

OVERVIEW

The EEC system provides optimum control of the engine through the enhanced capability of the powertrain control module (PCM). The EEC system also has an on board diagnostic (OBD) monitoring system with features and functions to meet federal regulations on exhaust emissions. The EEC system has two major divisions, hardware and software. The hardware includes the PCM, sensors, switches, actuators, solenoids, and interconnecting terminals. The software in the PCM provides the strategy control for outputs (engine hardware) based on the values of the inputs to the PCM. The PCM receives information from a variety of sensor and switch inputs. Based on the strategy and calibration stored within the PCM, the PCM generates the appropriate output. The system is designed to minimize emissions and optimize fuel economy and driveability. The software strategy controls the basic operation of the engine, provides the OBD strategy, controls the malfunction indicator lamp (MIL), communicates to the scan tool over the data link connector (DLC), allows for flash electrically erasable programmable read only memory (EEPROM), provides idle air and fuel trim, and controls failure mode effects management (FMEM).

DESCRIPTION AND OPERATION > ELECTRONIC ENGINE CONTROLS - SYSTEM OPERATION AND COMPONENT DESCRIPTION

System Operation

Refer to the ENGINE CONTROLS - DESCRIPTION & OPERATION (EXCEPT DIESEL & HYBRID) .

DIAGNOSIS AND TESTING > ELECTRONIC ENGINE CONTROLS > DTC CHART: POWERTRAIN CONTROL MODULE (PCM)

Diagnostics in this service information assume a certain skill level and knowledge of Ford-specific diagnostic practices. REFER to: Diagnostic Methods .

Powertrain Control Module (PCM) DTC Chart

DTC	Description	Action
P0128	Coolant Thermostat (Coolant Temp Below Thermostat Regulating Temperature)	REFER to: ENGINE COOLING .
P0217	Engine Coolant Overtemperature Condition	REFER to: ENGINE COOLING .
P025A	Fuel Pump Module A Control Circuit/Open	First, Refer to ENGINE CONTROLS - POWERTRAIN DTC CHARTS & DESCRIPTIONS (EXCEPT DIESEL & HYBRID) . If sent here from the ENGINE CONTROLS - POWERTRAIN DTC CHARTS & DESCRIPTIONS (EXCEPT DIESEL & HYBRID),