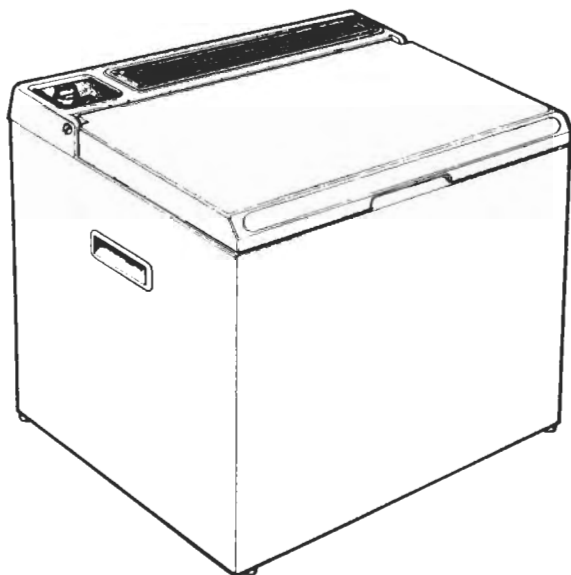


OPERATING INSTRUCTIONS

FOR PORTABLE

REFRIGERATOR

RC 160 T EG



Our goal . . . your satisfaction

This refrigerator is to be operated by HD-5 Propane Gas and electricity (12 V dc and 120 V ac), it may be used in adequately ventilated indoor structures just as outdoors.

F O R Y O U R S A F E T Y

If you smell gas:

1. Evacuate enclosure
2. Call for professional help

F O R Y O U R S A F E T Y

Do not store or use gasoline or other liquids with flammable vapors in the vicinity of this or any other appliance

WARNING!

This refrigerator consumes air (oxygen). Provide ample ventilation especially when sleeping. Do not use this refrigerator in unventilated structures to avoid endangering your life. Provide additional ventilation for any additional fuel burning appliances and additional occupants.

Instructions for installation:

The design of this refrigerator has been certified by the American Gas Association.

1. Installation:

The installation of the refrigerator must conform with the following American National Standards as applicable: ANSI Z21.74-1983 Portable Refrigerator.

The overall dimensions of the refrigerator are given in fig. 1.

For installation, for maintaining proper clearances from combustible material to the refrigerator, the following minimum clearances must be observed:

clearance from rear edge to outer casing of refrigerator:	4 inches
clearance above top of refrigerator lid:	13 inches
clearance at sides of refrigerator casing:	0 inches

Fig. 1. illustrates these minimum clearances.

The absorption cooling unit is cooled by convection air and therefore it is of the utmost importance that the air circulates free over the unit and that the air vent openings of the refrigerator are always kept open. The more ventilation you provide, the better the performance you can expect from the refrigerator.

2. Liquid Gas Operation:

The refrigerator may only be operated by a self-contained 14 oz propane HD 5 gas bottle, which is to be connected to the refrigerator by means of the supplied manual control valve and the pressure regulator with hose. The gas burner is fitted with a jet Nr. 21 which is suitable for use on Propane gas at a supply pressure of 11 inches water gauge.

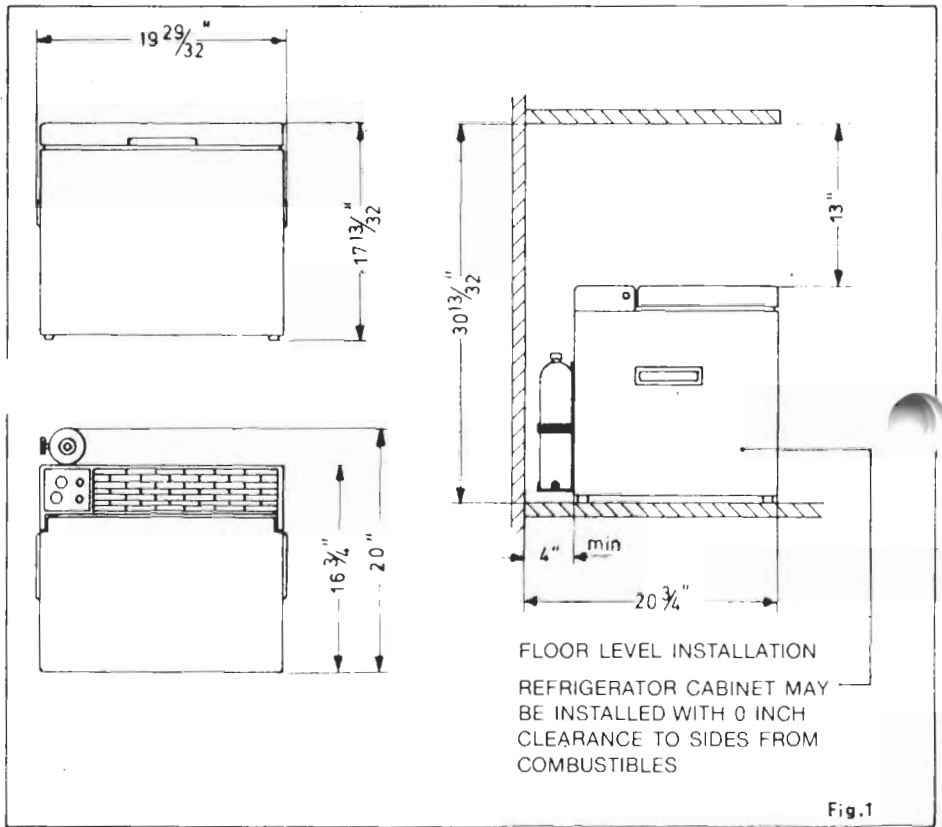
2.1. Connection of gas supply:

- fix the supplied cylinder holder (fig. 2.1) on the rear cover of the refrigerator by the two screws.
- fit the manual control valve (fig. 2.2) with pressure regulator (fig. 2.3) and hose finger tight to the self contained 14 oz gas cylinder (fig. 2.4)
- connect the gas hose to the inlet (fig. 2.5) at the back of the refrigerator.
- insert gas bottle assembly to the gas cylinder holder (fig. 2.1)

After connecting all gas connections must be checked for leaks. For this put a soapy solution on all gas connections, turn on the gas cylinder manual valve and watch for bubbles.

For the detection of leaks never use an open flame.

If the gas bottle is empty withdraw it from the bottle holder, unscrew the manual control valve / pressure regulator-assembly from the bottle and refit a new one.



3. Electrical operation:

When operating on electricity the cooling unit operates by means of two separate 75 W heating elements, one for use on 120 V a. c., the other for use on 12 V d. c..

- a) 120 Volts a. c.:

Warning: Electrical grounding instructions:

This appliance is equipped with a three-prong (grounding) plug for your protection against shock hazards and should be plugged directly into a properly grounded three-prong receptable. Do not cut or remove the grounding prong from this plug.

The cord is approximately 5 feet long and a grounded three-prong receptable should be installed in an accessible position within reach of the plug.

b) 12 Volts d. c.:

The current draw is 7,0 amps. If the box is operated by means of the car battery it is recommended that the refrigerator should only be operated when the car engine is running. If the engine is stopped, the car battery will loose power and become flat.

4. Leveling:

See that the refrigerator is standing level in both directions by means of a spirit level. This is important, for satisfactory operation of the cooling unit.

5. Starting the refrigerator:

The gas and electric controls are located in a recess, covered by a slide on the top of the refrigerator.

IMPORTANT!

When the unit is running, it is essential that this slide is in a closed position since otherwise a heat-build-up will occur which will affect the performance of the unit.

Do not use the unit on two or more power sources (i.e. gas and 120 V or 12 V) **SIMULTANEOUSLY**. The cooling unit will not operate properly in this case and damage may be caused.

5.1 Propane gas operation - Lighting the burner:

- a: open gas cylinder valve (fig. 2.2).
- b: turn gas thermostat knob (fig. 2.6) in the clockwise direction to MAX setting
- c: press in button (fig. 2.7) of flame failure safety device and keep it down for about 20 - 30 seconds, by this the gas pipe to the burner is vented.
- d: keep the button (fig. 2.7) of safety device pressed down and ignite the burner by pressing the piezo-gas lighter button (fig. 2.8) several times.
- e: when the gas burner lights (you can see the burner flame through the opening (fig. 2.9) on the rear of the refrigerator, keep the safety device button (fig. 2.7) pressed down for another 20 - 30 seconds, then release it and check that the burner stays alight.
- f: if, for any reason, the gas flame extinguishes, the flame safety device is working automatically and shuts off gas supply. While the button (fig. 2.7) is pushed, this device is temporary inoperative.
- g: when the refrigerator is no longer used on gas, turn off the gas supply at the gas cylinder.

5.2 Electric operation:

- a: see that gas cylinder valve (fig. 2.2) is turned off.
- b: connect to correct voltage electricity supply;
for 120 V a. c. operation turn electric thermostat knob (fig. 2.10) in the clockwise direction to MAX setting.

The 12 V circuit is not thermostatically regulated.

The knob (fig. 2.10) is useless for this energy source.

NOTE:

To stop the electrical 120 V a. c. operation, turn electric thermostat knob (fig. 2.10) in the anti-clockwise direction to OFF setting. For safety reasons disconnect it also. To stop the electrical 12 V d. c. operation, disconnect voltage supply.

6. Regulations of temperature:

After a sufficient period of maximum cooling set the appropriate thermostat knob at mid position. The cabinet will now automatically maintain a suitable temperature for ordinary food storage. Usually, no further adjustment will be needed, but in hot weather, or when more cooling is required, the knob must be turned to a higher position. If less cooling is required, the knob should be turned to a lower position.

7. Storing food in the refrigerator:

To prevent drying out and the transfer of flavors from one food to another, foods should always be stored in covered dishes, plastic bags or wrapped in foil or waxed paper. **NEVER PUT HOT FOOD INTO THE REFRIGERATOR!** Avoid using large dishes and do not stock food containers too closely as this interferes with the circulation of cold air within the cabinet.

8. Ice - making:

Fill the ice-trays with water to within 1/8" from the top and place them on the ice-tray support. When ice has formed the ice-tray can be released from the shelf by lifting one corner. Do not use a lever. Any unwanted ice should be left in the divider and replaced in the tray, empty spaces being refilled with water.

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

9. Defrosting:

Frost will form gradually on the cooling fins. It is a mistake to assume that an accumulation of frost gives a colder cabinet. For the most efficient and economical operation, the refrigerator should be defrosted regularly - about every ten to fourteen days, depending on the particular conditions of use. To de-

12. Maintenance:

L. P. gas equipment:

The burner (fig. 3) is fitted with a jet No. 21 which is suitable for use on Propane gas at a supply pressure of 11 inches, water gauge. The orifice in the jet is very small and must never be cleaned by means of a pin or a similar instrument, as this could damage the orifice. Should, for some reason, the jet require cleaning, it should be washed in alcohol and blown through with air.

12.1 Cleaning gas burner and jet:

Once or twice a year or depending on use, examine whether the flame is blue coloured. For this inspect the flame through burner flame opening (fig. 2.9) a yellow flame is sign of a bad combustion. For cleaning the flue and the burner assembly, proceed in the following way:

- a: unscrew rear cover of refrigerator box.
- b: disconnect and remove gas pipe from the burner. For this operation you need a 13/32" (10 mm) spanner for the union nut (fig. 3.1).
- c: unscrew the counter nut (fig. 3.2) of the jet (fig. 3.3) with a 1/2" (12 mm) spanner and take out guard (fig. 3.4).
- d: unscrew security plate (fig. 3.5) of the burner pipe (fig. 3.6) which is fastened by a screw, push the burner pipe from the jet and take out the jet from the boring.
- e: wash the jet with alcohol and blow through with air to check if the opening is quite clean. Do not use a probe.
- f: clean the burner pipe making sure its combustion- and aeration openings are free from dust.
- g: refit all parts, ensuring the burner is properly retained. Gas connections should be tight, but not overtightened. After replacing check all gas joints for tightness as described in the next item.

All instructions under item 12.1 must only be made by an expert, preferably by a licenced gas fitter.

12.2 Checking for gas leaks:

Periodically and after each maintenance work 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 2 Liquid Gas Operation.

12.3 Heaters:

Heat is supplied to the boiler of the cooling unit by two separate 75 Watt heaters, one for 12 V d. c. and one for 120 V a. c.. If a new heater has to be fitted proceed as follows:

- a: unscrew rear cover of refrigerator box.
- b: disconnect the 2 heater leads from the terminal block, take a written note of their respective positions and be careful not to disturb other connections.
- c: open the sheet metal coat of the boiler insulation at the back of the refrigerator, set the heating element free by taking off the insulation from the tubes, then release the screw below the heating tube and pull it upward out.
- d: check that new heater is of the correct type, then put the heating element completely into the heating tube and fasten the screw.
- e: put back the boiler insulation, packing it around the tubes and close the boiler casing.
- f: connect the leads to the terminal block and replace the rear cover of refrigerator box, reconnect the refrigerator and test.

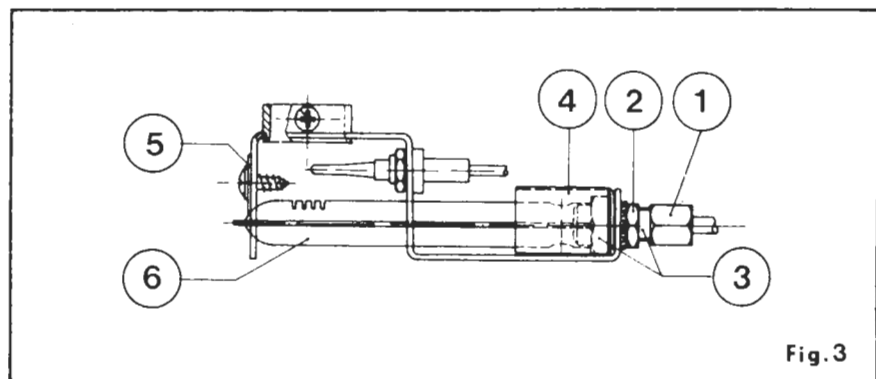
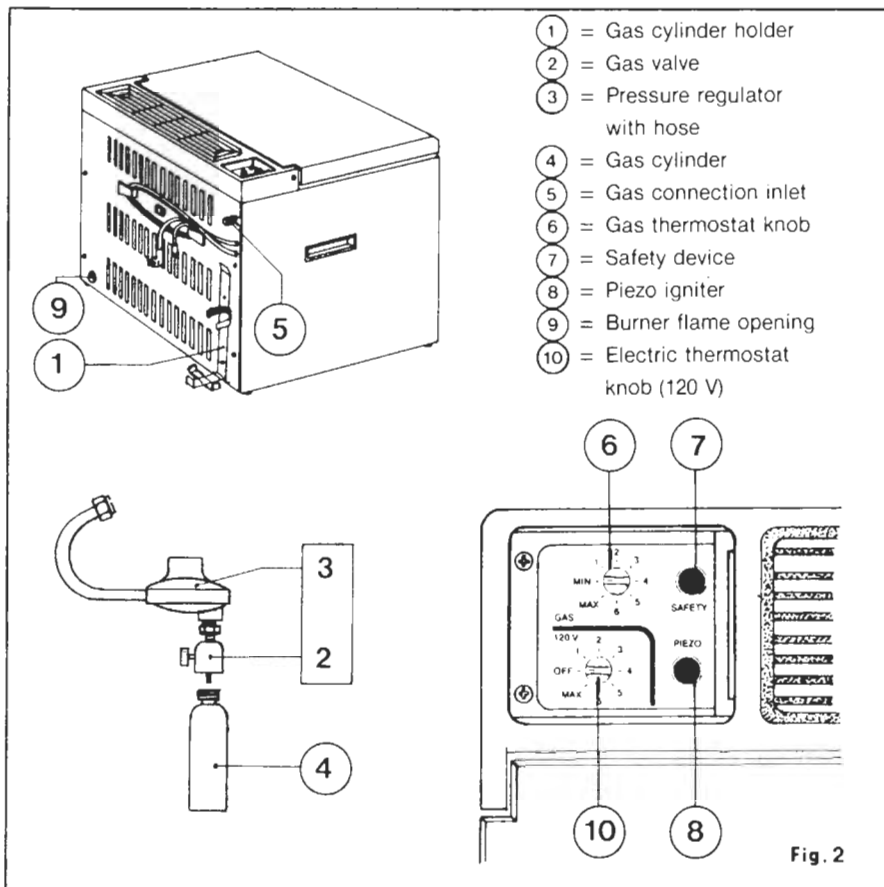
13. Trouble shooting:

If the refrigerator does not work satisfactorily:

- a: check that the refrigerator is level in both directions and that the proper clearances for air circulation at back and above top of casing have been allowed, see item 1.
- b: Thermostat incorrectly used, - see item 6.
- c: Evaporator (ice tray support) heavily covered with frost, - see item 9.
- d: Air circulation around cooling unit restricted - see item 1.
- e: Flame has gone out:
 - Connection between thermocouple and flame failure device loose. Tighten union, but do not overtighten.
 - Burner assembly loose refit.
 - Jet orifice or combustion - and aeration openings of burner pipe clogged, see item 12.
 - Faulty operation of the thermostat . . . thermostat will have to be exchanged by a new one.
- f: No performance on electric operation:
 - defective heater, see item 12.3.
 - Thermostat incorrectly used - see item 6.
 - faulty operation of the thermostat - to be exchanged by a new one.
 - voltage drop due to a defective battery (12 V operation).

14. Spare Parts:

All spare parts as burner, heating element, thermostat and so on are available at your service center. The address of the service center next to you can be found in the added booklet "Factory Authorized Service Centers For Dometic Refrigerators".



WIRING DIAGRAM

