Wheels: I have a 1998 Jeep Cherokee with 4.0 liter, inline 6-cylinder. The car has about 63,000 miles. A few months ago the "check engine light" came on. The guy at the car parts store put his reader on it and the code pointed to the oxygen sensor. My son found a blog which said to first check the 5 amp fuses which could be found in the black box under the hood. My Jeep has about five 15 amp fuses in the box. All tested good, but when I put them back in, the check engine light was no longer on. The light stayed out for about a week but came back on. I narrowed the culprit down to certain one of the 15 amp fuses. This has been the normal mode of operations for the last several months. If I pull the fuse and stick it back in, the light usually goes out. But it comes back on after a day or two. A few times it stayed out for almost a week. Just for the heck of it, I did change the fuse. My theory has been the oxygen sensor must not be bad if the light does not come back on, for sometimes almost a week. A friend speculated that what's probably happening is I'm resetting the computer each time I pull the fuse. Another piece of possibly related information, which I found in a manual) states as follows for my particular jeep (model and year)." On 1988 through 1990 models, an emission maintenance timer (mounted on the dash panel, to the right of the steering column) activates an emissions maintenance indicator light when the oxygen sensor is scheduled for replacement (approximately 82,500 miles)." As stated above I have only 63,000 miles, but somehow the age of the vehicle may be showing. I would appreciate any light you could throw on this problem.

**Halderman:** I wish I had the actual code number. There is a code for the heater circuit, which as you said is controlled by a fuse. The other codes relate to how fast it switches from rich to lean and from lean to rich. There are also codes related to which sensor it is either the upstream or the downstream sensor. If I know the exact code, this will help me narrow down where the problem might be. Thanks.

Wheels: The reader wrote back and provided the diagnostic code information: O<sub>2</sub> sensor Bank 1 Sensor 2 P0138

**Halderman:** This code tells me that it is the oxygen sensor downstream of the catalytic converter and it is sensing a high voltage.

It could be that the converter is not working as designed or that the sensor has failed and some of the heater current is getting into the signal wire. It will take a professional to distinguish the difference by performing tests of the converter and by looking at scan tool data.

I also asked Tom Freels, the Chrysler Automotive Program (CAP) coordinator at Sinclair Community College, for his opinion of this fault and he wrote:

"I agree, most likely a failed  $O_2$  heater is shorting internally. The light probably stayed off for a while due to the OBD-II monitor running 2 consecutive failed trips on a long enough drive. I have also seen Cherokees do this and blow the fuse that the customer is referring to. Hope this helps."

Thanks Tom. It looks like it is time to see a professional service technician so the root cause can be found and corrected.

