

TECH TIP

How About a Little More Brake and a Little Less Shake?

Today's RSD (Reduced Stopping Distance) compliant vehicle steer axles, with their increased size and torque, are more susceptible than prior vehicles to braking vibration issues due to assembled brake TIR (Total Indicator Reading). Three major factors contribute to assembled brake TIR; drum run-out, hub-to-drum mating surfaces/pilots and wheel bearing adjustment.

You must check TIR on a brake drum in an assembled brake. Do not disassemble the wheel/tire assembly, brake drum from hub or any other components prior to initial TIR inspection. Disassembly will change the original position of the assembled components and may vary TIR readings/performance.

If assembled TIR exceeds 0.015-inch (0.381 mm):

- Remove the drum and inspect the components. Damaged and corroded hub-to-drum mating surfaces/pilots are becoming a common cause of vibration complaints.
 - Verify wheel bearing adjustment. Wheel bearing end play must be within the required 0.001"-0.005" or be properly preloaded with Dr. Preload or assemble brake TIR will be increased. Excessive end play can cause the drum braking surface to not be concentric to the bearings/spindle.
- If damaged is found, replace the necessary components, re-assemble and verify TIR is within specification

IMPORTANT: For proper brake balance and performance:

- Verify that all brake drum diameters on an axle are within 0.025'
 - Verify all brake drums are under 0.080' of wear, allowing for wear during current service interval
 - Verify brake drums are all of equal original weight
 - Verify that the original Brake drum weight is proper to dissipate the heat generated by this brake in the current application
- *See Meritor Maintenance Manual 99100 (MM99100) for full details
(visit meritor.com/LOD)

