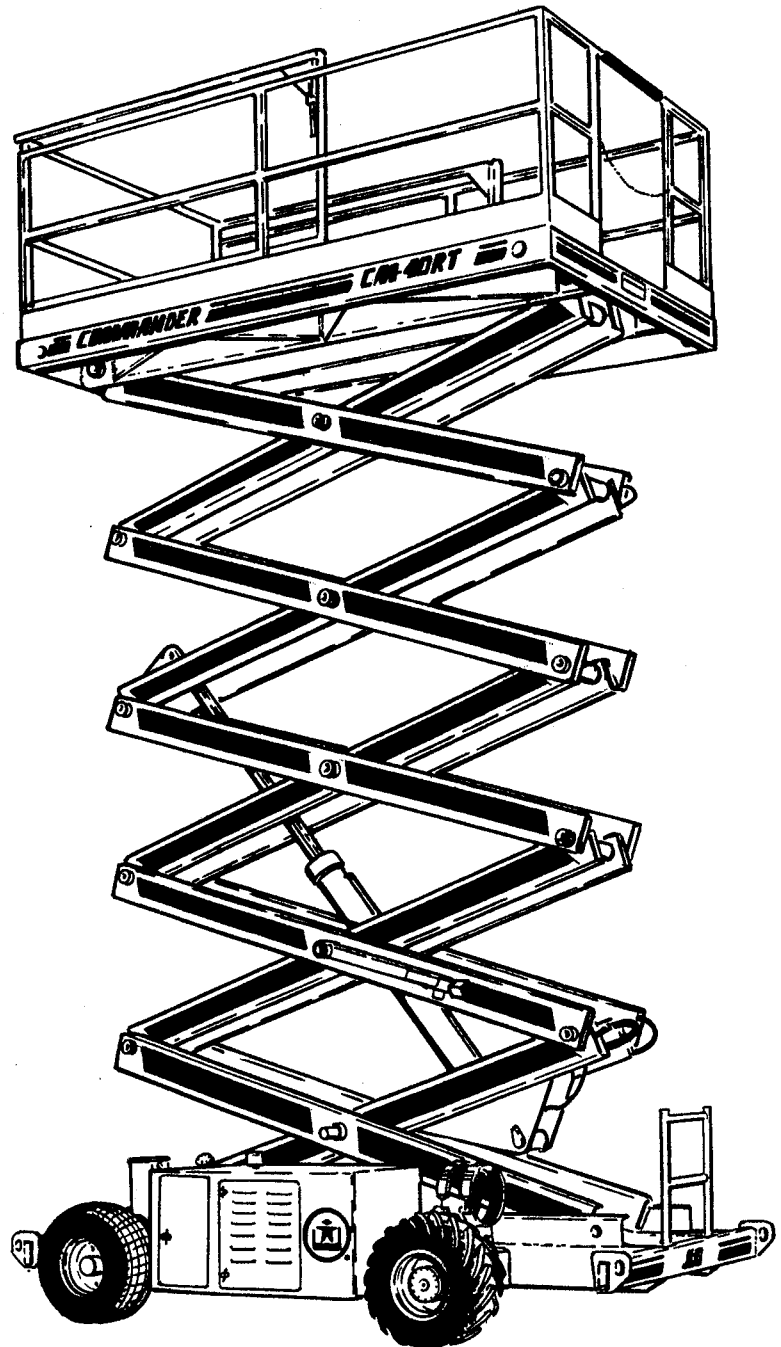




# ILLUSTRATED & PARTS MANUAL

## WORLD HEADQUARTERS

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## MODELS

**CM-25RT**  
**CM-33RT**  
**CM-40RT**



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## SECTION 1 — RECOMMENDED SERVICE PARTS STOCK

### MODELS CM25/33/40RT

The following list will service each Domestic Model CM25RT, CM33RT or CM40RT Sizzors Lifts with 89" Wheelbase (Gas/Diesel) with the current 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>		
Bushing, Super Oilite (Figure 2-1, 2-2, 2-4 and 2-6)	0961409	72
Pad, Sliding (Figure 2-1 and 2-2)	3340579	4
Cartridge, Holding Valve (Figure 2-3)	4640382	1
Bushing, Bronze - Lift Cylinder Barrel (Figure 2-3)	0961379	2
Bushing, Bronze - Lift Cylinder Rod (Figure 2-3)	0961380	2
Switch, Limit (Figure 2-6, 2-31 and 2-74)	4360057	1
Controller, Drive (Figure 2-9)	1600115	1
Switch, Toggle - SPST (Pump Volume, Drive Speed, Engine Speed, Power On and Ignition/Emergency Stop) (Figure 2-9 and 2-10)	4360199	3
Switch, Push-Button (Start and Horn) (Figure 2-9 and 2-10)	4360274	2
Switch, Toggle - DPDT/MC/CO (Lift) (Figure 2-9)	4360260	1
Relay (Figure 2-9, 2-10, 2-27 and 2-74)	3740049	15
Lamp, Indicator (Tilt) (Figure 2-9)	2920015	1
Alarm, Sonalert (Tilt) (Figure 2-9)	0140019	1
Switch, Toggle - DPDT/CO (Select) (Figure 2-10)	4360073	1
Switch, Toggle - SPDT/MC/CO (Lift) (Figure 2-10)	4360198	1
Breaker, Circuit - 15 Amp (Figure 2-10)	4360232	2
Element, Hydraulic Filter (Figure 2-12)	2120110	4
Cartridge - 4640533 Valve (Figure 2-12)	7010529	1
Cartridge - 4640529 Valve (Figure 2-12)	7004292	1
Cartridge - 4640632 Valve (Figure 2-12)	4640523	1
Switch, Level Sensor (Figure 2-12)	4360171	1
Coil - 4640399/4640597 Valve (Figure 2-13 and 2-14)	7000418	4
Cartridge - 4640597 Valve Inlet Relief (Figure 2-14)	7000447	1
Seal Kit - 4640597 Valve Working Section (Figure 2-14)	7000414	2
Seal Kit - 4640597 Valve Inlet (Figure 2-14)	7000413	1
Cartridge, Pressure Sensing - 4640598 Valve (Figure 2-15)	7010511	1
Cartridge, Relief - 4640598 Valve (Figure 2-15)	7010512	1
Cartridge, Modulating Orifice Spool - 4640598 Valve (Figure 2-15)	7010513	1
Cartridge, Electric/Hydraulic Relief - 4640598 Valve (Figure 2-15)	7010514	1
Coil, Electric/Hydraulic Relief - 4640598 Valve (Figure 2-15)	7009742	1
Seal Kit - 3600145 Pump Shaft (Figure 2-18, 2-25 and 2-27)	2900660	1
Breather, Hydraulic (Figure 2-28)	1340021	1
Seal Kit - Steer Cylinder (Figure 2-36)	2901119	1
Seal Kit - Drive Motor (Figure 2-41)	2900449	2
Bearing Kit - Drive Hub (Figure 2-47)	7010429	1
Diode - 6 Amp (Figure 2-74)	3990010	6
<b>OPTIONAL/VARIABLE PARTS</b>		
Seal Kit - Lift Cylinder (CM40RT) (Figure 2-3)	2901116	1
Seal Kit - Lift Cylinder (CM33RT/CM25RT) (Figure 2-3)	2901115	1
Wheel, Bearing (Extendable Platform) (Figure 2-5)	0440085	4

## SECTION 1 — RECOMMENDED SERVICE PARTS STOCK

### MODELS CM25/33/40RT (CONTINUED)

DESCRIPTION OPTIONAL/VARIABLE PARTS (CONTINUED)	JLG PART NO.	QTY
Pad, Wear (Extendable Platform) (Figure 2-5)	0440085	4
Pad, Wear (Traversing Platform) (Figure 2-6)	3340590	16
Bushing, Nylatron (Traversing Platform) (Figure 2-6)	0961461	2
Switch, Toggle - DPDT (With Traversing Platform or Leveling Jacks) (Figure 2-6, 2-10, 2-32 and 2-74)	4360202	2
Seal Kit - Extension Cylinder (Traversing Platform) (Figure 2-7)	2901121	1
Seal Kit - 4640375/4640516 Valve Working Section (Traversing Platform) (Figure 2-8)	7000549	1
Seal Kit - 4640375 Valve Outlet Section (Traversing Platform Without Jacks) (Figure 2-8)	7006047	1
Seal Kit - 4640516 Valve Outlet Section (Traversing Platform With Jacks) (Figure 2-8)	2900657	1
Seal Kit - 4640375/4640516 Valve Inlet Section (Traversing Platform) (Figure 2-8)	7000550	1
Cartridge - 4640375/4640516 Valve Inlet Relief (Traversing Platform) (Figure 2-8)	7006053	1
Switch, Toggle - DPST (4WD) (Figure 2-9)	4360203	1
Switch, Key (Gas and Diesel Machines) (Figure 2-10)	4360003	1
Switch, Key (Electric Machines) (Figure 2-10)	4360284	1
Switch, Block (Electric Machines) (Figure 2-10)	4360267	1
Switch, Block (Electric Machines) (Figure 2-10)	4360281	1
Switch, Toggle - DPDT/CO (Dual Fuel) (Figure 2-10)	4360201	1
Breaker, Circuit - 3 Amp (Diesel and Factory Mutual Electric Machines) (Figure 2-10)	4360212	1
Breaker, Circuit - 30 Amp (Gas and Diesel Machines) (Figure 2-10)	4360216	1
Cable, Pull (With Optional Manual Lowering) (Figure 2-11)	1060377	1
Cartridge - 4640123 Valve (Hydraforce Version) (Figure 2-12)	7010510	1
Coil - 4640123 Valve (Hydraforce Version) (Figure 2-12)	7004368	1
Coil - 4640123 Valve (FPS Version) (Figure 2-12)	7000558	1
Coil - 4640385 Valve (4WD Only) (Figure 2-16)	7000417	2
Coil - 4640352 Valve (With Leveling Jacks) (Figure 2-17)	4640049	4
Seal Kit - 4640352 Valve Working Section (With Leveling Jacks) (Figure 2-17)	7000549	5
Seal Kit - 4640352 Valve Inlet Section (With Leveling Jacks) (Figure 2-17)	7006062	1
Cartridge - 4640352 Valve Inlet Relief (With Leveling Jacks) (Figure 2-17)	7006053	1
Relay - Start (Gas Machines) (Figure 2-18)	3740059	1
Box, Control - Precision Governor (Gas Machines) (Figure 2-18)	1600117	1
Actuator, Precision Governor (Gas Machines) (Figure 2-18)	2500005	1
Element, Air Cleaner (Gas and Diesel Machines) (Figure 2-18 and 2-25)	7004214	4
Relay - Start Lockout (Gas and Diesel Machines) (Figure 2-18 and 2-25)	3740030	1
Switch, Pressure (All Gas Machines and Diesel Machines with 110V Generator Option) (Figure 2-18 and 2-25)	4360037	1
Separator/Filter (Gas Machines) (Figure 2-18)	2120112	1
Switch, Vacuum (Dual Fuel Machines) (Figure 2-19)	4360188	1
Filterlock (Dual Fuel Machines) (Figure 2-19)	2120077	1
Valve, Gas Lock (Dual Fuel Machines) (Figure 2-19)	4640391	1
Actuator, Throttle (Diesel Machines) (Figure 2-25)	0060023	1
Switch, Pressure (Diesel Machines With Engine Distress Package) (Figure 2-25)	4360065	1
Fuse - 200 Amp (Electric Machines) (Figure 2-27)	2400025	1

# SECTION 1 — RECOMMENDED SERVICE PARTS STOCK

## MODELS CM25/33/40RT (CONTINUED)

DESCRIPTION	JLG PART NO.	QTY
OPTIONAL/VARIABLE PARTS (CONTINUED)		
Relay, Contactor (Electric Machines) (Figure 2-27)	3740064	1
Relay (Factory Mutual Electric Machines) (Figure 2-27)	3740070	1
Seal Kit - Leveling Jack Cylinder (Figure 2-33)	2901130	4
Bushing, Bronze - Front Spindle (2WD) (Figure 2-34)	0960839	4
Bushing, Bronze - Front Spindle (4WD) (Figure 2-34)	0961029	4
Seal, Oil - Front Axle (2WD Only) (Figure 2-34)	3930353	2
Cup, Bearing - Front Axle (2WD Only) (Figure 2-34)	0440174	4
Cone, Bearing - Front Axle (2WD Only) (Figure 2-34)	0440175	4
Seal Kit - Lockout Cylinder (Oscillating Axle) (Figure 2-37)	2900379	2
Seal Kit - Drive Motor (4WD Front) (Figure 2-43)	2900714	2
Seal Kit - Drive Brake (Ausco Version) (Figure 2-45)	2900131	2
Seal Kit - Drive Brake (Mico Version) (Figure 2-45)	2900641	2
Seal Kit - Drive Brake (4WD Front) (Figure 2-48)	2900755	2
Seal Kit - Drive Hub (4WD Front) (Figure 2-48)	2900754	2
Resistor - 20 Ohm (Diesel Only) (Figure 2-74)	3730003	1

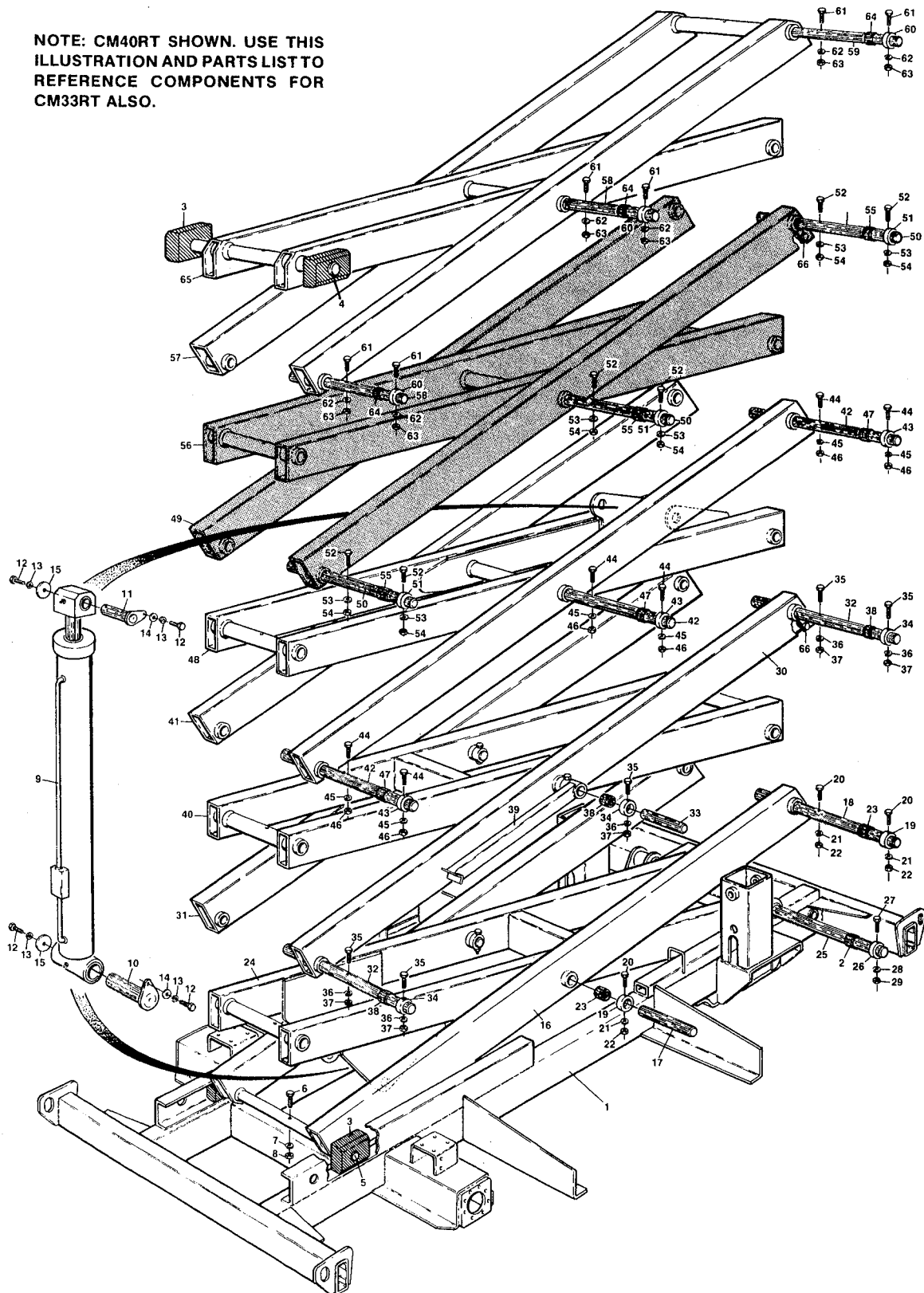




**SECTION 2**  
**ILLUSTRATED**  
**PARTS LIST**

## SECTION 2 — ILLUSTRATED PARTS LIST

**NOTE: CM40RT SHOWN. USE THIS ILLUSTRATION AND PARTS LIST TO REFERENCE COMPONENTS FOR CM33RT ALSO.**



**Figure 2-1. Frame and Sizzor Arms Assembly and Installations (CM40RT/CM33RT).**

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—1		<b>FRAME AND SIZZOR ARMS ASSEMBLY AND INSTALLATIONS (CM40RT/CM33RT)</b>	Ref.	
—1	2360301	Frame (CM40/33RT - Gas/Diesel With 80" Wheelbase)	1	
	2360316	Frame (CM40/33RT - Electric With 80" Wheelbase)	1	
	2360318	Frame (CM40/33RT - Gas/Diesel With 89" Wheelbase)	1	
	2360336	Frame (CM40/33RT - Electric With 89" Wheelbase)	1	
—2	See Note	Bushing, Bronze (Sizzor Arm Pivots)	4	
	0961664	Bushing, Composite (Sizzor Arm Pivots)	2	
	0239993	<b>SIZZOR ARMS ASSEMBLY AND INSTALLATION (CM40RT - 80" WHEELBASE)</b>	Ref.	D
	0251026	<b>SIZZOR ARMS ASSEMBLY AND INSTALLATION (DOMESTIC CM40RT - 89" WHEELBASE)</b>	Ref.	A
	0252246	<b>SIZZOR ARMS ASSEMBLY AND INSTALLATION (C.S.A. CM40RT - 89" WHEELBASE)</b>	Ref.	—
	0239624	<b>SIZZOR ARMS ASSEMBLY AND INSTALLATION (CM33RT - 80" WHEELBASE) (NOT SHOWN)</b>	Ref.	C
	0251025	<b>SIZZOR ARMS ASSEMBLY AND INSTALLATION (DOMESTIC CM33RT - 89" WHEELBASE) (NOT SHOWN)</b>	Ref.	D
	0252245	<b>SIZZOR ARMS ASSEMBLY AND INSTALLATION (C.S.A. CM33RT - 89" WHEELBASE) (NOT SHOWN)</b> Note: Use 1 composite-type bushing in place of 2 bronze bushings (Machines built prior to May 1993). When using existing pins and new composite - type bushing, Graphokote Lube (P/N 3020028) is required at installation. When replacing pivot pins, use chrome pivot pins and composite-type bushings. Chrome pivot pins require no lubrication at installation.	Ref.	—
—3	3340579	Pad, Sliding (Attaching Parts)	4	
—4	3422268	Pin (Top)	1	
—5	3422269	Pin (Bottom)	1	
—6	0641528	Bolt 5/16"-18NC x 3 1/2"	2	
—7	4761500	Lockwasher 5/16"	2	
—8	3311501	Nut 5/16"-18NC	2	
—9	1682101	Lift Cylinder Assembly (CM40RT - 80" Wheelbase) (See Figure 2-3 for Breakdown)	1	
	1682243	Lift Cylinder Assembly (CM40RT - 89" Wheelbase) (See Figure 2-3 for Breakdown)	1	
	1682079	Lift Cylinder Assembly (CM33RT - 80" Wheelbase) (See Figure 2-3 for Breakdown)	1	
	1682242	Lift Cylinder Assembly (CM33RT - 89" Wheelbase) (See Figure 2-3 for Breakdown) (Attaching Parts)	1	
—10	3421645	Pin (Bottom)	1	
—11	3421647	Pin (Top)	1	
—12	0641808	Bolt 1/2"-13NC x 1"	4	
—13	4761800	Lockwasher 1/2"	4	
—14	4751800	Flatwasher 1/2"	4	
—15	4740303	Flatwasher, Special	2	
—16	Consult Factory	Arm Weldment (Lower Outside) (Attaching Parts)	1	
—17	3422270	Pin (Center) (Standard)	2	
	3422273	Pin (Center) (C.S.A.)	2	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—1		<b>FRAME AND SIZZOR ARMS ASSEMBLY AND INSTALLATION (CM40RT/CM33RT) (CONTINUED)</b>	Ref.	
—18	3422267	Pin (Top) (Standard)	1	
	3422274	Pin (Top) (C.S.A.)	1	
—19	1440227	Collar	6	
—20	0641528	Bolt 5/16"-18NC x 3 1/2"	7	
—21	4761500	Lockwasher 5/16"	7	
—22	3311501	Nut 5/16"-18NC	7	
—23	See Note	Bushing, Bronze (Qty. 8 Per Arm)	16	
	0961664	Bushing, Composite (Qty. 4 Per Arm)	8	
—24	0200366	Arm Weldment (Lower Inside) (Attaching Parts)	1	
—25	3421637	Pin (Bottom)	1	
—26	1440227	Collar	2	
—27	0641528	Bolt 5/16"-18NC x 3 1/2"	3	
—28	4761500	Lockwasher 5/16"	3	
—29	3311501	Nut 5/16"-18NC	3	
—30	Consult Factory	Arm Weldment (2nd Outside - RH) (CM40RT)	1	
	0200519	Arm Weldment (Lower Mid Outside - RH) (CM33RT)	1	
—31	Consult Factory	Arm Weldment (2nd Outside - LH) (CM40RT)	1	
	0200520	Arm Weldment (Lower Mid Outside - LH) (CM33RT) (Attaching Parts)	1	
—32	3422267	Pin (Bottom and Top) (Standard)	2	
	3422273	Pin (Bottom and Top) (C.S.A.)	2	
—33	3422270	Pin (Center) (Standard)	2	
	3422274	Pin (Center) (C.S.A.)	2	
—34	1440227	Collar	10	
—35	0641528	Bolt 5/16"-18NC x 3 1/2"	12	
—36	4761500	Lockwasher 5/16"	12	
—37	3311501	Nut 5/16"-18NC	12	
—38	See Note	Bushing, Bronze (Qty. 6 Per Arm)	12	
	0961664	Bushing, Composite (Qty. 3 Per Arm)	6	
—39	4843248	Prop, Safety	2	
—40	0200406	Arm Weldment (2nd Inside) (CM40RT)	1	
	0200369	Arm Weldment (Lower Mid Inside) (CM33RT)	1	
—41	Consult Factory	Arm Weldment (3rd Outside) (CM40RT)	2	
	Consult Factory	Arm Weldment (Upper Mid Outside) (CM33RT) (Attaching Parts)	2	
—42	3422267	Pin (Bottom, Center and Top) (Standard)	3	
	3422273	Pin (Bottom, Center and Top) (C.S.A.)	3	
—43	1440227	Collar	6	
—44	0641528	Bolt 5/16"-18NC x 3 1/2"	9	
—45	4761500	Lockwasher 5/16"	9	
—46	3311501	Nut 5/16"-18NC	9	
—47	See Note	Bushing, Bronze (Qty. 6 Per Arm)	12	
	0961664	Bushing, Composite (Qty. 3 Per Arm)	6	
—48	0200405	Arm Weldment (3rd Inside) (CM40RT)	1	
	0200370	Arm Weldment (Upper Mid Inside) (CM33RT)	1	
—49	Consult Factory	Arm Weldment (Mid Outside) (CM40RT Only) (Attaching Parts)	2	
—50	3422267	Pin (Bottom, Center and Top) (Standard)	3	
	3422273	Pin (Bottom, Center and Top) (C.S.A.)	3	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-1		<b>FRAME AND SIZZOR ARMS ASSEMBLY AND INSTALLATIONS (CM40RT/CM33RT) (CONTINUED)</b>	Ref.	
-51	1440227	Collar	6	
-52	0641528	Bolt 5/16"-18NC x 3 1/2"	9	
-53	4761500	Lockwasher 5/16"	9	
-54	3311501	Nut 5/16"-18NC	9	
-55	See Note 0961664	Bushing, Bronze (Qty. 6 Per Arm)	12	
		Bushing, Composite (Qty. 3 Per Arm)	6	
-56	0200415	Arm Weldment (Mid Inside) (CM40RT Only)	1	
-57	Consult Factory Consult Factory	Arm Weldment (Upper Outside) (CM40RT)	1	
		Arm Weldment (Upper Outside) (CM33RT) (Attaching Parts)	1	
-58	3422267	Pin (Bottom and Center) (Standard)	2	
	3422273	Pin (Bottom and Center) (C.S.A.)	2	
-59	3421640	Pin (Top)	1	
-60	1440227	Collar	6	
-61	0641528	Bolt 5/16"-18NC x 3 1/2"	9	
-62	4761500	Lockwasher 5/16"	9	
-63	3311501	Nut 5/16"-18NC	9	
-64	See Note 0961664	Bushing, Bronze (Qty. 8 Per Arm)	16	
		Bushing, Composite (Qty. 4 Per Arm)	8	
-65	0200407	Arm Weldment (Upper Inside) (CM40RT)	1	
	0200371	Arm Weldment (Upper Inside) (CM33RT)	1	
-66	1320061	Clamp, Hose (Attaching Parts)	4	
	0641508	Bolt 5/16"-18NC x 1"	1	
	4761500	Lockwasher 5/16"	1	
	3311501	Nut 5/16"-18NC	1	

SECTION 2 — ILLUSTRATED PARTS LIST

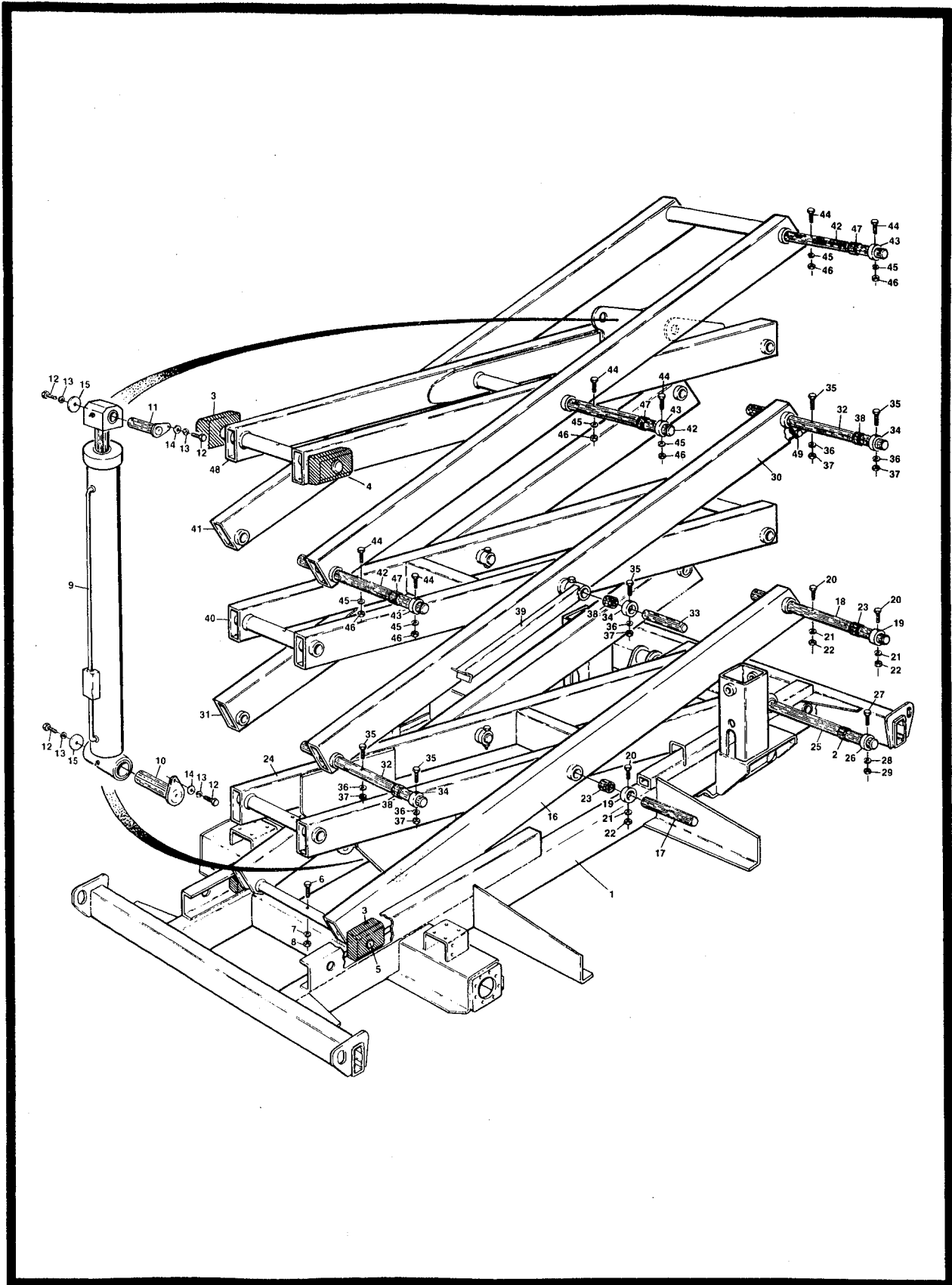


Figure 2-2. Frame and Sizzor Arms Assembly and Installations (CM25RT).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—2		<b>FRAME AND SIZZOR ARMS ASSEMBLY AND INSTALLATIONS (CM25RT)</b>	Ref.	
—1	2360301	Frame (80" Wheelbase Gas and Diesel)	1	
	2360316	Frame (80" Wheelbase Electric)	1	
	2360318	Frame (89" Wheelbase Gas and Diesel)	1	
	2360336	Frame (89" Wheelbase Electric)	1	
—2	See Note	Bushing, Bronze (Sizzor Arms Pivot)	4	
	0961664	Bushing, Composite (Sizzor Arms Pivot)	2	
	0251055	<b>SIZZOR ARMS ASSEMBLY AND INSTALLATION (80" WHEELBASE)</b>	Ref.	A
	0251067	<b>SIZZOR ARMS ASSEMBLY AND INSTALLATION (DOMESTIC 89" WHEELBASE)</b>	Ref.	B
	0252244	<b>SIZZOR ARMS ASSEMBLY AND INSTALLATION (C.S.A. 89" WHEELBASE)</b>	Ref.	—
		<b>Note: Use 1 composite-type bushing in place of 2 bronze bushings (Machines built prior to May 1993). When using existing pins and new composite - type bushing, Graphokote Lube (P/N 3020028) is required at installation. When replacing pivot pins, use chrome pivot pins and composite-type bushings. Chrome pivot pins require no lubrication at installation.</b>		
—3	3340579	Pad, Sliding (Attaching Parts)	4	
—4	3422268	Pin (Top)	1	
—5	3422269	Pin (Bottom)	1	
—6	0641528	Bolt 5/16"-18NC x 3 1/2"	2	
—7	4761500	Lockwasher 5/16"	2	
—8	3311501	Nut 5/16"-18NC	2	
—9	1682079	Lift Cylinder Assembly (80" Wheelbase) (See Figure 2-3 for Breakdown)	1	
	1682242	Lift Cylinder Assembly (89" Wheelbase) (See Figure 2-3 for Breakdown) (Attaching Parts)	1	
—10	3421645	Pin (Bottom)	1	
—11	3421647	Pin (Top)	1	
—12	0641808	Bolt 1/2"-13NC x 1"	4	
—13	4761800	Lockwasher 1/2"	4	
—14	4751800	Flatwasher 1/2"	4	
—15	4740303	Flatwasher, Special	2	
—16	Consult Factory	Arm Weldment (Lower Outside) (Attaching Parts)	1	
—17	3422270	Pin (Center) (Standard)	2	
	3422274	Pin (Center) (C.S.A.)	2	
—18	3422267	Pin (Top) (Standard)	1	
	3422273	Pin (Top) (C.S.A.)	1	
—19	1440227	Collar	6	
—20	0641528	Bolt 5/16"-18NC x 3 1/2"	7	
—21	4761500	Lockwasher 5/16"	7	
—22	3311501	Nut 5/16"-18NC	7	





**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-2		<b>FRAME AND SIZZOR ARMS ASSEMBLY AND INSTALLATIONS (CM25RT) (CONTINUED)</b>	Ref.	
-23	See Note 0961664	Bushing, Bronze (Qty. 8 Per Arm)	16	
-24	0200366	Bushing, Composite ((Qty. 4 Per Arm) Arm Weldment (Lower Inside) (Attaching Parts)	8 1	
-25	3422271	Pin (Bottom)	1	
-26	1440227	Collar	2	
-27	0641528	Bolt 5/16"-18NC x 3 1/2"	3	
-28	4761500	Lockwasher 5/16"	3	
-29	3311501	Nut 5/16"-18NC	3	
-30	0200519	Arm Weldment (Mid Outside - RH)	1	
-31	0200520	Arm Weldment (Mid Outside - LH) (Attaching Parts)	1	
-32	3422267	Pin (Bottom and Top) (Standard)	2	
	3422273	Pin (Bottom and Top) (C.S.A.)	2	
-33	3422270	Pin (Center) (Standard)	2	
	3422274	Pin (Center) (C.S.A.)	2	
-34	1440227	Collar	10	
-35	0641528	Bolt 5/16"-18NC x 3 1/2"	12	
-36	4761500	Lockwasher 5/16"	12	
-37	3311501	Nut 5/16"-18NC	12	
-38	See Note 0961664	Bushing, Bronze (Qty. 6 Per Arm) Bushing, Composite (Qty. 3 Per Arm)	12 6	
-39	4843248	Prop, Safety	2	
-40	0200369	Arm Weldment (Mid Inside)	1	
-41	Consult Factory	Arm Weldment (Upper Outside) (Attaching Parts)	2	
-42	3422267	Pin (Bottom and Center) (Standard)	2	
	3422273	Pin (Bottom and Center) (C.S.A.)	2	
	3422272	Pin (Top)	1	
-43	1440227	Collar	6	
-44	0641528	Bolt 5/16"-18NC x 3 1/2"	9	
-45	4761500	Lockwasher 5/16"	9	
-46	3311501	Nut 5/16"-18NC	9	
-47	See Note 0961664	Bushing, Bronze (Qty. 6 Per Arm) Bushing, Composite (Qty. 3 per Arm)	12 6	
-48	0200419	Arm Weldment (Upper Inside)	1	
-49	1320061	Clamp, Hose (Attaching Parts)	4	
	0641508	Bolt 5/16"-18NC x 1"	1	
	4761500	Lockwasher 5/16"	1	
	3311501	Nut 5/16"-18NC	1	

SECTION 2 — ILLUSTRATED PARTS LIST

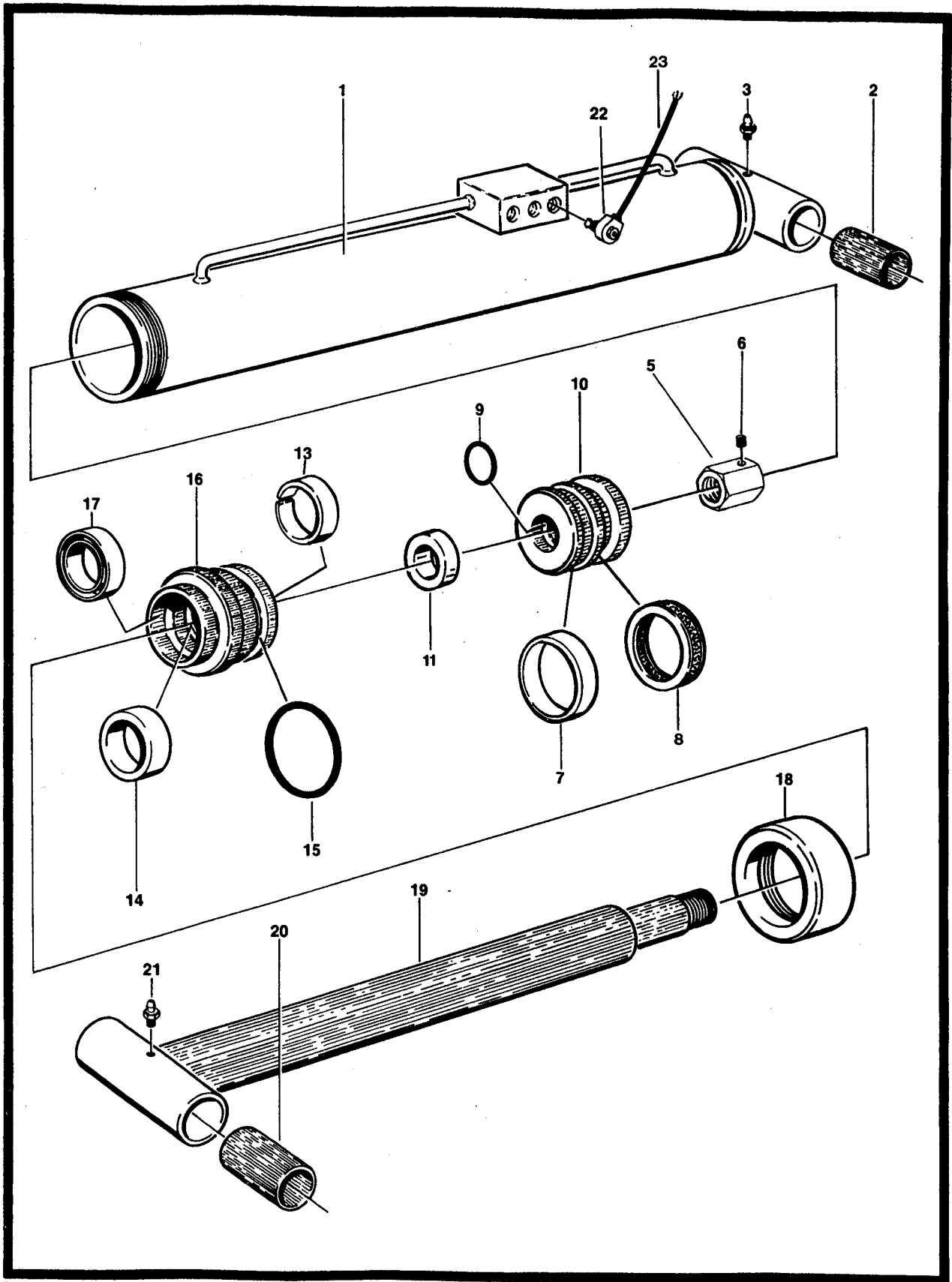


Figure 2-3. Lift Cylinder Assembly.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—3	1682101	LIFT CYLINDER ASSEMBLY (CM40RT - 80" WHEELBASE)	Ref.	B
	1682243	LIFT CYLINDER ASSEMBLY (CM40RT - 89" WHEELBASE)	Ref.	A
	1682079	LIFT CYLINDER ASSEMBLY (CM33RT/CM25RT - 80" WHEELBASE)	Ref.	B
	1682242	LIFT CYLINDER ASSEMBLY (CM33RT/CM25RT - 89" WHEELBASE)	Ref.	A
<b>Note: Refer to Number Stamped on Barrel for Identification.</b>				
—1	1682080	Barrel Assembly	1	
—2	0961379	Bushing, Bronze	2	
—3	2160002	Fitting, Grease	1	
—4	Not Used			
—5	3300254	Nut, Special (Uses 2 Setscrews)	1	
	3300286	Nut, Hex (Uses 1 Setscrew)	1	
	0100011	Loctite #242	A/R	
	0100038	Primer, Locking	A/R	
—6	3951602	Setscrew 1/4"-20NC x 3/8"	2	
	3900170	Setscrew 3/8"-16NC x 3/8"	1	
—7	Kit	Ring, Wear	1	
—8	Kit	T-Seal	1	
—9	Kit	O-Ring	1	
—10	3480137	Piston	1	
—11	4564356	Spacer, Tube (CM40RT - 80" Wheelbase)	1	
	4564707	Spacer, Tube (CM40RT - 89" Wheelbase)	1	
	4564272	Spacer, Tube (CM33RT/CM25RT - 80" Wheelbase)	1	
	4564708	Spacer, Tube (CM33RT/CM25RT - 89" Wheelbase)	1	
—12	Not Used			
—13	Kit	Ring, Wear	1	
—14	Kit	Seal	1	
—15	Kit	O-Ring	1	
—16	1682076	Head (CM40RT)	1	
	1682098	Head (CM33RT)	1	
—17	Kit	Ring, Wiper	1	
—18	1120358	Cap	1	
	0100035	Loctite #222	A/R	
—19	1682100	Rod Assembly (CM40RT)	1	
	1682082	Rod Assembly (CM33RT/CM25RT)	1	
—20	0961380	Bushing, Bronze	2	
—21	2160002	Fitting, Grease	1	
—22	4640382	Valve, Holding	1	
	7009742	Coil (Modular Controls)	1	
	2900503	Seal Kit (Modular Controls)	1	
	7000645	Coil (Hydraforce)	1	
	2900800	Seal Kit (Hydraforce)	1	
	1060016	Cable, Electrical - 16/3	24 ft./7.3m	
—23	2901116	Seal Kit (Includes Items 7,8,9,13,14,15 and 17) (CM40RT)	1	
	2901115	Seal Kit (Includes Items 7,8,9,13,14,15 and 17) (CM33RT/CM25RT)	1	

SECTION 2 — ILLUSTRATED PARTS LIST

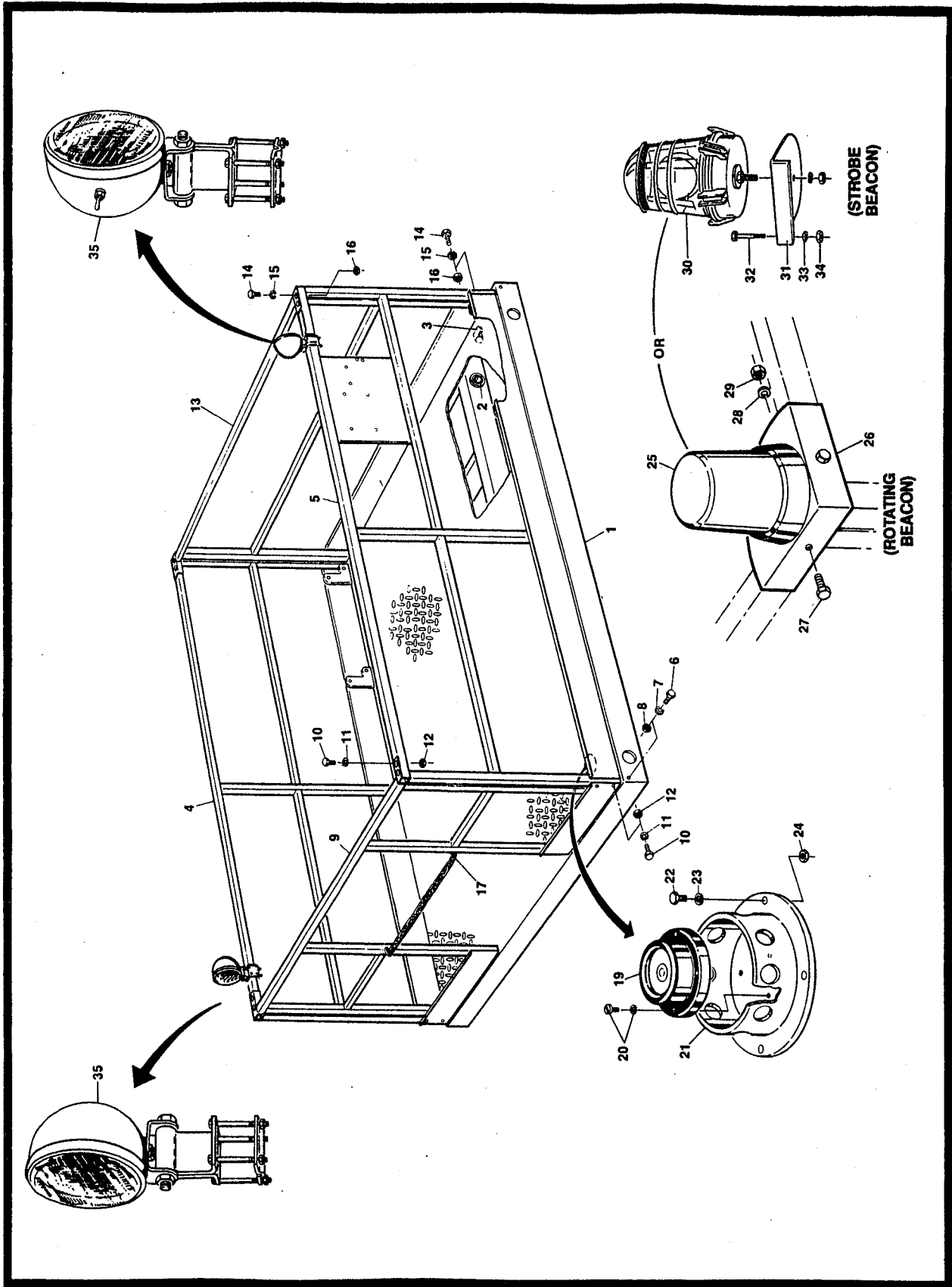


Figure 2-4. Platform and Handrail Installation.

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—4		<b>PLATFORM AND HANDRAIL INSTALLATIONS</b>	Ref.	
—1	3510203	Platform Weldment (Standard and Extendable)	1	D
—2	0961409	Bushing	4	
—3	1320095	Clamp (Attaching Parts)	1	
	3311501	Nut 5/16"-18NC	1	
	4761500	Lockwasher 5/16"	1	
	4300038	Stud (Welded on Parts)	1	
	0239704	<b>HANDRAILS INSTALLATION (42"/1.09m HEIGHT) (STANDARD PLATFORM)</b>	Ref.	—
	0251151	<b>HANDRAILS INSTALLATION (43 1/2"/1.1m HEIGHT) (STANDARD PLATFORM)</b>	Ref.	A
	0239705	<b>HANDRAILS INSTALLATION (42"/1.09m HEIGHT) (EXTENDABLE PLATFORM)</b>	Ref.	—
	0251152	<b>HANDRAILS INSTALLATION (43 1/2"/1.1m HEIGHT) (EXTENDABLE PLATFORM)</b>	Ref.	A
—4	3640602	Handrail - LH Side (42"/1.09m Height)	1	
	3640680	Handrail - LH Side (43 1/2"/1.1m Height)	1	
—5	3640601	Handrail - RH Side (42"/1.09m Height)	1	
	3640681	Handrail - RH Side (43 1/2"/1.1m Height) (Attaching Parts)	1	
—6	0641518	Bolt 5/16"-18NC x 2 1/4"	2	
—7	4751500	Flatwasher 5/16"	2	
—8	3311505	Locknut 5/16"-18NC	2	
—9	3640603	Handrail - Rear (42"/1.09m Height)	1	
	3640679	Handrail - Rear (43 1/2"/1.1m Height) (Attaching Parts)	1	
—10	0641416	Bolt 1/4"-20NC x 2"	8	
—11	4761400	Lockwasher 1/4"	8	
—12	3311401	Nut 1/4"-20NC	8	
—13	3640612	Handrail - Front (42"/1.09m Height) (Standard Platform Only)	1	
	3640682	Handrail - Front (43 1/2"/1.1m Height) (Standard Platform Only) (Attaching Parts)	1	
—14	0641416	Bolt 1/4"-20NC x 2"	8	
—15	4761400	Lockwasher 1/4"	8	
—16	3311401	Nut 1/4"-20NC	8	
—17	2700056	Snaphook	1	
	1260136	Chain	3.5 ft/1.07m	
	3010088	Link	2	
—18	Not Used			
	0250317	<b>CIRCULAR LEVEL INSTALLATION (OPTIONAL)</b>	Ref.	—
—19	2420038	Level, Circular (Attaching Parts)	1	
—20	3910610	Screw #6-32 x 5/8"	3	
	4770600	Starwasher #6	3	
—21	4842981	Mounting Weldment (Attaching Parts)	1	
—22	0641406	Bolt 1/4"-20NC x 3/4"	4	
—23	4761400	Lockwasher 1/4"	4	
—24	3311401	Nut 1/4"-20NC	4	



**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2-4		<b>PLATFORM AND HANDRAIL INSTALLATIONS (CONTINUED)</b>	Ref.	
	0250809	<b>ROTATING BEACON INSTALLATION (80" and 89" WHEELBASE GAS AND DIESEL MACHINES/89" WHEELBASE ELECTRIC MACHINES)</b>	Ref.	—
—25	2920018	Light, Rotating Beacon (Amber) (Includes Mounting Hardware)	1	
—26	0901113	Bracket, Mounting (Attaching Parts)	1	
—27	0641416	Bolt 1/4"-20NC x 2"	2	
—28	4761400	Lockwasher 1/4"	2	
—29	3311401	Nut 1/4"-20NC	2	
	1060016	Cable - 16/3	16 R/4.9m.	
	3740049	Relay (Located in Platform Control Box)	1	
	0250716	<b>BEACON LIGHT INSTALLATION ( 80" WHEELBASE ELECTRIC MACHINES)</b>	Ref.	B
—30	2920096	Light, Strobe Beacon	1	
—31	0901546	Bracket, Mounting (Attaching Parts)	1	
—32	0641414	Bolt 1/4"-20NC x 1 3/4"	2	
—33	4761400	Lockwasher 1/4"	2	
—34	3311401	Nut 1/4"-20NC	2	
	0251805	<b>WORKLIGHTS INSTALLATION (80" AND 89" WHEELBASE GAS AND DIESEL MACHINES/89" WHEELBASE ELECTRIC MACHINES)</b>	Ref.	—
	0250711	<b>WORKLIGHTS INSTALLATION (80" WHEELBASE ELECTRIC MACHINES)</b>	Ref.	A
—35	2920095	Lamp (80" and 89" Wheelbase Gas and Diesel Machines/89" Wheelbase Electric Machines)	2	
	2920095	Lamp (80" Wheelbase Electric Machines)	2	

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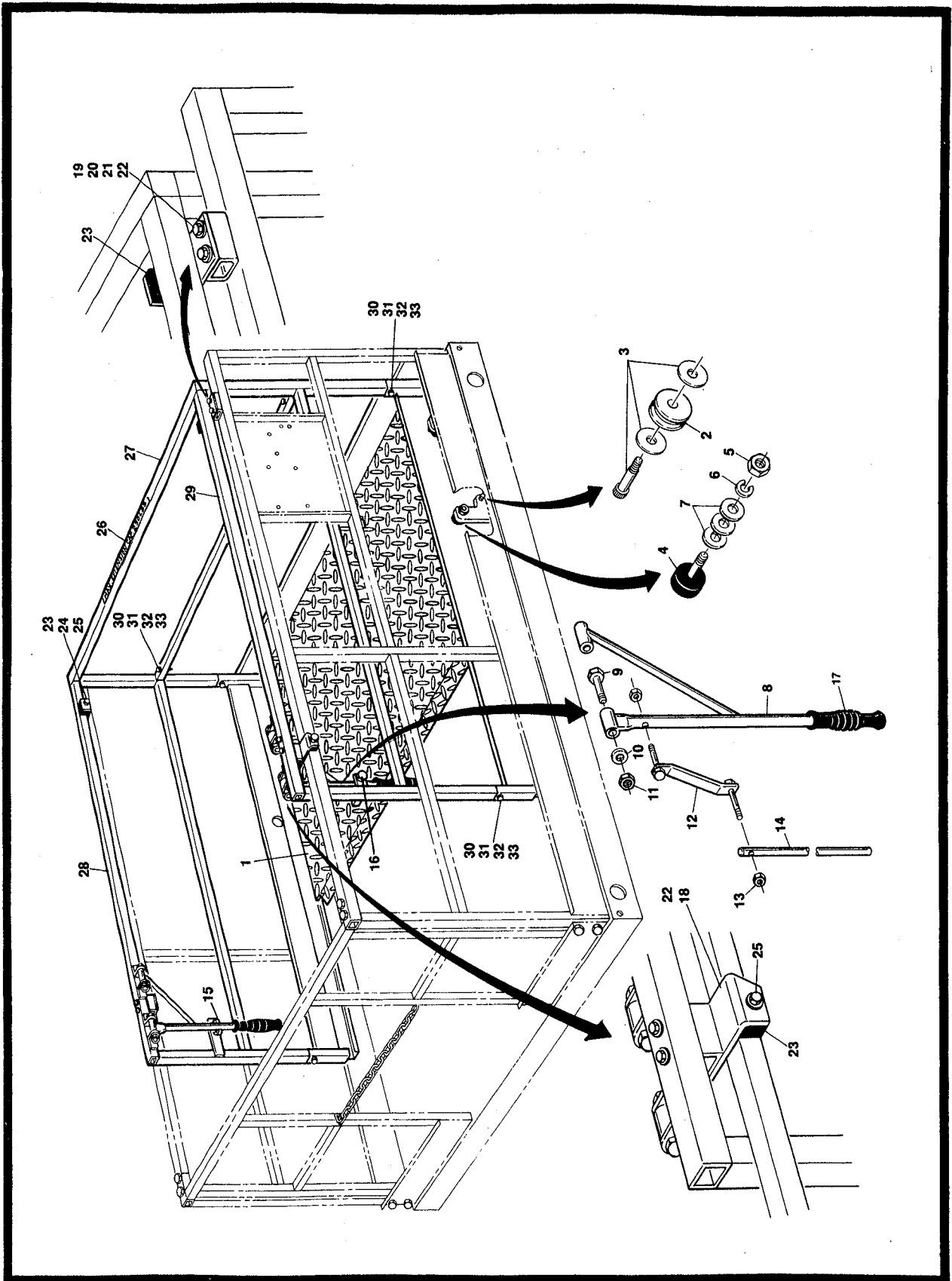


Figure 2-5. Platform Extension Installation.



**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—5	0239788	<b>PLATFORM EXTENSION INSTALLATION (FIXED HANDRAILS 42"/1.09m HEIGHT)</b>	Ref.	G
	0251155	<b>PLATFORM EXTENSION INSTALLATION (FIXED HANDRAILS 43 1/2"/1.1m HEIGHT)</b>	Ref.	D
	0252412	<b>PLATFORM EXTENSION INSTALLATION (REMOVABLE HANDRAILS - 43 1/2"/1.1m HEIGHT)</b>	Ref.	A
—1	3510204	Platform/Handrail Weldment (Fixed Handrail Design) (42"/1.09m Handrail Height)	1	
	3510274	Platform/Handrail Weldment (Fixed Handrail Design) (43 1/2"/1.1m Handrail Height)	1	
	3510357	Platform, Extension (Removable Handrail Design) (43"/1.1m Handrail Height)	1	
—2	3860049	Roller (Attaching Parts)	4	
—3	3900163	Screw, Shoulder	1	
	4740350	Flatwasher, Special	2	
—4	0440085	Wheel, Bearing (Attaching Parts)	4	
—5	3322002	Nut, Jam 5/8"-18NF	1	
—6	4792000	Starwasher 5/8"	1	
—7	4712200	Flatwasher 3/4" Narrow	3	
—8	4843336	Handle, Latch (Attaching Parts)	2	
—9	0641620	Bolt 3/8"-16NC x 2 1/2"	2	
—10	4751600	Flatwasher	2	
—11	3311605	Locknut 3/8"-16NC	2	
—12	0200409	Arm, Latch (Attaching Parts)	2	
—13	3311505	Locknut 5/16"-18NC	2	
—14	3841010	Rod, Latch (With Fixed 42"/1.09m Handrail Height)	2	
	3841068	Rod, Latch (With Fixed 43 1/2"/1.1m Handrail Height)	2	
	3841160	Rod, Latch (With Removable 43 1/2"/1.1m Handrail Height)	2	
—15	1380132	Clip, Handle (Attaching Parts)	2	
—16	3941004	Screw, Self-Tap #10-24NC x 1/2"		
—17	2560088	Grip, Handle	2	
—18	0181515	Angle, Mounting - Wear Pad (Attaching Parts)	4	
—19	0641424	Bolt 1/4"-20NC x 2"	2	
—20	4751400	Flatwasher 1/4"	6	
—21	3311405	Locknut 1/4"-20NC	2	
—22	3532918	Plate, Doubler	A/R	
—23	3340587	Pad, Wear (Attaching Parts)	4	
—24	0641605	Bolt 3/8"-16NC x 5/8"	1	
—25	4761600	Lockwasher 3/8"	1	
—26	3251852	Nameplate - Capacity	1	
—27	4565554	Rail, Center (Machines with Removable Handrails)	2	
—28	3640783	Handrail - Left Side (Machines with Removable Handrails)	1	



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—5	0239788	<b>PLATFORM EXTENSION INSTALLATION (CONTINUED)</b>	Ref.	G
—29	3640784	Handrail - Right Side (Machines with Removable Handrails) (Attaching Parts)	1	
—30	0641414	Bolt 1/4"-20NC x 1 3/4" (Side Handrails)	4	
—31	0641416	Bolt 1/4"-20NC x 2" (Center Rails)	4	
—32	4751400	Flatwasher 1/4"	16	
—32	4761400	Lockwasher 1/4"	8	
—33	3311401	Nut 1/4"-20NC	8	
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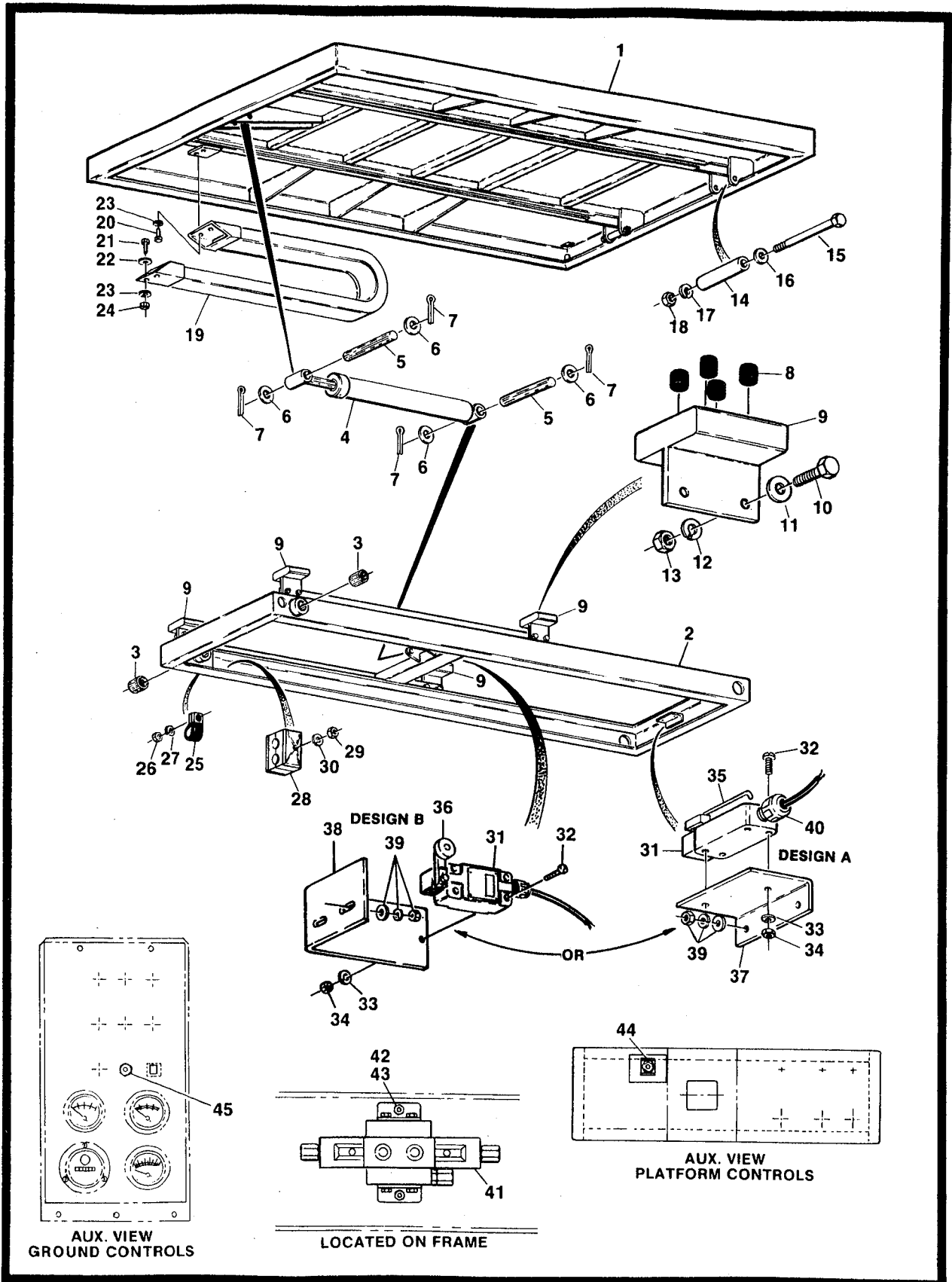


Figure 2-6. Traversing Platform Installations.

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2-6		<b>TRAVERSING PLATFORM INSTALLATIONS</b>	Ref.	
	3510255	<b>TRAVERSING PLATFORM INSTALLATION (CM40RT WITHOUT OUTRIGGERS)</b>	Ref.	C
	3510344	<b>TRAVERSING PLATFORM INSTALLATION (CM40RT WITH OUTRIGGERS)</b>	Ref.	—
	3510249	<b>TRAVERSING PLATFORM INSTALLATION (CM33RT WITHOUT OUTRIGGERS)</b>	Ref.	B
	3510343	<b>TRAVERSING PLATFORM INSTALLATION (CM33RT WITH OUTRIGGERS)</b>	Ref.	—
	3510265	<b>TRAVERSING PLATFORM INSTALLATION (CM25RT WITHOUT OUTRIGGERS)</b>	Ref.	B
	3510342	<b>TRAVERSING PLATFORM INSTALLATION (CM25RT WITH OUTRIGGERS)</b>	Ref.	—
—1	3510251	Platform Weldment	1	
—2	3510250	Sub-Deck Weldment	1	
—3	0961409	Bushing, Super Oilite	4	
—4	1681591	Extension Cylinder Assembly (See Figure 2-7 for Breakdown) (Attaching Parts)	1	
—5	3421327	Pin	2	
—6	4752200	Flatwasher 3/4"	4	
—7	3450406	Pin, Cotter 1/8" x 1 1/2"	4	
—8	3340590	Pad, Wear	16	
—9	4843637	Block, Slide (Attaching Parts)	4	
—10	0642216	Bolt 3/4"-10NC x 2"	2	
—11	4752200	Flatwasher 3/4"	2	
—12	4762200	Lockwasher 3/4"	2	
—13	3312201	Nut 3/4"-10NC	2	
—14	0961461	Bushing, Nylatron (Attaching Parts)	2	
—15	0641852	Bolt 1/2"-13NC x 6 1/2"	1	
—16	4751800	Flatwasher 1/2"	1	
—17	4761800	Lockwasher 1/2"	1	
—18	3311801	Nut 1/2"-13NC	1	
—19	1180172	Carrier (Attaching Parts)	1	
—20	0641405	Bolt 1/4"-20NC x 5/8" (Platform Attach)	2	
—21	0641408	Bolt 1/4"-20NC x 1" (Sub-Deck Attach)	2	
—22	4751400	Flatwasher 14"	2	
—23	4761400	Lockwasher 1/4"	4	
—24	3311401	Nut 1/4"-20NC	2	
—25	1320169	Clamp, Loop (Attaching Parts)	2	
—26	3311001	Nut #10-24NC	1	
—27	4761000	Lockwasher #10	1	
—28	1320159	Clamp, Hose (Attaching Parts)	2	
—29	3311401	Nut 1/4"-20NC	1	
—30	4761400	Lockwasher 1/4"	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2-6		<b>TRAVERSING PLATFORM INSTALLATIONS (CONTINUED)</b>	Ref.	
-31	4360057	Switch, Limit (Attaching Parts)	1	
-32	0721016	Screw, Machine #10-24NC x 2"	2	
-33	4761000	Lockwasher #10	2	
-34	3311001	Nut #10-24NC	2	
-35	4360056	Lever, Switch (Design A - Prior to April 1991)	1	
-36	4360298	Arm and Roller (Design B - April 1991 to Present)	1	
-37	0901697	Bracket, Mounting - Limit Switch (Design A - Prior to April 1991)	1	
-38	0901761	Bracket, Mounting - Limit Switch (Design B - April 1991 to Present) (Attaching Parts)	1	
-39	3311401	Nut 1/4"-20NC	2	
	4761400	Lockwasher 1/4"	2	
	4751400	Flatwasher 1/4"	2	
	4300085	Stud (Welded on Part)	2	
-40	4460049	Connector, Strain Relief	1	
-41	4640375	Valve Assembly - FPS (Without Outriggers) (See Figure 2-8 for Breakdown)	1	
	4640516	Valve Assembly - FPS (With Outriggers) (See Figure 2-8 for Breakdown) (Attaching Parts)	1	
-42	3311601	Nut 3/8"-16NC	2	
-43	4761600	Lockwasher 3/8"	2	
	4300034	Stud (Welded on Part)	2	
-44	4360202	Switch, Toggle	1	
	3790012	O-Ring	1	
	4060229	Shield, Switch	1	
	3252000	Nameplate - Platform Extend	1	
	3990010	Diode - 6 Amp	2	
-45	4360202	Switch, Toggle	1	
	3790012	O-Ring	1	

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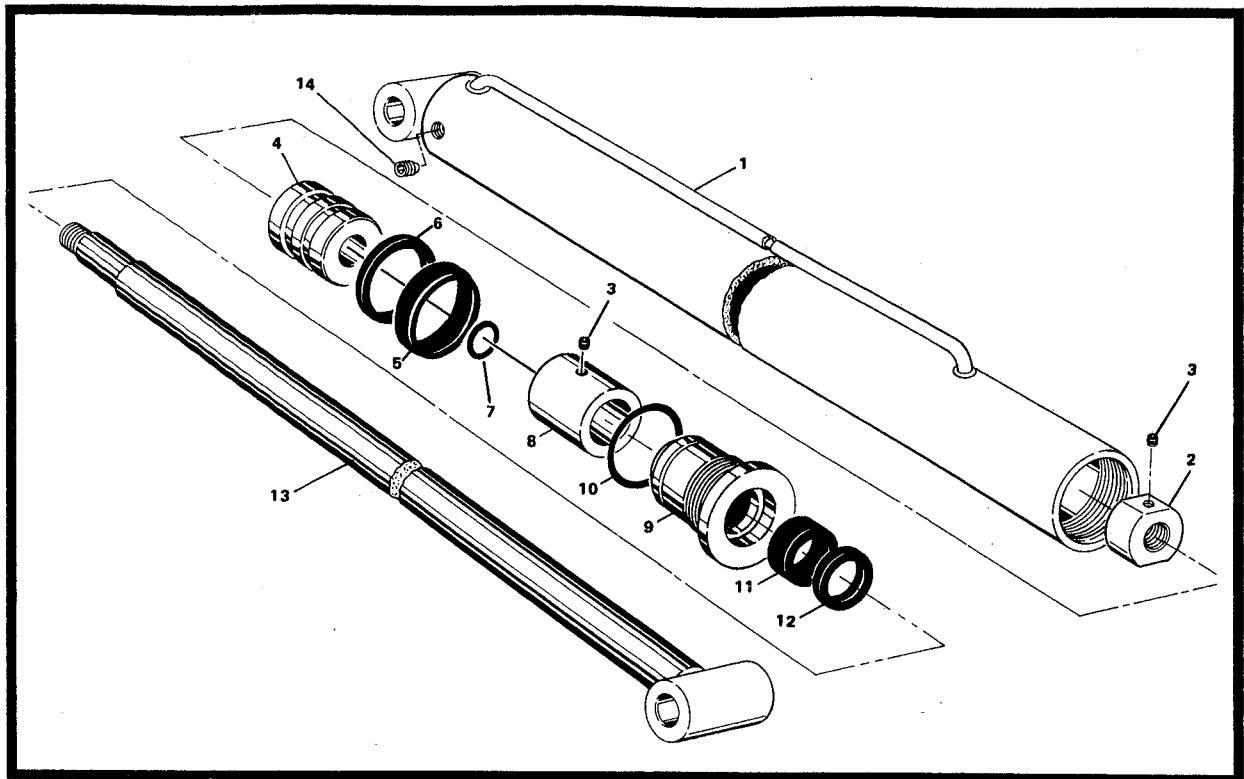


Figure 2-7. Extension Cylinder Assembly (Traversing Platform).

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-7	1681591	<b>EXTENSION CYLINDER ASSEMBLY (TRAVERSING PLATFORM)</b>	Ref.	B
-1	1681594	Barrel	1	
-2	3300184	Locknut, Special	1	
-3	3900141	Setscrew 1/4"-20NC x 3/8"	2	
	0100011	Loctite #242	A/R	
-4	3480123	Piston	1	
-5	Kit	Ring, Wear	1	
-6	Kit	Seal, Piston	1	
-7	Kit	O-Ring, Piston	1	
-8	4562720	Tube, Spacer	1	
-9	1681402	Head	1	
-10	Kit	O-Ring	1	
-11	Kit	Seal, Rod	1	
-12	Kit	Wiper, Rod	1	
-13	1681593	Rod Assembly	1	
-14	2200202	Plug, Pipe	4	
	0100020	Pipe, Sealant	A/R	
	2901121	Seal Kit (Includes Items 5,6,7,10,11 and 12)	1	

SECTION 2 — ILLUSTRATED PARTS LIST

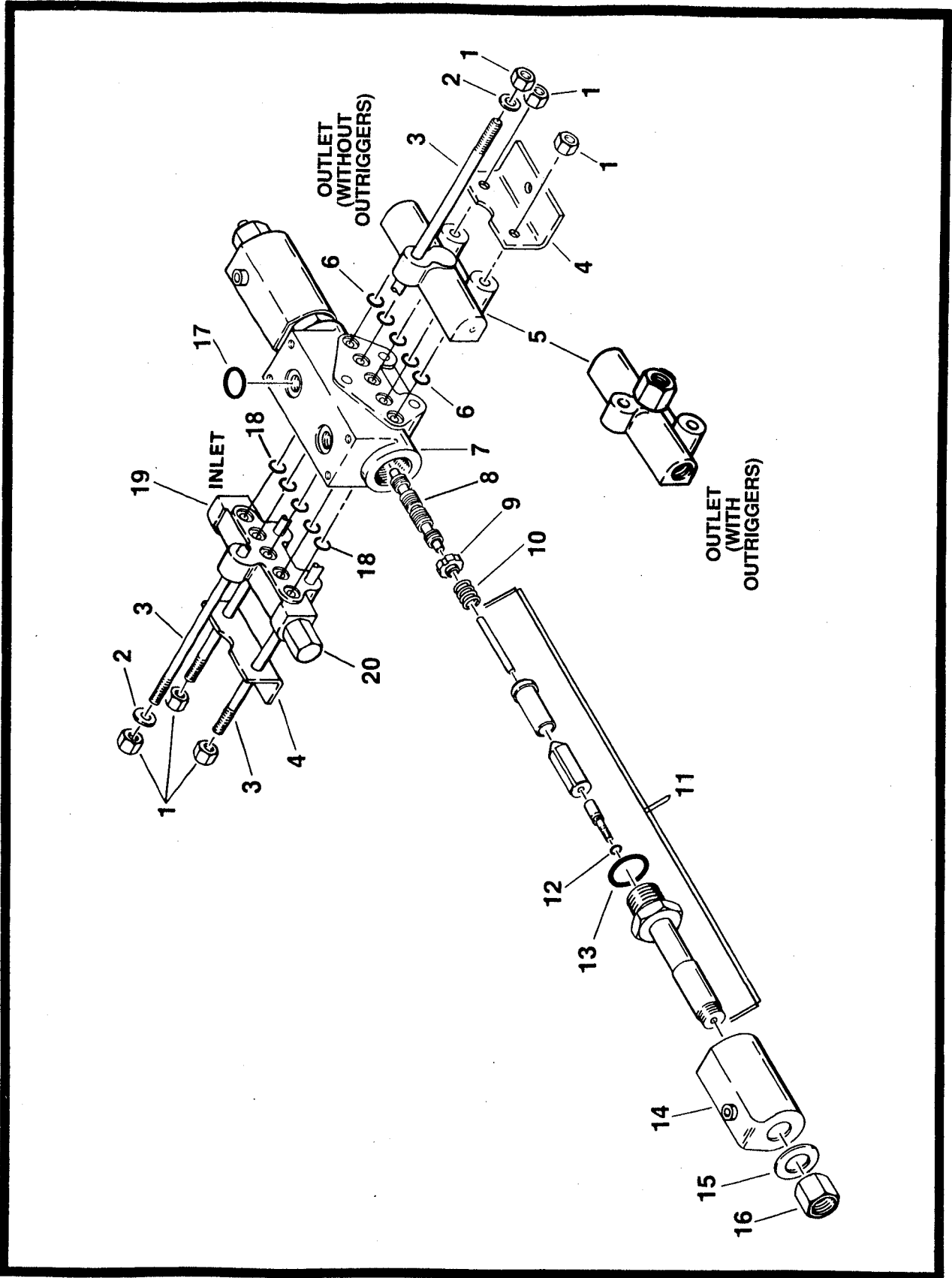


Figure 2-8. Valve Assembly - FPS (Traversing Platform).



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-8	4640375	<b>VALVE ASSEMBLY - FPS (TRAVERSING PLATFORM WITHOUT LEVELING JACKS)</b>	Ref.	C
	4640516	<b>VALVE ASSEMBLY - FPS (TRAVERSING PLATFORM WITH LEVELING JACKS)</b>	Ref.	—
—1	7000585	Nut	6	
—2	7000586	Washer	2	
—3	7006043	Rod, Tie	3	
—4	7006039	Bracket, Mounting	2	
—5	7000600	Section, Valve - Outlet (Without Leveling Jacks)	1	
	7006042	Section, Valve - Outlet (With Leveling Jacks)	1	
—6	Kit	O-Ring	5	
—7	7006041	Section, Valve - Complete	1	
—8		Spool (Not Sold Separately)	1	
—9	7006037	Retainer, Spring	2	
—10	7006036	Spring	2	
—11	7006034	Tube Assembly	2	
—12	Kit	O-Ring	2	
—13	Kit	O-Ring	2	
—14	4640049	Coil, Solenoid	2	
—15		Nameplate (Not Sold Separately)	2	
—16	7006033	Nut	2	
—17	Kit	O-Ring	2	
—18	Kit	O-Ring	5	
—19	7006040	Section, Valve - Inlet	1	
—20	7006053	Relief, Inlet	1	
	7000549	Seal Kit - Single Section (Includes Items 12,13,17 and 18.)	1	
	7006047	Seal Kit - Standard Outlet (Includes Item 6.) (4640375 Valve)	1	
	2900657	Seal Kit - Outlet With Power Beyond (4640516 Valve)	1	
	7000550	Seal Kit - Inlet Relief	1	

SECTION 2 — ILLUSTRATED PARTS LIST

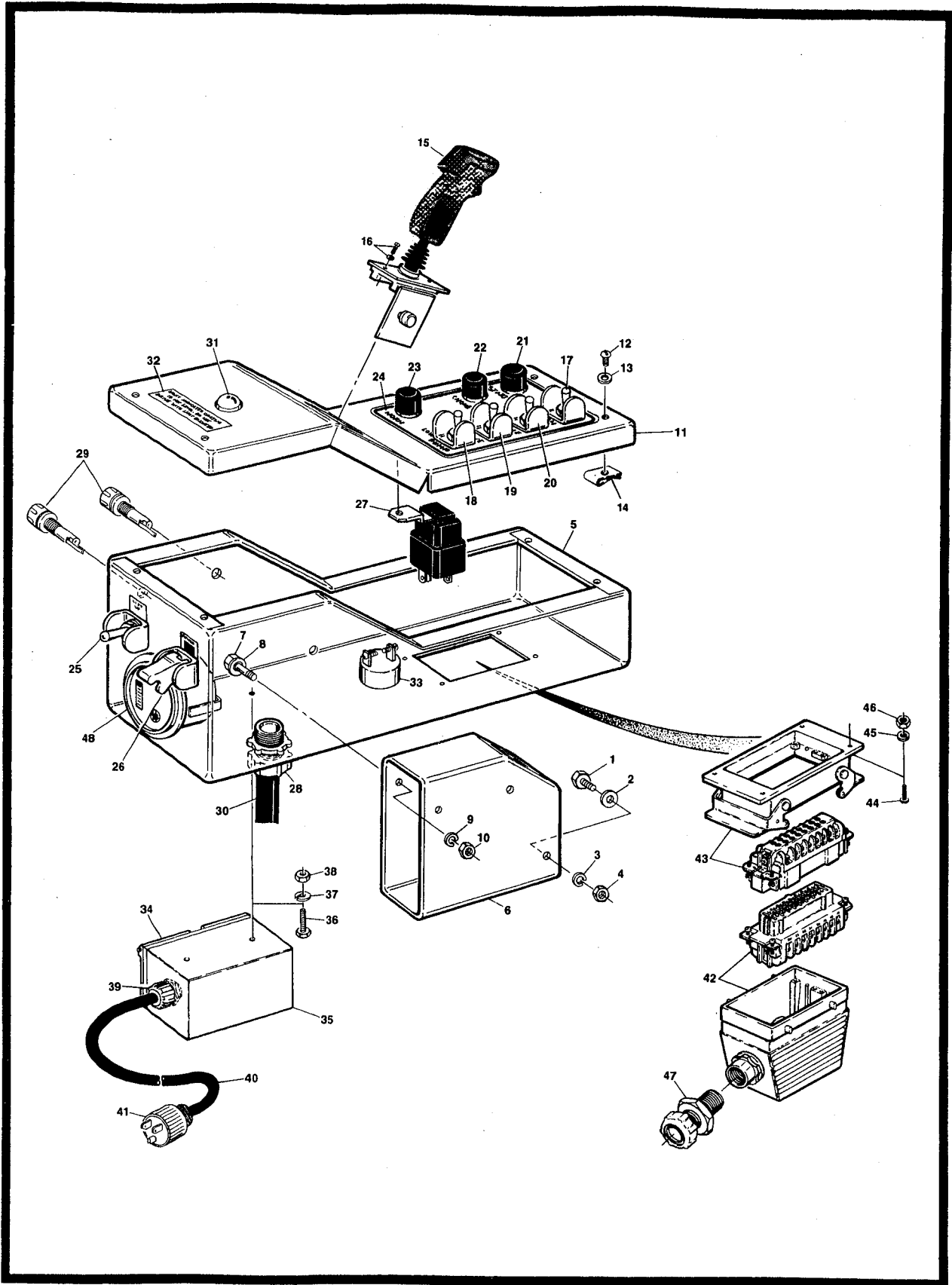


Figure 2-9. Platform Control Box Installation.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—9	0250642	PLATFORM CONTROL BOX INSTALLATION (80" WHEELBASE/FORD MACHINES)	Ref.	—
	0250048	PLATFORM CONTROL BOX INSTALLATION (80" WHEELBASE/DEUTZ AND KOHLER MACHINES)	Ref.	A
	0250920	PLATFORM CONTROL BOX INSTALLATION (80" WHEELBASE/ELECTRIC MACHINES)	Ref.	—
	0251033	PLATFORM CONTROL BOX INSTALLATION (FACTORY MUTUAL ELECTRIC MACHINES)	Ref.	—
	0251145	PLATFORM CONTROL BOX INSTALLATION (89" WHEELBASE/2WD MACHINES)	Ref.	A
	0251629	PLATFORM CONTROL BOX INSTALLATION (89" WHEELBASE/4WD MACHINES)	Ref.	—
	0251863	PLATFORM CONTROL BOX INSTALLATION (89" WHEELBASE/ELECTRIC MACHINES)	Ref.	—
	0250349	Control Box Assembly (80" Wheelbase/Ford Machines)	1	B
	0250047	Control Box Assembly (80" Wheelbase/Deutz and Kohler Machines)	1	D
	0250917	Control Box Assembly (80" Wheelbase/Electric Machines)	1	—
	0251032	Control Box Assembly (Factory Mutual Electric Machines)	1	A
	0251133	Control Box Assembly (89" Wheelbase/2WD Machines)	1	A
	0251628	Control Box Assembly (89" Wheelbase/4WD Machines)	1	B
	0251812	Control Box Assembly (89" Wheelbase/Electric Machines) (Attaching Parts)	1	—
—1	0641406	Bolt 1/4"-20NC x 2/4"	3	
—2	4751400	Flatwasher 1/4"	6	
—3	4761400	Lockwasher 1/4"	3	
—4	3311401	Nut 1/4"-20NC	3	
—5	3532969	Box	1	
—6	4564494	Tube, Mounting (Attaching Parts)	1	
—7	0641408	Bolt 1/4"-20NC x 1"	3	
—8	4751400	Flatwasher 1/4"	6	
—9	4761400	Lockwasher 1/4"	3	
—10	3311401	Nut 1/4"-20NC	6	
—11	4843363	Lid (All 80" Wheelbase Machines and All Electric Machines)	1	
	4843695	Lid (89" Wheelbase Gas and Diesel Machines) (Attaching Parts)	1	
—12	0750806	Screw #8 x 3/4"	4	
—13	4740120	Washer, Nylon	4	
—14	3300177	Nut, Tinnerman	4	
	4420008	Tape, Insulation (Factory Mutual Electric Machines)	4 ft./1.2m	
—15	1600115	Controller (Attaching Parts)	1	
—16	3910808	Screw, Round Head #8-32 x 1 1/2"	2	
—17	4360199	Switch, Toggle - SPST (Optional 4 Wheel Drive Posi-Traction) (80" Wheelbase Gas and Diesel)	1	
	4360203	Switch, Toggle - DPST (4Wheel Drive) (89" Wheelbase/4WD Machines)	1	
	4060229	Shield, Switch	1	
	3790012	O-Ring	1	
	3520028	Plug, Hole (Electric Machines)	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-9		<b>PLATFORM CONTROL BOX INSTALLATIONS (CONTINUED)</b>	Ref.	
—18	4360199	Switch, Toggle - SPST (Pump)	1	
	3790012	O-Ring	1	
	4060229	Shield	1	
—19	4360199	Switch, Toggle - SPST (Drive)	1	
	3790012	O-Ring	1	
	4060229	Shield	1	
—20	4360199	Switch, Toggle - SPST (Engine) (All Gas and Diesels)	1	
	3790012	O-Ring	1	
	4060229	Shield	1	
	3520028	Plug, Hole (Electric)	1	
—21	4360274	Switch, Push Button - SPST/MC (Start)	1	
	3520026	Plug, Hole (Electric)	1	
—22	4360274	Switch, Push Button - SPST/MC (Choke) (80" Wheelbase Deutz and Kohler Only)	1	
	3520026	Plug, Hole (80" Wheel Base Ford and All Electric Machines)	1	
—23	4360274	Breaker, Push Button - SPST/MC (Horn)	1	
—24	1701256	Decal - Platform Controls (All 80" Wheelbase Machines and All Electric Machines)	1	
	1701381	Decal - Platform Controls (89" Wheelbase Gas and Diesel Machines)	1	
—25	4360260	Switch, Toggle - DPDT/MC Center Off (Lift)	1	
	3790012	O-Ring	1	
	4060229	Shield	1	
	3251860	Nametag - Lift	1	
—26	4360199	Switch, Toggle - SPST (Power On)	1	
	4360141	Guard, Switch	1	
	3790012	O-Ring	1	
	4060229	Shield	1	
	3251877	Nametag - Power On	1	
—27	3740049	Relay (All Except 89" Wheelbase/4WD Machines)	1	
	3740049	Relay (89" Wheelbase/4WD Machines Only) (Attaching Parts)	2	
	3311401	Nut 1/4"-20NC	1	
	4761400	Lockwasher 1/4"	1	
—28	4460071	Connector	1	
	0960238	Bushing	1	
	3300048	Locknut, Electrical	1	
—29	2400021	Fuseholder, Panel (Factory Mutual Electric Machines Only)	1	
	3251967	Nameplate - 1.5 Amp	1	
	3251968	Nameplate - 5 Amp	1	
	1880003	Label, Replacement - 1.5 Amp	1	
	1880002	Label, Replacement - 5 Amp	1	
—30	1060145	Cable, Electrical - 16/19 (CM25RT)	51 ft./15.5m	
	1060145	Cable, Electrical - 16/19 (CM33RT)	65 ft./19.8m	
	1060145	Cable, Electrical - 16/19 (CM40RT)	70 ft./21.3m	
	0250405	<b>TILT INDICATOR LIGHT AND ALARM INSTALLATION</b>	Ref.	—
—31	2920015	Light - Tilt	1	
—32	1701137	Decal	1	
—33	0140019	Alarm, Sonalert	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—9		<b>PLATFORM CONTROL BOX INSTALLATIONS (CONTINUED)</b>	Ref.	
	0250410	<b>110V RECEPTACLE INSTALLATION (GAS AND DIESEL MACHINES OPTION)</b>	Ref.	A
	0250721	<b>110V RECEPTACLE INSTALLATION (ELECTRIC MACHINES OPTION)</b>	Ref.	A
—34	4060092	Shield	1	
	4460190	Receptacle (Gas and Diesel Machines)	1	
	4460347	Receptacle (Electric Machines)	1	
—35	0860038	Box, Switch (Attaching Parts)	1	
—36	0641406	Bolt 1/4"-20NC x 3/4"	2	
—37	4761400	Lockwasher 1/4"	2	
—38	3311401	Nut 1/4"-20NC	2	
—39	4460049	Connector	1	
	0960407	Bushing, Reducer	1	
—40	1060308	Cable, Electrical - 12/3 (CM25RT)	51 ft./15.5m	
	1060308	Cable, Electrical - 12/3 (CM33RT)	60 ft./18.3m	
	1060308	Cable, Electrical - 12/3 (CM40RT)	70 ft./21.3m	
	1700598	Decal, Wire Marker - Ground	2	
	1700599	Decal, Wire Marker - Neutral	2	
—41	4460138	Plug, Twist Lock - Male	1	
	4460205	Plug, Twist lock - Male (With Detachable Control Box Option - Not Shown)	2	
	4460134	Receptacle, Twist Lock - Female (With Detachable Control Box Option - Not Shown)	1	
	0250762	<b>DETACHABLE PLATFORM CONTROL BOX INSTALLATION (OPTION)</b>	Ref.	—
—42	4460360	Hood Cover T & B (Detachable Control Box Option)	1	
	4460362	Plug, Male	1	
—43	4460359	Base, Mounting (Detachable Control Box Option)	1	
	4460361	Plug, Female (Attaching Parts)	1	
—44	3910808	Screw #8-32NC x 1/2"	4	
—45	4760800	Lockwasher #8	4	
—46	3310801	Nut #8-32NC	4	
—47	4460051	Connector (Detachable Control Box Option)	1	
	0251319	<b>BATTERY CAPACITY INDICATOR GAUGE INSTALLATION (ELECTRIC MACHINES OPTION)</b>	Ref.	—
—48	2420075	Gauge, Battery Capacity Indicator	1	

## SECTION 2 — ILLUSTRATED PARTS LIST

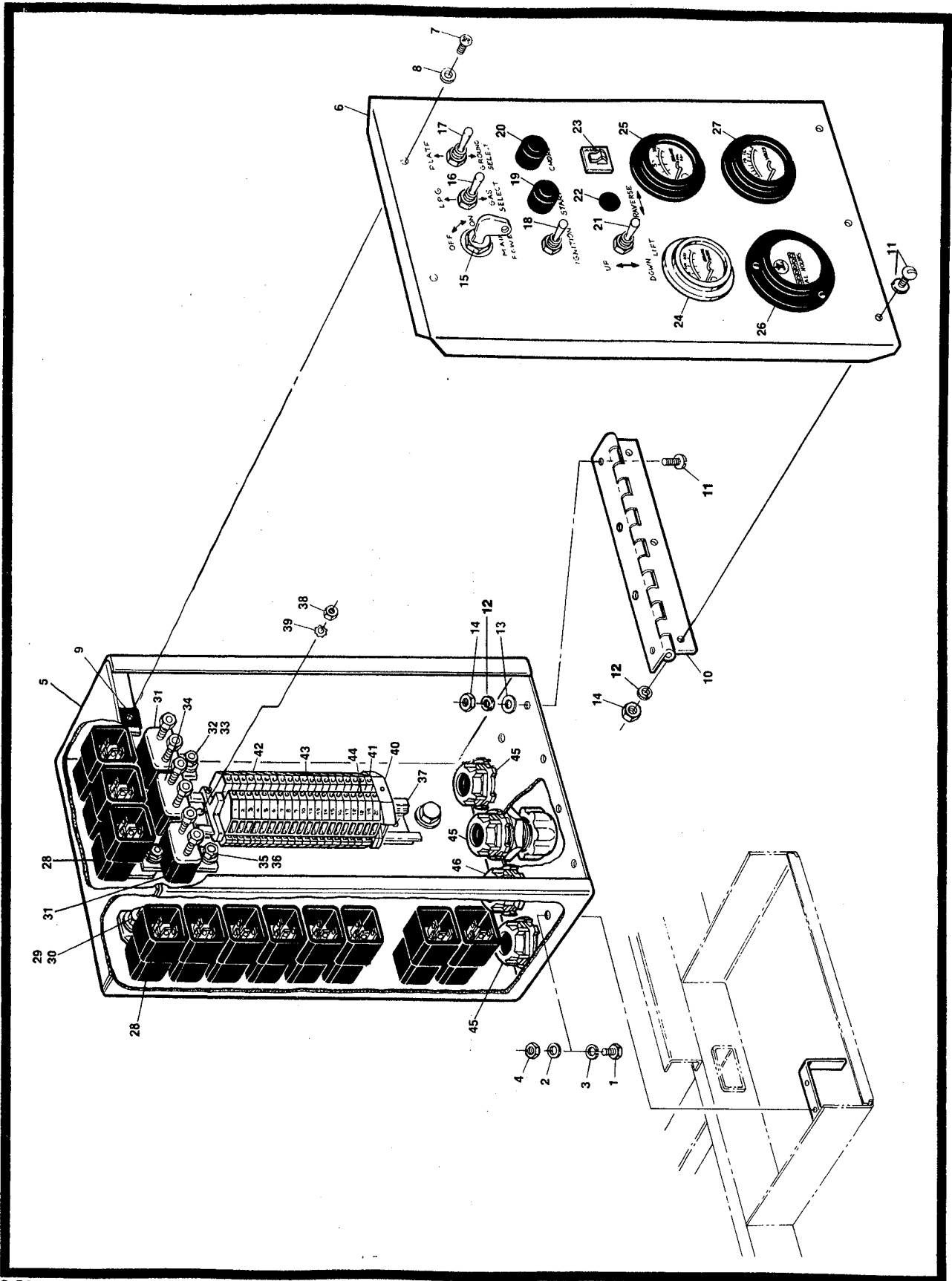


Figure 2-10. Ground Control Box Installations.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—10		<b>GROUND CONTROL BOX INSTALLATION</b>	Ref.	
	0250307	<b>GROUND CONTROL BOX INSTALLATION (80" WHEELBASE/FORD MACHINES)</b>	Ref.	—
	0250306	<b>GROUND CONTROL BOX INSTALLATION (80" WHEELBASE/KOHLER MACHINES)</b>	Ref.	—
	0250308	<b>GROUND CONTROL BOX INSTALLATION (80" WHEELBASE/DEUTZ MACHINES)</b>	Ref.	—
	0250843	<b>GROUND CONTROL BOX INSTALLATION (80" WHEELBASE/ELECTRIC MACHINES)</b>	Ref.	—
	0250845	<b>GROUND CONTROL BOX INSTALLATION (FACTORY MUTUAL ELECTRIC MACHINES)</b>	Ref.	—
	0251135	<b>GROUND CONTROL BOX INSTALLATION (89" WHEELBASE/2WD FORD MACHINES)</b>	Ref.	—
	0251585	<b>GROUND CONTROL BOX INSTALLATION (89" WHEELBASE/4WD FORD MACHINES)</b>	Ref.	—
	0251136	<b>GROUND CONTROL BOX INSTALLATION (89" WHEELBASE/2WD DEUTZ MACHINES)</b>	Ref.	—
	0251586	<b>GROUND CONTROL BOX INSTALLATION (89" WHEELBASE/4WD DEUTZ MACHINES)</b>	Ref.	—
	0251856	<b>GROUND CONTROL BOX INSTALLATION (89" WHEELBASE/ELECTRIC MACHINES)</b>	Ref.	—
	0860620	Ground Control Box Assembly (80" Wheelbase/Ford Machines)	1	E
	0860599	Ground Control Box Assembly (80" Wheelbase/Kohler Machines)	1	D
	0860621	Ground Control Box Assembly (80" Wheelbase/Deutz Machines)	1	D
	0860650	Ground Control Box Assembly (80" Wheelbase/Electric Machines)	1	—
	0860651	Ground Control Box Assembly (Factory Mutual Electric Machines)	1	A
	0860674	Ground Control Box Assembly (89" Wheelbase/2WD Ford Machines)	1	B
	0860707	Ground Control Box Assembly (89" Wheelbase/4WD Ford Machines)	1	C
	0860675	Ground Control Box Assembly (89" Wheelbase/2WD Deutz Machines)	1	B
	0860708	Ground Control Box Assembly (89" Wheelbase/4WD Deutz Machines)	1	C
	0860722	Ground Control Box Assembly (89" Wheelbase/Electric Machines)	1	—
		(Attaching Parts)		
—1	0641408	Bolt 1/4"-20NC x 1"	2	
—2	4751400	Flatwasher 1/4"	4	
—3	4761400	Lockwasher 1/4"	2	
—4	3311401	Nut 1/4"-20NC	2	
—5	4843375	Box, Control (All Except 89" Wheelbase Electric Machines)	1	
	4843902	Box, Control (89" Wheelbase Electric Machines)	1	
—6	3251985	Lid (Ford, Deutz and 80" Wheelbase Electric)	1	
	3251915	Lid (Kohler)	1	
	3252114	Lid (89" Wheelbase Electric Machines)	1	
		(Attaching Parts)		

## SECTION 2 — ILLUSTRATED PARTS LIST

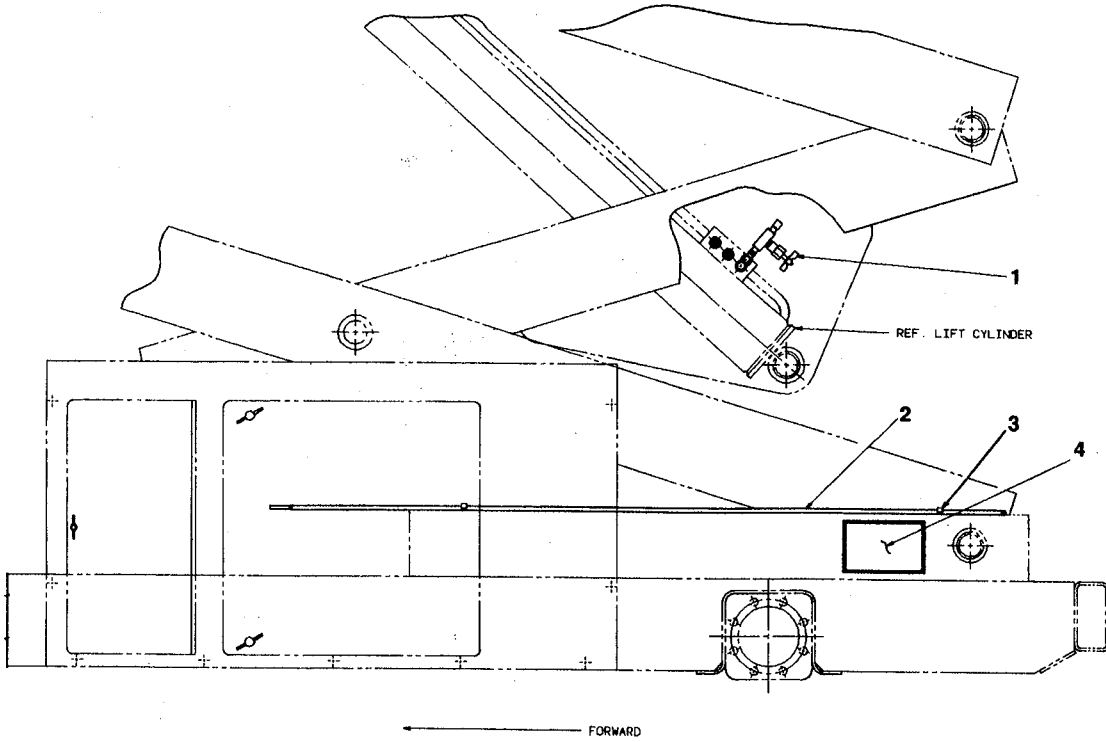
FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-10		<b>GROUND CONTROL BOX INSTALLATIONS (CONTINUED)</b>	Ref.	
-7	0750806	Screw #8 x 3/4"	2	
-8	4740120	Washer, Nylon	2	
-9	3300177	Nut, Tinnerman	2	
	4420037	Strip, Rubber (Not Shown)	36 1/4"	
-10	2600161	Hinge (Attaching Parts)	1	
-11	3911008	Screw #10-24NC x 1/2"	7	
	4740120	Washer, Nylon (Not Shown)	3	
-12	4761000	Lockwasher #10	4	
-13	4751000	Flatwasher #10	4	
-14	3311001	Nut #10-24NC	7	
-15	4360003	Switch, Key (All Except 89" Wheelbase Electric Machines)	1	
	4360284	Switch, Key (89" Wheelbase Electric Machines)	1	
	4360267	Switch, Block (89" Wheelbase Electric Machines)	1	
	4360281	Switch, Block (89" Wheelbase Electric Machines)	3	
-16	4360201	Switch, Toggle - DPDT Center Off (Ford and Kohler with Dual Fuel)	1	
	3790012	O-Ring	1	
	3520028	Plug, Hole (Without Dual Fuel)	1	
-17	4360073	Switch, Toggle - DPDT Center Off (Select)	1	
	3790012	O-Ring	1	
-18	4360199	Switch, Toggle - SPST (Ignition/Emergency Stop) (Gas and Diesel)	1	
	3790012	O-Ring	1	
	3520028	Plug, Hole (Electric Machines)	1	
-19	4360274	Switch, Push Button - SPST M/C (Start) (Gas and Diesel)	1	
	3520026	Plug, Hole (Electric Machines)	1	
-20	4360274	Switch, Push Button - SPST M/C (Choke - Kohler)	1	
	3520026	Plug, Hole (Ford, Deutz and Electric Machines)	1	
-21	4360198	Switch, Toggle - SPDT M/C Center Off (Lift)	1	
	3790012	O-Ring	1	
-22	3520028	Plug, Hole (Standard)	1	
	4360202	Switch, Toggle - DPDT M/C Center Off (Traverse) (Use with Optional Traversing Platform)	1	
	3790012	O-Ring	1	
-23	4360212	Breaker, Circuit - 3 Amp (Deutz and Factory Mutual Electric)	1	
	3520026	Plug, Hole (Ford, Kohler and Electric)	1	
-24	2420019	Gauge, Water Temperature (Ford)	1	
	2420126	Sender, Water Temperature (Ford)	1	
	2420125	Gage, Oil Temperature (Deutz - Optional)	1	
	3520070	Plug, Hole (Deutz, Kohler and Electric)	1	
-25	2420035	Gauge, Oil Pressure (Ford)	1	
	2420111	Gauge, Oil Pressure (Deutz)	1	
	2420110	Sender, Oil Pressure (Deutz Only)	1	
	3520070	Plug, Hole (Kohler and Electric)	1	
-26	2420009	Hourmeter	1	
-27	2420091	Voltmeter (Ford, Kohler and Deutz)	1	
	3520070	Plug, Hole (Electric)	1	
-28	3740049	Relay - SPST (2WD)	11	
	3740049	Relay - SPST (4WD)	13	
	3740049	Relay - SPST (Electric) (Attaching Parts)	6	



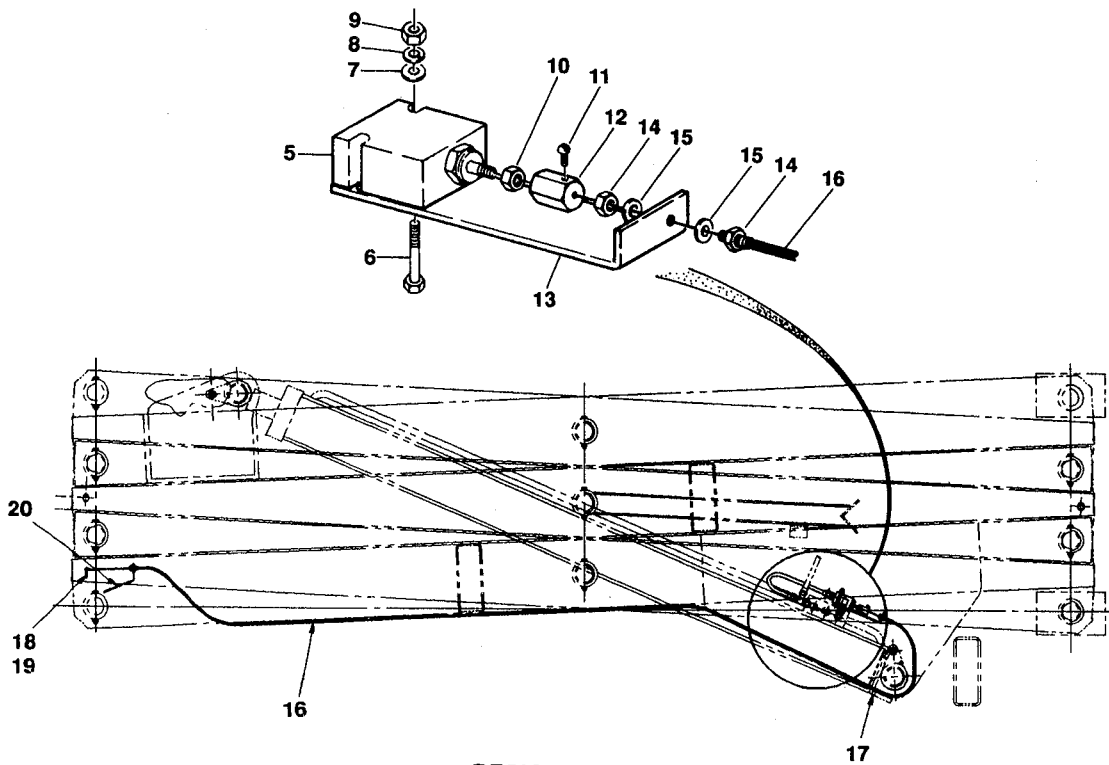
**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—10		<b>GROUND CONTROL BOX INSTALLATION (CONTINUED)</b>	Ref.	
—29	3311401	Nut 1/4"-20NC	1	
—30	4761400	Lockwasher 1/4"	1	
	1701342	Decal, Relay Function (All 80" Wheelbase Machines and 89" Wheelbase 2WD Machines)	1	
	1701498	Decal, Relay Function (89" Wheelbase 4WD Machines)	1	
	1701497	Decal, Relay Function (89" Wheelbase Electric Machines)	1	
—31	4360232	Breaker, Circuit - 15 Amp (Gas and Diesel)	2	
	4360232	Breaker, Circuit - 15 Amp (Electric) (Attaching Parts)	5	
—32	3311001	Nut #10-24NC	2	
—33	4751000	Flatwasher #10	2	
	4761000	Lockwasher #10	2	
—34	4360216	Breaker, Circuit - 30 Amp (Gas and Diesel Only) (Attaching Parts)	1	
—35	3311001	Nut #10-24NC	1	
—36	4751000	Flatwasher #10	1	
	4761000	Lockwasher #10	1	
—37	3640621	Rail (Attaching Parts)	1	
—38	3310601	Nut #6-32NC	2	
—39	4770600	Starwasher #6	2	
—40	4460299	Stop, Terminal	2	
—41	4460300	Barrier, Terminal	1	
—42	4460298	Block, Terminal (Gas and Diesel)	21	
	4460298	Block, Terminal (Electric)	20	
—43	4460301	Strip, Terminal Marker	1	
—44	4460309	Bar, Buss - 3 Position (All except 89" Wheelbase Electric Machines)	1	
	4460308	Bar, Buss - 2 Position (89" Wheelbase Electric Machines) (Attaching Parts)	3	
	4460305	Screw	3	
	4460306	Washer	3	
	4460307	Sleeve	3	
—45	4460051	Connector	3	
	0960238	Bushing	3	
	3300048	Locknut, Conduit	3	
—46	4460071	Connector (1/2")	1	
	4460051	Connector (3/4")	1	
	0960238	Bushing	1	
	3300048	Locknut, Conduit	1	

# SECTION 2 — ILLUSTRATED PARTS LIST



DESIGN A



DESIGN B

Figure 2-11. Manual Descent/Emergency Lowering Installation (Optional).

## SECTION 2 — ILLUSTRATED PARTS LIST

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—11		<b>MANUAL DESCENT/EMERGENCY LOWERING INSTALLATIONS (OPTIONAL)</b>	Ref.	
	0251181	<b>MANUAL LOWERING INSTALLATION (DESIGN A - PRIOR TO MARCH 1991)</b>	Ref.	—
—1	4640128	Valve, Flow Control	1	
—2	4843702	Tool, Operating (Shown in Stowed Position)	1	
—3	1380135	Clip, Gripper	1	
—4	3252024	Decal - Lowering Operation	1	
	0251791	<b>MANUAL LOWERING INSTALLATION (DESIGN B - MARCH 1991 TO PRESENT)</b>	Ref.	A
—5	4640699	Valve, Pull (Attaching Parts)	1	
—6	0641416	Bolt 1/4"-20NC x 2"	2	
—7	4751400	Flatwasher 1/4"	2	
—8	4761400	Lockwasher 1/4"	2	
—9	3311401	Nut 1/4"-20NC	2	
	2900503	----- Seal Kit	1	
—10	3311402	Nut, Jam 1/4"-20NC	1	
—11	0080190	Adapter	1	
—12	3911008	Screw, Round Head #10-24NC x 1/2"	1	
—13	0901767	Bracket, Cable	1	
—14	3321402	Nut, Jam 1/4"-28NF	2	
—15	4751400	Flatwasher 1/4"	2	
—16	1060377	Cable	1	
—17	4240018	Strap, Tie	1	
—18	3760170	Ring	1	
—19	3841127	Rod	1	
—20	1701437	Decal - Lowering Operation	1	

# SECTION 2 — ILLUSTRATED PARTS LIST

NOTE: LOCATION OF VALVES MAY VARY.

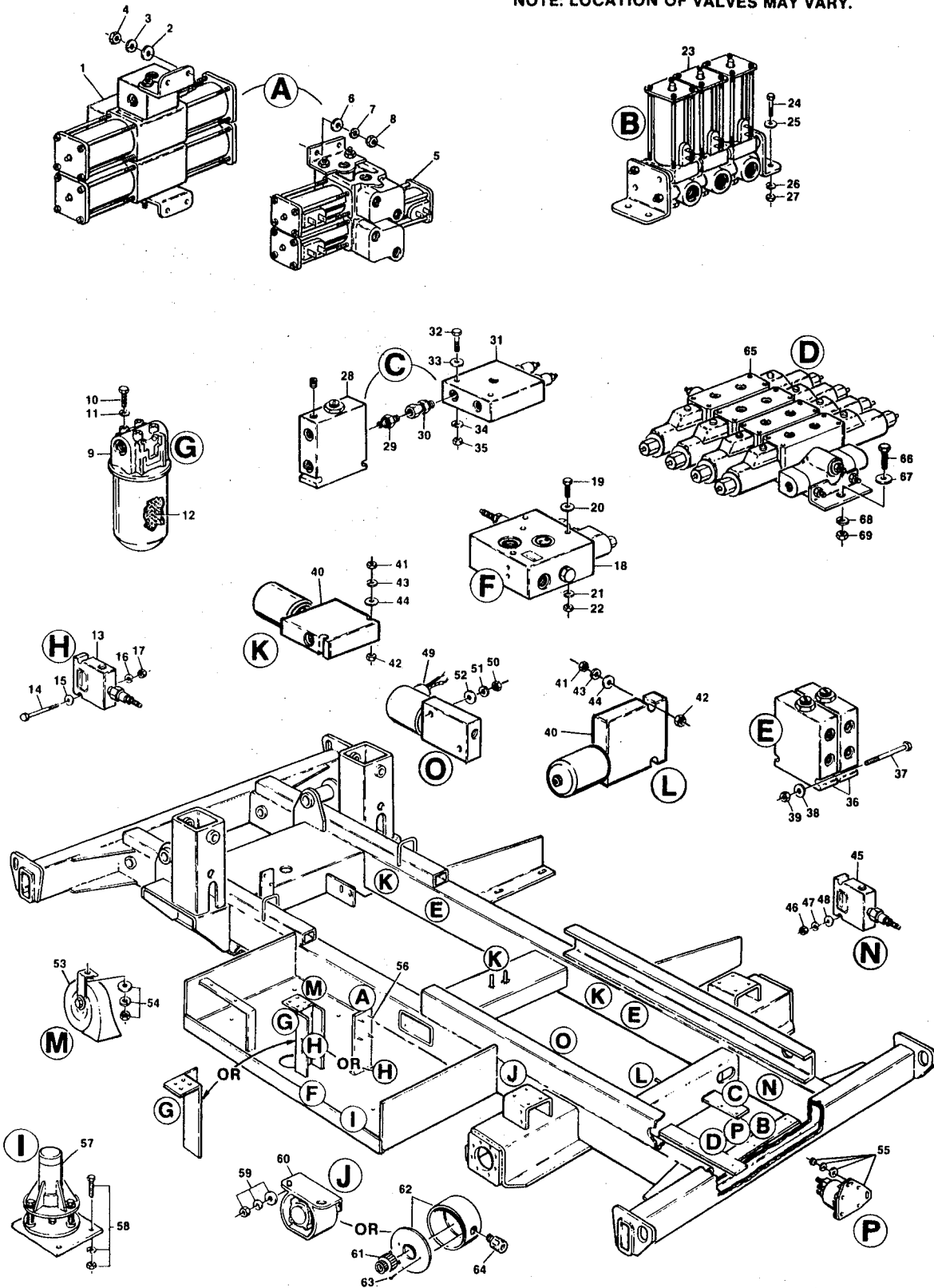


Figure 2-12. Control Valves and Alarms Installation.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—12		<b>CONTROL VALVES AND ALARMS INSTALLATION</b>	Ref.	
	0250244	<b>CONTROL VALVES INSTALLATION (FORD AND DEUTZ) (2WD WITH 80" WHEELBASE)</b>	Ref.	F
	0250803	<b>CONTROL VALVES INSTALLATION (FORD AND DEUTZ) (2WD WITH 89" WHEELBASE)</b>	Ref.	E
	0250402	<b>CONTROL VALVES INSTALLATION (FORD AND DEUTZ) (4WD WITH 80" WHEELBASE)</b>	Ref.	F
	0251009	<b>CONTROL VALVES INSTALLATION (FORD AND DEUTZ) (4WD WITH 89" WHEELBASE)</b>	Ref.	D
	0239981	<b>CONTROL VALVES INSTALLATION (KOHLEK)</b>	Ref.	A
	0250655	<b>CONTROL VALVES INSTALLATION (ELECTRIC) (WITH 80" WHEELBASE)</b>	Ref.	C
	0251851	<b>CONTROL VALVES INSTALLATION (ELECTRIC) (WITH 89" WHEELBASE)</b>	Ref.	C
—1	4640597	Valve Assembly - 2 Stack Racine (See Figure 2-14 for Breakdown) (Attaching Parts)	1	
—2	3311601	Nut 3/8"-16NC	4	
—3	4761600	Lockwasher 3/8"	4	
—4	4751600	Flatwasher 3/8"	4	
—5	4640399	Valve Assembly - 2 Stack Racine (See Figure 2-13 for Breakdown) (Attaching Parts)	1	
—6	3311601	Nut 3/8"-16NC	4	
—7	4761600	Lockwasher 3/8"	4	
—8	4751600	Flatwasher 3/8"	4	
—9	2120109	Filter Assembly (Attaching Parts)	1	
—10	0641506	Bolt 5/16"-18NC x 3/4"	4	
—11	4761500	Lockwasher 5/16"	4	
—12	2120110	Element	1	
—13	4640533	Valve, Sequence (Attaching Parts)	1	
—14	0641416	Bolt 1/4"-20NC x 2" (80" Wheelbase Machines Only)	2	
—15	4751400	Flatwasher 1/4" (80" Wheelbase Machines Only)	2	
—16	4761400	Lockwasher 1/4" (80" Wheelbase Machines Only)	2	
—17	3311401	Nut 1/4"-20NC (80" Wheelbase Machines Only)	2	
	7010529	Cartridge	2	
	2900698	Seal Kit	1	
—18	4640598	Valve Assembly - Modular Control (See Figure 2-15 for Breakdown) (Attaching Parts)	1	
—19	0641620	Bolt 3/8"-16NC x 2 1/2" (80" Wheelbase Machines Only)	3	
—20	4751600	Flatwasher 3/8" (80" Wheelbase Machines Only)	3	
—21	4761600	Lockwasher 3/8" (80" Wheelbase Machines Only)	3	
—22	3311601	Nut 3/8"-16NC (80" Wheelbase Machines Only)	3	
—23	4640385	Valve Assembly - 3 Stack Racine (4WD 89" Wheelbase and all 80" Wheelbase Machines) (See Figure 2-16 for Breakdown) (Attaching Parts)	1	
—24	0641608	Bolt 3/8"-16NC x 1"	4	
—25	4751600	Flatwasher 3/8"	4	
—26	4761600	Lockwasher 3/8"	4	
—27	3311601	Nut 3/8"-16NC	4	

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—12		<b>CONTROL VALVES AND ALARMS INSTALLATION (CONTINUED)</b>	Ref.	
—28	4640260	Valve, Flow Divider (4WD with 89" Wheelbase/All 2WD and Electric Machines)	1	
	4640545	Valve, Flow Divider (4WD with 80" Wheelbase Machines Only)	1	
	7009738	Cartridge (4640545 Valve)	1	
	7009739	Seal Kit (4640545 Valve)	1	
	2200235	Plug, Pipe (89" Wheelbase Machines)	1	
—29	2220594	Fitting, Straight	1	
—30	2220435	Fitting, Straight (80" Wheelbase)	1	
	2220451	Fitting, Straight (89" Wheelbase)	1	
—31	4640529	Valve, Counterbalance (Attaching Parts)	1	
—32	0641620	Bolt 3/8"-16NC x 2 1/2"	2	
—33	4751600	Flatwasher 3/8"	2	
—34	4761600	Lockwasher 3/8"	2	
—35	3311601	Nut 3/8"-16NC	2	
	7004292	Cartridge	1	
	7004293	Seal Kit	1	
—36	4640588	Valve, Flow Divider (4WD Only) (Attaching Parts)	2	
—37	0641536	Bolt 5/16"-18NC x 4 1/2"	2	
—38	4751500	Flatwasher 5/16"	2	
—39	3311501	Nut 5/16"-18NC	2	
	3010099	Link (Not Shown)	2	
	7010510	Cartridge	1	
	7009739	Seal Kit	1	
—40	4640540	Valve, Modular (4WD Only) (Attaching Parts)	2	
—41	3311401	Nut 1/4"-20NC	2	
—42	3311501	Nut 5/16"-18NC (Used as a Spacer)	2	
—43	4761401	Lockwasher 1/4"	2	
—44	4711401	Flatwasher 1/4" Narrow	2	
	4300036	Stud (Welded on Part)	2	
	7010528	Cartridge	1	
	7009745	Coil	1	
	2900503	Seal Kit	1	
—45	4640632	Valve, Pressure Reducing (89" Wheelbase Machines Only) (Attaching Parts)	1	
—46	3311401	Nut 1/4"-20NC	2	
—47	4761400	Lockwasher 1/4"	2	
—48	4751400	Flatwasher 1/4"	2	
	4640523	Cartridge	1	
	2900698	Seal Kit	1	
—49	4640123	Valve, Solenoid (89" Wheelbase Machines Only) (Attaching Parts)	1	
—50	3311401	Nut 1/4"-20NC	2	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—12		<b>CONTROL VALVES AND ALARMS INSTALLATION (CONTINUED)</b>	Ref.	
—51	4761400	Lockwasher 1/4"	2	
—52	4751400	Flatwasher 1/4"	2	
	7004368	Coil (Hydraforce Version)	1	
	7000558	Coil (FPS Version)	1	
—53	0140028	Horn (Console Box Operated) (Electric Machines Only) (Attaching Parts)	1	
—54	3311401	Nut 1/4"-20NC	1	
	4761400	Lockwasher 1/4"	1	
	4751400	Flatwasher 1/4"	1	
	4300031	Stud (Welded on Part)	1	
—55	3740067	Relay (80" Wheelbase Electric Machines Only) (Attaching Parts)	1	
	3311401	Nut 1/4"-20NC	2	
	4761400	Lockwasher 1/4"	2	
	4751400	Flatwasher 1/4"	2	
	4300031	Stud (Welded on Part)	2	
	3534062	Plate, Cover - Valve (80" Wheelbase Machines) (Located at Rear Center - Not Shown)	1	
	3534228	Plate, Cover - Valve (89" Wheelbase Machines) (Located at Rear Center - Not Shown)	1	
—56	0901618	Bracket, Valve Mounting (80" Wheelbase Machines) (Welded On Part)	1	
	0901684	Bracket, Valve Mounting (89" Wheelbase Machines) (Welded On Part) (Attaching Parts)	1	
	0641610	Bolt 3/8"-16NC x 1 1/4" (89" Wheelbase Machines Only)	2	
	4751600	Flatwasher 3/8" (89" Wheelbase Machines Only)	2	
	4761600	Lockwasher 3/8" (89" Wheelbase Machines Only)	2	
	3311601	Nut 3/8"-16NC (89" Wheelbase Machines Only)	2	
	0250405	<b>TILT INDICATOR INSTALLATION</b>	Ref.	A
—57	4360171	Sensor, Level (Attaching Parts)	1	
—58	0641406	Bolt 1/4"-20NC x 3/4"	3	
	4761400	Lockwasher 1/4"	3	
	3311401	Nut 1/4"-20NC	3	
	0250408	<b>MOTION ALARM INSTALLATION (GAS AND DIESEL)</b>	Ref.	C
	0250407	<b>DESCENT ALARM INSTALLATION (GAS AND DIESEL)</b>	Ref.	B
	0250406	<b>TRAVEL ALARM INSTALLATION (GAS AND DIESEL)</b>	Ref.	C
—59	0140024	Alarm, Horn (Attaching Parts)	1	
—60	3311501	Nut 5/16"-18NC	2	
	4761500	Lockwasher 5/16"	2	
	4751500	Flatwasher 5/16"	2	
	4300038	Stud (Welded on Parts)	2	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—12		<b>CONTROL VALVES AND ALARMS INSTALLATION (CONTINUED)</b>	Ref.	
	0250719 0250718 0250717	<b>MOTION ALARM INSTALLATION (ELECTRIC) DESCENT ALARM INSTALLATION (ELECTRIC) TRAVEL ALARM INSTALLATION (ELECTRIC)</b>	Ref. Ref. Ref.	A A A
—61	0140026	Alarm, Horn	1	
—62	0860617	Box Assembly (Attaching Parts)	1	
—63	3941406	Screw, Self-Tapping 1/4" x 3/4"	2	
—64	4460049 3300047	Connector, Strain Relief Nut, Conduit	1 1	
	0250152	<b>CONTROL VALVES INSTALLATION (LEVELING JACK OPTION)</b>	Ref.	—
—65	4640352	Valve Assembly - 4 Stack F.P.S. (See Figure 2-17 for Breakdown) (Attaching Parts)	1	
—66	0641608	Bolt 3/8"-16NC x 1"	2	
—67	4751600	Flatwasher 3/8"	2	
—68	4761600	Lockwasher 3/8"	2	
—69	3311601	Nut 3/8"-16NC	2	



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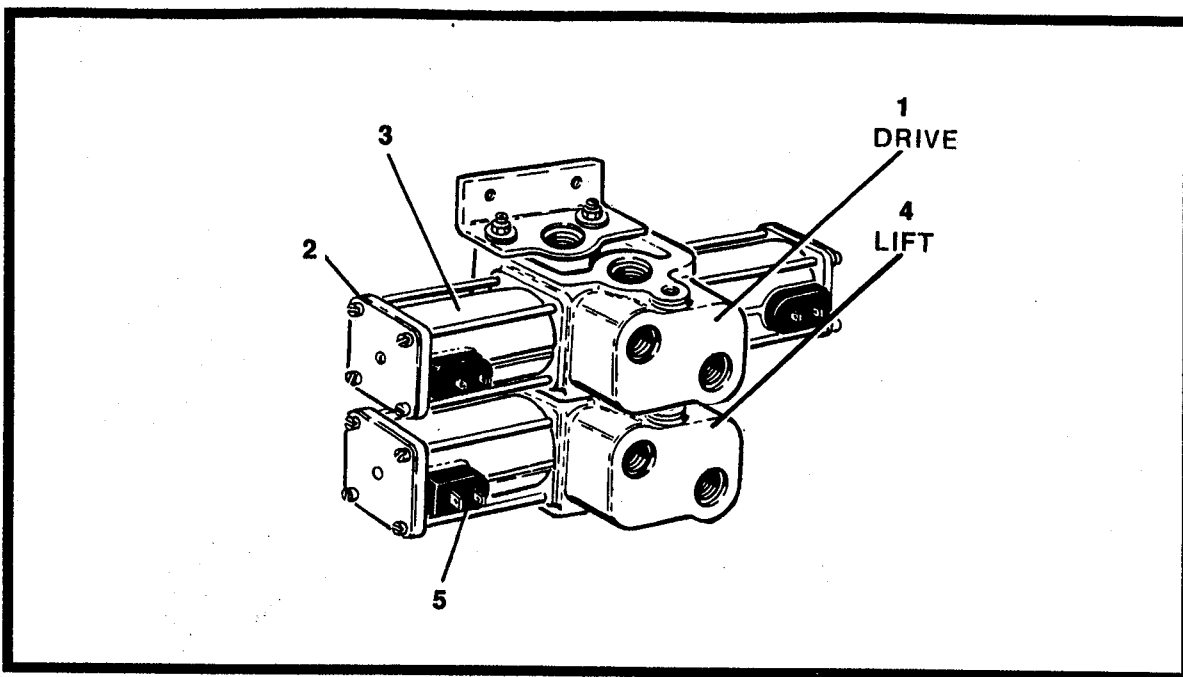


Figure 2-13. Control Valve Assembly - Racine 2 Stack.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-13	4640399	<b>CONTROL VALVE ASSEMBLY - RACINE 2 STACK</b>	Ref.	B
-1	7004894	Section Assembly - Complete (Drive)	1	
	7003827	Spool	1	
	7003825	Washer, Hat	2	
	7002348	Spring	2	
-2	7004896	Guide Tube Assembly	2	
-3	7000418	Coil - 12VDC	2	
-4	7004895	Section Assembly - Complete (Lift)	1	
-5	7000418	Coil - 12VDC	1	
	7002347	O-Ring, Square (Small) (Located Between Sections)	1	
	7000448	O-Ring, Square (Large) (Located Between Sections)	1	
	7004893	Stacking Kit (Includes Brackets and Assembly Hardware)	1	

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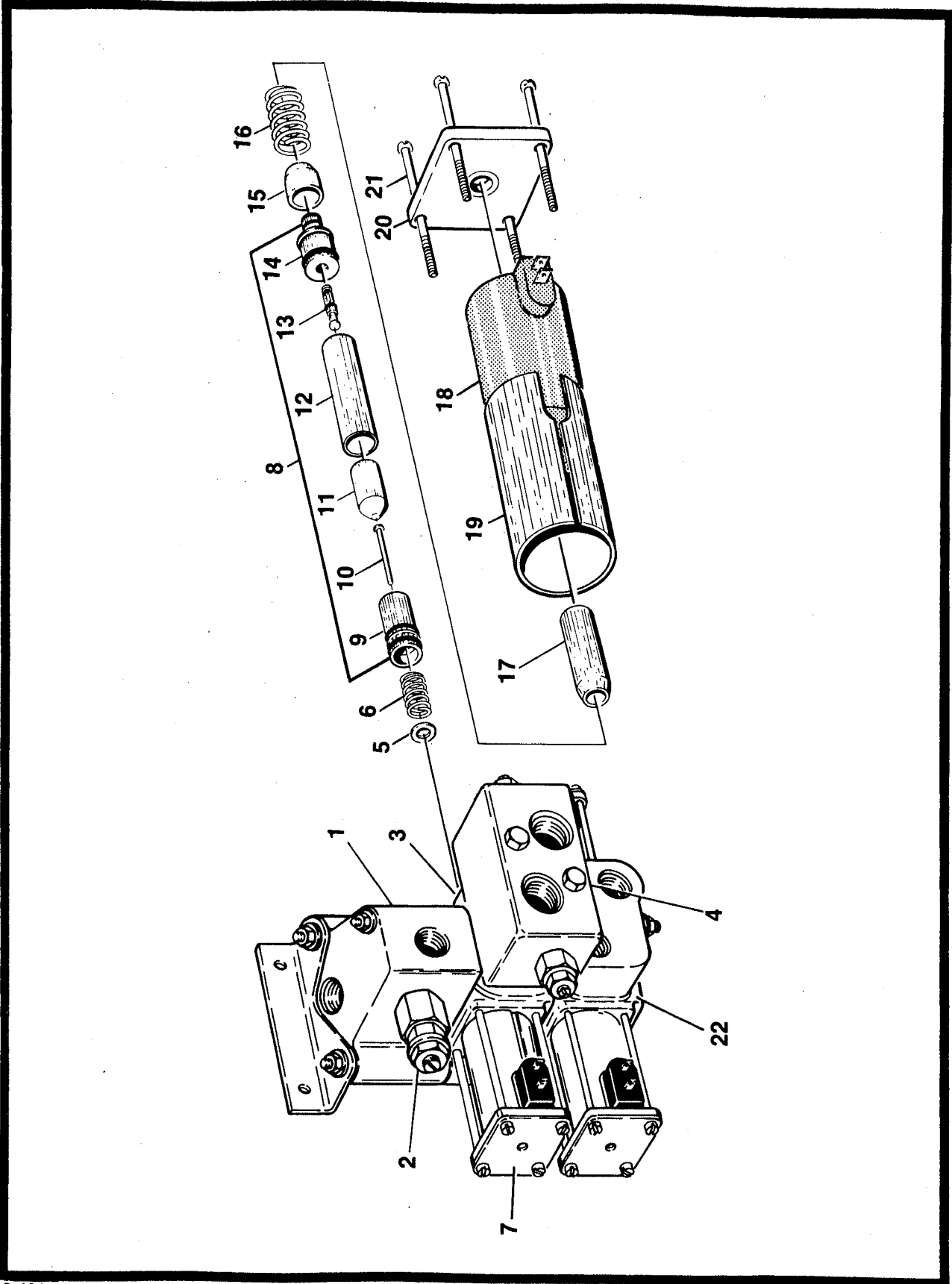


Figure 2-14. Valve Assembly - Racine 2 Stack.

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—14	4640597	<b>VALVE ASSEMBLY - RACINE 2 STACK</b>	Ref.	A
—1	7002254	Inlet Relief Section Assembly	1	
—2	7000447	Cartridge	1	
—3	7000466	Valve Section - Complete	1	
—4	7000468	Relief Valve Block Assembly (No Longer Field Serviceable)	1	
—5	7002274	Washer	2	
—6	7002273	Spring	2	
—7		Solenoid Assembly	2	
—8	7004821	Guide Tube Assembly	1	
—9	7003830	Female Cone/O-Ring Assembly	1	
—10	7002346	Pin, Push	1	
—11	7002344	Plunger	1	
—12	7000470	Tube, Guide	1	
—13	7003829	Actuator Pin/Quad Ring Assembly	1	
—14	7003831	Pin Guide/O-Ring Assembly	1	
—15	7002333	Sleeve, Inner Flux	1	
—16	7002334	Spring	1	
—17	7002336	Sleeve, Outer Flux	1	
—18	7000418	Coil	1	
—19	7002335	Case, Solenoid	1	
—20	7002338	Plate, End	1	
—21	7002339	Screw	4	
—22	7003860	Valve Section - Complete (Refer to Items 5-21 for Serviced Parts)	1	
	7000414	Seal Kit - Working Section	2	
	7000413	Seal Kit - Inlet Relief	1	
	7002265	Mounting Hardware Kit	1	

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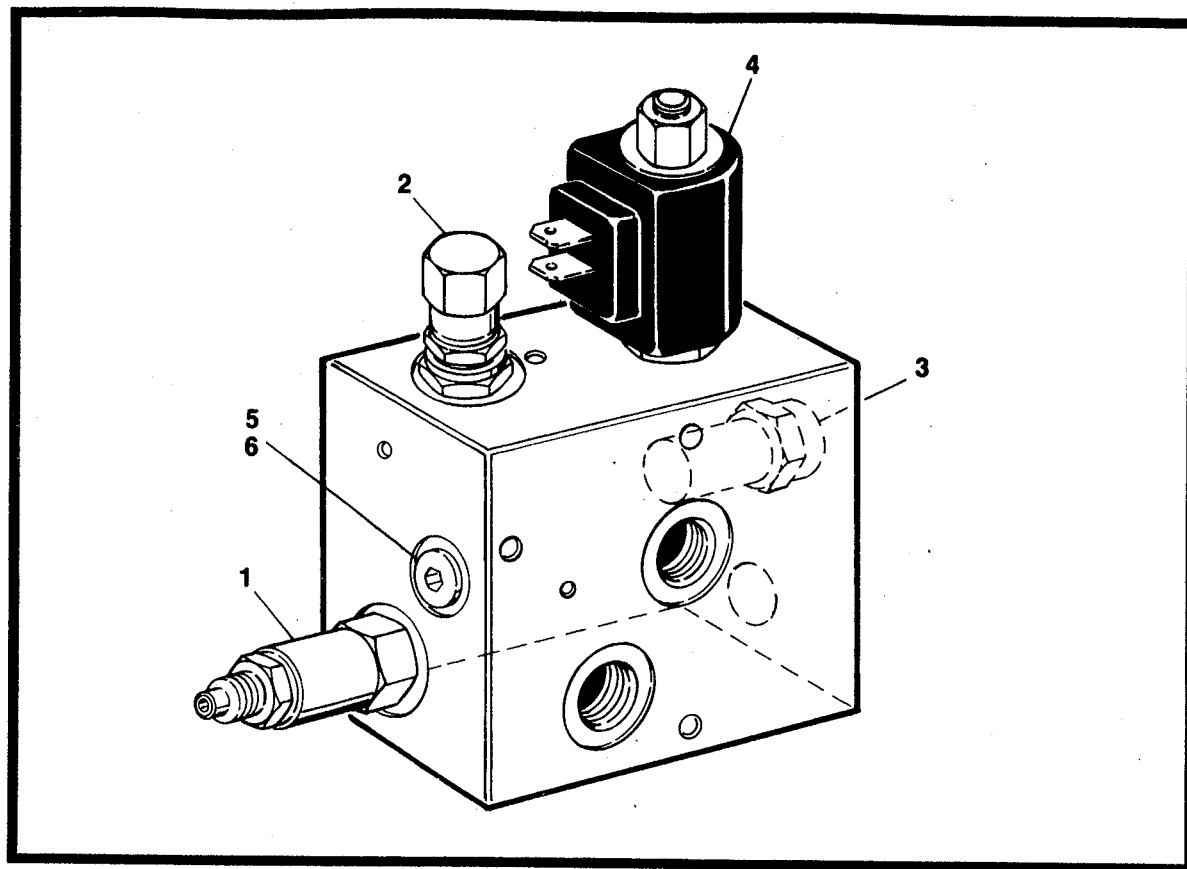


Figure 2-15. Valve Assembly - Modular Controls.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-15	4640598	<b>MODULAR CONTROL VALVE ASSEMBLY</b>	Ref.	A
-1	7010511	Cartridge, Pressure Sensing	1	
-2	7010512	Cartridge, Relief	1	
-3	7010513	Cartridge, Modulating Orifice Spool	1	
-4	7010514	Cartridge, Electric/Hydraulic Relief	1	
	7009742	Coil - 12VDC	1	
	7010516	Nut	1	
-5	7010515	Orifice	1	
-6	7004232	Plug	1	
	2900735	Seal Kit (Item 1)	1	
	2900503	Seal Kit (Items 2 and 4)	2	
	2900736	Seal Kit (Item 3)	1	

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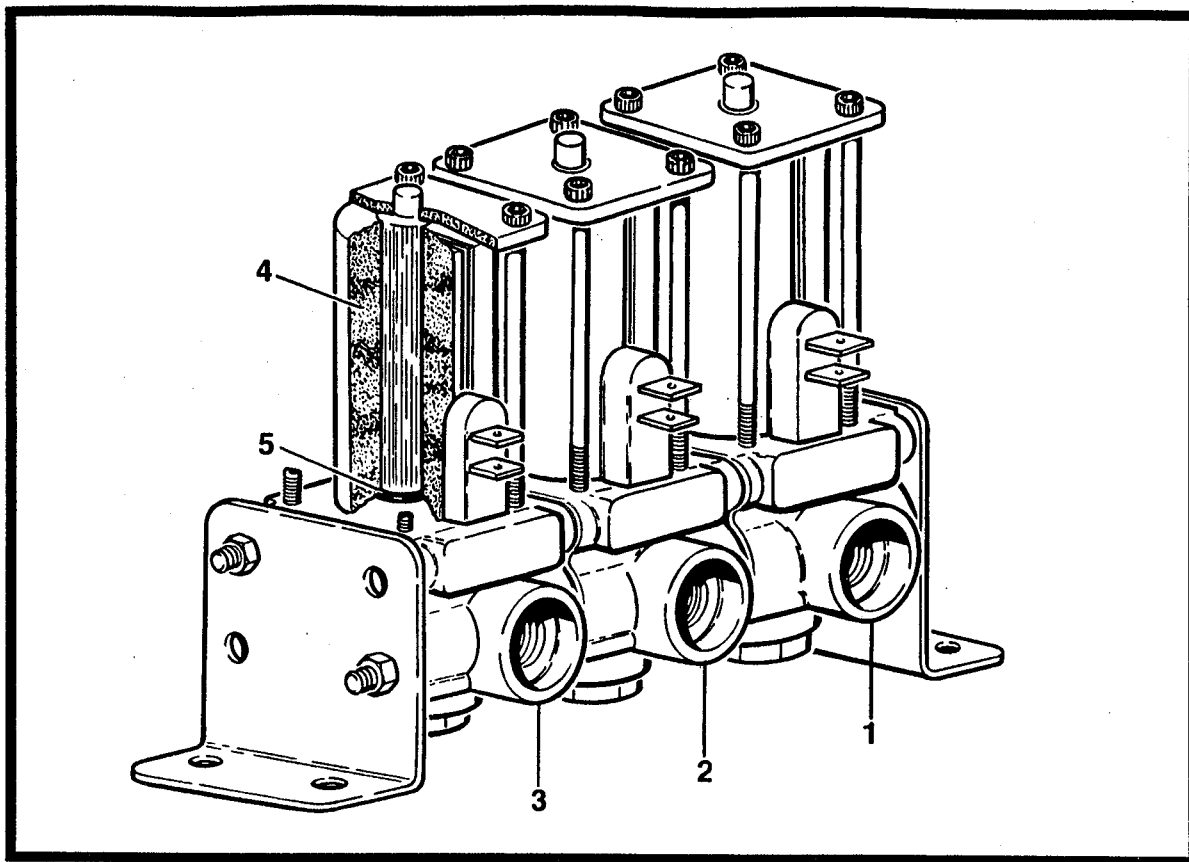


Figure 2-16. Valve Assembly - Racine 3 Stack.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-16	4640385	VALVE ASSEMBLY - RACINE 3 STACK	Ref.	—
—1	7003844	Valve Section	1	
—2	7003843	Valve Section	1	
—3	7003842	Valve Section	1	
—4	7000417	Coil	3	
—5	7002310	O-Ring	4	

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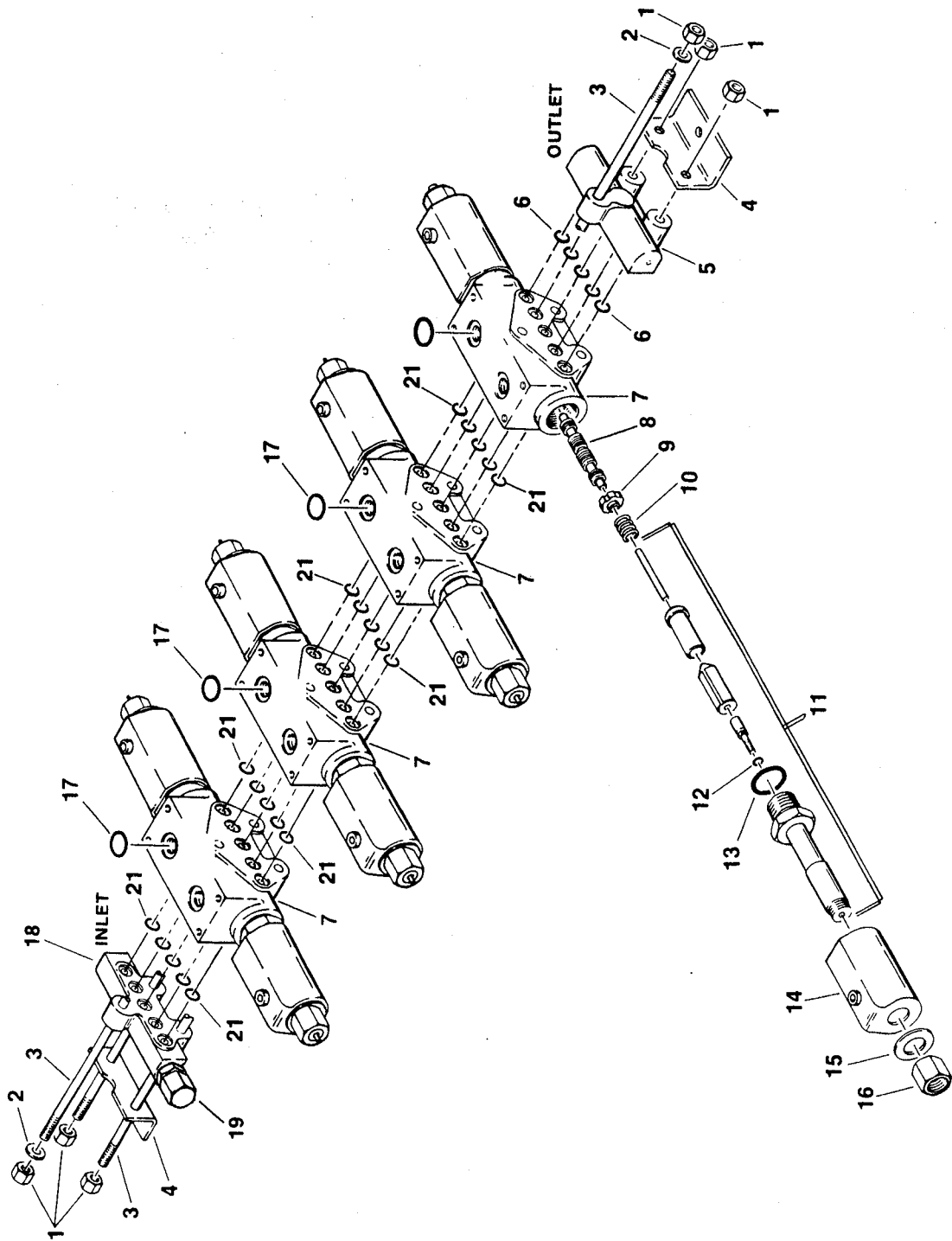


Figure 2-17. Valve Assembly - FPS 4 Stack.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—17	4640352	<b>VALVE ASSEMBLY - FPS 4 STACK</b>	Ref.	C
—1	7000585	Nut	6	
—2	7000586	Washer	2	
—3	7006002	Rod, Tie	3	
—4	7006039	Bracket, Mounting	2	
—5	7006056	Section, Valve - Outlet	1	
—6	7000589	O-Ring	5	
—7	7006041	Section, Valve - Complete	4	
—8		Spool (Not Sold Separately)	1	
—9	7006037	Retainer, Spring	2	
—10	7006036	Spring	2	
—11	7006034	Tube Assembly	2	
—12	7006048	O-Ring	2	
—13	7006035	O-Ring	2	
—14	4640049	Coil, Solenoid	2	
—15		Nameplate (Not Sold Separately)	2	
—16	7006033	Nut	2	
—17	7000596	O-Ring	2	
—18	7006056	Section, Valve - Inlet	1	
—19	7006053	Cartridge, Relief	1	
—20	Not Used			
—21	7000588	O-Ring	20	
	7000549	Seal Kit - Single Section (Includes Items 12,13,17 and 21)	5	
	7006062	Seal Kit - Standard Outlet (Includes Item 6)	1	

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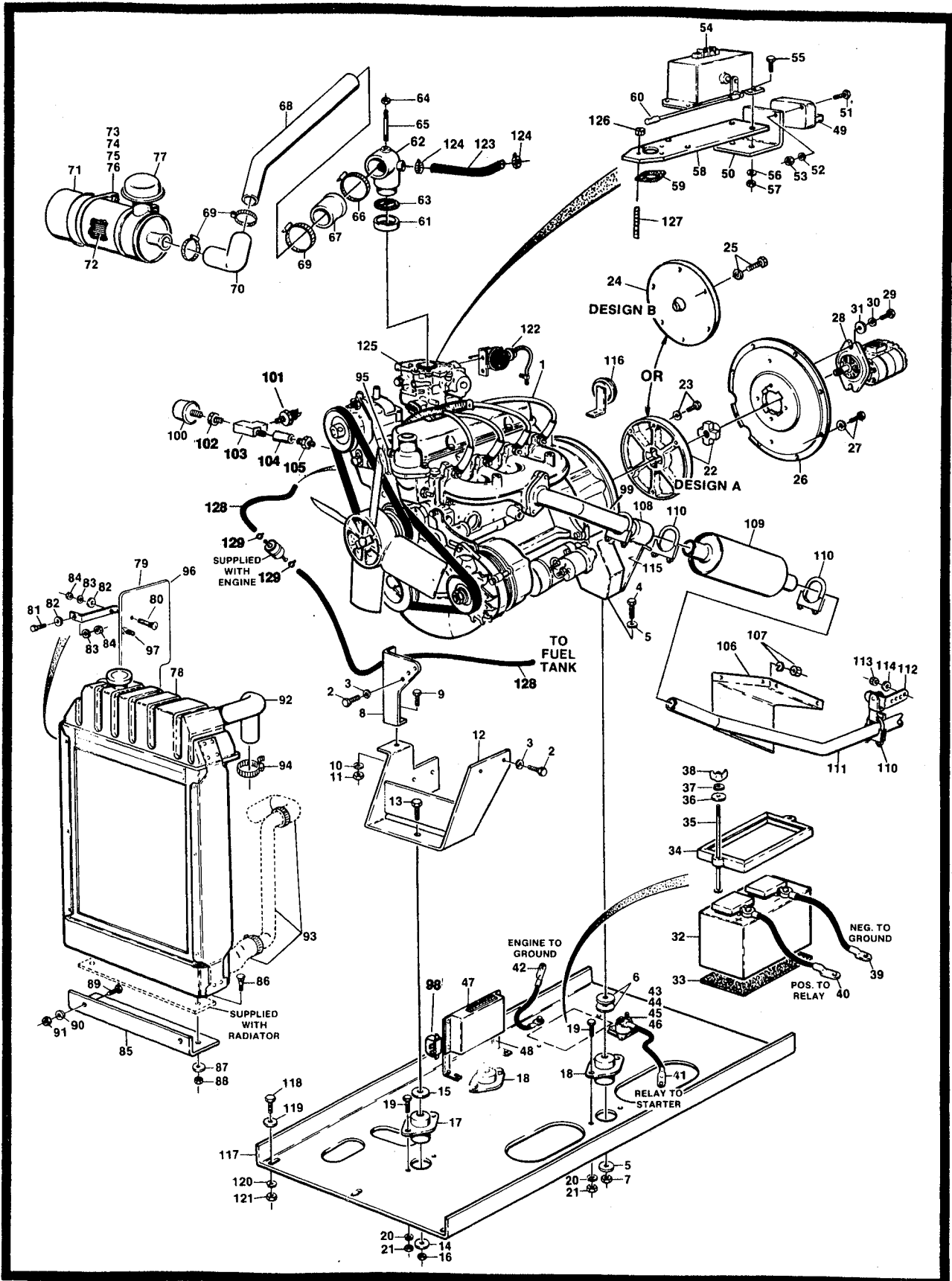


Figure 2-18. Ford Engine Installation - VSG-411.



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-18	0250189	<b>FORD ENGINE INSTALLATION - VSG-411 (80" WHEELBASE)</b>	Ref.	E
	0250955	<b>FORD ENGINE INSTALLATION - VSG-411 (89" WHEELBASE)</b>	Ref.	D
-1	2000109	Engine - Ford VSG-411 (Attaching Parts)	1	
-2	0701014	Bolt 10MM x 30MM (Front)	5	
-3	4831000	Lockwasher 10MM (Front)	5	
-4	0641727	Bolt 7/16"-14NC x 3 3/8" (Rear)	2	
-5	4751700	Flatwasher 7/16" (Rear)	4	
-6	4740273	Flatwasher, Special (Rear)	2	
-7	3311705	Locknut 7/16"-14NC (Rear)	2	
-8	3533291	Plate, Engine Mount (Front - Top) (Attaching Parts)	1	
-9	0641812	Bolt 1/2"-13NC x 1 1/2"	1	
-10	4761800	Lockwasher 1/2"	1	
-11	3311801	Nut 1/2"-13NC	1	
-12	4843497	Bracket, Engine Mount (Front - Bottom) (Attaching Parts)	2	
-13	0641826	Bolt 1/2"-13NC x 3 1/4"	1	
-14	4751800	Flatwasher 1/2"	1	
-15	4740274	Flatwasher, Special	1	
-16	3311805	Locknut 1/2"-13NC	1	
-17	3200201	Mount, Motor (Front)	1	
-18	3200202	Mount, Motor (Rear) (Attaching Parts)	2	
-19	0641608	Bolt 3/8"-16NC x 1"	1	
-20	4761600	Lockwasher 3/8"	1	
-21	3311601	Nut 3/8"-16NC	1	
	0239972	Coupling Installation - Love Joy (Design A)	1	—
	0250595	Coupling Installation - Hayes (Design B)	1	—
-22	1660176	Coupling, Love Joy (Design A) (Attaching Parts)	1	
-23	0641510	Bolt 5/16"-18NC x 1 1/4"	6	
	4761500	Lockwasher 5/16"	6	
-24	1660182	Coupling, Hayes (Design B) (Attaching Parts)	1	
-25	0641507	Bolt 5/16"-18NC x 7/8"	6	
	4761500	Lockwasher 5/16"	6	
	3020021	Grease	A/R	
-26	0080169	Plate, Adapter (Attaching Parts)	1	
-27	0641610	Bolt 3/8"-16NC x 1 1/4"	8	
	4761600	Lockwasher 3/8"	8	
-28	3600145	Pump Assembly (Not Field Serviceable) (Attaching Parts)	1	
-29	0641608	Bolt 3/8"-16NC x 1"	2	
-30	4761600	Lockwasher 3/8"	2	
-31	4751600	Flatwasher 3/8"	2	
	2900660	Shaft Seal Kit	1	

## SECTION 2 — ILLUSTRATED PARTS LIST

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-18		<b>FORD ENGINE INSTALLATION - VSG-411 (CONTINUED)</b>	Ref.	
-32	0400003	Battery	1	
-33	3980003	Masonite	1	
-34	0400002	Hold-Down, Battery (Attaching Parts)	1	
-35	0630370	Rod, Tie-Down	2	
-36	4751600	Flatwasher 3/8"	2	
-37	4761600	Lockwasher 3/8"	2	
-38	3300029	Wingnut 3/8"-16NC	2	
-39	1060046	Cable, Battery (Negative to Ground)	1	
-40	1060154	Cable, Battery (Positive to Relay)	1	
-41	1060080	Cable, Battery (Relay to Starter)	1	
-42	1060221	Cable, Battery (Engine to Ground)	1	
-43	3740059	Relay (Ford Start) (When Equipped) (Attaching Parts)	1	
-44	0641408	Bolt 1/4"-20NC x 1"	2	
-45	4761400	Lockwasher 1/4"	2	
-46	3311401	Nut 1/4"-20NC	2	
	3300220	Nut Special (Not Shown)	2	
-47	1600117	Box, Control - Precision Governor (Attaching Parts)	1	
	3911012	Screw, Machine #10-24NC x 3/4"	4	
	4751000	Flatwasher #10	4	
	4761000	Lockwasher #10	4	
	3311001	Nut #10-24NC	4	
	0100009	Adhesive	A/R	
-48	0901419	Bracket, Box (Attaching Parts)	2	
	4761400	Lockwasher 1/4"	2	
	4751400	Flatwasher 1/4"	2	
-49		ESC Unit (Supplied With Engine) (Attaching Parts)	1	
-50	0901614	Bracket, Mounting (When Equipped)	1	
-51	3911007	Screw, Machine #10-24NC x 7/8"	2	
-52	4761000	Lockwasher #10	2	
-53	3311001	Nut #10-24NC	2	
-54	2500005	Actuator, Precision Governor (Attaching Parts)	1	
-55	0641410	Bolt 1/4"-20NC x 1 1/4"	4	
-56	4761400	Lockwasher 1/4"	4	
-57	3311401	Nut 1/4"-20NC	4	
-58	3533445	Bracket, Mounting (13 7/8" Length)	1	
	3533882	Bracket, Mounting (15 1/8" Length)	1	
-59	3960392	Gasket	1	
-60	3841041	Rod, Throttle (#10 Threads)	1	
	3841049	Rod, Throttle (1/4" Threads)	1	
	0310003	Joint, Ball (Governor Attach) (#10 Threads)	1	
	1660157	Joint, Ball (1/4" Threads)	2	
	0310004	Joint, Ball (Carburetor Attach) (#10 Threads)	1	
	3321002	Nut, Jam #10-32NF	2	
	3321402	Nut, Jam 1/4"-28NF	2	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-18		<b>FORD ENGINE INSTALLATION - VSG-411 (CONTINUED)</b>	Ref.	
-61	0080092	Adapter, Carburetor	1	
-62	0080175	Adapter, Air Intake (Attaching Parts)	1	
-63	3960388	Gasket	1	
-64	3311405	Locknut 1/4"-20NC	1	
-65	4300056	Stud 1/4"-20NC x 4 3/8"	1	
-66	1320058	Clamp, Hose	1	
-67	2720341	Hose, Air Intake Reducer	1	
-68	4843533	Tube, Air Intake	1	
-69	1320058	Clamp, Hose	3	
-70	0080039	Elbow, Air Intake	1	
-71	1340020	Air Cleaner Assembly	1	
-72	7004214	Element	1	
-73	0340002	Band, Mounting - Air Cleaner (Attaching Parts)	2	
-74	0641406	Bolt 1/4"-20NC x 3/4"	2	
-75	4761400	Lockwasher 1/4"	2	
-76	3311401	Nut 1/4"-20NC	2	
-77	1120161	Cap, Air Inlet	1	
-78		Radiator (Supplied with Engine) (Attaching Parts)	1	
-79	3533664	Bracket, Mounting (Top)	1	
-80	0630360	Bolt, Carriage 5/16"-18NC x 1 1/4" (Top)	1	
-81	0641508	Bolt 5/16"-18NC x 1" (Top)	1	
-82	4751500	Flatwasher 5/16" (Top)	2	
-83	4761500	Lockwasher 5/16" (Top)	2	
-84	3311501	Nut 5/16"-18NC (Top)	2	
-85	3533663	Bracket, Mounting (Bottom)	2	
-86	0630403	Bolt, Carriage 7/16"-14NC x 1 1/2" (Bottom)	2	
-87	4751700	Flatwasher 7/16" (Bottom)	2	
-88	3311705	Locknut 7/16"-14NC (Bottom)	2	
-89	0641710	Bolt 7/16"-14NC x 1 1/4" (Bottom)	2	
-90	4761700	Lockwasher 7/16" (Bottom)	2	
-91	3311701	Nut 7/16"-14NC (Bottom)	2	
-92	2720264	Hose, Radiator (Top)	1	
-93		Hose, Radiator (Bottom - Supplied With Engine)	1	
-94	1320014	Clamp, Hose	2	
-95	2420118	Sender, Temperature (Water) (Standard)	1	
	2420130	Sender, Temperature (Water) (With Engine Distress Switch)	1	
-96	4060713	Shield, Radiator (Attaching Parts)	1	
-97	3921008	Screw #10-24NC x 1/2"	3	
-98	3740030	Relay (Start Lockout)	1	
-99	4564564	Pipe, Exhaust	1	
-100	2420033	Sender, Pressure (Oil) (Standard)	1	
	2420131	Sender, Pressure (Oil) (With Engine Distress Switch)	1	
-101	4360037	Switch, Pressure (Oil)	1	
-102	2220273	Fitting, Reducer	1	
-103	2180360	Fitting, Tee	1	
-104	2200261	Fitting, Coupling	1	
-105	2180537	Fitting, Straight	1	



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-18		<b>FORD ENGINE INSTALLATION - VSG-411 (CONTINUED)</b>	Ref.	
—106	4060738 4060736	Shield, Exhaust (80" Wheelbase) Shield, Exhaust (89" Wheelbase) (Attaching Parts)	1 1	
—107	3311401 4761400 4300032	Nut 1/4"-20NC Lockwasher 1/4" Stud (Welded on Part)	2 2 2	
—108	1660181	Connector, Exhaust	1	
—109	3220033	Muffler	1	
—110	1320019	Clamp, Muffler	4	
—111	4564449 4564683	Tailpipe (80" Wheelbase) Tailpipe (89" Wheelbase)	1 1	
—112	0901387	Hanger, Exhaust (Attaching Parts)	1	
—113	3311501	Nut 5/16"-18NC	2	
—114	4751500 4300038	Flatwasher 5/16" Stud (Welded on Parts)	2 2	
—115	3533646	Support, Exhaust	1	
—116	0140001	Horn	1	
—117	3533648	Tray, Engine Mounting (Attaching Parts)	1	
—118	0641610	Bolt 3/8"-16NC x 1 1/4"	6	
—119	4751600	Flatwasher 3/8"	12	
—120	4761600	Lockwasher 3/8"	6	
—121	3311601	Nut 3/8"-16NC	6	
—122	0250446 0237568 2720016 2180623	Choke Installation (1989 Models Only) Choke Assembly Hose, Suction Fitting, Tee <b>Note: (1990 and Newer Models have Factory Equipped Choke)</b>	Ref. 1 1 ft./3m 1	—
—123	2720042	Hose	1.5 ft./5m	
—124	1320032	Clamp	2	
—125	2900397 7000892	Carburetor (Without Built-in Choke) (1989 Models Only) Carburetor (With Built-in Choke) (1990 and Newer Models) (Attaching Parts)	1 1	
—126	3321501	Nut 5/16"-24NF	2	
—127	4300090	Stud, Carburetor	2	
—128	7000878 2720058	Rebuild Kit - Carburetor Hose, Fuel	1	
—129	1320022	Clamp	2	
	2120112	Separator/Filter (Location In-line Between In-take Manifold and Distributor)	1	
	0250815	<b>ENGINE HEATER INSTALLATION (NOT SHOWN)</b>	Ref.	—
	2580026 0700820 4564328	Heater Kit - Engine Coolant Bolt, Metric 8M x 60MM Spacer, Tube <b>Note: Hardware Used to Space Terminal Strip Away From Engine Block)</b>	1 2 2	

SECTION 2 — ILLUSTRATED PARTS LIST

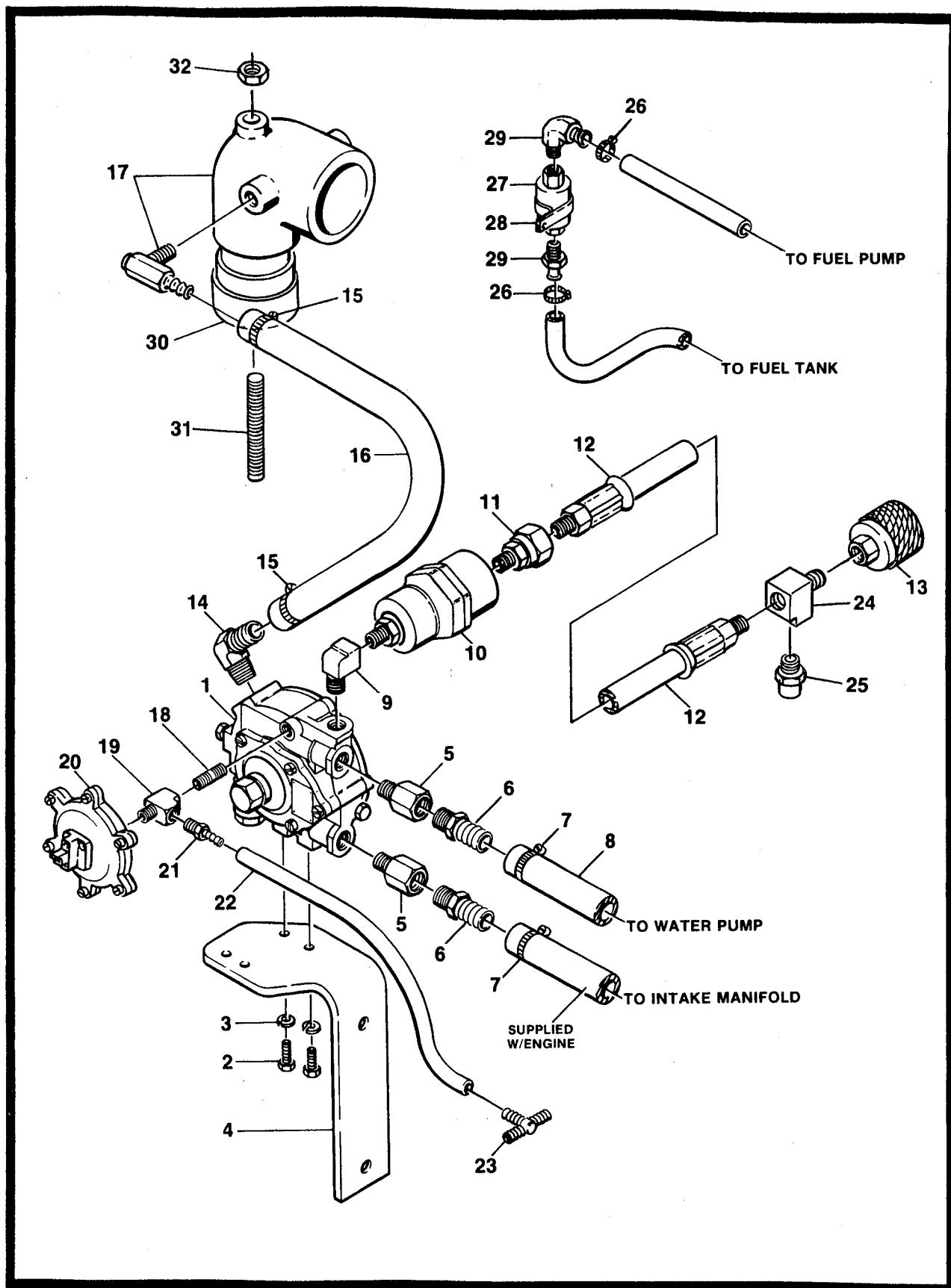


Figure 2-19. Dual Fuel Installation (Ford).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-19	0250790	<b>DUAL FUEL INSTALLATION (FORD)</b>	Ref.	A
-1	3720011	Regulator (Attaching Parts)	1	
-2	0641405	Bolt 1/4"-20NC x 5/8"	2	
-3	4761400	Lockwasher 1/4"	2	
-4	0901664	Bracket	1	
-5	2220364	Fitting, Adapter	2	
-6	2180535	Fitting, Barbed	2	
-7	1320032	Clamp	4	
-8	2720042	Hose	32 in.	
-9	2220648	Fitting, 90°	1	
-10	2120077	Filterlock	1	
-11	2220003	Fitting, Swivel	1	
-12	2720118	Hose	1	
-13	2180387	Fitting, Tank	1	
-14	2220675	Fitting, 90° Barbed	1	
-15	1320032	Clamp	2	
-16	2720112	Hose	24 in.	
-17	0080167	Adapter	1	
	3960388	Gasket	1	
-18	2180104	Fitting, Nipple	1	
-19	2180360	Fitting, Tee	1	
-20	4360188	Switch, Vacuum	1	
-21	2180536	Fitting, Barbed	1	
-22		Hose (Supplied With Engine)	A/R	
-23	2180623	Fitting, Tee	1	
-24	2220290	Fitting, Tee	1	
-25	2180389	Fitting, Pressure Relief	1	
-26	1320022	Clamp	2	
-27	4640391	Valve, Gas Lock	1	
-28	1320095	Clamp, Mounting	1	
-29	2220805	Fitting, Barbed	2	
-30	0080092	Adapter, Carburetor	1	
-31	3840979	Rod, Threaded	1	
-32		Nut (Supplied With Engine)	1	

SECTION 2 — ILLUSTRATED PARTS LIST

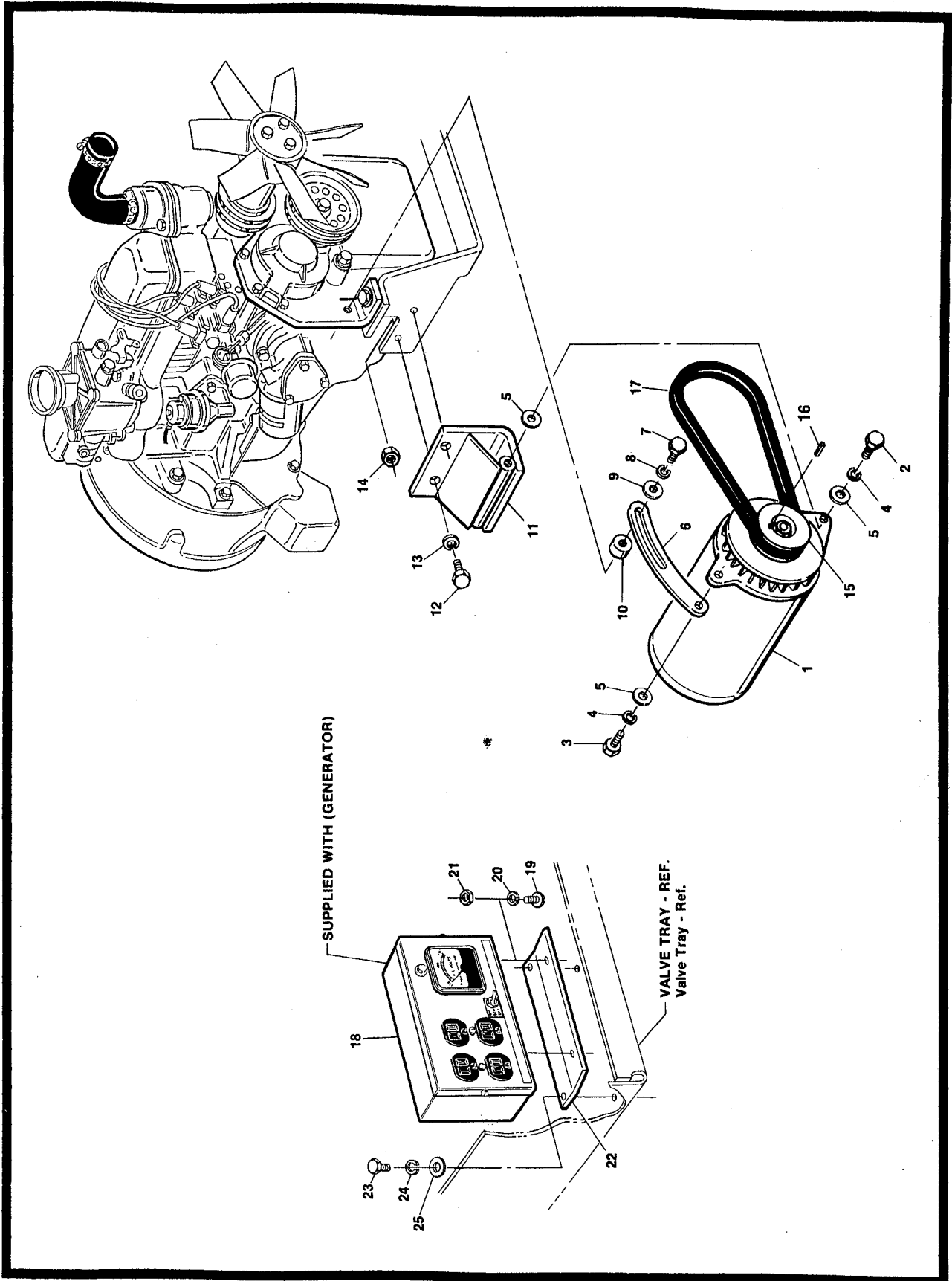


Figure 2-20. Generator Installation - 110V (Ford).



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—20	0250444	<b>GENERATOR INSTALLATION - 110V (FORD)</b>	Ref.	A
—1	2460011	Generator (Attaching Parts)	1	
—2	0641511	Bolt 5/16"-18NC x 1 3/8"	2	
—3	0641507	Bolt 5/16"-18NC x 7/8"	1	
—4	4761500	Lockwasher 5/16"	3	
—5	4751500	Flatwasher 5/16"	5	
—6	4340569	Support (Attaching Parts)	1	
—7	0641511	Bolt 5/16"-18NC x 1 3/8"	1	
—8	4761500	Lockwasher 5/16"	1	
—9	4751500	Flatwasher 5/16"	1	
—10	0961247	Bushing	1	
—11	0901650	Bracket, Mounting (Attaching Parts)	1	
—12	0641609	Bolt 3/8"-16NC x 1 1/8" (When Equipped)	2	
—13	4761600	Lockwasher 3/8"	2	
—14	3311601	Nut 3/8"-16NC	2	
—15	3580134	Pulley (Attaching Hardware Supplied With Generator)	1	
—16	2860012	Key, Woodruff	1	
—17	0480057	V-Belt	1	
—18		Box, Control (Supplied With Generator) (Attaching Parts)	1	
—19	3911004	Screw, Machine #10-24NC x 1/2"	2	
—20	4761000	Lockwasher #10	2	
—21	3311001	Nut #10-24NC	2	
—22	0901609	Bracket, Mounting (Attaching Parts)	1	
—23	0641507	Bolt 5/16"-18NC x 7/8"	2	
—24	4761500	Lockwasher 5/16"	2	
—25	4751500	Flatwasher 5/16"	2	

SECTION 2 — ILLUSTRATED PARTS LIST

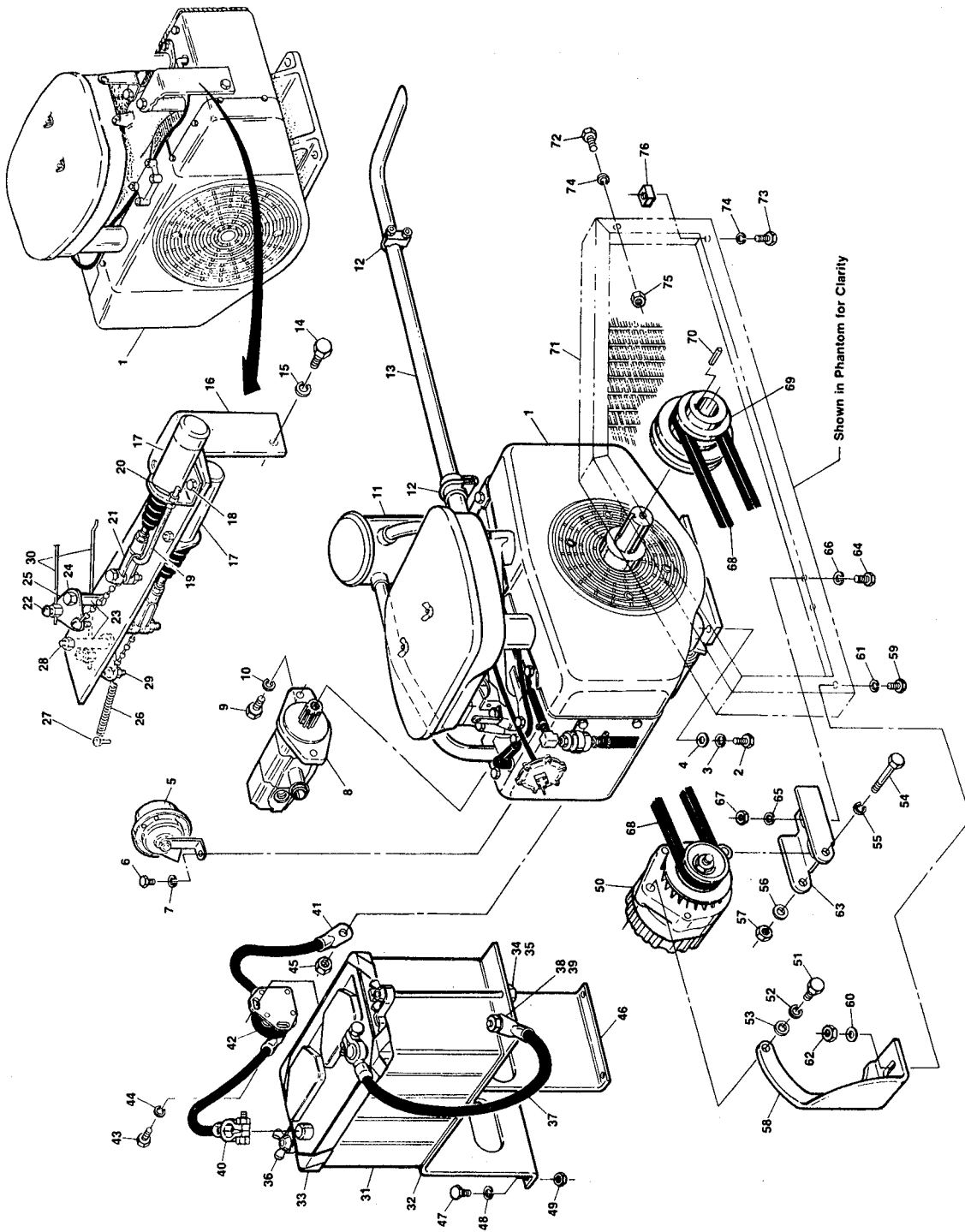


Figure 2-21. Kohler Engine Installation - 18HP.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—21	0239764	<b>KOHLER ENGINE INSTALLATION - 18HP</b>	Ref.	A
—1	2000108	Engine, Kohler - 18HP (Attaching Parts)	1	
—2	0641610	Bolt 3/8"-16NC	4	
—3	4751600	Flatwasher 3/8"	4	
—4	4761600	Lockwasher 3/8"	4	
—5	0140001	Horn (Attaching Parts)	1	
—6	0641406	Bolt 1/4"-20NC x 3/4"	1	
—7	4761400	Lockwasher 1/4"	1	
—8	3600155	Pump Assembly (See Figure 2-22 for Breakdown) (Attaching Parts)	1	
—9	0641610	Bolt 3/8"-16NC x 1 1/4"	2	
—10	4761600	Lockwasher 3/8"	2	
—11	3220072	Muffler Assembly (Includes Gaskets and Mounting Hardware)	1	
—12	1320020	Clamp, Muffler	2	
—13	4564357	Pipe, Exhaust	1	
	0237795	Choke and Throttle Assembly (Attaching Parts)	1	E
—14	0641406	Bolt 1/4"-20NC	2	
—15	4761400	Lockwasher 1/4"	2	
—16	3200257	Mount, Solenoid	1	
—17	3740028	Solenoid, Choke and Throttle (Attaching Parts)	2	
—18	0641406	Bolt, Hex Head 1/4"-20NC x 3/4" Long (Grade 5)	4	
	4761400	Lockwasher 1/4" Dia.	4	
	3311401	Nut, Hex 1/4"-20NC	4	
	4751400	Flatwasher 1/4" Dia.	4	
—19	3840765	Rod (Attaching Parts)	2	
—20	3311401	Nut, Hex 1/4"-20NC	2	
—21	1360061	Clevis, Yoke Throttle Solenoid	2	
—22	4460302	Terminal, Cable Pivot	2	
	4751400	Flatwasher 3/8" ID x 3/4" OD	2	
	3450303	Cotter Pin 3/32" x 3/4"	2	
—23	4563626	Spacer (Attaching Parts)	2	
—24	0721014	Capscrew #10-24NC x 1 3/4" Long (Grade 5)	1	
	4751000	Flatwasher 3/16" ID x 1/2" OD	1	
	3311001	Nut, Hex #10-24NC	1	
	4761000	Lockwasher #10 Dia.	1	
—25	3531512	Plate	2	
—26	4160022	Spring (Attaching Parts)	1	
—27	0750804	Pan Head Thread Forming Screw #8 x 1/2" Long	1	

## SECTION 2 — ILLUSTRATED PARTS LIST

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—21	0239764	<b>KOHLER ENGINE INSTALLATION - 18HP (CONTINUED)</b>	Ref.	
—28	0721014	Cap Screw #10-24NC x 1 3/4" Long (Grade 5)	1	
	4751000	Flatwasher 3/16" ID x 1/2" OD	1	
	3311001	Nut, Hex #10-24NC	1	
	4761000	Lockwasher #10 Dia.	1	
—29	0721005	Cap Screw #10-24NC x 5/8" Long (Grade 5)	2	
	3311001	Nut, Hex #10-24NC	1	
	4761000	Lockwasher #10 Dia.	1	
—30	3840897	Rod, Linkage	2	
—31	0400003	Battery	1	
—32	3980003	Seat, Battery	1	
—33	0400002	Hold-Down, Battery (Attaching Parts)	1	
—34	0641672	Bolt 3/8"-16NC x 9"	2	
—35	4751600	Flatwasher 3/8"	2	
—36	3300029	Wingnut 3/8"-16NC	2	
—37	1060046	Cable, Battery (Ground) (Attaching Parts)	1	
—38	3311401	Nut 3/8"-16NC	1	
—39	4761400	Lockwasher 3/8"	1	
—40	1060046	Cable, Battery (Battery to Relay)	1	
—41	1060221	Cable, Battery (Relay to Starter)	1	
—42	3740059	Relay (Attaching Parts)	1	
—43	0641406	Bolt 1/4"-20NC x 3/4"	2	
—44	4761400	Lockwasher 1/4"	2	
—45	3300220	Nut, Special	2	
—46	4340572	Support, Battery (Attaching Parts)	1	
—47	0641508	Bolt 5/16"-18NC x 1"	4	
—48	4761500	Lockwasher 5/16"	4	
—49	3311501	Nut 5/16"-18NC	4	
—50	2460015	Alternator (Attaching Parts)	1	
—51	0700812	Bolt, Metric M8 x 25MM (Top)	1	
—52	4761500	Lockwasher 5/16" (Top)	1	
—53	4751500	Flatwasher 5/16" (Top)	1	
—54	0641620	Bolt 3/8"-16NC x 2 1/2"	1	
—55	4751600	Flatwasher 3/8"	1	
—56	4761600	Lockwasher 3/8"	1	
—57	3311601	Nut 3/8"-16NC	1	
—58	0901571	Bracket, Alternator (Top) (Attaching Parts)	1	
—59	0641610	Bolt 3/8"-16NC x 1 1/4"	1	
—60	4751600	Flatwasher 3/8"	1	
—61	4761600	Lockwasher 3/8"	1	
—62	3311601	Nut 3/8"-16NC	1	
—63	0901414	Bracket, Alternator (Bottom) (Attaching Parts)	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—21	0239764	<b>KOHLER ENGINE INSTALLATION - 18HP (CONTINUED)</b>	Ref.	
—64	0641610	Bolt 3/8"-16NC x 1 1/4"	2	
—65	4751600	Flatwasher 3/8"	2	
—66	4761600	Lockwasher 3/8"	2	
—67	3311601	Nut 3/8"-16NC	2	
—68	0480057	Belt Alternator	1	
—69	3580132	Pulley	1	
—70	2880408	Key	1	
—71	4060698	Shield	1	
		(Attaching Parts)		
—72	0641408	Bolt 1/4"-20NC x 1"	1	
—73	0641406	Bolt 1/4"-20NC x 3/4"	3	
—74	4761400	Lockwasher 1/4"	4	
—75	3311401	Nut 1/4"-20NC	1	
—76	3300182	Clip, Nut	3	

SECTION 2 — ILLUSTRATED PARTS LIST

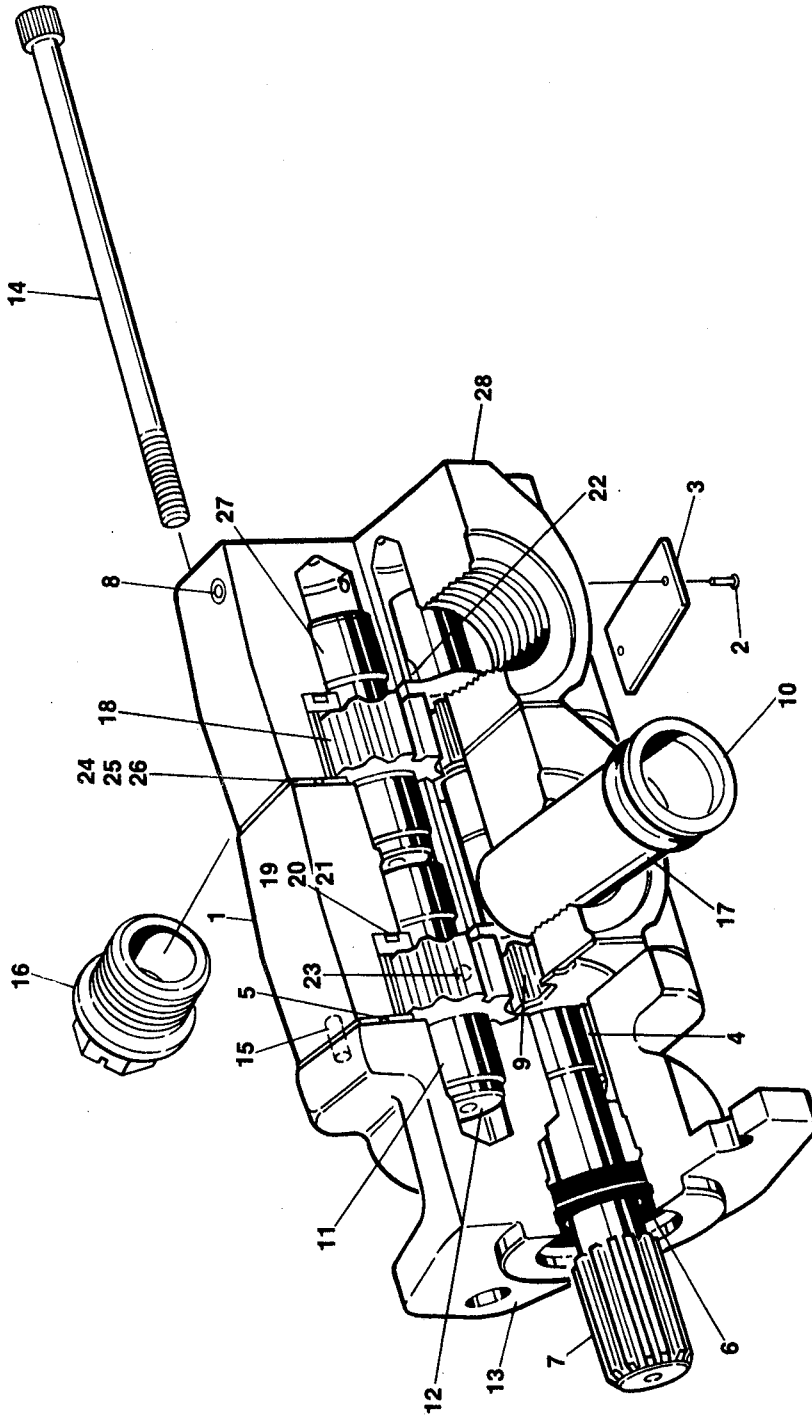


Figure 2-22. Pump Assembly - John Barnes (2 Section) (Kohler Machines).

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—22	3600155	<b>PUMP ASSEMBLY - JOHN BARNES (2 SECTION) (KOHLER MACHINES)</b>	Ref.	—
—1	Not Serviced	Housing, Center	1	
—2	Not Serviced	Tag Nail	2	
—3	Not Serviced	Nameplate	1	
—4	7010901	Pin, Shear	1	
—5	7010902	Ring, Crescent	4	
—6	Kit	Seal, Oil	1	
—7	7010904	Shaft, Drive	1	
—8	7010905	Plug	1	
—9	7010906	Gear	1	
—10	Not Serviced	Plug, Shipping	1	
—11	7010907	Bearing	8	
—12		Idler Shaft Sub-Assembly	1	
	7010918	Ball	1	
	7010906	Gear	1	
	7010902	Ring, Crescent	2	
	7010941	Shaft, Idler	1	
—13	Not Serviced	Stator	1	
—14	7010910	Screw	8	
—15	7010911	Pin, Shear	4	
—16		Plug, Plastic	1	
—17	7010912	Tube	1	
—18	7010913	Gear	2	
—19	7010914	Plate, Pressure	2	
—20	Kit	Seal, Pressure Plate Back-Up	2	
—21	Kit	Seal, Pressure Plate	2	
—22	7010917	Pin, Shear	1	
—23	7010918	Ball	1	
—24	7010919	Plate, Wear	2	
—25	Kit	Seal, Plate	2	
—26	Kit	Seal	2	
—27	7010922	Shaft, Idler	1	
—28	Not Serviced	Housing, End	1	
	2900740	Seal Kit (Includes Items 6,20,21,25 and 26)	1	

SECTION 2 — ILLUSTRATED PARTS LIST

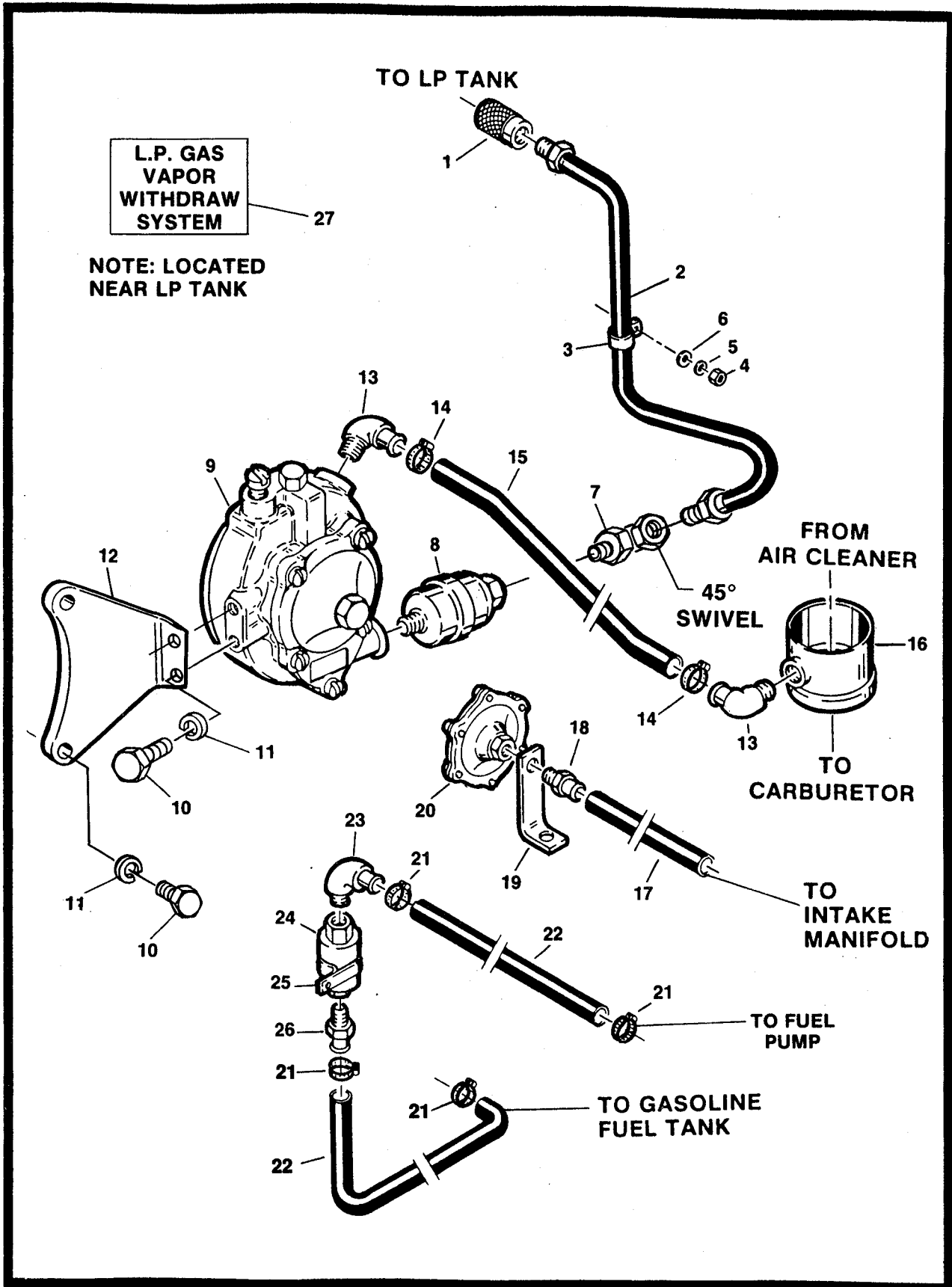


Figure 2-23. Dual Fuel Installation - Kohler.



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-23		<b>DUAL FUEL INSTALLATIONS - KOHLER</b>	Ref.	
	0239896	<b>DUAL FUEL INSTALLATION - VAPOR WITHDRAWAL SYSTEM</b>	Ref.	A
-1	2180387	Fitting, LP Connector	1	
	0100020	Loctite	A/R	
-2	2720116	Hose	1	
-3	1320044	Clamp, Insulated (Attaching Parts)	1	
-4	3311401	Nut 1/4"-20NC	1	
-5	4761400	Lockwasher 1/4"	1	
-6	4751400	Flatwasher 1/4"	1	
-7	2220125	Fitting, 45°	1	
	0100020	Loctite	A/R	
-8	2120077	Filter Lock - LP	1	
	0100020	Loctite	A/R	
-9	3720012	Regulator (Attaching Parts)	1	
-10	0641406	Bolt 1/4"-20NC x 3/4"	4	
-11	4761400	Lockwasher 1/4"	4	
-12	0901590	Bracket	1	
-13	2220675	Fitting, 90° Barbed	2	
	0100020	Loctite	A/R	
-14	1320032	Clamp	2	
-15	2720112	Hose	2 ft./6m	
-16	0080142	Adapter, Carburetor	1	
-17	2720016	Hose	9 in./23cm	
-18	2180536	Fitting, Straight Barbed	1	
-19	0901415	Bracket	1	
-20	4360188	Switch, Vacuum Safety	1	
	0100020	Loctite	A/R	
-21	1320022	Clamp	4	
-22	2720015	Hose	3.6 ft./1m	
-23	2220296	Fitting, 90° Barbed	1	
-24	4640391	Fuel Lock - Gas	1	
	0100020	Loctite	A/R	
-25	1320060	Clamp	1	
-26	2220315	Fitting, Straight Barbed	1	
-27	1700819	Decal - Vapor Withdrawal	1	

SECTION 2 — ILLUSTRATED PARTS LIST

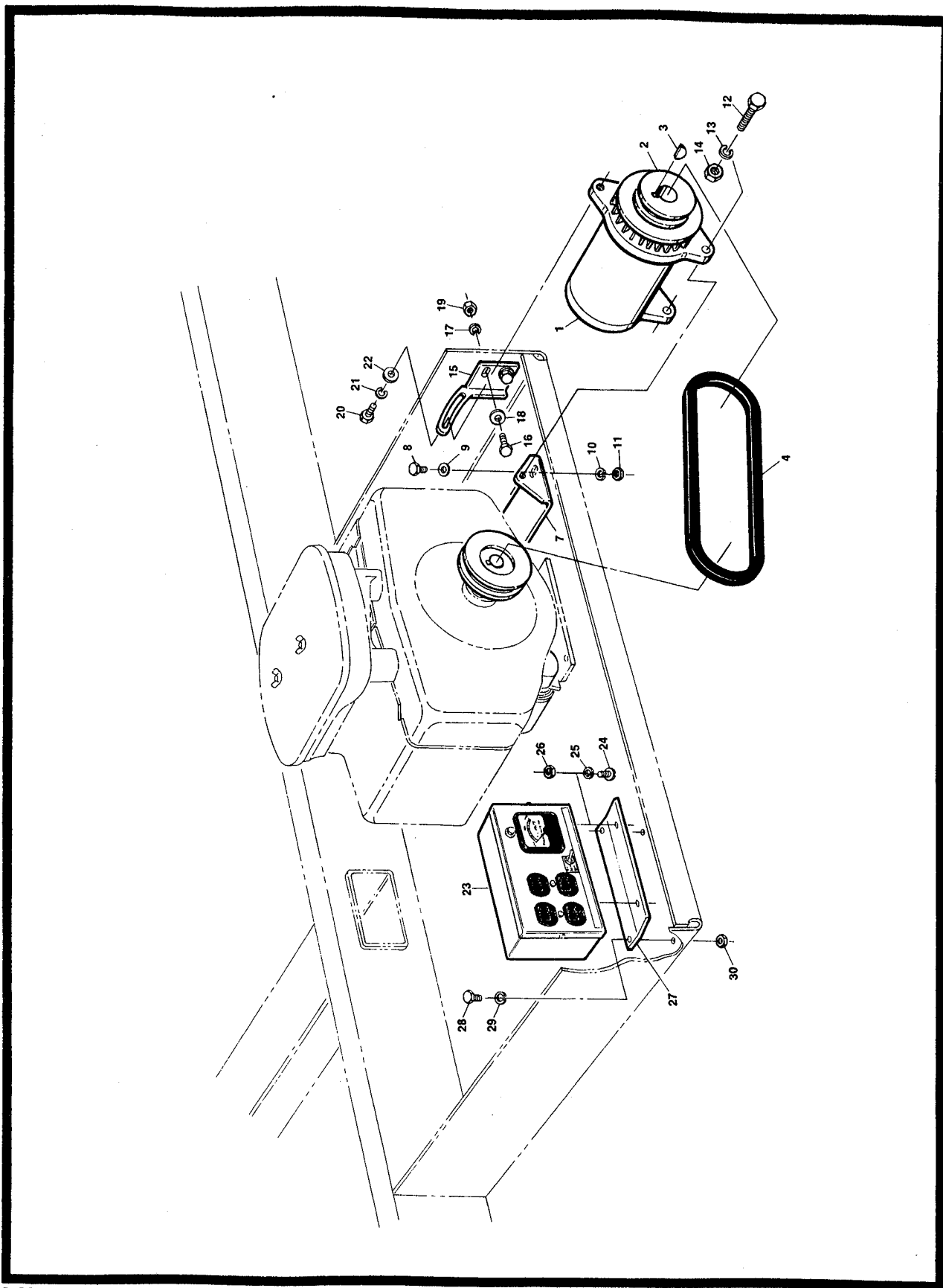


Figure 2-24. Generator Installation - 110V (Kohler).

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—24	0250098	<b>110 VOLT GENERATOR INSTALLATION - KOHLER</b>	Ref.	—
—1	2640011	Generator, Powermite 110	1	
—2	3580134	Pulley	1	
—3	2860012	Key, Woodruff	1	
—4	0480038	Belt	1	
—5	Not Used	Pulley	1	
—6	Not Used	Key, Square	1	
—7	0901468	Bracket, Generator Mounting (Bottom) (Attaching Parts)	1	
—8	0641610	Bolt 3/8"-16NC x 1 1/4"	2	
—9	4751600	Flatwasher 3/8"	2	
—10	4761600	Lockwasher 3/8"	2	
—11	3311601	Nut 3/8"-16NC	2	
—12	0641510	Bolt 5/16"-18NC x 1 1/4"	2	
—13	4761500	Lockwasher 5/16"	2	
—14	3311501	Nut 5/16"-18NC	2	
—15	0901469	Bracket, Generator Mounting (Top) (Attaching Parts)	1	
—16	0641610	Bolt 3/8"-16NC x 1 1/4"	2	
—17	4761600	Lockwasher 3/8"	2	
—18	4751600	Flatwasher 3/8"	2	
—19	3311601	Nut 3/8"-16NC	2	
—20	0641506	Bolt 5/16"-18NC x 3/4"	1	
—21	4761500	Lockwasher 5/16"	1	
—22	4751500	Flatwasher 5/16"	1	
—23		Box, Control (Supplied With Generator) (Attaching Parts)	1	
—24	3911004	Screw, Round Head #10-24NC x 1/2"	2	
—25	4761000	Lockwasher #10	2	
—26	3311001	Nut #10-24NC	2	
—27	0901609	Bracket, Box Mounting (Attaching Parts)	1	
—28	0641506	Bolt 5/16"-18NC x 3/4"	2	
—29	4761500	Lockwasher 5/16"	2	
—30	3311501	Nut 5/16"-18NC	2	

SECTION 2 — ILLUSTRATED PARTS LIST

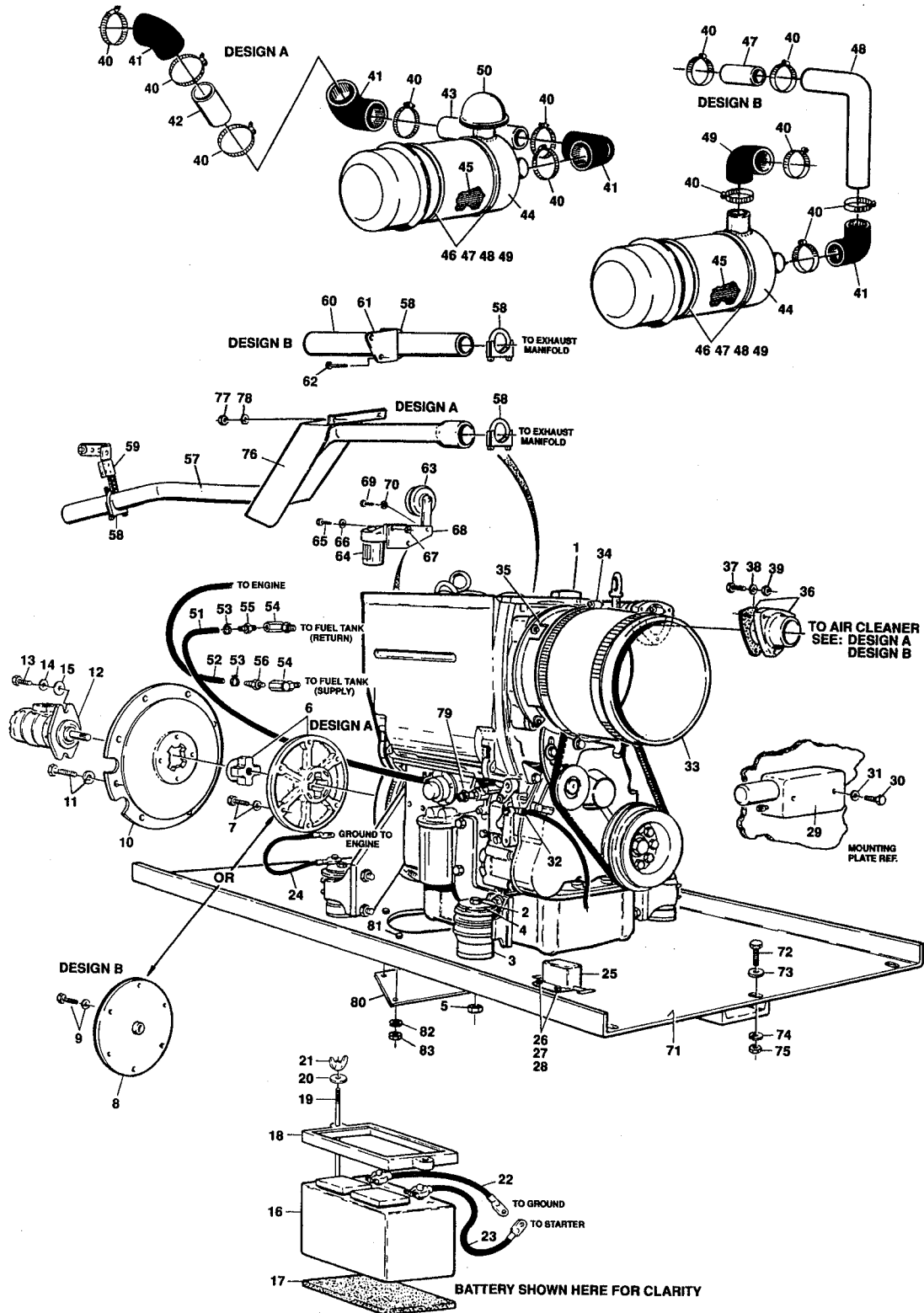


Figure 2-25. Deutz Engine Installation - F2L-1011.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-25	0250245	<b>DEUTZ ENGINE INSTALLATION - F2L-1011 (80" WHEELBASE)</b>	Ref.	A
	0251224	<b>DEUTZ ENGINE INSTALLATION - F2L-1011 (89" WHEELBASE)</b>	Ref.	C
	0252275	<b>DEUTZ ENGINE INSTALLATION - F2L-1011 (89" WHEELBASE WITH NOISE REDUCTION PACKAGE)</b>	Ref.	B
-1	2000106	Engine, Deutz - F2L-1011 Diesel (Attaching Parts)	1	
-2	0641840	Bolt 1/2"-13NC x 5"	4	
-3	0361817	Spacer	4	
-4	4751800	Flatwasher 1/2"	4	
-5	3311805	Locknut 1/2"-13NC	4	
	0239968	Coupling Installation - Lovejoy (Design A)	1	—
	0250594	Coupling Installation - Hayes (Design B)	1	—
-6	1660176	Coupling, Love Joy (Design A) (Attaching Parts)	1	
-7	0700812	Bolt, Metric 8MM x 25MM	6	
	4831900	Lockwasher, Metric 8MM	6	
-8	1660182	Coupling, Hayes (Design B) (Attaching Parts)	1	
-9	0700800	Bolt, Metric 8MM x 16MM	6	
	4831908	Lockwasher, Metric 8MM	6	
-10	0080169	Plate, Adapter (Attaching Parts)	1	
-11	0701014	Bolt, Metric 10MM x 30MM	8	
	4832000	Lockwasher, Metric 10MM	8	
-12	3600145	Pump Assembly - Vickers (Attaching Parts)	1	
-13	0641609	Bolt 3/8"-16NC x 1 1/8"	2	
-14	4761600	Lockwasher 3/8"	2	
-15	4751600	Flatwasher 3/8"	2	
	2900660	Seal Kit - Shaft	1	
-16	0400003	Battery	1	
-17	3980003	Seat, Masonite	1	
-18	0400002	Holddown, Battery (Attaching Parts)	1	
-19	0630370	Rod, Tie-Down	2	
-20	4751600	Flatwasher 3/8"	2	
-21	3300029	Wingnut	2	
-22	1060046	Cable, Battery (Negative to Ground)	1	
-23	1060154	Cable, Battery (Positive to Starter)	1	
-24	1060093	Cable, Battery (Engine to Ground)	1	
-25	3740030	Relay, Adlo (Attaching Parts)	1	
-26	0641408	Bolt 1/4"-20NC x 1"	2	
-27	4761400	Lockwasher 1/4"	2	
-28	3311401	Nut 1/4"-20NC	2	
-29	0060023	Actuator (Attaching Parts)	1	
-30	0641406	Bolt 1/4"-20NC x 3/4"	2	
-31	4761400	Lockwasher 1/4"	2	
-32	0080172	Adapter, Throttle	1	
	3951003	Setscrew #10-24NC x 3/8"	1	
	3450202	Pin, Cotter 1/16" x 1/2"	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-25		<b>DEUTZ ENGINE INSTALLATION - F2L-1011 (CONTINUED)</b>	Ref.	
-33	2720342	Hose, Intake (Attaching Parts)	1	
-34	1320059	Clamp (Air Cleaner Mounted Outside Hood)	2	
	1320059	Clamp (Air Cleaner Mounted Outside Hood)	3	
	4280280	Strip, Neoprene (Not Shown) (When Equipped)	1	
-35	4843513	Intake, Air	1	
-36	3960407	Gasket	1	
	0080177	Adapter, Air Intake (Attaching Parts)	1	
-37	0641512	Bolt 5/16"-18NC x 1 1/2"	3	
-38	4761500	Lockwasher 5/16"	3	
-39	3311501	Nut 5/16"-18NC	3	
-40	1320180	Clamp, Hose	6	
-41	0080039	Elbow, Air Intake (Air Cleaner Mounted Outside Hood) (Design A)	3	
	0080039	Elbow, Air Intake (Air Cleaner Mounted Inside Hood) (Design B)	1	
-42	4564476	Tube, Air Intake (Air Cleaner Mounted Outside Hood) (Design A)	1	
-43	4564475	Tube, Air Intake (Air Cleaner Mounted Outside Hood) (Design A)	1	
-44	0340020	Air Cleaner Assembly	1	
-45	7004214	Element	1	
-46	0340002	Band, Mounting (Attaching Parts)	2	
	0641406	Bolt 1/4"-20NC x 3/4" (Air Cleaner Mounted Outside Hood) (Design A)	4	
	0641420	Bolt 1/4"-20NC x 2 1/2" (Air Cleaner Mounted Inside Hood) (Design B)	4	
	4761400	Lockwasher 1/4"	4	
	3311401	Nut 1/4"-20NC	4	
	0362043	Bar, Spacer (Air Cleaner Mounted Inside Hood Only) (Design B)	2	
-47	2720351	Tube, Rubber (Air Cleaner Mounted Inside Hood) (Design B)	1	
-48	4565347	Tube, Air Intake (Air Cleaner Mounted Inside Hood) (Design B)	1	
-49	0080046	Elbow (Air Cleaner Mounted Inside Hood) (Design B)	1	
-50	1120161	Cap, Inlet (air Cleaner Mounted Outside Hood) (Design A)	1	
-51	2720058	Hose, Fuel Line (Supply)	6 ft./1.8m	
-52	2720271	Hose, Fuel Line (Return)	8 ft./2.4m	
-53	1320022	Clamp, Hose	4	
-54	2200462	Fitting, 90°	2	
-55	2180348	Fitting, Barbed	1	
	0010043	Sealant	A/R	
-56	2180666	Fitting, Barbed	1	
	0010043	Sealant	A/R	
	7000693	Muffler (Standard - Not Shown)	1	
	3220036	Arrestor, Spark (Optional - Not Shown)	1	
-57	4564469	Tailpipe (80" Wheelbase) (Design A)	1	
	4564934	Tailpipe (89" Wheelbase) (Design A)	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-25		<b>DEUTZ ENGINE INSTALLATION - F2L-1011 (CONTINUED)</b>	Ref.	
-58	1320019	Clamp, Muffler (Design A)	2	
	1320019	Clamp, Muffler (Design B)	1	
	1320176	Clamp, Muffler (Design B)	1	
-59	0901387	Bracket, Hanger (Design A) (Attaching Parts)	1	
	3311501	Nut 5/16"-18NC	2	
	4761500	Lockwasher 5/16"	2	
	4751500	Flatwasher 5/16"	2	
	4300038	Stud (Welded on Part)	2	
-60	4565348	Tailpipe (Design B)	1	
-61	0901705	Bracket (Design B) (Attaching Parts)	1	
-62	0701010	Bolt, Metric 10MM x 20MM	2	
	4832000	Lockwasher, Metric 20MM	2	
-63	0140001	Horn	1	
-64		Filter, Fuel (Supplied With Engine) (Attaching Parts)	1	
-65	0641508	Bolt 5/16"-18NC x 1"	2	
-66	4761500	Lockwasher 5/16"	2	
-67	3311501	Nut 5/16"-18NC	2	
-68	0901621	Bracket, Mounting - Filter (Attaching Parts)	1	
-69	0701010	Bolt, Metric M10 x 20MM	2	
-70	4832000	Lockwasher, Metric 10MM	2	
-71	4843437	Tray, Engine Mounting (Air Cleaner Mounted Outside Hood)	1	
	4843934	Tray, Engine Mounting (Air Cleaner Mounted Inside Hood) (Attaching Parts)	1	
-72	0641612	Bolt 3/8"-16NC x 1 1/2"	6	
-73	4751600	Flatwasher 3/8"	12	
-74	4761600	Lockwasher 3/8"	6	
-75	3311601	Nut 3/8"-16NC	6	
-76	4060736	Shield, Exhaust (89" Wheelbase Only) (Design A Exhaust Only) (Attaching Parts)	1	
-77	3311401	Nut 1/4"-20NC	2	
-78	4761400	Lockwasher 1/4"	2	
	4300032	Stud (Welded on Part)	2	
-79	2420110	Sender, Pressure (Standard)	1	
	2180730	Fitting, Adapter (Standard)	1	
	2180749	Fitting, 45° (With 110V Generator Option)	1	
	2180537	Fitting, Nipple (With 110V Generator Option)	1	
	4360037	Switch, Pressure (With 110V Generator Option)	1	
	2180360	Fitting, Tee (With 110V Generator Option)	1	
	2200261	Fitting, Coupling (With 110V Generator Option)	1	
	4360065	Switch, Pressure (Use With Optional Engine Distress Signal)	1	
	2180360	Fitting, Tee (Use With Optional Engine Distress Signal)	1	
	2180749	Fitting, 45° (Use With Optional Engine Distress Signal)	1	
-80	3535551	Plate, Cover (With Noise Reduction Package) (Attaching Parts)	1	
-81	0641408	Bolt 1/4"-20NC x 1"	3	
-82	4761400	Lockwasher 1/4"	3	
-83	3311401	Nut 1/4"-20NC	3	

SECTION 2 — ILLUSTRATED PARTS LIST

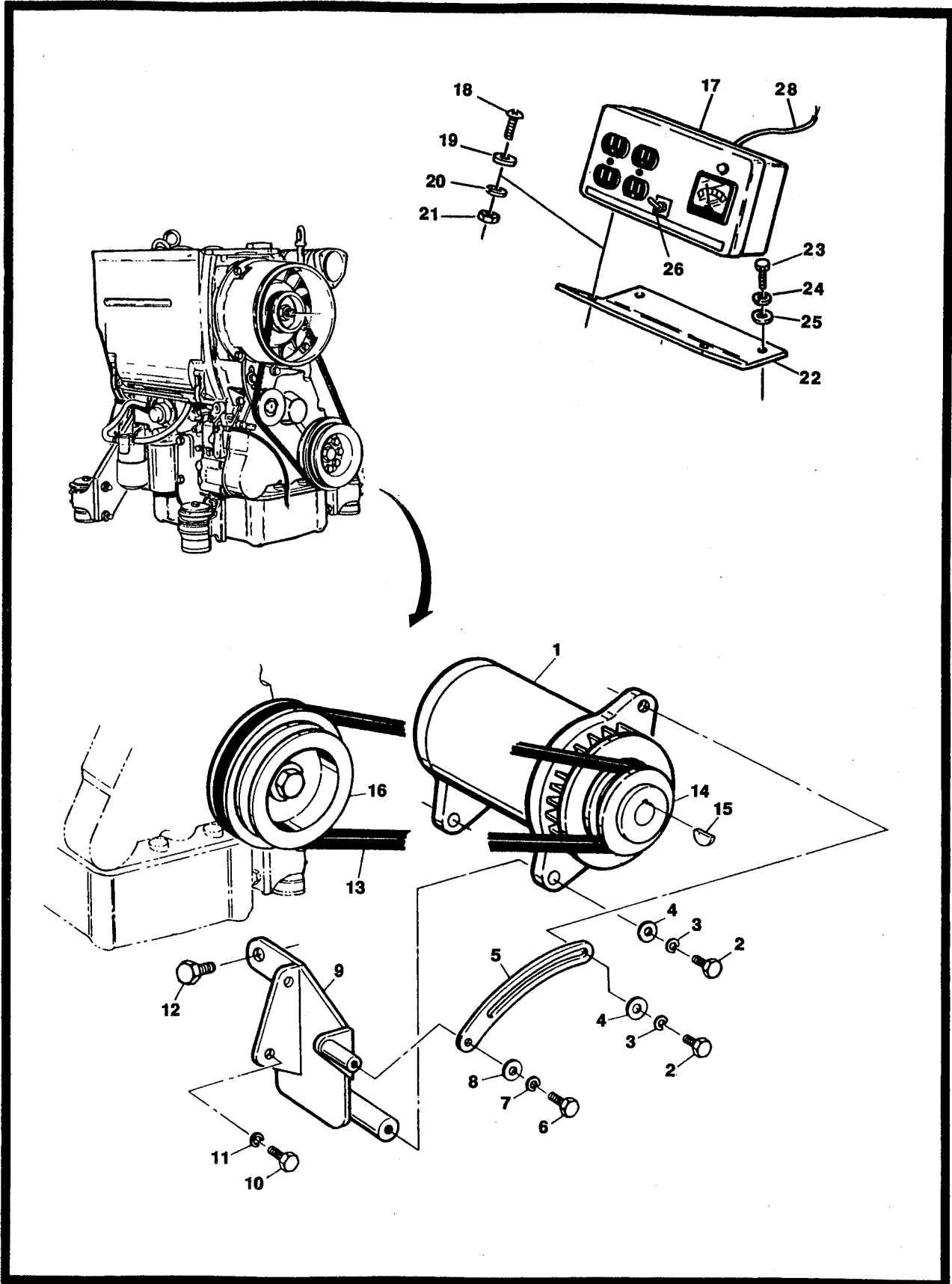


Figure 2-26. Generator Installation - 110V (Deutz).



**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—26	0251801	<b>GENERATOR INSTALLATION - 110V (DEUTZ)</b>	Ref.	C
—1	2460011	Generator (Attaching Parts)	1	
—2	0641510	Bolt 5/16"-18NC x 1 1/4"	3	
—3	4761500	Lockwasher 5/16"	3	
—4	4751500	Flatwasher 5/16"	3	
—5	0361815	----- Arm, Adjustable (Attaching Parts)	1	
—6	0641510	Bolt 5/16"-18NC x 1 1/4"	1	
—7	4761500	Lockwasher 5/16"	1	
—8	4751500	Flatwasher 5/16"	1	
—9	4843410	----- Bracket, Mounting - Generator (Attaching Parts)	1	
—10	0701012	Bolt, Metric 10MM x 25M	2	
—11	4812000	Flatwasher, Metric 10MM	2	
	0100011	Loctite	A/R	
—12	0701414	Bolt, Metric 14MM x 30MM	1	
—13	0480059	----- V-Belt	1	
—14	3580134	Pulley	1	
—15	2860012	Key	1	
—16	3580158	Pulley	1	
—17		Box, Control (Supplied With Generator) (Attaching Parts)	1	
—18	3911004	Screw, Machine #10-24NC x 1/2"	2	
—19	4751000	Flatwasher #10	2	
—20	4761000	Lockwasher #10	2	
—21	3311001	Nut #10-24NC	2	
—22	0901609	----- Bracket, Mounting - Box (Attaching Parts)	1	
—23	0641507	Bolt 5/16"-18NC x 7/8"	2	
—24	4761500	Lockwasher 5/16"	2	
—25	4751500	Flatwasher 5/16"	2	
—26	3251476	----- Decal - Generator	1	
—27	Not Used			
—28	1060012	Cable - 12/4	4 ft./1.2m	

## SECTION 2 — ILLUSTRATED PARTS LIST

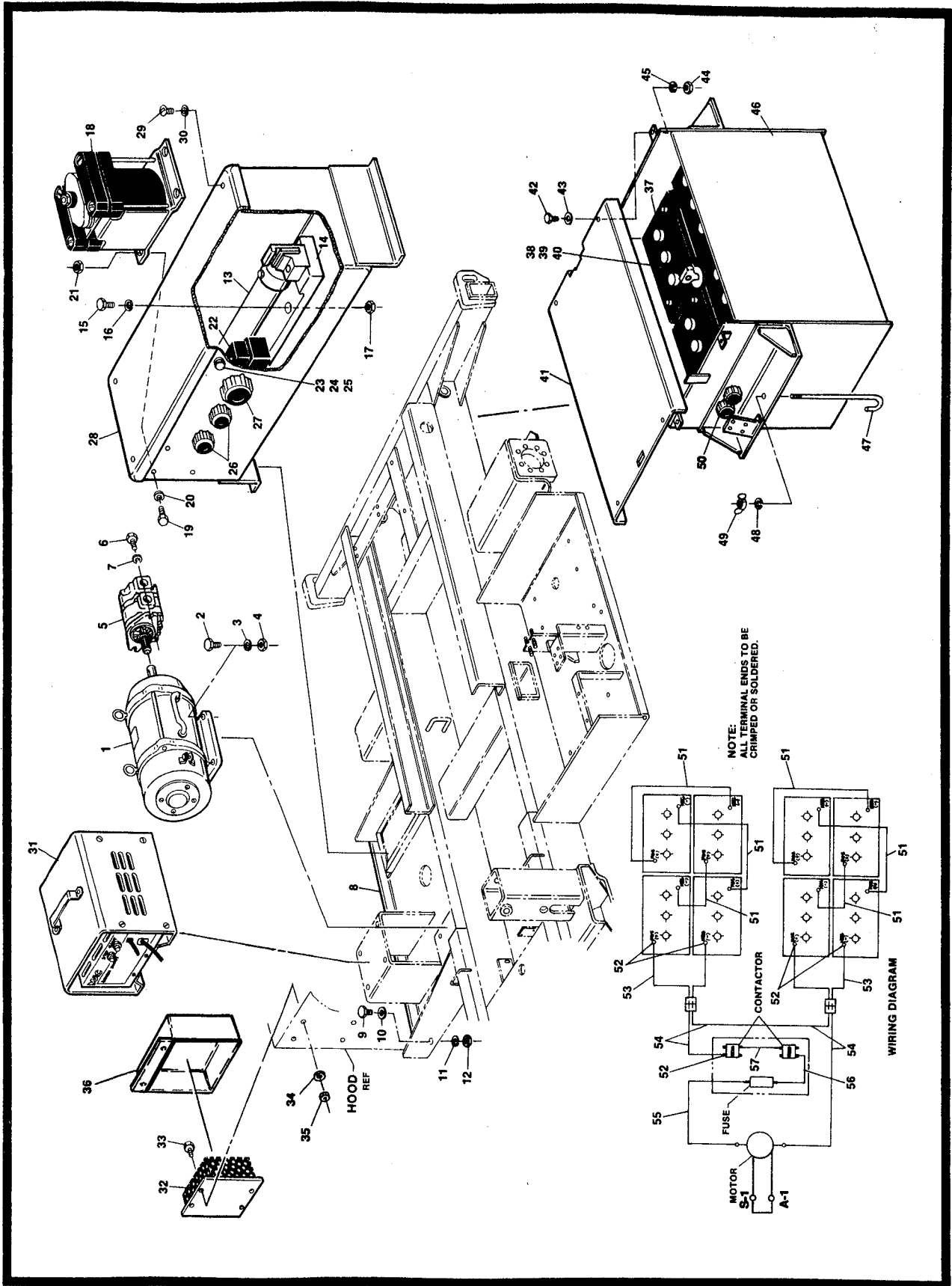


Figure 2-27. Electric Powered Machine Components Installation.

**SECTION 2 — ILLUSTRATED PARTS LIST**

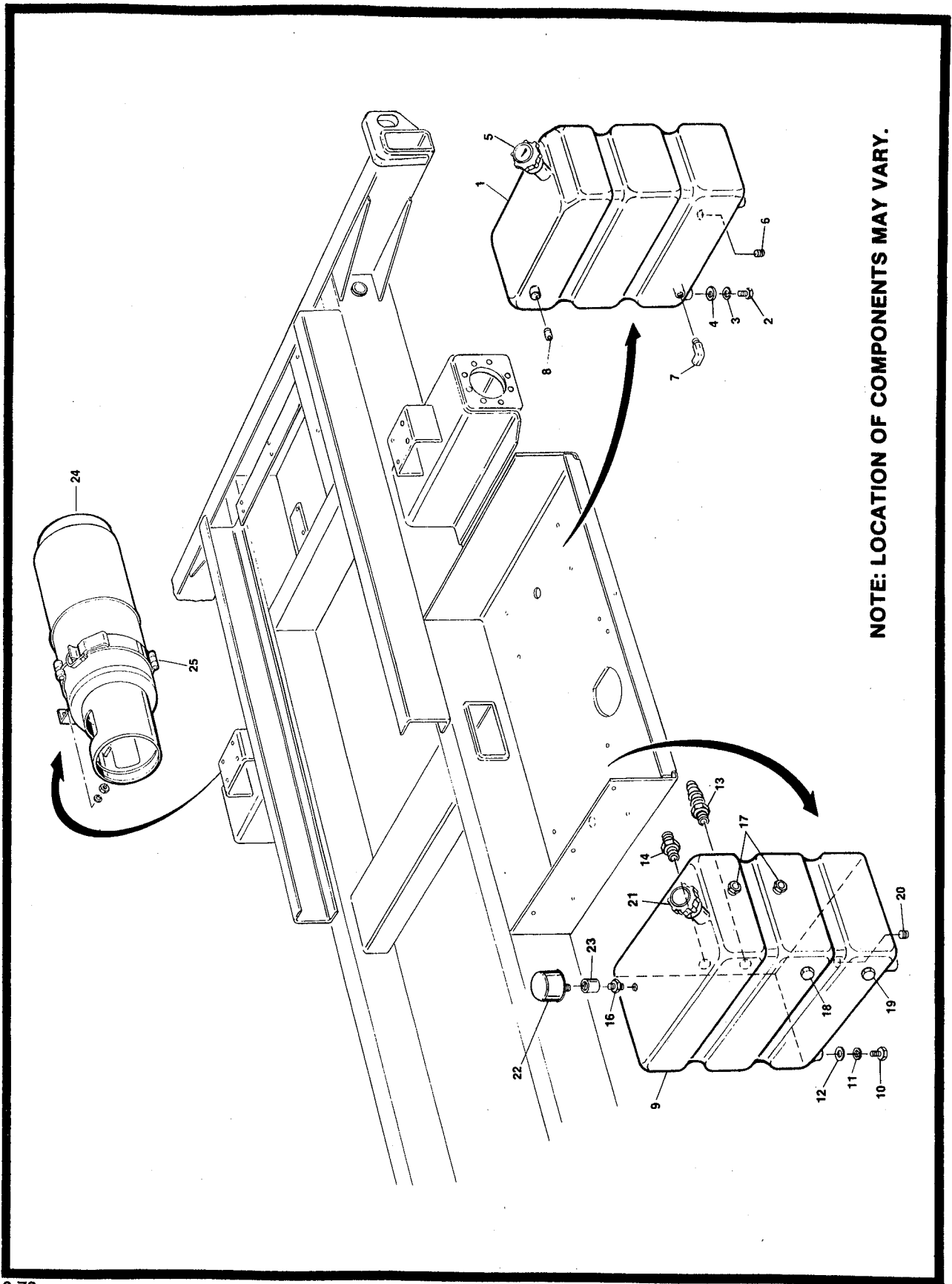
FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—27		<b>ELECTRIC POWERED MACHINE COMPONENTS INSTALLATION</b>	Ref.	
	0250605	<b>MOTOR, PUMP AND CHARGER INSTALLATION</b>	Ref.	C
	0251041	<b>MOTOR PUMP AND CHARGER INSTALLATION (FACTORY MUTUAL APPROVAL)</b>	Ref.	A
—1	3160153	Motor, Electric (Attaching Parts)	1	
—2	0641614	Bolt 3/8"-16NC x 1 3/4"	4	
—3	4761600	Lockwasher 3/8"	4	
—4	3311601	Nut 3/8"-16NC	4	
	0340040	Band, Motor Cover (Factory Mutual Machines Only)	1	
—5	3600170	Pump Assembly (Not Field Serviceable) (Attaching Parts)	1	
—6	0641610	Bolt 3/8"-16NC x 1 1/4"	2	
—7	4761600	Lockwasher 3/8"	2	
	2900660	Seal Kit - Pump Shaft	1	
—8	4843550	Plate, Motor Mounting (Attaching Parts)	1	
—9	0641610	Bolt 3/8"-16NC x 1 1/4"	6	
—10	4751600	Flatwasher 3/8"	12	
—11	4761600	Lockwasher 3/8"	6	
—12	3311601	Nut 3/8"-16NC	6	
—13	2400025	Fuse - 200 Amp	1	
—14	2400027	Fuseholder (Attaching Parts)	1	
—15	0641408	Bolt 1/4"-20NC x 1"	4	
—16	4761400	Lockwasher 1/4"	4	
—17	3311401	Nut 1/4"-20NC	4	
—18	3740064	Relay, Contactor (Attaching Parts)	2	
—19	0641408	Bolt 1/4"-20NC x 1"	4	
—20	4761400	Lockwasher 1/4"	4	
—21	3311401	Nut 1/4"-20NC	4	
—22	3740049	Relay (Standard)	1	
	3740070	Relay (Factory Mutual) (Attaching Parts)	1	
—23	0641408	Bolt 1/4"-20NC x 1"	1	
—24	4761400	Lockwasher 1/4"	1	
—25	3311401	Nut 1/4"-20NC	1	
—26	4460051	Connector, Strain Relief (3/4")	2	
	0960238	Bushing	2	
	3300048	Locknut, Conduit	2	
—27	4460052	Connector, Strain Relief (1/2")	2	
	0960239	Bushing	2	
	3300047	Locknut, Conduit	2	
—28	1670511	Cover, Fuseholder Box (Attaching Parts)	1	



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-27		<b>ELECTRIC POWERED MACHINE COMPONENTS INSTALLATION (CONTINUED)</b>	Ref.	
-29	3911012	Screw, Round Head #10-24NC	4	
-30	4740120	Washer, Neoprene	4	
-31	0400080	Charger, Battery	1	
	7010629	Board, Circuit	1	
-32	1600122	Converter	1	
		(Attaching Parts)		
-33	0641408	Bolt 1/4"-20NC x 1"	4	
-34	4761400	Lockwasher 1/4"	4	
-35	3311401	Nut 1/4"-20NC	4	
-36	0860726	Cover, Converter	1	
	0250502	<b>BATTERIES INSTALLATION (80" WHEELBASE MACHINES)</b>	Ref.	D
	0251754	<b>BATTERIES INSTALLATION (89" WHEELBASE MACHINES)</b>	Ref.	A
-37	0400055	Battery	8	
		(Attaching Parts)		
-38	0630428	Bolt, Hold-Down	2	
	4740273	Washer, Special	2	
-39	4761600	Lockwasher 3/8"	2	
-40	3311601	Nut 3/8"-16NC	2	
-41	1670550	Cover, Battery Box	2	
		(Attaching Parts)		
-42	0641406	Bolt 1/4"-20NC x 3/4"	4	
-43	4751400	Flatwasher 1/4"	4	
-44	4761400	Lockwasher 1/4"	4	
-45	3311401	Nut 1/4"-20NC	4	
-46	4843557	Box, Battery (Left Side)	1	
	4843519	Box, Battery (Right Side)	1	
		(Attaching Parts)		
-47	3841046	J-Rod	2	
-48	4761600	Lockwasher 3/8"	2	
-49	3300029	Wingnut 3/8"-16NC	2	
-50	4460051	Connector, Strain Relief	4	
	0960238	Bushing	4	
	3300048	Locknut	4	
-51	1060352	Cable, Battery (Negative to Positive Terminals)	6	
-52	4460199	End, Terminal	4	
-53	1060347	Cable, Battery (Batteries to Connector)	2	
-54	1060348	Cable, Battery (Batteries to Motor and Contactor)	1	
-55	1060351	Cable, Battery (Motor to Fuse)	1	
-56	1060340	Cable, Battery (Fuse to Contactor)	1	
-57	1060338	Cable, Battery (Contactor to Contactor)	1	

SECTION 2 — ILLUSTRATED PARTS LIST



NOTE: LOCATION OF COMPONENTS MAY VARY.

Figure 2-28. Tanks Installation.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—28		<b>TANKS INSTALLATION</b>	Ref.	
	0250244	<b>TANKS INSTALLATION (FORD AND DEUTZ 2WD WITH 80" WHEELBASE)</b>	Ref.	F
	0250803	<b>TANKS INSTALLATION (FORD AND DEUTZ 2WD WITH 89" WHEELBASE)</b>	Ref.	E
	0239981	<b>TANKS INSTALLATION - FUEL (KOHLER 2WD)</b>	Ref.	B
	0239764	<b>TANKS INSTALLATION - HYDRAULIC OIL (KOHLER 2WD)</b>	Ref.	A
	0250655	<b>TANKS INSTALLATION (ELECTRIC 2WD WITH 80" WHEELBASE)</b>	Ref.	C
	0251851	<b>TANKS INSTALLATION (ELECTRIC 2WD WITH 89" WHEELBASE)</b>	Ref.	B
	0250402	<b>TANKS INSTALLATION (FORD AND DEUTZ 4WD WITH 80" WHEELBASE)</b>	Ref.	F
	0251009	<b>TANKS INSTALLATION (FORD AND DEUTZ 4WD WITH 89" WHEELBASE)</b>	Ref.	D
—1	4400273	Tank, Fuel (Attaching Parts)	1	
—2	0641608	Bolt 3/8"-16NC x 1"	4	
—3	4761600	Lockwasher 3/8"	4	
—4	4751600	Flatwasher 3/8"	4	
—5	1120362	Fuel Cap/Gauge Assembly	1	
—6	2220204	Plug, Pipe	1	
—7	2220317	Fitting, 90° Barbed	1	
—8	2220202	Plug, Pipe	3	
—9	4400282	Hydraulic Tank Assembly (Attaching Parts)	1	B
—10	0641608	Bolt 3/8"-16NC x 1"	4	
—11	4761600	Lockwasher 3/8"	4	
—12	4751600	Flatwasher 3/8"	4	
—13	4400274	Tank, Hydraulic	1	
—14	2210066	Fitting	1	
—15	2220376	Fitting	1	
—16	Not Used			
—17	2220281	Fitting, Straight	1	
	2420115	Gauge, Sight	2	
	0100020	Sealant	A/R	
—18	2220240	Plug	1	
—19	2220242	Plug	1	
—20	3520022	Plug, Magnetic	1	
	0100020	Sealant	A/R	
—21	1120361	Cap	1	
—22	1340021	Breather	1	
—23	2200265	Coupling	1	
	0250790	<b>LP TANKS INSTALLATION (FORD)</b>	Ref.	A
	0239846	<b>LP TANKS INSTALLATION (KOHLER)</b>	Ref.	—
—24	4400040	Tank - L.P. (33.5 Lbs.)	2	
—25	1320065	Strap (1 Per Tank) (Kohler)	2	
	1320126	Clamp (1 Per Tank) (Ford)	2	
	1320127	Latch Mechanism (1 Per Tank) (Ford)	2	

SECTION 2 — ILLUSTRATED PARTS LIST

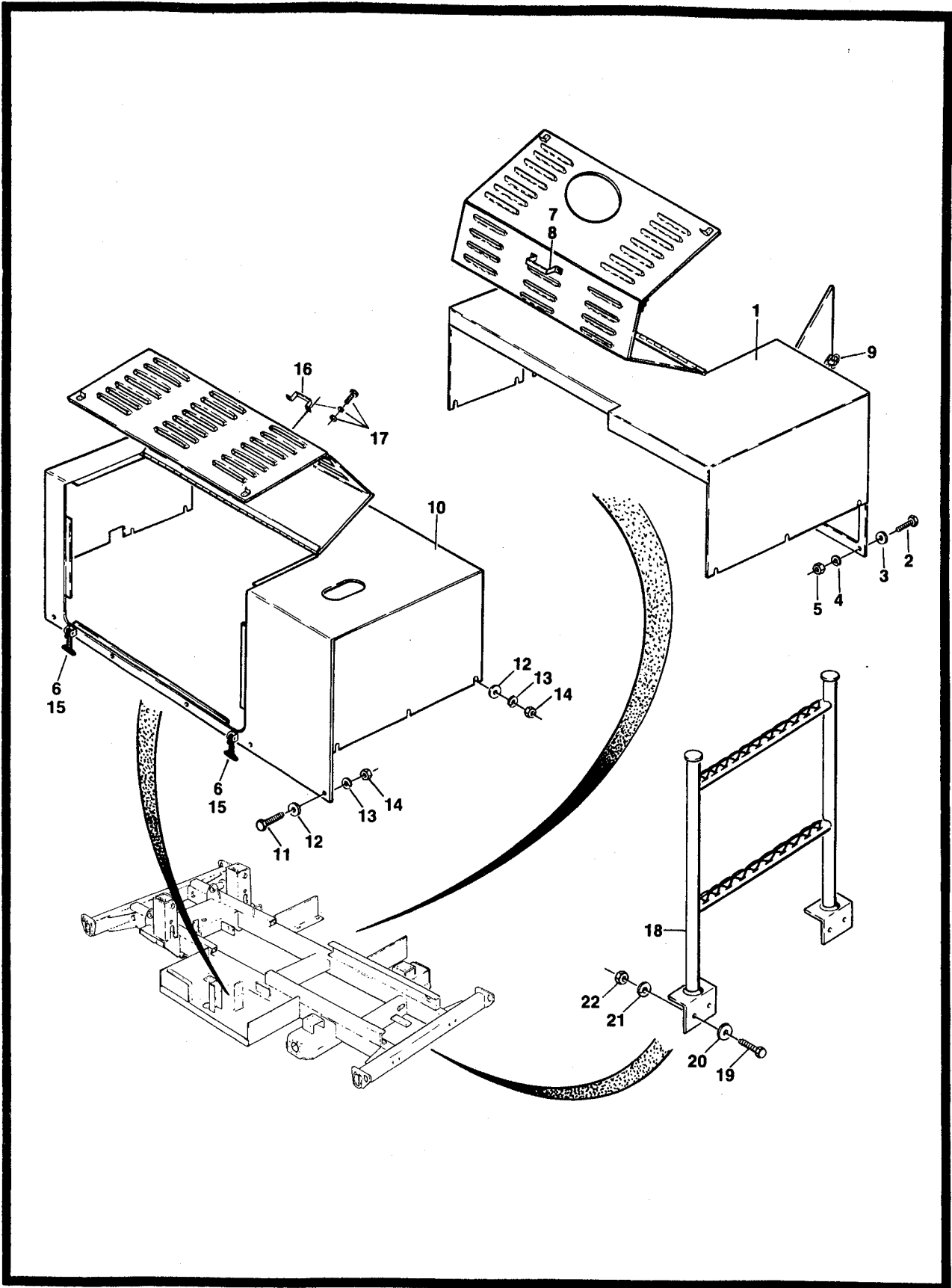


Figure 2-29. Hoods and Ladders Installation - Kohler.



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—29		<b>HOODS AND LADDER INSTALLATION - KOHLER</b>	Ref.	
	0239864	<b>HOODS INSTALLATION</b>	Ref.	—
—1	2680377	Hood Weldment - Left Side (Attaching Parts)	1	
—2	0641406	Bolt 1/4"-20NC x 3/4"	5	
—3	4751400	Flatwasher 1/4"	11	
—4	4761400	Lockwasher 1/4"	11	
—5	3311401	Nut 1/4"-20NC	11	
	4300031	Stud (Welded on Part)	6	
—6	2940035	Latch, Flexible	2	
—7	2560003	Handle (Attaching Parts)	1	
—8	3911008	Screw, Machine #10-24NC x 1/2"	2	
	4761000	Lockwasher #10	2	
	3311001	Nut #10-24NC	2	
—9	2940050	Latch	1	
	3820012	Rivet	2	
—10	2680378	Hood Weldment - Right Side (Attaching Parts)	1	
—11	0641406	Bolt 1/4"-20NC x 3/4"	5	
—12	4751400	Flatwasher 1/4"	11	
—13	4761400	Lockwasher 1/4"	11	
—14	3311401	Nut 1/4"-20NC	11	
—15	2940035	Latch, Flexible	2	
—16	2560003	Handle (Attaching Parts)	1	
—17	3911008	Screw, Machine #10-24NC x 1/2"	2	
	4761000	Lockwasher #10	2	
	3311001	Nut #10-24NC	2	
	0250039	<b>LADDER INSTALLATION</b>	Ref.	—
—18	4843359	Ladder (Attaching Parts)	1	
—19	0641632	Bolt 3/8"-16NC x 4"	4	
—20	4751600	Flatwasher 3/8"	4	
—21	4761600	Lockwasher 3/8"	4	
—22	3311601	Nut 3/8"-16NC	4	

# SECTION 2 — ILLUSTRATED PARTS LIST

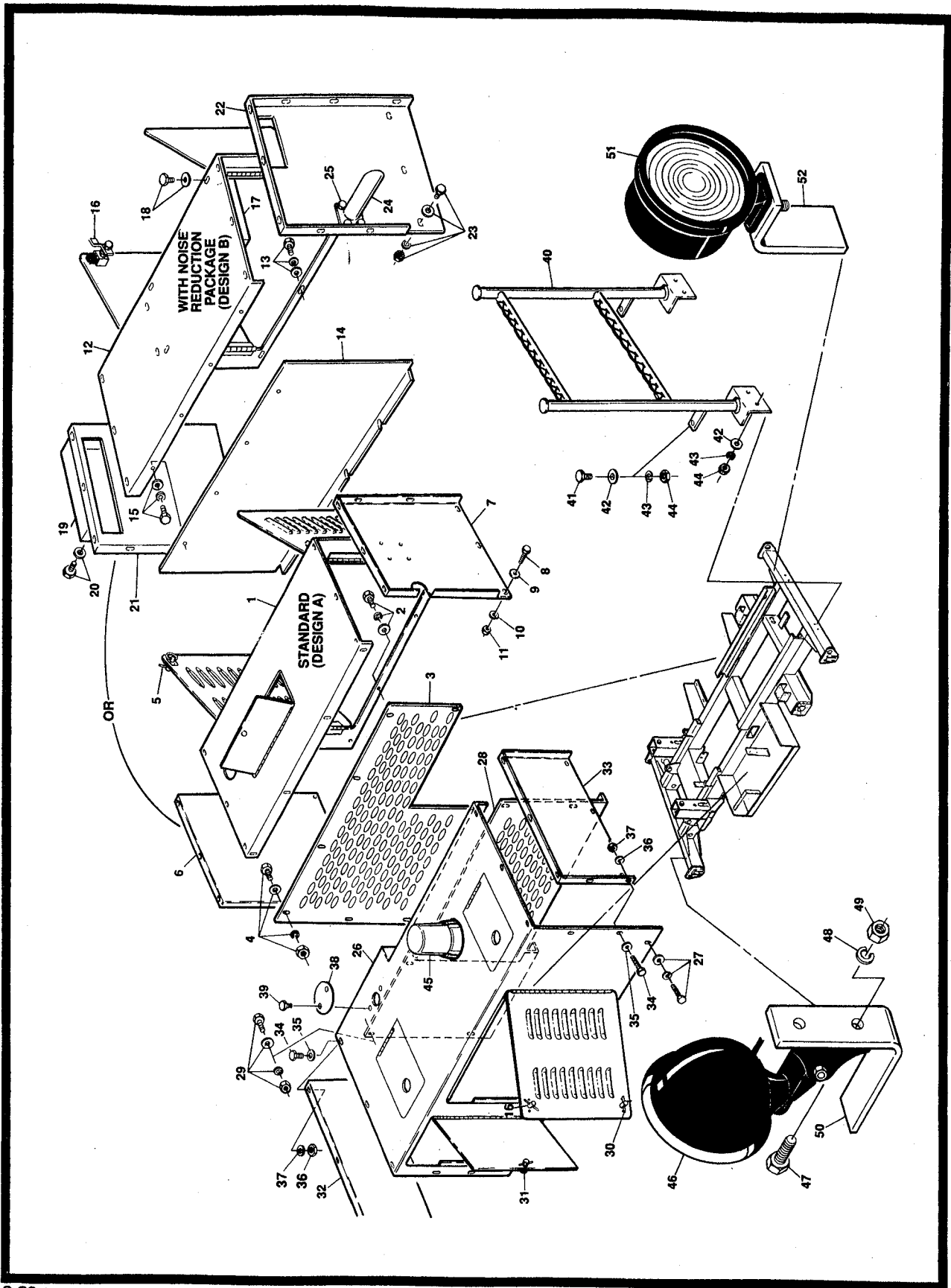


Figure 2-30. Hoods and Ladders Installation - Ford, Deutz and Electric.

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—30		<b>HOODS AND LADDERS INSTALLATION - FORD, DEUTZ AND ELECTRIC</b>	Ref.	
	0250241	<b>HOOD INSTALLATION - RIGHT SIDE (FORD - STANDARD) (DESIGN A)</b>	Ref.	C
	0250247	<b>HOOD INSTALLATION - RIGHT SIDE (DEUTZ - STANDARD) (DESIGN A)</b>	Ref.	B
	0250540	<b>HOOD INSTALLATION - RIGHT SIDE (ELECTRIC - STANDARD) (DESIGN A)</b>	Ref.	—
—1	2680379	Hood Weldment (Ford)	1	
	2680382	Hood Weldment (Deutz)	1	
	2680385	Hood Weldment (Electric) (Attaching Parts)	1	
—2	0641406	Bolt 1/4"-20NC x 3/4"	4	
	4761400	Lockwasher 1/4"	4	
	4751400	Flatwasher 1/4"	4	
—3	3534197	Plate, Inside Cover (Ford)	1	
	3534534	Plate, Inside Cover (Deutz)	1	
	3534064	Plate, Inside Cover (Electric) (Attaching Parts)	1	
—4	0641410	Bolt 1/4"-20NC x 1 1/4"	7	
	4751400	Flatwasher	7	
	4761400	Lockwasher 1/4"	7	
	3311401	Nut 1/4"-20NC	7	
—5	2940048	Latch	2	
	3820019	Rivet	4	
—6	3533705	Panel, Front (Ford)	1	
	2680381	Panel, Front (Deutz)	1	
	3534058	Panel, Front (Electric)	1	
—7	3533706	Panel, Rear (Ford and Deutz)	1	
	3534059	Panel, Rear (Electric) (Attaching Parts)	1	
—8	0641410	Bolt 1/4"-20NC x 1 1/4"	12	
—9	4751400	Flatwasher 1/4"	24	
—10	4761400	Lockwasher 1/4"	12	
—11	3311401	Nut 1/4"-20NC	12	
	0251978	<b>HOOD INSTALLATION - RIGHT SIDE (DEUTZ WITH NOISE REDUCTION PACKAGE) (DESIGN B)</b>	Ref.	A
—12	2680396	Hood Weldment (Deutz) (Attaching Parts)	1	
—13	3941406	Screw, Self-Tapping	4	
	4761400	Lockwasher 1/4"	4	
	4751400	Flatwasher 1/4"	4	
—14	3535350	Plate, Inside Cover (Deutz) (Attaching Parts)	1	
—15	3941406	Screw, Self-Tapping	7	
	4761400	Lockwasher 1/4"	7	
	4751400	Flatwasher 1/4"	7	
—16	2940042	Latch, Door	2	
—17	3535353	Plate, Hood (Top) (Attaching Parts)	1	
—18	0641406	Bolt 1/4"-20NC x 3/4"	8	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—30		<b>HOODS AND LADDERS INSTALLATION - FORD, Ref. DEUTZ AND ELECTRIC (CONTINUED)</b>		
	4751400	Flatwasher 1/4"	16	
	4761400	Lockwasher 1/4"	8	
	3311401	Nut 1/4"-20NC	8	
—19	3535352	----- Plate, Air Intake (Attaching Parts)	1	
—20	0641406	Bolt 1/4"-20NC x 3/4"	6	
	4751400	Flatwasher 1/4"	12	
	4761400	Lockwasher 1/4"	6	
	3311401	Nut 1/4"-20NC	6	
—21	2680395	----- Panel, Front (Deutz)	1	
—22	3535348	Panel, Rear (Deutz) (Attaching Parts)	1	
—23	0641406	Bolt 1/4"-20NC x 3/4"	12	
	0641408	Bolt 1/4"-20NC x 1"	6	
	4751400	Flatwasher 1/4"	34	
	4761400	Lockwasher 1/4"	18	
	3311401	Nut 1/4"-20NC	18	
	0181637	Angle	2	
—24	4844024	----- Snorkel, Exhaust (Attaching Parts)	1	
—25	0641406	Bolt 1/4"-20NC x 3/4"	4	
	4751400	Flatwasher 1/4"	8	
	4761400	Lockwasher 1/4"	4	
	3311401	Nut 1/4"-20NC	4	
	0250242	<b>HOOD INSTALLATION - LEFT SIDE (22 1/2" HEIGHT)</b>	Ref.	A
	0250687	<b>HOOD INSTALLATION - LEFT SIDE (26 1/2" HEIGHT) (NOT SHOWN)</b>	Ref.	A
—26	2680380	Hood Weldment (22 1/2" Height)	1	
	2680387	Hood Weldment (26 1/2" Height) (Attaching Parts)	1	
—27	0641406	Bolt 1/4"-20NC x 3/4"	5	
	4761400	Lockwasher 1/4"	5	
	4751400	Flatwasher 1/4"	5	
—28	3534089	----- Plate, Inside Cover (When Equipped) (Attaching Parts)	1	
—29	0641406	Bolt 1/4"-20NC x 3/4"	6	
	4751400	Flatwasher 1/4"	6	
	4761400	Lockwasher 1/4"	6	
	3311401	Nut 1/4"-20NC	6	
—30	2940048	----- Latch (Valve Area Door)	2	
	3820019	Rivet	4	
—31	2940050	Latch (Ground Control Door)	1	
	3820019	Rivet	2	

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—30		<b>HOODS AND LADDERS INSTALLATION - FORD DEUTZ AND ELECTRIC (CONTINUED)</b>	Ref.	
—32	3533708	Panel, Front (15 11/16" Height)	1	
	3534074	Panel, Front (19 11/16" Height)	1	
—33	3533709	Panel, Rear (15 11/16" Height)	1	
	3534073	Panel, Rear (19 11/16" Height) (Attaching Parts)	1	
—34	0641406	Bolt 1/4"-20NC x 3/4"	8	
—35	4751400	Flatwasher 1/4"	16	
—36	4761400	Lockwasher 1/4"	8	
—37	3311401	Nut 1/4"-20NC	8	
—38	1670560	Plate, Cover (Attaching Parts)	1	
—39	0751006	Screw #10 x 3/4"	2	
	0250332	<b>LADDER INSTALLATION (ALL 80" WHEELBASE CM40RT/80" WHEELBASE CM33RT WITH TRAVERSING PLATFORM)</b>	Ref.	A
	0252253	<b>LADDER INSTALLATION (CM40RT WITH TRAVERSING PLATFORM BUILT AFTER SEPTEMBER 1991)</b>	Ref.	—
	0250876	<b>LADDER INSTALLATION (ALL 89" WHEELBASE CM40RT WITH FIXED PLATFORM/89" WHEELBASE CM40RT WITH TRAVERSING PLATFORM BUILT PRIOR TO SEPTEMBER 1991/89" WHEELBASE CM33RT WITH TRAVERSING PLATFORM)</b>	Ref.	B
	0250331	<b>LADDER INSTALLATION (80" WHEELBASE CM33RT WITH FIXED PLATFORM)</b>	Ref.	A
	0250875	<b>LADDER INSTALLATION (89" WHEELBASE CM33RT WITH FIXED PLATFORM/89" WHEELBASE CM25RT WITH TRAVERSING PLATFORM BUILT AFTER AUGUST 1991)</b>	Ref.	B
	0251074	<b>LADDER INSTALLATION (CM25RT WITH FIXED PLATFORM)</b>	Ref.	A
	0251075	<b>LADDER INSTALLATION (CM25RT WITH TRAVERSING PLATFORM BUILT PRIOR TO AUGUST 1991)</b>	Ref.	A
—40	4843456	Ladder (All 80" Wheelbase CM40RT/80" Wheelbase CM33RT with Traversing Platform)	1	
	4843993	Ladder (All 89" Wheelbase CM40RT with Traversing Platform)	1	
	4843626	Ladder (All 89" Wheelbase CM40RT with Fixed Platform/ 89" Wheelbase CM33RT with Traversing Platform)	1	
	4843455	Ladder (80" Wheelbase CM33RT with Fixed Platform)	1	
	4843625	Ladder (89" Wheelbase CM33RT with Fixed Platform/CM25RT with Traversing Platform Built After August 1991)	1	
	4843683	Ladder (CM25RT with Fixed Platform)	1	
	4843684	Ladder (CM25RT with Traversing Platform Built Prior to August 1991) (Attaching Parts)	1	
—41	0641612	Bolt 3/8"-16NC x 1 1/2"	2	
—42	4751600	Flatwasher 3/8"	8	
—43	4761600	Lockwasher 3/8"	6	
—44	3311601	Nut 3/8"-16NC	6	
	4300034	Stud (Welded on Part)	4	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-30		<b>HOODS AND LADDERS INSTALLATION - FORD DEUTZ AND ELECTRIC (CONTINUED)</b>	Ref.	
	0252266	<b>BEACON LIGHT INSTALLATION (OPTIONAL)</b>	Ref.	—
-45	2920018	Light, Beacon (Amber)	1	
	0251800	<b>HEADLIGHT AND TAILLIGHT INSTALLATION (OPTIONAL)</b>	Ref.	—
-46	2920001	Headlight (Attaching Parts)	2	
-47	0641608	Bolt 3/8"-16NC x 1"	2	
-48	4761600	Lockwasher 3/8"	2	
-49	3311601	Nut 3/8"-16NC	2	
-50	0900446	Bracket, Mounting	1	
-51	2920019	Tailight	2	
-52	0901382	Bracket	2	

## SECTION 2 — ILLUSTRATED PARTS LIST

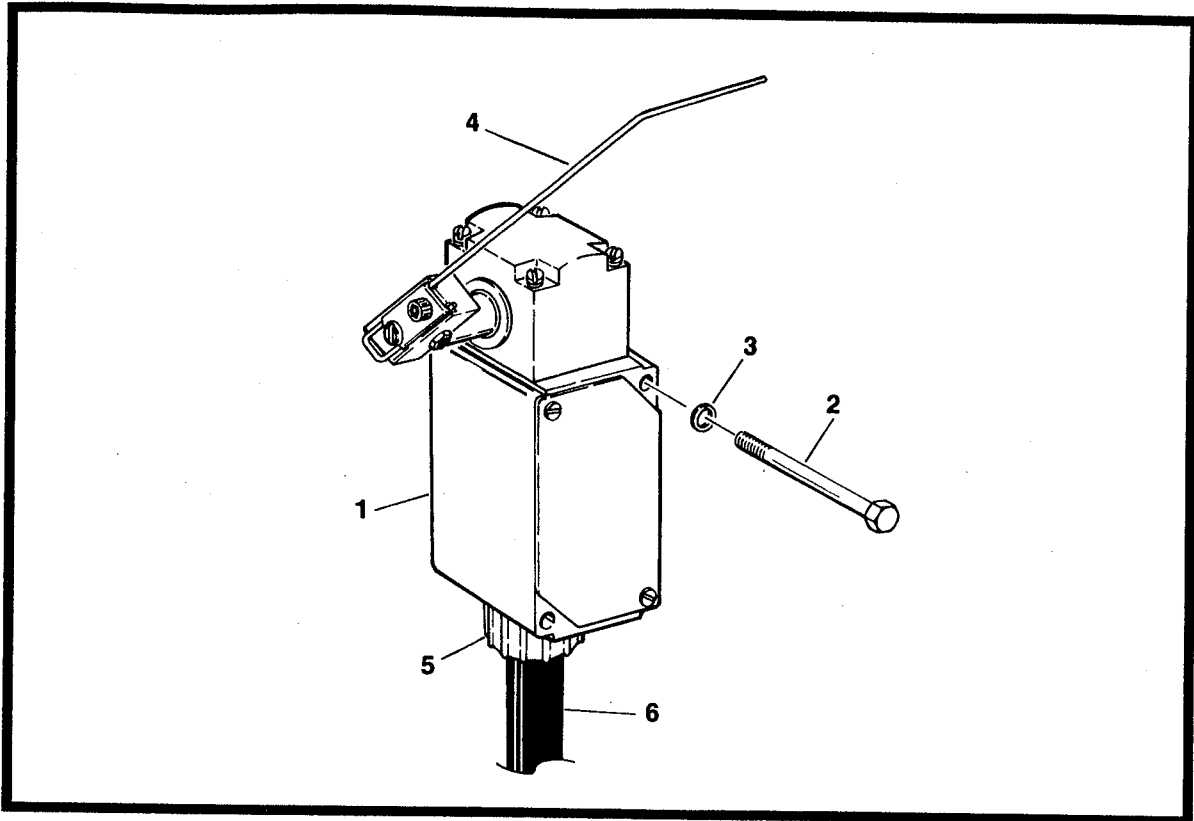


Figure 2-31. Limit Switches Installation.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—31	0250146 0250147	<b>LIMIT SWITCH INSTALLATION (STANDARD) LIMIT SWITCH INSTALLATION (DRIVE CUT-OUT OPTION)</b>	Ref. Ref.	— A
—1	4360057	Switch, Limit - High Engine/High Drive Cutout (Attaching Parts)	1	
—2	3911032	Screw, Machine #10-24NC x 2"	2	
—3	4761000	Lockwasher #10	2	
—4	4360056	Lever, Switch	1	
—5	4460052	Connector, Strain Relief	1	
—6	1060300	Cable, Control - 16/2 (Standard Machines)	10 ft.	
	1060330	Cable, Control - 16/3 (Factory Mutual Electric Machines)	10 ft.	
	1060300	Cable, Control - 16/3 (Drive Cutout Option)	20 ft.	

SECTION 2 — ILLUSTRATED PARTS LIST

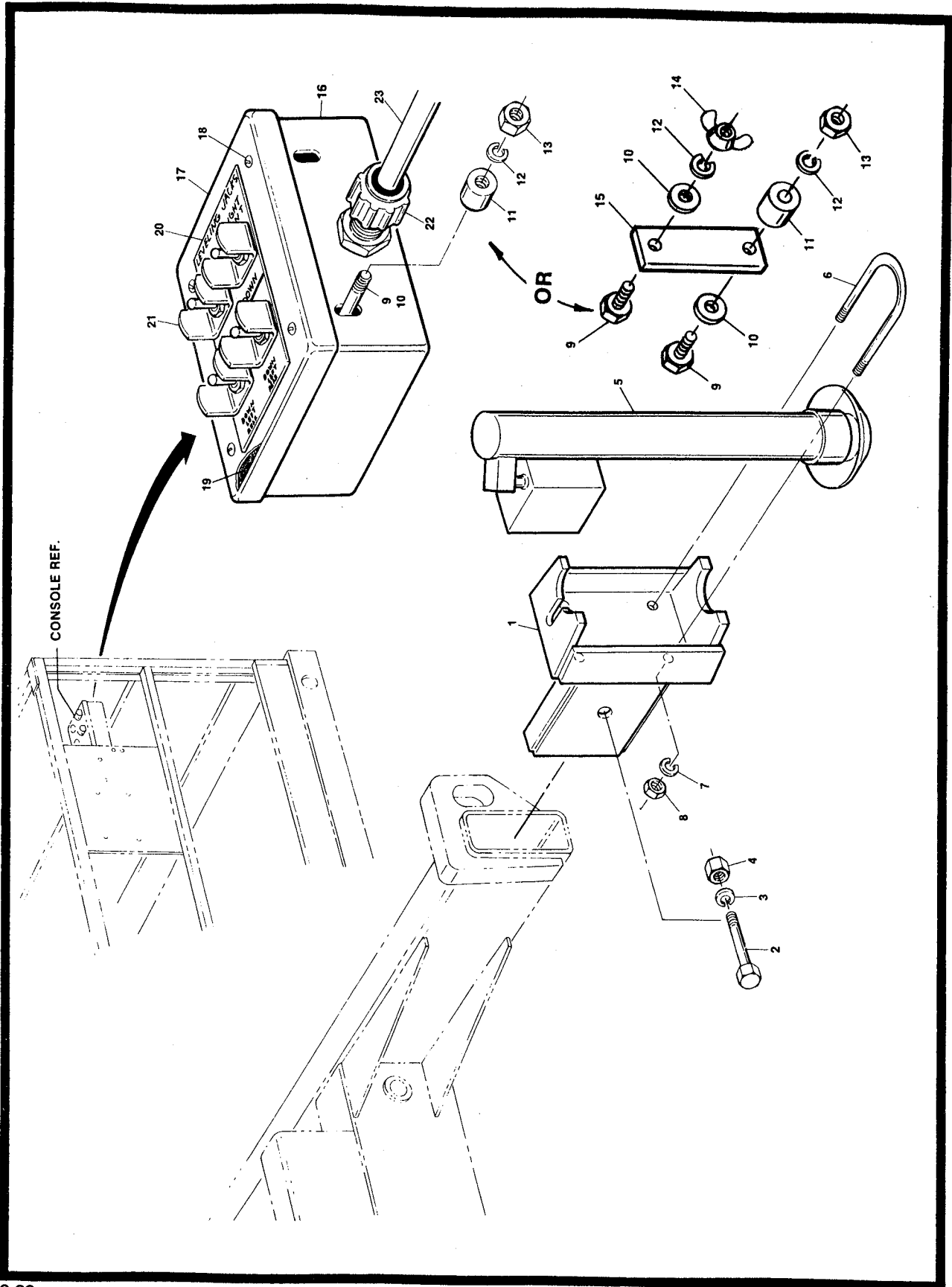


Figure 2-32. Hydraulic Leveling Jack Components Installation.



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—32	0250151	<b>HYDRAULIC LEVELING JACK COMPONENTS INSTALLATION (80" WHEEL BASE MACHINES)</b>	Ref.	B
	0251745	<b>HYDRAULIC LEVELING JACK COMPONENTS INSTALLATION (89" WHEELBASE MACHINES)</b>	Ref.	A
	0251132	<b>HYDRAULIC LEVELING JACK COMPONENTS INSTALLATION (WITH DETACHABLE CONTROL BOX) (80" WHEELBASE MACHINES)</b>	Ref.	—
	0251792	<b>HYDRAULIC LEVELING JACK COMPONENTS INSTALLATION (WITH DETACHABLE CONTROL BOX) (89" WHEELBASE MACHINES)</b>	Ref.	A
—1	4843300	Support, Jack Cylinder (80" Wheelbase Machines)	4	
	4843866	Support, Jack Cylinder (89" Wheelbase Machines) (Attaching Parts)	4	
—2	0642232	Bolt 3/4"-10NC x 4"	1	
—3	4762200	Lockwasher 3/4"	1	
—4	3312201	Nut 3/4"-10NC	1	
—5	1680378	Jack Cylinder Assembly (See Figure 2-33 for Breakdown) (Attaching Parts)	4	
—6	0630327	U-Bolt	2	
—7	4761800	Lockwasher 1/2"	4	
—8	3311801	Nut 1/2"-13NC	4	
	0250153	<b>JACK CONTROL BOX INSTALLATION</b>	Ref.	A
	0251133	<b>JACK CONTROL BOX INSTALLATION (DETACHABLE)</b>	Ref.	—
	0860533	Control Box Assembly (Attaching Parts)	1	B
—9	0641409	Bolt 1/4"-20NC x 1 1/8"	2	
	4300083	Stud (Welded on Part) (Detachable Box)	2	
—10	4751400	Flatwasher 1/4"	2	
—11	4562298	Tube, Spacer	2	
—12	4761400	Lockwasher 1/4"	2	
—13	3311401	Nut 1/4"-20NC	2	
—14	3300202	Wingnut 1/4"-20NC (Detachable Box)	2	
—15	3534487	Plate, Mounting (Detachable Box)	1	
—16	0860556	Box, Control	1	
—17	1670469	Cover (Attaching Parts)	1	
—18	0750804	Screw, Machine #8 x 1/2"	4	
	4770800	Starwasher #8	4	
	3300177	Nut, Tinnerman	4	
—19	4420008	Tape, Sealing	2 Ft.	
—20	3251795	Nameplate	1	
—21	4360202	Switch, Toggle - DPDT/MC	4	
	4060229	Shield	4	
	3790012	O-Ring	4	
—22	4460052	Connector	1	
	0960239	Bushing	1	
	3300047	Locknut, Conduit	1	
—23	1060018	Cable, Electrical - 16/12 (CM40RT)	70 ft./21.3m	
	1060018	Cable, Electrical - 16/12 (CM33RT)	65 ft./19.8m	
	1060018	Cable, Electrical - 16/12 (CM25RT)	51 ft./15.5m	

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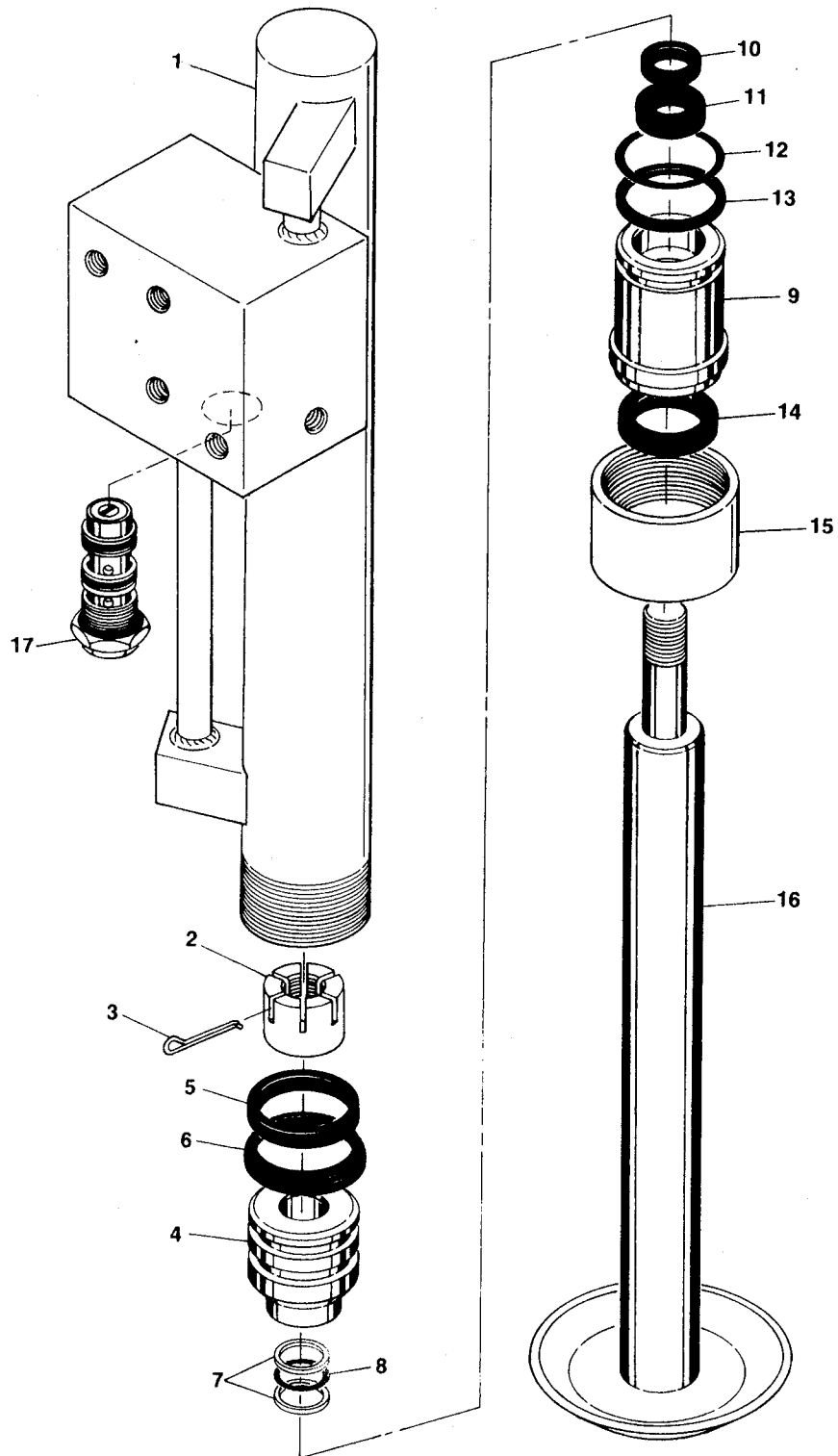


Figure 2-33. Jack Cylinder Assembly.

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—33	1680378	<b>JACK CYLINDER ASSEMBLY</b>	Ref.	C
—1	1680661	Cylinder, Barrel	1	
—2	3300164	Nut, Piston Retaining	1	
	0100011	Loctite #242	A/R	
—3	3420931	Pin, Cotter	1	
—4	3480089	Piston	1	
—5	Kit	Ring, Wear	1	
—6	Kit	Seal, Piston	1	
—7	Kit	Back-Up Ring	2	
—8	Kit	O-Ring	1	
—9	1680895	Head	1	
—10	Kit	Ring, Wear	1	
—11	Kit	Back-Up Ring	1	
—12	Kit	O-Ring	1	
—13	Kit	Back-Up Ring	1	
—14	Kit	Wiper Seal	1	
—15	1120263	Cap, Head Retainer	1	
	0100011	Loctite #242	A/R	
—16	1681266	Rod	1	
—17	4640639	Valve, Cartridge	1	
	2901130	Seal Kit (Includes Items 5,6,7,8,10,11,12,13 and 14.)	1	

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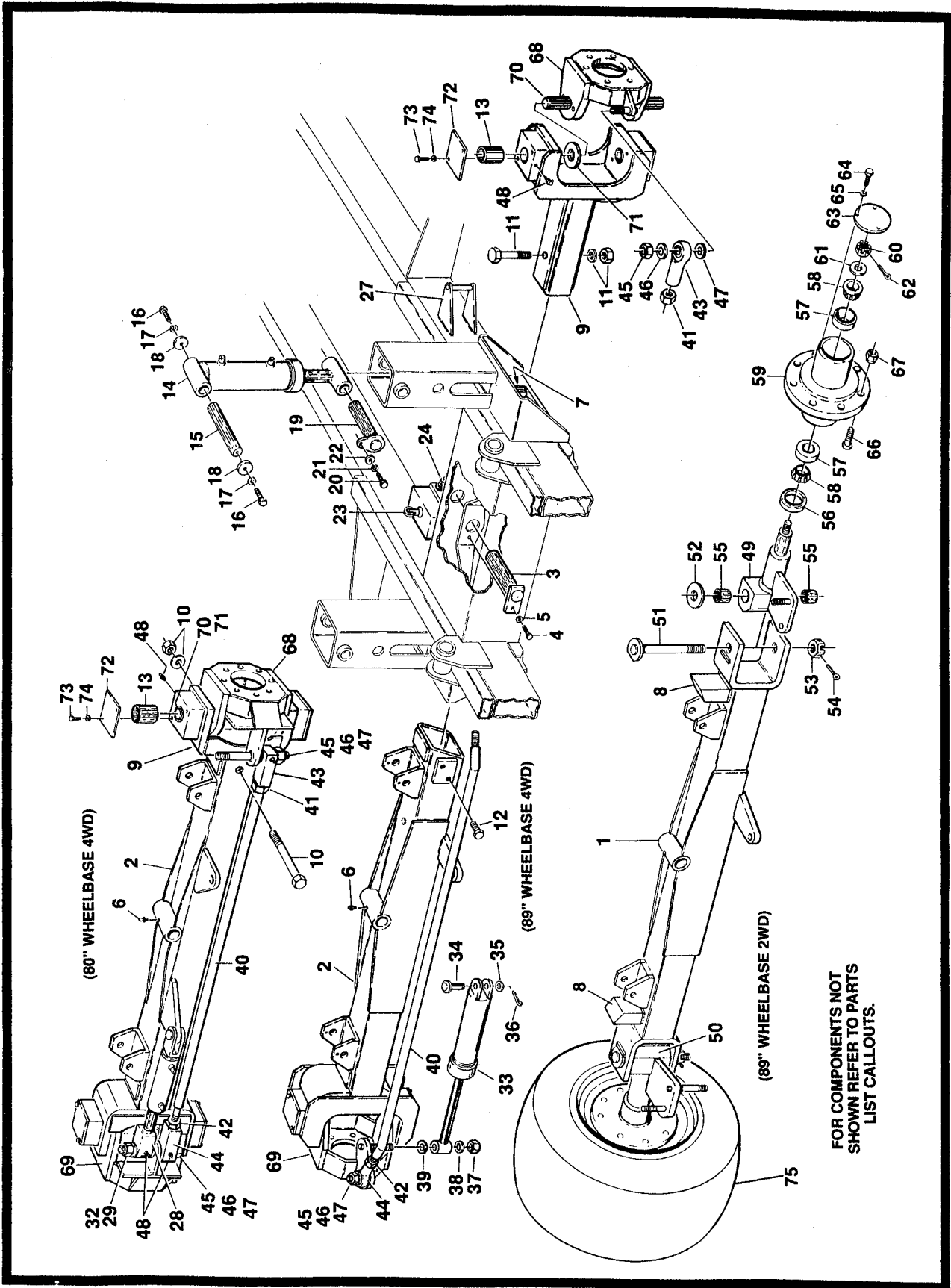


Figure 2-34. Axle and Steering Assemblies and Installation.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-34		<b>AXLE AND STEERING ASSEMBLIES AND INSTALLATIONS</b>	Ref.	
	0250238	<b>FIXED AXLE INSTALLATION (80" WHEELBASE 2WD)</b>	Ref.	—
	0251094	<b>FIXED AXLE INSTALLATION (89" WHEELBASE 2WD)</b>	Ref.	—
	0239632	<b>OSCILLATING AXLE INSTALLATION (80" WHEELBASE 2WD)</b>	Ref.	B
	0250812	<b>OSCILLATING AXLE INSTALLATION (89" WHEELBASE 2WD)</b>	Ref.	D
	0250239	<b>FIXED AXLE INSTALLATION (80" WHEELBASE 4WD)</b>	Ref.	—
	0251095	<b>FIXED AXLE INSTALLATION (89" WHEELBASE 4WD)</b>	Ref.	—
	0250116	<b>OSCILLATING AXLE INSTALLATION (80" WHEELBASE 4WD)</b>	Ref.	—
	0250813	<b>OSCILLATING AXLE INSTALLATION (89" WHEELBASE 4WD)</b>	Ref.	D
—1	4843240	Front Axle Weldment (80" Wheelbase 2WD) (Not Shown)	1	
	4843571	Front Axle Weldment (89" Wheelbase 2WD)	1	
—2	4843388	Front Axle Weldment (80" Wheelbase 4WD)	1	
	4843592	Front Axle Weldment (89" Wheelbase 4WD) (Attaching Parts)	1	
—3	4842795	Pin Weldment	1	
—4	0641606	Bolt 3/8"-16NC x 3/4"	1	
—5	4761600	Lockwasher 3/8"	1	
	0961029	----- Bushing, Bronze	2	
—6	2160002	Fitting, Grease	1	
—7	3531655	Shim - 1/8"	A/R	
	3531656	Shim - 11/64"	A/R	
	3531657	Shim - 1/4"	A/R	
—8	0560468	Block, Stop (80" Wheelbase Fixed Axle Only)	2	
	0560901	Block, Stop (89" Wheelbase Fixed Axle Only)	2	
—9	4843420	Axle Yoke Weldment (80" Wheelbase 4WD Only)	1	
	4843596	Axle Yoke Weldment (89" Wheelbase 4WD Only) (Attaching Parts)	1	
—10	0682444	Bolt 7/8"-9NC x 5 1/2" (Grade 8) (80" Wheelbase)	1	
	4752400	Flatwasher 7/8" (80" Wheelbase)	1	
	3312405	Locknut 7/8"-9NC (80" Wheelbase)	1	
—11	0642240	Bolt 3/4"-10NC x 5" (89" Wheelbase)	1	
	4752200	Flatwasher 3/4" (89" Wheelbase)	1	
	3312205	Locknut 3/4"-10NC (89" Wheelbase)	1	
—12	0642208	Bolt 3/4"-10NC x 1" (89" Wheelbase Only)	1	
	0100011	Loctite #242	1	
	0961029	----- Bushing, Bronze	4	
—14	1681608	Lockout Cylinder Assembly (80" Wheelbase Oscillating Axle Only) (See Figure 2-37 for Breakdown)	2	
	1682185	Lockout Cylinder Assembly (89" Wheelbase Oscillating Axle Only) (See Figure 2-37 for Breakdown) (Attaching Parts)	2	
—15	3421335	Pin (Top)	1	
—16	0641606	Bolt 3/8"-16NC x 3/4" (Top)	2	
—17	4761600	Lockwasher 3/8" (Top)	2	
—18	4740308	Flatwasher, Special (Top)	2	
—19	4842794	Pin (Bottom)	1	
—20	0641406	Bolt 1/4"-20NC x 3/4" (Bottom)	1	
—21	4761400	Lockwasher 1/4" (Bottom) (When Equipped)	1	
—22	4751400	Flatwasher 1/4" (Bottom)	2	
	0100011	Loctite #242	A/R	
—23	4640485	----- Lockout Valve Assembly (Oscillating Axle Only) (See Figure 2-38 for Breakdown) (Attaching Parts)	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-34		<b>AXLE AND STEERING ASSEMBLIES AND INSTALLATIONS (CONTINUED)</b>	Ref.	
-24	0641632 4751600 4761600 3311601	Bolt 3/8"-16NC x 4" Flatwasher 3/8" Lockwasher 3/8" Nut 3/8"-16NC	2 2 2 2	
-25	Not Used			
-26	Not Used			
	0239636 0250819 0252242	<b>STEERING INSTALLATION (80" WHEELBASE 2WD)</b> <b>STEERING INSTALLATION (89" WHEELBASE 2WD)</b> <b>STEERING INSTALLATION (89" WHEELBASE 2WD - CSA)</b>	Ref. Ref. Ref.	C B —
	0250118 0251010	<b>STEERING INSTALLATION (80" WHEELBASE 4WD)</b> <b>STEERING INSTALLATION (89" WHEELBASE 4WD)</b>	Ref. Ref.	D E
-27	4843735	Guide, Hose (89" Wheelbase 4WD Only)	2	
-28	1682483	Steer Cylinder Installation (80" Wheelbase)	2	
	1681953	Steer Cylinder Assembly (See Figure 2-35 for Breakdown)	2	
		Steer Cylinder Assembly (See Figure 2-35 for Breakdown)	2	
		<b>Note: When replacing complete cylinder recommend using p/n 1682483 cylinder. (Attaching Parts)</b>		
-29	3312205	Locknut 3/4"-10NC	1	
-30	Not Used			
-31	Not Used			
-32	4740321	Washer, Special	1	
-33	1681604	Steer Cylinder Installation (89" Wheelbase)	1	
		Steer Cylinder Assembly (See Figure 2-36 for Breakdown)	1	
		(Attaching Parts)		
-34	3431620	Pin, Clevis (Frame Attach)	1	
-35	4712600	Flatwasher 1" Narrow	1	
-36	3450608	Pin, Cotter	1	
-37	3322205	Locknut 3/4"-16NF (Spindle Attach)	1	
-38	4712200	Flatwasher 3/4"	1	
-39	4740321	Washer, Special	1	
-40	3840990	Tie-Rod Installation (80" Wheelbase)	1	
	3841051	Tie-Rod Installation (89" Wheelbase)	1	
	3841056	Tie-Rod (All 80" Wheelbase)	1	
	3300228	Tie-Rod (2WD 89" Wheelbase)	1	
-41	3300230	Tie-Rod (4WD 89" Wheelbase)	1	
		Nut, Jam 1"-12NF (LH Threads) (80" Wheelbase)	1	
		Nut, Jam 3/4"-16NF (LH Threads) (89" Wheelbase - 4WD Built Prior to August 1990 and all 2WD)	1	
	3322202	Nut, Jam 3/4"-16NF (RH Threads) (89" Wheelbase - 4WD Built After August 1990)	1	
-42	3322602	Nut, Jam 1"-12NF (RH Threads) (80" Wheelbase)	1	
	3322202	Nut, Jam 3/4"-16NF (RH Threads) (89" Wheelbase)	1	
-43	0560703	Block, Tie-Rod (LH Side) (80" Wheelbase)	1	
	1360188	Block, Tie-Block (LH Side) (89" Wheelbase - 4WD Built Prior to August 1990 and all 2WD)	1	
	1360122	Block, Tie-Block (LH Side) (89" Wheelbase - 4WD Built after August 1990)	1	
-44	0560042	Block, Tie-Block (RH Side) (80" Wheelbase)	1	
	1360122	Block, Tie-Block (RH Side) (89" Wheelbase) (Attaching Parts)	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-34		<b>AXLE AND STEERING ASSEMBLIES AND INSTALLATION (CONTINUED)</b>	Ref.	
-45	3312205	Locknut 3/4"-10NC	1	
-46	4712200	Flatwasher 3/4" Narrow	1	
-47	4740321	Washer, Special (80" Wheelbase)	1	
	4740372	Washer, Special (89" Wheelbase)	1	
-48	2160002	Fitting, Grease (2WD)	6	
	2160002	Fitting, Grease (4WD)	2	
	2160001	Fitting, Grease - 90° (4WD)	4	
		Spindle and Hub Installation (80" Wheelbase 2WD)	1	
		Spindle and Hub Installation (89" Wheelbase 2WD)	1	
-49	4843254	Spindle (LH Side) (80" Wheelbase) (Not Shown)	1	
	4843578	Spindle (LH Side) (89" Wheelbase - Standard)	1	
	4843990	Spindle (LH Side) (89" Wheelbase - CSA)	1	
-50	4843253	Spindle (RH Side) (80" Wheelbase) (Not Shown)	1	
	4843577	Spindle (RH Side) (89" Wheelbase - Standard)	1	
	4843991	Spindle (RH Side) (89" Wheelbase - CSA)	1	
-51	3421340	(Attaching Parts) King Pin (Standard)	1	
	3421979	King Pin (CSA)	1	
-52	0440162	Washer, Thrust	1	
-53	3323003	Nut, Slotted 1 1/4"-12NF	1	
-54	3450610	Pin, Cotter 3/16" x 2 1/2"	1	
-55	0960839	Bushing, Bronze (2 Per Spindle)	4	
-56	3960353	Seal, Oil (1 Per Side)	2	
-57	0440174	Cup, Bearing (2 Per Side)	4	
-58	0440175	Cone, Bearing (2 Per Side)	4	
-59	2780166	Hub, Wheel (80" Wheelbase)	2	
	2780177	Hub, Wheel (89" Wheelbase)	2	
-60	3322603	(Attaching Parts) Nut, Slotted 1"-12NF	1	
-61	4740034	Washer, Special	1	
-62	3450610	Pin, Cotter 3/16" x 2 1/2"	1	
-63	1120311	Cap, Hub (1 Per Side) (2WD) (Attaching Parts)	2	
-64	0721004	Screw, Machine #10-24NC x 1/2"	3	
-65	4761000	Lockwasher #10	3	
-66	0630408	Bolt, Wheel 9/16"-18NF x 1 5/8" (8 Per Side) (80" Wheelbase)	16	
	0630137	Bolt, Wheel 5/8"-18NF x 1 7/8" (9 Per Side) (89" Wheelbase)	18	
-67	3300212	Nut, Wheel 9/16"-18NF x (8 Per Side) (80" Wheelbase)	16	
	3300012	Nut, Wheel 5/8"-18NF (9 Per Side) (89" Wheelbase)	18	
-68	4843386	Spindle Installation (80" Wheelbase 4WD)	1	
	4130232	Spindle (LH Side) (80" Wheelbase)	1	
	4843387	Spindle (LH Side) (89" Wheelbase)	1	
-69	4130233	Spindle (RH Side) (80" Wheelbase)	1	
		Spindle (RH Side) (89" Wheelbase) (Attaching Parts)	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—34		<b>AXLE AND STEERING ASSEMBLIES AND INSTALLATIONS (CONTINUED)</b>	Ref.	
—70	3421190	Kingpin	2	
	0641608	Bolt 3/8"-16NC x 1" (2 Per Pin)	4	
	4761600	Lockwasher 3/8" (2 Per Pin)	4	
	4751600	Flatwasher 3/8"	4	
	1380124	Clip, Retainer (2 Per Pin)	4	
	4920096	Wire, Safety (1 Ft. Per Pin)	2 ft.	
—71	0440161	Washer, Thrust	1	
—72	3530244	Plate, Cover	2	
—73	0641404	Bolt 1/4"-20NC x 1/2" (2 Per Plate)	4	
—74	4761400	Lockwasher 1/4" (2 Per Plate)	4	
	0239785	<b>TIRES AND WHEELS INSTALLATION (80" WHEELBASE 2WD)</b>	Ref.	—
	0250345	<b>TIRES AND WHEELS INSTALLATION (80" WHEELBASE 4WD)</b>	Ref.	—
	0250888	<b>TIRES AND WHEELS INSTALLATION (ALL 89" WHEELBASES)</b>	Ref.	—
—75	0239784	Tire and Wheel Assembly (Foam Filled) (80" Wheelbase 2WD - Front)	2	
	0239686	Tire and Wheel Assembly (Foam Filled) (80" Wheelbase 4WD - RH Side Front)	1	
	0239687	Tire and Wheel Assembly (Foam Filled) (80" Wheelbase 4WD - LH Side Front)	1	
		<b>Note: Foam-Filled Tire and Wheel Assemblies sold as assemblies only.</b>		
	0250887	Tire and Wheel Assembly (Pneumatic) (89" Wheelbase - RH Side Front)	1	
	0250886	Tire and Wheel Assembly (Pneumatic) (89" Wheelbase - LH Side Front)	1	
	4520123	Tire	1	
	4843635	Wheel	1	
	4640392	Stem, Valve	1	



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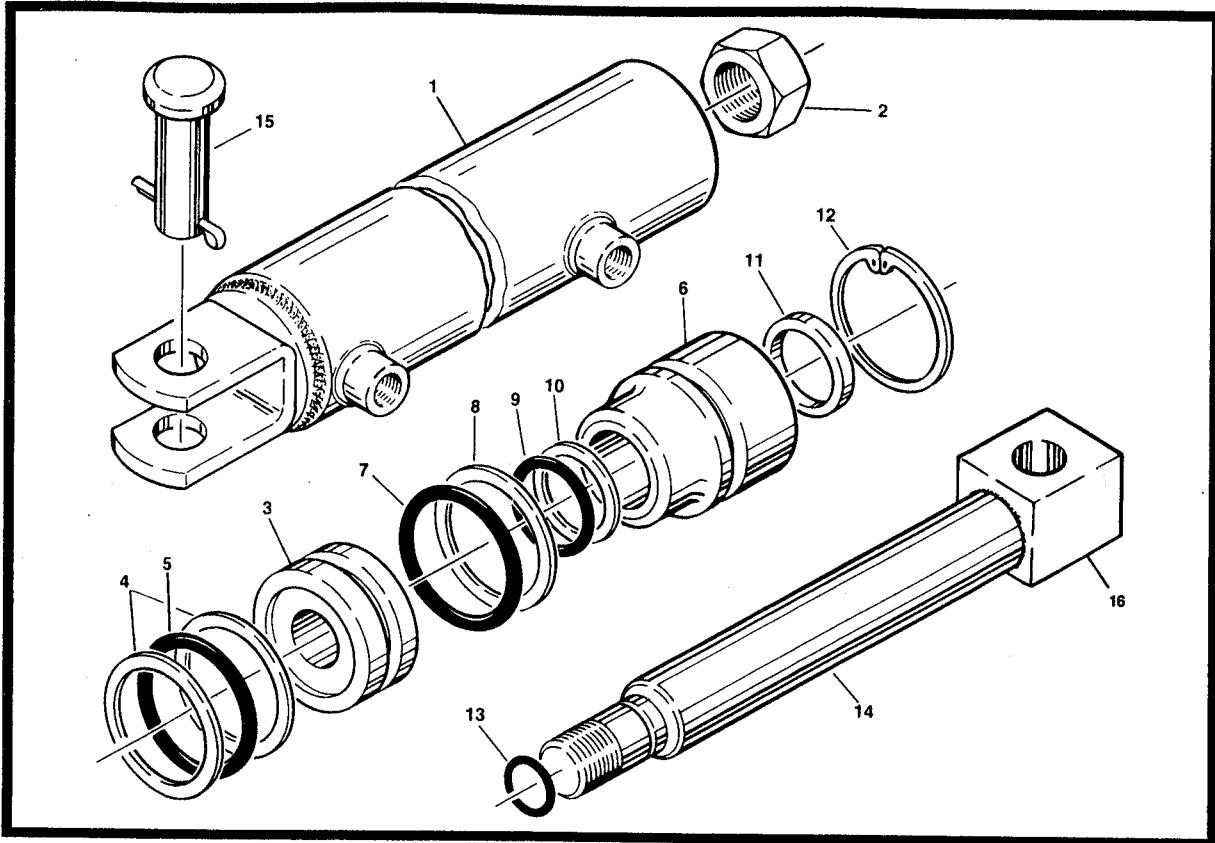


Figure 2-35. Steer Cylinder Assembly (80" Wheelbase).

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-35	1681953	<b>STEER CYLINDER ASSEMBLY (80" WHEELBASE)</b>	Ref.	—
	1682483	<b>STEER CYLINDER ASSEMBLY (80" WHEELBASE)</b>	Ref.	—
—1	7001078	Barrel	1	
—2	7001074	Nut, Jam	1	
—3	7001075	Piston	1	
—4	Kit	Ring, Back-up	2	
—5	Kit	O-Ring	1	
—6	7001076	Guide	1	
—7	Kit	O-Ring	1	
—8	Kit	Ring, Back-up	1	
—9	Kit	O-Ring	1	
—10	Kit	Ring, Back-up	1	
—11	Kit	Wiper, Rod	1	
—12	Kit	Ring, Retaining	1	
—13	Kit	O-Ring	1	
—14	7001077	Rod (1681953 Cylinder)	1	
		<b>Note: Repair 7001077 Rod by replacing clevis end with item 16 Block (p/n 0560950) or replace with 7001091 rod. Do not order 7001077 rod!</b>		
	7001091	Rod (1682483 Cylinder) (Not Shown)	1	
—15	7001089	Pin, Clevis (Includes Hairpin)	1	
—16	0560950	Block, Repair (1681953 Cylinder Only - Welded on Part)	1	
	2900700	Seal Kit (Includes Items 4,5,7,8,9,10,11,12 and 13)	1	

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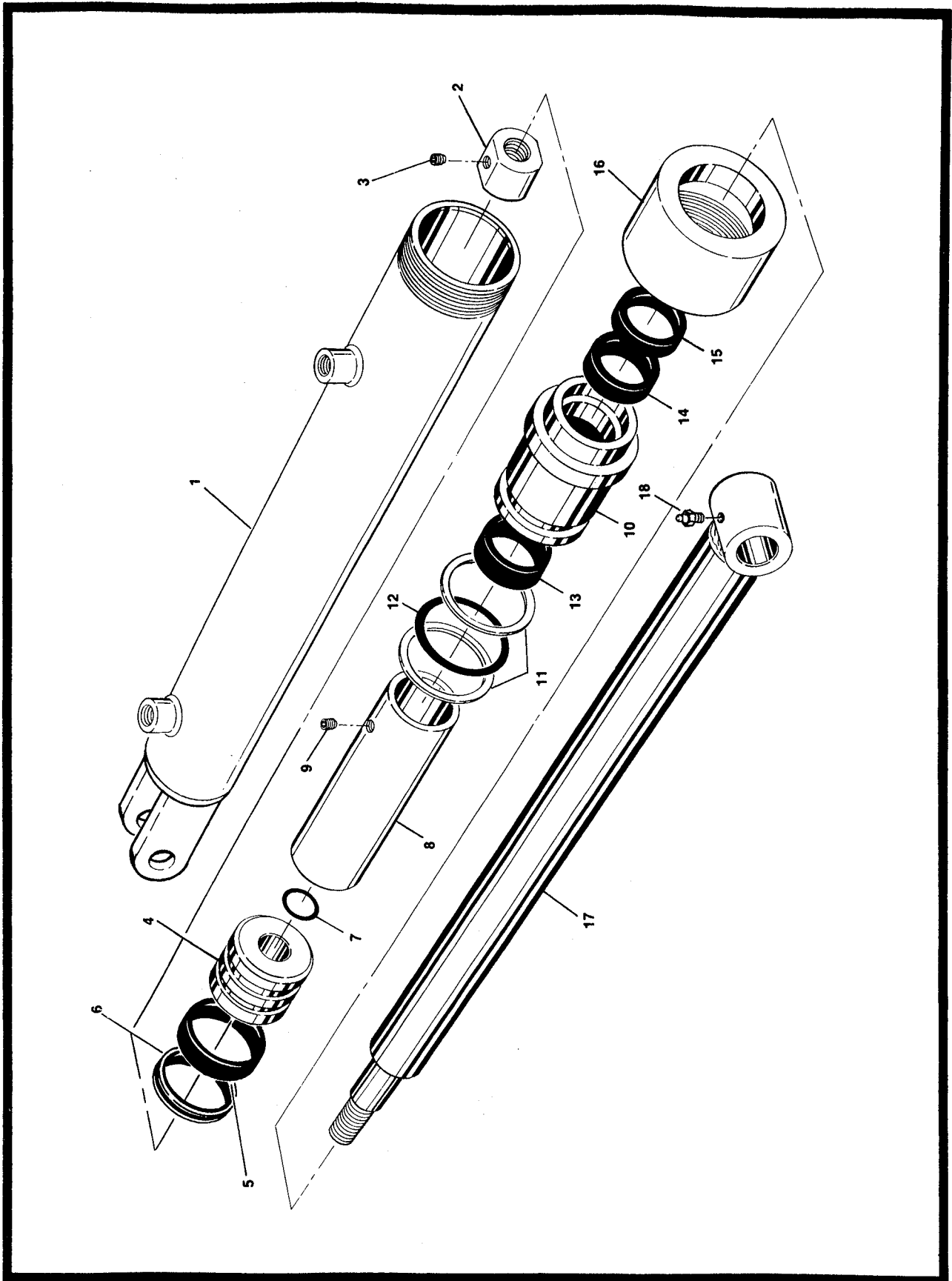


Figure 2-36. Steer Cylinder Assembly (89" Wheelbase).

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—36	1681604	<b>STEER CYLINDER ASSEMBLY (89" WHEELBASE)</b>	Ref.	D
—1	1681607	Barrel Assembly	1	
—2	3300187	Nut	1	
—3	3900141	Set Screw	2	
	0100011	Nyloc	A/R	
—4	3480120	Piston	1	
—5	Kit	Ring	1	
—6	Kit	T-Seal	1	
—7	Kit	O-Ring	1	
—8	4563142	Tube, Spacer	1	
—9	3900141	Set Screw	1	
	0100011	Nyloc	A/R	
—10	1680892	Head, Cylinder	1	
—11	Kit	Ring	2	
—12	Kit	O-Ring	1	
—13	Kit	Ring, Wear	1	
—14	Kit	Seal, Rod	1	
—15	Kit	Seal, Wiper	1	
—16	1120179	Head, Retainer	1	
—17	1681605	Rod Assembly	1	
—18	2160002	Fitting, Grease	1	
	2901119	Seal Kit (Includes Items 5,6,7,11,12,13,14 and 15)	1	

SECTION 2 — ILLUSTRATED PARTS LIST

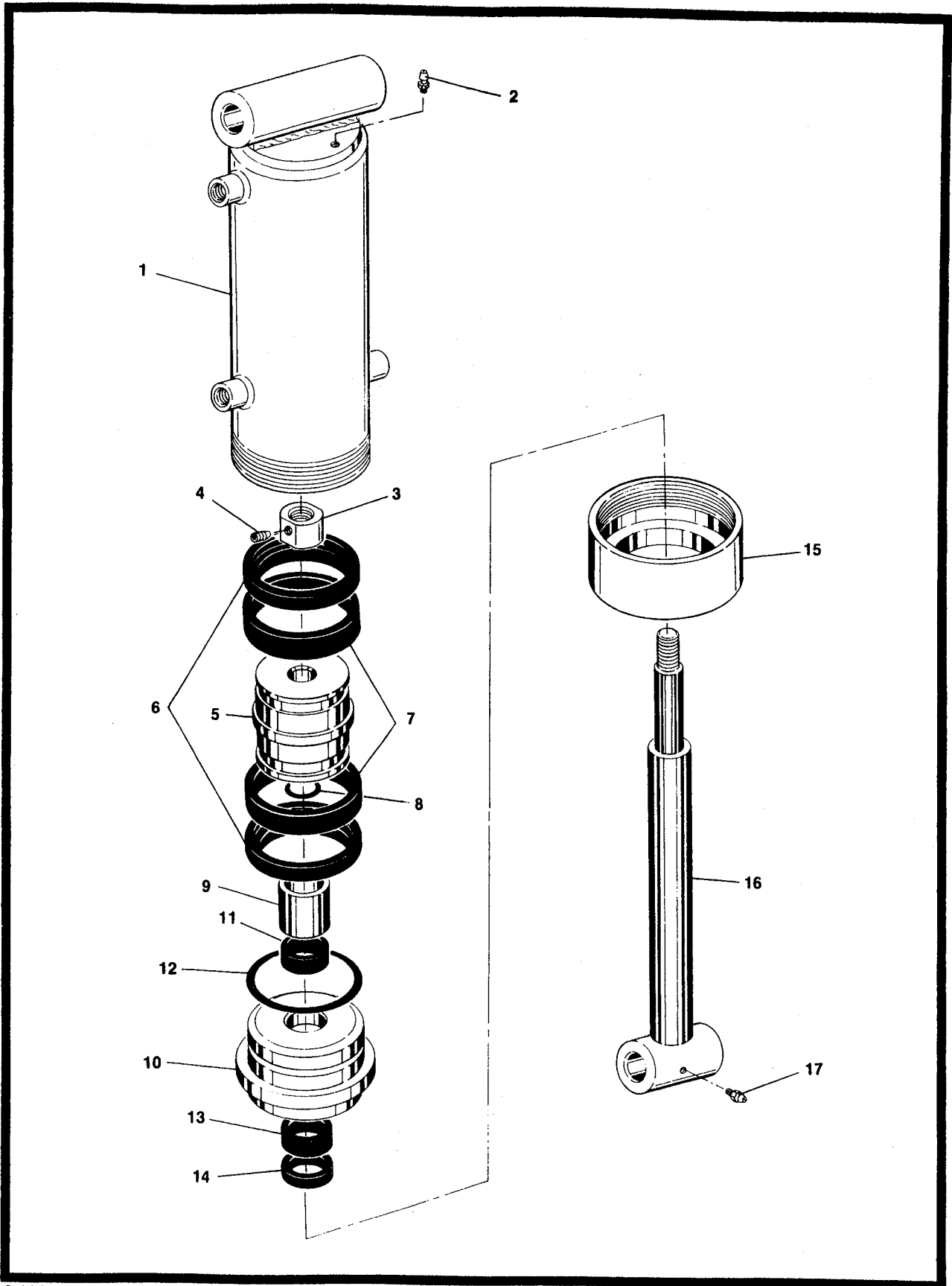


Figure 2-37. Lockout Cylinder Assembly.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—37	1681608	<b>LOCKOUT CYLINDER ASSEMBLY (80" WHEELBASE)</b>	Ref.	B
	1682185	<b>LOCKOUT CYLINDER ASSEMBLY (89" WHEELBASE) (NOT SHOWN)</b>	Ref.	—
—1	1681611	Barrel Assembly (80" Wheelbase)	1	
	1682186	Barrel Assembly (89" Wheelbase)	1	
—2	4640273	Bleeder	2	
—3	3300187	Nut	1	
—4	3951403	Set Screw 1/4"-20NC x 3/8"	2	
	0100011	Loctite	A/R	
—5	3480116	Piston	1	
—6	Kit	Seal	2	
—7	Kit	Ring, Lock	2	
—8	Kit	O-Ring	1	
—9	4563147	Spacer (80" Wheelbase)	1	
	4564606	Spacer (89" Wheelbase)	1	
—10	1681322	Head	1	
—11	Kit	Ring	1	
—12	Kit	O-Ring	2	
—13	Kit	Seal, Rod	1	
—14	Kit	Seal, Wiper	1	
—15	1120108	Head, Retainer	1	
	0100011	Loctite	A/R	
—16	1681609	Rod Assembly	1	
—17	2160002	Fitting, Grease	1	
	2900379	Seal Kit (Includes Items 6,7,8,11,12,13 and 14)	1	

SECTION 2 — ILLUSTRATED PARTS LIST

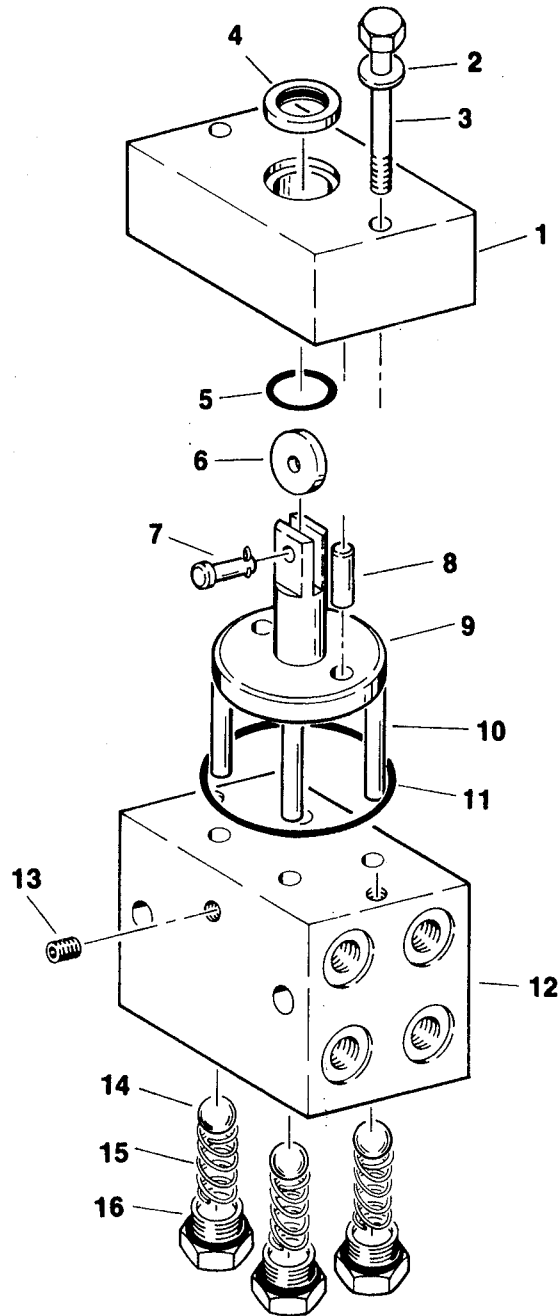


Figure 2-38. Lockout Valve Assembly.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—38	4640485	<b>LOCKOUT VALVE ASSEMBLY</b>	Ref.	A
—1	0560679	Block, Top Valve	1	
		(Attaching Parts)		
—2	0641518	Bolt 5/16"-18NC x 2 1/4"	2	
—3	4761500	Lockwasher 5/16"	2	
—4	3960047	Seal, Rod	1	
—5	3790116	O-Ring	1	
—6	3860037	Roller, Cam	1	
		(Attaching Parts)		
—7	3430407	Clevis Pin With Cotter Pin	1	
—8	3421284	Pin	2	
—9	3840833	Plunger, Rod	1	
—10	3840854	Rod	4	
—11	3790231	O-Ring	1	
—12	0560467	Block, Bottom Valve	1	
—13	2200202	Plug	1	
	0100011	Loctite	A/R	
—14	0320008	Ball	4	
—15	4160078	Spring	4	
—16	2180658	Plug	4	

SECTION 2 — ILLUSTRATED PARTS LIST

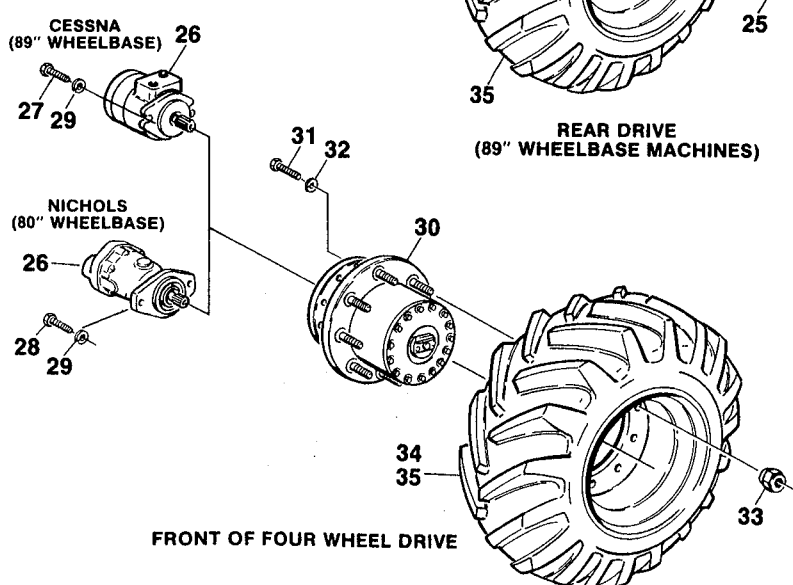
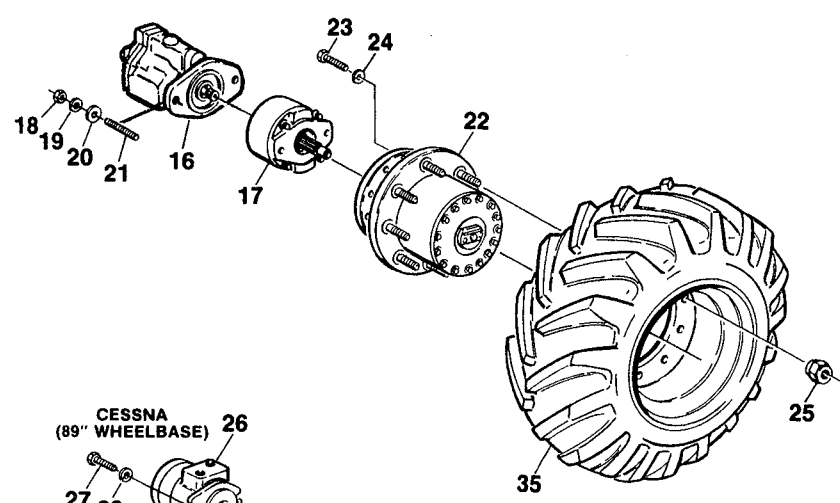
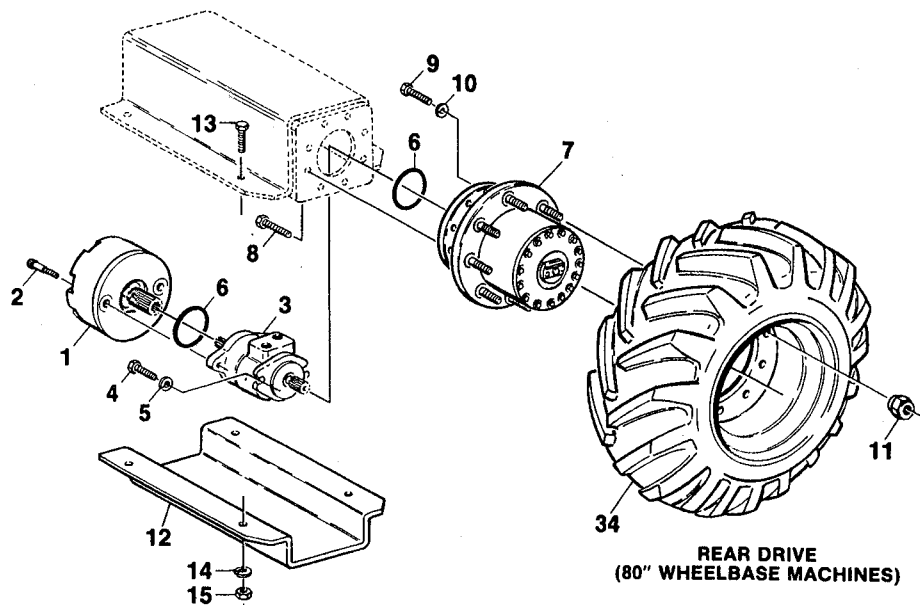


Figure 2-39. Wheel Drive Installations.



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—39		<b>WHEEL DRIVE INSTALLATIONS</b>	Ref.	
	0238751	<b>WHEEL DRIVE INSTALLATION (10.6 CID NICHOLS MOTOR) (80" WHEELBASE 2WD - REAR)</b>	Ref.	B
	0250419	<b>WHEEL DRIVE INSTALLATION (12.9 CID NICHOLS MOTOR) (80" WHEELBASE 2WD - REAR)</b>	Ref.	B
	0250420	<b>WHEEL DRIVE INSTALLATION (8.8 CID NICHOLS MOTOR) (80" WHEELBASE 4WD - REAR)</b>	Ref.	B
—1	0920075	Drive Brake Assembly (See Figures 2-44 for Breakdown) (Attaching Parts)	2	
—2	3931856 0100019	Bolt, Socket Head 1/2"-13NC x 3 1/2" Loctite	1 A/R	
—3	3160148	Drive Motor Assembly (10.6 CID Nichols 111-5-ASI) (2WD) (See Figure 2-40 for Breakdown)	2	
	3160167	Drive Motor Assembly (12.9 CID Nichols 111-6-ASI) (2WD) (See Figure 2-40 for Breakdown)	2	
	3160168	Drive Motor Assembly (8.8 CID Nichols 111-4-ASI) (4WD) (See Figure 2-40 for Breakdown) (Attaching Parts)	2	
—4	0641810	Bolt 1/2"-13NC x 1 1/4"	2	
—5	4751800 0100019	Flatwasher 1/2" Loctite	2 A/R	
—6	3790042	O-Ring	4	
—7	2780107	Drive Hub Assembly (See Figure 2-46 for Breakdown) (Attaching Parts)	2	
—8	0630417 0100019	Bolt, Special (2 Bottom Holes) Loctite	2 A/R	
—9	0642012	Bolt 5/8"-11NC x 1 1/2"	6	
—10	4762000	Lockwasher 5/8"	6	
—11	3300212	Nut, Wheel (8 Per Side)	16	
—12	3534032	Plate, Doubler (Attaching Parts)	2	
—13	0681610	Bolt 3/8"-16NC x 1 1/4" (Grade 8)	4	
—14	4751600	Flatwasher 3/8"	4	
—15	3271601	Nut 3/8"-16NC	4	
	0251022	<b>WHEEL DRIVE INSTALLATION (CESSNA MOTOR) (89" WHEELBASE 2WD FORD AND DEUTZ - REAR/89" WHEELBASE 2WD ELECTRIC - REAR BUILT PRIOR TO SEPTEMBER 1991)</b>	Ref.	A
	0252304	<b>WHEEL DRIVE INSTALLATION (CESSNA MOTOR) (89" WHEELBASE 2WD ELECTRIC - REAR BUILT AFTER SEPTEMBER 1991)</b>	Ref.	—
	0251023	<b>WHEEL DRIVE INSTALLATION (CESSNA MOTOR) (89" WHEELBASE 4WD - REAR)</b>	Ref.	A
—16	3160080	Drive Motor Assembly (Cessna)(Ford and Deutz Machines) (See Figure 2-41 for Breakdown)	2	
	3160118	Drive Motor Assembly (Cessna) (Electric Machines) (See Figure 2-41 for Breakdown) <b>Note: Electric machines built prior to September 1991 use 3160080 Motor; however, recommend 3160118 Motor when replacing complete Drive Motor.</b>	2	
—17	0920027	Drive Brake Assembly (See Figure 2-45 for Breakdown) (Attaching Parts)	2	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—39		<b>WHEEL DRIVE INSTALLATIONS (CONTINUED)</b>	Ref.	
—18	3311801	Nut 1/2"-13NC	2	
—19	4761800	Lockwasher 1/2"	2	
—20	4711800	Flatwasher 1/2" Narrow	2	
—21	4300074	Stud 1/2"-13NC x 6 1/8"	2	
	0100011	Loctite #242	A/R	
—22	2780168	Drive Hub Assembly (2WD) (See Figure 2-47 for Breakdown)	2	
	2780167	Drive Hub Assembly (4WD) (See Figure 2-47 for Breakdown) (Attaching Parts)	2	
—23	0642014	Bolt 5/8"-11NC x 1 3/4"	6	
—24	4762000	Lockwasher 5/8"	6	
—25	3300012	Nut, Wheel (9 Per Side)	18	
	0250118	<b>WHEEL DRIVE INSTALLATION (80" WHEELBASE 4WD - FRONT)</b>	Ref.	D
	0251010	<b>WHEEL DRIVE INSTALLATION (89" WHEELBASE 4WD - FRONT)</b>	Ref.	E
—26	3160127	Drive Motor Assembly (12.9 CID Nichols 111-6-ASO) (80" Wheelbase) (See Figure 2-42 for Breakdown)	2	
	3160170	Drive Motor Assembly (Cessna) (89" Wheelbase) (See Figure 2-43 for Breakdown) (Attaching Parts)	2	
—27	0641810	Bolt 1/2"-13NC x 1 1/4"	2	
—28	0641808	Bolt 1/2"-13NC x 1"	2	
—29	4761800	Lockwasher 1/2"	2	
—30	2780107	Drive Hub Assembly (80" Wheelbase) (See Figure 2-46 for Breakdown)	2	
	2780172	Drive Hub/Brake Assembly (89" Wheelbase) (See Figure 2-48 for Breakdown) (Attaching Parts)	2	
—31	0642012	Bolt 5/8"-11NC x 1 1/2"	8	
	0642014	Bolt 5/8"-11NC x 1 3/4"	8	
—32	4762000	Lockwasher 5/8"	8	
—33	3300212	Nut, Wheel (8 Per Side) (80" Wheelbase)	16	
	3300012	Nut, Wheel (9 Per Side) (89" Wheelbase)	18	
	0239785	<b>TIRE AND WHEEL INSTALLATION (80" WHEELBASE 2WD)</b>	Ref.	—
	0250345	<b>TIRE AND WHEEL INSTALLATION (80" WHEELBASE 4WD)</b>	Ref.	—
	0250888	<b>TIRE AND WHEEL INSTALLATION (89" WHEELBASE - ALL)</b>	Ref/	—
—34	0239686	Tire and Wheel Assembly - Foam-Filled (80" Wheelbase - 2WD RH Side Rear, and 4WD RH Side Front and Rear)	1	
	0239687	Tire and Wheel Assembly - Foam-Filled (80" Wheelbase - 2WD LH Side Rear and 4WD LH Side Front and Rear)	1	
		<b>Note: Foam-Filled Tire and Wheel Assemblies Sold as Complete Assemblies Only.</b>		

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—39		<b>WHEEL DRIVE INSTALLATIONS (CONTINUED)</b>	Ref.	
—35	0250886	Tire and Wheel Assembly - Pneumatic (89" Wheelbase - LH Side)	2	
	0250887	Tire and Wheel Assembly - Pneumatic (89" Wheelbase - RH Side)	2	
	4520123	Tire	1	
	4843635	Wheel	1	
	4640230	Stem, Valve	1	

## SECTION 2 — ILLUSTRATED PARTS LIST

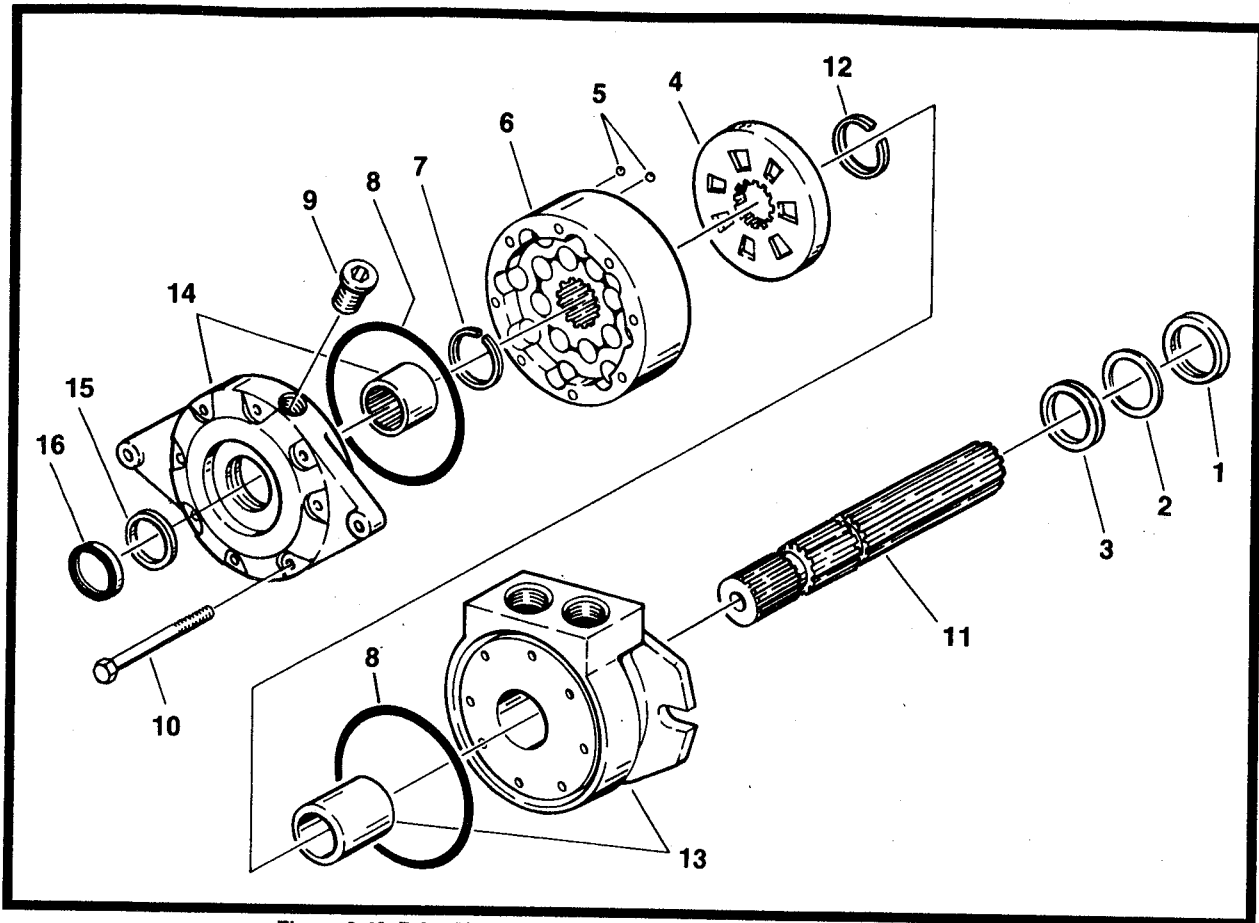


Figure 2-40. Drive Motor Assembly (80" Wheelbase 2WD and 4WD Rear).

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—40		<b>DRIVE MOTOR ASSEMBLIES (80" WHEELBASE 2WD AND 4WD - REAR)</b>	Ref.	
	3160168	<b>DRIVE MOTOR ASSEMBLY (8.8 CID NICHOLS 111-4-ASI) (4WD REAR)</b>	Ref.	—
	3160148	<b>DRIVE MOTOR ASSEMBLY (10.6 CID NICHOLS 111-5-ASI) (2WD)</b>	Ref.	—
	3160167	<b>DRIVE MOTOR ASSEMBLY (12.9 CID NICHOLS 111-6-ASI)</b>	Ref.	—
—1	Kit	Seal, Dust	1	
—2	Kit	Ring, Back-Up	1	
—3	Kit	Seal, Quad Ring	1	
—4	7004196	Valve, Rotary (3160168 and 3160167)	1	
—5	7004166	Valve, Rotary (3160148)	1	
—6	7004167	Ball, Check Valve	2	
—7	7004199	IGR Assembly (3160168)	1	
—8	7004181	IGR Assembly (3160148)	1	
—9	7004178	IGR Assembly (3160167)	1	
—7	Kit	Ring, Snap	1	
—8	Kit	Seal, Ring	2	
—9	7004171	Plug, Vent (Includes O-Ring)	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—40		<b>DRIVE MOTOR ASSEMBLIES (CONTINUED)</b>	Ref.	
—10	7004173	Bolt (3160168 and 3160148)	8	
	7004197	Bolt (3160167)	8	
—11	7004183	Shaft, Spline	1	
—12	7004184	Ring, Snap	1	
—13	7004198	Body/Bearing Assembly (3160168 and 3160167)	1	
	7004185	Body/Bearing Assembly (3160148)	1	
—14	7004186	Cover/Bearing Assembly	1	
—15	Kit	Seal, Lip	1	
—16	Kit	Seal, Dust	1	
	7004177	Seal Kit (Includes Items 1,2,3,7,8 and Vent Plug O-Ring)	1	
	7004189	Seal Kit (Includes Items 2,3,8,15 and 16)	1	

SECTION 2 — ILLUSTRATED PARTS LIST

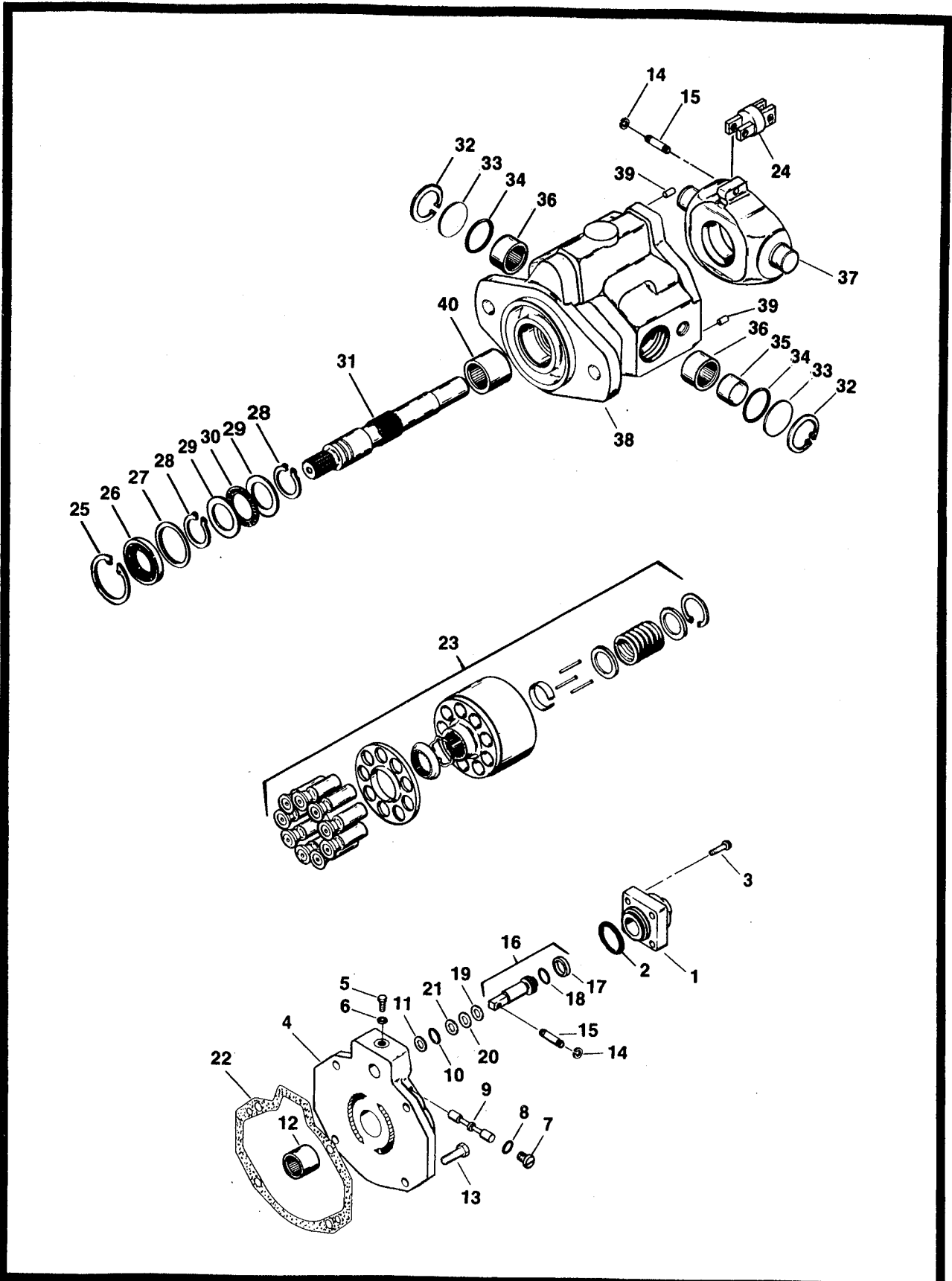


Figure 2-41. Drive Motor Assembly (89" Wheelbase 2WD and 4WD Rear).

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—41	3160080	<b>DRIVE MOTOR ASSEMBLY (89" WHEELBASE 2WD AND 4WD REAR FORD AND DEUTZ MACHINES)</b>	Ref.	A
	3160118	<b>DRIVE MOTOR ASSEMBLY (89" WHEELBASE 2WD ELECTRIC MACHINES)</b>	Ref.	A
—1	7004939	Control Piston Housing Assembly	1	
—2	Kit	O-Ring	1	
—3	7004938	Bolt, Socket Head	4	
—4	7004941	Backplate Assembly	1	
—5	7004942	Plug Assembly	1	
—6	Kit	O-Ring	1	
—7	7004944	Plug Assembly (Shuttle Spool)	2	
—8	Kit	O-Ring	1	
—9	7004946	Spool, Shuttle	1	
—10	Kit	O-Ring	1	
—11	7004918	Washer, Backup	1	
—12	7004917	Bearing, Needle	1	
—13	7004933	Bolt	4	
—14	7004937	Ring, Retaining	4	
—15	7004929	Pin, Connector	2	
—16	7004948	Control Piston Assembly	1	
—17	Kit	Ring, Slippery	1	
—18	Kit	O-Ring	1	
—19	4100028	Spacer, Piston - .105"/2.7mm	A/R	
—20	4100027	Spacer, Piston - .092"/2.3mm	A/R	
—21	4100029	Spacer, Piston - .110"/2.8mm	A/R	
—22	Kit	Gasket, Housing	1	
—23	7004916	Rotating Kit Assembly (Sold as an Assembly Only)	1	
—24	7004928	Connector, Camplate	1	
—25	Kit	Ring, Retaining	1	
—26	Kit	Seal, Shaft	1	
—27	7004906	Washer	1	
—28	Kit	Ring, Retaining	2	
—29	7004907	Race, Thrust	2	
—30	7004908	Bearing, Thrust	1	
—31	7004912	Shaft, Drive	1	
—32	Kit	Ring, Retaining	2	
—33	7004913	Cover, Trunnion	2	
—34	Kit	O-Ring	2	
—35	7004911	Race, Inner	1	
—36	7004914	Bearing	2	
—37	7004927	Camplate	1	
—38	7004959	Housing Assembly	1	
—39	7004960	Pin, Roll (1/4" Dia. x 1/2" Long)	2	
—40	7004910	Bearing	1	
	2900449	Seal Repair Kit (Includes Items 2,6,8,10,22,25,26, 1 28,32 and 34)		

SECTION 2 — ILLUSTRATED PARTS LIST

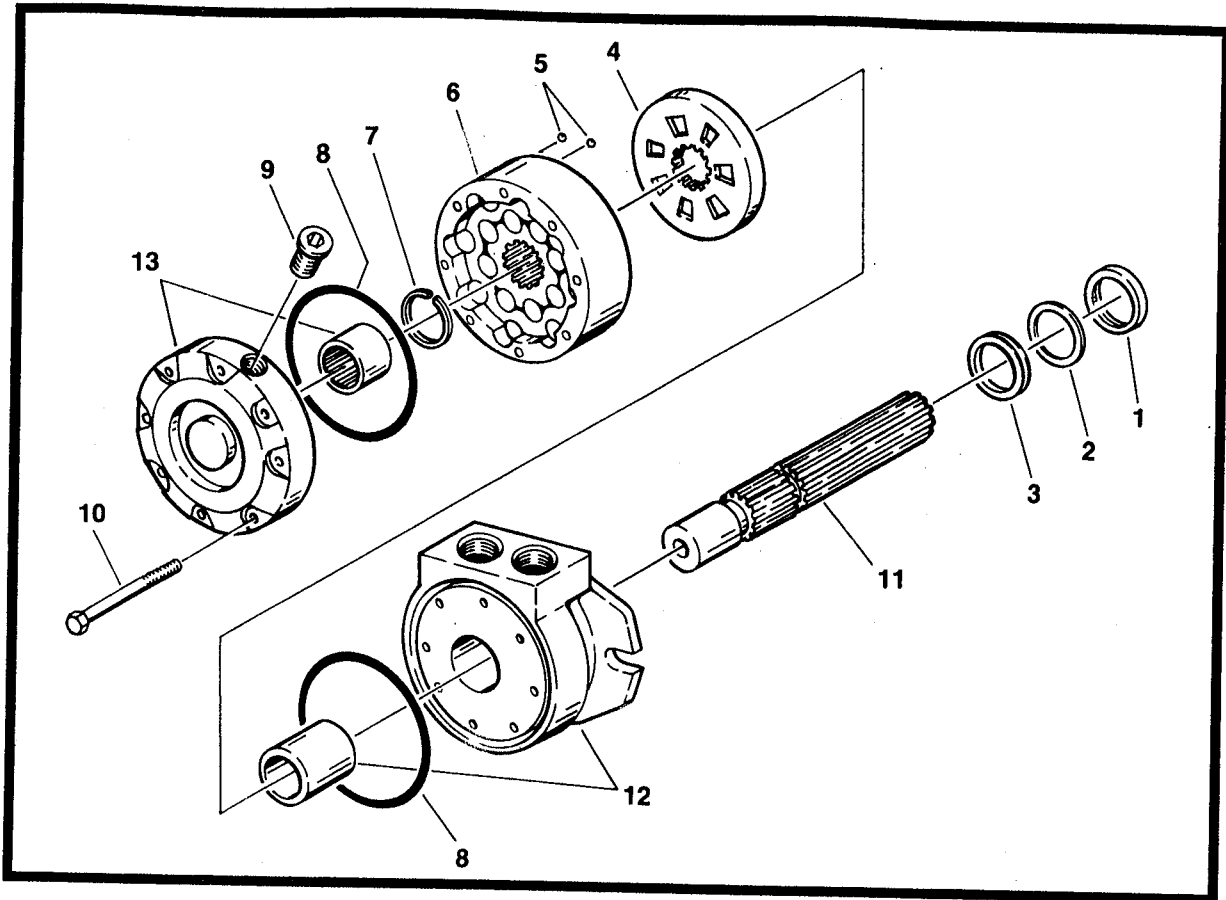


Figure 2-42. Drive Motor Assembly (80" Wheelbase 4WD Front).

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-42	3160127	<b>DRIVE MOTOR ASSEMBLY (12.9 CID NICHOLS 111-6-ASO) (80" WHEELBASE 4WD - FRONT)</b>	Ref.	B
-1	Kit	Seal, Dust	1	
-2	Kit	Ring, Back-Up	1	
-3	Kit	Seal, Quad Ring	1	
-4	7004196	Valve, Rotary	1	
-5	7004167	Ball, Check Valve	1	
-6	7004179	IGR Assembly	2	
-7	Kit	Ring, Snap	1	
-8	Kit	Seal, Ring	1	
-9	7004171	Plug, Vent (Includes Ring)	2	
-10	7004197	Bolt	1	
-11	7010700	Shaft, Spline	8	
-12	7004198	Body/Bearing Assembly	1	
-13	7004192	Cover/Bearing Assembly	1	
	7004177	Seal Kit (Includes Items 1,2,3,8 and Vent plug O-Ring)	1	



SECTION 2 — ILLUSTRATED PARTS LIST

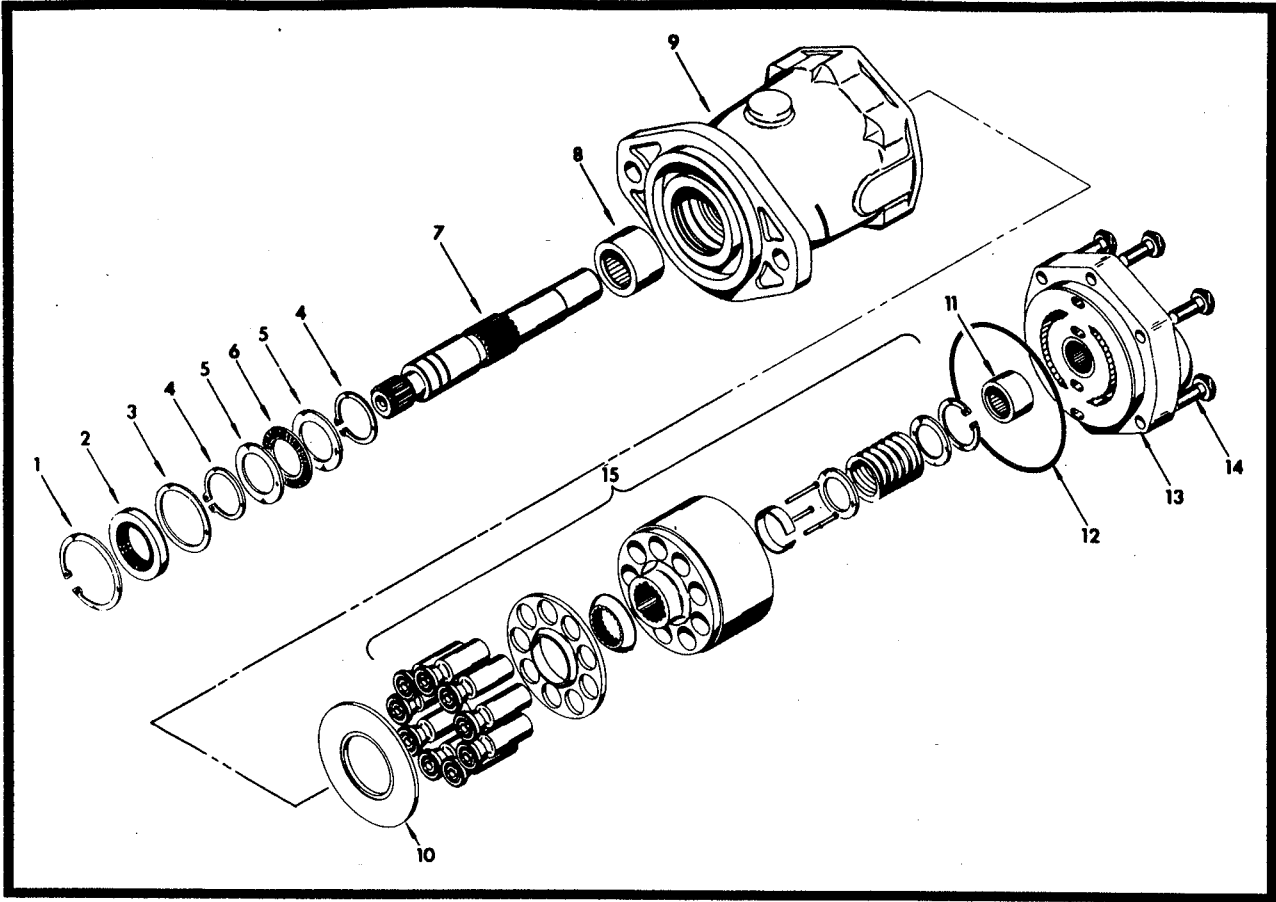
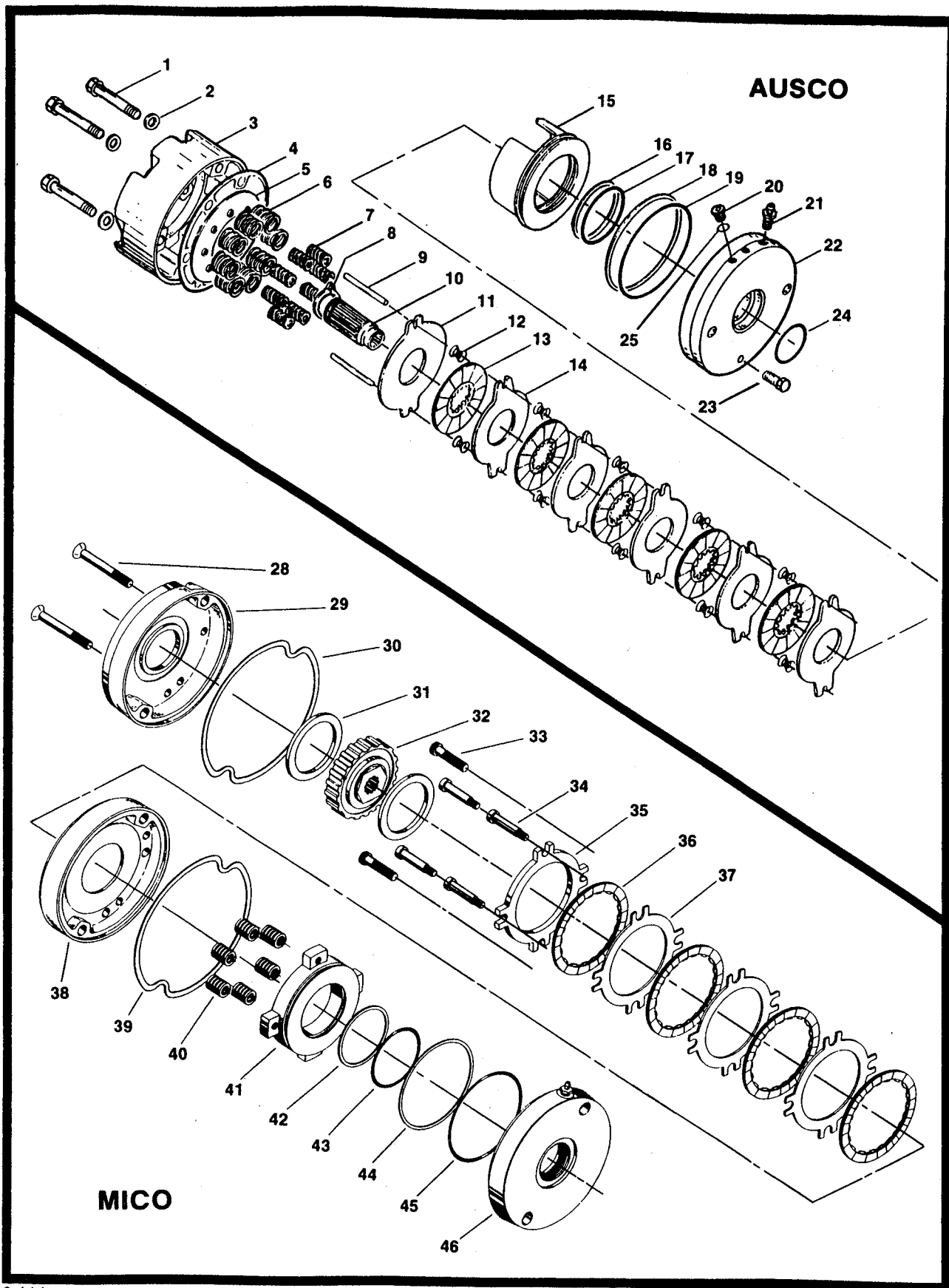


Figure 2-43. Drive Motor Assembly (89" Wheelbase 4WD Front).

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-43	3160170	<b>DRIVE MOTOR ASSEMBLY (CESSNA) (89" WHEELBASE 4WD FRONT)</b>	Ref.	—
—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	7007874	Shaft, Splined	1	
—8	7004910	Bearing	1	
—9	7007881	Housing Assembly (Includes Item 8)	1	
—10	7007876	Insert, Cam Plate	1	
—11	7004917	Bearing	1	
—12	Kit	O-Ring	1	
—13	7007882	Backplate Assembly (Includes Item 11)	1	
—14	7007879	Bolt	6	
—15	7007883	Rotating Kit Assembly (Sold As An Assembly Only)	1	
	2900714	Seal Kit (Includes 1,2,4 and 12)	1	

SECTION 2 — ILLUSTRATED PARTS LIST



AUSCO

MICO

Figure 2-44. Brake Assemblies - Ausco and Mico (80" Wheelbase).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-44	0920075	<b>BRAKE ASSEMBLIES - AUSCO AND MICO (80" WHEELBASE)</b>	Ref.	—
		<b>BRAKE ASSEMBLY - AUSCO</b>	Ref.	
—1	7003072	Bolt	4	
—2	7000729	Lockwasher	4	
—3	7003073	Housing	1	
—4	Kit	Gasket	1	
—5	7003010	Retainer, Spring	1	
—6	7000782	Spring, Compression	8	
—7	7000798	Spring, Compression	8	
—8	7003074	Ring, Retaining	1	
—9	7000717	Pin, Torque	2	
—10	7003075	Shaft, Splined	1	
—11	7003054	Disc, Primary	1	
—12	7003006	Spring, Compression	6	
—13	7003076	Disc, Rotating	3	
—14	7003056	Disc, Stationary	3	
—15	7003077	Piston	1	
—16	7000722	Ring, Packing Back-up	1	
—17	Kit	O-Ring	1	
—18	Kit	Ring, Packing Back-up	1	
—19	Kit	O-Ring	1	
—20	7003078	Plug Hex Socket	1	
—21	7000796	Screw, Bleeder	1	
—22	7003079	Plate, Power	1	
—23	7003059	Valve, Pressure Relief	1	
—24	Kit	O-Ring (Gasket)	1	
—25	Kit	O-Ring	1	
—26	Not Used			
—27	Not Used 2900691	Seal Kit (Includes Items 4,17,18,19,24 and 25)	1	
		<b>BRAKE ASSEMBLY - MICO</b>	Ref.	
—28		Bolt	2	
—29		Cover	1	
—30	Kit	Gasket, Case	1	
—31		Washer, Thrust	2	
—32		Shaft, Spline	1	
—33		Bolt, Socket Head	2	
—34	7007967	Bolt, Socket Head Shoulder (Tension Pins)	4	
—35	Kit	Disc, Primary	1	
—36	Kit	Disc, Rotor	4	
—37	Kit	Disc, Stator	3	
—38		Plate, Spring	1	
—39	Kit	Gasket, Case	1	
—40	Kit	Spring	6	
—41		Piston	1	
—42	Kit	Ring, Back-up	1	
—43	Kit	O-Ring	1	
—44	Kit	Ring, Back-up	1	
—45	Kit	O-Ring	1	
—46		Plate, Pressure	1	
	7007971	Repair Kit - Ring (Includes Items 30,39,42,43,44 and 45)	1	
	7007969	Repair Kit - Lining (Includes Items 30,35,36,37 and 39)	1	
	7007972	Repair Kit - Spring (Includes Items 30,39 and 40)	1	

SECTION 2 — ILLUSTRATED PARTS LIST

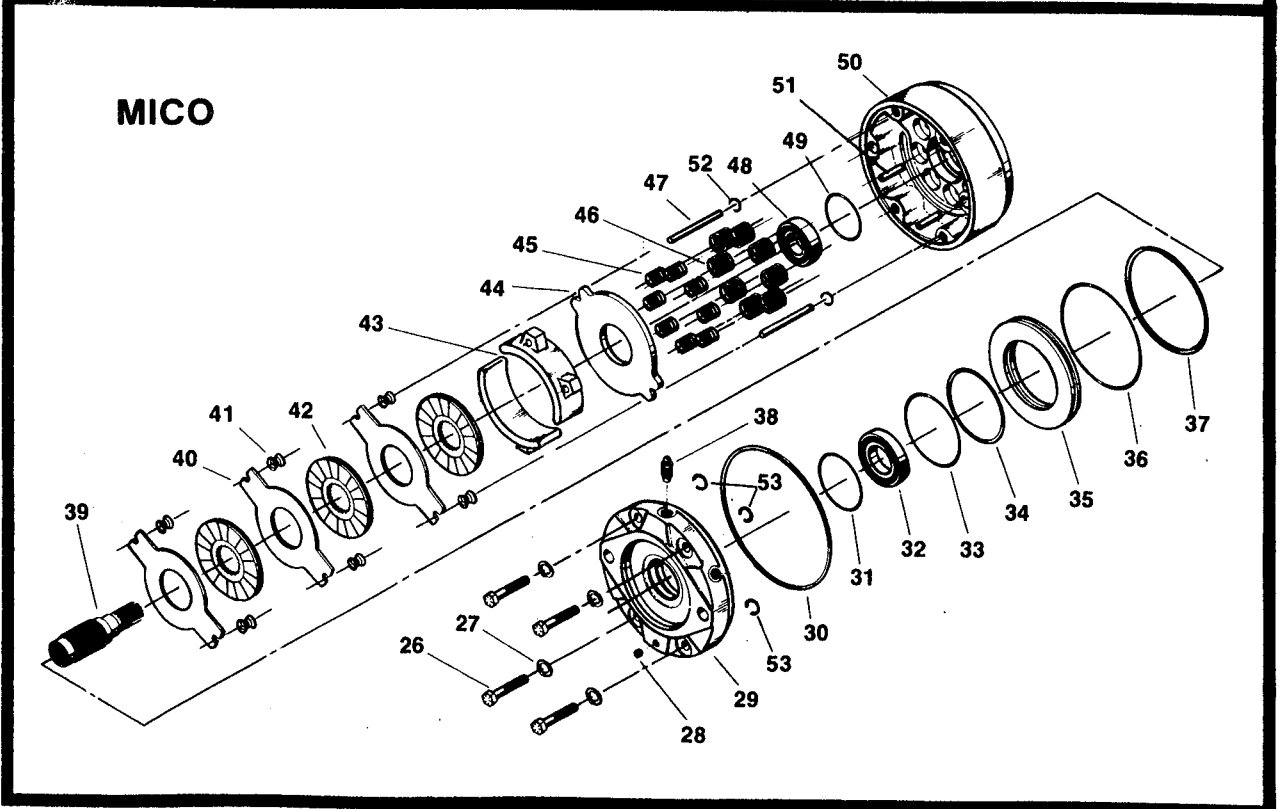
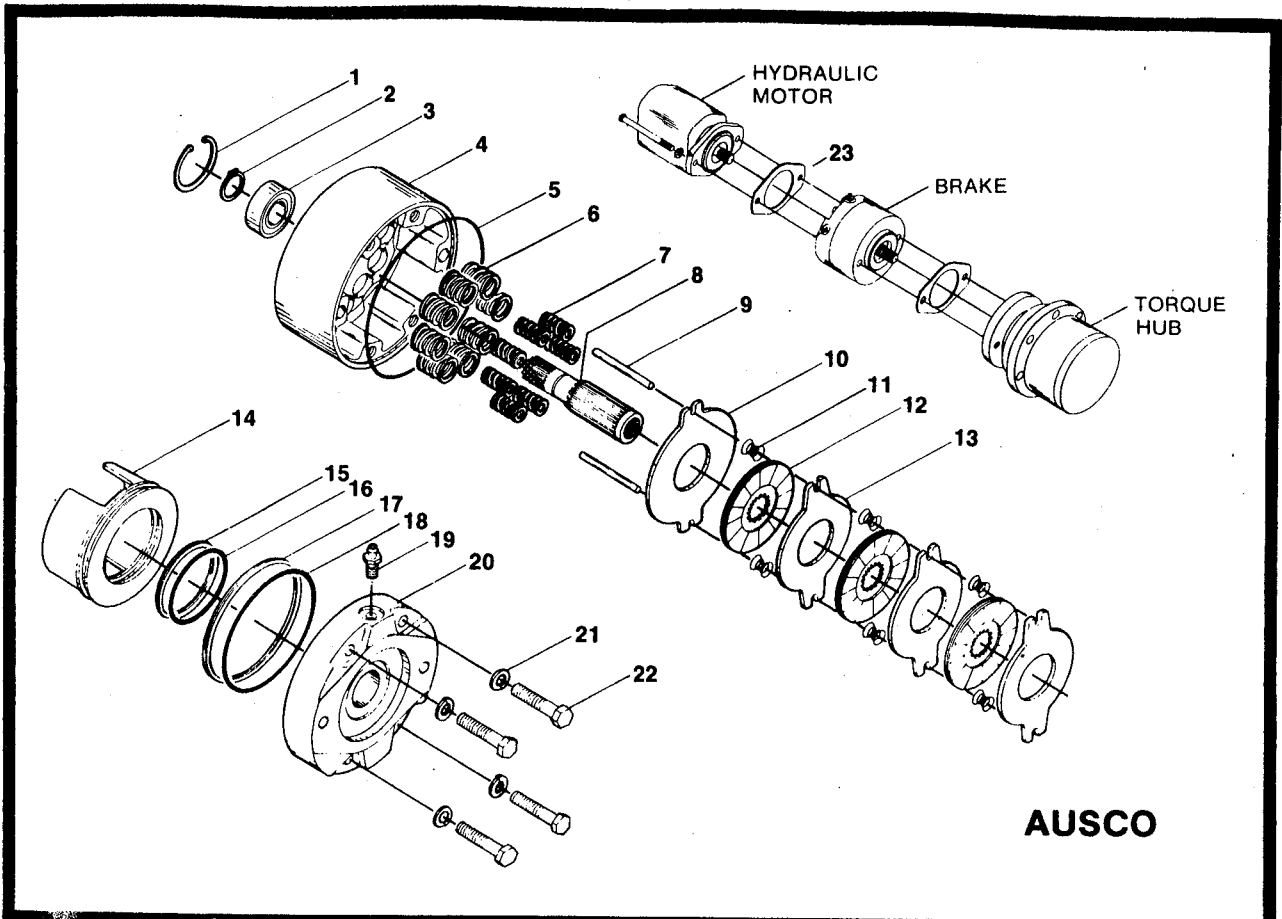


Figure 2-45. Brake Assemblies - Ausco and Mico (89" Wheelbase).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—45	0920027	<b>BRAKE ASSEMBLY - AUSCO AND MICO (89" WHEELBASE)</b>	Ref.	G
		<b>BRAKE ASSEMBLY - AUSCO</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	7000729	Lockwasher	4	
—22	7000730	Bolt	4	
	7003007	Bolt, Flanged	4	
—23	Kit	Gasket	2	
—24	Not Used			
—25	Not Used			
	2900131	Seal Kit (Includes Items 1,2,15,16,17,18 and 24)	1	
		<b>BRAKE ASSEMBLY - MICO</b>	Ref.	
—26	7007913	Cap Screw	4	
—27	7007912	Lockwasher	4	
—28	7007924	Pipe Plug	1	
—29	7007975	Cover	1	
—30	Kit	Square Ring	1	
—31	Kit	O-Ring	1	
—32	7007920	Bearing	1	
—33	Kit	O-Ring	1	
—34	Kit	Back-Up Ring	1	
—35	7007923	Piston	1	
—36	Kit	O-Ring	1	
—37	Kit	Back-Up Ring	1	
—38	7007914	Bleeder Screw	1	
—39	7007903	Shaft	1	
—40	7007908	Disc	3	
—41	7007916	Spring	6	
—42	7007909	Friction Disc	3	
—43	7007902	Separator	2	
—44	7007907	Disc (Large Diameter)	1	
—45	7007906	Spring	8	
—46	7007905	Spring	8	



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—45	0920027	<b>BRAKE ASSEMBLY (CONTINUED)</b>	Ref.	G
—47	7007915	Pin, Dowel	2	
—48	7007904	Bearing	1	
—49	Kit	Oil Seal	1	
—50	7007976	Housing	1	
—51	7007901	Spirol Pin	4	
—52	Kit	O-Ring	2	
—53	Kit	O-Ring	4	
	7007933	Mounting Gasket (Not Shown)	1	
	2900641	Seal Kit (Includes Items 30,31,32,33,34,36,37,49,52 and 53)	1	

SECTION 2 — ILLUSTRATED PARTS LIST

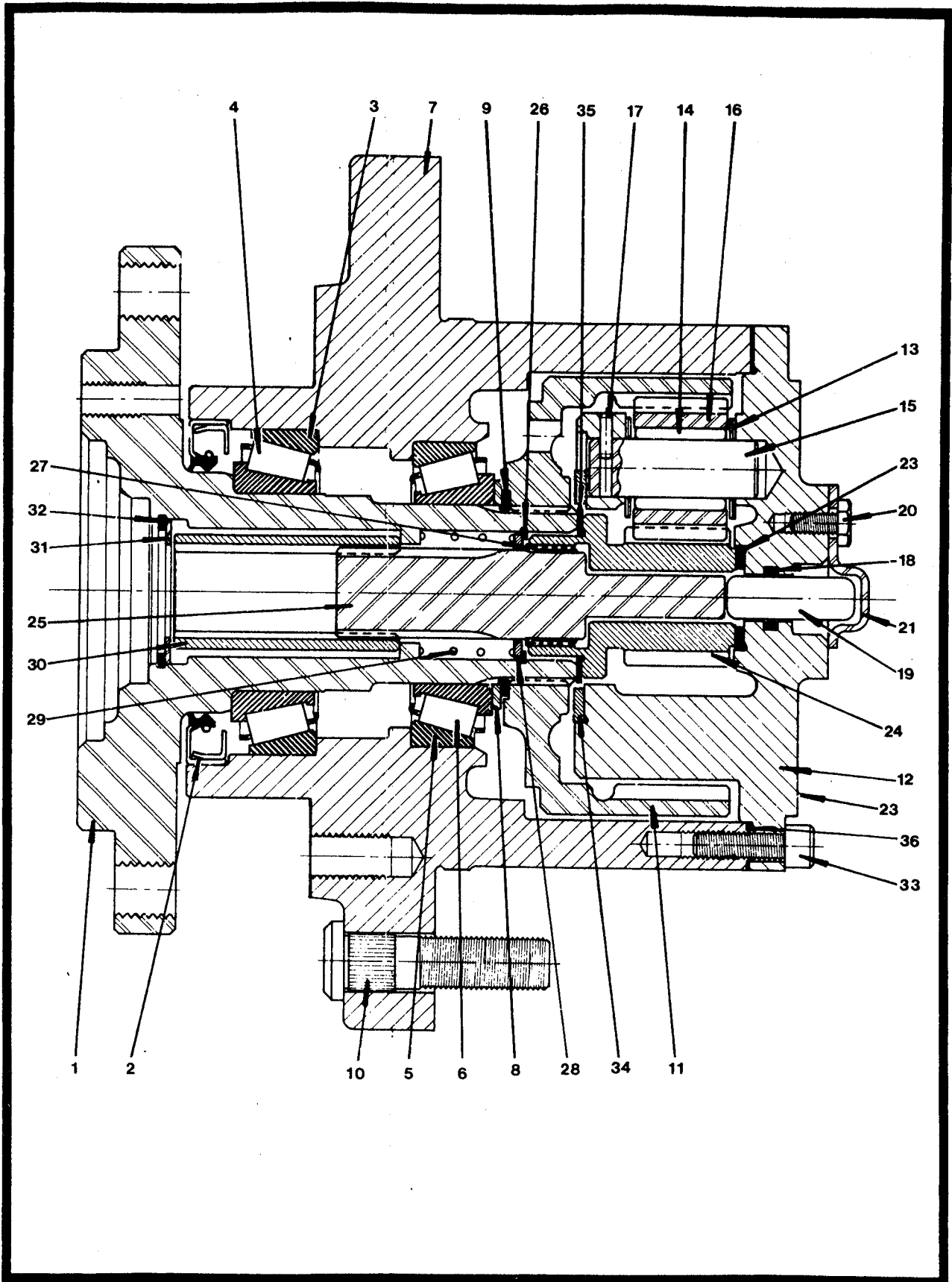


Figure 2-46. Drive Hub Assembly (80" Wheelbase).



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-46	2780107	<b>DRIVE HUB ASSEMBLY (80" WHEELBASE)</b>	Ref.	—
—1	7007605	Spindle	1	
—2	7000228	Seal	1	
—3	7000255	Bearing Cup	1	
—4	7000256	Bearing Cone	1	
—5	7007606	Bearing Cup	1	
—6	7007607	Bearing Cone	1	
—7	7007608	Hub	1	
—8	7000232	Spacer	1	
—9	7000229	Retaining Ring	1	
—10	7007609	Stud	8	
—11	7007610	Internal Gear	1	
	7007611	Carrier Sub-Assembly	1	
—12	7001955	Cover	1	
—13	7007612	Thrust Washer	12	
—14	7007613	Needle Roller	57	
—15	7001959	Planet Shift	3	
—16	7007614	Planet Gear	3	
—17	7007615	Spring Pin	3	
—18	7000213	O-Ring	1	
—19	7000212	Disconnect Rod	1	
—20	7000216	Bolt	2	
—21	7007616	Disconnect Cap	1	
—22	7007617	Magnetic Plug	2	
—23	7007618	Thrust Washer	1	
—24	7007619	Input Gear	1	
—25	7001969	Input Shaft	1	
—26	7007620	Retaining Ring	1	
—27	7007621	Retaining Ring	1	
—28	7007622	Spacer	1	
—29	7007623	Spring	1	
—30	7007624	Coupling	1	
—31	7007625	Thrust Washer	1	
—32	7007626	Retaining Ring	1	
—33	7007627	Bolt	16	
—34	7007628	Thrust Washer	1	
—35	7007629	Thrust Washer	1	
—36	7007630	Cover Gasket	1	

SECTION 2 — ILLUSTRATED PARTS LIST

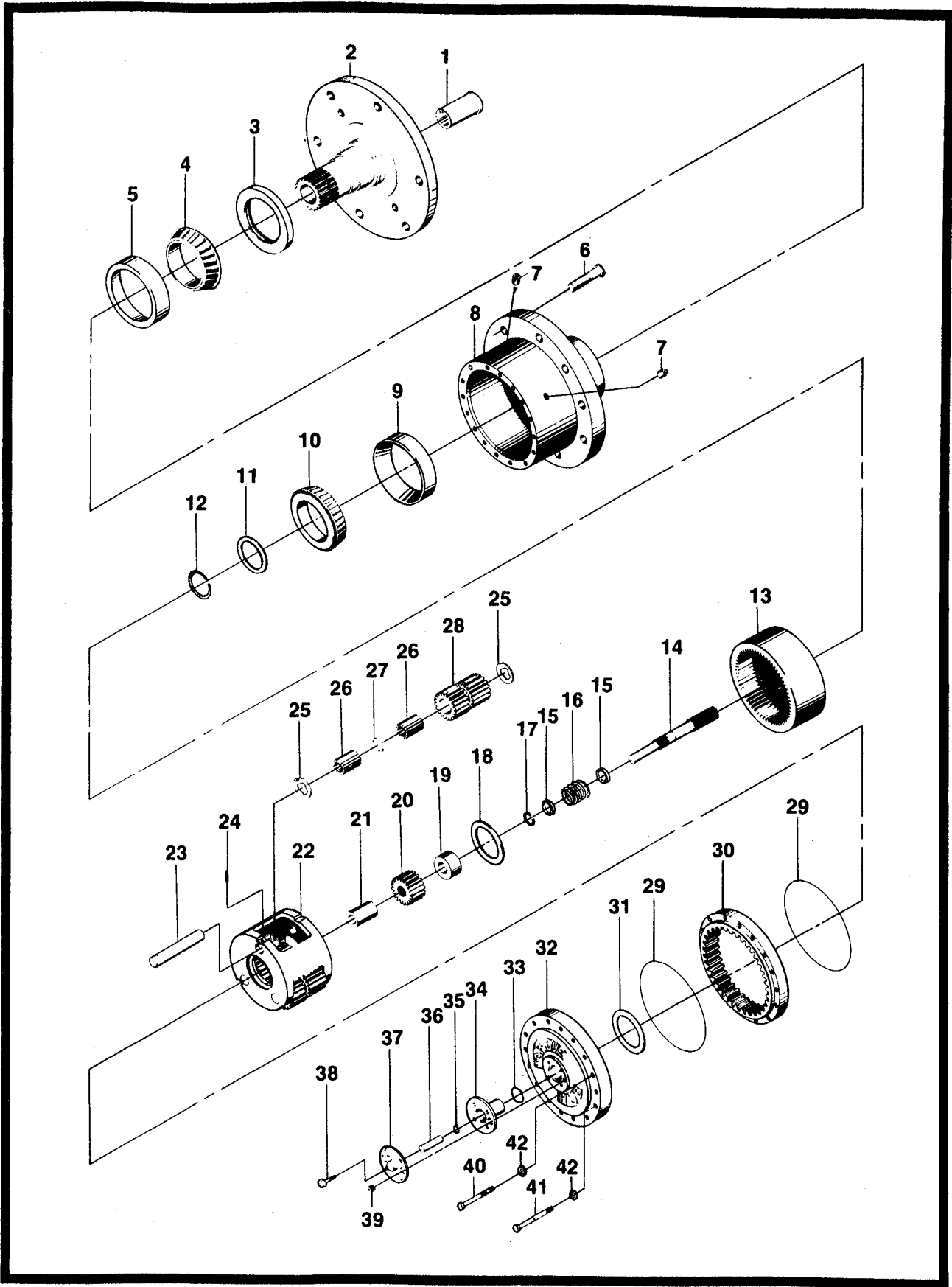


Figure 2-47. Drive Hub Assembly (89" Wheelbase 2WD and 4WD Rear).

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2-47	2780168	<b>DRIVE HUB ASSEMBLY (89" WHEELBASE 2WD REAR)</b>	Ref.	—
	2780167	<b>DRIVE HUB ASSEMBLY (89" WHEELBASE 4WD REAR)</b>	Ref.	—
—1	7000206	Coupling	1	
—2	7001997	Spindle	1	
—3	7001998	Seal	1	
—4	Kit	Cone, Bearing	1	
—5	Kit	Cup, Bearing	1	
—6	7007697	Bolt, Wheel	9	
—7	7000242	Plug, Pipe	2	
—8	7007601	Hub	1	
—9	7000257	Cup, Bearing	1	
—10	7000258	Cone, Bearing	1	
—11	7000232	Spacer	1	
—12	7000229	Ring, Retaining	1	
—13	7000246	Gear, Internal	1	
	7000250	Input Shaft Assembly (2780168)	1	
	7007650	Input Shaft Assembly (2780167)	1	
—14	7000260	Shaft (2780168)	1	
	7007651	Shaft (2780167)	1	
—15	7000263	Spacer	2	
—16	7000262	Spring	1	
—17	7000261	Ring, Retaining	1	
—18	7000253	Washer, Thrust	1	
—19	7000252	Spacer (2780168)	1	
	7007653	Spacer (2780167)	1	
—20	7000201	Gear, Input (2780168)	1	
	7007652	Gear, Input (2780167)	1	
—21	7007654	Spacer (2780167 Only)	1	
	7000247	Carrier Assembly (2780167)	1	
	7000202	Carrier Assembly (2780168)	1	
—22	7001931	Carrier	1	
—23	7001911	Shaft	3	
—24	7001913	Pin, Roll	3	
—25	7001985	Washer, Thrust	6	
—26	7001909	Roller, Needle	96	
—27	7000263	Spacer	3	
—28	7001912	Gear, Cluster (2780167)	3	
	7007643	Gear, Cluster (2780168)	3	
—29	7000230	O-Ring	2	
—30	7000248	Gear, Ring (2780167)	1	
	7000203	Gear, Ring (2780168)	1	
—31	7000253	Washer, Thrust	1	
—32	7001989	Cover Assembly	1	
	7000226	Cover	1	
—33	7000215	O-Ring	1	
—34	7000227	Cap, Cover	1	
—35	7000213	O-Ring	1	
—36	7000212	Rod, Disconnect	1	
—37	7000211	Cap, Disconnect	1	
—38	7000220	Bolt	4	
—39	7000243	Plug, Pipe	1	



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—47		<b>DRIVE HUB ASSEMBLY (89" WHEELBASE) (CONTINUED)</b>	Ref.	
—40	7000217	Bolt	12	
—41	7000214	Bolt, Shoulder	4	
—42	7007603	Flatwasher	16	
	7010429	----- Bearing Kit (Includes Items 4 and 5)	1	

SECTION 2 — ILLUSTRATED PARTS LIST

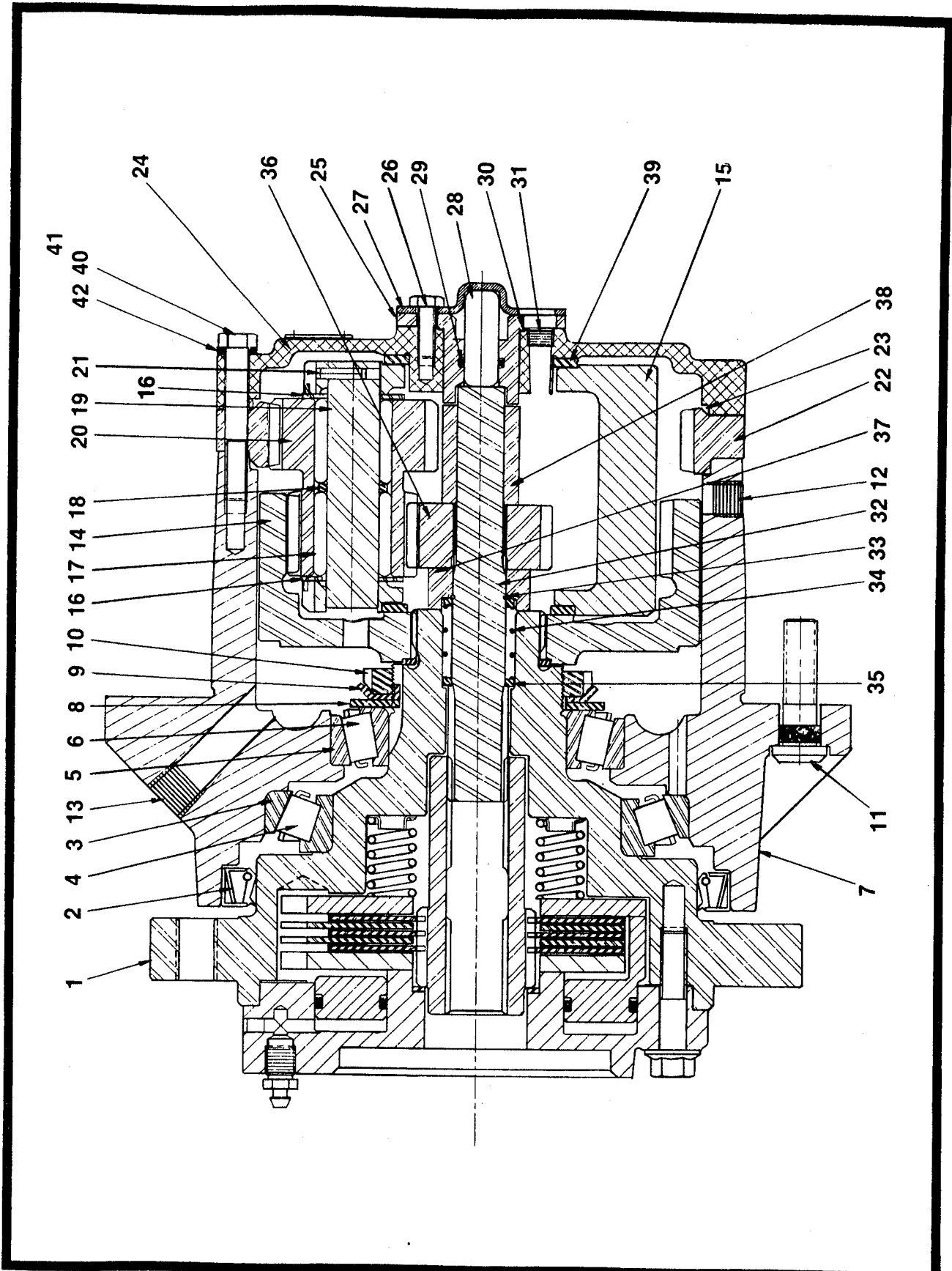


Figure 2-48. Drive Hub/Brake Assembly (89" Wheelbase 4WD Front).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-48	2780172	<b>DRIVE HUB/BRAKE ASSEMBLY (89" WHEELBASE 4WD FRONT)</b>	Ref.	—
		Hub/Spindle Assembly	1	
—1	7010454	Spindle	1	
—2	Kit	Seal	1	
—3	7007683	Cup, Bearing	1	
—4	7007684	Cone, Bearing	1	
—5	7007685	Cup, Bearing	1	
—6	7007686	Cone, Bearing	1	
—7	7007687	Hub	1	
—8	7007688	Washer, Tongued	1	
—9	7007689	Lockwasher	1	
—10	7007690	Locknut	1	
—11	7000241	Stud	9	
—12	7000242	Plug, Pipe	2	
—13	7007617	Plug, Magnetic	2	
—14	7007691	Gear, Internal	1	
		-----		
		Carrier Assembly	1	
—15	7001931	Carrier	1	
—16	7001985	Washer, Thrust	6	
—17	7001909	Roller, Needle	96	
—18	7000263	Spacer	3	
—19	7001911	Shaft, Planet	3	
—20	7001912	Gear, Cluster	3	
—21	7001913	Pin, Roll	3	
—22	7000248	Gear, Ring	1	
—23	Kit	O-Ring	2	
		-----		
		Cover Assembly	1	
—24	7000226	Cover	1	
—25	7000227	Cap, Cover	1	
—26	7000220	Bolt	4	
—27	7000211	Cap, Disconnect	1	
—28	7000212	Rod, Disconnect	1	
—29	Kit	O-Ring	1	
—30	Kit	O-Ring	1	
—31	7000243	Plug, Pipe	2	
		-----		
		Input Shaft Assembly	1	
—32	7000250	Shaft, Input	1	
—33	7000261	Ring, Retaining	1	
—34	7000262	Spring	1	
—35	7000263	Spacer	2	
—36	7000251	Gear, Input	1	
—37	7000252	Spacer, Input	1	
—38	7007654	Spacer, Thrust	1	
—39	7000253	Washer, Thrust	2	
—40	7000217	Bolt	12	
—41	7000214	Bolt, Shoulder	4	
—42	7007603	Flatwasher	16	
—43	Kit	Gasket	1	
—44	7010453	Brake Assembly	1	
—45	7003087	Disc, Stationary	2	
—46	7003089	Disc, Rotating	3	
—47	7003088	Piston	1	
—48	7010455	Coupling	1	
	2900754	Seal Kit - Hub (Includes Items 2,23,29,30 and 43)	1	
	2900755	Seal Kit - Brake (Includes Piston Rings and Gaskets)	1	

New 9/91

SECTION 2 — ILLUSTRATED PARTS LIST

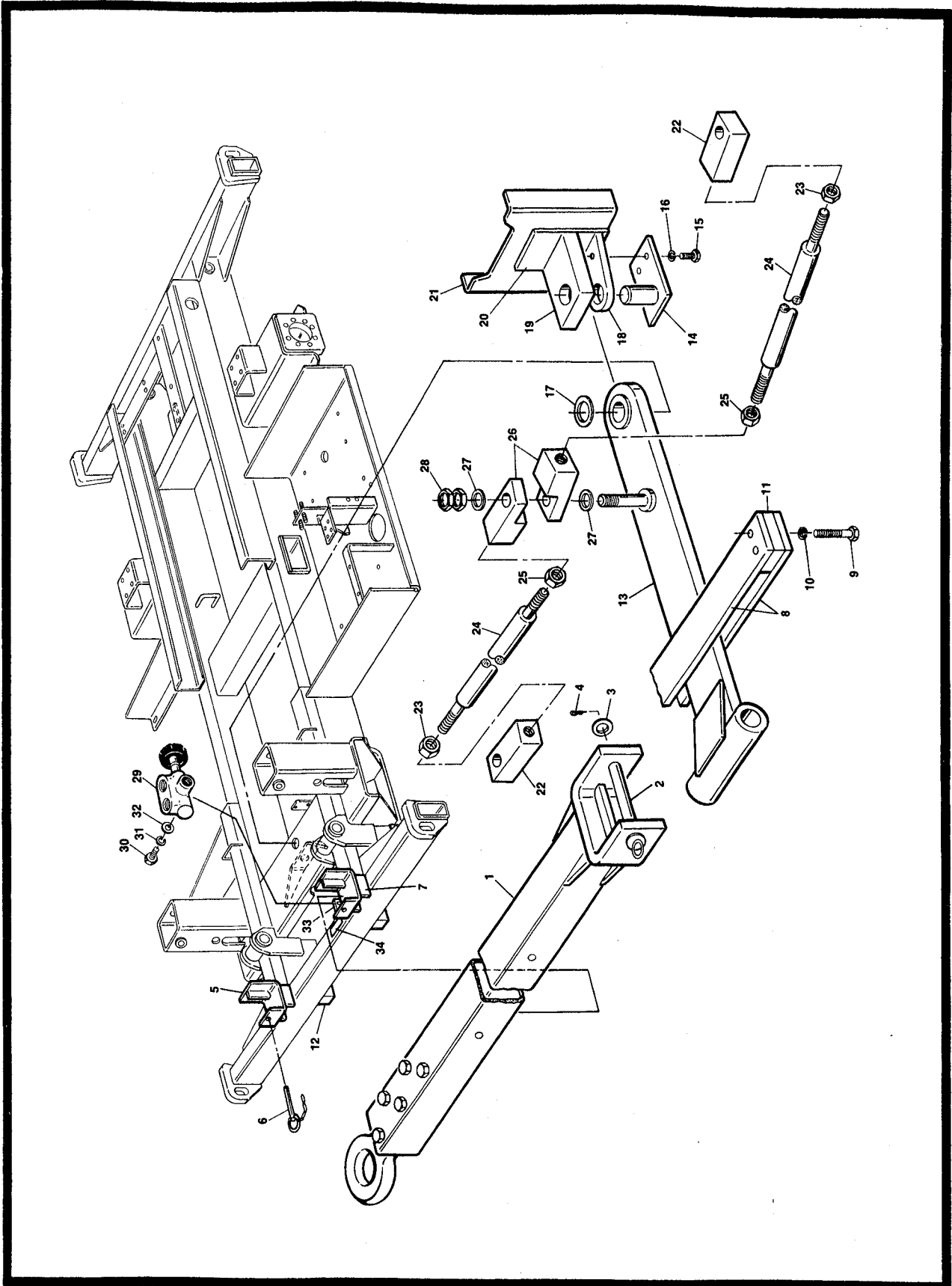


Figure 2-49. Tow Package Installation.



**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2-49	0250956	<b>TOW PACKAGE INSTALLATION</b>	Ref.	—
—1	0250145	Tow Bar Assembly	1	A
—2	3420447	Pin, Tow	1	
—3	4740036	Flatwasher, Special	1	
—4	3420372	Hairpin	1	
—5	0901611	Bracket, Stowage - Tow Bar	2	
—6	3420292	Pin, Quick Release	2	
	1260017	Chain (8' Lengths)	2	
—7	3534336	Plate, Support - Stow Bracket	4	
—8	3534337	Plate, Support - Tongue (Attaching Parts)	2	
—9	0641824	Bolt 1/2"-13NC x 3"	4	
—10	4761800	Lockwasher 1/2"	4	
—11	0560885	Block, Spacer	2	
—12	0560886	Block, Mounting (Welded on Part)	2	
—13	4843653	Tongue, Towing (Attaching Parts)	1	
—14	3421707	Pin, Hitch	1	
—15	0641608	Bolt 3/8"-16NC x 1"	2	
—16	4761600	Lockwasher 3/8"	2	
—17	4740307	Washer, Thrust	2	
—18	3040452	Lug, Hitch (Welded on Part)	1	
—19	0361800	Bar, Hitch (Welded on Part)	1	
—20	3533726	Plate, Hitch (Welded on Part)	1	
—21	3533727	Support, Hitch (Welded on Part)	1	
—22	0560703	Block, Tie-Rod	2	
—23	3300228	Nut, Jam 1"-12NF (LH Threads)	2	
—24	3841058	Tie-Rod	2	
—25	3322502	Nut, Jam 1"-12NF	2	
—26	0560884	Block, Tie-Rod	2	
—27	4752600	Flatwasher 1"	2	
—28	3312605	Locknut 1"-8NC	1	
—29	4640261	Valve Assembly - Tow (Attaching Parts)	1	
—30	0641507	Bolt 5/16"-18NC x 7/8"	2	
—31	4761500	Lockwasher 5/16"	2	
—32	4751500	Flatwasher 5/16"	2	
—33	0900479	Plate, Mounting - Valve (Welded on Part)	1	
—34	3250872	Nameplate - Steer/Tow	1	
	3820001	Rivet	4	

SECTION 2 — ILLUSTRATED PARTS LIST

NOTE: CM33RT SHOWN. USE THIS ILLUSTRATION AND PARTS LIST TO REFERENCE COMPONENTS FOR CM25RT AND CM40RT ALSO.

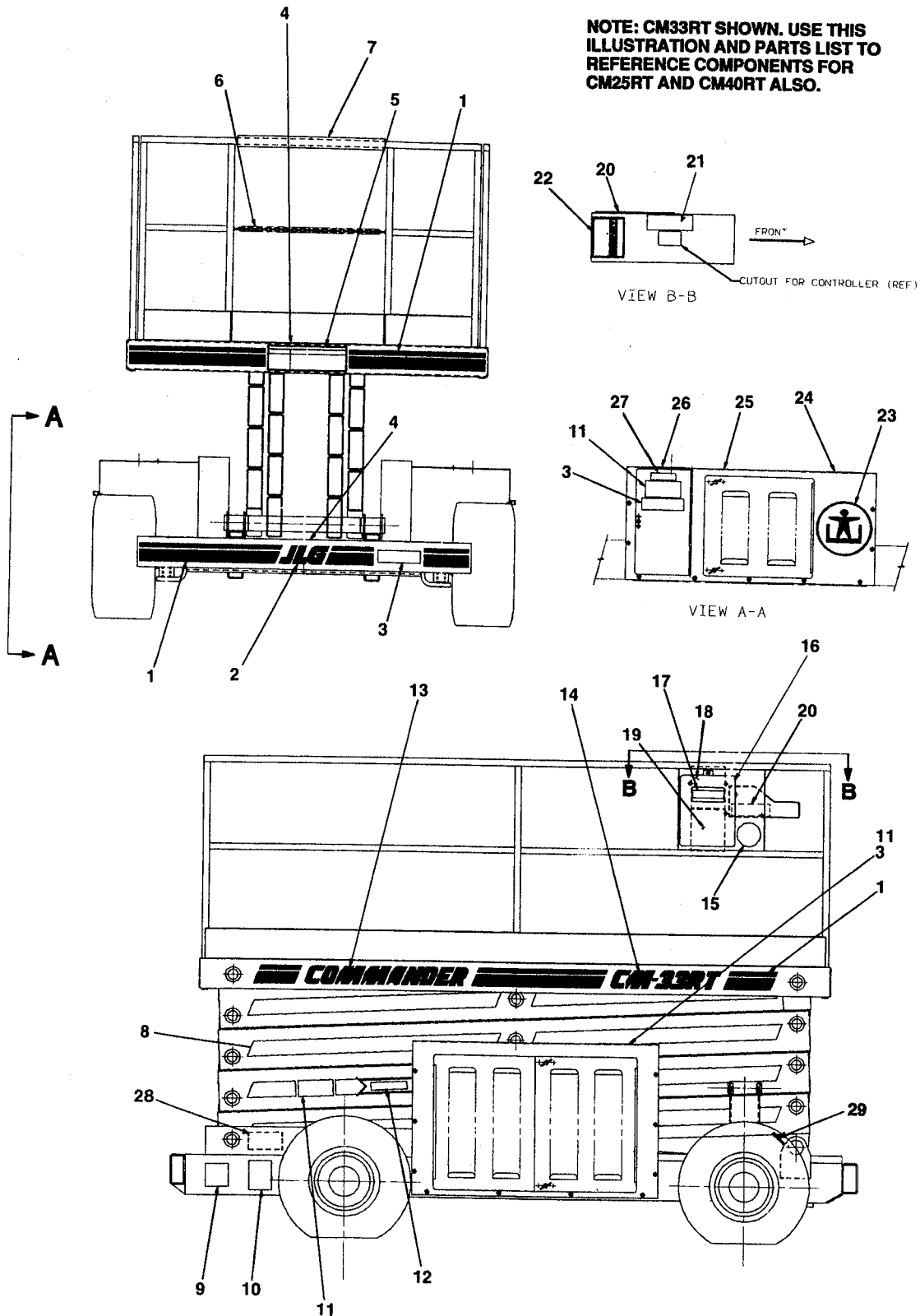


Figure 2-50. Nameplates and Decals Installation.

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—50	0251047	NAMEPLATES AND DECALS INSTALLATION (CM25RT BUILT PRIOR TO JULY 1991)	Ref.	—
	0251988	NAMEPLATES AND DECALS INSTALLATION (CM25RT BUILT JULY 1991 TO PRESENT)	Ref.	B
	0251071	NAMEPLATES AND DECALS INSTALLATION (CM25RT WITH TRAVERSING PLATFORM BUILT PRIOR TO JULY 1991)	Ref.	—
	0251989	NAMEPLATES AND DECALS INSTALLATION (CM25RT WITH TRAVERSING PLATFORM BUILT JULY 1991 TO PRESENT)	Ref.	B
	0239967	NAMEPLATES AND DECALS INSTALLATION (CM33RT BUILT PRIOR TO JULY 1991)	Ref.	A
	0251986	NAMEPLATES AND DECALS INSTALLATION (CM33RT BUILT JULY 1991 TO PRESENT)	Ref.	B
	0250952	NAMEPLATES AND DECALS INSTALLATION (CM33RT WITH TRAVERSING PLATFORM BUILT PRIOR TO JULY 1991)	Ref.	—
	0251987	NAMEPLATES AND DECALS INSTALLATION (CM33RT WITH TRAVERSING PLATFORM BUILT JULY 1991 TO PRESENT)	Ref.	B
	0250130	NAMEPLATES AND DECALS INSTALLATION (CM40RT BUILT PRIOR TO JULY 1991)	Ref.	A
	0251984	NAMEPLATES AND DECALS INSTALLATION (CM40RT BUILT JULY 1991 TO PRESENT)	Ref.	B
	0250953	NAMEPLATES AND DECALS INSTALLATION (CM40RT WITH TRAVERSING PLATFORM BUILT PRIOR TO JULY 1991)	Ref.	—
	0251985	NAMEPLATES AND DECALS INSTALLATION (CM40RT WITH TRAVERSING PLATFORM BUILT JULY 1991 TO PRESENT)	Ref.	B
	0251983	NAMEPLATES AND DECALS INSTALLATION (COMMON TO ALL MACHINES BUILT JULY 1991 TO PRESENT)	Ref.	—
	—1	1700431	Decal - Strip (Brown/Orange)	29/8.84m
—2	1701110*	Decal - JLG	2	
—3	3250873*	Nameplate - Danger	4	
—4	4420039	Tape - Safety Tread	37.9m	
—5	3252010*	Nameplate - Capacity (CM25RT - Standard)	1	
	3252008*	Nameplate - Capacity (CM25RT - With Traversing Platform)	1	
	3251913*	Nameplate - Capacity (CM33RT - Standard)	1	
	3251993*	Nameplate - Capacity (CM33RT - With Traversing Platform)	1	
	3251927*	Nameplate - Capacity (CM40RT - Standard)	1	
	3251992*	Nameplate - Capacity (CM40RT - With Traversing Platform)	1	
	3820001	Rivet	4	
—6	2820024	Tubing, Vinyl	2.57.8m	
—7	3340564	Padding	1	
—8	1701310	Decal - Strip (Orange) (CM25RT)	51/15.55m	
	1701310	Decal - Strip (Orange) (CM33RT)	67/20.4m	
	1701310	Decal - Strip (Orange) (CM40RT)	84/25.6m	
—9	1700593*	Decal - Inspection	1	
—10	Consult Factory	Nameplate - Serial Number	1	
—11	1701259*	Decal - Crushing Hazard	4	
—12	1700713*	Decal - Safety Prop	2	
—13	1701069*	Decal - Commander	2	
—14	1701369*	Decal - CM25RT	2	
	1701258*	Decal - CM33RT	2	
	1701291*	Decal - CM40RT	2	
	3251813*	Decal - USA	1	
—15	0860520	Box, Manual Storage	1	
—16		(Attaching Parts)		



**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—50		<b>NAMEPLATES AND DECALS INSTALLATIONS (CONTINUED)</b>	Ref.	
	0641405	Bolt 1/4"-20NC x 5/8"	4	
	4751400	Flatwasher 1/4"	4	
	4761400	Lockwasher 1/4"	4	
	3311401	Nut 1/4"-20NC	4	
	1060279	Cable, Lanyard	1	
—17	1700157*	Decal - Manuals	1	
—18	3251308*	Nameplate - Danger	1	
—19	3251912*	Nameplate - Caution	1	
—20	3252011*	Nameplate - Capacity (CM25RT Standard)	1	
	3252008*	Nameplate - Capacity (CM25RT with Traversing Platform)	1	
	3251914*	Nameplate - Capacity (CM33RT Standard)	1	
	3251993*	Nameplate - Capacity (CM33RT with Traversing Platform)	1	
	3251928*	Nameplate - Capacity (CM40RT Standard)	1	
	3251992*	Nameplate - Capacity (CM40RT with Traversing Platform)	1	
—21	1701133*	Decal - Drive/Steer	1	
—22	1701257*	Decal - Warning	1	
—23	1700427*	Decal - Logo	1	
—24	1700430	Decal - Fuel (Gas)	1	
	1700428	Decal - Fuel (Diesel)	1	
—25	3251249*	Nameplate - Daily Checklist	1	
—26	1700419*	Decal - Hydraulic Fluid	1	
—27	1701122*	Decal - Ground Control	1	
—28	3252024	Nameplate - Manual Lowering (Optional) (Prior to March 1991)	1	
—29	1701437	Decal - Manual Descent (Optional) (March 1991 to Present)	1	
		<b>DECAL INSTALLATION - FACTORY MUTUAL MACHINES (NOT SHOWN)</b>	Ref.	
	3251503	Nameplate - Battery Information	1	
	1701328	Decal - Factory Mutual Research Corporation	1	
	1701327	Decal - Factory Mutual Research Corporation	1	
	3251899	Nameplate -EE	1	
	2900773*	Decal Kit - CM25RT	1	
	2900758*	Decal Kit - CM33RT	1	
	2900757*	Decal Kit - CM40RT	1	
		* - Indicates Kit Components per Model.		

SECTION 2 — ILLUSTRATED PARTS LIST

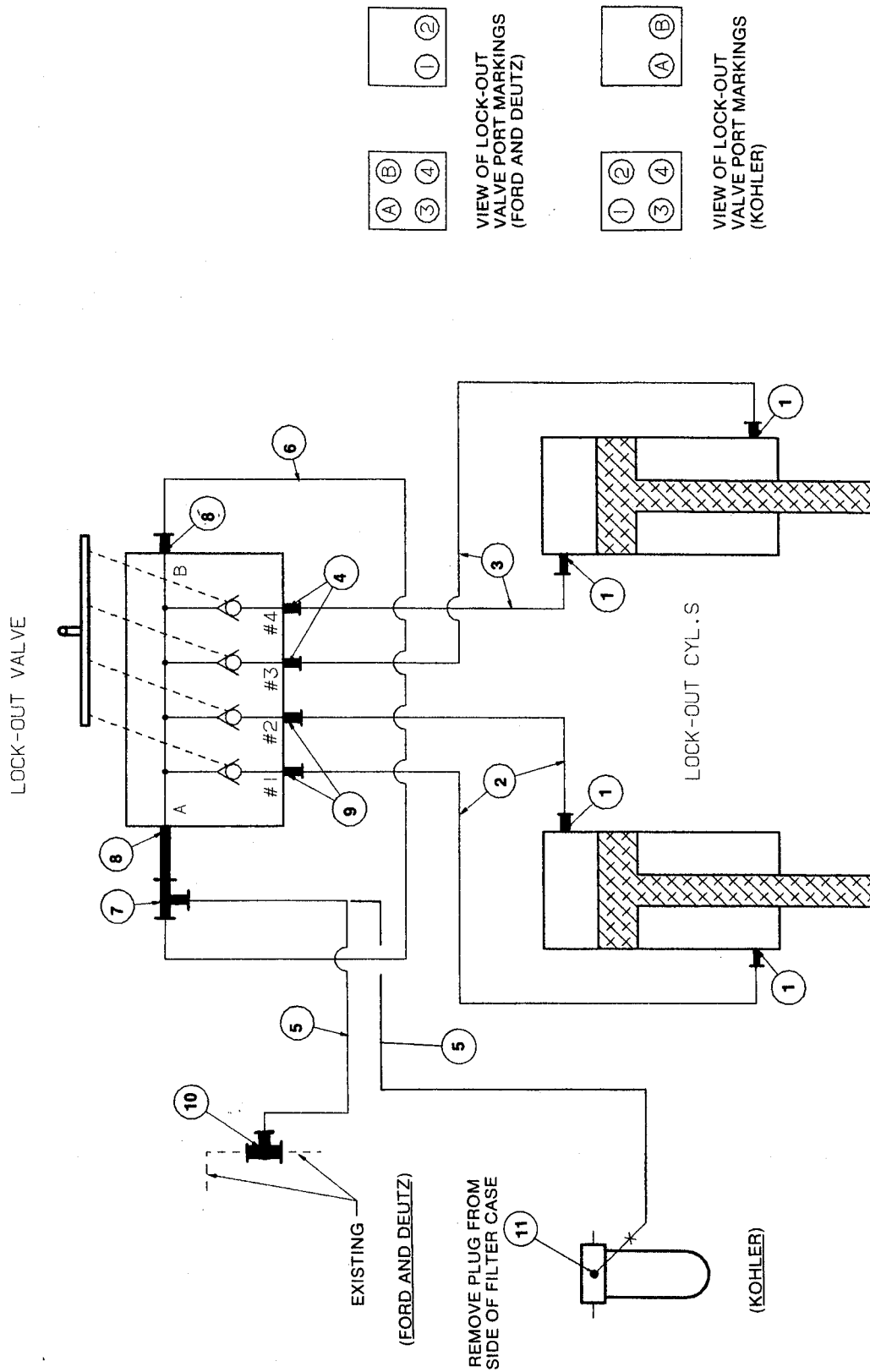


Figure 2-51. Hydraulic Diagram - Axle (Oscillating).

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—51	2791574	<b>HYDRAULIC DIAGRAM - AXLE (OSCILLATING) (FORD, DEUTZ AND ELECTRIC)</b>	Ref.	C
	2791545	<b>HYDRAULIC DIAGRAM - AXLE (OSCILLATING) (KOHLER)</b>	Ref.	—
—1	2220417	Fitting	4	
—2	2750760	Hose	2	
—3	2751010	Hose	2	
—4	2220582	Fitting	2	
—5	2750897	Hose (Ford, Deutz and Electric)	1	
	2751410	Hose (Kohler)	1	
—6	2750900	Hose	1	
—7	2220605	Fitting, Tee	1	
	2220654	Fitting, (Kohler Only)	1	
—8	2220582	Fitting (Ford and Deutz)	2	
	2220472	Fitting, 90° (Kohler)	2	
—9	2220472	Fitting, 90° (Ford and Deutz)	2	
	2220582	Fitting (Kohler)	2	
—10	2220605	Fitting, Tee (Ford and Deutz Only)	1	
—11	2220574	Fitting (Kohler Only)	1	





## SECTION 2 — ILLUSTRATED PARTS LIST

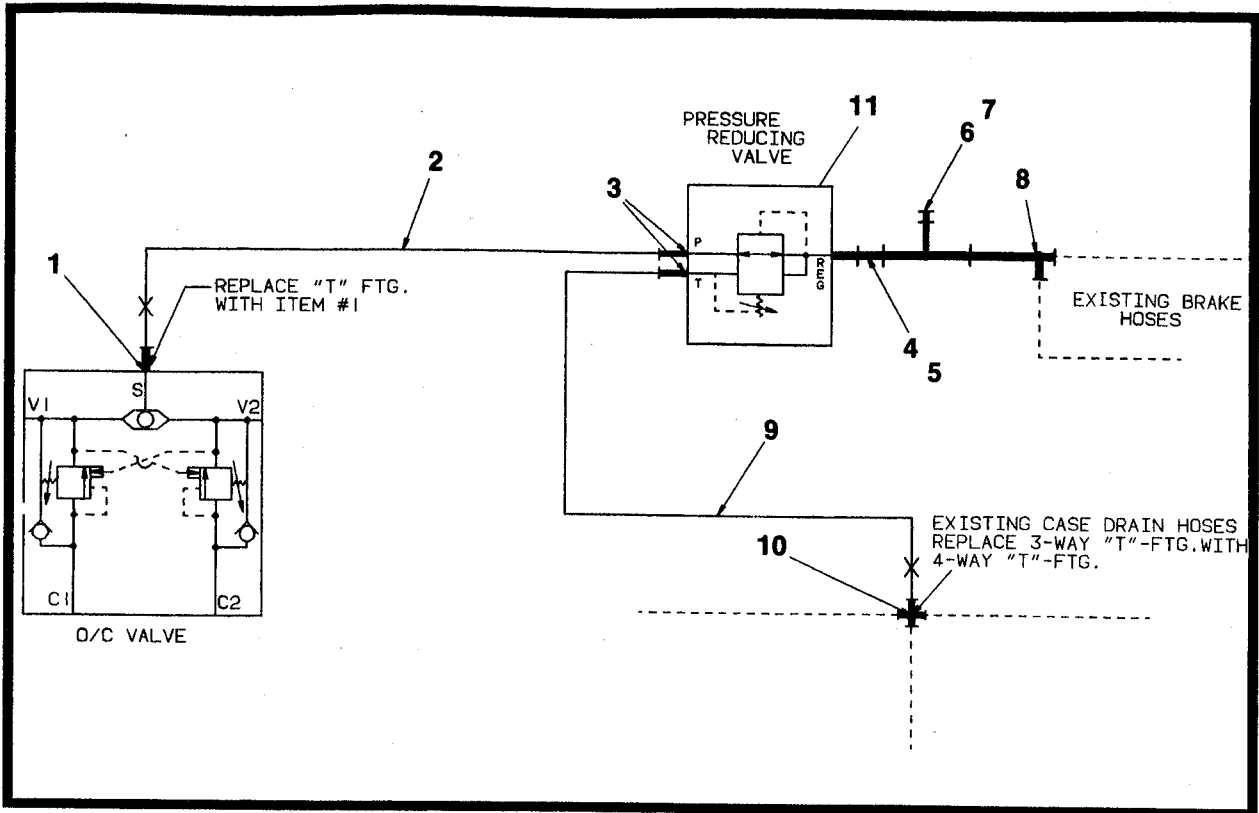


Figure 2-52. Hydraulic Diagram - Brakes with Pressure Reducing Valve.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-52	2791611	HYDRAULIC DIAGRAM - BRAKES WITH PRESSURE REDUCING VALVE	Ref.	A
-1	2220415	Fitting	1	
-2	2751018	Hose	1	
-3	2220585	Fitting, 90°	2	
-4	2220250	Fitting, Reducer	1	
-5	2220752	Fitting, Tee	1	
-6	2220428	Fitting, Quick Disconnect	1	
-7	2220429	Cap, Dust	1	
-8	2220684	Fitting, Tee	1	
-9	2750760	Hose	1	
-10	2220739	Fitting, Tee	1	
-11	4640632	Valve	1	

SECTION 2 — ILLUSTRATED PARTS LIST

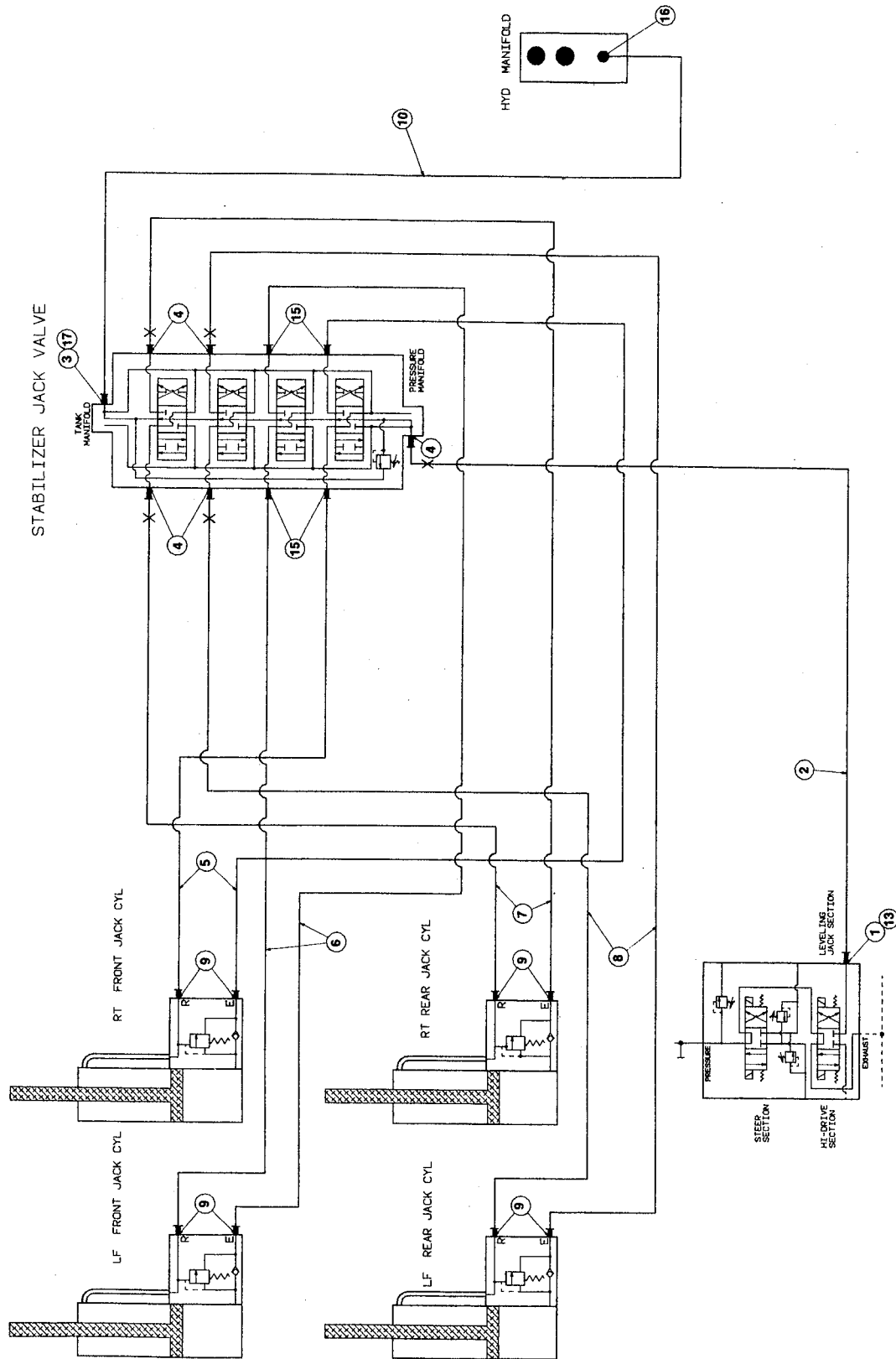


Figure 2-53. Hydraulic Diagram - Leveling Jacks.

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-53	2791559	<b>HYDRAULIC DIAGRAM - LEVELING JACKS</b>	Ref.	—
-1	2220628	Fitting, 90°	1	
-2	2750895	Hose	1	
-3	2220371	Fitting	1	
-4	2220582	Fitting	4	
-5	2750784	Hose	2	
-6	2751440	Hose	2	
-7	2751391	Hose	2	
-8	2751435	Hose	2	
-9	2220416	Fitting, 90°	8	
-10	2751128	Hose	1	
-11	Not Used			
-12	Not Used			
-13	2220609	Fitting, Reducer	1	
-14	2220654	Fitting, 90°	1	
-15	2220472	Fitting, 90°	4	
-16	2220344	Fitting	1	
-17	2220507	Fitting, 90°	1	



## SECTION 2 — ILLUSTRATED PARTS LIST

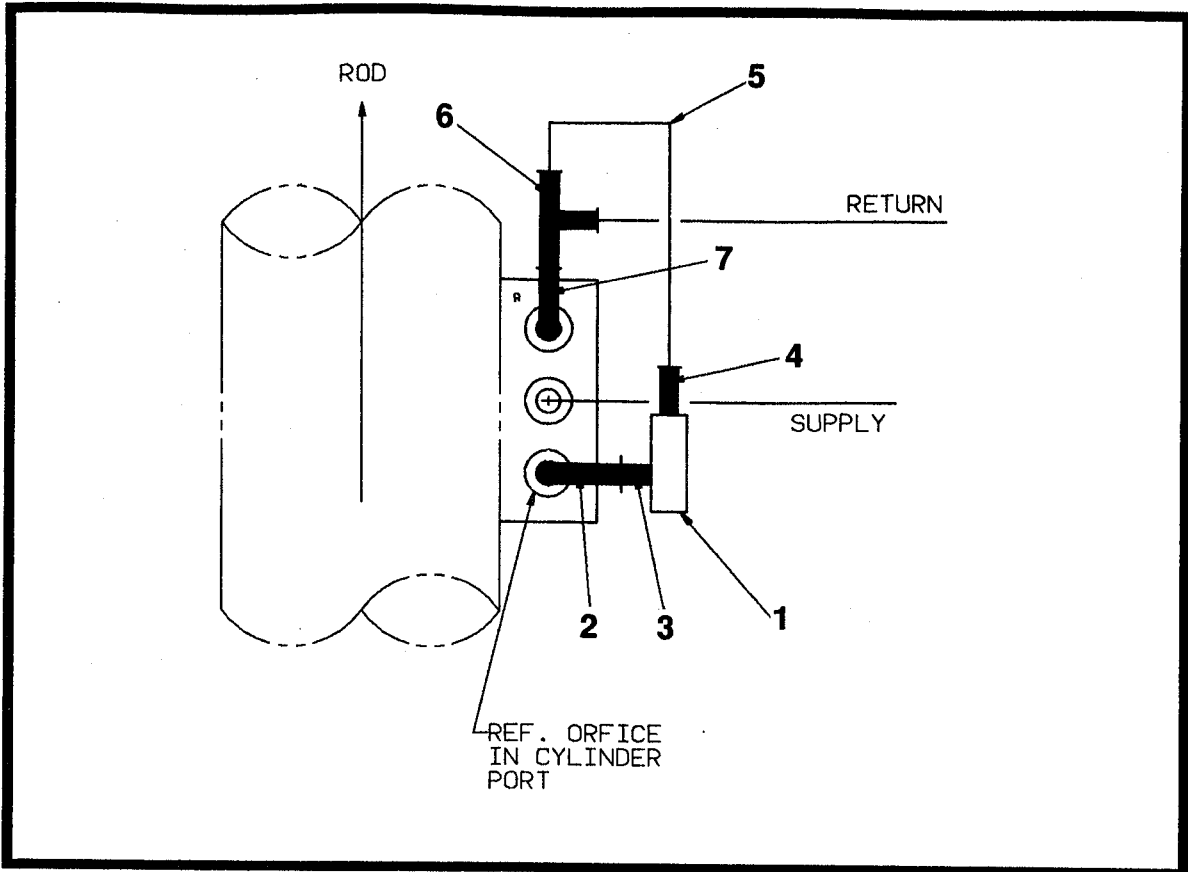


Figure 2-54. Hydraulic Diagram - Manual Lowering.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-54	0251181	<b>HYDRAULIC DIAGRAM - MANUAL DESCENT/ EMERGENCY LOWERING (PRIOR TO MARCH 1991)</b>	Ref.	—
	0251791	<b>HYDRAULIC DIAGRAM - MANUAL DESCENT/ EMERGENCY LOWERING (MARCH 1991 TO PRESENT)</b>	Ref.	B
-1	4640128	Valve, Flow Control (Prior to March 1991)	1	
	4640699	Valve, Pull (March 1991 to Present)	1	
	2900503	Seal Kit (4640699 Valve)	1	
-2	2220111	Fitting, 90°	1	
-3	2220261	Fitting, Nipple (Prior to March 1991)	1	
	2220820	Fitting, 90° (March 1991 to Present)	1	
-4	2220773	Fitting, 90° (Prior to March 1991)	1	
	2220399	Fitting, Adaptor (March 1991 to Present)	1	
-5	4564884	Tube (Prior to March 1991)	1	
	4565177	Tube (March 1991 to Present)	1	
-6	2220635	Fitting, Tee	1	
-7	2220473	Fitting, 90°	1	

## SECTION 2 — ILLUSTRATED PARTS LIST

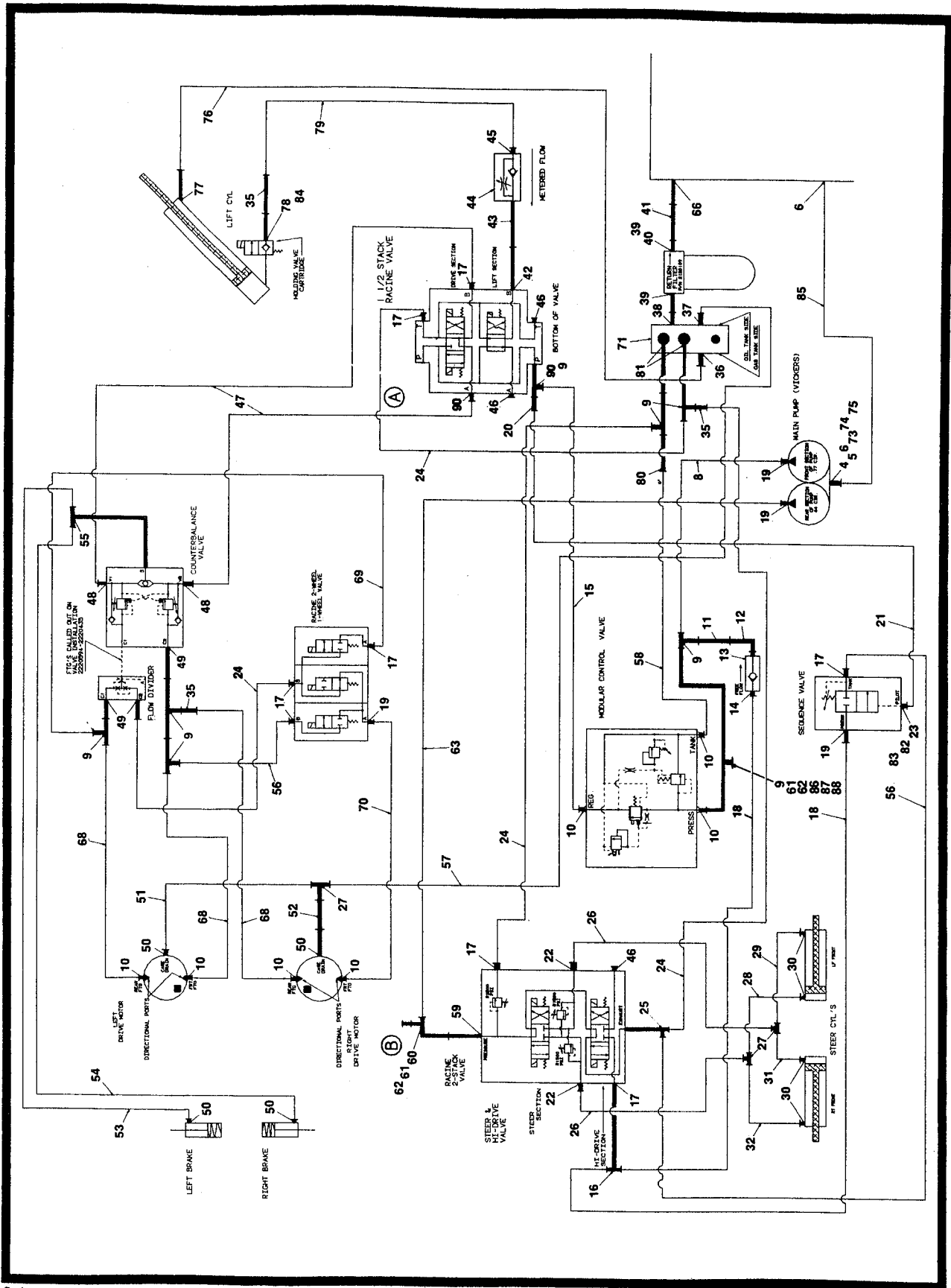


Figure 2-55. Hydraulic Diagram - Standard (80" Wheelbase 2WD - Ford, Deutz and Electric).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-55	2791570	<b>HYDRAULIC DIAGRAM - STANDARD (80" WHEELBASE 2WD - FORD, DEUTZ AND ELECTRIC)</b>	Ref.	D
-1	Not Used			
-2	Not Used			
-3	Not Used			
-4	2240020	Fitting, Split Flange	2	
-5	2210060	Fitting, 90°	1	
-6	1320033	Clamp	4	
-7	Not Used			
-8	2750759	Hose	1	
-9	2220385	Fitting, Tee	8	
-10	2220374	Fitting	7	
-11	2220670	Fitting	1	
-12	2220252	Fitting, Straight	1	
-13	4640009	Valve, Check	1	
-14	2220345	Fitting	1	
-15	2750775	Hose	1	
-16	2220383	Fitting, Tee	1	
-17	2220373	Fitting	8	
-18	2750791	Hose	3	
-19	2220596	Fitting, 90°	4	
-20	2220618	Fitting, Reducer	1	
-21	2751412	Hose	1	
-22	2220468	Fitting	2	
-23	2220654	Fitting, 90°	1	
-24	2750970	Hose	4	
-25	2220602	Fitting, Tee	1	
-26	2750897	Hose	2	
-27	2220504	Fitting, Tee	3	
-28	2751394	Hose	1	
-29	2750900	Hose	1	
-30	2220585	Fitting, 90°	4	
-31	2751427	Hose	1	
-32	2751409	Hose	1	
-33	Not Used			
-34	Not Used			
-35	2220386	Fitting, 90°	2	
-36	2220703	Fitting, 90°	1	
-37	2220583	Fitting, 90°	1	
-38	2220340	Fitting, Straight Nipple	1	
-39	2220275	Fitting	1	
-40	2220403	Fitting	1	
-41	2751930	Hose	1	
-42	2220113	Fitting, 90°	1	
-43	2220280	Fitting, Straight Nipple	1	
-44	4640216	Valve, Adjustable Restrictor	1	
-45	2220354	Fitting	1	
-46	2220238	Fitting, Plug	3	
-47	2750792	Hose	2	
-48	2220366	Fitting, 90°	2	
-49	2220375	Fitting	3	
-50	2220415	Fitting	4	
-51	2750889	Hose	1	
-52	2750891	Hose	1	
-53	2751391	Hose	1	
-54	2750760	Hose	1	
-55	2220711	Fitting, Tee	1	





**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-55		<b>HYDRAULIC DIAGRAM - STANDARD (80" WHEELBASE (2WD - FORD, DEUTZ AND ELECTRIC) (CONTINUED)</b>	Ref.	
-56	2751494	Hose	2	
-57	2751011	Hose	1	
-58	2750757	Hose	1	
-59	2180491	Fitting, 90°	1	
-60	2220820	Fitting, 90°	1	
-61	2220428	Fitting, Quick Disconnect	2	
-62	2220429	Cap, Dust	2	
-63	2751472	Hose	1	
-64	Not Used			
-65	Not Used			
-66	2220376	Fitting	1	
-67	Not Used			
-68	2750977	Hose	3	
-69	2750928	Hose	1	
-70	2750777	Hose	1	
-71	3100056	Manifold, Hydraulic	1	
-72	Not Used			
-73	0641710	Bolt 7/16"-14NC x 1 1/4"	4	
-74	2790222	O-Ring	1	
-75	4761700	Lockwasher 7/16"	4	
-76	2751123	Hose	1	
-77	2220473	Fitting, 90°	1	
-78	2220796	Fitting, 90°	1	
-79	2750930	Hose	1	
-80	2220683	Fitting, 45°	1	
-81	2220346	Fitting	2	
-82	2180540	Fitting, Modified	1	
-83	2180621	Fitting, Orifice	1	
-84	4640382	Valve, Cartridge	1	
-85	2720295	Hose, Suction	1	
-86	2220619	Fitting, Reducer	1	
-87	2220741	Fitting	1	
-88	2220438	Fitting, Nipple	1	
-89	2220237	Fitting, Plug	1	
-90	2220600	Fitting, Straight	2	
	0100020	----- Sealant, Thread	A/R	



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2—56	2791544	<b>HYDRAULIC DIAGRAM - STANDARD (80" WHEELBASE 2WD - KOHLER)</b>	Ref.	B
—1	2720311	Hose, Suction	1	
—2	1320033	Clamp	4	
—3	2210066	Fitting	1	
—4	2751492	Hose	1	
—5	Not Used			
—6	2751472	Hose	1	
—7	2220596	Fitting, 90°	2	
—8	2220385	Fitting, Tee	6	
—9	2220373	Fitting	7	
—10	2220670	Fitting	2	
—11	2220400	Fitting, Nipple	2	
—12	4640037	Valve, Check	1	
—13	2220343	Fitting	1	
—14	2750913	Hose	1	
—15	2220238	Fitting, Plug	2	
—16	2220468	Fitting	3	
—17	2750897	Hose	5	
—18	2220504	Fitting, Tee	2	
—19	2750900	Hose	1	
—20	2751427	Hose	1	
—21	2751394	Hose	1	
—22	2751409	Hose	1	
—23	2220585	Fitting, 90°	4	
—24	2220383	Fitting, Tee	2	
—25	2750970	Hose	1	
—26	2750775	Hose	1	
—27	2220446	Fitting, Reducer	1	
—28	2750994	Hose	1	
—29	2220628	Fitting, 90°	1	
—30	2750928	Hose	1	
—31	2220600	Fitting	1	
—32	2220618	Fitting, Reducer	2	
—33	2750902	Hose	1	
—34	2750976	Hose	3	
—35	2751492	Hose	1	
—36	Not Used			
—37	Not Used			
—38	2750977	Hose	1	
—39	2220250	Fitting, Reducer	1	
—40	2220428	Fitting, Quick Disconnect	2	
—41	2220429	Cap, Dust	2	
—42	2750774	Hose	1	
—43	2220596	Fitting, 90°	4	
—44	2220752	Fitting, Tee	1	
—45	2220399	Fitting	1	
—46	Not Used			
—47	2220491	Fitting	1	
—48	2751035	Hose	1	
—49	2220376	Fitting	1	
—50	4640216	Valve, Adjustable Restrictor	1	
—51	2220396	Fitting	1	
—52	2751163	Hose	1	
—53	2220473	Fitting, 90°	1	
—54	2220796	Fitting, 90°	1	
—55	2220366	Fitting, 90°	2	
—56	2220375	Fitting	3	



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-56		<b>HYDRAULIC DIAGRAM - STANDARD (80" WHEELBASE 2WD - KOHLER) (CONTINUED)</b>	Ref.	
-57	2751467	Hose	2	
-58	2750968	Hose	1	
-59	2751484	Hose	1	
-60	2220386	Fitting, 90°	2	
-61	2751502	Hose	1	
-62	2220415	Fitting	5	
-63	2220654	Fitting, 90°	1	
-64	2220605	Fitting, Tee	1	
-65	2751893	Hose	1	
-66	2750930	Hose	1	
-67	Not Used			
-68	2220111	Fitting, 90°	1	
-69	2220261	Fitting, Straight	1	
-70	3100056	Manifold, Hydraulic	1	
-71	2220340	Fitting, Nipple	1	
-72	2220372	Fitting	1	
-73	2220619	Fitting, Reducer	2	
-74	2220275	Fitting, Reducer	1	
-75	2220828	Fitting, 90°	1	
-76	2220671	Fitting, 90°	1	
-77	2220239	Fitting, Plug	1	
-78	2220374	Fitting, 90°	7	



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-57	2791571	<b>HYDRAULIC DIAGRAM - STANDARD (80" WHEELBASE 4WD FORD AND DEUTZ)</b>	Ref.	D
-1	Not Used			
-2	Not Used			
-3	Not Used			
-4	2240020	Fitting, Split Flange	2	
-5	2210060	Fitting, 90°	1	
-6	1320033	Clamp	4	
-7	2220671	Fitting, 90°	2	
-8	2750759	Hose	2	
-9	2220385	Fitting, Tee	10	
-10	2220374	Fitting	7	
-11	2220670	Fitting	1	
-12	2220252	Fitting, Straight	1	
-13	4640009	Valve, Check	1	
-14	2220345	Fitting	1	
-15	2750775	Hose	1	
-16	2220383	Fitting, Tee	1	
-17	2220373	Fitting	2	
-18	2750791	Hose	12	
-19	2220596	Fitting, 90°	2	
-20	2220618	Fitting, Reducer	4	
-21	2751412	Hose	1	
-22	2220468	Fitting	1	
-23	2220654	Fitting, 90°	2	
-24	2750970	Hose	2	
-25	2220602	Fitting, Tee	3	
-26	2750897	Hose	1	
-27	2220504	Fitting, Tee	2	
-28	2751394	Hose	3	
-29	2750900	Hose	1	
-30	2220585	Fitting, 90°	1	
-31	2751427	Hose	4	
-32	2751409	Hose	1	
-33	Not Used		1	
-34	Not Used			
-35	2220386	Fitting, 90°	9	
-36	2220703	Fitting, 90°	1	
-37	2220583	Fitting, 90°	1	
-38	2220340	Fitting, Straight Nipple	1	
-39	2220275	Fitting	1	
-40	2220403	Fitting	2	
-41	2751930	Hose	1	
-42	2220113	Fitting, 90°	1	
-43	2220280	Fitting, Straight Nipple	1	
-44	4640216	Valve, Adjustable Restrictor	1	
-45	2220354	Fitting	1	
-46	2220238	Fitting, Plug	1	
-47	2750792	Hose	2	
-48	2220366	Fitting, 90°	2	
-49	2220375	Fitting	2	
-50	2220415	Fitting	5	
-51	2750889	Hose	6	
-52	2750891	Hose	1	
-53	2751391	Hose	1	
-54	2750760	Hose	1	
-55	2220711	Fitting, Tee	1	





**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-57	2791571	<b>HYDRAULIC DIAGRAM - STANDARD (80" WHEELBASE 4WD FORD AND DEUTZ) (CONTINUED)</b>	Ref.	D
-56	2751494	Hose	2	
-57	2751011	Hose	1	
-58	2750757	Hose	1	
-59	2180491	Fitting, 90°	1	
-60	2220820	Fitting, 90°	1	
-61	2220428	Fitting, Quick Disconnect	2	
-62	2220429	Cap, Dust	2	
-63	2751472	Hose	1	
-64	Not Used			
-65	Not Used			
-66	2220376	Fitting	1	
-67	2750927	Hose	1	
-68	2750977	Hose	4	
-69	2750928	Hose	2	
-70	Not Used			
-71	3100056	Manifold, Hydraulic	1	
-72	Not Used			
-73	0641710	Bolt 7/16"-14NC x 1 1/4"	4	
-74	3790222	O-Ring	1	
-75	4761700	Lockwasher 7/16"	4	
-76	2751123	Hose	1	
-77	2220473	Fitting, 90°	1	
-78	2220796	Fitting, 90°	1	
-79	2750930	Hose	1	
-80	2220677	Fitting, 45°	1	
-81	2751901	Hose	1	
-82	2751411	Hose	1	
-83	2220605	Fitting, Tee	1	
-84	2220586	Fitting	1	
-85	2220375	Fitting	4	
-86	2750972	Hose	1	
-87	2220619	Fitting, Reducer	1	
-88	Not Used			
-89	Not Used			
-90	Not Used			
-91	Not Used			
-92	Not Used			
-93	2220683	Fitting, 45°	1	
-94	2220346	Fitting	2	
-95	2180540	Fitting, Modified	1	
-96	2180621	Fitting, Orifice	1	
-97	4640382	Valve, Cartridge	1	
-98	2720295	Hose, Suction	1	
-99	2751518	Hose	2	
-100	2220671	Fitting, 90°	4	
-101	2751517	Hose	2	
-102	2750968	Hose	1	
-103	2751489	Hose	1	
-104	2751472	Hose	1	
-105	2220741	Fitting	1	
-106	2220438	Fitting, Nipple	1	
-107	2220237	Plug	1	
	0100020	Sealant, Thread	A/R	



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-58	2791690	<b>HYDRAULIC DIAGRAM - STANDARD (89" WHEELBASE - 2WD)</b>	Ref.	G
-1	4564672	Tube	1	
-2	4564673	Tube	1	
-3	4564674	Tube	1	
-4	4564675	Tube	1	
-5	4564676	Tube	1	
-6	4564677	Tube	1	
-7	4564678	Tube	1	
-8	4564679	Tube	1	
-9	4564680	Tube	1	
-10	4564698	Tube	1	
-11	4564699	Tube	1	
-12	2720295	Hose, Suction (60"/1.53m Length)	1	
-13	2220669	Fitting, Split Flange Kit	1	
-14	2210060	Fitting, 90' Split Flange	1	
-15	1320033	Clamp	8	
-16	2750777	Hose	1	
-17	2220600	Fitting, Straight	2	
-18	2180679	Orifice	1	
-19	Not Used			
-20	2180745	Fitting, Modified	1	
-21	2220345	Fitting, Straight	1	
-22	2220275	Fitting, Reducer	1	
-23	2220403	Fitting, 90'	1	
-24	2210003	Fitting, Nipple	2	
-25	2720355	Hose, Suction (11 1/2"/29.2cm Length)	1	
-26	2220832	Fitting, 4-Way	1	
-27	2220596	Fitting, 90'	3	
-28	2220621	Fitting, Reducer	1	
-29	2220507	Fitting, 90'	1	
-30	Not Used			
-31	2220835	Fitting, Union	2	
-32	2750970	Hose	2	
-33	4640009	Valve, Check	1	
-34	2220452	Fitting	1	
-35	2220700	Fitting, Tee	2	
-36	2220679	Fitting, Tee	1	
-37	2220408	Fitting, Straight	1	
-38	2220374	Fitting, Straight	1	
-39	2220385	Fitting, Tee	2	
-40	2220651	Fitting, Swivel	1	
-41	2180750	Fitting, Tee	1	
-42	2220373	Fitting, Stright	5	
-43	2220422	Fitting	1	
-44	2220417	Fitting, Straight	2	
-45	2750896	Hose	2	
-46	2220468	Fitting, Straight	2	
-47	2220238	Fitting, Plug	2	
-48	2220113	Fitting, 90'	1	
-49	2220593	Fitting, Straight	3	
-50	4640382	Valve, Cartridge	1	
-51	2220383	Fitting, Tee	1	
-52	2220280	Fitting, Straight	1	
-53	4640216	Valve, Colorflow	1	
-54	2220580	Fitting, 90'	1	
-55	2220796	Fitting, 90'	1	



**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-58		<b>HYDRAULIC DIAGRAM - STANDARD (89" WHEELBASE 2WD) (CONTINUED)</b>	Ref.	
-56	2220386	Fitting, 90°	2	
-57	2220473	Fitting, 90°	1	
-58	2750930	Hose	1	
-59	2751123	Hose	1	
-60	2751466	Hose	2	
-61	2180746	Fitting, Modified	1	
-62	2220261	Fitting, Coupling	2	
-63	2220428	Fitting, Quick Disconnect	3	
-64	2220429	Cap, Dust	3	
-65	2220415	Fitting	4	
-66	2751026	Hose	1	
-67	2220250	Fitting, Reducer	3	
-68	2220584	Fitting, Tee	1	
-69	2220673	Fitting, 90°	1	
-70	4640197	Valve, Check	1	
-71	2220414	Fitting, Straight	1	
-72	2750760	Hose	1	
-73	2751021	Hose	2	
-74	2220822	Fitting, Orifice	1	
-75	2750900	Hose	1	
-76	2751391	Hose	1	
-77	2751010	Hose	1	
-78	2220711	Fitting, Tee	1	
-79	2220752	Fitting, Tee	1	
-80	2220684	Fitting, Tee	2	
-81	2751514	Hose	2	
-82	2750972	Hose	1	
-83	2750757	Hose	1	
-84	2750979	Hose	1	
-85	2750791	Hose	1	
-86	2220469	Fitting, 4 Way	1	
-87	2220618	Fitting, Reducer	1	
-88	2220366	Fitting, 90°	2	
-89	2220375	Fitting	7	
-90	2751017	Hose	1	
-91	2220567	Fitting, 90°	1	
-92	2220585	Fitting, 90°	1	
-93	2220696	Fitting, Reducer	1	
-94	2180491	Fitting, Modified	1	

SECTION 2 — ILLUSTRATED PARTS LIST

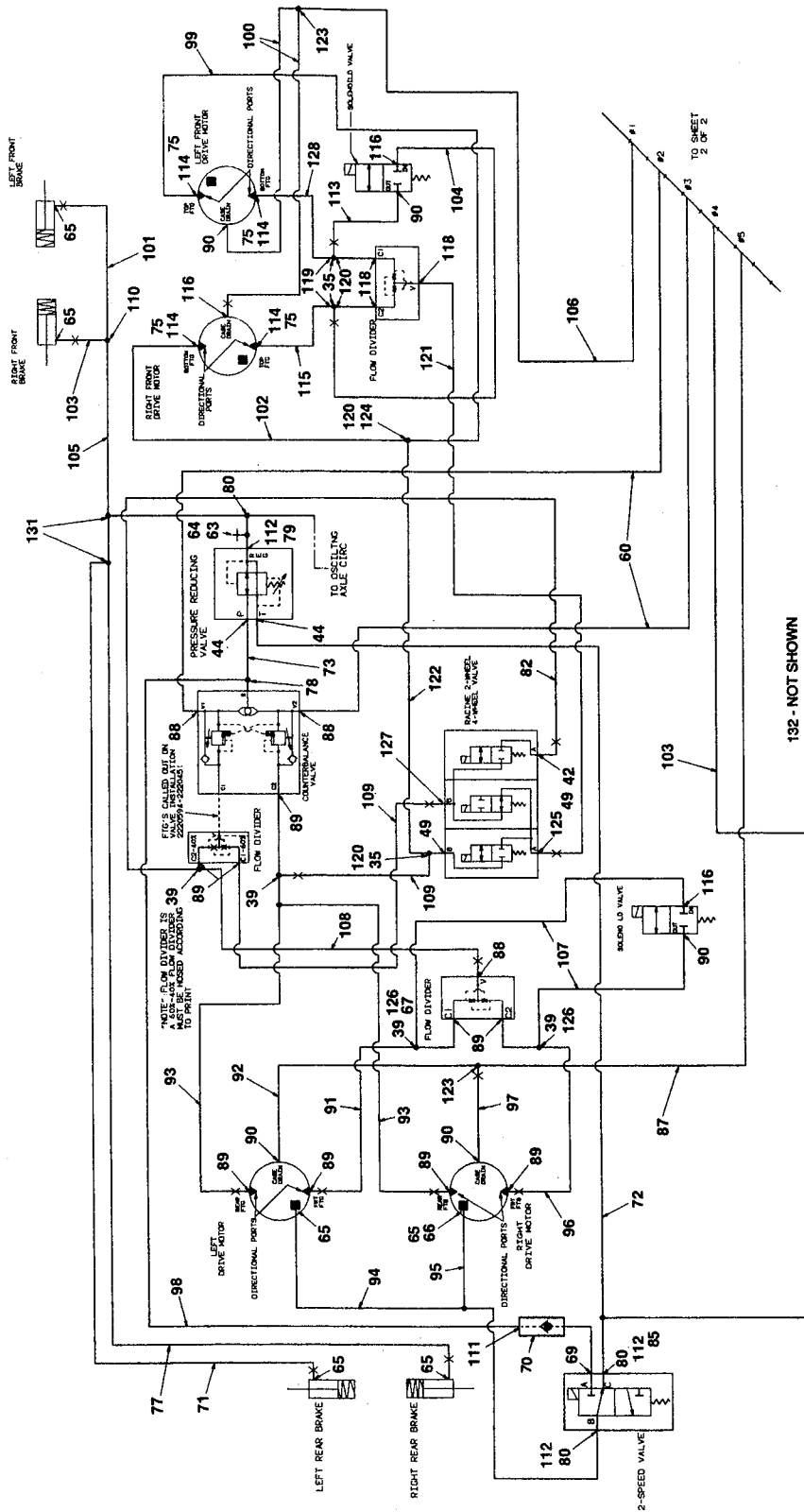


Figure 2-59. Hydraulic Diagram - Standard (89" Wheelbase - 4WD) (Sheet 1 of 2).

SECTION 2 — ILLUSTRATED PARTS LIST

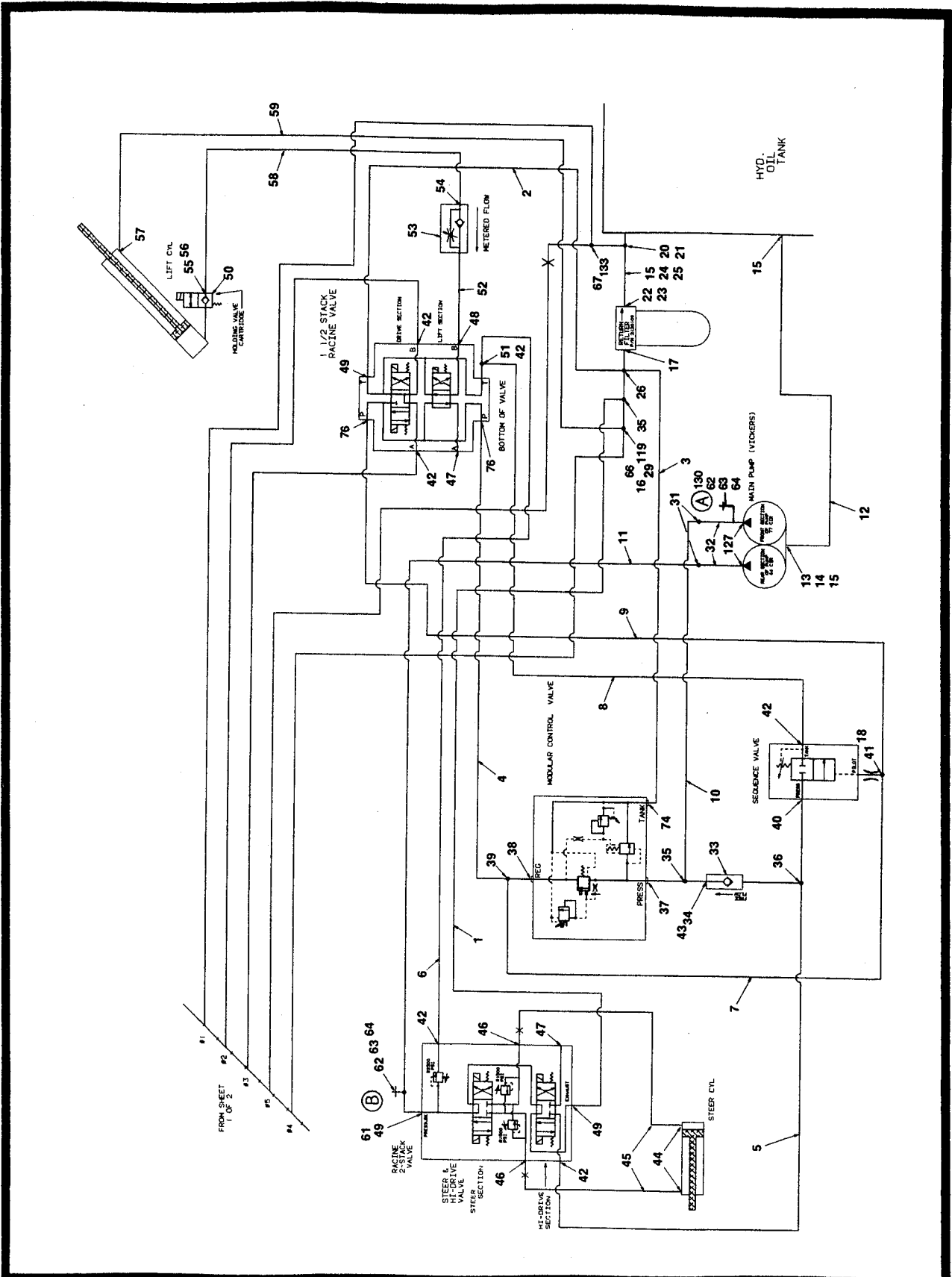


Figure 2-59. Hydraulic Diagram - Standard (89" Wheelbase - 4WD) (Sheet 2 of 2).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-59	2791691	<b>HYDRAULIC DIAGRAM - STANDARD (89" WHEELBASE - 4WD)</b>	Ref.	G
-1	4564672	Tube	1	
-2	4564673	Tube	1	
-3	4564674	Tube	1	
-4	4564675	Tube	1	
-5	4564676	Tube	1	
-6	4564677	Tube	1	
-7	4564678	Tube	1	
-8	4564679	Tube	1	
-9	4564680	Tube	1	
-10	4564698	Tube	1	
-11	4564699	Tube	1	
-12	2720295	Hose, Suction (60"/1.53m Length)	1	
-13	2220669	Fitting, Split Flange Kit	1	
-14	2210060	Fitting, 90° Split Flange	1	
-15	1320033	Clamp	4	
-16	Not Used			
-17	2220696	Fitting, Reducer	1	
-18	2180679	Orifice	1	
-19	Not Used			
-20	2180745	Fitting, Modified	1	
-21	2220432	Fitting	1	
-22	2220275	Fitting, Reducer	1	
-23	2220403	Fitting, 90°	1	
-24	2210003	Fitting, Nipple	2	
-25	2720355	Hose, Suction (11 1/2"/29.2cm Length)	1	
-26	2220832	Fitting, 4-Way	1	
-27	Not Used			
-28	Not Used			
-29	2220609	Fitting, Reducer	1	
-30	Not Used			
-31	2220835	Fitting, Union	2	
-32	2750970	Hose	2	
-33	4640009	Valve, Check	1	
-34	2220452	Fitting	1	
-35	2220700	Fitting, Tee	2	
-36	2220679	Fitting, Tee	1	
-37	2220408	Fitting, Straight	1	
-38	2220374	Fitting, Straight	5	
-39	2220385	Fitting, Tee	6	
-40	2220651	Fitting, Swivel	1	
-41	2180750	Fitting, Tee	1	
-42	2220373	Fitting, Straight	7	
-43	2220422	Fitting	1	
-44	2220417	Fitting, Straight	4	
-45	2750896	Hose	2	
-46	2220468	Fitting, Straight	2	
-47	2220238	Fitting, Plug	2	
-48	2220113	Fitting, 90°	1	
-49	2220593	Fitting, Straight	3	
-50	4640382	Valve, Cartridge	1	
-51	2220383	Fitting, Tee	1	
-52	2220280	Fitting, Straight	1	
-53	4640216	Valve, Colorflow	1	
-54	2220580	Fitting	1	
-55	2220796	Fitting, 90°	1	



**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—59		<b>HYDRAULIC DIAGRAM - STANDARD (89" WHEELBASE 4WD) (CONTINUED)</b>	Ref.	
—56	2220386	Fitting, 90°	3	
—57	2220473	Fitting, 90°	1	
—58	2750930	Hose	1	
—59	2751123	Hose	1	
—60	2751466	Hose	2	
—61	2180746	Fitting, Modified	1	
—62	2220261	Fitting, Coupling	2	
—63	2220428	Fitting, Quick Disconnect	3	
—64	2220429	Cap, Dust	3	
—65	2220415	Fitting, Straight	6	
—66	2220462	Fitting	2	
—67	2220507	Fitting, 90°	2	
—68	2220584	Fitting, Tee	2	
—69	2220673	Fitting, 90°	1	
—70	4640197	Valve, Check	1	
—71	2751391	Hose	1	
—72	2750760	Hose	1	
—73	2750902	Hose	1	
—74	2220567	Fitting, 90°	1	
—75	2180755	Fitting, Modified Reducer	4	
—76	2220600	Fitting, Straight	2	
—77	2751010	Hose	1	
—78	2220711	Fitting, Tee	1	
—79	2220752	Fitting, Tee	1	
—80	2220684	Fitting, Tee	1	
—81	Not Used			
—82	2750972	Hose	1	
—83	Not Used			
—84	Not Used			
—85	2220822	Fitting, Modified Orifice	1	
—86	Not Used			
—87	2751110	Hose	1	
—88	2220366	Fitting, 90°	2	
—89	2220375	Fitting, Straight	9	
—90	2220628	Fitting, 90°	5	
—91	2750773	Hose	1	
—92	2750918	Hose	1	
—93	2750774	Hose	2	
—94	2751017	Hose	1	
—95	2751026	Hose	1	
—96	2750791	Hose	1	
—97	2750991	Hose	1	
—98	2751021	Hose	1	
—99	2750766	Hose	1	
—100	2750909	Hose	2	
—101	2750892	Hose	1	
—102	2750759	Hose	1	
—103	2751410	Hose	2	
—104	2751004	Hose	2	
—105	2750756	Hose	1	
—106	2751155	Hose	1	
—107	2751002	Hose	2	
—108	2750777	Hose	1	
—109	2750968	Hose	2	
—110	2220504	Fitting, Tee	1	
—111	2220414	Fitting, Straight	1	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-59		<b>HYDRAULIC DIAGRAM - STANDARD (89" WHEELBASE 4WD) (CONTINUED)</b>	Ref.	
-112	2220250	Fitting, Reducer	3	
-113	Not Used			
-114	2220772	Fitting, Swivel	4	
-115	2750763	Hose	1	
-116	2220372	Fitting	2	
-117	Not Used	Hose	1	
-118	2220451	Fitting	3	
-119	2220621	Fitting, Reducer	3	
-120	2220622	Fitting, Reducer	3	
-121	2751337	Hose	1	
-122	2751374	Hose	1	
-123	2220490	Fitting, Tee	2	
-124	2220481	Fitting, Tee	1	
-125	2220655	Fitting, 90°	1	
-126	2220619	Fitting, Reducer	3	
-127	2220596	Fitting, 90°	2	
-128	27751476	Hose	1	
-129	Not Used			
-130	2180491	Fitting, Modified	1	
-131	2220605	Fitting, Tee	1	
-132	4100033	Loom, Hose	30/9.14m	
-133	2220344	Fitting, Straight	2	

## SECTION 2 — ILLUSTRATED PARTS LIST

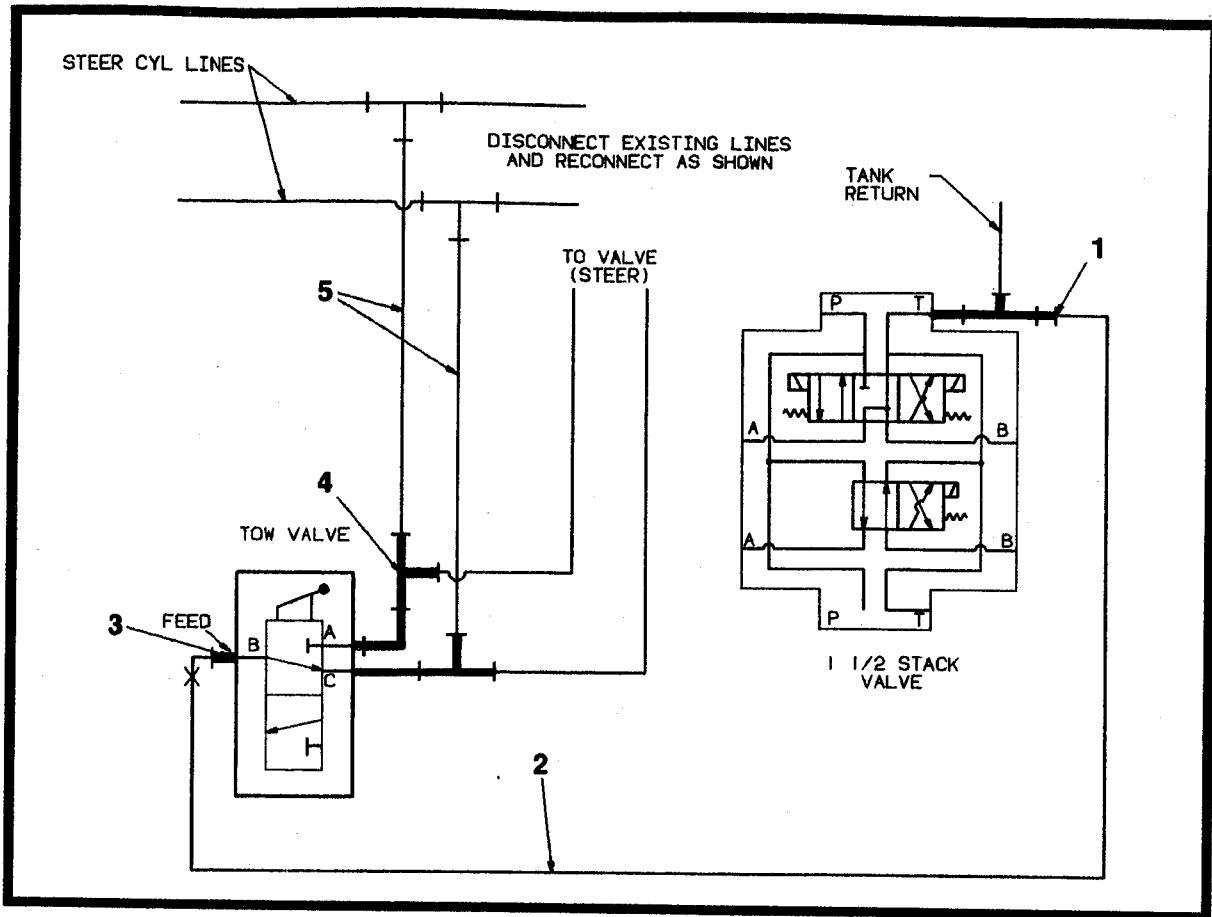


Figure 2-60. Hydraulic Diagram - Tow.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-60	0250956	<b>HYDRAULIC DIAGRAM - TOW</b>	Ref.	—
-1	2220385	Fitting, Tee	1	
-2	2220619	Fitting, Straight	1	
-3	2751114	Hose	1	
-4	2220468	Fitting	2	
	2220605	Fitting, Tee	2	
-5	2751394	Hose	2	

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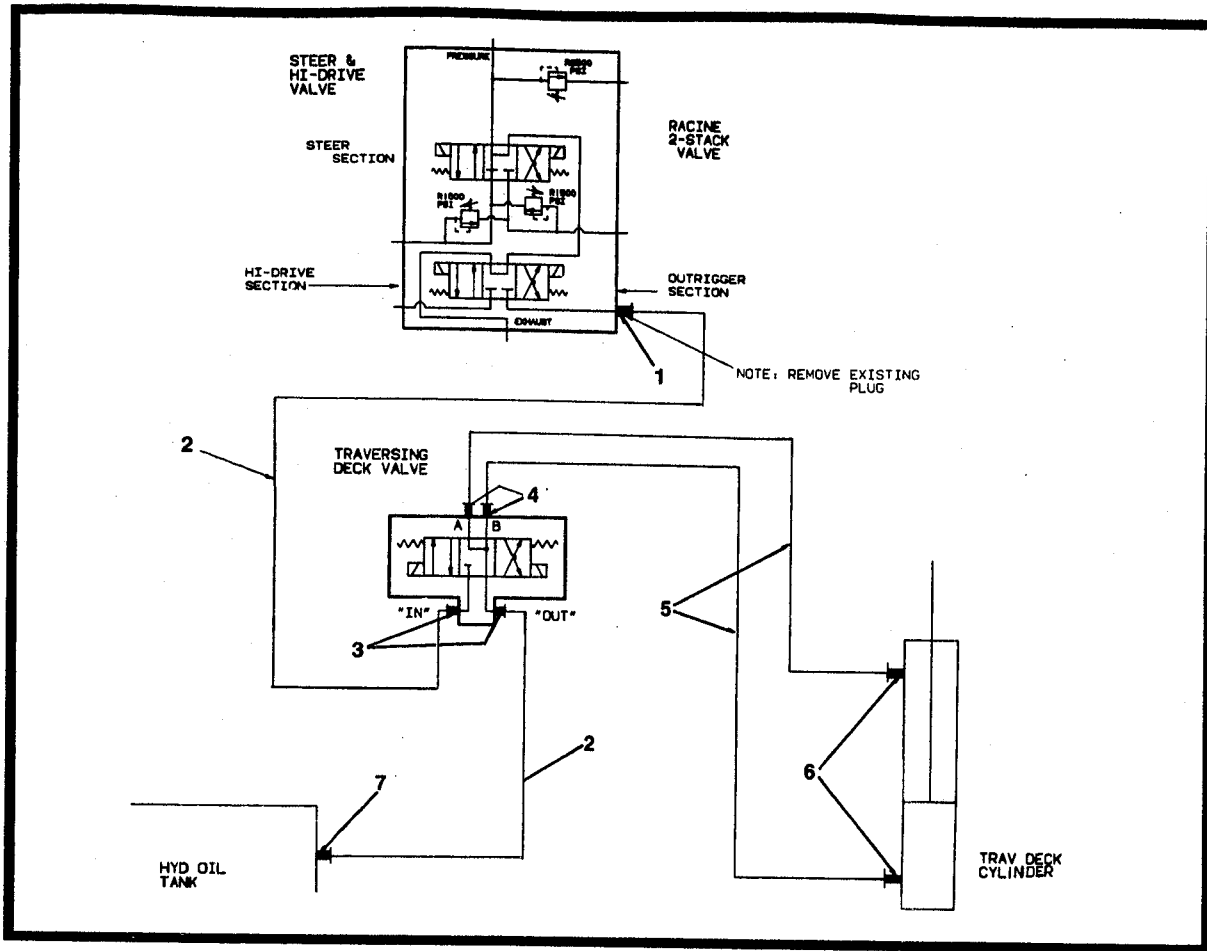
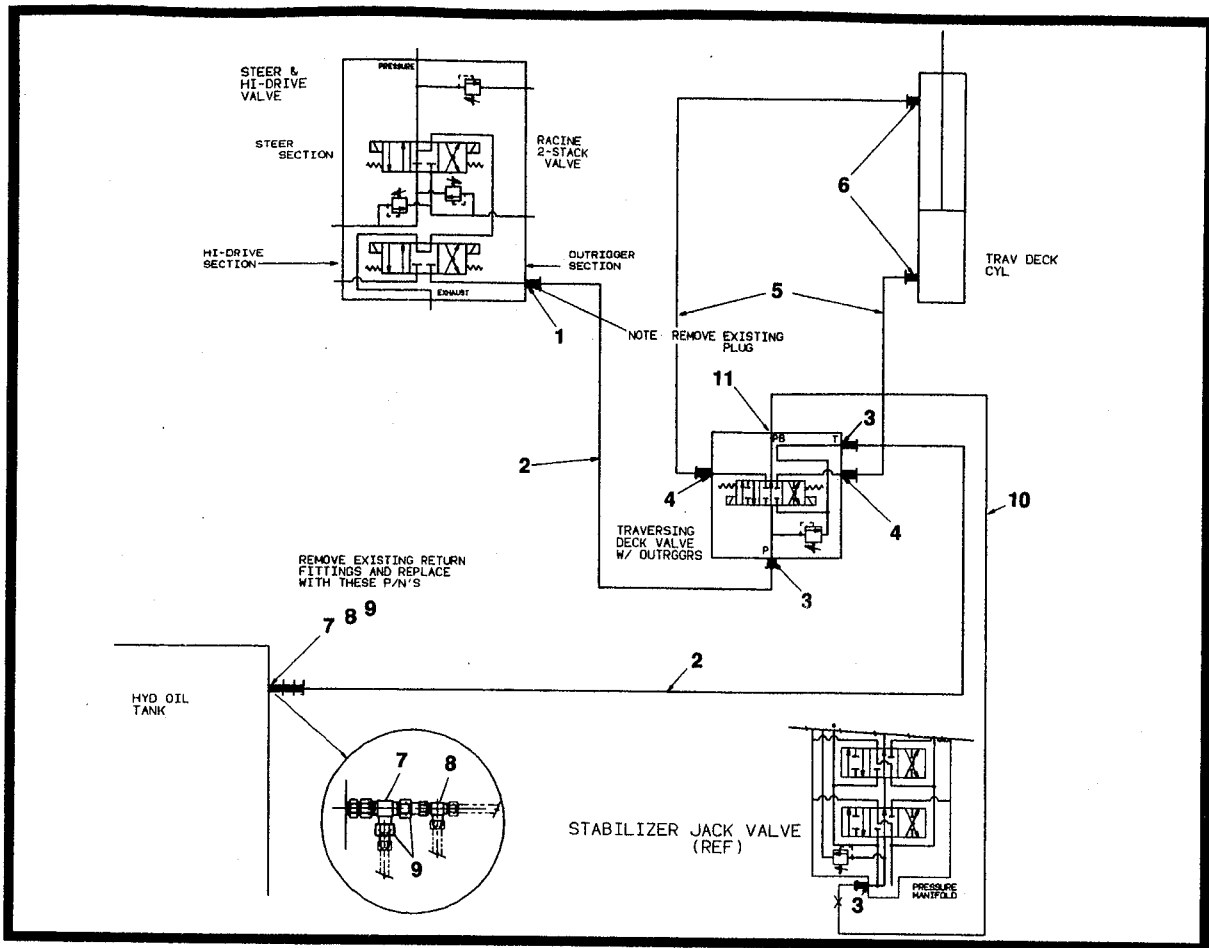


Figure 2-61. Hydraulic Diagram - Traversing Platform.

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-61	3510255	HYDRAULIC DIAGRAM - TRAVERSING PLATFORM (CM40RT WITHOUT LEVELING JACKS)	Ref.	C
	3510249	HYDRAULIC DIAGRAM - TRAVERSING PLATFORM (CM33RT WITHOUT LEVELING JACKS)	Ref.	B
	3510265	HYDRAULIC DIAGRAM - TRAVERSING PLATFORM (CM25RT WITHOUT LEVELING JACKS)	Ref.	B
-1	2220372	Fitting, Straight	1	
-2	2750997	Hose	2	
-3	2220371	Fitting, Straight	2	
-4	2220472	Fitting, Reducer	2	
-5	2751458	Hose (CM40RT)	2	
	2751029	Hose (CM33RT)	2	
	2751417	Hose (CM25RT)	2	
-6	2220414	Fitting, Straight	2	
-7	2220635	Fitting, Tee	1	

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**Figure 2-62. Hydraulic Diagram - Traversing Platform (With Leveling Jacks).**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-62	3510344	<b>HYDRAULIC DIAGRAM - TRAVERSING PLATFORM (CM40RT WITH LEVELING JACKS)</b>	Ref.	—
	3510343	<b>HYDRAULIC DIAGRAM - TRAVERSING PLATFORM (CM33RT WITH LEVELING JACKS)</b>	Ref.	—
	3510342	<b>HYDRAULIC DIAGRAM - TRAVERSING PLATFORM (CM25RT WITH LEVELING JACKS)</b>	Ref.	—
-1	2220372	Fitting, Straight	1	
-2	2750997	Hose	2	
-3	2220371	Fitting, Straight	3	
-4	2220472	Fitting, Reducer	2	
-5	2751458	Hose (CM40RT)	2	
	2751029	Hose (CM33RT)	2	
	2751417	Hose (CM25RT)	2	
-6	2220414	Fitting, Straight	2	
-7	2220635	Fitting, Tee	2	
-8	2220383	Fitting, Tee	1	
-9	2220619	Fitting, Reducer	1	
-10	2750908	Hose	2	
	2220473	Fitting, 90°	1	

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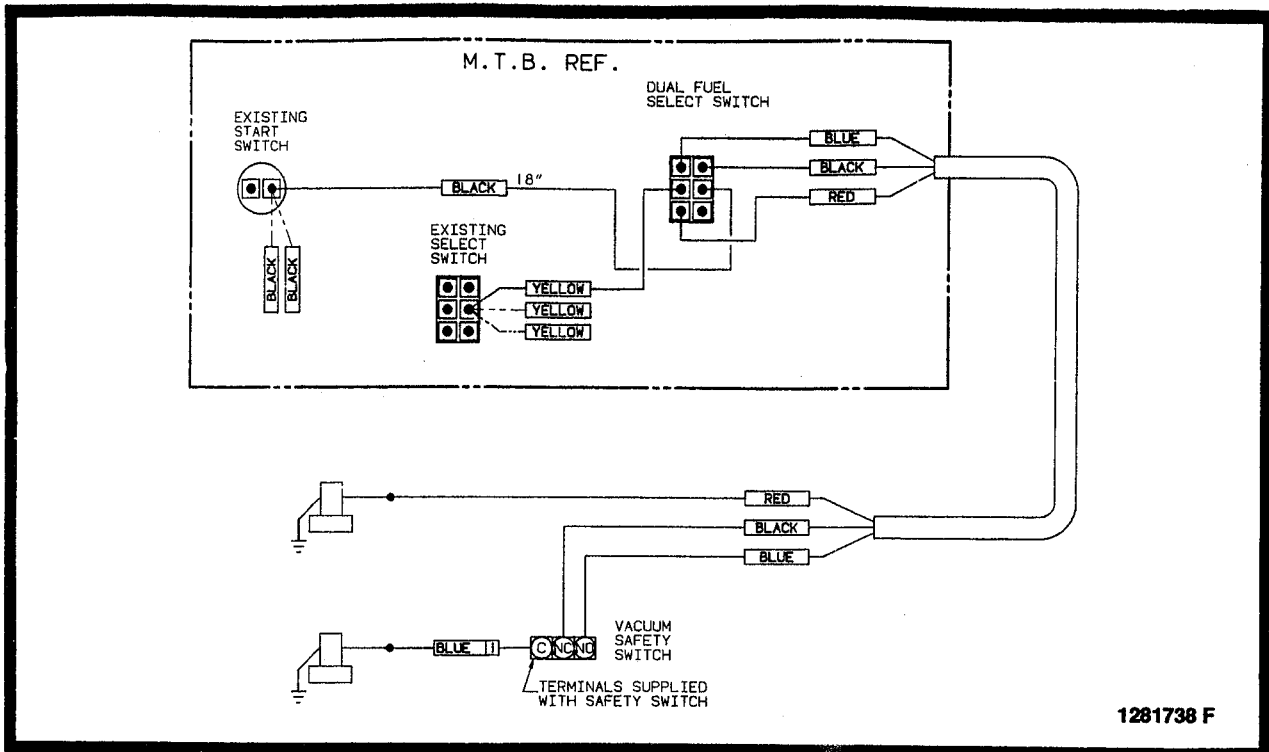


Figure 2-63. Electrical Diagram - Dual Fuel (Ford).

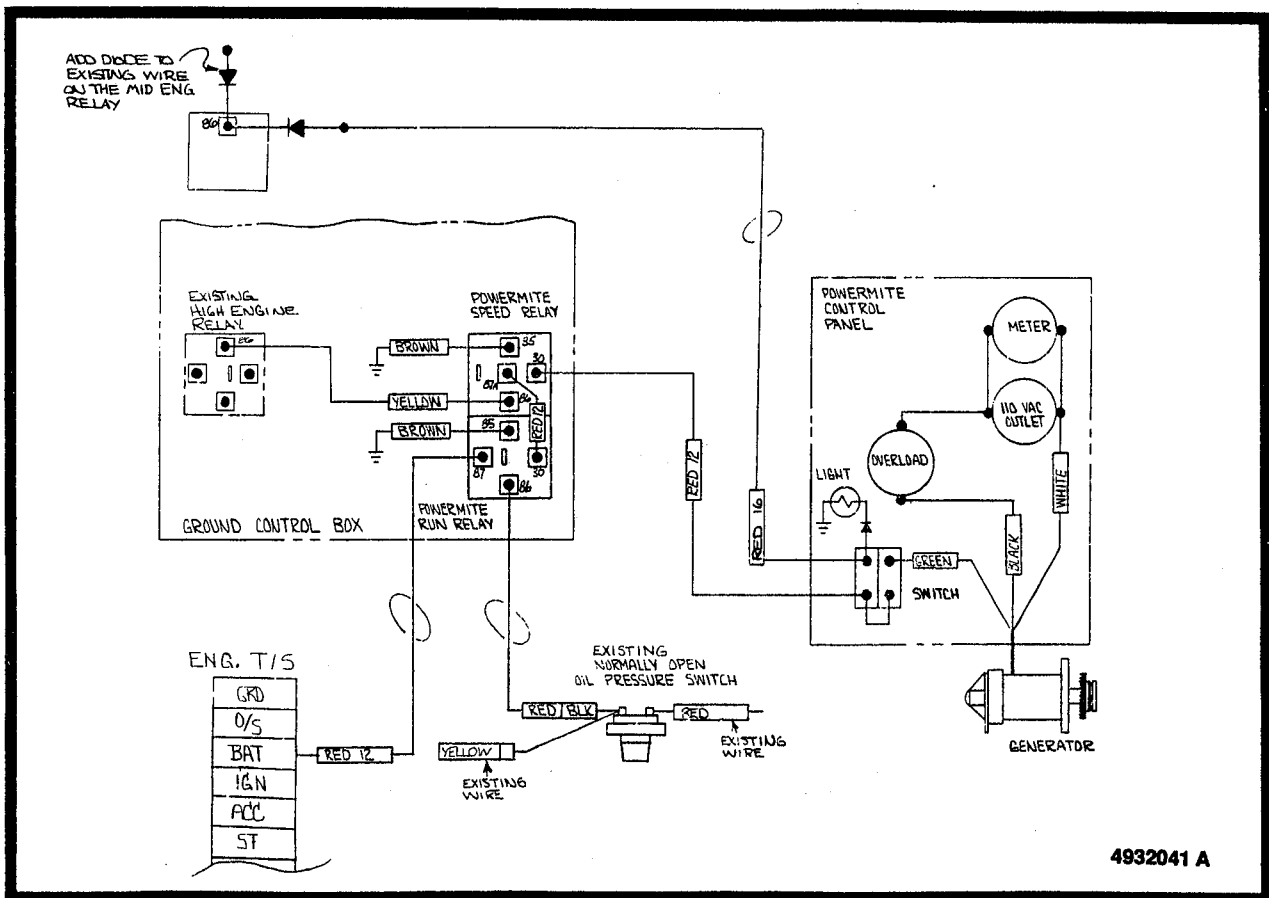
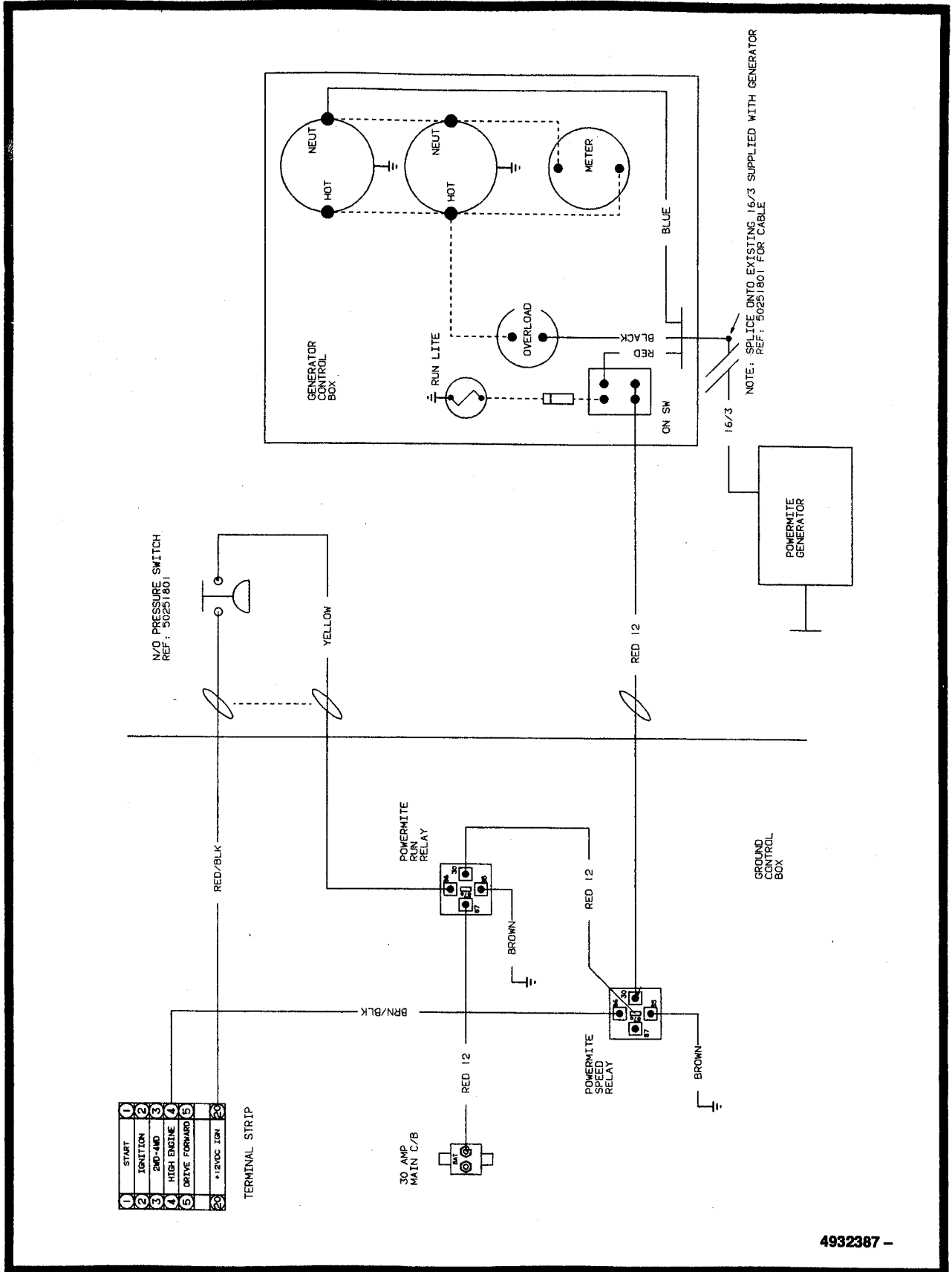


Figure 2-64. Electrical Diagram - Generator (Ford).

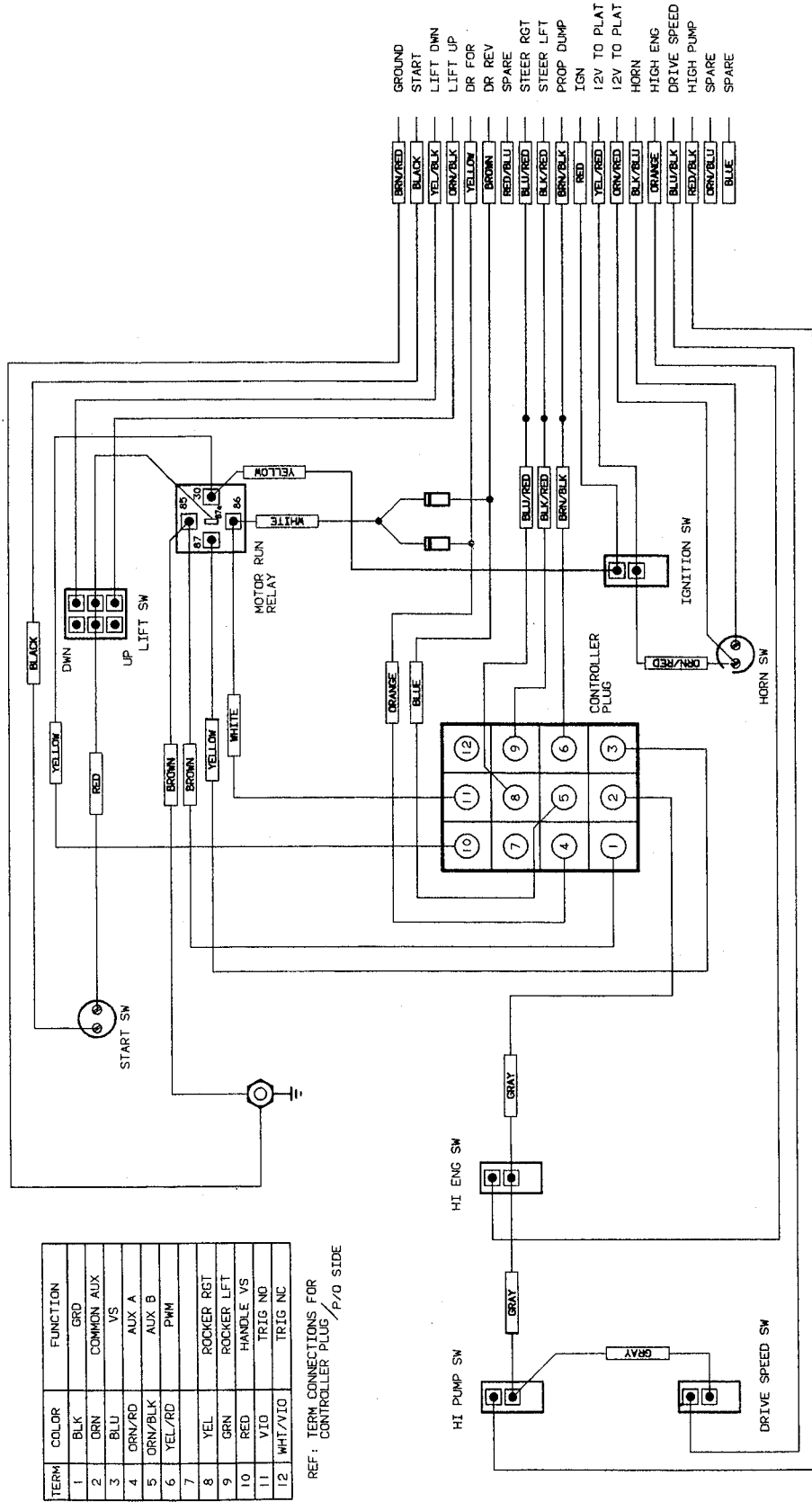
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4932387 -

Figure 2-65. Electrical Diagram - Generator (Deutz).

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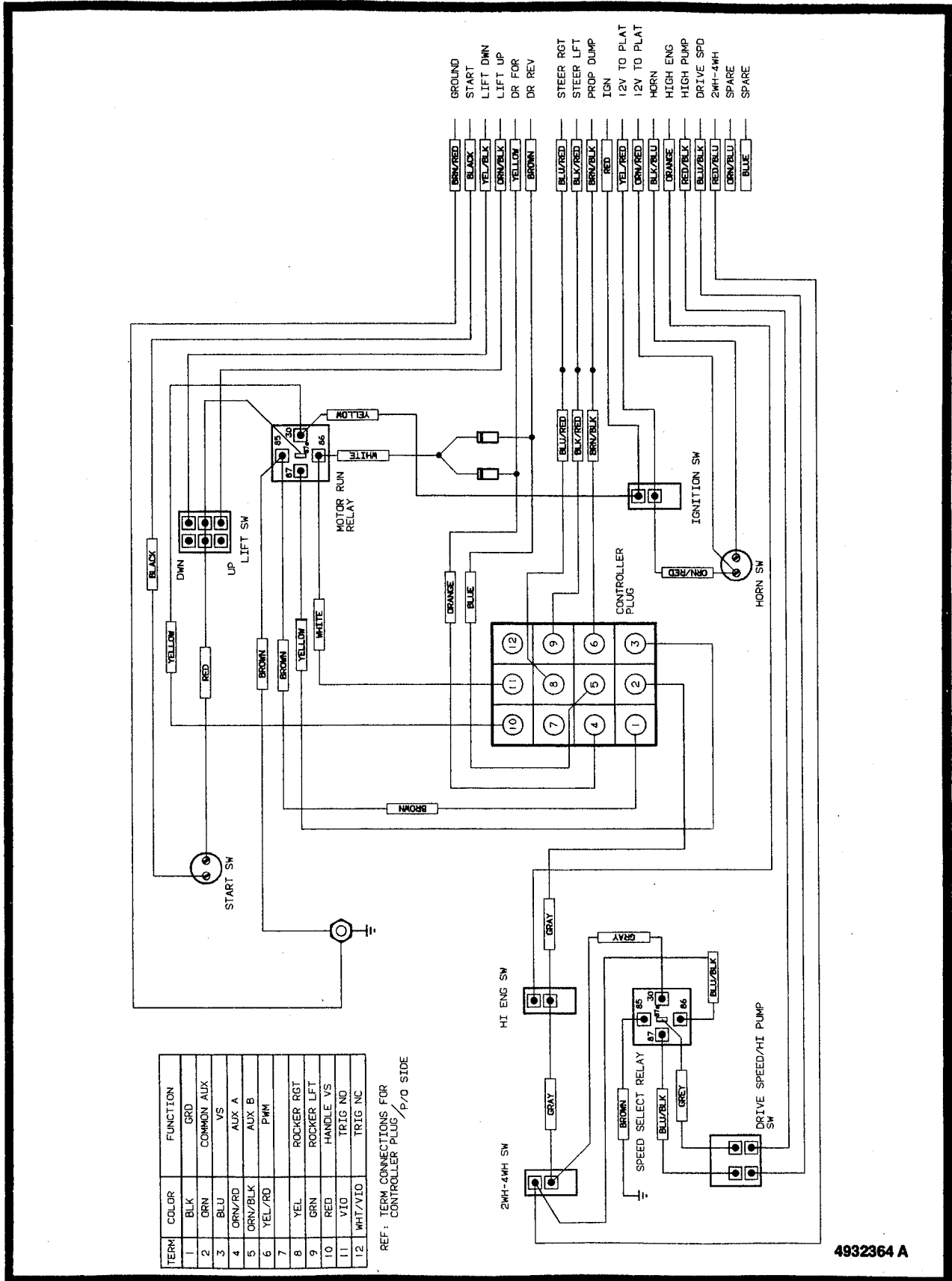


4932081 B

Figure 2-66. Electrical Diagram - Platform (2WD Gas and Diesel - 89" Wheelbase).



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67. Electrical Diagram - Platform (4WD - 89" Wheelbase).





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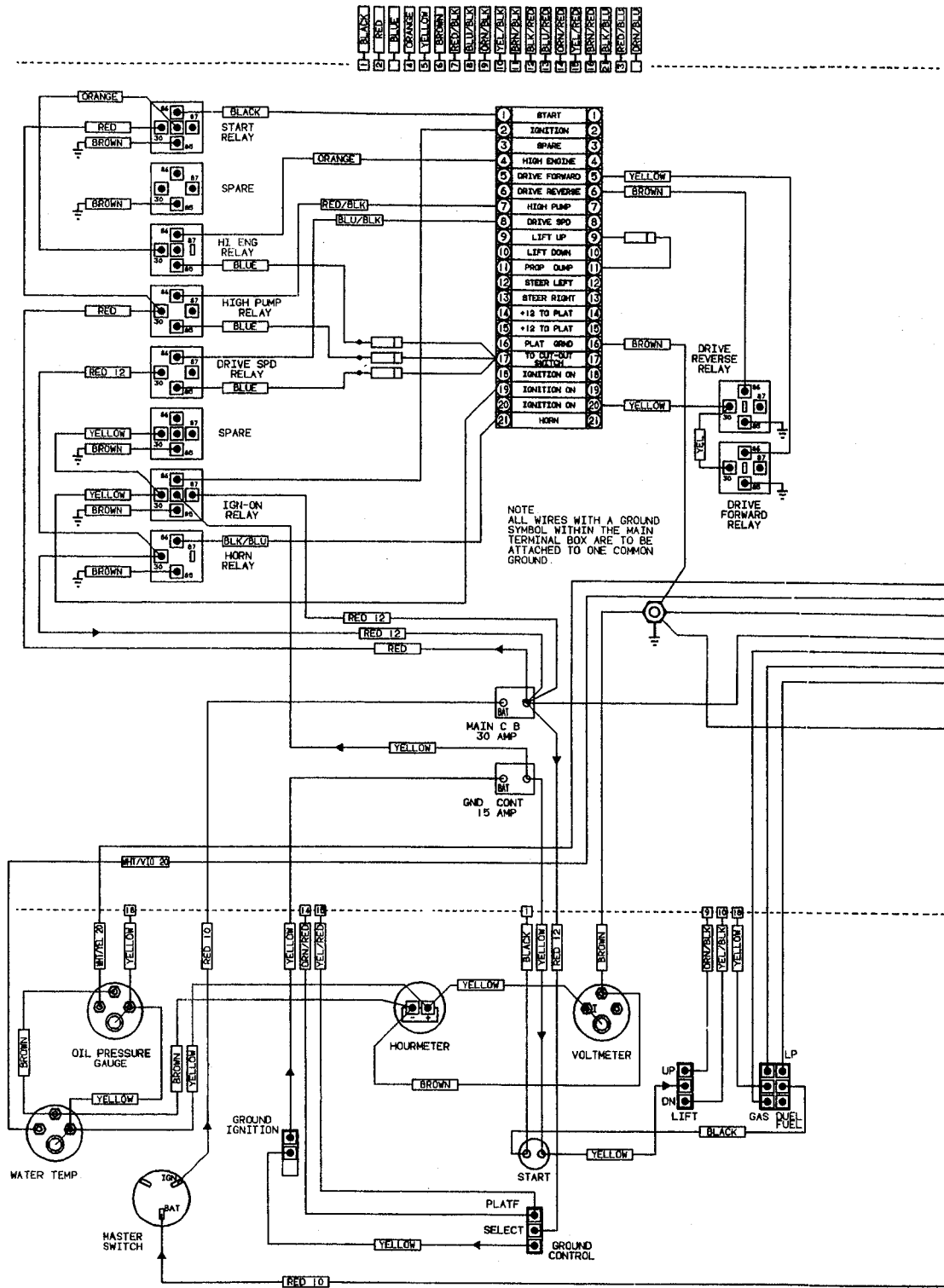
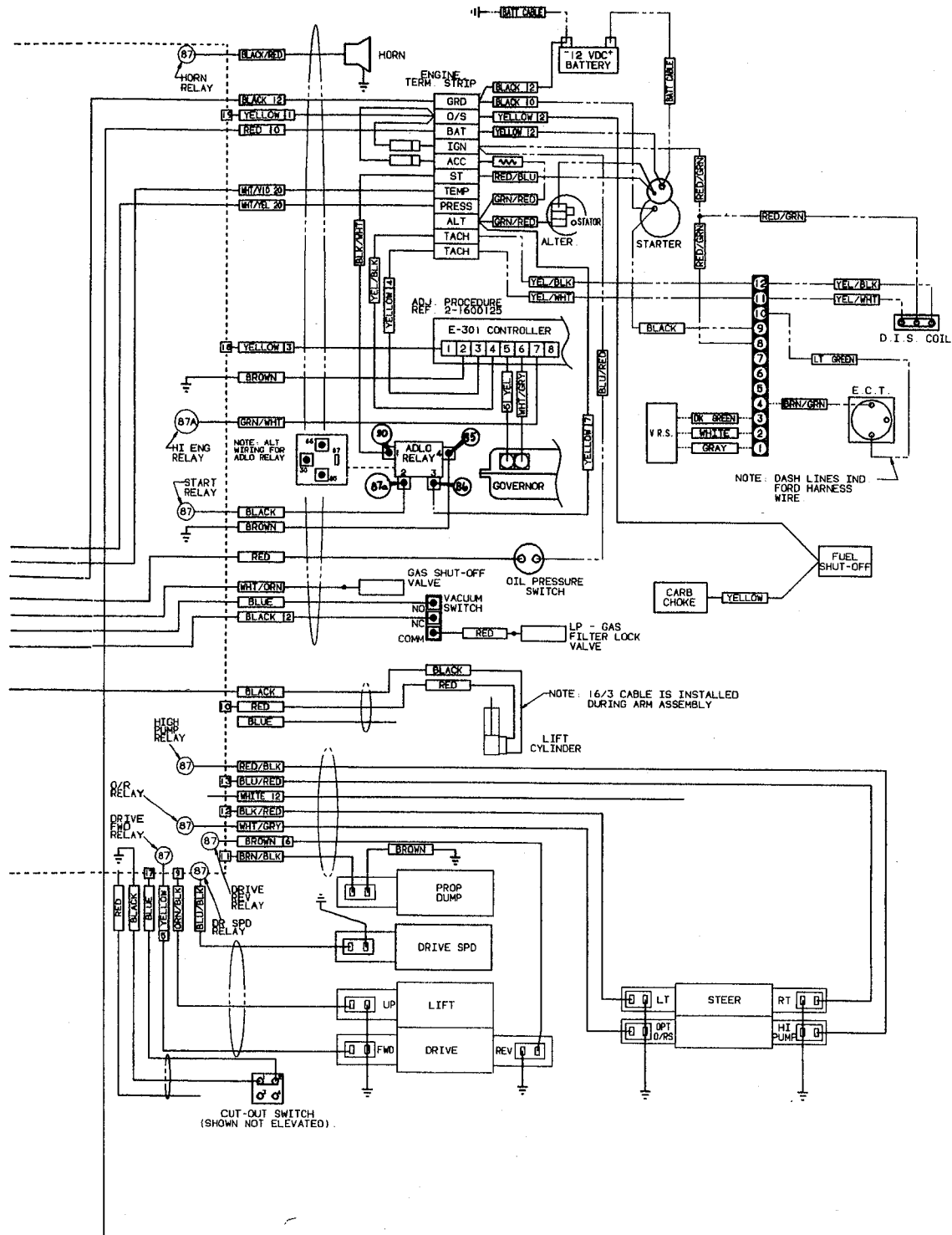


Figure 2-69. Electrical Diagram - Standard (89" Wheelbase - Ford 2WD) (Sheet 1 of 2).

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4932083 B

Figure 2-69. Electrical Diagram - Standard (89" Wheelbase - Ford 2WD) (Sheet 2 of 2).





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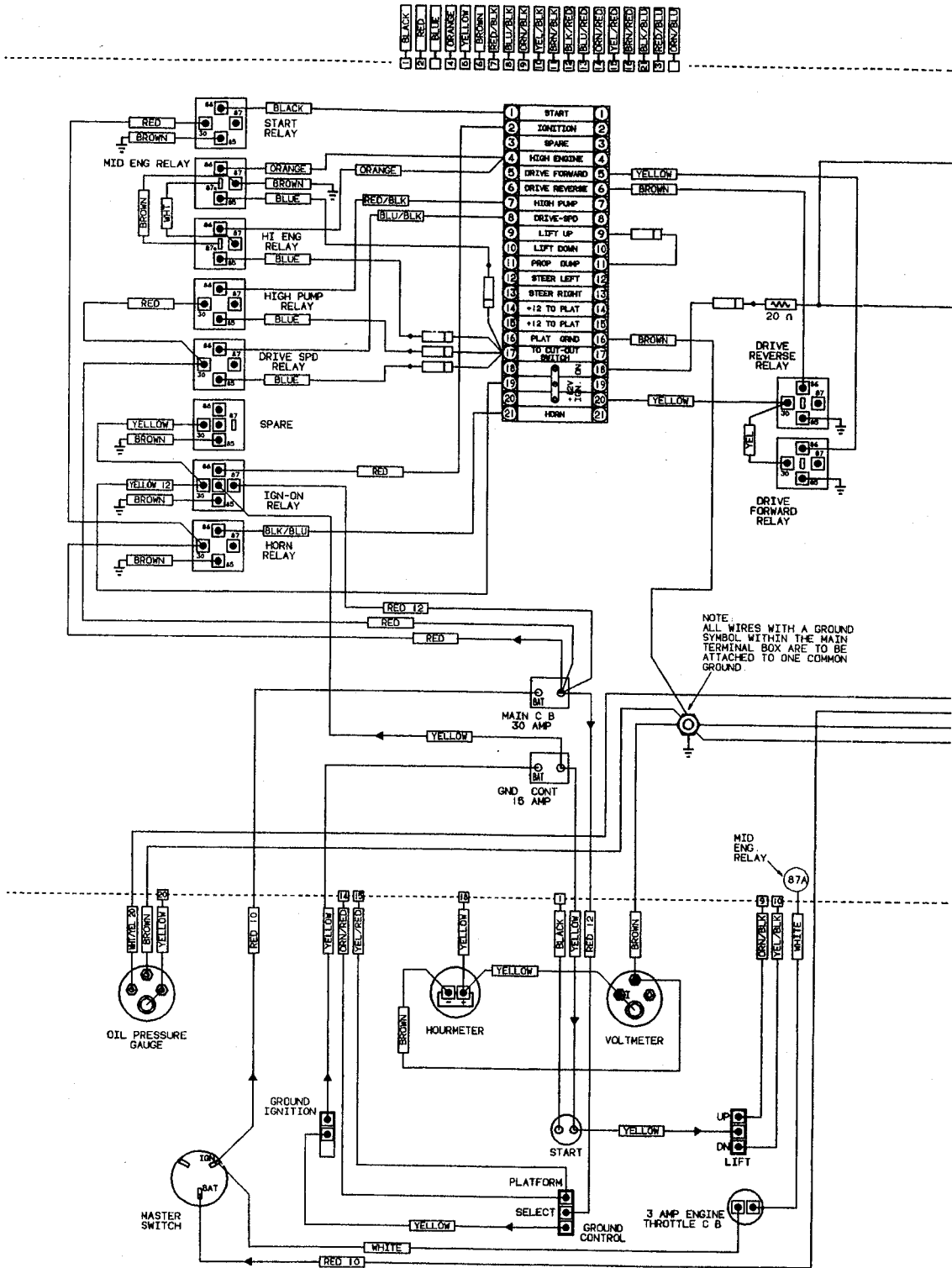
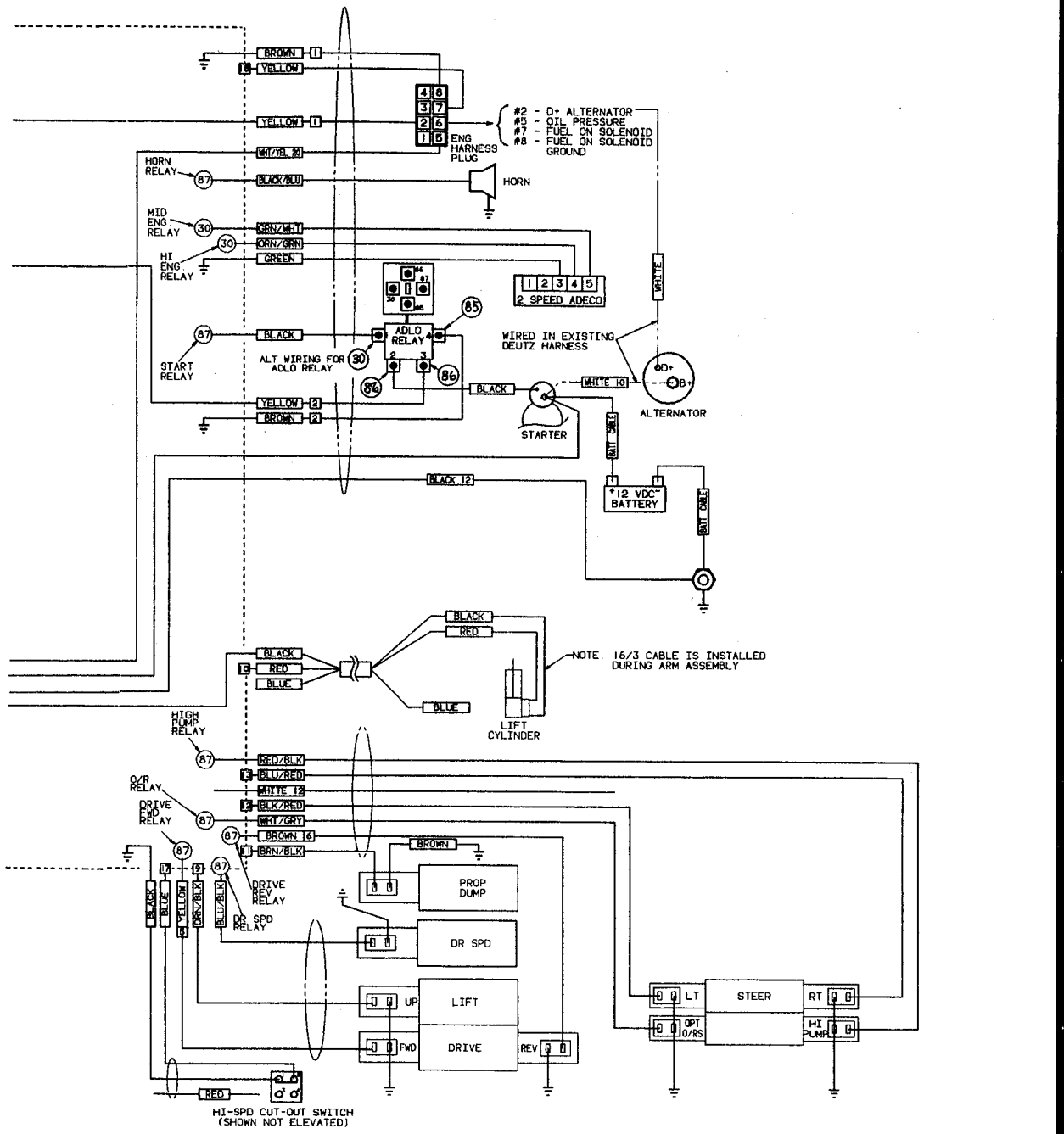


Figure 2-71. Electrical Diagram - Standard (89" Wheelbase - Deutz 2WD) (Sheet 1 of 2).



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4932082 C

Figure 2-71. Electrical Diagram - Standard (89" Wheelbase - Deutz 2WD) (Sheet 2 of 2).

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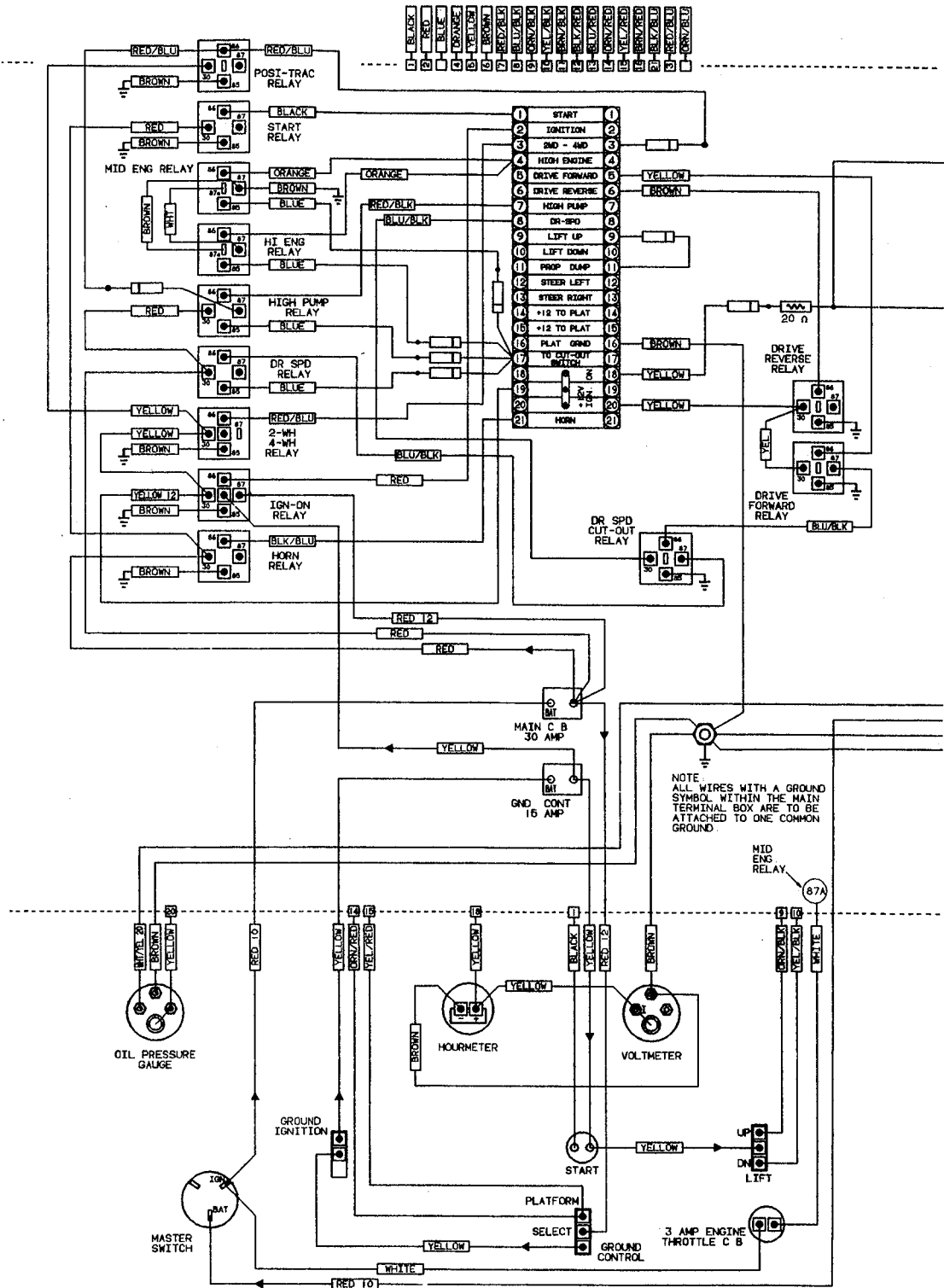
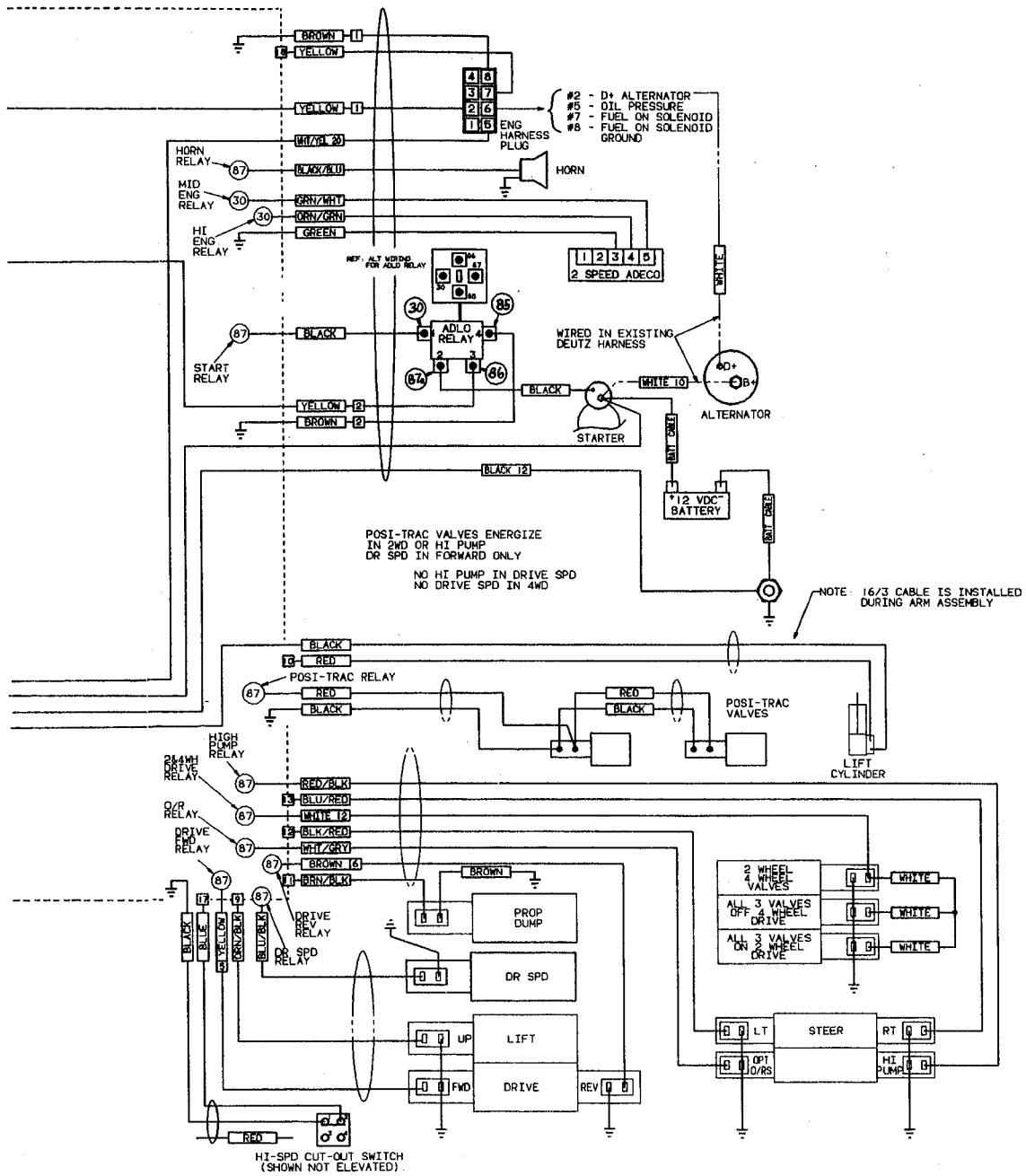


Figure 2-72. Electrical Diagram - Standard (89" Wheelbase - Deutz 4WD) (Sheet 1 of 2).

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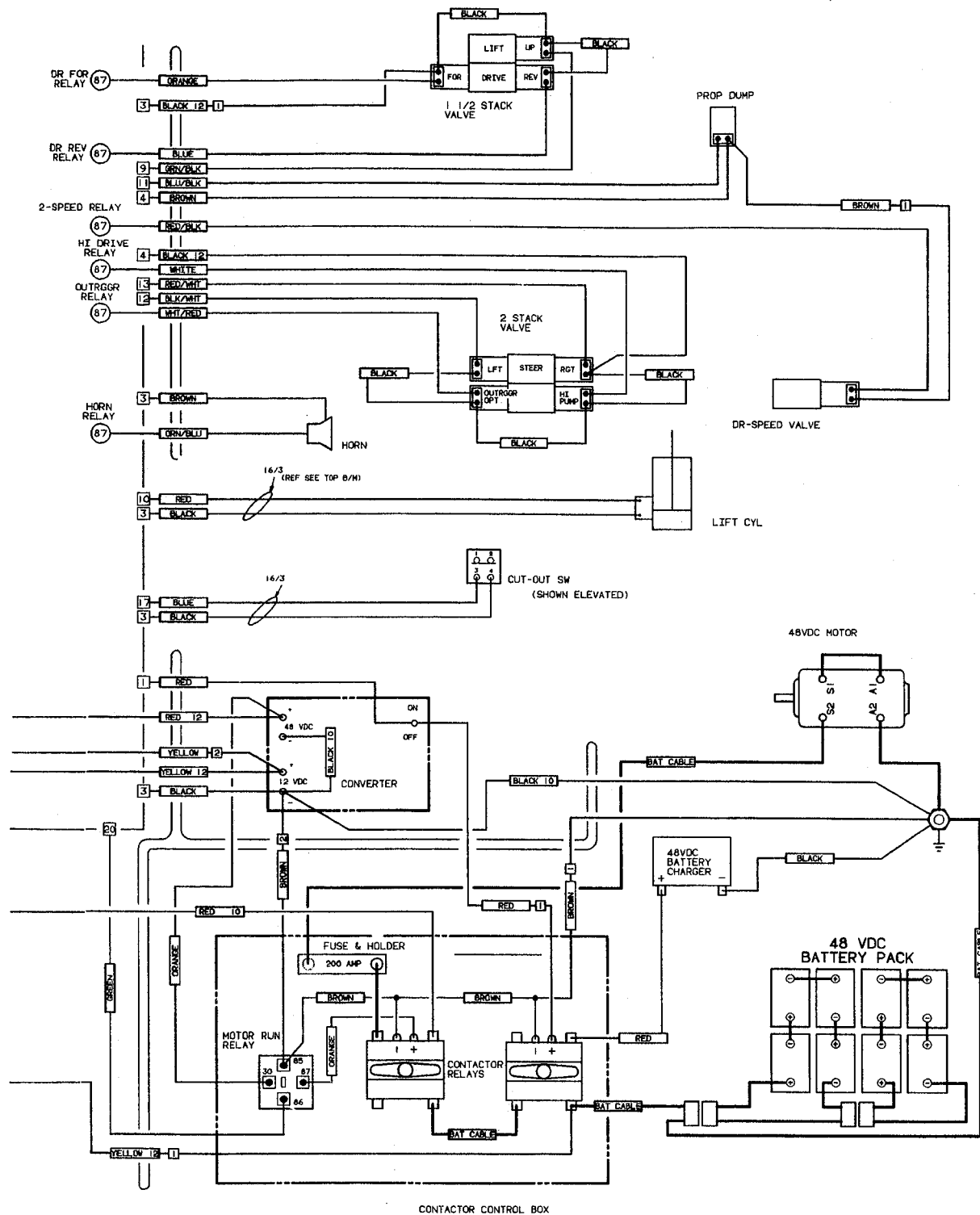


4932357 B

Figure 2-72. Electrical Diagram - Standard (89" Wheelbase - Deutz 4WD) (Sheet 2 of 2).



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4932385A

Figure 2-73. Electrical Diagram - Standard (89" Wheelbase - Electric) (Sheet 2 of 2).

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-74		<b>ELECTRICAL COMPONENTS AND WIRING DIAGRAM CHARTS LIST</b>	Ref.	
		<b>Note: *-Indicates Wiring Diagrams shown in preceding pages.</b>		
	1281221	<b>ALARMS WIRING DIAGRAMS - GAS AND DIESEL (DWG ONLY)</b>	Ref.	B
	0250407	Alarm Wiring Diagram - Descent (B/M Only)	1	B
	3740049	Relay - SPDT	1	
	0140024	Alarm	1	
	0250408	Alarm Wiring Diagram - Motion (B/M Only)	1	C
	3740049	Relay - SPDT	1	
	0140024	Alarm	1	
	3990010	Diode - 6 Amp	4	
	0250406	Alarm Wiring Diagram - Travel (B/M Only)	1	C
	3740049	Relay - SPDT	1	
	0140024	Alarm	1	
	3990010	Diode - 6 Amp	2	
	1281280	<b>ALARMS WIRING DIAGRAMS - ELECTRIC MACHINES (DWG. ONLY)</b>	Ref.	B
	0250718	Alarm Wiring Diagram - Descent (B/M Only)	1	A
	0140026	Alarm	1	
	0860617	Box, Electrical	1	
	0250719	Alarm Wiring Diagram - Motion (B/M Only)	1	A
	0140026	Alarm	1	
	0860617	Box, Electrical	1	
	3990010	Diode - 6 Amp	4	
	0250717	Alarm Wiring Diagram - Travel (B/M Only)	1	A
	0140026	Alarm	1	
	0860617	Box, Electrical	1	
	3990010	Diode - 6 Amp	2	
	4932009	<b>ALARM WIRING DIAGRAM - TILT</b>	Ref.	B
	4921227	Harness - Tilt Indicator	1	
	4931684	<b>ALTERNATOR WIRING DIAGRAM (KOHLER)</b>	Ref.	—
	3990010	Diode - 6 Amp	1	
	0250502	<b>BATTERY WIRING DIAGRAM - ELECTRIC MACHINES ONLY (80" WHEELBASE)</b>	Ref.	D
	0251754	<b>BATTERY WIRING DIAGRAM - ELECTRIC MACHINES ONLY (89" WHEELBASE)</b>	Ref.	A
	0251319	<b>BATTERY CAPACITY INDICATOR GAUGE WIRING DIAGRAM - ELECTRIC MACHINES ONLY (OPTIONAL)</b>	Ref.	—
	2420075	Gauge, Battery Capacity Indicator	1	
	0250809	<b>BEACON LIGHT WIRING DIAGRAM (ALL GAS AND DEUTZ MACHINES/89" WHEELBASE ELECTRIC MACHINES) (PLATFORM MOUNTED)</b>	Ref.	—
	2920018	Light, Beacon - Amber	1	
	3740049	Relay - SPDT	1	
	1060016	Cable, Electrical - 16/3	18 ft./4.9m	
	0250716	<b>BEACON LIGHT WIRING DIAGRAM (80" WHEELBASE ELECTRIC MACHINES) (PLATFORM MOUNTED)</b>	Ref.	B
	2920096	Light, Strobe		

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-74		<b>ELECTRICAL COMPONENTS AND WIRING DIAGRAM CHARTS LIST (CONTINUED)</b>	Ref.	
	0252266	<b>BEACON LIGHT WIRING DIAGRAM (FRAME MOUNTED)</b>	Ref.	—
	2920018	Light, Beacon - Amber	1	
	3740049	Relay - SPDT	1	
	1060016	Cable, Electrical - 16/3	6 ft./1.83m	
	0250762	<b>DETACHABLE PLATFORM CONTROL BOX WIRING DIAGRAM</b>	Ref.	—
	0250147	<b>DRIVE CUTOUT WIRING DIAGRAM (CM40RT - 30 FEET)</b>	Ref.	A
	1060300	Cable, Electrical - 16/3	20 ft./6.1m	
	4360057	Switch, Limit	1	
	1281783*	<b>DUAL FUEL WIRING DIAGRAM - FORD (DWG ONLY)</b>	Ref.	F
	4931444*	<b>DUAL FUEL WIRING DIAGRAM - FORD (B/M ONLY - PRIOR TO OCTOBER 1991)</b>	Ref.	E
	4932451	<b>DUAL FUEL WIRING DIAGRAM - FORD (B/M ONLY - OCTOBER 1991 TO PRESENT)</b>	Ref.	—
	4360201	Switch, Toggle - DPDT	1	
	4921305	Harness (Platform Box to Vacuum Switch) (Machines Built September 1990 to Present)	1	
	4931749	<b>DUAL FUEL WIRING DIAGRAM - KOHLER</b>	Ref.	—
	3990010	Diode - 6 Amp	1	
	4932387*	<b>GENERATOR WIRING DIAGRAM - 110 VOLT (DEUTZ)</b>	Ref.	—
	3990010	Diode - 6 Amp	1	
	3740049	Relay - SPDT	2	
	1060012	Cable, Electrical - 12/4C	4 ft./12.2m	
	4360037	Switch, Pressure - Oil	1	
	4932041*	<b>GENERATOR WIRING DIAGRAM - 110 VOLT (FORD) WITH TERMINAL STRIP)</b>	Ref.	A
	3990010	Diode - 6 Amp	2	
	3740049	Relay - SPDT	2	
	Consult Factory	<b>GENERATOR WIRING DIAGRAM - 110 VOLT (KOHLER)</b>	Ref.	
	4932388	<b>HEADLIGHT AND TAILLIGHT WIRING DIAGRAM (OPTIONAL)</b>	Ref.	—
	4360199	Switch, Toggle - SPST	1	
	0251474	<b>INVERTER WIRING DIAGRAM - 110V (ELECTRIC MACHINES ONLY) (OPTIONAL)</b>	Ref.	—
	2460023	Inverter	1	
	0901738	Bracket, Mounting (80" Wheelbase Only)	1	
	4931981	<b>LEVELING JACKS WIRING DIAGRAM (80" WHEELBASE GAS AND DIESEL/ALL 89" WHEELBASE MACHINES)</b>	Ref.	C
	4932352	<b>LEVELING JACKS WIRING DIAGRAM (80" WHEELBASE ELECTRIC MACHINES ONLY)</b>	Ref.	—
	3740049	Relay - SPDT	1	
	4921205	Harness - Pump	1	
	4921206	Harness - Dump	1	
	3990010	Diode - 6 Amp	1	
	3990010	Diode - 6 Amp (80" Wheelbase Electric Only)	1	
	1060018	Cable, Electrical - 16/12	A/R	
		(CM40RT)	70 ft./21.4m	
		(CM33RT)	65 ft./19.8m	
		(CM25RT)	51 ft./15.61m	

**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2-74		<b>ELECTRICAL COMPONENTS AND WIRING DIAGRAM CHARTS LIST (CONTINUED)</b>	Ref.	
	1060016	<b>LIFT CYLINDER WIRING DIAGRAM</b> Cable, Electric - 16/3	Ref. 24 ft./7.3m	
	4932004	<b>PLATFORM CONTROL BOX WIRING DIAGRAM - FORD 2WD AND 4WD WITH 80" WHEELBASE</b>	Ref.	C
	4921215	Harness - Controller	1	
	4920830	Harness - Lift	1	
	4931948	<b>PLATFORM CONTROL BOX WIRING DIAGRAM - KOHLER AND DEUTZ 2WD AND 4WD WITH 80" WHEELBASE</b>	Ref.	A
	4921214	Harness - Controller	1	
	4920830	Harness - Lift	1	
	4932048	<b>PLATFORM CONTROL BOX WIRING DIAGRAM - ELECTRIC MACHINES WITH 80" WHEELBASE</b>	Ref.	—
	4921267	Harness - Controller	1	
	4932002	<b>PLATFORM CONTROL BOX WIRING DIAGRAM - FACTORY MUTUAL ELECTRIC MACHINES WITH 80" WHEELBASE</b>	Ref.	A
	4921287	Harness - Controller	1	
	4932081*	<b>PLATFORM CONTROL BOX WIRING DIAGRAM - ALL 2WD GAS AND DIESEL MACHINES WITH 89" WHEELBASE</b>	Ref.	B
	4921362	Harness - Controller	1	
	4920830	Harness - Lift	1	
	4932386*	<b>PLATFORM CONTROL BOX WIRING DIAGRAM - 2WD ELECTRIC MACHINES WITH 89" WHEELBASE</b>	Ref.	—
	4921267	Harness - Controller	1	
	4932364*	<b>PLATFORM CONTROL BOX WIRING DIAGRAM - 4WD WITH 89" WHEELBASE</b>	Ref.	A
	4921363	Harness - Controller	1	
	4920830	Harness - Lift	1	
			<b>RECEPTACLE WIRING DIAGRAM - 110 VOLT (OPTIONAL)</b>	Ref.
1060145	<b>PLATFORM TO GROUND CABLE WIRING DIAGRAM</b> Cable, Electrical - 16/19 (CM40RT) (CM33RT) (CM25RT)	Ref. A/R 70 ft./21.4m 65 ft./19.8m 51 ft./15.6m		
1060308	<b>RECEPTACLE WIRING DIAGRAM - 110VOLT (OPTIONAL)</b> Cable, Electrical - 12/3 (CM40RT) (CM33RT) (CM25RT)	Ref. A/R 70 ft./21.4m 65 ft./19.8m 51 ft./15.6m		



**SECTION 2 — ILLUSTRATED PARTS LIST**

<b>FIGURE &amp; INDEX NO.</b>	<b>PART NUMBER</b>	<b>ITEMS &amp; DESCRIPTION</b>	<b>QTY.</b>	<b>REV.</b>
2—74		<b>ELECTRICAL COMPONENTS AND WIRING DIAGRAM CHARTS LIST (CONTINUED)</b>	Ref.	
	4932000	<b>STANDARD WIRING DIAGRAM - FORD 2WD AND 4WD WITH 80" WHEELBASE AND WITHOUT TERMINAL STRIP ON ENGINE</b>	Ref.	B
	3990010	Diode - 6 Amp	5	
	4921232	Harness - Valve	1	
	1060016	Cable, Electrical - 16/3	10 ft./3.1m	
	3730012	Resistor - 10 Ohm 20 Watt	1	
	4921213	Harness - Engine	1	
	4932039	<b>STANDARD WIRING DIAGRAM - FORD 2WD AND 4WD WITH 80" WHEELBASE AND WITH TERMINAL STRIP ON ENGINE</b>	Ref.	A
	3990010	Diode - 6 Amp	5	
	4921232	Harness - Valve	1	
	4921242	Harness - Engine	1	
	1060016	Cable, Electrical - 16/3	10 ft./3.1m	
	4932083*	<b>STANDARD WIRING DIAGRAM - FORD 2WD WITH 89" WHEELBASE</b>	Ref.	B
	3990010	Diode - 6 Amp	4	
	4921288	Harness - Valve	1	
	4921242	Harness - Engine	1	
	1060016	Cable, Electrical - 16/3	25 ft./7.6m	
	4932358*	<b>STANDARD WIRING DIAGRAM - FORD 4WD WITH 89" WHEELBASE</b>	Ref.	C
	3990010	Diode - 6 Amp	4	
	4921288	Harness - Valve	1	
	4921242	Harness - Engine	1	
	1060016	Cable, Electrical - 16/3	25 ft./7.6m	
	4931949	<b>STANDARD WIRING DIAGRAM - KOHLER</b>	Ref.	—
	3990010	Diode - 6 Amp	4	
	4921182	Harness - Valve	1	
	4921181	Harness - Engine	1	
	4932001	<b>STANDARD WIRING DIAGRAM - DEUTZ 2WD AND 4WD WITH 80" WHEELBASE</b>	Ref.	E
3990010	Diode - 6 Amp	6		
4921182	Harness - Valve (Prior to October 1990)	1		
4921232	Harness - Valve (October 1990 to Present)	1		
1060016	Cable, Electrical - 16/3	25 ft./7.6m		
4921216	Harness - Engine	1		
3730003	Resistor 20 Ohm	1		
4932082*	<b>STANDARD WIRING DIAGRAM - DEUTZ 2WD WITH 89" WHEELBASE</b>	Ref.	C	
3990010	Diode - 6 Amp	6		
4921288	Harness - Valve	1		
4921216	Harness - Engine	1		
1060016	Cable, Electrical - 16/3	25 ft./7.6m		
3730003	Resistor 20 Ohm	1		

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FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-74		<b>ELECTRICAL COMPONENTS AND WIRING DIAGRAM CHARTS LIST (CONTINUED)</b>	Ref.	
	4932357*	<b>STANDARD WIRING DIAGRAM - DEUTZ 4WD WITH 89" WHEELBASE</b>	Ref.	B
	3990010	Diode - 6 Amp	8	
	4921288	Harness - Valve	1	
	4921216	Harness - Engine	1	
	1060016	Cable, Electrical - 16/3	25 ft./7.6m	
	3730003	Resistor - 20 Ohm	1	
	4932049	<b>STANDARD WIRING DIAGRAM - ELECTRIC MACHINES WITH 80" WHEELBASE</b>	Ref.	C
	3990010	Diode - 6 Amp	8	
	4921255	Harness - Motor	1	
	4921252	Harness - Valve	1	
	1060016	Cable, Electrical - 16/3	10 ft./3.1m	
	4932385*	<b>STANDARD WIRING DIAGRAM - ELECTRIC MACHINES WITH 89" WHEELBASE</b>	Ref.	A
	3990010	Diode - 6 Amp	8	
	4921377	Harness - Motor	1	
	4921376	Harness - Valve	1	
	1060300	Cable, Electric - 16/3	10 ft./3.1m	
	4932003	<b>STANDARD WIRING DIAGRAM - FACTORY MUTUAL ELECTRIC MACHINES WITH 80" WHEELBASE</b>	Ref.	B
	3990010	Diode - 6 Amp	8	
	4921256	Harness - Motor	1	
	4921253	Harness - Valve	1	
	1060330	Cable, Electrical - 16/3	10 ft.	
	0251416	<b>TILT INDICATOR WIRING DIAGRAM</b>	Ref.	A
	1060016	Cable, Electric - 16/3	6 ft./1.83m	
	4360280	Sensor, Tilt	1	
	1281554	<b>TRAVERSING PLATFORM WIRING DIAGRAM (WITHOUT LEVELING JACKS) (DWG. ONLY)</b>	Ref.	A
	3510255	<b>TRAVERSING PLATFORM WIRING DIAGRAM (B/M ONLY) (CM40RT WITHOUT LEVELING JACKS)</b>	Ref.	C
	3510249	<b>TRAVERSING PLATFORM WIRING DIAGRAM (B/M ONLY) (CM33RT WITHOUT LEVELING JACKS)</b>	Ref.	B
	3510265	<b>TRAVERSING PLATFORM WIRING DIAGRAM (B/M ONLY) (CM25RT WITHOUT LEVELING JACKS)</b>	Ref.	B
	4360202	Switch, Toggle	2	
	3990010	Diode - 6 Amp	2	
	1060016	Cable, Electrical - 16/3 (Cut-Out Switch to Drive Relays)	A/R	
		(CM40RT)	70 ft./21.4m	
		(CM33RT)	65 ft./19.8m	
		(CM25RT)	51 ft./15.6m	
	1060016	Cable, Electrical - 16/3 (Platform Extension Switch to Ground Extension Switch)	A/R	
		(CM40RT)	131 ft./40m	
		(CM33RT)	111 ft./33m	
		(CM25RT)	93 ft./28.35m	

**SECTION 2 — ILLUSTRATED PARTS LIST**

FIGURE & INDEX NO.	PART NUMBER	ITEMS & DESCRIPTION	QTY.	REV.
2-74		<b>ELECTRICAL COMPONENTS AND WIRING DIAGRAM CHARTS LIST (CONTINUED)</b>	Ref.	
	1281609	<b>TRAVERSING PLATFORM WIRING DIAGRAM (WITH LEVELING JACKS) (DWG ONLY)</b>	Ref.	—
	3510344	<b>TRAVERSING PLATFORM WIRING DIAGRAM (B/M ONLY) (CM40RT WITH LEVELING JACKS)</b>	Ref.	—
	3510343	<b>TRAVERSING PLATFORM WIRING DIAGRAM (B/M ONLY) (CM33RT WITH LEVELING JACKS)</b>	Ref.	—
	3510342	<b>TRAVERSING PLATFORM WIRING DIAGRAM (B/M ONLY) (CM25RT WITH LEVELING JACKS)</b>	Ref.	—
	4360202	Switch, Toggle	2	
	3990010	Diode - 6 Amp	2	
	1060016	Cable, Electrical - 16/3 (Cut-Out Switch to Drive Relays)	A/R	
		(CM40RT)	61 ft./18.6m	
		(CM33RT)	51 ft./15.6m	
		(CM25RT) (Not Required)	0	
	1060018	Cable, Electrical - 16/12 (Platform Extension Switch to Ground Extension Switch)	A/R	
		(CM40RT)	70 ft./21.4m	
		(CM33RT)	65 ft./19.8m	
		(CM25RT)	51 ft./15.6m	
	0251805	<b>WORKLIGHTS WIRING DIAGRAM - PLATFORM (ALL GAS AND DIESEL MACHINES/89" WHEELBASE ELECTRIC MACHINES)</b>	Ref.	—
	2920013	Worklight	2	
	0250711	<b>WORKLIGHTS WIRING DIAGRAM - PLATFORM (80" WHEELBASE ELECTRIC MACHINES)</b>	Ref.	A
	2920095	Worklight	2	







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