

# Installation and Owner's Manual N611v and N811v Models

# To the Installer:

Please affix this envelope containing the Owner's Manual adjacent to the refrigerator.

# To the Consumer:

Please retain these instructions for future reference.



Improper installation, adjustment, alteration, service or maintenance can cause personal injury or property damage. Refer to this manual. For assistance or additional information, contact a qualified installer, service agency, or the gas supplier.

### FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquid in the vicinity of this or any other appliance.

### FOR YOUR SAFETY

If you smell gas:

- 1. Open windows
- 2. Don't touch electrical switches.
- 3. Extinguish any open flame.
- 4. Immediately call your gas supplier.

NORCOLD, Inc. P.O. Box 4248 Sidney, OH 45365-4248 Norcold Customer Service Dept. Telephone: 800-543-1219 Fax: 937-497-3183 Web Site: www.norcold.com

### Owner's Manual

### Safety Instructions



- Do not remove the round ground prong from any of the AC power cords.
- At regular intervals, make sure that the refrigerator flue the burner, the vent areas, and the ventilation air pathway between the vents are completely free from any flammable material or blockage. After a period of storage, it is especially important to check these areas for any flammable material or blockage caused by animals.

### **About Your Refrigerator**

### **Storage Volume:**

This refrigerator is made for storage of foods and frozen food and for making ice.

Total capacity N611v models N811v models 6.3 cubic feet 7.5 cubic feet

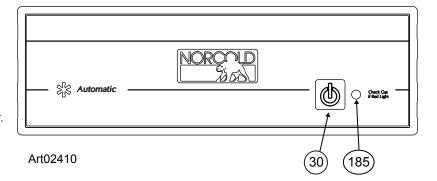
# **Operating the Refrigerator Controls**

### Start the controls for automatic operation:

Push and release the ON/OFF button [30] to start the refrigerator (See Art02410).

- If the indicator light [185] glows solid green, it means that:
  - 120 volt AC power is available to the refrigerator.
  - The refrigerator is operating on AC electric power.
- If the indicator light [185] glows solid amber, it means that:
  - 120 volt AC power is not available to the refrigerator.
  - The refrigerator is operating on propane gas.
- If the indicator light [185] glows solid red, it means that:
  - There is a problem and the refrigerator is not cooling.
  - Refer to the "Fault Code" section of this manual.

To shut down the refrigerator, push and release the ON/OFF button.



### Effects of High Altitude on Propane Gas Operation

When you operate the refrigerator on propane gas at altitudes higher than 5500 feet above sea level:

- You may experience reduced cooling performance of the refrigerator.
- You may experience burner outages.

To avoid these possible problems, Norcold recommends that you operate the refrigerator on AC when at altitudes higher than 5500 feet above sea level.

### Effects of Freezing Temperatures on Refrigerator Operation

A gas absorption refrigerator is not designed to operate in freezing temperatures. If the refrigerator is not equipped for low temperature operation, and if the cooling system of the refrigerator is exposed to temperatures of 32° F. or lower for an extended period of time, the refrigerator operation may be disrupted. The refrigerator operation will resume when the cooling system of the refrigerator warms sufficiently.

If the refrigerator is equipped for low temperature operation, the refrigerator will operate in temperatures down to 0° F.

Disrupted operation of the refrigerator, due to extended exposure to temperatures of 32° F. or lower, and any costs incurred to warm the cooling system of the refrigerator are not covered by the Norcold limited warranty. Please contact your local RV dealer for information about how to resume refrigerator operation or about how to equip your refrigerator for operation in freezing temperatures. Do not change the installation or the venting of your refrigerator. Refrigerator failures, which are the result of changes to either the refrigerator installation or to the venting, are not covered by the Norcold limited warranty.

### **Refrigerator Care Checklist**

Your refrigerator will give you years of trouble free service if you do these simple checks every three to six months:

- Make sure the air flow in the lower intake vent, through the refrigerator coils and condenser, and out the upper exhaust vent is not blocked or decreased.
- Make sure the area behind the refrigerator is clear. Do not use the area behind the refrigerator for storage of anything, especially gasoline and other flammable vapors and liquids.

### Defrosting

The cooling fins of the refrigerator operate at below freezing temperature and will naturally form frost from humidity, which is always present in the air. The humidity inside the refrigerator increases:

- with higher outside temperature and humidity.
- with the storage of non-sealed fresh foods or warm foods.
- with the amount of time that the door(s) are open.
- with any air leakage into the refrigerator.

Although the refrigerator is not frost -free, it is made to limit frost on the cooling fins. At regular intervals, the temperature control system automatically melts most of the frost from the cooling fins. The water from the cooling fins drains into a collection cup that is attached to the back of the refrigerator. The heat of the cooling system evaporates the water from the collection cup.

It is normal for frost to collect inside the freezer. Excess frost decreases the cooling performance of the refrigerator. Defrost the refrigerator and freezer as necessary:

- Remove all food from the refrigerator.
- Turn the refrigerator OFF.

**NOTICE** Defrosting the refrigerator makes excess water inside the refrigerator.

- Remove the drain hose from the drip cup at the rear of the refrigerator.
- Put the drain hose into a half-gallon or larger container to capture water.
- Put dry towels (etc.) inside the refrigerator and freezer to absorb melted frost.



High temperatures can cause the inside surfaces of the refrigerator to warp or melt. Do not use pans of HOT water, a hair dryer, or any other high temperature devices to defrost the refrigerator. Do not use any hard or sharp objects to remove frost. Damage to the interior of the refrigerator can occur.

- To increase the speed of defrosting, put pans of WARM water in the refrigerator and freezer.
- Remove the wet towels (etc.) and dry the interior.
- Remove the drain hose from the large container and put the drain hose back into the drip cup.
- Remove the large container from the enclosure.
- Start up the refrigerator.
- Allow the refrigerator to cool down.
- Return all food to the refrigerator.

### **Refrigerator Maintenance Checklist**

Have a qualified RV dealer or a Norcold authorized service center do these annual safety and maintenance checks:

- Examine the gas supply lines for leaks.
- Make sure the propane gas pressure is 11 inches of water column.
- Make sure the combustion seal is complete and intact.
- Make sure the burner and the burner orifice are clean.
- Make sure the electrode spark gap is 1/8 3/16 inch.
- Make sure the AC voltage is 108 132 volts and the DC voltage is 10.5 15.4 volts.
- Make sure the thermocouple tip is clean and secure.
- Make sure the area at the rear of the refrigerator is free of any combustible materials, gasoline, and other flammable vapors and liquids.

### **Refrigerator Storage**

If the refrigerator is stored for an extended period of time, before start uP, make sure there are no obstructions in the vents, the ventilation air pathway, the burner, the orifice, or the flue area.

### **Refrigerator Maintenance**

### Gas flame appearance:

While in GAS operation, examine the appearance of the gas flame:

- Turn the temperature switch to the COLDEST position.
- Open the lower intake vent.



The burner box cover can be hot. Wear gloves to avoid burns.

- Remove the burner box cover by removing the screw.
- Look at the gas flame [75] (See Art01605).
  - The flame should be:
    - a darker blue color on the inside of the flame and a lighter blue color on the outside of the flame.
    - a constant shape without flickering.
  - Contact your dealer or Norcold authorized service center if the flame is:
    - yellow
    - flickering or changing shape.
  - Make sure the flame does not touch the inside of the flue tube [76].
  - If the flame touches the inside of the flue tube, contact your dealer or Norcold authorized service center.
- Close the burner box door.

### Remove and clean the burner orifice:

Your dealer or Norcold authorized service center must do this procedure.

Remove and clean the burner orifice (See Art00956):

- Close the valve at the propane gas tank(s).
- Push and release th ON/OFF button to shut down the refrigerator.



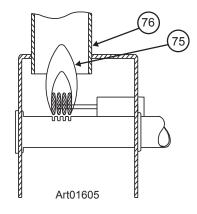
CAUTION The burner box cover can be hot. Wear gloves to avoid burns.

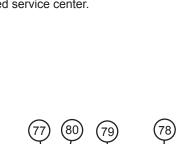
- Open the lower intake vent.
- Remove the drip cup by removing the screw.
- Remove the burner box cover by removing the screw.

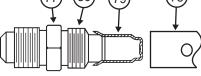


To avoid possible propane gas leaks, always use two wrenches to loosen and tighten the gas supply line connections.

- Remove the flare nut from the orifice assembly [77] (See Art00956).
- Remove the burner [78] from the orifice assembly.







Art 00956



Do not try to remove the orifice [79] from the orifice adapter [80] when cleaning. Removal will damage the orifice and seal of the orifice and can cause a propane gas leak. Leaking propane gas can ignite or explode which can result in dangerous personal injury or death. Do not clean the orifice with a pin or other objects.

- Clean the orifice assembly with air pressure and alcohol only.
- Using a wrench, assemble the orifice assembly to the burner.
- Assemble the flare nut to the orifice assembly.
- Examine all of the connections for gas leaks.
- Clean the burner box.
- Assemble the burner box cover.
- Assemble the drip cup.

### Remove the Refrigerator

Your dealer or Norcold authorized service center must do this procedure.



The rear of the refrigerator has sharp edges and corners. To prevent cuts or abrasions when working on the **CAUTION** refrigerator, be careful and wear cut resistant gloves.

1. Close the valve at the propane gas tank(s).



To avoid possible propane gas leaks, always use two wrenches to loosen and tighten the gas supply line connections.

- 2. Remove the AC power cord(s) from the receptacle.
- 3. Remove the DC wiring from the refrigerator:
  - Put a mark on the DC wires so you can put them back in the correct location.
  - Remove the DC fuse or remove the DC wiring from the battery or the converter.
  - Remove the DC wires from the refrigerator.
- 4. Open the lower intake vent and remove the gas supply line from the bulkhead fitting of the refrigerator.
- 5. Remove the plastic plugs from the mounting flanges of the refrigerator.
- 6. Remove the screws from the mounting flange at the rear of the refrigerator.
- 7. Remove the screws from the upper and lower mounting flanges on the front of the refrigerator.
- 8. Remove the refrigerator from the opening.

### Reinstall the Refrigerator

Your dealer or Norcold authorized service center must do this procedure.



Make sure the combustion seal is not broken, is completely around the refrigerator mounting flanges, and is between the mounting flanges and the wall of the enclosure. If the combustion seal is not complete, exhaust fumes can be present in the living area of the vehicle. The breathing of exhaust fumes can cause dizziness, nausea, and in extreme cases, death.

- 1. Push the refrigerator completely into the enclosure.
- 2. Install the screws in the upper and then the lower mounting flanges on the front of the refrigerator.
- 3. Install the screws in the mounting flange at the rear of the refrigerator.
- 4. Put the plastic plugs into the mounting flanges of the refrigerator.



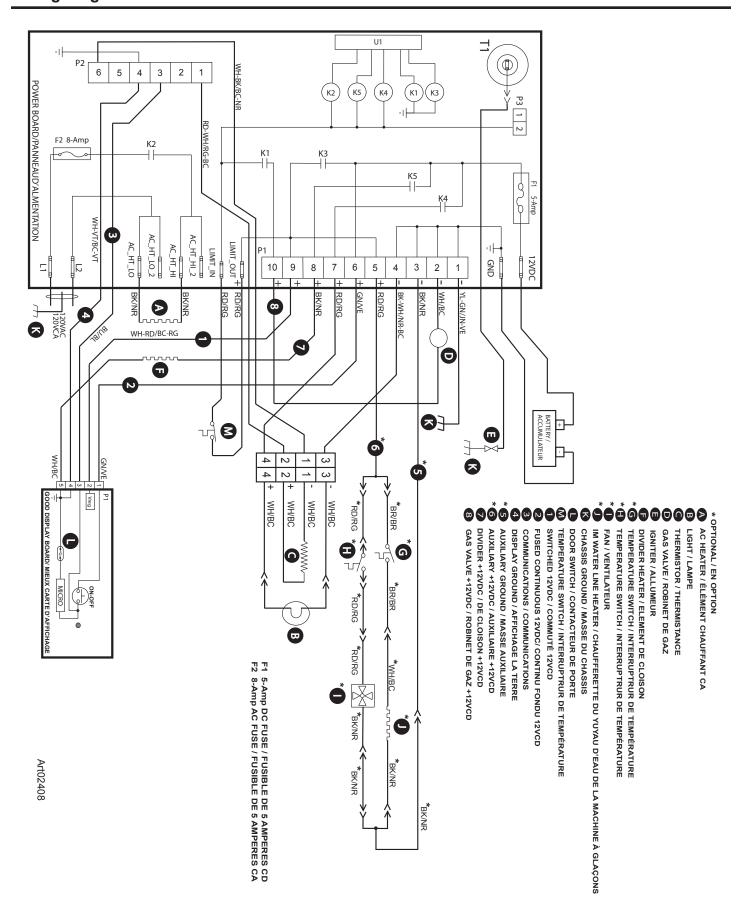
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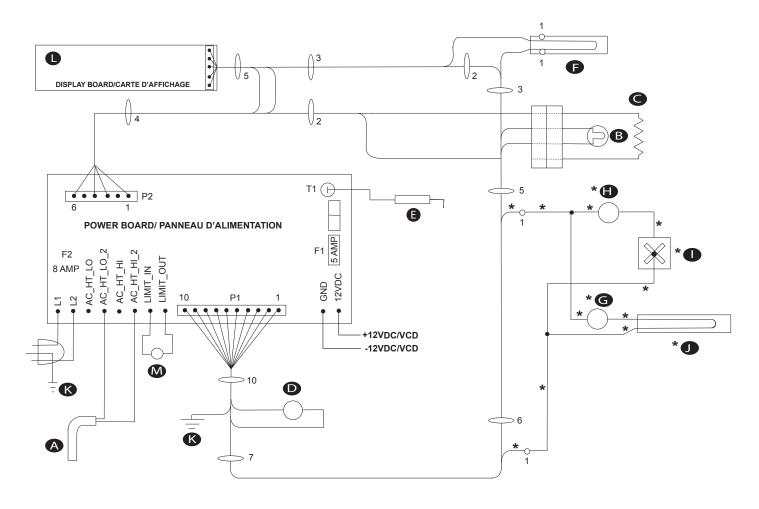
- 5. Attach the gas supply line to the bulkhead fitting of the refrigerator.
- 6. Open the valve at the propane gas tank(s).



Do not allow the leak checking solution to touch the electrical components. Many liquids are electrically conductive and can cause electrical shorts and in some cases, fire.

- 7. Examine the gas supply line for leaks.
- 8. Connect the DC wiring to the refrigerator:
  - Connect the DC wires to the refrigerator.
  - Install the DC fuse or connect the DC wiring to the battery or the converter.
- 9. Connect the black AC power cord to the receptacle.

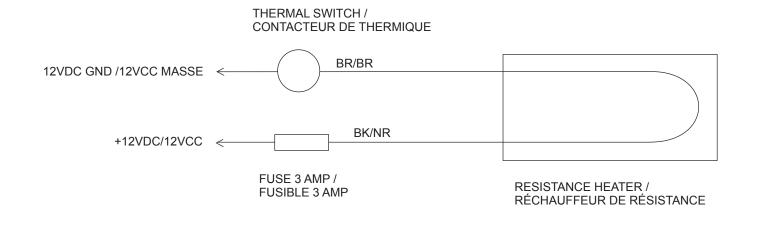


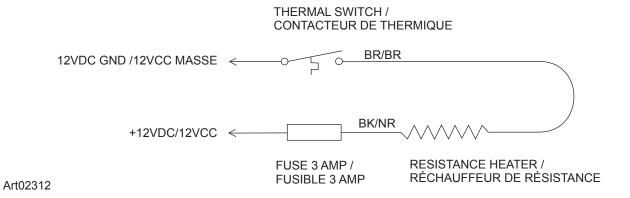


- \* OPTIONAL / EN OPTION
- A C HEATER / ÉLÉMENT CHAUFFANT CA
- B LIGHT / LAMPE
- THERMISTOR / THERMISTANCE
- GAS VALVE / ROBINET DE GAZ
- **■** IGNITER / ALLUMEUR
- DIVIDER HEATER / ELEMENT DE CLOISON
- \* G TEMPERATURE SWITCH / INTERRUPTRUR DE TEMPÉRATURE
- \* 1 TEMPERATURE SWITCH / INTERRUPTRUR DE TEMPÉRATURE
- \* FAN / VENTILATEUR
- \* IM WATER LINE HEATER / CHAUFFERETTE DU YUYAU D'EAU DE LA MACHINE À GLAÇONS
  - K CHASSIS GROUND / MASSE DU CHASSIS
  - **DOOR SWITCH / CONTACTEUR DE PORTE**
  - M TEMPERATURE SWITCH / INTERRUPTRUR DE TEMPÉRATURE

Art02409

## Wiring Diagram and Pictorial - Low Ambient Heater (optional)







This kit supplies DC voltage to the heater any time the ambient temperature is low enough. Extended storage during cold weather will drain the vehicle batteries. To prevent battery drain, remove the 3 amp fuse from the low ambient heater.

### **Replacement Parts**

You may purchase replacement parts through your local RV dealer or authorized Norcold Service Center.

# NOTICE

The refrigerator is not cooling, If the indicator light is either on solid red or flashes on red.

Indicator Light and Color	Meaning	Corrective Actions
Green, flashes off once every 20 seconds	The refrigerator is operating on AC electric power. The thermister sensed inoperable, so temperature is being controlled by backup operating system.	Check: - That the thermister is plugged in See your dealer or authorized Norcold Service Center.
Amber, flashes off once every 20 seconds.	The refrigerator is operating on propane gas. The thermister sensed inoperable, so temperature is being controlled by backup operating system.	Check: - That the thermister is plugged in See your dealer or authorized Norcold Service Center.
Red, on solid.	No AC input sensed available. Refrigerator defaulted to propane gas operation, but did not establish a flame (gas lockout).	Check:  That the refrigerator is plugged into a servicable oulet.  That the valve of the propane gas tank(s) is open.  That the propane gas is at the correct pressure.  That the manual shut off valve of the refrigerator is open.  That there is not air in the propane gas supply line.  See your dealer or authorized Norcold Service Center.
Red, flashes on two (2) times every five (5) seconds.	This is a fault within the refrigerator controls.	Turn the refrigerator power OFF and then back ON to reset. If the Fault Code continues, see your dealer or authorized Norcold Service Center.
Red, flashes on three (3) times every five (5) seconds.	A temperature limit swich is open.	This is not owner serviceable. See your dealer or authorized Norcold Service Center.
Red, flashes on four (4) times every five (5) seconds.	This is a problem with the AC heater relay	This is not owner serviceable. See your dealer or authorized Norcold Service Center.
Red, flashes on five (5) times every five (5) seconds.	A flame is present at the burner when there should none.	This is not owner serviceable. See your dealer or authorized Norcold Service Center.
Red, flashes on eight (8) times every five (5) seconds.	The DC voltage to the refirgerator is too low.	Check: - That the battery charging equipment of the vehicle is operational That the AC/DC converter is operational (if applicable) See your dealer or authorized Norcold Service Center.
Red, flashes on nine (9) times every five (5) seconds.	The DC voltage to the refirgerator is too low to support cooling when operating on propane gas.	Check: - That the battery charging equipment of the vehicle is operational That the AC/DC converter is operational (if applicable). See your dealer or authorized Norcold Service Center.

### **Installation Manual**

### Safety Instructions



- This refrigerator is not approved for use as a free standing refrigerator. It is equipped for the use of propane gas only and can not be changed to use any other fuels (natural gas, butane, etc.).
- Incorrect installation, adjustment, alteration, or maintenance of this refrigerator can cause personal injury, property damage, or both.
- Obey the instructions in this manual to install intake and exhaust vents.
- Do not install the refrigerator directly on carpet. Put the refrigerator on a metal or wood panel that extends the full width and depth of the refrigerator.

### Certification and Code Requirements

The refrigerator installation must conform to the following, as applicable:

### In the United States and Canada:

- Local codes, or in the absence of local codes, the National Fuel Gas Code, ANSI Z223.1/NFPA 54, the Natural Gas and Propane installation Code, CSA B149.1, ANSI A119.2 Recreational Vehicles Code, and CSA Z240 RV Series, Recreational Vehicles.
- A manufactured home (mobile home) installation must conform with the Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280 [formerly the Federal Standard for Mobile Home Construction and Safety, Title 24 (part 280), and the current CSA Z240.4, Gas-equipped Recreational Vehicles and Mobile Housing.
- If an external power source is utilized, the appliance, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, the National Electrical code, and ANSI/NFPA 70, or the Canadian Electrical Code, CSA C22.2.
   Parts 1 and 2.

All propane gas supply piping and fittings must obey local, state, and national codes about type and size. These components must also obey the current NFPA 1192 section 2-4, and in Canada with the current CAN 1-6.10 Standard.

### Ventilation Requirements



The completed installation must:

- Make sure there is sufficient intake of fresh air for combustion.
- Make sure the living space is completely isolated from the combustion system of the refrigerator.
- Make sure there is complete and unrestricted ventilation of the flue exhaust which, in gas mode, can produce carbon monoxide. The breathing of carbon monoxide fumes can cause dizziness, nausea, or in extreme cases, death.

The bottom of the opening for the lower intake vent, which is also the service access door, must be even with or immediately below the floor level. This allows any leaking propane gas to escape to the outside and not to collect at floor level.

CSA International certification allows the refrigerator to have zero (0) inch minimum clearance at the sides, rear, top, and bottom. While there are no maximum clearances specified for certification, the following maximum clearances are necessary for correct refrigerator performance:

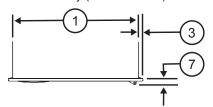
Bottom 0 inch min. 0 inch max.
Each Side 0 inch min 1/2 inch max.
Top 0 inch min. 1/4 inch max.
Rear 0 inch min. 1 inch max.

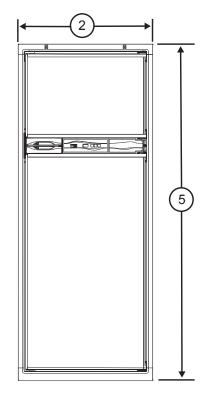
These clearances plus the lower and upper vents cause the natural air draft that is necessary for good refrigeration. Cooler air comes in through the lower vent, goes up around the refrigerator coils where it removes the excess heat from the refrigerator components, and goes out through the upper vent. If this air flow is blocked or decreased, the refrigerator will not cool correctly.

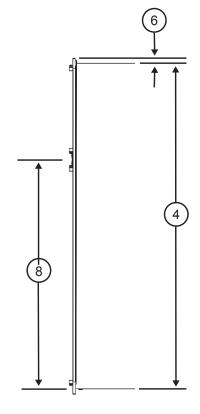
# **Key Refrigerator Dimensions**

These key refrigerator dimensions are for your reference as necessary (See Art01733).

Refrigerator cabinet width w/o trim: 23.47 in. max
Refrigerator width overall w/ trim: 24.6in
Refrigerator cabinet to side trim: 0.80 in
Refrigerator cabinet height w/o trim: N600 models - 52.85 in. max
Refrigerator height overall w/ trim: N600 models - 54.5 in
Refrigerator cabinet to top/bottom trim: 0.93 in6
Enclosure wall to hinges: 1.10 in
Refrigerator cabinet to center of handles: N600 models - 32.5 in







### Art01733

# Assemble the Enclosure for the Refrigerator

- 1. Make sure the enclosure is 59.88 60.01 inches high for N81X models or 52.88 53.01 inches high for N61X models x 23.50 23.63 inches wide x 24 inches deep.
- 2. Make sure the floor is solid and level.
  - The floor must be metal or a wood panel and extend the full width and depth of the enclosure.
  - The floor must be able to support the weight of the refrigerator and its contents.
- 3. Make sure there are no adjacent heat sources such as a furnace vent, a hot water heater vent, etc.
- 4. If there is more than 1/2 inch between either side of the refrigerator and the inside of the enclosure:
  - Fill the space with fiberglass insulation or add a baffle to eliminate the excess clearance.
    - Make sure that the rear of the batt-type insulation is between 18 19 inches from the face of the enclosure.
    - Securely attach the batt-type insulation to the enclosure so that it remains in this position during refrigerator installation, if it becomes wet, and in windy conditions.

### **Install the Lower and Upper Vents**

1. Using the following chart, decide which vents and rough opening (RO) sizes to use:

Certified Vent	P/N	RO Height	RO Width
Upper Roof Exhaust Cap	622293	N/A	N/A
Upper Roof Exhaust Vent	616319	24 in.	5 1/4 in.
Lower Metal Intake	616010	13 5/8 in.	21 5/8 in.
Upper Exhaust & Lower Intake Plastic-large	621156	13 3/4 in.	21 1/2 in.
Upper Exhaust & Lower Intake Plastic-small	620505, 636264	6 3/16 in.	17 3/16 in.

2. Install the lower intake vent (See Art01598, Art01599, and Art01602):



The lower intake vent is also the service access opening for the components on the rear of the refrigerator.

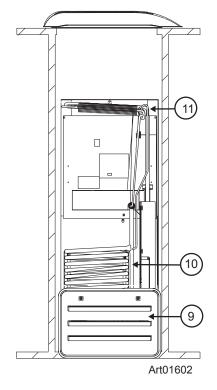


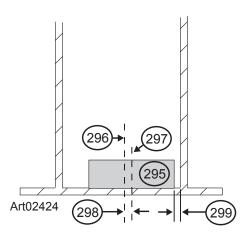
Make sure the bottom of the opening of the lower intake vent is even with or immediately below the floor level. This allows any leaking propane gas to escape to the outside and not to collect at floor level.

- Make sure the bottom of the opening of the lower intake vent [9] is even with or immediately below the floor level.
- When using either 616010 or 621156 vent, align the lower intake vent vertically below the coils [10] and the condenser [11] of the refrigerator.
- When using either 620505 or 636264 vent, either:
  - Make sure that the centerline [297] of the vent rough opening [295] is 1 1/2 inch to the right of the enclosure centerline [296] (See Art02424).

OR

- Make sure that the right-hand edge of the vent rough opening [295] is 1 3/8 inch [299] from the inside wall of the enclosure (See Art02424).





3. Install the upper exhaust vent:

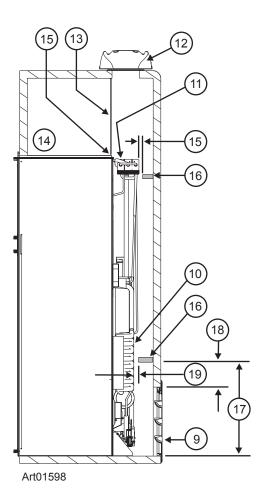


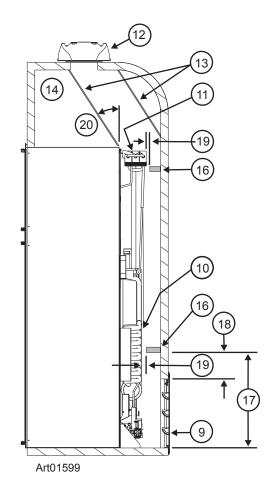
Make sure that no sawdust, insulation, or other construction debris is on the refrigerator or in the enclosure. **ACAUTION** Debris can cause a combustion hazard and prevent the refrigerator from operating correctly.



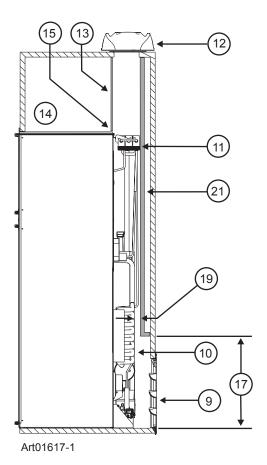
Tighten the screws of the upper roof exhaust cap to 10 inch-pounds max. Also make sure that the air flow around the upper roof exhaust cap is not blocked or decreased by other roof mounted features such as a luggage carrier, an air conditioner, a solar panel, etc.

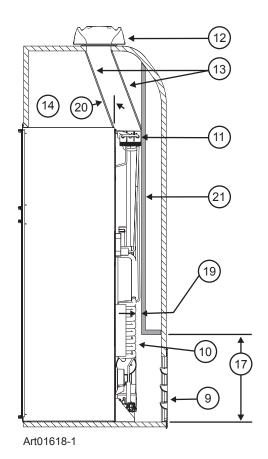
- If the design of the vehicle allows, install the roof exhaust vent [12] directly above the condenser [11] of the refrigerator (See Art01598).
  - Install a baffle [13] to prevent stagnant hot air in the area [14] above the refrigerator.
    - Make sure there is less than 1/4 inch clearance [15] between the baffle and the top of the refrigerator.
    - Make sure the baffle is the full width of the inside of the enclosure.
- If the design of the vehicle does not allow you to install the roof exhaust vent directly above the condenser of the refrigerator (See Art01599).
  - Align the roof exhaust vent [12] above the condenser [11] of the refrigerator and move it inboard as necessary.





- Install two baffles [13] to prevent stagnant hot air in the area [14] above the refrigerator.
  - Make sure the baffles are the full width of the inside of the enclosure.
  - Make sure that the baffles are no more than 45° from vertical [20].
  - Put one baffle between the top rear edge of the refrigerator and the inside edge of the upper exhaust vent opening.
  - Put the other baffle between the outside edge of the upper exhaust vent opening and the side wall of the vehicle.
- If the depth of the enclosure is 24 inches or more and is less than 25 inches, no baffles are necessary at the rear of the enclosure.
- If the depth of the enclosure is 25 inches or more and is less than 26 inches, add two baffles [16] to the rear of the enclosure (See Art01598 and Art01599).
  - Put one baffle 18 inches to 18 1/2 inches above the bottom of the enclosure [17].
  - Put the other baffle at the lowest edge of the condenser [11] of the refrigerator.
    - Make sure that the baffles are 1 inch or less [19] from the coils [10] and condenser of the refrigerator.
    - Make sure that the baffles are the full width of the inside of the enclosure.
- If the depth of the enclosure is more than 26 inches, install a wood or an aluminum or galvanized sheet solid box baffle [21] in the rear of the enclosure (See Art01617-1 and Art01618-1).
  - Make sure that the bottom of the solid box baffle is 18 inches to 18 1/2 inches above the bottom of the enclosure [17].





- Make sure that the back of the solid box baffle is perpendicular to the bottom of the enclosure.
- Make sure that the back of the solid box baffle is either against the top of the enclosure or against the angled baffle [13] (depending on the vehicle design).
  - Make sure that the solid box baffle is one inch or less [19] from the coils [10] and condenser of the refrigerator.
  - Make sure that the solid box baffle is the full width of the inside of the enclosure.
- If the design of the vehicle does not allow you to install a roof exhaust vent, install an upper side-wall exhaust vent.

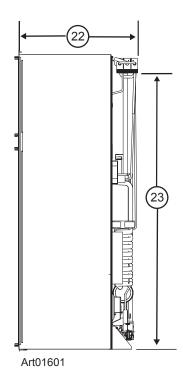


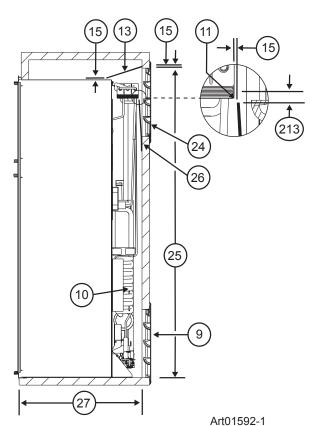
The refrigerator is 23.7 in. min. to 24.0 in. max. from the rear of the breaker to the rear of the condenser [22]. N611v models are 47.1 in. min. to 47.4 in. max. from the bottom of the refrigerator to the bottom of the refrigerator condenser [23]. N811v models are 54.1 in. min. to 54.4 in. max. from the bottom of the refrigerator to the bottom of the refrigerator condenser [23] (See Art01601).



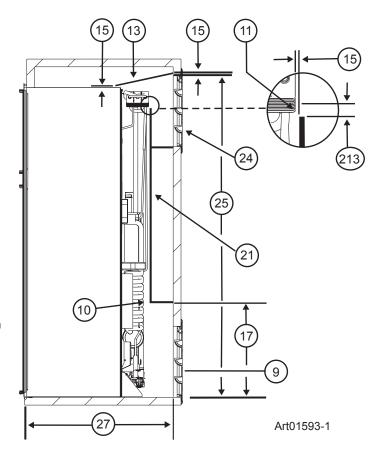
Only use an upper side-wall exhaust vent on refrigerator models that are equipped with a fan. If you use an upper side-wall exhaust vent on a refrigerator model that is not equipped with a fan, the refrigerator cooling performance will be poor.

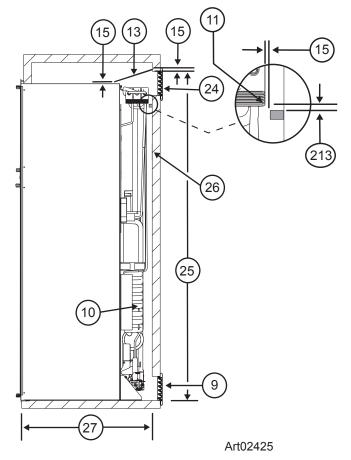
- Make sure the refrigerator model is equipped with a fan.
- Install the upper side-wall exhaust vent [24] (See Art01592 and Art01593).
  - For N611v models, make sure the distance [25] from the bottom of the enclosure to the top of the rough opening for the upper exhaust vent is at least 55 inches.
  - For N811v models, make sure the distance [25] from the bottom of the enclosure to the top of the rough opening for the upper exhaust vent is at least 62 inches.
  - Align the upper exhaust vent [24] horizontally above the lower intake vent [9] of the refrigerator.
  - To prevent stagnant hot air in the area above the refrigerator, install an aluminum or galvanized steel sheet baffle [13] between the top of the refrigerator and the top of the upper exhaust vent.
    - Make sure there is less than 1/4 inch clearance between the baffle and the top of the refrigerator and that the baffle overlaps the refrigerator 1 inch or less.
    - Make sure that the baffle is against the wall of the vehicle at the top of the upper exhaust vent and 1/4 inch or less from the top of the opening for the upper exhaust vent [15].
    - Make sure the baffle is the full width of the inside of the enclosure.
- When using an upper side-wall exhaust vent 621156:
  - If the depth of the enclosure is 24 inches or more and is less than 26 inches [27], install a bent aluminum or galvanized steel sheet baffle [26] to the rear of the enclosure (See Art01592-1).



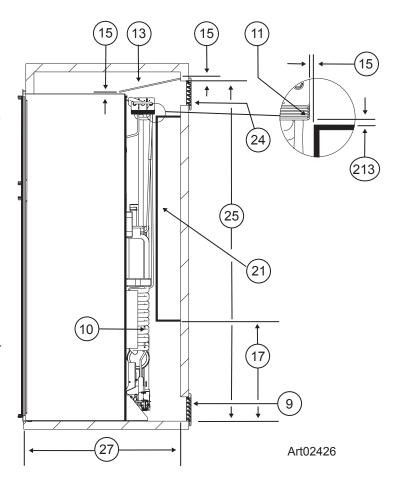


- Make sure that the bend of the baffle is the full width of the inside of the enclosure.
- Make sure that the bend of the baffle is flush with the bottom edge of the upper intake vent door frame.
- Make sure that the top edge of the baffle is between 1/4 inch [213] below the condenser and 1 1/2 inches above the bottom of the condenser and that there is 1/4 inch or less clearance [15] between the rear of the condenser and the baffle.
  - For the best cooling performance, the baffle should be 1/4 inch below the bottom of the condenser.
- If the depth of the enclosure is more than 26 inches [27], install a wood or an aluminum or galvanized steel sheet solid box baffle [21] between the lower intake vent and the upper exhaust vent (See Art01593-1).
  - Make sure that the solid box baffle is the full width of the inside of the enclosure.
  - Make sure that the bottom of the solid box baffle is 18 inches to 18 1/2 inches above the bottom of the enclosure [17].
  - Make sure that the back of the solid box baffle is perpendicular to the bottom of the enclosure.
  - Make sure that the horizontal top of the solid box baffle is even with the bottom edge of the upper exhaust vent [24].
  - Make sure that the vertical top edge of the baffle is between 1/4 inch [213] below the condenser and 1 1/2 inches above the bottom of the condenser.
  - Make sure that there is 1/4 inch or less clearance [15] between the rear of the condenser and the baffle.
- When using an upper side-wall exhaust vent 620505 or 636264:
  - If the depth of the enclosure is 24 inches or more and is less than 25 inches [27], do not install a baffle.
  - If the depth of the enclosure is 25 inches or more and is less than 26 inches [27], install a baffle [16] to the rear of the enclosure (See Art02425).
    - Make sure that the baffle is the full width of the inside of the enclosure.





- Make sure that the top edge of the baffle is between 1/4 inch and 1/2 inch [213] below the condenser and that there is 1/4 inch or less clearance [15] between the rear of the condenser and the baffle.
  - For the best cooling performance, the baffle should be 1/4 inch below the bottom of the condenser.
- If the depth of the enclosure is more than 26 inches [27], install a wood or an aluminum or galvanized steel sheet solid box baffle [21] between the lower intake vent and the upper exhaust vent (See Art02526).
  - Make sure that the solid box baffle is the full width of the inside of the enclosure.
  - Make sure that the bottom of the solid box baffle is 18 inches to 18 1/2 inches above the bottom of the enclosure [17].
  - Make sure that the back of the solid box baffle is perpendicular to the bottom of the enclosure.
  - Make sure that the horizontal top of the solid box baffle is even with the bottom edge of the condenser [11].
  - Make sure that the vertical top edge of the baffle is between 1/4 inch and 1/2 inch [213] below the condenser.
  - Make sure that there is 1/4 inch or less clearance [15] between the rear of the condenser and the baffle.

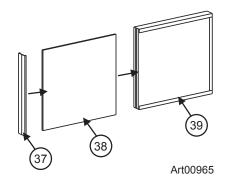


### **Install Decorative Door Panels**

NOTICE

The doors are made to accept decorative panels. The decorative panels must be 3/16 inch or less in thickness. Install the decorative door panels in the refrigerator doors before installing the refrigerator in the vehicle.

- Make an upper door panel that is 21 19/32 inches wide x 14 17/32 inches high.
- Make a lower door panel that is:
  - 21 19/32 inches wide and
  - 31 5/8 inches high (for N611v models) or
  - 38 5/8 inches high (for N811v models).
- Pull the panel retainer [37] off each door (See Art00965).
- Push the decorative door panel [38] into the slots of the door [39].
- Push each panel retainer into the slot on the edge of the door.



Put the refrigerator in position (See Art00963, Art00963, and Art00964):



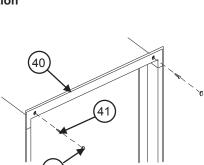
Make sure the combustion seal [28] is not broken, is completely around the refrigerator mounting flanges, and is between the mounting flanges and the wall of the enclosure If the seal is not complete, exhaust fumes can be present in the living area of the vehicle. The breathing of exhaust fumes can cause dizziness, nausea, or in extreme cases, death.

- Push the refrigerator completely into the enclosure.
- Put the upper trim piece [40] onto the front of the refrigerator.
- put screws [41] through the upper and lower mounting flanges on the front of the refrigerator and into the enclosure wall and floor.
- Put a cap [42] on each of the screw holes in the upper trim piece [4] on the front of the refrigerator.



Do not omit the bottom trim piece. This piece is part of the combustion

- Push the bottom trim piece [29] onto the front of the refrigerator.
- Put two screws [41] through the trim piece, the mounting flange, and into the floor.
- Put screws through the mountingflange on the rear of the refrigerator and into the floor.



# Connect the Electrical Components

### Connect the 120 volts AC supply:



Connect the AC power cord(s) only to a grounded three-prong receptacle. Do not remove the round ground prong from any of the AC power cords. Do not use a two prong adapter or an extension cord with any of the AC power cords. Operation of the refrigerator without correct ground can cause dangerous electrical shock or death if you are touching the metal parts of the refrigerator.

- Make sure the receptacle is positioned within easy reach of the lower intake vent.
- Make sure the power cord(s) does not touch the burner cover, the flue pipe, or any hot component that could damage the insulation of the power cord.

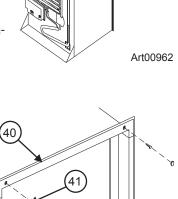
### Connect the 12 volts DC supply:

Determine the min. wire size and the max. fuse size to use:

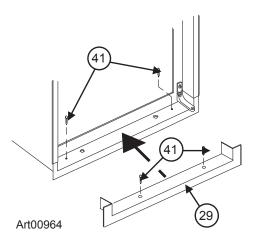


If you use an incorrect wire size and/or fuse size, electrical fire can result.

- Use a minimum of 18 AWG wire and a maximum 6 Amp fuse.
- If the wire size is larger than the min. size, use the correct fuse per RVIA A119.2 standard or local codes.



Art00963



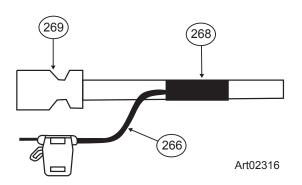
### Connect the Low Ambient Heater (optional)

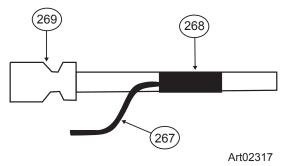
Connect the low ambient heater wires to the 12 volts DC supply. The black (+) wire of the low ambient heater is 16 AWG and the brown (-) wire is 18 AWG.

- Cut the 12V input (+) wire behind the quick connect [269]; strip both ends (See Art02316).
- 2. Solder the wires with the 16AWG black wire [266].
- 3. Wrap the soldered wires with black electrical tape [268]; BE SURE there are no exposed strands.
- Cut the 12V ground wire behind the quick connect [269]; strip both ends (See Art02317).
- 5. Solder the wires with the 18AWG wire [267].
- Wrap the soldered wires with black electrical tape [268]; BE SURE there are no exposed strands.
- 7. Connect 12V supply to the input wires.



This kit supplies DC voltage to the heater any time the ambient temperature is low enough. Extended storage during cold weather will drain the vehicle batteries. To prevent battery drain, remove the 3 amp fuse from the low ambient heater.





### **Connect the Propane Gas Components**

### Connect the propane gas components and examine the gas supply system for leaks:

If you use compressed air for the test:

- The pressure of the compressed air at the manual shut off valve of the refrigerator must not be more than 1/2 psig (14 inches Water Column).
- If the pressure of the compressed air is more than 1/2 psig (14 inches Water Column), remove the gas supply line from the bulkhead fitting of the refrigerator before the test.
- If the pressure of the compressed air is equal to or less than 1/2 psig (14 inches Water Column), close the manual shut off valve of the refrigerator before the test.

### Ignition and Start Up

### Automatic Operation:

Push and release the ON/OFF button [30] to start the refrigerator (See Art02410).

- If the indicator light [185] glows solid green, it means that:
  - 120 volt AC power is available to the refrigerator.
  - The refrigerator is operating on AC electric power.
- If the indicator light [185] glows solid amber, it means that:
  - 120 volt AC power is not available to the refrigerator.
  - The refrigerator is operating on propane gas.
- If the indicator light [185] glows solid red, it means that:
  - There is a problem and the refrigerator is not cooling.
  - Refer to the "Fault Code" section of this manual.

### Do a test of the gas safety valve:

- 1. Remove the AC power cord(s) from the receptacle.
- 2. Push and release the ON/OFF button to start the refrigerator.
- 3. Open the lower intake vent.
- 4. Remove one wire from the solenoid of the gas safety valve at the rear of the refrigerator.
- 5. Within 30 seconds, the flame should extinguish. This means that the gas safety valve is operating correctly.
- 6. Put the wire back on the solenoid of the gas safety valve.
- 7. Reconnect the AC power cord(s) into the receptacle.
- 8. Close the lower intake vent.

### Shut down:

To shut down the refrigerator, push and release the ON/OFF button.

