

INSTALLATION GUIDE



Congratulations on your new Minus40 Refrigerator!

This premium product incorporates the latest innovations in refrigeration technology with a highly durable design. Properly maintained, the unit(s) will provide many years of reliable service.

Please read the following instructions carefully as it contains important information concerning the safety, installation, operation and maintenance of your Refrigerator.

SAFETY INSTRUCTION

- Always disconnect the unit from the mains supply before attempting to do maintenance or before removing the bottom grille.
- In case of unit failure, disconnect it from the power supply and contact your service technician or supplier for advice.
- If the supply cord is damaged it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.

Follow these easy steps to Install your new Minus40 unit.

- Remove all wrapping and packing material.
- Be careful not to damage any of the delicate wiring or pipe-work in the compressor compartment.
- Position the unit out of direct sunlight and away from any other sources of heat.
- The maximum ambient temperature in which the unit will function is 32°C.
- The unit may not be built into a furnishing fixture, or have its back to the wall.
- The unit "breathes" through the grill, and if blocked, the unit will not operate properly, damaging the compressor.
- Ensure the unit is perfectly level for the door(s) to function properly.
- Built-in voltage protector

Note: The Voltage Protector has a 3 to 5-minute time delay once switched on

BUILT-IN VOLTAGE PROTECTOR

This premium product incorporates a built-in voltage protector that regulates the power supply and ensures a stable voltage supply to the refrigerator to maximise equipment efficiency and reduce damage and downtime caused by a power surge.

POWER SUPPLY

DO NOT CONNECT THE UNIT TO THE MAINS SUPPLY UNTIL YOU HAVE READ THE FOLLOWING INFORMATION.

- A qualified person by all local standards and regulations should carry out any electrical alterations to the unit.
- The power supply should be in accordance with the electrical specifications listed on the rating plate. The rating plate can be located inside the unit on the top right-hand side.
- Always ensure that the electrical connection is suitably earthed.
- An inadequate electrical installation can result in voltage reduction at the compressor or cause damage to the motor.
- If in doubt about any of the electrical matters mentioned above, a suitably qualified electrician should be consulted.
- When all of the electrical requirements have been satisfied, the unit may be plugged into the mains socket.

ALWAYS USE A DIRECT CONNECTION TO THE PLUG OUTLET EXTENSION CORDS SHOULD NEVER BE USED.

LOADING GUIDE

When loading the unit

- always ensure that you do not block the internal air vents and always allow space for the cold air to circulate the contents and the inside of the cooler.
- The Minus40 is designed to automatically evaporate the condensate water in the compressor compartment.

MAINTENANCE INSTRUCTIONS

Repairs:

- Before carrying out any maintenance or repair work, please ensure that the unit has been disconnected from the mains supply.
- Any service performed on these refrigerators within the 1-year warranty period MUST be cleared and reported to the manufacturer. Failure to do this will void the standard warranty.

CLEANING INSTRUCTIONS

Interior and Exterior Cleaning

- Please ensure that the unit has been disconnected from the electricity supply.
- The unit should be cleaned periodically with a non-abrasive cleaner and soft cloth.
- Do not use any detergents or abrasive
- A damp cloth may be used provided that all surfaces are polished dry afterwards.

In the event of the unit not being used for extended periods;

- Disconnect from the power supply.
- Remove all the medicines & vaccines to another fridge or suitable storage.
- Thoroughly clean the unit inside and out.
- Leave the door(s) slightly open so that air can circulate freely.
- Switch the unit back on & wait until temperature has stabilized before loading medicine / vaccines



TROUBLE SHOOTING CHECKLIST

| SYMPTOM | CHECK |
|--|--|
| <ul style="list-style-type: none"> ❖ The unit does not run & the controller or fans do not work or the lights are off | <ul style="list-style-type: none"> ❖ Make sure the unit is plugged in ❖ Check for a tripped circuit breaker |
| <ul style="list-style-type: none"> ❖ Unit does not run, but the controller is on | <ul style="list-style-type: none"> ❖ Check the temperature setting on the controller ❖ Unplug the unit, wait two hours and plug it in. If you hear it running, a problem is causing the compressor to overheat ❖ Check if the evaporator fan is running ❖ Listen if the compressor ever runs. If not the compressor might be faulty |
| <ul style="list-style-type: none"> ❖ Unit is not cold enough | <ul style="list-style-type: none"> ❖ Check the temperature setting ❖ Assure that there is enough room for airflow in the fridge. ❖ Check for airflow restrictions in front and at the back of the grille. ❖ Clean the condenser coils ❖ Check the door seal |
| <ul style="list-style-type: none"> ❖ Unit is too cold | <ul style="list-style-type: none"> ❖ Check the temperature setting |
| <ul style="list-style-type: none"> ❖ Unit is noisy | <ul style="list-style-type: none"> ❖ Hissing and popping sounds are normal. ❖ Check that the fridge is level |
| <ul style="list-style-type: none"> ❖ Unit runs continuously | <ul style="list-style-type: none"> ❖ Check the door seals ❖ Clean Condensor |
| <ul style="list-style-type: none"> ❖ In the event of a breakdown | <ul style="list-style-type: none"> ❖ Disconnect the fridge from power supply. Contact your supplier for advice. |
| <ul style="list-style-type: none"> ❖ Temperature control | <ul style="list-style-type: none"> ❖ Minus40 refrigerator regulates air temperature to control the product temperature. ❖ The running temperature of the refrigerators is factory pre-set at a range between 2°C to 8°C air temperature. It is factory pre-set with a built-in defrost sequence of a maximum of 15 minutes every 2 Hours to remove ice build-up from the evaporator coil. ❖ During these defrost cycles air temperature can exceed 8°C for a very short time, but product temperature will remain in the safe vaccine temperature range between 2°C to 8°C. |



CAUTION



THIS FRIDGE CONTAINS SMALL QUANTITY OF HYDROCARBON REFRIGERANT GAS WITHIN ITS SEALED SYSTEM. FLAMMABLE REFRIGERANT USED. TO BE REPAIRED ONLY BY TRAINED SERVICE TECHNICIAN.

WARNING

WARNING: THIS UNIT HAS A HYDROCARBON REFRIGERANT, ANY REFRIGERATION REPAIR OR ELECTRICAL REPAIR WORK MUST ONLY BE CARRIED OUT BY A SUITABLE QUALIFIED PERSON.

- Do not damage the refrigeration circuit, if you do so, open a window immediately to ventilate the area and seek assistance from a qualified professional to repair.
- This appliance may contain a flammable gas within its sealed refrigeration system. As such it is mandatory that the cabinet is serviced, and at end-of-life, recycled, by a professional organisation/skilled person who have the necessary qualifications, certificates, and expertise to do so. If in doubt, contact Minus40.
- The appliance must only be charged with the refrigerant indicated on the rating label; such refrigerant must be obtained from an authorized supplier. To use another type of refrigerant would be dangerous and is not permitted under any circumstances.
- The room into which the unit is to be installed must be well ventilated and free from sources of ignition. It must not be in a position where refrigerant could gather in the event of a leak. If it is below ground level, then extra precautions may be necessary, and an expert should be consulted

CONDENSER CLEANING

Always follow these steps when cleaning the unit condenser.

1 Power off

Unplug the unit from the mains electricity supply.



2 Remove the Grille

Remove the bottom grille underneath the door(s) by lifting slightly and pull away from the retaining handle.

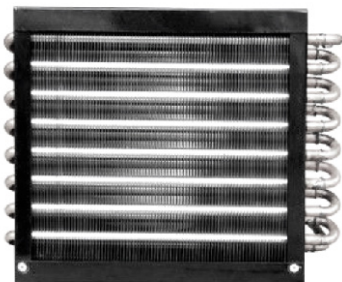
CAUTION: Some pipework & components might be hot



3 Locate Condenser

Locate the condenser next to, and attached to, the fan.

*It looks similar to a car radiator



4 Soft Brush

Take a soft brush and clean the fins.

CAUTION: The condenser is very delicate

- Do not to bend the fins.
- Never poke anything through the fins
- Never use water
- Never use a hard brush



5 Vacuum

If possible, use a vacuum to clean away the debris. Check the rest of the compartment for any foreign objects and remove.



6 Remove Tools

Ensure that all tools have been removed.



7 Log the Data

Log the date of the cleaning and make a dairy note to clean it again in 2 to 3 months

CONDENSER CLEANING SCHEDULE

Please indicate the DAYS that the condenser is cleaned on the chart

| Date cleaned marked with an 'X' | Date cleaned marked with an 'X' | | | | | | | | | | |
|---------------------------------|---------------------------------|---|---|---|---|---|---|---|---|----|----|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 |
| Jan | | | | | | | | | | | |
| Feb | | | | | | | | | | | |
| Mar | | | | | | | | | | | |
| Apr | | | | | | | | | | | |
| May | | | | | | | | | | | |
| Jun | | | | | | | | | | | |
| Jul | | | | | | | | | | | |
| Aug | | | | | | | | | | | |

8 Interior and Exterior Cleaning Instructions

Interior and Exterior Cleaning

- Please ensure that the unit has been disconnected from the electricity supply.
- The unit should be cleaned periodically with a non-abrasive cleaner and soft cloth.
- Do not use any detergents or abrasive
- A damp cloth may be used provided that all surfaces are polished dry afterwards.



In the event of the unit not being used for extended periods

- Disconnect from the power supply.
- Remove all the medicines & vaccines to another fridge or suitable storage.
- Thoroughly clean the unit inside and out.
- Leave the door(s) slightly open so that air can circulate freely.
- The unit can now be put into storage.

Why Clean the Condenser?

The function of the condenser is to dissipate the heat from within the fridge/freezer. By keeping the fins clear of dust, the unit will run more effectively with lower energy consumption and a longer product life.

CONDENSER CLEANING SCHEDULE

Please indicate the DAYS that the condenser is cleaned on the chart

| Date cleaned marked with an 'X' | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|--|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | |
| Jan | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Feb | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Mar | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Apr | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| May | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Jun | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Jul | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Aug | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Sep | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Oct | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nov | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Dec | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

- Clean the condenser with a soft brush
- Check the condenser monthly
- If there is dirt or fluff on the condenser clean as above
- Mark the chart above with a cross on the DAYS that the condenser is cleaned

