

TYRE FITMENT

Tubeless

WARNING: For tubeless application only 'MT' or 'TL' profile rims must be used.

Before deciding to use tubeless tyres it is essential to establish that the wheels are suitable. If the wheels were supplied as original equipment with tubeless tyres fitted then they should be satisfactory. If, on the other hand, the wheels were supplied as original equipment fitted with tubed tyres, the machine's manufacturer must be consulted before attempting conversion to tubeless tyres. In the case of after-market wheels the wheel manufacturer will be able to advise regarding suitability for tubeless tyre fitment.

This applies to cast alloy/composite wheels only. Tubeless tyres must not be fitted to wire spoked wheels unless a tube and a rim band are used. (Exception - BMW MTprofile spoked wheels)

How to strip off a tubeless tyre

Note. To avoid the possibility of tyre levers damaging alloy rims, it is recommended that rim flange protectors are used (see below).

- 1 Remove valve cap and valve core and allow the assembly to deflate. (Illus. A).
- 2 Push each bead off the shoulders of the rim, so that the tyre beads enter the well of the rim. (Illus.B) This operation will almost certainly require the use of a bead releasing tool.
- 3 At the point opposite the valve, ease the edge of the tyre down into the well of the rim and insert a small tyre lever at the valve position and lever the bead of the tyre over the edge of the wheel rim. (Illus. C)
- 4 Hold the lever down with one hand and, with the other, insert a second lever a short distance away. Lift more of the bead of the tyre over the rim flange with this lever. (Illus. D)
- 5 Repeat this in easy stages until the bead is free from the rim flange.
- 6 Finally, lever the second bead from the rim. (Illus. E)
- 7 Check tubeless valve for correct fitment and durability.
- 8 Remove any balance weights from wheel.

Tyre Fitment Safety

Before removing or fitting tyres your attention is drawn to the inside back cover.

How to fit a tubeless tyre

- 1 Check valve unit for correct type and serviceability. If in doubt, or when fitting a new tyre, replace the unit. Lubricate bottom bead with a recommended lubricant, but do not use an excessive amount as this can result in bead 'creep' in service. Check for 'Tubeless' marking.
 - 2 Place tyre on top of the wheel and ensure that the directional arrow is pointing in the correct direction according to whether the wheel is for the front or rear of the machine. Ensure that no foreign matter is left inside the tyre. (Illus. F)
 - 3 By hand, push the lower bead over the rim-flange and into the rim-well (Illus G). Alternating one side then the other, ease the rest of the lower bead over the rim-flange until all the lower bead is into the rim-well. It may be necessary to lubricate the final part and ease it into place with a tyre lever. Ensure that the part of the tyre opposite the fitting point is always in the rim-well.
 - 4 Lubricate the upper bead and starting at a point opposite the valve, push the bead over the rim-flange into the well. Holding this part of the bead in the well, work around the circumference, alternating each side, gently easing the bead over the rim-flange (Illus. H).
- Eventually, a tyre lever will become necessary. Carefully using the lever, ease a small portion at a time over the rim-flange. If excessive force becomes necessary, this may be because the tyre bead opposite the fitting point is not completely into the rim-well. Adjust this and the tyre should then be eased over the flange until completely into the rim-well (Illus. I).
- 5 Unnecessary force may damage the tyre beads or rim-flanges.
 - 6 Ensure that tyre is evenly fitted all round.
 - 7* Lubricate tyre beads and inflate to a maximum of 40psi 2.80 bar.
 - 8* As rims may have tapered, Contre Pente or hump safety ledge features the beads may not seat correctly even at 40psi 2.80 bar. In such a case deflate the tyre, loosen the beads and re-lubricate before reinflation. When inflated check that moulded tyre side wall rim-fit lines are concentric with the rim flange on both sides of the assembly.
 - 9 Set pressure at correct level of the machine.,
 - 10 Re-balance assembly as required.

RiderWearHouse addendum:

- (7) Ensure that the red dot or sidewall mark indicating the tyre's lightest area is next to the tyre valve.
- (8) A large air supply from a compressor with a reserve air tank is usually required. The larger volume rush of available air helps seat the bead. A ratchet strap can also be used around the tyre's circumference to assist in this procedure. Temporarily removing the tyre valve core may also be helpful.

Stripping off a Tubeless Tyre

Illustration A



Illustration B



Illustration C



Illustration D



Illustration E



Fitting a Tubeless Tyre

Illustration F



Illustration G



Illustration H



Illustration I



Note: For safety purposes always inflate tyre in a cage.

TYRE FITMENT

Tubed

It is important to avoid undue force with levers as this will permanently damage the wire beads which are not designed to stretch. It is important to make full use of the well of the rim when fitting and removing tyres.

when the tyre is in position and fully inflated the beads rest on the shoulders of the rim. The design of the rim facilitates fitting as it allows part of the circumference of the tyre bead to be dropped into the well while the part diametrically opposite is pushed over the flange.

Lubrication of the beads with slightly soapy water will help fitting and removing. Do not use an excessive amount as this can result in bead 'creep' in service.

How to strip off a tube type tyre

- 1 Remove valve cap, rim nut and valve core, allow the tube to deflate.
- 2 Push each bead off the shoulder of the rim.

How to fit a tube type tyre

WARNING: A tube of the correct size must always be fitted to a tubed type tyre.

- 1 Remember to use small tyre levers and avoid using undue force.
- 2 Check that the tyre, tube and rim tape are sound. Ensure no foreign matter such as grit, wrapping paper or labels, is left inside the tyre, as this will damage the tube. Fitting is easier if the tube is dusted lightly with french chalk. Ensure the tube carries the correct size marking.
- 3 Slightly inflate tube and slip into the cover, making sure that the tube is not creased or twisted (Illus N). Lightly lubricate lower bead of the tyre.
- 4 Place the tyre with the tube inside on top of the wheel with the valve in line with the valve hole in the rim. Direction of rotation is important and most tyres are marked to indicate the recommended direction of rotation, according to front or rear fitting.
- 5 Thread the valve through the valve hole (Illus O). Allow the lower bead to sink into the centre of the rim and the upper bead to remain outside.
- 6 Working from each side of the valve and using both hands, press the remainder of the lower bead over the rim. A lever may be used to complete the operation (Illus P). It is important to ensure the

- 3 At a point diametrically opposite the valve, ease the bead of the tyre down into the well of the rim. Push the valve stem in as far as it will go, insert a small tyre lever at the side of the valve and lift the bead over the rim (Illus J).

- 4 Hold down the lever with one hand, and with the other insert a second lever a short distance away. Lift top bead of the cover over the rim of the lever (Illus K).

- 5 Repeat this in easy stages until the bead is free of the rim. Withdraw the tube, starting from the side opposite the valve (Illus L).

- 6 Finally, lever the second bead from rim (Illus M).

N.B. To avoid the possibility of tyre levers damaging alloy rims, it is recommended that rim flange protectors are used.

bead area diametrically opposite the fitting point is always in the base of the rim well.

- 7 To fit the second or top bead, the method is similar to that described for the first or lower bead, except that it is important to start from a point diametrically opposite the valve (Illus Q). As before, ensure the bead is in the well of the rim and then work round in both directions until only a small portion of the bead remains. This last section should first be lubricated before being gently levered over the rim, simultaneously depressing the valve slightly (Illus R).

Unnecessary force tends to damage the tyre and may break the wire beads. Always ensure the tyre bead opposite the fitting point has completely dropped into the rim well.

- 8 Push valve inwards to make sure that the tube near the valve is not trapped under the bead. Pull valve finally back into position.
- 9 Make sure the tyre is evenly fitted all round and that the valve protrudes squarely through the valve hole.
- 10* Inflate to approximately 2.1 kg/cm² (30psi).
- 11 Deflate and check that valve is not trapped. Fit rim nut.
- 12 Inflate to recommended pressure and check that fitting lines on tyre run true with the rim tighten valve rim nut and fit valve cap finger tight.

RiderWearHouse addendum:

(10) Make sure the sidewall's red dot (or balance marking) is located adjacent to the valve stem. This mark indicates the lightest side of the tire.

Stripping off a Tube Type Tyre

Illustration J

Note: Valve depressed by finger



Illustration K



Illustration L



Illustration M



Fitting a Tube Type Tyre

Illustration N

Note: Valve depressed by finger

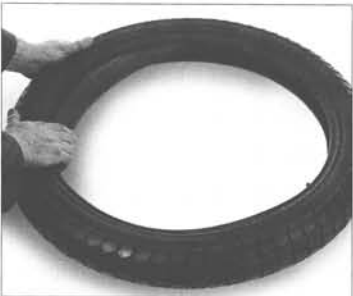


Illustration O



Illustration P



Illustration Q



Illustration R



Note: For safety purposes always inflate tyre in a cage.