



Tow Bar Wiring Assembly MP380

Trailer rear lighting and supplementary electrical connections for caravan equipment
Suitable for 12v Negative earth vehicles with combined hazard / direction flasher unit.

CONTENTS

- Pre-wired lighting 12N and supplementary 12S sockets.
- Mounting plate with socket seals.
- Audible sensor for trailer indicator circuits
- Cable snap connectors

FITTING INSTRUCTIONS

1. Check vehicle rear lights are working correctly.
Ensure all circuits are off before starting work.
- For vehicles with bulb failure detection systems, connections must be made to the input side of monitoring unit.
2. Fit the pre-wired socket mounting plate between Towball and vehicle towing bracket using the existing mounting bolts.
3. If access for the socket cables is not provided, drill suitable holes near to the towbar, removing any sharp edges with a file, repainting and fitting suitable grommets.
4. Locate the wiring to the rear lights of the vehicle (usually on one side) and select a suitable point at which to mount the Audible Relay and make the necessary relay and 7 core cable connections.
5. Strip approx. 150mm. of the 7 core black cable sheath taking care not to damage the wires inside.
6. Identify the function of individual vehicle rear lamp wires by tracing back to the bulb holder or using a circuit tester.

Connect the relay and 7 core cable using the snap connectors provided, as below, following the wiring Diagram 1.

12N Socket	7 core cable	Connection
Pin 1	Yellow	Yellow of the Audible sensor
Pin 2	Blue	Rear Fog lights in vehicle wiring
Pin 3	White	Suitable good earth
Pin 4	Green	Green Audible Relay
Pin 5	Brown	R/H tail lamps in vehicle wiring
Pin 6	Red	Stop lamps in vehicle wiring
Pin 7	Black	L/H tail lamp in vehicle wiring

AUDIBLE SENSOR CONNECTIONS

Orange of Relay	-	L/H indicator lamp in vehicle wiring
Slate of Relay	-	R/H indicator lamp in vehicle wiring
Black of Relay	-	To suitable good earth

Connect these using the insulated snap connectors provided.

Do not cut the wires to vehicle indicator lamps.

7. Ensure all wiring connections are correct, connect trailer 12N plug and check vehicle and trailer lights function correctly.

8. Tape the audible sensor to the vehicle wiring, making sure not to cover the sound output holes or if increased volume is required, fix sensor relay to a metal panel using the mounting points provided.

Trailer turn indicator lamps should flash in unison with vehicle indicator lamps and Audible sensor should buzz.

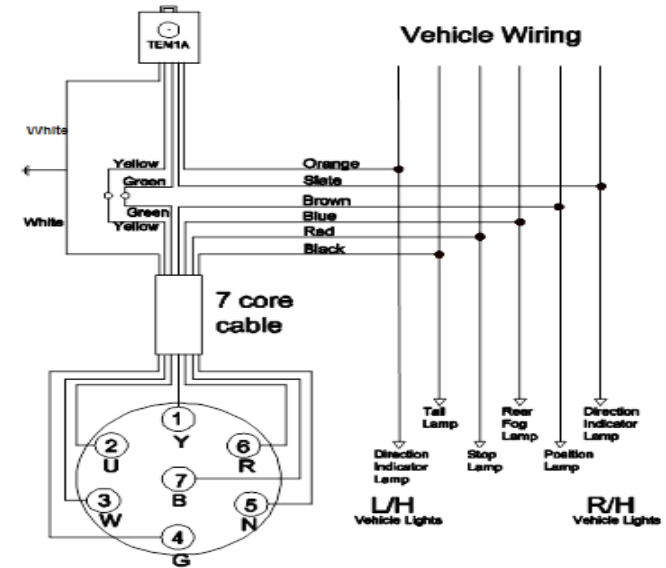
Failure to buzz shows trailer indicator lights have failed. Check connections and bulbs.

Notes

Earth connections can be made to the vehicle chassis or bodywork. A good connection is important, this should be bare metal, free from paint or rust

Number plate lamps on the trailer should be wired to avoid a common connection between terminal 5 & 7 of the 12N socket.

This unit is not suitable for vehicles with modular lighting systems, ie. Jaguar, late model BMW, Mercedes Benz, etc.



WIRING INSTRUCTIONS 12S SOCKET GREY CABLE

Due to the use of a revised 12S wiring system which is incompatible with the original UK Industry wiring system, we suggest that you connect your 12S socket as follows, to provide maximum compatibility.

12S Socket	7 core cable	Function
Pin 1	Yellow	Reversing Lamp
Pin 2	Blue	Switched battery feed (Caravan battery charging original system)
Pin 3	White	Suitable earth in towing vehicle. (return circuit for Pins 2 & 4)
Pin 4	Green	Permanent battery feed.
Pin 5	Brown	Spare
Pin 6	Red	Switched battery feed (for refrigerator when towing)
Pin 7	Black	Suitable earth in towing vehicle (return circuit for Pin 6)

NOTE

1. Connections to Pin2, 4 & 6 may vary on earlier installations.
2. Ensure that no bridging connection exists between Pin 2 and Pin 3 of the 12S caravan plug.
3. Pin 2 and 6 for charging Caravan Battery and running refrigerator should be connected through a relay, so that current is only passed when engine is running. Maypole dual charging relay kit (Part No.MP292) is recommended for this purpose.
4. Pin 4 which supplies interior lights or battery charging for caravans wired to the new system, is switched to battery charging by a relay in these caravans when the vehicle engine is running.
5. Always use a suitably fused battery supply for live connections. When extending the 12S cable, use wire of the same or greater thickness to prevent voltage drop.