

# Mi-T-M® CORPORATION

8650 Enterprise Drive, Peosta IA 52068  
563-556-7484 / Fax 563-556-1235

## PARTS LIST FOR

**HSE-2504-0M10** (AFTER SERIAL #15005912)  
**HSE-2504-0M30** (AFTER SERIAL #15006771)  
**HSE-3004-0M10** (AFTER SERIAL #15006433)  
**HSE-3004-0M30** (AFTER SERIAL #15006771)  
**HSE-3504-0M10** (AFTER SERIAL #15006097)  
**HSE-3504-0M30** (AFTER SERIAL #15006771)



PUMP OIL GRADE:	Mi-T-M AW-4085-0016
PUMP OIL CAPACITY:	41 oz. / 1.2 liters
FUEL NOZZLE:	1.75 60°B Delavan
BTU INPUT:	294,000
PRESSURE NOZZLE SIZE:	
FOR HSE-2504/3004:	4.0
FOR HSE-3504:	3.5

This Parts Listing has been compiled for your benefit. You can be assured your Mi-T-M hot water pressure washer was constructed and designed with quality and performance in mind using over 25 years experience in the pressure washer business. Each component has been rigorously tested to insure the highest level of acceptance.

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 Mi-T-M parts for repair of your pressure washer. Failure to do so can cause hazardous operating conditions and will VOID warranty.
2. This unit has multiple safety devices which should never be altered, modified, removed or made inoperable. If a device fails, replace immediately with only genuine manufacturer replacement parts.
3. Electrical System: The unit must be connected to a properly grounded electrical source which provides the correct voltage and adequate fuse protection. Disconnect from power source when making repairs. Never assume the pressure washer is safe to work on just because it is not operating. It could restart at any time. Never operate the pressure washer with electrical enclosures open, removed or damaged. Do not allow metal components of the pressure washer to come in contact with live electrical components.
4. Do not operate the unit without all protective covers in place. Know how to stop and bleed pressures quickly. Be thoroughly familiar with controls.
5. Before servicing the unit, turn unit off, and trigger the gun to release trapped pressure. Do not make repairs while the unit is running. Service in a clean, dry, flat area.
6. After testing the machine, DO NOT leave the pressurized unit unattended. Shut off the unit and release trapped pressure before leaving.

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**NOTES**

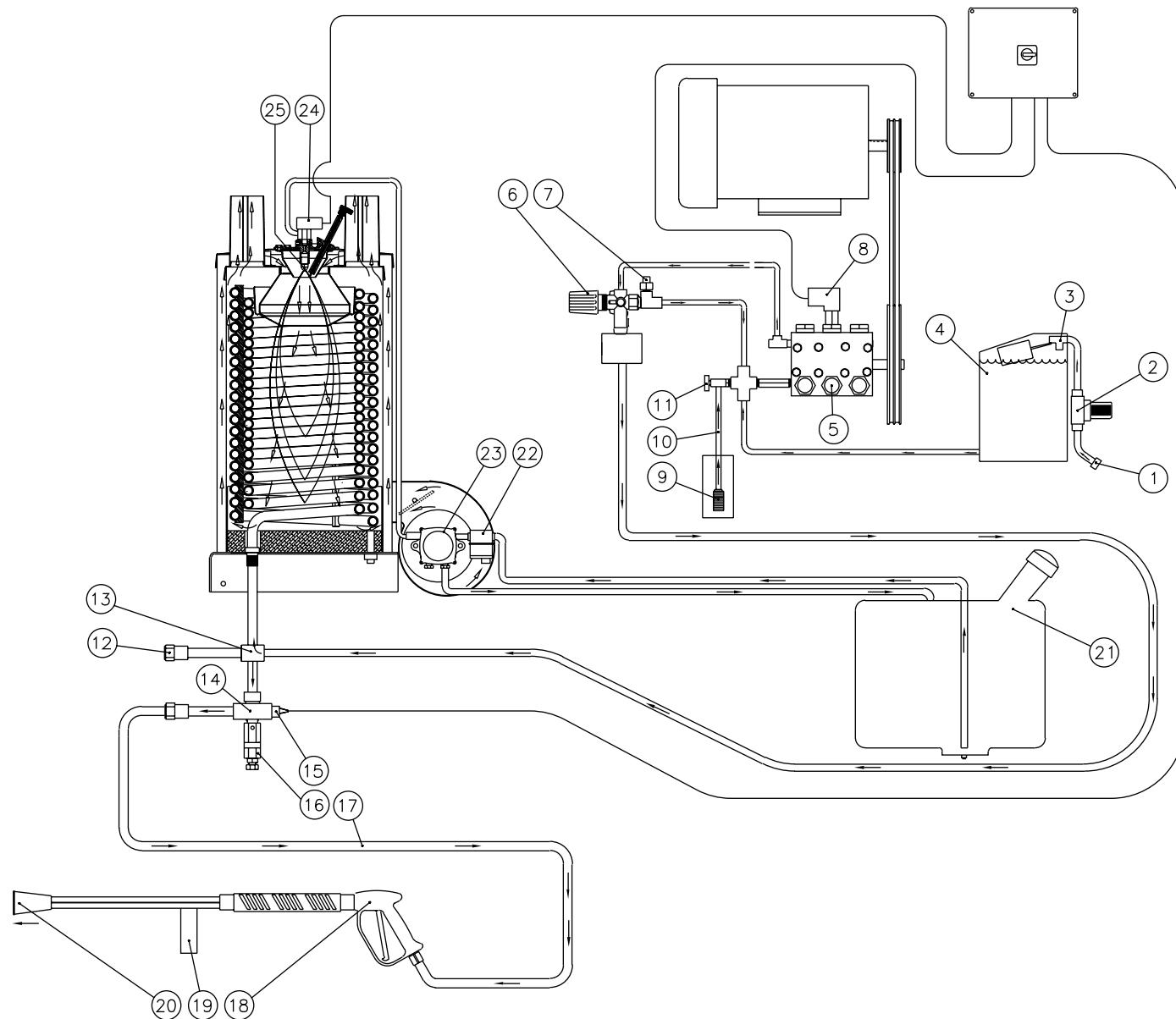
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## SPECIFICATIONS

HSE-2504/3004/3504-0M10/0M30

MODEL NUMBER	HSE-2504-0M10	HSE-2504-0M30	HSE-3004-0M10	HSE-3004-0M30	HSE-3504-0M10	HSE-3504-0M30
Operating Pressure (PSI/Bar):	2500/ 172		3000/ 207		3500/ 241	
Water Volume (GPM/lpm):	3.2/ 12.1		3.5/ 13.3		3.3/ 12.5	
Outlet Water Temperature (F/C):	140 F/ 78 C (+/- 10 F) rise above inlet ambient (210 F/ 99 C maximum)					
<b>Electrical System:</b>						
Phase	Single	Three	Single	Three	Single	Three
Hz			60			
Voltage	208-230	208-230/460	208-230	208-230/460	208-230	208-230/460
Total System Amperage	25	16/8	36	24/12	39	28/14
On/ Off Switch	Industrial Cam Switch					
<b>Motor (Pump):</b>	TEFC					
Horsepower	6		8		10	
RPM			1750			
Amperage	23.5	14.8/7.4	34.5	22/11	37.5	25/12.5
Service Factor	1.15		1.00	1.15	1.00	1.15
<b>High Pressure Pump:</b>	Belt Driven, Oil Bath, Triplex Piston					
Oil Type	SAE20-40W					
Oil Capacity (oz./liters)	41/1.2					
Plungers	Ceramic					
Manifold	Forged Brass					
Valves	Stainless Steel					
<b>Water System:</b>						
Inlet Water Strainer	Removable Bowl for inspection and cleaning of Stainless Steel Screen					
Float Tank Capacity (Gal./ Liters)	2.0 / 7.6					
Unloader	Pressure Trapping, Preset					
Heat Dump Valve	Relieves heated water during unloader bypass stage					
Detergent System	Adjustable high pressure					
<b>Burner Fuel System:</b>						
Fuel Type	No.1 or No.2 Fuel Oil, Diesel or Kerosene					
Fuel Capacity (Gal./liters)	10/37.9					
Fuel Filter/ Water Separator	Spin on (10 micron) filter/ E-Z water drain					
Fuel Pump	Two Line, Single Stage					
Fuel Pressure (PSI/ BAR)	145/ 10					
Fuel Nozzle	1.75 60 B Delavan					
Fuel Consumption (GPH/ LPH)	2.1/ 7.9 Cont. Burning					
<b>Burner Electrical System:</b>						
Voltage	208/ 230					
Amps	1.5					
<b>Heat Exchanger:</b>	Vertical, Top Fired, Dual Spiral Coil					
BTU Input	294,000					
Efficiency	86% with #2 Fuel Oil/ Diesel					
Smoke Density	0-3 per ASTM D2156					
<b>Safety Relief:</b>						
Pressure Switch	Shuts off burner fuel supply upon trigger release					
High Limit Switch	Shuts off burner fuel supply when outlet water temperature exceeds 210 F/ 99 C					
Fuel Solenoid Valve	120 Volt, controls fuel supply to burner					
Safety Relief	Relieves excess system pressure					
<b>High Pressure Nozzle:</b>	4				3.5	
Unit Net Weight (Lbs/Kg)	564/256	558/253	607/276	595/270	631/286	612/278
Unit Shipping Weight (Lbs/Kg)	694/315	688/312	737/335	732/332	761/345	742/337
Unit Net Dimension (In/Cm)	49.5Lx28Wx40.5H/126Lx70Wx103H					
Unit Shipping Dimension (In/Cm)	57.5Lx35.5Wx59.5H/146Lx90Wx151H					

## FLOW CHART



OMHSE064-120998-BAR

## GENERAL THEORY OF OPERATION

**WATER FLOW:** Connect a pressurized water source to the INLET GARDEN HOSE CONNECTION (1) and turn on the water supply. The water will flow through a WATER STRAINER (2) which has a removable inspection bowl and then through a FLOAT VALVE (3) into a WATER FLOAT TANK (4).

The water is then drawn into the TRIPLEX HIGH PRESSURE PUMP (5) which has an UNLOADER (6) that bypasses the water when the trigger gun is closed. To protect the pump from heated water during this bypass stage, a HEAT DUMP VALVE (7) will open at 140°F/60°C allowing the heated water to escape. The Heat Dump Valve automatically resets when the water cools. Attached to the pump is a PRESSURE SWITCH (8) that controls the fuel supply to the burner.

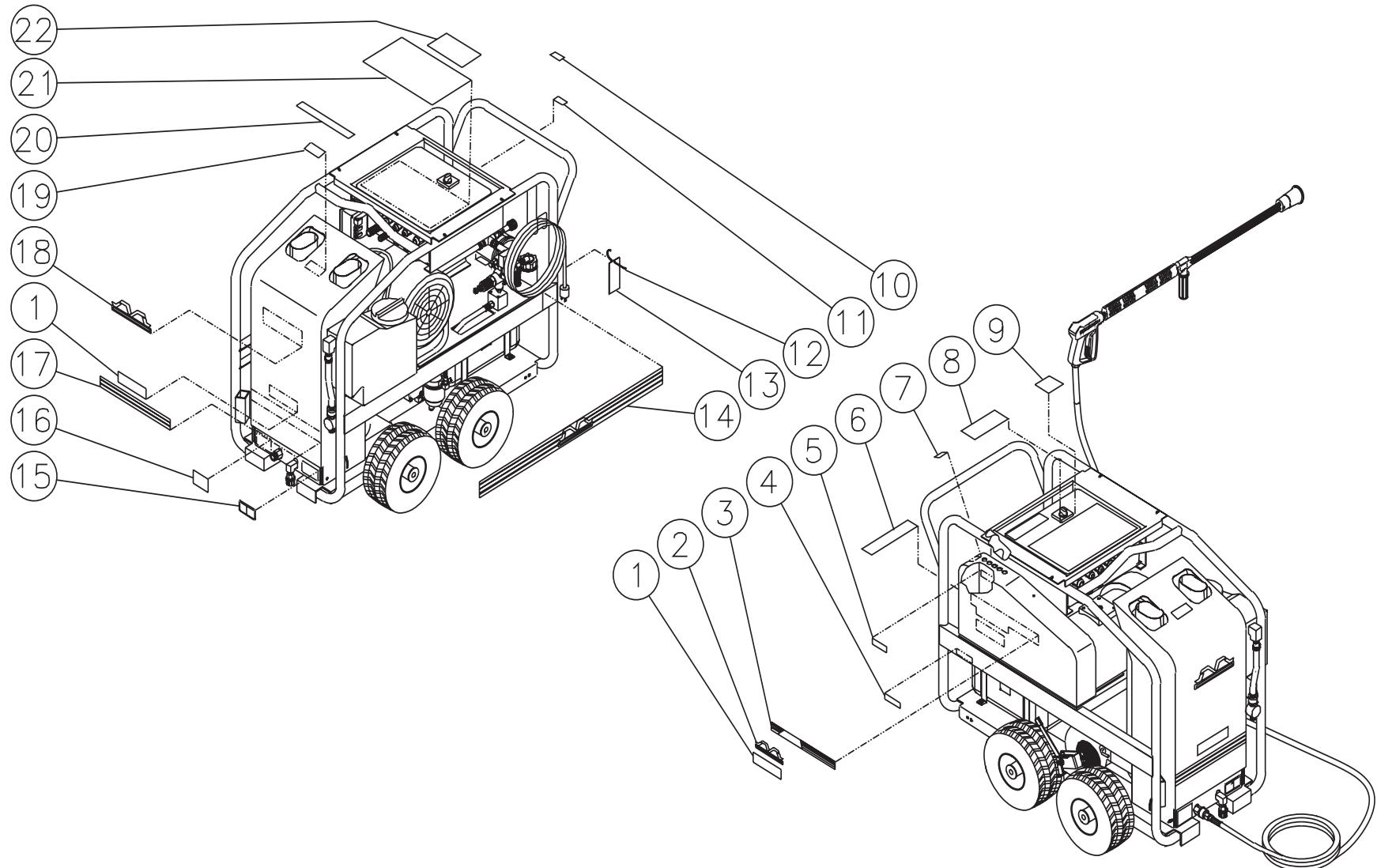
When using detergents, the solution passes through the DETERGENT STRAINER (9) located on the DETERGENT HOSE (10). The detergent solution then travels through the DETERGENT METERING VALVE (11).

From there, the water may be allowed to flow out of the DRAIN PLUG (12) or through HEAT EXCHANGER INLET (13) 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 safety system contains a HIGH TEMPERATURE LIMIT SWITCH (15) which senses the water temperature and shuts off the fuel supply to the burner if it gets too hot. If the unloader fails to bypass water or the burner remains on when the trigger gun is closed, the SAFETY RELIEF (16) will relieve and allow water to exit safely.

The heated water then flows through the HIGH PRESSURE HOSE (17) and to the TRIGGER GUN ASSEMBLY (18) which allows the operator to control the water spray. When the trigger gun is open, the water flows through the ADJUSTABLE PRESSURE DUAL LANCE (19) and exits the NOZZLE (20).

**FUEL FLOW:** The Fuel Pump draws fuel from the FUEL TANK (21) through a replaceable FUEL FILTER/WATER SEPARATOR (22) and into the FUEL PUMP (23). Fuel exits the fuel pump, into a FUEL SOLENOID VALVE (24) which controls fuel flow to the FUEL NOZZLE (25) where it ignites and burns in the heat exchanger.

## SAFETY DECAL PLACEMENT



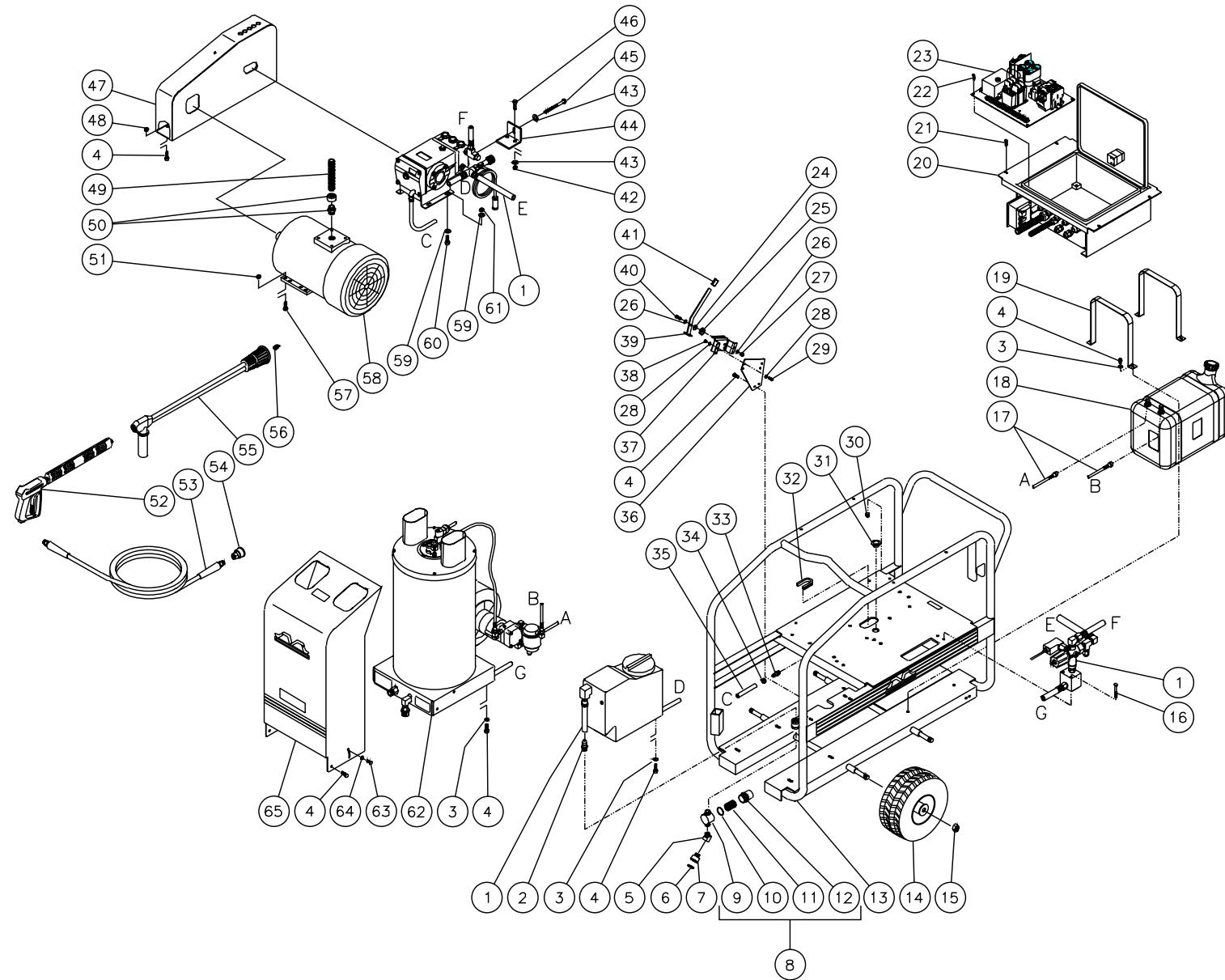
OMHSE021-083002-BAR

OMHSE021-083002-BAR

## SAFETY DECAL PLACEMENT

REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Decal- Die Cut 2504	34-0512	2	12	Cable Tie	33-0022	1
-	Decal- Die Cut 3004	34-0105	2	13	Decal- Warning: Hang Tag (E/S)	34-1035	1
-	Decal- Die Cut 3504	34-0034	2	14	Decal- Stripe w/Logo	34-0725	1
2	Mi-T-M Small Logo	62-0087	1	15	Decal- Warning: Don't Modify Plumbing (E/S) (See 34-9012)	N/A Sep.	1
3	Decal- Stripe	34-0501	1	16	Decal- Data Plate	N/A	1
4	Decal- Pump Oil Drain (E/S) (See 34-9012)	N/A Sep.	1	17	Decal- Stripe	34-0560	1
5	Decal- Warning: Guard in Place (E/S) (See 34-9012)	N/A Sep.	1	18	Mi-T-M Large Logo	62-0093	1
6	Decal- Warning: Do Not Use Gasoline (E/S) (See 34-9012)	N/A Sep.	1	19	Decal- Warning: Hot Coil Exhaust (E/S) (See 34-9012)	N/A Sep.	1
7	Decal- American Flag	34-0521	1	20	Decal- Terminal Stripe (See 34-9012)	N/A Sep.	1
8	Decal- Caution: Auto Start/Stop Option (E/S) (See 34-9012)	N/A Sep.	1	21	Decal- Warning/Caution/Operation (HSE-2504-0M10) (E/S) (See 34-9012)	N/A Sep.	1
9	Decal- Steam Instructions Option (E/S) (See 34-9012)	N/A Sep.	1	22	Decal- Off/Pump/Burner/Steam (See 34-9012)	N/A Sep.	1
10	Decal- Pump I.D.	34-0396	1	Safety Decal Kit (Includes 4-6, 8-9, 11, 15, 19-22)			
11	Decal- Detergent Adjustment (E/S) (See 34-9012)	N/A Sep.	1				

## FRAME ASSEMBLY

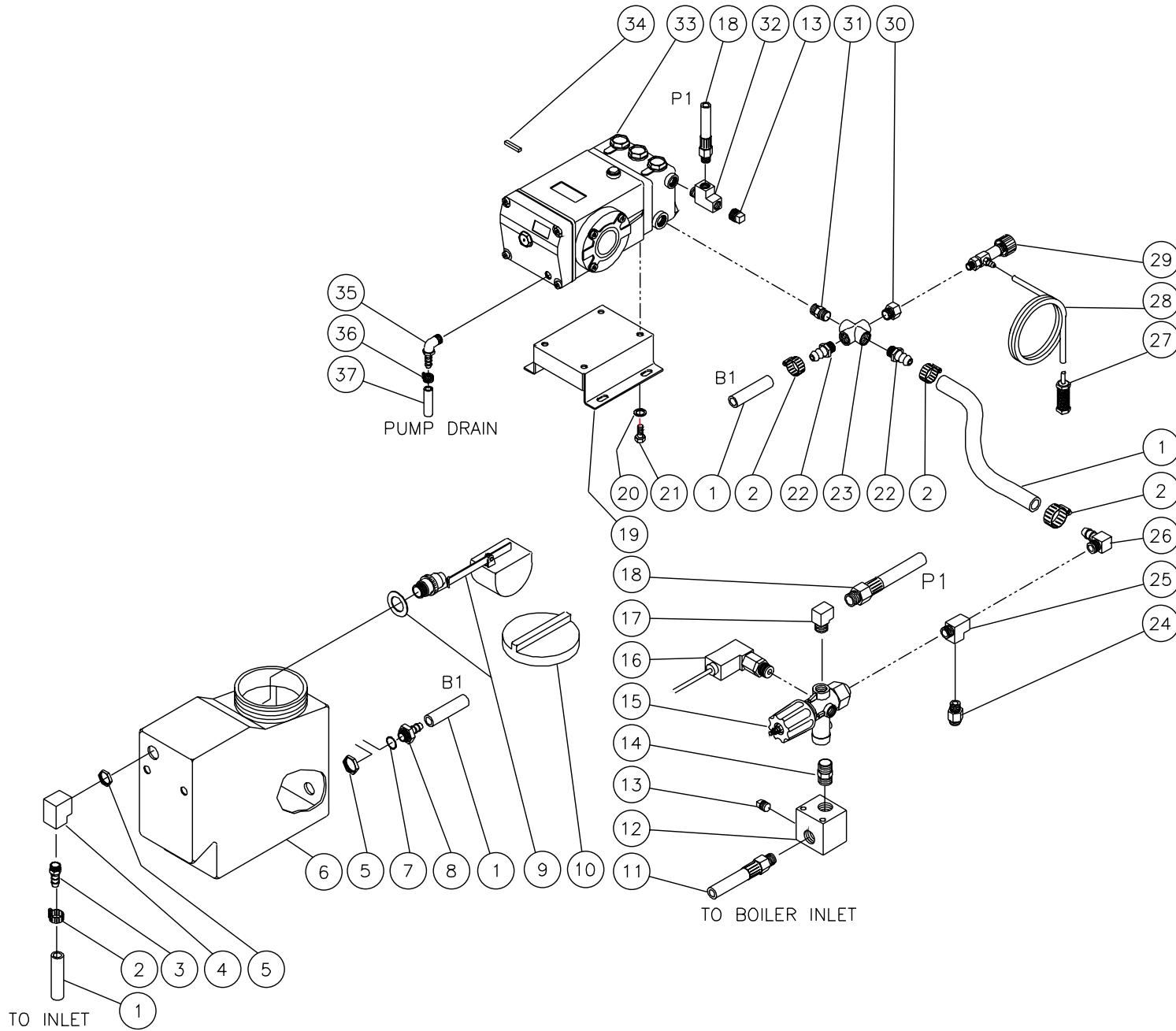


OMHSE016-060702-BAR

## FRAME ASSEMBLY

REF #	DESCRIPTION	PART #	QTY.	REF #	DESCRIPTION	PART #	QTY	REF #	DESCRIPTION	PART #	QTY
1	Float Tank/Pump/Unloader Assy. (See Exploded Drawing)	N/A Sep.	1	26	Washer	28-0003	2	50	Conduit	32-0488	1
2	Hose Barb	23-0005	1	27	Locknut	30-0157	1	51	Hex Nut	30-3030	4
3	Flatwasher	28-0022	12	28	Washer	28-0002	8	52	Gun/Lance Assembly	850-0181	1
4	Bolt	27-9524	20	29	Screw	27-0015	4	53	High Pressure Hose (HSE-2504)	15-0146	1
5	Elbow	23-0344	1	30	Plug	24-0034	1	-	High Pressure Hose (HSE-3004 & 3504)	15-0166	1
6	Gasket	26-0001	1	31	Bushing	32-0465	1	54	Screw Connect	17-0035	1
7	Garden Hose Swivel	23-0095	1	32	Trim Lock	33-0020	1	55	Adjustable Pressure Dual Lance (HSE-2504 & 3004)	850-0185	1
8	Water Filter Assembly (Includes 9-12)	19-0003	1	33	Hose Barb	23-0073	1	-	Adjustable Pressure Dual Lance (HSE-3504)	850-0180	1
9	Strainer Body	19-0021	1	34	Hose Clamp	42-0004	1	56	High Pressure Nozzle- 1504 (HSE-2504 & 3004)	18-0054	1
10	Gasket w/Strainer Bowl (See 19-0003)	N/A Sep.	1	35	Hose	15-0020	2	-	High Pressure Nozzle- 1503.5 (HSE-3504)	18-0254	1
11	Stainless Steel Screen	19-0023	1	36	Brake Plate	20-0581A01	1	57	Bolt	27-8923	4
12	Strainer Bowl	19-0022	1	37	Bracket	20-0682A01	1	58	Motor- 6HP (HSE-2504-0M10)	2-0090	1
13	Frame Assembly	5-0138A01	1	38	Locknut	30-0155	4	-	Motor- 6HP (HSE-2504-0M30)	2-0091	1
14	Pneumatic Tire	14-0072	4	39	Brake Handle Assembly	20-0552A01	1	-	Motor- 8HP (HSE-3004-0M10)	2-0092	1
15	Nut	30-0117	4	40	Screw	27-0068	1	-	Motor- 8HP (HSE-3004-0M30)	2-0093	1
16	Bolt	27-8040	2	41	Handle Grip	7-0170	1	-	Motor- 10HP (HSE-3504-0M10)	2-0094	1
17	Fuel Hose	15-0190	1	42	Locknut	30-0159	2	-	Motor- 10HP (HSE-3504-0M30)	2-0095	1
18	Fuel Tank Assembly	850-0290	1	43	Flatwasher	28-0023	3	59	Flatwasher	28-0030	8
19	Fuel Tank Strap	20-0579A01	2	44	Bracket	13-0003A01	1	60	Bolt	27-0166	4
20	Electric Panel Assembly (See Exploded Drawing)	N/A Sep.	1	45	Bolt	27-0576	1	61	Hex Nut	30-0161	4
21	Screw	27-8922	4	46	Bolt	27-0118	2	62	Heat Exchanger Assembly (See Exploded Drawing)	N/A Sep.	1
22	Bolt	27-9527	4	47	Beltguard/ Sheave Assembly (See Exploded Drawing)	N/A Sep.	1	63	Knob	62-0057	2
23	Control Panel Assembly (See Exploded Drawing)	N/A Sep.	1	48	Hex Nut	30-3023	4	64	Flatwasher	28-0001	2
24	Washer	28-0057	1	49	Conduit *(One Foot Required) (HSE-2504/3004-0M10/30 & HSE-3504-0M30)	32-0486	1	65	Hood Assembly	850-0244	1
25	Grommet	33-0366	1	-	Conduit *(One Foot Required) (HSE-3504-0M10)	32-0510	1	*Must Order In One Foot Lengths			

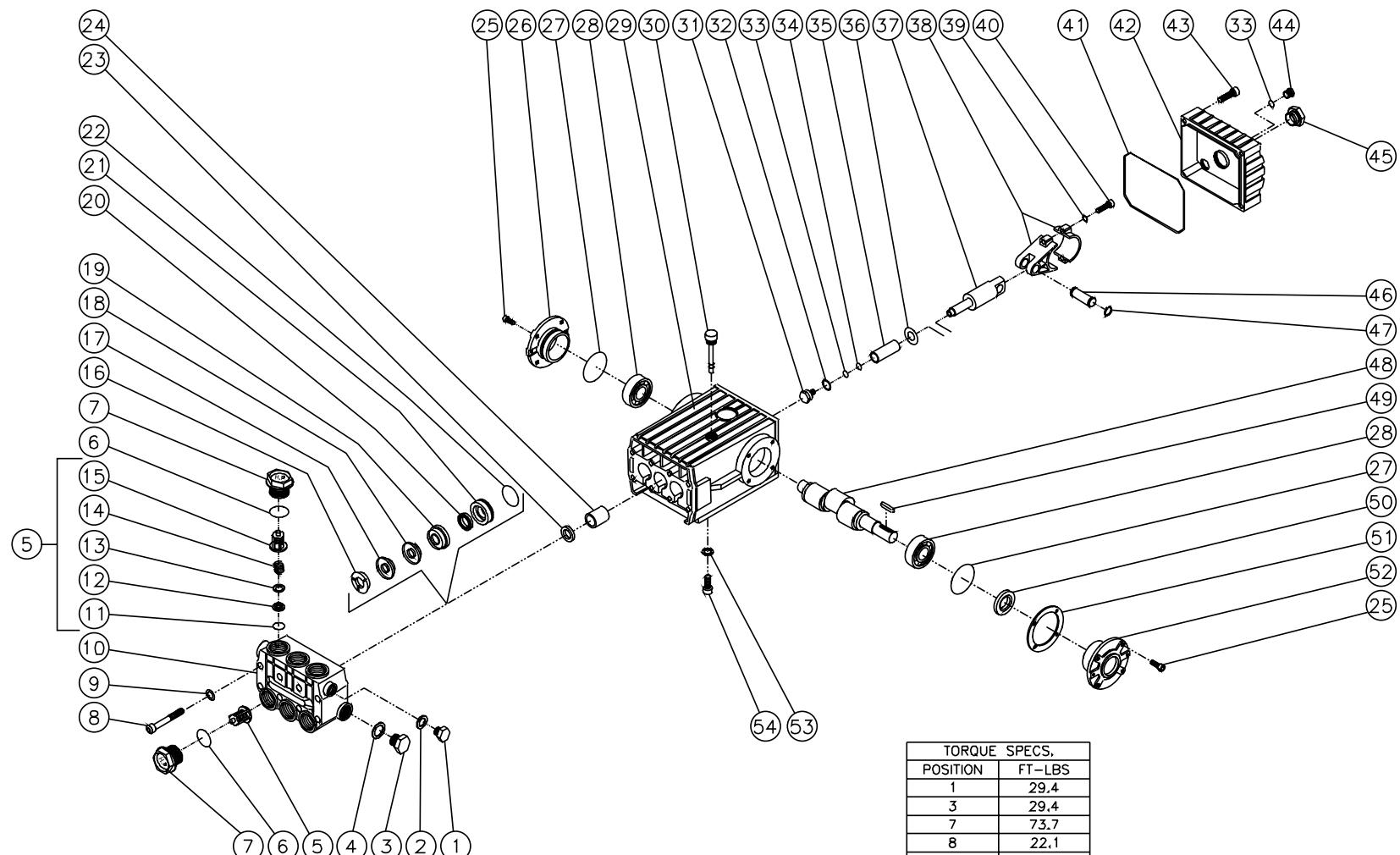
## FLOAT TANK/PUMP/UNLOADER ASSEMBLY



OMHSE017-110901-BAR

FLOAT TANK/PUMP/UNLOADER ASSEMBLY							
REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Hose *(Four Feet Required)	15-0007	1	20	Bolt	29-0055	4
2	Hose Clamp	42-0011	3	21	Bolt w/ Pump	27-8471	4
3	Hose Barb	23-0105	1	22	Hose Barb	23-0045	2
4	Elbow	23-0307	1	23	Cross	22-0071	1
5	Locknut	23-0138	2	24	Heat Dump Valve	22-0208	1
6	Float Tank	12-0066	1	25	Branch Tee	23-0127	1
7	O-ring	25-0427	1	26	Elbow	23-0119	1
8	Restrictor	23-0351	1	27	Detergent Strainer w/ Check Valve	19-0056	1
9	Float Valve Assembly	850-0238	1	28	Detergent Hose	15-0021	6
10	Float Tank Cap	39-0100	1	29	Detergent Valve	22-0226	1
11	High Pressure Hose Assembly	15-0192	1	30	Reducer	23-0056	1
12	Manifold Block	51-0022	1	31	Hex Nut	23-0012	1
13	Plug	24-0034	2	32	Street Tee	23-0058	1
14	Hex Nipple	24-0024	1	33	High Pressure Pump Assembly	3-0202	1
15	Unloader Assembly	850-0252	1	34	Pump Key	43-0048	1
16	Pressure Switch	22-0171	1	35	Elbow	23-0123	1
17	Elbow	23-0306	1	36	Hose Clamp	42-0004	1
18	High Pressure Hose Assembly	15-0194	1	37	Hose	15-0020	2
19	Lockwasher	5-0101A01	1	*Must Order in One Foot Lengths			

## PUMP ASSEMBLY (3-0202)

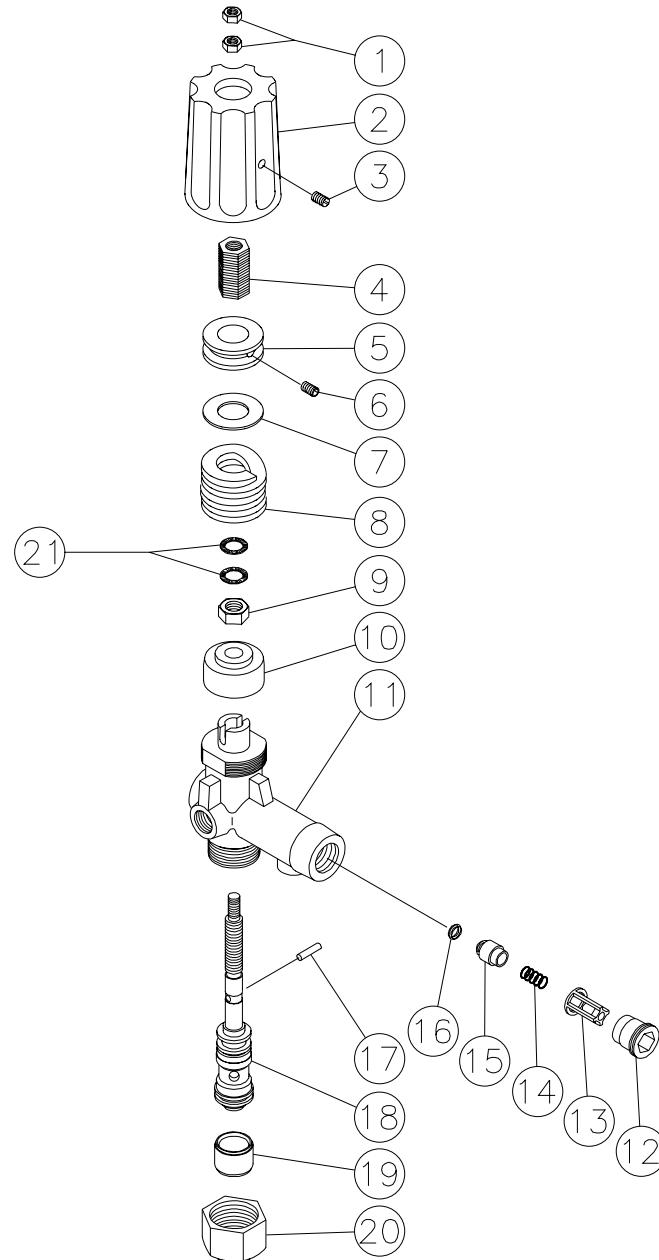


TORQUE SPECS.	
POSITION	FT-LBS
1	29.4
3	29.4
7	73.7
8	22.1
25	14.7
31	14.7
40	14.7
43	7.3
44	14.7
45	14.7
54	29.4

## PUMP ASSEMBLY (3-0202)

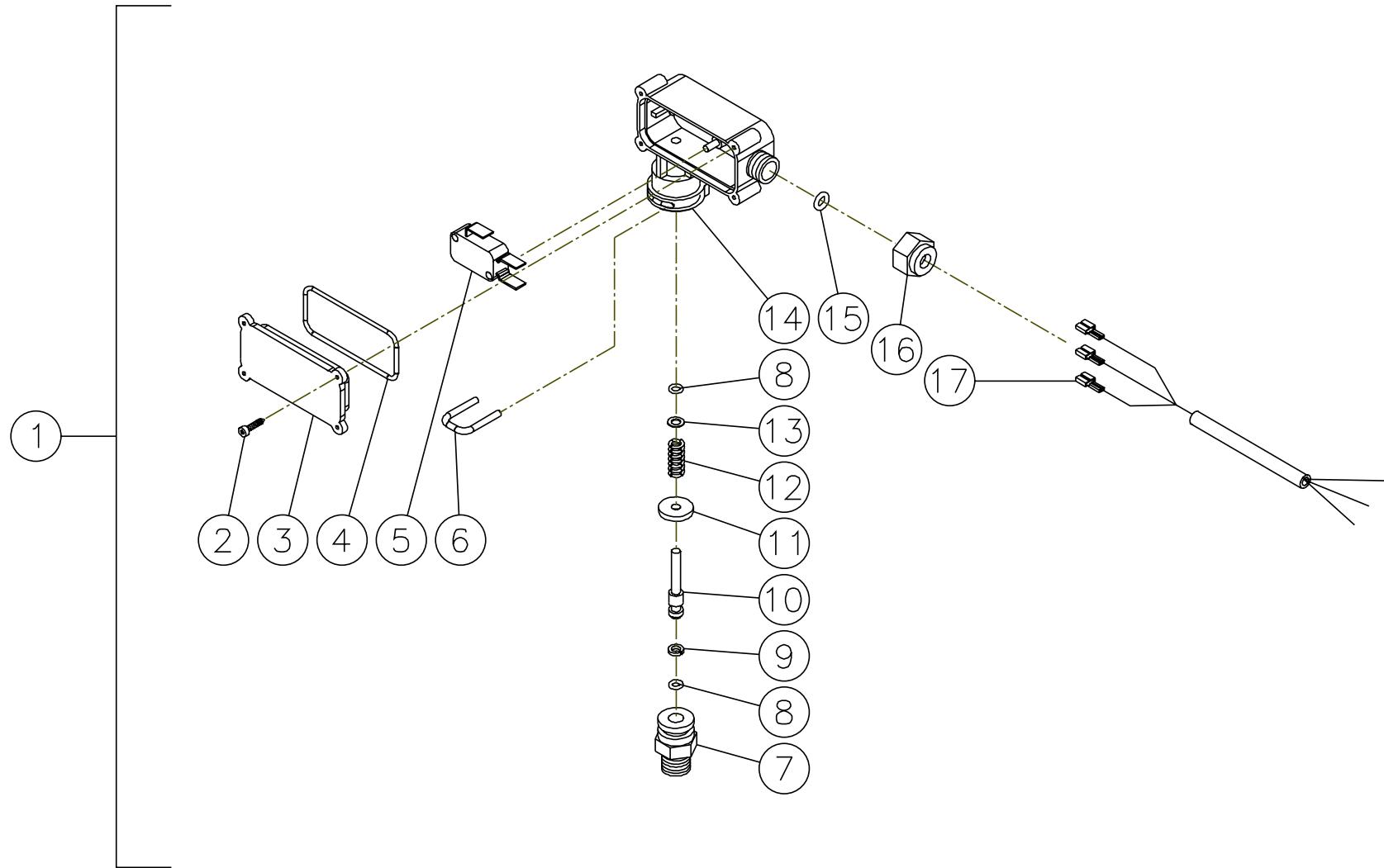
REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Plug	39-0018	1	21	Low Pressure Seal Retainer	46-0887	3	41	O-ring Cover	25-0339	1
2	Washer	28-1002	1	22	O-ring	25-0015	3	42	Crankcase Cover	46-0295	1
3	Plug	39-0019	1	23	Oil Seal	26-0047	3	43	Bolt	27-8404	5
4	Washer	28-1038	1	24	Bushing	9-0029	3	44	Plug	39-0017	1
5	Valve Assembly (Inc. 11-15) (See 70-0009)	N/A Sep.	6	25	Bolt	27-8431	8	45	Oil Level Indicator	46-0114	1
6	O-ring	25-0012	6	26	Crankcase Cover	46-0336	1	46	Connecting Rod Pin	43-0032	3
7	Valve Plug	46-0889	6	27	O-ring	25-0013	2	47	Retaining Ring	46-0103	6
8	Bolt	27-8185	8	28	Bearing	48-0012	2	48	Crankshaft	46-0050	1
9	Flatwasher	28-1039	8	29	Crankcase	46-0292	1	49	Key	43-0048	1
10	Manifold	46-0890	1	30	Oil Dip Stick	46-0144	1	50	Oil Seal	26-0049	1
11	O-ring (See 70-0009)	N/A Sep.	6	31	Bolt	46-0069	3	51	Shim	46-0113	1
12	Valve Seat (See 70-0009)	N/A Sep.	6	32	Gasket	28-0400	3	52	Crankcase Open Cover	46-0296	1
13	Valve Plate (See 70-0009)	N/A Sep.	6	33	O-ring	25-0014	4	53	Lockwasher	29-0055	4
14	Valve Spring (See 70-0009)	N/A Sep.	6	34	Back-up Ring	46-0109	3	54	Bolt	27-8471	4
15	Valve Cage (See 70-0009)	N/A Sep.	6	35	Plunger	46-0052	3		Valve Assembly (6 each 5, 11-15)	70-0009	
16	High Pressure Head Ring (See 70-0030)	N/A Sep.	3	36	Washer	46-0146	3		Head Ring Kit (3 each 16)	70-0030	
17	High Pressure V-Packing (See 70-0299)	N/A Sep.	3	37	Piston Rod	46-0056	3		V-Packing Kit (3 each 17, 18, 20)	70-0299	
18	V-Packing Support (See 70-0299)	N/A Sep.	3	38	Connecting Rod	46-0051	3		Intermediate Retainer Kit (3 each 18, 19)	70-0148	
19	High Pressure Intermediate Seal Retainer	46-0659	3	39	Lockwasher	29-0154	6		Low Pressure Seal Kit (3 each 20-22)	70-0298	
20	Low Pressure Seal	46-0886	3	40	Bolt	27-8435	6		V-Packing Assembly (Inc. 16-22)	70-0300	

## UNLOADER (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 (22-0171)

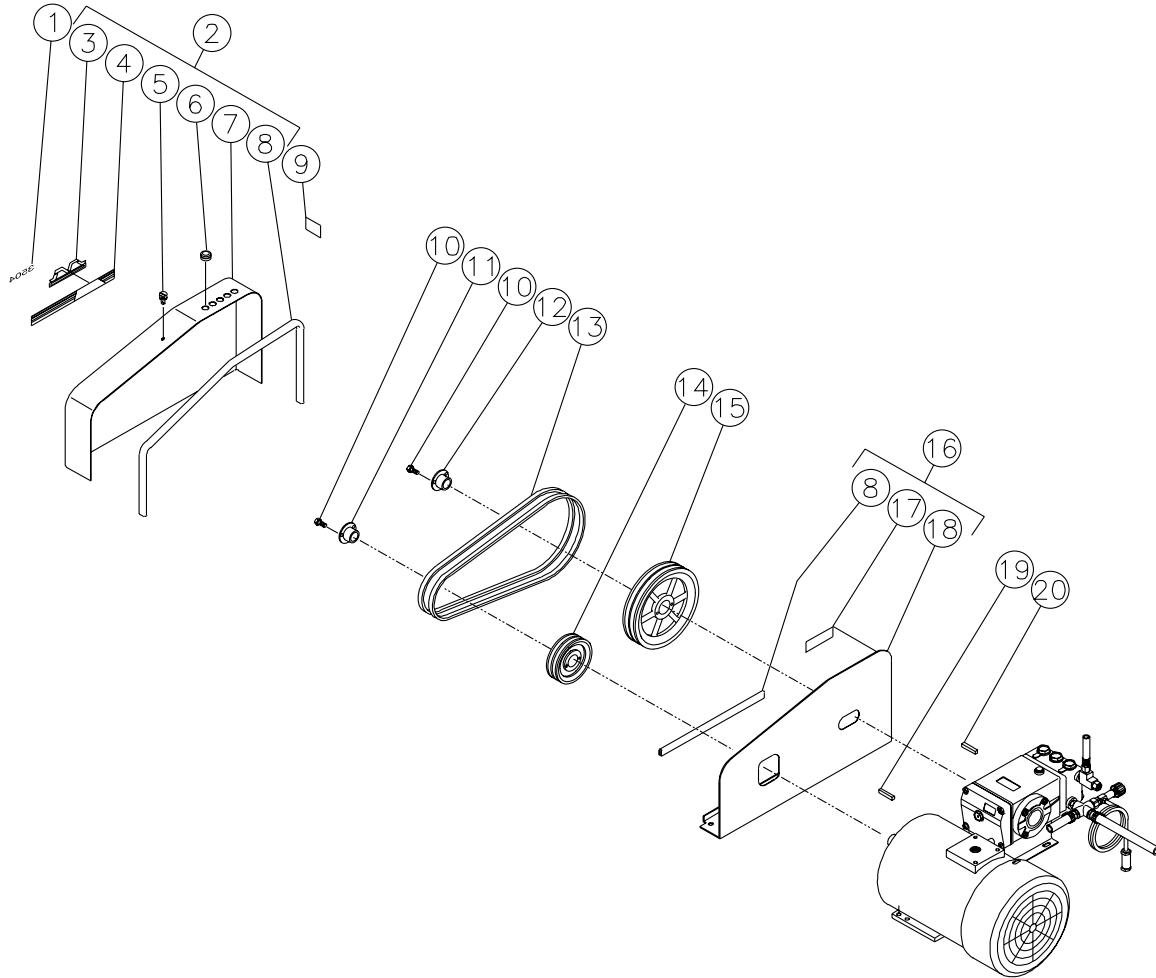


22-0171&22-0243-120799-BAR

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

## BELTGUARD/SHEAVE ASSEMBLY

OMHSE019-050598-BAR

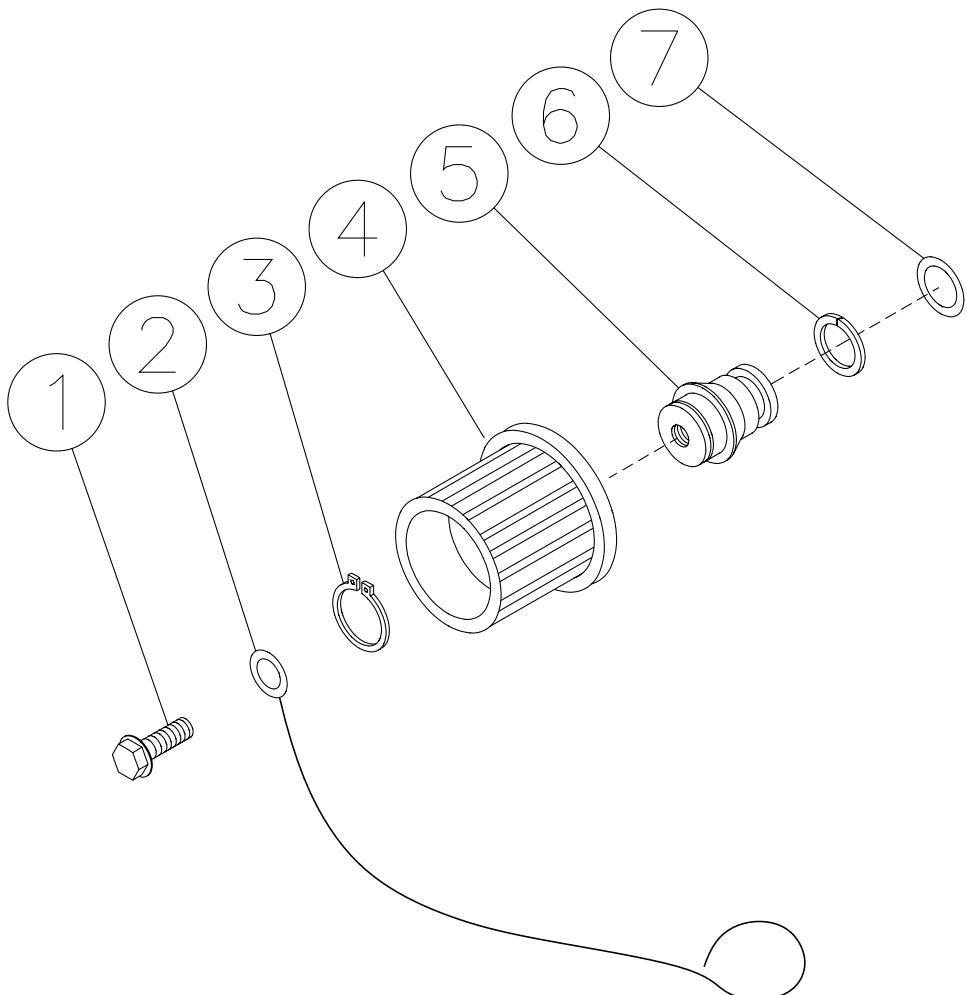


OMHSE019-050598-BAR

BELTGUARD/SHEAVE ASSEMBLY			
REF. #	DESCRIPTION	PART #	QTY.
1	Decal-2504	34-0512	1
-	Decal-3004	34-0105	1
-	Decal-3504	34-0034	1
2	Beltguard Cover Assembly (Includes 3-8)	850-0242	1
3	Mi-T-M Logo	62-0086	1
4	Decal- Stripe	34-0501	1
5	Fastener	33-0197	1
6	Rubber Grommet	33-0001	5
7	Beltguard Cover- Black	6-0064A01	1
8	Trimlock *(Five Feet Required)	33-0020	1
9	Decal-American Flag	34-0521	1
10	Bolt	27-0015	4
11	Motor Bushing (HSE-2504)	9-0010	1
-	Motor Bushing (HSE-3004/3504)	9-0008	1
12	Pump Bushing	9-0017	1
13	Belt (HSE-2504/3504)	11-0001	2
-	Belt (HSE-3004)	11-0017	2
14	Motor Sheave (HSE-2504)	10-0065	1
-	Motor Sheave (HSE-3004)	10-0036	1
-	Motor Sheave (HSE-3504)	10-0041	1
15	Pump Sheave	10-0038	1
16	Backplate Assembly (Includes 8, 17, 18)	850-0241	1
17	Decal-Warning: Beltguard in Place (See 34-9012)	N/A Sep.	1
18	Backplate (See 850-0241)	N/A Sep.	1
19	Pump Key	43-0048	1
20	Motor Key	N/A	1
	Safety Decal Kit (Includes 17)	34-9012	

\*Must Order in One Foot Lengths

## COIL DRAIN PLUG (850-0218)

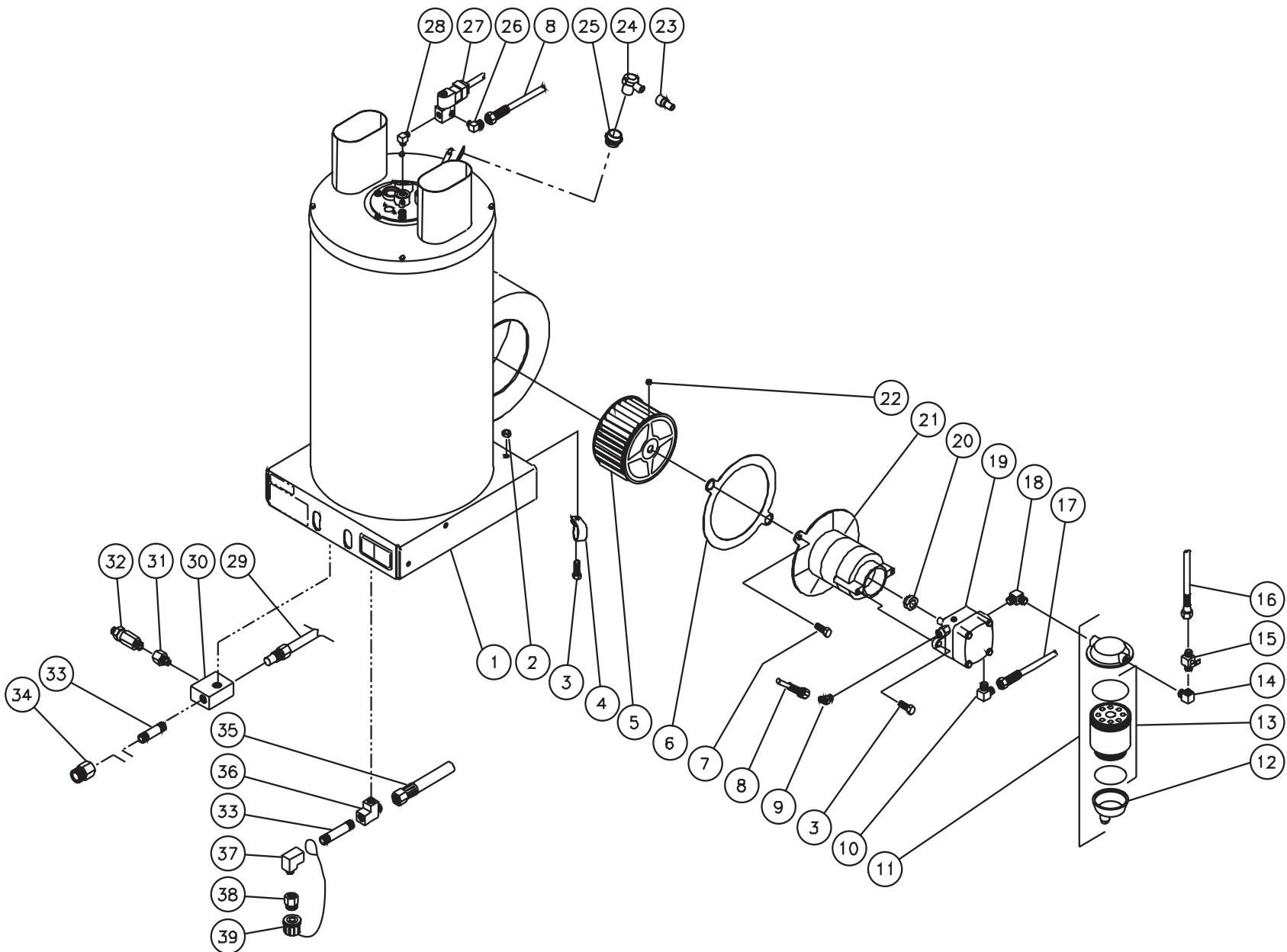


850-0218-041597-BAR

COIL DRAIN PLUG (850-0218)			
REF. #	DESCRIPTION	PART #	QTY.
1	Bolt	27-9526	1
2	Retaining Cable	33-0260	1
3	Snap Ring	33-0261	1
4	Hand Wheel	16-0239	1
5	Plug	24-0147	1
6	Back-up Ring	25-0424	1
7	O-ring	25-0423	1

8500218-041597-BAR

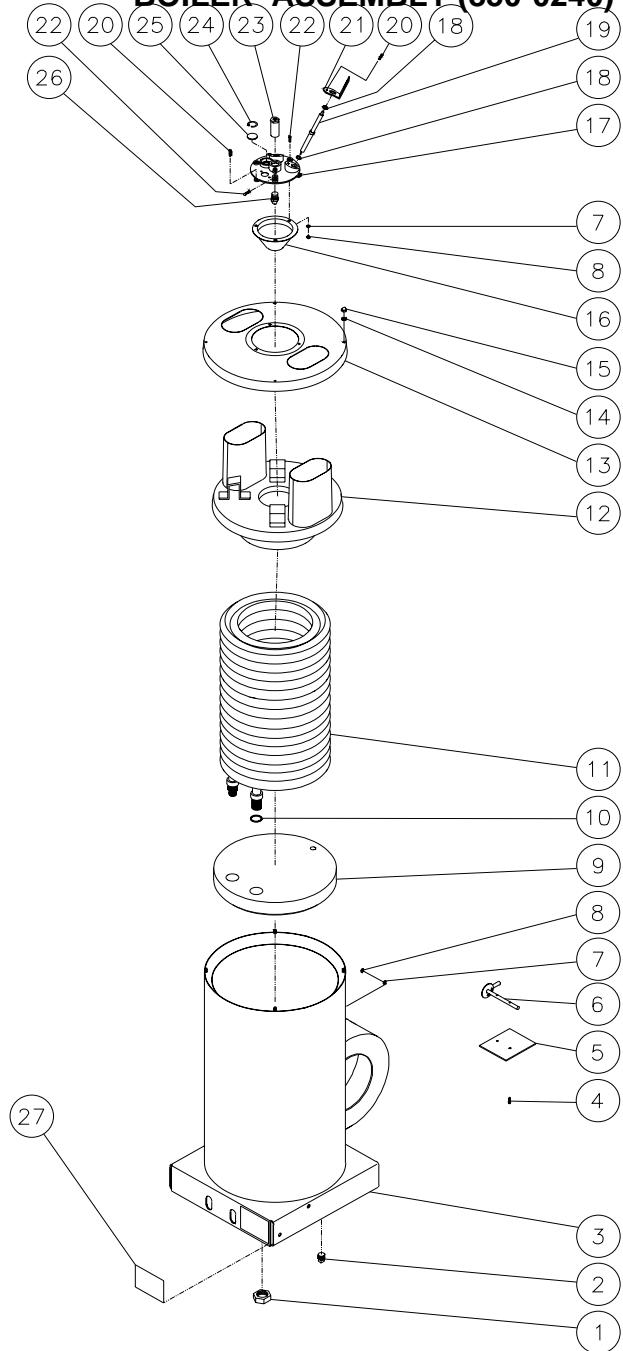
## HEAT EXCHANGER/BLOWER MOTOR



OMHSE018-011602-RD

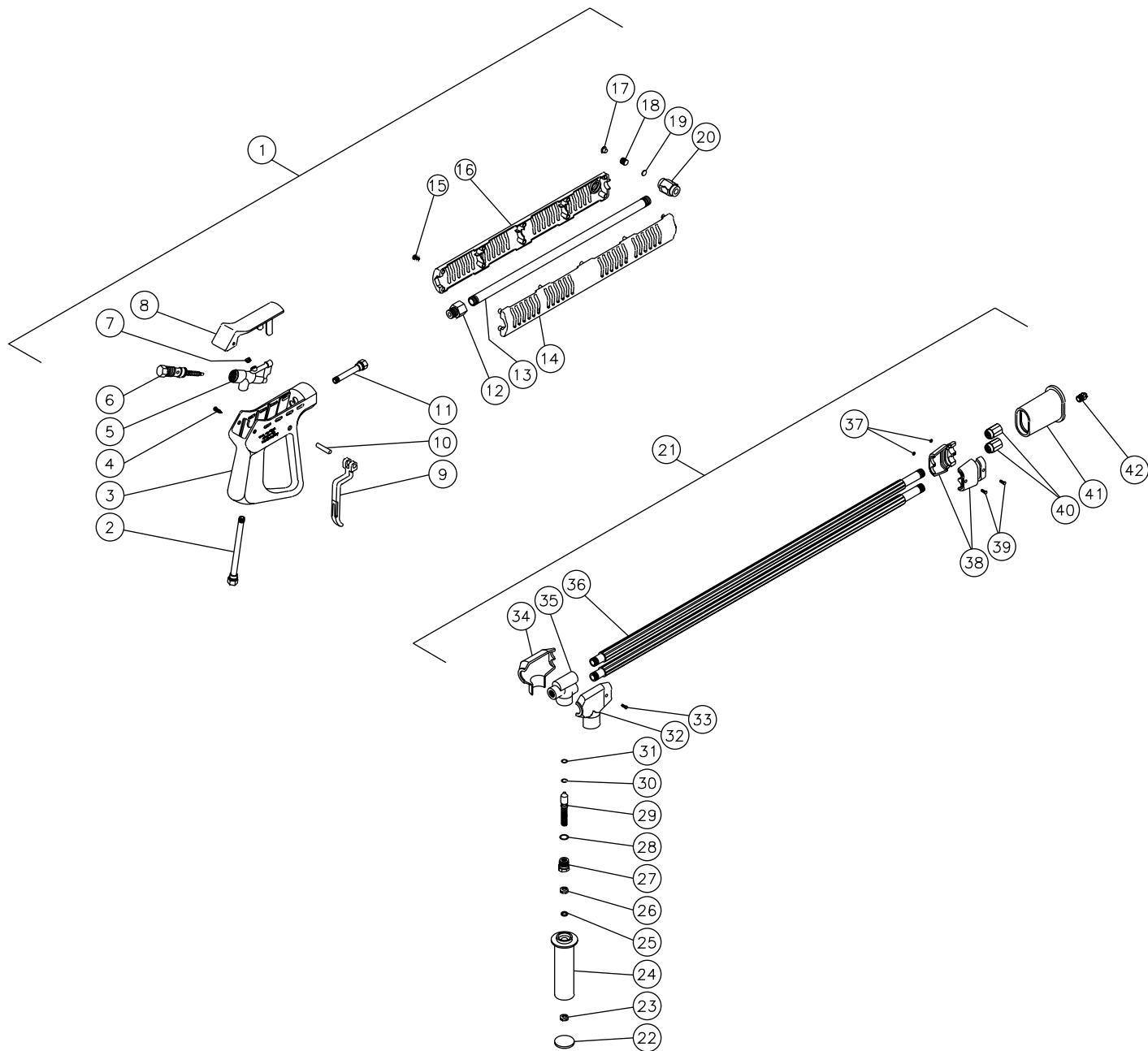
HEAT EXCHANGER/BLOWER MOTOR				
REF. #	DESCRIPTION	PART #	QTY.	
1	Heat Exchanger Assembly	850-0240	1	
2	Nut	30-3022	1	
3	Bolt	27-8898	3	
4	Clamp	33-0291	1	
5	Blower Fan	44-0103	1	
6	Shim- Black	20-0460A01	1	
7	Bolt	27-9524	2	
8	High Pressure Fuel Hose Assembly	15-0165	1	
9	Elbow	23-0288	1	
10	Elbow	23-0237	1	
11	Fuel Water Separator	19-0070	1	
12	Fuel Water Separator Bowl	19-0071	1	
13	Fuel Water Separator Strainer	19-0053	1	
14	Elbow	23-0014	1	
15	Valve	22-0265	1	
16	Inlet Fuel Hose	15-0147	1	
17	Return Fuel Hose	15-0190	1	
18	Elbow	23-0130	1	
19	Fuel Pump	3-0020	1	
20	Coupler w/ Blower Motor	33-0265	1	
21	Blower Motor-240 Volt	2-0086	1	
22	Screw w/Blower Fan	30-3031	1	
23	Insulator	32-0375	2	
24	Electrode Connector Cap	44-0083	2	
25	Electrode Boot	32-0418	2	
26	Elbow	23-0287	1	
27	Fuel Solenoid-120 Volt	44-0101	1	
28	Elbow	23-0249	1	
29	High Limit Temperature Switch	32-0423	1	
30	Coil Outlet Block	24-0138	1	
31	Adapter	23-0369	1	
32	Pressure Relief Valve	22-0273	1	
33	Pipe Nipple	24-0141	2	
34	Adapter	23-0197	1	
35	High Pressure Hose Assembly	15-0192	1	
36	Street Tee	23-0058	1	
37	Elbow	23-0034	1	
38	Adapter	23-0279	1	
39	Coil Drain Plug Assembly	850-0218	1	

## BOILER ASSEMBLY (850-0240)



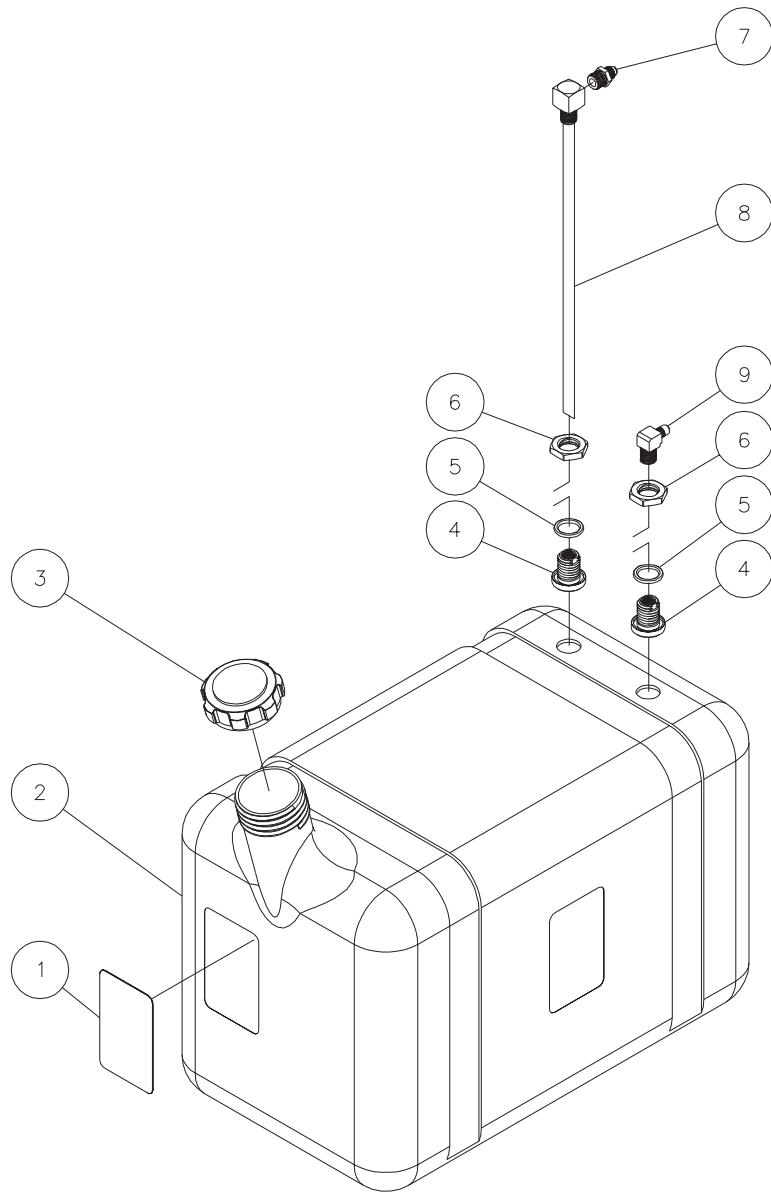
BOILER ASSEMBLY (850-0240)							
REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Nut	30-0121	2	15	Nut	30-6002	4
2	Plug	24-0034	1	16	Cone	20-0373	1
3	Heat Exchanger Outer Wrap Assembly	20-0431A01	1	17	Electrode Plate	38-0046	1
4	Bolt	27-8879	2	18	Washer	28-0523	4
5	Air Diverter Plate	20-0378A01	1	19	Electrode	32-0420	2
6	Air Diverter Stem Assembly	20-0377A01	1	20	Bolt	27-9526	5
7	Lockwasher	28-1009	4	21	Electrode Mounting Clip	20-0446A01	2
8	Hex Nut	30-6001	4	22	Bolt	27-8878	4
9	Insulation Bottom	33-0250	1	23	Nozzle Holder	23-0292	1
10	Washer	28-0521	2	24	Snap Ring	33-0254	1
11	Heat Exchanger Coil	66-0011	1	25	Sight Glass	33-0252	1
12	Inner Pan Assembly	20-0372	1	26	Fuel Oil Nozzle	18-0308	1
13	Top Pan Assembly	20-0371A01	1	27	Decal-Warning: Do Not Modify Plumbing (E/S) (See 34-9012)	N/A Sep.	1
14	Lockwasher	28-1028	4		Safety Decal Kit (Includes 27)	34-9012	

## GUN/WAND (850-0181) & ADJUSTABLE PRESSURE DUAL LANCE (850-0180 AND 850-0185)



GUN (850-0181) & ADJUSTABLE PRESSURE DUAL LANCE (850-0180 AND 850-0185)							
REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Gun/Lance Assembly (Includes 2-20)	850-0181	1	24	Handle	16-0313	1
2	Pipe Assembly	16-0016	1	25	Washer	28-1021	1
3	Plastic Housing	16-0008	1	26	Nut	30-3010	1
4	Screw	27-3230	2	27	Adaptor	23-0271	1
5	Housing	16-0012	1	28	O-ring	25-0351	1
6	Gun Repair Kit	70-0055	1	29	Piston	16-0314	1
7	Plug	39-0024	1	30	Back-up Ring	25-0352	1
8	Cover	16-0009	1	31	O-ring	25-0353	1
9	Trigger Safety Lock-off	16-0010	1	32	Upper Protector	16-0315	1
10	Trigger Pin	16-0063	1	33	Screw	27-8862	1
11	Pipe Assembly	16-0013	1	34	Lower Protector	16-0316	1
12	Adaptor	16-0283	1	35	Body	23-0272	1
13	Pipe	16-0277	1	36	Lance w/Protective Cover 36"	16-0328	2
14	Guard Lance (Right Side)	16-0320	1	-	Lance w/Protective Cover 48"	16-0317	2
15	Screw	27-8382	6	37	Nut	30-3060	2
16	Guard Lance (Left Side)	16-0321	1	38	Pipe Clamp	16-0318	2
17	Plug	39-0076	1	39	Screw	27-8861	2
18	Screw	49-0103	1	40	Nipple	24-0127	2
19	Spacer	16-0282	1	41	Nozzle Protector	16-0319	1
20	Lance Holder (See 16-0306)	N/A Sep.	1	42	Nozzle- 4060	18-0110	1
21	Dual Lance Assembly (Includes 22-42) 36"	850-0185	1		Gun Assembly ( Includes 12-20)	16-0001	
-	Dual Lance Assembly (Includes 22-42) 48"	850-0180	1		Lance Assembly (Includes 13-21)	16-0306	
22	Handle Plug	16-0312	1		O-ring Kit (Includes 28, 30, 31)	70-0143	
23	Nut	30-3002	1				

## FUEL TANK (850-0290)

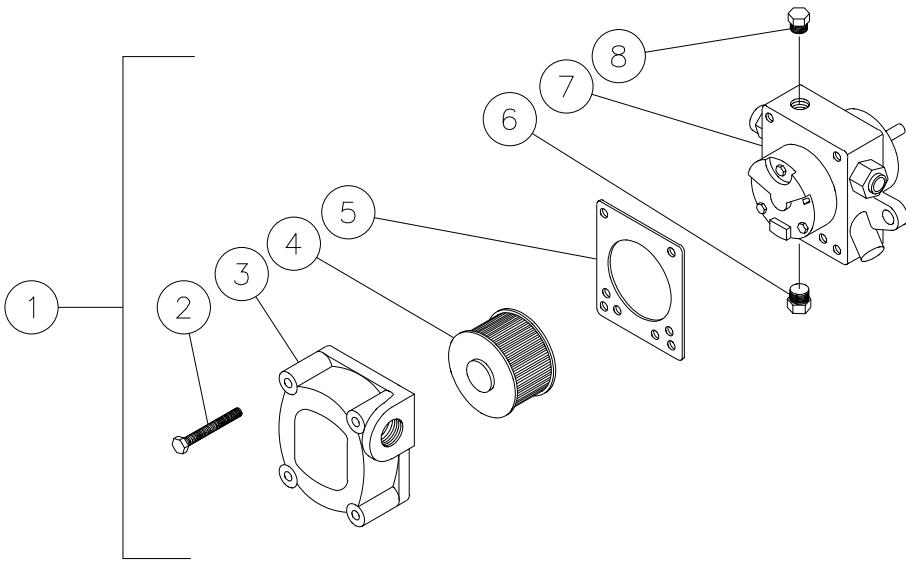


850-0290-121100-KS

850-0290-121100-KS

FUEL TANK (850-0290)			
REF #	DESCRIPTION	PART #	QTY
1	Decal- Caution: Risk of Fire (See 34-9012)	N/A Sep.	1
2	Fuel Tank	12-0126	1
3	Vented Fuel Cap	12-0033	1
4	Bulkhead Fitting	23-0408	2
5	O-ring	25-0427	2
6	Nut	23-0409	2
7	Flare	23-0247	1
8	Fuel Pick-up	33-0352	1
9	Elbow	23-0237	1
	Fuel Tank Assembly (Includes 1-9)	850-0290	
	Safety Decal Kit (Includes 1)	34-9012	

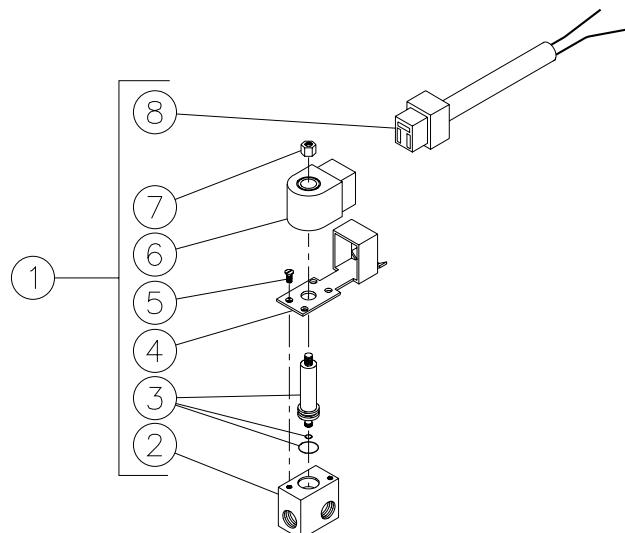
## FUEL PUMP (3-0020)



OMHSP018A-041597-BAR

FUEL PUMP (3-0020)			
REF. #	DESCRIPTION	PART #	QTY.
1	Fuel Pump Complete - Right Hand	3-0020	1
2	Cover Screw	46-1006	4
3	Cover-Right Hand	46-1005	1
4	Strainer	19-0034	1
5	Cover Gasket	26-0109	1
6	Plug	24-0044	3
7	Body	N/A	1
8	Plug	24-0082	1

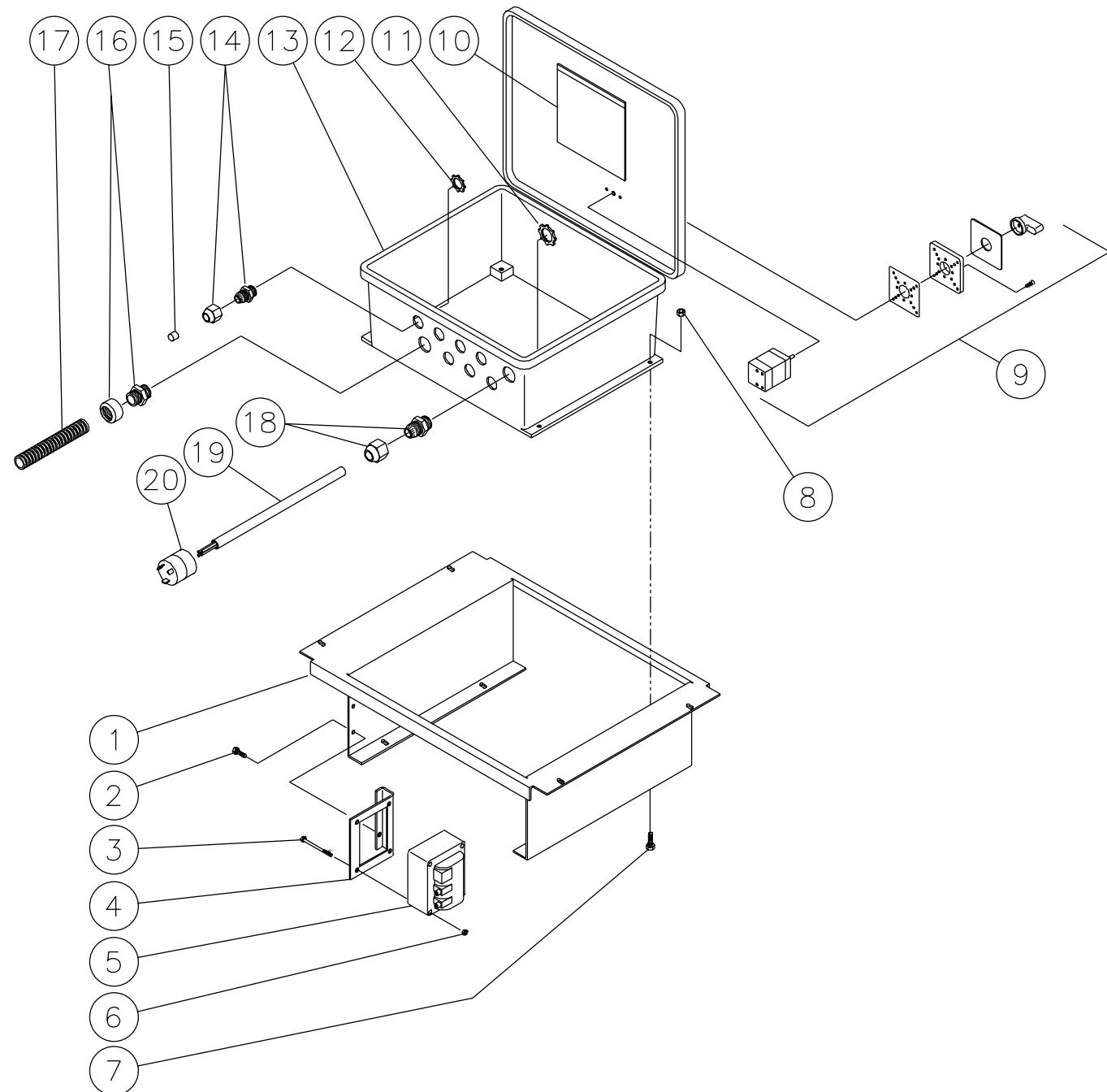
## FUEL SOLENOID (44-0101)



OMHSP013-44-0101-121698-BAR

FUEL SOLENOID (44-0101)			
REF. #	DESCRIPTION	PART #	QTY.
1	Solenoid Complete-120V	44-0101	1
2	Solenoid Body	46-1013	1
3	Solenoid Piston	46-1012	1
4	Solenoid Base	46-1014	1
5	Screw (See 44-0101)	N/A Sep.	2
6	Solenoid Coil-120V	46-1020	1
7	Spring (See 44-0101)	N/A Sep.	1
8	Piston Nut	46-1016	1
9	Din Connector Cord	32-0443	1

## CONTROL PANEL

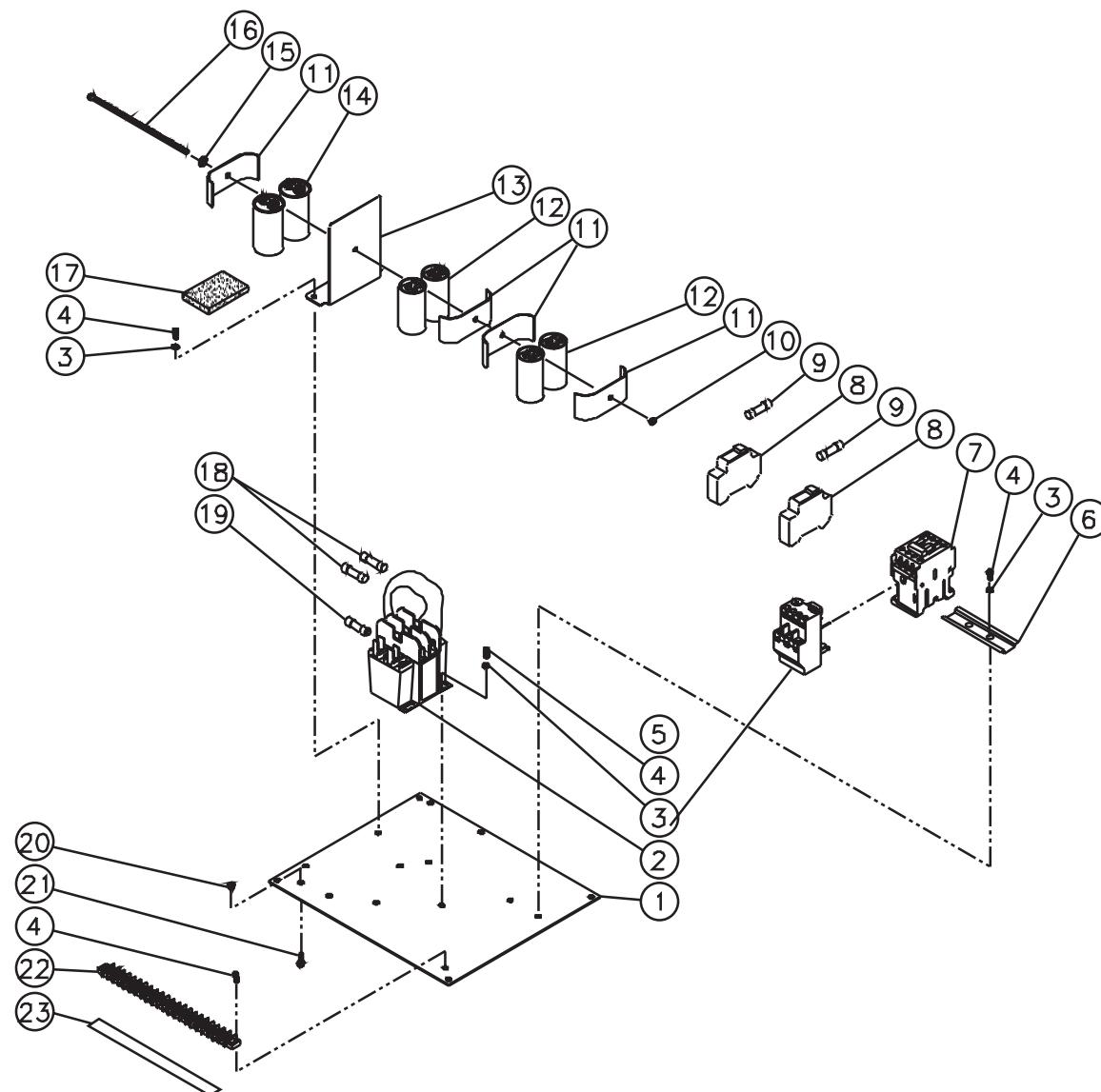


OMHSE020-120700-KS

## CONTROL PANEL

REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Control Panel	20-0432A01	1	15	Plug	32-0514	2
2	Bolt	27-9526	2	16	Bushing	32-0488	1
3	Bolt	27-8899	4	17	Conduit *(One Foot Required) (HSE-2504/3004-0M10/30, HSE-3504-0M30)	32-0486	1
4	Ignitor Bracket	20-0418A01	1	-	Conduit *(One Foot Required) (HSE-3504-0M10)	32-0510	1
5	Ignitor- 240 Volts	850-0223	1	18	Strain Relief	9-0046	1
6	Hex Nut	30-0137	4	-	Strain Relief (HSE-3504-0M10)	9-0048	1
7	Bolt	27-8898	4	19	Power Cord w/GFCI Plug (HSE-2504-0M10)	32-0334	1
8	Hex Nut	30-3022	4	-	Power Cord *(Fourty Feet Required) (HSE-2504-0M30)	32-0025	1
9	Cam Switch	32-0464	1	-	Power Cord *(Fourty Feet Required) (HSE-3004-0M10)	32-0021	1
10	Envelope	41-0184	1	-	Power Cord *(Fourty Feet Required) (HSE-3004/3504-0M30)	32-0023	1
11	Locknut (HSE-2504/3004)	32-0292	2	-	Power Cord *(Fourty Feet Required) (HSE-3504-0M10)	32-0504	1
-	Locknut (HSE-3504)	32-0515	1	20	Plug (HSE-2504-0M30)	32-0118	1
12	Locknut	32-0108	7	-	Plug (HSE-3004/3504-0M10)	32-0012	1
13	Electric Box	32-0462	1	-	Plug (HSE-3004/3504-0M30)	32-0037	1
14	Strain Relief	32-0437	7	*Must Order in One Foot Lengths.			

## ELECTRIC PANEL SINGLE PHASE

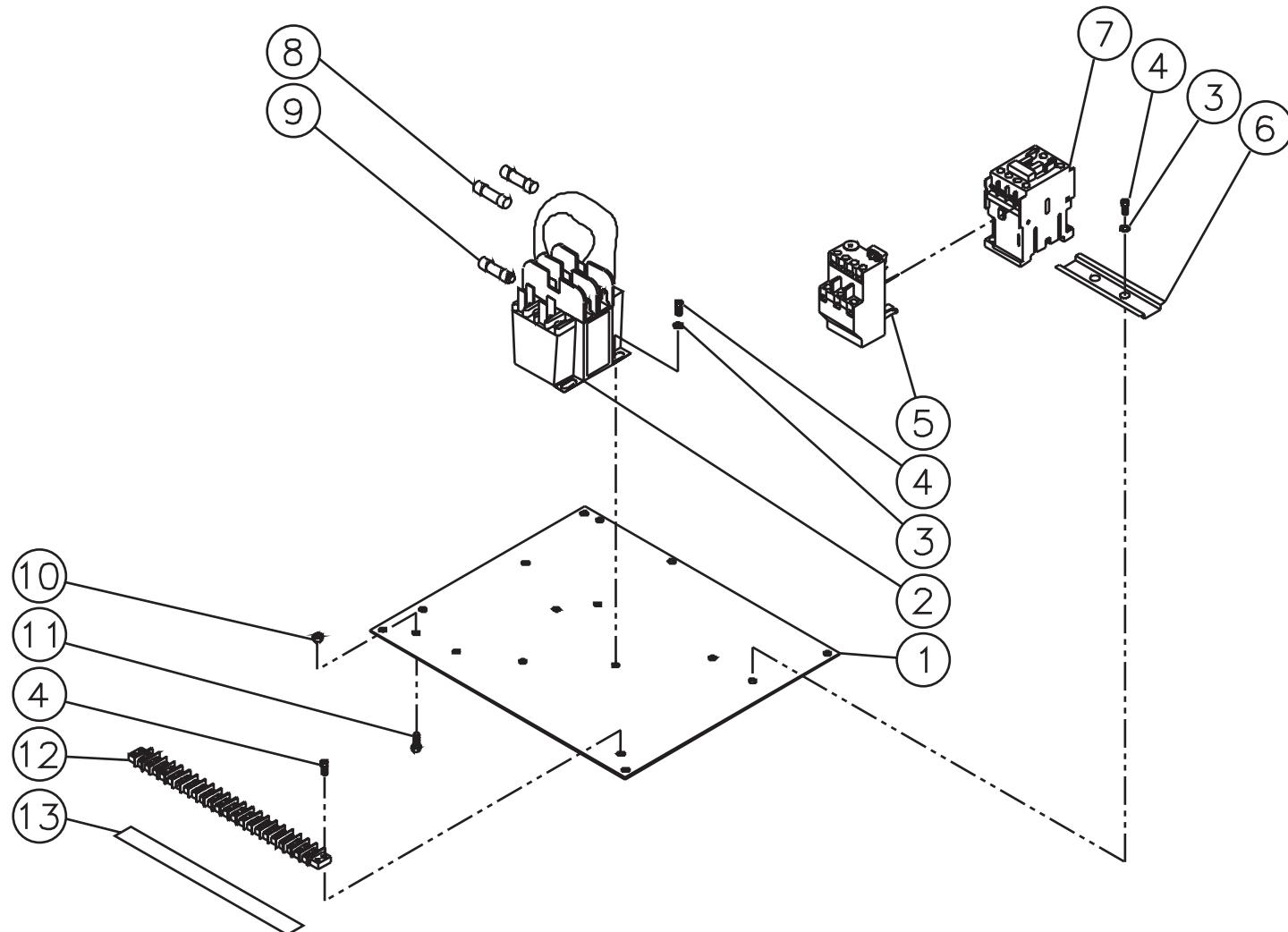


OMHSE023-041802-KZ

## ELECTRIC PANEL SINGLE PHASE

REF. #	DESCRIPTION	PART #	QTY.	REF. #	DESCRIPTION	PART #	QTY.
1	Electric Panel	20-0434A06	1	13	Capacitor Bracket	20-0437A01	1
2	Transformer	32-0313	1	14	Run Capacitor (HSE-2504)	32-0518	2
3	Starwasher	28-1009	6	-	Run Capacitor (HSE-3004)	32-0520	2
4	Bolt	27-8835	8	-	Run Capacitor (HSE-3504)	32-0519	2
5	Overload Relay (HSE-2504)	32-0484	1	15	Washer (HSE-2504/3504)	28-0001	1
-	Overload Relay (HSE-3004)	32-0485	1	-	Washer (HSE-3004)	28-0002	1
-	Overload Relay (HSE-3504)	32-0490	1	16	Bolt (HSE-2504/3504)	27-0759	1
6	Din Rail *(One Foot Required)	32-0316	1	-	Bolt (HSE-3004)	27-0038	1
7	Contactor (HSE-2504/3004)	32-0479	1	17	Foam Pad	N/A	1
-	Contactor (HSE-3504)	32-0480	1	18	Fuse	32-0467	2
8	Fuse Holder (HSE-3004/3504)	32-0473	2	19	Fuse	32-0471	1
9	Fuse (HSE-3004/3504)	32-0470	2	20	Hex Nut	30-3022	2
10	Hex Nut (HSE-2504/3504)	30-0154	1	21	Bolt	27-8898	1
-	Hex Nut (HSE-3004)	30-0155	1	22	Terminal Strip	32-0463	1
11	Capacitor Clamp (HSE-2504/3504)	20-0467	2	23	Decal- Terminal Strip (See 34-9012)	N/A Sep.	1
-	Capacitor Clamp (HSE-3004)	20-0467	4		Safety Decal Kit (Includes 23)	34-9012	
12	Start Capacitor (HSE-2504/3504)	32-0516	2	*Must Order in One Foot Lengths			
-	Start Capacitor (HSE-3004)	32-0517	4				

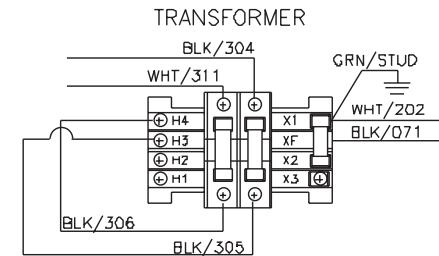
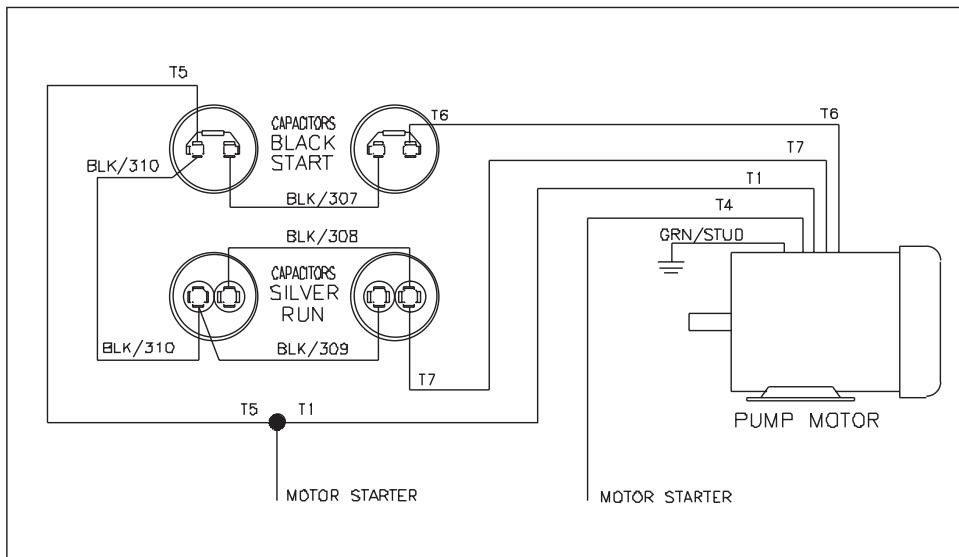
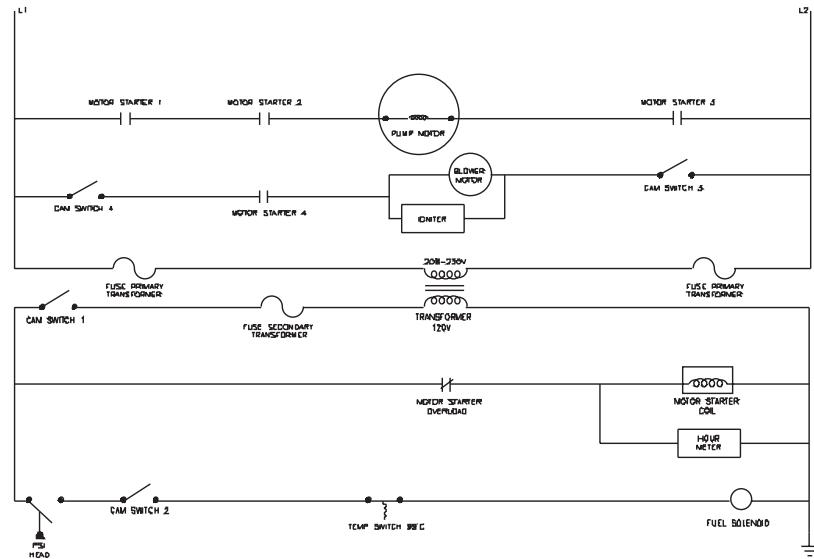
## ELECTRIC PANEL THREE PHASE



OMHSE022-041802-KZ

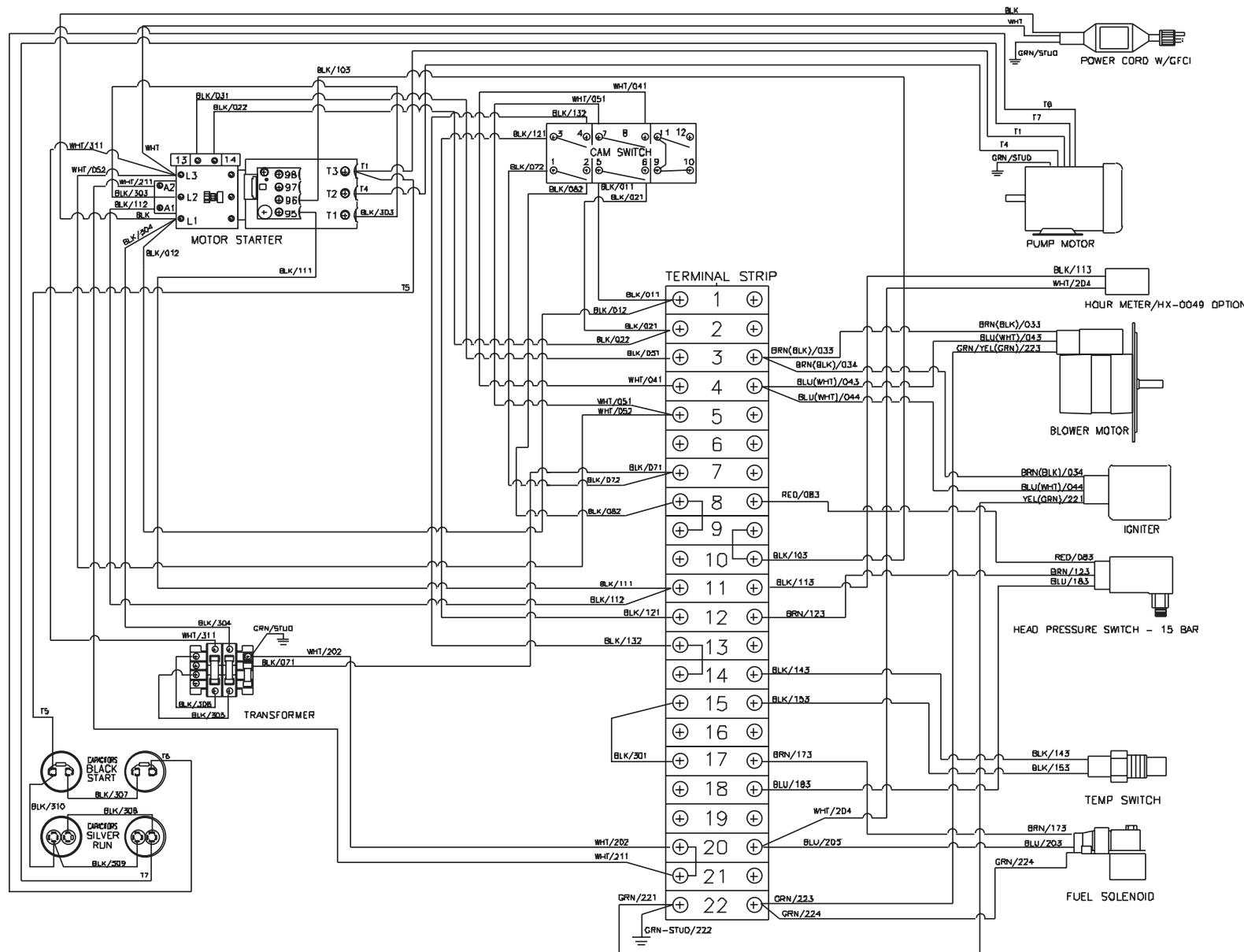
<b>ELECTRIC PANEL THREE PHASE</b>			
<b>REF. #</b>	<b>DESCRIPTION</b>	<b>PART #</b>	<b>QTY.</b>
1	Electric Panel	20-0434A06	1
2	Transformer	32-0313	1
3	Starwasher	28-1009	4
4	Bolt	27-8835	6
5	Overload Relay (HSE-2504-0M30)	32-0483	1
-	Overload Relay (HSE-3004/3504-0M30)	32-0484	1
6	Din Rail (One Foot Required)	32-0316	1
7	Contactor (HSE-2504-0M30)	32-0477	1
-	Contactor (HSE-3004/3504-0M30)	32-0478	1
8	Fuse	32-0467	2
9	Fuse	32-0471	1
10	Hex Nut	30-3022	2
11	Bolt	27-8898	1
12	Terminal Strip	32-0463	1
13	Decal- Terminal Strip (See 34-9012)	N/A Sep.	1
	Safety Decal Kit (Includes 13)	34-9012	
*Must Order in One Foot Lengths			

## WIRING SCHEMATIC FOR HSE-2504-0M10 (208-230 VOLT)

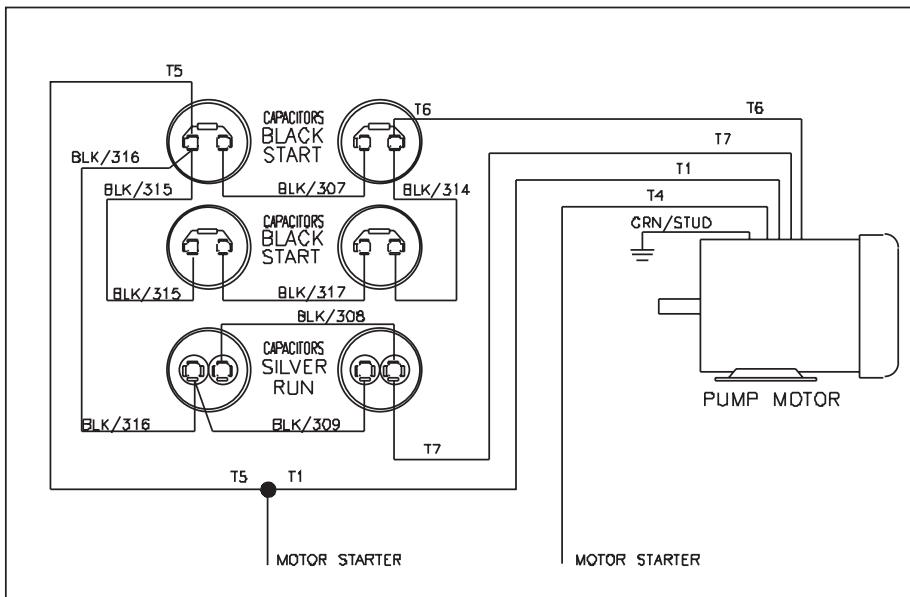
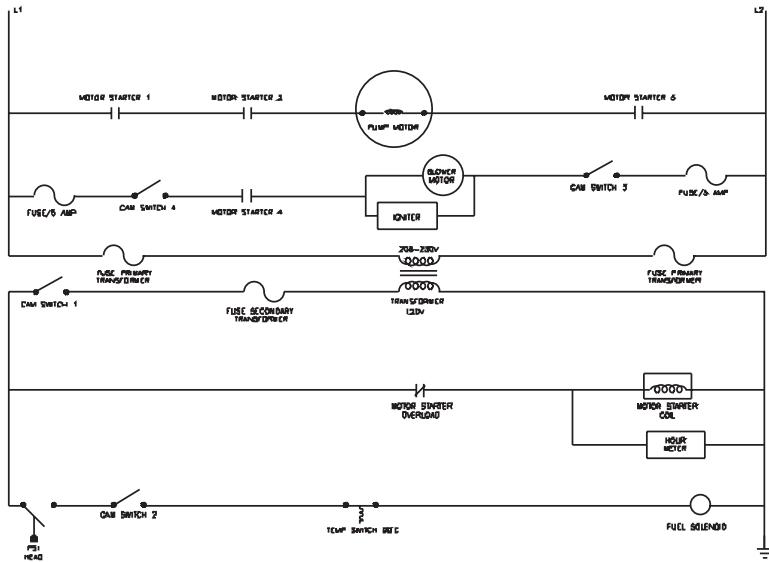


FACTORY SETTING	PRIMARY VOLTAGE TERMINALS		SECONDARY VOLTAGE TERMINALS	
	208	H4-H3	115	XF-X1
	230	H4-H2	115	XF-X1

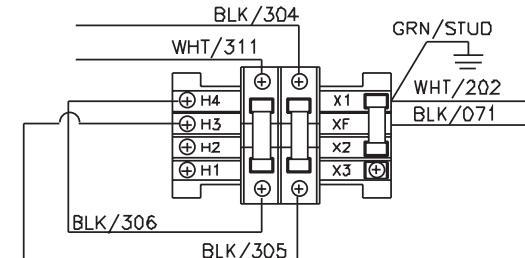
## WIRING DIAGRAM FOR HSE-2504-0M10 (208-230 VOLT)



## WIRING SCHEMATIC FOR HSE-3004-0M10 (208-230 VOLT)

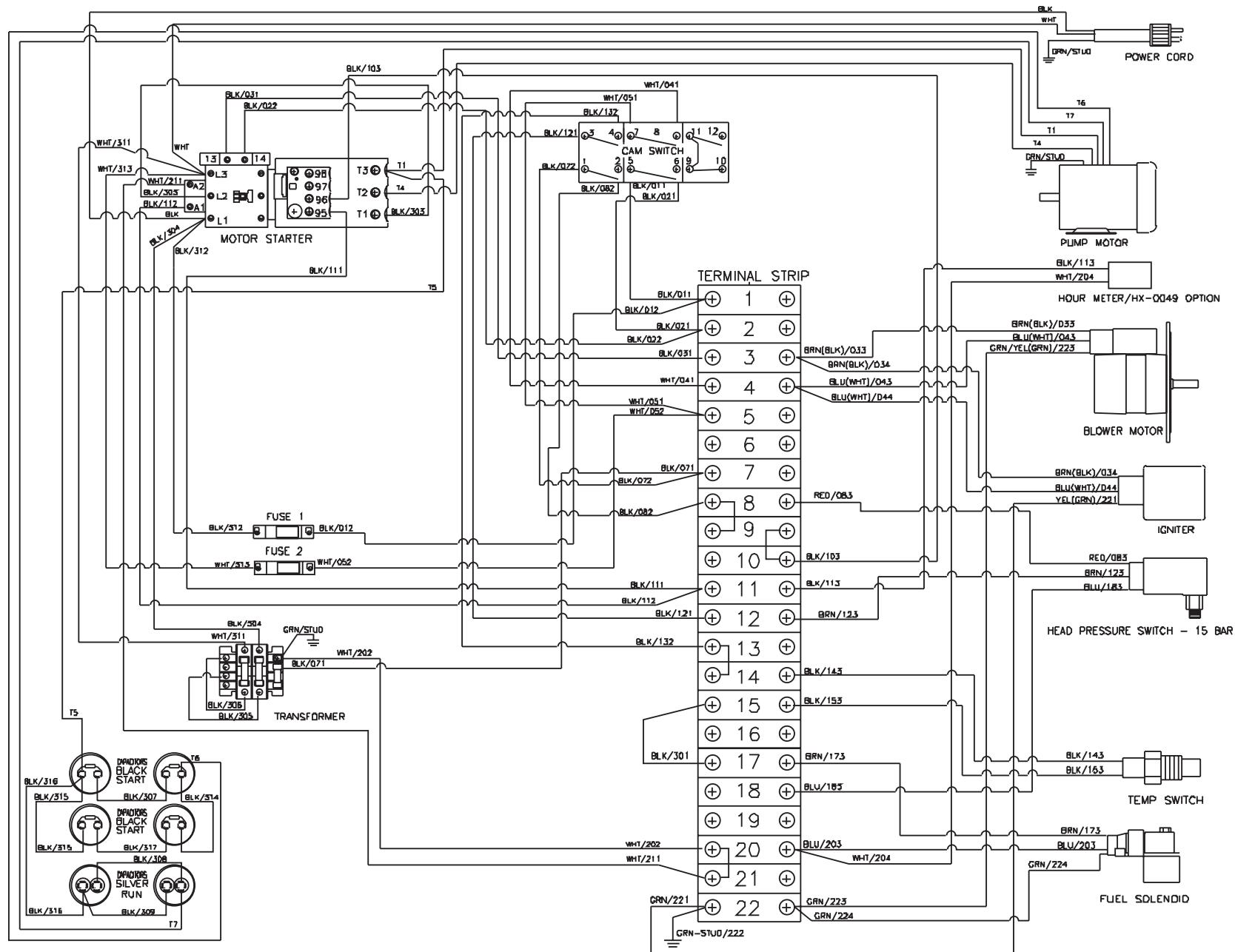


TRANSFORMER

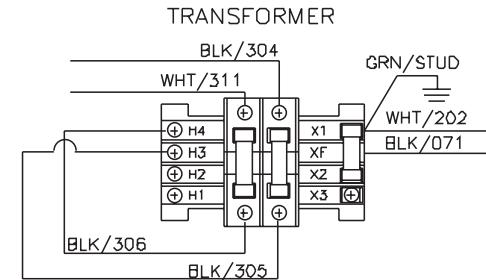
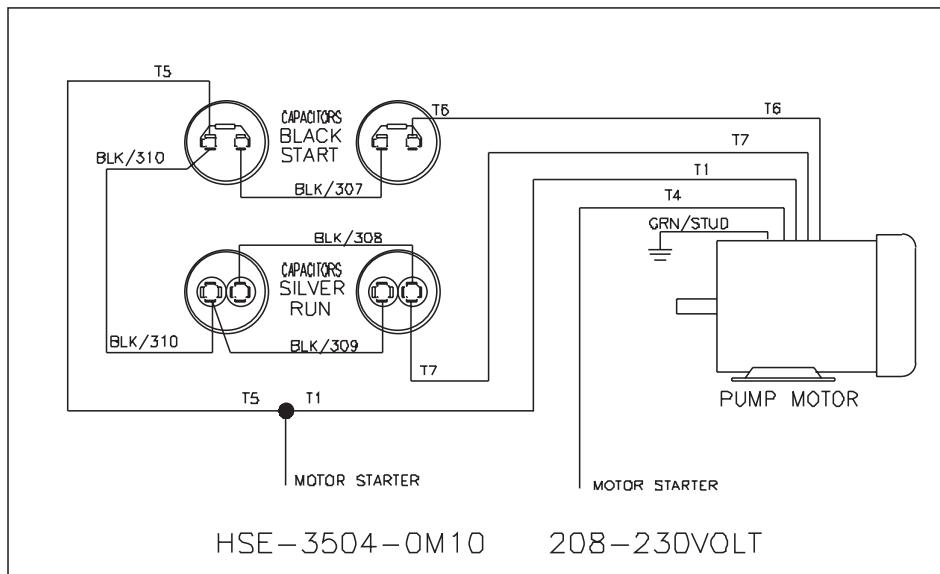
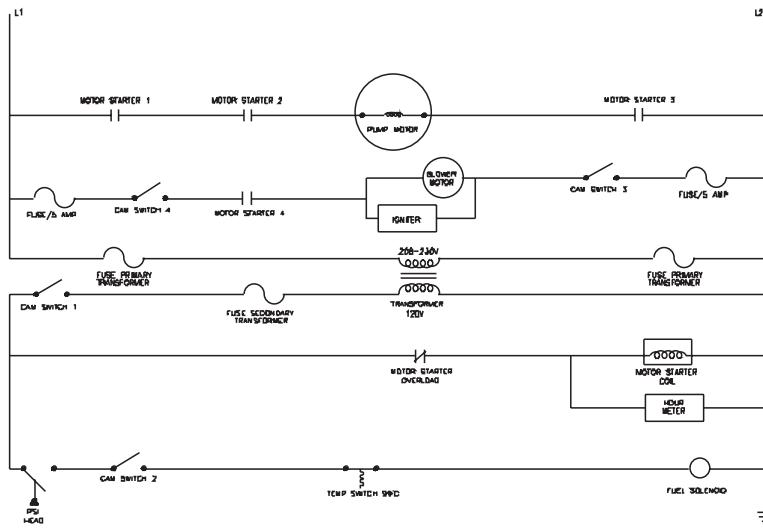


FACTORY SETTING	PRIMARY VOLTAGE TERMINALS		SECONDARY VOLTAGE TERMINALS	
208	H4-H3		115	XF-X1
230	H4-H2		115	XF-X1

## WIRING DIAGRAM FOR HSE-3004-0M10 (208-230 VOLT)

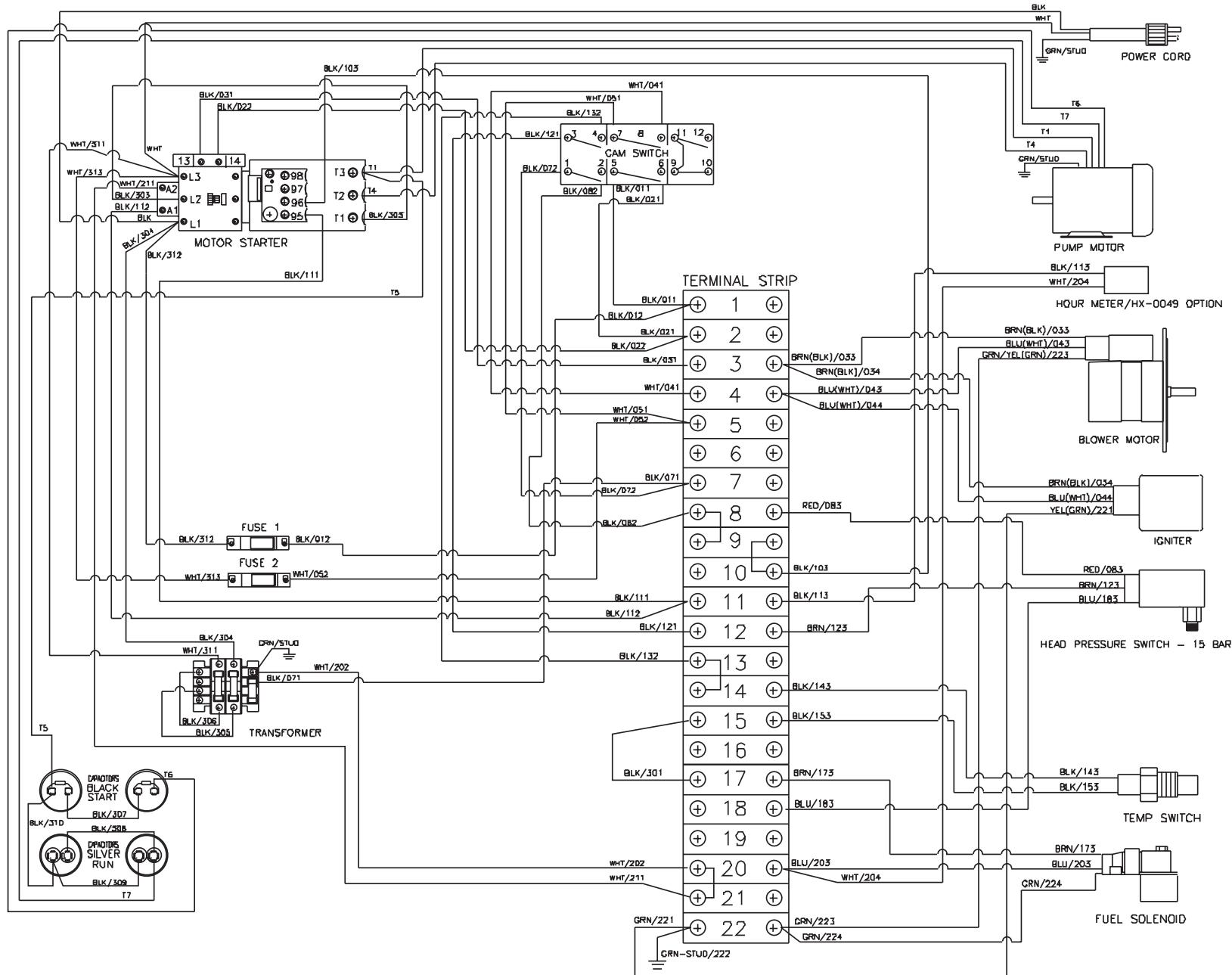


## WIRING SCHEMATIC FOR HSE-3504-0M10 (208-230 VOLT)

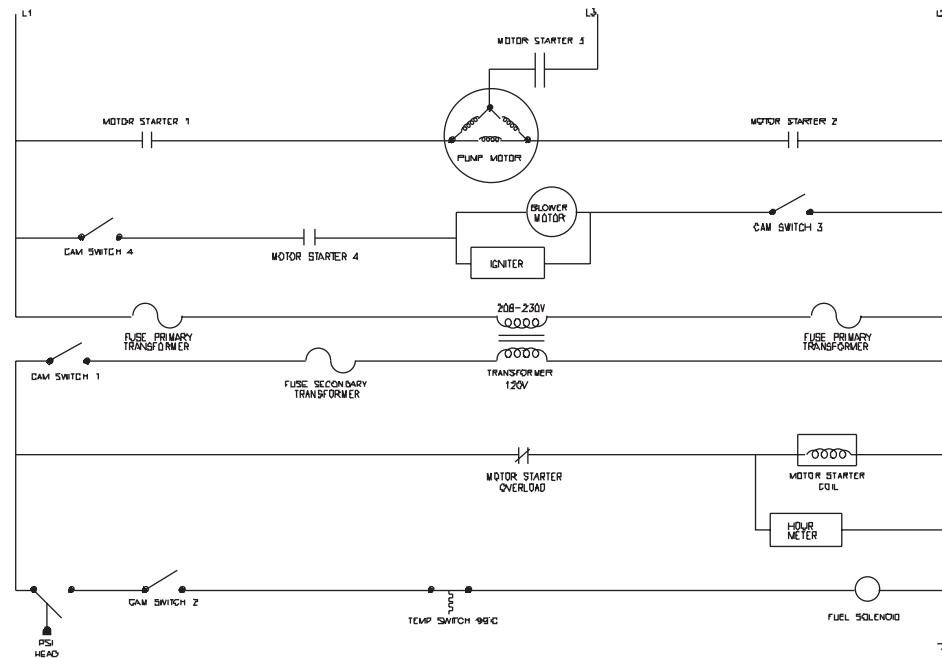


FACTORY SETTING	PRIMARY VOLTAGE TERMINALS		SECONDARY VOLTAGE TERMINALS	
	208	H4-H3	115	XF-X1
230	H4-H2		115	XF-X1

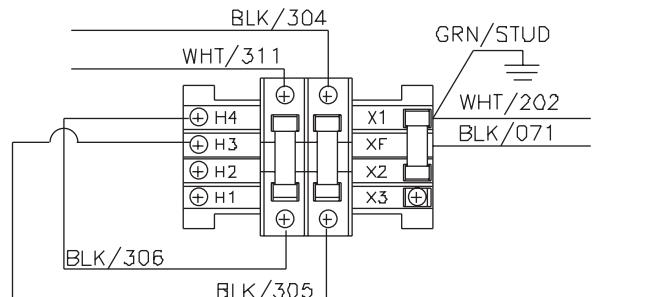
## WIRING DIAGRAM FOR HSE-3504-0M10 (208-230 VOLT)



## WIRING SCHEMATIC FOR HSE-2504/3004/3504-0M30 (208-230 VOLT)



### TRANSFORMER



FACTORY SETTING	PRIMARY VOLTAGE TERMINALS		SECONDARY VOLTAGE TERMINALS	
	208	H4-H3	115	XF-X1
	230	H4-H2	115	XF-X1

WIRING DIAGRAM FOR HSE-2504/3004/3504-0M30 (208-230 VOLT)

