

**RALCO**  
**Tyres**

THE WORLD IS YOURS

## Two Wheeler Tyre Guide

**RALSON (INDIA) LIMITED (AUTO DIVISION)**

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No worries with RALCO

**CCT**  
COOL COMPOUND TECHNOLOGY

\*Conditions apply. Warranty valid on Two-Wheeler Tyres only.

[www.ralson.com](http://www.ralson.com)



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## Ralco Warranty for Two Wheeler Tyres

Ralco promises to deliver the very best, which is evident from the millions of hearts we have won. During manufacturing, each tyre passes through a rigorous quality control process.

Two Wheeler Tyres, manufactured by Ralco, used in normal service conditions and in accordance with the safety warnings and the maintenance recommendations from Ralco, are covered by a warranty subject to the terms and conditions set out below:

- A. Ralco provides a Three (3) year unconditional warranty to its customers. Date of purchase is documented by the original tyre sale invoice and the Warranty Card filled and duly stamped by an authorized Ralco dealer.
- B. Warranty applies only to damages to the tyres, and not to the tubes.
- C. Warranty Card should be retained after the purchase and should be produced to invoke the warranty.
- D. Tyres which become unserviceable under the following circumstances will not be covered by this warranty:
  - Repairable damage (Like nail puncture, etc.).
  - Accident, fire, chemical explosion, tyre alteration or vandalism.
  - Tyres purchased from unauthorized dealers.
  - Tyre damages due to failure of non-Ralco tubes.
  - Re-grooved tyres.
- E. The charges related to tyre fitting and unfitting, transportation charges, balancing charges and other charges if any, are not covered under the warranty and shall be charged separately as applicable.
- F. Claimed tyres and/or tubes shall be inspected by Ralco authorised representatives and their decision shall be final.
- G. Ralco shall not be liable for any injury, death or consequential damage/loss suffered due to failure of tyre and/or tube.
- H. Ralco retains the right to amend or modify the terms and conditions of the Warranty at any time without assigning any reason thereof.
- I. Warranty terms and conditions are governed by the laws of India.

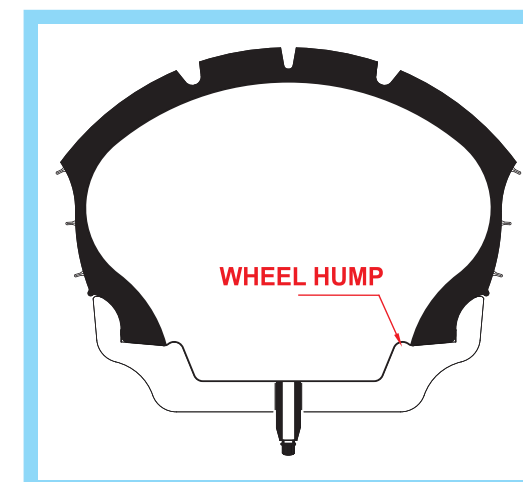
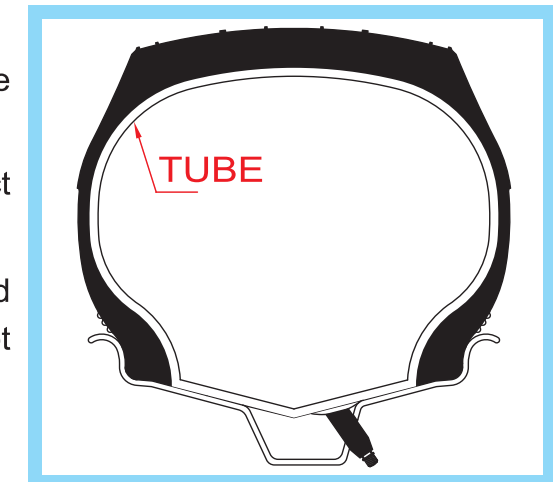
Please visit [www.ralson.com](http://www.ralson.com) for any queries and further details.

## Tube-Type Vs Tubeless

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### Tube-Type (TT) Tyres

- The inner liner is not built to retain air, the tube performs this function.
- The function of the inner liner is to protect the casing plies from tube abrasion.
- Inflated tube ensures bead seating and therefore TT wheel rims mostly do not have a hump design.



### Tubeless (TL) Tyres

- The function of the inner liner is to retain air.
- The bead is built to air-lock tyre rim assembly, it also holds the tyre on to the rim.
- When there is an external penetration, the inner liner clings on to the external object thus preventing the loss of pressure.



Do not fit a tube-type tyre as a tubeless as the tube components are specifically designed to perform distinct functions.

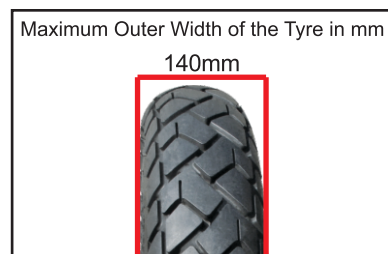


## Tyre Sidewall Markings



**140**

This is the tyre width across the tread, measured in mm.



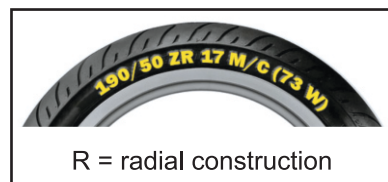
**70**

The aspect ratio is calculated as the sidewall height expressed as a percentage of the tyre width. So a tyre with an aspect ratio of 70 is a tyre whose sidewall height is equal to 70% of its width (98mm in the present case).



**-**

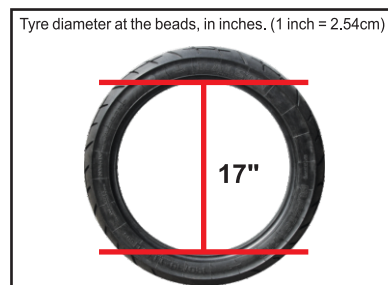
"-" Indicates Bias/Nylon tyre (If there is an "R" in place of "-", that means it is a Radial tyre).



**17**

This is the diameter in inches of the rim of the wheel that the tyre has been designed to fit.

Please see in the image



## Tubeless Valve

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**Valve:** Use a high quality tubeless valve to ensure good performance and resistance against ageing and ozone exposure.

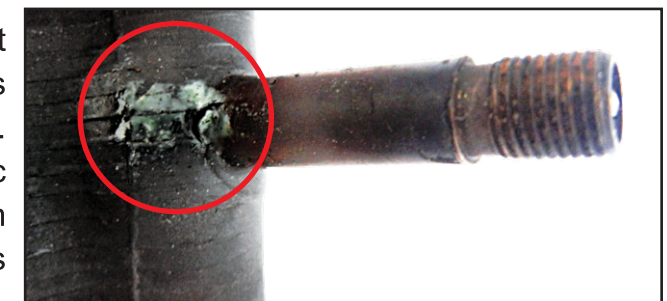


### Avoid Using Low Grade Valves

Do not use locally made inferior valves that litter the market. The quality varies tremendously from manufacturer to manufacturer. No product liability or insurance exists and usually there is no traceability in case of a problem when it comes to generic off-the-shelf low quality valves.

### Periodic Inspection of the Valve

Valves tend to develop cracks at the base over a period of time. This can lead to the failure of the valve. RALCO recommends periodic checking of valves of tyre-rim assembly and replacing the valves as soon as any cracks are observed.



### Valve Caps

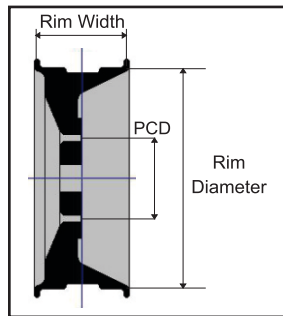
Ensure the placement of valve caps at all times. In addition to protecting the valve core against dust, it also acts as a secondary air seal.





## Rim

Proper width of the rim is important when it comes to stability and handling.



### Rim Specifications:

**Rim Width** is the distance between the inner surfaces of the wheel.

**Rim Diameter** is the diameter of the inner surface of the wheel.



- 2.15 inches is the rim width.
- 18 inches is the rim diameter.
- B is the flange profile.

### Warning:

An improper rim size can have serious negative effects on tyre performance and affects the safety of the passenger as well as the stability of the vehicle.

- A tyre that is fitted on a wider rim will have a flattened profile and may easily reach the edge of the tread during cornering causing instability during the process.
- A narrow rim alters the tyre profile concentrating the tyre wear in a very small area while cornering. It also makes for a smaller contact patch during braking which in turn has an adverse effect on the performance while cornering and braking.

## Load Index

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**66**

### Load Index

This is a numerical code which shows the maximum load that the tyre can carry.

### LOAD INDEX (LOAD IN KG PER TYRE)

Index Load	Index Load	Index Load	Index Load
30 106	46 170	62 265	78 425
31 109	47 175	63 272	79 437
31 112	48 180	64 280	80 450
33 115	49 190	65 290	81 462
34 118	50 195	66 300	82 475
35 121	51 200	67 307	83 487
36 125	52 200	68 315	84 500
37 128	53 206	69 325	85 515
38 132	54 212	70 335	86 530
39 136	55 218	71 345	87 545
40 140	56 224	72 355	88 545
41 145	57 230	73 365	89 580
42 150	58 236	74 375	90 600
43 155	59 234	75 387	
44 160	60 250	76 400	
45 165	61 257	77 412	

**S**

### Speed Index:

This indicates the maximum speed that the tyre can endure. Speed Index 'S' indicates that the tyre can run up to a speed of 180km/h

Speed Rating (km/h)			
J	100	S	180
K	110	T	190
L	120	U	200
M	130	H	210
N	140	V	240
P	150	(V)	>240
Q	160	W	270
R	170	(W)	>270



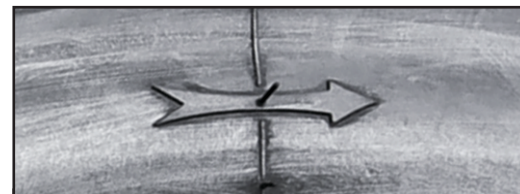
**ISI**

Approval service description  
for India.



### Rotation direction and fitment position (Front/Rear)

The direction of a tyre's rotation and the  
position in which it must be fitted in.



The direction of rotation is indicated  
by an arrow on the sidewall of the tyre

**R00192152615**

Indicates Factory Code, Size Code  
Week of Manufacture & Year of Manufacture.  
"26" Indicates Week of Manufacture.  
"15" Indicates Year of Manufacture.

Week of Manufacture      Year of Manufacture



Factory code and size code

**M/C**

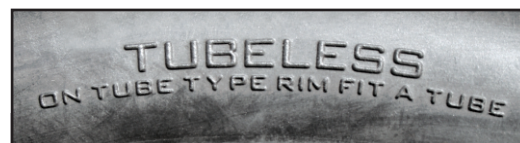
Motorcycle



Motorcycle

### Tubeless or Tube-type

Tubeless: TL  
Tube-type: TT



Tubeless: Tyre with no inner tube.  
Tube-type: Tyre with inner tube

## Tubes

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In a tube type tyre, the tube retains the air pressure which in  
turn has a direct effect on the performance of the tyre. The  
selection of a proper tube is crucial for optimizing the  
performance of the tyre.



### Caution:

- 1 Ensure that tube size always matches with the corresponding tyre size. Whenever in doubt, consult the tyre manufacturer about the suitability of a particular type of tube with a particular type of tyre.
- 2 Tubes that are too large or tubes which have been used a lot may crease or crack within a tyre and create a serious risk of tyre deflation and loss of control in the vehicle.
- 3 If the tube is too small, it will stretch too much and result in the loss of physical properties at a much quicker rate.
- 4 It is always recommended that a new tyre be equipped with a new tube at all times.
- 5 The failure of a tube in service may cause a tyre to fail along with it.
- 6 Tubes that are creased, cracked and weak are unsuitable for service and hence should be replaced with new tubes.

### Tube Markings:



### Tube Size

The tube can be fitted with the tyre  
sizes: 2.75-10 or 3.00-10.



### Tube Manufacturing Date:

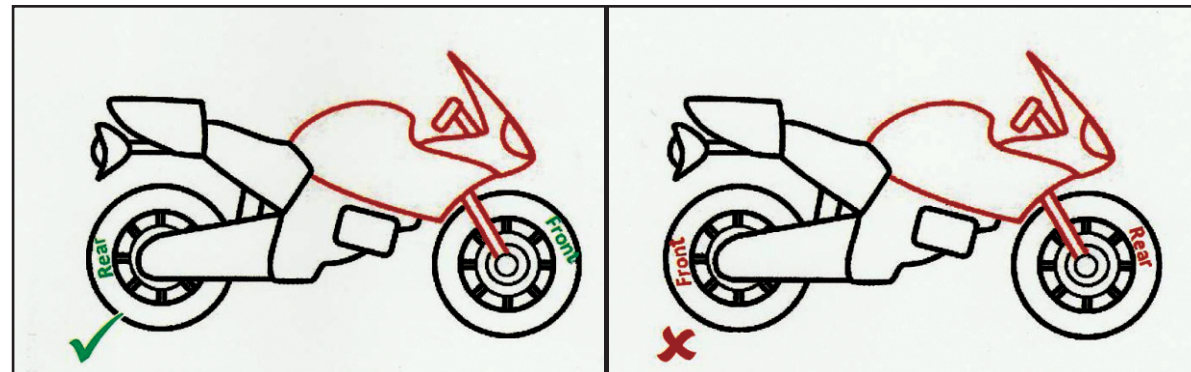
Different manufacturers use different  
systems to mention the  
manufacturing date.



## Abnormal Ways of Tyre Usage

### Correct Placement

Mount tyres marked front wheel in the front and tyres marked rear wheel in the back.



Never mount a front tyre on the rear axle and vice-versa.

- The front tyre is designed primarily to steer the vehicle and to carry lesser load when compared to the rear tyre.
- The rear tyre is primarily designed to transfer torque from the engine and to move the vehicle forward. It has a higher load carrying capacity when compared to the front tyre. Fitting the front tyre in the rear and vice versa can have adverse effects on both the tyre and the performance of the vehicle.

**Example:** Hero Splendor, Front Tyre: 2.75-18 42P and Rear Tyre: 2.75-18 48P. If the front tyre in this case is fitted at the rear then the tyre would not be able to match OE specification and can fail in case of excessive load.

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### Tyre Structure and Load Pressure

Provides the details of the structure of a tyre and indicates the maximum load that can be carried by the tyre. Also mentions the maximum air pressure to be used that supports the load.

### Country of Manufacture

Indicates the Country of manufacture of the tyre.



### Manufacturer's Name

RALSON/RALCO



### Commercial Name

Blaster Pro



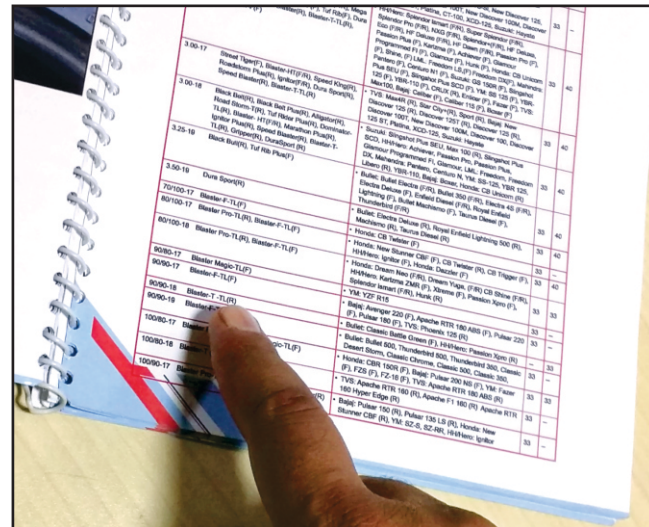


## Mounting

- 1) The inspection and cleaning of the tyre must be done thoroughly.



- 2) Total compliance with tyre and motorcycle manufacturer's specifications must be ensured.



- 3) The rim must be free of rust, clean and in a good condition.
- 4) The tyre and wheel type must be matching at all times. One shouldn't fit a TL (Tubeless) tyre on a TT (Tube-type) wheel.
- 5) The valve must be replaced during tyre change.



## Abnormal Ways of Tyre Handling

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### Correct Inflation Pressure



Improper inflation pressure has the following adverse effects:

1. Abnormal tyre wear which results in shorter life spans.
2. This makes the tyre more susceptible to road hazard damages.
3. It also reduces the grip on the contact patch of the tyre.
4. Rolling with low air pressure reduces resistance and life span of a tyre. It also has an adverse effect on fuel efficiency.
  - The consequences of rolling at low pressure may not be evident immediately and can appear even after correction.
  - The contact patch of a bike tyre with proper inflation pressure is roughly equivalent to the size of a credit card.



Never mount Tubeless tyre on Tube-type rim.

### Fitting the tyre with wrong directionality

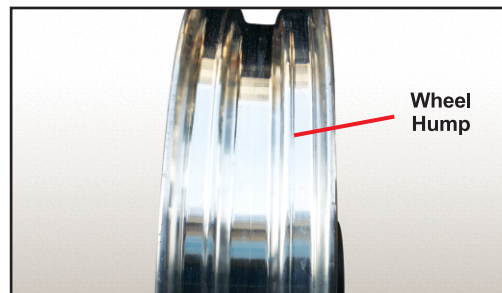


The wrong direction of rotation can have adverse effects on tyre performance.



## Abnormal Ways of Tyre Handling

**A tubeless tyre should always be fitted on a tubeless rim:**



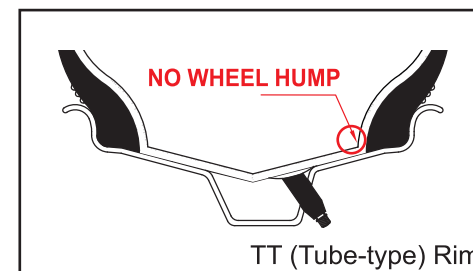
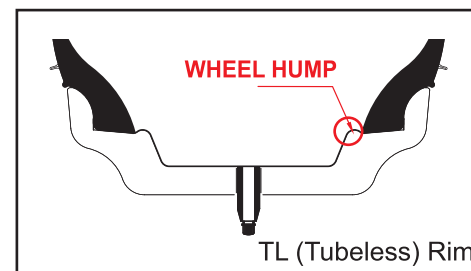
**Wheel Hump for Tubeless Tyre**



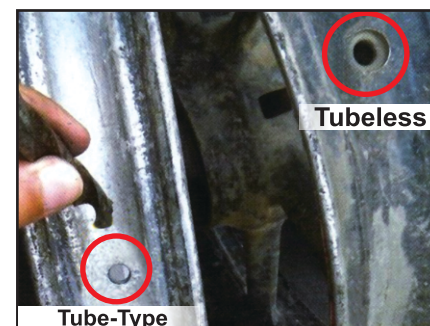
**No Wheel Hump for Tube-Type Tyre**

**Wheel Hump in TL:** Tubeless rims have a wheel hump design which locks the bead thereby preventing dislocation even at low air pressures.

**No Hump in TT:** An inflated tube ensures the bead seating and that is why TT wheel rims in most cases lack a hump design.



The valve slot shape in tubeless and tube-type rim is different as demonstrated in the picture.

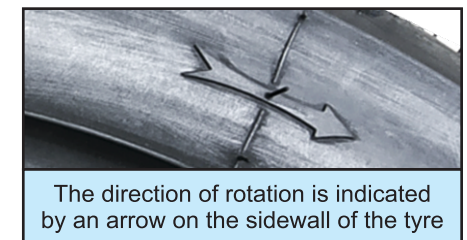


**Never mount a tubeless tyre on a tube-type (TT) rim.**

6) The inner parts of the rim and the bead of the tyre must be lubricated on both sides with a suitable lubricant. Do not use grease or mobil oil. Use only liquid soap.



7) Note the rolling direction of the tyre, this is denoted by an arrow on one side of the sidewall.



- 8) Perform bead to rim mounting using adequate levers, finish this process at the location just ahead of the valve.
- 9) Ensure that the inflation is done without the valve core and without any interruption till the beads are well seated on the rim.
- 10) The valve core should be replaced and inflated to the recommended pressure, the valve cap must be screwed post this.

**Note:** Additional points to be noted and taken care of for tube-type tyres.



- It is recommended to use a new inner tube for safety purposes.
- In spoke based wheels, ensure that the rim band is installed thereby preventing the inner tube being damaged by spokes.
- Inflate the tube slightly before inserting it into the tyre envelope.



**Do**  
Always use a vegetable based lubricant for bead lubrication. Use new valves in Tubeless and new tube in Tube-type with new tyre.

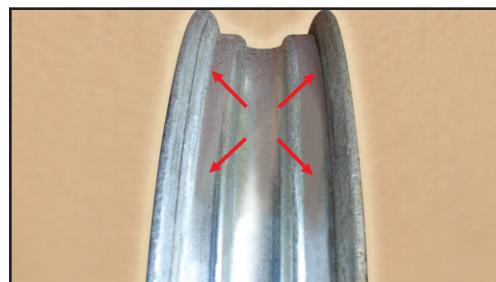


**Don't**  
Tyres should not be mounted with petroleum based lubricants. Improper hand tools should not be used to mount tyres.



## Demounting

- 1) Completely deflate the tyre by unscrewing the valve.
- 2) There is a seal between tyre and bead, break it.
- 3) Take out tyre using 2 tyre levers.
- 4) Wheel Cleaning: Check the wheel lip/hump for old rubber, dirt, scrapes etc. Make sure to clean and/or repair it.



### Do

All fitment tools must be maintained and kept in good working condition  
Use clean vegetable based lubricants at all times.



### Don't

Do not demount without proper lubrication  
Do not damage the bead by using ill maintained tools and procedures.

## Abnormal Ways of Tyre Handling

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### Mounting with Machine v/s Mounting with Hand Tools



One should not mount a tyre without adequate lubrication.  
Use liquid soap only.

**Avoid mounting with hand tools. If not, make sure that the hand tools are proper and do not have any sharp edges. This will prevent the bead from getting damaged.**



Always ensure that a proper  
tyre lever is used



Improper hand tool



Do not mount a tyre with inadequate hand tools as it may damage the bead of the tyre tube (in case of TT tyres) and/or rim.



### Advice On Repairing

#### Equivalent Tyre Sizes (Applicable for Bias Tyres only)

A	B	Rim for A	Rim for B
80/80	2.75	-	1.85
80/90	2.75 - 3.00	1.85	1.85
90/90	3.00 - 3.25 - 3.60	2.15	1.85-2.15-X
100/90	3.50 - 4.10	2.5	2.15-3.0
110/90	4.00 - 4.10 - 4.60	2.5	3.0-3.0-3.5
120/80	4.25 - 4.50 - 4.60	2.75	X-3.5-3.5
120/90	4.25 - 4.50	-	X-3.5
130/80	4.50 - 4.60 - 5.10	3.00	3.5-3.5-3.5
130/90	4.50 - 4.60 - 5.10	3.00	3.5-3.5-3.5
140/80	4.50 - 5.10 - 5.50	-	3.5-3.5-X
140/90	5.10 - 5.50	3.50	3.5-X

**Note:** Size not in BIS and ETRTO standards

#### Points to be adhered to while fitting alternative tyre sizes:

- The overall diameter should remain the same or changed to a minimum extent.
- LI/SI of an alternative tyre  $\geq$  LI/SI of OE tyre.  
LI stands for Load Index, SI stands for Speed index.
- Ensure that the alternative tyre does not touch the vehicle body anywhere.

Following are pre-requisites for high quality repair work:

- Clean working surface.
- High quality tools and consumables.
- Professionally trained and skilled repair technicians.

#### Verification:

Before tyre repair, the tyre must be dismantled from the rim and checked for any signs of internal damage caused by:

- 1) Running of the tyre at low inflation pressure vis-a-vis OE recommendation.
- 2) Often an inclined penetration on the crown area can damage the inside of the sidewall and this is not evident from the outside.

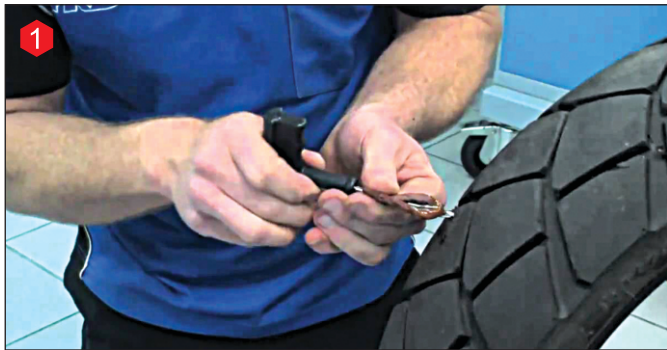


- It is essential to thoroughly inspect the tyre after demounting, in order to properly gauge its actual condition and the type of repair that is to be done.
- Improper repair can have negative consequences for vehicle and rider's safety. Please follow the instructions carefully.
- Repairs are the sole responsibility of the person handling it. After repair, the guarantee of safety is taken on by the specialist who has performed the job.

#### Repair Patches

There are 2 kinds of tubeless repairs that are currently in practice:

- 1) Plug-in repair (Temporary repair).
- 2) Mushroom repair (Recommended by RALCO).



Temporary repair



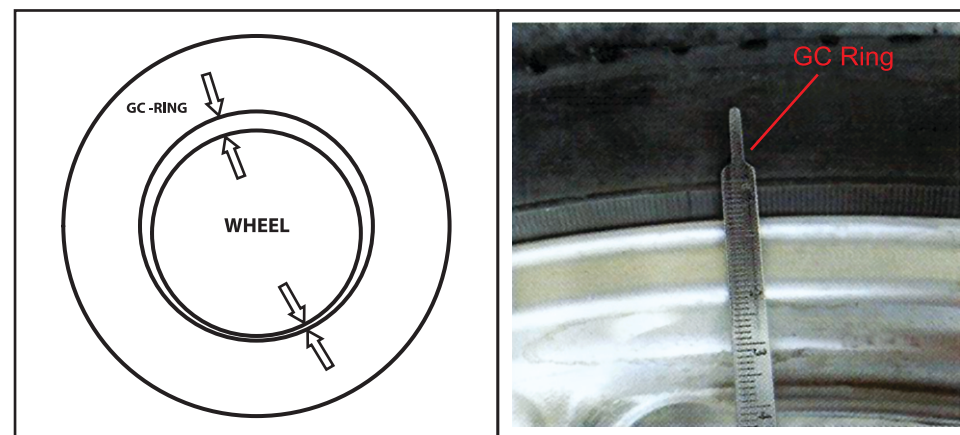
Mushroom repair

## Troubleshooting Handling Issue

### Improper Mounting:

**Cause:** Improper mounting of a tyre-wheel assembly can result in vibration issues which are caused due to the assembly having a radial run out (out of round).

**Troubleshooting:** It is crucial that we follow proper mounting procedures and ensure that the tyre is properly seated with the help of a centering guide.



The Centering Guideline (GC Ring) provides visual indication of proper bead seating of a tyre on the rim.



If the distance between the rim flange edge and the bead seating ring varies by more than 2mm at 4 different places around the wheel, the tyre should be completely deflated and the beads must be seated again.

## Useful Tips



- RALCO suggests the use of dry air (air clear of dust and moisture). Using nitrogen does not have any negative impact on tyre performance.
- Replace the valve cap after checking the tyre pressures. This protects the valve core against dust and also acts as a secondary air seal.

### Know About Tyre Pressure:

- Every vehicle comes with an attached OE recommendation sticker with air pressure specifications. Follow these specifications to keep your tyre at optimum health.
- You can locate the pressure sticker near the chain sprocket or on the fuel tank.
- OE recommendations have two different air pressure value suggestions for a rider, i.e. with and without a pillion.
- Adjust the air pressure of your tyre according to the nature of usage.

#### COLD TYRE PRESSURES

IN kg f/Cm <sup>2</sup> (psi)	FRONT	REAR
RIDER & PILLION	1.75(25)	2.80(41)
RIDER ONLY	1.75(25)	2.00(28)

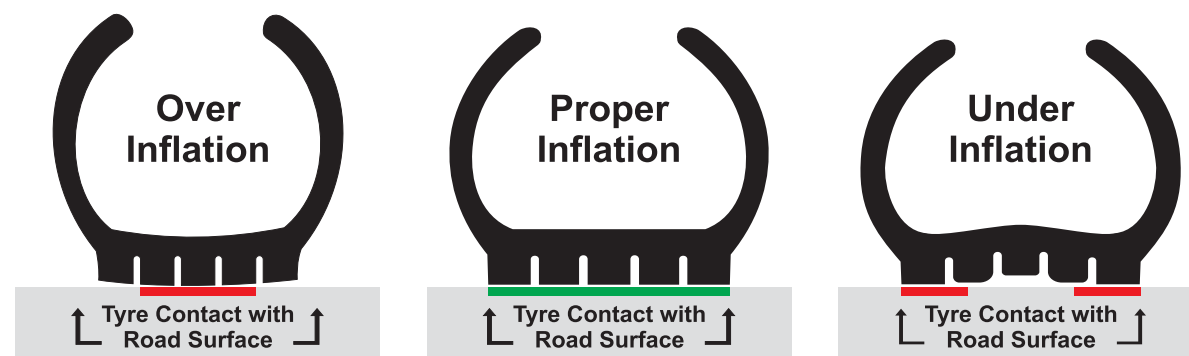


## Useful Tips

### Tips on Air Pressure

RALCO strongly recommends the checking of tyre pressure at least once every fortnight when tyre is not heated (A tyre that has not run for at least 2 hours or has run for less than 3km at a reduced speed is considered to be fit for air pressure checking).

- Avoid checking the inflation pressure of the tyre after longer running. If not, follow the OE recommendations and add 4 PSI to the OE recommended cold pressure.
- One should always stick to the pressure levels recommended by the vehicle manufacturer.



Over inflated tyres have contact with the road only in the center portion of the tyre. This causes steering & braking problems. It results in reduced traction and increased wear of the tyres and suspension.

Properly inflated tyres make full contact with road surface. This provides maximum traction and control while steering & braking. Properly inflated tyres experience wear evenly across the surface thereby saving money by increasing the life of tyre.

The primary cause of accident due to tyre failure is under inflation. Under inflated tyres run on their edges only. This leads to uneven tyre wear and poor response time during steering, braking and accelerating.



### Deformed or Damaged Rim

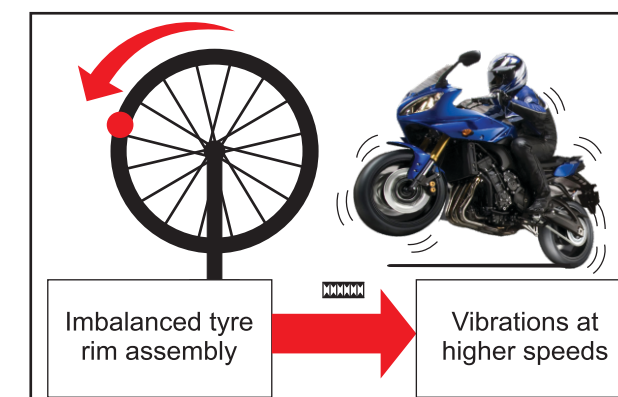
**Cause:** A deformed/damaged rim can badly affect the roundness of a tyre wheel assembly which in turn can result into various handling issues including vibration.

**Troubleshooting:** Ensure that the rim is in good condition, does not have any damage and is not bent.

### Lack of Balanced Wheel Assembly

**Cause:** The lack of balancing results in vibration at higher speeds due to the effect of residual forces from an unbalanced mass.

**Troubleshooting:** A lack of proper balancing could result in the customer experiencing vibration issues at high speeds. Wheel assembly should be properly balanced to avoid this.



## Useful Tips



### Uneven wear and/or level of wear

**Cause:** Uneven wear and/or significant difference in the level of wear between the front and rear tyres can cause handling issues and vibration.

**Troubleshooting:** Check tyres for signs of uneven wear or a difference in the level of wear between the front and rear tyres. If identified, the cause of the uneven wear

must be pinpointed and corrected. The tyres having uneven or extensive wear must then be replaced.

### Inflation Pressure

**Cause:** A mismatch or improper inflation pressure in the tyres can have hostile effects on the handling and general performance of the vehicle.

**Troubleshooting:** Check tyre pressure with a calibrated gauge. If any discrepancy in inflation pressure is observed; adjust the pressure to OE recommended levels.



### Warming up of Tyres

For the best performance and maximum grip, tyres should be at the correct operating temperature.

Advise your customers to ride at moderate speeds and lean angles during the first few miles of each ride. Avoid rash acceleration and braking until the tyre is at optimum working temperature.

### Tyre Life Span

**Wear in tyres depends on many factors:**

1. Pressure maintenance, driving style, daily routes etc., all of these affect wear and tear in tyres.
2. Characteristics of the vehicle.
3. Type of road surface.
4. Characteristics of the tyre.
5. Climatic Condition.

Therefore, it is impossible to define tyre mileage in distance or years but an acceptable range does exist.

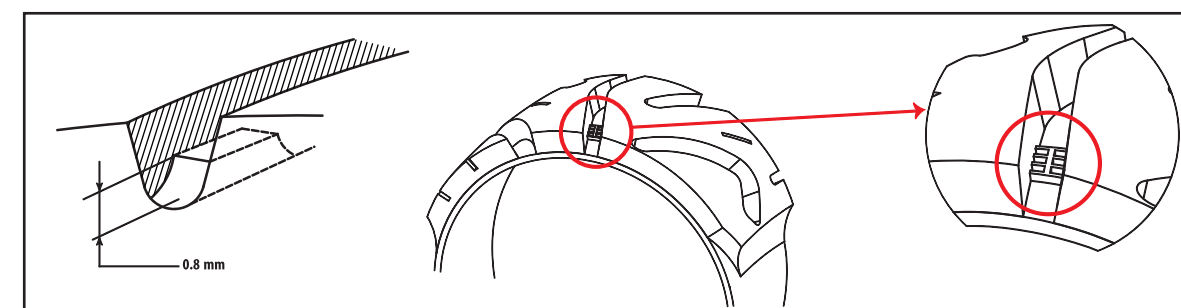


### Do's

Check periodically, the remaining tread depth of a tyre.

Remove and replace the tyre if any point of the tread rubber reaches tread wear indicator.

### Tread Wear Indicator (TWI)



TWI height in all RALCO motorcycle tyres is 0.8mm (Minimum).



## Storage Advice

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Ageing is caused by dampness, inappropriate temperatures, exposure to light, chemicals as well as factors stemming from electrical equipments. So it is imperative that the products are stored correctly at all times.

**DAMP:** The tyres must be stored in a cool, dry room with available natural ventilation to avoid condensation. If stored outside, cover the tyre with an opaque, waterproof tarpaulin.

**LIGHT:** Protect tyres from exposure to UV rays, sunlight or artificial sources.

**TEMPERATURE:** The ideal temperature for storage is below 35°C. Avoid direct contact with pipes and radiators at all times.

**ELECTRICAL EQUIPMENT, SOLVENTS, HYDRO CARBONS, FLAMMABLE SUBSTANCES and CHEMICALS:** Do not store tyres in an area where such equipment or chemicals are present.

**STOCK ROTATION:** The tyres should be stored in the order and according to the time when they were brought in (first in, first out).

### SHORT-TERM STORAGE (<4 weeks):

1. Stack the tyres on pallets and lay them flat if possible.
2. Tyre stacks should not exceed 1.2 meters (4 feet) in height.
3. After 4 weeks, the stacks should be rearranged with the tyres piled up in the reverse order.



**LONG-TERM STORAGE:** The tyres must be stored vertically on shelves which are at least 10cm (4 inches) from the floor. Rotate the tyres slightly once in a month to prevent deformation.



## Inappropriate tyre dimension

**Cause:** Incorrect tyre dimensions can cause major handling issues for riders.

**Troubleshooting:** Always ensure that the tyre size is as per OE or tyre manufacturer recommendations.

## Mixing Radial and Bias

**Cause:** Mixing of radial type and bias type tyres in the front and rear wheels.

**Troubleshooting:** Always ensure that the tyre structure is the same on both the front and the rear wheels.

## Causes other than related to tyres

- The distribution of load has a major impact on handling of the vehicle.
- The presence of added accessories like bags, wind screens, handles, non origin wheels etc, or modification in the existing body also affects the handling of the vehicle.
- Motorcycle Condition:
  - Uniformity in spoked or damaged wheels.
  - The wear in bearing.
  - Fork- seals, oil and alignment.
  - Swing arm.
  - Steering columns.
  - Condition of shock absorbers.
  - Damaged frame, engine mounting points etc.

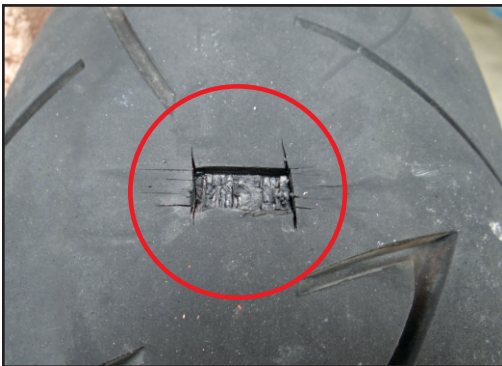
## Common Damages

### Crown

#### Crown cut/puncture

**Symptoms:** A cut/penetration or a tear out in the crown area.

**Cause:** Damage to the crown area due to an accidental contact with an external object while in service.



### Crown shock

**Symptoms:** Rupture in the crown area confined to a small area.

**Cause:** Damage to the crown area inflicted by an external object, the curb or a pothole.



## Fitment

**RALCO**  
Tyres

Ralco Tyres Sizes Motorcycle Tyres		Vehicle Application	Air Pressure in PSI Front Rear	
2.25-18	Speciale Afrique (F/R)	• Hero: Majestic	33	40
2.50-16	Mega Star (F/R), Tuf Grip (R), Tuf Rib (F), Dura Sport (R), Blaster-T (R)	• Hero: Puch (F/R), TVS: XL HD (F/R), Kinetic: Luna Magnum (F/R)	33	40
2.50-17	Mega Power Plus (F), Speciale Afrique (F/R), Pneu Speciale Afrique (F/R), Ignitor (F/R)	• HH/Hero: Street (R)	–	40
2.50-18	Mega Power Plus (F), Tuf Rider (F/R), Roadstorm-F (F), Pneu Speciale Afrique (F/R), Ignitor (F/R)	• HH/Hero: CD 100 (F), YM: CRUX (F), Libero (F), RX-100, 125, 135 (F), Bajaj: Boxer AT (F)	33	40
2.75-17	Speed King (R), Tuf Rider (F/R), Cascade (R), Tuf Rib(F), Blaster Magic-TL(F), Blaster-F(F)	• TVS: Phoenix 125, Max4R, Star City+, Sport, Bajaj: Pulsar 150, 135, 180, Pulsar 135 LS, Pulsar 150, 180 DTSi, Discover DTS-i, DTS-Si, New Discover 125, Discover 125T, Discover 100T, New Discover 100M, Discover 100 & 125 ST, Platina, CT-100, XCD-125, Suzuki: Hayate	33	–
2.75-18	Tuf Rider Plus(R), Street Tiger(F), Leopard-XP(F/R), Road Storm(R), Blaster-HT(F/R), Mega Power Plus(F), Roadstorm-F(F), Tuf Rib(F), Dura Sport(R), Speed Blaster(R), Blaster-T-TL(R), Blaster-F(F)	• HH/Hero: Splendor Ismart (F/R), Super Splendor (F/R), Splendor Pro (F/R), NXG (F/R), Splendor+(F/R), HF Deluxe, Eco (F/R), HF Deluxe (F/R), HF Dawn (F/R), Passion Pro (F), Passion Plus (F), Karizma (F), Achiever (F), Glamour Programmed FI (F), Glamour (F), Hunk (F), Honda: CB Unicorn (F), Shine, (F) LML: Freedom LS,(F) Freedom DX(F), Mahindra: Pantero (F), Centuro N1 (F), Suzuki: GS 150R (F), Slingshot Plus SEU (F), Slingshot Plus SCD (F), YM: SS 125 (F), YBR-125 (F), YBR-110 (F), CRUX (R), Enticer (F), Fazer (F),TVS: Max100, Bajaj: Caliber (F), Caliber 115 (F), Boxer (F)	33	40
3.00-17	Street Tiger(F), Blaster-HT(F/R), Speed King(R), Roadstorm Plus(R), Ignitor(F/R), Dura Sport(R), Speed Blaster(R), Blaster-T-TL(R)	• TVS: Max4R (R), Star City+(R), Sport (R), Bajaj: New Discover 125 (R), Discover 125T (R), Discover 125 (R), Discover 100T, New Discover 100M, Discover 100, Discover 125 ST, Platina, XCD-125, Suzuki: Hayate	33	40
3.00-18	Black Belt(R), Black Belt Plus(R), Alligator(R), Road Storm-T(R), Tuf Rider Plus(R), Dominator-TL(R), Blaster- HT(F/R), Marathon Plus(R), Ignitor Plus(R), Speed Blaster(R), Blaster-T-TL(R), Gripper(R), DuraSport (R)	• Suzuki: Slingshot Plus SEU, Max 100 (R), Slingshot Plus SCD, HH/Hero: Achiever, Passion Pro, Passion Plus, Glamour Programmed FI, Glamour, LML: Freedom, Freedom DX, Mahindra: Pantero, Centuro N, YM: SS-125, YBR 125, Libero (R), YBR-110, Bajaj: Boxer, Honda: CB Unicorn (R)	33	40
3.25-19	Black Bull(R), Tuf Rib Plus(F)	• Bullet: Bullet Electra (F/R), Bullet 350 (F/R), Electra 4S (F/R), Electra Deluxe (F), Enfield Diesel (F/R), Royal Enfield Lightning (F), Bullet Machismo (F), Taurus Diesel (F), Thunderbird (F/R)	33	40
3.50-19	Dura Sport(R)	• Bullet: Electra Deluxe (R), Royal Enfield Lightning 500 (R), Machismo (R), Taurus Diesel (R)	33	40
70/100-17	Blaster-F-TL(F)	• Honda: CB Twister (F)	33	–
80/100-17	Blaster Pro-TL(R), Blaster-F-TL(F)	• Honda: New Stunner CBF (F), CB Twister (R), CB Trigger (F), HH/Hero: Ignitor (F), Honda: Dazzler (F)	33	40
80/100-18	Blaster Pro-TL(R), Blaster-F-TL(F)	• Honda: Dream Neo (F/R), Dream Yuga, (F/R) CB Shine (F/R), HH/Hero: Karizma ZMR (F), Xtreme (F), Passion Xpro (F), Splendor ismart (F/R), Hunk (R)	33	33
90/80-17	Blaster Magic-TL(F)	• YM: YZF R15	33	–
90/90-17	Blaster-F-TL(F)	• Bajaj: Avenger 220 (F), Apache RTR 180 ABS (F), Pulsar 220 (F), Pulsar 180 (F), TVS: Phoenix 125 (R)	33	–
90/90-18	Blaster-T -TL(R)	• Bullet: Classic Battle Green (F), HH/Hero: Passion Xpro (R)	–	33
90/90-19	Blaster-F-TL(F)	• Bullet: Bullet 500, Thunderbird 500, Thunderbird 350, Classic Desert Storm, Classic Chrome, Classic 500, Classic 350,	33	–
100/80-17	Blaster Pro-TL(R), Blaster Magic-TL(F)	• Honda: CBR 150R (F), Bajaj: Pulsar 200 NS (F), YM: Fazer (F), FZS (F), FZ-16 (F), TVS: Apache RTR 180 ABS (R)	33	33
100/80-18	Blaster-T (TL) (R)	• TVS: Apache RTR 160 (R), Apache F1 160 (R) Apache RTR 160 Hyper Edge (R)	33	–
100/90-17	Blaster Pro-TL(R), Speed Blaster(R), Gripper(R)	• Bajaj: Pulsar 150 (R), Pulsar 135 LS (R), Honda: New Stunner CBF (R), YM: SZ-S, SZ-RR, HH/Hero: Ignitor	33	–



Ralco Tyres Sizes Motorcycle Tyres		Vehicle Application	Air Pressure in PSI	
			Front	Rear
100/90-18	Black Panther(R), Blaster Pro-TL(R), Speed Blaster(R)	• RE: Continental GT (F), Honda: CB Unicorn (R), Suzuki: GS 150R (R), HH/Hero: Karizma ZMR (R), Karizma (R), Hunk (R)	–	33
110/70-17	Blaster Magic-TL(F)	• Honda: CBR 250R (F), Kawasaki: Ninja 300 (F)	33	–
110/80-17	Speed Blaster-TL(R)	• Suzuki: Inazuma (F), Honda: CB Trigger (R), Unicorn Dazzler (R), TVS: Apache RTR 180 ABS(R)	–	33
110/90-16	Cascade(R), Night Dragon-TL(R), Speed Blaster-TL, (R)	• Kinetic: Hyosung Aquila Gv250 (F)	33	–
110/90-19	Speed Blaster-TL,(R)	• Bullet: Bullet 500, Thunderbird 350 /500 (R), Classic Desert Storm (R), Classic Chrome -500(R), CLASSIC BG (R)	–	33
120/80-17	Blaster Pro-TL(R), Speed Blaster-TL(R),	• Bajaj: Pulsar 220 (R), Pulsar 180 (R)	33	40
120/80-18	Speed Blaster-TL, (R)	• Bullet: Bullet 500, (R) Thunderbird 500 (R), Thunderbird 350 (R), Classic Desert Storm (R), Classic Chrome (R), Classic 500 (R), CLASSIC BG (R)	–	33
120/80-19	Tornado 3-TL(R)	• Bullet: Bullet 500, Thunderbird 350 /500 (R), Classic Desert Storm (R), Classic Chrome -500(R), CLASSIC BG (R)	–	33
130/70-17	Blaster Pro-TL(R)	• Honda: CBR 150R (F), Bajaj: Pulsar 200 NS (R), YM: YZF R15 (R)	–	33
140/70-17	Blaster Pro-TL(R)	• Honda: CBR 250R (R), Kawasaki: Ninja 300, Suzuki: Inazuma	–	33
150/60-17	Blaster Pro-TL(R)	• Honda: CBR 250R (R), Kawasaki: Ninja 300/650R (R), Suzuki: Inazuma	–	33
150/70-15	Blaster Pro-TL(R)	• Bajaj: Avenger 220 (R)	–	33
<b>E-Bike/Scooter Tyres</b>				
16x2.5	EB-01	• Avon: e-lite (F/R), Suzuki: Yo Smart	40	40
16x3.0	Blaster-E-TL, Energia, EB-02	• Hero: Zion, Maxi, Optima Plus, Zion	45	45
2.75-10	Spark	• Bajaj: Sunny, Sunny Spice, Sunny Zip(F/R), Kinetic: Pride, Hero King, Style (F/R), TVS: Scooty ES, Teenz	36	36
3.00-10	Comfort, City Ride, Blaster-ST-TL	• TVS: Scooty Pep, Pep+(F/R), Mahindra: Kine (F/R), LML: Trendy, Kinetic: Kine, Zing, Zing 80, Bajaj: Spirit	36	36
3.50-8	RT-09	• Bajaj 150, F.E. Vespa, Priya, Super		
3.50-10	RT-09, Super Cat, RT-12, Blaster-ST-TL	• LML: NV 2 Stroke, 4 Stroke, Star Euro 200, NV-spl, Select-2, Sat Xpress, Supremo, Vespa, Xpress 5 Mahindra: Rodeo RZ, Duro DZ, Flyte, TVS: Spectra, Hero: Pleasure, Honda: Activa RS, Eterno, Bajaj: Bravo, Chetak 2S, Chetak 4S, Classic, Fusion, Kristal DTS-i, Legend, Legend NXT2, Kinetic: Zoom, Honda, Marvel, Nova, Girmar Leo Hero -EZ	36	36
90/90-12	Blaster-ST, Blaster-S-TL	• Honda: Activa 125 (F), Aviator (F), TVS: Jupiter (F/R), Wego (F/R)	36	36
90/100-10	Blaster-ST-TL, Blaster-S	• Honda: Dio, Activa, Activa 125, Activa-I, LETS, Suzuki: Access 125, Access 125 (Special Edition), Swish 125, Alpha, YM: Ray Z, Ray, Hero: Maestro, Pleasure, Cruz, Wave	36	36
100/90-10	Blaster ST	• Honda: Activa (Old), Dio (Old), Eterno (Old)	36	36
<b>Three-Wheeler/ULT Tyres</b>				
4.00-8	Tri Star, Seven Star, Miller, Power, Rib, Lug, Loadstar	• Bajaj, TVS, Piaggio	45	60
4.50-10	Power Rib, Power Lug, Loadstar, E-Rib	• Bajaj, Force, Lovson, Piaggio, Vikram	60	70
4.50-12	Powre Rib Plus	• Maruti Omni, Maruti Omni Cargo, Van	43	50
5.00-10	Power Rib, Loadstar	• Piaggio, Mahindra, Minidor, Vikram(R)	70	–
5.00-12	Power Rib Plus	• Tata Ace	43	50
155/80D12	Power Rib Plus, Load Star	• Tata Ace	–	65
165/80D12	Power Rib Plus	• Tata Ace	50	60
165/80D13	Power Rib Plus, Load Star	• Tata Ace	50	60
165/80D14	Power Rib Plus	• Tata Ace	50	60
<b>TL : Tubeless, (F): Front, (R): Rear, (F/R): Front/Rear</b>				
2.25-17	Yucatan (F/R), Speciale Afrique (F/R)	• Bajaj Major (F/R), Bajaj M50 / M80 (F/R), HH/Hero: Street (F)	–	–

## Crown Crazing

**Symptoms:** Crack on the base or edge of tread surface.

**Cause:** Cracks on the tread surface can be caused by one of the following factors or a combination of all the following:

1. Ageing of Product.
2. Exposure to Ozone or UV.
3. Usage of corrosive or aggressive cleaning products.



## Uneven Wear

**Symptoms:** The uneven wear of tyres .

**Cause:** Uneven wear can be attributed to any of the following factors or a combination of all of the following:

1. Inadequate/improper inflation pressure.
2. Suspension issues or problems with steering and/or wheel bearing elements.
3. Wrong rolling direction.
4. Improper condition during usage.
5. Non-compliance of load based guidelines.
6. Other mechanical anomalies/ imperfections in the vehicle.

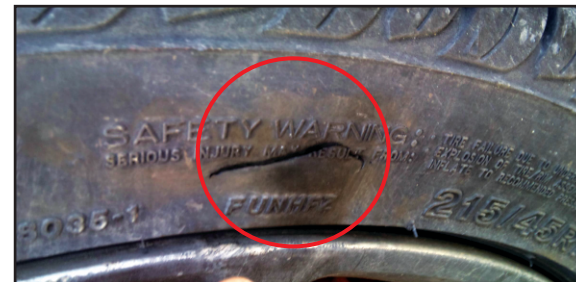


## Common Damages on the Sidewall

### Sidewall Cut

**Symptoms:** A cut penetration or tear on the sidewall.

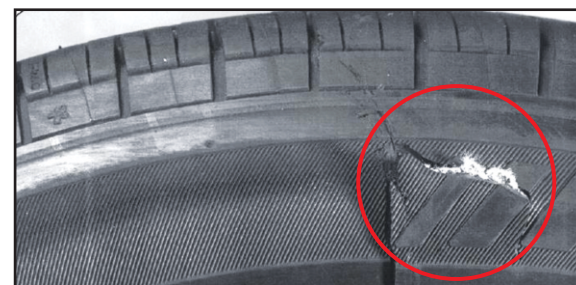
**Cause:** Damage to sidewall due to accidental contact with an external object while in service.



### Pinch Shock

**Symptoms:** Cuts or folding in the carcass ply with or without broken cords.

**Cause:** This type of damage is caused by pinching of the tyre sidewall between the rim and pothole/curb or accidental contact with an external object.



### Sidewall Crazing

**Symptoms:** Sidewall cracks.

**Cause:** Sidewall cracks can be caused any of the following factors or by a combination of all of these:

1. Running a low inflation pressure for a prolonged period.
2. Ageing of the product.
3. Over Exposure to ozone or UV.
4. Usage of wax, varnish or other washing products.



## Common Damages on the Bead

### Mounting/De-mounting damage

**Symptoms:** Deformation of or cut or tear in the bead area with or without rupturing in the tringle.

**Cause:** This type of damage is caused to the bead area due to improper mounting/demounting of the tyre.



### Common damages to inner liner in tyre: Run flat or run under inflated damage

**Symptoms:** Mottling or creasing of the inner liner.

**Cause:** Running the tyre at lower pressures than what is the ideal OE recommended inflation pressure.

