



USA
SERVICE OFFICE
The Dometic Corp.
2320 Indust. Parkway
Elkhart, IN 46516
Phone: 574-294-2511

CANADA
Dometic Corp.
46 Zatonski, Unit 3
Brantford, ON N3T 5L8
Canada
Phone: 519-720-9578

**FOR SERVICE CENTER
ASSISTANCE**
CALL: 800-544-4881



**RECORD THIS INFORMATION FOR FUTURE REFERENCE
BEFORE INSTALLING THE UNIT:**

Model No. _____ Serial No. _____
Product No. _____
Date Purchased _____ Place of Purchase _____

REFRIGERATOR MODEL

RML 8330 UL

**For Mobile Home or Recreational Vehicle
Installation**

Operation by LP Gas, 12V DC or 120V AC

FOR CHILD SAFETY

DANGER: Risk of child entrapment. Before you throw away your old refrigerator: Take off the doors, leave the shelves in place, so that children may not easily climb inside.

FOR YOUR SAFETY

If you smell gas:

1. Shut off gas supply at main valve.
2. Open windows.
3. Don't touch electrical switches.
4. Extinguish any open flame.
5. 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.

AVIS

Cet appareil doit être réparé seulement par un réparateur autorisé. Modification de l'appareil pourrait être extrêmement dangereuse, et pourrait causer mal ou mort.

INSTALLATION INSTRUCTIONS

REFRIGERATOR MODEL

RML 8330

Dometic Corporation
LaGrange, IN 46761
USA

822 6102-15
01/2012

FRANÇAIS PAGE 21

**IMPORTANT INSTRUCTIONS
READ CAREFULLY**

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WARNING!

**DO NOT USE A FLAME TO CHECK
FOR GAS LEAKS**



WARNING!

Most LP gas appliances used in recreational vehicles are vented to the outside of the vehicle. When parked close to a gasoline pump, it is possible that the gasoline fumes could enter this type of appliance and ignite from the burner flame, **CAUSING A FIRE OR AN EXPLOSION.**

FOR YOUR SAFETY, it is recommended that all LP gas appliances which are vented to the outside should be shut off when refueling.

The refrigerator must be shut off during refueling.



0.0 Unpacking and transport

Lifting / carrying the refrigerator

CAUTION!

Never use for lifting or carrying other parts of the refrigerator (i.e. cooling unit, gas pipe, frontpanel) !

The refrigerator will be damaged !

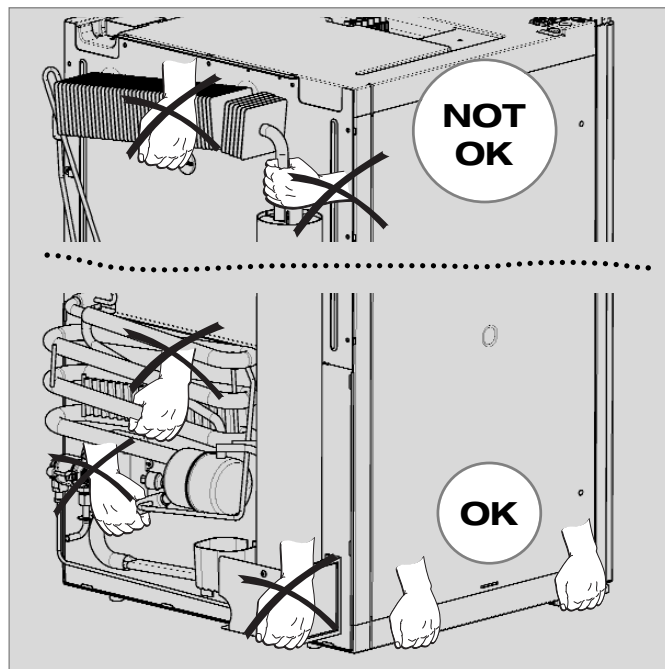


Fig. 0

1.0 General

1.1 Introduction

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.

1.2 Guide to these installation instructions

Before you start installing the refrigerator, please read the installation instructions carefully.

These instructions provide you with the necessary guidance for the proper installation of your refrigerator. **Observe in particular the safety instructions.** Observation of the instructions and handling recommendations is important for dealing with the refrigerator safely and for protecting you from injury and the refrigerator from damage. You must understand what you have read before you carry out a task.

Keep these instructions in a safe place so they may be referred to at any time.

1.3 Copyright protection

The information, texts and illustrations in these instructions are copyright protected and are subject to industrial property rights. No part of these instructions may be reproduced, copied or utilised in any other way without written authorisation by Dometic.

1.4 Explanation of symbols used in this manual

Warning notices

Warning notices are identified by symbols. A supplementary text gives you an explanation of the degree of danger.

Observe these warning notices rigorously. You will thus protect yourself and other people from injury, and the appliance from damage.



DANGER!

DANGER indicates an imminent hazardous situation which, if not avoided, could result in death or serious injury.



WARNING!

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



CAUTION!

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

CAUTION!

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

Information



INFORMATION gives you supplementary and useful guidance when dealing with your refrigerator.

Environmental Tips



ENVIRONMENTAL TIPS gives you useful guidance for saving energy and disposal of the appliance.

1.5 Warranty

Warranty arrangements are in accordance with the normal conditions applicable for the country concerned. For warranty or other maintenance, please contact our customer services 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.



Deviations from these installation instructions without prior notification of Dometic result in Dometic GmbH's warranty obligations becoming void!

1.6 Limitation of liability

All information and guidance in these operating instructions were prepared after taking into consideration the applicable standards and regulations as well as the current state of the art. **Dometic** reserves the right to make changes at any time which are deemed to be in the interest of improving the product and safety.

Dometic will assume no liability for damage in the case of :

- non-observation of the operating instructions
- application not in accordance with the regulations or provisions
- use of non-original spare parts
- modifications and interferences to the appliance
- effect of environmental influences, such as
 - temperature fluctuations
 - humidity

1.7 Environmental notices



Refrigerators manufactured by Dometic GmbH are free of CFC/HCFC and HFC. Ammonia (a natural compound of hydrogen and nitrogen) is used in the cooling unit as a coolant. Non-ozone-hazardous cyclopentane is used as a propellant for manufacturing PU foam insulation.

Disposal

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

2.0 Safety instructions

2.1 Application according to regulations

This appliance is designed for storage of food and storage of frozen food and making ice. The refrigerators outlined herein have been design certified by CSA under ANSI Z21.19 / CSA 1.4 Refrigerator Standard for installation in a mobile home or recreational vehicle.

The refrigerator is to be used solely for storing foodstuffs.

CAUTION!

The refrigerator must not be exposed to rain.

2.2 User's responsibility

Anyone operating the refrigerator must be familiar with the safe handling and understand the advice in the operating instructions (part no. 289 0111-17).

2.3 Working upon and checking the refrigerator



WARNING!

Work on gas equipment, exhaust system and electrical facilities must be carried out by authorized personnel only. Substantial damage to property and/or injury to persons can arise through unprofessional procedures.



DANGER!



Never use an open flame to check gas bearing parts and pipes for leakage!

There is a danger of fire or explosion..



WARNING!

Never open the absorber cooling unit! It is under high pressure.

There is a danger of injury!

2.4 Operating the refrigerator with gas

It is imperative that the operating pressure corresponds to the data specified on the rating plate of the appliance. Compare the operating pressure of the rating plate with the data specified on the pressure reducing valve of the liquid gas cylinder.

3.0 Description of model

3.1 Model identification

Example :

RML

8330

Model range

“Large”

Refrigerator Mobile /
Mobile Absorption Refrigerator

0 = manual energy selection + manual
ignition **(battery igniter)**

3.2 Refrigerator rating plate

The rating plate is to be found on the inside of the refrigerator. It contains all important details of the refrigerator. You can read off from this the model identification, the product number and the serial number. You will need these details whenever you contact the customer service centre or when ordering spare parts.

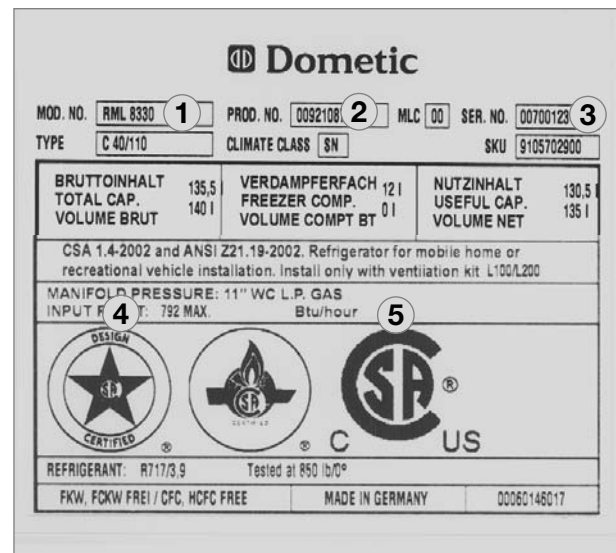


Fig. 1

- ① Model number
- ② Product number
- ③ Serial number
- ④ Electrical rating details
- ⑤ Gas pressure

3.3 Technical data

Model	Dimensions H x W x D (mm) Depth incl. door	Gross capacity with freezer compartment		Rating details mains/battery	Consumption * electricity/gas over 24hrs	Net weight	Ignition Piezo	Automat
RML 8330	s. fig. 2	140 lit. 4.94 Cu.ft	12 lit. 0.42 Cu.ft	170 W / 170 W	ca.3.2 KWh / 380 g ca.3.2 KWh / 13.4 oz	37 kg 81.57 lb	•	

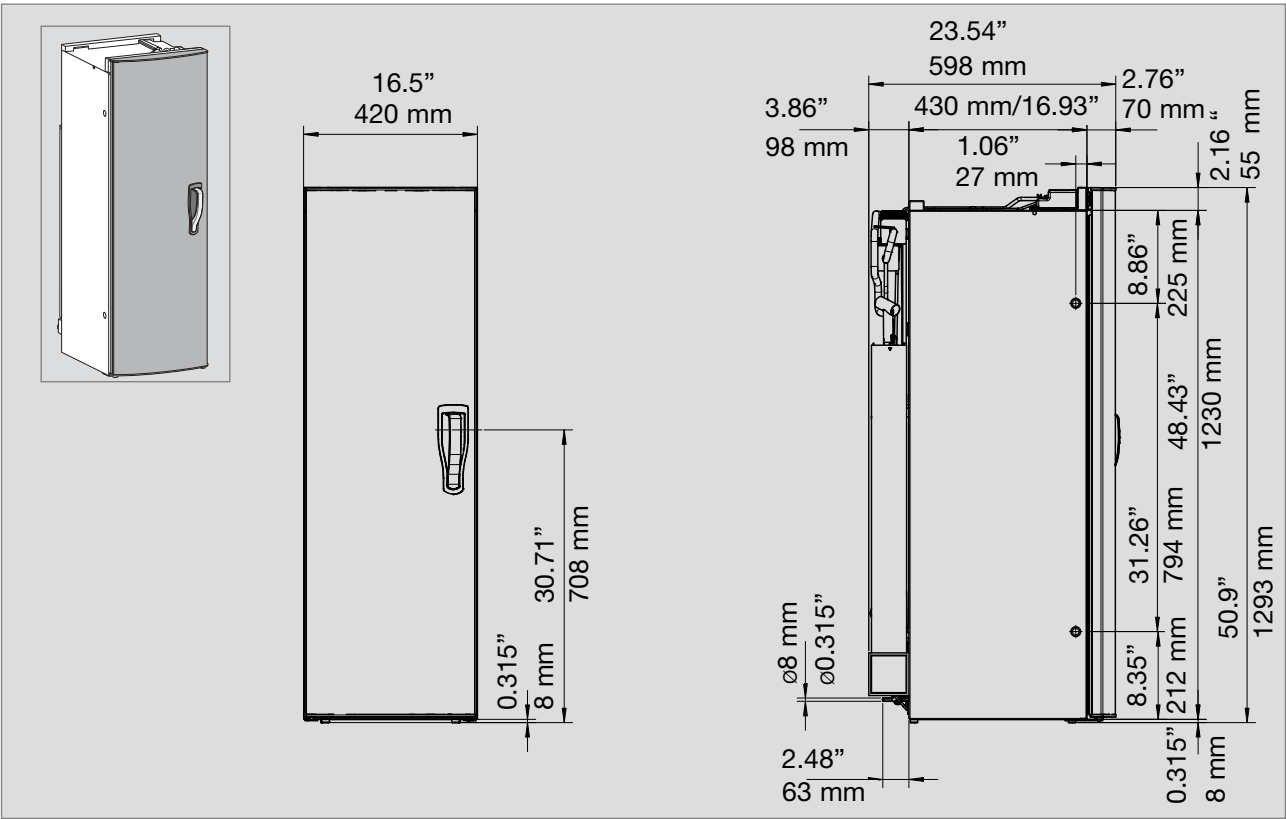


Fig. 2

4.0 Installation instructions

4.1 Installation



WARNING!

The appliance may be installed by authorized personnel only!

The refrigerators outlined herein have been design certified by CSA under ANSI Z21.19 / CSA 1.4 Refrigerator Standard for installation in a mobile home or recreational vehicle. 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:

- **National Fuel Gas Code ANSI Z223.1 - (latest edition)**
- **Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280**
- **Recreational Vehicles ANSI A119.2 - (latest edition)**

The unit must be electrically grounded in accordance with the National Electric Code ANSI / NFPA 70 - (latest edition) when installed if an external alternating current electrical source is utilized.

- **Any applicable local code.**

In Canada., the installation must conform with:

- **Current CSA B 149.1 Natural Gas and Propane Installation Code**
- **Current CSA Standard Z 240.4 GAS-EQUIPPED RECREATIONAL VEHICLES AND MOBILE-HOUSING**
- **Any applicable local code.**

The unit and the exhaust duct system must be in principle installed so that it is accessible for maintenance work, can be easily installed and dismantled and removed from the vehicle without great effort.

CAUTION!

The appliance shall be installed in such a way that it is shielded from excessive heat radiation.

4.1.1 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. (Fig. 3, Clearance door/ventilation grille at least 0.98" (25 mm)). Otherwise ventilation could be impaired which causes a loss in cooling performance. Awnings are often placed at the door side of a caravan. This complicates evacuation of combustion gases and heat through the ventilation grilles (loss in cooling performance)!

(Fig. 3) The air vent grilles are blocked. There must be a distance between the door and the air vents of at least 0.98" (25 mm) !

If the door/grille distance is between 0.98" (25 mm) and 1.77" (45 mm), we recommend installing a **Dometic ventilation kit (item no. 241 2985 - 00/0)** to achieve an optimal cooling performance in high ambient temperatures.

(Fig. 4) The air vent grilles offer an unobstructed dissipation of heat and exhaust gas even when the door is opened.

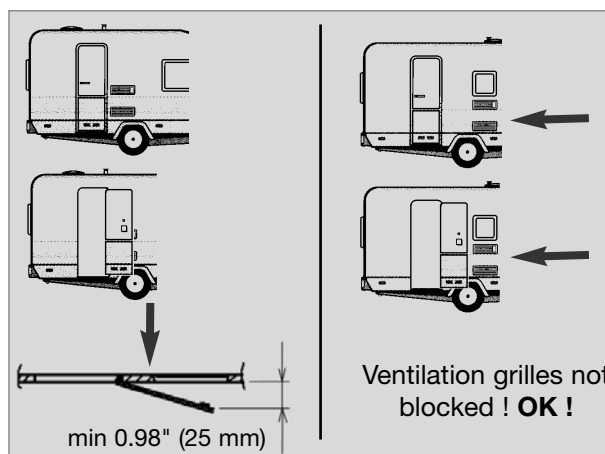


Fig. 3

Fig. 4

4.1.2 Rear installation

Rear installation often causes an unfavourable installation arrangement, as ideal ventilation cannot always be assured (e.g. the lower ventilation grille is covered by the bumper or the rear lights of the vehicle!). The maximum cooling performance of the aggregate is actually not available.

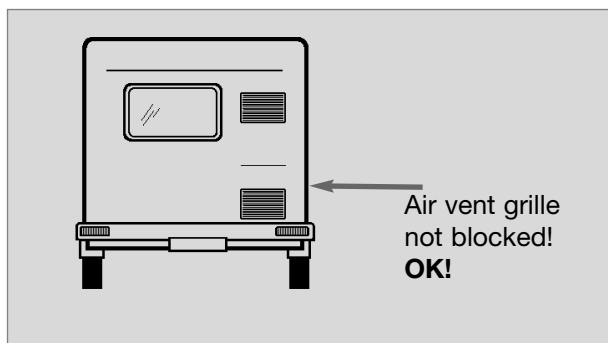


Fig. 5

Another unfavourable method of rear installation is to install the air intake and exhaust grilles (Fig. 6) at the side wall of the recreation vehicle. The air-heat recirculation is very restricted which means that heat exchangers (condenser, absorber) cannot be adequately cooled. The optional method of an additional air vent grille installed in the floor also exhibits an insufficient air flow duct.

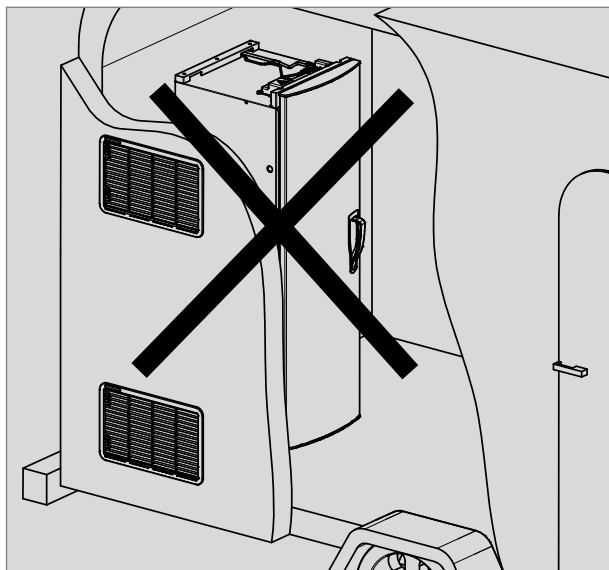


Fig. 6

CAUTION!

The maximum cooling performance is not available! Do not apply this installation method, as it does not provide proper ventilation! Please refer to the description in section 4.2.

4.1.3 Draught-proof installation

Refrigerators in motorhomes, caravans or other vehicles must be installed in a draught-proof manner. This means that the combustion air for the burner is not taken from the living space and that exhaust fumes are prevented from entering the living space.

Adequate sealing between the back of the refrigerator and the vehicle interior has to be provided.

Dometic strongly recommends carrying this out using a flexible seal (in order to simplify later removal and installation of the unit for maintenance purposes).



WARNING!

By no means use durable sealing compounds, fitting foam or similar material to realise draught-proof installation of the refrigerator! Do NOT use any easily inflammable materials for sealing (in particular silicon sealing compound or similar). Risk of fire! The device manufacturer's product liability and warranty shall lapse if such materials are used.

Insert lipped seals (1) into the installation recesses at the bottom and at each side (Fig. 7-9). Insert deflector plate (2), fitted with a lipped seal (3) of heavy-duty, non-flammable material, into the installation recess.

Insert deflector plate (2) in such a way that the

hot air escapes through the air vent grille into the open air. Affix the discharge plate to the caravan wall, **not to the refrigerator !**

Finally, push the refrigerator into the recess from the front. Ensure that the lipped-seals have tight contact to the refrigerator's housing

That ensures that the refrigerator can easily be removed for maintenance or repair.

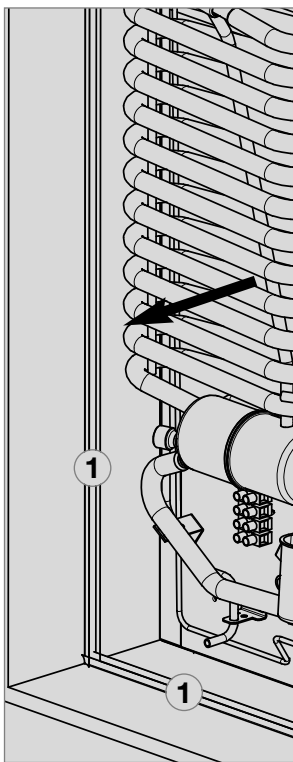


Fig. 7

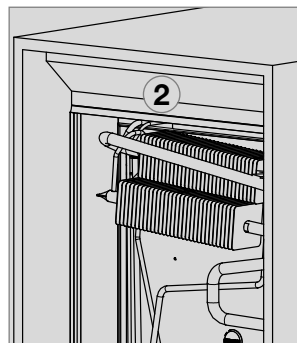


Fig. 8

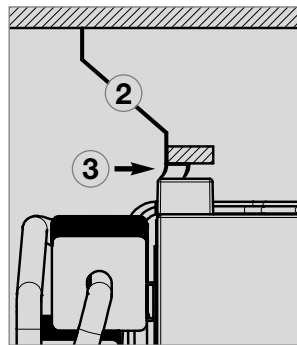


Fig. 9

The cavity in-between the outer vehicle wall and refrigerator is completely isolated from the vehicle interior. Intrusion of exhaust fumes into the living space is prevented. Fumes will escape through the upper ventilation grille to the outside. The draught-proof installation does not require a special exhaust gas duct to be used.



Deviations shall require the consent of the manufacturer.

4.2 Ventilation

4.2.1 Ventilation and air extraction of the refrigerator

A correct installation of the refrigerator is essential for its correct operation, as due to physical reasons heat builds up at the back of the appliance which must be allowed to escape into the open air.



In the event of high ambient temperatures, full performance of the cooling unit can only be achieved by means of adequate ventilation and extraction.

Ventilation is provided for the unit by means of two apertures (ventilation grilles) in the vehicle's wall. Fresh air enters at the bottom, extracts the heat and exits through the upper vent grille (chimney effect). **The upper ventilation grille should be positioned as high as possible above the cooling unit (Fig. 11). Install the lower ventilation grille at floor level of the recess floor (Fig. 10), allowing unburnt gas (heavier than air) to escape directly into the open air. The gas burner must be located above the edge (1) .**

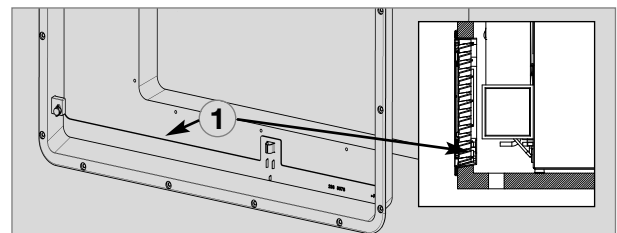


Fig. 10

Should this arrangement prove impossible, a ventilation aperture must be introduced by the manufacturer of the vehicle into the recess floor in order to avoid the accumulation of unburnt gas on the floor (see Fig. 11,12).

4.2.2 Positioning of ventilation grilles

The ventilation grilles must have an open cross-section of at least **62 sq inches / 400 cm²**. This is achieved by using the Dometic absorber ventilation and air extraction systems which have been tested and approved for this purpose.

Standard:

Installation with lower ventilation grille and upper ventilation grille LS 330.

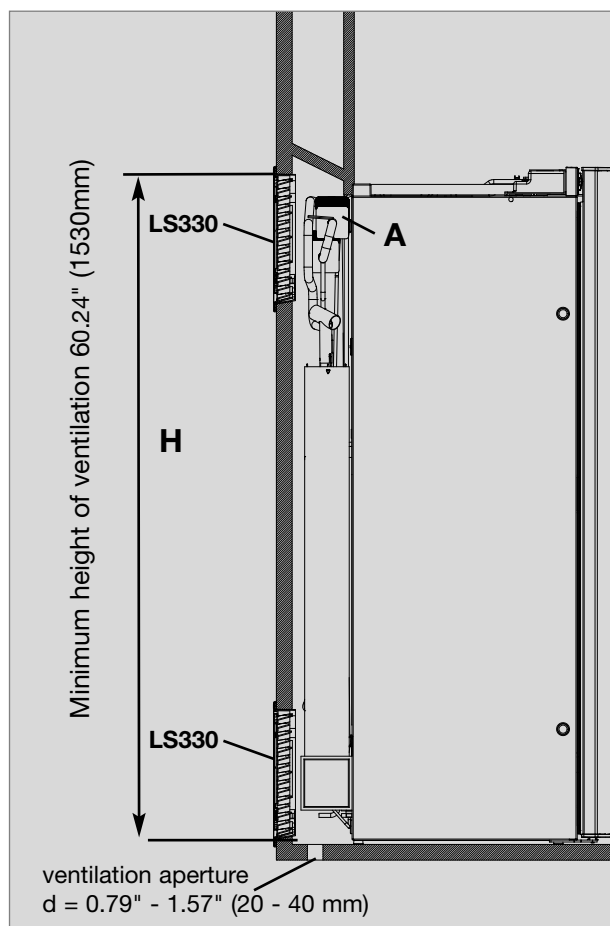


Fig. 11

The upper ventilation grille should be positioned as high as possible above the condenser (A). Install the lower ventilation grille at floor level of the vehicle,

Alternative:

Installation with upper ventilation grille LS 200 and lower ventilation grille LS 330.

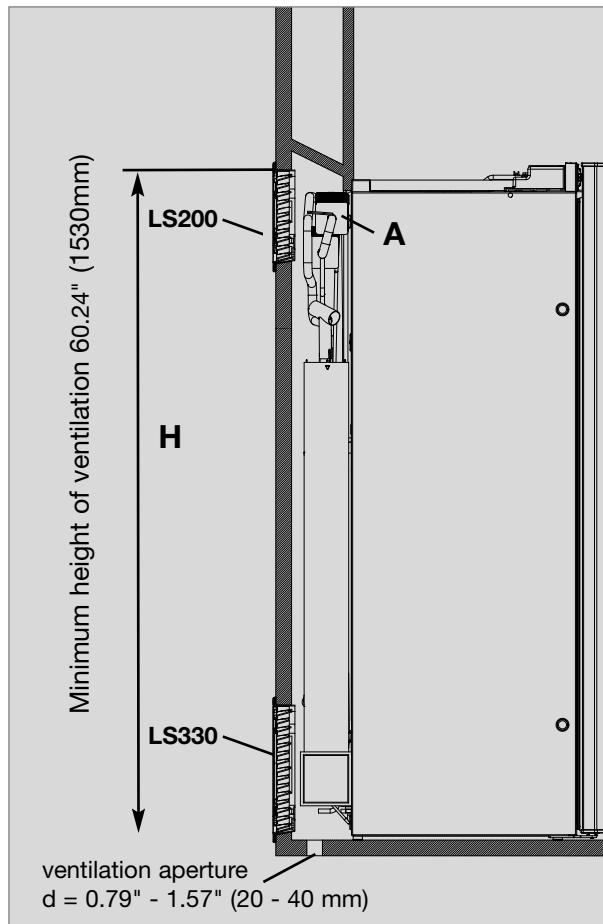


Fig. 12



Correct mounting of the lower ventilation grille facilitates access to the connections and functional parts during maintenance.

4.3 Installing the ventilation system

4.3.1 Installing LS 330 or LS 200

To install the ventilation grilles, cut two rectangles, width for LS 330 **a = 9.8" in x b = 16.14" in (a = 249 mm x b = 410 mm)** or for LS 200 **a = 17.76" x b = 6.14" in (a = 451 mm x b = 156 mm)**, in the outer wall of the vehicle (for position of the cuts, see Fig. 11,12).

1

Cut two rectangles in the exterior wall of the vehicle.

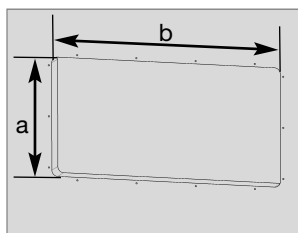


Fig. 13

2

Seal the mounting frame making it water-proof (*does not apply for mounting frames with integral seal*) and screw into position.

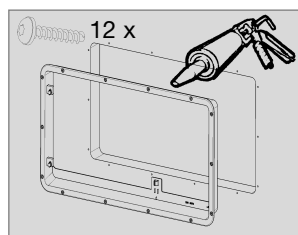


Fig. 14

3

Insert ventilation grille.

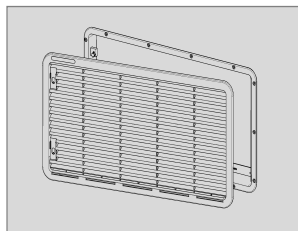


Fig. 15

4

Install locking slider.

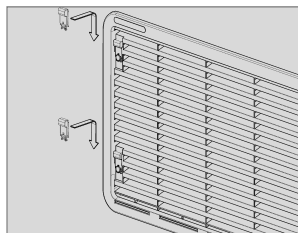


Fig. 16

5

Lock ventilation grille.

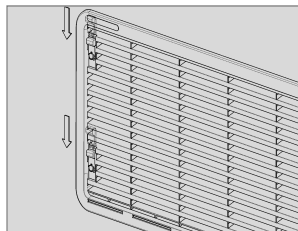


Fig. 17

4.4 Exhaust duct system

The exhaust gas duct system must be made in such a manner as to achieve a complete extraction of combustion products to the outside of living space. The flue gas is vented directly through the upper grille. Do not use any kind of aluminium flue pipe to lead the flue gas out.

The T-piece (Fig. 18) must be aligned with the exterior wall.

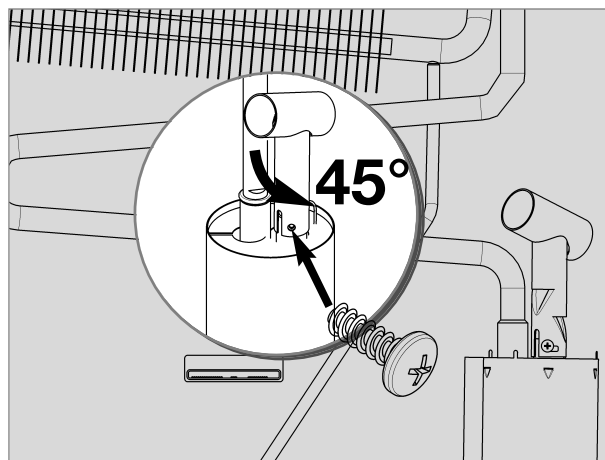


Fig. 18

CAUTION!

An installation other than described will reduce the cooling capacity and jeopardise the manufacturer's warranty/product liability.

4.5 Installation recess

The refrigerator must be installed draught-proof in a recess (also refer to Section "4.1.3"). The measurements of the recess are stated in the table below. Push the appliance far enough into the recess until the front edge of the refrigerator casing is aligned with the front of the recess. Allow a gap of **0.59"-0.79" (15-20 mm)** between the back wall of the recess and the refrigeration unit. The floor of the recess must be level, allowing the appliance to be pushed easily into its correct position. The floor must be substantial enough to bear the weight of the appliance. **Ensure that the refrigerator is installed level in the recess.**



4.5.1 Recess dimensions

Height H	Width B	Depth T
51.06 in	16.7 in	21.73 in
1297 mm	424 mm	552 mm

4.6 Securing the refrigerator

In the sidewalls of the refrigerator, there are four plastic sleeves for securing the refrigerator. The sidewalls or strips attached for securing the refrigerator must be prepared to hold the screws firmly in place even when under increased load (while the vehicle is moving). Fastening screws and caps are supplied with the refrigerator.

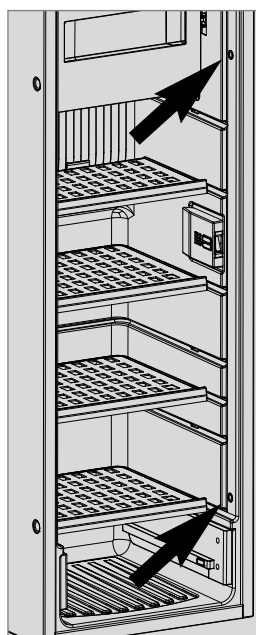


Fig. 19

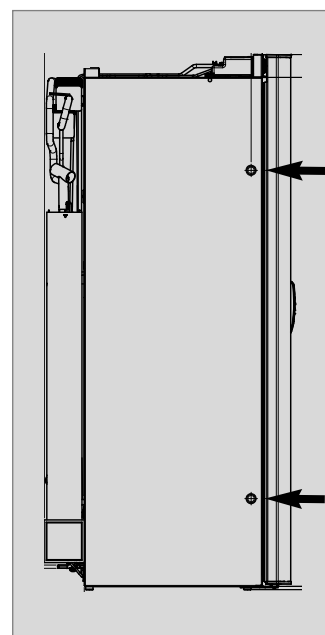


Fig. 20

CAUTION!

Always insert screws through the sleeves provided as otherwise components laid in foam, such as cables etc., could be damaged.

After the refrigerator is put in its final place, secure the screws into the wall of the recess. The screws must penetrate the casing of the refrigerator.

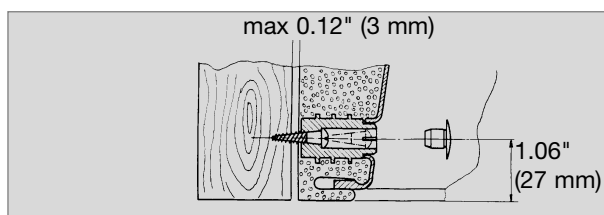


Fig. 21

4.7 Gas installation



WARNING!

The gas connection shall be carried out by specialised personnel* only.

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

- **Observe the regulations stated in section 2.1**
- **This refrigerator is provided for installation within liquid gas equipment and must be run exclusively on liquid gas (propane) (no natural gas, town gas).**
- **The pressure regulator must concur with the operating pressure specified on the rating plate of the appliance. The operating pressure corresponds to the standard pressure of the country of specification.**
- **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 to the appliance must be installed securely and free of stress using pipe connectors and must be securely connected to the vehicle (a hose connection is not permissible) .**
- **The gas connection to the appliance is effected by means of suitable coupling tube fitting (s. figure 22).**
- **The refrigerator must be equipped with a shut-off valve allowing to cut the supply line. Such a shut-off device must be readily accessible to the user.**

Hook-up to the gas supply line is accomplished at the manual gas shutoff valve, which is furnished with a 3/8" SAE (UNF 5/8" - 18) male flare connection. Always use a backup wrench when connecting the gas supply line to the gas inlet fitting.

Following proper installation, a testing for leakage and a flame test must be carried out by *qualified personnel. A certificate of testing must be issued.

Check all connections for gas leaks with soap and water. **DO NOT** use a open flame for detecting leaks. Ignite the burner to ensure correct operation of gas valve, burner and ignition. In case the appliance fails to operate correctly after all checks have been carried out, refer to the authorized service provider in your area.

Gas connection

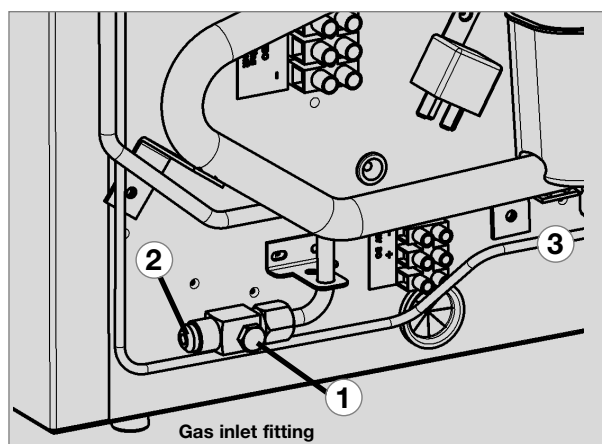


Fig. 22

- ① Testing point
- ② Connection to gas supply
- ③ Connection to gas burner

Gas supply

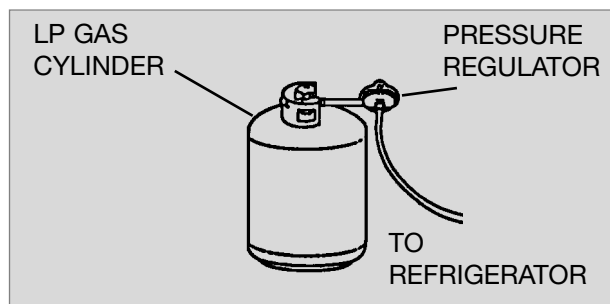


Fig. 23

The gas supply system must incorporate a pressure regulator to maintain a supply pressure of not more than 13.5 inches (343 mm) water column, static (no load). When testing the gas supply system at test pressures in excess of 1/2 psig (3.5 kPa), 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 (3.5 kPa), the appliance 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.



The refrigerator must be equipped with a gas cock in the supply line to allow the supply to be disconnected. Such a shut-off device must be readily accessible to the user.



WARNING!

Do not use a open flame to check for gas leaks!

Gas pressure

Refer to data label.



When using **LPG gas**, please consider that the burner needs cleaning at shorter intervals due to the gas combustion method (2 - 3 times per year recommended).

4.8 Electrical installation



WARNING!

The electrical installation shall be carried out by qualified personnel only.

** Specialized personnel are accredited experts who are able, by virtue of their training and knowledge, to vouch for the correct installation.*

- **The electrical installation must be in accordance with the national regulations of the respective countries.**
- **The connection cables must be routed in a way to prevent contact with hot components of the unit/burner or with sharp edges.**
- **Changes to the internal electrical installation or the connection of other electrical components (e.g. external fan, not from Dometic) to the internal wiring of the appliance will render any claims from warranty and product liability void!**

4.8.1 Mains connection

- **The power should be supplied by a properly grounded socket outlet or a grounded non-detachable connection. Where a socket outlet with mains supply is used, the outlet must be freely accessible.**

Should the connection cable be damaged, have it replaced by Dometic Customer Services or by qualified personnel to avoid hazards.

We recommend leading the power supply via a board-side fuse protection.

4.8.2 Battery connection

The machine's 12V connection cable is connected (observing correct polarity) to a terminal strip. The wiring for the heating element (refer to A, B wiring diagram connections; connection cable white/red) must be direct and by the shortest possible route to the battery or electric generator.

Cable cross sections and cable lengths :

Motorcaravan & Caravan (inside)

6 mm ²	< 6 m or
AWG 10)	< 20 ft

10 mm ²	> 6 m or
AWG 8	> 20 ft

Caravan (outside)

min 2,5 mm² or min AWG 14

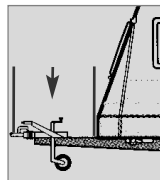


Fig. 24

CAUTION!

If the appliance is installed in a caravan the respective leads for the 12V+ and 12V-connections A/B and C/D must not be connected to each other on the caravan-side.

Provide a 16 A (USA = 20 A) fuse to protect on-board 12 V circuit.

In order to ensure that the 12V power supply is shut off when stopping the engine (otherwise the battery would discharge within a few hours), perform the power supply to the heating element (cf. page 18, connection A/B in wiring diagram) in a way to have the 12V supply only live while the vehicle ignition is switched on.

The connection C/D (interior light, cable black/violet) must be permanently provided by a 12V DC power supply to be protected by a 2 A (USA = 3 A) fuse.

4.8.3 Terminal strip

Contacts :

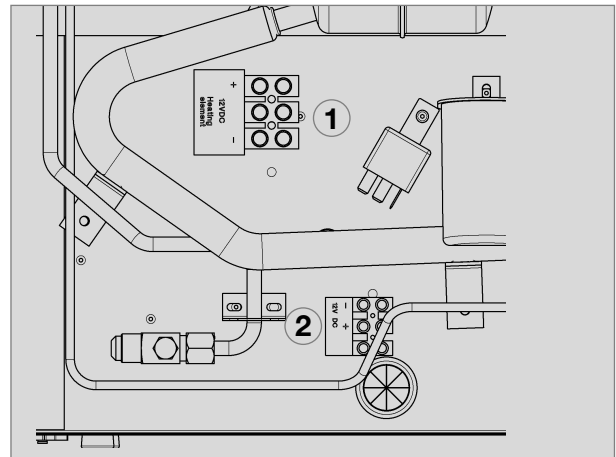


Fig. 25

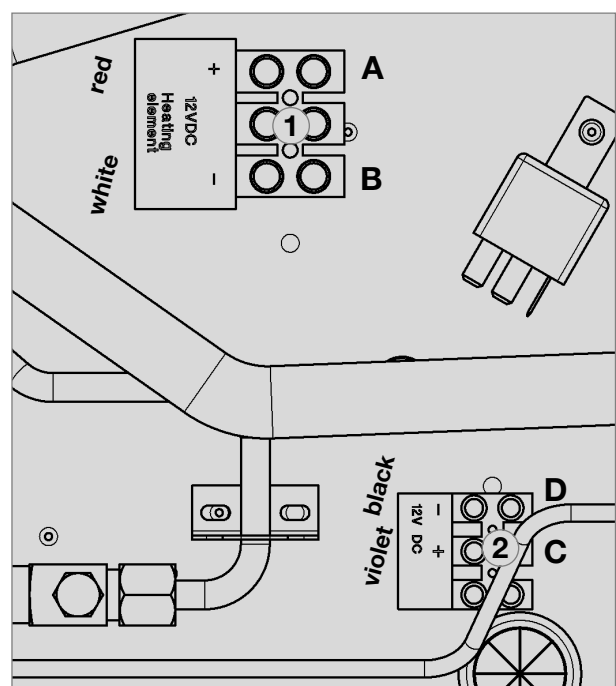


Fig. 26

- 1 A = Positive connection, heating element DC
- B = Ground, heating element DC
- C = Positive connection, interior light
- D = Ground, interior light

4.8.4 Wiring diagram

Wiring diagram RML 8330

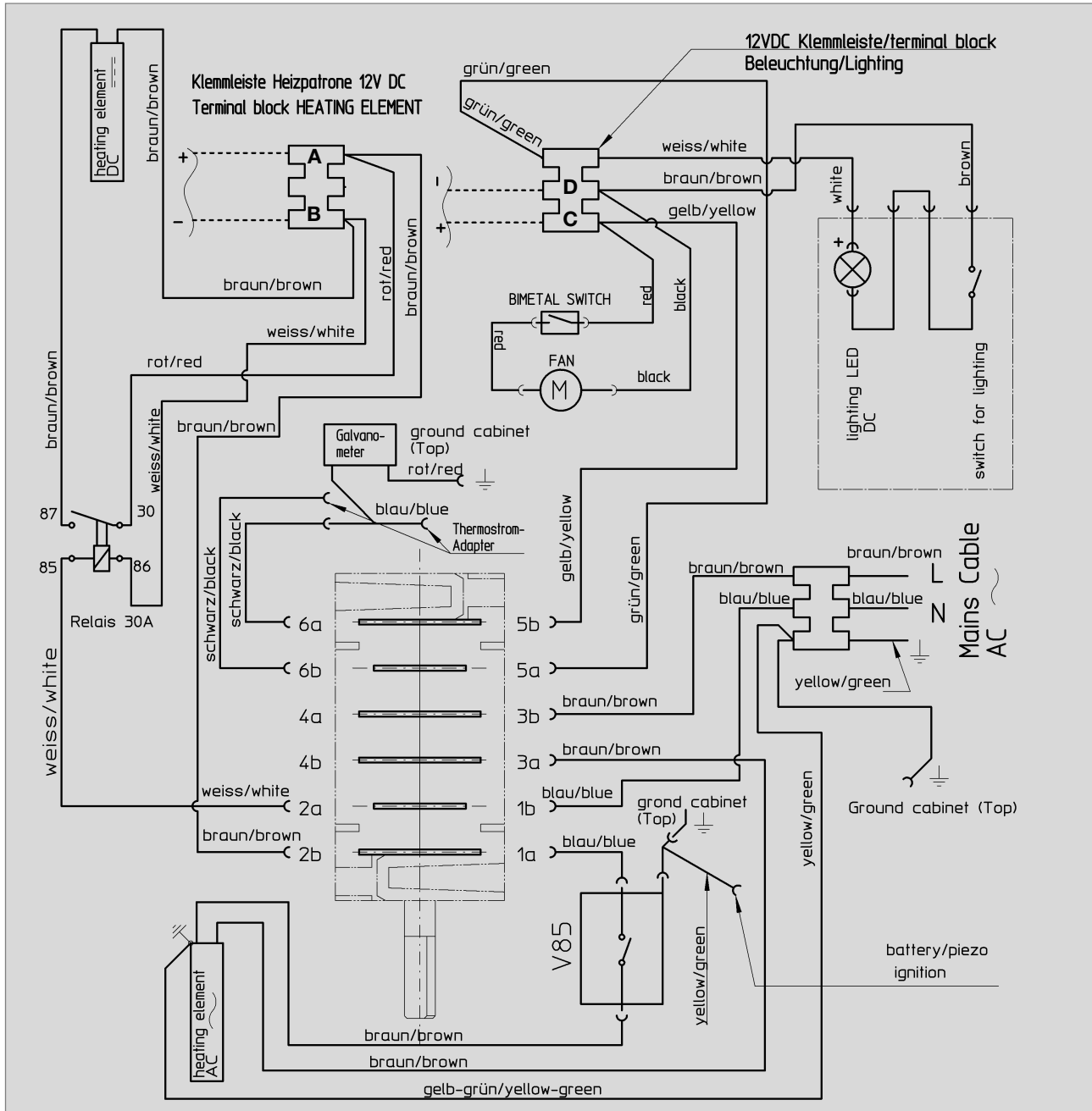


Fig. 27

