

## TECHNICAL BULLETIN

# Proper Mounting of 398 MPT (Agricultural Truck Tire)

Proper mounting practices of the 398 MPT tire are mandatory to ensure uniform tire/wheel assemblies when used for agricultural truck applications. Failure to follow these mounting recommendations may result in improper tire/rim fit and can lead to vehicle vibrations and bouncing during high speed drive.

Based on expertise in agricultural tires and years of experience gained through rigorous testing and study the following recommendations for uniform assemblies are being provided:

1. Rim cleaning - While mounting on a used rim, the rim must be cleaned to remove rust and dirt remains.
2. Lubricating - Apply a uniform layer of tire/rim lubricant on both, tire's beads and rim's seating areas before assembly.
3. Matching tire on rim - All Alliance high speed agricultural truck tires carry a yellow colored spot on sidewall, marking the RRO 1st Harmonic Low Point of the tire. Rim with DOT approval should be marked with a spot (usually Blue color) showing the RRO 1st Harmonic High Point of the rim. While mounting together, spot on tire should be matched with spot on rim to have the best compensated fitment. If rim is not marked with the 1st Harmonic point, it must be manually measured with mechanical or laser gauge to find the rim's RRO first high point and match it with the spot on the tire.
4. Balancing - The tire/rim assembly needs to be balanced on a truck tire balancing machine and counterweights should be placed on rim with the correct weight and position as marked by the machine.
5. Tire/rim concentricity - To ensure uniform mounting of tire on rim, there is a need to measure the distance between rim flange interface and circumferential rubber mark on the tire sidewall above the bead area. Distance needs to be measured at every 90° on flange circumference. Acceptable range  $\pm 2.0$  mm.
6. Inflating pressure - To control tire's stiffness, the inflated pressure inside the tire should be adjusted in accordance to the Load-Pressure table published in the technical catalog (website catalog) with reference to the specific load and max speed of the vehicle. The right inflation pressure should be continuously maintained and adjusted according to the work conditions (load/speed).
7. Tire assembly / truck axle centering - While installing the tire & rim assembly on the truck axle, especially if agricultural rim is being used, there might be a scenario where the hole diameter in the rim center disc are bigger than the bolt diameter of the axle. In such situation there is a need to use special cone tightening bolts which will center it on the axle.

Following the above mounting recommendations will reduce vehicle vibrations and bouncing and will ensure a high quality and comfortable ride at all conditions.

