

Bosch ADS Software Update – Oct 2018

Ver 3.3

<https://www.boschdiagnostics.com/pro/ads/>

Version 3.3 contains new vehicle and special test additions and enhancements. New model year combined with older model year coverage ensures the best comprehensive diagnostic coverage you need.

Over 8,000 new tests, systems and vehicle-ECU combinations are included in this 3.3 update including improvements and suggestions from professional technicians.

Software and coverage feature details provided throughout these release notes.



Added Coverage - Summary

- **Nissan / Infiniti** – New coverage for 2017-2018 systems
- **Ford** – New coverage for 2017-2018 systems
- **Chrysler/Jeep** - New coverage for 2004-2018 systems
- **GM** – New coverage for 2014-2016 systems
- **BMW** – New coverage for 2006-2017 systems
- **Mercedes** - New coverage for 2006-2017 systems
- **VW/Audi** – New coverage for 2000-2015 systems
- **Smart** – New coverage for 2017 systems

New Software Features

OBDII Readiness Monitor Update

Mode 1 Readiness status update will now display Current Drive Cycle in addition to 'Since Cleared':

The screenshot shows the 'Generic OBDII' application interface. At the top, there is a navigation bar with a back arrow, a 'Demo' indicator, and the date 'October 3, 2018'. Below the navigation bar, the title 'Generic OBDII' is displayed on the left, and three utility buttons ('Use Metric Units', 'Share', 'Help') are on the right. A sidebar on the left contains menu items: 'Readiness Mode 1' (highlighted), 'Data Stream Mode 1', 'Freeze Frame Mode 2', 'DTCs Modes 3, 4, 7, A', and 'O2 Sensors Mode 5'. The main content area is titled 'Readiness (Mode 1)' and contains a table with three columns: 'Monitor Description', 'Since Cleared', and 'Current Drive Cycle'. The table lists five monitors with their respective statuses.

Monitor Description	Since Cleared	Current Drive Cycle
Catalyst Monitor	Ready	Not Ready
2nd Air Monitor	Not Supported	Not Ready
Oxygen Sensor Monitor	Ready	Not Ready
NMHC Catalyst Monitor	Ready	Not Ready
PM Filter Monitor	Not Ready	Not Supported

New Coverage Features (All new coverage details starts on page 18)

BMW

Electronic Parking Brake Service Mode Activation – This test is used to move the electronic parking brake calipers to service position to perform brake service on vehicle (brake pad/rotor replacement)



Electronic Parking Brake Service Mode Activation

[Screen Capture](#)

This service function is used to activate 'Workshop/Assembly Mode'.

In this mode, the parking brake calipers are moved to their open position and the parking brake button is temporarily deactivated (personal protection).

Activation of the Parking Brake Service Mode must be performed for the following repairs:

- Replacement of brake pads
- Replacement of brake calipers or
- Replacement of an EMF actuator.

[Continue](#)
[Abort](#)

Valvetronic running-in Phase – This test is used to reset and adapt valvetronic (VANOS) components to the engine controller after parts replacement or if there are issues with Vanos adaptations being run on the vehicle



Valvetronic Running-in Phase

[Screen Capture](#)

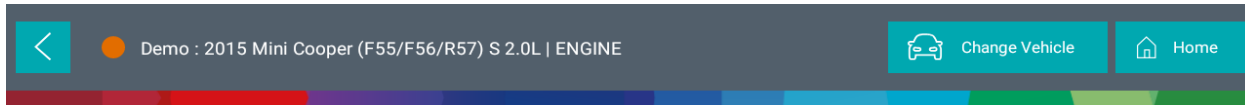
The following test module is necessary if:

- Valvetronic servomotor was changed.
- Teaching-in errors are present.
- Adjustment problems are present.
- Control deviation errors present, for the microscopic smoothing of the eccentric shaft.

[Continue](#)
[Abort](#)

BMW con't.

Valvetronic Limit Position Learning Mode – This test teaches min and max end stop positions to engine controller for maintenance or repairs done on Valvetronic (VANOS) system



Valvetronic Limit Position Learning Mode

[Screen Capture](#)

Each time after repair work has been carried out on the Valvetronic system, the limit positions on the adjusting mechanism must be relearned for minimum and maximum lift. During the adaptation process, the eccentric shaft is twisted slowly in the direction of minimum lift until a point of mechanical resistance is reached. This position at the mechanical limit position is stored. The same procedure applies to the maximum lift position.

[Continue](#)[Abort](#)

Steering Angle Sensor Adjustment – This test calibrates the SAS after replacement or repairs



Steering Angle Sensor Adjustment

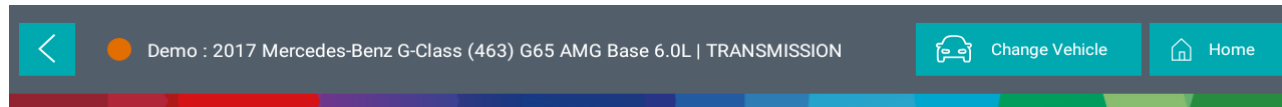
[Screen Capture](#)

Exactly set front wheels to straight-ahead position. Here the steering wheel must be exactly horizontal visually (Approximate setting by eye is sufficient).

[Continue](#)[Abort](#)

MERCEDES- BENZ

Reset Adaptation Parameters – Reset Learned Adaptation Parameters



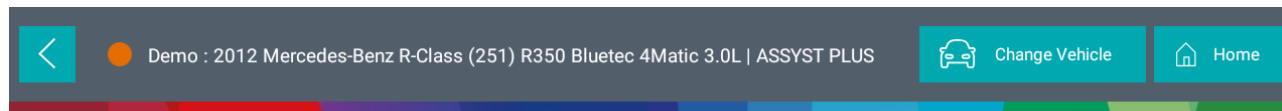
Reset Adaptation Parameters

[Screen Capture](#)

All the transmission control adaptation values are reset in the following test step with the exception of the torque converter clutch adaptation.

[Continue](#)[Abort](#)

Resetting Of Service-Interval Display – Oil Life Reset for reset of interval



Resetting Of Service-Interval Display

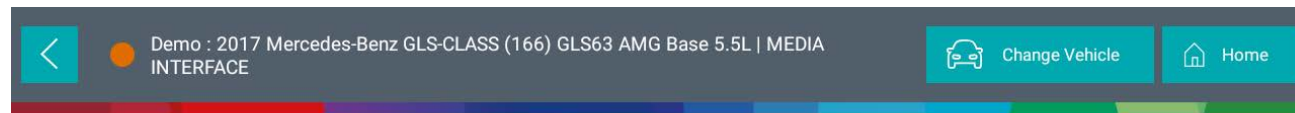
[Screen Capture](#)

Only reset service interval display following oil change. Ignition ON, engine must not run.

[Continue](#)[Abort](#)

MERCEDES- BENZ con't.

Selftest – Perform Self Test and report if ECU and connected devices are working properly



Selftest

Screen Capture

Turn ignition off and then on.

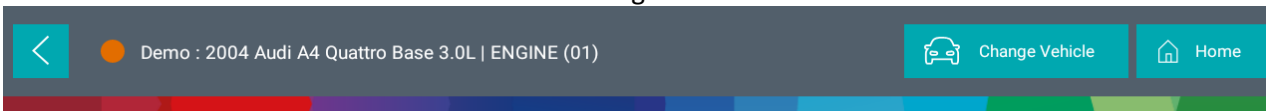
Confirm that the engine is stopped.

Continue

Abort

VOLKSWAGEN / AUDI

Lambda Control (Aging Check: Bank 2 Sensor 1) – Check Bank 2 Sensor 1 aging value. Value has to be above 0.80. The value for a new sensor is 1.99 will decrease as the sensor ages



Lambda Control (Aging Check: Bank 2 Sensor 1)

[Screen Capture](#)

Key must be ON with Engine Running,
No fault codes, No stored DTCs.

[Continue](#)[Abort](#)

Lambda Control (Sensor Readiness - After Catalyst) – Tests Oxygen Sensors after the Catalytic Converter to make sure they are reading properly



Lambda Control (Sensor Readiness - After Catalyst)

[Screen Capture](#)

Key must be ON with Engine Running,
No fault codes, No stored DTCs.

[Continue](#)[Abort](#)

VOLKSWAGEN / AUDI con't.

Lambda Control (Delta Lambda Bank 1/3) – Tests Bank 1/3 Sensors to make sure they are working properly

The header bar is dark grey with a white back arrow on the left. In the center, it says "Demo : 2007 Volkswagen Passat 2.0T 2.0L | ENGINE (01)". On the right, there are two buttons: "Change Vehicle" with a car icon and "Home" with a house icon.

Lambda Control (Delta Lambda Bank 1/3)

Screen Capture

Key must be ON with Engine Running,
No fault codes, No stored DTCs.

Continue

Abort

Lambda Control (Sensor Exchange) – Tests and compares Oxygen Sensors, after Catalytic Converter, to the Air Mass to make sure they are working properly

The header bar is dark grey with a white back arrow on the left. In the center, it says "Demo : 2004 Audi A4 Quattro Base 3.0L | ENGINE (01)". On the right, there are two buttons: "Change Vehicle" with a car icon and "Home" with a house icon.

Lambda Control (Sensor Exchange)

Screen Capture

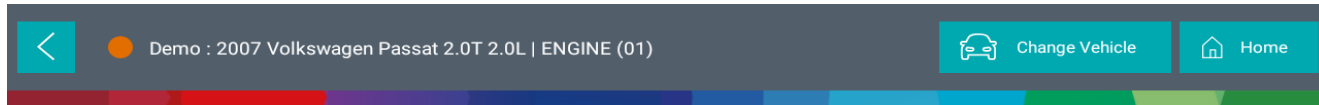
Key must be ON with Engine Running,
No fault codes, No stored DTCs.

Continue

Abort

VOLKSWAGEN / AUDI con't.

Lambda Control (Aging Check: Bank 1/3 Sensor 2) – Check Bank 1/3 Sensor 2 aging value. Value has to be above 0.80. The value for a new sensor is 1.99 will decrease as the sensor ages



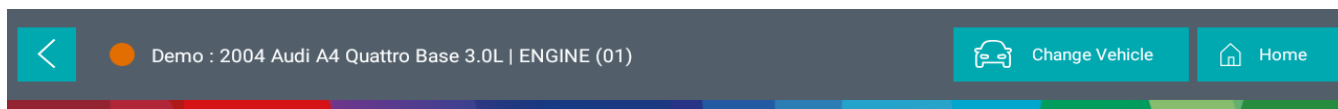
Lambda Control (Aging Check: Bank 1/3 Sensor 2)

[Screen Capture](#)

Key must be ON with Engine Running,
No fault codes, No stored DTCs.

[Continue](#)[Abort](#)

Lambda Control (Aging Check: Bank 2/4 Sensor 2) – Check Bank 2/4 Sensor 2 aging value. Value has to be above 0.80. The value for a new sensor is 1.99 will decrease as the sensor ages



Lambda Control (Aging Check: Bank 2/4 Sensor 2)

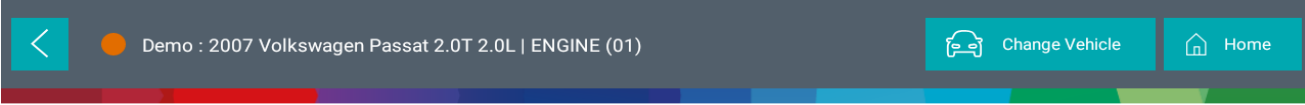
[Screen Capture](#)

Key must be ON with Engine Running,
No fault codes, No stored DTCs.

[Continue](#)[Abort](#)

VOLKSWAGEN / AUDI con't.

Lambda Control (Catalytic Conversion Test Bank 1) – Check Bank 1/3 Catalytic Converter to ensure it is properly reducing emissions. Good if below 0.50 at the end of the test



Lambda Control (Catalytic Conversion Test Bank 1)

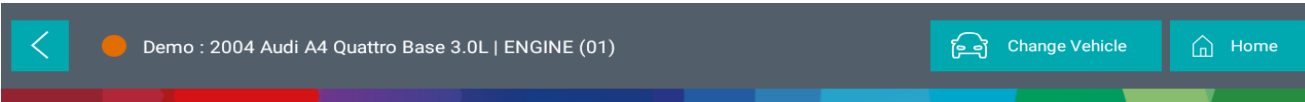
Screen Capture

Key must be ON with Engine Running,
No fault codes, No stored DTCs.

Continue

Abort

Lambda Control (Catalytic Conversion Test Bank 2/4) – Test Bank 2/4 Catalytic Converter to ensure it is properly reducing emissions. Good if below 0.50 at the end of the test



Lambda Control (Catalytic Conversion Test Bank 2/4)

Screen Capture

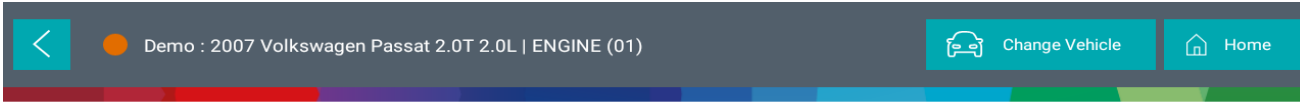
Key must be ON with Engine Running,
No fault codes, No stored DTCs.

Continue

Abort

VOLKSWAGEN / AUDI con't.

Lambda Control (Aging Check: Bank 1/2 Sensor 1) – Check Bank 1/2 Sensor 1 aging value. Value has to be above 0.80. The value for a new sensor is 1.99 will decrease as the sensor ages



Lambda Control (Aging Check: Bank 1/2 Sensor 1)

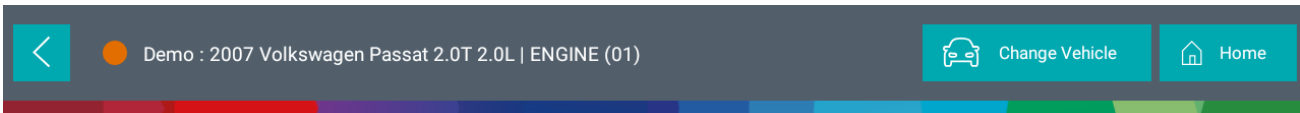
Screen Capture

Key must be ON with Engine Running,
No fault codes, No stored DTCs.

Continue

Abort

Lambda Control (Sensor Readiness - After Catalyst) – Tests Oxygen Sensors after the Catalytic Converter to make sure they are reading properly



Lambda Control (Sensor Readiness - After Catalyst)

Screen Capture

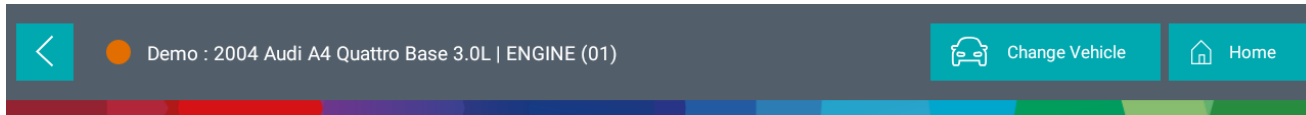
Key must be ON with Engine Running,
No fault codes, No stored DTCs.

Continue

Abort

VOLKSWAGEN / AUDI con't.

Lambda Control (Sensor Exchange) – Tests and compares Oxygen Sensors, after Catalytic Converter, to the Air Mass to make sure they are working properly



Lambda Control (Sensor Exchange)

Screen Capture

Key must be ON with Engine Running,
No fault codes, No stored DTCs.

Continue

Abort

NISSAN / INFINITI

Purg Vol Cont/V – The purge valve precisely controls the amount of fuel vapor that is purged from the charcoal canister



Purg Vol Cont/V

[Screen Capture](#)

Operate According to the Following Procedures.

[Continue](#)[Abort](#)

Vent Control Valve – This controls the flow of outside air in and out of the charcoal canister



Vent Control Valve

[Screen Capture](#)

Command State:

[Continue](#)[Abort](#)

NISSAN / INFINITI con't.

Engine Coolant Temperature – This test is used to change the coolant temperature readings the vehicle is reading so the coolant fan can be activated



Engine Coolant Temperature

[Screen Capture](#)

Operate According to the Following Procedures.

Continue

Abort

Intake Valve Timing Assign Angle – This is used to change the Intake valve timing in degrees



Intake Valve Timing Assign Angle

[Screen Capture](#)

Cool down engine before starting the test

Continue

Abort

NISSAN / INFINITI con't.

Exhaust Valve Timing Assign Angle – This is used to change the exhaust valve timing in degrees



Exhaust Valve Timing Assign Angle

[Screen Capture](#)

Cool down engine before starting the test

Continue

Abort

Steering Angle Sensor Calibration – Calibrates the steering wheel angle after any type of work has been done to the alignment or steering wheel position sensor(s)



Steering Angle Sensor Calibration

[Screen Capture](#)

Touch "Start" after keep that the steering wheel is in the neutral position when driving straight ahead.

Continue

Abort

GENERAL MOTORS

Power Steering Softstops Learn – Resets the values used to determine the limits of the Power Steering as the wheel is turned stop to stop

<
Demo : 2016 Buick Lacrosse Premium 3.6L | POWER STEERING CONTROL
Change Vehicle
Home

Power Steering Softstops Learn

Screen Capture

Follow procedure to reset stops.

With ignition on and engine off,

Open and Close Drivers Door.

Continue
Abort

Throttle Sweep – Allows user to command open or close throttle to test for smooth operation of Throttle blade

<
Demo : 2016 Chevrolet Camaro LT 2.0L | ENGINE
Change Vehicle
Home

Throttle Sweep

Screen Capture Sort Customize

Command State: 86.6 %

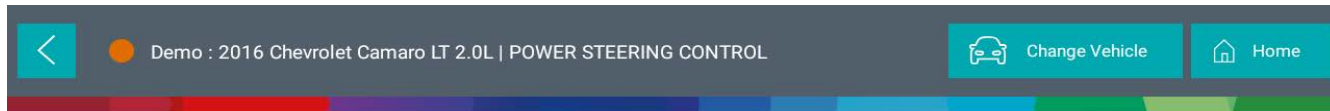
Tap here to View ALL Data Items
Tap here to Select Data Items

Warning: When loading live data, you will not have access to command buttons (On/Off, Start/Stop) until data is completely loaded and visible.

Increase
Decrease
Stop
Exit

GENERAL MOTORS con't.

Learned Values Reset – Allows user to reset the learned values for the Power Steering after a repair to the system



Learned Values Reset

[Screen Capture](#)

Notice: Perform the learn procedure in a place where the vehicle can be safely driven in a circle.

[Continue](#)[Abort](#)

DPF Service Regeneration – Allows Technician to run a forced DPF Regeneration. Used after a DPF component is replaced to clean system and reset regeneration schedules



DPF Service Regeneration

[Screen Capture](#)

Caution:

Tailpipe exhaust temp will be greater than 300 Deg C/572 Deg F during regeneration
Perform test outdoors away from people, other vehicles, and combustibles
Due to elevated engine temperatures, open hood and keep vehicle in an open environment
Do not connect shop exhaust hose to tailpipe

[Continue](#)[Abort](#)

New Coverage – USA Domestic

New Chrysler/Jeep Coverage

10 new Adjustment type special tests including:

- **Engine/PCM** - Diesel Particulate Filter Regeneration
- **Transmission/Electronic Shifter** – Quick Learn, Reset Adaptive Values
- **Instrument Cluster** - Initialize Cluster Configuration w/o Odometer Affect
- **Others** – MEMORY SEAT Pedal Adjustment

1,475 new Actuation type special tests including:

- **Engine/PCM** - Activate Fuel Lift Pump, AdBlue Dosing Valve, Air Condition, Air Conditioner Relay Command, Blow by Heater, Blow By Heater Relay Command, Boost Low Pressure Actuator, Boost Pressure Actuator, Camshaft Valve Control Position inlet command, Camshaft Valve Control Position outlet command, Check PCM Odometer, Compression Test , Cooler Bypass Valve, Crank Case Ventilation Pressure Actual Offset Reset Value S1, Crank Case Ventilation Pressure Actual Offset Reset Value S2, Cruise control lamp command, Cylinder UniAir Valve Command tests, DEF Reductant Doser Pump Override Test, Diesel Particulate Filter Lamp Command, Downstream lambda probe heater command, DPF Lamp, DPF Reset Option, Dump Valve, Dump valve command, EGR tests, Electric Thermostat Heater Solenoid, Electric Thermostat Heater Solenoid Duty Cycle, Electromagnetic Brake for Engine Stop Command, Engine Oil Pressure Lamp Command, Engine Oil Pump Valve, Engine Water Over Temperature Lamp Command, ESIM Forced Monitor Test, ETC Lamp, ETC System Test, ETC Throttle Follower Test, Evaporative System Integrity Monitor (ESIM) solenoid command, Exhaust Gas Cooler Bypass Valve, Exhaust Gas Recirculation Valve, First Start Power Limitation, Fuel Filter Heating, Fuel Filter Water Level Warning Lamp, Fuel Injector, Fuel Pressure Regulator Valve, Fuel Pump Relay Command, Fuel System Run Up Test, Gearbox oil pump command, General Stop For All Actuators, Generator Ramp Time, Glow Lamp, Glow lamp command, Glow Plug, Glow plug module command, Glow Relay, Half engine mode valve command, High Pressure Fuel Rail Test, Injector Command tests, Injector Kill Test, In-Plant Mode Activation, Intake Air Throttle Actuator Test, Intake lambda probe heater command, Intake Throttle Duty Cycle, Leak Detection Pump, Leak Detection Pump Forced Monitor Test, Metering Unit, MIL Lamp, Motorized throttle command, MProp Command (High Pressure), Oil Pressure Lamp, Oxygen Sensor 1 Heater tests, Power limitation function, Pressure Regulator Valve, Pressure Value Correction Shut-Off, Primary Pump (Solenoid), PTC Cabin Heater 1 Status, PTC Cabin Heater 2 Status, PTC Cabin Heater 3 Status, Purge canister valve command, Purge Vapors Test, Purging Pump (Backflow), Radiator Cooling Fan PWM D-Cycle, Radiator Fan 1 Duty Cycle, Radiator Fan 2 Duty Cycle, Rail Pressure, Ram Active Air Box Test, Roller Learning Shut-Off, SCR relay, Set Engine RPM Test, Shutoff Correction Quantity, Shutoff Injector Quantity, Speed Limiter, Stop All Actuators, Stop Start Confirmation, Swirl Valve actuator Test, Thermostat activation command, Throttle Valve, Throttle Valve Actuator, Turbo oil supply valve command (half engine mode) command, Turbocharger Pressure Actuator Command, Upstream lambda probe heater bank1 command, Upstream lambda probe heater command, Urea Pressure Line Heater, Urea Tank Heater, Valve multi-air system activation tests, Variable coolant pump command, Variable displacement oil pump command, Variable swirl actuator closing command, VVL Service Test, Waste gate valve command, Water In Fuel Filter Lamp Command
- **Hybrid** - APM status, Chiller Shut-off Valve, EAC Compressor Speed Request, Electric Transmission Oil Pump, Front Refrigerant Shut-off Valve, High Temp Aux Pump, High Temp Cabin Valve Rotation, High Temp Shut-off Valve, High Voltage Battery Precharge Contactor Test, High Voltage Coolant Heater, Low

- Temp Active Pump, Low Temp Passive Pump, Master ePT Wake Up Output 1, OBCM Wakeup, Park Pawl Actuator Control, Radiator Fan Duty Cycle, Thermal System Enable
- **Transmission/Electronic Shifter** - Command Shift Lock, Electric Pump Drive Unit Command, Electropump motor command, Engagement Electrovalve PPV1 Command (3rd/2nd/R), Engagement electrovalve PPV1 command (3rd/2nd/Reverse), Engagement electrovalve PPV1 command (6th/7th/R/5th), Engagement Electrovalve PPV2 Command (1st/4th/5th/6th), Engagement electrovalve PPV2 command (2nd/3rd/4th/1st), Even Gear Clutch (K2) Control Solenoid Valve Command, Even Gear Clutch (K2) Control|Solenoid Valve Command, Even gear clutch K2 control solenoid valve command, Headlamps move in highest position, Headlamps move in left position, Headlamps move in lowest position, Headlamps move in middle (vertical) position, Headlamps move in right position, Headlamps move in the straight ahead position, Knob LED control, LED, Odd Gear Clutch (K1) Control Solenoid Valve Command, Odd gear clutch (K1) control|solenoid valve command, Odd gear clutch K1 control solenoid valve command, PPV-K2 Clutch Electrovalve, QPV-K1 Clutch Electrovalve, Range selection electrovalve command, Range Selection Electrovalve Command (PPVS), SDU Electropump, Shift Lock Command, Shift Solenoid A
 - **ABS** - ABS Safety indication, ABS Static Test, Anti-lock Brake System (ABS) safety indication, Apply release brake rear left EPB, Apply release brake rear right EPB, Apply release electric brake EPB, ASR Warning Lamp, ASR/ESP Safety indication, Automatic Functions Activation, Electric Park Brake Spindle Position, Electronic Brake Distribution (EBD) safety indication, Electronic Stability Control (ESC) OFF lamp indication, EPB Button lamp, EPB Failure Lamp, EPB Function Lamp, EPB switch lamp, ESC Safety Lamp, ESP Light, Hill-Holder Safety indication, Hill-Holder Safety Lamp/Message, Inlet Valve FL, Inlet valve FL activation, Inlet Valve FR, Inlet valve FR activation, Inlet valve front left activation, Inlet valve front right activation, Inlet valve rear left activation, Inlet valve rear right activation, Inlet valve RL, Inlet valve RL activation, Inlet valve RR, Inlet valve RR activation, Outlet Valve FL, Outlet valve FL activation, Outlet valve FR, Outlet valve FR activation, Outlet valve front left activation, Outlet valve front right activation, Outlet valve rear left activation, Outlet valve rear right activation, Outlet valve RL, Outlet valve RL activation, Outlet valve RR, Outlet valve RR activation, Pilot Front (USV - Normally Closed), Pilot valve 1 activation, Pilot Valve 2, Pilot valve 2 activation, Pressure Control Relief Valve (PCR - Normally Closed), Priming Front (HSV - Normally Closed), Priming valve 1 activation, Priming Valve 2, Priming valve 2 activation, Recirculation Pump, Recirculation pump activation, Separation Valve (SV - Normally Open), Switch On EPB Failure Lamp, Switch On EPB Function Lamp, Wheel Speed Sensor Functional Test
 - **Transfer Case** - RDU Range Fork Position, Set Transference Clutch Torque
 - **Suspension** - Fill Spring From Reservoir, Spring Deflate To Atmosphere
 - **Instrument Cluster** – Lamp/Indicator tests, Gauge tests
 - **Climate (HVAC)** - Indicator/Lamp tests, A/C Request, Blower tests, Cabin Temperature Sensor
 - **Body Control** - Lamp and Buzzer/Warning tests, Door Lock tests, Window tests, Wiper/Washer tests, Headlight tests, Turn Signal tests, Diesel Fuel Heater Relay
 - **Others** - tests for COMFORT STEERING WHEEL, ELECTRIC POWER STEERING, AUTOMATIC HEADLAMP LEVELING, AUDIO, POWER SLIDING DOORS, FOLD STOW MODULE

Special test fixes/improvements:

- 2014 Ram 6.7L ENGINE - fixed DPF Regen Stationary Desoot test

New Ford Coverage

- New coverage for 2017-2018MY vehicles and systems
- Added coverage for 88 new systems
- Added coverage for 175 new vehicle-ecu combinations

5 new Adjustment type special tests including:

- **Engine/PCM** - Reset KAM
- **Transmission** - Clear Transmission Adaptive KAM Tables, Initialize Adaptive KAM Tables, Reset KAM, Stop Trans-Adaptive Learning And Measure Slip Time

616 new Actuation type special tests including:

- **Engine/PCM** – Air Conditioning Compressor Command State, All Injectors Disabled, All Wheel Drive Clutch Control Commanded, Command Equivalence Ratio Air To Fuel Mixture Bank 1, Command Of Coolant Pump - HVAC/Cabin, Command of diverter valve - HVAC/cabin, Commanded Equivalence Ratio Air To Fuel Mixture Bank 1, Commanded Equivalence Ratio Air To Fuel Mixture Bank 2, Converter Pressure Control, Coolant Pump A Is Commanded On, Desired Camshaft Angle For All Banks, Desired Engine Cooling Fan Speed, Desired Fuel Rail Pressure, Desired Generator Voltage, Desired Line Pressure Control, Desired Voltage Generator 2, Desired Wastegate Control Vacuum, Engine Revolutions Per Minute, EVAP Canister Vent Valve, EVAP Leak Detection Pump, EVAP Leak Detection Pump to Vent Solenoid Valve Leak Test, Evap System Switching Valve Control Duty Cycle-Commanded, EVAP Vapor Blocking Valve, Evaporative Emission Canister Purge Valve Duty Cycle, Firm Shift, Fuel Fill Door Unlock Control Output is Commanded To Enable, Fuel Injector 1, Fuel Injector 2, Fuel Injector 3, Fuel Injector 4, Fuel Injector 5, Fuel Injector 6, Fuel Injector 7, Fuel Injector 8, Fuel Pump, Fuel Pump - Duty Cycle, Fuel Pump On/Off, Fuel Volume Control Valve, Gear Command By Output State Control, Grill Shutter A Position - Commanded, Heater Control For HO2S 11 And HO2S 21, Heater Control For HO2S 12 And HO2S 22, High Speed Engine Cooling Fan Control, Injector 1 Disable, Injector 2 Disable, Injector 3 Disable, Injector 4 Disable, Injector 5 Disable, Injector 6 Disable, Injector 7 Disable, Injector 8 Disable, Injector Electrical Test, Intake Manifold Runner Control, KOEO, KOER, KOER Glow Plug Test, Line Pressure Control Measured In Current, Low Speed Engine Cooling Fan Control, One Touch Start Status, Output State Control Of Torque Converter, Power Balance, Reductant Injector Duty Cycle, Reductant Line Heater Control, Reductant Tank Heater Control, Relative Compression, Shift Solenoid A, Shift Solenoid Pressure Control A, Shift Solenoid Pressure Control B, Shift Solenoid Pressure Control C, Shift Solenoid Pressure Control D, Shift Solenoid Pressure Control E, Spark Advance - Control State, Starter Motor Control Output Detected, Stepper Motor EGR Position - Control State, Turbocharger Bypass Valve 1, Turbocharger Wastegate Control, Variable Camshaft Timing Exhaust Angle Desired, Variable Camshaft Timing Intake Desired Angle, Variable Fan Duty Cycle
- **Hybrid** - DC To DC Converter Enable, Electric Motor Electronics Coolant Pump, Fan Speed Demanded, Power Supply B, On Demand Test
- **Transmission** - Converter Pressure Control, Desired Line Pressure Control, Firm Shift, Gear Command By Output State Control, Line Pressure Control Measured In Current, Output State Control Of Torque Converter, Pressure Control Solenoid A, Shift Solenoid Pressure Control tests
- **Brakes/ABS** - ABS Booster Solenoid Current, Hydraulic Pump Motor, Inlet Valve tests, Outlet Valve tests, Vacuum Pump Status, On Demand Test
- **AWD/Transfer Case** - 4WD PWM Clutch Status, CCW Relay, CW Relay, Continuous Vacuum Hublock Solenoid, On Demand Test, Shift Motor Position Sense Contact Plate Power Circuit Status
- **Instrument Cluster** - Lamp tests, Gauge tests, Segment tests, Button tests, Dimming Control, On Demand Test
- **Climate (HVAC)** - Air Mode Actuator, Blower Motor, Left Blend Door Mode, Right Blend Door Mode

- **Body Control** - Lamp and Buzzer/Warning tests, Door Lock tests, On Demand Test, Wiper tests, Turn Signal tests, Headlight tests
- **Seat** – Bladder Inflate tests, Memory tests, Front Motor Up/Down, Horizontal Motor Backward/Forward, Rear Motor Up/Down, Recline Motor Back / Forth, Seat Heat and Cool Command tests, Telescope In/Out, Tilt Up/Down
- **Others** - Tests for SEAT CONTROL, POWER RUNNING BOARD, STEERING COLUMN, DOOR MODULE, HEADLAMP CONTROL

Special test fixes/improvements:

- 2009 F-250 5.4L PCM - fixed Variable Cam Timing Duty Cycle test
-

New GM/ Saturn Coverage

147 new Adjustment type special tests including:

- **Engine/PCM** - Ambient Air Temperature Calculation Reset, Brake Pedal Position Sensor Learn, Catalyst 1 Reset, CKP Reluctor Wheel Learn, CrankShaft Pos Variation Learn, DPF Pressure Sensor Reset, DPF Service Regeneration, DPF/Catalyst 2 Reset, Engine Oil Life Reset, Excessive Clutch Slip Data Reset, Fuel Composition Reset, Fuel Filter Life Reset, Fuel Trim Reset, Gear Selector -N- Position Learn, HO2S Heater Learn, HO2S Learn Reset, Idle Learn Reset, Idle Speed Adjustment, Intake System Learned Values Reset, Learned Airflow Adapts Reset, NOx Catalyst Reset, NOx Sensor Reset tests, O2 Heater Resistance Reset, Pilot Injection Balance Procedure, Reductant Fluid Tank Level Reset, Reductant Injector Reset, Reductant System Reset, Reset Injection Value tests
- **Hybrid** - Clear Secured High Voltage DTCs, Fuel Economy Reset, Hybrid/EV Battery Pack Capacity Learn, Hybrid/EV Battery Pack Coolant Control Solenoid Valve Learn, Hybrid/EV Battery Pack Data Reset, OnBoard Jump Assist Counter Reset, Pass. Comp. Heater Coolant Control Solenoid Valve Learn
- **Transmission** - Gear Selector -N- Position Learn, Reset Transmission Adapts, Transmission Adaptive Pressure Reset, Transmission Oil Life Reset, Transmission Service Fast Learn, Transfer Case Clutch Overtemperature Counter Reset
- **Transfer Case/AWD** - AWD Disabled-by-Malfunction Counter Reset, Range Actuator Learn,
- **Brakes/ABS** - Adaptive Pressure Control Learn, Automated Brake Bleed, Brake Controls Offset Learn, Brake Pressure Sensor Calibration, Park Brake Cable Replacement Procedure, Park Brake Calibration, Steering Wheel Angle Sensor Learn, Yaw Rate Sensor Recalibration
- **Tire Pressure Monitor/RCDLR** - Tire Pressure Sensor Registration, Tire Type/Pressure Selection
- **Safety/Airbag** - Passenger Presence Sensor Learn, Reset High Voltage Disable Request After Crash Event Detected, Setup SDM Primary Key In BCM, Yaw Rate Sensor Learn
- **Climate/HVAC** - HVAC Actuators Learn, HVAC Afterblow Configuration
- **Instrument Cluster** - CAN Bus Configuration Learn, Driver Information Center Options, Instrument Cluster Initialization
- **Steering** - Clear Active Pull Compensation Learned Limits, Learned Values Reset, Power Steering Softstops Reset
- **Body Control** - Brake Pedal Position Sensor Learn, Clear Window Learned Values tests, Invalidate All Fobs, Program Key Fob tests, Reset Teen Driver Key PIN
- **Others** – SEAT MEMORY Adjustable Pedal Calibration, Learn Pedal Softstops, RADIO Control Module Reset, LIFTGATE Hand-Free Liftgate Sensor Control Module Calibration, Liftgate Maximum Open Position Learn, PARK ASSIST Parking Assist Sensor Learn

787 new Actuation type special tests including:

- **Engine/PCM** –14V Power Module Setpoint, A/C Relay, Active Grill Shutter Test, Active Grille Air Shutter, Active Grille Air Shutter 2, AIR Pump Service Bay Test, AIR System, Autostart/Autostop, Camshaft Position Actuator, Canister Vent Solenoid, Catalyst Test, Charge Air Cooler Coolant Pump, CMP Actuator, CMP Actuator Solenoid, Compression Test, Coolant Thermostat Heater and Cooling Fan, Cooling Fan, Cooling Fan Solenoid Valve, Cylinder 1, Cylinder 1 Injector Flow Identifier, Cylinder 4, Cylinder 4 (deactivation), Cylinder 6, Cylinder 6 (deactivation), Cylinder 7, Cylinder 7 (deactivation), Cylinder Deactivation System, Cylinder Power Balance, Depressurize Fuel System, Discharge Stop/Start Capacitor, DPF Regeneration Enable, EGR Cooler Bypass Motor, EGR Valve, Engine Controls Ignition Relay, Engine Coolant Pump Relay, Engine Coolant Temperature, Engine Coolant Thermostat Heater, Engine Coolant Thermostat Heater and Cooling Fan, Engine Oil Pressure Control Solenoid Valve, Engine Serial Number, Engine Speed, Engine Speed Control, EVAP Leak Detection Pump, EVAP Leak Detection Pump Switching Valve, EVAP Leak Detection Pump to Vent Solenoid Valve Leak Test, EVAP Purge

Solenoid, EVAP Purge/Seal, EVAP Service Bay, EVAP Service Bay Test, EVAP Test, EVAP Vent Solenoid, Exh. Aftertreatment Fuel Injector, Exhaust Aftertreatment Fuel Injector Flow Test, Exhaust Camshaft Position Actuator, Exhaust Camshaft Position Actuator Bank 2, Exhaust CMP Actuator, Exhaust CMP Actuator Bank 1, Exhaust CMP Actuator Bank 2, Exhaust CMP Actuator Solenoid, Exhaust CMP Actuator Solenoid 1, Exhaust CMP Actuator Solenoid Bank 1, Exhaust CMP Actuator Solenoid Bank 2, Exhaust CMP Actuator Solenoid Valve Bank 1, Exhaust Flow Control Valve System, Exhaust Gas Recirculation , Fan Relay 1, Fan Relays 1, 2 & 3, Fan Relays 2 & 3, Fuel Injector Balance, Fuel Mode Select Switch Indicator, Fuel Pressure, Fuel Pressure Regulator, Fuel Pressure Regulator 1, Fuel Pump, Fuel Pump Enable, Fuel Pump Relay, Fuel Pump Speed, Fuel Rail Pressure, Fuel Tank Pressure Test, Fuel Temperature, Fuel Trim Enable, GEN L-Terminal, Glow Plug, High Pressure Fuel Cut-Off Solenoid Valve, HO2S Bank 1 Sensor 1 - Heater, HO2S Bank 1 Sensor 2 - Heater, HO2S Bank 2 Sensor 1 - Heater, HO2S Bank 2 Sensor 2 - Heater, HO2S Heater Bank 1 Sensor 1, HO2S Heater Bank 1 Sensor 2, HO2S Heater Bank 2 Sensor 1, HO2S Heater Bank 2 Sensor 2, HO2S Heater Sensor 1, HO2S Heater Sensor 2, HO2S Test, Idle Ignition Timing, Idle Spark, Instrument Panel Illumination, Intake Air Flow Valve Motor, Intake Air Flow Valve Position, Intake Air Heater, Intake Camshaft Position Actuator, Intake Camshaft Position Actuator Bank 2, Intake Camshaft Position Actuator Park Lock Solenoid Valve, Intake Camshaft Position Actuator Park Lock Test, Intake CMP Actuator, Intake CMP Actuator Bank 1, Intake CMP Actuator Bank 2, Intake CMP Actuator Solenoid, Intake CMP Actuator Solenoid Bank 1, Intake CMP Actuator Solenoid Bank 2, Intake Rocker Arm Solenoid Valve 1, Intake Rocker Arm Solenoid Valve 2, Loop Status, Low Pressure Fuel Cut-Off Solenoid Valve, LPG Cut-Off Solenoid Valves, LPG Vaporizer Relay 2, LPG Vaporizer Relay 3, LPG Warm-Up Mode Indicator, MAF Sensor Supply Voltage Low Side Driver, Malfunction Indicator Lamp, Modulated Main Pressure Control Solenoid, O2 Sensor Heater Bank 1 Sensor 1, O2 Sensor Heater Bank 1 Sensor 2, O2 Sensor Heater Bank 2 Sensor 1, O2 Sensor Heater Bank 2 Sensor 2, Oxygen Sensor Heater, Reductant Fluid Quality Test, Reductant Heater 1, Reductant Heater 2, Reductant Heater 3, Reductant Injection Quantity Test, Reductant Injector, Reductant Pump, Reductant Purge Valve, Reductant System Leak Test, Reductant System Malfunction Warning Service Bay Test, Requested Torque, Reverse Inhibit, Secondary Air Injection Pump Relay, Secondary Air Injection Solenoid Valve, Secondary Air Injection Valve, Secondary Air Pump Control State, Skip Shift Controls, Spark Retard, Starter Pinion Solenoid Actuator Relay, Starter Relay, Supercharger Bypass Solenoid Valve, TC Vane Pos. Ctrl. Solenoid, TC Wastegate Solenoid, Throttle Position, Throttle Sweep, Transmission Accumulator Solenoid Valve, Turbo Charger, Turbocharger Bypass Solenoid Valve, Turbocharger Bypass Valve 1, Turbocharger Bypass Valve 2, Turbocharger Vane Position, Turbocharger Wastegate Solenoid Valve Bank 1, Turbocharger Wastegate Solenoid Valve Bank 2, Wait To Start Lamp, Wastegate Solenoid Duty Cycle

- **Hybrid** - 14V Power Module Fan, 14V Power Module Setpoint, Autostart/Autostop, Auxiliary Transmission Fluid Pump Speed, Auxiliary Transmission Pump Relay, Battery Charging System Negative Contactor, Battery Charging System Positive Contactor, Battery Energy Control Module, Check High Voltage System Related DTCs, Cooling Fan Motor, DC Charge Port Lock, Drive Motor Coolant Pump Relay, Drive Motor Speed, EAC Compressor Speed, Exhaust Heat Exchanger Exhaust Bypass Valve, Fuel Fill Door Lock, Hybrid Electronics Coolant Pump, Hybrid/EV Battery DC Charging Positive Contactor, Hybrid/EV Battery Multifunction Contactor, Hybrid/EV Battery Negative Contactor, Hybrid/EV Battery Pack Coolant Control Solenoid Valve, Hybrid/EV Battery Pack Coolant Pump, Hybrid/EV Battery Pack Cooling Fan, Hybrid/EV Battery Pack Heater Passive Isolation Test, Hybrid/EV Battery Pack Heater Power, Hybrid/EV Battery Pack Isolation Test, Hybrid/EV Battery Pack Precharge Contactor Command, Hybrid/EV Battery Pack Precharge Transistor, Hybrid/EV Battery Positive Contactor, Hybrid/EV Powertrain Control Module, ICE Only Mode, Line PC Solenoid, Pass. Comp. Heater Coolant Control

Solenoid Valve, PC Solenoid 2, PC Solenoid 3, PC Solenoid 4, PC Solenoid 5, Regenerative Braking Status, Vent Refuel System

- **Transmission** - Line PC Solenoid, PC Solenoid tests, Shift Solenoid tests, TCC Control Solenoid, TCC Enable Solenoid, TCC Pressure Control Solenoid tests
- **ABS/Parking Brake** - ABS Motor, ABS Relay Test, Brake Booster Electric Vacuum Pump, Park Brake Cable Service Apply, Park Brake Cable Service Release, Rear Brake Caliper Piston Extend, Rear Brake Caliper Piston Retract, Solenoid tests
- **Safety/Airbag** – Lamp/Indicator tests
- **Transfer Case** - Pump Motor Tests, Range Actuator, Rear Drive Clutch Solenoid Valve, Lamp tests, Transfer Case Clutch
- **Suspension** - All Shock Absorber Actuators, Depressurize System, Pressurize System, Shock Absorber tests, Suspension Position Sensor Trim Height
- **Instrument Cluster** - Display Test, Dimming tests, Instrument Cluster Gauge Sweep, Lamp tests
- **Climate/HVAC** - A/C Compressor, A/C Request, Air Inlet Door, Air Recirculation Door, Blower Motor, Mode Door tests
- **Body Control** - Lamp and Buzzer/Warning tests, Door Lock tests, Wiper tests, Washer tests
- **Seat** – Lumbar tests, Horizontal Movement tests, Vertical Movement tests

Special test fixes/improvements:

- 2004 Aveo PCM - fixed Crank Variation Learn test
-

New Coverage – USA Asian

New Nissan / Infiniti Coverage

- New coverage for 2017-2018MY vehicles and systems
- Added coverage for 133 new systems
- Added coverage for 1,345 new vehicle-ecu combinations

- **6 new Adjustment type special tests including:**
- **Engine/PCM** - Target Idle RPM Adjustment
- **Transmission** - G Sensor Calibration
- **ABS/Brakes** - G Sensor Calibration
- **Safety/Airbag** - OCCUPANT DETECTION SYSTEM Zero Point Reset Function
- **Body Control** - Reset to Default Settings

- **12 new Actuation type special tests including:**
- **Engine/PCM** - Active Grille Shutter, Cooling Fan, Engine Coolant, Fan Duty Control, Fuel Injection, Fuel Pump Control Module, Intake Valve Timing Assign Angle, Purg Vol Cont/V, Tumble Control Valve

New Toyota / Lexus Coverage

Special test fixes/improvements:

- 1997 ES300 ENGINE - fixed EVAP Monitor test
-

New Coverage – USA European

New Alfa Romeo Coverage

446 new Actuation type special tests including:

- **Engine/PCM** - Air Conditioner Relay Command, Blow By Heater Relay Command, Blow-by Heater command, Camshaft Valve Control Position inlet command, Camshaft Valve Control Position outlet command, Cruise control lamp command, Diagnosis Module for Tank Leakage (DMTL) command, Diesel Particulate Filter Lamp Command, Downstream lambda probe heater command, Dump Valve, Dump valve command, EGR cooler bypass command, EGR high pressure cooler bypass command, EGR Valve Command, electromagnetic brake for engine stop command, Engine After Run Coolant Pump, Engine Oil Pressure Lamp Command, Engine Water Over Temperature Lamp Command, ESIM Forced Monitor Test, Evaporative System Integrity Monitor (ESIM) solenoid command, Exhaust bypass valve command, First Start Power Limitation, Fuel Pump Relay Command, Gearbox oil pump command, General Stop For All Actuators, Glow lamp command, Half engine mode valve command, Injector 1 coil command, Injector 2 coil command, Injector 3 coil command, Injector 4 coil command, Injector 5 coil command, Injector 6 coil command, In-Plant Mode Activation, Intake lambda probe heater command, Motorized throttle command, MProp Command (High Pressure), Purge canister valve command, Radiator Cooling Fan PWM D-Cycle, Stop All Actuators, Thermostat activation command, Turbo oil supply valve command (half engine mode) command, Turbocharger Pressure Actuator Command, Upstream lambda probe heater bank 2 command, Upstream lambda probe heater bank1 command, Upstream lambda probe heater command, Valve multiair system activation cyl.1, Valve multiair system activation cyl.2, Valve multiair system activation cyl.3, Valve multiair system activation cyl.4, Variable coolant pump command, Variable displacement oil pump command, Variable swirl actuator closing command, Waste Gate Valve, Waste gate valve command, Water In Fuel Filter Lamp Command
- **Transmission** - Electric Pump Drive Unit Command, Engagement Electrovalve PPV tests, Even Gear Clutch tests, Odd Gear Clutch tests, Range selection electrovalve command, Shift Lock Command
- **ABS** - ABS Static Test, Automatic Functions Activation, Lamp/Indicator tests, Inlet Valve tests, Outlet Valve tests, Pilot valve 1 activation, Pilot valve 2 activation, Priming valve 1 activation, Priming valve 2 activation, Recirculation Pump, Wheel Speed Sensor Functional Test
- **Climate (HVAC)** - Indicator/Lamp tests, A/C Request, Air Defrost Motor Distribution, Air Rear Motor Distribution, Rear HVAC Blower Motor, Recirculation Motor
- **Instrument Cluster** - Lamp tests, Display Dimming
- **Body Control** - Lamp and Buzzer/Warning tests, Fan Climate Relay, Window tests, Wiper/Washer tests, Door locks

New Audi Coverage

55 new Adjustment type special tests including:

- **Engine/PCM** - Camshaft Adjustment (Intake), Electronic Throttle (Kick-Down Adaptation), Electronic Throttle (Throttle Body Adaptation), Emission Reduction (EVAP Valve Test), Emission Reduction (Leak Diagnostic System), Emission Reduction (Secondary Air Injection: Bank 1/3), Fuel Injection (Fuel Pump Adaptation), Fuel Injection (Fuel Supply System), Ignition (Knock Sensor Test - Short Trip), Lambda Control (Aging Check: Bank 1/2 Sensor 1), Lambda Control (Aging Check: Bank 1/3 Sensor 2), Lambda Control (Aging Check: Bank 2/4 Sensor 2), Lambda Control (Catalytic Conversion Test Bank 1), Lambda Control (Delta Lambda Bank 1/3), Lambda Control (Sensor Readiness - After Catalyst), Lambda Control Shut-Off, Readiness Code (Automatic "End Of Line" Check), Vacuum Pump Test (Short Trip)
- **ABS/Brakes** - Activate ESP System/Function Test, Deactivate ESP System/Function Test

New BMW / Mini Coverage

5 new Adjustment type special tests including:

- **ABS/Brakes** - Calibrate Steering Wheel Angle Sensor
- **Steering** - Electrical Steering Column Adjustment - Partial Normalization, Electrical Steering Column Adjustment Normalization, Steering Column Reset Counter For All Blocked Movements
- **Others** – SEAT module Control Unit Reset

17 new Actuation type special tests including:

- **Engine/PCM** – Engine Running Injector Kill Test, Fuel Pump Reset
- **ABS/Brakes** - ABS Pump Activation Test, DSC Brake Bleed Procedure, Electronic Parking Brake Service Mode Activation, Electronic Parking Brake Service Mode Deactivation

New Fiat Coverage

648 new Actuation type special tests including:

- **Engine/PCM** - Air Conditioner Relay Command, Blow By Heater Relay Command, Blow-by Heater command, Camshaft Valve Control Position inlet command, Camshaft Valve Control Position outlet command, Cruise control lamp command, Diagnosis Module for Tank Leakage (DMTL) command, Diesel Particulate Filter Lamp Command, Downstream lambda probe heater command, Dump Valve, Dump valve command, EGR cooler bypass command, EGR high pressure cooler bypass command, EGR Valve Command, electromagnetic brake for engine stop command, Engine After Run Coolant Pump, Engine Oil Pressure Lamp Command, Engine Water Over Temperature Lamp Command, ESIM Forced Monitor Test, Evaporative System Integrity Monitor (ESIM) solenoid command, Exhaust bypass valve command, First Start Power Limitation, Fuel Pump Relay Command, Gearbox oil pump command, General Stop For All Actuators, Glow lamp command, Half engine mode valve command, Injector 1 coil command, Injector 2 coil command, Injector 3 coil command, Injector 4 coil command, Injector 5 coil command, Injector 6 coil command, In-Plant Mode Activation, Intake lambda probe heater command, Motorized throttle command, MProp Command (High Pressure), Purge canister valve command, Radiator Cooling Fan PWM D-Cycle, Stop All Actuators, Thermostat activation command, Turbo oil supply valve command (half engine mode) command, Turbocharger Pressure Actuator Command, Upstream lambda probe heater bank 2 command, Upstream lambda probe heater bank1 command, Upstream lambda probe heater command, Valve multiair system activation cyl.1, Valve multiair system activation cyl.2, Valve multiair system activation cyl.3, Valve multiair system activation cyl.4, Variable coolant pump

command, Variable displacement oil pump command, Variable swirl actuator closing command, Waste Gate Valve, Waste gate valve command, Water In Fuel Filter Lamp Command

- **Transmission** - Electric Pump Drive Unit Command, Engagement Electrovalve PPV tests, Even Gear Clutch tests, Odd Gear Clutch tests, Range selection electrovalve command, Shift Lock Command
- **ABS** - ABS Static Test, Automatic Functions Activation, Lamp/Indicator tests, Inlet Valve tests, Outlet Valve tests, Pilot valve 1 activation, Pilot valve 2 activation, Priming valve 1 activation, Priming valve 2 activation, Recirculation Pump, Wheel Speed Sensor Functional Test
- **Climate (HVAC)** - Indicator/Lamp tests, A/C Request, Air Defrost Motor Distribution, Air Rear Motor Distribution, Rear HVAC Blower Motor, Recirculation Motor
- **Instrument Cluster** - Lamp tests, Display Dimming
- **Body Control** - Lamp and Buzzer/Warning tests, Fan Climate Relay, Window tests, Wiper/Washer tests, Door locks

New Mercedes-Benz Coverage

- New coverage for 2017MY vehicles and systems
- Added coverage for 475 new systems
- Added coverage for 1,405 new vehicle-ecu combinations

28 new Adjustment type special tests including:

- **Transmission** - Dynamometer Mode ON/OFF
- **ABS/Brakes** - Brake Pressure Sensor Zero Pos. Compensation, Calibration Of Acceleration Sensor, Intake Valve Calibration, Lateral Acceleration Sensor Zero Position Calibration, Longitudinal Acceleration Sensor Zero Position Calibration, Null Balancing - Steering Wheel Angle Sensor, Separation Valve Calibration
- **Suspension** - Suspension Level Recalibration
- **Steering** - Reset Control Unit
- **Others** – CLIMATE Adapting Of Control Motors, LEFT HEADLAMP Axle Sensor Zero Point Programming

14 new Actuation type special tests including:

- **ABS/Brakes** – High Pressure And Return Flow Pump, Left Rear Pressure Regulating Valve Pressure Release
- **Others** – tests for DOOR CONTROL, DRIVER SAM, STEERING COLUMN MODULE, CENTRAL DISPLAY

New Smart Coverage

- New coverage for 2017MY vehicles and systems
 - Added coverage for 27 new systems
 - Added coverage for 27 new vehicle-ecu combinations
-

New Volkswagen Coverage

56 new Adjustment type special tests including:

- **Engine/PCM** - Camshaft Adjustment (Intake), Electronic Throttle (Kick-Down Adaptation), Electronic Throttle (Throttle Body Adaptation), Emission Reduction (EVAP Valve Test), Emission Reduction (Leak Diagnostic System), Emission Reduction (Secondary Air Injection: Bank 1/3), Fuel Injection (Fuel Pump Adaptation), Fuel Injection (Fuel Supply System), Ignition (Knock Sensor Test - Short Trip), Lambda Control (Aging Check: Bank 1/2 Sensor 1), Lambda Control (Aging Check: Bank 1/3 Sensor 2), Lambda Control (Aging Check: Bank 2/4 Sensor 2), Lambda Control (Catalytic Conversion Test Bank 1), Lambda Control (Delta Lambda Bank 1/3), Lambda Control (Sensor Readiness - After Catalyst), Lambda Control Shut-Off, Readiness Code (Automatic "End Of Line" Check), Vacuum Pump Test (Short Trip)
- **ABS/Brakes** - Activate ESP System/Function Test, Deactivate ESP System/Function Test, Pedal Adjustment

49 new Actuation type special tests including:

- **Engine/PCM** - Compression Test, EGR tests, Fuel Injector, High Pressure Fuel Rail Test, Oxygen Sensor Heater tests, Rail Pressure, Shutoff Injector Quantity, Throttle Valve
-



Bosch Automotive Service Solutions Inc.

28635 Mound Road

Warren, MI 48092

USA

tech@boschdiagnostics.com

855-267-2483