

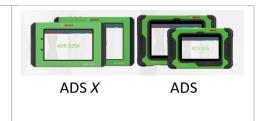
# **Bosch ADS Software Update - November 2022**

# Ver 5.4

Version 5.4 update introduces all new **2022** vehicle coverage and additional **ADAS** calibrations.

3,939 new special test & 544 new system applications included in this update.

Software and coverage feature details provided in these release notes.



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

#### 2022 Coverage added - DTC, Data support and Bi-Directional functions

- Ford F-150 Lightning
- Lexus new system coverage across most models
- Toyota new system coverage across most models

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

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

#### • 2022 Coverage:

- o Audi Coverage for MY2022 e-Tron GT, RS e-Tron GT, RS3, S7 Sportback
- Ford Coverage for MY2022 F-150 Lightning
- Genesis Coverage for MY2017-2019 G70
- Honda Coverage for MY2022 Clarity
- Hyundai Coverage for MY2022 Kona Electric and Kona N
- Lexus Coverage for MY2022 IS500
- Mazda Coverage for MY2022 CX-30 and CX-9
- Mercedes Coverage for MY2022 Sprinter 1500
- Nissan Coverage for MY2022 Qashqui
- Porsche Coverage for MY2022 Macan

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

# **New Coverage Details – USA Domestic**

# New Chrysler/Dodge/Jeep/Ram Coverage

383 new Adjustment type special tests:

1st Gear Clutch Test (62TE), 1st Gear Clutch Test (Non-RFE), 1st Gear Clutch Test (RFE), 2-4 Solenoid, 2C Or 2-4 Solenoid, 2nd Gear Clutch Test (62TE), 2nd Gear Clutch Test (Non-RFE), 2nd Gear Clutch Test (RFE), 2nd Prime Gear Clutch Test (RFE), 3rd Gear Clutch Test (62TE), 3rd Gear Clutch Test (Non-RFE), 3rd Gear Clutch Test (RFE), 4C Solenoid State, 4th Gear Clutch Test (62TE), 4th Gear Clutch Test (Non-RFE), A/C Compressor Clutch Relay Control State, A/C Relay, A/C Request, ABS Warning Light, AC Button, AC Indicator, Acc/Run/Start Relay, Accessory Delay Time, Active Grill Shutter Test, Actuate All Heaters, Actuate All Vents, Air Condition, Alternator Field Control State, Alternator Field Duty Cycle, Antenna Power, Auto Shutdown Relay Control State, Auto Wipers, Automatic High Beam Operation, Auxiliary Coolant Pump Relay, Auxiliary Coolant Pump, BACK button, Back Up Lights, Background LED Illumination Level, Backlight Control-A/C LED, Backlight Control-Auto LED, Backlight Control-Blue LEDs, Backlight Control-ESP LED, Backlight Control-Front Defrost LED, Backlight Control-Rear Defrost LED, Backlight Control-Recirc LED, Backlight Control-Red LEDs, Backlight Control-Stop/Start LED, Backlight Control-White Backlight LEDs, Backlight Control-White Ring LEDs, Blower Motor, BLUE Circuit, Boost Low Pressure Actuator, Boost Pressure Actuator, BTSI Coil Output Control, BTSI Control, Bussed SRS Indicator Lamp Request, Buttons/Encoder Control-A/C Button, Buttons/Encoder Control-Auto Button, Buttons/Encoder Control-Back Button, 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 Blower Knob, Buttons/Encoder Control-Rotary Tuner Knob, Buttons/Encoder Control-Rotary Volume Knob, Buttons/Encoder Control-Screen Off Button, Buzzer Control, Cabin Temperature Sensor, CEGR H-Bridge Valve Duty Cycle, Central Stop Lamp, Check PCM Odometer, CHSML and Stop/Turn Lights, CNG Injector Relay, CNG Shut Off Relay, CNG/Gasoline Forced Fuel Type, Coolant Three Way Valve Test, Cooled EGR H-Bridge Valve System Test, Courtesy Lamps Rear Dome Light, Courtesy/Convenient/Ambient Function, Crankcase Ventilation, Cruise Control Lamp, Cylinder 1 Deactivation Solenoid Control State, Cylinder 4 Deactivation Solenoid, Cylinder 6 Deactivation Solenoid Control State, Cylinder 7 Deactivation Solenoid Control State, D LED State, Dedicated Left DRL, Dedicated Right DRL, Direction - VOLUME Encoder, Door Handle Power Control, Door Handle Verification Test, Double Start Override Relay, DPF Lamp, DPF Reset Option, DR Solenoid, DRLs and Side Repeaters, Dual Speed Fuel Pump Relay, Dual Speed Oil Pump Status, Dual Speed Oil Pump, Duct Sensor -Floor Left, Duct Sensor - Floor Right, Duct Sensor - Panel Left, Duct Sensor - Panel Right, Dump Valve, 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, EBD Warning Light, EBL (REAR DEFOG) button, EBL (REAR DEFOG) Indicator, EGR Cooler Bypass, EGR DC Motor And Solenoid Valve, EGR Duty Cycle, EGR Valve Solenoid Duty Cycle, Electric Park Brake Telltale, Electric Thermostat Heater Solenoid Duty Cycle, Electric Thermostat Heater Solenoid, Electric Vacuum Pump, EMCC VLP Solenoid, Enable The One Press All Unlock Feature, Enable Trailer Tow Lamps, Engine After Run Coolant Pump, Engine Off Injector Toggle Test, Engine Oil Pump Valve, Engine Running Injector Kill Test, Enter Button, ESC Button Lamp, ESC Safety Lamp, ESIM Forced Monitor Test, ESP button, ESP OFF Indicator,

ETC Throttle Follower Test, Faceplate Controls (Eject Button), Flash Hazard Lamps on Lock, FRONT DEFROST button, Front Defrost Indicator, Front Dome Reading Light, Front Left Turn Lamp, Front Mode 1 Actuator Position, Front Right Turn Lamp, Front Wash, Front Wash-Mist, Front Wiper Test, Front Wiper, Fuel Filter Heating, Fuel Injector 1, Fuel Injector 2, Fuel Injector 3, Fuel Injector 4, Fuel Injector 5, Fuel Injector 6, Fuel Injector 7, Fuel Injector 8, Fuel Pump Relay Control State, Fuel Pump Relay, Gas Injector Relay, General Stop Function, Glow Lamp, Glow Relay, HALOS Circuit, Headlamp Delay Time, Headlamps On With Wipers, Headlamps, Heated Rear Window Relay, HEV Belt-Driven Coolant Pump Clutch Relay, HEV Engine Aux Heater LIN Coolant Pump, HEV Fuel Tank Isolation Valve Solenoid, HEV TPIM Inverter LIN Coolant Pump, High Beam Light, High Speed Fan Relay, High Speed Fan, Hill Hold Indicator, Horn LS Driver, HVAC Cool Down Test, HVAC POWER button, I/P Illumination, Idle RPM Test, Ignition Coil 1, Ignition Coil 2, Ignition Coil 3, Ignition Coil 4, IGNM Motor Control, Illuminated Approach Time, Immobilizer Antenna, Indicator Control-A/C Indicator, Indicator Control-Auto Indicator, Indicator Control-ESP Off Indicator, Indicator Control-Front Defrost Indicator, Indicator Control-Recirc Indicator, Indicator Control-Stop/Start Indicator, Inlet Valve Left Front, Inlet Valve Left Rear, Inlet Valve Right Front, Inlet Valve Right Rear, Intake Manifold Short Runner Valve Solenoid, Intake Manifold Tuning Valve Solenoid, IPC Self Test, KIN ACC LED State, KIN LED Control, KIN OFF LED State, KIN RUN LED State, KIN Start-Stop LED State, Knob Lock State, LC Solenoid, Left Park/Tail Lamp, Left Temperature Door Position, LF Antenna Verification Test, LF Turn Lamp/DRL, License Plate Lamp, Locate Learned Keys, Low Reverse Solenoid, Low Speed Fan Relay, LR Solenoid, LR Stop/Turn Signal Lamp, M LED State, Malfunction Indicator Lamp, Metering Unit, MS Solenoid, Multiair VVA Solenoid 1, Multiair VVA Solenoid 2, Multiair VVA Solenoid 3, Multiair VVA Solenoid 4, MUTE button, N LED State, Neutral Gate Test (62TE), Neutral Gate Test (Non-RFE), Neutral Gate Test (RFE), N-Lock Solenoid State, O2 1/1 Heater Duty-Cycle, O2 1/2 Heater Duty-Cycle, O2 Heater Test, Oil Pressure Lamp, Optical Horn, Outlet Valve Left Front, Outlet Valve Left Rear, Outlet Valve Right Front, Outlet Valve Right Rear, Over Drive Solenoid On Time, Over Drive Solenoid, Overdrive Switch Test (Non-RFE), OverDrive Switch Test (RFE), Overdrive Switch Test, Oxygen Sensor 1/1 Heater Duty Cycle, Oxygen Sensor 1/2 Heater Duty Cycle, Oxygen Sensor 2-1 Heater Duty Cycle, Oxygen Sensor 2-2 Heater Duty Cycle, P LED State, Paddle Shifter, Parking and Plate Lights, Park-Tail Lamps, PPV1 Electro-Valve, PPV2 Electro-Valve, PPV-K2 Clutch Electro-Valve, PPVS Electro-Valve, Pressure Control Solenoid Valve, Pressure Regulator Valve, Pre-Supply Pump, Priming Valve 1, Priming Valve 2, Proportional Purge Solenoid, Purge Solenoid Duty Cycle, Purge Valve Duty-Cycle, Purge Vapors Test, QPV K1 Clutch Electro-Valve, R LED State, Radiator Cooling Fan PWM Cntrl State, Radiator Cooling Fan PWM Duty Cycle, Radiator Cooling Fan Relay 1 Control State, Radiator Cooling Fan Relay 2 Control State, Radiator Fan 1 Duty Cycle, Radiator Fan 2, Radiator Fan 3, Read VIN, Rear Defrost Indicator, Rear Dome Dimming Light, Rear Wash-Wipe, RECIRC button, RECIRC Indicator, Recirculation Actuator, Recirculation Pump, RED Circuit, Redundant Ignition RUN/START Feed Output Control, Redundant Ignition RUN-START Feed Output Control, Reverse Gear Clutch Test (62TE), Reverse Gear Clutch Test (Non-RFE), Reverse Gear Clutch Test (RFE), RF Turn Lamp/DRL, Right Park/Tail Lamp, Right Temp. Door Actuator Position, RR Stop/Turn Signal Lamp, Run Relay, Run/Acc Relay, Run/Start Relay, SCREEN OFF button, SDU/ Electro-Pump, Secondary Air Pump, Secondary Air Solenoid, Set Engine RPM Test, Shift Lever Position Test (62TE), Shift Lever Position Test (Non-RFE), Shift Lever Position Test (RFE), Shift Solenoid 1, Shift Solenoid 2, Shift Solenoid 3, Shift Solenoid 4, Shift Solenoid 5, Shift Solenoid 6, Small Leak Verification Test, Sound Horn On Lock, Sound Horn On Remote Start, START STOP button, Stop All Actuators, Stop/Start Relay, Surge Solenoid Control State, Surge Valve Solenoid, TCC Pressure Control Solenoid, TCM VIN Verification, Telltale ABS, Telltale Airbag, Telltale Brake, Telltale Charging, Telltale ETC, Telltale Fog Front, Telltale High Beam, Telltale Low Fuel, Telltale MIL, Telltale Oil, Telltale Seat Belt, Telltale Transmission Temp, Telltale Turn Left, Telltale Turn Right, Telltale - EPS, Telltale - ESC Off, Telltale

- ESC, Telltale - Park Lamp, Telltale-Coolant, Telltale-Cruise Mode, Telltale-Tire Pressure Monitor, Temperature Warning Lamp, Temporary Remote Start Disable, Thermistor Test, Thermostat Heater, Throttle Valve Actuator, TPM Sensor Rolls Test, Trunk Lamp, Trunk Release Relay, Tumble Generator Valve, Turn Signal, UD Solenoid, Underdrive Solenoid, Vacuum Pump Relay, Variable Speed Fuel Pump Test, Variable Swirl Actuator, View Last Successful Remote Start Event Data, View Last VTA Trigger Cause Data, View Remote Start Abort Data, View Remote Start Inhibit Data, VLP Solenoid, VTA Indicator LED, VVA Cylinder #1, VVA Cylinder #2, VVA Cylinder #3, VVA Cylinder #4, VVA Solenoids Pre-Energization, VVT Exhaust Phaser 1 Actuator, VVT Intake Phaser 2 Actuator, Wastegate Solenoid Control State, Wastegate Solenoid Duty Cycle, Water In Fuel Filter Lamp Command, WHITE 1 Circuit, WHITE 2 Circuit

#### 60 new Actuation type special tests:

Active Grill Shutter Replaced, Actuator Calibration, Auto Door Lock, Auto Door Unlock, Bleed Brakes, Brake Pedal Calibration, CAM Crank Relearn Routine, Clear Engine Auto Restart Crank Counter, Clear Learning Value, Clear Misfire TLC, Clear Stored Accumulated Fuel Mass, Clear Variable Line Pressure Counters, Clutch Pedal Learn, Configure IBS for Stop-Start, Coolant Three Way Valve Replaced, Crankshaft Pos. Variation Learn, Disable Auto Relock, EGR System Test, Emissions Rolls Test Mode, Enable/Disable DRL, Engine Idle Shutdown Feature Enable/Disable, Exhaust Phaser 1 Cleaning, Exhaust Phaser 2 Cleaning, Exit Shipping Mode, Hydraulic Circuit Depressurization, Idle Shutdown Timer Adjustment, Initialize ORC, Intake Phaser 1 Cleaning, Intake Phaser 2 Cleaning, Learn Clutches Contact Point, Learn ETC, Longitudinal G Sensor Calibration, New Actuators, New Engine Installed, OCM System Verification Test, PROXI Back Up IPC to BCM., Proxi Configuration Alignment, Quick Learn, Quicklearn 62TE, Quicklearn Non RFE, Quicklearn RFE, Reset Adaptive After Oil Change, Reset Adaptive Memory, Reset Adaptive Values, Reset Adaptives After Block Change, Reset Air-Fuel Adaptives, Reset Camshaft Adaptives, Reset Enhanced Automatic Oil Change Indicator, Reset Memory, Reset Turbo Adaptives, Reset Turbo Over Boost Counter, Reset VCM Adaptives, Reset VVA Freeze Incorrect Request, TCC Break In, Throttle Body Self-Learning, Tire Pressure Sensor Registration, Update Front and Rear Axle Nominal Tire Pressure Values, Valve Body Solenoid Learn, Write Pinion Factor, Write VIN

# **New Ford/Lincoln Coverage**

Added coverage for 81 new system applications

### 15 new Adjustment type special tests:

Battery Monitor System Reset, Brake System Pressure Bleeding, Clear Transmission Adaptive Tables, Electronic Integrated Park Brake - Initialization, Electronic Integrated Park Brake, Engine Oil Life Reset, Misfire Monitor Neutral Profile Correction, Occupant Classification System Module (OCSM) Reset, PMI - Manual Configuration (TCCM), Programmable Module Installation CCM, Relearn Vehicle Data, Reset KAM, Steering Angle Sensor Calibration, Suspension Height Sensor Calibration, TPMS Sensor Training Mode

### 213 new Actuation type special tests:

% Of Total Fuel Mass To Be Delivered By Direct Inj -Commanded, (Cruise) Resume Switch, (Cruise) Set- Switch, (Cruise) Set+ Switch, ABS Valve Power Supply, ABS Warning Lamp, A-C Recirculating Servo Position Status, Active Air Dam Position - Commanded, Active Grille Air Shutter -A- Position Commanded, Active Grille Air Shutter -B- Position Commanded, Actuator Supply Voltage -B- Control State, Adaptive Cruise Distance Gap (-) Switch, Adaptive Cruise Distance Gap (+) Switch, Adaptive Front Lighting Fault, Air Conditioning Compressor Commanded

State, Air Mode Actuator, Airbag Warning Indicator, All Warning Lamps, Anti Theft Indicator Lamp Control, Anti Theft RF Enable And Transmit Command, Anti-Theft Horn Status, Auxiliary Blower Output, Battery Pack Coolant Ctrl Valve A - Output Ckt Energized, Blower Motor Speed, Brake System Fault Indicator Lamp, Brake-Shift Interlock, Camera Power Control, Canister Vent - Duty Cycle, CCW Relay, Center High Mounted Stop Lamp Output Control, Coast Clutch Solenoid -Control State, Coast Clutch Solenoid - Duty Cycle, Commanded Equivalence Ratio (Air to Fuel Mixture) Bank 1, Commanded Equivalence Ratio (Air To Fuel Mixture) Bank 2, Commanded Gear -Control State, Commanded Gear, Converter Clutch Lockup Solenoid - Control State, Coolant Overtemp, Coolant Pump -A- is Commanded On, Courtesy Lamps, CW Relay, DC-DC Enable Status, Delayed Accessory Power, Desired Gear - Control State, Desired Idle Speed (Rpm), Driver Heated Seat, Dynamic Pressure Control Solenoid 1 - Duty Cycle, Dynamic Pressure Control Solenoid 2 - Duty Cycle, Dynamic Pressure Control Solenoid 3 - Duty Cycle, ECO Mode, EGR Duty Cycle, EGR Valve Position Desired, Electric Air Pump - Control State, Electronic Pressure -Control State, Electronic Pressure Control - Duty Cycle, Engine Coolant Bypass Valve Control Output, Engine Oil Pressure Control Duty Cycle - Commanded, Engine Output Test, Engine Running Fuel Injector Control, EVAP Leak Test, EVAP Purge - Duty Cycle, EVAP Purge/Vent Control, Evaporative Emission Canister Purge Valve Duty Cycle, Evaporative Emission Canister Vent Valve, Fan control high speed, Fan control low speed, Fan Speed Desired, Four Wheel Drive Clutch Output, Front Blower Relay, Front Fog Lamp Indicator, Front Fog Lamps Request, Front Left-Front Right Traction Control Isolation Valve 1, Front Left-Front Right Traction Control Supply 1, Front Park Lamps Output, Front Window Down Output, Front Window Up Output, Fuel Gauge Indicator Control, Fuel Pump - Duty Cycle, Fuel Pump Relay, Fuel Pump, Fuel Rail Pressure Desired, Fuel Trim Bank 1 - Control State, Fuel Trim Bank 2 - Control State, Generator Voltage Desired, Heater Control For HO2S 11 And HO2S 21, Heater Control For HO2S 12 And HO2S 22, High Beam Indicator, High Speed Fan, Hill Descent Control, HO2S11 Heater - Control State, HO2S12 Heater - Control State, HO2S21 Heater - Control State, HO2S22 Heater - Control State, Hydraulic Pump Motor, Idle Air Control, IMRC Command - Control State, Key (Removal) Inhibit, KOEO Self Test, KOEO, KOER Self Test, KOER, Lamp Control, LED Backlighting, Left Blend Door Position, Left Bottom Bolster Bladder Inflate Status, Left Cursor Left Arrow, Left Cursor OK Button, Left Front Dump, Left Front Isolation Valve, Left Front Turn Signal Lamp Status, Left Front-Right Rear Traction Control Supply 1, Left Headlamp Low Beam, Left Rear Dump, Left Rear Isolation Valve, Left Rear Turn Signal Lamp Status, Left Rear Turn Signal-Trailer Relay Status, Left Turn Signal Lamp Status, Line Pressure Control Desired, Load Shed Output Control, Low Fuel Warning Indication, Low Speed Fan, Low Washer Fluid Warning, Max Defrost, Mirror Fold In Output, Mirror Fold Out Output, Oil Pressure Low Indicator, On Demand Test, Output State Control Of Torque Converter, Over Drive (O-D) off, Passenger Heated Seat, PCM WAKEUP LINE, Power Balance, Power Fold Mirror Activation Status, Power Point Output Relay, Pressure Control Solenoid 1 - Duty Cycle, Pressure Control Solenoid 2 - Duty Cycle, Pressure Control Solenoid 3 - Duty Cycle, Rear (Hvac) Mode Control Input, Rear Blower Control, Rear Defrost (Heated Backlight), Rear Fog Lamp Indicator, Rear Left-Rear Right Traction Control Isolation Valve 2, Rear Left-Rear Right Traction Control Supply 2, Rear Park Lamps Output, Rear Temperature Flap Position, Rear Window Down Output, Rear Window Up Output, Relative Compression, Reverse Lamp, Right Blend Door Position, Right Front Dump, Right Front Isolation Valve, Right Front Turn Signal Lamp Status, Right Front-Left Rear Traction Control Valve 2, Right Headlamp Low Beam, Right Rear Dump, Right Rear Isolation Valve, Right Rear Turn Signal Lamp Status, Right Rear Turn Signal-Trailer Relay Status, Right Turn Signal Lamp Status, Run-Accessory Output Control, Run-Start Output Control, Safety Belt Warning Lamp, Seat Bladder Pump Status, Seat Cushion Bladder Inflate Status 1, Secondary Air Management Valve 1 - Control State, Secondary Air Management Valve 2 - Control State, Shift Solenoid A, Shift Solenoid B, Shift Solenoid C, Shift Solenoid D, Shift Solenoid F Commanded Current, Shift Solenoid Pressure Control A, Shift Solenoid Pressure

Control B, Shift Solenoid Pressure Control C, Shift Solenoid Pressure Control D, Shift Solenoid Pressure Control E, Side Light Lamp, Side Mirror Heating Output Control, Side Mirror Turn Signal Lamp Control, Spark Advance - Control State, Spark Advance, Speed Control (ASLD) Switch, Speed Control Actuator Switch Off, Speed Control Actuator Switch On, Speed Control Cancel Switch, Speed Control Cancel-Resume Switch, Speed Control Gap Switch, Speed Control On-Off Cancel Switch, Speed Control On-Off Switch, Speedometer, Spotlight Mirror Output, Stepper Motor EGR Position - Control State, Stop-Start, Tachometer Gauge Indicator Control, Temperature Gauge, Tire Pressure Telltale Status, Torque Converter Clutch - Control State, Torque Converter Clutch - Duty Cycle, Torque Converter Clutch Solenoid Commanded Current, Traction Control - Duty Cycle, Traction Control Indicator, Traction Control Off Indicator, Trailer Brake Output Circuit Duty Cycle - Measured, Trailer Tow Park-Tail Lamp Output, Transfer Case Shift Motor Pos Sense - Contact Plate Power Stat, Transmission System (Mil) Fault, Turbocharger Bypass Valve 1, Turbocharger Wastegate, Two Speed Fuel Pump - Control State, Variable Speed Fan Command - Control State, Volume, Warning Lamp Status 1 - Charge Warning

### **New GM Coverage**

### 55 new Adjustment type special tests:

Adaptive Pressure Control Learn, Ambient Air Temperature Calculation Reset, Automated Brake Bleed, BARO Sensor Reset, Brake Pedal Position Sensor Learn, Brake Pressure Sensor Calibration, CAN Bus Configuration Learn, Configure New Module, Copy And Paste TPM Information, Crankshaft Pos Variation Learn, Engine Block Coolant Valve Position Learn, Engine Oil Life Reset, Fuel Composition Reset, Fuel Pump Driver Control Module Configuration, Fuel Trim Reset, HO2S Heater Learn, HVAC Actuators Learn, HVAC Afterblow Configuration, Idle Learn Reset, Info Display/Infotainment Faceplate Reset, Invalidate All Fobs, Particulate Filter Pressure Sensor Reset, Particulate Filter Regeneration, Program Key Fob 1, Program Key Fob 2, Program Key Fob 3, Program Key Fob 4, Rear Gate Driver Information Center Message Reset, Remote Vehicle Speed Limiting Reset, Reset High Voltage Disable Request After Crash Event Detected, Reset Particulate Filter, Reset Teen Driver Key PIN, Restore Factory Settings, RVS Disable History Reset, Setup SDM Part Number In BCM, Steering Wheel Angle Sensor Learn, Timing Belt Life 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

# 232 new Actuation type special tests:

A/C Compressor Clutch, A/C Relay, ABS Left Front Solenoid Valves, ABS Left Rear Solenoid Valves, ABS Pump Motor, ABS Right Front Solenoid Valves, ABS Right Rear Solenoid Valves, Accessory Circuit 1, Accessory Circuit 2, Accessory Circuit 3, Accessory Circuit 4, Accessory/RAP Relay, Activate Rear Park Brake Service Position, Active Grille Air Shutter 2, Active Grille Air Shutter, Air Cleaner Monitor Setup, All Door Lock Unlock, Assist Step Courtesy Lamp, Auxiliary Coolant Pump Speed, Auxiliary Ignition Run Relay, Backup Lamps, Blower Motor, Brake System Hydraulics Corner Test, CD, Center High Mounted Stop Lamp, Central Stop Lamp, Charge Air Cooler Coolant Pump Speed, Cooling Fan 2, Cooling Fan 3, Courtesy Lamps, Cylinder Power Balance, Daytime Running Lamps, Deactivate Rear Park Brake Service Position, Diesel Intake Air Flow Control Valve Position, Display Dimming, Display Test, Driver Seat - Blower Command, Driver

Seat Cushion Heating, EGR System Flow Deviation Service Bay Test, Engine Block Coolant Control Valve Position, Engine Controls Ignition Relay, Engine Controls Ignition Supply Voltage, Engine Coolant Control Valve Mode, Engine Coolant Control Valve Position, Engine Coolant Control Valve, Engine Coolant Fill, Engine Coolant Flow Control Valve Position, Engine Cooling Fan, Engine Oil Type Setup, Engine Serial Number, Engine Speed Control, Engine Speed, Erase Valet Mode Code, EVAP Purge/Seal, EVAP Vent Solenoid, Exhaust Gas Recirculation Valve 2. Exhaust Gas Recirculation Valve Position, Exhaust Gas Recirculation Valve, Exhaust Pressure Regulator Valve Position, Fog Lamps, Forward Collision Alert Switch, Front Suspension Position Sensor Trim Height, Fuel Control Loop Status, Fuel Heater, Fuel Injector Balance, Fuel Pressure Regulator 2, Fuel Pressure Regulator, Fuel Pressure, Fuel Pump Relay, Fuel Pump, Fuel Rail Pressure, Fuel Trim Enable, GEN L-Terminal, Generator Regulator Setpoint, Glow Plugs, Green Indicator, Hands-Free Sensor Lamp Command, High Beam, High Fuel Pressure Limiter Valve Test, High Side Driver 1, High Side Driver 2, HO2S Bank 1 Sensor 1 - Heater, HO2S Bank 1 Sensor 2 -Heater, HO2S Bank 2 Sensor 1 - Heater, Horn Relay, Illuminate All Indicators, Incandescent Dimming, Instrument Cluster Gauge Sweep, Instrument Panel Illumination, Intake CMP Actuator Solenoid, Intake CMP Actuator, Intake Manifold Runner Control Valve, Internal Combustion Engine Autostart/Autostop, Key Fob Button Test, Lane Departure Warning Indicator, Lane Departure Warning Switch, LED Backlight Dimming, Left Assist Step Motor, Left Backup Lamp, Left Daytime Running Lamp, Left Front Park Lamp, Left Front Shock Absorber Actuator, Left Front Turn Lamp, Left Front Turn Signal Lamp, Left High Beam, Left Low Beam, Left Rear Shock Absorber Actuator, Left Rear Turn Signal Lamp, Left Rear Turn Signal/Stop Lamp, Left Side Marker Lamp Command, Left Stop Lamp, Left Tail Lamp, Left Trailer Tow Turn/Stop Lamp, Left Turn Signal, License Plate Lamps, Line PC Solenoid, Line Pressure Control Solenoid Valve, Low Beams, LR Turn Signal, Mass Airflow Sensor, Mirror Folding Control, Misfire Graph, Next Available Slot, Nitrogen Oxides Catalytic Converter Reductant Loading Reset, O2 Sensor Heater Bank 2 Sensor 2, Object Detection Alert Indicators, Parking Lamps, Particulate Filter Regeneration Enable, Passenger Air Bag Off Indicator, Passenger Air Bag On Indicator, Passenger Seat - Blower Command, Passenger Seat Belt Reminder Indicator, Passenger Seat Cushion Heating, PC Solenoid 2, PC Solenoid 3, PC Solenoid 4, PC Solenoid 5, Phone Call Test, Power Mode Timeout, Pressure Control Solenoid Valve 2, Pressure Control Solenoid Valve 4, Pressure Control Solenoid Valve 5, Proactive Alerts, Rear Cross Traffic Audible Alert, Rear Differential Clutch Motor Current, Rear Fog Lamp, Rear Fog Lamps, Red Indicator, Reductant Heater 2, Reductant Heater 3, Reductant Heater, Reductant Injection Quantity Test, Reductant Injector, Reductant Pump, Reductant Purge Valve, Reductant System Leak Test, Reductant System Malfunction Warning Service Bay Test, Reductant System Tamper Warning Service Bay Test, RF Turn Signal, Right Assist Step Motor, Right Backup Lamp, Right Daytime Running Lamp, Right Front Park Lamp, Right Front Shock Absorber Actuator, Right Front Turn Signal Lamp, Right High Beam, Right Low Beam, Right Rear Shock Absorber Actuator, Right Rear Turn Signal Lamp, Right Rear Turn Signal/Stop Lamp, Right Side Marker Lamp Command, Right Stop Lamp, Right Tail Lamp, Right Trailer Tow Turn/Stop Lamp, Right Turn Signal, RR Turn Signal, Run Crank Relay, Seat Back Horizontal Movement, Seat Back Side Bolster Movement, Seat Belt Retractor Motor, Seat Cushion Front Vertical Movement, Seat Cushion Rear Vertical Movement, Seat Cushion Side Bolster Movement, Seat Horizontal Movement, Seat Lumbar Support Horizontal Movement, Seat Lumbar Support Vertical Movement, Security Indicator, Sensor Supply Voltage, Shift Lock Solenoid, Shift Solenoid 1, Shift Solenoid 2, Shift Transmission Gear, Shift Transmission, Starter Relay, 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 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, Transport Mode, Turbocharger/Supercharger Boost Control Position, Vehicle Health Data Upload, Wait to Start Indicator, Windshield Washer Pump, Windshield Wiper Motor Relay, Windshield Wiper Motor, Windshield Wiper Relay, Wiper Washer Motor

# **New Coverage Details – USA Asian**

### **New Honda Coverage**

1 new Adjustment type special test:

Start Clutch Status Data Clear

1 new Actuation type special tests:

**Boost Pressure Test** 

# New Nissan Coverage

221 new Adjustment type special tests:

A/F Initial Learning, A/F Sensor Response Diagnosis Status B1, A/F Sensor Response Diagnosis Status B2, Active Control Engine Mounting A, Active Control Engine Mounting B, Actuator Air Bleeding Pattern, Adaptives After Replacing Particulate Filter, AFT Maintenance, After Camshaft Position Sensor Replacement, After Clutch Pedal Switch Replacement, After Crankshaft Position Sensor Replacement, After Electric Throttle Control Actuator Replacement, After Fuel Injector Replacement, After Fuel Rail Pressure Sensor Replacement, After High Pressure Fuel Pump Replacement, After Turbocharger Replacement, After Turbocharger Solenoid Valve Replacement, Air Bleed, Air Bleeding - FL Line, Air Bleeding - FR Line, Air Bleeding - RL Line, Air Bleeding - RR Line, Air Bleeding Pattern - RL Wheel, Air Bleeding Pattern - RR Wheel, Air Bleeding, Air Fuel Ratio Correction Value, Air Fuel Ratio Sensor, 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 UNLOCK SELECT, Automatic Lock Setting, Automatic Lock/Unlock Set, 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 Airfuel 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, 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, DPF Regeneration, Drain System Air Bleeding Pattern, Dual battery relay voltage drop count data clear, ECO Mode Reset Function, EGR Control Valve Closed Position Learning, Electric Intake Valve Timing Control Learning, Electric O.P Air Bleeding, Electric Oil Pump Air Bleeding, Electric Parking Brake System: Test Mode Procedure, Engine Adaptive, Engine basis parts value 1 and 2 clear, Engine Brake Adjustment, 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, GPF Service Regeneration Reset Routine Execution, High Pressure Fuel Circuit Fault Finding, High Pressure Fuel Pump Total Starts Counter Clear, Horn Chirp Setting, Horn With Keyless Lock, ID Read, ID Registration, Idle Air Vol Learn, 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, 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, Power Supply Air Bleeding Pattern 1, Power Supply Air Bleeding Pattern 2, Pressure Sensor Initialization, Program Key Fobs, Programmed Values, Programming Reinitialization, Programming Selections/Engaging Zones, R Lamp Timer Logic Setting, 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, 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, ST Angle Sensor Adjustment, Start Brake Pad Replacement, Start OBD test: Catalytic converter, Start OBD test: O2 sensors, Starter Operation Count Clear, Starter Operation Counter Clear, Steering Angle Initialization, Steering Angle Sensor Adjustment, Steering Angle Sensor Calibration, Stop/Start engine restart cause data recorder, Stop/Start engine stall cause data recorder, Stop/Start prohibit cause data recorder, Sub-Starter Generator Oper Count Clear, Supercharger Magnet Clutch Engagement Count Clear, System Mode Change, Target 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, Trunk Open Set, Upshifts, Usual Air Bleeding - All lines, Usual Air Bleeding - FL Line, Usual Air Bleeding - FR Line, Usual Air Bleeding - RL Line, Usual Air Bleeding - RR Line, V/T Control Learn, Valve Calibration, Valve Check, Valve Flushing, Valve Timing Adjustment, Valve Timing Offset Data Clear, Valve Timing Offset Data Writing, Vcr Base Position Learning, VIN Registration, VVEL Position Sensor Adj Prepare, Waste Gate Actuator Position Learning Value Clear, Waste Gate Regulation, 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, Zero Point Reset Function

(TBD)EAP FAIL IND, (TBD)Epkb Request, (TBD)EPS Reaction Force Request, (TBD)Hand Free Warning, (TBD)LDP L STEP, 4WD AT Flow, 4WD Warning Light, A/C Compressor Relay Control, A/C Compressor, A/C Indicator, A/F Sensor Heater, AAC/V Output Duty, AAC/V Output Step, ABS Front Left Hold Solenoid, ABS Front Left Release Solenoid, ABS Front Right Hold Solenoid, ABS Front Right Release Solenoid, ABS Motor, ABS Rear Left Hold Solenoid, ABS Rear Right Hold Solenoid, ABS Rear Right Release Solenoid, ABS Solenoid (SRLR), ABS Solenoid, ABS Warning Light, AC Compressor Relay, AC Compressor, A-C INDICATOR, ACC Indicator, Accelerator Pedal Actuator Test 1, Accelerator Pedal Actuator Test 2, Accumulator Zero Down, Accy/RAP Relay, Activate Demo Mode Of Exterior Lamp, Activate the Slip Indicator Light, 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, Answer Back With I-Key Unlock, Anti Key Lock In Function, ARC Disp 2, ARC Disp, ARC operation indication, ARS Warning Light, AS Seat Lamp Test, Assist Seat Lamp Test, ATC 1 Disp, ATC 2 Disp, ATC 3 Disp, ATC 4 Disp, ATC 5 Disp, A-TRC(TRAC) Indicator Light, Auto ACC 1, AUTO ACC 2, Auto LSD Indicator Light, Auto Mode, Auto retractable door mirror, Auto Stop Start, Automatic Back Door, Automatic Brake Hold Lamp Active, Automatic Brake Hold SW Lamp Active, Back Door/Trunk Lock Relay, Back Door/Trunk Unlock, Back Dr Open Warn, Battery Cooling, Battery Heater, Battery Saver, BCI Warning Indicator, BH Operated Light, BH Standby 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, Brake Warning Light, BSI Indicator On, BSI ON Indicator, BSI Warning Indicator, BSW Indicator LH, BSW Indicator RH, BSW On Indicator, BSW Warning Lamp, BSW/BSI WARNING LAMP, BSW-BSI INDICATOR DRIVE, BSW-BSI WARNING LAMP, 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, Check Activated Canister Shutoff Valve, Check Boost Pressure Control, Check Component Purging Pressure Control, Check Coolant Pump Switchover Valve, Check Coolant Thermostat Heating Element, Check Cylinder Fuel Injectors For Leaks, Check Cylinder Fuel Injectors, Check Deceleration Air Switchover Valve, Check Engine And AC With Integrated Control Fan Motor, Check Engine Oil Pump Valve, Check Exhaust Camshaft Solenoid, Check Fuel High Pressure Circulation for Leak Tightness, Check Fuel Pressure And Temperature Sensor Rail Pressure, Check Fuel Tank Pressure Sensor, Check Intake Camshaft Solenoid, Check Intake Port Shutoff Actuator Motor, Check Mode, Check Purging Switchover Valve, Check Quantity Control Valve, Check Throttle Valve Actuator, Check Valve Bypass Valve, CNG Cylinder Shutoff Valve, CNG Engine Shutoff Valve, 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, Crawl Control Light, Cruise Control-PCS-LKA Buzzer, C-SCV Target Step (Bank1), C-SCV Target Step (Bank2), C-VTC Target Angle, Cylinder Cutout Test, DAB Indicator Light, Daytime Running Light, DCA Indicator, 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, 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 Test, Downhill Assist Control Light, DOWNSTREAM OXYGEN SENSOR HEATING, Drive Mode Test, Driver Seat, DSS Signal Buzzer, EAP SW LAMP, EAPM Warning Lamp, EBS Relay, ECB Control Invalid, ECB Main Relay 2, ECB Main Relay, ECB Motor Relay, ECB Motor Relay2, ECB Solenoid (SC1), ECB Solenoid (SC2), ECB Solenoid (SCC), ECB Solenoid (SGH), ECB Solenoid (SLA) Valve Close, ECB Solenoid (SLA), ECB Solenoid (SLAFL) Valve Close, ECB Solenoid (SLAFL) Valve Open, ECB Solenoid (SLAFL), ECB Solenoid (SLAFL2), ECB Solenoid (SLAFR) Valve Close, ECB Solenoid (SLAFR) Valve Open, ECB Solenoid (SLAFR), ECB Solenoid (SLAFR2), ECB Solenoid (SLARL) Valve Close, ECB Solenoid (SLARL) Valve Open, ECB Solenoid (SLARL), ECB Solenoid (SLARL2), ECB Solenoid (SLARR) Valve Close, ECB Solenoid (SLARR) Valve Open, ECB Solenoid (SLARR), ECB Solenoid (SLARR2), ECB Solenoid (SLR) Valve Close, ECB Solenoid (SLR), ECB Solenoid (SLRFL) Valve Close, ECB Solenoid (SLRFL) Valve Open, ECB Solenoid (SLRFL), ECB Solenoid (SLRFL2), ECB Solenoid (SLRFR) Valve Close, ECB Solenoid (SLRFR) Valve Open, ECB Solenoid (SLRFR), ECB Solenoid (SLRFR2), ECB Solenoid (SLRRL) Valve Close, ECB Solenoid (SLRRL) Valve Open, ECB Solenoid (SLRRL), ECB Solenoid (SLRRL2), ECB Solenoid (SLRRR) Valve Close, ECB Solenoid (SLRRR) Valve Open, ECB Solenoid (SLRRR), ECB Solenoid (SLRRR2), ECB Solenoid (SMC), ECB Solenoid (SMC/SRC/SCC), ECB Solenoid (SMC1), ECB Solenoid (SMC2), ECB Solenoid (SRC), ECB Solenoid (SSA), ECB Solenoid (SSC), ECB Warning Indicator, EGR Cont (Mode 1), EGR Cont (Mode 3), EGR Control Valve, EGR Cut Solenoid, EGR Solenoid, EGR Vol Cont/V, EGR VOL CONT-V, EGRC Solenoid Valve, Electric Fan Override Test, Electric 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 Electic 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, EVAP Canister Purge Control Solenoid Valve, EVAP CNT Duty Valve Open, EVAP Leak Diag, EVAP Leak Mode8, EVAP Leak P1441, E-VTC Target Angle (Exhaust), EXH V-T ASSIGN ANGLE, Exhaust Air Flap, Exhaust Camshaft Dephaser Solenoid Valve, Exhaust Camshaft Set Point, Exhaust Fuel Injector, Exhaust Gas Recirculation Cooler Bypass Valve, Exhaust Valve Timing Assign Angle, Exhaust Valve Timing Control Solenoid Valve, Exterior Lamps, External Buzzer, EXTERNAL LAMPS, Fan Duty Control, Fan Unit High Speed Relay, FAN UNIT HIGH SPEED, Fan Unit Low Speed Relay, FAN UNIT LOW SPEED, 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, 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, H/B Motor 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 LAMP, Horn Test, Horn, Horn-IPDM-E, Horn-Multi Remote Ent, HPCR Fuel Act Override, Hv Battery Cooling Fan, HVAC Test, Hydraulic Motor, 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 In Alarm, Ignition Key Warning Alarm, Ignition On Ind, Ignition Relay, Ignition Switch LED Power, Ignition Timing (Mode 1), Ignition Timing (Mode 3), Ignition Timing, Ill Dim Signal, Illumination Dim Signal, Immobilizer Lamp, Indicat. Lamp VSC OFF, INDICATOR LAMP DRIVE, Indicator, Injection Pressure Regulator, Injector Cylinder 2, Injector Cylinder 3, Injector Cylinder 4, Injector-Cylinder 1, Inside ANT Diagnosis, Inside Buzzer, Inspection Mode, 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 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 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, Motor Relay Control, MOTORISED THROTTLE, Oil Pressure Sw, Oil Pressure Switch, Optic Axis Active Test, 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, PKB Full Release Control, PKB Light, PKB Lock Control, PKB Release Control, Power Balance (Cylinder #1), Power Balance (Cylinder #2), Power Balance (Cylinder #3), Power Balance (Cylinder #4), Power Balance (Cylinder #5), Power Balance (Cylinder #6), Power Balance (Cylinder #7), Power Balance (Cylinder #8), Power Balance, Power Slide Door, Power Sliding Door, Power Window Down, Power Window Remote Down Set, PPS Solenoid, Pre Crash Brake OFF Light, Pre-Charge Pump, PRES Regulator, Pressure Control Solenoid A, Pressure Control Solenoid B, Pressure Control Solenoid C, Programming Cl 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, Pump Check Pattern, Purg Vol Cont/V, PURG VOL CONT-V, Purging Switchover Valve, Push Switch Indicator, 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,

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, 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, 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, Short Cranking Output, Signal Check, Siren, Sliding motor, Slip Indicator Light, Solenoid Actuator Driving FR 2 Wheels, Solenoid Actuator Driving FR-LH, Solenoid Actuator Driving FR-RH, Solenoid Actuator Driving RR 2 Wheels, Solenoid Actuator Driving RR-LH, Solenoid Actuator Driving RR-RH, Solenoid Driving FR-LH, Solenoid Driving FR-RH, Solenoid Driving RR, Solenoid Driving RR-LH, Solenoid Driving RR-RH, Solenoid Relay, Sonar buzzer, Speaker Mute Signal, Speed Sensor Function, 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 ON Relay Active, Stop Lamp On Relay, Stop Lamp, Stop Light Relay, Stop light System Indicator Light, Stop start OFF switch indicator, Stratified Direct Injection Timing Angle, Stratified EGR Position, Stroke Simulator Cut Valve Pattern, Sub Fuel Cont Sol /V, Sub Fuel Pump Relay, Super Charger Clutch Relay, 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 Indicator, Tire Pressure Warning Lamp, TPMS ID flat tire warn, TPMS ID Registration Warning, TPMS LAMP WARN TEST, TPMS Warning Light, Trac Motor Relay, TRAC Solenoid (SPFL), TRAC Solenoid (SPFR), TRAC Solenoid (SRCF), TRAC Solenoid (SRCR), TRAC Solenoid (SRMF), TRAC Solenoid (SRMR), TRC OFF Indicator Light, Trunk Open Test, Trunk, Trunk/Back Door, Trunk/Glass Hatch Open, Trunk/Glass Hatch, Trunk-back door, TRUNK-GLASS HATCH, Trunk-Luggage Lamp Test, Trunkluggage 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, UPSTREAM O2 SENSOR HEATING, V/T Assign Angle, Valve Timing Sol, Valve, Variable Duct Solenoid Output, VC/V Bypass/V, VCR System, Vehicle Disp, 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, VSC OFF Indicator Light, VSC Warning Light, VSC/TRAC Off Indicator Light, VSC/TRAC Solenoid, VSC/TRC Solenoid (SMF), VSC/TRC Solenoid (SMR), VSC/TRC Solenoid (SPFL), VSC/TRC Solenoid (SPFR), VSC/TRC Solenoid (SRCF), VSC/TRC Solenoid (SRCR), VSC/TRC Solenoid (SRMF), VSC/TRC Solenoid (SRMR), VTC Solenoid, VVL Int Exh Solenoid Simultaneous Drive, VVL Solenoid Exhaust, VVL Solenoid Intake, W/G, Warning Buzzer, Warning

Lamp, Warning System Indicator, Washer Fluid Pump Relay, Wastegate Actuator, Water Temperature, YAW STEP L, YAW STEP R, Yellow Lane Dep.Warng.Indic. Lamp

# **New Subaru Coverage**

#### 1 new Adjustment type special tests:

**VSC Sensor Neutral Memorization** 

# New Toyota/Lexus Coverage

Added coverage for 463 new system applications

#### 631 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 Operation Limit History Counter Clear, A/T Code Reset, aCol Function, Activate The EGR Valve Close Bank 1, Activate The VN Turbo Open Bank 1, Activate The VSV For Air Bleed Control, Add Foot Air in FACE Mode, Advanced Illumination System Setting, Advanced Park Parallel Parking Control Area, Advanced Park Perpendicular Parking Control Area, AFS (Electronic Swivel) Function, AFS Function, AHS Function, AHS Operation Pattern Setting, AHS Operation Vehicle Speed Setting (Pattern1), AHS Operation Vehicle Speed Setting (Pattern2), AHS Operation Vehicle Speed Setting (Pattern3), Air Bleeding, Air Conditioner Switch Indicator Function, Air Inlet Damper Mode, Air Inlet Damper Targ Pulse, Air Inlet Mode, Air Outlet Servo Pulse (P), Air Purifier Auto Cancel, Air Purifier, All Readiness, All Unlock/Open-Close, Ambient Temperature Adjustment, Ambient Temperature Shift, 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 Power Window Down, Back Door Power Window Up, Backup Battery Replacement Reset, Bad Weather Function, Battery Status Info Update, Blower Operation Setting (StopStart), Bluetooth Connection History, Body Control with Torque Demand, Body Ctrl with Torque Demand, Brightness Level Adjust (Canceling), Brightness Level Adjust (Lowering), BSM Approaching Vehicle Detection Timing Setting, BSM Buzzer Volume Adjust, BSM Master Abnormal History, BSM Mirror Indicator Brightness, BSM Slave Abnormal History, Button Press Buzzer, Camera Synchronous Error History, Center Console Spot Light, Clear Abnormal Operation History, Clearance Warning Buzzer Volume, Close ALL P/W Function, Closer Power Operation, Coming Home Light, Compressor Mode, Compressor/Air Inlet DEF operation, 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, Deceleration Sensor Zero Point Calibration, DEF(PSW/Lock) Mode Setting,

Delay of Monitoring, Destination Setting, Detection of Vehicle, Diagnostic Mode, Disp Ex OFF Sen, Disp Ex ON Sen, Door Auto Lock Timer Setting, Door Handle Lock Button, Door Key P/W Down, Door Key P/W Up, Door Key Related Close, Door Key Related Open, Door Key Related Operation, Door Lock Answerback Sound Setting, Door Lock Indicator Function, Door Lock Indicator Pattern Setting (IG OFF), Door Lock Indicator Pattern Setting (IG ON), Door Open SW Operation Adjust, Door Unlock 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, Driver Seat Distance Adjust when Get Off, Driver Seat Lift Up Distance Adjust when Get Off, Driver Seat RA Lumbar Support Oper, Driver Seat RA Pelvis Support Oper, Driver Seat RA Side Support Oper, Driver Seatbelt Warning Buzzer Function, Driver Side Seatbelt Warning Buzzer, DRL Function, ECB Utility, 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, Efficient Ventilation Mode, Electronic Swivel Function, Emblem Sensor Detection Sensitivity, Emission Gas Sensor Shift, Engine Start Indicator, Engine Switch Light Function, Entry Delay, Time, Entry Delay, Entry Unlock Twice Function, EPB Initialize, 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 Neck Heater Auto Mode Adjustment, FR Seat A/C and Heater Sensitivity Adjust, Fr/Rr Seat Interference Avoidance Function (D), Fr/Rr Seat Interference Avoidance Function (P), Front Center Seatbelt Warning Buzzer Function, Front Passenger Side Seatbelt Warning Buzzer, Front 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, HWD Auto Function, I/L ON W/Door Key Unlock, I/L when ACC OFF, 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, 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, Ion Generate Control, IPA Obstacle Avoidance Distance, IPA Parallel Parking Control Area, IPA Perpendicular Parking Control Area, 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, 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, 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, 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, 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, One Touch Open/Close SW Operation Setting (RL), One Touch Open/Close SW Operation Setting (RR), Open Door Warning Function, Operation History Clear, Optical Disc Error History, Ottoman Return Position, Out-Handle-Lgt Approached, Out-Handle-Lgt Unlocked, Out-Handle-Lgt w/Master SW, Outside Air Mode Auto Switch Function, Outside Door Handle Fold Adjust, Outside PSD SW Operation(RL), Outside PSD SW Operation(RR), Oxygen Supply, P Auto Operation Interference Avoidance Function, P Seat Auto Switch Return 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 Window Voice Control Function, Pre Air Conditioner Defrosting Function, Prevention of Key Left in Vehicle, Prohibition Flag of FHL Function, Projection Adjustment (Distortion), Projection Adjustment (Keystone), Projection Adjustment (Tilt), Proposal Service Frequency Adjust, Proposal Service Volume Adjust, Proposal Services Function, Provision of When Door is Half Open, Proximity Sound Control (Vehicle Stationary), Proximity Sound Level Increase (Vehicle Starting), Proximity Sound Volume Adjustment, PSD Buzzer (LH), PSD Buzzer (RL), PSD Buzzer (RR), PSD Preparation for Open Function, PSD SW Operation (LH), PSD SW Operation (RL), PSD SW Operation (RR), P-Seat Auto Pattern, R Wiper Stop Function at Back Door/Trunk Lid Open, RA Ottoman Operation, Rain Mode, RCTA Function, RCTAB Function, Rear

A/P HI Set, Rear Center Seatbelt Warning Buzzer Function, Rear Curtain Close Relay, Rear Curtain Open Relay, Rear Left Master SW Shade Function, Rear Left Seatbelt Warning Buzzer Function, Rear Right Master SW Shade Function, Rear Right Seatbelt Warning Buzzer Function, Rear Seat Interference Avoidance Function (P), Rear Seatbelt Warning Buzzer Function, Rear Seatbelt Warning Buzzer, Rear Shade Delay Time, Rear Sunshade linked with Shift Lever R Funct, Rear SW Auto Operation, Rear Wiper INT Operation, Rear Wiper Washer Function, Rear Wiper with Reverse Setting, Refrigerant Pressure History Clear, Refrigerant Shortage Check, Relax with Ottoman Up, Relax with P-Seat Lift, Relax with P-Seat Slides, Remote Air Conditioner Start Setting, Remote Air Conditioner Stop Setting, Remote Door Lock Setting, Reset A/C Information, Reset Memory, Residential Area Mode Setting, Response Time Adjust, Return with Passenger Seat, Reverse Buzzer Setting, Reverse Coupled Actuation Mirror Angle Setting, Reverse Coupled Actuation Mirror Angle, Right Headlight Shade Angle Setting, RL Back View Auto Memory Operation Function, RL Back View Memory Operation Slide Pos Setting, RL Business Mode Operation Site Change Function, RL Door Open Return Auto Function, RL Door Open Return Reinstatement Auto Function, RL Entertain Mode Operation Site Change Function, RL Entertain Mode P-Seat Target Position Setting, RL Interference Avoidance Operation Area Setting, RL Manual Ottoman Close Finish Buzzer Function, RL Memory Operation Ottoman Position Setting, RL Occupant Condition Setting, RL Ottoman Operation Buzzer Function, RL Pressure Correction Function, RL Refresh Spot Heater Upper Limit Temp Setting, RL Relaxation Mode Operation Site Change Function, RL Riding Position Operation Function, RL Seat A/C and Heater Sensitivity Adjust, RL Seat Back Finish Buzzer Function, RL Seat Back Operation Order Change Setting, RL Seat Heater Auto Function, RL Seat Lift Up Buckle Operation Function, RL Seat Operation Site Change Function, RL Warmth Refresh Heater Level Setting, RL Window Auto Down From Driver, RL Window Auto Down, RL Window Auto Up From Driver, RL Window Auto Up, Roof Opened Intrusion Function, Room Light when Aprchd, R-pos to Rear Sun Shade COM, RR Back View Auto Memory Operation Function, RR Back View Memory Operation Slide Pos Setting, RR Business Mode Operation Site Change Function, RR Door Open Return Auto Function, RR Door Open Return Reinstatement Auto Function, RR Entertain Mode Operation Site Change Function, RR Manual Ottoman Close Finish Buzzer Function, RR Memory Operation Ottoman Position Setting, RR Occupant Condition Setting, RR Ottoman Operation Buzzer Function, RR Pressure Correction Function, RR Refresh Spot Heater Upper Limit Temp Setting, RR Relaxation Mode Operation Site Change Function, RR Riding Position Operation Function, RR Seat A/C and Heater Sensitivity Adjust, RR Seat Back Finish Buzzer Function, RR Seat Back Operation Order Change Setting, RR Seat Heater Auto Function, RR Seat Lift Up Buckle Operation Function, RR Seat Operation Site Change Function, RR Warmth Refresh Heater Level Setting, RR Window Auto Down From Driver, RR Window Auto Down, RR Window Auto Up From Driver, RR Window Auto Up, S-Belt-Bkl-Lgt/ACC OFF, S-Belt-Bkl-Lgt/Door Open, Scuff Plate Lamp linked to D-Door Unlock SW, Scuff Plate Lamp linked to Door open, Scuff Plate Lamp linked to Smart, Scuff Plate Lamp linked to Wireless Key, Seat Airflow Mode Setting, Seat Belt Warning, Seat Blast Mode Setting, Seat Heater Auto Operation, Seat Lift Up Distance Adjust, Seat Move Distance, Seat Position Voice Control Function, Seat position/Tilt Telesco memory recall setting, Seat Switch Link Function, Seat Travel Distance, Seatbelt Information Indicator, Security Alarm Setting, Security Control with Mechanism Key Function, Security control with mechanism key, Security System, Sedan/Wagon Setting, Sensitivity Adjust, Sensitivity, 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, Slide Link Cushion Length Ctrl, Slide Link Hdrest Length Ctrl, Slide Roof Open Warning Function, Slide Roof Open Warning, Slide Roof Voice Control Function, Software Error History, 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 Heater Auto Function, Steering Heater Sensitivity Adjust, Step Light Lighting Time, Stop PreA/C, SUBARU/Toyota, Sudden Braking Notification Function, Suggestion Service Function, Switch Grille Shutter Control Mode, Switch Oil Maintenance Display, T1 RoomLamp BatterySave, Tacho Meter Mode, Tail Remind Buzzer Function, Tail Remind Buzzer, Telematics Microphone Volume Adjust, Telematics Speaker Volume Adjust, Timing Adjustment of PSD Prep for Open Function, Tire Circumference Setting, Tire Pressure Sensor Registration, Torque Sensor Adjustment, Touch Activation Over Threshold, Touch Panel Reaction Time Adjust (Multi Operation), Town Mode, Traffic Sign Recognition Animation Function, Trunk Lid Linked with Door Lock Function, Trunk Lid Open Mode Function, Trunk Lid Operation by Electrical Key Function, Trunk Lid Operation by Entry Function, Trunk Lid Operation, Trunk Link with Door Lock, 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, Valet Mode Cancel, Video Device Connection Check(mm), Voice Guidance Function, VSC Sensor Neutral Memorization, VSC/TRAC/4WD Control Prevention Mode, Walk Away Lock after Getting Out Func (Closing), Walk Away Lock after Getting Out Function, Warning by Glass Broken Sensor, Warning by Horn Function, Warning by Horn, Warning Time, Window Open Warning Function, Window Open Warning, Wiper Specification Switch, Wiper Voice Control Function, Wireless Auto Lock, Wireless Backdoor Open Operation Adjust, Wireless Buzzer Resp, Wireless Buzzer Response Function, Wireless Buzzer Vol, Wireless Buzzer Volume Setting, Wireless Buzzer Volume, Wireless Control Function, Wireless Control, Wireless Glass Hatch Open Operation Adjust, Wireless Glass Hatch Open, Wireless Key Related Close, Wireless Key Related Open, Wireless Key Related Operation, Wireless Lock Function with Doors Open, Wireless PBD Operation, Wireless Power Back Door Open, Wireless PSD Operation (RL), Wireless PSD Operation (RR), Wireless PSD SW Operation (LH), Wireless PSD SW Operation(RL), Wireless PSD SW Operation(RR), Wireless Trunk Lid Open Operation Adjust, Wireless Unlock Twice Function, Write VIN, Zero Point Calibration Sensitivity Check, Zero Point Calibration, Zero Point Sensor Calibration

### 1216 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 Indicator Lamp, A-C Driving Demand, Access to Rear Seat Signal, Accumulator Drive, Accumulator Valve, ACM Inhibit, Activate DPF Rejuvenate (PM), Activate DPF Rejuvenate (S), Activate DS1 Solenoid, Activate DS2 Solenoid, Activate DSL Solenoid, Activate EGR Cooler Bypass VSV, Activate Fuel Pressure Switching Valve, Activate Fuel Route Switching Valve Relay, Activate Lock Up, Activate S1 Solenoid, Activate S2 Solenoid, Activate S3 Solenoid, Activate S4 Solenoid, Activate SL Solenoid, Activate SL1 Solenoid, Activate SL2 Solenoid, Activate SL3 Solenoid, Activate SL4 Solenoid, Activate SL5 Solenoid, Activate 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 Heater 2 Relay, Activate the Electric Heater 3 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 (DS1), Activate The Solenoid (SC1), Activate The Solenoid (SC2), Activate the Solenoid (SC3), Activate the Solenoid (SL6), Activate The Solenoid (SLC), Activate The Solenoid (SLG), Activate The Solenoid (SLN), Activate the Solenoid (SLS) High/Low, Activate the Solenoid (SLS) MAX/MIN, Activate The Solenoid(Sc), Activate The Solenoid(Slp), Activate The Starter Relay, Activate the TC Terminal, Activate The Vacuum Pump, Activate The VALVEMATIC After Warm Up, Activate The VALVEMATIC Before Warm Up, Activate The VN Turbo Cleaning, Activate The VSV For AICS, Activate The VSV For Canister Control, Activate The VSV For Evap Control, Activate The VSV For Exhaust Brake, Activate The VSV For Fuel Pressure Up Control, Activate The VSV For Intake Control, Activate The VSV For Purge Cut, Activate The VSV For Secondary Air Control, Activate The VSV For Swirl Control Valve, Activate The VSV For Tank Bypass, Activate The VSV For Vent Valve, Activate The Water Flow Valve 3, Activate The Water Flow Valve 4, Activate The Water Flow Valve 5, Activate The Water Pump, Activate Vent VSV, Active TRC Indicator, Active TRC Warning Indicator, ACTIVE TRC Warning, Adjustable Seat, Advanced Parking Guidance Indicator, Advice Display, AF/O2 Sensor Operation, AFS Alarm Display, AFS Indicator (Malfunction) Display, AFS OFF Indicator, AHS LH High Beam, AHS RH High Beam, Air Bypass Valve Solenoid, Air Cleaner Warning, Air Conditioner Auto Indicator, Air Inlet Damper (Rear), 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, 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, Audio / Heater IG, Audio / Heater Power Supply, Auto Air Conditioner Indicator, Auto High Beam Control Indicator, Auto High Beam Warning Indicator, Auto Leveling Headlamp Indicator, Auto LSD Indicator, Auto Oil Supply System, Auto Power OFF Cancel, Automated EVAP Test, Automatic High Beam Indicator (Green), Automatic High Beam Indicator (Yellow), Automatic High Beam Indicator, Automatic High Beam Operation, Automatic High Beam Switch Light, Automatic High Beam, Auxiliary Battery Charge Warning, Auxiliary Battery Warning, AVS Comfort Indicator, AVS Sports Indicator, Back Door Select, Backup Relay, Batt Cool Down Servo Targ Pls, Battery Magnetic Valve, Beep, Blind Spot Monitor Indicator, Blower Level, Blower Motor, BR2-BL2 Heater, BR5-BL5 Heater, Brake Ejector VSV, Brake Hold Indicator, Brake Indicator Lamp, Brake Lining Wear Warning, Brake Override Indicator, Brake Override Warning, Brake Warning, 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 Engine Lamp, Check Engine Warning, Check Mode, Check The Imbalance Cylinder, Clearance Light (+ Front Side Marker Light), Clearance Light, Clearance Sonar Indicator (Daytime), Clearance Sonar Indicator (Night Running), Clearance Sonar Indicator (Night Stopping), Clearance Sonar LCD Indicator, Clearance Sonar Switch Activation, CNG Mode Indicator, Collision Door Lock Release, Color Test Screen (Adjustment), Color Test Screen (Black), Color Test Screen (Blue), Color Test Screen (Color Bars), Color Test Screen (Green), Color Test Screen (Red), Color Test Screen (White), Compression Check, Compression Test, Compressor Motor Relay, Compressor Target Speed, Connect The TC And TE1, Control ETCS Open/Close - Fast, Control ETCS Open/Close - Slow, Control The A/C Cut Signal, Control The A/C Magnet Clutch, Control the ACIS VSV Motor Duty Ratio, Control The All Cylinders Fuel Cut(CNG), Control The All Cylinders Fuel Cut, Control The C/D, Control the Cylinder#1 Fuel Cut, Control the Cylinder#2 Fuel Cut, Control the Cylinder#3 Fuel Cut, Control the Cylinder#4 Fuel Cut, Control the Cylinder#5 Fuel Cut, Control the Cylinder#6 Fuel Cut, Control the Cylinder#7 Fuel Cut, Control the Cylinder#8 Fuel Cut, Control The EGR Step Position Bank 1, Control The EGR Step Position, Control The EGR System, Control The Electric Cooling Fan, Control the Electric Thermostat Duty Ratio, Control the Engine Cooling Fan Duty Ratio, Control The ETCS Open/Close Fast Speed, Control The ETCS Open/Close Slow Speed, Control The Exhaust Exterior Valve Angle, Control the Exhaust VVT OCV Duty Ratio Bank 1, Control the Exhaust VVT OCV Duty Ratio Bank 2, Control The Fuel Pump / Speed, Control the Fuel Pump Duty Ratio, 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 Position, Control The Shift Ratio (CVT), Control The Supercharger, Control the Target Fuel Pressure Offset, Control the Transmission Oil Pump, Control The VVT Linear (Bank1), Control The VVT System (Bank1), Control the VVT-iE Linear (Bank 1), Control the VVT-iE Linear (Bank 2), Control the Wastegate Valve Duty Ratio, Cool A/M Servo Pulse(D), Cool A/M Servo Pulse(P), Cool Air Bypass Damper (Driver Side), Cool Air Bypass Damper (Passenger Side), Cool Air Bypass Pls(P), Cool Air Bypass Pulse, Coolant Cool Warning Lamp, Coolant Hot Warning Lamp, Cooling Electric Expansion Valve, Cornering Lamp Test, Cornering Light, Cornering Light-Front Side Illuminate Light (Dim), Cornering Light-Front Side Illuminate Light, Courtesy Light, Courtesy SW Signal, CRAWL Indicator, CRAWL Warning Indicator, CRAWL Warning, Cruise Indicator (Yellow), Cruise Indicator, Cushion Length, Cylinder Compression Check, D-4S (A/F Control), D-4S (Fuel Cut), D-4S (Injection Volume), 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 Relay Rear, Dehumidification Magnetic Valve, Deicer Relay Front, Delivery Heater, Delivery Shut Valve, Diesel Particulate Filter Warning, Diesel Throttle Target Angle 2, Diesel Throttle Target Angle Bank 1, Diesel Throttle Target Angle, Diffuse Pulse(R), Dimmer Signal, Disconnect System Function Check, Door Illumination 1, Door Illumination 2, Door Lock Indicator, Door Lock, Door Lock/Unlock Status Lamp, Door Open Warning, Door Unlock, Double Lock Unset, Downhill Assist Control Indicator, Downhill Assist Control 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 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, DSU Solenoid, Easy Access Buckle, ECB Main Relay, ECB Solenoid (SLA), ECB Solenoid (SLR), ECB Warning, ECO Mode Indicator, ECONO Indicator, ECT PWR Indicator, ECT SNOW Indicator, EGR Cut VSV, EGR Step Position #2 Control, EGR Step Position, Electric Heater1, Electric Heater2, Electric Heater3, Electric Water Heater, Electric Water Pump, Electrical Fan, Electromagnetic Oil Pump, Emergency Call Cancellation, Emergency Exit Warning, Emission Pulse(R), Enforced Driving FHL Warning Trigger, EPB Auto OFF Indicator, EPB Control Switch, EPS Warning, EV Drive Indicator, EV Mode Indicator, EV System Warning Lamp, Evaporator Magnetic Valve, Exhaust Bypass VSV Control, Exhaust Gas VSV Control, Exhaust Shutter VSV, Exhaust Solenoid1, Exhaust Solenoid2, Exhaust Switching VSV, EXO, Extended Illumination 1, Extended Illumination 2, Exterior Lighting SW, Extra High Beam, Face A/O Servo Pulse(D), Face A/O Servo Pulse(P), FL Gas Spring Switch Valve, FL Wheel Up/Down, Flash Handle Fold, Flash Handle Return, Fold/Unfold Mirrors, Foot A/O Servo Pulse(D), Foot A/O Servo Pulse(P), Foot Light, Four-Wheel Damping Force Full Hard, Four-Wheel Damping Force Full Soft, Fr Control Rear Air Outlet Damper Servo Motor, FR Gas Spring Switch Valve, FR Wheel Up/Down, Front Air Mix Damper Control Servo Motor, Front Air Outlet Damper Control Servo Motor, Front Buzzer, Front Deicer Relay, Front Evaporator Magnetic Valve, Front Fog Lamp Indicator, Front Fog Light Relay, Front Fog Light, Front Foot Light, Front Footwell Lights, Front Gate Valve, Front Left Air Mix Damper Control Servo Motor, Front Left Air Outlet Damper Control Servo Motor, Front Left Height Solenoid, Front Left Seat Blower, Front Left Seat Heater, Front Left Solenoid, Front Left Wheel Up/Down, Front Passenger Side Door Open, Front Passenger Side Seat Belt, Front Right Air Mix Damper Control Servo Motor, Front Right Air Outlet Damper Control Servo Motor, Front Right Height Solenoid, Front Right Seat Blower, Front Right Seat Heater, Front Right Solenoid, Front Right Wheel Up/Down, Front Sliding Sunshade, Front Vertical Operation, Front Vertical, Front Washer Relay, Front Washer, Front Wheel Up by Accumulator, Front Wheel Up/Down, Front Wiper Hi Operation, Front Wiper Lo Operation, Fr-Seat Inside Transmitter, Fuel Cap Reminder Warning, Fuel Consumption Meter Operation, Fuel Cooler Solenoid Valve, Fuel Cooler VSV, Fuel Cut Bank 2 For Idle, Fuel Filler Opener, Fuel Filter Indicator, Fuel Filter Warning, Fuel Gauge Indicator, Fuel Gauge Operation (1-2), Fuel Gauge Operation (1-4), Fuel Gauge Operation (3-4), Fuel Gauge Operation (Empty), Fuel Gauge Operation (Full), Fuel Gauge Operation (Sender E), Fuel Gauge Operation (Sender F), Fuel Gauge Operation (Warning), Fuel Gauge Operation For CNG (1-2), Fuel Gauge Operation For CNG (1-4), Fuel Gauge Operation For CNG (3-4), Fuel Gauge Operation For CNG (Empty), Fuel Gauge Operation For CNG (Full), Fuel Gauge Operation For CNG (Sender E), Fuel Gauge Operation For CNG (Sender F), Fuel Gauge Operation For CNG (Warning), Fuel Indicator (CNG), Fuel Indicator Lamp, Fuel Injector Timing, Fuel Leak Test, Fuel Lid Lock Relay, Fuel Lid Opener, Fuel Lid, Fuel Meter Operation (CNG), Fuel Meter Operation (Reductant), Fuel Meter Operation, Fuel Pressure Relief Valve Open, Fuel Pump - Duty Cycle, Fuel Pump Duty Control, Fuel Pump Duty, Fuel Pump Relay, Fuel Pump Single Phase Energization (U Phase), Fuel Pump Single Phase Energization (V Phase), Fuel Pump Single Phase Energization (W Phase), Fuel Pump Single Phase Energization, Fuel Pump Speed Control, Fuel Vapor-Containment Valve, Fuel Warning (CNG), Glass Hatch Open Operation, Glass Hatch Open, GLOW Warning, Go to Dealer Indicator, Go To Service Warning, Green Indicator, Hard Switch Lighting, Hazard Answer Back, Hazard, HCAC System VSV, HCAC VSV Check, HCAC VSV, Head Lamp Warning Indicator, Head Light Hi, Head Up Display Indicator, Headlamp Indicator, Headlight Cleaner, Headlight High Beam, Headlight Indicator, Headlight Leveling Indicator Display, Headlight Leveling Indicator, Headlight Leveling Initialize Incomplete Display, Headlight Low Beam, Headlight Relay, Headlight Relay-Light Power Supply Relay, Headlight System Malfunction Display, Headrest Front-Rear, Headrest Motor, Heads Up Display Indicator, Heat Exchange Shut Valve, Heater Valve, Heating Electric Expansion Valve,

Heating Three-way Valve, Height Control Prohibition Switch, Height High Indicator, Height High Warning, HICM System Check, High Beam Headlight, High Beam Indicator, High Beam LH, High Beam RH, High Pressure Magnetic Valve, High Voltage Electric Heater, High-Beam Headlights, Hold Indicator, Hold Lamp, Hot A/M Servo Pulse(D), Hot A/M Servo Pulse(P), HV System Certification Mode Indicator, HV System Indicator (0%), HV System Indicator (100%), HV System Indicator (200%), HV System Indicator (300%), HV System Indicator (400%), HV System Indicator (-50%), HV System Indicator (MAX), HV System Indicator (MIN), HV Unit Hot Warning Indicator, HV Unit Hot Warning, HV-EV System Indicator (0%), HV-EV System Indicator (100%), HV-EV System Indicator (200%), HV-EV System Indicator (300%), HV-EV System Indicator (400%), HV-EV System Indicator (-50%), HV-EV System Indicator (MAX), HV-EV System Indicator (MIN), HWD Relay, Hybrid Battery Charge, Hybrid Battery Heater Relay, Hybrid System Warning, Hydrogen Leak Indicator, Hydrogen Leak Warning, IAC Duty Ratio, ICS OFF Indicator, ICS OFF Warning, IG OFF P/W Control Permission Output, IG OFF P-W Control Permission Output, IGP Signal, Illuminated Entry System, 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. 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, Indicator TEMS Sports, 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 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 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, 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 Mode Indicator (Yellow), Luggage Mode Indicator, Lumbar Bottom, Lumbar Lift, Lumbar Middle, Lumbar Slide, Lumbar Upper, M/H Bypass Cool Servo Pls, M/H Bypass Hot Servo Pls, Magnetic Clutch Relay, Magnetic Valve Operation, Main Battery(HV) Indicator, Maintenance Indicator Lamp, Maintenance Warning, Manual EVAP System Check, Master Warning, Memory Cancel Light, Meter Day Mode Switch, Meter Display (0), Meter Display (1), Meter Display (2), Meter Display (3), Meter Display (4), Meter Display (5), Meter Display (6), Meter Display (7), Meter Display (8), Meter Display (9), Meter Display (All), Meter Display 1, Meter Display 2, Middle Pressure Magnetic Valve, Mirror Auto Indicator (Daytime), Mirror Auto Indicator (Night Running), Mirror Auto Indicator (Night Stopping), Mirror Fold Signal, Mirror Fold, Mirror Heater Relay, Mirror Heater, Mirror Left/Right, Mirror Return Signal, Mirror Return, Mirror Up/Down, MMT E Mode Warning, Motor Relay Control, Motor Relay, Multi Channel SW, Multi Display All (White), Multi Display Default Screen, Multi Display Select Switch, Multi Switch (Back), Multi Switch (Down), Multi Switch (Enter), Multi Switch (Left), Multi Switch (Right), Multi Switch (Top), Multi Switch (Up), Multi Switch Operation, Navi CVT Indicator, Night Lighting, Night View Indicator, O/D Cut Signal, O-D OFF Indicator, ODO-TRIP Change Switch, OFF Road Guidance Indicator, OFF Road Guidance Warning, Off-road 1 Indicator (Daytime), Off-road 1 Indicator (Nighttime), Off-road 2 Indicator (Daytime), Off-road 2 Indicator (Nighttime), Off-road 3 Indicator (Daytime), Off-road 3 Indicator (Nighttime), Off-road 4 Indicator (Daytime), Off-road 4 Indicator (Nighttime), Off-Road Switch Light, Oil Level Warning, Oil Pressure Meter Operation (1-2), Oil Pressure Meter Operation (1-4), Oil Pressure Meter Operation (3-4), Oil Pressure Meter Operation (HIGH), Oil Pressure Meter Operation (LOW), Oil Pressure Meter Operation, Oil Pressure Warning, Oil Pump, Open Door Warning, Ottoman Short-Long, Ottoman, Outside Mirror Footwell Lights, Outside Trunk/Backdoor Transmitter, Over Speed Indicator, Overhead Tuner Power Supply ON, Oxygen Drive, P Range Indicator, P Supply for Steering Lock, Panel Light, Park Warning, Passenger Seat Operation Switch Indicator, Passenger Side Seat Belt Warning, PBD Buzzer, PBD Close SW Light, PBD Clutch, PBD Motor, PBD Open/Close, PCS Buzzer, PCS OFF Warning, PCS Warning Indicator, PCS Warning, Pedestrian Protection Warning, Pelvis Support Operation, Pinion Gear Plunger (Hood Close), 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 Warning, Pre-crash Indicator, Prohibit The Catalyst OT Misfire Prevent F/C, Protection Relay, Proximity Sound (Low Speed), Proximity Sound (Vehicle Stationary), Proximity Sound Indicator, Pr-Seat Outside Transmitter, Pr-Seat Select, PSD Buzzer, PSD Close, PSD Clutch, PSD Motor, PSD Open Signal, PSD Open, P-Seat Outside Transmitter, P-Seat Select, PTC Heater, Pump Motor Relay, Purge Dilution Valve Duty Bank 2, R/L Selection SW Left Indicator Full, R/L Selection SW Left Indicator Red, R/L Selection SW Right Indicator Full, R/L Selection SW Right Indicator Red, Radar Cruise Approach Alarm Buzzer, Radar Cruise Indicator (Yellow), Radar Cruise Indicator, Radar Cruise Proximity Warning Buzzer, Radar Cruise Ready Indicator, Radar Cruise Stop Buzzer, Radar Cruise Stop Keeping Announce Buzzer, RCD OFF Indicator, RCTA Indicator, RCTA OFF Indicator, Ready Indicator, Rear A/M Servo Pulse(P), Rear A-C Mag Valve, Rear Air Mix Damper Control Servo Motor, Rear Air Mix Servo Target Pulse, Rear Blower Level, Rear Blower Motor, Rear Buzzer, Rear Defogger Relay, Rear Defogger, Rear DIFF LOCK Indicator, Rear Door Sunshade Down, Rear Door Sunshade Up, Rear Fog Lamp Indicator, Rear Fog Lamp, Rear Fog Light Relay, Rear Fog Light, Rear Gate Solenoid, Rear Gate Valve, Rear Inner Wheel Control Indicator, Rear Inner Wheel Control Warning, Rear Inverter Cooling Fan, Rear Left Height Solenoid, Rear Left Seat A/C Auto Indicator Full, Rear Left Seat A/C Auto Indicator Red, Rear Left Seat A/C Indicator Full, Rear Left Seat A/C Indicator Red, Rear Left Seat Blower, Rear Left Seat Heater, Rear Left Solenoid, Rear Left Wheel Up/Down, Rear Leveling Solenoid, Rear Light Indicator, Rear personal light, Rear Right Air Mix Damper Control Servo

Motor, Rear Right Height Solenoid, Rear Right Seat A/C Auto Indicator Full, Rear Right Seat A/C Auto Indicator Red, Rear Right Seat A/C Indicator Full, Rear Right Seat A/C Indicator Red, Rear Right Seat A/C Level Indicator Red, Rear Right Seat Blower, Rear Right Seat Heater, Rear Right Solenoid, Rear Right Wheel Up/Down, Rear Seat Belt Warning, Rear Seat Belt, Rear Seat Lumbar Adjustment, Rear Side Buckle Light, Rear Washer Relay, Rear Washer, Rear Wheel Up by Accumulator, Rear Wheel Up/Down, Rear Wiper Operation, Rear Wiper Washer Motor Relay, Red Indicator, Reductant Consumption Warning, Reductant Discharge, Reductant Filling (Pressure Keep), Reductant Injection Valve, Reductant Pipe Heater, Reductant Pump Check (Backward), Reductant Purge, Reductant Quality Warning, Reductant Tank Heater, Reductant Warning Indicator, Reductant Warning, Refresh B1, Refresh B2, Refresh B3, Refresh B4, Refresh B5, Refresh BL1, Refresh BL2, Refresh BL3, Refresh BL4, Refresh BL5, Refresh BR1, Refresh BR2, Refresh BR3, Refresh BR4, Refresh BR5, Refresh C1, Refresh C2, Refresh C3, Refresh C4, Refresh C5, Refrigerant Gas Volume Check, Regulator Shut Valve, Relay for Interior Light Auto Cut Function, Release Actuator, 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 Up/Down, Rr Inner Wheel Control Indicator, Rr Inner Wheel Control Warning, RR Wheel Up/Down, Rr-Seat Inside Transmitter, SCV Duty Ratio, Seat Backrest Recline, Seat Belt Indicator, Seat Heater Active Level, Seat Memory Light, Seat Slide Operation, Secondary Air VSV Control, Security Horn 2, Security Horn, Security Indicator, Self Power Siren, Sensitivity Check, SET Indicator, Shift-By-Wire Warning, Shock Detection Unlock, Shoulder, Shut Off Valve, Side Back Support, Side Cushion Support, Side Mirror Foot Light, Side Support Operation, Signal Check, SIL Down Indicator, SIL Indicator (Down), SIL Indicator (Up), SIL Up Indicator, SLC Solenoid, Slide Roof, Sliding Sunshade, Slip Control System, Slip Warning, SLS Pressure, Smart System Indicator, Smart System Warning, SOC Gauge (1-2), SOC Gauge (1-4), SOC Gauge (3-4), SOC Gauge (MAX), SOC Gauge (MIN), SOC Warning Indicator, SOC Warning, Solenoid (SB), Solenoid Relay, Solenoid (SB), Solenoid (ST), Sound, Speed Alarm Buzzer, Speed Meter Operation, Speed Signal Input (0), Speed Signal Input (120), Speed Signal Input (160), Speed Signal Input (200), Speed Signal Input (240), Speed Signal Input (280), Speed Signal Input (320), Speed Signal Input (360), Speed Signal Input (40), Speed Signal Input (400), Speed Signal Input (80), Speedometer Operation (0km-H,0mph), Speedometer Operation (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), Starter (Hood Close), Starter Motor Drive Magnet Switch (Hood Close), Steering Heater Indicator (Yellow), Steering Heater, 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, Stratified Charge Combustion, Sub Fuel Gauge Operation (1-2), Sub Fuel Gauge Operation (1-4), Sub Fuel Gauge Operation (3-4), Sub Fuel Gauge Operation (Empty), Sub Fuel Gauge Operation (Full), Sub Fuel Gauge Operation (Sender E), Sub Fuel Gauge Operation (Sender F), Sub Fuel Gauge Operation, Sub Fuel Tank VSV, Supercharger Control, Swirl Control VSV, Tachometer Operation (0rpm), Tachometer Operation (10000rpm), Tachometer Operation (2000rpm), Tachometer Operation (3000rpm), Tachometer Operation (4000rpm), Tachometer Operation (5000rpm), Tachometer Operation (6000rpm), Tachometer Operation (7000rpm), Tachometer Operation (8000rpm), Tachometer Operation (9000rpm), Tachometer Operation, Tail OFF Indicator, Taillamp Indicator, Taillight Relay, Taillight-Clearance Light, Target Fuel Pressure Control, Telesco Operation, 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, Tilt Operation, Timer Switch (00), Timer Switch (H), Timer Switch (M), Timer Switch (Single), Tire Pressure Warning System Indicator, Tow Haul Indicator, Trip Reset Switch, Trunk And Back-Door Open, Turbo Boost VSV Control, Turbo Boost VSV, Turbo Charger Step Motor, Turbo Pressure VSV, Turn Light LH Relay Operation, Turn Light RH Relay Operation, Turn Signal Indicator - Left, Turn Signal Indicator - Right, Upper Air Mix (Driver Side), Upper Air Mix (Passenger Side), Variable Intake VSV Control, Variable Shade Beam LH, Variable Shade Beam LH/RH, Variable Shade Beam LH-RH, Variable Shade Beam RH, Varial Intake VSV, Vehicle Approach Warning OFF Indicator, Vehicle Horn, Vehicle Proximity Notification System Warning, Vehicle Stop Warning, VGRS Warning, Viscous Heater, VN Turbo Open, Volt Meter Operation (0V), Volt Meter Operation (12V), Volt Meter Operation (15V), Volt Meter Operation (18V), Volt Meter Operation (3V), Volt Meter Operation (6V), Volt Meter Operation (9V), VSC Indicator Lamp, VSC TRC Indicator, VSC/TRC Indicator, 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, Wiper Motor Hi, Wiper Motor Lo, Wiper Power Relay, Wireless Buzzer, Wireless Door Lock Diag Mode

# New Coverage Details - USA European

# New BMW Coverage

# 43 new Adjustment type special tests:

Activate Parking Brake For Pad Replacement, Activate power steering, Activate Vehicle Mode, Activate/Deactivate Transportation Mode, Adaption Function Reset, Ambient lighting adaptation, Ambient lighting: Automatic addressing, Assembly Position Of Window Lifters, Auxiliary Battery (24V EPS) Exchange, Bluetooth Activate/Deactivate, Bluetooth interface activation/deactivation, Camera functional test, Central electronics control unit reset, Deactivate Parking Brake For Pad Replacement, Delete the personal profile, Disassembly position of window lifters, Driver's Door Power Window Regulator Initialisation, ECU Reset, Electrical Steering Column Adjustment Standardization, EPS: Steering Start-Up, Exterior mirror test, Front Driver/Pass Door Power Window Regulator Initialization, Front Passenger's Door Power Window Regulator Initialisation, Headlight range control functional test, Initialization Of Both Rear Window Lifters, Keyless entry: Deactivate/activate, Learn Steering End Stop, PDC Sensor Functional Test, Rear Driver/Pass Side Door Pwr Window Regulator Initialization, Reset Adaptation Parameters, Reset Control Unit, Reset Starter Lock, Reset Steering Angle Offset Values, Reset Tone Setting, Selector lever control unit reset, Settings, Slide/Tilt Sunroof Initialization, Steering Basic Setting, Steering column adjustment adaptation, Steering column adjustment initialisation, Window lifter motors: Adapting, Window Lifter Standard Initialization, Windshield Wiper Service Position Adjustment

# 67 new Actuation type special tests:

Activate SDARS, Audio system self test, Auto-Hold Indicator Lamp, BDC Terminal\_15 (de-)activation, Black Test Card, Blue Test Card, Brake Lights, Check Antennas, Compressor Clutch, Control Valve In A/C Compressor, Cornering Light Functional Test, Cornering Light,

Deactivate Hard Disk Protection Mode, Delete Coupled Bluetooth Devices, Dim mirror, Display Test, Exterior mirror: System self-test, Fog Lights, Front Door Power Windows Regulator Initialisation, Green Test Card, Headlight Washer System, High-Beam Headlights, Horn, Issue Front PDC Signal Tone, LED headlamp test, Locator Lighting, Lock All Doors, Lock and Enable, Low-Beam Headlights, LWR Reference Run, Mirror Heating, 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, No-Signal Test Screen, Output Check Control Gong, Park Distance Control, Power Down, Rear Driver and Passenger Window Regulator Initialization, Rear Driver Side Power Window Close, Rear Driver Side Power Window Open, Rear Driver's Door Power Window Regulator Initialisation, Rear Fog Light, Rear Passenger Side Power Window Close, Rear Passenger Side Power Window Open, Rear Passenger's Door Power Window Regulator Initialisation, Rear Wiper, Red Test Card, Start Station Search, Station Search For Strongest TV Channel, Steering Wheel Vibration, Switch On/Off Radio Data System, Switch On/Off Traffic Reports, System Test, Tail Lights, Test CD/DVD ejection, Test Tone With 10,000 Hz, Test Tone With 100 Hz, Test Tone With 1000 Hz, Tuner Frequency 88.9 MHz, Unlock All Doors, Windscreen Washer Pump, Wiper Service Position

### **New Mercedes Coverage**

1 new Adjustment type special test:

Calibration Of Steering Angle Sensor



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