

TYRE CARE

What do you need to know?



Take care of your tyres and they will take care of you

Tyres may not be the first thing you consider when it comes to vehicle safety, but tyres are your vehicle's only link with the road. In fact, your safety (and that of your passengers) actually relies on an area of contact between the tyre and the road surface, which is no bigger than the palm of your hand.

In addition to grip, tyres also support the weight of the vehicle and provide drive and directional control.

The following checklist outlines a few simple procedures, which, if carried out regularly, will ensure your tyres remain safe and you get value for money in terms of performance and service life.

Each procedure is explained in more detail throughout this guide to help you look after your tyres correctly.

After all, if you look after your tyres, they will look after you!

Tyre Checklist

1. Select the right tyre for your vehicle
2. Visually check tyre condition on a regular basis
3. Inspect tread depth to ensure tyres are safe and legal
4. Maintain correct inflation pressures
5. Fit tyres in sets of two or four. If just two tyres are fitted, fit them to the rear. For 4x4s use identical size tyres all round
6. Consider a wheel alignment check to ensure tyres wear evenly

I. Selection and fulfillment

When fitting replacement tyres ensure they are of the same size, load index and speed symbol as recommended by the vehicle manufacturer.

Where tyres are not fitted in complete sets of four, we advise that tyre types are not mixed across an axle

Consult your tyre dealer for fitment details for your car, especially if you are in any doubt

2. Visual tyre care

By visually checking your tyres on a regular basis you can help maintain them in good condition throughout their service life and prevent having them changed unnecessarily or even failing prematurely. Check all tyres, including the spare, for these items:

■ Stones or Nail

If not removed when embedded in the tread, stones and nails can work into the casing and cause damage, possibly leading to deflation.

■ Oil, Fuel or Paint

Oil, fuel or paint can have a harmful effect on the rubber compound used in tyres. Oil can make the tread rubber swell, reducing the pattern grooves and affecting adhesion. Immediate removal with detergent and plenty of water is recommended.

■ Damage and Ageing

Damage in any form e.g. cuts, bulges, vibration or air loss must be examined immediately by a tyre specialist, as they could be signs of potential tyre failure. Ageing, such as surface cracking or crazing

in the sidewall area of the tyre, should also be examined by a tyre specialist as soon as is practical. Cracking and crazing occurs naturally through ozone damage and from over exposure of the tyre to the elements, especially sunshine. To reduce the effect, only wash tyre sidewalls when necessary and then just with water, or as little “car wash” as possible.

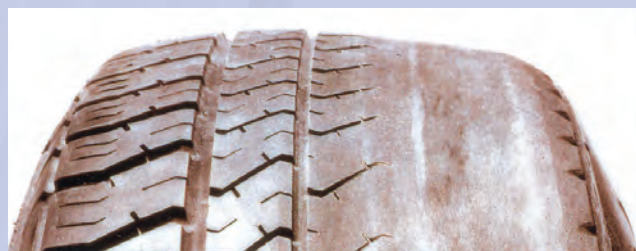
This advice applies equally to everyday vehicles as well as to un-run or little-used vehicles such as caravans or motor homes.

■ Tyre Service Life

Regular inspection by a tyre specialist is recommended and tyres which have been in use for 5 years or more should continue to be inspected by a specialist at least annually. Tyres which have been in service for 10 years or more from the date of manufacture should be replaced. For original equipment tyres, also refer to your vehicle’s manufacturer recommendations.

■ Tyre Tread Wear

Tyre tread wear should be checked regularly. Abnormal wear is often an indication of a mechanical anomaly with the vehicle, such as incorrect alignment, or problems with the steering or suspension. Always have the mechanical parts of the vehicle checked and rectified by a professional.



3. Tread Depth Inspection

Are your tyres legal? When should you change them?

Always ensure your tyres conform to the UK minimum legal tread depth i.e. 1.6mm. This means that your tyres should have at least 1.6mm of tread left across the central three quarters of the tyre tread breadth and around the entire circumference of the tyre.

Please be aware that the 'wet weather' performance (ie - grip on wet roads) is dramatically reduced when a tyre has less than 3.0 mm.

Various types of tread depth indicator devices can be purchased from car product specialists. These can be dipped into the tyre tread to measure the depth in millimetres.

In addition, most car tyres now have tread wear indicators set into the tread grooves, which show when the tyre is worn to 1.6mm of remaining tread. When these indicators become level with the tread surface your tyres should be changed immediately.

Note: If you are taking your vehicle abroad legal tread depth may vary, you should consult your tyre specialist or a reputable source.



TYRE CHANGING

WHEN SHOULD MOTORISTS CHANGE THEIR CAR TYRES?

The Tread Wear Indicators moulded into the base of the tread grooves are set at this depth.

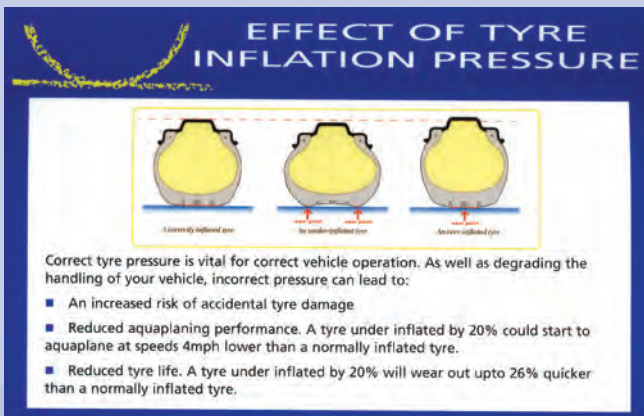
The minimum legal depth of 1.6mm across the central three quarters of the tyre tread circumferentially is the minimum legal limit, which must be observed.

On a Michelin tyre the position of the tread wear indicators is shown by a moulded Michelin man in the shoulder area.

Treadwear indicator 1.6mm

Tyre Pressure

Maintaining the correct tyre pressure is an important factor in both the safety and longevity of tyres. Over or under inflation could adversely affect the vehicle handling and the tyre's performance and durability.



Additionally keeping your tyres at the correct pressure and using energy efficient tyres reduces your engines workload. This means you'll save fuel and reduce CO2 emissions too!

Make sure of the correct tyre pressures by referring to the vehicle manufacturer's handbook.

Check tyre pressures monthly and before any long trip. The tyres should be checked when cold, as they heat up as you drive causing a slight increase in pressure. Don't forget to check the spare tyre.

If you intend to towing with the vehicle, e.g. a trailer or caravan, always consult the vehicle handbook or a tyre specialist for suggestions as increased pressures may be required. Remember your trailer or caravan will also need its tyres checked.

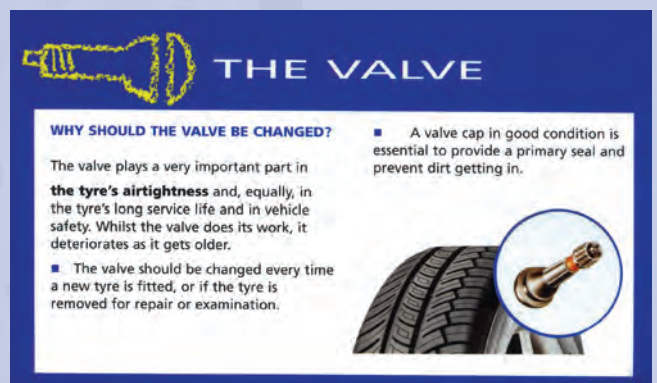
Note: Ask about inflating your tyres with Nitrogen.

Valves

Ensure that the tyre and wheel combination on your vehicle is fitted with the appropriate valve and valve cap. Both valve and valve cap play a very important part in the tyre's ability to maintain air pressure, tyre service-life and vehicle safety in general.

Whilst the valve does its work of allowing air in and out of the tyre as required, it deteriorates with age and should therefore be changed every time a new tyre is fitted, or if the tyre is removed for repair or examination.

Always use valve caps which have an internal seal that is in good condition. The valve cap retains the air within the tyre and also prevents dirt or grit getting into the valve. Do not over tighten the valve cap as this can damage the seal and allow any air seeping past the valve to escape from the tyre.



5. Tyre Positioning and Handling

When replacing car tyres the ideal situation would be to replace all four tyres together. However as vehicles wear their front and rear tyres at different rates, this cannot always be done. In this case, new tyres should be fitted to the rear and move the part worn rear tyres to the front. It is recommended to re-balance the old tyres when they are moved to the front

Why Fit New Tyres to the Rear

Primarily to ensure that vehicle stability is maintained in extreme working conditions of hard or emergency breaking and cornering. This is especially critical on wet or slippery roads. This also provides additional protection against sudden deflation in the rear tyres, which is most likely to cause loss of vehicle control.

Most modern vehicles being front wheel drive, the front tyres wear faster than the rear ones.

The driver is therefore used to having less grip at the front as the tyres wear towards replacement. By fitting new tyres to the rear and repositioning the more worn tyres on the front axle, the condition the driver has become used to is retained after the tyre change.

4 Wheel Drive Vehicles

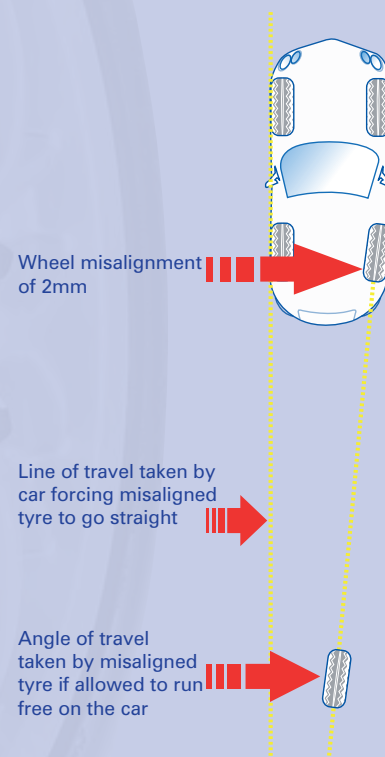
It is strongly recommended that on 4x4 vehicles identical sets of four (same make, pattern load index/speed symbol)

are used. The vehicle manufacturer's recommendations should also be followed.

6. Alignment

Vehicle suspension misalignment can result in rapid, irregular tyre wear, which is bad news for your pocket and can affect the handling and safety of the vehicle.

- If your suspension is misaligned by 4mm (just 2mm per wheel), then for every mile you travel the tyre is being forced sideways by 8.4m (24ft) on a car with 15" wheels.
- With 13" or 14" wheels, 2mm misalignment per wheel will result in even greater tyre scrub. No wonder incorrect alignment results in excessive shoulder wear. Watch out for this when you visually check your tyres.



The writing on the wall

Tyre Markings

TYRE SIZE DESIGNATION

TYRE SIZE				SERVICE DESCRIPTION	
235	/ 85	R 16		120	S
Nominal Section Width (mm)	Nominal Aspect Ratio	Construction Code	Nominal Rim Diameter	Load Index	Speed Symbol

Tyre Size Designation

Prefix letters are included when necessary as part of tyre size designation. P identifies a tyre primarily intended for use on passenger cars and light 4x4's. LT identifies a tyre primarily intended for service on light trucks and 4x4's. We strongly recommend fitting the same type of tyre on all four corners of the vehicle, fitting different types of tyre on the same vehicle can cause issues with the vehicles handling characteristics. The '235' is the nominal width of the tyres cross section in millimetres. The '85' is the 'aspect ratio' - the ratio of the side wall height to the cross-section width. The 'R' stands for radial-ply construction. The '16' stands for diameter (in inches) of the wheel that the tyre is designed to fit. Always ensure that the tyre fitted has the correct or higher load/speed rating as specified for the vehicle. It is not recommended to mix tyres with different load/speed ratings on the same axle.

Location of Tread Wear Indicators

(Markings not on all tyres) Tread wear indicators moulded into the base of the tread are set at 2mm to warn of the nearing minimum legal tread depth at 1.6mm.

Load Capacity Index

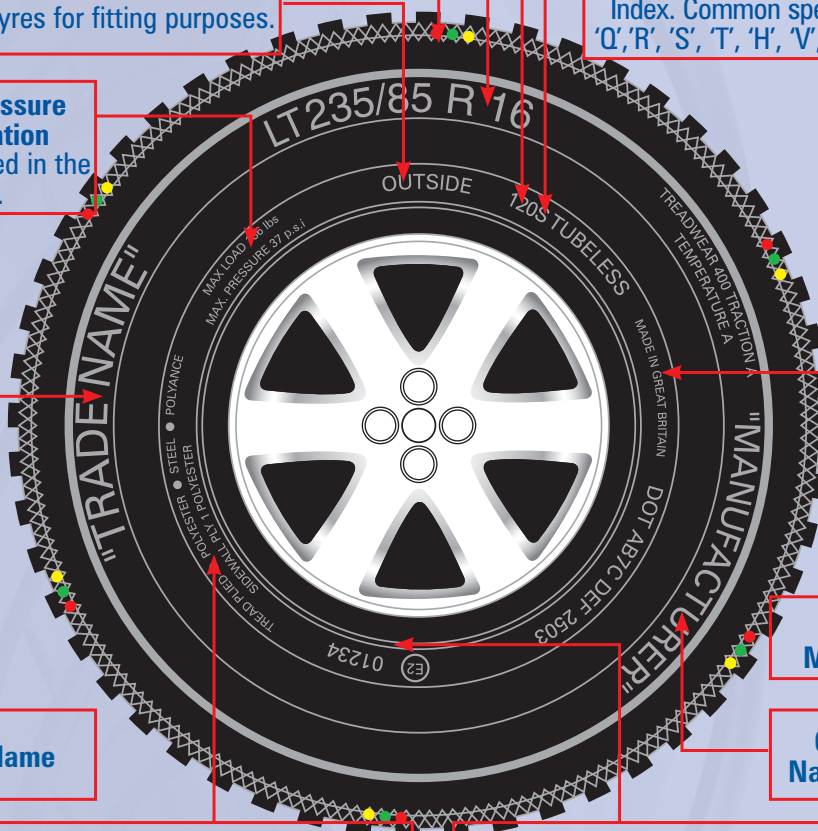
Shows the maximum weight the tyre can carry at the speed indicated by its speed rating.

Indicates exterior sidewall on asymmetric tyres for fitting purposes.

Speed Category Symbol

A letter which indicates the speed at which the tyre can carry the load corresponding to the Load Capacity Index. Common speed ratings are 'Q', 'R', 'S', 'T', 'H', 'V', 'W', 'Y', and 'Z'.

Load Pressure Information (Not required in the UK).



Country of Manufacturer

Commercial Name & Identity

Brand Name

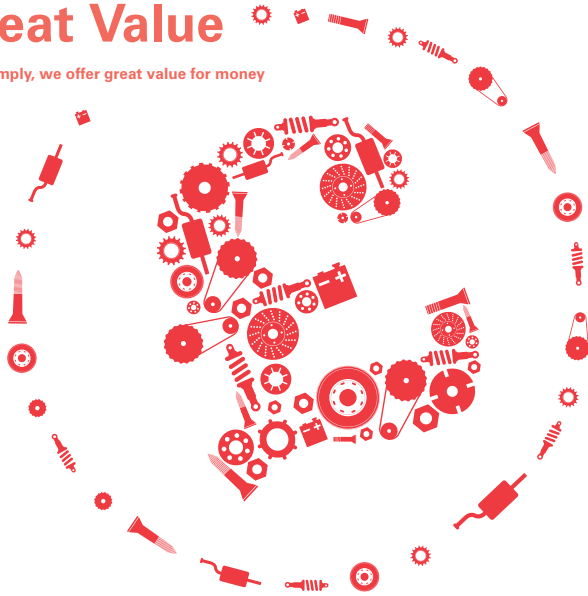
Tyre Construction Details (Not required in the UK).

European ECE Type Approval mark number.

03

Great Value

Quite simply, we offer great value for money



Save more

Free five point
tyre safety check

Free air and water

Free engine oil
top ups on MOTs*

Free checks on
exhausts, brakes
and batteries

*Not applicable for all sites

04

Great service

We pride ourselves on delivering the best service possible. From new tyres to replacement batteries, our professional staff can guide you in the right direction



Our service promise to you

Our tyre availability is second to none and our prices are great value

Our knowledgeable team will offer you unbiased advice and provide you with the right solution for your motoring needs

We will not recommend or sell you any products you do not need

We will provide you with an all inclusive quotation before we start any work on your vehicle and keep you informed of any complications

We invest in the latest technology to ensure your safety at to protect your vehicle

We will provide a clean and comfortable reception waiting area with a drinks facility

Our team will be polite and courteous at all times

Thank you for choosing Protyre, if you have any comments please speak to a member of the team