

2022 CHEVROLET CORVETTE SERVICE MANUAL

- SEARCH

1. Diagnostic Overview, Starting Point, and Programming

2. Vehicle Diagnostic Information

3. Specifications

4.

K9 Body Control Module: Scan Tool Information

Body Control Module 12V Battery Data Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Battery Capacity		Varies	The scan tool displays Ah (Amp hr). Ah/20 is the amount of current a battery can supply for 20hrs until the voltage drops to 10.5V.
Battery Current		Varies	The scan tool displays Amps. This is the current flowing through the Battery Sensor Module.
Battery Current During Autostop		Varies	The scan tool displays Amps. This is the amperage flowing out of battery to maintain vehicle systems during an autostop.
Battery Sensor Internal Temperature Sensor		Varies	The scan tool displays temperature in Celsius.
Battery Sensor Module - Battery Nominal Resistance		Varies	The scan tool displays mOhm. This is the internal impedance of the 12V battery as measured by the Battery Sensor Module.
Battery Sensor Module - Battery Voltage		Varies	The scan tool displays Volts. This is the actual 12V battery voltage as measured by the Battery Sensor Module.
Battery Sensor Module - Data Received		Yes	The scan tool displays Yes or No. This value indicates that information has been received by the Body Control Module from the Battery Sensor Module.
Battery Sensor Module - Ignition Off Minimum Battery State of Charge		Varies	The scan tool displays percentage (%).
Battery Sensor Module - Ignition Off Minimum Battery Voltage		Varies	The scan tool displays battery voltage in volts (V). This is the lowest 12V battery voltage recorded during key off.
Battery Sensor Module - Maximum Cranking Current		Varies	The scan tool displays maximum cranking current in amperes (A). This is the actual peak value of amps measured by the Battery Sensor Module on the previous engine crank event.
Battery Sensor Module - Minimum Cranking Voltage		Varies	The scan tool displays minimum cranking voltage in volts (V). This is the actual lowest voltage measured by the Battery Sensor Module on the previous engine crank event.
Battery Sensor Module - Open Circuit Voltage		Varies	The scan tool displays Volts.
Battery Sensor Module - Predicted Minimum Crank Voltage		Varies	The scan tool displays Volts. This is a value calculated by the Battery Sensor Module that predicts the minimum voltage during the next engine crank event.
Battery Sensor Module - State of Charge		Varies	The scan tool displays percentage (%). This is a measurement of the charge level compared to a fully charged 12V battery as measured by the Battery Sensor Module.
Battery Sensor Module State of Charge Error		Varies	The scan tool displays percentage (%).
Battery Sensor Module - State of Charge Status OK			
Battery Sensor Module - State of Charge Variance		Varies	The scan tool displays percentage (%).
Battery Sulfation Protection Mode			
Battery Type		Default	The scan tool displays Default, Flooded Battery, AGM Battery, Enhanced Flooded Battery, or Lithium Battery.
Battery Voltage Too Low		No	The scan tool displays Yes or No.
Charge Recovery Mode Active - Battery Saver Mode		0	The scan tool displays a numeric value. This indicates the level that battery saver mode is operating at. This provides an indication of what actions are being taken.
Charge Recovery Mode Active - Battery Disconnected			

Parameter	System State	Expected Value	Description
Charge Recovery Mode Active - Charge Efficiency Off	Ã€Ã€Ã€	Ã€Ã€Ã€	Ã€Ã€Ã€
Charge Recovery Mode Active - Service Tool Request	Ã€Ã€Ã€	Ã€Ã€Ã€	Ã€Ã€Ã€
Charge Recovery Mode Active - State of Charge Loss	Ã€Ã€Ã€	Ã€Ã€Ã€	Ã€Ã€Ã€
Charge Recovery Mode Active - Vehicle Inactive Too Long	Ã€Ã€Ã€	Ã€Ã€Ã€	Ã€Ã€Ã€
Low-Voltage Battery Previous State of Charge	Ã€Ã€Ã€	Varies	The scan tool displays percentage (%).
Low-Voltage Battery State of Charge	Ã€Ã€Ã€	Varies	The scan tool displays percentage (%).
Low-Voltage Battery Temperature	Ã€Ã€Ã€	Varies	The scan tool displays temperature in Celsius (Ã€,Ã€°C).
Net Battery Amp Hours	Ã€Ã€Ã€	Varies	The scan tool displays Ah. This is the sum of Amp per hour as measured through the Battery Sensor Module.
Net Battery Amp Hours Charged	Ã€Ã€Ã€	Varies	The scan tool displays Ah.
Net Battery Amp Hours Discharged	Ã€Ã€Ã€	Varies	The scan tool displays Ah.
Parasitic Current Greater than 0mA Counter	Ã€Ã€Ã€	Varies	The scan tool displays min. This is a counter that tracks if the current during ignition off is within a particular range.
Parasitic Current -5.0A to -10.0A Counter	Ã€Ã€Ã€	Varies	The scan tool displays min. This is a counter that tracks if the current during ignition off is within a particular range.
Parasitic Current 0mA to -10mA Counter	Ã€Ã€Ã€	Varies	The scan tool displays min. This is a counter that tracks if the current during ignition off is within a particular range.
Parasitic Current -1.25A to -2.5A Counter	Ã€Ã€Ã€	Varies	The scan tool displays min. This is a counter that tracks if the current during ignition off is within a particular range.
Parasitic Current -10mA to -20mA Counter	Ã€Ã€Ã€	Varies	The scan tool displays min. This is a counter that tracks if the current during ignition off is within a particular range.
Parasitic Current -40mA to -80mA Counter	Ã€Ã€Ã€	Varies	The scan tool displays min. This is a counter that tracks if the current during ignition off is within a particular range.
Parasitic Current -20mA to -40mA Counter	Ã€Ã€Ã€	Varies	The scan tool displays min. This is a counter that tracks if the current during ignition off is within a particular range.
Parasitic Current -80mA to -160mA Counter	Ã€Ã€Ã€	Varies	The scan tool displays min. This is a counter that tracks if the current during ignition off is within a particular range.
Parasitic Current -10.0A or less Counter	Ã€Ã€Ã€	Varies	The scan tool displays min. This is a counter that tracks if the current during ignition off is within a particular range.
Parasitic Current -2.5A to -5.0A Counter	Ã€Ã€Ã€	Varies	The scan tool displays min. This is a counter that tracks if the current during ignition off is within a particular range.
Parasitic Current -640mA to -1.25A Counter	Ã€Ã€Ã€	Varies	The scan tool displays min. This is a counter that tracks if the current during ignition off is within a particular range.
Parasitic Current -160mA to -320mA Counter	Ã€Ã€Ã€	Varies	The scan tool displays min. This is a counter that tracks if the current during ignition off is within a particular range.
Parasitic Current -320mA to -640mA Counter	Ã€Ã€Ã€	Varies	The scan tool displays min. This is a counter that tracks if the current during ignition off is within a particular range.
Stop/Start Mode	Ã€Ã€Ã€	Ã€Ã€Ã€	Ã€Ã€Ã€
Voltage Drop During Autostop	Ã€Ã€Ã€	Varies	The scan tool displays Volts. This is a measurement of the amount that the battery voltage has dropped during an autostop.

Body Control Module Ã€Ã€Ã€ Brake Pedal Position Data Ã€Ã€Ã€ Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Brake Pedal Position Sensor Fully Released Learn Status	Ã€Ã€Ã€	Yes	The scan tool displays Yes or No.
Brake Pedal Initial Travel Position Achieved	Ã€Ã€Ã€	No	The scan tool displays Yes or No.
Brake Pedal Position Switch Circuit Signal	Ã€Ã€Ã€	Ã€Ã€Ã€	Ã€Ã€Ã€
Extended Travel Brake Pedal Position Signal	Ã€Ã€Ã€	Ã€Ã€Ã€	Ã€Ã€Ã€

Parameter	System State	Expected Value	Description
Extended Travel Brake Pedal Position Switch	Active/Inactive	Inactive	The scan tool displays Active or Inactive.
Torque Converter Clutch/Cruise Control Brake Pedal Position Switch	Active/Inactive	Inactive	The scan tool displays Active or Inactive.

Body Control Module Active/Inactive Chassis Control Data Active/Inactive Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Drive Mode Select Switch 1	Active/Inactive	Inactive	The scan tool displays Inactive, Switch 1, Switch 2, Switch 3, Switch 4, Switch 5, Switch 6, Switch 7, Switch 8, Open/Short to Battery, Short to Ground, or Invalid. This is the primary bank of switches which the vehicle operator interfaces with for different selectable vehicle operating modes such as Sport Mode, Fuel Economy Mode...
Drive Mode Select Digital Switch 1	Active/Inactive	Inactive	The scan tool displays Active or Inactive. This is a discrete switch the vehicle operator interfaces with to select vehicle operating modes such as Sport Mode, Fuel Economy Mode...
Driver Shift Control Mode Switch	Active/Inactive	Inactive	The scan tool displays Upshift, Downshift, Inactive, or Invalid.
Hill Descent Control Switch	Active/Inactive	Inactive	The scan tool displays Active or Inactive.
Traction Control Switch	Active/Inactive	Inactive	The scan tool displays Active or Inactive. This indicates the state of the input that enables or disables the traction control system, which is a system designed to prevent loss of traction (and therefore the control of the vehicle) when excessive throttle or steering is applied by the driver.

Body Control Module Active/Inactive Content Theft Deterrent Alarm Trigger Active/Inactive Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Content Theft Deterrent Alarm Status	Active/Inactive	Has Not Alarmed - No Alarm	The scan tool displays Has Not Alarmed - No Alarm, Alarming - Alarm, or Has Alarmed - Alarm Active. This indicates if the vehicle content theft deterrent system is in alarm mode or not.
Content Theft Deterrent Indicator	Active/Inactive	Off	The scan tool displays Off, On, Flashing Slow, or Flashing Fast. This is the illuminating lamp on the instrument cluster that indicates if the vehicle security system is active or not.
Current Content Theft Deterrent Trigger	Active/Inactive	No Information/None	This indicates what factor led to the activation of the content theft deterrent system.
Content Theft Deterrent Trigger History 1	Active/Inactive	No Information/None	This indicates the factor that led to the first history reason for activation of the content theft deterrent system.
Content Theft Deterrent Trigger History 2	Active/Inactive	No Information/None	This indicates the factor that led to the second history reason for activation of the content theft deterrent system.
Content Theft Deterrent Trigger History 3	Active/Inactive	No Information/None	This indicates the factor that led to the third history reason for activation of the content theft deterrent system.
Glass Breakage	Active/Inactive	Not Detected	The scan tool displays Not Detected or Detected. This parameter indicates the damage to glass as a result to breaking. Glass divides into pieces as a result of a sudden or violent action.
Horn Relay Command	Active/Inactive	Inactive	The scan tool displays Active or Inactive. This refers to a request to initiate the sound for a vehicle's loud warning signal. This is used to display whether the Body Control Module is commanding the horn relay to be on or off.
Liftglass	Active/Inactive	Inactive	The scan tool displays Active or Inactive. The liftglass ajar warning light will be illuminated when the liftglass is not properly closed. This parameter indicates if the liftglass active or inactive.
Power Sounder Content Theft Deterrent Alarm Module Command	Active/Inactive	No Alarm	The scan tool displays No Alarm or Alarm Active. The power sounder is part of the vehicle's theft deterrent system. This parameter shows if the power sounder is commanded active (monitoring for vehicle theft attempt) or not.
Power Sounder Content Theft Deterrent Alarm Module Internal Battery State of Charge	Active/Inactive	OK	The scan tool displays OK or Not OK. This parameter describes the internal battery state of charge in the Power Sounder Content Theft Deterrent Alarm Module.

Parameter	System State	Expected Value	Description
Rear Closure Unlock Command	Active	Inactive	The scan tool displays Active or Inactive. This parameter for the rear closure unlock relay or unlock actuator will display On/Off upon the door being commanded to unlock. Commanded ON is when the Body Control Module energizes the rear closure unlock relay/actuator to unlock the door.
Security Indicator Command	Active	Inactive	The scan tool displays Active or Inactive. Security Indicator Command refers to the command that is sent out by the module to turn the lamp (symbolic icon) on which acts as an indicator for the active state of the security system.
Security Siren Command	Active	Not Requested	The scan tool displays Not Requested or Disarmed. This is the serial data command to activate the output circuit for the alarm siren. Alarm siren is like a horn, but will activate during a theft event to warn away intruders.
Ultrasonic Intrusion Sensor	Active	Disarmed	The scan tool displays Armed or Disarmed. The rear integration module supplies a low side drive output interface to the Intrusion and Inclination Sensor.
Ultrasonic Intrusion Sensor Disable Switch Signal	Active	Inactive	The scan tool displays Active or Inactive. This is the switch which enables/disables the Ultrasonic Intrusion Sensor of the vehicle.
Ultrasonic Intrusion Sensor Malfunction	Active	No	The scan tool displays Yes or No. This sensor detects an unauthorized opening of the vehicle's cabin by sending and receiving ultrasonic waves. This indicates the state of the sensor to fail to operate normally.

Body Control Module Active Electric Power Management Data Active Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Battery Current	Active	Varies	The scan tool displays Amps. This is the current flowing through the Battery Sensor Module.
Battery Saver Mode	Active	Off	The scan tool displays Off, Assembly Plant Mode, Transport Mode, or Storage Mode.
Battery Saver Mode Ignition Off - Battery Voltage less than 11.6V	Active	False	The scan tool displays True or False. This will set with key off if battery voltage drops below 11.6V
Battery Saver Mode Ignition Off - Battery Voltage less than 12.0V	Active	False	The scan tool displays True or False. This will set with key off if battery voltage drops below 12.0V.
Battery Saver Mode Ignition Off - Parasitic Current 100mA or greater	Active	False	The scan tool displays True or False. This will set with key off if parasitic current is greater than 100mA.
Battery Saver Mode Ignition Off - Parasitic Current 1A or greater	Active	False	The scan tool displays True or False. This will set with key off if parasitic current is greater than 1A.
Fuel Economy Mode	Active	Active	The scan tool displays Active or Inactive.
Generator Regulator Setpoint	Active	Active	The scan tool displays Volts.
Load Shed Reason	Active	Varies	The scan tool displays Amp Hour Demand Too High, Regulated Voltage Control, Hybrid/EV Battery State of Charge Low, Low Voltage, Service Tool Request, Battery Save Mode, or None. This provides indication of what is causing vehicle loads to be turned off in an attempt to prolong 12V battery life.
Load Shed Requested	Active	Active	Active
Low-Voltage Battery Previous State of Charge	Active	Varies	The scan tool displays percentage (%).
Low-Voltage Battery State of Charge	Active	Varies	The scan tool displays percentage (%).
Low-Voltage Battery Temperature	Active	Varies	The scan tool displays temperature in Celsius (°C).
Requested Idle Boost Level	Active	Varies	The scan tool displays Assembly Plant Mode, Low Temperature, Ah, HVAC Request, Low Voltage, Remote Start, Service Tool Request, or None.
Regulated Voltage Control Mode	Active	Varies	The scan tool displays Remote Start, Fuel Economy Mode, Normal, Charge Recovery Mode, Assembly Plant Mode, or Ignition and Start Switch Start.
Stop/Start Mode	Active	Active	Active

Body Control Module Active Front Exterior Lighting Data Active Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Headlamp Leveling Function	Active	Inactive	The scan tool displays Active or Inactive.
Headlamp Leveling Sensor Learn	Learn Not Enabled	Learn Not Enabled	The scan tool displays Learn Not Enabled, Learning, Learn Successful, or Learn Failed. This parameter indicates the headlamp learns suspension trim position.
Left Headlamp Vertical Motor Command	Active	Inactive	This scan tool displays Active or Inactive.
Right Headlamp Vertical Motor Command	Active	Inactive	This scan tool displays Active or Inactive.
Left Auxiliary Daytime Running Lamps	Off	Off	The scan tool displays On or Off.
Right Auxiliary Daytime Running Lamps	Off	Off	The scan tool displays On or Off.
Left Daytime Running Lamps	Off	Off	The scan tool displays On or Off.
Right Daytime Running Lamps	Off	Off	The scan tool displays On or Off.
Left Front Auxiliary Park Lamp Command	Off	Off	The scan tool displays On or Off.
Right Front Auxiliary Park Lamp Command	Off	Off	The scan tool displays On or Off.
Left Low Beam Command	Active	Inactive	The scan tool displays Active or Inactive.
Right Low Beam Command	Active	Inactive	The scan tool displays Active or Inactive.
Left Front Turn Signal Lamp Command	Off	Off	The scan tool displays On or Off.
Right Front Turn Signal Lamp Command	Off	Off	The scan tool displays On or Off.
Left Front Fog Lamp Command	Off	Off	The scan tool displays On or Off.
Right Front Fog Lamp Command	Off	Off	The scan tool displays On or Off.
Left Park Lamps Command	Off	Off	The scan tool displays On or Off.
Right Park Lamps Command	Off	Off	The scan tool displays On or Off.
Left Turn Signal Repeater Lamp Command	Off	Off	The scan tool displays On or Off.
Right Turn Signal Repeater Lamp Command	Off	Off	The scan tool displays On or Off.
Surround View Exterior Courtesy Lamps Command	Off	Off	The scan tool displays On or Off.

Body Control Module Active Heated Steering Wheel Data Active Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Heated Steering Wheel Indicator	Off	Off	The scan tool displays Off, Low, Medium, or High.
Heated Steering Wheel Request Source	Switch	Switch	The scan tool displays Switch or Remote Vehicle Start.
Heated Steering Wheel Command	Off	Off	The scan tool displays Off, Low, Medium, or High.
Heated Steering Wheel Relay	Inactive	Inactive	The scan tool displays Active or Inactive.
Heated Steering Wheel Switch	Inactive	Inactive	The scan tool displays Active or Inactive.
Service Heated Steering Wheel Indicator	Inactive	Inactive	The scan tool displays Active or Inactive.
Heated Steering Wheel Load Reduction	Inactive	Inactive	The scan tool displays Active or Inactive.
Heated Steering Wheel Mode	Off	Off	The scan tool displays Off, Remote Vehicle Start, Automatic, or Switch.
Heated Steering Wheel Diagnostic Fault Active - Stuck Switch	Inactive	Inactive	The scan tool displays Active or Inactive.
Heated Steering Wheel	Inactive	Inactive	The scan tool displays Active or Inactive.
Heated Steering Wheel Internal Temperature	Off	Off	The scan tool displays Off, Low, Medium, or High.

Body Control Module Active HVAC Sensor Data Active Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
A/C Evaporator Temperature	°C	Varies	The scan tool displays temperature in Celsius (°C). This parameter refers to the sensor used to determine the temperature of the air conditioning system's evaporator. The temperature is displayed with a low level of detail.
A/C Evaporator Temperature	°C	Varies	The scan tool displays temperature in Celsius (°C). This parameter indicates the temperature (degrees of heat) of the air conditioning system's evaporator.
Ambient Air Temperature	°C	Varies	The scan tool displays temperature in Celsius (°C). This parameter indicates the temperature of the air surrounding the vehicle.
Humidity Level at the Windshield	%	Varies	The scan tool displays percentage (%). This is the measurement of the amount of moisture near the windshield that is used by the heating, ventilation, air conditioning (HVAC) system to prevent fogging.
Left Front HVAC Mode Status		Not Determined	The scan tool displays Not Determined, Off, Auto, Floor, Floor and Vent, Vent, Vent and Windshield, Windshield, Floor and Windshield, or Floor and Vent and Windshield, or Max Defrost. This parameter describes what state the heating, ventilation, air conditioning system is in for the front left area of the vehicle cabin.
Left Rear HVAC Mode Status		Not Determined	The scan tool displays Not Determined, Off, Auto, Floor, Floor and Vent, Vent, Vent and Roof, Roof, Roof and Floor, or Floor and Vent and Roof. This parameter describes what state the heating, ventilation, air conditioning system is in for the rear left area of the vehicle cabin.
Passenger Compartment Humidity	%	Varies	The scan tool displays percentage (%). The parameter indicates the amount of water in the air in the passenger compartment.
Rear Lower Duct Air Temperature Sensor Voltage	V	Varies	The scan tool displays Volts. This is a temperature sensor used to monitor the air temperature from the rear floor ducts.
Right Front HVAC Mode Status		Not Determined	The scan tool displays Not Determined, Off, Auto, Floor, Floor and Vent, Vent, Vent and Windshield, Windshield, Floor and Windshield, or Floor and Vent and Windshield, or Max Defrost. This parameter describes what state the heating, ventilation, air conditioning system is in for the front right area of the vehicle cabin.
Right Rear HVAC Mode Status		Not Determined	The scan tool displays Not Determined, Off, Auto, Floor, Floor and Vent, Vent, Vent and Roof, Roof, Roof and Floor, or Floor and Vent and Roof. This parameter describes what state the heating, ventilation, air conditioning system is in for the rear right area of the vehicle cabin.
Sunload Sensor Voltage	V	Varies	The scan tool displays Volts. This is a sensor that detects how warm the sun is shining.
Windshield Temperature	°C	Varies	The scan tool displays temperature in Celsius (°C). This parameter detects the temperature of the front window (windshield).

Body Control Module HVAC System Data Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
A/C Compressor Refrigerant Solenoid Valve Command		Varies	The scan tool displays percentage (%).
A/C Compressor Displacement		Ready	The scan tool displays Ready, Ramp up, Running, or Ramp down. A variable displacement air conditioning compressor has the ability to change the amount of refrigerant that is pumped into the system (output) while it is running by way of a pulse width modulated (PWM) solenoid. A PWM solenoid will vary the compressor output by using a DC supply voltage that is switched on and off at a given frequency for a modulated period of time (duty cycle). The duty cycle is the on time of the voltage and is expressed as a percentage of the time period. This parameter describes the condition in which a variable displacement air conditioning compressor is increasing displacement, holding steady, or decreasing displacement.
A/C Switch		Compressor Off	The scan tool displays Compressor Off, Compressor On, or Compressor In Econ. This parameter is used to indicate the status of the signal being sent to the Engine Control Module to turn the A/C on.
Air Quality Sensor		Varies	The scan tool displays percentage (%). This is a sensor that measures the amount of contamination, pollution, dirt, odor in the ambient air.

Parameter	System State	Expected Value	Description
Air Quality Recirculation Control	Active/Inactive	Inactive	The scan tool displays Active or Inactive. The recirculation door in an air conditioning system has the ability to either allow fresh air into the vehicle or to pass the existing cabin air back through the air conditioning system. The recirculation door will be closed if the Air Quality Sensor detects oxidizing, reducing, or ammonia gasses and reopens the door when these gasses are no longer detected.
Auxiliary Blower Motor Speed Command	Active/Inactive	Varies	This parameter shows the value (counts) being sent to command the rear blower from the Auxiliary Blower switch on the front panel. This describes the rear blower motor for the HVAC system. This is supplemental to the primary blower fan.
Auxiliary Coolant Pump	Active/Inactive	Inactive	The scan tool displays Active or Inactive. The Auxiliary Coolant Pump refers to a second engine cooling pump that may be devoted to a different function other than for purposes of engine cooling.
Auxiliary Coolant Pump Dry	Active/Inactive	Inactive	The scan tool displays Active or Inactive. This parameter contains the fault information that is communicated by the Electric Auxiliary Coolant Pump over Local Interconnect Network (LIN) to the engine controller. An electric coolant pump circulates engine coolant. This indicates whether the pump was operated without coolant.
Auxiliary Coolant Pump Internal Status	Active/Inactive	Inactive	The scan tool displays Active or Inactive. This parameter contains the fault information that is communicated by the Electric Auxiliary Coolant Pump over Local Interconnect Network (LIN) to the engine controller. An electric coolant pump circulates engine coolant. This indicates whether the pump indicates an internal error.
Auxiliary Coolant Pump Motor Stalled	Active/Inactive	Inactive	The scan tool displays Active or Inactive. This parameter contains the fault information that is communicated by the Electric Auxiliary Coolant Pump over Local Interconnect Network (LIN) to the engine controller. An electric coolant pump circulates engine coolant. This indicates whether the pump has stopped running.
Auxiliary Heater Enable Signal	Active/Inactive	Inactive	The scan tool displays Active or Inactive.
Blower Motor Feedback Signal	Active/Inactive	Varies	The scan tool displays percentage (%). The Blower Motor passes air through the heater core and circulates air throughout the passenger compartment. The Blower Motor is controlled by a module. This parameter indicates the Blower Motor operation Feedback Signal received by the module.
Blower Motor Speed	Active/Inactive	Varies	This parameter indicates the commanded HVAC Blower Motor Speed, displayed in percent, that the blower is turning. The blower motor is a motor with a cage attached to force the air through ducts such as heater, ventilation and defrost ducts.
Blower Motor Speed Command	Active/Inactive	Varies	This parameter indicates the commanded HVAC Blower Motor Speed, displayed in percent, that the blower is turning. The blower motor is a motor with a cage attached to force the air through ducts such as heater, ventilation and defrost ducts.
Blower Motor Speed Feedback Signal	Active/Inactive	Normal Function	The scan tool displays Out of Range Low, Stall, Partial Stall, Voltage Out of Range, Normal Function, Motor Over Temperature, Not Used, Mechanical Malfunction, or Out of Range High. The Blower Motor passes air through the heater core and circulates air throughout the passenger compartment. The Blower Motor is controlled by a module. This parameter indicates the Blower Motor operation Feedback Signal received by the module.
Blower Motor Speed Request	Active/Inactive	Active/Inactive	This parameter shows the current state of the switch that turns on the front blower (device that produces a current of air).
Calculated A/C Evaporator Air Temperature	Active/Inactive	Varies	The scan tool displays temperature in Celsius (°C). This parameter indicates the calculated temperature (degrees of heat) of the air that is flowing through the evaporator. The temperature is calculated by the HVAC controller using parameters such as outside air temperature, evaporator temperature and compressor status. An evaporator is a device in a process used to turn the liquid form of a chemical substance into its gaseous-form/vapor.
Coolant Heater Control Module Inlet Coolant Temperature	Active/Inactive	Varies	The scan tool displays this parameter Identifier as a value between -40°C and 150°C approximately to reflect Inlet Coolant Temperature into Coolant Heater Control Module, reported by Coolant Heater Control Module.

Parameter	System State	Expected Value	Description
Coolant Heater Control Module LIN Bus	True	True	The scan tool displays this parameter identifier as False or True. This parameter identifier is indicative of a Signal State of Coolant Heater Operation Enable from Electronic Climate Control to Coolant Heater Control Module on Local Interconnect Network Bus that allows Coolant Heater to Start Diagnostics whether or not Heating is commanded.
Coolant Heater Control Module Status	Normal Function	Normal Function	The scan tool displays Normal Function, Temporarily Limited, Recoverable Malfunction, or Non-Recoverable Malfunction. This parameter is used to determine whether the Coolant Heater Control Module is operating normally (Normal Operation) or if there is a problem with a) the Coolant Heater Control Module (scan tool displays only Limited Operation) or b) there is a blockage or restriction in coolant flow (scan tool switches between Normal Running and Limited Operation).
Coolant Heater Control Module Temperature	Varies	Varies	The scan tool displays temperature in Celsius (°C). This is the temperature inside the coolant heater control module.
Coolant Heater Current	Varies	Varies	The scan tool displays the present electric current flow value of the coolant heater in amps.
Desired Engine Coolant Bypass Valve Position	Not Requested	Not Requested	The scan tool displays Not Requested, Bypass, or Connected. This parameter displays the requested target position of the Coolant Bypass Valve.
Engine Coolant Heater Command	Varies	Varies	The scan tool displays in kW. This is the serial data command to control the device to heat up the coolant in case the engine does not produce enough heat.
Front Blower Motor State	Varies	Varies	The scan tool displays Not Determined, Off, Auto, Manual, or Manual Max. This parameter indicates the current mode or condition of the front blower motor.
Heater Pump Speed	Varies	Varies	The scan tool displays the heater pump speed in RPM. This is a coolant pump which circulates heat through the heater core to maintain cabin temperature. While the vehicle is in Autostop, the pump can interrupt the Autostop timing, if the cabin temperature is too low.
HVAC Afterblow	Inactive	Inactive	The scan tool displays Active or Inactive. This parameter displays whether the afterblow function is in a functioning state or not. The afterblow function temporarily turns on the fan after the vehicle is off to dry the evaporator core which will reduce microbial growth and odors. An evaporator is a device in a process used to turn the liquid form of a chemical substance into its gaseous-form/vapor.
HVAC Afterblow - Blower Motor Speed	Varies	Varies	This parameter displays how fast the fan is running while in an afterblow condition. The fan speed is displayed as steps from 0 to 12 with 0 being off and 12 being the fastest speed. The afterblow function temporarily turns on the fan after the vehicle is off to dry the evaporator core which will reduce microbial growth and odors. An evaporator is a device in a process used to turn the liquid form of a chemical substance into its gaseous-form/vapor.
HVAC Afterblow Configuration			
HVAC System Heater Core Coolant Flow Rate Feedback	Varies	Varies	The scan tool displays the coolant flowing rate in L/min. The HVAC System Heater Core contains coolant that flows through the core to heat the vehicle passenger compartment. The system is controlled by a module. This parameter indicates the coolant flow rate through the heater core requested by the module.
HVAC System Heater Core Coolant Flow Rate Request	Varies	Varies	The scan tool displays the coolant flowing rate in L/s. The HVAC System Heater Core contains coolant that flows through the core to heat the vehicle passenger compartment. The system is controlled by a module. This parameter indicates the coolant flow rate through the heater core requested by the module.

Parameter	System State	Expected Value	Description
Rear Defogger Activated by Automatic	Yes	Yes	The Auto Rear Defogger (heating wires in the glass) can automatically activate if the ambient temperature is below 5°C. This parameter has the states Yes/No.
Rear Defogger Command			
Rear Defogger Deactivation Reason			
Rear Defogger Indicator			
Rear Defogger Mode			
Rear Defogger On Time Remaining			
Rear Defogger Relay Command			
Rear Defogger Status			
Rear Defogger Switch			
Sun Azimuth			
Sun Elevation			

Body Control Module HVAC Door Position Data 1 Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Air Recirculation Door Actuator Command		Varies	This is the serial data command to move the flap of the Recirculation Door, in counts or pulses, for a HVAC system door. Recirculation is using inside air for the HVAC system, instead of outside fresh air.
Left Temperature Door Position Command		Varies	The scan tool displays percentage (%). This is the serial data command to control the actual position (angle) of the flap that controls the air flow (and therefore the air temperature) through the left heater core.
Low Speed Pollution Taking Recirc Action			

Body Control Module HVAC Door Position Data 2 Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Right Temperature Door Position Command		Varies	The scan tool displays percentage (%). This is the serial data command to move the position (angle) of the flap that controls the air flow (and therefore the air temperature) through the right heater core.

Body Control Module HVAC Faceplate Data Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			

Parameter	System State	Expected Value	Description
Air Recirculation Door Position	ÃÃÃ"	Varies	The scan tool displays the command status of the HVAC control module recirculation switch: Not Determined, Auto, Fresh Air, or Recirc. The mode of recirculation means the air inside the vehicle is recirculated rather than drawn from outside.
Air Quality Sensor Switch	ÃÃÃ"	Off	The scan tool displays Off, Low Sensitivity, or Hi Sensitivity. This parameter describes the switch state of the Air Quality Sensor on the HVAC Faceplate.
Auxiliary Blower Motor Switch	ÃÃÃ"	Off	The scan tool displays Not Determined, Off, Auto, Manual, or Manual Max. This parameter reflects the current state of the switch in the rear of the vehicle that controls the rear blower. This describes the rear blower motor for the HVAC system. This is supplemental to the primary blower fan.
Desired Left Temperature	ÃÃÃ"	Varies	The scan tool displays Temp Set Off, Temp Set Normal, Temp Set Low, or Temp Set Hi. This parameter displays the setting of left temperature.
Desired Right Temperature	ÃÃÃ"	Varies	The scan tool displays Temp Set Off, Temp Set Normal, Temp Set Low, or Temp Set Hi. This parameter displays the setting of right temperature.

Body Control Module ÃÃÃ" Hybrid/EV Data ÃÃÃ" Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Coolant Heater Control Module Temperature	ÃÃÃ"	Varies	The scan tool displays temperature in Celsius (Ã,Ã°C). This is the temperature inside the coolant heater control module.

Body Control Module ÃÃÃ" Indicator Data ÃÃÃ" Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Child Security Lock Indicator command	ÃÃÃ"	Off	The scan tool displays On or Off.
Lane Departure Warning Indicator Status	ÃÃÃ"	Off	The scan tool displays On or Off.
Security Indicator Command	ÃÃÃ"	Off	The scan tool displays On or Off.

Body Control Module ÃÃÃ" Interior Lighting Data ÃÃÃ" Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Cargo Lamp Command	ÃÃÃ"	Inactive	The scan tool displays Active or Inactive.
Cargo Lamp Indicator	ÃÃÃ"	Inactive	The scan tool displays Active or Inactive.
Cargo Mirror Lamp	ÃÃÃ"	Inactive	The scan tool displays Active or Inactive.
Dome Lamp Command	ÃÃÃ"	Off	The scan tool displays On or Off.
Door Ambient Lighting Command	ÃÃÃ"	Off	The scan tool displays On or Off.
Front Courtesy Lamps	ÃÃÃ"	Inactive	The scan tool displays Active or Inactive.
Front Footwell Ambient Lighting Command	ÃÃÃ"	Off	The scan tool displays On or Off.
Instrument Panel Ambient Lighting Command	ÃÃÃ"	Off	The scan tool displays On or Off.
Interior Courtesy Lamps Command	ÃÃÃ"	Inactive	The scan tool displays Active or Inactive.
Left Turn Signal Switch	ÃÃÃ"	Inactive	The scan tool displays Active or Inactive.
Right Turn Signal Switch	ÃÃÃ"	Inactive	The scan tool displays Active or Inactive.
Overhead Ambient Lighting Command	ÃÃÃ"	Off	The scan tool displays On or Off.
Park Lamps Indicator	ÃÃÃ"	Inactive	The scan tool displays Active or Inactive.
Rear Footwell Ambient Lighting Command	ÃÃÃ"	Off	The scan tool displays On or Off.
Welcome Lighting	ÃÃÃ"	Off	The scan tool displays On or Off.

Body Control Module ÃÃÃ" Keyless Entry Data ÃÃÃ" Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Current Number of Key Fobs Programmed	ÃÃÃ"	Varies	This parameter indicates how many transmitters have been learned to the Body Control Module currently.
Key Fob Identifier	ÃÃÃ"	Varies	This parameter refers to the part number of key fob or transmitter being placed in the backup pocket location that uses the radio transmitter inside a vehicle key used to control the central door locking via button presses.

Parameter	System State	Expected Value	Description
Hands-Free Liftgate Sensor Lamp	Off	Off	The scan tool displays On or Off.
Left Stop Lamp Command	Off	Off	The scan tool displays On or Off.
Right Stop Lamp Command	Off	Off	The scan tool displays On or Off.
Left Tail Lamp	Off	Off	The scan tool displays On or Off.
Right Tail Lamp	Off	Off	The scan tool displays On or Off.
Left Auxiliary Tail Lamp	Off	Off	The scan tool displays On or Off.
Right Auxiliary Tail Lamp	Off	Off	The scan tool displays On or Off.
Left Rear Turn Signal Lamp Command	Off	Off	The scan tool displays On or Off.
Right Rear Turn Signal Lamp Command	Off	Off	The scan tool displays On or Off.
Left Trailer Turn Signal/Stop Lamp Command	Off	Off	The scan tool displays On or Off.
Right Trailer Turn Signal/Stop Lamp Command	Off	Off	The scan tool displays On or Off.
License Plate Lamps Command	Off	Off	The scan tool displays On or Off.
Rear Fog Lamp Command	Off	Off	The scan tool displays On or Off.
Tail Lamps	Off	Off	The scan tool displays On or Off.
Trailer Backup Lamps Command	Off	Off	The scan tool displays On or Off.

Body Control Module Rear HVAC Data Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Lower Rear Duct Temperature	Varies	Varies	The scan tool displays temperature in Celsius (°C). This is the temperature reading in the HVAC air routing system.
Upper Rear Duct Temperature	Varies	Varies	The scan tool displays temperature in Celsius (°C). This is the temperature reading in the HVAC air routing system.

Body Control Module Remote Vehicle Start Data Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Engine Stalled During Remote Vehicle Start Mode	Varies	Varies	This parameter indicates the number of times the engine was stalled or unexpectedly stops running. This is part of the Remote Vehicle Start subsystem that disables remote start.
Park Lamps Request	No	No	The scan tool displays Yes or No. This parameter refers to the state (on or off) of the electronic request to illuminate the lamps located on the exterior four corners of the vehicle.
Remote Vehicle Start Disabled By Driver	Varies	Varies	This parameter determines if remote vehicle start was turned off by the driver. Remote start is activated by pressing a button on the key fob which allows the engine to start when the key fob is several yards from the vehicle.
Remote Vehicle Start Request	No	No	The scan tool displays Yes or No. This parameter displays the On / Off position or status for the remote start functionality.
Remote Vehicle Start Source	None	None	The scan tool displays None, Key Fob 1, Key Fob 2, Key Fob 3, Enhanced Services, or Virtual Key. This parameter indicates which key fob was used for Remote Vehicle Start such as husband, wife, child, Onstar, bluetooth, etc...
Remote Vehicle Start Status	Inactive	Inactive	The scan tool displays Yes or No. This parameter indicates the state of remote start which is activated by pressing a button on the key fob which allows the engine to start when the key fob is several yards from the vehicle. States are active or inactive.
Remote Vehicle Start Timer	Varies	Varies	This parameter indicates the amount of time the engine will run after a remote start request. One additional request is allowed which will reset the timer once. The scan tool displays time remaining in seconds.
Run/Crank Relay Command	None	None	The scan tool displays None, Active, or Deactive. This parameter indicates the state (off or on) of command for an ignition relay control circuit. "Run" means engine is started and keeps going, and "crank" engages the starter when the key in the ignition switch turns making engine turn over.
Turn Signal Lamps Request	No	No	The scan tool displays Yes or No. This parameter indicates the request for the turn signal lamps to flash during a remote start request and remain on for visual confirmation the remote start is functioning.

Body Control Module Remote Vehicle Start Disable History Data Scan Tool Data Parameters

Parameter	System State	Expected Value	Description

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Remote Vehicle Start Disable History 1	Ï€Ï€Ï€	Varies	The scan tool displays Valet Mode, Run Abort, Ignition Switch Status, Hood Open Switch Signal Invalid, Hood Open Switch, Hazard Lamps Switch, Key Fob in Vehicle, Crank Abort, Brake Transmission Shift Interlock Solenoid Actuator, Content Theft Deterrent Mode, Power Mode Incorrect, Battery Voltage, Remote Vehicle Start Crank Time, or Folding Top Position. This parameter indicates one of the last eight reasons the powertrain has disabled the remote vehicle start.
Remote Vehicle Start Disable History 2	Ï€Ï€Ï€	Varies	The scan tool displays Valet Mode, Run Abort, Ignition Switch Status, Hood Open Switch Signal Invalid, Hood Open Switch, Hazard Lamps Switch, Key Fob in Vehicle, Crank Abort, Brake Transmission Shift Interlock Solenoid Actuator, Content Theft Deterrent Mode, Power Mode Incorrect, Battery Voltage, Remote Vehicle Start Crank Time, or Folding Top Position. This parameter indicates one of the last eight reasons the powertrain has disabled the remote vehicle start.
Remote Vehicle Start Disable History 3	Ï€Ï€Ï€	Varies	The scan tool displays Valet Mode, Run Abort, Ignition Switch Status, Hood Open Switch Signal Invalid, Hood Open Switch, Hazard Lamps Switch, Key Fob in Vehicle, Crank Abort, Brake Transmission Shift Interlock Solenoid Actuator, Content Theft Deterrent Mode, Power Mode Incorrect, Battery Voltage, Remote Vehicle Start Crank Time, or Folding Top Position. This parameter indicates one of the last eight reasons the powertrain has disabled the remote vehicle start.

Body Control Module Ï€Ï€Ï€” Seat Heating/Venting/Cooling Data Ï€Ï€Ï€” Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Seat Heating/Venting/Cooling Load Shed	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Inactive. When this parameter is active, it indicates the Heating/Venting/Cooling system is shutdown to reduce strain on the vehicle electrical system which is experiencing too high of a current draw.
Left Front Seat Heating/Venting/Cooling Operating Conditions	Ï€Ï€Ï€	Varies	The scan tool displays Remote Vehicle Start, Automatic, Manual, or Autostop Request. The functional behavior of heated seats is dependent on its determined operational state. This parameter indicates the defined state which it is operating in.
Left Front Seat Heating/Venting/Cooling Requested Mode	Ï€Ï€Ï€	Varies	The scan tool displays Off, Seat Back Heating, Seat Back and Cushion Heating, or Seat Venting/Cooling. This parameter indicates the type of Heated/Vented Seat function being requested, as determined by the Body Control Module tracking various inputs.
Left Front Seat Heating/Venting/Cooling Requested Level	Ï€Ï€Ï€	Varies	The scan tool displays Off, High, Medium, or Low. This parameter indicates the type of Heated/Vented Seat level of intensity being requested as determined by the Body Control Module tracking various inputs.
Left Front Seat Heating/Venting/Cooling Mode	Ï€Ï€Ï€	Varies	The scan tool displays Off, Seat Back Heating, Seat Back and Cushion Heating, or Seat Venting/Cooling. This parameter indicates the type of Heated/Vented Seat function being applied as commanded by the Body Control Module software based on a number of factors.
Left Front Seat Heating/Venting/Cooling Level	Ï€Ï€Ï€	Varies	The scan tool displays Off, High, Medium, or Low. This parameter indicates the type of Heated/Vented Seat level of intensity being applied as commanded by the Body Control Module software based on a number of factors.
Left Front Seat Blower Command	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Inactive. This parameter can be used for setting various blower speeds but service tool will only turn on high to verify module outputs and fan operation.
Right Front Seat Heating/Venting/Cooling Operating Conditions	Ï€Ï€Ï€	Varies	The scan tool displays Remote Vehicle Start, Automatic, Manual, or Autostop Request. The functional behavior of heated seats is dependent on its determined operational state. This parameter indicates the defined state which it is operating in.
Right Front Seat Heating/Venting/Cooling Requested Mode	Ï€Ï€Ï€	Varies	The scan tool displays Off, Seat Back Heating, Seat Back and Cushion Heating, or Seat Venting/Cooling. This parameter indicates the type of Heated/Vented Seat function being requested, as determined by the Body Control Module tracking various inputs.
Right Front Seat Heating/Venting/Cooling Requested Level	Ï€Ï€Ï€	Varies	The scan tool displays Off, High, Medium, or Low. This parameter indicates the type of Heated/Vented Seat level of intensity being requested as determined by the Body Control Module tracking various inputs.
Right Front Seat Heating/Venting/Cooling Mode	Ï€Ï€Ï€	Varies	The scan tool displays Off, Seat Back Heating, Seat Back and Cushion Heating, or Seat Venting/Cooling. This parameter indicates the type of Heated/Vented Seat function being applied as commanded by the Body Control Module software based on a number of factors.
Right Front Seat Heating/Venting/Cooling Level	Ï€Ï€Ï€	Varies	The scan tool displays Off, High, Medium, or Low. This parameter indicates the type of Heated/Vented Seat level of intensity being applied as commanded by the Body Control Module software based on a number of factors.
Right Front Seat Blower Command	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Inactive. This parameter can be used for setting various blower speeds but service tool will only turn on high to verify module outputs and fan operation.

Body Control Module "Sunroof Data" Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Sunroof Closed	"	Yes	The scan tool displays Yes or No. This parameter indicates that sunroof is not open. The sunroof is a fixed or operable opening in an automobile roof which allows light and/or fresh air to enter the passenger compartment.
Sunroof Open	"	Yes	The scan tool displays Yes or No. This parameter indicates the sunroof state that it is not closed. The sunroof is a fixed or operable opening in an automobile roof which allows light and/or fresh air to enter the passenger compartment.
Sunroof Switch	"	Varies	The scan tool displays Inactive, Open, Close, or Stop. This is the switch to move the sunroof.
Sunroof Switch Fault	"	Varies	The scan tool displays Short to Ground, Short to Battery, Stuck, or None.
Sunroof Not Learned	"	No	The scan tool displays Yes or No. This parameter indicates that the control module has not learned the sunroof (the glass) home position.
Sunroof Motor Overtemperature	"	No	The scan tool displays Yes or No. This parameter indicates that the motor that operates the sunroof motor is too hot to operate properly.
Sunroof Obstruction	"	No	The scan tool displays Yes or No. This parameter indicates that an obstruction is detected which prevents the movement of the sunroof.
Sunroof System Voltage Low	"	No	The scan tool displays Yes or No. This parameter indicates the sunroof performance is degraded due to voltage being below a certain threshold.
Sunroof Vent	"	No	The scan tool displays Yes or No. This parameter indicates the sunroof is partially open.
Sunshade Closed	"	Yes	The scan tool displays Yes or No.
Sunshade Open	"	Yes	The scan tool displays Yes or No.
Sunshade Switch	"	Varies	The scan tool displays Inactive, Open, Close, or Stop. This is the switch to move the sunshade (the non-transparent cover below the sunroof).
Sunshade Switch Fault	"	Varies	The scan tool displays Short to Ground, Short to Battery, Stuck, or None.
Sunshade Not Learned	"	No	The scan tool displays Yes or No. This parameter indicates that the sunshade position is not learned.
Sunshade Motor Overtemperature	"	Inactive	The scan tool displays Active or Inactive. This parameter indicates that the motor that operates the sunshade is too hot to operate properly.
Sunshade Obstruction	"	No	The scan tool displays Yes or No. This parameter indicates that an obstruction is detected which prevents the movement of the sunshade.
Sunshade System Voltage Low	"	No	The scan tool displays Yes or No. This parameter indicates that the sunshade performance is degraded due to voltage being below a certain threshold.

Body Control Module "Tire Pressure Monitoring Sensor Data" Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Left Front Tire Pressure Sensor Identification	"	Varies	This parameter refers to the part number of the electronic device that measures the force of air on the interior surface of the left, front tire.
Left Front Tire Pressure Sensor Battery Status	"	Normal	The scan tool displays Normal or Low Pressure. This parameter displays the state of the power supply (battery) for the left front tire pressure sensor which is an electronic device that measures the force of air on the interior surface of the tire.
Left Front Tire Pressure Sensor Status	"	Varies	This parameter will display different types of sensor faults. The tire pressure sensors are mounted inside a tire assembly on valve stems or wheel rims.
Left Front Tire Pressure Sensor Signal Strength	"	Varies	The tire pressure monitoring system detects a pressure loss at the tires. Each wheel is equipped with a pressure sensor to measure the pressure and temperature. This parameter displays the signal strength of the sensor.
Left Front Tire Pressure Signal Frame Count	"	Varies	This is the number of data frames the tire pressure sensor is transmitting while driving.

Parameter	System State	Expected Value	Description
Left Front Tire Pressure Signal Packet Count	00000000	Varies	This is the number of packet counts the tire pressure sensor is transmitting while driving.
Left Rear Tire Pressure Sensor Identification	00000000	Varies	This parameter refers to the part number of the electronic device that measures the force of air on the interior surface of the left, rear tire.
Left Rear Tire Pressure Sensor Battery Status	00000000	Normal	The scan tool displays Normal or Low Pressure. This parameter displays the state of the power supply (battery) for the left rear tire pressure sensor which is an electronic device that measures the force of air on the interior surface of the tire.
Left Rear Tire Pressure Sensor Status	00000000	Varies	This parameter will display different types of sensor faults. The tire pressure sensors are mounted inside a tire assembly on valve stems or wheel rims.
Left Rear Tire Pressure Sensor Signal Strength	00000000	Varies	The tire pressure monitoring system detects a pressure loss at the tires. Each wheel is equipped with a pressure sensor to measure the pressure and temperature. This parameter displays the signal strength of the sensor.
Left Rear Tire Pressure Signal Frame Count	00000000	Varies	This is the number of data frames the tire pressure sensor is transmitting while driving.
Left Rear Tire Pressure Signal Packet Count	00000000	Varies	This is the number of packet counts the tire pressure sensor is transmitting while driving.
Right Front Tire Pressure Sensor Identification	00000000	Varies	This parameter will display the six digit identification number of the sensor indicated which is an electronic device that measures the force of air on the interior surface of the tire.
Right Front Tire Pressure Sensor Battery Status	00000000	Normal	The scan tool displays Normal or Low Pressure. This parameter displays the state of the power supply (battery) for the right front tire pressure sensor which is an electronic device that measures the force of air on the interior surface of the tire.
Right Front Tire Pressure Sensor Status	00000000	Varies	This parameter will display different types of sensor faults. The tire pressure sensors are mounted inside a tire assembly on valve stems or wheel rims.
Right Front Tire Pressure Sensor Signal Strength	00000000	Varies	The tire pressure monitoring system detects a pressure loss at the tires. Each wheel is equipped with a pressure sensor to measure the pressure and temperature. This parameter displays the signal strength of the sensor.
Right Front Tire Pressure Signal Frame Count	00000000	Varies	This is the number of data frames the tire pressure sensor is transmitting while driving.
Right Front Tire Pressure Signal Packet Count	00000000	Varies	This is the number of packet counts the tire pressure sensor is transmitting while driving.
Right Rear Tire Pressure Sensor Identification	00000000	Varies	This parameter will display the six digit identification number of the sensor indicated which is an electronic device that measures the force of air on the interior surface of the tire.
Right Rear Tire Pressure Sensor Battery Status	00000000	Normal	The scan tool displays Normal or Low Pressure. This parameter displays the state of the power supply (battery) for the right rear tire pressure sensor which is an electronic device that measures the force of air on the interior surface of the tire.
Right Rear Tire Pressure Sensor Status	00000000	Varies	This parameter will display different types of sensor faults. The tire pressure sensors are mounted inside a tire assembly on valve stems or wheel rims.
Right Rear Tire Pressure Sensor Signal Strength	00000000	Varies	The tire pressure monitoring system detects a pressure loss at the tires. Each wheel is equipped with a pressure sensor to measure the pressure and temperature. This parameter displays the signal strength of the sensor.
Right Rear Tire Pressure Signal Frame Count	00000000	Varies	This is the number of data frames the tire pressure sensor is transmitting while driving.
Right Rear Tire Pressure Signal Packet Count	00000000	Varies	This is the number of packet counts the tire pressure sensor is transmitting while driving.

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Left Front Tire Pressure	ÅçÄ€Ä"	Varies	Tire pressure is a measure of the amount of air in a vehicle's tires, in pounds per square inch (PSI). This parameter is the amount of pressure present in the front of the vehicle on the left side.
Left Front Tire Pressure Sensor Mode	ÅçÄ€Ä"	Varies	The scan tool displays Learn Mode - Remotely Triggered, Undefined, Re-Measure, Drive Mode, Power Down, Wake-Up, or Learn Mode - Pressure Triggered. This parameter refers to the operational level of the electronic device that measures the force of air on the interior surface of the left front tire.
Left Front Tire Pressure Status	ÅçÄ€Ä"	Varies	The scan tool displays Unknown, Nominal, Very Low Pressure, Low, Weak Signal, or High. This parameter indicates the state of the tire based on tire pressure.
Left Front Tire Temperature	ÅçÄ€Ä"	Varies	The tire pressure monitoring system detects a pressure loss at the tires. Each wheel is equipped with a pressure sensor to measure the pressure and temperature. This parameter displays the temperature of the tire.
Left Rear Tire Pressure	ÅçÄ€Ä"	Varies	Tire pressure is a measure of the amount of air in a vehicle's tires, in pounds per square inch (PSI). This parameter is the amount of pressure present in the rear of the vehicle on the left side.
Left Rear Tire Pressure Sensor Mode	ÅçÄ€Ä"	Varies	The scan tool displays Learn Mode - Remotely Triggered, Undefined, Re-Measure, Drive Mode, Power Down, Wake-Up, or Learn Mode - Pressure Triggered. This parameter refers to the operational level of the electronic device that measures the force of air on the interior surface of the left rear tire.
Left Rear Tire Pressure Status	ÅçÄ€Ä"	Varies	The scan tool displays Unknown, Nominal, Very Low Pressure, Low, Weak Signal, or High. This parameter identifies status of left rear tire pressure.
Left Rear Tire Temperature	ÅçÄ€Ä"	Varies	The tire pressure monitoring system detects a pressure loss at the tires. Each wheel is equipped with a pressure sensor to measure the pressure and temperature. This parameter displays the temperature of the tire.
Right Front Tire Pressure	ÅçÄ€Ä"	Varies	Tire pressure is a measure of the amount of air in a vehicle's tires, in pounds per square inch (PSI). This parameter is the amount of pressure present in the front of the vehicle on the right side.
Right Front Tire Pressure Sensor Mode	ÅçÄ€Ä"	Varies	The scan tool displays Learn Mode - Remotely Triggered, Undefined, Re-Measure, Drive Mode, Power Down, Wake-Up, or Learn Mode - Pressure Triggered. This parameter refers to the operational level of the electronic device that measures the force of air on the interior surface of the right front tire.
Right Front Tire Pressure Status	ÅçÄ€Ä"	Varies	The scan tool displays Unknown, Nominal, Very Low Pressure, Low, Weak Signal, or High. This parameter indicates the state of the tire based on tire pressure.
Right Front Tire Temperature	ÅçÄ€Ä"	Varies	The tire pressure monitoring system detects a pressure loss at the tires. Each wheel is equipped with a pressure sensor to measure the pressure and temperature. This parameter displays the temperature of the tire.
Right Rear Tire Pressure	ÅçÄ€Ä"	Varies	Tire pressure is a measure of the amount of air in a vehicle's tires, in pounds per square inch (PSI). This parameter is the amount of pressure present in the rear of the vehicle on the right side.
Right Rear Tire Pressure Sensor Mode	ÅçÄ€Ä"	Varies	The scan tool displays Learn Mode - Remotely Triggered, Undefined, Re-Measure, Drive Mode, Power Down, Wake-Up, or Learn Mode - Pressure Triggered. This parameter refers to the operational level of the electronic device that measures the force of air on the interior surface of the right rear tire.
Right Rear Tire Pressure Status	ÅçÄ€Ä"	Varies	The scan tool displays Unknown, Nominal, Very Low Pressure, Low, Weak Signal, or High. This parameter indicates the state of the tire based on tire pressure.
Right Rear Tire Temperature	ÅçÄ€Ä"	Varies	The tire pressure monitoring system detects a pressure loss at the tires. Each wheel is equipped with a pressure sensor to measure the pressure and temperature. This parameter displays the temperature of the tire.
Last Tire Fill Alert Notification	ÅçÄ€Ä"	Varies	The scan tool displays Left Rear Inner, Left Rear Outer, Right Rear Outer, Left Front, Right Rear Inner, Spare, Unknown, or Right Front. Tire Fill Alert is a software feature that indicates when a predetermined pressure level is reached performed on the last tire.
Tire Fill Alert System State - Current	ÅçÄ€Ä"	Varies	The scan tool displays Non Monitor, Monitoring, Active, or Achieved. Tire Fill Alert is software feature in the Tire Pressure Module system. Basically, the Tire Pressure Module system enables the High Pressure Warnings when the air pressure level goes higher than target pressure level. This parameter indicates the immediate status of the system in the present power cycle.

Parameter	System State	Expected Value	Description
Tire Fill Alert System State - Previous	Ï€Ï€Ï€	Varies	The scan tool displays Non Monitor, Monitoring, Active, or Achieved. Tire Fill Alert is software feature in the Tire Pressure Module System. Basically, the Tire Pressure Module system enables the High Pressure Warnings when the air pressure level goes higher than target pressure level. This parameter indicates the status in the former power cycle.
Self Auto Learn Status - Left Front Sensor	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Inactive. For vehicles with Self Auto Learn capable sensors, this parameter is used to define transmission during rolling Self Auto Learn state. A value of 1 means Self Auto Learn rolling state is Active and a value of 0 sets for all other non Self Auto Learn transmissions.
Self Auto Learn Status - Left Rear Sensor	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Inactive. For vehicles with Self Auto Learn capable sensors, this parameter is used to define transmission during rolling Self Auto Learn state. A value of 1 means Self Auto Learn rolling state is Active and a value of 0 sets for all other non Self Auto Learn transmissions.
Self Auto Learn Status - Right Front Sensor	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Inactive. For vehicles with Self Auto Learn capable sensors, this parameter is used to define transmission during rolling Self Auto Learn state. A value of 1 means Self Auto Learn rolling state is Active and a value of 0 sets for all other non Self Auto Learn transmissions.
Self Auto Learn Status - Right Rear Sensor	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Inactive. For vehicles with Self Auto Learn capable sensors, this parameter is used to define transmission during rolling Self Auto Learn state. A value of 1 means Self Auto Learn rolling state is Active and a value of 0 sets for all other non Self Auto Learn transmissions.

Body Control Module Ï€Ï€Ï€ Windows Data Ï€Ï€Ï€ Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
All Windows Up/Down	Ï€Ï€Ï€	Close	The scan tool displays Open or Close.
Driver Window Learned	Ï€Ï€Ï€	Yes	The scan tool displays Yes or No.
Driver Window Motor Relay Fault Status	Ï€Ï€Ï€	OK	This scan tool displays OK or Malfunction.
Left Front Window Express Down	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Inactive.
Left Front Window Express Up	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Inactive.
Left Front Window Learned Indicator	Ï€Ï€Ï€	Not Active	The scan tool displays Active or Not Active.
Left Front Window Lockout Status	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Inactive.
Left Front Window Motor Current	Ï€Ï€Ï€	Varies	The scan tool displays left front window motor current in amperes (A).
Left Front Window Switch	Ï€Ï€Ï€	Inactive	The scan tool displays Inactive, Up, Express Up, Down, Express Down, or Stop.
Left Rear Window Express Up	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Inactive.
Left Rear Window Express Down	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Inactive.
Left Rear Window Learned	Ï€Ï€Ï€	Yes	The scan tool displays Yes or No.
Left Rear Window Learned Indicator	Ï€Ï€Ï€	Not Active	The scan tool displays Active or Not Active.
Left Rear Window Lockout Status	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Not Active.
Left Rear Window Motor Current	Ï€Ï€Ï€	Varies	The scan tool displays left rear window motor current in amperes (A).
Left Rear Window Motor Relay Fault Status	Ï€Ï€Ï€	OK	This scan tool displays OK or Malfunction.
Left Rear Window Switch	Ï€Ï€Ï€	Inactive	The scan tool displays Inactive, Up, Express Up, Down, Express Down, or Stop.
Passenger Window Learned	Ï€Ï€Ï€	Yes	The scan tool displays Yes or No.
Passenger Window Motor Relay Fault Status	Ï€Ï€Ï€	OK	This scan tool displays OK or Malfunction.
Right Front Window Express Up	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Inactive.
Right Front Window Express Down	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Inactive.
Right Front Window Learned Indicator	Ï€Ï€Ï€	Not Active	The scan tool displays Active or Not Active.
Right Front Window Lockout Status	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Inactive.
Right Front Window Motor Current	Ï€Ï€Ï€	Varies	The scan tool displays right front window motor current in amperes (A).
Right Front Window Switch	Ï€Ï€Ï€	Inactive	The scan tool displays Inactive, Up, Express Up, Down, Express Down, or Stop.
Right Rear Window Express Up	Ï€Ï€Ï€	Inactive	The scan tool displays Active or Inactive.

Parameter	System State	Expected Value	Description
Right Rear Window Express Down	Active	Inactive	The scan tool displays Active or Inactive.
Right Rear Window Learned	Active	Yes	The scan tool displays Yes or No.
Right Rear Window Learned Indicator	Active	Not Active	The scan tool displays Active or Not Active.
Right Rear Window Lockout Status	Active	Inactive	The scan tool displays Active or Inactive.
Right Rear Window Motor Current	Active	Varies	The scan tool displays right rear window motor current in amperes (A).
Right Rear Window Motor Relay Fault Status	Active	OK	This scan tool displays OK or Malfunction.
Right Rear Window Switch	Active	Inactive	The scan tool displays Inactive, Up, Express Up, Down, Express Down, or Stop.
Window Lockout Indicator	Active	Inactive	The scan tool displays Active or Inactive.

Body Control Module Wiper/Washer Data Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Windshield Washer Switch	Active	Off	This parameter is used to display the state of the windshield washer switch. The states are On or Off. This is the electrical connection that controls the input to the motor that causes washer fluid to be dispensed on the front windshield.
Windshield Wiper Switch	Active	Off	The scan tool displays Off, Sensitivity 1, Sensitivity 2, Sensitivity 3, Sensitivity 4, Sensitivity 5, Low, or High. This is the electrical connection that controls the input to the motor that causes movement of the wiper arm to clear the front windshield.
Windshield Wiper Mode	Active	Varies	The scan tool displays Low, High, Delay 1, Delay 2, Delay 3, Delay 4, Delay 5, Suspended Due to Engine Crank, Parked, Service Park, Depressed Park, or Winter Park. This parameter displays the windshield wiper mode status.
Windshield Wiper Auto Mode Switch	Active	Active	Active
Windshield Wiper Motor Protection Mode	Active	Active	Active

Body Control Module Tire Pressure Monitoring System Data Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Selected Front Tire Type	Active	Standard Load	The scan tool displays No Tire Type, Standard Load, Extra Load, Load Range C, Load Range D, or Load Range E. This parameter displays the front tire type.
Front Tire Pressure on Placard	Active	Varies	This parameter reads the tire pressures selected for the front of the vehicle during programming / vehicle setup. Placard is the label printed on the driver side door. The recommended tire inflation pressures are listed on that label. The purpose of this parameter is to monitor for vehicles which have for some reason cleared the placard values to zero.
Front Tire Pressure on Placard (Eco)	Active	Varies	This parameter shows the tire pressure printed on the label (placard) in the driver side door. There are 3 pressures given on the label for Comfort, Eco, Fully Loaded.
Front Tire Pressure on Placard (Comfort)	Active	Varies	This parameter shows the tire pressure printed on the label (placard) in the driver side door. There are 3 pressures given on the label for Comfort, Eco, Fully Loaded.
Front Tire Pressure on Placard (Fully Loaded)	Active	Varies	This parameter shows the tire pressure printed on the label (placard) in the driver side door. There are 3 pressures given on the label for Comfort, Eco, Fully Loaded.
Tire Pressure Monitoring System Regulation Type	Active	Varies	The scan tool displays FMVSS, China, ECER64, or None. The Tire Pressure Monitoring System can be built to follow different legal standards. This parameter shows the name of the regulation (law giving entity), like Federal Motor Vehicle Safety Standards or Economic Commission for Europe.

Body Control Module Tire Pressure Monitoring System Data Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
-----------	--------------	----------------	-------------

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Selected Rear Tire Type	Ã¸Ã¸Ã¸	Standard Load	The scan tool displays No Tire Type, Standard Load, Extra Load, Load Range C, Load Range D, or Load Range E. This parameter is used to display the type of tire selected (Load Range) for rear of the vehicle. The load range of the tire is generally how much weight or load the tire is capable performing.
Rear Tire Pressure on Placard	Ã¸Ã¸Ã¸	Varies	This parameter reads the tire pressures selected for the rear of the vehicle during programming / vehicle setup. Placard is the label printed on the driver side door. The recommended tire inflation pressures are listed on that label. The purpose of this parameter is to monitor for vehicles which have for some reason cleared the placard values to zero.
Rear Tire Pressure on Placard (Eco)	Ã¸Ã¸Ã¸	Varies	This parameter shows the tire pressure printed on the label (placard) in the driver side door. There are 3 pressures given on the label for Comfort, Eco, Fully Loaded.
Rear Tire Pressure on Placard (Comfort)	Ã¸Ã¸Ã¸	Varies	This parameter shows the tire pressure printed on the label (placard) in the driver side door. There are 3 pressures given on the label for Comfort, Eco, Fully Loaded.
Rear Tire Pressure on Placard (Fully Loaded)	Ã¸Ã¸Ã¸	Varies	This parameter shows the tire pressure printed on the label (placard) in the driver side door. There are 3 pressures given on the label for Comfort, Eco, Fully Loaded.
Tire Pressure Monitoring System Regulation Type	Ã¸Ã¸Ã¸	Varies	The scan tool displays FMVSS, China, ECER64, or None. The Tire Pressure Monitoring System can be built to follow different legal standards. This parameter shows the name of the regulation (law giving entity), like Federal Motor Vehicle Safety Standards or Economic Commission for Europe.

Body Control Module Ã¸Ã¸Ã¸ Vehicle Access Data Ã¸Ã¸Ã¸ Scan Tool Data Parameters

Parameter	System State	Expected Value	Description
Operating Conditions: Ignition ON/Vehicle in Service Mode, Vehicle in Park, All Doors Closed			
Child Security Lock - Lock Command	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Inactive or Lock.
Child Security Lock - Unlock Command	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Inactive or Unlock.
Driver Door Open Switch	Ã¸Ã¸Ã¸	Inactive	This scan tool displays Active or Inactive.
Fuel Fill Door Lock	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Inactive or Lock.
Fuel Fill Door Unlock	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Inactive or Unlock.
Glove Box Unlatch Switch	Ã¸Ã¸Ã¸	Locked	The scan tool displays Locked or Unlocked.
Left Front Door Ajar Switch	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Active or Inactive.
Left Front Door Lock Command	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Inactive or Lock.
Left Front Door Lock Indicator Command	Ã¸Ã¸Ã¸	Off	The scan tool displays On or Off.
Left Front Door Lock Switch	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Active or Inactive.
Left Front Door Unlock Command	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Inactive or Unlock.
Left Rear Door Ajar Switch	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Active or Inactive.
Left Rear Door Lock Command	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Inactive or Lock.
Left Rear Door Lock Indicator Command	Ã¸Ã¸Ã¸	Off	The scan tool displays On or Off.
Left Rear Door Unlock Command	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Inactive or Unlock.
Passenger Door Open Switch	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Active or Inactive.
Right Front Door Ajar Switch	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Active or Inactive.
Right Front Door Lock Command	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Inactive or Lock.
Right Front Door Lock Indicator Command	Ã¸Ã¸Ã¸	Off	The scan tool displays On or Off.
Right Front Door Unlock Command	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Inactive or Unlock.
Right Rear Door Ajar Switch	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Active or Inactive.
Right Rear Door Lock Command	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Inactive or Lock.
Right Rear Door Lock Indicator Command	Ã¸Ã¸Ã¸	Off	The scan tool displays On or Off.
Rear Door Unlock Indicator Command	Ã¸Ã¸Ã¸	Off	The scan tool displays On or Off.
Right Rear Door Unlock Command	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Inactive or Unlock.
Rear Closure Release	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Inactive or Unlock.
Rear Closure Lock Command	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Inactive or Lock.
Rear Closure Unlock Command	Ã¸Ã¸Ã¸	Inactive	The scan tool displays Inactive or Unlock.

Parameter	System State	Expected Value	Description
Theft Deterrent Lock Command	ÃÃÃ	Inactive	The scan tool displays Inactive or Lock.
Theft Deterrent Unlock Command	ÃÃÃ	Inactive	The scan tool displays Inactive or Unlock.

Body Control Module ÃÃÃ Content Theft Deterrent Alarm Trigger ÃÃÃ Scan Tool Output Controls

Output Control	Description
Horn Relay Command	This output control refers to a request to initiate the sound for a vehicle's loud warning signal. This output control is used to command the horn relay on and off.

Body Control Module ÃÃÃ Exterior Lighting ÃÃÃ Scan Tool Output Controls

Output Control	Description
Center High Mounted Stop Lamp	This output control is used to activate the center high mounted stop lamp when selecting On. The center high mounted stop lamp should illuminate until commanded Off.
Left Stop Lamp	This output control is used to activate the left stop lamp when selecting On. The left stop lamp should illuminate until commanded Off.
Right Stop Lamp	This output control is used to activate the right stop lamp when selecting On. The right stop lamp should illuminate until commanded Off.
License Plate Lamps	This output control is used to activate the license plate lamps when selecting On. The license plate lamps should illuminate until commanded Off.
Backup Lamps	This output control is used to activate the backup lamps when selecting On. The backup lamps should illuminate until commanded Off.
Left Park Lamps	This output control is used to activate the left park lamps when selecting On. The left park lamps should illuminate until commanded Off.
Right Park Lamps	This output control is used to activate the right park lamps when selecting On. The right park lamps should illuminate until commanded Off.
Left Daytime Running Lamps	This output control is used to activate the left daytime running lamps when selecting On. The left daytime running lamps should illuminate until commanded Off.
Right Daytime Running Lamps	This output control is used to activate the right daytime running lamps when selecting On. The right daytime running lamps should illuminate until commanded Off.
Left Auxiliary Daytime Running Lamps	This output control is used to activate the left auxiliary daytime running lamps when selecting On. The left auxiliary daytime running lamps should illuminate until commanded Off.
Right Auxiliary Daytime Running Lamps	This output control is used to activate the right auxiliary daytime running lamps when selecting On. The right auxiliary daytime running lamps should illuminate until commanded Off.
Left Front Auxiliary Park Lamp Command	This output control is used to activate the left front auxiliary park lamp when selecting On. The left front auxiliary park lamp should illuminate until commanded Off.
Right Front Auxiliary Park Lamp Command	This output control is used to activate the right front auxiliary park lamp when selecting On. The right front auxiliary park lamp should illuminate until commanded Off.
Left Front Turn Signal Lamp Command	This output control is used to activate the left front turn signal lamp when selecting On. The left front turn signal lamp should illuminate until commanded Off.
Right Front Turn Signal Lamp Command	This output control is used to activate the right front turn signal lamp when selecting On. The right front turn signal lamp should illuminate until commanded Off.
Left Turn Signal Repeater Lamp Command	This output control is used to activate the left turn signal repeater lamp when selecting On. The left turn signal repeater lamp should illuminate until commanded Off.
Right Turn Signal Repeater Lamp Command	This output control is used to activate the right turn signal repeater lamp when selecting On. The right turn signal repeater lamp should illuminate until commanded Off.
Rear Fog Lamp(s)	This output control is used to activate the rear fog lamp(s) when selecting On. The rear fog lamp(s) should illuminate until commanded Off.

Body Control Module ÃÃÃ HVAC Controls ÃÃÃ Scan Tool Output Controls

Output Control	Description
Blower Motor	This output control commands the HVAC blower motor speed, displayed in percent. The blower should be turning. The blower motor is a motor with a cage attached to force the air through ducts such as heater, ventilation and defrost ducts.

Body Control Module ÃÃÃ Interior Lighting ÃÃÃ Scan Tool Output Controls

Output Control	Description
Child Security Lock Indicator	This output control is used to activate the child security lock indicator when selecting On. The child security lock indicator should illuminate until commanded Off.
Dome/Reading Lamps Front Overhead Console	This output control is used to activate the dome/reading lamps when selecting On. The dome/reading lamps should illuminate until commanded Off.
Lane Departure Warning Indicator	This output control is used to activate the lane departure warning indicator when selecting On. The lane departure warning indicator should illuminate until commanded Off.

Output Control	Description
Security Indicator	This output control is used to activate the security indicator when selecting On. The security indicator should illuminate until commanded Off.

Body Control Module " Power Mode " Scan Tool Output Controls

Output Control	Description
Run/Crank Relay Command	This output control is used to command run/crank relay active or inactive.
Accessory/Retained Accessory Power Relay Command	This output control is used to command accessory/retained accessory power relay active or inactive.
Run Relay Command	This output control is used to command run relay active or inactive.
Power Mode Timeout	This output control is used to disable or enable the power mode timeout function (not whether timer is active or inactive).
Battery Saver Mode	This output control is used to enable or disable the transport mode state.

Body Control Module " Seat Heating/Venting/Cooling " Scan Tool Output Controls

Output Control	Description
Left Front Seat Heating	This output control is used to turn on/off all outputs for heating elements for the left front seat.
Right Front Seat Heating	This output control is used to turn on/off all outputs for heating elements for the right front seat.
Driver Seat Blower	This output control can be used for setting various blower speeds, but service tool will only turn on high to verify module outputs and fan operation.
Passenger Seat Blower	This output control can be used for setting various blower speeds, but service tool will only turn on high to verify module outputs and fan operation.

Body Control Module " Configuration/Reset Functions " Scan Tool Output Controls

Output Control	Description
Brake Pedal Position Sensor Learn	
Brake Pedal Position Sensor Learn	This output control is used to activate the brake pedal position sensor learn when selecting Learn. The brake pedal position sensor learn procedure should start.
HVAC Actuators Learn	
HVAC Actuators Learn	This output control is used to activate the HVAC actuators learn when selecting Learn. The HVAC actuators learn procedure should start.