

## **“Check Engine” “Service Engine Soon”**



### **WHAT DOES IT MEAN?**

The check engine light is turned on whenever the vehicle's onboard computer detects a fault. When the light is on, the vehicle isn't operating at peak efficiency and/or may be emitting excessive emissions.

### **WHY DOES IT COME ON?**

Early computer controlled vehicles had the capacity to detect as little as only 20 different fault conditions. Vehicles sold in the U.S. since 1996 have the capability to detect and store hundreds of fault codes. These fault codes may indicate malfunctions ranging from a loose gas cap to engine misfire or transmission slippage.

### **WHERE TO BEGIN?**

The first step is to determine what code(s) the vehicle's computer has detected. This can be done quickly and some auto parts stores offer a free "Code Reader" service. This is really though, only the beginning of the diagnostic process. Knowing what code(s) the computer has stored serves to narrow the diagnostic procedure. It may be compared to a person seeking medical treatment, telling the doctor, "My arm hurts." Does the doctor amputate, apply a cast, treat a cut, burn or other type of wound? The course of treatment depends upon what further examination and/or tests reveal. Much the same is true with today's vehicles—just replacing a part based on a stored code will often not remedy the situation. Further diagnosis may reveal a host of other causes, which in turn, may have caused the computer to illuminate the warning light indicating a failure.

### **VERIFYING THE REPAIR**

Following a repair, any stored codes will be cleared, but the repair process isn't complete. The vehicle will need to be operated, often within strict manufacturer determined parameters, to allow the onboard computer to complete its

diagnostic checks. These diagnostic system checks are referred to as monitors. In addition to providing repair verification, NY state inspection procedures require the monitors to have been completed. At present 1996-2000 model year vehicles are allowed to have up to two incomplete monitors and still pass the NY state test. 2001 and newer vehicles may only have one incomplete monitor. At times a vehicle may have more than one problem, yet only display a single code. This is due to the fact that many onboard computers will not run any additional monitors once an error has been detected and the check engine light has been turned on. So, while repairing the initial problem, clearing the code and driving the vehicle, additional problems may surface.

### **THE BOTTOM LINE**

We make every effort to fully and accurately diagnose each vehicle with the initial diagnosis. However, in view of the increasing complexity of today's vehicles and the infinite number of variables involved, at times additional problems/diagnostic codes may present themselves. We appreciate your understanding as we endeavor to keep your vehicle operating as cleanly and efficiently as possible.