## **WARRANTY OF TBR TIRES**

*Tyre Refund Warranty* = { $[y - x] \div y$ } × *Purchase Price* 

Where Y is the Warranty Kilometres on the Invoice and X is the number of Kilometres the TBR tire has travelled.

However Analysis of common injuries of TBR tires, proper use and maintenance procedures are followed.

# ANALYSIS OF COMMON INJURIES OF TBR TIRES

# TYRE CROWN INJURY

Tyre Crown Pattern Breaking Injury



Steering firstly while the vehicle is motionless during starting.

Tyre Crown Impact Blast



Impact burst is caused by the impaction of foreign object on the tread when the tire pressure is high.

Tyre Crowen Abrasion Under Lower Air Pressure



Tire pressure is low and the tread is embedded into the tire. Because the carrass is tightened by the steel cord in the steel belt only small part of the tread is embedded into the tire and the rubber pattern in the tread is deformed and is rubbing each other, which caused such abrasion.

Eccentric Wear of Tread



The wear, deformation and dsplacementof the mechanical parts makes the camber of the vehicle being changed, or the repaining and/ or calibration of vehicle is not correct, which makes the tread not being vertical to the road surface and caused the eccentric abrasion. and the wearing is faster.

Tread Wear Under high Pressure



The pressure is high, so the groundingarea of the tire is small, which caused the tread center is seriously worn.

Dot Wear



It is caused by the punctuation in thetire tread by the sharp objet such as boltand nail etc.

# TYRE SHOULDER DAMAGES

## Punctuation and Delaminating



The deformation in radial direction on the radial tire is big, so it may be scrapped or punctured by the object in the rough road which may cause the penetration of muddy water or sands. If they are not found or treated in time, it will cause the delaminating by the rushing of the exposed steel cords of the damaged area.

#### Shoulder Cuts



When driving, the tire is cut by the sharp object such as the stone and metal parts or by the embedded parts of suspension plates etc, at the same time, it may cut and damage the shoulder or may damage the steel cords at the end of the steel belt, or it may be caused by the tire burst.

# Shuolder Corp & Pattern Block Dropping Off



Tire shoulder is pushed and scratched by the objects such as the roadbed etc, or try to pass in force or skidding to start under heavy load etc, which may cause the chunking of the tire shoulder.

# **BEAD DAMAGE**

Rim Cut



When mounbing the tire, the rim is not suitable or it is not well aligned, the guard ring is deformed and cuts the beads section which will cause such damage.

## Rim Break



Because of rim fatigue and nonstandard wheel rim, as well as high air pressure of tire and badly overloading, wheel rim gets widely break so lead to wheel rim exposure.

#### Flange Cuts



The rim flange is crack, the bead sedion coes not has the pressure from the rim flange under the pressure of the inner force, partial of the bead is embedded, and it is camaged by the sharp flange crack when traveling.

# SIDEWALL DAMAGES

Chain Burst



When using the tire with low pressure under heavy load, the carcass fabric cords is fatigue and broken, which will cause the chain broken. burst

## Side Wall Scratch



It is caused by the punctuation or scrapng of the object when using the tire.

# Foreign Material Between Side Wall



When the vehicle is traveling with twin tire, there are some foreign between the two tires, where the steel cords of the sde wall may deform and may cause such damage.



# & MAINTENANCE

## 1.Air pressure

- ■Tire should be inflated as per the pressure stipulated in "Pressure/Load List" in the national standard.
- After inflation, the tire should be checked completely and it should not has any leakage of air. If leaking, it should be handled in time.
- ■The internal pressure of the tire must correct during the using of the tire. When traveling or working in long times, please check the pressure regularly. When parking in long time, the front axle and rear axle must be putted up.
- If pressure is high, the tire tread may be easily worn and it may burst. If pressure is low, the tire is easy to deform and it may be crushed.
- ■When mounting the twin tires, the air pressure of the tires must be same, where it must not be a higher one and a lower one.

#### 2.Load

- ■The tire load must comply with the load specified in the current national standard, it is forbidden to drive with overload.
- Distribution of truck load must be uniform, where unbalance load must be avoided.
- Serious overload will cause unusual abrasion of tire tread, shoulder empty, delaminating and bead burst etc.
- ■The tire with higher plies and heavy load is inadvisable to run in the expressway.
- ■The load of the reinforced tire can be reasonably increased as per the design standard.

## 3.Speed

- Different kinds of tires has different limitation of speed, overspeeding will result in early damage of the tire.
- ■Do not overspeeding in bad road condition. Hard brake and sudden turn should be reduced to avoid the impact of the obstacle on the tire, especially the sharp object.
- ■Tire temperature increases fast in high speed. If overheated, related measure should be taken in time (For Example: Parking the vehicle to decrease the temperature naturally) to avoid the burst of the tire.
- ■The balance of the assembly with high-speed tire and rim must be inspected,where the counter weight and calibration should be implemented.