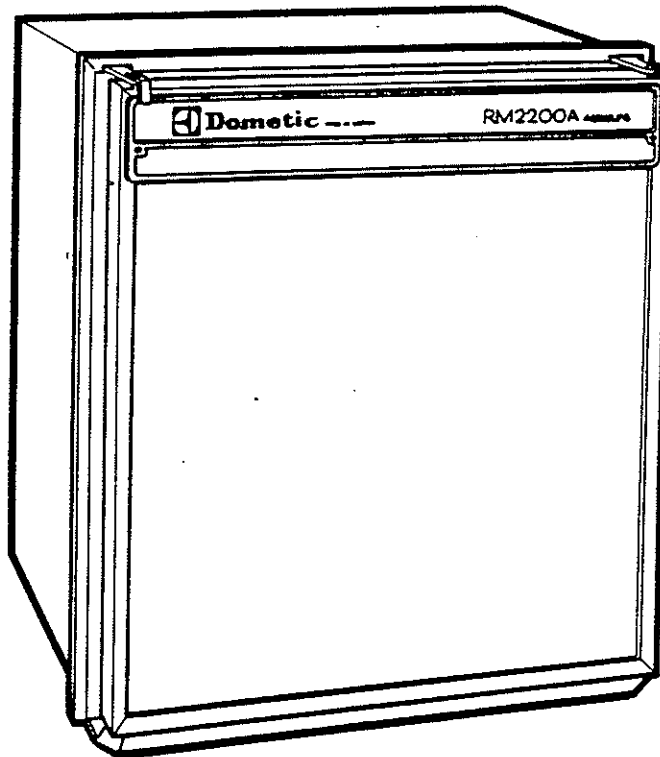




REFRIGERATOR MODEL RM2200A

OPERATION BY L.P. GAS OR ELECTRICITY (DUAL VOLTAGE, 12/110V)
FOR USE IN A MOBILE HOME OR RECREATIONAL VEHICLE



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.

INSTRUCTIONS FOR INSTALLATION AND USE

INSTRUCTIONS FOR INSTALLATION

This refrigerator has been Design Certified by the American Gas Association and the Canadian Gas Association for mobile home or recreational vehicle installation. This certificate is contingent, however, upon proper installation and the use of the venting components as shown in these instructions.

1. CHANGING THE OUTER DOOR PANEL

If required, the outer door panel can be removed and replaced by one of a different material or color. To do this, take out the screw from each end of the plastic nameplate strip, then pull one end of the strip outwards for $\frac{1}{4}$ " and downwards until it is disengaged from the door.

Slide the outer door panel upwards until there is sufficient space to insert the fingers underneath it. Holding the top and bottom edges of the panel, bow out its center until it can be removed from the door frame.

If desired, a replacement door panel can be made from materials such as rust-proofed metal, suitable plastic, or plastic coated hardboard, with a finish to match other equipment in the vehicle. The material should be from $\frac{1}{32}$ " to $\frac{1}{8}$ " thick, and $18 \frac{5}{16}$ " wide x $19 \frac{1}{8}$ " high.

Fit the door panel by locating one side behind the door frame and bowing out its center until its other side can be engaged. Slide the panel down as far as it will go, then refit the nameplate strip, engaging the retaining section of its rear top edge under the door frame, and sliding it up until its lower retainers can be located over the top of the door panel. Finally, replace the two screws.

2. TO CHANGE THE DOOR HINGES FROM ONE SIDE TO THE OTHER

- Unscrew and remove upper hinge pin, open door and lift it off lower hinge pin. Transfer lower hinge pin to opposite side of foot-plate.
- Transfer plastic stop for travel catch, and upper hinge-pin bush, to opposite sides of top of door. (Remove them as follows. (i) From left-hand top corner, turn plastic stop or hinge pin bush approximately 45° counter-clockwise and pull it out; (ii) from right-hand top corner, turn plastic stop or hinge pin bush approximately 45° clockwise and pull it out. Fit in reverse order).
- Engage door on lower hinge pin, then refit upper hinge pin. Check door closure. If necessary adjust the seal by loosening upper hinge pin, and the four screws under the foot-plate, and move the door inwards or outwards a little until a satisfactory seal is obtained, then tighten the screws.

3. INSTALLATION - GENERAL REQUIREMENTS

The installation of the refrigerator must comply with the following American National Standards and Canadian Standards, as applicable :-

- Local codes, or, in the absence of local codes, the National Fuel Gas Code, ANSI Z223.1-1980.
- Federal Standard for Mobile Home Construction and Safety, Title 24, HUD (part 280) or, when such standard is not applicable, the Standard for Mobile Homes, ANSI/NFPA No. 501B - 1977.
- Local codes, or, in the absence of local codes, the Standard for Recreation Vehicles, ANSI/NFPA No. 501C - 1977.
- Current Standard CSA Z240.4 - Gas Equipped Recreational Vehicles and Mobile Housing.
- Current CSA Standard C22.1 Canadian Electrical Code Part 1 (for mobile housing only).
- Current Standard CSA Z240.6.2 - Electrical Requirements for Recreational Vehicles.
- Local codes, or, in the absence of local codes, the current CAN1 - B149.2 Installation Code For Propane Burning Appliances and Equipment.

The refrigerator should be installed on a firm base and must be level in relation to the trailer so that when the trailer is level, the refrigerator is level, - see item 9.

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 overall dimensions of the refrigerator are given below, and the dimensions of the recess to house it are given in fig.3. These allow sufficient clearances for the refrigerator to be inserted and withdrawn.

The following minimum clearances must be allowed at the back and over the top for air circulation over the cooling unit.

Clearance from rear edge of outer casing of refrigerator - 4 inches.
Clearance over top of unit condenser fins - $1\frac{1}{8}$ inches. This is the minimum height which can be allowed over the condenser fins. Wherever possible, this height should be increased by up to 11 inches, - the more ventilation you provide, the better the performance you can expect from the refrigerator.

The refrigerator should be installed in accordance with the illustrations on page 3. Both the flue gases and the ventilation air must pass to the outside, and the joints between the body of the refrigerator and the vehicle, and in any ventilation ducts, must be effectively sealed to prevent exhaust gases from the combustion system entering the living space. The rear of the metal frame at the front of the refrigerator, and the underside of the lower front plate, have foam sealing strips attached in order to seal the joints between the refrigerator and the front of the recess at the top, sides, and bottom. Before installing the refrigerator, make sure that these sealing strips are in place and are not damaged.

Surfaces adjacent to and above the flue outlet must be of, or covered with, fireproof material.

The refrigerator must be secured in the recess. This can be done by using screws or bolts through the holes in the rear base plate, or by screws through the front frame of the cabinet into the front of the recess.

Vents

The absorption cooling unit is of the air-cooled type and it is of the utmost importance that air circulates freely over the unit at the back of the refrigerator. To ensure this, two vents must be provided in the wall of the trailer so that air passes in through the lower vent, over the cooling unit, and out through the upper vent. Details of the vents are given in fig. 3. These vents have been certified for use with this refrigerator and contain the proper size openings; they must be installed and must not be modified in any way.

Any joints in the floor of the recess must be sealed to prevent gas, in the event of a leak, entering the cavities or cupboards below the refrigerator.

The lower vent has to be opened to gain access to the gas and electric controls which are accessible only from the rear of the refrigerator.

4. FLUE BAFFLE

The flue baffle should be in position in the boiler tube, suspended by its support wire, so that the lower end of the baffle is 3 inches from the bottom of the boiler tube. This is correctly positioned during manufacture and should not become displaced during normal use.

5. GAS PRESSURE

The gas bottle must be fitted with a pressure regulator to reduce the pressure to 11 inches water gauge. The burner is fitted with a size 4 jet which is suitable for use on Propane and Butane gas at a supply pressure of 11 inches water gauge.

6. GAS CONNECTIONS

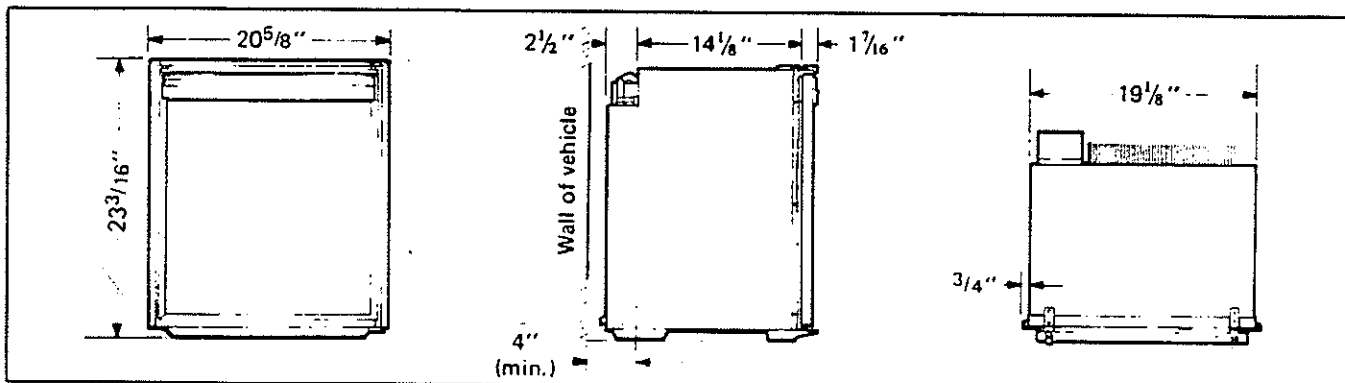
The supply pipe from the pressure regulator on the gas bottle to the refrigerator should preferably be of copper, or of another type approved for use with continuously operating L.P. gas appliances, and should be connected to the inlet of the gas valve (B, fig.4) at the back of the refrigerator.

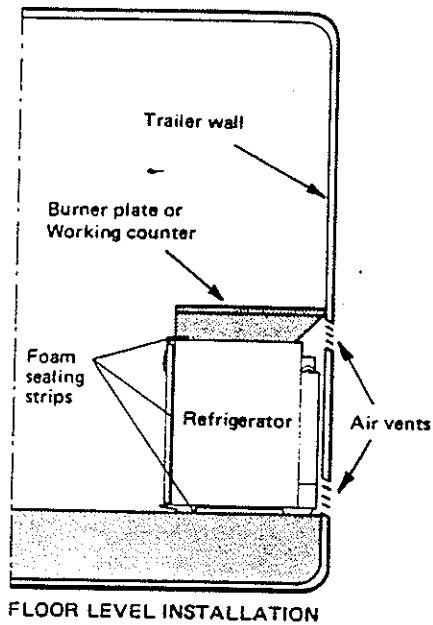
After connecting, all gas connections should be checked for leaks in accordance with item 9.

7. ELECTRICAL CONNECTIONS

The heating element which operates the cooling unit on electricity is rated at 95 watts and has two windings, one for use on 110 volts a.c., the other for use on 12 volts d.c.

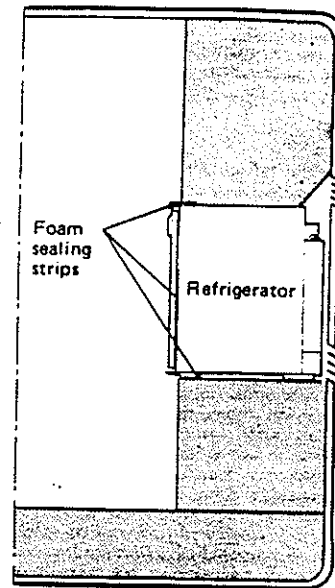
If an external electrical source is utilized, the refrigerator, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, the National Electrical Code, ANSI/NFPA No. 70-1981.





FLOOR LEVEL INSTALLATION

FIG. 1



INSTALLATION ABOVE FLOOR LEVEL

FIG. 2

VENTILATION

The air vents, illustrated below, are contained in the following kits. These vents must be used and must not be modified in any way.

USA: Dometic Kit No. 1 (containing 1 upper vent 123, and 1 lower vent 183).

CANADA: Dometic Kit VT24 (containing 1 upper vent VT24-II, and 1 lower vent VT24-I).

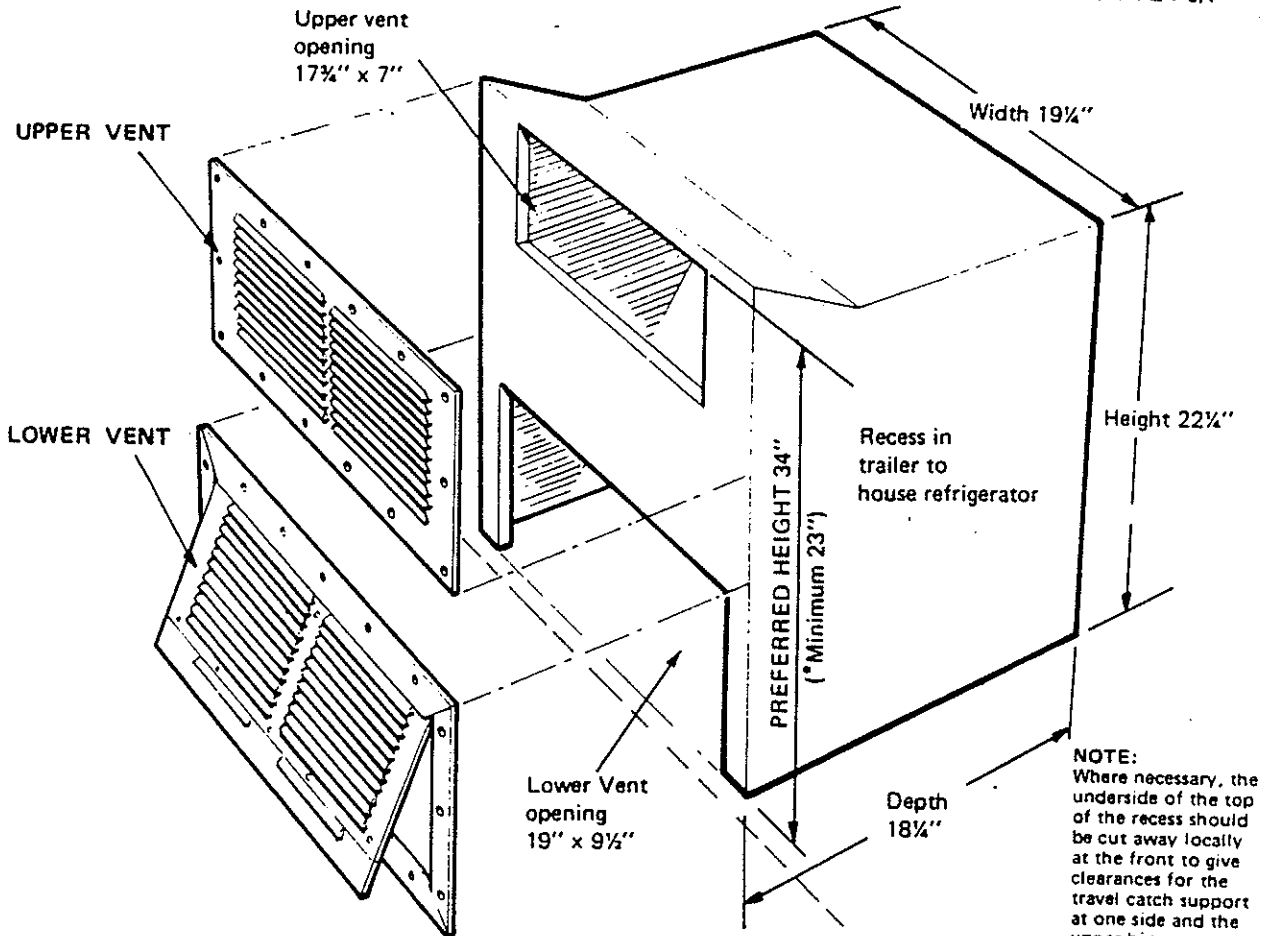


FIG. 3

* This is the minimum height allowable. Where possible, this height should be raised by up to 11 inches in order to increase the natural air-flow to give best cooling unit performance.

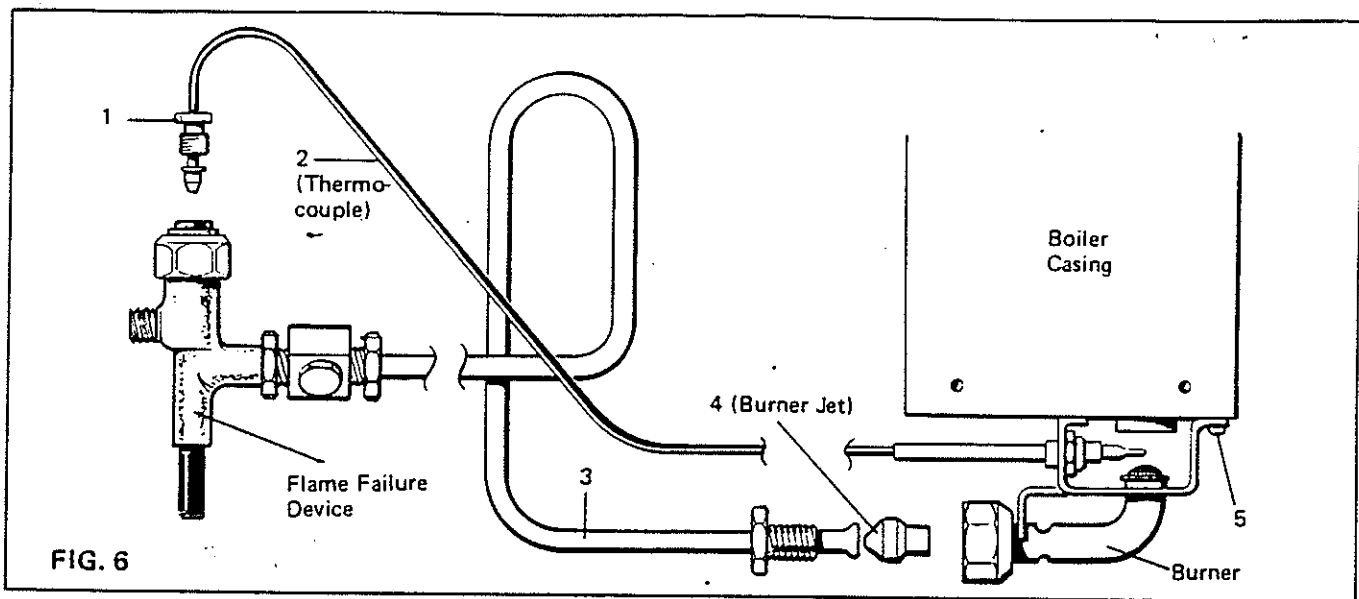


FIG. 6

3. Take off flue top, then lift out flue baffle on its support wire which will then be visible.
 4. Remove burner shield which is held to bottom of boiler casing by two screws.
 5. Disconnect and remove gas pipe (3) from between flame failure device and burner.
 6. Pull out burner jet (4) and clean it by washing in alcohol or blowing through with air. **DO NOT USE A PROBE.**
 7. Disconnect end of thermocouple (2) from flame failure device by unscrewing union (1). Leave other end of thermocouple secured to burner bracket.
 8. Remove burner bracket with burner and thermocouple attached, by undoing screw (5) holding it to bottom of boiler.
 9. Clean burner, making sure its gauze head and aeration ports are clear.
 10. Clean flue tube, preferably by means of a special brush available from your supplier.
 11. Check that foam sealing strips (fig 1) are in good condition, renewing if necessary, then re-fit all parts ensuring that the burner bracket is properly retained. Do not over-tighten the thermocouple union when connecting it; gas connections should also be tight, but not overtightened.
- After re-connection, check all gas joints for soundness as described in the next item, then test refrigerator for satisfactory operation.

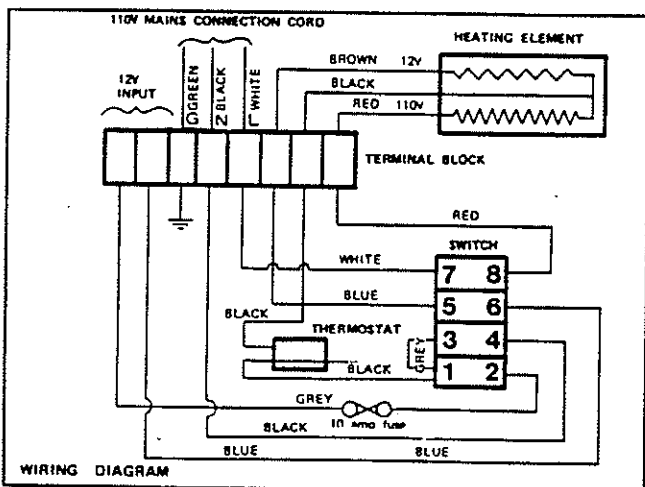
(e) Checking for Gas Leaks

Periodically, the entire gas installation should be checked for leaks. Test all pipe connections with soapy water (not with a flame), watching for bubbles, — see item 9.

19. ELECTRIC EQUIPMENT

(a) Heater

Heat is supplied to the boiler of the cooling unit by a 95 watt heater which has two separate windings, one for use on 12V d.c., the other for 110V a.c. If a new heater has to be fitted at any time, it will be necessary to disconnect from the electricity supply and to gain access to the back of the refrigerator.



1. Take off the cover from the electric equipment control box by removing the screw (H, fig. 4). Disconnect the three heater leads from the terminal block, taking a written note of their respective positions and being careful not to disturb other connections.
 2. Release the armoured sleeve protecting the heater leads from the top of the control box by removing the retaining plate held by one screw.
 3. Take out the screws and remove the cover from the opening in the back of the boiler casing through which the heater is fitted.
 4. Remove sufficient insulation from the boiler through the opening to gain access to the heater in its metal pocket. Bend back the retaining wire clip at the top of the pocket, and lift the heater from the pocket at the same time withdrawing its leads from the armoured sleeve.
 5. Check that the new heater is of the correct type, then fit it in the metal boiler pocket, at the same time threading the three leads through the armoured sleeve. (This operation will be assisted if the ends-of-the-leads are temporarily taped together). Push the heater fully down in the pocket, then bend the retaining wire clip over the top to prevent it rising in use.
 6. Connect the leads to the terminal block as before, fix the armoured sleeve to the top of the control box with the retaining plate and screw, and replace the control box cover.
 7. Put back the boiler insulation, packing it around the tubes, refit the cover, reconnect the refrigerator and test.
- If gas connections have been disturbed, test for leaks as in item 9.

(b) Fuse

If there is no circuit when connected to 12 volts, check that the fuse has not burnt out — see item 7 (c).

20. TROUBLE SHOOTING

If refrigerator does not freeze satisfactorily:-

- (a) Check that the refrigerator is level in both directions, and that the proper clearances for air circulation over the cooling unit at the back have been allowed — see item 3.
- (b) Thermostat incorrectly used ... see item 12.
- (c) Evaporator heavily coated with frost ... see item 15.
- (d) Air circulation around cooling unit restricted ... see item 3.
- (e) Flame has gone out:
 - i Gas in bottle used up ... fit new bottle.
 - ii Connection between thermocouple and flame failure device body loose ... tighten union (1, fig. 6) but do not overtighten.
 - iii Clogged thermostat by-pass screw ... clean or exchange it.
- (f) Flue baffle not inserted into central tube of the cooling unit ... see item 18 (a).
- (g) Wrong gas pressure at burner ... have pressure checked. Pressure at burner must not fall below 11 ins w.g. when thermostat is set on 'MAX'.
- (h) Burner assembly loose ... refit.
- (i) Jet orifice or burner gauze clogged ... see item 18 (d).
- (j) Faulty operation of the thermostat ... thermostat will have to be exchanged for new one.
- (k) Electric operation ... burnt out winding in heater, see item 19 (a).
- (l) 12V operation ... voltage drop due to defective battery, or wiring from battery to refrigerator not heavy enough ... see item 7 (b).
- (m) 12V operation ... burnt out fuse, see item 7 (c).

Odor from fumes:-

- (n) Flame touches side of the boiler due to displacement of burner through loose screw or bent bracket ... correct position or fit new burner and bracket. Burner displacement may cause smoke and sooting of the flue.

- (o) Burner damaged or gauze choked.
- (p) Flame touches flue baffle:-
 - i Baffle too low in flue ... see item 18 (a).
 - ii Gas pressure too high ... see item 20 (g).
 - iii Jet orifice has been opened out ... fit new jet of correct size (size 4).
- (q) Dirty flue tube; clean flue, burner and jet as described in item 18 (d).

should be available, if required, from your Dometic Service Point or Distributor Service Department.

Part No.	Description
341913-14	By-pass screw, size 14, for gas thermostat
2902595	Electric Thermostat K50
2900703-14	Gas Thermostat, V35
2901156	Flame Failure Device
2901181-01	Piezo Igniter
2901738	Thermocouple
2901764	Burner, with bracket
2901788-02	Electrode, with lead, for igniter
2901860-01	Burner Jet, size 4
2901943	Heating Element, type 178, 12/110V, 95W

21. SPARE PARTS

The following is a list of commonly used replacement parts which

All the above instructions are to be followed closely. This refrigerator is quality guaranteed, however, we are not responsible for any failures caused by improper adjustments and unfavorable installation conditions. Contact service point or distributor service department for assistance if required.

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