Datasheet

DataSheet The Camping and Caravanning Safe for the road – safe on the road Club The Friendly Club





Some important safety factors to consider

Before you begin to tow, it is vital to check that your car and trailer combination are correctly matched. This matching covers the safe physical and legal limits to the weight of the caravan that you should tow with your car details are covered in our Data Sheet -Matching Car and Caravan.

TOWBAR – A well fitted and maintained towbar is vital for safety. It is the main connection between car and trailer. Inspect the tow bracket annually, checking for cracking or serious rusting and that the bolts are correctly tightened or get it checked out when the car is serviced.

Detachable towbars should be treated with extra care. Make sure both the housing and bar are clean before fitting. When in place, check there is no excessive movement. If you are uncertain about your towbar, have it checked by a towbar specialist.

TYRES – The only contact your car and caravan have with the road is through the tyres. Look after them and you will improve the safety and behaviour of your unit.

Carry a spare wheel and if your car has a compact spare, check that it is suitable for use when towing. Runflat tyres are also often not suitable in a deflated condition when you are towing. Never mix different specification tyres on the same axle. Check the pressures and condition of tyres every trip. You will find correct pressures detailed in your handbook, but if your caravan was bought

secondhand check that the tyres fitted are as the handbook specification as this could affect the pressures required. If in doubt contact the Club's technical information helpline.

Check the caravan wheel nuts are tightened to the correct torque, don't forget that overtightening nuts can be as bad as having them too loose.

BRAKES – Brakes are life and death components. Maintenance is best left to properly trained mechanics. It's worth keeping an eye on your brake mechanism and cables. If you have any doubts, have them checked.

ELECTRICS - The road lights on your caravan are operated from the towcar through a standard seven pin (12N) socket and plug or selected pins within the newer 13-pin socket and plug system. Adapter cables are available to link a seven-pin and 13-pin system together.

You must have by law a visual or audible warning on the towcar to show the caravan indicators are working. Traditional systems give a positive indication that work separately from the car system, but now it is more common for caravan indicators to be monitored by the car's bulb failure system.

Before moving off, check all caravan road lighting functions are working.

SUSPENSION – Check the condition of both car and caravan suspension. It's important for safety Statistics show that caravans are safe and accidents rare, but to ensure your safety it is necessary to consider some important safety factors.

This data sheet looks at safety factors to consider before you set off and other considerations when on the road to keep you safe.

Many references are to caravans, but this can equally refer to other towed camping units such as a folding camper or trailer tent.

as well as comfort. When your caravan is attached to your vehicle it should tow level or slightly nose down, preferably not with its nose up. If you find the car rear sags, you may need some form of suspension aid. Get specialist advice on the type required for your car from your car dealer or suspension aid supplier.

NOSEWEIGHT - Ideally, for stability, the noseweight should be about seven per cent of the actual laden weight of the caravan. But the noseweight must also not exceed the car towball limit or the caravan hitch limit, so use the lowest limit which will probably be the car towball limit. If the lowest figure is less than five per cent of the caravan's weight this could compromise stability, so reconsider your choice of towcar.

The caravan noseweight can be adjusted by the amount of equipment stored to the front or rear of the axle. Avoid counteracting a heavy noseweight with weights at the extreme rear of the caravan as this will have a detrimental effect on stability. Noseweight can be checked with a purpose built noseweight gauge (preferably complying with BS7961) or by using bathroom scales.



A purpose built noseweight gauge (left) and using bathroom scales (right)

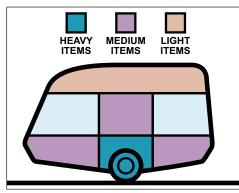
MIRRORS – The law says you must have mirrors to provide an adequate view to the rear and along both sides of your trailer. If your caravan obscures the view from your rear view mirror, or your caravan is wider than your car, you will need additional external towing mirrors. These should not project more than 200mm (250mm if your towing mirrors are E-marked to the latest standard) beyond your unit's widest points.

Make sure the mirrors are adjusted correctly and extension mirrors, where required, are removed when not towing.

PAYLOAD – Payload is the weight of items that you are allowed to carry in the caravan for personal use and for essential items such as gas cylinders and battery. You will find the figure in the handbook. Check the loaded weight of your caravan on a public weighbridge or use a weighing device periodically to make sure that you Red breakaway cable

are not exceeding the maximum technically permissible loaded mass - MTPLM.

Alternatively, weigh each individual item on the bathroom scales before loading, but don't forget major weight components like gas cylinders, battery and spare wheel.



Sometimes the spare wheel is standard equipment and hence within the unladen weight of caravan or MRO (mass in running order), but otherwise it is an optional extra with its weight coming out of your payload. Remember that fitting a caravan mover adds about 40kg to the caravan payload and can easily push you over the payload limit.

Overloading can cause failure of vital components such as tyres. The payload should be kept evenly distributed between each side of the caravan and as close to the axle as possible for maximum stability.

BREAKAWAY CABLE - Caravans with brakes are legally required to have a breakaway cable fitted. In the unlikely event of the caravan becoming detached from the towcar, the cable will pull on the caravan brakes.

It is better to attach the cable to a dedicated mounting point on the towbar rather than around the towball. Make sure there is enough slack in the cable so the brakes are not pulled on when turning.

Unbraked trailers up to 750kg are required to have secondary couplings - normally a chain to keep



Check this out before setting out

- ✓ Internal and external loads are safely secured
- ✓ Windows and roof vents are securely closed
- Gas cylinder valves are turned off
- ✓ Noseweight is within car and caravan limits
- Steadies and jockey wheel raised and secured
- Coupling head is fully engaged on the car towball
- Breakaway cable/secondary cable attached correctly
- ✓ Road lights working correctly

For further information on the use of breakaway cables and coupling up see the technical advice sheets at nationalcaravan.co.uk

the trailer attached to the towcar if the main coupling fails.

COUPLING – Ensure that the caravan coupling head is fully engaged on the car towball. Often the head will have a coloured indicator to show when engagement is complete, but it is worth winding down the jockey wheel until the back of the car is raised about 25 to 50mm to confirm a secure coupling.



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Towing on the road

Towing a caravan is no more difficult than driving solo providing you are aware of the length of your unit. There is no reason why your trailer should not dutifully follow your car but you will need to allow more time and space to stop safely, overtake and corner under control.

CORNERS – On roundabouts and corners your unit will not follow the exact path of your car. You'll need to take a wider path so that the rear of your unit clears the kerb line and other obstructions.

SPEED – Watch your speed, particularly on long down hill stretches. The onset of instability in such circumstances is far more difficult to control than at a more modest speed and when uphill with the car pulling the caravan rather than caravan pushing the car. Remember, the motorway speed limit of 60mph is a maximum and it is sometimes wiser to travel at a lower speed.

With a load on the back, acceleration will be slower and you will need more time and space for overtaking. Your combination is longer and wider than your car alone so you will need to take this into consideration before pulling out.

HILL STARTS – Hill starts need more throttle than normal to get going and you will need delicate clutch control to avoid stalling.

BRAKING – When towing it will take you an average of 20 per cent more distance to stop. Avoid violent braking.

INSTABILITY – Snaking is the most common form

of instability and is often due to bad loading, inadequate nose weight, excessive speed or incorrect tyre pressures or a combination of factors. Even with well matched units, air turbulence from passing lorries or coaches will often cause some affect on your unit. Take special care when overtaking such vehicles and if possible maintain as much lateral gap as possible with your outfit.

Vertical instability is called pitching and can occur if you hit a pothole. In either case don't apply your brakes. Slow down gradually by easing off the accelerator. A stabiliser may help to avoid instability but must not be a replacement for good car and caravan matching or weight distribution.

Similarly, there are now electronic car and caravan safety systems which can provide benefits in the event of snaking occurring such as ESP (electronic stability program) and TSP (trailer stability program) in cars. The trailer specific program being the better option if available. Where TSP is not available on the towcar then AL-KO's ATC and BPW's iDC systems can be fitted to certain caravans.

TIREDNESS – it can kill. If you are planning a long journey make sure you plan some breaks. Pull off the road for a coffee or perhaps get an hour or two of sleep. It will keep you refreshed and ready to complete your journey.

Be considerate to other road users

- Caravans get more than their fair share of blame for holding up traffic. Towing a caravan or trailer may reduce the speed you would normally travel solo. If this leads to a build up of traffic behind your unit, pull over when it is safe to do so, to allow faster vehicles to pass.
- Don't travel in a convoy.
- Be aware of your speed when going up and down hills. Try not to stop, but use your vehicle's gears wisely.
- Indicate well in advance if you intend overtaking or turning off the highway.
- Always try to anticipate what other drivers are likely to do.
- Allow plenty of space between your car and the vehicle in front.
- Be aware of oncoming traffic especially if a vehicle is indicating to turn across your lane.
- When parking, make sure you do so in a place that will not cause a nuisance to other travellers. If you park on an incline apply both vehicle and trailer handbrakes.

Safe off and on the road

In this guide we have dealt with keeping your caravan or trailer safe as a road vehicle. It is also important to consider the safety of your onboard gas and mains electrical systems and appliances.

The Club recommends you have an annual service undertaken by a workshop belonging to the Approved Workshop scheme. These workshops will check out the safety of your habitation systems as well as ensuring your caravan is road worthy.

See approvedworkshops .co.uk for details of the nearest Approved Workshop to you.

- If you have to reverse, get a helper to keep an eye on the back of your caravan and agree suitable hand signals between you. This is important for the safety of the caravan and pedestrians.
- Reversing around corners can be difficult and almost impossible for small short trailers. If you have problems, unhitch and manhandle the trailer into position – as long as you have enough manpower to do it without injury.
- The Camping and Caravanning Club runs manoeuvring courses that will help increase your confidence when travelling with your unit and positioning it.

What the law says

- Caravans and their towing vehicles should be in such a condition that they cause no danger to other road users.
- You may drive up to 60mph on motorways and dual carriageways. On all other roads the speed limit is 50mph unless lower limits are in force.
- Normal cars (gross vehicle weight not exceeding 3,500kg) may tow a trailer up to a maximum body length of seven metres (not including draw bar) and width not exceeding 2.55 metres. Some imported caravans can be wider.
- No special driving licence is required to tow a caravan. However, drivers who have passed their test since 1 January 1997 may need to take an additional (B+E) test if they wish to have a larger outfit. With a large 4x4 you could be limited to towing no more than 750kg although a family saloon will permit the

Manoeuvring Courses and B+E

towing of a reasonable size caravan.

- Your trailer must carry a number plate with the registration number of the tow vehicle on it as well as red reflecting trailer triangles.
- Passengers are not allowed to travel in a trailer while it is being towed.
- You must have a full driving licence to be able to tow.
- Towing vehicles must not use the outside lane of a three (or more) lane motorway even when overtaking, unless signs indicate otherwise or the nearside lanes are blocked by roadworks.
- Tyres must be capable of carrying the maximum permitted weight of the trailer and have a tread depth of no less than 1.6mm across the central three-quarters of the breadth of the tyre and around the entire circumference.
- Stopping overnight in a lay-by may be considered an obstruction. You could be asked to move on.
- If you park your caravan in the street overnight you must not park at parking meters and you must display lights all round.
- A trailer must not be left on the road uncoupled from its towing vehicle unless the brake is on or at least one wheel is effectively prevented from moving.
- If you carry anything on your trailer, like a bicycle, the load must be secured and not stick out dangerously.

The Friendly Club

New to towing or simply want to build your confidence?

Your Club offers manoeuvring courses for all towing abilities with qualified driving instructors.

- New: B+E Driving Test did you know you could be towing illegally? Ask us – we have courses available to help you pass
- Course fee only £90 for members (for caravan & motorhome courses)
- Receive your FREE copy of the Club's Safe Towing for Life handbook (caravan course only)
- Save 5% off your
 Club Care Caravan Insurance



Book now by calling **0845 130 7412** For course dates and venues visit

www.campingandcaravanningclub.co.uk/courses

Useful contact information

The Camping and Caravanning Club: Greenfields House, Westwood Way, Coventry, CV4 8JH 0845 130 7632 or 024 7647 5442 campingandcaravanning club.co.uk

The Highway Code: Copies of The Highway Code are available from bookshops. highwaycode.gov.uk

Information for drivers who passed their test after 1 January 1997: DVLA Information Leaflet INF30 is available by calling DVLA on 0870 240 0009 on-line at: dvla.gov.uk

For further information see the Police Foundation's publication: The Essential Towing Handbook – Towing ROADCRAFT ISBN 0 11 552022 8