

## REAR VIEW MIRRORS

This leaflet is prepared by The Caravan Club as part of its free service to members. The contents are believed correct at time of publication, but this can be checked with the Club's Information Department.

October 2009

### THE LAW

A car towing a caravan, if first used on or after 1 June 1978 and before 26 January 2010 (ie the majority of cars in use now) must have:

- a) at least one exterior mirror fitted on the offside of the vehicle: and
- b) at least one interior mirror, unless a mirror so fitted would give the driver no view to the rear of the vehicle; and
- c) at least one exterior mirror fitted on the nearside of the vehicle unless an interior mirror gives the driver an adequate view to the rear.

These mirrors must comply with the requirements in EC Directives 71/127, 79/795, 86/562 or 88/321 or ECE Regulation 46.01. That is, they must comply with the old/existing requirements for mirrors, unless they already comply with EC Directives 2003/97 or 2005/27 which are not yet obligatory for cars.

Since the Motor Vehicles (Designation of Approval Marks) Regulations 1979, mirrors have had to have EC type approval to be legally used. This approval is made apparent by the e-mark specified in the contemporary legislation being marked on the equipment. The e-marks used have changed as the legislation has been updated to reflect technological advances, making it difficult to give detailed advice on the precise characteristics of the 'e' or 'E' marking which indicates type approval. Mirrors without the relevant e-mark may well be EC compliant and therefore legal. However, the consumer has no apparent proof of legality without confirmation from the manufacturer.

The e-mark may contain numbers such as E11, which is the designated number for the United Kingdom, or other numbers, such as E1, E2; the number merely denotes the country of testing.

The mirrors must be fixed in the following manner:

- a) in such a way that they remain steady under normal driving conditions;
- b) exterior mirrors visible to the driver through a side window or portion of the windscreen swept by the wipers;
- c) where the bottom edge of the mirror is less than 2m above the road, the mirror shall not project more than 20cm beyond the overall width of the vehicle (or trailer being pulled);
- d) where the bottom edge of the mirror complying with Directives 2003/97 or 2005/27 or ECE Regulation 46.02 (ie a new specification mirror but on a car first used before 26 January 2010) is less than 2m above the road, the mirror shall not project more than 25cm;
- e) interior mirrors shall be capable of being adjusted by the driver;
- f) each exterior mirror on the driver's side shall be capable of being adjusted by the driver from the driving seat.

Therefore, cars towing caravans that are currently being used do **not** need to have new mirrors fitted, nor do new mirrors need to be purchased. This applies to all cars used before 25 January 2010. If you have an historic vehicle pre-dating 1 June 1978, contemporary towing mirrors may be used. This situation will **not** change after 26 January 2010.

## **FUTURE SITUATION**

A car towing a caravan, first used on or after 26 January 2010, comes under item 9 of the table in The Road Vehicles (Construction and Use) (Amendment) (No 4) Regulations 2005 and as such must have mirrors complying with Directives 2003/97 and 2005/27; that is, the mirrors must show the new e-mark as set out in this new legislation. Members wishing to confirm the compliance of a specific mirror with this legislation are advised to seek advice from the mirror manufacturer, distributor or retailer.

**The above advice was received from The Club's legal advisors in May 2008, and to the best of our knowledge represents the legal situation regarding mirrors. The comments below do not constitute formal legal advice, but may be helpful in practical decision making.**

## **THE REALITY**

Assuming most cars on the road are post 1978, they should have an internal mirror and at least an offside mirror which meets the above requirements when the vehicle is solo. However, when a caravan is added, it is quite likely the internal mirror becomes redundant (good see-through vision when towing is rare) and there is then a need to have two external mirrors. It is quite likely that the standard one(s) fitted do not provide an 'adequate' view to the rear when a caravan is added, unless it is the same width as the car or less. It is possible that a large towing vehicle (eg a 4x4) with a relatively narrow caravan might achieve this, but even if that is the case, fitting additional mirrors gives two advantages:

1. It will further improve your vision to the rear of the outfit
2. It will minimise the risk of a challenge from the Police over whether you have adequate rear vision. The Club is aware of instances where outfits without additional mirrors have been targeted for attention, and even if you can prove your vision is adequate, why risk this?

Therefore, additional mirrors will normally need to be fitted on the nearside and offside when towing. Due to the maximum width these mirrors may project, remember that when driving solo it will most likely be a legal requirement to remove the additional mirrors, and is certainly best practice, not only for reasons of safety and legality, but also to minimise fuel consumption.

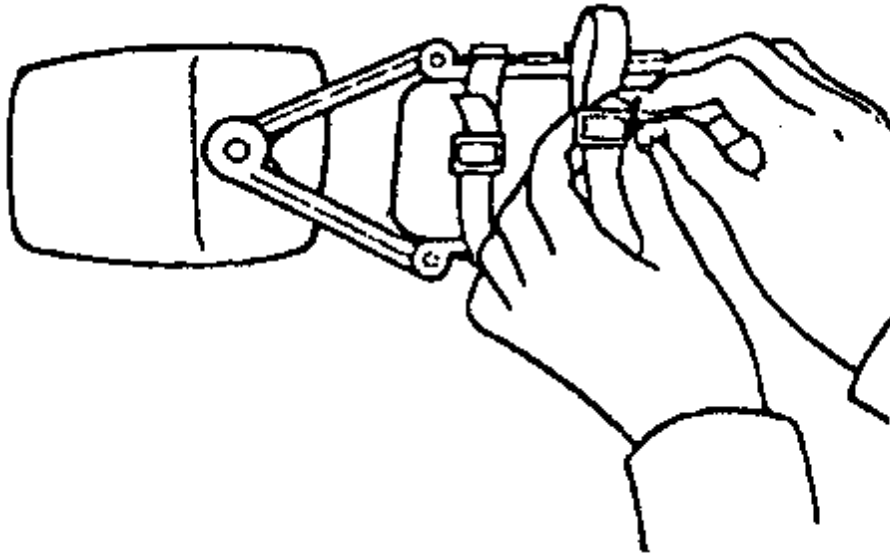
A key question is exactly what constitutes an 'adequate' view. In all of the legislation regarding mirrors, the requirements are defined in an extremely complicated manner. Rather than giving a confusing (if technically) exact definition, a good approximation would be to say that for a typical car-caravan combination, you need to be able to see a zone at least 4-5m wider than the caravan at a distance of about 10-20m behind the caravan. If you really want to see the full detail of the legislative requirements, see the section below on 'Legislation' for how to find this.

If you are at all unsure of the legality of your car mirrors in providing an 'adequate' view to the rear, The Club recommends that you purchase a pair of towing mirrors that are approved to directives 2003/97 or 2005/27. By doing this you will avoid the likelihood of being stopped by the police and risking prosecution, with the added bonus that, if and when you purchase a new vehicle after 26 January 2010, you will not need to buy new mirrors!

## **MIRROR CHOICES**

### **1 MIRRORS THAT CLIP ONTO THE EXISTING CAR MIRROR.**

These are generally quick and easy to fit, and can be used on the nearside or offside. The mirror face is often adjustable. Methods of attachment vary, but often one or more straps loop around the back of the existing mirror and are tightened to provide a secure fit. These straps may perish in time, so look for a model that offers replacements at a reasonable price. Some car mirrors, where the casing appears to be moulded into the car body or is of a particularly unusual shape may not be suitable with this type. Most mirrors are of this type, including most of the cheaper options.



### **2 MIRRORS THAT MOUNT ONTO THE CAR WING**

These normally grip under the top of the wheel arch and between the car bonnet and adjacent wing. To meet the legal requirements this type of mirror should 'give' if hit but return to its original position. Because they are above the wheel and tend to be quite large, vibration can be a problem. The difficulty with these mirrors is that if they should become displaced, even the driver's side one cannot be readjusted from the driver's seat. The Road Vehicles (Construction & Use) Regulations (the UK 'rulebook' for vehicle design) requires such adjustability, but the European Directives do not necessarily have the same requirement. This results in a potential conflict of requirements, and the precise legal position of these mirrors for use in the UK is therefore not clear. The Club does not expect this situation to be resolved (either by regulatory harmonisation or by a court case to clarify the meaning of the existing law) in the imminent future, but some such mirrors remain available as approved accessories through certain vehicle

manufacturers. The lack of ready adjustability while in use is certainly a disadvantage, as is the size of these mirrors, which is especially significant in terms of their storage once they are removed from the car on arrival on site. Their exact legal position cannot be clarified at present, however. Should this situation change, further advice will be included here.

### **3 MIRRORS THAT MOUNT ONTO THE CAR DOOR**

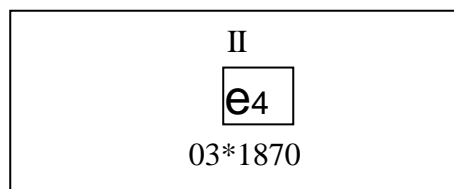
These often grip on the door underside and slot into the space between the side window and the window rubber. They are adjustable from the driving position and tend to vibrate less than wing-mounted types. Care must be taken when fitting not to damage the door paintwork and some types may interfere with the opening and closing of the window. Mirrors of this type are not commonly found now, although older ones may still be seen.

## **TIPS FOR CHOOSING AND USING TOWING MIRRORS**

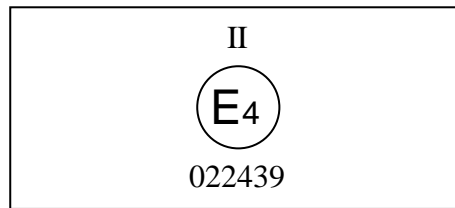
- Many mirrors are available with the option of flat or convex glass. The latter gives a wider view, but is subject to a small amount of distortion which can give a false impression of distance, with objects appearing further away than they actually are. The choice between these options is really one of personal preference.
- In some car parks and on ferries, it is often advisable to remove towing mirrors once parked up. If the separation of parked vehicles is not generous, the extended mirrors may obstruct people walking between them, with a risk that your mirrors may well be displaced, or even damaged. If leaving the vehicle somewhere insecure for any length of time, it may be best to remove the mirrors anyway for reasons of security.
- Some towcars have standard mirrors which readily fold back against the vehicle body when parked, sometimes electrically. Take care if using this facility while towing mirrors are attached to them, as larger mirrors may hit the vehicle body side or side window. In some instances, it may be possible to minimise this issue by careful mirror attachment. For instance, in the photo below, the towing mirror has been attached to the top edge of the car mirror rather than the bottom.



- Mirrors vary significantly in terms of cost. As best The Club can judge, cost is not necessarily a good indication of the mirror's quality and conformity with legislation etc. Some very cheap mirrors are fully compliant with the latest EC Directives, for instance. The challenge when choosing mirrors, however, is how to judge their quality. As an example, one issue to bear in mind is that good mirrors will (as the legislation now requires) be made using safety glass. In the event of an impact, non-safety glass may shatter, fall out, or even be projected towards the car occupants if the side window is open. By contrast, safety glass should remain attached to the mirror body, and even if broken, will often give a usable degree of residual vision until a replacement lens can be sourced. Unfortunately, it is hard to be sure a given mirror is actually fitted with safety glass without literally taking a hammer to it! This really means the only options for the purchaser are:
  - Look for mirrors marked with the relevant e-marking. Some manufacturers have claimed compliance with the necessary legislation without marking their products in this way, which we find inexplicable, so unmarked mirrors should be treated with due caution, in our view.
  - Enquire of the retailer or manufacturer regarding the level of legislative compliance achieved.
  - Look for recent product tests in caravanning publications, but bear in mind that these may not always be written by technically-astute authors, and hence while such articles might be useful in terms of advice relating to ease of fitting to odd-shaped car mirrors, perhaps, they may not always give accurate details of legislative compliance.
- For an example of e-marking, see below:



The mirror bearing the EC component type-approval mark shown above is a Class II mirror (exterior rear view), which has been approved in the Netherlands (e4) and has been assigned the Type Approval number 03\*1870. The small 'e' indicates that the approval is to the relevant EC directives, and therefore applies within the European Community (EC).



The above approval mark indicates that the mirror is a Class II (exterior rear view) mirror, which has been approved in the Netherlands (E4) according to ECE Regulation 46 and has been assigned approval number 022439. The first two digits of the approval number indicate that Regulation 46 with the later 02 series of amendments was used when the approval was granted. The large 'E' indicates that the approval is to the ECE regulation, and therefore applies to the very large group of countries (56 individual countries in total at present, including most of Europe, North America, Russia, Japan etc) which recognise this regulatory system. ECE stands for European Commission for Europe – an agency of the United Nations which among other aims seeks to harmonise regulations for vehicle design. The ECE and EC requirements are technically similar.

Towing mirrors are likely to be Class III (small), but could feasibly be either Class II (large) or possibly Class IV (wide angle), and may be approved in any European Community country (ie may have any 'e' number) or any country recognising the ECE scheme (most of the World - ie may have any 'E' number). Products approved in any one country have to be accepted for use elsewhere in either the European Union or the ECE area respectively, depending on which scheme they are approved to. The type approval number will vary from model to model of mirror, of course. The marking is usually achieved by moulding these details into the plastic of the mirror body, although other options are possible. The text of the marking can be quite small and obscure.

- The Club is sometimes asked about the use of rear vision cameras instead of mirrors (as opposed to in addition to them). The latest legislation does permit this in certain circumstances, but the requirements are complex, and beyond the scope of this document to cover. Members are not advised to use such devices in this way unless they have been specifically approved for this application.

## LEGISLATION

The legislation affecting mirrors is complex. The following links to internet-based sources of the relevant documents are provided for the interest of those wishing to pursue this topic further, but The Club is not able to answer specific queries on the interpretation of the detailed content of these documents, beyond the advice given elsewhere in this information leaflet.

If you are reading this leaflet as an electronic document, click on the links below to access the directives directly:

[71/127 EEC](#)

[79/795 EEC](#)

[86/562 EEC](#)

[88/321 EEC](#)

[2003/97 EC](#)

[2005/27 EC](#)

[ECE Regulation 46 and latest amendment](#)

These documents are mainly in Adobe Acrobat (pdf) format, although some are simply web pages.

The specific website addresses linked to the above are quite complex in some cases, hence if reading a paper version of the leaflet, it is recommended that you put the relevant directive number into the Eur-Lex search engine, which can be found via the [www.eur-lex.europa.eu/](http://www.eur-lex.europa.eu/) website. For the ECE regulation, go to [www.unece.org/](http://www.unece.org/) and then select 'Vehicle Regulations' from the 'Quick links' menu on the left hand side of the screen, then 'UNECE Vehicle Regulations' on the right hand side of the screen.

## **THE MARKET**

The mirror manufacturers/suppliers listed below have been approached for confirmation of compliance with the relevant legislation. However, The Club does not have the resources to verify the information received from them and members should look for indication of compliance on the mirrors themselves, their packaging or take advice from retailers, particularly as some companies may have some models that do comply and some that do not, and this mix may well change over time. This is not an exhaustive list and there may be other manufacturers that offer compliant mirrors:

***Pyramid Products Ltd, Byron Avenue, Lowmoor Road Industrial Estate, Kirby in Ashfield, Notts NG17 7LA. Tel No: 01623 754567; Fax No: 01623 754566; e-mail: [sales@pyramid-products.com](mailto:sales@pyramid-products.com) website: [www.pyramid-products.com](http://www.pyramid-products.com)***

***Pennine Leisure Supplies Ltd, Unit G9, Lock View, Lowfields Business Park, Elland, HX5 9HD, Tel No: 01422 313455; Fax No: 01422 313550; e-mail: [info@plsgroup.co.uk](mailto:info@plsgroup.co.uk) website: [www.plsgroup.co.uk](http://www.plsgroup.co.uk)***

***Towsure Products Ltd, 151-183 Holme Lane, Hillsborough, Sheffield S6 4JR. Tel No: 0114 250 3000; Fax No: 0114 250 3001; e-mail: [towsure@towsure.co.uk](mailto:towsure@towsure.co.uk) website: [www.towsure.com](http://www.towsure.com)***

***Summit Accessories Ltd, MXL Centre, 6 Lombard Way, Banbury, Oxon, OX16 4TJ. Tel No: 0129 527 0770; Fax No: 0129 527 0249; e-mail: [chris@summit-auto.com](mailto:chris@summit-auto.com) website: [www.summit-auto.com](http://www.summit-auto.com)***

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***Milenco Ltd, Blackhill Drive, Wolverton Mill, Milton Keynes MK12 5TS. Tel No: 01908 220102; Fax No: 01908 220104; e-mail: [admin@milenco.com](mailto:admin@milenco.com) website: [www.milenco.com](http://www.milenco.com)***

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