WARNING

In the event of a fuse blowing there exists a fault in the circuit protected by that fuse, and the cause should be ascertained before replacing the fuse: It is important to remember that a fuse is fitted for the protection of the circuit and is a safeguard against fire and injury.

GUARANTEE

Your ZIG product is designed to give long and trouble free service, if it should fail to function correctly, please return it to the manufacturers stating where and when it was purchased together with details of the fault. If the manufacturers consider that the fault is due to defective parts or workmanship, they will repair the item or supply a replacement, free of charge.

PETER EVERARD LTD.

Manufacturers of Electrical & Automotive Products

[redacted]

CASHES GREEN

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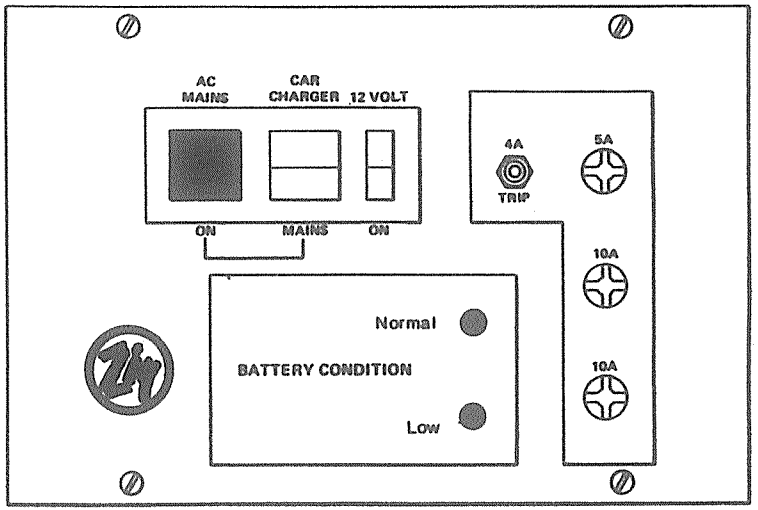
The ZIG CF5 Caravan Battery charging & Distribution System



The ZIG CF5 Unit

Important Features:

Suitable for both tourers and motorised caravans.

Mains battery charging – providing 6 Amps output.

Charging from vehicle – split charging device built in.

FOUR outputs. (3 fused and one with push-button trip).

Incorporates the unique ZIG Electronic battery monitor.

Double pole mains switch.

Designed with safety in mind, the CF5 incorporates no less than six protection devices and in the event of overheating the mains supply is automatically disconnected. The supply will be restored when conditions return to normal without any action from the user.

Uses readily obtainable standard fuses.

Complies with all B.S. & CEE Safety regulations.

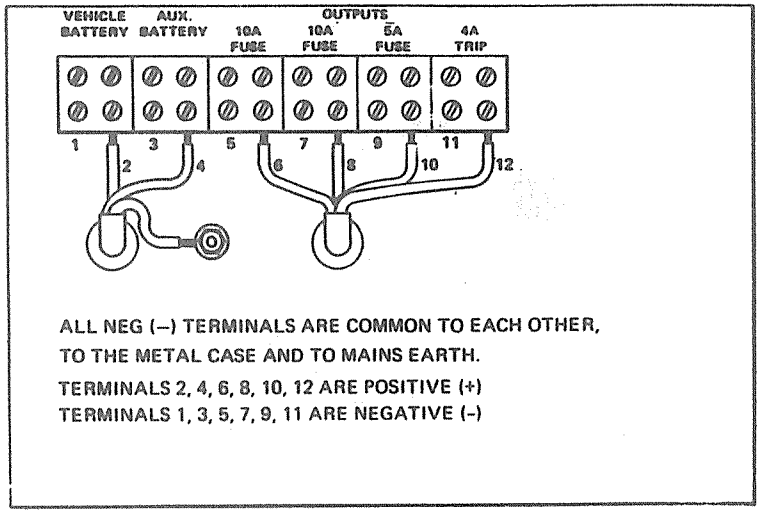
(1)

Instructions for installation

Choose a suitable position for the unit, i.e. the side of a wardrobe or similar such that air will be able to move freely around the back of the unit. Leave enough room to connect the cables to the rear terminal block.

Cut a rectangular hole 7 3/8" (178mm) x 4 7/8" (125mm), the CF5 is designed to overlap the hole thereby covering any jagged edges.

Fit the Unit into the hole and if the panel is very thin it is recommended that thin battens are fitted behind the screw holes to give greater support.



The Terminal connection on the rear

Wiring

Suitable cable can be bought from motor accessory shops. Great care should be taken in wiring the Unit, its performance depends on how this work is carried out – UNDER NO CIRCUMSTANCES USE CABLE SMALLER THAN RECOMMENDED.

Touring Caravans (non-motorised)

It is necessary to use a twin wiring system with touring caravans and the use of red (+) and black (–) cable is suggested.

Using at least 2mm^2 (28/30) cable connect terminals 1 and 2 to the 7 core cable as follows:–

No. 1 to WHITE No. 2 to BLUE

If you have a positive earth car you can reverse these connections (No. 1 to BLUE – No. 2 to WHITE) subject to the following conditions:–

1. The van must not be hitched to a neg. earth car.
2. There must be no wiring connected to the van chassis.

A much more satisfactory solution is to have your tow-car re-polarised – this can be done by most garages for a moderate charge.

The remaining connections are described in "General wiring instructions" below.

Motorised Caravans

Wiring is much simplified in the case of motorised caravans as earth return can usually be used – to effect this ensure a sound connection between any one of the negative terminals on the CF5 and the vehicle chassis using as short a length as possible of 5mm cable – do the same with the negative terminal of the auxiliary battery – *do it well* – this cable will have to carry as much current as all the other cables put together!

Using at least 3mm^2 cable connect No. 2 to the vehicle battery – an ideal take off point is usually at the starter solenoid. Using similar cable connect No. 4 to the auxiliary battery + terminal. Note that the CF5 is only suitable for negative earth motorised caravans, but see note above concerning re-polarisation. In the instructions below ignore the negative (–) connection.

General wiring instructions

Connect the remaining terminals to the accessories using at least 1mm^2 (14/0.30) terminals 6, 8, 10, 12, being the positive connections and 5, 7, 9, 11, the negative.

The following system is suggested:

Connect water pump to one 10A output (5, 6)
Fan, cooker hood, etc. to the other (7, 8)
Lighting to the trip circuit (11, 12)
If more than three lights are fitted split the load between the trip and the 5A output (9, 10).

When all the 12V connections are complete the mains supply can be fitted, route the cable to mains input, if extra cable is needed use 0.75mm^2 3-core flexible and join in a 15 amp joint box or terminal block. Connect as follows:

BROWN	to	LIVE	INPUT
BLUE	to	NEUTRAL	200/250 VOLTS
GREEN/YELLOW	to	EARTH	50/60 Hz.

Your ZIG CF5 is now ready for use.

Instructions for use

Charging from the vehicle

Set charger switch to 'CAR' – the battery will be charged when the engine is running – the rate of charge depends on the distance from the engine, the cable in use and the state of the vehicle's battery.

N.B. In the case of touring caravans the cable connecting the towcar 7 pin BLUE terminal to the alternator or battery must be at least 2mm^2 – the bigger the better.

Charging from the mains

Set charger switch to 'mains', mains switch to 'on'. When a mains supply is connected to the van the CF5 will charge the auxiliary battery at a maximum of 6 amps. Under normal circumstances it should not be necessary to leave the charger switched on for more than four hours. Note that in mains charging mode the CF5 will get quite hot and it is important that adequate ventilation is provided to the rear of the box. In the event of overheating for any reason a thermal trip is fitted which will disconnect the supply, this switch will reset automatically when conditions return to normal.

The Battery Condition Monitor

The red light will glow when the battery terminal voltage is below 11 volts, above this voltage the green light will glow. Note that a true reading is given with the 12V equipment in the van switched off and when neither charging system is in operation. The red light may come on when an appliance is switched on, this is normal – current surges cause momentary voltage drop.

The 12 Volt switch

This serves to disconnect all the 12V accessories and the battery monitor – it should be turned off when the caravan is not in use.

The Trip

This is designed to restore the lighting circuit instantly in the event of a temporary overload, without the need to replace a fuse, simply press the button to reset. If the trip refuses to reset, there is a fault.

The fuses

These are standard 1¼ inch glass fuses and can easily be obtained from radio and electrical dealers, glass car fuses can also be used if necessary.