



PARTS LIST FOR  
AIR COMPRESSORS  
***AM1-PE15-08M***  
***AM1-PE15-20M***

PHASE:	SINGLE
VOLTS:	115/208-230
MAXIMUM AMPS:	13.2/7.2-6.6
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

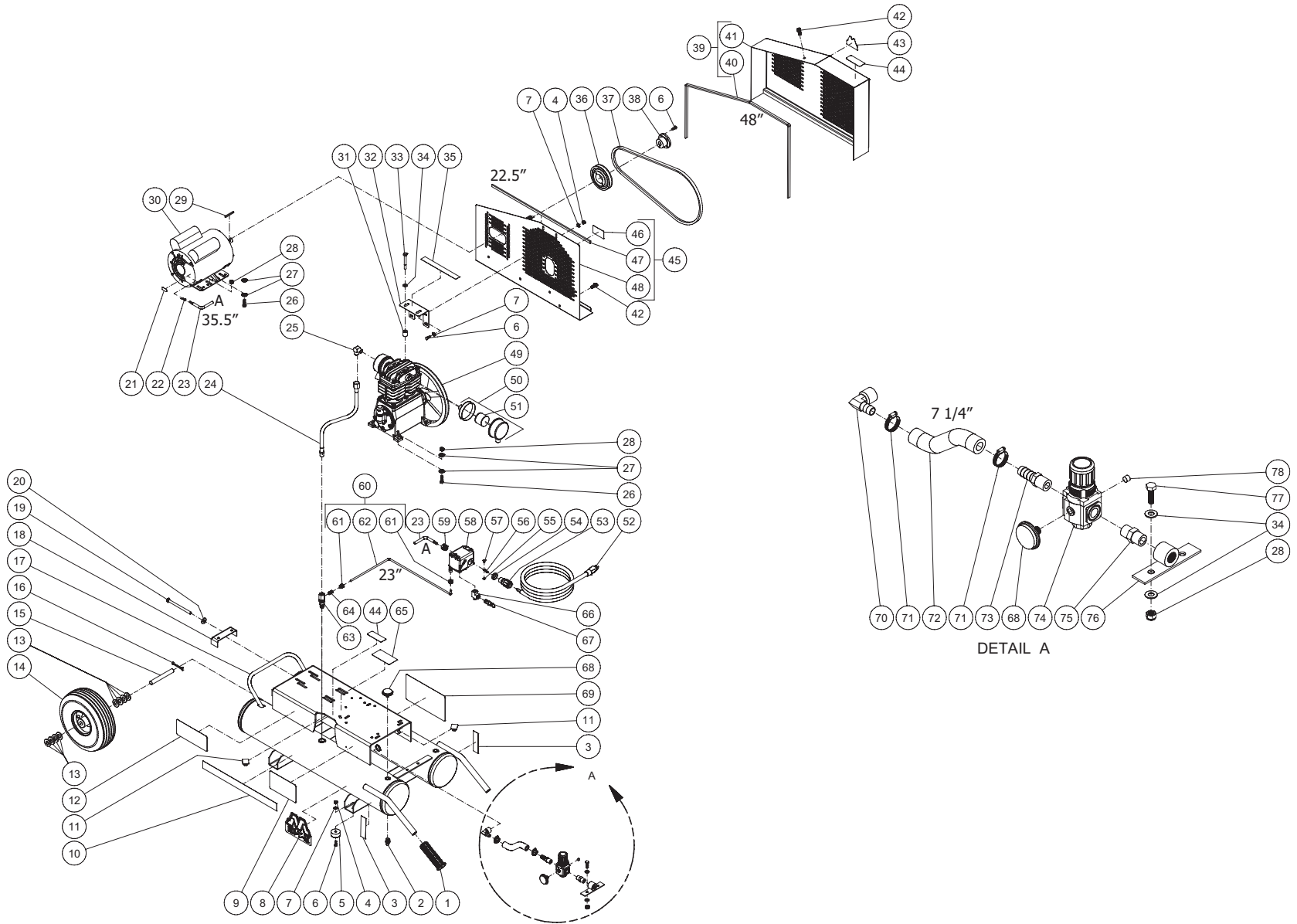
MODEL NUMBER	AM1-PE15-08M	AM1-PE15-20M
<b>MOTOR:</b>		
Horsepower	1.5	
Voltage	115	
Amperage	13.2	
HZ	60	
Phase	1	
RPM	1725	
S.F.	1.2	
<b>COMPRESSOR PUMP:</b>		
Number of Cylinders	2	
Compression Stages	1	
Bore/Stroke	2.56" x 1.89"	
RPM	675	
Flywheel	10.5"	
Lubrication	Splash	
Oil Quantity	10.0 oz.	
Oil Type	30W Non-Detergent	
Crankcase	Cast Iron	
Bearings	Ball	
Cylinder	Cast Iron	
Valves	Reed-Single	
Head	Cast Iron	
Filter	Canister	
<b>PRESSURE SWITCH SETTING:</b>		
Cut-out	125 PSI	
Cut-in	95 PSI	
<b>AIR TANK:</b>		
Capacity	8 gallons	20 gallons
<b>PERFORMANCE:</b>		
CFM @ 40 PSI	7.2	
CFM @ 100 PSI	6.5	
Maximum Pressure	125 PSI	
Pump-up Time: 0-125 PSI	96 seconds	242 seconds
Recovery Time: 95-125 PSI	17 seconds	38 seconds
<b>WEIGHT:</b>		
Net	174 lbs.	203 lbs.
Shipping	200 lbs.	268 lbs.
<b>DIMENSIONS:</b>		
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"



## 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)**.

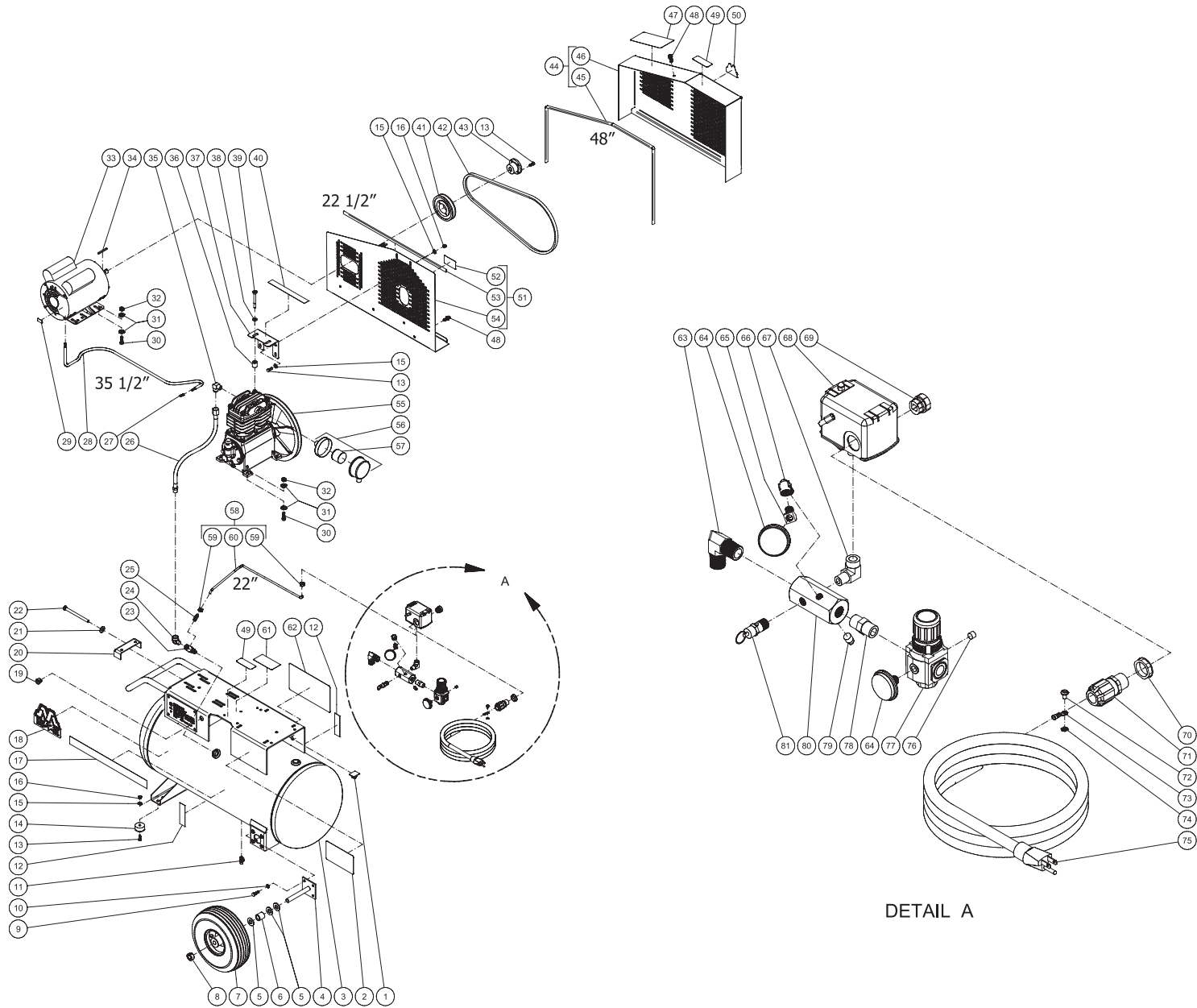
# TANK ASSEMBLY FOR AM1-PE15-08M



AM1-PE15-08M 033016 ALC

TANK ASSEMBLY							
ITEM	DESCRIPTION	PART #	QTY	ITEM	DESCRIPTION	PART #	QTY
1	HANDLE GRIP	7-0059	2	41	BELTGUARD COVER ASSEMBLY	N/A	1
2	PETCOCK	23-0312	2	42	BOLT	27-9524	4
3	DECAL - TANK DRAIN (SEE 71-2001)	N/A	2	43	DECAL - MI-T-M	N/A	1
4	LOCKNUT	30-0155	6	44	DECAL - RISK OF BURNS (SEE 71-2001)	N/A	2
5	ISOLATOR	14-0069	4	45	BELTGUARD BACK ASSEMBLY (INC. 46-48)	854-0094	1
6	BOLT	27-0015	8	46	DECAL - BELTGUARD IN PLACE (SEE 71-2001)	N/A	1
7	WASHER	28-0002	8	47	EDGING *(TWO FEET REQUIRED)	33-0020	1
8	DECAL - MI-T-M	N/A	1	48	BELTGUARD BACK - SM	N/A	1
9	DECAL - MAINTENANCE INSTRUCTIONS (SEE 71-2001)	N/A	1	49	PUMP	3-0315	1
10	DECAL - 17" STRIPE	N/A	1	50	AIR FILTER ASSEMBLY	19-0253	1
11	WIRE CLIP	33-0264	2	51	FILTER	19-0252	1
12	DECAL - OPERATING INSTRUCTIONS (SEE 71-2001)	N/A	1	52	CORD	32-0754	1
13	WASHER	28-0008	8	53	STRAIN RELIEF	32-0766	1
14	WHEEL	14-0130	1	54	ELECTRICAL LOCKNUT	32-0108	1
15	AXLE	20-0420	1	55	STAR WASHER	28-1009	3
16	COTTER PIN	43-0092	2	56	TERMINAL	32-0099	3
17	AIR TANK ASSEMBLY	N/A	1	57	SCREW	27-8933	2
18	TIGHTENER BRACKET	20-0614A01	1	58	PRESSURE SWITCH	22-0232	1
19	BOLT	27-0133	1	59	BUSHING	9-0045	1
20	WASHER	28-0023	1	60	TUBE ASSEMBLY	854-0022	1
21	DECAL - 115 VOLT (SEE 71-2001)	N/A	1	61	NUT	23-0315	2
22	TERMINAL	32-0003	6	62	TUBING *(TWO FEET REQUIRED)	54-0034	1
23	CORD *(THREE FEET REQUIRED)	32-0445	1	63	CHECK VALVE	22-0334	1
24	HOSE	15-0236	1	64	ADAPTER	23-0328	1
25	ELBOW	23-0426	1	65	DECAL- SILVER STICKER	N/A	1
26	BOLT	27-0068	8	66	TEE	23-0127	1
27	WASHER	28-0022	16	67	SAFETY VALVE	22-0228	1
28	LOCKNUT	30-0157	10	68	PRESSURE GAUGE	22-0271	2
29	KEY	43-0073	1	69	DECAL - CAUTION/WARNING/DANGER (SEE 71-2001)	34-0819	1
30	MOTOR	2-0118	1	70	HOSE BARB	23-0418	1
31	SPACER	33-0358	2	71	HOSE CLAMP	42-0011	2
32	BRACKET	20-1134A01	1	72	HOSE *(ONE FOOT REQUIRED)	15-0007	1
33	BOLT	27-8040	2	73	HOSE BARB	23-0105	1
34	WASHER	28-0003	6	74	REGULATOR	22-0231	1
35	DECAL - CHECK OIL	N/A	1	75	NIPPLE	24-0010	1
36	SHEAVE	10-0099	1	76	REGULATOR MOUNTING BRACKET	20-0421A01	1
37	BELT	11-0083	1	77	BOLT	27-0067	2
38	BUSHING	9-0037	1	78	PLUG	24-0082	1
39	BELTGUARD COVER ASSEMBLY (INC. 40-41)	854-0095	1	-	DECAL SET	71-2001	1
40	EDGING *(FOUR FEET REQUIRED)	33-0020	1	*MUST ORDER IN ONE FOOT LENGTHS			

# TANK ASSEMBLY FOR AM1-PE15-20M



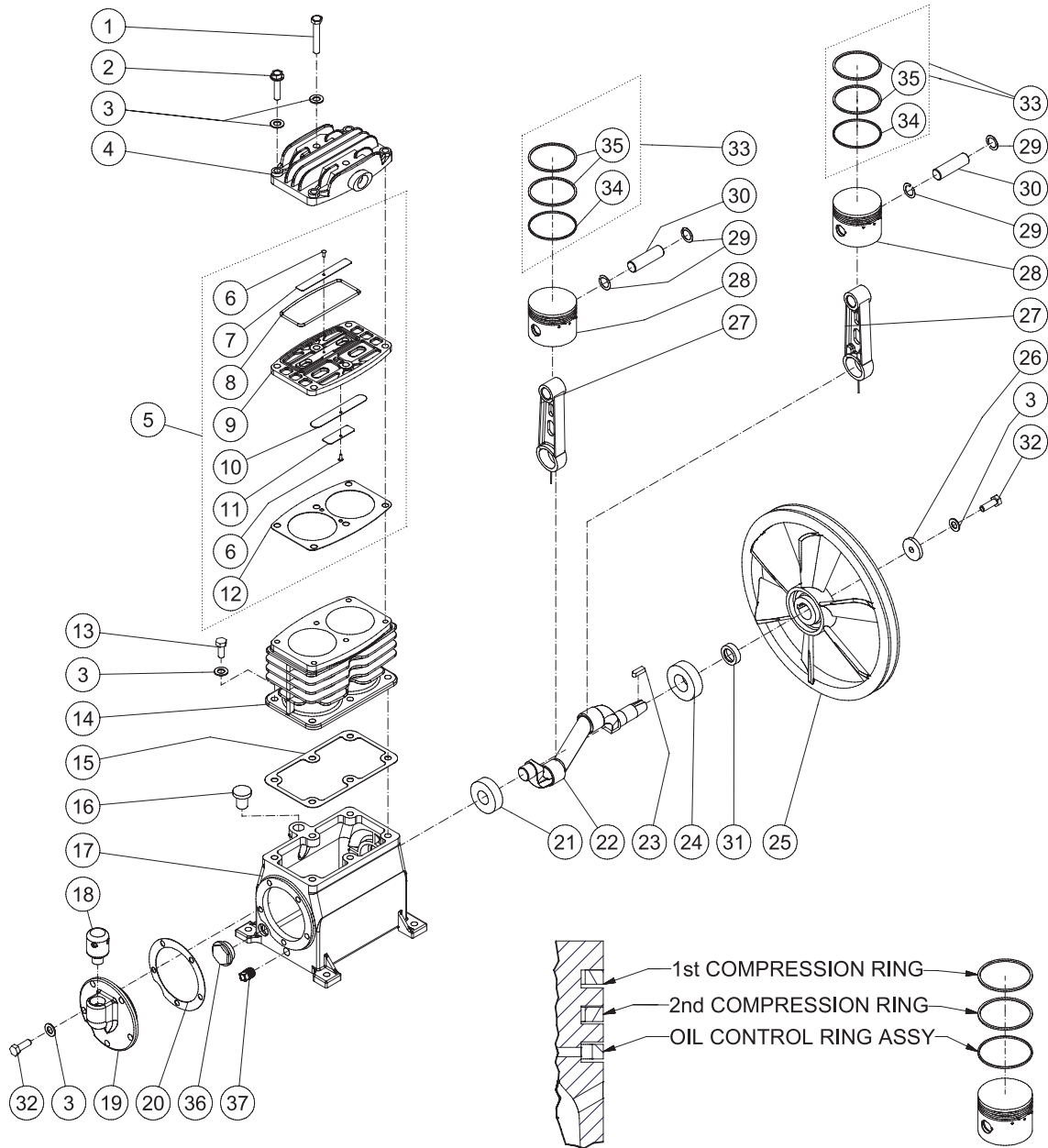
AM1-PE15-20M 053116 ALC



TANK ASSEMBLY							
ITEM	DESCRIPTION	PART#	QTY	ITEM	DESCRIPTION	PART#	QTY
1	WIRE CLIP	33-0264	2	42	BELT	11-0083	1
2	DECAL - MAINTENANCE INSTRUCTIONS (SEE 71-2001)	N/A	1	43	BUSHING	9-0037	1
3	AIR TANK ASSEMBLY	N/A	1	44	BELTGUARD COVER ASSEMBLY	854-0095	1
4	AXLE	20-0670A01	2	45	EDGING *(FOUR FEET REQUIRED)	33-0020	1
5	WASHER	28-0008	6	46	BELTGUARD COVER ASSEMBLY	N/A	1
6	SPACER	62-0188	2	47	DECAL - OPERATING INSTRUCTIONS (SEE 71-2001)	N/A	1
7	WHEEL	14-0130	2	48	BOLT	27-9524	4
8	COLLAR	33-0351	2	49	DECAL - RISK OF BURNS (SEE 71-2001)	N/A	2
9	BOLT	27-0067	9	50	DECAL - Mi-T-M	34-2167	1
10	LOCKWASHER	29-0007	8	51	BELTGUARD BACK ASSEMBLY	854-0094	1
11	PETCOCK	23-0312	1	52	DECAL - BELTGUARD IN PLACE (SEE 71-2001)	N/A	1
12	DECAL - TANK DRAIN (SEE 71-2001)	N/A	2	53	EDGING *(TWO FEET REQUIRED)	33-0020	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	TUBE ASSEMBLY	854-0057	1
18	DECAL - Mi-T-M	34-2169	1	59	NUT	23-0315	1
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 71-2001)	N/A	1
22	BOLT	27-0133	1	63	ELBOW	24-0267	1
23	CHECK VALVE	22-0334	1	64	ELBOW	23-0133	1
24	ELBOW	24-0042	1	65	ELBOW	23-0118	1
25	ADAPTER	23-0328	1	66	ELBOW	24-0021	1
26	HOSE	15-0236	1	67	PRESSURE SWITCH	22-0232	1
27	TERMINAL	32-0003	6	68	BUSHING	9-0045	1
28	CORD *(THREE FEET REQUIRED)	32-0445	1	69	ELECTRICAL LOCKNUT	32-0108	1
29	DECAL - 115 VOLT (SEE 71-2001)	N/A	1	70	STRAIN RELIEF	32-0766	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	2-0118	1	74	CORD	32-0754	1
34	KEY	43-0073	1	75	PLUG	24-0082	1
35	ELBOW	23-0426	1	76	REGULATOR	22-0231	1
36	SPACER	33-0358	2	77	PRESSURE GAUGE	22-0271	2
37	BRACKET	20-1134A01	1	78	NIPPLE	24-0010	1
38	WASHER	28-0003	2	79	PLUG	24-0082	1
39	BOLT	27-8040	2	80	MANIFOLD	24-0266	1
40	DECAL - CHECK OIL	N/A	1	81	SAFETY VALVE	22-0228	1
41	SHEAVE	10-0099	1	-	DECAL SET	71-2001	1

\*MUST ORDER IN ONE FOOT LENGTHS

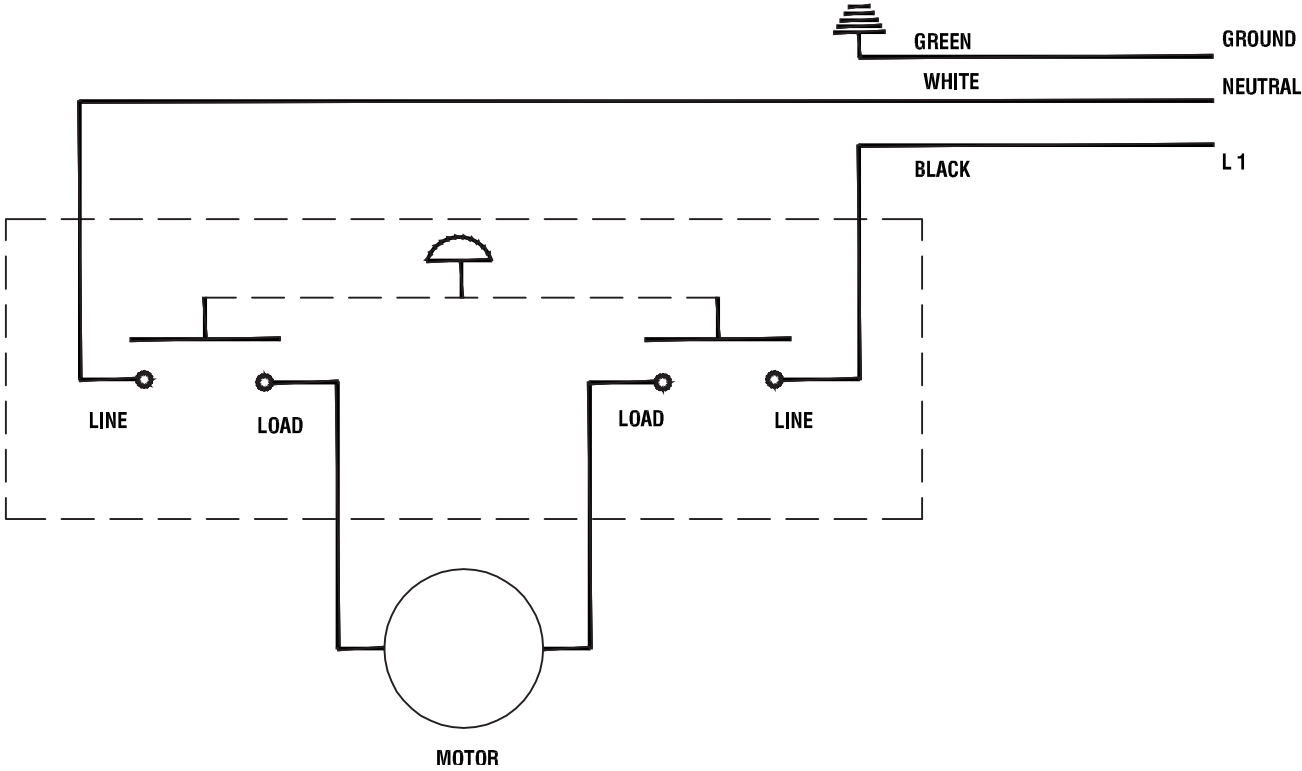
# SINGLE STAGE COMPRESSOR (3-0315)



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

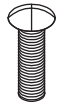
# WIRING SCHEMATIC



ACWD-0005 SCHEMATIC-093003-GJH

# WIRING DIAGRAM

ASSEMBLE ALL GROUND WIRES AS SHOWN TO ASSURE PROPER CONTACT



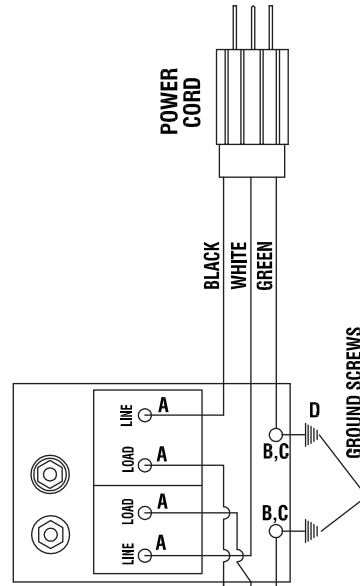
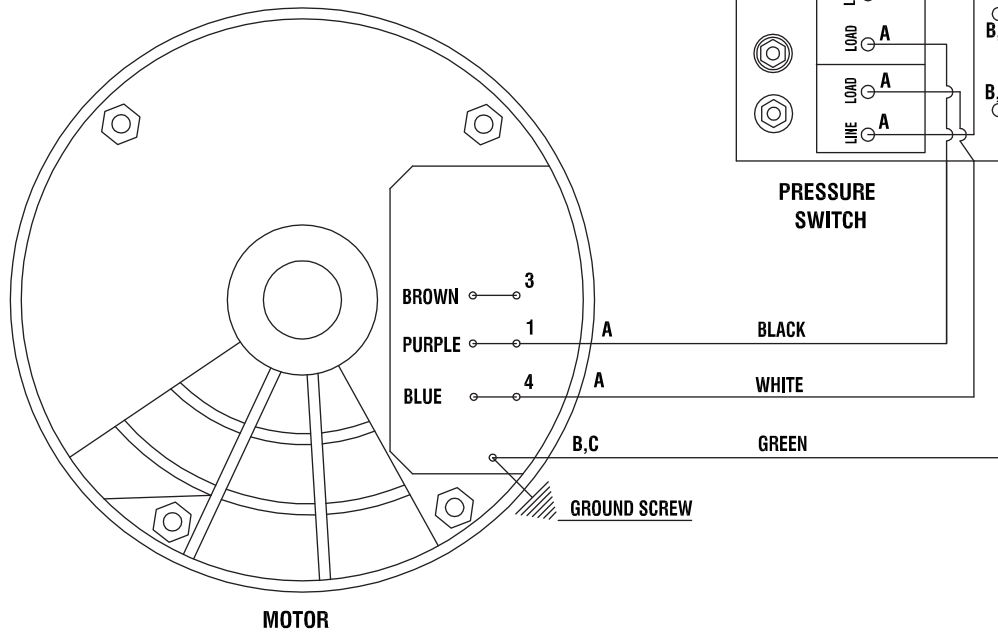
GROUND SCREW



RING TERMINAL



EXTERNAL TOOTH LOCKWASHER



ACWD-0005-093003-GJH

WIRE TERMINATIONS			
REF #	DESCRIPTION	PART #	QTY
A	Terminal - Fork	32-0003	6
B	Terminal - Ring	32-0099	3
C	Lockwasher	28-1009	3
D	Screw	27-8933	1

ACWD-0005 DIAGRAM-093003-GJH

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