

Deciphering Cars



THE LITTLE RED LIGHT IN MY 1993 PLYMOUTH Grand Voyager said “Check Engine.” I appreciated the suggestion. But I had no idea what it meant. ■ The van, you see, had been a gift from my wife’s sister. It had 187,00 kilometers (116,000 miles) on it when I picked it up in Chicago for the long drive to Boston. Halfway back the engine almost caught on fire; when I arrived two days later, I discovered that it needed nearly \$5,000 in repairs. Three days after that work was done, the transmission died.

All in all, this “free” van had cost me nearly \$8,000, and now something else was wrong. What was it? I didn’t trust the dealership to tell me what was really going on: I felt that they were dishing out the bad news one broken part at a time, so that I wouldn’t realize the full scope of my problems. So instead of turning to the experts, I turned to the Internet. I was troubled by what I learned—not about the state of the old van, but about how limited my access was to information about a product that I owned.

A lot of people are intimidated by the idea of trying to repair a modern car. What’s so discouraging, apparently, is the “car computer”—the electronic brain that controls everything from the emissions system to the battery charger. People who once had no problem doing tune-ups with strobe timing lights see these electronic boxes and just give up.

But in fact, the car computer is your friend—constantly monitoring whether anything is going wrong.

At the suggestion of a friend, I typed the keywords “Voyager” and “Diagnostic Trouble Codes” into Google. This landed me at a Web site that offered step-by-step instructions on how to get my car’s computer to spill its secrets.

Different cars have different “secret handshakes” that you need to know to extract the diagnostic codes. On some GM cars, for instance, you turn on the car’s ignition then hold down the “Off” and “Warmer” buttons on the climate control system until a special light appears on the instrument panel. For

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other cars you need a device called an onboard diagnostic (OBD) scanner; these gizmos cost anywhere from \$20 to \$250. For my Plymouth van, you read the codes by turning the ignition switch on and off two times in a row, turning it back on, and counting the number of times that the “Check Engine” light flashes.

In theory, knowing these codes should let you fix your car just the way the pros do. Just ask the car computer what component is malfunctioning, and then replace it. And if the computer can’t figure it out, you replace the computer itself! This simple logic will let you diagnose the vast majority of common car problems.

But there’s a problem with this approach: you need to know those diagnostic codes. Without them, you’re nowhere. And as it turns out, even though you’ve paid tens of thousands of dollars to buy your car, you have no right to know what those codes really mean—or how to get them out of *your* machine.

Automakers, independent service shops, and AAA have struggled for years over who has rights to these diagnostic

codes. Clearly, by controlling access to this information, automakers can give their own dealers an edge in servicing their own vehicles—or they can force independent garages to sign up for training and pay hefty license fees.

In 2001, the U.S. Congress threatened automakers with the Right to Repair Act, which would have forced them to reveal their codes. The legislation was scuttled in 2002 when automakers promised that they would share their technical information. The legislation, officially designated HR 2735, was reintroduced in the House of Representatives last July.

Not surprisingly, automakers oppose the legislation. “It is not necessary,” says John Trajnowski, a principal staff engineer at Ford Motor. “We are making all of our information available now.” Consumers and independent repair shops can purchase three-day access to Ford’s Motorcraft Web site for \$19.95.

Trajnowski contends that the legislation “is being sponsored primarily by after-market-parts manufacturers,” who want to force carmakers to reveal their “proprietary control strategies” for sensors, controls, and other high-tech car equipment. This would make it easier for third parties to make clone parts.

But even if the legislation has such a hidden purpose, it’s irrelevant. The real issue here is our rights as owners of technology in the digital age: if we buy a car that has an onboard computer, that computer should act in our best interests. If it makes a diagnosis, we have a right to know it. Our tools shouldn’t hide information from us in order to enhance somebody else’s revenue. AAA has taken a similar position and is strongly supporting HR 2735. With luck, it will pass before the end of the session this fall.

As for my van, the computer said that the problem was with the oxygen sensor. But the fan control relay was also acting up. And there were possibly problems with the internal logic module. I decided that things were going to keep breaking, so we halted all repairs and traded in the van for a 2004 Honda Pilot. We got \$500. ■

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