

**PARTS LIST FOR
*PORTABLE
GASOLINE DRIVEN
OIL FIRED
HOT PRESSURE WASHER***

ENGINE OIL GRADE:	SAE10W-30
PUMP OIL GRADE:	SAE 20 or 30 Non-Detergent
PUMP OIL CAPACITY:	SEE INDIVIDUAL MACHINE SPECIFICATIONS
FUEL NOZZLE:	1.75 80° A Delavan
BTU INPUT:	299,600
PRESSURE NOZZLE SIZE:	3.7

This Parts Listing has been compiled for your benefit. You can be assured your hot water pressure washer was constructed and designed with quality and performance in mind. Each component has been rigorously tested to insure the highest level of quality.

The contents of this Parts Listing are based on the latest product information available at the time of publication. The manufacturer reserves the right to make changes in price, color, materials, equipment, specifications or models at any time without notice.

WARNING

THIS IS A PROFESSIONAL HIGH PRESSURE, HOT WATER PRESSURE WASHER. CAUTION SHOULD BE OBSERVED WHEN USING OR REPAIRING THIS UNIT! READ AND FOLLOW THE SAFETY WARNINGS LISTED BELOW BEFORE ATTEMPTING ANY REPAIRS ON THIS PRESSURE WASHER!

SAFETY WARNINGS

1. NEVER alter or modify the equipment. Be sure any accessory items and system components being used will withstand the pressure developed. Use only genuine manufactured parts for repair of your pressure washer. Failure to do so can cause hazardous operating conditions and will VOID warranty.
2. NEVER make adjustments on machinery while the unit is connected to the engine without first removing the ignition cable from the spark plug. Turning over the machinery by hand during adjustment or cleaning might start the engine and machinery with it, causing serious injury to the operator.
3. Know how to stop and bleed pressures quickly. Be thoroughly familiar with controls.
4. Before servicing the unit, turn unit off, relieve the water pressure and allow the unit to cool down. Do not make repairs while the unit is running. Service in a clean, dry, flat area. Block the wheels to prevent the unit from moving. Be especially careful to properly dispose of any flammable materials.
5. After operating the machine, DO NOT leave the pressurized unit unattended. Shut off the unit and release trapped pressure before leaving.

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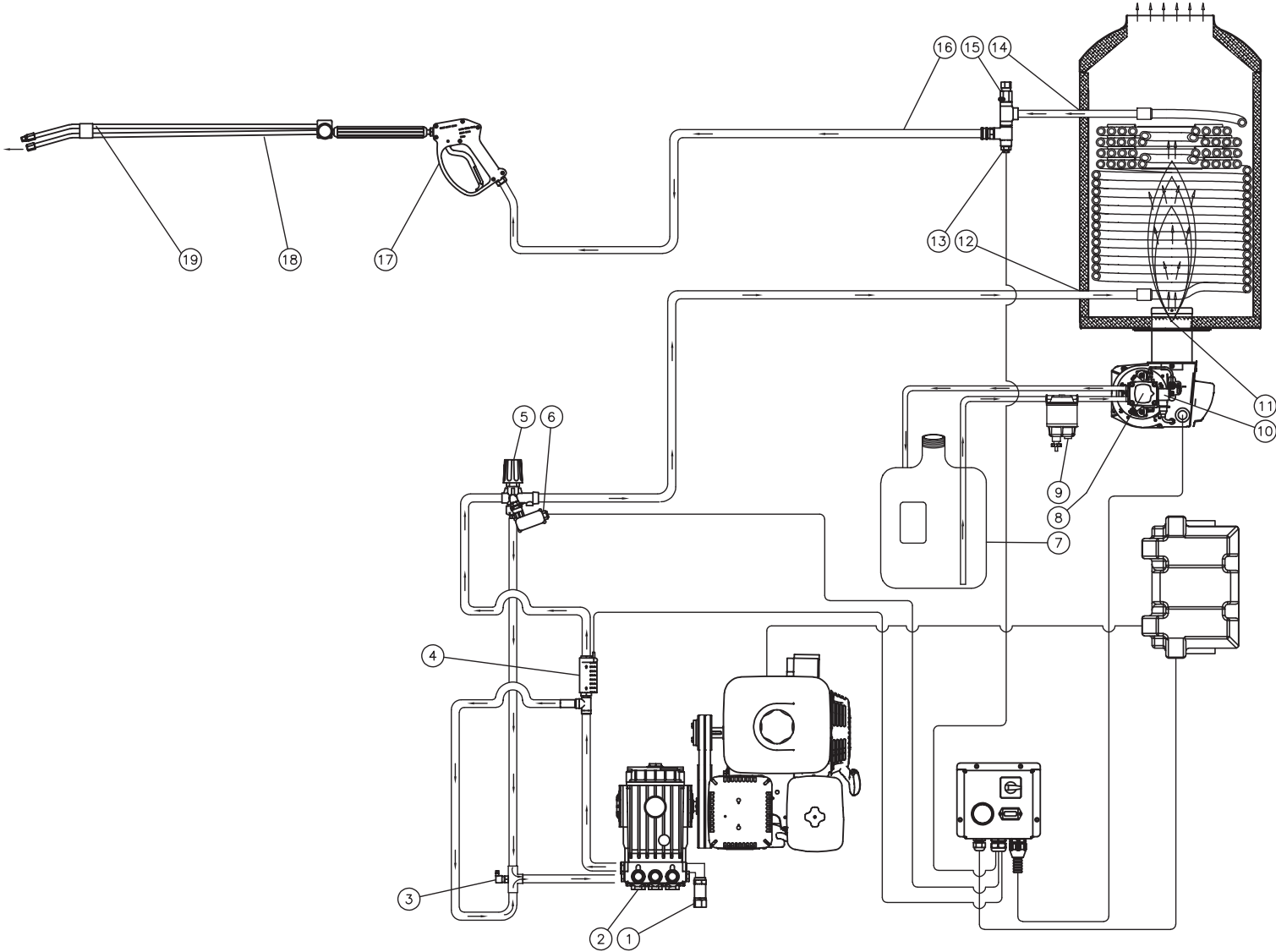
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SPECIFICATIONS

Operating Pressure (PSI/Bar):	4000 / 275.8 (+/-5%)	
Water Volume (GPM/lpm):	3.7 / 14.0 (+/-5%)	
Outlet Water Temperature (F/C)	130°F / 54°C (+/- 10°F) rise above inlet ambient (210°F / 99°C maximum)	
High Pressure Nozzle	3.7	
Engine:	Honda	
Horsepower	GX390	
Engine Type	4 Stroke, Overhead Valve, Single Cylinder	
Oil Type	SAE 10W-30	
Oil Capacity (oz. / liter)	37 / 1.1	
Low Oil Protection	Oil Alert™	
Fuel Type	Unleaded Gasoline 86 Octane Minimum	
Fuel Capacity (Gal. / liter)	1.7 / 6.5	
Starting	12 Volt Electric	
Battery	BCI Group 24DC, RV / Marine Dual Purpose Deep Cycle / Cranking Battery	
Maximum No Load RPM	3600 (+/- 100)	
High Pressure Pump:	Belt Driven, Oil Bath, Triplex Piston	Direct Driven, Oil Bath, Triplex Piston
Oil Type	SAE20 or 30 Non-Detergent	
Oil Capacity (oz. / liter)	41 / 1.2	14 / 0.4
Plungers	Ceramic	
Manifold	Forged Brass	
Valves	Stainless Steel	
Unloader	Pressure Trapping - Pre-set at the factory	
Heat Dump Valve	Relieves heated water during unloader bypass stage	
Water System:		
Inlet Water Strainer	Removable thimble for inspection and cleaning of stainless steel screen	
Heat Dump Valve	Protects pump against damaging heat in recirculated and inlet water	
Burner Fuel System		
Fuel Type	No 1 or No 2 Fuel Oil, Diesel or Kerosene	
Fuel Capacity (Gal. / liter)	10 / 37.8	
Fuel Filter/ Water Separator	Spin on (10 micron) filter / E-Z water drain	
Fuel Pump	Two Line, Single Stage	
Fuel Pressure (PSI / BAR)	150 / 10.4	
Fuel Nozzle	1.75 80° A Delavan	
Fuel Consumption (GPH / LPH)	2.14 / 8.10 Cont. Burning	
Burner Electrical System		
Voltage	12	
Amps	13.0	
Heat Exchanger	Vertical, Oil Fired, Pancake Coil	
BTU Input	299,600	
Efficiency	75% with #2 Fuel Oil / Diesel	
Smoke Density	0-3 Per ASTM D2156	
Safety System		
Pressure Switch	Shuts off burner fuel supply upon trigger release	
Fuel Solenoid	12 Volt, controls fuel supply to burner	
Safety Relief	Relieves excess system pressure	
Flow Switch	Shuts off blower motor when engine runs out of fuel	
Unit Net Weight (Lbs/kg)	504 / 229	459 / 208
Unit Shipping Weight (Lbs/kg)	634 / 288	589 / 267
Unit Net Dimensions (In/cm)	47.5L x 30W x 48H / 120.6L x 76.2W x 121.9H	
Unit Shipping Dimensions (In/cm)	57.5L x 35.5W x 59.5H / 146.1L x 90.2W x 151.1H	

NOTES

FLOW CHART FOR BELT DRIVE



FLOW

GENERAL THEORY OF OPERATION

WATER FLOW: Connect a pressurized water source to the INLET GARDEN HOSE CONNECTION (1) and turn on the water supply.

Water is fed through a filter on the INLET GARDEN HOSE CONNECTION (1) and into a TRIPLEX HIGH PRESSURE PUMP (2) which has an UNLOADER (5) that bypasses the water when the trigger gun is closed. To protect the pump from heated water during bypass stage, a HEAT DUMP VALVE (3) will open at 140° F/60° C allowing the heated water to escape. The Heat Dump Valve automatically resets when the water cools. The BURNER CONTROL PRESSURE SWITCH (6) controls the fuel supply to the burner.

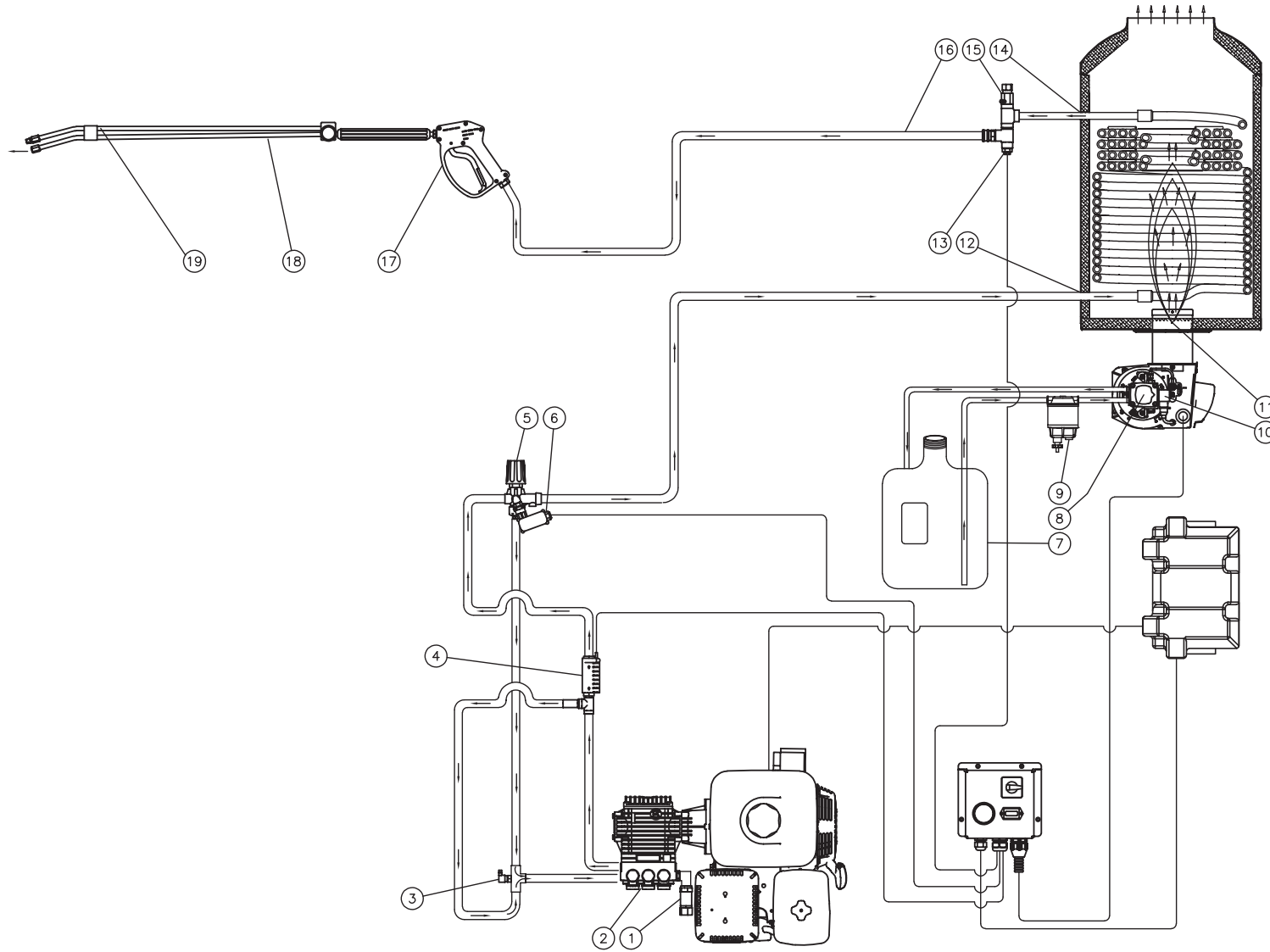
If the engine runs out of fuel with the key in the 'on' position, there will be no water flowing through a FLOW SWITCH (4) controlling the burner blower motor. This shuts off the blower motor preventing the deep cycle battery from losing charge.

From there, the water flows through HEAT EXCHANGER INLET (12) where it is heated when the burner is on. As the water exits the HEAT EXCHANGER OUTLET (14), it enters a safety system which protects the operator from danger. The system also contains an ADJUSTABLE THERMOSTAT (13) which senses the water temperature and shuts off the fuel supply to the burner if the water gets too hot. If the unloader fails to bypass water or the burner remains on when the trigger gun is closed, the SAFETY RELIEF (15) will relieve and allow water to exit safely.

The heated water then flows through the HIGH PRESSURE HOSE (16) and to the TRIGGER GUN ASSEMBLY (17) which allows the operator to control the water spray. When the trigger gun is open, the water flow through the ADJUSTABLE PRESSURE DUAL LANCE (18) and exits the NOZZLE (19).

FUEL FLOW: The Fuel Pump draws fuel from the FUEL TANK (7) through a replaceable FUEL FILTER/WATER SEPARATOR (9) and into the FUEL PUMP (8). Fuel exits the fuel pump, into a FUEL SOLENOID VALVE (10) which controls fuel flow to the FUEL NOZZLE (11) where it ignites and burns in the heat exchanger.

FLOW CHART FOR DIRECT DRIVEN



FLOW DIAGRAM - DIRECT DRIVIE 12V

GENERAL THEORY OF OPERATION

WATER FLOW: Connect a pressurized water source to the INLET GARDEN HOSE CONNECTION (1) and turn on the water supply.

Water is fed through a filter on the INLET GARDEN HOSE CONNECTION (1) and into a TRIPLEX HIGH PRESSURE PUMP (2) which has an UNLOADER (5) that bypasses the water when the trigger gun is closed. To protect the pump from heated water during bypass stage, a HEAT DUMP VALVE (3) will open at 140° F/60° C allowing the heated water to escape. The Heat Dump Valve automatically resets when the water cools. The BURNER CONTROL PRESSURE SWITCH (6) controls the fuel supply to the burner.

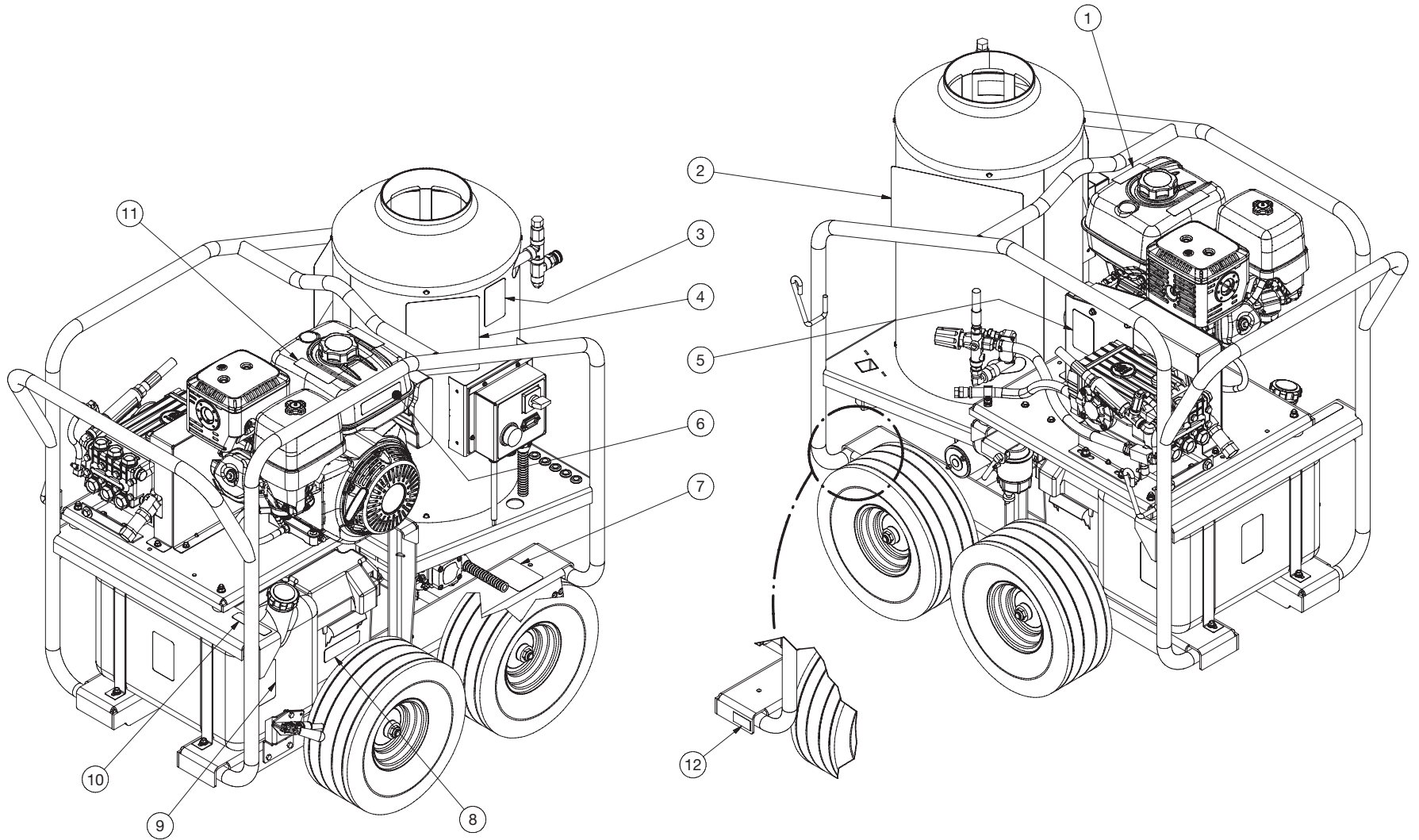
If the engine runs out of fuel with the key in the 'on' position, there will be no water flowing through a FLOW SWITCH (4) controlling the burner blower motor. This shuts off the blower motor preventing the deep cycle battery from losing charge.

From there, the water flows through HEAT EXCHANGER INLET (12) where it is heated when the burner is on. As the water exits the HEAT EXCHANGER OUTLET (14), it enters a safety system which protects the operator from danger. The system also contains an ADJUSTABLE THERMOSTAT (13) which senses the water temperature and shuts off the fuel supply to the burner if the water gets too hot. If the unloader fails to bypass water or the burner remains on when the trigger gun is closed, the SAFETY RELIEF (15) will relieve and allow water to exit safely.

The heated water then flows through the HIGH PRESSURE HOSE (16) and to the TRIGGER GUN ASSEMBLY (17) which allows the operator to control the water spray. When the trigger gun is open, the water flow through the ADJUSTABLE PRESSURE DUAL LANCE (18) and exits the NOZZLE (19).

FUEL FLOW: The Fuel Pump draws fuel from the FUEL TANK (7) through a replaceable FUEL FILTER/WATER SEPARATOR (9) and into the FUEL PUMP (8). Fuel exits the fuel pump, into a FUEL SOLENOID VALVE (10) which controls fuel flow to the FUEL NOZZLE (11) where it ignites and burns in the heat exchanger.

SAFETY DECAL PLACEMENT BELT DRIVE

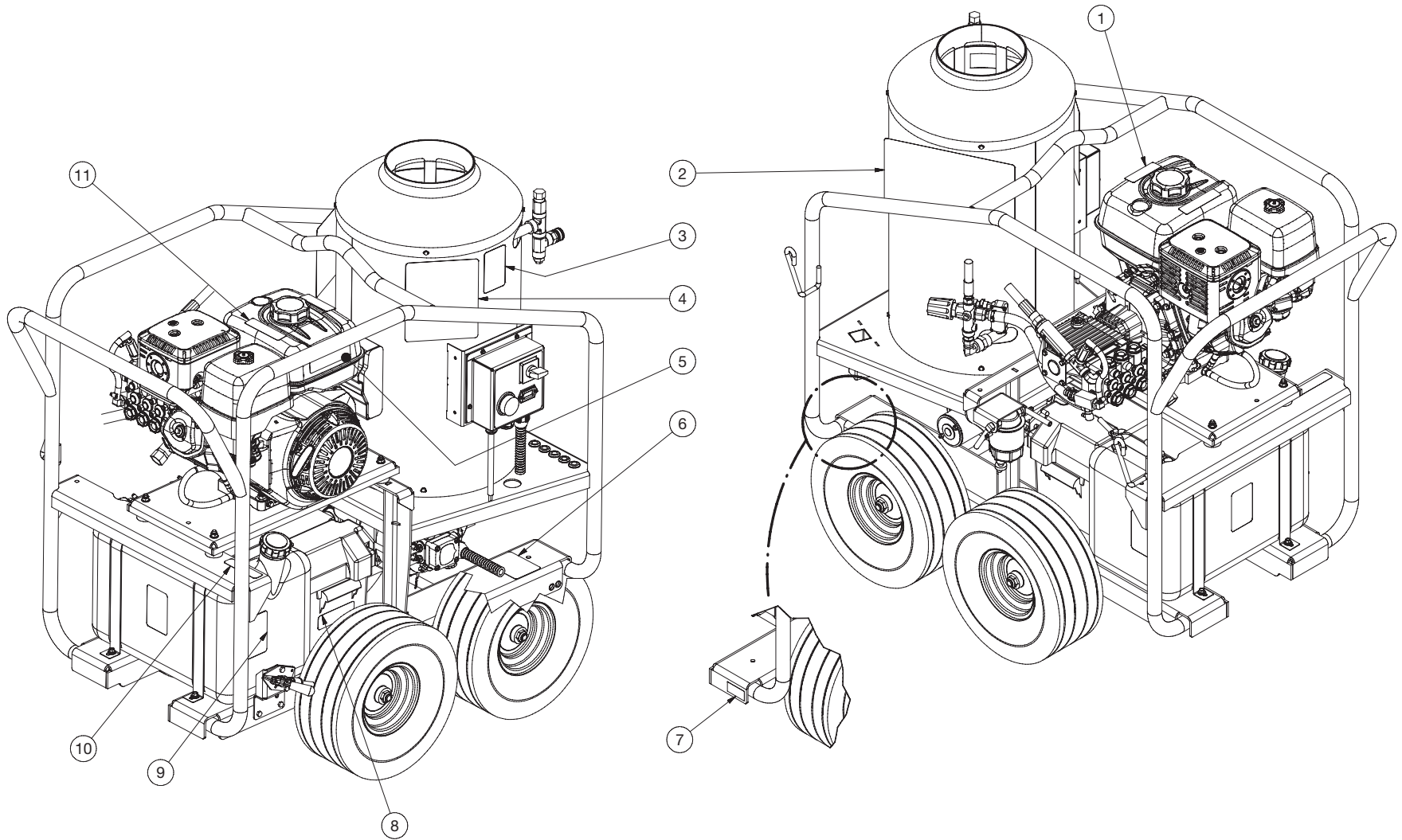


DECAL PLACEMENT - BELT DRIVE 12V 010218 CH

DECAL PLACEMENT - BELT DRIVEN 12V 010218 CH			
DECAL PLACEMENT			
ITEM	TITLE	PART #	QTY
1	DECAL - RISK OF FIRE (SEE 71-3003)	N/A	1
2	DECAL - 12V WARNING/CAUTION (SEE 71-3003)	N/A	1
3	DECAL - WARNING HOT SURFACES (SEE 71-3003)	N/A	1
4	DECAL - OPERATION (SEE 71-3003)	N/A	1
5	DECAL - WARNING; RISK OF INJURY (SEE 71-3003)	N/A	1
6	DECAL - 4000 PSI (SEE 71-3003)	N/A	1
7	DECAL - DATA PLATE	N/A	1
8	DECAL - RISK OF INJURY (SEE 71-3003)	N/A	1
9	DECAL - RISK OF FIRE (SEE 71-3003)	N/A	1
10	DECAL - DIESEL ONLY (SEE 71-3003)	N/A	1
11	DECAL - RISK OF BURNS (SEE 71-3003)	N/A	1
12	DECAL - MADE IN USA	34-3553	1
-	DECAL SET	71-3003	1

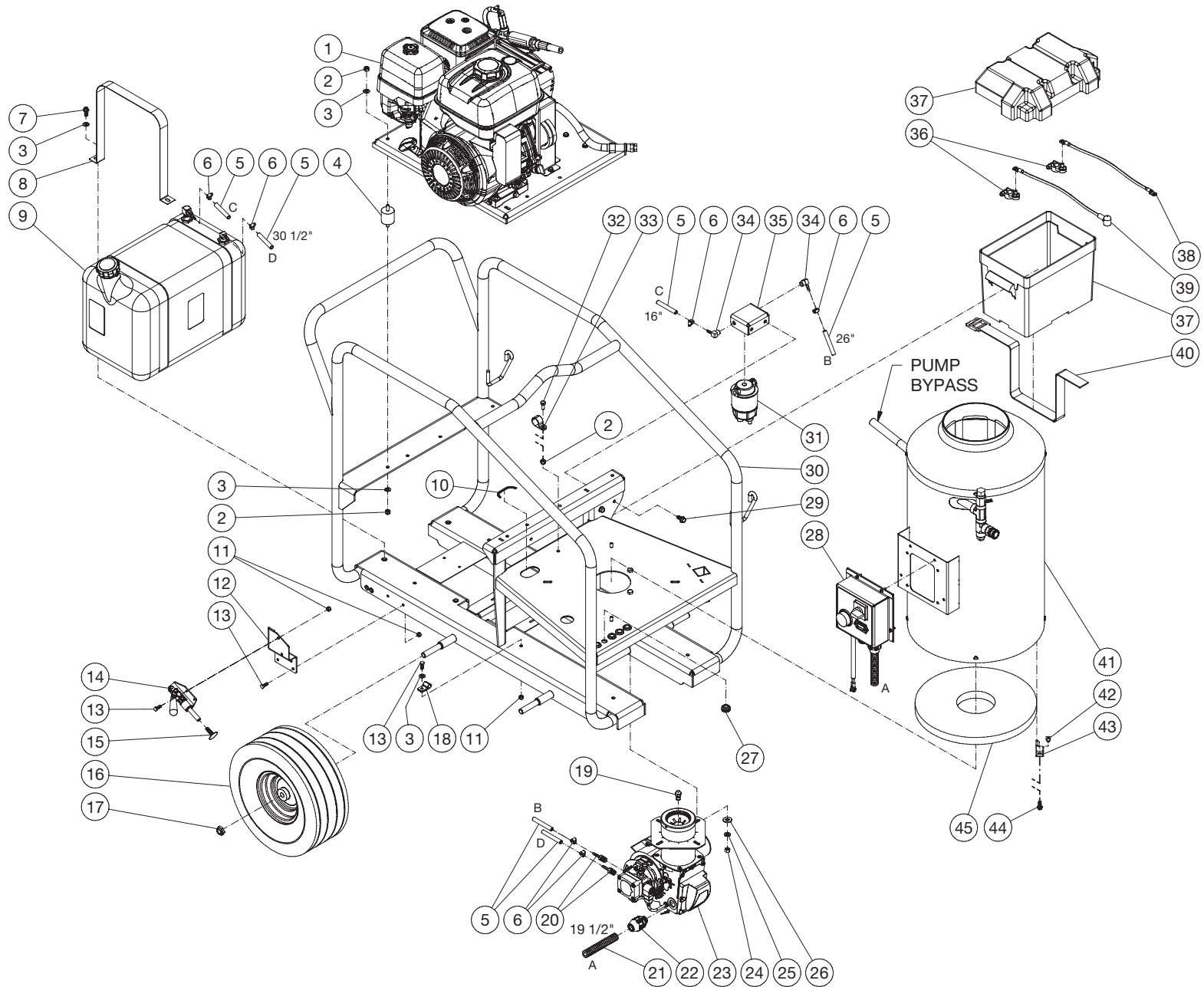
SAFETY DECAL PLACEMENT DIRECT DRIVE

DECAL PLACEMENT - DIRECT DRIVE 12V 010318 JVA



DECAL PLACEMENT - DIRECT DRIVE 12V 010318 JVA			
DECAL PLACEMENT			
ITEM	TITLE	PART #	QTY
1	DECAL - RISK OF FIRE (SEE 71-3003)	N/A	1
2	DECAL - 12V WARNING/CAUTION (SEE 71-3003)	N/A	1
3	DECAL - WARNING HOT SURFACES (SEE 71-3003)	N/A	1
4	DECAL - OPERATION (SEE 71-3003)	N/A	1
5	DECAL - 4000 PSI (SEE 71-3003)	N/A	1
6	DECAL - DATA PLATE	N/A	1
7	DECAL - MADE IN USA	34-3553	1
8	DECAL - RISK OF INJURY (SEE 71-3003)	N/A	1
9	DECAL-CAUTION RISK OF FIRE (SEE 71-3003)	N/A	1
10	DECAL - DIESEL ONLY (SEE 71-3003)	N/A	1
11	DECAL - RISK OF BURNS (SEE 71-3003)	N/A	1
-	DECAL SET	71-3003	1

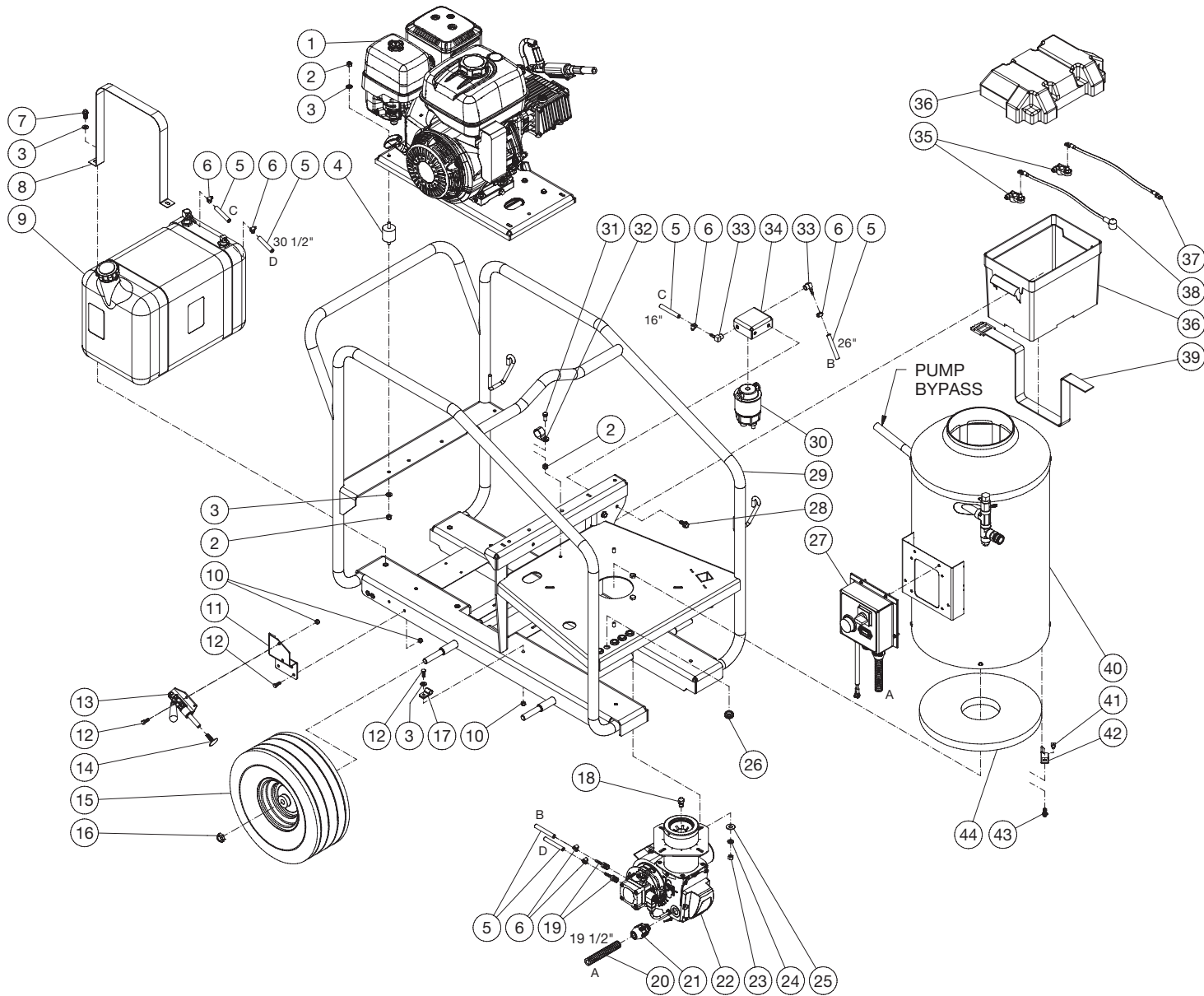
BELT DRIVE UNIT ASSEMBLY



UNIT ASSEMBLY - BELT DRIVE 12V VERTICAL 010218 CH

UNIT ASSEMBLY - BELT DRIVE 12V VERTICAL 010218 CH			
UNIT ASSEMBLY			
ITEM	TITLE	PART #	QTY
1	ISOLATION PLATE ASSEMBLY	N/A	1
2	LOCKNUT	30-0157	9
3	WASHER	28-0003	13
4	ISOLATOR	14-0110	4
5	FUEL HOSE *(SEVEN FEET REQUIRED)	15-0008	1
6	CLAMP WORM	42-0004	6
7	BOLT	27-9524	4
8	FUEL TANK STRAP	20-0579A01	2
9	BURNER FUEL TANK ASSEMBLY	N/A	1
10	EDGING	33-0020	1
11	LOCKNUT	30-0155	5
12	BRAKE BRACKET	20-1314A18	1
13	BOLT	27-0015	5
14	PUSH/PULL TOGGLE CLAMP	33-0400	1
15	BOLT	27-9550	1
16	WHEEL	14-0154	4
17	LOCKNUT	30-0117	4
18	CLIP	43-0003	1
19	FUEL NOZZLE	18-0455	1
20	BARB	23-0051	2
21	CONDUIT FLEX *(TWO FEET REQUIRED)	32-0253	1
22	CONDUIT FITTING	32-0255	1
23	BURNER	4-0036	1
24	NUT	30-0006	4
25	LOCKWASHER	29-0008	4
26	WASHER	28-0023	4
27	GROMMET	33-0001	5
28	ELECTRIC BOX ASSEMBLY	N/A	1
29	BOLT	27-1202	2
30	FRAME	5-0375A18	1
31	FUEL FILTER / WATER SEPERATOR	19-0070	1
32	BOLT	27-0066	1
33	CLIP	33-0291	1
34	ELBOW	23-0054	2
35	FUEL FILTER BRACKET	20-1305A01	1
36	BATTERY END	32-0066	2
37	BATTERY BOX	33-0093	1
38	CABLE	32-9113	1
39	CABLE	32-9123	1
40	STRAP	33-0089	1
41	COIL ASSEMBLY	N/A	1
42	CLIP NUT	30-6027	4
43	COIL MOUNT BRACKET	20-1513	4
44	BOLT	27-1200	4
45	INSULATION BLANKET *(TWO FEET REQUIRED)	33-0032	1
*MUST ORDER IN ONE FOOT LENGTHS			

DIRECT DRIVE UNIT ASSEMBLY

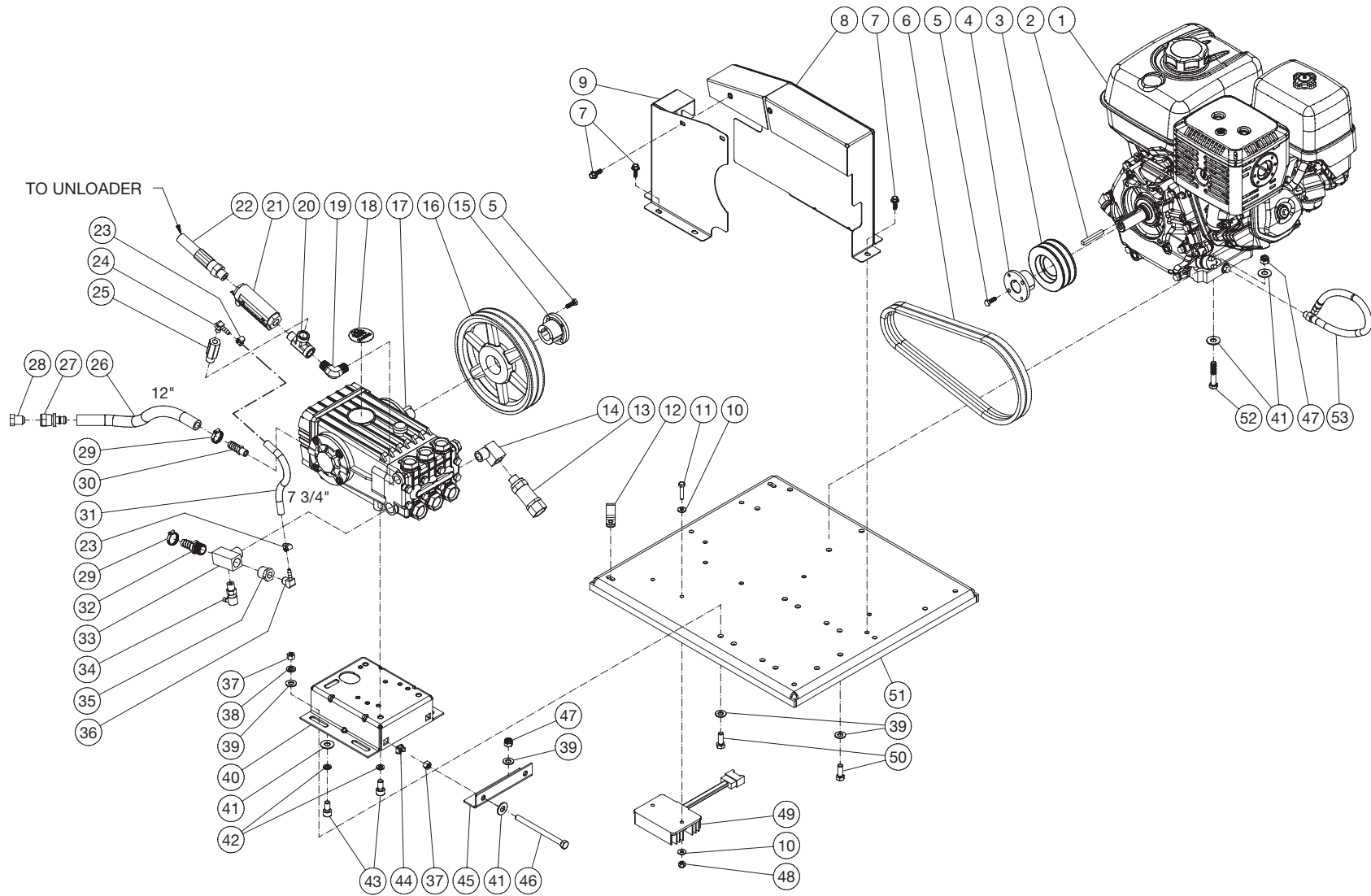


UNIT ASSEMBLY - DIRECT DRIVE 12V VERTICAL 010318 CH

UNIT ASSEMBLY - DIRECT DRIVE 12V VERTICAL 010318 JVA			
UNIT ASSEMBLY			
ITEM	DESCRIPTION	PART #	QTY
1	ISOLATION PLATE ASSEMBLY	N/A	1
2	LOCKNUT	30-0157	9
3	WASHER	28-0003	13
4	ISOLATOR	14-0110	4
5	FUEL HOSE *(SEVEN FEET REQUIRED)	15-0008	1
6	CLAMP WORM	42-0004	6
7	BOLT	27-9524	4
8	FUEL TANK STRAP	20-0579A01	2
9	BURNER FUEL TANK ASSEMBLY	N/A	1
10	LOCKNUT	30-0155	5
11	BRAKE BRACKET	20-1314A18	1
12	BOLT	27-0015	5
13	PUSH/PULL TOGGLE CLAMP	33-0400	1
14	BOLT	27-9550	1
15	WHEEL	14-0154	4
16	LOCKNUT	30-0117	4
17	CLIP	43-0003	1
18	FUEL NOZZLE	18-0455	1
19	BARB	23-0051	2
20	CONDUIT FLEX *(TWO FEET REQUIRED)	32-0253	1
21	CONDUIT FITTING	32-0255	1
22	BURNER	4-0036	1
23	NUT	30-0006	4
24	LOCKWASHER	29-0008	4
25	WASHER	28-0023	4
26	GROMMET	33-0001	5
27	ELECTRIC BOX ASSEMBLY	N/A	1
28	BOLT	27-1202	2
29	FRAME	5-0375A18	1
30	FUEL FILTER / WATER SEPERATOR	19-0070	1
31	BOLT	27-0066	1
32	CLIP	33-0291	1
33	ELBOW	23-0054	2
34	FUEL FILTER BRACKET	20-1305A01	1
35	BATTERY END	32-0066	2
36	BATTERY BOX	33-0093	1
37	CABLE	32-9113	1
38	CABLE	32-9123	1
39	STRAP	33-0089	1
40	COIL ASSEMBLY	N/A	1
41	CLIP NUT	30-6027	4
42	COIL MOUNT BRACKET	20-1513	4
43	BOLT	27-1200	4
44	INSULATION BLANKET *(TWO FEET REQUIRED)	33-0032	1

*MUST ORDER IN ONE FOOT LENGTHS

BELT DRIVE ISOLATION PLATE

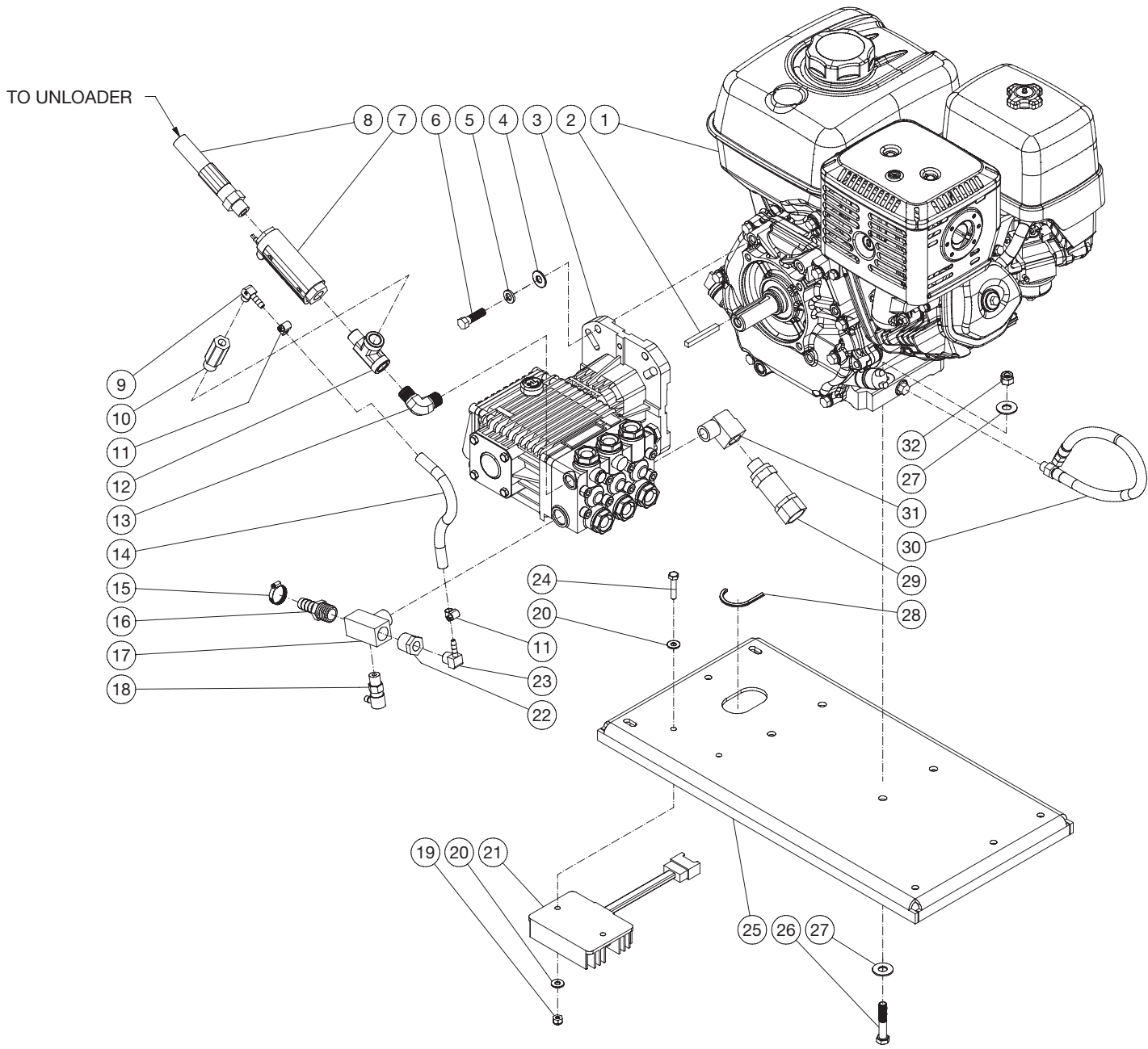


ISO PLATE ASSY - BELT DRIVE 12V VERT 010218 CH

ISO PLATE ASSY - BELT DRIVE 12V VERT 010218 CH			
ISOLATION PLATE			
ITEM	TITLE	PART #	QTY
1	ENGINE - HONDA	1-0191	1
2	KEY	43-0078	1
3	SHEAVE	10-0074	1
4	BUSHING	9-0005	1
5	BOLT	27-0015	4
6	BELT	11-0016	2
7	BOLT	27-1200	8
8	PUMP BELTGUARD	6-0186A18	1
9	ENGINE BELTGUARD	6-0187A18	1
10	WASHER	28-0002	4
11	BOLT	27-0017	2
12	CLIP	33-0291	1
13	FILTER	19-0206	1
14	ELBOW	23-0035	1
15	BUSHING	9-0017	1
16	SHEAVE	10-0007	1
17	PUMP	3-0203	1
18	DECAL - PUMP	34-2290	1
19	ELBOW	24-0131	1
20	STREET TEE	23-0058	1
21	FLOW SWITCH	22-0428	1
22	HIGH PRESSURE HOSE	15-0194	1
23	CLAMP WORM	42-0004	2
24	ELBOW	23-0501	1
25	EASY START VALVE	22-0242	1
26	HOSE *(ONE FOOT REQUIRED)	15-0305	1
27	HOSE BARB	23-0360	1
28	PLUG	23-0411	1
29	HOSE CLAMP	42-0011	2
30	HOSE BARB	23-0120	1
31	HOSE *(ONE FOOT REQUIRED)	15-0079	1
32	BARB	23-0045	1
33	BRANCH TEE	23-0519	1
34	HEAT DUMP VALVE	22-0408	1
35	REDUCER	23-0056	1
36	ELBOW	23-0054	1
37	NUT	30-0006	6
38	LOCKWASHER	29-0008	4
39	WASHER	28-0004	12
40	PUMP HAT	5-0153A18	1
41	WASHER	28-0023	11
42	LOCKWASHER	29-0054	4
43	BOLT	27-8471	4
44	CLIP NUT	30-6025	2
45	TENSION BRACKET	20-0584A18	1
46	BOLT	27-0133	2
47	LOCKNUT	30-0159	6
48	LOCKNUT	30-0155	2
49	RECTIFIER	W/ ENGINE	1
50	BOLT	27-0117	6
51	ISOLATION PLATE	5-0376A18	1
52	BOLT	27-0121	4
53	OIL DRAIN HOSE	70-0358	1

*MUST ORDER IN ONE FOOT LENGTHS

DIRECT DRIVE ISOLATION PLATE

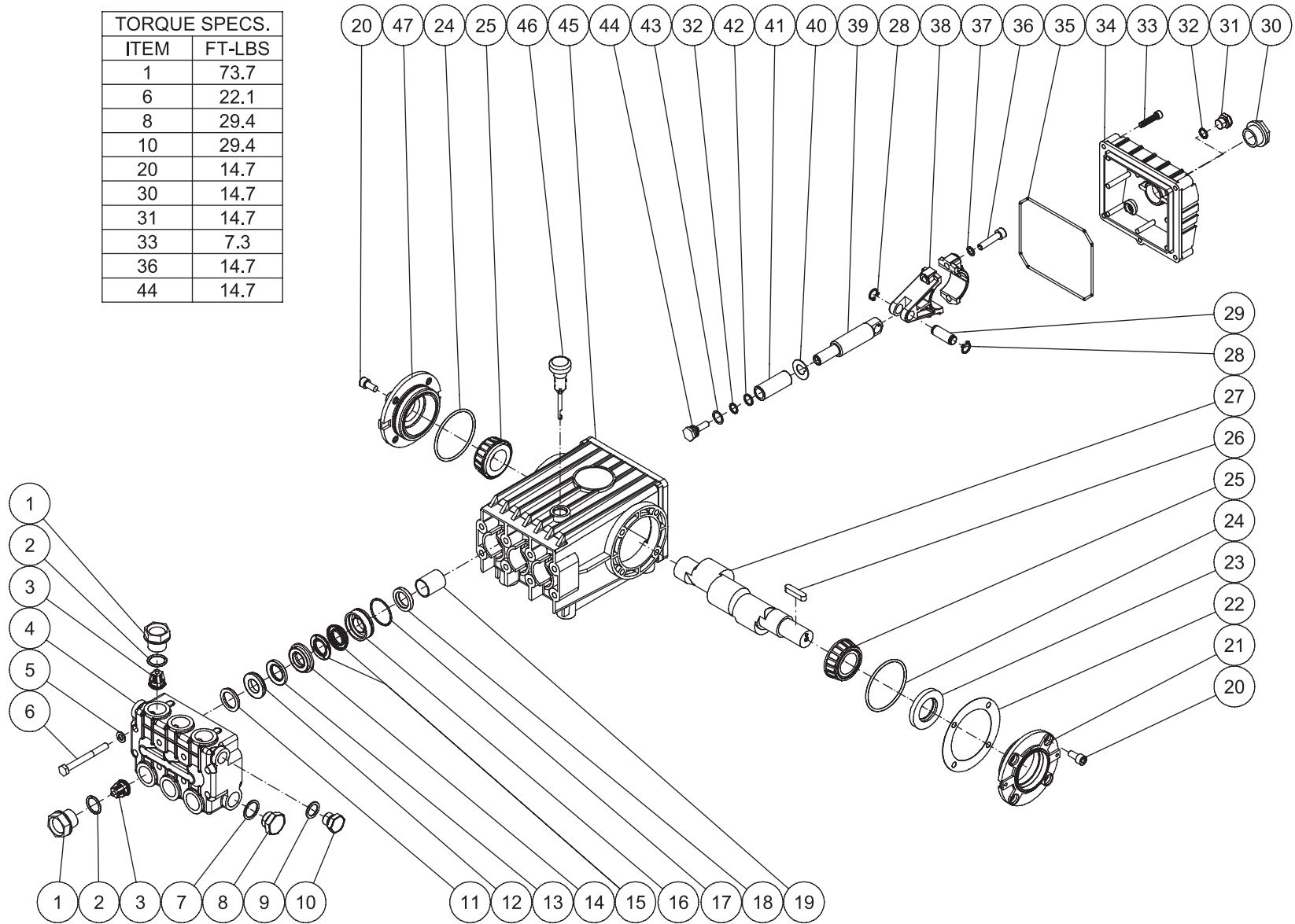


ISO PLATE ASSY - DIRECT DRIVE 12V VERT 010318 JVA

ISO PLATE ASSY - DIRECT DRIVE 12V VERT 010318 JVA			
ISOLATION PLATE ASSEMBLY			
ITEM	DESCRIPTION	PART #	QTY
1	ENGINE - HONDA	1-0191	1
2	KEY	43-0078	1
3	PUMP	3-0350	1
4	WASHER	28-0022	4
5	LOCKWASHER	29-0008	4
6	BOLT	27-0118	4
7	FLOW SWITCH	22-0428	1
8	HIGH PRESSURE HOSE	15-0194	1
9	ELBOW	23-0501	1
10	EASY START VALVE	22-0242	1
11	CLAMP WORM	42-0004	2
12	STREET TEE	23-0058	1
13	ELBOW	24-0131	1
14	HOSE *(ONE FOOT REQUIRED)	15-0079	1
15	HOSE CLAMP	42-0011	1
16	BARB	23-0045	1
17	BRANCH TEE	23-0519	1
18	HEAT DUMP VALVE	22-0408	1
19	LOCKNUT	30-0155	2
20	WASHER	28-0002	4
21	RECTIFIER	W/ ENGINE	1
22	REDUCER	23-0056	1
23	ELBOW	23-0054	1
24	BOLT	27-0017	2
25	ISOLATION PLATE	5-0377A18	1
26	BOLT	27-0121	4
27	WASHER	28-0023	8
28	EDGING	33-0020	1
29	FILTER	19-0206	1
30	OIL DRAIN HOSE	70-0358	1
31	ELBOW	23-0035	1
32	LOCKNUT	30-0159	4
*MUST ORDER IN ONE FOOT LENGTHS			

PUMP ASSEMBLY (3-0203) (AFTER SERIAL #15045000)

TORQUE SPECS.	
ITEM	FT-LBS
1	73.7
6	22.1
8	29.4
10	29.4
20	14.7
30	14.7
31	14.7
33	7.3
36	14.7
44	14.7



3-0202_3-0203 042914

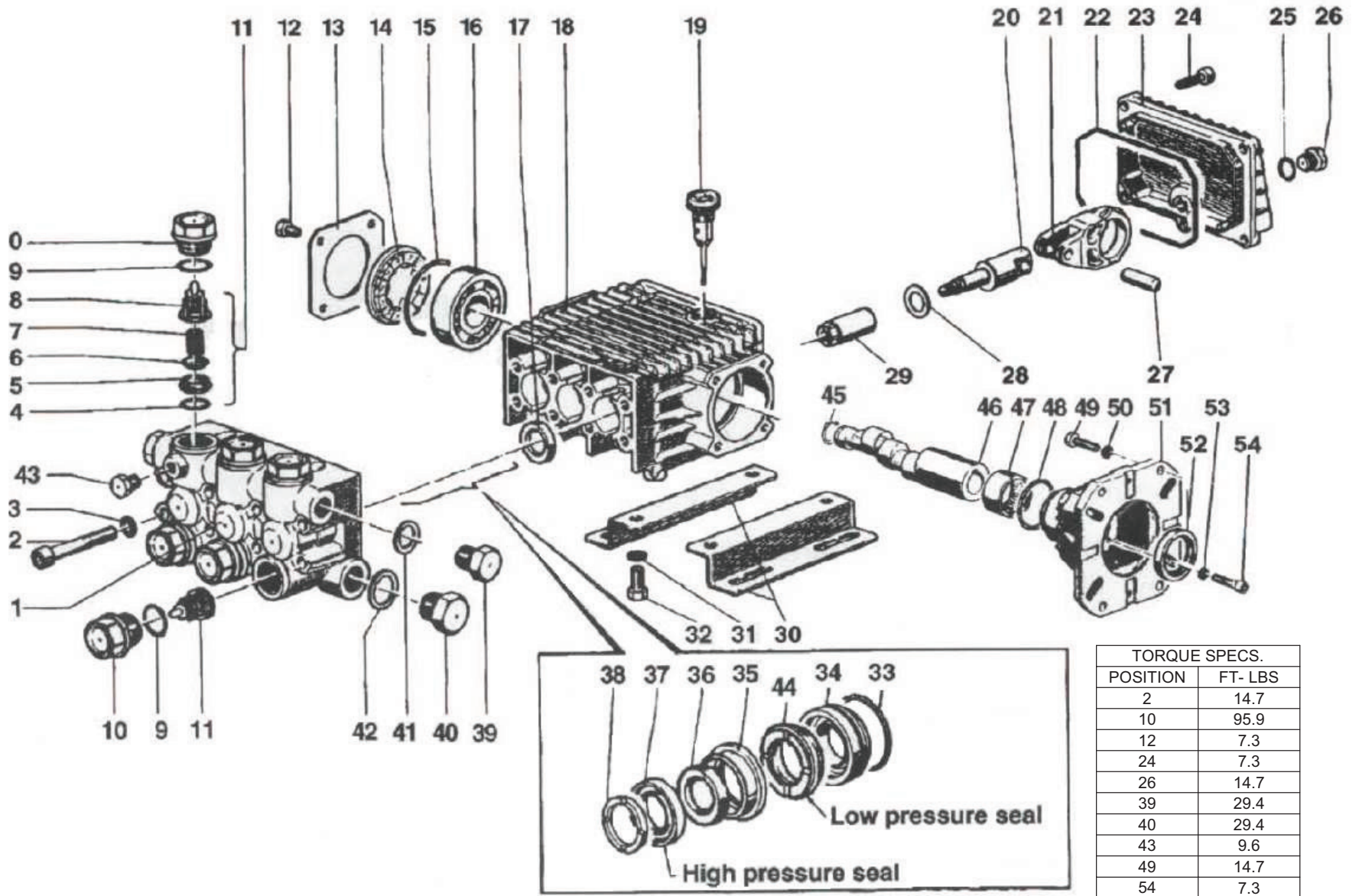
PUMP ASSEMBLY

ITEM	DESCRIPTION	PART #	QTY	ITEM	DESCRIPTION	PART #	QTY
1	VALVE CAP	46-0889	6	25	BEARING	48-0012	2
2	O-RING	25-0012	6	26	KEY	43-0048	1
3	VALVE (SEE KIT 70-0009)	22-0056	6	27	CRANKSHAFT	46-0050	1
4	MANIFOLD	46-0890	1	28	RETAINING RING	46-0103	6
5	WASHER	28-1039	8	29	CONNECTING ROD PIN	43-0032	3
6	BOLT	27-8185	8	30	OIL LEVEL INDICATOR	46-0114	1
7	WASHER	28-1038	2	31	PLUG	39-0017	1
8	PLUG	39-0019	2	32	O-RING	25-0014	4
9	WASHER	28-1002	2	33	BOLT	27-8404	5
10	PLUG	39-0018	2	34	CRANKCASE OPEN COVER	46-0295	1
11	HEAD RING (SEE KIT 70-0030 AND 852-0122)	70-0030	3	35	O-RING	25-0339	1
12	V-PACKING SUPPORT (SEE KIT 70-0147 AND 852-0122)	26-0098	3	36	BOLT	27-8435	6
13	O-RING (SEE KIT 70-0147 AND 70-0148 AND 852-0122)	25-0207	3	37	LOCKWASHER	29-0154	6
14	HIGH PRESSURE INTERMEDIATE SEAL RETAINER (SEE KIT 70-0148)	46-0659	3	38	CONNECTING ROD	46-0051	3
15	PRESSURE SEAL (SEE KIT 70-0147 AND 852-0122)	26-0197	3	39	PISTON ROD	46-0056	3
16	LOW PRESSURE SEAL RETAINER	46-0057	3	40	SLINGER WASHER	46-0146	3
17	O-RING (SEE KIT 852-0122)	25-0015	3	41	PLUNGER	46-0052	3
18	OIL SEAL	26-0047	3	42	BACK-UP RING	46-0109	3
19	BUSHING	9-0029	3	43	WASHER	28-0400	3
20	BOLT	27-8431	8	44	NUT / PISTON	46-0069	3
21	CRANKCASE COVER	46-0296	1	45	CRANKCASE	46-0047	1
22	SHIM	46-0113	1	46	OIL DIP STICK	46-0144	1
23	OIL SEAL	26-0049	1	47	CRANKCASE COVER	46-0336	1
24	O-RING	25-0013	2				

REPLACEMENT KITS

KIT#	DESCRIPTION	ITEMS	# OF ASSEMBLIES	# OF CYLINDERS
70-0009	VALVES	3	6	3
70-0030	HEAD RING	11	3	3
70-0147	V-PACKING	12, 13, 15	3	3
70-0148	INTERMEDIATE RETAINER	13, 14	3	3
852-0122	V-PACKING ASSY	11-13, 15, 17	3	3

PUMP ASSEMBLY (3-0350)



3-0350 091213

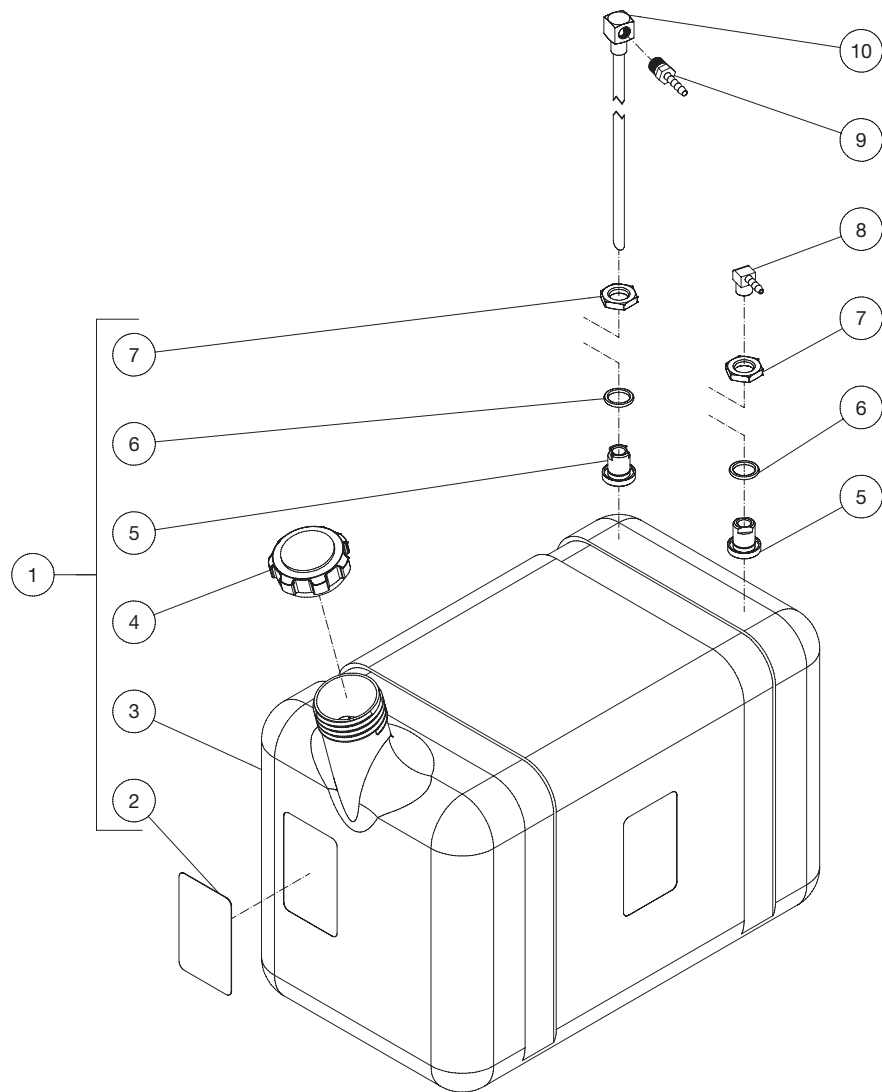
PUMP ASSEMBLY

ITEM	DESCRIPTION	PART #	QTY	ITEM	DESCRIPTION	PART #	QTY
1	MANIFOLD	46-1391	1	28	WASHER	46-1395	3
2	BOLT	27-8439	8	29	PLUNGER, 13 mm	46-1396	3
3	WASHER	29-0154	8	30	RAIL	-	2
4	O-RING (SEE KIT 70-0028)	25-0053	6	31	WASHER	-	4
5	VALVE SEAT (SEE KIT 70-0028)	SEE KIT	6	32	NUT	-	4
6	VALVE PLATE (SEE KIT 70-0028)	SEE KIT	6	33	O-RING (SEE KIT 70-0552)	SEE KIT	3
7	VALVE SPRING (SEE KIT 70-0028)	SEE KIT	6	34	PACKING RETAINER (SEE KIT 70-0552)	SEE KIT	3
8	VALVE CAGE (SEE KIT 70-0028)	SEE KIT	6	35	INTERMEDIATE RING (SEE KIT 70-0552)	SEE KIT	3
9	O-RING	25-0012	6	36	PACKING (SEE KIT 70-0552 & 70-0553)	SEE KIT	3
10	VALVE PLUG	39-0071	6	37	PACKING (SEE KIT 70-0552 & 70-0553)	SEE KIT	3
11	VALVE ASSEMBLY (SEE KIT 70-0028)	46-0565	6	38	HEAD RING (SEE KIT 70-0552)	SEE KIT	3
12	BOLT	27-8000	4	39	CAP SCREW	39-0018	1
13	COVER/CRANKCASE CLOSED	46-0084	1	40	CAP SCREW	39-0019	1
14	SPACER	46-0574	1	41	WASHER	28-0600	1
15	O-RING	25-0060	1	42	WASHER	46-1402	1
16	BALL BEARING	46-1392	1	43	CAP SCREW	39-0032	1
17	OIL SEAL (SEE KIT 70-0391)	26-0046	3	44	SEAL, LOW PRESS (SEE KIT 70-0552 & 70-0553)	SEE KIT	1
18	CRANKCASE	46-0570	1	45	RETAINING RING	46-0104	1
19	OIL DIPSTICK	46-0143	1	46	CRANKSHAFT	46-1404	1
20	PISTON GUIDE	46-1393	3	47	ROLLER BEARING	48-0040	1
21	CONNECTING ROD	46-0572	3	48	O-RING	25-0316	1
22	O-RING	46-1394	1	49	BOLT	-	4
23	REAR COVER	46-0571	1	50	WASHER	-	4
24	BOLT	24-8401	5	51	GAS FLANGE	38-0038	1
25	O-RING	25-0014	1	52	OIL SEAL	26-0181	1
26	CAP SCREW	39-0017	1	53	WASHER	29-0153	4
27	PIN	43-0079	3	54	SCREW	27-8404	4

REPLACEMENT KITS

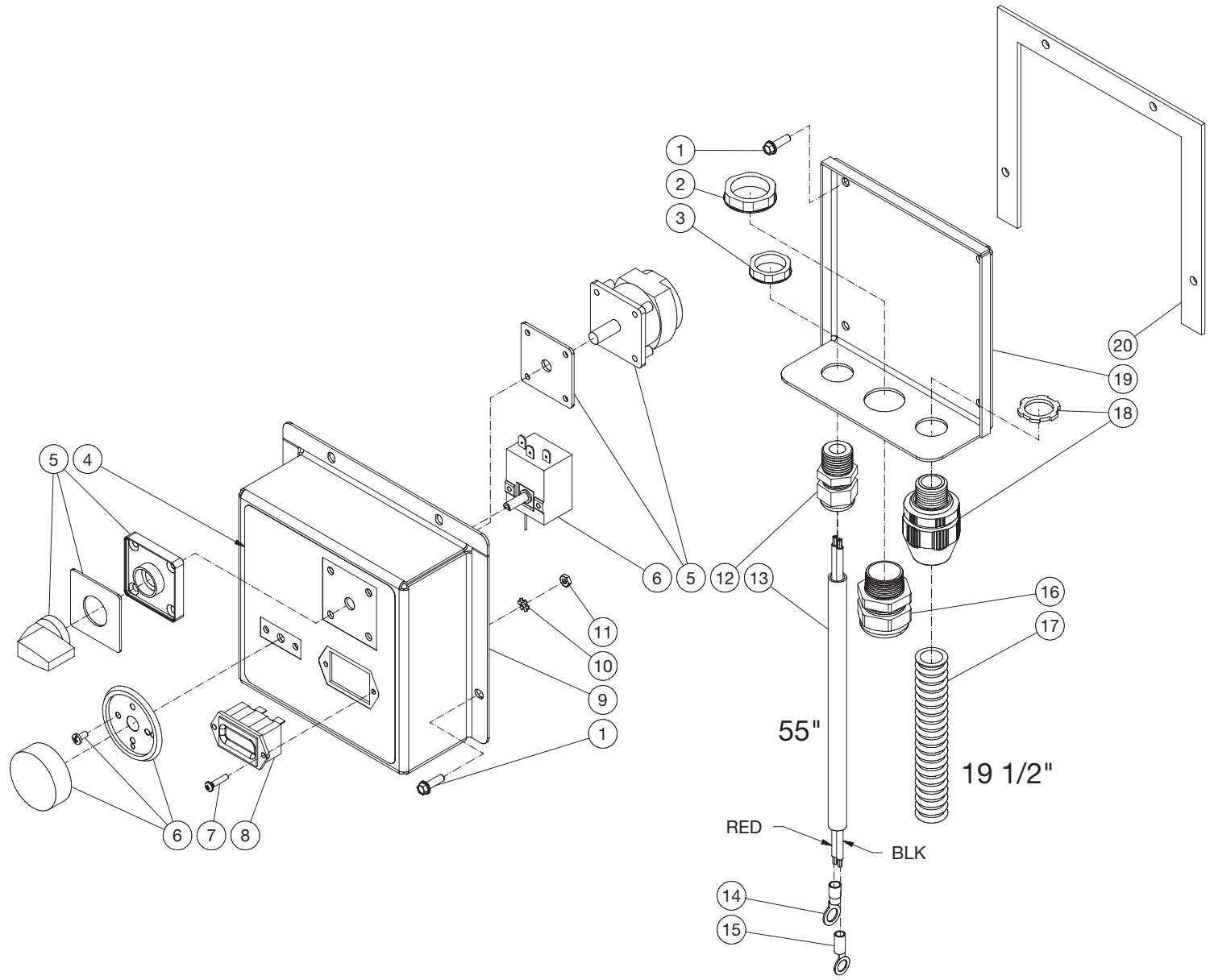
KIT #	DESCRIPTION	ITEMS	# OF ASSEMBLIES	# OF CYLINDERS
70-0028	KIT - VALVE	4,5,6,7,8,11	6,6,6,6,6,6	3
70-0391	KIT - OIL SEAL	17	3	3
70-0552	KIT - PRESSURE SEAL	33,34,35,36,37,38,44	1,1,1,1,1,1,1	1
70-0553	KIT - GENERAL PRESSURE SEAL	36,37,44	3,3,3	3

BURNER FUEL TANK



BURNER FUEL TANK ASSY - 12V 101717 CH			
BURNER FUEL TANK ASSEMBLY			
ITEM	TITLE	PART #	QTY
1	FUEL TANK ASSY (INC 2-7)	850-0307	1
2	DECAL-CAUTION RISK OF FIRE (SEE 71-3003)	N/A	1
3	FUEL TANK	N/A	1
4	FUEL CAP	12-0033	1
5	BULKHEAD FITTING	23-0408	2
6	O-RING	25-0427	2
7	NUT	23-0409	2
8	ELBOW	23-0054	1
9	BARB	23-0051	1
10	FUEL PICK-UP	33-0352	1

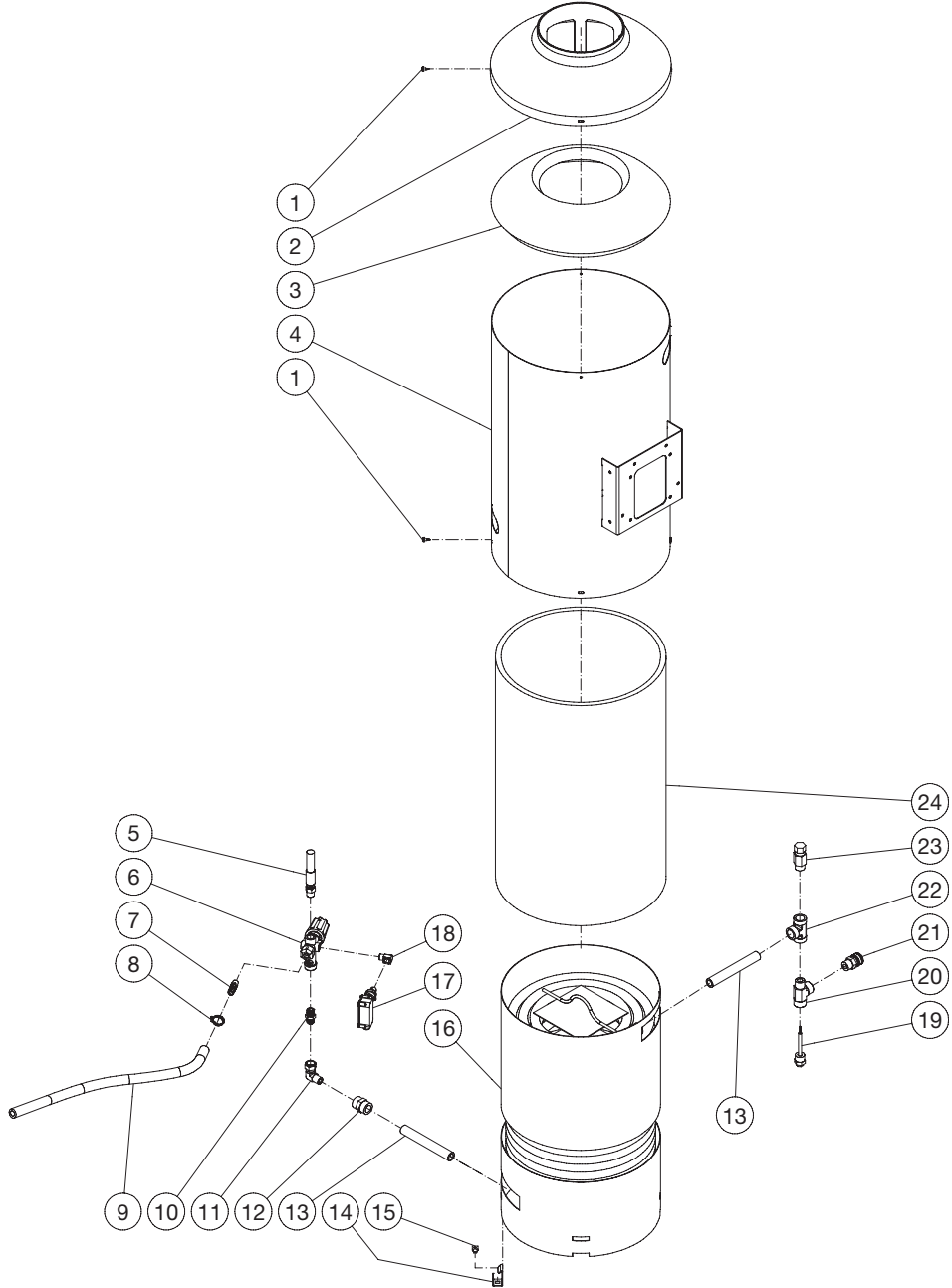
ELECTRIC BOX ASSEMBLY



ELECTRIC BOX ASSY - 12V 010218 CH

ELECTRIC BOX ASSY - 12V 010218 CH			
ELECTRIC BOX ASSEMBLY			
ITEM	TITLE	PART #	QTY
1	BOLT	27-9526	8
2	ELECTRICAL LOCKNUT	32-0292	1
3	ELECTRICAL LOCKNUT	32-0108	1
4	DECAL - 12V ELECTRIC PANEL	N/A	1
5	CAM SWITCH	32-1222	1
6	ADJUSTABLE THERMOSTAT	32-0962	1
7	SCREW	27-8881	2
8	HOUR METER	32-0668	1
9	ELECTRIC BOX COVER	20-1511A18	1
10	STAR WASHER	28-1009	2
11	NUT	30-0052	2
12	STRAIN RELIEF	32-0437	1
13	CORD - 10/2 *(FIVE FEET REQUIRED)	32-1226	1
14	TERMINAL RING	32-1138	1
15	TERMINAL RING	32-0639	1
16	CORD RELIEF	9-0046	1
17	CONDUIT FLEX *(TWO FEET REQUIRED)	32-0253	1
18	CONDUIT FITTING	32-0255	1
19	ELECTRIC BOX BACK	20-1510A18	1
20	GASKET	26-0384	1
*MUST ORDER IN ONE FOOT LENGTHS			

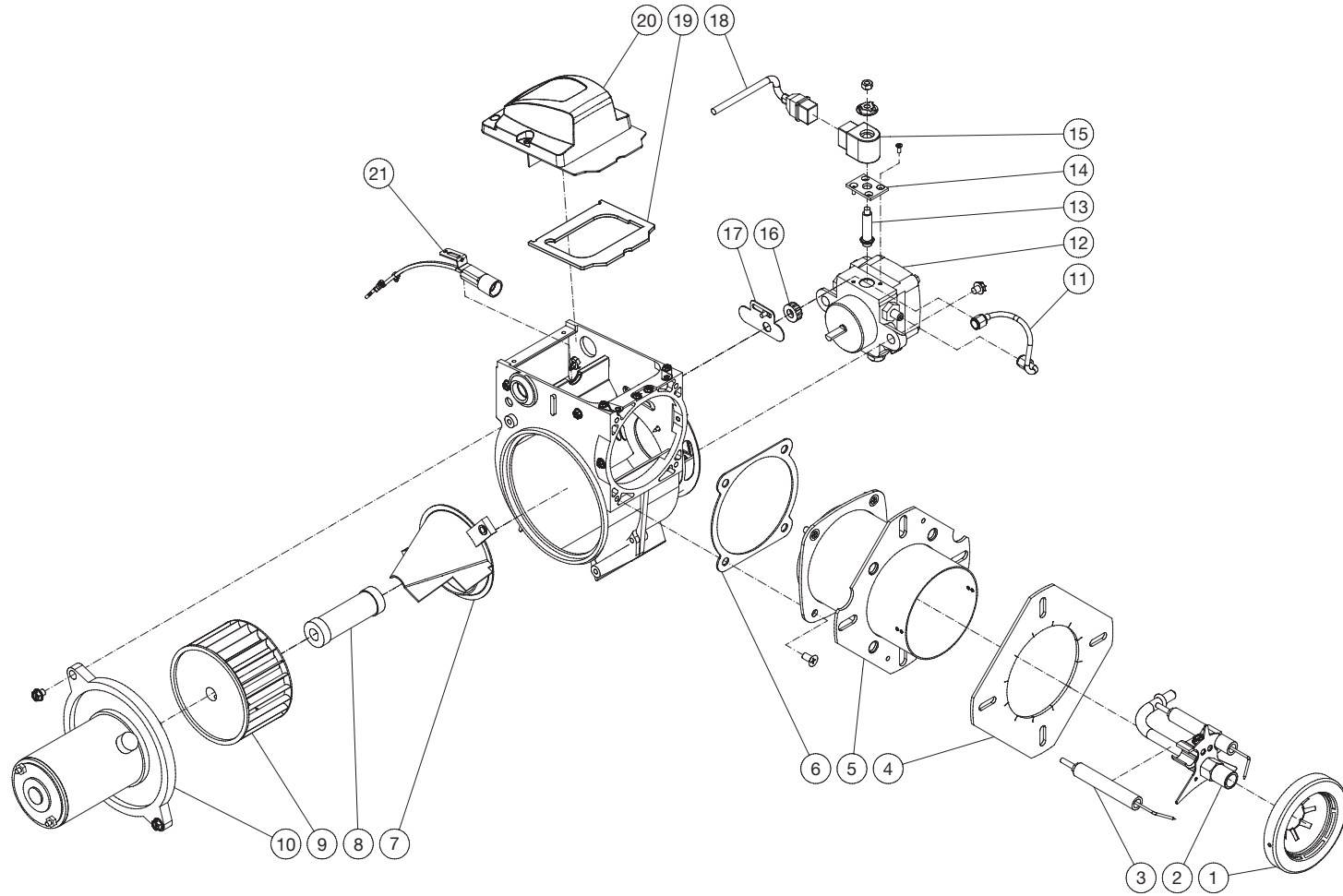
COIL ASSEMBLY



COIL ASSEMBLY - 12V VERTICAL 010218 CH

COIL ASSEMBLY - 12V VERTICAL 010218 CH			
COIL ASSEMBLY			
ITEM	TITLE	PART #	QTY
1	BOLT	27-3062	8
2	DOME	20-0707A18	1
3	INSULATION BLANKET *(TWO FEET REQUIRED)	33-0032	1
4	OUTER WRAP	20-1512A18	1
-	OUTER WRAP - S.S. (HX-0273)	21-0328	1
5	HIGH PRESSURE HOSE	15-0194	1
6	UNLOADER	850-0252	1
7	HOSE BARB	23-0120	1
8	HOSE CLAMP	42-0011	1
9	HOSE *(TWO FEET REQUIRED)	15-0007	1
10	NIPPLE	24-0002	1
11	ELBOW	24-0046	1
12	ADAPTER	24-0243	1
13	PIPE NIPPLE	24-0254	2
14	COIL MOUNT BRACKET	20-1513	4
15	CLIP NUT	30-6027	4
16	HEAT EXCHANGER COIL	66-0027	1
17	PRESSURE SWITCH	22-0243	1
18	ELBOW	23-0014	1
19	ADJUSTABLE THERMOSTAT	32-0962	1
20	STREET TEE	24-0242	1
21	QUICK CONNECT SOCKET	17-0029	1
22	TEE	24-0055	1
23	SAFETY RELEIF VALVE	22-0434	1
24	INSULATION BLANKET *(FOUR FEET REQUIRED)	33-0540	1
*MUST ORDER IN ONE FOOT LENGTHS			

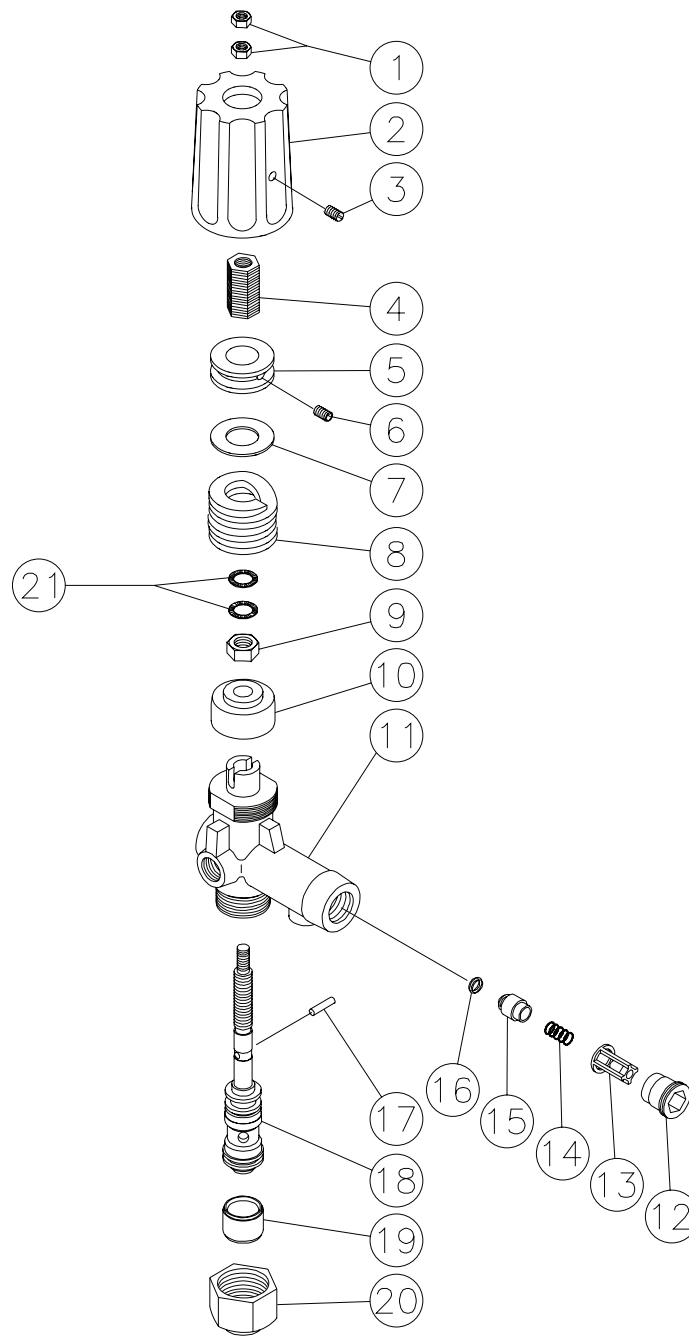
BURNER ASSEMBLY (4-0036)



4-0036 101917 CH

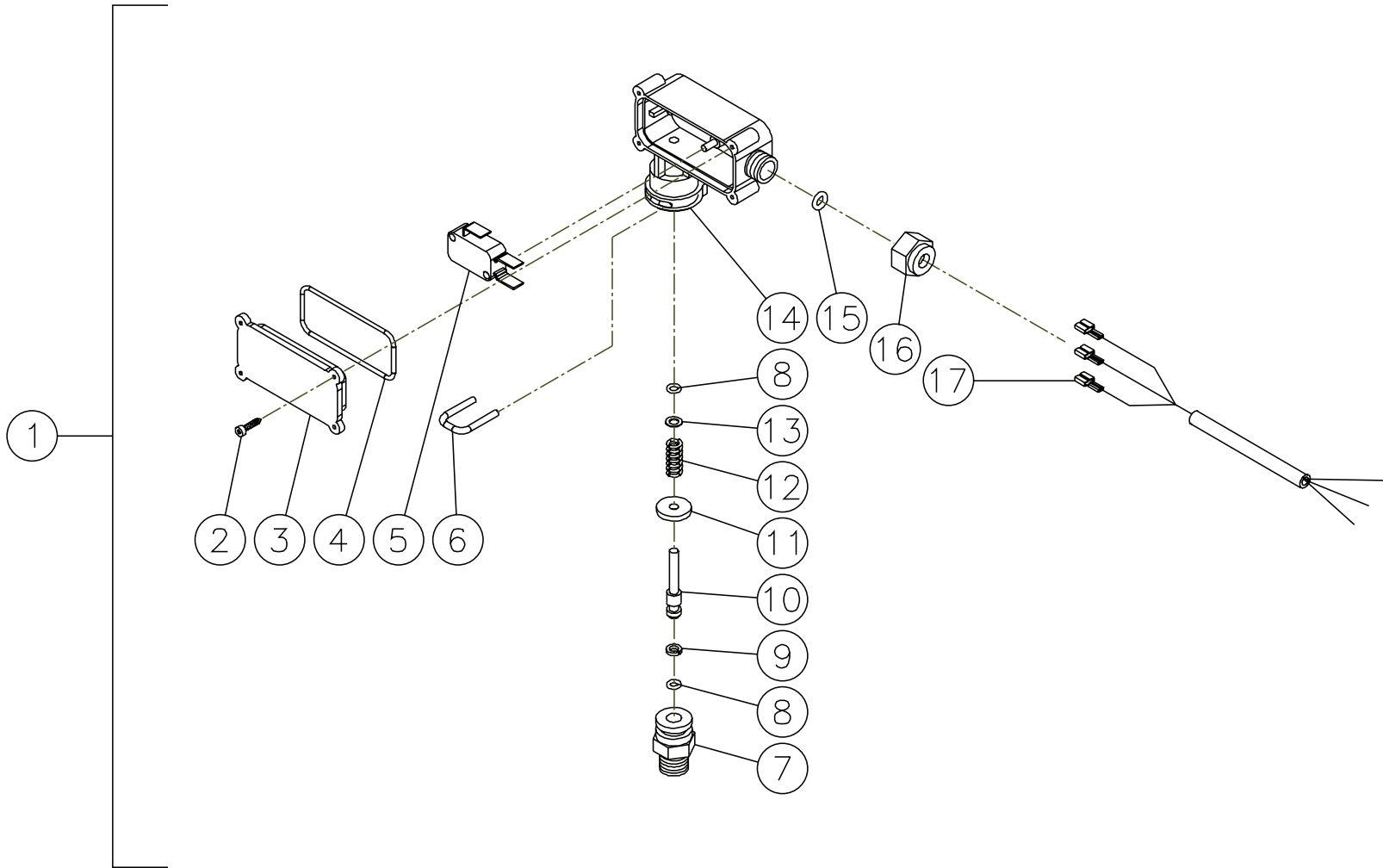
4-0036 BURNER ADV 12V 101917			
BURNER			
ITEM	TITLE	PART #	QTY
1	COMBUSTION HEAD	44-0011	1
2	ELECTRODE KIT	44-0111	1
3	ELECTRODE	44-0114	2
4	FLANGE MOUNTING GASKET	44-0108	1
5	AIR TUBE	44-0169	1
6	GASKET FLANGE	26-0138	1
7	AIR GUIDE	44-0051	1
8	COUPLING	44-0127	1
9	BLOWER WHEEL	44-0124	1
10	MOTOR	2-0139	1
11	TUBING	44-0025	1
12	FUEL PUMP	3-0434	1
13	SOLENOID PISTON	46-1012	1
14	BASE PLATE	46-1004	1
15	COIL	46-1015	1
16	NUT	44-0022	1
17	ADJUSTMENT PLATE	44-0031	1
18	CORD SET	44-0122	1
19	IGNITER GASKET KIT	70-0369	1
20	IGNITER ASSEMBLY W/BASEPLATE	44-0125	1
21	CAD CELL DETECTOR	44-0048	1

UNLOADER ASSEMBLY (850-0252)



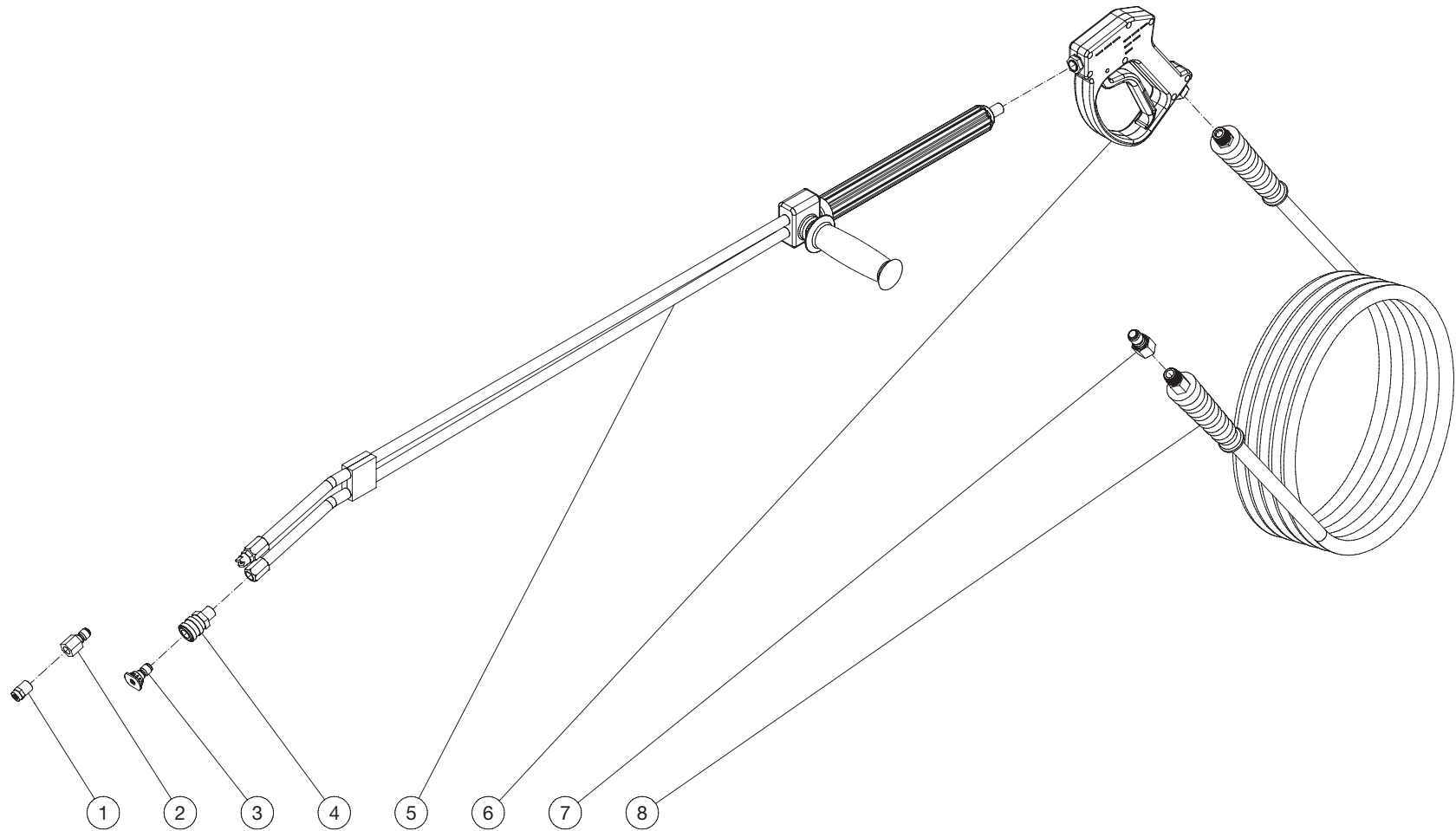
UNLOADER (850-0252)			
REF. #	DESCRIPTION	PART #	QTY.
1	Hex Nut	8-0362	2
2	Cover	7-0098	1
3	Set Screw	27-4280	1
4	Adjusting Insert- Brass	8-0363	1
5	Adjustment Nut	8-0364	1
6	Set Screw	8-0365	1
7	Glide Ring	8-0366	1
8	Spring	49-0104	1
9	Hex Nut	8-0367	1
10	Bushing	8-0368	1
11	Unloader Body	8-0369	1
12	Retainer	8-0269	1
13	Valve Housing	8-0104	1
14	Spring	49-0023	1
15	Valve	8-0105	1
16	O-ring	25-0036	1
17	Cylinder Pin	8-0372	1
18	Piston Repair Kit	70-0243	1
19	Spacer	8-0371	1
20	Stop Nut	8-0157	1
21	Washer	29-0154	2
	Check Valve Repair Kit (Includes 13-16)	70-0244	
	Unloader Complete	850-0252	

PRESSURE SWITCH (22-0243)



PRESSURE SWITCH								
REF. #	DESCRIPTION	PART #	QTY.		REF. #	DESCRIPTION	PART #	QTY.
1	Pressure Switch- 15 BAR	22-0171	1		11	Washer	N/A	1
-	Pressure Switch- 25 BAR	22-0243	1		12	Spring- 15 BAR	49-0144	1
2	Screw	N/A	4		-	Spring- 25 BAR	49-0145	1
3	Cover	N/A	1		13	Washer	N/A	1
4	O-ring (See 70-0306)	N/A Sep.	1		14	Plastic Housing	N/A	1
5	Micro Switch	N/A	1		15	O-ring (See 70-0306)	N/A Sep.	1
6	Retainer Clip	N/A	1		16	Nut- 15 BAR	N/A	1
7	Body	N/A	1		-	Nut- 25 BAR	N/A	1
8	O-ring (See 70-0306)	N/A Sep.	2		17	Wire Assembly	N/A	1
9	Back-up Ring (See 70-0306)	N/A Sep.	1			O-ring Repair Kit (Inc. 4, 8-9, 15)	70-0306	
10	Piston	N/A	1					

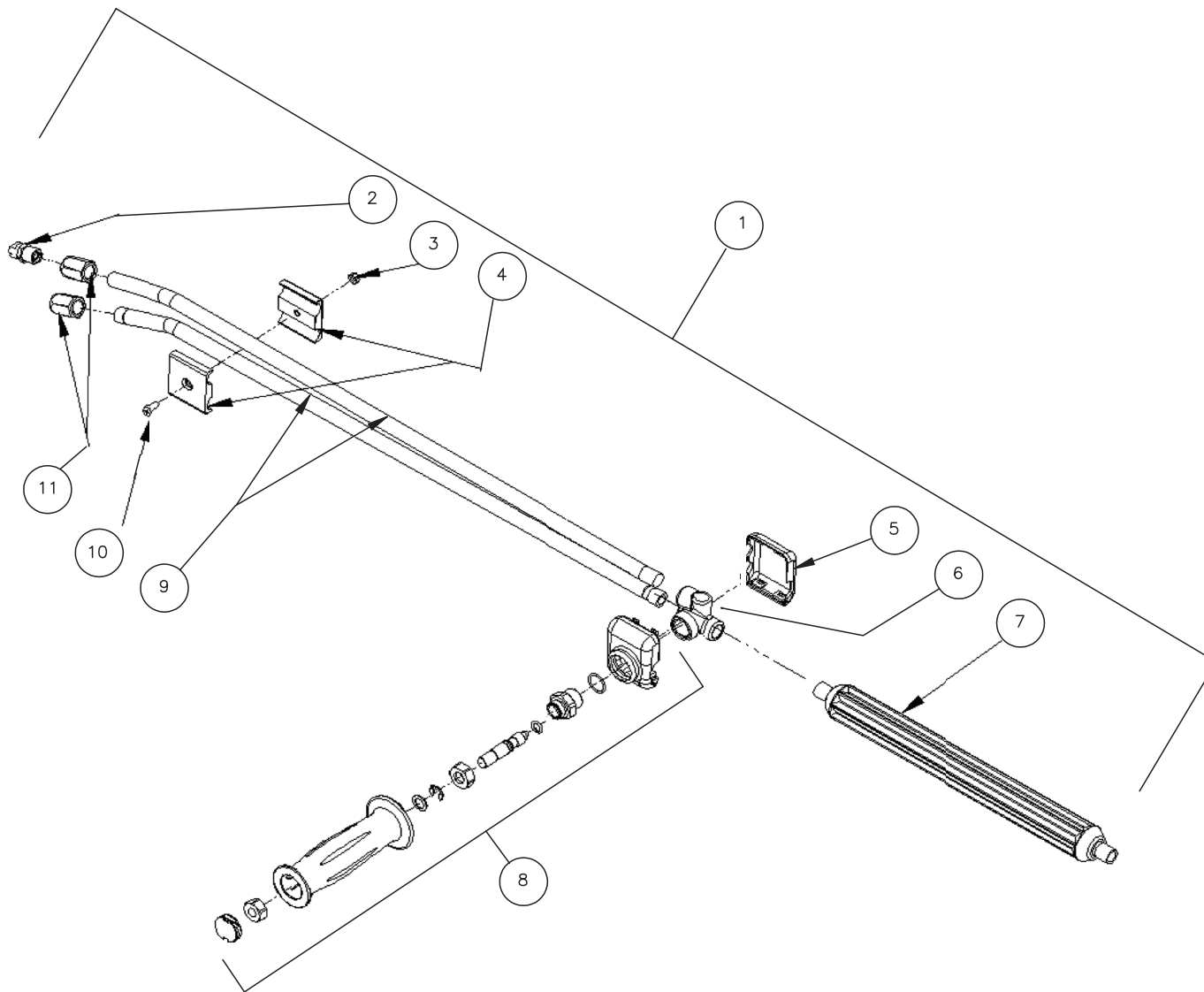
GUN/WAND/HOSE ASSEMBLY



GUN WAND AND HOSE ASSEMBLY - 12V 101917 CH

GUN WAND AND HOSE ASSEMBLY - 12V 101917 CH			
GUN / WAND / HOSE			
ITEM	TITLE	PART #	QTY
1	NOZZLE - 2503	18-0151	1
2	QUICK CONNECT	17-0017	1
3	NOZZLE - 00037	18-0445	1
-	NOZZLE - 15037	18-0446	1
-	NOZZLE - 25037	18-0447	1
-	NOZZLE - 40037	18-0448	1
4	QC SOCKET	17-0028	1
5	DUAL LANCE	16-0417	1
6	GUN	16-0446	1
7	QUICK CONNECT	17-0006	1
8	HOSE	15-0166	1

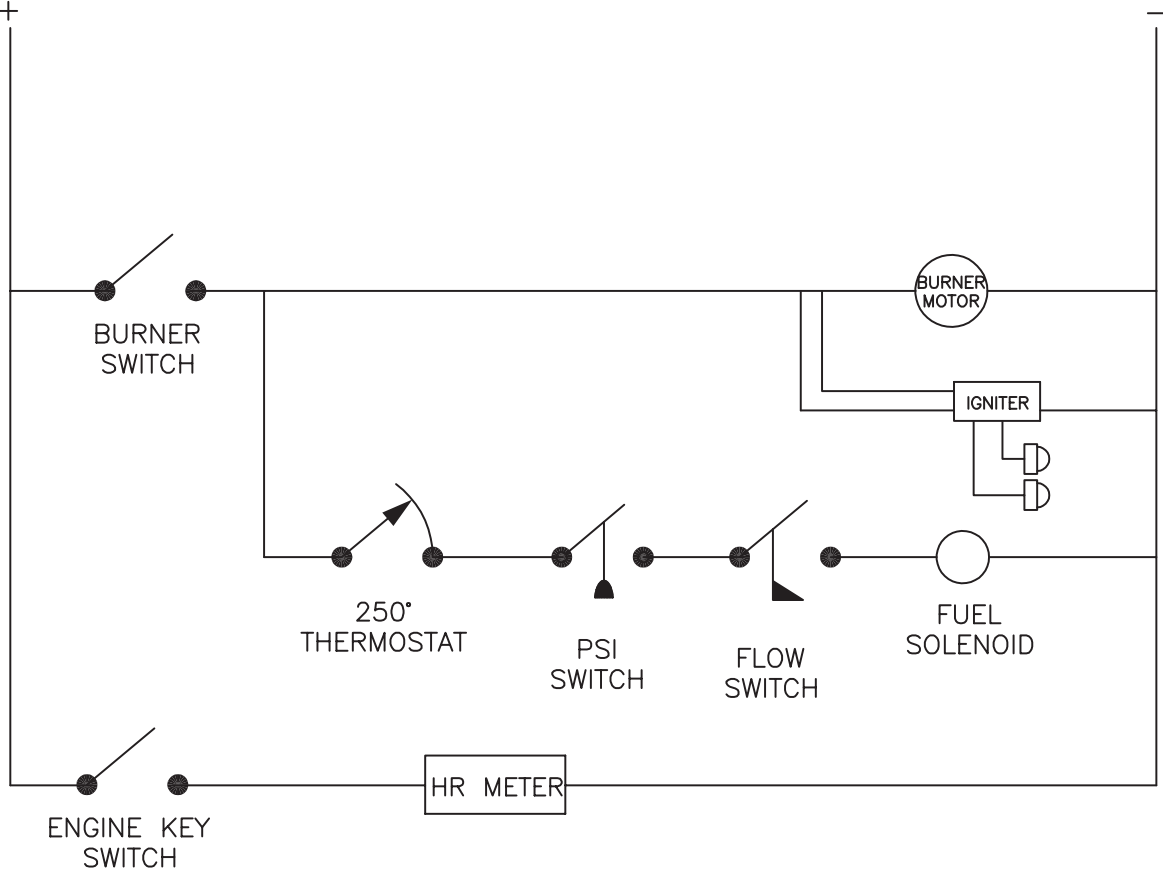
DUAL LANCE ASSEMBLY (16-0417)



16-0416_16-0417-102405-RZ

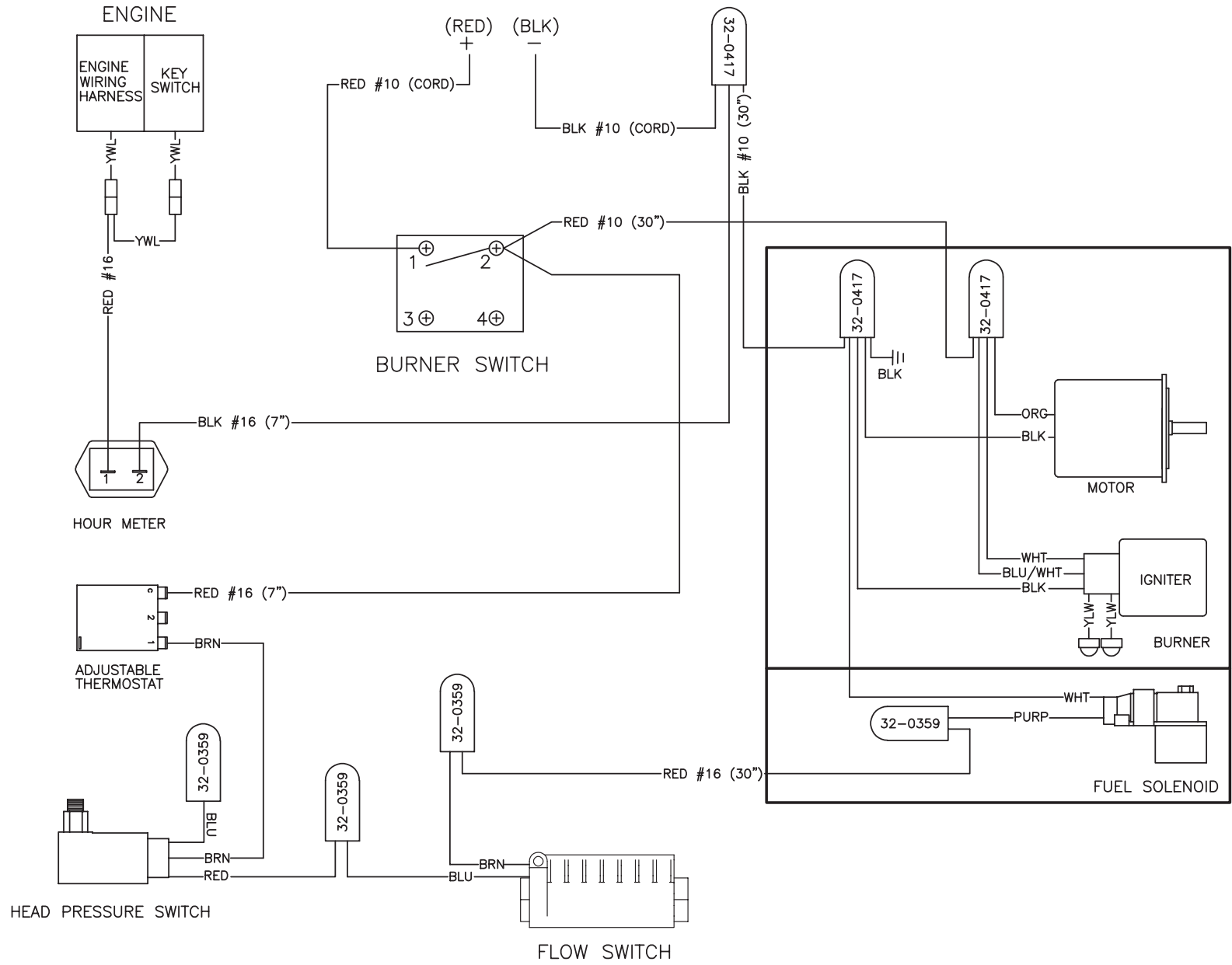
DUAL LANCE ASSEMBLY (16-0416 & 16-0417)			
REF. #	DESCRIPTION	PART #	QTY.
1	Dual Lance Assembly - 36" (Inc. 2-11)	16-0416	1
-	Dual Lance Assembly - 48" (Inc. 2-11)	16-0417	1
2	Detergent Nozzle	18-0110	1
3	Nut	30-6001	1
4	Clamp	16-0420	2
5	Lower Valve Cover (See 16-0416 or 16-0417)	N/A Sep.	1
6	Housing (See 16-0416 or 16-0417)	N/A Sep.	1
7	Lance	16-0419	1
8	Handle Repair Kit	70-0419	1
9	Lance (See 16-0416)	N/A Sep.	2
-	Lance (See 16-0417)	N/A Sep.	2
10	Screw	27-8196	1
11	Nozzle Adapter	24-0280	2

WIRING SCHEMATIC



WS - 12V VERTICAL 111317 CH

WIRING DIAGRAM



WD - 12V VERTICAL 111317 CH

Manufactured by Mi-T-M
50 MI-T-M Drive, Peosta IA 52068
563-556-7484/ Fax 563-556-1235