

Electronic Engine Controls

DTC Chart: Powertrain Control Module (PCM)

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).

Powertrain Control Module (PCM) DTC Chart

P0125	Insufficient Coolant Temp For Closed Loop Fuel Control	REFER to: Engine Cooling (303-03 Engine Cooling - 2.3L EcoBoost (201kW/273PS), Diagnosis and Testing).
P0128	Coolant Thermostat (Coolant Temp Below Thermostat Regulating Temperature)	REFER to: Engine Cooling (303-03 Engine Cooling - 2.3L EcoBoost (201kW/273PS), Diagnosis and Testing).
P0217	Engine Coolant Overtemperature Condition	REFER to: Engine Cooling (303-03 Engine Cooling - 2.3L EcoBoost (201kW/273PS), Diagnosis and Testing).
P0218	Transmission Fluid Temperature Sensor "A" Over Temperature Condition	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P025A	Fuel Pump Module A Control Circuit/Open	First, Refer to Powertrain Control/Emissions Diagnosis (PC/ED) manual. If sent here from the PC/ED manual, INSTALL a new BCM , REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Removal and Installation).
P025B	Fuel Pump Module A Control Circuit Range/Performance	First, Refer to Powertrain Control/Emissions Diagnosis (PC/ED) manual. If sent here from the PC/ED manual, INSTALL a new BCM , REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Removal and Installation).
P025C	Fuel Pump Module A Control Circuit Low	First, Refer to Powertrain Control/Emissions Diagnosis (PC/ED) manual. If sent here from the PC/ED manual, INSTALL a new BCM , REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Removal and Installation).
P025D	Fuel Pump Module A Control Circuit High	First, Refer to Powertrain Control/Emissions Diagnosis (PC/ED) manual. If sent here from the PC/ED manual, INSTALL a new BCM , REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Removal and Installation).

P027B	Fuel Pump Module B Control Circuit Range/Performance	First, Refer to Powertrain Control/Emissions Diagnosis (PC/ED) manual. If sent here from the PC/ED manual, INSTALL a new BCM , REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Removal and Installation).
P0461	Fuel Level Sensor A Circuit Range/Performance	First, Refer to Powertrain Control/Emissions Diagnosis (PC/ED) manual. If sent here from the PC/ED manual, REFER to: Instrumentation, Message Center and Warning Chimes (413-01 Instrumentation, Message Center and Warning Chimes, Diagnosis and Testing).
P0462	Fuel Level Sensor A Circuit Low	First, Refer to Powertrain Control/Emissions Diagnosis (PC/ED) manual. If sent here from the PC/ED manual, REFER to: Instrumentation, Message Center and Warning Chimes (413-01 Instrumentation, Message Center and Warning Chimes, Diagnosis and Testing).
P0463	Fuel Level Sensor A Circuit High	First, Refer to Powertrain Control/Emissions Diagnosis (PC/ED) manual. If sent here from the PC/ED manual, REFER to: Instrumentation, Message Center and Warning Chimes (413-01 Instrumentation, Message Center and Warning Chimes, Diagnosis and Testing).
P0504	Brake Switch A / B Correlation	REFER to: Cruise Control (419-03A Cruise Control, Diagnosis and Testing). REFER to: Cruise Control (419-03B Cruise Control - Vehicles With: Adaptive Cruise Control, Diagnosis and Testing).
P0521	Engine Oil Pressure Sensor/Switch "A" Circuit Range/Performance	REFER to: Instrumentation, Message Center and Warning Chimes (413-01 Instrumentation, Message Center and Warning Chimes, Diagnosis and Testing).
P0522	Engine Oil Pressure Sensor/Switch "A" Circuit Low	REFER to: Instrumentation, Message Center and Warning Chimes (413-01 Instrumentation, Message Center and Warning Chimes, Diagnosis and Testing).
P0523	Engine Oil Pressure Sensor/Switch "A" Circuit High	REFER to: Instrumentation, Message Center and Warning Chimes (413-01 Instrumentation, Message Center and Warning Chimes, Diagnosis and Testing).
P0524	Engine Oil Pressure Too Low	REFER to: Instrumentation, Message Center and Warning Chimes (413-01 Instrumentation, Message Center and Warning Chimes, Diagnosis and Testing).
P0532	A/C Refrigerant Pressure Sensor "A" Circuit Low	REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing). REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).
P0533	A/C Refrigerant Pressure Sensor "A" Circuit High	REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).

		REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).
P0555	Brake Booster Pressure Sensor Circuit	REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control, Diagnosis and Testing).
P0556	Brake Booster Pressure Sensor Circuit Range/Performance	REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control, Diagnosis and Testing).
P0557	Brake Booster Pressure Sensor Circuit Low	REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control, Diagnosis and Testing).
P0562	System Voltage Low	REFER to: Charging System (414-00 Charging System - General Information, Diagnosis and Testing).
P0563	System Voltage High	REFER to: Charging System (414-00 Charging System - General Information, Diagnosis and Testing).
P0572	Brake Switch A Circuit Low	REFER to: Cruise Control (419-03A Cruise Control, Diagnosis and Testing). REFER to: Cruise Control (419-03B Cruise Control - Vehicles With: Adaptive Cruise Control, Diagnosis and Testing).
P0573	Brake Switch A Circuit High	REFER to: Cruise Control (419-03A Cruise Control, Diagnosis and Testing). REFER to: Cruise Control (419-03B Cruise Control - Vehicles With: Adaptive Cruise Control, Diagnosis and Testing).
P05FF	Brake Pressure Sensor / Brake Pedal Position Sensor Correlation	REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control, Diagnosis and Testing). REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control, Diagnosis and Testing).
P0645	A/C Clutch Relay Control Circuit	REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing). REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).
P0657	Actuator Supply Voltage "A" Circuit/Open	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P065B	Generator Control Circuit Range/Performance	REFER to: Anti-Lock Brake System (ABS) and Stability Control

		(206-09 Anti-Lock Brake System (ABS) and Stability Control, Diagnosis and Testing). REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control, Diagnosis and Testing).
P065C	Generator Mechanical Performance	REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control, Diagnosis and Testing). REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control, Diagnosis and Testing).
P06A0	Variable A/C Compressor Control Circuit	REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing). REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).
P06DA	Engine Oil Pressure Control Circuit/Open	GO to Pinpoint Test E
P06DB	Engine Oil Pressure Control Circuit Low	GO to Pinpoint Test E
P06DC	Engine Oil Pressure Control Circuit High	GO to Pinpoint Test E
P06DD	Engine Oil Pressure Control Circuit Performance/Stuck Off	GO to Pinpoint Test E
P06E4	Control Module Wake-up Circuit Performance	REFER to: Starting System (303-06 Starting System - 2.3L EcoBoost (201kW/273PS), Diagnosis and Testing).
P06E9	No engine rotation detected during crank event	REFER to: Starting System (303-06 Starting System - 2.3L EcoBoost (201kW/273PS), Diagnosis and Testing).
P0702	Transmission Control System Electrical	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0706	Transmission Range Sensor "A" Circuit Range/Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0707	Transmission Range Sensor "A" Circuit Low	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0708	Transmission Range Sensor "A" Circuit High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint

		Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0709	Transmission Range Sensor "A" Circuit Intermittent	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0710	Transmission Fluid Temperature Sensor "A" Circuit	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0711	Transmission Fluid Temperature Sensor "A" Circuit Range/Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0712	Transmission Fluid Temperature Sensor "A" Circuit Low	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0713	Transmission Fluid Temperature Sensor "A" Circuit High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0715	Turbine/Input Shaft Speed Sensor "A" Circuit	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0716	Turbine/Input Shaft Speed Sensor "A" Circuit Range/Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0717	Turbine/Input Shaft Speed Sensor "A" Circuit No Signal	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0718	Turbine/Input Shaft Speed Sensor "A" Circuit Intermittent	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0720	Output Shaft Speed Sensor Circuit	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80,

		Diagnosis and Testing).
P0721	Output Shaft Speed Sensor Circuit Range/Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0722	Output Shaft Speed Sensor Circuit No Signal	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0723	Output Shaft Speed Sensor Circuit Intermittent	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0729	Gear 6 Incorrect Ratio	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0731	Gear 1 Incorrect Ratio	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0732	Gear 2 Incorrect Ratio	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0733	Gear 3 Incorrect Ratio	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0734	Gear 4 Incorrect Ratio	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0735	Gear 5 Incorrect Ratio	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0736	Reverse Incorrect Ratio	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0740	Torque Converter Clutch	

	Solenoid Circuit/Open	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0741	Torque Converter Clutch Solenoid Circuit Performance/Stuck Off	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0743	Torque Converter Clutch Solenoid Circuit Electrical	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0748	Pressure Control Solenoid "A" Electrical	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0750	Shift Solenoid "A"	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0751	Shift Solenoid "A" Performance/Stuck Off	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0752	Shift Solenoid "A" Stuck On	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0753	Shift Solenoid "A" Electrical	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0755	Shift Solenoid "B"	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0756	Shift Solenoid "B" Performance/Stuck Off	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0757	Shift Solenoid "B" Stuck On	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic

		Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0758	Shift Solenoid "B" Electrical	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0759	Shift Solenoid "B" Intermittent	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0760	Shift Solenoid "C"	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0761	Shift Solenoid "C" Performance/Stuck Off	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0762	Shift Solenoid "C" Stuck On	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0763	Shift Solenoid "C" Electrical	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0764	Shift Solenoid "C" Intermittent	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0766	Shift Solenoid "D" Performance/Stuck Off	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0767	Shift Solenoid "D" Stuck On	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0768	Shift Solenoid "D" Electrical	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).



P0769	Shift Solenoid "D" Intermittent	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P076F	Gear 7 Ratio Incorrect	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0771	Shift Solenoid "E" Performance/Stuck Off	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0772	Shift Solenoid "E" Stuck On	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0773	Shift Solenoid "E" Electrical	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0774	Shift Solenoid "E" Intermittent	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P077D	Output Shaft Speed Sensor Circuit High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0791	Intermediate Shaft Speed Sensor "A" Circuit	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0792	Intermediate Shaft Speed Sensor "A" Circuit Range/Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0793	Intermediate Shaft Speed Sensor "A" Circuit No Signal	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0794	Intermediate Shaft Speed Sensor "A" Circuit	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).

	Intermittent	Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P07C0	Input/Turbine Shaft Speed Sensor "A" Circuit High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P07C6	Intermediate Shaft Speed Sensor "A" Circuit High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P07C8	Intermediate Shaft Speed Sensor "B" Circuit High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P07D9	Gear 8 Incorrect Ratio	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P07F6	Gear 9 Incorrect Ratio	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P07F7	Gear 10 Incorrect Ratio	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0868	Transmission Fluid Pressure Low	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0882	TCM Power Input Signal Low	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0883	TCM Power Input Signal High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0960	Line Pressure Control (LPC) A Control Circuit/Open	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80,

		Diagnosis and Testing).
P0961	Pressure Control Solenoid "A" Control Circuit/Open	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0962	Pressure Control Solenoid "A" Control Circuit Low	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0963	Pressure Control Solenoid "A" Control Circuit High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0973	Shift Solenoid "A" Control Circuit Low	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0974	Shift Solenoid "A" Control Circuit High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0976	Shift Solenoid "B" Control Circuit Low	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0977	Shift Solenoid "B" Control Circuit High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0979	Shift Solenoid "C" Control Circuit Low	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P097A	Shift Solenoid "A" Control Circuit /Open	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P097B	Shift Solenoid "B" Control Circuit /Open	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P097C	Shift Solenoid "C" Control	

	Circuit /Open	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P097D	Shift Solenoid "D" Control Circuit /Open	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P097E	Shift Solenoid "E" Control Circuit /Open	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P097F	Shift Solenoid "F" Control Circuit /Open	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0980	Shift Solenoid "C" Control Circuit High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0982	Shift Solenoid "D" Control Circuit Low	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0983	Shift Solenoid "D" Control Circuit High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0985	Shift Solenoid "E" Control Circuit Low	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0986	Shift Solenoid "E" Control Circuit High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0998	Shift Solenoid "F" Control Circuit Low	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0999	Shift Solenoid "F" Control Circuit High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic

		Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0A3B	Generator Over Temperature	REFER to: Charging System (414-00 Charging System - General Information, Diagnosis and Testing).
P0A5A	Generator Current Sensor Circuit Range/Performance	REFER to: Charging System (414-00 Charging System - General Information, Diagnosis and Testing).
P0A5B	Generator Current Sensor Circuit Low	REFER to: Charging System (414-00 Charging System - General Information, Diagnosis and Testing).
P0A5C	Generator Current Sensor Circuit High	REFER to: Charging System (414-00 Charging System - General Information, Diagnosis and Testing).
P0B0D	Electric/Auxiliary Transmission Fluid Pump Motor Control Module	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0C27	Electric/Auxiliary Transmission Fluid Pump "A" Motor Current Low	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0C28	Electric/Auxiliary Transmission Fluid Pump "A" Motor Current High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0C29	Electric/Auxiliary Transmission Fluid Pump "A" Driver Circuit Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0C2A	Electric/Auxiliary Transmission Fluid Pump "A" Motor Stalled	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0C2C	Electric Transmission Fluid Pump Control Module Feedback Signal Range/Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0C2D	Electric Transmission Fluid Pump Control Module Feedback Signal Low	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0C2E	Electric Transmission Fluid Pump Control Module	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint

	Feedback Signal High	Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P1001	KOER Not Able to Complete, KOER Aborted	<p>RETRIEVE and RECORD all Diagnostic Trouble Codes (DTCs). REPAIR any self-test or Continuous Memory Diagnostic Trouble Codes (CMDTCs) first. CLEAR the <u>DTC</u>. RERUN the <u>KOER</u> self-test. If the <u>DTC</u> returns, REPROGRAM the <u>PCM</u> with the latest software.</p> <p>REFER to: Module Programming (418-01 Module Configuration, General Procedures).</p> <p>RERUN the <u>KOER</u> self-test. If the <u>DTC</u> returns,   Click here to access Guided Routine (PCM). After installing the new <u>PCM</u> PROGRAM it with the latest software.</p>
P103C	Aspirator Valve Control Circuit/Open	REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control, Diagnosis and Testing).
P103D	Aspirator Valve Control Circuit Low	REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control, Diagnosis and Testing).
P103E	Aspirator Valve Control Circuit High	REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control, Diagnosis and Testing).
P1299	Cylinder Head Overtemperature Protection Active	REFER to: Engine Cooling (303-03 Engine Cooling - 2.3L EcoBoost (201kW/273PS), Diagnosis and Testing).
P1397	System Voltage Out Of Self Test Range	REFER to: Charging System (414-00 Charging System - General Information, Diagnosis and Testing).
P1464	A/C Demand Out Of Self Test Range	<p>REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p> <p>REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).</p>
P1548	Engine Air Filter Restriction	<p>This <u>DTC</u> sets when the <u>PCM</u> detects low air pressure after the air filter. CHECK the Air Cleaner (ACL) element, Air Cleaner (ACL) inlet and outlet pipes for restrictions, water or contamination. REPAIR as necessary. RETRIEVE and REPAIR all other Diagnostic Trouble Codes (DTCs).</p> <p>REFER to: Diagnostic Trouble Code Charts (100-00 General Information, Diagnosis and Testing).</p>
P1595	Forced engine shutdown – remote start system fault, transmission range not in park	REFER to: Locks, Latches and Entry Systems (501-14 Handles, Locks, Latches and Entry Systems, Diagnosis and Testing).
P161A	Incorrect Response from Immobilizer Control Module	REFER to: Passive Anti-Theft System (PATS) (419-01B Passive

		Anti-Theft System (PATS), Diagnosis and Testing). REFER to: Passive Anti-Theft System (PATS) (419-01C Passive Anti-Theft System (PATS) - Vehicles With: Keyless Vehicle System, Diagnosis and Testing).
P161B	Incorrect Response from Secondary Immobilizer Module	REFER to: Passive Anti-Theft System (PATS) (419-01B Passive Anti-Theft System (PATS), Diagnosis and Testing). REFER to: Passive Anti-Theft System (PATS) (419-01C Passive Anti-Theft System (PATS) - Vehicles With: Keyless Vehicle System, Diagnosis and Testing).
P162F	Starter Motor Disabled - Engine Crank Time Too Long	REFER to: Starting System (303-06 Starting System - 2.3L EcoBoost (201kW/273PS), Diagnosis and Testing).
P1636	Inductive Signature Chip Communication Error	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P163E	Transmission Control Module Programming Error	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P163F	Transmission ID Block Corrupted, Not Programmed	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P166A	Restraints Deployment Communication Circuit	First, Refer to Powertrain Control/Emissions Diagnosis (PC/ED) manual. If sent here from the PC/ED manual, INSTALL a new BCM. REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Removal and Installation).
P1703	Brake Switch Out Of Self-Test Range	REFER to: Cruise Control (419-03A Cruise Control, Diagnosis and Testing). REFER to: Cruise Control (419-03B Cruise Control - Vehicles With: Adaptive Cruise Control, Diagnosis and Testing).
P1705	Transmission Range Circuit Not Indicating Park/Neutral During Self Test	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P1711	Transmission Fluid Temperature Sensor Out Of Self Test Range	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P1744	Torque Converter Clutch Solenoid Circuit	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80,



		Diagnosis and Testing).
P175A	Transmission Fluid Over Temperature Condition - Electric Transmission Fluid Pump Disabled	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P1783	Transmission Overtemperature Condition	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P1820	Transfer Case Clockwise Shift Relay Coil Circuit Failure	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive Systems, Diagnosis and Testing).
P1821	Transfer Case Clockwise Shift Relay Coil Open Circuit	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive Systems, Diagnosis and Testing).
P1822	Transfer Case Clockwise Shift Relay Coil Short Circuit To Battery	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive Systems, Diagnosis and Testing).
P1823	Transfer Case Clockwise Shift Relay Coil Short Circuit To Ground	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive Systems, Diagnosis and Testing).
P1828	Transfer Case Counter Clockwise Shift Relay Coil Circuit Failure	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive Systems, Diagnosis and Testing).
P1829	Transfer Case Counter Clockwise Shift Relay Coil Open Circuit	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive Systems, Diagnosis and Testing).
P1830	Transfer Case Counter Clockwise Shift Relay Coil Short Circuit To Battery	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive Systems, Diagnosis and Testing).
P1831	Transfer Case Counter Clockwise Shift Relay Coil Short Circuit To Ground	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive Systems, Diagnosis and Testing).
P1833	Transfer Case Differential Lock-Up Solenoid Open Circuit	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive Systems, Diagnosis and Testing).
P1834	Transfer Case Differential Lock-Up Solenoid Short Circuit To Battery	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive Systems, Diagnosis and Testing).
P1835	Transfer Case Differential Lock-Up Solenoid Short Circuit To Ground	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive Systems, Diagnosis and Testing).
P184A	Transfer Case Unable To Transition Between 4x2 and 4x4 Mode	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive Systems, Diagnosis and Testing).
P184B	Transfer Case Unable To Transition Between 4x4 High	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive

	and 4x4 Low Range	Systems, Diagnosis and Testing).
P1870	Mechanical Transfer Case 4x4 Switch Circuit Failure	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive Systems, Diagnosis and Testing).
P1871	Mechanical Transfer Case 4x4 Switch Circuit Short To Battery	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive Systems, Diagnosis and Testing).
P1874	Transfer Case Hall Effect Sensor Power Circuit Failure	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive Systems, Diagnosis and Testing).
P1875	Transfer Case Hall Effect Sensor Power Circuit Short To Battery	REFER to: Four-Wheel Drive Systems (308-07A Four-Wheel Drive Systems, Diagnosis and Testing).
P187F	Differential Lock-Up Input Switch Circuit Low	REFER to: Electronic Locking Differential (ELD) (205-02 Rear Drive Axle/Differential - Vehicles With: Dana M220, Diagnosis and Testing).
P1935	Brake Switch/Sensor Signal	REFER to: Cruise Control (419-03A Cruise Control, Diagnosis and Testing). REFER to: Cruise Control (419-03B Cruise Control - Vehicles With: Adaptive Cruise Control, Diagnosis and Testing).
P193E	A/C Clutch Request Signal	REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing). REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).
P1A02	Transmission One Way Clutch Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2534	Ignition Switch Run/Start Position Circuit Low	REFER to: Starting System (303-06 Starting System - 2.3L EcoBoost (201kW/273PS), Diagnosis and Testing).
P2535	Ignition Switch Run/Start Position Circuit High	REFER to: Starting System (303-06 Starting System - 2.3L EcoBoost (201kW/273PS), Diagnosis and Testing).
P25B0	Fuel Level Sensor "A" Stuck	REFER to: Instrumentation, Message Center and Warning Chimes (413-01 Instrumentation, Message Center and Warning Chimes, Diagnosis and Testing).
P2601	Coolant Pump "A" Control Circuit Performance/Stuck Off	REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing). REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).

P2602	Coolant Pump "A" Control Circuit Low	REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing). REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).
P2603	Coolant Pump "A" Control Circuit High	REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing). REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).
P2669	Actuator Supply Voltage "B" Circuit/Open	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2681	Engine Coolant Bypass Valve "A" Control Circuit/Open	REFER to: Transmission Cooling (307-02 Transmission Cooling - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2683	Engine Coolant Bypass Valve "A" Control Circuit High	REFER to: Transmission Cooling (307-02 Transmission Cooling - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2700	Transmission Friction Element "A" Apply Time Range/Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2701	Transmission Friction Element "B" Apply Time Range/Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2702	Transmission Friction Element "C" Apply Time Range/Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2703	Transmission Friction Element "D" Apply Time Range/Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2704	Transmission Friction Element "E" Apply Time Range/Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).

P2705	Transmission Friction Element "F" Apply Time Range/Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2707	Shift Solenoid "F" Performance/Stuck Off	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2708	Shift Solenoid "F" Stuck On	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2709	Shift Solenoid "F" Electrical	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2710	Shift Solenoid "F" Intermittent	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2745	Intermediate Shaft Speed Sensor "B" Circuit	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2746	Intermediate Shaft Speed Sensor "B" Circuit Range/Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2747	Intermediate Shaft Speed Sensor "B" Circuit No Signal	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2748	Intermediate Shaft Speed Sensor "B" Circuit Intermittent	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2758	Torque Converter Clutch Pressure Control Solenoid Stuck On	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2760	Torque Converter Clutch Pressure Control Solenoid	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).

	Intermittent	Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2769	Torque Converter Clutch Circuit Low	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2770	Torque Converter Clutch Circuit High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2783	Torque Converter Temperature Too High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2796	Electric Transmission Fluid Pump Control Circuit	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2801	Transmission Range Sensor "B" Circuit Range/Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2802	Transmission Range Sensor "B" Circuit Low	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2803	Transmission Range Sensor "B" Circuit High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2804	Transmission Range Sensor "B" Circuit Intermittant	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2805	Transmission Range Sensor "A"/"B" Correlation	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 2.3L EcoBoost (201kW/273PS) (307-01 Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
U0104	Lost Communication With Cruise Control Module	REFER to: Cruise Control (419-03B Cruise Control - Vehicles With: Adaptive Cruise Control, Diagnosis and Testing).
U0121	Lost Communication With	GO to Pinpoint Test A

	Anti-Lock Brake System (ABS) Control Module	
U0126	Lost Communication With Steering Angle Sensor Module	GO to Pinpoint Test B
U012D	Lost Communication With Generator Control Module	REFER to: Charging System (414-00 Charging System - General Information, Diagnosis and Testing).
U0164	Lost Communication With HVAC Control Module	GO to Pinpoint Test C
U0212	Lost Communication With Steering Column Control Module	GO to Pinpoint Test B
U023A	Lost Communication With Image Processing Module A	GO to Pinpoint Test D
U0405	Invalid Data Received From Cruise Control Module	This <u>DTC</u> sets when the <u>PCM</u> receives invalid network data from the <u>CCM</u> . RETRIEVE and REPAIR all non-network Diagnostic Trouble Codes (DTCs) in the <u>PCM</u> , <u>CCM</u> , and other modules on the network. For <u>PCM</u> Diagnostic Trouble Codes (DTCs) refer to this chart. If there are no <u>PCM</u> Diagnostic Trouble Codes (DTCs) DIAGNOSE the observable symptom. If there are no observable symptoms, DISREGARD this <u>DTC</u> .
U042E	Invalid Data Received From Generator Control Module	REFER to: Charging System (414-00 Charging System - General Information, Diagnosis and Testing).
U2200	Control Module Configuration Memory Corrupt	INSTALL As-Built data from Professional Technician Society (PTS) following diagnostic scan tool instructions under Module Programming>As-Built. CLEAR the Diagnostic Trouble Codes (DTCs). REPEAT the self-test. If <u>PCM DTC</u> U2200 is retrieved again,   Click here to access Guided Routine (PCM) .
All Other DTCs	—	Refer to Powertrain Control/Emissions Diagnosis (PC/ED) manual. Section 3 Symptom Charts.

Pinpoint Tests

U0121

DTC Fault Trigger Condition-PCM

DTC	Description	Fault Trigger Conditions
U0121	Lost Communication With Anti-Lock Brake System (ABS) Control Module	The <u>PCM</u> sets this <u>DTC</u> if data messages from the <u>ABS</u> module through the <u>GWM</u> are missing.

Normal Operation and Fault Conditions

REFER to: [Communications Network - System Operation and Component Description](#) (418-00 Module Communications Network, Description and Operation).

Possible Sources

- Communications network concern
- [ABS](#) module
- [GWM](#)
- [PCM](#)

PINPOINT TEST A : U0121

A1 VERIFY THE CUSTOMER CONCERN

- Ignition ON.
- Verify there is an observable symptom present.

Is an observable symptom present?

Yes	GO to A2
No	The system is operating normally at this time. The DTC may have been set due to high network traffic or an intermittent fault condition.

A2 CHECK THE COMMUNICATION NETWORK

- Using a diagnostic scan tool, perform a network test.

Did the [ABS](#) module pass the network test?

Yes	GO to A3
No	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).

A3 PERFORM ABS (ANTI-LOCK BRAKE SYSTEM) CONTROL MODULE SELF-TEST

- Using a diagnostic scan tool, perform a [ABS](#) control module self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control, Diagnosis and Testing).
No	GO to A4

A4 CHECK THE BCM (BODY CONTROL MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)

- Using a diagnostic scan tool, retrieve the BCM Diagnostic Trouble Codes (DTCs).

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Diagnosis and Testing).
No	GO to A5

A5 PERFORM THE PCM (POWERTRAIN CONTROL MODULE) SELF-TEST

- Using a diagnostic scan tool, perform the PCM self-test.

Is DTC P0562 or DTC P0563 recorded?

Yes	REFER to PCM DTC Chart in this section.
No	GO to A6

A6 RECHECK THE PCM (POWERTRAIN CONTROL MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)

NOTE: *If new modules were installed prior to the DTC being set, the module configuration may be incorrectly set during the PMI, or the PMI may not have been carried out.*

- Using a diagnostic scan tool, clear the Diagnostic Trouble Codes (DTCs).
- Wait 10 seconds.
- Repeat the PCM self-test.

Is DTC U0121 still present?

Yes	GO to A7
No	The system is operating correctly at this time. The <u>DTC</u> may have been set due to high network traffic or an intermittent fault condition.

A7 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0121 SET IN OTHER MODULES

- Using a diagnostic scan tool, clear all Diagnostic Trouble Codes (DTCs).
- Ignition OFF.
- Ignition ON.
- Wait 10 seconds.
- Using a diagnostic scan tool, retrieve all Continuous Memory Diagnostic Trouble Codes (CMDTCs) from all modules.

Is DTC U0121:00 set in any other module?

Yes	GO to A8
No	GO to A9

A8 CHECK FOR CORRECT ABS (ANTI-LOCK BRAKE SYSTEM) MODULE OPERATION

- Ignition OFF.
- Disconnect and inspect the ABS connector.
- 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 ABS connector. Make sure it seats and latches correctly.
- Operate the system and determine if the concern is still present.


Is the concern still present?

Yes	CHECK <u>OASIS</u> for any applicable service articles: <u>TSB</u> , <u>GSB</u> , <u>SSM</u> or <u>FSA</u> . If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new <u>ABS</u> module. REFER to: Anti-Lock Brake System (ABS) Module (206-09 Anti-Lock Brake System (ABS) and Stability Control, Removal and Installation).
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.

A9 CHECK FOR CORRECT PCM (POWERTRAIN CONTROL MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect the 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 <u>OASIS</u> for any applicable service articles: <u>TSB</u> , <u>GSB</u> , <u>SSM</u> or <u>FSA</u> . If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern,  Click here to access Guided Routine (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.

U0126, U0212

DTC Fault Trigger Condition-PCM

DTC	Description	Fault Trigger Conditions
U0126	Lost Communication With Steering Angle Sensor Module	The <u>PCM</u> sets this <u>DTC</u> if data messages from the <u>SCCM</u> through the <u>GWM</u> are missing.
U0212	Lost Communication With Steering Column Control Module	The <u>PCM</u> sets this <u>DTC</u> if data messages from the <u>SCCM</u> through the <u>GWM</u> are missing.

Normal Operation and Fault Conditions

REFER to: [Communications Network - System Operation and Component Description](#) (418-00 Module Communications Network, Description and Operation).

Possible Sources

- Communications network concern
- SCCM
- GWM
- PCM

PINPOINT TEST B : U0126, U0212

B1 VERIFY THE CUSTOMER CONCERN	
<ul style="list-style-type: none"> • Ignition ON. • Verify there is an observable symptom present. 	
Is an observable symptom present?	
Yes	GO to B2
No	The system is operating normally at this time. The <u>DTC</u> may have been set due to high network traffic or an intermittent fault condition.
B2 CHECK THE COMMUNICATION NETWORK	
<ul style="list-style-type: none"> • Using a diagnostic scan tool, perform a network test. 	
Did the <u>SCCM</u> module pass the network test?	
Yes	GO to B3
No	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).
B3 PERFORM SCCM (STEERING COLUMN CONTROL MODULE) SELF-TEST	
<ul style="list-style-type: none"> • Using a diagnostic scan tool, perform a <u>SCCM</u> self-test. 	

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	211-05 DT
No	GO to B4

B4 CHECK THE BCM (BODY CONTROL MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)

- Using a diagnostic scan tool, retrieve the BCM Diagnostic Trouble Codes (DTCs).

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Diagnosis and Testing).
No	GO to B5

B5 PERFORM THE PCM (POWERTRAIN CONTROL MODULE) SELF-TEST

- Using a diagnostic scan tool, perform the PCM self-test.

Is DTC P0562 or P0563 recorded?

Yes	REFER to PCM DTC Chart in this section.
No	GO to B6

B6 RECHECK THE PCM (POWERTRAIN CONTROL MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)

NOTE: If new modules were installed prior to the DTC being set, the module configuration may be incorrectly set during the PMI, or the PMI may not have been carried out.

- Using a diagnostic scan tool, clear the Diagnostic Trouble Codes (DTCs).
- Wait 10 seconds.
- Repeat the PCM self-test.

Is DTC U0126 or U0212 still present?

Yes	GO to B7
No	The system is operating correctly at this time. The <u>DTC</u> may have been set due to high network traffic or an intermittent fault condition.

B7 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0126 OR U0212 SET IN OTHER MODULES

- Using a diagnostic scan tool, clear all Diagnostic Trouble Codes (DTCs).
- Ignition OFF.
- Ignition ON.

- Wait 10 seconds.
- Using a diagnostic scan tool, retrieve all Continuous Memory Diagnostic Trouble Codes (CMDTCs) from all modules.

Is **DTC U0126:00 or U0212** set in any other module?

Yes	GO to B8
No	GO to B9

B8 CHECK FOR CORRECT SCCM (STEERING COLUMN CONTROL MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect the SCCM connector(s).
- 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 SCCM connector(s). Make sure it seats and latches correctly.
- Operate the system and determine if the concern is still present.


Is the concern still present?

Yes	CHECK <u>OASIS</u> for any applicable service articles: TSB , GSB , SSM or FSA . If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new <u>SCCM</u> . REFER to: Steering Column Control Module (SCCM) (211-05 Steering Wheel and Column Electrical Components, Removal and Installation).
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.

B9 CHECK FOR CORRECT PCM (POWERTRAIN CONTROL MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect the 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 <u>OASIS</u> for any applicable service articles: TSB , GSB , SSM or FSA . If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern,  Click here to access Guided Routine (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.

U0164

DTC Fault Trigger Condition-PCM

DTC	Description	Fault Trigger Conditions
U0164	Lost Communication With HVAC Control Module	The <u>PCM</u> sets this <u>DTC</u> if data messages from the <u>HVAC</u> control module over the HS-CAN / through the <u>GWM</u> are missing.

Normal Operation and Fault Conditions

The HVAC control module functions are performed by the FCIM.

REFER to: [Communications Network - System Operation and Component Description](#) (418-00 Module Communications Network, Description and Operation).

Possible Sources

- Communications network concern
- FCIM
- HVAC control module
- BCM
- GWM
- PCM

PINPOINT TEST C : U0164

C1 VERIFY THE CUSTOMER CONCERN	
<ul style="list-style-type: none"> • Ignition ON. • Verify there is an observable symptom present. 	
Is an observable symptom present?	
Yes	GO to C2
No	The system is operating normally at this time. The <u>DTC</u> may have been set due to high network traffic or an intermittent fault condition.
C2 CHECK THE COMMUNICATION NETWORK	
<ul style="list-style-type: none"> • Using a diagnostic scan tool, perform a network test. 	
Did the <u>FCIM</u> control module pass the network test?	

Yes	GO to C3
No	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).

C3 PERFORM FCIM (FRONT CONTROLS INTERFACE MODULE) CONTROL MODULE SELF-TEST

- Using a diagnostic scan tool, perform a [FCIM](#) control module self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to: Information and Entertainment System (415-00B Information and Entertainment System - General Information - Vehicles With: SYNC 3, Diagnosis and Testing). REFER to 415-00
No	GO to C4

C4 CHECK THE BCM (BODY CONTROL MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)

- Using a diagnostic scan tool, retrieve the [BCM](#) Diagnostic Trouble Codes (DTCs).

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Diagnosis and Testing).
No	GO to C5

C5 PERFORM THE PCM (POWERTRAIN CONTROL MODULE) SELF-TEST

- Using a diagnostic scan tool, perform the [PCM](#) self-test.

Is [DTC P0562](#) or [P0563](#) recorded?

Yes	REFER to PCM DTC Chart in this section.
No	GO to C6

C6 RECHECK THE PCM (POWERTRAIN CONTROL MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)

NOTE: If new modules were installed prior to the [DTC](#) being set, the module configuration may be incorrectly set during the [PMI](#), or the [PMI](#) may not have been carried out.

- Using a diagnostic scan tool, clear the Diagnostic Trouble Codes (DTCs).
- Wait 10 seconds.

- Repeat the PCM self-test.

Is DTC U0164 still present?

Yes	GO to C7
No	The system is operating correctly at this time. The <u>DTC</u> may have been set due to high network traffic or an intermittent fault condition.

C7 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0164 SET IN OTHER MODULES

- Using a diagnostic scan tool, clear all Diagnostic Trouble Codes (DTCs).
- Ignition OFF.
- Ignition ON.
- Wait 10 seconds.
- Using a diagnostic scan tool, retrieve all Continuous Memory Diagnostic Trouble Codes (CMDTCs) from all modules.

Is DTC U0164:00 set in any other module?

Yes	GO to C8
No	GO to C9

C8 CHECK FOR CORRECT FCIM (FRONT CONTROLS INTERFACE MODULE) HVAC (HEATING, VENTILATION AND AIR CONDITIONING) CONTROL MODULE OPERATION

- Ignition OFF.
- Disconnect and inspect the FCIM HVAC control module connector(s).
- 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 FCIM HVAC control module connector(s). Make sure it seats and latches correctly.
- Operate the system and determine if the concern is still present.


Is the concern still present?

Yes	CHECK <u>OASIS</u> for any applicable service articles: <u>TSB</u> , <u>GSB</u> , <u>SSM</u> or <u>FSA</u> . If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new <u>FCIM</u> control module. 415-00 FCIM 415-00 FCIM 415-00 FCIM CHECK <u>OASIS</u> for any applicable service articles: <u>TSB</u> , <u>GSB</u> , <u>SSM</u> or <u>FSA</u> . If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new <u>HVAC</u> control module. With <u>DATC</u> , 412-00 RI With <u>EMTC</u> , 412-00 RI
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.

C9 CHECK FOR CORRECT PCM (POWERTRAIN CONTROL MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect the 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 <u>OASIS</u> for any applicable service articles: <u>TSB</u> , <u>GSB</u> , <u>SSM</u> or <u>FSA</u> . If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern,  Click here to access Guided Routine (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.

U023A**DTC Fault Trigger Condition-PCM**

DTC	Description	Fault Trigger Conditions
U023A	Lost Communication With Image Processing Module A	The <u>PCM</u> sets this <u>DTC</u> if data messages from the <u>IPMA</u> through the <u>GWM</u> are missing.

Normal Operation and Fault Conditions

REFER to: [Communications Network - System Operation and Component Description](#) (418-00 Module Communications Network, Description and Operation).

Possible Sources

- Communications network concern
- IPMA
- GWM
- PCM

PINPOINT TEST D : U023A

D1 VERIFY THE CUSTOMER CONCERN

- Ignition ON.
- Verify there is an observable symptom present.

Is an observable symptom present?

Yes	GO to D2
No	The system is operating normally at this time. The <u>DTC</u> may have been set due to high network traffic or an intermittent fault condition.

D2 CHECK THE COMMUNICATION NETWORK

- Using a diagnostic scan tool, perform a network test.

Did the IPMA pass the network test?

Yes	GO to D3
No	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).

D3 PERFORM IPMA (IMAGE PROCESSING MODULE A) SELF-TEST

- Using a diagnostic scan tool, perform a IPMA module self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to: Lane Keeping System (419-07 Lane Keeping System, Diagnosis and Testing).
No	GO to D4

D4 CHECK THE BCM (BODY CONTROL MODULE) DIAGNOSTIC TROUBLE CODES (DTCS)

- Using a diagnostic scan tool, retrieve the BCM Diagnostic Trouble Codes (DTCs).

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, Diagnosis and Testing).
No	GO to D5

D5 PERFORM THE PCM (POWERTRAIN CONTROL MODULE) SELF-TEST

- Using a diagnostic scan tool, perform the PCM self-test.

Is **DTC P0562** or **P0563** recorded?

Yes	REFER to PCM DTC Chart in this section.
No	GO to D6

D6 RECHECK THE PCM (POWERTRAIN CONTROL MODULE) DIAGNOSTIC TROUBLE CODES (DTCs)

NOTE: If new modules were installed prior to the **DTC** being set, the module configuration may be incorrectly set during the **PMI**, or the **PMI** may not have been carried out.

- Using a diagnostic scan tool, clear the Diagnostic Trouble Codes (DTCs).
- Wait 10 seconds.
- Repeat the **PCM** self-test.

Is **DTC U023A** still present?

Yes	GO to D7
No	The system is operating correctly at this time. The DTC may have been set due to high network traffic or an intermittent fault condition.

D7 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U023A SET IN OTHER MODULES

- Using a diagnostic scan tool, clear all Diagnostic Trouble Codes (DTCs).
- Ignition OFF.
- Ignition ON.
- Wait 10 seconds.
- Using a diagnostic scan tool, retrieve all Continuous Memory Diagnostic Trouble Codes (CMDTCs) from all modules.

Is **DTC U023A:00** set in any other module?

Yes	GO to D8
No	GO to D9



D8 CHECK FOR CORRECT IPMA (IMAGE PROCESSING MODULE A) OPERATION

- Ignition OFF.
- Disconnect and inspect the **IPMA** connector(s).
- 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 **IPMA** connector. Make sure it seats and latches correctly(s).
- Operate the system and determine if the concern is still present.

Is the concern still present?

Yes	CHECK OASIS for any applicable service articles: TSB , GSB , SSM or FSA . If a
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	<p>service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern, INSTALL a new <u>IPMA</u>.</p> <p>REFER to: Interior Rear View Mirror (501-09 Rear View Mirrors, Removal and Installation).</p>
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.

D9 CHECK FOR CORRECT PCM (POWERTRAIN CONTROL MODULE) OPERATION	
<ul style="list-style-type: none"> • Ignition OFF. • Disconnect and inspect the <u>PCM</u> connectors. • Repair: <ul style="list-style-type: none"> • 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 <u>PCM</u> connectors. Make sure they seat and latch correctly. • Operate the system and determine if the concern is still present. <p>Is the concern still present?</p>	
Yes	<p>CHECK <u>OASIS</u> for any applicable service articles: <u>TSB</u>, <u>GSB</u>, <u>SSM</u> or <u>FSA</u>. If a service article exists for this concern, DISCONTINUE this test and FOLLOW the service article instructions. If no service articles address this concern,</p> <div style="display: flex; align-items: center;">   Click here to access Guided Routine (PCM). </div>
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.

Oil Pressure Control Solenoid Faults

Refer to Wiring Diagrams Cell [24](#) for schematic and connector information.

Normal Operation and Fault Conditions

303-01 DO overview

DTC Fault Trigger Condition-PCM

DTC	Description	Fault Trigger Conditions
P06DA	Engine Oil Pressure Control Circuit/Open	Sets when the <u>PCM</u> detects an open on the engine oil pressure control solenoid valve circuit.
P06DB	Engine Oil Pressure Control Circuit Low	Sets when the <u>PCM</u> detects a short to ground on the engine oil pressure control solenoid valve circuit.

P06DC	Engine Oil Pressure Control Circuit High	Sets when the <u>PCM</u> detects a short to voltage on the engine oil pressure control solenoid valve circuit.
P06DD	Engine Oil Pressure Control Circuit Performance/Stuck Off	Sets when the <u>PCM</u> detects the engine oil pressure control solenoid valve is stuck.

Possible Sources

- Engine oil pressure control solenoid valve
- PCM
- Wiring, terminals or connectors

PINPOINT TEST E : OIL PRESSURE CONTROL SOLENOID FAULTS

E1 CHECK THE ENGINE OIL PRESSURE CONTROL SOLENOID VALVE SUPPLY VOLTAGE						
<ul style="list-style-type: none"> • Ignition OFF. • Disconnect Engine oil pressure control solenoid valve C1744. • Ignition ON. • Measure: 						
Click to display connectors						
Positive Lead	Measurement / Action	Negative Lead				
C1744-1		Ground				
<p>Is the voltage greater than 11 volts?</p> <table border="1"> <tr> <td>Yes</td> <td>GO to E2</td> </tr> <tr> <td>No</td> <td>VERIFY BJB fuse F97 (20A) is OK. If OK, REPAIR the open circuit. If not OK, REFER to the Wiring Diagrams manual to identify the possible causes of the circuit short.</td> </tr> </table>			Yes	GO to E2	No	VERIFY BJB fuse F97 (20A) is OK. If OK, REPAIR the open circuit. If not OK, REFER to the Wiring Diagrams manual to identify the possible causes of the circuit short.
Yes	GO to E2					
No	VERIFY BJB fuse F97 (20A) is OK. If OK, REPAIR the open circuit. If not OK, REFER to the Wiring Diagrams manual to identify the possible causes of the circuit short.					
E2 CHECK THE ENGINE OIL PRESSURE CONTROL SOLENOID VALVE CIRCUIT FOR A SHORT TO VOLTAGE						
<ul style="list-style-type: none"> • Ignition OFF. • Disconnect <u>PCM</u> C175E. • Ignition ON. • Measure: 						
Click to display connectors						
Positive Lead	Measurement / Action	Negative Lead				
C1744-2		Ground				
<p>Is any voltage present?</p> <table border="1"> <tr> <td></td> <td></td> </tr> </table>						

Yes	REPAIR the circuit.
No	GO to E3

E3 CHECK THE ENGINE OIL PRESSURE CONTROL SOLENOID VALVE CIRCUIT FOR AN OPEN

- Ignition OFF.
- Measure:

[Click to display connectors](#)

Positive Lead	Measurement / Action	Negative Lead
C175E-7	Ω	C1744-2

Is the resistance less than 3 ohms?

Yes	GO to E4
No	REPAIR the circuit.

E4 CHECK THE ENGINE OIL PRESSURE CONTROL SOLENOID VALVE CIRCUIT FOR A SHORT TO GROUND

- Measure:

[Click to display connectors](#)

Positive Lead	Measurement / Action	Negative Lead
C1744-2	Ω	Ground

Is the resistance greater than 10,000 ohms?

Yes	GO to E5
No	REPAIR the circuit.

E5 CHECK THE ENGINE OIL PRESSURE CONTROL SOLENOID VALVE OPERATION

- **NOTE:** Engine oil level and contamination can affect the oil pressure reading.
Check the engine oil level and correct as necessary.
- Connect PCM [C175E](#).
- Connect Engine oil pressure control solenoid valve [C1744](#).
- Using a diagnostic scan tool, view the PCM PID EOP_PRESS.
- Start the engine.
- Record the EOP_PRESS PID reading.
- Ignition OFF.
- Disconnect Engine oil pressure control solenoid valve [C1924](#).
- Start the engine.

- Record the EOP_PRESS PID reading.
- Ignition OFF.

Did the engine oil pressure increase by greater than 276 kpa (40 psi) with the solenoid disconnected?

Yes	GO to E6
No	INSTALL a new oil pressure control solenoid valve. 303-14 EOP Sol

E6 VERIFY ENGINE OIL PRESSURE CONTROL SOLENOID VALVE CONNECTION AND WIRING

- Disconnect Engine oil pressure control solenoid valve [C1744](#).
- Disconnect PCM connectors.
- Inspect connectors and wiring:
 - 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 **all** 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	REPAIR the circuit or connector as needed.
No	The system is operating correctly at this time. The concern may have been caused by loose module connections. ADDRESS the root cause of any connector or pin issues.

