



# TECH TIPS



Promoting safe, proper bearing handling practices for the heavy-duty market

## How do you rate on bearing adjustment?

What method do you use to adjust wheel bearings? Whatever system you employ, it should have these four basic characteristics:

1. **Accurate, repeatable, verifiable.** A responsible wheel-bearing adjustment procedure must be both accurate and repeatable. That means you must not only be able to pick a value to adjust the bearings to, but also get close to it every time, no matter how many times you do it. Verifiable means being able to "loop" the system; the more accurate and repeatable your procedure is, the lesser the requirement for verifiability.
2. **Safety.** Ask yourself, "If I do not follow the manufacturer's recommended practices during inspection and repair of wheel-hub assemblies, what is the worst thing that can happen?" If you correctly answered that the wheel may separate from the vehicle which could result in someone being seriously injured or killed, then you can see why we need some sort of design safeguard in place so that does not happen.
3. **Optimization of wheel-end system.** A good wheel end bearing-adjustment program should do more than just get the best tire life, or the best seal life. Instead it should address all the wheel end components that are impacted by bearing adjustment and maximize the system to do what is best for all of the components.
4. **No/few special tools required.** Truck wheel-end maintenance is performed at many locations, and if special tools are required, the time will come when somebody will not be able to use the procedure. Special tools make it difficult to apply on a broad-based scale.

At The Timken Company, we subscribe to The Maintenance Council's recommended industry practice RP 618 for achieving proper end-play adjustment of steer, drive and trailer axle bearings. While there are other methods available, RP 618 is a good, systematic approach that can help detect small problems before they become accidents.

**WARNING:** Never spin a bearing with compressed air. The force of the compressed air may cause the rollers to be expelled with great velocity. Proper bearing maintenance and handling practices are critical. Failure to follow installation instructions and failure to maintain proper lubrication can cause equipment failure, creating a risk of serious bodily harm.