POWER VENTILATOR ASSEMBLY
PART NO. 3108705.744
For Two Door Absorption Refrigerators
PATENT NO. 5355693

INSTALLATION INSTRUCTIONS

Power Ventilator Asm.
3108705.744
SAFETY INSTRUCTIONS

This manual has safety information and instructions to help users eliminate or reduce the risk of accidents and injuries.

RECOGNIZE SAFETY INFORMATION

This is the safety-alert symbol. When you see this symbol in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating instructions.

UNDERSTAND SIGNAL WORDS

A signal word, WARNING OR CAUTION is used with the safety-alert symbol. They give the level of risk for potential injury.

WARNING indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION indicates a potentially hazardous situation which, if not avoided may result in minor or moderate injury.

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided may result in property damage.

Read and follow all safety information and instructions.

WARNING

These instructions must be read and understood before installation of this kit. This kit must be installed by a Dometic Service Center or a qualified service technician. Modification of this product can be extremely hazardous and could result in personal injury or property damage.

PURPOSE:

This Power Ventilator Assembly is for Dometic's six (6) cubic foot or larger refrigerators with multiple venting applications. Its purpose is to assist required air movement across the refrigerator condenser to ensure optimum performance.

Note: Install the ventilator switch after power ventilator assembly installation.

This Assembly Contains:

<table>
<thead>
<tr>
<th>Qty</th>
<th>Part No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3107930.004</td>
<td>Ventilator fan, 12V DC</td>
</tr>
<tr>
<td>1</td>
<td>3104133.016</td>
<td>Fan Limit Switch, 12V DC</td>
</tr>
<tr>
<td>2</td>
<td>3108706.858</td>
<td>Screw, #8x3/8 Drill Point</td>
</tr>
<tr>
<td>1</td>
<td>3105432.003</td>
<td>Mounting Bracket, RH</td>
</tr>
<tr>
<td>1</td>
<td>3105432.011</td>
<td>Mounting Bracket, LH</td>
</tr>
<tr>
<td>1</td>
<td>315503.005</td>
<td>Fuse Holder and Fuse (1 amp)</td>
</tr>
<tr>
<td>2</td>
<td>3108710.033</td>
<td>Screws, #8 x 2&quot;</td>
</tr>
<tr>
<td>1</td>
<td>3309090.03</td>
<td>Installation Instructions</td>
</tr>
<tr>
<td>1</td>
<td>3105433.019</td>
<td>Wiring Diagram Decal</td>
</tr>
<tr>
<td>2</td>
<td>312096.001</td>
<td>Screws, 10-16 x .38</td>
</tr>
</tbody>
</table>

Parts Supplied by Installer: (Through-the-Floor)

<table>
<thead>
<tr>
<th>Qty</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Varmit Screen</td>
</tr>
<tr>
<td>1</td>
<td>Fabricated Duct Extension</td>
</tr>
</tbody>
</table>

GENERAL INSTRUCTIONS:

These instructions are supplemental to the refrigerator installation instructions.

Important:

- The Power Ventilator Assembly must be used with certified upper and lower side vents.
- Install refrigerator in accordance with the installation instructions supplied with the refrigerator.
- Follow the N.E.C., state and local code requirements referenced in the product installation instructions.
- Comply with the compartment sealing instructions indicated in the instructions packet.
Select the option which suits your specific application. Follow Power Ventilator Assembly instructions for that specific application.

**OPTION 1**: Through-The-Floor Vent Installation with Upper Roof Vent

**OPTION 2**: Upper and Lower **Plastic** Side Vents

**OPTION 3**: Side-By-Side Refrigerator with Upper and Lower **Plastic** Side Vents

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**OPTION 1**: Through-The-Floor Vent Installation with Upper Roof Vent

**FIG. 1**

- **ROUTE WIRING TO THIS AREA & SECURE**
- **SECURE SWITCH WITH #8x3/8" SELF DRILLING SCREWS**
- **MIN. 70 SQ. IN. TOTAL AREA**
- **MIN. depth of duct is 4" Max. depth of duct is 54"**
- **1-1/2" Typ.**
- **6-1/2"**
- **11" Min. 20" Max.**
- **4" Min.**
- **1-1/2"**
- **6-1/2"**
- **Duct Extension**
- **#10 Fan Mgt. Bolts**
- **3105432.003 & 3105432.011 Mounting Brackets**
- **Varmint Screen**

**FIG. 1A**

- **Closes 150°F/Opens 130°F ±10°F**
- **RED WIRE FUSE 1 AMP.**
- **TERMINAL J3 ON REFRIGERATOR POWER MODULE (12 VDC +)**
- **REFRIGERATOR FRAME GROUND TERMINAL**

**FIG. 1B**

- **FAN LIMIT SWITCH (Close on Temp. Rise)**
- **RED WIRE**
- **FUSE 1 AMP.**
- **COIL**
- **FAN LIMIT SWITCH**
- **TERMINAL J3 ON REFRIGERATOR POWER MODULE**
- **(POSITIVE)**
- **MOTOR**
- **FAN RED WIRE**
- **FAN BLUE WIRE**

- **TEMPERATURE LIMIT SWITCH**
  
  - Closes 150°F/Opens 130°F ±10°F
  - **MOUNT FAN LIMIT SWITCH ON RIGHT SIDE OF CONDENSER EXCEPT THESE MODELS: NDR1292, NDR1492, NDA1402, NDE1402, NDE1402 & NEA1402**
  - **LOCATE FAN LIMIT SWITCH LEFT SIDE OF REFRIGERATOR**
  - **SECURE SWITCH WITH #8x3/8" SELF DRILLING SCREWS**
  - **RED WIRE ROUTE TO POSITIVE TERMINAL ON REFRIGERATOR**

- **FAN PRE-ASSEMBLY AREA**
  - Temporarily Locate fan in this area before final installation into cabinet

- **BLOWER**
  - Route blue wire to frame ground terminal on refrigerator
  - Route red wire to limit switch

- **FUSED RED WIRE ROUTED TO TERMINAL J3 ON POWER MODULE (POSITIVE)**

- **MIN. depth of duct is 4" Max. depth of duct is 54"**
A. OPTION 1: REFRIGERATOR ACCESS REQUIREMENT (REAR)

Important: Power Ventilator Assembly must be used with certified upper roof vent and the refrigerator must be installed as directed by the installation instructions supplied with the refrigerator.

1. REFRIGERATOR ACCESS (REAR)

With the use of this Kit in conjunction with below-floor ventilation, a sealed access panel is required. Access is necessary to complete the installation, to perform gas leak tests, and to perform periodic maintenance. If the access is located within an interior wall, it must be completely sealed from the living space.

If the refrigerator is placed along the sidewall and floor ventilation is provided, rear access is required. This door or panel should prevent water entry. The following are minimum sizes allowed for each series refrigerator.

<table>
<thead>
<tr>
<th>MODEL SERIES</th>
<th>ACCESS PANEL DIMENSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>RM3662, RM3862, NDR1062</td>
<td>22&quot; 14&quot;</td>
</tr>
<tr>
<td>NDR1292, NDR1492, NDA1402, NDE1402, NDR1402, NEA1402</td>
<td>36&quot; 16&quot;</td>
</tr>
</tbody>
</table>

2. Power Ventilator Installation

Note: Install fan limit switch prior to refrigerator installation.

![Warning]

Disconnect 115 volt AC and 12 volt DC. Failure to follow these instructions could create a shock hazard causing death or severe personal injury.

a. Use the (2) #8X3/8" self drilling screws (supplied) to install fan limit switch to refrigerator. See FIG. 1 for fan limit switch location and dimensions.

b. Attach red wire from fan motor to one terminal of the fan limit switch. Route the wire along the side of the refrigerator as shown in FIG. 1.

Note: Route wire away from sharp edges and hot surfaces.

c. Attach red wire with fuse holder to the remaining terminal of the fan limit switch. Route the wire along the side of the refrigerator as shown in FIG. 1.

B. OPTION 2: REFRIGERATOR INSTALLATION WITH UPPER AND LOWER SIDE VENTS

Important: Power Ventilator Assembly must be used with certified upper and lower side vents and the refrigerator installed per dimensions in Table 2. For additional installation information, see the Installation Instructions supplied with the refrigerator.

Note: Use only on models listed in Table 2.

1. Power Ventilator Installation

![Warning]

Disconnect 115 volt AC and 12 volt DC. Failure to follow these instructions could create a shock hazard causing death or severe personal injury.

a. Use the (2) #8X3/8" self drilling screws (supplied) to install fan limit switch to refrigerator. See FIG. 1 for fan limit switch location and dimensions.

b. Attach red wire from fan motor to one terminal of the fan to the limit switch. Route the wire along the side of the refrigerator as shown in FIG. 1.

Note: Route wire away from sharp edges and hot surfaces.
**TABLE 2**

(Dimensions in Inches)

<table>
<thead>
<tr>
<th></th>
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<tr>
<td>RM3862</td>
<td>61</td>
<td>24-5/8</td>
<td>5-1/8</td>
<td>8</td>
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<td>NDR1062</td>
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<td>24-5/8</td>
<td>5-1/8</td>
<td>8</td>
<td>3-1/2</td>
<td>1</td>
</tr>
</tbody>
</table>

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**FIG. 2**

- **CENTER OF REFRIG**
- **BLUE WIRE TO TERMINAL ON FRAME**
- **RED WIRE TO TERMINAL J3 ON POWER MODULE**
- **VENTILATOR FAN**
- **BAFFLE**
- **THE FAN PLACEMENT DIMENSION TO THE REFRIGERATOR FLOOR MUST BE MAINTAINED EVEN WHEN UPPER VENT IS LOCATED HIGHER THAN MIN. DIM. "A"**

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* When dimension "D" exceeds 1", it may be necessary to add baffle/s above lower access vent, as shown, for more efficient operation in warm temperatures.

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- c. Attach red wire with fuse holder to the remaining terminal of the fan limit switch. Route the wire long the side of the refrigerator as shown in FIG. 2.
  
  **Note:** Route wire away from sharp edges and hot surfaces.

- d. Remove the fuse from fuse holder and store in safe location for later installation.

- e. Install mounting brackets to ventilator fan using the #8 x 2" screws provided. See FIG. 1B.

- f. Install refrigerator according to installation instructions supplied with refrigerator.

  **Note:** Completion of the Power Ventilator Assembly installation will be made through the rear access panel See Table 2.

- g. Connect the short red wire (fuse holder base) to the refrigerator terminal block labeled +12V DC. See FIG. 2.

  **Note:** Do Not install fuse at this time.

- h. Install fan as shown in FIG. 2.

  **Note:** Ensure that air flow arrow on fan is pointing upward.

- i. Inspect all wiring. Ensure wiring is secure and will not contact sharp edges and hot surfaces.

- j. Attach wiring diagram form kit beside wiring diagram on refrigerator.

- k. Complete additional installation instructions stated in the installation instructions supplied with the refrigerator.

- l. Install fuse within fuse holder.

- m. The power ventilator is now functional. The fan limit switch will energize the fan when ambient temperatures exceed 100°F. This system will operate automatically with the fluctuation of the refrigerator's condenser temperatures.
C. OPTION 3: SIDE-BY-SIDE REFRIGERATORS INSTALLATION WITH UPPER AND LOWER SIDE VENTS

Important: Power Ventilator Assembly must be used with certified upper and lower side vents and the refrigerator installed per dimensions in Table 3. For additional installation information, see the Installation Instructions supplied with the refrigerator.

Note: Use Only on Models in Table 3.

1. Power Ventilator Installation

   a. Use the (2) #8X3/8” self drilling screws (supplied) to install fan limit switch to refrigerator. See FIG. 1 for fan limit switch location and dimensions.
   b. Install refrigerator according to installation instructions supplied with the refrigerator.

   Note: Completion of the Power Ventilator Assembly installation will be made through access panel (lower vent).
   c. Install mounting brackets to ventilator fan using the #8 x 2” screws provided. See FIG. 1B.
   d. Install fan as shown in FIG. 3.

   Note: Ensure that air flow arrow on fan is pointing upward. Screws mount through fan into sidewall (adequate support is required).

   e. Attach red wire from fan motor to one terminal of fan limit switch.
   f. Attach red wire with fuse holder to the remaining terminal of fan limit switch. Route the wire along side of refrigerator as shown in FIG. 3.

   Note: Route wire away from sharp edges and hot surfaces.
   g. Remove fuse from fuse holder and store in safe location for later installation.
   h. Connect the short red wire (fuse holder base) to the refrigerator terminal block labeled +12V DC. See FIG. 3.

   Note: Do Not install fuse at this time.
   i. Inspect all wiring. Ensure wiring is secure and will not contact sharp edges and hot surfaces.
   j. Complete additional installation instructions stated in the installation instructions supplied with the refrigerator.
   k. Install fuse within the fuse holder.
   l. Attach wiring diagram from kit beside existing wiring diagram on refrigerator.
   m. The power ventilator is now functional. The fan limit switch will energize the fan when ambient temperatures exceed 100°F. This system will operate automatically with the fluctuation of refrigerator’s condenser temperatures.

### TABLE 3

<table>
<thead>
<tr>
<th></th>
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<tbody>
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<td>NDR1292</td>
<td>63</td>
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<tr>
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<td>24-7/8</td>
<td>5-1/8</td>
<td>3-5/8</td>
<td>1</td>
<td>44-1/2</td>
</tr>
</tbody>
</table>

(Dimensions in Inches)
When dimension "D" exceeds 1", it may be necessary to add baffle/s above lower access vent, as shown, for more efficient operation in warm temperatures.

* THE FAN PLACEMENT DIMENSION TO THE REFRIGERATOR FLOOR MUST BE MAINTAINED EVEN WHEN UPPER VENT IS LOCATED HIGHER THAN MIN. DIM. *A*