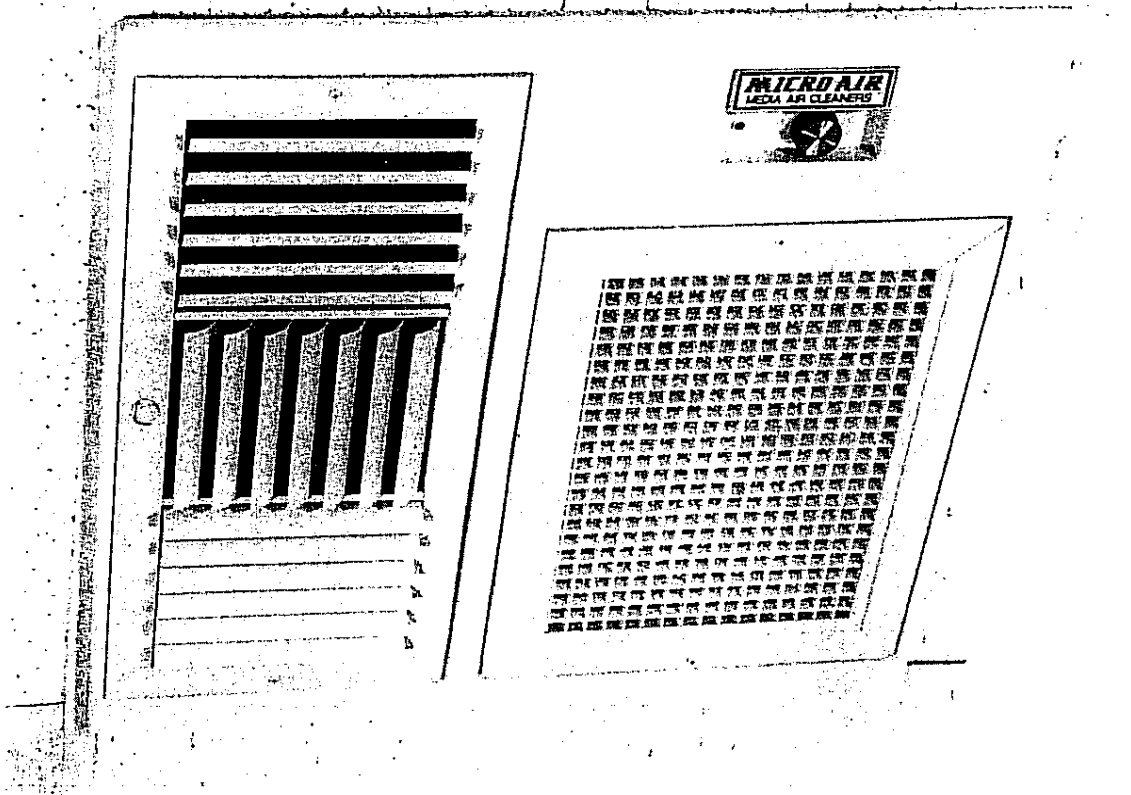


# **MICRO AIR<sup>®</sup>**

## **AIR CLEANERS**



# **MODEL MAR 600**

## **INSTALLATION**

and

## **OPERATING INSTRUCTIONS**

## SPECIFICATIONS

Input Volts: 120 volts, 60 Hz (optional 220 volts, 50 Hz)

### Max. Power

Draw - 120V: Max. 2.0 amps  
Min. 0.75 amps

CFM: Max. 600 (Nominal CFM)  
Min. 200

dBA\*: Max. 52  
Min. 50

\*measured at 6' from intake grille

### Dimensions:

Cabinet  
20½" x 22½" x 14"  
(52 cms x 57.2 cms x 35.6 cms)

Cover  
25" x 25"  
(63.5 cms x 63.5 cms)

### Filters:

Standard  
20" x 10" x 6"  
Pleated 95% ASHRAE

Optional  
20" x 10" x 2"  
Washable 96%

Optional  
20" x 10" x 1" Charcoal

Shipping Wt.: 50 lbs. (22.5 kgs)

Actual Wt.: 39 lbs. (17.6 kgs)

Specifications subject to change without notice.

Metal-Fab, Inc. offers a limited 2 year warranty (from date of installation) on replacement parts due to faulty workmanship and materials. All patent rights reserved.

### FEATURES:

Sturdy, lightweight, galvanized housing.

Attractive vinyl cover with one three-way adjustable supply grille for true 180° coverage and flow adjustment.

Hinged cover swings down for easy access to filter and blower assembly.

Motors with built-in thermal protection are isolation mounted for minimum noise.

Variable speed control allows close matching to fit air flow requirements.

Light indicates unit operation.

Easy installation into 2' x 2' T-bar ceiling.

Acoustical foam insulation.

### OPTIONS:

Chemical filters for odor and gas removal.

Remote operation kit.

Washable filters for lower maintenance costs.

## INSTALLATION

### A. Unpacking

1. Remove unit from carton. Open lid and remove all internal cardboard shipping packing.

2. Remove filters by slightly bending the two retaining bars and lifting upwards. NOTE: If charcoal filter was installed, remove plastic wrapping before reinstalling.

3. Be sure to remove support brackets, S-hooks and turnbuckles before discarding carton.

### B. Suggested Equipment for Hanging

1. 12 gauge or heavier wire to support air cleaner from structural ceiling.

2. Electric drill and bits.

3. Screwdrivers.

4. Pliers.

5. Gloves.

6. Nutdriver.

### C. Mounting

1. Prepare ceiling area by removing the 2' x 2' ceiling tile where the air cleaner will mount, or by cutting a 2' x 2' opening from a 2' x 4' ceiling tile, and removing adjacent tiles as necessary to provide clear working area.

2. Firmly secure a 12 gauge or heavier wire to a firm structure above the T-bar ceiling directly above each of the four corners of the opening.

**CAUTION: FIRM STRUCTURE MUST BE CAPABLE OF SUPPORTING A MINIMUM WEIGHT OF 100 LBS.**

3. Attach a S-hook to each end of brackets with turnbuckles in an extended position. Bracket angles are to be facing outward.

**CAUTION: THE T-BAR SYSTEM MUST NOT SUPPORT ANY OF THE WEIGHT OF THE SYSTEM.**

4. Carefully lift the air cleaner up into the opening and attach to brackets using #10-32 Hex nuts and lock washers.

5. Position the air cleaner so that the plastic face overlaps the T-bar ¼" on every side, then tighten the turnbuckles until the top side of the plastic just touches the bottom of the side of the T-bars. (Fig. 1)

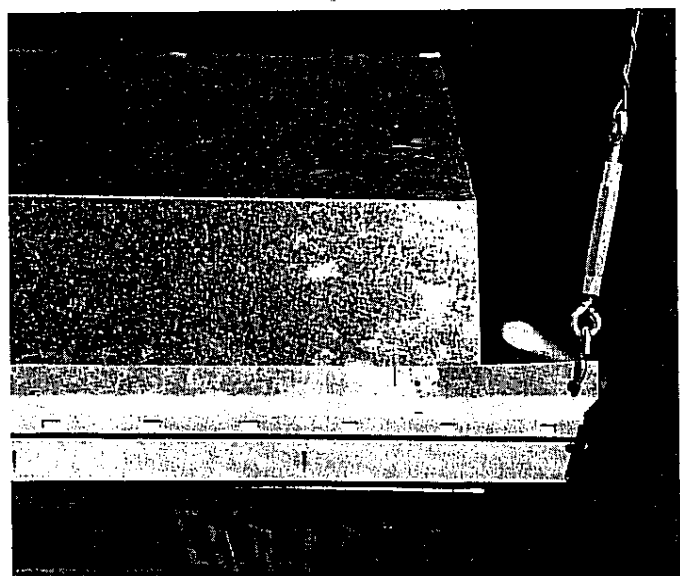


FIG. 1

7. Wiring should be done before replacing ceiling tiles and reassembly of air cleaner.

#### D. Wiring

1. The electrical connection should be made only by a qualified electrician and must comply with local electrical codes.

2. A hole is provided for conduit connection.

3. Use wire nuts to connect the black and white building wire to the respective black and white wires pigtailed within the unit. The green grounding wire must be attached to the weld stud on the cabinet.

4. The wiring diagram is attached to the inside surface of the unit.

## OPERATION

1. The variable speed control has an "off" position (full counter-clockwise), and a minimum (full clockwise) to maximum speed range. A green indicator light provides a direct indication of unit operation.

2. The curved blades on each supply grille are adjustable from closed to full open. A good starting position is with a 1/2" opening in all the blades. As this gap is reduced, the air velocity and throw will increase. Noise will increase slightly as well. Increasing the gap has the opposite effect. Closing some of the blades will cause a redistribution of the available air flow.

## SERVICE

1. Always be sure the power switch is OFF before performing any service to the air cleaner. See wiring diagram attached to the inside surface of the unit.

**CAUTION: THE MAR 600 DOES NOT HAVE INTERLOCK SWITCHES FOR INTERRUPTION OF POWER TO THE UNIT WHEN THE COVER IS IN THE OPEN POSITION. TO PERFORM WORK ON THE ELECTRICAL PORTION OF THE AIR CLEANER, DISCONNECT POWER TO UNIT AT CIRCUIT BREAKER.**

2. The plastic cover is held in place by a push button latch on one end and by a hinge on the other end. Access to the filter section or blower section is obtained by simply pressing the push button latch and swinging the cover down. (See Fig. 2)

3. The prefilter must be cleaned each time the primary filter is changed. To remove the prefilter, slide the four (4) metal U-clips off of the frame of the intake grille. Remove the prefilter and egg crate.

4. Wash the prefilter in a container of hot water and a good industrial or institutional detergent that is aluminum-safe. Soak for 15 minutes or more, swishing occasionally. Rinse thoroughly in clear water, drain, then allow to completely dry before assembly.

**CAUTION: DO NOT USE ANY CAUSTIC OR ACIDIC SOLUTIONS STRONG ENOUGH TO DAMAGE ALUMINUM.**

5. The grille may be washed if necessary in a solution of warm water and detergent. Rinse thoroughly in clear water, drain, and allow to dry before assembly.

6. The primary filter can be removed by first removing the metal vanes which hold the filter in place. Bending the vanes slightly in the middle and pulling the end of the vanes from one of the holes in the unit will allow the vanes to be withdrawn from the unit. The primary filter may be removed and discarded (or washed if washable-type). The new or cleaned filter may be put into place and the vanes replaced. Be sure to put the vanes in the uppermost holes with the filter snug against the filter stops. This is to ensure the filter sets against the foam on the filter stops to prevent any significant air bypass. Make sure the filter is replaced according to the air flow directional arrow on the side of the filter.

7. If the unit has a washable filter, the recommended cleaning method is with a garden hose and nozzle or other water spray. A mild detergent maybe used if the filter is stained or greasy.

8. The speed control is factory set for proper minimum speed setting. If field adjustment becomes necessary, then the minimum setting can be adjusted by first turning the speed control to the minimum position. A hole is provided in the side of the speed control for access to the minimum adjust set screw. Adjust the minimum voltage setting to the desired low setting. Be careful not to jumper screwdriver between the internal parts of the speed control and the unit cabinet. If a volt meter is available, the minimum voltage as measured between the motor side of the speed control and the incoming white wire should be approximately 70 volts.

9. Oil the motor every six months with 20 SAE oil.

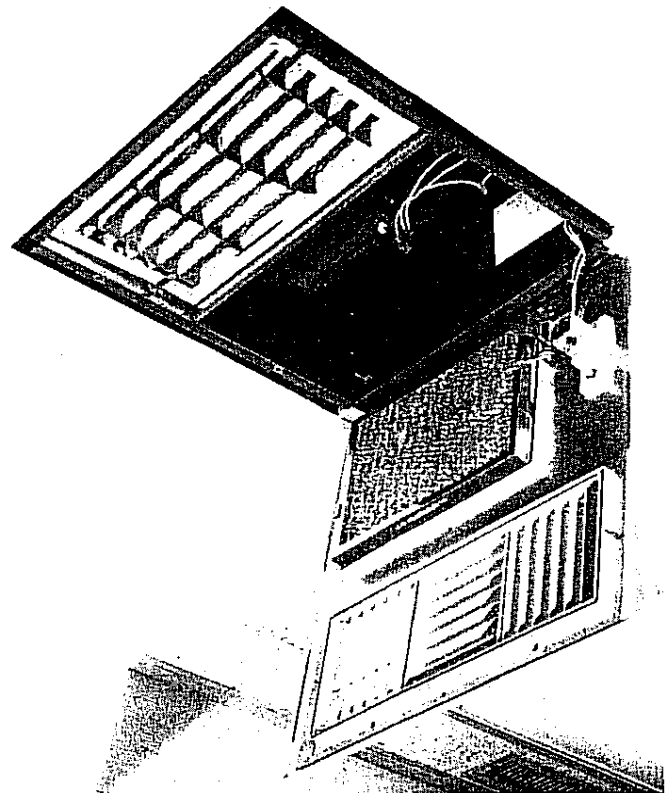
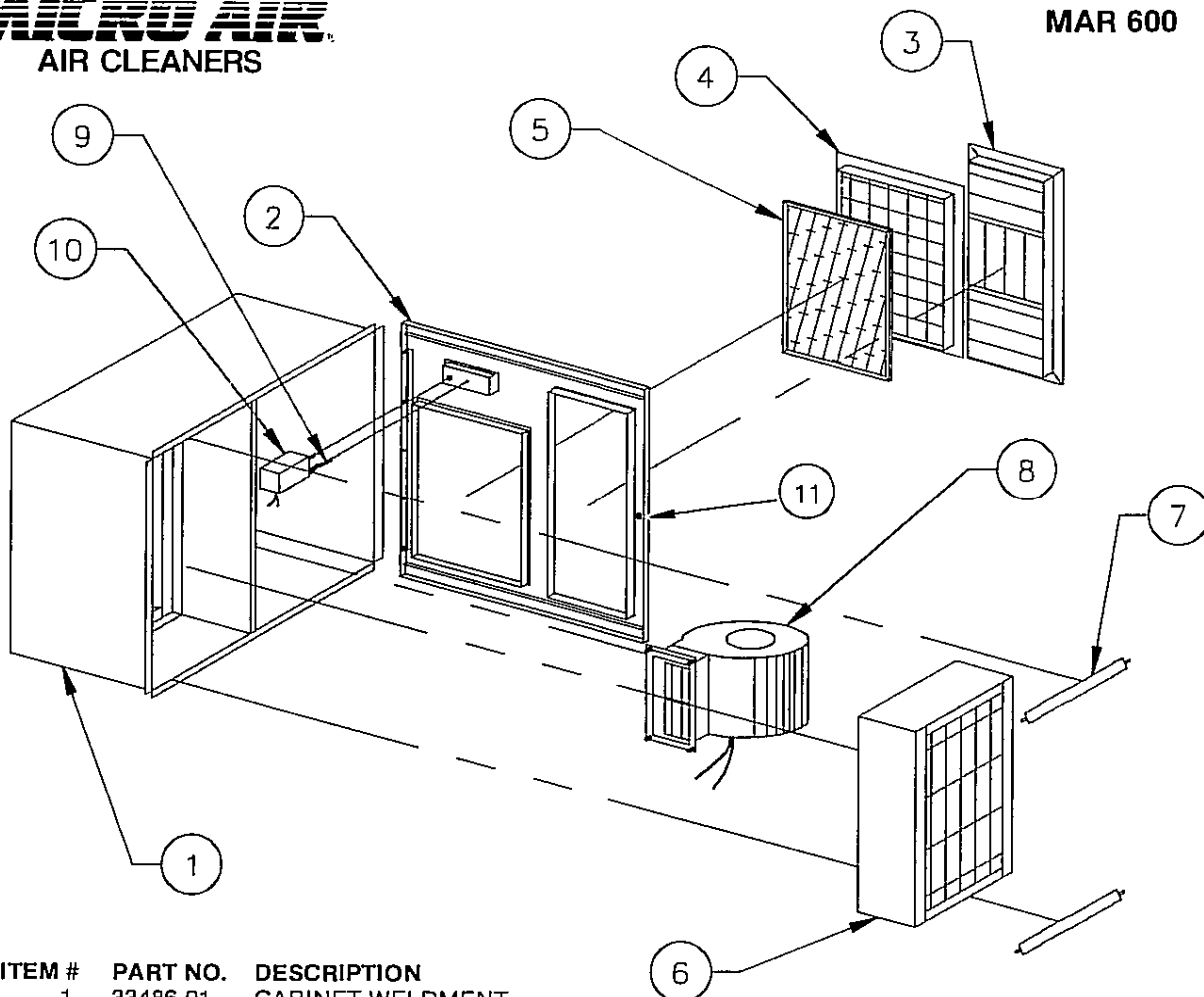


FIG. 2

**MICRO AIR**  
AIR CLEANERS

**MAR 600**



ITEM #	PART NO.	DESCRIPTION
1.	33486-01	CABINET WELDMENT
2.	33646-01	BEZEL PLATE DOOR REPLACEMENT (Less Items 3, 4, 5, 9 and 10)
3.	P1208	3-WAY GRILLE
4.	33499-01	GRILLE ASSEMBLY (Including Prefilter)
5.	P1258	PREFILTER
6.	P1252	PLEATED FILTER
7.	33289-01	FILTER RETAINER CLIP
8.	P1544	MOTOR/BLOWER (120V.)
9.	P1026	LAMP
10.	30170-02	SPEED CONTROL WITH KNOB
11.	P336	PUSH BUTTON LATCH
(Optional)	P1668	CHARCOAL AFTERFILTER
(Optional)	P1251	WASHABLE FILTER

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AIR CLEANERS

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