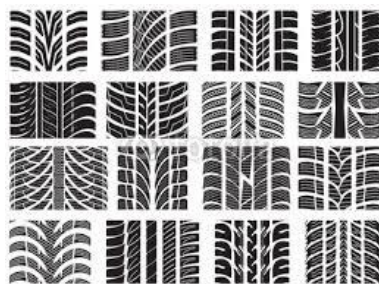


TIME TO RE-TYRE?



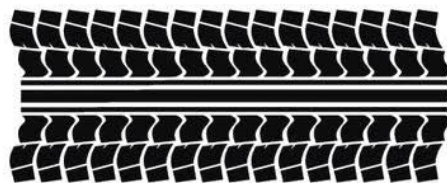
Rather depressingly, the tyres on our cars are something of a reminder of our own mortality. Some of them see out their allotted span while others are struck down in their prime and yet others just fade away. Like people, there is unfortunately little to be done to bring them back to life, although a little surgery is sometimes successful in extending their usefulness for a while.

A few years ago there was a case of a fatality involving an MGB which had suffered a sudden tyre deflation on the motorway and crashed seriously. The cause of this was established as being a tyre which was, on the face of it, perfectly serviceable but was simply too old for safe use and as a consequence of its age and perhaps the way in which it had been stored had unfortunately failed at a crucial moment. This is a good reminder of the fact that irrespective of wear tyres have a finite life and although this is said to be up to 10 years if they are stored in ideal conditions, their working life is said to be more like 6. The date of manufacture can be found on the sidewall, four figures denoting the week and year of manufacture, such as 0712, the year being the last pair.



If possible tyres should be kept somewhere cool and dry and certainly out of direct sunlight. Some time ago I bought an eight year old car with less than 12000 miles on the clock. Even without knowing how it had been kept the tyre date markings all showed them to be originals but when I got it home and checked the pressures one of the valves proved to be defective and before I could get the tyres changed another valve failed while driving, so it's not just the tyres themselves that age. The tyres in question had also gone incredibly hard, as I found out when the new ones were fitted.

In some ways tyres are still quite undeveloped compared to other parts of the car and while very much has changed in the materials of which they comprise they are still not as extended-life as things like oil, filters and bodywork have become. Why do tyres deteriorate? The hardening referred to above is due to a continuation of the vulcanising process which takes place during manufacture. Light, heat and movement all contribute to this gradual increase in stiffness and -importantly- brittleness. Oxygen and ozone also affect the elasticity and strength of the outer casing and the way in which the inner and outer parts of the tyre bond. The gradual absorption of water also has an effect on this, the result being a reduction in strength and heat resistance and using compressed air which is not completely dry is also a contributor to this aspect of their decay.



Tyres can be quite expensive things, so you really need to get as much use from them as possible. What can you do to prolong the life of your tyres? The most obvious and simple thing is to check their pressures weekly and to take action to correct any unusual wear characteristics by realignment. Keeping a car garaged and so protecting the tyres from some of the agents of deterioration certainly helps, as does correctly looking after tyres being stored. Checking pressures is a good time to give the visible parts of the tyre a once-over for any damage (as the roads are full of debris) or deterioration (such as cracking, particularly within the treads).

Do not rely on the MOT to advise you as to the state of your tyres as the regulations governing that part of the Test are quite relaxed, for instance allowing cracking so long as the inner reinforcement is not exposed and a minimum tread depth of only 1.6mm across the centre $\frac{3}{4}$ of the tread. This figure is really pretty low and all tyres have a Tread Wear Indicator, a 2mm high bar running across the base of the tread at various points and usually signified at its edge, although the industry would like to see a minimum of 3mm. Just think how small the four contact points are between you and the road and then consider the depth of tread in those areas. At the legal limit it's minimal in the dry, never mind the wet....

Look after your tyres and they will look after you. Ignore them at your peril: They may well kill you.

MJB