

This tyre safety information has been taken from the Continental Tyre website. All credit for this useful information must go to them. There are many references to Continental throughout the text. Extract any useful information that you need

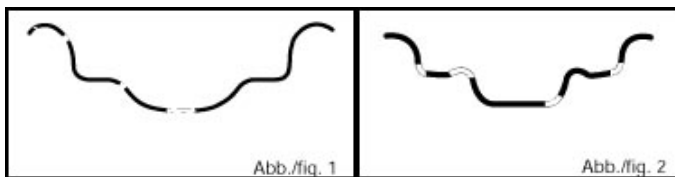
Motorcycle Tyre Safety

Tyre rims

In the past the development of tyre and rim technology has led to various rim constructions. Over the years with the application of both theory and experience two basic rim systems have been developed, one for tubeless tyres and the other for tubetype tyres.

For tyres which use an inner-tube, that is tubetype tyres, the WM rim is used (fig 1).

Next, the MT rim (without illustration) was developed for tubeless tyres then the humped MT H2 rim (fig 2). The hump prevents the tyre from slipping down to the well due to air loss.



Tyre Designs

Crossply tyres

On today's market the crossply tyre is the "classic" design. Its advantages are its straightforward structure and its sturdy sidewalls, which particularly in off-road use offer many benefits (impact protection). Crossply tyres have a maximum design speed of 240 km/h (150 mph).

Material used: usually rayon or nylon fabric.

Typical designation: 4.00 - 18 64H TL TKH 24 1

Breaker tyres

The breaker tyre originated from the crossply design, to provide a tread area which was effectively reinforced from the inside, giving the tyre a longer service life through reduced transverse slip and making it less prone to failure.

Transverse slip originates from the tyre design and results from the lateral deformation of the rolling tyre.

Slip always results in wear: the greater the slip, the greater the wear. Although circumferential wear (also known as longitudinal wear) can be substantially reduced through a defensive riding style and also careful acceleration, it cannot be totally avoided, because slip is always needed to transmit the tyre forces to the road.

Continental uses this design on its TK 16/17 and Milestone. This type of tyre has a maximum design speed of 210 km/h (131 mph) in the Conti range.

Material used: usually rayon or nylon fabric. Normally the breaker and casing feature the same material.

Typical designation: 130/90 - 16 73H TL reinforced TK 17.

Bias belted tyres

The bias belted tyre is the precursor of the radial tyre. Whilst the casing is still crossply in design, the tyre features a belt, usually made from Kevlar. Suitable for speeds up to 250 km/h (156 mph).

The bias belted tyre can be recognised by the B (=bias belted) in the designation on the outside of the tyre. For example: *150/70 B 17 69H TL Enduro Pro*.

Radial tyres

Radial tyres feature a casing angle of approx. 90° to the circumferential direction (direction of travel) and a belt angle of 0 - 25° approximately. The belt, located under the tread area, gives the tyre stability and permits far higher speeds, as the centrifugal force deformation is substantially lower.

Reduced material thickness in the sidewall section means the tyre heats up less and the high speed strength is further increased.

In terms of riding dynamics, modern motorcycles are geared to radial tyres. As an example, a *4.00 - 18 64H TT Conti TKH 24* tyre "grows" by approximately 2 cm on average at a speed of 210 km/h (131 mph), whereas a comparable radial tyre only expands by a few millimetres. The radial tyre can be recognised by the R in the designation on the outside of the tyre.

Example: 120/70 ZR 17 (58W)TL ContiForce

Advice on tyre pressure

Motorcycle manufacturers always go into the subject of air pressure in great detail in their vehicle manuals. It is possible to find instruction on air pressure for every driving situation. In addition it is usually possible to find a sticker on the vehicle with the necessary information written on it.

The manufacturers make a distinction between load (riding solo or with a pillion passenger, with or without luggage) and speed (on secondary roads or motor-ways).

Naturally in such a short fitment guide it is not possible to give the necessary tyre pressure details for every motorbike and because of this we refer you to the recommendations of the motorcycle manufacturers.

From years of experience we are aware that motorcyclists sometimes ride on tyres for which the air pressure is not suited to the driving conditions. We do however advise that you always ride at the highest pressure level given in the manual.

Some amount of comfort will be lost, but that loss will be outweighed by improved safety. In addition the rolling resistance will be lower which will help to save fuel.

Incorrect inflation pressure reduces the service life and may have a negative influence on the riding characteristics of the motorcycle.

Under-inflated tyres flex excessively, easily overheat and can suffer damage. Over-inflation can cause uneven wear. Improper inflation, either too high or too low, can adversely affect overall handling and ride quality.

Tyre pressure will be measured when the tyres are cold. During riding the tyre becomes warm and the tyre pressure is there-fore higher (up to 0,5 bar). This excess pressure should not be let off as it will automatically be balanced out as the tyre cools down again.

If you possess no tyre pressure recommendations for your motorcycle follow air pressure recommendations shown in the Continental fitment guide.

As a rule the tyre pressure for motorway riding should be 0.2 bar higher. The same also applies to a bike with a fully laden rear axle.

The most important safety rules for motorcycle tyres

- Observe specified minimum air pressure. (See motorcycle owner's manual)
- Check inflation pressure, and adjust if necessary, on every refuelling stop
- Do not exceed maximum load capacity. (See motorcycle registration papers)

- Avoid impact strain (E.g. curbstones)
- Check tyres regularly for signs of damage
- Never ride on tyres with less than 2mm tread depth (More is better)
- Only buy specified tyres. Handling characteristics can only be optimized through proper tyre fitment
- Use the right inner-tubes to match the tyres (if necessary). New tubes for new tyres
- Make sure valve caps are fitted. New valve for new tubeless tyre
- Only use specified rims in perfect condition. Specialty rims require special approval
- Only have tyres fitted by a skilled tyre fitter

Tyre selection

When selecting new Continental motorcycle tyres, be sure they meet the requirements of your motorcycle and its expected usage. For the makes and models not covered by the Continental fitment guide, contact your Continental dealer or the motor-cycle manufacturer before tyres are fitted.

Load carrying capacity

Never exceed the accessory restrictions and vehicle load capacity found in the motorcycle owner's manual or the maximum load moulded on the tyre sidewall.

Speed ratings

Look at the table for speed ratings (page 80) to find the right tyre for your motorcycle. Continental does not recommend the use of any of its products in excess of legal speed limits.

Fitting tyres

Only specially trained persons should fit tyres. Fitting tyres requires that you lubricate both sides of the tyre bead and rim, all the way around. Use a commercial tyre-bead lubricant or soapy water. Do not use a petroleum-based or silicone-based lubricant. Observe the directional arrow on the sidewall. Do not use sealing liquids.

Balancing

Balancing and tyre service are best performed by your Continental motorcycle tyre dealer who has the equipment and know-how. Ask your dealer to check the concentricity and balance of your tyre/wheel assembly after mounting. Do not use balancing liquids.

Clearance

To prevent tyre damages by touching parts of vehicle sufficient clearance is important under all riding conditions.

Maintenance

Continental does not recommend repairing a damaged tyre by simply fitting a new inner-tube. Due to safety reasons Continental recommends to always fit a new tyre instead of repairing it.

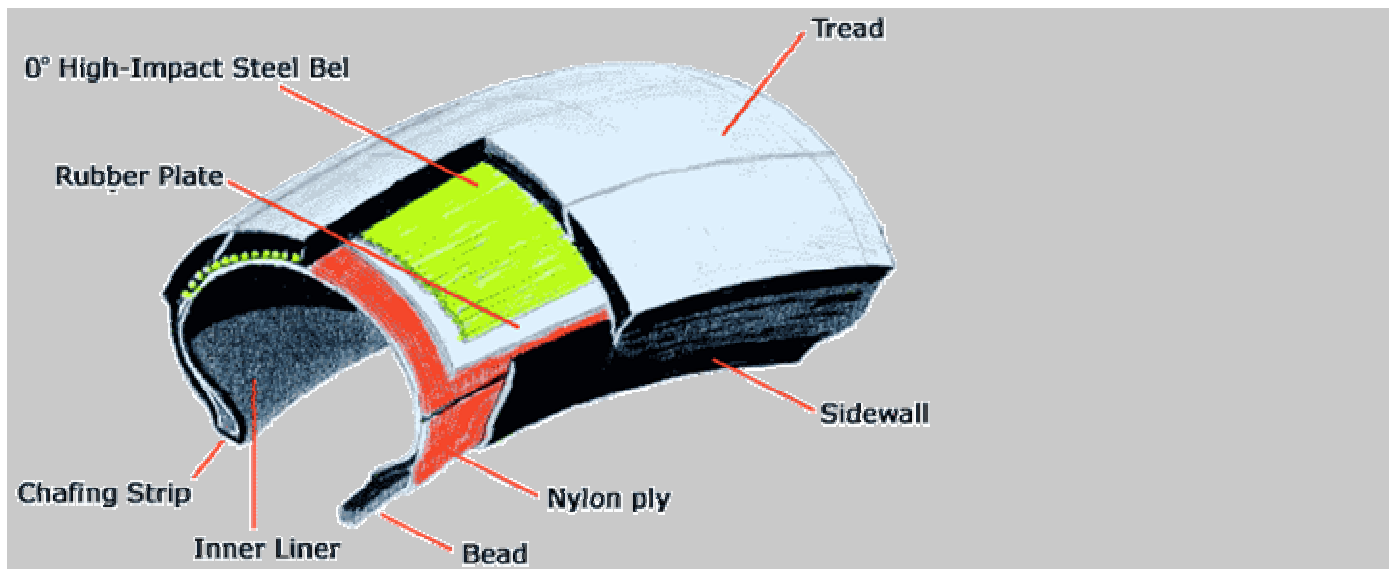
Regrooving

It is prohibited to regroove motorcycle tyres.

Tyre storage

Tyres should be stored in a cool, dry and dark environment.

New Contiforce Max



- the MAX is ideal for fast road riding on sports and sports/touring bikes
- 0° construction utilising a patented HIGH-IMPACT steel belt; a feature used by no other motorcycle tyre manufacturer
- new compound developments have allowed our engineers to give the MAX a deeper tread; so even though grip levels are 20% higher than the standard ContiForce, mileage does not suffer
- the 0° construction of the MAX delivers increased straight-line stability and shock absorption leading to a more comfortable, controlled ride with a reduce tendency to react to road irregularities
- the MAX has high levels of wet road grip and feedback with a very fast warm-up time
- the modified ContiForce tread pattern of the MAX puts more rubber in contact with the road, to further increase grip, especially at extreme lean angles
- the optimised multiple curvature design gives light, responsive steering a handling
- at this price level no other tyre comes close to the performance of the ContiForce MAX