INSTALLATION INSTRUCTIONS

MODELS

MFAD-2
MFAD-3

MOTORIZED FRESH AIR DAMPER

DATE: 04-12-94

MANUAL 2100-225 REV. B
SUPERSEDES REV. A
FILE VOL. III, TAB 19

TABLE OF CONTENTS

[redacted]

Manufactured under U.S. patent number 5,301,744.
Other patents pending.

DESCRIPTION

The motorized fresh air dampers MFAD-2, 3 are internally mounted dampers designed to bring in up to 25% fresh air. The damper blade is powered by a 24 VAC motor with spring return on power loss. The damper is powered open anytime the unit blower motor is energized.

APPLICATION

The amount of outside fresh air brought into the structure is dependent on the supply and return duct static pressure present in the duct system. Refer to Page 2 for ventilation air that will be supplied at different duct static pressures.

For free blow applications with return air filter grill and supply grill use 0.00 supply air static pressure and 0.1 return air static pressure.

	MFAD-2	MFAD-3
Suitable for use with:	WA181-A WH181-A WA241-A WA241-B WH241-A WH241-B WH241-C WH241LA	WA301-A WA301-B WA301-C WA301-D WH301-A WH301-B WH301-C WA361-A WA361-B WA361-C WA361-D WA361-E WA361-F WH361-A WH361-B WH361-C WH301LA WH301LB WH361LA WH361LB

MOTORIZED FRESH AIR DAMPER MFAD-2

Ventilation Air (CFM)	85	135	190	240	295
Return Air Static Pressure	.00	.05	.10	.15	.20

MOTORIZED FRESH AIR DAMPER MFAD-3

HIGH SPEED

	Supply Air ESP	Ventilation Air (CFM)				
	.00 .20 .40	65 45 25	90 70 50	230 210 190	280 270 N/A	330 330 N/A
Return Air Static Pressure		.00	.05	.10	.15	.20

LOW SPEED

Ventilation Air (CFM)	50	100	240	300
Return Air Static Pressure	.00	.05	.10	.15

INSTALLATION

STEP 1. Disconnect all power to wall mount unit before installing MFAD.

STEP 2. Remove service door. (See Figure 1) Remove fresh air damper or blank off plate if installed on service door. Remove 4 screws from top of front condenser grille. (See Figure 3A)

STEP 3. The "exhaust cover plate" must be in place when an MFAD-2, or -3 is installed. (See Figure 2)

STEP 4. Install MFAD with notch in front lip of MFAD centered over hole in condenser partition. (See Figure 3A)

STEP 5. Position MFAD with front lip over condenser partition and under front grille. (See Figure 3B) This is important to insure proper drainage of any water entering damper assembly.

STEP 6. Use a self drilling screw through hole provided in left mounting flange to secure MFAD in position.

STEP 7. Route wires as shown in Figure 3A into unit low voltage terminal strip area.

STEP 8. Connect black wire to C terminal of low voltage block. Connect red wire to G terminal of low voltage block. See wall mount low voltage connection diagram in the unit installation instructions for wiring diagram.

STEP 9. Check MFAD for proper operation. MFAD should open whenever the blower is energized.

STEP 10. Replace 4 screws in front condenser grille and replace service door. Plug 4 holes in service door with plastic plugs provided.

FIGURE 1

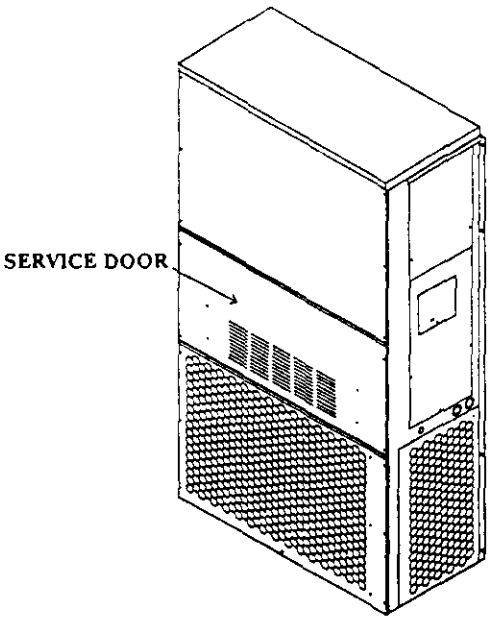


FIGURE 2

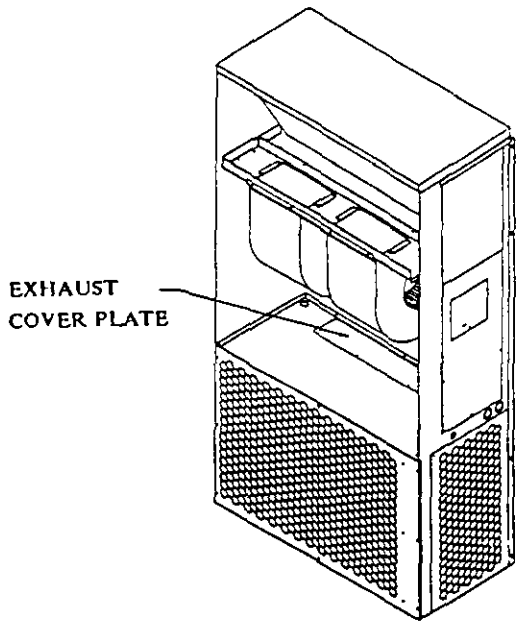


FIGURE 3A

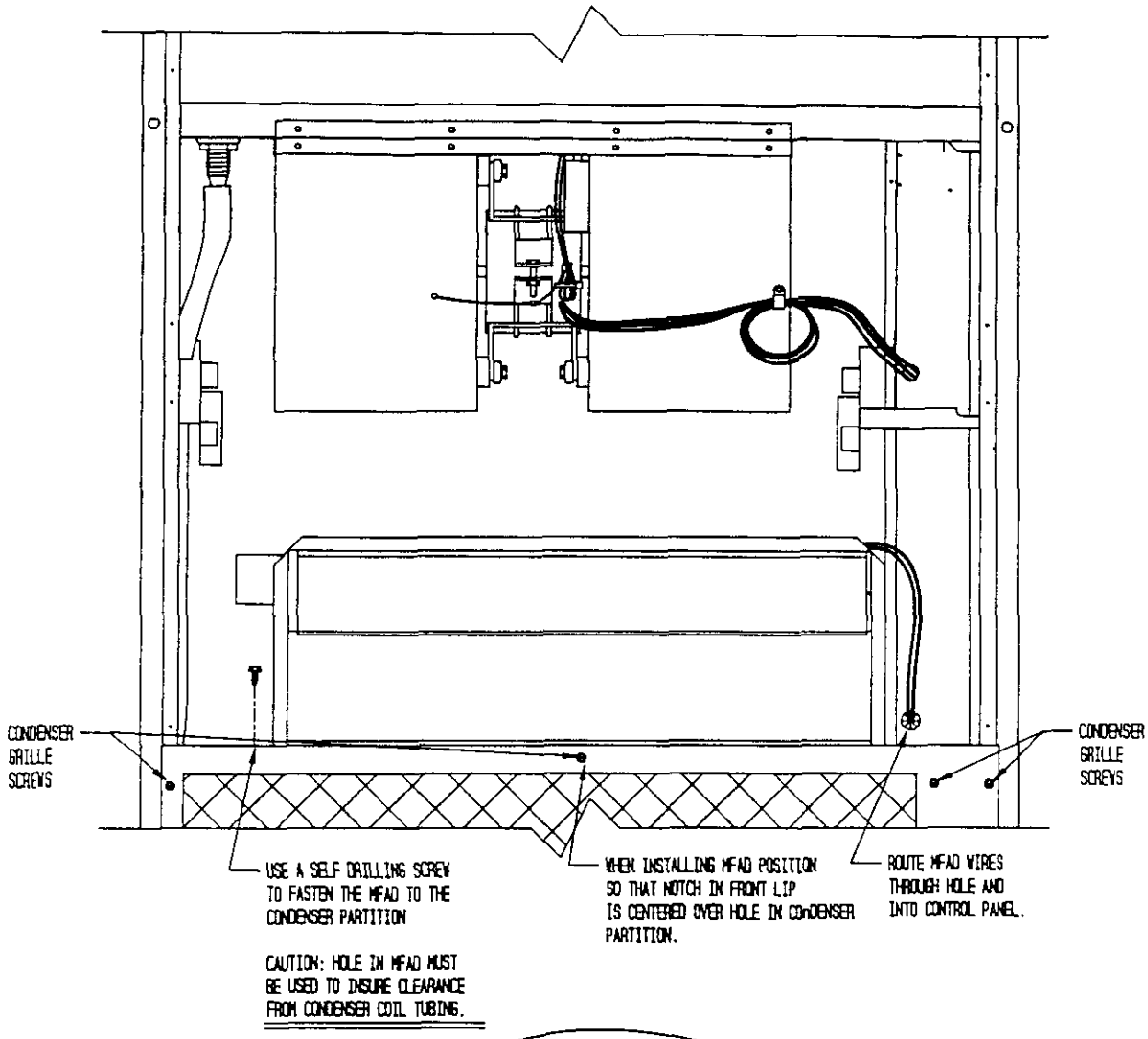
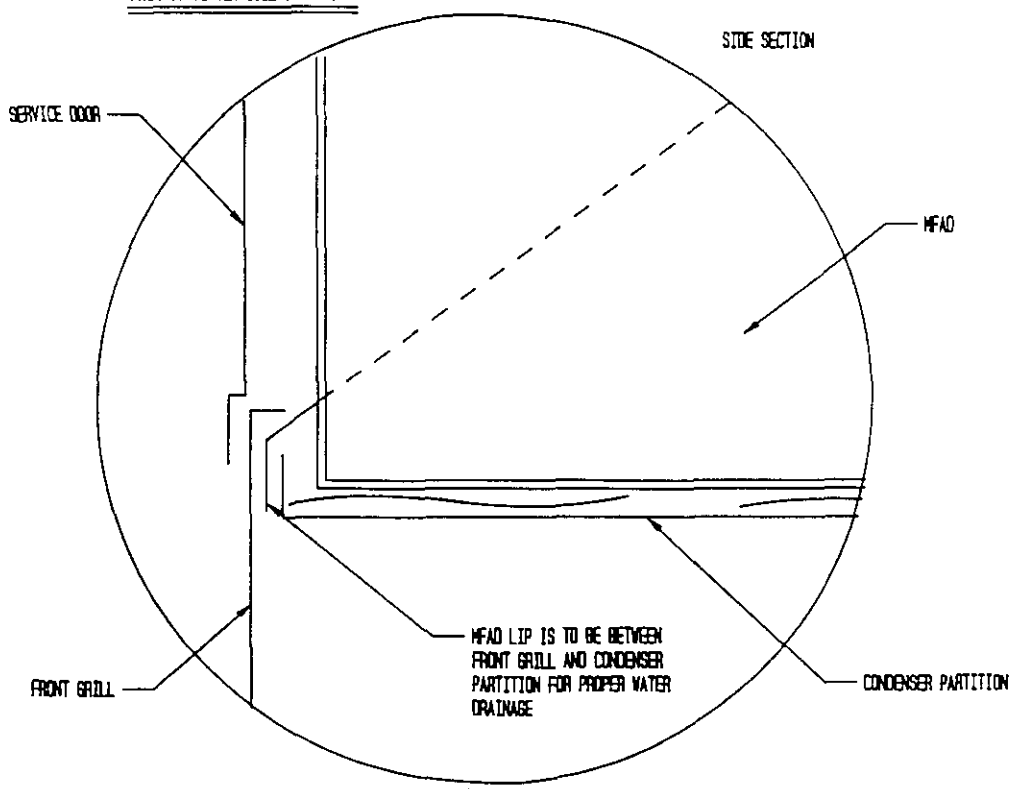


FIGURE 3B



INSTALLATION INSTRUCTIONS

MODEL
MFAD-5

MOTORIZED FRESH AIR DAMPER

DATE: 04-12-94

MANUAL 2100-224 REV. B
SUPERSEDES REV. A
FILE VOL. III, TAB 19

TABLE OF CONTENTS

Manufactured under U.S. patent number 5,301,744.
Other patents pending.

DESCRIPTION

The motorized fresh air damper MFAD-5 is an internally mounted dampers designed to bring in up to 25% fresh air. The damper blade is powered by a 24 VAC motor with spring return on power loss. The damper is powered open anytime the unit blower motor is energized.

APPLICATION

The amount of outside fresh air brought into the structure is dependent on the supply and return duct static pressure present in the duct system. Refer to Page 2 for ventilation air that will be supplied at different duct static pressures.

For free blow applications with return air filter grill and supply grill use 0.00 supply air static pressure and 0.1 return air static pressure.

	MFAD-5		
Suitable for use with:	WA421-A	WH481-A	WH421LA
	WA421-B	WH481-B	WH421LB
	WA421-C	WH481-C	WH421LC
	WA421-E		
	WA421-F	WA601-A	WH481LA
		WA601-B	WH481LB
	WH421-A	WA601-C	WH481LC
	WH421-B	WA601-E	
	WH421-C	WA601-F	WH601LA
			WH601LB
	WA481-A	WH601-A	WH601LC
	WA481-B	WH601-B	
	WA481-C	WH601-C	
	WA481-E		
	WA481-F		

MOTORIZED FRESH AIR DAMPER
MFAD-5

HIGH SPEED

	Supply Air ESP	Ventilation Air (CFM)				
	.00 .20 .40	180 175 165	265 255 245	350 335 325	420 410 405	490 490 490
Return Air Static Pressure		.00	.05	.10	.15	.20

LOW SPEED

Ventilation Air (CFM)	125	225	330	415	500
Return Air Static Pressure	.00	.05	.10	.15	.20

INSTALLATION

STEP 1. Disconnect all power to wall mount unit before installing MFAD.

STEP 2. Remove service door. (See Figure 1) Remove fresh air damper or blank off plate if installed on service door. Remove 4 screws from top of front condenser grille. (See Figure 3A)

STEP 3. The "exhaust cover plate" must be in place when an MFAD-5 is installed. (See Figure 2)

STEP 4. Install MFAD with notch in front lip of MFAD centered over hole in condenser partition. (See Figure 3A)

STEP 5. Position MFAD with front lip over condenser partition and front grille. (See Figure 3B) This is important to insure proper drainage of any water entering damper assembly.

STEP 6. Use a self drilling screw through hole provided in left mounting flange to secure MFAD in position.

STEP 7. Route wires as shown in Figure 3A into unit low voltage terminal strip area.

STEP 8. Connect black wire to C terminal of low voltage block. Connect red wire to G terminal of low voltage block. See wall mount low voltage connection diagram in the unit installation instructions for wiring diagram.

STEP 9. Check MFAD for proper operation. MFAD should open whenever the blower is energized.

STEP 10. Replace 4 screws in front condenser grille and replace service door. Plug 4 holes in service door with plastic plugs provided.

FIGURE 1

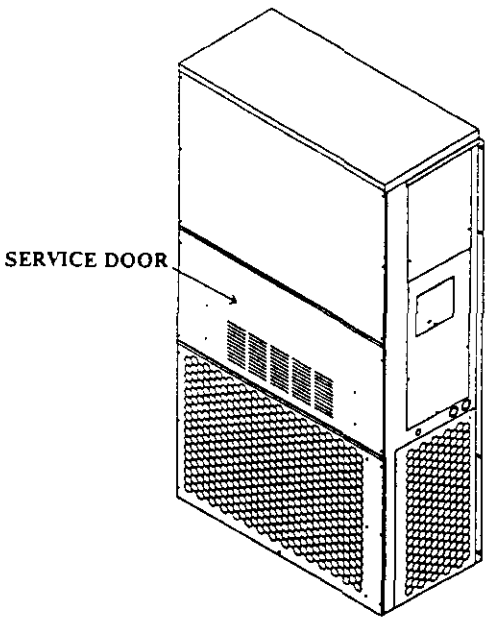


FIGURE 2

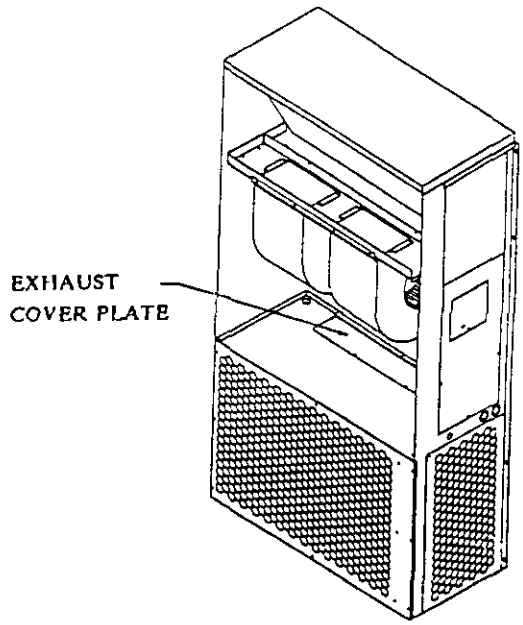


FIGURE 3A

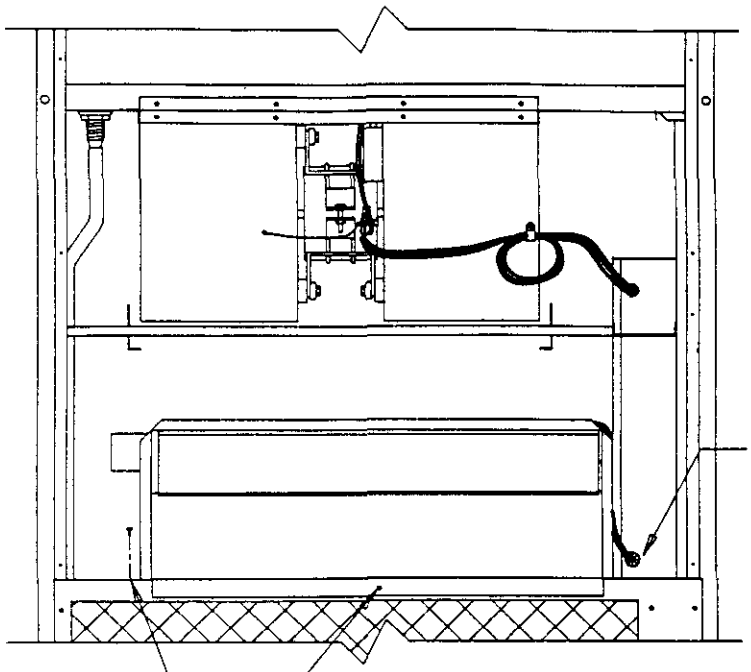


FIGURE 3B