



INTERNATIONAL  
**ROADCHECK**  
2022

# International Roadcheck

May 17-19, 2022 | Focus on Wheel Ends

This year's International Roadcheck will focus on wheel ends, which include the wheels, rims, hubs and tires on a commercial motor vehicle. Violations involving those components historically account for about one quarter of the vehicle out-of-service violations discovered during International Roadcheck, and past International Roadcheck data routinely found wheel end components in the top 10 of vehicle violations.

Wheel end components support the heavy loads carried by commercial motor vehicles, maintain stability and control, and are critical for braking, keeping the vehicle safely on the road. Failure of these components may lead to a catastrophic crash. It is crucial for commercial motor vehicle drivers to check wheel end components during pre- and post-trip inspections. The driver's observations during the inspection are the first step in detecting a wheel-end or wheel-bearing problem. In addition, identifying wheel end problems before they cause downtime may save drivers and motor carriers from expensive emergency roadside towing and repairs.

During International Roadcheck, inspectors will primarily conduct the North American Standard Level I Inspection, a 37-step procedure that includes an examination of driver operating requirements and vehicle mechanical fitness. Steps 15 and 18 focus specifically on the wheels, rims and hubs of a commercial motor vehicle. On the right, we've outlined what inspectors will be looking for during the wheel ends portion of the Level I Inspection, so make sure you proactively check these components during your routine pre- and post-trip inspections.

Drivers may also find abnormal or uneven tire wear, see or smell smoking or extremely hot hubcaps (too hot to touch), or notice smoke from a wheel end, or feel wheel vibration, wobble or noise. Increased stopping distance or decreased braking power, abnormal side pull when braking, wheel lock-up or skidding are all signs that your wheel ends may need maintenance or replacement.

## During inspection of wheel ends on a commercial motor vehicle, inspectors will:

- ✓ Check for cracks or unseated locking rings, studs or clamps.
- ✓ Check for bent, cracked or broken rims on the inside and outside wheel rims.
- ✓ Check for loose, broken, missing or damaged wheel fasteners and elongated stud holes.
- ✓ Check spoke wheels for cracks across spokes and in the web area or slippage in the clamp areas.
- ✓ Check the hub for lubricant leaks, missing caps or plugs.
- ✓ Check the inner wheel seal for leaks.
- ✓ Check the tire and valve stem for leaks.
- ✓ Check for proper inflation, cuts and bulges on all tires, including the inside tire on a dual set.
- ✓ Check for regrooved tires on steering axle.
- ✓ Check tread wear and measure major tread groove depth.
- ✓ Inspect the sidewall for improper repairs, such as tire plugs.
- ✓ Check for exposed fabric or cord.
- ✓ Check for tire contact with any part of the vehicle.
- ✓ Check for markings on the tire that would exclude its use on a steering axle.
- ✓ Check for debris between the tires.
- ✓ Check for tires touching one another or any part of the vehicle.

For more information, visit [www.roadcheck.org](http://www.roadcheck.org).

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