

ICECO



YC49B2/TCD65A

V1.0

Please email us at: official@icecofreezer.com

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Supply Details

MODEL	YC49B2	TCD65A
Dimensions (LxWxH)	17.48 x 19.69 x 23.3 (inches)	20.47 x 18.9 x 23.82 (inches)
	444 x 500 x 592 (mm)	520 x 480 x 605 (mm)
Net Weight	39.24 lbs	40 lbs
	17.8 kg	18 kg
Capacity	51.8 quarts	68.7 quarts
	49 liters	65 liters
Voltage	DC 12/24V	

2.1 General Information

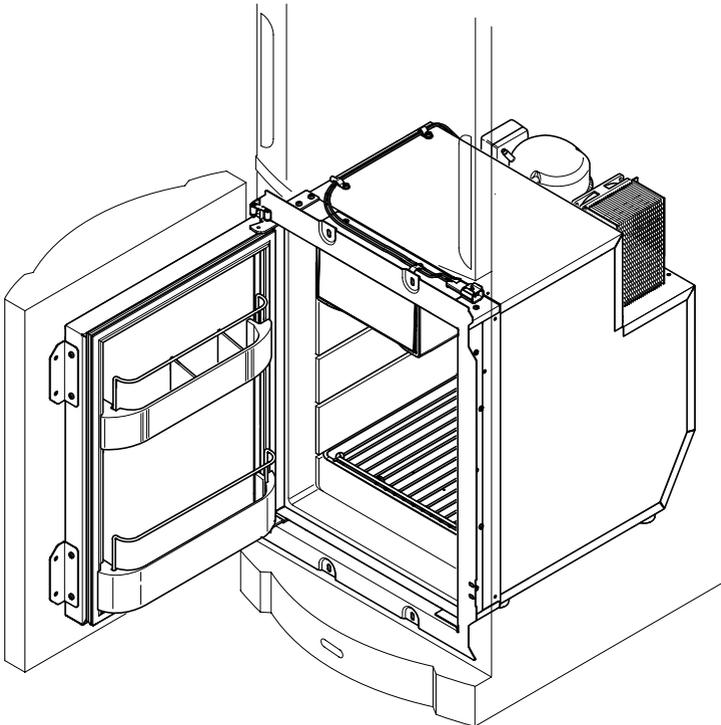
ICECO refrigerators guarantee performance and reliability.

Provided with a totally hermetic compressor, they offer a minimal power consumption and noise level. All the models are extremely easy to install. They can work even if they are assembled at a slant of up to 30°.

In order to make sure that your ICECO refrigerator works as efficiently as possible, please pay attention to the following general instructions:

- Opening the door of the refrigerator uselessly increases the waste of energy;
- Proper ventilation of the compressor and of the condenser unit reduces the energy consumption and also ensures the yield;

- The wiring system of the vehicle is in proper condition. Routinely check the batteries and the charge level. Follow the instructions about the cable cross sections and the fuse connections strictly;
- Keep the inside of the refrigerator clean and dry. Remove any condensate water which might gather in the tray under the freezer compartment;
- Keep the door of the refrigerator slightly open in order to air it out if you do not use it for a long time, for example in winter.



The refrigerators are pre-set for being assembled in a niche of the truck. Fastening can be done on the front plate band.

It is very important for the refrigerating unit, consisting of the compressor and the condenser, to be well ventilated, with the cool air coming in from the bottom and going out from the top. You must ensure proper ventilation of the refrigerating unit.

2.2 Wiring System

To have the refrigerator operate with the vehicle battery, please refer to the instruction manual of the vehicle's manufacturer.

WIRING SYSTEM: FUNCTIONS AND FEATURES (WITH AUXILIARY BATTERY)

The electronic unit of the compressor is a piece of electronic equipment which pilots the motor of the compressor and carries out all the controls and electrical protection of the system. Its main features are the following:

- Protection of the battery with automatic turning off of the compressor when the feeding voltage reaches the minimum threshold (cut out)
- The compressor will start up automatically again when the voltage goes back to normal values (cut in).

TABLE FOR BATTERY SAVER TRIPPING VOLTAGES

	FEEDING	CUT OUT	CUT IN
YC49B2	12V	9.6V	10.9V
	24V	21.3V	22.7V
TCD65A	12V	10.4V	11.7V
	24V	22.8V	24.2V

2.3 Wiring Connections

When you connect the refrigerator, you must remember the following:

- Use cables having the proper cross section (see table) to make the feeding lines. If possible, such cables should be without any joints on the leads which could lead to voltage drops.
- If the wiring system of the vehicle is insufficient or not properly sized for the refrigerator, connect it directly to the battery without using intermediate wiring.
- Any switches must have a breaking load not less than 20 A
- Make sure the polarity is right: connect the red cable to the positive terminal " + " and the black cable to the negative terminal " - ".

CROSS SECTION CABLES mm ²	MAXIMUM LENGHT OF CABLES IN METRES (12V)
2.5 (13 AWG)	2.5 (8 FT)
4 (11 AWG)	4 (13 FT)
6 (9 AWG)	6 (20 FT)
10 (7 AWG)	10 (33 FT)



WARNING

Never connect bare electric wires, and use only connectors of a size suitable to the cross section of the cable being used.

2.4 Setting The Inside Temperature

The refrigerators are provided with a manual thermostat. Turn it clockwise to lower the temperature, and turn it counterclockwise to raise the temperature and activate the ON-OFF switch in its end position. The knob of the thermostat is located inside the refrigerator, under the lamp.

1.41 Defrosting

Defrosting must be carried out when the ice layer is thicker than 4 mm. Set the thermostat at the OFF position. While defrosting, keep food and beverages in a cool place. Do not use any sharp metal object to remove the ice or frost. Do not start the refrigerator up again until it is completely defrosted and dry. Also empty the main tray.

2.5 Maintenance



WARNING

Before every maintenance operation, disconnect the power supply from the electric outlet. In case of refrigerator wrong operation, contact the Indel B Service Center.

1.51 Cleaning

Periodically clean the inside of the refrigerator using sodium carbonate dissolved in lukewarm water. Avoid using abrasive products, cleaners or soaps. After cleaning, rinse with fresh water and dry with care. When you are not using the refrigerator, clean and dry its inside to prevent mould and bad smells formation.



WARNING

Do NOT wash the refrigerator drawers and parts in a Dishwasher.

2.6 Useful Advices

If the refrigerator does not work, or if it works wrongly, before referring to our after sales service, make sure that:

- Power is not missing.
- The voltage which reaches the station is equal to the one shown on the plate.
- The connections are correctly made.
- The ventilation grids are not obstructed.
- The refrigerating unit is not near a source of heat.
- The fuse mounted on the feeding line is not blown.

1 If nothing is running or only fan is running, using a volt meter on 20v DC setting, check voltage at fridge with truck off and fridge off. What is voltage? Turn fridge on and see if voltage drops below 11 volts. If yes, there is most likely a wiring issue with the truck. If no, proceed to next step (for details go to Chapter 2 “How to detect functional problems and fix them”).

- 2 If fan does not run, bypass thermostat wires on ECU terminal C to T. If fan now runs, also check if compressor is now running and if yes replace thermostat.
- 3 If fan runs and compressor does not, change ECU and check if compressor is now running.



WARNING

The power cable must be replaced only by qualified technical personnel and, in any case, by a service authorized by the manufacturer. ICECO disclaims any responsibility if the above instructions and conditions are disattended or not met.

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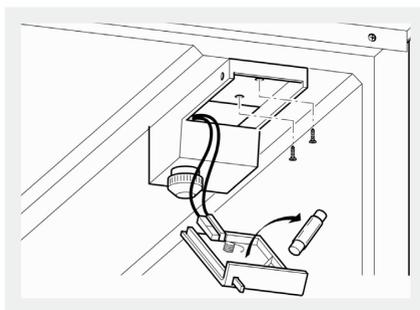
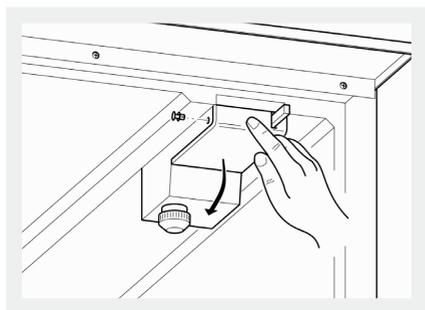
How To Detect Functional Problems And Fix Them

3.1 Form A How To Fix Lamp (Model YC49B2 AND TCD65A)

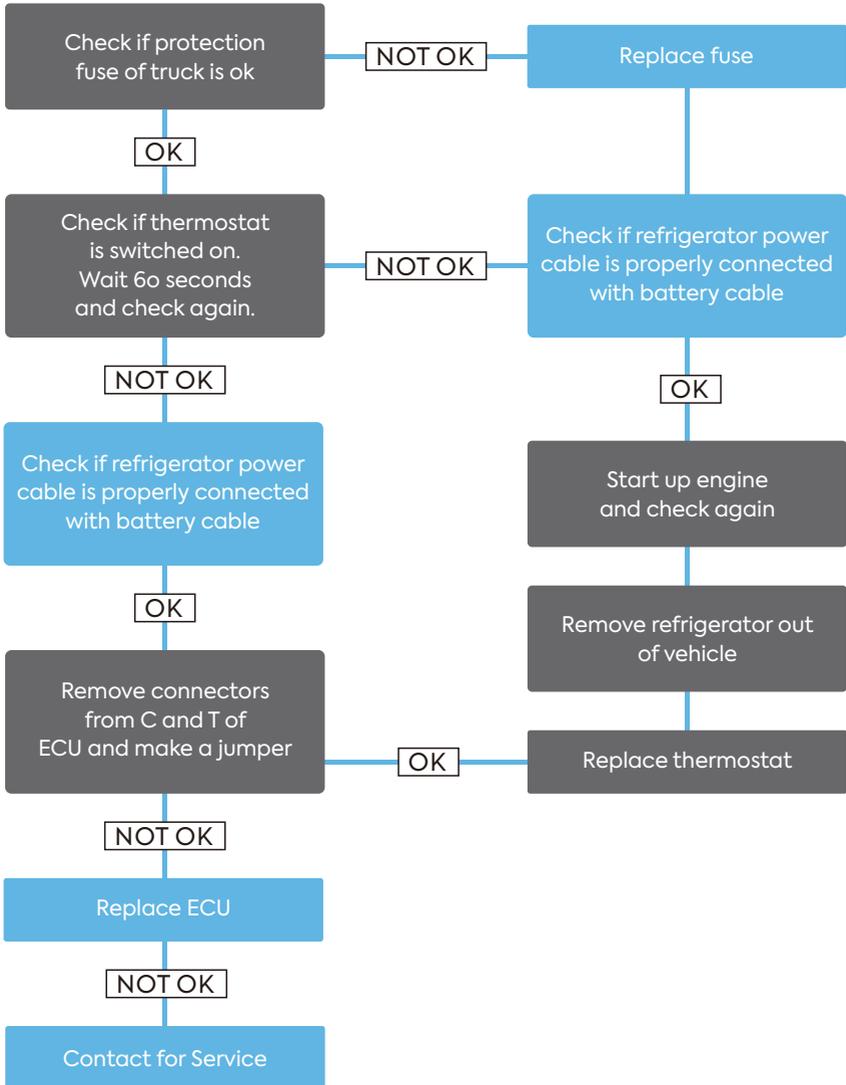
The interior lighting is installed at the top. Check to make sure that a proper 12 V or 24 V light bulb has been installed, based on the voltage of the electrical system to which the refrigerator has been connected.

The consignment includes a 12 V or 24 V light bulb (Max power: 3 W). In order to replace the light bulb, slide the lighting unit's glass down using the appropriate lever.

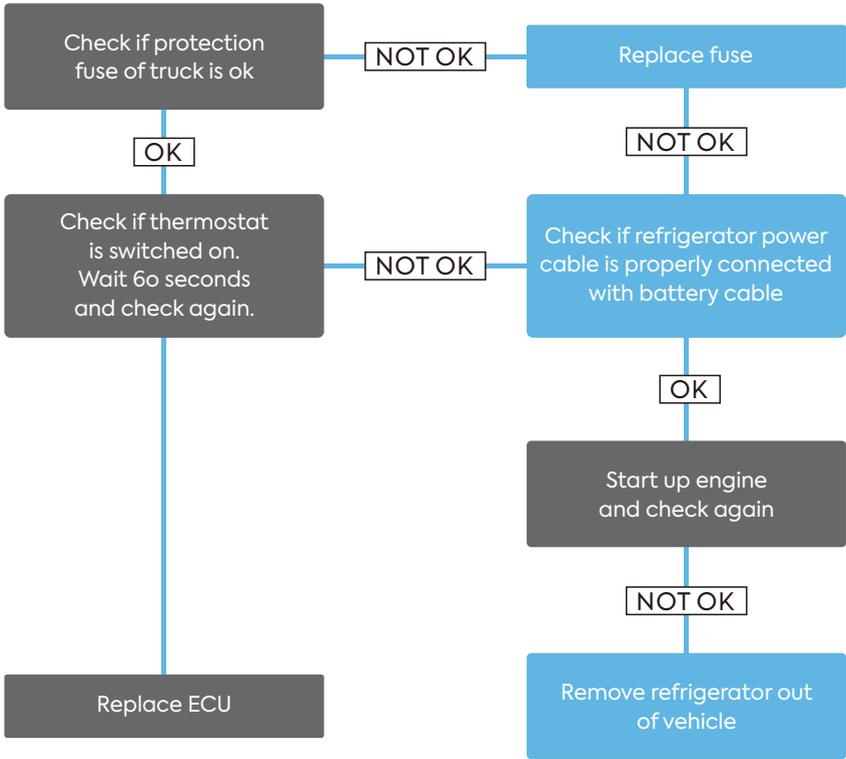
Replace the light bulb and to return the lighting unit to its original state. Time: 5 minutes



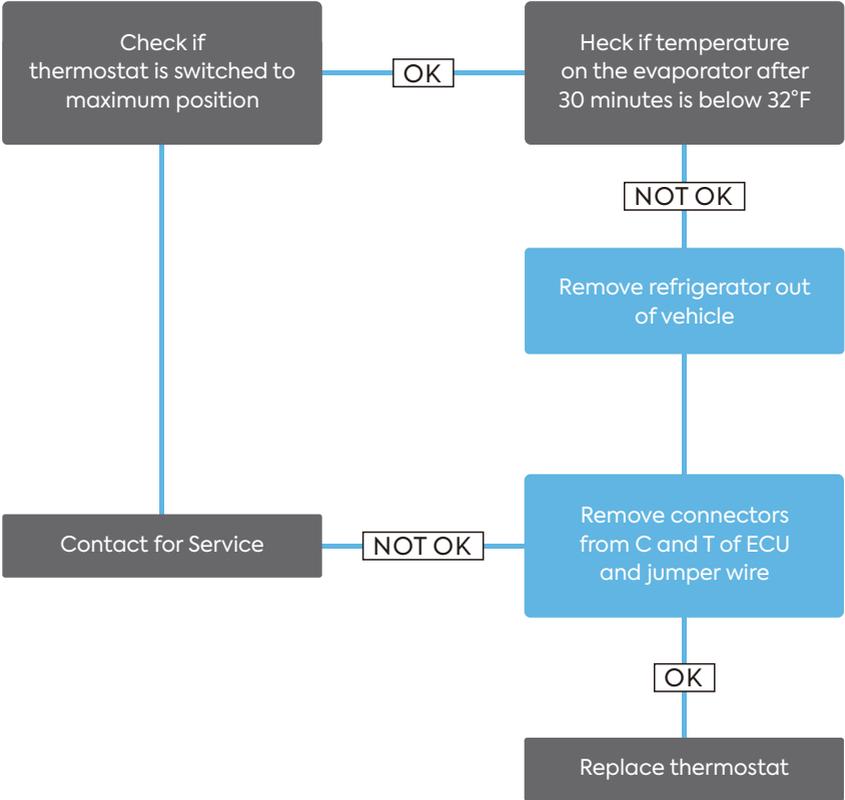
3.2 Problem: Refrigerator Does Not Work At ALL / NO Cooling And No Vibration From Motor/ Compressor



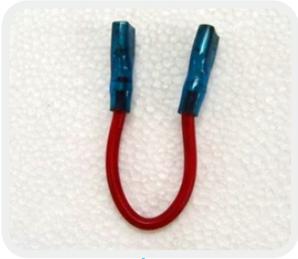
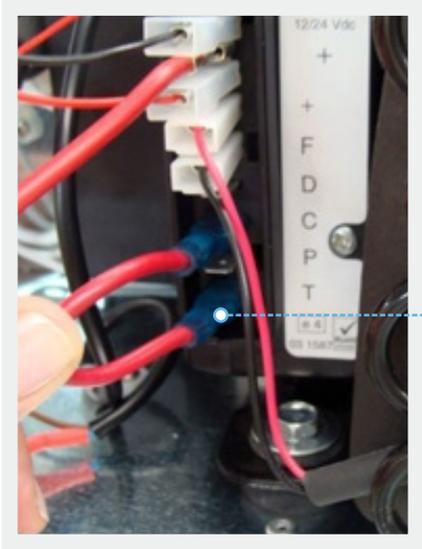
3.3 Problem: Refrigerator Does Not Work At ALL / NO Cooling And No Vibration From Motor/ Compressor + Fan Does Not Work



3.4 Problem: Refrigerator Is Not Cooling Enough But Compressor Runs



3.5 Form B How To Short Circuit Thermostat On ECU



◀ Jumper wire example

3.6 Form C How To Replace Thermostat

Time for repair: 55 minutes



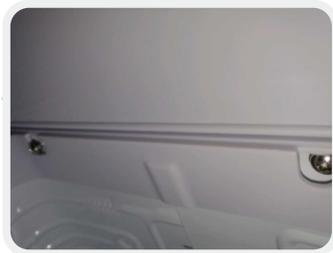
- ◀ Open the fridge and remove the thermostat Knob



- ◀ Remove the plastic element fixing the thermostat from the evaporator



◀ Unscrew the evaporator
(2 screws on the back of
the evaporator)



◀ Unscrew the evaporator
(2 screws on the back of
the evaporator)



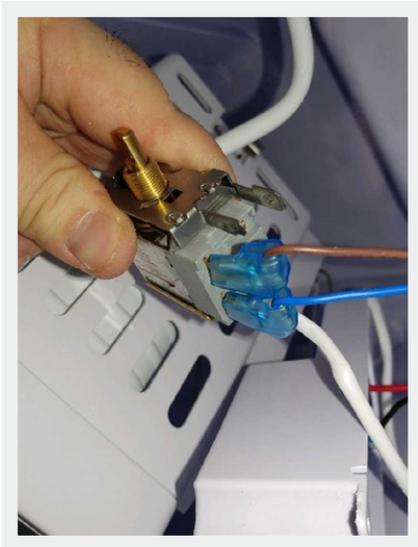
◀ Remove the rubber cap from the sensor of the thermostat



◀ Remove the lamp and unscrew the ceiling light (3 screws)



◀ Unscrew the thermostat



◀ Detach the wires from the thermostat, pull out the thermostat and reverse the procedure to install the new thermostat

3.7 Form D How To Replace ECU (Electronic Control Unit)

Time: 33 minutes

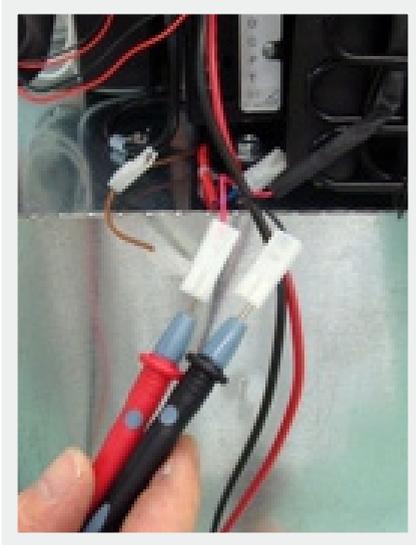


- ◀ Disconnect all wires from ECU, unscrew it (one screw) and with the help of a screwdriver push the connector towards left side. Reverse the procedure to install the new ECU



3.7 Form E How To Test And Replance Fan

Time: 32 minutes



- ◀ Disconnect wires of fan from + and F of the ECU and check if there is continuity. If not replace fan.



- ◀ Cut the four black plastic strips holding the fan to the condenser



- ◀ Remove the fan from condenser and reverse the procedure to install the new one

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How To Replace Aesthetical Parts

4.1 Part 1: Door (premium Version)

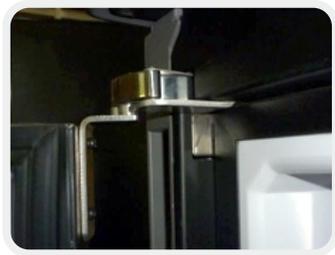
Time: 32 minutes



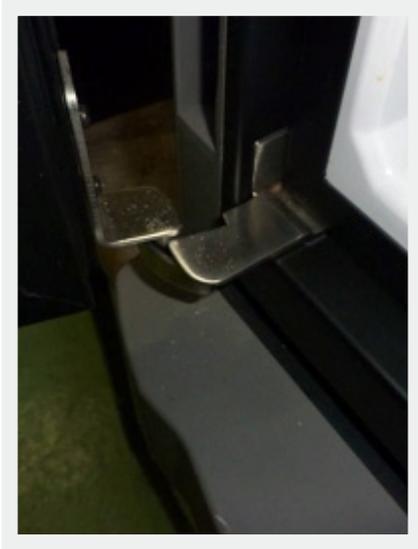
◀ Unscrew the 4 screws
of the door hinge



◀ Unscrew the 4 screws
of the bracket



◀ Unscrew the 4 screws
of the outside hinge



◀ Unscrew the 2 screws
of the lower hinge



▲ Unscrew the frame
(two on the top and two on the downside)



◀ Pull out the cabinet from the furniture and unscrew the flanges (37 screws)



4.2 Evaporator Door (premium And Fleet Versions)

Time: 5 minutes



- ◀ Open the evaporator door



- ◀ Bend the door using the two hands pushing from the sides



- ◀ After the operation 2 pivots go out from the holes on the plastic frame

4.3 Part: Handle (fleet Version)

Time: 10 minutes



- ◀ Raise up the handle and push the spring towards the middle. The handle and the pivot will be unfixed



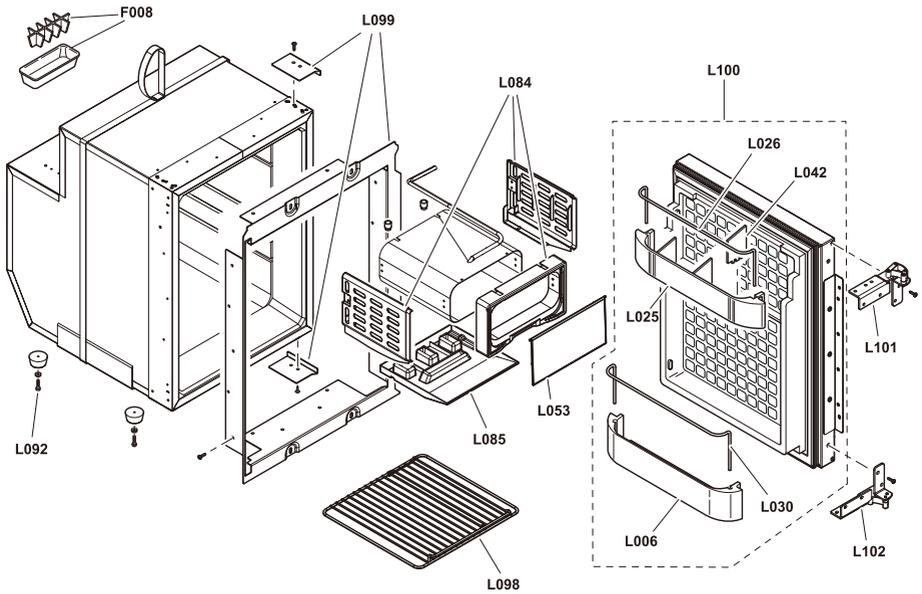


- ◀ Insert the pivot of the handle from the top of the door and push it inside.
Place the new handle making enter the pivots of the spring in the two holes

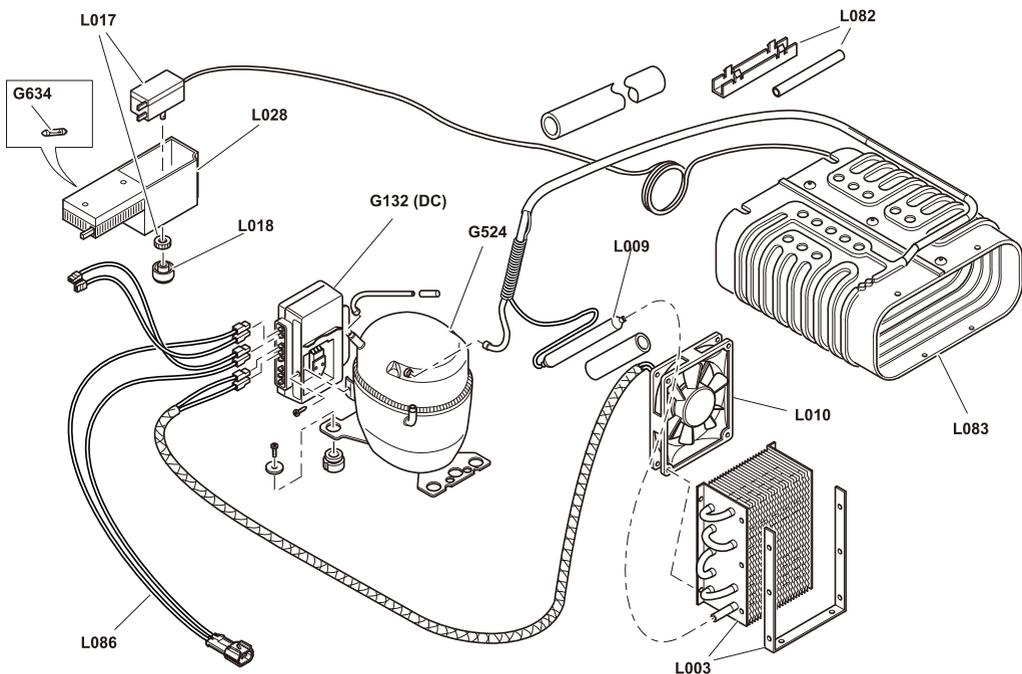


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Spare Parts



F008	ICE TRAY	L026	BOTTLE STOPPER
L092	FOOT	L042	BOTTLE SPACER
L099	FRAME	L025	BOTTLE HOLDER
L084	EVAPORATOR WALLS	L101	LOCK
L085	DRIP TRAY	L102	LOWER HINGE
L053	FREEZER LID	L030	BOTTLE STOPPER
L098	GRID	L006	BIG BOTTLE HOLDER
L100	COMPLETE DOOR		



G634	LAMP	L086	CONNECTION CABLE
G132	ELECTRONIC	L009	BOTTLE HOLDER
G524	COMPRESSOR	L010	LOCK
L017	THERMOSTAT	L083	LOWER HINGE
L028	LAMP HOLDER	L003	BOTTLE STOPPER
L018	THERMOSTAT KNOB	L082	THERMOSTAT SENSOR SUPPORT

FCC warning:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

ICECO

Cooler Than A Cooler