

GRAM



FS 230-00

FS 290-00

FS 320-00

M60 Series Manual

CONGRATULATIONS ON YOUR NEW GRAM FREEZER.

Congratulations on your new freezer. The freezer was developed taking the different storage requirements of food items into consideration. The freezer is equipped with freezing drawers in various sizes giving room to all the little things as well as a big turkey.

To ensure that you get as much joy out of your new freezer as possible, it is important that you become familiar with the freezer's functions and know how to use the accessories. Please read this manual carefully before setting up and using your freezer.

As these instructions apply to several freezer models, the equipment may vary from model to model.

Before using the freezer

On receipt, check to ensure that the freezer has not become damaged during transportation. Transport damage should be reported to the local supplier before the freezer is put to use.

It is also highly recommended that your freezer is left in its final position in the kitchen for a minimum of 2 hours prior to turning on. This allows the oil to settle in the compressor, which is caused by movement during transportation.

Before filling the freezer with items of food, the freezer's interior should be cleaned with lukewarm water containing a mild detergent. Use a soft cloth. If the freezer has been stored in cold surroundings (colder than +5°C), it must be allowed to stabilise for at least 2 hours before being switched on.

Read more about setting up and installation on pages 8 through to 13.

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IMPORTANT INFORMATION

The freezer contains the environment-friendly, non-ozone depleting refrigerant R600a. As R600a is a flammable gas, it is important to avoid damage to the refrigeration circuit during transport and installation. If the refrigeration circuit is damaged, avoid using naked flame in the vicinity of the freezer and connecting power to freezer. Also make sure that there is good ventilation in the room. If you are in doubt, please contact your supplier.

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.

Children should be supervised to ensure that they do not play with the appliance.

WARNING: Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.

WARNING: Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.

WARNING: Do not damage the refrigerant circuit.

WARNING: Do not use electrical appliances inside the food storage compartments of the appliance, unless they are recommended by the manufacturer.

Transporting and moving the freezer

The freezer must always be moved in the vertical position. The cabinet must not be tilted more than approx 40°. If the freezer has been tilted more than 40°, the power supply must not be connected until the appliance has stood upright for at least 2 hours.

If the freezer is not to be used for some time

If the freezer is to remain unused for a time, switch it off by pressing button  (2), (diagram on page 13). Then disconnect the power supply to the freezer and if possible, pull the plug out of the wall socket.

Empty, defrost and clean the freezer. Leave the freezer door slightly ajar. This will prevent bad smells in the cabinet.

Warning

Old refrigerators and freezers are often fitted with complicated latches that can only be opened from the outside. If you have an old unit like this stored away somewhere, or if you scrap it, remember to destroy the latch to prevent children from being exposed to danger by getting locked inside the unit.

Note! Please also observe the environmental rules on disposal.

Disposal

If a refrigerator/freezer is to be disposed of, this must be done in an environmentally correct way, in accordance with current rules of disposal.

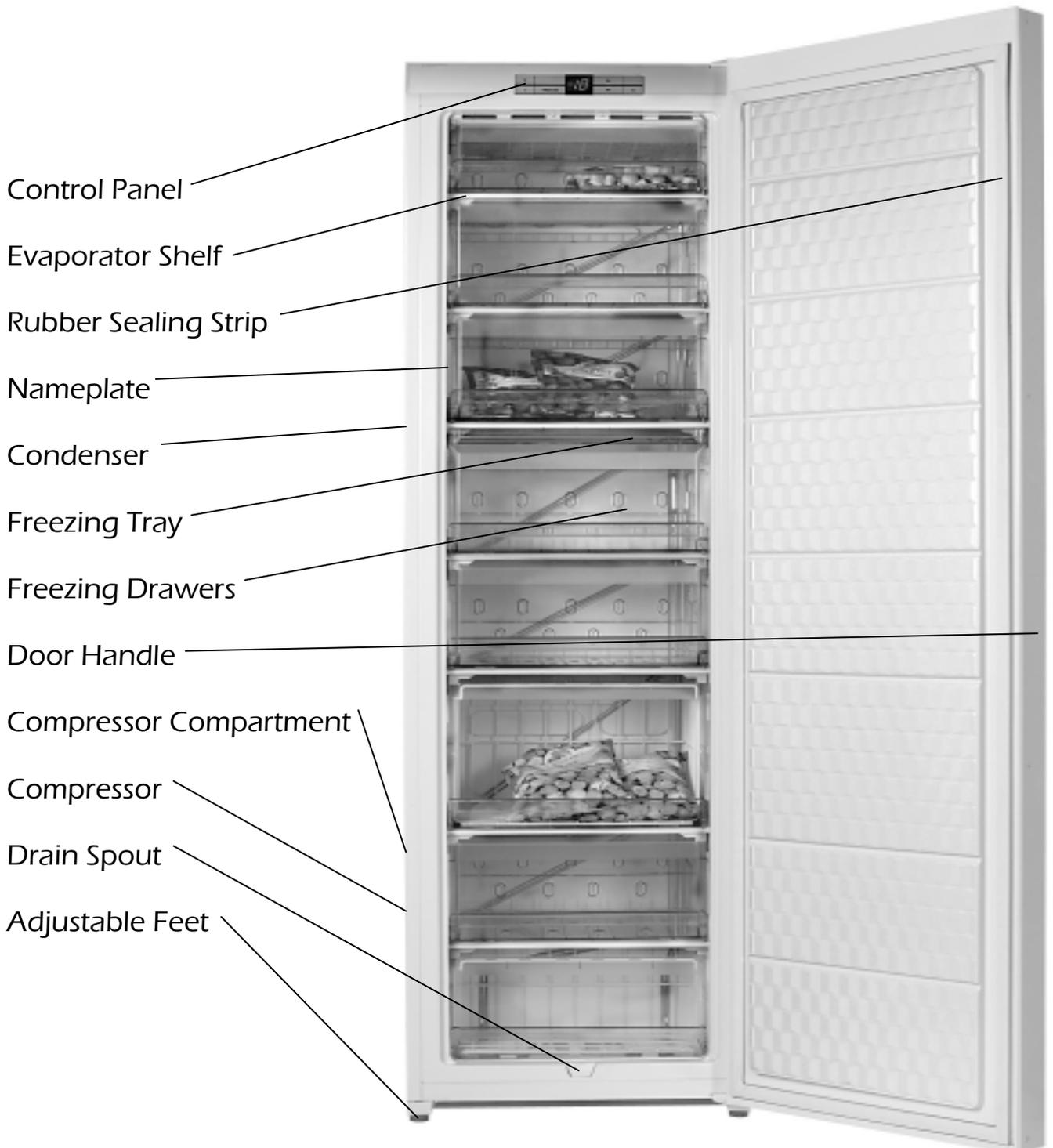
Please observe the environmental rules on disposal. There might be special requirements/conditions to be observed. Information on disposal can be obtained from:

- Gram A/S
- Your white-goods supplier
- Authorities (your local council, Ministry of the Environment, etc.)



PRODUCT DESCRIPTION

The freezer is intended for use in a normal household. It is designed for temperature class SN-T in accordance with European standard EN 153. This means that the refrigerator will run best at a room temperature of +10°C to +43°C.



SETTING UP AND INSTALLATION

Where to place the freezer

For safety reasons the freezer must not be installed outdoors; it must be placed in a dry room. Never place the appliance close to sources of heat such as cookers or radiators, and avoid placing it in direct sunlight. The surface on which the appliance is placed must be level and sturdy. The small wheels mounted at the rear of the freezer make it easy to place it in the required position.

The freezer can be set up free-standing against a wall or built into a kitchen cabinet.

It is important that the appliance stands completely level and that there is good air circulation over, under and around it. The freezer can be adjusted by turning the two adjusting screws on the plinth. After adjustment, the feet and the two rear wheels must be in contact with the surface on which the appliance stands. It is extremely important that the freezer's adjustable feet are set correctly to avoid movement or future distortion of the cabinet (2 optional rear feet are supplied in the parts kit).

It is also advantageous, but not necessary, that the freezer is tilted slightly towards the rear to allow the door to close on its own.

The illustrations on the following pages (8 & 9), show how to create sufficient air circulation around the cabinet. The dimensions give the actual size of openings. The circulation area must be at least 200 cm².

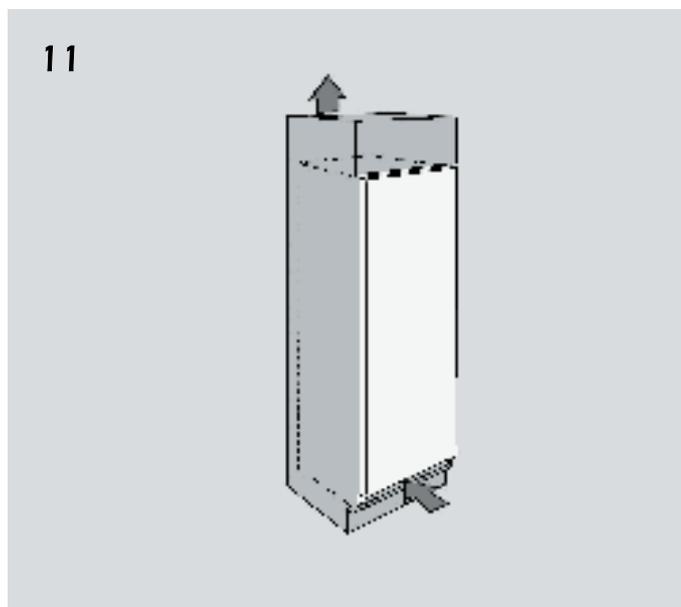
Building into a kitchen cabinet

Building into a kitchen cabinet with sufficient ventilation around the freezer to dissipate heat from the compressor. The appliance can stand direct on the floor or on its plinth. (10)



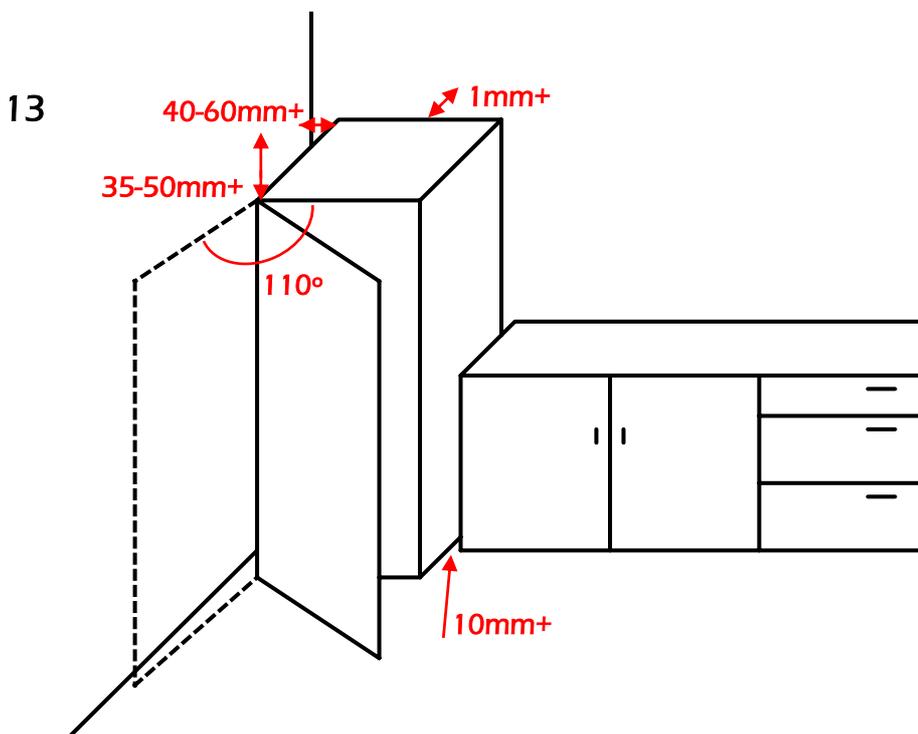
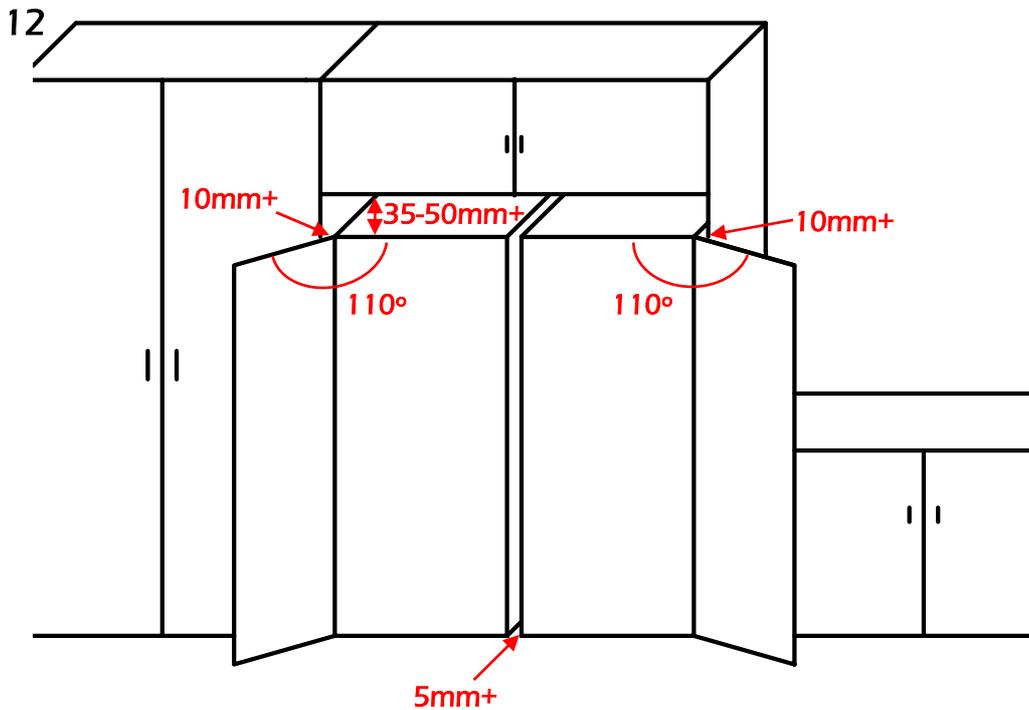
Building into a freezer cabinet

Building into a freezer cabinet follows the same principal as shown in illustration 10. (11)



Installation And Ventilation Diagrams

The measurements below is a guideline only. The degree of the door opening shows the minimum requirement to easily access the storage bins. (12 & 13)



Electrical connection

The appliance is intended for connection to alternating current. The connection values for voltage (V) and frequency (Hz) are given on the nameplate inside the cabinet.

Power must be connected via a wall socket with switch. The wall socket should be easily accessible.

It is recommended, as with any high tech appliance, that a power surge protection device be used.

All earthing requirements stipulated by the local electricity authority must be observed. The cabinet plug and wall socket should then give correct earthing. If in doubt, contact your local supplier or an authorised electrician.

WARNING - This appliance must be earthed. The flexible cord (mains lead) fitted to this appliance has three cores for use with a 3-pin 10 amp plug.

IMPORTANT

The cores in this mains lead are coloured in accordance with the following code:

GREEN AND YELLOW - EARTH

BLUE - NEUTRAL

BROWN - LIVE

These colours might not correspond with the colour markings identifying the terminals in your plug.

Proceed as follows:

Connect the GREEN AND YELLOW core to the plug terminal marked "E" or by an earth symbol, or coloured GREEN or GREEN AND YELLOW. Connect the BLUE core to the plug terminal marked "N" or coloured BLACK.

Connect the BROWN core to the plug terminal marked "L" or coloured RED.

Changing the door hinge over to the opposite side

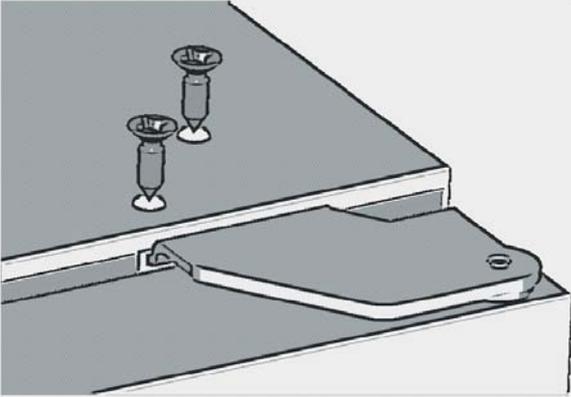
Illustrations 14-19 over the page, show how easy it is to change the doors from right-hinged to left-hinged, or vice versa. (Changing the door from left to right is done in the same way, but opposite).

Top and bottom left hand hinges and accessories are supplied in the parts kit.

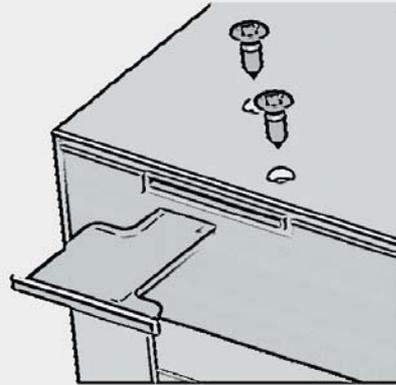
***The freezer must be switched off and emptied completely.**

- Remove the 2 screws in the hinge top on the right-hand side of the cabinet. (14)
- Lift the freezer door slightly and take the door and upper hinge off by pulling the door towards you.
- Remove the dummy hinge from the opposite side by unscrewing the 2 screws. (15)
- Reverse the dummy hinge and refit it on the opposite side of the cabinet using 2 screws.
- Tilt the freezer to an angle of max. 45° and unscrew the bottom hinge. This is done by removing the 2 screws holding the bottom hinge on the cabinet underside. (16)
- Remove the lower dummy hinge in the opposite side in the same way as the upper dummy hinge was removed. (17)
- Reverse the dummy hinge and refit it on the opposite side of the cabinet.
- Reverse the upper right-hand hinge and refit it in the lower left-hand corner of the cabinet.
- Place the cabinet in the correct position again.
- Remove the door handle by removing the screws. (18)
- Reverse the lower right-hand hinge and refit it on the top part of the door in the left side of the cabinet. Push the door into position and slide the upper hinge into the upper left-hand hinge casing. Tighten the 2 screws. Remember to adjust the hinges.
- Remove the screws on the right-hand side of the door and screw them onto the left side of the door. Use the screws from the left side to attach the handle to the right-hand edge of the door. (19)

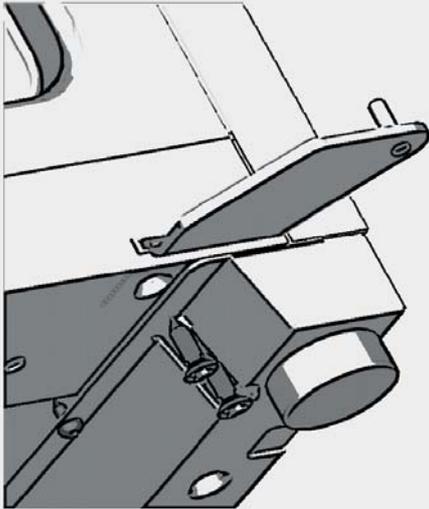
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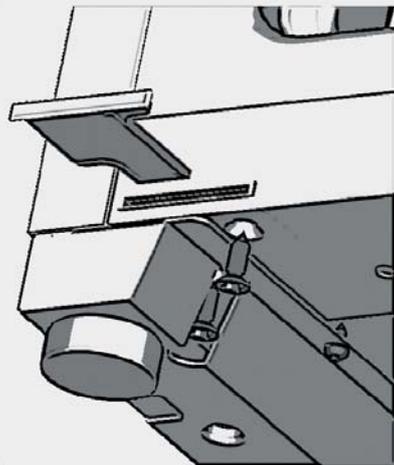
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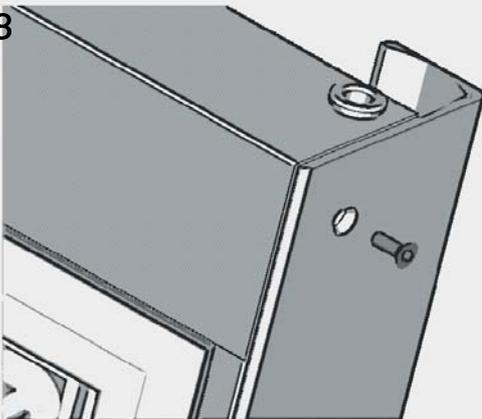
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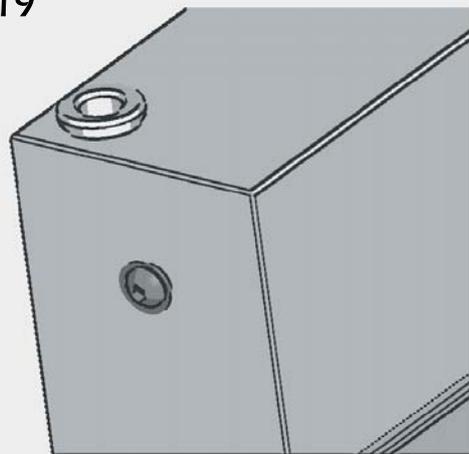
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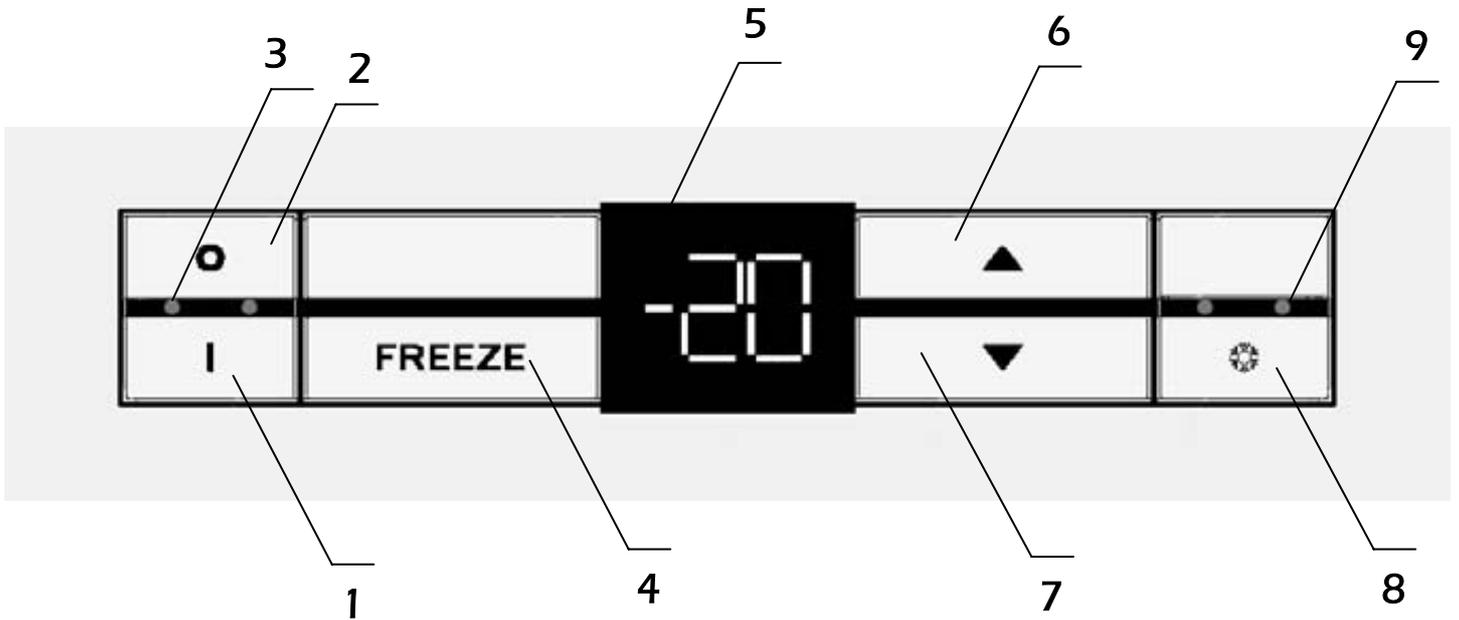
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19



USING THE FREEZER



1	Freezer's ON button.
2	Freezer's OFF button.
3	Green light-emitting LED signalling that freezer's chamber has been switched on.
4	"FREEZE" button for adjusting and setting the temperature.
5	Display showing the set temperature, and alarm status codes.
6	Button for step-by-step temperature regulation, upwards.
7	Button for step-by-step temperature regulation, downwards.
8	"QUICK FREEZE" button
9	Blue light-emitting LED showing the "Quick Freeze" function is activated.

Electronic Control

The freezer is equipped with electronic control. The control panel is concealed behind the freezer door. The freezer has been factory set to operate at optimum temperature, i.e. -18°C . If you wish to change the preset temperature, the new setting will be stored in the electronic control. In case of power failure, the control will remember the latest setting when the power to the cabinet is restored.

The electronic control has the following functions:

- On/Off switch function.
- Display of the real temperature inside the freezer's chamber.
- Setting the temperature inside the freezer's chamber.
- Acoustic and visual signalling of alarms.
- Visual signalling with use of LED's of switched on functions.
- Emergency program in case of sensor fault.
- Power-saving sensors.

Operating the freezer

Start the freezer by plugging it into a wall socket.

If the mains lead has been damaged, it must be replaced with a corresponding type supplied by an electrical service centre and installed by a qualified electrician.

The freezer incorporates a "stand-by function" and in the display two horizontal lines indicate that the power supply has been connected.

- Start the freezer by pressing the start button  (1). After approx. 5 seconds, the green light emitting LED (3) lights up to indicate that the freezer is switched on. The actual temperature inside the freezer's compartment is shown on the display (5).
- To turn the freezer off, press and hold the off button  (2).

Temperature regulation

The temperature in the freezer can be set within the range of -23°C to -14°C by pressing and holding the "FREEZE" button (4), The set temperature will be shown on the display (5). Press the button ▲ (6) or button ▼ (7) until the new required temperature is reached.

A brief acoustic signal will be given whenever a button is activated. When activating the buttons  (1),  (2) or  (8) the action will not become visible on the display until after approx 2 seconds.

If there has been a power failure or the power supply to the freezer has been disconnected, the electronic control will remember the latest setting when the power is reconnected.

Temperature inside the freezer

The temperature settings and temperature values shown on the display are average temperatures of the freezer. Do not change the temperature setting simply because it is warmer in summer. The increase of the room temperature will be detected by the sensor and the compressor will automatically run for a longer time to maintain the set temperature.

Brief temperature variations

Brief temperature variations are normal and may occur when fresh food has just been placed inside the freezer or when the door is open for longer periods. These variations will not affect the food products and the temperature will quickly return to the set-point level.

If the door to the freezer is open for more than 2 minutes, the display will show E4 and the acoustic alarm will activate.

Please refer to page 17 to remedy.

Freezing down

Fast freezing down to a low temperature is important if food quality is to be preserved. Freezing down is activated by pressing the freezing down button  (8), and the blue light-emitting LED (9) shows that the “Quick Freeze” function is on.

You can choose between 24 and 48 hours’ freezing down. It is recommended to activate the “Quick Freeze” 2 to 4 hours before filling the freezer with large quantities of food.

By pressing the button once “Quick Freeze” is set to 24 hours and “24” is briefly shown on the display (5). By pressing the button twice, “Quick Freeze” is set to 48 hours and “48” is briefly shown on the display (5). By pressing the button once more, this function is deactivated and the blue light-emitting LED is switched off.

After the “Quick Freeze” button is activated, the symbols “24” and “48” are displayed for 5 seconds. The actual temperature in the freezer is then displayed.

ALARMS

Normal use of the freezer may give rise to various disruptions with unstable cabinet function as a consequence. These disruptions are shown on the display by means of an alarm code (an "E" followed by a number) and signalled by the acoustic alarm. In case of several faults, the alarm codes will be displayed in turn.

Alarm codes

E2 - temperature sensor fault in the freezer's chamber

A temperature sensor has been damaged. Call your supplier. A built in emergency program attempts to maintain an acceptable temperature until the fault is corrected.

E4 - door is open

The door of the freezer's chamber has been opened for more than 2 minutes. The alarm code disappears when the door is closed.

E5 - temperature too high

The temperature in the freezer has been higher than the set temperature for more than 2 hours.

E6 - temperature too high at power failure

There has been a power failure, the power to the freezer has been disconnected or the temperature in the freezer has been higher than the set temperature for more than 2 hours after power failure.

Interrupting an alarm

The acoustic alarm can always be interrupted by opening the door and pressing any button. The alarm code will remain displayed until the alarm has been cancelled. A 2 hour silence will follow.

The alarm codes E4, E5, E6 can be cancelled by pressing for 7-8 seconds simultaneously, the buttons ▲ (6) and ▼ (7).

The exception: in case of the alarm E2 it is possible to cancel the alarm only after replacing damaged sensors.

In such cases please contact your supplier.

USING THE FREEZER'S ACCESSORIES

The whole of the freezer can be used for freezing down and for the long-term storage of frozen items of food.

In addition, the freezer comes equipped with a freezing tray for berries, etc...

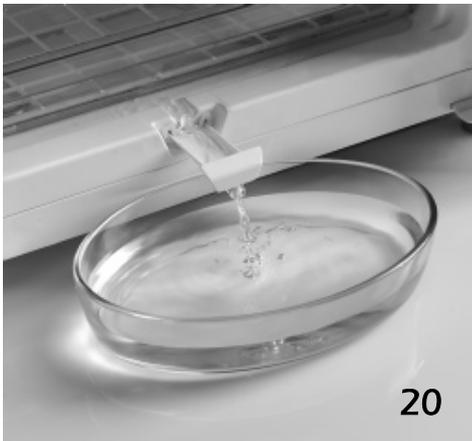
When packing the wire bins in your freezer with food, make sure to place containers or boxes on the bottom of the bin. Avoid placing food on the bottom that will easily push down in between the wire.

This ensures that the bins won't get stuck to the individual evaporator shelves, due to food (such as bags of mince) moulding and freezing down in between the gaps in the wire bin.

DEFROSTING AND CLEANING

Manual defrosting of the freezer

It is recommended to defrost the freezer compartment at least once a year. Stop the freezer compressor by pressing the lower button  (2). Remove all items from the freezer. To keep them as cold as possible during defrost, they can be placed in a refrigerator compartment. Place a bowl containing hot water (not boiling) in the freezer. Pull out the drain spout and place an empty bowl under it to receive the defrost water (20). When the ice has melted, clean out the freezer using water and a mild washing-up liquid. Dry the freezer with a soft cloth.



Warning

It is dangerous to use electrical apparatus, knives or sharp objects to speed up the defrosting process.

Cleaning

Turn the freezer off by pressing button  (2) and disconnect the power supply to the freezer.

The freezer is best cleaned using a weak soap solution and a soft cloth. Never use cleaning agents that scour. It is also highly recommended that harsh cleaning agents are not used to clean the plastic components as certain chemicals can lead to premature deterioration and cause damage to these parts. Clean the sealing strip around the door regularly to prolong its life. Use only clean water for cleaning the sealing strip.

The plastic parts of the cabinet cannot withstand boiling water (max 85°C).

It is important to prevent water from getting into the control panel. Remove dust and threads from the compressor compartment at the back of the freezer with a vacuum cleaner.

Cleaning of doors in stainless steel or aluminium

Stainless steel or aluminium doors on GRAM products can, with advantage, be cleaned with a spray and a soft cloth. There are a number of different spraying agents for this purpose on the market. We recommend that you contact your usual white goods supplier for advice on the advantages and disadvantages of the individual products.

GRAM CUSTOMER CARE & SERVICING

Checklist

If you discover a problem with your freezer, please refer to the following points before contacting your supplier for assistance.

PROBLEM	POSSIBLE CAUSES	WHAT TO DO
Freezer does not operate.	*No electricity to the power point.	*Check the plug is connected correctly to the power point. *Check another appliance at the same power outlet. *Check the house fuse/circuit breaker.
Compressor operating for long periods.	*Hot weather. *Frequent door openings. *Large quantity of food recently added. *Door not sealing properly.	*Minimise door openings to allow the temperature to stabilise. *Refer to <i>Temperature Regulation</i> on page 17. *Check the cabinet is level and door seals are clean and undamaged. *Check there are no obstructions that are preventing the door from closing.
Compressor not operating.	*No electricity to power point. *Possibility of fault with compressor or electronic control.	*Check power to refrigerator. *If compressor is still not operating after checking power and once the defrost cycle has completed, please contact your supplier
Storage compartments are too warm.	*Temperature setting not correct. *Frequent door openings. *Large quantity of food recently added.	*Refer to <i>Temperature Regulation</i> on page 17. *Minimise door openings to allow the temperature to stabilise.
Freezer not coming down to temperature.	*Ice build up around the sensor.	*A manual defrost is required when ice build up is noticed.
Door not closing properly.	*Fridge not level. *Dented or damaged door seal.	*Adjust feet. Refer to <i>Setting Up And Installation</i> on page 7. *Contact your supplier for advice.
Condensation on outside of the refrigerator.	*This is not unusual during periods of high humidity.	*Wipe dry.

PROBLEM	POSSIBLE CAUSES	WHAT TO DO
Door is out of alignment.	*With time and usage, movement or distortion may occur.	*Adjust feet and make sure the cabinet is level. *Refer to <i>Setting Up And Installation</i> on page 7.
Wire bins get stuck / won't pull out easily.	Packets of food moulded and frozen through the gaps of the wire bins, sticking to the evaporator shelf.	Carry out a defrost of your freezer long enough for the evaporator shelf to rid itself of ice and the food to release. Gently lift the bin up and pull out. If this does not work, a full defrost of your freezer may be required, with the possibility of food in this bin to perish. Do not re-freeze defrosted food.

Contact details

If after referring to the manual and above checklist you still require assistance, please contact your supplier or visit the importers website for service centre details on <http://www.indepower.co.nz> Please have the appliance information ready to provide to your supplier. This information is shown on the silver nameplate inside the cabinet or on the back page of this manual.

Spare parts

When ordering spare parts, please give the model and serial number of your freezer.

REFRIGERATION WARRANTY

This document sets out terms and conditions of warranty. This is an important document. Please retain this document with your proof of purchase documents in a safe place for future reference.

This warranty is valid in New Zealand only.

Terms and conditions:

1. In this warranty
 - (a) 'Refrigerator' means any 'Gram' or 'Elcold' energy efficient refrigerator or freezer accompanied by this document which is purchased from a Dealer authorised by Independent Power (NZ) Limited;
 - (b) 'Dealer' means any dealer expressly authorised to sell refrigerators on behalf of Independent Power (NZ) Limited.
 - (c) 'Warranty Period' means where you use the Refrigerator for personal, domestic or household purposes in New Zealand for the period of 24 months following the date of the original purchase of the Refrigerator;
 - (d) 'you' means the purchaser of the Refrigerator not having purchased the Refrigerator for re-sale, and 'your' has the corresponding meaning;
 - (e) 'Authorised Service Agent' means any agent expressly authorised to undertake repairs by Independent Power (NZ) Limited.
2. Independent Power (NZ) Limited warrants that when dispatched the Refrigerator is free from defects in materials and workmanship for the Warranty Period.
3. Should you encounter problems with your Refrigerator during the Warranty Period please contact the Dealer you purchased your Refrigerator from with the serial number for the Refrigerator and proof of purchase documents. Proof of purchase is required before you can make a claim under this warranty. Before contacting the Dealer for assistance please refer to the owner's manual and trouble shooting checklist.
4. During the Warranty Period Independent Power (NZ) Limited or it's Authorised Service Agents will, at no extra charge, subject to these terms and conditions, repair or replace, any parts which it considers defective. This warranty does not cover noise or vibration within the Refrigerator which is considered normal, or bulbs, filters or similar perishable parts. You agree that any replaced Refrigerator or replaced parts become the property of Independent Power (NZ) Limited.
5. Where you are within an Independent Power (NZ) Limited service area, this warranty includes the cost of transporting the Refrigerator to and from the nearest Authorised Service Agent and travelling costs for

representatives of the Authorised Service Agent to your home. If you are outside an Independent Power (NZ) Limited service area, you will bear these costs. For information about whether you are in an Independent Power (NZ) Limited service area please check our website <http://www.indepower.co.nz>

6. You may not make a claim under this warranty unless the defect claimed is due to faulty or defective parts or workmanship. Independent Power (NZ) Limited is not liable in the following situations (which are not exhaustive):
 - (a) The Refrigerator is damaged by:
 - i. Accident,
 - ii. Misuse or abuse, including lack of routine maintenance or service such as cleaning, adjustments, lubrication or alignments,
 - iii. Normal wear and tear,
 - iv. Incomplete or improper installation,
 - v. Incorrect or improper operation,
 - vi. Power surges, electrical storm damage or incorrect power supply,
 - vii. Insect or vermin infestation,
 - viii. Deterioration caused by external environmental conditions,
 - (b) The Refrigerator is modified without authority from Independent Power (NZ) Limited.
 - (c) The Refrigerator was serviced or repaired by anyone other than an Authorised Service Agent.

Limitation of Liability

7. The Consumer Guarantees Act 1993, the Sales of Goods Act 1908, and Fair Trading Act 1986 imply warranties and conditions and obligations which cannot be excluded, restricted or modified. To the extent permitted by law, the liability of Independent Power (NZ) Limited shall be limited at it's option to the replacement or repair of the Refrigerator and loss or damage whether direct, indirect or consequential that is reasonably foreseeable.

Privacy

8. You acknowledge that in the event that you make a warranty claim it will be necessary for Independent Power (NZ) Limited and it's Authorised Service Agents to exchange information in relation to you to enable Independent Power (NZ) Limited to meet it's obligations under this warranty.

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The logo for GRAM, featuring the word "GRAM" in a bold, italicized, sans-serif font. The letter "G" is significantly larger and more stylized than the other letters, with a thick stroke and a slight curve at the top.

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