

## Wheel alignment: expert tips and trouble tracing

### Correct wheel alignment saves money and makes happy customers!

Wheel alignment consists of **adjusting the angles of the wheels so that they are set to the car maker's specification**. The purpose of these adjustments is to stop the vehicle pulling to one side which causes wear on the tyres and the steering & suspension parts thus ensuring an excellent road holding. All new vehicles leave the factory with their alignment checked and adjusted.



### Challenge

**Any severe driving incidents and with every replacement of steering and suspension components justifies a wheel alignment**, even if the parts are not adjustable. Failure to do this may result in the camber and toe specifications drifting outside the manufacturer's limit. This may lead to the vehicle pulling and premature wear of the tyre and the suspension parts.

At first drivers may not notice these defects but after some time of usage it can start causing **uneven tyre wear and a pull/drift to the left or right**. Tyre wear leads to frequent replacement of tyres and pull/drift leads to premature wear of the suspension parts all of which add unnecessary cost for the owner. Vehicle pulling **causes irritation and/or fatigue whilst driving the car** and even incorrect inflation and rotation of the tyres can have an effect on fuel consumption.


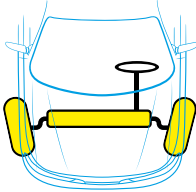

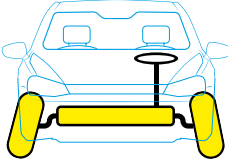

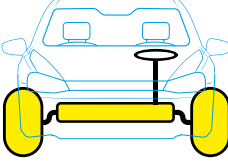

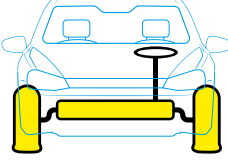

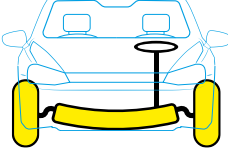
### Easy Solutions

Make sure a full wheel alignment procedure is carried out accurately and to the correct technical standards once you have carried out the replacements of steering and suspension parts.



# EASY SOLUTIONS BULLETIN

## Interpreting tyre wear patterns related to misalignment of the wheels and chassis part issues.

PROBLEM	CAUSE	CORRECTIVE ACTIONS
<p><b>FEATHERING</b></p>  <p>Thin inner or outer edge of the tyre is worn out. Each tread rib has a rounded edge on one side and a sharp edge on the other side.</p>	<p><b>INCORRECT TOE</b></p> 	<p>Correct the toe setting and execute a wheel alignment. Check and replace if needed the bushings in the front suspension system to avoid reoccurrence.</p>
<p><b>ONE SIDE WEAR</b></p>  <p>The inner or outer ribs of the tyre wear out faster than the rest of the tyre.</p>	<p><b>EXCESSIVE CAMBER</b></p> 	<p>Execute a wheel alignment. To avoid reoccurrence check the shock absorbers, ball joints and control arm bushings if they are not worn out. Replace the worn out parts.</p>
<p><b>CENTRE WEAR</b></p>  <p>Ribs gone from centre of the tyre.</p>	<p><b>THE TYRES ARE OVERINFLATED</b></p> 	<p>Check the pressure of the tyres. Remove air if the tyres are overinflated.</p>
<p><b>EDGE WEAR</b></p>  <p>Ribs gone from both sides of the tyre.</p>	<p><b>THE TYRES ARE UNDERINFLATED</b></p> 	<p>Check the pressure of the tyres. Add air if the tyres are underinflated. To avoid reoccurrence check if no steering component is bent or worn out. Execute a wheel alignment.</p>
<p><b>CUP WEAR</b></p>  <p>Cupped or scalloped dips appearing around the edge of the tread on one side or the other.</p>	<p><b>WORN OUT OR BENT SUSPENSION PARTS</b></p> 	<p>Check and replace the steering &amp; suspension parts. Execute a wheel alignment.</p>