

Loading and towing safely

Information for light vehicles

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Information for light vehicles (eg car, utility vehicle).

Whether you're taking rubbish to the tip, moving house or going boating or camping, it pays to be up to date with towing and loading requirements.

On average seven people a year are killed and 26 seriously injured in crashes involving a light vehicle towing a trailer (the word trailer includes caravans, as well as boat, horse and garden trailers). Incorrect loading is a factor in around 27 light vehicle crashes a year including three deaths and five serious injuries.

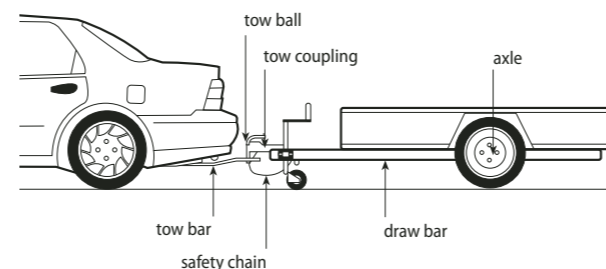
Make sure you're not one of them – follow the safe towing and loading guidelines in this brochure whenever you're loading up your car, utility vehicle or trailer.

How much can I carry safely?

To ensure your safety, and the safety of others, it's very important not to overload your vehicle or trailer. If possible, consult the owner's manual for the recommended weight limits to be towed or carried by your vehicle.

As a general guide for towing trailers without brakes, the maximum weight of a loaded trailer being towed should not be more than three quarters of the weight of the vehicle (unloaded) you're going to tow it with – and then only if your vehicle's brakes and tyres are in excellent condition.

Loaded trailers weighing more than 2,000 kg must have special brakes – for more information, please refer to the *Glovebox Guide to Safe Loading and Towing*.

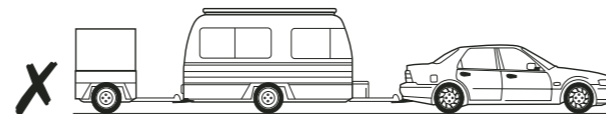


Tow connections

On average, inadequate tow couplings and safety chains contribute to one serious crash every year. The law requires you to ensure there is a safe and strong connection and at least one safety chain between towing and towed vehicles.

The trailer draw bar should be level or slightly nose down when the trailer is loaded. Trailers must be fitted with at least one safety chain which must be short enough to prevent the trailer's tow coupling from hitting the ground if the tow coupling breaks.

Light vehicles (excluding light tractors) are not permitted to tow more than one trailer.

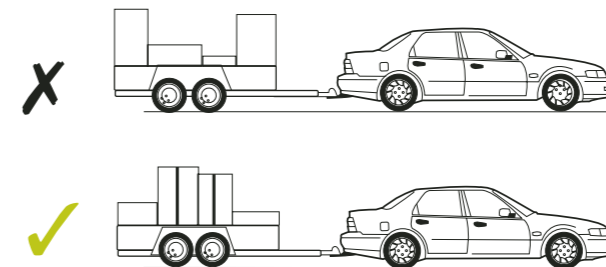


Loading light vehicles and trailers

The law says that you, as the driver, must ensure loads are safely placed, secured and not likely to annoy, distract or harm other road users, or cause damage to property (eg escape from the vehicle or drag on the roadway).

Arranging loads safely

- Spread a load of goods out evenly across the floor or deck of the vehicle or trailer, to keep its height as low as possible – and, in the case of the trailer, positioned as close to the trailer axle as possible. Avoid placing heavier loads towards the rear of the trailer.



- No part of the trailer body or its load is allowed to touch the ground.
- If using a roof rack, evenly distribute objects along and across the rack (between the left and right sides, and between the front and back of the vehicle) and secure with clamps or straps or ropes.
- If you have to stack the load, put larger and heavier items at the bottom.
- If possible arrange loads so they don't project outside the body of the vehicle (see *Overhanging loads* section). Minimise any projecting loads so you reduce the risk of injury to the driver, passengers and other road users.
- Check any goods inside or on your vehicle or trailer are placed where they won't injure anyone or distract the driver

Passengers

You should ensure that any passengers are sitting in a safe position and that they're using an approved safety belt or restraint (if one is fitted).

It is against the law for a person to ride in or on a vehicle, or in or on an object carried on a vehicle, in a manner or position that may cause injury to that person. It is also against the law to ride in a caravan while it is being towed.

Securing loads safely

All loads (whether on a trailer or inside a vehicle) should be properly restrained so they can't shift around while the vehicle is moving.

This means securely packed inside compartments that are:

- rigidly attached to the vehicle, or
- held securely in racks or cradles or frames designed to fit that size of object and which are rigidly attached to the vehicle, or
- held by webbing straps, ropes or clamps that are securely attached to appropriate anchor points (rails, hooks or eyes) on the vehicle.

Don't rely on the 'grip' (friction) between an object and the floor of the vehicle or trailer bed to restrain the load – remember this effect is eliminated when the vehicle goes over a bump that lifts the load upwards.

Tying your load down

It is recommended that you use webbing straps or ropes when fastening loads up to 100 kg to a vehicle or trailer. Ensure straps or ropes are in good condition, and strong enough to do the job. Also consider what type of fastening is appropriate for the type of load. Avoid passing a strap or rope over sharp edges – use additional packing if needed to protect the strap or rope from being damaged and weakened by the load.

A minimum of two straps or ropes should be used to prevent the load, or part of the load, from twisting. Secure straps or ropes to suitable anchor points on the vehicle or trailer and tighten before beginning your journey.

NB For loads over 100 kg, please refer to the *Glovebox Guide to Safe Loading and Towing*.



TIP: Keep each load's weight down by making more trips.

TIP: If part of the load is removed during the journey, you may need to re-arrange and re-secure the rest of the load.

Covering loads

Anything that could be affected by air movement or by the motion of the vehicle should be covered. Use netting or a tarpaulin to cover loose matter such as grass clippings, firewood, topsoil, and general rubbish to prevent spilling or shedding. Fragile loads (such as glass sheets) should be completely enclosed in case of breakage during the journey.

Animals

Animals should be transported in adequately ventilated cages, boxes, pens, crates, or containers that are suited to their size, and are secured inside or attached to the deck of the vehicle.

Lighting

At night the back of your trailer must show a red light. If your load covers up essential lights on your vehicle or trailer, you must fit temporary lights to your load to make sure you comply with legal requirements. For example, bicycles carried on a towbar-mounted cycle rack on the back of your vehicle can often cover up your tail lights.

A vehicle lighting retailer or garage can advise you on purchasing and fitting temporary lights to your load.

Dangerous goods

You need to take particular care when carrying dangerous goods such as compressed gases and liquids. Legal restrictions also apply. Please read Land Transport New Zealand's *factsheet 69* (available online at <http://www.landtransport.govt.nz/factsheets/69.html> or by calling 0800 699 000) before attempting to carry dangerous goods.

Overhanging loads

If your load extends more than 20 cm beyond the sides of your vehicle or trailer, or more than one metre beyond the front or back of either vehicle, then you must attach additional safety warning devices (flags or hazard panels in daylight and additional lights at night). Please refer to the *Glovebox Guide to Safe Loading and Towing* for information on these requirements.

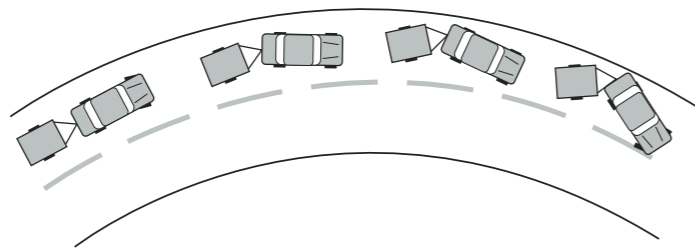
Safe towing guidelines

The maximum trailer towing speed is 90 km/h. However, don't tow a trailer at this speed unless you're sure that you can do so comfortably and safely.

If you're travelling more slowly than the traffic flow, be considerate. Keep left and leave space in front of your vehicle to allow others to pass you safely, or stop at a safe place to let other vehicles past.

General tips for safe towing

- As you turn, the extra weight of the trailer will continue pushing your vehicle ahead, especially on gravel or greasy roads. Apply brakes **lightly** before cornering (too much and your trailer could jack-knife).



- Allow extra space for stopping – open up at least a four second gap between you and the vehicle ahead. The gap should be extended in wet or windy conditions.



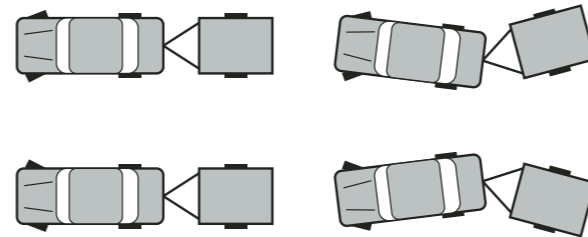
- Always use a lower gear when travelling downhill.

Swaying (snaking)

- Avoid sudden lane changes and changes of direction to avoid swaying or snaking.
- If the trailer starts to sway, don't apply your brakes – instead, remove your foot from the accelerator and allow the vehicle to slow down.

Reversing

- Turn the front wheels to the left to pivot the trailer to the right and vice versa if turning right, then straighten the wheels as the trailer moves in the desired direction.



- Back slowly and check clearances often.
- Soft ground may slow your trailer's response.



TIP: If you're towing a caravan, choose where you park carefully – roadside cambers can trap your caravan against poles.

Checks to make before and during a trip

- Make test stops at low speed to check the feel of your vehicle's brakes.
- Check all doors, hatches, covers and any load or equipment are properly secured.
- Check the trailer is correctly loaded by gently moving the steering wheel from side to side while the car is moving at about 40 to 50 km/h (this should be done on a good standard, clear road). Feel and watch the trailer response. If the trailer does not fall back into line quickly, stop, adjust and re-secure the load.
- Regularly check that any straps or ropes are tight – they may slacken during the trip if the load in your vehicle or trailer settles due to road vibration.
- Check the coupling and safety chain/s are properly connected.
- Check your vehicle and trailer brakes (where fitted), tyres and wheel bearings are not overheating.
- Check all lights are still working.
- Check the tyres are still correctly inflated.

TIP: Remember to allow extra time for your trip.

Checks to make between trips

If you own your own trailer, it must have a current warrant of fitness (WoF) and vehicle registration, just like your car! Regular maintenance between WoFs is also important – no matter how good you are at towing, you can never tow a badly maintained trailer safely.

- Check tyre pressures and look for signs of wear or damage.
- Clean all lights and reflectors.
- Check all lights are working.
- Check with your local garage to ensure the tow coupling and brake mechanisms are in good condition and properly lubricated.
- Jack the trailer up and spin the wheels, listening for rumbling noises which indicate worn wheel bearings.
- Check all anchor points (rails, hooks, eyes) are securely attached to the vehicle or trailer.

This brochure is intended to give a brief overview of safe loading and towing practices for light vehicles. For more information, including advice on specific types of loads, please refer to the *Glovebox Guide to Safe Loading and Towing*, available online at www.landtransport.govt.nz or call 0800 699 000.