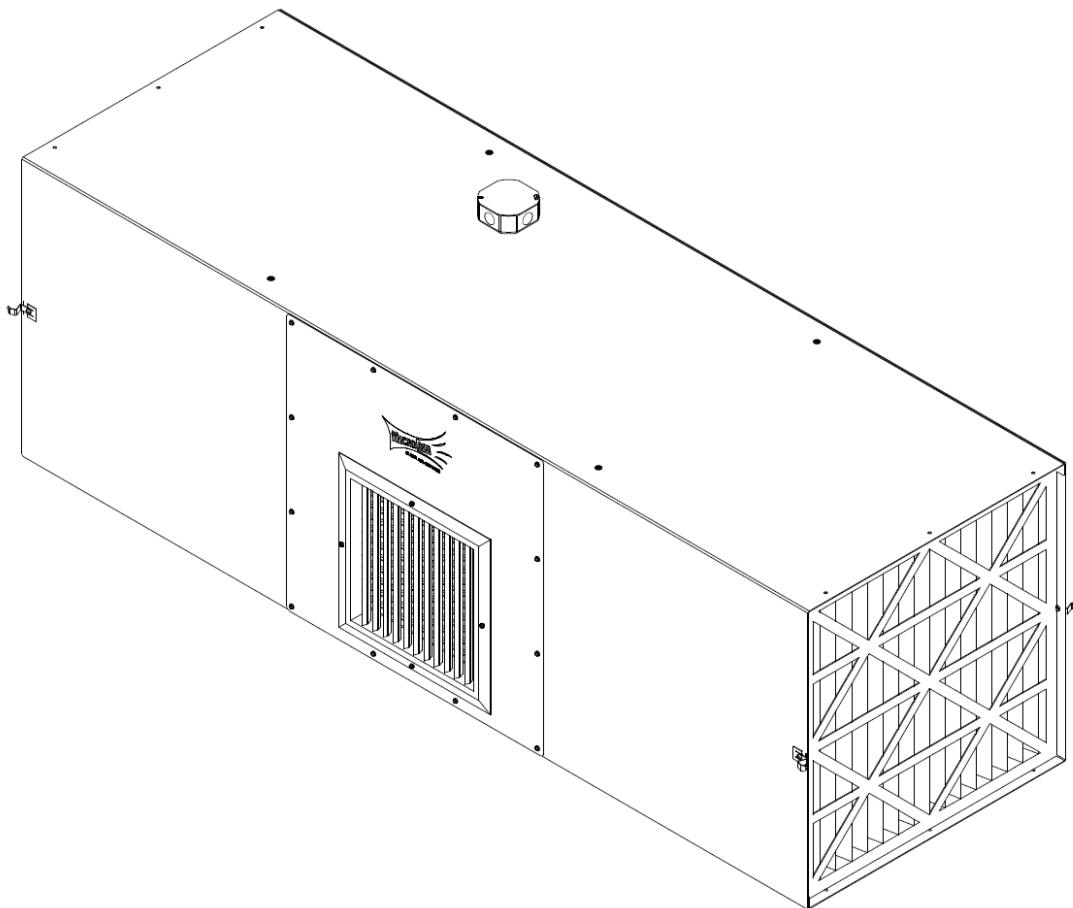




# MXT3500

Installation and Operation Manual



This manual contains specific cautionary statements relative to worker safety. Read this manual thoroughly and follow as directed. It is impossible to list all of 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.

**WARNING:**

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



All electrical work must be done by a qualified electrician according to local, state and national 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.

**MXT3500 SPECIFICATIONS:**

Input Voltage:	115 VAC, 60 Hz, 1-Phase
Motor:	1 HP, 1075 RPM, 3-Speed, Direct Drive
Blower:	10-10 Direct Drive
Max Current:	11.8 Amps
Air Flow:	3650 CFM
Dimensions:	24" H x 24" W x 72" L
Noise Level:	67 dBA at 6' away from unit
Noise Level w/ Silencer:	60 dBA at 6' away from unit
Shipping Weight:	200 lbs.
Actual Weight:	160 lbs.

**PRE-OPERATING INSTRUCTIONS:**

NOTE: The following instructions will vary depending on options ordered.

1. Inspect the unit for any visible damage that may have occurred during shipment. Report any damage to the delivery carrier.
2. Remove the shipping crate, shipping straps and plastic wrap from unit.
3. Remove the unit from the shipping skid and set on a level surface.
4. Remove attachment option from shipping carton.
5. Determine the location where the unit is to be installed. Be sure to allow sufficient access to the unit for servicing and maintenance on all sides.

**EQUIPMENT / TOOLS REQUIRED:**

- Forklift
- Lifting straps or chains
- Hoist
- Socket wrenches
- Concrete anchors (for wall mount / floor stand)
- Wire nuts

**EYEBOLTS HANGING INSTRUCTIONS:**

1. Remove the 4 threaded eyebolts and hardware from the Owner's Manual envelope.
2. Place an eyebolt to each of the 4 through holes on top of the cabinet. Use 3/8-16 hex nut and 3/8" washer to fasten to cabinet.
3. Once eyebolts are secured, the MXT3500 is ready to be hung in an appropriate location (See **FIG. 1**).



**CAUTION:** Use strong braided wire or chain to support the air cleaner. Hang from ceiling / roof structural supports.

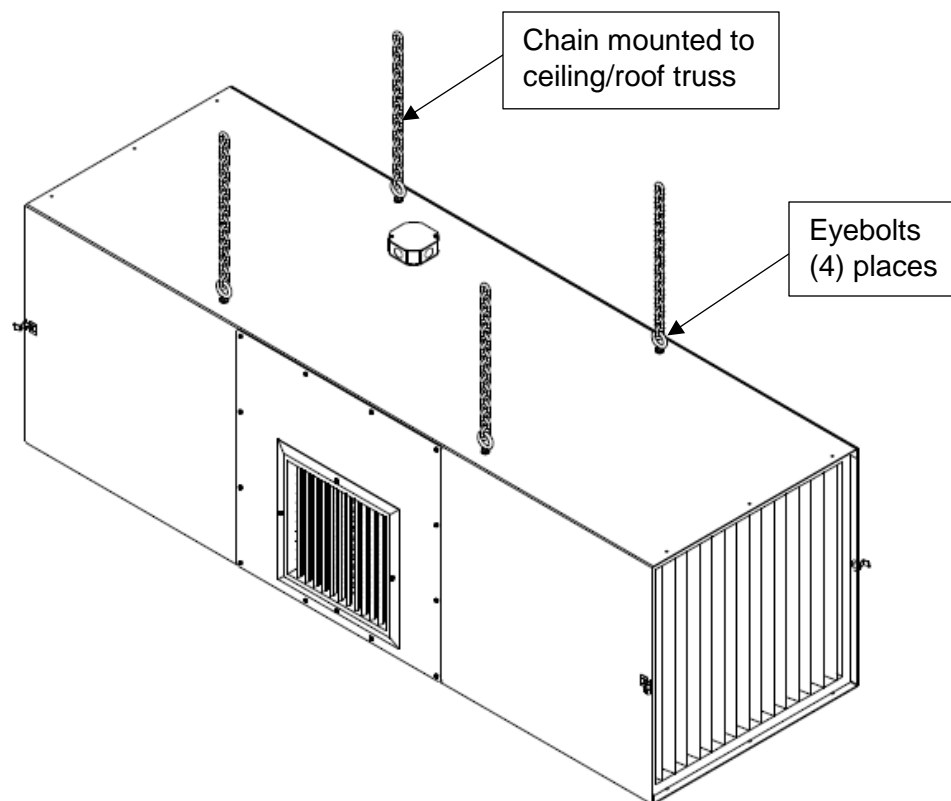


FIG. 1

**NOTE:** Chain, link or cable should hang vertically.

**CHANNEL HANGING INSTRUCTIONS:**

1. Remove 3/8" hardware from the Owner's Manual envelope.
2. Lift unit to access the threaded holes on the bottom of the cabinet. **NOTE:** The cabinet can be lifted by installing eyebolts on the top. Eyebolts are not supplied by Micro Air (See **FIG. 1**).
3. Line up mounting channel with holes on bottom of cabinet. Bolt in place.
4. Once channels are secured, the MXT3500 is ready to be hung in an appropriate location (See **FIG. 2**).



**CAUTION:** Use strong braided wire or chain to support the air cleaner. Hang from ceiling / roof structural supports.

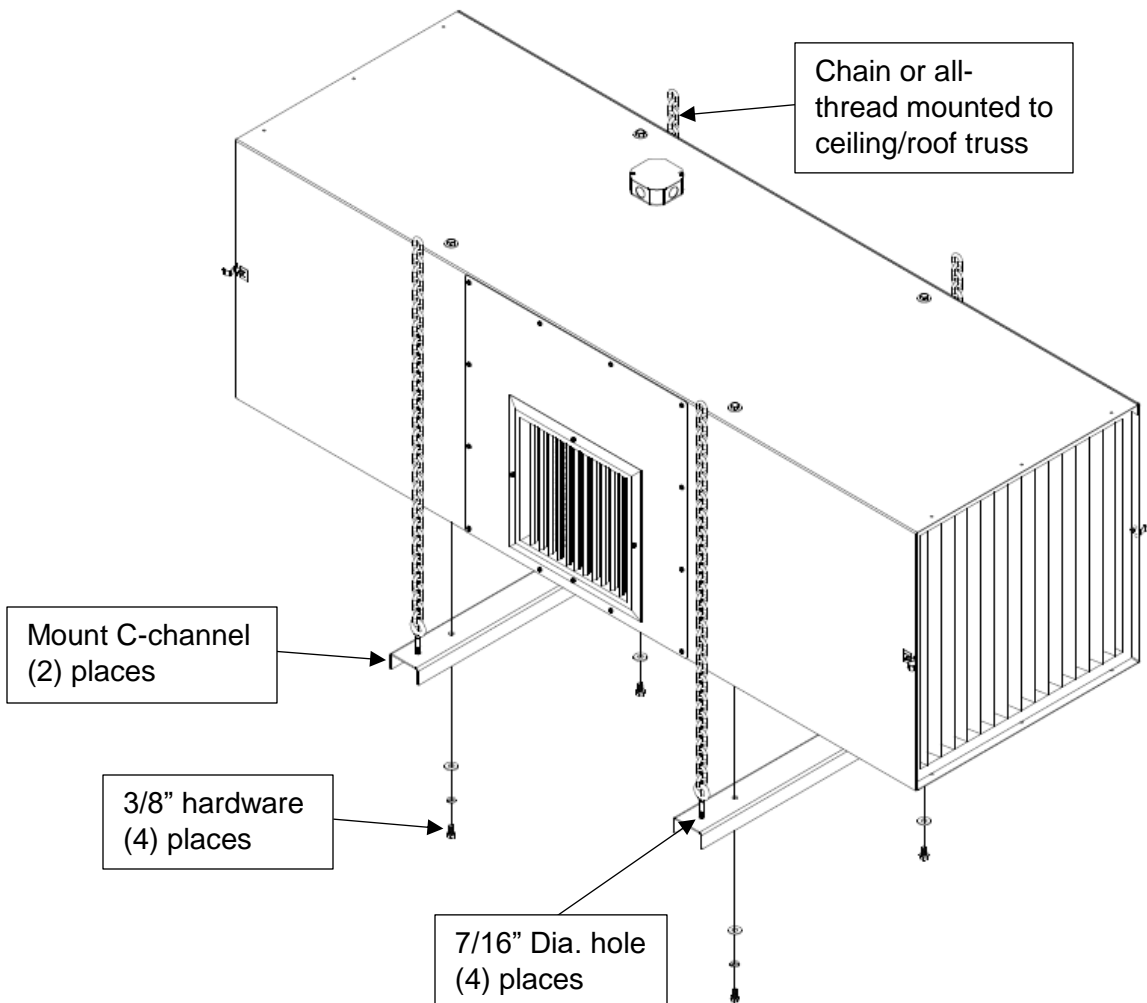


FIG. 2

**NOTE:** Chain, link or cable should hang vertically.

**WALL MOUNT:**

1. Remove 3/8" hardware from the Owner's Manual envelope.
2. Install wall mount. The brackets have (8) 7/16" holes to mount to wall. The holes are spaced 16" apart horizontally by 24" vertically. **NOTE:** Anchors are not supplied by Micro Air. Minimum embedment depth for a 3/8" dia. wedge anchor is 1-1/2".
3. Lift unit to access the threaded holes on the bottom of the cabinet. **NOTE:** The cabinet can be lifted by installing eyebolts on the top. Eyebolts are not supplied by Micro Air (See **FIG. 1**).
4. Install cabinet to wall mount by bolting to the bottom of the cabinet with the hardware supplied (See **FIG. 3**).

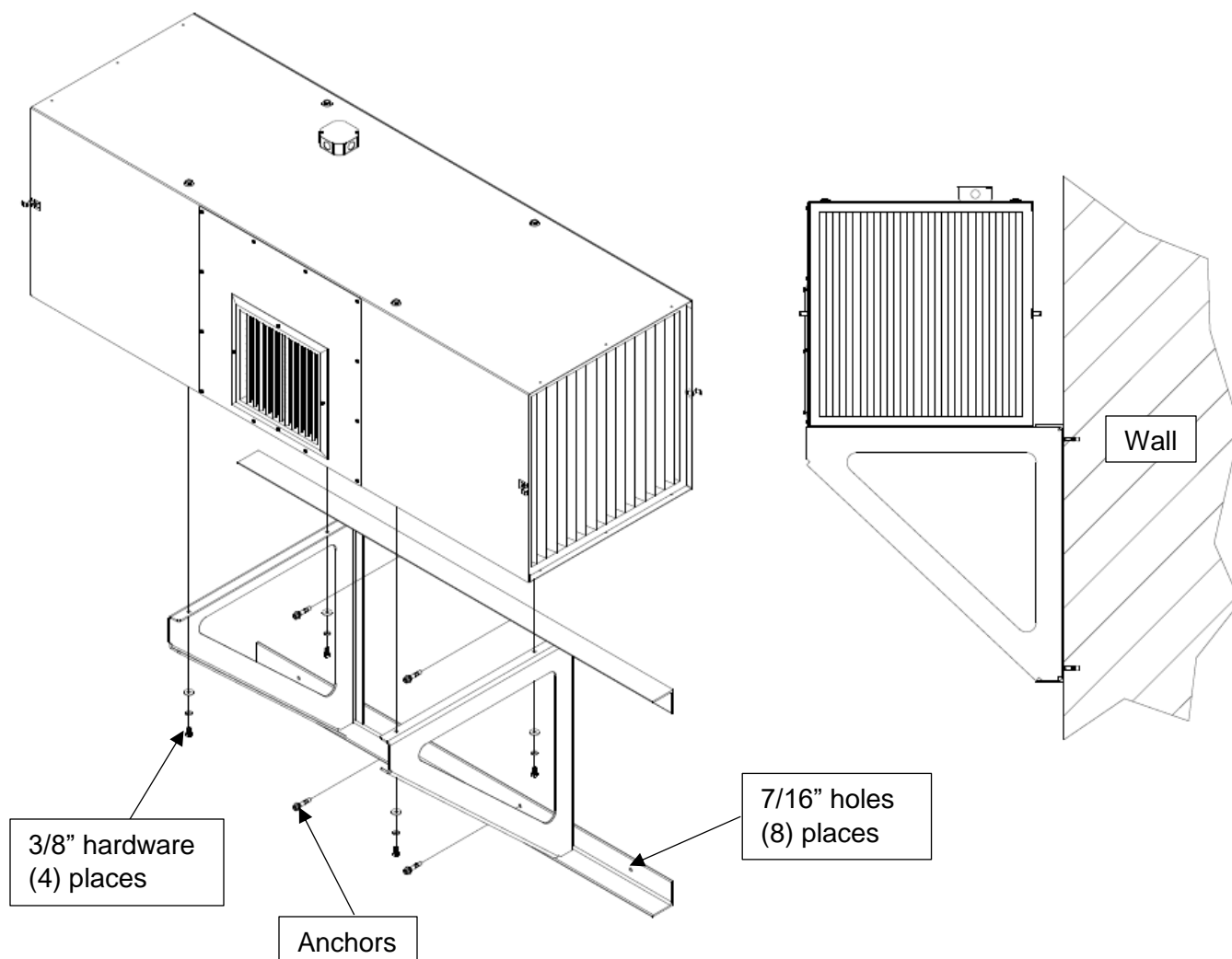


FIG. 3

**10' FLOOR STAND:**

1. Remove 3/8" hardware from the Owner's Manual envelope.
2. Install floor stand. The stand has (4) 5/8" holes to mount to the floor. The holes are spaced 22" apart. **NOTE:** Anchors are not supplied by Micro Air. Typical minimum embedment depth for a 1/2" dia. wedge anchor is 2-1/2".
3. Lift unit to access the threaded holes on the bottom of the cabinet. **NOTE:** The cabinet can be lifted by installing eyebolts on the top. Eyebolts are not supplied by Micro Air (See **FIG. 1**).
4. Install cabinet to floor stand by bolting to the bottom of the cabinet with the hardware supplied (See **FIG. 4**).

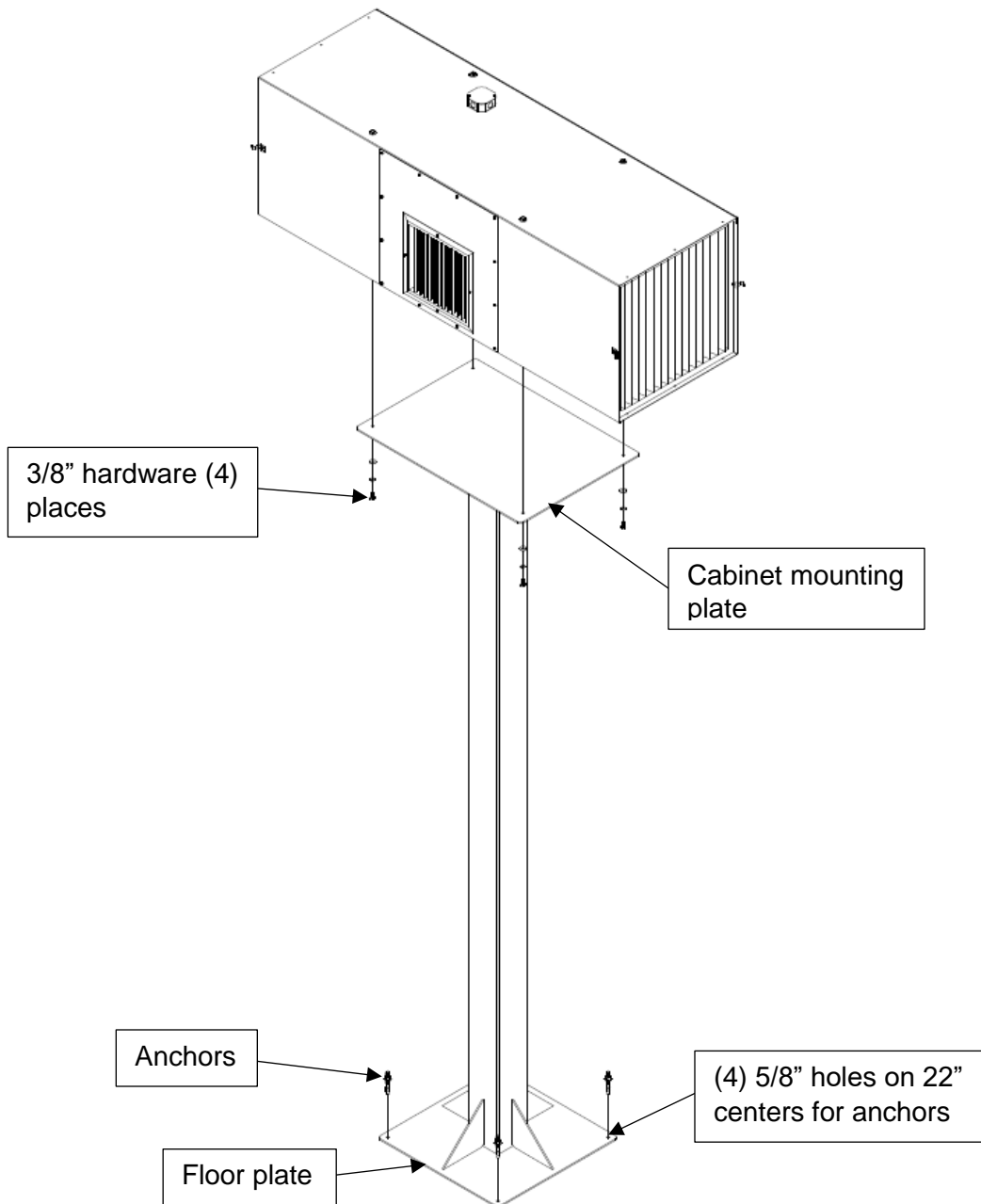


FIG. 4

**OPTIONAL SCRIM PRE-FILTER:**

In order to access the filters, the Scrim pre-filters will need to be removed. Disengage the latch from the scrim pre-filters (6 places per side). Note that they will be installed from the factory when purchased with the unit.

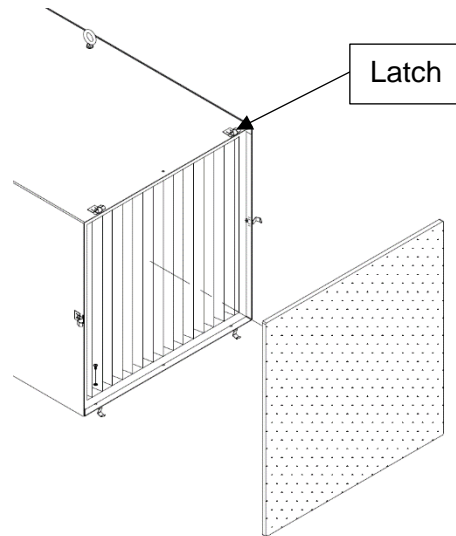


FIG. 5

**OPTIONAL MAGNAHELIC GAUGE:**

Installation:

1. Remove parts from package and inspect for any damage during shipping.
2. Mount the Magnahelic Gauge into the mounting bracket and place the male barb fittings in the pressure ports on the side of the gauge. **NOTE:** The bracket can be mounted on any flat surface. Additional air hose can be purchase from the factory.
3. Plug the two ports on the back of the gauge.
4. Mount the bracket using the (4) self-tapping screws.
5. Using  $\frac{1}{4}$ " clear tubing connect the "LOW" pressure port on the gauge to the pre-installed barb fitting on the unit. The "HIGH" pressure port stays disconnected (See FIG. 6).  
**NOTE:** The magnahelic assembly will be installed from the factory when purchased with the unit.

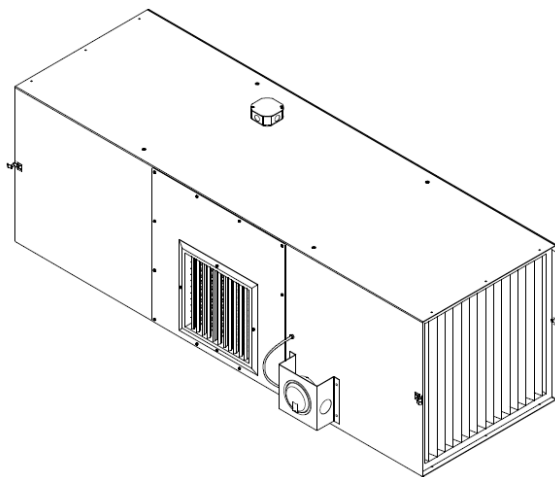


FIG. 6

**OPTIONAL SILENCER ASSEMBLY:**

## Installation:

1. Remove parts from package and inspect for any damage during shipping.
2. Place silencer over exhaust panel.
3. Using supplied self-drilling sheet metal screws, attach silencer. See **FIG. 8** for location of silencer assembly. 16 New holes will have to be drilled on the exhaust panel.

**NOTE:** If the silencer is bought separate from the MXT unit, the exhaust grille will need to be removed before installing the silencer assembly.

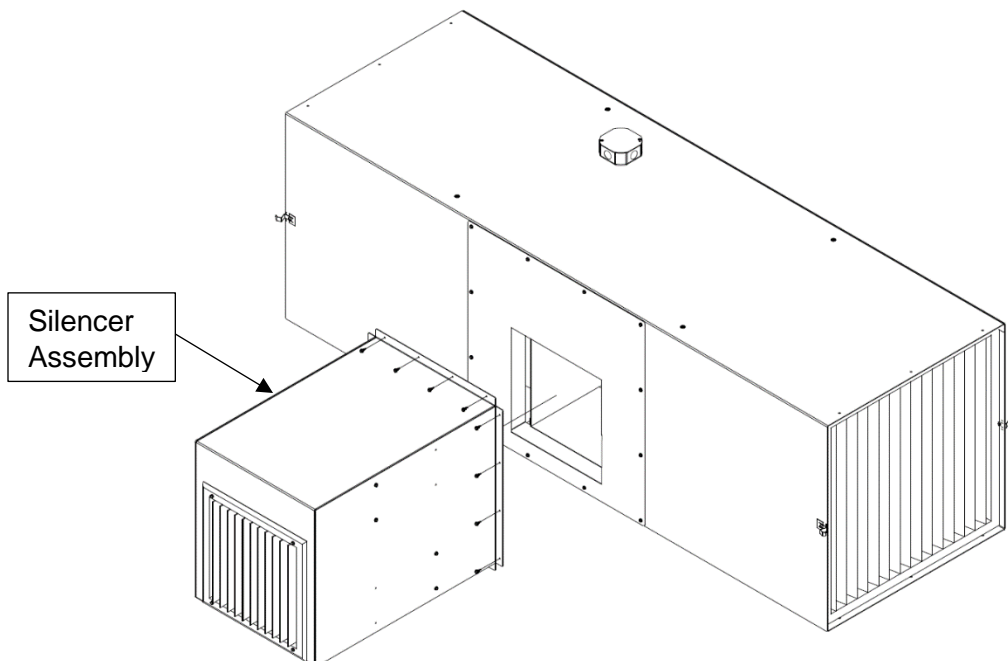


FIG. 7

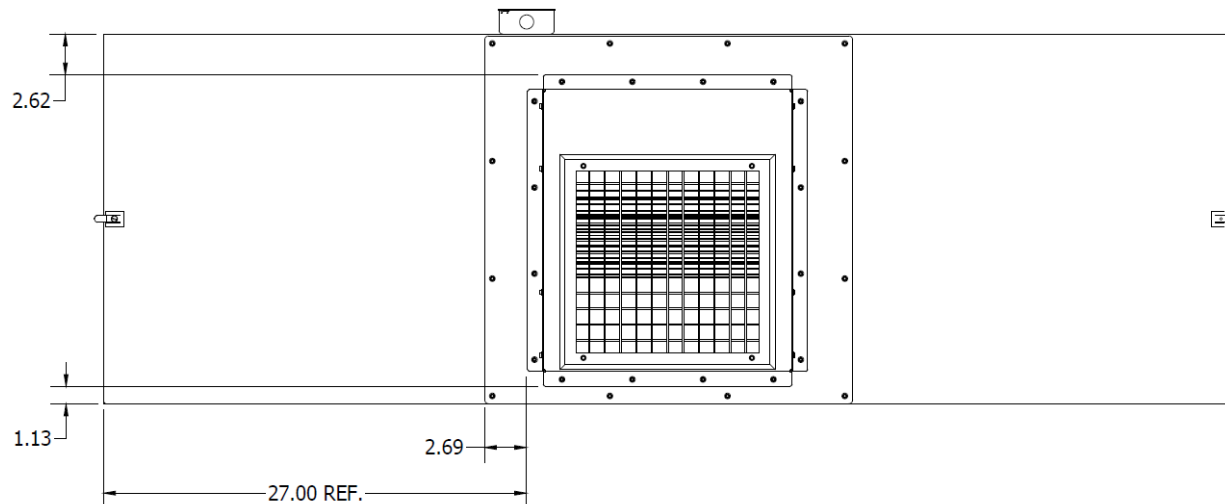


FIG. 8



**ELECTRICAL INSTALLATION:**

All electrical work must be done by a qualified electrician according to local, state and national codes.

1. Conduit electrical connections should be made by a qualified electrician, and must comply with local codes.
2. Remove the electrical box cover located on the top side of the unit.
3. Make electrical connections as shown in wiring diagram to the wires protruding from junction box.
4. Check current draw of the motor. Do not exceed Amps specified.

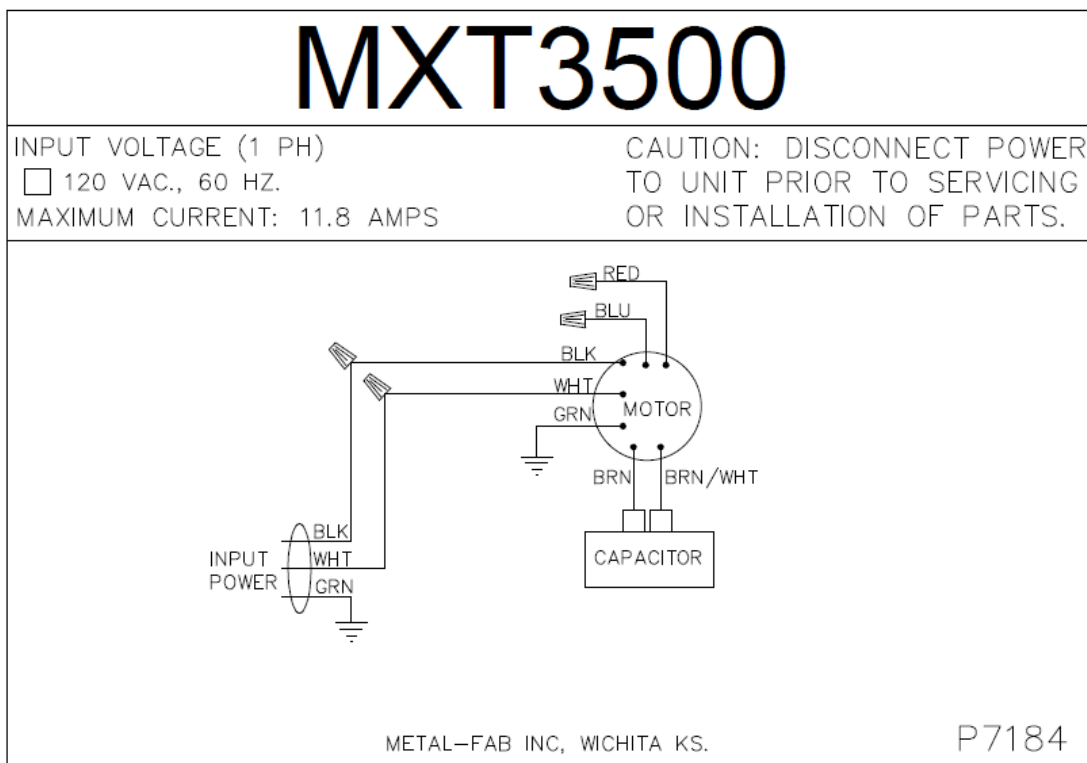


FIG. 9

### CHANGING THE FILTERS:

As the filters collect airborne pollutants, they will eventually become “loaded,” which will cause a decrease in airflow.



**CAUTION:** Always make sure that the unit is turned off before changing filters or servicing the unit.

1. Turn the unit off.
2. Disengage latches and remove the pleated pre-filters. **NOTE:** Replace the pre-filters only. If the unit airflow is back to normal, the unit is operating properly and there's no need to replace the main filters.
3. Visually inspect the main filters. If the filters show excessive particulate build-up, they will need to be replaced.
4. Pull the filter from the unit.
5. Install new filter and pre-filter. Make sure that the airflow directional arrow on the pleated pre-filter is pointing towards the inside of the cabinet.
6. Engage latches to secure pleated pre-filters.

**NOTE:** For units equipped with the optional Scrim Pre-Filter, remove the scrim pre-filter by disengaging the latches (See **FIG. 5**).

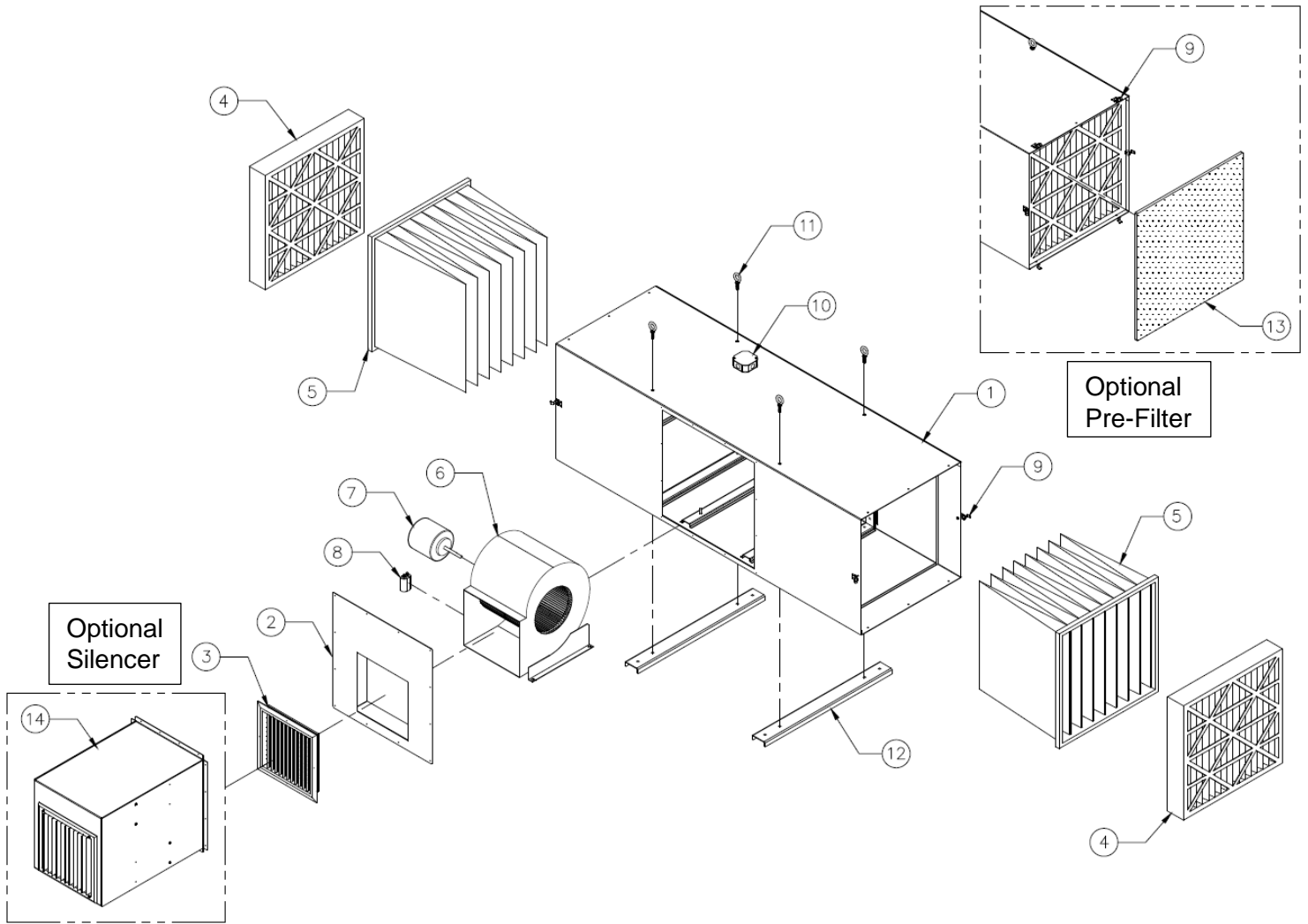
For units equipped with the Magnahelic Pressure Gauge:

1. The magnahelic gauge indicates the static pressure. Note the reading at initial start-up. As the filters become “loaded,” the static pressure will gradually increase. This will indicate the need to change the filters. **NOTE:** Typical pressure range for most applications is 1.0 in-w.g. until the filters will need to be replaced. Upon start up, the gauge should measure some amount of pressure drop (typically 0.4 in-w.g.). If no pressure is measured, check connections for proper installation.
2. Replace the scrim pre-filters and pleated pre-filters only. If the pressure reading decreases, the unit is operating properly. If the gauge continues to read high after replacing the pre-filters, then the main filters will also need to be replaced.

### GENERAL MAINTENANCE:

1. Check the blower bearings for unusual wear and the blower wheel for debris and dirt. Clean when necessary.
2. Check the wiring for loose connections or cracked insulation.
3. No lubrication is required for the motor.
4. Excessive dirt or oil should be removed periodically.

**MXT3500 PARTS LIST:**



**FIG. 10**

ITEM	PART NO.	DESCRIPTION	ITEM	PART NO.	DESCRIPTION
1	30651-01	Cabinet Weldment	9	P335	Latch
2	30655-01	Access Cover	10	P7182	Junction Box
3	P1420	Grille		P7183	Junction Box Cover
4	P1411	Pleated Pre-Filter	11*	P2437	Eyebolts
5	P1440	55% Bag Filter	12*	30658-01	C-Channel Mount
	P1441	95% Bag Filter	13*	30667-01	Scrim Pre-Filter
6	P3575	Blower	14*	30672-01	Silencer Assembly
7	P7180	Motor, 1HP. 115V			
8	P7181	Capacitor			

\*Optional

**NOTES**

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