




Tyres – keep them safe and legal

Tyres are so important and the only thing keeping your vehicle on the road in wet or slippery conditions however many people have no idea how to properly check not only the tread but also the general condition of their tyres.

 You probably have a good idea of the condition and life of the tyres on your own car however if you borrow or rent a vehicle, or use one for your work, do you check the tyres before driving off? **You** as driver would be responsible for using it on a road and for any tyre defects and could receive a £100 fine and 3 points per tyre if dealt with by post or up to £2,500 each plus points if dealt with at court. This leaflet aims to cover only the basic and common areas of tyre safety however there are lots more potential offences, including a generic 'using a vehicle in a dangerous condition' which tyres could form an element of so if in doubt you should check with a trusted garage or qualified professional.

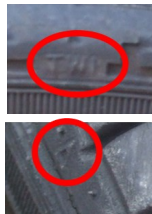
Checking the tread depth (how worn your tyres are)

This is the most basic and legal requirement of every driver for every journey. Minimum legal tread depths required are:-

- ✓ Cars and light vans = **1.6mm**
- ✓ Motorbikes, large vehicles and passenger carrying vehicles = **1.0mm**
- ✓ Mopeds and scooters must just have a **visible tread pattern** and not be worn smooth

Minimum tread levels apply to the central $\frac{3}{4}$ of the width, around the entire circumference but there must be *some* visible tread pattern across the whole area (i.e. the outer edges can have barely a trace of tread but mustn't be worn completely smooth).

The easiest way to check this on standard car tyres is the '20p test' - simply hold a 20p coin into the groove of the tyres - if you can't see the outer ring around the edge your tyre is legal, if you can then it is below the legal limit and needs to be changed.



Another simple way to check wear is to look for the **tread wear indicators** which are located at regular intervals around most new car tyres and usually indicated by a small triangle symbol or 'TWI' inline on the outside edge (see examples).

The TWI is a small lump of rubber within the tread which is raised to 1.6mm*. Whilst the tyre is legal (has more than 1.6mm of tread) this will sit below the part of the tyre that makes contact with the road (as seen in the example top right of this page) – as soon as it is flush and starts to wear along with the rest of the tyre this indicates the tread at this point is likely* to be below 1.6mm and illegal.

**some tyre manufacturers add the TWI at 2.0mm to add an extra safety margin, or 3.0mm which is the recommended depth to replace your tyres and far safer than waiting until legal minimum*



Be aware that tyres often wear unevenly, especially on the inside of the tyre which should also be checked.

As you can see in this example, a tyre can be completely legal on the outside but dangerous on the inside (this one is so worn the cord is showing from beneath the rubber). Common causes of uneven wear can include tracking problems (one side wears more), over inflation (centre wears more) and under inflation (outside edges wear more).



How old is my tyre?

You can check the age of your tyre by looking for date of manufacture which will be 4 numbers in a rounded rectangle, with the first two numbers being week number and the second two the year. In the example shown this tyre was made in week 33 (mid August) of 2004.




Knowing this can be useful information when examining a used car, trailer or caravan you may be considering buying.



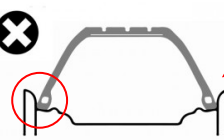
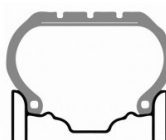
Other defects to be aware of include:

- X tears or deep cuts
- X bulges (often poking out in a ball shape)
- X any ply or cord showing,
- X is unsuitable or not maintained in fit condition (includes inflated to correct pressures)

Are stretched tyres legal?

 Stretched tyres (fitting narrow tyres onto wider rims) can be a grey area as it depends on the amount of stretch and the tyre and wheel combination (as some manufacturers allow a small margin of wheel sizes for their tyres).

It isn't clear why people would want to risk the effectiveness of their tyres by intentionally fitting a size contrary to the wheel and it could be something you would need to disclose to your insurer however in cases of extreme stretch the tyre isn't likely to sit on the rim as required risking failure and could lead to a prosecution where if challenged, the court would decide on legality. The images below are provided by the DVSA and show how the fitment (and safety) differ.



Tyre not sitting against the rim as required

See the back of this sheet for more on stretched tyres →





Telephone: 01787 226995
 Fax: 0845 3016853
 E-mail: mail@btmauk.com
 Website: www.btmauk.com
 Registered Office: Peershaws
 Berewyk Hall Court
 White Colne
 Colchester
 Essex, CO6 2QB

Tyre Technical Advisory Committee

Issued: 20/05/2010 Reviewed: 8/3/2021

Euro look – tyre and wheel compatibility

In order to deliver their intended performance tyres must be fitted to a rim of appropriate width. There is a growing fashion to customise cars by stretching the tyres over excessively wide rims. See illustration below. Such fitment causes excessive distortion of the tyre sidewall and could lead to premature tyre failure. There is also a serious risk of the tyre being dislodged from the wheel rim under sudden cornering forces.

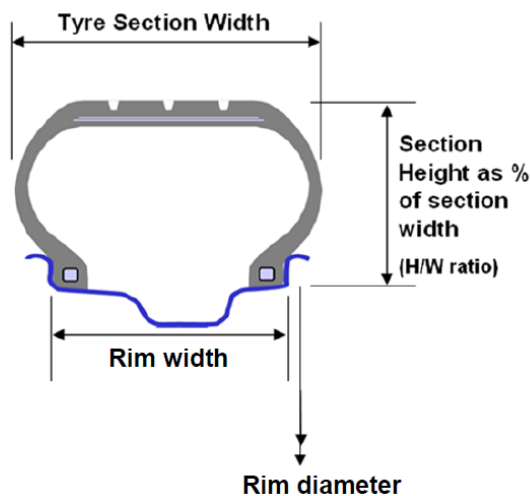
Vehicle manufacturers' original wheel and tyre equipment complies with the recommended fitments set out in BS ISO 4001: 2007. These data are also available in the relevant section of the standards manual published by the European Tyre and Rim Technical Organisation (ETRTO), available [here](#).

Aftermarket fitments that do not respect these recommendations may invalidate motor insurance and may contravene the Road Vehicles Construction & Use Regulation 27 (tyre not maintained in such condition as to be fit for the use to which the vehicle is being put), Regulation 63 (bodywork and spray suppression) and the Road Traffic Act section 40 (vehicle in dangerous condition).

Recommended rim widths calculated in accordance with BS ISO 4001: 2007 for the most popular tyre sizes are set out in the table below.

Tyre size	Minimum rim width	Optimum rim width	Maximum rim width
205/55R16	5.5"	6.5"	7.5"
225/40R18	7.5"	8.0"	9.0"
225/45R17	7.0"	7.5"	8.5"
195/65R15	5.5"	6.0"	7.0"

Consumers are urged to consult the relevant tyre manufacturer before changing tyre or wheel sizes to ensure compatibility of the two components for the vehicle application.



The comments in this Position Statement are based on the general operating practices and environment found in the United Kingdom and the Republic of Ireland. No undertaking express or implied is given regarding the applicability of these comments to other operating environments. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, mechanical, photocopying, recording or otherwise, without the prior permission in writing of the publisher.

Although great care has been taken in the compilation and preparation of this Position Statement to ensure accuracy, the publisher cannot in any circumstances accept responsibility for errors or omissions or advice given in this publication.