

DIAMOND PRODUCTS

ULTIMATE DRILLING MACHINE

PARTS LIST

AUGUST 2009

PART#: 1801355

ULTIMATE DRILLING MACHINE

OPERATING SUMMARY

See the Operator's Manual, 1801409, for more detailed information and many illustrations.

STARTING: The function switch at the rear control panel must be in the center START / DRIVE position and the MASTER DISCONNECT switch must be on. Be certain both red STOP switches are pulled out. The engine throttle, choke and start key are all at the rear of the engine.

MOVING: The self-propelled function only works with the function switch in the START / DRIVE position. Gently raise or lower the lever on the drive valve mounted at the upper right rear of the machine. To steer the unit, lift the rear tires off the ground and pivot to the proper direction. The machine may also be moved manually by lifting the rear tires off the ground and pushing or pulling. Be certain the rear legs and front mast are raised up for maximum ground clearance.

HYDRAULIC OUTLETS: The function switch must be in the lower HYDRAULIC OUTLETS position. It is best to attach the hoses before switching to this function or with the unit off. Flow to the outlet is controlled by a cartridge at the top of the main hydraulic manifold. This cartridge should normally be left in the OFF position until flow is required. Due to internal pressure loss, the pressure at the rear pressure manifold (quick connects) will be less than that at the gauge on the main manifold.

DRILLING: The labels at the front controls summarize the typical drilling operation. Please read them and review the following additional information.

After positioning the drill, put the function switch in the upper DRILL position. This activates the controls at the front panel. Be certain the circuit breakers at the rear electric outlet panel are on as AC power is needed for the vacuum pump.

The DRILL DOWN, DRILL UP, and TURBO switches are intermittent and must be held to operate. Holding UP or DOWN *and* TURBO will raise and lower the drill more rapidly for initial positioning or pulling a bit out of a hole. To adjust the speed of cylinder stroke hold the up or down switch and turn the small black knob at the top right of the main hydraulic manifold. This is also the maximum speed the drill can move while in the AUTO DRILL mode and should be set slow. With the drill set to the proper RPM, gently jog the DOWN switch to *slowly* start the hole. Once contact is made, switch to AUTO DRILL. Drilling will continue until the cylinder strokes to its maximum length or until the AUTO DRILL switch is turned off.

The DRILL DOWN, DRILL UP, and TURBO switches will not operate when in the AUTO DRILL mode.

TWO SPEED DRILL MOTOR: Set to high speed for drills up to 10" Diameter (Shift Clockwise) and low speed for drills greater than 10" (Shift Counter Clockwise).

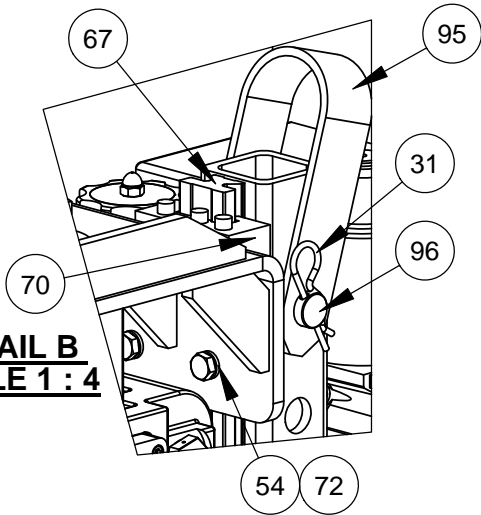
COUNTERWEIGHT: For smaller bits it should be removed and stored or mounted at the front frame position. The rear position is recommended for 16" bits and larger when the machine becomes front heavy.

Table of Contents

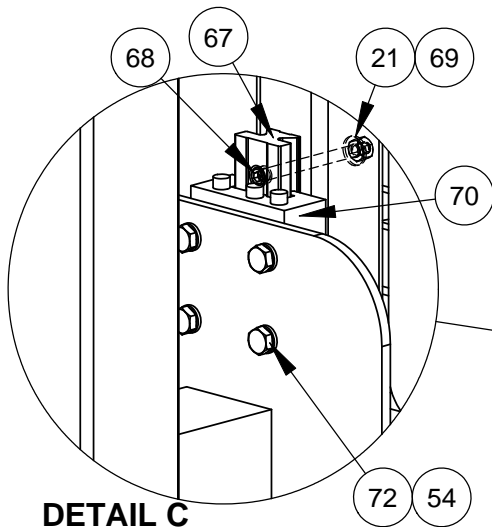
<u>Description</u>	<u>Page No.</u>
1 .Top Level Assembly Views.....	4-11
2. Axle Assembly	12
3. Engine Assembly.....	13
4. Alternator Assembly	14
5. Vacuum Pump Assembly	15
6. Water Bottle Assembly.....	16
7. Hydraulic Tank Assembly.....	17
8. Drive Valve Assembly	18
9. Gas Tank Assembly.....	20-21
10. Water Tank Assembly.....	22
11. Rear Lift Assembly.....	23
12. Water Pump Assembly	24
13. Hydraulic Manifold W/ Cartridges.....	25
14. Manifold Mounting Assembly.....	26-27
15. Hydraulic Manifold Assembly.....	28-29
16. Electric Panel Assembly.....	30-32
17. Outlet Box Assembly.....	34-36
18. Control Panel Assembly.....	38-39
19. Electric Schematic.....	40-41
20. Wire Assembly Kit.....	43
21. Mast Assembly	44
22. Cylinder Assembly.....	45
23. Roller Carriage.....	46-47
24. Pillow Block Assembly.....	48
25. Light / Strobe Assembly.....	49
26. Hydraulic Schematic.....	50
27. Hose Kit.....	51
28. 2 Speed Drill Motor Option.....	52
28. Warranty	Back Cover

4250025: ULTIMATEDRILLING MACHINE

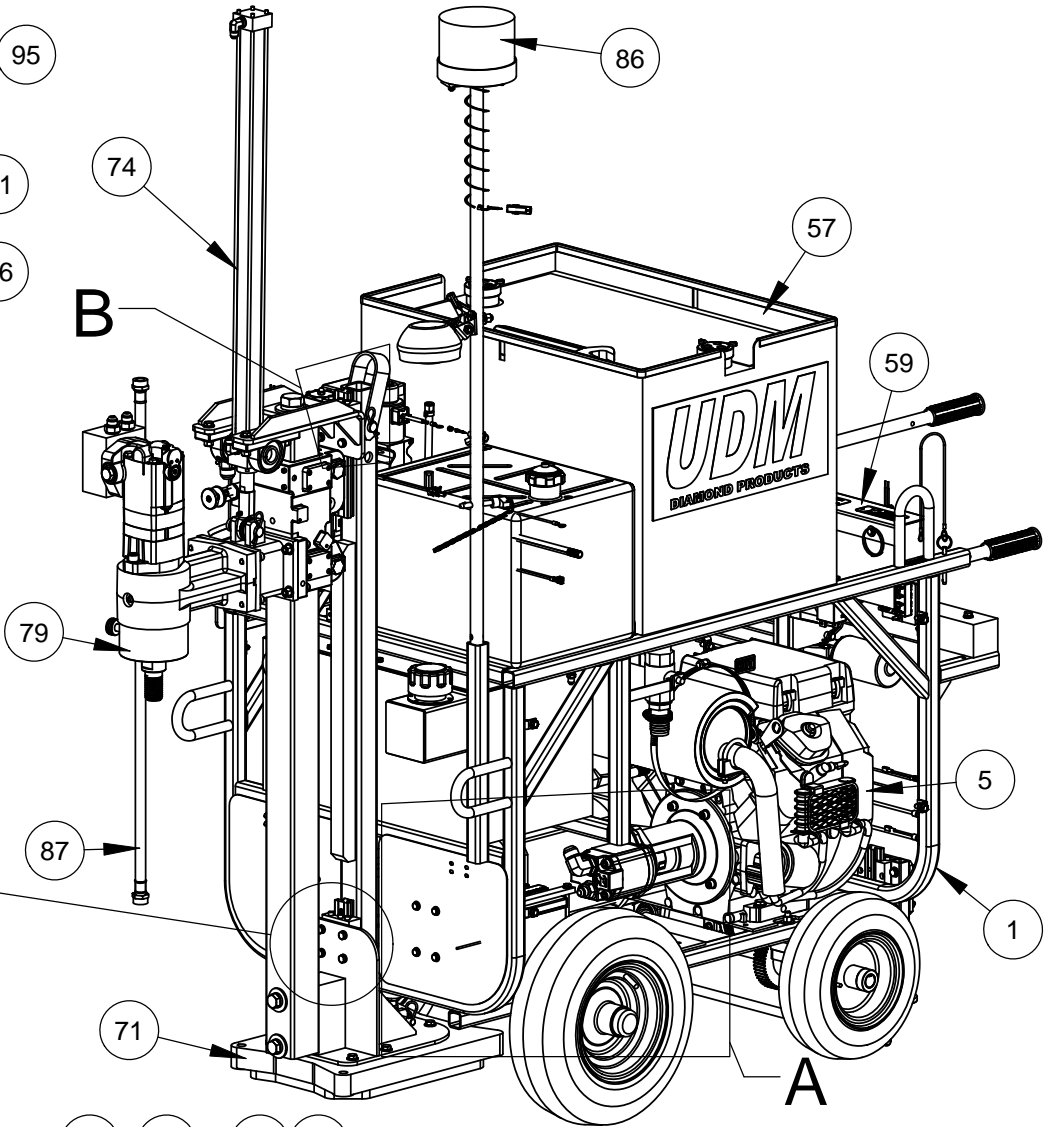
DETAIL B
SCALE 1 : 4



DETAIL C
SCALE 1 : 4

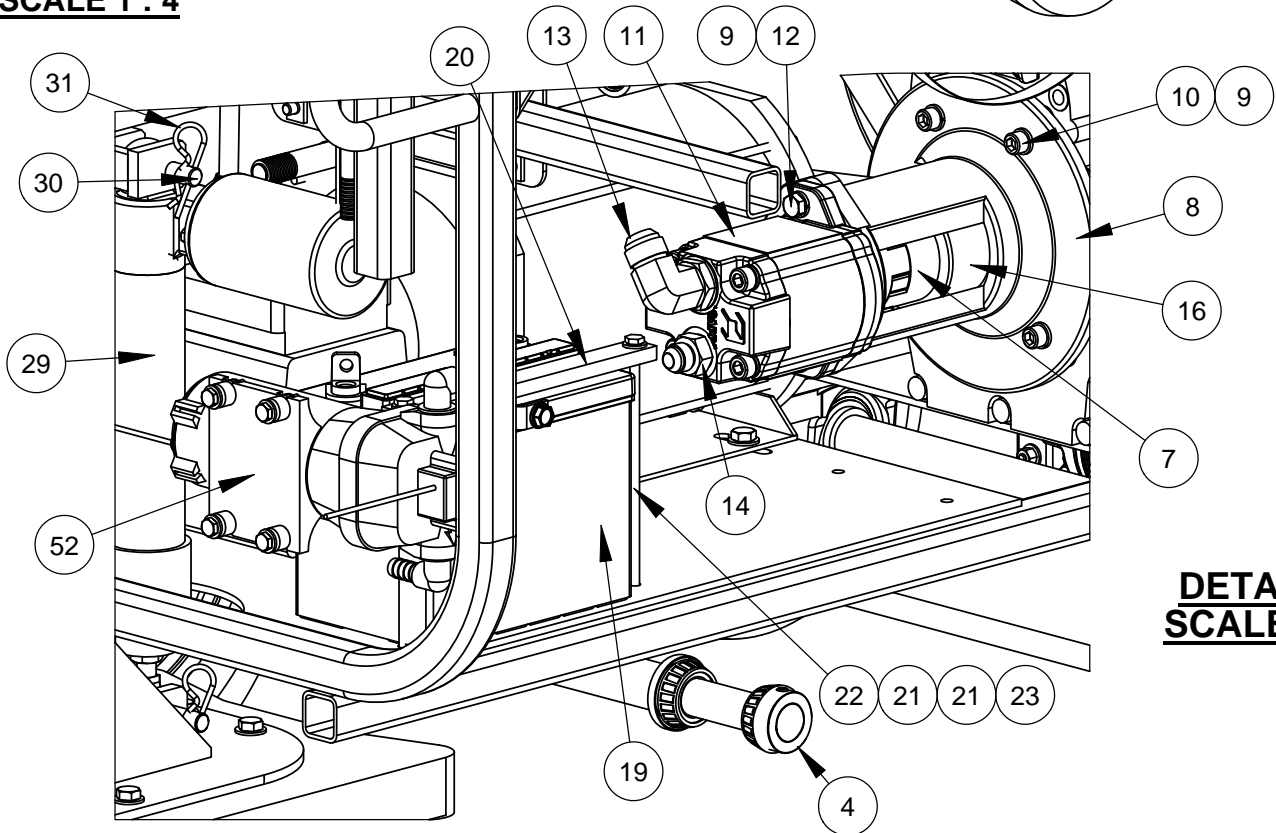


B



A

DETAIL A
SCALE 1 : 5



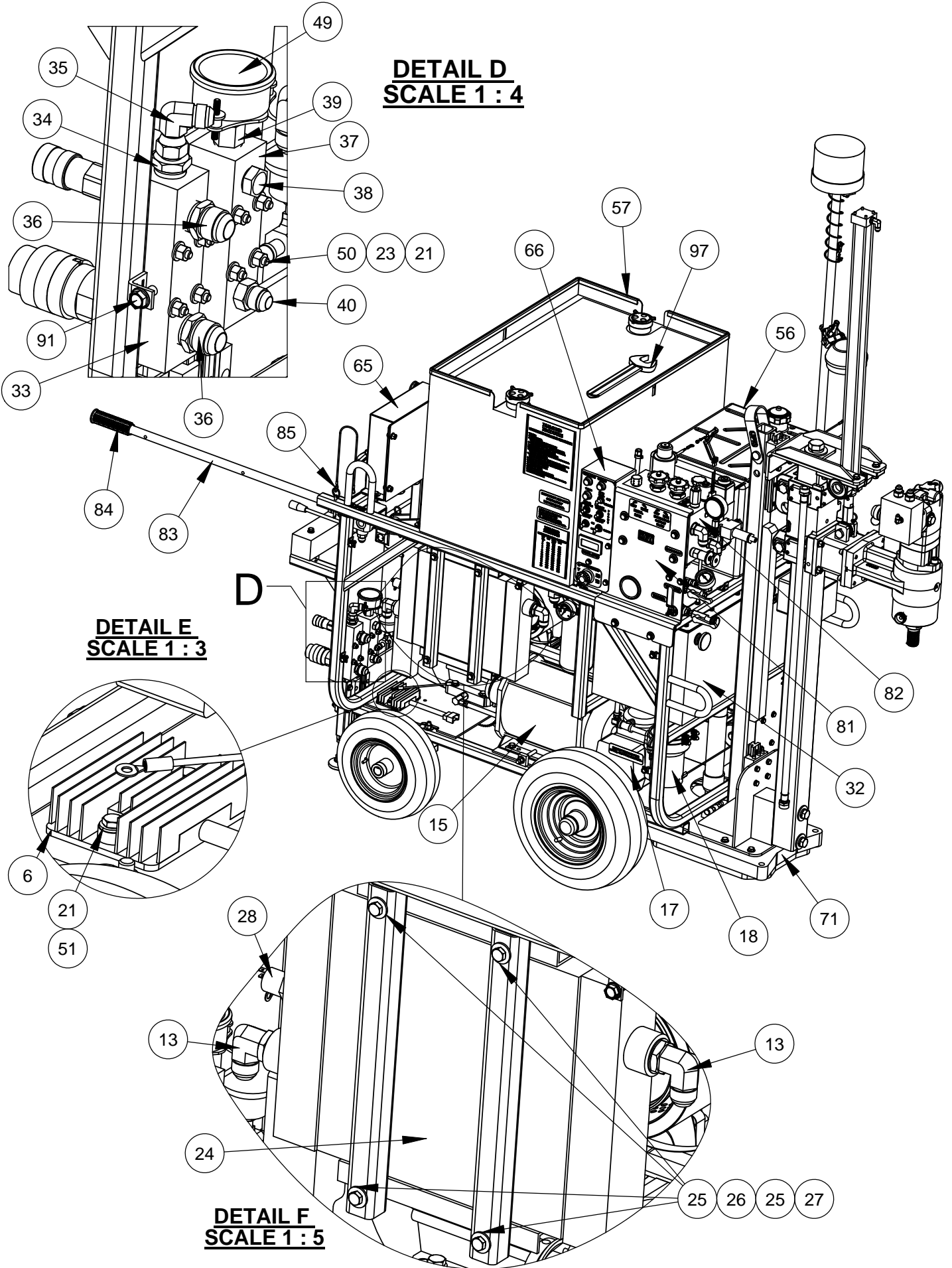
4250025: ULTIMATE DRILLING MACHINE

ITEM	PART NO.	QTY.	DESCRIPTION
1	4645109	1	Frame, Ultimate Drilling Machine
2	4645159	1	Rear Axle Assembly
3	2400276	2	Tire, 16 x 1", Pneumatic
4	2500009	2	Set Collar, 1" ID
5	4641048	1	Honda Engine Assy., 20.5 HP
6	2701670	1	Rectifier Assembly
7	2400290	1	Coupling Assy., 3/4 - 1-1/8"
8	4645129	1	Pump Mount, SAE 2 Bolt
9	2900006	10	Lock Washer, 3/8" Split
10	2900724	4	Cap Screw, Soc. Hd., 3/8-16 x 1-1/4"
11	2600569	1	Pump, 1.0 CI, 2 Bolt SAE
12	2900005	6	Cap Screw, Hex Hd., 3/8-16 x 1"
13	3200400	3	Elbow, 3/4" O-Ring to 3/4" Male JIC
14	3200287	1	Adapter, 5/8" O-Ring to 1/2" M. JIC
15	4645039	1	Alternator Assy., 5KW
16	2400285	1	Timing Belt, 1-1/2" x 46 Teeth
17	4645157	1	Vacuum Pump Assembly
18	4645230	1	Water Jar Assembly
19	2500584	1	Battery, 12 Volt Group Size U1
20	4646122	1	BatterySupport
21	2900009	32	Flat Washer, 1/4" SAE
22	2901405	2	1/4-20 x 7-1/2" Hex Hd., Cap Screw
23	2900010	12	Lock Nut, 1/4-20 Nylon
24	2400296	1	Heat Exchanger, Air/Oil, 12 Volt
25	2900567	13	Flat Washer, 5/16" USS
26	2900494	4	Cap Screw, Hex Hd., 5/16-18 x 2"
27	2900039	4	Lock Nut, 5/16-18 Nylon
28	2800697	1	Temperature Switch, 1/2 NPT
29	4645206	1	Actuator, Electric, 12 V., 5" Stroke
30	2900607	1	Clevis Pin, 3/4" x 2-3/4"
31	2900829	2	Hairpin Cotter, 1/8" x 5/8" to 7/8"
32	4645198	1	Hydraulic Tank Assembly
33	4646101	1	Manifold, 3/4 NPT
34	3201522	1	Adapter, 3/4" M. Pipe to 1/2" M. JIC
35	3200304	1	Elbow, 1/2" M. JIC to 1/2" F. JIC
36	3200097	2	Adapter, 3/4" M. JIC to 3/4" M. Pipe
37	4646102	1	Manifold, SAE O-Ring
38	3201434	1	1/2" SAE O-Ring Plug
39	3202050	1	1/2" O-ring - 1/4" FPT
40	3200286	1	Adapter, 1/2" O-Ring to 1/2" M. JIC
41	3200137	1	Hex Nipple, 3/4" NPT
42	3200383	1	Nipple, Hex, 3/4" MPT TO 1/2" MPT
43	3200371	1	Adaptor, 1/2" MPT to 1/2" O-Ring
44	3200330	1	Adapter, 3/4" M. Pipe to 3/4" O-Ring
45	3200100	1	Coupler, 3/4" Quick Disconnect
46	3200101	1	Nipple, 3/4" Quick Disconnect
47	3200104	1	Coupler, 1/2" Q.D.
48	3200105	1	Nipple, 1/2" Q.D.
49	3200250	1	Gauge, Hydraulic, 3000 PSI
50	2901001	8	Cap Screw, Hex Hd., 1/4-20 x 2-1/2"
51	2900052	2	Cap Screw, Hex Hd., 1/4-20 x 1-1/4"
52	4645235	1	Water Pump Assy., W/90 Deg. Fittings

ITEM	PART NO.	QTY.	DESCRIPTION
53	4645202	1	Bracket, Gas Tank
54	2900031	15	Lock Washer, 5/16" Split
55	2900019	5	Cap Screw, Hex Hd., 5/16-18 x 3/4"
56	4645218	1	Gas Tank Assy.
57	4645201	1	Water Tank Assembly
58	4645209	1	Electric Cyl. Rear Lift Assy.
59	4645132	1	Electric Panel Assembly
60	4645184	1	Valve Assembly
61	2600561	1	Hydraulic Motor, 9.8 CI
62	2400293	1	Spur Gear, 28 Teeth, 20, Deg.
63	2900014	12	Flat Washer, 3/8" SAE
64	3200626	2	Adapter, 5/8" O-Ring to 1/4" M. JIC
65	4645134	1	Electric Outlet Assembly
66	4645149	1	Control Panel
67	4645119	2	Guide Rail
68	2903208	8	Cap Screw, Soc. Hd., 1/4-28 x 3"
69	2900220	8	Lock Nut, 1/4-28 Nylon
70	2400275	2	Guide Block
71	4645148	1	Mast Assembly
72	2900313	8	Cap Screw, Hex Hd., M8 x 30mm
73	4645040	1	Roller Carriage
74	4645234	1	Cylinder Assembly
75	4641010	1	Key, 1/2" Sq. x 4" Long
76	4645123	1	Spacer, 4-3/8"
77	2900918	4	Cap Screw, Soc. Hd., 3/8-16 x 2"
78	2900018	4	Lock Nut, 3/8-16 Nylon
79	4645215	1	Pillow Block Assembly 1.250-7
80	4645238	1	Hyd. Motor, 4.9/9.6 CI
81	4645057	1	Manifold Mounting Bracket Assy.
82	4645049	1	Hydraulic Manifold Assembly
83	4645199	2	Handle Bar, 36" Long
84	2500001	2	7/8" Handle Grip
85	2900279	2	Lock Pin, 1/4" W/17" Lanyard
86	4645219	1	Light Assy., Strobe & Spot
87	4645221	1	Hose Assy., Water, 1/2 x 39-1/2"
88	4645138	1	Hose Assy., Water, 1/2"
89	4645216	1	Cover Plate
90	4645207	1	Cover Plate
91	2901292	10	Cap Screw, Flange Hd., 5/16"-18 x 3/4"
92	4645241	1	Weight Bar Assy., 55#
93	2900022	2	Flat Washer, 5/16" SAE
94	2900248	2	Cap Screw, Hex Hd., 5/16-18 x 3"
95	4600159	1	Shackle, 3/4" Pin
96	2900362	1	Clevis Pin, 3/4" x 2-3/4"
97	2400010	1	Wrench, 1-3/8"
98	1800169	1	Serial Number Plate, US
99	2900053	2	Rivet, 3/32" Dia.
100	4645236	1	Hose Kit, Ultimate Drilling Machine
101	4645237	1	Wire Assy. Kit UDM
102	1800537	1	Label, HOT
103	1801289A	1	UDM Labels

4250025: ULTIMATE DRILLING MACHINE

DETAIL D
SCALE 1 : 4

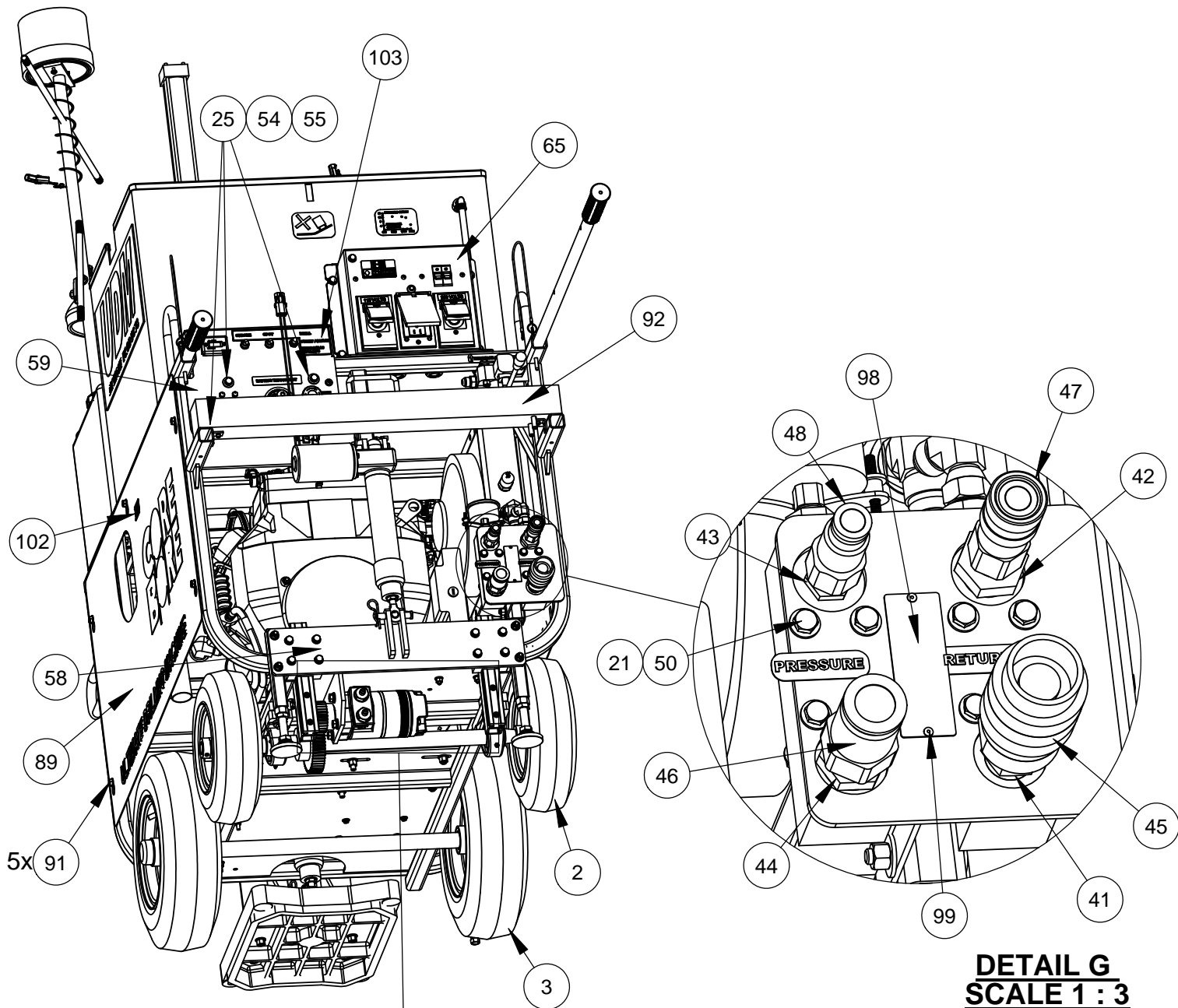


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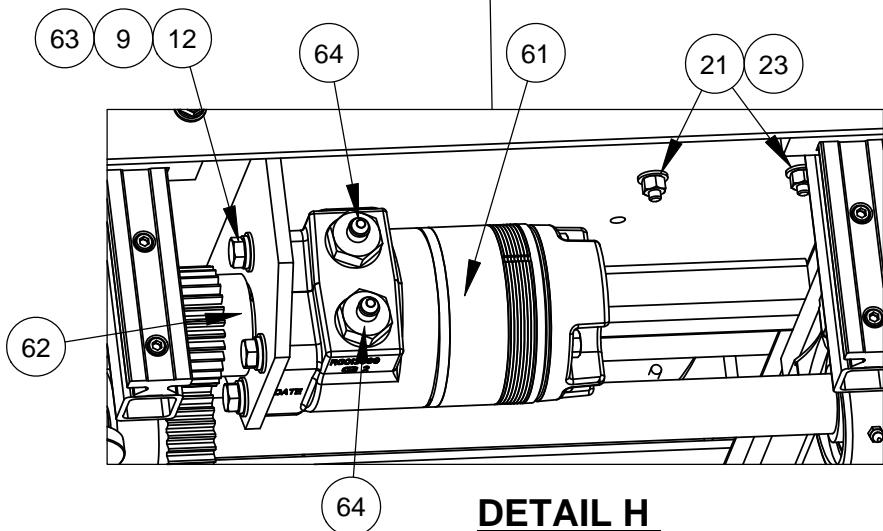
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1	4645109	1	Frame, Ultimate Drilling Machine
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5	4641048	1	Honda Engine Assy., 20.5 HP
6	2701670	1	Rectifier Assembly
7	2400290	1	Coupling Assy., 3/4 - 1-1/8"
8	4645129	1	Pump Mount, SAE 2 Bolt
9	2900006	10	Lock Washer, 3/8" Split
10	2900724	4	Cap Screw, Soc. Hd., 3/8-16 x 1-1/4"
11	2600569	1	Pump, 1.0 CI, 2 Bolt SAE
12	2900005	6	Cap Screw, Hex Hd., 3/8-16 x 1"
13	3200400	3	Elbow, 3/4" O-Ring to 3/4" Male JIC
14	3200287	1	Adapter, 5/8" O-Ring to 1/2" M. JIC
15	4645039	1	Alternator Assy., 5KW
16	2400285	1	Timing Belt, 1-1/2" x 46 Teeth
17	4645157	1	Vacuum Pump Assembly
18	4645230	1	Water Jar Assembly
19	2500584	1	Battery, 12 Volt Group Size U1
20	4646122	1	BatterySupport
21	2900009	32	Flat Washer, 1/4" SAE
22	2901405	2	1/4-20 x 7-1/2" Hex Hd., Cap Screw
23	2900010	12	Lock Nut, 1/4-20 Nylon
24	2400296	1	Heat Exchanger, Air/Oil, 12 Volt
25	2900567	13	Flat Washer, 5/16" USS
26	2900494	4	Cap Screw, Hex Hd., 5/16-18 x 2"
27	2900039	4	Lock Nut, 5/16-18 Nylon
28	2800697	1	Temperature Switch, 1/2 NPT
29	4645206	1	Actuator, Electric, 12 V., 5" Stroke
30	2900607	1	Clevis Pin, 3/4" x 2-3/4"
31	2900829	2	Hairpin Cotter, 1/8" x 5/8" to 7/8"
32	4645198	1	Hydraulic Tank Assembly
33	4646101	1	Manifold, 3/4 NPT
34	3201522	1	Adapter, 3/4" M. Pipe to 1/2" M. JIC
35	3200304	1	Elbow, 1/2" M. JIC to 1/2" F. JIC
36	3200097	2	Adapter, 3/4" M. JIC to 3/4" M. Pipe
37	4646102	1	Manifold, SAE O-Ring
38	3201434	1	1/2" SAE O-Ring Plug
39	3202050	1	1/2" O-ring - 1/4" FPT
40	3200286	1	Adapter, 1/2" O-Ring to 1/2" M. JIC
41	3200137	1	Hex Nipple, 3/4" NPT
42	3200383	1	Nipple, Hex, 3/4" MPT TO 1/2" MPT
43	3200371	1	Adaptor, 1/2" MPT to 1/2" O-Ring
44	3200330	1	Adapter, 3/4" M. Pipe to 3/4" O-Ring
45	3200100	1	Coupler, 3/4" Quick Disconnect
46	3200101	1	Nipple, 3/4" Quick Disconnect
47	3200104	1	Coupler, 1/2" Q.D.
48	3200105	1	Nipple, 1/2" Q.D.
49	3200250	1	Gauge, Hydraulic, 3000 PSI
50	2901001	8	Cap Screw, Hex Hd., 1/4-20 x 2-1/2"
51	2900052	2	Cap Screw, Hex Hd., 1/4-20 x 1-1/4"
52	4645235	1	Water Pump Assy., W/90 Deg. Fittings

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55	2900019	5	Cap Screw, Hex Hd., 5/16-18 x 3/4"
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57	4645201	1	Water Tank Assembly
58	4645209	1	Electric Cyl. Rear Lift Assy.
59	4645132	1	Electric Panel Assembly
60	4645184	1	Valve Assembly
61	2600561	1	Hydraulic Motor, 9.8 CI
62	2400293	1	Spur Gear, 28 Teeth, 20, Deg.
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65	4645134	1	Electric Outlet Assembly
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71	4645148	1	Mast Assembly
72	2900313	8	Cap Screw, Hex Hd., M8 x 30mm
73	4645040	1	Roller Carriage
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79	4645215	1	Pillow Block Assembly 1.250-7
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81	4645057	1	Manifold Mounting Bracket Assy.
82	4645049	1	Hydraulic Manifold Assembly
83	4645199	2	Handle Bar, 36" Long
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85	2900279	2	Lock Pin, 1/4" W/17" Lanyard
86	4645219	1	Light Assy., Strobe & Spot
87	4645221	1	Hose Assy., Water, 1/2 x 39-1/2"
88	4645138	1	Hose Assy., Water, 1/2"
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DETAIL G
SCALE 1 : 3



DETAIL H
SCALE 1 : 4

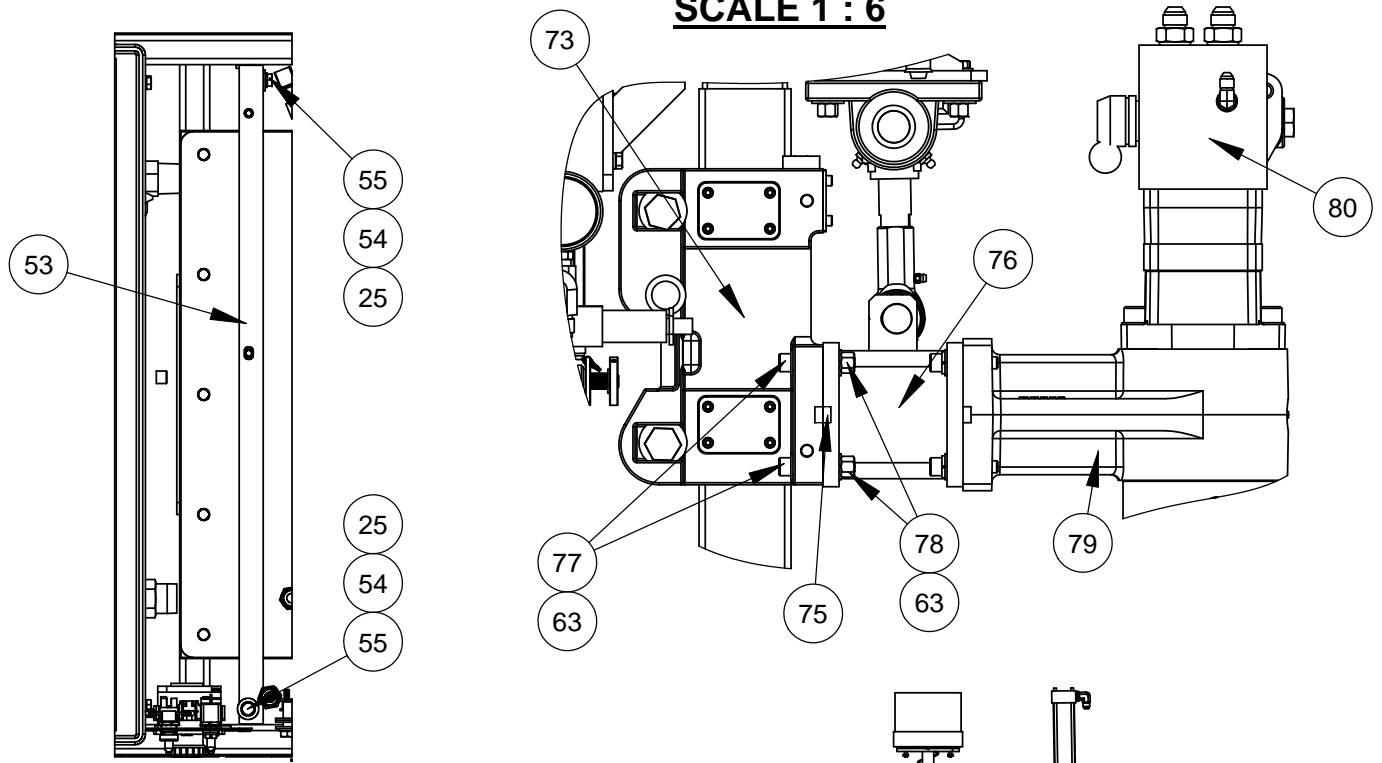
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37	4646102	1	Manifold, SAE O-Ring
38	3201434	1	1/2" SAE O-Ring Plug
39	3202050	1	1/2" O-ring - 1/4" FPT
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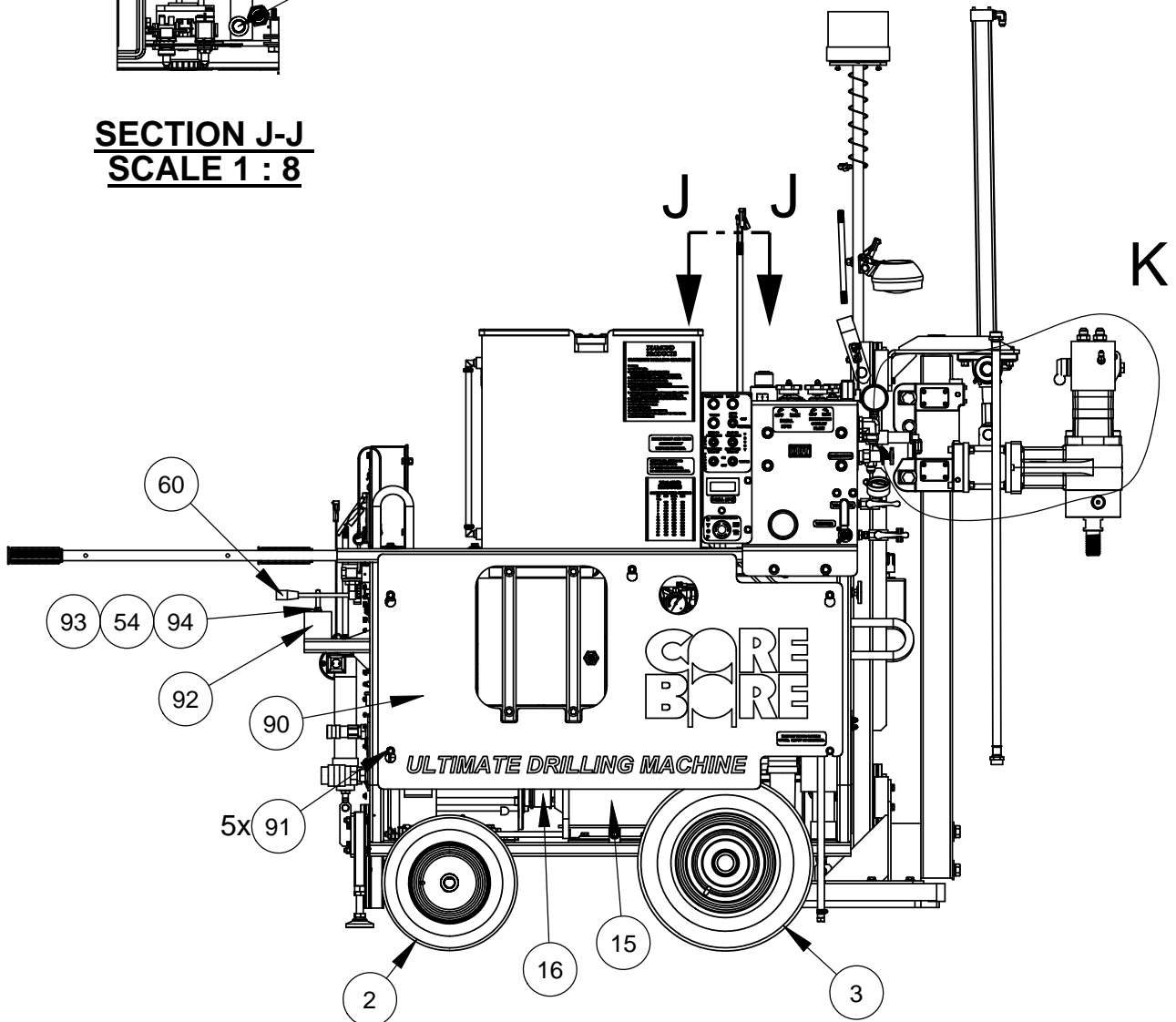
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83	4645199	2	Handle Bar, 36" Long
84	2500001	2	7/8" Handle Grip
85	2900279	2	Lock Pin, 1/4" W/17" Lanyard
86	4645219	1	Light Assy., Strobe & Spot
87	4645221	1	Hose Assy., Water, 1/2 x 39-1/2"
88	4645138	1	Hose Assy., Water, 1/2"
89	4645216	1	Cover Plate
90	4645207	1	Cover Plate
91	2901292	10	Cap Screw, Flange Hd., 5/16"-18 x 3/4"
92	4645241	1	Weight Bar Assy., 55#
93	2900022	2	Flat Washer, 5/16" SAE
94	2900248	2	Cap Screw, Hex Hd., 5/16-18 x 3"
95	4600159	1	Shackle, 3/4" Pin
96	2900362	1	Clevis Pin, 3/4" x 2-3/4"
97	2400010	1	Wrench, 1-3/8"
98	1800169	1	Serial Number Plate, US
99	2900053	2	Rivet, 3/32" Dia.
100	4645236	1	Hose Kit, Ultimate Drilling Machine
101	4645237	1	Wire Assy. Kit UDM
102	1800537	1	Label, HOT
103	1801289A	1	UDM Labels

4250025: ULTIMATE DRILLING MACHINE

DETAIL K
SCALE 1 : 6



SECTION J-J
SCALE 1 : 8

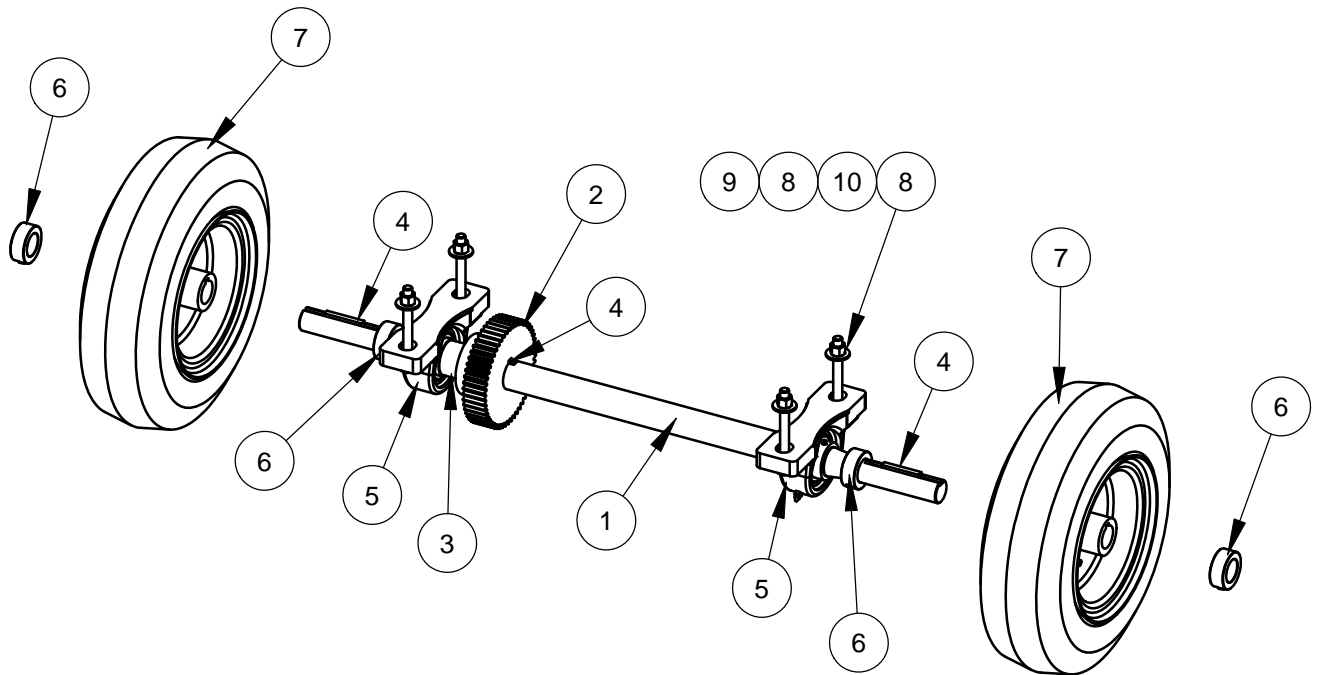
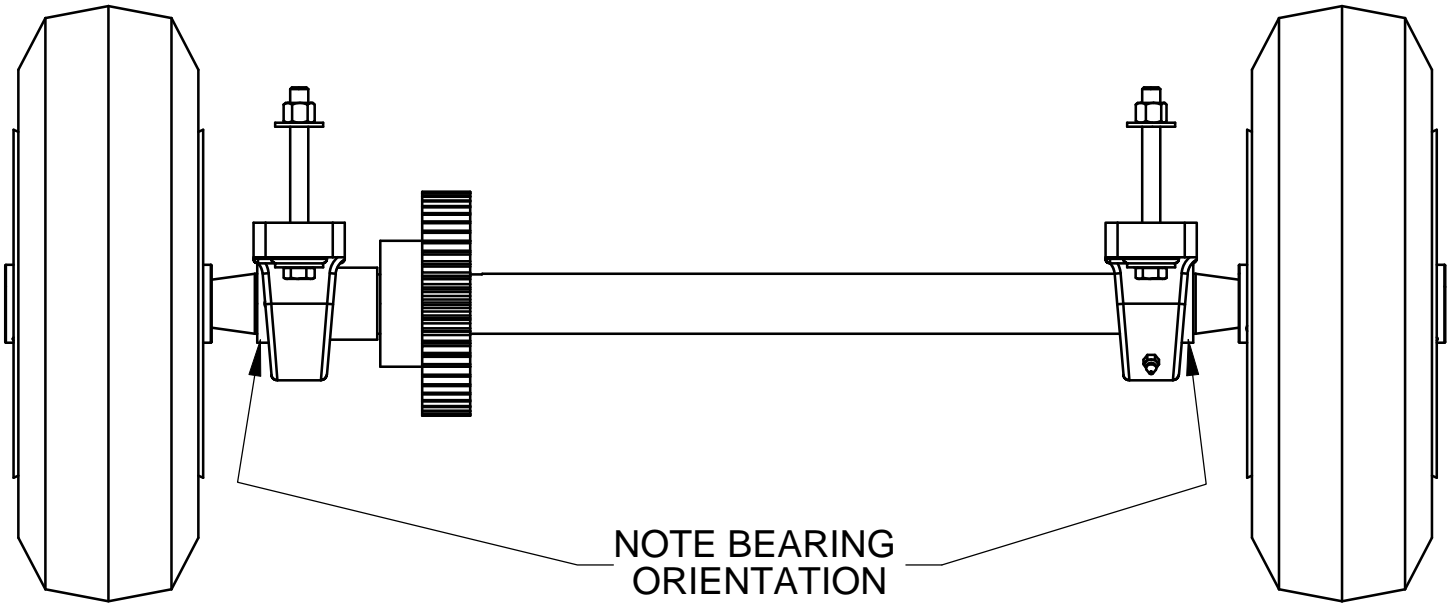


4250025: ULTIMATE DRILLING MACHINE

ITEM	PART NO.	QTY.	DESCRIPTION
1	4645109	1	Frame, Ultimate Drilling Machine
2	4645159	1	Rear Axle Assembly
3	2400276	2	Tire, 16 x 1", Pneumatic
4	2500009	2	Set Collar, 1" ID
5	4641048	1	Honda Engine Assy., 20.5 HP
6	2701670	1	Rectifier Assembly
7	2400290	1	Coupling Assy., 3/4 - 1-1/8"
8	4645129	1	Pump Mount, SAE 2 Bolt
9	2900006	10	Lock Washer, 3/8" Split
10	2900724	4	Cap Screw, Soc. Hd., 3/8-16 x 1-1/4"
11	2600569	1	Pump, 1.0 CI, 2 Bolt SAE
12	2900005	6	Cap Screw, Hex Hd., 3/8-16 x 1"
13	3200400	3	Elbow, 3/4" O-Ring to 3/4" Male JIC
14	3200287	1	Adapter, 5/8" O-Ring to 1/2" M. JIC
15	4645039	1	Alternator Assy., 5KW
16	2400285	1	Timing Belt, 1-1/2" x 46 Teeth
17	4645157	1	Vacuum Pump Assembly
18	4645230	1	Water Jar Assembly
19	2500584	1	Battery, 12 Volt Group Size U1
20	4646122	1	BatterySupport
21	2900009	32	Flat Washer, 1/4" SAE
22	2901405	2	1/4-20 x 7-1/2" Hex Hd., Cap Screw
23	2900010	12	Lock Nut, 1/4-20 Nylon
24	2400296	1	Heat Exchanger, Air/Oil, 12 Volt
25	2900567	13	Flat Washer, 5/16" USS
26	2900494	4	Cap Screw, Hex Hd., 5/16-18 x 2"
27	2900039	4	Lock Nut, 5/16-18 Nylon
28	2800697	1	Temperature Switch, 1/2 NPT
29	4645206	1	Actuator, Electric, 12 V., 5" Stroke
30	2900607	1	Clevis Pin, 3/4" x 2-3/4"
31	2900829	2	Hairpin Cotter, 1/8" x 5/8" to 7/8"
32	4645198	1	Hydraulic Tank Assembly
33	4646101	1	Manifold, 3/4 NPT
34	3201522	1	Adapter, 3/4" M. Pipe to 1/2" M. JIC
35	3200304	1	Elbow, 1/2" M. JIC to 1/2" F. JIC
36	3200097	2	Adapter, 3/4" M. JIC to 3/4" M. Pipe
37	4646102	1	Manifold, SAE O-Ring
38	3201434	1	1/2" SAE O-Ring Plug
39	3202050	1	1/2" O-ring - 1/4" FPT
40	3200286	1	Adapter, 1/2" O-Ring to 1/2" M. JIC
41	3200137	1	Hex Nipple, 3/4" NPT
42	3200383	1	Nipple, Hex, 3/4" MPT TO 1/2" MPT
43	3200371	1	Adaptor, 1/2" MPT to 1/2" O-Ring
44	3200330	1	Adapter, 3/4" M. Pipe to 3/4" O-Ring
45	3200100	1	Coupler, 3/4" Quick Disconnect
46	3200101	1	Nipple, 3/4" Quick Disconnect
47	3200104	1	Coupler, 1/2" Q.D.
48	3200105	1	Nipple, 1/2" Q.D.
49	3200250	1	Gauge, Hydraulic, 3000 PSI
50	2901001	8	Cap Screw, Hex Hd., 1/4-20 x 2-1/2"
51	2900052	2	Cap Screw, Hex Hd., 1/4-20 x 1-1/4"
52	4645235	1	Water Pump Assy., W/90 Deg. Fittings

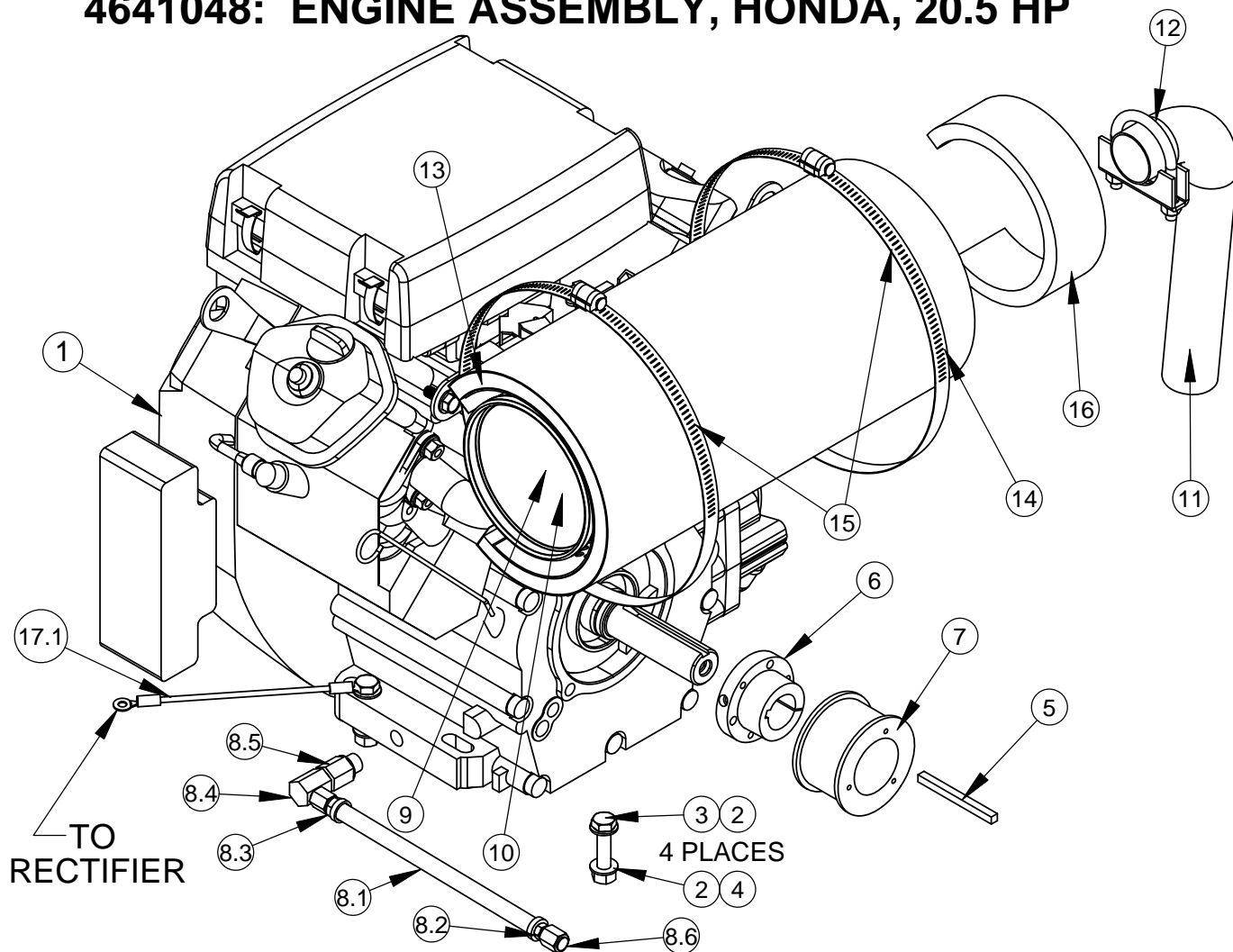
ITEM	PART NO.	QTY.	DESCRIPTION
53	4645202	1	Bracket, Gas Tank
54	2900031	15	Lock Washer, 5/16" Split
55	2900019	5	Cap Screw, Hex Hd., 5/16-18 x 3/4"
56	4645218	1	Gas Tank Assy.
57	4645201	1	Water Tank Assembly
58	4645209	1	Electric Cyl. Rear Lift Assy.
59	4645132	1	Electric Panel Assembly
60	4645184	1	Valve Assembly
61	2600561	1	Hydraulic Motor, 9.8 CI
62	2400293	1	Spur Gear, 28 Teeth, 20, Deg.
63	2900014	12	Flat Washer, 3/8" SAE
64	3200626	2	Adapter, 5/8" O-Ring to 1/4" M. JIC
65	4645134	1	Electric Outlet Assembly
66	4645149	1	Control Panel
67	4645119	2	Guide Rail
68	2903208	8	Cap Screw, Soc. Hd., 1/4-28 x 3"
69	2900220	8	Lock Nut, 1/4-28 Nylon
70	2400275	2	Guide Block
71	4645148	1	Mast Assembly
72	2900313	8	Cap Screw, Hex Hd., M8 x 30mm
73	4645040	1	Roller Carriage
74	4645234	1	Cylinder Assembly
75	4641010	1	Key, 1/2" Sq. x 4" Long
76	4645123	1	Spacer, 4-3/8"
77	2900918	4	Cap Screw, Soc. Hd., 3/8-16 x 2"
78	2900018	4	Lock Nut, 3/8-16 Nylon
79	4645215	1	Pillow Block Assembly 1.250-7
80	4645238	1	Hyd. Motor, 4.9/9.6 CI
81	4645057	1	Manifold Mounting Bracket Assy.
82	4645049	1	Hydraulic Manifold Assembly
83	4645199	2	Handle Bar, 36" Long
84	2500001	2	7/8" Handle Grip
85	2900279	2	Lock Pin, 1/4" W/17" Lanyard
86	4645219	1	Light Assy., Strobe & Spot
87	4645221	1	Hose Assy., Water, 1/2 x 39-1/2"
88	4645138	1	Hose Assy., Water, 1/2"
89	4645216	1	Cover Plate
90	4645207	1	Cover Plate
91	2901292	10	Cap Screw, Flange Hd., 5/16"-18 x 3/4"
92	4645241	1	Weight Bar Assy., 55#
93	2900022	2	Flat Washer, 5/16" SAE
94	2900248	2	Cap Screw, Hex Hd., 5/16-18 x 3"
95	4600159	1	Shackle, 3/4" Pin
96	2900362	1	Clevis Pin, 3/4" x 2-3/4"
97	2400010	1	Wrench, 1-3/8"
98	1800169	1	Serial Number Plate, US
99	2900053	2	Rivet, 3/32" Dia.
100	4645236	1	Hose Kit, Ultimate Drilling Machine
101	4645237	1	Wire Assy. Kit UDM
102	1800537	1	Label, HOT
103	1801289A	1	UDM Labels

4645159: AXLE ASSEMBLY



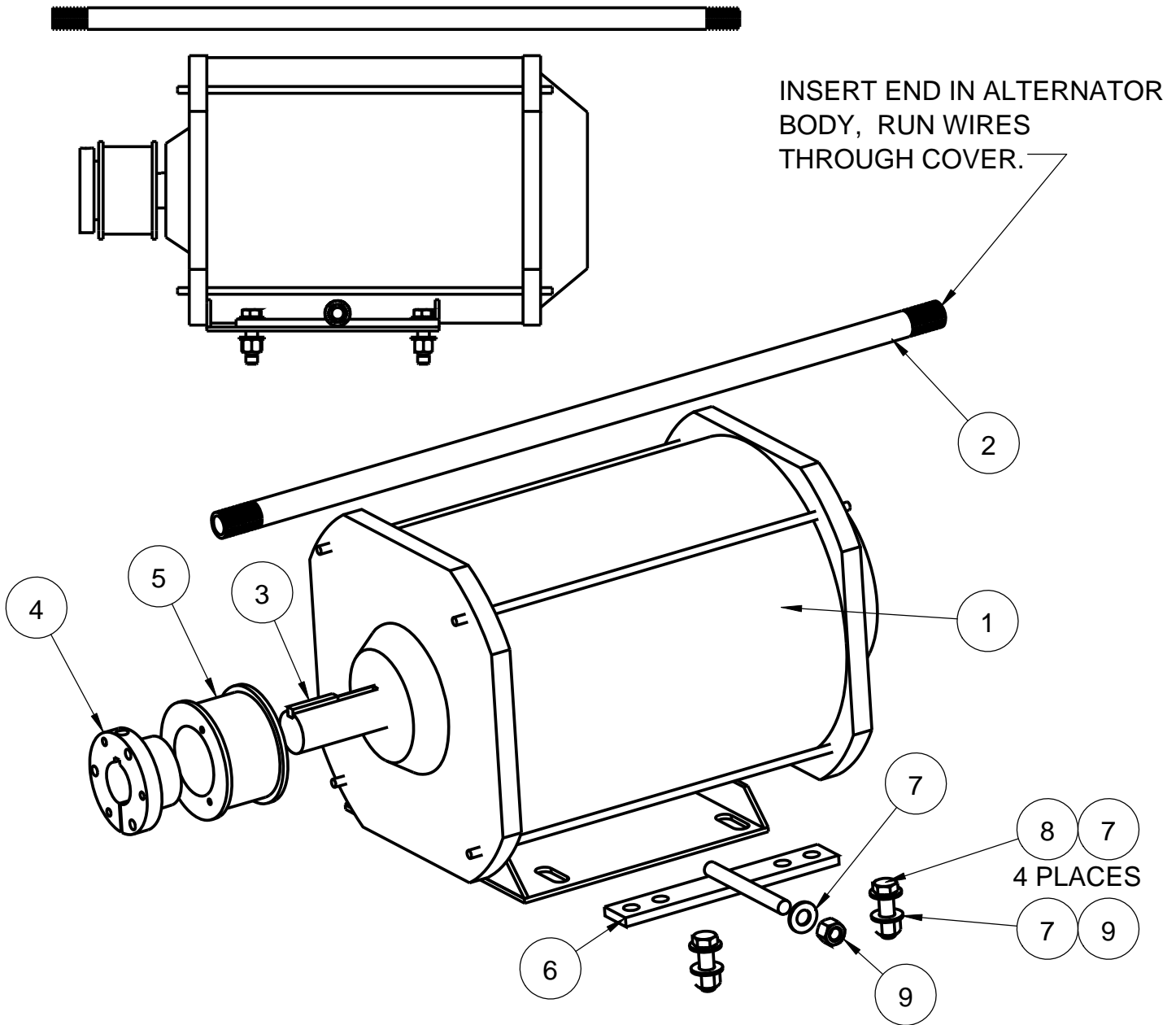
ITEM NO.	PART NUMBER	QTY.	DESCRIPTION
1	4645114	1	Axle Shaft
2	2400294	1	Spur Gear, 54 Tooth, 20 Deg., 1-1/4 Bore
3	2400298	1	Bearing, 1-1/4 x 1-1/2 x 1.0"
4	2400299	3	Key, 1/4 x 1-3/4"
5	2500365	2	Pillow Block Bearing, 1-1/4"
6	2500009	4	Set Collar, 1" ID
7	2400277	2	Tire, 12 x 3-1/2, Pneumatic
8	2900473	8	Flat Washer, 3/8" USS
9	2900057	4	Cap Screw, Hex Hd., 3/8-16 x 3-3/4"
10	2900018	4	Lock Nut, 3/8-16 Nylon

4641048: ENGINE ASSEMBLY, HONDA, 20.5 HP



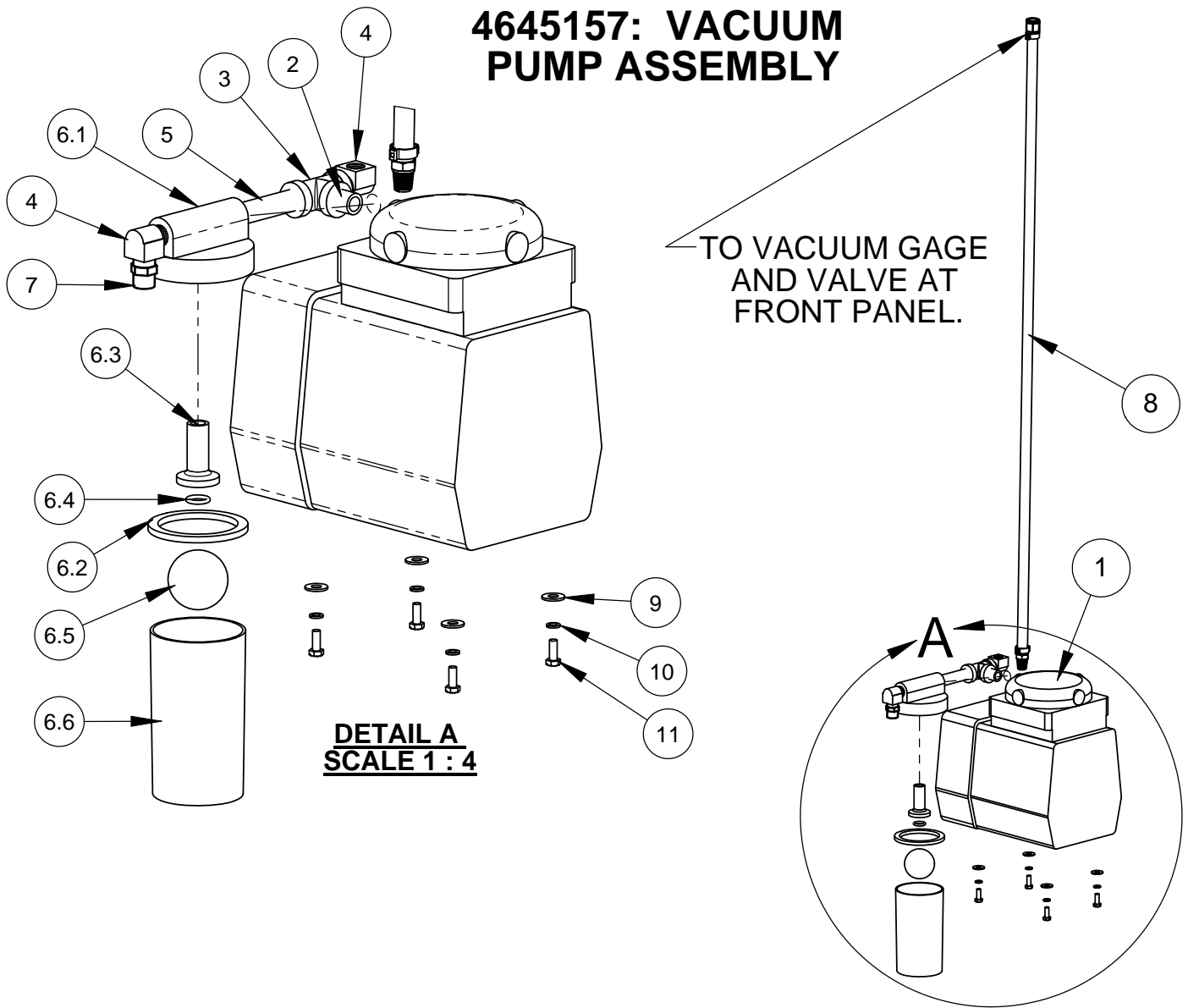
ITEM	PART NO.	QTY.	DESCRIPTION
16	4640108	1	Honda, 20.5 HP, W/Elec. Connector
2	2900014	8	Flat Washer, 3/8" SAE
3	2900317	4	Cap Screw, Hex Hd., M10 x 45mm
4	2900304	4	Lock Nut, M10 Nylon
5	6047977	1	Key, 1/4" Sq. x 3"
6	2400283	1	Bushing, QD, 1-1/8"
7	2400281	1	Pulley, 3.11 OD x 1-1/2" Belt x 1/2" Pitch
8	4646023	1	Oil Drain Hose Assembly
8.1	4646073	1	Hose, 1/4" ID
8.2	3200040	1	Fitting, 1/4" M. JIC to 1/4" Push Lock
8.3	3201270	1	Fitting, 1/4" M. Pipe to 1/4" Pushlock
8.4	3200059	1	Elbow, 1/4" Male to 1/4" Female Pipe
8.5	3201269	1	Adapter, M14x1.5 M. to 1/4" F. Pipe
8.6	3200006	1	Cap, 1/4" JIC
9	2705029	1	Muffler Assy., Honda, R. Side Exhaust
10	2400289	1	Muffler, Honda, R Side Exhaust, Catalytic
11	4600158	1	Exhaust Pipe
12	2503909	1	Muffler Clamp, 1-3/4"
13	4600094	1	Insulation, Fiberglass
14	4600095	1	Shield, Muffler Insulation
15	2400045	2	Clamp, Worm Drive, 7-10"
16	4600098	1	Insulation, Fiberglass, 1 x 2 x 12"
17	4646018	1	Wire Assembly, 12 Gage

4645039: ALTERNATOR ASSEMBLY, 5KW



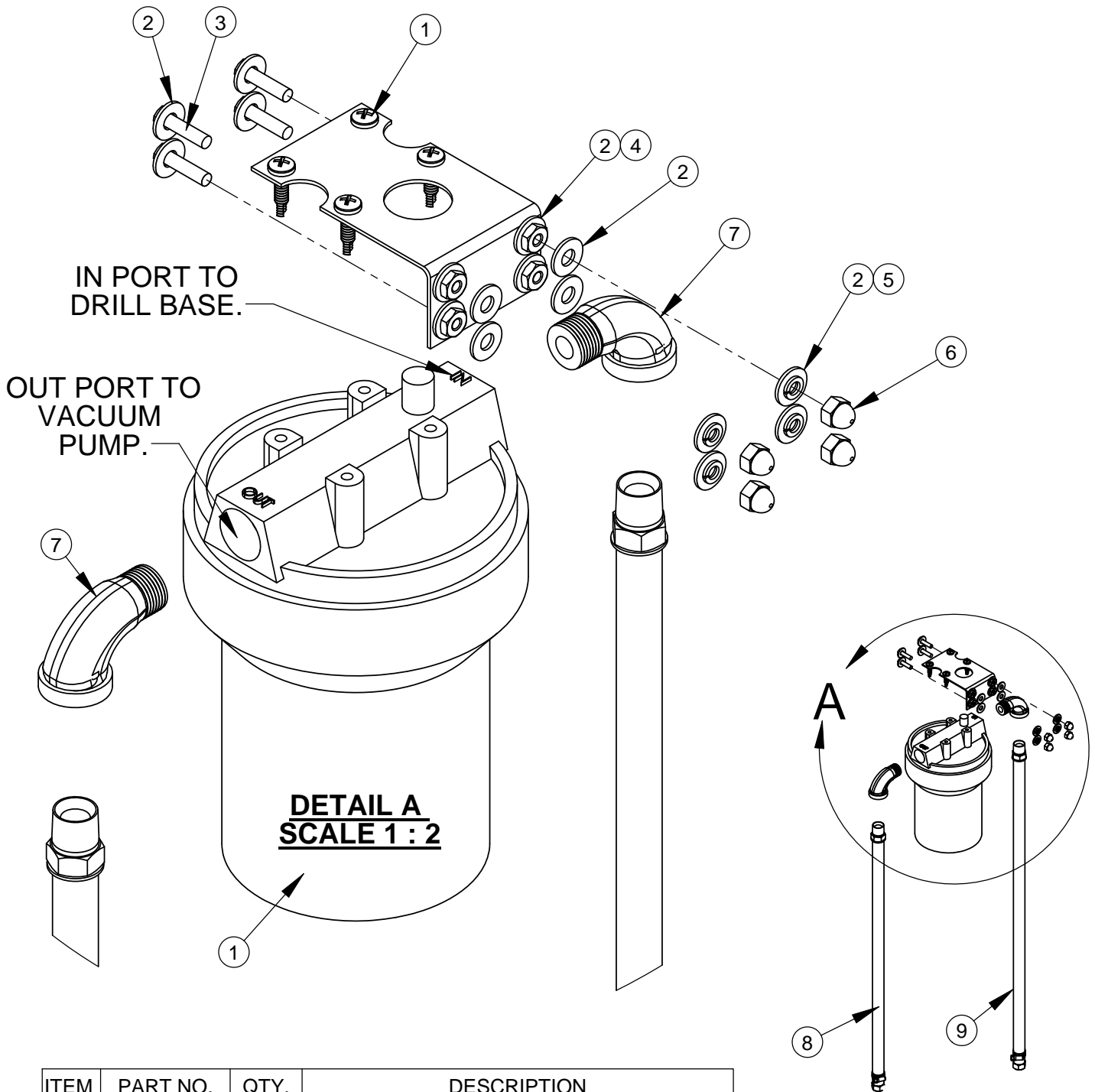
ITEM	PART NO.	QTY.	DESCRIPTION
1	2800851	1	Alternator, 5000 W., 115/230 V., 42/21 Amp
2	4600086	1	Wire Cover, 1/2 x 22"
3	2501538	1	Square Key, 1/4 X 1-3/8"
4	2400283	1	Bushing, QD, 1-1/8"
5	2400281	1	Pulley, 3.11 OD x 1-1/2" Belt x 1/2" Pitch
6	4600100	1	Belt Adjustment Assy.
7	2900014	9	Flat Washer, 3/8" SAE
8	2900013	4	Cap Screw, Hex Hd., 3/8-16 x 1-1/4"
9	2900018	5	Lock Nut, 3/8-16 Nylon

4645157: VACUUM PUMP ASSEMBLY



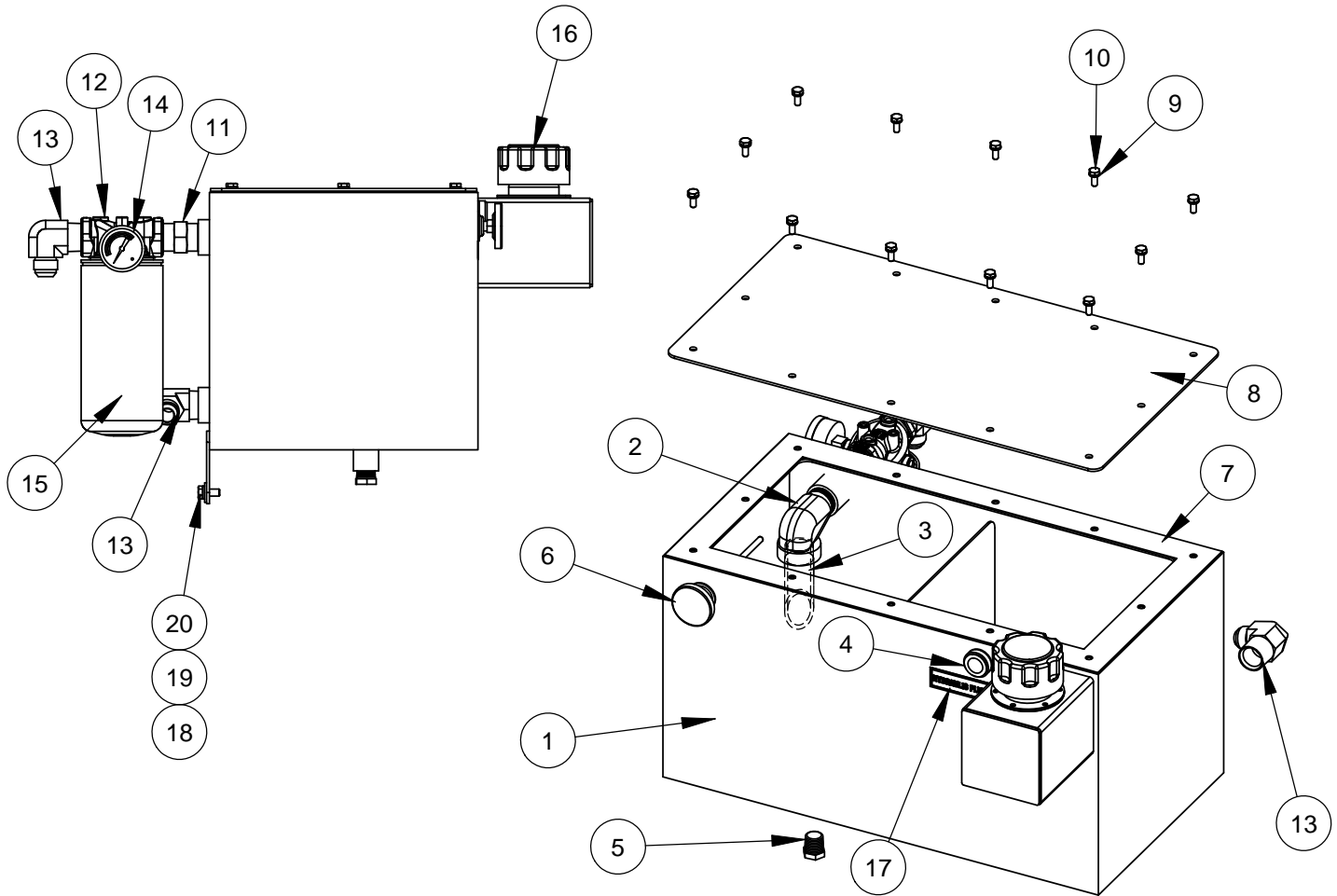
ITEM NO.	PART NUMBER	QTY.	DESCRIPTION
1	4645143	1	Vacuum Pump Assy., 115V, W/ Connectors Includes 2700171
2	3200007	1	Nipple, 1/4 NPT, Close
3	3200010	1	Pipe Tee, 1/4" FPT
4	3200012	2	Street Elbow, 1/4" NPT
5	3200088	1	Nipple, 1/4 MPT x 2-1/2", Sched. 40, Galv.
6	2700171	1	Water Jar Assembly
6.1	2700014	1	Water Jar Lid
6.2	2700017	1	Water Jar Gasket
6.3	2700015	1	Funnel Fitting
6.4	2700016	1	O-Ring
6.5	2700172	1	Float Ball
6.6	2700170	1	Water Trap Jar
7	3200043	1	1/4 MPT - 1/4 NPSM Straight Pipe
8	4641047	1	Hose Assy., 1/4 x 33-3/8"
9	2900016	4	Flat Washer, #10 USS
10	2900038	4	Lock Washer, #10 Split
11	2900448	4	Machine Screw, Hex Hd., #10-32 x 1/2"

4645230 WATER BOTTLE ASSEMBLY



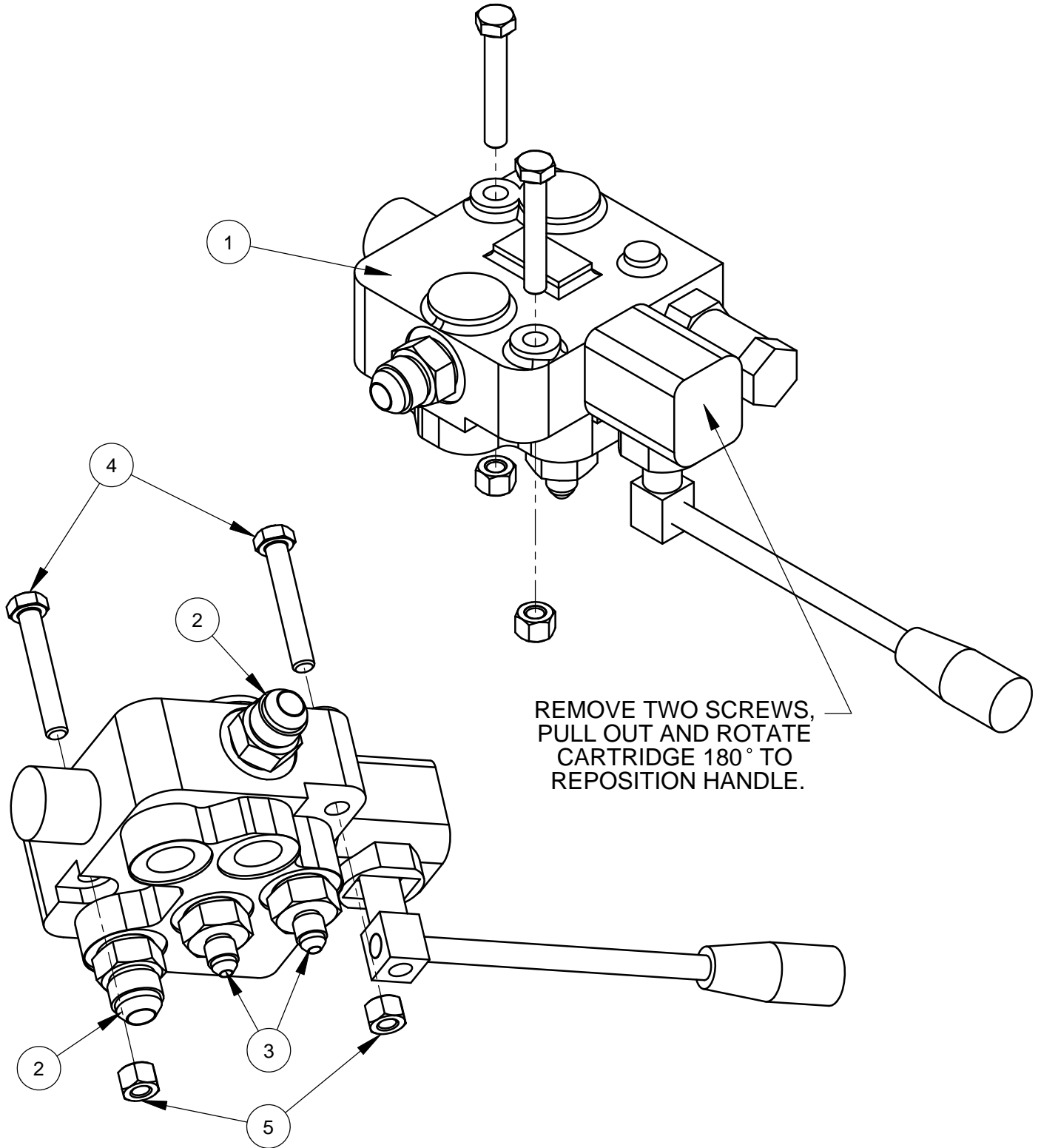
ITEM	PART NO.	QTY.	DESCRIPTION
1	2400302	1	Water Jar/Filter Assy.
	2400302E	4	Pan Hd., 10-24 x 3/4" Self-Tapping
2	2900016	16	Flat Washer, #10 USS
3	2900015	4	Machine Screw, Hex Hd., #10-24 x 3/4"
4	2900050	4	Hex Nut, #10-24
5	2900038	4	Lock Washer, #10 Split
6	2900840	4	Acorn Nut, #10-24
7	3200230	2	3/8" Street Elbow, Galvanized
8	4641049	1	Hose Assy., 3/8 x 17.5"
9	4641046	1	Hose Assy., 3/8 x 21.5"

HYDRAULIC TANK ASSEMBLY: 4645198



ITEM NO.	PART NUMBER	QTY.	DESCRIPTION
1	4645116	1	Oil Reservoir Weldment
2	3200409	1	Street Elbow, 1" NPT
3	4646026	1	Nipple, 1"NPT x 4" x 45 Deg.Bevel, Sched. 40
4	2400258	1	Fluid Level Sight Port
5	3200160	1	Plug, 1/2-14 NPT
6	2800459	1	Thermometer, 2", 0 - 200 F
7	4645197	1	Gasket
8	4645117	1	Cover, Hydraulic Tank
9	2900024	12	Lock Washer, 1/4" Split
10	2900023	12	Cap Screw, Hex Hd., 1/4-20 x 5/8"
11	3201671	1	Hex Nipple, 1" NPT
12	3200505	1	Filter Head
13	3200111	2	Elbow, 1" M. Pipe to 3/4" M. JIC
14	3200502	1	Gauge, Hydraulic Pressure
15	3201175	1	Hydraulic Filter Element
16	2401305	1	Filler/Breather Cap (Top Mount)
17	1800535	1	Decal, "Hydraulic Fluid Only"
18	2900567	2	Flat Washer, 5/16" USS
19	2900031	2	Lock Washer, 5/16" Split
20	2900019	2	Cap Screw, Hex Hd., 5/16-18 x 3/4"

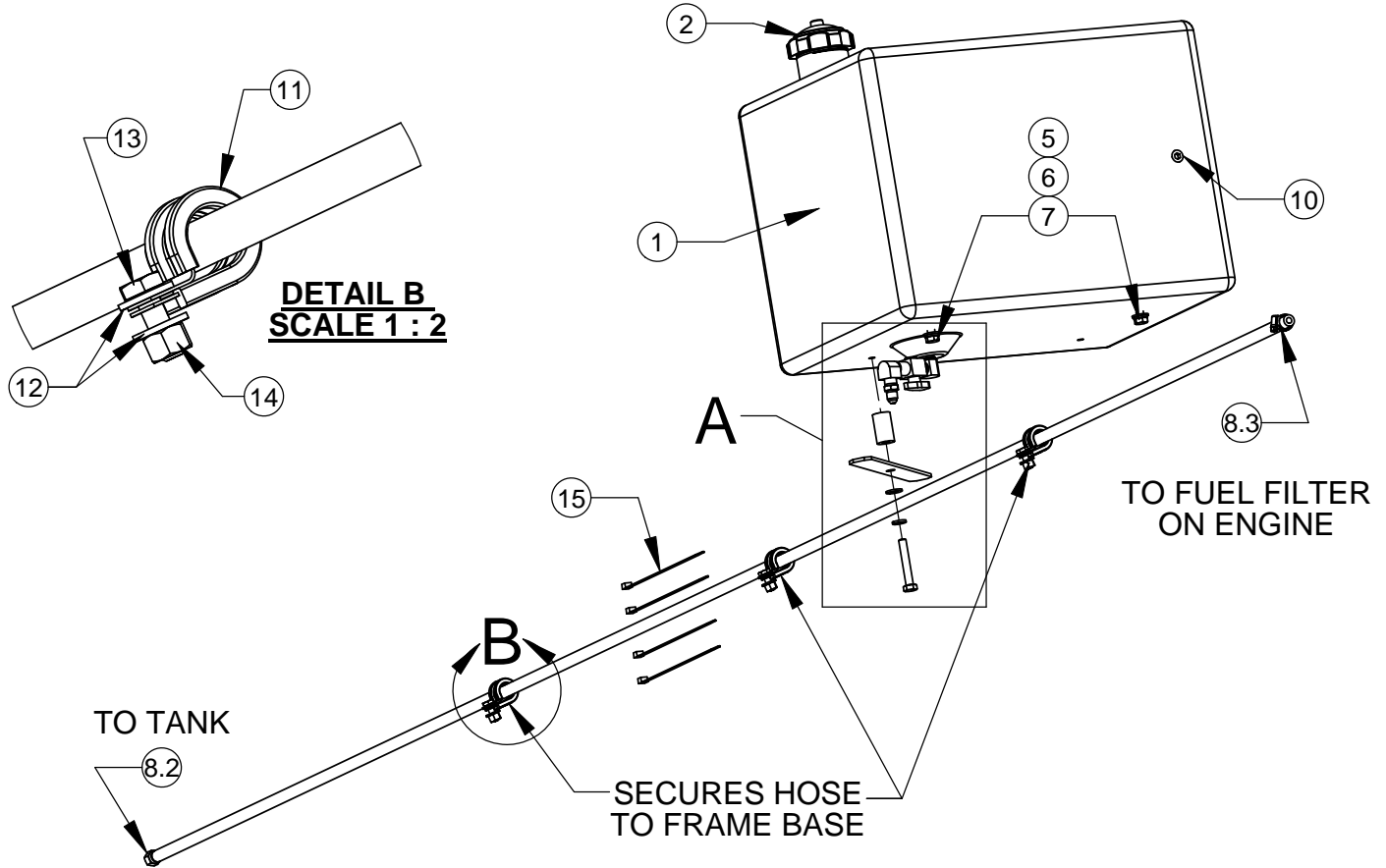
4645184 DRIVE VALVE ASSEMBLY



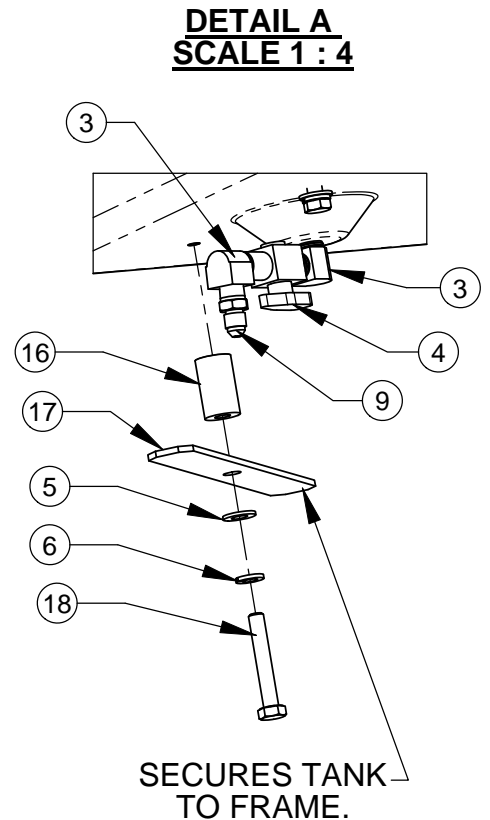
ITEM	PART NO.	QTY.	DESCRIPTION
1	2400286	1	Valve, Directional
2	3200286	2	Adapter, 1/2" O-Ring to 1/2" M. JIC
3	3201291	2	Adapter, 1/2"M.O-Ring to 1/4" MJIC
4	2900494	2	Cap Screw, Hex Hd., 5/16-18 x 2"
5	2900039	2	Lock Nut, 5/16-18 Nylon

Intentionally Blank

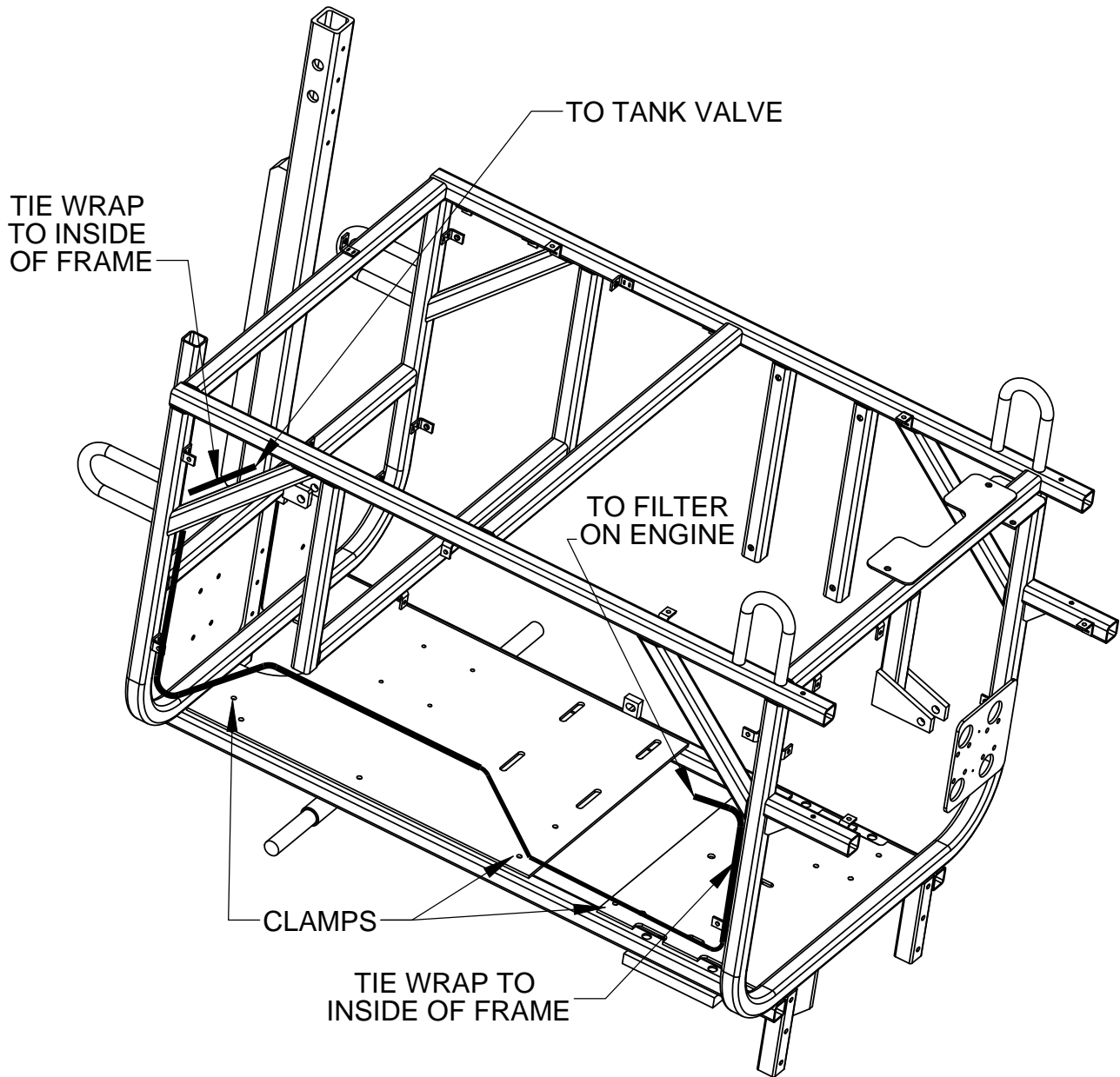
4645218: GAS TANK ASSEMBLY



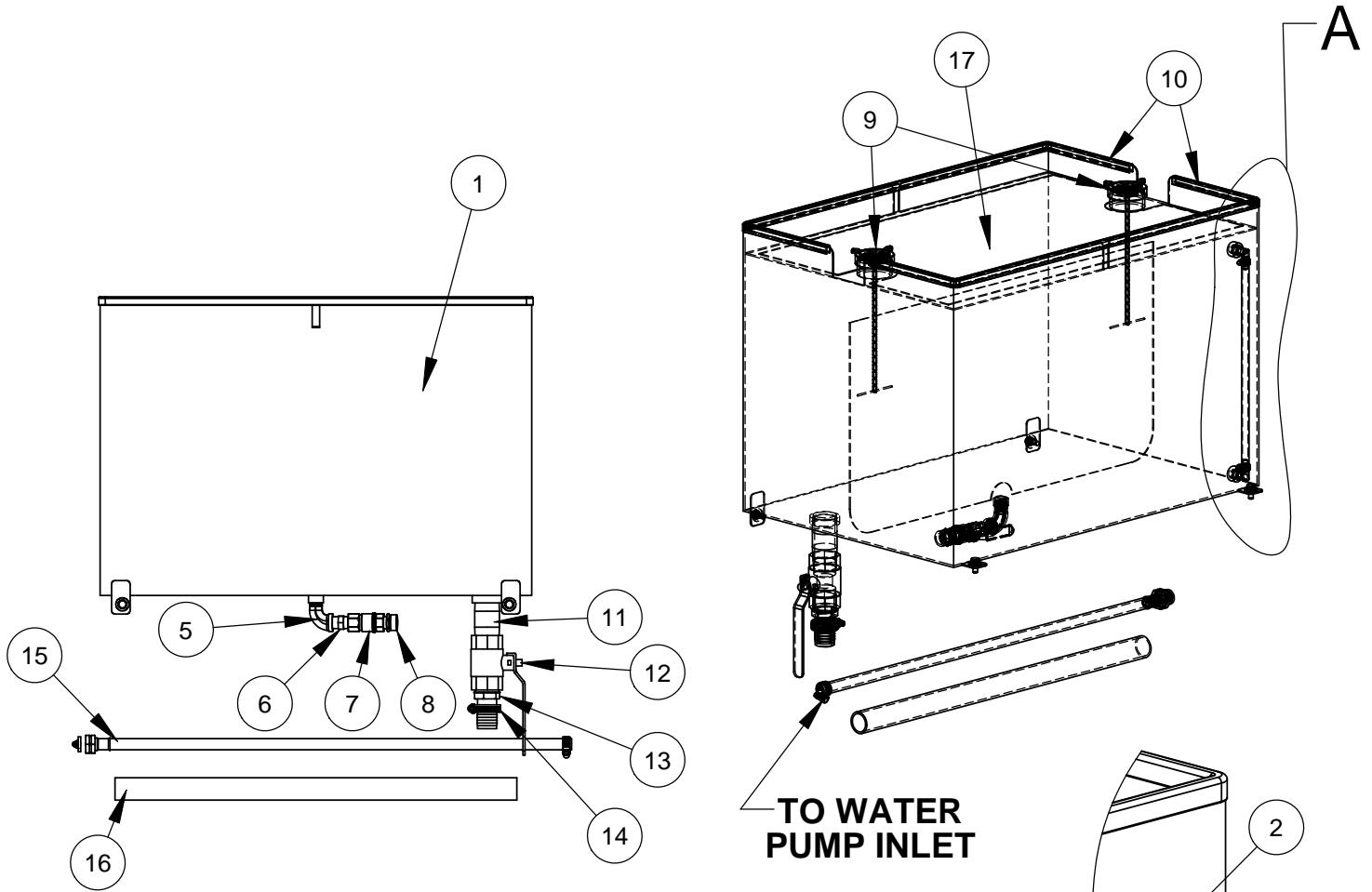
ITEM	PART NO.	QTY.	DESCRIPTION
1	2500650	1	Fuel Tank
2	2500649	1	Fuel Tank Cap
3	3200012	2	Street Elbow, 1/4" NPT
4	3200108	1	Fuel Shut-Off Valve, 1/4"
5	2900022	3	Flat Washer, 5/16" SAE
6	2900031	3	Lock Washer, 5/16" Split
7	2900019	2	Cap Screw, Hex Hd., 5/16-18 x 3/4"
8	4645213	1	Hose Assy., Gas, 1/4 x 110.6"
8.2	3200091	1	Fitting, 1/4" F. JIC to 1/4" Push Lock
8.3	3200390	1	Hose Clamp #6
9	3200418	1	Adapter, 1/4" M. Pipe to 1/4" M. JIC
10	3200552	1	Plug, 1/4" NPT
11	2500999	3	Clamp, 5/8" Hose
12	2900009	6	Flat Washer, 1/4" SAE
13	2900144	3	Cap Screw, Hex Hd., 1/4-20 x 3/4"
14	2900010	3	Lock Nut, 1/4-20 Nylon
15	2800068	4	Wire Tie, 7-1/2"
16	2400314	1	3/4 x 1-1/4" Standoff
17	4641139	1	Bar, 1/8x1.0x8.5"
18	2900494	1	Cap Screw, Hex Hd., 5/16-18 x 2"



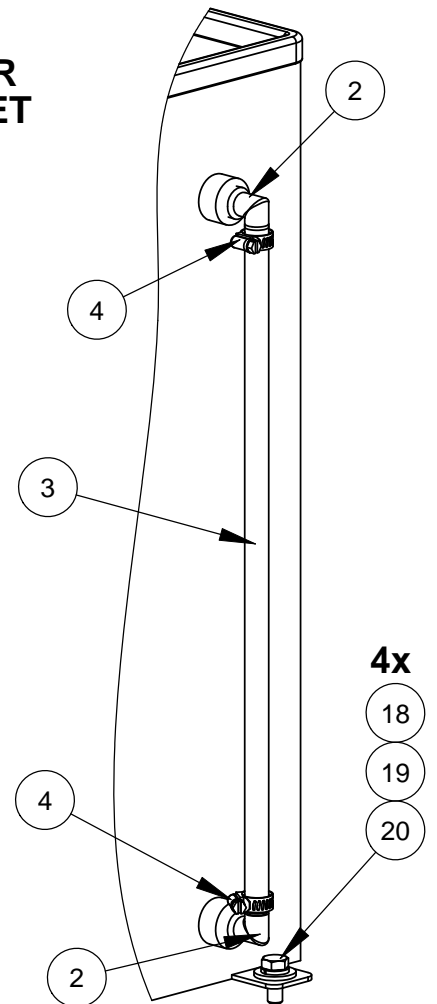
4645218: GAS LINE ROUTING



4645201, WATER TANK ASSEMBLY

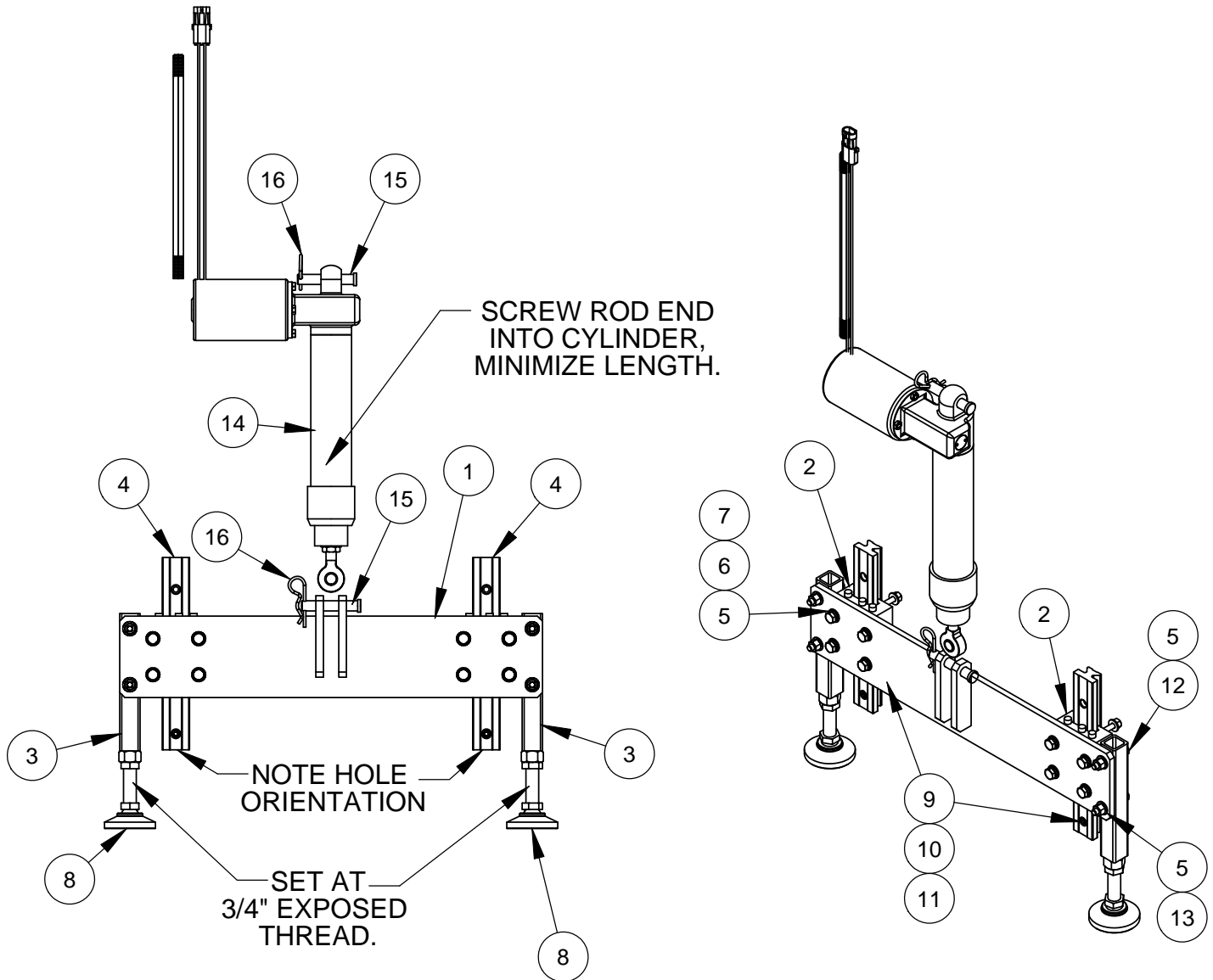


ITEM NO.	PART NUMBER	QTY.	DESCRIPTION
1	4645200	1	Water Tank, 44 Gallon
2	3200365	2	Elbow, 3/8" MPT to 3/8" Hose Barb 90deg
3	4645183	1	Hose, Clear, 3/8 x 14.85"
4	3200390	2	Hose Clamp #6
5	3200013	1	Street Elbow, 1/2" NPT
6	3200507	1	Nipple, Hex, 1/2"
7	3200027	1	Water Valve
8	3200155	1	Fitting, 1/2" M. Pipe to 3/4" M. Garden
9	2502851	2	Fuel Tank Cap, 2" NPT
10	4645048	2	Edge Trim, 44-1/4"
11	3200562	1	Nipple, 1-1/4 NPT x 3"
12	3201879	1	Valve, Ball, 1-1/4"
13	3205530	1	Fitting, 1-1/4" MPT to 1-1/4" Hose Barb
14	3400615	1	Clamp, Worm Drive, 7-10"
15	4645137	1	Hose Assy, Water, 1/2 x 32.6"
16	4645217	1	Hose, Clear, 1-1/4" x 27"
17	4645004	1	Rubber Pad, 1/16 x 18 x 28"
18	2900567	4	Flat Washer, 5/16" USS
19	2900031	4	Lock Washer, 5/16" Split
20	2900019	4	Cap Screw, Hex Hd., 5/16-18 x 3/4"



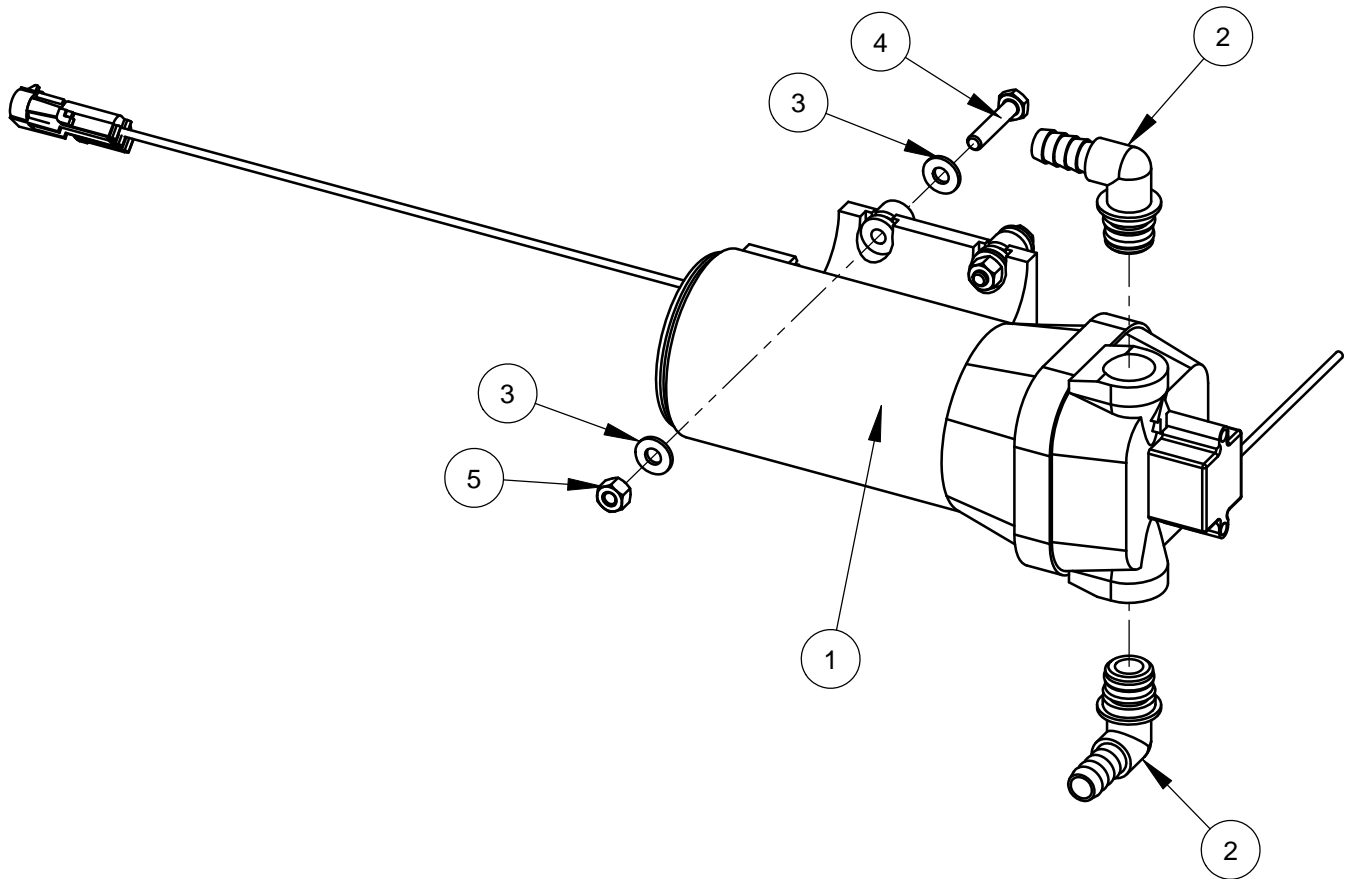
DETAIL A
SCALE 1 : 4

4645209 REAR LIFT ASSEMBLY



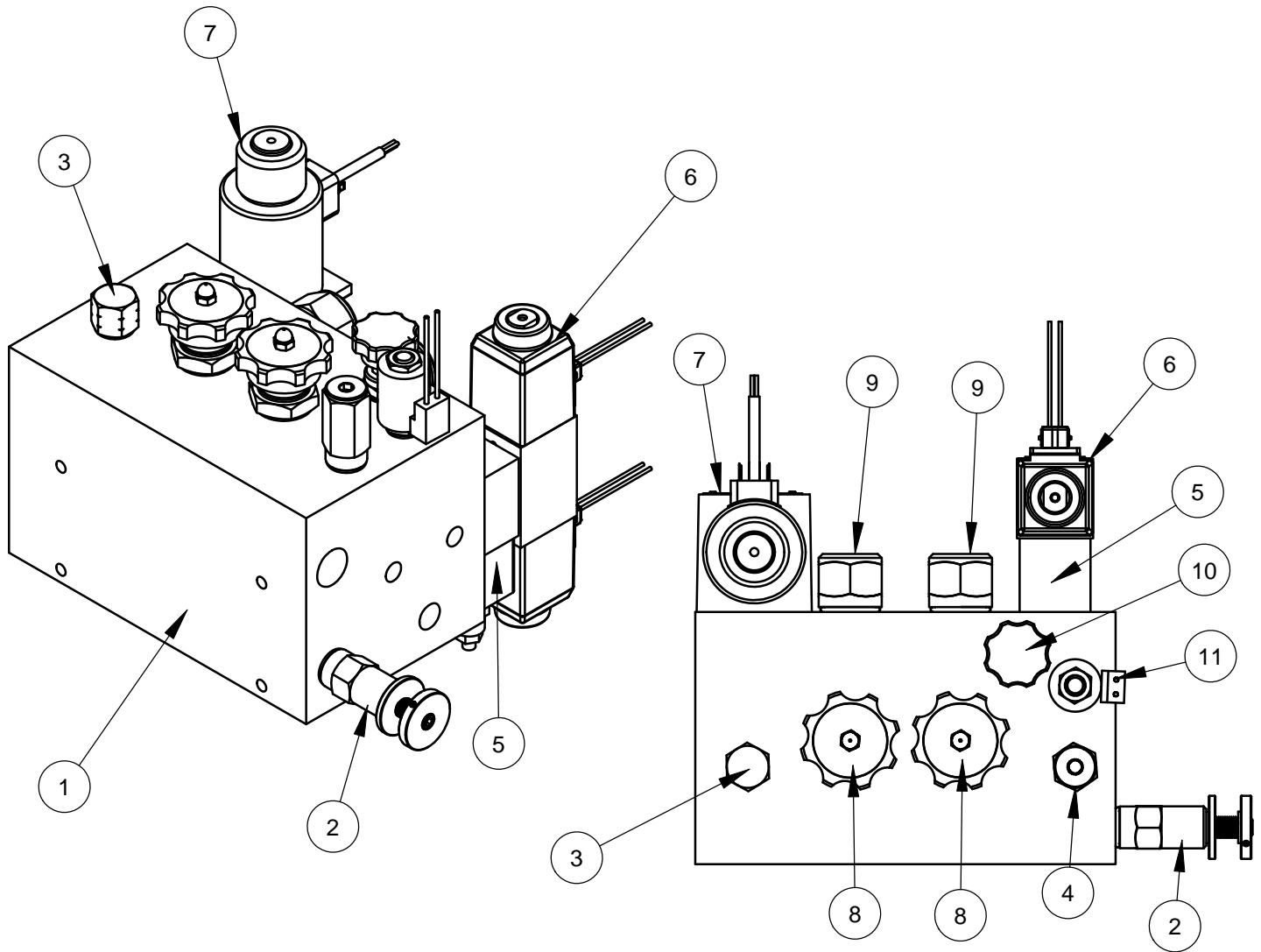
BOM Table			
ITEM	PART NO.	QTY.	DESCRIPTION
1	4645204	1	Bracket
2	2400275	2	Guide Block
3	4645203	2	Leg
4	4645119	2	Guide Rail
5	2900022	16	Flat Washer, 5/16" SAE
6	2900031	8	Lock Washer, 5/16" Split
7	2900760	8	Cap Screw, Hex Hd., M8 x 35mm
8	2400301	2	Leveling Pad, 5/8-11
9	2900187	6	Cap Screw, Soc. Hd., 1/4-20x2-1/4"
10	2900009	6	Flat Washer, 1/4" SAE
11	2900010	6	Lock Nut, 1/4-20 Nylon
12	2900494	4	Cap Screw, Hex Hd., 5/16-18 x 2"
13	2900039	4	Lock Nut, 5/16-18 Nylon
14	4645206	1	Actuator, ELeCtric, 12 V., 5" Stroke
15	2900607	2	Clevis Pin, 3/4" x 2-3/4"
16	2900829	2	Hairpin Cotter, 1/8" x 5/8" to 7/8"

4645235 WATER PUMP ASSEMBLY



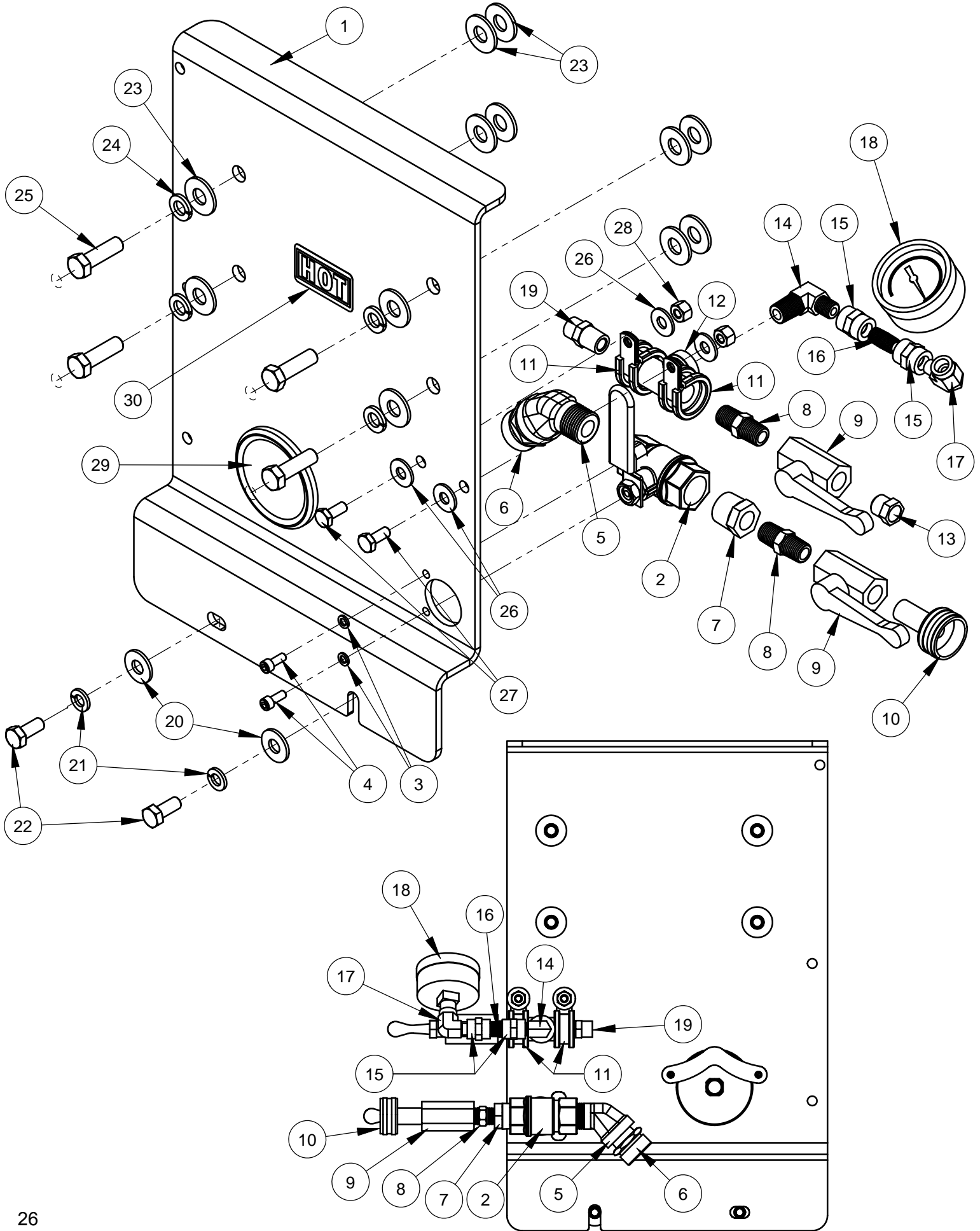
ITEM	PART NO.	QTY.	DESCRIPTION
1	4645155	1	Water Pump, 4GPM, 12V, W/ Connector
2	2701694	2	Port Fitting, 1/2" Barb x 90 Degree
3	2900009	8	Flat Washer, 1/4" SAE
4	2900052	4	Cap Screw, Hex Hd., 1/4-20 x 1-1/4"
5	2900010	4	Lock Nut, 1/4-20 Nylon

2400292 HYDRAULIC MANIFOLD W/CARTRIDGES



ITEM	PART NO.	QTY.	DESCRIPTION
1	2400262	1	Manifold Block
2	2400263	1	Relief Cartridge, 2100 PSI
3	2400264	1	Priority Flow Cartridge
4	2400265	1	Pressure Reducing Cartridge
5	2400305	1	Counter Balance Valve
6	2400266	1	Directional Control Valve, 10-1/2 GPM
7	2400267	1	Directional Control Valve, 32 GPM
8	2400268	2	Flow Cartridge, 0-15 GPM
9	2400269	2	Pressure Sensing Cartridge
10	2400303	1	Priority FLOW Cartridge
11	2400304	1	Solenoid Cartridge, 3 Way

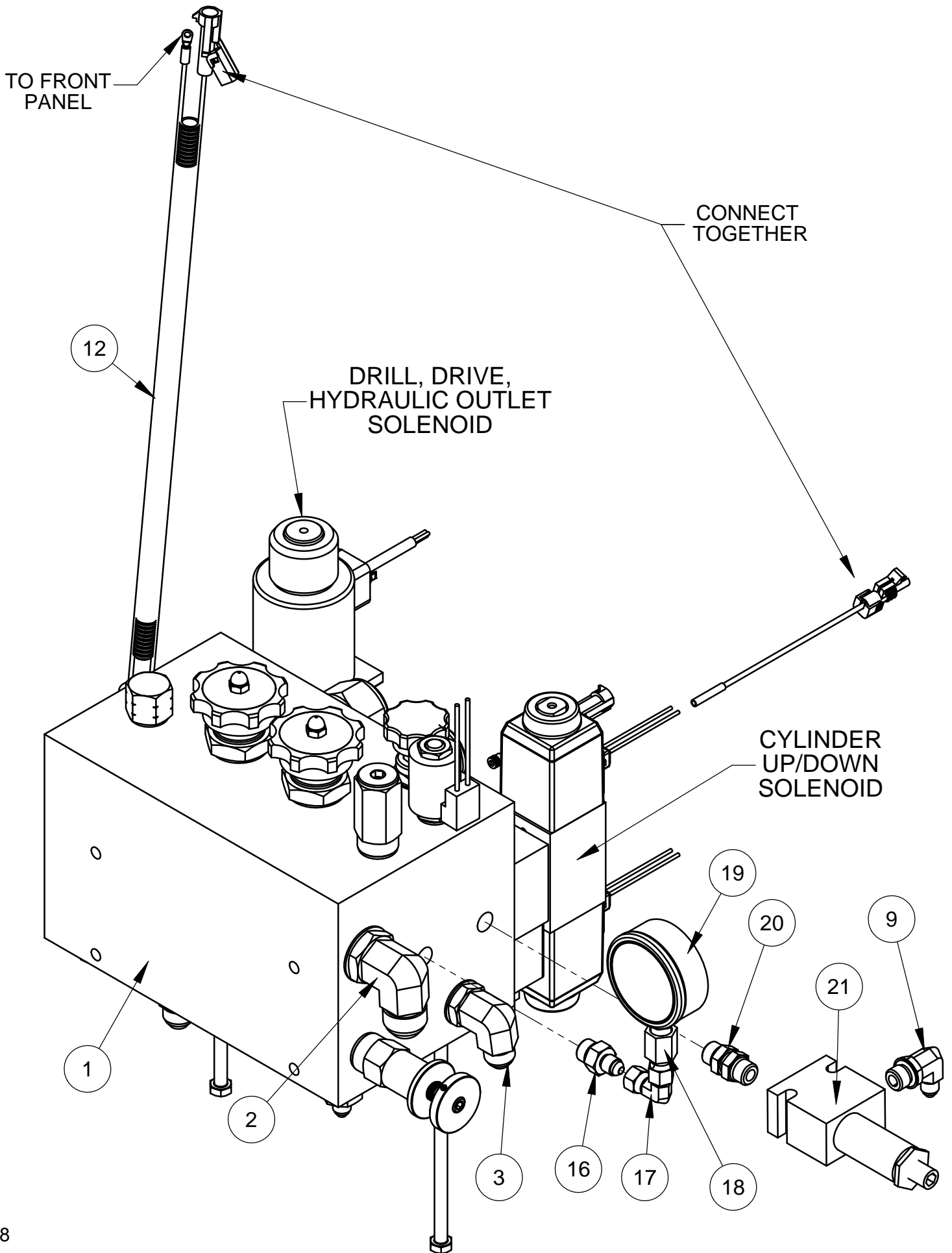
4645057: MANIFOLD MOUNTING ASSEMBLY



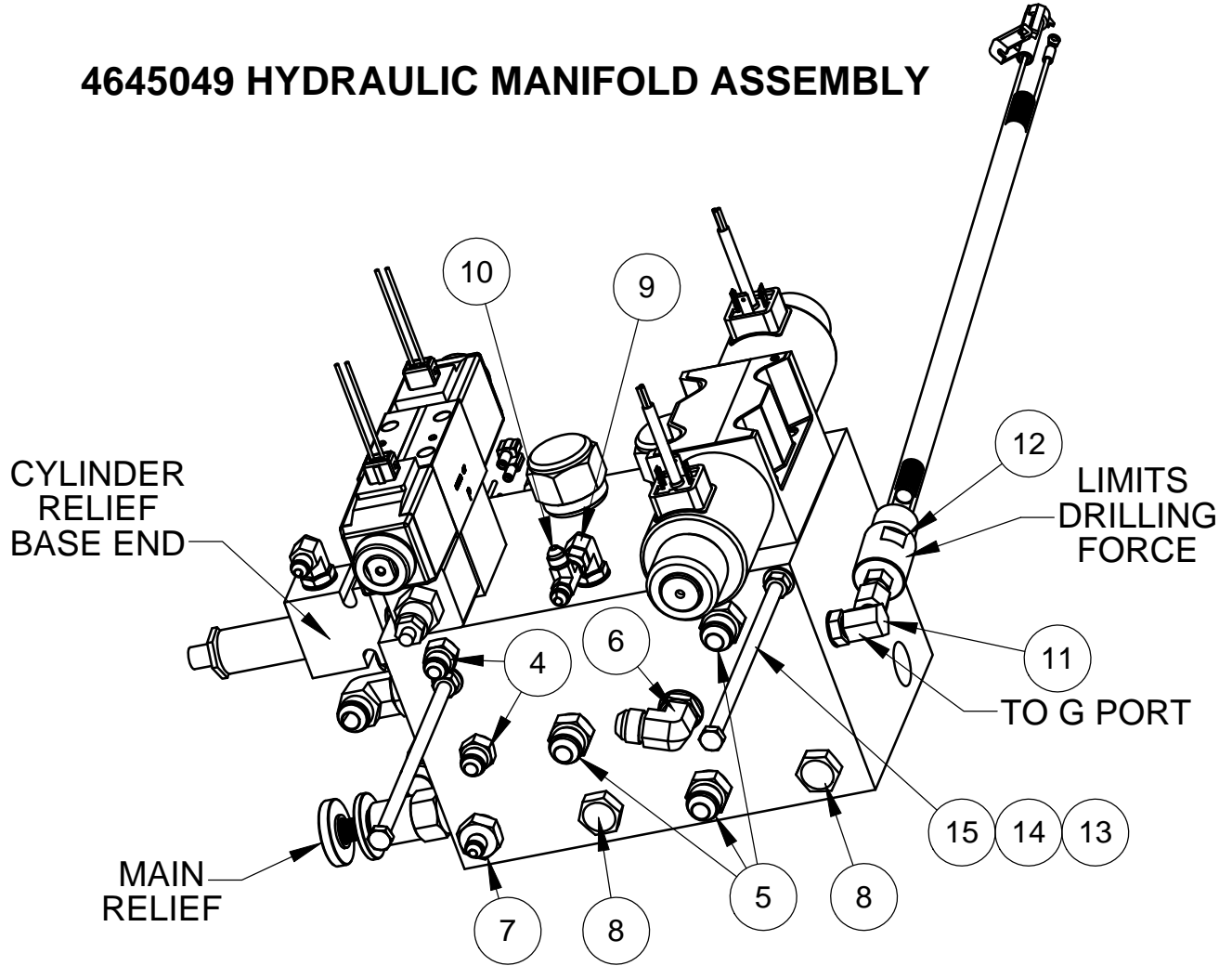
4645057: MANIFOLD MOUNTING ASSEMBLY

ITEM	PART NO.	QTY.	DESCRIPTION
1	4645133A	1	Mounting Bracket
2	3200026	1	Water Valve, 1/2" FPT
3	2900038	2	Lock Washer, #10 Split
4	2900899	2	Cap Screw, Soc. Hd., #10-24 x 1/2"
5	3200207	1	Street Elbow, 1/2" NPT x 45 degree
6	3200155	1	Fitting, 1/2" M. Pipe to 3/4" M. Garden
7	3200229	1	1/2 MPT - 1/4 FPT Bushing
8	3200060	2	Hex Nipple, 1/4" NPT
9	3200474	2	Valve, Water/Air, 1/4 FPT
10	3200042	1	Fitting, 3/4" F. Garden to 1/4" M. Pipe
11	2400189	2	Hose Clamp, 7/8" x 1/2" Wide
12	3200010	1	Pipe Tee, 1/4" FPT
13	3200067	1	Breather Vent, 1/4" NPT
14	3200530	1	Elbow, 1/8" to 1/4" Male Pipe
15	3200066	2	Hex Pipe Coupling, 1/8" NPT
16	3200117	1	Close Nipple, 1/8" NPT
17	3200156	1	Street Elbow, 1/8" NPT
18	3201880	1	Gauge, Vacuum, 1/8 NPT
19	3200043	1	1/4 MPT - 1/4 NPSM Straight Pipe
20	2900567	2	Flat Washer, 5/16" USS
21	2900031	2	Lock Washer, 5/16" Split
22	2900019	2	Cap Screw, Hex Hd., 5/16-18 x 3/4"
23	2900473	12	Flat Washer, 3/8" USS
24	2900006	4	Lock Washer, 3/8" Split
25	2900013	4	Cap Screw, Hex Hd., 3/8-16 x 1-1/4"
26	2900126	4	Flat Washer, 1/4" USS
27	2900023	2	Cap Screw, Hex Hd., 1/4-20 x 5/8"
28	2900010	2	Lock Nut, 1/4-20 Nylon
29	3200250	1	Gauge, Hydraulic, 3000 PSI
30	1800537	1	Label, HOT

4645049 HYDRAULIC MANIFOLD ASSEMBLY

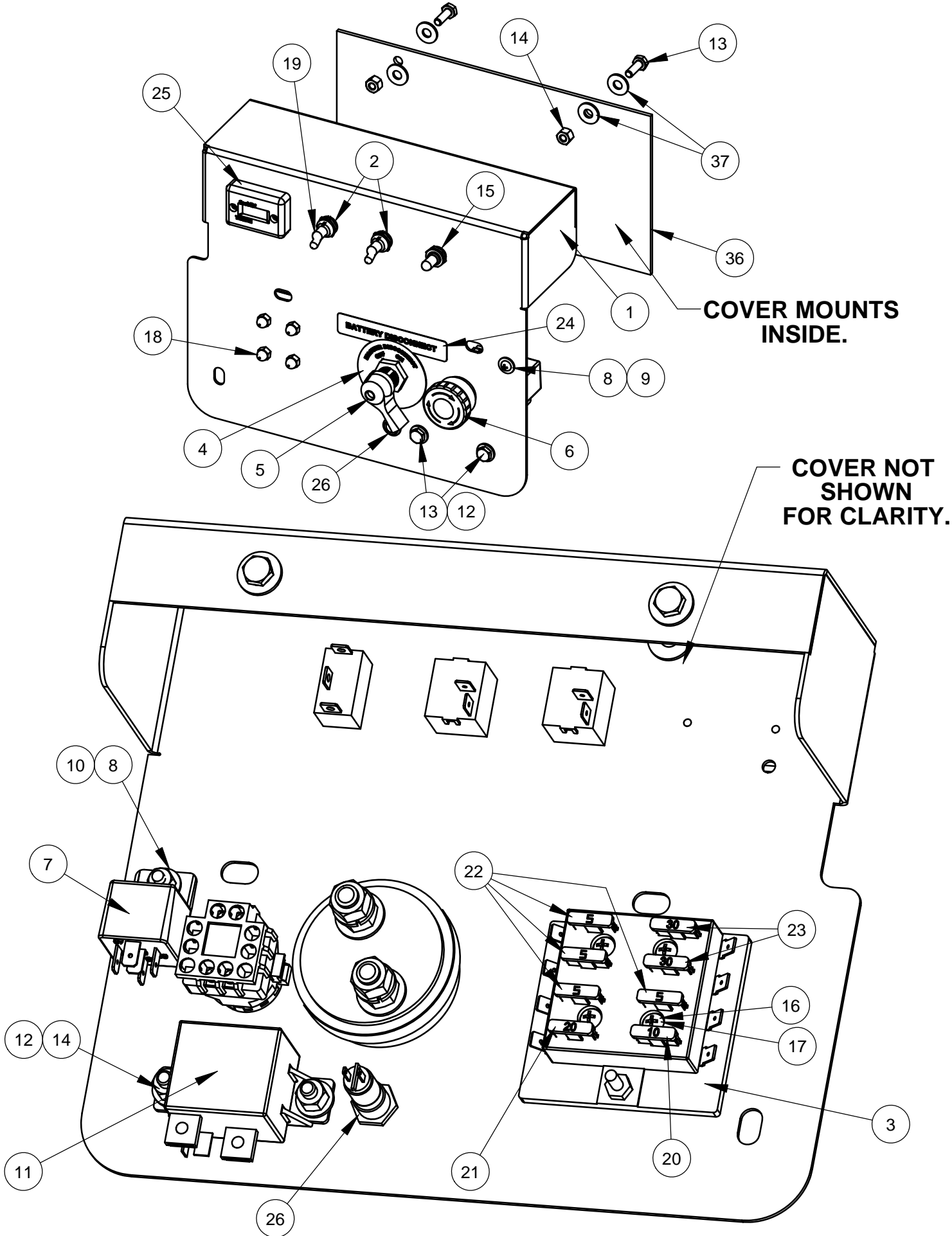


4645049 HYDRAULIC MANIFOLD ASSEMBLY



ITEM	PART NO.	QTY.	DESCRIPTION
1	4645029	1	Manifold w/ Connectors
2	3200400	1	Elbow, 3/4" O-Ring to 3/4" Male JIC
3	3200366	1	Elbow, 5/8" O-Ring to 1/2" Male JIC, 90 Deg.
4	3200263	2	Adapter, 3/8" O-Ring to 3/8" M. JIC
5	3200286	3	Adapter, 1/2" O-Ring to 1/2" M. JIC
6	3200285	1	Elbow, 1/2" O-Ring to 1/2" Male JIC
7	3201291	1	Adapter, 1/2" M. O-Ring to 1/4" MJIC
8	3201434	2	1/2" SAE O-Ring Plug
9	3200551	2	Elbow, 3/8" O-Ring to 1/4" M. JIC
10	3201360	1	Tee, 1/4" M. JIC to 1/4" F. JIC
11	3200115	1	Elbow, 3/8" O-Ring to 1/4" F. Pipe
12	4645220	1	Pressure Switch, NC, W/Connectors, 1500 PSI
13	2900022	2	Flat Washer, 5/16" SAE
14	2900141	2	Hex Nut, 5/16-18
15	2900914	2	Capscrew, Hex Hd., 5/16-18 x 8"
16	3200375	1	Adapter, 3/8" O-Ring to 1/4" M. JIC
17	3201241	1	Elbow, 1/4" M. JIC to 1/4" F. JIC
18	3200216	1	1/4 FJIC - 1/4 FPT Swivel
19	3201539	1	Pressure Gage, 500 PSI, 1/4 NPT
20	3201661	1	3/8 SAE Hex Union
21	2400306	1	Relief Valve, 250 PSI

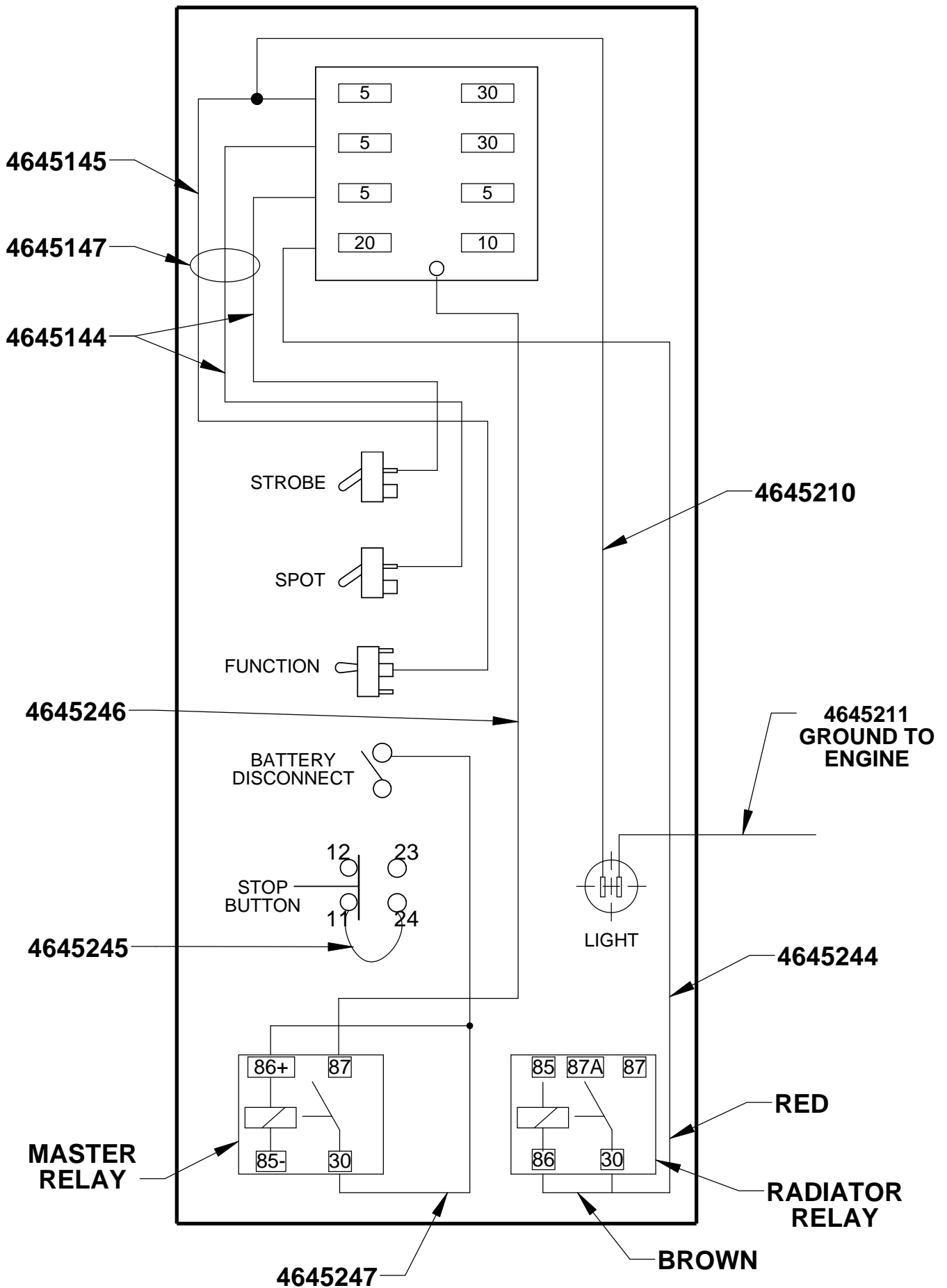
4645132 ELECTRIC PANEL ASSEMBLY



4645132: ELECTRIC PANEL ASSEMBLY

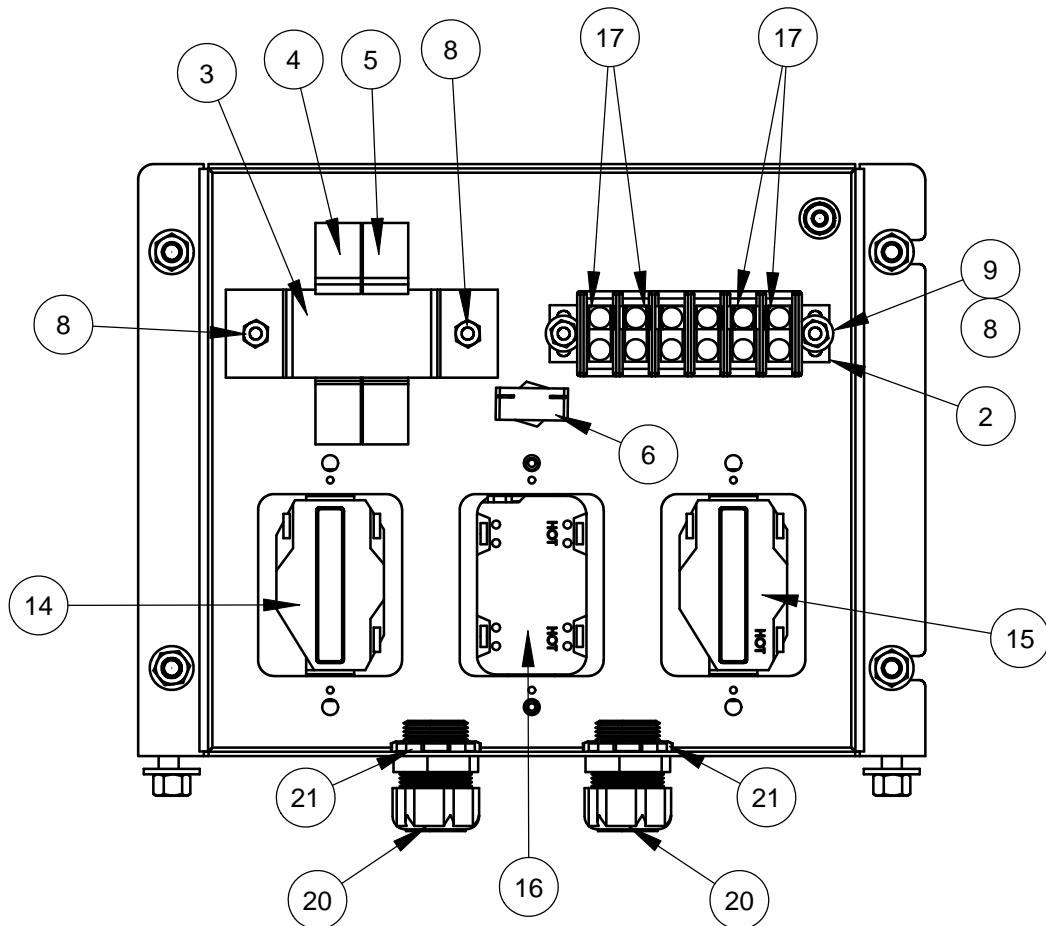
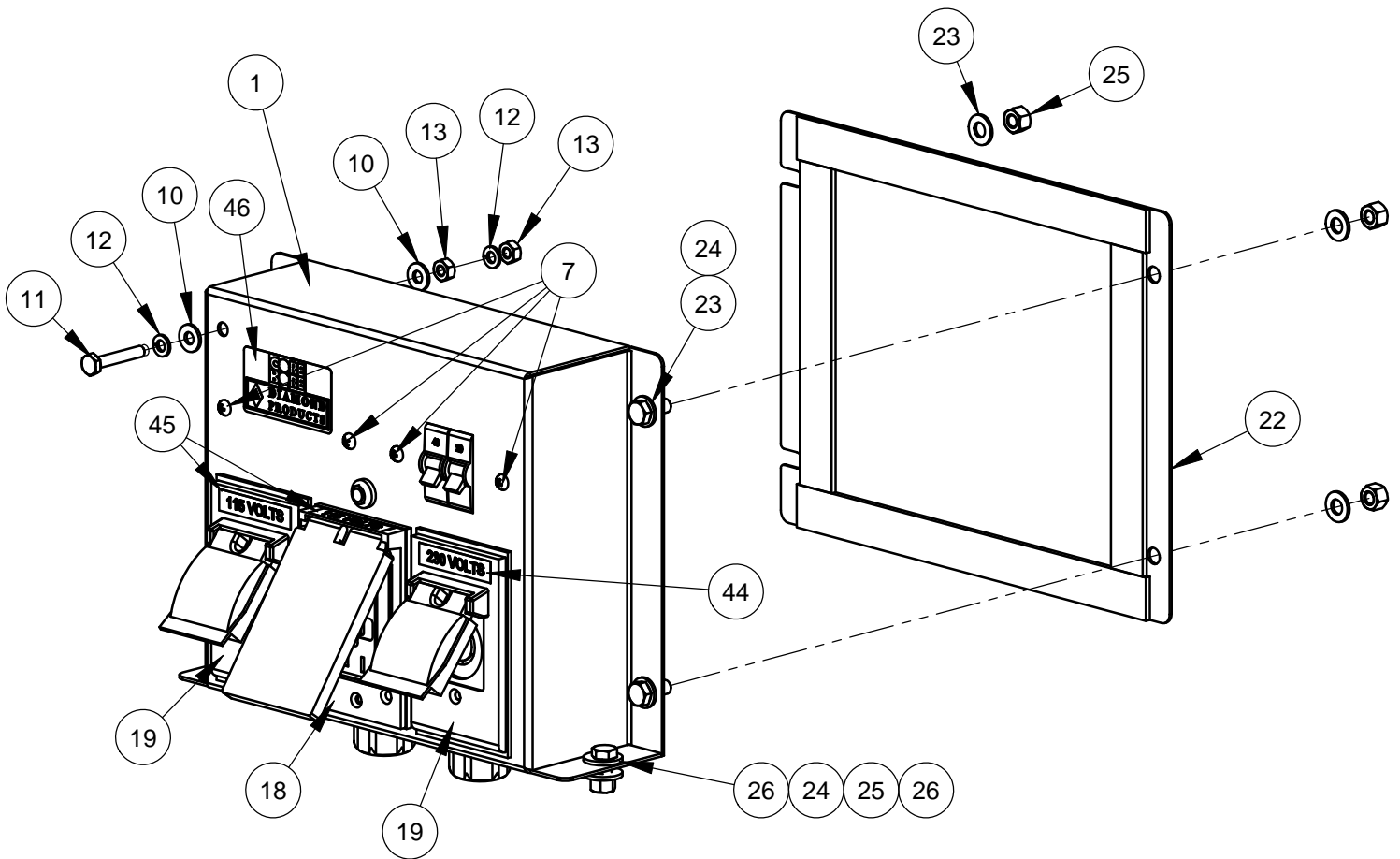
ITEM	PART NO.	QTY.	DESCRIPTION
1	4645131	1	Electric Panel
2	2800062	2	Toggle Switch On/Off
3	2800696	1	Fuse Panel, 8 Circuit
4	2800566	1	Face Plate, Battery Disconnect
5	2800565	1	Battery Disconnect Switch
6	2801367	1	E-Stop Switch
7	2800144	1	Relay, 50 Amp, 12 V, SPDT
8	2900016	2	Flat Washer, #10 USS
9	2900159	1	Machine Screw, Rd. Hd., #10-24 x 5/8"
10	2900017	1	Lock Nut, #10-24 Nylon
11	2800872	1	Relay, 75 Amp, 12 V, SPST
12	2900009	4	Flat Washer, 1/4" SAE
13	2900144	4	Cap Screw, Hex Hd., 1/4-20 x 3/4"
14	2900010	4	Lock Nut, 1/4-20 Nylon
15	2800122	1	Switch, Toggle, On/Off/On
16	2900038	4	Lock Washer, #10 Split
17	2900967	4	Machine Screw, Rd. Hd., #10-24 x 1"
18	2900840	4	Acorn Nut, #10-24
19	2800063	3	Switch Boot
20	2800389	1	Fuse, 10 Amp Red ATO/ATC
21	2800291	1	Fuse, 20 Amp Yellow ATO/ATC
22	2800635	4	Fuse, 5 Amp, Tan ATO, (Blade Type)
23	2801328	2	Fuse, 30 Amp Green ATO/ATC
24	1800846	1	Label, Battery Disconnect
25	2800120	1	Tach/Hour Meter, W/#6 Screws
26	2800640	1	Indicator Light (Red)
27	4645147	1	Wire Cover, 6"
28	4645144	2	Wire Assy., 16 Ga., Black, 11"
29	4645145	1	Wire Assy., 18 Ga., Black, 11"
30	4645210	1	Wire Assy., 18 Ga., Black, 7.0"
31	4645211	1	Wire Assy., 18 Ga., Grn., 21"
32	4645244	1	Wire Assy., 2 Wire, Push Ons
33	4645245	1	Wire, 18 Ga., Green, 5"
34	4645246	1	Wire Assy., 8 Gage, Black, 10.5"
35	4645247	1	Wire Assy. 2 Wire
36	4600096	1	Cover, Rubber, 6 x 11-1/2"
37	2900126	4	Flat Washer, 1/4" USS

4645132 SCHEMATIC



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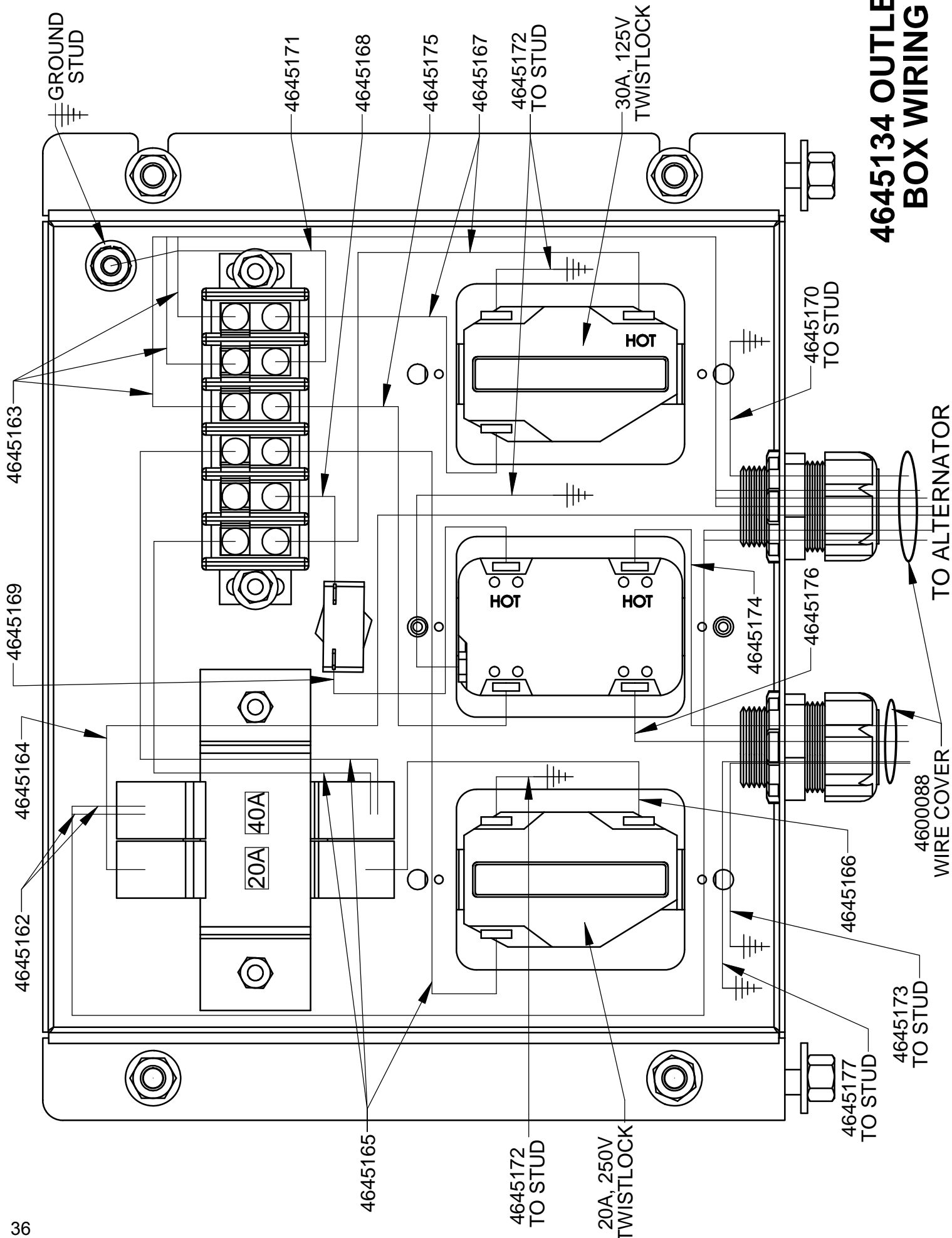
4645134 OUTLET BOX



4645134 OUTLET BOX

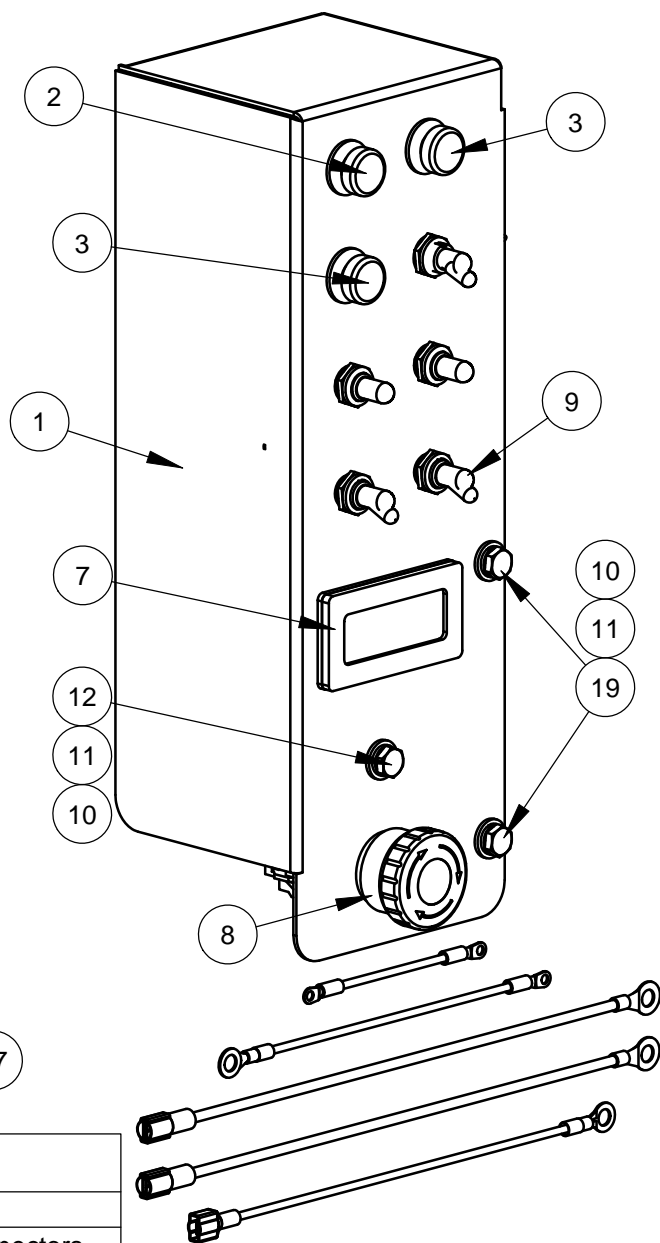
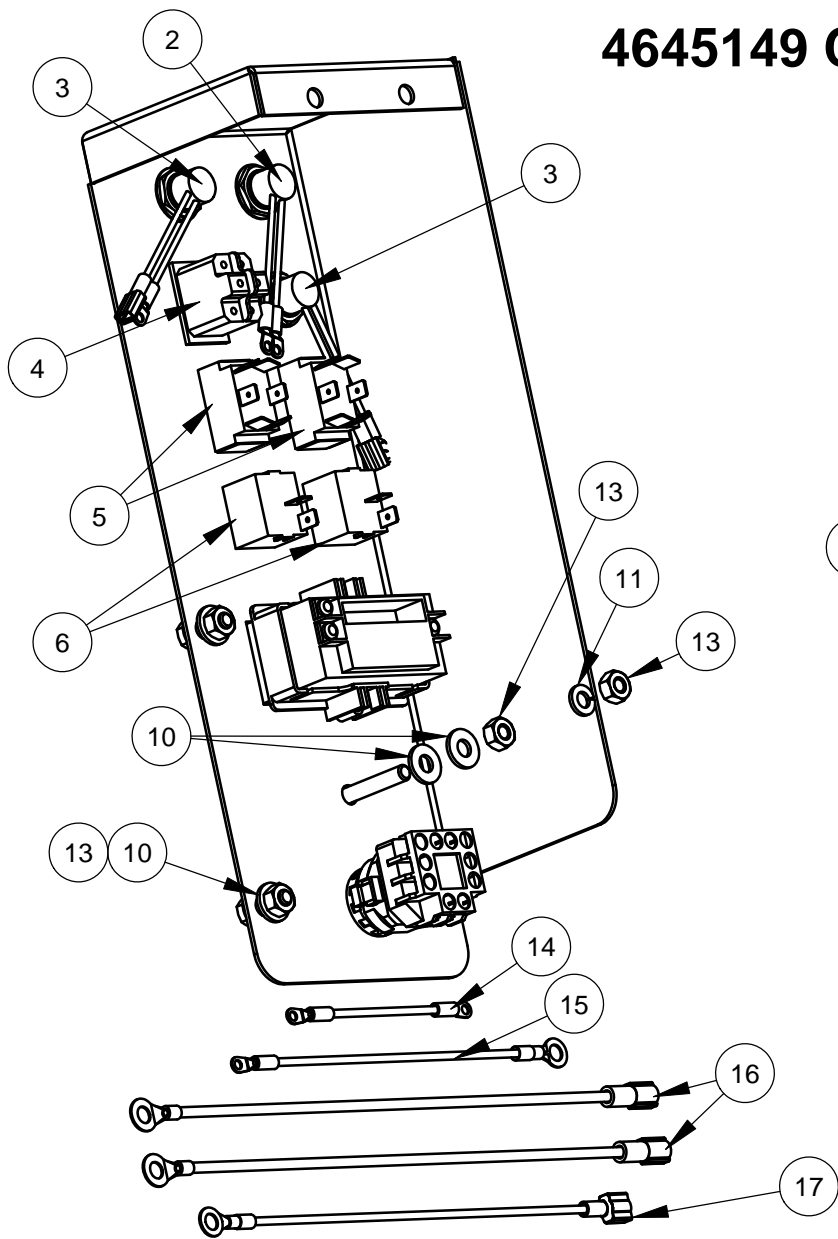
ITEM NO.	PART NUMBER	QTY.	DESCRIPTION
1	4645127	1	Electric Box
2	2800139	1	Terminal Block, Six Position
3	4648047	1	Bracket, Front Mount
4	2800858	1	Circuit Breaker, 20 Amp
5	2800859	1	Circuit Breaker, 40 Amp
6	2800860	1	Circuit Breaker, 20 Amp
7	2900967	4	Machine Screw, Rd. Hd., #10-24 x 1"
8	2900017	4	Lock Nut, #10-24 Nylon
9	2900926	2	Washer, M5
10	2900009	2	Flat Washer, 1/4" SAE
11	2900416	1	Tap Screw, Hex Hd., 1/4-20 X 1-1/2"
12	2900024	2	Lock Washer, 1/4" Split
13	2900125	2	Hex Nut, 1/4-20
14	2800089	1	Receptacle, Twistlock, 20A, 250V
15	2800430	1	Receptacle, Twistlock, 30A, 125V
16	2800698	1	Receptacle, 125V, GFCI
17	2800150	4	Jumper
18	2800801	1	Outlet Cover
19	2800791	2	Outlet Cover
20	2800171	2	Connector, 3/4" Cord
21	2801304	2	Lock Nut, 3/4"
22	4645135	1	Cover Plate W/Seal
23	2900022	8	Flat Washer, 5/16" SAE
24	2900019	6	Cap Screw, Hex Hd., 5/16-18 x 3/4"
25	2900039	6	Lock Nut, 5/16-18 Nylon
26	2900567	4	Flat Washer, 5/16" USS
27	4645162	2	Wire Assy., 14 Ga., Blk
28	4645163	3	Wire Assy., 14 Ga., Wht.
29	4645164	1	Wire Assy., 14 Ga., Red
30	4645165	3	Wire Assy., 12 Ga., Black
31	4645166	1	Wire, 12 Gage, Red
32	4645167	2	Wire Assy., 8 Gage, Black
33	4645168	1	Wire Assy., 12 Ga., Black
34	4645169	1	Wire Assy., 12 Ga., Black
35	4645170	1	Wire Assy., 14 Ga., Green, 53"
36	4645171	1	Wire Assy., 10 Ga., Green
37	4645172	3	Wire Assy., 10 Ga., Green, 10.4"
38	4645173	1	Wire Assy., 10 Ga., Green, 81"
39	4645174	1	Wire Assy., 18 Ga., Black, 55-1/2"
40	4645175	1	Wire Assy., 12 Ga., Black
41	4645176	1	Wire Assy., 18 Ga., Gray, 55-1/2"
42	4645177	1	Wire Assy., 18 Ga., Green, 65.9"
43	4600088	2	Wire Cover, 1/2 x 37"
44	1800810	1	Voltage Label, 230V
45	1801348	2	Voltage Label, 115V
46	1800415	1	Decal, Core Bore/Diamond Products

4645134 OUTLET BOX WIRING



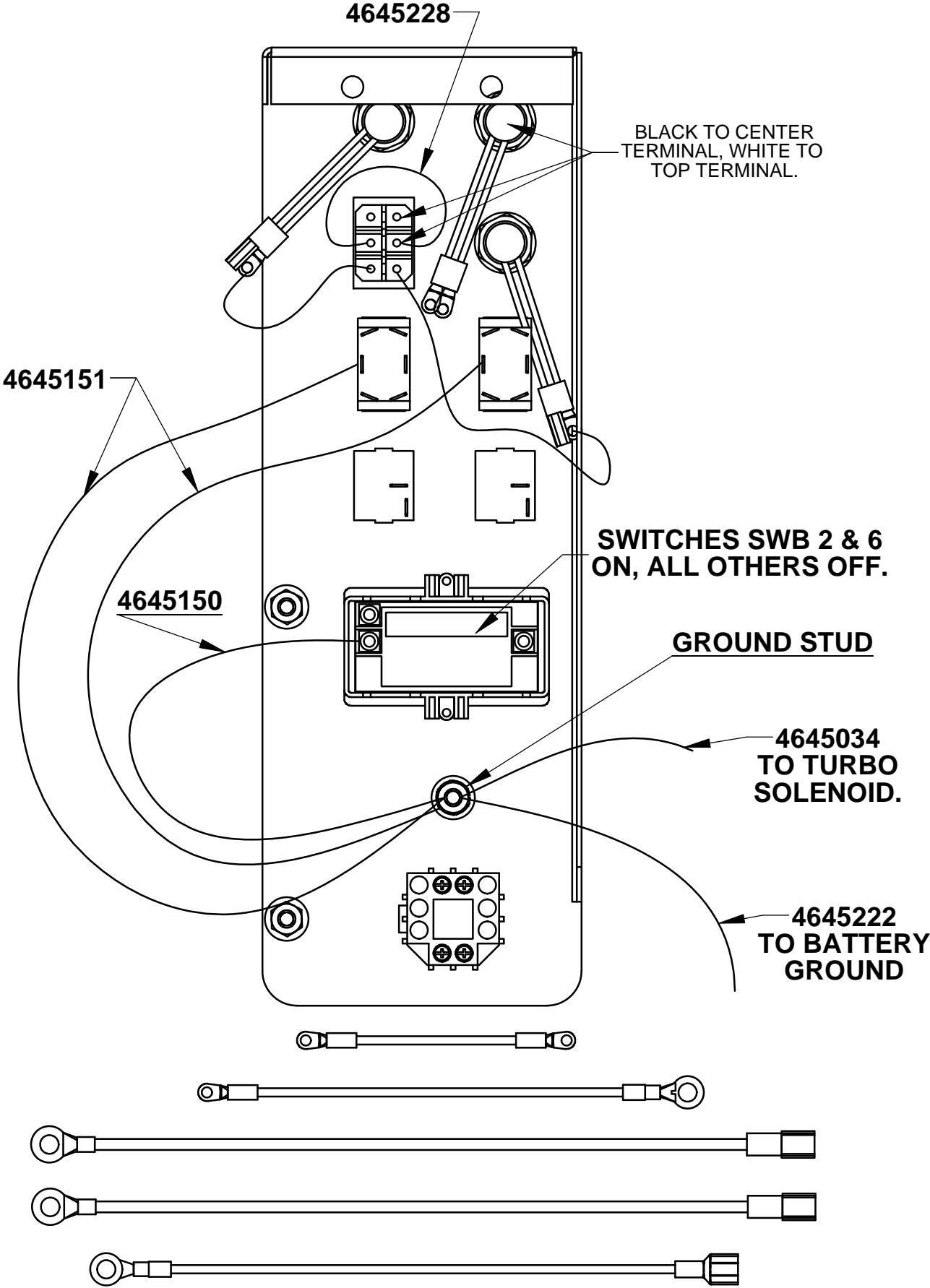
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4645149 CONTROL PANEL

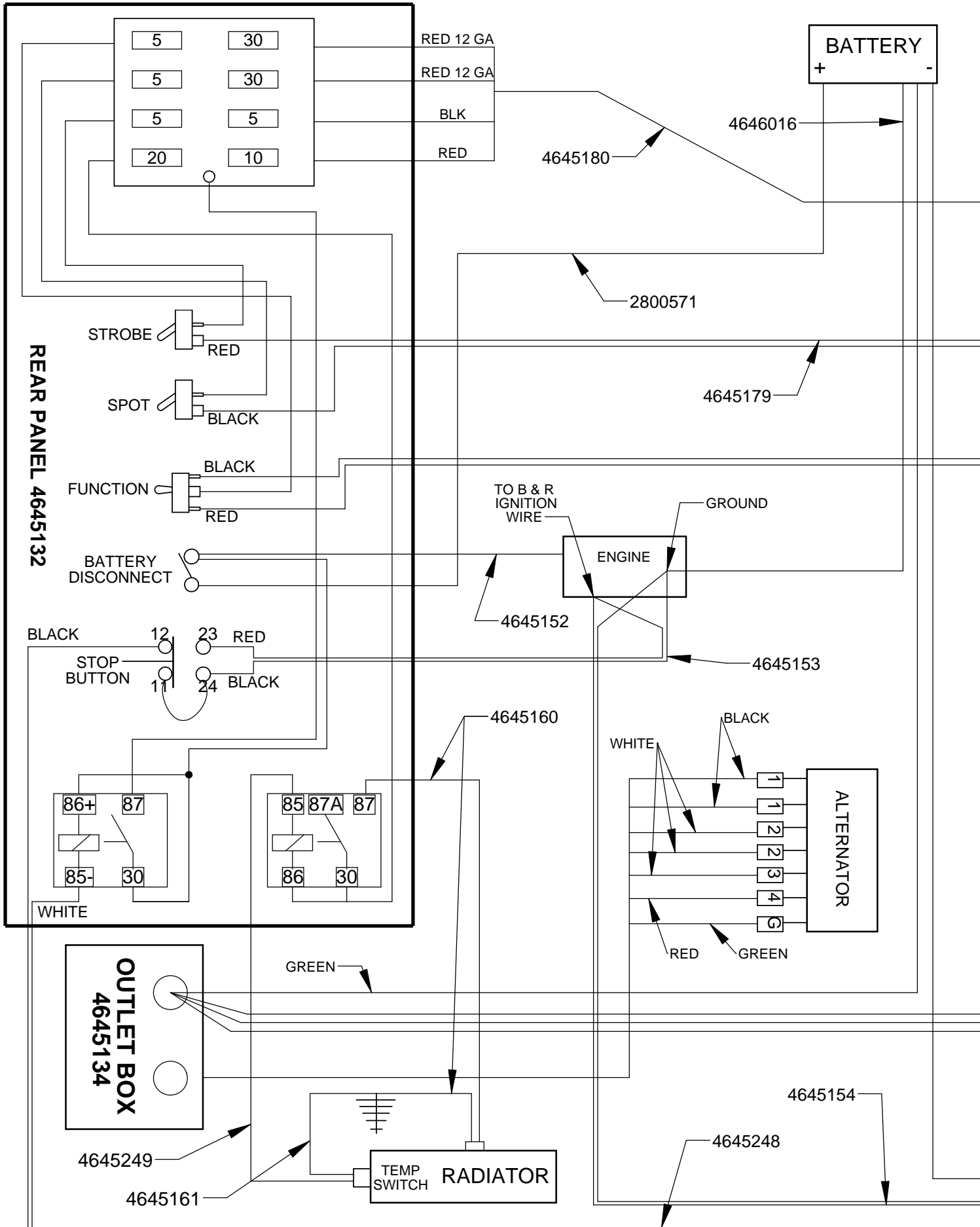


ITEM NO.	PART NUMBER	QTY.	DESCRIPTION
1	4645208	1	Mounting Bracket, Switches
2	4645227	1	Switch, Pushbutton W/ Ring Connectors
3	4645212	2	Switch, Pushbutton W/ Connectors
4	2800159	1	Toggle Switch, DPDT, On/On
5	2800094	2	Switch, Toggle, On/Off/On
6	2800062	2	Toggle Switch On/Off
7	2800861	1	Digital Indicator, LED
8	2801367	1	E-Stop Switch
9	2800063	5	Switch Boot
10	2900009	7	Flat Washer, 1/4" SAE
11	2900024	4	Lock Washer, 1/4" Split
12	2900416	1	Tap Screw, Hex Hd., 1/4-20 X 1-1/2"
13	2900125	4	Hex Nut, 1/4-20
14	4645228	1	Wire Assy., 18 Ga., Blk, 3-3/4"
15	4645150	1	Wire Assy., 18 Ga., Green, 7"
16	4645151	2	Wire Assy., 12 Ga., Green, 11"
17	4645034	1	Wire Assy., 18 Ga., Green, 9.1"
18	4645222	1	Wire Assy., 10 Ga., Green, 51" (Not Shown)
19	2900144	2	Cap Screw, Hex Hd., 1/4-20 x 3/4"

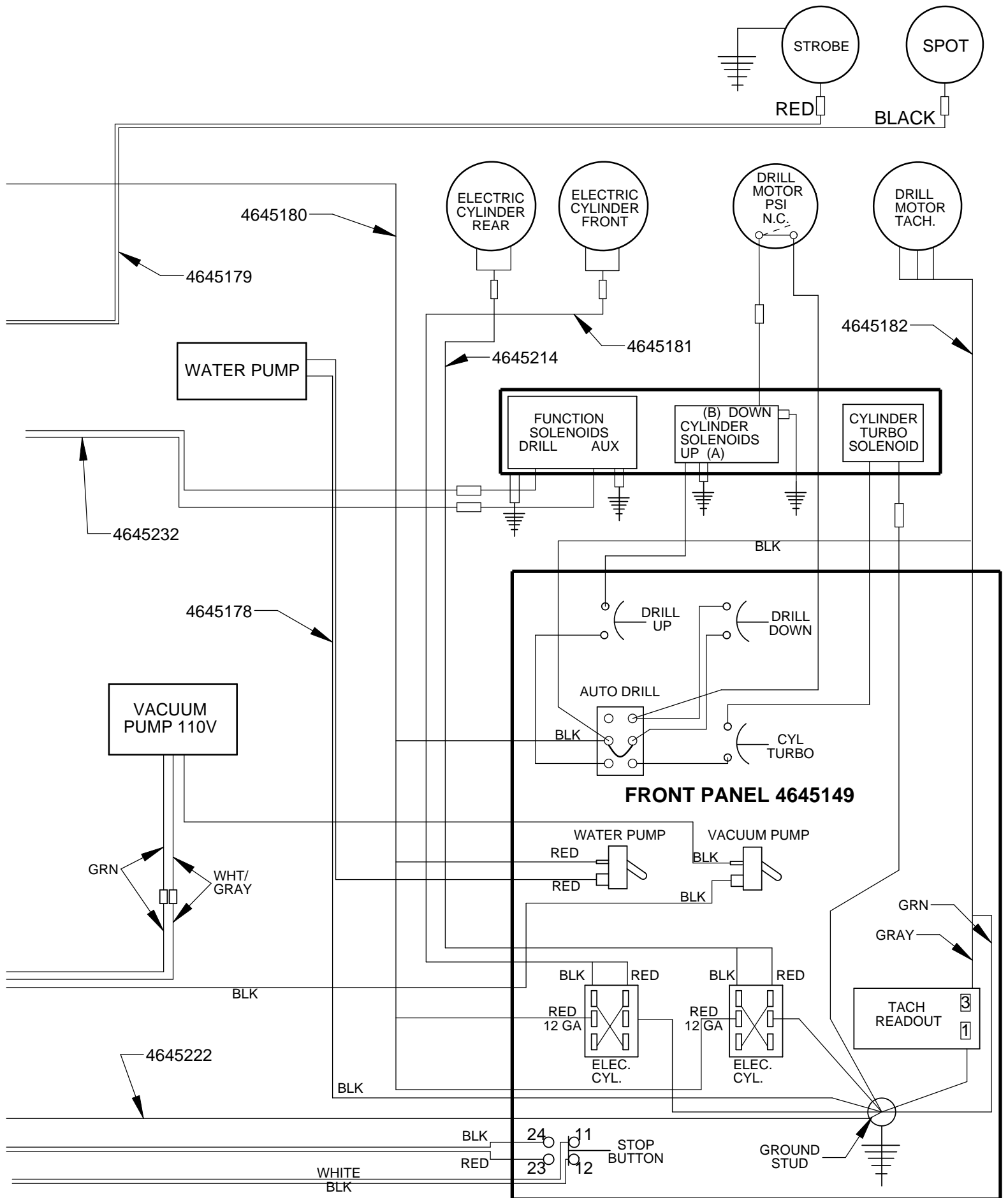
4645149 CONTROL PANEL SCHEMATIC



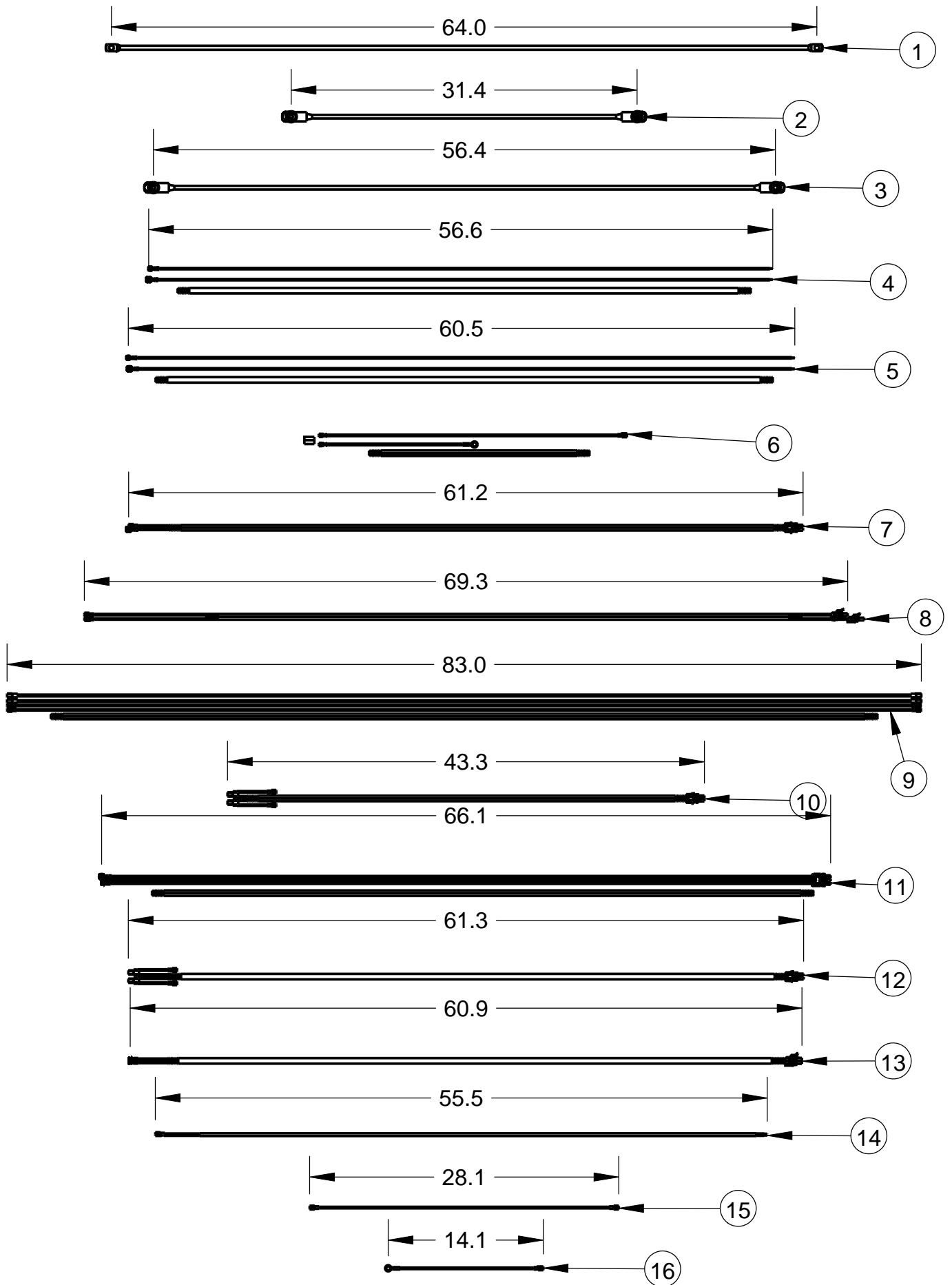
1801213 ULTIMATE DRILLING MACHINE ELECTRIC SCHEMATIC



1801213 ULTIMATE DRILLING MACHINE ELECTRIC SCHEMATIC



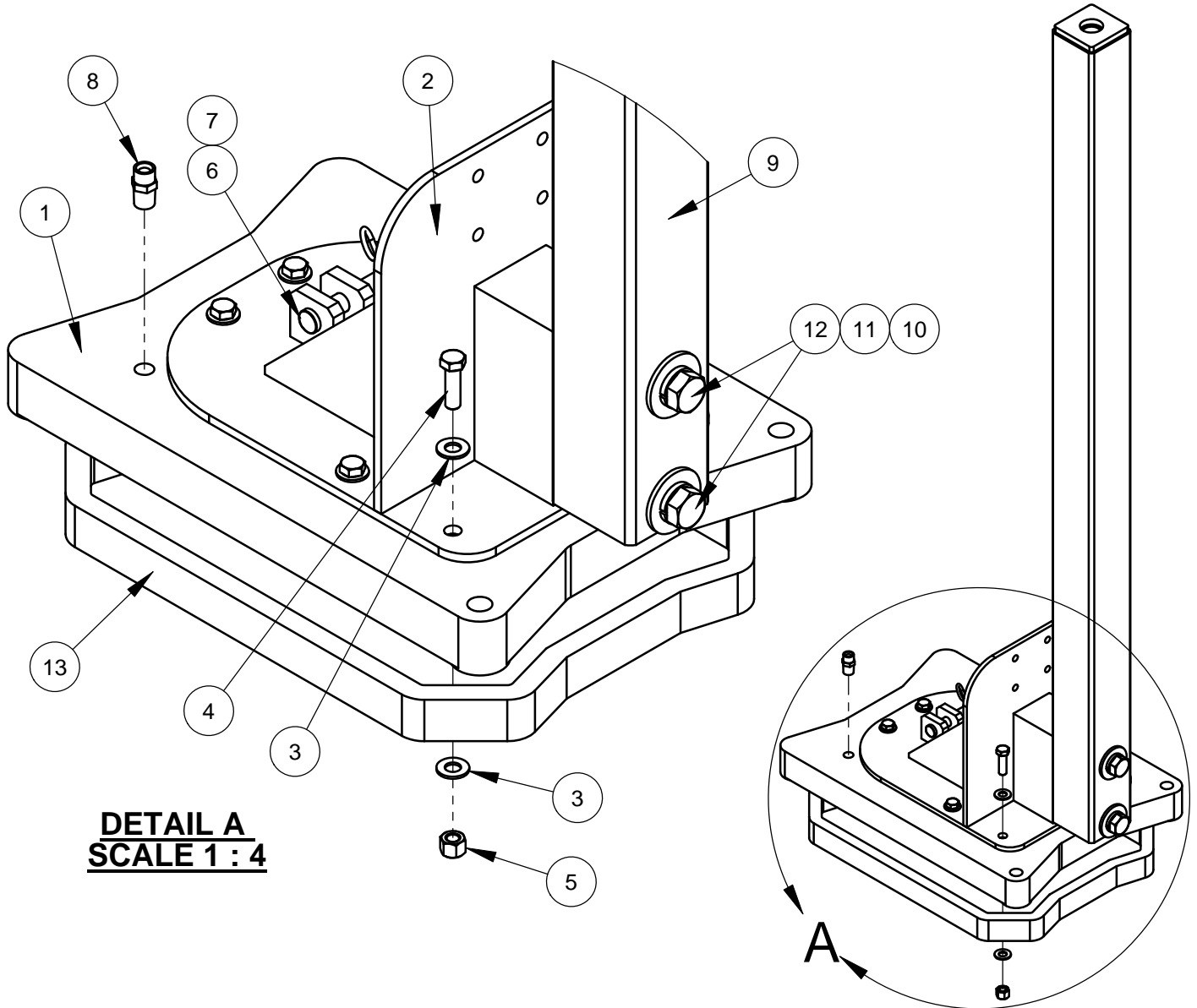
4645237 WIRE ASSEMBLY KIT



4645237 WIRE ASSEMBLY KIT

ITEM	PART NO.	QTY.	DESCRIPTION
1	2800571	1	Wire Assy., 4 Ga., Red x 64"
2	4646016	1	Battery Cable Assy., Black
3	4645152	1	Wire Assy., 6 Ga., Red
4	4645153	1	Wire Assy., Emergency Off
5	4645154	1	Wire Assy., Emergency Off
6	4645160	1	Wire Assy., Radiator
7	4645178	1	Wire Assy., Water Pump
8	4645179	1	Wire Assy., Lights
9	4645180	1	Wire Assy., Power Line
10	4645181	1	Wire Assy., Electric Cylinder
11	4645182	1	Wire Assy., Tachometer
12	4645214	1	Wire Assy., Electric Cylinder
13	4645232	1	Wire Assy., 18 Ga. 61", 2 Wire
14	4645248	1	Wire Assy., 2 Wire, 18 Gage
15	4645249	1	Wire Assy., 14 Gage Black, 28"
16	4645161	1	Wire Assy., 14 Ga., Grn

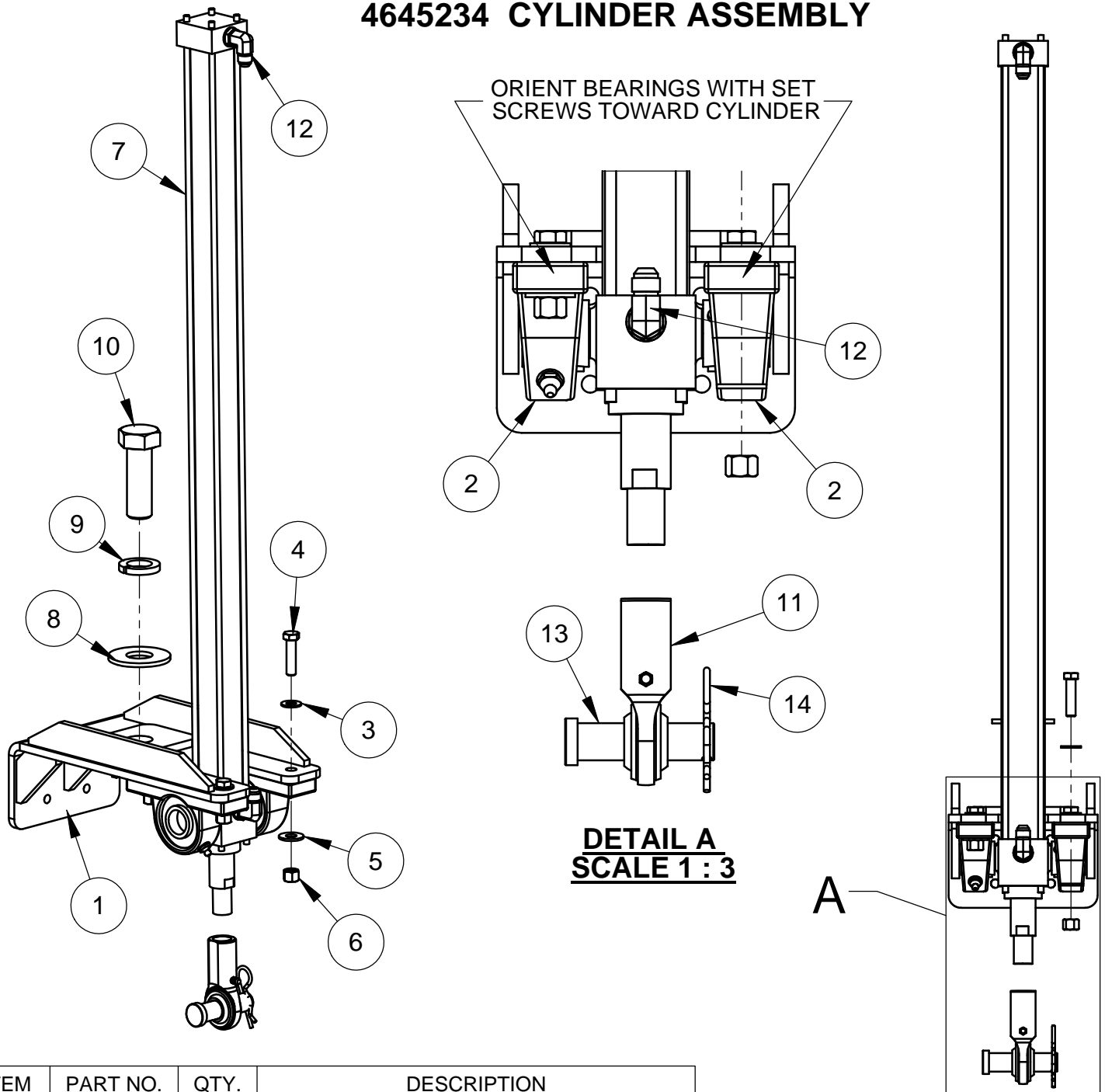
4645148 MAST ASSEMBLY



DETAIL A
SCALE 1 : 4

ITEM	PART NO.	QTY.	DESCRIPTION
1	4645118	1	Drill Base
2	4645112	1	Bottom Mast Bracket Assy.
3	2900014	16	Flat Washer, 3/8" SAE
4	2900013	8	Cap Screw, Hex Hd., 3/8-16 x 1-1/4"
5	2900018	8	Lock Nut, 3/8-16 Nylon
6	2900607	1	Clevis Pin, 3/4" x 2-3/4"
7	2900829	1	Hairpin Cotter, 1/8" x 5/8" to 7/8"
8	3200043	1	1/4 MPT - 1/4 NPSM Straight Pipe
9	4640118	1	Mast, 2-7/8" Sq. x 47-11/16"
10	2900128	2	Flat Washer, 5/8" USS
11	2900113	2	Lock Washer, 5/8" Split
12	2900146	2	Cap Screw, Hex Hd., 5/8-11 x 4"
13	4643027	1	Gasket

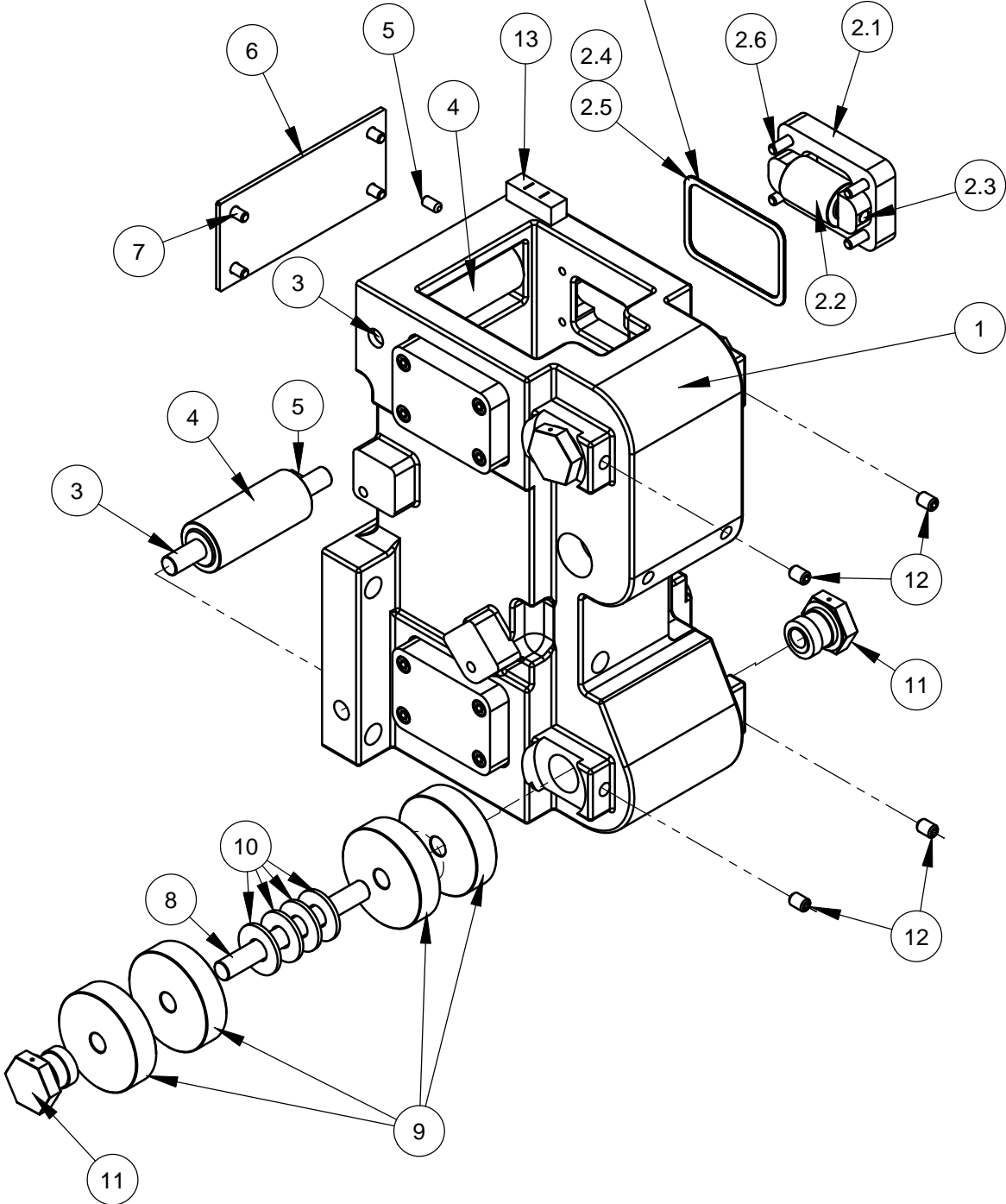
4645234 CYLINDER ASSEMBLY



ITEM	PART NO.	QTY.	DESCRIPTION
1	4645110	1	Top Mast - Cylinder Bracket
2	2500013	2	Bearing, 1" Pillowblock
3	2900014	4	Flat Washer, 3/8" SAE
4	2900029	4	Cap Screw, Hex Hd., 3/8-16 x 1-1/2"
5	2900473	4	Flat Washer, 3/8" USS
6	2900018	4	Lock Nut, 3/8-16 Nylon
7	2400297	1	Cylinder, Hyd., 1-1/2 x 30"
8	2900145	1	Flat Washer, 1" USS
9	2900365	1	Lock Washer, 1" Split
10	2900370	1	Cap Screw, Hex Hd., 1-8 x 3"
11	2500738	1	Rod End, 3/4-16 Female
12	3200271	2	Elbow, 3/8" O-Ring to 3/8" M. JIC
13	2900362	1	Clevis Pin, 3/4" x 2-3/4"
14	2900829	1	Hairpin Cotter, 1/8" x 5/8" to 7/8"

4645040: ROLLER CARRIAGE

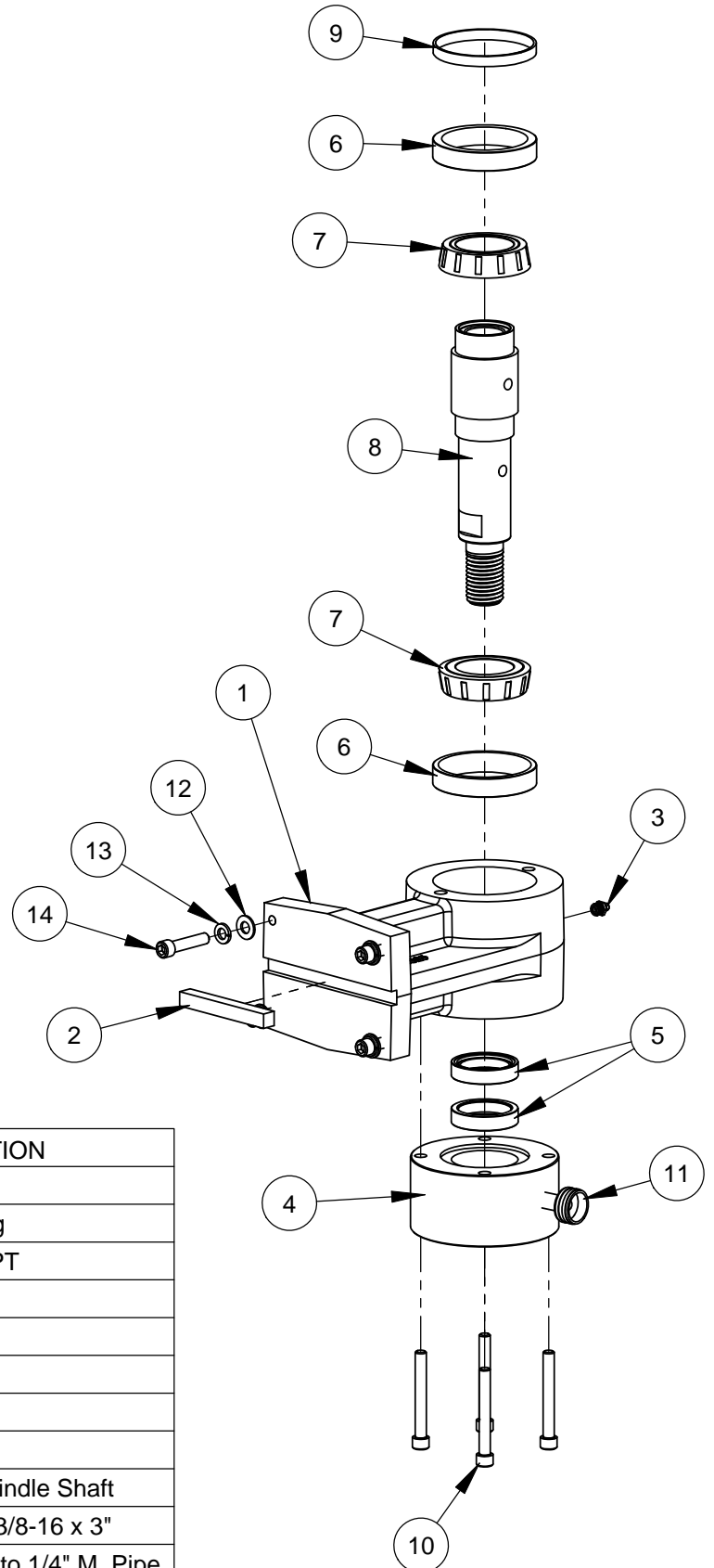
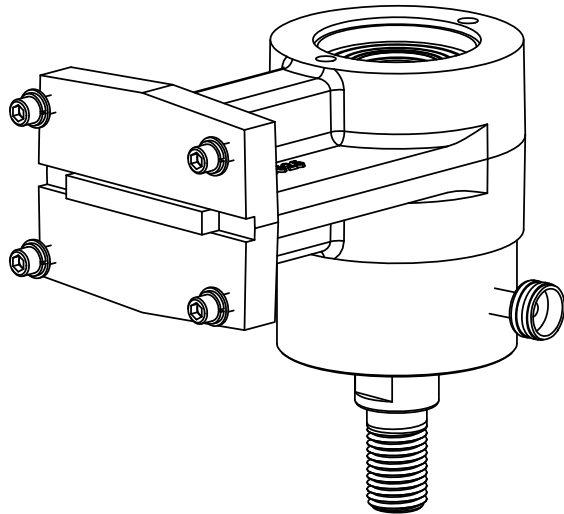
SHIM AS REQUIRED
4 PLACES.



4645040: ROLLER CARRIAGE

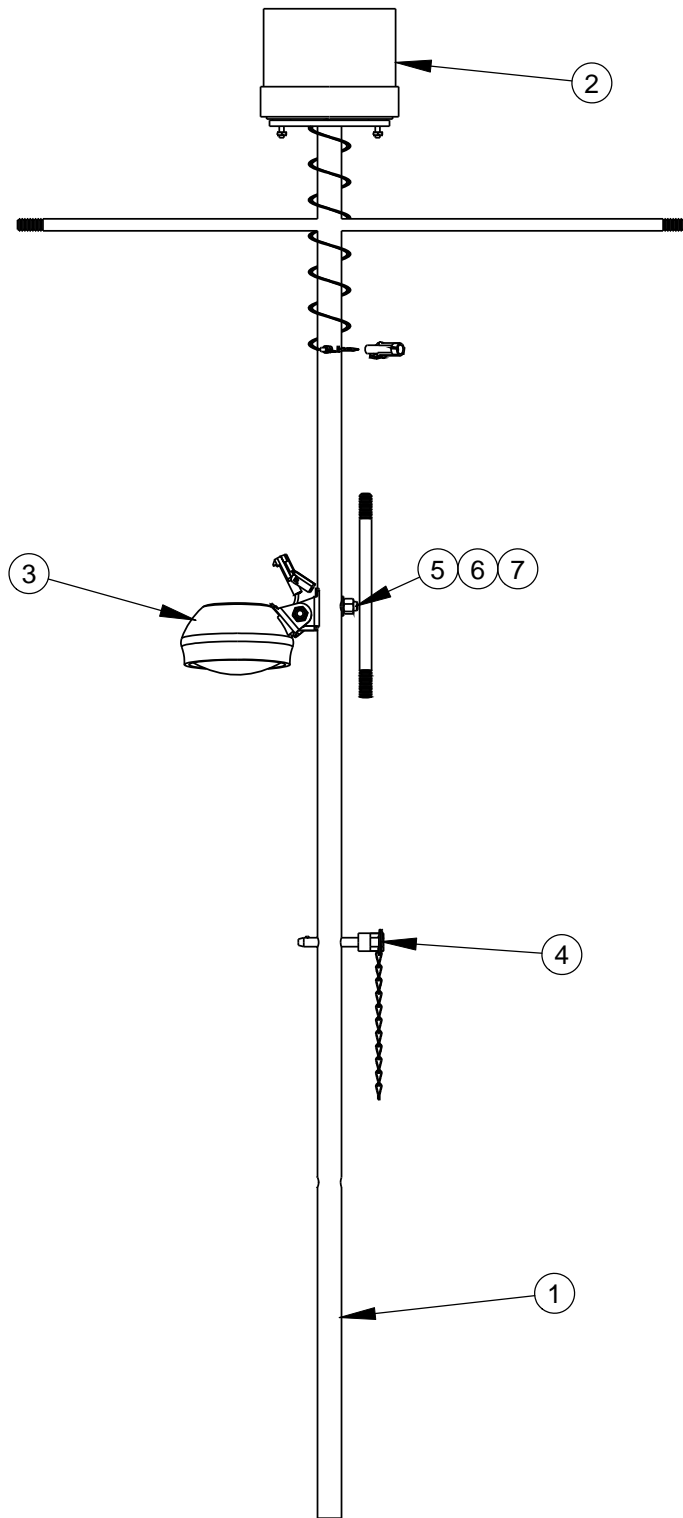
ITEM NO.	PART NUMBER	QTY.	DESCRIPTION
1	4647100	1	Roller Carriage
2	4647107	4	Side Roller Assembly (Plastic 7/8" Roller)
2.1	4647102	1	Side Roller Housing
2.2	4647113	1	Side Roller, Plastic
2.3	4647106	1	Side Roller Shaft
2.4	2400011	5	Aluminum Gasket Shim, .005"
2.5	2400054	5	Aluminum Gasket Shim, .003"
2.6	2900116	4	Cap Screw, Soc. Hd., #10-24 x 3/4"
3	4647112	2	Lower Roller Shaft
4	4647114	2	Lower Roller (plastic)
5	2900118	2	Set Screw, Soc. Hd., #10-24 x 3/8"
6	2400009	1	Aluminum Cover Plate
7	2900117	4	Cap Screw, Soc. Hd., #10-24 x 3/8"
8	4647120	2	Shaft, Adjustable Roller
9	4647115	8	Plastic Roller
10	2900473	8	Flat Washer, 3/8" USS
11	4647122	4	Roller Adjuster
12	2900101	4	Set Screw, Soc. Hd., 1/4-20 x 3/8"
13	2700690	1	Level, Torpedo, 1.15"

4645215: PILLOW BLOCK ASSEMBLY, 1-1/4-7 SPINDLE



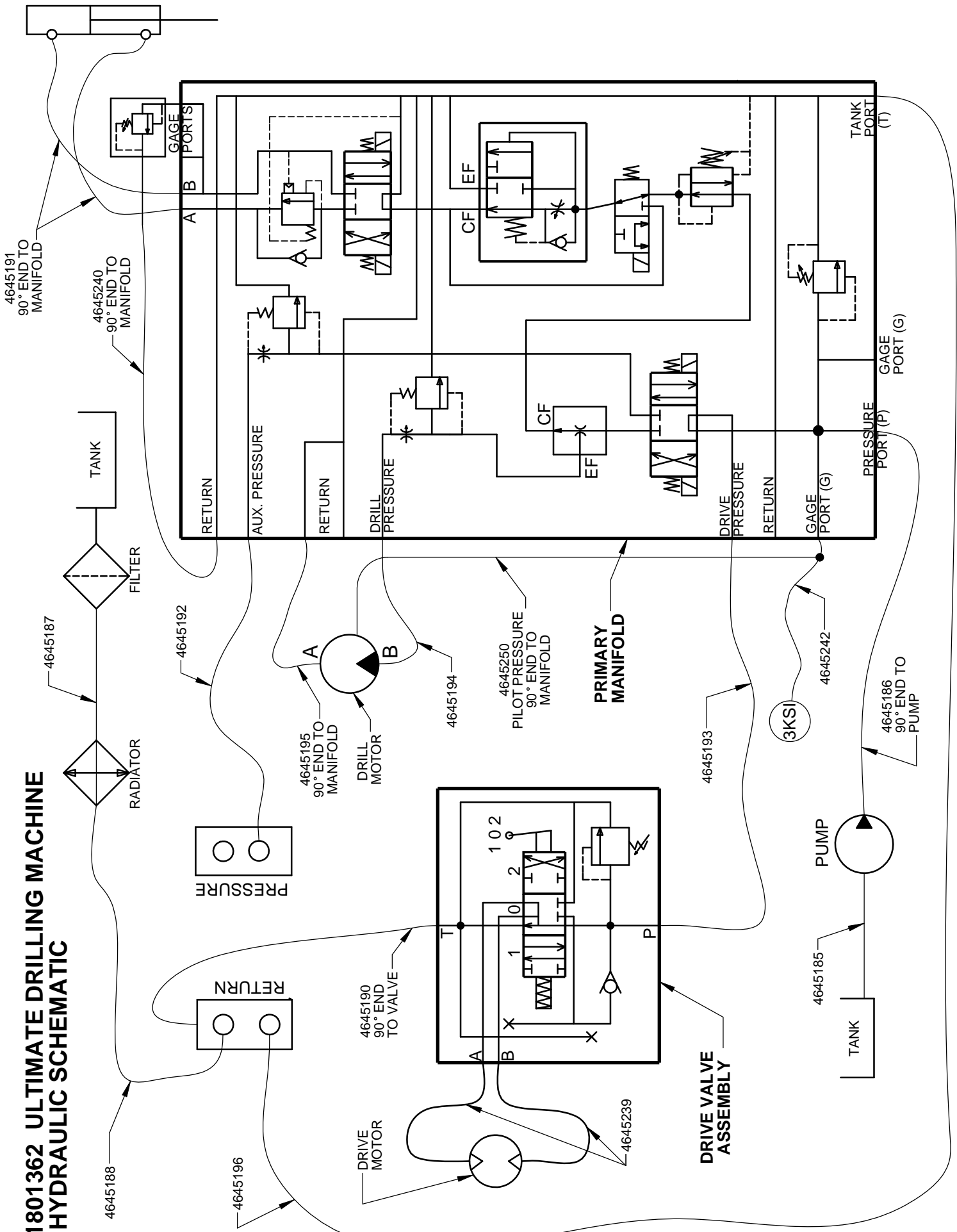
ITEM	PART NO.	QTY.	DESCRIPTION
1	4644132	1	Hydraulic Pillow Block
2	4641010	1	Key, 1/2" Sq. x 4" Long
3	2900062	1	Grease Fitting, 1/8" NPT
4	4699920	1	Water Housing
5	2700021	2	Trostel Seal
6	2400014	2	Bearing Race
7	2400013	2	Tapered Bearing
8	4699905	1	Spindle Shaft 1.250-7
9	4699901	1	Shim For Hydraulic Spindle Shaft
10	2900120	4	Cap Screw, Soc. Hd., 3/8-16 x 3"
11	3200042	1	Fitting, 3/4" F. Garden to 1/4" M. Pipe
12	2900014	4	Flat Washer, 3/8" SAE
13	2900006	4	Lock Washer, 3/8" Split
14	2900124	4	Cap Screw, Soc. Hd., 3/8-16 x 1-3/4"

4645219: LIGHT ASSEMBLY



ITEM	PART NO.	QTY.	DESCRIPTION
1	4645041	1	Light Tower
2	4645139	1	Strobe Light Assy., 12V, Amber
3	4645141	1	Light, 12V Spot Assy.
4	2900257	1	Lock Pin, T Handle, 3/8"
5	2900047	1	Cap Screw, Hex Hd., 3/8-16 x 1-3/4"
6	2900014	1	Flat Washer, 3/8" SAE
7	2900018	1	Lock Nut, 3/8-16 Nylon

1801362 ULTIMATE DRILLING MACHINE HYDRAULIC SCHEMATIC



4645191
90° END TO
MANIFOLD

4645240
90° END TO
MANIFOLD

TANK

FILTER

4645187

RADIATOR

4645188

PRESSURE

RETURN

4645196

DRIVE
MOTOR

4645239

4645195
90° END TO
MANIFOLD

DRILL
MOTOR

4645194

4645250
90° END TO
MANIFOLD

PRIMARY
MANIFOLD

DRIVE VALVE
ASSEMBLY

4645193

3KSI

PUMP

4645185

TANK

4645186
90° END TO
PUMP

GAGE
PORT (G)

RETURN

DRIVE
PRESSURE

CF

EF

DRILL
PRESSURE

RETURN

AUX. PRESSURE

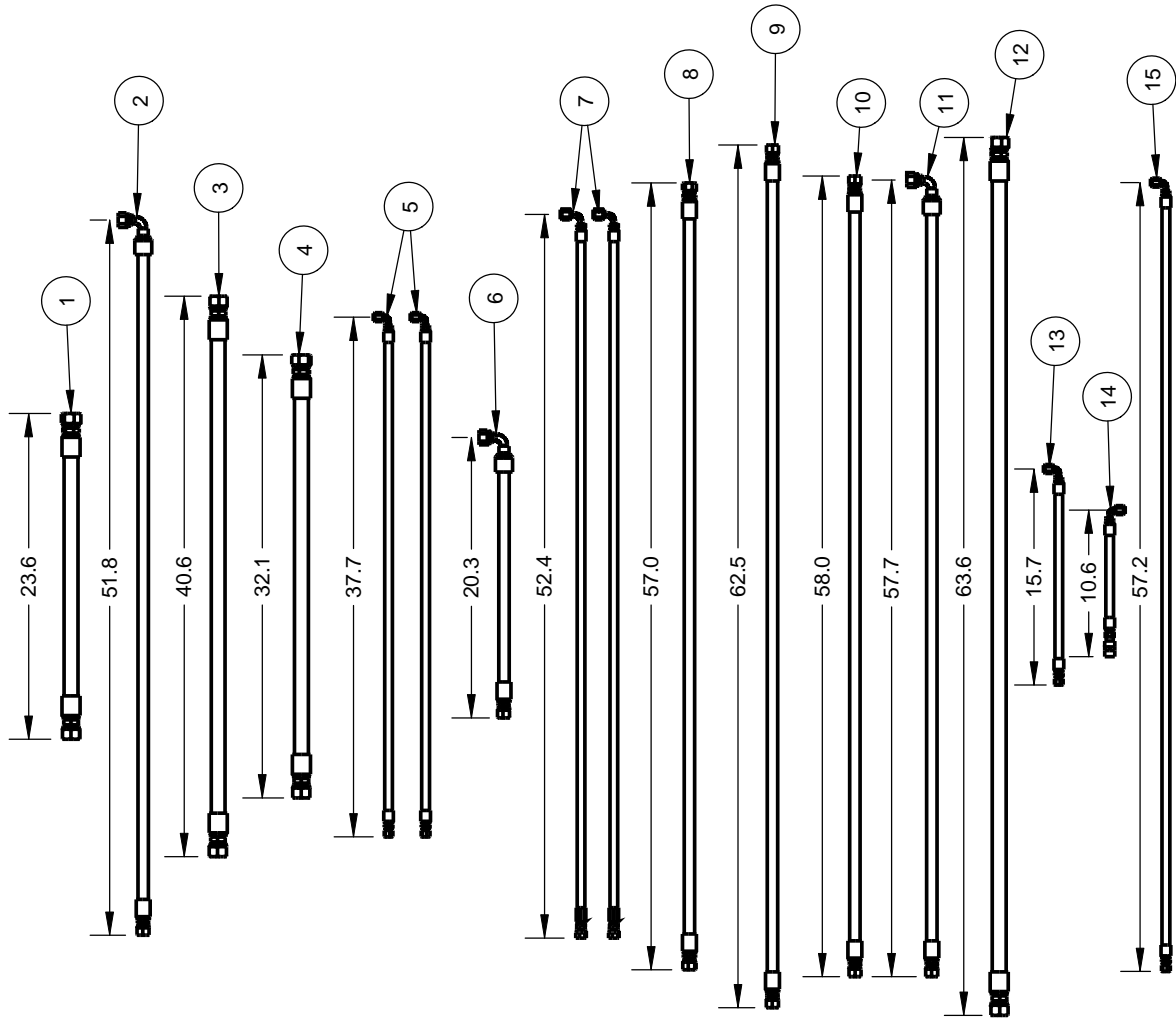
RETURN

PRESSURE
PORT (P)

GAGE
PORT (G)

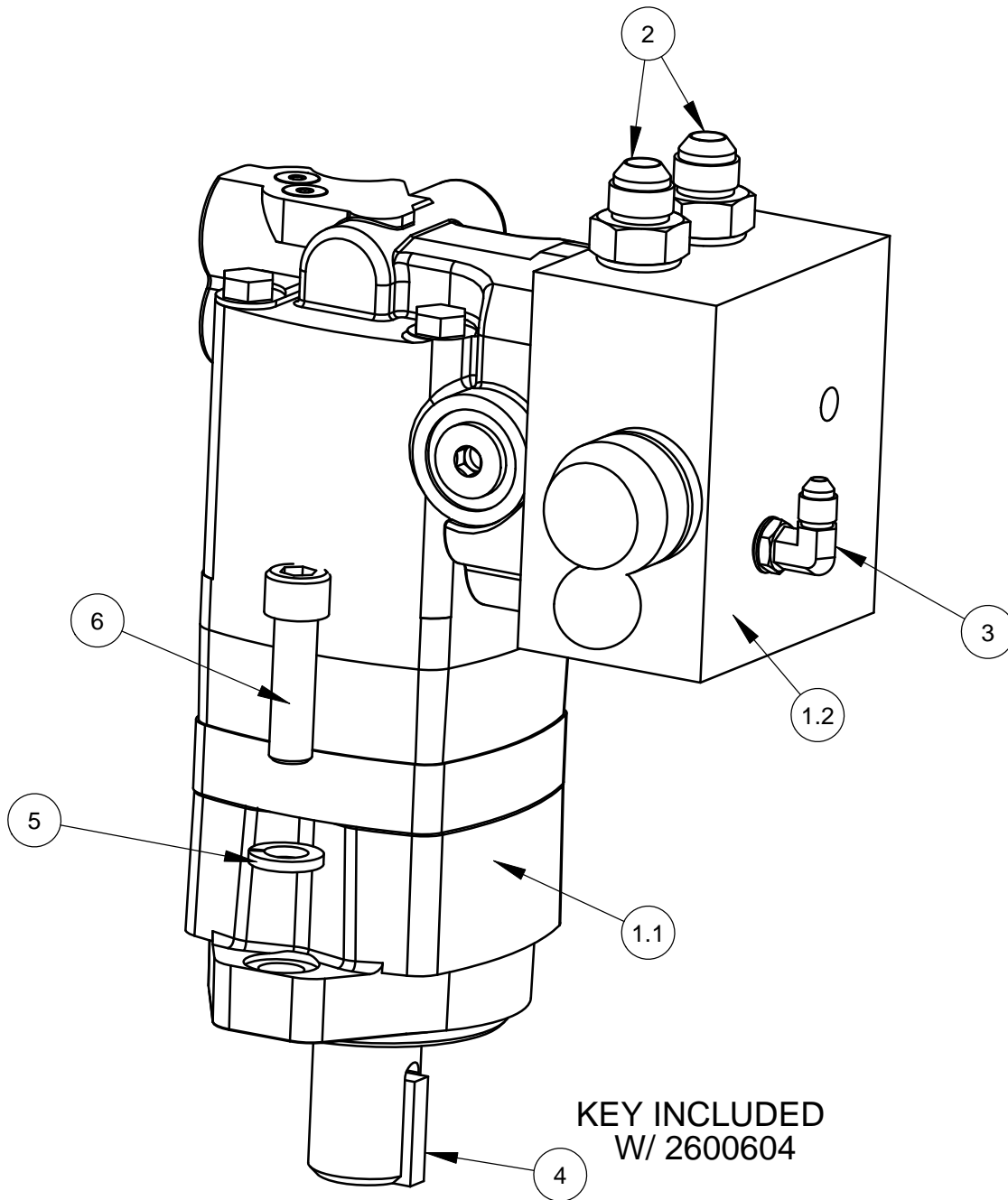
TANK
PORT (T)

4645236 HOSE KIT



ITEM	PART NO.	QTY.	DESCRIPTION
1	4645185	1	Hose Assembly, 3/4"
2	3200129	2	Fitting, 3/4" F. JIC to 3/4" Hose Crimp
	4645186	1	Hose Assembly, 1/2"
	3200290	1	Fitting, 1/2" Female JIC to 1/2" Hose Crimp
	3200408	1	Elbow, 1/2" F. JIC to 1/2" Parkrimp 90 deg.
3	4645187	1	Hose Assembly, 3/4"
	3200129	2	Fitting, 3/4" F. JIC to 3/4" Hose Crimp
4	4645188	1	Hose Assembly, 3/4"
	3200129	2	Fitting, 3/4" F. JIC to 3/4" Hose Crimp
5	4645239	2	Hose Assy., 1/4"
	3200128	1	Fitting, 1/4" F. JIC to 1/4" Hose Crimp
	3200624	1	Elbow, 1/4" F. JIC to 1/4" Hose Crimp
6	4645190	1	Hose Assembly, 1/2"
	3200290	1	Fitting, 1/2" Female JIC to 1/2" Hose Crimp
	3200408	1	Elbow, 1/2" F. JIC to 1/2" Parkrimp 90 deg.
7	4645191	2	Hose Assembly, 1/4"
	3200318	1	3/8 FJIC - 1/4 Parkrimp
	3205534	1	3/8 FJIC - 1/4 Parkrimp, 90 Deg.
8	4645192	1	Hose Assembly, 1/2"
	3200290	2	Fitting, 1/2" Female JIC to 1/2" Hose Crimp
	4645193	1	Hose Assembly, 1/2"
9	3200290	2	Fitting, 1/2" Female JIC to 1/2" Hose Crimp
10	4645194	1	Hose Assembly, 1/2"
	3200290	2	Fitting, 1/2" Female JIC to 1/2" Hose Crimp
11	4645195	1	Hose Assembly, 1/2"
	3200290	1	Fitting, 1/2" Female JIC to 1/2" Hose Crimp
	3200408	1	Elbow, 1/2" F. JIC to 1/2" Parkrimp 90 deg.
12	4645196	1	Hose Assembly, 3/4"
	3200129	2	Fitting, 3/4" F. JIC to 3/4" Hose Crimp
13	4645240	1	Hose Assy., 1/4"
	3200128	1	Fitting, 1/4" F. JIC to 1/4" Hose Crimp
	3200624	1	Elbow, 1/4" F. JIC to 1/4" Hose Crimp
14	4645242	1	1/4" Hose Assembly
	3200145	1	1/4 MPT - 1/4 Hose Crimp
	3201110	1	Coupling, 1/4" NPT
	3200624	1	Elbow, 1/4" F. JIC to 1/4" Hose Crimp
15	4645250	1	Hose Assy., 1/4"
	3200128	1	Fitting, 1/4" F. JIC to 1/4" Hose Crimp
	3200624	1	Elbow, 1/4" F. JIC to 1/4" Hose Crimp

4645238 HYDRAULIC MOTOR, 2 SPEED



ITEM	PART NO.	QTY.	DESCRIPTION
1	2600604	1	Hyd. Motor, 4.9/9.6 CI & Manifold
1.1	2600618	1	Hyd. Motor, 4.9/9.6 CI
1.2	2705873	1	Manifold, 2-Speed Motor
2	3200287	2	Adapter, 5/8" O-Ring to 1/2" M. JIC
3	3200214	1	Elbow, 1/4" M. O-Ring to 1/4" M. JIC
4	2502531	1	Key, 5/16" Sq. x 1-1/4"
5	2900084	2	Lock Washer, 1/2" Split
6	2900119	2	Cap Screw, Soc. Hd., 1/2-13 x 3/4"

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EQUIPMENT AND PARTS WARRANTY

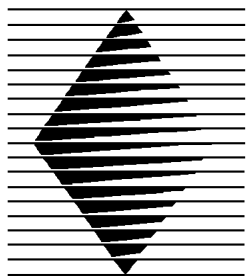
Diamond Products warrants all equipment manufactured by it against defects in workmanship or materials for a period of one (1) year from the date of shipment to Customer.

The responsibility of Diamond Products under this Warranty is limited to replacement or repair of defective parts at Diamond Products' Elyria, Ohio factory, or at a point designated by it, of such parts as shall appear to us upon inspection at such parts, to have been defective in material or workmanship, with expense for transportation and labor borne by Customer.

In no event shall Diamond Products be liable for consequential or incidental damages arising out of the failure of any Product to operate properly.

Integral units such as engines, electric motors, batteries, transmissions, etc., are excluded from this Warranty and are subject to the prime manufacturer's warranty.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND ALL SUCH OTHER WARRANTIES ARE HEREBY DISCLAIMED.



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