



COMBI MASTER - FITTING INSTRUCTIONS

1. DISCONNECT THE VEHICLE BATTERY
2. MOUNTING: The unit should be mounted behind one of the trim panels in the boot of the towing vehicle using self-tapping screws through the mounting lugs.
3. Take the cables supplied and cut 0.5m off the green cable. Strip back the insulation and fit push-on connector and cover to one end of each cable.
4. Route the longer heavy duty green cable to the front of the vehicle finishing near the battery.
5. Route the blue cable to the front of the vehicle and connect to a live ignition feed (e.g. a lead that is only live when the ignition is on) using blue self-stripping cable connector. Do not connect to the ignition coil.
6. Connect the longer green cable to terminal 6 on the COMBI MASTER
7. Connect the blue cable to terminal 8 on the COMBI MASTER
8. Connect the white cable to terminal 7 of the COMBI MASTER and the other end to suitable earth point using ring terminal.
9. Fit a push on cover and connector to the red and blue leads of the GREY 12S cable and then connect the red lead to terminal 9 and the blue lead to terminal 10 of the COMBI MASTER
10. If a "constant live" feed from vehicle battery to caravan is required, connect the green lead of the grey 12S cable to the heavy duty green lead connected to terminal 6.
11. Fit blade fuseholder between the two heavy duty green cables using push-on connectors and covers. (Do not fit fuse at this stage).
12. If you intend charging your trailer battery in your vehicle boot, the live charging connection is made to terminal 11 of the COMBI MASTER. If you are not using this facility insulate the terminal by fitting a push-on cover and connector.
13. RE-CHECK YOUR WIRING and then connect the shorter heavy duty green cable to the battery positive or the starter solenoid live feed, using a spade terminal.
14. Fit 25amp fuse in the blade fuseholder.
15. Reconnect the vehicle battery.

WIRING STANDARD FOR NEW CARAVANS:

Most new caravans are now wired to the new ISO3732 revised standard. The following changes have occurred :

- Pin 2 is no longer used to supply a charging current to the caravan battery. (You should still wire it as before, this will mean that both old and new caravans will be accommodated.)
- Pin 4 not only provides the "constant live" feed for the caravan's interior lights but also is relay-switched during towing to charge the battery.
- The relay which switches Pin 4 to supply a charge to the auxiliary battery also switches it so that it no longer provides the "constant live" feed to the interior lights etc. This meets EMC requirements by rendering the caravan emission-free during towing.
- Pin 6 is still used for power to the caravan fridge but the return for the fridge is now Pin 7. This means you should now take both white AND black of the grey 12S 7-core cable to a good earth on the car's' chassis.

ADDITIONAL NOTES :

If you have a voltmeter you can check that the COMBI MASTER is functioning correctly by measuring the voltage at the fridge 12v connection. 12v should only be present when the vehicle ignition is switched on and the engine is running.

BATTERY CHARGING :-

There is a volt drop across both the seven pin plug and socket and the trailer wiring when the fridge is running on 12volts. This volt drop is sufficient to reduce the charge to the trailer battery to an insufficient level. Therefore, if you are running the fridge in your trailer whilst travelling we recommend that you charge the trailer battery in the boot of the towing vehicle. (Ensure battery is firmly strapped in place.)

MOTOR CARAVANS :-

If using the W4 Combi Master in a motor caravan (i.e. no 12S socket), fit cables directly to appropriate connections.

Your COMBI MASTER pack contains:-

1 COMBI MASTER	1 Ring Terminal	1 Blade Fuseholder
0.5m White cable	1 Spade Terminal	1 25amp Blade Fuse
5m Blue cable	8 Push-On Connectors	
5.5m H/duty green cable	8 Push-On Covers	1 Blue Self-Strip Cable Connector

Due to our policy of continual development we reserve the right to change specifications and pack contents without further notice.

We recommend that this unit is checked / fitted by a qualified technician.

