

# Bosch ADS Software Update – July 2023

## Ver 5.11

<https://www.boschdiagnostics.com/diagnostic-systems>

Version 5.11 update includes more model year **2023** vehicle coverage and additional **ADAS** calibrations.

2,905 new special tests & 197 new system applications included in this update.

Software and coverage feature details provided in these release notes.



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## Coverage Highlights (More Details start on Page 3)

### 2023 Coverage added – DTC, Data support and Bi-Directional functions

- **Ford** – E-350 Super Duty, E-450 Super Duty, F-450 Super Duty, F-550 Super Duty
- **Genesis** – Electrified GV70
- **Hyundai** – Ioniq 6

### Multiple Models and Years Coverage added - Bi-Directional functions

#### ADAS\* – New ADAS calibration coverage:

- **2023 Coverage:**
  - Acura – Coverage added for Integra
  - Ford – Coverage added for F-450 & F-550
  - Genesis – Coverage added for GV70
  - Honda – Coverage added for HR-V
  - Hyundai – Coverage added for Kona
  - Infiniti – Coverage added for QX60
  - Lexus – Coverage added for LC500 & LC500h
  - Mitsubishi – Coverage added for Outlander & Outlander Sport
  - Nissan – Coverage added for 2021-2023 Rogue
  - Subaru – Coverage added for Impreza
  - Toyota – Coverage added for Bz4x & Crown

*\*All Dynamic ADAS calibrations are included in standard ADS Tool Subscription. Static calibrations that require ADAS targets and fixtures require additional ADAS Subscription used with ADS 625/625X.*

## New Coverage Details – USA Domestic

### New Chrysler/Dodge/Jeep/Ram Coverage

#### 131 new Adjustment type special tests:

ABS Bleed Brakes, ABS Initialization, Active Grill Shutter Replaced, Actuator Calibration, AMP Non ANC Qualifier, Auto High Beam Demo Mode Test, Bleed Brakes, Brake Pedal Calibration, Brake Pedal Learn, CAM Crank Relearn Routine, Change Country Code, Channel Output Test, Check PCM VIN, Clear All Learned Seat Parameters, Clear DEF Pump Learned Offset Values, Clear Engine Auto Restart Crank Counter, Clear Learning Value, Clear Misfire TLC, Clear Stored Accumulated Fuel Mass, Clear TPM Sensor Rolls Test Results, Clear Variable Line Pressure Counters, Clutch Pedal Learn, Configure License Plate Size, Coolant Three Way Valve, Coolant Three Way Valve Replaced, Diesel Particulate Filter Regeneration, DPF Regen, DPF Replacement, Driving Regeneration Request, Dual Alternator Enable/Disable, ECU Replacement With Value Transfer, EGR Coolant Regeneration, EGR System Test, EGS Initialization, Emissions Rolls Test Mode, Enable / Disable Vehicle Features, Enable/Disable Seatbelt Minder Chime, Engine Idle Shutdown Feature Enable/Disable, EPB Service Procedures, Exhaust Phaser 1 Cleaning, Exhaust Phaser 2 Cleaning, Exit Shipping Mode, FCM Enable Emissions Rolls Test Mode, Fleet Pin Reset, Front Axle Disconnect Feature, Hard Stop Search, Headlamp Leveling, HVAC Actuator Calibration Test, Idle Shutdown Timer Adjustment, Initialize ABS, Initialize Cluster Configuration w/o Odometer Affect, Initialize CVT, Initialize ORC, Injector Quantity Adjustment, Intake Phaser 1 Cleaning, Intake Phaser 2 Cleaning, Key FOB Identification, Key Fobs Linked To Memory, KeySense PIN Reset, Learn ETC, Light Rain Sensor Calibration, Mass Air Flow Sensor Initialization, Microphone Output Short Test, Microphone Tone Test, Most Recent Cool Down Test Results, Motor Position Learn, New Engine Installed, Non-Volatile Memory Reset, Oil Change Light Reset, Oil Change Monitor Type, Program Engine Serial Number, Program Tire Sensor Identifications, Program Tire Size, Program Variant Coding, PTO RPM Adjustment, Quick Learn, Quicklearn 62TE, Quicklearn Non RFE, Quicklearn RFE, RAM Active Air Box Calibration, Remote Start Temporary Disable, Reset Adaptive After Oil Change, Reset Adaptive Memory, Reset Adaptive Values, Reset Adaptives After Block Change, Reset After Replacement Of Lambda Sensor, Reset Air-Fuel Adaptives, Reset Camshaft Adaptives, Reset ECU, Reset Enhanced Automatic Oil Change Indicator, Reset Error Free Operation Time to 40 Hours, Reset Memory, Reset of Lambda Values, Reset of SCR Long Term Adaptation Factor, Reset Parameters to Default, Reset SCR Mileage Counter to 200 Miles, Reset VCM Adaptives, Reset VVA Freeze Incorrect Request, Reset Zero Fuel Quantity Calibration, Resolver Offset Learn, Rollover Detection, SCR DEF Tank Fluid Level Filter Reset, SCR System After ECU Replacement Procedure, SCR System Catalyst Reset, SCR System Dosing Module Replacement, SCR System Pressure Line Replacement, SCR System Tank or Pump Replacement, SCR System Wiring Harness Replacement, Sensor Wiring Test, Service Procedures, Set Max Cruise Speed, Set Max Vehicle Speed, Snorkel Output Test, Standardization, Stationary Desoot (DPF Regen), Store Learned TCU Adaptives, System Air Mass/Pressure/Ride Height Readings, TCC Break In, TCM Reset Learned Adaptives Routine, Tip Start Temporary Disable, Tire Pressure Sensor Registration, TLC Learn, Turbo Actuator Pre-Align / Self Calibrate, Turn off Gain Mode Override, Update Pressure Thresholds, VGT Learn, View/Reset Duty Cycle Maps, VIN Lock, Write Pinion Factor, Write VIN

#### 1144 new Actuation type special tests:

1st Gear Clutch Test (62TE), 1st Gear Clutch Test (Non-RFE), 1st Gear Clutch Test (RFE), 2/4 Clutch Volume Index Check, 2-3 Skip Shift Solenoid Control State, 2-4 Solenoid, 2-4 Solenoid State, 2C Or 2-4 Solenoid, 2nd Gear Clutch Test (62TE), 2nd Gear Clutch Test (Non-RFE), 2nd

Gear Clutch Test (RFE), 2nd Prime Gear Clutch Test (RFE), 3rd Gear Clutch Test (62TE), 3rd Gear Clutch Test (Non-RFE), 3rd Gear Clutch Test (RFE), 4 Low Indicator, 4C Solenoid, 4C Solenoid State, 4th Gear Clutch Test (62TE), 4th Gear Clutch Test (Non-RFE), 4th Gear Clutch Test (RFE), 4WD, 4WD Auto, 4WD AUTO Indicator, 4WD Indicator, 4WD LED, 4WD Lock Indicator, 4WD Low, 4WD Neutral Indicator, A/C, A/C Compressor Clutch Relay Control State, A/C Relay, A/C Select, ABS, ABS fault Lamp, ABS Lamp, ABS Light, A-C Button, A-C Compressor Clutch Relay Control State, AC emergency shut off, AC Indicator, A-C INDICATOR, AC Off For Vehicle Manoeuvring, AC Request, A-C Request, A-C Select, ACC Enter In-Plant Mode, Activate Driver and Passenger Head Restraints, Activate TPM High Gain Mode, Active Exhaust Valve 1, Active Exhaust Valve 2, Active Grill Shutter Test, Actuate All Heaters, Actuate All Seat Heaters, Actuate All Vents, Adjustable Pedal Disable Relay, Air Bag, Air Bag Lamp, Air Bag Light, Air Dam Test, Alarm/Doors Status/Deterrence LED, All Doors/Central Locks, All Doors-Central Locks, Alternator Current Limit, Alternator Field Control State, Alternator Field Duty Cycle, Alternator Field Duty-Cycle, Alternator Output Voltage Setpoint, Alternator Test, Ambient Temperature, AMP Output Short Test, AMP Output Tone Test, ANC Output Short Test, Antenna Power, Approach Light State, Audio Test, Audio Test For Subwoofer Specific, Audio Video Signal Detection, AUTO Button, Auto Indicator, AUTO LED, Auto Shutdown (ASD) #1 Relay Control State (Left Bank), Auto Shutdown (ASD) #2 Relay Control State (Right Bank), Auto Shutdown (ASD) Relay Control State, Auto Shutdown Relay Control State, Auxiliary Coolant Pump, Auxiliary Fuel Pump, Average Ambient Temperature, BACK button, Background LED Illumination Level, Background LED State, Backlight Control, Backlight Control-Backlight PWM1, Backlight Control-Backlight PWM2, Backlight Control-Backlight PWM3, Backlight Control-Backlight PWM4, Backlight Control-Backlight PWM5, Backlight Control-Backlight PWM6, Backlight Control-Blue Driver/Passenger Temp Down, Backlight Control-Display PWM, Backlight Control-HVAC Recirc/AC/Front Def/Rear Def, Backlight Control-LED Jewel Indicator auto, Backlight Control-LED Jewel Indicators excluding Auto, Backlight Control-Red Driver/Passenger Temp Up, Hazard, Backlight Control-Sapphire Blue Enter/Mute Knobs, Backlight Control-Sapphire Blue HVAC Auto/Fan Off, Backlight Control-Sapphire Blue Knob Halo Rings, Backlight Control-Sapphire Blue Lower Row Switchbank Buttons, Backlight Control-Sapphire Blue Screen Off, Back Buttons, Backlighting: Driver Temp Down, Pass Temp Down, Backlighting: Driver Temp Up, Pass Temp Ujp., Backlighting: Knob Halo White Backlighting, Backup Alarm, Backup Lamp Left, Backup Lamp Right, Baggage Lamps, Balance Settings, Bass Settings, Battery Bad (Red), Battery Good (White), Battery LED 1, Battery LED 2, Battery LED 3, Battery LED 4, Battery LED 5, Battery LED 6, Battery LED 7, Battery LED 8, Battery LED 9, Battery Voltage LEDs, Battery Voltage Output, Bed Lamp, Blind Spot Indicator State, Blower Motor Speed, Blue Cooled Seat Indicators, Blue Heated Seat Indicators, Blue Temperature Bar, Boost Pressure, Boost Pressure Actuator, Brake Indicator, Brake Light, Brake State Output, Brake Switch, BRAKE Text, Brake Warning Lamp, BSM State, BTSI Coil Output Control, BTSI Control, BTSI Solenoid, Button 11 (Spare), Button 14 (Spare), Button 15 (Spare), Button 16 (Spare), Button 24 (Spare), Button 6 (Spare), Button 7 (Spare), Button 8 (Spare), Button Indicators, Buttons/Encoder Control-Button 1 (Front Defrost), Buttons/Encoder Control-Button 10 (FCW), Buttons/Encoder Control-Button 12 (Back), Buttons/Encoder Control-Button 13 (Screen Off), Buttons/Encoder Control-Button 14 (ESP), Buttons/Encoder Control-Button 16 (PTS), Buttons/Encoder Control-Button 17 (Mute), Buttons/Encoder Control-Button 18 (Enter), Buttons/Encoder Control-Button 19 (Rear Defrost), Buttons/Encoder Control-Button 2 (Driver Temp Up), Buttons/Encoder Control-Button 20 (Passenger Temp Down), Buttons/Encoder Control-Button 21 (Auto), Buttons/Encoder Control-Button 22 (Driver Temp Down), Buttons/Encoder Control-Button 23 (Recirc), Buttons/Encoder Control-Button 3 (Fan Off), Buttons/Encoder Control-Button 4 (Driver Temp Up), Buttons/Encoder Control-Button 5 (AC), Buttons/Encoder Control-Button 9 (Eco), Buttons/Encoder Control-Rotary 1 Detents (Volume), Buttons/Encoder Control-Rotary 1 Direction (Volume), Buttons/Encoder Control-Rotary 2 Detents (Fan), Buttons/Encoder Control-Rotary 2 Direction (Fan), Buttons/Encoder

Control-Rotary 3 Detents (Tune), Buttons/Encoder Control-Rotary 3 Direction (Tune), Buttons/Encoder Control-Rotary 4 Detents, Buttons/Encoder Control-Rotary 4 Direction, Buzzer Control, Cabin Temperature Sensor, Cargo Lamp, Cargo Light, Cargo Light Indicator, Catalyst Efficiency Test, CEGR H-Bridge Valve Duty Cycle, Center High Mount Stop Lamp, Center Stop Lamp, Central high mounted Stop Light (CHMSL), CENTRAL LOCK PASSENGER, Channel 1 Audio Control, Channel 10 Audio Control, Channel 11 Audio Control, Channel 12 Audio Control, Channel 2 Audio Control, Channel 3 Audio Control, Channel 4 Audio Control, Channel 5 Audio Control, Channel 6 Audio Control, Channel 7 Audio Control, Channel 8 Audio Control, Channel 9 Audio Control, Charge Air Cooler Coolant Pump, Charge Port Lock Motor, Charge Port Un-Lock Motor, Check Engine - MIL Lamp, Check Engine MIL Lamp, Check Engine-MIL (Malfunction Indicator Lamp), Check PCM Odometer, CHMSL Lamp, Clutch Signal To ECM Output Control, CNG Indicator, CNG Injector Relay, CNG Shut Off Relay, CNG/Gasoline Forced Fuel Type, Cold Start Aid Driver 1, Compressed Natural Gas, Compression Test, Compressor Current, Control All Solenoids, Control the steering column, Convenience/Reading Lamp, Convenience-Reading Lamp, Coolant Bad Indicator, Coolant Good Indicator, Coolant High Temperature Auxiliary Electric Pump, Coolant Temp LED 1, Coolant Temp LED 2, Coolant Temp LED 3, Coolant Temp LED 4, Coolant Temp LED 5, Coolant Temp LED 6, Coolant Temp LED 7, Coolant Temp LED 8, Coolant Temp LED 9, Coolant Temp LEDs, Coolant Temperature, Coolant Three Way Valve Test, Cooldown Test, Cooled EGR H-Bridge Valve System Test, Cooled Seat Driver High Indicator, Cooled Seat Driver Low Indicator, Cooled Seat Driver Med Indicator, Cooled Seat Passenger High Indicator, Cooled Seat Passenger Low Indicator, Cooled Seat Passenger Med Indicator, Cooler Bypass Valve, Cooling Valve Position, Courtesy Lamps, Crankcase Ventilation Heater, Cyl 1 Deactivation Sol Cntrl State, Cyl 6 Deactivation Sol Cntrl State, Cyl 7 Deactivation Sol Cntrl State, Cylinder 1 Deactivation Solenoid Control State, Cylinder 4 Deactivation Solenoid, Cylinder 4 Deactivation Solenoid Control State, Cylinder 6 Deactivation Solenoid Control State, Cylinder 7 Deactivation Solenoid Control State, DC Clutch Volume Index Check, Dedicated DRL Lamp Left, Dedicated DRL Lamp Right, DEF (Reductant) Pressure Line Heater Test, DEF (Reductant) Tank Heater Test, DEF Dosing Injection Quantity, DEF Reductant Doser Prime Override Test, DEF Reductant Doser Pump Override Test, Diesel Cabin Heat 1, Diesel Cabin Heat 2, Diesel Cabin Heat 3, Diesel Cabin Heater #1, Diesel Cabin Heater #2, Diesel Cabin Heater #3, Diesel Cabin Heater 1, Diesel Cabin Heater 2, Diesel Cabin Heater 3, Diesel Cabin Heater 4, Diesel Fuel Heater Relay, Digital Inputs1 High Memory, Disable Passenger Airbag Lamp Request, Door Ambient Light State, Door Courtesy Lamp State, Door Handle Power Control, Door Handle Verification Test, Double Start Override Relay, DPF Reset Option, DR Solenoid, Driver Cooled Seat, Driver Heated Seat, Driver Side Seat Belt, Driver Temp Detents, Driver Temp Down Button, Driver Temp Rotary Direction, Driver Temp Up Button, DRL, DTI FUEL TRANSFER RLY, DTI LTR CLNT PMP, DTI SPRCHRGR BPV MOTOR, Dual Speed Fuel Pump Relay, Dual Speed Oil Pump, Dual Speed Oil Pump Status, Duct Sensor - Floor Left, Duct Sensor - Floor Right, Duct Sensor - Panel Left, Duct Sensors -Panel Right, Duty Cycle Purge Solenoid, Easy Entry/Exit, EBL Status, EC Mirror State, ECO, ECO Button, ECO Indicator, ECO ON-OFF Indicator, ECVD Compressor PWM Command, ECVD Compressor PWM Command~ECVD Compressor PWM Command, EGR Cooler Bypass, EGR DC Motor Sol Vlv Recir Vlv, EGR Duty Cycle, EGR Positioner, EGR Throttle Valve, EGR Valve Replaced, EGR Valve Solenoid Duty Cycle, Electric Thermostat Heater Solenoid, Electric Thermostat Heater Solenoid Duty Cycle, Electric Vacuum Pump, Electronic Stability Control, Electronic Stability Control Off, EMCC VLP Solenoid, Emissions Rolls Test Mode Is Active, Engine After Run Coolant Pump, Engine Check Lamp [MIL], Engine Digital Fan 1, Engine Digital Fan 2, Engine Off Injector Toggle Test, Engine RPM Control, Engine Running Injector Kill Test, Engine Speed Output, Engine Temp LEDs, Engine Temperature, Enter, Enter Button, EPB Failure Lamp, EPB Service, EPB Warning Light, EQ Loudness Test, ESC, ESC Disable Lamp, ESC Indicator, ESC Malfunction Lamp, ESC Off, ESC ON-OFF Indicator, ESCL 12 Volt Feed Control, ESCL Unlock Control, ESIM Forced

Monitor Test, ESM Power Supply, ESP button, ESP Light, ETC Indicator Test, ETC System Test, ETC Throttle Follower Test, EVAP Purge Valve, Evaporator Sensor Temperature, Evaporator Temp Sensor, Evaporator Temperature Sensor, Exhaust Brake, Exhaust Brake Auto Green, Exhaust Brake Yellow, Exhaust Gas Cooler Bypass Valve, Exhaust Gas Recirculation Valve, Extend Mileage With SCR Active Faults, FAD Feedback Voltage, FAD Lock Request, FAD Supply Voltage, Fade Settings, Fan Clutch PWM Duty Cycle Output, Fan Clutch Test, Fan Off Button, Fan Rotary Detents, FCW Button, Feature Pin, First Pass Cool Down Test Results, First Row Driver Seatbelt Buckle Sensor-Switch, First Row Passengers Seatbelt Buckle Sensor-Switch, Flipper Glass 2, Foot Well, Foot Well/Halo Lamps, Foot Well-Halo Lamps, Frequency Step Selection, Front Blower Control, Front Blower Motor, Front Blower Speed, Front Collision Off, Front Collision Off, Front Defrost, FRONT DEFROST button, Front Defrost Indicator, Front Fog, Front Fog Lamps, Front Mode 1 Actuator Position, Front Mode 1 Defrost Actuator Position, Front Mode 2 Panel Actuator Position, Front Mode Actuator Position, Front Mode Door Actuator Position, Front Off Road Camera Washer, Front Washer, Front Wiper (High/Low), Front Wiper (High-Low), Front Wiper (On/Off), Front Wiper (On-Off), Front/Rear Washer, Front-Rear Washer, Fuel Filter Heating, Fuel filter water level warn lamp, Fuel Injector, Fuel Injector 1, Fuel Injector 1 Control State, Fuel Injector 2, Fuel Injector 2 Control State, Fuel Injector 3, Fuel injector 3 Control State, Fuel Injector 4, Fuel Injector 4 Control State, Fuel Injector 5, Fuel Injector 5 Control State, Fuel Injector 6, Fuel Injector 6 Control State, Fuel Injector 7, Fuel Injector 7 Control State, Fuel Injector 8, Fuel Injector 8 Control State, Fuel Injector Balance, Fuel Level LEDs, Fuel Level Output, Fuel Pre Supply Pump, Fuel Pressure Override, Fuel Pressure Regulated O/P (Bar), Fuel Pressure Regulator, Fuel Pump, Fuel Pump Relay, Fuel Pump Relay Control State, Fuel System Run Up Test, Functional LED Illumination Level, Functional LED State, Gas Injector Relay, Gasoline Indicator, Gated Park ZFII Output, Gated Park ZFII Output Control, Gear Position, Gear Selection, Generator Ramp Time, Generator Speed Threshold, Glow Lamp, Glow Plug, Head Rest Relay, Headlamp Washer, Heated Seat Automatic Addressing, Heated Seat Driver High Indicator, Heated Seat Driver Low Indicator, Heated Seat Driver Med Indicator, Heated Seat Passenger High Indicator, Heated Seat Passenger Low Indicator, Heated Seat Passenger Med Indicator, Heated Steering Wheel, Heated Steering Wheel indicator, Heated Steering Wheel~Heated Steering Wheel, HEV Belt-Driven Coolant Pump Clutch Relay, HEV Engine Aux Heater LIN Coolant Pump, HEV Engine Belt-Driven Coolant Pump Clutch Relay, HEV Fuel Tank Isolation Valve Solenoid, HEV TPIM Inverter LIN Coolant Pump, High Beam, High Beam Indicator, High Beam Light, High Pressure Fuel Rail Test, High Speed Engine Cooling Fan Control, High Speed Fan, High Speed Fan Relay, Horizontal Motor Backward/Forward, Horn, HPCR Duty Cycle, HVAC Cool Down Test, HVAC Self Test, I/O Control All-Limp Home Mode active, I/O Control All-Red Lamp, I/P Illumination, Idle RPM Test, Ignition Coil 1, Ignition Coil 10, Ignition Coil 2, Ignition Coil 3, Ignition Coil 4, Ignition Coil 5, Ignition Coil 6, Ignition Coil 7, Ignition Coil 8, Ignition Coil 9, Ignition Run, Ignition Run - Acc 1, Ignition Run - Acc 2, Ignition Run - Start, Ignition RUN/ACC 1, Ignition RUN/ACC 2, Ignition RUN/START, Ignition RUN-ACC 1, Ignition RUN-ACC 2, Ignition RUN-START, Immobilizer Antenna Test, Indicator Control-A/C Indicator, Indicator Control-Auto Indicator, Indicator Control-FCW Indicator, Indicator Control-Front Defrost Indicator, Indicator Control-Indicator 1 (Auto), Indicator Control-Indicator 10 (SSO), Indicator Control-Indicator 11 (PPA), Indicator Control-Indicator 12 (LDW), Indicator Control-Indicator 2 (AC), Indicator Control-Indicator 3 (Recirc), Indicator Control-Indicator 4 (Front Defrost), Indicator Control-Indicator 5 (Rear Defrost), Indicator Control-Indicator 6 (ECO), Indicator Control-Indicator 7 (FCW), Indicator Control-Indicator 8 (Traction Control), Indicator Control-Indicator 9 (PTS), Indicator Control-LDW Indicator, Indicator Control-Park Sense Indicator, Indicator Control-Rear Defrost Indicator, Indicator Control-Recirc Indicator, Injector Kill Test, Inlet Metering Valve, Inlet Valve FL, Inlet Valve FR, Inlet Valve Left Front, Inlet Valve Left Rear, Inlet Valve LF(Normally Open), Inlet Valve LR (Normally Open), Inlet Valve RF (Normally Open), Inlet Valve Right Front, Inlet Valve Right Rear, Inlet valve RL, Inlet valve RR, Inlet Valve RR (Normally

Open), Input Test, Instrument Panel Illumination Level Output, Intake Manifold Short Runner Valve (SRV) Solenoid Control State, Intake Manifold Short Runner Valve Solenoid, Intake Manifold Tuning Valve (MTV) Solenoid Control State, Intake Manifold Tuning Valve Solenoid, Intake Port Shut Off, Intake Throttle Duty Cycle, Inverter Enable Relay, Inverter Status Indicator, IOD RELAY ON LSD, I-P Illumination, IPC Self Test, IRCM Heater, IRCM Relay Unlock Control, ITOS - Cabin Temperature, Key Pad Back Lighting, Keypad Backlight Control, KeySense, KIN ACC LED State, KIN Antenna Power, KIN LED Control, KIN OFF LED State, KIN RUN LED State, KIN Start/Stop LED State, KIN Start-Stop LED State, Knob Lock State, L/U And SEL On Off Solenoid, L/U Solenoid Current, Lane Departure Warning ON-OFF Indicator, LC Clutch Volume Index Check, LC Solenoid, LDP Solenoid, LDW Warning Indicator, Leak Detection Pump, Leak Detection Pump Forced Monitor Test, LED Control-LED 1 (Auto Control), LED Control-LED 2 (EBL), LED Control-LED 3 (Front defrost), LED Control-LED 4 (recirc), LED Control-LED 5 (A/C), LED Test - Damping Mode Automatic Active, LED Test - Damping Mode Hard / Sport Active, LED Test - Damping Mode Soft Active, Left Rear Tail/Park Lamp, Left Air Catcher LED, Left Auxiliary High Beam, Left Backrest Heat Seat Linear PWM Request -Output, Left Cushion Heat Seat Linear PWM Request -Output, Left Day Light Lamp, Left Floor Duct Sensor, Left Front Fog Lamps, Left Front Park Lamp, Left Front Turn Lamp, Left HID Lamp, Left High Beam, Left High Beam Shutter, Left Low Beam, Left Panel Duct Sensor, Left Rear AUX Turn Lamp, Left Rear Fog Lamps, Left Rear Tail-Park Lamp, Left Rear Turn Lamp, Left Rear Turn Lamp (BUX), Left Rear Turn/Stop Lamp, Left Rear Turn-Stop Lamp, Left Reartail-Park Lamp, Left Reverse Lamp, Left Reverse Lamp 2, Left Reverse Lamp State, Left Side Markers, Left Signal Mirrors/Side Repeaters (BUX), Left Signal Mirrors-Side Repeaters (BUX), Left Signature Lamp, Left Solar Sensor Values, Left Trailer Tow Turn/Stop Lamp, Left Trailer Tow Turn-Stop Lamp, Left Turn Signal Indicator, Left Vent Seat Linear PWM Request -Output, LF Antenna Verification Test, License Plate Lamp, License Plate Lamp WK -Right Rear Rail Lamp WD, Lift Pump Relay, Liftgate Release Motor, Linear Hall, Linear Solenoid A, Linear Solenoid B, Linear Solenoid C, Linear Solenoid D, Linear Solenoid E, Linear Solenoid F, Linear Solenoid G, Locate Learned Keys, LOCK 4WD, Low Fuel, LOW LED, Low Pressure Feed Valve 1, Low Pressure Feed Valve 2, Low Pressure Feed Vlv 1(Normal close), Low Pressure Feed Vlv 2(Normal close), Low Reverse Solenoid, Low Speed Fan Relay, Low-Reverse Solenoid, LR Clutch Volume Index Check, LR Solenoid, Main Left Temperature Actuator Position, Main/Left Temp Selected, Main-Left Temp. Door Actuator Position, Main-Left Temperature Actuator Position, Malfunction Indicator Lamp, Memory Seat ECU Self Test, Metering Unit Actuator, Mid-Range Settings, MIL Lamp, Mirror Direction Control, Mirror Fold, Mirror Fold Window Control, Mirror Heat State, Mirror LED -Day-Night, Mirror LED Left State, Mirror LED -ON-OFF, Mirror LED Right State, Mirror Right LED State, Mirror Signal Lamp State, Mirror Vertical/Horizontal Direction, Mode, Mode 2 Actuator Position (Defrost Panel Door), Motorized Thermistor-Cabin Temp, MS Solenoid, Multiair VVA Solenoid 1, Multiair VVA Solenoid 2, Multiair VVA Solenoid 3, Multiair VVA Solenoid 4, Mute, MUTE button, Mute Test, Neutral, Neutral Gate Test (62TE), Neutral Gate Test (Non-RFE), Neutral Gate Test (RFE), Neutral LED, O2 1/1 Heater Duty-Cycle, O2 1/2 Heater Duty-Cycle, O2 Heater Test, OBD Button 1 Pad 1, OBD Button 1 Pad 2, OBD Button 2 Pad 1, OBD Button 2 Pad 2, OBD Button 3 Pad 1, OBD Button 3 Pad 2, OBD Button 4 Pad 1, OBD Button 4 Pad 2, OBD Button 5 Pad 1, OBD Button 5 Pad 2, OBD Button 6 Pad 1, OBD Button 6 Pad 2, OBD Button 7 Pad 1, OBD PPPA -Pad 1, OBD PPPA -Pad 2, OD Clutch Volume Index Check, Oil Pressure Bad, Oil Pressure Good, Oil Pressure Lamp, Oil Pressure LED 1, Oil Pressure LED 2, Oil Pressure LED 3, Oil Pressure LED 4, Oil Pressure LED 5, Oil Pressure LED 6, Oil Pressure LED 7, Oil Pressure LED 8, Oil Pressure LED 9, Oil Pressure LEDs, Oil Pressure Output, Outlet Valve FL, Outlet valve FR, Outlet valve front left activation, Outlet valve front right activation, Outlet Valve Left Front, Outlet Valve Left Rear, Outlet Valve LF (Normally Closed), Outlet Valve LR (Normally Closed), Outlet valve rear left activation, Outlet valve rear right activation, Outlet Valve RF (Normally Closed), Outlet Valve Right Front, Outlet Valve Right Rear, Outlet valve RL, Outlet valve RR, Outlet

Valve RR (Normally Closed), Over Drive Solenoid, Over Drive Solenoid On Time, Over-Drive Solenoid, Overdrive Switch Test, Overdrive Switch Test (Non-RFE), OverDrive Switch Test (RFE), Oxygen Sensor 1 Heater, Oxygen Sensor 1/1 Heater Control State, Oxygen Sensor 1/1 Heater Duty Cycle, Oxygen Sensor 1/2 Heater Control State, Oxygen Sensor 1/2 Heater Duty Cycle, Oxygen Sensor 1-1 Heater Duty-Cycle, Oxygen Sensor 1-2 Heater Duty-Cycle, Oxygen Sensor 2 Heater, Oxygen Sensor 2/1 Heater Control State, Oxygen Sensor 2/1 Heater Duty Cycle, Oxygen Sensor 2/2 Heater Control State, Oxygen Sensor 2/2 Heater Duty Cycle, Oxygen Sensor 2-1 Heater Duty Cycle, Oxygen Sensor 2-1 Heater Duty-Cycle, Oxygen Sensor 2-2 Heater Duty Cycle, Oxygen Sensor 2-2 Heater Duty-Cycle, Oxygen System Heater Test, Park Lamp Rear Left, Park Lamp Rear Right, Parking Brake And Low Brake Fluid, Parking Light Indicator, Parttime LED, Passenger Airbag (PAB) Status, Passenger Airbag LED, Passenger Cooled Seat, Passenger Heated Seat, Passenger Occupant Detection Sensor (ODS), Passenger Seat Belt, Passenger Temp Detents, Passenger Temp Down Button, Passenger Temp Rotary Direction, Passenger Temp Up Button, Pedals Forward/Backward, Pilot 1 (USV Front, MCI Front -Normally Open), Pilot 1 (USV LF-RR, MCI LF-RR -Normally Open), Pilot 2 (USV Rear, MCI Rear -Normally Open), Pilot 2 (USV RF-LR, MCI RF-LR -Normally Open), PL Solenoid Current, Pneumatic Intercooler Bypass, Pneumatic Waste Gate, Police Passenger Un-Lock Motor, Position Lamp, Position Lamp Telltale, Position Lights, Power (OFF), Power Down, Power Mirror Feed Relay Control, Power On and Disable User Inputs, PPPA, PPPA ON-OFF Indicator, Pressure Control Solenoid Valve, Pressure Regulator Valve, Pressure Value Correction Shut-Off, Pre-Supply Pump, Priming 1 (HSV Front, LPF Front -Normally Closed), Priming 1 (HSV LF-RR, LPF LF-RR -Normally Closed), Priming 2 (HSV Rear, LPF Rear -Normally Closed), Priming 2 (HSV RF-LR, LPF RF-LR -Normally Closed), Proportional Purge Solenoid, Proportional Purge Solenoid., PTC Heater Relay 1, PTC Heater Relay 2, PTC Heater Relay 3, PTO, PTS Button, PTS ON-OFF Indicator, PTS Switch Simulation, Puddle Lamp State, Pump, Purge Solenoid Duty Cycle, Purge Valve Duty-Cycle, Purge Vapors Test, Radiator Cooling Fan PWM Cntrl State, Radiator Cooling Fan PWM Control State, Radiator Cooling Fan PWM Duty Cycle, Radiator Cooling Fan PWM Duty-Cycle, Radiator Cooling Fan Relay 1 Control State, Radiator Cooling Fan Relay 1,2,3 Control State, Radiator Cooling Fan Relay 2 Control State, Radiator Fan 1 Duty Cycle, Radiator Jalousie ShutterPosition, Radiator-Condenser Cooling Fan Relay 1 Control State, Radiator-Condenser Cooling Fan Relay 2 Control State, Radio, Radio Volume, Rail Pressure, Ram Active Air Box Test, Ram Box, Range Select Downshift Test Routine, Range Select Downshift Voltage, Range Select Upshift Test Routine, Range Select Upshift Voltage, Read VIN, Ready, Rear Axle Lock, Rear Axle Locker Command, Rear Blower Speed, Rear Blower State, Rear Defrost Button, Rear Defrost Indicator, Rear Fog, Rear Fog Lamps, Rear Heated Window, Rear Mode 1 Actuator Position, Rear Wiper, Recirc, RECIRC button, RECIRC Indicator, Recirc. Door Actuator Position, Recirculation Door Actuator Position, Recirculation LED, Recirculation Pump, Recirculation pump activation, Recliner, Red Brake Lamp, Red Hazard Button, Red Heated Seat and Steering Wheel Indicators, RED Heated Seat Indicators, Red Temperature Bar, Redundant Ignition RUN/START Feed Output Control, Redundant Ignition RUN-START Feed Output Control, Remote Start Antenna Test, Reverse Gear Clutch Test (62TE), Reverse Gear Clutch Test (Non-RFE), Reverse Gear Clutch Test (RFE), Reverse Lockout Solenoid, Reverse Lockout Solenoid Control State, Right Air Catcher LED, Right Auxiliary High Beam, Right Backrest Heat Seat Linear PWM Request -Output, Right Cushion Heat Seat Linear PWM Request -Output, Right Day Light Lamp, Right Floor Duct Sensor, Right Front Fog Lamps, Right Front Park Lamp, Right Front Turn Lamp, Right HID Lamp, Right High Beam, Right High Beam Shutter, Right Low Beam, Right Panel Duct Sensor, Right Rear Fog Lamps, Right Rear Park Lamp, Right Rear Tail/Park Lamp, Right Rear Tail-Park Lamp, Right Rear Turn Lamp, Right Rear Turn Lamp (BUX), Right Rear Turn/Stop Lamp, Right Rear Turn-Stop Lamp, Right Reartail-Park Lamp, Right Reverse Lamp, Right Reverse Lamp #2, Right Reverse Lamp 2, Right Reverse Lamp State, Right Side Markers, Right Signal Mirrors/Side Repeaters (BUX), Right

Signal Mirrors-Side Repeaters (BUX), Right Signature Lamp, Right Solar Sensor Values, Right Temp Actuator Position, Right Temp. Door Actuator Position, Right Temperature Actuator Position, Right Temperature Selected, Right Trailer Tow Turn/Stop Lamp, Right Trailer Tow Turn-Stop Lamp, Right Turn Signal Indicator, Right Vent Seat Linear PWM Request, Right Vent Seat Linear PWM Request -Output, Roller Learning Shut-Off, Rotary 4 Detents, Rotary 4 Direction, RT-LT Sidemarkers-RT-LT Applique Parklamps, Screen Off, SCREEN OFF button, SDAR Station Selection, Seat Belt, Seat Belt Lamp, Seat Belt Light, Seat Position Recall, Second Row Center Seatbelt Switch, Second Row Left Seatbelt Switch, Second Row Right Seatbelt Switch, Secondary Air Pump, Secondary Air Solenoid, Secondary Solenoid Current, Secondary/Thatchum Lock Motor, Secondary/Thatchum Un-Lock Motor, Secondary-Thatchum Lock Motor, Secondary-Thatchum Un-Lock Motor, Select Level Switches-Damping Mode Button, Sensor Rolls Test, SERV LED, Service Lamp, Set Engine RPM Test, Shift Lever Position Test (62TE), Shift Lever Position Test (Non-RFE), Shift Lever Position Test (RFE), Shift Solenoid 1, Shift Solenoid 2, Shift Solenoid 3, Shift Solenoid 4, Shift Solenoid 5, Shift Solenoid 6, Shift Solenoid A, Shutoff Correction Quantity, Shutoff Injector Quantity, Side Mirrors Heater Control, Skip Shift Solenoid, Small Leak Verification Test, Snow Plow Left Turn Lamp, Snow Plow Park Lamps, Snow Plow Right Turn Lamp, Snow Plow Switch #1, Snow Plow Switch #2, Snow Plow Switch #3, Snow Plow Switch #4, Snow Plow Switch 1, Snow Plow Switch 2, Snow Plow Switch 3, Snow Plow Switch 4, Software Test, SPARE LED LAMP DRIVER, SPARE RELAY 1 LSD, SPARE RELAY 2 LSD, Speaker Quadrant Selection, Split Cooling Drive Duty Cycle, Sport ON-OFF Indicator, SRS Indicator Lamp Request, SRS Lamp, SRV Test, Start/Stop System, Starter Relay, Starter Solenoid, Starter Solenoid (High), Starter Solenoid High, Steering Column, Steering Wheel Linear PWM Request -Output, Stop - Start System Active Indicator, Stop / Start System Active Lamp, Stop All Actuators, Stop Start Confirmation, Stop/Start System Active, Stop-Start ON-OFF Indicator, Stop-Start System Active, Stop-Turn Lamp Left, Stop-Turn Lamp Right, Sun Shade Control, Surge Solenoid Control State, Surge Valve Solenoid, Sway Bar Indicator, Swing Gate Lock, Swing Gate Unlock, Switch Illumination State, Switch On EPB Failure Lamp, Switch On EPB Function Lamp, System Wiring Test, T Case Service Indicator Request, Tail Gate Lock, Tail Gate Unlock, T-Case Motor Duty Cycle, T-Case Motor Solenoid Lock, T-Case Motor-Motor Lock, T-Case Service Indicator Request, TCC Pressure Control Solenoid, Telltale ABS, Telltale Airbag, Telltale Brake, Telltale Charging, Telltale ESP, Telltale Fog Front, Telltale Glow Plug, Telltale High Beam, Telltale MIL, Telltale Seat Belt, Telltale Tire Pressure Monitor, Telltale Turn Left, Telltale Turn Right, Telltale - ESC, Telltale - ESC Off, Telltale - ESP Off, Telltale - Park, Telltale - Position Lamp, Telltale - Rear Fog, Telltale ESP/BAS, Telltale-Tire Pressure, Telltale-Tire Pressure Monitor, Telltale-Tow Mode, Temporary Remote Start Disable, Thermistor Test, Thermostat Drive Duty Cycle, Third Row Center Seatbelt Switch, Third Row Left Seatbelt Switch, Third Row Right Seatbelt Switch, Throttle Valve, Throttle Valve Actuator, Tilt Mirrors in Reverse, Timeout Time Flash To Pass, Timeout Time Paddle Shift Switches, Tire Pressure, Tire Pressure Monitoring, Tone Test, Topper Center Mounted Stop Lamp, TOPPER CHMSL, Torque Coupling Control, TOW-HAUL, Tow-Haul Indicator, TPM Sensor Rolls Test, Trac Cntrl Outlet Vlv 1(Normal open), Trac Cntrl Outlet Vlv 2(Normal open), Traction Control Outlet Valve 1, Traction Control Outlet Valve 2, Trailer Backup Lamps, Trailer BU Lamps, Trailer Tail Lamp Relay, Transfer Case 4WD/Lock/Part Lamp, Transfer Case AWD/Auto/Full Lamp, Transfer Case Low Lamp Request, Transfer Case Neutral Lamp Request, Transmission Verification Test, Treble Settings, Truck Bed Lighting Leds, Truck Cargo Lamps, Trunk/Flipper Glass Release Motor, Trunk-Flipper Glass Release Motor, Tumble Generator Valve, Tuner Rotary Detents, Tuner Rotary Direction, Turn Left, Turn Right, Turn Signal Lamp State, Twilight Sensor Value, UConnect Live Apps Installation, UD Clutch Volume Index Check, UD Solenoid, UGDO Power Supply, Underdrive Solenoid, Under-Drive Solenoid, Unlock 1/Driver Lock, Unlock 1-Driver Lock, Unlock 2/Passenger Locks, Unlock 2-Passenger Locks, Unlock Left Rear Door, Unlock Right Rear Door, Unlock Run - Start, Unlock RUN-START, Vacuum Cleaner Power Saver Indicator, Vacuum Cleaner Relay Driver,



Vacuum Cleaner Switch Backlight, Vacuum Pump Relay, Variable Displacement AC, Variable Swirl Actuator, Variable Swirl Valve Shutoff, Variable Valve Timing, VVT Control Valve, Vehicle Speed Output, Vehicle Sway Green, Vehicle Sway White, Vehicle Sway Yellow, Vertical Front, Vertical Rear, Video Input, View Last Successful Remote Start Event Data, View Last VTA Trigger Cause Data, View Remote Start Abort Data, View Remote Start Inhibit Data, View Satellite Sensor Information, VLP Solenoid, Volume Rotary Detents, Volume Rotary Direction, VTA Indicator LED, VVA Cylinder #1, VVA Cylinder #2, VVA Cylinder #3, VVA Cylinder #4, VVA Solenoids Pre-Energization, VVL Service Test, VVT Exhaust Phaser 1 Actuator, VVT Exhaust Phaser 2 Actuator, VVT Intake Phaser 1 Actuator, VVT Intake Phaser 2 Actuator, VVT Tests, Washer Camera, Wastegate Solenoid Control State, Wastegate Solenoid Duty Cycle, Water In Fuel, Water Pump Charge Air Cooling, White Backlighting Buttons, White Backlighting Channel 1, White Backlighting Channel 2, White Backlighting Knob Buttons, White Backlighting Knob Indicators, White Knob Indicators, White Lower Halos, White Upper Halos, Window Control, Window State, WK Head Rest Relay, Yellow A/C and Auto Indicators, Yellow Button Indicators, Yellow Fault Lamp

## New Ford/Lincoln Coverage

- Added coverage for 84 new system applications

### 5 new Adjustment type special tests:

Clear Transmission Adaptive Tables, Engine Oil Life Reset, Relearn Vehicle Data - TCM, Reset KAM, TPMS Sensor Training Mode

### 186 new Actuation type special tests:

(Cruise) Resume Switch, (Cruise) Set- Switch, (Cruise) Set+ Switch, (EVAP) Vapor Blocking Valve, 4WD-AWD Front Axle Disconnect - Clutch Commanded State, 4WD-AWD Front Axle Disconnect - High Level Strategy Commanded, 4WD-AWD Rear Differential Unit Actuator -A- Requested Torque, ABS Valve Power Supply, ABS Warning Lamp, A-C Distribution Valve A Output Ckt Commanded Energized, A-C Distribution Valve B Output Ckt Commanded Energized, A-C Recirculating Servo Position Status, Actuator Supply Voltage -B- Control State, Adaptive Cruise Distance Gap (-) Switch, Adaptive Cruise Distance Gap (+) Switch, Adaptive Front Lighting Fault, AHD (Auto Headlamp Dipped), Air Conditioning Clutch Engaged, Air Conditioning Compressor Commanded State, Air Mode Actuator, Airbag Warning Indicator, All Warning Lamps, Anti-Theft Horn Status, Battery Pack Coolant Ctrl Valve A - Output Ckt Energized, Blind Spot Detection System Telltale, Blower Motor Speed, Brake-Shift Interlock, Camera Power Control, Center High Mounted Stop Lamp Output Control, Center Speaker Status, Center Tweeter Status, Commanded Equivalence Ratio (Air To Fuel Mixture) Bank 2, Coolant Overtemp, Coolant Pump -A- is Commanded On, Courtesy Lamps, Courtesy Puddle Step Lamps, Decklid-Liftglass Release Output Status, Delayed Accessory Power, Desired Idle Speed (Rpm), Diesel Pre-Heater, Driver Heated Seat, Dynamic Stability Control (DSC) Off, ECO Mode, Eco Stop-Start, EGR Valve Position Desired, Engine Coolant Bypass Valve Control Output, Engine Coolant Bypass Valve -D- Commanded to be Energized, Engine Idle Shutdown Extended, Engine Oil Pressure Control Duty Cycle - Commanded, Evaporative Emission Canister Purge Valve Duty Cycle, Evaporative Emission Canister Vent Valve, Fan Speed Desired, FM Radio Band, Front Blower Relay, Front Fog Lamp Indicator, Front Park Lamps Output, Front Window Down Output, Front Window Up Output, Fuel Gauge Indicator Control, Fuel Pump Relay, Fuel Rail Pressure Desired, General Warning Indicator 1 (Red), General Warning Indicator 2 (Amber), Generator 2 Voltage Desired, Generator Voltage Desired, Glow Plug Voltage Commanded, Heater Control For HO2S 11 And HO2S 21, Heater Control For HO2S 12 And HO2S 22, High Beam Indicator, Hill Descent Control, Hydraulic Pump Motor, Key (Removal) Inhibit, KOEO Self Test, Lamp Control, Lane Departure Warning

Telltale, LED Backlighting, Left Blend Door Position, Left Front Dump, Left Front Fog Lamp, Left Front Isolation Valve, Left Front Speaker Status, Left Front Turn Signal Lamp Status, Left Front Tweeter Status, Left Front-Right Rear Traction Control Supply 1, Left Front-Right Rear Traction Control Valve 1, Left Headlamp High Beam, Left Headlamp Low Beam, Left Rear Dump, Left Rear Isolation Valve, Left Rear Speaker Status, Left Rear Turn Signal Lamp Status, Left Rear Turn Signal-Trailer Relay Status, Left Rear Tweeter Status, Left Turn Signal Lamp Status, Liftgate Release Output Status, Liftgate-Decklid Release Output Status, LIGHTS ON WARNING., Line Pressure Control Desired, Load Shed Output Control, Low Fuel Warning Indication, Low Washer Fluid Warning, Maintenance Warning Lamp, Malfunction Indicator Lamp, Max Defrost, Oil Pressure Low Indicator, Oil Pressure, Output State Control Of Torque Converter, Passenger Heated Seat, PCM WAKEUP LINE, Power Point Output Relay, Rear Defrost (Heated Backlight), Rear Fog Lamp Indicator, Rear Park Lamps Output, Reverse Lamp, Right Cursor Down Arrow, Right Cursor Left Arrow, Right Cursor OK Button, Right Cursor Right Arrow, Right Cursor Up Arrow, Right Front Dump, Right Front Fog Lamp, Right Front Isolation Valve, Right Front Speaker Status, Right Front Turn Signal Lamp Status, Right Front Tweeter Status, Right Front-Left Rear Traction Control Supply 2, Right Front-Left Rear Traction Control Valve 2, Right Headlamp High Beam, Right Headlamp Low Beam, Right Rear Dump, Right Rear Isolation Valve, Right Rear Speaker Status, Right Rear Turn Signal Lamp Status, Right Rear Turn Signal-Trailer Relay Status, Right Rear Tweeter Status, Right Turn Signal Lamp Status, Run-Accessory Output Control, Safety Belt Warning Lamp, Shift Solenoid F Commanded Current, 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, Shock Setting Button, Side Light Lamp, Side Mirror Heating Output Control, Side Mirror Turn Signal Lamp Control, Sounder Output Request, Spark Advance, Speed Control (ASLD) Switch, Speed Control Actuator Switch Off, Speed Control Actuator Switch On, Speed Control Cancel Switch, Speed Control Cancel-Resume Switch, Speed Control Gap Switch, Speed Control On-Off Cancel Switch, Speed Control On-Off Switch, Speedometer, Spotlight Mirror Output, Start Button Mode Indicator Control, Steering Effort Button, Stop-Start Telltale Amber, Stop-Start Telltale Red, Stop-Start, Subwoofer Status, Tachometer Gauge Indicator Control, Temperature Gauge, Third Row Left Speaker Status, Third Row Power Fold Seat Output, Third Row Right Speaker Status, Throttle Position - Desired, Tire Pressure Telltale Status, Torque Converter Clutch Solenoid Commanded Current, Traction Control Indicator, Traction Control Off Indicator, Transmission System (Mil) Fault, Transmission Temperature Gauge Pointer Position, Turbo Boost Gauge Pointer Placement Command, Variable Camshaft Timing Exhaust Angle Desired, Variable Camshaft Timing Intake Desired Angle, Variable Geometry Turbocharger Commanded, Vehicle Mode, Viscous Fan Pulse Width Modulated Control - Commanded, Volume, Warning Lamp Status 1 - Charge Warning

## New GM Coverage

### 90 new Adjustment type special tests:

Adaptive Pressure Control Learn, Ambient Air Temperature Calculation Reset, Automated Brake Bleed, AWD Disabled-by-Malfunction Counter Reset, Backup Battery Timer Reset, Brake Pedal Position Sensor Learn, Brake Pressure Sensor Calibration, Brake System Plunger Motor Position Sensor Learn, CAN Bus Configuration Learn, Cancel Camera Learn, Clear Approach Detection Disable Reasons, Clear Disable History Data, Clear Driver Window Learned Values, Clear Left Rear Window Learned Values, Clear Manufacturer Enable Counter, Clear Passenger Window Learned Values, Clear Right Rear Window Learned Values, Configure New Module, Control Module Reset, Copy And Paste TPM Information, Crankshaft Pos Variation Learn, DPF Pressure Sensor Reset, DPF Service Regeneration, DPF/Catalyst 2 Reset, Engine Coolant Control Valve Learn, Engine Coolant Pump Data Reset, Engine Oil Life Reset, Exhaust Flow Control Valve

Learn, Front Axle Brake Pad Life Monitoring Reset, Fuel Pump Driver Control Module Configuration, Fuel Pump Trim Reset, Fuel Rail Pressure Relief Valve Learned Values Reset, Fuel Trim Reset, Hands-Free Liftgate Sensor Control Module Calibration, Heated Oxygen Sensor Heater Resistance Learned Values Reset, HO2S Heater Learn, HO2S Learned Values Reset, HVAC Actuators Learn, HVAC Afterblow Configuration, Idle Learn Reset, Info Display/Infotainment Faceplate Reset, Intake System Learned Values Reset, Invalidate All Fobs, Learned Values Reset, Liftgate Maximum Open Position Learn, Longitudinal Acceleration Sensor Learn, O2 Heater Resistance Reset, Park Brake Calibration, Passenger Presence Sensor Learn, Power Steering Pressure Sensor Learn, Program Key Fob 1, Program Key Fob 2, Program Key Fob 3, Program Key Fob 4, Range Actuator Correlation Learn, Range Actuator Learn, Rear Axle Brake Pad Life Monitoring Reset, Rear Differential Hydraulic System Service Bleed, Reset High Voltage Disable Request After Crash Event Detected, Reset Teen Driver Key PIN, RVS Disable History Reset, Setup SDM Part Number In BCM, Steering Gear Learned Values Reset, Steering Gear Replacement Procedure, Steering Wheel Angle Sensor Centering, Steering Wheel Angle Sensor Learn, Steering Wheel Angle Sensor Reset, Throttle Body Idle Air Flow Compensation Reset, Timing Belt Life Reset, Tire Pressure Reset, Tire Pressure Sensor Registration, Tire Pressure Sensor Signal Reset, Tire Type/Pressure Selection, Transmission Adaptive Pressure Reset, Transmission Clutch 1 Return Spring Learn, Transmission Clutch 1 Volume Learn, Transmission Clutch 2 Return Spring Learn, Transmission Clutch 2 Volume Learn, Transmission Clutch 3 Return Spring Learn, Transmission Clutch 3 Volume Learn, Transmission Clutch 4 Return Spring Learn, Transmission Clutch 4 Volume Learn, Transmission Clutch 5 Return Spring Learn, Transmission Clutch 5 Volume Learn, Transmission Service Fast Learn, Turbocharger Wastegate Learn, Vehicle Dynamic Sensor Offset Calibration, WLAN Password Reset, WLAN Service Set Identifier (SSID) Reset, Yaw Rate Sensor Learn

### **296 new Actuation type special tests:**

A/C Compressor Clutch, A/C Relay, ABS Left Front Solenoid Valves, ABS Left Rear Solenoid Valves, ABS Pump Motor, ABS Right Front Solenoid Valves, ABS Right Rear Solenoid Valves, AC Compressor Solenoid Valve, Accent Lighting 1, Accent Lighting 2, Accessory Power Mode Indicator, Accessory Power Relay, Accessory/RAP Relay, Accessory/Retained Accessory Power Relay, Active Grill Air Shutter 1, Active Grill Air Shutter 2, Active Grill Air Shutter System, Active Grill Shutter Test, Active Grille Air Shutter 2, Air Cleaner Monitor Setup, Air Recirculation Door Motor Direction, All Door Lock Unlock, All Indicators, Assist Step Motor, ATC Neutral Indicator, ATC Range, Autostart/Autostop, Auxiliary Coolant Pump, Auxiliary Ignition Run Relay, Auxiliary Transmission Fluid Pump, Backup Lamps, Blower Motor Speed, Brake Booster Electric Vacuum Pump, Brake Transmission Shift Interlock Solenoid Actuator, Camshaft Position Actuator, Cargo Lamp, CD, Center Brake Lamp, Central Stop Lamp, Compression Test, Cooling Fan, Courtesy Lamps, Cylinder Deactivation System Service Bay Test, Cylinder Deactivation System, Cylinder Power Balance, Daytime Running Lamps, Depressurize Fuel System, Display Dimming, Display Test, Door Dead Lock Lock/Unlock, Driver Information Center Segments, Driver Mirror Fold, Driver Mirror Movement, Driver Seat Back Horizontal Movement, Driver Seat Cushion Front Vertical Movement, Driver Seat Cushion Left Rear Haptic Movement, Driver Seat Cushion Rear Vertical Movement, Driver Seat Cushion Right Rear Haptic Movement, Driver Seat Horizontal Movement, Driver Window Motor, Engage Front Axle, Engine Block Coolant Valve, Engine Controls Ignition Relay, Engine Controls Ignition Supply Voltage, Engine Coolant Control Valve Mode, Engine Coolant Control Valve Position, Engine Coolant Fill, Engine Coolant Pump, Engine Cooling Fan 2, Engine Cooling Fan, Engine Mount Actuator Output 1, Engine Mount Actuator Output 2, Engine Oil Pressure Control Solenoid Valve, Engine Oil Type Setup, Engine Speed Control, Engine Speed, Erase Valet Mode Code, EVAP Canister Purge Valve, EVAP Purge Pump, EVAP Purge Solenoid Valve, EVAP Purge/Seal, EVAP Service Bay Test, EVAP Vent Solenoid, Evaporative Emission

Canister Vent Valve, Exhaust Camshaft Position Actuator Bank 1, Exhaust Camshaft Position Actuator, Exhaust CMP Actuator Solenoid Bank 1, Exhaust Flow Control Valve System, Exterior Driver Door Handle Switch, Exterior Left Rear Door Handle Switch, Exterior Passenger Door Handle Switch, Exterior Right Rear Door Handle Switch, Fog Lamps, Forward Collision Alert Switch, Front Axle Differential Lock High Control Relay, Front Axle Differential Lock Indicator, Front Axle Differential Lock Low Control Relay, Front Fog Lamps, Fuel Control Loop Status, Fuel Injector Balance, Fuel Pressure Regulator, Fuel Pressure, Fuel Pump 2 Relay, Fuel Pump Enable, Fuel Pump, Fuel Rail Pressure, Fuel Trim Enable, GEN L-Terminal, Generator Regulator Setpoint, Green Indicator, Hands-Free Liftgate Sensor Lamp, Head-Up Display Dimming Level, Head-Up Display Pattern Check, High Beam, High Beams, High Side Driver 1, High Side Driver 2, HO2S Bank 1 Sensor 1 - Heater, HO2S Bank 1 Sensor 2 - Heater, HO2S Bank 2 Sensor 1 - Heater, HO2S Heater Sensor 1, HO2S Heater Sensor 2, Horn Relay, Illuminate All Indicators, Inadvertent Load, Incandescent Dimming, Indicator Dimming, Info Display Test, Instrument Cluster Dimming, Instrument Cluster Gauge Sweep, Intake Camshaft Position Actuator Bank 1, Intake Camshaft Position Actuator Position, Intake Camshaft Position Actuator, Intake CMP Actuator Solenoid, Internal Combustion Engine Autostart/Autostop, Key Fob Button Test, Lane Departure Warning Indicator, Lane Departure Warning Switch, LED Backlight Dimming, Left Dedicated Daytime Running Lamp, Left Exterior Flood Lamp, Left Front Turn Lamp, Left Front Turn Signal Lamp, Left Headlamp Low Beam, Left Park Brake Actuator, Left Park Lamps, Left Rear Turn Signal/Brake Lamp, Left Rear Turn Signal/Stop Lamp, Left Rear Window Motor, Left Temperature Door Motor Direction, Left Trailer Tail Lamp, Left Trailer Turn Signal Lamp, Left Trailer Turn Signal/Stop Lamp Command, License Plate Lamps, Lift Gate Module Open/Close Test, Line PC Solenoid, Line Pressure Control Solenoid Valve, Low Beams, LR Turn Signal, Malfunction Indicator Lamp, Mass Airflow Sensor, Misfire Graph, Mode Door Position, Next Available Slot, 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, Object Detection Alert Indicators, Oxygen Sensor 1-1 Heater, Oxygen Sensor 1-2 Heater, Oxygen Sensor 2-1 Heater, Oxygen Sensor 2-2 Heater, Parking Assist Switch LED, Parking Lamps, Passenger Air Bag Off Indicator, Passenger Air Bag On Indicator, Passenger Mirror Fold, Passenger Mirror Movement, Passenger Seat Belt Reminder Indicator, Passenger Seat Belt Tension Sensor, Passenger Window Motor, PC Solenoid 3, Phone Call Test, Pickup Bed Cargo Lamp, Pressure Control Solenoid Valve 2, Pressure Control Solenoid Valve 4, Pressure Control Solenoid Valve 5, Pressure Control Solenoid Valve, Pump Motor, Range Actuator Lock, Range Actuator, Read LIN Bus Device ID Information, Rear Axle Differential Lock High Control Relay, Rear Axle Differential Lock Indicator, Rear Axle Differential Lock Low Control Relay, Rear Brake Caliper Piston Extend, Rear Brake Caliper Piston Retract, Rear Cross Traffic Audible Alert, Rear Cross Traffic Visual Alert, Rear Defrost, Rear Differential Clutch Solenoid Valve, Rear Fog Lamp, Rear Temperature Door Motor Direction, Rear Washer Relay, Rear Wiper, Rearview Camera Display, Red Indicator, RF Turn Signal, Right Dedicated Daytime Running Lamp, Right Exterior Flood Lamp, Right Front Turn Signal Lamp, Right Headlamp Low Beam, Right Park Brake Actuator, Right Park Lamps, Right Rear Turn Signal/Brake Lamp, Right Rear Turn Signal/Stop Lamp, Right Rear Window Motor, Right Temperature Door Position, Right Trailer Tail Lamp, Right Trailer Turn Signal Lamp, RR Turn Signal, Run Crank Relay, Run/Start Power Mode Indicator, Security Indicator, Sensor Supply Voltage Relay, Sensor Supply Voltage, Shift Lock Solenoid, Shift Solenoid 1, Shift Solenoid 2, Shift Transmission Gear, Shift Transmission, Shock Absorber Front Left, Shock Absorber Front Right, Shock Absorber Rear Left, Shock Absorber Rear Right, Spark Retard, Speech Recognition, Starter Drive, Starter Motor, Starter Relay, Steering Column Telescope In, Steering Column Telescope Out, Steering Column Tilt Down, Steering Column Tilt Up, Stop Lamp, Suspension Position Sensor Trim Height, TAC Motor, TCC Control Solenoid, TCC Pressure Control Solenoid Valve - Dynamic Test, TCC Pressure Control Solenoid Valve - Static Test, TCC Pressure Control Solenoid Valve, Throttle Position, Throttle Sweep, Traction Control Left

Front Solenoid Valves, Traction Control Left Rear Solenoid Valves, Traction Control Right Front Solenoid Valves, Traction Control Right Rear Solenoid Valves, Trailer Backup Lamps, Trailer Brake Duty Cycle, Trailer Brake Relay, Trailer Stop Lamps, Transfer Case Clutch Engagement, Transfer Case Clutch Identifier, Transfer Case Range, Transmission Accumulator Solenoid Valve, Transmission Clutch Learn Status, Transmission Control Solenoid Valve 1 Current, Transmission Control Solenoid Valve 1, Transmission Control Solenoid Valve 10, Transmission Control Solenoid Valve 2 Current, Transmission Control Solenoid Valve 2, Transmission Control Solenoid Valve 3 Current, Transmission Control Solenoid Valve 3, Transmission Control Solenoid Valve 4 Current, Transmission Control Solenoid Valve 4, Transmission Control Solenoid Valve 5 Current, Transmission Control Solenoid Valve 5, Transmission Control Solenoid Valve 6 Current, Transmission Control Solenoid Valve 6, Transmission Control Solenoid Valve 7 Current, Transmission Control Solenoid Valve 7, Transmission Control Solenoid Valve 8 Current, Transmission Control Solenoid Valve 8, Transmission Control Solenoid Valve 9, Transmission Cooling Fan Duty Cycle, Turbocharger Bypass Solenoid Valve, Turbocharger Wastegate Position, Vehicle Health Data Upload, Vehicle Level Control Compressor Relay, Vehicle Level Control Exhaust Valve, Wastegate Actuator, Window Lockout Switch Indicator, Windshield Washer Relay, Windshield Wiper Motor Relay, Wiper Washer Motor

## New Coverage Details – USA Asian

### New Honda/Acura Coverage

#### 37 new Adjustment type special tests:

After a Vehicle Collision, After Replacing Front Passenger Seat Components, Air Bleeding For Repair(ABS), Air Bleeding For Repair(ABS/VSA/TCS), Air Bleeding For Repair(TCS), All Sensor Calibration, ATF Reset, Brake Pad Maintenance Mode, Brake Pressure Sensor Calibration, Crank Pattern Clear, Crank Pattern Learning., Customize Reset, ECM/PCM Reset, ECU Activation, Engine Oil Life Reset, EPS Steering Angle Sensor Value Clear, EPS Steering Sensor Value Clear, Initialization, Longitudinal G Sensor Neutral Point Learn, Memorize Zero Position, ODS Unit Initialization, OPDS Initialization, Pop Up Hood(PUH) Calibration, Replace TCM/PCM, Reset Of Assistant Side Window Position, Reset Of Driver Side Window Position, Reset Of Rear Left Side Window Position, Reset Of Rear Right Side Window Position, Sensor Calibration Test, Start Clutch Feedback Learn, Start Clutch Status Data Clear, Steering End Learning, Stroke Sensor Learning, SWS Initialization, The Wheel Size Setup For Indirect TPMS, Tire Pressure Sensor Registration With Activation Tool, Tire Pressure Sensor Registration

#### 380 new Actuation type special tests:

A/C Clutch, ABS Brake Light Relay/TSA Relay Test, ABS ESS Forced Indication, ABS Solenoid Test, ABS VSA Test, ACC Alarm Test, ACC Brake Actuator, ACC Indicator Light, ACC Information Display, ACC Relay, Accessory, ADJ Motor, AFS Reflector, Air Bypass Valve Control Solenoid (ABV), All Injectors OFF, Assistant Door Courtesy Light, Assistant Door Mirror Motor Down, Assistant Door Mirror Motor Left, Assistant Door Mirror Motor Right, Assistant Door Mirror Motor Up, Assistant Door Pocket Illumination Light, Assistant Outer Handle Illumination Light, Assistant Remote Switch Illumination Light, Assistant Side Power Window Motor Down, Assistant Side Power Window Motor Up, Assistants Inner Handle Illumination Light, Auto Lock Cancel Switch, Automatic Headlights, Boost Pressure Test, BSI Buzzer Status, BSI Fail Lamp, BSI Indicator On, BSI System Fail, BSI System Status, BSI Unavailable, Buzzer, CARD BATT Indicator Turn On, Cargo Light Drive UV Only, Cargo Light Drive, Charge LID Relay, Clean Left Side Radar, Clean Right Side Radar, Clear History Of Switch device, Climate Ctrl Check, Clutch Pressure Control

(Linear) Solenoid A, Clutch Pressure Control (Linear) Solenoid B, Clutch Pressure Control (Linear) Solenoid C, Clutch Pressure Control (Linear) Solenoid D, Clutch Pressure Control Solenoid A, Clutch Pressure Control Solenoid B, Clutch Pressure Control Solenoid C, CMBS Brake, Column Telescopic Motor - Full Down, Column Telescopic Motor - Full Up, Column Tilt Motor - Full Down, Column Tilt Motor - Full Up, Communication Status Check, Communication Using Cabin Front Antenna, Communication Using Cabin Middle Antenna, Communication Using Cabin Rear Antenna, Communication Using Driver Antenna, Communication Using Front Passenger Antenna, Communication Using Rear Driver Antenna, Communication Using Rear Passenger Antenna, Communication Using Trunk Room Antenna, Communication Using Trunk/Tailgate Antenna, Cruise Control Cancel History, CS FS Antenna, CTM Buzzer Status, CTM System Fail, CTM System Status, Daytime Running Light (Canada), Daytime Running Light Output, Daytime Running Light Relay, DC Output Cabin Front Antenna, DC Output Cabin Middle Antenna, DC Output Cabin Rear Antenna, DC Output Driver Antenna, DC Output Front Passenger Antenna, DC Output Rear Driver Antenna, DC Output Rear Passenger, DC Output Trunk Room Antenna, DC Output Trunk/Tailgate Antenna, Detect Equipped Honda Body Systems, Display Card Batt, Display Do not have key, Display No Card, Door Lock Without Answer Back, Door Lock, Lock Actuator, Door Lock, Unlock Actuator, Door Unlock Without Answer Back, Driver Door Courtesy Light, Driver Door Lock Unlock Actuator, Driver Door Mirror Motor Down, Driver Door Mirror Motor Left, Driver Door Mirror Motor Right, Driver Door Mirror Motor Up, Driver Door Pocket Illumination Light, Driver Door Power Window Motor - Down, Driver Door Power Window Motor - Up, Driver Inner Handle Illumination Light, Driver Outer Handle Illumination Light, Driver Rear Door Courtesy Light, Driver Remote Switch Illumination Light, Driver Side Power Window Motor Down, Driver Side Power Window Motor Up, DRL Relay, DUAL Indicator, DWS/Indirect TPMS Parameter Configuration Message, EGR Tests, Electric Current of Linear Solenoid CPC, Electric Current of Linear Solenoid DN, Electric Current of Linear Solenoid DR, Electric Current of Linear Solenoid SC, EU DRL, EVAP Solenoids Test, EXT F (Cabin Front Antenna), EXT FR AS (Passenger's Antenna), EXT FR DR (Driver's Antenna), EXT INTTRUNK (Trunk Room Antenna), EXT M (Cabin Middle Antenna), EXT R (Cabin Rear Antenna), EXT RR AS (Passenger Side Rear Passenger's Antenna), EXT RR DR (Driver Side Rear Passenger's Antenna), EXT RT (Cabin Rear Tray Antenna), EXT Side-Glass AS (Side-Glass Passenger Antenna), EXT Side-Glass DR (Side-Glass Driver Antenna), EXT TR (TRUNK Or TAIL-GATE Antenna), Exterior Buzzer Output (Short Time), Exterior Buzzer Output(Long Time), Exterior Buzzer Output, Exterior BUZZER, External Buzzer ON, Fail Wipe Signal, FCAN Authorized Flag, FI Wakeup, Flash Left Side Indicator, Flash Right Side Indicator, Floor Light, Foot Light, Forced Control Of Electric Current Of Linear Solenoid D, Forced Control Of Lockup Clutch, FR DEICER RLY, FR-DEF Indicator, Front Center Detection Result, Front Defroster Relay, Front Detection Sound Request, Front Display - Backlight, Front Fog Light, Front Left Detection Result, Front Panel Module, Front Right Detection Result, Front Washer Motor, Front Wiper High Speed, Front Wiper Low Speed, Front Wiper Motor (High), Front Wiper Motor (Low), Frontal Crash Detection Signal Output, Fuel Lid, Fuel Pump OFF, Fuel Pump ON, G/Box Relay, Gate Light, Gear Shift, Glass Hatch Open, Green LED, Hazard Flashers, Hazard Relays, Head Light (High), Head Light High, Head Light Low, Head Light, Headlight Backup, Headlight Cleaner, Headlight Washer Motor, Headrest Motor, High Wipe Signal, Horn, IGNCONT Line, Ignition Key Light, IGNTRX Line Turn To Low Level, IGNTRX Line, Immobilizer Indicator Turn On, Immobilizer Lamp, IMOCONT Line, IMS1 Output, IMS2 Output, IMT(IMRC) Activation, IMT(IMRC) Test, Indicator, INH Solenoid For Start Clutch Type, Initiator Operation Check, Injector Kill Test, Intake VTC Test, Interior Buzzer Output, Interior Light Cut, Interior Light, Interior Small Light, Intermittent Wipe Signal, Internal Buzzer ON, ISO Warning Light, Key Switch Out Line Turn To On, Keyless Buzzer, keyless Check, Left And Right Parking Actuator Control, Left BSI Radar Unavailable, Left Front CAS Solenoid, Left Front Pulser, Left Front Solenoid, Left Front TCS Solenoid, Left Front VSA Solenoid, Left Power Mirror Full Down, Left Power Mirror Full Left, Left Power Mirror Full

Right, Left Power Mirror Full Up, Left Rear Power Window Motor - DOWN, Left Rear Power Window Motor - UP, Left Rear Power Window Motor Down, Left Rear Power Window Motor Up, Left Rear Pulser, Left Rear Solenoid, Left Rear VSA Solenoid, Left RR Slide Relay, Left Side Indicator, Left Slide Actuator, Left Sliding Door Lock, Left Sliding Door Unlock, Left Turn Signal Lamp, Lights Off Using Backup Line, Lights On Using Backup Line, LIN Washer, LIN Wiper Assembled Position Operation, Lock/Unlock All Doors, Lockup Clutch, Low Wipe Signal, Lumbar Horizontal Motor, MA EPS CONTROL ON/OFF, MA EPS Switching, Maintenance Position Front Wiper, Map Light Off, Memory Buzzer, Memory Indicator 1, Memory Indicator 2, Memory Seat Indicator 1, Memory Seat Indicator 2, Memory Switch Illumination Light, Meter Buzzer, Navigation LCD Display Segment, No CARD Indicator Turn On, No Rain Condition Signal, No Wipe Signal, Occupied Signal Output, Off-Board EVAP Test (Level 2) Support, Parking Lights, Passenger Door Power Window - Down, Passenger Door Power Window - Up, Passenger Rear Door Courtesy Light, Power Seat - Front Up/Down Motor - Full Down, Power Seat - Front Up/Down Motor - Full Up, Power Seat - Rear Up/Down Motor - Full Down, Power Seat - Rear Up/Down Motor - Full Up, Power Seat - Recline Motor - Full Backward, Power Seat - Recline Motor - Full Forward, Power Seat - Slide Motor - Full Backward, Power Seat - Slide Motor - Full Forward, Power Tailgate Clutch, Power Window Relay, Power Window RLY Rr, Pressure Test Assistance mode, Pressure Test, PTG Motor Close, PTG Motor Open, PTG Release Close, PTG Release, Puddlelt, Purge Cut Solenoid (PCS) - Close, Purge Sol Cut Solenoid (PCS) - Open, Purge Sol=Close, Vent Sol=Close, Purge Sol=Close, Vent Sol=Open, Purge Sol=Open, Vent Sol=Close, Radiator Fan, Rain Condition Signal, Rear Assistant Door Courtesy Light, Rear Blower, Rear Center Detection Result, Rear Defroster RLY, Rear Defroster, Rear Detection Sound Request, Rear Differential Air Purge, Rear Differential Oil Pressure Sensor Check, Rear Driver Door Courtesy Light, Rear Fog Lamp, Rear Left Detection Result, Rear Left Door Courtesy Light, Rear Left Inner Handle Illumination Light, Rear Right Detection Result, Rear Right Door Courtesy Light, Rear Right Inner Handle Illumination Light, Rear Seat Switch Light, Rear Washer Motor, Rear Wiper Motor, Recall Memory Position, RECIRC Indicator, Red LED, RF1 RXVCC, RF1 TXD Line, RF1 TXVCC, RF2 RXVCC, RF2 TXD Line, RF2 TXVCC, RF2 Unit RXVCC Power On, Right BSI Radar Unavailable, Right Front Pulser, Right Front Solenoid, Right Front TCS Solenoid, Right Front VSA Solenoid, Right Power Mirror Full Down, Right Power Mirror Full Left, Right Power Mirror Full Right, Right Power Mirror Full Up, Right Rear Power Window Motor - DOWN, Right Rear Power Window Motor - UP, Right Rear Power Window Motor Down, Right Rear Power Window Motor Up, Right Rear Pulser, Right Rear Solenoid, Right Rear VSA Solenoid, Right RR Slide Relay, Right Side Indicator, Right Slide Actuator, Right Turn Signal Lamp, RR-DEF Indicator, Security Indicator, Security Net Line Turn To Low Level, Self Check, Self Diag Test, Self-Diagnostic Function, Serial Line Status Check, Shift Lock Solenoid, Shift Solenoid A, Shift Solenoid B, Shift Solenoid C, Shift Solenoid D, Shift Solenoid E, Side or Rear Crash Detection Signal Output, SMART Indicator Turn On, SMART KEY OUT, SMART Lamp, S-Net Line, Solenoid Valve Activation, Starter Switch Light, Store Memory Position, Sub Throttle, Sunroof Close, Sunroof Open, System Check, TC Bypass Valve, Throttle Actuator Control Test, Tilt Mirror, Tire Air Low Indicator, TP Position Check, TPMS Warning Light, Trunk (T/G), TSA Relay Test, Turbo Boost Control Solenoid V, Turn On Left Side Alert, Turn On Right Side Alert, Turn On Right Side Indicator, Unlock Trunk, Upper Park Position Front Wiper, Vent Shut Solenoid Valve (VSV) - Close, Vent Shut Solenoid Valve (VSV) - Open, VTEC Solenoid 1, VTEC Solenoid 2, VTEC Solenoid, VTEC Test, Warning Lamp, Warning light activation, Waste Gate Solenoid (WGS), Work LT

## New Hyundai/Genesis Coverage

- Added coverage for 113 new system applications

**10 new Adjustment type special tests:**

12V Battery SOC Calibration, Assembly Check(ECU Replacement), Auto Detected Configuration Reset, iMEB Actuator Initialization, Longitudinal G Sensor Calibration(HAC/DBC Only), Seat Limit Position Setting, TPMS Reception Rate Measuring Mode, TPMS Test, WCT Reprogram, Wheel Sensor ID Writing

**589 new Actuation type special tests:**

(LED) DRL Lamp LH, (LED) DRL Lamp RH, 12V Latch Relay OFF, 12V Latch Relay ON, 12V Relay OFF, 12V Relay ON, 3LH SBR Left Indicator, 3rd Row SBR Center Indicator(Option), 3rd Row SBR Left Indicator(Option), 3rd Row SBR Right Indicator(Option), 3RH SBR Center Indicator, 4th Row SBR Center Indicator(Option), 4th Row SBR Left Indicator(Option), 4th Row SBR Right Indicator(Option), AAF Forced Operation - Auto, AAF Forced Operation - Close, AAF Forced Operation - Open, Activation Switch LED, Actuator Control - Apply, Actuator Control - Release, ACV Open-Close Control, After Blower USM Set Off, After Blower USM Set On, All Door Lock Signal Output(to PTGM), All LEDs On, All Mood Lamp Blue LED Test, All Mood Lamp Green LED Test, All Mood Lamp Red LED Test, All Mood Lamp White LED Test, All Tank Valve Open, APC Open-Close Control, Assist BSD Indicator, Assist Door Courtesy Lamp Output, Assist Door Lock Indicator, Assist Mirror Position Down, Assist Mirror Position Left, Assist Mirror Position Right, Assist Mirror Position Up, Assist Outside Mirror Down, Assist Outside Mirror Left, Assist Outside Mirror Right, Assist Outside Mirror Up, Assist Power Window Down (Option), Assist Power Window Up (Option), Assist Seat Belt Indicator, Assist Side Window Auto Down, Assist Side Window Auto Up, Assist Side Window Down, Assist Side Window Up, Assistant Side Outside Handle Antenna Output (Power and GND), ATM Solenoid, Auto Cut Relay, Auto Defog Mode Door - Close, Auto Defog Mode Door - Open, Auto Light Power, AV Tail, AVM + FrontLeft + FrontRight View, AVM + RearLeft + RearRight View, Back Up Lamp, Battery Cool EXV(Electric expansion valve), Battery Cool Valve(Evaporator), Battery Coolant Valve Operation Mode1 (Combined Mode) ON, Battery Coolant Valve Operation Mode1 (Seperated Mode) ON, Battery EWP Operation Mode for Degassing and Circulation, BCM Buzzer Output (Internal/External), BCM Internal Buzzer Output, Bifunction Headlamp High LH Solenoid IPS Output, Bifunction Headlamp High RH Solenoid IPS Output, BSD Indicator, Burglar Horn Relay, CBV Open-Close Control, Cell Balancing Deactivate, Central Door Lock Indicator, Central Door Lock Relay, Central Door Lock Switch Indicator Output, Central Door Unlock Relay, Charge Inlet Lock Relay, Charge Inlet Unock Relay, Charging Status LED (Green) On, Charging Status LED (Yellow) On, Child Lock Relay Output, Child Unlock Relay Output, Clamp Status ACC(Amber) LED Color illumination, Clamp Status IGN(Blue) LED Color illumination, Clamp Status Off(Red) LED Color illumination, COD N-O Relay 1 Control, Compressor Off, Compressor On, Console Mode Door - Vent, Console Off Door, Console On Door, Console Temperature Air Mix Door 0%, Console Temperature Air Mix Door 100%, Console Temperature Air Mix Door 50%, Control All the LEDs, Coolant 3Way Valve, COOLANT VALVE - 3WAY (HTR) - Close, COOLANT VALVE - 3WAY (HTR) - Open, Cooler step 3 operation, Cornering Lamp LH Output, Cornering Lamp RH Output, Courtesy Lamp RL Output, Courtesy Lamp RR Output, CTV Open-Close Control, D\_DRL Relay, Dead Lock Relay, Dedicated DRL Left Output, Dedicated DRL Output (Option), Dedicated DRL Right Output, Defogger / Deicer Relay, DEHUM VALVE - EXV (DEHUMI) Valve Close, DEHUM VALVE - EXV (DEHUMI) Valve Open, Disconnecter Disengage, Disconnecter Engage, Door Lock Indicator, Door Lock Relay, Door Unlock Relay, Door Unlock Signal, Drive Side Puddle Lamp, Driver Air Mix Door-0%, Driver Air Mix Door-100%, Driver Air Mix Door-50%, Driver Courtesy Lamp, Driver Door Courtesy Lamp Output, Driver Door Lock, Driver Door Unlock Relay (Option), Driver Door Unlock Relay, Driver Door Unlock, Driver Heater Control, Driver Mode Door-DEF, Driver Mode Door-Floor, Driver Mode Door-Vent, Driver Seat Belt Indicator, Driver Seat Heat Mode to the High, Driver Seat Vent Mode to the High, Driver Side Outside Handle Antenna Output (Power and GND), Driver Side Repeater, DRL



Relay(Canada), DRV/AST Power Window Enable Output, DRV-AST Power Window Enable Output, DRVM (Driving Rear View Monitor), Electronic Expansion Valve (Battery Chiller) - Close, Electronic Expansion Valve (Battery Chiller) - Open, Electronic Expansion Valve (Heat Pump) - Close, Electronic Expansion Valve (Heat Pump) - Open, Electronic Expansion Valve (Receiver Drier) - Close, Electronic Expansion Valve (Receiver Drier) - Open, EMS Wakeup Output, End Cell HTR Relay Control, EPB Apply RH and LH, EPB Release RH and LH, ESS Lamp, Europe Cornering Lamp Left Relay Output, Europe Cornering Lamp Right Relay Output, Event Indicate LED On-Off, EVP, EWP Max RPM Operation, Exterior Tail Lamp Front Left Output, Exterior Tail Lamp Front Right Output, Exterior Tail Lamp Left(Front and Rear) Output, Exterior Tail Lamp Rear Left Output, Exterior Tail Lamp Rear Right Output, Exterior Tail Lamp Right(Front and Rear) Output, External Buzzer Output, Fan 1st, Fan 2nd, Fan 3rd, Fan 4th, Fan 5th, Fan 6th, Fan 7th, Fan 8th, Fan 9th, FAN ON, Fan Stop, Fan1 1st, Fan1 2nd, Fan1 3rd, Fan1 4th, Fan1 5th, Fan1 6th, Fan1 7th, Fan1 8th, Fan1 9th, Fan1 Stop, FBV Open-Close Control, FDV Heater Relay Control, FDV Open-Close Control, Flasher Sound Relay(Optional), Folding Mirror Relay, Foot Lamp Output(Optional), Foot Lamp Output, FPS Open Mode, FPV Heater Relay Control, FPV Open-Close Control, Front Air Flow Door - 0%, Front Air Flow Door - 100%, Front Air Flow Door - 50%, Front BLDC Blower Motor 0RPM, Front BLDC Blower Motor 1000RPM, Front BLDC Blower Motor 1500RPM, Front BLDC Blower Motor 2000RPM, Front BLDC Blower Motor 2500RPM, Front BLDC Blower Motor 500RPM, Front BLDC Blower Motor MAX RPM, Front Blower Fan Motor-1Step, Front Blower Fan Motor-2Step, Front Blower Fan Motor-3Step, Front Blower Fan Motor-4Step, Front Blower Fan Motor-5Step, Front Blower Fan Motor-6Step, Front Blower Fan Motor-7Step, Front Blower Fan Motor-8Step, Front Blower Fan Motor-Off, Front Bumper Antenna Output (Power and GND), Front Charge Door Lamp Output, Front Deicer Relay, Front Fog and Cornering Lamp Left Output, Front Fog and Cornering Lamp Right Output, Front Fog Lamp Indicator, Front Fog Lamp Left Output, Front Fog Lamp Output, Front Fog Lamp Relay, Front Fog Lamp Right Output, Front Glass Heated Relay Output, Front Glass Heated Switch Indicator Output, Front Heated Glass Relay, Front Indicate LED On-Off, Front Left Side Window Auto Down, Front Left Side Window Auto Up, Front Left Side Window Down, Front Left Side Window Up, Front Left Turn Signal Output, Front Right Side Window Auto Down, Front Right Side Window Auto Up, Front Right Side Window Down, Front Right Side Window Up, Front Right Turn Signal Output, Front Seat Heat Mode to the High, Front Seat Vent Mode to the High, Front Tank Valve Open, Front Top-AVM View, Front Turn Signal Lamp Activation LH Output, Front Turn Signal Lamp Activation RH Output, Front Washer Motor Output, Front-AVM View, Front-SVM View, Frunk Lamp Output, FSV Open-Close Control, Fuel Door Lock Solenoid Output (PHEV Only), Fuel Door Open Solenoid Output (PHEV Only), Fuel Door Open, Gauge ON, Glove Box Lamp Output, HAC Brake Lamp Actuator, Haptic Steering Wheel Motor Output, Haptic Steering Wheel Output, Hat Shelf Antenna Output (Power and GND), Hazard Indicator, Hazard Mode State for Turn Signal Lamp Sequential Mode, Hazard Relay, Head Lamp High Indicator, Head Lamp High Left Output, Head Lamp High Output, Head Lamp High Relay, Head Lamp High Right Output, Head Lamp Low Indicator, Head Lamp Low Left Output, Head Lamp Low Output, Head Lamp Low Right Output, Head Lamp Low Signal, Head Lamp Washer Relay, Head Lamp Welcome Command, Heated Handle Indicator(Optional), Heated Handle Indicator, Heated Handle Output(Optional), Heated Handle Output, Heated Washer Nozzle Output, Heated Washer Nozzle Relay, Heater step 3 operation, High Mounted Stop Lamp Output, HLL(Head Lamp Leveling) Max(High) Position, HLL(Head Lamp Leveling) Middle(Center) Position, HLL(Head Lamp Leveling) Min(Low) Position, Horn Relay(NA), Horn Relay, HV PTC OFF, HV PTC ON(Min.), Ignition 3 Relay, Illumination, iMEB Valve Control-Line Split Valve, iMEB Valve Control-Low Press Traction Control Valve, iMEB Valve Control-Low Press Wheel Split Valve, iMEB Valve Control-MCV(#2), iMEB Valve Control-MCV(#5), iMEB Valve Control-MCV(#6), iMEB Valve Control-Pedal Simulator Valve, iMEB Valve Control-Release Control Valve, iMEB Valve Control-Traction Control Valve, iMEB Valve Control-Wheel Split Valve, Indicator ALL OFF, Indicator ALL

ON, Inlet Valve-Left Front, Inlet Valve-Left Rear, Inlet Valve-Right Front, Inlet Valve-Right Rear, Intake Door - Fresh, Intake Door - Recirc, Interior Antenna #1 Output (Power and GND), Interior Antenna #2 Output (Power and GND), Interior Antenna #3 (Trunk Antenna : Sedan Type) Output (Power, Interior Lamp Autocut Relay Output(Optional), Interior Mood Lamp Output (Option), Interior Mood Lamp Output, IOD Relay, IR Emitter Communication, Isolation Detection Circuit Deactivate, Key Hole Illumination (Manual Key Type), Key Hole Illumination, Key Interlock Solenoid(Manual Key Type), Lamp Control - EPB Status Lamp, Lamp Control - EPB Warning Lamp, Lamp Load Power Relay, LampLoad AutoCut IPS Output, LED Out, LongTermLoad Cut Relay Output, Luggage Lamp Relay, Luggage Lamp, Main Relay (+) ON, Main Relay Control (-), Main Relay Control (+), Main Relay(-) ON, Main Relay(-)(+), Precharge Relay OFF simultaneous, Main Relay(-), Main Relay(+ ON Normal Sequence, Main Relay(-), Precharge Relay ON simultaneous, Main Relay(-), Precharge Relay, Simultaneously ON (Precharge se, Manual HLLD Signal Output, MAP Lamp, Mid Tank Valve Open, Mirror Folding Operation (Option), Mirror LED Left, Mirror LED Right, Mirror Select Left indicator, Mirror Select Right indicator, Mirror Unfolding Operation (Option), Mood Lamp 1 Output, Mood Lamp 2 Output, Mood Lamp 3 Output, Mood Lamp Output, Motor, Motor1, Folding, Motor2, Unfolding, Move Assist Outside Mirror To The Highest Position, Move Assist Outside Mirror To The Lowest Position, Move Assist Outside Mirror To The Most Left Position, Move Assist Outside Mirror To The Most Right Position, Move DRIVE OUTSIDE MIRROR to the highest position, Move DRIVE OUTSIDE MIRROR to the lowest position, Move DRIVE OUTSIDE MIRROR to the most left position, Move DRIVE OUTSIDE MIRROR to the most right position, Move P-Seat to the Foremost Position (Cushion Extension), Move P-Seat to the Foremost Position (Head Rest Slide), Move P-Seat to the Foremost Position (Recline), Move P-Seat to the Foremost Position (Shoulder), Move P-Seat To The Foremost Position (Slide), Move P-Seat to the Highest Position (FR Height), Move P-Seat to the Highest Position (Headrest), Move P-Seat to the Highest Position (RR Height), Move P-Seat to the Last Position (Cushion Extension), Move P-Seat to the Last Position (HeadRest Slide), Move P-Seat to the Last Position (Recline), Move P-Seat to the Last Position (Shoulder), Move P-Seat To The Last Position (Slide), Move P-Seat to the Lowest Position (FR Height), Move P-Seat to the Lowest Position (Headrest), Move P-Seat to the Lowest Position (RR Height), Multimedia Load Power Relay, Navi Wakeup Signal Output, OBC Relay(-) ON, OBC Relay(+ ON, OBC Relay(+)/(-) ON Simultaneous, OBC Wake up Output, Openbed Box Lamp Output, Openbed Cargo Lamp Output, Openbed Lamp Switch Indicator Output, Operate Assist Side Fold, Operate Assist Side Unfold, Operate DRIVE SIDE FOLD, Operate DRIVE SIDE UNFOLD, Operate DRIVE SIDE WINDOW AUTO DOWN, Operate DRIVE SIDE WINDOW AUTO UP, Operate DRIVE SIDE WINDOW DOWN, Operate DRIVE SIDE WINDOW UP, Optional Rear Seat Warmer - Left, Optional Rear Seat Warmer - Right, Outlet Valve-Left Front, Outlet Valve-Left Rear, Outlet Valve-Right Front, Outlet Valve-Right Rear, Over Speed Warning Indicator, Parasitic Current Auto-Block IPS, Parking Brake Indicator, PAS Buzzer Output (RPAS Buzzer Output), PAS Indicator (RPAS Off Indicator), PAS Indicator/RPAS OFF Indicator, PAS/RPAS Buzzer Output, Passenger Air Mix Door-0%, Passenger Air Mix Door-100%, Passenger Air Mix Door-50%, Passenger Mode Door - Defog, Passenger Mode Door - Floor, Passenger Mode Door - Vent, Passenger Seat Heat Mode to the High, Passenger Seat Vent Mode to the High, Perform CPU (Video Recording and Display Output) On-Off, Perform Erase All Video File, Perform Event Recording, Pocket Light Output (Option), Power Supply to the ACC Relay of Main MCU, Power Supply to the IGN1 Relay of Main MCU, Power Supply to the IGN1/IGN2 Relay of Main MCU, Power Supply to the IGN1/STARTER Relay of Main MCU, Power Supply to the IGN1-IGN2 Relay of Main MCU, Power Supply to the IGN1-STARTER Relay of Main MCU, Power Window Relay, Precharge Relay ON, Precharge Relay ON, Main Relay (-), (+ ON (Normal sequence), Puddle Lamp Output, Puddle Pocket Lamp Output, Quick Charge Relay (+),(-), Main Relay (-), (+ ON (Normal Char, Quick Charger Relay(-) ON, Quick Charger Relay(-)(+) ON simultaneous, Quick Charger Relay(+ ON, RAD FAN Operation, Radiator Fan Forced Operation, Rear Air Flow Door -

0%, Rear Air Flow Door - 100%, Rear Air Flow Door - 50%, Rear Air Mix Door-0%, Rear Air Mix Door-100%, Rear Air Mix Door-50%, Rear Air Mix(A) Door-0%, Rear Air Mix(A) Door-100%, Rear Air Mix(A) Door-50%, Rear Blower Fan Motor-1Step, Rear Blower Fan Motor-2Step, Rear Blower Fan Motor-3Step, Rear Blower Fan Motor-4Step, Rear Blower Fan Motor-5Step, Rear Blower Fan Motor-6Step, Rear Blower Fan Motor-7Step, Rear Blower Fan Motor-8Step, Rear Blower Fan Motor-Off, Rear Bumper Antenna Output (Power and GND), Rear Charge Door Lamp Output, Rear Curtain DN Output, Rear Curtain Down Output [Rear Curtain Hall Sensor Power Output, Rear Curtain Up Output [Rear Curtain Hall Sensor Power Output(O, Rear Curtain Up Output, Rear Defogger Relay, Rear Driver B-PILLAR Door - 0%, Rear Driver B-PILLAR Door - 100%, Rear Fog Lamp (Option), Rear Fog Lamp Indicator, Rear Fog Lamp Left Output, Rear Fog Lamp Relay, Rear Fog Lamp Right Output, Rear illumination, Rear Left Door Lock Indicator Output, Rear Left Power Window Down (Option), Rear Left Power Window Up (Option), Rear Left Side Courtesy Lamp, Rear Left Side Door Curtain Down (Only Windows Close Status), Rear Left Side Door Curtain Up (Only Windows Close Status), Rear Left Side Window Auto Down (Option:Curtain Bottom Status), Rear Left Side Window Auto Up (Option:Curtain Bottom Status), Rear Left Side Window Down (Option:Curtain Bottom Status), Rear Left Side Window Up (Option:Curtain Bottom Status), Rear Left Turn Signal Output, Rear LH Seat Heat Mode to the High, Rear LH Seat Vent Mode to the High, Rear Mood Lamp (Both Left and Right), Rear Passenger B-PILLAR Door - 0%, Rear Passenger B-PILLAR Door - 100%, Rear Pocket Lamp (Both Left and Right), Rear Power Window Enable Output (Option), Rear Power Window LH Up Relay, Rear RH Seat Heat Mode to the High, Rear RH Seat Vent Mode to the High, Rear Right Door Lock Indicator Output, Rear Right Power Window Down (Option), Rear Right Power Window Up (Option), Rear Right Side Courtesy Lamp, Rear Right Side Door Curtain Down (Only Windows Close Status), Rear Right Side Door Curtain Up (Only Windows Close Status), Rear Right Side Window Auto Down (Option:Curtain Bottom Status), Rear Right Side Window Auto Up (Option:Curtain Bottom Status), Rear Right Side Window Down (Option:Curtain Bottom Status), Rear Right Side Window Up (Option:Curtain Bottom Status), Rear Right Turn Signal Output, Rear Room Lamp Output, Rear SBR Symbol Indicator Output(Optional), Rear Seat Belt Center Indicator (Option), Rear Seat Belt Center Indicator, Rear Seat Belt Left Indicator (Option), Rear Seat Belt Left Indicator, Rear Seat Belt Right Indicator (Option), Rear Seat Belt Right Indicator, Rear Seat Heat Mode to the High, Rear Seat Vent Mode to the High, Rear Tank Valve Open, Rear Temp Cool Door - 0%, Rear Temp Cool Door - 100%, Rear Temp Cool Door - 50%, Rear Temp Warm Door - 0%, Rear Temp Warm Door - 100%, Rear Temp Warm Door - 50%, Rear Top-AVM View, Rear View Switch Indicator Output, Rear Washer Motor Output, Rear Washer Motor, Rear Wiper Relay (Option), Rear Wiper Relay, Rear-AVM View, Rear-SVM View, Refrigerant 2Way Valve - #1 OFF, Refrigerant 2Way Valve - #1 ON, Refrigerant 2Way Valve - #2 OFF, Refrigerant 2Way Valve - #2 ON, Refrigerant 3Way Valve - #1 OFF, Refrigerant 3Way Valve - #1 ON, Refrigerant 3Way Valve - #2 OFF, Refrigerant 3Way Valve - #2 ON, RKE Tailgate Signal Output(to PTGM), RL Door Lock Relay, RL Door Unlock Relay, Room Lamp Output, RPAS Switch Indicator (Option), Safety Power Window Enable, Safety Power Window Sunroof Enable, Security LED Output, Security LED, ShortTermLoad Cut Relay/IPS Output, ShortTermLoad Cut Relay-IPS Output, Solenoid Thermal Expansion Valve - Close, Solenoid Thermal Expansion Valve - Open, SSB illumination Output (Power and GND), Start Inhibit Relay (Option), Start Inhibit Relay, Static Bending LH Output (Option), Static Bending LH Output, Static Bending RH Output (Option), Static Bending RH Output, Steering Warmer Output, Steering Warmer Switch Indicator Output, Stop Lamp Left, Stop Lamp Left/Right/HMSL Output (Option), Stop Lamp Left-Right-HMSL Output (Option), Stop Lamp Right, Stop Lamp, Storage Bos Lid Release Relay Output, Sunroof Enable Output, SunRoof Power Relay control, System Identification, Tail Interior Lamp, Tail Lamp Indicator, Tail Lamp Output, Tail Lamp Relay, Tailgate/Trunk Release Relay, Tailgate-Trunk Release Relay, Turn LH Output, Turn RH Output, Turn Signal Lamp Front Left Output, Turn Signal Lamp Front Right Output, Turn Signal Lamp Rear

Left Output, Turn Signal Lamp Rear Right Output, Turn Signal Sound Output, Unfold Mirrors, VESS Sound Play (5 Sec), VESS Sound Play (Until Stop Command), Window Lock Indicator, Window Lock to Driver Door Module, Wiper High Relay, Wiper High-Speed Relay [Wiper High RLY With Wiper Power RLY], Wiper Low Relay, Wiper Low-Speed Relay [Wiper Low RLY With Wiper Power RLY], Wiper Power Relay, Wiper Relay (for INT)[Wiper RLY With Wiper Power RLY], Wiper Relay

## New Mitsubishi Coverage

### 10 new Adjustment type special tests:

Decel G Sensor Calibration, Finish Brake Pad Replacement, Initialization Position Adjustment, Start Brake Pad Replacement, Steering Angle Sensor Adjustment, Steering Angle Sensor Calibration, System Mode Change, Valve Calibration, Valve Check, Valve Flushing

### 21 new Actuation type special tests:

ABS Motor, Brake Operation, Brake Release, FR LH ABS Solenoid (ACT), FR LH ABS SOLENOID(ACT), FR LH SOL, FR RH ABS Solenoid (ACT), FR RH ABS SOLENOID(ACT), FR RH SOL, Front Left Solenoid, Front Right Solenoid, PB SW indicator ON, Rear Left Solenoid, Rear Right Solenoid, RR LH ABS Solenoid (ACT), RR LH ABS SOLENOID(ACT), RR LH SOL, RR RH ABS Solenoid (ACT), RR RH ABS SOLENOID(ACT), RR RH SOL, Stop Lamp On Relay

## New Coverage Details – USA European

### New Fiat Coverage

#### 1 new Actuation type special tests:

Parking Light Indicator

### New Mercedes Coverage

#### 4 new Adjustment type special tests:

Calibration Of Steering Angle Sensor, Control Unit Reset, Reset Control Unit, Steering Angle Initialization

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