



TYRES

INTRODUCTION

Tyres are without doubt, the most important component on a vehicle. Tyres not only define the dynamic behaviour of the car they are attached to, but they must also damp vibration, support the weight of the vehicle, accept and enable changes of vehicle direction and maintain the selected vehicle direction.

The tyres fitted to your vehicle define the following performance criteria:

1. Acceleration
2. Braking
3. Fuel consumption
4. Top speed
5. Cornering velocity
6. Straight line stability

Selecting replacement tyres can be confusing; there are seemingly thousands of different tyres available. However, their importance means that there is a lot of information to help you.

CHOOSING THE CORRECT TYRE

The tyres fitted to your vehicle offer a myriad of information that will help replacement. The vehicle handbook should also help.

The tyre sidewall contains a lot of coded information; this data explains the exact criteria to which the tyre is suited. By decoding this information you will be able to replace with like for like (well almost).....

SIDEWALL INFORMATION

195/50 R15 91Y

15 Wheel diameter (inches)

195 Tyre section width (mm)

50 Aspect ratio (%) (sidewall height/section width x 100)

R Tyre construction type (R = radial)

91 Load index, the maximum load that can be carried by that 1 tyre

Y Speed rating, the maximum speed that the tyre is able to operate at its maximum load index

LOAD INDEX

[CLICK HERE TO OPEN THE AUTOSAVA LOAD INDEX CHART](#)

SPEED RATING

[CLICK HERE FOR THE AUTOSAVA SPEED RATING CHART](#)

TYRE SELECTION

The exact tyre type that you choose may depend on many factors, your budget being a major factor; however, you should keep these other factors in mind:

- Annual mileage – tyre wear rate and rolling resistance will both be an issue
- Driving style – sporty driving will require higher performance tyres
- Vehicle power – high BHP and torque add extra stress to your tyres
- Fuel economy – fitting low rolling resistance tyres may reduce your fuel usage
- Climate – English weather is not such an issue, but if you are planning to travel to hot or cold places you may need different tyres
- Do you tow? – if so you may need to look for higher performance tyres
- FWD/RWD – FWD vehicles use their front tyres disproportionately more than their rears or those of RWD vehicles
- Wheel material – Some aluminium wheels require tyres that are designed to be fitted only to aluminium wheels
- Road usage – high speed motorway travel requires different tyres to city travel

TYRE LIFE

A high powered FWD car may require front tyres 3 to 5 times more regularly than rear tyres. However, tyre life is dependent on how you drive and how you maintain your tyres.

However, current tread depth legislation requires that car tyres must have a minimum of 1.6mm of tread in a continuous band throughout the central $\frac{3}{4}$ of the tread width and over the whole circumference of the tyre.

For safety sake, autosava suggest that you change your tyres when the tread depth approaches 3mm. Your life depends on it, for the sake of a few quid it is reckless not to.