

## Version 5.15

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### Overview

Version 5.15 update includes new model year **2024** vehicle coverage and additional **ADAS** calibrations for many brands, plus access to **secure** 2022/2023 **Volvo** vehicles.

7,770 new special tests & 2,349 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 3)***

#### **MY2022 Additions:**

- **Volvo** – C40, XC40 Recharge

#### **MY2023 Additions:**

- **Volvo** – C40, C40 Recharge, S60, S90, V60, V60 Cross Country, V90 Cross Country, XC40, XC40 Recharge, XC60, XC90

#### **MY2024 Additions:**

- **Acura** – RDX
- **Buick** – Envision
- **Cadillac** – Escalade, Escalade ESV
- **Chevrolet** – Suburban, Tahoe
- **Dodge** - Durango
- **Ford** – Bronco, Bronco Sport, E-350 Super Duty, E-450 Super Duty, Edge, Escape, E-Transit, Expedition, F-150, F-150 Lightning, F250 Super Duty, F-350 Super Duty, Maverick, Mustang, Mustang Mach-E, Police Interceptor Utility, Ranger
- **Genesis** – G80, GV70, GV80
- **GMC** – Yukon, Yukon XL
- **Hyundai** – Elantra, Elantra N, Nexo, Santa Cruz, Venue
- **Infiniti** – Q50, QX50, QX60, Qx80
- **Jeep** – Compass, Grand Cherokee L
- **Kia** – Forte, K5, Telluride
- **Lexus** – NX350h
- **Lincoln** – Navigator
- **Mitsubishi** – Outlander Sport

- **Nissan** – Armada, Kicks, Leaf, Rogue, Titan, Titan XD
- **RAM** – 4500, 5500
- **Subaru** – Ascent, Crosstrek
- **Toyota** – 4Runner, Crown, Prius, Prius AWD-e, RAV4, RAV4 Prime, Sienna, Venza
- **Special Test Additions** – multiple brands
- **ADAS Coverage:**
  - **2023 Coverage:**
    - Ram – ProMaster 1500, ProMaster 2500, ProMaster 3500
  - **2024 Coverage:**
    - Dodge – Durango
    - Ford – Bronco Sport, E-350 Super Duty, E-450 Super Duty, Edge, Expedition, F-250 Super Duty, F-350 Super Duty, Maverick, Ranger
    - Infiniti – Q50, QX50, QX60
    - Lincoln – Navigator
    - Mitsubishi - Outlander Sport, Eclipse Cross, Mirage, Mirage G4, Outlander
    - RAM – 1500, 4500, ProMaster 1500, ProMaster 2500, ProMaster 3500
    - Toyota – Crown, RAV4, RAV4 Prime, bZ4X, Camry

## ***New Coverage – USA Domestic***

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

- Added coverage for 324 new system applications

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

ABS Bleed Brakes, ABS Initialization, Accessory Delay, Active Grill Shutter Replaced, Actuator Calibration, AFLS Calibration, AMP Non ANC Qualifier, Auto Door Lock, Auto High Beam Demo Mode Test, Automated Bleed, Automatic Addressing, AUTOMATIC DOOR UNLOCK SELECT, Bleed Brake Procedure, Bleed Brakes, Brake Pedal Calibration, Brake Pedal Learn, Calibrate Liftgate, Calibration Routine, CAM Crank Relearn Routine, Change Country Code, Channel Output Test, Check PCM VIN, Clear All Learned Seat Parameters, Clear CAN BUFFER Count, Clear DEF Pump Learned Offset Values, Clear Engine Auto Restart Crank Counter, Clear Last Remote Start Event Data, Clear Last VTA Trigger, Clear Learning Value, Clear Remote Start Abort Data, Clear Remote Start Inhibit Data, Clear Stored Accumulated Fuel Mass, Clear TPM Sensor Rolls Test Results, Clear TPM Sensor Warnings, Clear Variable Line Pressure Counters, Clock Display, Closed Coupled Replacement, Clutch Pedal Learn, Clutch Sensor Calibration Mode, Configure DRL, Configure License Plate Size, Coolant Three Way Valve, Coolant Three Way Valve Replaced, Diesel Particulate Filter Regeneration, DPF Pressure Sensor Reset, DPF Regen, DPF Replacement, Driving Regeneration Request, DTCM Replacement, Dual Alternator Enable/Disable, Dual Fuel Tank Enable / Disable, ECU Replacement With Value Transfer, EGR Coolant Regeneration, EGR Low Pressure Learn, EGR System Test, EGS Initialization, ELSD Quicklearn, Emissions Rolls Test Mode, Enable / Disable Vehicle Features, Enable/Disable DRL, Enable/Disable Seatbelt Minder Chime, Engine Idle Shutdown Feature Enable/Disable, Entry Time, EPB Service Procedures, Erase Calibration value storage, Exhaust Phaser 1 Cleaning, Exhaust Phaser 2 Cleaning, Exit in Plant Mode, Exit Logistic Mode, Exit Shipping Mode, FCM Enable Emissions Rolls Test Mode, Fire Protection System Activate, Flash Lamps with Lock, Fleet Pin Reset, Front Axle Disconnect Feature, GSE Injector Adaptation, Hard Stop Search, Headlamp Leveling, High Temp Cabin Valve Cal/Test, Horizontal Adjustment, Horn Duration, HVAC Actuator Calibration Test, Idle Shutdown Timer Adjustment, Initialize ABS, Initialize Cluster Configuration w/o Odometer Affect, Initialize CVT, Initialize ORC, Injector Quantity Adjustment, Intake Phaser 1 Cleaning, Intake Phaser 2 Cleaning, IPC Replacement, Key FOB Identification, Key Fobs Linked To Memory, KeySense PIN Reset, Learn ETC, Light Rain Sensor Calibration, Longitudinal G Sensor Calibration, Low Temp Coolant Fill - Active Pump, Low Temp Coolant Fill - Passive Pump, Manual Hard Drive Back-up, Manual Logistic Mode Procedure Enable, Mass Air Flow Sensor Initialization, Microphone Output Short Test, Microphone Tone Test, Modify Volumetric Sensors Sensitivity, Most Recent Cool Down Test Results, Motor Position Learn, New Engine Installed, Non-Volatile Memory Reset, OCM System Verification Test, Oil Change Light Reset, Oil Change Monitor Type, Oil Life Restore, Overboost counter reset, Phonic Wheel Ttooth Learning Reset, Pressure Sensor Calibration, Program Engine Serial Number, Program Tire Sensor Identifications, Program Tire Size, Program Variant Coding, Proxi Configuration, Proxi Configuration Alignment, PTO RPM Adjustment, PTO Settings, Purge fuel circuit reset, Quick Learn, Quicklearn 62TE, Quicklearn Non RFE, Quicklearn RFE, RAM Active Air Box Calibration, Range Position Sensor Reset, RDU Replacement, Remote Start Override, Remote Start Temporary Disable, Reset Adaptive Values, Reset After Replacement Of Lambda Sensor, Reset Camshaft Adaptive, 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 Injector Compensation Values, Reset Memory, Reset of Lambda Values, Reset of SCR Long Term Adaptation Factor, Reset Parameters to Default, Reset SCR Mileage Counter to 200 Miles, Reset Service Information, Reset VCM Adaptives, Reset Zero Fuel Quantity Calibration, Resolver Offset Learn, Restore Customer Programmable Features, Rollover Detection, SCR

DEF Tank Fluid Level Filter Reset, SCR System After ECU Replacement Procedure, SCR System Catalyst Reset, SCR System Dosing Module Replacement, SCR System Pressure Line Replacement, SCR System Tank or Pump Replacement, SCR System Wiring Harness Replacement, Seat Belts Alarm Enable, Seat Calibration, Sensor Wiring Test, Service Procedures, Set Axle Type, Set Max Cruise Speed, Set Max Vehicle Speed, Set Ride Height Level, Snorkel Output Test, Standardization, Stationary Desoot (DPF Regen), Store Learned TCU Adaptives, System Air Mass/Pressure/Ride Height Readings, TCC Break In, TCM Reset Learned Adaptives Routine, Throttle Body Self-Learn Activation, Tip Start Override, Tip Start Temporary Disable, Tire Pressure Sensor Registration, TLC Learn, Turbo Actuator Pre-Align / Self Calibrate, Turbocharger adaptive parameters reset, Update Front and Rear Axle Nominal Tire Pressure Values, Update Pressure Thresholds, Valve Body Solenoid Learn, Valve Variator Actuator (VVA) freeze wrong request reset, VCM Adaptive Parameter Reset After Block Change, VCM Adaptive Parameter Reset After Oil Change, VGT Learn, VGT Sector Gear Hysteresis Test, View/Reset Duty Cycle Maps, VIN Lock, VVL Cam Crank Relearn, Write Pinion Factor, Write VIN

### **1965 new Actuation type special tests:**

EOBD (Electronic On Board Diagnostic) failure indication, 1st Gear Clutch Test (62TE), 1st Gear Clutch Test (Non-RFE), 1st Gear Clutch Test (RFE), 2/4 Clutch Volume Index Check, 2-3 Skip Shift Solenoid Control State, 2-4 Solenoid, 2-4 Solenoid State, 2C Or 2-4 Solenoid, 2nd Gear Clutch Test (62TE), 2nd Gear Clutch Test (Non-RFE), 2nd Gear Clutch Test (RFE), 2nd Prime Gear Clutch Test (RFE), 2nd Row Blend Door 1, 2nd Row Blend Door 2, 2nd Row Blend Door 3, 2nd Row Blend Door 4, 2nd Row Center Seat Backrest Release Actuator, 2nd Row Headrest Release Switch, 2nd Row LT Easy Entry-Exit Switch 2, 2nd Row LT Latch Switch, 2nd Row LT Seat Backrest Release Actuator, 2nd Row LT Seat Easy Entry Release Actuator, 2nd Row LT Seat Fold Switch, 2nd Row LT Seat Headrest Release Actuator, 2nd Row Mode Door 1, 2nd Row Mode Door 2, 2nd Row RT Easy Entry-Exit Switch 2, 2nd Row RT Latch Switch, 2nd Row RT Seat Backrest Release Actuator, 2nd Row RT Seat Easy Entry Release Actuator, 2nd Row RT Seat Fold Switch, 2nd Row RT Seat Headrest Release Actuator, 2WD Rolls Mode, 2WD Test Mode, 3rd Gear Clutch Test (62TE), 3rd Gear Clutch Test (Non-RFE), 3rd Gear Clutch Test (RFE), 3rd Row Fold-Unfold Switch 1 Left, 3rd Row Fold-Unfold Switch 1 Right, 3rd Row Fold-Unfold Switch 2 Left, 3rd Row Fold-Unfold Switch 3 Left, 3rd Row Fold-Unfold Switch 3 Right, 3rd Row Headrest Release, 3rd Row Headrest Release Switch, 3rd Row LT Recline Switch FWD, 3rd Row LT Recline Switch RWD, 3rd Row LT Seat Folding Motor 1, 3rd Row LT Seat Folding Motor 2, 3rd Row LT Seat Headrest Release Actuator, 3rd Row Mode Door 1 Actuator Position, 3rd Row Mode Door 2 Actuator Position, 3rd Row RT Recline Switch FWD, 3rd Row RT Recline Switch RWD, 3rd Row RT Seat Folding Motor 1, 3rd Row RT Seat Folding Motor 2, 3rd Row RT Seat Headrest Release Actuator, 4 Low Indicator, 4C Solenoid, 4C Solenoid State, 4th Gear Clutch Test (62TE), 4th Gear Clutch Test (Non-RFE), 4th Gear Clutch Test (RFE), 4WD, 4WD Auto, 4WD AUTO Indicator, 4WD Indicator, 4WD LED, 4WD Lock Indicator, 4WD Low, 4WD Neutral Indicator, A/C, A/C Clutch Relay Control State, A/C Compressor Clutch Relay Control State, A/C Pressure 5 Volt Supply, A/C Request, A/C Select, ABS, Abs Failure Indicator, ABS fault Lamp, ABS Lamp, ABS Light, ABS Safety lamp, AC Button, A-C Button, A-C Compressor Clutch Relay Control State, AC Condenser Fan, AC emergency shut off, AC Indicator, A-C INDICATOR, A-C Indicator PWM, AC Off For Vehicle Manoeuvring, AC Request, A-C Request, A-C Select, ACC Enter In-Plant Mode, ACM Wake Up, Activate Driver and Passenger Head Restraints, Activate Fuel Lift Pump, Active Exhaust Valve 1, Active Exhaust Valve 2, Active Grill Shutter Test, Actuate All Heaters, Actuate All Seat Heaters, Actuate All Vents, Actuator Position, Actuator Test For SCR Device Relay, Actuator Test For Scrdevrly, Actuator Test Of Urea Back Flow Pump Actuator, Adjustable Pedal Disable Relay, Adjustable Pedal State, Aero LED, Aero Level, Aftertreatment System Performance Test, Aim Test, Air Bag, Air Bag Lamp, Air Bag Light, Air Condition, Air Condition Relay Control, Air Conditioner Relay Command, Air Dam Test, Air Suspension Leakdown Test, Airbag failure indication, Airbag Fault Indicator, All Doors/Central Locks, All Doors-Central Locks, All LEDs On, All Stop Lights, Alternator Current Limit, Alternator Field Control State,

Alternator Field Duty Cycle, Alternator Field Duty-Cycle, Alternator Output Voltage Setpoint, Alternator Test, Alternator Voltage Set Point Value, Ambient Dimming, Ambient Lamp, Ambient Temperature, AMP Output Short Test, AMP Output Tone Test, ANC Output Short Test, Antenna Power, Antilock brake (ABS) failure indication, APM Status, Apply release brake rear left EPB, Apply release brake rear right EPB, Apply release electric brake EPB, Approach Light State, ASD Engine, Assist Call Button Green LED, Assist Call Button Red LED, Assist Call Green Day PWM, Assist Call Green LED Control PWM, Assist Call Green Night PWM, Assist Call Red Day PWM, Assist Call Red LED Control PWM, Assist Call Red Night PWM, ATMM Left Actuator Command -%, ATMM Left Actuator Command -Degrees, ATMM Left Actuator Command -Hz, ATMM Right Actuator Command -%, ATMM Right Actuator Command - Degrees, ATMM Right Actuator Command -Hz, Audio, Audio Network Test, Audio Routing, Audio Test, Audio Test For Subwoofer Specific, Audio Video Signal Detection, Auto - Backlight, AUTO Button, Auto High beam headlamp indication, Auto High Beam Indicator, Auto Indicator, AUTO LED, Auto Shutdown (ASD) #1 Relay Control State (Left Bank), Auto Shutdown (ASD) #2 Relay Control State (Right Bank), Auto Shutdown (ASD) Relay Control State, Auto Shutdown Relay Control State, Auto Wipers, AutoApply function, Auxiliary Coolant Pump, Auxiliary Fuel Pump, AVAC Motor Central Position, AVAC Motor Down Most Position, AVAC Motor Up Most Position, Average Ambient Temperature, BACK button, Background LED Illumination Level, Background LED State, Backlight 1 Level, Backlight 2 Level, Backlight 3 Level, Backlight 4 Level, Backlight 5 Level, Backlight 6 Level, Backlight 7 Level, Backlight 8 Level, Backlight Control, Backlight Control - Heated Seats, Backlight Control - Other, Backlight Control-A/C LED, Backlight Control-Auto LED, 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-Blue LEDs, Backlight Control-Display PWM, Backlight Control-ESP LED, Backlight Control-Front Defrost LED, Backlight Control-HVAC Recirc/AC/Front Def/Rear Def, Backlight Control-LED Jewel Indicator auto, Backlight Control-LED Jewel Indicators excluding Auto, Backlight Control-Rear Defrost LED, Backlight Control-Recirc LED, Backlight Control-Red Driver/Passenger Temp Up, Hazard, Backlight Control-Red LEDs, 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, Backlight Control-Stop/Start LED, Backlight Control-White Backlight LEDs, Backlight Control-White Ring LEDs, Backlighting: Driver Temp Down, Pass Temp Down, Backlighting: Driver Temp Up, Pass Temp Upj., Backlighting: Knob Halo White Backlighting, Backslide Window, Backup Alarm, Backup Lamp Left, Backup Lamp Right, BACKUP LIGHT L-R, Backup Lights, Baggage Lamps, Balance Settings, Bass Settings, Battery Bad (Red), Battery Charge LEDs, 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, Battery Voltage LEDs, Battery Voltage Output, BCI LED Control, Bed Lamp, Blind Spot Indicator State, Blower Down Button, Blower Knob - Backlight, Blower Motor, Blower Motor Speed, Blower Up Button, BLUE Circuit, Blue Cooled Seat Indicators, Blue Heated Seat Indicators, Blue Temperature Bar, Boost Low Pressure Actuator, Boost Pressure, Boost Pressure Actuator, Both Headlamps Max High Position, Both Headlamps Max Low Position, Brake Failure Indicator, Brake Indicator, Brake Light, Brake State Output, Brake Switch, Brake system failure indication [BRAKE], BRAKE Text, Brake Warning Lamp, BSM State, BSM Wake Up, BTSI, BTSI Coil Output Control, BTSI Control, BTSI Solenoid, Button 11 (Spare), Button 14 (Spare), Button 15 (Spare), Button 16 (Spare), Button 24 (Spare), Button 6 (Spare), Button 7 (Spare), Button 8 (Spare), Button Indicators, Buttons/Encoder Control-A/C Button, Buttons/Encoder Control-Auto Button, Buttons/Encoder Control-Back Button, 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-Driver/Main Temp Down Button, Buttons/Encoder Control-Driver/Main Temp Up Button, Buttons/Encoder Control-EBL (Rear Defrost) Button, Buttons/Encoder Control-Enter Button, Buttons/Encoder Control-ESP Button, Buttons/Encoder Control-Front Defrost Button, Buttons/Encoder Control-HVAC Power Button, Buttons/Encoder Control-Mute Button, Buttons/Encoder Control-Passenger Temp Down Button, Buttons/Encoder Control-Passenger Temp Up Button, Buttons/Encoder Control-Recirc Button, 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, Buttons/Encoder Control-Rotary Blower Knob, Buttons/Encoder Control-Rotary Tuner Knob, Buttons/Encoder Control-Rotary Volume Knob, Buttons/Encoder Control-Screen Off Button, Buzzer Control, Buzzer Output, Cabin Temperature Sensor, Camera Washer, Cargo Lamp, Cargo Light, Cargo Light Indicator, CARGO LIGHTS, Catalyst Efficiency Test, CEGR H-Bridge Valve Duty Cycle, Ceiling Light, Ceiling Light Rear Left, Ceiling Light Rear Right, Center High Mount Stop Lamp, Center Stop Lamp, Central high mounted Stop Light (CHMSL), Central Lock (Pass Side), CENTRAL LOCK PASSENGER, Channel 1 Audio Control, Channel 1 Audio Output Status, Channel 10 Audio Control, Channel 10 Audio Output Status, Channel 11 Audio Control, Channel 11 Audio Output Status, Channel 12 Audio Control, Channel 12 Audio Output Status, Channel 13 Audio Output Status, Channel 14 Audio Output Status, Channel 15 Audio Output Status, Channel 16 Audio Output Status, Channel 17 Audio Output Status, Channel 18 Audio Output Status, Channel 19 Audio Output Status, Channel 2 Audio Control, Channel 2 Audio Output Status, Channel 20 Audio Output Status, Channel 21 Audio Output Status, Channel 22 Audio Output Status, Channel 23 Audio Output Status, Channel 24 Audio Output Status, Channel 3 Audio Control, Channel 3 Audio Output Status, Channel 4 Audio Control, Channel 4 Audio Output Status, Channel 5 Audio Control, Channel 5 Audio Output Status, Channel 6 Audio Control, Channel 6 Audio Output Status, Channel 7 Audio Control, Channel 7 Audio Output Status, Channel 8 Audio Control, Channel 8 Audio Output Status, Channel 9 Audio Control, Channel 9 Audio Output Status, Charge Air Cooler Coolant Pump, CHARGE PLUG LOCK, CHARGE PLUG UNLOCK, Charge Port Command CAN, Charge Port Command Hard Wired, Charge Port Lock Motor, Charge Port Request Tester, Charge Port Un-Lock Motor, Check Engine - MIL Lamp, Check Engine (MIL) Lamp, Check Engine MIL Lamp, Check Engine-MIL (Malfunction Indicator Lamp), Check PCM Odometer, Chiller Shut-off Valve, CHMSL, CHMSL Control, CHMSL Lamp, Clutch Signal To ECM Output Control, CNG Indicator, CNG Injector Relay, CNG Shut Off Relay, CNG/Gasoline Forced Fuel Type, Cold Start Aid Driver 1, Cold Start Aid Driver 1 Output, Compressed Natural Gas, Compression Test, Compressor Circuit Test, Compressor Cool Down, Compressor Current, Compressor Running, Control All Solenoids, Control the steering column, Convenience/Reading Lamp, Convenience-Reading Lamp, Coolant Bad Indicator, Coolant Fill, Coolant Fill Active Pump, Coolant Good Indicator, Coolant High Temperature Auxiliary Electric Pump, Coolant Temp LED 1, Coolant Temp LED 2, Coolant Temp LED 3, Coolant Temp LED 4, Coolant Temp LED 5, Coolant Temp LED 6, Coolant Temp LED 7, Coolant Temp LED 8, Coolant Temp LED 9, Coolant Temp LEDs, Coolant Temperature, Coolant Three Way Valve Test, Cooldown Test, Cooled EGR H-Bridge Valve System Test, Cooled Seat Driver High Indicator, Cooled Seat Driver Low Indicator, Cooled Seat Driver Med Indicator, Cooled Seat Passenger High Indicator, Cooled Seat Passenger Low Indicator, Cooled Seat Passenger Med Indicator, Cooler Bypass Valve, Cooling Valve Position, Courtesy Lamp 2, Courtesy Lamps, Crankcase Ventilation, Crankcase Ventilation Heater, Cruise Control LED On/Off, Cushion Extender Motor, Cyl 1 Deactivation Sol Cntrl

State, Cyl 6 Deactivation Sol Cntrl State, Cyl 7 Deactivation Sol Cntrl State, Cylinder 1 Deactivation Solenoid Control State, Cylinder 1 UniAir valve command, Cylinder 2 UniAir valve command, Cylinder 3 UniAir valve command, Cylinder 4 Deactivation Solenoid, Cylinder 4 Deactivation Solenoid Control State, Cylinder 4 UniAir valve command, Cylinder 6 Deactivation Solenoid Control State, Cylinder 7 Deactivation Solenoid Control State, Cylinder Balance Test, Daylights Left, Daylights Right, DC Clutch Volume Index Check, DeadLock Relay, DEADLOCK-SECONDARY LOCK (FT), DEADLOCK-SECONDARY LOCK (RR), Dedicated DRL Lamp Left, Dedicated DRL Lamp Right, DEF (Reductant) Pressure Line Heater Test, DEF (Reductant) Tank Heater Test, DEF Dosing Injection Quantity, DEF Reductant Doser Prime Override Test, DEF Reductant Doser Pump Override Test, Diesel Cabin Heat 1, Diesel Cabin Heat 1 State, Diesel Cabin Heat 2, Diesel Cabin Heat 2 State, 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, Diesel Fuel Heater Relay, Diesel Glow Plug 1, Diesel Glow Plug 2, Digital Inputs1 High Memory, Direct Backlight, Direction - VOLUME Encoder, Disable Level Control, Disable Passenger Airbag Lamp Request, Display Start Inhibit Data, Door Ajar Indicator, Door Ambient Light State, Door Courtesy Lamp State, Door Handle Power, Door Handle Power Control, Door Handle Verification Test, Door Open, Vehicle Does Not Lower, Door Puddle Lamp State, Door Status Led, Double Start Override Relay, Down arrow, DOWN Select Button, Downstream lambda probe heater command, DPF Lamp, DPF Reset Option, DR Solenoid, Drive Away function, Driver Cooled Seat, Driver Door Ajar, DRIVER DOOR LOCK LED, Driver Door Lock-Unlock, Driver Door Unlock, Driver Heated Seat, Driver heated seat relay command, Driver Side Seat Belt, Driver Temp Detents, Driver Temp Down Button, Driver Temp Rotary Direction, Driver Temp Up Button, DRIVER UNLOCK, DRL, DRL Lamp, DTCM Efficiency Position, DTI FUEL TRANSFER RLY, DTI LTR CLNT PMP, DTI SPRCHRGR BPV MOTOR, DTI VVL SOL1, DTI VVL SOL2, DTI VVL SOL3, DTI VVL SOL4, Dual Speed Fuel Pump Relay, Dual Speed Oil Pump, Dual Speed Oil Pump Status, Dual Tank Aux LP Relay, Duct Sensor - Floor Left, Duct Sensor - Floor Right, Duct Sensor - Panel Left, Duct Sensors -Panel Right, Dump valve command, Duty Cycle Purge Solenoid, DZ AUTO button, DZ DRIVER TEMP DOWN button / SZ TEMP UP button, DZ DRIVER TEMP UP button / SZ TEMP UP button, DZ PASSENGER TEMP DOWN button, DZ PASSENGER TEMP UP button, EAC Compressor Speed Request, Easy Entry/Exit, EBD Safety Lamp, EBL (REAR DEFOG) button, EBL (REAR DEFOG) Indicator, 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, ECM WAKEUP, ECO, ECO Button, ECO Indicator, ECO LED, ECO ON-OFF Indicator, ECVD Compressor PWM Command, ECVD Compressor PWM Command~ECVD Compressor PWM Command, EGR Cooler Bypass, EGR DC Motor Sol Vlv Recir Vlv, EGR Duty Cycle, EGR Hi Pressure Motor Test, EGR Positioner, EGR Throttle Valve, EGR Valve Actuator Test, EGR Valve Replaced, EGR Valve Solenoid Duty Cycle, ELCM Forced Monitor Test, Electric Motor Control, Electric Power Steering Failure Indication, Electric Thermostat Heater, Electric Thermostat Heater Solenoid, Electric Thermostat Heater Solenoid Duty Cycle, Electric Transmission Oil Pump, Electric Vacuum Pump, Electric Wastegate Valve, Electronic Parking Brake (EPB) failure indication, Electronic Stability Control, Electronic Stability Control Off, ELSD System Function Test, EMCC VLP Solenoid, Emergency Call Backlight LED PWM, Emergency Call Green LED PWM, Emergency Call Red LED PWM, Emissions Rolls Test Mode Is Active, EMTC Encoder Power Return, EMTC Encoder Power Supply (5V), Enable Door Locks, Engine After Run Coolant Pump, Engine Check Lamp [MIL], Engine Digital Fan 1, Engine Digital Fan 2, Engine Off Injector Toggle Test, Engine RPM Control, Engine Running Injector Kill Test, Engine Speed Output, Engine Temp LEDs, Engine Temperature, Engine Warm Up, Enter, Enter Button, Enter Plant Mode, EPB Button lamp, EPB Failure Lamp, EPB Service, EPB Warning Light, EQ Loudness Test, ESC, ESC - HILL HOLDER Sys Fail Indicator, ESC Disable Lamp, ESC Indicator, ESC Malfunction Lamp, ESC Off, ESC OFF lamp, ESC ON-OFF Indicator, ESC Safety Lamp, ESC System Deactivation, ESCL 12 Volt Feed Control, ESCL Unlock Control, ESIM Forced Monitor Test, ESM Power Supply, ESP button, ESP Light, ESP OFF Indicator, ETC Indicator Test, ETC

Lamp, ETC System Test, ETC Throttle Follower Test, EVAP Purge Valve, Evaporator Sensor Temperature, Evaporator Temp Sensor, Evaporator Temperature Sensor, EVCU Wake Up, Exhaust Brake, Exhaust Brake Auto Green, Exhaust Brake Yellow, Exhaust Gas Cooler Bypass Valve, Exhaust Gas Recirculation Valve, Extend Mileage With SCR Active Faults, External Temperature, Externally Controlled Variable Displacement (ECVD) Command (DC), F L Heat Seat Request - Output, F L Vent Seat Request - Output, F R Heat Seat Request - Output, F R Vent Seat Request - Output, Faceplate Controls, Faceplate Controls-Eject, FAD Feedback Voltage, FAD Lock Request, FAD Power Output, FAD Request Output, FAD Supply Voltage, Fade Settings, Fan Clutch PWM Duty Cycle Output, Fan Clutch Test, Fan Control, Fan Off Button, Fan Rotary Detents, Fan Rotary Direction, Fast Down Leveling Test, Fault Message F1 -Service Air Suspension, FCW Button, Feature Pin, Fill Spring From Reservoir, First Pass Cool Down Test Results, First Row Driver Seatbelt Buckle Sensor-Switch, First Row Passengers Seatbelt Buckle Sensor-Switch, Flasher-Rear backup Left Light, Flasher-Rear backup Right Light, Flipper Glass, Flipper Glass 2, Fog Lamp, Fog Lamps, Fog Lights, Foot Well, Foot Well/Halo Lamps, Foot Well-Halo Lamps, Forward Collision Warning OFF, Freeze Current State, Frequency Step Selection, Frequency Step Selection Tuner FM2, Front Axle Disconnect HSD, Front Axle Disconnect LSD, Front Axle Lock Enable, Front Blower Control, Front Blower Motor, Front Blower Speed, Front Ceiling Light, Front Collision Off, Front Collision Off, Front Defrost, Front Defrost -Backlight, FRONT DEFROST button, Front Defrost Indicator, Front Defrost-Max Defrost Button, Front Driver window lifter command, Front Fog, Front Fog Lamps, Front Fog Light Left, Front Fog Light Right, Front Fog Lights, Front Left Flasher, Front Mode 1 Actuator Position, Front Mode 1 Defrost Actuator Position, Front Mode 2 Panel Actuator Position, Front Mode Actuator Position, Front Mode Door Actuator Position, Front Off Road Camera Washer, Front Passenger window lifter command, Front Refrigerant Shut-off Valve, Front Right Flasher, Front Vertical Motor, Front Washer, Front Wiper, Front Wiper (High/Low), Front Wiper (High-Low), Front Wiper (On/Off), Front Wiper (On-Off), Front Wiper Hi Speed, Front Wiper High Speed, Front Wiper Intermittent Speed 1, Front Wiper Intermittent Speed 2, Front Wiper Intermittent Speed 3, Front Wiper Intermittent Speed 4, Front Wiper Intermittent Speed 5, Front Wiper Intermittent Speed 6, Front Wiper Low Speed, Front Wiper Low-Int Speed, Front Wiper Test, Front/Rear Washer, Front-Rear Washer, Fuel Door Lock, FUEL DOOR UNLOCK, Fuel Filter Heater, FUEL FILTER HEATER - PARK (L-R), Fuel Filter Heating, Fuel filter water level warn lamp, Fuel Filter Water Level Warning Lamp, Fuel Injector, Fuel Injector 1, Fuel Injector 1 Control State, Fuel Injector 2, Fuel Injector 2 Control State, Fuel Injector 3, Fuel injector 3 Control State, Fuel Injector 4, Fuel Injector 4 Control State, Fuel Injector 5, Fuel Injector 5 Control State, Fuel Injector 6, Fuel Injector 6 Control State, Fuel Injector 7, Fuel Injector 7 Control State, Fuel Injector 8, Fuel Injector 8 Control State, Fuel Injector Balance, Fuel Injector Cleaning, Fuel Level, Fuel Level LEDs, Fuel Level low, Fuel Level Output, Fuel Metering Unit, Fuel Metering Unit Actuator, Fuel Pre Supply Pump, Fuel Pressure Override, Fuel Pressure Regulated O/P (Bar), Fuel Pressure Regulator, Fuel Pressure Regulator Valve, Fuel Pump, Fuel Pump Relay Control State, Fuel System Run Up Test, Functional LED Illumination Level, Functional LED State, Gas Injector Relay, Gasoline Indicator, GATED PARK RELAY, Gated Park ZFII Output, Gated Park ZFII Output Control, Gear Position, Gear Selection, Generator Ramp Time, Generator Speed Threshold, Glass Washer Front, Glass Washer Rear, Glow Lamp, Glow Plug, Glow plug indication - Cold Start inhibition, Glow Relay, Grid Test, HALOS Circuit, Haptic Motor, HCSS WAKEUP, Head Lamp Wash, Head Rest Actuation, Head Rest Relay, Headlamp Delay Time, Headlamp Leveling Position, Headlamp Leveling Standard, Headlamp Washer, Headlamp Washer Motor State, Headlamps On With Wipers, Heated Rear Window, Heated Seat Automatic Addressing, Heated Seat Driver High Indicator, Heated Seat Driver Low Indicator, Heated Seat Driver Med Indicator, Heated Seat Passenger High Indicator, Heated Seat Passenger Low Indicator, Heated Seat Passenger Med Indicator, Heated Steering Wheel, Heated Steering Wheel indicator, Heated Steering Wheel PWM Control, Heated Steering Wheel Request - Output, Heated Steering Wheel~Heated Steering Wheel, Heater EBL, Heater Rear Window, Height Sensor Check, HEV Belt-Driven Coolant Pump Clutch Relay, HEV Engine Aux Heater LIN Coolant Pump, HEV Engine Belt-



Driven Coolant Pump Clutch Relay, HEV Fuel Tank Isolation Valve Solenoid, HEV TPIM Inverter LIN Coolant Pump, High Beam, High Beam Duty Cycle, High beam headlamp indication, High Beam Indicator, High Beam Left, High Beam Light, High Beam Right, High Beams, High Beams Lights, High Pressure Fuel Rail Test, High Pressure Fuel System Test, HIGH SIDE POWER SEAT RELAY, High Speed Engine Cooling Fan Control, High Speed Fan, High Speed Rad Fan State, 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-Holder Safety Lamp-Message, Hood Ajar, Horizontal Headrest Motor, Horizontal Motor, Horizontal Motor Backward/Forward, Horn, Horn relay command, HPCR Duty Cycle, HPCR Duty Cycle Output, HSD 21W 1, HSD 21W 2, HSD 21W 3, HSD 21W 4, HSD FOR LED 1, HSD FOR LED 2, HSD RELAY 1, HSD RELAY 2, HSD RELAY 3, HSD RELAY 4, HSD RELAY 5, HSD RELAY 6, HSD RELAY 8, HUD Lighting Level, HVAC A-C Indicator, HVAC AUTO Indicator, HVAC Backlight Control, HVAC Cool Down Test, HVAC Front DEF Indicator, HVAC Mode Button, HVAC Power (OFF) Button, HVAC POWER button, HVAC Rear DEF Indicator, HVAC REC Indicator, HVAC Self Test, HVAC SYNC Indicator, I/O Control All-Limp Home Mode active, I/O Control All-Red Lamp, I/P Illumination, ICR-HCR Relay, Idle RPM Test, Ignition ACC/RUN/START 1, Ignition Coil 1, Ignition Coil 10, Ignition Coil 2, Ignition Coil 3, Ignition Coil 4, Ignition Coil 5, Ignition Coil 6, Ignition Coil 7, Ignition Coil 8, Ignition Coil 9, Ignition Run, Ignition Run - Acc 1, Ignition Run - Acc 2, Ignition Run - Start, Ignition RUN 2, Ignition Run State, Ignition RUN/ACC 1, Ignition RUN/ACC 2, Ignition Run/Acc/PAD State, Ignition RUN/START, Ignition RUN/START 1, Ignition RUN-ACC 1, Ignition RUN-ACC 2, Ignition RUN-START, Ignition Start 1, Ignition Switch Run/Start Position Circuit, Ignition Unlock/Run/Start State, Immobilizer Antenna, Immobilizer Antenna Test, In Motion Menu, Indicator Channel, Indicator Control-A/C Indicator, Indicator Control-Auto Indicator, Indicator Control-ESP Off 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, Indicator Control-Stop/Start Indicator, Initiate P2BA9 SCR Refill Monitor, Injector 1 coil command, Injector 1 command, Injector 2 coil command, Injector 2 command, Injector 3 coil command, Injector 3 command, Injector 4 coil command, Injector 4 command, Injector Kill Test, Inlet Metering Valve, Inlet Valve FL, Inlet Valve FR, Inlet Valve Left Front, Inlet Valve Left Rear, Inlet Valve LF(Normally Open), Inlet Valve LR (Normally Open), Inlet Valve RF (Normally Open), Inlet Valve Right Front, Inlet Valve Right Rear, Inlet valve RL, Inlet valve RR, Inlet Valve RR (Normally Open), Input Test, Instrument Panel Illumination Level Output, Intake Air Throttle Actuator, Intake Air Throttle Actuator Test, Intake Manifold Short Runner Valve (SRV) Solenoid Control State, Intake Manifold Short Runner Valve Solenoid, Intake Manifold Tuning Valve (MTV) Solenoid Control State, Intake Manifold Tuning Valve Solenoid, Intake Port Shut Off, Intake Throttle Duty Cycle, Intake Throttle Duty Cycle Output, Interior Ambient Lighting, Interior Convenience Lamps, Interior Convenience Lamps 2, Interior Convenience Lamps 3, Interior Panel Dimming Lamps, Interior Panel Dimming Lamps 2, Interior Vanity Lamps, Internal Night Lights, Inverter, Inverter Enable, Inverter Enable Relay, Inverter Status Indicator, Inverter Switch, IOD RELAY ON LSD, I-P Illumination, IP Run 1, IP Run 3, IP Run Start 1, IP Run Start 2, IPC Self Test, IRCM Heater, IRCM Relay Unlock Control, ITOS - Cabin Temperature, Key Pad Back Lighting, Key Solenoid Coil, Keypad Backlight Control, KeySense, KIN ACC LED State, KIN Antenna Power, KIN LED Control, KIN OFF LED, KIN OFF LED State, KIN RUN LED, KIN RUN LED State, KIN Start/Stop LED State, KIN Start-Stop Button (SSB) LED, KIN Start-Stop LED State, Knob Lock State, L/U And SEL On Off Solenoid, L/U Solenoid Current, Lamps Actuation-Left leveling actuator position, Lamps Actuation-Right leveling actuator position, Lane Departure Warning - on not armed- on armed- on warning, Lane

Departure Warning ON-OFF Indicator, Latch Motor Cinch Direction, Latch Motor Release Direction, Lateral Anti Tilt Sensor, LC Clutch Volume Index Check, LC Solenoid, LDP Solenoid, LDW Warning Indicator, Leak Detection Pump, Leak Detection Pump Forced Monitor Test, LED Control-LED 1 (Auto Control), LED Control-LED 2 (EBL), LED Control-LED 3 (Front defrost), LED Control-LED 4 (recirc), LED Control-LED 5 (A/C), LED Intensity Output, 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 Backup Lamp, Left Cushion Heat Seat Linear PWM Request -Output, Left Day Light Lamp, Left Daytime Running Lamp, Left DRL Light, Left Floor Duct Sensor, Left Front Fog Lamp, Left Front Fog Lamps, Left Front Park Lamp, Left Front Park Lamps, Left Front Side Marker, Left Front Turn Lamp, Left Front Turn Lamp Output Status, Left Front Turn Signal, Left HID Lamp, Left High Beam, Left High Beam Lamp, Left High Beam Shutter, Left High Beam State, Left Low Beam, Left Low Beam Lamp, Left Low Beam Lamp Driver Output State, Left Low Beam-HID, Left Panel Duct Sensor, Left Parking Lights, Left Rear AUX Turn Lamp, Left Rear Door Lock-Unlock, Left Rear Fog Lamp, Left Rear Fog Lamps, Left Rear Park Lamp, Left Rear Tail-Park Lamp, Left Rear Turn Lamp, Left Rear Turn Lamp (BUX), Left Rear Turn Signal Lamp Status, Left Rear Turn Signal/Brake Lamp, Left Rear Turn/Stop Lamp, Left Rear Turn-Stop Lamp, Left Reartail-Park Lamp, Left Recliner Switch, Left Reverse Lamp, Left Reverse Lamp 2, Left Reverse Lamp State, Left Seat Back Motor Adjustment, Left Seat Latch Motor Adjustment, Left Seat Stow Motor Adjustment, Left Side Markers, Left Signal Mirrors Side Repeaters, Left Signal Mirrors/Side Repeaters (BUX), Left Signal Mirrors-Side Repeaters (BUX), Left Signature Lamp, Left Solar Sensor Values, Left Stop-Turn Lamp, Left Temp Down -Backlight, Left Temp Down Button, Left Temp UP -Backlight, Left Temp Up Button, Left Trailer Tow Turn/Stop Lamp, Left Trailer Tow Turn-Stop Lamp, Left TT Turn Stop Lamp State, Left Turn Indicator, Left Turn Light, Left Turn Lights, Left Turn Signal, Left Turn Signal Indicator, Left Turn Signal Lamp, Left turn signal lamp indication, Left Vent Seat Linear PWM Request -Output, Level Not Permitted, LF Antenna Verification Test, License Plate Lamp, License Plate Lamp WK -Right Rear Rail Lamp WD, License Plate Lamps, License Plate Lights, Lift Pump Relay, Liftgate Release Motor, Light Parking, LIN Anti Tilt Sensor Check, LIN Line Request Check, Lin Module Data, LIN Siren Check, LIN Ultrasonic Sensors Check, Linear Hall, Linear Solenoid A, Linear Solenoid B, Linear Solenoid C, Linear Solenoid D, Linear Solenoid E, Linear Solenoid F, Linear Solenoid G, Load Level, Locate Learned Keys, LOCK 4WD, Lock Doors Command, Longitudinal Anti Tilt Sensor, Low Beam Left, Low Beam Light, Low Beam Lights, Low Beam Right, Low Beams, 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 Rad Fan State, Low Temp Active Pump, Low Temp Passive Pump, Low Temp Passive Pump 1, Low Temp Passive Pump 2, Lower LED, Lowering, Low-Reverse Solenoid, LR Clutch Volume Index Check, LR Door Ajar, LR DOOR LOCK LED, LR Solenoid, LSD FOR LED 3, LSU Heater 1, Main Left Temperature Actuator Position, Main/Left Temp Selected, Main-Left Temp. Door Actuator Position, Main-Left Temp. Door Position, Main-Left Temperature Actuator Position, Malfunction Indicator Lamp, Master Ept Wake Up Output, Master ePT Wake Up Output 1, Memory Seat ECU Self Test, Menu, Metering Unit, Metering Unit Actuator, Middle LED, Mid-Range Settings, MIL Lamp, Minus, Mirror Direction Control, Mirror Fold, Mirror Fold Window Control, Mirror Heat State, Mirror Heater, Mirror LED, Mirror LED -Day-Night, Mirror LED Left State, Mirror LED -ON-OFF, Mirror LED Right State, MIRROR PUDDLE LIGHT L-R, Mirror Puddle Lights, Mirror Right LED State, Mirror Signal Lamp State, Mirror Vertical/Horizontal Direction, Mode, Mode 2 Actuator Position (Defrost Panel Door), Mode -Backlight, Mode Button, Mode Door 1 (Panel), Mode Door 2 (Defrost-Demist), Mode Door 3 (Floor), Mode Selection, Motor A Control, Motor B Control, Motor Brake State, Motor Direction, Motor RPM, Motorized Thermistor-Cabin Temp, MS Solenoid, Multiair VVA Solenoid 1, Multiair VVA Solenoid 2, Multiair VVA Solenoid 3, Multiair VVA Solenoid 4, Mute, MUTE button, Mute Test, Neutral, Neutral Gate Test (62TE), Neutral Gate Test (Non-RFE), Neutral Gate Test (RFE), Neutral LED, Night lighting command, NOx Sensor Replacement, O2 Heater Test, O2 Heater Tests, O2

Sensor Heater Bank1 Sensor1, O2 Sensor Heater Bank1 Sensor2, O2 Sensor Heater Bank2 Sensor1, O2 Sensor Heater Bank2 Sensor2, 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, OD Clutch Volume Index Check, OFF Button, Offroad Level 1, Offroad Level 2, Oil Pressure Bad, Oil Pressure Good, Oil Pressure Lamp, Oil Pressure LED 1, Oil Pressure LED 2, Oil Pressure LED 3, Oil Pressure LED 4, Oil Pressure LED 5, Oil Pressure LED 6, Oil Pressure LED 7, Oil Pressure LED 8, Oil Pressure LED 9, Oil Pressure LEDs, Oil Pressure Output, OPTIONAL HSD 1 PWM, OPTIONAL HSD 2 PWM, ORC RELAY CONTROL, Outlet Valve FL, Outlet valve FR, Outlet valve front left activation, Outlet valve front right activation, Outlet Valve Left Front, Outlet Valve Left Rear, Outlet Valve LF (Normally Closed), Outlet Valve LR (Normally Closed), Outlet valve rear left activation, Outlet valve rear right activation, Outlet Valve RF (Normally Closed), Outlet Valve Right Front, Outlet Valve Right Rear, Outlet valve RL, Outlet valve RR, Outlet Valve RR (Normally Closed), Over Drive Solenoid, Over Drive Solenoid On Time, Over-Drive Solenoid, Overdrive Switch Test, Overdrive Switch Test (Non-RFE), OverDrive Switch Test (RFE), Oxygen Sensor 1 Heater, Oxygen Sensor 1/1 Heater Control State, Oxygen Sensor 1/1 Heater Duty Cycle, Oxygen Sensor 1/2 Heater Control State, Oxygen Sensor 1/2 Heater Duty Cycle, Oxygen Sensor 1-1 Heater Duty-Cycle, Oxygen Sensor 1-2 Heater Duty-Cycle, Oxygen Sensor 2 Heater, Oxygen Sensor 2/1 Heater Control State, Oxygen Sensor 2/1 Heater Duty Cycle, Oxygen Sensor 2/2 Heater Control State, Oxygen Sensor 2/2 Heater Duty Cycle, Oxygen Sensor 2-1 Heater Duty Cycle, Oxygen Sensor 2-1 Heater Duty-Cycle, Oxygen Sensor 2-2 Heater Duty Cycle, Oxygen Sensor 2-2 Heater Duty-Cycle, Oxygen System Heater Test, PARK - SIGNATURE LEFT, PARK - SIGNATURE RIGHT, Park Assist Switch Simulation, Park Lamp Rear Left, Park Lamp Rear Right, Park Lamp State, Park LED, Park Light, Park Mode Level, Park Mode Pending, Park Pawl Actuator Control, Parking Brake And Low Brake Fluid, Parking Position Lamp Indication, PARK-SIGNATURE LEFT, PARK-SIGNATURE RIGHT, Parttime LED, Passenger Airbag (PAB) Status, Passenger Airbag LED, Passenger Cooled Seat, Passenger Door Ajar, PASSENGER DOOR LOCK LED, Passenger Door Lock-Unlock, Passenger Door Unlock, Passenger Heated Seat, Passenger heated seat relay command, Passenger Occupant Detection Sensor (ODS), Passenger Seat Belt, Passenger Temp Detents, Passenger Temp Down Button, Passenger Temp Rotary Direction, Passenger Temp Up Button, Pedal Adjustment, Pedals, Pedals Forward/Backward, Permanent Static System Fault, Phone, 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, PLGM Chime Output, PLGM Drive Clutch Output, PLGM Drive Motor-Close Direction, PLGM Drive Motor-Open Direction, Plus, Pneumatic Intercooler Bypass, Pneumatic Waste Gate, Police Passenger Un-Lock Motor, Position Lamp, Position Lamp Telltale, Position Lights, Power (OFF), Power Down, Power Fold Seat Disable Relay #1, Power Fold Seat Disable Relay #2, Power Inverter State, Power limitation function, Power Mirror Feed Relay Control, Power On and Disable User Inputs, Power Side Step Module Actuation Test, Power Windows, PPPA, PPPA ON-OFF Indicator, Pressure Control Solenoid Valve, Pressure Regulator Valve, Pressure Value Correction Shut-Off, Pre-Supply Pump, Priming 1 (HSV Front, LPF Front -Normally Closed), Priming 1 (HSV LF-RR, LPF LF-RR -Normally Closed), Priming 2 (HSV Rear, LPF Rear -Normally Closed), Priming 2 (HSV RF-LR, LPF RF-LR -Normally Closed), Proportional Purge Solenoid, Proportional Purge Solenoid., Proportional Surge Solenoid, PTC Cabin Heater 1 Actuation, PTC Cabin Heater 2 Actuation, PTC Cabin Heater 3 Actuation, PTC Heater Relay 1, PTC Heater Relay 2, PTC Heater Relay 3, PTO, PTS Button, PTS ON-OFF Indicator, PTS Switch Simulation, Puddle Lamp State, Pump, Pump Control, Purge canister valve command, Purge Solenoid Duty Cycle, Purge Vapors Test, PWM Fan Actuation Test, PWM Output, R L Heat Seat Request - Output, R R Heat Seat Request - 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,

Radiator Fan 1 Duty Cycle, Radiator Fan 2, Radiator Fan 2 Duty Cycle, Radiator Fan 3, Radiator Fan Duty Cycle, Radiator Jalousie ShutterPosition, Radiator-Condenser Cooling Fan Relay 1 Control State, Radiator-Condenser Cooling Fan Relay 2 Control State, Radio, Radio List Enter Button, Radio Mute Backlight, Radio Mute Button, Radio Power Button, Radio Screen OFF Backlight, Radio Screen OFF Button, Radio Tone Test, Radio Volume, Rail Pressure, Rail Pressure Sensor Replacement, Raising, Raising Lowering Interrupted, Ram Active Air Box Test, Ram Box, Range Select Downshift Test Routine, Range Select Downshift Voltage, Range Select Upshift Test Routine, Range Select Upshift Voltage, Read VIN, Ready, Rear Axle Lock, Rear Axle Lock Enable, Rear Axle Locker Command, Rear Blend Door Output, Rear Blower CFM, Rear Blower Relay, Rear Blower Speed, Rear Blower Speed Output, Rear Blower State, Rear Defrost Backlight, Rear Defrost Button, Rear Defrost EBL, Rear Defrost Indicator, Rear Defrost State, Rear Driver Floor Duct Sensor Temperature, Rear Driver Panel Duct Sensor Temperature, Rear Fog, Rear Fog Lamps, Rear Fog Light, Rear Heated Window, Rear I-Wipe State, Rear Left Position Light, Rear Left window lifter command, Rear Left Window Manual Mode, Rear Mode 1 Actuator Position, Rear Mode Door Output, Rear Right Position Light, Rear Right Turn Lamp, Rear Right window lifter command, Rear Right Window Manual Mode, Rear Speed Sensor Supply, Rear Vertical Motor, Rear Window Washer, Rear Window Wiper, Rear Wiper, Recirc, Recirc -Backlight, RECIRC button, RECIRC Indicator, Recirc. Door Actuator Position, Recirculation Door Actuator Position, Recirculation LED, Recirculation Pump, Recirculation pump activation, Recliner, Recliner Motor, Red Brake Lamp, RED Circuit, Red Hazard Button, Red Heated Seat and Steering Wheel Indicators, RED Heated Seat Indicators, Red Temperature Bar, Reduce Speed, Redundant Ignition RUN/START Feed Output Control, Redundant Ignition RUN-START Feed Output, Redundant Ignition RUN-START Feed Output Control, Remote Start Antenna Test, Repetition driver door open for MTA (Robotic Gear), Reverse Gear Clutch Test (62TE), Reverse Gear Clutch Test (Non-RFE), Reverse Gear Clutch Test (RFE), Reverse Gear Light, Reverse Gear Lights, Reverse Lamp, Reverse Lamp State, Reverse Lockout Solenoid, Reverse Lockout Solenoid Control State, Right Air Catcher LED, Right Auxiliary High Beam, Right Backrest Heat Seat Linear PWM Request -Output, Right Backup Lamp, Right Cushion Heat Seat Linear PWM Request -Output, Right Day Light Lamp, Right Daytime Running Lamp, Right DRL Light, Right Floor Duct Sensor, Right Front Door Handle Power, Right Front Fog Lamp, Right Front Fog Lamps, Right Front Park Lamp, Right Front Park Lamps, Right Front Side Marker, Right Front Turn Lamp, Right Front Turn Lamp State, Right Front Turn Signal, Right HID Lamp, Right High Beam, Right High Beam Shutter, Right Low Beam, Right Low Beam Incandescent, Right Low Beam Lamp, Right Low Beam-HID, Right Panel Duct Sensor, Right Parking Lights, Right Rear Door Handle Power, Right Rear Door Lock LED, Right Rear Door Lock-Unlock, Right Rear Fog Lamp, Right Rear Fog Lamps, Right Rear Park Lamp, Right Rear Tail/Park Lamp, Right Rear Tail-Park Lamp, Right Rear Turn Lamp, Right Rear Turn Lamp (BUX), Right Rear Turn Lamp State, Right Rear Turn/Stop Lamp, Right Rear Turn-Stop Lamp, Right Reartail-Park Lamp, Right Recliner Switch, Right Reverse Lamp, Right Reverse Lamp #2, Right Reverse Lamp 2, Right Reverse Lamp State, Right Seat Back Motor Adjustment, Right Seat Latch Motor Adjustment, Right Seat Stow Motor Adjustment, Right Side Markers, Right Signal Mirrors Side Repeaters, Right Signal Mirrors/Side Repeaters (BUX), Right Signal Mirrors-Side Repeaters (BUX), Right Signature Lamp, Right Solar Sensor Values, Right Stop-Turn Lamp, Right Temp Actuator Position, Right Temp Down -Backlight, Right Temp Down Button, Right Temp Up -Backlight, 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 TT Turn Stop Lamp State, Right Turn Indicator, Right Turn Light, Right Turn Lights, Right Turn Signal, Right Turn Signal Indicator, Right Turn Signal Lamp, Right turn signal lamp indication, Right Vent Seat Linear PWM Request, Right Vent Seat Linear PWM Request -Output, Roller Learning Shut-Off, Rotary 4 Detents, Rotary 4 Direction, RPS Power Supply (5V), RR Door Ajar, RT-LT Sidemarkers-RT-LT Applique Parklamps, Run, Run Acc 2, Run-Start 1, SBMT, SBMT (Supply Battery Monitoring Time), SCR Inlet Temp Sensor Replacement, SCR Relay Actuation Test, Screen Off, SCREEN OFF button, Screen Test Pattern, SDAR Station Selection, Seat Belt,

Seat Belt Lamp, Seat Belt Light, Seat belt unfastened Lamp, Seat Mode Switch Adjustment, Seat Position Recall, Seat Selector Switch Adjustment, Second Row Center Seatbelt Switch, Second Row Left Seatbelt Switch, Second Row Right Seatbelt Switch, Secondary Air Pump, Secondary Air Solenoid, Secondary Solenoid Current, Secondary/Thatchum Lock Motor, Secondary/Thatchum Un-Lock Motor, Secondary-Thatchum Lock Motor, Secondary-Thatchum Un-Lock Motor, Seek Status, Seek Status Tuner AM-FM, Seek Status Tuner DAB, Select Level Switches-Damping Mode Button, Self Test, Self Test Routine, Sensor Rolls Test, SERV LED, Service Air Suspension, See Dealer Now -(Red Lamp), Service Lamp, Set Engine RPM Test, Shift Lever Position Test (62TE), Shift Lever Position Test (Non-RFE), Shift Lever Position Test (RFE), Shift Lock Command, Shift Solenoid 1, Shift Solenoid 2, Shift Solenoid 3, Shift Solenoid 4, Shift Solenoid 5, Shift Solenoid 6, Shift Solenoid A, Short Term Control Motor Current, Shutoff Correction Quantity, Shutoff Injector Quantity, Side arrow, Side Marker, Side markers, Side Mirrors Heater Control, SIDE TURN LEFT, SIDE TURN RIGHT, Skip Shift Solenoid, Small Leak Verification Test, Smart Bar Command, Snow Plow Left Turn Lamp, Snow Plow Park Lamps, Snow Plow Right Turn Lamp, Snow Plow Switch #1, Snow Plow Switch #2, Snow Plow Switch #3, Snow Plow Switch #4, Snow Plow Switch 1, Snow Plow Switch 2, Snow Plow Switch 3, Snow Plow Switch 4, Software Test, Sound Horn On Lock, SPARE LED LAMP DRIVER, SPARE RELAY 1 LSD, SPARE RELAY 2 LSD, Speaker Quadrant Selection, Split Cooling Drive Duty Cycle, Sport ON-OFF Indicator, Spring Deflate To Atmosphere, Spring Deflate to Reservoir, SRS Indicator Lamp Request, SRS Lamp, SRV Test, Standard Vehicle Level, Start Stop LED, START STOP button, Start/Stop System, Starter, Starter Relay, Starter Solenoid, Starter Solenoid (High), Starter Solenoid High, Starter Status, Steering Column, Steering Column Back, Steering Column Down, Steering Column Forward, Steering Column Up, Steering Wheel Linear PWM Request - Output, Stop - Start System Active Indicator, STOP - STOP TURN LEFT, STOP - STOP TURN RIGHT, Stop / Start System Active Lamp, Stop Lamp, Stop Light, Stop Start Confirmation, Stop/Start System Active, Stop-Start Activation, Stop-Start ON-OFF Indicator, Stop-Start System Active, Stop-Turn Lamp Left, Stop-Turn Lamp Right, Sun Shade Control, Sunroof Close, Sunroof Enable, SUNROOF MOTOR, Sunroof Open, Sunroof Temperature Sensor Degrees, Sunroof Temperature Sensor Voltage, Sunroof Vent, Surge Solenoid Control State, Sway Bar 1, Sway Bar 2, Sway Bar Indicator, Swing Gate Lock, Swing Gate Unlock, Swirl Valve actuator Test, Switch Illumination State, Switch On EPB Failure Lamp, Switch On EPB Function Lamp, System Disabled (Tire Jack Mode), System Temporarily Not Available, System Wiring Test, T Case Service Indicator Request, TAIL - SIDE MARKER LEFT, TAIL - SIDE MARKER RIGHT, Tail Gate Lock, Tail Gate Unlock, Tail-Stop Lamp, T-Case Brake Shift Motor, T-Case Brake State, T-Case Mode Position Custom, T-Case Mode/Position-Standard, T-Case Motor Brake HSD Output, T-Case Motor Brake LSD Duty Cycle, T-Case Motor Direction, T-Case Motor Duty Cycle, T-Case Motor Solenoid Lock, T-Case Motor-Motor Lock, T-Case Service Indicator Request, TCC Pressure Control Solenoid, TCM VIN Verification, Telltale ABS, Telltale Airbag, Telltale Brake, Telltale Charging, Telltale ESP, Telltale Fog Front, Telltale Glow Plug, Telltale High Beam, Telltale MIL, Telltale Seat Belt, Telltale Tire Pressure Monitor, Telltale Turn Left, Telltale Turn Right, Telltale - ESC, Telltale - ESC Off, Telltale - ESP Off, Telltale - Park, Telltale - Position Lamp, Telltale - Rear Fog, Telltale ESP/BAS, Telltale-Tire Pressure, Telltale-Tire Pressure Monitor, Telltale-Tow Mode, Temperature Down Button, Temperature Up Button, Temporary Remote Start Disable, Thatchum Lock Motor, Thatchum Unlock Motor, 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, Throttle Valve Actuator, Tilt Mirrors in Reverse, Time Controlled Spring Fill, Timeout Time Flash To Pass, Timeout Time Paddle Shift Switches, Tire Pressure, Tire Pressure Monitoring, Tone Test, Top LED, Topper Center Mounted Stop Lamp, TOPPER CHMSL, Torque Coupling Control, TOW-HAUL, Tow-Haul Indicator, TPM Sensor Rolls Test, TPMS, TPMS Generic Failure Lamp, TPMS Generic Failure Monitoring Lamp, Trac Cntrl Outlet Vlv 1(Normal open), Trac Cntrl Outlet Vlv 2(Normal open), Traction Control Outlet Valve 1, Traction Control Outlet Valve 2, Trailer Backup Lamps, Trailer BU Lamps, Trailer Tail Lamp Relay, Transfer Case 4WD/Lock/Part Lamp, Transfer Case AWD/Auto/Full Lamp, Transfer Case Clutch Torque,

Transfer Case Low Lamp Request, Transfer Case Neutral Lamp Request, Transmission Component Tests, Transmission Feed State, Transmission Verification Test, Transponder Antenna Power, Treble Settings, Truck Bed Lighting Leds, Truck Cargo Lamps, Trunk Door Handle Power, Trunk Opening Relay, Trunk Release Relay, Trunk/Flipper Glass Release Motor, Trunk-Flipper Glass Release Motor, Trunk-Gate, Tumble Generator Valve, Tune Knob -Backlight, Tuner Rotary Detents, Tuner Rotary Direction, Turbo/VGT Component Replacement, Turn Left, Turn Light, Turn Right, Turn Signal Lamp State, Twilight Sensor Value, UConnect Live Apps Installation, UD Clutch Volume Index Check, UD Solenoid, UGDO, UGDO Power Supply, Under Inflation Lamp, Under Inflation Monitoring Lamp, Underdrive Solenoid, Under-Drive Solenoid, Universal Garage Door Open, Unlock 1/Driver Lock, Unlock 1-Driver Lock, Unlock 2/Passenger Locks, Unlock 2-Passenger Locks, Unlock doors command, Unlock Left Rear, Unlock Left Rear Door, Unlock Right Rear, Unlock Right Rear Door, Unlock Run -Start, Unlock RUN-START, Up arrow, UP Select Button, Upstream lambda probe heater command, 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 Speed-RPM, Vehicle Sway Green, Vehicle Sway White, Vehicle Sway Yellow, Vehicle Theft Alarm, Vertical Front, Vertical Headrest Motor, Vertical Rear, VES Display Screen Control, VES Headphone Tone Test-Headphone 1, VES Headphone Tone Test-Headphone 2, Video Input, View Last Successful Remote Start Event Data, View Last VTA Trigger Cause Data, View Remote Start Abort Data, View Remote Start Inhibit Data, View Satellite Sensor Information, View VTA Enable Data, VLP Solenoid, VOLTAGE STABILIZER STATUS LED, Volume Knob -Backlight, Volume Rotary Detents, Volume Rotary Direction, VSO, VTA Indicator LED, VTA Lamp, VVA Solenoids Pre-Energization, VVL Service Test, VVT Exhaust Phaser 1 Actuator, VVT Exhaust Phaser 2 Actuator, VVT Intake Phaser 1 Actuator, VVT Intake Phaser 2 Actuator, VVT Tests, Washer, Washer Camera, Waste gate valve command, Wastegate Solenoid Control State, Wastegate Solenoid Duty Cycle, Water In Fuel, Water Pump Charge Air Cooling, WHITE 1 Circuit, WHITE 2 Circuit, White Backlighting Buttons, White Backlighting Channel 1, White Backlighting Channel 2, White Backlighting Knob Buttons, White Backlighting Knob Indicators, White Knob Indicators, White Lower Halos, White Upper Halos, Wind shield Wash, Wind shield wiper, Window Control, Window Hall Sense Supply, Window lifter commands enable, Window lifter enable commands, Window State, Windshield heater, Windshield Heater Relay, Windshield Washer, Windshield wiper, Wiper Hi/Low State, Wiper On/Off State, WK Head Rest Relay, Yellow A/C and Auto Indicators, Yellow Button Indicators, Yellow Fault Lamp, Yellow Lane Departure Warning Indicator, Yellow Rear Defrost Indicator, Yellow Recirc Indicator

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

- Added coverage for 428 new system applications

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

Clear the Pedestrian Protection System Deployment Data, PMI - ECU Read/Write (DCDC), PMI - ECU Read/Write (TRM)

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

Front Left - Front Right Traction Control Supply 1, On Demand Test, Rear Left - Rear Right Traction Control Supply 2

## ***General Motors Coverage***

- Added coverage for 321 new system applications

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

Adaptive Pressure Control Learn, Adjustable Pedal Calibration, Automated Brake Bleed, Backup Battery Timer Reset, Battery Sensor Module Learn, Brake Pedal Position Sensor Learn, Brake Pressure Sensor Calibration, CAN Bus Configuration Learn, Cancel Camera Learn, Clear Disable History Data, Clear Driver Window Learned Values, Clear Manufacturer Enable Counter, Clear Passenger Window Learned Values, Configure New Module, Control Module Reset, Copy And Paste TPM Information, Crankshaft Pos Variation Learn, Crankshaft Pos. Variation Learn, Cylinder Deactivation Exhaust Flow Valve Learn, Driver Information Center Options, Engine Oil Life Reset, Exhaust Flow Control Valve Learn, Fuel Trim Reset, HO2S Heater Learn, HVAC Actuators Learn, HVAC Afterblow Configuration, Idle Learn Reset, Idle Speed Adjustment, Info Display/Infotainment Faceplate Reset, Invalidate All Fobs, License Compliance Materials Download Error Counter Reset, Oil Life Reset, Park Brake Cable Replacement Procedure, Park Brake Calibration, Passenger Presence Sensor Learn, Power Steering Softstops Learn, Power Steering Softstops Reset, Program Key Fob 1, Program Key Fob 2, Program Key Fob 3, Program Key Fob 4, Radio Favorites Reset, Rear Gate Driver Information Center Message Reset, Remote Vehicle Speed Limiting Reset, Request Radio Registration, Reset High Voltage Disable Request After Crash Event Detected, Reset Transmission Control Module, RVS Disable History Reset, Setup SDM Part Number In BCM, Steering Wheel Angle Sensor Centering, Steering Wheel Angle Sensor Learn, Steering Wheel Angle Sensor Reset, Timing Belt Life Reset, Tire Pressure Reset, Tire Pressure Sensor Registration, Tire Pressure Sensor Signal Reset, Tire Type/Pressure Selection, Transmission Adaptive Pressure Reset, Transmission Clutch 1 Return Spring Learn, Transmission Clutch 1 Volume Learn, Transmission Clutch 2 Return Spring Learn, Transmission Clutch 2 Volume Learn, Transmission Clutch 3 Return Spring Learn, Transmission Clutch 3 Volume Learn, Transmission Clutch 4 Return Spring Learn, Transmission Clutch 4 Volume Learn, Transmission Clutch 5 Return Spring Learn, Transmission Clutch 5 Volume Learn, Transmission Service Fast Learn, Vehicle Dynamic Sensor Offset Calibration, WLAN Password Reset, Yaw Rate Sensor Learn

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

A/C Compressor Command, A/C Relay, ABS Left Front Solenoid Valves, ABS Left Rear Solenoid Valves, ABS Motor, ABS Pump Motor, ABS Right Front Solenoid Valves, ABS Right Rear Solenoid Valves, Accent Lighting 1, Accessory Power Mode Indicator, Accessory Power Relay, Accessory/RAP Relay, Accessory/Retained Accessory Power Relay, Active Antenna, Active Grill Air Shutter 1, Active Grill Air Shutter 2, Active Grill Air Shutter System, Air Recirculation Door Motor Direction, AIR System, All Door Lock Unlock, All Indicators, Audio Source Control, Auxiliary Ignition Run Relay, Backup Lamps, Blower Motor Speed Command, Blower Motor Speed, Brake Booster Electric Vacuum Pump, Brake Hydraulics Test, Brake Transmission Shift Interlock Solenoid Actuator, Cancel Valet Mode, CD, Center Brake Lamp, Center High Mounted Stop Lamp, Central Stop Lamp, Child Security Lock Motors, Compression Test, Control Functions, Cooling Fan, Courtesy Lamps, Cylinder Deactivation Exhaust Flow Control Valve, Daytime Running Lamps, Display Check, Display Dimming, Display Test, Door Dead Lock Lock/Unlock, Driver Information Center Dimming, Driver Information Center Segments, Driver Mirror Movement, Driver Seat - Blower Command, Driver Seat Back Horizontal Movement, Driver Seat Cushion Front Vertical Movement, Driver Seat Cushion Heating, Driver Seat Cushion Left Front Haptic Movement, Driver Seat Cushion Left Rear Haptic Movement, Driver Seat Cushion Rear Vertical Movement, Driver Seat Cushion Right Front Haptic Movement, Driver Seat Cushion Right Rear Haptic Movement, Driver Seat Horizontal Movement, Driver Window Motor, Engine Control Ignition Relay, Engine Controls Ignition Relay, Engine Mount Actuator Output 1, Engine Mount Actuator Output 2, Engine Speed Control, EVAP Purge Solenoid, EVAP Purge/Seal, EVAP Service Bay Test, EVAP Vent Solenoid, Exhaust CMP Actuator Bank 1, Exhaust CMP Actuator Bank 2, Exhaust CMP Actuator Solenoid 1, Exhaust CMP Actuator Solenoid Bank 1, Exhaust CMP Actuator Solenoid Bank 2, Exhaust CMP Actuator, Exhaust Flow

Control Valve System, Exterior Driver Door Handle Switch, Exterior Left Rear Door Handle Switch, Exterior Passenger Door Handle Switch, Exterior Right Rear Door Handle Switch, Fader Position Control, Fog Lamps, Forward Collision Alert Switch, Front Fog Lamps, Fuel Pump Enable, Fuel Pump Speed, GEN L-Terminal, Generator Regulator Setpoint, Green Indicator, Hazard Lamps Switch Backlight, Head-Up Display Dimming Level, Head-Up Display Pattern Check, High Beam, High Beams, High Side Driver 1, High Side Driver 2, HO2S Bank 1 Sensor 1 - Heater, HO2S Bank 1 Sensor 2 - Heater, HO2S Bank 2 Sensor 1 - Heater, HO2S Heater Sensor 2, Horn Relay, Idle Spark, Illuminate All Indicators, Inadvertent Load, Incandescent Dimming, Info Display Dimming, Info Display Test, Instrument Cluster Dimming, Instrument Cluster Gauge Sweep, Instrument Panel Illumination, Intake Camshaft Position Actuator Bank 2, Intake CMP Actuator Bank 1, Intake CMP Actuator Solenoid Bank 1, Intake CMP Actuator Solenoid Bank 2, Intake CMP Actuator Solenoid, Intake CMP Actuator, Key Fob Button Test, Lane Departure Warning Indicator, Lane Departure Warning Switch, LED Backlight Dimming, Left Backup Lamp, Left Brake Lamp, Left Daytime Running Lamp, Left Dedicated Daytime Running Lamp, Left Fog Lamp, Left Front Corner, Left Front Park Lamp, Left Front Turn Lamp, Left Front Turn Signal Lamp, Left High Beam, Left Low Beam, Left Low Beam/Daytime Running Lamp, Left Park Lamps, Left Rear Corner, Left Rear Turn Signal Lamp, Left Rear Turn Signal/Brake Lamp, Left Rear Turn Signal/Stop Lamp, Left Rear Window Motor - Express, Left Rear Window Motor, Left Side Marker Lamp Command, Left Stop Lamp, Left Tail Lamp, Left Temperature Door Motor Direction, Left Trailer Tow Turn/Stop Lamp, Left Turn Signal, License Plate Lamps, Line PC Solenoid, Line Pressure Control Solenoid Valve, Low Beam Lamps, Low Beams, LR Turn Signal, Lumbar Forward/Backward, Malfunction Indicator Lamp, Misfire Graph, Mode Door Position, MOST Communication Enable Circuit, Next Available Slot, O2 Sensor Heater Bank 1 Sensor 1, O2 Sensor Heater Bank 1 Sensor 2, O2 Sensor Heater Bank 2 Sensor 1, O2 Sensor Heater Bank 2 Sensor 2, Object Detection Alert Indicators, Outside Rear View Mirror Courtesy Lamp, Park Brake Cable Service Apply, Park Brake Cable Service Release, Parking Assist Switch LED, Parking Lamps, Passenger Air Bag Off Indicator, Passenger Air Bag On Indicator, Passenger Mirror Movement, Passenger Seat - Blower Command, Passenger Seat Belt Reminder Indicator, Passenger Seat Cushion Heating, Passenger Window Motor, PC Solenoid 2, PC Solenoid 3, PC Solenoid 4, PC Solenoid 5, Phone Call Test, Pressure Control Solenoid Valve 2, Pressure Control Solenoid Valve 3, Pressure Control Solenoid Valve 4, Pressure Control Solenoid Valve 5, Pressure Control Solenoid Valve, Proactive Alerts, Radio Tuner AM Frequency, Radio Tuner FM Frequency, Read LIN Bus Device ID Information, Rear Cross Traffic Audible Alert, Rear Cross Traffic Haptic Alert, Rear Cross Traffic Visual Alert, Rear Defogger, Rear Differential Clutch Motor Current, Rear Fog Lamp, Rear Fog Lamps, Rearview Camera Display, Rearview Camera Screen Reverse Path Indicator Line, Red Indicator, RF Turn Signal, Right Backup Lamp, Right Brake Lamp, Right Daytime Running Lamp, Right Dedicated Daytime Running Lamp, Right Fog Lamp, Right Front Corner, Right Front Park Lamp, Right Front Turn Signal Lamp, Right High Beam, Right Low Beam, Right Low Beam/Daytime Running Lamp, Right Park Lamps, Right Rear Corner, Right Rear Turn Signal Lamp, Right Rear Turn Signal/Brake Lamp, Right Rear Turn Signal/Stop Lamp, Right Rear Window Motor - Express, Right Rear Window Motor, Right Side Marker Lamp Command, Right Stop Lamp, Right Tail Lamp, Right Temperature Door Motor Direction, Right Trailer Tow Turn/Stop Lamp, Right Turn Signal, RR Turn Signal, Run Crank Relay, Run/Start Power Mode Indicator, Satellite Antenna, 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, Secondary Air Injection Valve, Secondary Air Pump Control State, Security Indicator, Shift Lock Solenoid, Shift Solenoid 1, Shift Solenoid 2, Shift Solenoid Valve 1, Shift Solenoid Valve 2, Shift Solenoid Valve, Shift Transmission Gear, Shift Transmission, Spark Retard, Speech Recognition, Starter Relay, Steering Column Adjustment, Steering Column Telescope In, Steering Column Telescope Out, Steering Column Tilt Down, Steering Column Tilt Up, Stop Lamp, Suspension Position Sensor Trim Height, 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, Traction Control Left Front Solenoid Valves, Traction Control Left Rear Solenoid Valves, Traction Control Right Front Solenoid Valves, Traction Control Right Rear Solenoid Valves, Trailer Backup Lamps, Trailer Brake Duty Cycle, Trailer Brake Relay, Trailer Park Lamps, 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, Transmission Gear, Trunk Lamp, Trunk Lid Unlatch, Update Air Temperature, Vehicle Health Data Upload, Volume Control, Windshield Washer Relay, Windshield Wiper Motor Relay, Windshield Wiper Motor, Wiper Washer Motor

## ***New Coverage – USA Asian***

### ***Honda/Acura Coverage***

- Added coverage for 44 new system applications

#### **34 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(ABS/VSA/TCS), Air Bleeding For Repair(TCS), All Sensors Learning, ATF Reset, Brake Pad Maintenance Mode, Brake Pressure Sensor Calibration, Crank Pattern Clear, Crank Pattern Learning., Customize Reset, Differential Torque Setup, ECM/PCM Reset, ECU Activation, Engine Oil Life Reset, Initialization, Longitudinal G Sensor Neutral Point Learn, ODS Unit Initialization, OPDS Initialization, Pop Up Hood(PUH) Calibration, Replace TCM/PCM, Reset Of Assistant Side Window Position, Reset Of Driver Side Window Position, Reset Of Rear Left Side Window Position, Reset Of Rear Right Side Window Position, Start Clutch Feedback Learn, Start Clutch Status Data Clear, Stroke Sensor Learning, SWS Initialization, The Wheel Size Setup For Indirect TPMS, Tire Pressure Sensor Registration With Activation Tool, Tire Pressure Sensor Registration

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

A/C Clutch, ABS Brake Light Relay/TSA Relay Test, ABS ESS Forced Indication, ABS Solenoid Test, ABS VSA Test, ACC Alarm Test, ACC Brake Actuator, ACC Indicator Light, ACC Information Display, ACC Relay, Accessory, ADJ Motor, AFS Reflector, Air Bypass Valve Control Solenoid (ABV), All Injectors OFF, Assistant Door Courtesy Light, Assistant Door Mirror Motor Down, Assistant Door Mirror Motor Left, Assistant Door Mirror Motor Right, Assistant Door Mirror Motor Up, Assistant Door Pocket Illumination Light, Assistant Outer Handle Illumination Light, Assistant Remote Switch Illumination Light, Assistant Side Power Window Motor Down, Assistant Side Power Window Motor Up, Assistants Inner Handle Illumination Light, Auto Lock Cancel Switch, Automatic Headlights, Battery Fan High Speed Test, Battery Fan Low Speed Test, Battery Fan Mid Speed Test, Battery Fan Test, Boost Pressure 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, 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 Wipe Signal, Horn, IGNCONT Line, Ignition Key Light, IGNTRX Line Turn To Low Level, IGNTRX Line, Immobilizer Indicator Turn On, Immobilizer Lamp, IMOCONT Line, IMS1 Output, IMS2 Output, IMT(IMRC) Activation, IMT(IMRC) Test, Indicator, INH Solenoid For Start Clutch Type, Initiator Operation Check, Injector Kill Test, Intake VTC Test, Interior Buzzer Output, Interior Light Cut, Interior Light, Interior Small Light, Intermittent Wipe Signal, Internal Buzzer ON, ISO Warning Light, Key Switch Out Line Turn To On, Keyless Buzzer, keyless Check, Left And Right Parking Actuator Control, Left BSI Radar Unavailable, Left Front CAS Solenoid, Left Front Pulser, Left Front Solenoid, Left Front TCS Solenoid, Left Front VSA Solenoid, Left Power Mirror Full Down, Left Power Mirror Full Left, Left Power Mirror Full Right, Left Power Mirror Full Up, Left Rear Power Window Motor - DOWN, Left Rear Power Window Motor - UP, Left Rear Power Window Motor Down,

Left Rear Power Window Motor Up, Left Rear Pulser, Left Rear Solenoid, Left Rear VSA Solenoid, Left RR Slide Relay, Left Side 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, 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, Parking Lights, Passenger Door Power Window - Down, Passenger Door Power Window - Up, Passenger Rear Door Courtesy Light, PAX System Warning Reset, Power Seat - Front Up/Down Motor - Full Down, Power Seat - Front Up/Down Motor - Full Up, Power Seat - Rear Up/Down Motor - Full Down, Power Seat - Rear Up/Down Motor - Full Up, Power Seat - Recline Motor - Full Backward, Power Seat - Recline Motor - Full Forward, Power Seat - Slide Motor - Full Backward, Power Seat - Slide Motor - Full Forward, Power Tailgate Clutch, Power Window Relay, Power Window RLY Rr, Pressure Test Assistance mode, Pressure Test, PTG Motor Close, PTG Motor Open, PTG Release Close, PTG Release, Puddlelt, 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, RF1 RXVCC, RF1 TXD Line, RF1 TXVCC, RF2 RXVCC, RF2 TXD Line, RF2 TXVCC, RF2 Unit RXVCC Power On, Right BSI Radar Unavailable, Right Front Pulser, Right Front Solenoid, Right Front TCS Solenoid, Right Front VSA Solenoid, Right Power Mirror Full Down, Right Power Mirror Full Left, Right Power Mirror Full Right, Right Power Mirror Full Up, Right Rear Power Window Motor - DOWN, Right Rear Power Window Motor - UP, Right Rear Power Window Motor Down, Right Rear Power Window Motor Up, Right Rear Pulser, Right Rear Solenoid, Right Rear VSA Solenoid, Right RR Slide Relay, Right Side 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, 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 298 new system applications

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

Adaptive Value Backup Input (ECU Transfer Assy replacement at once), Adaptive Value BackUp Input (ECU replacement), Air Bleeding Mode, Assembly Check(ECU Replacement), Auto Detected Configuration (ESC Only), Auto Detected Configuration Reset, Auto Variant Coding, Brake Pad Change Mode, HCU Air Bleeding Mode, Longitudinal G Sensor Calibration(HAC/DBC Only), Multiplicative

Injection Time Correction for All Cylinders, Multiplicative Injection Time Correction for Cylinder1, Multiplicative Injection Time Correction for Cylinder2, Multiplicative Injection Time Correction for Cylinder3, Multiplicative Injection Time Correction for Cylinder4, Purge Solenoid Valve Opening Additive Correction, Reset of Injector Q-stat Adaptation, Resetting Adaptive Values, Resetting Auto Trans Adaptive Values, Resetting E-CVVT Values, Seat Limit Position Setting, TPMS Reception Rate Measuring Mode, TPMS Test, WCT Reprogram, Wheel Sensor ID Writing, Write VIN

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

(LED) DRL Lamp LH, (LED) DRL Lamp RH, 12V Relay OFF, 12V Relay ON, 3rd Row Center SBR Center Indicator, 3rd Row SBR Center Indicator(Optional), 3rd Row SBR Left Indicator(Optional), 3rd Row SBR Right Indicator(Optional), 4th Row SBR Center Indicator(Optional), 4th Row SBR Left Indicator(Optional), 4th Row SBR Right Indicator(Optional), AAF Control - Close, AAF Control - Open, AAF Relay, A-C Compressor Relay, Activation Switch LED, Actuator Control - Apply, Actuator Control - Release, ACV Open-Close Control, AEWP Control - PWM Type, All Door Lock Signal Output(to PTGM), All LEDs, All Mood Lamp Blue LED Test, All Mood Lamp Green LED Test, All Mood Lamp Red LED Test, All Mood Lamp White LED Test, All Tank Valve Open, Alternator Control, Alternator Test, Alt'L Signal Out, APC Open-Close Control, Assist BSD Indicator, Assist Door Courtesy Lamp Output, Assist Door Lock Indicator, Assist Mirror Position Down (Option), Assist Mirror Position Left (Option), Assist Mirror Position Right (Option), Assist Mirror Position Up (Option), Assist Outside Mirror Down, Assist Outside Mirror Left, Assist Outside Mirror Right, Assist Outside Mirror Up, Assist Power Window Down (Option), Assist Power Window Up (Option), Assist Seat Belt Indicator (Option), Assist Seat Belt Indicator, Assist Side Window Auto Down, Assist Side Window Auto Up, Assist Side Window Down, Assist Side Window Up, Assistant Side Outside Handle Antenna Output (Power and GND), ATM Solenoid, Auto Cut Relay, Auto Defog Mode Door - Close, Auto Defog Mode Door - Open, Auto Light Power, 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 Warning Lamp, BCM Buzzer Output (Internal/External), BCM Buzzer Output (Internal-External), Bifunction Headlamp High LH Solenoid IPS Output, Bifunction Headlamp High RH Solenoid IPS Output, BSD Indicator, Burglar Horn Relay, Canister Purge Valve, Canister Shut Off Valve Clocked(OBD-2 Only), Canister Shut Off Valve Toggling(OBD-2 Only), Canister Shut Off Valve(Leak Test), Canister Shut Off Valve(OBD-2 Only), CBV Open-Close Control, CDA Control Solenoid Valve - EX, B1, CDA Control Solenoid Valve - EX, B2, CDA Control Solenoid Valve - IN, B1, CDA Control Solenoid Valve - IN, B2, Central Door Lock Indicator, Central Door Lock Relay, Central Door Lock Switch Indicator Output, Central Door 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, Clamp Status ACC(Amber) LED Color illumination, Clamp Status IGN(Blue) LED Color illumination, Clamp Status Off(Red) LED Color illumination, CNG Bi-Fuel Fuel Change, CNG Shut sol valve in Fuel Tank, COD N-O Relay 1 Control, Compressor Off, Compressor On, Console Mode Door - BI-Level, Console Mode Door - Floor, Console Mode Door - Vent, Console Off Door, Console On Door, Console Temperature Air Mix Door 0%, Console Temperature Air Mix Door 100%, Console Temperature Air Mix Door 50%, Control All the LEDs, Coolant 3Way Valve, Cooler step 3 operation, Cooling Fan PWM, Cornering Lamp Left Relay Output (Option), Cornering Lamp LH Output, Cornering Lamp RH Output, Cornering Lamp Right Relay Output (Option), Courtesy Lamp RL Output, Courtesy Lamp RR Output, CPP(Canister Puge Pump) Control, Cruise Control Main Lamp(Auto CruiseType Only), Cruise Control Main Lamp(Optional), Cruise Control Set Lamp(Auto Cruise Type Only), Cruise Control SET Lamp(Optional), CTV Open-Close Control, CVVD Intake, CVVT Exhaust, CVVT Intake, D Target Position, D\_DRL Relay, Damper Clutch Solenoid (DCC), Dead Lock Relay, Dedicated DRL Left Output, Dedicated DRL Output (Option), Dedicated DRL Right Output, Def Door - Close, Def Door - Open, Defogger - Deicer Relay, Defogger Indicator, Differential Pressure Valve, Door Lock Indicator, Door Lock Relay, Door Unlock Relay, Drive Side Puddle Lamp, Driver Air Mix Door-0%,

Driver Air Mix Door-100%, Driver Air Mix Door-50%, Driver Courtesy Lamp, Driver Door Courtesy Lamp Output, Driver Door Lock, Driver Door Unlock Relay (Option), Driver Door Unlock Relay, Driver Door Unlock, Driver Heater Control, Driver Mode Door-DEF, Driver Mode Door-DEF., Driver Mode Door-Floor, Driver Mode Door-Vent, Driver Seat Belt Indicator, Driver Seat Heat Mode to the High, Driver Seat Vent Mode to the High, Driver Side Outside Handle Antenna Output (Power and GND), Driver Side Repeater, DRL Relay(Canada), DRV/AST Power Window Enable Output, DRV-AST Power Window Enable Output, DRVM (Driving Rear View Monitor), EGR Valve, ELCM Change Over Value(COV) Control, ELCM Pump Control, Electric Oil Pump Run, Electric Oil Pump, Electric Shuttle Valve-Left Front, Electric Shuttle Valve-Right Front, Electrically Controlled Water Pump (Option), Electrically Controlled Water Pump, Electronic Waste Gate Valve (Turbo Only), Electronically Controlled Water Pump(CWP), EMS Wakeup Output, End Cell HTR Relay Control, Engine Check Lamp(MIL), Engine Coolant Filling Mode, EPB Apply RH and LH, EPB Release RH and LH, ESS Lamp, ETC Motor, EV Charge Door Open Lamp Output, EV Charge Door Open Relay, EVAP Leakage Test, Event Indicate LED On-Off, EVP, 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 Left(FrontandRear) Output, Exterior Tail Lamp Rear Left Output, Exterior Tail Lamp Rear Right Output, Exterior Tail Lamp Right(Front and Rear) Output, Exterior Tail Lamp Right(FrontandRear) Output, External Buzzer Output, Fan 1st, Fan 2nd, Fan 3rd, Fan 4th, Fan 5th, Fan 6th, Fan 7th, Fan 8th, Fan 9th, Fan Motor Control-High Speed, Fan Motor Control-Low Speed, FAN ON, Fan PWM, Fan Stop, FBV Open-Close Control, FDV Heater Relay Control, FDV Open-Close Control, Flasher Sound Relay(Option), Flow Stop Valve, Folding Actuator Signal Output, Foot Lamp Output(Option), FPCM pressure control, FPS Open Mode, FPV Heater Relay Control, FPV Open-Close Control, Front Air Flow Door - 0%, Front Air Flow Door - 100%, Front Air Flow Door - 50%, Front Blower Fan Motor-1Step, Front Blower Fan Motor-2Step, Front Blower Fan Motor-3Step, Front Blower Fan Motor-4Step, Front Blower Fan Motor-5Step, Front Blower Fan Motor-6Step, Front Blower Fan Motor-7Step, Front Blower Fan Motor-8Step, Front Blower Fan Motor-Off, Front Bumper Antenna Output (Power and GND), Front Charge Door Lamp Output, Front Deicer Relay, Front Fog and Cornering Lamp Left Output, Front Fog and Cornering Lamp Right Output, Front Fog Lamp Indicator, Front Fog Lamp Left Output, Front Fog Lamp Output, Front Fog Lamp Relay, Front Fog Lamp Right Output, Front Glass Heated Relay Output, Front Glass Heated Switch Indicator Output, Front Indicate LED On-Off, Front Left Side Window Auto Down, Front Left Side Window Auto Up, Front Left Side Window Down, Front Left Side Window Up, Front Left Turn Signal Output, Front Right Side Window Auto Down, Front Right Side Window Auto Up, Front Right Side Window Down, Front Right Side Window Up, Front Right Turn Signal Output, Front Seat Heat Mode to the High, Front Seat Vent Mode to the High, Front Tank Valve Open, Front Top-SVM View, Front Turn Signal Lamp Activation LH Output, Front Turn Signal Lamp Activation RH Output, Front Washer Motor Output, Front-SVM View, Frunk Lamp Output, FSV Open-Close Control, Fuel Door Lock Solenoid Output (PHEV Only), Fuel Door Open Solenoid Output (PHEV Only), Fuel Door Open Solenoid Output, Fuel Door Open, Fuel Open Loop, Fuel Pressure Indicator Lamp(LPI), Fuel Pressure Ragulator (GDI Only), Fuel Pump Control(1st stage), Fuel Pump Control(2nd stage), Fuel Pump Control, Fuel Pump Relay Control for LPG, Fuel Pump Relay for LPG, Fuel Pump Relay(1st stage), Fuel Pump Relay(2nd stage), Fuel Pump Relay, Fuel Tank Isolation Valve Relay Open, Fuel Tank Isolation Valve, Gasoline Lamp (Bi-Fuel), Gauge ON, Glove Box Lamp Output, HAC Brake Lamp Actuator, Haptic Steering Wheel Motor Output, Haptic Steering Wheel Output, Hat Shelf Antenna Output (Power and GND), Hazard Indicator, Hazard Mode State for Turn Signal Lamp Sequential Mode, Hazard Relay, Head Lamp High Indicator, Head Lamp High Left Output, Head Lamp High Output, Head Lamp High Relay, Head Lamp High Right Output, Head Lamp 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, Head Lamp Welcome Command, Heated Handle Indicator(Option), Heated Handle Output(Option), Heated Washer Nozzle Output, Heated Washer Nozzle Relay, Heater step 3 operation, HICM Activate

Diagnostics, HICM Relay, High Mounted Stop Lamp Output, High Pressure Fuel Pump Control, High Pressure Fuel Pump Control2, HLL(Head Lamp Leveling) Max(High) Position, HLL(Head Lamp Leveling) Middle(Center) Position, HLL(Head Lamp Leveling) Min(Low) Position, HMI Mirror Alert Left LED Blinking, HMI Mirror Alert Left LED ON, HMI Mirror Alert Right LED Blinking, HMI Mirror Alert Right LED ON, HMI Switch LED, Horn Relay(NA), Horn Relay, HV PTC OFF, HV PTC ON(Min.), Idle Speed Actuator, 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, Illumination, iMEB Valve Control-Line Split Valve, iMEB Valve Control-Low Press Traction Control Valve, iMEB Valve Control-Low Press Wheel Split Valve, iMEB Valve Control-Pedal Simulator Valve, iMEB Valve Control-Release Control Valve, iMEB Valve Control-Traction Control Valve, iMEB Valve Control-Wheel Split Valve, Immobilizer Lamp(Optional), Indicator ALL OFF, Indicator ALL ON, Indirect Vent door, Injector Disable-Cylinder 1, Injector Disable-Cylinder 2, Injector Disable-Cylinder 3, Injector Disable-Cylinder 4, Injector Disable-Cylinder 5, Injector Disable-Cylinder 6, Injector Disable-Cylinder 7, Injector Disable-Cylinder 8, Injector(DI) Disable-Cylinder 1, Injector(DI) Disable-Cylinder 2, Injector(DI) Disable-Cylinder 3, Injector(DI) Disable-Cylinder 4, Injector(MPI) Disable-Cylinder 1, Injector(MPI) Disable-Cylinder 2, Injector(MPI) Disable-Cylinder 3, Injector(MPI) Disable-Cylinder 4, Inlet Valve-Left Front, Inlet Valve-Left Rear, Inlet Valve-Right Front, Inlet Valve-Right Rear, Intake Door - Fresh, Intake Door - Recirc, Interior Antenna #1 Output (Power and GND), Interior Antenna #2 Output (Power and GND), Interior Antenna #3 (Trunk Antenna : Sedan Type) Output (Power, Interior Lamp Autocut Relay Output(Optional), Interior Mood Lamp Output (Option), Internal Buzzer, IOD Relay, IR Emitter Communication, ISG Lamp, ISG Test(Optional), ITM Valve, Key Hole Illumination (Manual Key Type), Key Interlock Solenoid(Manual Key Type), Lamp Control - EPB Status Lamp, Lamp Control - EPB Warning Lamp, Lamp Control, Lamp Load Power Relay, LampLoad AutoCut IPS Output, LED Out, LongTermLoad Cut Relay Output, LPG Cut Valve for Fuel Rail, LPG Cut Valve for Fuel Tank, LPG Fuel Pump PWM, LPG Lamp, Luggage Lamp Relay, Luggage Lamp, Main Relay (+) ON, Main Relay Control (-), Main Relay Control (+), Main Relay(-) ON, Main Relay(-)(+), Precharge Relay OFF simultaneous, Main Relay(-), Main Relay(+) ON Normal Sequence, Main Relay(-), Precharge Relay ON simultaneous, Main Relay, Manual HLLD Signal Output, Map Lamp Output, Mid Tank Valve Open, Mirror Folding Operation (Option), Mirror LED Left, Mirror LED Right, Mirror Select Left indicator, Mirror Select Right indicator, Mirror Unfolding Operation (Option), Mood Lamp 1 Output, Mood Lamp 2 Output, Mood Lamp 3 Output, Mood Lamp Output, Motor, Motor1, Folding, Motor2, Unfolding, Move Assist Outside Mirror To The Highest Position, Move Assist Outside Mirror To The Lowest Position, Move Assist Outside Mirror To The Most Left Position, Move Assist Outside Mirror To The Most Right Position, Move DRIVE OUTSIDE MIRROR to the highest position, Move DRIVE OUTSIDE MIRROR to the lowest position, Move DRIVE OUTSIDE MIRROR to the most left position, Move DRIVE OUTSIDE MIRROR to the most right position, Move P-Seat to the Foremost Position (Cushion Extension), Move P-Seat to the Foremost Position (Head Rest Slide), Move P-Seat to the Foremost Position (Recline), Move P-Seat to the Foremost Position (Shoulder), Move P-Seat To The Foremost Position (Slide), Move P-Seat to the Highest Position (FR Height), Move P-Seat to the Highest Position (Headrest), Move P-Seat to the Highest Position (RR Height), Move P-Seat to the Last Position (Cushion Extension), Move P-Seat to the Last Position (HeadRest Slide), Move P-Seat to the Last Position (Recline), Move P-Seat to the Last Position (Shoulder), Move P-Seat To The Last Position (Slide), Move P-Seat to the Lowest Position (FR Height), Move P-Seat to the Lowest Position (Headrest), Move P-Seat to the Lowest Position (RR Height), Multimedia Load Power Relay, N Target Position, Navi Wakeup Signal Output, Norminal Idle Speed Offset, 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(Optional), 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, Oil Pressure Warning Lamp, On/Off Solenoid A (SS-A), Openbed Box Lamp Output, Openbed Cargo Lamp

Output, Opened Lamp Switch Indicator Output, Operate Assist Side Fold, Operate Assist Side Unfold, Operate DRIVE SIDE FOLD, Operate DRIVE SIDE UNFOLD, Operate DRIVE SIDE WINDOW AUTO DOWN, Operate DRIVE SIDE WINDOW AUTO UP, Operate DRIVE SIDE WINDOW DOWN, Operate DRIVE SIDE WINDOW UP, Outlet Valve-Left Front, Outlet Valve-Left Rear, Outlet Valve-Right Front, Outlet Valve-Right Rear, Over speed indicator(Optional), Over Speed Warning Indicator, P Target Position, Parasitic Current Auto-Block IPS, Parking Brake Indicator, PAS Buzzer Output (RPAS Buzzer Output), PAS Indicator (RPAS Off Indicator), Passenger Air Mix Door-0%, Passenger Air Mix Door-100%, Passenger Air Mix Door-50%, Passenger Mode Door - Defog, Passenger Mode Door - Floor, Passenger Mode Door - Vent, Passenger Seat Heat Mode to the High, Passenger Seat Vent Mode to the High, Perform CPU (Video Recording and Display Output) On-Off, Perform Erase All Video File, Perform Event Recording, Pocket Light Output (Option), Power Supply to the ACC Relay of Main MCU, Power Supply to the IGN1 Relay of Main MCU, Power Supply to the IGN1/IGN2 Relay of Main MCU, Power Supply to the IGN1/STARTER Relay of Main MCU, Power Supply to the IGN1-IGN2 Relay of Main MCU, Power Supply to the IGN1-STARTER Relay of Main MCU, Power Window Relay (with Safety P-WDW Enable), Power Window Relay, Precharge Relay ON, Pressure Control Solenoid (LP), Pressure Control Solenoid Valve A(Line Pressure), Pressure Control Solenoid Valve(VFS) A, Puddle Lamp Output, Puddle Pocket Lamp Output, R Target Position, RAD FAN Operation, Radiator shutter 1 - Auto test, Radiator shutter 1 - Close test, Radiator shutter 1 - Open test, Read VIN, Rear Air Flow Door - 0%, Rear Air Flow Door - 100%, Rear Air Flow Door - 50%, Rear Air Mix Door-0%, Rear Air Mix Door-100%, Rear Air Mix Door-50%, Rear Air Mix(A) Door-0%, Rear Air Mix(A) Door-100%, Rear Air Mix(A) Door-50%, Rear Assist Power Window Down Relay, Rear Assist Power Window Up Relay, Rear Blower Fan Motor-1Step, Rear Blower Fan Motor-2Step, Rear Blower Fan Motor-3Step, Rear Blower Fan Motor-4Step, Rear Blower Fan Motor-5Step, Rear Blower Fan Motor-6Step, Rear Blower Fan Motor-7Step, Rear Blower Fan Motor-8Step, Rear Blower Fan Motor-Off, Rear Bumper Antenna Output (Power and GND), Rear Charge Door Lamp Output, Rear Curtain Down Output [Rear Curtain Hall Sensor Power Output, Rear Curtain Down Output, Rear Curtain Up Output [Rear Curtain Hall Sensor Power Output(O, Rear Curtain Up Output, Rear Defogger Relay, Rear Driver B-PILLAR Door - 0%, Rear Driver B-PILLAR Door - 100%, Rear Driver Power Window Down Relay, Rear Driver Power Window Up Relay, Rear Fog Lamp (Option), Rear Fog Lamp Indicator, Rear Fog Lamp Left Output, Rear Fog Lamp Relay (Option), Rear Fog Lamp Right Output, Rear illumination, Rear Left Door Lock Indicator Output, Rear Left Power Window Down (Option), Rear Left Power Window Up (Option), Rear Left Side Courtesy Lamp, Rear Left Side Door Curtain Down (Only Windows Close Status), Rear Left Side Door Curtain Up (Only Windows Close Status), Rear Left Side Window Auto Down (Option:Curtain Bottom Status), Rear Left Side Window Auto Up (Option:Curtain Bottom Status), Rear Left Side Window Down (Option:Curtain Bottom Status), Rear Left Side Window Up (Option:Curtain Bottom Status), Rear Left Turn Signal Output, Rear LH Seat Heat Mode to the High, Rear LH Seat Vent Mode to the High, Rear mode door - B-L, Rear mode door - Floor, Rear mode door - Vent, Rear Mood Lamp (Both Left and Right), Rear Passenger B-PILLAR Door - 0%, Rear Passenger B-PILLAR Door - 100%, Rear Pocket Lamp (Both Left and Right), Rear Power Window Enable Output (Option), Rear Power Window LH Up Relay, Rear RH Seat Heat Mode to the High, Rear RH Seat Vent Mode to the High, Rear Right Door Lock Indicator Output, Rear Right Power Window Down (Option), Rear Right Power Window Up (Option), Rear Right Side Courtesy Lamp, Rear Right Side Door Curtain Down (Only Windows Close Status), Rear Right Side Door Curtain Up (Only Windows Close Status), Rear Right Side Window Auto Down (Option:Curtain Bottom Status), Rear Right Side Window Auto Up (Option:Curtain Bottom Status), Rear Right Side Window Down (Option:Curtain Bottom Status), Rear Right Side Window Up (Option:Curtain Bottom Status), Rear Right Turn Signal Output, Rear Room Lamp Output, Rear SBR Symbol Indicator Output(Optional), Rear Seat Belt Center Indicator (Option), Rear Seat Belt Left Indicator (Option), Rear Seat Belt Right Indicator (Option), Rear Seat Heat Mode to the High, Rear Seat Vent Mode to the High, Rear Seat Warmer Left(Optional), Rear Seat Warmer Right(Optional), Rear Tank Valve Open, Rear Top-SVM View, Rear View Switch Indicator

Output, Rear Washer Motor Output, Rear Wiper Relay (Option), Rear Wiper Relay, Rear-SVM View, Refrigerant 2Way Valve - #1 OFF, Refrigerant 2Way Valve - #1 ON, Refrigerant 2Way Valve - #2 OFF, Refrigerant 2Way Valve - #2 ON, Refrigerant 3Way Valve - #1 OFF, Refrigerant 3Way Valve - #1 ON, Refrigerant 3Way Valve - #2 OFF, Refrigerant 3Way Valve - #2 ON, RKE Tailgate Signal Output(to PTGM), RL Door Lock Relay, RL Door Unlock Relay, Room Lamp Output, RPAS Switch Indicator(Option), RVM Swich Indicator Output, Safety ECU Enable Output (High), Safety Power Window Enable, Safety Power Window Sunroof Enable, SBL Function Test SBL LH ON, Security LED Output, Security LED, Shift Control Solenoid Valve (28/B), Shift Control Solenoid Valve (37R/C), Shift Control Solenoid Valve (46/C), Shift Control Solenoid Valve (OD and LR), Shift Control Solenoid Valve (UD/C), Shift Control Solenoid Valve A (Primary Pulley), Shift Control Solenoid Valve B (Secondary Pulley), Shift Control Solenoid Valve C (Clutch), Shift Solenoid A (Primary), Shift Solenoid B (Secondary), Shift Solenoid C (Clutch), ShortTermLoad Cut Relay/IPS Output, ShortTermLoad Cut Relay-IPS Output, SSB illumination Output (Power and GND), Start Inhibit Relay (Option), Start Inhibit Relay, Start Relay, Static Bending LH Output (Option), Static Bending RH Output (Option), Steering Warmer Output, Steering Warmer Switch Indicator Output, Stop Lamp Left, Stop Lamp Left/Right/HMSL Output (Option), Stop Lamp Left-Right-HMSL Output (Option), Stop Lamp Right, Stop Lamp, Storage Bos Lid Release Relay Output, Sunroof Enable Output, Sunroof Power Relay control(Option), 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, Torque Converter Clutch Solenoid Valve, Turbo dump(ReCirculation) Valve (RCV), Turbo waste gate(WGT) valve, Turn LH Output, Turn RH Output, Turn Signal Lamp Front Left Output, Turn Signal Lamp Front Right Output, Turn Signal Lamp Rear Left Output, Turn Signal Lamp Rear Right Output, Turn Signal Sound Output, Turn Signal Sound Relay Output, Vacuum Pump (ELCM), Variable Exhaust Flap, Variable Force Solinoid Valve - Exhaust Bank1 test, Variable Force Solinoid Valve - Intake Bank1 test, Variable Intake Manifold 1 (Option), Variable Intake Solenoid(Option), Variable Oil Pump Solenoid, VCM Motor (Option), VESS Sound Play (5 Sec), VESS Sound Play (Until Stop Command), VVL Control Solenoid Valve - EX, B1, VVL Control Solenoid Valve - EX, B2, VVL Control Solenoid Valve - IN, B1, VVL Control Solenoid Valve - IN, B2, Warm Bypass door, Window Lock Indicator, Window Lock to Driver Door Module, Wiper High-Speed Relay [Wiper High RLY With Wiper Power RLY], Wiper Low-Speed Relay [Wiper Low RLY With Wiper Power RLY], Wiper Power Relay, Wiper Relay (for INT)[Wiper RLY With Wiper Power RLY]

## **Kia Coverage**

- Added coverage for 97 new system applications

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

Adaptive Value Backup Input (ECU Transfer Assy replacement at once), Adaptive Value BackUp Input (ECU replacement), Air Bleeding Mode, Assembly Check(ECU Replacement), Auto Detected Configuration Reset, Clutch Learning Reset, DCT Learning Function, HCU Air Bleeding Mode, Longitudinal G Sensor Calibration(HAC/DBC Only), Multiplicative Injection Time Correction for All Cylinders, Multiplicative Injection Time Correction for Cylinder1, Multiplicative Injection Time Correction for Cylinder2, Multiplicative Injection Time Correction for Cylinder3, Multiplicative Injection Time Correction for Cylinder4, Pressure Sensor Calibration, Purge Solenoid Valve Opening Additive Correction, Reset Adaptive Values, Reset of Injector Q-stat Adaptation, Resetting Adaptive Values, Resetting Auto Trans Adaptive Values, Resetting E-CVVT Values, TPMS Reception Rate Measuring Mode, TPMS Test, Write VIN

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



(LED) DRL Lamp LH, (LED) DRL Lamp RH, 3rd Row Center SBR Center Indicator, 3rd Row SBR Left Indicator(Option), 3rd Row SBR Right Indicator(Option), AAF Control - Close, AAF Control - Open, AAF Relay, A-C Compressor Relay, Activation Switch LED, AEWP Control - PWM Type, All Door Lock Signal Output(to PTGM), All LEDs, All Mood Lamp Blue LED Test, All Mood Lamp Green LED Test, All Mood Lamp Red LED Test, All Mood Lamp White LED Test, Alternator Control, Alternator Test, Alt'L Signal Out, Assist Door Courtesy Lamp Output, Assist Door Lock Indicator, Assist Mirror Position Down (Option), Assist Mirror Position Left (Option), Assist Mirror Position Right (Option), Assist Mirror Position Up (Option), Assist Outside Mirror Down, Assist Outside Mirror Left, Assist Outside Mirror Right, Assist Outside Mirror Up, Assist Power Window Down (Option), Assist Power Window Up (Option), Assist Seat Belt Indicator (Option), Assist Seat Belt Indicator, Assistant Side Outside Handle Antenna Output (Power and GND), ATM Solenoid, Auto Cut Relay, Auto Light Power, Auxiliary Fuel Injector for Flexible fuel, Auxiliary Fuel Pump for Flexible fuel, AV Tail, Back Up Lamp, Battery Warning Lamp, BI-Fuel System Fuel Change(GSL to LPG), BI-Fuel System Fuel Change(LPG to GSL), Bifunction Headlamp High LH Solenoid IPS Output, Bifunction Headlamp High RH Solenoid IPS Output, BSD Switch LED ON-OFF, Burglar Horn Relay, Canister Purge Valve, Canister Shut Off Valve Clocked(OBD-2 Only), Canister Shut Off Valve Toggling(OBD-2 Only), Canister Shut Off Valve(Leak Test), Canister Shut Off Valve(OBD-2 Only), CDA Control Solenoid Valve - EX, B1, CDA Control Solenoid Valve - EX, B2, CDA Control Solenoid Valve - IN, B1, CDA Control Solenoid Valve - IN, B2, Central Door Lock Indicator, Central Door Lock Relay, Central Door Lock Switch Indicator Output, Central Door Unlock Relay, Chageover Valve, Charge Inlet Lock Relay, Charge Inlet Unock Relay, Checking the wear amount of clutch, Child Lock Relay Output, Child Unlock Relay Output, Clamp Status ACC(Amber) LED Color illumination, Clamp Status IGN(Blue) LED Color illumination, Clamp Status Off(Red) LED Color illumination, Clutch Reference Position Check, CNG Bi-Fuel Fuel Change, CNG Shut sol valve in Fuel Tank, Control Solenoid Valve (VFS) A, Cooling Fan PWM, Cornering Lamp Left Relay Output (Option), Cornering Lamp LH Output, Cornering Lamp RH Output, Cornering Lamp Right Relay Output (Option), Courtesy Lamp RL Output, Courtesy Lamp RR Output, CPP(Canister Puge Pump) Control, Cruise Control Main Lamp(Auto CruiseType Only), Cruise Control Main Lamp(Option), Cruise Control Set Lamp(Auto Cruise Type Only), Cruise Control SET Lamp(Option), CVVD Intake, CVVT Exhaust, CVVT Intake, D Target Position, D\_DRL Relay, Dead Lock Relay, Dedicated DRL Left Output, Dedicated DRL Output (Option), Dedicated DRL Right Output, Defogger - Deicer Relay, Defogger Indicator, Differential Pressure Valve, Door Lock Relay, Door Unlock Relay, Drive Side Puddle Lamp, Driver Courtesy Lamp, Driver Door Courtesy Lamp Output, Driver Door Lock, Driver Door Unlock Relay (Option), Driver Door Unlock Relay, Driver Door Unlock, Driver Heater Control, Driver Seat Belt Indicator, Driver Seat Heat Mode to the High, Driver Seat Vent Mode to the High, Driver Side Outside Handle Antenna Output (Power and GND), DRL Relay(Canada), DRV-AST Power Window Enable Output, EGR Valve, ELCM Change Over Value(COV) Control, ELCM Pump Control, Electric Oil Pump, Electric Shuttle Valve-Left Front, Electric Shuttle Valve-Right Front, Electrically Controlled Water Pump (Option), Electrically Controlled Water Pump, Electronic Waste Gate Valve (Turbo Only), Electronically Controlled Water Pump(CWP), EMS Wakeup Output, Engage Both Clutch(20mm), Engine Check Lamp(MIL), Engine Coolant Filling Mode, EPB Apply RH and LH, EPB Release RH and LH, ESS control, ESS Lamp, ETC Motor, EV Charge Door Open Lamp Output, EV Charge Door Open Relay, EVAP Leakage Test, EVP, Exhaust Flap(EF), Exhaust Gas Recirculation Valve, Exhaust Gas Recirculation, Exterior Tail Lamp Front Left Output, Exterior Tail Lamp Front Right Output, Exterior Tail Lamp Left(Front and Rear) Output, Exterior Tail Lamp Left(FrontandRear) Output, Exterior Tail Lamp Left(FrontRear) Output, Exterior Tail Lamp Rear Left Output, Exterior Tail Lamp Rear Right Output, Exterior Tail Lamp Right(Front and Rear) Output, Exterior Tail Lamp Right(FrontandRear) Output, Exterior Tail Lamp Right(FrontRear) Output, External Buzzer Output, Fan Motor Control-High Speed, Fan Motor Control-Low Speed, Fan PWM, Flasher Sound Relay(Option), Flow Stop Valve, Foot Lamp Output(Option), FPCM pressure control, Front Bumper Antenna Output (Power and GND), Front Charge Door Lamp Output, Front Deicer Relay, Front Fog

Cornering Lamp Left Output, Front Fog Cornering Lamp Right Output, Front Fog and Cornering Lamp Left Output, Front Fog and Cornering Lamp Right Output, Front Fog Lamp Indicator, Front Fog Lamp Left Output, Front Fog Lamp Output, Front Fog Lamp Relay, Front Fog Lamp Right Output, Front Glass Heated Relay Output, Front Glass Heated Switch Indicator Output, Front Left Turn Signal Output, Front Right Turn Signal Output, Front Seat Heat Mode to the High, Front Seat Vent Mode to the High, Front Top-SVM View, Front Turn Signal Lamp Activation LH Output, Front Turn Signal Lamp Activation RH Output, Front Washer Motor Output, Front-SVM View, Fuel Door Open Solenoid Output, Fuel Open Loop, Fuel Pressure Indicator Lamp(LPI), Fuel Pressure Ragulator (GDI Only), Fuel Pump Control(1st stage), Fuel Pump Control(2nd stage), Fuel Pump Control, Fuel Pump Relay Control for LPG, Fuel Pump Relay for LPG, Fuel Pump Relay(1st stage), Fuel Pump Relay(2nd stage), Fuel Pump Relay, Fuel Tank Isolation Valve Relay Open, Fuel Tank Isolation Valve, Gasoline Lamp (Bi-Fuel), Gauge ON, Glove Box Lamp Output, HAC Brake Lamp Actuator, Haptic Steering Wheel Motor Output, Haptic Steering Wheel Output, Hat Shelf Antenna Output (Power and GND), Hazard Indicator, Hazard Mode State for Turn Signal Lamp Sequential Mode, Hazard Relay, Head Lamp High Indicator, Head Lamp High Left Output, Head Lamp High Output, Head Lamp High Relay, Head Lamp High Right Output, Head Lamp Low Indicator, Head Lamp Low Left Output, Head Lamp Low Output, Head Lamp Low Right Output, Head Lamp Low Signal, Head Lamp Washer Relay, Heated Handle Indicator(Optional), Heated Handle Output(Optional), Heated Washer Nozzle Output, Heated Washer Nozzle Relay, HICM Activate Diagnostics, HICM Relay, High Mounted Stop Lamp Output, High Pressure Fuel Pump Control, High Pressure Fuel Pump Control2, HMI Mirror Alert Left LED Blinking, HMI Mirror Alert Left LED ON, HMI Mirror Alert Right LED Blinking, HMI Mirror Alert Right LED ON, HMI Switch LED, Horn Relay(NA), Horn Relay, Idle Speed Actuator, 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, Illumination, 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, Injector(DI) Disable-Cylinder 1, Injector(DI) Disable-Cylinder 2, Injector(DI) Disable-Cylinder 3, Injector(DI) Disable-Cylinder 4, Injector(MPI) Disable-Cylinder 1, Injector(MPI) Disable-Cylinder 2, Injector(MPI) Disable-Cylinder 3, Injector(MPI) Disable-Cylinder 4, Inlet Valve-Left Front, Inlet Valve-Left Rear, Inlet Valve-Right Front, Inlet Valve-Right Rear, Interior Antenna #1 Output (Power and GND), Interior Antenna #2 Output (Power and GND), Interior Antenna #3 (Trunk Antenna : Sedan Type) Output (Power, Interior Lamp Autocut Relay Output(Optional), Interior Mood Lamp Output (Option), Interior Mood Lamp Output, Internal Buzzer, IOD Relay, ISG Lamp, ISG Test(Optional), ITM Valve, Key Hole Illumination (Manual Key Type), Key Interlock Solenoid(Manual Key Type), Lamp Control - EPB Status Lamp, Lamp Control - EPB Warning Lamp, Lamp Control, Lamp Load Power Relay, LampLoad AutoCut IPS Output, Left Mirror LED Blinking, Left Mirror LED ON, LongTermLoad Cut Relay Output, LPG Cut Valve for Fuel Rail, LPG Cut Valve for Fuel Tank, LPG Fuel Pump PWM, LPG Injector Disable Cylinder1, LPG Injector Disable Cylinder2, LPG Injector Disable Cylinder3, LPG Injector Disable Cylinder4, LPG Lamp, Luggage Lamp Relay, Luggage Lamp, Main Relay, Manual HLLD Signal Output, Map Lamp Output, 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 DRIVE OUTSIDE MIRROR to the highest position, Move DRIVE OUTSIDE MIRROR to the lowest position, Move DRIVE OUTSIDE MIRROR to the most left position, Move DRIVE OUTSIDE MIRROR to the most right position, Move P-Seat to the Foremost Position (Cushion Extension), Move P-Seat to the Foremost Position (Head Rest Slide), Move P-Seat to the Foremost Position (Recline), Move P-Seat to the Foremost Position (Shoulder), Move P-Seat To The Foremost Position (Slide), Move P-Seat to the Highest Position (FR Height), Move P-Seat to the Highest Position (Headrest), Move P-Seat to the Highest Position (RR Height), Move P-Seat to the

Last Position (Cushion Extension), Move P-Seat to the Last Position (HeadRest Slide), Move P-Seat to the Last Position (Recline), Move P-Seat to the Last Position (Shoulder), Move P-Seat To The Last Position (Slide), Move P-Seat to the Lowest Position (FR Height), Move P-Seat to the Lowest Position (Headrest), Move P-Seat to the Lowest Position (RR Height), Multimedia Load Power Relay, N Target Position, Navi Wakeup Signal Output, Norminal Idle Speed Offset, 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(Optional), 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, Oil Pressure Warning Lamp, On-Off Solenoid A (SS-A), Operate DRIVE SIDE FOLD, Operate DRIVE SIDE UNFOLD, Operate DRIVE SIDE WINDOW AUTO DOWN, Operate DRIVE SIDE WINDOW AUTO UP, Operate DRIVE SIDE WINDOW DOWN, Operate DRIVE SIDE WINDOW UP, Outlet Valve-Left Front, Outlet Valve-Left Rear, Outlet Valve-Right Front, Outlet Valve-Right Rear, Over speed indicator(Optional), Over Speed Warning Indicator, P Target Position, Parasitic Current Auto-Block IPS, Parking Brake Indicator, PAS Buzzer Output (RPAS Buzzer Output), PAS Indicator (RPAS Off Indicator), Passenger Seat Heat Mode to the High, Passenger Seat Vent Mode to the High, Pocket Light Output(Optional), Power Supply to the ACC Relay of Main MCU, Power Supply to the IGN1 Relay of Main MCU, Power Supply to the IGN1-IGN2 Relay of Main MCU, Power Supply to the IGN1-STARTER Relay of Main MCU, Power Window Relay (with Safety P-WDW Enable), Power Window Relay, Pressure Control Solenoid (LP), Pressure Control Solenoid Valve(VFS) A, Puddle Lamp Output, R Target Position, Radiator shutter 1 - Auto test, Radiator shutter 1 - Close test, Radiator shutter 1 - Open test, Read VIN, Rear Assist Power Window Down Relay, Rear Assist Power Window Up Relay, Rear Assist Side Window Auto Up, Rear Assist Window Auto Down, Rear Assist Window Down, Rear Bumper Antenna Output (Power and GND), Rear Charge Door Lamp Output, Rear Curtain Down Output, Rear Curtain Up Output, Rear Defogger Relay, Rear Driver Power Window Down Relay, Rear Driver Power Window Up Relay, Rear Driver Side Window Auto Up, Rear Driver Window Auto Down, Rear Driver Window Down, Rear Driver Window Up, Rear Fog Lamp (Option), Rear Fog Lamp Indicator, Rear Fog Lamp Left Output, Rear Fog Lamp Relay (Option), Rear Fog Lamp Right Output, Rear Left Power Window Down (Option), Rear Left Power Window Up (Option), Rear Left Turn Signal Output, Rear LH Seat Heat Mode to the High, Rear LH Seat Vent Mode to the High, Rear Power Window Enable Output (Option), Rear Power Window LH Up Relay, Rear RH Seat Heat Mode to the High, Rear RH Seat Vent Mode to the High, Rear Right Power Window Down (Option), Rear Right Power Window Up (Option), Rear Right Turn Signal Output, Rear Room Lamp Output, Rear Seat Belt Center Indicator (Option), Rear Seat Belt Left Indicator (Option), Rear Seat Belt Right Indicator (Option), Rear Seat Heat Mode to the High, Rear Seat Vent Mode to the High, Rear Seat Warmer Left(Optional), Rear Seat Warmer Right(Optional), Rear Top-SVM View, Rear View Switch Indicator Output, Rear Washer Motor Output, Rear Wiper Relay (Option), Rear Wiper Relay, Rear-SVM View, Right Mirror LED Blinking, Right Mirror LED ON, RKE Tailgate Signal Output(to PTGM), RL Door Lock Relay, RL Door Unlock Relay, Room Lamp Output, RPAS Switch Indicator(Optional), RVM Swich Indicator Output, Safety ECU Enable Output (High), Safety Power Window Enable, Security LED Output, Shift Control Solenoid Valve (28-B), Shift Control Solenoid Valve (37R-C), Shift Control Solenoid Valve (46-C), Shift Control Solenoid Valve (OD and LR), Shift Control Solenoid Valve (UD-C), Shift Control Solenoid Valve A(UD/B), Shift Control Solenoid Valve B(2-6/B), Shift Control Solenoid Valve C(35R/C), Shift Control Solenoid Valve D(OD/C), Shift Control Solenoid Valve E(SS-A), Shift Solenoid A (Primary), Shift Solenoid B (Secondary), Shift Solenoid C (Clutch), ShortTermLoad Cut Relay-IPS Output, SSB illumination Output (Power and GND), Start Inhibit Relay (Option), Start Inhibit Relay, Start Relay, Static Bending LH Output (Option), Static Bending RH Output (Option), Steering Warmer Output, Steering Warmer Switch Indicator Output, Stop Lamp Left, Stop Lamp Left-Right-HMSL Output (Option), Stop Lamp Right, Stop Lamp, Sunroof Enable Output, Sunroof Power Relay control(Optional), SVM + FrontLeft + FrontRight View, SVM + RearLeft + RearRight View, System Identification, Tail Interior Lamp, Tail Lamp Indicator, Tail Lamp Output, Tail Lamp Relay, Tailgate-Trunk Release Relay, TCI

Bypass Valve(Turbo Only), TCS Valve-Left Front, TCS Valve-Right Front, Torque Converter Clutch Solenoid Valve, Turbo dump(ReCirculation) Valve (RCV), Turbo waste gate(WGT) valve, Turn LH Output, Turn RH Output, Turn Signal Lamp Front Left Output, Turn Signal Lamp Front Right Output, Turn Signal Lamp Rear Left Output, Turn Signal Lamp Rear Right Output, Turn Signal Sound Relay Output, Vacuum Pump (ELCM), Variable Exhaust Flap, Variable Force Solinoid Valve - Exhaust Bank1 test, Variable Force Solinoid Valve - Intake Bank1 test, Variable Intake Manifold 1 (Option), Variable Intake Solenoid(Optional), Variable Oil Pump Solenoid, VCM Motor (Option), VVL Control Solenoid Valve - EX, B1, VVL Control Solenoid Valve - EX, B2, VVL Control Solenoid Valve - IN, B1, VVL Control Solenoid Valve - IN, B2, Window Lock to Driver Door Module, Wiper High-Speed Relay [Wiper High RLY With Wiper Power RLY], Wiper Low-Speed Relay [Wiper Low RLY With Wiper Power RLY], Wiper Power Relay, Wiper Relay (for INT)[Wiper RLY With Wiper Power RLY]

## ***Mitsubishi Coverage***

- Added coverage for 21 new system applications

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

ABS Warning Light, AFS OFF Indicator, AHB Indicator, Air Conditioning Switch, Air Outlet C-O Damper, ASC-TCL Failure Indicator, ASC-TCL OFF Indicator, ASC-TCL OP. Indicator, ASG Indicator, ASG OFF Indicator, Brake Indicator, BSW Buzzer, BSW Indicator, BSW ON-OFF Setting, Charge Indicator, Condenser Fan, Cruise Control Indicator, Driver Seatbelt Indicator, ECO Indicator, Engine Malfunction IND., Engine switch(Control), Engine Switch(LED ON), FCM Indicator, FCM OFF Indicator, Front Blower Fan, Front Fog Light Indicator, Fuel Gauge, Headlight Auto leveling, High Beam Indicator, Idle Up Request, Indicator2, In-Out Select Damper, Input Vehicle Speed, LDW Indicator: Standby Request, LDW Indicator: System Fail Req., LDW Indicator: TEMP. Fail Req., LDW Indicator: Warning Request, Meter Illumination, Meter Indication (BSW Status), Meter Indication (RCTA Warning), Mirror Indicator, PA. Seatbelt Indicator, Passenger S SRS OFF Light, Passenger S SRS ON Light, Positionlight Indicator, PTC Heater, RCTA Buzzer, Rear Defogger Switch, Rear Fog Light Indicator, Rear PTC Heater, Speedometer, SRS Indicator, SRS Warning Light, Stoplight:ON, Tachometer, Tire Pressure Indicator, TSR Display Request, Turn Signal Indicator(LH), Turn Signal Indicator(RH)

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

- Added coverage for 318 new system applications

### **214 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, 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 Bleeding, Air Fuel Ratio Correction Value, Air Fuel Ratio Sensor, ALC Setting, Anti Theft Alarm Trigger Setting, Anti-Lock Out Set, AP Position Learn Clear, Auto Door Lock, Auto Light Logic Setting, Auto Park Inhibition, Automatic Door Lock/Unlock Setting, Automatic Door Locking, AUTOMATIC DOOR UNLOCK SELECT, Automatic Lock Setting, Automatic Unlocking, Auxiliary Gearbox Clutch Point Learning, Battery Discharge Current Integration Clear, BCM Diagnosis When Engine Does Not Start, BCM Diagnosis When the Door Lock Is Malfunctioning, Blind Spot Detection Configuration, Blind Spot Detection Shut-Off Requester Test, Blow Mode, Blow Set, Cause of Auto Cancel 2, Cause of Auto Cancel 4, Cause of Auto Cancel 6, 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, CLUTCH SENSOR RESET, CML Battery Discharge Current Integration Clear, CO Adjustment, Communication Test With Key, Computer Programming, Conform CVTF Deterioration, Cumulative Sub-Battery Discharge Current Clear, Custom A/Light Setting, Decel G Sensor Calibration, Diagnosis for Remote Engine Starter, Door Lock / Unlock, Door Motor Starting Position Reset, Door Open Detection Acoustic Alarm, Door unlocking Driver door/all doors, Door Unlocking Triggering Delay, DPF Regeneration, 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, Engine Adaptive, Engine basis parts value 1 and 2 clear, Engine Brake Adjustment, Engine Start by I-Key, Erase Calibration Data, Erase Learning Value, Erase Memory Data, Erase Statistic Memory, Ethanol Concentration, EVAP System Close, FEB Operation Mileage, Fine Adjustment Front View Camera Top View, Fine adjustment of DS camera, top view, Fine adjustment of PAS camera, top view, Fine Adjustment Reversing Camera Top View, Finish Brake Pad Replacement, FRE Memory Set, Front Camera Guidelines Correction, Fuel Pressure Release, Fuel Supply Prevention, FWD Clutch Point Learning, G Sensor Calibration, Gas Sensor Adjustment, GPF Service Regeneration Reset Routine Execution, High Pressure Fuel Circuit Fault Finding, High Pressure Fuel Pump Total Starts Counter Clear, Horn With Keyless Lock, ID Read, ID Registration, Idle Air Volume Learn, Ignition Battery Saver Set, Ignition Timing (ADV), Ignition Timing Adjustment, Illumination Delay Setting, Initialization Position Adjustment, Injection Pump Adaptive, Injection Timing, Interior Light/Door Lock Interaction Setting, 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 Requ.Test, Lane Departure Warning Camera Configuration, Launch Control Counter Reset, Levelizer Adjustment, Lock/Unlock By I-Key, Longitudinal G Sensor Calibration, M/T Neutral Pos Learn, Misfire Count (Past), Misfire count (real-time), Multi Answer Back Setting, 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, Pressure Sensor Initialization, Program Key Fobs, Programmed Values, Programming Reinitialization, Programming Selections/Engaging Zones, R Lamp Timer Logic Setting, Rear Door Window Open Detect. Acoustic Alarm, Rear Lid Unlocking Triggering Delay, REC Memory Set, Regeneration of Gasoline Particulate Filter, REMO CONT ID CONFIR, Remo Cont ID Erase, REMO CONT ID REGIST, Reset Adaptation Values for Shift Operation, Reset Adaption To Factory Setting, Reset Fuel And Timing Learn Tables, Reset Fuel Consumption Short Term Log, Reset to Default Settings, Reset Vehicle Height Initial Value, Retained Power Setting, Reversing Camera Guidelines Correction, Room Lamp Off Timer Setting, Room Lamp On Timer Setting, Room Lamp Timer Setting, Rotary Position Sensor Learn, RTCV Actuator Calibrate, Save Computer Data, Save/Write Data for CPU Replace, SC Magnetic Clutch Engage Count Clear, Self-Learning Cont, Set R-DEF Timer, Set Rear Temperature Correction, Set Temperature Correction, 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, 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 Evaporator Temperature Upper Limit Setting, Target Idle RPM Adjustment, Target IGN TIM ADJ, Target Ignition Timing Hold, Tcu Activate Setting, Teach-in Of Selection Range Sensor, Temp Set Correct In Deg C, Temp Set Correct In Deg F, Tire Pressure Sensor Registration, Upshifts, 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, Weight Classification Sensor Reset, Wiper Speed Setting, Write Fuel Learn Value, Write High Pressure Fuel Pump Total Starts Count, Write Saved Data, Write Starter Operation Count, WRITE VIN(MANUAL INPUT), Write VIN

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

(TBD)EAP FAIL IND, (TBD)Epkb Request, (TBD)EPS Reaction Force Request, (TBD)Hand Free Warning, (TBD)LDP L STEP, 12V BATTERY CHARGE W-L, 4WD AT Flow, A/C Compressor Relay Control, A/C Compressor, A/C Indicator, A/F Sensor Heater, AAC/V Output Duty, AAC/V Output Step, ABS Motor, AC Compressor Relay, AC Compressor, A-C INDICATOR, ACC Indicator Lamp, ACC Indicator, Accelerator Pedal Actuator Test 1, Accelerator Pedal Actuator Test 2, Accy/RAP Relay, Activate Demo Mode Of Exterior Lamp, Activate the Starter Cut Relay, Active Grille Air Shutter, Active Grille Shutter, Active Pedal, ADAS Buzzer 2, ADAS BUZZER, Advanced Homogeneous Direct Injection Angle, Advanced Stratified Direct Injection Angle, AEB Disp, A-F Ratio Cntrl Stop Stratified Chrg Cmb Trnsfr, Air Bypass Valve Solenoid, Air Cond Rly, Air Conditioner Relay Output, Air Conditioner Test, Air Inlet Control Flap On Front End Panel, Air Inlet Flap, Air Pump Relay, Air Pump, Air/Liquid Pump Of Camera, ALC Disp, ALC Level, ALL INDICATORS DRIVE, All LCD Segments, ALL SEG, All Shock Absorber, Alternator Duty Cycle, Alternator Duty, Alternator Voltage, ANC Test Tone, Answer Back With I-Key Unlock, Antenna Self-Test, Anti Key Lock In Function, ARC Disp 2, ARC Disp, ARC operation indication, AS Seat Lamp Test, Assist Seat Lamp Test, ATC 1 Disp, ATC 2 Disp, ATC 3 Disp, ATC 4 Disp, ATC 5 Disp, Auto ACC 1, AUTO ACC 2, Auto retractable door mirror, Auto Stop Start, Automatic Back Door, Automatic Brake Hold Lamp Active, Automatic Brake Hold SW Lamp Active, Back Door open Test, Battery Cooling, Battery Heater, Battery Saver, BCI Warning Indicator, Boost Pressure, Booster Solenoid, Boot/Trunk Open, Brake Actuator 1 Mode 1, Brake Actuator 1 Mode 2, Brake Actuator 1 Mode 3, Brake Actuator 2 Mode 1, Brake Actuator 2 Mode 2, Brake Actuator 2 Mode 3, Brake Actuator 3 Mode 1, Brake Actuator 3 Mode 2, Brake Actuator 3 Mode 3, Brake Actuator, Brake Hold Disp, Brake Hold Display, Brake Operation, Brake Release, Brake SW, Brake Switch, BSI Indicator On, BSI ON Indicator, BSI Warning Indicator, BSW Indicator LH, BSW Indicator RH, BSW On Indicator, BSW Warning Lamp, BSW/BSI INDICATOR DRIVE, BSW/BSI WARNING LAMP, BSW-BSI INDICATOR DRIVE, BSW-BSI WARNING LAMP, BUZZER 1 (ADAS), BUZZER 1 (CCM), BUZZER 2 (ADAS), BUZZER 2 (CCM), BUZZER 3 (ADAS), BUZZER 3 (CCM), BUZZER 4 (ADAS), BUZZER 4 (CCM), BUZZER DRIVE, Buzzer, Camshaft Dephaser: Solenoid Valve Slide Movement, Camshaft Positioner, Canister Bleed Solenoid Valve, Canister Drain Cut Valve, Cargo Lamp Output, Catalyst Exhaust Gas Downstream O2 Resistance Heater PWM, Catalyst Exhaust Gas Upstream O2 Resistance Heater PWM, Cause of Auto Cancel 1, Causes Of Engine Stop Prevention, CBV Position Override, Charge Air Cooler Cooling Electric Water Pump, CHARGE STAT INDICATOR 1, CHARGE STAT INDICATOR 2, CHARGE STAT INDICATOR 3, Charge Status Indicator 1, Charge Status Indicator 2, Charge Status Indicator 3, 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 Purging Switchover Valve, Check Quantity Control Valve, Check Throttle Valve Actuator, Check Valve Bypass Valve, CNG Cylinder Shutoff Valve, Command St Whl Forc, Command Steering Angle, Component Quantity Control Valve, Compressor, Confirm Dongle ID, Continuously Variable Valve Timing Control Side Intake, Coolant Circulation Switching S/V, Coolant Temperature, Cooling Fan, Cornering Lamp Test, CORNERING LAMP, C-SCV Target Step (Bank1), C-SCV Target Step (Bank2), C-VTC Target Angle, Cylinder Cutout Test, Daytime Running Light, DCA Indicator, DC-DC Conv Duty, 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: Headlamp Leveling, Display: Test, Door Handle Lamp Test, Door Lock Ind, Door Lock Indicator, Door lock status indicator, Door Lock, Door Mirror LED LH, Door Mirror LED RH, Door Warning Lamp, DOWNSTREAM OXYGEN SENSOR HEATING, Drive Mode Test, Drive Power Distribute Torque, Driver Seat, EAP SW LAMP, EAPM Warning Lamp, ECO Indicator Lamp, ECO Tree, 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 Parking Brake Activation, 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 SPEED OUTPUT TEST, Engine Start Request, Engine Start, Engine Sw Illumi, ESS Active, ESS Relay Active, ETC Correction Valve, ETS Solenoid Control, ETS S-V, EV SYSTEM W-L, 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 Solenoid, 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, FL Shock Absorber, FL Tire Disp, Flasher test, Flasher, FLAT TIRE WARNING, Flex-Fuel Additional Pump, Flex-Fuel Additional Solenoid Valve, FLYWHEEL TARGET PROGRAMMING, Fog Lamp Override, FPCM, FR Fog lamp, 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, FR Shock Absorber, FR Tire Disp, Fr Wiper, Fresh Air Memory, Front Assist Window, Front Buzzer, Front Driver Window, Front Fog Lamp, Front lamp, Front Left Solenoid, Front Right Solenoid, Front window defogger (driver side), Front window defogger (passenger side), Front Wiper Test, Front Wiper, F-S CHG RLY, Fuel Flow Actuator, Fuel Flow Solenoid Valve, Fuel Heater Relay, Fuel Heater, Fuel Injection, Fuel Lid Open Indicate, FUEL LID OPEN, 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 Shutoff Valve 1, Fuel Shutoff Valve 2, Fuel Shutoff Valve 3, Fuel Shutoff Valve, Fuel Supply Pump Override Test, Fuel System Leakage Test, FUEL-T TEMP SEN, Gas Pump Command State, Glow Relay, HALF BACK DOOR, Hazard Answer Back, Hazard Lamp, HDC DISP, HDC Display, Head Lamp High, Head Lamp Washer, HEAD LAMP(HI), Head Lamp, Head Lamps, Headlamp High, Headlamp Low, Headlamp Washer, Heater Relay Unit, Heater Valve Flow, HEATING RESISTOR RELAY 1, HEATING RESISTOR RELAY 2, HEATING RESISTOR RELAY 3, High Beam Assist Test, High Beam Lamp Test, High Pressure Circuit Leak Test, Horn Acknowledgement Signal, Horn Chirp Test, HORN LAMP, Horn Test, Horn, Horn-IPDM-E, Horn-Multi Remote Ent, HPCR Fuel Act Override, Hv Battery Cooling Fan, HVAC Test, Hydraulic Control, IACV-AAC/V Opening, ICC Buzzer, ICC Warning Lamp, ID REGIST WARNING, Idle Target RPM, Ign Cont2, IGN KEY WARN ALM, Ignition Accessory Battery Saver, Ignition Cont1, Ignition Cont2, Ignition Cylinder 1, Ignition Cylinder 2, Ignition Cylinder 3, Ignition Cylinder 4, Ignition Illumination, Ignition Key Gong, Ignition Key In Alarm, Ignition Key Warning Alarm, Ignition On Ind, Ignition On Warning System, Ignition Relay, Ignition Switch LED Power, Ignition Timing (Mode 1), Ignition Timing (Mode 3), Ignition Timing, Ill Dim Signal, Illumination Dim Signal, Immobilizer Lamp, INDICATOR LAMP DRIVE, Indicator, Injection Pressure Regulator, Injector Cylinder 2, Injector Cylinder 3, Injector Cylinder 4, Injector-Cylinder 1, Inside ANT Diagnosis, Inside Buzzer, Instrument Cluster Indicat. Lamps, INT LAMP, 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, INTELLIGENT KEY LINK (CAN), Intelligent Key Link, Interior Lamp, Interior Lamps, Interrupt Disp, Key Fob Low Battery Warning, Key

Fob Power Window Test, Key Lock Solenoid, Key Reminder Warn, Key Reminder, Lamps, Lane Departure W/L, Lane Departure Warning Display, LANE DEPARTURE W-L, LCD, LDP Buzzer, LDP ON IND, Ldp On Indicator, LDP Warning Indicator, LDP Warning Lamp, LDW On Indicator, LDW Warning Indicator, LDW Warning Lamp, LED LH INDICATOR, LED, Left Exterior Mirror LED Test, Left Solenoid, Levelizer Test, Lifting motor, Light On Alarm, LIGHT WARN ALM, Lock (Central Locking), Lock Doors, Lock Indicator, Low Beam Swivel Test Left, Low Beam Swivel Test Right, LOW BEAM TEST LEFT, LOW BEAM TEST RIGHT, Low Pressure Fuel Pump, Low-Beam Headlight Left, Low-Beam Headlight Right, LPG Air Fuel Ratio Revision Value, LPG Shutoff Valve Relay, Luggage Lamp Test, Lumbar support (Up-Down) motor, Malfunction Status Of Stop/Start System, MAP/Baro SW/V, Master Warning Active, Memory Indicator 1, Memory Indicator 2, MEMORY SW INDCTR, Meter Buzzer, Meter Lamp, Mirror +5 V Test, MIRROR MOTOR LH, MIRROR MOTOR RH, 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, MOTORIZED THROTTLE, Oil Pressure Sw, Oil Pressure Switch, Optic Axis Active Test, Outside Air Temperature Diagnosis, Outside Buzzer, Oxygen Sensor 1 Heater, Oxygen Sensor 2 Heater, P Range, P/REG CONT SOL/V, Panic Alarm, Parcel Shelf, Parking Brake Full Release, Parking Lamp, Partial Load Operation Crankcase Ventilation Valve, PB SW indicator ON, PBD, Pedal Motor, Plug In Indicator, 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, Power Limitation Indicator, Power Slide Door, Power Sliding Door, Power Window Down, Power Window Remote Down Set, PRES Regulator, Pressure Control Solenoid A, Pressure Control Solenoid B, Pressure Control Solenoid C, Programming CI Touch Point, PROGRAMMING THROTTLE LIMITS, PRVR Solenoid, PSD PBD Open Test, PTC Heater Relay 1, PTC Heater Relay 2, PTC Heater Relay 3, PTC Relay-1, PTC Relay-2, PTC Relay-3, Purg Vol Cont/V, PURG VOL CONT-V, Purging Switchover Valve, Push Switch Indicator, Quick Charge Permit Signal Circuit, Quick Charge Relay +, Quick Charge Relay -, RAB Warning Lamp (Malfunction), RAB Warning Lamp (Operation), Radiator Fan Drive, Radiator Fan Output Hi, Radiator Fan Output Lo, Radiator Fan Relay Test, Radiator Fan Relay, RCTA-BSW Indicator, Read Tire Id, READY Indicator Lamp, Ready Indicator, Rear Assist Window, Rear Buzzer, Rear Defogger Indicator, Rear Defogger, Rear Driver Window, Rear Left Solenoid, Rear O2 Diagnosis, Rear Right Solenoid, Rear Wiper, Reclining motor, Recycle Air Memory Switch, Release Hand Warning, Remote Engine Starter, Retractable Mirror, Reverse Gear Reset Values Of Shift Operations, Reverse Lamp Relay, REVERSE LAMP RLY, Reverse Lamp, Reverse Warning, Right Exterior Mirror LED Test, Right Solenoid, Rise Up Wiper Test, RL Shock Absorber, RL Tire Disp, Roof, RR Fog Lamp, 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, RR Shock Absorber, RR Tire Disp, RR Wiper, RTCV Hysteresis Test, RUN FLAT TIRE W/L, Run Flat Tire Warning Buzzer, RUN FLAT TIRE W-L, RUN FLAT-T WARN BUZZER, SCB/V Cont SOL/V, SCR Performance, SCV Solenoid, Seat belt lamp test, Seat Belt Warn Test, SEAT LIFT, SEAT LIFTER FR, Seat Lifter Front, Seat Lifter Rear, SEAT LIFTER RR, SEAT LIFTER, Seat Reclining, SEAT SLIDE, Secondary Air Cut Solenoid, Security Horn, Security Indicator, Setting Initialize Completion Flag, Shift Lock Solenoid, Shift Solenoid A, Shift Solenoid B, Shift Solenoid C, Shift Solenoid D, Shift Solenoid E, Shift Spot Lamp Test, SHIFTLOCK SOLENOID TEST, SHIFTLOCK SORENOID TEST, Short Cranking Output, Siren, Sliding motor, 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, Sonar



buzzer, Speaker Mute Signal, Speed Sensor Function, START Button Illumination, Start Up Sound Speaker, Starter Cut Relay, Stationary Cornering Lamp Low, Steering Reaction Force Activation, Step Lamp Test, Stop Current Command, Stop Lamp 1, Stop Lamp 2, Stop Lamp 3, Stop Lamp Off Relay 1 Active, Stop Lamp Off Relay 2 Active, Stop Lamp Off Relay, Stop Lamp ON Relay Active, Stop Lamp On Relay, Stop Lamp, Stop Light Relay, Stop start OFF switch indicator, Stratified Direct Injection Timing Angle, Stratified EGR Position, Sub Fuel Cont Sol /V, Sub Fuel Pump Relay, Super Charger Clutch Relay, Super Lock, Supercharger Clutch Relay, SWIRL CONT SOL VALVE, Swirl Control Valve, Switch lamp 2, Switch lamp 3, Switch Lamp, SYSTEM ON LAMP DRIVE, Tail Lamp, Tail Light, 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, TELESCO MOTOR, THEFT IND, Theft Indicator, Thermostat Heater Control Solenoid Valve, Thigh support motor, Third O2 Sensor Heater, Third O2/S Diagnosis, Throttle Valve Position Setpoint, Tilt Motor, Tire Pressure Warning Lamp, TPMS ID flat tire warn, TPMS ID Registration Warning, TPMS LAMP WARN TEST, Truck Relay Test, Truck Unlock Test, Trunk Locall Identifier, Trunk Open Test, Trunk/Back Door, Trunk/Glass Hatch Open, Trunk/Glass Hatch, Trunk-back door, TRUNK-GLASS HATCH, Trunk-Luggage Lamp Test, Trunk-luggage lamp, 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, Turn Disp, Turn display (LH), Turn display (RH), TURN SIGNAL LAMP LEFT, TURN SIGNAL LAMP RIGHT, Unit Characteristics Data, Unlock Doors, Unlock Driver Door, Unlock Passenger Door, Unlock Rear Doors, UPSTREAM O2 SENSOR HEATING, V/T Assign Angle, Valve Tests, Valve Timing Sol, Variable Duct Solenoid Output, VC/V Bypass/V, VCR System, Vehicle Disp, Vehicle Height Standard Position Forcing Return, Vehicle Security Horn, VEHICLE SECURITYT HORN, Vent Control Valve, VENT CONTROL-V, VIAS S/V-1, VIAS Solenoid, VIAS S-V-1, VIAS S-V-2, Vibration Motor, VMC left turning operation indication, VMC Right turning operation indication, Voltage Control, VSP Off Indicator, VSP SPEAKER LH, VSP SPEAKER RH, VSP Speaker, VTC Solenoid, VVL Int Exh Solenoid Simultaneous Drive, VVL Solenoid Exhaust, VVL Solenoid Intake, W/G, Warning Buzzer, Warning Lamp, Warning System Indicator, Washer Fluid Pump Relay, Wastegate Actuator, Water Pump 1, Water Temperature, YAW STEP L, YAW STEP R, Yellow Lane Dep.Warng.Indic. Lamp

## **Subaru Coverage**

- Added coverage for 61 new system applications

### **33 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, Camera Caution Display Settings, Camera Guide Line Settings, Clear AT Learning Value, Compressor Auto Mode, Diag Recorder Settings, 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, Memory Initialization, Mode/All Flow, Mode/Heat III, Mode/Vent II, RAB Operation Record Data, Record Clear, 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, System Initialization, Tire Pressure Sensor Registration, Variable compressor break-in drive, Variable Flow Change Sol Duty Setting, VIN Entry

### **240 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, All seat UNLOCK output, All seats door warning, Alternator control mode, AM Seek Up/Down, 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, 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, Diag Recorder Data delete, Diag Recorder Data output, Digital Audio Broadcast Antenna Check, Digital TV check, Door Mirror Indicator Active Test, Down range display, Driver Door, Driver Seat Belt Reminder, Driver Seat Mirror Operation Test, Driver Seat Sensor Power Supply, Dual-Range LO Indicator, E/G remaining oil warning, EGR Control, EGR Valve Control (Duty), EGR Valve, ELCM pump, ELCM switching valve, EPB Active, EPB Hill Hold, EPS Indicator Lamp, Exhaust Control Valve Control, EYESIGHT failure, Fixed Idle Ignition Timing, FM Seek Up/Down, 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, 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, LED Switch Lighting Test, Left Steering Responsive Headlight, Line Solenoid, lock actual. LOCK output, Lock-Up Duty Solenoid, Low Fuel Warning Indication, LP - EGR Valve Control, 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, Night Brightness Check, Night Brightness Check: Dark, Night Brightness Check: Most Bright, Night Brightness Check: Most Dark, Night Brightness Check: Standard, No-key warning, Noon Brightness Check, Noon Brightness Check: Bright, Noon Brightness Check: Dark, Noon Brightness Check: Most Bright, Noon Brightness Check: Most Dark, Noon Brightness Check: Standard, 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 Mirror Operation Test, Passenger Seat Sensor Power Supply, P-CR OFF, PCV Test, Position light, Power Meter (100%), Power Meter (-100%), Power Windows Tests, 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, Right Steering Responsive Headlight, 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, 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 392 new system applications

### **699 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/C Auto Switch Mode, A/C Control Mode Switching, A/C Operation Limit History Counter Clear, A/T Code Reset, aCol Function, Activate Parking Brake After Pad Replacement, Activate Parking Brake For Pad Replacement, Activate The EGR Valve Close Bank 1, Activate The VN Turbo Open Bank 1, Activate The VSV For Air Bleed Control, Activate/Stop/Status DSC Bleeding(HL), Activate/Stop/Status DSC Bleeding(HR), Activate/Stop/Status DSC Bleeding(VL), Activate/Stop/Status DSC Bleeding(VR), Actuator Air Bleeding Pattern, Add Foot Air in FACE Mode, Advanced Illumination System Setting, Advanced Park Parallel Parking Control Area, Advanced Park Perpendicular Parking Control Area, Advanced Parking Guidance Avoidance Distance, Advanced Parking Guidance Parallel Parking Area, Advanced Parking Guidance Perpendicular Parking, AFS (Electronic Swivel) Function, AFS Function, AHS Function, AHS Operation Pattern Setting, AHS Operation Vehicle Speed Setting (Pattern1), AHS Operation Vehicle Speed Setting (Pattern2), AHS Operation Vehicle Speed Setting (Pattern3), Air Bleed, Air Bleeding - FL Line, Air Bleeding - FR Line, Air Bleeding - RL Line, Air Bleeding - RR Line, Air Bleeding Pattern - RL Wheel, Air Bleeding Pattern - RR Wheel, Air Bleeding, Air Conditioner Mode, Air Conditioner Switch Indicator Function, Air Inlet Damper Mode, Air Inlet Damper Targ Pulse, Air Inlet Mode, Air Outlet Servo Pulse (P), Air Purifier Auto Cancel, Air Purifier, All Readiness, All Unlock/Open-Close, Ambient lighting adaptation, Ambient lighting: Automatic addressing, Ambient Temperature Adjustment, Ambient Temperature Shift, Approach Display OFF, Assembly Position Of Window Lifters, AT Code Registration, ATF Thermal Degradation Estimate Reset, Audio Information Display Function, Auto A/C, Auto Door Lock Pattern Setting (Speed), Auto Door Lock, Auto Entry Cancel 2 Setting, Auto Entry Cancel Setting, Auto Fold Mirror, Auto LightOff Timer, Auto Lock Time, Auto Lock, Auto Lock/Shift, Auto Mode Start Function, Auto Rear Wiper in Reverse Setting, Auto Unlock/Shift, Auto Wiper, Automatic Door Lock Function, Automatic Door Lock Setting, Automatic Door Unlock Function when D-Door Open, Automatic Door Unlock Function, Automatic Door Unlock Setting, Automatic Light Off Timing Setting, Automatic Locking after Getting Out Function, Automatic Locking Cancel Time Adjust, Automatic Locking Time Adjust, Automatic Locking Timeout Adjust, Automatic Mirror Fold Setting, Back Door Opening Operation, Back Door P/W UP when half-shut, Back Door Power Window Down, Back Door Power Window Up, Backup Battery Replacement Reset, Bad Weather Function, Battery Status Info Update, Bleed, Blower Operation Setting (StopStart), Bluetooth

Connection History, Body Control with Torque Demand, Body Ctrl with Torque Demand, Brake Fluid Flush Reminder (CBS) Reset, Brake Pedal Pos. Sensor Zero Pos. Compensat., Brightness Level Adjust (Canceling), Brightness Level Adjust (Lowering), BSM Approaching Vehicle Detection Timing Setting, BSM Buzzer Volume Adjust, BSM Master Abnormal History, BSM Mirror Indicator Brightness, BSM Slave Abnormal History, Button Press Buzzer, Camera Synchronous Error History, Center Console Spot Light, Central electronics control unit reset, Clear Abnormal Operation History, Clearance Warning Buzzer Volume, Close ALL P/W Function, Closer Power Operation, Coming Home Light, Commissioning Electric Parking Brake, Compressor Mode, Compressor/Air Inlet DEF operation, Control Mode, Cruising Range Reset, 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, Daytime Running Light Function, DCM Operation History, Deactivate Parking Brake For Pad Replacement, Deceleration Sensor Zero Point Calibration, DEF(PSW/Lock) Mode Setting, Delay of Monitoring, Destination Setting, Detection of Vehicle, Diagnostic Mode, Disassembly position of window lifters, Disp Ex OFF Sen, Disp Ex ON Sen, Door Auto Lock Timer Setting, Door Handle Lock Button, Door Key Linked Back P/W DOWN, Door Key Linked Back P/W UP, Door Key P/W Down, Door Key P/W Up, Door Key Related Close, Door Key Related Open, Door Key Related Operation, Door Lock Answerback Sound Setting, Door Lock Indicator Function, Door Lock Indicator Pattern Setting (IG OFF), Door Lock Indicator Pattern Setting (IG ON), Door Open SW Operation Adjust, Door Unlock 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 Distance Adjust when Get Off, Driver Seat Lift Up Distance Adjust when Get Off, Driver Seat RA Lumbar Support Oper, Driver Seat RA Pelvis Support Oper, Driver Seat RA Side Support Oper, Driver Seatbelt Warning Buzzer Function, Driver Side Seatbelt Warning Buzzer, Driver's Door Power Window Regulator Initialisation, Driving Dynamics Sensor Adjustment, DRL Function, DSC Brake Bleed Procedure, ECO Drive Indicator Light, ECO Drive Indicator Zone Display Function (Meter), ECO Drive Indicator Zone Display Function, ECO Drive Indicator Zone, ECO MODE Cancel, ECO Mode Control, ECO Mode Start Function, ECU Data Initialization, ECU Data Save And Write, ECU Reset, Efficient Ventilation Mode, Electric Parking Brake System: Test Mode Procedure, Electrical Steering Column Adjustment Standardization, Electronic Swivel Function, Emblem Sensor Detection Sensitivity, Emission Gas Sensor Shift, Engine Revolution (For Judging Stable Combustion), Engine Start Indicator, Engine Switch Light Function, Entry Delay Time, Entry Delay, Entry Unlock Twice Function, EPB Initialize, EPS: Steering Start-Up, ESB Hydraulic-System Bleeding, ESP Control Unit: Restart, ESP Interchange Test, ESP Sensor Ring Test, EV Mode Cruising Range Reset, EV System Start Indicator, Evaporator Control, Extended Headlight Lighting, Exterior Light (Door Open), Exterior Light Control, Exterior Lights Lighting Timer Setting, Exterior Lights ON Function, Exterior Lights ON when Approached Function, Exterior Lights ON when Door Opened Function, Exterior Lights ON when Door Unlocked Function, FACE Wind Amount Adjust Function, Factory Mode, Fan speed increment control, FCTA Function ON/OFF State Stored, FCTA Warning Timing State Stored 1, FCTA Warning Timing State Stored 2, FCTA Warning Timing State Stored 3, Filter Sensor, FL Neck Heater Auto Mode Adjustment, FL Seat A/C and Heater Sensitivity Adjust, Flasher Sound Tone Setting, Flasher Sound Volume Adjust, Flasher Sound Volume Adjustment, Follow Me Home Lighting Time, Foot/DEF Auto Mode, Foot/DEF Automatic Blow Up Function, Forced Actuator Refresh, Forget to Turn IG OFF Alarm Function, Fr Rr Buzzer Freq, Fr Rr Buzzer Volume, Fr Corner Sensor Onset Range, FR Neck Heater Auto Mode Adjustment, FR Seat A/C and Heater Sensitivity Adjust, Fr Sensor Onset Range, Fr Side Sens Actuation Setting, Fr/Rr Seat Interference Avoidance Function (D), Fr/Rr Seat Interference Avoidance Function (P), Front Brake Pad Wear Indicator Reset, Front Center Seatbelt Warning Buzzer Function,

Front Driver/Pass Door Power Window Regulator Initialization, Front Passenger Side Seatbelt Warning Buzzer, Front Passenger's Door Power Window Regulator Initialisation, Front Side Dist Sensor, Front SW Auto Operation, Glass Hatch Open Function, Grille Shutter Initialization, Halogen Lamp/HID, Hazard Answer Back Function, Headlight in Conjunction with Wiper, Headlight ON in Conjunction with Wiper Function, Headlight Upper Shade Angle Setting, Height Offset Rear Wheels, Height Sensor Initialization, High Voltage Fuse Accumulated Load History Reset, History Clear, HWD Auto Function, I/L ON W/Door Key Unlock, I/L when ACC OFF, ICS Function, ICS Stop Distance, ICS SW Status Memory, ID Registration/Tire Position Write, IG ON Key Out Warning, Ignition Available Area Setting (Back Door Type), Ignition Available Area Setting (Trunk Lid Type), 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, Initialise puncture indicator, Initialization Of Both Rear Window Lifters, Initialization, Injection Timing Value, Injection Timing, Inside Foot Light, Instr-Panel Interference Avoidance Function (P), Integrated Current Value Initialization, Interior Footwell Lights Function, Interior Illumination Light 2 Function, Interior Illumination Light 3 Function, Interior Light Control, Interior Lights Lighting Timer Setting, Interior Lights ON Function, Intrusion Sensor 1 Sensitivity Level Adjust, Intrusion Sensor 2 Sensitivity Level Adjust, Intrusion Sensor Function, Intrusion Sensor Reduction in Sensitivity Setting, Intrusion Sensor Sensitivity Level (Window Open), Intrusion Sensor Sensitivity Level, Intrusion Sensor Sound Detection Function, Intrusion Win Opened, Intuitive P/A Auto Mute Function, Ion Generate Control, IPA Obstacle Avoidance Distance, IPA Parallel Parking Control Area, IPA Perpendicular Parking Control Area, Keep Sense Buzzer, Key Left in Vehicle Alarm Function, Key Low Battery Warning Function, Key Low Battery Warning, Key Out Range Warning, Key Remind Sound, Key Remind Volume, Keyless entry: Deactivate/activate, Kick Sensor Close Lock Function, Kick Sensor Operation Function with ACC ON, Lane Change Flashing Times Adjust, Lane Change Flashing Times Setting, Lane CHG Flash CNT, Language, Learning Value Reset, Leave Buzzer Volume, Left the Key Prevention Funct (Battery Remove), Light Auto OFF Delay Setting, Light Auto OFF Delay, Light Blink Clearance Lights at Unlock Function, Light Control Glass Brightness Memory Function, Light Control Glass Voice Control Function, Light Control, Light up Clearance Lights at Door Unlock Function, Light up Clearance Lights Door Unlock Function, Lighting (EXT): Headlight Assembly Adjustment, Lighting Time, Linked Rear Wiper Washer, Lock Indicator Lighting Time Adjust, Lost Communication Time Initialization, Low Speed Wide Light Function, Manual Fr/Rr Seat Interference Avoidance Function, Master Caution Display Function, Memory Call Function, Memory Call Link Function, Mirr-Foot-Lgt Approached/Exterior Light Approached, Mirr-Foot-Lgt Unlocked/Exterior Light Unlocked, Mirr-Foot-Lgt w/Master SW, Mirror Foot Light Time/Exterior Light Time, MT/AT Setting, Multi Weather Light Function, Noise and Vibration Reduction, Non P/R Range Rear Sensor, Object Not Moving 3s Buzz Vol, ODO Display Time After IG OFF Adjust, ODO Display Time After IG OFF Setting, Off-Road Guidance Indicator, One Motion with Unlock Door, One Motion, Open Door Warning Function, Operation History Clear, 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 Auto Operation Interference Avoidance Function, P Seat Lift Up Buckle Operation Function, P Seat Lower Back Operation Away Function, P Seat Lower Cushion Operation Away Function, P Seat Lumbar Operation Away Function, P Seat Operation Interference Avoidance Function, P Seat Pressure Correction Function, P Seat RA Return Operation Function, P Seat Reclining Link Headrest F/R Length Function, P Seat Refresh Level Setting, P Seat Shoulder Operation Away Function, P Seat Side Back Support Operation Away Function, P Side Cushion Support Operation Away Function, P Window Auto Down From Driver, P Window Auto Down, P Window Auto Up From Driver, P Window Auto Up, P/W Down W/ Transmit, P/W Operation Buzzer W/ Transmit Function, P/W Up W/ Smart, P/W Up W/ Transmit, P/W Wireless Ope Buzz, Panic Alarm Function, Panic Function, Park Wait Time Adjust, Park Wait Time, Partition Lighting Adjust, Passenger Seat RA Lumbar Support Oper, Passenger Seat RA Pelvis Support

Oper, Passenger Seat RA Side Support Oper, Passenger Seatbelt Warning Buzzer Function, 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 Steering ECU Initial Setting, Power Supply Air Bleeding Pattern 1, Power Supply Air Bleeding Pattern 2, Power Window Voice Control Function, Pre Air Conditioner Defrosting Function, Prevention of Key Left in Vehicle, Prohibition Flag of FHL Function, Projection Adjustment (Distortion), Projection Adjustment (Keystone), Projection Adjustment (Tilt), Proposal Service Frequency Adjust, Proposal Service Volume Adjust, Proposal Services Function, Provision of When Door is Half Open, Proximity Sound Control (Vehicle Stationary), Proximity Sound Level Increase (Vehicle Starting), Proximity Sound Volume Adjustment, PSD Buzzer Function (LH), PSD Buzzer Function (RH), PSD Kick Sensor Sensitivity Adjust (LH), PSD Kick Sensor Sensitivity Adjust (RH), PSD One Touch SW Adjust (LH), PSD One Touch SW Adjust (RH), PSD One Touch SW Function (LH), PSD One Touch SW Function (RH), PSD Preparation for Open Function, PSD SW Operating Condition Setting (LH), PSD SW Operating Condition Setting (RH), PSD Wireless Function (LH), PSD Wireless Function (RH), PSD Wireless One Motion Function (LH), PSD Wireless One Motion Function (RH), PSD Wireless SW Setting (LH), PSD Wireless SW Setting (RH), P-Seat Auto Pattern, R Wiper Stop Function at Back Door/Trunk Lid Open, RA Ottoman Operation, Rain Mode, RCTA Function, RCTAB Function, RCTAB Operation Timing Setting, RCTAB Sensitivity, RDC Initialization, Rear A/P HI Set, Rear Brake Pad Wear Indicator Reset, Rear Center Seatbelt Warning Buzzer Function, Rear Curtain Close Relay, Rear Curtain Open Relay, Rear Driver/Pass Side Door Pwr Window Regulator Initialization, Rear Left Seatbelt Warning Buzzer Function, Rear Right Seatbelt Warning Buzzer Function, Rear Seat Interference Avoidance Function (P), Rear Seatbelt Warning Buzzer Function, Rear Seatbelt Warning Buzzer, Rear Shade Delay Time, Rear Sunshade linked with Shift Lever R Funct, Rear SW Auto Operation, Rear Wiper INT Operation, Rear Wiper Interval Speed, Rear Wiper Retract Time, Rear Wiper Washer Function, Rear Wiper with Reverse Setting, Recog ECU H Temp Hist Reset, Refrigerant Pressure History Clear, Refrigerant Shortage Check, Relax with P-Seat Lift, Remote Air Conditioner Start Setting, Remote Air Conditioner Stop Setting, Remote Door Lock Setting, Remote Eng Start Stop Setting (Trunk Lid Opened), Reset A/C Information, Reset Control Unit, Reset Memory, Reset puncture indicator, Reset Starter Lock, Residential Area Mode Setting, Response Time Adjust, Reverse Buzzer Setting, Reverse Coupled Actuation Mirror Angle Setting, Reverse Coupled Actuation Mirror Angle, Reverse Range Front Sensor, Rewipe Function, 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 Corner Sensor Long Distance Detection (Shift R), Rr Corner Sensor Onset Range, RR Seat A/C and Heater Sensitivity Adjust, RR Seat Heater Auto Function, Rr Sensor Onset Range, RR Window Auto Down From Driver, RR Window Auto Down, RR Window Auto Up From Driver, RR Window Auto Up, S-Belt-Bkl-Lgt/ACC OFF, S-Belt-Bkl-Lgt/Door Open, Scuff Plate Lamp linked to D-Door Unlock SW, Scuff Plate Lamp linked to Door open, Scuff Plate Lamp linked to Smart, Scuff Plate Lamp linked to Wireless Key, Seat Airflow Mode Setting, Seat Belt Warning, Seat Blast Mode Setting, Seat Heater Auto Operation, Seat

Lift Up Distance Adjust, Seat Move Distance, Seat Position Voice Control Function, Seat position/Tilt Telesco memory recall setting, Seat Switch Link Function, Seat Travel Distance, Seatbelt Information Indicator, Security Alarm Setting, Security Control with Mechanism Key Function, Security control with mechanism key, Security System, Sedan/Wagon Setting, Sensitivity Adjust, Sensitivity, Sensor Condition N, Sensor Unit Zero Position Compensation, Servomotor Initialization, Set Temperature Shift, S-FLOW Control Auto Function, Shade Upper Area Lighting Function, Shift Control Synchronization, Shift Lever R Signal Delay Time Adjust, Shift Linked Automatic Door Lock Function, Shift Linked Automatic Door Unlock Function, Side Sensor Alarm Function, Side Sensor Onset Range, Slide Link Cushion Length Ctrl, Slide Link Hdrest Length Ctrl, Slide Roof Open Warning Function, Slide Roof Open Warning, Slide Roof Voice Control Function, Slide/Tilt Sunroof Initialization, Smart Back Door P/W Down, Smart Back Door P/W ON Time, Smart Back Door P/W Up, Software Error History, Sonar Mode, Speed Alarm Buzzer Function, Speed Limit Display Function, Speed Linked Automatic Door Lock Function, Speed Linked Automatic Door Unlock Function, Start Indicator Function, Start Off Mode, Start PreA/C, Start Switch Light Function, Starter Exchange, Steering Angle Sensor Calibration, Steering column adjustment adaptation, Steering column adjustment initialisation, Steering Heater Auto Function, Steering Heater Sensitivity Adjust, Step Light Lighting Time, Stop PreA/C, SUBARU/Toyota, Sudden Braking Notification Function, Suggestion Service Function, Switch Battery Type, Switch Grille Shutter Control Mode, Switch Oil Maintenance Display, T1 RoomLamp BatterySave, Tacho Meter Mode, Tail Remind Buzzer Function, Tail Remind Buzzer, Telematics Microphone Volume Adjust, Telematics Speaker Volume Adjust, Temporary Mute Function, Temporary Mute Reset Speed Adjust, Timing Adjustment of PSD Prep for Open Function, Tire Circumference Setting, Tire Pressure Monitoring: Deactivating The Production Mode, Tire Pressure Sensor Registration, Torque Sensor Adjustment, Total Warm-up Time Setting, Touch Activation Over Threshold, Touch Panel Reaction Time Adjust (Multi Operation), Town Mode, TPMS/RDC - Reset Production Mode, Traffic Sign Recognition Animation Function, Trunk Lid Linked with Door Lock Function, Trunk Lid Open Mode Function, Trunk Lid Operation by Electrical Key Function, Trunk Lid Operation by Entry Function, Trunk Lid Operation, Trunk Link with Door Lock, Trunk Open Mode, Tunnel Beam Function, Turn by Turn Animation Function, Ultrasonic Sensor (Front Center) Detection Range, Ultrasonic Sensor (Front Corner) Detection Range, Ultrasonic Sensor (Rear Center) Detection Range, Ultrasonic Sensor (Rear Corner) Detection Range, Ultrasonic Sensor (Side) Alarm Detection Range, Ultrasonic Sensor (Side) Alarm Function, Ultrasonic Sensor Actuation (Shift N), Units By Region, Unlock 2 Operation, Unlock Key Twice Function, Unlock Key Twice, User Support Service Function, Usual Air Bleeding - All lines, Usual Air Bleeding - FL Line, Usual Air Bleeding - FR Line, Usual Air Bleeding - RL Line, Usual Air Bleeding - RR Line, Valet Mode Cancel, Valve current adapting, Video Device Connection Check(mm), Voice Guidance Function, VSC/TRAC/4WD Control Prevention Mode, Walk Away Lock after Getting Out Func (Closing), Walk Away Lock after Getting Out Function, Warm-up Time Setting, Warning by Glass Broken Sensor, Warning by Horn Function, Warning by Horn, Warning Time, Window lifter motors: Adapting, Window Lifter Standard Initialization, Window Open Warning Function, Window Open Warning, Windshield Wiper Service Position Adjustment, Wiper Specification Switch, Wiper Voice Control Function, Wireless Auto Lock, Wireless Backdoor Open Operation Adjust, Wireless Buzzer Resp, Wireless Buzzer Response Function, Wireless Buzzer Vol, Wireless Buzzer Volume Setting, Wireless Buzzer Volume, Wireless Control Function, Wireless Control, Wireless Glass Hatch Open Operation Adjust, Wireless Glass Hatch Open, Wireless Key Related Close, Wireless Key Related Open, Wireless Key Related Operation, Wireless Lock Function with Doors Open, Wireless PBD Operation, Wireless Power Back Door Open, Wireless Trunk Lid Open Operation Adjust, Wireless Unlock Twice Function, Write VIN, Zero Point Calibration Sensitivity Check, Zero Point Calibration, Zero Point Sensor Calibration

**1376 new Actuation type special tests:**

2nd START Indicator, 4LO Indicator, 4WD AUTO Indicator, 4WD Auto Mode Indicator, 4WD Control Prevention Mode, 4WD Indicator (Green), 4WD Indicator (Yellow), 4WD Lock Indicator, 4WD Warning Indicator, 4WD Warning Light, 4WD Warning, A/C Idle Up VSV, A/F Control, A/M Servo Pulse(FR D), A/M Servo Pulse(FR P), A/O Servo Pulse(FR D), A/O Servo Pulse(FR P), A/O Servo Pulse(Rr D), A/O Servo Pulse(Rr P), A/T Indicator Operation 1, A/T Indicator Operation 3, A/T Oil Temperature Operation, ABS Front Left Hold Solenoid, ABS Front Left Release Solenoid, ABS Front Right Hold Solenoid, ABS Front Right Release Solenoid, ABS Indicator Lamp, ABS Pump Activation Test (5 seconds), ABS Rear Left Hold Solenoid, ABS Rear Right Hold Solenoid, ABS Rear Right Release Solenoid, ABS Solenoid (SFLH), ABS Solenoid (SFLR), ABS Solenoid (SFRH), ABS Solenoid (SFRR), ABS Solenoid (SRLH), ABS Solenoid (SRLR), ABS Solenoid (SRRH), ABS Solenoid (SRRR), ABS Solenoid, ABS Warning Light, A-C Driving Demand, Access to Rear Seat Signal, Accumulator Drive, Accumulator Valve (Downside), Accumulator Valve (Upside), Accumulator Valve, 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 4WD Lock Light, Activate The ACC Cut Relay, Activate the Air Inlet Damper Target Pulse, Activate The Air Pump Heater, Activate the Charger Cooling Fan, 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 Heater Water Pump., Activate the In-tank Fuel Pump Relay, Activate The LPG Solenoid Valve, Activate the Mirror Heater Relay, Activate The Power Window, Activate The Pre-Stroke Control Valve, Activate the Rear AC Magnet Valve, Activate The Return Solenoid Valve, Activate the Slip Indicator Light, Activate The Solenoid (SC1), Activate The Solenoid (SC2), Activate the Solenoid (SC3), Activate the Solenoid (SL6), Activate The Solenoid (SLC), Activate The Solenoid (SLG), Activate The Solenoid (SLN), Activate the Solenoid (SLS) High/Low, Activate the Solenoid (SLS) MAX/MIN, Activate The Solenoid(Sc), Activate The Solenoid(Slp), Activate The Starter Relay, Activate the TC Terminal, Activate The Vacuum Pump, Activate The VALVEMATIC After Warm Up, Activate The VALVEMATIC Before Warm Up, Activate The VN Turbo Cleaning, Activate The VSV For AICS, Activate The VSV For Canister Control, Activate The VSV For Evap Control, Activate The VSV For Exhaust Brake, Activate The VSV For Fuel Pressure Up Control, Activate The VSV For Intake Control, Activate The VSV For Purge Cut, Activate The VSV For Swirl Control Valve, Activate The VSV For Tank Bypass, Activate The VSV For Vent Valve, Activate The Water Flow Valve 3, Activate The Water Flow Valve 4, Activate The Water Flow Valve 5, Activate The Water Pump, Activate Vent VSV, Activate/Stop/Status DSC Pulse Valves(AVHLAVHR), Activate/Stop/Status DSC Pulse Valves(AVVLAVVR), Activate/Stop/Status DSC Pulse Valves(EVHLEVHR), Activate/Stop/Status DSC Pulse Valves(EVVLEVVR), Active TRC Indicator, Active TRC Warning Indicator, ACTIVE TRC Warning, Actuator Test, Advanced Parking Guidance Indicator, Advice Display, AFS Alarm Display, AFS Indicator (Malfunction) Display, AFS OFF Indicator, AHS LH High Beam, AHS RH High Beam, Air Bypass Valve Solenoid, Air Cleaner Warning, Air Conditioner Auto Indicator, Air Inlet Damper (Rear), Air Inlet Damper Control Servo Motor, Air Inlet, Air Mix Damper (Driver Side), Air Mix Damper (Passenger Side), Air Mix Damper (Rear), Air Mix Servo Targ Pulse(D), Air Mix Servo Targ Pulse(P), Air Mix Servomotor Pulse D Side, Air Outlet (Front), Air Outlet (Rear), Air Outlet Damper (Driver Side), Air Outlet Damper (Passenger Side), Air Outlet Damper (Rear), Air Outlet DEF, Air Outlet



Rear FOOT (Driver Side), Air Outlet Rear FOOT (Passenger Side), Air Outlet Servometer Pulse (D), Air Purifier Mode, Air Purifier(Ion), Air Suspension Indicator - HI, Air Suspension Indicator - LO, Air Suspension Indicator - N, Air Suspension Indicator (HI), Air Suspension Indicator (LO), Air Suspension Indicator (N), Alternator Voltage Control, ARS Warning Light, Ashtray Light, ASL Indicator, ASL Warning, Assist Fan, AST Indicator, A-T Indicator Operation (2), A-T Indicator Operation (3), A-T Indicator Operation (4), A-T Indicator Operation (B), A-T Indicator Operation (D), A-T Indicator Operation (L), A-T Indicator Operation (N), A-T Indicator Operation (P), A-T Indicator Operation (R), A-T Indicator Operation (S), A-T Indicator Operation (Sport M), A-T Indicator Operation (Sport S), A-T Oil Temperature Warning, A-T P Warning, A-TRC(TRAC) Indicator Light, Auto Air Conditioner Indicator, Auto High Beam Control Indicator, Auto High Beam Warning Indicator, Auto Leveling Headlamp Indicator, Auto LSD Indicator Light, Auto LSD Indicator, Auto Mode, Auto Oil Supply System, Auto Power OFF Cancel, Auto-Hold Indicator Lamp, AutoHold LED Control, Automated EVAP Test, Automatic High Beam Indicator (Green), Automatic High Beam Indicator (Yellow), Automatic High Beam Indicator, Automatic High Beam Operation, Automatic High Beam Switch Light, Automatic High Beam, Auxiliary Battery Charge Warning, Auxiliary Battery Warning, AVS Comfort Indicator, AVS Sports Indicator, Back Door Select, Back Door Sensor Power Supply, Batt Cool Down Servo Targ Pls, Battery Magnetic Valve, BDC Terminal\_15 (de-)activation, Beep, BH Operated Light, BH Standby Indicator, BH Standby Light, Blind Spot Monitor Indicator, Blower Level, Blower Motor, Brake Ejector VSV, Brake Hold Indicator, Brake Indicator Lamp, Brake Lights, Brake Line Mix-up test, Brake Lining Wear Warning, Brake Override Indicator, Brake Override Warning, Brake Warning Light, Brake Warning, BSM Indicator, BSM OFF Indicator, BSM State, BSM Switch Indicator (Daytime), BSM Switch Indicator (Night/ Moving), BSM Switch Indicator (Night/ Stopped), Buzzer Operation (1.6khz, Vol S, W-O Damping), Buzzer Operation (2.0khz, Vol S, W-O Damping), Buzzer Operation (2.4khz, Vol L, W-O Damping), Buzzer Operation (800hz, Vol L, W- Damping), Buzzer Operation (800hz, Vol L, W-O Damping), Buzzer Operation (800hz, Vol S, W- Damping), Buzzer Operation (800hz, Vol S, W-O Damping), Buzzer, Cancel Communication Function Pausing, Cargo Light, Catalyst OT Misfire Prevention F/C, Ceiling Light, Cent Consol Spot LGT, Center DIFF LOCK Indicator, Charge Indicator Lamp, Charge Indicator, Charge Warning (Red), Charge Warning Indicator, Charge Warning, Check Antennas, Check Engine Lamp, Check Engine Warning, Check Mode, Check The Cylinder Compression, Clearance Light (+ Front Side Marker Light), Clearance Light, Clearance Sonar Indicator (Daytime), Clearance Sonar Indicator (Night Running), Clearance Sonar Indicator (Night Stopping), Clearance Sonar LCD Indicator, Clearance Sonar Switch Activation, CNG Mode Indicator, Collision Door Lock Release, Color Test Screen (Adjustment), Color Test Screen (Black), Color Test Screen (Blue), Color Test Screen (Color Bars), Color Test Screen (Green), Color Test Screen (Red), Color Test Screen (White), Compression Check, Compression Test, Compressor Clutch, Compressor Motor Relay, Compressor Target Speed, Connect The TC And TE1, Control The A/C Cut Signal, Control The A/C Magnet Clutch, Control the ACIS VSV Motor Duty Ratio, Control The ACM Inhibit, Control The All Cylinders Fuel Cut(CNG), Control The All Cylinders Fuel Cut, Control The C/D, Control the Cylinder#1 Fuel Cut, Control the Cylinder#2 Fuel Cut, Control the Cylinder#3 Fuel Cut, Control the Cylinder#4 Fuel Cut, Control the Cylinder#5 Fuel Cut, Control the Cylinder#6 Fuel Cut, Control The EGR Step Position Bank 1, Control The EGR Step Position, Control The EGR System, Control The Electric Cooling Fan, Control the Electric Thermostat Duty Ratio, Control the Engine Cooling Fan Duty Ratio, Control The ETCS Open/Close Fast Speed, Control The ETCS Open/Close Slow Speed, Control The Exhaust Exterior Valve Angle, Control the Exhaust VVT OCV Duty Ratio Bank 1, Control the Exhaust VVT OCV Duty Ratio Bank 2, Control The Fuel Pump / Speed, Control The Fuel Pump Duty Ratio (Brushless), Control the Fuel Pump Duty Ratio, Control The Idle Fuel Cut Prohibit, Control The Injection Mode, Control The Injection Volume For A/F Sensor, Control The Injection Volume(CNG), Control the Intake VVT OCV Duty Ratio Bank 1, Control the Intake VVT OCV Duty Ratio Bank 2, Control The Intercooler Water Pump, Control The Line Pressure Up, Control The Lock Up, Control the Motor/Generator Cooling Oil Pump, Control The Select Cylinder Fuel Cut, Control The Selected Cylinder

Fuel Cut, Control the Shift Area (CVT), Control the Shift Position 4 Speed, Control the Shift Position 6 Speed, Control The Shift Ratio (CVT), Control the Target Fuel Pressure Offset, Control the Transmission Oil Pump, Control The VVT Linear (Bank1), Control The VVT System (Bank1), Control the VVT-iE Linear (Bank 1), Control the VVT-iE Linear (Bank 2), Control the Wastegate Valve Duty Ratio, Control Valve In A/C Compressor, Cool A/M Servo Pulse(D), Cool A/M Servo Pulse(P), Cool Air Bypass Damper (Driver Side), Cool Air Bypass Damper (Passenger Side), Cool Air Bypass Pls(P), Cool Air Bypass Pulse, Coolant Cool Warning Lamp, Coolant Hot Warning Lamp, Cooling Electric Expansion Valve, Cornering Lamp Test, Cornering Light, Cornering Light-Front Side Illuminate Light (Dim), Cornering Light-Front Side Illuminate Light, Courtesy Light, Courtesy SW Signal, Crawl Control Light, CRAWL Indicator, CRAWL Warning Indicator, CRAWL Warning, Cruise Control-PCS-LKA Buzzer, Cruise Indicator (Yellow), Cruise Indicator, Cushion Length, Cylinder Compression Check, D-4S (A/F Control), D-4S (Fuel Cut), D-4S (Injection Volume), DAB Indicator Light, Damper Step FL (Electric Current), Damper Step FL, Damper Step FR (Electric Current), Damper Step FR, Damper Step RL (Electric Current), Damper Step RL, Damper Step RR (Electric Current), Damper Step RR, Day/Night Time signal, Daytime Running Light, DCM Firmware Update, D-Door Unlock, DEF A/O Servo Pulse(D), Defogger Control, Defogger Relay Rear, Dehumidification Magnetic Valve, Deicer Relay Front, Delivery Heater, Delivery Shut Valve, Diesel Particulate Filter Warning, Diesel Throttle Target Angle #2, Diesel Throttle Target Angle 2, Diesel Throttle Target Angle Bank 1, Diesel Throttle Target Angle, Diffuse Pulse(R), Dim mirror, Dimmer Signal, Disconnect System Function Check, Display Mode, Door Illumination 1, Door Illumination 2, Door Lock Indicator, Door Lock, Door Lock/Unlock Status Lamp, Door Open Warning, Door Unlock, Downhill Assist Control Indicator, Downhill Assist Control Light, Downhill Assist Control Warning, Drift From The Lane Indicator, Drift From The Lane Warning, Drift From The Lane, Drive Swivel Motor LH LEFT, Drive Swivel Motor LH, Drive Swivel Motor RH RIGHT, Drive Swivel Motor RH, Drive The Leveling Motor, Driver Seat Sensor Power Supply, Driver Side Door Open, Driver Side Seat Belt Warning, Driver Side Seat Belt, Dr-Seat Outside Transmitter, Dr-Seat Select, D-Seat Outside Transmitter, D-Seat Select, DSS Signal Buzzer, DSU Solenoid, Easy Access Buckle, EBS Relay, ECB Control Invalid, ECB Main Relay 2, ECB Main Relay, ECB Main Relay2, ECB Motor Relay, ECB Motor Relay2, ECB Solenoid (SC1), ECB Solenoid (SC2), ECB Solenoid (SCC), ECB Solenoid (SGH), ECB Solenoid (SLA) Valve Close, ECB Solenoid (SLA), ECB Solenoid (SLAFL) Valve Close, ECB Solenoid (SLAFL) Valve Open, ECB Solenoid (SLAFL), ECB Solenoid (SLAFL2), ECB Solenoid (SLAFR) Valve Close, ECB Solenoid (SLAFR) Valve Open, ECB Solenoid (SLAFR), ECB Solenoid (SLAFR2), ECB Solenoid (SLARL) Valve Close, ECB Solenoid (SLARL) Valve Open, ECB Solenoid (SLARL), ECB Solenoid (SLARL2), ECB Solenoid (SLARR) Valve Close, ECB Solenoid (SLARR) Valve Open, ECB Solenoid (SLARR), ECB Solenoid (SLARR2), ECB Solenoid (SLR) Valve Close, ECB Solenoid (SLR), ECB Solenoid (SLRFL) Valve Close, ECB Solenoid (SLRFL) Valve Open, ECB Solenoid (SLRFL), ECB Solenoid (SLRFL2), ECB Solenoid (SLRFR) Valve Close, ECB Solenoid (SLRFR) Valve Open, ECB Solenoid (SLRFR), ECB Solenoid (SLRFR2), ECB Solenoid (SLRRL) Valve Close, ECB Solenoid (SLRRL) Valve Open, ECB Solenoid (SLRRL), ECB Solenoid (SLRRL2), ECB Solenoid (SLRRR) Valve Close, ECB Solenoid (SLRRR) Valve Open, ECB Solenoid (SLRRR), ECB Solenoid (SLRRR2), ECB Solenoid (SMC), ECB Solenoid (SMC/SRC/SCC), ECB Solenoid (SMC1), ECB Solenoid (SMC2), ECB Solenoid (SMC-SRC-SCC), ECB Solenoid (SRC), ECB Solenoid (SSA), ECB Solenoid (SSC), ECB Utility, ECB Warning Indicator, ECB Warning Light, ECB Warning, ECO Mode Indicator, ECONO Indicator, ECT PWR Indicator, ECT SNOW Indicator, EGR Cut VSV, EGR Step Position #2 Control, EGR Step Position, Electric Heater1, Electric Heater2, Electric Heater3, Electric Water Heater, Electrical Fan, Electromagnetic Oil Pump, Emergency Call Cancellation, Emergency Exit Warning, Emission Pulse(R), Enforced Driving FHL Warning Trigger, EPB Auto OFF Indicator, EPB Control Switch, EPB Warning Light, EPS Warning, ESP Test, EV Drive Indicator, EV Mode Indicator, EV System Warning Lamp, Evaporator Magnetic Valve, Exhaust Bypass VSV Control, Exhaust Gas VSV Control, Exhaust Shutter VSV, Exhaust Solenoid1, Exhaust Solenoid2, Exhaust Switching VSV, EXO, Extended Illumination 1, Extended Illumination 2, Exterior Lighting SW, Exterior mirror test, Exterior mirror: System self-test, Extra High Beam, Face A/O Servo Pulse(D), Face A/O Servo Pulse(P),

Face Direction Check, FL Gas Spring Switch Valve, FL Wheel Up/Down, Flash Handle Fold, Flash Handle Return, Fog Lights, Fold/Unfold Mirrors, Foot A/O Servo Pulse(D), Foot A/O Servo Pulse(P), Foot Light, Forced Actuator Refresh, Four-Wheel Damping Force Full Hard, Four-Wheel Damping Force Full Soft, Fr Control Rear Air Outlet Damper Servo Motor, FR Gas Spring Switch Valve, FR Wheel Up/Down, Front Air Mix Damper Control Servo Motor, Front Air Outlet Damper Control Servo Motor, Front Buzzer, Front Deicer Relay, Front Door Power Windows Regulator Initialisation, Front Evaporator Magnetic Valve, Front Fog Lamp Indicator, Front Fog Light Relay, Front Fog Light, Front Foot Light, Front Footwell Lights, Front Gate Valve, Front Left Air Mix Damper Control Servo Motor, Front Left Air Outlet Damper Control Servo Motor, Front Left Height Solenoid, Front Left Seat Blower, Front Left Seat Heater, Front Left Solenoid, Front Left Wheel Up/Down, Front Passenger Side Door Open, Front Passenger Side Seat Belt, Front Right Air Mix Damper Control Servo Motor, Front Right Air Outlet Damper Control Servo Motor, Front Right Height Solenoid, Front Right Seat Blower, Front Right Seat Heater, Front Right Solenoid, Front Right Wheel Up/Down, Front Sliding Sunshade, Front Vertical Operation, Front Washer Relay, Front Washer, Front Wheel Up by Accumulator, Front Wheel Up/Down, Front Wiper Hi Operation, Front Wiper Lo Operation, Front/Rear Buzzer, Fr-Seat Inside Transmitter, Fuel Cap Reminder Warning, Fuel Consumption Meter Operation, Fuel Cooler Solenoid Valve, Fuel Cooler VSV, Fuel Cut Bank 2 For Idle, Fuel Filler Opener, Fuel Filter Indicator, Fuel Filter Warning, Fuel Gauge Indicator, Fuel Gauge Operation (1-2), Fuel Gauge Operation (1-4), Fuel Gauge Operation (3-4), Fuel Gauge Operation (Empty), Fuel Gauge Operation (Full), Fuel Gauge Operation (Sender E), Fuel Gauge Operation (Sender F), Fuel Gauge Operation (Warning), Fuel Gauge Operation For CNG (1-2), Fuel Gauge Operation For CNG (1-4), Fuel Gauge Operation For CNG (3-4), Fuel Gauge Operation For CNG (Empty), Fuel Gauge Operation For CNG (Full), Fuel Gauge Operation For CNG (Sender E), Fuel Gauge Operation For CNG (Sender F), Fuel Gauge Operation For CNG (Warning), Fuel Indicator (CNG), Fuel Indicator Lamp, Fuel Injector Timing, Fuel Leak Test, Fuel Lid Lock Relay, Fuel Lid Opener, Fuel Lid, Fuel Meter Operation (CNG), Fuel Meter Operation (Reductant), Fuel Meter Operation, Fuel Pressure Relief Valve Open, Fuel Pump - Duty Cycle, Fuel Pump Duty Control, Fuel Pump Duty, Fuel Pump Single Phase Energization (U Phase), Fuel Pump Single Phase Energization (V Phase), Fuel Pump Single Phase Energization (W Phase), Fuel Pump Single Phase Energization, Fuel Pump Speed Control, Fuel Vapor-Containment Valve, Fuel Warning (CNG), Glass Hatch Open Operation, Glass Hatch Open, GLOW Warning, Go to Dealer Indicator, Go To Service Warning, Green Indicator, H/B Motor Relay, Hazard Answer Back, Hazard, H-B Motor Relay, HCAC System VSV, HCAC VSV Check, HCAC VSV, Head Lamp Warning Indicator, Head Light Hi, Head Up Display Indicator, Headlamp Indicator, Headlight Cleaner, Headlight High Beam, Headlight Indicator, Headlight Leveling Indicator Display, Headlight Leveling Indicator, Headlight Leveling Initialize Incomplete Display, Headlight Low Beam, Headlight Relay, Headlight Relay-Light Power Supply Relay, Headlight System Malfunction Display, Headlight Washer System, Headrest Front-Rear, Headrest Motor, Heads Up Display Indicator, Heat Exchange Shut Valve, Heater Valve, Heating Electric Expansion Valve, Heating Three-way Valve, Height Control Prohibition Switch, Height High Indicator, Height High Warning, HICM System Check, High Beam Headlight, High Beam Indicator, High Beam LH, High Beam RH, High Pressure Magnetic Valve, High Voltage Electric Heater, High-Beam Headlights, Hill Hold Control Button Led, Hold Indicator, Hold Lamp, Horn, Hot A/M Servo Pulse(D), Hot A/M Servo Pulse(P), HV System Certification Mode Indicator, HV System Indicator (0%), HV System Indicator (100%), HV System Indicator (200%), HV System Indicator (300%), HV System Indicator (400%), HV System Indicator (-50%), HV System Indicator (MAX), HV System Indicator (MIN), HV Unit Hot Warning Indicator, HV Unit Hot Warning, HV-EV System Indicator (0%), HV-EV System Indicator (100%), HV-EV System Indicator (200%), HV-EV System Indicator (300%), HV-EV System Indicator (400%), HV-EV System Indicator (-50%), HV-EV System Indicator (MAX), HV-EV System Indicator (MIN), HWD Relay, Hybrid Battery Charge, Hybrid Battery Heater Relay, Hybrid System Warning, Hydrogen Leak Indicator, Hydrogen Leak Warning, IAC Duty Ratio, ICS OFF Indicator, ICS OFF Warning, IG OFF P/W Control Permission Output, IG OFF P-W Control Permission Output, IGP Signal,

Illuminated Entry System, Immobilizer Indicator, iMT Indicator (Green), iMT Indicator (Yellow), Indicat. A/T P, Indicat. Hold, Indicat. INTUITIVE P/A LCD, Indicat. Lamp O/D OFF, Indicat. Lamp VSC OFF, Indicat. Ready (EV), Indicat. VSC OFF, Indicate AFS OFF Lamp, Indicate. Pre-Collision, Indicator 2nd START, Indicator 4LO, Indicator 4WD AUTO, Indicator 4WD Lock, Indicator 4WD, Indicator AFS, Indicator Auto LSD, Indicator Brake Hold, Indicator Condition, Indicator CRAWL, Indicator Ctr DIFF LOCK, Indicator Downhill Assist Control, Indicator ECO, Indicator ECONO, Indicator EPS, Indicator EV Mode, Indicator For Lighting, Indicator GLOW, Indicator Height High, Indicator Key, Indicator Lamp Airbag, Indicator Lamp Back Door Open, Indicator Lamp Beam, Indicator Lamp Coolant Cool, Indicator Lamp Coolant Hot, Indicator Lamp Cruise, Indicator Lamp Doors All open, Indicator Lamp ECB, Indicator Lamp ECT PWR, Indicator Lamp ECT SNOW, Indicator Lamp Fr FOG, Indicator Lamp Head, Indicator Lamp Hood Door Open, Indicator Lamp Luggage Door Open, Indicator Lamp oil Level, Indicator Lamp Oil Pressure, Indicator Lamp Rr FOG, Indicator Lamp Rr Light, Indicator Lamp Slip, Indicator Lamp Tail, Indicator Lamp Washer, Indicator Lamp Water Level, Indicator Lithium Charge, Indicator MMT E Mode, Indicator MMT M Mode, Indicator Navi CVT, Indicator Oil Maintenance, Indicator Over Speed, Indicator Park, Indicator Ready(HV), Indicator Rear Differential LOCK, Indicator Rear Door LH open, Indicator Rear Door RH open, Indicator Ride Mode, Indicator SIL, Indicator Slip-OFF, Indicator Sport(CVT Sport), Indicator Tail Cancel, Indicator TEMS Comfort, Indicator Timing Belt, Indicator Tire Pressure Warning System, IndicatorHeadlamp Auto Leveling, IndicatorTEMS Sports, Infrared Signal Status, Initial Axis Adjust Value Display, Injection Timing #1, Injection Timing #2, Injection Timing #3, Injection Timing #4, Injection Timing #5, Injection Timing #6, Injection Timing #7, Injection Timing #8, Injection Timing Select Cylinder, Injection Volume Control, Injection Volume, Injection Way Control, Injector Compensation, Inside Handle Illumination, Inside Handle Light, Inside Luggage Tuner Power Supply ON, Inside Luggage Tuner Power Supply, Inside Trunk/Backdoor Transmitter, Inspection Mode, Instrument Panel Illumination, Intake Air VSV Control, Intake Control VSV, Intake VSV 2 Control, Intelligent Parking Assist Indicator, Intercooler Water Pump Relay, Interior Illumination Light, Interior Illumination Light1, Interior Panel Relay, Intrusion Sensor Power, INTUITIVE P/A LCD OFF Indicator, INTUITIVE P-A LCD Indicator, INTUITIVE P-A LCD OFF Indicator, Ion Generator, ISC Step Position, KDSS Indicator, KDSS Warning, Key Cylinder Illumination, Latch Release Test, Latch Release, LDA Buzzer, LDA Control Indicator (Left), LDA Control Indicator (Right), LDA Control Indicator, LDA Indicator (White), LDA Indicator, LDA Steering Control Indicator, LDA Warning Indicator (Left), LDA Warning Indicator (Right), LDA Warning Indicator, LDA Warning, LED Headlamp Warning, Left High Beam, Left LDA Indicator, Left LDA Warning, Left Turn Signal Indicator, Left Turn Signal Lamp, Left Turn Signal Light, LH Courtesy Light, LH Mirror Up/Down, Lift Up Buckle, Lifter Operation, Light Control Glass Relay, Light Control Switch (DOWN), Light Control Switch (Single), Light Control Switch (UP), Limited Power Indicator, Lithium Battery Check Indicator, Lithium Battery Hot Indicator, LKA Lane Out Alarm Buzzer, Locator Lighting, Lock All Doors, Lock and Enable, Low Beam Headlight, Low Beam, Low Pressure Magnetic Valve, Low Pressure Tank Solenoid, Low-Beam Headlights, Lower Air Mix (Driver Side), Lower Air Mix (Passenger Side), Lower Back, Lower Cushion, LPG Indicator, Luggage Compartment Light, Luggage Mode Indicator (Yellow), Luggage Mode Indicator, Lumbar Bottom, Lumbar Lift, Lumbar Middle, Lumbar Slide, Lumbar Upper, LWR Reference Run, M/H Bypass Cool Servo Pls, M/H Bypass Hot Servo Pls, Magnetic Clutch Relay, Magnetic Valve Operation, Main Battery(HV) Indicator, Maintenance Indicator Lamp, Maintenance Warning, Manual EVAP System Check, Master Warning, Meter Day Mode Switch, Meter Display (0), Meter Display (1), Meter Display (2), Meter Display (3), Meter Display (4), Meter Display (5), Meter Display (6), Meter Display (7), Meter Display (8), Meter Display (9), Meter Display (All), Meter Display 1, Meter Display 2, Middle Pressure Magnetic Valve, Mirror Auto Indicator (Daytime), Mirror Auto Indicator (Night Running), Mirror Auto Indicator (Night Stopping), Mirror Fold Signal, Mirror Fold, Mirror Heater Relay, Mirror Heater, Mirror Heating, Mirror Left/Right, Mirror Return Signal, Mirror Return, Mirror Up/Down, MMT E Mode Warning, Motor Relay Control, Motor Relay, Move SMC left to bottom left, Move SMC left to bottom right, Move SMC left to top left, Move SMC left to top right,

Move SMC right to bottom right, Move SMC right to top left, Move SMC right to top right, Multi Channel SW, Multi Display All (White), Multi Display Default Screen, Multi Display Select Switch, Multi Switch (Back), Multi Switch (Down), Multi Switch (Enter), Multi Switch (Left), Multi Switch (Right), Multi Switch (Top), Multi Switch (Up), Multi Switch Operation, Navi CVT Indicator, Night Lighting, Night View Indicator, Normal Sleep Mode, O/D Cut Signal, O-D OFF Indicator, ODO-TRIP Change Switch, OFF Road Guidance Indicator, OFF Road Guidance Warning, Off-road 1 Indicator (Daytime), Off-road 1 Indicator (Nighttime), Off-road 2 Indicator (Daytime), Off-road 2 Indicator (Nighttime), Off-road 3 Indicator (Daytime), Off-road 3 Indicator (Nighttime), Off-road 4 Indicator (Daytime), Off-road 4 Indicator (Nighttime), Off-Road Switch Light, Oil Level Warning, Oil Pressure Meter Operation (1-2), Oil Pressure Meter Operation (1-4), Oil Pressure Meter Operation (3-4), Oil Pressure Meter Operation (HIGH), Oil Pressure Meter Operation (LOW), Oil Pressure Meter Operation, Oil Pressure Warning, Oil Pump, Open Door Warning, Ottoman, Outside Mirror Footwell Lights, Outside Trunk/Backdoor Transmitter, Over Speed Indicator, Overhead Tuner Power Supply ON, Overhead Tuner Power Supply, Oxygen Drive, P Range Indicator, P Supply for Steering Lock, Panel Light, Park Warning, Parking Brake Service Mode, Passenger Seat Operation Switch Indicator, Passenger Seat Sensor Power Supply, Passenger Side Seat Belt Warning, PBD Buzzer, PBD Close SW Light, PBD Clutch, PBD Motor, PBD Open/Close, PCS Approach Alarm Buzzer, PCS Buzzer, PCS Collision Alarm Buzzer, PCS Crash Alarm Buzzer, PCS OFF Warning, PCS Warning Indicator, PCS Warning, Pedestrian Protection Warning, Pelvis Support Operation, Pinion Gear Plunger (Hood Close), PKB Full Release Control, PKB Light, PKB Lock Control, PKB Release Control, Power Down, Power For BDoor Sens, Power For DR-Seat Sens, Power For Intrusion Sensor2, Power For PR-Seat Sens, Power For P-Seat Sens, Power For Tilt Sensor, Power Meter Operation, Power Running Board Forced Retracting, Power Window SW LED, Power Windows, Power/Engine SW Light, PPS Indicator, PPS Solenoid, PPS Warning, Pre Crash Brake OFF Light, Pre-Charge Pump, Pre-crash Indicator, Prohibit the Catalyst OT Misfire Prevent Fuel Cut, Prohibit the Idle Fuel Cut, Proximity Sound (Low Speed), Proximity Sound (Vehicle Stationary), Proximity Sound Indicator, Pr-Seat Outside Transmitter, Pr-Seat Select, P-Seat Outside Transmitter, P-Seat Select, PTC Heater, Pulse-wheel test, Pump Check Pattern, Pump Control, Pump Motor Relay, Purge Dilution Valve Duty Bank 2, Radar Cruise Approach Alarm Buzzer, Radar Cruise Indicator (Yellow), Radar Cruise Indicator, Radar Cruise Proximity Warning Buzzer, Radar Cruise Ready Indicator, Radar Cruise Stop Buzzer, Radar Cruise Stop Keeping Announce Buzzer, RCD OFF Indicator, RCTA Indicator, RCTA OFF Indicator, Ready Indicator, Rear A/M Servo Pulse(P), Rear A-C Mag Valve, Rear Air Mix Damper Control Servo Motor, Rear Air Mix Servo Target Pulse, Rear Blower Level, Rear Blower Motor, Rear Buzzer, Rear Defogger Relay, Rear Defogger, Rear DIFF LOCK Indicator, Rear Driver and Passenger Window Regulator Initialization, Rear Driver Side Power Window Close, Rear Driver Side Power Window Open, Rear Driver Side Sensor Power Supply, Rear Driver's Door Power Window Regulator Initialisation, Rear Fog Lamp Indicator, Rear Fog Lamp, Rear Fog Light Relay, Rear Fog Light, Rear Gate Solenoid, Rear Gate Valve, Rear Inner Wheel Control Indicator, Rear Inner Wheel Control Warning, Rear Inverter Cooling Fan, Rear Left Height Solenoid, Rear Left Seat Blower, Rear Left Seat Heater, Rear Left Solenoid, Rear Left Wheel Up/Down, Rear Leveling Solenoid, Rear Light Indicator, Rear Passenger Side Power Window Close, Rear Passenger Side Power Window Open, Rear Passenger Side Sensor Power Supply, Rear Passenger's Door Power Window Regulator Initialisation, Rear personal light, Rear Right Air Mix Damper Control Servo Motor, Rear Right Height Solenoid, Rear Right Seat Blower, Rear Right Seat Heater, Rear Right Solenoid, Rear Right Wheel Up/Down, Rear Seat Belt Warning, Rear Seat Belt, Rear Seat Lumbar Adjustment, Rear Side Buckle Light, Rear Washer Relay, Rear Washer, Rear Wheel Up by Accumulator, Rear Wheel Up/Down, Rear Wiper Operation, Rear Wiper Washer Motor Relay, Rear Wiper, Red Indicator, Reductant Consumption Warning, Reductant Discharge, Reductant Filling (Pressure Keep), Reductant Injection Valve, Reductant Pipe Heater, Reductant Pump Check (Backward), Reductant Purge, Reductant Quality Warning, Reductant Tank Heater, Reductant Warning Indicator, Reductant Warning, Refresh B1, Refresh B2, Refresh B3, Refresh B4, Refresh B5, Refresh C1, Refresh C2, Refresh C3, Refresh

C4, Refrigerant Gas Volume Check, Regulator Shut Valve, Relay for Interior Light Auto Cut Function, Remote Engine Starter, Reverse Buzzer, Reverse Gear Signal, Reverse Signal, RH Courtesy Light, RH Mirror Right/Left, RH Mirror Up/Down, Ride Mode Indicator, Right High Beam, Right LDA Indicator, Right LDA Warning, Right Turn Signal Indicator, Right Turn Signal Lamp, Right Turn Signal Light, RL Wheel Air Bleeding Pattern, RL Wheel Up/Down, Rr Inner Wheel Control Indicator, Rr Inner Wheel Control Warning, RR Wheel Air Bleeding Pattern, RR Wheel Up/Down, Rr-Seat Inside Transmitter, SCV Duty Ratio, Seat Backrest Recline, Seat Belt Indicator, Seat Heater Active Level, Seat Slide Operation, Secondary Air VSV Control, Security Horn 2, Security Horn, Security Indicator, Self Power Siren, Sensitivity Check, Service Function Measured Data Wheel Electronics, SET Indicator, Shift-By-Wire Warning, Shock Detection Unlock, Shoulder, Shut Off Valve, Side Back Support, Side Cushion Support, Side Mirror Foot Light, Side Support Operation, Signal Check, SIL Down Indicator, SIL Indicator (Down), SIL Indicator (Up), SIL Up Indicator, SLC Solenoid, Slide Roof, Sliding Sunshade, Slip Control System, Slip Indicator Light, Slip Warning, SLS Pressure, Smart System Indicator, Smart System Warning, SOC Gauge (1-2), SOC Gauge (1-4), SOC Gauge (3-4), SOC Gauge (MAX), SOC Gauge (MIN), SOC Warning Indicator, SOC Warning, Solenoid (SB), Solenoid Relay, Solenoid(SB), Solenoid(ST), Speed Alarm Buzzer, Speed Meter Operation, Speed Signal Input (0), Speed Signal Input (120), Speed Signal Input (160), Speed Signal Input (200), Speed Signal Input (240), Speed Signal Input (280), Speed Signal Input (320), Speed Signal Input (360), Speed Signal Input (40), Speed Signal Input (400), Speed Signal Input (80), Speedometer Operation (0km-H,0mph), Speedometer Operation (200km-H,200mph), Speedometer Operation (240km-H,240mph), Speedometer Operation (280km-H,280mph), Speedometer Operation (320km-H,320mph), Speedometer Operation (360km-H,360mph), Speedometer Operation (400km-H,400mph), Speedometer Operation (40km-H,40mph), Speedometer Operation (80km-H,80mph), Sport Indicator (CVT Sport), Start SW Light Power Supply, Starter (Hood Close), Starter Motor Drive Magnet Switch (Hood Close), Steering Heater Indicator (Yellow), Steering Heater, Steering Wheel Vibration, Step Light, Stoichiometric Ratio Combustion, Stop Start Buzzer, Stop Start Permit Cond (A/C), Stop Start Permit Cond (ABS), Stop Start Permit Cond (Battery), Stop Start Permit Cond (Engine), Stop Start Precondition2 (Control), Stop And Start OFF Indicator, Stop And Start ON Indicator, Stop Lamp Relay, Stop Lamp, Stop Light Relay, Stop light System Indicator Light, Stratified Charge Combustion, Stroke Simulator Cut Valve Pattern, Sub Fuel Gauge Operation (1-2), Sub Fuel Gauge Operation (1-4), Sub Fuel Gauge Operation (3-4), Sub Fuel Gauge Operation (Empty), Sub Fuel Gauge Operation (Full), Sub Fuel Gauge Operation (Sender E), Sub Fuel Gauge Operation (Sender F), Sub Fuel Gauge Operation, Sub Fuel Tank VSV, Supercharger Control, Swirl Control VSV, Tachometer Operation (0rpm), Tachometer Operation (10000rpm), Tachometer Operation (2000rpm), Tachometer Operation (3000rpm), Tachometer Operation (4000rpm), Tachometer Operation (5000rpm), Tachometer Operation (6000rpm), Tachometer Operation (7000rpm), Tachometer Operation (8000rpm), Tachometer Operation (9000rpm), Tachometer Operation, Tail Lights, Tail OFF Indicator, Taillamp Indicator, Taillight Relay, Taillight-Clearance Light, Target Fuel Pressure Control, Temporary Activation and Temporary Deactivation, Temporary Vehicle Start Up, 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), Tire Pressure Indicator, Tire Pressure Light, Tire Pressure Warning System Indicator, Tow Haul Indicator, TPMS Warning Light, Trac Motor Relay, TRAC Solenoid (SPFL), TRAC Solenoid (SPFR), TRAC Solenoid (SRCF), TRAC Solenoid (SRCR), TRAC Solenoid (SRMF), TRAC Solenoid (SRMR), TRC OFF Indicator Light, TRC(TRAC) Motor Relay, TRC(TRAC) OFF Indicator Light, Trip Reset Switch, Trunk And Back-Door Open, Turbo Boost VSV Control, Turbo Pressure VSV, Turn Light LH Relay Operation, Turn Light RH Relay Operation, Turn Signal Indicator - Left, Turn Signal Indicator - Right, Unlock All Doors, Upper Air Mix (Driver Side), Upper Air Mix (Passenger Side), Variable Intake VSV Control, Variable Shade Beam LH, Variable Shade Beam LH/RH, Variable Shade Beam LH-RH, Variable Shade Beam RH, Vehicle Approach Warning OFF Indicator, Vehicle Horn, Vehicle Proximity Notification System Warning, Vehicle Stop Warning, VGRS Warning,

Viscous Heater, VN Turbo Open, Volt Meter Operation (0V), Volt Meter Operation (12V), Volt Meter Operation (15V), Volt Meter Operation (18V), Volt Meter Operation (3V), Volt Meter Operation (6V), Volt Meter Operation (9V), VSC Indicator Lamp, VSC OFF Indicator Light, VSC TRC Indicator, VSC Warning Light, VSC/TRAC Off Indicator Light, VSC/TRAC Solenoid, VSC/TRC Indicator, VSC/TRC Solenoid (SMF), VSC/TRC Solenoid (SMR), VSC/TRC Solenoid (SPFL), VSC/TRC Solenoid (SPFR), VSC/TRC Solenoid (SRCF), VSC/TRC Solenoid (SRCR), VSC/TRC Solenoid (SRMF), VSC/TRC Solenoid (SRMR), VSC-TRAC Off Indicator Light, VSC-TRAC Solenoid (SMF), VSC-TRAC Solenoid (SMR), VSC-TRAC Solenoid (SPFL), VSC-TRAC Solenoid (SPFR), VSC-TRAC Solenoid (SRCF), VSC-TRAC Solenoid (SRCR), VSC-TRAC Solenoid (SRMF), VSC-TRAC Solenoid (SRMR), VSC-TRC(TRAC) Solenoid, VVT Exhaust Linear (Bank 1), VVT Exhaust Linear (Bank 2), VVT Linear (Bank 2), VVT System (Bank 2), VVTL System (Bank 1), VVTL System (Bank 2), Washer Nozzle Heater, Washer Warning, Water Level Warning, Water Pump, Water Temperature Meter Operation (120C,248F), Water Temperature Meter Operation (127C,260F), Water Temperature Meter Operation (50C,122F), Water Temperature Meter Operation (60C,140F), Water Temperature Meter Operation (70C,158F), Water Temperature Meter Operation (80C,176F), Water Temperature Meter Operation (Middle), Water Temperature Meter Operation, Wheel Electronics - Warning and Calibration Data, Wheel Speed Sensor Functional Test, Wheel Speed Sensor Supply, Windscreen Washer Pump, Wiper Motor Hi, Wiper Motor Lo, Wiper Power Relay, Wiper Service Position, Wireless Buzzer

## ***New Coverage – USA European***

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

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

Audio Routing

### ***Volvo Coverage***

- Added coverage for 192 new system applications

#### **190 new special tests:**

Apply parking brake, Entry light, Fresh/recirculated-air flap 100%, Front left parking light, Front left window lifter adaptation, Front right window lifter adaptation, Luggage compartment lighting, Rear DS door switch actuation, Rear lid: Close, Rear PS door CL button LED, Rear right turn signal indicator, Rear right window lifter adaptation, Rear window washer pump, Rear window wiper relay, Seat memory button LED, Shock absorber solenoid valve test, Sun roof: Opening, Transmission position P adaptation, Additional brake light, Air conditioner control motors: Adapting, Automatic transmission control unit: Reset adaptation values, Close sun blind, Control unit calibration, Display Reversing camera, Front DS door CL button LED, Front right parking light, Front right turn signal indicator, Headlamp setting: Information, Instrument illumination, Interval display service: Resetting, Learning of rear lid maximum open position, Longitudinal acceleration sensor, Lateral acceleration sensor: Adaptation, Rear PS exit lighting, Release parking brake, Reset adaption value, Transmission position sensor calibration, Washer jet heater, Adapting of control motors, Air conditioner control motors: Service position activation, Autom. transm. adaptation values adapt., Auxiliary/supplementary heating: Read/reset the history data of the function <Preconditioning>, Front DS door trim ambient light., Front DS ext. door handle light., Front windscreen washer pump, Open glove box, Parking brake service mode, Read out airbag crash data, Rear PS door storage comp. light., TPMS system initialisation reset, Trailer rear fog light, Auxiliary/supplementary heating: Test, Backup lamp, Calibrate acceleration sensor, Clutch pedal:

Resetting the actuation counter, Electric parking brake: Actuator test, Headlamp washer relay, Open sun blind, Rear DS door stor. comp. lighting, Rear DS exit lighting, Rear DS ext. door handle lighting, Right trailer turn signal indicator, Sensor unit calibration, START button illumination, Start gear indicator mode, Stop lamps, Activate air suspension, Auxiliary/supplementary heating: Fill and bleed the component <Fuel supply pipe>, Battery (12V): Resetting, Blind spot warning lamp, Clutch actuator: Bleeding, Front DS exit lighting, Front right fog headlight, Front side marker lights, Level sensors: Setting, Parking brake system tilt sensor: Adapting, Read central electronics control unit config., Rear DS door CL button LED, Rear left parking light, Reset ALCOGUARD, Sun roof: Close, Trailer brake lights, Windscreen wiper, Activate service position, Air mix flap initialization, Brake-pedal position sensor: Adapting, Central driver assistance control unit: Adapting, Footwell lamps, Front left fog headlight, Front left turn signal indicator, Front PS ext. door handle light., Left trailer turn signal indicator, Level control activation/deactivation, Read out crash data, Rear DS door trim ambient light., Rear left window lifter adaptation, Tank flap control motor, Transfer case calibration, Transfer case pump vent, Transmission control unit: Activate gear indicator, Activate parking brake after pad replacement, Deactivate parking brake for pad replacement, Commissioning electric parking brake, Front DS door storage comp. lighting, Front PS door CL button LED, Front PS door trim ambient light., Horn relay, Rear lid power latchg.sys./unlock, Rear PS door switch actuation, Rear right parking light, Reset adaptation parameters, Reset control unit, Right trailer side light lamp, Running board light, Seat memory button lighting, Supplementary heater: Reset starter interlock, Trailer reversing light, Transmission adaption, Yaw rate sensor: Adapting, Battery replacement, Button illumination 1, Commissioning mode, Delete navigation maps, Front PS door storage comp. lighting, Front PS exit lighting, Gearshift adaptation, Hazard warning switch LED, Leak test, Left trailer side light lamp, Null balancing, steering wheel angle sensor, Number plate light, Power supply relay, Rear fog light, Rear left turn signal indicator, Rear PS door trim ambient light., Rear PS ext. door handle light., Sun roof adaptation, Sun shade adaptation, ESP hydraulic-system bleeding, ESP sensor unit adaptation, Front driver assistance camera, Front radar sensor: Dynamic adaptation, Engine control unit: Misfiring, read out values, Engine control unit: Reset the crash recognition, HV battery isolation test, Battery (high-voltage): Reading out the current capacity, SOH (State of Health), Engine oil level check, Exhaust gas differential pressure sensor: Resetting, HV battery charging module: Transfer vehicle identification number (VIN), Mixture correction reset, Electro-hydraulic brake system activation, Tyre pressure indicator reset, Battery (high-voltage): Battery contact test, Battery (high-voltage): Battery voltage test, Battery (high-voltage): Readout of the current capacity, Camshaft timing control: Resetting, Charge air compressor: Resetting, Engine control unit: Reset engine oil level, Fuel high-pressure system reset, Battery (high-voltage): Battery temperature test, Battery contact fault counter reset, Cooling system: Bleeding, Drain fuel tank, Engine stop data read-out, Gasoline particulate filter: Resetting, Electric coolant pump: Actuation 100 %, Engine start data read-out, Fuel pump, Lambda sensor (bank 1, sensor 1) reset, Mixture correction: Read out values, Radiator-fan relay, Battery (high-voltage): Adjust SOH (State of Health), Battery (high-voltage): Initialising after replacing the component <Battery (high-voltage)> or the component <High-voltage battery module>, Electric coolant pump: Actuation 50 %, HV battery cell voltage equalization, Neutral position sensor: Adapting, Radiator blind adaptation, Tank leak diagn. pump vent valve, Cooling blower: Actuation, Engine start/stop data read-out, Lambda sensor (bank 1, sensor 2) reset, MIL Lamp, Reset fuel service life, Throttle valve control unit reset, Top speed configuration, Engine control unit: Read out knock counter, HV battery charge, HV charging connection test, Injector reset, Resetting electric fuel pump, Wastegate solenoid: Resetting



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