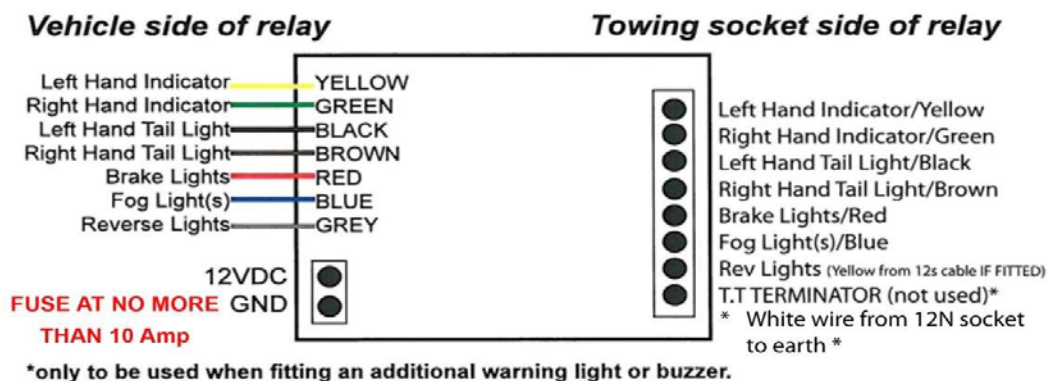


FITTING PROCEDURE

- Before commencing with installation please read all pages of this fitting instruction carefully.
- All vehicle road lights must be working correctly before commencing with installation.
- Ensure vehicle circuits are de-energised, isolated and safe to work on (Always follow vehicle manufacturer's instructions).
- Fasten 12N Pre-Wired socket mounting plate between the towball and towbar neck flange using the existing towball bolts.
- Run the 12N, 7 core cable into the boot through a grommet. This may require an appropriate hole to be drilled in the vehicle.
- Locate the vehicle's wiring harness.
- Connect GND terminal of the PFJ01 to vehicle earth (-0 volts), using 9/0.3mm black wire and a red 6.4mm ring earth terminal.
- Connect 12VDC terminal of the PFJ01 to +12 volts dc supply, through a 10 amp fuse, using 28/0.3mm red wire. The source of supply for the PFJ01 should not feed any other system or load. The source of +12 volts should be a spare fuse on the vehicle's fuse board (Check vehicle manual).
- Using a high impedance automotive tester or digital volt meter check that vehicle +12volts dc is present on 12VDC terminal. The "Power On" LED should now be lit. (WARNING Only test for voltages through the wire aperture on the terminal blocks and not the screw head.)
- Connect each of the PFJ01 control input wires to the vehicle's rear road lights, as specified in the fitting diagram below. If insulation displacement tap connectors are the preferred method of connection, use Red insulation displacement tap connectors. Test the appropriate output terminal for +12volts dc after each connection. (WARNING only test for the vehicle road light function wires using a high impedance automotive tester or a digital volt meter.)
- Connection identification warning labels should now be attached by folding around the relevant wires adjacent to the joints on the vehicle's wiring loom. (Remember to include contact details on warning label).
- When all vehicle road light input wires have been connected and the output terminals have tested OK, connect the 12N socket 7 core cable to the appropriate PFJ01 output terminals using the fitting diagram.
- Connect the white wire from the 12N socket 7 core cable to vehicle earth (-0 volts), using a red 6.4mm ring earth terminal. Reconnect vehicle power (Always follow vehicle manufacturer's instructions.)



- **Fog light function-** to activate fog lights on attached trailer- turn fog lights on, then immediately off. Fog lights ONLY be illuminated on trailer. As a reminder, a warning buzzer will activate every 90 seconds in the vehicle. To will now cancel this function- turn off side lights.
- **For vehicles with combined brake and tail light you have to discard (not connect) the black and brown wire on the bypass relay (input side only) and connect the single wire on the vehicle to the red wire on bypass relay.**

TEST PROCEDURE

1. Switch the vehicle engine off and remove the 10 Amp supply fuse to the PFJ01.
2. Re-insert the 10 Amp supply fuse, and check the "Power On" LED is lit.
3. Start the vehicle engine and turn on and off the vehicle road lights in the following sequence:-
Side lights, Brake lights, Left indicator light, Right indicator light, Fog lights
4. As each vehicle road light function is switched on in the sequence indicated above, test the corresponding 12N socket output (as shown in the fitting diagram), +12 volts dc should be measured on each corresponding output.
5. With the vehicle engine running, commission the installation by plugging a 12N socket tester or trailer board into the 12N socket. (Note some socket testers do not trigger the indicator audible bulb failure warning). The operation of the tester or test board should mirror the vehicle's rear road light operation.
6. All the vehicle road light functions should now be turned on together to 'pressure test' the complete electrics installation. All input cables and terminations should be checked for 'cool' operation. All the road light functions should be seen to operate on the 12N socket tester. When a trailer test board or trailer is connected to the 12N socket and the directional indicators operate, an audible indication of operation should be heard and the T.T TERMINATOR pin output should become energised. This output is for use with a second buzzer or LED dashboard warning light.

If the customer's towed unit's light fail to operate correctly, turn off all the vehicle road light functions, disconnect the customer's towed unit and test the socket road light function output that was not energising using a high impedance automotive tester or digital volt meter, if the socket output is now found to be energised +12volts dc (when switched on), this shows that a fault exists in the customer's towed unit.