



THE WORK PRO®

**PARTS LIST FOR
AIR COMPRESSORS
*AM1-PE15-08WP***

| | |
|--------------------------|-----------------------|
| 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: | 15.45 oz. / 0.45 L |

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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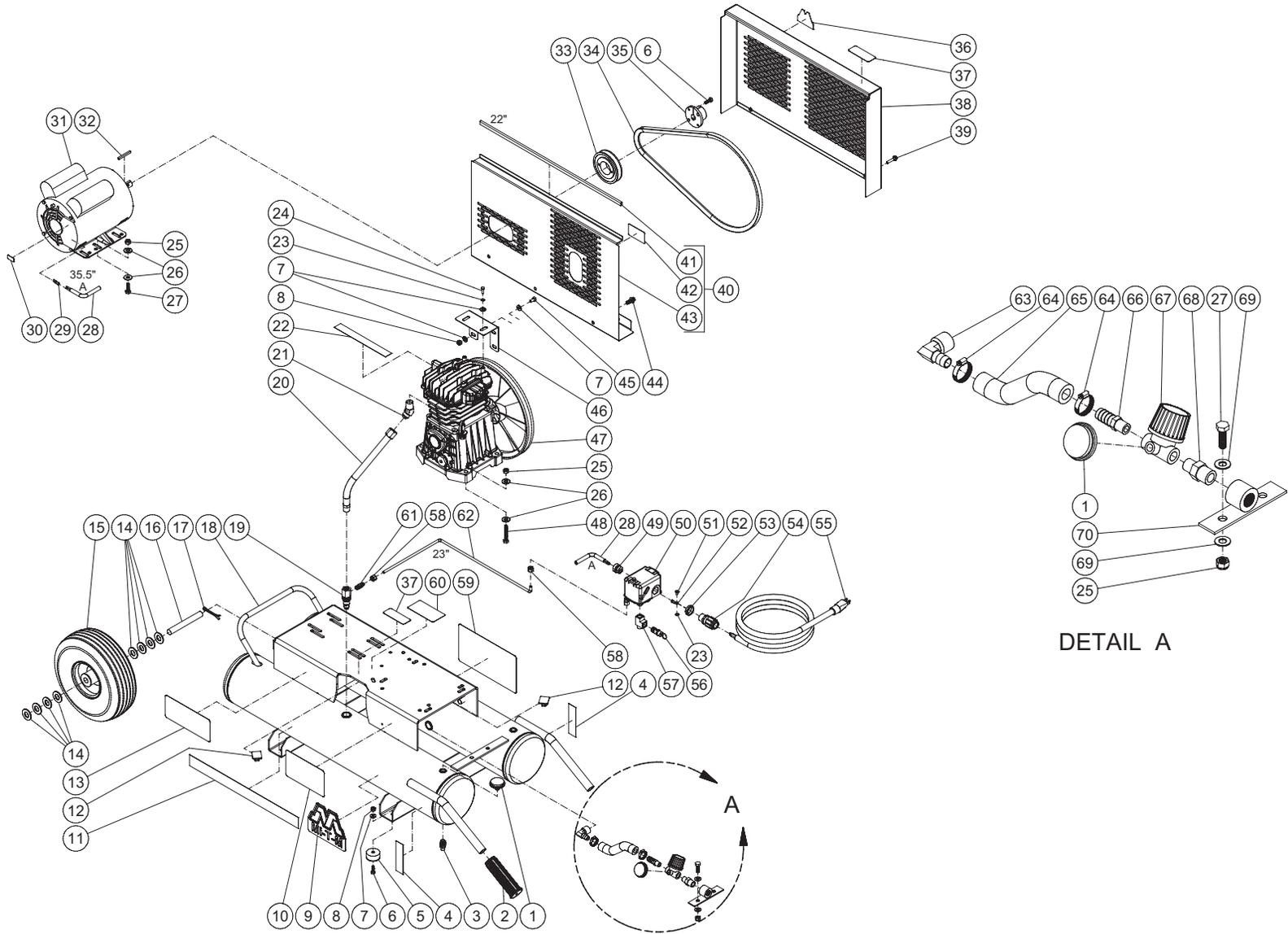
SPECIFICATIONS

| | |
|---------------------------------|---------------------|
| MODEL NUMBER | AM1-PE15-08WP |
| MOTOR: | |
| Horsepower | 1.5 |
| Voltage | 115 |
| Amperage | 13.2 |
| HZ | 60 |
| Phase | 1 |
| RPM | 1725 |
| S.F. | 1.2 |
| COMPRESSOR PUMP: | |
| Number of Cylinders | 2 |
| Compression Stages | 1 |
| Bore/Stroke | 2.33" x 1.66" |
| RPM | 1500 |
| Flywheel | 11 3/4" |
| Lubrication | Splash |
| Oil Quantity (oz./L) | 15.45 / 459.9 |
| Oil Type | 30W Non-Detergent |
| Crankcase | Aluminum |
| Bearings | Ball |
| Cylinder | Cast Iron |
| Valves | Reed |
| Head | Aluminum |
| Filter | Foam Filter |
| PRESSURE SWITCH SETTING: | |
| Cut-out | 125 PSI |
| Cut-in | 95 PSI |
| AIR TANK: | |
| Capacity | 8 gallons |
| PERFORMANCE: | |
| CFM Air Displacement | 6.5 |
| CFM @ 40 PSI | 5.4 |
| CFM @ 100 PSI | 5.2 |
| CFM @ 125 PSI | 4.1 |
| Maximum Pressure | 125 PSI |
| Pump-up Time: 0-125 PSI | 42 seconds |
| Recovery Time: 95-125 PSI | 7 seconds |
| WEIGHT: | |
| Net | 140 lbs. |
| Shipping | 160 lbs. |
| DIMENSIONS: | |
| Basic L x W x H | 44.5" x 18.5" x 25" |
| Shipping L x W x H | 45" x 19" x 32" |

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-PE15-08WP

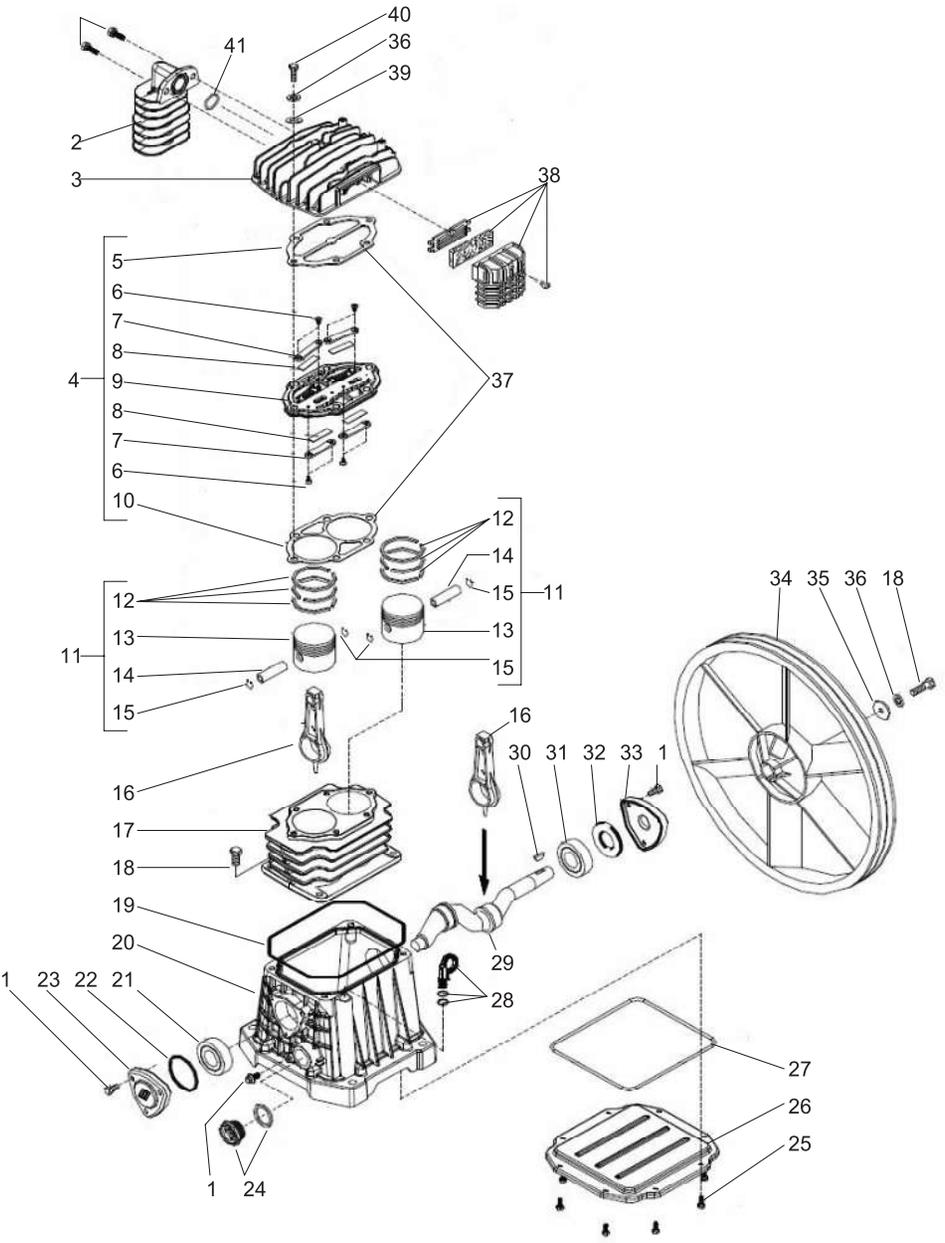


DETAIL A

| TANK ASSEMBLY | | | | | | | |
|---------------|--|---------|-----|---------------------------------|--|------------|-----|
| ITEM | DESCRIPTION | PART # | QTY | ITEM | DESCRIPTION | PART # | QTY |
| 1 | PRESSURE GAUGE | 22-0446 | 2 | 37 | DECAL - RISK OF BURNS (SEE 71-2001) | N/A | 2 |
| 2 | HANDLE GRIP | 7-0059 | 2 | 38 | BELTGUARD COVER | 6-0181A01 | 1 |
| 3 | PETCOCK | 23-0312 | 2 | 39 | BOLT | 27-8898 | 2 |
| 4 | DECAL - TANK DRAIN (SEE 71-2001) | N/A | 2 | 40 | BELTGUARD BACK ASSY | 854-0155 | 1 |
| 5 | ISOLATOR | 14-0069 | 4 | 41 | EDGING *(TWO FEET REQUIRED) | 33-0020 | 1 |
| 6 | BOLT | 27-0015 | 6 | 42 | DECAL - BELTGUARD IN PLACE (SEE 71-2001) | N/A | 1 |
| 7 | WASHER | 28-0002 | 10 | 43 | BELTGUARD BACK | N/A | 1 |
| 8 | LOCKNUT | 30-0155 | 6 | 44 | BOLT | 27-9524 | 3 |
| 9 | DECAL - MI-T-M | 34-2169 | 1 | 45 | BOLT | 27-0014 | 2 |
| 10 | DECAL - MAINTENANCE INSTRUCTIONS (SEE 71-2001) | N/A | 1 | 46 | BRACKET | 20-1134A01 | 1 |
| 11 | DECAL - 17" STRIPE | 34-2188 | 1 | 47 | PUMP | 3-0425 | 1 |
| 12 | WIRE CLIP | 33-0264 | 2 | 48 | BOLT | 27-0071 | 4 |
| 13 | DECAL - OPERATING INSTRUCTIONS (SEE 71-2001) | N/A | 1 | 49 | BUSHING | 9-0045 | 1 |
| 14 | WASHER | 28-0008 | 8 | 50 | PRESSURE SWITCH | 22-0232 | 1 |
| 15 | WHEEL | 14-0130 | 1 | 51 | SCREW | 27-8933 | 1 |
| 16 | AXLE | 20-0420 | 1 | 52 | TERMINAL | 32-0099 | 3 |
| 17 | COTTER PIN | 43-0092 | 2 | 53 | ELECTRICAL LOCKNUT | 32-0108 | 1 |
| 18 | AIR TANK ASSEMBLY | N/A | 1 | 54 | STRAIN RELIEF | 32-0766 | 1 |
| 19 | CHECK VALVE | 22-0334 | 1 | 55 | CORD | 32-0754 | 1 |
| 20 | HOSE | 15-0237 | 1 | 56 | SAFETY VALVE | 22-0228 | 1 |
| 21 | ELBOW | 24-0351 | 1 | 57 | TEE | 23-0127 | 1 |
| 22 | DECAL - CHECK OIL | N/A | 1 | 58 | NUT | 23-0486 | 2 |
| 23 | STAR WASHER | 28-1009 | 5 | 59 | DECAL - CAUTION/WARNING/DANGER (SEE 71-2001) | N/A | 1 |
| 24 | BOLT | 27-8878 | 2 | 60 | DECAL- SILVER STICKER | N/A | 1 |
| 25 | LOCKNUT | 30-0157 | 10 | 61 | ADAPTER | 23-0328 | 1 |
| 26 | WASHER | 28-0022 | 16 | 62 | TUBING *(TWO FEET REQUIRED) | 54-0034 | 1 |
| 27 | BOLT | 27-0067 | 6 | 63 | HOSE BARB | 23-0418 | 1 |
| 28 | CORD *(THREE FEET REQUIRED) | 32-0445 | 1 | 64 | HOSE CLAMP | 42-0011 | 2 |
| 29 | TERMINAL | 32-0003 | 6 | 65 | HOSE *(ONE FOOT REQUIRED) | 15-0007 | 1 |
| 30 | DECAL - 115 VOLT (SEE 71-2001) | N/A | 1 | 66 | HOSE BARB | 23-0120 | 1 |
| 31 | MOTOR | 2-0118 | 1 | 67 | REGULATOR | 22-0326 | 1 |
| 32 | KEY | 43-0073 | 1 | 68 | NIPPLE | 24-0146 | 1 |
| 33 | SHEAVE | 10-0049 | 1 | 69 | WASHER | 28-0003 | 4 |
| 34 | BELT | 11-0046 | 1 | 70 | REGULATOR MOUNTING BRACKET | 20-0421A01 | 1 |
| 35 | BUSHING | 9-0037 | 1 | - | AIR COMPRESSOR DECAL SET | 71-2001 | 1 |
| 36 | DECAL - MI-T-M | N/A | 1 | *MUST ORDER IN ONE FOOT LENGTHS | | | |

PUMP ASSEMBLY (3-0425)

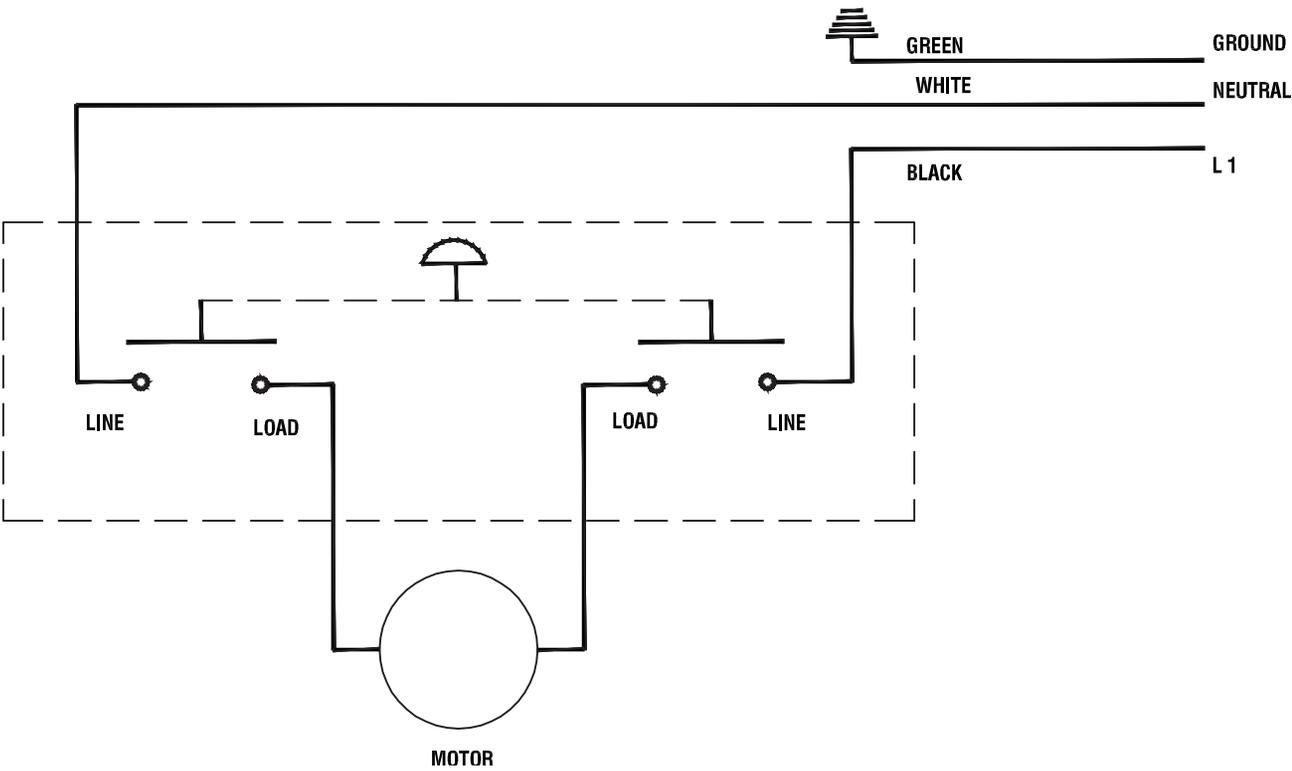
| TORQUE SPECS | | |
|--------------|--------|----|
| POSITION | FT-LBS | NM |
| 1 | 7.5 | 10 |
| 6 | 2 | 3 |
| 18 | 18 | 25 |
| 40 | 18 | 25 |



3-0425 030716 ALC

| PUMP ASSEMBLY | | | | | | | |
|---------------|--|---------|-----|------|---|---------|-----|
| ITEM | DESCRIPTION | PART # | QTY | ITEM | DESCRIPTION | PART # | QTY |
| 1 | BOLT | 27-8906 | 8 | 22 | REAR COVER CRANKCASE O-RING (SEE KIT 70-0678) | SEE KIT | 1 |
| 2 | AFTERCOOLER | 46-1650 | 1 | 23 | REAR CRANKCASE COVER | 46-1656 | 1 |
| 3 | PUMP HEAD | 46-1651 | 1 | 24 | OIL SIGHT GLASS ASSY | 46-1657 | 1 |
| 4 | VALVE PLATE KIT (INC. 5-10) | 70-0675 | 1 | 25 | BOLT | 27-8878 | 8 |
| 5 | PUMP HEAD GASKET (SEE KIT 70-0675, 70-0677, OR 70-0678) | SEE KIT | 1 | 26 | CRANKCASE BOTTOM PAN | 46-1658 | 1 |
| 6 | SCREW (SEE KIT 70-0675) | SEE KIT | 8 | 27 | CRANKCASE BOTTOM PAN GASKET (SEE KIT 70-0678) | SEE KIT | 1 |
| 7 | VALVE COVERS (SEE KIT 70-0675) | SEE KIT | 4 | 28 | OIL DIPSTICK ASSY | 39-0382 | 1 |
| 8 | REED VALVES (SEE KIT 70-0675) | SEE KIT | 4 | 29 | CRANKSHAFT | 46-1659 | 1 |
| 9 | REED VALVE PLATE (SEE KIT 70-0675) | SEE KIT | 1 | 30 | KEY | 43-0147 | 1 |
| 10 | REED VALVE GASKET (SEE KIT 70-0675, 70-0677, OR 70-0678) | SEE KIT | 1 | 31 | BALL BEARING | 48-0100 | 1 |
| 11 | PISTON ASSY KIT (INC. 12-15) | 70-0676 | 2 | 32 | OIL SEAL | 26-0390 | 1 |
| 12 | PISTON RING ASSY (SEE KIT 70-0676) | 46-1652 | 2 | 33 | FRONT CRANKCASE COVER | 46-1660 | 1 |
| 13 | PISTON (SEE KIT 70-0676) | SEE KIT | 2 | 34 | FLYWHEEL | 10-0164 | 1 |
| 14 | PISTON PIN (SEE KIT 70-0676) | SEE KIT | 2 | 35 | WASHER | 28-0022 | 1 |
| 15 | SNAP RING (SEE KIT 70-0676) | SEE KIT | 4 | 36 | LOCKWASHER | 29-0007 | 7 |
| 16 | CONNECTING ROD | 46-1653 | 2 | 37 | PUMP/CYLINDER GASKET KIT (INC. 5 & 10) | 70-0677 | 1 |
| 17 | CYLINDER | 46-1654 | 1 | 38 | AIR CLEANER ASSY | 19-0283 | 1 |
| 18 | BOLT | 27-8062 | 5 | 39 | WASHER | 28-0003 | 6 |
| 19 | CYLINDER CRANKCASE O-RING (SEE KIT 70-0678) | SEE KIT | 1 | 40 | BOLT | 27-8435 | 6 |
| 20 | CRANKCASE | 46-1655 | 1 | 41 | AFTERCOOLER O-RING (SEE KIT 70-0678) | SEE KIT | 1 |
| 21 | REAR BALL BEARING | 48-0105 | 1 | - | SET OF GASKETS KIT (INC. 5, 10, 19, 22, 27, & 41) | 70-0678 | 1 |

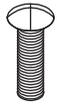
WIRING SCHEMATIC



ACWD-0005 SCHEMATIC-093003-GJH

WIRING DIAGRAM

ASSEMBLE ALL GROUND WIRES AS SHOWN
TO ASSURE PROPER CONTACT



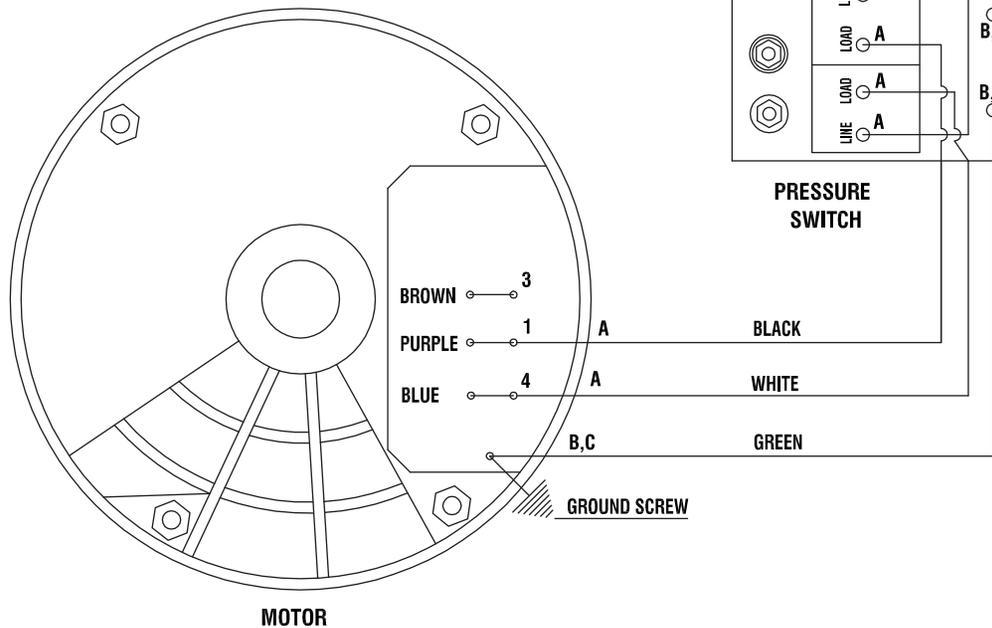
GROUND SCREW



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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