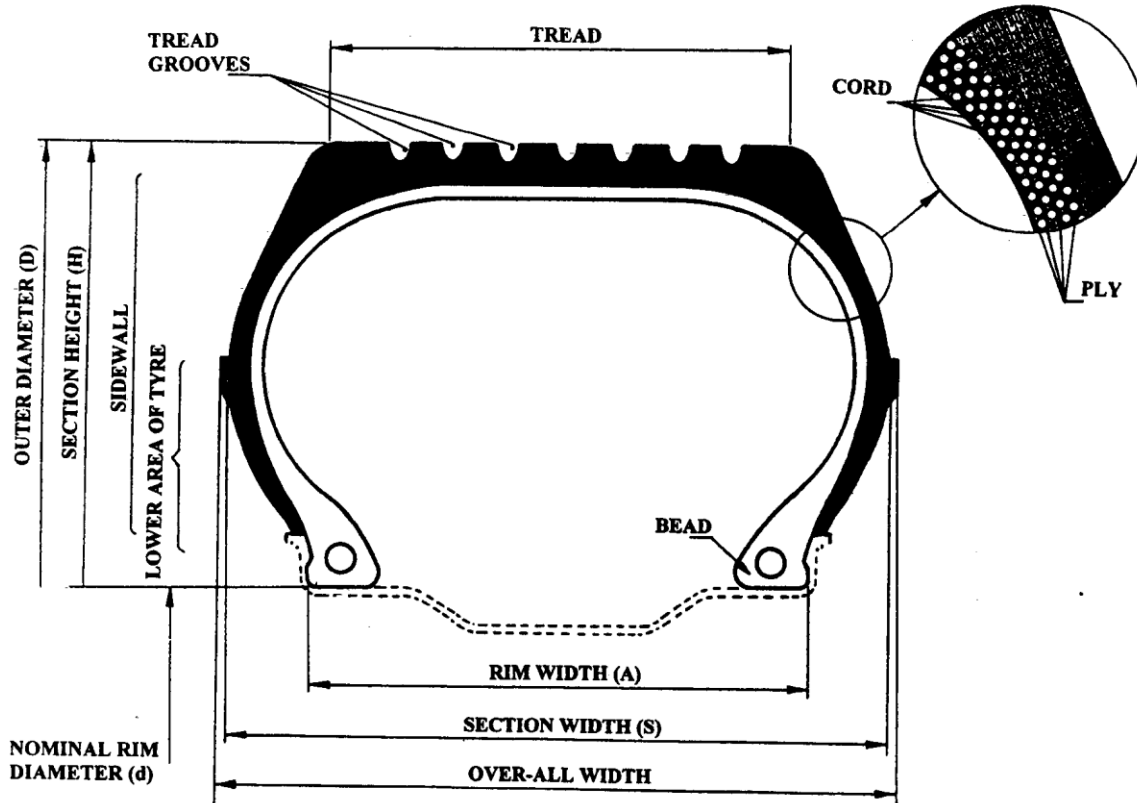


# TYRE

## Nomenclature of tyre:



**Bead** — Part of a pneumatic tyre which is of such shape and structure as to fit the rim and hold the tyre on it.

**Tread** — Part of a tyre which comes into contact with the ground and contributes to ground adhesion.

**Cord** — Strands forming the fabric of the plies in tyre.

**Ply** — Layer of rubber-coated parallel cords.

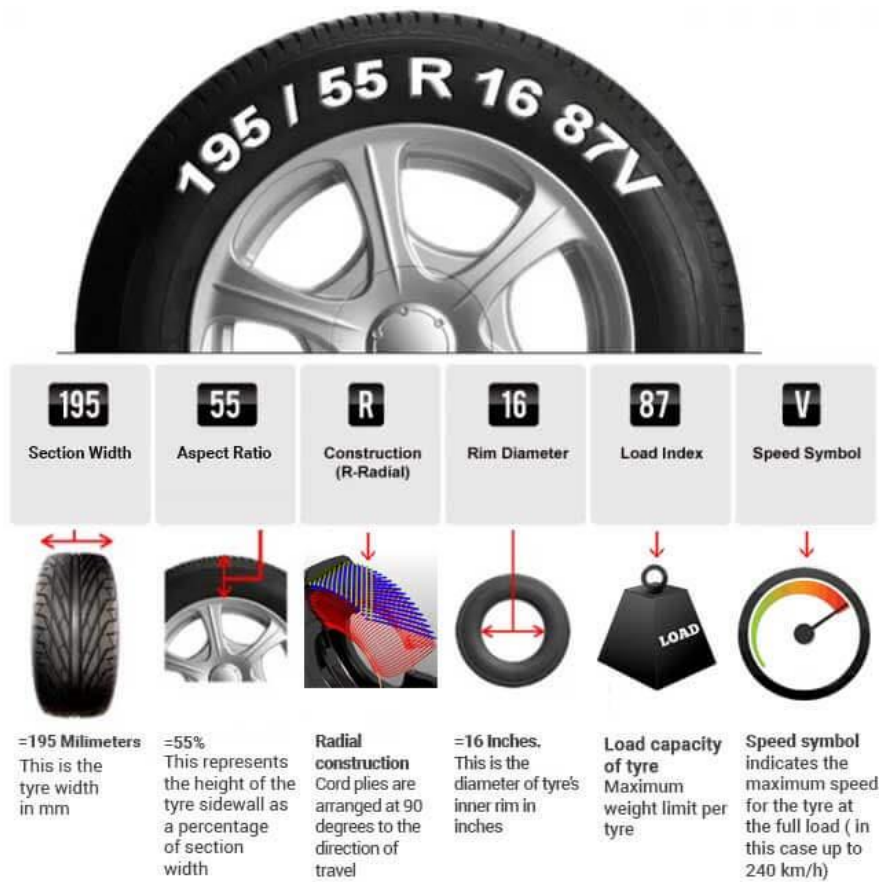
## Types of tyre:

1. Diagonal or bias ply- Structure in which the ply cords extend to the beads and are laid at alternate angles of substantially less than  $90^\circ$  to the centre line of the tread.

- Radial- Structure in which the ply cords extend to the beads and are laid substantially at 90° to the centre line of the tread.

### Specification of tyre:

- Width of tyre.
- Aspect ratio of tyre
- Type of construction (Radial/ Bias)
- Load index of tyre.
- Speed rating of tyre.



Typical specification of a tyre.

### **Types of tyre wear:**

1. Feathering
2. Cupping
3. One edge.
4. Centre or both edges.

### **Causes and remedies of tyre wear:**

#### **Feathering:**

##### **Causes**

- Improper alignment (TOE)
- Worn or damaged steering and/or suspension parts
- Hard cornering

##### **Remedies**

- Check/correct alignment
- Check/replace steering and/or suspension parts
- Based on tread depth rotate/replace tire.

#### **Cupping:**

##### **Causes**

- Worn or damaged steering and/or suspension parts
- Improper balancing

##### **Remedies**

- Check/replace steering and/or suspension parts
- Check/correct balance
- Check/replace wheels
- Based on tread depth rotate/replace tire

#### **One edge:**

##### **Causes**

- Improper alignment (CAMBER)

##### **Remedies**

- Check/correct alignment

- Worn or damaged steering and/or suspension parts
- Check/replace steering and/or suspension parts

### **Centre or both edges:**

#### **Causes**

- Center wear - over inflated
- Both edges - under inflated  
overloaded  
slow leak

#### **Remedies**

- Adjust air pressure
- Check fitment
- Check/correct air leak