

# How To Guide

## How to Install and Use Your Parago Compressor Fridge

Your compressor fridge is quite straight forward to install but there are a few points to consider prior to installation. The most important installation points are;

- Ventilation for fan
- Cable thickness
- Adequate battery power/size

Allow adequate ventilation behind the fridge, we usually allow approximately 30-40mm clearance behind the fridge for air movement when fitting compressor fridges. There also needs to be an air gap above the fridge at the front to allow warm air to escape. (FIG. 1)



Additional air vents to the side of your furniture both high and low will also benefit the efficiency of the fridge.

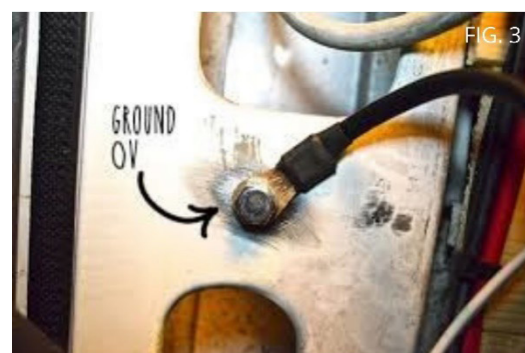
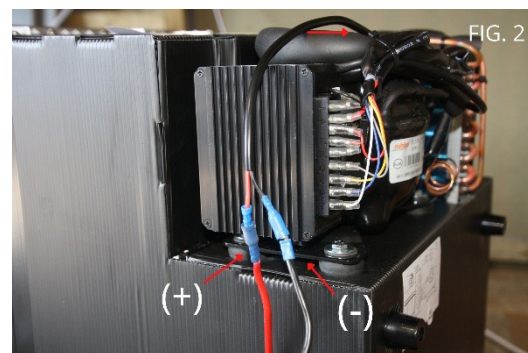
Your fridge can be connected directly to your leisure battery, or to a power management system. If connecting to a power management system you must ensure that adequate cable diameter size is used throughout the wiring loom to the fridge. A reduction in cable diameter can lead to voltage drop and the fridge turning off.

The cable used to connect the fridge needs to have a cross section of 3-6mm, depending on the length of the cable run to the power supply. As mentioned, this is to avoid any voltage drop between the power supply and the fridge. The fridge has a low voltage battery protection built into it's electronics, this means that the fridge will cut out and stop working if the voltage at entry point to the fridge drops below the pre-set voltage.

Even a small voltage drop along the cable can mean that the fridge could cut out earlier than it should do and therefore not utilise the full extend of the battery's stored power. In the worst instances of voltage drop/cable resistance then the fridge won't start up at all. For most fridge installations in a small campervan a cable size of 0.3mm strand thickness x 44 strand cable (rated at 35 amps) is adequate.

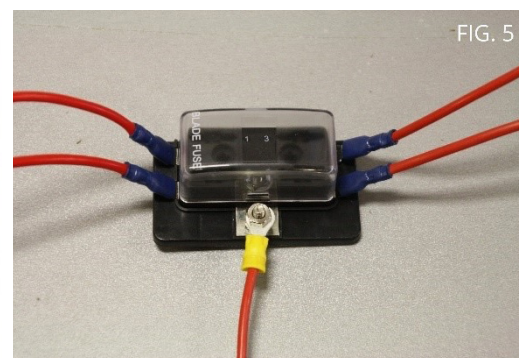
The back of the fridge has 2 wires, red (-) and black (+). (Fig. 2)

The black (-) cable can be run to suitable earth point on the van chassis close to the back of the fridge (Fig. 3) Make sure you sand any paint away around the Earth Point to allow a good connection. The black (-) can alternatively be run to the (-) of your leisure battery or the earth block of your Power Management System.



The red (+) cable on the back of the fridge is run to the (+) of your leisure battery via a 10-15 amp fuse, (Fig. 4 or 5) or to a permanent live (+) on your power management unit. N.B. Check adequate cable thickness has been used from the Power management to the leisure battery is using this option.

It will be easier to allow extra cable length on both (+) and (-) cables so that they can be connected while the fridge is outside of it's housing, the fridge can then be carefully slid back in place and secured. Avoid any unnecessarily long cable lengths as this can lead to voltage drop along the cable.



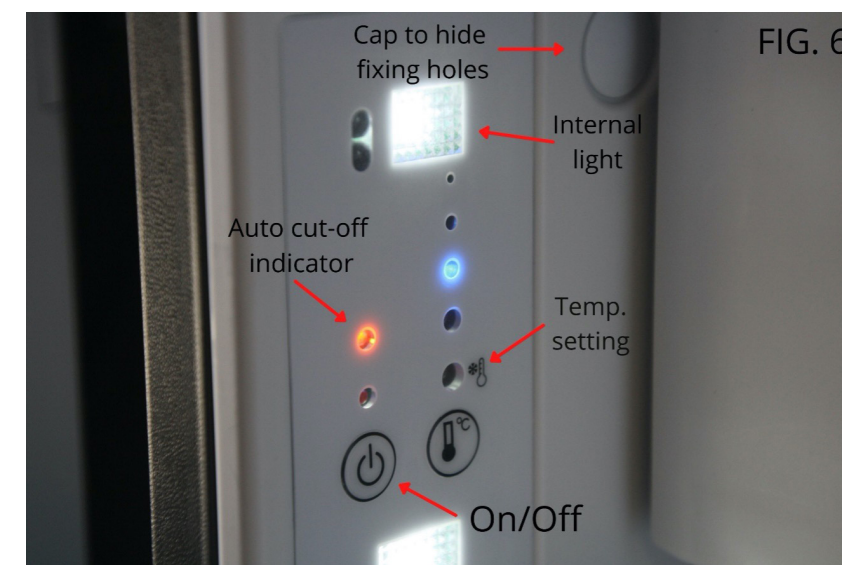
Once installation is complete (but before the fridge is set back and secured in place) the fuse should be installed and the fridge tested. Turn the thermostat to it's maximum setting (cold), you should hear and feel the fridge start up. The fridge should have chilled down in about 20 minutes. If the ice box is opened, then there should be frozen condensation on the ice box inner housing. At maximum setting the fridge will be able to chill to approximately -12 degrees Celsius within the icebox. A usual setting for efficiency is at around 30%- 50% of maximum setting, this should maintain the main compartment of the fridge at 4-5 degrees Celsius.

The controls for the fridge are quite straight forward. (FIG. 6) Firmly press and hold the left side power button for 2 seconds to turn on and off.

Control the temperature with the thermometer icon button, the larger the blue light the cooler the setting.

The upper light above the on/off button will be Blue when the fan and compressor are in operation and will be Orange when the fridge has achieved the desired temperature (The fan and compressor will turn off at this point).

The lower light above the On/Off will slowly flash red if the fridge has de-activated due to low power supply (battery is nearly depleted). This is to protect the battery from being over discharged.



Once all the connections are secure and you are happy the fridge is functioning properly then the fridge can be secured in place. Inside the fridge are 4 capped holes, remove the caps and use screws to screw the fridge into the surrounding wooden panels.

Alternatively, a flush fitting frame (sold separately) can be used to secure the fridge into its aperture.