

F10 CHECK FOR CORRECT PCM (POWERTRAIN CONTROL MODULE) OPERATION

Ignition OFF.

Disconnect and inspect all PCM connectors.

Repair:

corrosion (install new connector or terminals - clean module pins)

damaged or bent pins - install new terminals/pins

pushed-out pins - install new pins as necessary

Reconnect the PCM connectors. Make sure they seat and latch correctly.

Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW the TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new PCM. REFER to: POWERTRAIN CONTROL MODULE (PCM) .
No	The system is operating correctly at this time. The concern may have been caused by module connections. ADDRESS the root cause of any connector or pin issues.

DIAGNOSIS AND TESTING > CHARGING SYSTEM - 2.7L ECOBOOST (238KW/324PS) > PINPOINT TESTS > PINPOINT TEST G : DTC P0620, P065B

Refer to CHARGING SYSTEM for schematic and connector information.

Normal Operation and Fault Conditions

The PCM monitors the generator output via the generator monitor (GENMON) circuit. The PCM uses the generator command (GENCMD) circuit to command the generator to either increase or decrease output. If the GENCMD circuit (generator control circuit) or the "A" sense circuit are open or shorted to ground, the PCM will not be able to control the generator output. When the engine speed is greater than 2,000 rpm, the generator defaults to a steady voltage output of 13.5-volts and the PCM sends a request to the IPC to illuminate the charging system warning indicator. A GENCMD circuit fault can be confirmed by viewing the PCM PID generator command line fault (GENCMD_LF) (YES status indicator fault).

Diagnostic Trouble Code (DTC) Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
P0620	Generator Control Circuit	The PCM sets this DTC if the GENCMD circuit, "A" sense circuit, or B+ circuit is open or shorted to ground.