750889	Hose	2
-12	2220346	Fitting	1
-13	2220114	Fitting, Straight	1
-14	2220473	Fitting, 90°	1
-15	2220466	Fitting, 90°	1
-16	2220366	Fitting, 90°	2
-17	2220375	Fitting, Straight	1
-18	2220386	Fitting, 90°	1
-19	2220670	Fitting, Straight	2
-20	2220252	Fitting, Nipple	2
-21	4640009	Valve, Check	2
-22	2220679	Fitting, Tee	3
-23	2750998	Hose	1
-24	2220619	Fitting, Reducer	1
-25	2220618	Fitting, Reducer	2
-26	2751013	Hose	1
-27	2750771	Hose	1
-28	2220596	Fitting, 90°	1
-29	2220474	Fitting, 90°	1
-30	2220602	Fitting, Tee	1
-31	2750774	Hose	1
-32	2751350	Hose	1
-33	2750762	Hose	1
-34	2750968	Hose	1
-35	2220695	Fitting, Tee	1
-36	2220282	Fitting, Reducer	1
-37	2751466	Hose	1
-38	2220261	Fitting, Nipple	1
-39	2220428	Fitting, Disconnect	2
-40	2220429	Cap, Disconnect	2
-41	2180357	Fitting, Modified 90°	1
-42	2220373	Fitting, Straight	1
-43	2220347	Fitting, Straight	1
-44	2220682	Fitting, Tee	1
-45	2220435	Fitting, Straight	1
-46	Not Used		
-47	2220438	Fitting, Reducer	1
-48	2180217	Orifice	1
-49	2220250	Fitting, Reducer	1
-50	2220414	Fitting, Straight	2
-51	2751018	Hose	1
-52	4640197	Valve, Check	1
-53	2220345	Fitting, Straight	2
-54	2220493	Fitting, 90°	1
-55	2750759	Hose	1



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-61		<b>HYDRAULIC DIAGRAM - PUMP (VICKERS VALVES WITHOUT STEERING WHEEL) (CONTINUED)</b>	Ref.
-56	2180651	Fitting, Modified Straight	1
-57	2220582	Fitting, Straight	3
-58	2750902	Hose	3
-59	2751355	Hose	1
-60	2220472	Fitting, 90°	3
-61	2220605	Fitting, Tee	4
-62	2220622	Fitting, Reducer	1
-63	2750969	Hose	1
-64	2750900	Hose	2
-65	2220417	Fitting, Straight	1
-66	2220585	Fitting, 90°	2
-67	Not Used		
-68	Not Used		
-69	2220444	Fitting, Tee	1
-70	2220438	Fitting, Straight	1
-71	2220400	Fitting, Straight	1
-72	4640520	Valve	1
-73	2751010	Hose	1
-74	2220753	Fitting, Adapter	1
	0100020	Sealant	A/R

C

SECTION 2 — ILLUSTRATED PARTS LIST

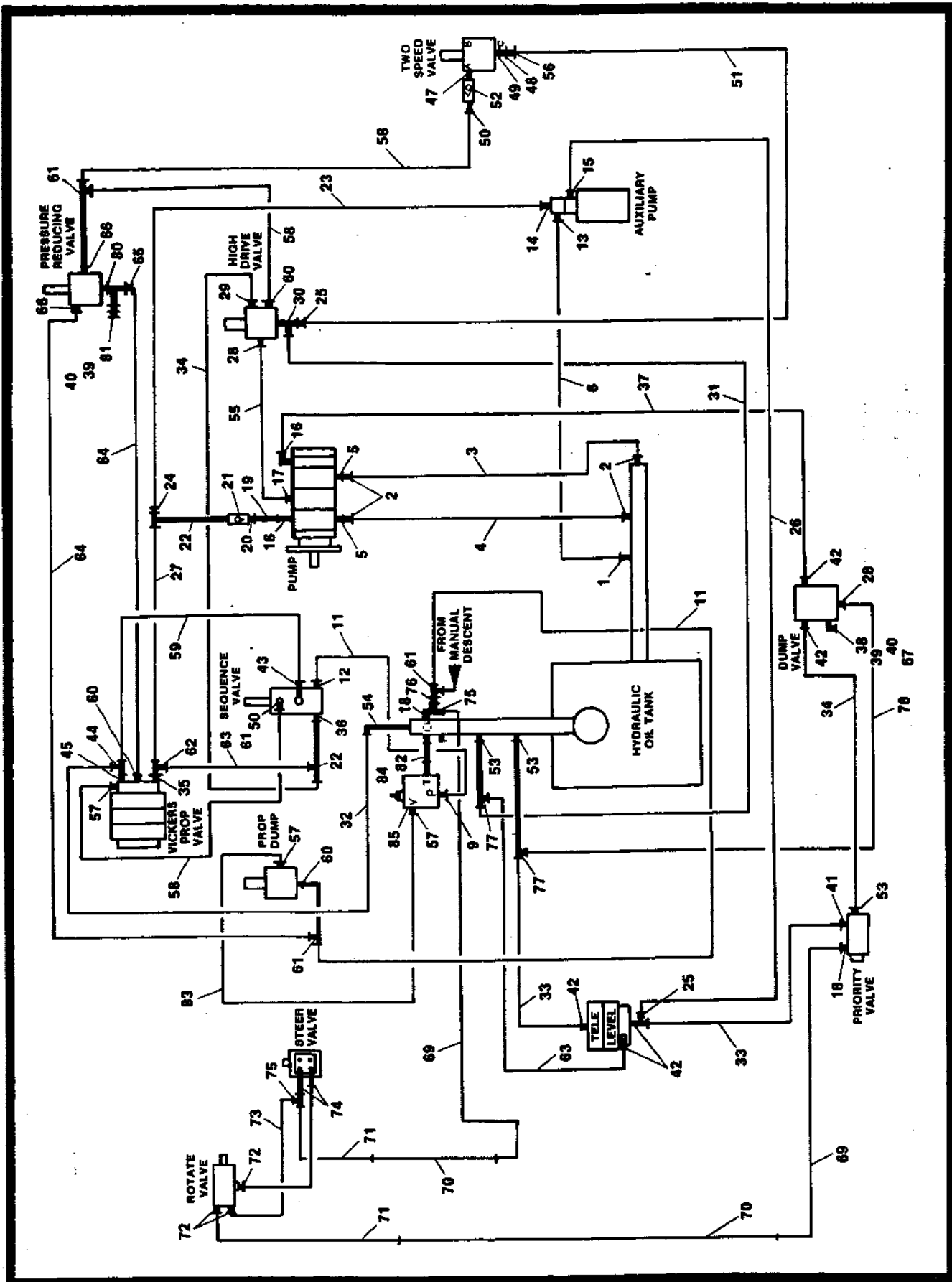


Figure 2-62. Hydraulic Diagram - Pump (Vickers Valves With Steering Wheel).



**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>
2-62	2791227	<b>HYDRAULIC DIAGRAM - PUMP (VICKERS VALVES WITH STEERING WHEEL)</b>	Ref. <span style="float: right;">D</span>
-1	2220009	Fitting, Straight	1
-2	1320012	Clamp, Hose	8
-3	2720077	Hose, Suction	1
-4	2720076	Hose, Suction	1
-5	2220592	Fitting, 90°	2
-6	2750122	Hose	1
-7	Not Used		
-8	Not Used		
-9	2220374	Fitting, Straight	1
-10	2220239	Fitting, Plug	1
-11	2750889	Hose	2
-12	2220346	Fitting	1
-13	2220114	Fitting, Straight	1
-14	2220473	Fitting, 90°	1
-15	2220466	Fitting, 90°	1
-16	2220366	Fitting, 90°	2
-17	2220375	Fitting, Straight	1
-18	2220344	Fitting, Straight	2
-19	2220670	Fitting, Straight	1
-20	2220252	Fitting, Nipple	2
-21	4640009	Valve, Check	1
-22	2220679	Fitting, Tee	2
-23	2750998	Hose	1
-24	2220619	Fitting, Reducer	1
-25	2220618	Fitting, Reducer	2
-26	2750905	Hose	1
-27	2750771	Hose	1
-28	2220596	Fitting, 90°	2
-29	2220474	Fitting, 90°	1
-30	2220602	Fitting, Tee	1
-31	2750774	Hose	1
-32	2751350	Hose	1
-33	2750974	Hose	2
-34	2750968	Hose	2
-35	2220695	Fitting, Tee	1
-36	2220282	Fitting, Reducer	1
-37	2751466	Hose	1
-38	2220261	Fitting, Nipple	1
-39	2220428	Fitting, Disconnect	2
-40	2220429	Cap, Disconnect	2
-41	2220659	Fitting, 90°	1
-42	2220373	Fitting, Straight	5
-43	2220347	Fitting, Straight	1
-44	2220682	Fitting, Tee	1
-45	2220435	Fitting, Straight	1
-46	Not Used		
-47	2220438	Fitting, Reducer	1
-48	2180217	Orifice	1
-49	2220250	Fitting, Reducer	1
-50	2220414	Fitting, Straight	2
-51	2751018	Hose	1
-52	4640197	Valve, Check	1
-53	2220345	Fitting, Straight	3
-54	2220493	Fitting, 90°	1
-55	2750759	Hose	1

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-62	2791227	<b>HYDRAULIC DIAGRAM - PUMP (VICKERS VALVES WITH STEERING WHEEL) (CONTINUED)</b>	Ref.
-56	2180651	Fitting, Modified Straight	1
-57	2220582	Fitting, Straight	3
-58	2750902	Hose	3
-59	2751355	Hose	1
-60	2220472	Fitting, 90°	3
-61	2220605	Fitting, Tee	4
-62	2220622	Fitting, Reducer	1
-63	2750969	Hose	2
-64	2750900	Hose	2
-65	2220417	Fitting, Straight	1
-66	2220585	Fitting, 90°	2
-67	2220111	Fitting, 90°	1
-68	Not Used		
-69	2791153	Hose	2
-70	4562719	Tube	2
-71	2751152	Hose	2
-72	2220371	Fitting, Straight	3
-73	2750926	Hose	1
-74	2220372	Fitting, Straight	2
-75	2220635	Fitting, Tee	2
-76	2220609	Fitting, Reducer	1
-77	2220385	Fitting, Tee	2
-78	2750929	Hose	1
-79	Not Used		
-80	2220444	Fitting, Tee	1
-81	2220438	Fitting, Straight	1
-82	2220400	Fitting, Straight	1
-83	2751010	Hose	1
-84	2220753	Fitting, Adapter	1
-85	4640520	Valve	1
	0100020	----- Sealant	A/R

SECTION 2 — ILLUSTRATED PARTS LIST

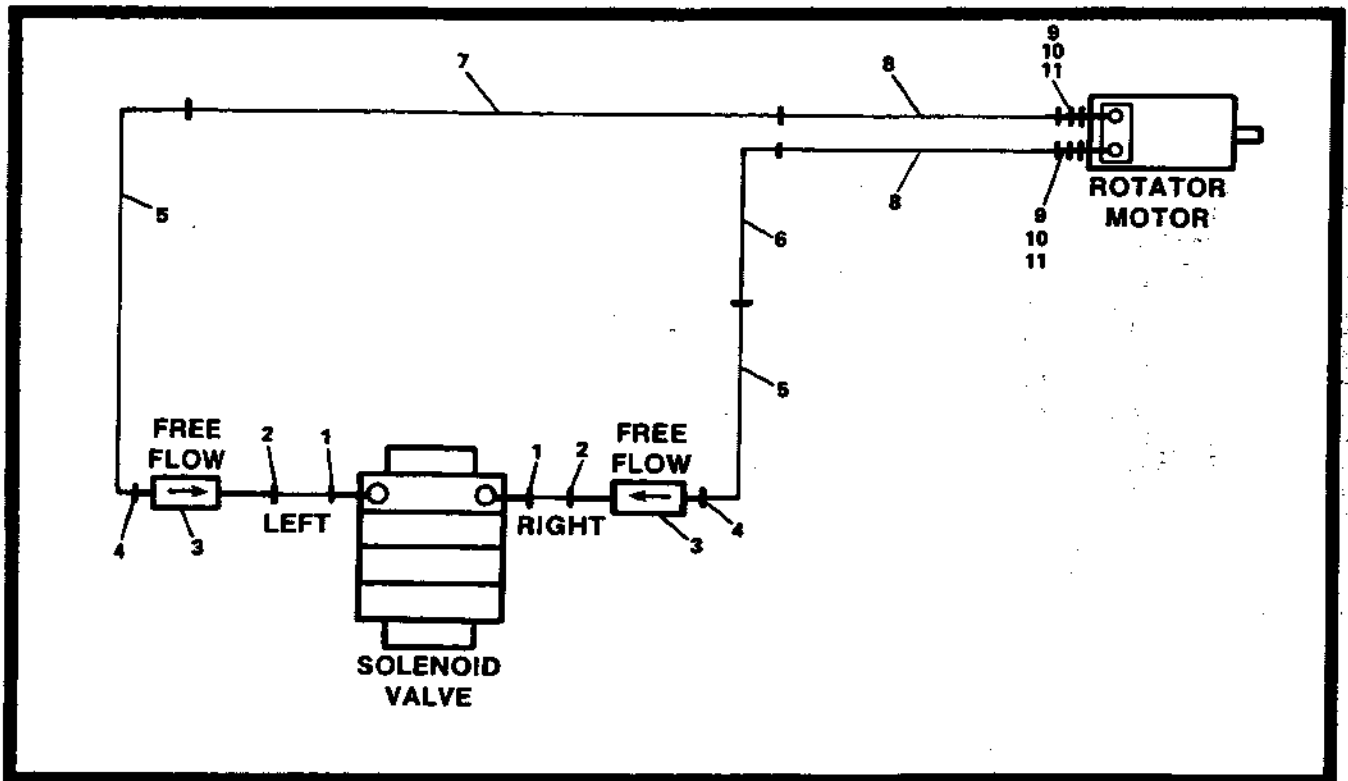


Figure 2-63. Hydraulic Diagram - Rotate (Without Steering Wheel).

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-63	2790889	HYDRAULIC DIAGRAM - ROTATE (2 SECTION BOOM WITHOUT STEERING WHEEL)	Ref.	E
	2790995	HYDRAULIC DIAGRAM - ROTATE (3 SECTION BOOM WITHOUT STEERING WHEEL)	Ref.	B
-1	2180029	Fitting	2	
-2	2220261	Fitting	2	
-3	4640383	Valve, Restricted	2	
-4	2220414	Fitting, Straight	2	
	2220416	Fitting, 90°	2	
	2220462	Fitting, 90°	2	
-5	2751437	Hose 90" Length	2	
	2751447	Hose 80" Length	2	
-6	4562532	Tube (2 Section Boom)	1	
	4563210	Tube (3 Section Boom)	1	
-7	4562531	Tube (2 Section Boom)	1	
	4563211	Tube (3 Section Boom)	1	
-8	2751436	Hose (268" Length)	2	
	2751875	Hose (325" Length)	2	
-9	2220609	Fitting	2	
-10	2220507	Fitting	2	
-11	2220497	Fitting	2	

SECTION 2 — ILLUSTRATED PARTS LIST

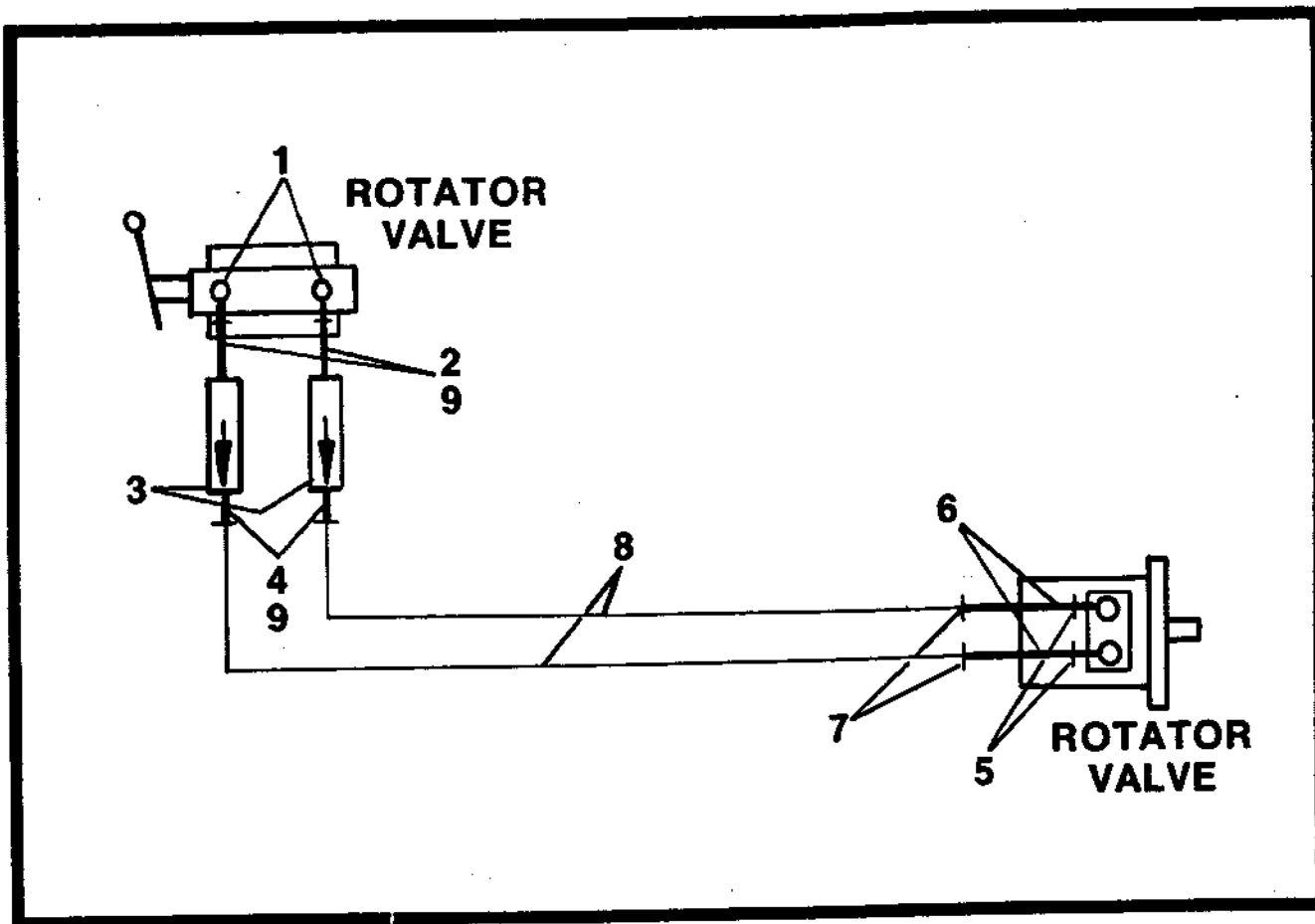


Figure 2-64. Hydraulic Diagram - Rotate (With Steering Wheel).

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-64	2791029	<b>HYDRAULIC DIAGRAM - ROTATE (2 SECTION BOOM WITH STEERING WHEEL)</b>	Ref.
-1	2220111	Fitting, 90° O-Ring	2
-2	2220261	Fitting, Nipple	2
-3	4640383	Valve, Restrictor	2
-4	2220414	Fitting, Pipe	2
-5	2220497	Fitting, O-Ring	2
-6	2220507	Fitting, 90° Stem	2
-7	2220609	Fitting, Reducer	2
-8	2751014	Hose	2
-9	0100020	Loctite	A/R

SECTION 2 — ILLUSTRATED PARTS LIST

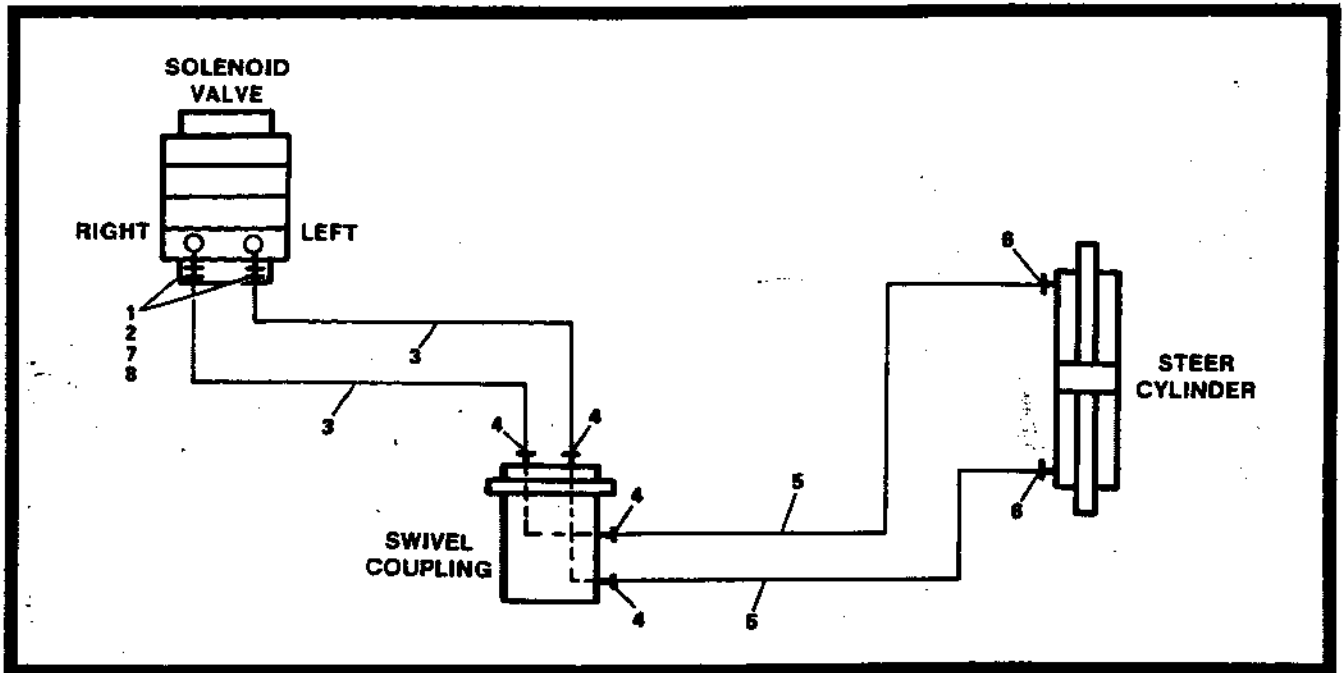


Figure 2-65. Hydraulic Diagram - Steer (Without Steering Wheel).

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-65	2790883	<b>HYDRAULIC DIAGRAM - STEER (WITHOUT STEERING WHEEL)</b>	Ref. C
-1	2180540	Fitting	2
-2	2220462	Fitting, 90° (When Equipped)	2
-3	2751011	Hose (With Both Ends Straight)	2
	2750899	Hose (With 1 Straight End and 1 90° End)	2
-4	2220417	Fitting	4
-5	2751396	Hose	2
-6	2220586	Fitting	2
-7	2180380	Fitting	2
-8	0100011	Loctite	A/R

SECTION 2 — ILLUSTRATED PARTS LIST

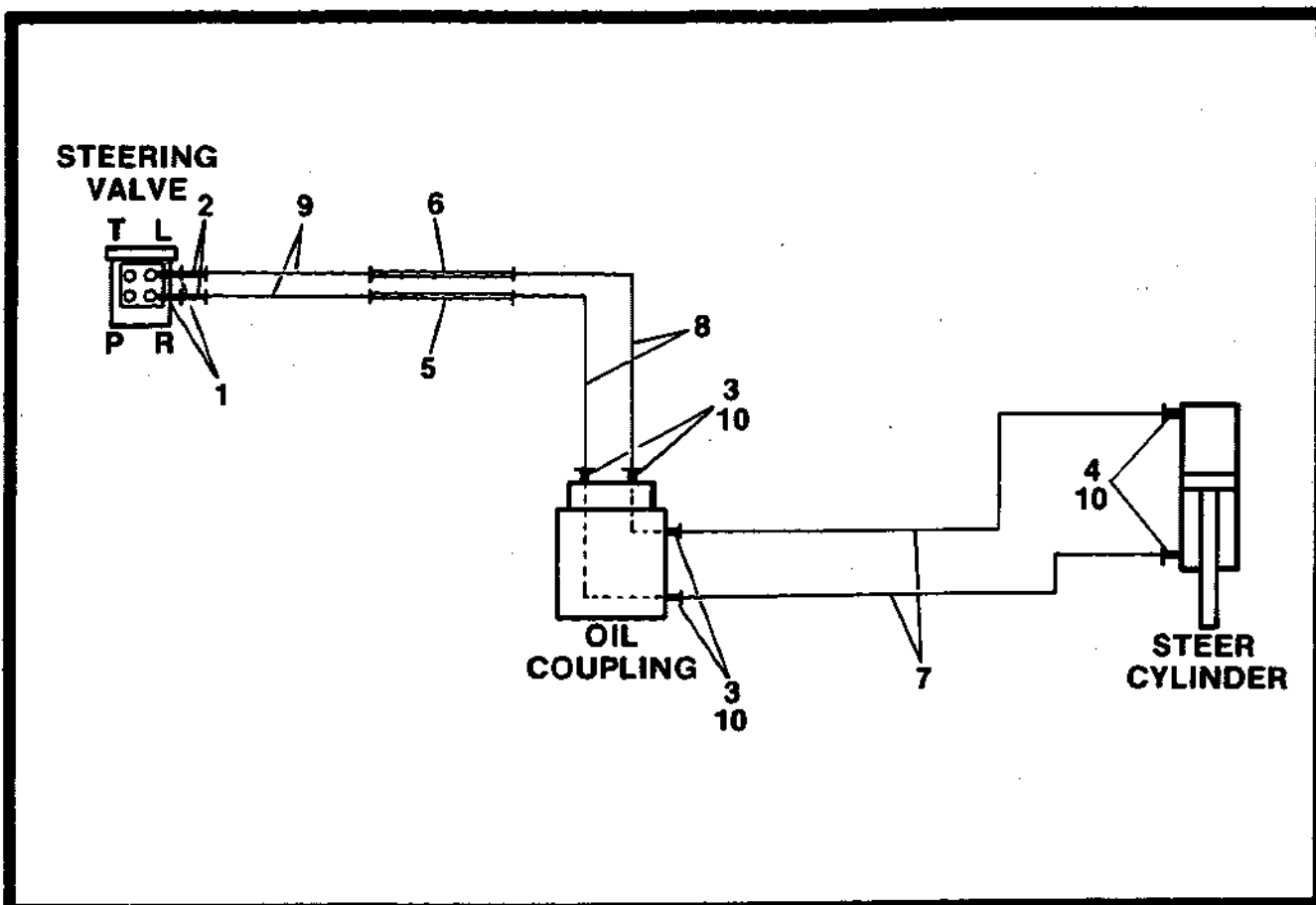


Figure 2-66. Hydraulic Diagram - Steer (With Steering Wheel).

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-66	2791028	<b>HYDRAULIC DIAGRAM - STEER (2 SECTION BOOM WITH STEERING WHEEL)</b>	Ref. —
	2790996	<b>HYDRAULIC DIAGRAM - STEER (3 SECTION BOOM WITH STEERING WHEEL)</b>	Ref. C
-1	2220468	Fitting, Straight O-Ring	2
-2	2220462	Fitting, 90° (3 Section Only)	2
-3	2220417	Fitting, Pipe	4
-4	2220414	Fitting, Straight (2 Section)	2
	2220416	Fitting, 90° (3 Section)	2
-5	4562532	Tube Assembly (2 Section)	1
	4563210	Tube Assembly (3 Section)	1
-6	4562531	Tube Assembly (2 Section)	1
	4563211	Tube Assembly (3 Section)	1
-7	2751396	Hose (2 Section)	2
	2751016	Hose (3 Section)	2
-8	2751447	Hose	2
-9	2751446	Hose, 1/4" x 290"	2
	2751888	Hose, 1/4" x 365" (3 Section)	2
-10	0100020	Loctite	A/R

SECTION 2 — ILLUSTRATED PARTS LIST

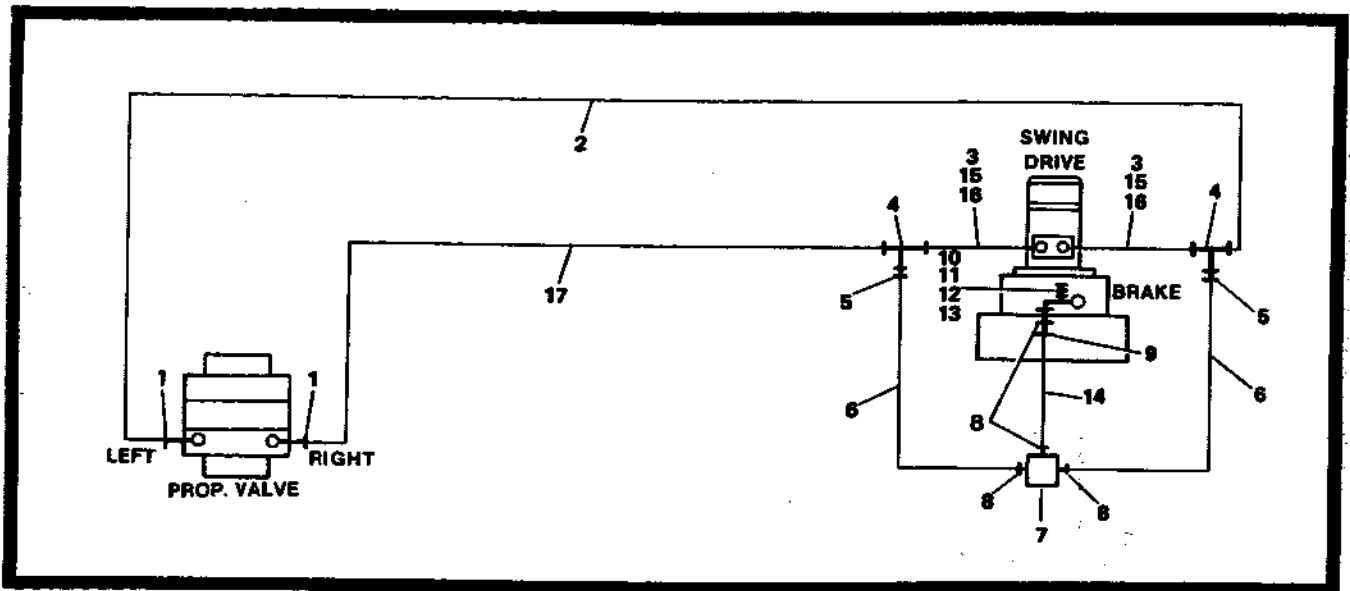


Figure 2-67. Hydraulic Diagram - Swing.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-67	2790887	<b>HYDRAULIC DIAGRAM - SWING (RACINE)</b>	Ref.
	2791229	<b>HYDRAULIC DIAGRAM - SWING (VICKERS)</b>	Ref.
-1	2220497	Fitting (Racine)	2
	2220577	Fitting (Vickers)	2
-2	2751003	Hose	1
-3	2220757	Fitting, Straight	2
-4	2220635	Fitting, Tee	2
-5	2220609	Fitting, Straight	2
-6	2750901	Hose	2
-7	4640013	Valve, Shuttle	1
-8	2220414	Fitting, Straight	4
-9	2220462	Fitting 90° (When Equipped)	1
-10	2220110	Fitting, 90°	1
-11	2180166	Fitting, Tee	1
-12	2220428	Fitting, Quick Disconnect	1
-13	2220429	Cap, Dust	1
-14	2750900	Hose	1
-15	2180394	Orifice	2
-16	0100011	Loctite	A/R
-17	2751003	Hose	1

C

SECTION 2 ILLUSTRATED PARTS LIST

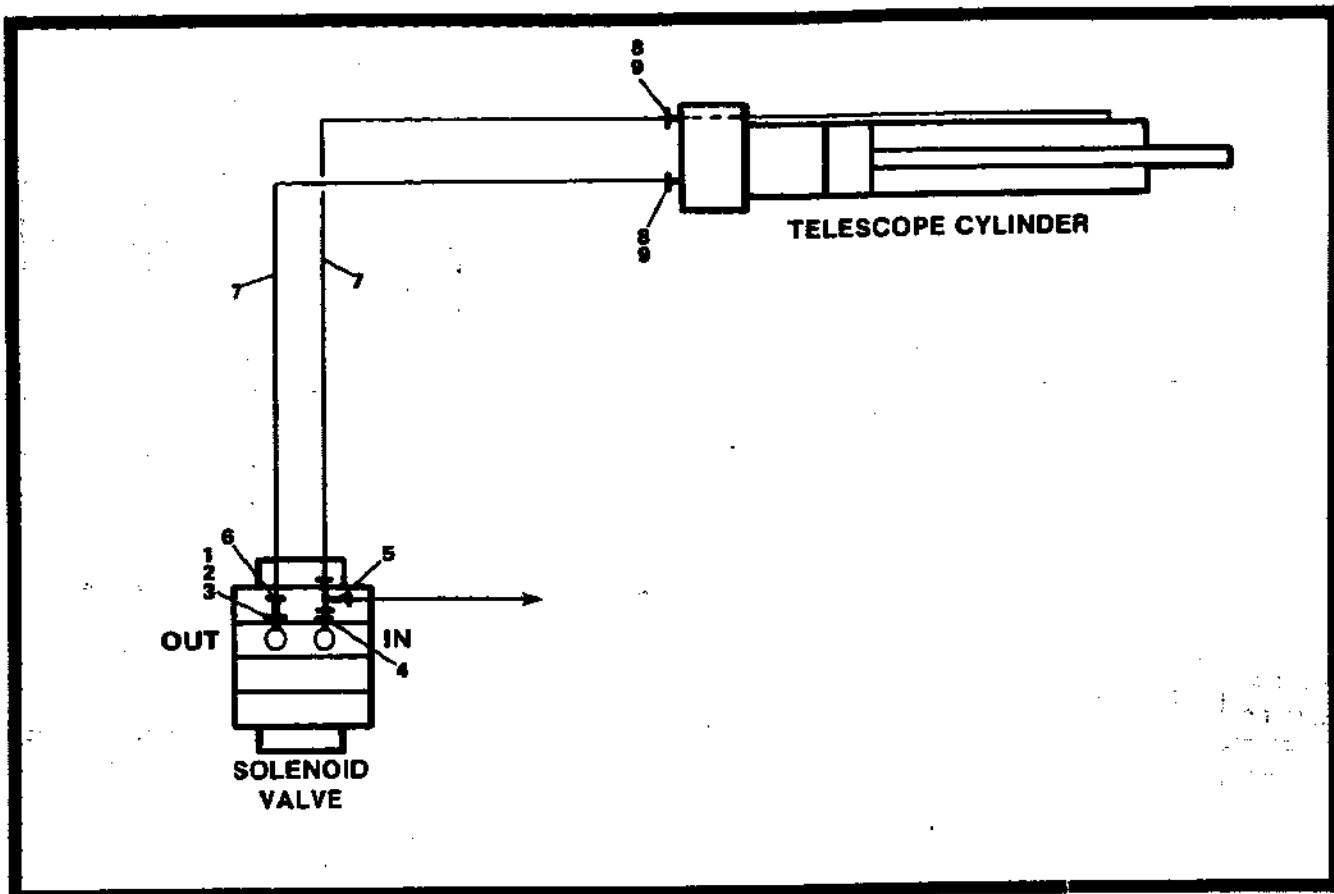


Figure 2-68. Hydraulic Diagram - Telescope.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-68	2790886	<b>HYDRAULIC DIAGRAM - TELESCOPE</b>	Ref. C
-1	2180479	Fitting, Modified	1
-2	2180486	Orifice	1
-3	0100011	Loctite	A/R
-4	2220591	Fitting, Straight	1
-5	2220606	Fitting, Tee	1
-6	2220507	Fitting, 90°	1
-7	2751128	Hose (With Straight Ends)	1
	2750908	Hose (With 1 Straight End and 1 90° End)	2
-8	2220372	Fitting, Straight	2
-9	2220509	Fitting, 90° (When Equipped)	2



SECTION 2 — ILLUSTRATED PARTS LIST

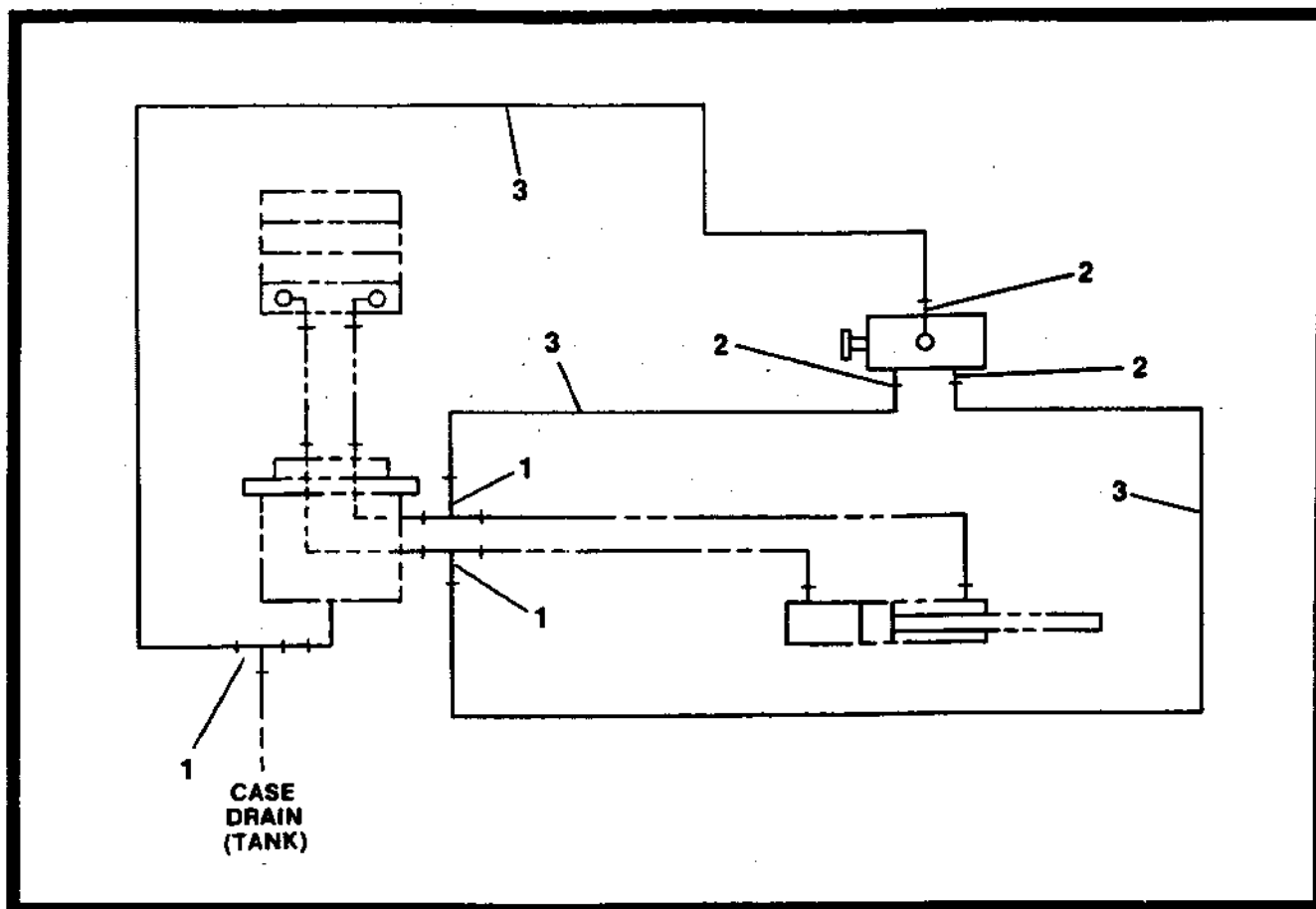


Figure 2-69. Hydraulic Diagram - Tow.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-69	2791031	<b>HYDRAULIC DIAGRAM - TOW</b>	Ref.
-1	2220605	Fitting, Tee	3
-2	2220468	Fitting	3
-3	2751428	Hose	3

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-70		<b>ELECTRICAL WIRING DIAGRAMS - RACINE VALVES</b>	Ref.	
	1280577	<b>ENGINE AND VALVES WIRING DIAGRAM - WISCONSIN WITH GEAR PUMP AND 3 STACK VALVE WITHOUT PROP TELE (DWG ONLY)</b>	Ref.	C
	4931440	Engine Wiring Diagram (B/M Only)	1	C
	4920574	Harness - Choke Relay to Choke	1	
	4920575	Harness - Power Feed to Choke Relay	1	
	4920578	Harness - Ignition Relay to Ignition Coil	1	
	4920579	Harness - Power to Ignition Relay	1	
	4920523	Harness - Power to Glow Plug	1	
	4920662	Harness - Start Switch to Terminal Strip	1	
	1280576	<b>ENGINE AND VALVES WIRING DIAGRAM - WISCONSIN WITH PISTON PUMP AND 3 STACK VALVE WITHOUT PROP TELE (DWG. ONLY)</b>	Ref.	C
	4931440	Engine Wiring Diagram (B/M Only) (Refer To Available Harness List Near Beginning of This P/L)	1	C
	4931525	Valve Wiring Diagram - Without Steering Wheel (B/M Only)	1	—
	4920576	Harness - Proportional Valve to Ground	1	
	4931480	Valve Wiring Diagram - With Steering Wheel (B/M Only)	1	
	4920576	Harness - Proportional Valve to Ground	1	
	1280578	<b>ENGINE AND VALVE WIRING DIAGRAM - WISCONSIN WITH GEAR PUMP AND 4 STACK VALVE WITH PROP TELE (DWG ONLY)</b>	Ref.	—
	4931440	Engine Wiring Diagram (B/M Only) (Refer To Available Harness List Near Beginning of This P/L)	1	
	1280575	<b>ENGINE AND VALVE WIRING DIAGRAM - WISCONSIN WITH PISTON PUMP AND 4 STACK VALVE WITH PROP TELE (DWG ONLY)</b>	Ref.	A
	4931440	Engine Wiring Diagram (B/M Only) (Refer To Available Harness List Near Beginning of This P/L)	1	
	4931482	Valve Wiring Diagram - Without Steering Wheel (B/M Only)	1	
	4920584	Harness - Proportional Valve To Ground	1	
	4931479	Valve Wiring Diagram - With Steering Wheel (B/M Only)	1	
	4920584	Harness - Proportional Valve To Ground	1	
	1280581	<b>ENGINE AND VALVE WIRING DIAGRAM - DEUTZ WITH 3 STACK VALVE WITHOUT PROP TELE (DWG ONLY)</b>	Ref.	B
	4931484	Engine Wiring Diagram - Without Glow Plugs (B/M Only)	1	
	4920585	Harness - Engine Run	1	
	4920594	Harness - Alternator	1	
	4920587	Harness - Adlo Relay Ground	1	
	4920590	Harness - Start Signal From Adlo Relay To Start Relay	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-70		<b>ELECTRICAL WIRING DIAGRAMS - RACINE VALVES (CONTINUED)</b>	Ref.	
	4931483	Engine Wiring Diagram - With Glow Plugs (B/M Only)	1	
	4920591	Harness - Power To Glow Plug Relay	1	
	4920592	Harness - Power To Glow Plugs	1	
	4920593	Harness - Power To Primer	1	
	4920523	Harness - Power To Glow Plug Switch	1	
	4920596	Harness - Start Signal To Glow Plug Relay (Also Refer To Available Harnesses Listed Under P/N 4931484 - Without Glow Plugs Above)	1	
	4931478	<b>GROUND CONTROL WIRING DIAGRAM (GAS/DIESEL)</b>	Ref.	B
	4920497	Harness - Circuit Breaker To Select Switch	1	
	4920499	Harness - Circuit Breaker To Ground Ignition Switch	1	
	4920577	Harness - Select Switch To Relays	1	
	4920501	Harness - Circuit Breaker	1	
	4920502	Harness - Ground	1	
	4920504	Harness - Horizontal Cut-Out	1	
	4920505	Harness - Relay Ground	1	
	4920506	Harness - Relay Ground	1	
	4920507	Harness - Relay Ground	1	
	4920508	Harness - Mid Engine	1	
	4920509	Harness - Swing	1	
	4920510	Harness - Swing	1	
	4920511	Harness - Lift	1	
	4920512	Harness - Lift	1	
	4920513	Harness - Mid Engine	1	
	4920524	Harness - Swing Relay To Bang-Bang Dump	1	
	4920602	Harness - Proportional Dump	1	
	4920518	Harness - Power Distributor	1	
	4920519	Harness - Ignition On	1	
	4920521	Harness - Select Switch To Ignition On	1	
	4920580	Harness - Start	1	
	4920525	Harness - Proportional Dump to Relay	1	
	4931312	<b>GROUND CONTROL WIRING DIAGRAM (ELECTRIC MACHINE) (DWG ONLY)</b>	Ref.	A
	4931422	<b>PLATFORM WIRING DIAGRAM -WITHOUT PROP TELE</b>	Ref.	B
	4920427	Harness - Power Feed (Ignition To 20 Amp C.B.)	1	
	4920420	Harness - Drive Controller	1	
	4920456	Harness - Lift or Swing Controller	1	
	4920422	Harness - Start and Choke	1	
	4920423	Harness - Power To Toggle Switch	1	
	4920531	Harness - Bang-Bang Dump	1	
	4920609	Harness - Power Feed (20 Amp C.B. To Terminal Strip)	1	
	4931586	<b>PLATFORM WIRING DIAGRAM - WITH PROP TELE</b>	Ref.	—
	4920421	Harness - Prop Tele (Also Refer To Available Harnesses Listed Under P/N 4931422 - Without Prop Tele Above)	1	
	4931313	<b>PLATFORM WIRING DIAGRAM (S/N 0308308653 ELECTRIC MACHINE ONLY) (DWG ONLY)</b>	Ref.	—
4931342	<b>VALVES WIRING DIAGRAM (ELECTRIC MACHINES ONLY) (DWG ONLY)</b>	Ref.	C	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	
2-71		<b>ELECTRICAL WIRING DIAGRAMS - VICKERS VALVES</b>	Ref.	
	1280727	<b>ENGINE AND VALVES WIRING DIAGRAM (DWG ONLY)</b>	Ref.	C
	4931622	Engine Wiring Diagram - Wisconsin (B/M Only)	1	B
	4920797	Harness - Relay Power	1	
	4920798	Harness - Relay Ground	1	
	4920733	Harness - Choke Switch Power	1	
	4920850	Harness - Engine	1	
	4931625	Engine Wiring Diagram - Deutz (B/M Only)	1	A
	4920797	Harness - Relay Power	1	
	4920798	Harness - Relay Ground	1	
	4921127	Harness - Engine	1	
	4931620	<b>GROUND CONTROL WIRING DIAGRAM (GAS/DIESEL MACHINES)</b>	Ref.	E
	4920718	Harness - Terminal Strip To Relay	6	
	4920846	Harness - Terminal Strip To Relay (Includes Diode)	3	
	4920793	Harness - Horn To Start Signal Relays	1	
	4920719	Harness - Fuse Holder	1	
	4920720	Harness - Lift Relay	1	
	4920721	Harness - Swing Relay	1	
	4920722	Harness - Ignition On To Terminal Strip	1	
	4920723	Harness - 35 Amp C.B. To Engine Harness	1	
	4920724	Harness - Start To Start Signal Relay	1	
	4920725	Harness - Lift Switch To Terminal 4 Lift Relay	1	
	4920726	Harness - Lift Switch To Terminal 5 Lift Relay	1	
	4920727	Harness - Swing Switch To Terminal 4 Swing Relay	1	
	4920728	Harness - Swing Switch To Terminal 5 Swing Relay	1	
	4920729	Harness - Ignition Switch To Switch	1	
	4920730	Harness - 35 Amp C.B. To Master Switch	1	
	4920731	Harness - Switch To Master Switch	1	
	4920847	Harness - Relay Ground	1	
	4920977	Harness - Power To Aux. Power, Start, Swing and Lift Switches	1	
	4920787	Harness - Power To Swing and Lift Switches	1	
	4920794	Harness - Master Switch To Ignition On Relays	1	
	4920795	Harness - Telescope Switch To Swing Relay	1	
	4920796	Harness - Select Switch To Ignition On Relay	1	
	4920892	Harness - Ignition On Relay To Terminal Strip	1	
	4931688	<b>GROUND CONTROL WIRING DIAGRAM (ELECTRIC MACHINES)</b>	Ref.	-
	4921000	Harness - Valve	1	
	4921001	Harness - Motor	1	
	4931625	<b>PLATFORM WIRING DIAGRAM - PQ CONTROLLERS WITHOUT PROP TELE</b>	Ref.	D
	4920734	Harness - Power Feed (Ignition To 20 Amp C.B.)	1	
	4920984	Harness - Drive Controller	1	
	4920855	Harness - Lift and Swing Controller	1	
	4920422	Harness - Start and Choke	1	
	4920858	Harness - Power To Toggle Switch	1	
	4920531	Harness - Bang-Bang Dump	1	
	4920609	Harness - Power Feed (20 Amp C.B. To Terminal Strip)	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.
2-71		<b>ELECTRICAL WIRING DIAGRAMS - VICKERS VALVES (CONTINUED)</b>	Ref.
	4931586	<b>PLATFORM WIRING DIAGRAM - PQ CONTROLLERS WITH PROP TELE</b>	Ref. —
	4920427	Harness - Power Feed (Ignition To 20 Amp C.B.)	1
	4920420	Harness - Drive Controller	1
	4920456	Harness - Lift or Swing Controller	1
	4920422	Harness - Start and Choke	1
	4920423	Harness - Power To Toggle Switch	1
	4920531	Harness - Bang-Bang Dump	1
	4920609	Harness - Power Feed (20 Amp C.B. To Terminal Strip)	1
	4920421	Harness - Prop Tele	1
	1280803	<b>PLATFORM WIRING DIAGRAM - OEM CONTROLLERS WITHOUT PROP TELE (DWG ONLY)</b>	Ref. —
	4931665	Platform Wiring Diagram (B/M Only)	1 A
	4920884	Harness - Ignition	1
	4920620	Harness - Start	1
	4920621	Harness - Creep	1
	4920622	Harness - Creep To Drive	1
	4920623	Harness - Terminal Strip To Aux. Power Switch	1
	4920624	Harness - Terminal Strip To Swing and Lift Switches	1
	4920625	Harness - Ground To Swing and Lift Switches	1
	4920818	Harness - Aux, Hi Engine, Hi Drive Jumper	1
	1280804	<b>PLATFORM WIRING DIAGRAM - OEM CONTROLLERS WITH PROP TELE (DWG ONLY)</b>	Ref. —
	4931666	Platform Wiring Diagram (B/M Only)	1
	4920629	Harness - Bang-Bang Dump	1
	4920630	Harness - Capacitor	1
	4920889	Harness - Creep To Tele	1
	4920891	Harness - Ground To Tele	1
	4920890	Harness - +12 To Tele (Also Refer To Available Harnesses Listed Under P/N 1280803 Without Prop Tele)	1







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