



## Technical Bulletin

TASTB Number 2

# Getting The Most From Your Air Springs

In the prior bulletin, we discussed the necessity of proper inflation and how it can extend the life of your air springs. Also critical to air spring life are properly maintained bushings and shock absorbers. In this bulletin we'll discuss how to inspect and identify potential problems in these important components of a suspension system.

### 1. Bushings

Bushings are wear items, and must be inspected regularly. This is especially true for rubber bushings. Rubber bushings are designed to flex, protecting the metal components from the stresses of normal suspension operation. Worn or damaged bushings affect axle alignment and can reduce air spring and shock absorber life.

A telltale sign of worn bushings is metal-to-metal contact at the suspension component connection points. Abnormal tire wear is also a good indicator. However, to avoid the expense of ruined tires and /or damage to other suspension components, performing periodic visual inspections can identify problems early on.

During the vehicle's regular PM service, visually inspect bushings for rubber deterioration. If the rubber is severely cracked or pushed away from the outer or inner shell, the bushing should be replaced. Bushings can also be checked by placing a pry bar between the trailing arm and the hanger. Apply pressure and observe for excessive movement of the bushing.

### 2. Shocks

Virtually all shocks are designed with a *dampening* effect on both *rebound* and *compression*. That dampening is what stabilizes the vehicle. Once gone, the vehicle (or suspension) is free to move at-will, unrestricted. Continued, unnecessary movement of the suspension will wear air springs and other suspension components out prematurely.

Shocks should also be checked during regular vehicle maintenance. Any shocks found with damaged or missing end bushings, or that exhibit signs of leaking should be replaced. And, while a shock absorber may not exhibit any outward appearance of damage, it can be worn out internally, providing no resistance or dampening.

In moderate weather, a good shock will be warm to the touch when a vehicle has just returned from a run. This heat is a result of normal internal friction and the flowing of fluid between chambers. Once removed from the vehicle, a worn-out shock can be easily compressed.

In summary, including the inspection of suspension components in the regular PM cycle will maximize the life of your air springs and improve tire life.



A Marmon Highway Technologies™ Company