Important:
This manual contains specific cautionary statements relative to worker safety. Read this manual thoroughly and follow as directed. It is impossible to list all the hazards of dust control equipment. It is important that use of the equipment be discussed with a Micro Air Representative. Persons involved with the equipment or systems should be instructed to operate in a safe manner.
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RP PARTS LIST 25
Cautions:

Avoid mixing combustible materials, such as buffing lint, paper, wood, aluminum, and magnesium dust, and with dust generated from grinding ferrous metals due to the potential fire hazard caused by sparks in the dust collector.

Under no conditions should the persons operating the dust collector be allowed to put cigarettes or any burning object into the hood or ducting of any dust collector system.

All users of Micro-Air Dust Collector Equipment should comply with all National and Local Fire Codes and/or other appropriate codes when determining the location and operation of dust control equipment.

Many of the processes outlined in this manual will expose the installer to circuits powered by high voltage. This installation is recommended for professional electricians or MicroAir trained personnel.

When dust collectors are used to collect flammable or explosive dusts, the dust collector should be located outside the building. Also, an installer of fire extinguisher equipment, familiar with this type of fire hazard and local fire codes, should be consulted for recommendations and installation of the proper fire extinguishing equipment. Dust collectors do not contain fire extinguishing equipment.

Explosion relief vents are required on some applications. Consult with an insurance underwriter or a NFPA manual to determine proper vent size ratio. Vents installed on dust control equipment within a building, must be vented to the outside to minimize changes of secondary explosion. Consult the proper authority having jurisdiction to determine proper method of venting.

Dust collectors do not contain Explosion Relief Vents, except on special order.

All wiring must be done in accordance with applicable National, State, and local electrical code. MicroAir does not determine what is acceptable in any local jurisdiction and cannot be held responsible for wiring that does not meet local codes.

Improper installation or operation of this equipment can cause damage to equipment and/or injury to personnel. The installation/operation manual must be read and followed in its entirety.
Input Voltage:
208-230/460VAC 60 Hz 3-Phase

Maximum Current:
5HP: 208-230V 13.2 - 12.0 amps
     460V  6.0 amps
7-1/2HP: 208-230V 21.0-18.8 amps
          460V  9.4 amps
10HP: 208-230V 26.4-24.0 amps
       460V 12.0 amps

Motor:
5HP, 3-Phase TEFC Motor, 3450 RPM
7-1/2HP, 3-Phase TEFC Motor, 3450 RPM
10HP, 3-Phase TEFC Motor, 3450 RPM

Cabinet Dimensions:
RP4, RPO4 129” H x 42” W x 62” D
RP6, RPO6 151” H x 42” W x 62” D
RP8, RPO8 171” H x 42” W x 62” D

Weight:
RP4, RPO4 1315 lb.
RP6, RPO6 1460 lb.
RP8, RPO8 1850 lb.

Filter Area:
RP4, RPO4 936 square feet
RP4, RPO4 1404 square feet
RP4, RPO4 1872 square feet

Dust Trap Capacity (Optional):
2.8 cubic feet total

Air Requirements:
• Minimum air line 3/4 inch at 80 psi minimum / 90 psi maximum.
• 3/4” NPT Female fitting is standard for shp air attachment.
• Clean, dry, compressed air at the correct pressure is required for the cleaning system to operate correctly.
• It is recommended that a pressure regulator and coalescing filter be installed between the compressed air source and the inlet to the dust collector.
Installation:

Inspection:
The Micro-Air Dust Collector is shipped on one skid. The skid should be inspected for any visible damage that may have occurred during shipment. One skid is the blower motor, collector cabinet, Dust collection Tray/Hopper, Mounting Legs.

Additional equipment that may be shipped includes:
- Leg Cross Bracing Kit
- 55 Gallon Barrel Lid Kit
- Inlet Plenum with (4) 14” x 14” Inlets
- Discharge Silencer
- Hepa After-Filter Kit
- Photohelic Kit
- Remote Start/Stop Station

Equipment/Tools Required:
Equipment and tools needed for proper installation will include the following:

- Crane or Lift Truck
- Lift Straps or Chain
- 1/2” Scocket Wrench
- Pipe Wrench

Assembly of Unit:
1. Determine the location where the unit is to be installed. Be sure to allow sufficient room to access the unit for servicing and maintenance on all sides.

2. Lift the unit with a lift truck or overhead crane using the four lifting lugs located at the corners of the unit (see Figure 1).

NOTE: Each lifting strap or chain should be rated for 2000 lb. The chains located on the motor side should be 10 inches shorter that the chains on the filter side to properly balance the unit while lifting. Recommended chain lengths are as follows.
- Front side: 48 inches
- Motor side: 38 inches

3. Bolt on the four legs. The two lower bolts at each corner will be removed and used to attach each leg (see Figure 2).

CAUTION: THE UNIT SHOULD BE LIFTED OFF THE SKID AND SET INTO POSITION BY UTILIZING THE LIFTING LUGS PROVIDED. SEVERE DAMAGE MAY RESULT FROM ANY OTHER LIFTING METHOD.
3. When the legs have been completely installed each leg should be bolted to the ground using the hole provided in the base plate of the leg (see Figure 2A).

4. After the legs have been properly anchored, the dust containment system can be installed. (refer to pages 9-10).

**Electrical Installation**

1. Remove the electrical box cover located on the backside of the unit near the blower motor.
2. Make connections from your supply power to terminal L1, L2, and L3. Wire size should be rated for motor horsepower load needed for your application (see Figure 4).

**NOTE:** A 7/8” diameter hole is provided for conduit connection of supply power.

1. Connect the power. Momentarily turn the unit on and off with the start/stop switches. Note the rotation of the motor. Proper rotation can be viewed at the open end of the blower motor (remove the motor access plate if your unit has been supplied with a motor/silencer shroud). The proper rotation is in the clockwise direction.

**NOTE:** All electrical work must be done by a qualified electrician according to local and national codes.

**CAUTION:** Installation can cause exposure to live components. Disconnect electrical power before proceeding with installation. Proper lock out / tag out procedures should be used.

**Compressed Air Installation**

The compressed air inlet for the Roto-Pulse cleaning system is at the top of the piping assembly located on the backside of the unit near the blower motor (see Figure 3). A minimum of a 3/4 inch line and plant air at a pressure at 80 psi is required for proper operation of the Roto-Pulse cleaning system.

**NOTE:** Clean, dry, compressed air at the correct pressure is required for the cleaning system to operate correctly. It is recommended that a pressure regulator and coalescing filter be installed between the compressed air source and the inlet to the dust collector.

**Compressed Air Inlet**

![FIGURE 3](image-url)
4. If motor rotation is in the proper direction then AMP draw of the motor should be checked. Correct motor AMP draw information is located on the inside of the Electrical Box Cover. If motor current is higher than rated for the motor supplied, do not continue operation. Re-check your wiring (refer to the inside of the electrical box cover) and if problems continue contact your Micro-Air Dust Collector representative for instructions.

5. Reassemble the electrical box cover onto the enclosure.

Units Installed Outdoors
1. The remote Start/Stop Control Enclosure supplied with the unit is not rated for outdoor use. The Control enclosure must be mounted indoors.
2. When the enclosure is mounted, make connection from your supply power to terminals L1, L2, and L3. Wire size should be rated for motor horsepower load needed for your application (see Figure 4).
3. When power connections have been made refer to wiring diagrams on pages 23-25 for wiring required between the remote Start/Stop enclosure and the Nema 4 J-box located on the unit.
4. When supply power has been terminated, reconnect the power. Momentarily turn the unit on and off with the Start/Stop switches. Note the rotation of the motor. Proper rotation can be viewed at the open end of the blower motor (Remove the motor access plate if your unit has been supplied with a motor/silencer shroud). The proper rotation is in the clockwise direction.
5. If the motor rotation is in the proper direction then AMP draw of the motor should be checked. Correct motor AMP draw information is located on the inside of the Electrical Box Cover. If motor current is higher than rated for the motor supplied, do not continue operation. Re-check your wiring (refer to the inside of the electrical box cover) and if problems continue contact your Micro Air Dust Collector representative for instructions.

6. Reassemble the electrical box cover onto the enclosure.

Unit Operation
1. Turn the unit on via the start switch located on the side of the electrical box.

NOTE: Some particulate may pass through the cartridge filters and blower upon initial start-up. This will end once the filters have been seasoned and a power cake has formed on the filter. If this condition continues to occur refer to the section “Roto-Pulse Cleaning Timer Adjustments” to increase the period of time between pulses.

2. Once the unit is running the Roto-Pulse cleaning system will be operational. Operation is detected by hearing a .07-second air pulse approximately every 5 seconds. If adjustment to timing of pulses is desired refer to the section “Roto-Pulse Cleaning Timer Adjustments”.

3. Check the After-Pulse Cleaning cycle by turning off the unit via the stop switch located on the side of the electrical box. The unit should continue to pulse every 5 seconds for a period of approximately 17 minutes. If adjustment to the after-pulse time is desired, refer to the section labeled “After-Pulse Cleaning”.

Cartridge Cleaning Operation
The Micro Air Dust Collector is designed with the Roto-Pulse Cleaning System to clean the cartridge filters. This system provides superior cleaning performance using a rotating tube with pre-drilled holes (see Figure 5). As the diaphragm valve opens, the Roto-Pulse tube rotates while air exits the holes, thus providing the cleaning of the cartridge.

![FIGURE 5](image-url)
1. For proper cleaning, the compressed air pressure should be regulated at 80 psi maximum.

2. During normal operation the Roto-Pulse cleaning system is factory set to clean two (2) cartridge filters for a period of .07 seconds every 5 seconds.

3. Once the unit is turned off, the cleaning cycle will continue for a period of 17 minutes. Do not service the filters until cleaning is completed.

CAUTION: Allow 20 minutes of downtime before opening filter access doors. After-Pulse system is momentarily operational After unit is turned off.

4. The Roto-Pulse cleaning operation dislodges particles from the cartridges. Particles then fall down into the dust collector hopper/tray.

NOTE: When servicing the collection system, be sure to turn the unit off.

Roto-Pulse Cleaning Timer Adjustments

CAUTION: Installation can cause exposure to live components. Disconnect electrical power before proceeding with timer adjustments. Proper lock out / tag out procedures should be used.

1. Turn unit off via the stop switch and disconnect power.

2. Remove the electrical box cover.

3. The timer control board is pre-set at the factory to clean two (2) cartridge filters every 5 seconds. This time can be adjusted from 1 second to 999 seconds. To adjust this time press the select button on the timer board until the off time LED is lit. Press the up/down buttons until the desired value is displayed. Press select to set the new value.

NOTE: Cleaning of the filters too often will decrease your level of performance. A certain level of dust cake on the filters will improve the efficiency of the filter cartridges. You should try to maintain a minimum of 1 in w.c. of pressure differential across the filters. If you can not maintain this minimum level of differential across the filters the time between cleaning pulses should be increased until this can be achieved.

4. The timer control board is preset at the factory to have a cleaning pulse duration of .07 seconds. This can be adjusted from .05 seconds to 600 seconds. To adjust this time press the select button on the timer board until the on time LED is lit. Press the up/down buttons until the desired value is displayed. Press select to set the new value.

NOTE: While this time can be adjusted we recommend that you leave the “ON TIME” at the factory setting. If less cleaning is needed you should increase the time between pulses as means of reducing the amount of cleaning. If more cleaning is needed you should decrease the amount of time between pulses. Beware, as the time between pulses is decreased for additional cleaning, this will increase your compressed air consumption and create an additional load on your compressed air system.

5. Once adjustments have been made replace the electrical box cover and reconnect the power.

6. Start the unit and observe the new pulse settings and determine if additional adjustments are necessary. If more adjusting is needed, repeat the previous steps.

After-Pulse Cleaning Timer Adjustments

1. The unit is equipped with an After-Pulse Cleaning Cycle. This cycle will continue to clean the cartridge filters for a period of time after the unit is turned off.

2. The length of the After-Pulse operation is preset at the factory for 999 seconds (17 minutes). This time can be adjusted from 0 seconds to 999 seconds. To adjust this time press the select button until the off time LED is lit. Press the up/down buttons until the desired value is displayed. Press select to set the new value. The After-Pulse operation can be disabled by setting the time value to zero (0) seconds.

Explosion Vent Maintenance

Refer to explosion vent instructions supplied by the vent manufacturer for information regarding use and maintenance of the explosion vent.
This Kit Includes:

20 ea. P3543 Self-Tapping Screws
12 ft. P3686 3/16” x 1” Self-Adhesive Foam
86 in. P1367 1” x 3/4” Foam (Placed at inside of Access Door)
1 ea. 38379-01 Dust Tray Weldment
2 ea. 38380-01 Dust Tray
1 ea. 38378-01 Dust Tray Access Door
2 ea. P1372 Door Latch

NOTE: Dust tray access door must be removed prior to assembly

INSTALLATION:
1. Apply self-adhesive foam to the bolt hole flange on the dust tray.
2. Align the hole pattern on the dust tray flanges with the hole pattern on the underside of the unit.
3. Attach the dust tray (38379-01), using twenty (20) self-tapping screws, to the unit.
RP DUST COLLECTOR

DUST COLLECTION HOPPER INSTALLATION PROCEDURE

This Kit Includes:

- 20 ea. P3543 Self-Tapping Screws
- 12 ft. P3686 3/16” x 1” Self-Adhesive Foam
- 1 ea. 38222-01 Hopper Weldment

INSTALLATION:
1. Apply self-adhesive foam to the bolt hole flange on the hopper.
2. Align the hole pattern on the hopper flanges with the hole pattern on the underside of the unit.
3. Attach the hopper (38222-01), using twenty (20) self-tapping screws, to the unit.

FIGURE 7
RP DUST COLLECTOR

DUST COLLECTOR LEG BRACING INSTALLATION PROCEDURE

This Kit Includes:

15 ea. P222  5/16” Hex Nuts
15 ea. P2614  5/16” Hex Bolts
30 ea. P3615  5/16” Flat Washers
30 ea. P249  5/16” Lock Washers
2 ea. 38394-01 Short Leg Cross Brace
4 ea. 38394-02 Long Leg Cross Brace

INSTALLATION:
1. Straighten and plumb each individual leg.
2. Bolt each end of the cross braces to the legs.
3. Tighten all bolts until secure.

FIGURE 8
This Kit Includes:

1 ea. 38275-01 RP Silencer Assembly

INSTALLATION:
1. Remove silencer from skid and inspect for any possible damage incurred during shipping.
2. If cross bracing has been installed remove bracing on the motor blower side and one of the remaining two sides.
3. Remove all of the self-tapping screws on the exhaust grill with a 3/8” nut driver and save (NOTE: DO NOT REMOVE EXHAUST GRILLE).
4. Remove the two bolts in the exhaust grille that are closest to the legs with a 1/2” wrench and save.
5. Install the silencer with the screws and bolts removed in steps 3 and 4. The side of the silencer with self-tapping screws should be on the side of the motor blower for installation.
5. Re-install the cross bracing removed from the side and the motor blower side in step 2.
RP DUST COLLECTOR

AFTERMARKET MAGNEHELIC KIT INSTALLATION PROCEDURE

This Kit Includes:

- 1 ea. 38294-01 Magnehelic Mounting Bracket
- 1 ea. P3755 0-10” w.c. Magnehelic Gauge
- 2 ea. P2098 1/8” Male x 1/4” Barb Fitting
- 4 ea. P3543 1/4”-14 x 1 Self-taping Screw
- 10 ft. P1848 1/4” Clear Tubing

INSTALLATION:
1. Remove parts from package and inspect for any possible damage incurred during shipping.
2. Turn off dust collector and disconnect power to the unit.
3. Mount the Magnehelic Gauge into the Magnehelic Mounting Bracket and place the (2) male barb fittings in the pressure ports located on the side of the Magnehelic Gauge.
4. Also use the two pressure port plugs supplied with the Magnehelic Gauge on the two ports located on the back side of the gauge.
5. Mount the bracket using the (4) 1/4” self-taping screws.
6. Using 1/4” clear tubing (Additional length can be purchased) connect the “LOW” pressure port on the gauge to the clean air plenum and “HIGH” pressure port to the dirty air plenum.
7. Reconnect the power to the unit and start the dust collector.

FIGURE 10
RP DUST COLLECTOR

PHOTOHELIC KIT INSTALLATION PROCEDURE

This Kit Includes:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ea.</td>
<td>38293-01</td>
<td>38293-01 Photohelic Mounting Bracket</td>
</tr>
<tr>
<td>1 ea.</td>
<td>P3643</td>
<td>0-10” w.c. Photohelic Gauge</td>
</tr>
<tr>
<td>2 ea.</td>
<td>P2098</td>
<td>1/8” Male x 1/4” Barb Fitting</td>
</tr>
<tr>
<td>4 ea.</td>
<td>P3543</td>
<td>1/4”-14 x 1 Self-taping Screw</td>
</tr>
<tr>
<td>10 ft.</td>
<td>P1848</td>
<td>1/4” Clear Tubing</td>
</tr>
</tbody>
</table>

NOTE: When using a Photohelic on a dust collector installed outdoors, the gauge can not be mounted on the unit. It must be mounted indoors. The gauge is not rated for outdoor use.

INSTALLATION:
1. Remove parts from package and inspect for any possible damage incurred during shipping.
2. Turn off dust collector and disconnect power to the unit.
3. Remove the plastic cover on the back of Photohelic Gauge.
4. Mount the Photohelic Gauge into the Photohelic Mounting Bracket and place the (2) male barb fittings in the pressure ports located on the side of the Photohelic Gauge.
5. Remove cover from electrical box so that wiring diagram on back of cover can be used.
6. Remove the two red wires that are connected to the Timer Board Pressure Switch Input and Relay CR1.
7. Wire the Photohelic Gauge as the electrical diagram shows in Detail “A” (see page 10) using the 3/4” conduit opening on the Photohelic and the 3/4” knockout located on the electrical box. (Wire and conduit supplied by others.)
8. Replace the cover back onto the Photohelic Gauge and mount the bracket using the (4) 1/4” self-taping screws.
9. Using 1/4” clear tubing (Additional length can be purchased) connect the “LOW” pressure port on the gauge to the clean air plenum and “HIGH” pressure port to the dirty air plenum.
10. You must place the enable/disable switch located on the timer board to the “DISABLE” position. This will disable the after-pulse mode of the timer board.
11. Replace the cover on the electrical box and reconnect the power to the unit.
12. The right set point dial of the gauge should be positioned at the filter differential set point you want the Roto-pulse system to be enabled. The left should be positioned at the filter differential set point you want the Roto-pulse system disabled.
RP DUST COLLECTOR

INLET PLENUM INSTALLATION PROCEDURE

This Kit Includes:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ea.</td>
<td>38292-01</td>
<td>RP Inlet Plenum Assembly</td>
</tr>
<tr>
<td>1 ea.</td>
<td>P3653</td>
<td>Hardware Package - Containing:</td>
</tr>
<tr>
<td>4 ea.</td>
<td>P261</td>
<td>5/16-18 X 1/4 Bolt</td>
</tr>
<tr>
<td>4 ea.</td>
<td>P249</td>
<td>5/16” Lock Washer</td>
</tr>
<tr>
<td>4 ea.</td>
<td>P233</td>
<td>5/16” Flat Washer</td>
</tr>
<tr>
<td>24 ea.</td>
<td>P2543</td>
<td>1/4” X 1” Self-Tapping Screw</td>
</tr>
<tr>
<td>11 ft.</td>
<td>P3686</td>
<td>3/16” X 1” Self-Adhesive Foam</td>
</tr>
</tbody>
</table>

INSTALLATION:
1. Remove inlet plenum from skid and inspect for any possible damage incurred during shipping.
2. Place self-adhesive foam on the outside of the inlet plenum hole pattern.
3. Place inlet plenum on top of dust collector and using the four (4) bolts, flat washers and lock washers provided to attach the inlet plenum at the four corners.
4. Use the twenty-four (24) self-tapping screws to complete the installation of the inlet plenum.
5. Three cap plates can be removed and reinstalled to allow you to use the opening best suited for your installation.

FIGURE 12
RP DUST COLLECTOR

BARREL LID KIT INSTALLATION PROCEDURE

This Kit Includes:

1 ea. 38229-01 Barrel Lid
2 ea. P3519 10" Hose Clamp
1 ea. P3553 10" Flex Hose

INSTALLATION:
1. Remove parts from box and inspect for any possible damage incurred during shipping.
2. Using the 10" hose clamp attach the 10" flex hose to the collar on the barrel lid.
3. With the remaining 10" hose clamp attach the barrel lid flex hose to the collar on the bottom of the dust collector hopper.
4. With barrel lid installed a 55 gallon barrel (not provided) can be placed under the barrel lid for material collection.
RP DUST COLLECTOR

MOTOR SHROUD INSTALLATION

This Kit Includes:

<table>
<thead>
<tr>
<th>Quantity</th>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 ea.</td>
<td>38324-01</td>
<td>Motor Shroud</td>
</tr>
<tr>
<td>15 ft.</td>
<td>P3553</td>
<td>Self-Adhesive Foam</td>
</tr>
<tr>
<td>12 ea.</td>
<td>P3543</td>
<td>Self-Tapping Screws</td>
</tr>
</tbody>
</table>

INSTALLATION:
1. Remove parts from package and inspect for any possible damage incurred during shipping.
2. Examine the vertical braces on each side of the motor that run the full length of the motor blower assembly. If each of the vertical braces have six (6) 7/32” diameter holes proceed to Step 6. If the braces do not have the six (6) 7/32” diameter holes proceed to Step 3.
3. Place the motor shroud, as shown in Figure 15 below, over the motor having located the slotted hole of the motor shroud on the right hand side. This will allow the wiring conduit to clear the motor shroud.
4. With the shroud in place mark the centers of the six (6) holes in each vertical brace. On the bottom right hand side of the shroud the electrical box will prevent you from marking two (2) of the holes. The two (2) holes may be omitted.
5. With the holes having been marked remove the motor shroud and use a 7/32” diameter drill bit to drill through the braces.
6. Apply the self-adhesive foam to the vertical braces as shown in the picture below.
7. Re-install the motor shroud around the motor and attach using the twelve (12) self-tapping screws provided.
8. The four bolts and small cover on the back of the motor shroud may be removed to allow you to check for proper rotation of the motor blower. When proper rotation has been checked re-install the cover.

![Diagram of Motor Shroud Installation](image-url)

**FIGURE 15**
RP DUST COLLECTOR

AFTER FILTER KIT INSTALLATION

This Kit Includes:

1 ea. 38364-01 After Filter Assembly
1 ea. P3639 Hepa Filter
1 ea. Hardware Package - Containing:
   6 ea. P3543 1/4” X 1” Self-Tapping Screw

INSTALLATION:
1. Remove parts from package and inspect for any possible damage incurred during shipping.
2. Remove leg supports from back of unit.
3. Remove the bolts and screws from exhaust grille (see Figure 16A).
4. Align holes from After Filter with holes located on the exhaust grille.
5. Attach After Filter with existing bolts, screws, and the six (6) self-tapping screws provided (see Figure 16B).
6. Re-attach the leg supports.
7. Discard extra screws.
RP4 WIRING DIAGRAM

INPUT VOLTAGE (3 PH)

- 208–230 VAC.
- 380–440 VAC.
- 190–220 VAC.
- OTHER: ___ VAC.
- 460 VAC.

FREQUENCY

- 50 HZ.
- 60 HZ.

MAXIMUM CURRENT ___ AMPS

208/230V
T1 - T7 - T8 - T9
T2 - T7 - T8 - T9
T3 - T7 - T8 - T9

460V
T2 - T7 - T8 - T9
T3 - T7 - T8 - T9

MOTOR WIRING CONNECTION

NOTE: CONNECT L2 TO TERMINAL 18 FOR 208V UNIT. CONNECT L3 TO TERMINAL 16 FOR 230V UNIT. CONNECT L2 TO TERMINAL 14 FOR 460V UNIT.

UNITS SUPPLIED WITH PHOTOHELIUM OPTION SEE DETAIL "A" (REFER TO OWNER'S MANUAL FOR ADDITIONAL INSTRUCTIONS)

DETAIL "A"

TERMINAL STRIP
LOCATED IN ELECTRICAL BOX

PILOT VALVE #2

PILOT VALVE #1

METAL—FAB INC. WICHITA KS.

P3558–10

FIGURE 17

19
RP6 WIRING DIAGRAM

RP6

INPUT VOLTAGE (3 PH)

- 208–230 VAC.
- 380–440 VAC.
- 190–220 VAC.
- OTHER: _______ VAC.
- 460 VAC.

FREQUENCY

- 50 Hz.
- 60 Hz.

MAXIMUM CURRENT

_______ AMPS

T1 — T7 — T14
208/230V T2 — T7 — T10
T3 — T7 — T10
T1 — T7 — T10
460V T2 — T7 — T10
T3 — T7 — T10

MOTOR WIRING CONNECTION

NOTE: CONNECT L2 TO TERMINAL 18 FOR 208V UNIT.
CONNECT L2 TO TERMINAL 16 FOR 230V UNIT.
CONNECT L2 TO TERMINAL 14 FOR 460V UNIT.

UNITS SUPPLIED WITH PHOTOHELIUM
OPTION SEE DETAIL "A"
(REFER TO OWNER'S MANUAL FOR ADDITIONAL INSTRUCTIONS)

METAL–FAB INC, WICHITA KS.

FIGURE 18
FIGURE 19

RP8 WIRING DIAGRAM

INPUT VOLTAGE (3 PH)

- 208–230 VAC
- 380–440 VAC
- 190–220 VAC
- OTHER: ___ VAC
- 460 VAC

FREQUENCY

- 50 Hz
- 60 Hz

MAXIMUM CURRENT

----- AMPS

NOTE: CONNECT L2 TO TERMINAL 18 FOR 208V UNIT.
CONNECT L2 TO TERMINAL 16 FOR 230V UNIT.
CONNECT L2 TO TERMINAL 14 FOR 460V UNIT.

UNITS SUPPLIED WITH PHOTHELCIC OPTION SEE DETAIL "A"
(REFER TO OWNER'S MANUAL FOR ADDITIONAL INSTRUCTIONS)

METAL–FAB INC, WICHITA KS.

P3569–10
RPO8 WIRING DIAGRAM

INPUT VOLTAGE (3 PH)
- 208–230 VAC.
- 380–440 VAC.
- 190–220 VAC.
- OTHER: ____ VAC.
- 460 VAC.

FREQUENCY
- 50 Hz.
- 60 Hz.

MAXIMUM CURRENT
- ____ AMPS

RPO8

1. FIELD SUPPLIED WIRING

MOTOR WIRING CONNECTION

NOTE: CONNECT L2 TO TERMINAL 18 FOR 208V UNIT.
CONNECT L2 TO TERMINAL 16 FOR 230V UNIT.
CONNECT L2 TO TERMINAL 14 FOR 460V UNIT.

UNITS SUPPLIED WITH PHOTOHELIC OPTION SEE DETAIL "A"
(REFER TO OWNER'S MANUAL FOR ADDITIONAL INSTRUCTIONS)

DETAIL "A"

METAL-FAB INC. WICHITA KS.

FIGURE 22
### RP Parts List

#### FIGURE 23

(The Above Shown is a RP4 Unit)

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>36720-11</td>
<td>Filter Support Assembly (Roto-Pulse)</td>
</tr>
<tr>
<td>2</td>
<td>P3649</td>
<td>4-Prong Knob</td>
</tr>
<tr>
<td>3</td>
<td>P3903-01</td>
<td>End Cap Assy. (Including Door Seal)</td>
</tr>
<tr>
<td>4</td>
<td>P38342-01</td>
<td>Door Seal</td>
</tr>
<tr>
<td>5</td>
<td>P7400RM</td>
<td>80/20 Cellulose Cartridge Filter 250sf</td>
</tr>
<tr>
<td>6</td>
<td>P7402RM</td>
<td>80/20 Cellulose Cartridge Filter 291sf</td>
</tr>
<tr>
<td>7</td>
<td>P7404RM</td>
<td>Spun Bound Polyester Cartridge Filter</td>
</tr>
<tr>
<td>8</td>
<td>P7405HO</td>
<td>Treated Spun Bound Polyester Cartridge</td>
</tr>
<tr>
<td>9</td>
<td>P3559</td>
<td>Rubber Washer</td>
</tr>
<tr>
<td>10</td>
<td>P2704</td>
<td>Washer</td>
</tr>
<tr>
<td>11</td>
<td>P3829-01</td>
<td>Electrical Box</td>
</tr>
<tr>
<td>12</td>
<td>P2099</td>
<td>3/4” Close Nipple</td>
</tr>
<tr>
<td>13</td>
<td>P3563</td>
<td>3/4” Galvanized Tee</td>
</tr>
<tr>
<td>14</td>
<td>P3834-01</td>
<td>3/4” NPT x 5/8” Barb</td>
</tr>
<tr>
<td>15</td>
<td>P3411</td>
<td>1” Hose Clamp</td>
</tr>
<tr>
<td>16</td>
<td>P3403</td>
<td>5/8” Air Hose</td>
</tr>
<tr>
<td>17</td>
<td>P3825-01</td>
<td>Lifting Bracket</td>
</tr>
<tr>
<td>18</td>
<td>P3825-02</td>
<td>Lifting Bracket</td>
</tr>
<tr>
<td>19</td>
<td>P3834-01</td>
<td>(2) Valve Manifold</td>
</tr>
<tr>
<td>20</td>
<td>P3834-02</td>
<td>(3) Valve Manifold</td>
</tr>
<tr>
<td>21</td>
<td>P3834-03</td>
<td>(4) Valve Manifold</td>
</tr>
<tr>
<td>22</td>
<td>P3834-04</td>
<td>1” Diaphragm Valve</td>
</tr>
<tr>
<td>23</td>
<td>P3834-06</td>
<td>Diaphragm Seal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>P3735</td>
<td>1/4” 90 deg. Presto Lock</td>
</tr>
<tr>
<td>18</td>
<td>P3603-04</td>
<td>Disk Pad (Small)</td>
</tr>
<tr>
<td>19</td>
<td>P3594</td>
<td>3/8” x 1/2” x 3/8” Bearing</td>
</tr>
<tr>
<td>20</td>
<td>P2286</td>
<td>Nylon Shoulder Washer</td>
</tr>
<tr>
<td>21</td>
<td>P2285</td>
<td>Compression Spring</td>
</tr>
<tr>
<td>22</td>
<td>P2284</td>
<td>Pivot Bolt</td>
</tr>
<tr>
<td>23</td>
<td>P36713-06</td>
<td>Filter Support Weldment</td>
</tr>
<tr>
<td>24</td>
<td>P249</td>
<td>5/16” Lock Washer</td>
</tr>
<tr>
<td>25</td>
<td>P222</td>
<td>5/16-18 Hex Nut</td>
</tr>
<tr>
<td>26</td>
<td>P36730-06</td>
<td>Roto Tube Weldment</td>
</tr>
<tr>
<td>27</td>
<td>P3413</td>
<td>1/2” Male x 5/8” Barb</td>
</tr>
<tr>
<td>28</td>
<td>P3595</td>
<td>17/32” x 5/8” x 3/4” Bearing</td>
</tr>
<tr>
<td>29</td>
<td>P3734</td>
<td>1/4” O.D. Air Hose</td>
</tr>
<tr>
<td>30</td>
<td>P3118</td>
<td>Pilot Valve</td>
</tr>
<tr>
<td>31</td>
<td>P3592</td>
<td>Solenoid Repair Kit</td>
</tr>
<tr>
<td>32</td>
<td>P3532</td>
<td>Stop Push Button</td>
</tr>
<tr>
<td>33</td>
<td>P3529</td>
<td>N.C. contact</td>
</tr>
<tr>
<td>34</td>
<td>P3874</td>
<td>Timer Board</td>
</tr>
<tr>
<td>35</td>
<td>P3533</td>
<td>Start Push Button</td>
</tr>
<tr>
<td>36</td>
<td>P3874</td>
<td>N.O. Contact</td>
</tr>
<tr>
<td>37</td>
<td>P1754</td>
<td>Control Transformer</td>
</tr>
</tbody>
</table>
FIGURE 24
(The Above Shown is a RP6 Unit)

FIGURE 25

<table>
<thead>
<tr>
<th>ITEM</th>
<th>PART NO.</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>35</td>
<td>P3910</td>
<td>5HP Motor Starter</td>
</tr>
<tr>
<td></td>
<td>P3912</td>
<td>7-1/2HP Motor Starter</td>
</tr>
<tr>
<td></td>
<td>P3913</td>
<td>10HP Motor Starter</td>
</tr>
<tr>
<td>36</td>
<td>P3915</td>
<td>5HP / 7-1/2HP / 10HP 460V Overload Protector</td>
</tr>
<tr>
<td></td>
<td>P3916</td>
<td>5HP / 7-1/2HP 208-230V Overload Protector</td>
</tr>
<tr>
<td></td>
<td>P3917</td>
<td>10HP 208-230V Overload Protector</td>
</tr>
<tr>
<td>N.S.</td>
<td>38275-01</td>
<td>Silencer</td>
</tr>
<tr>
<td>N.S.</td>
<td>38324-01</td>
<td>Motor Shroud</td>
</tr>
<tr>
<td>N.S.</td>
<td>38297-01</td>
<td>Magnehelic Kit</td>
</tr>
<tr>
<td>N.S.</td>
<td>P3099</td>
<td>Diaphragm Kit</td>
</tr>
<tr>
<td>N.S.</td>
<td>38296-01</td>
<td>Photohelic Kit</td>
</tr>
<tr>
<td>N.S.</td>
<td>38292-01</td>
<td>Inlet Plenum</td>
</tr>
<tr>
<td>N.S.</td>
<td>38284-01</td>
<td>Barrel Lid Kit</td>
</tr>
<tr>
<td>37</td>
<td>P3085</td>
<td>1/4” Presto Lock</td>
</tr>
<tr>
<td>38</td>
<td>P2443</td>
<td>Green Lamp</td>
</tr>
<tr>
<td>39</td>
<td>P2442</td>
<td>Red Lamp</td>
</tr>
</tbody>
</table>
FIGURE 26

(The Above Shown is a RP8 Unit)
Date of Install: ________________________________________________________

Installer:  ________________________________________________________


Amp Draw:  ________________________________________________________

Run Mode:  RPM  CFM  Static

Air Pressure:  ________________________________________________________

______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________
______________________________________________________________________________________