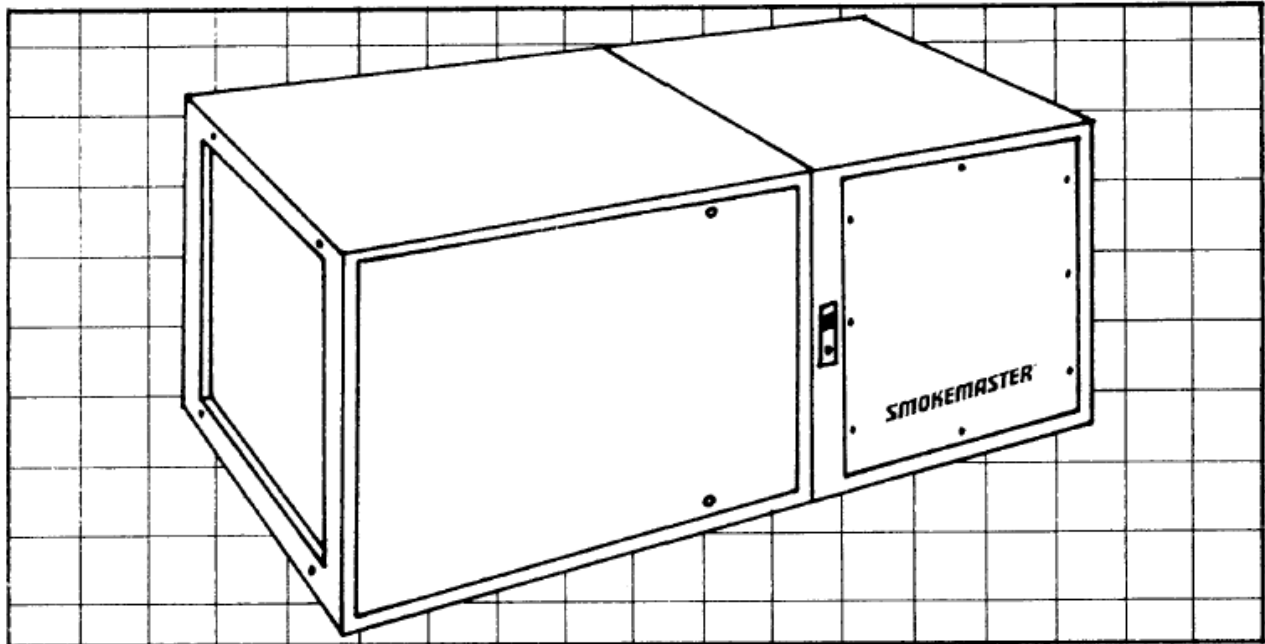


# **SMOKEMASTER®**

## **MODEL M66 R&L**

### **INDUSTRIAL MEDIA AIR CLEANER**



THE SMOKEMASTER M66 INDUSTRIAL MEDIA AIR CLEANER CAPTURES DUST, SAWDUST AND GRIT IN WORK AREAS. EITHER SOURCE CAPTURE TECHNIQUES OR AMBIENT AIR CLEANING CAN BE USED TO PROVIDE HEALTHIER WORKING CONDITIONS.

- All models allow two or three stage filtration.
- Filter configurations available to provide Up to 3200 CFM of air.
- Models available with airflow from left to right or right to left.
- Single phase operating voltages include 120 Vac, 240 Vac and 208 Vac.
- Three phase voltages include 230 Vac, 460 Vac and 208 Vac.
- All internal wiring completed and operationally checked at the factory.
- Optional plenum and hoses make source capture application easy.
- Permanently lubricated ball bearing motor requires no maintenance.
- Power lamp indicates when the unit is "ON".

For further information:  
**BERRIMAN ASSOCIATES**  
[www.berriman.com](http://www.berriman.com)  
1-800-480-3630

# TABLE OF CONTENTS

	PAGE
<b>SPECIFICATIONS</b>	<b>3</b>
<b>PLANNING THE INSTALLATION</b>	<b>4</b>
Introduction	4
Sizing	4
Ambient Cleaning	6
Source Capture Cleaning	6
<b>INSTALLATION</b>	<b>8</b>
When Installing This Product	8
Unpacking	8
Overhead Mounting	8
Stand Mounting	8
Source Capture Plenum	10
<b>ELECTRICAL INSTALLATION</b>	<b>10</b>
<b>CHECKOUT AND OPERATION</b>	<b>13</b>
<b>ADJUSTMENTS</b>	<b>13</b>
<b>PARTS LIST</b>	<b>15</b>
<b>WARRANTY</b>	<b>16</b>

# SPECIFICATIONS

## - IMPORTANT -

THE SPECIFICATIONS GIVEN IN THIS PUBLICATION DO NOT INCLUDE NORMAL MANUFACTURING TOLERANCES. THEREFORE, THIS UNIT MAY NOT MATCH THE LISTED SPECIFICATIONS EXACTLY. ALSO, THIS PRODUCT IS TESTED AND CALIBRATED UNDER CLOSELY CONTROLLED CONDITIONS AND SOME MINOR DIFFERENCES IN PERFORMANCE CAN BE EXPECTED IF THOSE CONDITIONS ARE CHANGED.

### SPECIFICATIONS

Dimensions: 27 1/8"H x 26 1/2"W x 56"L

Weight: 250 Lbs. installed weight.  
297 Lbs. shipping weight.  
Optional carbon module adds 45 Lbs. to the installed and shipping weight.

Cabinet: 16 gauge welded steel cabinet with a baked enamel, textured coated finish.

Power Input:

Voltage	Phase	1 HP Amps	2 HP Amps	3 HP Amps
110-120	1	12.0	N/A	N/A
208-240	1	6.6	9.0	N/A
208-240	3	3.8	7.0	9.0
440-480	3	1.9	3.5	4.4

Motor: 1 HP sealed ball bearings and thermally protected. Adjustable motor sheave allows for field adjustments to the rated airflow.

Blower: Forward curved, ball bearing, belt driven centrifugal blower. This blower is capable of moving 4400 CFM free air.

Instrumentation: Dirty Filter Gauge- Factory-installed pressure gauge designed to determine filter replacement cycle.

Indicator Light-Light indicates that the blower motor is energized properly.

Electrical Hookup: All single phase models include a 10' power cord with a standard molded plug. Three phase have pig tail only.

### FILTER OPTIONS

Prefilter: 30-35% efficient pleated filters, 24" x 24" x 4".

Primary Filters: 24" x 24" x 22", 8 pocket, 66 sq. ft. of synthetic media.

Stock Number	Filter	(CFM = Cubic Feet/Minute)		
		1 HP	2 HP	3 HP
41072	95% Bag	1940 cfm	2620 cfm	3020 cfm
41056	85% Bag	2030 cfm	2675 cfm	3150 cfm
41055	65% Bag	2150 cfm	2800 cfm	3170 cfm
41057	50% Bag	2190 cfm	2830 cfm	3200 cfm
41061	35% Bag	2210 cfm	2850 cfm	3225 cfm

### NOISE LEVELS

Distance in Feet	1 HP
9 Feet	73 dBA
15 Feet	70 dBA

Manufacturer has a policy of continuing product improvement and reserves the right to make changes and specifications without notice.

# PLANNING THE INSTALLATION

## - WARNING -

The M66 Media Air Cleaner is not explosion-proof. It must not be installed where there is danger of vapor, gas or dust explosion.

### INTRODUCTION

Clean air is the subject of numerous laws and regulations. Typical requirements in the United States are those put out by the Occupational Safety and Health Administration (OSHA). Private groups, such as the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE), have also published numerous recommendations.

Normally, clean air is defined in regulations and recommendations as air having a limited amount of contaminant in it, commonly expressed as parts per million or milligrams per cubic meter. Approved counteractions are intended to lower or eliminate the amount of contaminants in the air. One of the more common methods of achieving this goal is through the use of media air cleaners.

At no time should a media air cleaner be placed where there is a potential for explosion due to the presence of explosive dusts, gases or vapors. Contact the nearest manufacturer representative for assistance in determining the correct application of an electronic air cleaner.

### SIZING

Sizing is that part of the installation which determines how many air cleaning units are required to maintain a desired level of air quality. The process of sizing an application involves roughly calculating the number of air cleaners needed and then modifying the calculation according to the specific characteristics of each application.

If air contaminants are generated from fixed stations where hoods and hoses can be acceptably installed, cleaning the air by capturing the contaminant at the source is strongly recommended. For source capture air cleaning, a hood (not provided) is installed where the contaminants are generated and an attached hose

feeds the contaminants to a source capture plenum. The plenum transfers the contaminants from up to four hoses directly into the media air cleaner (hose and plenum are ordered as accessories).

The actual number of contaminant sources that can be conducted into one air cleaner may vary from one to four depending on the nature of the contaminants. The composition, quantity and rate of generation of the contaminants determines the air velocity needed to effectively capture these contaminants at the source. The required air velocity in turn not only affects the hood design and location but is also sets limits on how much hose can be used before the air pressure drop becomes too great for effective contaminant capture.

Therefore, when sizing an application for source capture air cleaning, it is necessary to keep in mind how the specific contaminants, the hood and the needed velocity all combine to affect the number of stations which can be attached to a single unit and the number of units which will be needed for a particular application.

When the installation of hoods and hoses is physically infeasible or unacceptable, the media air cleaners are strategically placed overhead or on stands to provide background air cleaning.

For background air cleaning, the number of media air cleaners needed can be estimated by the relationship of air volume to the needed air changes per hour. In these cases, the following formula is helpful:

$$\text{Media Air Cleaners} = \frac{\text{Air Volume} \times \text{Air Changes/Hour}}{\text{Clean Air Rating (CFM)} \times 60}$$

$$\text{Clean Air Rating} = \text{Airflow} \times \text{Efficiency}$$

A general rule of thumb is to provide ten air changes per hour in industrial applications. Obviously, the air changes per hour will vary with the degree of contaminant level.

A method for calculating the needed air changes per hour is to measure the generation rate of the

contaminants and the suggested allowable level of contamination. To use this method of calculation,

consult your manufacturer representative.

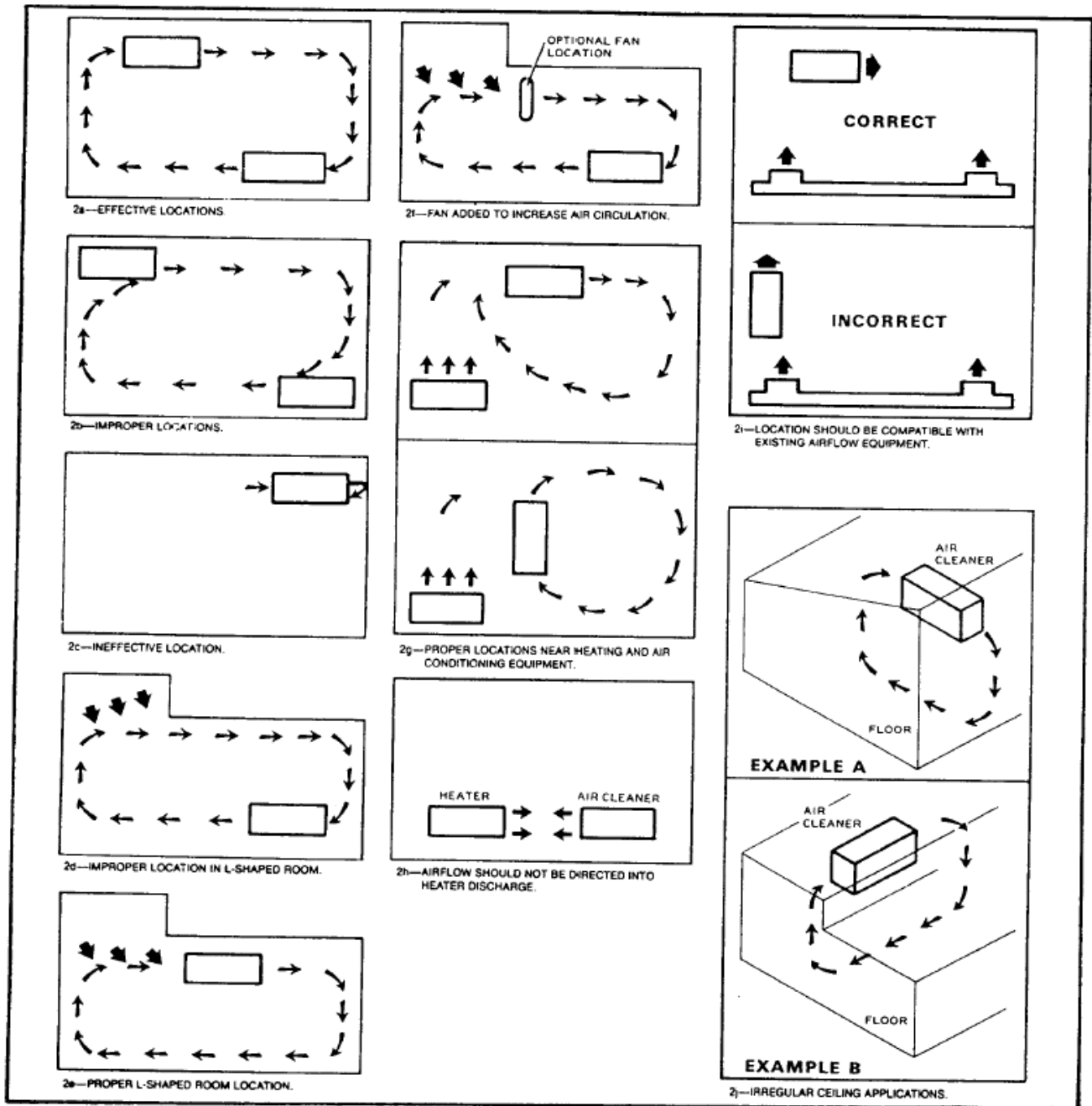


FIGURE 1 – GUIDELINES FOR LOCATING THE M66 WHEN AMBIENT CLEANING

Regardless of the method used to calculate the number of units needed to produce clean air, the physical conditions of the space to be cleaned may either limit this number or demand that more units be installed. For background air cleaning, it is important to establish a uniform airflow pattern throughout the entire space. Limitations to the calculated sizing may be a lack of space for mounting areas or the number of units may interrupt normal building operation; that is, a unit cannot be mounted where an overhead crane will smash into it or where stand mountings seriously interrupt building traffic patterns. The number of units required by air volume and air changes per hour might need to be increased when the shape of a structure is such that effective capturing and air distribution is not possible according to the sizing calculations.

### AMBIENT CLEANING

Whether an air cleaner is ceiling hung or placed on a stand, the first important consideration is that the inlet of the unit be located as close as is reasonably possible to the greatest concentration of air contaminants. Second, since the air cleaner draws contaminated air from approximately 10 ft. (3.0 m) around the outlet and exhausts the cleaned air from 50 to 75 ft. (15.2 m to 22.8 m) from the outlet, the inlet of the unit should be placed 25 percent of the distance along the wall of a room. See Fig. 2.

DO NOT locate an air cleaner inlet too close to the corners of a room. Contaminated air will be able to bypass the unit and not be cleaned. DO NOT locate an air cleaner outlet too close to a corner or wall. See Fig. 1 (1c). The cleaned air will recirculate directly back to the air cleaner inlet.

DO NOT locate an air cleaner in an L-shaped room so that exhausted air enters directly into the small portion of the room as shown in Fig. 1 (1d). This can produce a self-contained circular air pattern in the small part of the room that decreases the air cleaner's effectiveness. Locate an air cleaner in an L-shaped room as indicated in Fig. 1 (1e).

The shape of a room and location restrictions may require the installation of a fan as in Fig. 1 (1f) to promote proper air circulation. Also, the size of a room may require the use of fans to bring contaminants to an air cleaner inlet.

In rooms with irregular ceilings, install the air cleaner close to the ceiling on the highest wall as Example A indicates in Fig. 1 (1j). When one section of the ceiling is at least 12 in. (3-4.8 mm)

higher than another, locate the air cleaner in the area with the higher ceiling as shown in Example B of Fig. 1 (1j).

When selecting locations for numerous units, position the air cleaners to create uniform movement of air and provide maximum access to the sources of contamination. The outlets of the air cleaners should not be located so that they generate opposing air currents or that the outlet from one air cleaner is less than 30 ft. (9.1 m) from the inlet of another air cleaner.

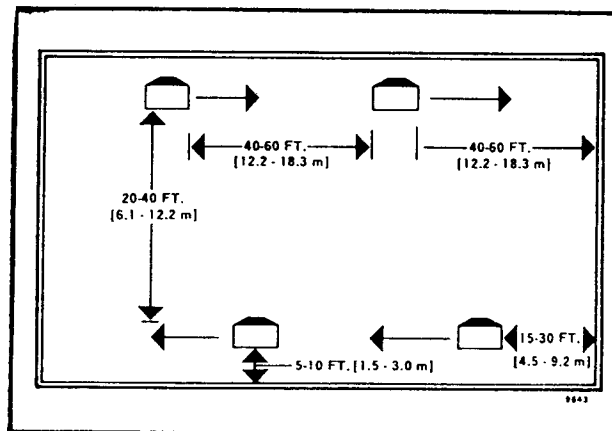


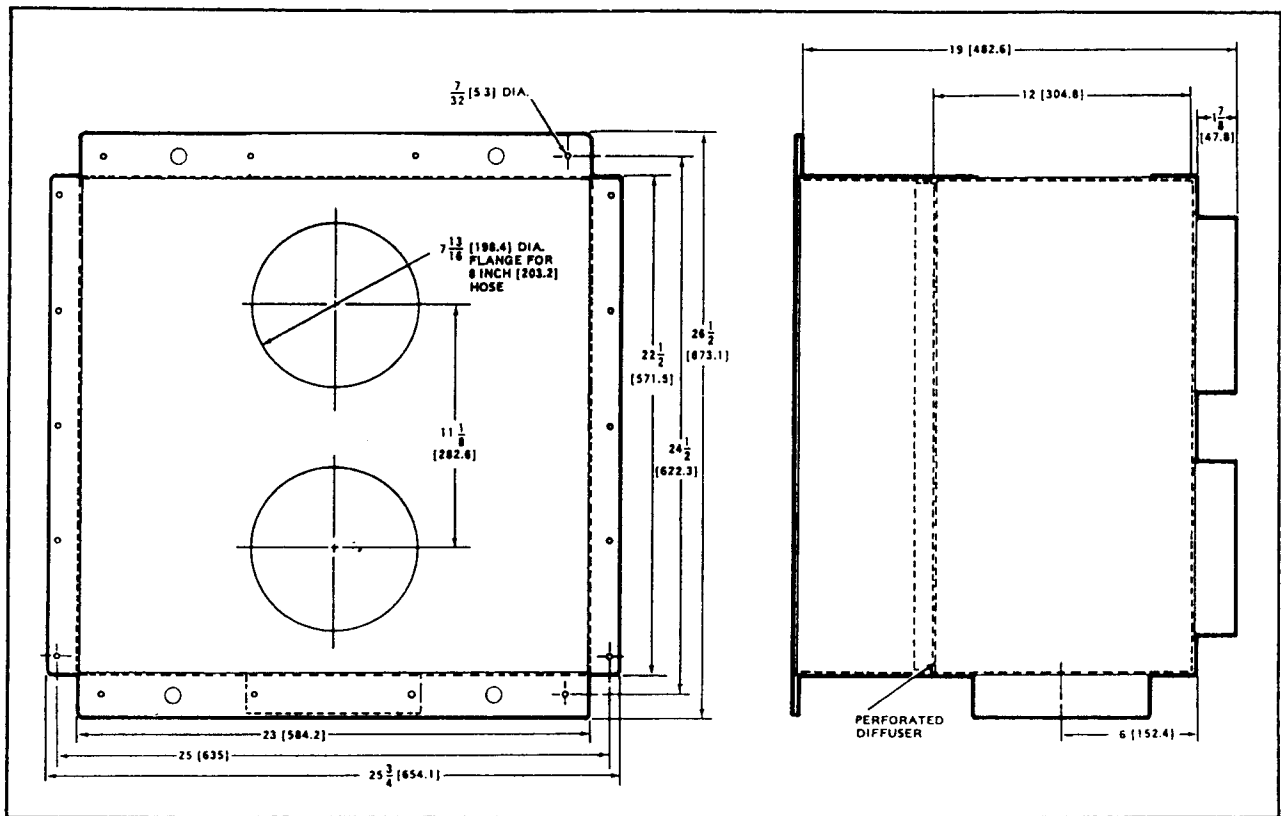
FIGURE 2 – M66 LOCATION GUIDE FOR BACKGROUND CLEANING

### SOURCE CAPTURE CLEANING

When selecting a location for a media air cleaner that uses a hood and hose to capture the contaminants at the source, note the available stand or ceiling mounting areas that will provide satisfactory air distribution for the air cleaner outlet. Choose the location that will keep the air pressure drop caused by the length of the hose within an acceptable range. Do not mount the outlet of the air cleaner so close to a wall that it inhibits the airflow. Also, the outlet of an air cleaner should not be located such that it interferes with the source capture process of another air cleaner hood.

To effectively control atmospheric contamination at its source, proper hood design is necessary. Minimum airflow and power consumption are also important factors in designing an effective local exhaust system to control contamination.

Capturing air contaminants at their source requires the creation of sufficient airflow past the contaminant source to remove the contaminated air and draw it into an exhaust hood. Fine airborne dust particles, mist, vapors, gases and fumes follow air currents. Airflow alone is sufficient to capture these contaminants.



**FIGURE 3 – SOURCE CAPTURE PLENUM**

Larger dust particles tend to have a trajectory, or throw, in air. Capturing these heavier particles calls for barriers and proper hood placement to direct the particles into the hood before they fall out of the air stream. This placement should also prevent particle scattering.

Basic knowledge of the contaminated airflow to be controlled is necessary before an effective hood or enclosure can be designed. The more complete and effective the design, the more economical and efficient the installation will be.

A complete enclosure is often the best way to start. Once a source is ideally enclosed, provide access and working openings as required. This concept can be used to develop booths, side- or downdraft hoods and side shields.

The access and working openings must be kept to a minimum. Whenever possible, they must also be kept away from the contaminated airflow. Any inspection and maintenance openings should be provided with tight doors whenever possible.

A hood that is open and does not enclose or confine the contaminant should be avoided. Open

hoods can be used but exhaust volumes must be large and cross drafts nearby can easily upset draft control.

Canopy hoods are effective in controlling operations that may suddenly release surges of gases and vapors. Hot processes are an example.

However, canopies should not be used where people may be working in the airflow between contaminant source and canopy because exhaust airflow can actually increase the worker's exposure to the contaminant. Plating tanks and cementing tables typically have this problem with canopy-type hoods.

The duct takeoff in the exhaust hood should be located in the normal line of contaminant travel. Arrange the duct openings to distribute the exhaust airflow throughout the hood. This is especially important with large, shallow hoods where air movement tends to concentrate close to the duct opening. The airflow can be spread around the hood by using multiple duct takeoffs, interior baffles or filter banks.

Air intake from areas not needing airflow or without contaminants can be controlled with flanges. Flanges minimize airflow from areas outside the desired air collection area. Usually the flange width is equal to the hood diameter but not exceeding 6 inches (152.4 mm). Flanges may increase the effectiveness of the hood allowing a reduction in hood airflow requirements by up to 25 percent.

Exhaust airflow requirements are calculated after the hood design is determined. The airflow volume is calculated using the enclosure's known

open area and the airflow velocity needed to collect the contaminants. The collected airflow must be sufficient to prevent the escape of any contaminated air. Table 1 shows airflow capture velocities for various type of processes.

Where enclosing the process is impractical, the hood should be located as close to the source as possible. The airflow must be adequate to maintain the capture velocity required to carry the contaminants to the hood opening. See Fig. 3.

## INSTALLATION

### WHEN INSTALLING THIS PRODUCT

1. Read these instructions carefully. Failure to follow them could damage the product or cause a hazardous condition.
2. Check the ratings given in the instructions and on the product to make sure the product is suitable for your application.
3. Installer must be a trained, experienced service technician.
4. After installation is complete, check out product operation as provided in these instructions.

### UNPACKING

All components of the M66 are assembled and packed in one box. Check all air cleaner components carefully when unpacking. Remove all shipping cardboard. Be sure to inspect all packing materials before discarding them.

### OVERHEAD MOUNTING

When installing the M66 in an overhead location, position the air cleaner as close to the contaminant source as possible. This increases the air cleaner's effectiveness. It is important to select an overhead mounting location for the air cleaner that provides easy access for cell cleaning and maintenance. Do not place a ladder against the air cleaner when it is mounted overhead in order to gain access to the air cleaner interior.

Be certain that the mounting apparatus from the air cleaner to the ceiling (not included) provides adequate strength and stability and that it is securely attached to the overhead structure. Do not fasten the air cleaner to a false ceiling, to plaster or to plasterboard. In some cases, it may be necessary to construct supports that will bear the weight of the M66 when it is hung in an overhead location.

### STAND MOUNTING

Securely place the M66 on an appropriate stand or cart and locate as close to the contaminant source as possible. The position should also allow satisfactory distribution of air from the outlet of the air cleaner. If a source capture hood, plenum and hose are used, observe the instructions in PLANNING THE INSTALLATION for selecting a suitable location for the unit.

### - CAUTION -

1. Disconnect the power supply before installation and connect the power after mounting the air cleaner to prevent electrical shock and equipment damage.
2. The air cleaner motor is equipped with an automatic thermal overload; it will de-energize. However, it may automatically energize after sufficient cooling time (several minutes to an hour). Therefore, be sure to turn off the air cleaner before servicing it.
3. If the air cleaner must be energized for an electrical check, be extremely careful near moving parts.

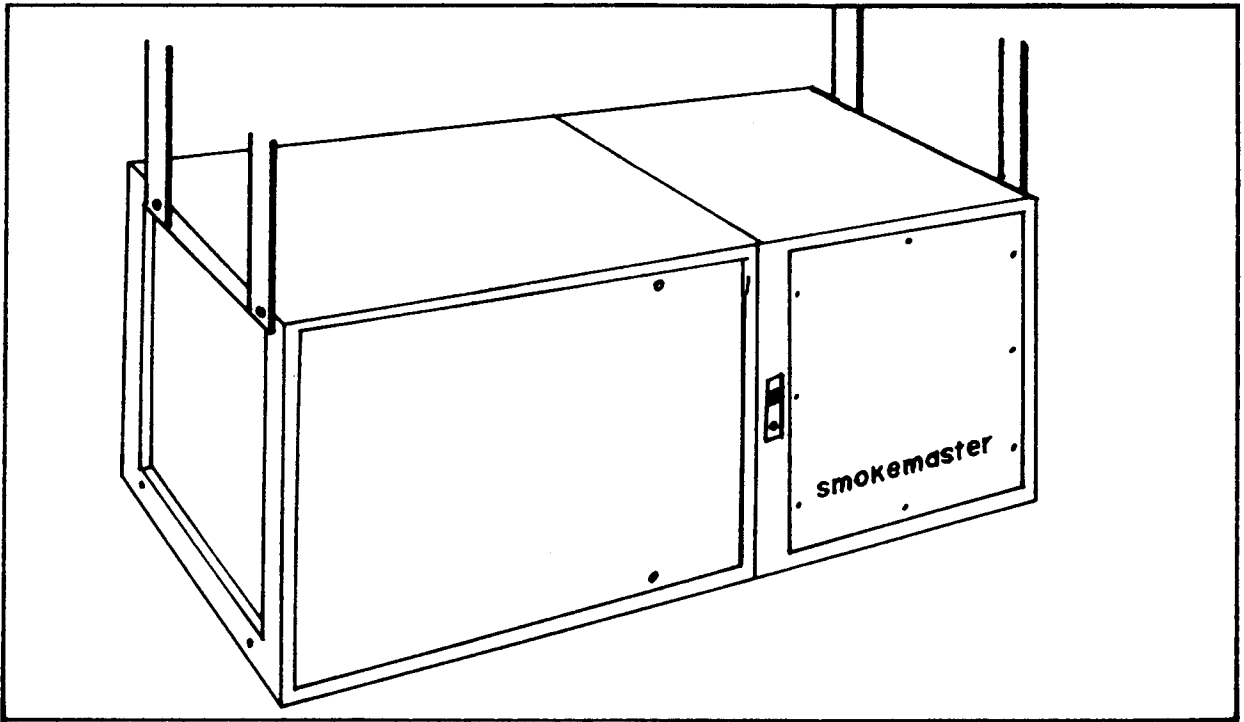


FIGURE 4 - MOUNTING THE M66 OVERHEAD.

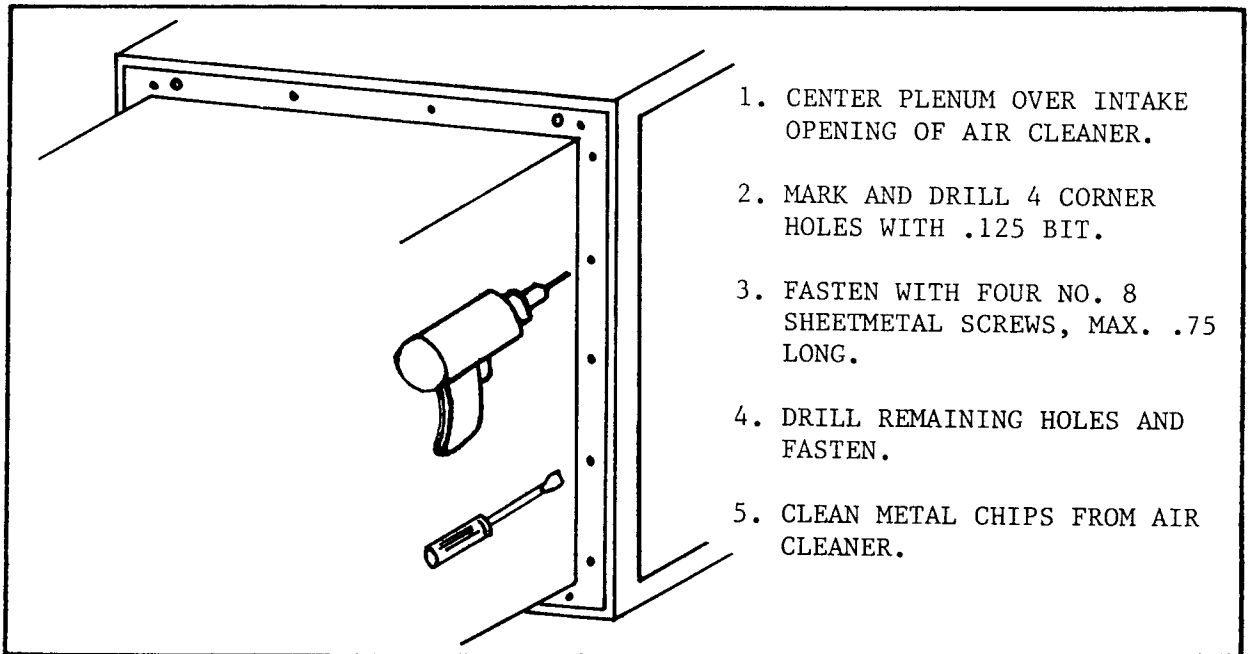


FIGURE 5 - INSTALLING THE SOURCE CAPTURE PLENUM.

## SOURCE CAPTURE PLENUM AND DUCTWORK

1. Center the plenum over the intake opening of the air cleaner.
2. Fasten the plenum to the air cleaner using four 3/8-16 UNC cap screws provided.
3. Drill holes at remaining screw locations around the plenum. Fasten with No. 8 sheet metal screws.
4. Remove any metal chips and shavings from the interior of the air cleaner.
5. Replace the filters.
6. Connect the hose length to the desired plenum flange using hose clamps (not furnished).
7. Block off unused plenum openings with tee caps that are available separately.
8. Route the hose(s) to the source capture hood. Support the hose(s) as necessary using hangers and support bands. Support bands on the hose should be at least 2 ¼" wide and placed at five foot intervals. Do not pinch or flatten the hose.
9. Hood size and location should be determined by an accepted authority or reference, such as the "Industrial Ventilation Manual", to meet applicable codes and ordinances for a particular application.

# ELECTRICAL INSTALLATION

## - CAUTION -

This procedure should be attempted only by persons qualified to install electrical wiring. All wiring must comply with applicable codes and ordinances.

it will have a green or bare grounding conductor for connection to the air cleaner green wire. DO NOT connect the grounding wire from the air cleaner to the white wire of the building. The air cleaner frame must be electrically connected to the frame of the building or the electrical conduit system.

## SINGLE PHASE UNITS

1. Locate an unswitched, single phase power circuit with a junction box near the air cleaner location. Be certain the circuit voltage matches the voltage of the air cleaner.
2. Check the circuit breaker or fuse for that circuit and determine whether the amperage rating of the circuit and the existing circuit loads are such that the air cleaner can be added to the circuit. If not, a new circuit must be wired from a circuit breaker or fuse to the air cleaner.
3. **CAUTION: Turn off the building circuit at the fuse or circuit breaker before proceeding.**
4. Connect a green wire from the grounding terminal in the air cleaner junction box to the grounded conduit of the building wiring system. If the building does not have conduit,

## THREE PHASE UNITS

1. Be certain the circuit voltage of the three-phase power supply line matches the voltage of the air cleaner.
2. **CAUTION: Turn off the building circuit at the fuse or circuit breaker before proceeding.**
3. Wire the air cleaner into the building circuit using practices and materials complying with applicable codes and ordinances.
4. Connect a green wire from the grounding terminal in the air cleaner junction box to the grounding circuit of the building wiring system.
5. Check for proper blower rotation on three phase units. See Fig. 12. Correct by interchanging any two of the power supply connections.

TABLE 1 – CONTAMINANT CAPTURE VELOCITIES<sup>a</sup>

CONTAMINANT DISPERSAL CONDITION	EXAMPLES	CAPTURE VELOCITY	
		fpm	m <sup>3</sup> /hr.
Released with practically no velocity into quiet air.	Evaporation from tanks, degreasing, etc.	50-100	914-1829
Released at low velocity into moderately still air.	Spray booths, intermittent container filling, low speed conveyor transfers, welding, plating, pickling.	100-200	1829-3658
Active generation into zone of rapid air motion.	Spray painting in shallow booths, barrel filling, conveyor loading, crushers.	200-500	3658-9144
Released at high initial velocity into zone of very rapid air motion.	Grinding, abrasive blasting, tumbling.	500-2000	9144-36,576

In each category above, a range of capture velocity is shown. The proper choice of values depends on several factors.

Lower End of Range

1. Room air currents minimal or favorable to capture.
2. Contaminants of low toxicity or of nuisance value only.
3. Intermittent, low production.
4. Large hood-large air mass in motion.

Upper End of Range

1. Disturbing room air currents.
2. Contaminants of high toxicity.
3. High production, heavy use.
4. Small hood-local control only.

<sup>a</sup>From INDUSTRIAL VENTILATION MANUAL by American Conference of Governmental Industrial Hygienists.

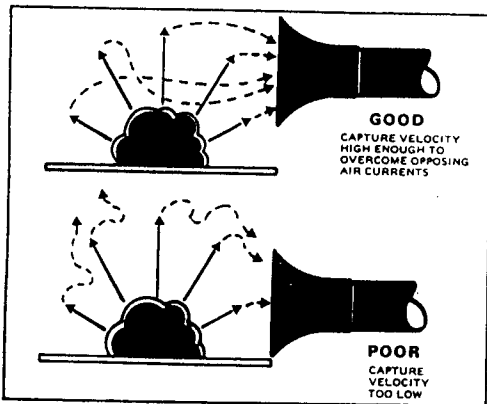


FIGURE 6 – CAPTURE VELOCITY

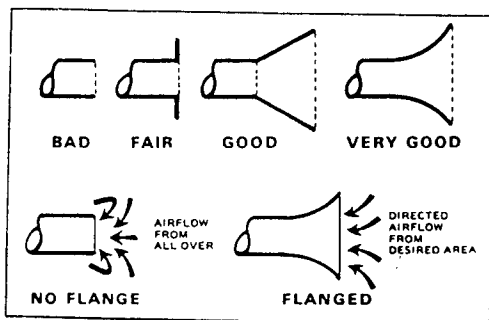


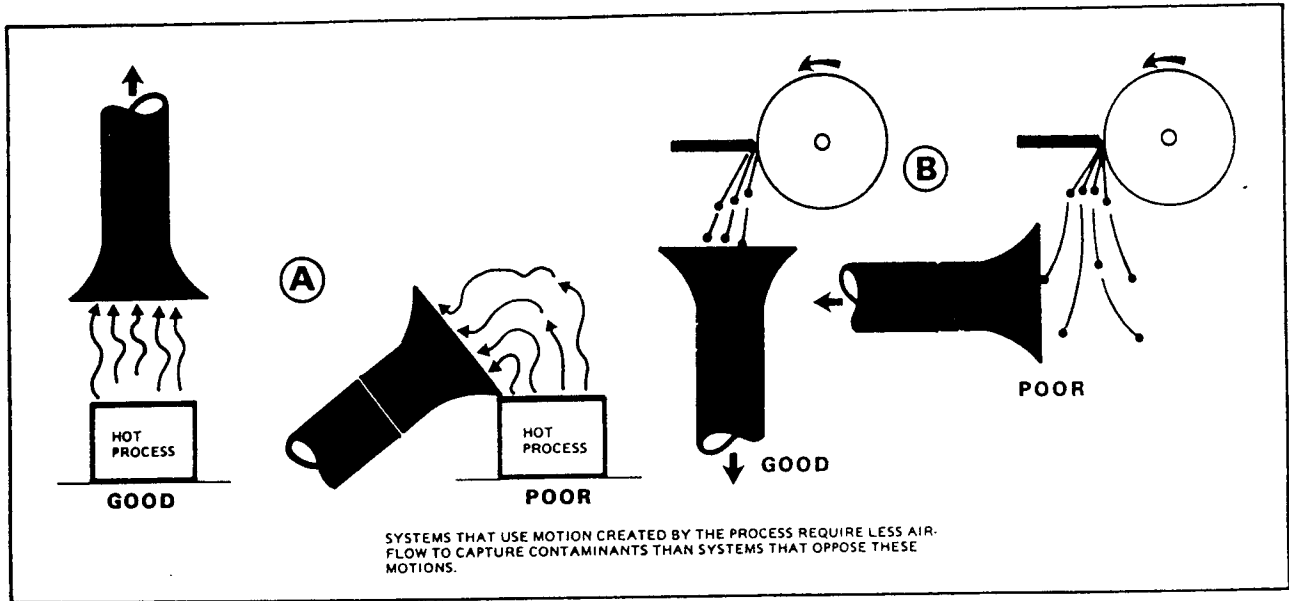
FIGURE 7 – HOOD FLANGES

Collecting contaminants is accomplished by eliminating or minimizing natural air currents at the contaminant site and by pulling the air into the exhaust hood. The airflow velocity must be high enough to overcome any opposing air currents and maintain the capture velocity. See Fig. 6.

Source of air motion to either minimize or use to advantage in hood design:

- Thermal air currents from heat generating operations.
- Machinery motion (conveyor belts, grinders, etc.).
- Material motion (dumping or container filling).
- Operator movements.
- Room air currents (generally 50 fpm [85 m<sup>3</sup>/hr.] minimum, could be much higher).
- Spot heating, cooling or ventilation equipment near area.

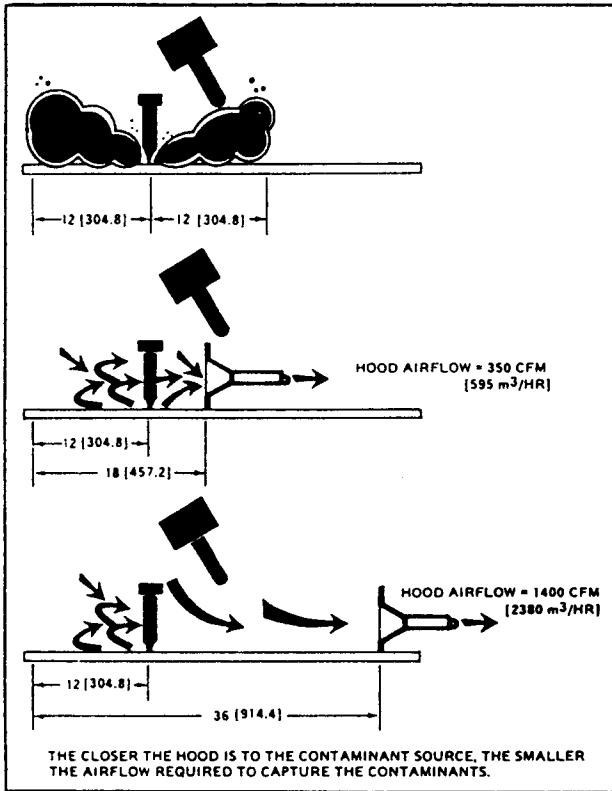
See Fig. 6.



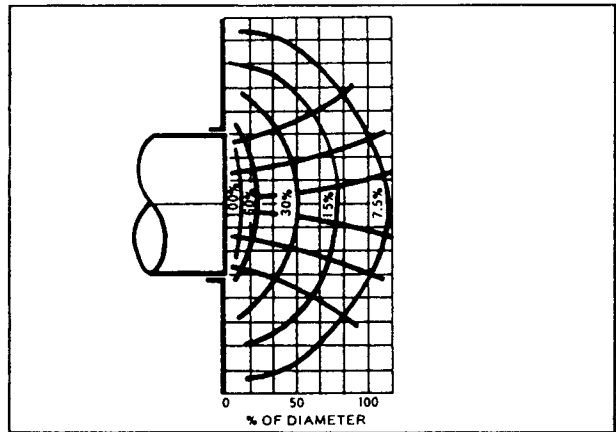
**FIGURE 8 – UTILIZING PROCESS MOTION**

The airflow needed in a hood design is affected by hood shape, size and location. The hood should be as close as possible and enclose the operation as much as possible.

Suction in a duct opening will draw in air equally from all directions. As distance from the inlet opening increases, the decrease in airflow velocity occurs more quickly. The velocity in feet per minute (fpm) equals the cubic feet per minute (cfm) from Fig. 9 divided by inlet area in feet (0.35 for eight-inch hose).



**FIGURE 9 – HOOD LOCATION, AIRFLOW NEEDED INCREASES WITH DISTANCE FROM WORK.**



**FIGURE 10 – VELOCITY CONTOUR (IN PERCENTAGE OF OPENING VELOCITY) FOR FLANGED CIRCULAR OPENING.**

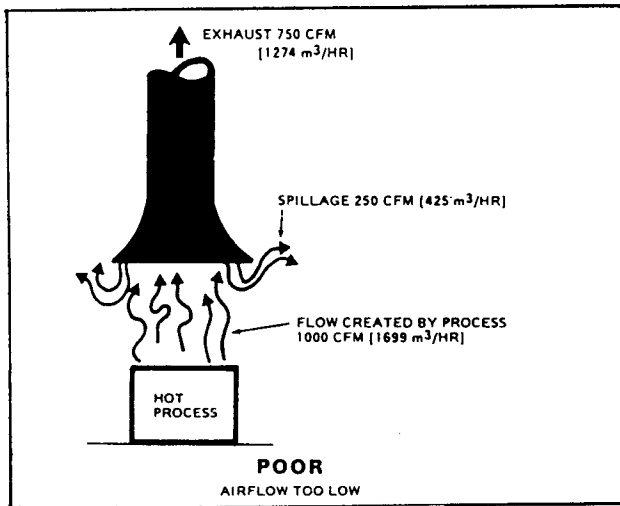


FIGURE 11 – MAINTAIN ADEQUATE AIRFLOW.

When utilizing thermal airflow occurring in a process, exhaust airflow should be greater than the process airflow. This will minimize air spillage at the rim of the hood.

For further information on ventilation and hood design, refer to a more complete source, such as:

INDUSTRIAL VENTILATION, by American Conference of Governmental Industrial Hygienists, published by Committee on Industrial Ventilation, Lansing, Michigan 48106.

HANDBOOK OF VENTILATION FOR CONTAMINANT CONTROL, by Henry J. McDermott, published by Ann Arbor Science, Box 1425, Ann Arbor, Michigan 48106.

## CHECKOUT AND OPERATION

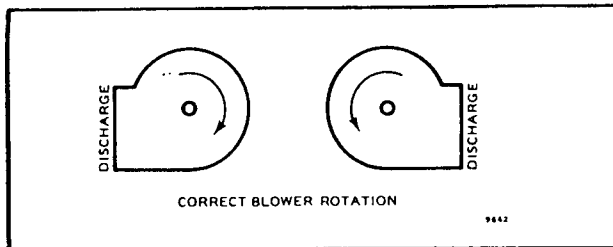


FIGURE 12 – THREE-PHASE BLOWER ROTATION

### CHECKOUT

Before operating the M66, check out the installation using the following procedure:

1. Make sure the air cleaner is oriented for good air circulation where it will not interfere with

personnel and material traffic. Keep out of fire lanes and away from overhead cranes.

2. Note that the access doors can be easily opened.
3. Make sure the M66 is securely mounted overhead or in a stable position on the accessory stand.
4. Observe that the filters are properly in place.
5. Check and adjust the belt tension, if necessary.
6. Make sure the junction box cover has been reinstalled.
7. Clean up the inside of the cabinet, the outside of the cabinet and the installation area.

## ADJUSTMENTS

Adjust the bi-directional louvers of the air cleaner so that the airflow discharge does not produce discomfort or a possible hazard to personnel and equipment.

The blower capacity for the M66 is factory-set. This capacity may be adjusted (see Specifications for adjustment range). Before adjusting the blower capacity, make sure that the On-Off switch is in the Off position.

### TO ADJUST THE BLOWER CAPACITY

1. Turn the air cleaner off and open the access door to the blower and motor section of the air cleaner.
2. Loosen the two bolts locking the end of the motor rail in position. Remove the belt.
3. Loosen the Allen setscrew on the face of the motor sheave.

4. Rotate the sheave into a position that gives the desired blower capacity.

**NOTE: When the sheave is rotated all the way into the shaft, the blower capacity is at its maximum. When the sheave is rotated five turns out on the shaft, the blower capacity is at its minimum. DO NOT ROTATE THE ADJUSTABLE SHEAVE MORE THAN FIVE TURNS OUT ON THE SHAFT. The sheave may already be adjusted one or more turns out on the shaft.**

5. Make sure the sheaves are in line. If not, loosen the motor and blower sheaves and align them properly. Tighten the sheaves securely.
6. Replace the belt and retighten bolts in the motor rail. The belt should be tightened enough to prevent slippage but not so tight that vibration occurs. The correct tension results in a ¼" to 1" deflection when a 10 lb. force is applied to the center of the belt span.
7. Close the access door and energize the air cleaner.

**NOTE: For some blower adjustments, it may be necessary to use a smaller belt to achieve proper tension. Generally, a 1-inch shorter belt will be required.**

#### **SERVICE OF THE FIRST STAGE PREFILTER**

1. Open the access door to the air cleaner cabinet by loosening two thumbscrews on the side of the air cleaner.
2. Swing open the filter retainer by pulling on the handle.
3. Slide the prefilter out of its retaining track.
4. Slide the new or cleaned prefilter into the retaining track and swing the filter retainer closed. Be sure the prefilter is installed with the airflow arrow pointing in the direction of the airflow.

5. Close the access door and secure with the two thumbscrews.

#### **SERVICE OF THE SECOND STAGE MAIN FILTER**

1. Open the access door to the air cleaner cabinet by loosening the two thumbscrews on the side of the air cleaner.
2. Swing open the filter retainer by pulling on the handle.
3. Slide the filter out of its retaining track.
4. Slide the new or cleaned main filter into the retaining track and swing the filter retainer closed.
5. Close the access door and secure with two thumbscrews.

#### **SERVICE OF THE CARBON MODULE – if applicable).**

1. Open the access door to the air cleaner cabinet by loosening the two thumbscrews on the side of the air cleaner.
2. Reach into the air cleaner downstream of the filters. Slide the used carbon module out of the retaining track and remove the carbon module.

### **- CAUTION -**

The carbon module weighs approximately 100 lbs. Use appropriate means to support the carbon module during service.

3. Slide the new or recharged carbon module into the retaining track.
4. Close the access door and secure with two thumbscrews.

#### **AIRFLOW OF M66 AIR CLEANER WITH VARIOUS FILTER OPTIONS**

<b>Filter Combination</b>	<b>Airflow (CFM)</b>	<b>Efficiency (ASHRAE)</b>
PN 41054 w/PN 41143 Prefilter	1650	65%
PN 41056 w/PN 41143 Prefilter	1430	85%
PN 41057 w/PN 41143 Prefilter	1700	50%
PN 41058 w/PN 41143 Prefilter	1680	45%
PN 41061 w/PN 41143 Prefilter	1750	35%
PN 41062 w/PN 41143 Prefilter	1720	50%

# PARTS LIST

NO.	DESCRIPTION	PART NO.
1	Power Switch	10140
2	Lamp, 120V Lamp, 240V	10177 10183
3	35% Prefilter, 2"	41143
4	65% Bag Filter 85% Bag Filter 50% Bag Filter 45% Bag Filter 35% Cube Filter 50% Cube Filter	41054 41056 41057 41058 41061 41062
5	Belt	30234
6	Motor, 1 Ph Motor, 3 Ph	40013 40009
7	Blower	37012
8	Outlet Grille	30486

