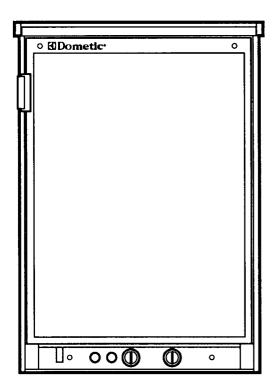
# **Dometic**®

# ABSORPTION REFRIGERATOR FOR LP-GAS AND ELECTRIC OPERATION



# 

# CANADA

SERVICE OFFICE The Dometic Corp. 509 S. Poplar St. LaGrange IN 46761

Dometic Distribution, Inc. 866 Langs Drive Cambridge, Ontario CANADA N3H 2N7





# 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 ÊTRE RÉPARÉ SEULEMENT PAR UN RÉPARATEUR AUTORISÉ. MODIFICATION DE L'APPAREIL POURRAIT ÊTRE EXTRÈMEMENT DANGEREUSE, ET POURRAIT CAUSER MAL OU MORT.

# INSTALLATION AND OPERATING INSTRUCTIONS

MODEL RM2310

#### **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

Form No. 3103619.007 © 1991 The Dometic Corp. LaGrange IN 46761

# 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 Z21.19 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 Z223.1 (latest edition).
- 2. Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280
- 3. Recreational Vehicles ANSI A119.2 (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
- 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 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 the 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.

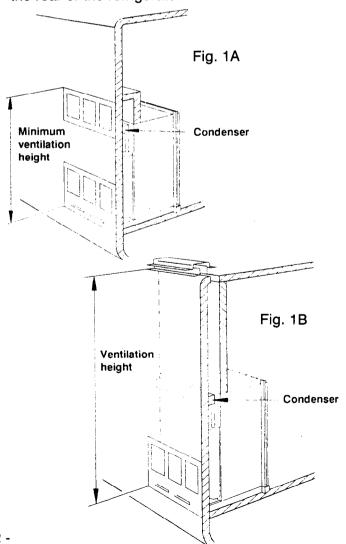
#### 3. Certified installation

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. 1A and 1B. 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.



# 5. Ventilation heights

Refer to Fig. 1A and 1B, Page 2.

	Minimum ventilation heights in inches and mm					
Refrigerator Model	Installation with upper and lower side vent	Installation with roof vent and lower side vent				
inch	37	31				
RM2310 mm	940	787				

#### 6. Clearances

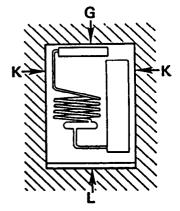
Minimum clearances in inches to combustible materials are:

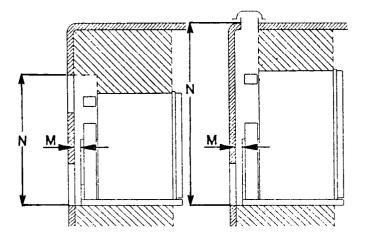
G:	Top	0''				
K:	Side	0''				
L:	<b>Bottom</b>	0''				
M:	Rear	1"				
N:	Ventilation Height					

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 SectionA. Installation, Item 5. Ventilation Heights. See Fig. 2.

Fig. 2



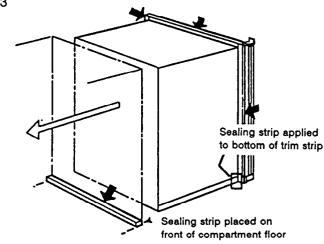


# 7. Installing refrigerator in enclosure

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.

Fig. 3

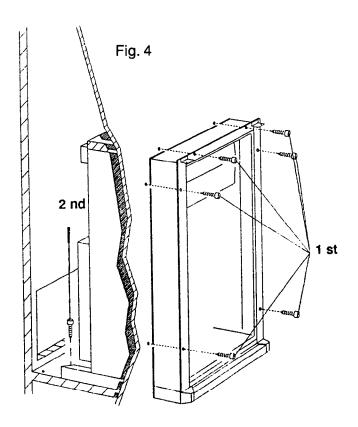


Be careful not to damage the sealing strip applied to the floor of the enclosure when the refrigerator is put in place.

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

The first six screws are installed on the front frame, and the last 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. (See Fig. 4, Page 4).

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.



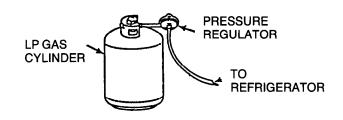
The dimensions shown in the Table below will give you adequate space for service and proper installation. See Fig. 5.

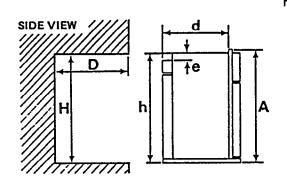
# 8. Gas connection

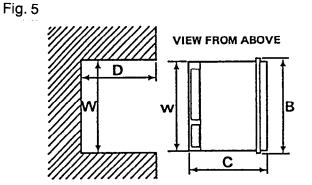
Hook up to the gas supply line accomplished at the manual gas shutoff valve, which is furnished with a 3/8" SAE (UNF 5/8" - 18) male flare connection. All completed connections should be checked for leaks with a non-corrosive leak detector. (See Fig. 6)



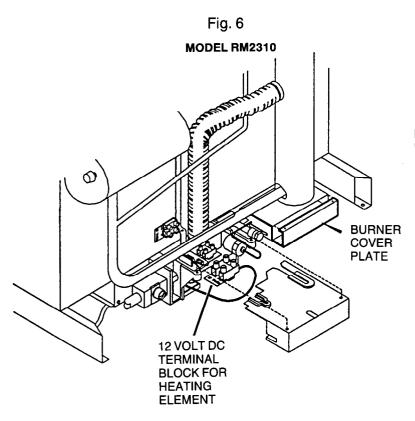
The gas supply system must incorporate a pressure regulator to maintain a supply pressure of not more than 11 inches water column.







Refrigerator model		Overall dimensions			Installation dimensions		Recess dimensions		4	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
RM2310	inch mm	30-3/8 771	21-11/16 551	22-1/16 560	29-9/16 751	20-1/4 514	20-3/8 517	29-3/4 756	20-1/2 521	21-3/8 542	1-1/4 32



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

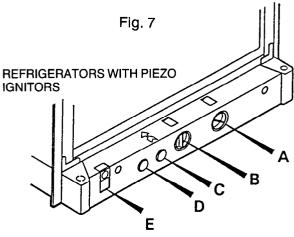
The gas safety shutoff must be tested after the refrigerator is connected to the LP Gas supply.

To test the gas safety shutoff, proceed as follows:

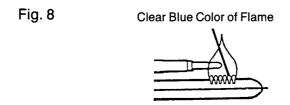
# ■ Refrigerator with Piezo Ignitor

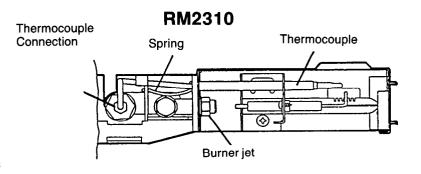
- A. Start the refrigerator according to the instructions for gas operation with piezo ignitor. See Section B. Operating Instructions, Item 3. Gas Operation.
- B. Check that the gas flame is lit. This can be observed through reflector "E". (See Fig. 7)

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. 6). 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). Be careful not to damage the burner jet.



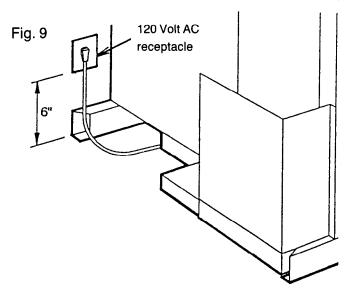


- F. No bubble should appear at the opening of the burner jet. Bubbles indicate a defective gas safety shutoff and service is required.
- G. If no bubbles were present at the burner jet, rinse the orifice with water. Replace the burner cover plate. Start the refrigerator by following the instructions 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.



# 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. 9). This allows easy access 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

# **■ 3-WAY REFRIGERATOR MODEL**

The 3-way model has a 12-volt DC terminal block located under a plastic cover on the back of the refrigerator for the refrigerator heater. (See Fig. 6)

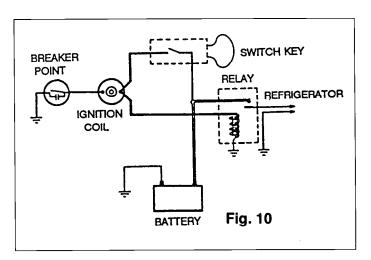
The refrigerator must be connected by a separate curcuit to the battery with two wires of adequate capacity to avoid voltage drop when the 12 volt DC heater is being operated. The wire gauge should be chosen with consideration to the length, refer to the Table below for wire size. The 12 volt DC circuit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

<u>DO NOT</u> 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							
MODEL		MAX. FUSE SIZE					
	14	12	10	8			
RM2310	10 ft. 3 m	17 ft. 5.2 m	27 ft. 8.2 m	43 ft. 13 m	15 amps		

# **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 volt DC power to the refrigerator when the ignition is turned off. (See Fig. 10).



# 12. Changing door hinges from one side to the other (Refer to Figure 11)

- A. Remove the top hinge pin and lift out the door.
- B. Remove lower hinge pin (including washers) and relocate them to the hole on the opposite side hinge.
- C. Unscrew the travel latch and relocate it on the opposite side.
- D. The bushing and the latch retainer on the top of the door should be reversed.
- E. Replace the door back on the refrigerator and install the top hinge pin.
- F. Remove the door handle and refasten it on the opposite side. Insert the plastic caps (found in the miscellaneous parts bag) into the screw holes left open on the door.
- G. Check the door to determine if it opens and closes easily and the gaskets seal on all sides; also make sure the travel catch operates properly. If adjustments are required, remove the plastic cover snapped over the top hinge, loosen the two screws and reposition the door. Tighten the screws and replace the plastic cover.

# 13. Instructions for mounting the door panel

The refrigerator is normally delivered without door panels(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. 12). When mounting the panel, proceed as follows:

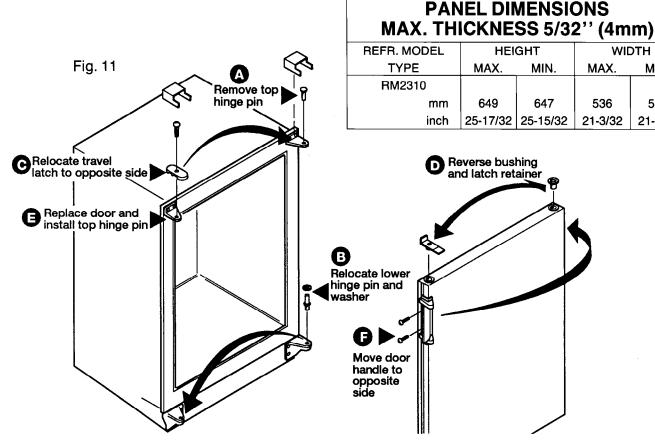
- A. The decoration strip(s) are taped inside the door. If installed on the door, remove the door decoration strip (2) by removing its two screws (1).
- B. Insert one of the vertical edges of the panel into the groove of the door frame (3).
- C. Bend the panel gently so that the free side of the panel 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).

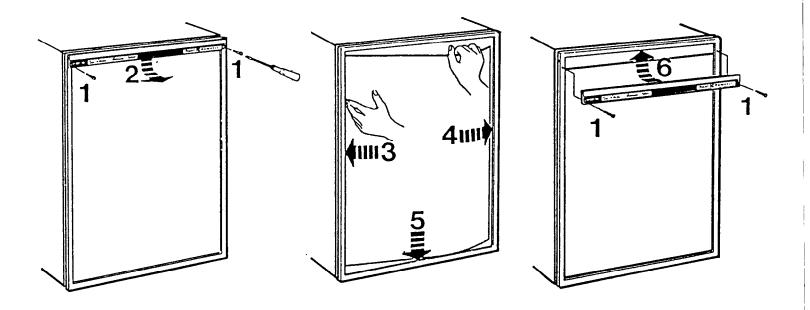
**WIDTH** 

MIN.

534

21-1/32





# SECTION B. OPERATION

# 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.

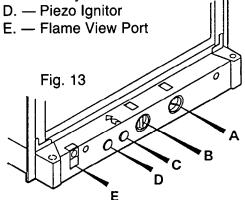
# 2. Controls

# Refrigerators with Piezo Ignitors

A. — ON/OFF Switch

B. — Thermostat Gas/Electric

C. — Safety Push-button



# 3. Gas Operation

- A. To start the refrigerator, turn knob "A" to the "GAS" position. (See Fig. 13).
- B. Turn the thermostat knob "B" one quarter (1/4) of a turn from the "OFF" position. (See Fig. 13).
- C. 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. 13).

- 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.
- E. To shut off the refrigerator, turn Knob "A" to the "OFF" position.

# 4. Electric operation

- A. Check to be sure the power cord is properly connected to the power supply. (See Fig. 9). 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 Fig. 13).
- 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 Fig. 13).

- 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. The 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.

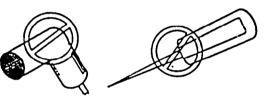
To release the ice cubes, hold the tray with both hands and twist the tray. Preferably, unused cubes should be replaced in the tray. Refill the tray with water and place the tray on the freezer shelf. Ice making is accelerated if the thermostat knob "B" is turned to the "MAX" setting. It is a good idea 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 if 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.

# **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

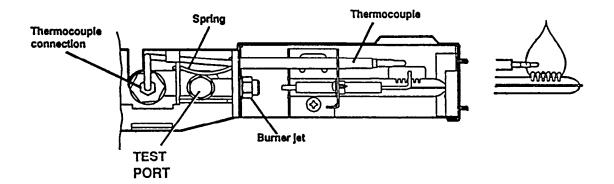
To keep your Dometic refrigerator operating efficiently and safely, periodic inspection and cleaning of several components is recommended once or twice a year.

- 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 noncorrosive 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.

Fig. 14



# 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. Check Gas Pressure

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. 15).

E. Cleaning Flue Tube, Burner and 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. 14).

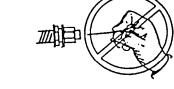
Once or twice a year, depending on use, clean and adjust the burner assembly.

# Proceed as follows:

- 1. Remove protection plate from the burner housing.
- 2. Disconnect the wire from the high voltage electrode.
- 3. 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.

# **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 the 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. 15).
- 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 fittings on the refrigerator need to be checked for leaks. Turn on the gas supply at the shut-off valve. Apply a noncorrosive 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.

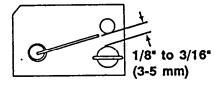
# **CAUTION**

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. 16).

Fig. 16



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.
- I. 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 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.