# **DETHLEFFS CARAVANS**

## TOWING CONNECTOR AND TOW BALL INFORMATION

#### **TOWING CONNECTOR**

In order for all of your caravans towing features to be enabled, your vehicle will need a 13-pin round Euro connector. This connector is required to charge the caravan battery while towing, power the electronic anti-sway, run the fridge on 12V, automatically park the satellite dish, puts the caravan into towing mode (interior lights, TV, water pump and heater all switch off), and provides power for the optional wireless rear view camera. The 13-pin connectors have proven to work reliably for many years compared with the 12-pin flat (Aus/NZ) towing connector.

An auto-electrician or your vehicle dealership can install the 13-pin connector. Please provide them with the 13-pin wiring diagram on the following page. It is very important they wire it exactly as the instructions show. They're welcome to call or email us if they need clarification, but the diagram should be perfectly adequate. You can leave your existing flat connector in place (for towing other trailers) and have the 13-pin round connector mounted on the opposite side for caravan use. Contact us if you require a 13-pin socket kit to be sent to you.

Please note, a 7-pin to 13-pin adaptor is not sufficient as it will only power the towing lights.

#### **AL-KO HIGH-RISE TOW BALL**

The caravan requires an AL-KO 50mm high-rise tow ball. If you don't already have one, we can supply and fit it here on the day of your caravan handover. These tow balls are 25mm higher than a standard tow ball and, once fitted, the centre of the ball needs to be within 420-460mm from the ground. Refer to images below:

#### **TOW BALL HEIGHT**

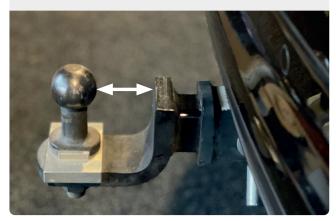
Check the distance between the centre of your current tow ball to the ground is 395-435mm. This will mean that, once the AL-KO high-rise ball is fitted, it will be within the optimum height range.

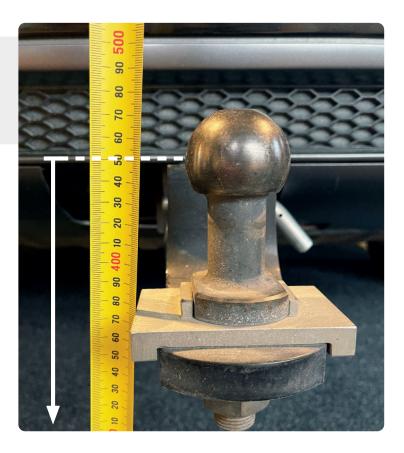


#### HITCH AND BALL SPACING

Measure the distance between the front edge of the tow ball and the hitch plate. This needs to be a minimum of 50mm.







If either of these measurements don't fall within the ranges provided, email brent@centralrv.co.nz prior to your handover.





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## 13-PIN WIRING DETAILS

PIN	FUNCTION	DETHLEFFS WIRE COLOURS	COMMON NZ COLOURS
1	LH indicator	Yellow	Yellow
2	Rear fog light	Blue	NA
3	Earth for lights	White	White
4	RH indicator	Green	Green
5	RH tail lights (see note below)	Brown	Brown
6	Brake lights	Red	Red
7	LH tail lights (see note below)	Black	Brown
8	Reversing light	Pink	Black or blue
9	ATC power (12V +)	Orange	Red
10	Fridge power (12V +)	Grey	Red
11	Earth for fridge (GND)	White/black	Black
12	Not used		
13	Earth for ATC (GND)	White/red	Black

### 13-PIN SOCKET WIRING

- Connect direct from battery via 30 amp overload to ignition switched relay, connect relay output to pins 9 and 10 (loop together).
- Run earth from rear chassis area to socket, connect to pins 11 and 13 (loop together).

### NOTE:

- » Use 30 amp cable minimum.
- » Pins 5 and 7 loop together for non-European vehicles.
- » VSR not recommended due to smart alternators in many new vehicles.



