

# **GENERAL TRAILER GUIDELINES**

Towing a trailer requires additional driving skills and safety precautions. The trailer may be a caravan or camper trailer, boat trailer, horse float or special-purpose trailer. A risk assessment must be conducted where there is an increased risk, taking into consideration these guidelines.

The driver of the vehicle is legally responsible for being safe when towing a trailer, and ensuring the towing vehicle, trailer and couplings meet the minimum standards. This guide outlines those requirements.

Towing heavy trailers, boats and caravans at high speed or on country roads, close to or above the vehicle's tow rating can be very high risk.

Each area should risk assess the skill and experience of any driver towing a trailer. Inexperienced drivers should gain experience with an experienced driver supervising and in a low risk environment.

A trailer must not be towed unless it is roadworthy and meets all the mass, lighting, and braking requirements.

The load must be restrained so that it stays on the trailer during normal driving conditions, including heavy braking, cornering, acceleration and even minor collisions. The load must not negatively affect the stability of the vehicle, making it difficult or unsafe to drive and must not protrude from the vehicle in a way that could injure people, damage property or obstruct others' paths.

Refer to the <u>Driver and Vehicle Safety Procedures</u> for further guidance.

### **TOWING VEHICLE REQUIREMENTS**

#### Towing capacity

- The towing capacity of the vehicle used must be legally compliant to tow the total weight of the boat/vessel, trailer, and equipment, including passengers.
- The manufacturer's towing limits must be adhered to at all times.
- Towing capacity and tow bar capacity details can be found in the vehicle's owner manual, or the GCM (Gross Combination Mass) specified on the vehicle's registration certificate, or via an online search for Australian specifications, or the tow bar's manufacturer. If manufacturer's specifications aren't available, see <u>Light vehicle</u> towing regulations.
- If no towing capacity is specified for your vehicle or towbar, the trailer's maximum loaded mass must not exceed your vehicle's unloaded mass. However, if the trailer has brakes that can be operated from within the towing vehicle you may tow up to 1 1/2 times the towing vehicle's unladen mass. The vehicle's unladen mass and the trailer's laden mass can be checked at a licensed weighbridge or at a sand and metal depot. They must each be weighed while they are NOT connected.

#### **Brakes**

- The vehicle being used to tow the trailer must have compatible braking to ensure it is legally compliant and that there is an adequate safety buffer in place for vehicle handling, braking and towing. The braking mechanism and trailer must be checked for safe function.
- If the trailer has its own brakes, the driver must know how they work and how the park brake system is operated.
- If there are no trailer brakes, the maximum load is 750kg.

#### Insurance

- The towing vehicle must be comprehensively insured.

### TRAILER REQUIREMENTS

- The trailer must be in good condition, suitable for the tasks being undertaken and must meet requirements for restraining loads.
- The trailer must be insured.
- The driver should do daily checks on the trailer and towing set up.
- Height of tow ball above the ground must match trailer.
- Size and style of the tow mechanism must match the trailer.
- Max tow ball mass must be <10% of GTM (Gross Trailer Mass), so that the trailer and vehicle is stable whilst towing. Check the trailer plate for the specifications. As an initial indication, two people should be able to lift the trailer onto the tow ball. A weighbridge may need to be used to confirm the tow ball mass by placing the jockey wheel on the weighbridge.
- Size, length and fasteners to connect safety chains from trailer to vehicle must match weight limit, have length for cornering and reversing and appropriate rated shackles.

- The shape, size, length and number of active pins in the wiring and plug between the vehicle and trailer needs to be checked, matched and checked that lights correctly work.
- The limits of how far loads can project from the back and sides of a trailer must be complied with. See <u>Light</u> <u>vehicle towing regulations</u> for these limits.

## PACKING/LOADING

## Load in a balanced symmetrical system

- Heaviest over the axle, lightest towards the ends.
- Load heavier items at the bottom and lighter items on top.
- Fill gaps between larger items with smaller items or packing material.
- Keep some weight over the tow ball.

## Pack emergency and spares equipment on top and accessibly

### Pack so that things are held snugly by other objects and can be roped in

## Raise and secure tail gates and ramps

## Plan for spills

- Use appropriate jerry cans for fuels
- It is not recommended that hazardous chemicals or dangerous goods be transported via University or private vehicles
- If transporting chemicals is necessary, they must be bunded and appropriate spill kit provided.

## Secure load with tie down straps, ropes and tarps

- A load can move and must be restrained in all directions, including upwards.
- Light and heavy loads move just as easily don't assume a heavy load will be held by its weight: it won't.
- Braking forces are typically higher at low speeds don't assume because you are travelling slowly that you don't have to restrain your load correctly.
- Ropes are only recommended for light loads. Ensure ropes are suitable for the load; otherwise, use webbing straps or chains.
- Cover the load (if required).
- Secure tarps (if used).
- Restrain light loads that could be blown away.
- A combination of methods can be used to achieve a safe and secure restraint.
- Don't use equipment that is broken, damaged or worn.
- If unsure, seek advice on restraining the load from more experienced colleagues.

#### **Projections**

- Do not exceed maximum length of projections overhanging from the vehicle, including rear, side and forward (see <u>Load Restraint Guide</u>).
- Attach appropriate warning signals to the end of any objects that project out from the back of the vehicle:
  - During the day: a flag/material which is brightly coloured and at least 300 mm square.
  - At night: a red light that can be seen from 200 m away.

## **BEFORE LEAVING**

### Check vehicle connection

- Tow ball, coupling & clip, safety chains and power cable, trailer park brakes, jockey wheel.
- Winch strap, turnbuckle & bow safety chain (if applicable).

### Check trailer wheels & tyres

- Wheel nuts, studs, bearings & tyres.
- Check for wobble, noises or rubbing sounds.
- Inflation tyre pressures: 40psi or 275 kPa.
- Check for uneven wear or damage on the tyres.

#### Check all spares and equipment are in place and serviceable

- Spare tyre/s, wheel brace, jack, handle, support base.

## Check padlocks & wheel locks have keys and spares (if relevant)

#### Check correct operation of the trailer's lights

#### Check jockey wheel is secure, in up position or removed and in trailer

## Check registration is current (if privately owned)

### SAFETY ON THE TOWING JOURNEY

#### All towing

- Adjust seat and mirrors
- Identify blind spots and consider extension rear view mirrors
- Switch lights on
- Monitor your vehicle's stability, steering and braking capacity
- Drive defensively
- Ensure safe braking distance
- Avoid sudden lane changes and swerving
- Use lower gear when travelling downhill. Know how to change gears manually, even in an 'automatic' vehicle.
- Slow down when travelling over bumpy roads or at rail crossings
- Drive at safe maximum speed
- Where areas are provided, pull over regularly to allow following vehicles to overtake
- Slow down for winds gusts eg passing trucks
- Be alert for highway hazards eg kangaroos
- Be aware of danger of over correcting
- Compensate for larger turning circle eg avoid gutters, poles
- Passengers must not travel in a trailer (including a caravan) that is being towed
- Reverse with a spotter outside the vehicle watching the rear of the trailer, ensuring the spotter stands clear and is always visible to the driver.
- Driver to take a break approximately every 2 hours to reduce fatigue.
- Apply the accelerator, brakes and steering smoothly and gently to avoid trailer sway, especially in wet or slippery conditions.
- Any fallen load must be picked up, if it is safe to do so, or someone arranged to retrieve it.

# Check the load and its restraint regularly during your journey to make sure the load remains secure

- Lashings can lose tension during the journey and loads may shift, settle or compress

#### See additional considerations for towing boats/vessels at Boats and boating activities

- Only suitably experienced skippers/coxswains are permitted to tow larger University vessels.

## **ARRIVAL**

## Check traffic, pedestrians and driveway access

#### Pull up evenly and squarely

## Mark out area with safety cones if required, especially if loading or unloading in traffic or public areas.

### **Leave trailer attached to vehicle** (if appropriate and safe)

- chock wheels
- engage trailer hand brake if present

## If detaching trailer

- first attach and lock down jockey wheel, if present
- engage trailer hand brake, if present
- chock wheels.

### Remove tarps and tie-down straps and/or ropes

#### **RETURN TO OWNER**

# Check tyres, covers, lights and cleanliness

## Wash with fresh water

- use brush and hoses
- attention is needed under wheels and connectors

# Record details in vehicle log

# Send a return email with details to designated person

## **REFERENCE LINKS**

### Light trailers and caravans

https://www.sa.gov.au/topics/driving-and-transport/vehicles/vehicle-types-and-specifications/light-trailers-and-caravans

### Light vehicle towing regulations

https://www.sa.gov.au/ data/assets/pdf\_file/0003/6375/MR25-Light-vehicle-towing-trailer-regulations-GVM-4.5-tonnes-or-less-05.....pdf

### **Load Restraint Guide**

https://www.ntc.gov.au/sites/default/files/assets/files/Load-Restraint-Guide-for-light-vehicles-2018.pdf

### The Driver's Handbook - Towing and Loads

https://www.mylicence.sa.gov.au/road-rules/the-drivers-handbook/towing

## Driver and Vehicle Safety Procedures

 $\underline{https://www.flinders.edu.au/content/dam/documents/staff/policies/health-safety/driver-vehicle-safety-procedures.pdf}$ 

# **Coxswain Safety Induction & Training Form**

https://staff.flinders.edu.au/content/dam/staff/documents/whs/coxswain-safety-induction-form.pdf

## Boats and boating activities

https://staff.flinders.edu.au/workplace-support/whs/information-documents/topic/boats-and-boating-activities