**Wheels:** An e-mail from Don says, "You were kind enough to help my son out a couple of weeks ago with a question regarding the cause of a collapsing radiator hose. He replaced the radiator cap as you suggested and has had no problems. We should all be so luck to get by with a $4.00 fix.

I have a problem with my 2003 GMC Envoy SLT. It has approximately 32,000 miles. At about 30,000 miles, the SUV developed what I would call a rocking motion that occurs approximately between 30 and 50 mph. Above that, there might be a small vibration in the steering wheel, but not really noticeable. It seems to occur both on acceleration and deceleration. However, under harder acceleration, the motion does not occur. I thought the wheels might be out of balance, so I had them balanced and rotated as part of my 30,000 mile oil change with no change in behavior. My wife had a similar problem with her Jag X-type and it turned out to be a bent rim. The SLT has aluminum wheels. I was wondering whether the behavior I described indicates a similar condition with the Envoy? If so, how is it detected and repaired?"

**Halderman:** The vibration I think you are feeling is often referred to as a waddle. This slight side-to-side motion is usually caused by one of two things:

- A defective tire where the steel belt around the circumference of the tire has shifted causing the side-to-side motion.
- A bent wheel usually caused by hitting a curb or other similar situation.
- In severe cases, the bearing hub could be bent.

The normal procedure used to locate this type of fault is for the service technician to hoist the vehicle about 2 inches off the ground and use a runout gauge to measure both the radial (out-of-round) and lateral (side-to-side) movement of the wheel, tire, and hub. Normal specification for runout is less than 0.060 inch or about the thickness of a nickel. If excessive runout is found, then either the wheel or the tire or both would need to be replaced to solve the problem.