

## **Introduction and Fitting Instructions**

*Read all the instructions before starting installation.*

First choose a suitable position for the C.F.9. unit taking into account the following:

1. The area required by the unit should be no less than: 190mm in depth, 330mm wide and 130mm high, this allows for the minimum 25mm all round clearance with an extra 25mm at the rear for the fridge connector.
2. Air must be allowed to circulate freely over the back of the unit. Vents in the form of two 25mm holes must be provided top and bottom, parallel to the front panel and centrally to the unit.
3. The mains inlet socket must be within reach: i.e. access to the mains inlet is required.
4. The caravan [leisure] battery must be within reach: i.e. this also must be within easy reach of the unit.
5. **THE APPLIANCE MUST BE EARTHED.**

Normally the side of a cupboard or wardrobe unit is satisfactory providing there is access to the terminal strip and the refrigerator socket on the rear of the C.F.9.

Once all the above considerations have been taken into account cut a rectangular hole 280mm x 83mm at the mounting point. N.B. if the panel material is very thin then glue battens to the back top and bottom edges of the hole, and screw the unit in place with the screws provided, as this makes removal of the unit easier should this be necessary in the future.

1. Ensure the 12S plug is disconnected from the car!
2. With cable at least 2 mmsq:
  - (a) Connect the [1] - negative terminal on the zig to the - negative terminal [3] on the 12S lead.
  - (b) Connect the [2] + positive terminal on the zig to the + positive terminal [4] on the 12S lead.

If you are wiring the unit into a motorised caravan then connect the [1] – negative terminal on the zig to chassis earth and the [2] + terminal on the zig to the main battery OR starter solenoid.

A 25A fuse must be fitted in the [2] + positive line as close to the source [battery or solenoid for a motor caravan] as possible.

**DO NOT CONNECT YOUR CAR 12S CONNECTOR YET**

If there isn't a caravan [leisure] battery fitted a suitable position should now be chosen. Bear in mind that: **The AREA MUST BE VENTILLATED TO THE OUTSIDE.** The battery should be mounted so that it cannot tip over and the surface beneath the battery should be corrosion resistant.

1. With cable at least 2 mmsq:
  - (a) Connect the - negative terminal on the caravan [leisure] battery to the - negative terminal [3] on the C.F.9.
  - (c) Connect the + positive terminal on the caravan [leisure] battery to the + positive terminal [4] on the C.F.9.

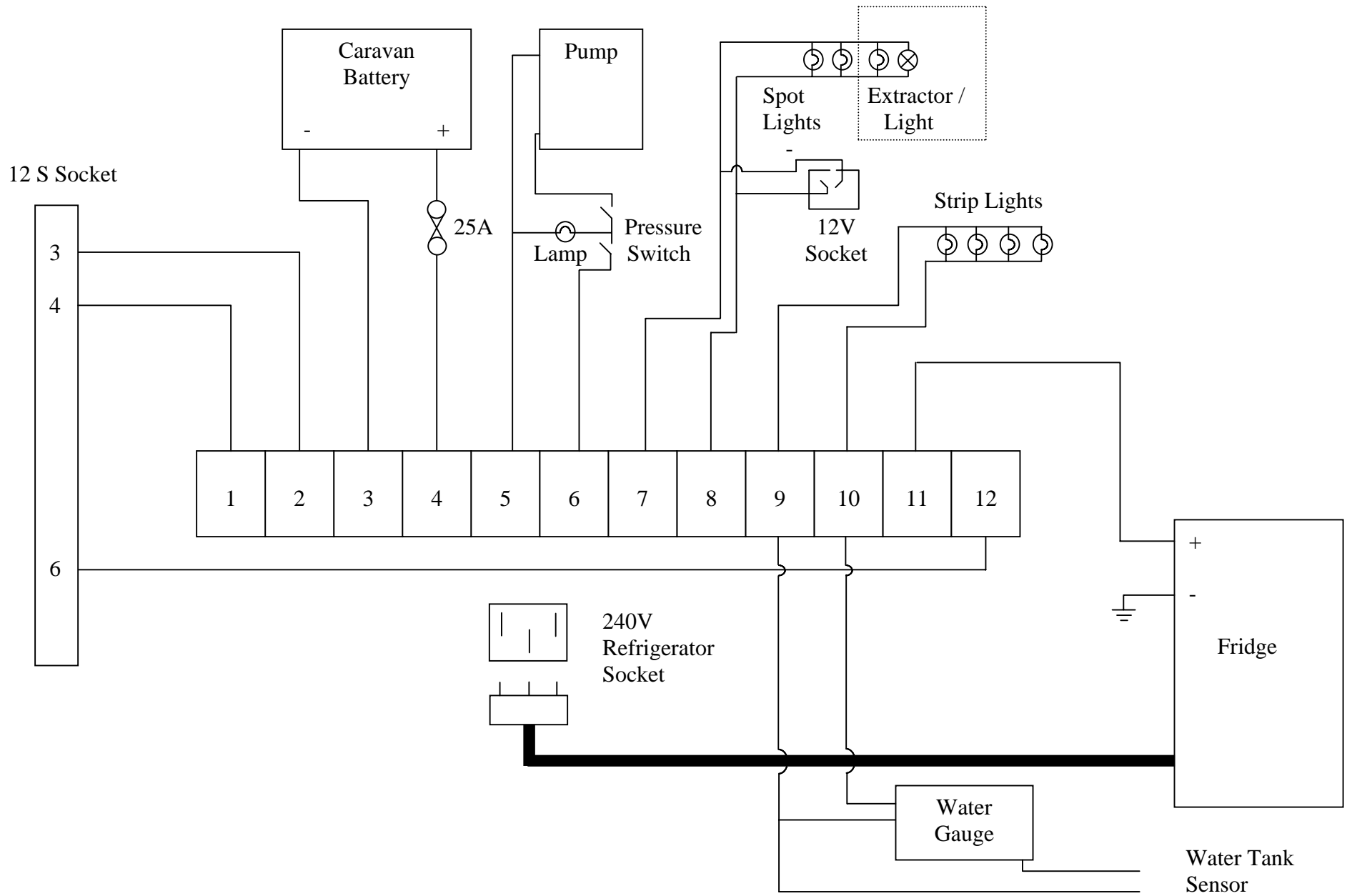
A 25A fuse must be fitted in the [4] + positive line as close to the caravan [leisure] battery as possible.

**DO NOT** use crocodile clips to attach your caravan [leisure] battery as this may cause sparks! **AVOID FLAMES AND SPARKS NEAR THE CARAVAN [LEISURE] BATTERY.**

Use proper terminals for the caravan [leisure] battery – smearing the connections with petroleum jelly will prevent corrosion.

**BEFORE MAKING ANY MORE CONNECTIONS TO THE C.F.9. REMOVE THE 25A FUSE** from the line to [2] on the C.F.9. [And on [4] on the C.F.9. for a motorised caravan]. N.B. these will need replacing once the wiring is complete before testing!

The various accessories can now be wired in! The load should be shared across the outlets of the C.F.9. as equally as possible. N.B. As all negative outlet terminals [ 5],[7] and [9] ] are joined together it does not matter which one is used for each fused outlet. Normally the water pump goes to [5] and [6], the fan, cooker hood e.t.c. to [7] and [8], lighting to [9] and [10] there follows a suggested layout:

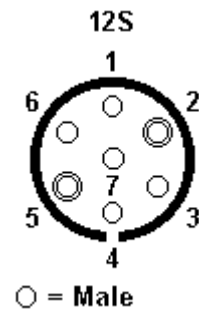


## **UNDER NO CIRCUMSTANCES MUST THE REFRIDGERATOR BE CONNECTED TO TERMINALS [2] – [10]**

How to connect the fridge:

Due to the high current required by the fridge it should be wired in such a way that it only operates when the engine is running. The Zig RM12 relay can be used to achieve this.

The C.F.9. unit provides two circuits for the supply to the fridge. I.E. 12V and 240VAC.



Connect the terminal [12] on the C.F.9. unit to terminal [6] on the 12S lead [red cable]

Connect the terminal [11] on the C.F.9. unit to fridge 12V + positive wire.

Connect the - negative fridge wire to the 12S – negative terminal [3]; in motorised caravans this can be to the nearest chassis earth point.

Wire remaining accessories and on completion replace the 25A fuse[s] TEST.