



TECH TIPS



Ford: Repeated PFE-DPFE Sensor Code

SYMPTOM: Repeated PFE-DPFE Sensor Code

APPLICATION: FORD, All With PFE-DPFE Sensor (86-94)

Ford vehicles equipped with a Pressure Feedback EGR Sensor, (PFE) or a Differential Pressure Feedback EGR Sensor, (DPFE) may experience repeated occurrence of false EGR system codes and possible incorrect replacement of components due to limitations of the factory diagnostic procedures. While the Ford "H" manual does include reference to the EGR valve as a possible source of an EGR PFE Sensor code it does not address valves that "Hang" momentarily.

Our testing has found that contaminant build-up in the area of the EGR pintle shaft, or pintle seat may cause the valves on these applications to be slow in opening when the PCM commands additional vacuum be applied to the valve. Sensing that insufficient EGR is occurring, the PCM commands for more vacuum to the EGR valve. When the valve does pop open, the combination of valve inertia and vacuum build-up cause the valve to over travel. This creates the sensed excessive EGR condition that triggers the false code.

Drivers' complaints usually include a buck-

ing or trailer hitching condition during shifting or initial off-idle acceleration as part of the drivability complaint, which can be especially noticeable on manual transmission equipped vehicles. EGR valve replacement is the recommended service.

A similar false code may also occur if the metering orifice located in the intake below the EGR valve and DPFE sensor is restricted. This type of problem will not create a trailer hitching condition but loss of fuel economy will be noted. Cleaning the orifice will correct this condition.

Always check to make sure that the ground straps are in place and complete connections are made.