# **Dometic**

# ABSORPTION REFRIGERATORS FOR LP-GAS AND ELECTRIC OPERATION

## **Models**

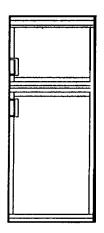
RM2410 RM2610 RM2510 RM2810

SERVICE OFFICE The Dometic Corp. 509 so. Poplar st. LaGrange, IN 46761

CANADA Dcmetic Distribution 866 Langs Drive Cambridge, Ontario CANADA N3H 2N7







Page
1-8
9-11
12-14

#### **WARNING**

This unit must be serviced by an authorized serviceman. Modification of the appliance can be extremely hazardous and could lead to serious injury or death.

#### **AVIS**

CET APPAREIL DOIT ETREREPARE SEULEMENT PAR UN REPARATEUR AUTORISE. MODIFICATION DE L'APPAREIL POURRAIT ETRE EXTREMEMENT DANGEREUSE, ET POURRAIT CAUSER MAL OU MORT.

### **INSTALLATION & OPERATING INSTRUCTIONS**

M O D E L S RM2410 RM2510 RM2610 RM2810

#### 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.

#### FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance. IMPORTANT INSTRUCTIONS
READ CAREFULLY

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## SECTION A. INSTALLATION

#### 1. GENERAL INSTRUCTIONS

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

The refrigerators outlined herein have been design certified by A.G.A. under the ANSI 221.19 Refrigerator Standard 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.

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

- 1. National Fuel Gas Code ANSI 2223.1 -(latest edition)
- 2. Manufactured Home Construction and Safety Standard, Tile 24 CFR, Part 3280
- 3. Recreational Vehicles ANSI Al 19.2-(latest edition).

The unit must be electrically grounded in accordance with the National Electric Code ANSI/NFPA 70-(latest edition) when installed if an external alternating current electrical source is utilized.

4. Any applicable local code.



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

- 1. Current CGA B 149 Gas Installation Codes
- 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 CANADIAN ELECTRICAL CODE C 22 Parts 1 and 2.

#### 2. VENTILATION

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 manual 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 size openings. The flow of combustion and ventilation 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.

#### 3. CERTIFIED INSTALLATION

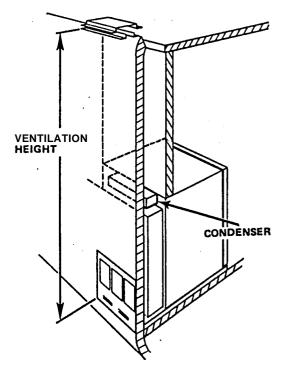
Certified installations require one roof vent and one lower side vent.

For Certified vent system kits, see separate list. For further information, contact your dealer or distributor.

#### 4. METHODS OF INSTALLATION

The methods of installation are shown in FIG. 1. It is essential that all maximum or minimum dimensions are strictly maintained as the performance of the refrigerator is dependent on adequate flow of air over the rear of the refrigerator.

FIG. 1



#### 5. VENTILATION HEIGHTS

Refer to FIG. 1, Page 1.

Installation with roof vent and lower side vent	Minimum ventilation heights In		
REFRIGERATOR	inches	mm	
RM2410 RM2510 RM2610 RM2810	34 42 58 82	884 lo87 1422 1575	

#### 6. CLEARANCES

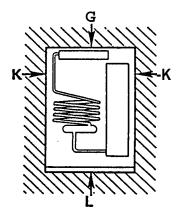
Minimum clearances in inches to combustible materials are:

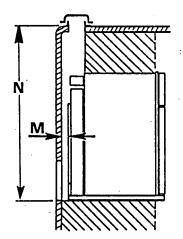
G: Top 0
K: Side 0
L: Bottom 0
M: Rear 1/2
N: Ventilation Height

NOTE: Clearance 'M' is between the rearmost part of the refrigerator and the wall behind the refrigerator.

NOTE: Clearance 'N' is the distance between the bottom of the lower vent to the roof material. For ventilation height, refer to Section *A. Installation, Item 5. Ventilation Heights.* See FIG. 2.

FIG. 2

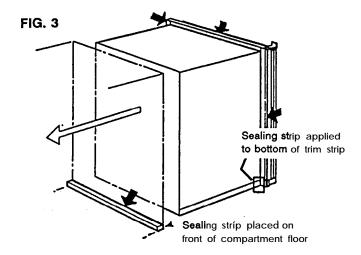




# 7. INSTALLING REFRIGERATOR IN ENCLOSURE

NOTE: 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 the full width and depth of the appliance.

The refrigerator must be installed in a substantial enclosure and must be level. When installing the refrigerator in the enclosure, be certain there is a complete seal between the front frame of the refrigerator and the top, sides and bottom of 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 and apply a second sealing strip to the bottom of the trim strip on the front base as shown in FIG. 3. The sealing should provide complete isolation of the appliance's combustion system from the vehicle interior.

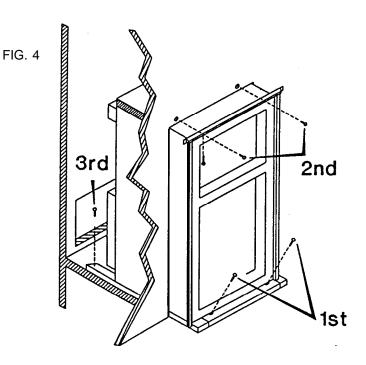


Be careful not to damage the sealing strip applied to the floor of the enclosure when the refrigerator is put in place.

The refrigerator is secured in the enclosure with six screws and they must be installed in the following order:

First two screws installed on front base, Second two screws installed in the top frame; Third two screws installed in the rear base. Failure to follow the sequence in securing refrigerator in enclosure can cause leakage between the frame and cabinet. The plastic caps are snapped in the front base to cover the screw heads and the decoration strip is secured to the top frame. (See FIG. 4, Page 3).

Any space between the counter, storage area or ceiling and top of the refrigerator 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.



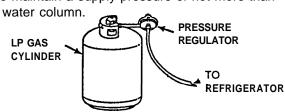
The dimensions shown in the Table below will give you adequate space for service and proper installation. See FIG. 5.

#### 8. GAS CONNECTION

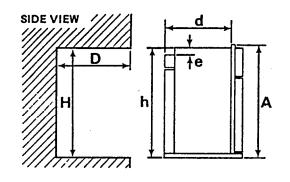
Hook up to the gas supply line accomplished at the manual gas shutoff valve, which is furnished with a 3/8" SAE (UNF 5/8" - 18) male flare connection. All completed connections should be checked for leaks with a non-corrosive leak detector. (See FIG. 6 & 6A)

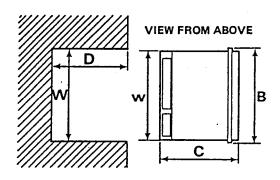


The gas supply system must incorporate a pressure regulator to maintain a supply pressure of not more than 11 inches water column.

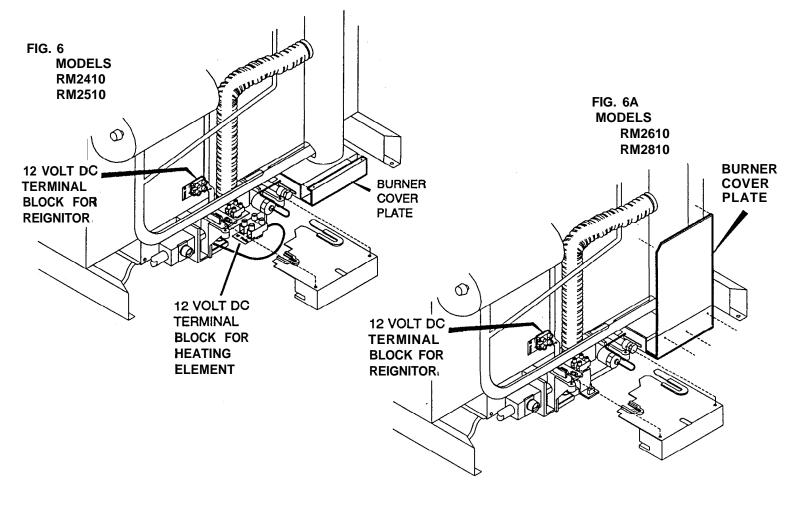








Refrigerator Model	Overall dimensions			Installation dimensions		Recess dimensions			Distance between top of condenser	
	Height A	Width B	Depth C	Height H	Width W	Depth D	Height H	Width W	Depth D	and top of refrigerator E
inch	33-1/2	22-53/64	24-1/2	32-7/32	21-1 7/32	23-19/32	32-7/16	21-1 3/1 6	24-3/32	1-1/4
RM2410 mm	839	580	622.5	618	547	599	823	554	612	32
inch RM2510	40-29/32	22-53/64	24-1/2	40-3/32	21-17/32	23-19/32	40-5/1 6	21-13/16	24-3/32	1-1/4
mm	1039	560	622.5	1018	547	599	1023	554	612	32
inch RM2610	52-1/8	22-53/64	24-1/2	51-5/16	21-17/32	23-19/32	51-1/2	21-13/16	24-3/32	1-1/8
mm	1324	580	622.5	1303	547	599	1308	554	612	29
inch RM2810	58-1/32	24-23/32	24-1/2	57-7/32	23-7/1 6	23-1 9/32	57-7/16	23-1 1/16	24-31/32	1-1/8
mm	1474	628	622.5	1453	595	599	1458	601	612	29



When testing the gas supply system at test pressures in excess of 1/2 psig the refrigerator and its individual shutoff valve must be disconnected from the gas supply piping system.

When testing the gas supply system at pressures less than or equal to 1/2 psig the appliance must be isolated from the gas supply piping by closing its individual manual shutoff valve.

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

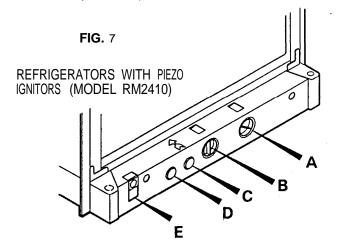
#### 9. GAS SAFETY SHUTOFF

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

To test the gas safety shutoff, proceed as follows:

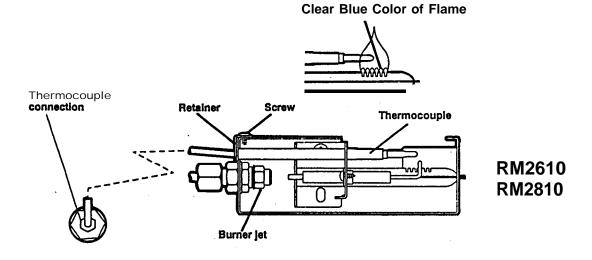
- Refrigerator with Piezo Ignitor (RM2410)
- A. Start the refrigerator according to the instructions for gas operation with piezo ignitor. See Section. B. Operating Instructions, *Item* 3. *Gas Operation*.

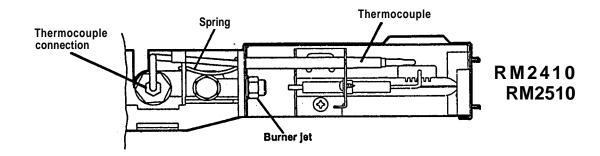
- B. Check that the gas flame is lit. This can be observed through reflector 'E'. (See FIG. 7).
- C. Close the gas valve by turning the knob 'A' back to 'OFF' position. (See FIG. 7).



- D. Wait one (1) minute.
- E. Remove burner cover plate. (See FIG. 6A). Open the gas valve by turning knob 'A' to position 'GAS' without pushing the buttons 'C' and 'D'. (See FIG. 7). Apply commercial leak check bubble solution to the burner jet. (See FIG. 8, Page 5). Be careful not to damage the burner jet.







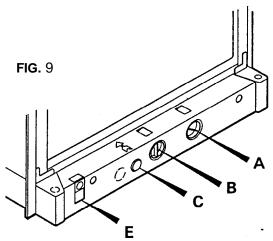
- F. No bubble should appear at the opening of the burner jet. Bubbles indicate a defective gas safety shutoff and service is required.
- G. If no bubbles were present at the burner jet, rinse the orifice with water. Replace the burner cover plate. Start the refrigerator by following the instructions for gas operation with piezo ignitor. See Section B. Operating Instructions, Item 3, Gas Operation.

Normal gas operation should occur. Allow the burner to operate for a minimum of five (5) minutes.

# WARNING DO NOT USE A FLAME TO CHECK FOR GAS LEAKS.

## ■ Refrigerators with Automatic Reignitors (RM2510, RM2610 & RM2810)

- A. Start the refrigerator according to the instructions for Gas Operation with Automatic Reignitor. See Section B. Operation Instructions, Item 3, Gas Operation.
- B. Check that the gas flame is lit and the lamp 'E' is out. (See FIG. 9).

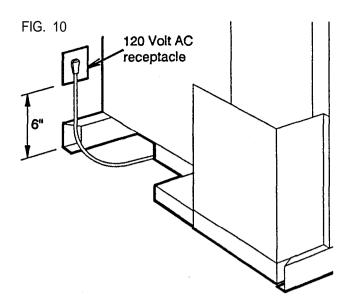


- C. Close the gas vatve by turning the knob 'A'. back to the 'OFF' position. (See FIG. 9).
- D. Wait one minute, then disconnect the 12 volt DC power. (See FIG. 6 and 6A).
- E. Remove burner cover plate. (See FIG. 6 and 6A). Open the gas valve by turning knob 'A' to the 'GAS' position without pushing button 'C'. (See FIG. 9). The reignitor should not be sparking. Apply commercial leak-check bubble solution to the burner jet. (See FIG. 8). Be careful not to damage burner jet.
- F. No bubbles should appear at the opening of the burner jet. Bubbles indicate a defective gas safety shutoff and service is required.
- G. If no bubbles were present at the burner jet, rinse the orifice with water. Replace the burner cover plate. Reconnect the 12 volt DC power supply to the refrigerator. See Section A. Installation, Item 11, 12 Volt DC Connection. Start the refrigerator by following the instructions for gas operation with automatic reignitor. Normal gas operation should now return. Allow the burner to operate a minimum of five minutes.



#### 10. 120 Volt AC Connection

The refrigerator is equipped with a three prong (grounded) plug for protection against shock hazards and should be plugged directly into a properly grounded three-prong receptacle. DO NOT cut off or remove the grounding prong from this plug. The free length of the cord is 2 feet and therefore recommended that the receptacle be located to the left side of the refrigerator (viewed from the rear) and approximately 6 inches from the floor. (See FIG. 10). This allows easy accessibility through the vent door. The cord should be routed to avoid contacting the burner cover, flue cover, or any other components that could damage the cord insulation.



#### 11. 12 VOLT DC CONNECTION

#### ■ P-WAY REFRIGERATOR MODELS

On 2-way refrigerator Models RM2510, RM2610 and RM2810, 12 volts DC must be connected to the refrigerator to provide power for operation of the automatic reignitor. On these units there is one terminal block marked 12 volts, located on the back of the refrigerator cabinet. (See FIG. 6 & 6A).

The reignitor must be connected to the battery circuit with a maximum fuse size of 3 amps and a minimum wire size of 14 gauge.

## ■ 3-WAY REFRIGERATOR MODELS WITH AUTOMATIC REIGNITOR

On 3-way refrigerator models with automatic reignitors, there are two terminal blocks for 12 volt DC. The 12 volt DC terminal block on the back of the refrigerator cabinet is for the reignitor; and the 12 volt DC terminal block located under a plastic cover on the back of the refrigerator is for the refrigerator heater. See FIG. 6 and 6A).

The refrigerator must be connected by a separate circuit to the battery with two wires of adequate capacity to avoid voltage drop when the 12 volt DC heater is being operated. The wire gauge should be chosen with consideration to the length, refer to the above Table for wire size. The 12 volt DC circuit must be fused; refer to the Table, on Page 7, for fuse size.

NOTE: The refrigerator Model RM2410 does not have an automatic reignitor. The 3-way model has only one 12 volt DC terminal block located under the plastic cover on the back of the refrigerator.

DO NOT use the body or chassis of the vehicle as a substitute for either of the two conductors. <u>DO NOT</u> connect any other electrical equipment or lighting to the refrigerator circuit

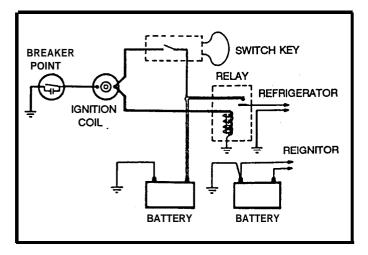
MAXIMUM TOTAL CONDUCTOR WIRE LENGTH IN FEET/METERS						
AWG	RM2410	RM2510	RM2610	RM2810		
14	9	7 ft.	6.5 tt	6.5 n		
	2.7 m	2.1 m	2 m	2 m		
12	15 ft.	12 ft.	10.5 N	10.5 ft.		
	4.6 m	3.6 m	3.2 m	3.2 m		
10	25 ft.	19 ft.	17 ft.	17 ft.		
	7.6 m	5.8 m	5.1 m	5.1 m		
6	40 ft.	31 n	27 n	27 ft.		
	12.2 m	9.5 m	8.1 m	8.1 m		
Maximum Fuse Size	15 amps	20 amps	25 amps	25 amps		

Refrigerator Circuit Maximum Fuse / Minimum Wire Size 3 amps / 14AWG

#### **CAUTION**

<u>DO NOT</u> operate the refrigerator on 12 volt DC when the vehicle is parked. The amperage draw of the 12 volt DC heating element can discharge a battery in a very short time. The installation of a 12 volt DC operated refrigerator requires a relay to be installed on the tow vehicle or in the caravan. The relay will automatically shut off the 12 voit DC power to the refrigerator when the ignition is turned off. (See FIG. 11).

FIG. 11



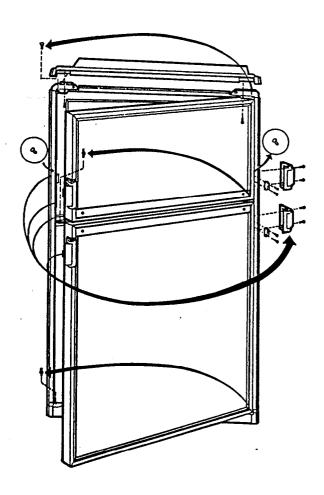
# 12. CHANGING DOOR HINGES FROM ONE SIDE TO THE OTHER

(Refer to FIG. 12) Open the top door (or door on single door models) and remove the two screws holding the top decoration. The screws are accessible from beneath.

Remove the top hinge pin and lift out the lower door. Remove center hinge pin (on two door models) and lift out the lower door. Unscrew the bottom hinge pin. Remove the plastic cap from the opposite lower hinge and place it in the hole just left by the lower hinge pin. Screw the lower hinge pin in the hole from which the plastic cap was removed.

Before replacing the door(s) on the refrigerator, remove the catch(es) and move it (them) to the other side of the cabinet. Plastic caps for the empty holes are in the pans bag. Remount the door(s) and the hinge pin(s) in the reverse order of their removal. Unscrew the handle(s) and re-fasten it (them) on the opposite side of the door. insert the plastic caps (from the pans bag) into the holes left open on the door(s). Before the top decoration is refitted, check that the door closes easily and the gasket seals well on all sides.

FIG. 12



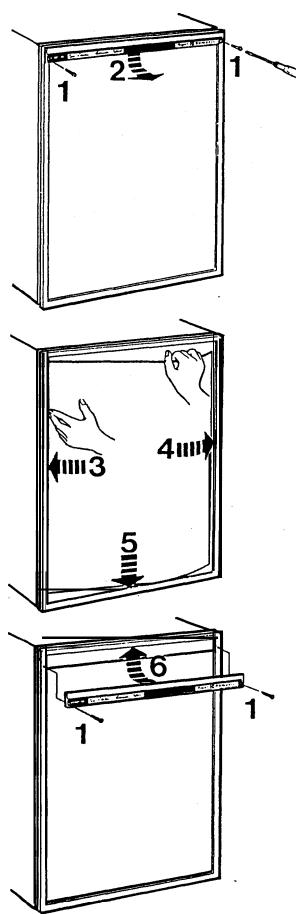
# 13. INSTRUCTIONS FOR MOUNTING THE DOOR PANEL

The refrigerator is normally delivered without door panel(s). Before starting the mounting work, check the panel dimensions for compliance with those given in the Table below, and read the instructions thoroughly. (See FIG. 13). When mounting the panel, proceed as follows:

- A. The decoration strip(s) are taped inside the door; if installed on the door. Remove the door decoration strip (2) by removing its two screws (1).
- B. Insert one of the vertical edges of the panel into the groove of the door frame (3).
- C. Bend the panel gently so that the free side of the panel can be slipped into the corresponding groove of the door frame (4).
- D. Slide the panel down into the groove of the bottom frame (5).
- E. Between the upper edge of the panel and the door frame there is a gap which should be covered by the decoration strip.
- F. Put the decoration strip across the door so that the gap is covered and push upward (6). The tabs on the inside of the strip should fit in behind the flange of the door frame. Secure the decoration strip with the two screws removed in Step A(1).

PANEL DIMENSIONS MAX. THICKNESS 5/32" (4mm)							
MODELS		НЕ	EIGHT	WIDTH			
TYPI	E	MAX	MIN.	MAX.	MIN.		
RM241	0						
	mm	697	695	515	513		
	inch	27-7/16	27-23/64	20-9/32	20-13/64		
RM251	0						
	mm	897	695	515	513		
	inch	35-5/16	35-15/64	20-9/32	20-1 3/64		
RM261	RM2610						
upper	mm	306	304	515	513		
	inch	12-3/64	1 1-31/32	20-9/32	20-13/64		
lower	mm	819	817	515	513		
	inch	32-1/4	32-5/32	20-9/32	20-13/64		
RM2810							
upper	mm	378	376	563	561		
	inch	14-7/8	14-51/64	22-11 /64	22-3/32		
lower	mm	897	895	563	561		
	inch	35-5/16	35-15/64	22-11 /64	22-3/32		

FIG. 13



## SECTION B. OPERATING INSTRUCTIONS

#### 1. IMPORTANCE OF LEVELING A REFRIGERATOR

In an absorption refrigerator system, ammonia is liquified 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.

The tubing in the evaporator section is specifically sloped to provide a continuous movement of liquid ammonia, flowing downward by gravity, through this section. 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. Any time the vehicle is parked for several hours with the refrigerator operating, the vehicle should be leveled to prevent this loss of cooling.

The vehicle needs to be leveled only so it is comfortable to live in (no noticeable sloping of floor or walls).

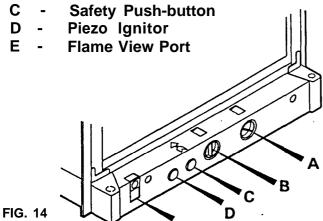
When the vehicle is moving the leveling is not critical, as the rolling and pitching movement of the vehicle will pass to either side of level - keeping the liquid ammonia from accumulating in the evaporator tubing.

#### 2. CONTROLS

Refrigerators with Piezo Ignitors (RM2410):

**ON/OFF Switch** 

В Thermostat Gas/Electric



(RM2510, RM2610 & RM2810) **ON/OFF Switch** Α В Thermostat, Gas/Electric C Safety Push-button Light

**Refrigerators with Automatic Reignitors** 

FIG. 15

#### 3. GAS OPERATION

#### Refrigerators with Piezo Ignitor (RM2410)

- To start the refrigerator, turn knob 'A' to the 'GAS' position. (See FIG. 14).
- В. Turn the thermostat knob 'B' one guarter (1/4) of a turn from the 'OFF' position. (See FIG. 14).
- Push button 'C' in until it bottoms out and hold. While holding button 'C', push button 'D' for the piezo ignitor several times to light the burner. This can be observed through the flame view port, 'E', on the refrigerator. (See FIG. 14).
- D. After the flame lights, continue to hold button 'C' for an additional ten (10) seconds. Release the button 'C' and check the flame view port 'E' to make sure the burner does not go out. If the burner goes out, repeat the lighting procedure Steps A. through D.

C

To shut off the refrigerator, turn Knob 'A' to the 'OFF' position.

## ■ Refrigerators with Automatic Reignitors (RM2510, RM2610 & RM2810)

- A. To start the refrigerator, turn Knob 'A' to the 'GAS position. (See FIG. 15)
- B. Turn the thermostat Knob 'B' one quarter (1/4) of a turn from the 'OFF' position. (See FIG. 15).
- C. Push button 'C' in until it bottoms out and hold. When lamp 'E' stops flashing, hold push-button 'C' an additional 15 seconds. Release button 'C'. If the lamp 'E' starts to flash again, repeat Steps A. through C. (See FIG. 15). If flame blows out, the reignitor will automatically relight the flame.

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.

#### 4. ELECTRIC OPERATION

- A. Check to be sure the power cord is properly connected to the power supply. (See FIG. 10). If the refrigerator is equipped for 12 volt DC operation, the tow vehicle or caravan engine should be running to prevent discharging the battery.
- B. Turn Knob 'A' to the position marked 'ELEC' for 120 volt AC operation or '12v' for 12 volt DC operation. (See FIGS. 14 and 15).
- C. Turn the thermostat Knob 'B' one quarter (1/4) of a turn from the 'OFF' position.
- D. To shut off the refrigerator, turn Knob 'A' to the 'OFF' position.

#### 5. THERMOSTAT

The refrigerator is equipped with a thermostat that can be adjusted by turning knob 'B' to a different setting to maintain the desired cabinet temperature (See FIGS. 14 and 15).

- A. 'OFF' Setting of the Thermostat: In gas operation, the thermostat closes its main valve and the burner runs continuously at the bypass rate or pilot. In electrical operation, the contacts in the thermostat are open and the heating elements are off.
- B. 'MAX' Setting of the Thermostat: In gas operation, the thermostat allows the burner to remain on high flame continuously. In electric operation, the heating element is 'ON' continuously.
- C. The thermostat can be adjusted between 'MAX' and 'OFF' to obtain the desired cabinet temperature. me closer the knob is to 'MAX' the colder the cabinet temperature. The closer the knob is to 'OFF the warmer the cabinet temperature.

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. Adjust the thermostat knob closer to 'MAX when the outside temperature becomes warm.

# 6. HOW TO USE THE REFRIGERATOR

#### A. 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.

#### **B. Frozen Food Storage Compartment**

Place quick frozen soft fruits and ice cream in the coldest part of the freezer compartment, which is at the bottom of the aluminum liner. In models with a shelf, place these foods on or just below the freezer shelf. Frozen vegetables may be stored in any part of the freezer compartment.

This compartment is not designed for the deep or quick freezing of food. Meat or fish, whether raw or prepared, can be stored in the frozen food storage compartment provided it is first pre-cooled in the refrigerator. It 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.

#### C. Ice Making

Ice cubes can be made in the tray. Fill 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. Preferably, 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 the 'MAX' setting. It is a good idea to do this a few hours before you require ice. Be sure to turn the thermostat back to the normal setting when the ice is formed. Food in the lower compartment can be frozen it the thermostat is left on 'MAX'.

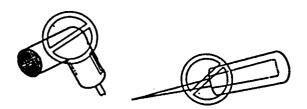
#### D. Defrosting

Shut off the refrigerator by turning knob 'A' to 'OFF position. Empty the refrigerator, leaving the drip tray under the finned evaporator. 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. When all the frost has melted, empty the drip tray and dry the interior of the refrigerator with a clean cloth. Replace the drip tray and ice tray. Replace all the food and set the thermostat to its normal position.

NOTE: On the RM2810, the drip tray/cup is on the rear of the refrigerator. It can be reached through the outside lower access door.

#### **CAUTION**

DO NOT use a hot air blower as permanent damage could result from warping the metal or plastic parts. DO NOT use a knife, ice pick or other sharp tools to remove frost from the freezer shelf. They can create a leak in the ammonia system.



#### E. Cleaning

To clean the interior lining of the refrigerator, use lukewarm, weak soda solution. The evaporator, ice trays and shelves must be cleaned with warm water only. It is important to always keep the refrigerator clean.

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

# 7. SHUT-OFF / STORAGE PROCEDURE

To shut off the refrigerator, turn knob 'A' to 'OFF position. 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.

## SECTION C. MAINTENANCE AND SERVICE

#### 1. PERIODIC MAINTENANCE

To keep your Dometic refrigerator operating efficiently and safely, period inspection and cleaning of several components is recommended once or twice a year.

- A. It is important to keep the area at the back of the refrigerator clear. Check the lower vent, upper vent and the area between these openings for any obstructions such as bird/insect nests, spider webs, etc. It is important to keep the refrigerator area free from combustible material, gasoline and other flammable liquids or vapors.
- B. Check all connections in the LP gas system (at the back of the refrigerator) for gas leaks. The LP gas supply must be turned on. Apply a non-corrosive bubble solution to all LP gas connections.



C. Check burner flame for proper appearance. The flame should be light blue with no yellow at the tip. (See FIG. 16).

FIG. 16



#### CAUTION

The following maintenance is required once or twice a year, but should only be done by a qualified serviceman who is familiar with LP gas systems and refrigerators.

#### D. CHECKGASPRESSURE

The LP gas pressure should be checked and readjusted if necessary. The correct operating pressure is eleven inches of water column. The correct place to take the pressure reading is at the test port just ahead of the main orifice. (See FIG. 17.)

E. CLEANING FLUE TUBE, BURNER & BURNER JET NOTE: Before working on the refrigerator make sure that 120 volt AC and optional 12 volt DC leads are disconnected. Shut off Gas valve

#### The Burner and the Burner Jet:

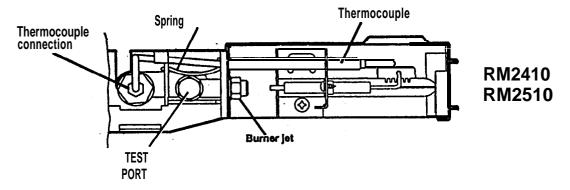
The color of the flame should be clear blue over the slots of the burner. (See FIG. 16).

Once or twice a year, depending on use, clean and adjust the burner assembly.

Proceed as follows:

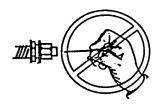
- Remove protection plate from the burner housing.
- 2. Disconnect the wire from the high voltage electrode.
- Remove the burner mounting screws and remove the burner assembly.
- 4. Clean burner tube with a brush. Blow with compressed air.
- Remove the burner jet. Soak the jet in wood alcohol and blow it out with compressed air. NEVER use a wire or pin to clean the burner jet.

FIG. 17



#### **CAUTION**

DO NOT use a wire or pin when cleaning the burner jet as damage can occur to the precision opening. This can cause damage to the refrigerator or create a fire hazard.



- 6. Remove the flue cap from top of flue tube and lift out the wire and spiral baffle. Clean the flue from the top, using a flue brush. Replace spiral baffle and flue cap.
- 7. Remove all loose scale, soot, etc. from area below the flue pipe. (See FIG. 17).
- 8. Reassemble.
- 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 flue tube.
- 10. The gas fillings on the refrigerator need to be checked for leaks. Turn on the gas supply at the shut-off valve. Apply a non-corrosive bubble solution to the fitting and observe for leaks. The safety valve will not allow gas pressure to any connections between it and the burner jet. These fittings must be checked before burner is lighted.

#### CAUTION

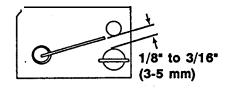
The safety shut-off must be manually depressed to allow gas pressure to flow to the burner jet. Be **sure to** apply the leak check solution before depressing the safety shut-off. DO NOT allow any open flame, sparks, smoking, etc., in the area of the test. DO NOT depress safety shut-off for over 30 seconds.

- 11. Allow 10 minutes for the LP gas to leave the burner area. Reconnect the 12 volt DC power. Light the burner per Section B. Operating Instructions, Item 3, Gas Operation. Allow burner to run 5 minutes.
- 12. Connect power cord to the 120 volt AC wall outlet.
- F. Check LP gas safety shut-off. See Section A. Installation, Item 9, Testing LP Gas Shut-Off.

#### G. 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 shall be a maximum of 3/16" (5mm) and a minimum of 1/8" (3mm). (See FIG. 18).

FIG. 18



NOTE: Avoid spraying water through the refrigerator's vents while washing your RV.

#### 2. TROUBLESHOOTING

## ■ THE REFRIGERATOR DOES NOT COOL PROPERLY

#### Causes and Remedies:

- A. Burner jet clogged. Remove the burner jet. Soak the jet in wood alcohol and blow it out with compressed air. Do not use a wire or pin to clean the burner jet.
- B. Refrigerator is not level.
- C. Flame has gone out. Remedy: 1) Gas bottle is empty - refill. 2) The tip of the flame failure safety device is not heated enough by flame. 3) Clogged bypass screw - clean or exchange it.
- D. Venting problem.

  Restriction in air flow across cooling unit.
- E. Heavy frost build-up on evaporator fins. Defrost.

- F. Flue baffle not inserted properly in flue tube.
- G. Improperly set thermostat.

  See paragraph on thermostat. In hot weather the setting should be closer to "MAX" than usual.
- H. Burner dirty. Clean.
  - Burner damaged.
  - Replace.
- J. LP gas pressure low at burner.
   Set main regulator so the pressure does not drop below 11 inches water column at pressure tap.
- K. Burner not located properly under flue tube. Relocate.

#### ■ ODOR FROM FUMES

Causes and Remedies:

- A. The flame touches side of boiler due to dislocation of the burner. Relocate. Burner dislocation may also cause smoke and discoloring of walls and ceiling.
- B. Burner damaged. Replace.
- C. The flue tube is dirty. Clean flue as follows:
  Cover burner and burner jet. Remove the flue cap
  from the top of the flue tube and lift out the wire and
  spiral baffle. Clean the flue from the top using a flue
  brush. Clean the spiral baffle. Replace the spiral
  baffle and flue cap..

All the instructions are to be followed closely. The refrigerator is quality-guaranteed. However, we are not responsible for any failures caused by improper adjustments and unfavorable installation conditions,

CONTACT AN AUTHORIZED SERVICE CENTER FOR PARTS AND REPAIRS WHEN REQUIRED.