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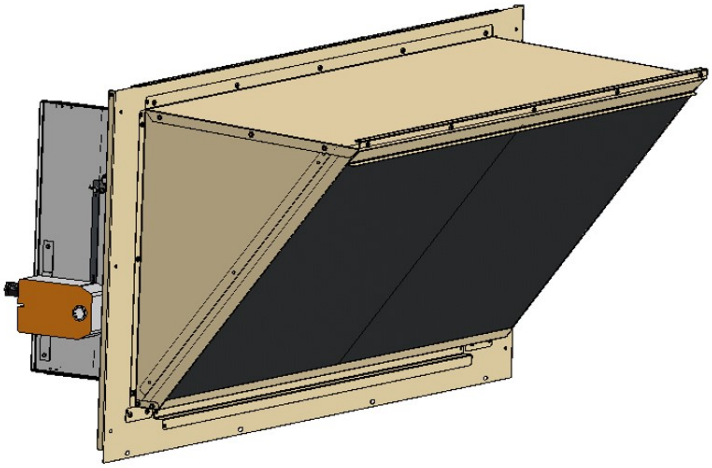
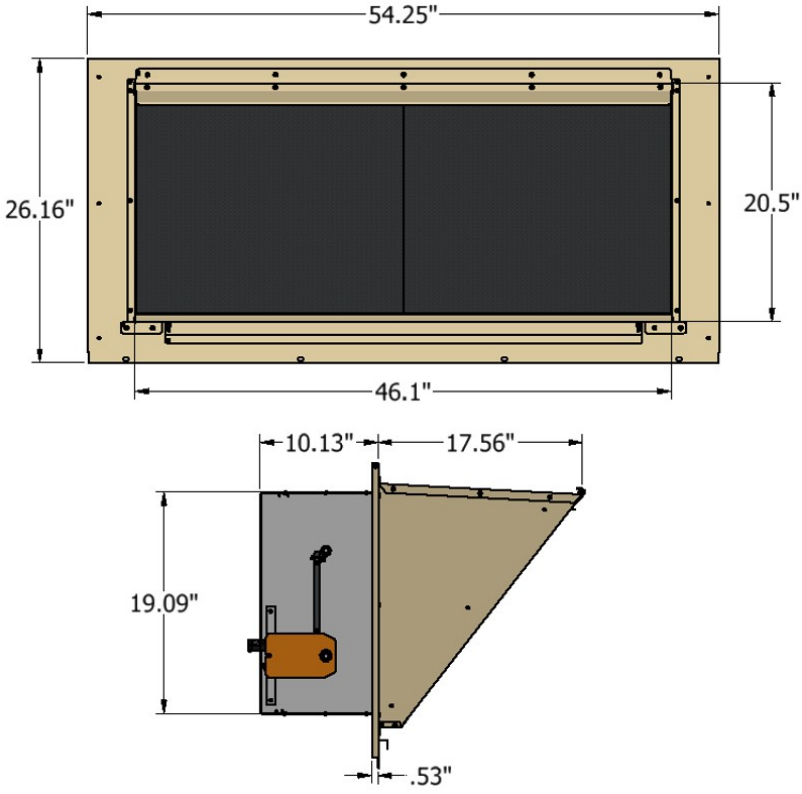
114-DK-090

0-100% MOTORIZED FRESH AIR DAMPER
FITS DAIKIN DB*/DR*/DF* 090-150
SANDSTONE BEIGE
0270L02702MC



APPLICATION

Most building codes require a certain amount of fresh air to overcome the effects of CO2 during times when the space is occupied. Use of fresh air dampers on HVAC equipment is an inexpensive way to allow fresh air into the building.
McDaniel Metals offers a motorized fresh air damper to fit Daikin light commercial packaged equipment. The motorized fresh air damper includes a small two position actuator that opens the damper when the indoor blower is running and closes the damper when the blower turns off.



MOTORIZED FRESH AIR DAMPER INSTALLATION

1. Remove the damper assembly from it's container and inspect for damage.
2. Remove the filter and upflow access panel from the rooftop unit, and retain screws.
3. Install the motorized damper sub-assembly to unit with retained screws, and attach hood sides per Figure 1.
4. Attach the hood heel per Figure 2.
5. Attach the hood bottom per Figure 3.
6. Locate the 5/16" head screws on the bottom of the damper slides and loosen them. Move the damper slides down (or remove), until they are positioned to provide the correct amount of fresh air and tighten the 5/16" head screws to keep it in place.
   See 'DETERMINING DAMPER SET POINT' below for proper setting.
7. Attach the filter screen, nsert the hog hair filter and two mist eliminators, and attach the hood filter access per Figures 4 & 5.
8. Remove the jumper plug from the RTU and plug in the damper harness, as circled in Figure 5 (Tape the jumper plug inside the unit for future use in case the damper must be disconnected). Tie wrap damper harness so that it does not interfere with air filter replacement.
9. Re-insert the filter access panel.

DETERMINING DAMPER SET POINT

While it is possible to estimate the amount of fresh air by visually adjusting the fresh air dampers, a more accurate determination can be made using a digital thermometer and the equation below.
(To X OA) + (Tr X RA) = Tm
To = Outdoor air temperature
OA= Percent of outdoor air
Tr = Return air temperature
RA= Percent of return air
Tm= Resulting mixed air temperature
Example:
Fresh air required is 10% outdoor air.
Outdoor air temperature is 60 degrees F.
Return air temperature is 75 degrees F.
(0.1 X 60) + (0.9 X 75) =
6.0 + 67.5 = 73.5
Mixed air temperature will be 73.5 degrees F when the OA is 60 degrees F and the RA is 75 degrees F with 10% outdoor air.

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STEP - 1: ATTACH MOTORIZED DAMPER SUB-ASSY TO UNIT USING SCREWS REMOVED FROM PANEL.
STEP - 2: ATTACH HOOD SIDES 1 & 2 TO DOOR USING SIX (6) PROVIDED HEX SCREWS.

FIGURE 1

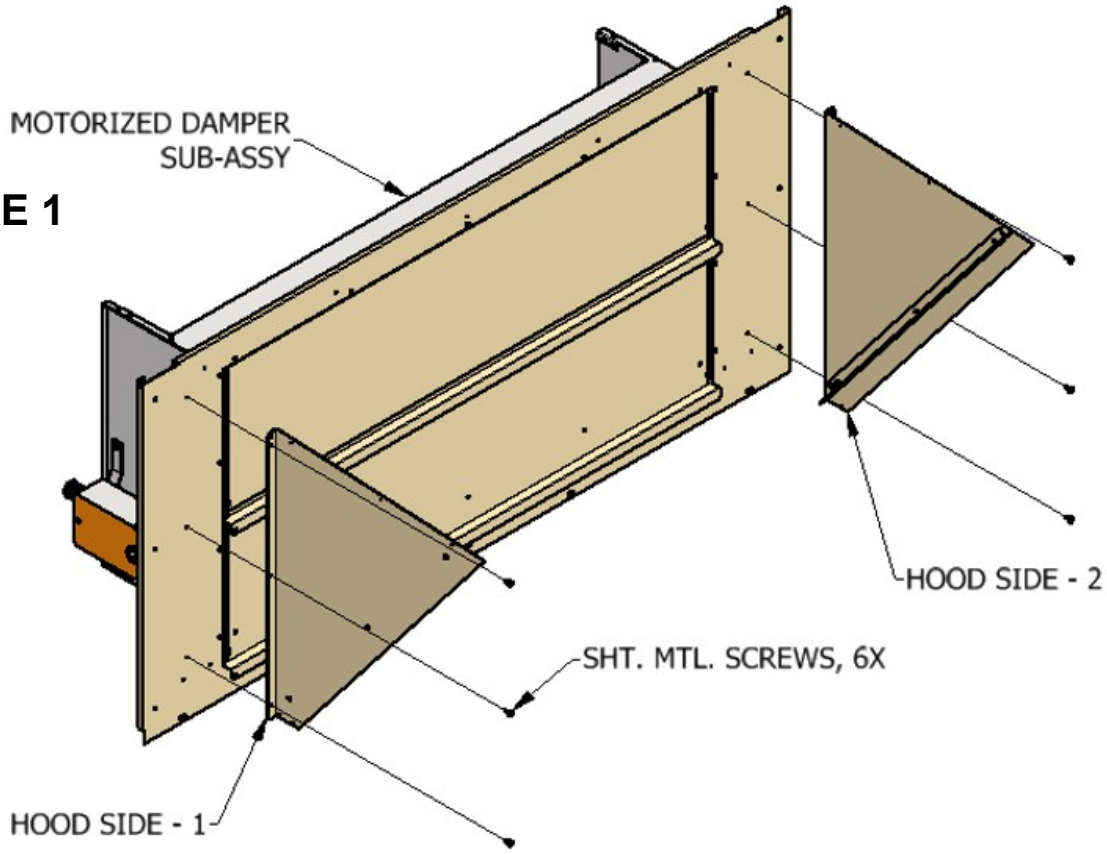
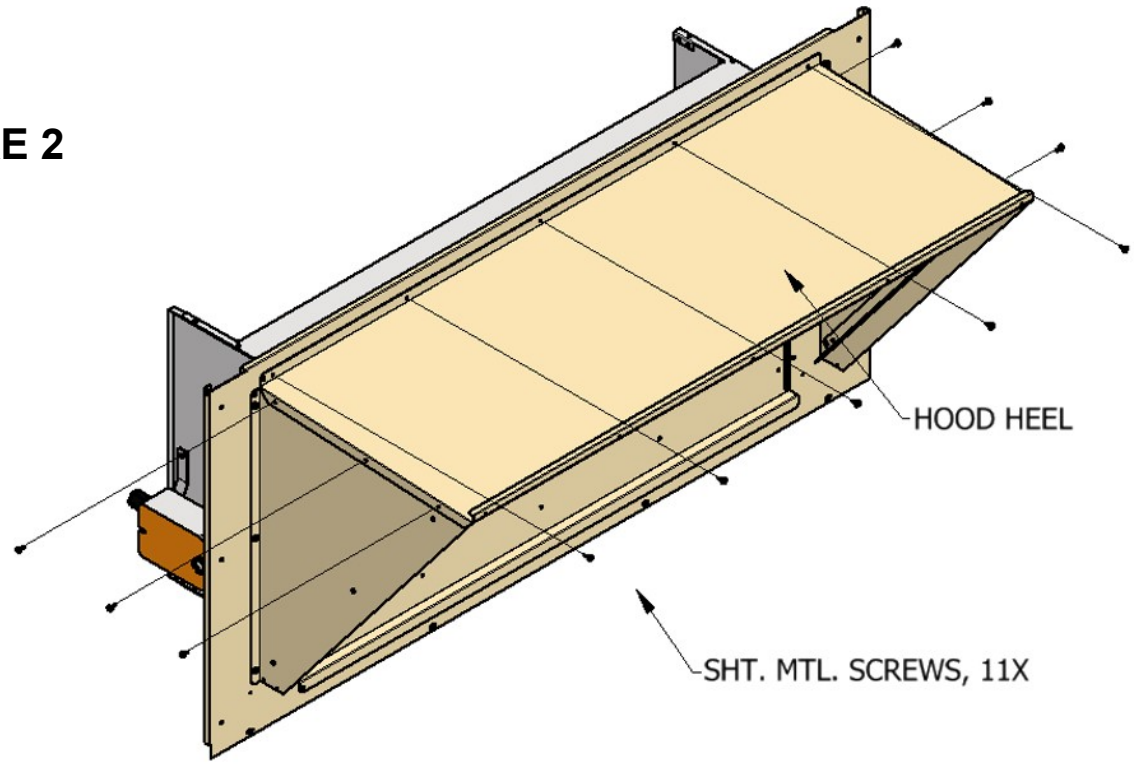


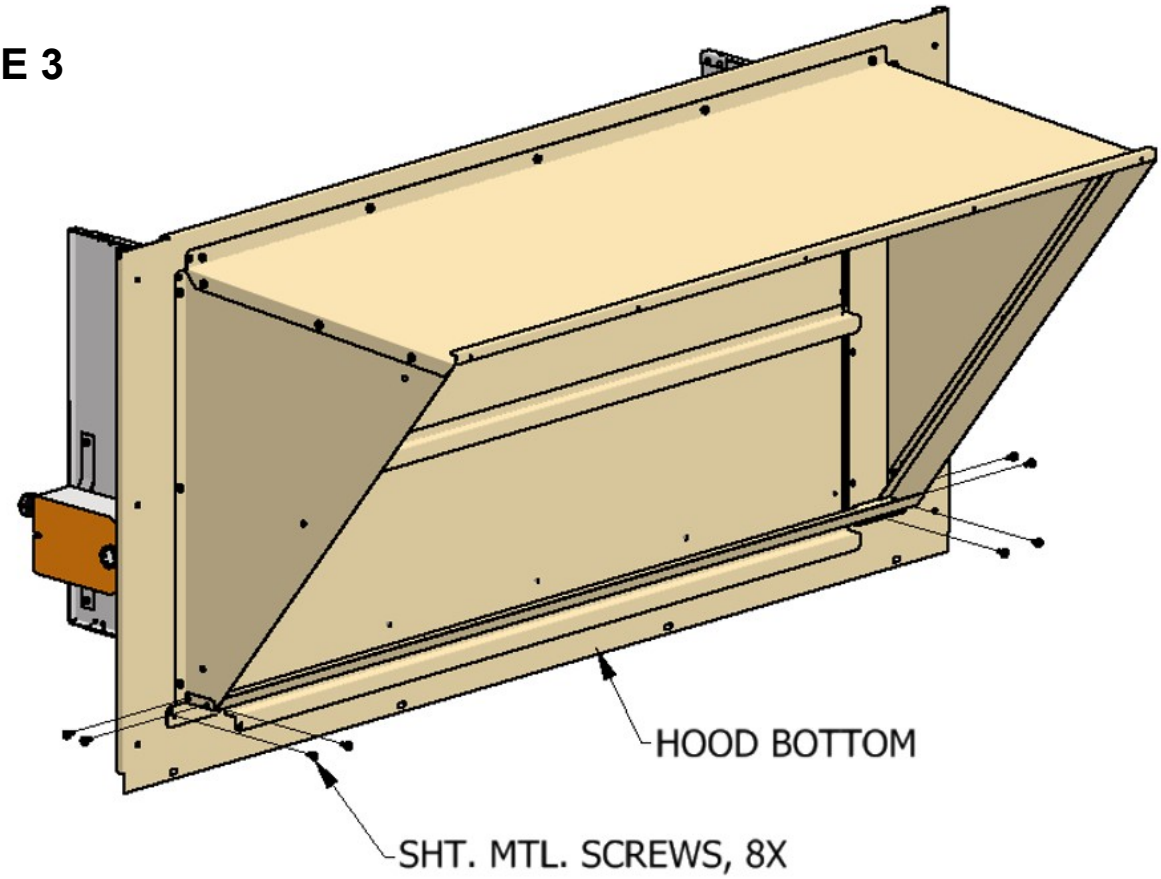
FIGURE 2



STEP - 3: ATTACH HOOD HEEL TO HOOD SIDES & DOOR USING ELEVEN (11) PROVIDED HEX SCREWS.

STEP - 4: ATTACH HOOD BOTTOM TO SIDES & DOOR USING EIGHT (8) PROVIDED HEX SCREWS.

FIGURE 3



STEP - 5: ATTACH FILTER SCREEN TO HOOD USING FIVE (6) PROVIDED SHT. MTL. SCREWS.

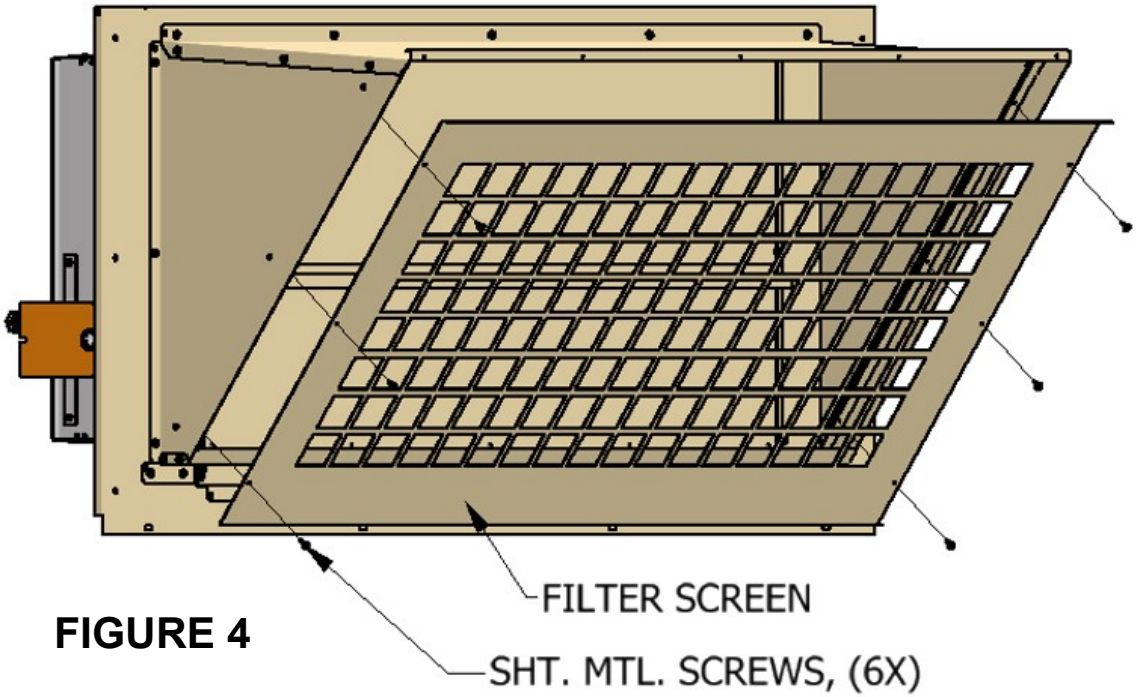
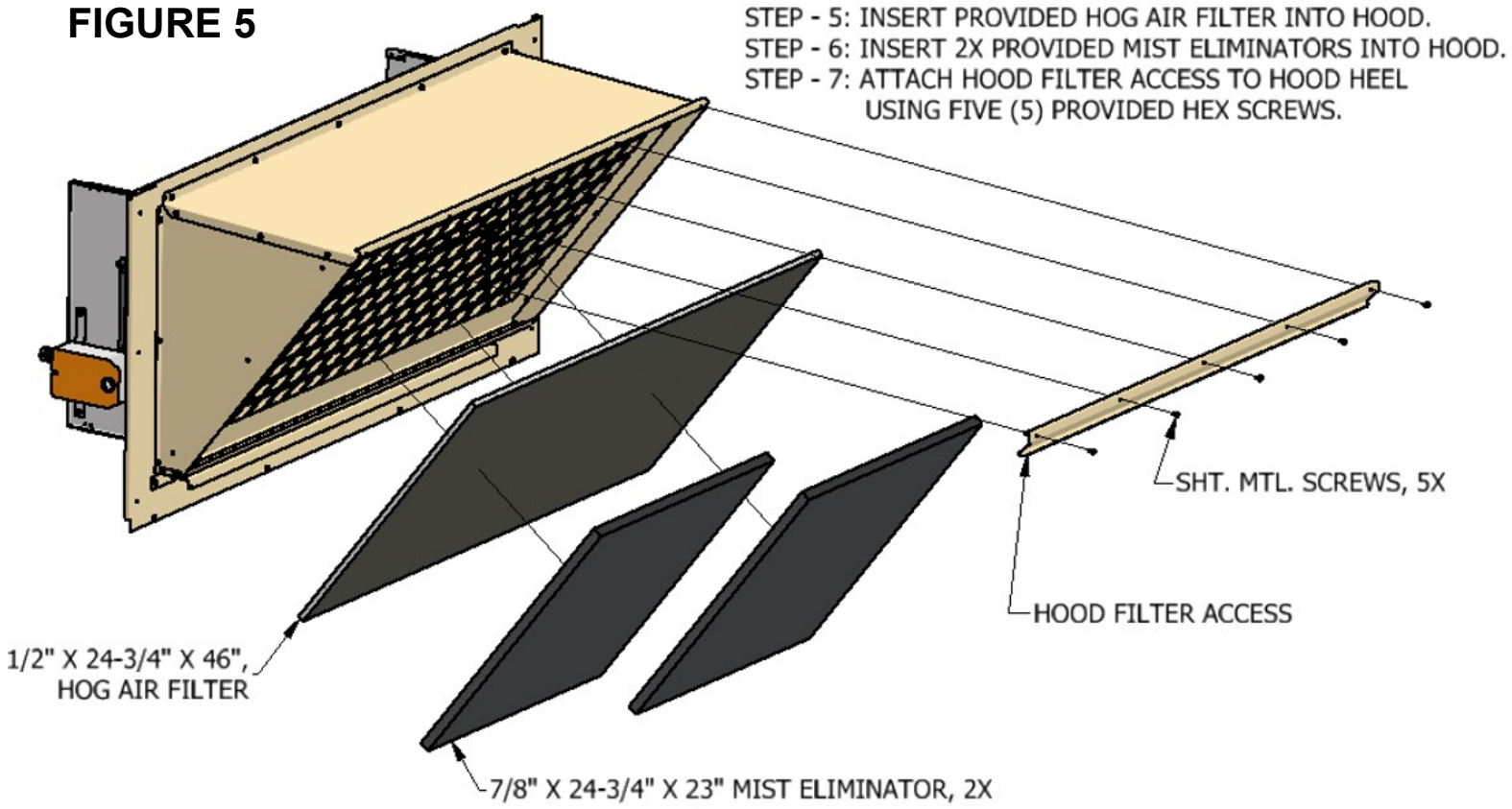


FIGURE 4

FIGURE 5



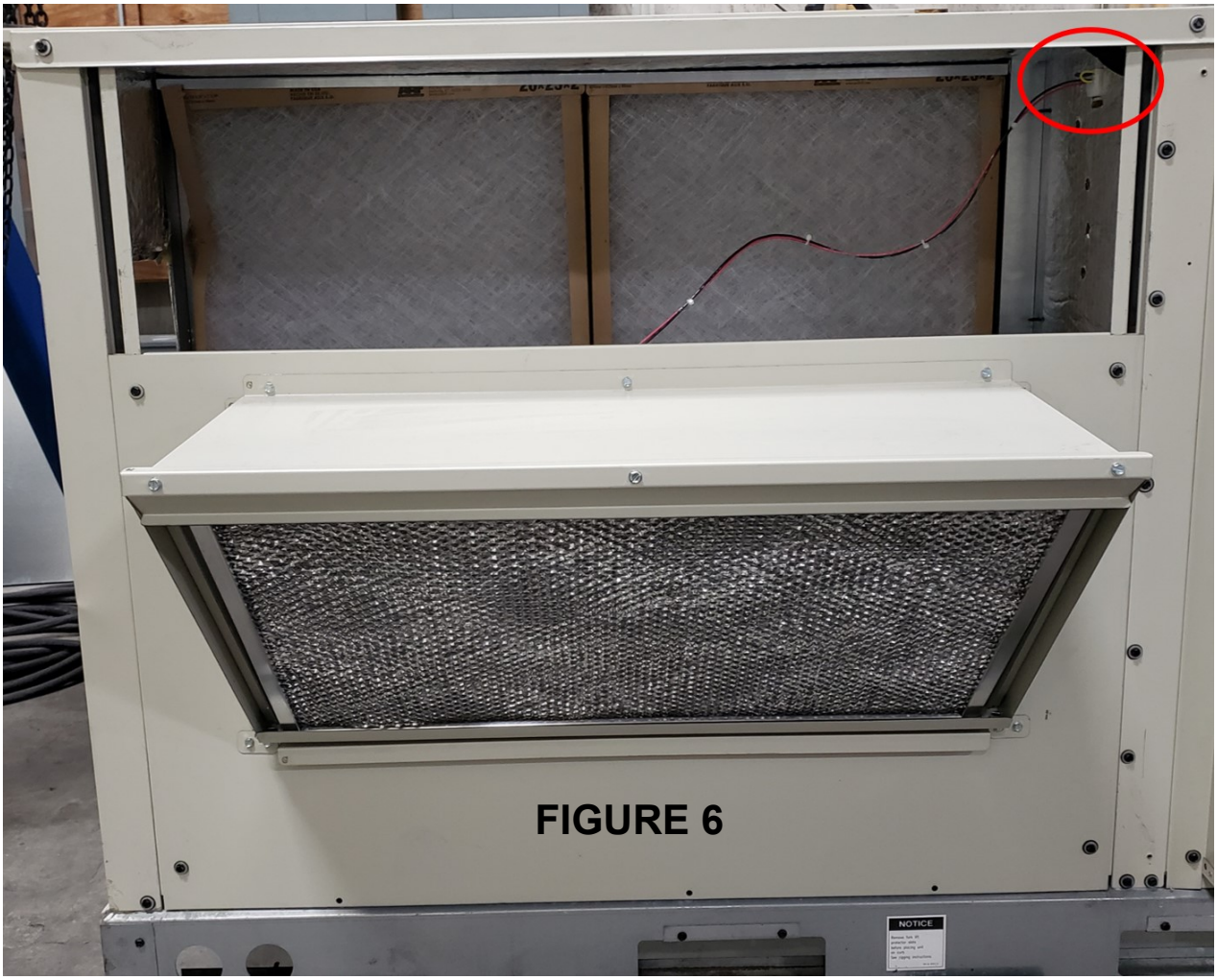


FIGURE 6

CONTENTS	
QTY	DESCRIPTION
1	MOTORIZED DAMPER SUB-ASSY
1	HOOD SIDE - 1 SUB-ASSY
1	HOOD SIDE - 2 SUB-ASSY
1	HOOD HEEL
1	HOOD FILTER ACCESS
1	HOOD BOTTOM
1	FILTER SCREEN
1	HOG HAIR FILTER
2	MIST ELIMINATOR
36	SHEET METAL SCREWS, #10 x 1/2" LG.
1	INSTALLATION GUIDE

Important Note

- **The fresh air mist eliminator should be flushed periodically with warm soapy water.**

114-DK-090 WIRE DIAGRAM
REV 1, 07/25/2022