

# Bosch ADS Software Update – Feb 2025

## Ver 6.5

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

**Version 6.5** software includes model year **2025** vehicle coverage and additional **ADAS** calibrations.

New AutoAuth support for Nissan Ariya secure gateway equipped vehicles.

New coverage for GM DoIP systems for vehicles such as Silverado EV/Sierra EV/Blazer EV/Lyriq adding functions for ADAS.

Over 2K new special tests and new system applications included in this update.

Software and coverage feature details provided in these release notes.



ADS X

ADS

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

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

- **Ford** – F-150
- **Mazda** – CX-30, CX-5, CX-50, CX-70, CX-90
- **Subaru** – Ascent, Crosstrek, Impreza
- **Toyota** – Highlander, RAV4
- **Special Test Additions** – multiple brands

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

- **2011-2025 Coverage:**
  - Audi – MY2021 SQ5 Sportback
  - Cadillac\*\* – MY2023-24 LYRIQ
  - Chevrolet\*\* – MY2024 Blazer EV, Silverado EV
  - Ford – MY2025 F-150
  - GMC\*\* – MY2019 Savana 4500, MY2024 Sierra EV
  - Honda – MY2024 Prologue
  - Hyundai\*\* – MY2023-24 Ioniq 6, MY2024 Kona Electric
  - Jaguar – MY2023-24 E-Pace, F-Pace, F-Type, I-Pace, XF
  - Kia – MY2024 EV9
  - Land Rover – MY2023-24 Discovery, Discovery Sport, Range Rover, Evoque, Veler
  - Lexus – MY2025 NX250, NX350, NX350h, NX450+, RX350, RX350h, RX450h+, RX500h, RZ300e, RZ450e, TX350, TX500h, TX550h+
  - Mazda – MY2025 CX-90
  - Mercedes-Benz – MY2015 C250 Base, C350 4Matic, C350 Base, C63 AMG Base
  - Nissan – MY2024 Z
  - Porsche – MY2011-16 Cayenne
  - Subaru – MY2025 Forester
  - Toyota – MY2025 Camry, Highlander, RAV4

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

\*\*All Dynamic ADAS calibrations 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 Ford/Lincoln Coverage

- Added coverage for 42 new system applications

#### 22 new Adjustment type special tests:

Active Torque Coupling Configuration, Anti-Lock Brake System (ABS) Calibration, Anti-Lock Brake System (ABS) Module Bleed Configuration, Battery Monitor System Reset, Clear Transmission Adaptive Tables, Climate Control System Actuators Calibration, Electronic Integrated Park Brake - Initialization, Electronic Integrated Park Brake - Service Tools, Engine Oil Life Reset, Misfire Monitor Neutral Profile Correction (Crank Relearn), Occupant Classification System Module (OCSM) Reset, Power Window Initialization - Driver Side, Power Window Initialization - Passenger Side, Relearn Vehicle Data - AWD, Relearn Vehicle Data, Reset KAM, Reset The Body Control Module (BCM), Reset the Outside Air Temperature Sensor Learned Values, Reset the Power Steering Control Module (PSCM), Steering Angle Sensor Calibration, Suspension Height Sensor Calibration, TPMS Sensor Training Mode

#### 215 new Actuation type special tests:

(Cruise) Resume Switch, (Cruise) Set- Switch, (Cruise) Set+ Switch, (EVAP) Vapor Blocking Valve, 4WD-AWD Power Transfer Unit - Clutch Commanded State, 4WD-AWD Power Transfer Unit - High Level Strategy Commanded, 4WD-AWD Rear Differential Unit Actuator -A- Requested Torque, ABS Warning Lamp, A-C Recirculating Servo Position Status, Active Grille Air Shutter -A- 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 Horn Status, Auxiliary Blower Output, Auxiliary Transmission Fluid Pump Commanded, Backward Pedal Position Control, Battery Pack Coolant Ctrl Valve A - Output Ckt Energized, Blower Motor Speed, Brake System Fault Indicator Lamp, Brake-Shift Interlock, Cabin Coolant Heater Control, Camera Power Control, Center High Mounted Stop Lamp Output Control, Center Speaker Status, Center Tweeter Status, Commanded Equivalence Ratio (Air to Fuel Mixture) Bank 1, Coolant Overtemp, Coolant Pump -A- is Commanded On, Courtesy Lamps, Courtesy Puddle Step Lamps, DC-DC Enable Status, Decklid - Liftglass Release Output Status, Delayed Accessory Power, Desired Idle Speed (Rpm), Driver Heated Seat, ECO Mode, EGR Valve Position Desired, Engine Coolant Bypass Valve Control Output, Engine Coolant Bypass Valve -D- Commanded to be Energized, Engine Coolant Bypass Valve -D- Output Status, Engine Idle Shutdown Extended, Engine Oil Pressure Control Duty Cycle - Commanded, Engine Running Fuel Injector Control, EVAP Leak Test, EVAP Purge/Vent Control, Evaporative Emission Canister Purge Valve Duty Cycle, Evaporative Emission Canister Vent Valve, Fan Speed Desired, FM Radio Band, Forward Pedal Position Control, Front Motor Up, Front Fog Lamp Indicator, Front Window Down Output, Front Window Up Output, Fuel Pump Relay, Fuel Pump, Fuel Rail Pressure Desired, Generator Voltage Desired, Heater Control For HO2S 11 And HO2S 21, Heater Control For HO2S 12 And HO2S 22, HEV Ready Light, High Beam Indicator, High Pressure Fuel System Test, Horizontal Motor Backward, Horizontal Motor Forward, Hybrid-EV Traction Battery Thermal System Operational Levels, Hybrid-EV Wake Up - Commanded, Hydraulic Pump Motor, Key (Removal) Inhibit, KOEO Self Test, KOER Self Test, Lamp Control, LED Backlighting, Left Blend Door Position, Left Bottom Bolster Bladder Inflate Status, Left Cursor Left Arrow, Left Cursor OK Button, Left Front Defrost Output, Left Front Dump, Left Front Fog Lamp, Left Front Isolation Valve, Left Front Speaker Status, Left Front Turn Signal Lamp Status, Left Front Tweeter Status, Left Front-Right Rear Traction Control Supply 1, Left Front-Right Rear Traction Control Valve 1, Left

Headlamp High Beam, Left Headlamp Low Beam, Left Rear Dump, Left Rear Isolation Valve, Left Rear Speaker Status, Left Rear Turn Signal Lamp Status, Left Rear Tweeter Status, Left Side Bolster Bladder Inflate Status, Left Turn Signal Lamp Status, Liftgate-Decklid Release Output Status, Line Pressure Control Desired, Load Shed Output Control, Low Fuel Warning Indication, Low Pressure Fuel Leakdown Test, Low Washer Fluid Warning, Lower Lumbar Bladder Inflate Status, Lumbar Forward Motor Control, Max Defrost, Mid-Lumbar Bladder Inflate Status, 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, Pedal Box In, Pedal Box Out, Power Balance, Power Fold Mirror Activation Status, Power Point Output Relay, Rear Defrost (Heated Backlight), Rear Fog Lamp Indicator, Rear Motor Down, Rear Motor Up, Rear Park Lamps Output, Rear Window Down Output, Rear Window Up Output, Recline Motor Backward, Recline Motor Forward, Relative Compression, Reverse Lamp, Right Blend Door Position, Right Bottom Bolster Bladder Inflate Status, Right Front Defrost Output, Right Front Dump, Right Front Fog Lamp, Right Front Isolation Valve, Right Front Speaker Status, Right Front Turn Signal Lamp Status, Right Front Tweeter Status, Right Front-Left Rear Traction Control Supply 2, Right Front-Left Rear Traction Control Valve 2, Right Headlamp High Beam, Right Headlamp Low Beam, Right Rear Dump, Right Rear Isolation Valve, Right Rear Speaker Status, Right Rear Turn Signal Lamp Status, Right Rear Tweeter Status, Right Side Bolster Bladder Inflate Status, Right Turn Signal Lamp Status, Run-Accessory Output Control, Safety Belt Warning Lamp, Seat Bladder Pump Status, Seat Cushion Bladder Inflate Status 1, Seat Cushion Bladder Inflate Status 2, Seat Cushion Bladder Inflate Status 3, Seat Cushion Bladder Inflate Status 4, Seat Headrest Backward, Seat Headrest Down, Seat Headrest Forward, Seat Lumbar Forward, Seat Lumbar Rearward, Seat Tilt Down Motor Control, 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, Sounder Output Request, Spark Advance, Speed Control (ASLD) Switch, Speed Control Actuator Switch Off, Speed Control Actuator Switch On, Speed Control Cancel Switch, Speed Control Cancel-Resume Switch, Speed Control Gap Switch, Speed Control On-Off Cancel Switch, Speed Control On-Off Switch, Speedometer, Spotlight Mirror Output, Start Button Mode Indicator Control, Steering Column Telescope In, Steering Column Telescope Out, Steering Column Tilt Up, Stop-Start, Subwoofer Status, Tachometer Gauge Indicator Control, Third Row Left Speaker Status, Third Row Power Fold Seat Output, Third Row Right Speaker Status, Tire Pressure Telltale Status, Torque Converter Clutch Solenoid Commanded Current, Traction Control Indicator, Traction Control Off Indicator, Trans Hydraulic Accumulator Sol Ckt - Commanded Energized, Transmission System (Mil) Fault, Turbocharger Bypass Valve 1, Turbocharger Wastegate, Upper Lumbar Bladder Inflate Status, Variable Camshaft Timing Exhaust Angle Desired, Variable Camshaft Timing Intake Desired Angle, Vehicle Mode, Video Output, Volume, Warning Lamp Status 1 - Charge Warning, Wiper Heater Output

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## New Coverage Details – USA Asian

### New Hyundai/Genesis Coverage

#### 1 new Adjustment type special tests:

TPMS Test

### New Kia Coverage

#### 15 new Adjustment type special tests:

Adaptive Value Backup Input (ECU Transfer Assy replacement at once), Adaptive Value BackUp Input (ECU replacement), Air Bleeding Mode, Assembly Check(ECU Replacement), Auto Detected Configuration Reset, CLU Variant Coding, Clutch Learning Reset, ESC Variant Coding, HCU Air Bleeding Mode, Longitudinal G Sensor Calibration(HAC/DBC Only), Resetting Adaptive Values, Resetting E-CVVT Values, TPMS Reception Rate Measuring Mode, TPMS Test, WCT Reprogram

#### 428 new Actuation type special tests:

(LED) DRL Lamp LH, (LED) DRL Lamp RH, 3rd Row Center SBR Center Indicator, 3rd Row SBR Left Indicator(Optional), 3rd Row SBR Right Indicator(Optional), A/C Compressor Test (ECV Type), A-C Compressor Relay, All Door Lock Signal Output(to PTGM), All Mood Lamp Blue LED Test, All Mood Lamp Green LED Test, All Mood Lamp Red LED Test, All Mood Lamp White LED Test, Alternator Control, Alternator Test, Alt'L Signal Out, Assist Door Courtesy Lamp Output, Assist Door Lock Indicator, Assist Mirror Position Down (Option), Assist Mirror Position Left (Option), Assist Mirror Position Right (Option), Assist Mirror Position Up (Option), Assist Outside Mirror Down, Assist Outside Mirror Left, Assist Outside Mirror Right, Assist Outside Mirror Up, Assist Power Window Down (Option), Assist Power Window Up (Option), Assist Seat Belt Indicator (Option), Assist Seat Belt Indicator, Assistant Side Outside Handle Antenna Output (Power and GND), ATM Solenoid, Auto Cut Relay, Auto Light Power, AV Tail, Back Up Lamp, Battery Warning Lamp, Bifunction Headlamp High LH Solenoid IPS Output, Bifunction Headlamp High RH Solenoid IPS Output, Burglar Horn Relay, Canister Purge Valve, Canister Shut Off Valve Clocked(OBD-2 Only), Canister Shut Off Valve(OBD-2 Only), Central Door Lock Indicator, Central Door Lock Relay, Central Door Lock Switch Indicator Output, Central Door Unlock Relay, Charge Inlet Lock Relay, Charge Inlet Unock Relay, Charging Status LED (Green) On, Charging Status LED (Yellow) On, Child Lock Relay Output, Child Unlock Relay Output, Clamp Status ACC(Amber) LED Color illumination, Clamp Status IGN(Blue) LED Color illumination, Clamp Status Off(Red) LED Color illumination, Compressor Off, Compressor On, Console Mode Door - Floor, Console Mode Door - Vent, Console On Door, Console Temperature Air Mix Door 0%, Console Temperature Air Mix Door 100%, Console Temperature Air Mix Door 50%, Coolant 3Way Valve, Cooling Fan PWM, Cornering Lamp Left Relay Output (Option), Cornering Lamp LH Output, Cornering Lamp RH Output, Cornering Lamp Right Relay Output (Option), Courtesy Lamp RL Output, Courtesy Lamp RR Output, Cruise Control Main Lamp(Optional), Cruise Control SET Lamp(Optional), D Target Position, D\_DRL Relay, Dead Lock Relay, Dedicated DRL Left Output, Dedicated DRL Output (Option), Dedicated DRL Right Output, Def Door - Close, Def Door - Open, Defogger - Deicer Relay, Defogger Indicator, Door Lock Relay, Door Unlock Relay, Drive Side Puddle Lamp, Driver Air Mix Door-100%, Driver Air Mix Door-50%, Driver Courtesy Lamp, Driver Door Courtesy Lamp Output, Driver Door Lock, Driver Door Unlock Relay (Option), Driver Door Unlock Relay, Driver Door Unlock, Driver Heater Control, Driver Mode Door-DEF., Driver Mode Door-Floor, Driver Mode Door-Vent, Driver Seat Belt Indicator, Driver Seat Heat Mode to the High, Driver Seat Vent Mode to the High, Driver Side Outside Handle Antenna Output (Power and GND), DRL Relay(Canada), DRV-AST Power Window Enable Output, Electric Shuttle Valve-Left Front, Electric Shuttle Valve-Right Front, Electrically Controlled Water Pump (Option), Electronic Waste Gate Valve (Turbo Only),

EMS Wakeup Output, Engine Check Lamp(MIL), EPB Apply RH and LH, EPB Release RH and LH, ESS Lamp, ETC Motor, EV Charge Door Open Lamp Output, EV Charge Door Open Relay, EVAP Leakage Test, EVP, Exhaust Gas Recirculation Valve, Exterior Tail Lamp Front Left Output, Exterior Tail Lamp Front Right Output, Exterior Tail Lamp Left(Front and Rear) Output, Exterior Tail Lamp Rear Left Output, Exterior Tail Lamp Rear Right Output, Exterior Tail Lamp Right(Front and Rear) Output, External Buzzer Output, Fan Motor Control-High Speed, Fan Motor Control-Low Speed, Flasher Sound Relay(Option), Foot Lamp Output(Option), Front Air Flow Door - 100%, Front Air Flow Door - 50%, Front Blower Fan Motor-1Step, Front Blower Fan Motor-2Step, Front Blower Fan Motor-3Step, Front Blower Fan Motor-4Step, Front Blower Fan Motor-5Step, Front Blower Fan Motor-6Step, Front Blower Fan Motor-7Step, Front Blower Fan Motor-8Step, Front Blower Fan Motor-Off, Front Bumper Antenna Output (Power and GND), Front Charge Door Lamp Output, Front Deicer Relay, Front Fog and Cornering Lamp Left Output, Front Fog and Cornering Lamp Right Output, Front Fog Lamp Indicator, Front Fog Lamp Left Output, Front Fog Lamp Output, Front Fog Lamp Relay, Front Fog Lamp Right Output, Front Glass Heated Relay Output, Front Glass Heated Switch Indicator Output, Front Left Turn Signal Output, Front Right Turn Signal Output, Front Seat Heat Mode to the High, Front Seat Vent Mode to the High, Front Top-SVM View, Front Turn Signal Lamp Activation LH Output, Front Turn Signal Lamp Activation RH Output, Front Washer Motor Output, Front-SVM View, Fuel Door Open Solenoid Output, Fuel Pressure Indicator Lamp(LPI), Fuel Pressure Ragulator (GDI Only), Fuel Pump Control, Fuel Pump Relay, Fuel Tank Isolation Valve, Gauge ON, Glove Box Lamp Output, HAC Brake Lamp Actuator, Haptic Steering Wheel Motor Output, Haptic Steering Wheel Output, Hat Shelf Antenna Output (Power and GND), Hazard Indicator, Hazard Mode State for Turn Signal Lamp Sequential Mode, Hazard Relay, Head Lamp High Indicator, Head Lamp High Left Output, Head Lamp High Output, Head Lamp High Relay, Head Lamp High Right Output, Head Lamp Leveling Min(Low) Position, Head Lamp Low Indicator, Head Lamp Low Left Output, Head Lamp Low Output, Head Lamp Low Right Output, Head Lamp Low Signal, Head Lamp Washer Relay, Heated Handle Indicator(Option), Heated Handle Output(Option), Heated Washer Nozzle Output, Heated Washer Nozzle Relay, High Mounted Stop Lamp Output, HMI Mirror Alert Left LED Blinking, HMI Mirror Alert Left LED ON, HMI Mirror Alert Right LED Blinking, HMI Mirror Alert Right LED ON, HMI Switch LED, Horn Relay(NA), Horn Relay, HV PTC OFF, HV PTC ON(Min.), Ignition 3 Relay, Ignition Coil Enable-Disable-#1, Ignition Coil Enable-Disable-#2, Ignition Coil Enable-Disable-#3, Ignition Coil Enable-Disable-#4, Illumination, Immobilizer Lamp(Option), Indicator ALL OFF, Indicator ALL ON, Indicator Output 100%, Indicator Output 25%, Injector(DI) Disable-Cylinder 1, Injector(DI) Disable-Cylinder 2, Injector(DI) Disable-Cylinder 3, Injector(DI) Disable-Cylinder 4, Injector(MPI) Disable-Cylinder 1, Injector(MPI) Disable-Cylinder 2, Injector(MPI) Disable-Cylinder 3, Injector(MPI) Disable-Cylinder 4, Inlet Valve-Left Front, Inlet Valve-Left Rear, Inlet Valve-Right Front, Inlet Valve-Right Rear, Intake Door - Fresh, Intake Door - Recirc, Interior Antenna #1 Output (Power and GND), Interior Antenna #2 Output (Power and GND), Interior Antenna #3 (Trunk Antenna : Sedan Type) Output (Power, Interior Lamp Autocut Relay Output(Option), Interior Mood Lamp Output (Option), Interior Mood Lamp Output, Internal Buzzer, IOD Relay, ITM Valve, Key Hole Illumination (Manual Key Type), Key Interlock Solenoid(Manual Key Type), Lamp Control - EPB Status Lamp, Lamp Control - EPB Warning Lamp, Lamp Control, Lamp Load Power Relay, LampLoad AutoCut IPS Output, LongTermLoad Cut Relay Output, Luggage Lamp Relay, Luggage Lamp, Main Relay, Manual HLLD Signal Output, Map Lamp Output, Mirror Folding Operation (Option), Mirror Unfolding Operation (Option), Mood Lamp 1 Output, Mood Lamp 2 Output, Mood Lamp 3 Output, Mood Lamp Output, Motor, Move DRIVE OUTSIDE MIRROR to the highest position, Move DRIVE OUTSIDE MIRROR to the lowest position, Move DRIVE OUTSIDE MIRROR to the most left position, Move DRIVE OUTSIDE MIRROR to the most right position, Move P-Seat to the Foremost Position (Cushion Extension), Move P-Seat to the Foremost Position (Head Rest Slide), Move P-Seat to the Foremost Position (Recline), Move P-Seat to the Foremost Position (Shoulder), Move

P-Seat To The Foremost Position (Slide), Move P-Seat to the Highest Position (FR Height), Move P-Seat to the Highest Position (Headrest), Move P-Seat to the Highest Position (RR Height), Move P-Seat to the Last Position (Cushion Extension), Move P-Seat to the Last Position (HeadRest Slide), Move P-Seat to the Last Position (Recline), Move P-Seat to the Last Position (Shoulder), Move P-Seat To The Last Position (Slide), Move P-Seat to the Lowest Position (FR Height), Move P-Seat to the Lowest Position (Headrest), Move P-Seat to the Lowest Position (RR Height), Multimedia Load Power Relay, N Target Position, Navi Wakeup Signal Output, O2 Heater Front (B1-S1), O2 Heater Rear (B1-S2), OBC Wake up Output, Oil Change Warning Lamp, Oil Pressure Warning Lamp, Operate DRIVE SIDE FOLD, Operate DRIVE SIDE UNFOLD, Operate DRIVE SIDE WINDOW AUTO DOWN, Operate DRIVE SIDE WINDOW AUTO UP, Operate DRIVE SIDE WINDOW DOWN, Operate DRIVE SIDE WINDOW UP, Outlet Valve-Left Front, Outlet Valve-Left Rear, Outlet Valve-Right Front, Outlet Valve-Right Rear, Over Speed Warning Indicator, P Target Position, Parasitic Current Auto-Block IPS, Parking Brake Indicator, PAS Buzzer Output (RPAS Buzzer Output), PAS Indicator (RPAS Off Indicator), Passenger Air Mix Door-0%, Passenger Air Mix Door-100%, Passenger Air Mix Door-50%, Passenger Mode Door - Defog, Passenger Mode Door - Floor, Passenger Mode Door - Vent, Passenger Seat Heat Mode to the High, Passenger Seat Vent Mode to the High, Pocket Light Output(Optional), Power Supply to the ACC Relay of Main MCU, Power Supply to the IGN1 Relay of Main MCU, Power Supply to the IGN1-IGN2 Relay of Main MCU, Power Supply to the IGN1-STARTER Relay of Main MCU, Power Window Relay (with Safety P-WDW Enable), Power Window Relay, Puddle Lamp Output, R Target Position, Radiator shutter 1 - Auto test, Radiator shutter 1 - Close test, Radiator shutter 1 - Open test, Read VIN, Rear Assist Power Window Down Relay, Rear Assist Power Window Up Relay, Rear Assist Side Window Auto Up, Rear Assist Window Auto Down, Rear Assist Window Down, Rear Bumper Antenna Output (Power and GND), Rear Charge Door Lamp Output, Rear Curtain Down Output, Rear Curtain Up Output, Rear Defogger Relay, Rear Driver Power Window Down Relay, Rear Driver Power Window Up Relay, Rear Driver Side Window Auto Up, Rear Driver Window Auto Down, Rear Driver Window Down, Rear Driver Window Up, Rear Fog Lamp (Option), Rear Fog Lamp Indicator, Rear Fog Lamp Left Output, Rear Fog Lamp Relay (Option), Rear Fog Lamp Right Output, Rear Left Power Window Down (Option), Rear Left Power Window Up (Option), Rear Left Turn Signal Output, Rear LH Seat Heat Mode to the High, Rear LH Seat Vent Mode to the High, Rear Power Window Enable Output (Option), Rear Power Window LH Up Relay, Rear RH Seat Heat Mode to the High, Rear RH Seat Vent Mode to the High, Rear Right Power Window Down (Option), Rear Right Power Window Up (Option), Rear Right Turn Signal Output, Rear Room Lamp Output, Rear Seat Belt Center Indicator (Option), Rear Seat Belt Left Indicator (Option), Rear Seat Belt Right Indicator (Option), Rear Seat Heat Mode to the High, Rear Seat Vent Mode to the High, Rear Seat Warmer Left(Optional), Rear Seat Warmer Right(Optional), Rear Top-SVM View, Rear View Switch Indicator Output, Rear Washer Motor Output, Rear Wiper Relay (Option), Rear Wiper Relay, Rear-SVM View, Refrigerant 2Way Valve - #1 OFF, Refrigerant 2Way Valve - #1 ON, Refrigerant 2Way Valve - #2 OFF, Refrigerant 2Way Valve - #2 ON, Refrigerant 3Way Valve - #1 OFF, Refrigerant 3Way Valve - #1 ON, Refrigerant 3Way Valve - #2 OFF, Refrigerant 3Way Valve - #2 ON, RKE Tailgate Signal Output(to PTGM), RL Door Lock Relay, RL Door Unlock Relay, Room Lamp Output, RPAS Switch Indicator(Optional), RVM Swich Indicator Output, Safety ECU Enable Output (High), Safety Power Window Enable, SBL Function Test SBL LH ON, Security LED Output, ShortTermLoad Cut Relay-IPS Output, SSB illumination Output (Power and GND), Start Inhibit Relay (Option), Start Inhibit Relay, Start Relay, Static Bending LH Output (Option), Static Bending RH Output (Option), Steering Warmer Output, Steering Warmer Switch Indicator Output, Stop Lamp Left, Stop Lamp Left-Right-HMSL Output (Option), Stop Lamp Right, Stop Lamp, Sunroof Enable Output, Sunroof Power Relay control(Optional), SVM + FrontLeft + FrontRight View, SVM + RearLeft + RearRight View, System Identification, Tail Interior Lamp, Tail Lamp Indicator, Tail Lamp Output, Tail Lamp Relay, Tailgate-Trunk Release Relay, TCI Bypass Valve(Turbo Only), TCS Valve-

Left Front, TCS Valve-Right Front, Turn LH Output, Turn RH Output, Turn Signal Lamp Front Left Output, Turn Signal Lamp Front Right Output, Turn Signal Lamp Rear Left Output, Turn Signal Lamp Rear Right Output, Turn Signal Sound Relay Output, Variable Force Solenoid Valve - Exhaust Bank1 test, Variable Force Solenoid Valve - Intake Bank1 test, Variable Intake Solenoid(Optional), Window Lock to Driver Door Module, Wiper High-Speed Relay [Wiper High RLY With Wiper Power RLY], Wiper Low-Speed Relay [Wiper Low RLY With Wiper Power RLY], Wiper Power Relay, Wiper Relay (for INT)[Wiper RLY With Wiper Power RLY]

## New Mazda Coverage

- Added coverage for 122 new system applications

## New Mitsubishi Coverage

### 13 new Adjustment type special tests:

Calibration value reset, Control valve learning mode, CVT Oil Degradation Level, ECU Information, Emission Gas Mode, In-use performance tracking, Learned Value Reset, Learning, Service Reminder, Test, Timing chain maintenance, Transport Mode Setting, Turn Signal sound customization

### 106 new Actuation type special tests:

A/C Relay, ABS Warning Light, A-C Compressor Relay O, A-C Switch, AFS OFF Indicator, AHB Indicator, Air Conditioning Switch, Air Outlet C-O Damper, ASC-TCL Failure Indicator, ASC-TCL OFF Indicator, ASC-TCL OP. Indicator, ASG Indicator, ASG OFF Indicator, A-T Lock Up Open Request, Brake Indicator, BSW Buzzer, BSW Indicator, BSW ON-OFF Setting, Charge Indicator, Chassis No VIN Information, Chassis No./VIN Writing, Coding Information Copy, Condenser Fan, Cooling Fan O, Cruise Control Indicator, Display Output, Driver Seatbelt Indicator, Dynamic Brake Buzzer, ECO Indicator, Engine Malfunction IND., Engine Running Injector Kill Test, Engine switch(Control), Engine Switch(LED ON), Engine TCL Drive, EPB Switch Indicator, EPB Warning Light, ESS Test Mode, EVAP Emission Purge SOL Valve, EVAP Emission Ventilation SOL, EVAP Function Test, Evaporative Emission Purge Solenoid O, Evaporative Emission Ventilation Solenoid O, FCM Indicator, FCM OFF Indicator, FL Wheel ABS Drive, FL Wheel TCL Drive, FR Wheel ABS Drive, FR Wheel TCL Drive, Front Blower Fan, Front Fog Light Indicator, Fuel Gauge, Fuel Pump O, Fuel Pump, Full Release Control, Headlight Auto leveling, High Beam Indicator, Idle Up Request, Ignition Timing 5 BTDC, Indicator2, Injector Stop, In-Out Select Damper, Input Vehicle Speed, LDW Indicator: Standby Request, LDW Indicator: System Fail Req., LDW Indicator: TEMP. Fail Req., LDW Indicator: Warning Request, Leveling Actuator, Meter Illumination, Meter Indication (BSW Status), Meter Indication (RCTA Warning), Mirror Indicator, Mode Selection Damper, Oil Feeder Control Valve O, Out-Inside Air Selection Damper, PA. Seatbelt Indicator, Parking Brake Light, Passenger S Airbag OFF Indicator Lighting Request, Passenger S Airbag ON Indicator Lighting Request, Passenger S SRS OFF Light, Passenger S SRS ON Light, Positionlight Indicator, PTC Heater, PWM Radiator Fan, Radiator Fan High, Radiator Fan Low, RCTA Buzzer, Rear Defogger Switch, Rear Fan Step (Input Value), Rear Fog Light Indicator, Rear PTC Heater, RL Wheel ABS Drive, RL Wheel TCL Drive, RR Wheel ABS Drive, RR Wheel TCL Drive, Speedometer, SRS Indicator, SRS Warning Light Lighting Request, SRS Warning Light, Stoplight:ON, Tachometer, Tire Pressure Indicator, TSR Display Request, Turn Signal Indicator(LH), Turn Signal Indicator(RH), VVT Oil Control Valve, Wastegate Solenoid Valve

## New Subaru Coverage

- Added coverage for 107 new system applications

**35 new Adjustment type special tests:**

Actuator Initialization, Auto Retractable Power Door Mirror Open Close ON/OFF Setting, Auto Retractable Power Door Mirror Open Trigger Setting, Auto Wiper at startup Setting, Camera Caution Display Settings, Camera Guide Line Settings, Clear AT Learning Value, Collision Result History Clear, Compressor Auto Mode, Diag Recorder Settings, Foot/DEF Auto Mode, Foot/Def Automatic Fan Speed Increase Function, Fresh/Recircle Air Door Auto Mode, Idle Speed Adjustment, Initial Button Setting, Initial Security Setting, Memory Initialization, Mode/All Flow, Mode/Heat III, Mode/Vent II, RAB Operation Record Data, Rear blower fan level, Record Clear, Release Max A/C By Mode Sw, Reverse Interlocking Door Mirror Last Memory ON/OFF Setting, Reverse Interlocking Door Mirror ON/OFF Setting, Reverse Interlocking Door Mirror Tilt Down Side Setting, Set Temperature Shift, Simple Roughness Monitor, System Initialization, Tire Pressure Sensor Registration, Variable compressor break-in drive, Variable Flow Change Sol Duty Setting, VIN Entry, Wiper link Auto Light Setting

**212 new Actuation type special tests:**

A/C Change Setting, A/C Compressor Relay, A/C Relay, A/T Oil Temperature, ABS Sequence Control Mode, ABS Warning, Active Grill Shutter Test, Air Mix Door Actuator Target Open (Driver Side), Air Mix Door Actuator Target Open (Passenger Side), Airbag Warning, Airmix Dr Act Trgt Open Angle (Drivers), Airmix Dr Act Trgt Open Angle (Pass), All Lamps, All seat UNLOCK output, All seats door warning, Alternator control mode, AM Seek Up/Down, Ambient Air Temperature setting, Ambient Temperature, AUTO switch mode setting, Auto Switch, AWD Linear Solenoid, AWD Mode Select, AWD Solenoid, AWD, Blower Fan Level Setting, Brake Lamp Lighting Operation, Brake Maintenance Mode, Brake Warning, Brightness, Canister Purge Control Solenoid, Charge, Check E/G warning, Color Check, Color Check: Black, Color Check: Blue, Color Check: Cross Talking, Color Check: Gradation, Color Check: Green, Color Check: Red, Color Check: White, Compression monitor, Coolant Circulation Valve Control, Cruise Indicator, D range display, Diag Recorder Data delete, Diag Recorder Data output, Digital Audio Broadcast Antenna Check, Digital TV check, Door Mirror Indicator Active Test, Down range display, Driver Door, Driver Seat Belt Reminder, Driver Seat Mirror Operation Test, Driver Seat Sensor Power Supply, Dual-Range LO Indicator, E/G remaining oil warning, EGR Control, EGR Valve Control (Duty), ELCM pump, ELCM switching valve, EPB Active, EPB Hill Hold, EPS Indicator Lamp, Exhaust Control Valve Control, EYESIGHT failure, Fixed Idle Ignition Timing, FM Seek Up/Down, FR Clutch Solenoid, Fresh/Rec Air Dr Act Trgt Open Angle, Front Fog Lamp Indicator, Fuel efficiency gauge (ECO gauge) 1/2 scale command, Fuel efficiency gauge (ECO gauge) 1/4 scale command, Fuel efficiency gauge (ECO gauge) 3/4 scale command, Fuel efficiency gauge (ECO gauge) MAX scale command, Fuel efficiency gauge (ECO gauge) MIN scale command, Fuel Pump OFF, Fuel Pump Relay, Fuel sender E-point command, Fuel sender F-point command, Fuel Warning Lamp, HBA OFF/FAIL, HBA, Heater core temperature setting, Heater Water Temperature Setting, HID auto leveler, High Beam Indicator, Hill start assist OFF/failure indicator, Horn Output, IGN 1, IGN 1/2, IGN 2, Illumination Lights Test, Immobilizer, Injection Quantity Control, Injection Stop Mode (Injector 1), Injection Stop Mode (Injector 2), Injection Stop Mode (Injector 3), Injection Stop Mode (Injector 4), Injection Stop Mode (Injector 5), Injection Stop Mode (Injector 6), In-Vehicle Air Temperature Setting, Keyless Buzzer, L range display, LANE OFF, LED LO beam, LED Switch Lighting Test, Left Steering Responsive Headlight, Line Solenoid, lock actual. LOCK output, Lock-Up Duty Solenoid, Low Fuel Warning Indication, LP - EGR Valve Control, Meter 1/2 scale command, Meter 1/4 scale command, Meter 3/4 scale command, Meter E scale command, Meter F-scale command, Mode Door Actuator Opening Angle Target, N range display, Night Brightness Check, No-key warning, Noon Brightness Check, Odometer numerical device display 0, Odometer numerical device display 1, Odometer numerical device display 2, Odometer numerical device display 3, Odometer numerical device display 4, Odometer numerical device display 6, Odometer



numerical device display 7, Odometer numerical device display 8, Odometer numerical device display 9, Oil Pressure, P Range Display, Part Number, Passenger Door, Passenger Seat Mirror Operation Test, Passenger Seat Sensor Power Supply, P-CR OFF, Position light, Power Meter (100%), Power Meter (-100%), Power Windows Tests, Primary Down Solenoid, Primary Up Solenoid, Quantity of Sunload Setting, R range display, Radiator Fan Relay, Range Display Test, Rear Defogger, Rear Differential Inspection Mode, Rear Fog Lamp Indicator, Rear Left Door, Rear Right Door, Recline Motor Backward, Recline Motor Forward, Right Steering Responsive Headlight, ROM ID, Seat Slide Backward, Seat Slide Forward, Secondary Solenoid Current, SET Indicator, Shift Indicator Lamp, Shift Lock Solenoid, Software Information, Software version, Sounder Output, Speaker Output Check(Harman/Kardon Audio Speakers), Speaker Output Check, Speaker Output Volume Adjustment, Speedometer test, SRH OFF, SRVD OFF, SRVD, Start SW Character Illumination Lighted, Start SW Indicator Lighted (Green), Start SW Indicator Lighted (Orange), Steering lock power supply, STSW, Tachometer test, Temp Gauge: C-Lock, Temp Gauge: C-Point, Temp Gauge: Dial 1 Instructions, Temp Gauge: Dial 2 Instructions, Temp Gauge: H-Lock, Temp Gauge: H-Point, Temp Gauge: Intermediate Stability Indication, Temp Gauge: Z-Point, TPMS Warning Light, Trip meter numerical device display 0, Trip meter numerical device display 1, Trip meter numerical device display 2, Trip meter numerical device display 3, Trip meter numerical device display 4, Trip meter numerical device display 5, Trip meter numerical device display 6, Trip meter numerical device display 7, Trip meter numerical device display 8, Trip meter numerical device display 9, Trunk open, Trunk Unlock Actuator, Tuner Power Supply On (Indoor Tuner), Turn Left Signal, Turn Right Signal, Up range display, VDC Function Check Mode, VDC OFF indicator, VDC operation/failure indicator, Warning Lamp, Washer Fluid Low Indicator, Water temperature (COOL) indicator, Water temperature (HOT) warning

## New Toyota/Lexus Coverage

- Added coverage for 117 new system applications

### 514 new Adjustment type special tests:

2 Steps Fade Out Control Function, 3rd Center Seatbelt Warning Buzzer Function, 3rd Left Seatbelt Warning Buzzer Function, 3rd Right Seatbelt Warning Buzzer Function, 4th Center Seatbelt Warning Buzzer Function, 4th Left Seatbelt Warning Buzzer Function, 4th Right Seatbelt Warning Buzzer Function, 6MT Setting, A/C Auto Switch Mode, A/C Control Mode Switching, A/C Operation Limit History Counter Clear, A/T Code Reset, A/T Compensation Code Reset, aCol Function, Activate The EGR Valve Close Bank 1, Activate The VN Turbo Open Bank 1, Add Foot Air in FACE Mode, Advanced Illumination System Setting, Advanced Park Parallel Parking Control Area, Advanced Park Perpendicular Parking Control Area, Advanced Parking Guidance Avoidance Distance, Advanced Parking Guidance Parallel Parking Area, Advanced Parking Guidance Perpendicular Parking, AFS (Electronic Swivel) Function, AFS Function, AHS Function, AHS Operation Pattern Setting, AHS Operation Vehicle Speed Setting (Pattern1), AHS Operation Vehicle Speed Setting (Pattern2), AHS Operation Vehicle Speed Setting (Pattern3), Air Bleeding, Air Conditioner Mode, Air Conditioner Switch Indicator Function, Air Inlet Damper Mode, Air Inlet Damper Targ Pulse, Air Inlet Mode, Air Outlet Servo Pulse (P), Air Purifier Auto Cancel, Air Purifier, All Readiness, All Unlock/Open-Close, Ambient Temperature Adjustment, Ambient Temperature Shift, Approach Display OFF, AT Code Registration, ATF Thermal Degradation Estimate Reset, Audio Information Display Function, Auto A/C, Auto Door Lock Pattern Setting (Speed), Auto Door Lock, Auto Entry Cancel 2 Setting, Auto Entry Cancel Setting, Auto Fold Mirror, Auto LightOff Timer, Auto Lock Time, Auto Lock, Auto Lock/Shift, Auto Mode Start Function, Auto Rear Wiper in Reverse Setting, Auto Unlock/Shift, Auto Wiper, Automatic Door Lock Function, Automatic Door Lock Setting, Automatic Door Unlock Function when D-Door Open, Automatic Door Unlock Function, Automatic Door Unlock Setting, Automatic Light Off Timing Setting, Automatic Mirror Fold

Setting, Back Door Power Window Down, Back Door Power Window Up, Backup Battery Replacement Reset, Bad Weather Function, Battery Status Info Update, Blower Operation Setting (StopStart), Body Control with Torque Demand, Brake Line Air Bleeding, Brightness Level Adjust (Canceling), Brightness Level Adjust (Lowering), BSM Approaching Vehicle Detection Timing Setting, BSM Buzzer Volume Adjust, BSM Master Abnormal History, BSM Mirror Indicator Brightness, BSM Slave Abnormal History, Button Press Buzzer, 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, Customize Setting Initialization, CVT Oil Pressure Calibration, D Seat Lower Back Operation Away Function, D Seat Lower Cushion Operation Away Function, D Seat Lumbar Operation Away Function, D Seat Operation Interference Avoidance Function, D Seat Refresh Level Setting, D Seat Shoulder Operation Away Function, D Seat Side Back Support Operation Away Function, D Side Cushion Support Operation Away Function, D Window Auto Down, D Window Auto Up, Daytime Running Light Function, DCM Operation History, DEF(PSW/Lock) Mode Setting, Delay of Monitoring, Destination Setting, Detection of Vehicle, 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 Indicator Function, Door Lock Indicator Pattern Setting (IG OFF), Door Lock Indicator Pattern Setting (IG ON), Door Open SW Operation Adjust, Door Unlock Sensor Touch Time Adjust, Door Unlock with 1 Motion, Double Lock, 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, DRL Function, ECO Drive Indicator Zone Display Function (Meter), ECO Drive Indicator Zone Display Function, 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 Revolution (For Judging Stable Combustion), Entry Delay Time, Entry Delay, Entry Unlock Twice Function, EPB Initialize, EV Mode Cruising Range Reset, Evaporator Control, Extended Headlight Lighting, Exterior Light (Door Open), Exterior Light Control, Exterior Lights Lighting Timer Setting, Exterior Lights ON Function, Exterior Lights ON when Approached Function, Exterior Lights ON when Door Opened Function, Exterior Lights ON when Door Unlocked Function, FACE Wind Amount Adjust Function, Factory Mode, Fan speed increment control, FCTA Function ON/OFF State Stored, FCTA Warning Timing State Stored 1, FCTA Warning Timing State Stored 2, FCTA Warning Timing State Stored 3, Filter Sensor, FL Neck Heater Auto Mode Adjustment, FL Seat A/C and Heater Sensitivity Adjust, Flasher Sound Volume Adjust, Follow Me Home Lighting Time, Foot/DEF Auto Mode, Foot/DEF Automatic Blow Up Function, Forced Actuator Refresh, Forget to Turn IG OFF Alarm Function, Fr Rr Buzzer Freq, Fr Rr Buzzer Volume, Fr Corner Sensor Onset Range, FR Neck Heater Auto Mode Adjustment, FR Seat A/C and Heater Sensitivity Adjust, Fr Sensor Onset Range, Fr Side Sens Actuation Setting, Fr/Rr Seat Interference Avoidance Function (D), Front Center Seatbelt Warning Buzzer Function, Front Side Dist Sensor, Front SW Auto Operation, Glass Hatch Open Function, Grille Shutter Initialization, Halogen Lamp/HID, Hazard Answer Back Function, Headlight in Conjunction with Wiper, Headlight ON in Conjunction with Wiper Function, Headlight Upper Shade Angle Setting, Heavy Knock History, Height Sensor Initialization, High Voltage Fuse Accumulated Load History Reset, HWD Auto Function, I/L ON W/Door Key Unlock, I/L when ACC OFF, ICS Function, ICS Stop Distance, ICS SW Status Memory, ID Registration/Tire Position Write, Ignition Available Area Setting (Back Door Type), Ignition Available Area Setting (Trunk Lid Type), Illumination System, Initialization, Injection Timing Value, Injection Timing, Inside Foot Light, Integrated Current Value Initialization, Interior Footwell Lights Function, Interior Illumination Light 2 Function, Interior Illumination Light 3 Function, Interior Light Control, Interior Lights Lighting Timer Setting, Interior Lights ON Function, Intrusion Sensor 1 Sensitivity Level Adjust, Intrusion Sensor 2 Sensitivity

Level Adjust, Intrusion Sensor Function, Intrusion Sensor Reduction in Sensitivity Setting, Intrusion Sensor Sensitivity Level (Window Open), Intrusion Sensor Sensitivity Level, Intrusion Sensor Sound Detection Function, Intrusion Win Opened, Intuitive P/A Auto Mute Function, Ion Generate Control, IPA Obstacle Avoidance Distance, IPA Parallel Parking Control Area, IPA Perpendicular Parking Control Area, K0 Thermal Estimate Reset, Keep Sense Buzzer, Key Left in Vehicle Alarm Function, Key Low Battery Warning Function, Key Low Battery Warning, Kick Sensor Close Lock Function, Kick Sensor Operation Function with ACC ON, Lane Change Flashing Times Adjust, Lane CHG Flash CNT, Leave Buzzer Volume, Light Auto OFF Delay Setting, Light Auto OFF Delay, Light Blink Clearance Lights at Unlock Function, Light Control Glass Brightness Memory Function, Light Control Glass Voice Control Function, Light Control, Light up Clearance Lights at Door Unlock Function, Light up Clearance Lights Door Unlock Function, Lighting (EXT): Headlight Assembly Adjustment, Lighting Time, Lock Indicator Lighting Time Adjust, Lost Communication Time Initialization, Low Speed Wide Light Function, Master Caution Display Function, Memory Call Function, Memory Call Link Function, Mirr-Foot-Lgt Approached/Exterior Light Approached, Mirr-Foot-Lgt Unlocked/Exterior Light Unlocked, Mirr-Foot-Lgt w/Master SW, Mirror Foot Light Time/Exterior Light Time, MT/AT Setting, Multi Weather Light Function, Noise and Vibration Reduction, Non P/R Range Rear Sensor, Object Not Moving 3s Buzz Vol, ODO Display Time After IG OFF Adjust, Open Door Warning Function, Operation History Clear, Out-Handle-Lgt Approached, Out-Handle-Lgt Unlocked, Out-Handle-Lgt w/Master SW, Outside Air Mode Auto Switch Function, Outside Door Handle Fold Adjust, Oxygen Supply, P Window Auto Down From Driver, P Window Auto Down, P Window Auto Up From Driver, P Window Auto Up, P/W Down W/ Transmit, P/W Operation Buzzer W/ Transmit Function, P/W Up W/ Smart, P/W Up W/ Transmit, P/W Wireless Ope Buzz, Panic Alarm Function, Panic Function, Park Wait Time Adjust, Parking Brake Service Mode, Partition Lighting Adjust, Passenger Seatbelt Warning Buzzer Function, Passive Mode (Security System), PBD Assist Close Operation, PBD Assist Open Operation, PBD Buzzer Function, PBD Buzzer Tone, PBD Buzzer Volume Adjust, PBD Close SW Press Condition, PBD Close SW Waiting Time, PBD Power Operation, PBD SW Operation, PBD/Emblem Sensor Function, PCS Alarm Activation Distance Retention Setting 1, PCS Alarm Activation Distance Retention Setting 3, PCS Cooperate Function, PCS Operation State Retention Setting, PCS Reminder Buzzer Sound, PCS Warning Sensitivity Retention Setting, PCS Warning Timing State Stored 3, Pilot Injection Volume Select Cylinder, Pilot Injection Volume Value, Pilot Injection Volume, PKSA (O) Auto Mute Function, PKSA (O) Forward Detection Image Display, PKSA (O) Image Display when Away from the Obstacle, PKSA (O) Judgment of Obstacle on Course, PKSA (O) Switch State Stored, PKSB (O) Function, PKSB (O) Target Stopping Distance, PKSB (P) Function, PKSB (P) Target Stopping Distance, PKSB (P) Width Adjustment (Y Axis), PKSB (V) Function, PKSB (V) Operation Timing Setting, PKSB (V) Sensitivity, PKSB Switch State Stored, Power Back Door Opening Adjust, Power Saving Wait Time(Out Of Entry Range), Power Steering ECU Initial Setting, Power 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, R Wiper Stop Function at Back Door/Trunk Lid Open, Rain Mode, RCTA Function, RCTAB Function, RCTAB Operation Timing Setting, RCTAB Sensitivity, Rear A/P HI Set, Rear Center Seatbelt Warning Buzzer Function, Rear Curtain Close Relay, Rear Curtain Open Relay, Rear Left Seatbelt Warning Buzzer Function, Rear Right Seatbelt Warning Buzzer Function, Rear Seatbelt Warning Buzzer Function, 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, Remote Air Conditioner Start Setting, Remote

Air Conditioner Stop Setting, Remote Door Lock Setting, Remote Eng Start Stop Setting (Trunk Lid Opened), Reset A/C Information, Reset Memory, Residential Area Mode Setting, Response Time Adjust, Reverse Buzzer Setting, Reverse Coupled Actuation Mirror Angle Setting, Reverse Coupled Actuation Mirror Angle, Reverse Range Front Sensor, Right Headlight Shade Angle Setting, RL Seat A/C and Heater Sensitivity Adjust, RL Seat Heater Auto Function, RL Window Auto Down From Driver, RL Window Auto Down, RL Window Auto Up From Driver, RL Window Auto Up, Roof Opened Intrusion Function, Room Light when Aprchd, R-pos to Rear Sun Shade COM, Rr Corner Sensor Long Distance Detection (Shift R), Rr Corner Sensor Onset Range, RR Seat A/C and Heater Sensitivity Adjust, RR Seat Heater Auto Function, Rr Sensor Onset Range, RR Window Auto Down From Driver, RR Window Auto Down, RR Window Auto Up From Driver, RR Window Auto Up, S-Belt-Bkl-Lgt/ACC OFF, S-Belt-Bkl-Lgt/Door Open, Scuff Plate Lamp linked to D-Door Unlock SW, Scuff Plate Lamp linked to Door open, Scuff Plate Lamp linked to Smart, Scuff Plate Lamp linked to Wireless Key, Seat Airflow Mode Setting, Seat Blast Mode Setting, Seat Heater Auto Operation, Seat Lift Up Distance Adjust, Seat Move Distance, Seat Position Voice Control Function, Seat position/Tilt Telesco memory recall setting, Seat Switch Link Function, Seat Travel Distance, Security Alarm Setting, Security Control with Mechanism Key Function, Security control with mechanism key, Security System, Sedan/Wagon Setting, Sensitivity Adjust, Sensitivity, Sensor Condition N, Servomotor Initialization, Set Temperature Shift, S-FLOW Control Auto Function, Shade Upper Area Lighting Function, Shift Lever R Signal Delay Time Adjust, Shift Linked Automatic Door Lock Function, Shift Linked Automatic Door Unlock Function, Side Sensor Alarm Function, Side Sensor Onset Range, Slide Link Cushion Length Ctrl, Slide Link Hdrest Length Ctrl, Slide Roof Open Warning Function, Slide Roof Open Warning, Slide Roof Voice Control Function, Sonar Mode, Speed Limit Display Function, Speed Linked Automatic Door Lock Function, Speed Linked Automatic Door Unlock Function, Start Indicator Function, Start Off Mode, Start PreA/C, Start Switch Light Function, Starter Exchange, Steering Heater Auto Function, Steering Heater Sensitivity Adjust, Step Light Lighting Time, Stop PreA/C, SUBARU/Toyota, Sudden Braking Notification Function, Suggestion Service Function, Switch Battery Type, Switch Grille Shutter Control Mode, Switch Oil Maintenance Display, T1 RoomLamp BatterySave, Tail Remind Buzzer Function, Telematics Microphone Volume Adjust, Telematics Speaker Volume Adjust, Temporary Mute Function, Temporary Mute Reset Speed Adjust, Tire Circumference Setting, Tire Pressure Sensor Registration, Torque Sensor Adjustment, Total Warm-up Time Setting, Touch Activation Over Threshold, Town Mode, Traffic Sign Recognition Animation Function, Trunk Lid Linked with Door Lock Function, Trunk Lid Open Mode Function, Trunk Lid Operation by Electrical Key Function, Trunk Lid Operation by Entry Function, Trunk Lid Operation, Trunk Link with Door Lock, Tunnel Beam Function, Turn by Turn Animation Function, Ultrasonic Sensor (Front Center) Detection Range, Ultrasonic Sensor (Front Corner) Detection Range, Ultrasonic Sensor (Rear Center) Detection Range, Ultrasonic Sensor (Rear Corner) Detection Range, Ultrasonic Sensor (Side) Alarm Detection Range, Ultrasonic Sensor (Side) Alarm Function, Ultrasonic Sensor Actuation (Shift N), Unlock 2 Operation, Unlock Key Twice Function, Unlock Key Twice, User Support Service Function, Voice Guidance Function, VSC/TRAC/4WD Control Prevention Mode, Walk Away Lock after Getting Out Func (Closing), Walk Away Lock after Getting Out Function, Warm-up Time Setting, Warning by Glass Broken Sensor, Warning by Horn Function, Warning by Horn, Warning Time, Window Open Warning Function, Window Open Warning, Wiper Specification Switch, Wiper Voice Control Function, Wireless Auto Lock, Wireless Backdoor Open Operation Adjust, Wireless Buzzer Resp, Wireless Buzzer Response Function, Wireless Buzzer Vol, Wireless Buzzer Volume Setting, Wireless Buzzer Volume, Wireless Control Function, Wireless Control, Wireless Glass Hatch Open Operation Adjust, Wireless Glass Hatch Open, Wireless Key Related Close, Wireless Key Related Open, Wireless Key Related Operation, Wireless Lock Function with Doors Open, Wireless PBD Operation, Wireless Power Back Door

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Open, Wireless Trunk Lid Open Operation Adjust, Wireless Unlock Twice Function, Zero Point Calibration

### 802 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 Light, 4WD Warning, 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), ABS Warning, A-C Driving Demand, Access to Rear Seat Signal, Accumulator Drive, ACM Inhibit, 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 SLT Solenoid, Activate SLU Solenoid, Activate SR 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 Circuit Relay, Activate the Coolant Water Route Switching Valve 2, Activate The Coolant Water Route Switching Valve, Activate the Electric Heater1 Relay, Activate the Electric Heater2 Relay, Activate the Electric Heater3 Relay, Activate The Electric Water Pump, 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 Vapor-Containment Valve, Activate The Heater Water Pump., Activate the Mirror Heater Relay, Activate The Power Window, Activate the Rear AC Magnet Valve, Activate the Slip Indicator Light, Activate The Solenoid (SC1), Activate The Solenoid (SC2), Activate the Solenoid (SC3), Activate the Solenoid (SL6), Activate The Solenoid (SLC), Activate The Solenoid (SLG), Activate the Solenoid (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 VSV For Intake Control, Activate The VSV For Swirl Control Valve, Activate The VSV For Vent Valve, Activate The Water Pump, Active TRC Indicator, ACTIVE TRC Warning, Advanced Parking Guidance Indicator, Advice Display, AFS Alarm Display, AFS Indicator (Malfunction) Display, AFS OFF Indicator, AHS LH High Beam, AHS RH High Beam, Air Bypass Valve Bank 2, Air Inlet Damper (Rear), Air Inlet Damper Control Servo Motor, Air Inlet, Air Mix Damper (Driver Side), Air Mix Damper (Passenger Side), Air Mix Damper (Rear), Air Mix Servo Targ Pulse(D), Air Mix Servo Targ Pulse(P), Air Mix Servomotor Pulse D Side, Air Outlet (Front), Air Outlet (Rear), Air Outlet Damper (Driver Side), Air Outlet Damper (Passenger Side), Air Outlet Damper (Rear), Air Outlet DEF, Air Outlet Rear FOOT (Driver Side), Air Outlet Rear FOOT (Passenger Side), Air Outlet Servometer Pulse (D), Air Purifier Mode, Air Purifier(Ion), Air Suspension Indicator (HI), Air Suspension Indicator (LO), Air Suspension Indicator (N), Airbag Warning, All Indicator, Alternator Voltage Control, 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, Auto Air Conditioner Indicator, Auto High Beam Control Indicator, Auto High Beam Warning Indicator, Auto Leveling Headlamp Indicator, Auto LSD Indicator, Auto Power OFF Cancel, 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 Warning, AVS Comfort Indicator, AVS Sports Indicator, Back Door Select, Back Door Sensor Power Supply, Batt Cool Down Servo Targ Pls, Battery Magnetic Valve, Beep, Blower Level, Blower Motor, Brake Hold Indicator, Brake Override Warning, Brake Warning, BSM Indicator, BSM OFF Indicator, BSM Warning, 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, Ceiling Light, Cent Consol Spot LGT, Center DIFF LOCK Indicator, Charge Indicator, Charge Warning (Red), Charge Warning, Check Engine Warning, Check Mode, Check The Cylinder Compression, Clearance Light (+ Front Side Marker Light), Clearance Light, 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 Test, Compressor Target Speed, Connect The TC And TE1, Control the ACIS VSV Motor Duty Ratio, Control The ACM Inhibit, Control The EGR Step Position Bank 1, Control The EGR Step Position, 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 VVT OCV Duty Ratio Bank 1, Control the Exhaust VVT OCV Duty Ratio Bank 2, Control The Fuel Pump Duty Ratio (Brushless), Control the Fuel Pump Duty Ratio, Control The Injection Mode, Control The Injection Volume For A/F Sensor, Control the Intake VVT OCV Duty Ratio Bank 1, Control the Intake VVT OCV Duty Ratio Bank 2, Control the Motor/Generator Cooling Oil Pump, Control The Select Cylinder Fuel Cut, Control the Shift Area (CVT), Control the Target Fuel Pressure Offset, Control the Transmission Oil Pump, 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 SW Signal, CRAWL Indicator, CRAWL Warning, Cruise Indicator (Yellow), Cruise Indicator, Cushion Length, D-4S (A/F Control), D-4S (Fuel Cut), D-4S (Injection Volume), Day/Night Time signal, Daytime Running Light, DCM Firmware Update, D-Door Unlock, DEF A/O Servo Pulse(D), Defogger Control, Defogger Relay Rear, Dehumidification Magnetic Valve, Deicer Relay Front, Delivery Heater, Diesel Particulate Filter Warning, Diesel Throttle Target Angle Bank 1, Diffuse Pulse(R), Dimmer Signal, Disconnect System Function Check, Display Mode, Door Lock, Door Lock/Unlock Status Lamp, Door Open Warning, Door Unlock, Downhill Assist Control Indicator, Downhill Assist Control Warning, Drift From The Lane Indicator, Drift From The Lane Warning, Drive Swivel Motor LH LEFT, Drive Swivel Motor LH, Drive Swivel Motor RH RIGHT, Drive Swivel Motor RH, Drive The Leveling Motor, Driver Seat Sensor Power Supply, Driver Side Seat Belt Warning, Dr-Seat Outside Transmitter, Dr-Seat Select, D-Seat Outside Transmitter, D-Seat Select, Easy Access Buckle, ECB Main Relay, ECB Solenoid (SLA), ECB Solenoid (SLR), ECB Utility, ECB Warning, ECO Mode Indicator, ECONO Indicator, ECT PWR Indicator, ECT SNOW Indicator, Electric Heater1, Electric Heater2, Electric Heater3, Electric Water Heater, Electrical Fan, Electromagnetic Oil Pump, Emergency Call Cancellation, Emergency Exit Warning, Emission Pulse(R), Enforced Driving FHL Warning Trigger, EPB Auto OFF Indicator, EPB Control Switch, EPS Warning, EV Drive Indicator, EV Mode Indicator, Evaporator Magnetic Valve, Extended Illumination 1, Extended Illumination 2, Exterior Lighting SW, Extra High Beam, Face A/O Servo Pulse(D), Face A/O Servo Pulse(P), Foot A/O Servo Pulse(D), Foot A/O Servo Pulse(P), Fr Control Rear Air Outlet Damper Servo Motor, 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 Left Air Mix Damper Control Servo Motor, Front Left Air Outlet Damper Control Servo Motor, Front Left Seat Blower, Front Left Seat Heater, Front Right Air Mix Damper Control Servo Motor, Front Right Air Outlet Damper Control Servo Motor, Front Right Seat Blower, Front Right Seat Heater, Front Sliding Sunshade, Front Vertical Operation, Front Washer Relay, Front Wiper Hi Operation, Front Wiper Lo Operation, Front/Rear Buzzer, Fr-Seat Inside Transmitter, Fuel Cap Reminder Warning, 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 Lid Lock Relay, Fuel Lid Opener, Fuel Lid, Fuel Pump - Duty Cycle, Fuel Pump Single Phase Energization, Fuel Warning (CNG), Glass Hatch Open, GLOW Warning, Go To Service Warning, Green Indicator, Hazard Answer Back, Hazard, 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, Heat Exchange Shut Valve, Heater Valve, Heating Electric Expansion Valve, Heating Three-way Valve, Height High Indicator, Height High Warning, 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, Hot A/M Servo Pulse(D), Hot A/M Servo Pulse(P), HV System Indicator (0%), HV System Indicator (100%), HV System Indicator (200%), HV System Indicator (300%), HV System Indicator (400%), HV System Indicator (-50%), HV System Indicator (MAX), HV System Indicator (MIN), HV Unit Hot Warning, HV-EV System Indicator (0%), HV-EV System Indicator (100%), HV-EV System Indicator (200%), HV-EV System Indicator (300%), HV-EV System Indicator (400%), HV-EV System Indicator (-50%), HV-EV System Indicator (MAX), HV-EV System Indicator (MIN), HWD Relay, Hybrid Battery Charge, Hybrid Battery Heater Relay, Hybrid System Warning, Hydrogen Leak Warning, ICS OFF Warning, IG OFF P/W Control Permission Output, IG OFF P-W Control Permission Output, IGP Signal, Illuminated Entry System, Illumination Module A1, Illumination Module A2, Illumination Module A3, Illumination Module A4, Illumination Module B1, Illumination Module B2, Illumination Module B3, Illumination Module B4, Immobilizer Indicator, iMT Indicator (Green), iMT Indicator (Yellow), Indicate AFS OFF Lamp, Indicator Condition, Indicator For Lighting, Initial Axis Adjust Value Display, Injection Timing Select Cylinder, Injection Volume, Injector Compensation, Inside Handle Illumination, Inside Luggage Tuner Power Supply ON, Inside Luggage Tuner Power Supply, Inside Trunk/Backdoor Transmitter, Inspection Mode, Instrument Panel Illumination, Intercooler Water Pump Relay, Interior Illumination Light, Interior Illumination Light1, Interior Panel Relay, Intrusion Sensor Power, INTUITIVE P-A LCD Indicator, INTUITIVE P-A LCD OFF Indicator, Ion Generator, KDSS Warning, Key Cylinder Illumination, Latch Release Test, Latch Release, LDA Indicator (White), LDA Indicator, LDA Steering Control Indicator, LDA Warning, LED Headlamp Warning, Left High Beam, Left LDA Indicator, Left LDA Warning, Left 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, Load Specification Information, Low Beam, Low Pressure Magnetic Valve, 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, Maintenance Warning, Master Warning, Meter Day Mode Switch, Meter Display (0), Meter Display (1), Meter Display (2), Meter Display (3), Meter Display (4), Meter Display (5), Meter Display (6), Meter Display (7), Meter Display (8), Meter Display (9), Meter Display (All), Middle Pressure Magnetic Valve, Mirror Fold Signal, Mirror Fold, Mirror Heater Relay, Mirror Heater, Mirror Return Signal, Mirror Return, MMT E Mode Warning, 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), Navi CVT Indicator, Night View Indicator, O-D OFF Indicator, ODO-TRIP Change Switch, OFF Road Guidance Indicator, OFF Road Guidance Warning, Oil Level Warning, Oil Pressure Meter Operation (1-2), Oil Pressure Meter Operation (1-4), Oil Pressure Meter Operation (3-4), Oil Pressure Meter Operation (HIGH), Oil Pressure Meter Operation (LOW), Oil Pressure Warning, Oil Pump, Open Door Warning, Outer Mirror Reverse Light, Outside Mirror Footwell Lights, Outside Trunk/Backdoor Transmitter, Over Speed Indicator, Overhead Tuner Power Supply ON, Overhead Tuner Power Supply, P Range Indicator, P Supply for Steering Lock, Panel Light, Park Warning, Passenger Seat Sensor Power Supply, Passenger Side Seat Belt Warning, PBD Buzzer, PBD Close SW Light, PBD Clutch, PBD Motor, PBD Open/Close, PCS Buzzer, PCS OFF Warning, PCS Warning, Pedestrian Protection Warning, Pelvis Support Operation, 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 Running Board Forced Retracting, Power Windows, Power/Engine SW Light, PPS Warning, Prohibit the Catalyst OT Misfire Prevent Fuel Cut, Prohibit the Idle Fuel Cut, Proximity Sound (Low Speed), Proximity Sound (Vehicle Stationary), Proximity Sound Indicator, Pr-Seat Outside Transmitter, Pr-Seat Select, P-Seat Outside Transmitter, P-Seat Select, PTC Heater, Radar Cruise Approach Alarm Buzzer, Radar Cruise Indicator (Yellow), Radar Cruise Indicator, Radar Cruise Proximity Warning Buzzer, Radar Cruise Stop Buzzer, Radar Cruise Stop Keeping Announce Buzzer, RCD OFF Indicator, RCTA Indicator, RCTA OFF Indicator, Ready Indicator, Rear A/M Servo Pulse(P), Rear A-C Mag Valve, Rear Air Mix Damper Control Servo Motor, Rear Air Mix Servo Target Pulse, Rear Blower Level, Rear Blower Motor, Rear Buzzer, Rear Defogger Relay, Rear Defogger, Rear DIFF LOCK Indicator, Rear Driver Side Sensor Power Supply, Rear Fog Lamp Indicator, Rear Fog Lamp, Rear Fog Light Relay, Rear Fog Light, Rear Inner Wheel Control Indicator, Rear Inner Wheel Control Warning, Rear Inverter Cooling Fan, Rear Left Seat Blower, Rear Left Seat Heater, Rear Light Indicator, Rear Passenger Side Sensor Power Supply, Rear personal light, Rear Right Air Mix Damper Control Servo Motor, Rear Right Seat Blower, Rear Right Seat Heater, Rear Seat Belt Warning, Rear Seat Lumbar Adjustment, Rear Side Buckle Light, Rear Washer Relay, Rear Welcome Light, Rear Wiper Operation, Rear Wiper Washer Motor Relay, Red Indicator, Reductant Discharge, Reductant Filling (Pressure Keep), Reductant Injection Valve, Reductant Pipe Heater, Reductant Pump Check (Backward), Reductant Purge, Reductant Tank Heater, Reductant Warning, Refresh B1, Refresh B2, Refresh B3, Refresh B4, Refresh B5, Refresh C1, Refresh C2, Refresh C3, Refresh C4, Refrigerant Gas Volume Check, Relay for Interior Light Auto Cut Function, Remote Engine Starter, Reverse Gear Signal, Reverse Signal, RH Courtesy Light, RH Mirror Right/Left, RH Mirror Up/Down, Ride Mode Indicator, Right Front Seat Heater, Right High Beam, Right LDA Indicator, Right LDA Warning, Right Turn Signal Indicator, Right Turn Signal Lamp, Right Turn Signal Light, Rr-Seat Inside Transmitter, Seat Backrest Recline, Seat Heater Active Level, Seat Slide Operation, Security Horn 2, Security Horn, Security Indicator, Self Power Siren, SET Indicator, Shift-By-Wire Warning, Shock Detection Unlock, Shoulder, Side Back Support, Side Cushion Support, Side Mirror Foot Light, Side Support Operation, Signal Check, SIL Indicator (Down), SIL Indicator (Up), Slide Roof, Sliding Sunshade, Slip Warning, Smart System Indicator, Smart System Warning, SOC Gauge (1-2), SOC Gauge (1-4), SOC Gauge (3-4), SOC Gauge (MAX), SOC Gauge (MIN), SOC Warning, Solenoid Relay, Speed Signal Input (0), Speed Signal Input (120), Speed Signal Input (160), Speed Signal Input (200), Speed Signal Input (240), Speed Signal Input (280), Speed Signal Input (320), Speed Signal Input (360), Speed Signal Input (40), Speed Signal Input (400), Speed Signal Input (80), Speedometer Operation (0km-H,0mph), Speedometer Operation (120km-H,120mph), Speedometer Operation (160km-H,160mph), Speedometer Operation (200km-H,200mph), Speedometer Operation (240km-H,240mph), Speedometer Operation (280km-H,280mph), Speedometer Operation (320km-H,320mph), Speedometer Operation (360km-H,360mph), Speedometer Operation (400km-H,400mph),



Speedometer Operation (40km-H,40mph), Speedometer Operation (80km-H,80mph), Sport Indicator (CVT Sport), Start SW Light Power Supply, Starter (Hood Close), Starter Motor Drive Magnet Switch (Hood Close), Steering Heater Indicator (Yellow), Steering Heater, Step Light, 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, 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), 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), Tailgate Open, Taillamp Indicator, Taillight Relay, Taillight-Clearance Light, Temporary Vehicle Start Up, Test The Turbo Charger Step Motor Bank 1, Timer Switch (00), Timer Switch (H), Timer Switch (M), Timer Switch (Single), Timing Belt Warning, Tire Pressure Warning System Indicator, Tow Haul Indicator, Trailer Reverse Assistant Light, Trip Reset Switch, Trunk And Back-Door Open, Turn Light LH Relay Operation, Turn Light RH Relay Operation, Upper Air Mix (Driver Side), Upper Air Mix (Passenger Side), Variable Shade Beam LH, Variable Shade Beam LH/RH, Variable Shade Beam LH-RH, Variable Shade Beam RH, Vehicle Approach Warning OFF Indicator, Vehicle Horn, Vehicle Proximity Notification System Warning, Vehicle Stop Warning, VGRS Warning, Viscous Heater, 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 OFF Indicator, VSC TRC Indicator, Washer Nozzle Heater, Washer Warning, Water Level Warning, Water Pump, Water Temperature Meter Operation (110C,230F), Water Temperature Meter Operation (120C,248F), Water Temperature Meter Operation (127C,260F), Water Temperature Meter Operation (50C,122F), Water Temperature Meter Operation (60C,140F), Water Temperature Meter Operation (70C,158F), Water Temperature Meter Operation (80C,176F), Water Temperature Meter Operation (Middle), Wiper Power Relay, Wireless Buzzer

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## New Coverage Details – USA European

### New BMW Coverage

#### 9 new Adjustment type special tests:

Front Driver/Pass Door Power Window Regulator Initialization, Initialization Of Both Rear Window Lifters, Initialize Power Window Regulators, Rain Sensor Initialization, Rear Driver/Pass Side Door Pwr Window Regulator Initialization, Rear wiper test reference run, Reset Control Unit, Test spray nozzles / exterior mirror heating, Windshield wiper test reference run

#### 46 new Actuation type special tests:

A/C Compressor Magnetic Coupling, Auxiliary Water Pump, Cent. Locking Full Veh. Unlocking, Centr. Lockg. Unlock Driver Door, Central Locking Safe Function, Front Left Seat Heating Stage 1, Front Left Seat Heating Stage 2, Front Left Seat Heating Stage 3, Front Right Seat Heating Stage 1, Front Right Seat Heating Stage 2, Front Right Seat Heating Stage 3, Headlight Washer System, Horn Relay, Left-Rear Power Window: Close, Left-Rear Power Window: Open, Lock (Central Locking), Lock All Doors, Mirror Heater, Rear center sun blind, Rear Driver Side Power Window Close, Rear Driver Side Power Window Open, Rear left sun blind, Rear Passenger Side Power Window Close, Rear Passenger Side Power Window Open, Rear right sun blind, Rear window lifter: Close, Rear window lifter: Open, Rear Window Washer Pump, Rear Windscreen Wiper, Rear-Window Defogger, Refrigerant Compressor, Release Rear Window, Right-Rear Power Window: Close, Right-Rear Power Window: Open, Sun Blind Down, Sun Blind Up, Unlock All Doors, Unlock Rear Lid, Water Heater Valve Left, Water Heater Valve Right, Windscreen Washer Pump, Windscreen Washer, Wiper end position test, Wiper Service Position, Wiper, Speed 1, Wiper, Speed 2

### New Mercedes-Benz Coverage

#### 1 new Adjustment type special tests:

ECU Reset

#### 2 new Actuation type special tests:

Defogger Control, Steering Wheel Vibration Test

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