

Electronic Engine Controls

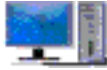
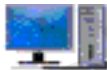
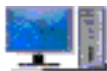
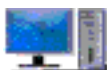
DTC Chart: Powertrain Control Module (PCM)

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

DTC	Description	Action
P0125	Insufficient Coolant Temp For Closed Loop Fuel Control	REFER to: Engine Cooling (303-03D Engine Cooling - 5.0L 32V Ti-VCT, Diagnosis and Testing).
P0128	Coolant Thermostat (Coolant Temp Below Thermostat Regulating Temperature)	REFER to: Engine Cooling (303-03D Engine Cooling - 5.0L 32V Ti-VCT, Diagnosis and Testing).
P0217	Engine Coolant Overtemperature Condition	REFER to: Engine Cooling (303-03D Engine Cooling - 5.0L 32V Ti-VCT, Diagnosis and Testing).
P0218	Transmission Fluid Temperature Sensor "A" Over Temperature Condition	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 5.0L 32V Ti-VCT (307-01B 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,   Click here to access Guided Routine (BCM).
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,   Click here to access Guided Routine (BCM).
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,   Click here to access Guided Routine (BCM).
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,   Click here to access Guided Routine (BCM).
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,   Click here to access Guided Routine (BCM).
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).
P0504	Brake Switch A / B Correlation	Without adaptive cruise control, REFER to: Cruise Control (419-03A Cruise Control, Diagnosis and Testing). With adaptive cruise control, REFER to: Cruise Control (419-03B Cruise Control - Vehicles With: Adaptive Cruise Control, Diagnosis and Testing).
P050F	Brake Assist Vacuum Too Low	REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control) .
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	With DATC REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing). With EMTC, 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	With DATC REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing). With EMTC, 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) .
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) .

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) .
P0558	Brake Booster Pressure Sensor Circuit High	REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control) .
P0559	Brake Booster Pressure Sensor Circuit Intermittent	REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control) .
P055F	Engine Oil Pressure Out of Range	REFER to: Instrumentation, Message Center and Warning Chimes (413-01 Instrumentation, Message Center and Warning Chimes, Diagnosis and Testing).
P0562	System Voltage Low	REFER to: Charging System - 3.3L Duratec - V6/5.0L 32V Ti-VCT (414-00 Charging System - General Information, Diagnosis and Testing).
P0563	System Voltage High	REFER to: Charging System - 3.3L Duratec - V6/5.0L 32V Ti-VCT (414-00 Charging System - General Information, Diagnosis and Testing).
P0572	Brake Switch A Circuit Low	Without adaptive cruise control, REFER to: Cruise Control (419-03A Cruise Control, Diagnosis and Testing). With adaptive cruise control, REFER to: Cruise Control (419-03B Cruise Control - Vehicles With: Adaptive Cruise Control, Diagnosis and Testing).

P0573	Brake Switch A Circuit High	Without adaptive cruise control, REFER to: Cruise Control (419-03A Cruise Control, Diagnosis and Testing). With adaptive cruise control, REFER to: Cruise Control (419-03B Cruise Control - Vehicles With: Adaptive Cruise Control, Diagnosis and Testing).
P05A1	Active Grille Air Shutter "A" Position Sensor Minimum / Maximum Stop Performance	REFER to: Active Grille Shutter (501-02 Front End Body Panels, Diagnosis and Testing).
P05A2	Active Grille Air Shutter "A" Control Circuit / Open	REFER to: Active Grille Shutter (501-02 Front End Body Panels, Diagnosis and Testing).
P05A7	Active Grille Air Shutter Control Module "A" Supply Voltage Circuit Low	REFER to: Active Grille Shutter (501-02 Front End Body Panels, Diagnosis and Testing).
P05C0	Active Grille Air Shutter Module "A" Over Temperature	REFER to: Active Grille Shutter (501-02 Front End Body Panels, 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) .
P0620	Generator Control Circuit	REFER to: Charging System - 3.3L Duratec - V6/5.0L 32V Ti-VCT (414-00 Charging System - General Information, Diagnosis and Testing).
P0625	Generator Field Terminal Circuit Low	REFER to: Charging System - 3.3L Duratec - V6/5.0L 32V Ti-VCT (414-00 Charging System - General Information, Diagnosis and Testing).

P0626	Generator Field Terminal Circuit High	REFER to: Charging System - 3.3L Duratec - V6/5.0L 32V Ti-VCT (414-00 Charging System - General Information, Diagnosis and Testing).
P0645	A/C Clutch Relay Control Circuit	With DATC REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing). With EMTC, 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 - 5.0L 32V Ti-VCT (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P065B	Generator Control Circuit Range/ Performance	REFER to: Charging System - 3.3L Duratec - V6/5.0L 32V Ti-VCT (414-00 Charging System - General Information, Diagnosis and Testing).

P06A0	Variable A/C Compressor Control Circuit	With DATC REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing). With EMTC, 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 L
P06DB	Engine Oil Pressure Control Circuit Low	GO to Pinpoint Test L
P06DC	Engine Oil Pressure Control Circuit High	GO to Pinpoint Test L
P06DD	Engine Oil Pressure Control Circuit Performance/Stuck Off	GO to Pinpoint Test L
P06E4	Control Module Wake-up Circuit Performance	REFER to: Starting System (303-06D Starting System - 5.0L 32V Ti-VCT, Diagnosis and Testing).
P06E9	No engine rotation detected during crank event	REFER to: Starting System (303-06D Starting System - 5.0L 32V Ti-VCT, Diagnosis and Testing).
P0702	Transmission Control System Electrical	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0736	Reverse Incorrect Ratio	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0754	Shift Solenoid "A" Intermittent	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0794	Intermediate Shaft Speed Sensor "A" Circuit Intermittent	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P07F6	Gear 9 Incoret Ratio	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0A5A	Generator Current Sensor Circuit Range/Performance	REFER to: Charging System - 3.3L Duratec - V6/5.0L 32V Ti-VCT (414-00 Charging System - General Information, Diagnosis and Testing).
P0A5B	Generator Current Sensor Circuit Low	REFER to: Charging System - 3.3L Duratec - V6/5.0L 32V Ti-VCT (414-00 Charging System - General Information, Diagnosis and Testing).
P0A5C	Generator Current Sensor Circuit High	REFER to: Charging System - 3.3L Duratec - V6/5.0L 32V Ti-VCT (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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P0C2E	Electric Transmission Fluid Pump Control Module Feedback Signal High	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 5.0L 32V Ti-VCT (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P1001	KOER Not Able to Complete, KOER Aborted	RETRIEVE and RECORD all Diagnostic Trouble Codes (DTCs). REPAIR any self-test or Continuous Memory Diagnostic Trouble Codes (CMDTCs) first. CLEAR the DTC. RERUN the KOER self-test. If the DTC returns, REPROGRAM the PCM with the latest software. REFER to: Module Programming (418-01 Module Configuration, General Procedures). RERUN the KOER self-test. If the DTC returns, INSTALL a new PCM, REFER to: Powertrain Control Module (PCM) (303-14D Electronic Engine Controls - 5.0L 32V Ti-VCT, Removal and Installation). After installing the new PCM PROGRAM it with the latest software.

P1299	Cylinder Head Overtemperature Protection Active	REFER to: Engine Cooling (303-03D Engine Cooling - 5.0L 32V Ti-VCT, Diagnosis and Testing).
P1397	System Voltage Out Of Self Test Range	REFER to: Charging System - 3.3L Duratec - V6/5.0L 32V Ti-VCT (414-00 Charging System - General Information, Diagnosis and Testing).
P1464	A/C Demand Out Of Self Test Range	With DATC REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing). With EMTC, REFER to: Climate Control System - Vehicles With: Electronic Manual Temperature Control (EMTC) (412-00 Climate Control System - General Information, Diagnosis and Testing).
P1501	Vehicle Speed Sensor Out Of Self Test Range	REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control) .
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	Without keyless vehicle system, REFER to: Passive Anti-Theft System (PATS) (419-01B Passive Anti-Theft System (PATS), Diagnosis and Testing). With keyless vehicle system, REFER to: Passive Anti-Theft System (PATS) (419-01C Passive Anti-Theft System (PATS) - Vehicles With: Keyless Vehicle System, Diagnosis and Testing).
P1636	Inductive Signature Chip Communication Error	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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,  Click here to access Guided Routine (BCM).

P1703	Brake Switch Out Of Self-Test Range	Without adaptive cruise control, REFER to: Cruise Control (419-03A Cruise Control, Diagnosis and Testing). With adaptive cruise control, REFER to: Cruise Control (419-03B Cruise Control - Vehicles With: Adaptive Cruise Control, Diagnosis and Testing).
P1744	Torque Converter Clutch Solenoid Circuit	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 5.0L 32V Ti-VCT (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P1783	Transmission Overtemperature Condition	REFER to: Transmission Cooling (307-02 Transmission Cooling, Diagnosis and Testing).
P1935	Brake Switch/Sensor Signal	Without adaptive cruise control, REFER to: Cruise Control (419-03A Cruise Control, Diagnosis and Testing). With adaptive cruise control, REFER to: Cruise Control (419-03B Cruise Control - Vehicles With: Adaptive Cruise Control, Diagnosis and Testing).
P193E	A/C Clutch Request Signal	With DATC REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing). With EMTC, 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 - 5.0L 32V Ti-VCT (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2535	Ignition Switch Run/Start Position Circuit High	REFER to: Starting System (303-06D Starting System - 5.0L 32V Ti-VCT, 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	With DATC REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing). With EMTC, 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	With DATC REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing). With EMTC, 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	With DATC REFER to: Climate Control System - Vehicles With: Dual Automatic Temperature Control (DATC) (412-00 Climate Control System - General Information, Diagnosis and Testing). With EMTC, 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 - 5.0L 32V Ti-VCT (307-01B 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, Diagnosis and Testing).
P2683	Engine Coolant Bypass Valve "A" Control Circuit High	REFER to: Transmission Cooling (307-02 Transmission Cooling, Diagnosis and Testing).
P2700	Transmission Friction Element "A" Apply Time Range/Performance	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B Automatic Transmission - 10-Speed Automatic Transmission - 10R80, Diagnosis and Testing).
P2760	Torque Converter Clutch Pressure Control Solenoid Intermittent	REFER to: Diagnostic Trouble Code (DTC) Charts and Pinpoint Tests - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 - 5.0L 32V Ti-VCT (307-01B 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 Anti-Lock Brake System (ABS) Control Module	GO to Pinpoint Test A
U0131	Lost Communication with Power Steering Control Module	GO to Pinpoint Test C
U0137	Lost Communication With Trailer Brake Control Module	GO to Pinpoint Test D

U0159	Lost Communication With Parking Assist Control Module "A"	GO to Pinpoint Test E
U0164	Lost Communication With HVAC Control Module	GO to Pinpoint Test F
U0199	Lost Communication With "Door Control Module A"	GO to Pinpoint Test G
U0200	Lost Communication With "Door Control Module B"	GO to Pinpoint Test H
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 I
U0252	Lost Communication With Lighting Control Module- Rear "B"	REFER to: Trailer Lamps (417-01 Exterior Lighting, Diagnosis and Testing).
U0256	Lost Communication With Front Controls Interface Module "A"	GO to Pinpoint Test J
U0284	Lost Communication with Active Grille Air Shutter Module "A"	REFER to: Active Grille Shutter (501-02 Front End Body Panels, Diagnosis and Testing).
U0298	Lost Communication With DC to DC Converter Control Module "A"	GO to Pinpoint Test K
U034B	Software Incompatibility with Brake Booster Control	REFER to: Anti-Lock Brake System (ABS) and Stability Control (206-09 Anti-Lock Brake System (ABS) and Stability Control) .

U0405	Invalid Data Received From Cruise Control Module	This DTC sets when the PCM receives invalid network data from the CCM. RETRIEVE and REPAIR all non-network Diagnostic Trouble Codes (DTCs) in the PCM, CCM, and other modules on the network. For PCM Diagnostic Trouble Codes (DTCs) refer to this chart. For all other Diagnostic Trouble Codes (DTCs), REFER to: Diagnostic Trouble Code Charts (100-00 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 PCM DTC U2200 is retrieved again, INSTALL a new PCM. REFER to: Powertrain Control Module (PCM) (303-14D Electronic Engine Controls - 5.0L 32V Ti-VCT, Removal and Installation).
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 PCM sets this DTC if data messages from the ABS module through the GWM 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) .
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 DTC 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 control module 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 ABS control module 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 TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new ABS 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 OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new PCM. REFER to: Powertrain Control Module (PCM) (303-14D Electronic Engine Controls - 5.0L 32V Ti-VCT, 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.

DTC Fault Trigger Condition-PCM

DTC	Description	Fault Trigger Conditions
U0212	Lost Communication With Steering Column Control Module	The PCM sets this DTC if data messages from the SCCM through the GWM 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 : U0212

B1 VERIFY THE CUSTOMER CONCERN	
• 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 DTC may have been set due to high network traffic or an intermittent fault condition.

B2 CHECK THE COMMUNICATION NETWORK

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

Did the SCCM 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

- Using a diagnostic scan tool, perform a SCCM self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to: Steering Wheel and Column Electrical Components (211-05 Steering Wheel and Column Electrical Components, Diagnosis and Testing).
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 U0212 still present?

Yes	GO to B7
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.

B7 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) 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 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.
- 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. 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 OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new SCCM. 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 OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new PCM. REFER to: Powertrain Control Module (PCM) (303-14D Electronic Engine Controls - 5.0L 32V Ti-VCT, 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.

U0131

Normal Operation and Fault Conditions

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

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
U0131	Lost Communication With Power Steering Control Module: Missing Message	A continuous memory DTC that sets in the PCM if messages from the PSCM through the GWM are missing.

Possible Sources

- Communication network concern
- Battery voltage concern
- GWM
- PSCM
- PCM

PINPOINT TEST C : U0131

C1 VERIFY THE CUSTOMER CONCERN

- 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 DTC may have been set due to high network traffic or an intermittent fault condition. CLEAR the DTC.

C2 CHECK THE COMMUNICATION NETWORK

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

Does the PSCM pass the network test?

Yes	GO to C3
No	DIAGNOSE no communication with the PSCM. REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).

C3 PERFORM THE PSCM (POWER STEERING CONTROL MODULE) SELF-TEST

- Using a diagnostic scan tool, perform aPSCM self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to: Power Steering (211-02 Power Steering, Diagnosis and Testing).
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 U0131 still present?

Yes	GO to C7
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.

C7 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0131 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 U0131:87 set in any other module?

Yes	GO to C8
No	GO to C9

C8 CHECK FOR CORRECT PSCM (POWER STEERING CONTROL MODULE) OPERATION

- Disconnect and inspect the PSCM 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 PSCM 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 TSB instructions. If no Technical Service Bulletins (TSBs) address this concern,  Click here to access Guided Routine (EPAS).
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 OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new PCM. REFER to: Powertrain Control Module (PCM) (303-14D Electronic Engine Controls - 5.0L 32V Ti-VCT, 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.

DTC Fault Trigger Condition-PCM

DTC	Description	Fault Trigger Conditions
U0137	Lost Communication With Trailer Brake Control Module	The PCM sets this DTC if data messages from the TBM through the GWM 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
- TBM
- GWM
- PCM

PINPOINT TEST D : U0137

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 DTC 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 TBM pass the network test?

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

D3 PERFORM TBM (TRAILER BRAKE CONTROL MODULE) SELF-TEST

- Using a diagnostic scan tool, perform a TBM self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to: Auxiliary Brake System - Vehicles With: Trailer Brake Control (206-10 Auxiliary Brake 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 U0137 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) U0137 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 U0137:00 set in any other module?

Yes	GO to D8
No	GO to D9

D8 CHECK FOR CORRECT TBM (TRAILER BRAKE CONTROL MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect the TBM 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 TBM 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 OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new TBM. REFER to: Trailer Brake Control Module (TBM) (206-10 Auxiliary Brake System, 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.

D9 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 OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new PCM. REFER to: Powertrain Control Module (PCM) (303-14D Electronic Engine Controls - 5.0L 32V Ti-VCT, 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.

DTC Fault Trigger Condition-PCM

DTC	Description	Fault Trigger Conditions
U0159	Lost Communication With Parking Assist Control Module "A"	The PCM sets this DTC if data messages from the PAM over the HS-CAN1 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
- PAM
- BCM
- PCM

PINPOINT TEST E : U0159

E1 VERIFY THE CUSTOMER CONCERN	
• Ignition ON. • Verify there is an observable symptom present.	
Is an observable symptom present?	
Yes	GO to E2
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.

E2 CHECK THE COMMUNICATION NETWORK

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

Did the PAM module pass the network test?

Yes	GO to E3
No	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).

E3 PERFORM PAM (PARKING ASSIST CONTROL MODULE) SELF-TEST

- Using a diagnostic scan tool, perform a PAM self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	Without park assist, REFER to: Parking Aid (413-13 Parking Aid - Vehicles With: Parking Aid Camera) . , With park assist, REFER to: Parking Aid (413-13C Parking Aid - Vehicles With: Active Park Assist, Diagnosis and Testing).
No	GO to E4

E4 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 E5

E5 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 E6

E6 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 U0159 still present?

Yes	GO to E7
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.

E7 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0159 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 U0159:00 set in any other module?

Yes	GO to E8
No	GO to E9

E8 CHECK FOR CORRECT PAM (PARKING ASSIST CONTROL MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect the BCM module 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 BCM 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 TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new BCM REFER to: Body Control Module (BCM) (419-10 Multifunction Electronic Modules, 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.

E9 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 OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new PCM. REFER to: Powertrain Control Module (PCM) (303-14D Electronic Engine Controls - 5.0L 32V Ti-VCT, 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.

U0164

DTC Fault Trigger Condition-PCM

DTC	Description	Fault Trigger Conditions
U0164	Lost Communication With HVAC Control Module	The FCIM controls the HVAC control module functions. The PCM sets this DTC if data messages from the HVAC control module through the GWM 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
- GWM
- PCM

PINPOINT TEST F : U0164

F1 VERIFY THE CUSTOMER CONCERN

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

Is an observable symptom present?

Yes	GO to F2
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.

F2 CHECK THE COMMUNICATION NETWORK

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

Did the FCIM control module pass the network test?

Yes	GO to F3
No	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).

F3 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	Without touchscreen, REFER to: Information and Entertainment System (415-00C Information and Entertainment System - General Information - Vehicles With: Touchscreen Display, Diagnosis and Testing). With touchscreen and without Sync®, REFER to: Information and Entertainment System (415-00B Information and Entertainment System - General Information - Vehicles With: SYNC Without Touchscreen, Diagnosis and Testing). Without Sync® REFER to: Information and Entertainment System (415-00A Information and Entertainment System - General Information - Vehicles Without: SYNC, Diagnosis and Testing). With Bang & Olufsen sound system, REFER to: Information and Entertainment System (415-00D Information and Entertainment System - General Information - Vehicles With: Bang and Olufsen Audio System, Diagnosis and Testing).
No	GO to F4

F4 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 F5

F5 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 F6

F6 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 F7
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.

F7 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 F8
No	GO to F9

F8 CHECK FOR CORRECT FCIM (FRONT CONTROLS INTERFACE MODULE) CONTROL MODULE OPERATION

- Ignition OFF.
- Disconnect and inspect the FCIM control module 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 FCIM control module 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 TSB instructions. If no Technical Service Bulletins (TSBs) address this concern,  Click here to access Guided Routine (FCIM).
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.

F9 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 OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new PCM. REFER to: Powertrain Control Module (PCM) (303-14D Electronic Engine Controls - 5.0L 32V Ti-VCT, 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.

DTC Fault Trigger Condition-PCM

DTC	Description	Fault Trigger Conditions
U0199	Lost Communication With "Door Control Module A"	The PCM sets this DTC if data messages from the DDM through the GWM 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
- DDM
- GWM
- PCM

PINPOINT TEST G : U0199

G1 VERIFY THE CUSTOMER CONCERN

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

Is an observable symptom present?

Yes	GO to G2
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.

G2 CHECK THE COMMUNICATION NETWORK

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

Did the DDM pass the network test?

Yes	GO to G3
No	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).

G3 PERFORM DDM (DRIVER DOOR MODULE) SELF-TEST

- Using a diagnostic scan tool, perform a DDM self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to: Locks, Latches and Entry Systems (501-14 Handles, Locks, Latches and Entry Systems, Diagnosis and Testing).
No	GO to G4

G4 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 G5

G5 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 G6

G6 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 U0199 still present?

Yes	GO to G7
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.

G7 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0199 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 U0199:87 set in any other module?

Yes	GO to G8
No	GO to G9

G8 CHECK FOR CORRECT DDM (DRIVER DOOR MODULE) MODULE OPERATION

- Ignition OFF.
- Disconnect and inspect the DDM 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 DDM module 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 TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new DDM. REFER to: Driver Door Module (DDM) (419-10 Multifunction Electronic Modules, 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.

G9 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 OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new PCM. REFER to: Powertrain Control Module (PCM) (303-14D Electronic Engine Controls - 5.0L 32V Ti-VCT, 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.

DTC Fault Trigger Condition-PCM

DTC	Description	Fault Trigger Conditions
U0200	Lost Communication With "Door Control Module B"	The PCM sets this DTC if data messages from the PDM through the GWM 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
- PDM
- GWM
- PCM

PINPOINT TEST H : U0200

H1 VERIFY THE CUSTOMER CONCERN	
• Ignition ON. • Verify there is an observable symptom present.	
Is an observable symptom present?	
Yes	GO to H2
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.

H2 CHECK THE COMMUNICATION NETWORK

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

Did the PDM pass the network test?

Yes	GO to H3
No	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).

H3 PERFORM PDM (PASSENGER DOOR MODULE) SELF-TEST

- Using a diagnostic scan tool, perform a PDM self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to: Locks, Latches and Entry Systems (501-14 Handles, Locks, Latches and Entry Systems, Diagnosis and Testing).
No	GO to H4

H4 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 H5

H5 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 H6

H6 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 U0200 still present?

Yes	GO to H7
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.

H7 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0200 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 U0200:87 set in any other module?

Yes	GO to H8
No	GO to H9

H8 CHECK FOR CORRECT PDM (PASSENGER DOOR MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect the PDM 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 PDM 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 TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new PDM module. REFER to: Passenger Door Module (PDM) (419-10 Multifunction Electronic Modules, 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.

H9 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 OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new PCM. REFER to: Powertrain Control Module (PCM) (303-14D Electronic Engine Controls - 5.0L 32V Ti-VCT, 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.

U023A

DTC Fault Trigger Condition-PCM

DTC	Description	Fault Trigger Conditions
U023A	Lost Communication With Image Processing Module A	The PCM sets this DTC if data messages from the IPMA through the GWM 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 I : U023A

I1 VERIFY THE CUSTOMER CONCERN	
• Ignition ON. • Verify there is an observable symptom present.	
Is an observable symptom present?	
Yes	GO to I2
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.

I2 CHECK THE COMMUNICATION NETWORK

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

Did the IPMA pass the network test?

Yes	GO to I3
No	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).

I3 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 I4

I4 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 I5

I5 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 I6

I6 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 I7
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.

I7 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 I8
No	GO to I9

I8 CHECK FOR CORRECT IPMA (IMAGE PROCESSING MODULE A) OPERATION

- Ignition OFF.
- Disconnect and inspect the IPMA 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 IPMA 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 OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new IPMA. REFER to: Interior Rear View Mirror (501-09 Rear View Mirrors, 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.

I9 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 OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new PCM. REFER to: Powertrain Control Module (PCM) (303-14D Electronic Engine Controls - 5.0L 32V Ti-VCT, 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.

DTC Fault Trigger Condition-PCM

DTC	Description	Fault Trigger Conditions
U0256	Lost Communication With Front Controls Interface Module "A"	The PCM sets this DTC if data messages from the FCIM through the GWM 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
- FCIM
- GWM
- PCM

PINPOINT TEST J : U0256

J1 VERIFY THE CUSTOMER CONCERN	
• Ignition ON. • Verify there is an observable symptom present.	
Is an observable symptom present?	
Yes	GO to J2
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.

J2 CHECK THE COMMUNICATION NETWORK

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

Did the FCIM pass the network test?

Yes	GO to J3
No	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).

J3 PERFORM FCIM (FRONT CONTROLS INTERFACE MODULE) SELF-TEST

- Using a diagnostic scan tool, perform a FCIM self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	Without touchscreen, REFER to: Information and Entertainment System (415-00C Information and Entertainment System - General Information - Vehicles With: Touchscreen Display, Diagnosis and Testing). With touchscreen and without Sync®, REFER to: Information and Entertainment System (415-00B Information and Entertainment System - General Information - Vehicles With: SYNC Without Touchscreen, Diagnosis and Testing). Without Sync® REFER to: Information and Entertainment System (415-00A Information and Entertainment System - General Information - Vehicles Without: SYNC, Diagnosis and Testing). With Bang & Olufsen sound system, REFER to: Information and Entertainment System (415-00D Information and Entertainment System - General Information - Vehicles With: Bang and Olufsen Audio System, Diagnosis and Testing).
No	GO to J4

J4 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 J5

J5 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 J6

J6 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 U0256 still present?

Yes	GO to J7
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.

J7 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0256 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 U0256:87 set in any other module?

Yes	GO to J8
No	GO to J9

J8 CHECK FOR CORRECT FCIM (FRONT CONTROLS INTERFACE MODULE) OPERATION

- Ignition OFF.
- Disconnect and inspect the FCIM 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 FCIM 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 TSB instructions. If no Technical Service Bulletins (TSBs) address this concern,  Click here to access Guided Routine (FCIM).
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.

J9 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 OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new PCM. REFER to: Powertrain Control Module (PCM) (303-14D Electronic Engine Controls - 5.0L 32V Ti-VCT, 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.

DTC Fault Trigger Condition-PCM

DTC	Description	Fault Trigger Conditions
U0298	Lost Communication With DC to DC Converter Control Module "A"	The PCM sets this DTC if data messages from the DC/DC Converter Control Module over the HS-CAN1 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
- DC/DC Converter Control Module
- PCM

PINPOINT TEST K : U0298

K1 VERIFY THE CUSTOMER CONCERN	
• Ignition ON. • Verify there is an observable symptom present.	
Is an observable symptom present?	
Yes	GO to K2
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.
K2 CHECK THE COMMUNICATION NETWORK	

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

Did the DC/DC Converter Control Module pass the network test?

Yes	GO to K3
No	REFER to: Communications Network (418-00 Module Communications Network, Diagnosis and Testing).

K3 PERFORM THE DC/DC CONVERTER CONTROL MODULE SELF-TEST

- Using a diagnostic scan tool, perform a DC/DC Converter Control Module self-test.

Are any Diagnostic Trouble Codes (DTCs) recorded?

Yes	REFER to: Direct Current/Direct Current (DC/DC) Converter Control Module (414-05 Voltage Converter/Inverter, Diagnosis and Testing).
No	GO to K4

K4 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 K5

K5 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 K6

K6 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 U0298 still present?

Yes	GO to K7
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.

K7 CHECK FOR DTC (DIAGNOSTIC TROUBLE CODE) U0298 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 U0298:00 or U0298:87 set in any other module?

Yes	GO to K8
No	GO to K9

K8 CHECK FOR CORRECT DC/DC CONVERTER CONTROL MODULE OPERATION

- Ignition OFF.
- Disconnect and inspect the DC/DC converter control module 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 DC/DC Converter Control module 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 OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new DC/DC Converter Control Module. REFER to: Direct Current/Direct Current (DC/DC) Converter Control Module (414-05 Voltage Converter/Inverter, 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.

K9 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 OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new PCM. REFER to: Powertrain Control Module (PCM) (303-14D Electronic Engine Controls - 5.0L 32V Ti-VCT, 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.

Oil Pressure Control Solenoid Faults

Refer to Wiring Diagrams Cell 26 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 PCM detects an open on the engine oil pressure control solenoid valve circuit.
P06DB	Engine Oil Pressure Control Circuit Low	Sets when the PCM detects a short to ground on the engine oil pressure control solenoid valve circuit.
P06DC	Engine Oil Pressure Control Circuit High	Sets when the PCM 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 PCM 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 L : OIL PRESSURE CONTROL SOLENOID FAULTS

L1 CHECK THE ENGINE OIL PRESSURE CONTROL SOLENOID VALVE SUPPLY VOLTAGE

- Ignition OFF.
- Disconnect Engine oil pressure control solenoid valve C1924.
- Ignition ON.

Is the voltage greater than 11 volts?

Yes	GO to L2
No	VERIFY BJB fuse F97 (10A) 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.

L2 CHECK THE ENGINE OIL PRESSURE CONTROL SOLENOID VALVE CIRCUIT FOR A SHORT TO VOLTAGE

- Ignition OFF.
- Disconnect PCM C1381E.
- Ignition ON.

Is any voltage present?

Yes	REPAIR the circuit.
No	GO to L3

L3 CHECK THE ENGINE OIL PRESSURE CONTROL SOLENOID VALVE CIRCUIT FOR AN OPEN

- Ignition OFF.

Is the resistance less than 3 ohms?

Yes	GO to L4
No	REPAIR the circuit.

L4 CHECK THE ENGINE OIL PRESSURE CONTROL SOLENOID VALVE CIRCUIT FOR A SHORT TO GROUND

Is the resistance greater than 10,000 ohms?

Yes	GO to L5
No	REPAIR the circuit.

L5 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 C1381E.
- Connect Engine oil pressure control solenoid valve C1924.
- Connect an EOP gauge to the oil pressure sender oil galley port. For more information, REFER to: [Engine](#) (303-00 Engine System - General Information, Diagnosis and Testing).
Oil Pressure Test.
- Start the engine.
- **NOTE:** *The PCM PID EOPDC_CMD may or may not be available in the diagnostic scan tool.*

If the active command PCM PID EOPDC_CMD is available in the diagnostic scan tool, enable the engine oil pressure control solenoid valve using the PCM PID EOPDC_CMD.

- If the active command PCM PID EOPDC_CMD is **not** available in the diagnostic scan tool, with the engine running, wait for approximately 20 to 30 seconds, the PCM commands the pump state transition from high pressure mode to low pressure mode.
- A pressure drop of **8 psi** or greater is anticipated. If the engine coolant temperature is less than 100°F (38°C), a pressure drop of **15 psi** or greater is anticipated.

Is the expected engine oil pressure drop present?

Yes	GO to L6
No	INSTALL a new oil pressure control solenoid valve. REFER to: Oil Pressure Control Solenoid (303-14D Electronic Engine Controls - 5.0L 32V Ti-VCT, Removal and Installation).

L6 VERIFY ENGINE OIL PRESSURE CONTROL SOLENOID VALVE CONNECTION AND WIRING

- Ignition OFF.
- Disconnect Engine oil pressure control solenoid valve C1924.
- 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.
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No	The system is operating correctly at this time. The intermittent concern may have been caused by a loose connection.
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