



RCT100 TOWING KIT **FITTING INSTRUCTIONS**

RCT 100 (12N SOCKET)

INTRODUCTION

To tow a caravan or trailer legally you must reproduce the obligatory lighting from the towing vehicle on to the rear of the caravan or trailer. The system used to do this is via a 7 pin plug and socket assembly. The plug and socket assembly allows the connection between the vehicle and the caravan or trailer to be temporary. The pins are arranged in such a way that the plug and socket can only be connected in one position ensuring that no circuits can become crossed.

The kit is designed as a replacement for an existing kit or as Fast Fit System. If it is to be fitted as a new assembly to a vehicle, extra components may be required to complete the installation.

1. A visual or audible warning that the indicators are functioning. This is a legal requirement. If your vehicle flasher unit does not provide this, it can be achieved by using an RCT380 (Supplied).
2. If the towing vehicle has a Canbus wiring system or bulb failure system then you should fit RCT480 7 way Smart relay. This comes complete with an audible warning buzzer in place of the RCT380 audible relay.

It is a legal requirement to have a device to show that the caravan, trailer, or trailer board indicators are operating. Any one of the above products will fulfill this requirement.

NOTE: The socket assembly should only be fitted after the towing bracket has been fitted. It is advisable to read these instructions carefully before beginning any fitting and to retain them for future use. The sensor relay supplied in this kit works in conjunction with the vehicles' heavy duty flasher unit, fitted as standard on most vehicles.

FITTING

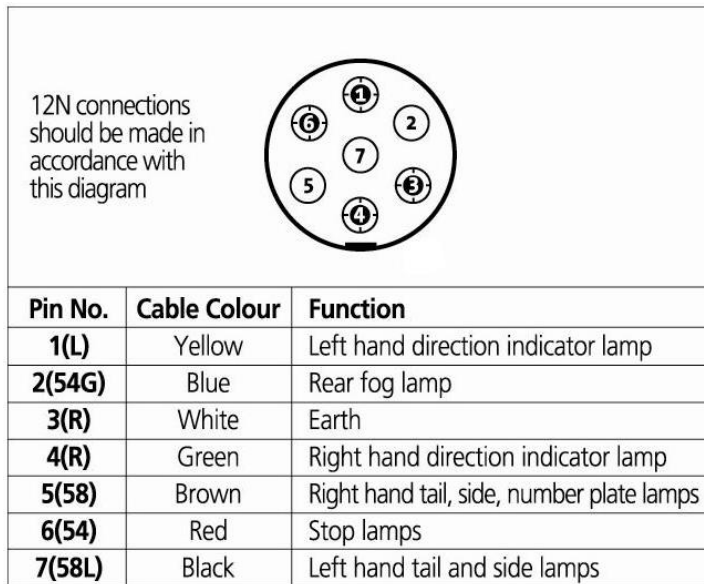
IMPORTANT Before commencing any of the fitting operations ensure that the vehicle is parked safely off the road with the hand-brake on and check that the correct fuse or fuses are removed to isolate the circuit. If in doubt consult a qualified auto electrician.

TOOLS REQUIRED

Pliers
Electrical screwdriver
1/2" or 13mm drill
5mm spanner (or adjustable spanner)
2 x 16mm spanners (or 2 adjustable spanners)

SOCKET AND VEHICLE WIRING

Fig 1.



MAKING CONNECTIONS

In order to make the necessary connections feed one of the 7 core cable wires and the relevant vehicle wire into the channels in the connector. The connector should then be squeezed together firmly with the pliers to make the connection. The plastic cover should then be clipped into place.

CHECKING CONNECTIONS

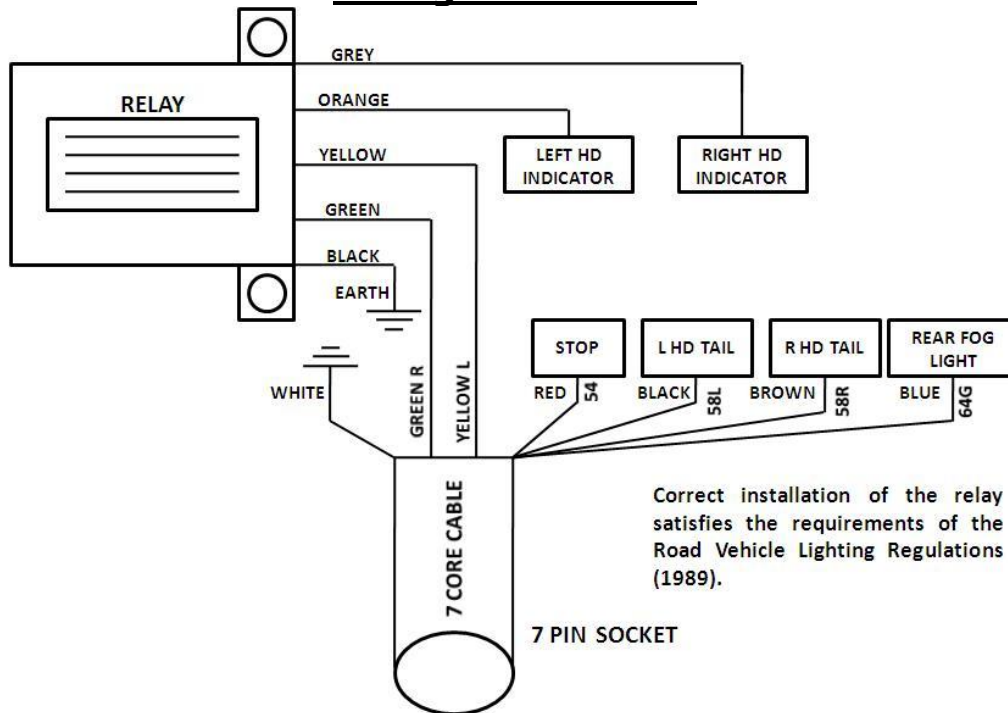
Before replacing the boot floor coverings and any other items removed during the fitting it is advisable to re-check all connections. If possible connect the socket to a caravan, trailer or trailer board to check that all functions are operating correctly.

PLEASE NOTE For vehicles with either a Bulb Failure Indicator or Dimmer Relay, the connections for the Left and Right Hand Tail, Indicator, Stop and Fog Lamps should be made to the input side of the Failure Indicator or Dimmer Relay. For vehicles equipped with Bulb Failure or Dimmer Relay systems, use of an RCT480 7 way smart relay is recommended.

1. Connect the 7 core cable to the socket in accordance with the diagram (Fig 1). Pass the cable through the hole in the socket seal and fasten the socket to the mounting plate using the nuts, bolts and washers provided. Ensure the socket seal fits snugly around the socket.
2. Attach the mounting plate (with socket fitted) to the towing bracket in between the tow ball and the tow bar itself using the existing bolts and ensuring that the hinge of the socket cap is uppermost. If a stabiliser is fitted ensure that the mounting plate is fitted on the opposite side of the tow bar. You may have to re-position the sockets on the mounting plate to ensure the socket hinges remain uppermost.
3. Pass the cable into the boot compartment through an existing hole if available. Otherwise using a ½" or 13mm drill, carefully make a hole in the rear of the vehicle in a suitable position close to the tow bar. Ensure that as you drill you do not damage any other cables or fittings. You may find it useful to remove the spare wheel. It is advisable to clean the hole with a suitable file and to treat it with an appropriate rust inhibitor. Seal the hole with the grommet supplied.
4. Locate the vehicle wiring harness in the boot compartment which supplies the rear lamp clusters. In most cars this will usually be to one side of the vehicle, i.e. cables supplying the left hand side (near side) lamp cluster will pass via the right hand (off side) of the vehicle before crossing the back of the vehicle.
5. Strip back approx 10" or 250mm of the outer sheath of the 7 core cable. Bare the end (approx ½" or 13mm) of the White (Earth) cable only.
6. Identify each cable in the wiring harness for its function by tracing back to the bulb holder, or by using a circuit tester (if you use a circuit tester you will have to temporarily re-connect the

- relevant fuse previously removed). Connect the appropriate 7 core cable to the relevant vehicle cable in accordance with the diagram (Fig 1) using the connectors provided.
7. Connect the Earth cable to a suitable point on the vehicle chassis. Ensure that it is bare metal free of paint and rust.

RCT380 Rear Sensor Relay with Audible Warning Device **Fitting Instructions**



The rear fitting sensor is designed to work in conjunction with a combined hazard warning and indicator flashing unit. Before commencing the fitting ensure the vehicle is parked safely off the road with handbrake on and remove the relevant fuse on the vehicle.

1. Fix the relay in the boot of the vehicle adjacent or near to the 7 core cable and the vehicle harness.
2. Ensure it will not be damaged by luggage etc.
3. Connect the wires in accordance with the diagram above.
4. Reconnect the relevant fuse on the vehicle.

The relay will only function when a trailer or caravan is connected.

When a trailer or caravan is connected, the buzzer will sound in unison with the flasher. If a bulb or connection failure occurs, the buzzer will cease to function.

This relay is suitable for 12V negative earth vehicles.

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