



**RM2410  
RM2510**

# **INSTALLATION & OPERATING INSTRUCTIONS**

## **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.**

## **POUR VOTRE SÉCURITÉ**

**Si vous sentez une odeur de gaz:**

- 1. Ouvrez les fenêtres.**
- 2. Ne touchez à aucun interrupteur.**
- 3. Éteignez toute flamme nue.**
- 4. Avertissez immédiatement votre fournisseur de gaz.**

## **FOR YOUR SAFETY**

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

## **POUR VOTRE SÉCURITÉ**

**Ne pas entreposer ni utiliser de l'essence ni d'autres vapeurs ou liquides inflammables à proximité de cet appareil ou de tout autre appareil.**

## **⚠ WARNING**

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

## **⚠ AVERTISSEMENT**

**Une installation, un réglage, une modification, une réparation ou un entretien non conforme aux normes peut entraîner des blessures ou des dommages matériels. Lisez attentivement le mode d'emploi fourni avec l'appareil. Pour obtenir de l'aide ou des renseignements supplémentaires, consultez un installateur ou un service d'entretien qualifié ou le fournisseur de gaz.**

## **⚠ WARNING**

**If the refrigerator stops cooling - or - if ammonia emanates from it, immediately turn the refrigerator off and contact a Service Center.**

## **⚠ AVERTISSEMENT**

**Si le réfrigérateur cesse de refroidir - ou - si de l'ammoniac s'en dégage, arrêtez immédiatement le réfrigérateur et contactez un centre de réparation.**



### **USA**

Service Office  
Dometic, LLC  
2320 Industrial Pkwy.  
Elkhart, IN 46516  
Phone: 574-294-2511

### **Corporate Office**

2320 Industrial Parkway Elkhart, IN 46516

### **For Service Center Assistance**

Call: 800-544-4881

### **CANADA**

Dometic, LLC  
46 Zatonski, Unit 3  
Brantford, ON N3T 5L8  
CANADA  
Phone: 519-720-9578



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## Symbols

The following symbols are used throughout the manual:



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



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



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



Information



Step-by-step instructions

# INTRODUCTION

Thank you for entrusting us to supply your new quality-guaranteed refrigerator which is designed for storage of foods, frozen foods and for making ice.

In this manual you will find installation and operating instructions for RM2410 (piezo igniter) and RM2510 (automatic ignition). The manual should be kept and stay with the refrigerator if it is ever moved or change owners. Installation and service should be performed by qualified personnel only! Read the manual carefully to ensure that you know how to operate the refrigerator safely and correctly. Be aware of possible safety hazards when seeing alert symbols on the refrigerator as well as in this manual.

## INSTALLATION INSTRUCTIONS

### CERTIFICATION AND CODE REQUIREMENTS

This appliance is certified under the latest edition of ANSI Z21.19•CSA 1.4 Refrigerators using gas fuel. The installation must conform with local codes, or in absence of local codes, the following standards as applicable.

#### In the U.S. the installation must conform with:

- National Fuel Gas Code, ANSI Z223.1/NFPA 54 (latest edition).
- Recreational Vehicles Code, ANSI A119.2 (latest edition)
- Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280.

If an external electrical source is utilized, the refrigerator, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, the National Electrical Code, ANSI/NFPA 70 - (latest edition).

#### In CANADA, the installation must conform with:

- Natural Gas and Propane Installation Code, CSA B149.1
- CSA Z240 RV Series, Recreational Vehicles.
- Current CSA Z240.4, Gas-equipped Recreational Vehicles and Mobile Housing.

If an external electrical source is utilized, the refrigerator, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, the Canadian Electrical Code, CSA C22.1, Parts I and II - (latest edition).



### VENTILATION REQUIREMENTS

#### GENERAL INFORMATION

Ventilation is one of the requirements for proper cooling unit operation. The installation should be made in such a manner as to separate the combustion system from the living space of the mobile home or recreational vehicle. Openings for air supply or for venting of combustion products should have a minimum dimension of not less than 1/4 inch.

Proper installation requires one lower fresh air intake and one upper exhaust vent. Certified installations require one roof vent and one lower side vent. The ventilation kits shown in this manual have been certified for use with RM410 and RM2510. The table below displays the components and their part no.

| Certified vent system kits |                 |              |
|----------------------------|-----------------|--------------|
| Kit no.                    | Components      | Part no.     |
| 3A                         | Roof Base       | 3103633.XXX* |
|                            | Roof Cover      | 3103634.XXX* |
|                            | Lower Side Vent | 3109350.XXX* |

\* Replace "XXX" with the color code numbers. For color codes, contact your supplier. For further information, contact your dealer or distributor.

#### CAUTION

**It is of especially importance that the airflow around the burner housing, the boiler insulation and the flow of combustion gases must not be obstructed. Items placed in the vicinity of the refrigerator compartment accordingly must be secured away from the refrigerator tubing and flue.**

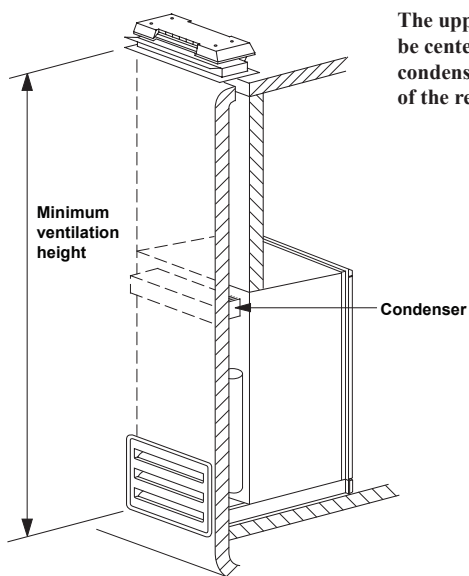
The lower side vent is fitted with a panel, which provides an adequate access opening for ready serviceability of the burner and control manifold of the refrigerator. This should be centered on the back of the refrigerator.

**NOTE!** While washing the RV - do not spray any water through the refrigerator vents.

# VENTILATION REQUIREMENTS

## VENTILATION HEIGHTS

| Minimum ventilation heights<br>Installation with roof vent and lower side vent |           |         |
|--------------------------------------------------------------------------------|-----------|---------|
| RM2410                                                                         | 34 inches | 864 mm  |
| RM2510                                                                         | 42 inches | 1067 mm |



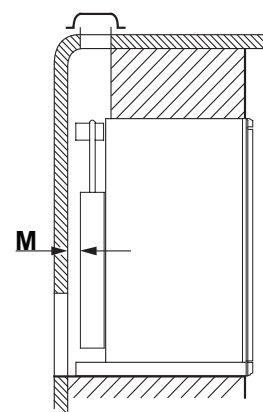
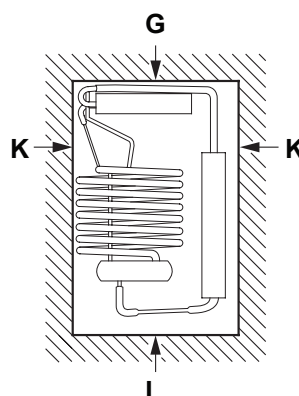
The upper vent should be centered over the condenser coil at the back of the refrigerator.

## CLEARANCES

Minimum clearances (in inches) to combustible materials are:

|                        |   |
|------------------------|---|
| Top (G)                | 0 |
| Sides (K)              | 0 |
| Bottom (L)             | 0 |
| Rear (M <sup>1</sup> ) | 0 |

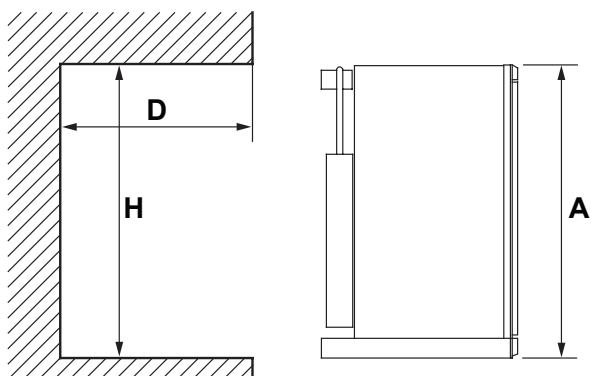
<sup>1</sup> The distance between the rearmost part of the refrigerator and the wall behind the refrigerator.



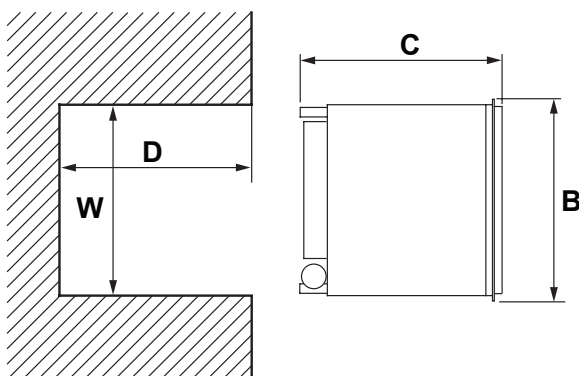
## OVERALL AND RECESS DIMENSIONS

| Dimensions<br>Model |        | Overall  |          |         | Recess   |          |         |
|---------------------|--------|----------|----------|---------|----------|----------|---------|
|                     |        | Height A | Width B  | Depth C | Height H | Width W  | Depth D |
| RM2410              | inches | 33-1/2   | 22-53/64 | 24-7/8  | 32-7/16  | 21-13/16 | 24-3/32 |
|                     | mm     | 839      | 580      | 632     | 823      | 554      | 612     |
| RM2510              | inches | 40-29/32 | 22-53/64 | 24-7/8  | 40-5/16  | 21-13/16 | 24-3/32 |
|                     | mm     | 1039     | 580      | 632     | 1023     | 554      | 612     |

Side view



View from above

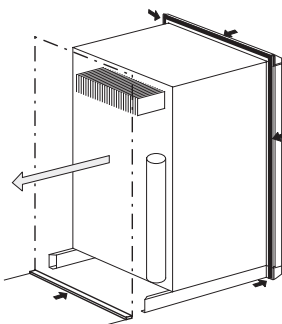


# INSTALLATION PROCEDURE

## INSTALLING REFRIGERATOR

- Make sure the floor is solid and level.
- The refrigerator must be installed in a substantial enclosure and must be level.
- Do not install the appliance directly on carpeting. Carpeting must be removed or protected by a metal or wood panel beneath the appliance, which extends at least full width and depth of the appliance.
- All areas within the recess in which the refrigerator is installed must be sealed. Make sure that there is a complete seal between the front frame of the refrigerator and the top, sides and bottom of the enclosure.

A length of sealing strip is applied to the rear surface of the front frame for this purpose. Also, apply a sealing strip to the foremost floor of the enclosure. The sealing should provide a complete isolation of the appliance's combustion system from the vehicle interior. Be careful not to damage the sealing strip when the refrigerator is put in place!



## SECURING THE REFRIGERATOR

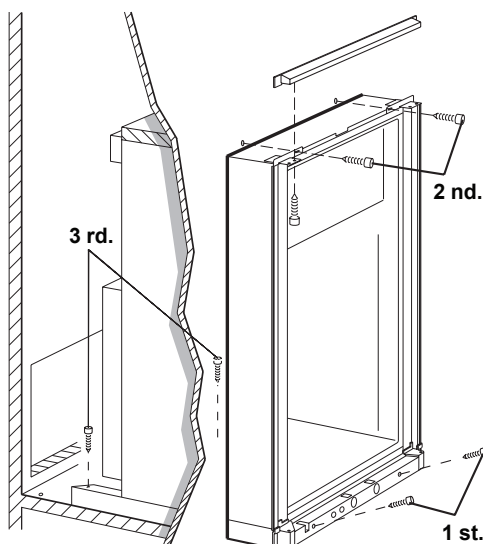
It is important to follow the sequence in securing refrigerator in enclosure since failure in doing that can cause leakage between the frame and cabinet!

Any space between the counter, storage area or ceiling and top of the refrigerator greater than 1½ inches should be blocked. The heat produced at the rear of the refrigerator will become trapped in this space, making the top of the refrigerator hot and reduce the efficiency of the refrigerator.

After the refrigerator has been installed (ensuring a combustion seal at the front frame), the refrigerator is to be secured in the enclosure with six screws (not included).

Install the six screws in the following order:

- 1. Two screws installed through the front base.
- 2. Two screws installed in the top frame.
- 3. Two screws installed in the rear base.



## CONNECTIONS

### Gas connection

Hook up to the gas supply line is accomplished at the manual gas valve, which is furnished with a 3/8" SAE (UNF 5/8" -18) male flare connection. All completed connections should be checked for leaks with a non-corrosive commercial bubble solution

### WARNING

**EXPLOSION HAZARD. Never use an open flame to check for gas leaks. Failure to heed this warning could cause an explosion resulting in death or severe personal injury.**

The gas supply system must incorporate a pressure regulator to maintain a supply pressure of not more than 11 inches water column. When testing the gas supply system at test pressures:

- > 1/2 psi - the refrigerator and its individual shutoff valve must be disconnected from the gas supply piping system.
- ≤ 1/2 psi - the appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve.

If detailed instructions on the installation and connection to the gas supply are required, contact your dealer or distributor.

### Testing LP gas safety shutoff

The gas safety shutoff must be tested after the refrigerator is connected to the LP gas supply.

#### RM2410

To test the gas safety shutoff, proceed as follows:

-  1. Turn on the refrigerator.
- 2. Check that the gas flame is lit. This can be observed through the reflector (E).
- 3. Close the gas valve by turning the knob (A) back to the OFF position.
- 4. Wait one (1) minute.
- 5. Remove the protection cover.
- 6. Open the gas valve by turning the knob (A) to position GAS without pushing the buttons (C) and (D).
- 7. Apply a non-corrosive commercial bubble solution to the burner jet. Be careful not to damage the burner jet.
- 8. No bubbles should appear at the opening of the burner jet. Bubbles indicate a defective gas safety shutoff and service is required.
- 9. If no bubbles were present at the burner jet, rinse the orifice with fresh water. Be careful not to damage the burner jet orifice.
- 10. Replace the protection cover.
- 11. Turn on the refrigerator. Normal gas operation should return. Allow the burner to operate for a minimum of 5 minutes.

# INSTALLATION PROCEDURE

## RM2510

To test the gas safety shutoff, proceed as follows:

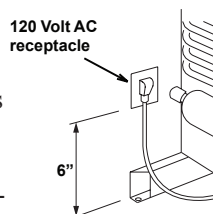
1. Turn on the refrigerator.
2. Check that the gas flame is lit and the lamp (E) is out.
3. Close the gas valve by turning the knob (A) back to the OFF position.
4. Wait one (1) minute.
5. Disconnect the 12 V DC power.
6. Remove the protection cover.
7. Open the gas valve by turning the knob (A) to position GAS without pushing button (C). The reigniter should not be sparking.
8. Apply a non-corrosive commercial bubble solution to the burner jet. Be careful not to damage the burner jet.
9. No bubbles should appear at the opening of the burner jet. Bubbles indicate a defective gas safety shutoff and service is required.
10. If no bubbles were present at the burner jet, rinse the orifice with fresh water. Be careful not to damage the burner jet orifice.
11. Replace the protection cover.
12. Reconnect the 12 V DC power to the refrigerator.
13. Turn on the refrigerator. Normal gas operation should now return. Allow the burner to operate for a minimum of 5 minutes.

## Electrical connection

### 120 V AC connection

The refrigerator is equipped with a three-prong (grounding) plug for your protection against shock hazards and should be plugged directly into a properly grounded threeprong receptacle. **Do not cut or remove the grounding prong from this plug.**

The free length of the cord is 2 feet and it is recommended that the receptacle is located to the left of the refrigerator (viewed from the rear) and approx. 6 inches from the floor. This allows easy access through the vent door. The cord should be routed to avoid direct contact with the burner cover, flue cover or any other components that could damage the cord insulation.



### 12 V DC connection (RM2510)

12 V DC must be connected to the refrigerator to provide power for operation of the automatic reigniter. The connection is made to the terminal block marked 12 V, located on the back of the refrigerator cabinet. Correct polarity must be observed when connecting to the DC supply. The refrigerator must be connected to the battery circuit with a maximum fuse size of 3 amps and a minimum wire size of 14 gauge.

**NOTE!** Do not use the chassis or vehicle frame as one of the conductors. Connect two wires at the refrigerator and route to the DC supply.

### Mounting the door panel

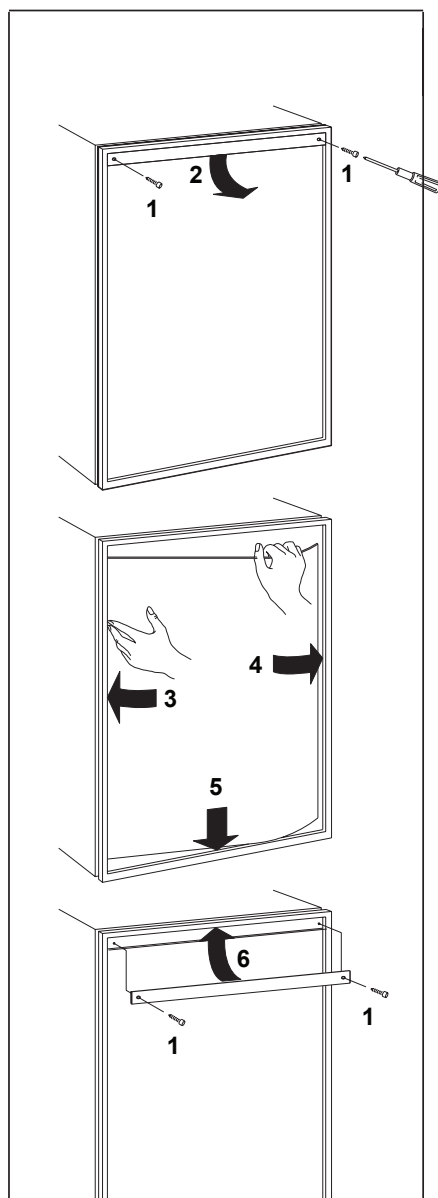
The refrigerator is normally delivered without door panel. Before mounting the door panel, read this instruction thoroughly and check that the panel dimensions are in compliance with those given in the table below.

| Panel dimensions<br>max. thickness 5/32" (4 mm) |        |         |          |          |
|-------------------------------------------------|--------|---------|----------|----------|
| Model                                           | Height |         | Width    |          |
|                                                 | max    | min     | max      | min      |
| RM2410                                          | mm     | 697     | 695      | 515      |
|                                                 | inch   | 27-7/16 | 27-23/64 | 20-9/32  |
| RM2510                                          | mm     | 897     | 895      | 515      |
|                                                 | inch   | 35-5/16 | 35-15/64 | 20-13/64 |

# INSTALLATION PROCEDURE

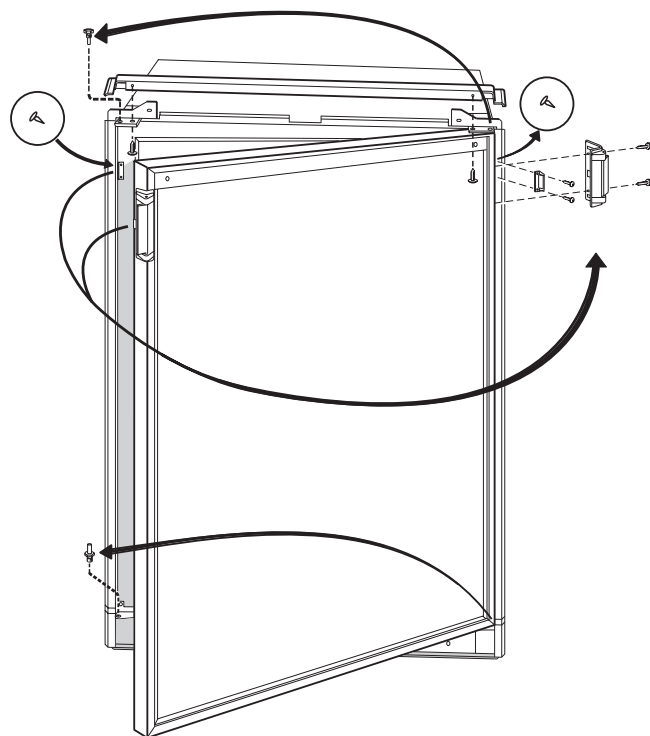
To mount the panel, follow these steps:

-  1. Open the door 90 degrees.  
On new refrigerators, the decoration strip is taped inside the door; if installed on the door, remove the door decoration strip (2) by removing its two screws (1).
2. Insert one vertical edges into the groove of the door frame (3).
3. Bend the panel gently so that the free side of the panel can be slipped into the corresponding groove of the door frame (4). Slide the panel down into the groove of the bottom frame (5).
4. Between the upper edge of the panel and the door frame there is a gap which should be covered by the decoration strip.
5. Put the decoration strip across the door so that the gap is covered and push it upward (6). The tabs on the inside of the strip should fit behind the flange of the door frame.
6. Secure the decoration strip with the two screws removed in step 1.



## Changing the door swing

-  1. Open the door and remove the two screws holding the top decoration. The screws are accessible from beneath.
2. Remove the top hinge pin and lift out the top door.
3. Unscrew the bottom hinge pin.
4. Remove the plastic cap from the opposite lower hinge and place it in the hole just "left empty" by the lower hinge pin.
5. Screw the lower hinge pin in the hole from which the plastic cap was removed.
6. Before replacing the door on the refrigerator, remove the catches and move them to the opposite side of the cabinet.
7. The holes are covered with plastic caps that must be removed and inserted in the holes that previously held the catches.
8. Unscrew the handle and move it to the opposite side of the door.
9. Insert the plastic caps into the holes left open on the door. (Plastic caps for empty holes are in the parts bag inside the refrigerator.)
10. Remount the door and hinge pins in the reverse order of their removal.
11. Before the top decoration is refitted, check that the door closes easily and the gasket seals well on all sides.



# OPERATING INSTRUCTIONS

## REFRIGERATOR OVERVIEW

### ABSORPTION COOLING SYSTEM

In an absorption refrigerator system, ammonia is liquefied in the finned condenser coil at the top rear of the refrigerator. The liquid ammonia then flows into the evaporator (inside the freezer section) and is exposed to a circulating flow of hydrogen gas, which causes the ammonia to evaporate, creating a cold condition in the freezer.

**i** When starting this refrigerator for the very first time, the cooling cycle may require up to four hours of running time before the cooling unit is fully operational.

The tubing in the evaporator section is specifically sloped to provide a continuous movement of liquid ammonia, flowing downward by gravity through this section.

Sodium chromate is used for corrosion protection less than 2 weight % of the coolant.

### Leveling the refrigerator

Leveling is one of the requirements for proper operation with absorption refrigerators. To ensure proper leveling the vehicle needs to be leveled so it is comfortable to live in (no noticeable sloping of floor or walls).

Any time the vehicle is parked for several hours with the refrigerator operating, the vehicle should be leveled to prevent this loss of cooling.

### CAUTION

**Do not park your RV on a slope for a longer period of time. Absorption refrigerators use a gravity-flow system. Being on an angle of more than a couple of degrees for extended periods of time stops the refrigeration and might cause damage to the cooling unit.**

If the refrigerator is operated when it is not level and the vehicle is not moving, liquid ammonia will accumulate in sections of the evaporator tubing. This will slow the circulation of hydrogen and ammonia gas, or in severe cases, completely block it, resulting in a loss of cooling.

When the vehicle is moving, the leveling is not critical, as the rolling and pitching movement of the vehicle will pass to either side of level, keeping the liquid ammonia from accumulating in the evaporator tubing.

### When the refrigerator is not in use

Any absorption refrigerator that is to be taken out of service for an extended period of time should be turned off.

### CAUTION

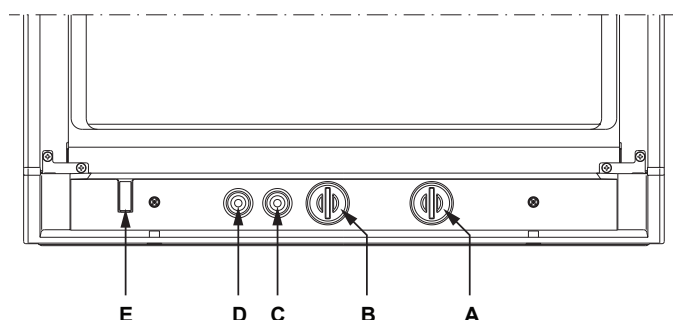
**It is important that you do not leave the refrigerator to run idle and/or unattended for days or weeks.**

### ⚠ WARNING

**FIRE OR EXPLOSION HAZARD.** When refueling or parked near gasoline pumps, shut off all LP gas appliances. Failure to heed this warning could cause a fire or explosion resulting in death or severe personal injury.

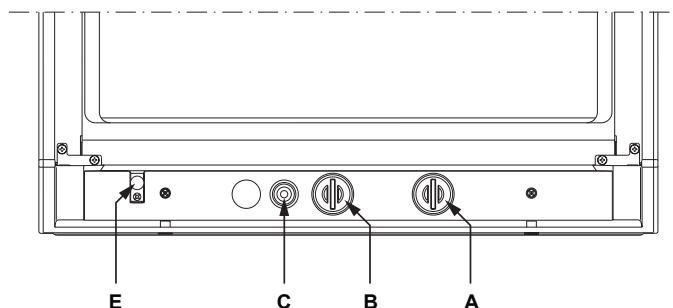
### CONTROL PANEL

#### RM2410



- A. ON/OFF switch
- B. Thermostat Gas/Electric
- C. Safety button
- D. Piezo igniter
- E. Flame view port

#### RM2510



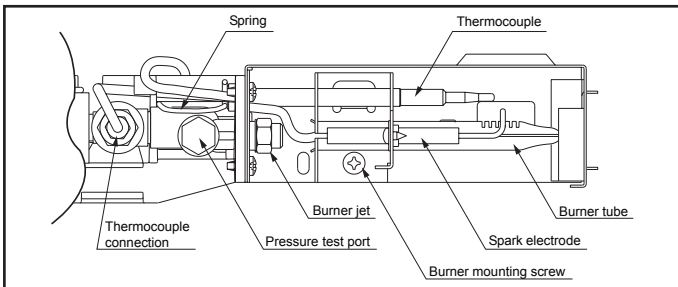
- A. ON/OFF switch
- B. Thermostat Gas/Electric
- C. Safety button
- E. Flame view port

# INSTRUCTIONS FOR USE

## GAS OPERATION

### WARNING

**FIRE HAZARD.** Before lighting the gas burner, after that the RV has not been used for some time, please check that the gas path between the burner jet and the burner tube has not been obstructed. Failure to heed this warning could cause a fire resulting in personal injury.



## RM2410

- 
1. Before starting the refrigerator, check that all the manual gas valves are in the ON position. To start the refrigerator, turn the ON/OFF switch to the GAS position.
  2. Turn the thermostat knob one quarter (1/4) of a turn from the OFF position.
  3. Press Safety button and hold. While holding the button, press the Piezo igniter button several times in order to light the burner. This can be observed through the flame view port.
  4. After the flame is lit, continue to hold the Safety button for 10 seconds. Release the button and check the flame view port to make sure the burner does not go out. If the burner goes out, repeat the lighting procedure.
  5. To shut off the refrigerator, turn the ON/OFF switch to OFF.

## RM2510

- 
1. To start the refrigerator, turn the ON/OFF switch to the GAS position. Lamp is lit.
  2. Turn the thermostat knob one quarter (1/4) of a turn from the OFF position.
  3. Press the Safety button and hold.
  4. When the lamp stops flashing, hold the Safety button an additional 15 seconds.
  5. Release the Safety button. If the lamp starts to flash again, repeat the procedure.
  6. If flame blows out, the reigniter will automatically relight the flame.
  7. To shut off the refrigerator, turn the ON/OFF switch to OFF.

**NOTE!** After changing an LP tank, or after a long shut off period, the gas line is likely to be filled with air. You may have to repeat the lighting procedure several times to purge the air out of the gas lines.

## ELECTRIC OPERATION

- 
1. Check to be sure the power cord is properly connected to the power supply.
  2. Turn the ON/OFF switch to the position marked ELEC for 120 V AC operation.
  3. Turn the thermostat knob one quarter (1/4) of a turn from the OFF position.
  4. To shut off the refrigerator, turn the ON/OFF switch to OFF.

## THERMOSTAT

The refrigerator is equipped with a thermostat which can be adjusted by turning the thermostat knob to **MAX** (coldest cabinet temperature) or **OFF** (warmest cabinet temperature) to obtain the desired cabinet temperature.

- **OFF:** In gas operation, the thermostat closes its main valve and the burner runs continuously at the bypass rate or pilot. In electric operation, the contacts in the thermostat are open and the heating element is off.
- **MAX:** In gas operation, the thermostat allows the burner to remain on high flame continuously. In electric operation, the heating element is "ON" continuously.

When the thermostat reaches the set temperature, it will cut the burner back to bypass or, in electric operation, shut off the heating element.

The setting of the thermostat is not critical, but we recommend it be adjusted to maintain a dry frost on the cooling fins. When it gets warmer outside, adjust the thermostat knob closer to **MAX**.

## SHUTOFF

To shut off the refrigerator, turn the ON/OFF switch to OFF. If the refrigerator will not be in operation for a period of weeks, you should empty, defrost and clean it; and leave the doors ajar. Dry the ice tray and keep it outside the cabinet.

# STORAGE COMPARTMENTS

## WARNING

**EXPLOSION HAZARD.** Never store explosive substances in the refrigerator, such as cigarette lighter fuel, gasoline, ether or the like. Failure to heed this warning could cause an explosion resulting in death or severe personal injury.

## Refrigerator volume

Total refrigerated volume:

|        |            |
|--------|------------|
| RM2410 | 3.9 cu.ft. |
| RM2510 | 5.1 cu.ft. |

## Food storage compartment

The food storage compartment is completely closed and unventilated, which is necessary to maintain the required low temperature for food storage. Consequently, foods having a strong odor or those that absorb odors easily should be covered. Vegetables, salads etc. should be covered to retain their crispness. The coldest positions in the refrigerator are under the cooling fins and at the bottom of the refrigerator. The warmer areas are on the upper door shelves. This should be considered when

placing different types of food in the refrigerator. One half of the lower door shelf is equipped with fingers. The fingers are designed to prevent large containers half-gallon of milk or juice) from shifting or spilling while traveling.

## Frozen food storage compartment

This compartment is not designed for deep or quick freezing of food.

- Quick frozen soft fruits and ice cream should be placed in the coldest part of the compartment, which is at the bottom of the aluminum liner.
- Frozen vegetables may be stored in any part of the freezer compartment.
- Meat or fish, whether raw or prepared, can be stored in the frozen food storage compartment provided they are pre-cooled in the refrigerator. They can be stored about three times longer in the frozen food compartment as compared to the fresh food compartment. To prevent food from drying out, keep it in covered dishes, containers, plastic bags or wrapped in aluminum foil.

## ICE MAKING

Ice cubes can be made in the ice tray. Fill the tray with water to within 1/4 inch (5mm) from the top. For faster ice making, place the tray in direct contact with the freezer shelf. To release the ice cubes, hold the tray with both hands and twist the tray. Preferable, unused cubes should be replaced in the tray. Refill the tray with water and place the tray on the freezer shelf.

Ice making is accelerated if the thermostat knob (B) is turned to MAX. It is a good idea to do this a few hours before you require ice. Be sure to turn the thermostat back to normal setting when the ice is formed; the refrigerator might otherwise become too cold.

# PRODUCT CARE

## DEFROSTING

- 
1. Shut off the refrigerator by turning knob (A) to OFF.
  2. Empty the refrigerator, leaving the drip tray under the finned evaporator.
  3. Leave the cabinet and freezer doors open. Defrosting time can be reduced by filling the ice tray with hot water and placing it on the freezer shelf.
  4. When all the frost has melted, empty the drip tray and dry the interior of the refrigerator with a clean cloth.
  5. Replace the drip tray and ice tray. Replace all food and set the thermostat to MAX for a few hours. Then, reset the thermostat to its normal position.

## CAUTION

**Do not use:**

- A knife or an ice pick, or other sharp tools to remove frost from the freezer shelves. It can create a leak in the ammonia system.
- A hot air blower. Permanent damage could result from warping the metal or plastic parts.

## CLEANING

Always keep the refrigerator clean. Cleaning the refrigerator is usually done after it is defrosted or put into storage. To clean the interior lining of the refrigerator, use lukewarm, weak soda solution. Use only warm water to clean the finned evaporator, gasket, ice tray and shelves. Never use strong chemicals or abrasive cleaning materials on any part of the refrigerator!

Keep the area at the back of the refrigerator clean. Check the lower vent, upper vent and area between these openings for any obstructions such as bird/insect nests, spider webs, etc. Clean the coils on the back of the refrigerator. Use a soft bristled brush to dust off the coils. It is important to keep the refrigerator area free from combustible material, gasoline and other flammable vapors or liquids.

# MAINTENANCE & SERVICE

**i** Service must be done on a regular schedule to keep the refrigerator operating properly.  
Refer all servicing to qualified service personnel.

## Replacing the heater

The heat necessary for the operation of an absorption cooling unit is supplied by an electric heater mounted in a pocket of the boiler system. The refrigerator is equipped with one electric heater for 120 V AC.

To replace the heater, follow these steps:

1. Disconnect the wall plug, and for RM2510, the 12 V DC leads to the reigniter.
2. Remove the protection cover.
3. Remove the plastic cover of the main control structure by loosening the two screws.
4. Disconnect the heater leads from the terminal block.
5. Pull off the metal hose.
6. With a pair of pliers, unfold the lug holding the lid of the boiler casing and open the lid.
7. Remove some insulation wool so that the heater is accessible.
8. Turn and lift the heater out of its pocket.
9. Fit the new heater into the pocket. Pull on the metal hose around the leads.
10. Connect the leads and put on the plastic cover.
11. Put back the insulation and close the lid of the boiler.

## Checking the connections

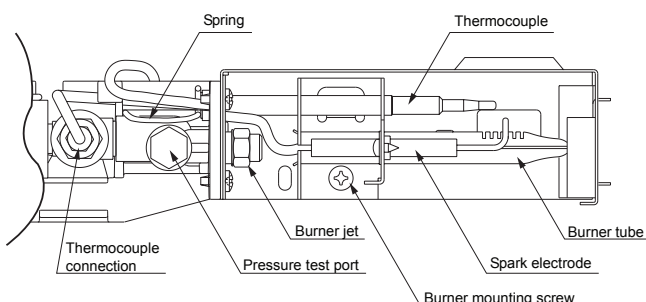
1. Make sure the LP gas supply is turned on.
2. Check all connections in the LP gas system for gas leaks.
3. Apply a non-corrosive bubble solution to all LP gas connections. The appearance of bubbles indicates a leak and should be repaired *immediately*!

### **! WARNING**

**EXPLOSION HAZARD. Never use an open flame to check for gas leaks. Failure to heed this warning could cause an explosion resulting in death or severe personal injury.**

## Checking the LP gas pressure

The LP gas pressure should be checked and readjusted if necessary. The correct operating pressure is 11 inches of water column. The correct place to measure the LP gas pressure is at the test port just ahead of the burner jet.



## INSPECTING THE FLUE BAFFLE

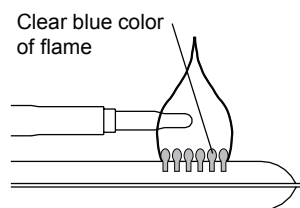
It should be reasonably clean and free of soot. Heavy soot formation indicates improper functioning of the burner. The flue and burner both require cleaning in the following manner:

1. Unplug the refrigerator power cord from the 120 V AC outlet.
2. RM2510: Disconnect or shut off the 12 V DC power to the refrigerator.
3. Shut off the gas valve.
4. Remove protection cover from the burner housing.
5. Disconnect the wire from the high voltage electrode.
6. Remove the burner mounting screw and then, remove the burner assembly.
7. Remove the flue cap from top of flue tube and lift out the wire and spiral baffle.
8. Clean the flue from the top using a flue brush. Blowing compressed air into the flue will not properly clean soot and scale out of the flue tube.
9. Replace spiral baffle and flue cap.
10. Clean burner tube with a brush. Blow out burner with compressed air.

### **! WARNING**

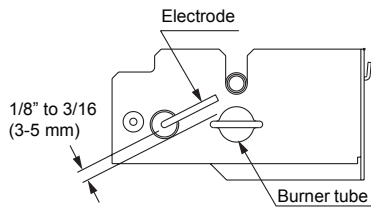
**FIRE HAZARD. Do not use a wire or pin when cleaning the burner jet as damage can occur to the precision opening. Failure to heed this warning could cause fire resulting in personal injury**

11. Before removing the burner jet, clean burner area of soot and scale that fell out of flue tube. Remove the burner jet. Soak the jet in wood alcohol and blow it out with compressed air. Reinstall and tighten burner jet.
12. Carefully reinstall burner. Make sure that the end of the burner fits into the slot on the burner bracket. Verify that the slots are centered under the flue tube and that the thermocouple is positioned properly (tip of thermocouple extends over two slots of burner). Check to make sure that the color of the flame is clear blue over the slots of the burner.



## MAINTENANCE & SERVICE

13. Reconnect the wire to high voltage electrode. Check the electrode for proper location and gap.



14. Turn on manual gas shutoff valve.
15. Examine all fittings for leaks. (Use a commercial non-corrosive bubble solution.)
16. RM2510: Connect 120 V power cord to the outlet and reconnect/turn on the 12 V DC power.
17. Check LP gas safety shutoff.

## REFRIGERATOR REMOVAL

Before removing the refrigerator:

- Verify that the AC and DC voltage leads are disconnected.
- Shut off the gas supply.
- Disconnect the gas supply line at the rear of the refrigerator. Always use a back up wrench when loosening and tightening connections.

To remove the refrigerator, follow these steps:

1. Cap the gas supply line.
2. Loosen the screws anchoring the refrigerator to the enclosure.
3. Slide the refrigerator out of the compartment.

Replacement is the reverse of removal. When reinstalling the refrigerator, make sure the sealing strips are properly positioned. Check all connections for gas leaks.

# TROUBLESHOOTING

| Symptom                                               | Check/Remedial action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The refrigerator has stopped cooling.                 | <ul style="list-style-type: none"> <li>• Immediately turn the refrigerator off and contact a Dometic dealer or Service Center.<br/>NOTE! Do not leave it running for days and never try to solve the problem by repeatedly restarting the refrigerator.</li> <li>• Do not use the refrigerator until it has been repaired.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Ammonia emanates from refrigerator                    | <ul style="list-style-type: none"> <li>• Immediately turn the refrigerator off.</li> <li>• Open windows and door to air out the coach and evacuate.</li> <li>• Contact a Dometic dealer or Service Center.</li> <li>• Do not use the refrigerator until it has been repaired.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Refrigerator or freezer is not cold enough            | <ul style="list-style-type: none"> <li>• Is the plug firmly connected to the socket? Is there a power failure?</li> <li>• Is the thermostat properly set?</li> <li>• Is the refrigerator level? (Because of its operation it is important to keep an absorption refrigerator level.)</li> <li>• Heavy frost build-up on evaporator fins? To prevent frost buildup, which can reduce efficiency, do not leave the unit's door open longer than necessary.</li> <li>• Has the overheating protection been triggered or not? (Must be checked by an authorized service technician.)</li> <li>• Has the door been closed properly? If not it can cause the inside temperature to rise.</li> <li>• Overpacked refrigerator? The unit will have to work harder if the refrigerator is stuffed and results in higher cabinet temperatures. Arrange the food in the unit to allow for free air circulation.</li> </ul> |
| Odors from fumes                                      | <ul style="list-style-type: none"> <li>• Dislocated burner</li> <li>• Damaged burner</li> <li>• Dirty flue tube</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| The refrigerator does not work in gas operation mode. | <ul style="list-style-type: none"> <li>• Gas bottle empty?</li> <li>• Air in the gas pipe?</li> <li>• Is the burner dirty, damaged or not properly located under the flue tube?</li> <li>• Is the burner jet clogged?</li> <li>• Is the flue baffle inserted properly in the flue tube?</li> <li>• Is the LP gas pressure low at burner? Set the main regulator to regulate the pressure so it does not drop below 11 inches water column at pressure tap.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                          |

If the problem persists and the refrigerator is still not working properly, contact your nearest Service Center. State the problem, model, product- and serial-number. These details are stated on the data label inside the compartment.

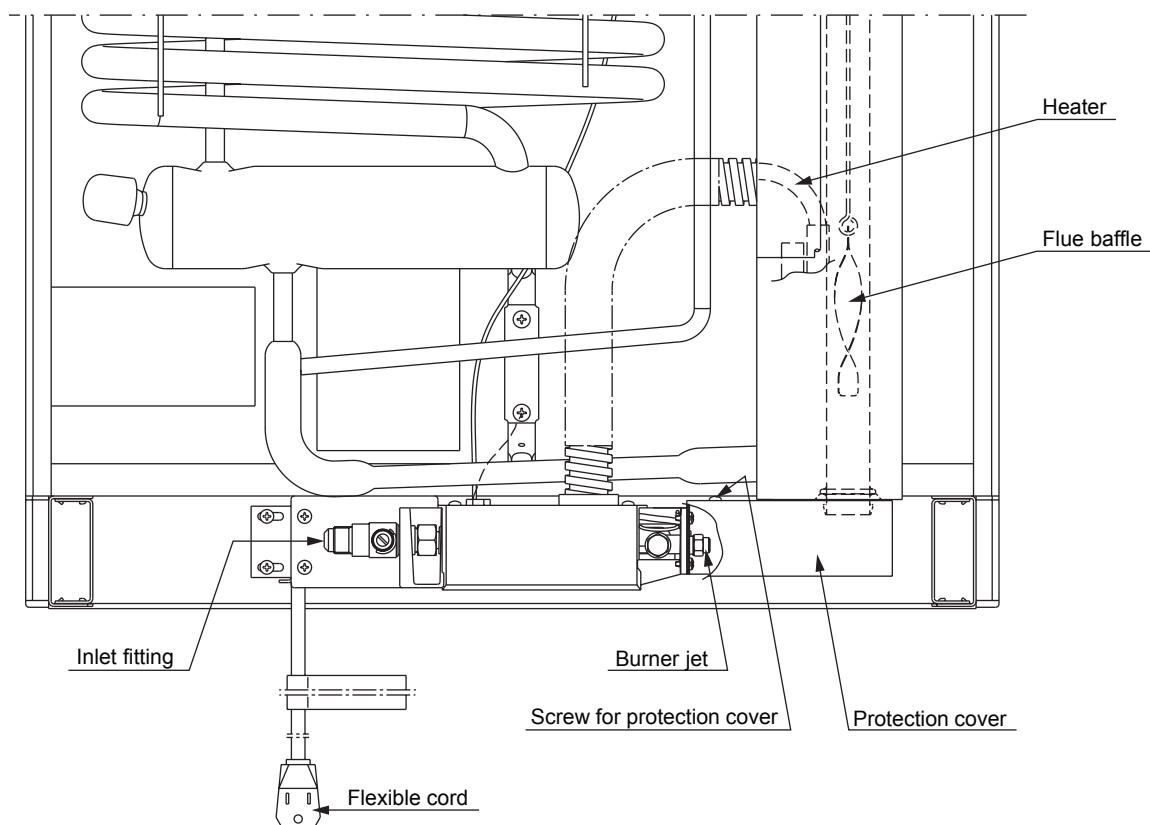
## APPENDIX A - SPARE PARTS

Please contact an authorized service center for parts and repairs as needed. The following spare parts can be obtained from your Dometic Service Center.

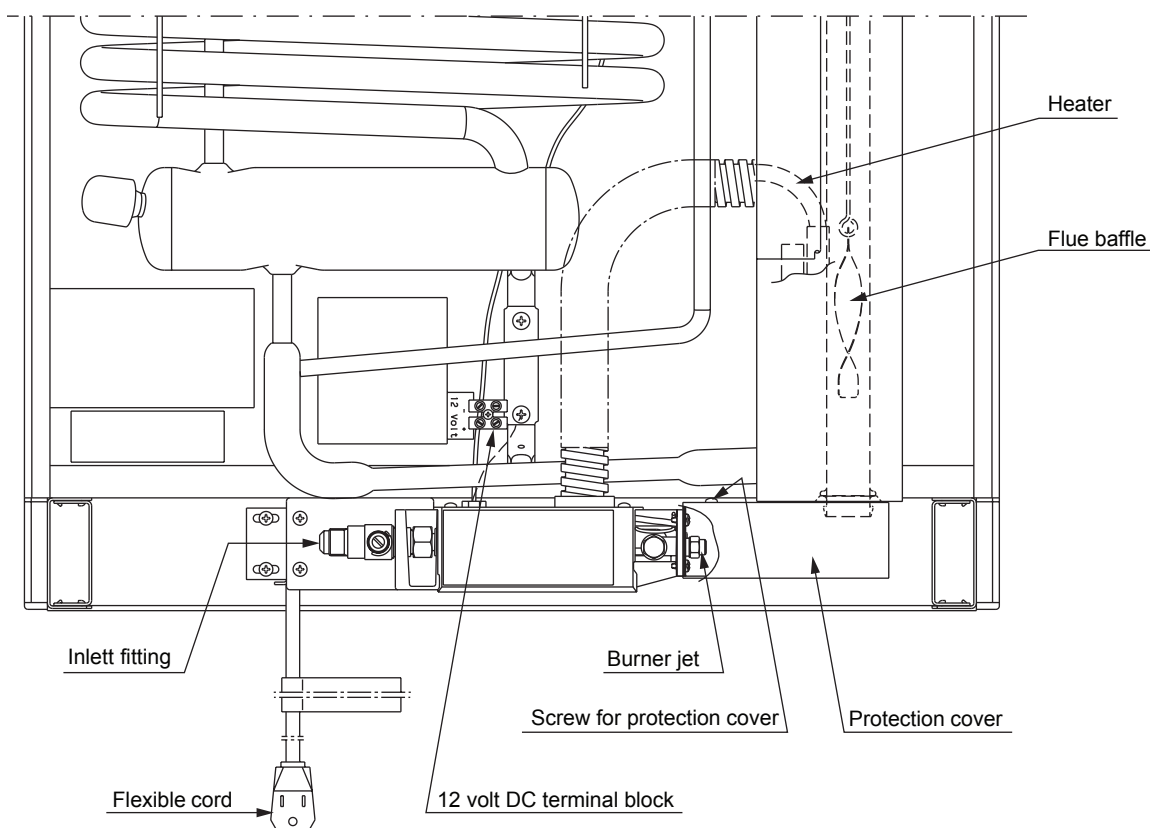
| <b>PART NO.</b> | <b>DESCRIPTION</b>     | <b>MODEL3</b>  |
|-----------------|------------------------|----------------|
| 385 06 44-33/1  | Heater, 160W, 120V     | RM2410         |
| 385 06 44-50/5  | Heater, 185 W, 120V    | RM2510         |
| 200 05 71-25/3  | Door shelf, 2 pieces   | RM2410         |
| 200 05 71-25/3  | Door shelf, 3 pieces   | RM2510         |
| 200 22 61-24/2  | Door shelf, lower      | RM2410, RM2510 |
| 200 27 26-06/1  | Box vegetable          | RM2510         |
| 200 74 19-15/9  | Jet, no. 39            | RM2410         |
| 200 74 19-16/7  | Jet, no. 43            | RM2510         |
| 200 75 03-03/6  | Burner, with electrode | RM2410, RM2510 |
| 200 75 90-01/7  | Baffle                 | RM2410, RM2510 |
| 293 03 79-00/9  | Electrode              | RM2410, RM2510 |
| 293 11 32-01/9  | Spark ignition device  | RM2510         |
| 293 14 96-04/2  | Thermocouple           | RM2410, RM2510 |
| 293 16 00-02/3  | Handle                 | RM2410, RM2510 |

## APPENDIX B - REARVIEW EQUIPMENT

RM2410

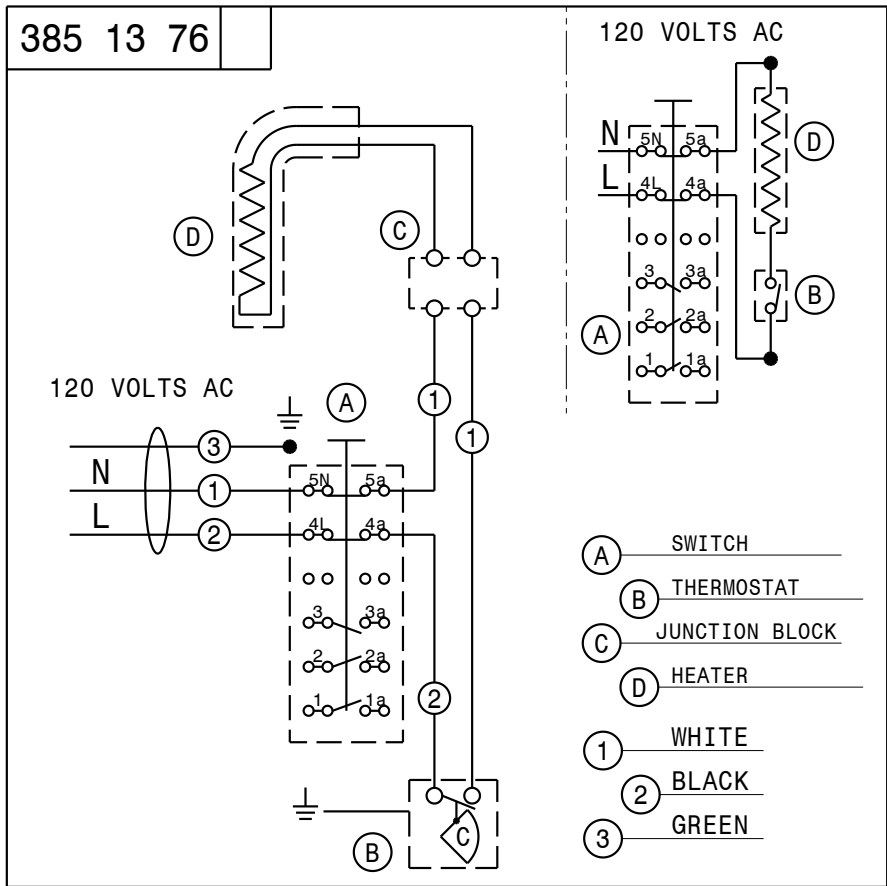


RM2510

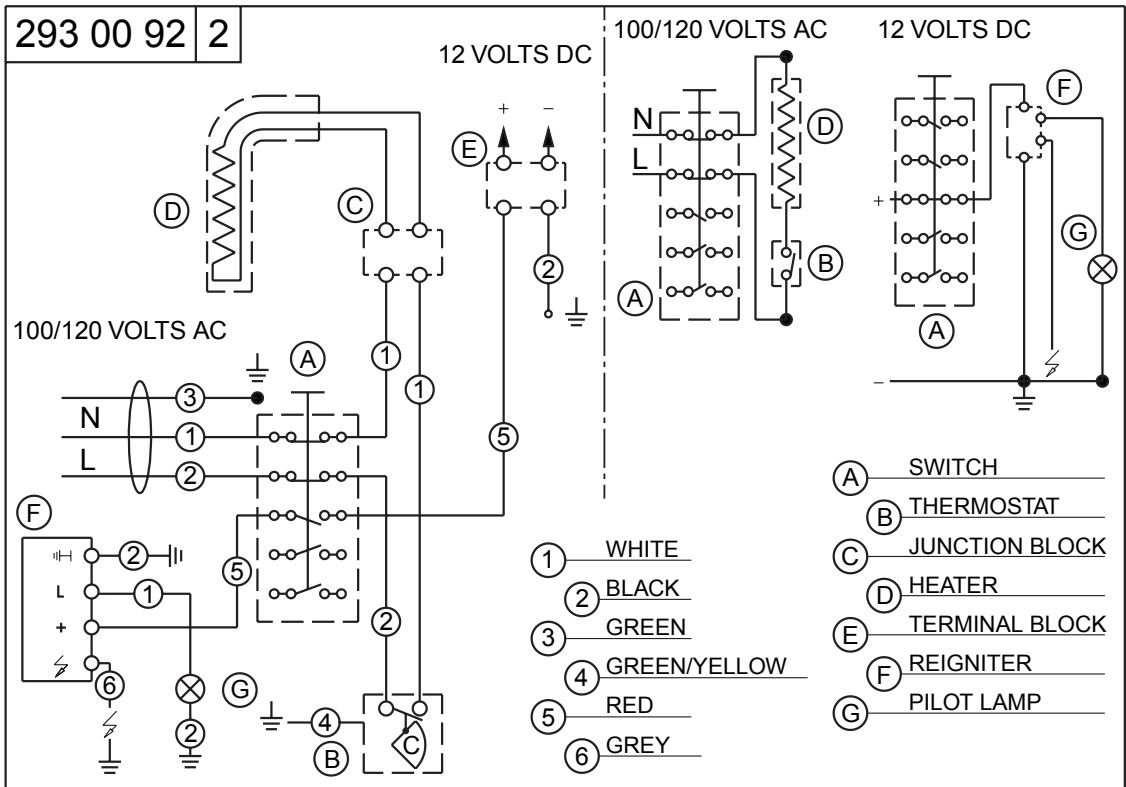


## APPENDIX C - WIRING DIAGRAM

# RM2410



# RM2510



# APPENDIX D - CONSUMER SUPPORT

## Dometic website

[www.dometicusa.com](http://www.dometicusa.com)

Please visit the website for information and news about Dometic products. You can obtain information about how to get in contact, learn about product care, download manuals, leaflets and warranties.

## Service and spare parts

For service, please contact the Service Center Assistance, see the front page of this manual - or - visit the Dometic website to find the location of the nearest Dometic Service Center.

Commonly used spare parts are listed in this manual, see APPENDIX A - SPARE PARTS. These should be available from your Dometic Service Center.

## Contact us

For contact information, please see the frontpage of this manual - or - visit the Dometic website.

## Register the appliance

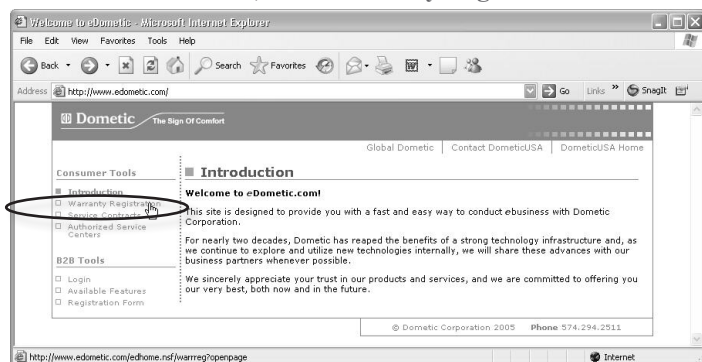
[www.edometric.com](http://www.edometric.com)

Timely registration will allow for enhanced communication and service under the terms of the warranty, see APPENDIX E - DOMETIC WARRANTY.

To register the appliance, fill in the pre-printed registration card on the last page of this manual or register on-line at the Dometic website [www.edometric.com](http://www.edometric.com).

TO REGISTER ON-LINE, FOLLOW THESE STEPS:

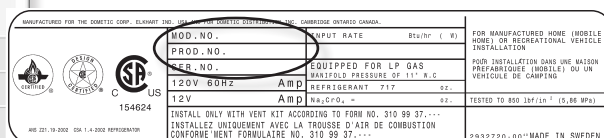
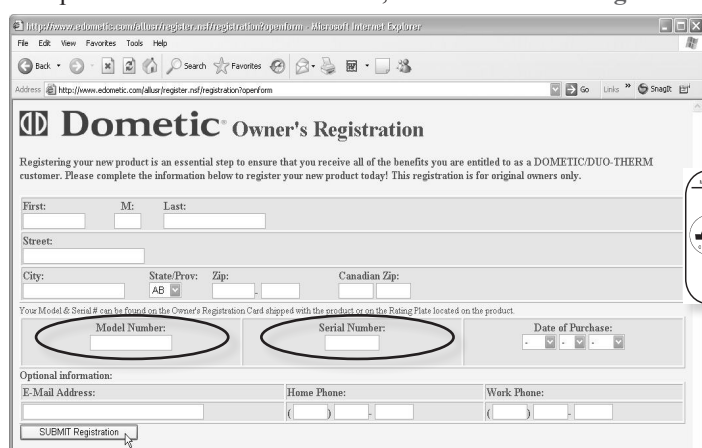
-  1. At [www.edometric.com](http://www.edometric.com), click **Warranty Registration**.



2. Click **Register your new Dometic product here**.



3. Complete the information and then, click the **Submit Registration** button.



The model number (e.g. RM3762) and serial number (e.g. 012 34567) are stated on the data label in the refrigerator compartment.

# APPENDIX E - DOMETIC WARRANTY

Congratulations, and Thank You for purchasing the industry's best built and best backed RV Refrigerator. Below you will find important warranty and maintenance information on Dometic's exclusive two (2) year warranty. Please take a few moments and familiarize yourself with the program. We at Dometic appreciate your business and are confident that you will have many years of trouble-free RV enjoyment.

## LIMITED TWO-YEAR WARRANTY DOMETIC REFRIGERATORS

1. This warranty is made only to the first purchaser (herein after referred to as the "Original Purchaser") who acquires the product for his own use and is installed and operated within the continental United States and Canada.
2. This warranty will be in effect for two years on parts and freight and two years on labor from the date of purchase by the Original Purchaser. It is suggested that the original purchaser retain a copy of the dated bill of sale as evidence of the date of purchase.
3. This warranty covers only specified parts, which shall be free from defects in material and workmanship under normal use. This warranty does not cover conditions unrelated to the material and workmanship of the product. Such unrelated conditions include, but are not limited to: (a) damage not reported within the first 7 days of ownership; (b) faulty installation or installation that does not comply with RVIA standards, and any damage resulting from such; (c) the need for normal maintenance and any damage resulting from the failure to provide such maintenance; (d) failure to follow Sellers instructions for use of product; (e) any accident to or misuse of any part of this product and any alteration by anyone other than the Seller or its authorized representative; (f) any non-Dometic parts that are installed as replacement parts will void any warranty (implied or written); (g) blow out conditions; (h) radio frequency interference and electromagnetic interference; (i) 12V system chassis ground decay and corrosion; (j) puncture of foam cabinet or vacuum insulated panels after acknowledged receipt; (k) animal or insect infiltration which damages unit or inhibits performance; (l) abuse or misuse of electrical components.
4. The specified parts covered by this warranty are as follows: Major components (cooling unit, LP gas valve, burner, burner housing, electronic display, electronic module, evaporator fins, foam integrity, frame, thermister, spark probe, ignition wire, ice maker compressor, second absorption loop, display escutcheon, lower toe plate, humidity switch, frame heater mullion, ice maker mullion) are covered for parts and freight for two years and labor for two years from date of purchase. All other components that fail must be reported within the first 90 days of ownership in order to receive coverage of parts, freight and labor under warranty.
5. This warranty requires the Original Purchaser to provide preventative maintenance on a yearly basis, starting at the anniversary of his date of purchase. The Original Purchaser must keep a record of the preventative maintenance to keep the warranty in effect. Failure of the Original Purchaser in providing this annual maintenance may void the warranty. The preventative maintenance must be performed at a Dometic Authorized Service Center/Dealer. The preventative maintenance required is an inspection, cleaning and full diagnostics performed on the entire electronic system, burner assembly, wiring and cooling unit. A copy of the receipt covering the main tenance checks must accompany the warranty claim during the second year of ownership. The cost of this preventative maintenance is the Original Purchaser's responsibility and should take about one hour.
6. In order to obtain the benefits of this warranty, the original purchaser must return the product which is found defective to the Seller named below or to a Dometic Authorized Service Center during the period that this warranty is in effect. The original purchaser is responsible for all charges incurred in delivery of the product to the Seller or Dometic Authorized Service Center, and in pick up after the warranty service has been completed. To obtain the location of the nearest Authorized Service Center, please call 1-800-544-4881 or in Canada call 1-519-653-4390.
7. Any item returned in the manner described in paragraph 6 will be examined by the Seller or the Authorized Dometic Service Center. If it is found that the returned item was defective in material and workmanship, the Seller or the Authorized Dometic Service Center will repair the product per the terms outlined in paragraph 4. **CONFIRM THE SERVICE AGENCY IS AN AUTHORIZED DOMETIC SERVICE CENTER. DO NOT PAY THE SERVICE AGENCY FOR WARRANTY REPAIRS. SUCH PAYMENTS WILL NOT BE REIMBURSED.**
8. The Seller does not authorize any person or company to create any warranty obligations or liability on their behalf. This warranty is not extended by the length of time which you are deprived of the use of the product. Repairs and replacement parts provided under the terms of this warranty shall carry only the non-expired portion of this warranty.
9. In no event shall either seller be liable for incidental or consequential damages. This includes any damage to another product or products resulting from such a defect. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply.
10. Any implied warranty, including the implied warranty of merchantability and fitness for any purpose, is limited to the duration of this limited warranty. Some states do not allow limitations on how long an implied warranty can last, so the above limitation may not apply.
11. **THIS WARRANTY GIVE SPECIFIC LEGAL RIGHTS, YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.** No action to enforce this warranty shall be commenced later than ninety (90) days after the expiration of the warranty period. Claims must be submitted in writing to the Dometic Warranty Department for arbitration.
12. All products (except those specifically built for commercial use) are warranted only when installed on vehicles built to R.V.I.A and C.R.V.A, Z-240 Standards.
13. The Seller reserves the right to change the design of any product without notice and with no obligation to make corresponding changes in products previously manufactured.

**DOMETIC, LLC**  
Warranty Department  
2320 Industrial Parkway  
Elkhart, IN 46516  
Phone: 574-294-2511  
Fax: 574-389-3975

# APPENDIX F - MAINTENANCE SCHEDULE

## REFRIGERATOR OWNER MAINTENANCE YEARLY RECORD

Customer Name: \_\_\_\_\_ Model No.: \_\_\_\_\_ Date of Purchase: \_\_\_\_\_  
 Address: \_\_\_\_\_ Serial No.: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_  
 Phone: \_\_\_\_\_

### FIRST YEAR

Date: \_\_\_\_\_  
 Dealership: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_  
 State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Technician: \_\_\_\_\_

Cleaned Burner Assembly: Yes / No  
 Cleaned/Check All Terminals Connections: Yes / No  
 Cleaned/Inspect All Ground Connections: Yes / No  
 Inspect and Test Door Seals: Yes / No  
 Inspect and Tighten LP Lines: Yes / No  
 Power Ventilator Installed: Yes / No  
 \*Gas Safety Shutdown in 45 seconds: Yes / No

|                      | ACTUAL | SPEC. RANGE         |
|----------------------|--------|---------------------|
| Electrode Gap        | _____  | 3/16"               |
| Thermister Reading   | _____  | 7-10,000 ohms @ 32° |
| *D/C Voltage         | _____  | 9.5 to 15 volts D/C |
| *A/C Voltage         | _____  | 120 Volts ± 10%     |
| Thermocouple Reading | _____  | 25-35 Millivolts    |
| *Delay Between Modes | _____  | Approx. 5 seconds   |

\* Use PAL RV Diagnostic Tool for these tests.

### ICEMAKER MODELS

Inspect Water Valve and All Connections: Yes / No  
 Inspect Heat Tape Switch for Proper  
 Operation: Yes / No

### SECOND YEAR

Date: \_\_\_\_\_  
 Dealership: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_  
 State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Technician: \_\_\_\_\_

Cleaned Burner Assembly: Yes / No  
 Cleaned/Check All Terminals Connections: Yes / No  
 Cleaned/Inspect All Ground Connections: Yes / No  
 Inspect and Test Door Seals: Yes / No  
 Inspect and Tighten LP Lines: Yes / No  
 Power Ventilator Installed: Yes / No  
 \*Gas Safety Shutdown in 45 seconds: Yes / No

|                      | ACTUAL | SPEC. RANGE         |
|----------------------|--------|---------------------|
| Electrode Gap        | _____  | 3/16"               |
| Thermister Reading   | _____  | 7-10,000 ohms @ 32° |
| *D/C Voltage         | _____  | 9.5 to 15 volts D/C |
| *A/C Voltage         | _____  | 120 Volts ± 10%     |
| Thermocouple Reading | _____  | 25-35 Millivolts    |
| *Delay Between Modes | _____  | Approx. 5 seconds   |

\* Use PAL RV Diagnostic Tool for these tests.

### ICEMAKER MODELS

Inspect Water Valve and All Connections: Yes / No  
 Inspect Heat Tape Switch for Proper  
 Operation: Yes / No



# PROTECTION FOR YOUR NEW INVESTMENT

We truly appreciate that you have chosen to purchase a Dometic product for your recreational vehicle and we want to help you protect this wise investment.

We at Dometic back our products with one of the most comprehensive warranties in the industry. Complete the registration card and mail to us or register your Product on-line at [www.edometic.com](http://www.edometic.com).



TIME-DATED  
MATERIAL  
Please Process  
Promptly!

Tape  
here

FIRST  
CLASS  
POSTAGE  
REQUIRED

 **Dometic**

Dometic Processing Center  
2320 Industrial Parkway  
Elkhart, IN 46516

Tape  
here

■ **WARRANTY VERIFICATION**

Your prompt registration records your right to protection under the terms and conditions of your warranty.

■ **FACTORY COMMUNICATION**

Returning your card of registering on-line guarantees you will receive product information and specials. Leaving your email address below will allow us to communicate with you quickly and efficiently.

■ **OWNER CONFIRMATION**

Your completed Owner's registration card serves as confirmation of ownership in the event of product damage or theft.

■ **2 PLUS 3 SERVICE CONTRACT**

Returning the card below or registering on-line assures you of an invitation to take advantage of an Optional 2 Plus 3 Full Service Contract which allows you to add up to 3 years of additional warranty coverage.



Return the card within **10** days to ensure your:

- WARRANTY VERIFICATION
- FACTORY COMMUNICATION
- OWNER CONFIRMATION
- 2 PLUS 3 SERVICE CONTRACT

*Fold here. Close with tape.*

**IMPORTANT:**  
Return Within  
10 days



**Owner's Registration Card**

Registering your product is an essential step to ensure that you receive all the benefits you are entitled to as a DOMETIC customer. Complete the information below and mail to us or register on-line at [www.edometic.com](http://www.edometic.com).

**Be sure to include your email address so that we can communicate with you quickly and efficiently. Your address will remain confidential and will not be distribute to third parties.**

Name

Address

City  Stat/Prov.

Date of Purchase    Zip/Postal Code        
MO DAY YEAR

Email Address

REFRIGERATOR MODEL NUMBER

SERIAL NUMBER

**TO THE INSTALLER**  
**PLEASE AFFIX THESE INSTRUCTIONS**  
**TO THE REFRIGERATOR**

**TO THE CONSUMER**  
**PLEASE RETAIN THESE INSTRUCTIONS**  
**FOR FUTURE REFERENCE**