Raybestos Bulletin 18-08

Drum Brake Hardware Discussion

Date: 04-30-18

Vehicles Involved: All

Condition: Brake Job on the Rear Brakes

If you are doing a brake job on the rear brakes, it is critical that you replace the hardware.

Drum brake hardware undergoes a lot of stress. If you don't replace the hardware, you run the risk of the hardware failing. This will cause issues with the rear brakes. Taking the time to replace the hardware during a rear brake job will save you time down the road.

Hold Down Spring Kits:

Hold down spring kits do exactly what their name says. They hold the brake shoes down and keep them in place (See Figure 1).

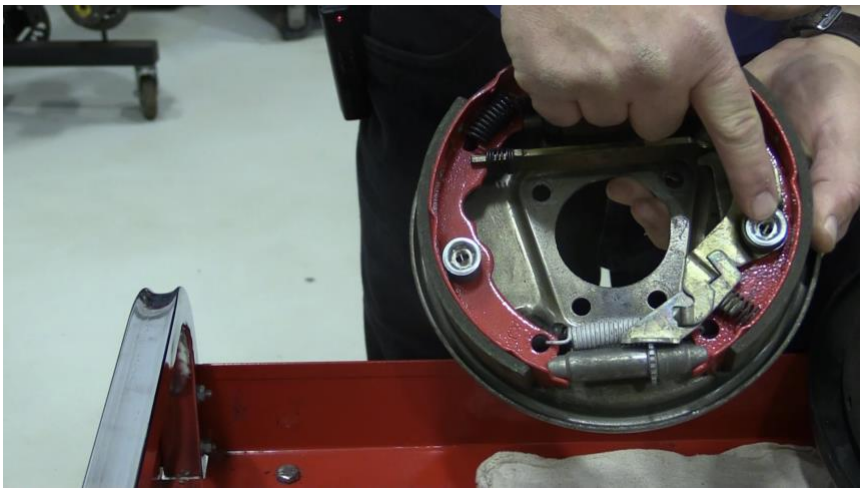

Figure 1

There are three main components in a hold-down spring kit: the springs, set cups and pins (See Figure 2).

These springs are extremely prone to corrosion. If you do not replace the hold down springs during a rear brake job, the springs are in danger of snapping. If this happens, it can cause brake drag or even a binding of the rear brakes.

Figure 2

Return Springs:

Return springs return the brake shoes to their resting condition after you release the brake pedal (See Figure 3).

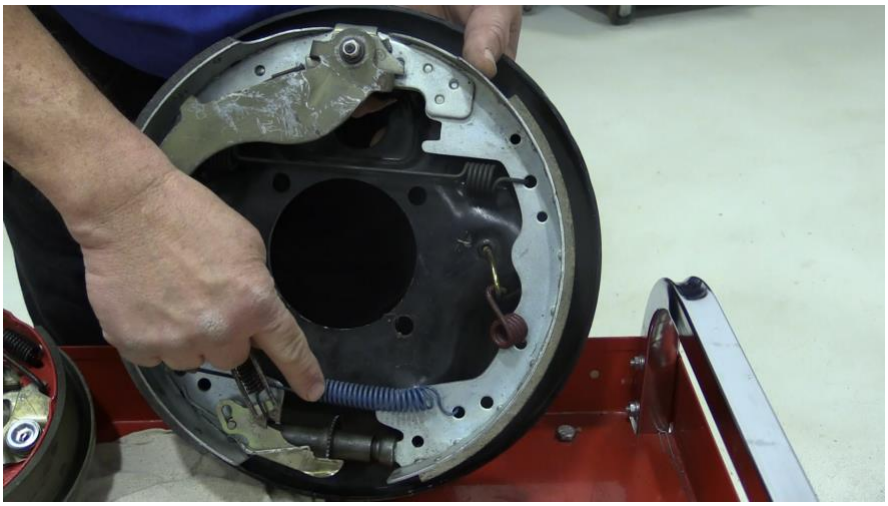

Figure 3

Brake springs are color coded so you can match up the springs out of the kit. However, don't worry if the colors don't match the springs on the vehicle. As long as you ordered the right kit, the springs will fit fine.

These return springs wear out and lose their tension over time. If you don’t replace the return springs during a brake job, the springs are at high risk of failure. Failed return springs will push the shoes up against the drum. This leads to rapid lining wear, brake drag and noise issues.

Self-Adjuster Hardware Kit:

Brake self-adjusters help ensure your brake shoes don't travel too far away from the drum.

How do self-adjusters work? As your shoes wear down, the gap between the shoes and the drum grows bigger. Each time the car stops while in reverse, the shoe is pulled against the drum. ` When that gap grows large enough, the adjusting lever rocks and moves the adjuster gear forward by one tooth (See Figure 4). The more the shoes wear, the more the adjuster advances. This ensures the shoes are close enough to the drum to operate effectively.

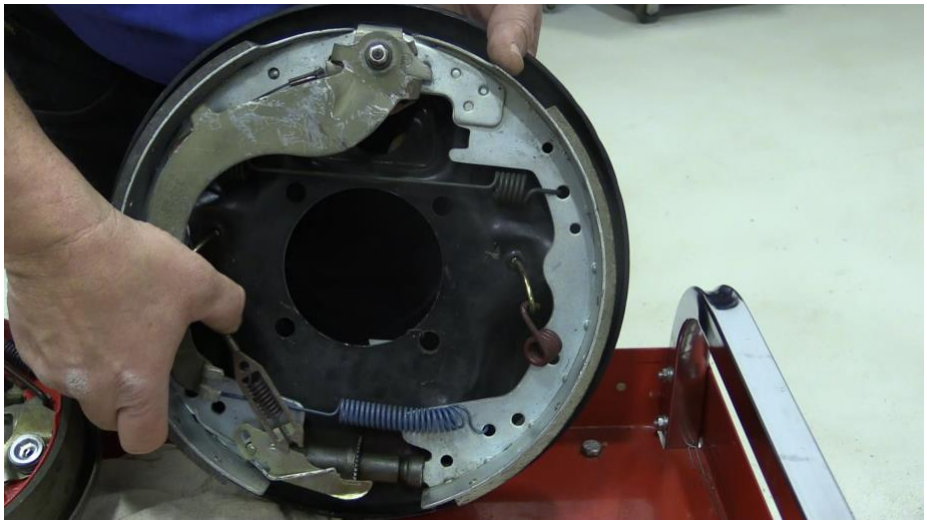

Figure 4

If the self-adjuster fails, the piston in the wheel cylinder has to come out further to apply the shoes against the drum. This will cause a low brake pedal.