



# TECHNICAL BULLETIN

#03132017

## Tire Wear and Shock Absorbers: How to Maximize your Tire Life & Increase Uptime

The Technology and Maintenance Council's recommended practice (TMC RP643) states:

***"Fleets have found it beneficial to install new shock absorbers when installing new tires, to maximize tire life."***

### **TMC** Recommended Practice

Proposed RP 643A (T)

VMRS 016-008-000

#### **AIR-RIDE SUSPENSION MAINTENANCE GUIDELINES**

Tires and shock absorbers work together to absorb and minimize the detrimental effects to vehicle stability and braking caused by harsh road conditions. Shock absorbers wear out over time just like tires. Under normal conditions shocks stroke an average of 1,750 times per every mile driven; that is 175 million times at 100,000 miles! They are constantly damping the road bumps allowing the suspension to glide over potholes, giving passengers the smoothest ride possible, and protecting the tire from high frequency wheel bounce.

**Tire Cupping** is caused by wheel bounce, which occurs when shock absorbers are worn. It is an uneven wear pattern of alternating hills and valleys in the tread area. When there is cupping, you might notice a slight rumbling or thumping sound as the vehicle moves.

*Tire Cupping:*  
*Uneven tire wear pattern  
caused by wheel bounce  
from worn shock absorbers*



Often when tires show symptoms of wear or failure, they are the only items that are replaced. Unfortunately, this is only half the equation to ensure the new tires are not worn out too soon. Pairing new tires with old shocks does not stop the damage. Tire cupping will begin to manifest itself immediately when used with worn shocks. **Pairing new tires to new shocks helps extend the tire's life span by eliminating wheel bounce.**

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## **NEW GABRIEL® SHOCKS, when installed with new tires in a preventive maintenance program, can help you:**

- Maximize Tire Life
- Improve braking performance
- Enhance truck safety
- Reduce shifting or damaged cargo
- Extend driveline component life
- Improve driver comfort, reduce fatigue
- Reduce battery cracking, broken lamps and cab mounts
- Reduce damage to radiator connections



***Decades of Proven Experience that delivers results!***

### **Maximize tire life with new shocks!**



To learn more about how to maximize your tire life and improve your uptime with Gabriel's innovative range of HD shocks, please visit our website at:

[gabriel.com/answerman/videos](http://gabriel.com/answerman/videos).

**Have questions? Need more help?**  
**Contact the Answerman at 800-999-3903**