

↗ DOMETIC

REFRIGERATION

REFRIGERATORS



RM 2191, RM 2193

EN

Absorber refrigerator
Installation and Operating Manual

**These operating instructions should be kept in a safe place.
If this device is passed on, please include these operating instructions with it.**

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Information



Environmental
Advice



Attention



Warning

1.0

INTRODUCTION

You have made an excellent choice in selecting the Dometic Absorption Refrigerator. We are sure that you will be fully satisfied with your new appliance in all respects.

The appliance, which works silently, meets high quality standards and guarantees the efficient utilisation of resources and energy throughout its entire life cycle, during manufacture, in use and when being disposed of.

Before you start to use the appliance, please read the installation and operating instructions carefully.

The refrigerator is designed for installation in leisure vehicles such as caravans or motorcaravans. The appliance has been certified for this application in accordance with EU Gas Directive 90/396/EEC.

2.0

FOR YOUR SAFETY

2.1



Warning and safety notices

Danger

Attention



- Never use a naked flame to check the appliance for leaks.

• Protect children!

When disposing of the refrigerator, remove all refrigerator doors and leave the storage rack in the refrigerator. This will prevent accidental locking in or suffocation.

• If you smell gas:

- close the locking tap of the gas supply and the valve on the cylinder.
- open the windows and leave the room.
- do not switch on anything electrical.
- extinguish naked flames.

• Never open the cooling unit; it is under high pressure.

• **Work on the gas, flue system and electrical components must only be carried out by qualified service personnel.**

- It is imperative that the operating pressure should correspond to the data given on the model plate of the appliance.
- Compare the operating pressure data given on the model plate with the data on the pressure monitor of the liquid gas cylinder.
- Liquid gas cylinders may only be changed by qualified personnel.
- Gas operation of the appliance is not permitted while travelling on ferries.
- Covers ensure electrical safety and must only be removed using a tool.
- The appliance must not be exposed to rain.
- **The refrigerator is not suitable for the proper storage of medications.**

2.2

Coolant

Ammonia is used as a coolant.

This is a natural compound also used in household cleaning agents (1 litre of Salmiak cleaner contains up to 200g of ammonia - about twice as much as is used in the refrigerator). Sodium chromate is used for corrosion protection (less than 2% of the coolant).

In the event of leakage (easily identifiable from the unpleasant odour):

- switch off the appliance.
- Air the room thoroughly.
- Inform the authorised Customer Service department.

3.0

WARRANTY AND CUSTOMER SERVICE

Warranty arrangements are in accordance with EC Directive 44/1999/CE and the normal conditions applicable for the country concerned. For warranty or other servicing, please contact our Dometic Service department. Any damage due to improper use is not covered by the warranty. The warranty does not cover any modifications to the appliance or the use of non-original Dometic parts; the warranty does not apply if the installation and operating instructions are not adhered to and no liability shall be entertained. Parts can be ordered throughout Europe from our Dometic Service department. Your Service Centre contact numbers are found in the "European Service Network" booklet

When contacting Dometic Service, please state the model and product numbers, together with the MLC Code, if applicable. You will find this information on the data plate inside the refrigerator.

3.1

Damage in transit

After removing the packaging, check whether the refrigerator has been damaged during transportation.

Any damage sustained in transit must be reported to the transportation company concerned no later than seven days after delivery of the goods.

4.0

DESCRIPTION OF MODEL

e.g. RM 2193

Refrigerator Mobil /
Mobile Absorption Refrigerator

5.0

REFRIGERATOR GUIDE

5.1

Cleaning

Before using the refrigerator, it is advisable to clean the appliance both inside and out.

- Use a soft cloth and lukewarm water with a mild detergent.
- Then rinse the appliance with clean water and dry thoroughly.
- Remove dust from the refrigerator unit at yearly intervals using a brush or soft cloth.



To avoid deterioration of materials:

- Do not use soap or hard, abrasive or soda-based cleaning agents.
- Do not allow the door seal to come into contact with oil or grease.

5.2

Using the refrigerator

- The refrigerator is silent in operation.
- When the appliance is first put into operation, there may be a mild odour which will disappear after a few hours. Ensure the living area is well ventilated.
- The freezer compartment should be cold about one hour after switching on the refrigerator.
- The refrigerator will take several hours to reach its operating temperature.

5.2.1

Importance of levelling the refrigerator

In an absorption refrigerator system, ammonia is liquefied in the finned condenser coil at the top 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 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. Remember to level the vehicle when stopping for more than an hour, otherwise the cooling unit could be permanently damaged due to overheating if it is left ON". When the vehicle is moving, the leveling is not critical as the rolling and pitching motion of the vehicle will pass to either side of level, keeping the liquid ammonia from accumulating in the evaporator tubing.

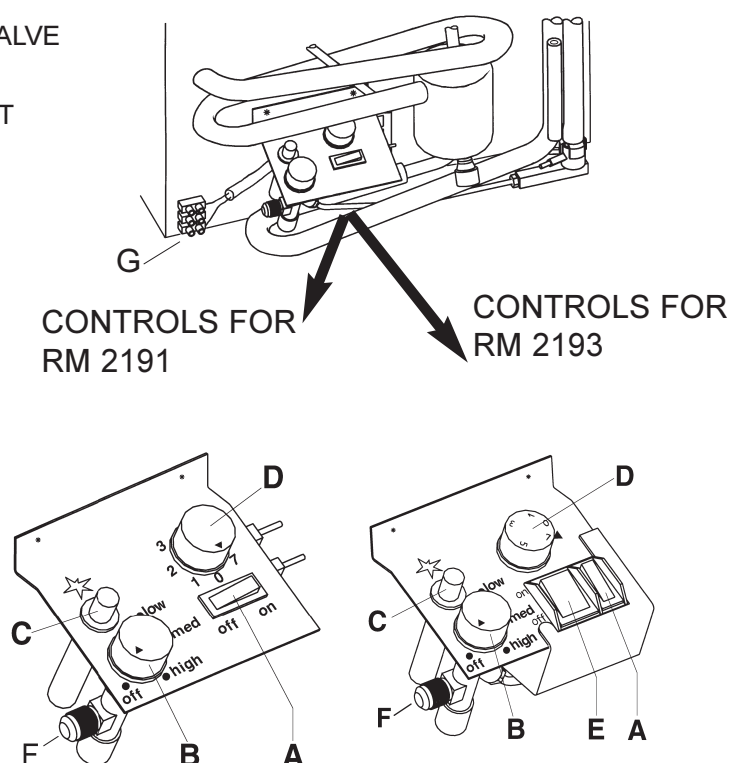
5.2.2

Controls

The gas and electric controls are located at the rear of the refrigerator and are accessible through the lower vent in the outside wall of the vehicle. See FIG. 8.

FIG. 1

- A = DC ON/OFF SWITCH
B = GAS ON/OFF SAFETY VALVE
C = PIEZO IGNITOR
D = ELECTRIC THERMOSTAT
E = AC ON/OFF SWITCH
F = GAS INLET FITTING
G = DC TERMINAL BLOCK



5.2.3

Gas operation

After initial installation, servicing, or changing gas cylinders, etc., the gas line may contain some air which should be allowed to escape by briefly turning on the refrigerator or other gas appliances. This will ensure that the flame lights immediately. See FIG. 1 for control location and identification.

- 1) Open the shutoff valve of the gas bottle. Check that there is enough gas. Open any on-board shutoff valve which is in the gas line to the refrigerator.
- 2) Open the lower vent at the rear of the refrigerator on the outside of the vehicle, and switch the electrical toggle switch/es (A in RM2191) and (A and E in RM2193) to the "OFF" position.
- 3) Turn the gas thermostat control (B) to the highest setting.
- 4) Depress the knob (B) of the flame failure device, and hold it down while depressing the piezo igniter button (C) several times in quick succession (a click should be heard each time it is depressed).
- 5) Keep the knob depressed for a further 10-15 seconds.
- 6) Release the knob and check for flame by looking through the opening in the metal burner cover.
- 7) If the burner has not lit, repeat the lighting procedure. If the burner fails to light within a couple of attempts, contact a qualified technician or your dealer.

NOTE: The refrigerator has a flame failure device which will automatically shut off the gas to the burner if the flame is blown out. While the knob (B) is being held in, this device is temporarily inoperative.

- 8) To terminate gas operation, turn knob (B) to the "OFF" position.

DO NOT attempt to operate the refrigerator by both gas and electricity at the same time. Always ensure that one method of operation is turned off before using the alternate energy source.

5.2.4

Electrical operation

1. RM 2191: DC OPERATION

On 12V DC operation, the temperature is controlled by a thermostat. The thermostat knob (D, in FIG. 1) should be set to position 4-5 in normal working conditions.

If the ambient temperature is high and/or fresh food is put into the refrigerator you may set the refrigerator to a higher position.

If you wish a higher temperature in the cooling compartment, set the knob to a lower position.

2. RM 2193: 12V DC / 230V AC OPERATION

In the case of the RM2193, the refrigerator works continuously on DC operation (no thermostat control).

On AC operation, the temperature is controlled by a thermostat. The thermostat knob (D, in FIG. 1) should be set to position 4-5 in normal working conditions. If the ambient temperature is high and/or fresh food is put into the refrigerator you may set the refrigerator to a higher setting.

If you wish a higher temperature in the cooling compartment, set the knob to a lower position.

3. To TERMINATE ELECTRIC OPERATION

To terminate electric operation, turn the switch/es to the "OFF" position (A in RM2191) and (A and E in RM2193).

NOTE: NEVER OPERATE THE REFRIGERATOR ON MORE THAN ONE ENERGY SOURCE AT A TIME.

5.3

Switching off

To terminate gas operation, turn knob (B) to the "OFF" position.

To terminate gas operation, turn the switch/es to the "OFF" position (A in RM2191) and (A and E in RM2193).

Place the toggle switch(es) for DC and AC operation to the "OFF" position or turn the gas valve to position "OFF", as applicable. See FIG. 1.

When not in use, the refrigerator should be emptied, cleaned and dried and the door left open so that fresh air can circulate inside.

The travel latch placed in the second hole will hold the door ajar and allow air to circulate.



Switching off gas operation

If the refrigerator is to be taken out of service for an extended period of time, the on-board shut-off valve and the cylinder valve must be closed.

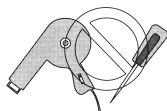
5.4

Defrosting

To defrost, take out any food, etc. then turn off the gas valve or switch of the DC/AC supply to the refrigerator. Leave the refrigerator door open and place a suitable dish or other receptacle under the evaporator to catch the defrost water.

When all the frost has melted, any remaining drops of water in the refrigerator should be wiped up with a clean cloth.

Note:



The layer of ice must never be removed forcibly, nor may defrosting be accelerated using a heat source.

5.5

Storing food

- Switch the refrigerator on approx. 12 hours before filling it.
- Always store pre-cooled foods in the refrigerator. Make sure that the food is well cooled when it is bought and also when transporting it. Use insulated cooling bags.
- When taking food out of the refrigerator only open the refrigerator door very briefly.
- Foods must be packed - best of all in closed containers - and stored separately from each other.
- Allow foods that have been warmed up to cool down before storing.
- Products that could emit volatile, flammable gases must not be stored in the refrigerator.
- The refrigerator must not be exposed to direct sunlight. Please bear in mind that the temperature inside a closed vehicle increases sharply if exposed to sunlight and that this can reduce the efficiency of the refrigerator.
- The air inside the refrigerator unit **MUST** be able to circulate freely without any hindrance. (see also section 6.2 "Ventilation").

The freezer compartment is suitable for making ice cubes and for short-term storage of frozen food. It is not suitable as a means of freezing foods.

5.6

Door locking



closed



open



park position

5.7

Changing the decor panel

The door panel can easily be mounted.

Dimensions of the panels in mm:

Height	501 mm
Width	453 mm
Thickness	3,3 mm

- A. Remove the door.
- B. Remove the lower trim molding.
(NOTE: Trim molding is not installed on new units in cartons)
- C. Fit the new panel in place and slide it up as far as possible.
- D. Fit the trim molding back in place.

5.8

Changing the doorhang



It is not always possible to change the door when the refrigerator is installed.

If required, the door hinges can be moved to the opposite side. Reverse the door hang in the following way:

- A. Unscrew the upper hinge pin, taking care not to lose the set of washers and bushings.
- B. Lift the door from the lower hinge pin. If decorative door panel is to be installed, see "5.7".
- C. Unscrew the pin and mount it on the opposite side hinge.
- D. Unscrew the travel catch and mount it on the opposite side.
- E. Replace door on lower hinge pin. Replace upper hinge pin and bushings removed in Step A.
- F. Check that the door closes properly and seals all around.

Troubleshooting

Before calling the authorised Service department, please check whether:

1. The instructions in the section "Using the refrigerator" have been followed.
2. The refrigerator is not tilted excessively.
3. It is possible to operate the refrigerator with an available power source.

Problem 1: The refrigerator does not work in gas operation mode.

Possible cause	Action you can take
a.) Gas bottle empty.	a.) Change gas bottle.
b.) Is the supply cut-out device open?.	b.) Open the cut-out device.

Problem 2: The refrigerator does not work on 12V.

Possible cause	Action you can take
a.) On-board fuse defective.	a.) Fit new fuse.

Problem 3: The refrigerator does not cool sufficiently.

Possible cause	Action you can take
a) Inadequate ventilation to the unit.	a) Check that the ventilation grilles are not covered. Check whether the refrigerator was installed properly (Installation Guide).
b) The thermostat setting is too low.	b) Turn the thermostat to a higher setting.
c) There is too much ice on the condenser.	c) Check that the refrigerator door seals when shut.
d) Too much warm food put inside.	d) Let food cool down first.

Maintenance

- EN 1949 stipulates that the appliance's gas equipment and its associated fume system must be inspected after installation and a certificate issued. Afterwards a qualified technician must inspect according to EN 1949 every two years and a certificate issued. It is the user's responsibility to arrange for inspections after purchase.
- It is recommended that the gas burner be inspected and cleaned as necessary at least once a year.

Product liability

Product liability of Dometic GmbH does not include damages which may arise from faulty operation, improper alterations or intervention in the equipment, adverse effects from the environment such as changes in temperature and air humidity, which may impact the equipment itself or the direct vicinity of the equipment or persons in the area.

▲ Environmental hints

Refrigerators manufactured by Dometic GmbH are CFC-free. Ammonia (a natural compound of hydrogen and nitrogen) is used in the cooling unit as a coolant. The non-ozone-hazardous cyclopentan is used as a propellant in the manufacture of the PU foam insulation.

5.12

♣ Disposal

In order to ensure that the recyclable packaging materials are re-used, these should be sent to the usual local collection system.

The appliance should be transferred to a suitable waste disposal company that will ensure re-use of the recyclable components and proper disposal of the rest.

For eco-friendly draining of the coolant from all absorber refrigeration units, a suitable disposal plant should be used

5.14

♣ Energy-saving tips

- At an average ambient temperature of approx. 25°C, it is sufficient to operate the refrigerator at the middle thermostat setting (for both gas and mains voltage).
- Where possible, always store goods that have previously been cooled.
- Do not position the refrigerator in direct sunlight.
- Constant circulation of air must be supplied to the refrigerator unit.
- Defrost regularly.
- Open the door only for a short time when removing goods from the refrigerator.
- Run the refrigerator for about 12 hours before filling it.

5.15

Technical Data

Model	Dimensions H x W x D (mm) depth incl. door	Gross capacity incl. freezer compartment	Usable capacity of freezer compartment	Connection Mains / Battery	* Consumption electricity / gas in 24 hrs	Netweight	Ignition Piezo	Ignition Reigniter	Stepped- cabinet
RM 2191	548x491x545	48 lit.	----	125W / 115W	approx. 2,5KWh / 270g	18 kg	X		
RM 2193	548x491x545	48 lit.	----	125W / 115W	approx. 2,5KWh / 270g	18 kg	X		

We reserve the right to make technical changes.

*Average consumption measured at an average ambient temperature of 25°C in pursuance of ISO Standard.

5.16

Declaration of conformity



DECLARATION OF CONFORMITY

according to

LVD 2014/35/EU
EMC Directive 2004/108/EC, 2014/30/EU
Gas Appliance Directive 2009/142/EC
ECE R10, Rev. 4

Type of equipment Brand Name Type family Manufacturer's (Factory) name address telephone no telefax no	Absorption Refrigerator DOMETIC C 40/110 DOMETIC GmbH In der Steinwiese 16, D-57074 Siegen INT+49 - 271 692 0 INT+49 - 271 692 304
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The following harmonized standards or technical specifications (designations) which comply with good engineering practice in safety matters in force within the EEA have been practiced:

EN 60335-1;12 (IEC 60335-1; 5 ed., Am. 1, Am. 2)	
EN 60335-2-24;10 (IEC 60335-2-24; 7 ed., Am. 1)	
EN 61000-3-2;06, A1, A2	EN 61000-3-3;08
EN 55014-1;06, A1, A2	EN 55014-2;97, A1, A2
EN 732;98	EN 60335-2-102;06
EN 30-1-1;10 A1 (Tectower-Models)	
EN 30-2-1; 98 A1, A2 (Tectower-Models)	
EN 50581;2010	

The equipment conforms completely with the above stated harmonized standards or technical specifications.

By signing this document, the undersigned declares as manufacturer, or the manufacturer's authorized representative established within the EEA, that the equipment in question complies with the requirements stated above.

Date	Signature	Position
2017.01.09	 Bernd Löher	General Manager

6.0

INSTALLATION GUIDE

On installation of the appliance, the technical and administrative regulations of the country in which the vehicle will first be used must be adhered to. Otherwise the refrigerator must be installed as described in these instructions. In some OEM applications it may not be possible for these instructions to be followed exactly. In this case an authorised Dometic representative may issue supplementary instruction

In Europe, for example, gas appliances, cable laying, installation of gas cylinders, as well as approval and checking for leaks must comply with DIN EN 1949 for liquid gas units in vehicles.

6.1

Installation

The appliance and its fume extraction shall be installed in such a way as to be accessible for servicing at all times and must be capable of easy removal and installation.

The appliance may only be installed by authorised personnel.

Installation and connection of the appliance must comply with the latest technical regulations, as follows:

- Technical regulations, liquid gas (TRF 1996)
- Technical regulations, DVGW Worksheet G 607 (DIN EN 1949)
- Technical regulations, EN 732
- The electrical installation must comply with national regulations (EN 60335-1 for Europe).
- The gas installation must comply with national regulations.
- Local and building control department requirements
- The appliance shall be installed in such a way that it is shielded from excessive heat radiation.

Excessive heat impairs performance and raises the energy consumption of the refrigerator.

6.1.1

Side Installation

If the appliance is installed on the same side of the vehicle as the entrance door, it is desirable that the door does not cover the refrigerator's vents.

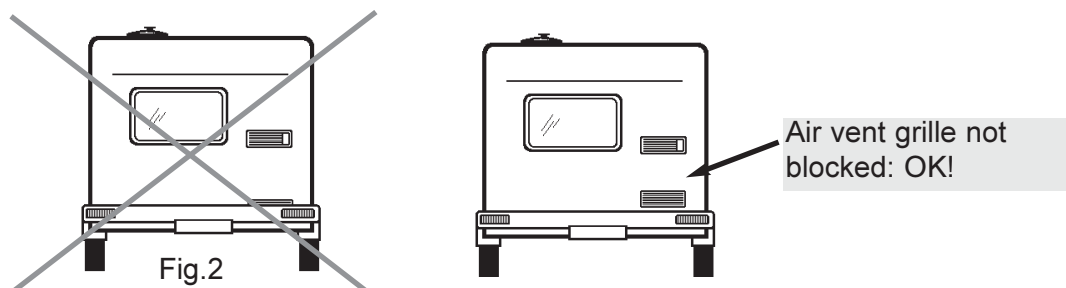
If this cannot be avoided there must be a gap of at least 25 mm between the door and the vents.

6.1.2

Rear installation

If the refrigerator is mounted at the rear of the vehicle you must ensure the lower grille is not covered by the bumper or rear lights.

This would prevent the air from circulating properly and cause problems in warm weather.



6.2

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. Ventilation grilles must have a free cross section of 250 cm² for air supply or venting of fumes. Proper installation requires one fresh air intake and one upper exhaust vent. The ventilation kits shown in this instruction manual have been certified for use with the refrigerator model listed in the Table. For "Certified Vent System Kits" see Section B. 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 properly sized openings. The flow of 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. This should be centered on the back of the refrigerator.

6.2.1

Certified Installation

Certified installations require one upper side vent and one lower side vent.

For certified vent system kits, see sect. 6.2.3.

For further information, contact your dealer or distributor.

6.2.2

Method of Installation

The methods of installation are shown in FIG. 1 and FIG. 1a. 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.

NOTE: The upper vent should be centered over the condenser coil at the back of the refrigerator.

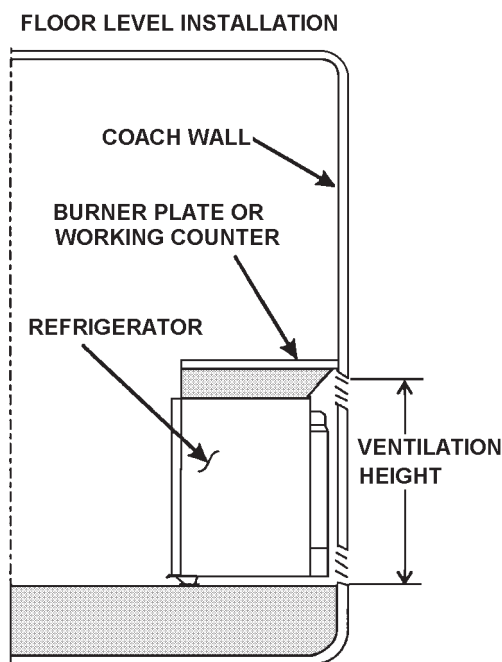


Fig. 1

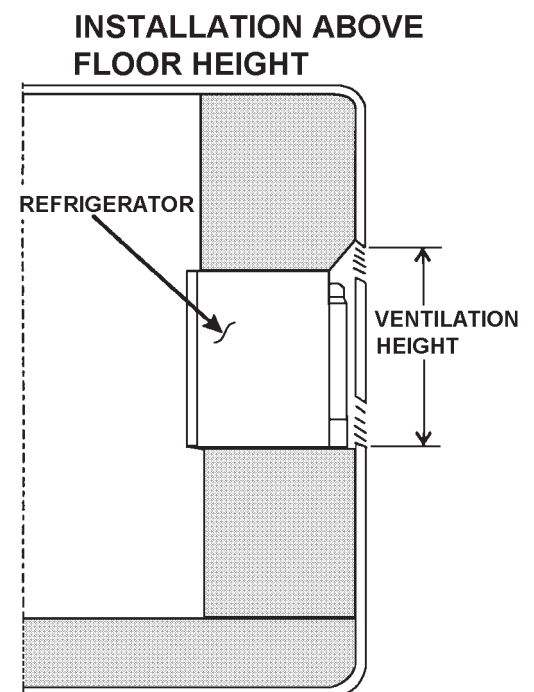


Fig. 1a

6.2.3

Ventilation heights

Refer to FIG A and FIG. B

Installation with
Upper side vent
And lower side vent

* Minimum Ventilation
Height "N"

REFRIGERATOR	INCHES	MM
RM 2193 Metal Side Vents (1) RM 123 Upper Vent (1) RM 183 Lower Vent	20 5/8"	524
RM 2193 Metal & Plastic Side Vents (1) RM 123 Upper Vent (1) 3107560.009 Lower vent	20 5/8"	524
RM 2193 Plastic Side Vents (1) 3107560.041 Upper vent (1) 3107560.009 Lower vent	22"	558,8

* These dimensions represent the minimum height allowable. It is recommended the Upper Vent be located to the maximum possible height of the vehicle for optimum performance in warmer climates.

6.2.4

Clearances

Minimum clearances in mm to combustible materials are:

G:	Top	0	K:	Side	0
L:	Bottom	0	M:	Rear	25
N:	See NOTE		P:	See NOTE	

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 top of upper side vent. For ventilation height, refer to Section A. Installation, Item 5. Ventilation Heights. See FIG. 2.

Surfaces directly above and sides adjacent to the flue outlet must be of, or covered with, fireproof material. See FIG. 2.

NOTE: Clearance "P" over top of unit condenser fins is 6 mm. This is the minimum height which can be allowed over the condenser fins. Whenever possible, increase this height by up to 11 inches; the more ventilation you provide, the better the performance you can expect from the refrigerator.

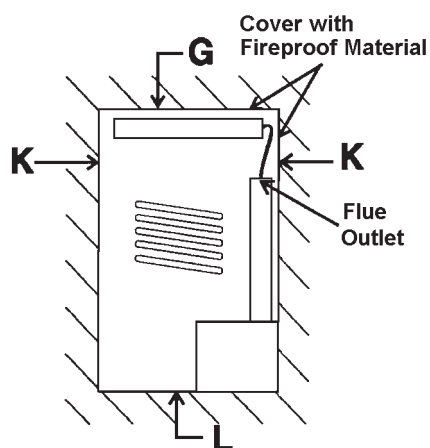
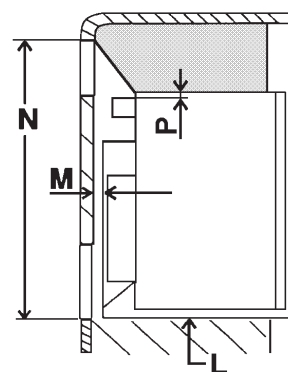


FIG. 2



6.2.3

Ventilation system

VENT KIT OPTIONS	COMPONENTS	PART NO.
DUAL METAL SIDE VENTS	* RM 123 Upper Metal Side Vent	3100451.024
	* RM 183 Lower Metal Side Vent	8030211.332
	** Power Ventilator Optional	3108705.751
UPPER METAL SIDE VENT LOWER PLASTIC SIDE VENT	* RM 123 Upper Metal Side Vent	3100451.024
	* Lower Plastic Side Vent	3107560.009
	** Power Ventilator, Optional	3108705.751
DUAL PLASTIC SIDE VENTS	* Upper Plastic Side Vent	3107560.041
	* Lower Plastic Side Vent	3107560.009
	** Power Ventilator Optional	3108705.751

* Vent System Requires One Each.

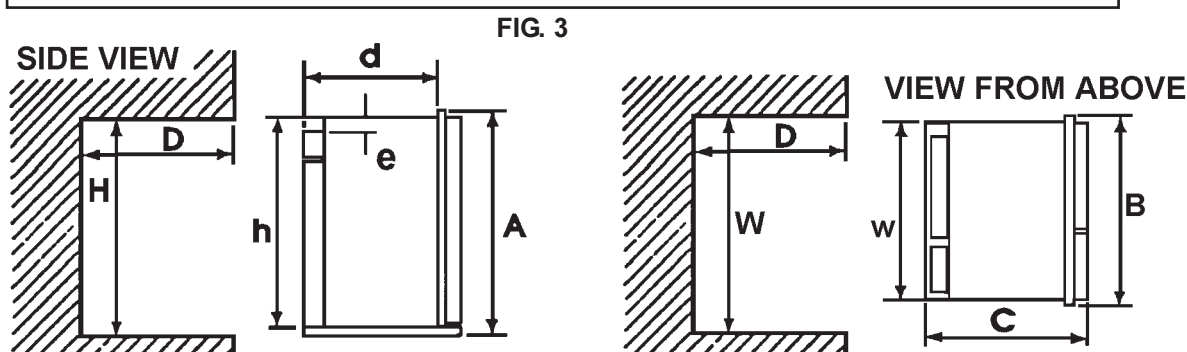
** Alternative instructions forwarded with ventilator kit. Used in conjunction with upper and lower side vents at minimum vent heights for optimum performance.

6.3

Installing the 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 dimensions shown in FIG.3 will give you adequate space for service and proper installation.



RM 2191 RM 2193	Overall Dimensions			Installation Dimensions			Recessed Dimensions			Distance between Top of condenser + Top of refrigerator
	Height A	Width B	Depth C	Height h	Width w	Depth d	Height H	Width W	Depth	e
Dual Metal (inches)	21-9/16	19-5/16	21-7/16	20-5/8	17-1/2	19-7/8	20-7/8	17-3/4	20-7/8	1/4"
Side Vents (mm)	548	491	545	524	445	505	530	451	519	6
Metal & Plastic (Inches)	21-9/16	19-5/16	21-7/16	20-5/8	17-1/2	19-7/8	20-7/8	17-3/4	20-7/8	1/4"
Side Vents (MM)	548	491	545	524	445	505	530	451	519	6
Dual Plastic (Inches)	21-9/16	19-5/16	21-7/16	20-5/8	17-1/2	19-7/8	20-7/8	17-3/4	*20-7/8	1/4"
Side Vents (MM)	548	491	545	524	445	505	530	451	*519	6

* Depth "D" Dimensions Requirement with Plastic Vent System is Dependant on Vehicle Side Wall Thickness. If the Vehicle Side Wall Thickness is less than 1,5 inches (38mm), the Recessed Depth Dimensions will be required to be Increased Proportionally to the Vehicle Wall Thickness.

Installation

The refrigerator must be installed in a substantial enclosure and must be level. When installing the refrigerator in the enclosure, all areas within the recess in which the refrigerator is installed must be sealed from the living space.

Make sure that 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 (FIG.4).

The sealing should provide a complete isolation of the appliance's combustion system from the vehicle interior.

Note: Be careful not to damage the sealing strip when refrigerator is put in place.

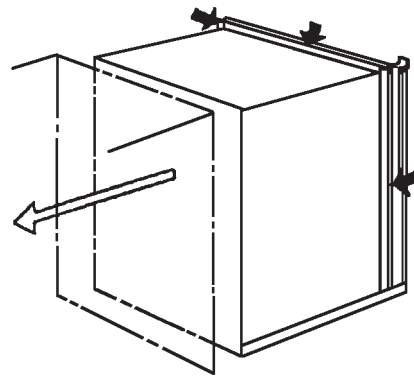


FIG. 4

6.4

Securing the refrigerator in enclosure

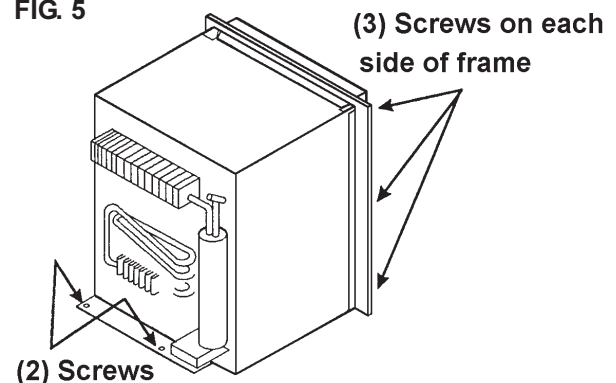
The refrigerator is installed in the enclosure with eight screws. Six screws are in the front frame and two are in the plate on the rear. See FIG. 5.

NOTE: Push refrigerator into enclosure until front frame is tight against the cabinet. First, secure the frame to cabinet with six screws. Second, install the two screws to the floor at the rear of the refrigerator.

Failure to follow the sequence in securing the refrigerator in the enclosure can cause leakage between the frame and cabinet. 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 reducing the efficiency.

The dimensions shown in FIG. 3 will give you adequate space for service and proper installation.

FIG. 5



6.5

Gas installation

- The rules in point 6.1 must be adhered to.
- When running on gas, these appliances are intended exclusively to use liquid gas (propane/butane) - under no circumstances should town gas or natural gas be used (EN 27418).
- A fixed, pre-set pressure regulator complying with EN 12864 must be connected to the liquid gas cylinder.
- The pressure regulator must concur with the operating pressure specified on the data plate of the appliance. The operating pressure corresponds to the standard pressure of the country of specification (EN 1949, EN 732).
- Only one connection pressure is permissible for any one vehicle. A plate showing the permanent, clearly legible notice must be displayed in full view at the point where the gas cylinder is installed.
- The gas connection (1) to the appliance must be installed securely and at zero potential using tube connectors and must be securely connected to the vehicle (a hose connection is not permissible).
- Inflamable material should not be in immediate proximity to the burner.
- The gas connection to the appliance is effected by means of a suitable coupling tube fitting L8, DIN 2353-ST, complying with Worksheet G607 of DVGW or EN1949 respectively. (e.g. Ermeto)



The gas connection may only be carried out by a qualified personnel.

Also the following proper installation, a testing for leakage and a flame test must be carried out by *qualified personnel in compliance with Worksheet G607 or EN1949 respectively.

A certificate of testing must be issued.

* qualified personnel

Qualified personnel are accredited experts who are able, by virtue of their training and knowledge, to vouch for the correct implementation of the leakage test.

6.5.1

Gas connection

See FIG. 6 - Gas inlet fitting may have a different orientation than shown.

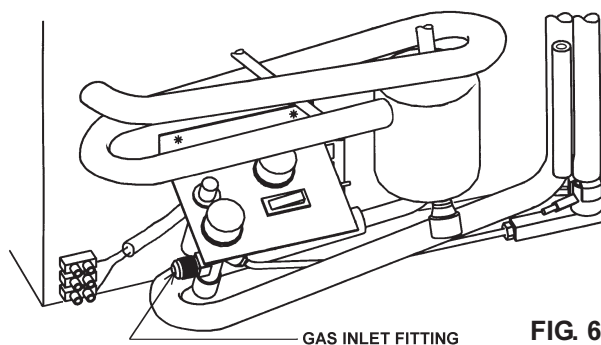
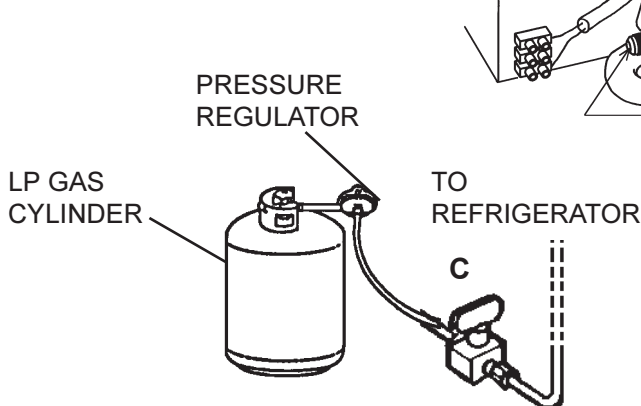


FIG. 6

The refrigerator must be equipped with a gas cock (C) in the supply line to allow the supply to be disconnected. Such a cutout device must be readily accessible to the user.

6.5.2

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:

A. Start the refrigerator according to the instructions for LP Gas Operation.

See "sec. 5.2 Using the refrigerator"

Check that the gas flame is lit. Allow it to burn a few minutes to ensure a full, stable flame.

C. Turn the gas safety valve (B, FIG. 8) to the "OFF" position. Within 1-2 minutes the gas safety device within the valve should automatically close. An audible "click" from the valve may be heard.

D. Turn the gas safety valve to the "HIGH" position (B, FIG. 8).

E. Without pushing in the knob (B, FIG. 8) of the gas safety device, apply a commercial leak detection solution to the burner jet. No bubbles should appear.

Bubbles indicate a gas leak and the safety valve must be replaced by a qualified service personnel.

F. Rinse the burner jet with water. Light the burner and allow it to burn for five minutes.



Gas pressure

Category	I _{3P(30)}	I _{3P(37)}	I _{3P(50)}	I ₃₊		I _{3B/P(50)}	I _{3B/P(30)}
mbar	30	37	50	28-37	30-37	50	30
BE				X			
DK							X
DE						X	X
FI							X
FR				X			
GR					X		X
IE		X		X			
IS							X
IT				X			
LU	X						X
NL	X						X
NO							X
AT						X	X
PT		X			X		
SE							X
CH				X			X
ES				X			
UK		X		X			

6.6

Electrical installation

Electrical installation may only be carried out by qualified personnel. The connection cables must be laid in such a way that they do not come in contact with hot components of the unit/burner or with sharp edges. The electrical installation must comply with national regulations (EN 60335-1 for Europe).

6.6.1

Power line connection

The power must be supplied via a properly earthed socket outlet or hardwired connection.

Where a socket outlet is used for the mains connection lead, the outlet must be freely accessible.

It is advisable to run the incoming supply through an on-board fuse or automatic circuit breaker. The power cable must be laid in such a way that it does not come in contact with hot components of the unit/burner or with sharp edges.

6.6.2

Battery connection

The machine's mains 12V connection cable is connected (observing correct polarity) to a terminal strip.

The cabling must be direct and by the shortest possible route to the battery and alternator respectively.

The heating element circuit must be connected to the vehicle battery by a suitable ignition operated relay in order that the 12V supply is only live while the vehicle ignition is switched on.

It is recommended that the electronic re-igniter and the interior light is connected to the on-board auxiliary battery.

Cross-sectional area of cable	Length of cable
4mm ²	< 6m
6mm ²	> 6m

The 12V circuit must be protected with a 16A fuse.

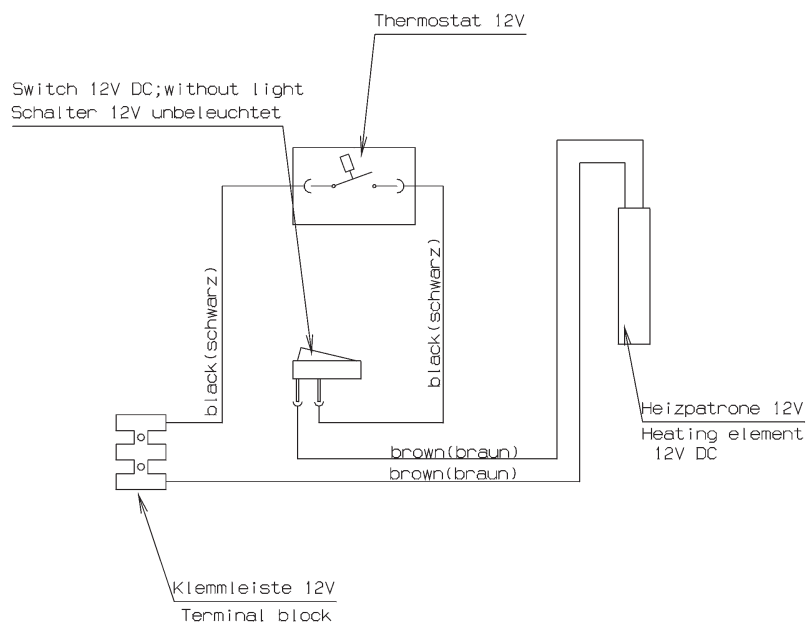
IMPORTANT:

To prevent the refrigerator from being left on and draining the battery when the vehicle's engine is not running and charging the battery, it is recommended that an automatic cutout relay be installed between the battery and the refrigerator toggle switch so that the refrigerator will not draw current when the vehicle ignition is switched off. Alternatively, a suitable plug and receptacle should be installed in the 12V supply line so that the refrigerator can be disconnected from the supply, as necessary.

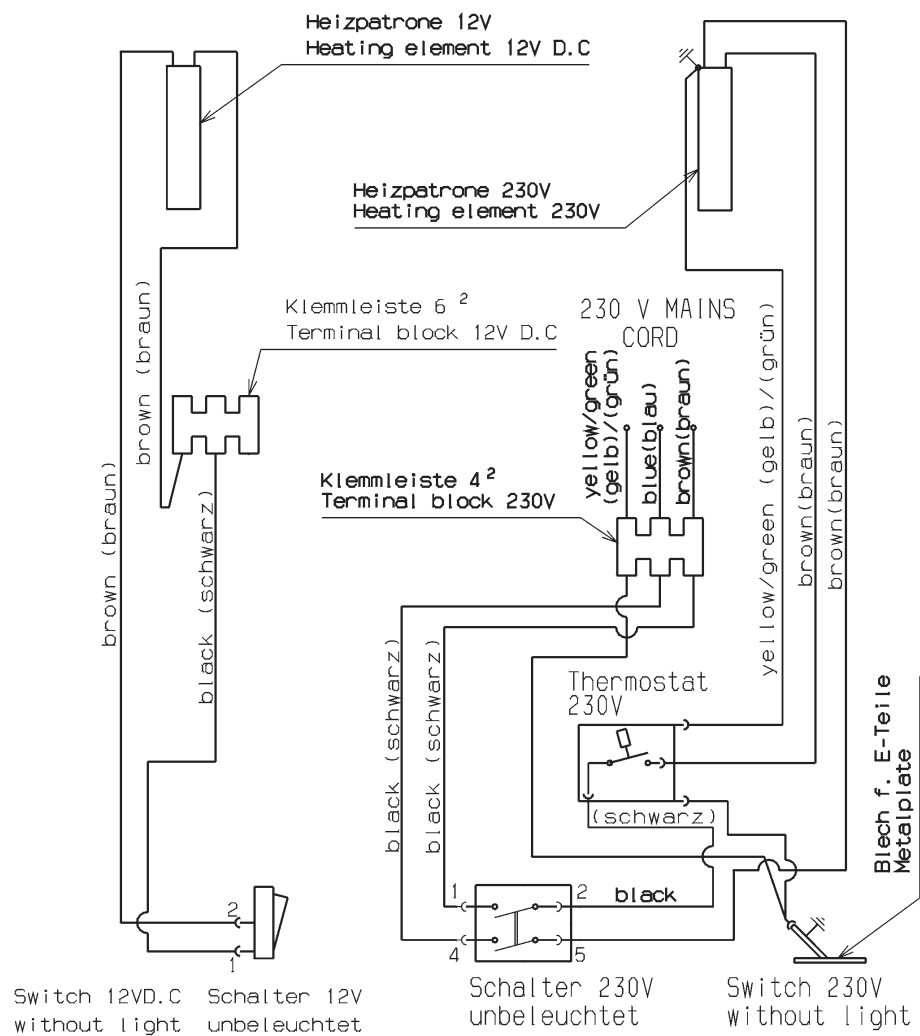
6.6.3

Wiring diagrams

RM 2191



RM 2193



Service and maintenance (for Service Technician only)



The user should be aware of service that must be done on a regular schedule to keep the refrigerator operating properly. **The service should only be performed by a qualified technician who is familiar with LP gas systems and refrigerators.**

REFRIGERATOR REMOVAL

Before working on, or removing the refrigerator, make sure the electrical supply (AC and DC) is turned OFF before leads are disconnected. Shut off the gas supply. Disconnect and cap the gas supply line. Loosen the screws anchoring the refrigerator to the enclosure and slide the refrigerator out of the compartment.

Replacement is the reverse of removal. Check all connections for gas leaks.

PERIODIC MAINTENANCE

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

A. It is important to keep the area at the back of the refrigerator clean. Check the lower vent, upper vent and area between these openings for any obstructions such as bird/insect nests, spider webs, etc. Clean the coils on the back of the refrigerator. Use a soft bristled brush to dust off the coils.

NOTE: AVOID SPRAYING WATER THROUGH THE REFRIGERATOR VENTS WHEN WASHING THE RV.

It is important to keep the refrigerator vent area free from combustible material, gas line and other flammable vapors or liquids.

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. The appearance of bubbles indicates a leak and should be repaired immediately **by a qualified serviceman who is familiar with LP gas systems and refrigerators.**

! WARNING

DO NOT USE A FLAME TO CHECK FOR GAS LEAKS.



C. Examination and Cleaning of Flue, Burner and Jet

Once or twice a year, look through the opening (see FIG. 9) in the burner box and examine the appearance of the burner flame which should be predominantly blue in color when the gas thermostat knob is set to its highest position. (Refer to FIG. 10).

If this is not the case, clean the flue, burner, jet, etc.

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(Refer to FIG. 10).

If this is not the case, clean the flue, burner, jet, etc.

FIG. 9

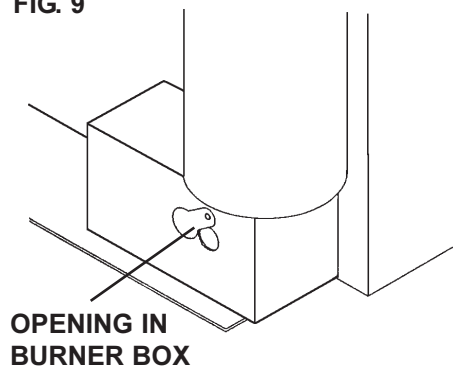
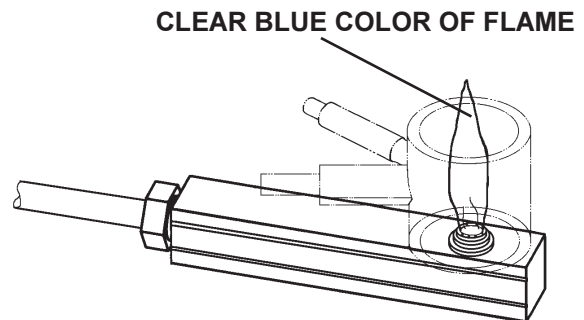


FIG. 10



D. Cleaning of Burner, Burner Jet (Refer to FIG. 11)

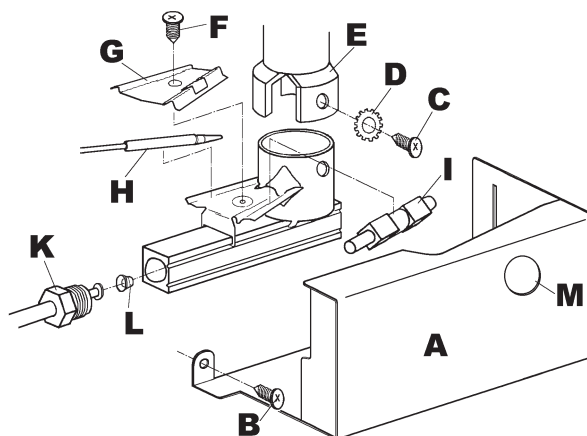
Proceed as follows:

- 1) Turn off the gas at the gas bottle.
- 2) By using a phillips screwdriver, remove the screw (B) and carefully withdraw the burner cover box. Clean the inside of the box of soot and other deposits.
- 3) To clean the burner, unscrew the screw (C) that fixes the burner on the boiler tube and be careful in order not to lose the washer.
- 4) Clean the inside of the burner.
- 5) To examine and eventually clean the burner jet, unscrew the gas pipe union (K) and pull out the burner jet (L).
- 6) Clean the jet by washing it in alcohol and blowing it through with air.

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.

- 7) Reassemble the components in the reverse order to that described above.

FIG. 11

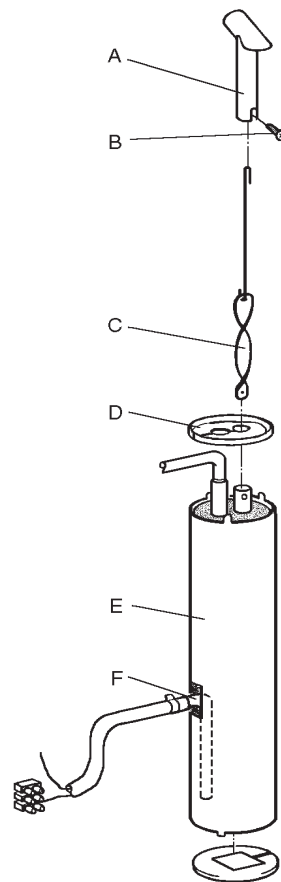


E. CLEANING OF FLUE TUBE, FLUE BAFFLE

Proceed as follows:

- 1) To clean the flue tube and the flue baffle, it is necessary to withdraw the refrigerator out of the recess.
By using a phillips screwdriver, remove the screw (B, in FIG. 11) and carefully withdraw the burner cover box.
- 3) Place a piece of paper or cloth between the boiler tube (E, in FIG. 11) and the burner assembly, to catch falling deposits.
- 4) Remove the "T-piece" (A, in FIG. 12) at the top of the flue by unscrewing the screw (B, in FIG. 12) that fixes it to the flue pipe.
- 5) Carefully takeout the flue baffle (C, FIG. 12) and clean.
- 6) Clean the flue tube of soot, etc. with the aid of a special flue brush, available from your supplier.

FIG. 12



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