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2023 Ford Expedition Service and Repair Manual

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<p>PCM (powertrain control module) P061B:00</p>	<p>Internal Control Module Torque Calculation Performance: No Sub Type Information</p>	<p>Sets when the PCM (powertrain control module) detects an internal calculation error. The presence of this DTC (diagnostic trouble code) may indicate that the vehicle is operating in failure mode and may experience a loss of power. Check for sensor and circuit related Diagnostic Trouble Codes (DTCs). Do not install a new electronic throttle body for this DTC (diagnostic trouble code) .</p>
<p>PCM (powertrain control module) P061C:00</p>	<p>Internal Control Module Engine RPM Performance: No Sub Type Information</p>	<p>Sets when the PCM (powertrain control module) detects an internal error. Verify correct operation of the CKP (crankshaft position) and CMP (camshaft position) sensors and related circuits. The presence of this DTC (diagnostic trouble code) may indicate that the vehicle is operating in failure mode and may experience a loss of power.</p>
<p>PCM (powertrain control module) P061D:00</p>	<p>Internal Control Module Engine Air Mass Performance: No Sub Type Information</p>	<p>Sets when the PCM (powertrain control module) detects internal an error. An intake air system leak at a hose, line or connection of any intake air system component may cause this DTC (diagnostic trouble code) to set. Aftermarket modifications to the intake air system may cause this DTC (diagnostic trouble code) to set. Verify the PCM (powertrain control module) is at the latest calibration level.</p>
<p>PCM (powertrain control module) P061F:00</p>	<p>Internal Control Module Throttle Actuator Controller Performance: No Sub Type Information</p>	<p>Sets when the PCM (powertrain control module) detects an internal error. Verify correct operation of the electronic throttle control (ETC) components and related circuits.</p>
<p>PCM (powertrain control module) P062B:00</p>	<p>Internal Control Module Fuel Injector Control Performance: No Sub Type Information</p>	<p>Sets when the PCM (powertrain control module) detects an internal error. The presence of this DTC (diagnostic trouble code) may indicate that the vehicle is operating in failure mode and may experience a loss of power.</p>
<p>PCM (powertrain control module) P062C:00</p>	<p>Internal Control Module Vehicle Speed Performance: No Sub Type Information</p>	<p>Sets when the PCM (powertrain control module) does not receive a valid vehicle speed or wheel speed signal. Diagnose all vehicle communication concerns, ABS (anti-lock brake system) Diagnostic Trouble Codes (DTCs), ABS (anti-lock brake system) related Diagnostic Trouble Codes (DTCs) in other modules, TCM (transmission control module) Diagnostic Trouble Codes (DTCs),</p>

Sample

PCM (powertrain control module)	P0206:00	Cylinder 6 Injector A Circuit/Open: No Sub Type Information	GO to Pinpoint Test DI
PCM (powertrain control module)	P02EE:00	Cylinder 1 Injector Circuit Range/Performance: No Sub Type Information	GO to Pinpoint Test DI
PCM (powertrain control module)	P02EF:00	Cylinder 2 Injector Circuit Range/Performance: No Sub Type Information	GO to Pinpoint Test DI
PCM (powertrain control module)	P02F0:00	Cylinder 3 Injector Circuit Range/Performance: No Sub Type Information	GO to Pinpoint Test DI
PCM (powertrain control module)	P02F1:00	Cylinder 4 Injector Circuit Range/Performance: No Sub Type Information	GO to Pinpoint Test DI
PCM (powertrain control module)	P02F2:00	Cylinder 5 Injector Circuit Range/Performance: No Sub Type Information	GO to Pinpoint Test DI
PCM (powertrain control module)	P02F3:00	Cylinder 6 Injector Circuit Range/Performance: No Sub Type Information	GO to Pinpoint Test DI
PCM (powertrain control module)	P2149:00	Fuel Injector Group B Supply Voltage Circuit/Open: No Sub Type Information	GO to Pinpoint Test KG
PCM (powertrain control module)	P21CF:00	Cylinder 1 Injector B Circuit/Open: No Sub Type Information	GO to Pinpoint Test KG
PCM (powertrain control module)	P21D0:00	Cylinder 2 Injector B Circuit/Open: No Sub Type Information	GO to Pinpoint Test KG
PCM (powertrain control module)	P21D1:00	Cylinder 3 Injector B Circuit/Open: No Sub Type Information	GO to Pinpoint Test KG
PCM (powertrain control module)	P21D2:00	Cylinder 4 Injector B Circuit/Open: No Sub Type Information	GO to Pinpoint Test KG
PCM (powertrain control module)	P21D3:00	Cylinder 5 Injector B Circuit/Open: No Sub Type Information	GO to Pinpoint Test KG
PCM (powertrain control module)	P21D4:00	Cylinder 6 Injector B Circuit/Open: No Sub Type Information	GO to Pinpoint Test KG

P0203:00		inoperative.
PCM (powertrain control module) P0204:00	Cylinder 4 Injector 'A' Circuit/Open: No Sub Type Information	Sets when the PCM (powertrain control module) detects the fuel injector circuitry is inoperative.
PCM (powertrain control module) P0205:00	Cylinder 5 Injector 'A' Circuit/Open: No Sub Type Information	Sets when the PCM (powertrain control module) detects the fuel injector circuitry is inoperative.
PCM (powertrain control module) P0206:00	Cylinder 6 Injector 'A' Circuit/Open: No Sub Type Information	Sets when the PCM (powertrain control module) detects the fuel injector circuitry is inoperative.
PCM (powertrain control module) P02EE:00	Cylinder 1 Injector Circuit Range/Performance: No Sub Type Information	Sets when the PCM (powertrain control module) detects the output voltage of the fuel injector control circuit is outside of the calibrated limit.
PCM (powertrain control module) P02EF:00	Cylinder 2 Injector Circuit Range/Performance: No Sub Type Information	Sets when the PCM (powertrain control module) detects the output voltage of the fuel injector control circuit is outside of the calibrated limit.
PCM (powertrain control module) P02F0:00	Cylinder 3 Injector Circuit Range/Performance: No Sub Type Information	Sets when the PCM (powertrain control module) detects the output voltage of the fuel injector control circuit is outside of the calibrated limit.
PCM (powertrain control module) P02F1:00	Cylinder 4 Injector Circuit Range/Performance: No Sub Type Information	Sets when the PCM (powertrain control module) detects the output voltage of the fuel injector control circuit is outside of the calibrated limit.
PCM (powertrain control module) P02F2:00	Cylinder 5 Injector Circuit Range/Performance: No Sub Type Information	Sets when the PCM (powertrain control module) detects the output voltage of the fuel injector control circuit is outside of the calibrated limit.

PCM (powertrain control module) P21D1:00	Cylinder 3 Injector 'B' Circuit/Open: No Sub Type Information	Sets when the PCM (powertrain control module) detects the fuel injector circuitry is inoperative. The comprehensive component monitor (CCM) monitors the operation of the fuel injector drivers in the PCM (powertrain control module) .
PCM (powertrain control module) P21D2:00	Cylinder 4 Injector 'B' Circuit/Open: No Sub Type Information	Sets when the PCM (powertrain control module) detects the fuel injector circuitry is inoperative. The comprehensive component monitor (CCM) monitors the operation of the fuel injector drivers in the PCM (powertrain control module) .
PCM (powertrain control module) P21D3:00	Cylinder 5 Injector 'B' Circuit/Open: No Sub Type Information	Sets when the PCM (powertrain control module) detects the fuel injector circuitry is inoperative. The comprehensive component monitor (CCM) monitors the operation of the fuel injector drivers in the PCM (powertrain control module) .
PCM (powertrain control module) P21D4:00	Cylinder 6 Injector 'B' Circuit/Open: No Sub Type Information	Sets when the PCM (powertrain control module) detects the fuel injector circuitry is inoperative. The comprehensive component monitor (CCM) monitors the operation of the fuel injector drivers in the PCM (powertrain control module) .
PCM (powertrain control module) P2C27:00	Fuel Injector Group 'B' Supply Sense Circuit Low: No Sub Type Information	Sets when the PCM (powertrain control module) detects the injector relay voltage is less than the calibrated threshold. This DTC (diagnostic trouble code) also sets when a concern is detected in the injector relay (INJRLY) circuit or the injector power monitor (INJPWRM) circuit.
PCM (powertrain control module) P2C28:00	Fuel Injector Group 'B' Supply Sense Circuit High: No Sub Type Information	Sets when the PCM (powertrain control module) detects the INJRLY circuit voltage is more than the calibrated threshold. This DTC (diagnostic trouble code) also sets when the injector power monitor (INJPWRM) circuit voltage is more than the calibrated threshold.

Possible Sources

- Fuel injector relay
- Fuel injector (9F593)
- PCM (powertrain control module) (12A650)

Fuel Control

303-04D Fuel Charging and Controls - 3.5L V6 PowerBoost (CN)	2022 F-150
Diagnosis and Testing	Procedure revision date: 11/5/2020

Fuel Control

Diagnostic Trouble Code (DTC) Chart

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices.

REFER to: [Diagnostic Methods](#)

(100-00 General Information, Description and Operation).

Diagnostic Trouble Code Chart

Module	DTC (diagnostic trouble code)	Description	Action
PCM (powertrain control module)	P0087:00	Fuel Rail/System Pressure - Too Low (Bank 1): No Sub Type Information	GO to Pinpoint Test DD
PCM (powertrain control module)	P0088:00	Fuel Rail/System Pressure - Too High (Bank 1): No Sub Type Information	GO to Pinpoint Test DD
PCM (powertrain control module)	P018C:00	Fuel Pressure Sensor B Circuit Low: No Sub Type Information	GO to Pinpoint Test DD
PCM (powertrain control module)	P018D:00	Fuel Pressure Sensor B Circuit High: No Sub Type Information	GO to Pinpoint Test DD
PCM (powertrain control module)	P0192:00	Fuel Rail Pressure Sensor Circuit Low (Bank 1): No Sub Type Information	GO to Pinpoint Test DD

and may be ignited. Failure to follow these instructions may result in serious personal injury.

WARNING

When handling fuel, always observe fuel handling precautions and be prepared in the event of fuel spillage. Spilled fuel may be ignited by hot vehicle components or other ignition sources. Failure to follow these instructions may result in serious personal injury.

WARNING

Clean all fuel residue from the engine compartment. If not removed, fuel residue may ignite when the engine is returned to operation. Failure to follow this instruction may result in serious personal injury.

WARNING

Fuel may remain pressurized in some fuel lines after the Fuel System Pressure Release procedure. Wear safety gloves and a face shield when disconnecting pressure lines to avoid skin and eye contact. Failure to follow this instruction may result in serious personal injury.

NOTE

With the engine running, the FRP PID (parameter identification) value may be 48-70 kPa (7-10 psi) higher than a fuel pressure reading taken with a mechanical gauge.

Refer to Wiring Diagrams Cell 024 for schematic and connector information.

Normal Operation and Fault Conditions Refer to the DTC (diagnostic trouble code) Fault Trigger Conditions. **DTC Fault Trigger Conditions**

DTC (diagnostic trouble code)	Description	Fault Trigger Condition
PCM (powertrain control module) P0087:00	Fuel Rail/System Pressure - Too Low (Bank 1): No Sub Type Information	Sets when the PCM (powertrain control module) detects the fuel rail pressure requested by the PCM (powertrain control module) is greater than the fuel rail pressure delivered, by more than a calibrated threshold for greater than a calibrated length of time.

Sample

PCM (powertrain control module)	P00C6:00	Fuel Rail Pressure Too Low - Engine Cranking (Bank 1): No Sub Type Information	GO to Pinpoint Test HP
PCM (powertrain control module)	P053F:00	Cold Start Fuel Pressure Performance Bank 1: No Sub Type Information	GO to Pinpoint Test HP

Global Customer Symptom Code (GCSC) Chart

Diagnostics in this manual assume a certain skill level and knowledge of Ford-specific diagnostic practices.

REFER to: [Diagnostic Methods](#)

(100-00 General Information, Description and Operation).

Global Customer Symptom Code Chart

Customer Symptom	Action
Start/Run/Move > Running > Smoke From Exhaust > Black	GO to Pinpoint Test HP
Driving Performance > Stalls/Quits > At Idle > Always	GO to Pinpoint Test HP
Driving Performance > Poor Fuel Economy > Combined > Unloaded	GO to Pinpoint Test HP

Pinpoint Tests

PINPOINT TEST HP : HIGH PRESSURE FUEL DELIVERY SYSTEM

NOTICE

Do not apply battery voltage across the fuel injection pump circuits. Damage to the fuel volume regulator solenoid may result.

Refer to Wiring Diagrams Cell 024 for schematic and connector information.

Normal Operation and Fault Conditions Refer to the DTC (diagnostic trouble code) Fault Trigger Conditions. **DTC Fault Trigger Conditions**

DTC (diagnostic trouble code)	Description	Fault Trigger Condition