

# MRF Tyre Guide: All you need to know



Tyres are not just round pieces of rubber fitted to your bike's wheels. A good set of tyres can make all the difference in your two-wheeler ownership experience. But which one should you go for? What is the difference between a tubed and a tubeless tyre? These questions will surely arise when selecting a new set of tyres. Let's look at each question one by one

**Tread pattern**

Grooves in the tyre enable it to evacuate water from the contact patch when the road is wet. A worn tread pattern with few grooves indicates that the tyre should be replaced in due time.

**Profile**

The tyre's profile influences the dynamic behaviour of a motorcycle. Sport tyres promote quick steering and extreme lean angles. Street tyres emphasize stability and low-speed manoeuvrability.

**Bead**

The edge of a tyre that sits on the wheel.

**Sidewall**

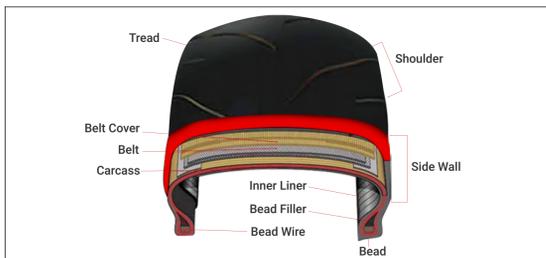
It contains Size, Brand Name, the maximum speed and load allowed. In the transmission of circumferential and side forces, as well as bump absorption the sidewall plays an important role.

## 1. Buying tyres

Let's talk shoes. Does one size fit all? Can rexine sneakers be used for trekking? Or can suede leather be used for working out? No.

The same goes for tyres. While selecting the best tyre for your bike, one must take into account what is expected of a new set of wheels. While off-road tyres are good if you stay in an area where road quality is bad, symmetrically treaded tyres are preferable for urban areas with superior roads.

### Construction



Nylon is a strong, yet light textile. It is used in a variety of fields, from clothes to body armour. Tyres also contain nylon, along with steel and other materials, to help improve strength and stiffness. A single unit of rubber, the most basic building block of rubber, is called a cord. It is the arrangement of cords that lends a tyre strength and shape.

When the cords are arranged in a tangential pattern, like in the strings of a guitar, it is a radial pattern. Radial tyres are the industry standard when it comes to automotive tyres in India.

### Tread

Ever heard your shoes squeak while walking on a wooden floor? That is the sound of your sole creating friction, helping you to walk. This happens because rubber, when in contact with a surface, offers resistance. This resistance is also loosely called "grip". Grip depends on many factors like composition of the surface, the area of contact, the weight applied, and so on. This concept can also be applied to tyres. The parallel or v-shaped grooves on the outer surface of a tyre are called treads. Tread design plays a crucial role in comfort, handling and braking.

- The tread design of a tyre plays an important role in handling and ride comfort.
- Tyres which do not have any tread (slick tyres) are used in racing because they offer maximum contact area, but are best-suited for race tracks, and not for ordinary use.
- Straight-cut tyres, or tyres with straight tread are best suited for heavy load and long haul applications.
- V-tread tyres offer the best grip in most everyday situations, along with good wet grip
- The best tyres feature a combination of different type of treads to improve grip on all sorts of surfaces and make it more versatile.

### Reading a tyre

While checking out from a store, the attendant scans your purchases with a barcode scanner. The barcode contains black and white lines that contain all the information pertaining to the product.

Similarly, every tyre has a set of markings on the outer wall, which can tell you everything you need to know about the tyre.

Imagine that you see 140/70/R17 TL painted on the sidewall of a tyre.

- 140 is the section width (140 mm)
- 70 is the aspect ratio, which is the ratio of the sidewall height to the width(70%)
- R 17 indicates that the tyre is of a radial construction and has a 17 inch diameter.

- Upsizing involves fitting larger tyres, which may or may not require a rim change.
- While upsizing, the overall outer diameter must remain the same.
- The aspect ratio of a tyre is inversely proportional to the wheel diameter, which is also an important factor to be considered.
- This is because choosing a tyre of incorrect dimensions can affect handling and fuel efficiency.
- Always consult an MRF service engineer to be on the safer side

## 2. Maintaining Tyres

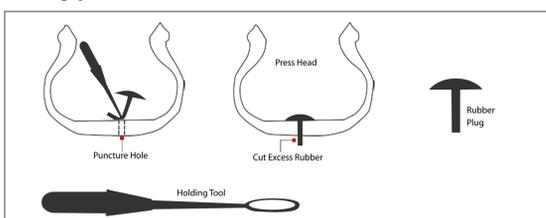
### Checking tyres for wear

Tyres are the main point of contact between the road and the bike. Just like a pencil tip wears when used, so do tyres. Worn tyres can reduce grip, fuel efficiency, and can cause accidents.

So this is how you can check if your tyres are worn out:

- Every tyre has a treadwear indicator, which looks like an upward-pointing arrow.
- If the outer wall of a tyre touches the tip of the indicator, it must be replaced.
- Tyres must have a minimum of 2mm tread depth left, to be effective.

### Fixing punctures



In many places across India, the roads are not properly laid out. Bad news for riders? Yes! Absolutely. Broken pieces of tarmac, debris from road accidents, rusted bits of construction material litter our roads everywhere. Add to this potholes and you have a destructive mix leading to tyre punctures. So what do you do when you suffer a flat? Keep in mind these points.

- It is recommended to carry a puncture repair kit, which can be purchased from an MRF T&S outlet
- Park your bike on the centre stand, and turn on the indicators
- Check where the puncture has occurred by running your hand around the tyre
- Remove puncturing object with an extractor tool
- Insert the puncture plug inside the plunger tool

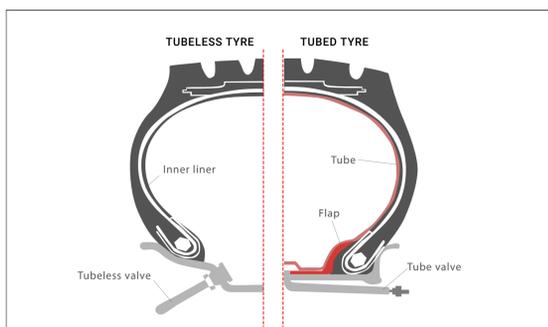
### Selecting the right rims



Your rims, while being made of a very strong alloy, do get damaged while riding over bad roads. There are a lot of quick-fixes available for fixing damaged or bent rims, but it is always a good idea to go in for a new set if your rims lose their shape. Here's what you should keep in mind

- A rim wider than the recommended size will affect stability while turning.
- A rim smaller than what the manufacturer has provided will degrade braking performance.
- Front and rear wheel rims differ in size.
- Never ride with damaged/cracked/bent rim/rims as that will overload the suspension and braking systems on your two-wheeler.
- A poorly fitted rim will cause handling issues.
- Always consult an MRF technician while opting for a new set of rims.

### Tubed and Tubeless Tyres

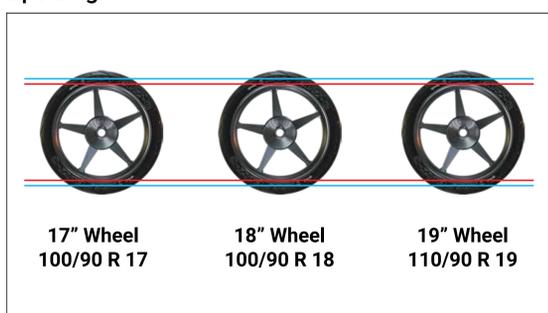


We have all kicked a ball around once in a while. And we all know that what keeps a ball round is the bladder, a thick rubber balloon that is inflated with air. Most modern football nowadays don't have a bladder, which helps in reducing weight and improving swing.

Tyre tubes are very similar to football bladders. Tubed tyres are cheap and easy to maintain, suffer blowouts, which can cause accidents. Tubeless tyres do not have a tube, but have a reinforced sidewall. They are lighter, and hence more fuel efficient.

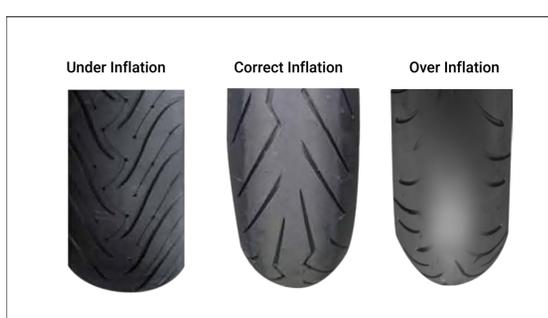
- TL means that this is a tubeless tyre.
- In case you have a doubt, consult an MRF T&S for help.
- You can find out the location of a T&S near you by going to [www.mrf tyres.com](http://www.mrf tyres.com)

### Upsizing



So you wake up one day and decide that your bathroom is too small, your living room cannot accommodate that 51 inch TV that you were dreaming of buying and parking lot can only house one of your three cars. What do you do? Go in for a larger house, obviously. But when it comes to tyres, bigger is not necessarily better. When going in for larger tyres, you "upsized", or upgrade. These are things you need to keep in mind while upsizing.

### Inflating tyres correctly



A tyre is like a football. Just like an over or under inflated football can spoil a game, an improperly inflated tyre can cause a lot of problems. While an overinflated tyre can result in a hard, bouncy ride, an underinflated tyre can damage handling and steering quality. Always keep in mind the proper inflation pressure for your tyre. Pressures differ depending on the weather, the size of the tyre and the amount of load to be carried by a vehicle. As a rule, it is better to overinflate tyres rather than underinflate them before setting off for that dream ride.

- Insert plunger tool and seal the gap
- Remove it and scrape off any rubber that extends from the repair area
- You can find out the location of a T&S near you by going to [www.mrf tyres.com](http://www.mrf tyres.com)