

BRITISH GLIDING ASSOCIATION

LAWS AND RULES **As Applicable to Glider Trailers**

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TRAILER LAWS AND RULES AS APPLICABLE TO GLIDER TRAILERS

INTRODUCTION

This Guide is in two parts. The first explains how the law affects you when towing a trailer and the restrictions imposed by your driving licence, the towing vehicle and the various road traffic laws, both in the UK and, in brief, in continental Europe. It also covers insurance issues affecting you, the tow vehicle, the trailer and its contents.

The second part explains the law about how trailers must be constructed and the lighting regulations, together with some helpful advice on maintenance.

In both these areas the law is extremely complex. We have tried to present it as clearly as possible, but it is inevitable that care and concentration are necessary to understand adequately how it affects you. As a starting point, we strongly suggest that you obtain (see the definitions in A1b just below) the MAM of your tow vehicle and trailer.

Note: The construction and use of trailers is covered by the Road Vehicles (Construction and Use) Regulations 1986 and Road Vehicles Lighting Regulations 1989 as amended by over 100 UK amendments and EU Directives. In addition various Road Traffic Acts and Driving Licence Regulations add to the complexity. The information in this guide was relevant to glider trailers at the time of original publication (November 2006). Although the guide is updated from time to time, drivers are urged to ensure that they are aware of and comply with current regulations.

SECTION A - TOWING A TRAILER

1 What the Various Terms Mean

- a) All **measurements** are **metric**. **Weights** are given in kgs, where 1000 kgs is equal to 1 Metric Tonne (within 2% of an Imperial Ton). **Lengths** are in millimetres and metres.
- b) For vehicles and **trailers**, the **Maximum Authorised Mass (MAM)** is the maximum loaded weight of the vehicle or trailer permitted by the manufacturer. For cars and commercial vehicles, it is given on the Vehicle Identification Number (VIN) Plate or in the Manual. For trailers it must be displayed on a marking plate affixed to the near side of the draw bar or A-frame.
(It is NOT the ACTUAL loaded weight of the vehicle or trailer that counts but the manufacturer's permitted maximum weight – i.e., the design maximum for the trailer and its load. Some trailers built for 15 metre single seat gliders have a MAM of less than 750, which is a key dividing point; many are over that value. Open class and two seat glider trailers all exceed 750 MAM.)
- c) You may find reference in some documents to **GVW** (Gross Vehicle Weight) or to **MTPLM** (Maximum Technically Permitted Laden Mass). For all practical purposes these are the same as MAM.
- d) The **Vehicle Unladen Weight (VUW)** is defined as the empty weight excluding fuel, water and loose tools and equipment. Remember that the addition of a tow bar will add significantly to the VUW.
- e) The **Kerb Weight** is NOT the same as the VUW. The Kerb Weight is usually given in the manual and is normally defined as the empty weight plus a full tank of

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fuel and 75Kgs allowance for the driver (but check as definitions do vary between manufacturers).

- f) The **Maximum Train Weight (MTW)** is the maximum allowed sum of the towing vehicle and trailer **actual** weights, defined by the tow vehicle manufacturer. It is defined on the tow Vehicle Identification Plate where specified. For cars, there will also be a defined maximum trailer actual weight.
- g) The **Maximum Combined Weight** is NOT the same as the MTW. It is the maximum sum of the MAM of the towing vehicle and the MAM of the trailer permitted by the driver's licence (i.e., it is defined by MAMs and not actual weights).
- h) The **length of a trailer** excludes the draw bar or A-frame; these are also excluded in defining the front of the trailer.

2 Driving Licence

- a) You must have a driving **licence valid for the tow combination**. **Do not assume** that this will be the case, especially if you qualified since 1.1.97 or are over 70.

Table 1 shows the entitlement conferred by the different categories shown on your Driving Licence. In summary, these categories are:

- A for Motorcycles
 - B for Cars
 - C for Goods Vehicles (C1 for Light Commercial Vehicles (LCV) and C for Large Goods Vehicles (LGV))
 - D for Buses (D1 for mini buses and D for coaches and large buses)
 - +E indicates a permitted trailer MAM in excess of 750 Kgs
- b) **Please note that it is the MAM that counts** for both tow vehicle and trailer and **NOT** their actual weight.
 - c) If you gained your **licence after 1.1.97**, you will have only B or B Auto entitlement and an extra test is required for all other categories.
 - d) ****IMPORTANT**** A category **B licence will be adequate** with many car and glider trailer combinations, using Option 2 which allows combinations of towing vehicle and trailer up to 3500 Kgs total MAM, where the MAM of the trailer does not exceed the unladen weight (VUW) of the towing vehicle. Option 1 allows for larger tow vehicles (up to 3500 MAM) but only with the lightest trailers (up to 750 MAM). **You are very likely to exceed the B licence limitations and will need to upgrade your licence to at least B+E if:**
 - the trailer is built for an open class or two seat glider
 - the tow vehicle is a large car, SUV, van or motorcaravan
 - e) If you gained your **licence prior to 1.1.97** you normally retain entitlement to B+E, C1, C1+E, D1 and D1+E, though with some changes to limits; if you still have the old style green licence, the categories shown are quite different but normally cover these same categories.
 - f) On **reaching age 70**, you lose all except B, B+E (and Auto) unless you obtain medical certification at three-yearly intervals. The requirement is the same as that for solo glider pilots (see Laws & Rules), but must be submitted on DVLA Form D4.

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Table 1 - Driving Licence Limitations

Licence Class Held		Towing Vehicle	Trailer	Max Combination Weight ¹	Min Driver Age
B, B Auto	Option 1 ⁵	Max 3500 MAM	Max 750 MAM	Max 4250 MAM	17
B, B Auto	Option 2	Max 3500 MAM less trailer MAM	More than 750 if trailer MAM < tow VUW	Max 3500 MAM	17
New drivers after 1.1.97 must pass an extra test to get B+E, and all C, C1, D, D1 (+E) ratings below					
B+E ²		Max 3500 MAM	More than 750	No licence limits	17
C1 ^{2,4}		3500 to 7500 MAM	Max 750 MAM	Max 8250 MAM	18
C1+E ^{2,4}		3500 to 7500 MAM	Over 750 MAM if trailer MAM < tow VUW	12000 MAM (8250 MAM if test passed before 1.1.97)	21 (18 if MTW < 7500)
D1 ²		Minibus with 9 to 16 pass seats	Max 750 MAM	No licence limits	21 ³
D1+E ²		Minibus with 9 to 16 pass seats	Over 750 MAM if trailer MAM < tow VUW	12000 MAM	21 ³
All drivers must pass an extra test to get C, D, (+E) ratings below					
C		Over 3500 MAM	Max 750 MAM	No licence limits	21 ³
C+E		Over 3500 MAM	Over 750 MAM	No licence limits	21 ³
D		Bus with >8 pass seats	Max 750 MAM	No licence limits	21 ³
D+E		Bus with >8 pass seats	Over 750 MAM	No licence limits	21
LGV drivers with C or D but not C1 or D1 must now pass an extra test to tow a trailer above 750 MAM.					

NOTES:

1. May be limited to a lower figure by the MTW of the towing vehicle (see vehicle plate)
2. This is a normal entitlement on pre-1.1.97 licence.
3. Min age 17 if member of armed forces
4. Vans and motor caravans over 3500 and up to 7500 MAM are in category C1 or C1+E.
5. It is expected that this option will be removed by 2010. It is not yet clear whether this will apply retrospectively (i.e., to those who qualified before the removal date).

3 Driving Regulations

- a) Vehicles and trailers are not permitted to use the outside lane of a three lane carriageway, except to overtake an exceptional load spanning two lanes.
- b) Maximum driving speeds are shown in Table 2.
- c) Passengers are forbidden in trailers.
- d) There is no Road Tax on private trailers.
- e) An MOT is not required for private trailers.
- f) (MTW over 3500) Provided that the tow vehicle is used only for the non-commercial carriage of goods for personal use, a tachograph is not required.
- g) The trailer must display the same number plate at the rear as the towing vehicle. If the towing vehicle has new style number plates (for new vehicles, optional from 01.03.01 and mandatory from 01.09.01) the trailer number plate must also be the new style. The number plate must be illuminated between dusk and sunrise. It must not be obscured (now a fixed penalty offence so an easy one for the law to

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catch you with) and must be readable in normal daylight from 75 feet directly behind the vehicle, and 53 feet behind at 45 degrees to each side of the trailer centre line.

- h) If the towing vehicle has a defined MTW, it is an offence to exceed it.
- i) The towing vehicle must be fitted with an **audible warning** device which sounds when the direction indicators are used.
- j) **Hazard warning** lights may only be used (a) to warn of a temporary obstruction, and (b) on a motorway or unrestricted dual carriageway to warn following drivers of the need to slow down for an obstruction ahead.
- k) It is an offence to tow an **unbraked trailer** with a loaded weight exceeding the lower of 750 or 50% of the towing VUW.
- l) After 01.01.98, any tow vehicle (except commercial vehicles and motorcaravans) which was first marketed after 01.01.96 can only have EC Type Approved and tested tow bars fitted.
- m) Trailer contents must be properly secured, other than remaining in place by their own weight, so as not to present a hazard to other road users and pedestrians.

4 **Good Driving and Towing Practice.**

Although not necessarily legal requirements in the UK, the following driving practices are highly recommended by motoring organisations and therefore by the BGA.

- a) You should not tow a trailer that exceeds either the tow vehicle manufacturer's recommended towing weight or tow hitch nose weight. Doing so could invalidate both vehicle warranty and vehicle and trailer insurance. Recommended practice for braked trailers is not to exceed 85% of the kerbside weight of the towing vehicle.
- b) Snaking – if the combination starts to snake, NEVER brake hard. Slow down gradually and carefully, releasing the accelerator and then using the gears to slow. Hold the wheel firmly and steer straight ahead, and never into or against the snake. Bad snaking normally means that there is insufficient nose weight on the tow ball.
- c) Stabilisers should only be used in accordance with the manufacturer's instructions and should be checked annually.
- d) Emergency braking can cause the trailer to 'jack-knife'. Avoid the need by keeping a safe distance behind other vehicles.
- e) The driver should have ready access to a warning triangle (preferably two – place one behind and one in front of the combination when stopped, especially on single carriageway roads), a First Aid Kit, spare bulbs and high visibility jacket (all compulsory in many other EU countries).
- f) Modern glider trailers add up to 5 side/marker lights on each side and can overload the fuse capacities of the towing vehicle. Always carry spare vehicle fuses, but check, before upgrading a fuse, that you will not overload the tow vehicle's wiring.

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- g) The tow combination should have dipped headlights at all times, except where doing so would dazzle other drivers.
- h) Although not a legal requirement, it makes good sense (in the UK, but not in all countries) to affix a 'Long Vehicle' label to the rear of a glider trailer, especially so if you are towing with a long vehicle such as an estate car or motorcaravan. But please read Footnote 2 to Table 3 in Section B for the legal requirements of such signs.
- i) Ensure you can monitor the trailer wheels through the wing mirrors, especially on single-axle trailers, so that a puncture does not become a catastrophe. For peace of mind, have the trailer tyres injected with a gel that automatically seals punctures.
- j) Unless you have taken the extra driving licence towing tests, you should practice and become competent at reversing with a glider trailer attached before towing one on public roads.
- k) Do not park a trailer for long periods with the hand brake applied to avoid the brake linings forming a rust bond and sticking fast to the inner surface of the drum. Use wheel chocks instead.

5 Insurance

- a) The increasing prevalence of fraudulent insurance claims has forced insurance companies to increase significantly their scrutiny of claims. As a result, you could well find your claim being rejected or the payment reduced if any aspect of your vehicle, trailer or load are not fully compliant with the law. Most insurance policies also include a clause requiring you to keep the insured property in good repair.
- b) Most tow vehicle insurance policies provide Third Party cover for an attached, towed trailer; this insures you for injury or damage caused by the trailer to third parties. However, since a glider trailer may be regarded as exceptional by some insurance companies, you are urged to check before you tow.
- c) Damage cover for the trailer and its contents requires a separate insurance policy.
- d) Be aware that many vehicle insurance policies now include a restriction clause removing all cover when the vehicle is 'used in or on restricted areas of airfields or airports', whether or not you are towing a trailer. You may thus be personally liable for any injury or damage accidents in these areas and you are strongly advised to find insurance without this exclusion.
- e) All trailer owners are urged to check that their trailer is roadworthy and complies with the relevant rules before setting out, otherwise insurance may be invalidated.
- f) If you have some form of recovery insurance on the tow vehicle, check that it covers your trailer. (In practice few recovery organisations will have vehicles able to carry a glider trailer.)

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6 Towing Abroad

- a) Any vehicle or trailer which complies with UK legislation can be imported temporarily (6 months maximum in any 12 months) into another EU country without having to obtain local type approval. However, it must comply with local law where this differs from UK law, for example in respect of vehicle lengths, widths, heights and weights. Not all aspects of vehicle construction, use and lighting have yet been harmonised across the EU (the process is currently under way) so you are advised to check before travelling – see (g) below. In particular, the rules and their interpretation regarding side and rear marking of long trailers seem to vary from state to state.
- b) Speed limits when towing vary enormously between different EU countries – see Table 2 – and in some countries such as France it is common to find sections of peages, autoroutes and many rural roads signed for both solo vehicles and trailers with both higher and lower limits than those that apply generally. If you see a sign with a caravan pictogram, it is best to assume it also applies to you and your glider trailer. Note that many EU countries impose ‘on the spot’ fines for exceeding speed limits and may impound your vehicle if you are unable to pay. French police, amongst others, have become particularly active with surreptitiously placed mobile speed cameras.
- c) Most countries also have a minimum speed on motorways – if you cannot maintain this minimum (eg on hills), you must stay in the innermost lane.
- d) It is an offence in most Continental countries to carry any form of equipment that detects the presence of speed cameras, though passive equipment such as a location warning on a SatNav system is normally acceptable. It is also an offence to indicate the presence of speed cameras to other motorists.
- e) Take with you your driving licence, vehicle registration document, insurance certificates (tow vehicle and trailer), trailer spares and items listed in 4(e) and (f) above.
- f) Check that you are properly insured. Many UK car policies now restrict cover outside the UK to just the statutory minimum Third Party cover unless an extra premium is paid. Many also have limits as low as 14 days on the length of individual trips. Note that an Insurance Green Card is no longer necessary in EU countries, but check with your insurer. Your insurer can supply a Bail Bond for Spain.
- g) The motoring recovery organisations and the Caravan Club are excellent sources of information on regulations for tow combinations abroad and, if you are taking your trailer abroad, you are strongly recommended to check whether any special requirements apply to trailers of exceptional length, such as glider trailers.

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**Table 2 - Speed Limits and Other Information
(LOWER LIMITS MAY BE SIGNED)**

Country	Speed Limits with trailer kph(mph)				Maximum	Other Notes
	Built-up Areas	Other Roads	Motorways ¹	Motorway Minimum	Overall Length (Meters)	
United Kingdom	48 (30)	80 (50)	97 (60)	none	18	
Andorra	40 (25)	70 (43)	none	none	18	
Austria	50 (31)	80 (50)	100 (62)	60 (37)	18.75	
Belgium	50 (31)	90 (56)	120 (75)	70 (43)	18	
Czech Republic	50 (31)	80 (50)	80 (50)	80 (50)		
France - normal	50 (31)	90 (56)	130 (80) ²	80 (50)	18	Illegal to drive on side lights only
France - wet roads	50 (31)	80 (50)	110 (68) ²	none	18	Illegal to drive on side lights only
Germany	50 (31)	80 (50)	80 (50)	60 (37)	18	
Italy	50 (31)	70 (43)	80 (50)	none	18.75	
Luxembourg	50 (31)	75 (47)	90 (56)	none	18	
Netherlands	50 (31)	80 (50)	80 (50)	60 (37)	18	
Poland	50 (31)	70 (43)*	80 (50)	40 (25)	18	*80 (50) where signed
Spain	50 (31)	70 (43)	80 (50) Note 1 applies to Autovias	60 (37)	18	Bail bond from your insurer strongly advised; 2 triangles & high visibility jackets for driver and passengers mandatory
Switzerland	50 (31)	60 (37)	80 (50)	60 (37)	18	

NOTES: 1. Dual carriageways/ divided lane highways often have lower limits.
2. On dual carriageways and toll-free Autoroutes 110 (68) dry and 100 (62) wet.
3. These limits apply only to combinations of less than 7500 MAM (3500 MAM in France).

7 Trailer Pre-tow Inspection.

Glider trailers are used for long journeys infrequently, so should be checked before any off-airfield journey. A regular check in summer may avoid a retrieve mishap. If you always rig your glider without moving the trailer, it is especially important to check that the trailer is ready for a retrieve. This is the recommended list of regular inspections.

- a) Electrical - check plugs, sockets and cable and plug in the 7 pin plug and check all lights work satisfactorily. (Warning: Your trailer may blow tow vehicle fuses – see 4(f) above.)
- b) Tyres - check for tread wear, damage to side walls, pressures and ensure wheel nuts are tight. Tyres more than 5 years old, especially when parked in the same position for long periods, tend to develop 'flat spots' and damage to the side walls.
- c) Bearings - use two hands at 10-to-2 on each wheel to try rocking it to and fro in the direction of the axle. There should be a very slight movement. Any more requires the bearings to be adjusted. (Also check for high temperatures after a longish run.)
- d) Draw bar - check all bolts tight, breakaway cable in good order, parking brake working and jockey wheel/stand adjusts satisfactorily. With trailer attached to car, move forward and brake - check all trailer brakes apply. Then check auto-reverse braking works. (If the trailer has brakes, they are legally required to work, even if the trailer MAM is under 750Kgs.)

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- e) Trailer body - walk round (and inside when glider rigged) and check condition of body and trailer floor. Check mudguard mountings. Check doors securely closed.
- f) Nose weight – a well-balanced trailer should have a nose weight on the tow ball of at least 50 Kgs up to 75 Kgs, but not above the maximum allowed by the tow vehicle manufacturer. Use a suitable length of wood and bathroom scales under the tow coupling to check the trailer when loaded. Inadequate nose weight is a major cause of trailer accidents caused by snaking. (Note: An empty glider trailer will probably not meet this requirement, so take especial care when towing one.)
- g) After coupling trailer – ensure that the trailer is roadworthy, correctly coupled to the tow vehicle with a working break-away cable, jockey wheel and trailer doors secured and trailer properly displays the tow vehicle number plate.

It is your **responsibility as driver** to ensure that the trailer combination passes all the above checks even if you are towing someone else's trailer on a friendly retrieve.

- 8 **Trailer Annual Inspection.** A more comprehensive inspection and service should be carried out annually. If the trailer is subject to high mileage, then a lubrication service should be carried out every 2000 miles on the coupling, brake linkages and wheel bearings. The trailer parts catalogue produced by Indespension (0800 720 720) gives an excellent step by step guide to trailer maintenance and servicing.

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SECTION B - TRAILER CONSTRUCTION AND LIGHTING

9 **Trailer Construction.** Table 3 summarises the regulations relevant to glider trailer construction. The Table excludes regulations that are unlikely ever to apply to a glider trailer so should not be taken as definitive for other types of trailer.

Table 3 – Trailer Construction

Trailer Feature	Rule	Notes and Observations
Trailer Dimensions		
Length	Excludes the draw bar or A-frame and tow coupling.	Measure from the front surface to the rear surface.
Maximum Length	Normally 7m but may exceed 7m if 'constructed and normally used for the conveyance of indivisible loads of exceptional length' such as a glider.	For indivisible loads max tow vehicle length 9.2m and max combination length 25.9m
Max Width	2.3m including wheels and mudguards	
Max Overhang	Between 1m and 2m, the end must be marked by attaching a piece of cloth or similar. Between 2m and 3.05m, a marker board as defined in the Regulations must be fitted and illuminated at night. Over 3.05m, an attendant must be carried and the police notified 2 days before commencing the journey.	Refers to overhang behind the trailer. Normally not relevant to glider trailers, although some open trailers may be affected.
Rear Markers ²	Not required and not permitted if tow vehicle below 7500 MAM and/or the trailer below 3500 MAM.	e.g., 'Long Vehicle' or diagonal red/yellow markers not normally permitted on glider trailers – but see note 2 below
Labeling	All trailers must have a manufacturer's label on the draw bar near side displaying: Manufacturer; Chassis number; No of axles; Max weight for each axle; Max load on tow vehicle; Maximum trailer MAM; Year built.	This information is a legal requirement, even for imported glider trailers.
Trailer Braking		
Parking Brake	Must be fitted, able to hold the trailer stationary when detached on a 16% gradient (1 in 6.25) and capable of being operated by a person standing on the ground.	Need only operate on two wheels on the same axle of a four wheel trailer.
Trailer parking	Wheel chocks are required in many European countries as well as a parking brake.	An essential part of your trailer kit – any caravan dealer will have sets.
Requirement if trailer MAM less than 750 ¹	Trailer brakes not required provided the tow vehicle has a VUW at least twice the trailer laden weight.	May apply to a glider trailer, but it is the trailer MAM which must be under 750 and NOT the trailer loaded weight ¹ .
Requirement if trailer MAM exceeds 750 up to 3500	Trailer must be fitted with brakes which may be of the over-run type on at least two wheels (if more than four trailer wheels, special rules apply).	Only applies to trailers first used before 1 Jan 1968.
	Trailer must have brakes on all wheels. If fitted with a spring damped coupling, another may be fitted as a replacement item.	Only applies to trailers first used after 1 Jan 1968 but manufactured before 1 October 1982
	Trailer must be fitted with brakes on all wheels which may be of the over-run type. Brake wear must be compensated for. The sliding part of the brake control must be protected by a bellows. The tow coupling must include a hydraulic damper.	Trailers manufactured after 1 October 1982 or first used after 1 April 1983.
Auto-reverse brakes	Trailer brakes must be auto-reverse , disengaging automatically when the tow combination reverses and applying normally when the combination moves forward again.	Only trailers first used after 1 April 1989. (Auto reverse is achieved using special wheel hubs that sense reverse direction and disengage braking, so replace damaged hubs only with same sort and side.)
Secondary Coupling	Unbraked trailers built after 1 Jan 1997 must be fitted with a secondary coupling which provides some steering and keeps the draw bar off the ground in the event of a coupling failure.	This is also an option for single axle braked trailers up to 1500 MAM instead of an automatic braking device (next row).

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Automatic Braking Device	Braked trailers must have a braking device that stops the trailer automatically if the tow coupling fails.	This is normally a breakaway cable (or chain) that applies the parking brake before snapping. It is strongly recommended that the cable is attached to the towing vehicle rather than the tow ball – special attachment brackets are available at any caravan shop.
Brakes if fitted	All brake fittings must work and be used even if not legally required.	If trailer under 750 MAM but has brakes, they must work.
Suspension, Wheels and Tyres		
Suspension	All trailers must have a suspension system between each wheel and the trailer frame.	
Tyres	Tyres must be able to carry the trailer MAM at the maximum allowed legal speed. Re-cut tyres are not allowed. Radial tyres must be E marked . Do not mix radial and cross-ply tyres on the trailer. Any spare tyre must thus be of the same construction as those on the wheels.	Tyres degrade when not used. Caravan organisations recommend replacing tyres after 5 to 7 years. As a minimum, have them professionally checked annually after 5 years.
Tyre wear	As for vehicles - a minimum tread depth of 1.6mm over the central 75% of the tyre with no visible defects.	
Mudguards	All trailers must have wings (mudguards) to catch spray, etc.	
Mirrors	Tow vehicles registered after 1 June 1978 must have an offside wing mirror and either an interior mirror providing a view to the rear or a near side wing mirror.	Common sense suggests that mirrors should also afford a view of the trailer tyres so that any problem is seen quickly.

- NOTE: 1. Even though it is theoretically possible to have an unbraked trailer carrying a glider, it is strongly recommended that only braked trailers with hydraulically damped couplings are used in order to avoid the direct transmission of every braking and acceleration shock to the glider with the potential for damage.
2. In the UK, it is permissible (but optional) for a glider trailer to carry a 'LONG VEHICLE' marker on the rear with the letters in reflective red provided that the background is in plain, non-reflective yellow. Trailers over 3500 Kgs and/or with tow vehicles over 7500 Kgs must carry markers consisting of red/yellow reflective diagonal stripes for combinations up to 11 metres, reflective markers indicating 'LONG VEHICLE' for combinations over 13 metres and either type of marker for combinations between 11 and 13 metres. However, regulations do not permit reflective yellow to be displayed on the rear of any other vehicle except on the number plate. You may wish to fit a suitably modified marker from a safety perspective. NOTE that the requirements vary from country to country, so always check local requirements before towing abroad.

10 Trailer Lighting.

- a) Table 4 summarises the regulations applicable to trailer lights. The table should enable you to check your new or older trailer for legality.
- b) With the full complement of marker, side, rear and number plate lights (all on the same circuit) the fuse rating of many towing vehicles will be exceeded. Always check that you will not overload the wiring before uprating fuses, otherwise these trailer lights must be powered via a relay switched separate circuit from the tow vehicle battery.
- c) Where trailer width is a factor in determining the lighting requirements, it is the overall width including mudguards that counts.
- d) All lights must be type approved with an 'E' mark. This is normally embossed on the lamp cover and means that the unit is of the correct size and wattage. It is an offence not to use type approved parts.
- e) Front marker, rear side and indicator lights and rear reflectors must be visible with doors open. This makes side hinged rear doors almost certainly illegal.

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- f) All trailers constructed since 1 October 1990 must have amber side marker lights and reflectors. Many imported trailers lack the lights and are therefore illegal.
- g) In general, all lights and reflectors must be visible along the axis perpendicular to their surface and at 45 degrees either side of this axis.
- h) If you are constructing or modifying a trailer, you are also recommended to consult a detailed parts specification such as those given in various trailer parts catalogues.

Table 4 - Trailer Lights, Reflectors and Markers

Item	Colour	No of	Dist from Ground		Distance		Notes
			Min	Max	Max from side ⁹	Min between	
ALL TRAILERS							
Rear Reflecting Triangles	Red ¹	2 ³	350	900 (1200 ⁴)	400	600 (400 ⁵)	
Rear Side Lights	Red ¹	2 ³	350	1500 (2100 ⁴)	400	500 (400 ⁶)	
Rear Stop (brake) Lights	Red ¹	2 ³	350	1500 (2100 ⁴)	400	400	
Rear Fog Lights	Red ¹	1 or 2 ³	250	1000	between centre line and offside ²		Not required if trailer less than 1300 wide. Min 100 from stop light.
Rear Number Plate Light -see also 3g in Section A	White	1	N/A	N/A	N/A	N/A	Must be fitted so as to illuminate the number plate adequately. May be part of a light cluster if fitted as maker specifies.
Rear Direction Indicators	Amber	2	350	1500 (2300 ⁴)	400	500 (400 ⁶)	
Side Reflectors	Amber	Varies	350	1500	Max 4000 from front of draw bar, 1000 from rear, max 3000 between		Required on all trailers over 5000 in length (thus all glider trailers) but see Side Marker Lights below
SPECIFIED TRAILERS ONLY							
Front Reflectors	White	2	350	900 (1500 ⁴)	150	600	Required if trailer built after 30 Sep 1990. May not be triangles.
Front Marker Lights	White	2 ³	None	1500 (2100 ⁴)	150	None	Only required if trailer more than 1600 wide.
Front End Outline Marker Lights	W/R ⁷	2 ³	None	Max possible	400	None	Only required if trailer more than 2100 wide. May be combined with front marker lights.
Rear End Outline Marker Lights	W/R ⁷	2 ³	None	Max possible	400	None	Only required if trailer more than 2100 wide
Side Marker Lights ⁸	Amber	Varies	None	2300	Max 4000 from front of draw bar, 1000 from rear, max 3000 between		Required on all trailers over 6000 in length built after 30 Sept 1990 (thus MOST glider trailers) ⁸
Rear Marker Plate	Red/ Yellow	Not allowed unless towed by a vehicle with a MAM exceeding 7500 (see also note 2 to Table 3).					

- NOTES: 1. Red lights and reflectors must only be visible from the rear.
 2. Single fog lights on the UK near side on imported trailers are both illegal and dangerous. The easiest step is to change to a matched pair.³
 3. A matched pair must be identical and the same height above ground and distance from the trailer sides.
 4. Permitted if vehicle design prevents standard value.

TRAILER LAWS and RULES AS APPLICABLE TO GLIDER TRAILERS

5. Permitted if trailer less than 1300 wide.
6. Permitted if trailer less than 1400 wide.
7. White to front, Red to rear.
8. Side reflectors are required in addition to side marker lights. These are normally combined with the reflector as part of the amber plastic light cover. On trailers built before 1 Oct 1990, a single side marker light may be fitted showing white to the front and red to the rear, positioned between the trailer centre and 1530mm to the rear of the trailer centre.
9. The side of the trailer includes the mudguards.

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