

# Tips for Avoiding Tire Violations

Everything carried on a truck rides on its tires. While well maintained tires can run safely for hundreds of thousands of over-the-road miles, improper loading (under-inflation or overloading) or poor maintenance can reduce tire performance, shorten service life or cause tire failures.

## ✓ Know the Regulations

Motor carrier regulations set minimum requirements for safe tire operation, including provisions for proper inflation and loading, minimum tread depth and safe tire condition. Compliance with these regulations does not guarantee safety but it significantly reduces the likelihood that a tire issue will cause a crash, either for the truck or bus, or for other vehicles that encounter the carcass of a failed tire. Tire regulations fall primarily under 49 CFR 393.75 in the United States. Similar regulations are established for Canadian provinces and territories.

## ✓ Keep Your Vehicle Suspension in Alignment

In addition to potentially affecting safe control of the vehicle, improper alignment will at least rapidly wear down tires. Your maintenance plan should include tire/wheel/suspension alignment.

## ✓ Follow Industry Best Practices for Tire Management

Tire inflation should be checked at appropriate intervals for the operation. There are many resources available to assist with proper tire management, including purchasing, maintaining, inspecting and removing from service tires for any type of operation. Check with Rubber Manufacturers Association, Tire Industry Association, tire manufacturer organizations or the Technology and Maintenance Council of the American Trucking Associations.



The Commercial Vehicle Safety Alliance's (CVSA) 29th annual International Roadcheck will take place June 7-9, 2016. International Roadcheck is a 72-hour period when CVSA-certified local, state, provincial and federal inspectors in jurisdictions across North America perform commercial motor vehicle inspections.

Each year, International Roadcheck places special emphasis on a category of violations. The special emphasis for 2016 International Roadcheck is tire safety. While checking a vehicle's tires is always part of roadside inspections, CVSA is highlighting tire safety as a reminder to drivers and carriers.

## ✓ Understand Tire Specifications

Tires are rated not only for size, but for maximum load, type of service and speed of operation. Tire specifications on the vehicle tire information label should be followed. Inspectors may check for overloading of tire capacity when scales are in use.

### Air Pressure

- 15 percent under inflation in a tire equals approximately an 8 percent decrease in expected tread mileage.
- 10 psi under inflation can cause tire wear out to be 20 percent faster than normal.
- Tires can lose 3 psi per month just due to air migration.
- Tires can run up to 5 degrees hotter for every psi the tire is under inflated due to excessive flexing.
- Matching tire air pressures is critical in dual assemblies. A mismatch of 5 psi can change the tire circumference, and over 100,000 miles would be equivalent to dragging the under inflated tire 246 miles.

### Tread Size

- For every size that a tread width is undersized from the recommended width, mileage is reduced by 10 percent.

### Tread Depths

- Across axles and between tandem axles, tread depths need to be within 4/32".

### Wheel Position/Matching Duals, Twin Screw Tractors

- Should be less than 1/4" difference in diameter (less than 3/4" difference in circumference).
- Left front steer tire wears faster than the right tire.