

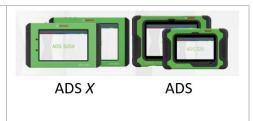
# **Bosch ADS Software Update – June 2025 Ver 6.9**

# https://www.boschdiagnostics.com/diagnostic-systems

**Version 6.9** software includes model year **2025** vehicle coverage and additional **ADAS** calibrations.

Over 6.5K new special tests and new system applications included in this update.

Software and coverage feature details provided in these release notes.



Next planned release: Ver 6.10 July 9.

# **Coverage Highlights (More Details start on Page 2)**

#### 2025 Coverage added - DTC, Data support and Bi-Directional functions

- Acura ADX
- Ford Expedition, F-450 Super Duty, F-550 Super Duty
- Genesis Electrified G80, Electrified GV70, G70, G80, G90, GV60, GV70, GV80, GV80 Coupe
- **Jeep** Wagoneer S
- Lexus IS300, IS350, IS500, LC500, LC500h, LS500, LS500h, LX600, LX700h, RC F, RC300, RC350
- Lincoln Navigator
- **RAM** 4500, 5500
- Toyota 4Runner, Corolla Cross, Mirai, Tacoma

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

- 2025 Coverage:
  - o Buick Enclave
  - o Cadillac CT4, Escalade IQ, Optiq
  - Ford Bronco, Expedition, F-150 Lightning, F-40 Super Duty, F-550 Super Duty, Transit-150, Transit-250, Transit-350, Transit-350 HD
  - Genesis Electrified GV70, G70, GV60, GV70, GV80, GV80 Coupe
  - o GMC Terrain
  - o Hyundai Ioniq 5, Santa Cruz, Tucson
  - Kia K4, Sorento
  - Lexus IS300, IS350, IS500, LC500, LC500h, LS500h, LS500h, LX700h, RC F, RC300, RC350
  - Lincoln Navigator
  - o Mazda CX-5, CX-50
  - Mitsubishi Eclipse Cross
  - Subaru Ascent, Impreza, WRX
  - o Toyota 4Runner, Corolla Cross, Prius, Tacoma

ADS 525X/625X only for bi-directional functions for Hyn/Kia/Gen, Nissan AutoAuth and DoIP system coverage \*\*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

Added coverage for 138 new system applications

#### 145 new Adjustment type special tests:

ABS Bleed Brakes, ABS Initialization, ABS Service Bleed, Active Grill Shutter Replaced, Actuator Calibration, AFLS Calibration, AMP Non ANC Qualifier, Auto Door Lock, Auto High Beam Demo Mode Test, Automated Bleed, Automatic Addressing, Bleed Brakes, Brake Pedal Calibration, Brake Pedal Learn, Calibrate Liftgate, Calibration Routine, 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 Stored Accumulated Fuel Mass, Clear TPM Sensor Rolls Test Results, Clear Variable Line Pressure Counters, Closed Coupled Replacement, Clutch Sensor Calibration Mode, Configure License Plate Size, Coolant Three Way Valve, Coolant Three Way Valve Replaced, Diesel Particulate Filter Regeneration, DPF Pressure Sensor Reset, DPF Regen, DPF Replacement, Driving Regeneration Request, DTCM Replacement, Dual Alternator Enable/Disable, Dual Fuel Tank Enable / Disable, ECU Replacement With Value Transfer, EGR Coolant Regeneration, EGR Low Pressure Learn, 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 in Plant Mode, 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, Hydraulic Prove Out 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, Manual Logistic Mode Procedure Enable, Mass Air Flow Sensor Initialization, Microphone Output Short Test, Microphone Tone Test, Motor Position Learn, New Engine Installed, Non-Volatile Memory Reset, Oil Change Light Reset, Oil Change Monitor Type, Oil Life Restore, Program Engine Serial Number, Program Tire Sensor Identifications, Program Tire Size, Program Variant Coding, PTO RPM Adjustment, PTO Settings, Quick Learn, Quicklearn 62TE, Quicklearn Non RFE, Quicklearn RFE, RAM Active Air Box Calibration, Range Position Sensor Reset, Remote Start Temporary Disable, Reset Adaptive Values, Reset After Replacement Of Lambda Sensor, Reset ECU, Reset Enhanced Automatic Oil Change Indicator, Reset Error Free Operation Time to 40 Hours, Reset H2O Lamp, Reset Injector Compensation Values, 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 Zero Fuel Quantity Calibration, 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, Seat Calibration, Sensor Wiring Test, Service Procedures, Set Axle Type, Set Max Cruise Speed, Set Max Vehicle Speed, Set Ride Height Level, 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, Update Pressure Thresholds, Valve Body Solenoid Learn, VGT Learn, VGT Sector Gear Hysteresis Test, View/Reset Duty Cycle Maps, VIN Lock, Write Pinion Factor, Write VIN

EOBD (Electronic On Board Diagnostic) failure indication, 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), 2nd Row Blend Door 1, 2nd Row Blend Door 2, 2nd Row Blend Door 3, 2nd Row Blend Door 4, 2nd Row Center Seat Backrest Release Actuator, 2nd Row Headrest Release Switch, 2nd Row LT Easy Entry-Exit Switch 2, 2nd Row LT Latch Switch, 2nd Row LT Seat Backrest Release Actuator, 2nd Row LT Seat Easy Entry Release Actuator, 2nd Row LT Seat Fold Switch, 2nd Row LT Seat Headrest Release Actuator, 2nd Row Mode Door 1, 2nd Row Mode Door 2, 2nd Row RT Easy Entry-Exit Switch 2, 2nd Row RT Latch Switch, 2nd Row RT Seat Backrest Release Actuator, 2nd Row RT Seat Easy Entry Release Actuator, 2nd Row RT Seat Fold Switch, 2nd Row RT Seat Headrest Release Actuator, 2WD Rolls Mode, 2WD Test Mode, 3rd Gear Clutch Test (62TE), 3rd Gear Clutch Test (Non-RFE), 3rd Gear Clutch Test (RFE), 3rd Row Fold-Unfold Switch 1 Left, 3rd Row Fold-Unfold Switch 1 Right, 3rd Row Fold-Unfold Switch 2 Left, 3rd Row Fold-Unfold Switch 3 Left, 3rd Row Fold-Unfold Switch 3 Right, 3rd Row Headrest Release, 3rd Row Headrest Release Switch, 3rd Row LT Recline Switch FWD, 3rd Row LT Recline Switch RWD, 3rd Row LT Seat Folding Motor 1, 3rd Row LT Seat Folding Motor 2, 3rd Row LT Seat Headrest Release Actuator, 3rd Row Mode Door 1 Actuator Position, 3rd Row Mode Door 2 Actuator Position, 3rd Row RT Recline Switch FWD, 3rd Row RT Recline Switch RWD, 3rd Row RT Seat Folding Motor 1, 3rd Row RT Seat Folding Motor 2, 3rd Row RT Seat Headrest Release Actuator, 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 Request, A/C Select, ABS, Abs Failure Indicator, ABS Failure Lamp, 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 Manoeuvering, AC Request, A-C Request, A-C Select, Activate Driver and Passenger Head Restraints, Activate Fuel Lift Pump, Active Exhaust Valve 1, Active Exhaust Valve 2, Active Grill Shutter Test, Actuate All Heaters, Actuate All Seat Heaters, Actuate All Vents, Actuator Position, Actuator Test For SCR Device Relay, Actuator Test For Scrdevrly, Actuator Test Of Urea Back Flow Pump Actuator, Adjustable Pedal Disable Relay, Aero LED, Aero Level, Aftertreatment System Performance Test, Air Bag, Air Bag Lamp, Air Bag Light, Air Condition, Air Condition Relay Control, Air Dam Test, Air Suspension Leakdown Test, Airbag failure indication, Airbag Fault Indicator, All Doors/Central Locks, All Doors-Central Locks, All LEDs On, Alternator Current Limit, Alternator Field Control State, Alternator Field Duty Cycle, Alternator Field Duty-Cycle, Alternator Output Voltage Setpoint, Alternator Test, Alternator Voltage Set Point Value, Ambient Lamp, AMP Output Short Test, AMP Output Tone Test, ANC Output Short Test, Antenna Power, Antilock brake (ABS) failure indication, Approach Light State, Assist Call Button Green LED, Assist Call Button Red LED, Assist Call Green Day PWM, Assist Call Green LED Control PWM, Assist Call Green Night PWM, Assist Call Red Day PWM, Assist Call Red LED Control PWM, Assist Call Red Night PWM, ATMM Left Actuator Command -%, ATMM Left Actuator Command -Degrees, ATMM Left Actuator Command -Hz, ATMM Right Actuator Command -%, ATMM Right Actuator Command -Degrees, ATMM Right Actuator Command -Hz, Audio Routing, Audio Test, Audio Test For Subwoofer Specific, Audio Video Signal Detection, AUTO Button, Auto High Beam Indicator, 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, AVAC Motor Central Position, AVAC Motor Down Most Position, AVAC Motor Up Most Position, Average Ambient Temperature, BACK button, Background LED Illumination Level, Background LED State, Backlight 1 Level, Backlight 2 Level, Backlight 3 Level, Backlight 4 Level, Backlight 5 Level, Backlight 6 Level, Backlight 7 Level,

Backlight 8 Level, 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 Coolant Heater, Battery Coolant Pump, 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 Down Button, Blower Motor Speed, Blower Up Button, Blue Cooled Seat Indicators, Blue Heated Seat Indicators, Blue Temperature Bar, Boost Low Pressure Actuator, Boost Pressure, Boost Pressure Actuator, Brake Failure Indicator, Brake Indicator, Brake Light, Brake State Output, Brake Switch, Brake system failure indication [BRAKE], BRAKE Text, Brake Warning Lamp, BSM State, BTSI, 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, Camera Washer, 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 (Pass Side), CENTRAL LOCK PASSENGER, Channel 1 Audio Control, Channel 1 Audio Output Status, Channel 10 Audio Control, Channel 10 Audio Output Status, Channel 11 Audio Control, Channel 11 Audio Output Status, Channel 12 Audio Control, Channel 12 Audio Output Status, Channel 13 Audio Output Status, Channel 14 Audio Output Status, Channel 15 Audio Output Status, Channel 16 Audio Output Status, Channel 17 Audio Output Status, Channel 18 Audio Output Status, Channel 19 Audio Output Status, Channel 2 Audio Control, Channel 2 Audio Output Status, Channel 20 Audio Output Status, Channel 21 Audio Output Status, Channel 22 Audio Output Status, Channel 23 Audio Output Status, Channel 24 Audio Output Status, Channel 3 Audio Control, Channel 3 Audio Output Status, Channel 4 Audio Control, Channel 4 Audio Output Status, Channel 5 Audio Control, Channel 5 Audio Output Status, Channel 6 Audio Control, Channel 6 Audio Output Status, Channel 7 Audio Control, Channel 7 Audio Output Status, Channel 8 Audio Control, Channel 8 Audio Output Status, Channel 9 Audio Control, Channel 9 Audio Output Status,

Charge Air Cooler Coolant Pump, CHARGE PLUG LOCK, CHARGE PLUG UNLOCK, Charge Port Command CAN, Charge Port Command Hard Wired, Charge Port Lock Motor, Charge Port Request Tester, Charge Port Un-Lock Motor, Check Engine - MIL Lamp, 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, Cold Start Aid Driver 1 Output, Compressed Natural Gas, Compression Test, Compressor Circuit Test, Compressor Cool Down, Compressor Current, Compressor Running, 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 Lamp 2, Courtesy Lamps, Crankcase Ventilation, Crankcase Ventilation Heater, Cushion Extender Motor, 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, Cylinder Balance Test, DC Clutch Volume Index Check, DEADLOCK-SECONDARY LOCK (FT), DEADLOCK-SECONDARY LOCK (RR), 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, Defeat Engine ON, 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, Direct Backlight, Disable Level Control, Disable Passenger Airbag Lamp Request, Display Start Inhibit Data, Door Ajar Indicator, Door Ajar Switches, Door Ambient Light State, Door Courtesy Lamp State, Door Handle Power Control, Door Handle Verification Test, Door Open, Vehicle Does Not Lower, Door Puddle Lamp State, Double Start Override Relay, DOWN Select Button, DPF Lamp, DPF Reset Option, DR Solenoid, Driver Cooled Seat, Driver Door Ajar, DRIVER DOOR LOCK LED, Driver Door Lock-Unlock, Driver Heated Seat, Driver Side Seat Belt, Driver Temp Detents, Driver Temp Down Button, Driver Temp Rotary Direction, Driver Temp Up Button, DRIVER UNLOCK, DRL, DRL Lamp, DTCM Efficiency Position, DTI FUEL TRANSFER RLY, DTI LTR CLNT PMP, DTI SPRCHRGR BPV MOTOR, DTI TPBV Status, DTI VVL SOL1, DTI VVL SOL2, DTI VVL SOL3, DTI VVL SOL4, Dual Speed Fuel Pump Relay, Dual Speed Oil Pump, Dual Speed Oil Pump Status, Dual Tank Aux LP Relay, Duct Sensor - Floor Left, Duct Sensor -Floor Right, Duct Sensor - Panel Left, Duct Sensors - Panel Right, Duty Cycle Purge Solenoid, Easy Entry/Exit, EBD Warning Light, EBL Status, EC Mirror State, E-Call Button Backlight LED, E-Call Button Green LED, E-Call Button Red LED, E-Call Green Day PWM, E-Call Green Night PWM, E-Call Red Day PWM, E-Call Red Night PWM, ECM WAKEUP, 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 VIv, EGR Duty Cycle, EGR Hi Pressure Motor Test, EGR Positioner, EGR Throttle Valve, EGR Valve Actuator Test, EGR Valve Replaced, EGR Valve Solenoid Duty Cycle, ELCM Forced Monitor Test, Electric Thermostat Heater, Electric Thermostat Heater Solenoid, Electric Thermostat Heater Solenoid Duty Cycle, Electric Vacuum Pump, Electric Wastegate Valve, Electronic Stability Control, Electronic Stability Control Off, EMCC VLP Solenoid, Emergency Call Backlight LED

PWM, Emergency Call Green LED PWM, Emergency Call Red LED PWM, Emissions Failure Lamp, Emissions Rolls Test Mode Is Active, EMTC Encoder Power Return, EMTC Encoder Power Supply (5V), 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, Engine Warm Up, Enter, Enter Button, Enter Plant Mode, EPB Auto Apply Control, EPB Drive Away Control, EPB Failure Lamp, EPB Function Lamp, EPB Service, EPB Switch Function LED, EPB Warning Light, EQ Loudness Test, ESC, ESC Disable Lamp, ESC Failure Lamp, ESC Indicator, ESC Malfunction Lamp, ESC Off, ESC OFF lamp, ESC ON-OFF Indicator, ESC System Intervention-Failure Indication HILL HOLDER System Failure Indication, ESCL 12 Volt Feed Control, ESCL Unlock Control, ESIM Forced Monitor Test, ESM Power Supply, ESP button, ESP Light, ETC Indicator Test, ETC Lamp, ETC System Test, ETC Throttle Follower Test, EVAP Purge Valve, Evaporator Sensor Temperature, 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, External Temperature, Externally Controlled Variable Displacement (ECVD) Command (DC), Faceplate Controls-Eject, FAD Feedback Voltage, FAD Lock Request, FAD Power Output, FAD Request Output, FAD Supply Voltage, Fade Settings, Fan Clutch PWM Duty Cycle Output, Fan Clutch Test, Fan Control, Fan Off Button, Fan Rotary Detents, Fast Down Leveling Test, Fault Message F1 -Service Air Suspension, FCW Button, Feature Pin, Fill Spring From Reservoir, First Row Driver Seatbelt Buckle Sensor-Switch, First Row Passengers Seatbelt Buckle Sensor-Switch, Flipper Glass 2, Fog Lamp, Foot Well, Foot Well/Halo Lamps, Foot Well-Halo Lamps, Freeze Current State, Frequency Step Selection, Front Blower Control, Front Blower Motor, Front Blower Speed, Front Collision Off, Front Collison 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 Vertical Motor, Front Washer, Front Wiper (High/Low), Front Wiper (High-Low), Front Wiper (On/Off), Front Wiper (On-Off), Front Wiper Hi Speed, Front Wiper Low-Int Speed, Front/Rear Washer, Front-Rear Washer, Fuel Door Lock, FUEL DOOR UNLOCK, Fuel Filter Heater, Fuel Filter Heating, Fuel filter water level warn lamp, Fuel Filter Water Level Warning 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 Injector Cleaning, Fuel Level LEDs, Fuel Level Output, Fuel Metering Unit, Fuel Metering Unit Actuator, Fuel Pre Supply Pump, Fuel Pressure Override, Fuel Pressure Regulated O/P (Bar), Fuel Pressure Regulator, Fuel Pressure Regulator Valve, Fuel Pump, Fuel Pump Relay Control State, Fuel System Run Up Test, Functional LED Illumination Level, Functional LED State, Gas Injector Relay, Gasoline Indicator, GATED PARK RELAY, Gated Park ZFII Output, Gated Park ZFII Output Control, Gear Position, Gear Selection, Generator Ramp Time, Generator Speed Threshold, Glow Lamp, Glow Plug, Glow Relay, Grid Test, Haptic Motor, Head Rest Actuation, 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 PWM Control, Heated Steering Wheel~Heated Steering Wheel, Heater EBL, Height Sensor Check, 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 headlamp indication, High Beam Indicator, High Beam Light, High Pressure Fuel Rail Test, High Pressure Fuel System Test, High Speed Engine Cooling

Fan Control, High Speed Fan, Hood Ajar, Horizontal Headrest Motor, Horizontal Motor, Horizontal Motor Backward/Forward, Horn, HPCR Duty Cycle, HPCR Duty Cycle Output, HSD 21W 1, HSD 21W 2, HSD 21W 3, HSD 21W 4, HSD FOR LED 1, HSD FOR LED 2, HSD RELAY 1, HSD RELAY 2, HSD RELAY 3, HSD RELAY 4, HSD RELAY 5, HSD RELAY 6, HSD RELAY 8, HUD Lighting Level, HVAC A-C Indicator, HVAC AUTO Indicator, HVAC Cool Down Test, HVAC Front DEF Indicator, HVAC Mode Button, HVAC Rear DEF Indicator, HVAC REC Indicator, HVAC SYNC Indicator, I/P Illumination, ICR-HCR Relay, 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, In Motion Menu, Indicator Channel, 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, Initiate P2BA9 SCR Refill Monitor, 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 Air Throttle Actuator, Intake Air Throttle Actuator Test, 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, Intake Throttle Duty Cycle Output, Interior Ambient Lighting, Interior Convenience Lamps, Interior Convenience Lamps 2, Interior Convenience Lamps 3, Interior Panel Dimming Lamps, Interior Panel Dimming Lamps 2, Interior Vanity Lamps, Inverter, Inverter Enable Relay, Inverter Status Indicator, IOD RELAY ON LSD, I-P Illumination, IP Run 1, IP Run 3, IP Run Start 1, IP Run Start 2, 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, KIN OFF LED State, KIN RUN LED, KIN RUN LED State, KIN Start/Stop LED State, KIN Start-Stop Button (SSB) LED, 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 Intensity Output, Left Rear Tail/Park Lamp, Left Air Catcher LED, Left Auxiliary High Beam, Left Backrest Heat Seat Linear PWM Request -Output, Left Backup Lamp, Left Cushion Heat Seat Linear PWM Request -Output, Left Day Light Lamp, Left Daytime Running Lamp, Left Floor Duct Sensor, Left Front Fog Lamp, Left Front Fog Lamps, Left Front Park Lamp, Left Front Park Lamps, Left Front Side Marker, Left Front Turn Lamp, Left Front Turn Signal, Left HID Lamp, Left High Beam, Left High Beam Lamp, Left High Beam Shutter, Left Low Beam, Left Low Beam-HID, Left Panel Duct Sensor, Left Rear AUX Turn Lamp, Left Rear Door Lock-Unlock, Left Rear Fog Lamp, Left Rear Fog Lamps, Left Rear Park Lamp, 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 Stop-Turn Lamp, Left Trailer Tow Turn/Stop Lamp, Left Trailer Tow Turn-Stop Lamp, Left Turn Light Status, Left Turn Signal Indicator, Left Turn Signal Lamp, Left turn signal lamp indication, Left Vent Seat Linear PWM Request -Output, Level Not Permitted, LF Antenna Verification Test, Licence Plate Lights, License Plate Lamp, License Plate Lamp WK -Right Rear Rail Lamp WD, License Plate Lamps, Lift Pump Relay, Liftgate Release Motor, Lin Module Data, Linear Hall, Linear Solenoid A, Linear Solenoid B, Linear Solenoid C, Linear Solenoid D, Linear Solenoid E, Linear Solenoid F, Linear Solenoid G, Load Level, Locate Learned Keys, LOCK 4WD, Low Beam Light, Low Fuel, LOW LED, Low Pressure Feed Valve 1, Low Pressure Feed Valve 2, Low Pressure Feed VIv 1(Normal close), Low Pressure Feed VIv 2(Normal close), Low Reverse Solenoid, Low Temp Passive Pump 1, Low Temp Passive Pump 2, Lower LED, Lowering, Low-Reverse Solenoid, LR Clutch Volume Index Check, LR Door Ajar, LR DOOR LOCK LED, LR Solenoid, LSD FOR LED 3, LSU Heater 1, Main Left Temperature Actuator Position, Main/Left Temp Selected, Main-Left Temp. Door Actuator Position, Main-Left Temp. Door Position, Main-Left Temperature Actuator Position, Malfunction Indicator Lamp, Memory Seat ECU Self Test, Metering Unit, Metering Unit Actuator, Middle LED, 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), Mode Button, Mode Door 1 (Panel), Mode Door 2 (Defrost-Demist), Mode Door 3 (Floor), Mode Selection, Motor Brake State, 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, NOx Sensor Replacement, O2 Heater Test, O2 Sensor Heater Bank1 Sensor1, O2 Sensor Heater Bank1 Sensor2, O2 Sensor Heater Bank2 Sensor1, O2 Sensor Heater Bank2 Sensor2, 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, OFF Button, Offroad Level 1, Offroad Level 2, 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, Open-Close, OPTIONAL HSD 1 PWM, OPTIONAL HSD 2 PWM, ORC RELAY CONTROL, 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, Park LED, Park Light, Park Mode Level, Park Mode Pending, Parking Brake And Low Brake Fluid, Parttime LED, Passenger Airbag (PAB) Status, Passenger Airbag LED, Passenger Cooled Seat, Passenger Door Ajar, PASSENGER DOOR LOCK LED, Passenger Door Lock-Unlock, 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, Pedals Forward/Backward, Permanent Static System Fault, 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, Power Side Step Module Actuation Test, 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., Proportional Surge Solenoid, PTC Cabin Heater 1 Actuation, PTC Cabin Heater 2 Actuation, PTC Cabin Heater 3 Actuation, 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 Vapors Test, PWM Fan Actuation Test, PWM Output, 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 Fan 2 Duty Cycle, Radiator Jalousie ShutterPosition, Radiator-Condenser Cooling Fan Relay 1 Control State, Radiator-Condenser Cooling Fan Relay 2 Control State, Radio, Radio Mute Button, Radio Screen OFF Button, Radio Volume, Rail Pressure, Rail Pressure Sensor Replacement, Raising, Raising Lowering Interrupted, 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 CFM, Rear Defrost Button, Rear Defrost Indicator, Rear Fog, Rear Fog Lamps, Rear Fog Light Status, Rear Heated Window, Rear Left Position Light Status, Rear Left Window Manual Mode, Rear Right Position Light, Rear Right Turn Lamp, Rear Right Window Manual Mode, Rear Vertical Motor, Rear Wiper, Recirc, RECIRC button, RECIRC Indicator, Recirc. Door Actuator Position, Recirculation Door Actuator Position, Recirculation LED, Recirculation Pump, Recirculation pump activation, Recliner, Recliner Motor, Red Brake Lamp, Red Hazard Button, Red Heated Seat and Steering Wheel Indicators, RED Heated Seat Indicators, Red Temperature Bar, Reduce Speed, 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 Gear Light Status, 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 Backup Lamp, Right Cushion Heat Seat Linear PWM Request -Output, Right Day Light Lamp, Right Daytime Running Lamp, Right Floor Duct Sensor, Right Front Door Handle Power, Right Front Fog Lamp, Right Front Fog Lamps, Right Front Park Lamp, Right Front Park Lamps, Right Front Side Marker, Right Front Turn Lamp, Right Front Turn Signal, Right HID Lamp, Right High Beam, Right High Beam Shutter, Right Low Beam, Right Low Beam-HID, Right Panel Duct Sensor, Right Rear Door Handle Power, Right Rear Door Lock LED, Right Rear Door Lock-Unlock, Right Rear Fog Lamp, 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 Stop-Turn Lamp, 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 Light, Right Turn Signal Indicator, Right Turn Signal Lamp, Right turn signal lamp indication, Right Vent Seat Linear PWM Request, Right Vent Seat Linear PWM Request -Output, Roller Learning Shut-Off, Rotary 4 Detents, Rotary 4 Direction, RPS Power Supply (5V), RR Door Ajar, RR DOOR LOCK LED, RT-LT Sidemarkers-RT-LT Applique Parklamps, Run, Run Acc 2, Run-Start 1, SCR Inlet Temp Sensor Replacement, SCR Relay Actuation Test, Screen Off, SCREEN OFF button, SDAR Station Selection, Seat Belt, Seat Belt Lamp, Seat Belt Light, Seat belt unfastened Lamp, 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, Seek Status, Seek Status Tuner AM-FM, Seek Status Tuner DAB, Self Test, Self Test Routine, Sensor Rolls Test, SERV LED, Service Air Suspension, See Dealer Now - (Red Lamp), 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, Short Term Control Motor Current, Shutoff Correction Quantity, Shutoff Injector Quantity, Side Marker, Side Mirrors Heater Control, Skip Shift Solenoid, Small Leak Verification Test, Smart Bar Command, 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, Spring Deflate To Atmosphere, Spring Deflate to Reservoir, SRS Indicator Lamp Request, SRS Lamp, SRV Test, Standard Vehicle Level, Start/Stop System, Starter, Starter Relay, Starter Solenoid, Starter Solenoid (High), Starter Solenoid High, Starter Status, Steering Column, Steering Wheel Linear PWM Request -Output, Stop - Start System Active Indicator, Stop / Start System Active Lamp, Stop Light Status, Stop Start Confirmation, Stop/Start System Active, Stop-Start ON-OFF Indicator, Stop-Start System Active, STOP-STOP TURN LEFT, STOP-STOP TURN RIGHT, Stop-Turn Lamp Left, Stop-Turn Lamp Right, Sun Shade Control, SUNROOF MOTOR, Surge Solenoid Control State, Sway Bar Indicator, Swing Gate Lock, Swing Gate Unlock, Swirl Valve actuator Test, Switch Illumination State, Switch On EPB Failure Lamp, Switch On EPB Function Lamp, System Disabled (Tire Jack Mode), System Temporarily Not Available, System Wiring Test, T Case Service Indicator Request, Tail Gate Lock, Tail Gate Unlock, TAIL-SIDE MARKER LEFT, TAIL-SIDE MARKER RIGHT, T-Case Motor Brake HSD Output, T-Case Motor Brake LSD Duty Cycle, T-Case Motor Direction, T-Case Motor Duty Cycle, T-Case Motor Solenoid Lock, T-Case Motor-Motor Lock, T-Case Service Indicator Request, TCC Pressure Control Solenoid, TCM VIN Verification, 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, Temperature Down Button, Temperature Up Button, 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 Test, Throttle Valve, Throttle Valve Actuator, Tilt Mirrors in Reverse, Time Controlled Spring Fill, Timeout Time Flash To Pass, Timeout Time Paddle Shift Switches, Tire Pressure, Tire Pressure Monitoring, Tone Test, Top LED, Topper Center Mounted Stop Lamp, TOPPER CHMSL, Torque Coupling Control, TOW-HAUL, Tow-Haul Indicator, TPM Sensor Rolls Test, TPMS, TPMS Generic Failure Lamp, Trac Cntrl Outlet VIv 1(Normal open), Trac Cntrl Outlet VIv 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 Clutch Torque, Transfer Case Low

Lamp Request, Transfer Case Neutral Lamp Request, Transmission Component Tests, Transmission Verification Test, Transponder Antenna Power, Treble Settings, Truck Bed Lighting Leds, Truck Cargo Lamps, Trunk Door Handle Power, Trunk/Flipper Glass Release Motor, Trunk-Flipper Glass Release Motor, Trunk-Gate, Tumble Generator Valve, Tuner Rotary Detents, Tuner Rotary Direction, Turbo/VGT Component Replacement, Turn Left, Turn Light, Turn Right, Turn Signal Lamp State, Twilight Sensor Value, UConnect Live Apps Installation, UD Clutch Volume Index Check, UD Solenoid, UGDO, UGDO Power Supply, Under Inflation Lamp, Underdrive Solenoid, Under-Drive Solenoid, Unlock 1/Driver Lock, Unlock 1-Driver Lock, Unlock 2/Passenger Locks, Unlock 2-Passenger Locks, Unlock Left Rear, Unlock Left Rear Door, Unlock Right Rear, Unlock Right Rear Door, UNLOCK RT RR, Unlock Run -Start, Unlock RUN-START, UP Select Button, Urea (Reductant) Pressure Line Heater Actuaton Test, Urea (Reductant) Tank Heater Actuaton Test, Urea Dosing Valve Actuation Test, 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 Speed-RPM, Vehicle Sway Green, Vehicle Sway White, Vehicle Sway Yellow, Vehicle Theft Alarm, Vertical Front, Vertical Headrest Motor, 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, View VTA Enable Data, VLP Solenoid, Volume Rotary Detents, Volume Rotary Direction, VTA Indicator LED, VTA Lamp, 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 Hall Sense Supply, Window State, Windshield Heater Relay, WINDSHIELD HEATER RELAY DR, WK Head Rest Relay, Yellow A/C and Auto Indicators, Yellow Button Indicators, Yellow Fault Lamp, Yellow Lane Departure Warning Indicator, Yellow Rear Defrost Indicator, Yellow Recirc Indicator

### New Ford/Lincoln Coverage

o Added coverage for 96 new system applications

### **New GM Coverage**

### 10 new Adjustment type special tests:

Configure New Module, Drive Motor Position Sensor Offset Reset, Exhaust Aftertreatment Fuel Injector Reset, License Compliance Materials Download Error Counter Reset - Wireless Charging System Equipped, Passenger Presence Sensor Learn, Rear Differential Hydraulic System Service Bleed, Reset High Voltage Disable Request After Crash Event Detected, RVS Disable History Reset, Variable Exhaust Control Valve Learn, Yaw Rate Sensor Learn

### 39 new Actuation type special tests:

Automatic Transmission Auxiliary Fluid Pump, Coolant Temperature Gauge Sweep, Drive Motor Clutch Actuator, Drive Motor Clutch, Drive Unit Fluid Pump 2 Speed Command, Drive Unit Fluid Pump Speed Command for Service Fill, Drive Unit Park Control Actuator Command, Emblem Light, Engine Block Coolant Control Valve, Engine Coolant Bypass - Oil Heat Exchanger Valve Position, Evaporative Emission System Switching Valve, Exhaust Aftertreatment Fuel Injector Cleaning Procedure, Exhaust Gas Recirculation Cooler Bypass Valve Position, Front Suspension Position Sensor Trim Height, Fuel Pump 2, Generator,

High Side Driver, Intake Air Flow Control Valve Position, Left Front Audio Tone Test, Left Front Shock Absorber Actuator, Left Rear Audio Tone Test, Left Rear Shock Absorber Actuator, Left Rear Window Switch Command, Liftgate Lamp Command, Passenger Air Bag Off Indicator, Passenger Air Bag On Indicator, Passenger Seat Belt Reminder Indicator, Passenger Seat Belt Tension Sensor, Right Front Audio Tone Test, Right Front Shock Absorber Actuator, Right Front Window Switch Command, Right Rear Audio Tone Test, Right Rear Shock Absorber Actuator, Seat Back Horizontal Movement, Seat Cushion Front Vertical Movement, Seat Cushion Rear Vertical Movement, Seat Horizontal Movement, Transfer Case Drain and Fill

# **New Coverage Details – USA Asian**

#### New Honda/Acura Coverage

Added coverage for 15 new system applications

#### 32 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), 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, Initialization, Longitudinal G Sensor Neutral Point Learn, ODS Unit Initialization, OPDS Initialization, Pop Up Hood(PUH) Calibration, Replace TCM/PCM, Reset Of Assistant Side Window Position, Reset Of Rear Left Side Window Position, Reset Of Rear Right Side Window Position, Resolver Position Calibration, Start Clutch Feedback Learn, Start Clutch Status Data Clear, Steering End Learning, Stroke Sensor Learning, SWS Initialization, TCU Setup, The Wheel Size Setup For Indirect TPMS

#### 196 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, Air Bypass Valve Control Solenoid (ABV), All Injectors OFF, Assistant Door Courtesy Light, Assistant Door Mirror Motor Left / Right, Assistant Door Mirror Motor Up / Down, Assistant Door Pocket Illumination Light, Assistant Outer Handle Illumination Light, Assistant Remote Switch Illumination Light, Assistants Inner Handle Illumination Light, Automatic Headlights, Backup Line - Headlights, Boost Pressure Test, BSI Buzzer Status, BSI Fail Lamp, BSI Indicator On, BSI System Fail, BSI System Status, BSI Unavailable, Cargo Light, Clean Left Side Radar, Clean Right Side Radar, 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 Pull Up / Push Down, Column Tilt Motor (Full Up / Full Down), Cruise Control Cancel History, CTM Buzzer Status, CTM System Fail, CTM System Status, Daytime Running Light, Driver Door Courtesy Light, Driver Door Mirror Motor Left / Right, Driver Door Mirror Motor Up Down, Driver Door Pocket Illumination Light, Driver Door Unlock, Driver Inner Handle Illumination Light, Driver Outer Handle Illumination Light, Driver Rear Door Courtesy Light, Driver Remote Switch Illumination Light, Drivers Window Control, 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, Emblem Light, Fail Wipe Signal, 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, Front

Defrost, Front Height Motor Up / Down, Front Washer Motor, Front Wiper Low Speed, Front Wiper Motor (High), Frontal Crash Detection Signal Output, Fuel Lid Opener, Fuel Pump OFF, Fuel Pump ON, Gate Light, Gear Shift, Glass Hatch Open Operation, Hazard Flashers, Head Light High, Head Light Low, Headlight Backup, Headrest Motor, Horn, IMT(IMRC) Activation, IMT(IMRC) Test, INH Solenoid For Start Clutch Type, Injector Kill Test, Intake VTC Test, Interior Light, Keyless Buzzer, 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 Right/Left, Left Power Mirror - Full Up/Down, Left Rear Power Window, Left Rear Pulser, Left Rear Solenoid, Left Rear VSA Solenoid, Left Rear Window Switch Command, Left Rear Window, Left Side Indicator, Left Sliding Door - Lock/Unlock, Left Turn Signal, Lock/Unlock All Doors, Lockup Clutch, MA EPS CONTROL ON/OFF, MA EPS Switching, Map Light Off, Memory Buzzer, Memory Seat Indicator 1, Memory Seat Indicator 2, Memory Switch Illumination Light, No Rain Condition Signal, No Wipe Signal, Occupied Signal Output, Parking Lights, Passenger Door Power Window, Passenger Rear Door Courtesy Light, PAX System Warning Reset, Power Window Relay, Pressure Test Assistance mode, Pressure Test, Radiator Fan, Rain Condition Signal, Rain Sensor - Front Wipers - High, Rain Sensor - Front Wipers - Intermittent - Once, Rain Sensor -Front Wipers - Low, Rear Blower, Rear Defroster, Rear Differential Air Purge, Rear Differential Oil Pressure Sensor Check, Rear Height Motor, Rear Left Door Courtesy Light, Rear Left Inner Handle Illumination Light, Rear Right Door Courtesy Light, Rear Right Inner Handle Illumination Light, Rear Wiper Motor, Recline Motor, Right BSI Radar Unavailable, Right Front Pulser, Right Front Solenoid, Right Front TCS Solenoid, Right Front VSA Solenoid, Right Front Window Switch Command, Right Power Mirror - Full Right/Left, Right Power Mirror - Full Up/Down, Right Rear Power Window, Right Rear Pulser, Right Rear Solenoid, Right Rear VSA Solenoid, Right Rear Window, Right Side Indicator, Right Turn Signal, Security Indicator, Self Diag Test, Self-Diagnostic Function, 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, Slide Motor, Solenoid Valve Activation, Sub Throttle, Sunroof Open/Close, Tailgate, TC Bypass Valve, Throttle Actuator Control Test, Tilt Mirror, TP Position Check, Trunk Fuel Opener Switch Illumination Light, 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, VTEC Solenoid 1, VTEC Solenoid 2, VTEC Solenoid, VTEC Test, Warning light activation, Waste Gate Solenoid (WGS)

# New Hyundai/Genesis Coverage

Added coverage for 618 new system applications

#### 25 new Adjustment type special tests:

12V Battery SOC Calibration, ACU Variant Coding, Adaptive Value Backup Input (ECU Transfer Assy replacement at once), Adaptive Value BackUp Input (ECU replacement), Air Bleeding Mode, Auto Detected Configuration (ESC Only), Auto Detected Configuration Reset, Brake Pad Change Mode, CLU Variant Coding, ESC Variant Coding, HCU Air Bleeding Mode, iMEB Actuator Initialization, Longitudinal G Sensor Calibration(HAC/DBC Only), Pedal Travel Sensor (PTS) Calibration, Pressure Sensor Calibration, Resetting Adaptive Values, Resetting E-CVVT Values, SAHLS Sensor Origin Point Setting, Seat Limit Position Setting, Set the steering feel torque to zero, TPMS Reception Rate Measuring Mode, TPMS Test, WCT Reprogram, Wheel Sensor ID Writing

### 657 new Actuation type special tests:

(LED) DRL Lamp LH, (LED) DRL Lamp RH, 12V Latch Relay OFF, 12V Latch Relay ON, 3D View, 3rd Row Center SBR Center Indicator, 3rd Row SBR Center Indicator(Option), 3rd Row SBR Left Indicator(Option), 3rd Row SBR Right Indicator(Option), 4th Row SBR Center Indicator(Option),

4th Row SBR Left Indicator(Option), 4th Row SBR Right Indicator(Option), A/C Compressor Relay, AAF Forced Operation - Auto, AAF Forced Operation - Close, AAF Forced Operation - Open, Actuator Control - Apply, Actuator Control - Release, After Blower USM Set Off, After Blower USM Set On, AHB Apply Valve #1, AHB Apply Valve #2, AHB Cut Valve #1, AHB Cut Valve #2, AHB Release Valve #1, AHB Release Valve #2, All Door Lock Signal Output(to PTGM), All Mood Lamp Blue LED Test, All Mood Lamp Green LED Test, All Mood Lamp Red LED Test, All Mood Lamp White LED Test, Alternator Control, Alt'L Signal Out, Assist BSD Indicator, Assist Door Courtesy Lamp Output, Assist Door Lock Indicator, Assist Mirror Position Down (Option), Assist Mirror Position Left (Option), Assist Mirror Position Right (Option), Assist Mirror Position Up (Option), Assist Outside Mirror Down, Assist Outside Mirror Left, Assist Outside Mirror Right, Assist Outside Mirror Up, Assist Power Winodow Down (Option), Assist Power Winodow Up (Option), Assist Seat Belt Indicator (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 Output, Back Up Lamp, Battery Coolant Valve Operation Mode1 (Combined Mode) ON, Battery Coolant Valve Operation Mode1 (Seperated Mode) ON, Battery EWP Operation Mode for Degassing and Circulation, Battery Warning Lamp, BCM Buzzer Output (Internal/External), BCM Buzzer Output (Internal-External), Bifunction Headlamp High LH Solenoid IPS Output, Bifunction Headlamp High RH Solenoid IPS Output, Bolster Left/Right Deflation, Bolster Left/Right Inflation, BSD Indicator, Burglar Horn Relay, Canister Purge Valve, Canister Shut Off Valve Clocked (OBD-2 Only), Canister Shut Off Valve(OBD-2 Only), Cell Balancing Deactivate, Central Door Lock Indicator, Central Door Lock Relay, Central Door Lock Switch Indicator Output, Central Door Lock Switch Output, Central Door Unlock Relay 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, Class TCF Beam Change, Compressor Off, Compressor On, Console Mode Door - Floor, 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%, COOLANT VALVE - 3WAY (HTR) - Close, COOLANT VALVE - 3WAY (HTR) - Open, Cooler step 3 operation, Cooling Fan PWM, Cornering Lamp Left Relay Output (Option), Cornering Lamp LH Output, Cornering Lamp RH Output, Cornering Lamp Right Relay Output (Option), Courtesy Lamp RL Output, Courtesy Lamp RR Output, Cruise Control Main Lamp(Option), Cruise Control SET Lamp(Option), D DRL Relay, Damper Clutch Solenoid (DCC), Dead Lock Relay, Dedicated DRL Left Output, Dedicated DRL Output (Option), Dedicated DRL Right Output, Defogger - Deicer Relay, Defogger Indicator, DEHUM VALVE - EXV (DEHUMI) Valve Close, DEHUM VALVE - EXV (DEHUMI) Valve Open, Diagnostic Valve, Disconnector Disengage, Disconnector Engage, Door Lock Indicator, Door Lock Relay, Door Unlock Relay, 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 Power Window Switch Autol Up Output, 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, DRVM (Driving Rear View Monitor), Electric Shuttle Valve-Left Front, Electric Shuttle Valve-Right Front, Electrically Controlled Water Pump (Option), 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 (Recever Drier) - Close, Electronic Expansion Valve (Recever Drier) -Open, Electronic Waste Gate Valve (Turbo Only), EMS Wakeup Output, Engine Check Lamp(MIL), EPB Apply RH and LH, EPB Release RH and LH, ESS Lamp, ETC Motor, EV Charge Door Open Lamp Output, EV Charge Door Open Relay, EVAP Leakage Test, Event Indicate LED On-Off, EVP, EWP Max RPM Operation, Exhaust Gas Recirculation Valve, 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 Motor Control-High Speed, Fan Motor Control-Low Speed, FAN ON, Fan PWM, Fan1 1st, Fan1 2nd, Fan1 3rd, Fan1 4th, Fan1 5th, Fan1 6th, Fan1 7th, Fan1 8th, Fan1 9th, Fan1 Stop, Flasher Sound Relay(Option), Folding Actuator Signal Output, Foot Lamp Output(Option), 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 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 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 Top-AVM View, Front Top-SVM View, Front Turn Signal Lamp Activation LH Output, Front Turn Signal Lamp Activation RH Output, Front Washer Motor Output, Front-Full View, Front-Left View, Front-Right View, Front-SVM View, Front-Wide View, Frunk Lamp Output, Fuel Door Lock Solenoid Output (PHEV Only), Fuel Door Open Solenoid Output (PHEV Only), Fuel Door Open Solenoid Output, Fuel Pressure Indicator Lamp(LPI), Fuel Pressure Ragulator (GDI Only), Fuel Pump Control, Fuel Pump Relay, Full AFS BPC Test Class C, Full AFS BPC Test Class E, Gauge ON, Glove Box Lamp Output, HAC Brake Lamp Actuator, Handle Fold - Left Side, Handle Fold -Right Side, 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(Option), Heated Handle Output(Option), 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, Ignition Coil Enable/Disable-#1, Ignition Coil Enable/Disable-#2, Ignition Coil Enable/Disable-#3, Ignition Coil Enable/Disable-#4, Illumination, iMEB Valve Control-Line 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-Wheel Split Valve, Immobilizer Lamp(Option), Indicator ALL OFF, Indicator ALL ON, Indicator Output 100%, Indicator Output 25%, Indirect Vent door, Injector Disable-Cylinder 1, Injector Disable-Cylinder 2, Injector Disable-Cylinder 3, Injector Disable-Cylinder 4, Inlet Valve-Front Left Control, Inlet Valve-Front Right Control, Inlet Valve-Left Front, Inlet Valve-Left Rear, Inlet

Valve-Rear Left Control, Inlet Valve-Rear Right Control, 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(Option), Interior Mood Lamp Output (Option), Internal Buzzer, IOD Relay, ISG Test(Option), Isolation Detection Circuit Deactivate, ITM Valve, Key Hole Illumination (Manual Key Type), Key Interlock Solenoid (Manual Key Type), Lamp Control - EPB Status Lamp, Lamp Control - EPB Warning Lamp, Lamp Control, Lamp Load Power Relay, LampLoad AutoCut IPS Output, LED Group Control - DRL Group, LED Group Control - Highbeam Group, LED Group Control - Lowbeam Group, LED Group Control - Position Group, LED Group Control - SIDE MARKER (Optional), LED Group Control - SIDE REPEATER, LED Group Control -Turn Signal Group Blinking, LED Group Control - Turn Signal Group, Lock Mode Initialization, LongTermLoad Cut Relay Output, Luggage Lamp Relay, Luggage Lamp, Lumbar Deflation, Lumbar Inflation, Lumbar Middle/Lower Inflation, Upper Deflation, Lumbar Upper/Middle Inflation, Lower Deflation, Main Relay (+) ON, Main Relay(-) ON, Main Relay(-), Precharge Relay, Simultaneously ON (Precharge se, Main Relay, Maintenance mode - EPB/MOC disengaging, Manual HLLD Signal Output, Map Lamp Output, Mirror Folding Operation (Option), 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, 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 (Headrest), Move P/Seat to the Foremost Position (Height), Move P/Seat to the Foremost Position (Recline), Move P/Seat to the Foremost Position (Slide), Move P/Seat to the Foremost Position (Tilt), Move P/Seat to the Last Position (Height), Move P/Seat to the Last Position (Recline), Move P/Seat to the Last Position (Slide), Move P/Seat to the Last Position (Tilt), Move P/Seat to the Lowest Position (FR Height), 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), Move Steering Column At The Longest Position (Tele), Move Steering Column To The Lowest Position (Tilt), Multimedia Load Power Relay, Navi Wakeup Signal Output, O2 Heater Front (B1/S1), O2 Heater Rear (B1/S2), OBC Relay(-) ON, OBC Relay(+) ON, OBC Relay(+)/(-) ON Simultaneous, OBC Wake up Output, Oil Change Warning Lamp(Option), Oil Change Warning Lamp, Oil Control Valve - Exhaust Bank 1(Option), Oil Control Valve - Exhaust Bank2, Oil Control Valve - Intake Bank2, Oil Pressure Warning Lamp, ON/OFF Solenoid A(Drive), 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, Outlet Valve-Front Left Control, Outlet Valve-Front Right Control, Outlet Valve-Left Front, Outlet Valve-Left Rear, Outlet Valve-Rear Left Control, Outlet Valve-Rear Right Control, 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), Passenger Air Mix Door-0%, Passenger Air Mix Door100%, 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 Window Relay, PRA Operation Control, Precharge Relay ON, Precharge Relay ON, Main Relay (-), (+) ON (Normal sequence), Pressure Control Solenoid (LP), PSB Retraction Test for Equipment RH, 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, Radiator Fan Forced Operation, Radiator shutter 1 - Auto test, Radiator shutter 1 - Close test, Radiator shutter 1 - Open test, Read VIN, 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 Assist Power Window Down Relay, Rear Assist Power Window Up Relay, 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 Down Output [Rear Curtain Hall Sensor Power Output, Rear Curtain Down 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 Driver Power Window Down Relay, Rear Driver Power Window Up Relay, Rear Fog Lamp (Option), Rear Fog Lamp Indicator, Rear Fog Lamp Left Output, Rear Fog Lamp Relay (Option), 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 mode door - B-L, Rear mode door - Floor, Rear mode door - Vent, 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 Curtain Down (Only Rear Right Power window Clos, 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(Option), Rear Seat Belt Center Indicator (Option), Rear Seat Belt Left Indicator (Option), Rear Seat Belt Right Indicator (Option), Rear Seat Heat Mode to the High, Rear Seat Vent Mode to the High, Rear Seat Warmer Left(Option), Rear Seat Warmer Right(Option), 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 Top-SVM View, Rear View Switch Indicator Output, Rear Washer Motor Output, Rear Wiper Relay (Option), Rear Wiper Relay, Rear-Left View, Rear-Right View, Rear-SVM View, Rear-Wide View, RKE Tailgate Signal Output(to PTGM), RL Door Lock

Relay, RL Door Unlock Relay, Room Lamp Output, RPAS Switch Indicator(Option), RVM Swich Indicator Output, Safety ECU Enable Output (High), Safety Power Window Enable, Safety Power Window Sunroof Enable, SAHLS Actuator 20%, SAHLS Actuator 80%, Security Indicator (Option), Security LED Output, Security LED, Shift Control Solenoid Valve A(UD/C), ShortTermLoad Cut Relay/IPS Output, Simulator Valve #2, Solenoid Thermal Expansion Valve - Close, Solenoid Thermal Expansion Valve - Open, SSB illumination Output (Power and GND), Start Inhibit Relay (Option), Start Inhibit Relay, Start Relay, Static Bending LH Output (Option), Static Bending RH Output (Option), Steering Warmer Output, Steering Warmer Switch Indicator Output, Stop Lamp Left, 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(Option), SVM + DRVM(Driving Rear View Monitor), SVM + FrontLeft + FrontRight View, SVM + RearLeft + RearRight View, System Identification, Tail Interior Lamp, Tail Lamp Indicator, Tail Lamp Output, Tail Lamp Relay, Tailgate/Trunk Release Relay, TCI Bypass Valve(Turbo Only), TCS Valve-Left Front, TCS Valve-Right Front, 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, Turn Signal Sound Relay Output, Variable Force Solinoid Valve - Exhaust Bank1 test, Variable Force Solinoid Valve - Intake Bank1 test, Variable Intake Solenoid(Option), VESS Sound Play (5 Sec), VESS Sound Play (Until Stop Command), Warm Bypass door, Welcome Function - Escort Mode ON, Welcome Function -Welcome Mode ON, Window Lock Indicator, Window Lock to Driver Door Module, Wiper High-Speed Relay [Wiper High RLY With Wiper Power RLY], Wiper Low-Speed Relay [Wiper Low RLY With Wiper Power RLY], Wiper Power Relay, Wiper Relay (for INT)[Wiper RLY With Wiper Power RLY]

### New Kia Coverage

o Added coverage for 189 new system applications

#### 27 new Adjustment type special tests:

12V Battery SOC Calibration, Auto Detected Configuration Reset, Brake Pad Change Mode, HCU Air Bleeding Mode, Longitudinal G Sensor Calibration(HAC/DBC Only), Multiplicative Injection Time Correction for All Cylinders, Multiplicative Injection Time Correction for Cylinder1, Multiplicative Injection Time Correction for Cylinder2, Multiplicative Injection Time Correction for Cylinder4, Multiplicative Injection Time Correction for Group(B) All Cylin, Multiplicative Injection Time Correction for Group(B) Cylinder2, Multiplicative Injection Time Correction for Group(B) Cylinder3, Pedal Travel Sensor (PTS) Calibration, Pressure Sensor Calibration, Purge Solenoid Valve Opening Additive Correction, Reset Adaptive Values, Reset of Injector Q-stat Adaptation, Resetting Adaptive Values, Resetting Auto Trans Adaptive Values, Resetting E-CVVT Values, SAHLS Sensor Origin Point Setting, Seat Limit Position Setting, Set the steering feel torque to zero, WCT Reprogram, Write VIN, Zero Recalibration of Occupant Classification Sensor

### 709 new Actuation type special tests:

(LED) DRL Lamp LH, (LED) DRL Lamp RH, 12V Latch Relay OFF, 12V Latch Relay ON, 1st Gear Lamp, 2nd Gear Lamp, 3D View, 3rd Gear Lamp, 3rd Row Center SBR Center Indicator, 3rd Row SBR Center Indicator(Option), 3rd Row SBR Left Indicator(Option), 3rd Row SBR Right Indicator(Option), 4th Row SBR Left Indicator(Option), 4th Row SBR Right Indicator(Option), 5th Gear Lamp, 6th Gear Lamp, A/C Compressor Relay, AAF Control - Close, AAF Control - Open, AAF Relay, A-C Compressor Relay, Activation Switch LED, Actuator Control - Apply, Actuator Control - Release, AEWP Control - PWM Type, After Blower USM Set Off, After Blower USM Set On, AHB Apply Valve #1, AHB Apply Valve

#2, AHB Cut Valve #1, AHB Cut Valve #2, AHB Release Valve #1, AHB Release Valve #2, All Door Lock Signal Output(to PTGM), All LEDs, All Mood Lamp Blue LED Test, All Mood Lamp Green LED Test, All Mood Lamp Red LED Test, All Mood Lamp White LED Test, Alternator Control, Alternator Test, Alt'L Signal Out, Assist BSD Indicator, Assist Door Courtesy Lamp Output, Assist Door Lock Indicator, Assist Mirror Position Down (Option), Assist Mirror Position Left (Option), Assist Mirror Position Right (Option), Assist Mirror Position Up (Option), Assist Outside Mirror Down, Assist Outside Mirror Left, Assist Outside Mirror Right, Assist Outside Mirror Up, Assist Power Winodow Down (Option), Assist Power Winodow Up (Option), Assist Seat Belt Indicator (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 Output, Back Up Lamp, Battery Coolant Valve Operation Mode1 (Combined Mode) ON, Battery Coolant Valve Operation Mode1 (Seperated Mode) ON, Battery EWP Operation Mode for Degassing and Circulation, Battery Warning Lamp, Bifunction Headlamp High LH Solenoid IPS Output, Bifunction Headlamp High RH Solenoid IPS Output, BSD Indicator, Burglar Horn Relay, Canister Purge Valve, Canister Shut Off Valve (OBD-2 Only), Canister Shut Off Valve Clocked(OBD-2 Only), Canister Shut Off Valve Toggling(OBD-2 Only), Canister Shut Off Valve(Leak Test), Canister Shut Off Valve(OBD-2 Only), CDA Control Solenoid Valve - EX, B1, CDA Control Solenoid Valve - EX, B2, CDA Control Solenoid Valve - IN, B1, CDA Control Solenoid Valve - IN, B2, Central Door Lock Indicator, Central Door Lock Relay, Central Door Lock Switch Indicator Output, Central Door Lock Switch Output, Central Door Unlock Relay 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, Class TCF Beam Change, CNG Bi-Fuel Fuel Change, CNG Shut sol valve in Fuel Tank, Compressor Off, Compressor On, Console Mode Door - Floor, 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%, COOLANT VALVE - 3WAY (HTR) - Close, COOLANT VALVE - 3WAY (HTR) -Open, Cooler step 3 operation, Cooling Fan PWM, Cornering Lamp Left Relay Output (Option), Cornering Lamp LH Output, Cornering Lamp RH Output, Cornering Lamp Right Relay Output (Option), Courtesy Lamp RL Output, Courtesy Lamp RR Output, CPP(Canister Puge Pump) Control, Cruise Control Main Lamp(Auto CruiseType Only), Cruise Control Main Lamp(Option), Cruise Control Set Lamp(Auto Cruise Type Only), Cruise Control SET Lamp(Option), CVVD Intake, CVVT Exhaust, CVVT Intake, D DRL Relay, Dead Lock Relay, Dedicated DRL Left Output, Dedicated DRL Output (Option), Dedicated DRL Right Output, Def Door - Close, Def Door - Open, Defogger - Deicer Relay, Defogger Indicator, DEHUM VALVE - EXV (DEHUMI) Valve Close, DEHUM VALVE - EXV (DEHUMI) Valve Open, Diagnostic Valve, Differential Pressure Valve, Door Lock Indicator, Door Lock Relay, Door Unlock Relay, 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-DEF., Driver Mode Door-Floor, Driver Mode Door-Vent, Driver Power Window Switch Autol Up Output, 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, EGR Valve, ELCM Change Over Value(COV) Control, ELCM Pump Control, Electric Oil Pump (for HEV), Electric Oil Pump, Electric Shuttle Valve-Left Front, Electric Shuttle Valve-Right Front, Electric water pump control., Electrically Controlled Water Pump (Option), 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 (Recever Drier) - Close, Electronic Expansion Valve (Recever Drier) -Open, Electronic Waste Gate Valve (Turbo Only), EMS Wakeup Output, Engine Check Lamp [MIL], Engine Check Lamp(MIL), Engine Clutch Control Solenoid (for HEV), Engine Coolant Filling Mode, ETC Motor, EV Charge Door Open Lamp Output, EV Charge Door Open Relay, EVAP Leakage Test, EWP Max RPM Operation, Exhaust Gas Recirculation Valve, Exhaust Gas Recirculation, 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 Motor Control-High Speed, Fan Motor Control-Low Speed, FAN ON, Fan PWM, Fan1 1st, Fan1 2nd, Fan1 3rd, Fan1 4th, Fan1 5th, Fan1 6th, Fan1 7th, Fan1 8th, Fan1 9th, Fan1 Stop, Flasher Sound Relay(Option), Flow Stop Valve, Folding Actuator Signal Output, Foot Lamp Output(Option), FPCM pressure 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 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 Left Turn Signal Output, Front Right Turn Signal Output, Front Seat Heat Mode to the High, Front Seat Vent Mode to the High, Front Top-AVM View, Front Turn Signal Lamp Activation LH Output, Front Turn Signal Lamp Activation RH Output, Front Washer Motor Output, Front-SVM View, Frunk Lamp Output, Fuel Door Open Solenoid Output, Fuel Open Loop, Fuel Pressure Indicator Lamp(LPI), Fuel Pressure Indicator Lamp, Fuel Pressure Ragulator (GDI Only), Fuel Pressure Regulator (GDI Only), Fuel Pump Control(1st stage), Fuel Pump Control(2nd stage), Fuel Pump Control, Fuel Pump Relay Control for LPG, Fuel Pump Relay for LPG, Fuel Pump Relay(1st stage), Fuel Pump Relay(2nd stage), Fuel Pump Relay, Fuel Tank Isolation Valve Relay Open, Fuel Tank Isolation Valve, Full AFS BPC Test Class C, Full AFS BPC Test Class E, Gasoline Lamp (Bi-Fuel), Gauge ON, Glove Box Lamp Output, 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(Option), Heated Handle Output(Option), Heated Washer Nozzle Output, Heated Washer Nozzle Relay, Heater step 3 operation, HICM Activate Diagnostics, HICM Relay, High Mounted Stop Lamp Output, High Pressure Fuel Pump Control, High Pressure Fuel Pump Control2, High Voltage Battery Heater Relay ON, 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.), Idle Speed Actuator, Ignition 3 Relay, Ignition Coil 1, Ignition Coil 2, Ignition Coil 3, Ignition Coil 4, Ignition Coil Enable/Disable-#1, Ignition Coil Enable/Disable-#2, Ignition Coil Enable/Disable-#3, Ignition Coil Enable/Disable-#4, Ignition Coil Enable-Disable-#1, Ignition Coil Enable-Disable-#2, Ignition Coil Enable-Disable-#3, Ignition Coil Enable-Disable-#4, Ignition Coil Enable-Disable-#5, Ignition Coil Enable-Disable-#6, Ignition Coil Enable-Disable-#7, Ignition Coil Enable-Disable-#8, Illumination, Immobilizer Lamp(Option),

Indicator ALL OFF, Indicator ALL ON, Indirect Vent door, Injector Disable-Cylinder 1, Injector Disable-Cylinder 2, Injector Disable-Cylinder 3, Injector Disable-Cylinder 4, Injector Disable-Cylinder 5, Injector Disable-Cylinder 6, Injector Disable-Cylinder 7, Injector Disable-Cylinder 8, Injector(DI) Disable-Cylinder 1, Injector(DI) Disable-Cylinder 2, Injector(DI) Disable-Cylinder 3, Injector(DI) Disable-Cylinder 4, Injector(MPI) Disable-Cylinder 1, Injector(MPI) Disable-Cylinder 2, Injector(MPI) Disable-Cylinder 3, Injector(MPI) Disable-Cylinder 4, 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(Option), Interior Mood Lamp Output (Option), Internal Buzzer, IOD Relay, ISG Lamp, ISG Test(Option), ITM Valve, Key Hole Illumination (Manual Key Type), Key Interlock Solenoid(Manual Key Type), Lamp Control, Lamp Load Power Relay, LampLoad AutoCut IPS Output, LED Group Control - DRL Group, LED Group Control - Highbeam Group, LED Group Control - Lowbeam Group, LED Group Control - Position Group, LED Group Control - SIDE MARKER (Optional), LED Group Control - SIDE REPEATER, LED Group Control - Turn Signal Group Blinking, LED Group Control - Turn Signal Group, Lock Mode Initialization, LongTermLoad Cut Relay Output, LPG Cut Valve for Fuel Rail, LPG Cut Valve for Fuel Tank, LPG Fuel Pump PWM, LPG Lamp, Luggage Lamp Relay, Luggage Lamp, Main Relay (+) ON, Main Relay(-) ON, Main Relay(-), Precharge Relay, Simultaneously ON (Precharge se, Main Relay, Manual HLLD Signal Output, Map Lamp Output, 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, 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 (Height), Move P/Seat to the Foremost Position (Recline), Move P/Seat to the Foremost Position (Slide), Move P/Seat to the Foremost Position (Tilt), Move P/Seat to the Last Position (Height), Move P/Seat to the Last Position (Recline), Move P/Seat to the Last Position (Slide), Move P/Seat to the Last Position (Tilt), Move P/Seat to the Lowest Position (FR Height), 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, Norminal Idle Speed Offset, O2 Heater Front (B1-S1), O2 Heater Front, O2 Heater Rear (B1/S2), O2 Heater Rear (B1-S2), O2 Heater Rear, OBC Relay(-) ON, OBC Relay(+) ON, OBC Relay(+)/(-) ON Simultaneous, OBC Wake up Output, Oil Change Warning Lamp(Option), Oil Change Warning Lamp, Oil Control Valve - Exhaust Bank 1 (Option), Oil Control Valve - Exhaust Bank 1, Oil Control Valve - Exhaust Bank2, Oil Control Valve - Intake Bank 1, Oil Control Valve - Intake Bank1, Oil Control Valve - Intake Bank2, Oil Pressure Warning Lamp, On/Off Solenoid A (SS-A), 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, Outlet Valve-Left Front, Outlet Valve-Left Rear, Outlet Valve-Right Front, Outlet Valve-Right Rear, Over speed indicator(Option), Over Speed Warning Indicator, Parasitic Current Auto-Block IPS, Parking Brake Indicator, PAS Buzzer Output (RPAS Buzzer Output), PAS Indicator (RPAS Off Indicator), 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 Erase All Video File, Perform Event Recording, Pocket Light Output (Option), Power Operation Request LH, 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 (with Safety P-WDW Enable), Power Window Relay, Precharge Relay ON, Precharge Relay ON, Main Relay (-), (+) ON (Normal sequence), Pressure Control Solenoid (LP), Pressure Control Solenoid Valve A(Line Pressure), Pressure Control Solenoid Valve(VFS) 'A', Puddle Lamp Output, Quick Charge Relay (+),(-), Main Relay (-), (+) ON (Normal Char, Quick Charger Relay(-) ON, Quick Charger Relay(-)(+) ON simultaneous, Quick Charger Relay(+) ON, Radiator Cooling Fan PWM, Radiator shutter 1 - Auto test, Radiator shutter 1 - Close test, Radiator shutter 1 - Open test, Read VIN, 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 Assist Power Window Down Relay, Rear Assist Power Window Up Relay, 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 Down Output [Rear Curtain Hall Sensor Power Output, Rear Curtain Down 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 Driver Power Window Down Relay, Rear Driver Power Window Up Relay, Rear Fog Lamp (Option), Rear Fog Lamp Indicator, Rear Fog Lamp Left Output, Rear Fog Lamp Relay (Option), 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 mode door - B-L, Rear mode door - Floor, Rear mode door - Vent, 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(Option), Rear Seat Belt Center Indicator (Option), Rear Seat Belt Left Indicator (Option), Rear Seat Belt Right Indicator (Option), Rear Seat Heat Mode to the High, Rear Seat Vent Mode to the High, Rear Seat Warmer Left(Option), Rear Seat Warmer Right(Option), 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 Wiper Relay (Option), Rear Wiper Relay, Rear-SVM View, RKE Tailgate Signal Output(to PTGM), RL Door Lock Relay, RL Door Unlock Relay, Room Lamp Output, RPAS Switch Indicator(Option), RVM Swich Indicator Output, Safety ECU Enable Output (High), Safety Power Window Enable, SAHLS Actuator 20%, SAHLS Actuator 80%, Security Indicator (Option), Security LED Output, Selection Injector Group(A) of Engine Idle state for Dual Injec, Shift Control Solenoid Valve (28/B), Shift Control Solenoid Valve (37R/C), Shift Control Solenoid Valve (46/C), Shift Control Solenoid Valve (UD/C), Shift Control Solenoid Valve E(SS-A), ShortTermLoad Cut Relay/IPS Output, ShortTermLoad Cut Relay-IPS Output, Simulator Valve #2, Solenoid Thermal Expansion Valve - Close, Solenoid Thermal Expansion Valve - Open, SSB illumination Output (Power and GND), Start Inhibit Relay (Option), Start Inhibit Relay, Start Relay, Static Bending LH Output (Option), Static Bending RH Output (Option), 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(Option), System Identification, Tail Interior Lamp, Tail Lamp Indicator, Tail Lamp Output, Tail Lamp Relay, Tailgate/Trunk Release Relay, Tailgate-Trunk Release Relay, TCI Bypass Valve (Turbo Only), TCI Bypass Valve (Turbo Only), TCS Valve-Left Front, TCS Valve-Right Front, Torque Converter Clutch Solenoid Valve, Turbo dump(ReCirculation) Valve (RCV), Turbo waste gate(WGT) valve, 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 Relay Output, Vacuum Pump (ELCM), Variable Exhaust Flap, Variable Force Solinoid Valve - Exhaust Bank1 test, Variable Force Solinoid Valve - Intake Bank1 test, Variable Intake Manifold 1 (Option), Variable Intake Solenoid(Option), Variable Oil Pump Solenoid, VCM Motor(Option), VESS Sound Play (5 Sec), VESS Sound Play (Until Stop Command), VVL Control Solenoid Valve - EX, B1, VVL Control Solenoid Valve - EX, B2, VVL Control Solenoid Valve - IN, B1, VVL Control Solenoid Valve - IN, B2, Warm Bypass door, Waste Gate Valve (Turbo Only), Welcome Function - Escort Mode ON, Welcome Function - Welcome Mode ON, Window Lock Indicator, Window Lock to Driver Door Module, Wiper High-Speed Relay [Wiper High RLY With Wiper Power RLY], Wiper Low-Speed Relay [Wiper Low RLY With Wiper Power RLY], Wiper Power Relay, Wiper Relay (for INT) [Wiper RLY With Wiper Power RLY]

# New Mazda Coverage

1 new Adjustment type special tests:

Steering Wheel Position Sensor Calibration

1 new Actuation type special tests:

On Demand Test

# New Nissan Coverage

30 new Adjustment type special tests:

Blind Spot Detection Configuration, Blind Spot Detection Shut-Off Requester Test, Cause of Auto Cancel 2, Cause of Auto Cancel 4, Cause of Auto Cancel 6, CLUTCH SENSOR RESET, FEB Operation Mileage, Fine Adjustment Front View Camera Top View, Fine adjustment of DS camera, top view, Fine adjustment of PAS camera, top view, Fine Adjustment Reversing Camera Top View, Finish Brake Pad Replacement, Front Camera Guidelines Correction, G Sensor Calibration, ID Registration, Initialization Position Adjustment, Lane Dep.Warning Camera Shut-Off Requ.Test, Lane Departure Warning Camera Configuration, Levelizer Adjustment, Pressure Sensor

Initialization, Reset Adaption To Factory Setting, Reset Vehicle Height Initial Value, Reversing Camera Guidelines Correction, Rotary Position Sensor Learn, Start Brake Pad Replacement, Start Initial Calibration, Steering Angle Initialization, Steering Angle Sensor Adjustment, System Mode Change, Tire Pressure Sensor Registration

#### 141 new Actuation type special tests:

(TBD)EAP FAIL IND, (TBD)Epkb Request, (TBD)EPS Reaction Force Request, (TBD)Hand Free Warning, (TBD)LDP L STEP, 4WD AT Flow, Accelerator Pedal Actuator Test 1, Accelerator Pedal Actuator Test 2, Active Pedal, ADAS Buzzer 2, ADAS BUZZER, Air Pump, Air/Liquid Pump Of Camera, ANC Test Tone, BCI Warning Indicator, Brake Actuator, Brake Operation, Brake Release, BSI Indicator On, BSI ON Indicator, BSI Warning Indicator, BSW Indicator LH, BSW Indicator RH, BSW On Indicator, BSW Warning Lamp, BSW/BSI INDICATOR DRIVE, BSW/BSI WARNING LAMP, BSW-BSI INDICATOR DRIVE, BSW-BSI WARNING LAMP, BUZZER 1 (ADAS), BUZZER 1 (CCM), BUZZER 2 (ADAS), BUZZER 2 (CCM), BUZZER 3 (ADAS), BUZZER 3 (CCM), BUZZER 4 (ADAS), BUZZER 4 (CCM), Buzzer, Cause of Auto Cancel 1, Compressor, DCA Indicator, Display: Headlamp Leveling, Door Mirror LED LH, Door Mirror LED RH, Drive Mode Test, Drive Power Distribute Torque, EAP SW LAMP, EAPM Warning Lamp, Electric Parking Brake Activation, ETS Solenoid Control, ETS S-V, Exhaust Solenoid, External Buzzer, Flasher test, Flasher, Front Buzzer, Hazard Lamp, High Beam Assist Test, Horn, ICC Buzzer, ICC Warning Lamp, ID REGIST WARNING, Indicator, Lane Departure W/L, LANE DEPARTURE W-L, LDP Buzzer, LDP ON IND, Ldp On Indicator, LDP Warning Indicator, LDP Warning Lamp, LDW On Indicator, LDW Warning Indicator, LDW Warning Lamp, LED LH INDICATOR, LED, Left Exterior Mirror LED Test, Left Solenoid, Levelizer Test, Lifting motor, Lock Operation, Low Beam Swivel Test Left, Low Beam Swivel Test Right, LOW BEAM TEST LEFT, LOW BEAM TEST RIGHT, Low-Beam Headlight Left, Low-Beam Headlight Right, Lumbar support (Up-Down) motor, Memory Indicator 1, Memory Indicator 2, MEMORY SW INDCTR, Meter Buzzer, Meter Lamp, MIRROR MOTOR LH, MIRROR MOTOR RH, Outside Buzzer, Parking Brake Full Release, Pedal Motor, RAB Warning Lamp (Malfunction), RAB Warning Lamp (Operation), RCTA-BSW Indicator, Rear Buzzer, Reclining motor, Release Hand Warning, Right Exterior Mirror LED Test, Right Solenoid, Run Flat Tire Warning Buzzer, RUN FLAT-T WARN BUZZER, SEAT LIFT, SEAT LIFTER FR, Seat Lifter Front, Seat Lifter Rear, SEAT LIFTER RR, SEAT LIFTER, Seat Reclining, SEAT SLIDE, Setting Initialize Completion Flag, Sliding motor, Slow Mode, Sonar buzzer, Speaker Mute Signal, Steering Reaction Force Activation, Stop Lamp Off Relay, Stop Lamp, Switch lamp 2, Switch lamp 3, Switch Lamp, TELESCO MOTOR, Thigh support motor, Tilt Motor, TPMS LAMP WARN TEST, TURN SIGNAL LAMP LEFT, TURN SIGNAL LAMP RIGHT, Unit Characteristics Data, Vehicle Height Standard Position Forcing Return, Vibration Motor, Voltage Pattern Output, Warning Lamp, Warning System Indicator, Washer Fluid Pump Relay, YAW STEP L, YAW STEP R

### New Subaru Coverage

1 new Actuation type special tests:

Register Transmitter ID

# New Toyota/Lexus Coverage

Added coverage for 790 new system applications

### 653 new Adjustment type special tests:

2 Steps Fade Out Control Function, 3rd Center Seatbelt Warning Buzzer Function, 3rd Left Seatbelt Warning Buzzer Function, 3rd Right Seatbelt Warning Buzzer Function, 4th Center Seatbelt Warning Buzzer Function, 4th Right Seatbelt

Warning Buzzer Function, 6MT Setting, A/C Auto Switch Mode, A/C Control Mode Switching, A/C Operation Limit History Counter Clear, A/T Code Reset, A/T Compensation Code Reset, Accumulator Zero Down, aCol Function, Activate The EGR Valve Close Bank 1, Activate The VN Turbo Open Bank 1, Activate The VSV For Air Bleed Control, Active Rear Wing Control, Actuator Air Bleeding Pattern, Add Foot Air in FACE Mode, Advanced Illumination System Setting, Advanced Park Parallel Parking Control Area, Advanced Park Perpendicular Parking Control Area, Advanced Parking Guidance Avoidance Distance, Advanced Parking Guidance Parallel Parking Area, Advanced Parking Guidance Perpendicular Parking, AFS (Electronic Swivel) Function, AFS Function, AHS Function, AHS Operation Pattern Setting, AHS Operation Vehicle Speed Setting (Pattern1), AHS Operation Vehicle Speed Setting (Pattern2), AHS Operation Vehicle Speed Setting (Pattern3), Air Bleed, Air Bleeding - FL Line, Air Bleeding - FR Line, Air Bleeding - RL Line, Air Bleeding - RR Line, Air Bleeding Pattern - RL Wheel, Air Bleeding Pattern - RR Wheel, Air Bleeding, Air Conditioner Mode, Air Conditioner Switch Indicator Function, Air Inlet Damper Mode, Air Inlet Damper Targ Pulse, Air Inlet Mode, Air Outlet Servo Pulse (P), Air Purifier Auto Cancel, Air Purifier, All Readiness, All Unlock/Open-Close, Ambient Temperature Adjustment, Ambient Temperature Shift, Approach Display OFF, AT Code Registration, ATF Thermal Degradation Estimate Reset, Audio Information Display Function, Auto A/C, Auto Door Lock Pattern Setting (Speed), Auto Door Lock, Auto Entry Cancel 2 Setting, Auto Entry Cancel Setting, Auto Fold Mirror, Auto LightOff Timer, Auto Lock Time, Auto Lock, Auto Lock/Shift, Auto Mode Start Function, Auto Rear Wiper in Reverse Setting, Auto Unlock/Shift, Auto Wiper, Automatic Door Lock Function, Automatic Door Lock Setting, Automatic Door Unlock Function when D-Door Open, Automatic Door Unlock Function, Automatic Door Unlock Setting, Automatic Light Off Timing Setting, Automatic Mirror Fold Setting, Back Door Power Window Down, Back Door Power Window Up, Backup Battery Replacement Reset, Bad Weather Function, Battery Status Info Update, Blower Operation Setting (StopStart), Bluetooth Connection History, Body Control with Torque Demand, Body Ctrl with Torque Demand, Brake Line Air Bleeding, Brightness Level Adjust (Canceling), Brightness Level Adjust (Lowering), BSM Approaching Vehicle Detection Timing Setting, BSM Buzzer Volume Adjust, BSM Master Abnormal History, BSM Mirror Indicator Brightness, BSM Slave Abnormal History, Button Press Buzzer, Camera Synchronous Error History, Center Console Spot Light, Clear Abnormal Operation History, Clearance Warning Buzzer Volume, Close ALL P/W Function, Closer Power Operation, Coming Home Light, Compressor Mode, Compressor/Air Inlet DEF operation, Control Mode, Cruising Range Reset, Customize Setting Initialization, CVT Oil Pressure Calibration, D Seat Lower Back Operation Away Function, D Seat Lower Cushion Operation Away Function, D Seat Lumbar Operation Away Function, D Seat Operation Interference Avoidance Function, D Seat Refresh Level Setting, D Seat Shoulder Operation Away Function, D Seat Side Back Support Operation Away Function, D Side Cushion Support Operation Away Function, D Window Auto Down, D Window Auto Up, Daytime Running Light Function, DCM Operation History, Deceleration Sensor Zero Point Calibration, DEF(PSW/Lock) Mode Setting, Delay of Monitoring, Destination Setting, Detection of Vehicle, Diagnostic Mode, Disp Ex OFF Sen, Disp Ex ON Sen, Door Auto Lock Timer Setting, Door Handle Lock Button, Door Key P/W Down, Door Key P/W Up, Door Key Related Close, Door Key Related Open, Door Key Related Operation, Door Lock Answerback Sound Setting, Door Lock Indicator Function, Door Lock Indicator Pattern Setting (IG OFF), Door Lock Indicator Pattern Setting (IG ON), Door Open SW Operation Adjust, Door Unlock Sensor Touch Time Adjust, Door Unlock with 1 Motion, Double Lock, Drain System Air Bleeding Pattern, Driver Seat Distance Adjust when Get Off, Driver Seat Lift Up Distance Adjust when Get Off, Driver Seat RA Lumbar Support Oper, Driver Seat RA Pelvis Support Oper, Driver Seat RA Side Support Oper, Driver Seatbelt Warning Buzzer Function, Driver Side Seatbelt Warning Buzzer, DRL Function, ECO Drive Indicator Light, ECO Drive Indicator Zone Display Function (Meter), ECO Drive Indicator Zone Display Function, ECO Drive Indicator Zone, ECO MODE Cancel, ECO Mode Control, ECO Mode Start Function, Efficient Ventilation Mode, Electric

Parking Brake System: Test Mode Procedure, Electronic Swivel Function, Emblem Sensor Detection Sensitivity, Emission Gas Sensor Shift, Engine Revolution (For Judging Stable Combustion), Entry Delay Time, Entry Delay, Entry Unlock Twice Function, EPB Initialize, EV Mode Cruising Range Reset, Evaporator Control, Extended Headlight Lighting, Exterior Light (Door Open), Exterior Light Control, Exterior Lights Lighting Timer Setting, Exterior Lights ON Function, Exterior Lights ON when Approached Function, Exterior Lights ON when Door Opened Function, Exterior Lights ON when Door Unlocked Function, FACE Wind Amount Adjust Function, Factory Mode, Fan speed increment control, FCTA Function ON/OFF State Stored, FCTA Warning Timing State Stored 1, FCTA Warning Timing State Stored 2, FCTA Warning Timing State Stored 3, Filter Sensor, FL Neck Heater Auto Mode Adjustment, FL Seat A/C and Heater Sensitivity Adjust, Flasher Sound Tone Setting, Flasher Sound Volume Adjust, Flasher Sound Volume Adjustment, Follow Me Home Lighting Time, Foot/DEF Auto Mode, Foot/DEF Automatic Blow Up Function, Forced Actuator Refresh, Forget to Turn IG OFF Alarm Function, Fr Rr Buzzer Freq, Fr Rr Buzzer Volume, Fr Corner Sensor Onset Range, FR Neck Heater Auto Mode Adjustment, FR Seat A/C and Heater Sensitivity Adjust, Fr Sensor Onset Range, Fr Side Sens Actuation Setting, Fr/Rr Seat Interference Avoidance Function (D), Fr/Rr Seat Interference Avoidance Function (P), Front Center Seatbelt Warning Buzzer Function, Front Passenger Side Seatbelt Warning Buzzer, Front Side Dist Sensor, Front SW Auto Operation, Glass Hatch Open Function, Grille Shutter Initialization, Halogen Lamp/HID, Hazard Answer Back Function, Headlight in Conjunction with Wiper, Headlight ON in Conjunction with Wiper Function, Headlight Upper Shade Angle Setting, Heavy Knock History, Height Offset Rear Wheels, Height Sensor Initialization, High Voltage Fuse Accumulated Load History Reset, History Clear, HWD Auto Function, I/L ON W/Door Key Unlock, I/L when ACC OFF, ICS Function, ICS Stop Distance, ICS SW Status Memory, ID Registration/Tire Position Write, IG ON Key Out Warning, Ignition Available Area Setting (Back Door Type), Ignition Available Area Setting (Trunk Lid Type), Illumination System, Initialization, Injection Timing Value, Injection Timing, Inside Foot Light, Instr-Panel Interference Avoidance Function (P), Integrated Current Value Initialization, Interior Footwell Lights Function, Interior Illumination Light 2 Function, Interior Illumination Light 3 Function, Interior Light Control, Interior Lights Lighting Timer Setting, Interior Lights ON Function, Intrusion Sensor 1 Sensitivity Level Adjust, Intrusion Sensor 2 Sensitivity Level Adjust, Intrusion Sensor Function, Intrusion Sensor Reduction in Sensitivity Setting, Intrusion Sensor Sensitivity Level (Window Open), Intrusion Sensor Sensitivity Level, Intrusion Sensor Sound Detection Function, Intrusion Win Opened, Intuitive P/A Auto Mute Function, Ion Generate Control, IPA Obstacle Avoidance Distance, IPA Parallel Parking Control Area, IPA Perpendicular Parking Control Area, K0 Thermal Estimate Reset, Keep Sense Buzzer, Key Left in Vehicle Alarm Function, Key Low Battery Warning Function, Key Low Battery Warning, Key Remind Sound, Key Remind Volume, Kick Sensor Close Lock Function, Kick Sensor Operation Function with ACC ON, Lane Change Flashing Times Adjust, Lane Change Flashing Times Setting, Lane CHG Flash CNT, Language, Learning Value Reset, Leave Buzzer Volume, Light Auto OFF Delay Setting, Light Auto OFF Delay, Light Blink Clearance Lights at Unlock Function, Light Control Glass Brightness Memory Function, Light Control Glass Voice Control Function, Light Control, Light up Clearance Lights at Door Unlock Function, Light up Clearance Lights Door Unlock Function, Lighting (EXT): Headlight Assembly Adjustment, Lighting Time, Lock Indicator Lighting Time Adjust, Lost Communication Time Initialization, Low Speed Wide Light Function, Manual Fr/Rr Seat Interference Avoidance Function, Master Caution Display Function, Memory Call Function, Memory Call Link Function, Mirr-Foot-Lgt Approached/Exterior Light Approached, Mirr-Foot-Lgt Unlocked/Exterior Light Unlocked, Mirr-Foot-Lgt w/Master SW, Mirror Foot Light Time/Exterior Light Time, MT/AT Setting, Multi Weather Light Function, Noise and Vibration Reduction, Non P/R Range Rear Sensor, Number of Tanks Initialization, Object Not Moving 3s Buzz Vol, ODO Display Time After IG OFF Adjust, ODO Display Time After IG OFF Setting, Off-Road Guidance Indicator, One Touch Open/Close SW Operation Setting (RL), One Touch Open/Close SW Operation Setting

(RR), Open Door Warning Function, Operation History Clear, Optical Disc Error History, Ottoman Return Position, Out-Handle-Lgt Approached, Out-Handle-Lgt Unlocked, Out-Handle-Lgt w/Master SW, Outside Air Mode Auto Switch Function, Outside Door Handle Fold Adjust, Outside PSD SW Operation(RL), Outside PSD SW Operation(RR), Oxygen Supply, P Auto Operation Interference Avoidance Function, P Seat Lower Back Operation Away Function, P Seat Lower Cushion Operation Away Function, P Seat Lumbar Operation Away Function, P Seat Operation Interference Avoidance Function, P Seat Pressure Correction Function, P Seat RA Return Operation Function, P Seat Refresh Level Setting, P Seat Shoulder Operation Away Function, P Seat Side Back Support Operation Away Function, P Side Cushion Support Operation Away Function, P Window Auto Down From Driver, P Window Auto Down, P Window Auto Up From Driver, P Window Auto Up, P/W Down W/ Transmit, P/W Operation Buzzer W/ Transmit Function, P/W Up W/ Smart, P/W Up W/ Transmit, P/W Wireless Ope Buzz, Panic Alarm Function, Panic Function, Park Wait Time Adjust, Parking Brake Service Mode, Partition Lighting Adjust, Passenger Seat RA Lumbar Support Oper, Passenger Seat RA Pelvis Support Oper, Passenger Seat RA Side Support Oper, Passenger Seatbelt Warning Buzzer Function, Passive Mode (Security System), PBD Assist Close Operation, PBD Assist Open Operation, PBD Buzzer Function, PBD Buzzer Tone, PBD Buzzer Volume Adjust, PBD Close SW Press Condition, PBD Close SW Waiting Time, PBD Power Operation, PBD SW Operation, PBD/Emblem Sensor Function, PCS Alarm Activation Distance Retention Setting 1, PCS Alarm Activation Distance Retention Setting 3, PCS Cooperate Function, PCS Operation State Retention Setting, PCS Reminder Buzzer Sound, PCS Warning Sensitivity Retention Setting, PCS Warning Timing State Stored 3, Pilot Injection Volume Select Cylinder, Pilot Injection Volume Value, Pilot Injection Volume, PKSA (O) Auto Mute Function, PKSA (O) Forward Detection Image Display, PKSA (O) Image Display when Away from the Obstacle, PKSA (O) Judgment of Obstacle on Course, PKSA (O) Switch State Stored, PKSB (O) Function, PKSB (O) Target Stopping Distance, PKSB (P) Function, PKSB (P) Target Stopping Distance, PKSB (P) Width Adjustment (Y Axis), PKSB (V) Function, PKSB (V) Operation Timing Setting, PKSB (V) Sensitivity, PKSB Switch State Stored, Power Back Door Opening Adjust, Power Saving Wait Time(Out Of Entry Range), Power Steering ECU Initial Setting, Power Supply Air Bleeding Pattern 1, Power Supply Air Bleeding Pattern 2, Power Window Voice Control Function, Pre Air Conditioner Defrosting Function, Prevention of Key Left in Vehicle, Prohibition Flag of FHL Function, Projection Adjustment (Distortion), Projection Adjustment (Keystone), Projection Adjustment (Tilt), Proposal Service Frequency Adjust, Proposal Service Volume Adjust, Proposal Services Function, Provision of When Door is Half Open, Proximity Sound Control (Vehicle Stationary), Proximity Sound Level Increase (Vehicle Starting), Proximity Sound Volume Adjustment, PSD Buzzer (LH), PSD Buzzer (RL), PSD Buzzer (RR), PSD SW Operation (LH), PSD SW Operation (RL), PSD SW Operation (RR), P-Seat Auto Pattern, R Wiper Stop Function at Back Door/Trunk Lid Open, RA Ottoman Operation, Rain Mode, RCTA Function, RCTAB Function, RCTAB Operation Timing Setting, RCTAB Sensitivity, Rear A/P HI Set, Rear Center Seatbelt Warning Buzzer Function, Rear Curtain Close Relay, Rear Curtain Open Relay, Rear Left Master SW Shade Function, Rear Left Seatbelt Warning Buzzer Function, Rear Right Master SW Shade Function, Rear Right Seatbelt Warning Buzzer Function, Rear Seat Interference Avoidance Function (P), Rear Seatbelt Warning Buzzer Function, Rear Seatbelt Warning Buzzer, Rear Shade Delay Time, Rear Sunshade linked with Shift Lever R Funct, Rear SW Auto Operation, Rear Wiper INT Operation, Rear Wiper Washer Function, Rear Wiper with Reverse Setting, Recog ECU H Temp Hist Reset, Refrigerant Pressure History Clear, Refrigerant Shortage Check, Register Transmitter ID, Relax with Ottoman Up, Relax with P-Seat Lift, Relax with P-Seat Slides, Remote Air Conditioner Start Setting, Remote Air Conditioner Stop Setting, Remote Door Lock Setting, Remote Eng Start Stop Setting (Trunk Lid Opened), Reset A/C Information, Reset Memory, Residential Area Mode Setting, Response Time Adjust, Return with Passenger Seat, Reverse Buzzer Setting, Reverse Coupled Actuation Mirror Angle Setting, Reverse Coupled Actuation Mirror Angle, Reverse Range Front Sensor, Right Headlight

Shade Angle Setting, RL Back View Auto Memory Operation Function, RL Back View Memory Operation Slide Pos Setting, RL Business Mode Operation Site Change Function, RL Door Open Return Auto Function, RL Door Open Return Reinstatement Auto Function, RL Entertain Mode Operation Site Change Function, RL Entertain Mode P-Seat Target Position Setting, RL Interference Avoidance Operation Area Setting, RL Manual Ottoman Close Finish Buzzer Function, RL Memory Operation Ottoman Position Setting, RL Occupant Condition Setting, RL Ottoman Operation Buzzer Function, RL Pressure Correction Function, RL Refresh Spot Heater Upper Limit Temp Setting, RL Relaxation Mode Operation Site Change Function, RL Riding Position Operation Function, RL Seat A/C and Heater Sensitivity Adjust, RL Seat Back Finish Buzzer Function, RL Seat Back Operation Order Change Setting, RL Seat Heater Auto Function, RL Seat Operation Site Change Function, RL Warmth Refresh Heater Level Setting, RL Window Auto Down From Driver, RL Window Auto Down, RL Window Auto Up From Driver, RL Window Auto Up, Roof Opened Intrusion Function, Room Light when Aprchd, R-pos to Rear Sun Shade COM, RR Back View Auto Memory Operation Function, RR Back View Memory Operation Slide Pos Setting, RR Business Mode Operation Site Change Function, Rr Corner Sensor Long Distance Detection (Shift R), Rr Corner Sensor Onset Range, RR Door Open Return Auto Function, RR Door Open Return Reinstatement Auto Function, RR Entertain Mode Operation Site Change Function, RR Manual Ottoman Close Finish Buzzer Function, RR Memory Operation Ottoman Position Setting, RR Occupant Condition Setting, RR Ottoman Operation Buzzer Function, RR Pressure Correction Function, RR Refresh Spot Heater Upper Limit Temp Setting, RR Relaxation Mode Operation Site Change Function, RR Riding Position Operation Function, RR Seat A/C and Heater Sensitivity Adjust, RR Seat Back Finish Buzzer Function, RR Seat Back Operation Order Change Setting, RR Seat Heater Auto Function, RR Seat Operation Site Change Function, Rr Sensor Onset Range, RR Warmth Refresh Heater Level Setting, RR Window Auto Down From Driver, RR Window Auto Down, RR Window Auto Up From Driver, RR Window Auto Up, S-Belt-Bkl-Lgt/ACC OFF, S-Belt-Bkl-Lgt/Door Open, Scuff Plate Lamp linked to D-Door Unlock SW, Scuff Plate Lamp linked to Door open, Scuff Plate Lamp linked to Smart, Scuff Plate Lamp linked to Wireless Key, Seat Airflow Mode Setting, Seat Belt Warning, Seat Blast Mode Setting, Seat Heater Auto Operation, Seat Lift Up Distance Adjust, Seat Move Distance, Seat Position Voice Control Function, Seat position/Tilt Telesco memory recall setting, Seat Switch Link Function, Seat Travel Distance, Seatbelt Information Indicator, Security Alarm Setting, Security Control with Mechanism Key Function, Security control with mechanism key, Security System, Sedan/Wagon Setting, Sensitivity Adjust, Sensitivity, Sensor Condition N, Servomotor Initialization, Set Temperature Shift, S-FLOW Control Auto Function, Shade Upper Area Lighting Function, Shift Control Synchronization, Shift Lever R Signal Delay Time Adjust, Shift Linked Automatic Door Lock Function, Shift Linked Automatic Door Unlock Function, Side Sensor Alarm Function, Side Sensor Onset Range, Slide Link Cushion Length Ctrl, Slide Link Hdrest Length Ctrl, Slide Roof Open Warning Function, Slide Roof Open Warning, Slide Roof Voice Control Function, Software Error History, Sonar Mode, Speed Limit Display Function, Speed Linked Automatic Door Lock Function, Speed Linked Automatic Door Unlock Function, Start Indicator Function, Start Off Mode, Start PreA/C, Start Switch Light Function, Starter Exchange, Steering Heater Auto Function, Steering Heater Sensitivity Adjust, Step Light Lighting Time, Stop PreA/C, SUBARU/Toyota, Sudden Braking Notification Function, Suggestion Service Function, Switch Battery Type, Switch Grille Shutter Control Mode, Switch Oil Maintenance Display, T1 RoomLamp BatterySave, Tacho Meter Mode, Tail Remind Buzzer Function, Tail Remind Buzzer, Telematics Microphone Volume Adjust, Telematics Speaker Volume Adjust, Temporary Mute Function, Temporary Mute Reset Speed Adjust, Tire Circumference Setting, Tire Pressure Sensor Registration, Torque Sensor Adjustment, Total Warm-up Time Setting, Touch Activation Over Threshold, Touch Panel Reaction Time Adjust (Multi Operation), Town Mode, Traffic Sign Recognition Animation Function, Trunk Lid Linked with Door Lock Function, Trunk Lid Open Mode Function, Trunk Lid Operation by Electrical Key Function, Trunk

Lid Operation by Entry Function, Trunk Lid Operation, Trunk Link with Door Lock, Tunnel Beam Function, Turn by Turn Animation Function, Ultrasonic Sensor (Front Center) Detection Range, Ultrasonic Sensor (Front Corner) Detection Range, Ultrasonic Sensor (Rear Center) Detection Range, Ultrasonic Sensor (Rear Corner) Detection Range, Ultrasonic Sensor (Side) Alarm Detection Range, Ultrasonic Sensor (Side) Alarm Function, Ultrasonic Sensor Actuation (Shift N), Units By Region, Unlock 2 Operation, Unlock Key Twice Function, Unlock Key Twice, User Support Service Function, Usual Air Bleeding - All lines, Usual Air Bleeding - FL Line, Usual Air Bleeding -FR Line, Usual Air Bleeding - RL Line, Usual Air Bleeding - RR Line, Valet Mode Cancel, Video Device Connection Check(mm), Voice Guidance Function, VSC/TRAC/4WD Control Prevention Mode, Walk Away Lock after Getting Out Func (Closing), Walk Away Lock after Getting Out Function, Warm-up Time Setting, Warning by Glass Broken Sensor, Warning by Horn Function, Warning by Horn, Warning Time, Window Open Warning Function, Window Open Warning, Wiper Specification Switch, Wiper Voice Control Function, Wireless Auto Lock, Wireless Backdoor Open Operation Adjust, Wireless Buzzer Resp, Wireless Buzzer Response Function, Wireless Buzzer Vol, Wireless Buzzer Volume Setting, Wireless Buzzer Volume, Wireless Control Function, Wireless Control, Wireless Glass Hatch Open Operation Adjust, Wireless Glass Hatch Open, Wireless Key Related Close, Wireless Key Related Open, Wireless Key Related Operation, Wireless Lock Function with Doors Open, Wireless PBD Operation, Wireless Power Back Door Open, Wireless PSD Operation (RL), Wireless PSD Operation (RR), Wireless PSD SW Operation (LH), Wireless PSD SW Operation(RL), Wireless PSD SW Operation(RR), Wireless Trunk Lid Open Operation Adjust, Wireless Unlock Twice Function, Write VIN, Zero Point Calibration Sensitivity Check, Zero Point Calibration

#### 1426 new Actuation type special tests:

2nd START Indicator, 4LO Indicator, 4WD AUTO Indicator, 4WD Auto Mode Indicator, 4WD Control Prevention Mode, 4WD Indicator (Green), 4WD Indicator (Yellow), 4WD Lock Indicator, 4WD Warning Indicator, 4WD Warning Light, 4WD Warning, A/C Idle Up VSV, A/F Control, A/M Servo Pulse(FR D), A/M Servo Pulse(FR P), A/O Servo Pulse(FR D), A/O Servo Pulse(FR P), A/O Servo Pulse(Rr D), A/O Servo Pulse(Rr P), A/T Indicator Operation 1, A/T Indicator Operation 3, A/T Oil Temperature Operation, ABS Front Left Hold Solenoid, ABS Front Left Release Solenoid, ABS Front Right Hold Solenoid, ABS Front Right Release Solenoid, ABS Indicator Lamp, ABS Rear Left Hold Solenoid, ABS Rear Right Hold Solenoid, ABS Rear Right Release Solenoid, ABS Solenoid (SFLH), ABS Solenoid (SFLR), ABS Solenoid (SFRH), ABS Solenoid (SFRR), ABS Solenoid (SRLH), ABS Solenoid (SRLR), ABS Solenoid (SRRH), ABS Solenoid (SRRR), ABS Solenoid, ABS Warning Light, ABS Warning, A-C Driving Demand, Access to Rear Seat Signal, Accumulator Drive, Accumulator Valve, ACM Inhibit, Activate DPF Rejuvenate (PM), Activate DPF Rejuvenate (S), Activate DS1 Solenoid, Activate DS2 Solenoid, Activate DSL Solenoid, Activate EGR Cooler Bypass VSV, Activate Fuel Pressure Switching Valve, Activate Fuel Route Switching Valve Relay, Activate Lock Up, Activate S1 Solenoid, Activate S2 Solenoid, Activate S3 Solenoid, Activate S4 Solenoid, Activate SL Solenoid, Activate SL1 Solenoid, Activate SL2 Solenoid, Activate SL3 Solenoid, Activate SL4 Solenoid, Activate SL5 Solenoid, Activate SL5 Solenoid, Activate SLT Solenoid, Activate SLU Solenoid, Activate SR Solenoid, Activate ST Solenoid, Activate the (Inverter) Water Pump, Activate the 4WD Lock Light, Activate The ACC Cut Relay, Activate the Air Inlet Damper Target Pulse, Activate The Air Pump Heater, Activate the Circuit Relay, Activate the Coolant Water Route Switching Valve 2, Activate The Coolant Water Route Switching Valve, Activate The EGR Valve Close, Activate the Electric Heater1 Relay, Activate the Electric Heater2 Relay, Activate the Electric Heater3 Relay, Activate The Electric Water Pump, Activate The Emergency Solenoid Valve, Activate the Engine Oil Pressure Control Valve, Activate the EVAP Purge VSV, Activate The FHL, Activate The Fuel Filler Opener, Activate the Fuel Pressure Discharge, Activate The Fuel Pump Speed Control, Activate The Fuel Pump Speed Control,

Activate The Fuel Return Pipe Valve, Activate The Fuel Vapor-Containment Valve, Activate The Heater Water Pump., Activate the In-tank Fuel Pump Relay, Activate The LPG Solenoid Valve, Activate the Mirror Heater Relay, Activate The Power Window, Activate The Pre-Stroke Control Valve, Activate the Rear AC Magnet Valve, Activate The Return Solenoid Valve, Activate the Slip Indicator Light, Activate The Solenoid (DS1), Activate The Solenoid (SC1), Activate The Solenoid (SC2), Activate the Solenoid (SC3), Activate the Solenoid (SL6), Activate The Solenoid (SLC), Activate The Solenoid (SLG), Activate The Solenoid (SLN), Activate the Solenoid (SLS) High/Low, Activate the Solenoid (SLS) MAX/MIN, Activate The Solenoid(Sc), Activate The Solenoid(Slp), Activate The Starter Relay, Activate the TC Terminal, Activate The Vacuum Pump, Activate The VALVEMATIC After Warm Up, Activate The VALVEMATIC Before Warm Up, Activate The VN Turbo Cleaning, Activate The VSV For AICS, Activate The VSV For Canister Control, Activate The VSV For Evap Control, Activate The VSV For Exhaust Brake, Activate The VSV For Fuel Pressure Up Control, Activate The VSV For Intake Control, Activate The VSV For Purge Cut, Activate The VSV For Secondary Air Control, Activate The VSV For Swirl Control Valve, Activate The VSV For Tank Bypass, Activate The VSV For Vent Valve, Activate The Water Flow Valve 3, Activate The Water Flow Valve 4, Activate The Water Flow Valve 5, Activate The Water Pump, Activate Vent VSV, Active TRC Indicator, Active TRC Warning Indicator, ACTIVE TRC Warning, Adjustable Seat, Advanced Parking Guidance Indicator, Advice Display, AF/O2 Sensor Operation, AFS Alarm Display, AFS Indicator (Malfunction) Display, AFS OFF Indicator, AHS LH High Beam, AHS RH High Beam, Air Bypass Valve Bank 2, Air Cleaner Warning, Air Conditioner Auto Indicator, Air Inlet Damper (Rear), Air Inlet Damper Control Servo Motor, Air Inlet, Air Mix Damper (Driver Side), Air Mix Damper (Passenger Side), Air Mix Damper (Rear), Air Mix Servo Targ Pulse(D), Air Mix Servo Targ Pulse(P), Air Mix Servomotor Pulse D Side, Air Outlet (Front), Air Outlet (Rear), Air Outlet Damper (Driver Side), Air Outlet Damper (Passenger Side), Air Outlet Damper (Rear), Air Outlet DEF, Air Outlet Rear FOOT (Driver Side), Air Outlet Rear FOOT (Passenger Side), Air Outlet Servometer Pulse (D), Air Purifier Mode, Air Purifier (Ion), Air Suspension Indicator - HI, Air Suspension Indicator - LO, Air Suspension Indicator - N, Air Suspension Indicator (HI), Air Suspension Indicator (LO), Air Suspension Indicator (N), Airbag Warning, All Indicator, Alternator Voltage Control, ARS Warning Light, Ashtray Light, ASL Indicator, ASL Warning, Assist Fan, AST Indicator, A-T Indicator Operation (2), A-T Indicator Operation (3), A-T Indicator Operation (4), A-T Indicator Operation (B), A-T Indicator Operation (D), A-T Indicator Operation (L), A-T Indicator Operation (N), A-T Indicator Operation (P), A-T Indicator Operation (R), A-T Indicator Operation (S), A-T Indicator Operation (Sport M), A-T Indicator Operation (Sport S), A-T Oil Temperature Warning, A-T P Warning, A-TRC(TRAC) Indicator Light, Audio / Heater IG, Audio / Heater Power Supply, Auto Air Conditioner Indicator, Auto High Beam Control Indicator, Auto High Beam Warning Indicator, Auto Leveling Headlamp Indicator, Auto Light, Auto LSD Indicator Light, Auto LSD Indicator, Auto Mode, Auto Oil Supply System, Auto Power OFF Cancel, Automated EVAP Test, Automatic High Beam Indicator (Green), Automatic High Beam Indicator (Yellow), Automatic High Beam Indicator, Automatic High Beam Operation, Automatic High Beam Switch Light, Automatic High Beam, Auxiliary Battery Charge Warning, Auxiliary Battery Warning, AVS Comfort Indicator, AVS Sports Indicator, Back Door Select, Back Door Sensor Power Supply, Backup Relay, Batt Cool Down Servo Targ Pls, Battery Magnetic Valve, Beep, BH Operated Light, BH Standby Indicator, BH Standby Light, Blind Spot Monitor Indicator, Blower Level, Blower Motor, BR2-BL2 Heater, BR5-BL5 Heater, Brake Ejector VSV, Brake Hold Indicator, Brake Indicator Lamp, Brake Lining Wear Warning, Brake Override Indicator, Brake Override Warning, Brake Warning Light, Brake Warning, BSM Indicator, BSM OFF Indicator, BSM State, BSM Switch Indicator (Daytime), BSM Switch Indicator (Night/ Moving), BSM Switch Indicator (Night/ Stopped), BSM Warning, Buzzer For Accessory Output, Buzzer Operation (1.6khz, Vol S, W-O Damping), Buzzer Operation (2.0khz, Vol S, W-O Damping), Buzzer Operation (2.4khz, Vol L, W-O Damping), Buzzer Operation (800hz, Vol L, W- Damping), Buzzer Operation (800hz, Vol L, W-O Damping), Buzzer Operation

(800hz, Vol S, W- Damping), Buzzer Operation (800hz, Vol S, W-O Damping), Buzzer, Cancel Communication Function Pausing, Cargo Light, Catalyst OT Misfire Prevention F/C, Ceiling Light, Cent Consol Spot LGT, Center DIFF LOCK Indicator, Charge Indicator Lamp, Charge Indicator, Charge Warning (Red), Charge Warning Indicator, Charge Warning, Check Display, Check Engine Lamp, Check Engine Warning, Check Mode, Check The Cylinder Compression, Check The Imbalance Cylinder, Clearance Light (+ Front Side Marker Light), Clearance Light, Clearance Sonar Indicator (Daytime), Clearance Sonar Indicator (Night Running), Clearance Sonar Indicator (Night Stopping), Clearance Sonar LCD Indicator, Clearance Sonar Switch Activation, CNG Mode Indicator, Collision Door Lock Release, Color Test Screen (Adjustment), Color Test Screen (Black), Color Test Screen (Blue), Color Test Screen (Color Bars), Color Test Screen (Green), Color Test Screen (Red), Color Test Screen (White), Compression Check, Compression Test, Compressor Motor Relay, Compressor Target Speed, Connect The TC And TE1, Control ETCS Open/Close -Fast, Control ETCS Open/Close - Slow, Control The A/C Cut Signal, Control The A/C Magnet Clutch, Control the ACIS VSV Motor Duty Ratio, Control The ACM Inhibit, Control The All Cylinders Fuel Cut(CNG), Control The All Cylinders Fuel Cut, Control The C/D, Control the Cylinder#1 Fuel Cut, Control the Cylinder#2 Fuel Cut, Control the Cylinder#3 Fuel Cut, Control the Cylinder#4 Fuel Cut, Control the Cylinder#5 Fuel Cut, Control the Cylinder#6 Fuel Cut, Control the Cylinder#7 Fuel Cut, Control the Cylinder#8 Fuel Cut, Control The EGR Step Position Bank 1, Control The EGR Step Position, Control The EGR System, Control The Electric Cooling Fan, Control the Electric Thermostat Duty Ratio, Control the Engine Cooling Fan Duty Ratio, Control The ETCS Open/Close Fast Speed, Control The ETCS Open/Close Slow Speed, Control The Exhaust Exterior Valve Angle, Control the Exhaust VVT OCV Duty Ratio Bank 1, Control the Exhaust VVT OCV Duty Ratio Bank 2, Control The Fuel Pump / Speed, Control The Fuel Pump Duty Ratio (Brushless), Control the Fuel Pump Duty Ratio, Control The Idle Fuel Cut Prohibit, Control The Injection Mode, Control The Injection Volume For A/F Sensor, Control The Injection Volume(CNG), Control the Intake VVT OCV Duty Ratio Bank 1, Control the Intake VVT OCV Duty Ratio Bank 2, Control The Intercooler Water Pump, Control The Line Pressure Up, Control The Lock Up, Control the Motor/Generator Cooling Oil Pump, Control The Select Cylinder Fuel Cut, Control The Selected Cylinder Fuel Cut, Control the Shift Area (CVT), Control the Shift Position 4 Speed, Control The Shift Position, Control The Shift Ratio (CVT), Control The Supercharger, Control the Target Fuel Pressure Offset, Control the Transmission Oil Pump, Control The VVT Linear (Bank1), Control The VVT System (Bank1), Control the VVT-iE Linear (Bank 1), Control the VVT-iE Linear (Bank 2), Control the Wastegate Valve Duty Ratio, Cool A/M Servo Pulse(D), Cool A/M Servo Pulse(P), Cool Air Bypass Damper (Driver Side), Cool Air Bypass Damper (Passenger Side), Cool Air Bypass Pls(P), Cool Air Bypass Pulse, Coolant Cool Warning Lamp, Coolant Hot Warning Lamp, Cooling Electric Expansion Valve, Cornering Lamp Test, Cornering Light, Cornering Light-Front Side Illuminate Light (Dim), Cornering Light-Front Side Illuminate Light, Courtesy Light, Courtesy SW Signal, Crawl Control Light, CRAWL Indicator, CRAWL Warning Indicator, CRAWL Warning, Cruise Control-PCS-LKA Buzzer, Cruise Indicator (Yellow), Cruise Indicator, Cushion Length, Cylinder Balance #1, Cylinder Balance #2, Cylinder Balance #3, Cylinder Balance #4, Cylinder Balance #5, Cylinder Balance #6, Cylinder Balance #7, Cylinder Balance #8, Cylinder Compression Check, D-4S (A/F Control), D-4S (Fuel Cut), D-4S (Injection Volume), DAB Indicator Light, Damper Step FL (Electric Current), Damper Step FL, Damper Step FR (Electric Current), Damper Step FR, Damper Step RL (Electric Current), Damper Step RL, Damper Step RR (Electric Current), Damper Step RR, Day/Night Time signal, Daytime Running Light, DCM Firmware Update, D-Door Unlock, DEF A/O Servo Pulse(D), Defogger Control, Defogger Relay Rear, Dehumidification Magnetic Valve, Deicer Relay Front, Delivery Heater, Delivery Shut Valve, Diesel Particulate Filter Warning, Diesel Throttle Target Angle 2, Diesel Throttle Target Angle Bank 1, Diesel Throttle Target Angle, Diffuse Pulse(R), Dimmer Signal, Display Mode, Door Illumination 1, Door Illumination 2, Door Lock Indicator, Door Lock, Door Lock/Unlock Status Lamp, Door Open Warning, Door Unlock, Double

Lock Unset, Downhill Assist Control Indicator, Downhill Assist Control Light, Downhill Assist Control Warning, Drift From The Lane Indicator, Drift From The Lane Warning, Drift From The Lane, Drive Swivel Motor LH LEFT, Drive Swivel Motor LH, Drive Swivel Motor RH RIGHT, Drive Swivel Motor RH, Drive The Leveling Motor, Driver Seat Sensor Power Supply, Driver Side Door Open, Driver Side Seat Belt Warning, Driver Side Seat Belt, Dr-Seat Outside Transmitter, Dr-Seat Select, D-Seat Outside Transmitter, D-Seat Select, DSS Signal Buzzer, DSU Solenoid, Easy Access Buckle, EBS Relay, ECB Control Invalid, ECB Main Relay 2, ECB Main Relay, ECB Main Relay2, ECB Motor Relay, ECB Motor Relay2, ECB Solenoid (SC1), ECB Solenoid (SC2), ECB Solenoid (SCC), ECB Solenoid (SGH), ECB Solenoid (SLA) Valve Close, ECB Solenoid (SLA), ECB Solenoid (SLAFL) Valve Close, ECB Solenoid (SLAFL) Valve Open, ECB Solenoid (SLAFL), ECB Solenoid (SLAFL2), ECB Solenoid (SLAFR) Valve Close, ECB Solenoid (SLAFR) Valve Open, ECB Solenoid (SLAFR), ECB Solenoid (SLAFR2), ECB Solenoid (SLARL) Valve Close, ECB Solenoid (SLARL) Valve Open, ECB Solenoid (SLARL), ECB Solenoid (SLARL2), ECB Solenoid (SLARR) Valve Close, ECB Solenoid (SLARR) Valve Open, ECB Solenoid (SLARR), ECB Solenoid (SLARR2), ECB Solenoid (SLR) Valve Close, ECB Solenoid (SLR), ECB Solenoid (SLRFL) Valve Close, ECB Solenoid (SLRFL) Valve Open, ECB Solenoid (SLRFL), ECB Solenoid (SLRFL2), ECB Solenoid (SLRFR) Valve Close, ECB Solenoid (SLRFR) Valve Open, ECB Solenoid (SLRFR), ECB Solenoid (SLRFR2), ECB Solenoid (SLRRL) Valve Close, ECB Solenoid (SLRRL) Valve Open, ECB Solenoid (SLRRL), ECB Solenoid (SLRRL2), ECB Solenoid (SLRRR) Valve Close, ECB Solenoid (SLRRR) Valve Open, ECB Solenoid (SLRRR), ECB Solenoid (SLRRR2), ECB Solenoid (SMC), ECB Solenoid (SMC/SRC/SCC), ECB Solenoid (SMC1), ECB Solenoid (SMC2), ECB Solenoid (SMC-SRC-SCC), ECB Solenoid (SRC), ECB Solenoid (SSA), ECB Solenoid (SSC), ECB Utility, ECB Warning Indicator, ECB Warning Light, ECB Warning, ECO Mode Indicator, ECONO Indicator, ECT PWR Indicator, ECT SNOW Indicator, EGR Cut VSV, EGR Step Position #2 Control, EGR Step Position, Electric Heater1, Electric Heater2, Electric Heater3, Electric Water Heater, Electric Water Pump, Electrical Fan, Electromagnetic Oil Pump, Emergency Call Cancellation, Emergency Exit Warning, Emission Pulse(R), Enforced Driving FHL Warning Trigger, EPB Auto OFF Indicator, EPB Control Switch, EPB Warning Light, EPS Warning, EV Drive Indicator, EV Mode Indicator, EV System Warning Lamp, Evaporator Magnetic Valve, Exhaust Bypass VSV Control, Exhaust Gas VSV Control, Exhaust Shutter VSV, Exhaust Solenoid1, Exhaust Solenoid2, Exhaust Switching VSV, EXO, Extended Illumination 1, Extended Illumination 2, Exterior Lighting SW, Extra High Beam, Face A/O Servo Pulse(D), Face A/O Servo Pulse(P), Face Direction Check, FL Gas Spring Switch Valve, FL Wheel Up/Down, Flash Handle Fold, Flash Handle Return, Fold/Unfold Mirrors, Foot A/O Servo Pulse(D), Foot A/O Servo Pulse(P), Foot Light, Four-Wheel Damping Force Full Hard, Four-Wheel Damping Force Full Soft, Fr Control Rear Air Outlet Damper Servo Motor, FR Gas Spring Switch Valve, FR Wheel Up/Down, Front Air Mix Damper Control Servo Motor, Front Air Outlet Damper Control Servo Motor, Front Buzzer, Front Deicer Relay, Front Evaporator Magnetic Valve, Front Fog Lamp Indicator, Front Fog Light Relay, Front Fog Light, Front Foot Light, Front Footwell Lights, Front Gate Valve, Front Left Air Mix Damper Control Servo Motor, Front Left Air Outlet Damper Control Servo Motor, Front Left Height Solenoid, Front Left Seat Blower, Front Left Seat Heater, Front Left Solenoid, Front Left Wheel Up/Down, Front Passenger Side Door Open, Front Passenger Side Seat Belt, Front Right Air Mix Damper Control Servo Motor, Front Right Air Outlet Damper Control Servo Motor, Front Right Height Solenoid, Front Right Seat Blower, Front Right Seat Heater, Front Right Solenoid, Front Right Wheel Up/Down, Front Sliding Sunshade, Front Vertical Operation, Front Vertical, Front Washer Relay, Front Washer, Front Wheel Up by Accumulator, Front Wheel Up/Down, Front Wiper Hi Operation, Front Wiper Lo Operation, Front/Rear Buzzer, Fr-Seat Inside Transmitter, Fuel Cap Reminder Warning, Fuel Consumption Meter Operation, Fuel Cooler Solenoid Valve, Fuel Cooler VSV, Fuel Cut Bank 2 For Idle, Fuel Filler Opener, Fuel Filter Indicator, Fuel Filter Warning, Fuel Gauge Indicator, Fuel Gauge Operation (1-2), Fuel Gauge Operation (1-4), Fuel Gauge Operation

(3-4), Fuel Gauge Operation (Empty), Fuel Gauge Operation (Full), Fuel Gauge Operation (Sender E), Fuel Gauge Operation (Sender F), Fuel Gauge Operation (Warning), Fuel Gauge Operation For CNG (1-2), Fuel Gauge Operation For CNG (1-4), Fuel Gauge Operation For CNG (3-4), Fuel Gauge Operation For CNG (Empty), Fuel Gauge Operation For CNG (Full), Fuel Gauge Operation For CNG (Sender E), Fuel Gauge Operation For CNG (Sender F), Fuel Gauge Operation For CNG (Warning), Fuel Indicator (CNG), Fuel Indicator Lamp, Fuel Injector Timing, Fuel Leak Test, Fuel Lid Lock Relay, Fuel Lid Opener, Fuel Lid, Fuel Meter Operation (CNG), Fuel Meter Operation (Reductant), Fuel Meter Operation, Fuel Pressure Relief Valve Open, Fuel Pump - Duty Cycle, Fuel Pump Duty Control, Fuel Pump Duty, Fuel Pump Relay, Fuel Pump Single Phase Energization (U Phase), Fuel Pump Single Phase Energization (V Phase), Fuel Pump Single Phase Energization (W Phase), Fuel Pump Single Phase Energization, Fuel Pump Speed Control, Fuel Vapor-Containment Valve, Fuel Warning (CNG), Glass Hatch Open, GLOW Warning, Go to Dealer Indicator, Go To Service Warning, Green Indicator, H/B Motor Relay, Hard Switch Lighting, Hazard Answer Back, Hazard, H-B Motor Relay, HCAC System VSV, HCAC VSV Check, HCAC VSV, Head Lamp Warning Indicator, Head Light Hi, Head Up Display Indicator, Headlamp Indicator, Headlight Cleaner, Headlight High Beam, Headlight Indicator, Headlight Leveling Indicator Display, Headlight Leveling Indicator, Headlight Leveling Initialize Incomplete Display, Headlight Low Beam, Headlight Relay, Headlight Relay-Light Power Supply Relay, Headlight System Malfunction Display, Headrest Front-Rear, Headrest Motor, Heads Up Display Indicator, Heat Exchange Shut Valve, Heater Valve, Heating Electric Expansion Valve, Heating Three-way Valve, Height Control Prohibition Switch, Height High Indicator, Height High Warning, HICM System Check, High Beam Headlight, High Beam Indicator, High Beam LH, High Beam RH, High Pressure Magnetic Valve, High Voltage Electric Heater, High-Beam Headlights, Hold Indicator, Hold Lamp, Hot A/M Servo Pulse(D), Hot A/M Servo Pulse(P), HV System Certification Mode Indicator, HV System Indicator (0%), HV System Indicator (100%), HV System Indicator (200%), HV System Indicator (300%), HV System Indicator (400%), HV System Indicator (-50%), HV System Indicator (MAX), HV System Indicator (MIN), HV Unit Hot Warning Indicator, HV Unit Hot Warning, HV-EV System Indicator (0%), HV-EV System Indicator (100%), HV-EV System Indicator (200%), HV-EV System Indicator (300%), HV-EV System Indicator (400%), HV-EV System Indicator (-50%), HV-EV System Indicator (MAX), HV-EV System Indicator (MIN), HWD Relay, Hybrid Battery Charge, Hybrid Battery Heater Relay, Hybrid System Warning, Hydrogen Leak Indicator, Hydrogen Leak Warning, IAC Duty Ratio, ICS OFF Indicator, ICS OFF Warning, IG OFF P/W Control Permission Output, IG OFF P-W Control Permission Output, IGP Signal, Illuminated Entry System, Illumination Module A1, Illumination Module A2, Illumination Module A3, Illumination Module A4, Illumination Module B1, Illumination Module B2, Illumination Module B3, Illumination Module B4, Immobilizer Indicator, iMT Indicator (Green), iMT Indicator (Yellow), Indicat. A/T P, Indicat. Hold, Indicat. INTUITIVE P/A LCD, Indicat. Lamp O/D OFF, Indicat. Lamp VSC OFF, Indicat. Ready (EV), Indicat. VSC OFF, Indicate AFS OFF Lamp, Indicate. Pre-Collision, Indicator 2nd START, Indicator 4LO, Indicator 4WD AUTO, Indicator 4WD Lock, Indicator 4WD, Indicator AFS, Indicator Auto LSD, Indicator Brake Hold, Indicator Condition, Indicator CRAWL, Indicator Ctr DIFF LOCK, Indicator Downhill Assist Control, Indicator ECO, Indicator ECONO, Indicator EPS, Indicator EV Mode, Indicator For Lighting, Indicator GLOW, Indicator Height High, Indicator Key, Indicator Lamp Airbag, Indicator Lamp Back Door Open, Indicator Lamp Beam, Indicator Lamp Coolant Cool, Indicator Lamp Coolant Hot, Indicator Lamp Cruise, Indicator Lamp Doors All open, Indicator Lamp ECB, Indicator Lamp ECT PWR, Indicator Lamp ECT SNOW, Indicator Lamp Fr FOG, Indicator Lamp Head, Indicator Lamp Hood Door Open, Indicator Lamp Luggage Door Open, Indicator Lamp oil Level, Indicator Lamp Oil Pressure, Indicator Lamp Rr FOG, Indicator Lamp Rr Light, Indicator Lamp Slip, Indicator Lamp Tail, Indicator Lamp Washer, Indicator Lamp Water Level, Indicator Lithium Charge, Indicator MMT E Mode, Indicator MMT M Mode, Indicator Navi CVT, Indicator Oil Maintenance, Indicator Over Speed, Indicator Park, Indicator Ready(HV),

Indicator Rear Differential LOCK, Indicator Rear Door LH open, Indicator Rear Door RH open, Indicator Ride Mode, Indicator SIL, Indicator Slip-OFF, Indicator Sport(CVT Sport), Indicator Tail Cancel, Indicator TEMS Comfort, Indicator Timing Belt, Indicator Tire Pressure Warning System, IndicatorHeadlamp Auto Leveling, IndicatorTEMS Sports, Infrared Signal Status, Initial Axis Adjust Value Display, Injection Timing #1, Injection Timing #2, Injection Timing #3, Injection Timing #4, Injection Timing #5, Injection Timing #6, Injection Timing #7, Injection Timing #8, Injection Timing Select Cylinder, Injection Volume Control, Injection Volume, Injection Way Control, Injector Compensation, Inside Handle Illumination, Inside Handle Light, Inside Luggage Tuner Power Supply ON, Inside Luggage Tuner Power Supply, Inside Trunk/Backdoor Transmitter, Inspection Mode, Instrument Panel Illumination, Intake Air VSV Control, Intake Control VSV, Intake VSV 2 Control, Intelligent Parking Assist Indicator, Intercooler Water Pump Relay, Interior Illumination Light, Interior Illumination Light1, Interior Panel Relay, Interlocking Shift OFF Display, Interlocking Shift ON Display, Intrusion Sensor Power, Intrusion Sensor, INTUITIVE P/A LCD OFF Indicator, INTUITIVE P-A LCD Indicator, INTUITIVE P-A LCD OFF Indicator, Ion Generator, ISC Step Position, KDSS Indicator, KDSS Warning, Key Cylinder Illumination, Latch Release Test, Latch Release, LDA Buzzer, LDA Control Indicator (Left), LDA Control Indicator (Right), LDA Control Indicator, LDA Indicator (White), LDA Indicator, LDA Steering Control Indicator, LDA Warning Indicator (Left), LDA Warning Indicator (Right), LDA Warning Indicator, LDA Warning, LED Headlamp Warning, Left High Beam, Left LDA Indicator, Left LDA Warning, Left Turn Signal Indicator, Left Turn Signal Lamp, Left Turn Signal Light, LH Courtesy Light, LH Mirror Up/Down, LH Motor, Lift Up Buckle, Lifter Operation, Light Control Glass Relay, Light Control Switch (DOWN), Light Control Switch (Single), Light Control Switch (UP), Limited Power Indicator, Lithium Battery Check Indicator, Lithium Battery Hot Indicator, LKA Lane Out Alarm Buzzer, Load Specification Information, Lock Display, Lock Faulty Display, Low Beam, Low Pressure Magnetic Valve, Low Pressure Tank Solenoid, Low-Beam Headlights, Lower Air Mix (Driver Side), Lower Air Mix (Passenger Side), Lower Back, Lower Cushion, LPG Indicator, Luggage Mode Indicator (Yellow), Luggage Mode Indicator, Lumbar Bottom, Lumbar Lift, Lumbar Middle, Lumbar Slide, Lumbar Upper, M/H Bypass Cool Servo Pls, M/H Bypass Hot Servo Pls, Magnetic Clutch Relay, Magnetic Valve Operation, Main Battery(HV) Indicator, Maintenance Indicator Lamp, Maintenance Warning, Manual EVAP System Check, Manual SW Indicator, Master Warning, Memory Cancel Light, Meter Day Mode Switch, Meter Display (0), Meter Display (1), Meter Display (2), Meter Display (3), Meter Display (4), Meter Display (5), Meter Display (6), Meter Display (7), Meter Display (8), Meter Display (9), Meter Display (All), Meter Display 1, Meter Display 2, Middle Pressure Magnetic Valve, Mirror Auto Indicator (Daytime), Mirror Auto Indicator (Night Running), Mirror Auto Indicator (Night Stopping), Mirror Fold Signal, Mirror Fold, Mirror Heater Relay, Mirror Heater, Mirror Left/Right, Mirror Return Signal, Mirror Return, Mirror Up/Down, MMT E Mode Warning, Motor Relay Control, Motor Relay, Multi Channel SW, Multi Display All (White), Multi Display Default Screen, Multi Display Select Switch, Multi Switch (Back), Multi Switch (Down), Multi Switch (Enter), Multi Switch (Left), Multi Switch (Right), Multi Switch (Top), Multi Switch (Up), Multi Switch Operation, Navi CVT Indicator, Night Lighting, Night View Indicator, Not Available Display, O/D Cut Signal, O-D OFF Indicator, ODO-TRIP Change Switch, OFF Road Guidance Indicator, OFF Road Guidance Warning, Off-road 1 Indicator (Daytime), Off-road 1 Indicator (Nighttime), Off-road 2 Indicator (Daytime), Off-road 2 Indicator (Nighttime), Off-road 3 Indicator (Daytime), Off-road 3 Indicator (Nighttime), Off-road 4 Indicator (Daytime), Off-road 4 Indicator (Nighttime), Off-Road Switch Light, Oil Level Warning, Oil Pressure Meter Operation (1-2), Oil Pressure Meter Operation (1-4), Oil Pressure Meter Operation (3-4), Oil Pressure Meter Operation (HIGH), Oil Pressure Meter Operation (LOW), Oil Pressure Meter Operation, Oil Pressure Warning, Oil Pump, Open Door Warning, Ottoman Short-Long, Ottoman, Outer Mirror Reverse Light, Outside Mirror Footwell Lights, Outside Trunk/Backdoor Transmitter, Over Speed Indicator, Overhead Tuner Power Supply ON, Overhead Tuner Power Supply, Overheat Display, P Range Display, P Range Indicator, P

Supply for Steering Lock, Pager For Accessory Output, Panel Light, Park Warning, Passenger Seat Operation Switch Indicator, Passenger Seat Sensor Power Supply, Passenger Side Seat Belt Warning, PBD Buzzer, PBD Close SW Light, PBD Clutch, PBD Motor, PBD Open/Close, PCS Approach Alarm Buzzer, PCS Buzzer, PCS Collision Alarm Buzzer, PCS Crash Alarm Buzzer, PCS OFF Warning, PCS Warning Indicator, PCS Warning, Pedestrian Protection Warning, Pelvis Support Operation, Pinion Gear Plunger (Hood Close), PKB Full Release Control, PKB Haul Display, PKB Light, PKB Lock Control, PKB Lock1, PKB Release Control, PKB Release1, Power For BDoor Sens, Power For DR-Seat Sens, Power For Intrusion Sensor2, Power For PR-Seat Sens, Power For P-Seat Sens, Power For Tilt Sensor, Power Meter Operation, Power Running Board Forced Retracting, Power Window SW LED, Power Windows, Power/Engine SW Light, PPS Indicator, PPS Solenoid, PPS Warning, Pre Crash Brake OFF Light, Pre-Charge Pump, Pre-crash Indicator, Prohibit The Catalyst OT Misfire Prevent F/C, Prohibit the Catalyst OT Misfire Prevent Fuel Cut, Prohibit the Idle Fuel Cut, Protection Relay, Proximity Sound (Low Speed), Proximity Sound (Vehicle Stationary), Proximity Sound Indicator, Pr-Seat Outside Transmitter, Pr-Seat Select, PSD Buzzer, PSD Close, PSD Clutch, PSD Motor, PSD Open Signal, PSD Open, P-Seat Outside Transmitter, P-Seat Select, PTC Heater, Pump Check Pattern, Pump Motor Relay, Purge Dilution Valve Duty Bank 2, R/L Selection SW Left Indicator Full, R/L Selection SW Left Indicator Red, R/L Selection SW Right Indicator Full, R/L Selection SW Right Indicator Red, Radar Cruise Approach Alarm Buzzer, Radar Cruise Indicator (Yellow), Radar Cruise Indicator, Radar Cruise Proximity Warning Buzzer, Radar Cruise Ready Indicator, Radar Cruise Stop Buzzer, Radar Cruise Stop Keeping Announce Buzzer, RCD OFF Indicator, RCTA Indicator, RCTA OFF Indicator, Ready Indicator, Rear A/M Servo Pulse(P), Rear A-C Mag Valve, Rear Air Mix Damper Control Servo Motor, Rear Air Mix Servo Target Pulse, Rear Blower Level, Rear Blower Motor, Rear Buzzer, Rear Defogger Relay, Rear Defogger, Rear DIFF LOCK Indicator, Rear Door Sunshade Down, Rear Door Sunshade Up, Rear Driver Side Sensor Power Supply, Rear Fog Lamp Indicator, Rear Fog Lamp, Rear Fog Light Relay, Rear Fog Light, Rear Gate Solenoid, Rear Gate Valve, Rear Inner Wheel Control Indicator, Rear Inner Wheel Control Warning, Rear Inverter Cooling Fan, Rear Left Height Solenoid, Rear Left Seat A/C Auto Indicator Full, Rear Left Seat A/C Auto Indicator Red, Rear Left Seat A/C Indicator Full, Rear Left Seat A/C Indicator Red, Rear Left Seat Blower, Rear Left Seat Heater, Rear Left Solenoid, Rear Left Wheel Up/Down, Rear Leveling Solenoid, Rear Light Indicator, Rear Passenger Side Sensor Power Supply, Rear personal light, Rear Right Air Mix Damper Control Servo Motor, Rear Right Height Solenoid, Rear Right Seat A/C Auto Indicator Full, Rear Right Seat A/C Auto Indicator Red, Rear Right Seat A/C Indicator Full, Rear Right Seat A/C Indicator Red, Rear Right Seat A/C Level Indicator Red, Rear Right Seat Blower, Rear Right Seat Heater, Rear Right Solenoid, Rear Right Wheel Up/Down, Rear Seat Belt Warning, Rear Seat Belt, Rear Seat Lumbar Adjustment, Rear Side Buckle Light, Rear Washer Relay, Rear Washer, Rear Welcome Light, Rear Wheel Up by Accumulator, Rear Wheel Up/Down, Rear Wiper Operation, Rear Wiper Washer Motor Relay, Red Indicator, Reductant Consumption Warning, Reductant Discharge, Reductant Filling (Pressure Keep), Reductant Injection Valve, Reductant Pipe Heater, Reductant Pump Check (Backward), Reductant Purge, Reductant Quality Warning, Reductant Tank Heater, Reductant Warning Indicator, Reductant Warning, Refresh B1, Refresh B2, Refresh B3, Refresh B4, Refresh B5, Refresh BL1, Refresh BL2, Refresh BL3, Refresh BL4, Refresh BL5, Refresh BR1, Refresh BR2, Refresh BR3, Refresh BR4, Refresh BR5, Refresh C1, Refresh C2, Refresh C3, Refresh C4, Refresh C5, Refrigerant Gas Volume Check, Regulator Shut Valve, Relay for Interior Light Auto Cut Function, Release Actuator, Release Display, Remote Engine Starter, Reverse Buzzer, Reverse Gear Signal, Reverse Signal, RH Courtesy Light, RH Mirror Right/Left, RH Mirror Up/Down, RH Motor, Ride Mode Indicator, Right Front Seat Heater, Right High Beam, Right LDA Indicator, Right LDA Warning, Right Turn Signal Indicator, Right Turn Signal Lamp, Right Turn Signal Light, RL Wheel Air Bleeding Pattern, RL Wheel Up/Down, Rr Inner Wheel Control Indicator, Rr Inner Wheel Control Warning, RR Wheel Air Bleeding Pattern, RR Wheel Up/Down,

Rr-Seat Inside Transmitter, SCV Duty Ratio, Seat Backrest Recline, Seat Belt Indicator, Seat Heater Active Level, Seat Memory Light, Seat Slide Operation, Secondary Air VSV Control, Security Horn 2, Security Horn, Security Indicator, Self Power Siren, Sensitivity Check, SET Indicator, Shift-By-Wire Warning, Shock Detection Unlock, Shoulder, Shut Off Valve, Side Back Support, Side Cushion Support, Side Mirror Foot Light, Side Support Operation, Signal Check, SIL Down Indicator, SIL Indicator (Down), SIL Indicator (Up), SIL Up Indicator, SLC Solenoid, Slide Roof, Slip Control System, Slip Indicator Light, Slip Warning, SLS Pressure, Smart System Indicator, Smart System Warning, SOC Gauge (1-2), SOC Gauge (1-4), SOC Gauge (3-4), SOC Gauge (MAX), SOC Gauge (MIN), SOC Warning Indicator, SOC Warning, Solenoid (SB), Solenoid Relay, Solenoid(SB), Solenoid(ST), Sound, Speed Alarm Buzzer, Speed Meter Operation, Speed Signal Input (0), Speed Signal Input (120), Speed Signal Input (160), Speed Signal Input (200), Speed Signal Input (240), Speed Signal Input (280), Speed Signal Input (320), Speed Signal Input (360), Speed Signal Input (40), Speed Signal Input (400), Speed Signal Input (80), Speedometer Operation (0km-H,0mph), Speedometer Operation (120km-H,120mph), Speedometer Operation (160km-H,160mph), Speedometer Operation (200km-H,200mph), Speedometer Operation (240km-H,240mph), Speedometer Operation (280km-H,280mph), Speedometer Operation (320km-H,320mph), Speedometer Operation (360km-H,360mph), Speedometer Operation (400km-H,400mph), Speedometer Operation (40km-H,40mph), Speedometer Operation (80km-H.80mph), Sport Indicator (CVT Sport), Start SW Light Power Supply, Starter (Hood Close), Starter Motor Drive Magnet Switch (Hood Close), Steering Heater Indicator (Yellow), Steering Heater, Steering Wheel Vibration, Step Light, Stoichiometric Ratio Combustion, Stop Start Buzzer, Stop Start Permit Cond (A/C), Stop Start Permit Cond (ABS), Stop Start Permit Cond (Battery), Stop Start Permit Cond (Engine), Stop Start Precondition2 (Control), Stop And Start OFF Indicator, Stop And Start ON Indicator, Stop Lamp Relay, Stop Lamp, Stop Light Relay, Stop light System Indicator Light, Stratified Charge Combustion, Stroke Simulator Cut Valve Pattern, Sub Fuel Gauge Operation (1-2), Sub Fuel Gauge Operation (1-4), Sub Fuel Gauge Operation (3-4), Sub Fuel Gauge Operation (Empty), Sub Fuel Gauge Operation (Full), Sub Fuel Gauge Operation (Sender E), Sub Fuel Gauge Operation (Sender F), Sub Fuel Gauge Operation, Sub Fuel Tank VSV, Supercharger Control, Swirl Control VSV, Tachometer Operation (0rpm), Tachometer Operation (10000rpm), Tachometer Operation (2000rpm), Tachometer Operation (3000rpm), Tachometer Operation (4000rpm), Tachometer Operation (5000rpm), Tachometer Operation (6000rpm), Tachometer Operation (7000rpm), Tachometer Operation (8000rpm), Tachometer Operation (9000rpm), Tachometer Operation, Tail OFF Indicator, Tailgate Open, Taillamp Indicator, Taillight Relay, Taillight-Clearance Light, Target Fuel Pressure Control, Telesco Operation, Temporary Vehicle Start Up, Test Mode, Test the Turbo Charger Step Motor #2, Test The Turbo Charger Step Motor Bank 1, Test The Turbo Charger Step Motor, Tilt Operation, Timer Switch (00), Timer Switch (H), Timer Switch (M), Timer Switch (Single), Timing Belt Warning, Tire Pressure Indicator, Tire Pressure Light, Tire Pressure Warning System Indicator, Tow Haul Indicator, TPMS Warning Light, Trac Motor Relay, TRAC Solenoid (SPFL), TRAC Solenoid (SPFR), TRAC Solenoid (SRCF), TRAC Solenoid (SRCR), TRAC Solenoid (SRMF), TRAC Solenoid (SRMR), Trailer Reverse Assistant Light, TRC OFF Indicator Light, TRC(TRAC) Motor Relay, TRC(TRAC) OFF Indicator Light, Trip Reset Switch, Trunk And Back-Door Open, Turbo Boost VSV Control, Turbo Boost VSV, Turbo Charger Step Motor, Turbo Pressure VSV, Turn Light LH Relay Operation, Turn Light RH Relay Operation, Turn Signal Indicator - Left, Turn Signal Indicator - Right, Upper Air Mix (Driver Side), Upper Air Mix (Passenger Side), Variable Intake VSV Control, Variable Shade Beam LH, Variable Shade Beam LH/RH, Variable Shade Beam LH-RH, Variable Shade Beam RH, Varial Intake VSV, Vehicle Approach Warning OFF Indicator, Vehicle Horn, Vehicle Proximity Notification System Warning, Vehicle Stop Warning, VGRS Warning, Viscous Heater, VN Turbo Open, Volt Meter Operation (0V), Volt Meter Operation (12V), Volt Meter Operation (15V), Volt Meter Operation (18V), Volt Meter Operation (3V), Volt Meter Operation (6V), Volt Meter Operation (9V),

VSC Indicator Lamp, VSC OFF Indicator Light, VSC OFF Indicator, VSC TRC Indicator, VSC Warning Light, VSC/TRAC Off Indicator Light, VSC/TRAC Solenoid, VSC/TRC Indicator, VSC/TRC Solenoid (SMF), VSC/TRC Solenoid (SMR), VSC/TRC Solenoid (SPFL), VSC/TRC Solenoid (SPFR), VSC/TRC Solenoid (SRCF), VSC/TRC Solenoid (SRCR), VSC/TRC Solenoid (SRMF), VSC/TRC Solenoid (SRMR), VSC-TRAC Off Indicator Light, VSC-TRAC Solenoid (SMF), VSC-TRAC Solenoid (SMR), VSC-TRAC Solenoid (SPFL), VSC-TRAC Solenoid (SPFR), VSC-TRAC Solenoid (SRCF), VSC-TRAC Solenoid (SRCR), VSC-TRAC Solenoid (SRMF), VSC-TRAC Solenoid (SRMR), VSC-TRC(TRAC) Solenoid, VVT Exhaust Linear (Bank 1), VVT Exhaust Linear (Bank 2), VVT Linear (Bank 2), VVT System (Bank 2), VVTL System (Bank 1), VVTL System (Bank 2), Washer Nozzle Heater, Washer Warning, Water Level Warning, Water Pump, Water Temperature Meter Operation (110C,230F), Water Temperature Meter Operation (120C,248F), Water Temperature Meter Operation (127C,260F), Water Temperature Meter Operation (50C,122F), Water Temperature Meter Operation (60C,140F), Water Temperature Meter Operation (70C,158F), Water Temperature Meter Operation (80C,176F), Water Temperature Meter Operation (Middle), Water Temperature Meter Operation, Wing and Deflector Extend/Fold, Wing Angle, Wing Extend, Wing Fold, Wiper Motor Hi, Wiper Motor Lo, Wiper Power Relay, Wireless Buzzer

# **New Coverage Details – USA European**

### **New Alfa Romeo Coverage**

#### 74 new Adjustment type special tests:

Active Grill Shutter Replaced, Actuator Calibration, Back Lighting, CAM Crank Relearn Routine, Clear Engine Auto Restart Crank Counter, Clear Learning Value, Clear Misfire TLC, Clear Stored Accumulated Fuel Mass, Clear Variable Line Pressure Counters, Close Door Calibration, Clutch Pedal Learn, Coolant Three Way Valve Replaced, DTCM Replacement, EGR System Test, Engine Idle Shutdown Feature Enable/Disable, Exhaust Phaser 1 Cleaning, Exhaust Phaser 2 Cleaning, Exit Logistic Mode, Exit Shipping Mode, Fire Protection System Activate, Front Axle Nominal Tire Pressure, GSE Injector Adaptation, Heated Seat NTC Validation, HVAC Actuator Calibration Test, HVAC FGA Self Learning Motors Test, Intake Phaser 1 Cleaning, Intake Phaser 2 Cleaning, Learn ETC, Modify Volumetric Sensors Sensitivity, New Engine Installed, Oil Service Reset, Open Door Calibration, Original VIN Lock, Overboost counter reset, Phonic Wheel Ttooth Learning Reset, Power Take - Off Unit Replacement, Proxi Configuration Alignment, Proxi Configuration, Purge fuel circuit reset, Quick Learn, Quicklearn 62TE, Quicklearn Non RFE, Quicklearn RFE, RDU Replacement, Rear Axle Nominal Tire Pressure, Reset Adaptive After Oil Change, Reset Adaptive Data, Reset Adaptive Memory, Reset Adaptive Values, Reset Adaptives After Block Change, Reset Air-Fuel Adaptives, Reset Camshaft Adaptive, Reset Camshaft Adaptives, Reset ECU, Reset Enhanced Automatic Oil Change Indicator, Reset Memory, Reset Service Information, Reset VCM Adaptives, Reset VVA Freeze Incorrect Request, Seat Belts Alarm Enable, Seat Belts Alarm Exclusion, TCC Break In, Throttle Body Self-Learn Activation, Trailer Hook Presence Disabling, Trailer Hook Presence Enabling, Turbocharger adaptive parameters reset, Valve Body Solenoid Learn, Valve Variator Actuator (VVA) freeze wrong request reset, VCM Adaptive Parameter Reset After Block Change, VCM Adaptive Parameter Reset After Oil Change, VIN Lock, VVL Cam Crank Relearn, Write Pinion Factor, Write VIN

### 876 new Actuation type special tests:

1st Gear Clutch Test (62TE), 1st Gear Clutch Test (Non-RFE), 1st Gear Clutch Test (RFE), 1st Row Ceiling Light, 2/4 Clutch Volume Index Check, 2-4 Solenoid State, 2-4 Solenoid, 2C Or 2-4 Solenoid, 2nd Gear Clutch Test (62TE), 2nd Gear Clutch Test (Non-RFE), 2nd Gear Clutch Test

(RFE), 2nd Row Ceiling Light, 2WD Rolls Mode, 3rd Gear Clutch Test (62TE), 3rd Gear Clutch Test (Non-RFE), 3rd Gear Clutch Test (RFE), 3rd Row Ceiling Light, 4C Solenoid State, 4C Solenoid, 4th Gear Clutch Test (62TE), 4th Row Ceiling Light, A/C Compressor Clutch Relay Control State, A/C Relay, A/C Request, A-C Compressor Clutch Relay Control State, A-C Request, Active Exhaust Valve 1, Active Exhaust Valve 2, Active Grill Shutter Test, Actuate All Heaters, Air Conditioner Relay Command, Air Defrost Motor Distribution (Left side), Air Defrost Motor Distribution (Right side), Air Distribution Motor Command (Mode), Air Mix Motor, AIR Mixing Motor Command (Left SIDE), AIR Mixing Motor Command (Right Side), Air Mode Motor, Air Rear Motor Distribution, Air Recirculation Motor Command, Air Vent - Floor Motor Distribution (Left side), Air Vent - Floor Motor Distribution (Right side), Airbag failure indication, Alarm/Doors Status Led, Alarm/Doors Status/Deterrence LED, Alarm-Doors Status-Deterrence LED, All Lights Front Command, All Lights Rear Command, All Stop Lights (EMEA 949), All Stop Lights (EMEA 952), All Stop Lights (NAFTA 949), All Stop Lights (NAFTA 952), ALL Stop Lights Command, All Stop Lights W-Combined Rear Lighting, All Stop Lights W-O Combined Rear Lighting, All Stop Lights, All Turn Lights Command, Alternator Field Control State, Alternator Field Duty Cycle, Alternator Field Duty-Cycle, Ambient dimming command, Ambient Dimming, Ambient Illumination; Interior, Ambient Light Control, Ambient Light, Ambient Lighting Command, AMP Output Short Test, AMP Output Tone Test, Antilock brake (ABS) failure indication, Assist Call Button Green LED, Assist Call Button Red LED, Assist Call Green Day PWM, Assist Call Green Night PWM, Assist Call Red Day PWM, Assist Call Red Night PWM, Audio Measure AC and DC, Audio Routing, Audio Volume (Current Source), Audio Volume (current source), Audio Volume (ENT), Audio Volume (INFO 1), Audio Volume (INFO 2), Audio Volume (SIG), Auto Shutdown Relay Control State, Autocheck, Automated Driver Door Ajar Signal, Automated Driver Door Open, Auxiliary Coolant Pump, Background LED Illumination Level, Backlight 1 Level, Backlight 2 Level, Backlight 3 Level, Backlight 4 Level, Backlight 5 Level, Backlight 6 Level, Backlight 7 Level, Backlight 8 Level, Backlight LEDS Activation, Backlight Leds Control, Backlighting Dimming Command, Backlighting, Backup Light, Backup Lights, Balance Level Settings, Balance Settings, Bass Level Settings, Bass Settings, Battery-Alternator FAIL-Charge, Blow By Heater Relay Command, BLOWER Motor Brushled, BLOWER Motor Brushless, Blower Motor Command, Blower Motor Speed, Blower Motor, Blue Lights, Brake System Failure [EMEA Only], Brake System Failure [US Only], Button LEDs, Button symbol Back-Light PWM Duty, Buzzer Control, Buzzer, Cabin AIR Temperature Sensor Blower, CEGR H-Bridge Valve Duty Cycle, Ceiling Light Front Command, Ceiling Light Front, Ceiling Light Rear Left or Central, Ceiling Light Rear Left, Ceiling Light Rear Right, Ceiling Light, Central high mounted Stop Light (CHMSL), Central high mounted Stop Light, Central Lock, Central Stop Lamp, Central Unlock, Channel 1, Channel 10, Channel 11, Channel 12, Channel 2, Channel 3, Channel 4, Channel 5, Channel 6, Channel 7, Channel 8, Channel 9, Charge Air Cooler Coolant Pump, Check PCM Odometer, CHSML and Stop/Turn Lights, Clearance Identification Lights Relay, CNG Injector Relay, CNG Shut Off Relay, CNG/Gasoline Forced Fuel Type, Comfort Closing And Opening, Comfort ClosingOpening, Comfort ENABLE Command, Comfort Enable, Command Key Unlock, Command Shift Lock, Control chime, Coolant High Temperature Auxiliary Electric Pump, Coolant Three Way Valve Test, Cooled EGR H-Bridge Valve System Test, Cruise control lamp command, Cylinder 1 Deactivation Solenoid Control State, Cylinder 1 UniAir valve command, Cylinder 2 UniAir valve command, Cylinder 3 UniAir valve command, Cylinder 4 Deactivation Solenoid Control State, Cylinder 4 Deactivation Solenoid, Cylinder 4 UniAir valve command, Cylinder 6 Deactivation Solenoid Control State, Cylinder 7 Deactivation Solenoid Control State, D+ Repetition Relay Command, Dasm Safety Indication Adaptative Cruise Control, Dasm Safety Indication Normal Cruise Control, Day Lights Left - Right, Day Lights Left, Day Lights Right, Day Lights, Day Run Light (DRL) Parking Light Left (Halogen), Day Run Light (DRL) Parking Light Left (Xeno), Day Run Light (DRL) Parking Light Left LED, Day Run Light (DRL) Parking Light Left, Day Run Light (DRL) Parking Light Right (Halogen), Day Run Light (DRL) Parking Light Right

(Xeno), Day Run Light (DRL) Parking Light Right LED, Day Run Light (DRL) Parking Light Right, Day Run Light (DRL) Parking Turn Light Left, Day Run Light (DRL) Parking Turn Light Right, Daylights and Position Left, Daylights and Position Right, Daylights Halogen Left, Daylights Halogen Right, Daylights Xenon Left, Daylights Xenon Right, DC Clutch Volume Index Check, Deactivation Parking Sensor LED, Deactivation Parking Sensor, Dead Lock Relay, DeadLock Relay, DeadLock Relay-Independent Driver Door Unlock, Defeat Engine ON, Diesel Particulate Filter Lamp Command, Dimming Graphics, Display Dimming, DNA Status LED 3, Door Ajar Signal To Front Ceiling Dome, Door Ajar, Door Locks, Door Status LED Command, Door Status Led, Doors Status - Deterrence LED Driver Door, Doors Status - Deterrence LED Passenger Door, Doors status - deterrence LED, Double Start Override Relay, Downstream lambda probe heater command, DR Solenoid, Drive Style 2 LED Command, Drive style 2 LED, Drive Style 3 LED Command, Drive style 3 LED, Driver Door Ajar Signal To Manual Transmission Automated, Driver Door Ajar Signal To MTA (Manual Transmission Automated), Driver Door Ajar Signal To MTA, Driver Door Handle And Puddle Light LED Command, Driver Door Lock Status LED Command, Driver Door Unlock, Driver Doors Status - Deterrence LED, Driver Heated Seat, Driver Seat Backrest Command, Driver Seat Lift Command, Driver Seat Slide Command, Driver Seat Tilt Command, Drivers Window Control, DRL - Front Park Lights, DRL Left, DRL Parking Light Left Command, DRL Parking Light Right Command, DRL Right, DSU LED Command 1, DSU LED Command 2, DSU LED Command 3, DTI FUEL TRANSFER RLY, DTI LTR CLNT PMP, DTI SPRCHRGR BPV MOTOR, DTI TPBV Status, Dual Speed Fuel Pump Relay, Dual Speed Oil Pump, Dump valve command, Duty Cycle Purge Solenoid, E-Call Button Backlight LED, E-Call Button Green LED, E-Call Button Red LED, E-Call Green Day PWM, E-Call Green Night PWM, E-Call Red Day PWM, E-Call Red Night PWM, ECO Led Command, ECO LED, ECO-LPG-SS-E-Costing LED Command, EGR cooler bypass command, EGR Valve Solenoid Duty Cycle, Electric seat movement Relay, Electric Seat Movimentation Relay, Electric Thermostat Heater Solenoid Duty Cycle, Electric Thermostat Heater Solenoid, Electric Vacuum Pump, Electric Wastegate Valve, Electronic Parking Brake (EPB) Failure Indication [US Only], Electronic Power Steering Fail, Electronic Stability Control (ESC) Fail, Electronic Stability Control (ESC) Indicator, Electronic Stability Control (ESC) Off, EMCC VLP Solenoid, Enable sunroof unit, Engine After Run Coolant Pump, Engine Oil Pressure Lamp Command, Engine Running Injector Kill Test, Engine Water Over Temperature Lamp Command, EOBD And Engine System Fault Lamp, EPS Adaptive Data Control, ESC (Electronic Stability Control) System Deactivation, ESIM Forced Monitor Test, ETC Throttle Follower Test, External Control Variable Displacement (ECVD), External Mirror Fold, External Mirror Unfold, Externalcrown Light Rear Left LED, Externalcrown Light Rear Right LED, Externally Controlled Variable Displacement (ECVD) Command (DC), Fader Level Settings, Fader Settings, Fan Climate Relay, FCW Indication Forward Collision Warning, FL Command Electrovalve, Flasher - Rear backup Left Light, Flasher - Rear backup Right Light, Flasher Front Left, Flasher Front Right, Flasher Rear - Lateral Left, Flasher Rear - Lateral Right, Fog Front Light Left, Fog Front Light, Fog Front Lights Left Right, Fog Lamps, Fog Light Led, Fog Lights, Fog Rear Light Left -T2 (952), Fog Rear Light Or Second Backup Light, Fog Rear Light Right -T2 (952), Fog Rear Lights -T2 (949), Forward Collision Warning Fail, Forward Collision Warning OFF, FR Command Electrovalve, Front Ceiling Light - Inadvertent Lights, Front Ceiling Light + Inadvertent Lights, Front Ceiling Light Command Enable, Front Ceiling Light, Front Driver Window Lifter Command Down, Front Driver Window Lifter Command Up, Front DRL Light Xenon, Front Fog Light Left, Front Fog Light Right, Front Fog Lights Halogen, Front Fog Lights, Front Foglights, Front Jet Wiper, Front Lateral Left Turn Lights, Front Lateral Right Turn Lights, Front Left Flasher, Front Left Heat Seat Request, Front Left Parking Light, Front Lock doors command, Front Mode Door Actuator Position, Front Parking Light, Front Passenger Window Lifter Command Down, Front Passenger Window Lifter Command Up, Front Position Light Xenon, Front Position-DRL Light Halogen, Front Right Flasher, Front Right Heat Seat Request, Front Right Parking Light,

Front Shut-Off Valve Request, Front SIDE Marker Command, Front Side Marker, Front Unlock, Front Wash, Front Wiper Test, Front Wiper, Fuel Filter Heater, Fuel Filter Heating, Fuel Injector 1 Control State, Fuel Injector 1, Fuel Injector 2 Control State, Fuel Injector 2, Fuel injector 3 Control State, Fuel Injector 3, Fuel Injector 4 Control State, Fuel Injector 4, Fuel Injector 5 Control State, Fuel Injector 5, Fuel Injector 6 Control State, Fuel Injector 6, Fuel Injector 7 Control State, Fuel Injector 7, Fuel Injector 8 Control State, Fuel Injector 8, Fuel Injector Balance, Fuel Pump Relay Command, Fuel Pump Relay Control State, Fuel Pump Relay, Functional Leds Control, Gas Injector Relay, Gear Lever Position Display Test, General Stop For All Actuators, Glow lamp command, Hazard Command LED, Hazard LED Command, Hazard LED, Head Lamp Wash Relay Command, Head Lamp Wash, Head Lamp Washer Relay, Headlamp DRL Parking Light Left Signal, Headlamp DRL Parking Light Right Signal, Headlamp Washer, Headlamps moving in the central vertical position, Headlamps moving in the highest position, Headlamps moving in the left limit position, Headlamps moving in the lowest position, Headlamps moving in the right limit position, Headlamps moving in the straight ahead position, Heated Rear Window Led Command, Heated Rear Window Relay Command, Heated Rear Window Relay, Heated Rear Window, Heated Seat Left Request, Heated Seat Right Request, Heated Steering Wheel Request, Heated Windows Command, Heater Rear Mirror, Heater Rear Window, Heating Driver Command, Heating Passenger Command, Heating Steering Wheel Command, 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 Enabled, High beam headlamp indication, High Beam Indicator, High BEAM Left Command, High Beam Left, High Beam Light Left, High Beam Light Right, High Beam Lights, High BEAM Right Command, High Beam Right, High Beam Xenon with shutter, High Beams Lights Halogen, High Beams Lights, High Beams, High Side For Diesel Filter Heater Relay Command, High Speed Fan Relay, High Speed Fan, Horn relay command, Horn Relay, Horn, Ice Led, Idle RPM Test, Ignition Coil 1, Ignition Coil 2, Ignition Coil 3, Ignition Coil 4, Indicator Lamp Airbag, Indicator LED Illumination Level, Indicator Leds Control, Injector 1 coil command, Injector 1 command, Injector 2 coil command, Injector 2 command, Injector 3 coil command, Injector 3 command, Injector 4 coil command, Injector 4 command, Instrument Panel Dimming, Instument Panel Dimming, 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, Internal Led Night Lights, Internal Night Lights, Internalcrown Light Rear Left LED, Internal crown Light Rear Right LED, Inverter Enable Command (949), Inverter Enable Command (952), Inverter Enable Command, Inverter Enable, Inverter Switch, Inverter, IP dimming command, Key LED PWM Duty, Key LED, Key lock command, Key Symbol Back-Light PWM Duty, Knob LED control, Lamp Control, Lane Departure Warning (LDW) Left Side, Lane Departure Warning (LDW) Right Side, Latch Cinch Test, Lateral Anti Tilt Sensor, Lateral Anti-tilt X Sensor, LC Clutch Volume Index Check, LC Solenoid, LCD Back-Light PWM Duty, LCD Symbols, LED Lock Inhibition Rear Widows Lifter, LEDS Position Activation, Left (Front/Central/Rear) Turn Lights, Left (Front-Central-Rear) Turn Lights, Left (Front-Rear) Parking Lights, Left Air Distribution Motor, Left Air Mix Motor, Left Air Mix Servo Motor Target Position, Left DRL, Left Front Park Lamp, Left Parking Lights, Left Rear Stop Light (Fixed), Left Rear Tail Light + Side Marker, Left Rear Tail Light, Left Rear Turn Lights (EMEA), Left Rear Turn-Stop (NAFTA), Left Rear Turn-Stop Light (Fixed), Left SBL Command, Left Turn Indicator, Left Turn Light Front-Lateral, Left Turn Light, Left Turn Lights, Left turn signal lamp indication, Left Turn Signal Lamp, Licence PLATE LED Lights Command, License Plate Lamp, License Plate Light, License Plate Lights Command, License Plate Lights, Liftgate Additional Parking Light Left And Right Command, Liftgate Parking Light Left And Right Command, LIN Anti Tilt Sensor Check, LIN Line Request Check, LIN Siren Check, LIN Ultrasonic Sensors Check, Lock Doors Command, Lock Inhibition Rear Widows Lifter LED, Lock Rear Doors Relay, Lock Unlock Doors LED, Longitudinal Anti Tilt Sensor, Loud Speaker Test, LOW BEAM Left

Command, Low Beam Left, Low Beam Light Left, Low Beam Light Right, Low Beam Lights Halogen, Low Beam Lights Left Right, Low Beam Lights, LOW BEAM Right Command, Low Beam Right, Low Beam Xenon, Low Beams, Low Fuel Lamp, Low Reverse Solenoid, Low Speed Fan Relay, Low Temp Passive Pump 2, Low-Reverse Solenoid, LPG Led Command, LR Clutch Volume Index Check, Main-Left Temp. Door Position, Microphone Test, Mid-Range Audio Level Settings, Mid-Range Settings, Mirror Heater, Mirror LED, Module Self Test, MProp Command (High Pressure), MS Solenoid, Multiair VVA Solenoid 1, Multiair VVA Solenoid 2, Multiair VVA Solenoid 3, Multiair VVA Solenoid 4, Neutral Gate Test (62TE), Neutral Gate Test (RFE), Night lighting command, Night lights, O2 1/1 Heater Duty-Cycle, O2 1/2 Heater Duty-Cycle, O2 Heater Test, O2 Sensor Heater Bank1 Sensor1, O2 Sensor Heater Bank1 Sensor2, O2 Sensor Heater Bank2 Sensor1, O2 Sensor Heater Bank2 Sensor2, OD Clutch Volume Index Check, On-Demand Self-Test, Over Drive Solenoid, Over-Drive Solenoid, Overdrive Switch Test (Non-RFE), OverDrive Switch Test (RFE), Overdrive Switch Test, Oxygen Sensor 1/1 Heater Duty Cycle, Oxygen Sensor 1/2 Heater Duty Cycle, Oxygen Sensor 1-1 Heater Duty-Cycle, Oxygen Sensor 1-2 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, Parking Assistant LED, Passenger and Rear Doors Unlock, Passenger Door Handle And Puddle Light LED Command, Passenger Door Lock Status LED Command, Passenger Door Power Window, Passenger Door Unlock, Passenger Doors Status - Deterrence LED, Passenger Heated Seat Relay, Passenger Seat Movement Relay Command, PEPS Ignition Switch LED Command, Power limitation function, Pressure Control Solenoid Valve, Proportional Purge Solenoid, Proportional Surge Solenoid, PTC Control (Relay), PTC Control, PTC High Power (Relay), PTC Low Power (Relay), Puddle Light Command Driver Side, Puddle Light Command Passenger Side, Puddle light Driver (Door handle and door panel), Puddle light Driver side, Puddle Light Driver, Puddle light Passenger (Door handle and door panel), Puddle light Passenger side, Puddle Light Passenger, Puddle Light Rear Driver(Door Handle And Door Panel), Puddle light Rear Left (Door handle and door panel), Puddle Light Rear Passenger(Door Handle And Door Panel), Puddle light Rear Right (Door handle and door panel), Puddle Light, Puddle Rear Light Left, Puddle Rear Light Right, Purge canister valve command, Purge Solenoid Duty Cycle, Purge Valve Duty-Cycle, Purge Vapors Test, QVPM Enable Command, Radiator Cooling Fan PWM Cntrl State, Radiator Cooling Fan PWM Control State, Radiator Cooling Fan PWM Duty-Cycle, Radiator Cooling Fan Relay 1 Control State, Radiator Cooling Fan Relay 2 Control State, Radiator-Condenser Cooling Fan Relay 1 Control State, Radiator-Condenser Cooling Fan Relay 2 Control State, Rain and Automatic Lights Sensors Check, Read VIN, Rear Ceiling Light - Inadvertent Lights, Rear Ceiling Light + Inadvertent Lights, Rear Ceiling Light 1st Row, Rear Ceiling Light 2nd Row, Rear Ceiling Light, Rear Ceiling Lights, Rear Defrost, Rear Department, Rear Door Status LED, Rear Fog Light / Side Marker Lights, Rear Fog Light or Second Backup Light - Side Marker Lights, Rear Fog Light or Second Backup Light, Rear Fog Light, Rear Fog Lights Left T2 Movable, Rear Fog Lights Right T2 Movable, Rear Fog Lights, Rear Fog T2 (Movable), Rear Heated Window, Rear HVAC Blower Motor, Rear Left Handle And Puddle Light LED Command, Rear Left Parking Light, Rear Left Position Light, Rear Left Turn Light, Rear Left window lifter command, Rear Load Compartment Status LED Command, Rear Parking Light - Side Markers, Rear Parking Light / Side Markers, Rear Parking Lights Command LED, Rear Parking Lights Command, Rear Reverse Light (Movable), Rear Reverse Light Left -T2 (952), Rear Reverse Light Right -T2 (952), Rear Reverse Lights -T2 (949), Rear Right And Left Tail T2 (Movable), Rear Right Handle And Puddle Light LED Command, Rear Right Parking Light, Rear Right Position Light, Rear Right Turn Light, Rear Right window lifter command, Rear Shut-Off Valve Request, Rear Stop Lights (Movable), Rear Trunk light, Rear Turn Lights Left EMEA, Rear Turn Lights Right EMEA, Rear Wash, Rear WINDOW Washer Command, Rear Window Washer, Rear Window Wiper (949), Rear WINDOW Wiper Command, Rear Window Wiper, Rear Wiper, Rec Motor, Recirc. Door Actuator Position, Recirculation Motor, Red LEDS Activation, Repetition

Driver Door Open For MTA (NCR), Repetition driver door open for MTA (Robotic Gear), Reverse Gear Clutch Test (62TE), Reverse Gear Clutch Test (Non-RFE), Reverse Gear Clutch Test (RFE), Reverse Gear Light, Reverse Gear Lights And Electrochromic Mirror Command, Reverse Gear Lights, Reverse Lamp, Right (Front/Central/Rear) Turn Lights, Right (Front-Central-Rear) Turn Lights, Right (Front-Rear) Parking Lights, Right Air Mix Motor, Right Air Mixing Motor, Right DRL, Right Front Park Lamp, Right Front Turn Light-Lateral, Right Parking Lights, Right Rear Tail Light (Fixed), Right Rear Tail Light, Right Rear Turn Lights (EMEA), Right Rear Turn-Stop (NAFTA), Right SBL Command, Right Temp. Door Actuator Position, Right Turn Indicator, Right Turn Light, Right Turn Lights, Right turn signal lamp indication, Right Turn Signal Lamp, RL Command Electrovalve, RR Command Electrovalve, Safety Indication Adaptive Cruise Control, Safety Indication Forward Collision Warning, Safety Indication Normal And Adaptative Cruise Control, Safety Indication Normal Cruise Control, Safety indication, SBMT (Supply Battery Monitoring Time), SBMT 0, SBMT -Supply Battery Monitoring Time, SBMT, SBMT2 (Supply Battery Monitoring Time), SDC Status Red LED, SDC Status White LED, Seat Belt Lamp, Secondary Air Pump, Secondary Air Solenoid, Set All Backlight Leds At PWM Value, Set All Functional Leds At PWM Value, Set Engine RPM Test, Set Engine RPM, SET PWM Display (Brightness), Set Transfercase Clutch Torque, Setting Dimming Levels (DISPLAY), Shift Lever Position Test (62TE), Shift Lever Position Test (Non-RFE), Shift Lever Position Test (RFE), Shift Lock Coil Command, Shift Lock Command, Shift Solenoid 1, Shift Solenoid 2, Shift Solenoid 3, Shift Solenoid 4, Shift Solenoid 5, Shift Solenoid 6, ShiftLock, Side Marker Front, Side Marker Lamps, Side Marker Lights Rear -T1 (952), Side Markers Command, Side markers, Siren Test, Small Leak Verification Test, Sport Led, SS Command LED, SS LED command, Step Light, Stop - Position - Turn Left Light 1, Stop -Position - Turn Left Light 2, Stop - Position - Turn Right Light 1, Stop - Position - Turn Right Light 2, Stop - Position Left Light 1, Stop - Position Left Light 2, Stop - Position Right Light 1, Stop -Position Right Light 2, Stop Start LED, Stop All Actuators, Stop And Start Led, Stop Lamp, Stop Light Left, Stop Light Right, Stop Light, Stop Parking Lights Left, Stop Parking Lights Right, Stop Parking Turn Lights Left 1, Stop Parking Turn Lights Left 2, Stop Parking Turn Lights Right 1, Stop Parking Turn Lights Right 2, StopStart LED Command, StopStart LED, Street Bending Light (SBL) Left, Street Bending Light (SBL) Right, Sunroof Abilitation, Surge Solenoid Control State, Surge Valve Solenoid, Tail LAMP Parking Light Left Command, Tail LAMP Parking Light Right Command, Tail LAMP Stop Light Left Command, Tail LAMP Stop Light Right Command, Tail Or Tail Side Marker Rear Left -T1 (949), Tail Or Tail Side Marker Rear Right -T1 (949), Tail Rear Right And Left -T2 (949), Tail Stop Or Tail Stop Turn Rear Left -T1 (952), Tail Stop Or Tail Stop Turn Rear Right -T1 (952), Tail Stop Rear Left -T2 (952), Tail Stop Rear Right -T2 (952), TCC Pressure Control Solenoid, TCM VIN Verification, Thermistor Test, Tone Test, Transmission Verification Test, Treble Level Settings, Treble Settings, Trunk Lamp, Trunk Latch Command relay, Trunk Light + Inadvertent Lights, Trunk Light Command, Trunk Light, Trunk Opening Relay Command, Trunk Opening Relay, Trunk Release Relay Command, Trunk Release Relay, Tumble Generator Valve, Turbocharger Pressure Actuator Command, Turn - Rear backup Left Light, Turn - Rear backup Right Light, Turn Front Lateral Lights Left, Turn Front Lateral Lights Right, Turn Front Light Left, Turn Front Light Right, Turn Light Front - Lateral Left, Turn Light Front - Lateral Right, TURN Light Front Left Command, Turn Light Front Left, TURN Light Front Right Command, Turn Light Front Right, TURN Light Lateral Left Command, TURN Light Lateral Right Command, Turn Light Rear -Lateral Left, Turn Light Rear - Lateral Right, Turn Rear Backup Left Light, Turn Rear Backup Right Light, Turn Rear Lateral Lights Left, Turn Rear Lateral Lights Right, Turn Rear Light Left -T1 (EMEA), Turn Rear Light Right -T1 (EMEA), Turn Stop Rear Left Light -T1 (NAFTA), Turn Stop Rear Right Light -T1 (NAFTA), UD Clutch Volume Index Check, UGDO (Universal Garage Door Open) enable command, Underdrive Solenoid, Under-Drive Solenoid, Universal Garage Door Open, Unlock doors command, Unlock Doors, Upstream lambda probe heater command, User Interface Test, Vacuum Pump Relay, Variable displacement oil pump command, Variable swirl

actuator closing command, Vehicle Speed Cluster, VLP Solenoid, VSO Regeneration Command, VVA Cylinder #1, VVA Cylinder #2, VVA Cylinder #3, VVA Cylinder #4, VVA Solenoids Pre-Energization, VVT Exhaust Phaser 1 Actuator, VVT Exhaust Phaser 2 Actuator, VVT Intake Phaser 1 Actuator, VVT Intake Phaser 2 Actuator, Waste gate valve command, Wastegate Solenoid Control State, Wastegate Solenoid Duty Cycle, Water In Fuel Filter Lamp Command, Welcome Lights Command, Window Heater Led, Window Lifter Switch Enable, Windshield heater, Windshield Heating, Windshield Washer Command, Windshield Washer Relay, Windshield Washer, Windshield Wiper Relay, Windshield wiper, Wiper Status

### **New BMW Coverage**

1 new Adjustment type special tests:

Reset Control Unit

1 new Actuation type special tests:

Start-up lane change warning sensors

#### **New Fiat Coverage**

**DTI TPBV Status** 

1 new Actuation type special tests:



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