Dometic®

INSTALLATION MANUAL

RM3762

RM3962

REFRIGERATOR FOR LP-GAS & ELECTRIC OPERATION

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.

POUR VOTRE SÉCURITÉ

Si vous sentez une odeur de gaz:

- 1. Ouvrez les fenêtres.
- 2. Ne touchez à aucun interrupteur.
- 3. Éteignez toute flamme nue.
- 4. Avertissez immédiatement votre fournisseur de gaz.

FOR YOUR SAFETY

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

POUR VOTRE SÉCURITÉ

Ne pas entreposer ni utiliser de l'essence ni d'autres vapeurs ou liquides inflammables à proximité de cet appareil ou de tout autre appareil.

A 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.

A AVERTISSEMENT

Une installation, un réglage, une modification, une réparation ou un entretien non conforme aux normes peut entraîner des blessures ou des dommages matériels. Lisez attentivement le mode d'emploi fourni avec l'appareil. Pour obtenir de l'aide ou des renseignements supplémentaires, consultez un installateur ou un service d'entretien qualifié ou le fournisseur de gaz.

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USA

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INTRODUCTION

This manual describes the installation procedure of RM3762 and RM3962. The installation is to be performed by qualified personnel only.

Read this manual thoroughly before installing the refrigerator. Comply with installation specifications and dimensions. Follow the instructions to ensure that the refrigerator is installed safely and that it runs efficiently. Be aware of possible safety hazards when seeing alert symbols on the refrigerator as well as in this manual.

For operating instructions, please refer to the USER MANUAL (825125601)

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SYMBOLS

The following symbols are used throughout the manual:



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



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



Used without the safety alert symbol indicates, a potentially hazardous situation which, if not avoided may result in property damage.



Information



Step-by-step instructions

CERTIFICATION AND CODE REQUIREMENTS

This appliance is certified under the latest edition of ANSI Z21.19•CSA 1.4 Refrigerators using gas fuel. The installation must conform with local codes, or in absence of local codes, the following standards as applicable.

In the U.S. the installation must conform with:

- National Fuel Gas Code, ANSI Z223.1/NFPA 54 (latest edition).
- Recreational Vehicles Code, ANSI A119.2 (latest edition).
- Manufactured Home Construction and Safety Standard, Title 24 CFR, Part 3280.

If an external electrical source is utilized, the refrigerator, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, the National Electrical Code, ANSI/NFPA 70 - (latest edition).



- Natural Gas and Propane Installation Code, CSA B149.1
- CSA Z240 RV Series, Recreational Vehicles.
- Current CSA Z240.4, Gas-equipped Recreational Vehicles and Mobile Housing.

If an external electrical source is utilized, the refrigerator, when installed, must be electrically grounded in accordance with local codes or, in the absence of local codes, the Canadian Electrical Code, CSA C22.1, Parts I and II - (latest edition).







VENTILATION REQUIREMENTS

GENERAL INFORMATION

Ventilation is one of the requirements for proper cooling unit operation. The installation should 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 should have a minimum dimension of not less than 1/4 inch.

Proper installation requires one *lower fresh air intake* and one *upper exhaust vent*. Certified installations require one *roof vent* and one *lower side vent*. The ventilation kits shown in this manual have been certified for use with RM 3762 and RM 3962. The table below displays the components and their part no.

Certified vent system kits			
Kit no.	Components	Part no.	
4A	Roof Base Roof Cover Lower Side Vent	3103633.XXX* or 3310893.XXX* 3103634.XXX* or 3310894.XXX* 3109350.XXX*	

^{*} Replace "XXX" with the color code numbers. For color codes, contact your supplier. For further information, contact your dealer or distributor.

The ventilation kits must be installed and used without modification! An opening toward the outside at floor level in the refrigerator compartment has to 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. This should be centered on the back of the refrigerator.

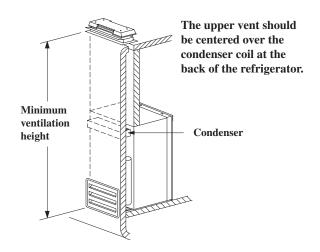
CAUTION

It is of especially importance that the airflow around the burner housing, the boiler insulation and the flow of combustion gases must not be obstructed. Items placed in the vicinity of the refrigerator compartment accordingly must be secured away from the refrigerator tubing and flue.

VENTILATION HEIGHTS

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.

Minimum ventilation heights Installation with roof vent and lower side vent			
	inches	mm	
RM3762	57-3/4	1465	
RM3962	66-13/16	1697	

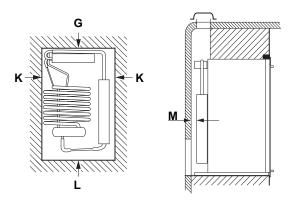


CLEARANCES

Minimum clearances (in inches) to combustible materials:

Top (G)	0
Side (K)	0
Bottom (L)	0
Rear (\mathbf{M}^1)	0

¹ The distance between the rearmost part of the refrigerator and the wall behind it.



INSTALLING THE REFRIGERATOR

Make sure the floor is solid and level. 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 full width and depth of the appliance.

The refrigerator must be level and installed in a substantial enclosure. For information about recess dimensions, see "APPENDIX A - TECHNICAL DATA".

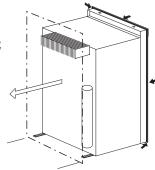


A wood strip must be in place across the upper opening of the enclosure. The top frame of the refrigerator will be anchored to the wood strip with screws.

When installing the refrigerator in the enclosure, all areas within the recess have to be sealed. Verify 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. The sealing strip should provide a complete isolation of the appliance's combustion system from the vehicle interior.

Be careful not to damage the sealing strip when the refrigerator is put in place!



SECURING THE REFRIGERATOR

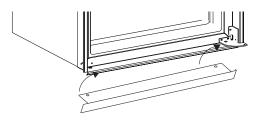
After the refrigerator has been installed (ensuring a combustion seal at the front frame), the refrigerator must be secured in the enclosure with six screws (not included). Furthermore, a lower front strip (shipped as a loose part) should be attached.

NOTE! It is important to follow the sequence in securing the refrigerator since failure in doing that can cause leakage between the frame and cabinet!

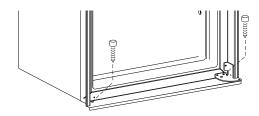
Install the six screws in the following order:



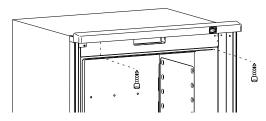
- 1. Two screws installed through the front base and installation of the lower front strip.
 - a) Install the lower front strip by sliding it under the bottom hinge plate. The hinge plate can be on the right or left side depending on the door swing. Once the lower front strip is slipped under the hinge, the part is possible to swing into place.



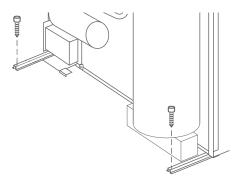
b) Secure the refrigerator and the lower front strip with two screws: One screw through the hinge and on the opposite side and then, one screw through the lower front strip.



2. Two screws installed in the top frame.



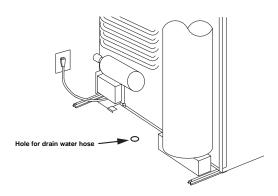
3. Two screws installed in the rear base.



INSTALLATION

DRAIN WATER HOSE

Drill a hole through the flooring. Seal around the hose that goes through the drilled hole and ensure that it does not kink when run through the floor. Check to make sure that the supplied hose is long enough in order for the water to drain outside of the vehicle. If not, the installer must supply the extra length of hose.



CONNECTIONS

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 examined for leaks using a solution of liquid detergent and water.



EXPLOSION HAZARD. Never use an open flame to check for gas leaks. Failure to heed this warning could cause an explosion resulting in death or severe personal injury.

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:

- > 1/2 psi the refrigerator and its individual shutoff valve must be disconnected from the gas supply piping system.
- \leq 1/2 psi the appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve.

If detailed instructions on the installation and connection to the gas supply are required, please contact your dealer or distributor.

Testing LP gas safety shut off

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

To test the gas safety shut off, follow these steps:



- 1. Start the refrigerator and switch to GAS mode.
 - 2. Check that the gas flame is lit and the GAS mode indicator lamp is on.
 - 3. Close the manual gas shutoff valve at the back of the refrigerator, see "APPENDIX B - REARVIEW EQUIPMENT"
 - 4. Wait for approx. 6-7 minutes. The ignition attempt is interrupted. LP [™] is displayed (flashing).
 - 5. Remove the protection cover.
 - 6. Open the manual gas shutoff valve. Do not change any button positions on the control panel.
 - 7. Apply a non corrosive commercial bubble solution to the burner jet orifice. No bubbles should appear at the opening of the burner jet orifice. The presence of bubbles indicates a defective gas safety shutoff, and service is required.
 - 8. If no bubbles were present at the burner jet orifice, it should be rinsed with fresh water. Be careful not to damage the burner jet orifice.
 - 9. Put back the cover.
 - 10. Press the ON/OFF button off and then back on. Normal operation of the burner should return.
 - 11. Allow the burner to operate for a minimum of five minutes.

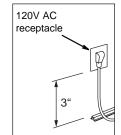
Electrical connection

120V AC connection

The refrigerator is equipped with a grounded three-prong plug for protection against shock hazards. It should be plugged directly into a properly grounded three-prong receptacle. Do not cut or remove the grounding prong from this plug!

The free length of the cord is 2 feet and therefore recommended that the receptacle be located to the left side (opposite side of refrigerator burner assembly) of the refrigerator (viewed from the rear).

To allow easy access through the vent door, place the receptacle 3" above the refrigerator mounting floor. The cord should be routed to avoid direct contact with the burner cover, flue cover or any other components that could damage the cord insulation.



INSTALLATION

12V DC connection

The refrigerator requires a continuous 12V DC supply to maintain the automatic energy system. The connection is made to the positive (+) and negative (-) terminals of the terminal block on back of the refrigerator, see "APPENDIX B - REARVIEW EQUIPMENT".

Correct polarity must be observed when connecting to the DC supply. Do not use the chassis or vehicle frame as one of the conductors. Connect two wires at the refrigerator and route to the DC supply. The connections must be clean, tight and free from corrosion.

Ensure that the wires from the battery to the refrigerator are able to handle the load. The distance the current must travel from the battery to the refrigerator dictates the AWG wire size to be used. Inadequate wire sizes can result in a voltage drop which affects the refrigerator performance.

Recommended wire sizes are displayed in the following table:

Conductor wire length and size		
Wire length	AWG	
17 ft 5 m	14	
27 ft 8 m	12	

REFRIGERATOR REMOVAL

Before removing the refrigerator:



- 1. Verify that the AC and DC voltage leads are disconnected.
 - 2. Shut off the gas supply.
 - 3. Disconnect the gas supply line at the rear of the refrigerator. Always use a back up wrench when loosening and tightening connections.

To remove the refrigerator, follow these steps:



- 1. Cap the gas supply line.
 - 2. Loosen the screws anchoring the refrigerator to the enclosure.
 - 3. Slide the refrigerator out of the compartment.

Replacement is the reverse of removal. When reinstalling the refrigerator, make sure the sealing strips are properly positioned. Check all connections for gas leaks.

MOUNTING INSTRUCTIONS

MODEL EQUIPPED WITH STEEL DOORS

Mounting the door handles

To mount the handles, follow these steps:



1. Snap on the handle by inserting its two tabs in the slot and slide into place.



2. Attach the handle with two screws.



MODEL EQUIPPED WITH DOOR INSERT PANELS

Reversing the door swing

The refrigerator is equipped with hinges that makes it possible to change the direction the door opens by moving the hinges to the opposite side. A special hinge kit must be used in order to change the door swing. For spare part numbers, refer to the USER MANUAL, APPENDIX A - SPARE PARTS. For additional information, please contact service point or distributor service dept. for assistance.

Installing the door panels

The refrigerator is delivered without door panel(s). Before starting the mounting work, read this instruction thoroughly and check that the panel dimensions are in compliance with those given in the table below.

Panel dimensions max. thickness 5/32" (4 mm)						
Model		Hei max	ght min	Width max min		
RM3762						
upper	inch	17-3/64	16-31/32	23-25/32	23-11/16	
	mm	433	431	604	602	
lower	inch	32-7/16	32-23/64	23-25/32	23-11/16	
	mm	824	822	604	602	
RM3962						
upper	inch	17-3/64	16-31/32	23-25/32	23-11/16	
	mm	433	431	604	602	
lower	inch	41-39/64	41-9/16	23-25/32	23-11/16	
	mm	1057	1055	604	602	

MOUNTING INSTRUCTIONS

To install the door panel, follow these steps:

1. Remove the decoration strip by inserting a finger in the plastic profile and pull.



- 2. Open the door 90 degrees.
- 3. Insert the door panel's edges into the grooves of the door frame. Push the panel sideways until the edge of the panel is fitted into the opposite side groove.



4. Snap on the decoration strip.



5. Snap on the handle.





To replace a mounted door panel, follow these steps:



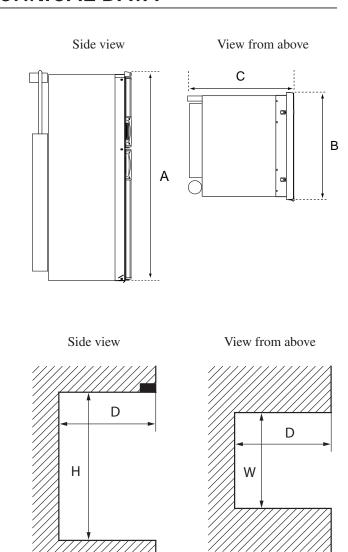
1. Detach the handle by using a flat blade screwdriver to gently push the two tabs away.



- 2. Remove the decoration strip, according to the previous instruction "To install the door panel", step 1.
- 3. Remove the door panel.
- 4. Install the new panel according to the previous instruction "To install the door panel", steps 3-5.

APPENDIX A - TECHNICAL DATA

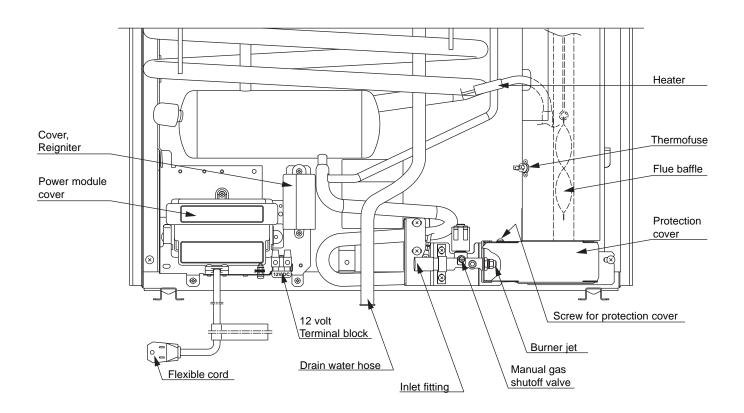
DATA	MODEL	RM3762	RM3962
OVERALL DIN	MENSIONS		
Height (A)	mm	1391	1624
	inches	54-3/4	63-15/16
Width (B)	mm	637	637
	inches	25-5/64	25-5/64
Depth (C)	mm	662	662
	inches	26-1/16	26-1/16
RECESS DIME	ENSIONS		
Height (H)	mm	1365	1599
	inches	53-3/4	62-61/64
Width (W)	mm	602	602
	inches	23-11/16	23-11/16
Depth (D)	mm	610	610
	inches	24	24



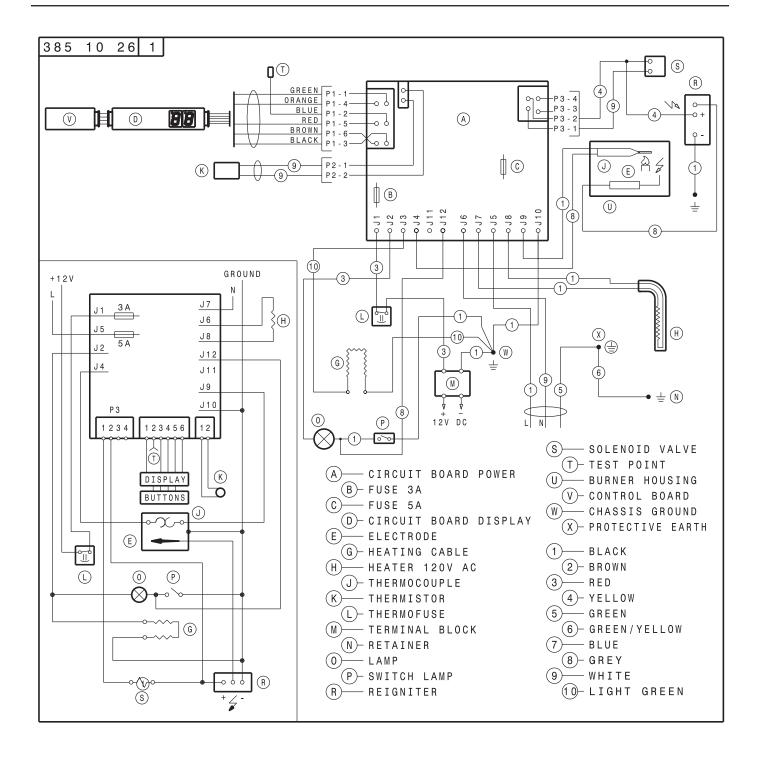
CORROSION PROTECTION

Sodium chromate is used to prevent corrosion (less than 2 weight % of the coolant).

APPENDIX B - REARVIEW EQUIPMENT



APPENDIX C - WIRING DIAGRAM



TO THE INSTALLER

PLEASE AFFIX THESE INSTRUCTIONS TO THE REFRIGERATOR

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TO THE CONSUMER

PLEASE RETAIN THESE INSTRUCTIONS FOR FUTURE REFERENCE