

Wheels: And e-mail from Robert says, “I have a 1993 Eagle Summit wagon with 113,000 miles. It’s been nearly bullet proof – the best car I’ve ever owned. It has just one irritating problem. The brakes pulsate, not the pedal – the entire car. Everything was fine for about 75,000 miles. Then the pulsation started. I turned the rotors (drum rear, no antilock system). It stopped for about 10,000 miles. I replaced the rotors when it came back. This lasted about 20,000 miles. I replaced the rotors again. This time they warped in less than 10,000 miles. I have bled the entire system each time to get a complete replacement of all the fluid after draining the mastery cylinder. Never any rust, water, or air problems and the pedal have always been high and very firm. Each time the calipers were off, I put a piece of 2 x 4 in front of the piston and worked the pedal to extend the piston to assure it was free. All fine. The pads are premium and they stop great with no pulling or fading at all, but they do pulsate quite badly. Sometimes it seems very bad and other times it is almost completely gone. However, it is there most of the time. I’ve been doing my own work for over 40 years but have never run into this. Please help!”

Halderman: Vehicle vibration (especially the steering wheel) during braking is due to excessive rotor or brake hub runout (greater than about 0.003 inch). Rotor thickness variation causes the brake pedal to pulsate so your problem is runout. You said you checked the runout. How much? Did you check the hubs for runout? Also the lug nuts have to be tightened using a torque wrench and to only 80 lb ft. and tightened in a star pattern. Try to stop the vehicle using the parking brake to see if the vibration occurs. Do this away from any traffic and on a back country road. If the vibration occurs, then the problem is due to out-of-round or warped rear brake drums. If the caliper slides are sticking, the pads could be dragging on the rotor causing heat and warpage. Always check that the hub surface is clean when installing new rotors.

