Caravan Towing Guide

Towing your caravan safely and legally

Essential advice for both experienced and novice caravanners

Supported by
We would like to thank The Camping and Caravanning Club and The Caravan Club for their support in compiling the content within this document.
What’s covered by the guide:

This guide has been written to help both experienced and novice caravanners to tow their caravans safely and legally.

The guide applies to all trailer caravans:

- With a maximum laden weight not exceeding 3,500 kg
- Overall width not exceeding 2.55 metres
- Overall body length not exceeding 7 metres, excluding drawbar and coupling.

This is the maximum size of caravan that can be legally towed by a motor vehicle whose maximum gross vehicle weight is no more than 3,500 kg. Although there are caravans in use whose width is greater than 2.55m or whose length is greater than 7m, these can only be towed by vehicles with a weight greater than 3,500kg, typically commercial vehicles.

Find out more about touring caravan payloads at www.tourerinfo.co.uk/payloads

In this guide we provide simple, easily understood advice on:

- The safe matching of caravans to cars
- The calculation of the ratio of caravan weight to car weight for safe towing
- What you need to take into account before towing a caravan
- Good driving techniques so you can tow with confidence.
The masses defined below are in accordance with European Standards and will generally be stated in a caravan’s owner’s Manual.

(Alternative/previous names of terms are shown in italics).

**Maximum Technically Permissible Laden Mass (MTPLM)**

*(Maximum Authorised Mass)*

Also known as the Maximum Authorised Mass (MAM), stated by the caravan manufacturer on the caravan weight plate (normally mounted close to the entrance door but can be mounted anywhere on the external skin (some manufacturers are now mounting them inside the gas locker) - the absolute maximum weight that the caravan must not exceed to be legal on the road. It includes allowances for the user payload - all fluids (water etc) and personal belongings that you may wish to carry (clothes, food etc).

**Mass in Running Order (MRO)**

*(Sometimes referred to as MIRO)*

Mass of the caravan equipped to the manufacturer’s standard specification stated on the caravan weight plate. From 2011 an NCC Approved caravan will have an allowance in the MRO for basic equipment such as gas bottles, water in the water heater and central heating system, water in any water storage tanks, any essential fluids and the electrical hook-up cable. In older caravans the equipment included in the MRO will be different, so check your handbook for what is included.

**User payload**

*(Caravan Allowable Payload)*

Payload relates to the weights of all items carried in a caravan and is the allowance you have for:

- equipment, including any equipment fitted by the dealer
- Personal effects

The total of the allowances represents the difference between the MTPLM and the MRO.
Optional equipment
Items made available by the manufacturer or dealer over and above the standard specification of the caravan, e.g. spare wheel, air conditioning, caravan mover, awning etc.

Personal effects
Those items which you choose to carry in a caravan and which are not included in the MRO or optional equipment. (e.g. clothes, crockery, cooking utensils, bedding, portable TV, portable radio, footwear, books, awning and food.)

Actual laden weight
The actual weight of the caravan when you use it - including its optional equipment and your personal effects. You need to know this weight because it will determine whether you are legally or illegally towing and also within your caravan towing experience. Later in this guide we tell you how you can calculate or otherwise determine what the actual weight of your caravan is.

A typical example of weights/masses in a caravan:
- **MRO**, unladen weight, including basic equipment .......................... 1325 Kg
- **User payload**, allows for: ........................................................................ 170 Kg
  Optional equipment: spare wheel, caravan mover, awning etc. & Personal effects, including food, bedding, cutlery, clothing, books etc
- **MTPLM** (never to be exceeded) ................................................................. 1495 Kg

Hitch limit
The maximum vertical static load that the towing coupling can bear, stamped on a plate on the coupling. See also the caravan drawbar limit, sometimes printed in the owner’s manual.

Hitch height
The height of the centre of the coupling hitch should lie in the range of 385mm to 455mm above ground level with the caravan laden and level front to back.

Noseweight
The downforce that the caravan’s coupling head imposes on a car’s towball, measured by a noseweight gauge - when stationary it should never be greater than the towbar/ball or hitch limit values, whichever is the lower.
The Car

The towing vehicle in this guide is assumed to be a car. The masses defined below will generally be stated in a car owner’s manual. (Alternative/previous names of terms are shown in italics).

Kerb weight

Car manufacturers’ definitions vary but in general terms it is the weight of the car in working order (with fuel and fluids). Depending upon the exact definition used by the car manufacturer, this may or may not include a 68 kg allowance for the weight of a driver and a 7 kg allowance for his luggage, but will not include a weight allowance for passengers or their luggage.

Gross vehicle weight (GVW)

The maximum allowable weight of the car when fully loaded. When towing, this will include the noseweight of the caravan.

Note: In other documents this may also be referred to as the Maximum Permissible Weight (MPW) or Maximum Authorised Mass (MAM).

Gross Train Weight (GTW)

The maximum permitted combined mass of the car and trailer as specified by the car manufacturer. Usually the sum of the Gross Vehicle Weight and Towing Load Limit. However, the car manufacturer sometimes restricts the car’s capability to carry payload within it (e.g. 7 occupants, perhaps) while simultaneously towing a heavy trailer or caravan. In such cases, the GTW may be less than the sum of GVW and Towing Load Limit. GTW must not be exceeded in use of the combination.

Towing load limit

(also known as the Maximum Permissible Towing Mass (MPTM) or Manufacturer’s Braked Towing Limit)

The maximum weight of a braked trailer that the car is allowed to tow.

Combined MAM

(sometimes referred to as Gross Train Weight – GTW)

A term commonly used in driving licence legislation. The sum of the car’s Gross Vehicle Weight and the caravan’s Maximum Technically Permissible Laden Mass. This figure can be greater than the car’s Gross Train Weight, as long as the actual weight of the combination in use does not exceed the GTW - i.e. car and/or the caravan must not be fully laden in such a case. See page 28 for how this figure is used on driving licence limits.
Noseweight Limit

The maximum vertical static load that the towbar can support through the towball. Published by the towbar manufacturer and shown on a plate on the towbar. This may also be known as the S-value, Tongue Weight, Tongue Load, Noseweight Limit or Towbar Load Limit.

The car manufacturer will also define a limit for maximum vertical static load that the car can tolerate (and this will usually be quoted in the Owner’s Manual). This figure can differ from that marked on the towbar, in which case the lowest value is the limit which must be observed.

Towball height

The height of the centre of the towball should lie in the range of 350mm to 420mm above ground level when the car is laden. Most manufacturers define this height with the car at full load, which can mean the towball will sit above this height range at more normal loading conditions. Note that for cars with dynamic ride height adjustment, the suspension must be at the normal running level before taking a measurement of towball height.
Calculating payload and actual laden weight

The mass of the personal effects required for two people to go caravanning is approximately **100kg**. This may include: bedding, clothing, cooking utensils, crockery, cutlery, food and external water carrier. A further 25kg for each additional person should be allowed for items such as books, drinks, and other non-essentials.

You can

a) weigh each item before it is placed in the caravan and add the total to the MRO or

b) take the fully loaded caravan to a public weighbridge.

The address of your nearest public weighbridge can be obtained from your local Council’s Trading Standards Department (Weights and Measures).

**Note:** Although regularly checked, weighbridges may give varying results as they are calibrated for much heavier vehicles. A public weighbridge operator will give you a written or printed record for each weighing.

or

c) use a portable weighing scale designed for use with trailers. These typically weigh one wheel at a time and then add up the weights.

**Remember:** The weight of the battery, gas cylinders and any manufacturer or dealer options must always be taken into account. Note an allowance for gas, fluids and the hook up cable is included in the MRO.

Calculating the caravan/car weight ratio

This ratio is the actual laden weight of the caravan expressed as a percentage of the Kerb Weight of the car, i.e.:

$$\frac{\text{(Actual laden weight of the caravan (use the MTPLM figure if unsure))}}{\text{(Kerb weight of the car)}} \times 100\%$$

**Why is this ratio important?**

It is used to ensure your fully loaded caravan is appropriate for your towing experience as it has a major influence on towing stability.

**The caravan industry recommends:**

For a **novice** caravanner, ideally, this ratio should not exceed 85%.

For an **experienced caravanner** the maximum recommended ratio is 100%, provided the figure is permissible in respect of the tow car’s published capability.

**Remember:** The weight of your personal effects and the optional equipment you have fitted will affect the result: Keep the caravan as light as possible – the lower the weight, the better the match and, provided items are stowed properly, the safer it is to tow.

**Note:** Care must always be taken not to exceed the car’s loading and towing limits including the combined MAM which takes preference over the weight ratios as mentioned above.
Safely matching the caravan with the car

1. Check your driving licence is suitable for your car and caravan combination - (see page 28).

2. Stay safe and legal:

To ensure that the combination of car and caravan is legal for use on the public highway you must ensure that:

- Your car’s GVW is not exceeded,
- Your caravan’s MTPLM is not exceeded,
- The combined laden weight of your car and caravan does not exceed your car’s combined MAM.

When determining the noseweight ensure that that the lowest load limit of these four elements is not exceeded:

- The car’s towbar and ball, and the car’s own noseweight limit
- The caravan’s drawbar limit
- The caravan braking system overrun device
- The caravan hitch coupling

These limits can usually be found stamped on the towbar and hitch themselves.

Then make sure that the caravan noseweight lies within the 5% to 7% range of the caravan’s laden weight or MTPLM if the laden weight is not known (see page 10).

Information on car and caravan limits may be found in the manufacturer’s handbook.

Car / Caravan matching

“Can my car tow this caravan safely?”

Dealers and Clubs can assist with the matching process if you need help.

Introducing Tow Check

NCC’s Tow Check is an easy to use online service that checks your car and caravan combination is safe and that whilst towing you remain lawful. Each car and caravan match is produced by a weight calculation that takes into consideration relevant driving licence restrictions and is based on towing expertise.

www.towcheck.co.uk
Loading a caravan

Important Guidelines:

- **Never exceed** the MTPLM. Remember that the weight of any optional extras that you may have added will need to be considered in your overall weight calculations, e.g. a caravan mover.

- In general, the higher the noseweight, the better the stability of the combination. **Experience shows that noseweight in the region of 5% to 7%** of the actual laden weight of the caravan is safe and normally achievable. More noseweight is safer still, but only if the characteristics of your outfit permit it. Adequate noseweight is essential to ensure good high speed stability for the combination. The way in which the caravan is loaded is critical. Heavy items placed at the front and rear or stored at height could destabilise the caravan under tow. The safest course is to place heavy items directly on the floor, close to the caravan axle, allowing you to achieve the correct noseweight. All loads should be restrained, as loose items within a caravan can move and create an unstable condition.

- Stability enhancement devices such as a mechanical stabiliser or electronic stability control system should never be used as a remedial measure when a caravan/car combination has poor stability. However, such aids can make a well-balanced caravan/car combination easier to handle on poor roads and in windy conditions.
The loading process

Follow these simple steps before each trip:

1. Ensure that the handbrake of your caravan is fully engaged, the wheels are chocked and the corner stabilisers are down.

2. Weigh items before loading to ensure that you remain within your payload allowance.

3. Load location:
   - Heavy items (e.g. your awning) on the floor directly over the axle/s.
   - Medium weight items, e.g. external furniture, barbecue, water carrier, should be placed on the floor, close to the axle. Only light items should be stored in the overhead lockers.

4. Remember:
   - Fixed beds - If your caravan has a rear fixed bed, do not fill the base with heavy items.
   - Fluids - Empty water tanks or containers and toilet cassette before moving off.

   Note: Carry a small container of water in the fridge for en route drinks rather than a part full tank.

5. Ensure that all items are secured to prevent them moving about in transit.

6. When all items are loaded safely, raise the corner steadies, remove any chocks from the wheels and check the noseweight. Use a proprietary noseweight gauge (ideally one which complies with BS 7961), follow the maker’s instructions and ensure that the measurement is made at the tow hitch connection point.

7. If the noseweight is not correct then adjust the position of the items within the caravan until you achieve the correct value. (You might need to take some items out). Avoid moving heavy items to the front or rear of the caravan to achieve this. Concentrate the load above the axle/s.

Finally, be mindful that the weight is distributed evenly in the caravan to ensure that each wheel carries approximately the same load.

You are now ready to connect up to the car.
The towball assembly

Care must be taken when matching the towball type to the coupling head. Generally it is best to use the towball supplied with the towbar (assuming that the ball is not integrated into the design, as in the case of a swan neck or detachable bar).

However some caravan coupling heads, e.g. those fitted with AL-KO AKS stabilisers, **MUST** be used with a special AL-KO bolt-on towball available from AL-KO or reputable towbar fitters, or with a fixed or removable swan neck type towbar.

This ensures that these relatively large coupling heads can articulate freely without interfering with the neck of the towball. Failure to use the correct towball in these circumstances can lead to towball and coupling damage and potentially cause inadvertent detachment.

**Very important** - if your car is fitted with a detachable towball and you have removed the towball from the connecting socket, you should ensure that it is fully engaged and the lock mechanism has worked correctly when you replace it.

Ensure that any road dirt or debris is cleaned thoroughly from the engagement receptacle prior to refitting and always follow the manufacturer’s assembly instructions precisely. Check that the ball has fully locked home after refitting. Failure to follow the towball manufacturer’s instructions could result in the towball disengaging unexpectedly.
Hitching and unhitching a caravan

This becomes easier with practice. Follow the same routine each time:
Check the noseweight of the laden caravan every time that you hitch it up and adjust the position of your personal effects if necessary.

When hitching to the car:

1. **Engage**
   the caravan handbrake

2. **Chock**
   the caravan wheels (particularly, if on a slope)

3. **Raise**
   the corner steadies
4. **Lift**
   the caravan front on the jockey wheel if necessary and

5. **Check**
   the noseweight

6. **Reverse**
   the car (with assistance) up to the caravan

   **Note:** For your safety, you are strongly advised not to stand between the car and the caravan

7. **Connect**
   the breakaway cable

   **Note:** See further guidance on connecting breakaway cables on pages 20 and 21.

8. **Engage**
   the car’s handbrake fully and then

9. **Release**
   the caravan handbrake fully
8

**Move**
the coupling over the towball then

**Engage**
the caravan handbrake

9

**Raise**
the release handle and

**Lower**
the caravan with the jockey wheel

10

**Click** the release handle (ensure the coupling is fully on the ball) and then

**Confirm** coupling engagement by raising the caravan a little using the jockey wheel

11

**Release**
the caravan handbrake fully

**Wind up**
the jockey wheel fully then

**Lift**
the jockey wheel column fully
Clamp the jockey wheel with its locking lever.

Connect the electrical system.

Note: The car shown has a 13 pin plug, however, it may have 1 or 2 plugs, 12N and 12S system.

Check all lights, indicators, reversing lights etc. on the car and the caravan are working correctly.

Recheck the coupling, breakaway cable and electrical connection(s), caravan brake lever is released.

Collect any chocks and corner steady pads.
Always check...

that the coupling indicator, where fitted, shows green for successful coupling.

Also check that if an integral stabiliser is fitted, the indicator is showing green. If a red indicator is showing in either, then the engagement is incorrect.

Walk all around the caravan to ensure that all the doors, windows, lockers and roof lights are closed and locked, check that any mains hook up is disconnected and the gas supply is turned off at the cylinder shut off valve.

Return to the coupling and CHECK AGAIN that the hitch is fully secured, the brake is off and that the breakaway cable is correct.
When unhitching from the car

**Note:** If the ground is uneven you may need to level the caravan from side to side using a spirit level or level indicator as a guide. The corner steadies are not intended to level the caravan, and any substantial cross slope may have to be countered using a ramped block under the wheel/s.

1. **ENGAGE** the handbrake on the car and the caravan.
2. **TURN OFF** the car’s engine.
3. **LOWER** the caravan jockey wheel.
4. **CLAMP** the shaft of the jockey wheel.
5. **CHOCK** the caravan wheels, particularly if on a long slope.
6. **DISCONNECT** the electrical system (make sure that the cable is not left to trail on the ground where it may become damaged).
7. **RAISE** the front of the caravan on the jockey wheel whilst releasing the coupling clear of the hitch ball.
8. **UNCLIP** the breakaway cable and stow carefully (tripping hazard).
9. **DRIVE** the car away from the caravan (or **MOVE** the caravan away from the towball).
10. **USE** the jockey wheel to level the caravan front to back.
11. **LOWER** the corner steadies, using pads if the ground is not firm.
Caravan electrical connections

Continental caravans and those manufactured in the UK from 2009 are usually fitted with a single 13 pin plug...

Caravans may be fitted with two 7 pin plugs (12N & 12S) for attachment to the car...

The important difference with the 13 pin plug, when compared to the old 12N/S type, is that the plug has an inner ring assembly that is independent from the outer body. To remove the plug it is important to rotate the outer body a full 90 degrees anti-clockwise, again until a click is heard or felt before withdrawing the plug from the socket. This will ensure that the inner and outer parts of the plug are returned to a locked condition.

You may need an adaptor, depending upon the electrical socket(s) fitted to your car and caravan. Ensure that the cable/s at the front of the caravan are not so loose as to be able to catch or rub on the ground, nor so tight that they become taut when the car and caravan are at an extreme angle to each other. If possible, align the cable/s so that they are about 30cm (12”) longer than the front of the coupling head on the caravan before attachment.
**Breakaway cable**

All trailers with an MTPLM greater than 750 kg must be fitted with brakes. Above this limit and below 3500 kg MTPLM, all trailers must also be fitted with a safety device to provide protection in the event of the separation of the main coupling while in motion. A device referred to as a breakaway cable fulfils this requirement and, when fitted to a trailer, its use is mandatory.

The purpose of a breakaway cable is to apply the trailer’s brakes on accidental disconnection of the trailer from the towing vehicle, and having done so, to break. This allows the trailer to come to a halt away from the towing vehicle.

**Important: only use a breakaway cable that is designed for this and purchased from a reputable dealer. It is generally constructed using a thin steel cable, normally plastic coated and fitted with a means of attachment for connection to the towing vehicle.**

The cable and clip(s) should be regularly checked for damage. It should be routed directly to the car without loops or kinks and through any guides in the caravan drawbar. Always replace any damaged cable with one of the correct design to ensure correct function. It should then be determined whether or not the towbar has a designated attachment point (i.e. a part specifically designated by its manufacturer for a breakaway cable).

Where a designated attachment point is provided, either pass the cable through the attachment point and clip it back on itself (Fig 1) or, if the clip is designed to be used in this way and this method is permitted by the trailer manufacturer, attach it directly to the designated point (Fig 2). Refer to the caravan’s handbook for guidance.

![Figure 1](image1.png)  ![Figure 2](image2.png)
Where no designated attachment point is provided, the cable should be looped back around the neck of the towball using a single loop only, as shown in Figs 3 & 4.

In some instances it may be possible to attach the cable assembly either to a permanent part of the towbar structure, as long as this meets the approval of the towbar manufacturer/supplier, or to an accessory sold for the specific purpose of breakaway cable attachment. For vehicles fitted with detachable towbars, guidance must be sought from the towbar manufacturer/supplier on the correct method for attaching the breakaway cable.

When the breakaway cable is attached it must not snag in use on the trailer coupling head, jockey heel or any accessories, e.g. a stabiliser, bumper shield, cycle carrier, etc. There should also be sufficient slack in the cable to allow the towing vehicle and trailer to articulate fully without applying tension to the cable which could otherwise cause the trailer brakes to be inadvertently applied.

The cable must not be allowed to drag on the ground. If there is too much slack, the cable might drag on the ground and be weakened so that it has insufficient strength to apply the brakes in the event of the trailer becoming detached when in motion. Excess slack may also lead to the cable being caught on an obstacle when in motion, leading to inadvertent application of the trailer brakes.

Care must also be taken to ensure that the cable cannot be entangled with the electrical cables.
**Practical towing guidance**

Experience in towing is not essential for taking up caravanning. Any driver should soon find that towing a caravan is both rewarding and pleasurable.

If you are at all unsure, The Caravan Club and The Camping & Caravanning Club offer towing and manoeuvring courses.

Caravans should always be towed either level or slightly nose down. You should always build up speed gradually to get used to the different handling and braking characteristics when towing. A caravan will alter the performance of the car and the driver will need to anticipate potential hazards much earlier. Experience will help the driver to minimise sudden changes in speed or direction, which might otherwise lead to a towing combination becoming unstable, and help to create a calmer and safer driving environment.

The speed at which a caravan is towed is very important. The aerodynamic forces that act on the caravan at speed may tend to reduce the noseweight, especially as road speed increases. At a critical speed any loss of noseweight can cause instability and this could occur at a lower speed when driving into a head wind. Gusting cross winds, exposed bridge sections, valleys and proximity to large goods vehicles may also initiate aerodynamic instability.

Slow down, but do not brake, to return to stability.

**Speed limits:**

<table>
<thead>
<tr>
<th>National speed limits</th>
<th>Car</th>
<th>Car and caravan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single carriageway</td>
<td>60 mph</td>
<td>50 mph</td>
</tr>
<tr>
<td>Dual carriageway or motorway</td>
<td>70 mph</td>
<td>60 mph</td>
</tr>
</tbody>
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Additionally, caravans must not be towed in the outside lane of a three or more lane motorway, unless this is unavoidable due to roadworks, accident or obstruction. They may be towed in the outside lane of a dual carriageway with three or more lanes. A good reserve of power is necessary for towing up gradients at altitude. When going uphill, change gear in good time. If your car is running short of power or is behind a slower vehicle, keep well into the nearside and out of the way of other vehicles. Remember that some hills which can be ascended with relative ease often pose an unexpected challenge if you come to a standstill in traffic and then have to re-start from scratch.

When going downhill, take extra care to ensure you do not gain speed. This can be avoided by changing down a gear and reducing speed as you approach...
the slope. Don’t leave this gear change too late. Using low gears throughout the descent will reduce the strain on the car’s brakes. For automatics, you may need to manually change to a lower gear in anticipation of the effect caused by the gradient change.

Note: If you plan to tow in countries where long, high altitude climbs can be anticipated, you should seek expert advice on the suitability of your car for such journeys. Further experience and training should be gained before tackling some of the more difficult elements of towing (mountain passes, difficult terrain, etc.).

Reversing

Reversing competently comes with practice. Watch for slopes, cambers, potholes and other irregularities that can cause the caravan to deviate. As with all manoeuvres, the secret is to do things smoothly and at low speed. At night, additional lighting and/or a second pair of eyes may be needed.

Steering a caravan in reverse is counter-intuitive:

1. To cause the rear of the caravan to turn one way, the steering wheel has to be moved initially in the opposite direction from how you would normally steer the car.

2. One technique is to remove the hand from the steering wheel in the direction in which the turn is intended and pull downwards on the steering wheel with the other hand.

3. Once the initial turn is established, the steering is a significant camber or irregularities on a road surface.
Road lights
The lights on a caravan must be clearly visible and in working order. The car must also have an audible and/or visual warning device linked to the wiring leading to the caravan indicators. The warning device will indicate whether the caravan direction indicators are working or will indicate whether they are not.

On many modern cars this function is integrated into the bulb failure warning system.

If you are going abroad remember to check the local motoring regulations.

Carrying passengers
It is illegal to carry passengers in a caravan when it is being towed.

Rear number plate requirement
It is a legal requirement to have a rear number plate attached to the caravan that matches the towing vehicle, which must be illuminated at night.
Towing mirrors

The law demands that a motor vehicle must have at least two functional rear view mirrors. There must be one on the offside and one internally, though most cars are also equipped with a nearside mirror.

**Note:** When towing a trailer the law requires the driver to have a clear view down both sides of the trailer and 4m either side at a distance of 20m behind the trailer. This not only means that a nearside mirror is necessary it also means that, when towing a caravan, towing extension mirrors are almost certainly necessary as most caravans are wider than their tow cars.

There will be some combinations of car and caravan which can satisfy this requirement without extension towing mirrors. However, these are likely to be the exception rather than the rule and most combinations will need extension towing mirrors. Unless you are absolutely certain that your vision meets the legal criteria, extension towing mirrors should always be used for legality and safety when your caravan is coupled up. Remember to remove them when not towing.

Ensure that the extension towing mirrors project no more than 250mm* beyond the widest part of the caravan. It is desirable that the offside extension towing mirror contains a plane mirror so that you can judge speed and distance correctly. Also ensure that they have safety glass and/or are e-marked, if required.

Towing mirrors fitted to cars registered from 26th January 2010 must carry ‘E’ markings showing compliance with European Directives 2003/97 or 2005/27 or ECE Regulation 46.02. Amongst other things this signifies that the glass will not break into large pieces if shattered. Even when ‘E’ marked mirrors are not mandatory, they are the best choice, as the approval process should confirm many aspects of the quality of their design and performance. Other mirrors may well be a false economy.

* For non ‘E’ marked mirrors this limit is 200mm
Wheels and tyres

The condition of a caravan’s tyres are too often overlooked, particularly the spare. Caravan tyres rarely wear out though the same legal tread depth limit of 1.6mm applies. You should check the tyre sidewalls and treads regularly for cracks, cuts and bulges routinely.

Replace the tyres, including the spare, in accordance with the caravan industry’s recommendation: This advises that caravan tyres should ideally be replaced at five years old and should never be used beyond seven years old.

**Note:** It is advisable to cover the whole wheel when the caravan is not in regular use, e.g. over the winter.

Tyres with higher inflation pressures (50 psi and above) may deteriorate faster - check them closely, looking for any bulges or signs of cracking. Take care when replacing tyres. It is important to ensure that the replacement tyres have at least the same load rating as the originals. Tyres suitable for cars may not be suitable for caravans.

Tyre pressures and wheel nuts or bolts on both the car and caravan should be checked regularly to comply with the manufacturer’s recommendations.

Car manufacturers provide recommendations for increased tyre pressures when towing or under heavier loading. Incorrectly inflated car and caravan tyres can initiate instability and premature tyre failure.

**Note:** To get an accurate reading, ONLY check pressure when a tyre is cold.
Wheel nuts or bolts should be checked with a torque wrench. If under-tightened, a wheel fixing can shake loose, but if it is over-tightened it can deform the seating (i.e. recess) on the wheel itself, and again, it can shake loose.

A torque wrench ensures that the correct tightness is achieved every time. Consult your owner’s manual.

When replacing a wheel, torque the wheel nuts up in the correct sequence and re-torque after the recommended bedding in distance, typically 30 miles.

If the car suffers a puncture and you do not have a normal size spare, refer to the manufacturer’s instructions for the suitability of towing with the compact size spare or run-flat tyre supplied – you may find that speed and distance may have to be reduced.

If you have to change a wheel at the roadside, position the car and caravan as clear of the carriageway as possible and ensure the hazard warning lights are operating. Do not put yourself at risk, especially if the deflated tyre is on the offside. In many European countries it is also obligatory to wear a high visibility safety jacket or waistcoat. This is strongly recommended even if it is not a legal requirement in the UK.
Driving licence information.
What licence do I need to tow a caravan?

Car licences held before 1 January 1997

All drivers who passed a car test before 1 January 1997 have an entitlement to drive any practical combination of car and caravan, subject only to a generous combined maximum allowable mass (MAM) of the combination of 8,250kg (category B+E entitlement). These drivers also have an entitlement to drive vehicles of C1 category (medium sized vehicles over 3,500kg and up to 7,500kg), including with a trailer or caravan (C1+E), subject to a combined maximum allowable mass (MAM) of the combination of 8,250kg.

When their initial licence expires at age 70, such drivers retain their B+E entitlement when applying for a new license, under a process known as ‘grandfather rights’.

Car licences gained since 1 January 1997.

Drivers who passed a car test from 1 January 1997 are also able to tow caravans, but have more restrictions on which combinations are permissible (category B entitlement).

Category B vehicles may be coupled with:

- a caravan up to 750 kg MTPLM (allowing a combined weight up to 4,250 kg combined MAM)
- a caravan over 750 kg MTPLM provided the MTPLM of the caravan does not exceed the unladen weight of the car and the combination does not exceed 3,500 kg combined MAM.

**Note:** For example, see below two situations – the same car but with a different caravan

<table>
<thead>
<tr>
<th>Car</th>
<th>Caravan</th>
<th>Licence</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRO ..........</td>
<td>1250 kg</td>
<td></td>
</tr>
<tr>
<td>GVW ..........</td>
<td>2000 kg</td>
<td>Category B</td>
</tr>
<tr>
<td>MTPLM ........</td>
<td>1250 kg</td>
<td></td>
</tr>
</tbody>
</table>

Combined MAM of this combination does not exceed 3,500 kg and the MTPLM of the caravan does not exceed the MRO of the car

<table>
<thead>
<tr>
<th>Car</th>
<th>Caravan</th>
<th>Licence</th>
</tr>
</thead>
<tbody>
<tr>
<td>MRO ..........</td>
<td>1250 kg</td>
<td></td>
</tr>
<tr>
<td>GVW ..........</td>
<td>2000 kg</td>
<td>Category B+E</td>
</tr>
<tr>
<td>MTPLM ........</td>
<td>1500 kg</td>
<td></td>
</tr>
</tbody>
</table>

Although the combined mass of the vehicle and caravan is within the 3,500 kg combined MAM limit, the MTPLM of the caravan is more than the kerb weight of the car.
Drivers who passed a car test on or after 1 January 1997 can still tow many caravans. To upgrade their licence to the much less restricted category B+E, however, they need to pass a further test.

**Amended rules for drivers passing their test after 19th January 2013**

New driving licence rules will apply to anyone passing their test after 19th January 2013. Existing licences issued before that date are not affected. Drivers who passed a car test on or after 19 January 2013 still receive a category B entitlement as previously indicated, but the requirement that the MTPLM of the caravan does not exceed the kerb weight of the car is removed. While this requirement has been removed as a driving licence issue, it remains strongly recommended best practice for caravanners.
Touring caravan weight ranges

There is a wide range of MTPLMs across the range of caravans produced and imported into the UK and you are strongly advised to be aware of the exact weight data for any particular caravan when considering licence entitlement.

In many cases, caravans towed by cars should be within the new category B threshold, however it is recommended that you should always check your eligibility for any given combination using the information from the manufacturer’s handbook.
Your notes:

Use this space to list your own vehicle / caravan weights, details etc.
Acknowledgements:
The NCC gratefully acknowledges the help and advice from:

The Camping and Caravanning Club
The Caravan Club

None of the above accept any responsibility for the accuracy of the contents of this publication.

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