Wheels: Joe writes, "In a previous column you said that the GM cruise control would not work if the third brake light was burned out. That was really helpful to me because changing these burned out bulbs fixed my 1993 Roadmaster cruise control. Thank you.

But why did they tie the cruise control into the brake lights in that manner? When the brake lights are on, the cruise control should turn off. If the brake lights are off, the cruise control should be enabled. Where is the advantage of having this function not work with the lights burned out? I'm just very curious about this point."

Halderman: Congratulations on fixing your cruise control. You are right – it seems strange that the high-mounted stop light (third brake light) would cause the cruise control to not work if the bulbs burned out, but it is due to how the system is wired. The cruise control is, as you stated, shut off if the brakes are applied so the ground for the sense circuit is through the filament of the third brake light bulb. When the brakes are applied, the voltage to the bulb opens the ground path and causes the cruise to disengage. Unfortunately, the ground is also lost if the bulb burns out. This is just an example where one circuit is being used to control another circuit to help save wire and connections. This is why I always check everything that does not work because, if one bulb is burned out, it can affect another system that would not thought to be connected.

