

## PLEASE READ THIS GUIDE CAREFULLY PRIOR TO TOWING A TRAILER

### *General Safety & Instructions – trailer towing*

#### **How To Connect A Trailer:**

When connecting a trailer to your towing vehicle, extra care must be taken to ensure that every step is executed correctly. Failure to comply with all instructions may result in faulty lighting or an accident due to the trailer disconnecting.

**Step 1.** Inspect the towing vehicle's tyres, tow bar and tow ball to ensure their serviceability, rating and overall integrity. Every new Australian vehicle's tow bar will come with a compliance plate stating the tow bars maximum load limit and an overall tow rating of the vehicle in which the manufacturer states the tow bar can legally comply (as seen in the images below).

The capacity of your tow bar and coupling must be at least equal to the loaded mass of the trailer. A tow bar fitted to a vehicle built after January 1992 must be marked with its load capacity and either the vehicle model for which it is designed or the tow bar manufacturer's part number.

- Tow bar must not protrude dangerously from a vehicle, or have sharp corners that could be a safety hazard when no trailer is fitted to your vehicle.
- Tow bar chain attachments must be able to withstand the rated load capacity of the tow bar.
- The safety chain attachments must be mounted adjacent to the tow coupling and arranged so as to maintain the direction of the trailer in the event of coupling failure or disconnection.

Tow bars with a removable towing lug should be fitted with safety chain connections on the non-removable part of the tow bar. If the chain connections are on the removable lug then the lug must be restrained by an additional chain to prevent disconnection from the tow bar if the lug attachment fails. Always ensure the pin is secure and the bolt is tight.

Many tow balls also state their rating on the top or on the rim of the ball as seen in the picture below. (If in doubt, DON'T USE IT. Refer to your towing vehicles owner's manual or contact a qualified tow bar specialist for further inspection).



**Step 2.** If the tow bar and tow ball are in good working order, attach the trailer coupling over the towing vehicle's tow ball checking both visually & physically that the trailer will not disconnect for any reason whatsoever.



Ensure the coupling locking latch is in the locked position or the trailer will bounce off the tow ball whilst driving.

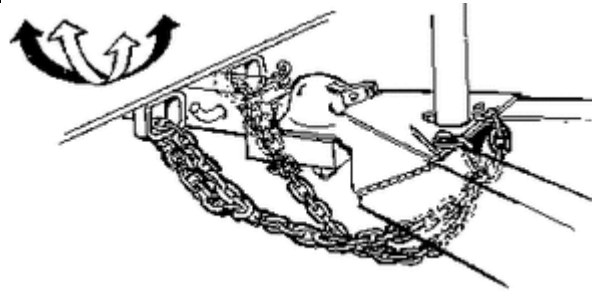
**Step 3.** The trailer must now be connected to the towing vehicle using a safety chain to prevent the trailer from disconnecting from the towing vehicle in the event that the coupling should come loose from the tow ball or during an accident. The chain(s) must be connected to the towing vehicle using D-shackles that are rated to withstand the combined weight of the load and the trailer. (Trailers towing over 2.5 ton ATM must be connected to the towing vehicle using 2 safety chains.)

The best way to connect the chains from the trailer to the towing vehicle is in a crossed over pattern where the chains act as a cradle to prevent the trailer coupling from hitting the ground in the event of disconnection. Ensure there is enough slack for maneuvering and cornering.

Trailers over 2.5 tonnes ATM must have two safety chains of designation of 3500 kg complying with Australian Standard AS 4177.4-1994 or Australian Standard AS 4177.42004.

Allow only enough slack in the chain(s) for turns, so that the trailer will not hit the ground when disconnected from the tow ball. This will ensure the trailer remains with the towing vehicle and doesn't roll away and cause further harm.

Important: the chain(s) should never drag along the ground! (This will weaken the chain(s) over time causing it to break much easier under pressure)



Double back excess chain to prevent dragging. Two chains are crossed under the tow ball to catch the coupling if the trailer disconnects.

**Step 4.** Connect the power cable plug from the trailer into the towing vehicle input ensuring all lights are working correctly. (These include: Stop lamps (Brake lights), indicators, parkers and number plate lights).

**Step 5.** Check that the jockey wheel is in the raised and locked position, ensure the hand brake (where applicable) is off and the coupling brake lockout is in the open position to engage braking on over-ride braking systems.



Always remember to raise the jockey wheel to prevent damage.



Always ensure the handbrake is off whilst driving or excessive damage to the brakes may occur.

You are now connected and ready to go. It is good practice to always check that both the towing vehicle and the trailer's tyres are inflated to the manufacturers specifications before towing.

## Towing Tips

Those that have been towing for years will tell you, there is an art to towing a trailer. If you haven't towed for a while or are new to the trailer game, it is important to refresh your driving tips before getting out there on the open road.

**Tip 1.** Remember that trailer wheels won't follow in the exact line that your car's tyres travel. Trailers have a tendency of "cutting" corners, therefore, extra space is required when turning corners with a trailer. (Car trailers especially require extra space for turning corners. It is recommended that corners are taken "wide" to ensure the trailer doesn't cut into the corner causing the tyres to jump a medium strip or contact any objects.)

**Tip 2.** Always allow extra space whenever overtaking, passing or turning with a trailer. (As touched on above, a trailer will generally be wider than your car, therefore, extra room will be required to pass parked vehicles etc.)

**Tip 3.** Always allow greater stopping distances when towing a trailer. The weight of the trailer will reduce the performance of your car's brakes and require greater stopping distances. (Remember to break early and lightly for corners.)

**Tip 4.** Accelerate, break and steer smoothly to prevent swaying. (Having majority of a loads weight in the rear of a trailer will encourage swaying, therefore, always secure majority of the loads with a slight positive weight in the front half of a trailer closest to the towing vehicle.)

**Tip 5.** Use a low gear when traveling down hills to increase vehicle control. (This will assist you with steering and

braking.)

**Tip 6.** It is a good practice to always have someone directing you when reversing with a trailer and apply your hazard lights to warn other road users that you are attempting to reverse. (A large number of incidences occur whilst reversing a trailer due to hard maneuvering and decrease in visibility. If there is no one to guide you, physically inspect the area you wish to reverse into looking for obstacles and hazards prior to attempting the maneuver.

**Tip 7.** Always be aware whilst on the roads and continuously remind yourself you are towing a trailer.

## How Much Can My Car Legally Tow?

Before hiring a trailer, it is important to know exactly what your vehicle is capable of towing. If a vehicle is overloaded, it can cause excessive damage to the vehicle and void any insurance as well as posing a major threat on our roads. Strong laws govern the overloading of trailers and are there to ensure the safety of all road users.

### How to check my cars rating:

A cars towing rating can depend on many combined factors including:

- The cars tow bar rating
- The tow ball rating
- Whether the trailer has brakes
- The rating of the cars tyres
- The cars transmission (manual / automatic)

Every new Australian car comes with a tow bar rating, either inside the drivers / passengers door, in the owner's manual or on the tow bar compliance plate, however many tow bars are after market and may require further investigation.

### Compliance Plates

Every Australian tow bar has a weight rating in which the manufacturer states the tow bar can legally comply. The capacity of your tow bar and coupling must be at least equal to the loaded mass of the trailer.

A tow bar fitted to a vehicle built after January 1992 must be marked with its load capacity and either the vehicle model for which it is designed or the tow bar manufacturer's part number.

### Cars Without Compliance Plates

If your tow bar is older or is not marked with a compliance plate, you should seek advice from the manufacturer or a suitably qualified person to determine the tow bar's capacity.

If the capacity is unknown, the trailer's maximum loaded mass must not exceed your vehicle's unloaded mass.

If the trailer has brakes that can be operated from within the towing vehicle (electric brakes) you may tow up to 1 1/2 times the towing vehicle's unladen mass.

You can check your vehicle's unladen mass and your trailer's laden mass at a licensed weighbridge or at your local sand and metal depot. They must each be weighed while they are NOT connected.

## **Tyres**

Before towing a trailer, it is important that you check to ensure your cars tyres are rated to withstand the load being towed. Failure to do so will overload the tyres.

## **Tow Ball Rating**

- Many tow balls state their rating on the top or on the rim of the ball as seen in the picture on the right. (If in doubt, DON'T USE IT. Refer to your towing vehicles owner's manual or contact a qualified tow bar specialist for further inspection).