

**Wheels:** Jane of Dayton writes that she is concerned that her Buick needed new brakes at 33,000 miles. She feels that brakes should last longer than this and wants to know your opinion.

**Halderman:** Jane included a copy of the repair order, which states that the front brakes were worn. This may mean that they are partially worn or could mean that they were worn to the point that the service technician thought they should be replaced. Many service technicians recommend replacement front disc brake pads whenever they are worn to 50% or less of the original usable thickness. According to one industry standard, the disc brake pads are “required” to be replaced whenever the thickness of the friction material is at or below the minimum allowable thickness as specified by the vehicle manufacturer. If the friction material thickness is close to the minimum, then the service technician can “suggest” replacement because it is close to the end of its service life. There is another factor to consider and this is that any service work performed on the braking system should be performed to “restore the braking system to as new condition.” It is this last statement that I believe the technician and the dealership took when it performed a rear brake cleaning and adjustment and suggested the replacement of the front disc brake pads.

**Wheels:** Shouldn't the brakes last longer than 33,000 miles?

**Halderman:** Brake service life is extremely variable based on driving habits, speeds, as well as vehicle weight and type of driving. A front-wheel-drive vehicle such as Jane's Buick is also harder on front brakes than most rear-wheel-drive vehicles because up to 80% of the braking is performed by the front brakes alone. For example, if the vehicle was driven to Cincinnati every day, the brakes could last much longer than 33,000 miles because the brakes are not being applied during most of the travel. A vehicle used in city driving may require brake replacement every 20,000 miles.

**Story Time:** I was involved in the maintenance of a fleet of vehicles that were driven all day every day and seldom on the highway. It was not unusual to replace the brakes for these vehicles every 6 weeks!

**Halderman:** Apparently, Jane did ask that the brakes be inspected. It was not mentioned in Jane's letter, but I would assume that the dealer notified her of the condition of the brakes and did get approval before the replacement of the front disc brake pads.

