



## UPPER & LOWER SIDE VENT INSTALLATION

### FOR NORCOLD MODELS 900/9100/N600/N800

Read these important instructions carefully. Become thoroughly acquainted with the content before installing vents and refrigerator.

**IMPORTANT NOTE:** Norcold's *Venting and Installation* instructions must be followed.

These *Upper and Lower Side Vent Installation* instructions are in addition to Norcold's *Ventilation and Installation* instructions that accompany each refrigerator. Follow the *Venting and Installation* instructions when installing the refrigerator. Installation must conform with local codes, or in the absence of local codes, with these standards:

#### **In the United States:**

- National Fuel Gas Code, ANSI Z223.1.
- Manufactured Home construction and Safety Standard, Title 24 CFR, Part 32-80.
- Standard for Recreational Vehicles, ANSI A119.2 latest edition.

#### **In Canada:**

- Current CGA B149.1 and CGA B149.2 installation code for Propane Appliances and Equipment.
- Current CSA Z240.4.2 Installation Requirement for Propane Appliances and Equipment in Recreational Vehicles.
- Current CSA Z240.6.2/C22.2 No. 148 Electrical Requirement for Recreational Vehicles.

When installed, the refrigerator must be electrically grounded in accord with local or state codes, the National Electrical code, and ANSI/NFPA 70. In Canada, grounding is in accord with the Canadian Electrical Code C22.2.

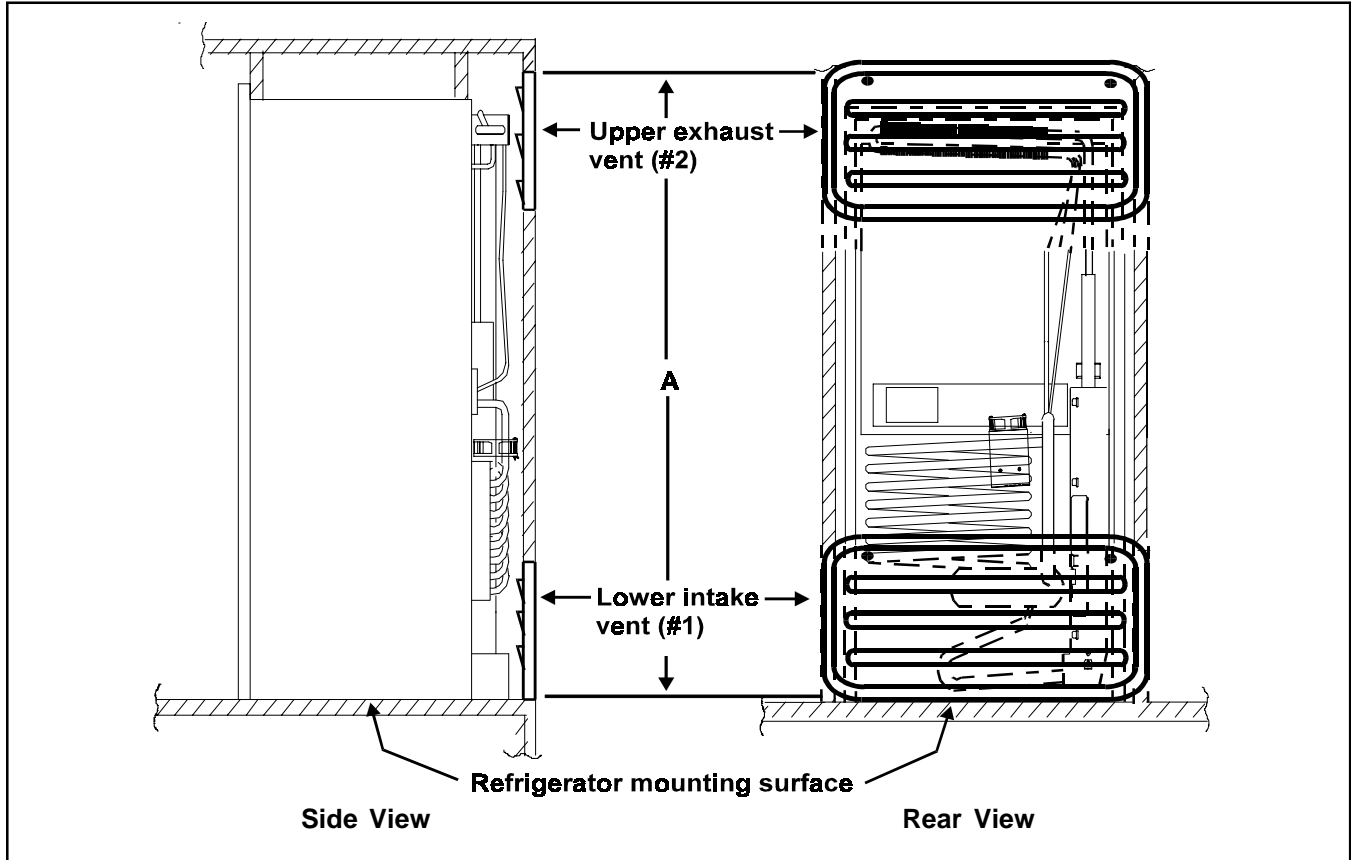
LP Gas supply piping and fittings must comply with local, state, and national codes governing type and size. These components should also comply with the current NFPA 501C section 2.41, 1990 and with the current CAN 1-6.10 Standard.

#### **Important!**

**During storage of the refrigerator in the RV or the trailer, always disconnect the power source.**

## Upper and Lower Side Vent Installation

These instructions provide an alternative method for installing Norcold 6 and 8 cubic foot refrigerators (see Table 1). This method allows for using two lower vents. The second lower vent serves as the upper exhaust vent, replacing the roof vent. Use only those vents specified in the refrigerator installation guide for side wall installation.



**Figure 1**

Refrigerator Models	
8 Cubic Foot Models	6 Cubic Foot Models
982F, 9182F, 982-FIM, N820F, N821F N841F, N841-FIM	962F, 9162F, 962-FIM, N620F, N621F N641F, N641-FIM
A = 62" minimum	A = 55" minimum

**Table 1**

1. Install the lower intake vent flush with the refrigerator mounting surface (see Figure 1, #1). this location provides the necessary ventilation from outside the vehicle.
2. Install the upper exhaust vent (see Figure 1, #2) directly above the lower vent at the **A** dimension, (see Figure 1 and Table 1) for the model being installed. Position this vent directly behind the cooling unit condenser to allow heat and exhaust from the cooling unit to vent to the outside.

## Ventilation Fan Installation

To ensure efficient performance, a continuous air flow is required across the refrigerator's cooling system. A thermostat controlled fan must attach to the refrigerator's cooling system before placing the refrigerator in the enclosure. This fan assists air flow across the cooling system. The thermostat turns on the fan whenever the refrigerator's cabinet temperature reaches 95 ° Fahrenheit. Even with the fan, the air flow from the side intake vent across the refrigerator's cooling system to the exhaust vent **must be unobstructed**.

Figure 2 shows the back of the refrigerator and the location of the 1st and 2nd absorber coils. Also in Figure 2 are items installation and their approximate locations.

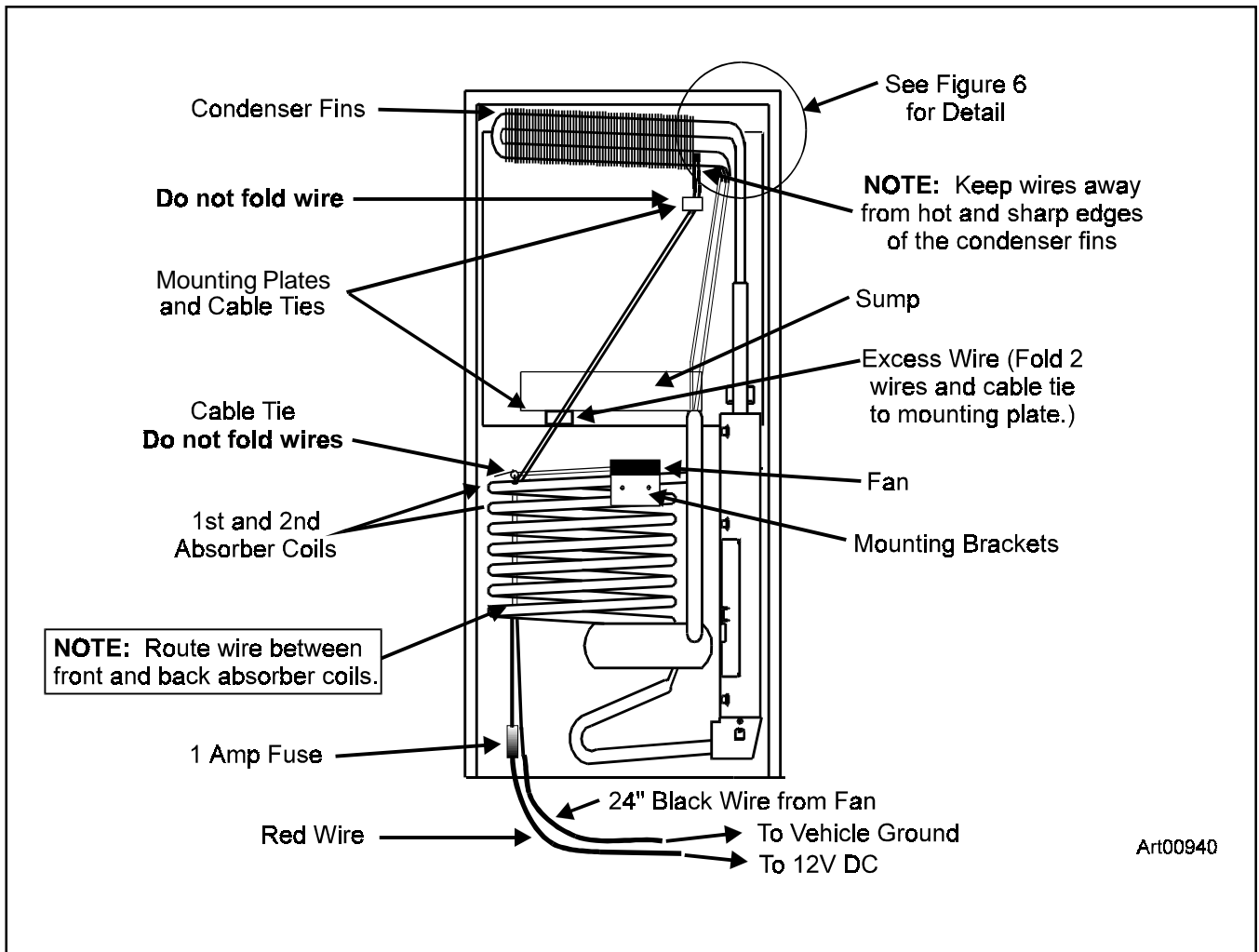


Figure 2

## Fan Installation

1. Position mounting bracket **A** (See Tools and Parts List, #I) around the top of the two absorber coils. Make sure the wider flange of mounting bracket **A** is to the bottom. The flanges of mounting bracket **A** face away from the refrigerator cabinet. See Figure 3.

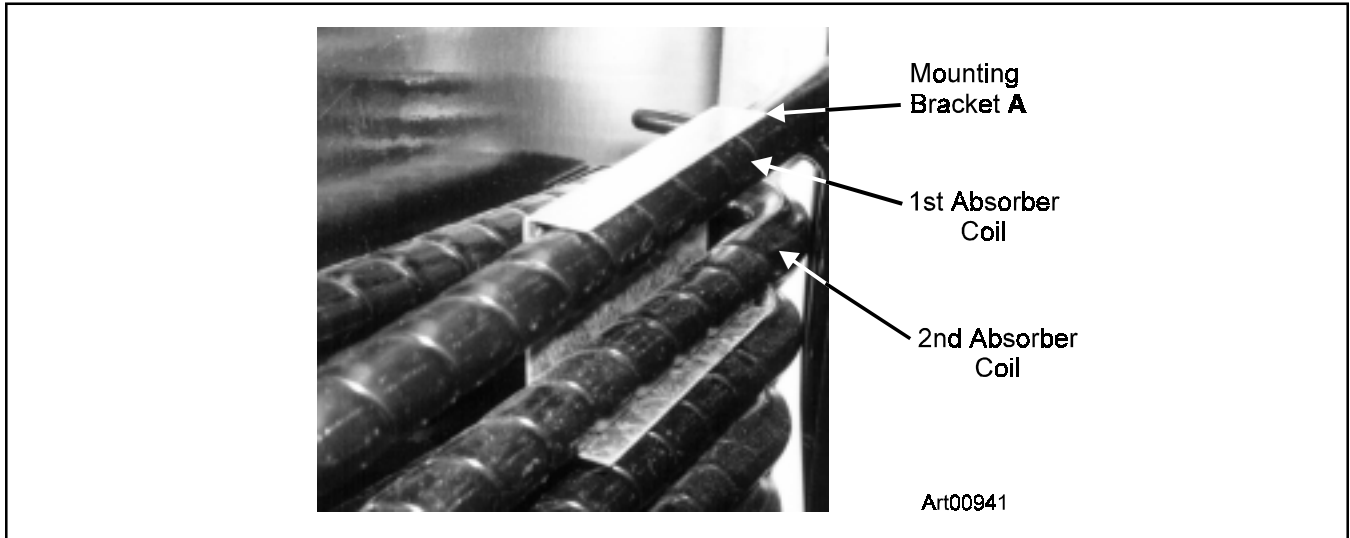


Figure 3

2. Position mounting bracket **B** (See Tools and Parts List, #J) around the front of the 1st and 2nd absorber coils. See Figure 2. This bracket has a wiring label on it. Push mounting bracket **B** and mounting bracket **A** together.

**NOTE:** Mount the flange of bracket **B** over the bottom flange of bracket **A**. Insert two 1 1/4" bracket screws. See Figure 4. **DO NOT** fully tighten.

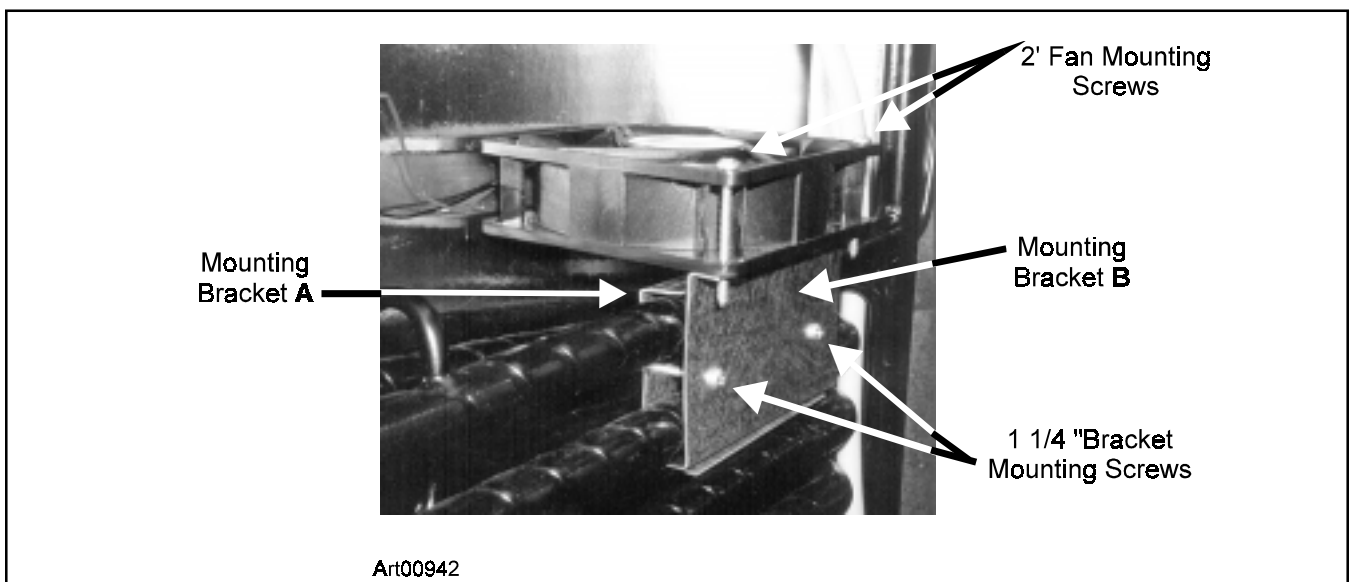
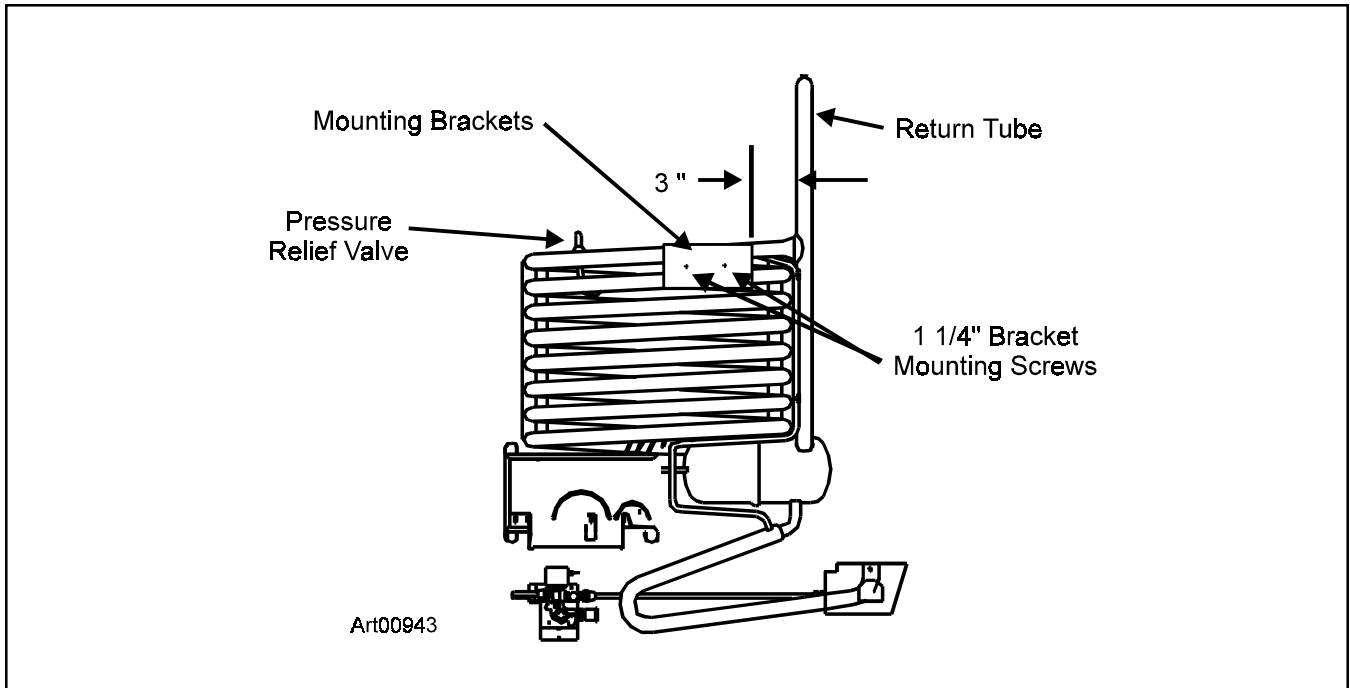


Figure 4

- Slide mounting brackets along the absorber coils. Leave a 3" clearance between the right edge of the brackets and the cooling unit's return tube. See Figure 5.



**Figure 5**

- Tighten 1 1/4" mounting bracket screws securing bracket to cooling system. See Figure 5.
- Place 12 VDC fan on top of the mounting bracket **B** (label side up) and fan wires exiting to the left side (when viewed from the back).

Insert two 2" fan mounting screws and tighten to secure fan to mounting bracket. See Figure 4. **Do not over tighten**, causing plastic fan housing to crack. Ensure fan wires do not contact the sharp edges of the bracket or are pinched in any way.

**NOTE:** When installing fan, leave remaining wires in plastic bag to prevent them from pinching.

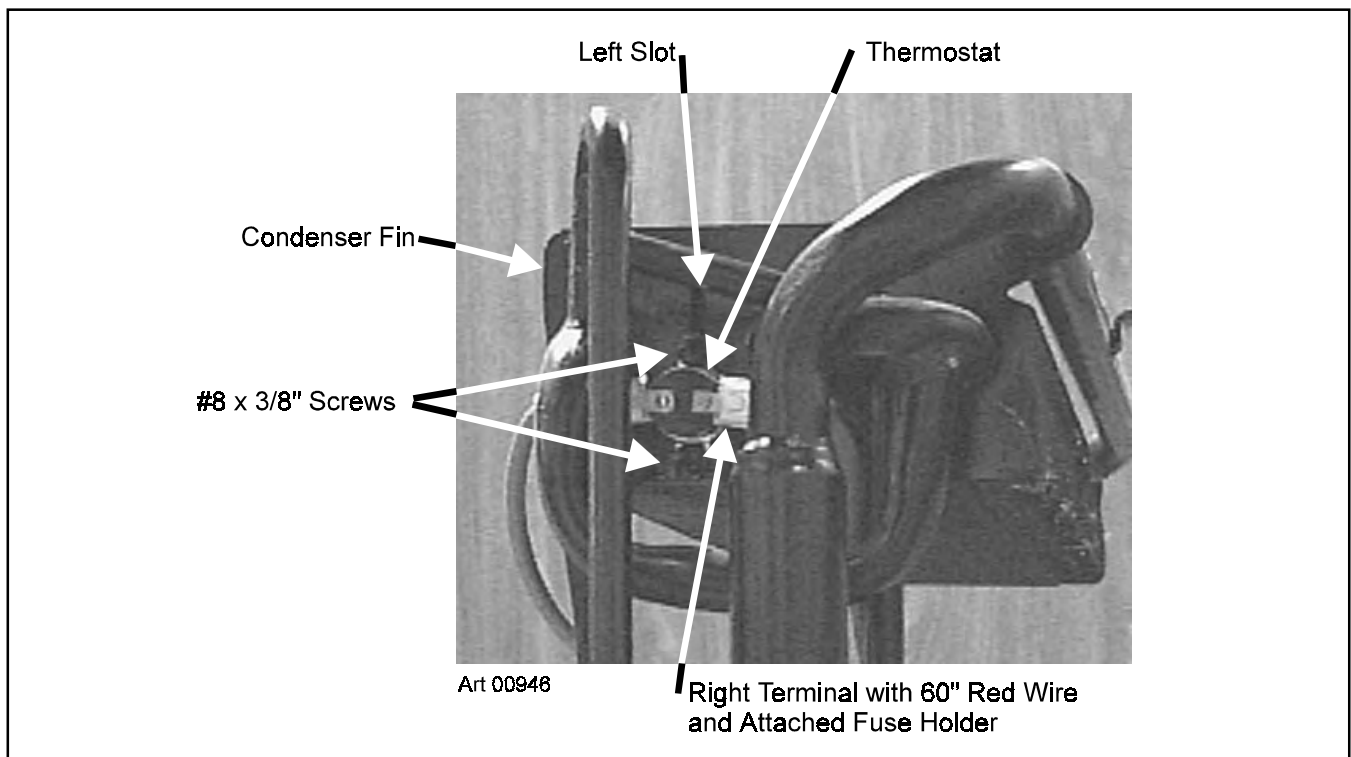
## Thermostat Installation

1. Viewing the refrigerator from the rear, mount the thermostat to the right condenser fin. Remove wires from the plastic bag. Untangle any wires that are connected to the thermostat and the fan. Align the holes of the thermostat with the left slot in the condenser fin. See Figures 2 and 6.

**IMPORTANT:** The thermostat is fragile, handle it with care. Do not hit the plastic thermostat with the screwdriver or allow the screwdriver to slip off the screw and contact the plastic.

**NOTE:** The 41" red wire goes to the left terminal. The 60" red wire (and attached fuse holder) goes to the right terminal.

2. Insert a #8 x 3/8" screw through the bottom hole of the thermostat and into the lowest point of the left condenser fin slot. Tighten the screw 1 or 2 turns to hold the thermostat in place. See Figure 6.
3. Insert a #8 x 3/8" screw through the top hole of the thermostat and into the condenser fin slot. See Figure 6.

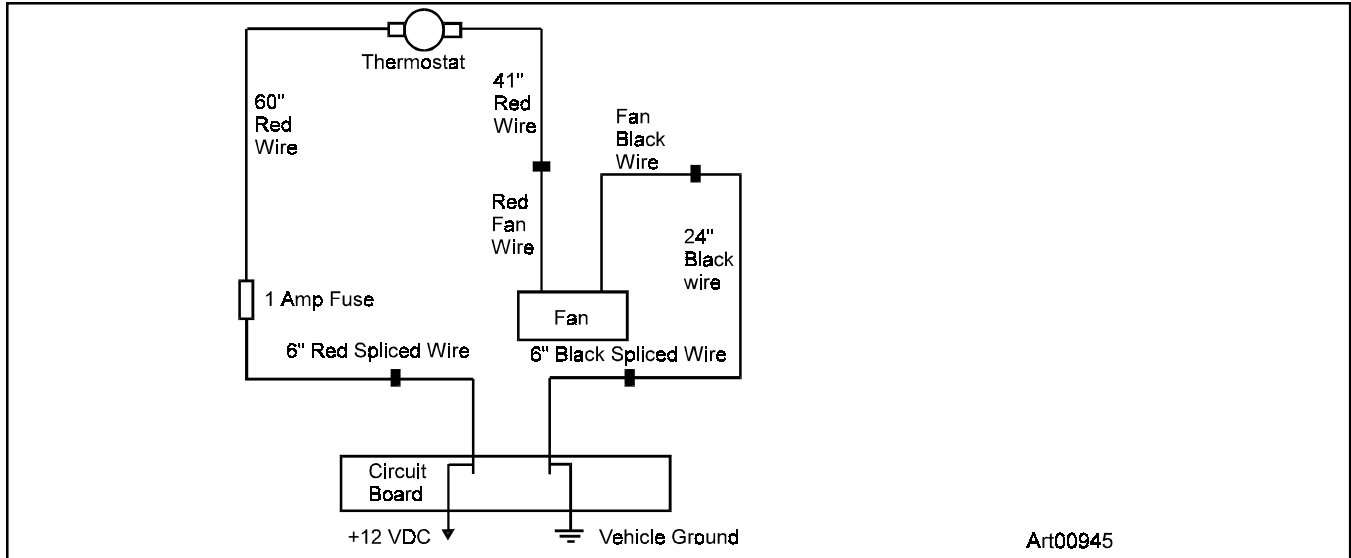


**Figure 6**

4. Tighten the screws to secure the thermostat to the condenser fin.

**IMPORTANT:** Do not overtighten the screws.

## Wire Connections



### Wiring:

#### Splice to Circuit Board (CB) (For 900, 9100, N600, N800 Models):

- Route the 6" red spliced wire and attached 60" red fused wire between the front and back absorber coils (Figure 2).
- Connect the female end of the 6" red spliced wire to the +12 V CB (circuit board) terminal (Figure 7).
- Route the 6" black spliced wire and attached 24" black wire between the front and back absorber coils (Figure 2).
- Connect the female end of the 6" black spliced wire to the 12 VCOM CB ground terminal (Figure 7).
- Secure all wires so they do not contact hot surfaces or sharp edges on the condenser fins or absorber coils. Use cable ties and adhesive mounting plates (figure 2) as described below.
- Use a cable tie to secure the 41" red wire, the 6" red wire, and the 24" black wire to the pressure relief valve (Figure 5).

5. Pull the wires straight down from the thermostat and place a mounting plate about 12" down from the condenser so the wires do not touch the condenser or the vertical tubing. Secure the wires to the mounting plate with a tie wrap. Place the mounting plate under the sump and to the left of the fan (Figure 2). Fold the excess wire as shown. Tie the folded wires to the mounting plate under the sump with a cable tie to prevent the wires from moving by air flow. This also prevents excess wire from getting caught between the side of the refrigerator and the enclosure. Make sure the wires are pulled in tight between the tie wrap locations and that the tie wraps are firmly secured.

The refrigerator is now ready for installation.

**IMPORTANT: Install the refrigerator according to Norcold's installation instructions.**

**900 / 9100 / N600 / N800 Series  
Side Wall Venting Components Required  
For Assembly Kit Part Number 619020**

<b>QTY</b>	<b>PART NUMBER</b>	<b>DESCRIPTION</b>
1	618698b	Installation Instructions
2	61633330	#8 x 3/8" Thermostat Mounting Screws
2	61581122	#6 x 1 1/4" Bracket Mounting Screws
2	618951	#8 x 2" Fan Mounting Screws
1	618978	6" Red Quick Connect Splice Wire #18 Gauge 4/64" Thermoplastic Insulation
1	619017	6" Black Quick connect Splice Wire #18 Gauge 4/64" Thermoplastic Insulation
2	618950	Tie Rap Mounting Plate Adhesive Backed
1	619018	Fan Wiring Diagram Label
1	618699	60" Red #18 Gauge Wire w/4/64" PVC Insulation, w/Quick Connect Terminals, w/DC Fuse Holder
1	618700	24" Black #18 Gauge Wire w/4/64" PVC Insulation, w/Quick Connect Terminals
1	618701	41" Red #18 Gauge Wire w/4/64" PVC Insulation, w/ Quick Connect Terminals
1	618856	12 VDC Fan (Brushless .30 Amps)
1	618093	12 VDC Thermostat (130 On / 115 Off)
1	619016	Fan Support Mounting Bracket (B)
1	618857	Fan Support Mounting Bracket (A)
4	61417922	Cable Ties
1	619023	Package Label
1	619286	Thermostat Warning Note

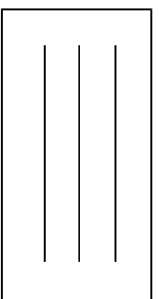


**TOOL LIST**

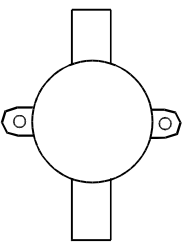
- 1.) Phillips Head Screwdriver
- 2.) Needlenose Pliers

**PARTS LIST**

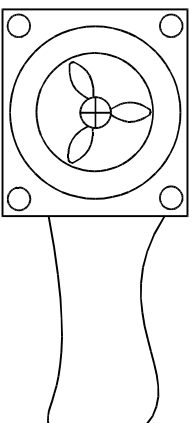
**Actual Size Components**



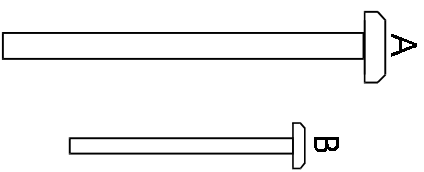
F.) Vent (Sold Separately)



G.) Thermostat

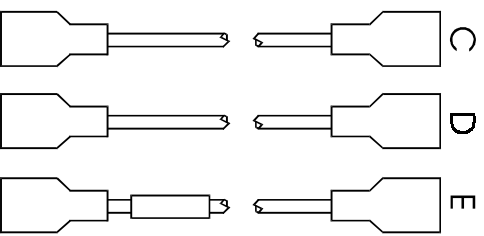


H.) +12VDC Fan

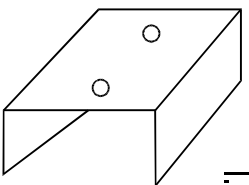


- A.) Number 8 x 2.0" Fan Mounting Screw
- B.) Number 6 x 1.25" Bracket Mounting Screw

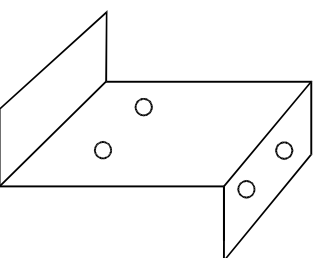
**Scaled Down Components**



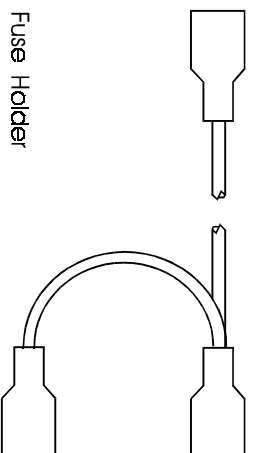
- C.) 24" Black 18 Gauge Wire
- D.) 36" Red 18 Gauge Wire
- E.) 60" Red 18 Gauge Wire With Fuse Holder



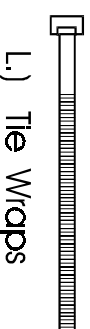
I.) Mounting Bracket A



J.) Mounting Bracket B



K.) 6" Spliced Wire



L.) Tie Wraps