Dometic

RM 2603 RM 2803

GAS/ELECTRIC FREEDOM 2-WAY

Automatic Energy Selector

Service Office
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Cambridge, Ontario
CANADA N3H 2N7

REFRIGERATOR FOR LP GAS AND ELECTRIC OPERATION EQUIPPED WITH AUTOMATIC ENERGY SELECTOR

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APPROVED

COMPLIES WITH NATIONAL SAFETY STANDARDS · DESIGN CERTIFIED · AMERICAN GAS ASSOCIATION

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 store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance.

INSTALLATION AND OPERATING INSTRUCTIONS

MODELS
RM2603
RM2803

RECORD THIS INFORMATION FOR FUTURE REFERENCE:

MODEL NUMBER _____
SERIAL NUMBER _____
DATE PURCHASED _____
PLACE OF PURCHASE _____

Form No. 3101320.004 3/88

3. INSTALLATION - General Requirements

This appliance is designed for storage of foods and storage of frozen foods and making ice.

The refrigerators outlined herein have been sign certified under ANSI Z 21.19a 1984, Refrigerators by the American Gas Association for installation in a mobile home or recreational vehicle and are approved by the Canadian Gas Association.

The certifications are, however, contingent on the installation being made in accordance with the following instructions as applicable.

The installation must in the USA conform with:

1. National Fuel Gas Code ANSI Z223.1-1984
2. Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 32-80
3. Recreational Vehicles ANSI/NFPA No. 501C-1987.

The unit must be electrically grounded in accordance with the National Electric Code ANSI/NFPA No. 70-1984 when installed if an external alternating current electrical source is utilized.

4. Any applicable local code.

The refrigerator should be installed on a firm base and must be level in relation to the R.V. so that when the R.V. is level, the refrigerator is level; see Paragraph 12.

The appliance must not be installed directly on carpeting. Carpeting must be protected by a metal or wood panel beneath the appliance which extends at least the full width and depth of the appliance.

The installation must in Canada conform with:

1. The current CGA B 149 Gas Installation Codes
2. Current CSA Standard Z 240.4 Gas-Equipped Recreational Vehicles and Mobile Housing
3. Any applicable local code.

The unit must be electrically grounded in accordance with the current **Canadian Electrical Code C22 Parts 1 and 2.**

4. METHOD OF INSTALLATION

The method of installation is shown below in FIG. 3. It is essential that all maximum or minimum dimensions are strictly maintained as the performance of the refrigerator is dependent on an adequate flow of air over the rear of the refrigerator.

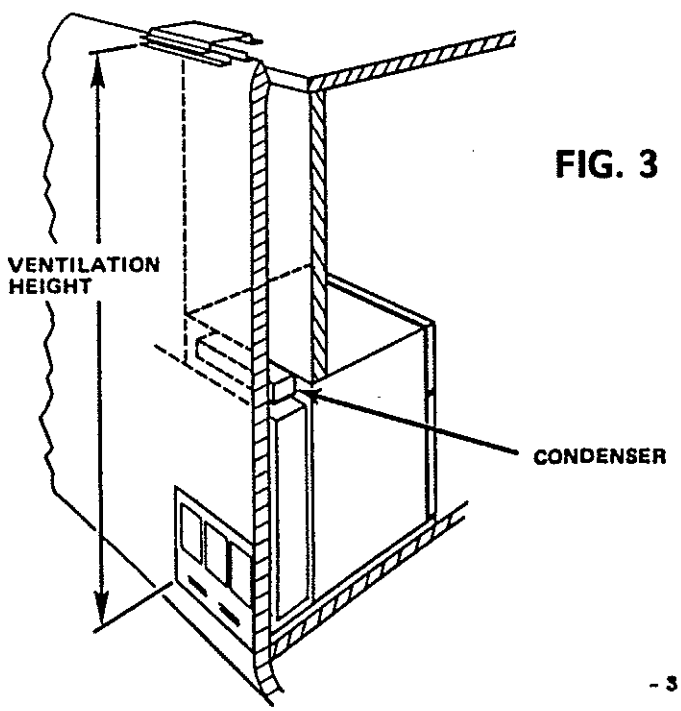


FIG. 3

5. VENTILATION

VENTILATION HEIGHTS: **Refer to FIG. 3**

Installation with roof vent and lower side vent Refrigerator	Minimum ventilation heights In	
	Inches	mm
RM2603	54	1372
RM2803	60	1524

The installation shall 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 shall have a minimum dimension of not less than 1/4 inch.

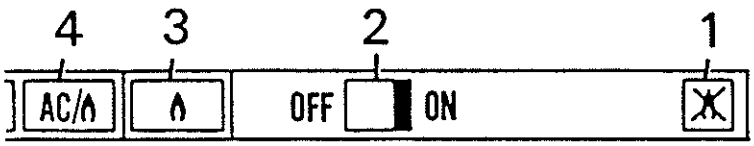
Proper installation requires one lower fresh air intake and one upper exhaust vent. The ventilation kits shown in this instruction booklet have been certified for use with the refrigerator models listed in the Table. For certified vent system kits, see separate list. The ventilation kits must be installed and used without modification. An opening toward the outside at floor level in the refrigerator compartment must be provided for ventilation of heavier-than-air fuel gases. The lower vent of the recommended kits is provided with proper sized openings. The flow of combustion and ventilating air must not be obstructed.

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.

11. TEST OF THE GAS SAFETY SHUT-OFF

The gas safety shut-off device must be tested after the refrigerator is placed in operation.

A. Start the refrigerator according to the instructions without connecting to 120 Volt power.
B. Check that the gas flame is lit. The green push-button lamp should now be lit. [A]
C. Close the manual gas valve on the back of the refrigerator.
D. Wait four minutes, the orange lamp [X] should now be lit and the green lamp goes out and the flame is extinguished.
E. Open the manual valve without turning the main switch. Test that no gas comes through the jet.



1. Orange, continuous light indicating gas ignitio failure, = no gas.
2. Main switch.
3. Push-button, green, give gas operation only.
4. Push-button, green, giving energy selection between AC and gas. No 12 V power selectio possible.

SECTION B. OPERATING INSTRUCTIONS

The area in the vicinity of the refrigerator must be kept clear and free from combustible materials, gasoline and other flammable vapors and liquids.

12. LEVELING

Before you start your refrigerator, make sure it is level. In an absorption refrigerant system, ammonia is liquified in the finned condenser coil at the top rear of the refrigerator. The liquid ammonia flows into the evaporator where it is exposed to a circulating flow of hydrogen gas, which causes the ammonia to evaporate, creating a cold condenser in the freezer.

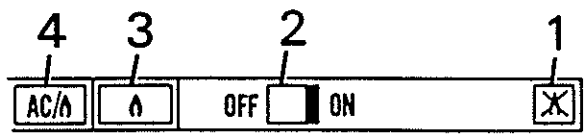
The tubing in the evaporator section is sloped to provide a continuous movement of liquid ammonia downward by gravity. If the refrigerator is operated in an out-of-level state, liquid ammonia can be trapped in low areas of the evaporator tubing. This will slow the circulation of hydrogen and ammonia gases. In severe off-level conditions, a complete liquid blockage can occur, resulting in the loss of cooling.

When the coach is stationary for a period, it must be level so that the refrigerator can operate properly. When the coach is parked, it should be leveled to the point of human comfort.

When the vehicle is moving, 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.

13. OPERATION

Before starting the refrigerator, check the gas valve at the supply tank, and the one at the rear of the refrigerator. Make sure both are turned on.



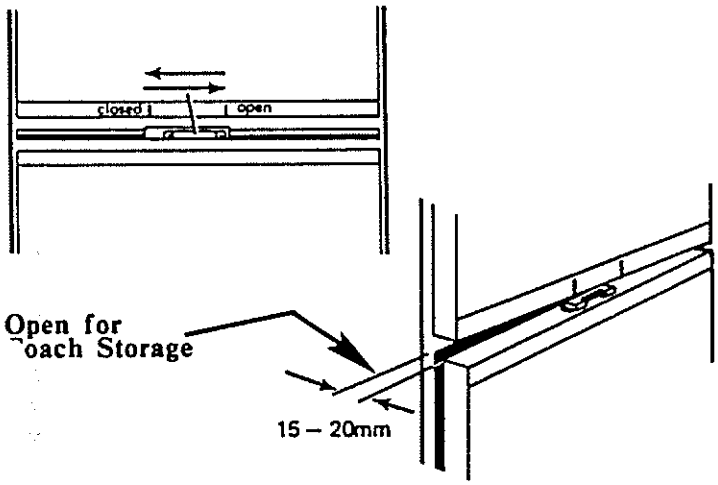
1. Orange, continuous light indicating gas ignition failure, = no gas.
2. Main switch.
3. Push-button, green, give gas operation only.
4. Push-button, green, giving energy selection between AC and gas. No 12 V power selection possible.

A. To start the refrigerator, set switch "2" to ON. Lamp"4" should now be green.
B. Turn the thermostat knob inside the cabinet to the mid-range for normal cooling.
C. To shut off the refrigerator, set switch "2" to the OFF position.

18. TO SHUT OFF THE REFRIGERATOR

To shut off the refrigerator, turn the know "2" OFF position. The travel latch has two alternate positions. The first holds the door tightly closed for use when traveling and the second position keeps the door slightly open which is useful when the cabinet is out of use, so fresh air can circulate inside.

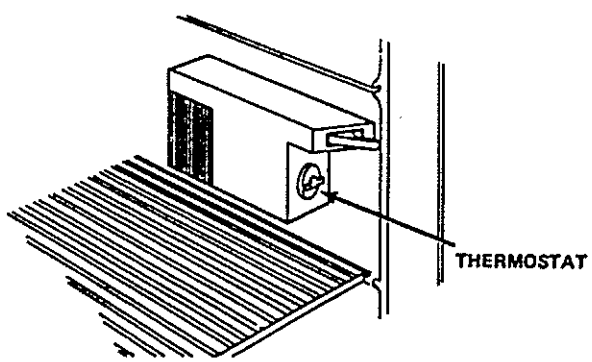
When not in use, the refrigerator should be emptied, cleaned and dried and the door left slightly open (by using the alternate position of the travel catch) so that fresh air can circulate inside. The ice tray should also be emptied, dried, and left handy on a shelf in the cabinet.



TRAVEL LATCH FOR 2–DOOR REFRIGERATOR

19. REGULATION OF TEMPERATURE

With the thermostat knob set at mid-range the cabinet will automatically maintain a suitable temperature for ordinary food storage. Usually, no further adjustment will be needed. In hot weather or when more cooling is required, turn the knob to a cooler setting. If less cooling is required, turn the knob to a warmer setting.



20. STORING FOOD IN THE REFRIGERATOR

This refrigerator is designed for the storage of fresh foods, the storage of frozen foods and making ice.

To prevent drying out and the transfer of flavors from one food to another, always store food in covered dishes, plastic bags or wrapped in foil or waxed paper. **NEVER PUT HOT FOOD IN THE REFRIGERATOR.**

Avoid using large dishes and do not stack food or food containers too closely as this interferes with the circulation of cold air within the cabinet.

Place packets of frozen food in the lower part of the frozen food storage compartment, soon after purchase. If frozen foods are allowed to thaw, do not re-freeze, but consume or discard them within 24 hours.

21. ICE MAKING

Fill the ice tray with water to within 1/8" from the top, and place it on the upper shelf in the frozen food compartment. When ice has formed, the ice tray can be released from the shelf by lifting one corner. DO NOT use a lever. Leave any unused ice in the divider, refill empty spaces with water and replace the tray.

DO NOT attempt to make ice while traveling as the water may spill out of the tray.

Ice will be made more quickly when the thermostat knob is set on the appropriate setting of HIGH or MAX. When ice has formed, be sure to turn back the knob to its normal setting otherwise the food in the cabinet may become too cold.

NOTE:
It is not good practice to attempt to make ice until the cabinet has cooled down as this may delay the usual time taken for the cabinet to reach its working temperature.

22. DEFROSTING

Frost will gradually form on the cooling fins and in the frozen food compartment. It is a mistake to assume that an accumulation of frost makes a colder cabinet.

For the most efficient and economical operation, defrost the refrigerator regularly - about every ten to fourteen days, depending on the particular conditions of use.

SECTION C. MAINTENANCE

24. CLEANING

lean the refrigerator thoroughly as necessary, particularly when it is to be out of use for any period of time.

First, defrost the cabinet as described in Section 21. Then clean the shelves, cabinet exterior and door with a clean cloth wrung-out in warm water to which a little mild liquid detergent has been added. Wipe with a clean cloth and dry thoroughly.

DO NOT wash any plastic parts in water that is more than lukewarm and DO NOT expose them to dry heat.

Wipe the outside of the cabinet with a clean, damp cloth and polish with a clean, dry duster.

NEVER USE STRONG CHEMICALS OR ABRASIVE CLEANING MATERIALS ON ANY PART OF THE REFRIGERATOR.

25. ELECTRICAL

The refrigerator is equipped for electric operation. This unit has both 120 volt AC and 12 volt DC capabilities.

There is an electric cartridge heater mounted in a pocket of the boiler system. To replace the heater, first check that the wall plug is disconnected. Also make sure the 12 volt leads are disconnected.

1. Disconnect the heater connector.
2. With a pair of pliers, unfold the lug holding the lid of the boiler casing and open the lid.
3. Remove some insulation to expose the heating element.
4. Turn and lift heater out of its pocket.
5. Fit the new heater into the pocket. Be sure it is the proper type and voltage.
6. Connect the leads and put protective covering around the leads.
7. Reset the insulation and replace the boiler box cover.

26. GAS EQUIPMENT

Flue Top and Baffle

The flue baffle is suspended from the top and must be in position in the flue tube of the cooling unit.

Flame Failure Safety Device

The head of the thermocouple should reach over two slots of the burner.

To replace thermocouple, proceed as follows:

1. Unscrew plug and retainer, pull thermocouple straight out.
2. Bend the new thermocouple to the same shape as the old one.
3. Reassemble in reverse order. Make sure the thermocouple tip is positioned properly over the burner.
4. Mount the retainer. The plug must be properly tightened to the valve housing to ensure good contact between the thermocouple and the magnetic coil within the housing.

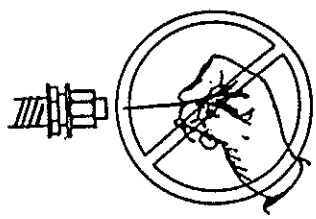
27. BURNER & BURNER JET

The color of the flame should be clear blue over the slots of the burner.

Once or twice a year, depending upon usage, it might be necessary to clean and adjust the burner assembly. This can be done as follows:

SHUT OFF GAS SUPPLY AND 12 VOLT/120VOLT POWER

1. Loosen screw and remove cover plate for burner housing.
2. Disconnect lighter cable from electrode.
3. Loosen burner fixing screw and withdraw burner.
4. Clean burner tube with a brush. Blow with compressed air.
5. Unscrew jet and clean with alcohol. Blow through jet, never use a needle or similar object.



6. Reassemble in reverse order.
7. Be careful that the end of the burner fits into the slot on the bracket. The slots of the burner must be centrally located under the boiler tube.

28. THE ELECTRODE

For a proper ignition function, it is necessary to keep the electrode insulation dry and free from dirt. The gap between burner tube and electrode should be approximately 3/16 inch.

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24. CLEANING

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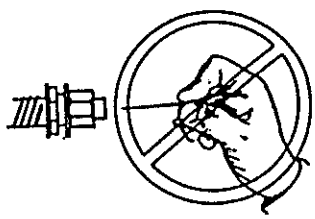

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