**Raybestos Bulletin 19-03**

# Low Brake Pedal Caused by Bad Wheel Bearing

## Date: 06-27-19

## Vehicles Involved: All

## Condition: Low/Soft/Spongy Brake Pedal

As a technician, it is easy to make assumptions based on past experiences. When a vehicle comes into a shop with a low or spongy brake pedal, what is your first thought? Chances are the first thing that comes to your mind is a problem in the hydraulic system. It could be a faulty master cylinder, a leak in the brake lines or a bad caliper.

However, the cause of a low brake pedal doesn't always lie in the hydraulic system. We recently had a vehicle come into our shop with a low brake pedal. Another shop diagnosed the vehicle with a faulty master cylinder. However, after replacing the master cylinder, the low brake pedal remained.

At first, we assumed that there was a problem in the hydraulics system somewhere. We got the car in the air and were preparing to perform an isolation/line lock test. But before we started the test, we wanted to run through our brake inspection checklist. As part of that checklist, we checked the play in the wheel bearing (See Figure 1). We found significant play in the bearing, which can lead to a soft brake pedal.

**Image 1**

Brake rotors are held in alignment by wheel bearings. If you have a faulty or loose wheel bearing, the rotor will wobble on its axis. This wobble causes the rotor to push the caliper piston into its bore (See Image 2). Now, when you hit the brake pedal, the piston has to travel farther than normal to apply the brakes. This causes a low or spongy brake pedal.

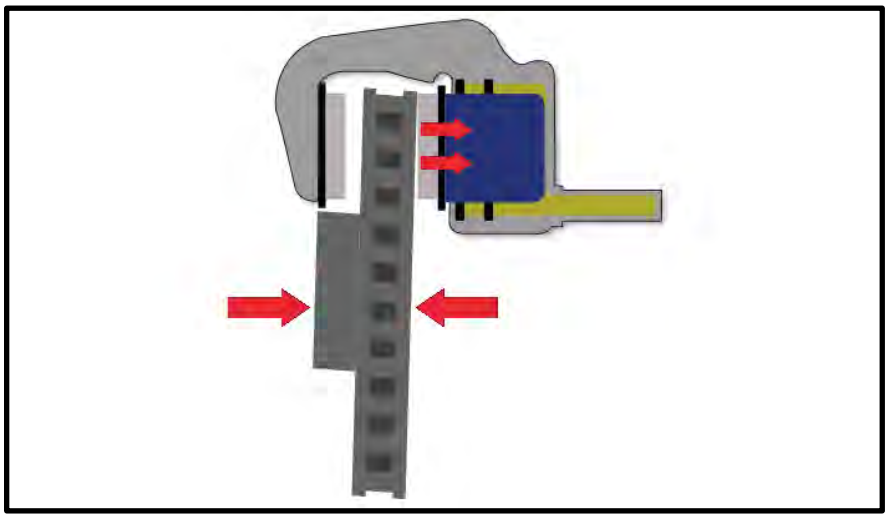

**Figure 2**

## Repair Procedure:

We determined the play in the wheel bearing was caused by a faulty bearing. We replaced the wheel bearing and a road test confirmed that this was the cause of the soft brake pedal.

This was an important reminder to our shop that we can't make assumptions as technicians. We must always remember to run through our inspection checklists to determine the actual cause of a problem.