



RECORD THIS UNIT INFORMATION FOR
FUTURE REFERENCE:

Model Number _____

Serial Number _____

Date Purchased _____

MODEL T80ACRV Refrigerator



USA

SERVICE OFFICE
Dometic Corporation
2320 Industrial Parkway
Elkhart, IN 46516
574-294-2511

CANADA

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

For Service Center
Assistance Call:
800-544-4881

WARNING

This manual must be read and understood before installation, adjustment, service, or maintenance is performed. This unit must be installed by a qualified service technician. Modification of this product can be extremely hazardous and could result in personal injury or property damage.

AVERTISSEMENT

Lire et comprendre ce manuel avant de procéder à l'installation, à des réglages, de l'entretien ou des réparations. L'installation de cet appareil doit être effectuée par un réparateur qualifié. Toute modification de cet appareil peut être extrêmement dangereuse et entraîner des blessures ou dommages matériels.

INSTALLATION & OPERATING INSTRUCTIONS

MODEL
T80ACRV

Form No. 3309837.007 11/05
(French 3309963.001)
©2005 Dometic Corporation
LaGrange, IN 46761

Important: These Instructions
must stay with unit.
Owner read carefully.

SAFETY INSTRUCTIONS

This manual has safety information and instructions to help users eliminate or reduce the risk of accidents and injuries.

RECOGNIZE SAFETY INFORMATION



This is the safety-alert symbol. When you see this symbol in this manual, be alert to the potential for personal injury.

Follow recommended precautions and safe operating instructions.

UNDERSTAND SIGNAL WORDS

A signal word, **WARNING** OR **CAUTION** is used with the safety-alert symbol. They give the level of risk for potential injury.

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

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

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

Read and follow all safety information and instructions.

GENERAL INFORMATION

- A. This refrigerator is certified under the latest edition of UL 250 and CSA C22.2 number 63.
Before installing your RV refrigerator, refer to the Installation Check List 3309440.000 located in the envelope assembly furnished with your refrigerator.
- B. This refrigerator is designed for making ice and the conservation of food and drinks only.
- C. All materials exposed to contact with food comply with **EC directive 89/109**.
- D. Install appliance away from heat sources in a dry and well-ventilated area. Avoid direct contact with water.
The Refrigerator is not waterproof.
- E. This refrigerator complies with **EC directive 89/336** governing radio suppression.

Note: The data plate bearing the model number, serial number, and technical data is located on the right-hand side, inside the refrigerator. An identical data plate is located on the back of the cabinet.

SPECIFICATIONS

A. Compressor Data

1. Voltage Operating Range
12 VDC systems: From 10.4 VDC to 17 VDC
2. Protection Systems
The compressor protection system facilitates protection against compressor overload and start failure as well as destructive battery discharge. When an overload protection is activated, the compressor enters a cycle in which it makes start attempts at approximately 60 second intervals until successful start is achieved.
3. Overload Protections
The compressor overload and start protection cuts off power to the compressor if the compressor speed drops below approximately 1,900 rpm, or if this motor speed is not reached during the start sequence. Possible reasons for overload protection activating could be too high refrigeration system pressures during operation or lack of pressure equalizing at start.
The fan overload protection stops the compressor and the fan if the fan current exceeds 0.5 A (average) or 1 A (peak).
An overheating of the electronic unit heat sink will cause the compressor to stop. Restart will occur automatically when a normal temperature has been reached.
4. Voltage Protection
If voltage outside the operating range is applied to the electronic unit, the compressor does not start, or it stops if the voltage limit is exceeded during operation. The compressor will restart automatically approximately 1 minute after the supply voltage has reached the reset voltage within the range in question.

5. Battery Protection

The electronic unit provides protection as follows:

Standard Battery Protection Settings

12 VDC cut-out	12 VDC cut-in
10.4	11.7

Refrigerator Amperage	
Model	Amperage
T80ACRV	4.56

INSTALLATION INSTRUCTIONS

A. Precautions

⚠ WARNING

Shock Hazard. The Dometic Refrigerator Power Supply is considered non-serviceable. Do not open case for any reason. Failure to follow these instructions could cause death or severe personal injury.

1. Read and understand the Installation and Operating instructions before attempting to start your refrigerator installation.
2. The manufacturer assumes no responsibility for any injuries or damage caused by non compliance with any of the installation instructions.
3. The installation must conform with local codes, or in the absence of local codes, the following standards are applicable.
 - a. NFPA 70, latest edition and CSA C22.1, latest edition, Parts 1 and 2.

B. Unpacking, Handling, and Inspection Instructions

⚠ CAUTION

Cut Hazard. This refrigerator contains an exposed coil assembly. To avoid personal injury, wear protective gloves when unpacking and handling refrigerator.

1. Inspect packaging for transport damage. Note any packaging damage that may indicate hidden damage to the refrigerator.
2. Remove refrigerator from packaging.
3. Inspect refrigerator for damage. Report any damage resulting from transport to the dealer no later than 24 hours after delivery.

4. Locate and save the envelope assembly inside the refrigerator. The eight (8) mounting screws are in this assembly.
5. Dispose of packaging material in accordance with local laws for sorted waste recycling.

C. Ventilation Requirements

⚠ WARNING

Shock Hazard. Vent to the interior of the RV only. Venting to the outside may expose the controls to moisture from rain, power washers etc., and could create a short in the electrical components causing an electric shock. Failure to follow this instructions may result in death, severe person injury and/or property damage.

This refrigerator requires ventilation for proper operation. Use a minimum of 76 total square inches. Two vents (inlet/discharge) are recommended. See FIG. 1 and 2.

2" clearance at the rear of unit is required.

1. Approved Vent Locations

- a. (A & B) - Pair of Grills = 76 Square Inch Minimum Inlet - 38 Square Inch Minimum Discharge - 38 Square Inch Minimum
- b. C or D - Single Grill = 76 Square Inch Minimum

Note: Alternate venting configurations may be used but must be approved by Dometic Corporation.

FIG. 1

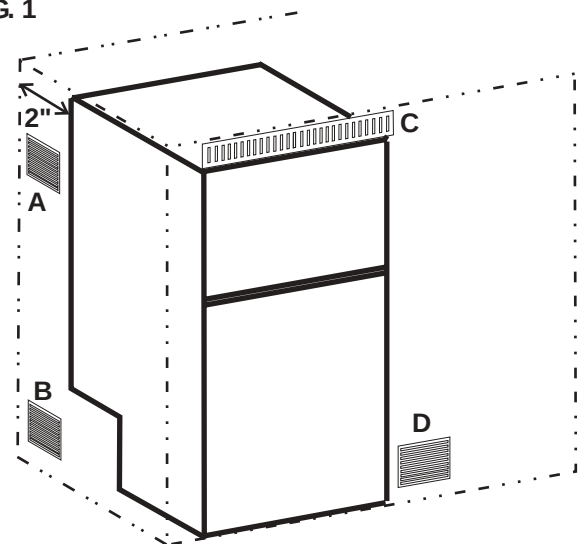
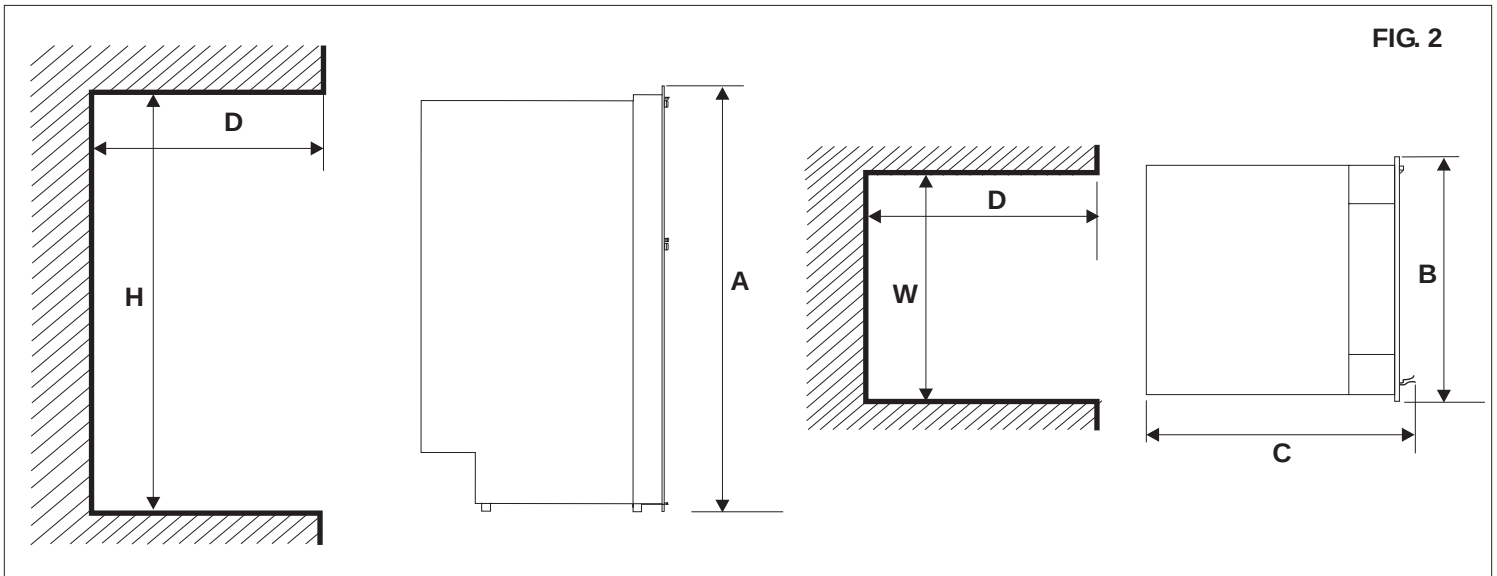


FIG. 2



Refrigerator Model	Overall Dimensions			Recess Dimensions		
	Height A	Width B	Depth C	Height H	Width W	Depth D
T80ACRV	inch	53-3/8"	24-13/16"	23.5"	53"	23-3/8"
	mm	1356	630	597	1346	594

D. Input Connections

1. 120 VAC power supply connection.

Note: The power supply is mounted to the rear of the cabinet.

The Dometic Refrigerator Power Supply operates directly from a standard 120 VAC, 60 Hz., power source and can be plugged directly into a standard AC receptacle. It functions by converting AC power into DC power for the compressor.

⚠ WARNING

Shock Hazard. Never remove the grounding post or use an adapter plug to connect the power supply plug to a receptacle. Failure to follow these instructions may result in death or severe personal injury.

The power supply is equipped with the correct power cord. The power cord is of a 3 conductor grounded style and under no circumstances should the ground connection be removed. Also ensure the power supply is plugged into a properly grounded outlet that is protected by a 10 amp maximum circuit breaker. Avoid the use of any electrical adapters or extension cords. Check that all wire sizing is correct and that all grounding systems are in good working order.

If there is a need to turn off the power supply, simply unplug the 120 VAC power supply cord from the AC receptacle.

2. 12 VDC Back-Up Power Supply
 - a. The Dometic Refrigerator Power Supply is designed to automatically switch to the 12 VDC back-up power source in the event of an interruption in the main 120 VAC power supply. The 12 VDC power source connects to the power supply either by screw down terminals or butt connectors depending on the model supplied with the refrigerator.
 - **(Power supply with screw down terminals)** Route a red + (positive) and black – (negative) wire of appropriate size from the back-up battery to the power supply location. (See chart on page 5). Strip wire back 1/2" and insert the Red positive (+) wire in the terminal marked "battery +". Insert the Black negative (–) wire in the terminal marked "Battery/Light –". Tighten screws.
 - **(Power supply with wire harness and butt connectors)** Route a red + (positive) and black – (negative) of appropriate wire size from the back-up battery to the power supply location. (See chart on page 5). Strip wire back 1/2" and insert the red wire into the butt connector with the red wire. Insert the black wire into the butt connector with the black wire. Crimp tight and make sure wires are secure.

Important: Route the 12 VDC supply wires in a manner that will not interfere with the placement of the refrigerator. Make sure the refrigerator is not standing on the power supply wires. Leave enough wire length to allow the refrigerator to be removed from alcove for servicing.

**Maximum Total Conductor Wire Length
(in feet and meters)**

Wire Length	Awg
Up To 17 ft. 5 m	14
UP To 27 ft. 8 m	12

Important: A 15 Amp circuit breaker must be installed in the 12 VDC supply wire by the installer. Make sure that proper polarity is maintained at all times.

F. Securing The Refrigerator

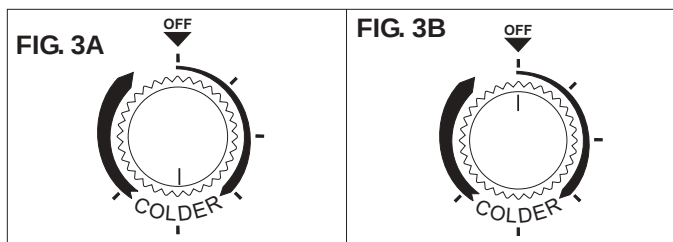
1. After the refrigerator is put in place, the refrigerator is to be secured in the enclosure with eight (8) mounting flange screws supplied. They are located in the envelope package with the literature and the ice tray.
2. Make sure the refrigerator mounting flange is flush with the cabinet face and install two (2) mounting flange screws (supplied) through the holes in the lower holes in the mounting flange and into the frame.
3. While maintaining a flush fit install the remaining six (6) mounting screws through the mounting flange and into the frame.

OPERATING INSTRUCTIONS

A. Rotary Thermostat

This refrigerator is fitted with a manual thermostat. It automatically maintains the set temperature.

1. To start the refrigerator, turn the thermostat adjustment knob clock-wise. To start off with, a mid-range setting should be selected. See FIG. 3A. Allow the refrigerator to run at least 12 hours before loading it with goods.
2. Once the refrigerator is cold, adjust the thermostat knob to obtain the desired temperature. The thicker the band, the colder the temperature.
3. To turn the refrigerator "OFF", rotate the thermostat adjust knob counter-clock-wise until the indicator is pointing to "OFF". See FIG. 3B



B. Loading The Refrigerator

Important: Do not put glass containers holding liquids in the freezer compartment. They may break due to expansion.

The food storage compartment is completely closed and non ventilated, 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 position in the refrigerator is 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.

When the refrigerator is heavily loaded, it will take a longer time to lower the temperature; therefore, to get maximum efficiency the refrigerator and food items should be precooled prior to loading. The shelves should not be covered with paper or plastic, and the food items should be arranged so air can circulate freely.

C. Defrosting The Refrigerator

Defrosting should be carried out whenever the frost layer exceeds a thickness of 1/8". Defrosting is necessary to guarantee efficient refrigeration and to avoid excessive power consumption. Excess frost buildup will effect the refrigerator performance.

1. Turn the thermostat adjustment knob to the "OFF" position. See FIG. 3B. Keep the door/freezer lid open to minimize the defrosting time.

CAUTION

Do not attempt to remove the frost layer using any sharp instruments. This could pierce the refrigerator plate and cause irreparable damage.

2. After defrosting, dry the entire interior surfaces, and then turn the refrigerator back "ON". (See Operating Instructions-Section A.)

D. Cleaning The Refrigerator Interior

1. Remove containers, ice trays, and shelves. See section F "Positioning Shelves".
2. Clean the interior using warm water mixed with baking soda or vinegar.
3. Rinse and dry carefully with a soft cloth.

Important: To help avoid damaging the cabinet finish do not use abrasive products, detergents or soap.

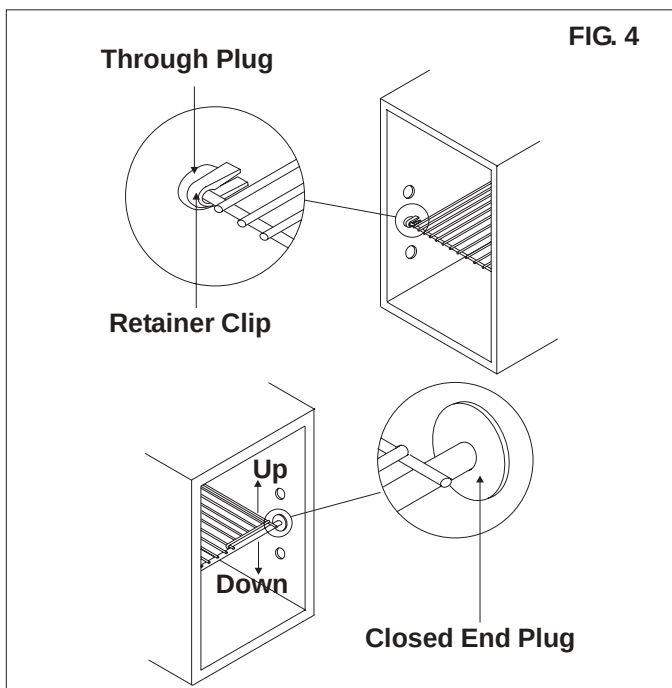
E. Storage Procedure

In the case of prolonged disuse, to avoid the formation of mold or unpleasant odors:

1. Shut off the refrigerator. See "OPERATING INSTRUCTIONS" A. "Rotary Thermostat" paragraph 3.
2. If the refrigerator will not be in operation for a period of weeks, it should be emptied, defrosted, cleaned, and the door(s) left ajar. The ice trays should also be dried and kept outside the cabinet.

F. Positioning Shelves

1. Remove front and rear retainer clip by applying pressure to open end of clip until it slides off the shelf bar. See Fig. 4.
2. Shift shelf to the left as far as it will go.
3. Pry closed end plug out of the right hand cabinet socket and lift up or down depending on location of shelf. Shelf will slide out of the left hand cabinet socket.
4. Place left hand side of shelf, with open end plug on shelf wire, in desired location. Place closed end plug on right side of shelf wire and place into corresponding right hand cabinet socket.
5. Shift shelf to the right as far as it will go.
6. To install front and rear retainer clip, apply pressure to closed end of clip until it slips into position over the shelf wire.



MAINTENANCE & SERVICE

A. Refrigerator Removal



Shock Hazard. Disconnect refrigerator at the 120 VAC and 12 VDC power supply. Failure to follow these instructions could cause death or severe personal injury.

1. Locate and remove the eight (8) mounting flange screws in the front face of the mounting flange.
2. Slide refrigerator out of the alcove.
3. Disconnect the 12 VDC wires attached to the power supply.
4. Disconnect the 120 VAC plug from the receptacle.

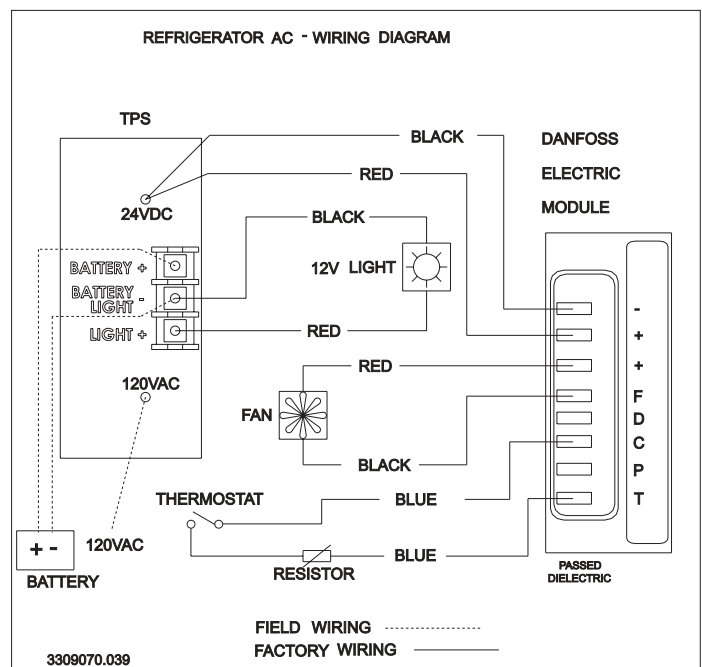
B. Cleaning Exterior



Cut Hazard. When cleaning condenser, wear protective gloves to avoid direct contact with fins. If these instructions are not followed injury could occur.

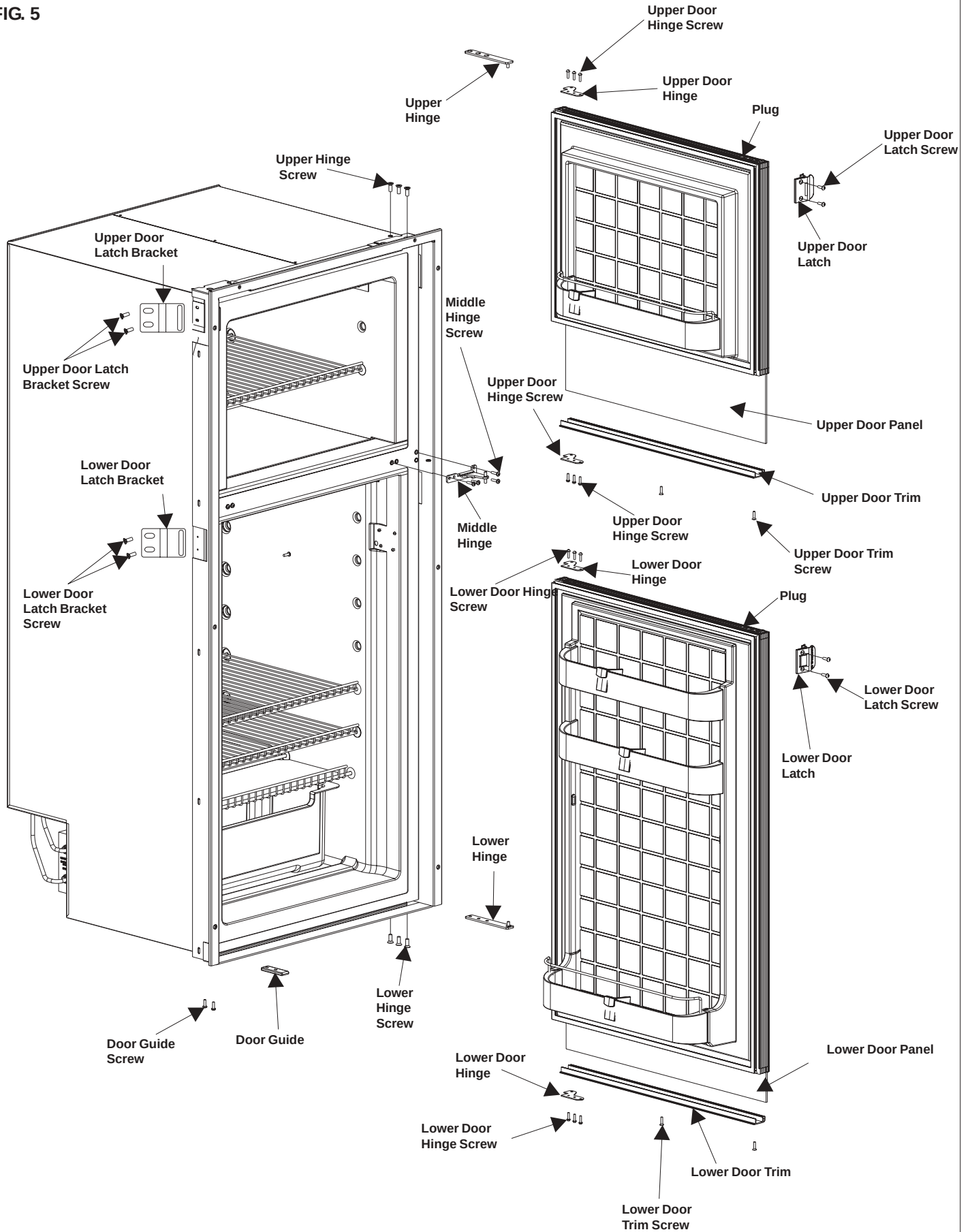
1. Clean the exterior cabinet with warm water. Rinse with cold water and dry with soft cloth.
2. Clean condenser once a year using a soft bristle brush or blow through it with compressed air.
3. Inspect heat sink located on the rear of the refrigerator distribution center for dust and debris. Clean with soft bristle brush if necessary.

WIRING DIAGRAM



Door Panel & Door Hinge Reversing Instructions

FIG. 5



D. Door Panel Replacement

1. If refrigerator is installed see Maintenance & Service Section A "Refrigerator Removal" on page 6.
2. Place refrigerator on the edge of a bench to access the bottom front of the refrigerator.
3. Unscrew the upper hinge screws and remove the upper hinge. Lift upper door off of the middle hinge. See FIG. 5

Note: When removing the middle hinge grasp and control the lower door to prevent it from falling.

4. Unscrew the middle hinge screws and remove the middle hinge. Lift lower door off of the lower hinge.
5. Remove the door hinges on the upper and lower door.
6. Unscrew the upper and lower door trim screws and remove the upper and lower door trim.
7. Slide door panel out of door.
8. Reassembly in reverse order.

E. Changing Door Hinges

1. If installed see Maintenance & Service Section A "Refrigerator Removal" on page 6.
2. Place refrigerator on the edge of a bench to access the bottom front of the refrigerator.
3. Unscrew the upper hinge screws and remove the upper hinge. Lift upper door off of the middle hinge. See FIG. 5

Note: When removing the middle hinge grasp and control the lower door to prevent it from falling.

4. Unscrew the middle hinge screws and remove the middle hinge. Lift lower door off of the lower hinge.
5. Unscrew the lower hinge screws and remove the lower hinge.
3. Assemble the lower hinge on opposite side.
4. Remove the door guide and attach it to the opposite side.
5. Remove the six plugs in each door located on opposite end of door when door hinges are located. Save for reinstallation.
5. Switch the door hinges on both doors to the opposite side.
6. Reinstall the six plugs in each door on opposite side.
6. Switch the upper and lower door latch and latch bracket.
7. Place the lower door hinge on the lower hinge.
8. While holding the lower door in position attach the middle hinge allowing the hinge pin to enter the hole in the lower door hinge.
9. While holding the upper door in position, attach the upper hinge allowing the hinge pin to enter the hole in the upper door hinge.
10. This completes the door hinge reversing.

TROUBLE SHOOTING GUIDELINES

A. Refrigerator Does Not Operate

1. The thermostat is set to OFF.
2. The circuit breaker between the refrigerator power supply and the 120 VAC supply has tripped.
4. Power supply cable is faulty or poorly connected.
5. If refrigerator works properly when operating on 120 VAC but not on back-up battery supply, the battery may not be delivering sufficient amount of power. If the battery voltage is less than 10.4 VDC, the unit will not operate.
6. The voltage on the electronic control unit terminal board does not correspond with the battery. Or the voltage drop is over 0.2-0.4 VDC check:
 - a. The size of the cable connecting the battery to the electronic control unit corresponds to specifications. See chart on page 5.
 - b. All connection points in the refrigerator power supply are properly tightened.
 - c. There are no signs of oxidation on the battery poles and contact points.
7. Does not operate on 120 VAC, check:
 - a. The 120 VAC power supply breaker is on.
 - b. The refrigerator power supply output wires are properly connected to the board terminals.
 - c. Output voltage to the refrigerator is sufficient.
8. Electronic unit heat sink overheating:
 - a. Insufficient venting.
 - b. Dirt build up on heat sink. Clean if necessary.

B. Excessive Refrigerator Noise

1. The refrigerator is not positioned on a flat surface.
2. The refrigerator is touching other objects that may cause vibration.
3. The refrigerant lines at the back of the refrigerator are touching or vibrating against the refrigerator.
4. Fan blade hitting other objects.

C. Insufficient Cooling

1. The door/lid is not sealed properly.
2. The refrigerator is positioned close to a heat source.
3. The refrigerator is insufficiently ventilated.
4. Excessive frost buildup on the evaporator.
5. Dust blocking the condenser.
6. The refrigerator is over-filled.
7. Fan not working.

If after checking the above, the refrigerator still does not function properly, contact a Dometic Service Center or a qualified service technician for assistance.