

Mounting Tubeless Truck Tires

Proper mounting practices are mandatory to help ensure uniform tire/wheel assemblies for application to heavy duty trucks which use 22.5 and 24.5 bead diameter tubeless truck tires. Failure to follow the industry recommendations for mounting uniformity may result in improper tire bead/wheel fit and can lead to vehicle vibration and irregular tire wear.

Bridgestone recently conducted a tire mounting study involving tubeless tires of different brands, aspect ratios and bead diameters on new and used steel and aluminum wheels. Bridgestone tires included in this study were R299, R194-LP, R293 and R194 designs.

Results of the evaluation showed that regardless of the item combination checked, uniform assemblies were obtained when the following three practices were performed:

1. Clean the wheel or rim
2. Lubricate the tire and beads
AND WHEEL/RIM BEAD SEAT
3. Check the assembly for concentricity

1. A used wheel/rim should be cleaned by wire brushing to remove rust, scale and build-up. Painting the cleaned metal with primer or anti-rust paint is recommended.
2. Before assembling tire and wheel/rim, lubricate tire beads and wheel/rim seat with a vegetable oil-based lubricant formulated for tire and wheel/rim use. Do not use petroleum- or solvent-based products, as they cause rubber deterioration.

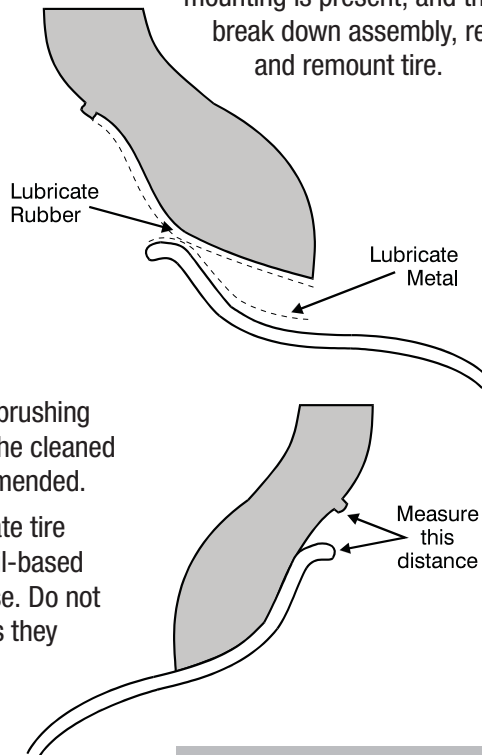
Failure to lubricate the wheel/rim as well as the tire can lead to a non-uniform assembly.

The best initial balance is obtained by matching the tire's light spot (marked by a yellow dot or circle) at the wheel/rim valve.

3. To check the assembly for concentricity of a tire and wheel/rim, measure the distance between the tire-flange interface and the circumferential ring molded into the

tire sidewall at four locations (90 degrees apart) around the tire-flange circumference. Distances measured should be within a 2/32" (1.5 mm) range for acceptable uniformity. If the ranges in distance within the same side of the tire are greater than this, break down assembly, re-lubricate and remount the tire.

Following these practices will reduce vehicle vibration and irregular wear occurrences. The first step in investigating these types of complaints should be the measurement of tire and wheel/rim concentricity to determine if non-uniform mounting is present, and the probable cause. If so, break down assembly, re-lubricate tire and wheel and remount tire.



**REMEMBER:
CLEAN! LUBRICATE! CHECK!
AND ALWAYS FOLLOW ALL
OSHA, RMA, AND MANUFACTURER
MOUNTING SAFETY PRECAUTIONS!**