



Dometic

INSTALLATION AND OPERATING INSTRUCTIONS

REFRIGERATOR FOR LP-GAS AND ELECTRIC OPERATION.

RM 2410 RM 2510
RM 2610 RM 2810

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.

WARNING: Improper installation, adjustment, alteration, service or maintenance can cause injury or property damage. Refer to this manual. For assistance or additional information consult a qualified installer, service agency or the gas supplier.

| | |
|----------------------|-----------|
| | Page |
| Installation | 7-11 |
| Instructions for use | 11-12 |
| Gas equipment | 13-14 |
| Electric equipment | 14 |
| Maintenance | 14 |
| Fault tracing | 15 |
| Door panel | last page |

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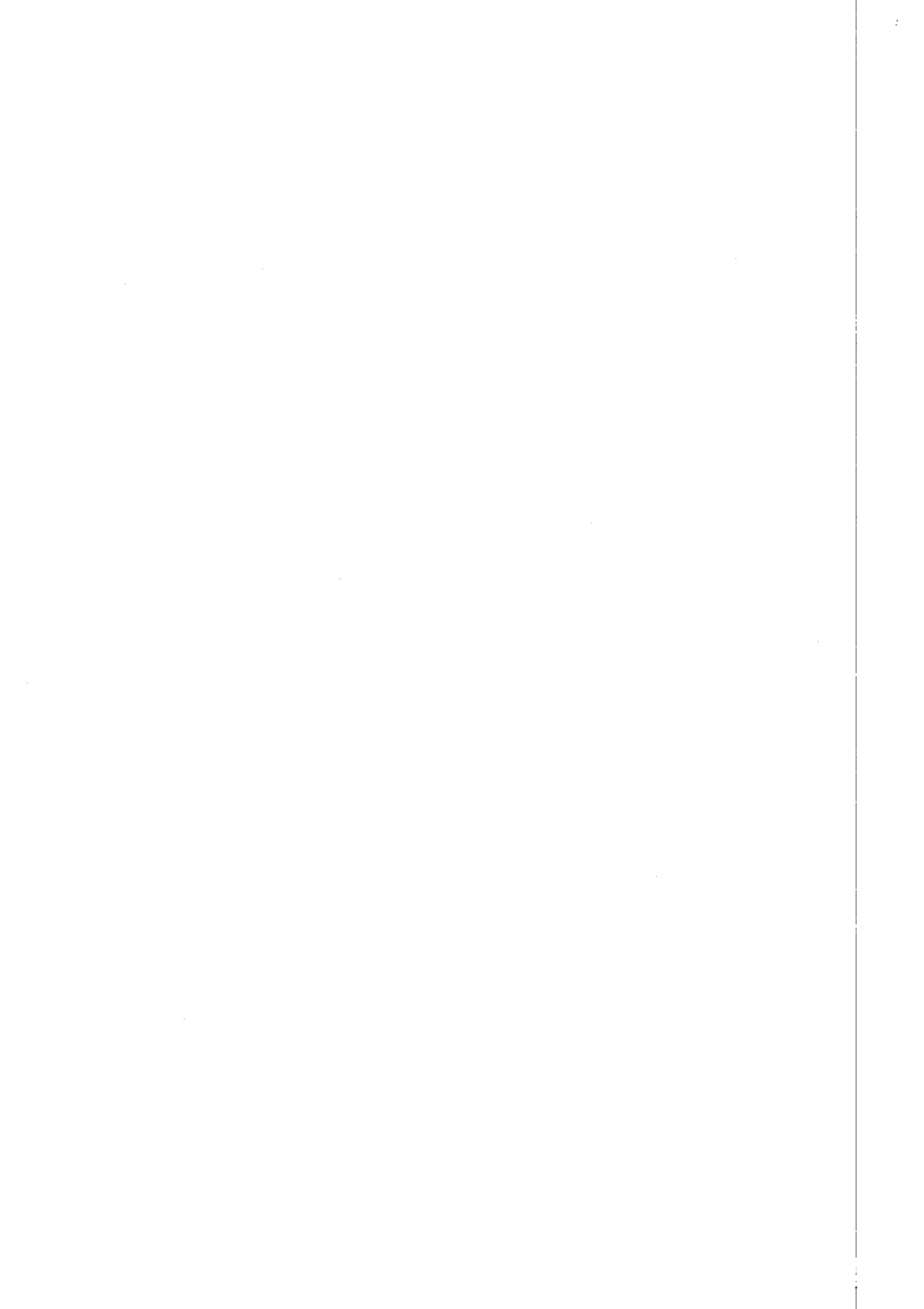
Dometic

quality leisure line products

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**REFRIGERATORS WITH
PIEZO IGNITER
RM 2410**

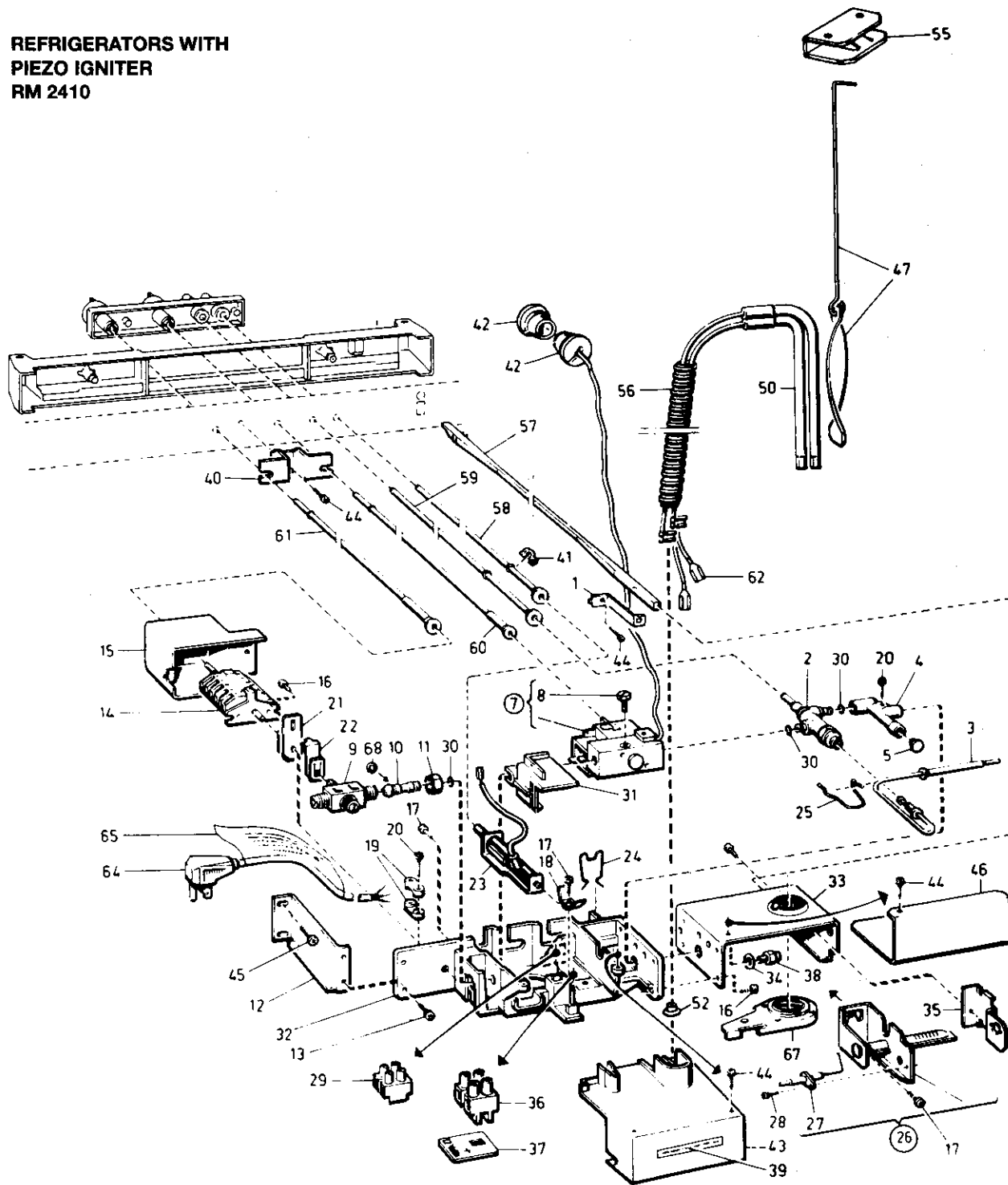
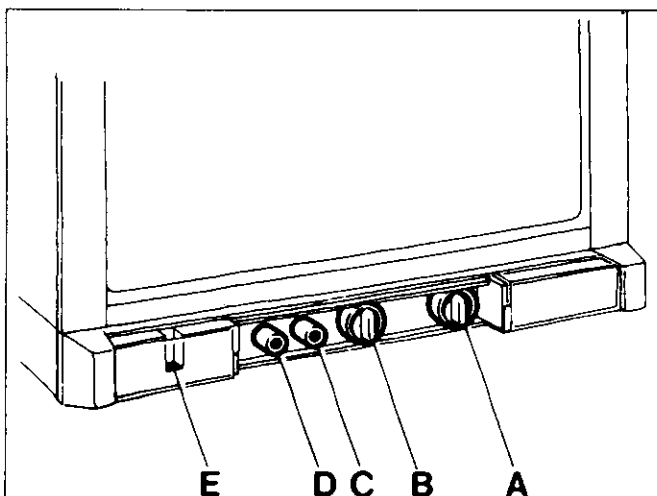


Fig.1

| Item No. | Description | Item No. | Description |
|----------|------------------------------|----------|-------------------|
| 1 | Retainer | 35 | Burner retainer |
| 2 | Thermo electric safety valve | 36 | Terminal 12/120V |
| 3 | Thermo couple element | 38 | Burner jet |
| 4 | Coupling | 42 | Plug |
| 7 | Thermostat | 43 | Cover |
| 9 | Cut-off valve | 46 | Cover |
| 10 | Nipple | 47 | Flue baffle |
| 11 | Nut | 50 | Heater |
| 14 | Switch | 52 | Bushing |
| 23 | Lighter | 53 | Retaining ring |
| 26 | Burner | 55 | Flue top |
| 27 | Electrod | 57 | Light conductor |
| 29 | Terminal | 58 | Push rod |
| 30 | Sealing ring | 59 | Push rod |
| 31 | Snap catch | 60 | Shaft, thermostat |
| 33 | Burner housing | 61 | Shaft, switch |
| | | 62 | Lead for 12v |
| | | 64 | Flexible cord |
| | | 67 | Clamping plate |



**REFRIGERATORS WITH
AUTOMATIC IGNITION
RM 2510**

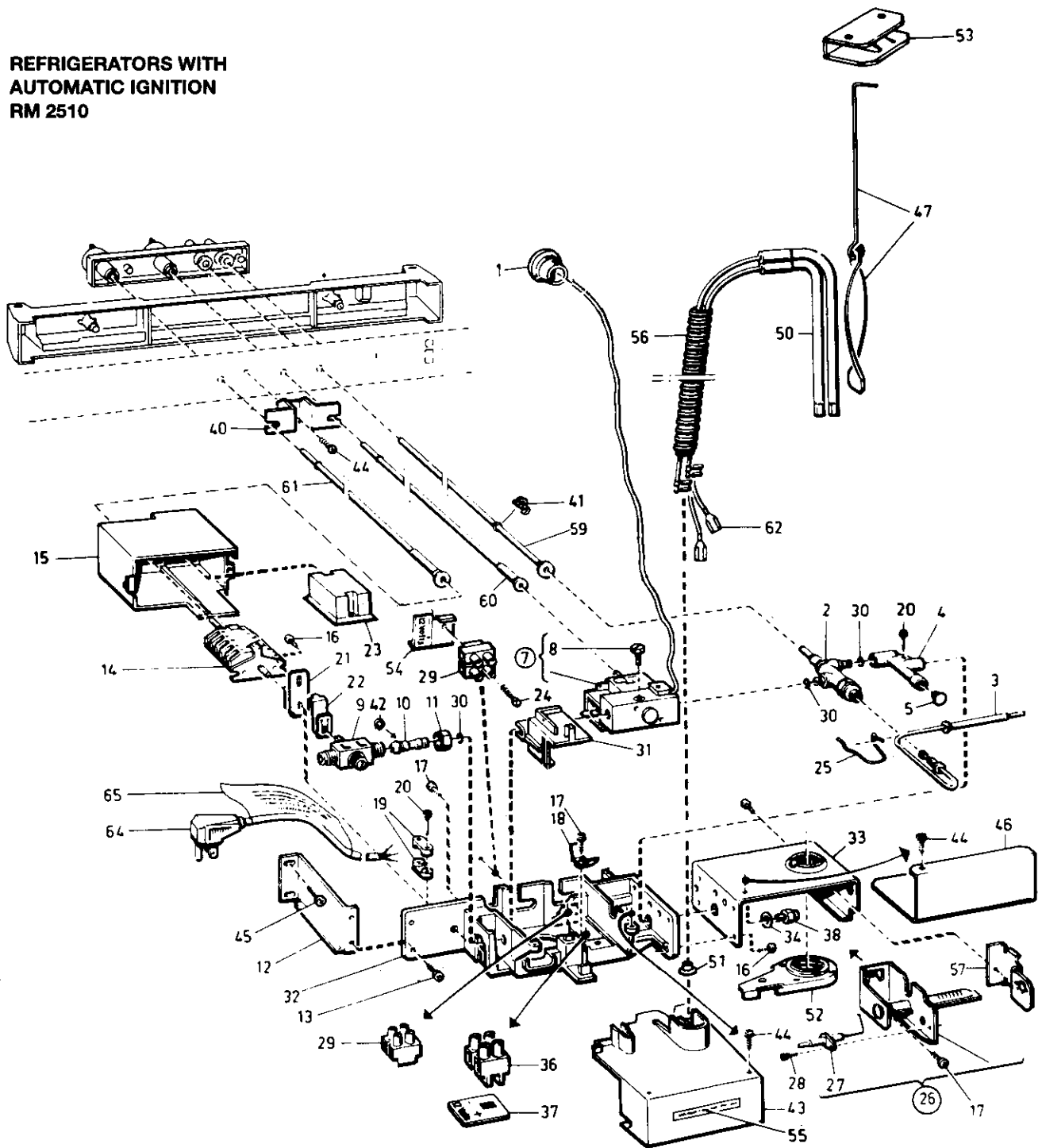
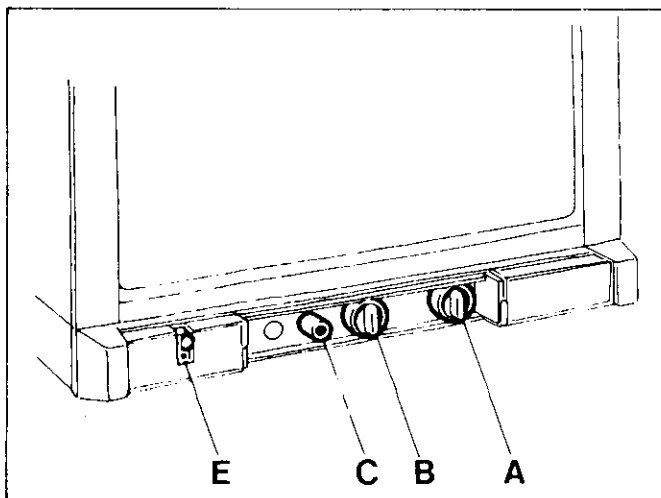


Fig.2



| Item No. | Description | Item No. | Description |
|----------|------------------------------|----------|-------------------|
| 1 | Plug | 36 | Terminal block |
| 2 | Thermo electric safety valve | 38 | Burner jet |
| 3 | Thermo couple element | 43 | Cover |
| 4 | Coupling | 46 | Cover |
| 7 | Thermostat | 47 | Flue baffle |
| 9 | Cut-off valve | 50 | Heater |
| 10 | Nipple | 51 | Bushing |
| 11 | Nut | 52 | Clamping plate |
| 14 | Switch | 53 | Flue top |
| 23 | Reigniter | 55 | Label for 12V |
| 26 | Burner | 57 | Burner retainer |
| 27 | Electrod | 59 | Push rod |
| 29 | Terminal block | 60 | Shaft, thermostat |
| 30 | Sealing ring | 61 | Shaft, switch |
| 31 | Snap catch | 62 | Lead for 12/120V |
| 33 | Burner housing | 64 | Flexible cord |

**REFRIGERATORS WITH
AUTOMATIC IGNITION
RM 2610
RM 2810**

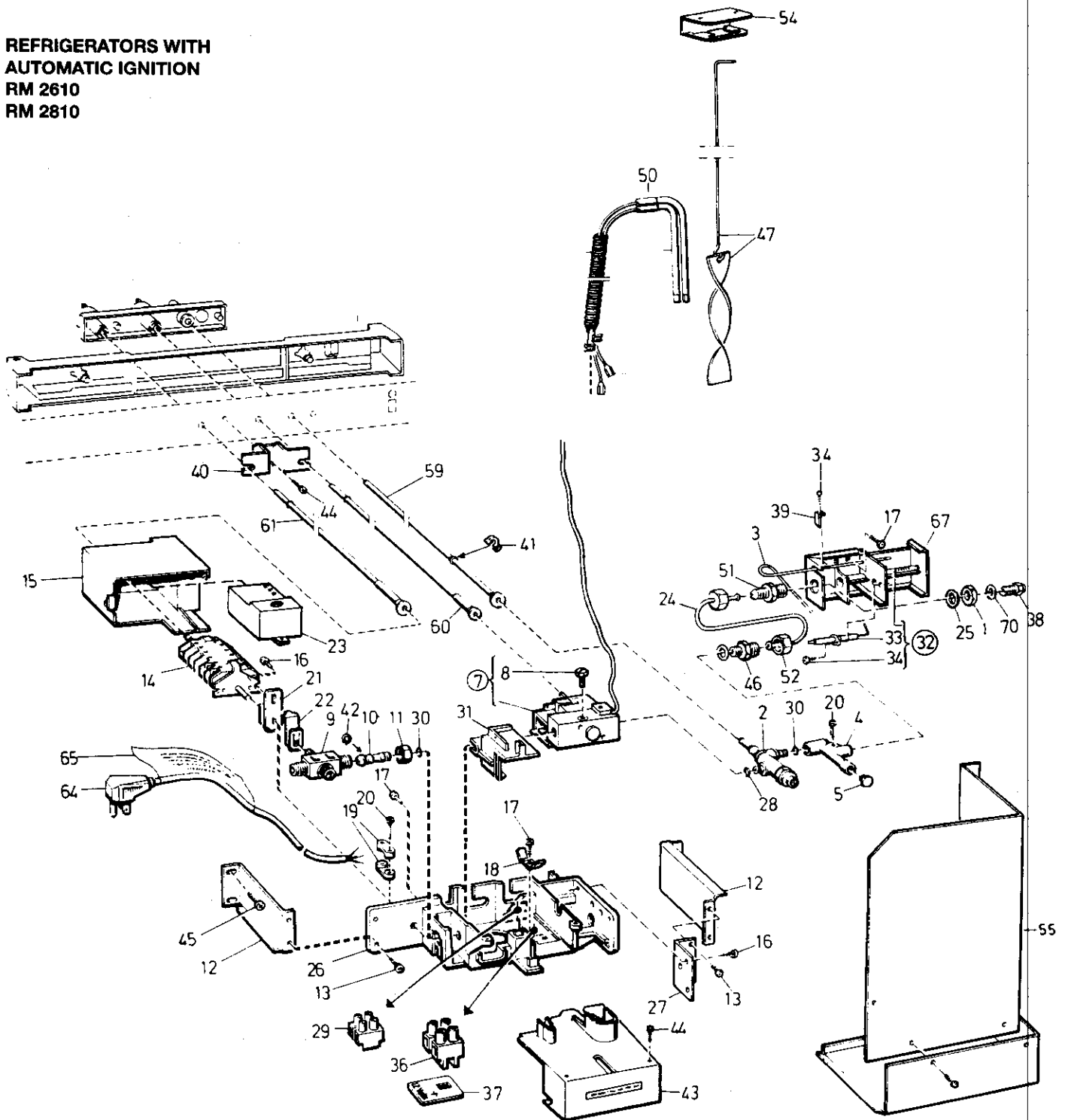
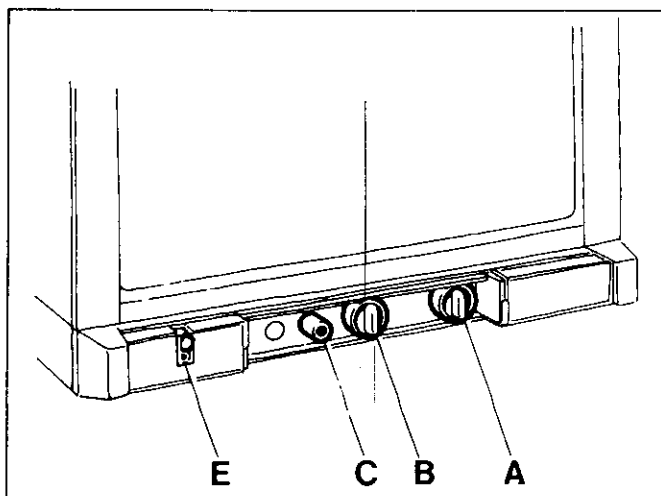
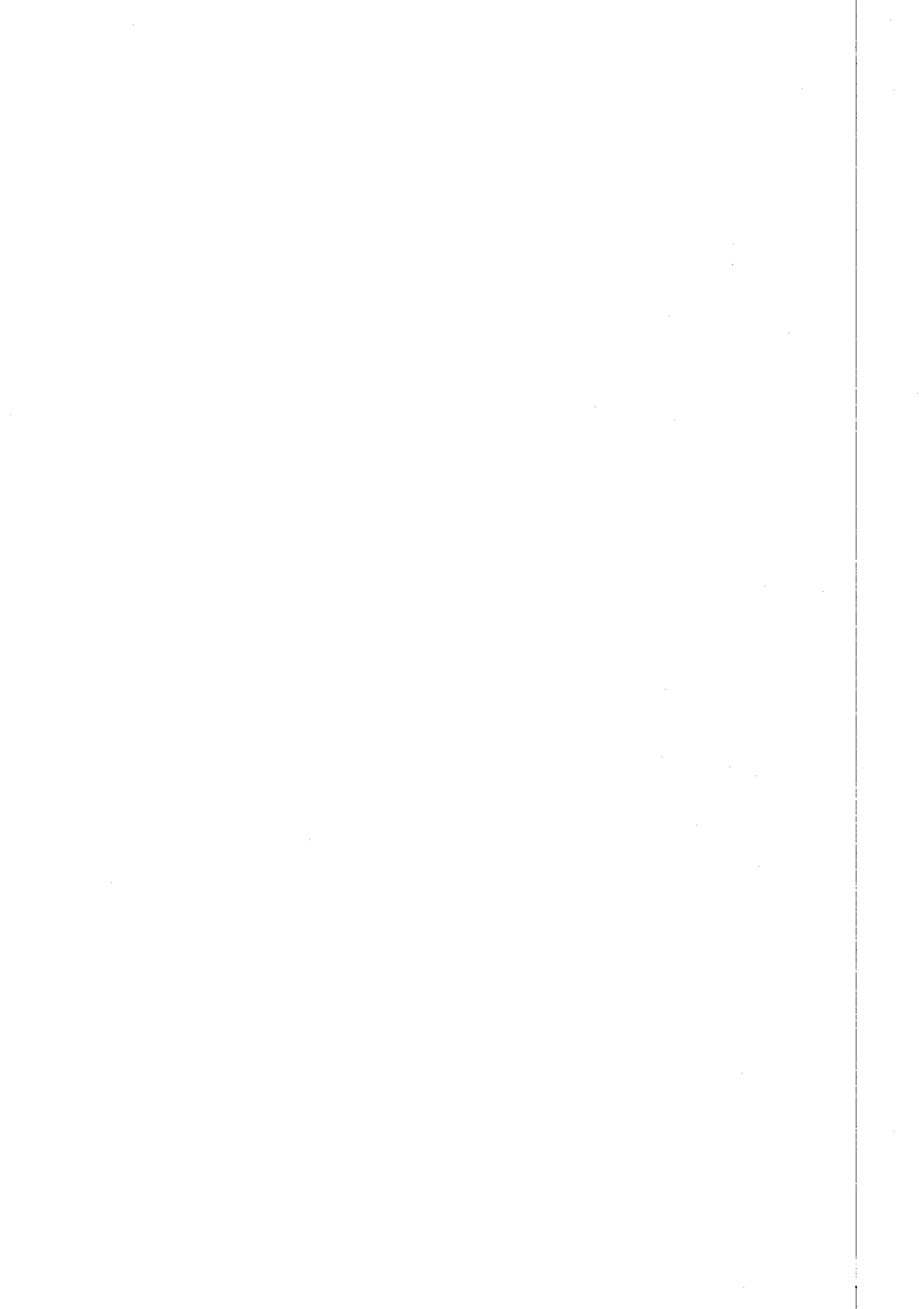


Fig.3



| Item No. | Description | Item No. | Description |
|----------|------------------------------|----------|-------------------|
| 2 | Thermo electric safety valve | 43 | Cover |
| 3 | Thermo couple element | 46 | Nipple |
| 4 | Coupling | 47 | Flue baffle |
| 7 | Thermostat | 50 | Heater |
| 9 | Cut-off valve | 51 | Nipple |
| 10 | Nipple | 54 | Flue cap |
| 11 | Nut | 55 | Protection plate |
| 14 | Switch | 59 | Push rod |
| 23 | Reigniter | 60 | Shaft, thermostat |
| 24 | Gas tube | 61 | Shaft, switch |
| 29 | Terminal block | 64 | Flexible cord |
| 31 | Snap catch | 67 | Burner housing |
| 32 | Burner | | |
| 33 | Electrod | | |
| 36 | Terminal block | | |
| 38 | Burner jet | | |



INSTALLATION

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 32-80.
3. Recreational Vehicles ANSI/NFPA No. 501 C-(latest edition)

The unit must be electrically grounded in accordance with the National Electric Code ANSI/NFPA No. 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 MOBIL HOUSING
3. Any applicable local code.

The unit must be electrically grounded in accordance with the current CANADIAN ELECTRICAL CODE C 22 Parts 1 and 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 ventilating 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.

GAS CONNECTION

Hook-up to the gas supply line is accomplished at the manual gas 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 soapy water.

WARNING

DO NOT use a flame to check for leaks.

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

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 appliances 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.

ELECTRICAL CONNECTION

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 ft. and therefore it is recommended that the receptacle should be located to the left side of the refrigerator (viewed from rear) and approximately 6" from the floor (see FIG. 4). This allows easy accessibility through the vent door. The cord should be routed to avoid coming in contact with the burner cover, flue cover or any other components that could damage the cord insulation.

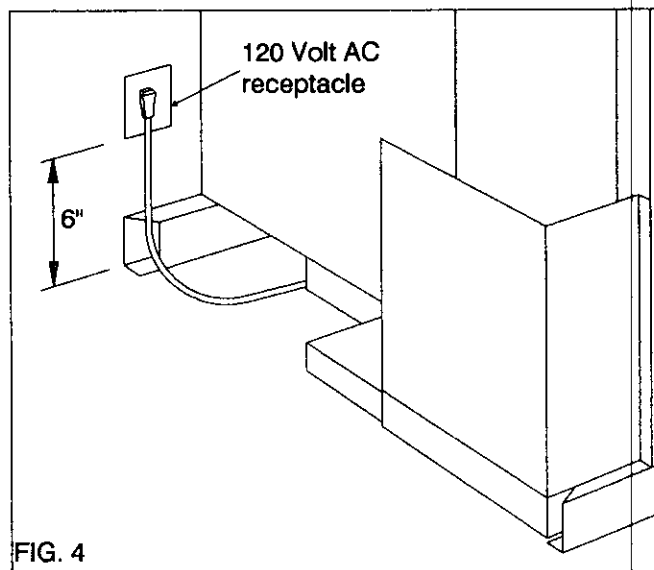


FIG. 4

Refrigerator models requiring 12 Volt DC supply

On units provided with automatic reigniter there is one additional terminal block marked **12 Volts**.

On 3-WAY units with automatic reigniter there are two additional blocks.

The refrigerator must be connected to the battery circuit with two wires of adequate capacity to avoid voltage drop. The wire gauge should be chosen with consideration to the wire length in accordance with table below. The 12 volt circuit must be fused. Maximum fuse size is 15 amps. for RM 2410, 20 amps. for RM 2510, 25 amps. for RM 2610 and RM 2810.

Maximum total conductor wire length in feet and meters.

| AWG | RM 2410 135W | RM 2510 175W | RM 2610 250W | RM 2810 275W |
|--------|-----------------|-----------------|-----------------|-----------------|
| 14 ft. | 9 | 7 | 6.5 | 6.5 |
| m | 2.7 | 2.1 | 2 | 2 |
| 12 ft. | 15 | 12 | 10.5 | 10.5 |
| m | 4.6 | 3.6 | 3.2 | 3.2 |
| 10 ft. | 25 | 19 | 17 | 17 |
| m | 7.6 | 5.8 | 5.1 | 5.1 |
| 8 ft. | 40 | 31 | 27 | 27 |
| m | 12.2 | 9.5 | 8.1 | 8.1 |

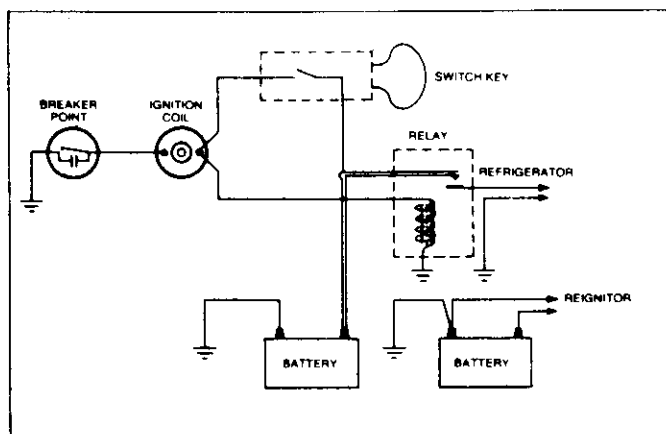
Do Not use the body or chassis of the vehicle as a substitute for either of the two conductors. Do not connect any other electrical equipment or lighting to the refrigerator circuit. The refrigerator will draw from 11 to 18 amps at 12 volt DC depending on model.

The reigniter must be connected to a separate battery circuit and will draw about 0.1 amp.

CAUTION

Do not operate the refrigerator on 12 volt DC when the vehicle is parked. You will run out of battery in a rather short time.

If possible the installation of a 12 volt DC operated refrigerator should be completed with a relay mounted either in the car or in the recreational vehicle (see FIG. below). This relay will automatically cut out the refrigerator when the car motor is stopped.



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.

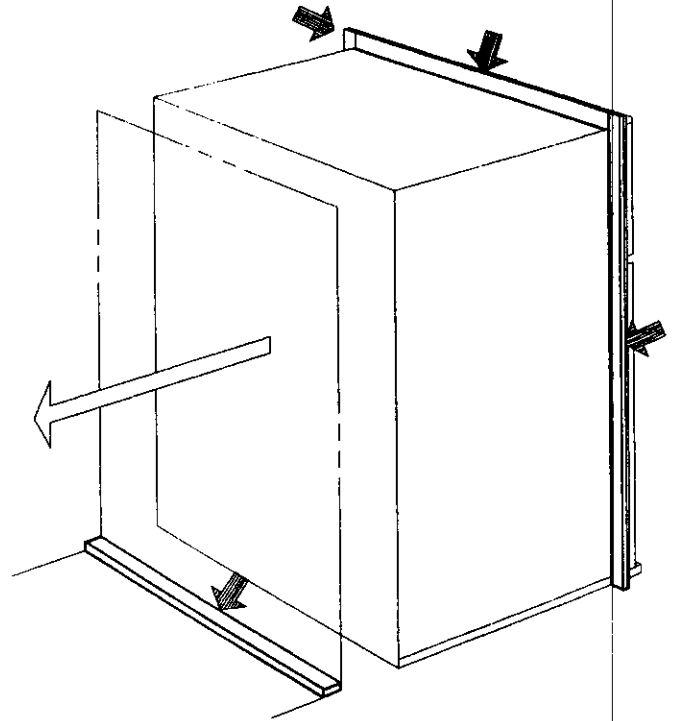


FIG. 5

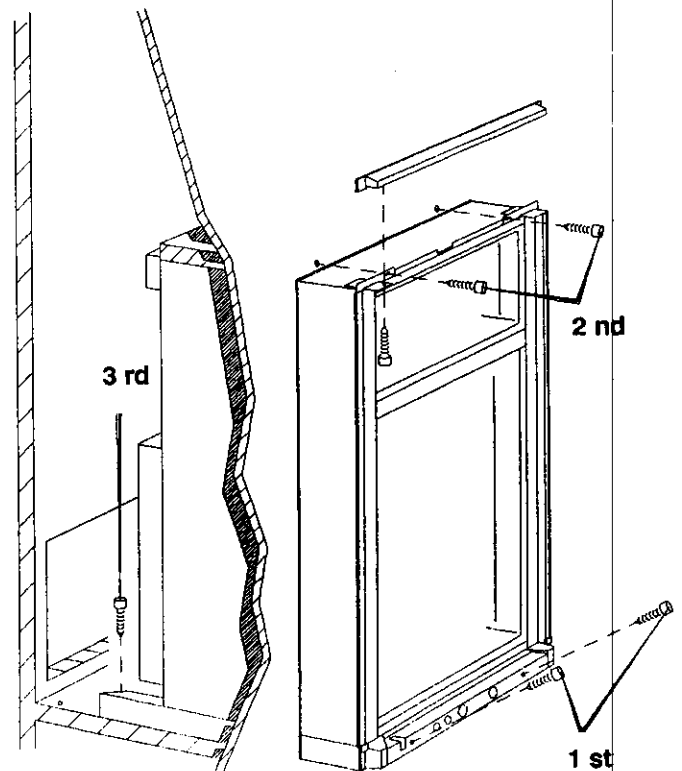


FIG. 6

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 the 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 as shown in FIG. 5. The sealing should provide a 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 must be installed in the following order: **1st** two screws installed on the front base; **2nd** two screws installed in the top frame; **3rd** 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. 6). Any space between the counter, storage area or ceiling and top of the refrigerator greater than 1-1/2 inches 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.

TO CHANGE THE DOOR, see last page

TO REMOVE AND REPLACE THE REFRIGERATOR

Before working on the refrigerator make sure that 120 volt AC and optional 12 volt DC leads are disconnected. Shut the gas valve. Unscrew the hexagon nut 11 and move the valve on the gas line out of the bracket. Check that the valve slips out of the clip connection with the switch shaft.

Loosen the screws anchoring the refrigerator to the enclosure (see FIG. 6) and slide the refrigerator forward out of the compartment.

When replacing the refrigerator make sure that the sealing strips are properly positioned. After reassembly the gas connection should be checked for leaks.

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.

METHODS OF INSTALLATION

The methods of installation are shown in FIG. 7. 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.

VENTILATION HEIGHTS

| Installation with roof vent and lower side vent | Minimum ventilation heights in | |
|---|--------------------------------|------|
| | Inches | mm |
| Refrigerator | | |
| RM 2410 | 34 | 864 |
| RM 2510 | 42 | 1067 |
| RM 2610 | 56 | 1422 |
| RM 2810 | 62 | 1575 |

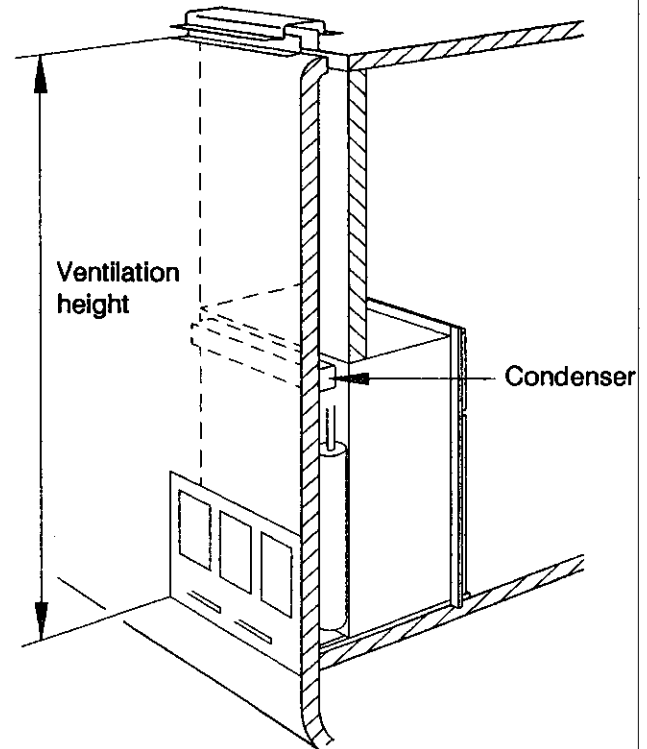


FIG. 7

CLEARANCES

Minimum clearances in inches to combustible materials are:

- G: Top 0"
- K: Side 0"
- L: Bottom 0"
- M: Rear 1/2"
- N: See example below

Clearance M between the rearmost part of the refrigerator and the wall behind the refrigerator.
 Clearance N on top of the condenser is related to the minimum ventilation height.

See Figures 8, 9 and examples below.

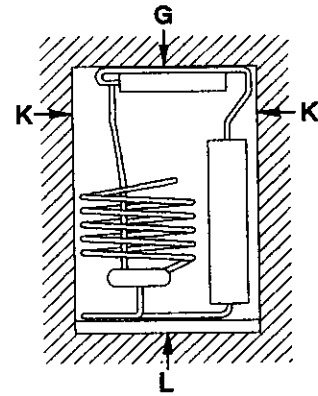
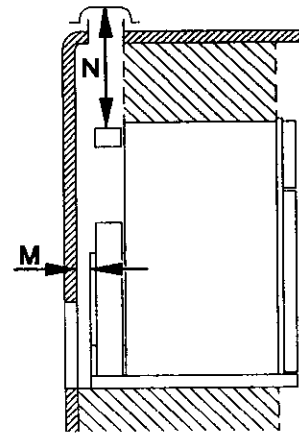


FIG. 8



Example for Clearance N:

The clearance N for the RM 2610 model is derived in the following way:

Installation with roof vent and lower side vent:

$N = \text{Minimum ventilation height } 56 \text{ (1422mm) minus installation height.}$

$51\text{-}5/16 \text{ plus distance between condenser top and refrigerator top } 1\text{-}1/8 \text{ plus distance between roof surface and roof vent cap } 5\text{-}1/4.$

$$(N = 56 - 51\text{-}5/16 + 1\text{-}1/8 + 5\text{-}1/4 = 11\text{-}1/16 \text{ inches})$$

$$(N = 1422 - 1303 + 29 + 133 = 281 \text{ mm})$$

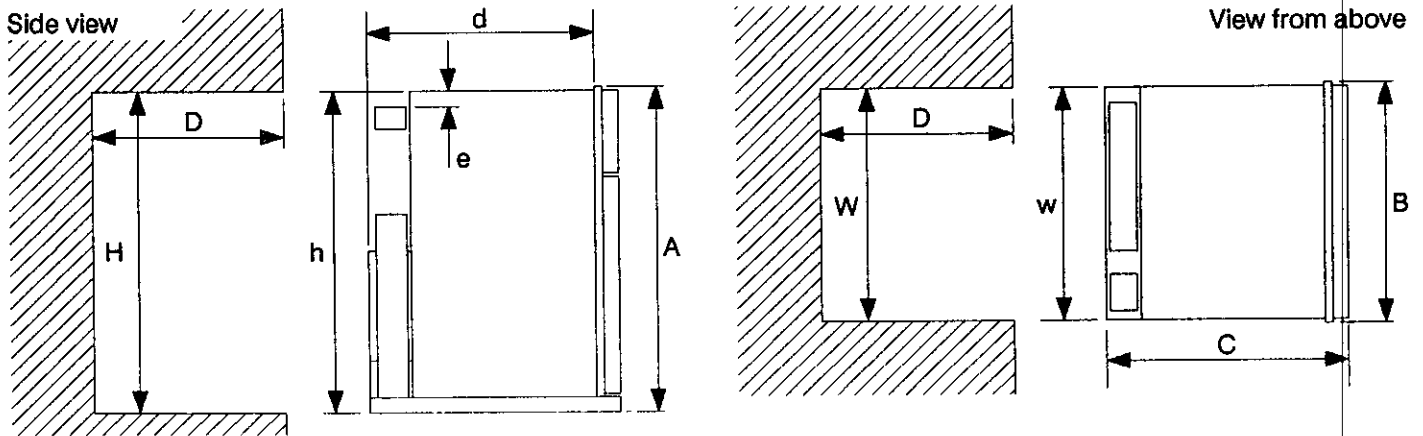


FIG. 9

| Refrigerator model | Overall dimensions | | | Installation dimensions | | | Recess dimensions | | | Distance between top of condenser and top of refrigerator e | |
|--------------------|--------------------|----------|----------|-------------------------|---------|----------|-------------------|---------|----------|---|-------|
| | Height A | Width B | Depth C | Height h | Width w | Depth d | Height H | Width W | Depth D | | |
| RM 2410 | inch | 33-1/2 | 22-53/64 | 24-1/2 | 32-7/32 | 21-17/32 | 23-19/32 | 32-7/16 | 21-13/16 | 24-3/32 | 1-1/4 |
| | mm | 839 | 580 | 622.5 | 818 | 547 | 599 | 823 | 554 | 612 | 32 |
| RM 2510 | inch | 40-29/32 | 22-53/64 | 24-1/2 | 40-3/32 | 21-17/32 | 23-19/32 | 40-5/16 | 21-13/16 | 24-3/32 | 1-1/4 |
| | mm | 1039 | 580 | 622.5 | 1018 | 547 | 599 | 1023 | 554 | 612 | 32 |
| RM 2610 | inch | 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 |
| RM 2810 | inch | 58-1/32 | 24-23/32 | 24-1/2 | 57-7/32 | 23-7/16 | 23-19/32 | 57-7/16 | 23-11/16 | 24-3/32 | 1-1/8 |
| | mm | 1474 | 628 | 622.5 | 1453 | 595 | 599 | 1458 | 601 | 612 | 29 |

This method of installation and these clearances will give you adequate space for service and proper installation.

TESTING LP GAS SAFETY SHUTOFF

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

To test the gas safety shutoff, proceed as follows:

Refrigerator with piezo igniter.

1. Start the refrigerator according to the instruction for Gas Operation with piezo Igniter.
2. Check that the gas flame is lit. This can be observed through the reflector E.
3. Close the gas valve by turning the knob A back to "OFF" position.
4. Wait 1 minute.
5. Remove cover plate, see (46) in FIG. 1. Open the gas valve by turning the knob A to position "GAS" without pushing the button C and D. Test that no gas comes through the jet, item 38. Use soapy water. Be careful not to damage the jet.
6. After test rinse the jet with fresh water. Once more be careful not to damage the jet. Replace the cover plate. Start the refrigerator by following the instruction for Gas Operation with piezo igniter. Normal gas operation should now return. Allow the burner to operate for a minimum of 5 minutes.

Refrigerator with automatic reigniter.

1. Start the refrigerator according to the instructions for Gas Operation with automatic reigniter.
2. Check that the gas flame is lit. The lamp E is out.
3. Close the gas valve by turning the knob A back to "OFF" position.
4. Wait 1 minute, then disconnect the 12 volt DC.
5. Remove cover plate, see (46) FIG. 2 for RM 2510 and (55) FIG. 3 for RM 2610/2810. Open the gas valve by turning knob A to position "GAS" without pushing the button C. The igniter should NOT be sparking. Test that no gas comes through the jet, item 38. Use soapy water. Be careful NOT to damage the jet.
6. After test rinse the jet with fresh water. Once more be careful not to damage the jet. Replace the cover plate. Connect the 12 volt DC. again. Start the refrigerator by following the instruction for Gas Operation with automatic reigniter. Normal gas operation should now return. Allow the burner to operate for a minimum of 5 minutes.

INSTRUCTIONS FOR USE

HOW TO START THE REFRIGERATOR

Leveling

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 am-

monia, 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 section 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.

Gas operation

with piezo igniter

1. To start the refrigerator, turn the knob A to "GAS" position.
2. Turn the thermostat knob B a quarter of a turn from "OFF" position.
3. Push the button C to stop and push the button D of the piezo igniter. The pushing has to be repeated until the gas is lit at the burner. This can be observed through the reflector E.
4. After the gas is lit keep the button C pushed for 10 seconds. Release the button and check through the reflector that the burner flame stays burning. If not repeat the lightning procedure. **To shut off the refrigerator** turn the knob A to "OFF" position.

Gas Operation

with automatic reigniter

1. To start the refrigerator turn the knob A to "GAS" position. Lamp E comes on.
2. Turn the gas thermostat knob B a quarter of a turn from position "OFF".
3. Press the button C to stop and keep it depressed. When lamp E goes out wait 15 sec. and release button C. If the lamp comes on again, repeat the procedure. If flame blow out reignition will take place automatically. **To shut off the refrigerator** turn the knob A to "OFF" position.

NOTE: After a replacement of the gas container or a long shut off period the gas line is likely to be filled with air. In such a case the lighting procedure has to be repeated until the air is pushed out of the line and the gas has reached the burner.

As soon as the necessary cold temperature inside the cabinet has been reached, adjust the thermostat knob to required setting.

Flame Blow Out

If trouble is encountered with flame blowing out under specially windy conditions, try to avoid the wind blowing against the wall where vent outlets are located. If the trouble persists, set the thermostat to MAX. This later measure can of course only be temporary such as when the vehicle is on tow, for after a day or so at this setting the foodstuffs in the cabinet will freeze.

Electric Operation

1. Check that the attachment plug is correctly connected to the power supply. When the refrigerator is equipped also for 12 Volt DC operation the low voltage connection is made at the marked terminals at the rear of the refrigerator.
2. Turn the knob **A** to desire position for electric operation. (12 V or ELEC).
3. Turn the thermostat knob **B** a quarter of a turn from "OFF" position. To shut off the refrigerator turn the knob **A** to "OFF" position.

HOW TO USE THE REFRIGERATOR

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 crispiness. 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 (1/2 gallon milk or juice) from shifting or spilling while traveling.

Frozen Food Storage Compartment

Quick frozen soft fruits and ice cream should be placed in the coldest part of the freezer compartment which is at the bottom of the aluminum liner, or in models with a shelf, on this or just below the freezer shelf. Frozen vegetables, may be stored in any part of the 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 they are precooled first in the refrigerator. They 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.

Ice Making

Ice cubes can be made in the ice tray. It should be filled with water to within 1/4" (5 mm) from the top. For faster ice making, the tray should be placed in direct contact with the freezer shelf.

To release the ice cubes, seize the tray with both hands and twist the tray. Cubes not required should preferably be replaced in the tray. Refill the tray with water and replace the tray on the freezer shelf.

Ice making is accelerated if the thermostat knob **B** is turned to setting "MAX". It is a good idea to do this a few hours before an anticipated need for ice, but be sure to turn the thermostat back to normal setting when the ice is formed. Food in the lower compartment can be frozen if the thermostat is left on "MAX".

Defrosting

Shut off the refrigerator by turning the knob **A** to "OFF" position. Empty the refrigerator, leaving the drip tray under the finned evaporator, and 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 "MAX" for a few hours, then reset the thermostat to its normal position.

NOTE: On the RM 2810 the drip tray/cup is on the rear of the refrigerator. It can be reached through the outside lower access door.

Cleaning

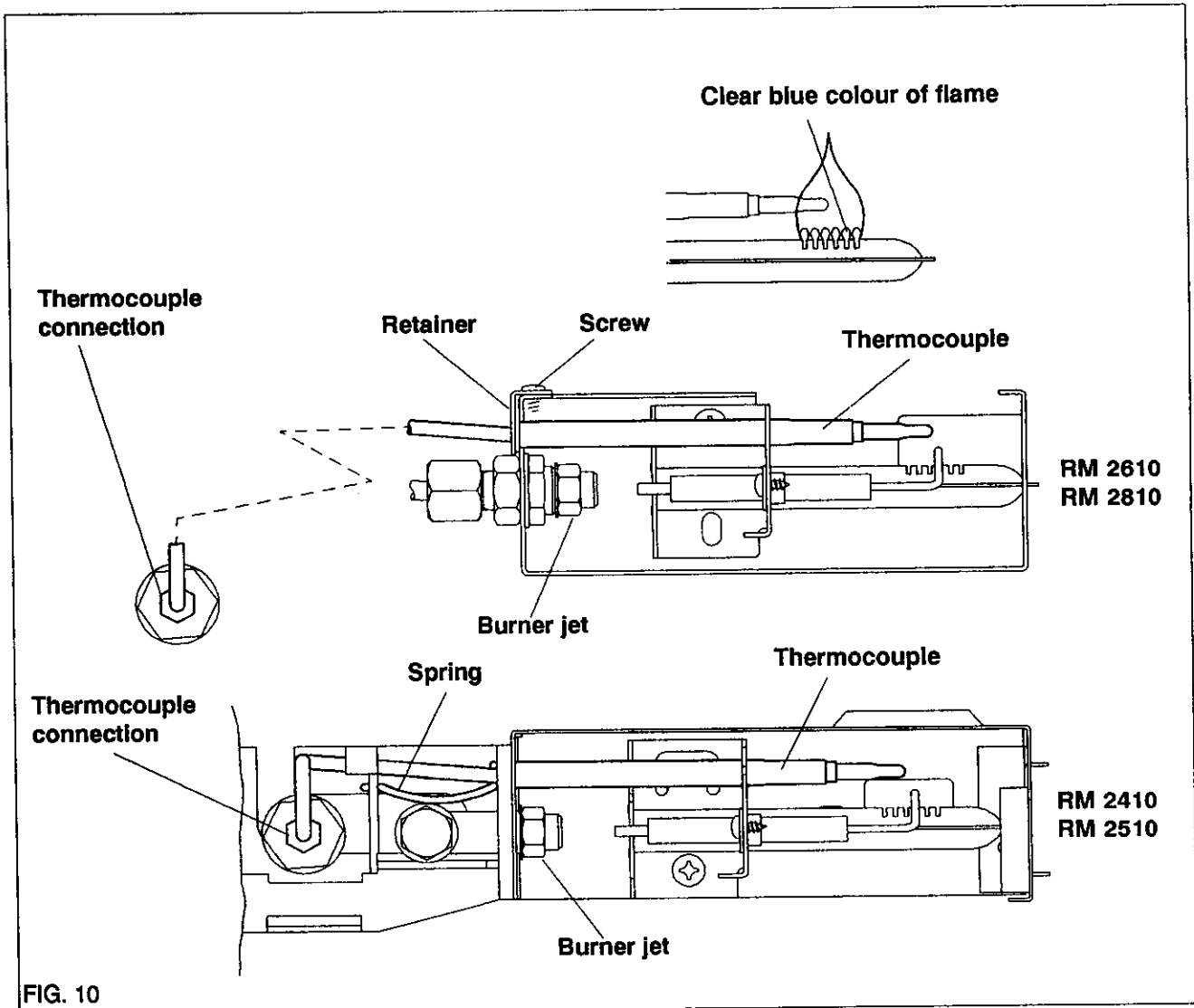
Cleaning the refrigerator is usually done after it is defrosted or put into storage. To clean the interior liner of the refrigerator, use a lukewarm weak soda solution. Use only warm water to clean the finned evaporator, ice tray and shelves. NEVER use strong chemicals or abrasives to clean these parts as the protective surfaces will be damaged. It is important to always keep the refrigerator clean.

To Shut Off the Refrigerator

To shut off the refrigerator turn the knob **A** to "OFF" position. If the refrigerator will not be in operation for a period of weeks, it should be emptied, defrosted, cleaned and the doors left ajar. The ice tray should also be dried and kept outside the cabinet.

CAUTION

DO NOT store explosive substances in the refrigerator, such as cigarett lighter gas, petrol, ether or the like.



GAS EQUIPMENT

Flue Cap and Baffle

1. The flue cap on the top of the flue tube must be in position to guide the flue away from the condenser.
2. The flue baffle is suspended from the top of the flue tube and must be in position in the flue tube of the cooling unit.

The Flame Failure Safety Device

The tip of the thermocouple shall reach in over two slots of the burner. To replace the thermocouple proceed as follows:

1. Remove the cover.
2. Disconnect the thermocouple connection and pull the thermocouple straight out.
3. Remove spring. (RM 2410, RM 2510)
Remove screw and retainer. (RM 2610, RM 2810)
4. Remove the thermocouple by pulling it left, then outward.
5. Bend the new thermocouple to the same shape as the old one.
6. Reassemble in reverse order. Check that the tip of the thermocouple has been correctly refitted in relation to burner.

7. Tighten the thermocouple connection finger-tight plus 1/4 turn. The plug must be properly tightened to the safety shutoff device to ensure good contact. **DO NOT OVER-TIGHTEN.**

The Thermostat

The refrigerator is equipped with a thermostat which is regulated by turning the knob **B** to different settings, in order to obtain the desired cabinet temperature.

At OFF Under normal operating conditions the thermostat valve remains closed and the burner is running continuously at the by-pass rate, just enough to keep the burner lit.

At MAX The thermostat valve remains open and the burner is running continuously at full gas rate. Lowest cabinet and freezer temperatures are obtained at this setting.

Between these two extremes of the dial various controlled temperatures can be obtained, by turning the thermostat knob **B** to a suitable position. The closer to "MAX" the lower the temperature. As soon as the required cold temperature inside the cabinet is reached, the thermostat cuts the burner main flame leaving the by-pass flame to keep safety valve open.

The Igniter

The refrigerator is fitted either with a piezo igniter (see FIG. 1) or an automatic reigniter (FIG. 2 and 3) which does not normally need any maintenance. If the igniter does not work properly contact an authorized service point.

ELECTRIC EQUIPMENT

Cartridge heater

The refrigerator is equipped also for electric operation. Some models are equipped for both 120 volt AC and 12 volt DC operation. The heat necessary for the operation of an absorption cooling unit is supplied by an electric heater mounted in a pocket of the boiler system.

To replace the heater proceed as follows:

1. Unplug the refrigerator power cord from the 120 volt AC outlet, and if the refrigerator is equipped also for 12 volt DC operation disconnect the 12 volt leads.
2. Remove the protection plate. (RM 2610, RM 2810). Remove the plastic cover of the main control structure by loosening the two screws
3. Disconnect the heater leads
4. Pull off the metal hose. (RM 2410, RM 2510).
5. With a pair of pliers unfold the lug holding the lid of the boiler casing and open the lid
6. Remove some insulation wool so that the heater is accessible
7. Turn and lift the heater out of its pocket
8. Fit the new heater into the pocket.
Pull on the metal hose around the leads. (RM 2410, RM 2510).
9. Connect the leads and put on the plastic cover
10. Reset the insulation and close the lid of the boiler casing

The Switch

The electric control also comprises an on-off switch operated by the selector knob **A**, at the front panel. The switch has two "ON" positions, one for 120 volt AC (ELEC.) and one for 12 volt DC operation.
(If the refrigerator is equipped also for 12 volt DC.)

The Thermostat

The electric thermostat is combined with the gas thermostat and is thus operated by the knob **B** at the front panel. The temperature in the refrigerator can be regulated by turning the thermostat knob **B**. Although the exact setting is not critical, it is suggested that the thermostat be adjusted so it will maintain a dry frost on the evaporator fins. It will be necessary to turn the thermostat knob closer to **MAX** when the ambient temperature becomes higher or the load unusually heavy. If less cooling is required a lower setting should be chosen.

PERIODIC MAINTENANCE

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 colour of the flame shall be clear blue over the slots of the burner (see FIG. 10).

Once or twice a year depending on use, it is necessary to 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.
5. 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.
6. Reassemble.
7. 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.

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 max. 3/16" (5mm) and min. 1/8" (3mm).

WARNING

If the refrigerator is used intermittently it should be checked at least once a year. It is important to keep the appliance area clear and free from combustible materials, gasoline and other flammable vapors and liquids. Check the venting system. The flow of combustion and ventilating air must not be obstructed.

Inspect the flue baffle. It should be reasonably clean and free from soot. Heavy soot formation indicates improper functioning of the burner. Clean baffle and flue. Further, clean cooling unit and floor under refrigerator. The entire gas installation should be checked for leaks at intervals. Test all pipe connections with soapy water, not with an open flame.

NOTE. Any service of the gas controls, with exception for the above, mentioned replacement, maintenance and cleaning operations must be performed by an authorized service center only.

NOTE: Avoid spraying water through the refrigerators vents while washing your RV.

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 not level.
- C. Flame has gone out.
Remedy: 1) Gas in bottle is used up-refill. 2) The tip of the flame failure safety device is not heated enough by flame. 3) Clogged by-pass screw - clean or exchange it.
- D. Venting problem.
Restriction in air flow across cooling unit.
- E. Heavy frost buildup 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 the 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 the flue cap.

All the above 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 service point or distributor service dept. for assistance.

Replacement Parts Suppliers: See page 1.

CHANGING DOOR HINGES FROM ONE SIDE TO THE OTHER

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 door. Remove center hinge pin (on two doors 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 empty" 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 opposite side of the cabinet. Plastic caps for the empty holes are in the parts bag. Remount the door(s) and the hinge pin(s) in the reverse order of their removal. Unscrew the handel(s) and re-fasten it (them) on the opposite side of the door. Insert the plastic caps (from the parts 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.

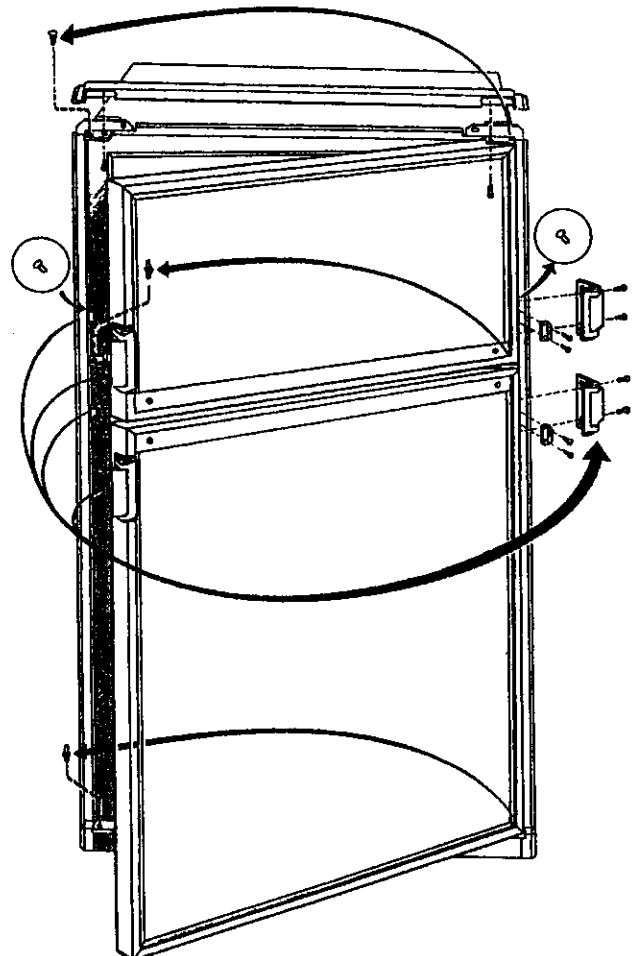


FIG. 11

INSTRUCTIONS FOR MOUNTING THE DOOR PANEL

The refrigerator is normally delivered without door panel(s). Before starting the mounting work check that the panel dimensions are in compliance with those given in the table and the instructions are read thoroughly. When mounting the panel, proceed as follows:

- 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).
- Insert one of the vertical edges of the panel into the groove of the door frame (3).
- Bend the panel gently so that the free side of the panel can be slipped into the corresponding groove of the door frame (4).
- Slide the panel down into the groove of the bottom frame (5).
- Between the upper edge of the panel and the door frame there is a gap which should be covered by the decoration strip.
- 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" (4 mm) | | | | | |
|---|------|---------|----------|----------|----------|
| REFR. MODELS TYPE | | HEIGHT | | WIDTH | |
| | | MAX. | MIN. | MAX. | MIN. |
| RM 2410 | mm | 697 | 695 | 515 | 513 |
| | inch | 27-7/16 | 27-23/64 | 20-9/32 | 20-13/64 |
| RM 2510 | mm | 897 | 895 | 515 | 513 |
| | inch | 35-5/16 | 35-15/64 | 20-9/32 | 20-13/64 |
| RM 2610 upper | mm | 306 | 304 | 515 | 513 |
| | inch | 12-3/64 | 11-31/32 | 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 |
| RM 2810 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 |

