

## Version 4.22

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### Overview

Version 4.22 update includes model year **2022** vehicle coverage and additional **ADAS** calibrations.

Over 6419 new special tests & 630 new system applications included in this update.

Software and coverage feature details provided in these release notes.

### ***New Coverage Highlights (Coverage details start on Page 2)***

#### **MY2022 Additions:**

- **Chevrolet** – Corvette, Express 4500
- **Genesis** – 2019-2020 G80
- **Honda** – Clarity
- **Jaguar** – XF
- **Mazda** – CX-30, CX-5, CX-9
- **Subaru** – WRX
- **Special Test Additions** – multiple brands
- **ADAS Coverage:**
  - **Acura** – Coverage added for 2022MY Models
  - **BMW** – Coverage added for 2022MY Models
  - **Chrysler** – Coverage added for 2022MY Models
  - **GM** – Coverage added for 2022MY Models
  - **Ford** – Coverage added for 2022MY Models
  - **New feature additions for 12 existing models for MY2022**

## ***New Coverage – USA Domestic***

### **Chrysler/Dodge/Jeep/Ram Coverage**

- Added coverage for 162 new system applications

#### **175 new Adjustment type special tests:**

ABS Bleed Brakes, ABS Initialization, Active Grill Shutter Replaced, Actuator Calibration, AFLS Calibration, ASCM Initialization, Auto High Beam Demo Mode Test, Bleed Brakes, Brake Pedal Calibration, 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 Misfire TLC, Clear Steering Pull Compensation, Clear Stored Accumulated Fuel Mass, Clear TPM Sensor Rolls Test Results, Clear Variable Line Pressure Counters, Closed Coupled Replacement, Clutch Pedal Learn, Configure License Plate Size, Coolant Three Way Valve Replaced, Coolant Three Way Valve, Diesel Particulate Filter Regeneration, DPF Pressure Sensor Reset, DPF Regen, DPF Replacement, Driving Regeneration Request, 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 Shipping Mode, FCM Enable Emissions Rolls Test Mode, Fleet Pin Reset, Headlamp Leveling, High Temp Cabin Valve Cal/Test, HVAC Actuator Calibration Test, Idle Shutdown Timer Adjustment, Initialize ABS, Initialize Cluster Configuration w/o Odometer Affect, Initialize CVT, Initialize ORC, 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, Low Temp Coolant Fill - Active Pump, Low Temp Coolant Fill - Passive Pump, Mass Air Flow Sensor Initialization, Microphone Output Short Test, Microphone Tone Test, Most Recent Cool Down Test Results, New Engine Installed, Non-Volatile Memory Reset, OCM System Verification Test, 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, Remote Start Temporary Disable, Reset Adaptive After Oil Change, Reset Adaptive Memory, Reset Adaptive Values, Reset Adaptives After Block Change, Reset After Replacement Of Lambda Sensor, Reset Air-Fuel Adaptives, Reset Camshaft Adaptives, Reset Clutch Capacity Adaption, Reset ECU, Reset Enhanced Automatic Oil Change Indicator, Reset Error Free Operation Time to 40 Hours, Reset H2O Lamp, Reset High Voltage Cable Open DTC, Reset Memory, Reset of Lambda Values, Reset of SCR Long Term Adaptation Factor, Reset Parameters to Default, Reset PTU Shift Counter, Reset SCR Mileage Counter to 200 Miles, Reset VCM Adaptives, Reset VVA Freeze Incorrect Request, 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, 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, Turn off Gain Mode Override, 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, ABS Bleed Brakes, ABSO Initialization, Bleed Brake Procedure, Clear TPM Sensor

Warnings, Configuration reset, Erase Calibration value storage, Exit Logistic Mode, Fire Protection System Activate, GSE Injector Adaptation, Longitudinal G Sensor Calibration, Modify Volumetric Sensors Sensitivity, Overboost counter reset, Phonic Wheel Ttooth Learning Reset, Pressure Sensor Calibration, Proxi Configuration, Purge fuel circuit reset, RDU Replacement, Reset Camshaft Adaptive, Reset Service Information, Seat Belts Alarm Enable, Steering Angle Calibration, Steering Angle Sensor Calibration, Throttle Body Self-Learn Activation, Turbocharger adaptive parameters reset, Update Front and Rear Axle Nominal Tire Pressure Values, Valve Variator Actuator (VVA) freeze wrong request reset, VCM Adaptive Parameter Reset After Block Change, VCM Adaptive Parameter Reset After Oil Change, VVL Cam Crank Relearn, Write VIN

### **1290 new Actuation type special tests:**

1st Gear Clutch Test (62TE), 1st Gear Clutch Test (Non-RFE), 1st Gear Clutch Test (RFE), 2-3 Skip Shift Solenoid Control State, 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 Prime Gear Clutch Test (RFE), 3rd Gear Clutch Test (62TE), 3rd Gear Clutch Test (Non-RFE), 3rd Gear Clutch Test (RFE), 4 Low Indicator, 4C Solenoid State, 4C Solenoid, 4th Gear Clutch Test (62TE), 4th Gear Clutch Test (Non-RFE), 4th Gear Clutch Test (RFE), 4WD AUTO Indicator, 4WD Auto, 4WD Indicator, 4WD LED, 4WD Lock Indicator, 4WD Low, 4WD Neutral Indicator, 4WD, A/C Compressor Clutch Relay Control State, A/C Relay, A/C Select, A/C, ABS fault Lamp, ABS Lamp, ABS Light, ABS, A-C Button, A-C Compressor Clutch Relay Control State, AC emergency shut off, AC Indicator, A-C INDICATOR, AC Off For Vehicle Manoeuvring, AC Request, A-C Request, A-C Select, ACC Enter In-Plant Mode, Activate Driver and Passenger Head Restraints, Activate Fuel Lift Pump, Activate TPM High Gain Mode, Active Exhaust Valve 1, Active Exhaust Valve 2, Active Grill Shutter Test, Actuate All Heaters, Actuate All Seat Heaters, Actuate All Vents, Actuator Test For SCR Device Relay, Actuator Test For Scrdevrly, Actuator Test Of Urea Back Flow Pump Actuator, Adjustable Pedal Disable Relay, Aftertreatment System Performance Test, Air Bag Lamp, Air Bag Light, Air Bag, Air Condition Relay Control, Air Condition, Air Spring Circuit Test, Air Suspension Leakdown Test, Alarm/Doors Status/Deterrence LED, All Doors/Central Locks, All Doors-Central Locks, Alternator Current Limit, Alternator Field Control State, Alternator Field Duty Cycle, Alternator Field Duty-Cycle, Alternator Output Voltage Setpoint, Alternator Test, Ambient Temperature, AMP Output Short Test, AMP Output Tone Test, ANC Output Short Test, Antenna Power, APM Status, 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, Atmosphere Valve Test, Audio Routing, Audio Test For Subwoofer Specific, Audio Test, Audio Video Signal Detection, AUTO Button, Auto Indicator, AUTO LED, Auto Shutdown (ASD) #1 Relay Control State (Left Bank), Auto Shutdown (ASD) #2 Relay Control State (Right Bank), Auto Shutdown (ASD) Relay Control State, Auto Shutdown Relay Control State, Auxiliary Coolant Pump, Auxiliary Fuel Pump, Average Ambient Temperature, BACK button, Background LED Illumination Level, Background LED State, Backlight 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, 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 Motor Speed, Blue Cooled Seat Indicators, Blue Heated Seat Indicators, Blue Temperature Bar, Boost Low Pressure Actuator, Boost Pressure Actuator, Boost Pressure, Brake Indicator, Brake Light, Brake State Output, Brake Switch, BRAKE Text, Brake Warning Lamp, BSM State, BTSI Coil Output Control, BTSI Control, BTSI Solenoid, Button 11 (Spare), Button 14 (Spare), Button 15 (Spare), Button 16 (Spare), Button 24 (Spare), Button 6 (Spare), Button 7 (Spare), Button 8 (Spare), Button Indicators, Button Symbol Backlight PWM Duty, Buttons/Encoder Control-Button 1 (Front Defrost), Buttons/Encoder Control-Button 10 (FCW), Buttons/Encoder Control-Button 12 (Back), Buttons/Encoder Control-Button 13 (Screen Off), Buttons/Encoder Control-Button 14 (ESP), Buttons/Encoder Control-Button 16 (PTS), Buttons/Encoder Control-Button 17 (Mute), Buttons/Encoder Control-Button 18 (Enter), Buttons/Encoder Control-Button 19 (Rear Defrost), Buttons/Encoder Control-Button 2 (Driver Temp Up), Buttons/Encoder Control-Button 20 (Passenger Temp Down), Buttons/Encoder Control-Button 21 (Auto), Buttons/Encoder Control-Button 22 (Driver Temp Down), Buttons/Encoder Control-Button 23 (Recirc), Buttons/Encoder Control-Button 3 (Fan Off), Buttons/Encoder Control-Button 4 (Driver Temp Up), Buttons/Encoder Control-Button 5 (AC), Buttons/Encoder Control-Button 9 (Eco), Buttons/Encoder Control-Rotary 1 Detents (Volume), Buttons/Encoder Control-Rotary 1 Direction (Volume), Buttons/Encoder Control-Rotary 2 Detents (Fan), Buttons/Encoder Control-Rotary 2 Direction (Fan), Buttons/Encoder Control-Rotary 3 Detents (Tune), Buttons/Encoder Control-Rotary 3 Direction (Tune), Buttons/Encoder Control-Rotary 4 Detents, Buttons/Encoder Control-Rotary 4 Direction, Buzzer Control, Cabin Temperature Sensor, Cargo Lamp, Cargo Light Indicator, Cargo Light, Catalyst Efficiency Test, CEGR H-Bridge Valve Duty Cycle, Center High Mount Stop Lamp, Center Stop Lamp, Central high mounted Stop Light (CHMSL), Channel 1 Audio Control, Channel 10 Audio Control, Channel 11 Audio Control, Channel 12 Audio Control, Channel 2 Audio Control, Channel 3 Audio Control, Channel 4 Audio Control, Channel 5 Audio Control, Channel 6 Audio Control, Channel 7 Audio Control, Channel 8 Audio Control, Channel 9 Audio Control, Charge Air Cooler Coolant Pump, Charge Port 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 (Malfunction Indicator Lamp), Check PCM Odometer, Chiller Shut-off Valve, 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 Output, Cold Start Aid Driver 1, Compressed Natural Gas, Compression Test, Compressor Circuit Test, Compressor Current, Control All Solenoids, Control the steering column, Convenience/Reading Lamp, Convenience-Reading Lamp, Coolant Bad Indicator, Coolant Good Indicator, Coolant High Temperature Auxiliary Electric Pump, Coolant Temp LED 1, Coolant Temp LED 2, Coolant Temp LED 3, Coolant Temp LED 4, Coolant Temp LED 5, Coolant Temp LED 6, Coolant Temp LED 7, Coolant Temp LED 8, Coolant Temp LED 9, Coolant Temp LEDs, Coolant Temperature, Coolant Three Way Valve Test, Cooldown Test, Cooled EGR H-Bridge Valve System Test, Cooled Seat Driver High Indicator, Cooled Seat Driver Low Indicator, Cooled Seat Driver Med Indicator, Cooled Seat Passenger High Indicator, Cooled Seat Passenger Low Indicator, Cooled Seat Passenger Med Indicator, Cooler Bypass Valve, Cooling Valve Position, Courtesy Lamps, Crankcase Ventilation Heater, Crankcase Ventilation, 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 Control State, Cylinder 4 Deactivation Solenoid, Cylinder 6 Deactivation Solenoid Control State, Cylinder 7 Deactivation Solenoid Control State,

Cylinder Balance Test, Dedicated DRL Lamp Left, Dedicated DRL Lamp Right, DEF (Reductant) Pressure Line Heater Test, DEF (Reductant) Tank Heater Test, DEF Dosing Injection Quantity, DEF Reductant Doser Prime Override Test, DEF Reductant Doser Pump Override Test, Diesel Cabin Heat 1, Diesel Cabin Heat 2, Diesel Cabin Heat 3, Diesel Cabin Heater #1, Diesel Cabin Heater #2, Diesel Cabin Heater #3, Diesel Cabin Heater 1, Diesel Cabin Heater 2, Diesel Cabin Heater 3, Diesel Cabin Heater 4, Diesel Fuel Heater Relay, Digital Inputs1 High Memory, Disable Level Control, Disable Passenger Airbag Lamp Request, Display Start Inhibit Data, DNA Status LED 3, Door Ambient Light State, Door Courtesy Lamp State, Door Handle Power Control, Door Handle Verification Test, Double Start Override Relay, DPF Lamp, DPF Reset Option, DR Solenoid, Driver Cooled Seat, Driver Heated Seat, Driver Side Seat Belt, Driver Temp Detents, Driver Temp Down Button, Driver Temp Rotary Direction, Driver Temp Up Button, DRL, DTI FUEL TRANSFER RLY, DTI LTR CLNT PMP, DTI SPRCHRGR BPV MOTOR, Dual Speed Fuel Pump Relay, Dual Speed Oil Pump Status, Dual Speed Oil Pump, Dual Tank Aux LP Relay, Duct Sensor - Floor Left, Duct Sensor - Floor Right, Duct Sensor - Panel Left, Duct Sensors - Panel Right, Duct Sensors -Panel Right, Duty Cycle Purge Solenoid, EAC Compressor Speed Request, Easy Entry/Exit, EBL Status, EC Mirror State, E-CALL Backlight LED, 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 Green Status LED, E-Call Red Day PWM, E-CALL Red Error LED, E-Call Red Night PWM, ECO Button, ECO Indicator, ECO ON-OFF Indicator, ECO, ECVD Compressor PWM Command, ECVD Compressor PWM Command~ECVD Compressor PWM Command, EGR Cooler Bypass, EGR DC Motor Sol Vlv Recir Vlv, EGR Duty Cycle, EGR Hi Pressure Motor Test, EGR Positioner, EGR Throttle Valve, EGR Valve Actuator Test, EGR Valve Replaced, EGR Valve Solenoid Duty Cycle, Electric seat movement Relay, Electric Thermostat Heater Solenoid Duty Cycle, Electric Thermostat Heater Solenoid, Electric Thermostat Heater, Electric Transmission Oil Pump, Electric Vacuum Pump, Electric Wastegate Valve, Electronic Stability Control Off, Electronic Stability Control, Electrovalve Even Gear Command, EMCC VLP Solenoid, Emergency Call Backlight LED PWM, Emergency Call Green LED PWM, Emergency Call Red LED PWM, Emissions Rolls Test Mode Is Active, Engine After Run Coolant Pump, Engine Check Lamp [MIL], Engine Digital Fan 1, Engine Digital Fan 2, Engine Off Injector Toggle Test, Engine RPM Control, Engine Running Injector Kill Test, Engine Speed Output, Engine Temp LEDs, Engine Temperature, Engine Warm Up, Enter Button, Enter Plant Mode, Enter, EPB Failure Lamp, EPB Service, EPB Warning Light, EQ Loudness Test, ESC Disable Lamp, ESC Indicator, ESC Malfunction Lamp, ESC Off, ESC ON-OFF Indicator, ESC, 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 Temp Sensor, Evaporator Temperature Sensor, Exhaust Brake Auto Green, Exhaust Brake Yellow, Exhaust Brake, Exhaust Gas Cooler Bypass Valve, Exhaust Gas Recirculation Valve, Extend Mileage With SCR Active Faults, Faceplate Controls-Eject, FAD Feedback Voltage, FAD Lock Request, FAD Supply Voltage, Fade Settings, Fan Clutch PWM Duty Cycle Output, Fan Clutch Test, Fan Off Button, Fan Rotary Detents, FCW Button, Fill Spring From Reservoir, First Pass Cool Down Test Results, First Row Driver Seatbelt Buckle Sensor-Switch, First Row Passengers Seatbelt Buckle Sensor-Switch, Flipper Glass 2, Foot Well, Foot Well/Halo Lamps, Foot Well-Halo Lamps, Frequency Step Selection, Front Blower Control, Front Blower Motor, Front Blower Potentiometer Knob Position, Front Blower Speed, Front Collision Off, Front Collison Off, FRONT DEFROST button, Front Defrost Indicator, Front Defrost, Front Fog Lamps, Front Fog, Front Jet Wiper, Front Left Heated Seat Button, Front Left Heated Seat Indicator, 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 Mode Potentiometer Knob Position, Front Off Road Camera Washer, Front Refrigerant Shut-off Valve, Front Right Heated Seat Button, Front Right Heated Seat Indicator, Front Temp Potentiometer Knob Position, Front Washer, Front Wiper (High/Low), Front Wiper (High-Low), Front Wiper (On/Off), Front Wiper (On-Off), Front/Rear Washer, Front-Rear Washer, Fuel Filter

Heater, Fuel Filter Heating, Fuel filter water level warn lamp, Fuel Filter Water Level Warning Lamp, 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 Injector Cleaning, Fuel Injector, Fuel Level LEDs, Fuel Level Output, Fuel Metering Unit Actuator, Fuel Metering Unit, Fuel Pre Supply Pump, Fuel Pressure Override, Fuel Pressure Regulated O/P (Bar), Fuel Pressure Regulator Valve, Fuel Pressure Regulator, Fuel Pump Relay Control State, Fuel Pump Relay, Fuel Pump, Fuel System Run Up Test, Functional LED Illumination Level, Functional LED State, Gas Injector Relay, Gasoline Indicator, Gated Park ZFII Output Control, Gated Park ZFII Output, Gear Position, Gear Selection, Generator Ramp Time, Generator Speed Threshold, Glow Lamp, Glow Plug, Glow Relay, Head Rest Relay, Headlamp Washer, 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 Button, Heated Steering Wheel indicator, Heated Steering Wheel, Heated Steering Wheel~Heated Steering Wheel, 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 Indicator, High Beam Light, High Beam, High Pressure Fuel Rail Test, High Pressure Fuel System Test, High Speed Engine Cooling Fan Control, High Speed Fan Relay, High Speed Fan, High Temp Aux Pump, High Temp Cabin Valve Rotation, High Temp Coolant Fill - Aux Pump, High Temp Shut-off Valve, High Voltage Battery Precharge Contactor Test, High Voltage Coolant Heater, Hill Ascending Button, Hill Ascending Indicator (Select Speed Lamp), Horizontal Motor Backward/Forward, Horn, HPCR Duty Cycle Output, HPCR Duty Cycle, HVAC Cool Down Test, HVAC Self Test, I/O Control All-Limp Home Mode active, I/O Control All-Red Lamp, I/P Illumination, 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 - Acc 1, Ignition Run - Acc 2, Ignition Run - Start, Ignition Run, 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 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 (Normally Open), Inlet Valve Left Front, Inlet Valve Left Rear (Normally Open), Inlet Valve Left Rear, Inlet Valve LF(Normally Open), Inlet Valve LR (Normally Open), Inlet Valve RF (Normally Open), Inlet Valve Right Front (Normally Open), Inlet Valve Right Front, Inlet Valve Right Rear (Normally Open), Inlet Valve Right Rear, Inlet valve RL, Inlet Valve RR (Normally Open), Inlet valve RR, Input Test, Instrument Panel Illumination Level Output, Intake Air Throttle Actuator Test, Intake Air Throttle Actuator, 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 Output, Intake Throttle Duty Cycle, Inverter Enable Relay, Inverter Status Indicator, IOD RELAY ON LSD, I-P Illumination, IPC Self Test, IRCM Heater, IRCM Relay Unlock Control, Key Pad Back Lighting, Keypad Backlight Control, KeySense, KIN ACC LED State, KIN Antenna Power, KIN LED Control, KIN OFF LED State, KIN RUN LED State, KIN Start/Stop LED State, KIN Start-

Stop LED State, Knob Lock State, L/U And SEL On Off Solenoid, L/U Solenoid Current, Lane Departure Warning ON-OFF Indicator, LC Solenoid, LDP Solenoid, LDW Warning Indicator, Leak Detection Pump Forced Monitor Test, Leak Detection Pump, LED Control-LED 1 (Auto Control), LED Control-LED 2 (EBL), LED Control-LED 3 (Front defrost), LED Control-LED 4 (recirc), LED Control-LED 5 (A/C), LED Test - Damping Mode Automatic Active, LED Test - Damping Mode Hard / Sport Active, LED Test - Damping Mode Soft Active, Left Rear Tail/Park Lamp, Left Air Catcher LED, Left Auxiliary High Beam, Left Backrest Heat Seat Linear PWM Request -Output, Left Cushion Heat Seat Linear PWM Request - Output, Left Day Light Lamp, Left Front Fog Lamps, Left Front Park Lamp, Left Front Turn Lamp, Left HID Lamp, Left High Beam Shutter, Left High Beam, Left Low Beam, Left Rear AUX Turn Lamp, Left Rear Fog Lamps, Left Rear Tail-Park Lamp, Left Rear Turn Lamp (BUX), Left Rear Turn Lamp, Left Rear Turn/Stop Lamp, Left Rear Turn-Stop Lamp, Left Reartail-Park Lamp, Left Reverse Lamp 2, Left Reverse Lamp State, Left Reverse Lamp, Left Side Markers, Left Signal Mirrors/Side Repeaters (BUX), Left Signal Mirrors-Side Repeaters (BUX), Left Signature Lamp, Left Solar Sensor Values, Left Temp Down Button, Left Temp Up Button, Left Trailer Tow Turn/Stop Lamp, Left Trailer Tow Turn-Stop Lamp, Left Turn Signal Indicator, Left Vent Seat Linear PWM Request -Output, LF Antenna Verification Test, License Plate Lamp WK -Right Rear Rail Lamp WD, License Plate Lamp, Lift Pump Relay, Linear Hall, Linear Solenoid A, Linear Solenoid B, Linear Solenoid C, Linear Solenoid D, Linear Solenoid E, Linear Solenoid F, Linear Solenoid G, Locate Learned Keys, LOCK 4WD, Low Fuel, LOW LED, Low Pressure Feed Valve 1, Low Pressure Feed Valve 2, Low Pressure Feed Vlv 1(Normal close), Low Pressure Feed Vlv 2(Normal close), Low Reverse Solenoid, Low Speed Fan Relay, Low Temp Active Pump, Low Temp Passive Pump 1, Low Temp Passive Pump 2, Low Temp Passive Pump, Low-Reverse Solenoid, LR Solenoid, LSU Heater 1, Main Left Temperature Actuator Position, Main/Left Temp Selected, Main-Left Temp. Door Actuator Position, Main-Left Temperature Actuator Position, Malfunction Indicator Lamp, Master ePT Wake Up Output 1, Master Ept Wake Up Output, Measure System Air Mass, Memory Seat ECU Self Test, Metering Unit Actuator, Metering Unit, Mid-Range Settings, MIL Lamp, Mirror Direction Control, Mirror Fold Window Control, Mirror Fold, 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 2 Actuator Position (Defrost Panel Door), Mode Button, Mode Selection, Mode, Motor A Control, Motor B Control, Motorized Thermistor-Cabin Temp, MS Solenoid, Multiair VVA Solenoid 1, Multiair VVA Solenoid 2, Multiair VVA Solenoid 3, Multiair VVA Solenoid 4, MUTE button, Mute Test, Mute, Neutral Gate Test (62TE), Neutral Gate Test (Non-RFE), Neutral Gate Test (RFE), Neutral LED, Neutral, NOx Sensor Replacement, O2 1/1 Heater Duty-Cycle, O2 1/2 Heater Duty-Cycle, O2 Heater Test, OBCM Wakeup, 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, Oil Pressure Bad, Oil Pressure Good, Oil Pressure Lamp, Oil Pressure LED 1, Oil Pressure LED 2, Oil Pressure LED 3, Oil Pressure LED 4, Oil Pressure LED 5, Oil Pressure LED 6, Oil Pressure LED 7, Oil Pressure LED 8, Oil Pressure LED 9, Oil Pressure LEDs, Oil Pressure Output, Outlet Valve FL, Outlet valve FR, Outlet valve front left activation, Outlet valve front right activation, Outlet Valve Left Front (Normally Closed), Outlet Valve Left Front, Outlet Valve Left Rear (Normally Closed), 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 (Normally Closed), Outlet Valve Right Front, Outlet Valve Right Rear (Normally Closed), Outlet Valve Right Rear, Outlet valve RL, Outlet Valve RR (Normally Closed), Outlet valve RR, Over Drive Solenoid On Time, Over Drive Solenoid, Over-Drive Solenoid, Overdrive Switch Test (Non-RFE), OverDrive Switch Test (RFE), Overdrive Switch Test, 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, Park Pawl Actuator Control, Parking Brake And Low Brake Fluid, Parttime LED, Passenger Airbag (PAB) Status, Passenger Airbag LED, Passenger Cooled Seat, Passenger Heated Seat, Passenger Occupant Detection Sensor (ODS), Passenger Seat Belt, Passenger Temp Detents, Passenger Temp Down Button, Passenger Temp Rotary Direction, Passenger Temp Up Button, Pedals Forward/Backward, Pilot 1 (USV Front, MCI Front -Normally Open), Pilot 1 (USV LF-RR, MCI LF-RR -Normally Open), Pilot 2 (USV Rear, MCI Rear -Normally Open), Pilot 2 (USV RF-LR, MCI RF-LR -Normally Open), PL Solenoid Current, Pneumatic Intercooler Bypass, Pneumatic Waste Gate, Police Passenger Un-Lock Motor, Position Lamp Telltale, Position Lamp, Position Lights, Power (OFF), Power Down, Power Mirror Feed Relay Control, Power On and Disable User Inputs, Power Side Step Module Actuation Test, PPPA ON-OFF Indicator, PPPA, 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 Indicator, PTS ON-OFF Indicator, PTS Switch Simulation, Puddle Lamp State, Pump Control, Pump, Purge Solenoid Duty Cycle, Purge Valve 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 Fan Duty Cycle, Radiator Jalousie ShutterPosition, Radiator-Condenser Cooling Fan Relay 1 Control State, Radiator-Condenser Cooling Fan Relay 2 Control State, Radio Volume, Radio, Rail Pressure Sensor Replacement, Rail Pressure, Ram Active Air Box Test, Ram Box, Range Select Downshift Test Routine, Range Select Downshift Voltage, Range Select Upshift Test Routine, Range Select Upshift Voltage, Read VIN, Ready, Rear Axle Lock, Rear Axle Locker Command, Rear Blower Speed, Rear Blower State, Rear Defrost Button (EBL), Rear Defrost Button, Rear Defrost Indicator, Rear Fog Lamps, Rear Fog Light Lamp, Rear Fog, Rear Heated Window, Rear Mode 1 Actuator Position, Rear Wiper, RECIRC button, RECIRC Indicator, Recirc, Recirc. Door Actuator Position, Recirculation Door Actuator Position, Recirculation LED, Recirculation pump activation, Recirculation Pump, Recliner, Red Brake Lamp, Red Hazard Button, Red Heated Seat and Steering Wheel Indicators, RED Heated Seat Indicators, Red Temperature Bar, Redundant Ignition RUN/START Feed Output Control, Redundant Ignition RUN-START Feed Output Control, Remote Start Antenna Test, Reverse Gear Clutch Test (62TE), Reverse Gear Clutch Test (Non-RFE), Reverse Gear Clutch Test (RFE), Reverse Lockout Solenoid Control State, Reverse Lockout Solenoid, Right Air Catcher LED, Right Auxiliary High Beam, Right Backrest Heat Seat Linear PWM Request -Output, Right Cushion Heat Seat Linear PWM Request -Output, Right Day Light Lamp, Right Front Fog Lamps, Right Front Park Lamp, Right Front Turn Lamp, Right HID Lamp, Right High Beam Shutter, Right High Beam, Right Low Beam, Right Rear Fog Lamps, Right Rear Park Lamp, Right Rear Tail/Park Lamp, Right Rear Tail-Park Lamp, Right Rear Turn Lamp (BUX), Right Rear Turn Lamp, Right Rear Turn/Stop Lamp, Right Rear Turn-Stop Lamp, Right Reartail-Park Lamp, Right Reverse Lamp #2, Right Reverse Lamp 2, Right Reverse Lamp State, Right Reverse Lamp, Right Side Markers, Right Signal Mirrors/Side Repeaters (BUX), Right Signal Mirrors-Side Repeaters (BUX), Right Signature Lamp, Right Solar Sensor Values, Right Temp Actuator Position, Right Temp Down Button, Right Temp Up Button, Right Temp. Door Actuator Position, Right Temperature Actuator Position, Right Temperature Selected, Right Trailer Tow Turn/Stop Lamp, Right



Trailer Tow Turn-Stop Lamp, Right Turn Signal Indicator, Right Vent Seat Linear PWM Request - Output, Right Vent Seat Linear PWM Request, Roller Learning Shut-Off, Rotary 4 Detents, Rotary 4 Direction, RT-LT Sidemarkers-RT-LT Applique Parklamps, SCR Inlet Temp Sensor Replacement, SCR Relay Actuation Test, SCREEN OFF button, Screen Off, Screen Test Pattern, SDAR Station Selection, Seat Belt Lamp, Seat Belt Light, Seat Belt, 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, Select Level Switches-Damping Mode Button, Self Test Routine, Sensor Rolls Test, SERV LED, Service Lamp, Set Engine RPM Test, Shift Lever Position Test (62TE), Shift Lever Position Test (Non-RFE), Shift Lever Position Test (RFE), Shift Solenoid 1, Shift Solenoid 2, Shift Solenoid 3, Shift Solenoid 4, Shift Solenoid 5, Shift Solenoid 6, Shift Solenoid A, Shutoff Correction Quantity, Shutoff Injector Quantity, Side Mirrors Heater Control, Skip Shift Solenoid, Small Leak Verification Test, Snow Plow Left Turn Lamp, Snow Plow Park Lamps, Snow Plow Right Turn Lamp, Snow Plow Switch #1, Snow Plow Switch #2, Snow Plow Switch #3, Snow Plow Switch #4, Snow Plow Switch 1, Snow Plow Switch 2, Snow Plow Switch 3, Snow Plow Switch 4, Software Test, SPARE LED LAMP DRIVER, SPARE RELAY 1 LSD, SPARE RELAY 2 LSD, Speaker Quadrant Selection, Split Cooling Drive Duty Cycle, Sport ON-OFF Indicator, Spring Deflate To Atmosphere, Spring Deflate to Reservoir, SRS Indicator Lamp Request, SRS Lamp, SRV Test, Start/Stop System, Starter Relay, Starter Solenoid (High), Starter Solenoid High, Starter Solenoid, Starter Status, Steering Wheel Linear PWM Request -Output, Stop - Start System Active Indicator, Stop / Start System Active Lamp, Stop All Actuators, Stop Start Confirmation, Stop/Start System Active, Stop-Start Button, Stop-Start Indicator, Stop-Start ON-OFF Indicator, Stop-Start System Active, Sun Shade Control, Surge Solenoid Control State, Surge Valve Solenoid, 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 Wiring Test, T Case Service Indicator Request, Tail Gate Lock, Tail Gate Unlock, T-Case Motor Duty Cycle, T-Case Motor Solenoid Lock, T-Case Motor-Motor Lock, T-Case Service Indicator Request, TCC Pressure Control Solenoid, 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 Off, Telltale - ESC, Telltale - ESP Off, Telltale - Park, Telltale - Position Lamp, Telltale - Rear Fog, Telltale ESP/BAS, Telltale-Tire Pressure Monitor, Telltale-Tire Pressure, Telltale-Tow Mode, Thermal System Enable, 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 Actuator, Throttle Valve, Tilt Mirrors in Reverse, Time Controlled Spring Fill, Timeout Time Flash To Pass, Timeout Time Paddle Shift Switches, Tire Pressure Monitoring, Tire Pressure, Tone Test, Topper Center Mounted Stop Lamp, TOPPER CHMSL, Torque Coupling Control, Tow-Haul Indicator, TOW-HAUL, TPM Sensor Rolls Test, TPMS Fault Lamp, Trac Cntrl Outlet Vlv 1(Normal open), Trac Cntrl Outlet Vlv 2(Normal open), Traction Control Indicator, Traction Control Outlet Valve 1, Traction Control Outlet Valve 2, Trailer Backup Lamps, Trailer BU Lamps, Trailer Tail Lamp Relay, Transfer Case 4WD/Lock/Part Lamp, Transfer Case AWD/Auto/Full Lamp, Transfer Case Low Lamp Request, Transfer Case Neutral Lamp Request, Transmission Component Tests, Treble Settings, Truck Bed Lighting Leds, Truck Cargo Lamps, Trunk/Flipper Glass Release Motor, Trunk-Flipper Glass Release Motor, Tumble Generator Valve, Tuner Rotary Detents, Tuner Rotary Direction, Turbo/VGT Component Replacement, Turn Left, Turn Right, Turn Signal Lamp State, Twilight Sensor Value, UConnect Live Apps Installation, UD Solenoid, UGDO Power Supply, Underdrive Solenoid, Under-Drive Solenoid, Unlock 1/Driver Lock, Unlock 1-Driver Lock, Unlock 2/Passenger Locks, Unlock 2-Passenger Locks, Unlock Run -Start, Unlock RUN-START, Urea (Reductant) Pressure Line Heater Actuation Test, Urea (Reductant) Tank Heater Actuation 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 Sway Green, Vehicle Sway White, Vehicle Sway Yellow, Vertical Front, Vertical Rear, Video Input Settings, Video Input, View Last Successful Remote Start Event Data, View Last VTA Trigger Cause Data, View Remote Start Abort Data, View Remote Start Inhibit Data, View Satellite Sensor Information, VLP Solenoid, Volume On-Off Button (Power On-Off), Volume Rotary Detents, Volume Rotary Direction, VTA Indicator LED, VVA Cylinder #1, VVA Cylinder #2, VVA Cylinder #3, VVA Cylinder #4

## ***Ford/Lincoln Coverage***

### **11 new Adjustment type special test:**

Clear Transmission Adaptive Tables, Damper Cold Start Initialization, Engine Oil Life Reset, Misfire Monitor Neutral Profile Correction, Relearn Vehicle Data, Reset KAM, Reset the Power Steering Control Module (PSCM) Learned Values, Ride Height Calibration, Steering Angle Sensor Calibration, Steering Wheel Position Sensor Calibration, VIN Learn

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

Actuator Supply Voltage -B- Control State, Air Conditioning Compressor Command State, Commanded Equivalence Ratio Air To Fuel Mixture Bank 1, Commanded Equivalence Ratio Air To Fuel Mixture Bank 2, Converter Pressure Control, Desired Engine Cooling Fan Speed, Desired Generator Voltage, Desired Line Pressure Control, Engine Coolant Bypass Valve Control Output, Engine Idle Shutdown Extended, Engine Revolutions Per Minute, Engine Running Fuel Injector Control, EVAP Canister Vent Valve, EVAP Leak Test, EVAP Purge/Vent Control, EVAP Vapor Blocking Valve, Evaporative Emission Canister Purge Valve Duty Cycle, Fuel Pump - Duty Cycle, Fuel Pump Relay, Heater Control For HO2S 11 And HO2S 21, Heater Control For HO2S 12 And HO2S 22, High Fan Test, Intake Manifold Runner Control, KOEO Self Test, KOER Self Test, Low Fan Test, On Demand Test, Output State Control Of Torque Converter, Power Balance, Relative Compression, Shift Solenoid F Commanded Current, Shift Solenoid Pressure Control A, Shift Solenoid Pressure Control B, Shift Solenoid Pressure Control C, Shift Solenoid Pressure Control D, Shift Solenoid Pressure Control E, Spark Advance - Control State, Transmission Forced Shift Control, Variable Camshaft Timing Exhaust Angle Desired, Variable Camshaft Timing Intake Desired Angle, Vehicle Mode

## ***General Motors Coverage***

- Added coverage for 120 new system applications

### **76 new Adjustment type special tests:**

Ambient Air Temperature Calculation Reset, Automated Brake Bleed, Automatic Headlamp Leveling Sensor Learn, Backup Battery Timer Reset, BARO Sensor Reset, Brake Pedal Position Sensor Learn, Brake Pedal Travel Sensor Learn, Brake Pressure Sensor Calibration, Brake System Plunger Motor Position Sensor Learn, Brake System Plunger Pressure Rise Starting Point Learn, CAN Bus Configuration Learn, Clear Manufacturer Enable Counter, Control Module Reset, Copy And Paste TPM Information, Crankshaft Pos Variation Learn, Cylinder Deactivation Exhaust Flow Valve Learn, Engine Block Coolant Valve Position Learn, Engine Coolant Control Valve Learn, Engine Coolant Pump Data Reset, Engine Oil Life Reset, Exhaust Flow Control Valve Learn, Front Axle Brake Pad Life Monitoring Reset, Fuel Pump Driver Control Module Configuration, Fuel Pump Trim Reset, Fuel Rail Pressure Relief Valve Learned Values Reset, Fuel Trim Reset, Heated Oxygen Sensor Heater Resistance Learned Values Reset, HO2S Heater Learn, HO2S Learned Values Reset, HVAC Actuators Learn, HVAC Afterblow Configuration, Idle Learn Reset, Intake System Learned Values Reset, Invalidate All Fobs, License Compliance Materials

Download Error Counter Reset, O2 Heater Resistance Reset, Park Brake Calibration, Particulate Filter Pressure Sensor Reset, Particulate Filter Regeneration, Program Key Fob 1, Program Key Fob 2, Program Key Fob 3, Program Key Fob 4, Radio Favorites Reset, Rear Axle Brake Pad Life Monitoring Reset, Rear Gate Driver Information Center Message Reset, Reset High Voltage Disable Request After Crash Event Detected, Reset Particulate Filter, Reset Teen Driver Key PIN, RVS Disable History Reset, Steering Angle Sensor Calibration, Steering Wheel Angle Sensor Learn, Steering Wheel Angle Sensor Offset Calibration, Steering Wheel Angle Sensor Reset, Throttle Body Idle Air Flow Compensation Reset, Tire Pressure Sensor Registration, Tire Pressure Sensor Signal Reset, Tire Type/Pressure Selection, Transmission Adaptive Pressure Reset, Transmission Clutch 1 Volume Learn, Transmission Clutch 2 Return Spring Learn, Transmission Clutch 2 Volume Learn, Transmission Clutch 3 Return Spring Learn, Transmission Clutch 3 Volume Learn, Transmission Clutch 4 Return Spring Learn, Transmission Clutch 4 Volume Learn, Transmission Clutch 5 Return Spring Learn, Transmission Clutch 5 Volume Learn, Transmission Service Fast Learn, Turbocharger Learned Values Reset, Turbocharger Wastegate Learn, Vehicle Dynamic Sensor Offset Calibration, Vehicle Longitudinal Accelerometer Sensor Learn, WLAN Password Reset, WLAN Service Set Identifier (SSID) Reset, Yaw Rate Sensor Learn

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

A/C Compressor Clutch, A/C Relay, Accessory Circuit 1, Accessory Circuit 2, Accessory Circuit 3, Accessory Circuit 4, Activate Rear Park Brake Service Position, Active Grill Air Shutter 1, Active Grill Air Shutter 2, Active Grill Air Shutter System, Active Grille Air Shutter 2, Active Grille Air Shutter, Air Cleaner Monitor Setup, Assist Step Courtesy Lamp, Audio Source Control, Autostart/Autostop, Auxiliary Coolant Pump Relay, Auxiliary Coolant Pump Speed, Backup Lamps, Blower Motor, Brake Hydraulics Test, Brake System Hydraulics Corner Test, Center High Mounted Stop Lamp, Charge Air Cooler Coolant Pump Speed, Compression Test, Control Functions, Cooling Fan 2, Cooling Fan 3, Cylinder Deactivation Exhaust Flow Control Valve, Cylinder Deactivation System, Cylinder Power Balance, Deactivate Brake Boost System, Deactivate Rear Park Brake Service Position, Depressurize Fuel System, Diesel Intake Air Flow Control Valve Position, Driver Seat - Blower Command, Driver Seat Cushion Heating, Driver Seat Cushion Left Front Haptic Movement, Driver Seat Cushion Right Front Haptic Movement, EGR System Flow Deviation Service Bay Test, Engine Block Coolant Control Valve Position, Engine Controls Ignition Relay, Engine Controls Ignition Supply Voltage, Engine Coolant Control Valve Mode, Engine Coolant Control Valve Position, Engine Coolant Control Valve, Engine Coolant Fill, Engine Coolant Flow Control Valve Position, Engine Coolant Pump Relay, Engine Coolant Pump, Engine Cooling Fan 2, Engine Cooling Fan, Engine Mount Actuator Output 1, Engine Mount Actuator Output 2, Engine Oil Pressure Control Solenoid Valve, Engine Oil Type Setup, Engine Speed Control, Engine Speed, Erase Valet Mode Code, EVAP Canister Purge Valve, EVAP Purge Pump, EVAP Purge/Seal, EVAP Service Bay Test, EVAP Vent Solenoid, Evaporative Emission Canister Vent Valve, Exhaust Camshaft Position Actuator Position, Exhaust Camshaft Position Actuator, Exhaust CMP Actuator Solenoid Bank 1, Exhaust Control Valve Position, Exhaust Flow Control Valve System, Exhaust Gas Recirculation Valve 2, Exhaust Gas Recirculation Valve Position, Exhaust Gas Recirculation Valve, Exhaust Pressure Regulator Valve Position, Fog Lamps, Forward Collision Alert Switch, Front Suspension Position Sensor Trim Height, Fuel Control Loop Status, Fuel Heater, Fuel Injector Balance, Fuel Pressure Regulator 2, Fuel Pressure Regulator, Fuel Pressure, Fuel Pump Enable, Fuel Pump Speed, Fuel Pump, Fuel Rail Pressure, Fuel Trim Enable, GEN L-Terminal, Glow Plugs, Green Indicator, Hands-Free Sensor Lamp Command, Headlamp Leveling Motors, Head-Up Display Pattern Check, High Fuel Pressure Limiter Valve Test, High Side Driver 1, High Side Driver 2, HO2S Bank 1 Sensor 1 - Heater, HO2S Bank 1 Sensor 2 - Heater, HO2S Bank 2 Sensor 1 - Heater, HO2S Heater Sensor 1, HO2S Heater Sensor 2, Ignition Timing Retard, Illuminate All Indicators, Info Display Dimming, Info Display Test, Instrument Cluster Gauge Sweep, Intake Camshaft Position Actuator Position, Intake Camshaft Position Actuator, Intake CMP Actuator Solenoid, Intake Manifold Runner Control Valve, Internal Combustion Engine Autostart/Autostop, Key Fob Button Test,

Lane Departure Warning Indicator, Lane Departure Warning Switch, Left Assist Step Motor, Left Daytime Running Lamp, Left Front Corner, Left Front Park Lamp, Left Front Shock Absorber Actuator, Left Front Turn Signal Lamp, Left Headlamp Vertical Motor, Left High Beam, Left Low Beam, Left Rear Corner, Left Rear Shock Absorber Actuator, Left Rear Turn Signal Lamp, Left Rear Turn Signal/Stop Lamp, Left Side Marker Lamp Command, Left Stop Lamp, Left Tail Lamp, Left Trailer Tow Turn/Stop Lamp, Left Turn Signal, License Plate Lamps, Line PC Solenoid, Line Pressure Control Solenoid Valve, Malfunction Indicator Lamp, Mass Airflow Sensor, Mirror Folding Control, Misfire Graph, Next Available Slot, Nitrogen Oxides Catalytic Converter Reductant Loading Reset, O2 Sensor Heater Bank 2 Sensor 2, Object Detection Alert Indicators, Oxygen Sensor 1-1 Heater, Oxygen Sensor 1-2 Heater, Oxygen Sensor 2-1 Heater, Oxygen Sensor 2-2 Heater, Parking Assist Switch LED, Parking Lamps, Particulate Filter Regeneration Enable, Passenger Seat - Blower Command, Passenger Seat Cushion Heating, PC Solenoid 3, Phone Call Test, Power Mode Timeout, Pressure Control Solenoid Valve 2, Pressure Control Solenoid Valve 4, Pressure Control Solenoid Valve 5, Pressure Control Solenoid Valve, Proactive Alerts, Radio Tuner AM Frequency, Radio Tuner FM Frequency, Rear Cross Traffic Audible Alert, Rear Cross Traffic Visual Alert, Rear Differential Clutch Motor Current, Rear Fog Lamps, Rearview Camera Display, Red Indicator, Reductant Heater 2, Reductant Heater 3, Reductant Heater, Reductant Injection Quantity Test, Reductant Injector, Reductant Pump, Reductant Purge Valve, Reductant System Leak Test, Reductant System Malfunction Warning Service Bay Test, Reductant System Tamper Warning Service Bay Test, Right Assist Step Motor, Right Daytime Running Lamp, Right Front Corner, Right Front Park Lamp, Right Front Shock Absorber Actuator, Right Front Turn Signal Lamp, Right High Beam, Right Low Beam, Right Rear Corner, Right Rear Shock Absorber Actuator, Right Rear Turn Signal Lamp, Right Rear Turn Signal/Stop Lamp, Right Side Marker Lamp Command, Right Stop Lamp, Right Tail Lamp, Right Trailer Tow Turn/Stop Lamp, Right Turn Signal, Seat Back Horizontal Movement, Seat Back Side Bolster Movement, Seat Belt Retractor Motor, Seat Cushion Front Vertical Movement, Seat Cushion Rear Vertical Movement, Seat Cushion Side Bolster Movement, Seat Horizontal Movement, Seat Lumbar Support Horizontal Movement, Seat Lumbar Support Vertical Movement, Security Indicator, Sensor Supply Voltage, Shift Solenoid 1, Shift Solenoid 2, Shift Transmission Gear, Shift Transmission, Spark Retard, Speech Recognition, Starter Drive, Starter Motor, Starter Pinion Solenoid Actuator Relay, Starter Relay, Steering Column Adjustment, Suspension Position Sensor Trim Height, TC Wastegate Solenoid, TCC Control Solenoid, TCC Pressure Control Solenoid Valve - Dynamic Test, TCC Pressure Control Solenoid Valve - Static Test, TCC Pressure Control Solenoid Valve, Throttle Position, Throttle Sweep, Torque Converter Clutch, Trailer Backup Lamps, Trailer Brake Duty Cycle, Trailer Brake Relay, Trailer Park Lamps, Transmission Accumulator Solenoid Valve, Transmission Clutch Learn Status, Transmission Control Solenoid Valve 1 Current, Transmission Control Solenoid Valve 1, Transmission Control Solenoid Valve 2 Current, Transmission Control Solenoid Valve 2, Transmission Control Solenoid Valve 3 Current, Transmission Control Solenoid Valve 3, Transmission Control Solenoid Valve 4 Current, Transmission Control Solenoid Valve 4, Transmission Control Solenoid Valve 5 Current, Transmission Control Solenoid Valve 5, Transmission Control Solenoid Valve 6 Current, Transmission Control Solenoid Valve 6, Transmission Control Solenoid Valve 7 Current, Transmission Control Solenoid Valve 7, Transmission Control Solenoid Valve 8 Current, Transmission Control Solenoid Valve 8, Transmission Control Solenoid Valve 9, Transmission Cooling Fan Duty Cycle, Transport Mode, Turbo Charger / Super Charger Bypass Valve, Turbocharger Bypass Solenoid Valve, Turbocharger Wastegate Actuator, Turbocharger Wastegate Position, Turbocharger/Supercharger Boost Control Position, Vehicle Health Data Upload, Wait to Start Indicator, Windshield Washer Pump, Windshield Wiper Motor, Windshield Wiper Relay

## ***New Coverage – USA Asian***

### **Honda/Acura Coverage**

- Added coverage for 66 new system applications

#### **44 new Adjustment type special tests:**

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

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

A/C Clutch, ABS Brake Light Relay/TSA Relay Test, ABS ESS Forced Indication, ABS Solenoid Test, ABS VSA Test, ACC Alarm Test, ACC Brake Actuator, ACC Indicator Light, ACC Information Display, ACC Relay, Accessory, Accumulator Pressure Test, ADJ Motor, AFS Reflector, Air Bypass Valve Control Solenoid (ABV), All Injectors OFF, Assistant Door Courtesy Light, Assistant Door Mirror Motor Down, Assistant Door Mirror Motor Left, Assistant Door Mirror Motor Right, Assistant Door Mirror Motor Up, Assistant Door Pocket Illumination Light, Assistant Outer Handle Illumination Light, Assistant Remote Switch Illumination Light, Assistant Side Power Window Motor Down, Assistant Side Power Window Motor Up, Assistants Inner Handle Illumination Light, Auto Lock Cancel Switch, Automatic Headlights, Automatic Returning Distance, Battery Fan High Speed Test, Battery Fan Low Speed Test, Battery Fan Mid Speed Test, Battery Fan Test, Both Sides Engagement Clutch Coil Test, Brake light relay test, BSI Buzzer Status, BSI Fail Lamp, BSI Indicator On, BSI System Fail, BSI System Status, BSI Unavailable, Buzzer, CARD BATT Indicator Turn On, Cargo Light Drive UV Only, Cargo Light Drive, Charge LID Relay, Clean Left Side Radar, Clean Right Side Radar, Clear History Of Switch device, Climate Ctrl Check, Clutch Pressure Control (Linear) Solenoid A, Clutch Pressure Control (Linear) Solenoid B, Clutch Pressure Control (Linear) Solenoid C, Clutch Pressure Control (Linear) Solenoid D, Clutch Pressure Control Solenoid A, Clutch Pressure Control Solenoid B, Clutch Pressure Control Solenoid C, CMBS Brake, Column Telescopic Motor - Full Down, Column Telescopic Motor - Full Up, Column Tilt Motor - Full Down, Column Tilt Motor - Full Up, Communication Status Check, Communication Using Cabin Front Antenna, Communication Using Cabin Middle Antenna, Communication Using Cabin Rear Antenna, Communication Using Driver Antenna, Communication Using Front Passenger Antenna, Communication Using Rear Driver Antenna, Communication Using Rear Passenger Antenna, Communication Using Trunk Room Antenna, Communication Using Trunk/Tailgate Antenna, Cruise Control Cancel History, CS FS Antenna, CTM Buzzer Status, CTM System Fail, CTM System Status, Daytime Running Light (Canada), Daytime Running Light Output, Daytime Running Light Relay, DC Output Cabin Front Antenna, DC Output Cabin Middle Antenna, DC Output Cabin Rear Antenna, DC Output Driver Antenna, DC Output Front Passenger Antenna, DC Output Rear Driver Antenna, DC Output Rear Passenger, DC Output Trunk Room Antenna, DC Output Trunk/Tailgate Antenna, Detect Equipped Honda Body Systems, Display Card Batt, Display Do not have key, Display No Card, Door Lock

Without Answer Back, Door Lock, Lock Actuator, Door Lock, Unlock Actuator, Door Unlock Without Answer Back, Driver Door Courtesy Light, Driver Door Lock Unlock Actuator, Driver Door Mirror Motor Down, Driver Door Mirror Motor Left, Driver Door Mirror Motor Right, Driver Door Mirror Motor Up, Driver Door Pocket Illumination Light, Driver Door Power Window Motor - Down, Driver Door Power Window Motor - Up, Driver Inner Handle Illumination Light, Driver Outer Handle Illumination Light, Driver Rear Door Courtesy Light, Driver Remote Switch Illumination Light, Driver Side Power Window Motor Down, Driver Side Power Window Motor Up, DRL Relay, DUAL Indicator, DWS/Indirect TPMS Parameter Configuration Message, EGR Tests, Electric Current of Linear Solenoid CPC, Electric Current of Linear Solenoid DN, Electric Current of Linear Solenoid DR, Electric Current of Linear Solenoid SC, EU DRL, EVAP Solenoids Test, EXT F (Cabin Front Antenna), EXT FR AS (Passenger's Antenna), EXT FR DR (Driver's Antenna), EXT INTTRUNK (Trunk Room Antenna), EXT M (Cabin Middle Antenna), EXT R (Cabin Rear Antenna), EXT RR AS (Passenger Side Rear Passenger's Antenna), EXT RR DR (Driver Side Rear Passenger's Antenna), EXT RT (Cabin Rear Tray Antenna), EXT Side-Glass AS (Side-Glass Passenger Antenna), EXT Side-Glass DR (Side-Glass Driver Antenna), EXT TR (TRUNK Or TAIL-GATE Antenna), Exterior Buzzer Output (Short Time), Exterior Buzzer Output(Long Time), Exterior Buzzer Output, Exterior BUZZER, External Buzzer ON, Fail Wipe Signal, FCAN Authorized Flag, FI Wakeup, Flash Left Side Indicator, Flash Right Side Indicator, Floor Light, Foot Light, Forced Control Of Electric Current Of Linear Solenoid D, Forced Control Of Lockup Clutch, Forced non assist mode, FR DEICER RLY, FR-DEF Indicator, Front ACM Solenoid, Front And Rear ACM Solenoid, Front Center Detection Result, Front Defroster Relay, Front Detection Sound Request, Front Display - Backlight, Front Fog Light, Front Left Detection Result, Front Panel Module, Front Right Detection Result, Front Washer Motor, Front Wiper High Speed, Front Wiper Low Speed, Front Wiper Motor (High), Front Wiper Motor (Low), Frontal Crash Detection Signal Output, Fuel Lid, Fuel Pump OFF, Fuel Pump ON, G/Box Relay, Gate Light, Gear Shift, Glass Hatch Open, Green LED, Hazard Flashers, Hazard Relays, Head Light (High), Head Light High, Head Light Low, Head Light, Headlight Backup, Headlight Cleaner, Headlight Washer Motor, Headrest Motor, High Beam Support System Operation, High Wipe Signal, Horn, Hydraulic Booster CAS Function Test, IGNCONT Line, Ignition Key Light, IGNTRX Line Turn To Low Level, IGNTRX Line, Immobilizer Indicator Turn On, Immobilizer Lamp, IMOCONT Line, IMS1 Output, IMS2 Output, IMT(IMRC) Activation, IMT(IMRC) Test, Indicator, INH Solenoid For Start Clutch Type, Initiator Operation Check, Injector Kill Test, Intake VTC Test, Interior Buzzer Output, Interior Light Cut, Interior Light, Interior Small Light, Intermittent Wipe Signal, Internal Buzzer ON, ISO Warning Light, Key Switch Out Line Turn To On, Keyless Buzzer, keyless Check, Left And Right Parking Actuator Control, Left BSI Radar Unavailable, Left Front CAS Solenoid, Left Front Pulser, Left Front Solenoid, Left Front TCS Solenoid, Left Front VSA Solenoid, Left Power Mirror Full Down, Left Power Mirror Full Left, Left Power Mirror Full Right, Left Power Mirror Full Up, Left Power Sliding Door - Buzzer, Left Power Sliding Door - Closer Motor, Left Power Sliding Door - Clutch, Left Power Sliding Door - Drive Motor - Close, Left Power Sliding Door - Drive Motor - Open, Left Power Sliding Door - Release, Left Rear Power Window Motor - DOWN, Left Rear Power Window Motor - UP, Left Rear Power Window Motor Down, Left Rear Power Window Motor Up, Left Rear Pulser, Left Rear Solenoid, Left Rear VSA Solenoid, Left RR Slide Relay, Left Side Engagement Clutch Coil Test, Left Side Indicator, Left Slide Actuator, Left Sliding Door Lock, Left Sliding Door Unlock, Left Turn Signal Lamp, Lights Off Using Backup Line, Lights On Using Backup Line, LIN Washer, LIN Wiper Assembled Position Operation, Lock/Unlock All Doors, Lockup Clutch, Low Wipe Signal, Lumbar Horizontal Motor, MA EPS CONTROL ON/OFF, MA EPS Switching, Maintenance Position Front Wiper, Map Light Off, Master Cylinder Pressure Test, Memory Buzzer, Memory Indicator 1, Memory Indicator 2, Memory Seat Indicator 1, Memory Seat Indicator 2, Memory Switch Illumination Light, Meter Buzzer, Navigation LCD Display Segment, No CARD Indicator Turn On, No Rain Condition Signal, No Wipe Signal, Occupied Signal Output, Off-Board EVAP Test (Level 2) Support, Parking Lights, Passenger Door Power Window - Down, Passenger Door Power Window - Up, Passenger Rear Door Courtesy Light, Power Seat - Front Up/Down Motor - Full Down, Power Seat - Front Up/Down Motor -

Full Up, Power Seat - Rear Up/Down Motor - Full Down, Power Seat - Rear Up/Down Motor - Full Up, Power Seat - Recline Motor - Full Backward, Power Seat - Recline Motor - Full Forward, Power Seat - Slide Motor - Full Backward, Power Seat - Slide Motor - Full Forward, Power Tailgate Clutch, Power Window Relay, Power Window RLY Rr, Pressure Test Assistance mode, Pressure Test, PTG Motor Close, PTG Motor Open, PTG Release Close, PTG Release, PuddleLtl, Purge Cut Solenoid (PCS) - Close, Purge Sol Cut Solenoid (PCS) - Open, Purge Sol=Close, Vent Sol=Close, Purge Sol=Close, Vent Sol=Open, Purge Sol=Open, Vent Sol=Close, Radiator Fan, Rain Condition Signal, Rear ACM Solenoid, Rear Assistant Door Courtesy Light, Rear Blower, Rear Center Detection Result, Rear Defroster RLY, Rear Defroster, Rear Detection Sound Request, Rear Differential Air Purge, Rear Differential Oil Pressure Sensor Check, Rear Driver Door Courtesy Light, Rear Fog Lamp, Rear Left Detection Result, Rear Left Door Courtesy Light, Rear Left Inner Handle Illumination Light, Rear Right Detection Result, Rear Right Door Courtesy Light, Rear Right Inner Handle Illumination Light, Rear Seat Switch Light, Rear Washer Motor, Rear Wiper Motor, Recall Memory Position, RECIRC Indicator, Red LED, Regenerative Brake Test, Returning Operation, RF1 RXVCC, RF1 TXD Line, RF1 TXVCC, RF2 RXVCC, RF2 TXD Line, RF2 TXVCC, RF2 Unit RXVCC Power On, Right BSI Radar Unavailable, Right Front Pulser, Right Front Solenoid, Right Front VSA Solenoid, Right Power Mirror Full Down, Right Power Mirror Full Left, Right Power Mirror Full Right, Right Power Mirror Full Up, Right Power Sliding Door - Buzzer, Right Power Sliding Door - Closer Motor, Right Power Sliding Door - Clutch, Right Power Sliding Door - Drive Motor - Close, Right Power Sliding Door - Drive Motor - Open, Right Power Sliding Door - Release, Right Rear Power Window Motor - DOWN, Right Rear Power Window Motor - UP, Right Rear Power Window Motor Down, Right Rear Power Window Motor Up, Right Rear Pulser, Right Rear Solenoid, Right Rear VSA Solenoid, Right RR Slide Relay, Right Side Engagement Clutch Coil Test, Right Side Indicator, Right Slide Actuator, Right Turn Signal Lamp, RR-DEF Indicator, S.U.E. Operation For AH-AWD, Security Indicator, Security Net Line Turn To Low Level, Self Check, Self Diag Test, Self-Diagnostic Function, Serial Line Status Check, Shift Lock Solenoid, Shift Solenoid A, Shift Solenoid B, Shift Solenoid C, Shift Solenoid D, Shift Solenoid E, Side or Rear Crash Detection Signal Output, SMART Indicator Turn On, SMART KEY OUT, SMART Lamp, S-Net Line, Solenoid Valve Activation, Starter Switch Light, Store Memory Position, Sub Throttle, Sunroof Close, Sunroof Open, System Check, TC Bypass Valve, Throttle Actuator Control Test, Tilt Mirror, Tire Air Low Indicator, TP Position Check, TPMS Warning Light, Trunk (T/G), TSA Relay Test, Turbo Boost Control Solenoid V, Turn On Left Side Alert, Turn On Right Side Alert, Turn On Right Side Indicator, Unlock Trunk, Upper Park Position Front Wiper, Vent Shut Solenoid Valve (VSV) - Close, Vent Shut Solenoid Valve (VSV) - Open, VTEC Solenoid 1, VTEC Solenoid 2, VTEC Solenoid, VTEC Test, Warning Lamp, Warning light activation, Waste Gate Solenoid (WGS), Work LT

## **Hyundai/Genesis Coverage**

- Added coverage for 47 new system applications

### **16 new Adjustment type special tests:**

Adaptive Value Backup Input (ECU Transfer Assy replacement, Adaptive Value BackUp Input (ECU replacement), Air Bleeding Mode, Assembly Check(ECU Replacement), Auto Detected Configuration Reset, Auto Variant Coding, HUD Calibration, Longitudinal G Sensor Calibration(HAC/DBC Only), Reset Adaptive Values, SAHLS Sensor Origin Point Setting, Steering Angle Sensor (SAS) Calibration, Vehicle Name Writing, WCT Reprogram, Wheel Sensor ID Writing, Write VIN, Zero Re-calibration of Occupant Classification Sensor

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

(LED) DRL Lamp LH, (LED) DRL Lamp RH, 3LH SBR Left Indicator, 3RH SBR Center Indicator, A-C Compressor Relay, ACC Relay, Activate Assist Side Antenna, Activate Driver Side Antenna, Activate Hat

Shelf Antenna, Activation Switch LED, Active Air Flap Test, Actuator Control - Apply, Actuator Control - Release, AFLS AIMG Mode, All Door Lock Signal Output(to PTGM), All LEDs, Assist Door Courtesy Lamp Output, Assist Door Courtesy Lamp, Assist Door Lock Indicator, Assist Outside Mirror Down, Assist Outside Mirror Left, Assist Outside Mirror Right, Assist Outside Mirror Up, Assist Power Window Down (Option), Assist Power Window DOWN, Assist Power Window Up (Option), Assist Power Window UP, Assist Seat Belt Indicator, ATM Solenoid, Auto Cut Relay, Auto Defog Mode Door - Close, Auto Defog Mode Door - Open, Auto Light Power, Auxiliary Fuel Injector for Flexible fuel, Auxiliary Fuel Pump for Flexible fuel, AV Tail, Back Up Lamp, Battery Cool EXV(Electric expansion valve), Battery Cool Valve(Evaporator), Battery Coolant Valve Operation Mode1 (Combined Mode) ON, Battery Coolant Valve Operation Mode1 (Seperated Mode) ON, BCM Internal Buzzer Output, Bifunction Headlamp High LH Solenoid IPS Output, Bifunction Headlamp High RH Solenoid IPS Output, Bolster Left/Right Deflation, Bolster Left/Right Inflation, Bumper Antenna Active, Burglar Horn Relay, Canister Purge Valve, Canister Shut Off Valve Clocked(OBD-2 Only), Canister Shut Off Valve(OBD-2 Only), Central Door Lock Indicator, Central Door Lock Relay, Central Door Lock Switch Indicator Output, Central Door Unlock Relay, Chageover Valve, 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, Compressor Off, Compressor On, Console Off Door, Console On Door, Console Temperature Air Mix Door 0%, Console Temperature Air Mix Door 100%, Console Temperature Air Mix Door 50%, Control All the LEDs, Coolant 3Way Valve, Cooling Fan PWM, Cornering Lamp LH Output, Cornering Lamp RH Output, Courtesy Lamp RL Output, Courtesy Lamp RR Output, Cruise Control Main Lamp(Optional), Cruise Control SET Lamp(Optional), D\_DRL Relay, DBL(Dynamic Bending Light) Max Position-LH, DBL(Dynamic Bending Light) Max Position-RH, DBL(Dynamic Bending Light) Max(LH) Position, DBL(Dynamic Bending Light) Max(RH) Position, DBL(Dynamic Bending Light) Middle Position-Center, Dead Lock Relay, Dedicated DRL Left Output, Dedicated DRL Output (Option), Dedicated DRL Right Output, Defogger - Deicer Relay, Defogger / Deicer Relay, Door Lock Relay, Door Unlock Relay, Driver Air Mix Door-0%, Driver Air Mix Door-100%, Driver Air Mix Door-50%, Driver Door Courtesy Lamp Output, Driver Door Unlock Relay (Option), Driver Door Unlock Relay, Driver Mode Door-DEF, Driver Mode Door-Floor, Driver Mode Door-Vent, Driver Seat Belt Indicator, 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, Electronic Waste Gate Valve (Turbo Only), Electronically Controlled Water Pump(CWP), Engine Check Lamp(MIL), EPB Apply RH and LH, EPB Releas RH and LH, EPB Release RH and LH, ESS Lamp, ETC Motor, Europe Cornering Lamp Left Relay Output, Europe Cornering Lamp Right Relay Output, EVAP Leakage Test, EVP, EWP Max RPM Operation, Exhaust Flap(EF), 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, External Buzzer, Fan Motor Control-High Speed, Fan Motor Control-Low Speed, Flasher Sound Relay(Optional), FOB Battery Indicator, Folding Mirror Relay, Foot Lamp Output(Optional), Foot Lamp Output, Front Air Flow Door - 0%, Front Air Flow Door - 100%, Front Air Flow Door - 50%, 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 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 Top-SVM View, Front Turn Signal Lamp Activation LH Output, Front Turn Signal Lamp Activation RH Output, Front Washer Motor Output, Front-Left View, Front-Right View, Front-SVM View, Front-Wide View, Fuel Lid Lock Relay, Fuel Lid Unlock Relay, Fuel Pressure Indicator Lamp(LPI), Fuel Pressure Ragulator (GDI Only), Fuel Pump



Control, Fuel Pump Relay, Fuel Tank Isolation Valve, Full AFLS BPC Test LED OFF, Full AFLS BPS Test Class C, Full AFLS BPS Test Class E, Full AFLS BPS Test Class E1, Full AFLS BPS Test Class E2, Full AFLS BPS Test Class HIGH, Full AFLS BPS Test Class V, Full AFLS BPS Test Class W, Full AFLS BPS Test LED OFF, Gauge ON, Glove Box Lamp Output, HAC Brake Lamp Actuator, Haptic Steering Wheel Motor Output, Haptic Steering Wheel Output, 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 Leveling Max(High) Position, Head Lamp Leveling Min(Low) Position, 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, Heated Handle Indicator, Heated Handle Output, Heated Washer Nozzle Output, Heated Washer Nozzle Relay, HICM Activate Diagnostics, HICM Relay, High Mounted Stop Lamp Output, 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.), IG3 Control Operation, IGN1 Relay, IGN2 Relay, Ignition 3 Relay, 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, iMEB Valve Control-Line Split Valve, iMEB Valve Control-Low Press Traction Control Valve, iMEB Valve Control-Low Press Wheel Split Valve, iMEB Valve Control-Pedal Simulator Valve, iMEB Valve Control-Release Control Valve, iMEB Valve Control-Traction Control Valve, iMEB Valve Control-Wheel Split Valve, Immobilizer Indicator, Immobilizer Lamp(Optional), Indicator ALL OFF, Indicator ALL ON, Indicator Output 100%, Indicator Output 25%, 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, 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, Interior Antenna 2, Interior Antenna 3(RV/Hatchback Only), Interior Lamp Autocut Relay Output(Optional), Interior Mood Lamp Output, IOD Relay, ISG Test(Optional), Key Hole Illumination, Key Interlock Solenoid(Manual Key Type), Key Out Indicator, Lamp Control - EPB Status Lamp, Lamp Control - EPB Warning Lamp, Lamp Control, Lamp Load Power Relay, LampLoad AutoCut IPS Output, 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, Manual HLLD Signal Output, Manually Active Air Flap - Close, Manually Active Air Flap - Open, MAP Lamp, Mirror Folding Operation (Option), Mirror LED Left, Mirror LED Right, Mirror Unfolding Operation (Option), Mood Lamp 1 Output, Mood Lamp 2 Output, Mood Lamp 3 Output, Mood Lamp Output, Motor, Move Steering Column To The Highest Position (Tilt), Move Steering Column To The Lowest Position (Tilt), Multimedia Load Power Relay, Navi Wakeup Signal Output, O2 Heater Front (B1-S1), O2 Heater Front (B2-S1), O2 Heater Rear (B1-S2), O2 Heater Rear (B2-S2), OBC Wake up Output, Oil Change Warning Lamp, Oil Control Valve - Exhaust Bank 1(Optional), Oil Control Valve - Exhaust Bank2, Oil Control Valve - Intake Bank1, Oil Control Valve - Intake Bank2, Optional Rear Seat Warmer - Left, Optional Rear Seat Warmer - Right, Outlet Valve-Left Front, Outlet Valve-Left Rear, Outlet Valve-Right Front, Outlet Valve-Right Rear, Over Speed Warning Indicator, Parasitic Current Auto-Block IPS, Parking Brake Indicator, PAS Indicator/RPAS OFF Indicator, PAS/RPAS Buzzer Output, Passenger Air Mix Door-0%, Passenger Air Mix Door-100%, Passenger Air Mix Door-50%, Passenger Mode Door - Defog, Passenger Mode Door - Floor, Passenger Mode Door - Vent, Power Window Relay, Precharge Relay ON, Precharge Relay ON, Main Relay (-), (+) ON (Normal sequence), Puddle Lamp Output, Quick Charge Relay (+),(-), Main Relay (-), (+) ON (Normal Char, Quick Charger Relay(-) ON, Quick Charger Relay(-)(+) ON simultaneous, Quick Charger Relay(+) ON, Rad Fan Forced Operation, Read VIN, Rear Air Flow Door - 0%, Rear Air Flow Door - 100%, Rear Air Flow Door - 50%, Rear Blower Fan Motor-1Step, Rear Blower Fan Motor-2Step, Rear Blower Fan Motor-3Step, Rear

Blower Fan Motor-4Step, Rear Blower Fan Motor-5Step, Rear Blower Fan Motor-6Step, Rear Blower Fan Motor-7Step, Rear Blower Fan Motor-8Step, Rear Blower Fan Motor-Off, Rear Center Seat Belt Indicator, Rear Charge Door Lamp Output, Rear Curtain DN Output, Rear Curtain Up Output, Rear Defogger Relay, Rear Driver B-PILLAR Door - 0%, Rear Driver B-PILLAR Door - 100%, Rear Fog Lamp (Option), Rear Fog Lamp Indicator, Rear Fog Lamp Left Output, Rear Fog Lamp Relay, Rear Fog Lamp Right Output, Rear Fog Lamp, Rear Left Power Window Down (Option), Rear Left Power Window DOWN, Rear Left Power Window Up (Option), Rear Left Power Window UP, Rear Left Seat Belt Indicator, Rear Passenger B-PILLAR Door - 0%, Rear Passenger B-PILLAR Door - 100%, Rear Power Window Enable Output (Option), Rear Power Window LH Up Relay, Rear Right Power Window Down (Option), Rear Right Power Window DOWN, Rear Right Power Window Up (Option), Rear Right Power Window UP, Rear Right Seat Belt Indicator, Rear Room Lamp Output, Rear Seat Belt Center Indicator, Rear Seat Belt Left Indicator, Rear Seat Belt Right Indicator, Rear Top-SVM View, Rear View Switch Indicator Output, Rear Washer Motor, Rear Wiper Relay (Option), Rear Wiper Relay, Rear-Left View, Rear-Right View, Rear-SVM View, Rear-Wide View, Refrigerant 2Way Valve - #1 OFF, Refrigerant 2Way Valve - #1 ON, Refrigerant 2Way Valve - #2 OFF, Refrigerant 2Way Valve - #2 ON, Refrigerant 3Way Valve - #1 OFF, Refrigerant 3Way Valve - #1 ON, Refrigerant 3Way Valve - #2 OFF, Refrigerant 3Way Valve - #2 ON, RKE Tailgate Signal Output(to PTGM), RL Door Lock Relay, RL Door Unlock Relay, RL-RR Power Window Enable Output, Room Lamp Output, RPAS Switch Indicator (Option), Safety Power Window Enable, SAHLS Actuator 20%, SAHLS Actuator 80%, SBL Function Test SBL LH ON, SBL Function Test SBL ON(ALL), SBL Function Test SBL RH ON, Security LED Output, ShortTermLoad Cut Relay-IPS Output, SSB Illumination, SSB LED Amber, SSB LED Blue/Red, SSB LED OFF, SSB LED White, Start Inhibit Relay (Option), Start Inhibit Relay, Starter Relay, Static Bending LH Output (Option), Static Bending LH Output, Static Bending RH Output (Option), Static Bending RH Output, Steering Warmer Output, Steering Warmer Switch Indicator Output, Stop Lamp Left, Stop Lamp Left-Right, Stop Lamp Left-Right-HMSL Output (Option), Stop Lamp Right, Stop Lamp, Sunroof Enable Output, SunRoof Power Relay control, 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, Tailgate-Trunk Release Relay, TCI Bypass Valve(Turbo Only), TCS Valve-Left Front, TCS Valve-Right Front, Trunk Antenna, 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, Unfold Mirrors, Vacuum Pump (ELCM), Variable Intake Solenoid(Option), VCM Motor (Option), VESS Sound Play (5 Sec), VESS Sound Play (Until Stop Command), Wiper High Relay Output, Wiper High Relay, Wiper Low Relay Output, Wiper Low Relay, Wiper Power Relay, Wiper Relay

## ***Kia Coverage***

### **2 new Adjustment type special tests:**

Auto Detected Configuration(ESC Only), Auto Variant Coding

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

Activation Switch LED, All LEDs On, Mirror LED Left State, Mirror LED Right State

## ***Mazda Coverage***

- Added coverage for 88 new system applications

### **12 new Adjustment type special test:**

Calibrating Lateral G Sensor for DSC, Calibrating Longitudinal G Sensor for DSC, Calibrating Pressure Sensor for DSC, Calibrating Yaw Rate for DSC, Change Engine Oil Maintenance Monitor Setting,

Coupling Calibration Data Writing, Engine Oil Life Reset, Engine Oil Press Sol. Valve - Oil deteriorate diagnostic reset, Reset KAM, Special Ignition ON, The Zero Position Learning for Yaw Rate Sensor, Tire Pressure Sensor Registration

**54 new Actuation type special tests:**

Active Grill Air Shutter Position, Air Conditioning Compressor Cycling Switch, Alarm, All Doors Lock Motor, All LCD Segments, All Warning Lamp and Indicator Lamp, BSM Illumination Mode, Burglar Horn Relay, Control Signal of Stop Lamp, Coupling Solenoid Duty Cycle, Desired RPM, Desired SEGRP Valve Position, EATC Operation Check, Electric Latch (Unlock), Electric Latch Motor Relay, Electric Oil Pump - Duty Cycle, Electric Oil Pump Relay, Electric Oil Pump, Engine Oil Press Sol. Valve - Event Data Recorder Set, EVAP Canister Purge Valve, EVAP Canister Vent Valve, FAN1 Control Signal, FAN2 Control Signal, FAN3 Control Signal, Fuel Injector 1, Fuel Injector 2, Fuel Injector 3, Fuel Injector 4, Fuel Pump, KOEO Self Test, KOER Self Test, Maintenance Mode, Mirror Warning Indicator - Left, Mirror Warning Indicator - Right, On Demand Test, Outer Buzzer, Pressure Control Solenoid Current - Commanded, RCTA Buzzer Request, Rear Wiper Motor - Low Speed, Reverse Lamp, Shift Solenoid 1 Current - Commanded, Shift Solenoid 2 Current - Commanded, Shift Solenoid 3 Current - Commanded, Shift Solenoid 4 Current - Commanded, Shift Solenoid ON/OFF, Speedometer, Tachometer, Target Exhaust VVT Control - Retard Amount from Advance Pos., Torque Converter Clutch Solenoid Current, Touch Sensor Power (Left Front), Touch Sensor Power (Right Front), Variable Fan Duty Cycle, Vehicle Drive Device Function Test Mode, Wastage Valve Position

## ***Mitsubishi Coverage***

- Added coverage for 24 new system applications

**2 new Adjustment type special tests:**

Coding Information Copy, Learning

**57 new Actuation type special tests:**

A/C Relay, A-C Compressor Relay O, A-C Switch, BSW Buzzer, BSW Indicator, BSW ON-OFF Setting, Chassis No VIN Information, Condenser Fan, Cooling Fan O, Display Output, Dynamic Brake Buzzer, ECU Information, Engine Running Injector Kill Test, Engine Switch(LED ON), EPB Switch Indicator, EPB Warning Light, EVAP Emission Purge SOL Valve, EVAP Emission Ventilation SOL, EVAP Function Test, Evaporative Emission Purge Solenoid O, Evaporative Emission Ventilation Solenoid O, Fuel Gauge, Fuel Pump O, Fuel Pump, Idle Up Request, Ignition Timing 5 BTDC, Injector Stop, LDW Indicator: Standby Request, LDW Indicator: System Fail Req., LDW Indicator: TEMP. Fail Req., LDW Indicator: Warning Request, Leveling Actuator, Meter Illumination, Meter Indication (BSW Status), Meter Indication (RCTA Warning), Mirror Indicator, Mode Selection Damper, Oil Feeder Control Valve O, Out-Inside Air Selection Damper, Parking Brake Light, Passenger S Airbag OFF Indicator Lighting Request, Passenger S Airbag ON Indicator Lighting Request, PTC Heater, PWM Radiator Fan, Radiator Fan High, Radiator Fan Low, RCTA Buzzer, Rear Defogger Switch, Rear Fan Step (Input Value), Speedometer, SRS Warning Light Lighting Request, Stoplight:ON, Tachometer, Timing chain maintenance, TSR Display Request, VVT Oil Control Valve, Waste Gate Solenoid Valve

## ***Nissan/Infiniti Coverage***

- Added coverage for 2 new system applications

**180 new Adjustment type special tests:**

A/F Initial Learning, A/F Sensor Response Diagnosis Status B1, A/F Sensor Response Diagnosis Status B2, Active Control Engine Mounting A, Active Control Engine Mounting B, Actuator Air Bleeding Pattern, Adaptives After Replacing Particulate Filter, Adjustment: Type Of Alarm Signal, AFT Maintenance, After Camshaft Position Sensor Replacement, After Clutch Pedal Switch Replacement, After Crankshaft Position Sensor Replacement, After Electric Throttle Control Actuator Replacement, After Fuel Injector Replacement, After Fuel Rail Pressure Sensor Replacement, After High Pressure Fuel Pump Replacement, After Turbocharger Replacement, After Turbocharger Solenoid Valve Replacement, 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 Fuel Ratio Correction Value, Air Fuel Ratio Sensor, AP Position Learn Clear, Auto Park Inhibition, Automatic Door Locking, Automatic Unlocking, Auxiliary Gearbox Clutch Point Learning, Battery Discharge Current Integration Clear, Blind Spot Detection Configuration, Blind Spot Detection Shut-Off Requester Test, Calibrate Yaw Rate Sensor, CC/SL Program, Check Fuel Lines, Clear Air-Fuel Ratio Learning, Clear ETC Learning, Clear E-VTC Op Learned Angle (Exh), Clear E-VTC Op Learned Deviation Angle (Exh), Clear FFD, Clear LPG Air-fuel Ratio Learning, Clear Normal TAS Learning, Clsd Thl Pos Learn, Clutch Pedal End Stroke, Clutch Point Learning, CML Battery Discharge Current Integration Clear, CO Adjustment, Communication Test With Key, Computer Programming, Conform CVTF Deterioration, Cumulative Sub-Battery Discharge Current Clear, Decel G Sensor Calibration, Door Open Detection Acoustic Alarm, Door unlocking Driver door/all doors, Door Unlocking Triggering Delay, DPF Regeneration, Drain System Air Bleeding Pattern, Dual battery relay voltage drop count data clear, ECO Mode Reset Function, EGR Control Valve Closed Position Learning, Electric Intake Valve Timing Control Learning, Electric O.P Air Bleeding, Electric Oil Pump Air Bleeding, Electric Parking Brake System: Test Mode Procedure, Engine Adaptive, Engine basis parts value 1 and 2 clear, Engine Brake Adjustment, Erase Calibration Data, Erase Learning Value, Erase Memory Data, Erase Statistic Memory, Ethanol Concentration, EVAP System Close, 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, Fuel Pressure Release, Fuel Supply Prevention, FWD Clutch Point Learning, G Sensor Calibration, GPF Service Regeneration Reset Routine Execution, High Pressure Fuel Circuit Fault Finding, High Pressure Fuel Pump Total Starts Counter Clear, ID Registration, Idle Air Vol Learn, Idle Air Volume Learn, Ignition Timing (ADV), Ignition Timing Adjustment, Initialization Position Adjustment, Injection Pump Adaptive, Injection Timing, Interval of Oil Change (OCS) Oxidation, Key Acknowledgement Signal On Locking, Key Acknowledgement Signal On Unlocking, Key Battery Flat Warning, Lane Dep.Warning Camera Shut-Off Requi.Test, Lane Departure Warning Camera Configuration, Launch Control Counter Reset, Lock/Unlock By I-Key, Longitudinal G Sensor Calibration, M/T Neutral Pos Learn, Misfire Count (Past), Misfire count (real-time), Number of Starting 1, Number of Starting 2, Number of Starting 3, Number of Starting 4, Number of Starting Cycles, Oil Change Interval (OCS) Dilution, Panic Alarm Triggering Delay, Power Supply Air Bleeding Pattern 1, Power Supply Air Bleeding Pattern 2, Programmed Values, Programming Reinitialization, Programming Selections/Engaging Zones, Rear Door Window Open Detect. Acoustic Alarm, Rear Lid Unlocking Triggering Delay, Regeneration of Gasoline Particulate Filter, Reset Adaptation Values for Shift Operation, Reset Adaption To Factory Setting, Reset Fuel And Timing Learn Tables, Reset Fuel Consumption Short Term Log, Reset Memory, Reversing Camera Guidelines Correction, RTCV Actuator Calibrate, Save Computer Data, Save/Write Data for CPU Replace, SC Magnetic Clutch Engage Count Clear, Self-Learning Cont, Shift Drum Reference Position, Solenoid VTC Operation Start Duty Learning, Start Brake Pad Replacement, Start OBD test: Catalytic converter, Start OBD test: O2 sensors, Starter Operation Count Clear, Starter Operation Counter Clear, Steering Angle Initialization, Steering Angle Sensor Adjustment, Steering Angle Sensor Calibration, Stop/Start engine restart cause data recorder, Stop/Start engine stall cause data recorder, Stop/Start prohibit cause data recorder, Sub-Starter Generator Oper Count Clear, Supercharger Magnet Clutch Engagement Count

Clear, System Mode Change, Target Idle RPM Adjustment, Target IGN TIM ADJ, Target Ignition Timing Hold, Teach-in Of Selection Range Sensor, Tire Pressure Sensor Registration, Upshifts, 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, V/T Control Learn, Valve Calibration, Valve Check, Valve Flushing, Valve Timing Adjustment, Valve Timing Offset Data Clear, Valve Timing Offset Data Writing, Vcr Base Position Learning, VIN Registration, VVEL Position Sensor Adj Prepare, Waste Gate Actuator Position Learning Value Clear, Waste Gate Regulation, Write Fuel Learn Value, Write High Pressure Fuel Pump Total Starts Count, Write Saved Data, Write Starter Operation Count, Zero Point Reset Function

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

4WD Warning Light, A/C Compressor Relay Control, A/C Compressor, A/F Sensor Heater, AAC/V Output Duty, AAC/V Output Step, ABS Front Left Hold Solenoid, ABS Front Left Release Solenoid, ABS Front Right Hold Solenoid, ABS Front Right Release Solenoid, ABS Motor, ABS Rear Left Hold Solenoid, ABS Rear Right Hold Solenoid, ABS Rear Right Release Solenoid, ABS Solenoid (SRLR), ABS Solenoid, ABS Warning Light, AC Compressor Relay, AC Compressor, ACC Indicator Lamp, Accumulator Zero Down, Activate the Slip Indicator Light, Active Grille Air Shutter, Active Grille Shutter, Advanced Homogeneous Direct Injection Angle, Advanced Stratified Direct Injection Angle, A-F Ratio Cntrl Stop Stratified Chrg Cmb Trnsfr, Air Bypass Valve Solenoid, Air Cond Rly, Air Conditioner Relay Output, Air Inlet Control Flap On Front End Panel, Air Inlet Flap, Air Pump Relay, Air Pump, Air/Liquid Pump Of Camera, Alternator Duty Cycle, Alternator Duty, Alternator Voltage, Antenna Self-Test, ARS Warning Light, A-TRC(TRAC) Indicator Light, Auto LSD Indicator Light, Auto Mode, Auto Stop Start, BH Operated Light, BH Standby Indicator, Boost Pressure, Booster Solenoid, Brake Operation, Brake Release, Brake Warning Light, Buzzer, Camshaft Dephaser: Solenoid Valve Slide Movement, Camshaft Positioner, Canister Bleed Solenoid Valve, Canister Drain Cut Valve, Catalyst Exhaust Gas Downstream O2 Resistance Heater PWM, Catalyst Exhaust Gas Upstream O2 Resistance Heater PWM, Causes Of Engine Stop Prevention, CBV Position Override, Charge Air Cooler Cooling Electric Water Pump, Check Activated Canister Shutoff Valve, Check Boost Pressure Control, Check Component Purging Pressure Control, Check Coolant Pump Switchover Valve, Check Coolant Thermostat Heating Element, Check Cylinder Fuel Injectors For Leaks, Check Cylinder Fuel Injectors, Check Deceleration Air Switchover Valve, Check Engine And AC With Integrated Control Fan Motor, Check Engine Oil Pump Valve, Check Exhaust Camshaft Solenoid, Check Fuel High Pressure Circulation for Leak Tightness, Check Fuel Pressure And Temperature Sensor Rail Pressure, Check Fuel Tank Pressure Sensor, Check Intake Camshaft Solenoid, Check Intake Port Shutoff Actuator Motor, Check Mode, Check Purging Switchover Valve, Check Quantity Control Valve, Check Throttle Valve Actuator, Check Valve Bypass Valve, CNG Cylinder Shutoff Valve, CNG Engine Shutoff Valve, Component Quantity Control Valve, Compressor, Continuously Variable Valve Timing Control Side Intake, Coolant Circulation Switching S/V, Coolant Temperature, Cooling Fan, Cornering Lamp Test, CORNERING LAMP, Crawl Control Light, Cruise Control-PCS-LKA Buzzer, C-SCV Target Step (Bank1), C-SCV Target Step (Bank2), C-VTC Target Angle, Cylinder Cutout Test, DAB Indicator Light, Daytime Running Light, DEF Dosing Unit Override Test, DEF Line Heater Test, DEF System Leak Test, DEF Tank Heater Test, DIG Power Balance Cylinder 1, DIG Power Balance Cylinder 2, DIG Power Balance Cylinder 3, DIG Power Balance Cylinder 4, DIG Power Balance Cylinder 5, DIG Power Balance Cylinder 6, DIG Power Balance Cylinder 7, DIG Power Balance Cylinder 8, Display: Test, Downhill Assist Control Light, DOWNSTREAM OXYGEN SENSOR HEATING, DSS Signal Buzzer, EBS Relay, ECB Control Invalid, ECB Main Relay 2, ECB Main Relay, 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 (SRC), ECB Solenoid (SSA), ECB Solenoid (SSC), ECB Warning Indicator, EGR Cont (Mode 1), EGR Cont (Mode 3), EGR Control Valve, EGR Cut Solenoid, EGR Solenoid, EGR Vol Cont/V, EGR VOL CONT-V, EGRC Solenoid Valve, Electric Fan Override Test, Electric Water Pump, Electrical Control EGR Target Step, Electrical Control Engine Mount Motor, Electronic Throttle Control, ENG COOLANT TEMP, Engine Coolant Bypass Valve, Engine Coolant Electric Water Pump, Engine Coolant Temperature, Engine Fan Override Test, Engine Mounting, Engine Oil Pressure Control Solenoid Valve, Engine Piloted Oil Pump, Engine Sw Illumi, ETC Correction Valve, EVAP Canister Purge Control Solenoid Valve, EVAP CNT Duty Valve Open, EVAP Leak Diag, EVAP Leak Mode8, EVAP Leak P1441, E-VTC Target Angle (Exhaust), EXH V-T ASSIGN ANGLE, Exhaust Air Flap, Exhaust Camshaft Dephaser Solenoid Valve, Exhaust Camshaft Set Point, Exhaust Fuel Injector, Exhaust Gas Recirculation Cooler Bypass Valve, Exhaust Valve Timing Assign Angle, Exhaust Valve Timing Control Solenoid Valve, Exterior Lamps, External Buzzer, EXTERNAL LAMPS, Fan Duty Control, Fan Unit High Speed Relay, FAN UNIT HIGH SPEED, Fan Unit Low Speed Relay, FAN UNIT LOW SPEED, Flasher test, Flasher, Flex-Fuel Additional Pump, Flex-Fuel Additional Solenoid Valve, FLYWHEEL TARGET PROGRAMMING, FPCM, FR LH ABS Solenoid (ACT), FR LH ABS SOLENOID(ACT), FR LH SOL, FR RH ABS Solenoid (ACT), FR RH ABS SOLENOID(ACT), FR RH SOL, Front Fog Lamp, Front Left Solenoid, Front Right Solenoid, Front Wiper, Fuel Flow Actuator, Fuel Flow Solenoid Valve, Fuel Heater Relay, Fuel Heater, Fuel Injection, FUEL METER DIAGNOSIS( ANALOG METER ), Fuel Pressure Solenoid Valve, Fuel Pump Control Module, Fuel Pump Relay 2, Fuel Pump Relay 3, Fuel Pump Relay, Fuel Pump, Fuel Rail Pressure Control Valve, Fuel Rail Pressure, Fuel Return Valve, Fuel System Leakage Test, FUEL-T TEMP SEN, Gas Pump Command State, Glow Relay, H/B Motor Relay, Hazard Lamp, Head Lamp Washer, Head Lamp, Headlamp High, Headlamp Low, Headlamp Washer, Heater Valve Flow, HEATING RESISTOR RELAY 1, HEATING RESISTOR RELAY 2, HEATING RESISTOR RELAY 3, High Pressure Circuit Leak Test, Horn Acknowledgement Signal, Horn, HPCR Fuel Act Override, IACV-AAC/V Opening, ID REGIST WARNING, Idle Target RPM, Ign Cont2, Ignition Cylinder 1, Ignition Cylinder 2, Ignition Cylinder 3, Ignition Cylinder 4, Ignition Key Gong, Ignition On Warning System, Ignition Relay, Ignition Timing (Mode 1), Ignition Timing (Mode 3), Ignition Timing, Indicat. Lamp VSC OFF, Indicator, Injection Pressure Regulator, Injector Cylinder 2, Injector Cylinder 3, Injector Cylinder 4, Injector-Cylinder 1, Inside Buzzer, Inspection Mode, Instrument Cluster Indicat. Lamps, INT V/T ASSIGN ANGLE, INT V-T ASSIGN ANGLE, Intake Duct S/V, Intake Manifold Pressure Solenoid, Intake Valve Timing Control Solenoid Valve, Intank Fuel Temperature Sensor, Key Lock Solenoid, Lamps, LED LH INDICATOR, Left Exterior Mirror LED Test, Lock (Central Locking), Lock Doors, Low Pressure Fuel Pump, LPG Air Fuel Ratio Revision Value, LPG Shutoff Valve Relay, Malfunction Status Of Stop/Start System, MAP/Baro SW/V, Mixture Ratio, Mode 1 DIG Power Balance Cylinder 1, Mode 1 DIG Power Balance Cylinder 2, Mode 1 DIG Power Balance Cylinder 3, Mode 1 DIG Power Balance Cylinder 4, Mode 1 DIG Power Balance Cylinder 5, Mode 1 DIG Power Balance Cylinder 6, Mode 1 DIG Power Balance Cylinder 7, Mode 1 DIG Power Balance Cylinder 8, Mode 3 DIG Power Balance Cylinder 1, Mode 3 DIG Power Balance Cylinder 2, Mode 3 DIG Power Balance Cylinder 3, Mode 3 DIG Power Balance Cylinder 4, Mode 3 DIG Power Balance Cylinder 5, Mode 3 DIG Power Balance Cylinder 6, Mode 3 DIG Power Balance Cylinder 7, Mode 3 DIG Power Balance Cylinder 8, Motor Fan, Motor Relay Control, MOTORISED THROTTLE, Optic Axis Active Test, OPTIC AXIS ACTIVE TEST~OPTIC AXIS ACTIVE TEST, Outside Buzzer, Oxygen Sensor 1 Heater, Oxygen Sensor 2 Heater, P Range, P/REG CONT SOL/V, Parking Lamp, Partial Load Operation Crankcase Ventilation Valve, PKB Full Release Control, PKB Light,

PKB Lock Control, PKB Release Control, Power Balance (Cylinder #1), Power Balance (Cylinder #2), Power Balance (Cylinder #3), Power Balance (Cylinder #4), Power Balance (Cylinder #5), Power Balance (Cylinder #6), Power Balance (Cylinder #7), Power Balance (Cylinder #8), Power Balance, PPS Solenoid, Pre Crash Brake OFF Light, Pre-Charge Pump, PRES Regulator, Pressure Control Solenoid A, Pressure Control Solenoid B, Pressure Control Solenoid C, Programming CI Touch Point, PROGRAMMING THROTTLE LIMITS, PRVR Solenoid, Pump Check Pattern, Purg Vol Cont/V, PURG VOL CONT-V, Purging Switchover Valve, Radiator Fan Drive, Radiator Fan Output Hi, Radiator Fan Output Lo, Radiator Fan Relay Test, Radiator Fan Relay, Rear Defogger, Rear Left Solenoid, Rear O2 Diagnosis, Rear Right Solenoid, Reverse Gear Reset Values Of Shift Operations, Right Exterior Mirror LED Test, RR LH ABS Solenoid (ACT), RR LH ABS SOLENOID(ACT), RR LH SOL, RR O2 Sensor Heater, RR RH ABS Solenoid (ACT), RR RH ABS SOLENOID(ACT), RR RH SOL, RTCV Hysteresis Test, RUN FLAT-T WARN BUZZER, SCB/V Cont SOL/V, SCR Performance, SCV Solenoid, Secondary Air Cut Solenoid, Shift Solenoid A, Shift Solenoid B, Shift Solenoid C, Shift Solenoid D, Shift Solenoid E, SHIFTLCK SORENOID TEST, Signal Check, Slip Indicator Light, Solenoid Actuator Driving FR 2 Wheels, Solenoid Actuator Driving FR-LH, Solenoid Actuator Driving FR-RH, Solenoid Actuator Driving RR 2 Wheels, Solenoid Actuator Driving RR-LH, Solenoid Actuator Driving RR-RH, Solenoid Driving FR-LH, Solenoid Driving FR-RH, Solenoid Driving RR, Solenoid Driving RR-LH, Solenoid Driving RR-RH, Solenoid Relay, Speed Sensor Function, START Button Illumination, Stop Current Command, Stop Lamp On Relay, Stop Light Relay, Stop light System Indicator Light, Stratified Direct Injection Timing Angle, Stratified EGR Position, Stroke Simulator Cut Valve Pattern, Sub Fuel Cont Sol /V, Sub Fuel Pump Relay, Super Charger Clutch Relay, Supercharger Clutch Relay, SWIRL CONT SOL VALVE, Swirl Control Valve, Tail Lamp, TANK FUEL TEMPERATURE SENSOR, TARGET EGR ANGLE, Target EGR Position, Target Electric Throttle Control Angle, Target Equivalence Ratio Control, Target Fan RPM, Target Idle Speed, TC Bypass Valve, TC-SC BYPASS VALVE, TCV Power System Test, Thermostat Heater Control Solenoid Valve, Third O2 Sensor Heater, Third O2/S Diagnosis, Throttle Valve Position Setpoint, Tire Pressure Indicator, TPMS LAMP WARN TEST, TPMS Warning Light, Trac Motor Relay, TRAC Solenoid (SPFL), TRAC Solenoid (SPFR), TRAC Solenoid (SRCF), TRAC Solenoid (SRCR), TRAC Solenoid (SRMF), TRAC Solenoid (SRMR), TRC OFF Indicator Light, Tumble Control Valve, TUMBLE CONTROL VALVE~TUMBLE CONTROL VALVE, Turbocharger Boost Control Actuator, Turbocharger Boost Control Solenoid Valve, Turbocharger Wastegate Solenoid Valve, Turbocharging Solenoid Valve, Unlock Doors, Unlock Driver Door, Unlock Passenger Door, Unlock Rear Doors, UPSTREAM O2 SENSOR HEATING, V/T Assign Angle, Valve Timing Sol, Variable Duct Solenoid Output, VC/V Bypass/V, VCR System, Vent Control Valve, VENT CONTROL-V, VIAS S/V-1, VIAS Solenoid, VIAS S-V-1, VIAS S-V-2, VSC OFF Indicator Light, VSC Warning Light, VSC/TRAC Off Indicator Light, VSC/TRAC Solenoid, 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), VTC Solenoid, VVL Int Exh Solenoid Simultaneous Drive, VVL Solenoid Exhaust, VVL Solenoid Intake, W/G, Warning Buzzer, Warning Lamp, Washer Fluid Pump Relay, Wastegate Actuator, Water Temperature

## **Subaru Coverage**

- Added coverage for 22 new system applications

### **29 new Adjustment type special tests:**

Actuator Initialization, AT learning mode, ATF Deterioration Degree Indication, Auto Retractable Power Door Mirror Open Close ON/OFF Setting, Auto Retractable Power Door Mirror Open Trigger Setting, Clear AT Learning Value, Compressor Auto Mode, Foot/DEF Auto Mode, Foot/Def Automatic Fan Speed Increase Function, Fresh/Recircle Air Door Auto Mode, Idle Speed Adjustment, Initial Button Setting, Initial Security Setting, Inspection Mode After ATF,T/M Exchange, Mode/All Flow, Mode/Heat III,

Mode/Vent II, RAB Operation Record Data, Reverse Interlocking Door Mirror Last Memory ON/OFF Setting, Reverse Interlocking Door Mirror ON/OFF Setting, Reverse Interlocking Door Mirror Tilt Down Side Setting, Set Temperature Shift, Simple Roughness Monitor, Steering Angle Sensor and Lateral G Sensor 0 Point, Tire Pressure Sensor Registration, Variable compressor break-in drive, Variable Flow Change Sol Duty Setting, VIN Entry, VSC(VDC) Centering Mode

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

A/C Change Setting, A/C Compressor Relay, A/C Relay, A/T Oil Temperature, AAI Solenoid Valve, ABS Function Test, ABS Sequence Control Mode, ABS Warning, AC Compressor Relay, Active Grill Shutter Test, Air Mix Door Actuator Target Open (Driver Side), Air Mix Door Actuator Target Open (Passenger Side), Airbag Warning, Airmix Dr Act Trgt Open Angle (Drivers), Airmix Dr Act Trgt Open Angle (Pass), All Lamps Lighted, All Lamps, All seat UNLOCK output, All seats door warning, Alternator control mode, Ambient Air Temperature setting, Ambient Temperature, AUTO switch mode setting, Auto Switch, AWD Linear Solenoid, AWD Mode Select, AWD Solenoid, AWD, Blower Fan Level Setting, Brake Lamp Lighting Operation, Brake Maintenance Mode, Brake Warning, Brightness, Canister Purge Control Solenoid, Charge, Check E/G warning, Clutch PC Solenoid 2, Clutch Pressure Control Solenoid Valve, Color Check: Black, Color Check: Blue, Color Check: Cross Talking, Color Check: Gradation, Color Check: Green, Color Check: Red, Color Check: White, Compression monitor, Coolant Circulation Valve Control, Cruise Indicator, D range display, Dealer Check Mode Procedure, Door Mirror Indicator Active Test, Down range display, Driver Door, Driver Seat Belt Reminder, Driver Seat Sensor Power Supply, Dual-Range LO Indicator, E/G remaining oil warning, EGR Control, EGR Valve, ELCM pump, ELCM switching valve, EPB Active, EPB Hill Hold, EPS Indicator Lamp, EYESIGHT failure, Fixed Idle Ignition Timing, FR Clutch Solenoid, Fresh/Rec Air Dr Act Trgt Open Angle, Front Fog Lamp Indicator, Fuel efficiency gauge (ECO gauge) 1/2 scale command, Fuel efficiency gauge (ECO gauge) 1/4 scale command, Fuel efficiency gauge (ECO gauge) 3/4 scale command, Fuel efficiency gauge (ECO gauge) MAX scale command, Fuel efficiency gauge (ECO gauge) MIN scale command, Fuel Pressure Solenoid, Fuel Pump Control, Fuel Pump OFF, Fuel Pump Relay, Fuel sender E-point command, Fuel sender F-point command, Fuel Tank Sensor Control Valve, Fuel Warning Lamp, Green Lamp Illumination Check, Green Lamp Lighted, Green LED Flashing, Green LED Lighting, Green LED Off, HBA OFF/FAIL, HBA, Heater Water Temperature Setting, HID auto leveler, High Beam Indicator, Hill start assist OFF/failure indicator, Horn Output, IGN 1, IGN 1/2, IGN 2, Illumination Lights Test, Immobilizer, Injection Quantity Control, Injection Stop Mode (Injector 1), Injection Stop Mode (Injector 2), Injection Stop Mode (Injector 3), Injection Stop Mode (Injector 4), Injection Stop Mode (Injector 5), Injection Stop Mode (Injector 6), Injector 1, Injector 2, Injector 3, Injector 4, Injector 5, Injector 6, In-Vehicle Air Temperature Setting, Keyless Buzzer, L range display, LANE OFF, LED LO beam, Left Steering Responsive Headlight, Left Yellow Lamp Illumination Check, Left Yellow Lamp Lighted, Line Solenoid, lock actual. LOCK output, Lock-Up Duty Solenoid, Low Fuel Warning Indication, Meter 1/2 scale command, Meter 1/4 scale command, Meter 3/4 scale command, Meter E scale command, Meter F-scale command, Mode Door Actuator Opening Angle Target, N range display, No-key warning, Odometer numerical device display 0, Odometer numerical device display 1, Odometer numerical device display 2, Odometer numerical device display 3, Odometer numerical device display 4, Odometer numerical device display 6, Odometer numerical device display 7, Odometer numerical device display 8, Odometer numerical device display 9, Oil Pressure, P Range Display, Part Number, Passenger Door, Passenger Seat Sensor Power Supply, P-CR OFF, PCV Test, Position light, Primary Down Solenoid, Primary Up Solenoid, Quantity of Sunload Setting, R range display, Radiator Fan Relay, Range Display Test, Rear Defogger, Rear Differential Inspection Mode, Rear Fog Lamp Indicator, Rear Left Door, Rear Right Door, Recline Motor Backward, Recline Motor Forward, Red Lamps Illumination Check, Red LED Flashing, Red LED Lighting, Red Led Off, Right Steering Responsive Headlight, Right Yellow Lamp Illumination Check, Right Yellow Lamp Lighted, ROM ID, Seat Slide Backward, Seat Slide Forward, Secondary Air Combi Valve 1, Secondary Air



Combi Valve 2, Secondary Air Pump Relay, Secondary Solenoid Current, SET Indicator, Shift Indicator Lamp, Shift Lock Solenoid, Software Information, Software version, Sounder Output, Speaker On, Speedometer test, SRH OFF, SRVD OFF, SRVD, Start SW Character Illumination Lighted, Start SW Indicator Lighted (Green), Start SW Indicator Lighted (Orange), Steering lock power supply, STSW, Sub Fuel Pump Relay, Tachometer test, Temp Gauge: C-Lock, Temp Gauge: C-Point, Temp Gauge: Dial 1 Instructions, Temp Gauge: Dial 2 Instructions, Temp Gauge: H-Lock, Temp Gauge: H-Point, Temp Gauge: Intermediate Stability Indication, Temp Gauge: Z-Point, TPMS Warning Light, Trip meter numerical device display 0, Trip meter numerical device display 1, Trip meter numerical device display 2, Trip meter numerical device display 3, Trip meter numerical device display 4, Trip meter numerical device display 5, Trip meter numerical device display 6, Trip meter numerical device display 7, Trip meter numerical device display 8, Trip meter numerical device display 9, Trunk open, Trunk Unlock Actuator, Tuner Power Supply On (Indoor Tuner), Turbocharger Wastegate Control, Turn Left Signal, Turn Right Signal, Up range display, VDC Function Check Mode, VDC OFF indicator, VDC operation/failure indicator, Vent Valve, Warning Lamp, Washer Fluid Low Indicator, Water temperature (COOL) indicator, Water temperature (HOT) warning

## **Toyota/Lexus Coverage**

- Added coverage for 40 new system applications

### **421 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 Left Seatbelt Warning Buzzer Function, 4th Right Seatbelt Warning Buzzer Function, 6MT Setting, A/T Code Reset, Activate The EGR Valve Close Bank 1, Activate The VN Turbo Open Bank 1, Activate The VSV For Air Bleed 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, AFS (Electronic Swivel) Function, AFS Function, AHS Function, AHS Operation Pattern Setting, Air Bleed, Air Bleeding Front Left, Air Bleeding Front Right, Air Bleeding Rear Right And Rear Left, Air Bleeding, 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 Shift, AT Code Registration, ATF Thermal Degradation Estimate Reset, Audio Information Display Function, Auto A/C, Auto Fold Mirror, 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 Unlock Function, Automatic Locking after Getting Out Function, Automatic Locking Cancel Time Adjust, Automatic Locking Time Adjust, Automatic Locking Timeout Adjust, Back Door Opening Operation, 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, 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, Compressor Mode, Compressor/Air Inlet DEF operation, CVT Oil Pressure Calibration, D Seat Lift Up Buckle Operation Function, 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 Reclining Link Headrest F/R Length 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, Daylight 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 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 Unlock Mode, Door Unlock Mode2, Door Unlock Sensor Touch Time Adjust, Door Unlock with 1 Motion., Double Door Lock Time Adjust, Double Door Unlock Setting, Double Lock, Drain System Air Bleeding Pattern, Driver Seat RA Lumbar Support Oper, Driver Seat RA Pelvis Support Oper, Driver Seat RA Side Support Oper, Driver Seatbelt Warning Buzzer Function, DRL Function, ECB Utility, ECO Drive Indicator Zone Display Function (Meter), ECO Drive Indicator Zone Display Function, ECO MODE Cancel, ECO Mode Start Function, Emblem Sensor Detection Sensitivity, Emission Gas Sensor Shift, Engine Start Indicator, Engine Switch Light Function, Entry Delay Time, Entry Delay, EPB Initialize, EV Mode Cruising Range Reset, EV System Start Indicator, Evaporator Control, Exterior Light (Door Open), Exterior Light Control, 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 Volume Adjust, Follow Me Home Lighting Time, Foot/DEF Auto Mode, Foot/DEF Automatic Blow Up Function, Forced Actuator Refresh, FR Neck Heater Auto Mode Adjustment, FR Seat A/C and Heater Sensitivity Adjust, Fr/Rr Seat Interference Avoidance Function (D), Front Center Seatbelt Warning Buzzer Function, Front SW Auto Operation, Fuel Density Learning Value Reset, Grille Shutter Initialization, Halogen Lamp/HID, Headlight in Conjunction with Wiper, Headlight Upper Shade Angle Setting, Height Offset Rear Wheels, High Voltage Fuse Accumulated Load History Reset, HWD Auto Function, I/L ON W/Door Key Unlock, I/L when ACC OFF, ID Registration/Tire Position Write, Ignition Available Area, Illumination Module A1, Illumination Module A2, Illumination Module A3, Illumination Module A4, Illumination Module B1, Illumination Module B2, Illumination Module B3, Illumination Module B4, Illumination System, Injection Timing Value, Injection Timing, Inside Foot Light, Interior Light Control, Intrusion Sensor Function, Intrusion Sensor Sensitivity Level, Intrusion Sensor Sound Detection Function, Intrusion Win Opened, Ion Generate Control, IPA Obstacle Avoidance Distance, IPA Parallel Parking Control Area, IPA Perpendicular Parking Control Area, Key Low Battery Warning, Key Out Range Warning, Kick Sensor Close Lock Function, Lane Change Flashing Times Adjust, Lane CHG Flash CNT, Learning Value Reset, Light Auto OFF Delay, Light Control, Light up Clearance Lights at Door Unlock Function, Light up Clearance Lights Door Unlock Function, Lighting (EXT): Headlight Assembly Adjustment, Lighting Time, Low Speed Wide Light Function, Master Caution Display 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, Noise and Vibration Reduction, ODO Display Time After IG OFF Adjust, One Motion with Unlock Door, One Motion, Optical Disc Error History, 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, Oxygen Supply, 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 Up W/ Smart, P/W Up W/ Transmit, P/W Wireless Ope Buzz, Panic Alarm Function, Panic Function, Park Wait Time, Partition Lighting Adjust, Passenger Seatbelt Warning Buzzer Function, Passenger Take Key, 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 One Motion, 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 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), Provision of When Door is Half Open, Proximity Sound Control (Vehicle Stationary), Proximity Sound Level Increase (Vehicle Starting), Proximity Sound Volume Adjustment, PSD Preparation for Open Function, RCTA Function, RCTAB Function, Rear A/P HI Set, Rear Center Seatbelt Warning Buzzer Function, Rear Curtain Close Relay, Rear Curtain Open Relay, Rear Left Seatbelt Warning Buzzer Function, Rear Left wheel air bleeding pattern, Rear Right Seatbelt Warning Buzzer Function, Rear Right wheel air bleeding pattern, Rear Seatbelt Warning Buzzer Function, Rear Shade Delay Time, Rear SW Auto Operation, Rear Wiper INT Operation, Recognition Camera Axis Adjust, Remote Air Conditioner Start Setting, Remote Air Conditioner Stop Setting, Remote Door Lock Setting, Reset Memory, Residential Area Mode Setting, Reverse Buzzer Setting, Reverse Coupled Actuation Mirror Angle, Right Headlight Shade Angle Setting, RL Seat A/C and Heater Sensitivity Adjust, RL Seat Heater Auto Function, 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 Seat A/C and Heater Sensitivity Adjust, RR Seat Heater Auto Function, 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 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, Security Alarm Setting, Security control with mechanism key, Security System, Sedan/Wagon Setting, Sensitivity, Servomotor Initialization, Set Temperature Shift, S-FLOW Control Auto Function, Shade Upper Area Lighting Function, Shift Control Synchronization, Slide Link Cushion Length Ctrl, Slide Link Hdrest Length Ctrl, Slide Roof Open Warning, Slide Roof Voice Control Function, Software Error History, Speed Alarm Buzzer Function, Speed Limit Display Function, Start PreA/C, Steering Angle Initialization, 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 Grille Shutter Control Mode, Switch Oil Maintenance Display, Tail Remind Buzzer Function, Telematics Microphone Volume Adjust, Telematics Speaker Volume Adjust, Timing Adjustment of PSD Prep for Open Function, Tire Circumference Setting, Tire Pressure Sensor Registration, Torque Sensor Adjustment, Touch Activation Over Threshold, Traffic Sign Recognition Animation Function, Trunk Lid Operation, Trunk Link with Door Lock, Trunk Open Mode, 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), Unlock 2 Operation, Unlock Key Twice, User Support Service Function, Usual Air Bleeding - All lines, Usual Air Bleeding - Front Left Line, Usual Air Bleeding - Front Right Line, Usual Air Bleeding - Rear Left Line, Usual Air Bleeding - Rear Right Line, Valet Mode Cancel, Video Device Connection Check(mm), Voice Guidance Function, Warning by Glass Broken Sensor, Warning by Horn, Warning Time, Window Open Warning, Wiper Specification Switch, Wiper Voice Control Function, Wireless Auto Lock, Wireless Buzzer Resp, Wireless Buzzer Vol, Wireless Buzzer Volume Setting, Wireless Buzzer Volume, Wireless Control, 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, Write VIN, Zero Point Calibration Sensitivity Check, Zero Point Calibration, Zero Point Calibration/Test Mode

### **1318 new Actuation type special tests:**

2nd START Indicator, 4LO Indicator, 4WD AUTO Indicator, 4WD Indicator (Green), 4WD Indicator (Yellow), 4WD Lock Indicator, 4WD Warning Light, 4WD Warning, A/C Idle Up VSV, A/C Magnetic Clutch Relay, 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 Oil Temperature Operation, ABS Front Left Release Solenoid, ABS Front Right Hold Solenoid, ABS Front Right Release Solenoid, ABS Indicator Lamp, ABS Motor Relay, ABS Rear Right Release Solenoid, ABS Solenoid (SFLH), ABS Solenoid (SFLR SFLH), ABS Solenoid (SFLR), ABS Solenoid (SFRH SFLH), ABS Solenoid (SFRH), ABS Solenoid (SFRR SFRH), ABS Solenoid (SFRR), ABS Solenoid (SRLH), ABS Solenoid (SRLR SRLH), ABS Solenoid (SRLR), ABS Solenoid (SRRH), ABS Solenoid (SRRR SRRH), ABS Solenoid (SRRR), ABS Solenoid, ABS Warning Light, Access to Rear Seat Signal, Accumulator Zero Down, 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 SLS Solenoid, Activate SLT Solenoid, Activate SLU Solenoid, Activate SR Solenoid, Activate ST Solenoid, Activate the (Inverter) Water Pump, 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 Pump2 Speed Control, Activate The Fuel Return Pipe Valve, Activate The Fuel Vapor-Containment Valve, Activate The Intank Fuel Pump Relay, 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 Control System, Activate The Solenoid (DS1), Activate The Solenoid (DS2), Activate The Solenoid (DSL), Activate The Solenoid (S1), Activate The Solenoid (S2), Activate The Solenoid (S3), Activate The Solenoid (S4), Activate The Solenoid (SC1), Activate The Solenoid (SC2), Activate the Solenoid (SC3), Activate The Solenoid (SL), Activate The Solenoid (SL1), Activate The Solenoid (SL2), Activate The Solenoid (SL3), Activate The Solenoid (SL4), Activate The Solenoid (SL5), 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 (SLS), Activate The Solenoid (SLT), Activate The Solenoid (SLU), Activate The Solenoid (SR), Activate The Solenoid (ST), 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 EGR Cooler Bypass, Activate The VSV For Evap Control, Activate The VSV For Exhaust Brake, Activate The VSV For Exhaust Bypass Control, Activate The VSV For Exhaust Gas Control, Activate The VSV For Exhaust Switching Valve, Activate The VSV For Fuel Pressure Up Control, Activate The VSV For Intake Air 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 Variable Intake Control, Activate The VSV For Vent Valve, Activate The

VSV2 For Intake Control, 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 Control Mount, Active TRC Indicator, ACTIVE TRC Warning, Actuator Check, Advanced Parking Guidance Indicator, Advice Display, AFS Alarm Display, AFS OFF Indicator, AICV VSV, Air Bypass Valve Solenoid, Air Inlet Damper (Rear), Air Inlet Damper Position (Linear), Air Inlet Damper Targ Pulse~Air Inlet Damper Targ Pulse, Air Inlet Damper Target Pulse, Air Inlet, Air Mix Damper (D Side), Air Mix Damper (Driver Side), Air Mix Damper (P Side), Air Mix Damper (Passenger Side), Air Mix Damper (Rear), Air Mix Servo Targ Pulse(D), Air Mix Servo Targ Pulse(D)~Air Mix Servo Targ Pulse(D), Air Mix Servo Targ Pulse(P), Air Mix Servomotor Pulse D Side, Air Mix Servomotor Step (D Side), Air Mix Servomotor Step (P Side), Air Outlet (Front), Air Outlet (Rear), Air Outlet Damper (Driver Side), Air Outlet Damper (Passenger Side), Air Outlet Damper (Rear), Air Outlet Damper Position (D Side), Air Outlet Damper Position (P Side), Air Outlet Damper Position Rear, Air Outlet DEF, Air Outlet DEF~Air Outlet DEF, Air Outlet Rear FOOT (Driver Side), Air Outlet Rear FOOT (Driver Side)~Air Outlet Rear FOOT (Driver, Air Outlet Rear FOOT (Passenger Side), Air Outlet Rear FOOT (Passenger Side)~Air Outlet Rear FOOT (Pas, Air Outlet Servo Pulse (D), Air Outlet Servo Pulse (P)~Air Outlet Servo Pulse (P), Air Outlet Servometer Pulse (D), Air Outlet Servomotor Step (P Side), Air Outlet Servomotor Step(D Side), Air Purifier Mode, Air Purifier(Ion), Air Suspension Indicator (HI), Air Suspension Indicator (LO), Air Suspension Indicator (N), Alternator Voltage Control, A-O Servo Pulse(Rr P)~A-O Servo Pulse(Rr P), ARS Warning Light, Ashtray Light, ASL Indicator, ASL Warning, ASR/TRAC Warning Light, 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, 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, Automatic Oil Supply, Auxiliary Battery Warning, AVS Comfort Indicator, AVS Sports Indicator, Back Door Select, Backup Light, Batt Cool Down Servo Targ Pls, Battery Magnetic Valve, Beep, BH Operated Light, BH Standby Light, Blower Motor, Blower Motor~Blower Motor, Boost Pressure Control VSV, Brake Cable Warning, Brake Ejector VSV Inspection, Brake Ejector VSV, Brake Hold Indicator, Brake Indicator Lamp, Brake Override Warning, Brake Warning Light, Brake Warning, BSM Indicator, BSM OFF Indicator, Buckle Light 1, 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, Canister Pressure Control VSV, Cargo Light, Catalyst OT Misfire Prevention F/C, Ceiling Light, Cent Consol Spot LGT, Center Console Light Operation, Center DIFF LOCK Indicator, Charge Indicator Lamp, Charge Indicator, Charge Warning (Red), Charge Warning, Check Display, Check Engine Warning, CHECK HEADLIGHT Indicator, Check Mode, Check The Cylinder Compression, Check The Imbalance Cylinder, Circuit Mode Indicator, Clearance Light Operation, Clearance Light, Clearance Sonar Indicator LCD, CNG Mode Indicator, 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), Compass Display, Compression Check, Compression Test, 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 A-C Cut Signal, Control the ACIS VSV Motor Duty Ratio, 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 2, 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, Control The Fuel Pump Duty, Control The IAC Duty Ratio, Control The Idle Fuel Cut Prohibit, Control The Injection Mode, Control the Injection Timing #1, Control the Injection Timing #2, Control the Injection Timing #3, Control the Injection Timing #4, Control the Injection Timing #5, Control the Injection Timing #6, Control the Injection Timing #7, Control the Injection Timing #8, Control The Injection Timing 1, Control The Injection Timing 2, Control The Injection Timing 3, Control The Injection Timing 4, Control The Injection Timing 5, Control The Injection Timing 6, Control The Injection Timing 7, Control The Injection Timing 8, Control The Injection Volume For A/F Sensor, 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 ISC Step Position, Control The Line Pressure Up, Control The Lock Up, Control the Motor/Generator Cooling Oil Pump, Control The Purge Dilution Valve Duty Bank1, Control The Purge Dilution Valve Duty Bank2, 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 5 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 Voltage Of Alternator, Control The VVT Linear (Bank1), Control The VVT Linear (Bank2), Control The VVT System (Bank1), Control The VVT System (Bank2), Control the VVT-iE Linear (Bank 1), Control the VVT-iE Linear (Bank 2), Control The VVTL System (Bank2), Control the Wastegate Valve Duty Ratio, Control VVT Exhaust Linear (Bank1), Control VVT Exhaust Linear (Bank2), Cool A/M Servo Pulse(D), Cool A/M Servo Pulse(P), Cool Air Bypass Damper (D Side), Cool Air Bypass Damper (Driver Side), Cool Air Bypass Damper (P Side), Cool Air Bypass Damper (Passenger Side), Cool Air Bypass Pls(P), Cool Air Bypass Pulse, Coolant Cool Warning Lamp, Coolant Hot Warning Lamp, Coolant Temp LCD, Cooling Electric Expansion Valve, Cornering Lamp Test, Cornering Light, Cornering Light-Front Side Illuminate Light, Courtesy Light, Courtesy SW Signal, Crawl Control Light, CRAWL Indicator, CRAWL Warning, Cruise Control-PCS-LKA Buzzer, Cruise Indicator (Yellow), Cruise Indicator, Cushion Length, Cylinder Compression Check, D-4S (A/F Control), D-4S (Fuel Cut), D-4S (Injection Volume), DAB Indicator Light, Day/Night Time signal, Daytime Running Light, DCM Firmware Update, D-Door Unlock, DEF A/O Servo Pulse(D), 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 2, Diesel Throttle Target Angle Bank 1, Diesel Throttle Target Angle, Diffuse Pulse(R), Dimmer Signal, Doom Relay Cut, Door Illumination 1, Door Illumination 2, Door Indicator, Door Lock Indicator, Door Lock, Door Lock/Unlock Status Lamp, Door Open Warning, 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 Buckle Light Output, Driver Side Seat Belt Warning, Driver Side Seat Belt, DRL Relay, 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 Indicator Light, ECB Invalid, ECB Linear Valve Offset, ECB Main Relay, ECB Main Relay1, ECB Main Relay2, ECB Motor Relay, ECB Motor Relay2, ECB Solenoid (SC1), ECB Solenoid (SC2), ECB Solenoid (SCC), ECB Solenoid (SGH), ECB Solenoid (SLA), ECB Solenoid (SLAFL), ECB Solenoid (SLAFL2), ECB Solenoid (SLAFR), ECB Solenoid (SLAFR2), ECB Solenoid (SLARL), ECB Solenoid (SLARL2), ECB Solenoid (SLARR), ECB Solenoid (SLARR2), ECB Solenoid (SLR), ECB Solenoid

(SLRFL), ECB Solenoid (SLRFL2), ECB Solenoid (SLRFR), ECB Solenoid (SLRFR2), ECB Solenoid (SLRRL), ECB Solenoid (SLRRL2), ECB Solenoid (SLRRR), ECB Solenoid (SLRRR2), ECB Solenoid (SMC), ECB Solenoid (SMC1), ECB Solenoid (SMC2), ECB Solenoid (SMC-SRC-SCC), ECB Solenoid (SRC), ECB Solenoid (SSA), ECB Solenoid (SSC), ECB Warning Light, ECB Warning, ECB Zero Down, ECO Mode Indicator, ECONO Indicator, ECT PWR Indicator, ECT SNOW Indicator, EGR Cut VSV, EGR Step Position #2 Control, EGR Step Position, EGR Step, Electric Heater1, Electric Heater2, Electric Heater3, Electric Water Heater, Electric Water Pump, Electrical Fan, Emergency Call Cancellation, Emergency Exit Warning, Emergency Solenoid Valve, Emission Pulse(R), Enforced Driving FHL Warning Trigger, Engine Cooling Fan, Engine Indicator, Engine(HV E/G Nonstop Mode), EPB Auto OFF Indicator, EPB Control Switch, EPB Warning Light, EPS Warning, ES Start Buzzer, ES Start Light, EV Drive Indicator, EV Mode Indicator, Evap VSV(Alone), Evaporator Magnetic Valve, Exhaust Brake Cut Relay, Exhaust Bypass Valve, Exhaust Bypass VSV Control, Exhaust Damper Position (Rear), Exhaust Gas Control VSV, Exhaust Gas VSV Control, Exhaust Shutter VSV, Exhaust Switching VSV, EXO, Exterior Foot Light Operation, Exterior Lighting SW, Extra High Beam, Face A/O Servo Pulse(D), Face A/O Servo Pulse(P), Flash Handle Fold, Flash Handle Return, Fold/Unfold Mirrors, Foot A/O Servo Pulse(D), Foot A/O Servo Pulse(P), Foot Light, Front Buzzer, Front Fog Lamp Indicator, Front Fog Light Relay, Front Fog Light, Front Foot Light, Front Left Seat Blower, Front Left Seat Heater, Front Passenger Side Seat Belt, Front Right Seat Blower, Front Right Seat Heater, Front Room Light, Front Sliding Sunshade, Front Vertical Operation, Front Washer Relay, Front Washer, Front Wiper Hi Operation, Front Wiper Lo Operation, Fr-Seat Inside Transmitter, Fuel Cap Reminder Warning, Fuel Cooler Solenoid Valve, Fuel Cooler VSV, Fuel Cut Bank 2 For Idle, Fuel Filler Opener, 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 Lamp, Fuel Injector Timing, Fuel Leak Test, Fuel Lid Opener, Fuel Lid Unlock, Fuel Lid, Fuel Pressure Control, Fuel Pressure Relief Valve Open, Fuel Pressure Up VSV, Fuel Pump - Duty Cycle, Fuel Pump / Spd, Fuel Pump Duty Control, 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 Pump, Fuel Pump2 Speed Control, Fuel Route Valve, Fuel ShutOff Delivery Pipe Valve, Fuel ShutOff Valve Fuel Pressure Regulator, Fuel Vapor-Containment Valve, Fuel Warning (CNG), Glass Hatch Open Operation, Glass Hatch Open, GLOW Warning, Go To Service Warning, H/B Motor Relay, Hazard Answer Back, Hazard, H-B Motor Relay, HC Absorber and Catalyst VSV, HCAC System VSV, HCAC VSV Check, HCAC VSV, Head Light (High), Head Light Hi, Head Light Low, Head Up Display Indicator, Headlamp Indicator, Headlight Cleaner, Headlight High Beam, Headlight Indicator, Headlight Leveling Indicator, Headlight Low Beam, Headlight Relay, Headlights - HI, Headrest Front-Rear, Headrest Motor, Heat Exchange Shut Valve, Heater Relay, Heater Valve, Heating Electric Expansion Valve, Heating Three-way Valve, Height High Indicator, Height High Warning, HICM System Check, High Beam Indicator, High Beam LH, High Beam RH, High Mounted Stoplamp Control, High Pressure Magnetic Valve, High Voltage Electric Heater, High-Beam Headlights, Hold Indicator, Horn Relay, Hot A/M Servo Pulse(D), Hot A/M Servo Pulse(P), 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, 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 System Warning, Hydrogen Leak Warning, IAC Duty Ratio, IACV Motor Control, ICS OFF Warning, Idle Up VSV,

IG OFF P/W Control Permission Output, IGP Signal, Illuminated Entry System, Immobilizer Indicator, iMT Indicator (Green), iMT Indicator (Yellow), indicat ECD ON, Indicat. DABS, Indicat. INTUITIVE P/A LCD, Indicat. Lamp ARS, Indicat. Lamp Ex Temp, Indicat. Lamp L-Cruise Check, Indicat. Lamp L-Cruise Ready, Indicat. Lamp O/D OFF, Indicat. Lamp Oil, Indicat. Lamp T.C. Oil Temperature, Indicat. Lamp TRAC(TRC) OFF, Indicat. Lamp Turn L, Indicat. Lamp Turn R, Indicat. Lamp VSC OFF, Indicat. Laser Cruise Display, Indicat. Night View, Indicat. ODO/TRIP Display, Indicat. Over Speed, Indicat. Tail Cancel, Indicate A/T Shift LCD, Indicate AFS OFF Lamp, Indicate SMART Key, Indicator 4WD, Indicator AFS, Indicator Condition, Indicator ECONO, Indicator EPS, Indicator For Lighting, Indicator GLOW, Indicator Height High, Indicator Lamp Airbag, Indicator Lamp Beam, Indicator Lamp Cruise, Indicator Lamp ECB, Indicator Lamp ECT PWR, Indicator Lamp ECT SNOW, Indicator Lamp Fr FOG, Indicator Lamp Head, Indicator Lamp oil Level, Indicator Lamp Rr FOG, Indicator Lamp Rr Light, Indicator Lamp Slip, Indicator Lamp Tail, Indicator Lamp Washer, Indicator Ready(HV), Indicator Tire Pressure Warning System, Indicator. VGRS, IndicatorHeadlamp Auto Leveling, IndicatorTEMS Sports, 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, Injector Volume, Inside Handle Illumination, Inside Handle Light, Inside Luggage Tuner Power Supply ON, Inside Trunk/Backdoor Transmitter, Inspection Mode, Instrument Panel Illumination, Intake Air Control VSV, Intake Air VSV Control, Intake Control VSV, Intake Control VSV1, Intake Control VSV2, Intake VSV 2 Control, Intercooler Water Pump Relay, Interior Illumination Light, Interior Illumination Light1, Interior Panel Relay, Interlocking Shift OFF Display, Interlocking Shift ON Display, Intrusion Sensor Power, INTUITIVE P-A LCD Indicator, INTUITIVE P-A LCD OFF Indicator, Ion Generator, ISC Duty, ISC Step Position, KDSS Warning, Key Remainder Buzzer, Key Remained Buzzer, Laser Cruise at Constant-Speed, Latch Release Test, Latch Release, LDA Indicator (White), LDA Indicator, LDA Steering Control Indicator, LDA Warning, LED Headlamp Warning, Left High Beam, Left LDA Indicator, Left LDA Warning, Left rear power window motor Up / Down, Left Turn Signal Indicator, Left Turn Signal Lamp, Left Turn Signal Light, LH Courtesy Light, LH Mirror Up/Down, License Plate Lamp, Lift Up Buckle, Lifter Operation, Light Control Switch (DOWN), Light Control Switch (Single), Light Control Switch (UP), Light Head HI DRL Operation, Light Remained Buzzer, Limited Power Indicator, Line Pressure Up Solenoid, Lithium Battery Check Indicator, Lithium Battery Hot Indicator, Lock Display, Lock Faulty Display, Lock Up Solenoid, Low Pressure Magnetic Valve, Low-Beam Headlights, Lower Air Mix (Driver Side), Lower Air Mix (Passenger Side), Lower Back, Lower Cushion, LPG Indicator, Luggage Closer Close/Rtn Ini Pos, Luggage Compartment Light, 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 Required, Maintenance Warning, Manual EVAP System Check, Map and Courtesy Light, Master Cut Valve1, Master Cut Valve2, Master Warning, Memory Cancel Lamp, Meter Buzzer, Meter Chime Continuously, Meter Chime, 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), Middle Pressure Magnetic Valve, Mirror Fold, Mirror Heater Relay, Mirror Heater, Mirror Left/Right, Mirror Return, Mirror Up/Down, MMT E Mode Warning, Motor Relay, Motor Relay1, Motor Relay2, 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-Display, Navi CVT Indicator, Night View Indicator, Not Available Display, Not P-position Warning, O/C Cut Control, O/D Cut Signal, O/D Cut Solenoid, O-D OFF Indicator, ODO-TRIP Change Switch, OFF Road Guidance Indicator, OFF Road Guidance Warning, 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 Warning, Open Door Warning, Other ECU



Power Cut, Outside Trunk/Backdoor Transmitter, Over Speed Indicator, Overhead Tuner Power Supply ON, Overheat Display, Oxygen Drive, P Range Display, P Range Indicator, P Supply for Steering Lock, Park Warning, Passenger Buckle Light Output, Passenger Power Window Up/Down, Passenger Seat Operation Switch Indicator, Passenger Side Seat Belt Warning, PBD Buzzer, PBD Close SW Light, PBD Clutch, PBD Motor, PBD Open/Close, PCS Buzzer, PCS OFF Warning, PCS Warning, Pedestrian Protection Warning, Pelvis Support Operation, 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 Running Board Forced Retracting, Power Supply Air Bleeding Pattern2, Power Window SW LED, Power Window Up/Down - Passenger, Power Window Up/Down - RL, Power Window Up/Down - RR, Power Windows, Power/Engine SW Light, PPS Solenoid, PPS Warning, Pre Crash Brake OFF Light, Pre-Charge Pump, Pre-crash Indicator, Prohibit The Catalyst OT Misfire Prevent F/C, Proximity Sound (Low Speed), Proximity Sound (Vehicle Stationary), Proximity Sound Indicator, Pr-Seat Outside Transmitter, Pr-Seat Select, PSD Buzzer, PSD Clutch, P-Seat Outside Transmitter, P-Seat Select, Pump Check Pattern, Pump for Evaporative System, Purge Cut VSV, Purge Dilution Valve Duty Bank 2, Purge VSV (Alone), Radar Cruise Approach Alarm Buzzer, Radar Cruise Indicator (Yellow), Radar Cruise Indicator, Radar Cruise Stop Buzzer, RCD OFF Indicator, RCTA Indicator, RCTA OFF Indicator, Ready Buzzer, Ready Indicator, Rear A/M Servo Pulse(P), Rear A-C Mag Valve, Rear Air Mix Servo Target Pulse, Rear Blower Motor, Rear Blower, Rear Buckle Light Output, Rear Buzzer, Rear Defogger, Rear DIFF LOCK Indicator, Rear Fog Lamp Indicator, Rear Fog Lamp, Rear Fog Light Relay, Rear Fog Light, Rear Inner Wheel Control Indicator, Rear Inner Wheel Control Warning, Rear Inverter Cooling Fan, Rear Left Seat Blower, Rear Left Seat Heater, Rear Light Indicator, Rear personal light, Rear Right Seat Blower, Rear Right Seat Heater, Rear Room Light LH, Rear Room Light RH, Rear Room Light, Rear Seat Belt Warning, Rear Seat Lumbar Adjustment, Rear Side Buckle Light, Rear Sunshade Operation, Rear Washer Relay Operation, Rear Washer Relay, Rear Washer, Rear Wiper Motor, Rear Wiper Operation, Rear Wiper Washer Motor Relay, Reductant Discharge, Reductant Filling (Pressure Keep), Reductant Injection Valve, Reductant Pipe Heater, Reductant Pump Check (Backward), Reductant Purge, Reductant Tank Heater, Reductant Warning, Refresh B1, Refresh B2, Refresh B3, Refresh B4, Refresh B5, Refresh C1, Refresh C2, Refresh C3, Refresh C4, Refrigerant Gas Volume Check, Regulator Shut Valve, Relay for Interior Light Auto Cut Function, Release Actuator, Release Display, Remote Engine Starter, Return Solenoid Valve, Reverse Buzzer, Reverse Gear Signal, RH Courtesy Light, RH Mirror Right/Left, RH Mirror Up/Down, Rheostat Cancel Operation, Rheostat Operation, Ride Mode Indicator, Right High Beam, Right LDA Indicator, Right LDA Warning, Right rear power window motor Up / Down, Right Turn Signal Indicator, Right Turn Signal Lamp, Right Turn Signal Light, RL Wheel Air Bleeding Pattern, RR Wheel Air Bleeding Pattern, Rr-Seat Inside Transmitter, SB Solenoid, Scuff Plate Light, SCV Duty Ratio, SCV Solenoid, Seat Backrest Recline, Seat Belt Buzzer, Seat Heater Active Level, Seat Light Operation, Seat Slide Operation, Secondary Air VSV Control, Security Horn 2, Security Horn, Security Indicator, Sensitivity Check, SET Indicator, Shift Light, Shift R Sign, Shift-By-Wire Warning, Shock Detection Unlock, Shoulder Belt Up/Down, Shoulder, Side Back Support, Side Cushion Support, Side Mirror Foot Light, Side Support Operation, Signal Check, SIL Indicator (Down), SIL Indicator (Up), SLC Solenoid, Slide Roof, Slip Control Solenoid, 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, Solenoid (DSU), Solenoid (SB), Solenoid (SLA), Solenoid (SLC), Solenoid (SLR), Solenoid Relay, Solenoid(DSL), Solenoid(S2), Solenoid(SB), Solenoid(SLS), Solenoid(SR), Solenoid(ST), Sound, Speed Buzzer, 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 LCD, Speedometer Operation (0km-H,0mph), 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), Sports Shift Reject Buzzer, Start Relay, Steering Heater Indicator (Yellow), Steering Heater, Steering Light Operation, Step Light Operation, Step Light, Stoichiometric Ratio Combustion, Stop And Start OFF Indicator, Stop And Start ON Indicator, Stop Lamp Relay, Stop Light Relay, Stop light System Indicator Light, Stop Light, Stratified Charge Combustion, Stroke Simulator Cut Valve Pattern, Stuck Steering Warning, 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 Tank VSV, Sub Throttle, Supercharger control relay, 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), Tail Light, Taillamp Indicator, Taillight Relay, Tank Pressure Bypass VSV, Target Fuel Pressure Control, Test Mode, Test the Turbo Charger Step Motor #2, Test The Turbo Charger Step Motor 2, Test The Turbo Charger Step Motor Bank 1, Test The Turbo Charger Step Motor, Timer Switch (00), Timer Switch (H), Timer Switch (M), Timer Switch (Single), Timing Solenoid, Tire Pressure Light, Tire Pressure Test Mode, Tire Pressure Warning System Indicator, Tow Haul Indicator, TPMS Warning Light, Trac Motor Relay, TRAC Solenoid (SA1 SA2), TRAC Solenoid (SA1), TRAC Solenoid (SA2), TRAC Solenoid (SFLR SFLH), TRAC Solenoid (SFRH SFLH), TRAC Solenoid (SFRR SFRH), TRAC Solenoid (SMC1), TRAC Solenoid (SMC2), TRAC Solenoid (SMF), TRAC Solenoid (SMFL), TRAC Solenoid (SMFR SMFL), TRAC Solenoid (SMFR), TRAC Solenoid (SMR SPFR), TRAC Solenoid (SMR), TRAC Solenoid (SPFL), TRAC Solenoid (SPFR), TRAC Solenoid (SRCF SRCR), TRAC Solenoid (SRCF), TRAC Solenoid (SRCR), TRAC Solenoid (SRH), TRAC Solenoid (SRLR SRLH), TRAC Solenoid (SRMF SRMR), TRAC Solenoid (SRMF), TRAC Solenoid (SRMR), TRAC Solenoid (SRRR SRRH), TRAC Solenoid (SS), TRC(TRAC) Motor Relay, TRC(TRAC) OFF Indicator Light, Trip Reset Switch, Trunk And Back-Door Open, Trunk Lid 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, Unmatch Key Warning, Upper Air Mix (Driver Side), Upper Air Mix (Passenger Side), Vapor Pressure VSV, 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, Vent Valve, 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 H/B Warning Buzzer, VSC Indicator Lamp, VSC OFF Indicator Light, VSC TRC Indicator, VSC Warning Light, VSC/TRAC Off Indicator Light, 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 Control (Bank 2), VVT Exhaust Linear (Bank 1), VVT Exhaust Linear (Bank 2), VVT Linear (Bank 2), VVT System (Bank 1), VVT System (Bank 2), VVTL Control B1, VVTL Control B2, VVTL System (Bank 1), VVTL System (Bank 2), Warning Buzzer, Washer Motor, Washer Nozzle Heater, Washer Warning, Water Level Warning, Water Pump, 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), Wiper Angle Control, Wiper Motor Hi, Wiper Motor Lo, Wiper Motor, Wiper Power Relay, Wireless Buzzer (Continuous Sound), Wireless Buzzer, Wireless Door Lock Diag Mode

## ***New Coverage – USA European***

### ***Alfa Romeo Coverage***

#### **34 new Adjustment type special tests:**

Actuator Test Injector, Actuator Test Inverse Pump, Actuator Test Pump, Actuator Test Tank Heater, Actuator Test Tube Heater, Assist Call Green Day PWM, Assist Call Green Night PWM, Assist Call Red Day PWM, Assist Call Red Night PWM, Backlight 1 Level, Backlight 2 Level, Backlight 3 Level, Backlight 4 Level, Backlight 5 Level, Backlight 6 Level, Backlight 7 Level, Backlight 8 Level, BLOWER Motor Brushed, BLOWER Motor Brushless, Damper Front Left Command, Damper Front Right Command, Damper Rear Left Command, Damper Rear Right Command, DNA Status LED 3, Electric seat movement Relay, Front Jet Wiper, Heated Rear Window Relay Command, Knob LED control, Line Departure Warning (LDW) Left Side, Line Departure Warning (LDW) Right Side, PTC Control (Relay), TPMS Fault Lamp, Trunk Release Relay Command, Windshield Heating

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

Configuration reset, Downstream Lambda Sensor Heater Self-learning Reset, Intake Lambda sensor adaptive parameters reset, Reset Fuel Rail Bleed Procedure, Reset of VCM Bad Programming Snapshot, Reset oil life monitoring parameter, Throttle Body Self-Learn Activation, VCM Adaptive Parameter Reset After Block Change, VCM Adaptive Parameter Reset After Oil Change

### ***Fiat Coverage***

#### **11 new Adjustment type special tests:**

Configuration reset, Overboost counter reset, Phonic Wheel Tooth Learning Reset, Purge fuel circuit reset, Reset Adaptive After Block Change, Reset Camshaft Adaptive, Throttle Body Self-Learn Activation, Turbocharger adaptive parameters reset, Valve Variator Actuator (VVA) freeze wrong request reset, VCM Adaptive Parameter Reset After Block Change, VCM Adaptive Parameter Reset After Oil Change

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

Actuator Test Injector, Actuator Test Inverse Pump, Actuator Test Pump, Actuator Test Tank Heater, Actuator Test Tube Heater, Button Symbol Backlight PWM Duty, Diagnose valve, DNA Status LED 3, Electric seat movement Relay, Electrovalve Even Gear Command, Front Jet Wiper, Knob LED control, Rear Fog Light Lamp, TPMS Fault Lamp

### ***Jaguar Coverage***

- Added coverage for 18 new system applications

#### **14 new Actuation type special test:**

Auto Hi Beam On-Of Stat -Electrochromatic Mir O-P Dark, Auto High Beam On-Off Status -Automatic High Beam Requested, Automatic High Beam On-Off Status -Reverse Inhibit Active, Imag Proc Ctrl Mod A On-Of Stat -Leg Soci Auto Engi (SAE N Amr, Image Processing Control Module A On-Off Status -Fog Detected, Image Processing Control Module A On-Off Status -Speed Inhibit, Image Processing Ctrl Mod A On-Of Stat -Camera Obstruction Det, Image Processing Ctrl Mod A On-Of Stat -Hand Traffic, Image Processing Ctrl Mod A On-Of Stat -High Amb Light Inhbt, Image Processing Ctrl Mod A On-Of Stat -High

Temp Inhibit, Image Processing Ctrl Mod A On-Of Stat -Power Sup Inhibit, Image Processing Ctrl Mod A On-Of Stat -Supply V Inhibit, Self Test - Camera System, Self Test - CEM System

## ***Land Rover Coverage***

- Added coverage for 42 new system applications

### **13 new Actuation type special test:**

Auto Hi Beam On-Of Stat -Electrochromatic Mir O-P Dark, Auto High Beam On-Off Status -Automatic High Beam Requested, Automatic High Beam On-Off Status -Reverse Inhibit Active, Imag Proc Ctrl Mod A On-Of Stat -Leg Soci Auto Engi (SAE N Amr, Image Processing Control Module A On-Off Status -Fog Detected, Image Processing Control Module A On-Off Status -Speed Inhibit, Image Processing Ctrl Mod A On-Of Stat -Camera Obstruction Det, Image Processing Ctrl Mod A On-Of Stat -Hand Traffic, Image Processing Ctrl Mod A On-Of Stat -High Amb Light Inhbt, Image Processing Ctrl Mod A On-Of Stat -High Temp Inhibit, Image Processing Ctrl Mod A On-Of Stat -Power Sup Inhibit, Image Processing Ctrl Mod A On-Of Stat -Supply V Inhibit, Self Test - Camera System

## ***Mercedes Benz Coverage***

### **1 new Adjustment type special tests:**

Rain Sensor Initialization

## ***Volkswagen Coverage***

### **323 new Adjustment type special tests:**

Acknowledge Comfort Closing With Flashing Light, Activate/Deactivate Emergency Braking Flashing, Activate/Deactivate Emergency Warning Flashing, Activate/Deactivate Freeway Blinking, Activate/Deactivate Front Wiper Service Position, Activate/Deactivate Parking Lights, Activate/Deactivate Water Droplet Removal, Adapt Automatic Rear Lid Locking At 5 km/h, Adapt Convenience Blinking Cycles, Adapt Opening An Individual Door, Adapt Parking Light at Terminal 15, Adapt Signal Horn At Terminal 15, Adaptation (10) / Long Adaptation (0A), Adaptation Acknowledgement Comfort Locking, Adaptation Acoustic Feedback When Locking, Adaptation Acoustic Feedback When Unlocking, Adaptation ATAS Alarm Delay, Adaptation Automatic Locking, Adaptation Automatic Unlocking, Adaptation Coming Home Function, Adaptation Country Setting Of Intelligent Alarm Horn, Adaptation Feedback For Locking By A Key, Adaptation Feedback For Locking Via RRC, Adaptation Feedback For Unlocking Via A Key, Adaptation Feedback For Unlocking Via RRC, Adaptation Flashing Cycles For Convenience Turn Signal Feature, Adaptation Headlamp Washer System, Adaptation Inclination Sensor Sensitivity, Adaptation Interior Monitoring Sensitivity, Adaptation Leaving Home Function, Adaptation Locking Via Access And Start Authorization, Adaptation Unlocking Via Access And Start Authorization, Adapting Battery Monitoring (Sounder), Adapting Single Door Unlock, Adaption Of Clutch Slip Points, Adaptive Brake Light, Adjustment Range Front (High Value), Adjustment Range Front (Low Value), Adjustment Range Rear (High Value), Adjustment Range Rear (Low Value), Adjustment: Locking Whilst Driving, Adjustment: Remote Control Conven. Actuation, Adjustment: Unlocking After Key Removal, Adjustment: Unlocking Options, Alarm Delay, Alarm Horn Adjustment, Ambient Light Threshold Coming/Leaving-Home, Anti-Theft Alarm Delay, Anti-Theft-System Alarm Delay, Assistance Driving Light Activation/Deactivation Delay, Assistance Light Sensor Correction, Audible Feedback When Locking, Audible Feedback When Unlocking, Audible Locking Con?rmation, Audible Unlocking Con?rmation, Auto Trans Kick-Down (TCM), Auto-Lock, Automatic Rear Window Wiping with Reverse Gear, Automatic Transmission Fluid Level Check, Automatic Transmission Fluid Pump Calibration, Automatic Transmission Fluid Pump Function Test, Auto-Unlock,

Auxiliary Heating, Auxiliary Heating/Venting Aid, Auxiliary Heating/Venting Shut-OFF, Basic Adjustment Clutch Conventional, Basic Adjustment Clutch, Basic Adjustment Electrical Fluid Pump Transmission, Basic Adjustment Transmission, Basic Setting Headlamps, Basic Setting, Basic Setting: Clutch Engagement Point, Basic Settings (04), Battery Monitoring Via Alarm Sounder, Brake Light Dimming, CO Adaption, Calibration of clutch valves, Calibration of cooling oil valve, Calibration Of Driving Position Sensor, Calibration Of Gear Selector Movement Sensors, Calibration Of Main Pressure Valve, Calibration Of Synchron Points, Central Locking Functions, Clearing The Shutdown And Reset Data, Combustion Air Blower CO2 Setup, Combustion Air Blower Setting (Low Speed), Comfort Function (Remote Control), Comfort Functions, Comfort Operation (via Remote Control), Comfort Operation: Automatic Roof, Comfort Operation: Closing, Comfort Operation: Opening, Comfort Turn Signals (Cycles), Coming Home Activation Time, Coming-Home Time, Compass Zone, Component Protection (Vehicle Identification Number), Confirmation Sound, Convertible Top Hydraulic Pump Actuation Test, Convertible Top Latch Actuation Test, Country Setting, Daytime Running Lights Dimming (Fog Lights), Daytime Running Lights Dimming (High Beam), Daytime Running Lights Dimming (Low Beam), Daytime Running Lights, Deactivate Factory Mode, Dosage Pump CO2 Volume Adjustment, Draq Torque Detection, Drive Select Standard Setting (Key 1), Drive Select Standard Setting (Key 2), Drive Select Standard Setting (Key 3), Drive Select Standard Setting (Key 4), DWA Driver Door Opening Alarm Delay Adjustm., DWA Interior Monitor Sensitivity Adjustment, DWA Primed Feedback Adjustment, DWA Tilt Sensor Sensitivity Adjustment, Dynamic Control Strategy, EEPROM Writing Of Basic Adjustment Data, Electrical Pump 3 For Transmission Function Test, End Stop Closed Check, End Stop Opened Check, Energy Management Shut-Off Priority Counter, England ROW DWA Alarm Signal Adjustment, Excessive Temperature Counter Write Reset, Factory Mode, Factory Reset, Fast Adaption, Fastadaption Twin Clutch, Fog Light Cold Diagnosis, Footwell Lighting Dimming (With Open Door), Footwell Lighting Dimming (with Terminal 58d), Footwell Lighting Dimming, Forced Change-Up Adjustment, Front Buzzer Frequency, Front Buzzer Volume, Garage Door Opener Country Setting, Gear Positioner Neutral Position, Gear Positioner Removal Position, Gear Selector Adaptation, Glass Variant, Halogen Headlights, Headlight Adjustment Position, Headlight Adjustment, Headlight Basic Setting, Headlight Position Learning, Headlight Washer Activation Delay, Headlight Washer Activation Time, Heater Or Metering Pump Deactivation, Heater Start (Customer Service), Heater Unlock, Heater/Air Conditioning, Highbeam with Assistance Driving Light, Highway/Comfort Blinking, Hydraulic System Bleed, Hydraulic System Release Pressure, Hydraulic Test, Inclination Sensor Sensitivity, Interior Monitoring Sensitivity, Interior Monitoring, Key FOB Clearing, Key FOB Matching, Keyless Locking Optical Feedback, Keyless Unlocking Optical Feedback, Kick-Down Adaptation, Kiss Point Basic Setting, Knockout Timer, Launch Control Counter Write Reset, Learn Vehicle Identification Number (VIN), Learned Values Reset, Learning Of Info On Control Units Fitted, Leaving Home Activation/Deactivation, Leaving Home Time, Leaving-Home Time, Line Filling Duration, Line Filling Enabling, Lock Blink, Lock Horn, Lock Transmission Hydraulic Pump, Locking Con?rmation (Key Switch), Locking Con?rmation (Remote Control), Locking With Key Switch Optical Feedback, Locking With Remote Control Opt. Feedback, Log-in(11) Adaptation(10), Log-in(11) Basic Settings(04), Log-in(11) or Coding II(11), Low Beam Response (Terminal 15), Low Beam Response, Low Voltage Shut-Off, Matching The ECU To Fuel Type (Gasoline Or Diesel), Mechatronic Identification, Metering Pump Activation, MIL Enabling, Mileage Data Adjustment, Move Gear Positioner To Neutral Position, Move Gear Positioner To Removal Position, NAR Parking Light Deactivation, Personalization (Key 1), Personalization (Key 2), Personalization (Key 3), Personalization (Key 4), Power Flow Interrup. When Stationary Adjustm., Production Date Transmission, Quickstart - Clutch Slip Point Adaptation Engine Decoupler, Quickstart - Manual Transmission Fluid Pump Test, Quickstart - Reset Of Adaption Values, Rain/Light Sensor Setup, Rear Buzzer Frequency, Rear Buzzer Volume, Rear Fog Light Dimming, Rear Roof Shades Basic Setting, Rear Sliding Roof Basic Setting, Rear Sunroof Control Module Adaptation, Rear Window Outside Mirror Heater Activation Time, Rear Wiper Comfort Function, Recirculation Pump During Auxiliary Heating,

Release Transmission Hydraulic Pump, Remote Control Adaptation, Remote Control Erasing, Remote Control Learning, Remote Control Matching, Remote Control Rear Lid Operating Time, Remote Control Unit Learning, Remote Control: Receiver, Replace Control Unit: Transfer Configuration, Reset Adaptation Parameters, Reset Adaption Of Application Point To Factory Settings, Reset Adaption Value, Reset After Replace Pressure Supply Init Adapt Electric Motor, Reset CAN Information, Reset Clutch 0 Logging Dates, Reset Clutch 1 Logging Dates, Reset Clutch 2 Logging Dates, Reset Clutch Characteristic Clutch 0, Reset Clutch Characteristic, Reset Clutch Control Travel Pressure Characteristic, Reset Clutch Pressure Sensor Adaptation, Reset Clutch Values For Transient Friction, Reset Clutch Values Forward, Reset Clutch Values Reverse, Reset Clutch Values, Reset Clutch Wear, Reset Drivingparts Per Shift Position, Reset Engagement Counters, Reset Factory Defaults, Reset Frequency Counter, Reset Gear Positioner Values, Reset Gearbox Mileage, Reset Kiss Point Adaption Fault Statistics 1, Reset Mileage And Adaption Counter, Reset Mileage Of Rough Road Detection, Reset Of Adaption Values Gear Box, Reset of Adaption Values, Reset of Adjustment/Calibration Values, Reset of CO-Adaption Values, Reset Of Clutch Pressure Adaption, Reset of Survey Counter, Reset of System Specific Adaption Values, Reset Pressure Reduction Logging Dates, Reset Start/Stop Counter, Reset Temperature Model, Reset Total Clutch Adaption, Roller Test Stand Mode, Roof Shade Control Module Adaptation, Roof Shades Basic Setting, Safe Con?rmation, Security Access (16) Adaptation (10) / Long Adaptation (0A), Security Access(16) Basic Settings (04), Selective (Single) Door Locking, Selector Lever Basic Setting, Selector Lever Position Sensor Calibration, Sensor Plausibility Enabling, Service Light Reset, Set Clutch Mileage To Zero, Set Gearbox Mileage To Vehicle Mileage, Set Of Clutch Mileage To Value, Showroom Effect, Shut Off Conditions, Side Marker Lights, Single Gear Indicator Adjustment, Sliding Roof Basic Setting, Start Automatic Trans Fluid Pressure Accumulator Discharge, Start Automatic Transmission Fluid Pressure Accumulator Charge, Steering Column Basic Setting, SWaP Function Crypt Data ID, Switch-Off Delay (Low Beam), Tail Light Dimming, Temp Threshold Auxiliary Heater: Full Load After Partial Load, Temp Threshold Auxiliary Heater: Partial Load After Full Load, Temp Threshold Auxiliary Heater: Start After Control Pause, Temperature Threshold Auxiliary Heater: Control Pause, Temperature Threshold: Ambient Temperature, Temperature Threshold: Coolant Temperature, Terminal 61 Function Enabling, Tilt Sensor Sensitivity, Tiptronic Steering Wheel Button Adjustment, Tourist Solution, Transfer Configuration, Transmission Adaptation Basic Setting 1, Transmission Adaptation Basic Setting 2, Transmission Adaptation Basic Setting 3, Transmission Grade (Front Window), Transmission Oil Level Test, Transmission Rapid Adaption, Transmission Setting Adaption, Transport/Service Mode, Travel/Tourist Mode, Turn Signal Dimming, Turn Signals in Side Rear View Mirror, Undervoltage Heater Turn-Off, Unlock Blink, Unlock Horn, Unlocking Con?rmation (Key Switch), Unlocking Con?rmation (Remote Control), Unlocking With Key Switch Optical Feedback, Unlocking With Remote Control Opt. Feedback, Variants Reduction, Visual Comfort Operating/Closing Confirmation, Visual Feedback When Locking/Unlocking, Visual Locking Con?rmation, Warning Lamp Enabling, Wheel Torque Limitation, Wiper Setup, Write Configuration

#### **224 new Actuation type special test:**

3rd Brake Light, 5th Camera Activation Request Control Value 1, A/C Compressor Regulator Valve, Activation Of Parking Spot Search Park Assist Control Value, Additional Hydraulic Pump For Gearbox Control Value, Additional Hydraulic Pump For Gearbox, Alarm Horn, Auto-Lock/Unlock for Rear Lid, Automatic Calibration Headlamp Test Mode Control Value, Auxiliary Heater Fuel Supply, Back-Up Lights Left, Back-Up Lights Right, Back-Up Lights, Blinker Rear Left, Blinker Rear Right, Blinkers Bulb Front Left, Blinkers Bulb Front Right, Brake Light Left, Brake Light Right, Brake Lights, Bumper Light Rear Left, Bumper Light Rear Right, Button Automated Driving Lighting Test Control Value, Central Locking Indicator Lamp, Central Locking Motors, Central Locking: Lock, Central Locking: Unlock, Child Safety Lock, Close Sliding Roof Signal, Close Windows and Roof Signal, Clutch Actuator Value, Combustion-Air Blower, Comfort Closing, Comfort Opening, Coolant Shut-Off Valve Control Value, Coolant Shut-Off

Valve, Curve Lighting Warning Light, Daytime Running Lights Bulb 2 Left, Daytime Running Lights Bulb 2 Right, Daytime Running Lights Bulb Left, Daytime Running Lights Bulb Right, Daytime Running Lights LED Module Control Circuit Left, Daytime Running Lights LED Module Control Circuit Right, Defined Segment Control Matrix Headlamp Left, Defined Segment Control Matrix Headlamp Right, Display For Lane Departure Warning Control Value, Display Road Sign In Dash Panel Insert Control Value, Display Road Sign In Dash Panel Insert, Door Warning Light, Doors Not Closed Signal, Dosing/Metering Pump, Dr Hazard Warn At Danger Coli Wt A Person Tst Ctrl Val, Driver Hazard Warning At Danger Of Collision With A Person Test, Dynamic Cornering Light: Adjust to Steering Angle Dependent Pos, Dynamic Cornering Light: Adjusting to Center Position, Dynamic Cornering Light: Adjusting to Inner Position, Dynamic Cornering Light: Adjusting to Outer Position, Dynamic Cornering Light: Position Left, Dynamic Cornering Light: Position Right, Emergency Flashers Control Lamp, Emergency Flashers Indicator Lamp, Engine Compartment Light, Exterior Ambient Lighting, Fog Lights Rear Left, Fog Lights Rear Right, Fog Lights Rear, Fog Lights, Fog-Lamps Bulb Left, Fog-Lamps Bulb Right, Footwell Lighting Rear Left, Footwell Lighting Rear Right, Footwell Lights Front, Footwell Lights Rear, Footwell Lights, Fresh Air Blower Activation, Front Fog Lights, Front Parking Aid Loudspeaker Control Value, Front Wiper Service Mode/Position, Front Wiper Tear Wiping, Fuel Pre-Heating Heater, Fuel Pump Relay, Fuel Tank Cap: Lock, Fuel Tank Cap: Unlock, FV Safe State Simulation Control Value, Gear Oil Cooling Valve Close Control Value, Gear Oil Cooling Valve Open Control Value, Gear Selection Value 1, Gear Selection Value 2, Gear Selection Value 3, Gearbob Hydraulic Pump, Glovebox Unlocking Motor, Glow-Plug with Flame Monitoring, Green Indicator Lamp For Lane Departure Warning Control Value, Green Indicator Lamp For Lane Departure Warning, Headlamp Cleaning System Relay, Headlamp Left High Beam Segment Control Test Control Value, Headlamp Left Low Beam Segment Control Test Control Value, Headlamp Right High Beam Segment Control Test Control Value, Headlamp Right Low Beam Segment Control Test Control Value, Headlight Range Control: Adjusting to Delivery Position, Headlight Range Control: Adjusting to Lowered Position, Headlight Range Control: Adjusting to Raised Position, Headlight Range Control: Adjusting to Specified Position, Headlight Washer Pump, Heated Rear Window Activation, Heated Rear Window, Heated Seat Front Left, Heated Seat Front Right, Heater Engine Coolant Blocking Valve, High Beam, High-Beams Bulb Left, High-Beams Bulb Right, Horn Relay, Horn, Individual Segment Control Matrix Headlamp, Interior Ambient Lighting, Interior Door Handle Illumination, Interior Illumination, Interior Lighting (Terminal 30), Interior Lights Dimming (Terminal 58d), Interior Lights Dimming, Interior Monitoring System Indicator Lamp, Interior Monitoring Vehicle Type, Lamp Test, Lane Departure Warning Indicator, License-Plate Lights, Lighting/Illumination, Load Management, Low Beam Lamp Left, Low Beam Lamp Right, Low Beam Reflector Motor Left, Low Beam Reflector Motor Right, Low Beams (Left/Right), Main Beam Activation Control Value, Main Beam Activation, Main Beam, Manoeuvre Light Request Control Value 1, Mirror Folding (In) Motors, Mirror Folding (Out) Motors, Mirror Function Test, Mirror Heating, Open Converter Clutch Control Value, Output Tests (03), Outside Warning Light/Door Exit Light Rear Right, Park Assist Activation Of Partner Control Units Control Value, Parking Aid Activation Control Value, Parking Lights LED Module Control Circuit Left, Parking Lights LED Module Control Circuit Right, Parking Lights Left Front, Parking Lights Left, Parking Lights Right Front, Parking Lights Right, Parking Lights, Rear Left Lock Motor, Rear Parking Aid Loudspeaker Control Value, Rear Right Lock Motor, Rear Windshield Unlocking Control Circuit, Recirculating Pump, Reference Segment Control Matrix Headlamp Control Value, Reference Segment Control Matrix Headlamp, Safe Indicator Light, Safety/Deadbolt Locks Activation, Seat Heating Enabling, Seat Movement Relay Disabling, Selector Lever Lock, Servotronic Steering: Full Assistance, Servotronic Steering: No Assistance, Shift Lock Control Value, Side Marker Light Blub Front Left, Side Marker Light Blub Front Right, Side Shades Motor, Side-Blinkers Bulb Left, Side-Blinkers Bulb Right, Signal Horn Control Circuit, Sliding Roof Function Request Disable, Sliding Sunroof Opening, Static Cornering Light Left: Down/Dim, Static Cornering Light Left: Up/Bright, Static Cornering Light Right: Down/Dim, Static Cornering Light Right: Up/Bright, Stationary Cornering Lamp, Steering Wheel

Vibration Control Value, Steering Wheel Vibration, Swinging Logo Test Control Value 1, System Identification, Tail Lights Left, Tail Lights Right, Tank Flap, Terminal 58s, Terminal 58st, Topview Camera Cleaning Request Control Value 1, Torque Converter Clutch, Trunk Light Left, Trunk Light Right, Trunk Light, Trunk Locking Module, Trunk Motor, Trunk Remote Unlocking, Turn Signals Left, Turn Signals Right, TV Camera Activation Request Control Value 1, Valet Parking Indicator Lamp, Vehicle Inclination Sensor Indicator Lamp, Visual Comfort Operation/Closing Confirmation, Warning Lamp For Adaptive Light Test Control Value, Warning Lamp, Window Regulator Lowering, Window Regulator Motor, Window Regulator Raising, Window Shade Motor Rear, Windscreen Heater For Camera Control Value, Windscreen Heater For Camera, Windscreen Heater For Lane Departure Warning, Windshield Washer Jet Heating, Windshield Washer Pump Front, Windshield Washer Pump Rear, Windshield Washer Pump, Windshield Wiper Motor Stage 1, Windshield Wiper Motor Stage 2, Windshield Wiper Motor, Wiper Interval Rear, Wiper: Upper Reverse Point, Yellow Indicator Lamp For Lane Departure Warning Control Value, Yellow Indicator Lamp For Lane Departure Warning

