The Neighborhood Wrench
Sales and Service LLC

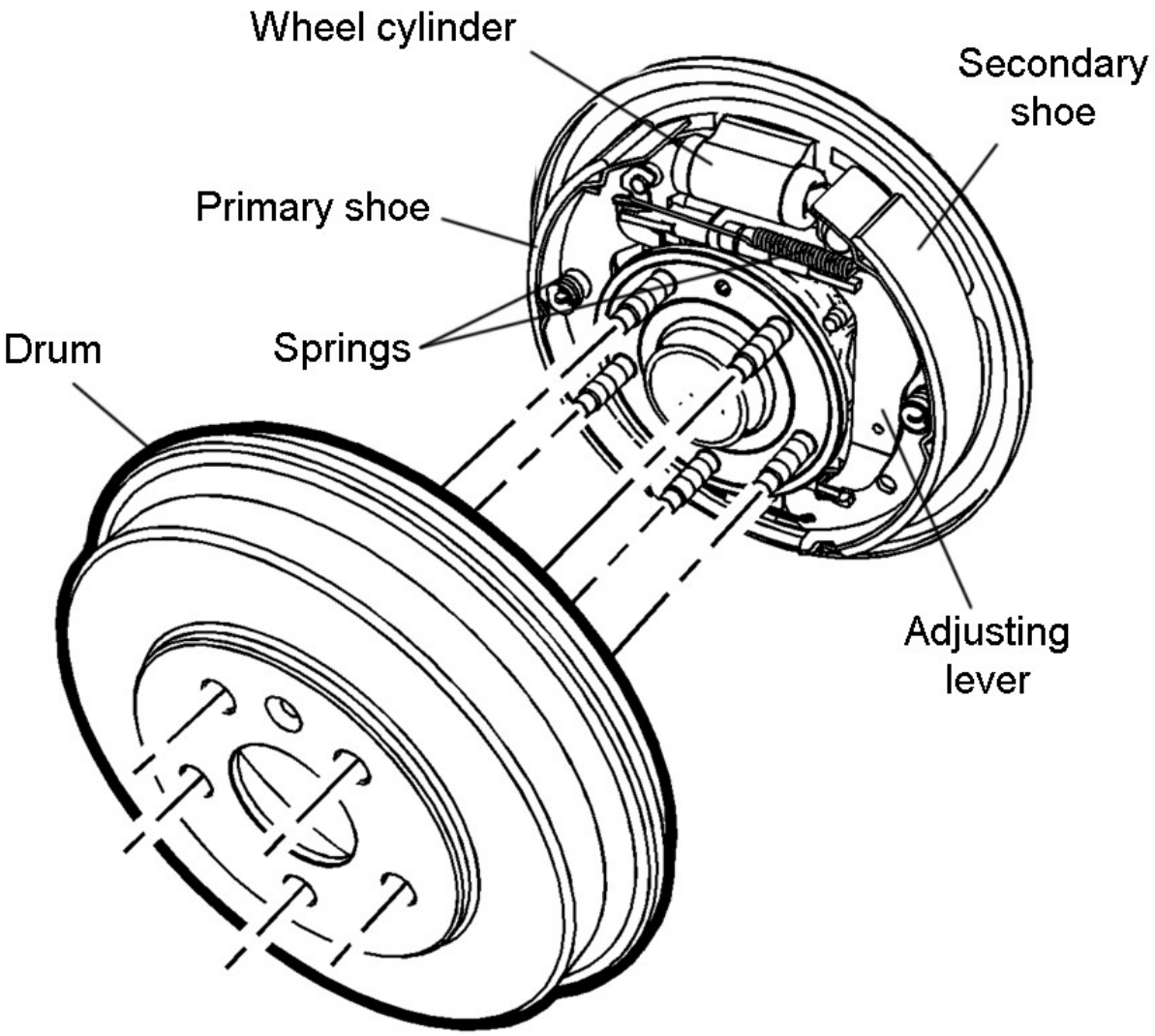
Drum Brakes

Customer Education Sheet

Virtually all modern vehicles has front disc brakes. Many also have rear disc brakes, but some have rear drum brakes. Classic vehicles (think ‘70s and earlier) may have front and rear drum brakes.

How Drum Brakes Work

The brake drum rotates with the wheel. When you push the brake pedal, the wheel cylinder pushes the brakes shoes against the inside of the drum. This creates drag, which slows down the vehicle. In order to function correctly, drum brakes need to be properly adjusted. This can be done at any time, but is often done by the technician when the brake shoes are replaced. The adjusting lever in the brakes makes sure this adjustment stays correct as the shoes wear down over time.



Symptoms of Bad Brakes

You should have your brakes checked if you notice a grinding noise when using the brakes, the brake pedal pulses when using the brakes, the vehicle pulls to one side when braking, the pedal feels soft or spongy, the brake pedal sinks, the parking brake does not work correctly, or the brake light comes on. Unlike disc brakes, drum brakes do not have wear indicators. If they grind, squeak, or make any other abnormal noises, you should have them checked.

Replacing Drum Brakes

Ideally, you should replace both sides at the same time. In most cases only the brake shoes and hardware (springs, adjusting lever, etc.) need to be replaced, but in some cases you may also need to replace the drums – for example, if they are scored or too thin. Wheel cylinders contain brake fluid, and if they are leaking they will also need to be replaced.

Cost to Replace Drum Brakes

The cost to replace brakes varies by vehicle, and whether or not the drums or wheel cylinders also need to be replaced. Also, having the brakes checked and replaced right away when you notice an issue is usually less expensive than driving for a while after they start grinding or making noise. This is because the drum can be damaged if the brake shoes wear below a certain point (“metal-to-metal”).

What if I Keep Driving My Vehicle When it Needs Brakes?

Brake shoes have a friction material that contacts the inside of the drum. The shoes will need to be replaced once this material gets too thin. If you continue to drive the vehicle and this friction material wears completely off, the brake shoe’s metal backing plate will grind against the drum and will damage it to the point that the drum also needs to be replaced.

If you still continue to drive the vehicle, the shoe’s metal backing plate can wedge into the inner surface of the drum (cause by excessive friction between the two metal parts), and this can cause the pins that hold the shoes in place to break. This results in the shoes (what’s left of them), the pins, the springs, and other hardware coming apart and grinding into each other when these parts are broken and no longer in position. If the wheel cylinder’s piston pops out it will start to leak brake fluid, which makes driving the vehicle extremely unsafe.

Also, driving with nonfunctioning (or out of adjustment) rear brakes can put extra strain on the front brakes, which can cause them to overheat and/or wear out more quickly.