

COMMON PORTABLE REFRIGERATOR PROBLEMS

3-way refrigerators are extremely popular in caravans, motorhomes etc. due to their versatile operation, but because of the way that they operate, they do have limitations.

They can get their power source from 240v, LP gas or 12v.

240v and gas are the main sources and either will cool your fridge to its operating temperature for use, **but**, to operate properly the fridge must be **level in all directions**. This is very important, and running the fridge out of level for extended periods can cause failure. Even when perfectly level the fridge will take a long time to cool and needs to be run overnight really to reach operating temperature.

12v is **only** to **maintain** temperature whilst travelling, so the fridge should be cold and stocked before switching to 12v as you leave and change to either 240v or gas when you stop. Please be aware that a 3-way fridge can pull 15 amps or more when used on 12v and therefore can flatten your battery in a short period of time. The 12v system needs to be connected using 6mm twin wire as a minimum to receive the proper voltage. The fridge does **not** need to be as level when mobile due to movement.

Common complaints include:-

1) Not cooling/cold enough on either 240v or gas.

See above regarding level first and if the fridge has been running out of level, turn it off, level the fridge and leave for 30 min. before restarting. Make sure thermostat is at least 1/3 up, leave overnight and check temperature in morning. If not cold contact us or nearest service agent.

2) Not working on 240v but ok on gas.

It may sound obvious, but check to see if the fridge is plugged in (it has to be plugged in somewhere close to the fridge) , turned on at the socket and that the thermostat is not off. Any one of these will cause this problem and results in between 20 to 30 customers every year making an unnecessary trip to us.

If the fridge is getting power but still not working then the likely problem is the element itself, we normally check these with a multimeter to find the resistance and replace as necessary.

3) Not cooling/cold enough on gas but ok on 240v

This can be caused by the fridge not receiving the correct gas pressure from either a faulty gas regulator or blockage in the gas line **or** a partial or full blockage in either the jet or the burner. Sometimes a regulator fault can be diagnosed yourself by lighting the stove burners one at a time and watching the flame size, if the flame on the first burner becomes noticeably smaller as the others are lit, then there is a good chance that the regulator needs to be replaced.

Fridge fans.

One of the most common things we find, are one or two computer type fans attached to the upper vent at the rear of the fridge. PLEASE DO NOT DO THIS!

This is one of the worst things you can do to your fridge! There is a point on the pipe work at the rear of a 3-way fridge that needs to get to approx. 70 C to operate properly, controlling this with a fan that is manually controlled, or worse still, running constantly, is practically impossible! If you do need a fan to help cooling the fins, only a thermostatically controlled fan will do the job. Even fans against the vents when not running are reducing airflow, and therefore efficiency, of the fridge.

If the cupboard around the top of the fridge is getting hot then the fridge is NOT installed properly. A fan is NOT the recommended method to fix this. A fan WILL help if the fridge is installed correctly but still suffers in hot, humid conditions. If the cupboard is getting hot then get a professional to have a look and advise you on the best way to fix it.

4) 12v compressor type fridges

90% of identified faults with compressor type portable refrigerators is an insufficient power supply. The main causes of poor power supply are:

- Poor battery output
- Poor connection at 12v socket
- Partial break in lead fittings
- Home handyman extension leads
- Blown fuses

Most fridges have a low voltage cut-out between 10 and 11 volts to ensure the battery has enough power to start a vehicle in emergency. This is not a problem with your fridge but with your power supply.

STILL EXPERIENCING PROBLEMS?

CALL KINGAROY REFRIGERATION AND AIR CONDITIONING ON 07 4162 4707

