

Tire Safety: Helping Prevent Blowouts, Breakdowns, and Roadside Emergencies

Tires are one of the most important safety components on a commercial vehicle and play a significant role in vehicle performance and reliability. Tire-related issues can contribute to roadside breakdowns, out-of-service violations, delays, and, in some cases, crashes. Developing strong tire inspection and maintenance habits can help reduce these risks while supporting safe operations.

Why Tire Safety Matters

A tire failure can create unexpected challenges for drivers and other motorists. In addition to vehicle damage and costly downtime, a tire failure at highway speeds may increase the risk of losing vehicle control or creating roadway hazards. Many tire-related issues can be identified during routine inspections before they become larger problems.

1. Proper Tire Inflation

Maintaining proper tire pressure is one of the most effective ways to promote tire performance and longevity. Tires that are underinflated may generate additional heat, increasing wear and the potential for failure over time.

During pre-trip and post-trip inspections, verify tire pressure using the appropriate tools rather than relying solely on a visual inspection. Dual tires deserve special attention, as a low or flat inside tire may not be immediately noticeable.

2. Look for Signs of Wear or Damage

Routine inspections provide an opportunity to identify concerns before they affect vehicle performance.

Watch for:

- Cuts or punctures
- Bulges or sidewall damage
- Exposed cords
- Uneven or irregular tread wear
- Embedded debris
- Low tread depth

If you notice a concern, follow your company's reporting procedures so it can be evaluated and addressed promptly.

3. Consider Heat, Speed, and Load Conditions

Tires naturally generate heat while in operation. Factors such as higher temperatures, heavier loads, and sustained highway speeds can increase operating temperatures and place additional stress on tires.

When practical, adjust driving habits to account for changing conditions, avoid unnecessary sudden braking or sharp maneuvers, and remain attentive during periods of extreme heat.

4. Be Aware of Road Hazards

Road debris, potholes, and curbs can damage a tire even when the damage is not immediately visible. Internal tire damage may develop following an impact and could affect future performance.

Whenever possible, avoid striking roadway hazards and report any significant impacts according to company procedures.

5. Inspect Dual Tires Carefully

Dual tire assemblies require extra attention during inspections. A low or damaged inner tire may be difficult to see but can place additional stress on the companion tire.

Take time to inspect between dual tires, check for trapped debris, and verify that both tires appear to be in good condition and properly inflated.

Final Thoughts

Routine tire inspections are an important part of operating a commercial vehicle safely. Identifying potential issues early and reporting concerns promptly can help reduce the likelihood of roadside breakdowns, improve equipment reliability, and contribute to safer travel for everyone on the road.



Knowledge Verification



Please answer, and forward a completed copy to your Safety Department/Safety Representative.

1. Underinflated tires may generate additional heat, which can increase the risk of tire failure over time. ☐ True ☐ False
2. Uneven tire wear should be noted and reported, as it may indicate a maintenance concern. ☐ True ☐ False
3. Impacts with road debris, potholes, or curbs can sometimes cause tire damage that is not immediately visible. ☐ True ☐ False
4. An inner tire in a dual tire assembly can be more difficult to identify as low or flat during a quick visual inspection. ☐ True ☐ False

Driver's Name:

Driver's Signature:

Witness Name:

Date:



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Value Driven Driving:

Module 1 - Preventing Rear-End Crashes

Module 2 - Preventing Loss of Control Crashes

Module 3 - Preventing Lane Change Crashes