

TOOLBOX TALKS

Extending Tire Life

Toolbox Talks are intended to facilitate health and safety discussions on the job site. For additional Toolbox Talks, please visit SAFETY.CAT.COM™

SAFETY.CAT.COM™

TOPIC: Extending Tire Life

Modern tires are engineered to be incredibly tough and withstand extreme temperatures and pressures. By taking some time to understand tire care, the life of your tires can be extended.

There are three things that lead to premature tire failure.

- Tire Use** – How aggressively are you driving? For some industrial vehicles, this may not be applicable; however, for automobiles, semi trailers and forklifts, the way you drive can protect your tires. Avoid hard turns and aggressive starts and stops that can peel away a lot of tread wear.
- Tire Pressure**
 - Low pressure – Under inflated tires flex a great deal during rotation, building up heat. Flexion and heat lead to premature breakdown of the rubber. Under inflation also results in uneven tread wear.
 - High pressure – Over inflation will result in the center of the tread bulging outward. Premature center wear can develop.
 - High temperatures and low temperatures can affect tire pressure. Be sure to check your tire pressure if there is a significant change in temperature.
- Tire Preventive Maintenance** – Make sure to rotate tires based on the manufacturer’s recommendations. The more evenly you can wear out the tire, the longer they last. Check your tires for:
 - Cracks – Indicates that the tire rubber is degrading from oxidation.
 - Bulges – Indicates that the reinforcement belting has broken inside the tire.
 - Chips/Gouges – This is an area of weakness that could give out when the tire is placed under high work loading or pressures.
 - Tread Wear – Most tires have tread indicators, or wear bars, at intervals between the treads. When the tread is level with the indicator then it’s time to replace the tires. Look for uneven wear. This could mean that the tire is under or over inflated. It could also indicate that the vehicle requires an alignment.
 - Tire Pressure – Tires lose air through permeation. On average, a tire will lose one or two pounds of air per month in cool weather, and more during the warmer months. Tire pressure should be checked when cold. Manufacturer pressure recommendations are set on cold tires.

Discussion Date: _____

Employee Participants:

Questions to Generate Discussion

- If a tire does not have a wear bar, what is an alternative way to determine wear?
- How often should tires be rotated?

The material in this document is provided for informational purposes only and not as a comprehensive or exhaustive resource on this topic. This material has been compiled from a multitude of sources believed to be accurate; however, Caterpillar Inc. assumes no responsibility for the accuracy or currency of this information and encourages you to consult experts in this area for more information. In no event does the content of this document supersede any applicable local, state, or federal statutes or regulations.

Control ID: V1110.1

SAFETY.CAT.COM™
<http://safety.cat.com/toolbox>

