

Trailer Trouble



Most of us use a trailer to tow the motor car. We pretty much ignore the thing, especially if the lights work. From time to time we have the wheel bearings checked and tires changed, but that is it.

We'd like to bring up a little noticed wear area on most trailers: **spring bushings**. Look under your trailer. If you have leaf springs, there are three bushings for each leaf, plus two more for a double-axle trailer. Each bushing wears as you ride along and flex the springs. If your trailer squeaks when loading or bouncing, it probably has bad bushings. Ron has replaced his bushings twice, with about 120,000 miles on the trailer.

To check, jack the trailer such that no pressure is on the spring to be checked. Don't forget to use safety stands with your jack! Check for loose connections at each spring pivot point, three per spring. If loose replace the bushings. If the spring wears into the bolt, where normally the bushing is separating the two, you'll ruin the bolt and the bracket it mounts to, requiring welding to repair. Bushings are easy to replace, if they have not been worn out! Most trailer shops carry them. Also use new bolts, nuts, and toggles (shackles) while doing the repair. Parts run about \$50 if you do a two-axle trailer.

Another problem area with trailers is the brakes. Here we are not concerned with lining wear, but the mechanism to activate the brakes.

Most trailers have electric brakes. (Let's assume some familiarity with the brake controller and proper adjustment.) Essentially, this device applies voltage to the brakes in the hubs of your trailer, which causes current to flow through each electro-magnet in each brake. These magnets are "hung" within the brake drum, and current passing through them attracts to the drum. They rub on the drum as it turns, which pulls them to the rear of the trailer (if moving forward) and this action activates the brakes via a linkage.

The current drawn by a healthy system is about 0.5 to 1.5 amps. for 4-brake systems. To find out the normal condition for your system, put an ammeter in series and try braking. (You may wish to buy a 5-10 amp meter at Radio Shack or another store and set it up permanently on the dash. It will allow you to know always what is going on with the brake's electrical system.) If you have broken wires or open magnet coils, less current than normal flows. If you have a shorted wire or shorted magnet coil, more current flows. One very common problem: as the magnet slides against the drum it wears the magnet's outside covering away, exposing the wires. Then you get an intermittent short that pegs your meter erratically. (cont. on p. 11)

To see if all the magnets are working, have someone stand on the brake, while you listen at each wheel. A working magnet will hum very slightly—easily heard with your ear near the hub. Do this for each wheel. No hum means you will likely find a problem at that wheel.

Removing the drums is the best way to check the system. Since the bearings need re-greasing regularly, this is a good time to have a look. Check the following with care: brake lining thickness, wear on brake magnets, broken or exposed wires, cracked or worn drums. Replace all that show too much wear. Most of the parts are inexpensive, especially when you consider how important they are.

Have a look before your trailer gives you trouble

Ron