



ACCOMPANIES YOU.

Owner's Manual

For Australian refrigerator model:

N614E.3F (182L 3-way operation with LP gas, 240 volts AC, or 12 volts DC)



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 LP 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.



DO NOT install this refrigerator in below deck marine applications. Do not install this refrigerator in fixed indoor cabin or other dwelling applications. This refrigerator must use only Thetford designed and approved outside air intake and exhaust ventilation for correct and safe operation. Any other ventilation could cause lethal combustion exhaust fumes and/or explosive LP gas fumes to be in the living area and/or to be below deck.

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For defined warranty terms, please see the one page warranty statement included in the product information packet.

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Safety Awareness

Read this manual carefully and understand the contents before you use the refrigerator.

Be aware of possible safety hazards when you see the safety alert symbol on the refrigerator and in this manual. A signal word follows the safety alert symbol and identifies the danger of the hazard. Carefully read the descriptions of these signal words to fully know their meanings. They are for your safety.



This signal word means a hazard, which if ignored, can cause dangerous personal injury, death, or much property damage.



This signal word means a hazard, which if ignored, can cause small personal injury or much property damage.

Safety Instructions



- The storage of flammable materials behind or around the refrigerator creates a fire hazard. Do not use the area behind the refrigerator to store anything, especially flammable materials (gasoline, cleaning supplies, etc.)
- Do not remove the round ground prong from the refrigerator AC power cord. Do not use a two prong adapter or extension cord on the AC power cord.
- A circuit overload can result in an electrical fire if the wires and/or fuses are not the correct size. Either use the wire and fuse sizes as written in the "Installation Manual" or refer to your local codes for the correct wire and fuse sizes.
- Incorrect installation, adjustment, change to, or maintenance of this refrigerator can cause personal injury, property damage, or both. Have service and maintenance work done by your dealer or by a Thetford authorized Service Center.
- Disconnect both the AC and DC power sources before doing any maintenance work on the refrigerator. All service work on this refrigerator must be done by a qualified service technician.
- Do not bypass or change the refrigerator's electrical components or features.
- This refrigerator is not intended for use by children or by infirm persons unless they have been sufficiently supervised by a responsible person to make sure that they can use the refrigerator safely.
- Young children should be supervised to make sure that they do not play with the refrigerator.
- When you discard an appliance, remove all doors to prevent accidental entrapment and suffocation.
- Do not spray liquids near electrical outlets, connections, or the refrigerator components. Many liquids are electrically conductive and can cause a shock hazard, electrical shorts, and in some cases fire.
- Do not use electrical appliances inside the food storage compartment of the refrigerator unless they are of the type recommended by the manufacturer.
- The refrigerator cooling system is under pressure. Do not try to repair or to recharge a defective cooling system. The cooling system contains sodium chromate. The breathing of certain chromium compounds can cause cancer. The cooling system contents can cause severe skin and eye burns, and can ignite and burn with an intense flame. Do not bend, drop, weld, move, drill, puncture, or hit the cooling system.
- 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.
- This refrigerator is not suitable for the proper storage of medications. Refer to the instructions included with the medications.



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

About Your Refrigerator

Storage Volume:

This refrigerator is made to store fresh and frozen foods and for making ice. According to AS 4555-2002.

Gross volume	182L
Gross Frozen compartment volume	53L
Gross Fresh Food volume	129L
Net Volume	176L

Leveling:



The refrigerator is made to operate within 3° off level side-to-side and 6° off level front-to-back (as looking at the front of the refrigerator). Operating it at more than these limits can cause damage to the cooling system and create a risk of personal injury or property damage. Make sure the vehicle is level before you operate the refrigerator.

Operation during travel:

While the refrigerator should be level when the vehicle is stopped, performance during travel is not usually effected. For safety and performance, the refrigerator controls will not allow the refrigerator to operate on LP gas while the vehicle is moving or for 15 minutes after the vehicle engine is turned off.

Food compartment:

Ignite or start up the refrigerator and let it cool for eight hours before loading with food. If the refrigerator does not start to cool down after about two hours, contact your dealer or an authorized Thetford Service Center.

For the best cooling performance:

- Let air move freely inside the entire food compartment.
- Do not cover the shelves with plastic, paper, etc.

To decrease the amount of ice that collects on the cooling fins:

- Cover all liquids and moist foods.
- Let all hot foods cool before putting them in the refrigerator.
- Do not open the door any longer than necessary.

Crisper(s):

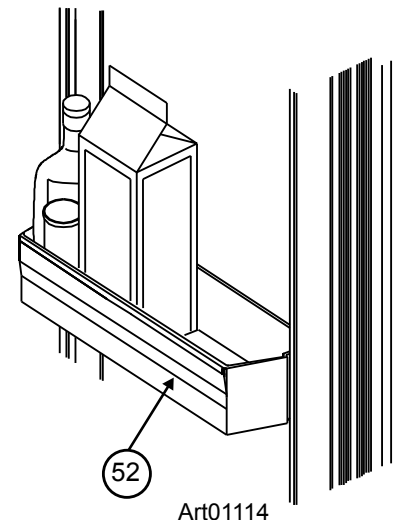
The crisper(s) are located at the bottom of the fresh food compartment and supply a storage area to preserve fruit and vegetable freshness. Make sure that you always push the crispers fully in.

NOTICE Do not wash the crispers in a dishwasher. The crispers are not dishwasher safe.

Door Bins:

You may put the door bins [52] of the fresh food compartment in a location that best meets your need (See Art01114). To remove the bins, lift them over the locator and pull them forward. To install the bins, push them onto the locator.

NOTICE Do not wash the door bins in a dishwasher. The door bins are not dishwasher safe.



Adjustable shelves:

The shelves in the frozen compartment and the fresh food compartment are made so you can remove them or move them.

To remove or move the shelf of the frozen compartment:

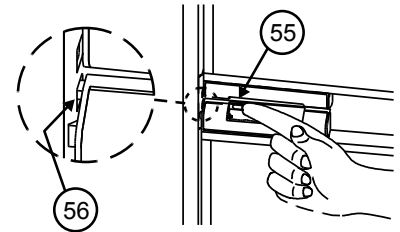
- Pull the shelf forward out of the slot.
- Push it fully into the slot that you wish.

To remove or move each shelf of the fresh food compartment:

- Remove the screw from the retainer of each shelf at the rear of the refrigerator.
- Pull each shelf forward out of the slot.
- Push each shelf fully into the slot that you wish.
- Attach the retainer with the screw.

Frozen compartment:

The frozen compartment is made to keep pre-frozen food frozen and not to quick freeze food. Keep pre-frozen foods in the frozen compartment.



Art00991

NOTICE

Do not put other items on the ice tray while the water is freezing. The water freezes more rapidly if the thermostat is at the coldest temperature setting.

Door handles:

During travel, the door latch prevents the door from opening. When closing each door, push the door toward the refrigerator until you hear a “click” sound.

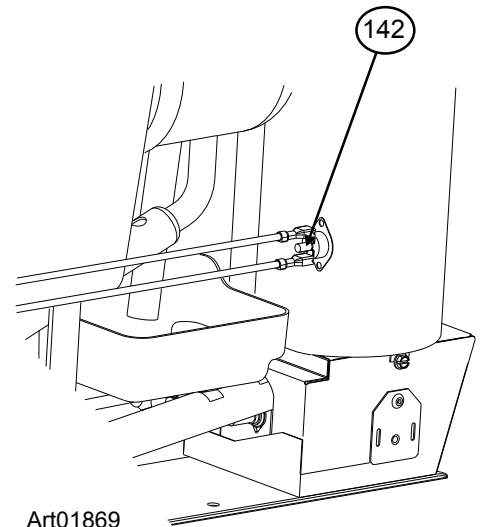
To open each door, pull the handle away from the refrigerator.

During storage, the storage latch prevents the door from completely closing. Use it to prevent odors when the refrigerator is stored for an extended period of time.

To operate the storage latch (see Art00991), open each door about 13 mm and push the storage latch [55] into the cutout [56] of the strike plate. Do not use the storage latch as a travel latch because the doors will not be fully closed.

Temperature switch monitor:

The refrigerator is equipped with a temperature switch [142] for overheating protection (See Art01869). A Thetford authorized service technician can determine if this switch has been triggered.



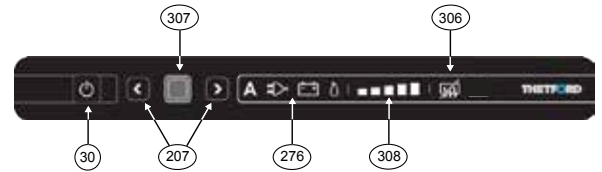
Art01869

Operating the Refrigerator Controls

LED Control Panel:

The control display panel is located between the frozen compartment door and the fresh food door (See Art02450).

On/Off switch	30
Selector switch.....	207
Confirmation button.....	307
Mode indicator	276
Cooling level indicators	308
Moisture reduction symbol.....	306



Turning the refrigerator on:

- Press and hold the On/Off switch [30] for one (1) second.
 - Part of the On/Off switch appears green.
 - The current mode indicator [276] and the cooling level indicator [308] illuminate and will dim after ten (10) seconds.
 - The light in the On/Off switch will remain on.

NOTICE To check the operating mode and the cooling level at any time, briefly press the On/Off switch. The mode indicator and the cooling level indicator illuminate for ten (10) seconds.

Selecting the operating mode:

- Turn the refrigerator on.
- Press and hold the confirmation button [307] for two (2) seconds.
 - The mode indicator will start to flash.
- Press either of the selector switches [207] until the desired mode indicator illuminates.
- Press the confirmation button [307] to start operation in the desired mode.



Auto Mode

The refrigerator control automatically selects the power source. The control selects AC electric first. If AC electric is not available, the control selects DC electric. If DC electric is not available, the control selects LP gas.



240VAC

The refrigerator operates on AC electric.



12VDC

The refrigerator operates on DC electric.



Gas

The refrigerator operates on LP gas.

Selecting the cooling level:

- Press and hold the confirmation button for two (2) seconds.
 - The cooling level indicator [308] will start to flash.
- Press the confirmation button again so that the cooling level indicators start to flash.
- Press either of the selector switches until the desired cooling level is illuminated.
- Press the confirmation button to set the cooling level.

minimum cooling level  maximum cooling level

NOTICE

If the cooling load changes, you must manually change the thermostat to maintain the same temperature inside the refrigerator.

When the outside air temperature is below 10° C, the refrigerator may have a tendency to freeze food at the colder temperature settings. To reduce the tendency to freeze food:

- Set the refrigerator controls to a lower cooling level.
- Keep the refrigerator full.
- Put foods that are more likely to freeze on the lower shelf.

Anti-condensation heater:

This refrigerator is equipped with an anti-condensation heater that prevents condensation from forming in the area of the control panel. The anti-condensation heater is automatically turned on when the refrigerator is powered on. You may turn this off when limited power is available to operate the refrigerator.

To turn off the anti-condensation heater:

- Push and hold both selector switches for two (2) seconds.
- The anti-condensation "off" symbol will illuminate.
- To turn the device on again, push and hold both selector switches for 2 seconds.

NOTICE

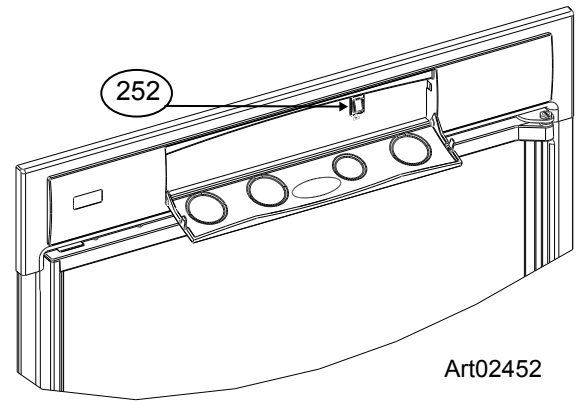
When the control panel is operating on AA batteries, the anti-condensation heater is automatically turned off.

Cooling unit ventilation fan:

This refrigerator is equipped with a fan, which is located on the rear of the refrigerator. The fan improves the refrigerator performance when the ambient temperature is more than 38°C. The fan switch [252] is located behind the door in the refrigerator's upper trim piece. (See Art02452)

The thermostat controls the fan when the fan switch is turned on. The fan will come on intermittently depending on ambient temperature. The fan will not operate when the fan switch is turned off, regardless of ambient temperature


The fan requires 12VDC power. Before turning the fan on, make sure that the refrigerator is connected to 12VDC power and the vehicle battery has sufficient capacity.



Ignition – LP gas operation


- Open the valve on the LP gas storage tank.
- Put the refrigerator into LP gas mode.
- Set the refrigerator at the maximum cooling setting.

NOTICE


You will hear a clicking sound indicating that the controls are sending a spark to the burner. If the flame does not ignite within 30 seconds, the gas safety valve will close and the gas indicator () and temperature LEDs will begin to flash. Switch the refrigerator off and on and select the gas source again.

- If the flame does not ignite after several attempts, contact your dealer or authorized Thetford Service Center.
- When the burner lights, set the refrigerator to the desired cooling level.

Start up – AC operation

- Make sure that 240VAC power is available to the refrigerator.
- Put the refrigerator into AC mode ().
- Set the desired cooling level.

Start up – DC operation

- Make sure that 12VDC power is available to the refrigerator.
- Put the refrigerator into DC mode ().
- Set the desired cooling level.

Shut down:

Press and hold the on/off button for two (2) seconds. All LEDs will turn off.

DC operation precautions and guidelines:

The DC operation is not intended for the initial start up and cooling of the refrigerator. Always use either the AC or LP gas mode to initially start up and cool the refrigerator. The refrigerator and its contents must be cooled and the temperature must be steady before you operate the refrigerator on DC.

This refrigerator is made to operate on 12VDC power while your vehicle is "in transit". Operate the refrigerator on DC power only when the vehicle engine is running.

Keep in mind the following electrical precautions for DC operation of the refrigerator:

For the refrigerator to operate correctly on DC power, the battery must be maintained in a fully charged condition.

- The capacity of the battery charging system must be more than what is necessary for the refrigerator and other DC appliances.
- While the vehicle engine is running, make sure the voltage of the DC power supply leads at the refrigerator is more than 11.5VDC.

Effects of High Altitude on LP Gas Operation

When you operate the refrigerator on LP gas at altitudes higher than 1700m above sea level:

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

To avoid these possible problems, Thetford recommends that you operate the refrigerator on AC when at altitudes higher than 1700m 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 resulting from changes to either the refrigerator installation or to the venting are not covered by the Thetford 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:

- Keep the food compartment and the frozen compartment clean. See "Cleaning".
- Defrost the refrigerator as necessary. See "Defrosting".
- Make sure the door seals correctly. See "Door Sealing".
- Be aware of any cooling changes that are not because of weather, loading, or gas control changes. If changes occur, contact your dealer or an authorized Thetford Service Center.
- When in LP gas operation, examine the appearance of the flame. See "LP Gas Flame Appearance".
- Make sure the air flow in the lower intake vent, through the refrigerator condenser and coils 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 any materials or combustible materials, 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.

It is normal for frost to collect inside the frozen compartment. Excess frost decreases the cooling performance of the refrigerator. Defrost the refrigerator and frozen compartment 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 two liter or larger container to capture water.
- Put dry towels (etc.) inside the refrigerator and frozen compartment 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 frozen compartment.
- 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.

Cleaning

A good time to clean the refrigerator is just after you defrost it.

Clean the inside of the refrigerator as often as necessary to avoid food odors:

- Remove all food from the refrigerator.

NOTICE Do not use abrasive cleaners, chemicals, or scouring pads because they can damage the interior of the refrigerator.

- Wash the interior with a solution of liquid dish detergent and warm water.
- Rinse with a solution of baking soda and clean water.
- Dry with a clean cloth.
- Put all food in the refrigerator.

Drip tray:

To remove and clean the drip tray:

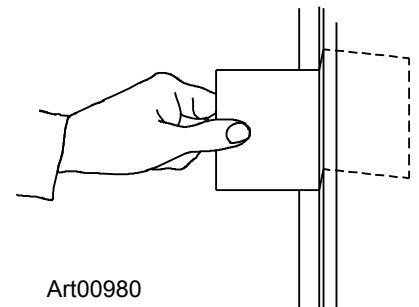
- Pull the shelf forward to remove from the refrigerator
- Make sure that the drip tray is empty of water.
- Pull the drip tray out of the drain hose.
- Pull the drip tray forward to remove from the slots in the refrigerator cabinet.
- Clean the drip tray.
- Push the drip tray back into the slots in the refrigerator cabinet.
- Push the drip tray back into the drain hose.
- Put the wire shelf back in the original position.

Door Sealing

Check the seal of the doors.

If either door does not seal correctly, excess frost will collect inside the refrigerator. Make sure the doors seal correctly (See Art00980):

- Close each door on a piece of paper that is about the size and thickness of a dollar bill.
- Gently pull the paper.
 - You should feel a slight drag between the gasket and the cabinet.
 - Do this on all four sides of the door.
 - If you do not feel a slight drag on the paper, the door does not seal correctly.
 - Have your dealer or an authorized Thetford Service Center correct the seal of the door.



Art00980

Refrigerator Maintenance

LP gas flame appearance:

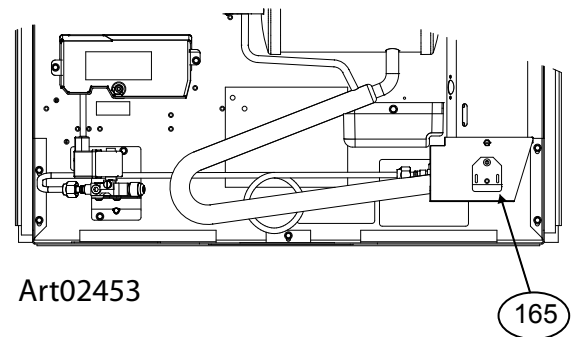
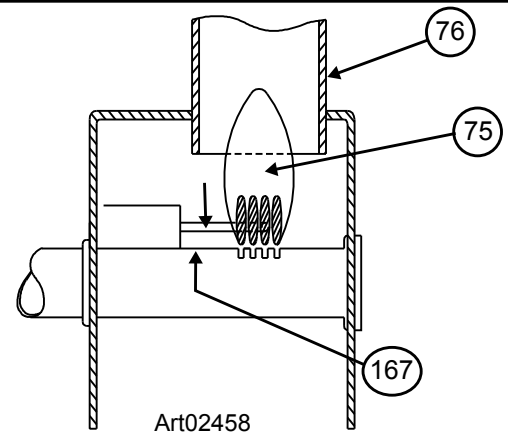
While in LP gas operation, examine the appearance of the LP gas flame:

- Set the refrigerator to the maximum cooling level.
- Open the lower intake vent.



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

- Open the burner box door [165] and look at the LP gas flame [75] (See Art00955 and Art02453).
 - 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 Thetford 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 an authorized Thetford Service Center.
- Close the burner box door.



Remove and clean the burner orifice:



Your dealer or an authorized Thetford Service Center must do this procedure.

To remove and clean the burner orifice:

- Close the valve at the LP gas tank(s).
- Shut down the refrigerator.



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

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



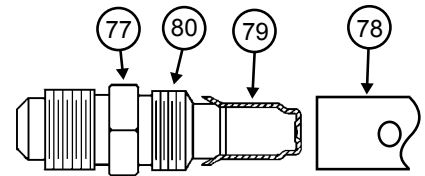
To avoid possible LP gas leaks, always use two wrenches to loosen and tighten the LP gas supply line at the manual shut off valve of the refrigerator.

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



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 LP gas leak. Leaking LP 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.
 - Tighten the flare nut by hand.
 - Hold the orifice assembly securely and, using a wrench, tighten the flare nut 1/4 revolution only.
- Examine all of the connections for LP gas leaks.
- Clean the burner box.
- Assemble the burner box cover.
- Assemble the drip cup.



Art 00956

Remove the Refrigerator

NOTICE

Your dealer or an authorized Thetford 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 refrigerator, be careful and wear cut resistant gloves.

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



To avoid possible LP gas leaks, always use two wrenches to loosen and tighten the LP gas supply line at the refrigerator's manual shut off valve.

2. Open the lower intake vent and remove the LP gas supply line from the manual shut off valve of the refrigerator.
3. Remove the AC power cord from the power point.
4. Remove the DC wiring from the refrigerator:
 - Remove the DC wiring from the battery or the converter of the vehicle.
 - Disconnect the DC supply from the refrigerator's DC wire harness.
5. Remove the screws from the mounting flange at the rear of the refrigerator.
6. Remove the top trim by gasping firmly and pulling to disengage the metal mounting clips.
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

NOTICE

Your dealer or an authorized Thetford Service Center must do this procedure.

WARNING

Make sure the combustion seal [29] is not broken, is completely around the refrigerator mounting flanges, and is between the mounting flanges and the wall of the enclosure (See Art02454). 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. Put the screws through the upper and lower mounting flanges at the front of the refrigerator.

CAUTION

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

4. Open the lower intake vent and put the screws through the mounting flange at the rear of the refrigerator and into the floor.

WARNING

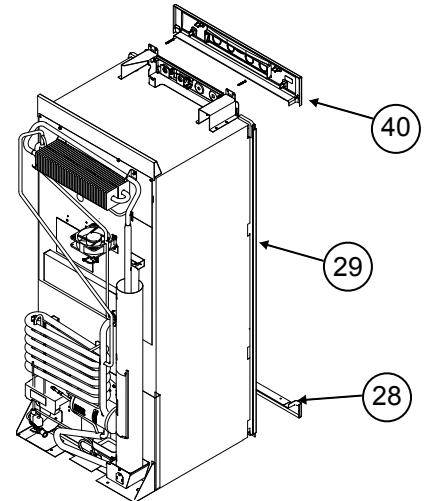
To avoid possible LP gas leaks, always use two wrenches to loosen and tighten the LP gas supply line at the refrigerator's manual shut off valve.

5. Attach the LP gas supply line to the manual shut off valve of the refrigerator.
6. Open the valve at the LP gas tank(s).

WARNING

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

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

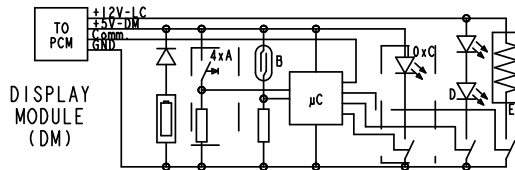
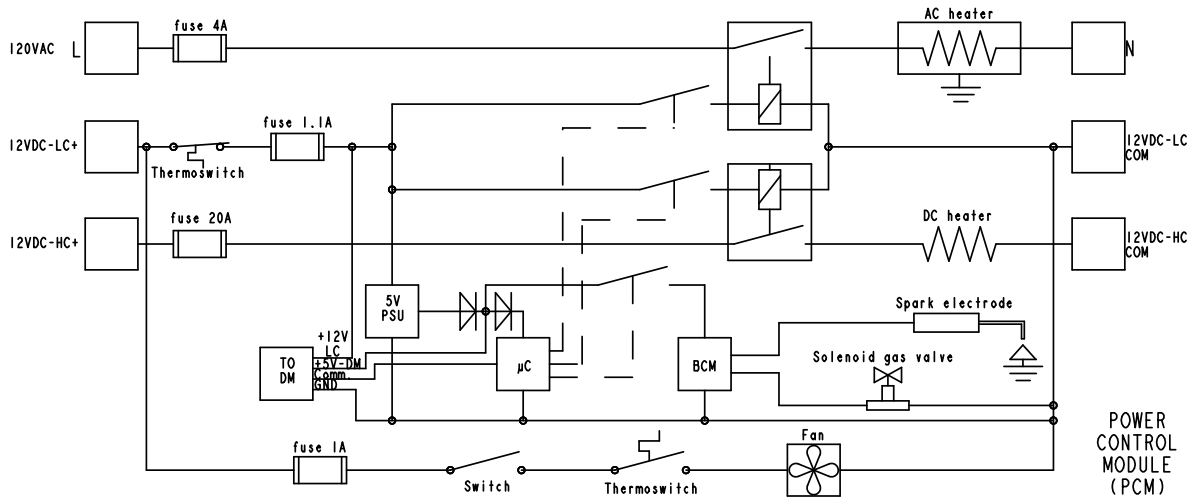


Art02454

Replacement Parts

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

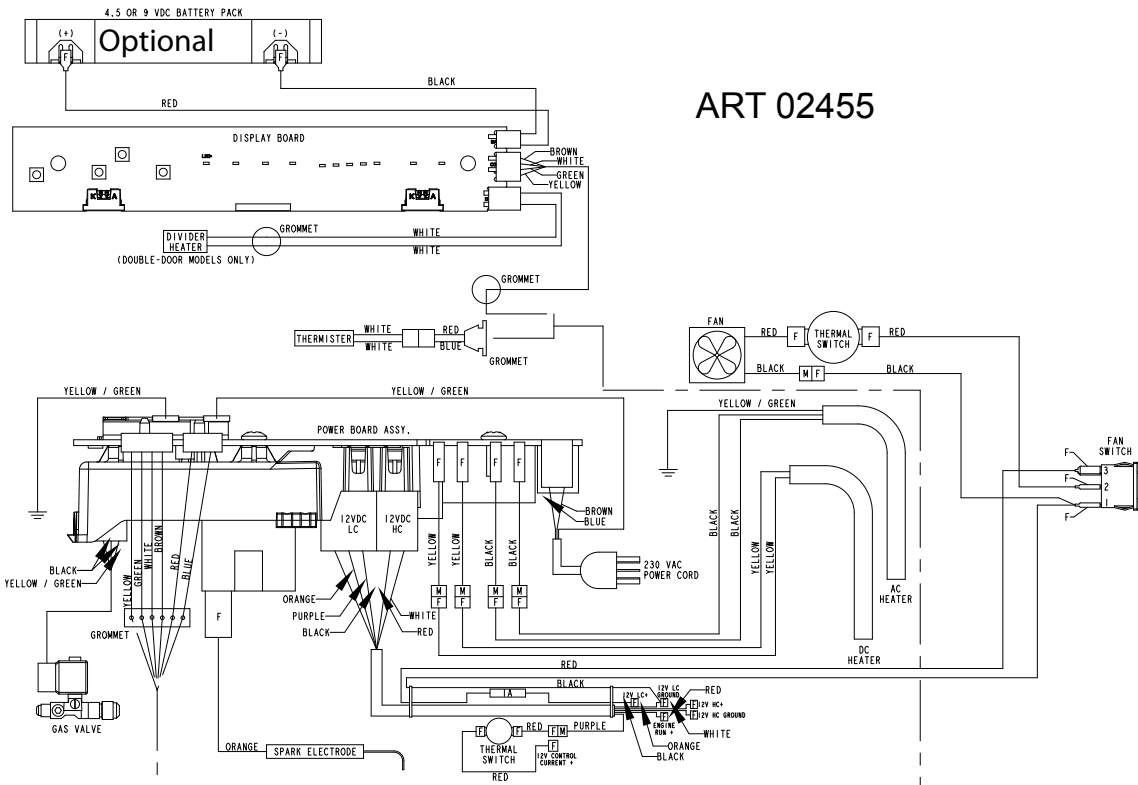
Wiring Schematic



- A) Push buttons: Power, Back, Mode/Enter, Next
- B) Reed switch
- C) LEDs: 3x Source, 5x Temperature, Divider heater, battery (red)
- D) Interior lights
- E) Divider heater (double door only)

ART 02456

Wiring Pictorial



A copy of the wiring pictorial / diagram is in a clear plastic bag on the rear of the refrigerator. Get access to the rear of the refrigerator through the lower intake vent.