



PARTS LIST FOR
AIR COMPRESSORS

AM1-PE02-08M

AM1-PE02-20M

PHASE:	SINGLE
VOLTS:	115/ 208 - 260
MAXIMUM AMPS:	18.8/ 10.2 - 9.4
MAXIMUM PRESSURE:	125 PSI
COMPRESSOR OIL GRADE:	SAE 30W Non-Detergent
COMPRESSOR OIL CAPACITY:	10.0 oz.

This Parts Listing has been compiled for your benefit. You can be assured your Mi-T-M Electric Air Compressor was constructed and designed with quality and performance in mind. 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. Mi-T-M reserves the right to make changes in price, color, materials, equipment, specifications or models at any time without notice.

WARNING

THIS IS A PROFESSIONAL ELECTRIC AIR COMPRESSOR. CAUTION SHOULD BE OBSERVED WHEN USING OR REPAIRING THIS UNIT! READ AND FOLLOW THE SAFETY WARNINGS LISTED BELOW BEFORE ATTEMPTING ANY REPAIRS ON THIS ELECTRIC AIR COMPRESSOR!

SAFETY WARNINGS

1. NEVER alter or modify the equipment. Be sure any accessory items and system components being used will withstand the pressure developed. Serious injury may occur from an air compressor malfunction or exploding accessories if incorrect system components, attachments or accessories are used. NEVER exceed manufactures maximum allowable pressure rating of attachments. Use only genuine Mi-T-M parts for repair of your air compressor. Failure to do so can cause hazardous operating conditions and will VOID warranty.
2. Know how to stop and bleed pressures quickly. Be thoroughly familiar with controls. Do not operate without protective covers/ guards.
3. Before servicing the unit, turn unit off, relieve the pressure and unplug the air compressor from the power source. Allow the unit to cool down. NEVER assume the air compressor is safe to work on just because it is not operating. It could restart at any time! 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.
4. After testing the machine, DO NOT leave the pressurized unit unattended. Shut off the unit and pressure before leaving.

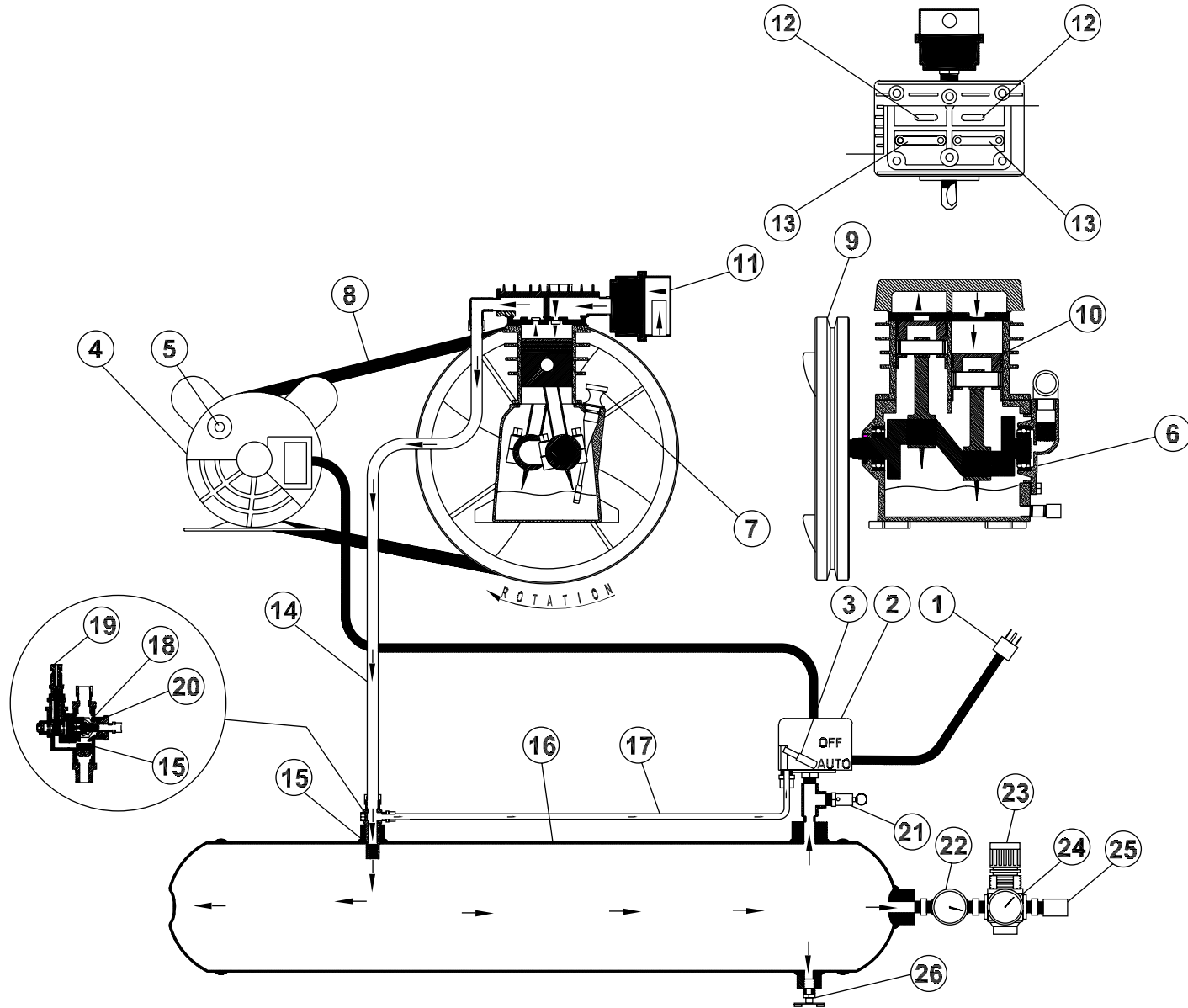
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SPECIFICATIONS

MODEL NUMBER	AM1-PE02-08M	AM1-PE02-20M
MOTOR:		
Horsepower	2.0	
Voltage	115	
Amperage	18.8	
HZ	60	
Phase	1	
RPM	1725	
S.F.	1.2	
COMPRESSOR PUMP:		
Number of Cylinders	2	
Compression Stages	1	
Bore/Stroke	2.56" x 1.89"	
RPM	875	
Flywheel	11"	
Lubrication	Splash	
Oil Quantity	10.0 oz.	
Oil Type	30W Non-Detergent	
Crankcase	Cast Iron	
Bearings	Ball	
Cylinder	Cast Iron	
Valves	Reed-Single	
Head	Cast Iron	
Filter	Canister	
PRESSURE SWITCH SETTING:		
Cut-out	125 PSI	
Cut-in	95 PSI	
AIR TANK:		
Capacity	8 gallons	20 gallons
PERFORMANCE:		
CFM Air Displacement	9.9	
CFM @ 40 PSI	9.1	
CFM @ 100 PSI	8.4	
Maximum Pressure	125 PSI	
Pump-up Time: 0-125 PSI	73 seconds	206 seconds
Recovery Time: 95-125 PSI	14 seconds	32 seconds
WEIGHT:		
Net	182 lbs.	203 lbs.
Shipping	208 lbs.	268 lbs.
DIMENSIONS:		
Basic L x W x H	44.5" x 18.5" x 25"	40" x 24" x 32"
Shipping L x W x H	45" x 19" x 32"	47" x 32" x 47"

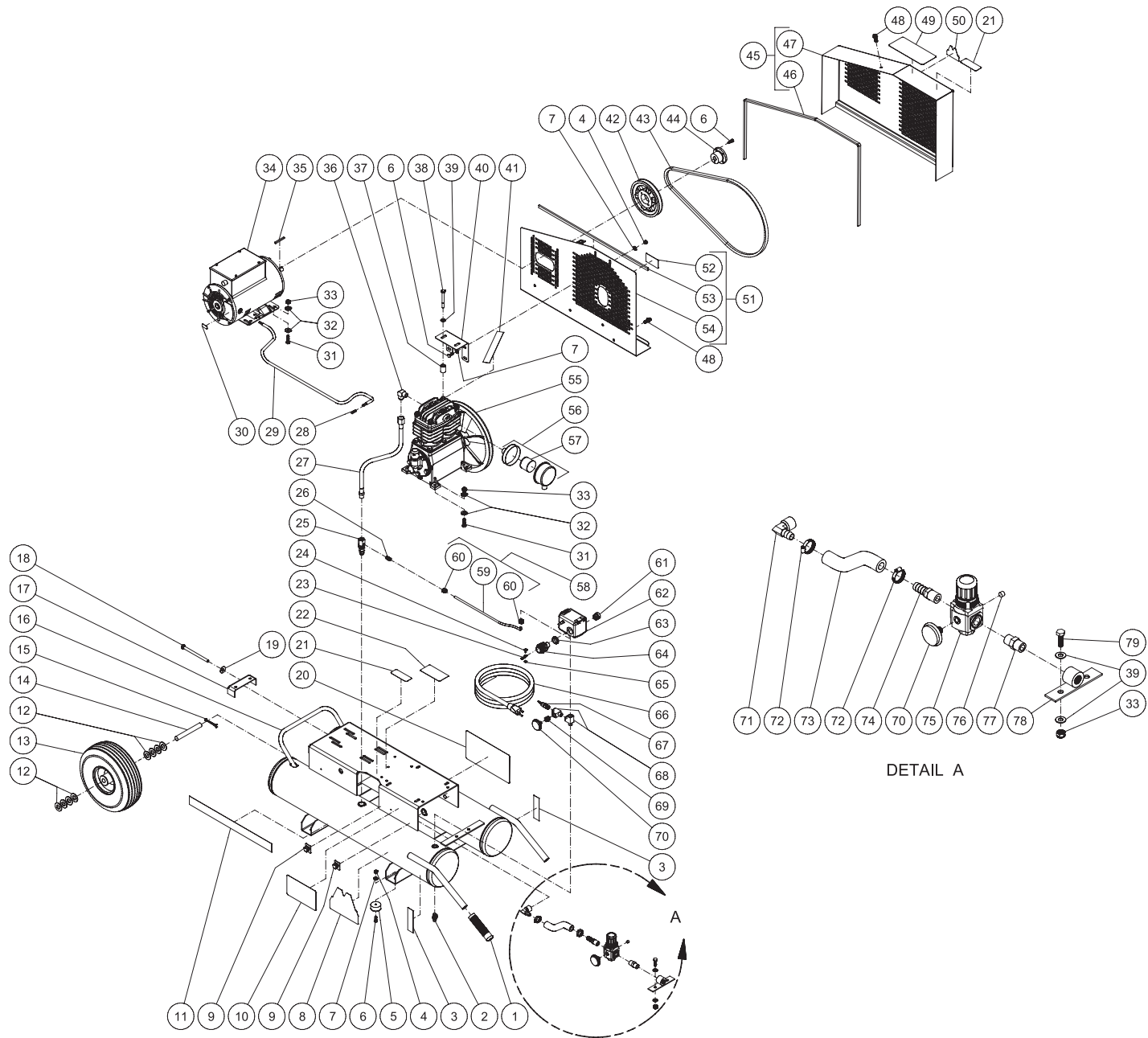
FLOW CHART



GENERAL THEORY OF OPERATION

1. The **POWER CORD (1)** sends the electrical supply to the **PRESSURE SWITCH (2)**. When the **PRESSURE SWITCH LEVER (3)** is in the "Auto" position, power is supplied to the **ELECTRIC MOTOR (4)** which is protected from electrical overloads by the **MANUAL RESET BUTTON (5)**.
2. The **COMPRESSOR PUMP (6)** is lubricated by oil. The oil level should be checked before each use by removing the **COMPRESSOR PUMP OIL DIPSTICK (7)**. Fill to proper level with SAE-30W non-detergent oil if needed.
3. When the unit is operating, the **V-BELT (8)** turns the **COMPRESSOR PUMP FLYWHEEL (9)** which rotates the crankshaft and moves the **PISTONS (10)**.
4. As the **PISTON (10)** moves down, air is drawn in through the **INLET AIR FILTER (11)** and then through the **INLET REED VALVE (12)**. At the same time, the **OUTLET REED VALVE (13)** is closed. This allows air to fill the piston chamber.
5. As the **PISTON (10)** moves up, the **INLET REED VALVE (12)** closes and the **OUTLET REED VALVE (13)** opens allowing the compressed air to flow into the **PUMP DISCHARGE LINE (14)**.
- 6a. **STANDARD START/STOP FEATURE:**
 1. The compressed air opens the **CHECK VALVE (15)** and moves into the **AIR TANK (16)**. When the pressure in the **AIR TANK (16)** reaches the maximum pressure setting of the **PRESSURE SWITCH (2)**, the **ELECTRIC MOTOR (4)** stops and the **CHECK VALVE (15)** will close.
 2. The pressurized air remaining in the **PUMP DISCHARGE LINE (14)** exits through the **PRESSURE SWITCH BLEND-OFF LINE (17)** so the **ELECTRIC MOTOR (4)** can restart under a no-load condition.
- 6b. **OPTIONAL DUAL CONTROL FEATURE:**
 1. This feature consists of a **PILOT CONTROL VALVE (18)** which has an **ADJUSTING KNOB (19)** with two positions.
 - a. **Start/Stop Position:** Turn the **ADJUSTING KNOB (19)** completely *clockwise* to the *closed* position. Air compressor will operate as described in the Start/Stop Feature as explained above.
 - b. **Constant Run Position:** Turn the **ADJUSTING KNOB (19)** completely *counterclockwise* to the *open* position. The compressed air opens the **CHECK VALVE (15)** and moves into the **AIR TANK (16)**. When the pressure in the **AIR TANK (16)** reaches the maximum pressure setting of the **PILOT CONTROL VALVE (18)**, the excess air exits the **PILOT VALVE MUFFLER (20)** and the **CHECK VALVE (15)** will close. Since the relief setting on the **PILOT CONTROL VALVE (18)** is lower than the maximum pressure setting on the **PRESSURE SWITCH (2)** the **ELECTRIC MOTOR (4)** will continue running. This feature is very useful under low voltage conditions, when motor starting can trip the circuit breaker (fuse).
7. The **SAFETY RELIEF VALVE (21)** protects the system from any overpressure conditions.
8. The **TANK PRESSURE GAUGE (22)** indicates tank pressure. The **AIR PRESSURE REGULATOR (23)** can be adjusted to the desired operating pressure which is indicated on the **OUTLET PRESSURE GAUGE (24)**. The air exits through the **OUTLET FITTING (25)**.
9. The **PRESSURE SWITCH LEVER (3)** stops the **ELECTRIC MOTOR (4)** when moved to the "OFF" position.
10. When the **PRESSURE SWITCH LEVER (3)** is in the "off" position, compressed air should be released from the **AIR TANK (16)** by opening the attached air tool or by pulling on the **SAFETY RELIEF VALVE (21)**. When the **TANK PRESSURE GAUGE (22)** registers less than 10 PSI, drain the condensation from the **AIR TANK (16)** by opening the **TANK DRAIN (26)**.

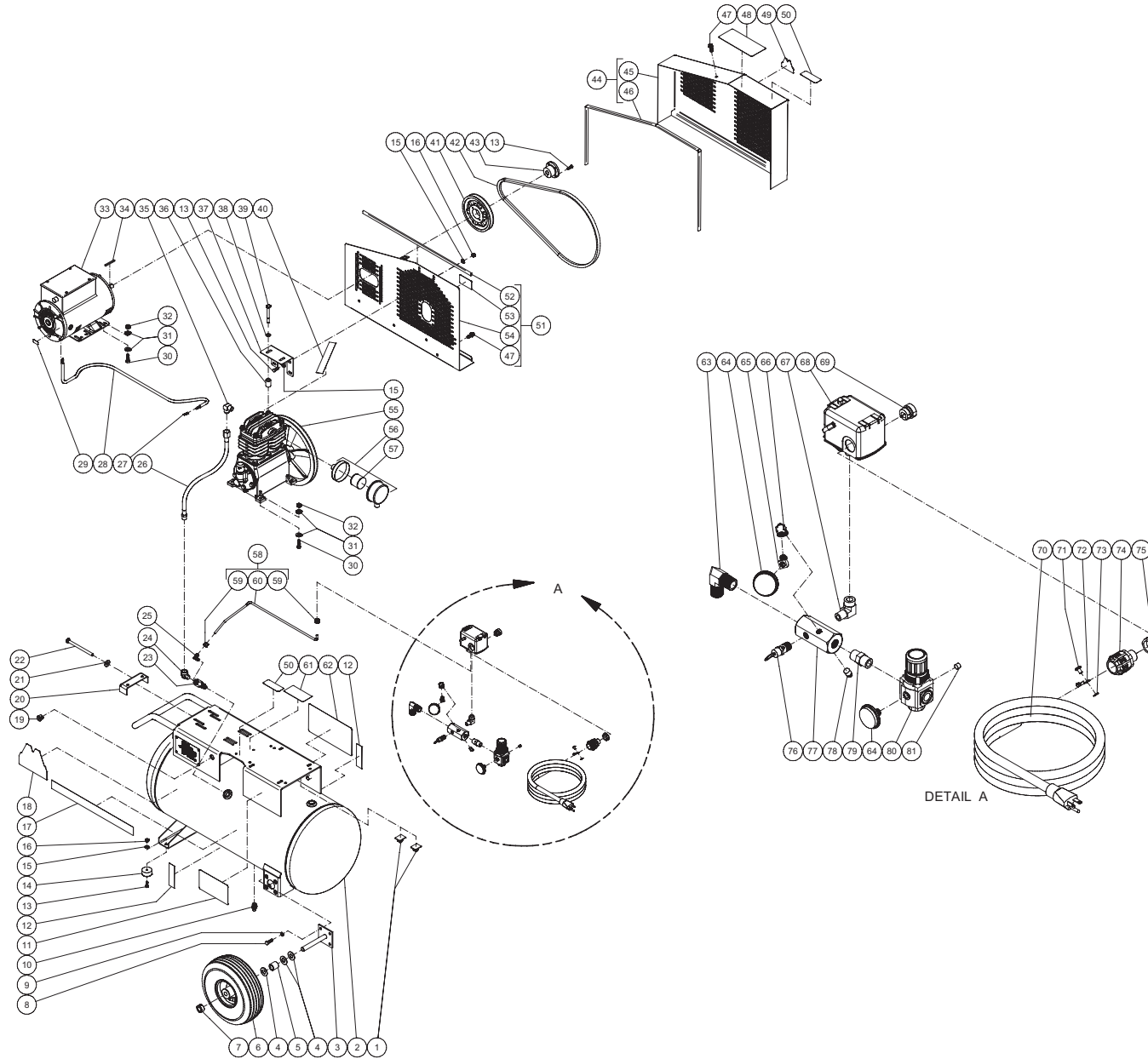
TANK ASSEMBLY FOR AM1-PE02-08M



AM1-PE02-08M-032309-CAW

AM1-PE02-08M							
ITEM	DESCRIPTION	Mi-T-M #	QTY	ITEM	DESCRIPTION	Mi-T-M #	QTY
1	HANDLE GRIP	7-0143	2	41	DECAL - CHECK OIL (SEE 34-9016)	N/A	1
2	PETCOCK	23-0312	2	42	SHEAVE	10-0150	1
3	DECAL - TANK DRAIN (SEE 34-9016)	N/A	2	43	BELT	11-0040	1
4	LOCKNUT	30-0155	6	44	BUSHING	9-0037	1
5	ISOLATOR	14-0069	4	45	BELTGUARD COVER ASSEMBLY *(INC. 46-47)	854-0095	1
6	BOLT	27-0015	8	46	EDGING *(FOUR FEET REQUIRED)	33-0020	1
7	WASHER	28-0002	8	47	BELTGUARD COVER	N/A	1
8	DECAL - Mi-T-M	34-2169	1	48	BOLT	27-9524	4
9	WIRE CLIP	33-0264	2	49	DECAL - OPERATING INSTRUCTIONS (SEE 34-9016)	N/A	1
10	DECAL - MAINTENANCE INSTRUCTIONS (SEE 34-9016)	N/A	1	50	DECAL - Mi-T-M	34-2167	1
11	DECAL - 17" STRIPE	34-2188	1	51	BELTGUARD BACK ASSEMBLY (INC. 52-54)	854-0094	1
12	WASHER	28-0008	8	52	DECAL - BELTGUARD IN PLACE (SEE 34-9016)	N/A	1
13	WHEEL	14-0017	1	53	EDGING *(THREE FEET REQUIRED)	33-0020	1
14	AXLE	20-0420	1	54	BELTGUARD BACK	N/A	1
15	COTTER PIN	43-0092	2	55	AIR COMPRESSOR PUMP	3-0315	1
16	AIR TANK ASSEMBLY	N/A	1	56	AIR FILTER ASSEMBLY	19-0253	1
17	TIGHTENER BRACKET	20-0614A01	1	57	FILTER	19-0252	1
18	BOLT	27-0133	1	58	TUBE ASSEMBLY	854-0022	1
19	WASHER	28-0023	1	59	TUBE - COPPER *(TWO FEET REQUIRED)	54-0034	1
20	DECAL - CAUTION/WARNING/DANGER (SEE 34-9016)	N/A	1	60	NUT	23-0315	2
21	DECAL - RISK OF BURNS (SEE 34-9016)	N/A	2	61	BUSHING	9-0045	1
22	DECAL - SILVER STICKER	N/A	1	62	PRESSURE SWITCH	22-0312	1
23	TERMINAL	32-0099	3	63	ELECTRICAL LOCKNUT	32-0108	1
24	SCREW	27-8933	1	64	STRAIN RELIEF	32-0358	1
25	CHECK VALVE	22-0334	1	65	STAR WASHER	28-1009	3
26	ADAPTER	23-0328	1	66	CORD	32-0756	1
27	HOSE	15-0236	1	67	SAFETY VALVE	22-0228	1
28	TERMINAL	32-0003	6	68	TEE	23-0127	2
29	CORD *(THREE FEET REQUIRED)	32-0445	1	69	REDUCER	23-0111	1
30	DECAL - 115 VOLT (SEE 34-9016)	N/A	1	70	PRESSURE GAUGE	22-0271	2
31	BOLT	27-0068	8	71	HOSE BARB	23-0418	1
32	WASHER	28-0022	16	72	HOSE CLAMP	42-0011	2
33	LOCKNUT	30-0157	10	73	HOSE *(ONE FOOT REQUIRED)	15-0007	1
34	MOTOR	2-0119	1	74	HOSE BARB	23-0105	1
35	KEY	43-0073	1	75	REGULATOR	22-0231	1
36	ELBOW	23-0426	1	76	PLUG	24-0082	1
37	SPACER	33-0425	2	77	NIPPLE	24-0010	1
38	BOLT	27-8040	2	78	REGULATOR MOUNTING BRACKET	20-0421A01	1
39	WASHER	28-0003	6	79	BOLT	27-0067	2
40	BRACKET	20-1134A01	1	-	DECAL SET	34-9016	1

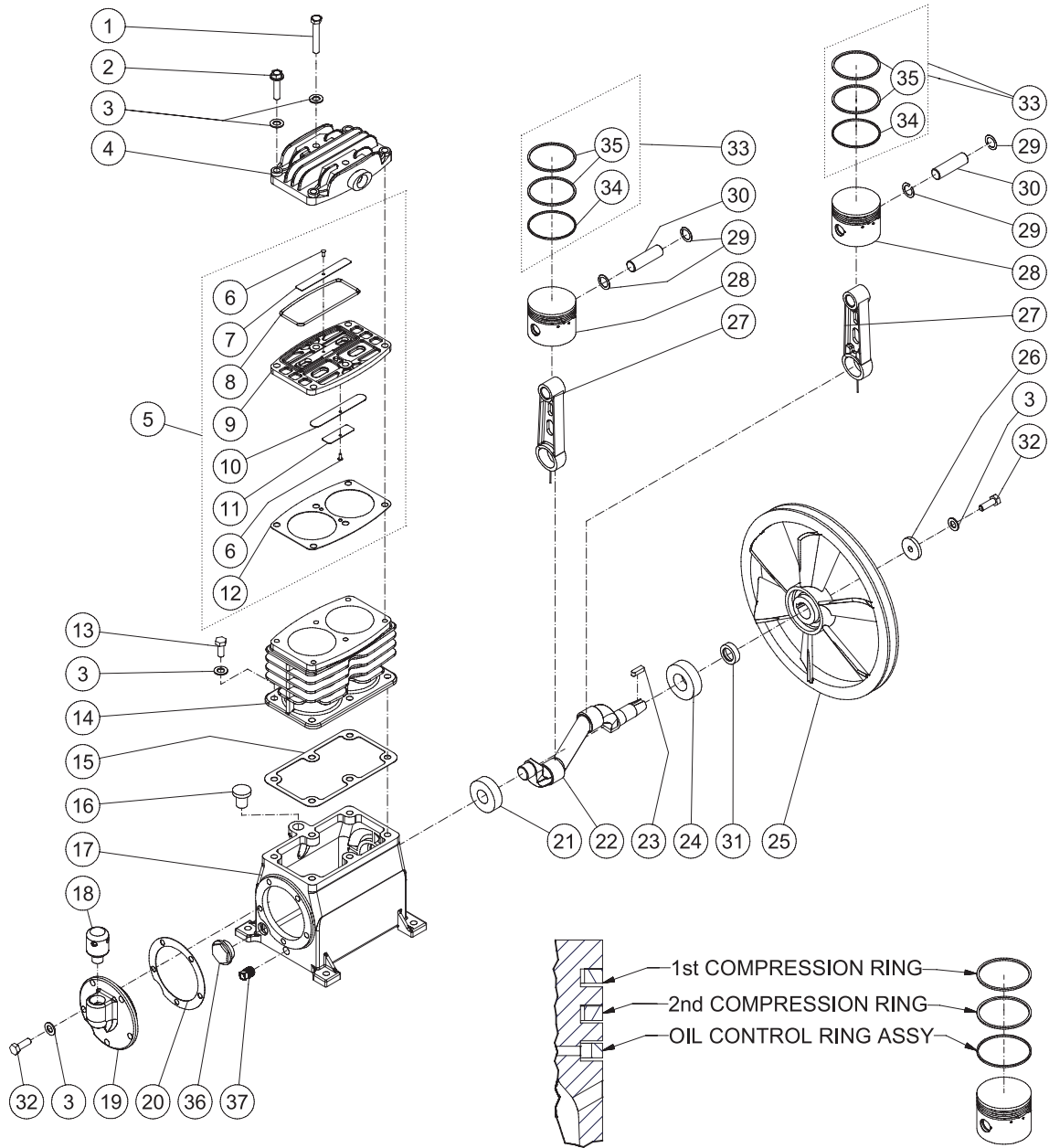
TANK ASSEMBLY FOR AM1-PE02-20M



AM1-PE02-20M-021610 PJH

AM1-PE02-20M				AM1-PE02-20M			
ITEM	DESCRIPTION	PART #	QTY	ITEM	DESCRIPTION	PART #	QTY
1	WIRE CLIP	33-0264	2	42	BELT	11-0040	1
2	AIR TANK ASSEMBLY	N/A	1	43	BUSHING	9-0037	1
3	AXLE	20-0670A01	2	44	BELTGUARD COVER ASSEMBLY *(INC. 45-46)	854-0095	1
4	WASHER	28-0008	6	45	BELTGUARD COVER ASSEMBLY	N/A	1
5	SPACER	62-0188	2	46	EDGING *(FOUR FEET REQUIRED)	33-0020	1
6	WHEEL	14-0017	2	47	BOLT	27-9524	4
7	COLLAR	33-0351	2	48	DECAL - OPERATING INSTRUCTIONS (SEE 34-9016)	N/A	1
8	BOLT	27-0067	9	49	DECAL - Mi-T-M	34-2167	1
9	LOCKWASHER	29-0007	8	50	DECAL - RISK OF BURNS *(SEE 34-9016)	N/A	2
10	PETCOCK	23-0312	1	51	BELTGUARD BACK ASSEMBLY (INC. 52-54)	854-0094	1
11	DECAL - MAINTENANCE INSTRUCTIONS *(SEE 34-9016)	N/A	1	52	EDGING *(THREE FEET REQUIRED)	33-0020	1
12	DECAL - TANK DRAIN *(SEE 34-9016)	N/A	2	53	DECAL - BELTGUARD IN PLACE *(SEE 34-9016)	N/A	1
13	BOLT	27-0015	6	54	BELTGUARD BACK ASSEMBLY	N/A	1
14	ISOLATOR	14-0069	2	55	AIR COMPRESSOR PUMP	3-0315	1
15	WASHER	28-0002	6	56	AIR FILTER ASSEMBLY	19-0253	1
16	LOCKNUT	30-0155	4	57	FILTER	19-0252	1
17	DECAL - 17" STRIPE	34-2188	1	58	TUBING ASSEMBLY	854-0057	1
18	DECAL - Mi-T-M	34-2169	1	59	NUT	23-0315	2
19	CORD BUSHING	32-0465	1	60	COPPER TUBE *(TWO FOOT REQUIRED)	54-0034	1
20	TIGHTENER BRACKET	20-0614A01	1	61	DECAL- SILVER STICKER	N/A	1
21	WASHER	28-0023	1	62	DECAL - CAUTION/WARNING/DANGER *(SEE 34-9016)	N/A	1
22	BOLT	27-0133	1	63	ELBOW	24-0267	1
23	CHECK VALVE	22-0334	1	64	PRESSURE GAUGE	22-0271	2
24	ELBOW	24-0042	1	65	ELBOW	23-0133	1
25	ELBOW	23-0316	1	66	ELBOW	23-0118	1
26	HOSE	15-0236	1	67	ELBOW	24-0021	1
27	TERMINAL	32-0003	6	68	PRESSURE SWITCH	22-0312	1
28	CORD *(THREE FEET REQUIRED)	32-0445	1	69	BUSHING	9-0045	1
29	DECAL - 115 VOLT (SEE 34-9016)	N/A	1	70	CORD	32-0756	1
30	BOLT	27-0068	8	71	SCREW	27-8933	1
31	WASHER	28-0022	16	72	TERMINAL	32-0099	3
32	LOCKNUT	30-0157	8	73	STAR WASHER	28-1009	3
33	MOTOR	2-0119	1	74	STRAIN RELIEF	32-0358	1
34	KEY	43-0073	1	75	ELECTRICAL LOCKNUT	32-0108	1
35	ELBOW	23-0426	1	76	SAFETY VALVE	22-0228	1
36	SPACER	33-0425	2	77	MANIFOLD	24-0266	1
37	BRACKET	20-1134A01	1	78	PLUG	24-0082	1
38	WASHER	28-0003	2	79	NIPPLE	24-0010	1
39	BOLT	27-8040	2	80	REGULATOR	22-0231	1
40	DECAL - CHECK OIL *(SEE 34-9016)	N/A	1	81	PLUG	24-0082	1
41	SHEAVE	10-0150	1	-	DECAL SET	34-9016	1

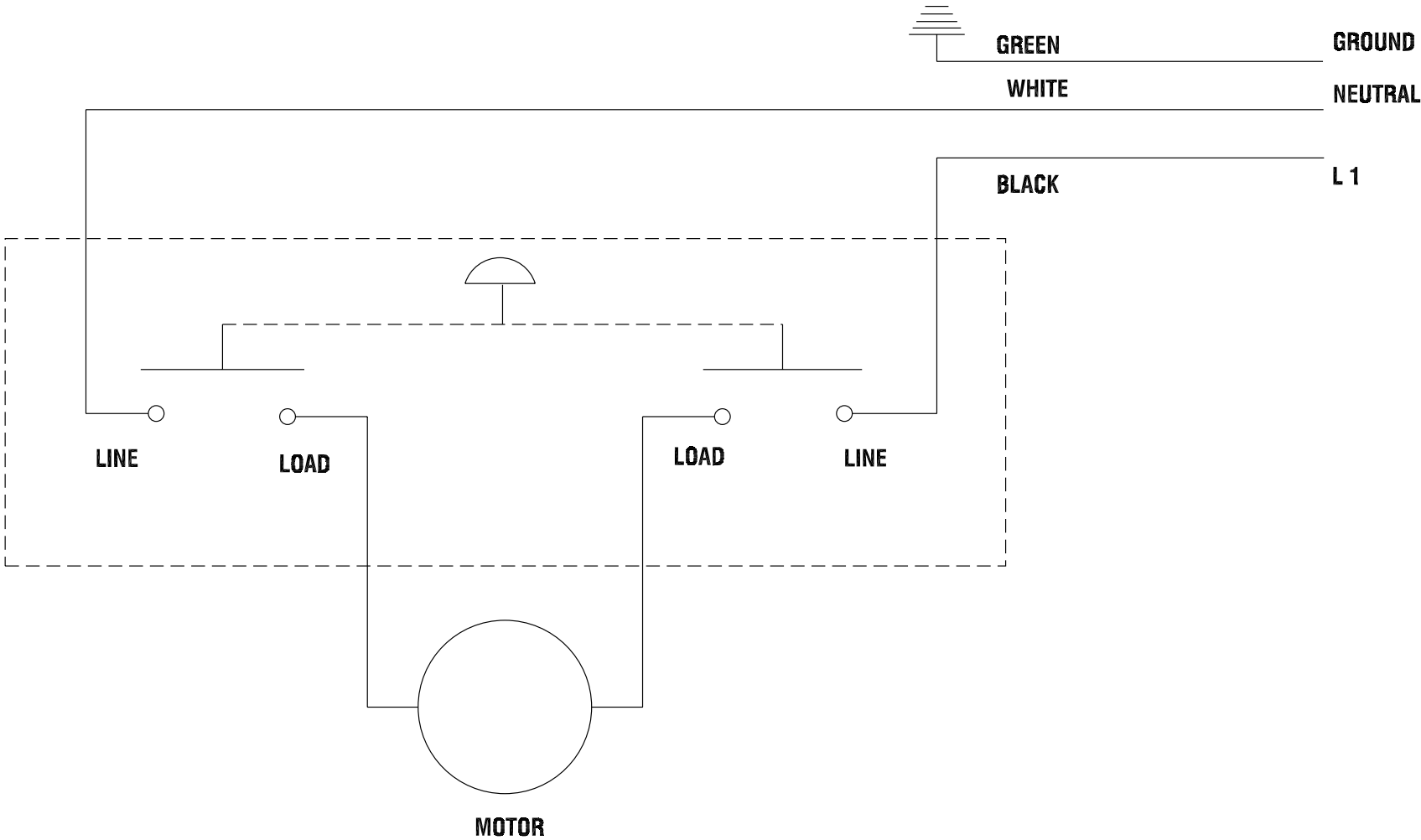
SINGLE STAGE COMPRESSOR (3-0315)



3-0315-092310-PJH

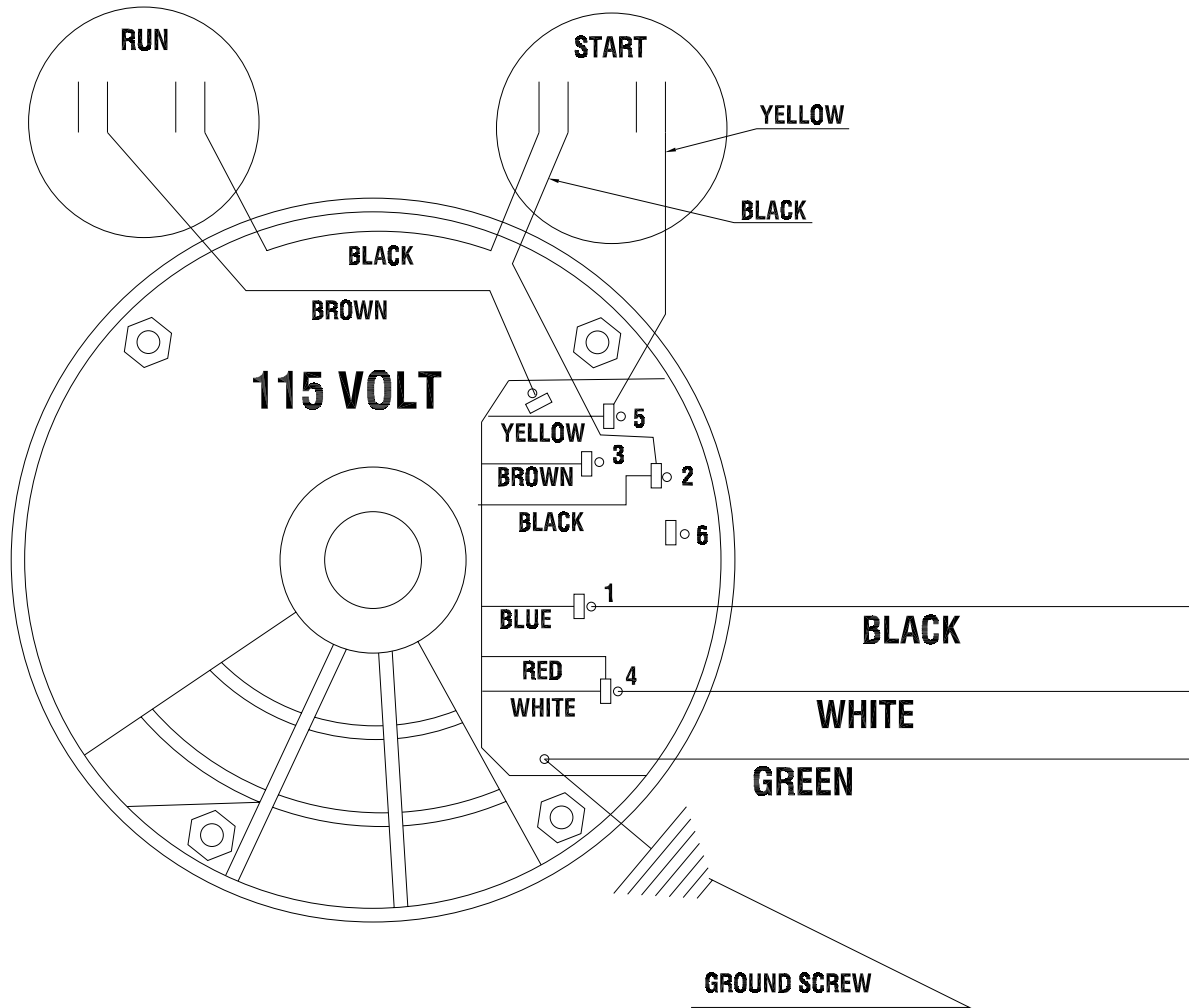
3-0315 092310-PJH			
PUMP 3-0315			
ITEM	DESCRIPTION	Mi-T-M #	QTY
1	BOLT	27-8918	2
2	BOLT	27-9525	4
3	WASHER	28-1059	18
4	CYLINDER HEAD	N/A	1
5	KIT - VALVE PLATE ASSY (6 - 12)	70-0535	1
6	BOLT	N/A	2
7	VALVE PLATE	N/A	1
8	O-RING	N/A	1
9	VALVE PLATE	N/A	1
10	INLET VALVE PLATE	N/A	1
11	VALVE PIECE	N/A	1
12	GASKET	N/A	1
13	BOLT	27-8032	6
14	CYLINDER	46-1354	1
15	GASKET	N/A	1
16	OIL PLUG	46-1358	1
17	CRANKCASE	N/A	1
18	BREATHER	46-1356	1
19	COVER	46-1357	1
20	GASKET	N/A	1
21	BEARING	48-0089	1
22	CRANKSHAFT	46-1355	1
23	KEY	43-0132	1
24	BEARING	48-0088	1
25	FLYWHEEL	10-0149	1
26	WASHER	N/A	1
27	CONNECTING ROD	46-1353	2
28	PISTON	46-1359	2
29	C-CLIP	46-1351	4
30	PIN	46-1352	2
31	OIL SEAL	26-0326	1
32	BOLT	27-8033	6
33	PISTON RING KIT	70-0534	2
34	PISTON OIL RING	N/A	1
35	PISTON RING	N/A	2
36	SIGHT GLASS	46-1336	1
37	PLUG	24-0009	1
38	KIT - PUMP GASKETS (Includes #'s 8, 12, 15, & 20)	70-0536	1

WIRING SCHEMATIC



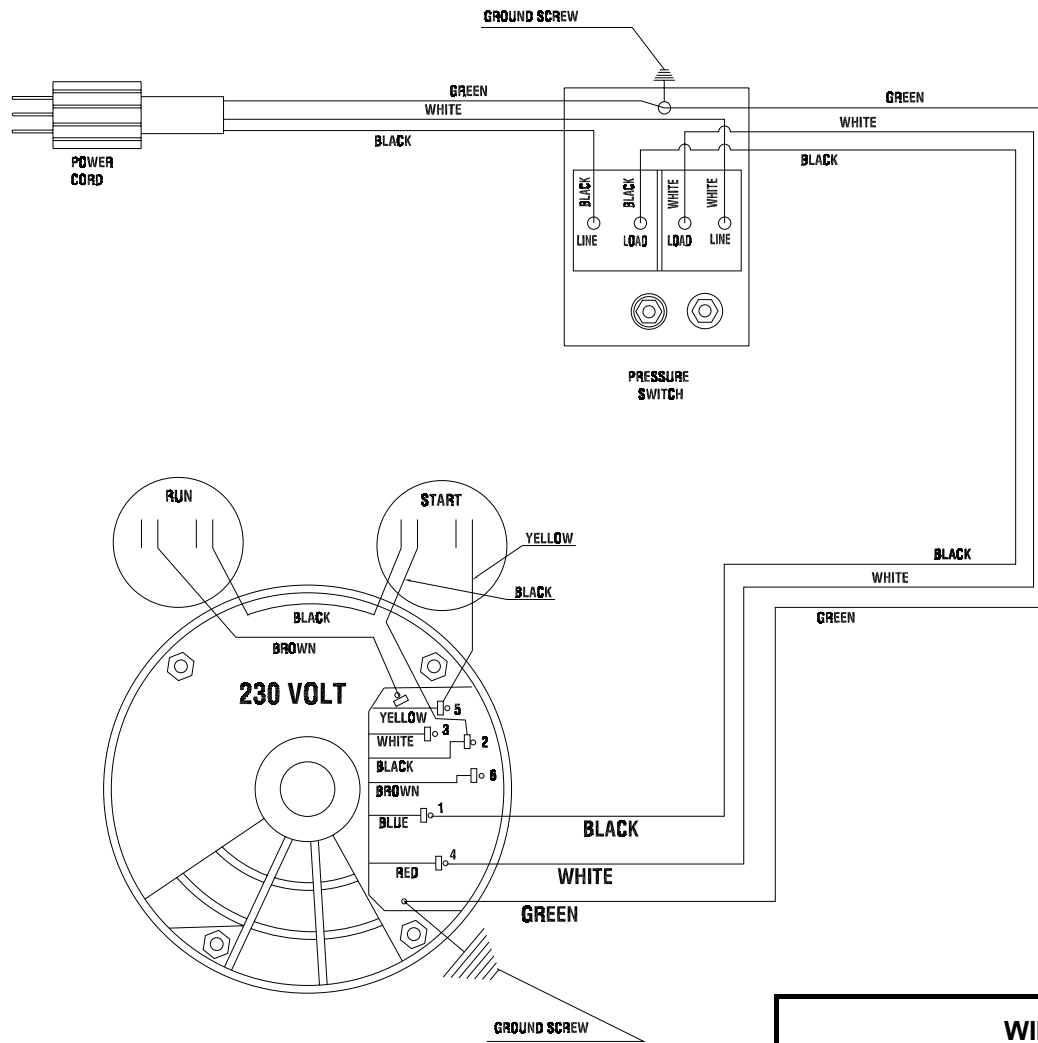
ACWD-0002 SCHEMATIC-040402-RD

WIRING DIAGRAM (115 VOLT)



ACWD-0002 115 VOLT WIRE DIAGRAM-040402-RD

WIRING DIAGRAM (230 VOLT)



ACWD-0002 D-040402-RD

WIRING DIAGRAM (230 VOLT)		
PART #	DESCRIPTION	QTY.
32-0003	Fork Terminal #14 Wire	6
32-0099	Ring Terminal #14 Wire	3

NOTES

Manufactured by Mi-T-M
8650 Enterprise Drive, Peosta IA 52068
563-556-7484/ Fax 563-556-1235