Tyre Pressure Monitoring System
Safe Tyres Save Lives

TYRE PRESSURE AND YOUR SAFETY

The air pressure within your tyres is the most important factor in determining how well they perform. Pressure affects the tyre’s speed capability, load carrying capacity, handling response, wear rate and overall safety. What’s more, under-inflated tyres will cause your car to use more fuel and emit more CO₂ emissions.

It’s therefore critical for your safety and comfort that your tyres are properly inflated in line with the vehicle manufacturers’ recommendations. Tyre pressures should be manually checked when they are cold at least once a month or before a long journey. For more details on how to check your tyre pressures, visit tyresafe.org.

TYRE PRESSURE MONITORING SYSTEMS (TPMS)

TPMS is a system fitted to a vehicle which constantly monitors the pressures or pressure imbalance in the tyres and provides a warning to the driver if these fall below a certain threshold.

Such is the importance of correct inflation, TPMS is a very useful safety feature. However, TPMS should not be seen as a replacement for regular manual tyre safety checks.

Two types of TPMS systems are fitted on cars today. Direct systems use radio sensors mounted inside of each wheel to measure the tyre inflation pressures. Indirect systems utilise the vehicle’s existing ABS sensors to measure and compare the rotational speeds of the tyres, which are affected by their pressures. Both types work with the vehicle’s main Electronic Control Unit (ECU) to alert the driver via dashboard warning lights to any pressure loss or variance issues.
TPMS AND THE LAW
Since November 2014, all new passenger vehicles sold in the EU must be equipped with TPMS.

Furthermore, with effect from 1st January 2015, all vehicles fitted with TPMS will need to have a fully functioning system when undergoing their annual MOT test. Inoperative or faulty TPMS systems will result in an MOT failure.

TPMS AND RUNFLAT TYRES
Runflat tyres are designed to provide a limited run-on period following a puncture. These types of tyres can be identified by the “RF” marking found on the tyre sidewall.

Runflat tyres are only designed to run for a limited period, at a maximum speed of 50 mph with a limited load carrying capacity.

Due to the nature of runflat tyres, these should only ever be fitted to vehicles equipped with TPMS.

TPMS SERVICING
To ensure your TPMS system continues to operate properly and reduce the likelihood of an MOT failure, it may be necessary to have the system serviced occasionally. TPMS sensors are designed to last for many years and miles, however, after a certain period, the sensor’s internal battery will run out meaning a replacement is needed.

In addition, sensors can become faulty or fail completely as a result of weather damage, corrosion or accidental damage caused when changing tyres. To ensure the sensor remains in good condition, many manufacturers recommend replacement of the valve cap and core components every time a tyre is changed.

When replacement TPMS sensors are fitted to your vehicle, your tyre fitter may need to programme the new component to the car using specialist diagnostic equipment.

If your TPMS sensor does develop a fault, under no circumstances should this be removed and replaced with a ‘standard’ non-TPMS type valve. Removing the sensor will not only reduce your safety on the road, it will also result in your car failing its MOT.

TPMS WARNING LIGHTS
If the TPMS warning light on your dashboard illuminates, this should not be ignored as there may be a problem with the pressure in one or more of your tyres. At the earliest opportunity, find a safe place to stop your vehicle where you can manually check your tyre pressures against the vehicle manufacturer’s recommended settings. These details can be found in your vehicle handbook, inside the fuel filler flap or on a placard located on the driver’s door sill.

If you are unable to check your pressures yourself, either call for roadside assistance or locate your nearest tyre professional who will be able to help you.

MANUAL CHECKS
While the benefits of TPMS are widely recognised, it is important that they are not seen as a replacement for regular manual tyre safety checks. Pressures should be tested at least once a month or before any long journey, when the tyres are cold using an accurate and reliable pressure gauge.

When checking pressures, it is advisable to also give the rest of the tyre a thorough visual inspection as well as ensuring the tread is not excessively or unevenly worn.

For more advice and information about tyre safety checks, visit tyresafe.org.