



Bosch ESI[truck] Heavy Duty Truck Software Update – Q1 2019

Ver 2019/1

Bosch ESI[truck] software release version 2019/1 is full of valuable and timesaving coverage features that you don't want to miss. Included are the details on new coverage additions.

In addition, the new Off-Highway Software package is now available, which gives users the ability to diagnose construction and agricultural vehicles.

Update your Bosch ESI[truck] Diagnostic Scan Tool to software version 2019/1 today to maximize the power of your Bosch ESI[truck] Diagnostic Scan Tool.



Newly Available Software Feature

Off-Highway Software

- Off-Highway coverage was first available with the last revision (2018/3)
- Includes diagnostic coverage for construction, agricultural, stationary engines, street sweepers, and more
- NOTE – these features are only available if you have purchased the ESI[truck] Off-Highway Upgrade Cable Kit and Introductory Software. Learn more about Bosch Off-Highway Software at <https://www.boschdiagnostics.com/pro/products/esitruck-highway-upgrade-cable-kit-introductory-software-license>

Added Coverage - Summary

Heavy –Duty Truck Additional Coverage

New content added for the following Heavy Duty Brands:

- Allison
- Bendix
- Caterpillar
- Cummins
- Detroit Diesel / MBE
- Eaton
- Freightliner
- Haldex
- PACCAR
- Power Solutions International (PSI)
- Mack
- Mercedes-Benz
- Meritor Wabco
- Navistar
- Volvo

Light and Medium –Duty Truck Additional Coverage

- Ford
- GMC/Chevrolet
- Hino
- Isuzu
- Mercedes Benz
- Mitsubishi-Fuso USA

Off-Highway: Stationary Engines Additional Coverage

- Caterpillar
- Deutz
- John Deere
- Mercedes Benz
- Perkins
- Volvo Penta

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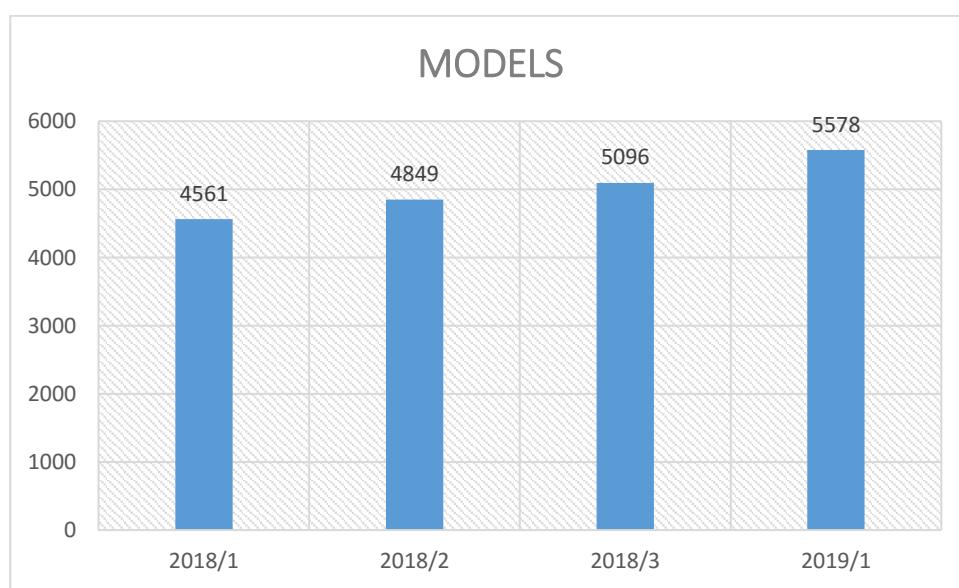
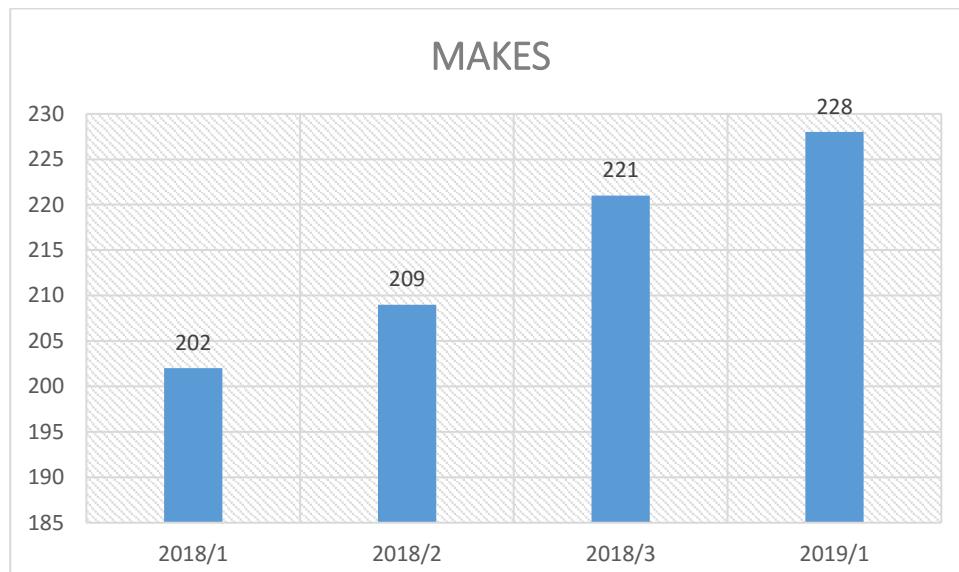
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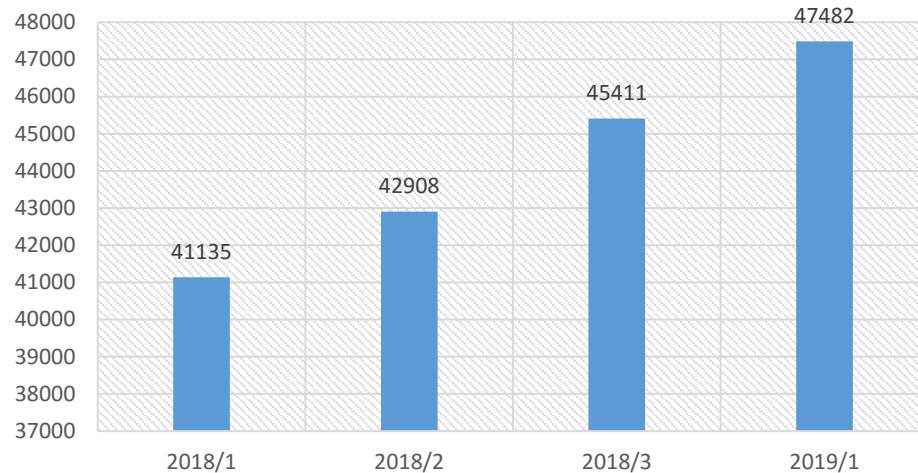
Coverage metrics 2019/1

1.1 Figures

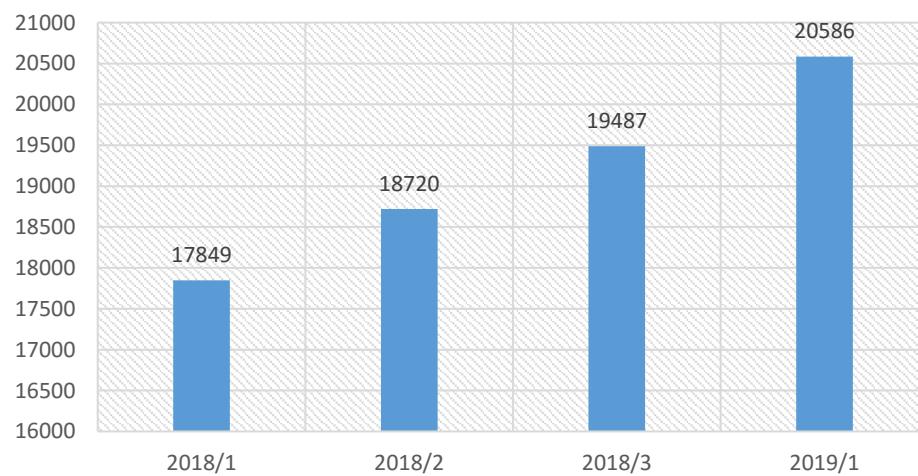
Note: These metrics include all type of vehicles/modules/licenses (Truck, OHW...)



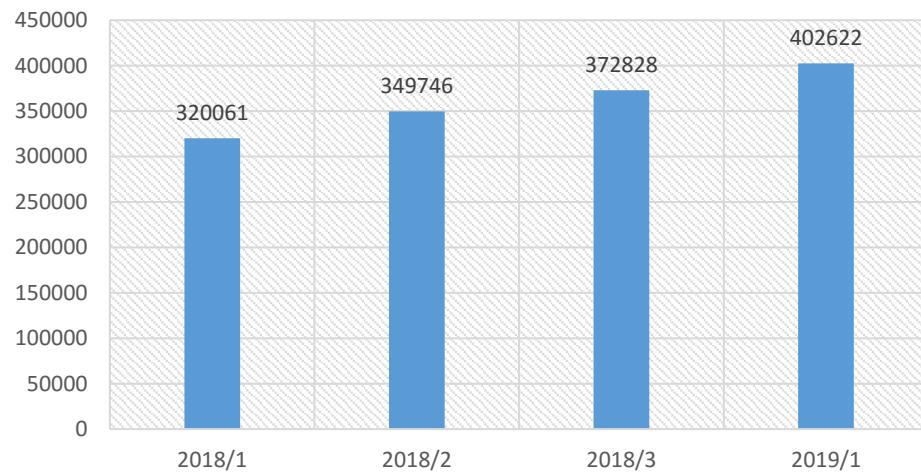
ELECTRONIC CONTROL SYSTEMS



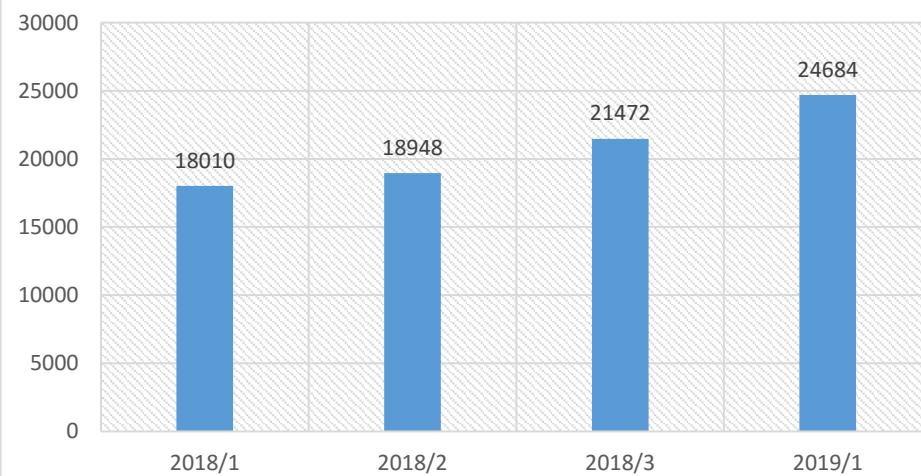
WIRING DIAGRAMS



FAULT CODES



TROUBLESHOOTING BY FAULT CODES



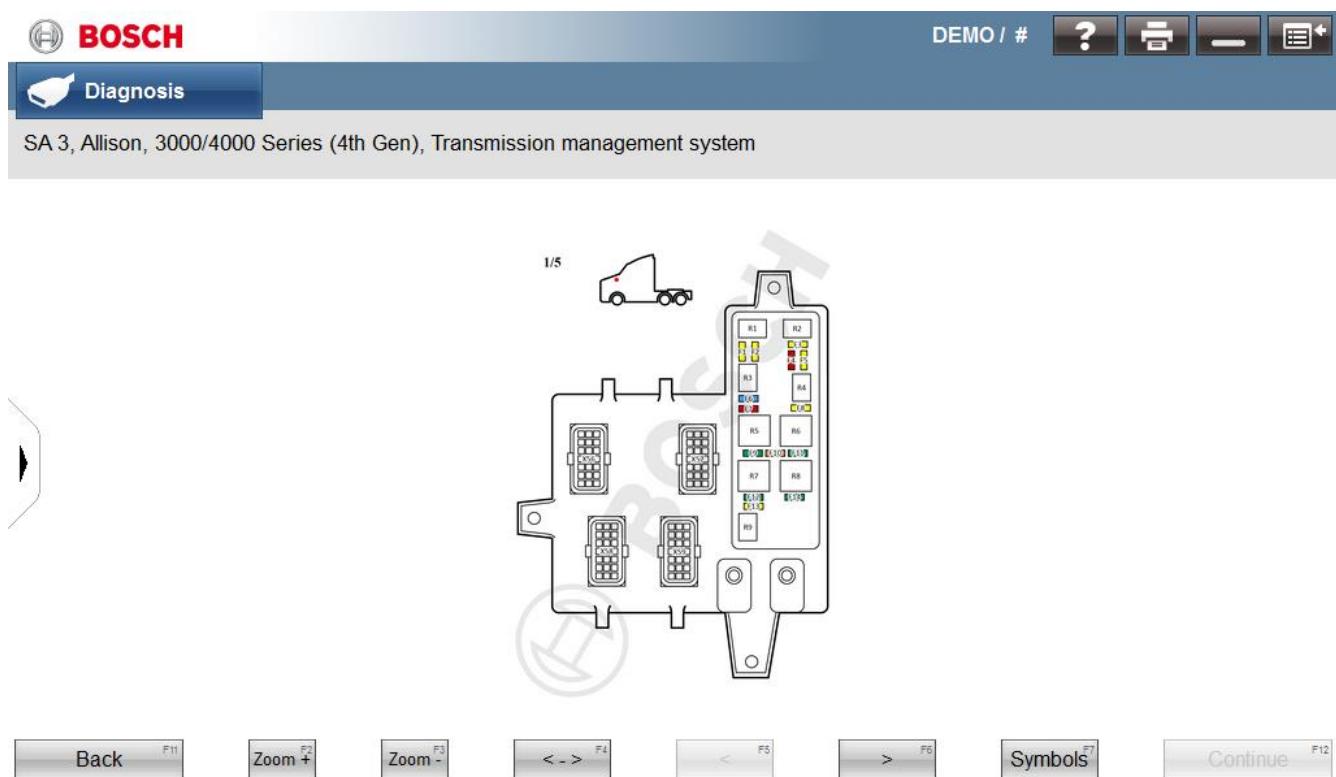
. 2 .

Software Innovations

2.1 Fuses and relays boxes

Technical information available in Model Info > Fuse and relay diagram.

Internet is not required.



2.2 Maintenance schedules (Service info) is shown alphabetically

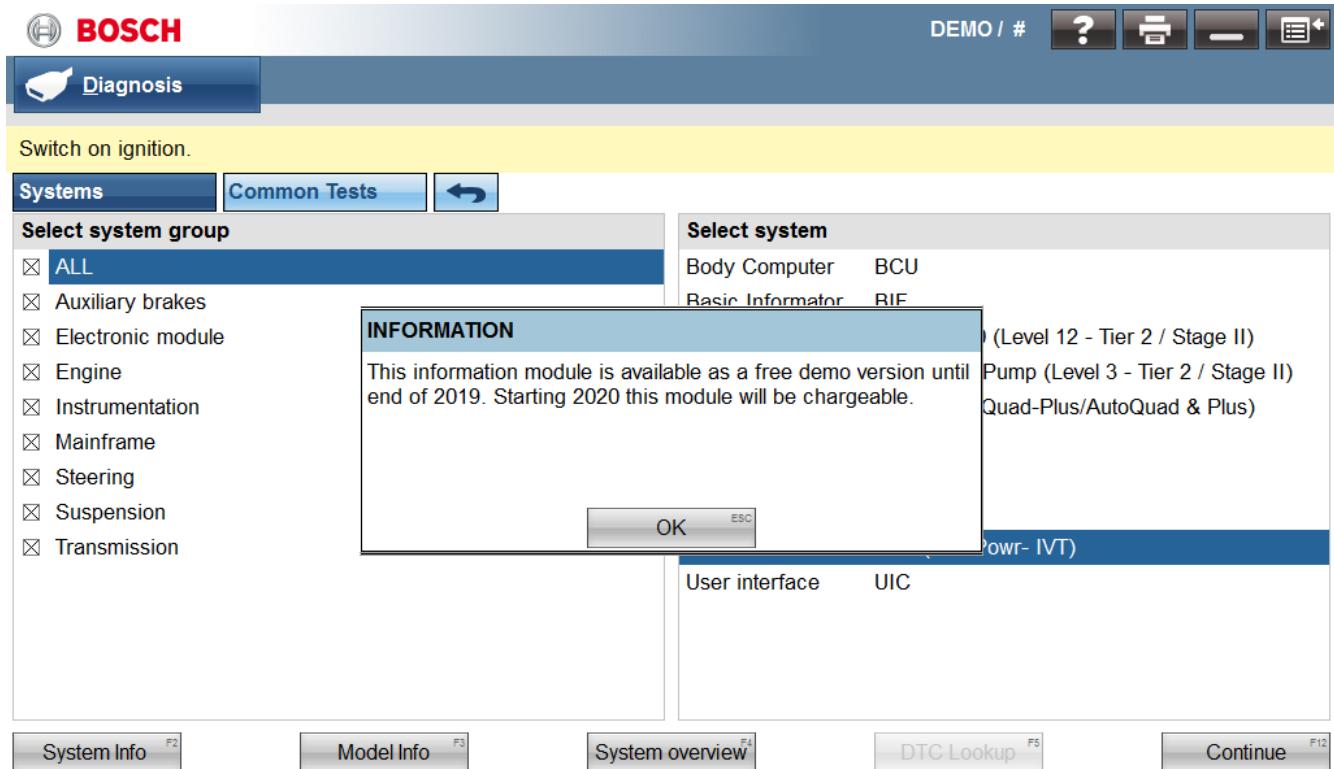
The screenshot shows the Bosch ESI[truck] software interface. At the top, there is a header bar with the Bosch logo, the text "BOSCH", and a "DEMO / #". To the right of the demo number are several icons: a question mark, a printer, a floppy disk, and a menu. Below the header, the text "ISX 11.9/12/15 CM2250 EPA10" is displayed. The main content area is titled "Complete service" and contains a list of maintenance intervals:

| Service Level | Mileage / Hours / Duration |
|---------------|--|
| Daily | |
| A | 25,000 miles (40,000 km) / 800 hours / 6 months |
| B | 50,000 miles (80,000 km) / 1500 hours / 12 months |
| C | 125,000 miles (200,000 km) / 3000 hours / 2 years |
| D | 150,000 miles (241,000 km) / 4500 hours |
| E | 200,000 miles (320,000 km) / 4500 hours |
| F | 250,000 miles (400,000 km) / 6000 hours / 2 years |
| G | 500,000 miles (800,000 km) / 10000 hours / 5 years |

At the bottom of the screen, there are three buttons: "Back F11", "Save F2", and "Continue F12".

2.3 Online Repair Information Off-Highway modules

Promotional period in Off-Highway modules until end of 2019.



. 3 .

Main new functionalities by brand – HEAVY DUTY

3.1 ALLISON

1000/2000 3rd gen

- Freeze frame data for diagnostic codes

1000/2000 4th gen

- Freeze frame data for diagnostic codes

Hybrid H 40/50 EP

- Manual diagnosis

3.2 BENDIX

All Systems

- Manual diagnosis

BOSCH

DEM0 / # ? Print Minimize Maximize

Diagnosis

Wingman ACB / Advanced, Radar Front End (anti-collision system)

Information

IMPORTANT

Only the errors present in the system will appear, meaning the errors that are active.

- Option 1

- The errors are displayed on screen and are made up of codes: SPN and FMI.- To see the rest of the errors press the buttons "UP" or "DOWN".

The format of the error code that must be entered is as follows:
SPN

- Example Code : 1069

Enter the fault code in the manual diagnosis section of the

Fault code Search F5

Back F11 Troubleshooting F2 Continue F12

3.3 CATERPILLAR

Transmissions CX28/CX31/CX35

- Manual diagnosis

3406, C-12, 3126, 3176

- Vehicle speed signal parameters

 **BOSCH** DEMO / #    

 **Diagnosis**

DRIVING SPEED SIGNAL - C-12 SAE J1708, Engine management system, unit injector

Information

CURRENT VALUE:

| Name | ACTUAL VALUE | MIN VALUE | MAX VALUE |
|---|-----------------------------|-----------|-----------|
| VEHICLE SPEED SIG., CALIBRATION VALUE  | 31200 ppm (Pulses per Mile) | 0 | 384000 |

All Systems

- Manual diagnosis

BOSCH

Diagnosis

C-12 SAE J1708, Engine management system, unit injector

Information

Visualization of blink codes sequence is only possible with the vehicle turned on and stopped.

Only the errors present in the system will appear, meaning the errors that are active.

In order to carry out the reading of the blinking codes the following steps must be followed:

1. Turn the ignition key.
2. Deactivate speed control system ("OFF").
3. "SET/RESUME" Tempomat switch . Press and hold the switch in any position until the malfunction indication lamp starts flashing.

Error codes will be displayed with the format shown in the next image. (See figure. 1.)

Pictures

Fault code
Search F5

Back F11
Troubleshooting F2
Continue F12

3.4 CUMMINS

All Systems

- Manual diagnosis

L9 CM2350

- Aftertreatment data record
- VGT calibration
- VGT compatibility test

The screenshot shows a software interface for Bosch Diagnosis. At the top left is the Bosch logo. To its right is a toolbar with icons for DEMO / #, Help (?), Print (P), Minimize (-), and Maximize (X). Below the toolbar, a blue header bar contains the text "COMPATIBILITY OF THE VGT ACTUATOR (VARIABLE GEOMETRY TURBINE) - L9 CM2350, Extra-high pressure injection, common rail". A sub-header "Information" is visible. The main content area contains text about compatible actuators and measurement readings. At the bottom left is a "Cancel" button, and at the bottom right is a "Continue" button.

- Time and data setting (PC and manual)
- Time and date synchronization with the tacograph
- PM sensor regeneration

BOSCH

Diagnosis

REGENERATION OF THE SOOT PARTICLES SENSOR - L9 CM2350, Extra-high pressure injection, common rail

Information

This test allows to clean the soot sensor of the aftertreatment system. Once the operation starts, a heater located inside the soot sensor will be activated.

Image

Cancel F11

Pictures F2

Continue F3

- Particulate filter status
- Parameters:
 - Engine brake
 - Vehicle speed signal
 - Auxiliary power take-off
 - Fan control

B4.5/6.7 CM2350

- Time and data setting (PC and manual)
- Aftertreatment data record
- DPF regeneration
- Parameters:
 - Engine brake
 - Vehicle speed signal
 - Auxiliary power take-off
 - Fan control

ISB 6.7 CM2350

- Aftertreatment data record
- Time and data setting (PC and manual)
- Parameters:
 - Engine brake
 - Vehicle speed signal

ISBe4 CM850 (ECS-DC4)

- Time and data setting (PC and manual)
- Time and date synchronization with the tacograph
- Parameters:
 - o Power take-off
 - o Auxiliary power take-off

X15 CM2350

- Aftertreatment data record
- Parameters:
 - o Engine brake
 - o Vehicle speed signal
 - o Fan control

ISBe (4 & 6 cylinders) CM800 & ECS-DC3

- Trip data
- Parameters:
 - o VIN
 - o Power take-off
 - o Auxiliary power take-off

ISL 8.9/9.5 CM2150 Euro 5

- Time and data setting (PC and manual)
- VGT calibration

ISBe 4.5/6.7 – ISDe 4.5/6.7 CM2150 Euro 5

- Time and data setting (PC and manual)
- Parameters:
 - o Engine brake
 - o Vehicle speed signal

ISB 6.7 CM2250

- Aftertreatment data record
- Parameters:
 - o Engine brake
 - o Vehicle speed signal

ISX CM2350

- Aftertreatment data record
- VGT compatibility test
- SCR regeneration
- Parameters:
 - o Engine brake

ISC 8.3 CM2250

- Aftertreatment data record
- Parameters:
 - o Engine brake

QSB 4.5/6.7 CM2250

- VGT installation and calibration
- VGT activation
- Fuel system leaks checking
- EFC activation

QSB 4.5/6.7 CM2350

- VGT installation and calibration
- Parameters:
 - o Maximum vehicle speed
 - o Cruise control
- Passwords management

QSM11 CM570

- Parameters:
 - o Engine protection
 - o VIN

QSX15 CM570

- Cylinder cutout

3.5 DETROIT-DIESEL / MBE

All Systems

- Manual diagnosis

CPC3 Evo New Cascadia

- New! Parameters configuration: Maximum Vehicle Speed, VIN, ESN, Power Curve Rating

CPC Systems

- New! Engine brake parameters for GHG14/GHG17 vehicles
- New! Vehicle speed signal, tire size parameters for EPA07/EPA10/GHG14/GHG7 vehicles
- Low Temperature ATD Regeneration for GHG14 vehicles

The screenshot shows the Bosch Diagnosis software interface. At the top, there's a header with the Bosch logo and navigation buttons for DEMO / #, ?, Print, Minimize, and Maximize. Below the header, a blue bar says "Diagnosis". The main area displays "ENGINE BRAKE - DDEC 13 CPC4, Common power train controller". A section titled "Information" asks "DO YOU WISH TO CHANGE THE PARAMETER?". Below that, a table lists "ACTUAL VALUES" for various parameters:

| Name | ACTUAL VALUE | MIN VALUE | MAX VALUE |
|--|---------------|-----------|-----------|
| CONFIGURATION OF THE ENGINE BRAKE | NOT INSTALLED | n/a | n/a |
| ENGINE BRAKE ACTIVATION, VEHICLE SPEED (MINIMUM VALUE) | 0 mph | 0 | 100 |
| ENGINE BRAKE ACTIVATION, MINIMUM ENGINE RPM (RETARDER DRIVELINE) | 800 rpm | 800 | 4000 |
| ENGINE BRAKE ACTIVATION, MINIMUM ENGINE RPM | 1100 rpm | 1000 | 4000 |
| ENGINE BRAKE ACTIVATION, DELAY TIME | 0 s | 0 | 5 |

At the bottom are four buttons: "Cancel" (F11), "Info" (F2), "F3" (with left and right arrows), and "Continue" (F12).

DDEC IV/DDEC V

- New! Vehicle speed signal, tire size parameters

DDEC V

- New! Engine brake parameters

DDEC 16 DD5

- Vehicle Technical data
- Service data

BOSCH

Diagnosis

Detroit Series DD5/8/13/15/16, engine: DDEC 16 GHG17 5.1 210 (DD5 GHG17)

Tightening torques

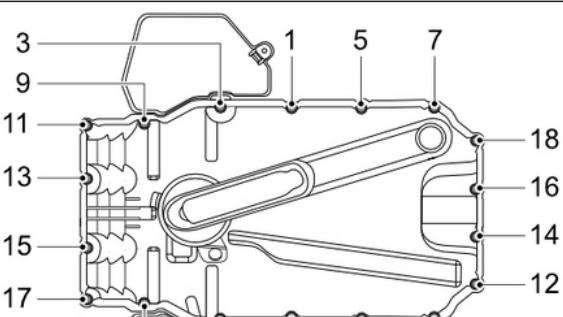
Search F8

Crankshaft
Cylinder head
Cylinder head cover
Engine flywheel
Engine lubrication
Exhaust manifold
Fuel system
General
Intake manifold
Rocker arm
Sump
Vibration damper

Tightening torques (Sump)

Sump: 18 lb-ft (25 Nm)

Tighten the bolts in numerical order



Back F11

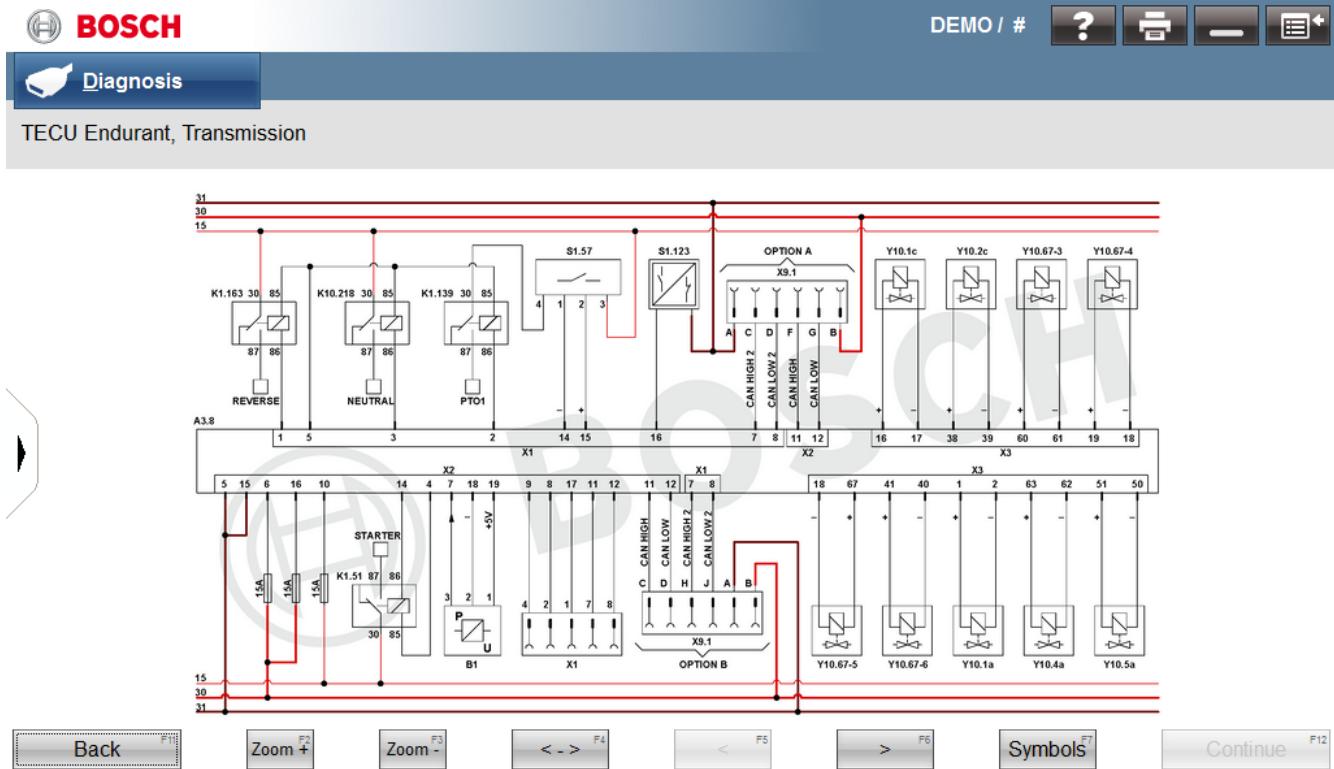
3.6 EATON

All Systems

- Manual diagnosis

Eaton Endurant

- New System! Fault codes reading, live data, technical data, wiring diagram



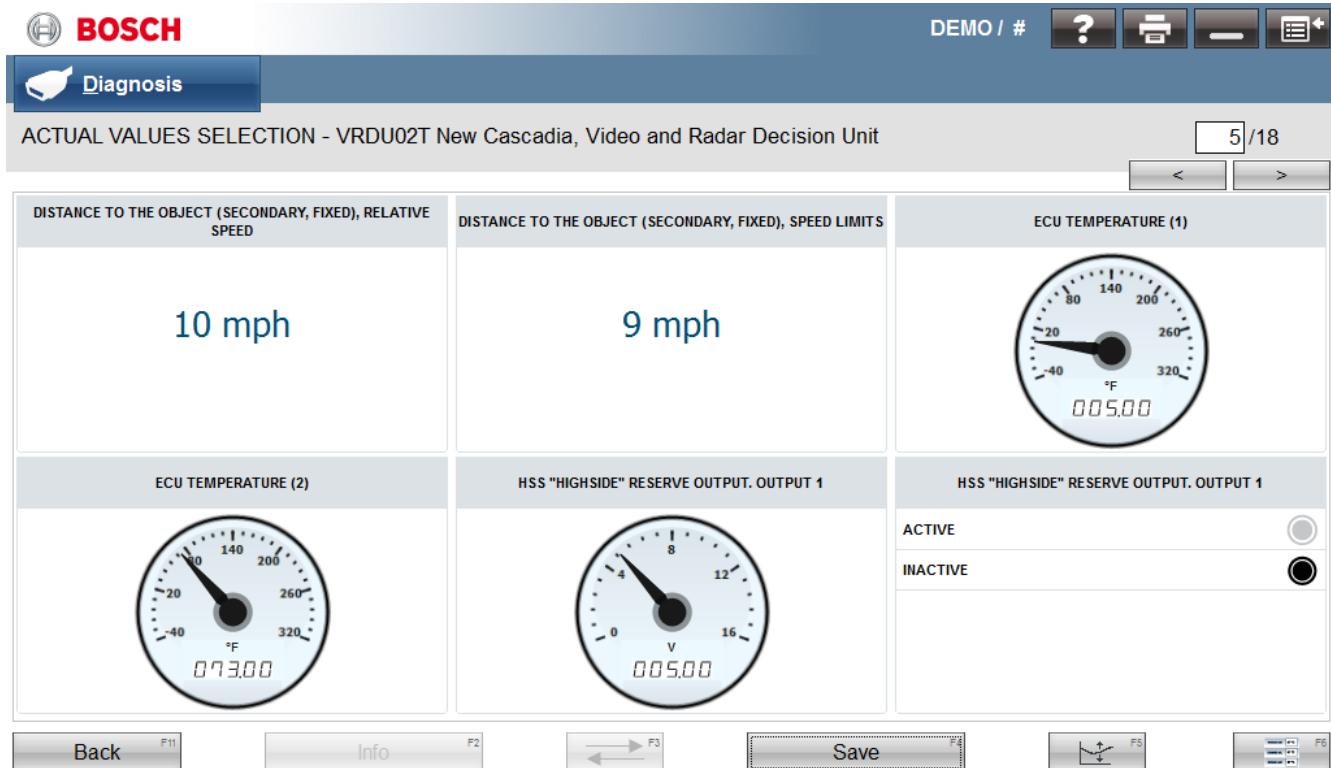
3.7 FREIGHTLINER

IPPC01T for New Cascadia

- Live data monitoring

VRDU02T for New Cascadia

- Live data monitoring



3.8 HALDEX

HalDEX PLC/PLC Plus

- Manual diagnosis

3.9 PACCAR

All Systems

- Manual diagnosis

Paccar Cab Electronic Control Unit 3 CECU 3 (K Line)

- New system checks for P30-1030-006, P30-1008-103 and 08.31.2015.15.30.32 variants

Paccar PMCI-2

- Service data

PCI DAF/PACCAR KWP2000

- Service data

3.10 PSI

8.8 LPG engine

- Technical data

3.11 MACK

All Systems

- Manual diagnosis

EMS V3

- VGT calibration

TECU V3

- Clutch disc replacement calibration

3.12 MERCEDES-BENZ

All Systems

- Manual diagnosis

MBE900/4000 EPA07

- Trip data and reset
- Multiple Cylinder Cut-out
- Vehicle speed signal (tire size) parameters
- Absolute maximum vehicle speed parameter

The screenshot shows the software's main interface with a header bar featuring the Bosch logo and navigation icons. Below the header, a blue bar indicates 'DEMO / #'. The main content area displays 'TRIP DATA - Detroit Diesel MBE CPC (EPA07), Common power train controller'. A section titled 'Information' shows 'PARTIAL DATA:' followed by a table of trip statistics.

| Name | ACTUAL VALUE | MIN VALUE | MAX VALUE |
|--------------------------|--------------|-----------|-----------|
| MILEAGE (TRIP) | 275037.5 mi | n/a | n/a |
| FUEL CONSUMPTION (TRIP) | 35266.51 gal | n/a | n/a |
| AVERAGE FUEL CONSUMPTION | 7.8 mpg | n/a | n/a |
| ENGINE LOAD, AVERAGE | 49 % | n/a | n/a |
| AVERAGE SPEED, VEHICLE | 35.3 mph | n/a | n/a |

At the bottom are four buttons: 'Cancel' (F11), 'Info' (F2), 'Print' (F3), and 'Continue' (F12).

3.13 MERITOR WABCO

All Systems

- Manual diagnosis

3.14 NAVISTAR

Navistar N9 EPA13 (2014-2018)

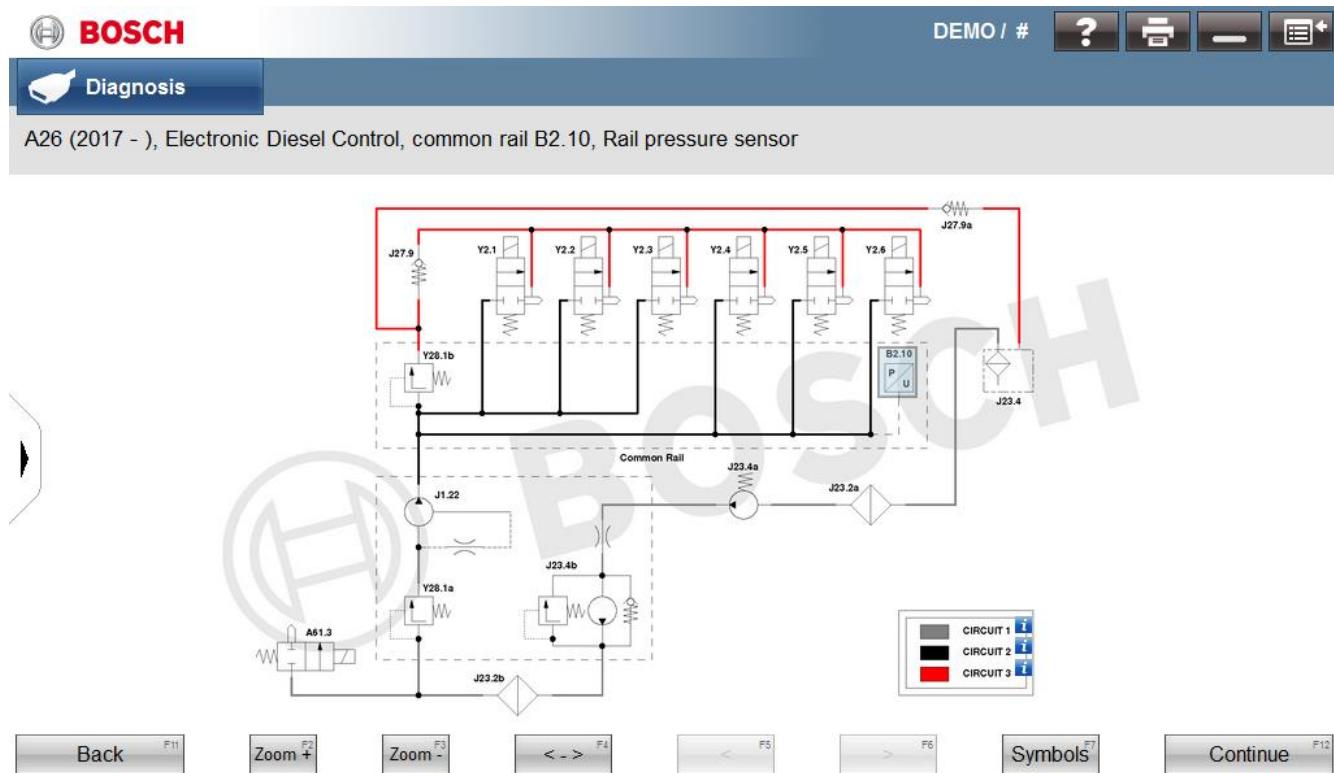
- New! Parameters modification: engine brake.
- Vehicle technical data

Navistar N13 EPA13 (2013-2014) & (2015 – 2017)

- New! Maintenance resets: Fuel relief valve, SCR fault reset, low coolant level, CMP/CKP learning, PTO
- Customer password programming
- Parameters modification: engine protection, engine brake
- Vehicle technical data

Navistar A26

- Fuel system operating diagram
- System Display



MaxxForce 11/13 (2010-2012)

- New! Parameters modification: geardown protection, idle shutdown timer
- New! Maintenance resets: Fuel relief valve,

The screenshot shows the Bosch Diagnosis software interface. At the top, there's a header with the Bosch logo and a menu bar with options like DEMO / #, ?, Print, Minus, and a list icon. Below the header, a sub-menu bar has 'Diagnosis' selected. The main window title is 'PRESSURE RELIEF VALVE - MaxxForce 11/13 (2010 - 2012), Electronic Diesel Control, common rail'. A section titled 'Information' contains the message 'THE CURRENT VALUES ARE DISPLAYED NEXT.' and a question 'DO YOU WISH TO RESET?'. Below this is a table with four rows of data:

| Name | ACTUAL VALUE | MIN VALUE | MAX VALUE |
|--|--------------|-----------|-----------|
| TIMES OPEN OF THE PRESSURE RELIEF VALVE | 5165 | 0 | 10000 |
| OPEN DURATION OF THE PRESSURE RELIEF VALVE | 6721 min | 0 | 10000 |
| < > | | | |

At the bottom are several buttons: 'RESET' (F11), 'Cancel' (F11), 'Info' (F2), '← →' (F3), and 'Continue' (F12).

MaxxForce 13 (2013)

- New! Parameters modification: vehicle speed signals, engine brake
- Maintenance resets: Fuel Relief Valve

MaxxForce DT (2007-2009)

- New! Parameters modification: engine brake, PTO

MaxxForce DT (2010-2012) / (2013)

- New! Parameters modification: Geardown Protection, vehicle speed signal, engine brake, temperature fan activation/deactivation

BOSCH

Diagnosis

FAN CONTROL - MaxxForce DT/9/10 (2010 - 2012), Electro-hydraulic injection system (HEUI)

Information

THEN ENTER AND/OR SELECT THE VALUES OF THE PARAMETERS YOU WANT TO CONFIGURE

IF YOU DO NOT WISH TO CONTINUE, PLEASE CANCEL THE PROCESS...

| Name | ACTUAL VALUE | MIN VALUE | MAX VALUE | NEW VALUE |
|-------------------------------------|--|-----------|-----------|-----------------------|
| FAN CONTROL, MODE | ON/OFF - TEMPERATURE CONTROL (COOLANT) | n/a | n/a | ON/OFF - TEMPERATU ▾ |
| FAN ACTIVATION TEMPERATURE | 212 °F | 204 | 302 | 212 |
| DEACTIVATION TEMPERATURE OF THE FAN | 204 °F | -40 | 212 | 204 |

Cancel F11 Info F2 F3 Continue F12

MaxxForce 7 (2010 – 2012)

- New! Parameters modification: engine brake, engine protection
- Service data

The screenshot shows the Bosch KTS Truck Diagnosis software interface. At the top, there's a header with the Bosch logo and the text "KTS Truck / #". Below the header, a toolbar includes icons for help, print, and other functions. A sub-header "Diagnosis" is followed by the text "MaxxForce 7 EPA10". The main area is a checklist titled "Vehicles with an average range between 7.0 - 11.0 mpg (2,98 - 4,68 km/L) or average fuel consumption between 21,4 - 33,6 L/100km". The checklist includes several items under sections like "Lubrication system", "Fuel system", and "Cooling system". Some items have checkboxes, while others are plain text. A "Remarks/Comments" column is present for each item. At the bottom, there are buttons for "Back" (F11), "Save" (F2), and "Continue" (F12).

| Vehicles with an average range between 7.0 - 11.0 mpg (2,98 - 4,68 km/L) or average fuel consumption between 21,4 - 33,6 L/100km | | |
|--|----------------|---------------------|
| <input type="checkbox"/> Check engine fault codes | | |
| <input type="checkbox"/> Make sure the engine is not emitting any strange noises | | |
| Lubrication system | | |
| <input checked="" type="checkbox"/> Check the engine oil level | | Remarks/Comments |
| <input type="checkbox"/> Check for oil leaks in the joints and tubes of the lubrication system | | |
| A - 11,000 mi (18.000 km) / 500 hours / 6 months | | |
| Fuel system | | |
| <input type="checkbox"/> Drain the water from the fuel/water separator | | Remarks/Comments |
| Intake air system | | |
| <input type="checkbox"/> Check condition, integrity, damage, corrosion and wear in the intake and exhaust system | | Remarks/Comments |
| Cooling system | | |
| Back F11 | Save F2 | Continue F12 |

DLC Engines

- New! Parameters modification: PTO, engine protection, engine brake
- Manual diagnosis

3.15 VOLVO

All Systems

- Manual diagnosis

EMS V3

- VGT calibration

TECU V3

- Clutch disc replacement calibration

. 4 .

Main new functionalities by brand – LIGHT & MEDIUM DUTY

4.1 FORD

Engines: 3.2/6.7 Powerstroke and 6.2/6.8 L Gas:

- New ODR Data. Operation Times, Distance, Adblue/DEF Data, Counts and emission data.

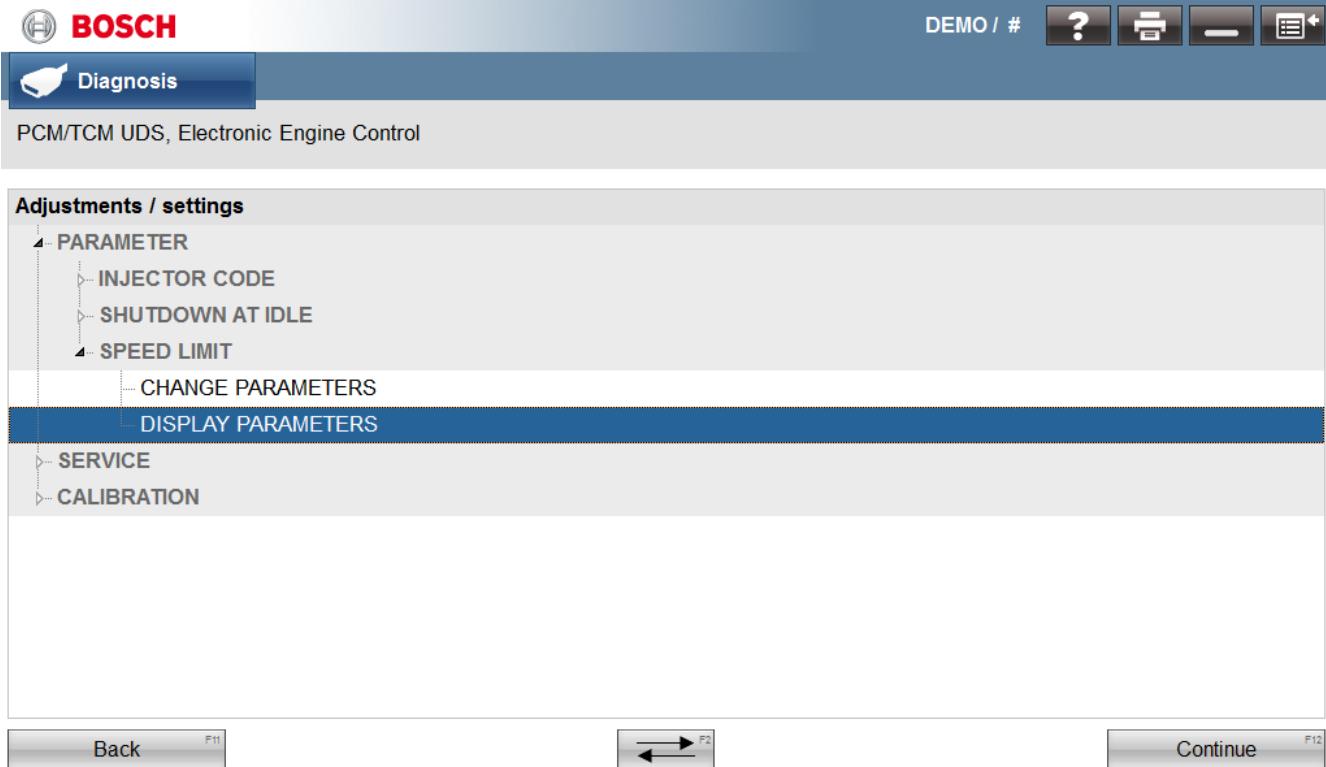
The screenshot shows the Bosch ESI software interface for a Ford vehicle. At the top, there's a header with the Bosch logo, 'DEMO / #', and several icons. Below the header, a blue bar indicates 'PCM/TCM UDS - Distance traveled operating data'. The main area displays a table of vehicle operating data:

| ROUTE | VALUE |
|--|----------|
| MILEAGE | 79847 mi |
| DISTANCE TRAVELED WITH ACTIVATED FAULT LA... | 74350 mi |
| DISTANCE TRAVELED SINCE FAULTS CLEARED | 42846 mi |

At the bottom, there are four buttons: 'Cancel' (F11), 'Info' (F2), a double-headed arrow icon (F3), and 'Continue' (F12).

F-250/550 6.7 Powerstroke:

- Speed limit. 2015 – 2016.



- SCR Injector Cleaning Procedure
- Reset EGR Valve.

BOSCH

PCM/TCM UDS, Electronic Engine Control

Adjustments / settings

- PARTICULATE FILTER RESET
- REFILLING OF THE ADBLUE/DEF TANK
- REINITIALIZATION OF THE ADAPTION VALUES**
 - AIR VOLUME SENSOR
 - AIR-CONDITIONING SYSTEM ACTIVATION REQUEST
 - CRANKSHAFT SENSOR
 - DOC (DIESEL OXIDATION CATALYST)
 - EGR (EXHAUST GAS RECIRCULATION) SYSTEM RESET
 - EGR VALVE**
 - ENGINE OIL SERVICE
 - EXHAUST GAS PRESSURE SENSOR IN FRONT OF THE PARTICULATE FILTER
 - FUEL PRESSURE REGULATION**
 - MISFIRE MONITORING
 - NITROGEN OXIDE NOX SENSOR BEHIND THE SCR CATALYTIC CONVERTER

Back F11 **Continue F12**

- Reset Turbo System.

BOSCH

PCM/TCM UDS, Electronic Engine Control

Adjustments / settings

- MISFIRE MONITORING
- NITROGEN OXIDE NOX SENSOR BEHIND THE SCR CATALYTIC CONVERTER
- NITROGEN OXIDE NOX SENSOR IN FRONT OF THE SCR CATALYTIC CONVERTER
- NON-ERASABLE INTERNAL MEMORY (KAM)
- OXYGEN CONCENTRATION AT THE NOX SENSOR
- PARTICULATE FILTER CONTROL SENSOR (PM - PARTICULATE MATTER)
- PARTICULATE FILTER PRESSURE DIFFERENTIAL SENSOR
- PROTECTION MODE "A" AGAINST TURBOCHARGER HEATING
- PROTECTION MODE "B" AGAINST TURBOCHARGER HEATING
- SCR (SELECTIVE CATALYTIC REDUCTION)
- SCR SYSTEM FAULT MEMORY
- VARIABLE GEOMETRY TURBOCHARGER (VGT)**
- WATER IN THE FUEL DETECTION COUNTER

CALIBRATION

Back F11 **Continue F12**

TorqShift Transmission in 6.0L Powerstroke. Component Activations:

- Control Pressure Valve.
- Shift Valves: SSA / SSB / SSC / SSD / SSE.
- Torque Converter Valve.

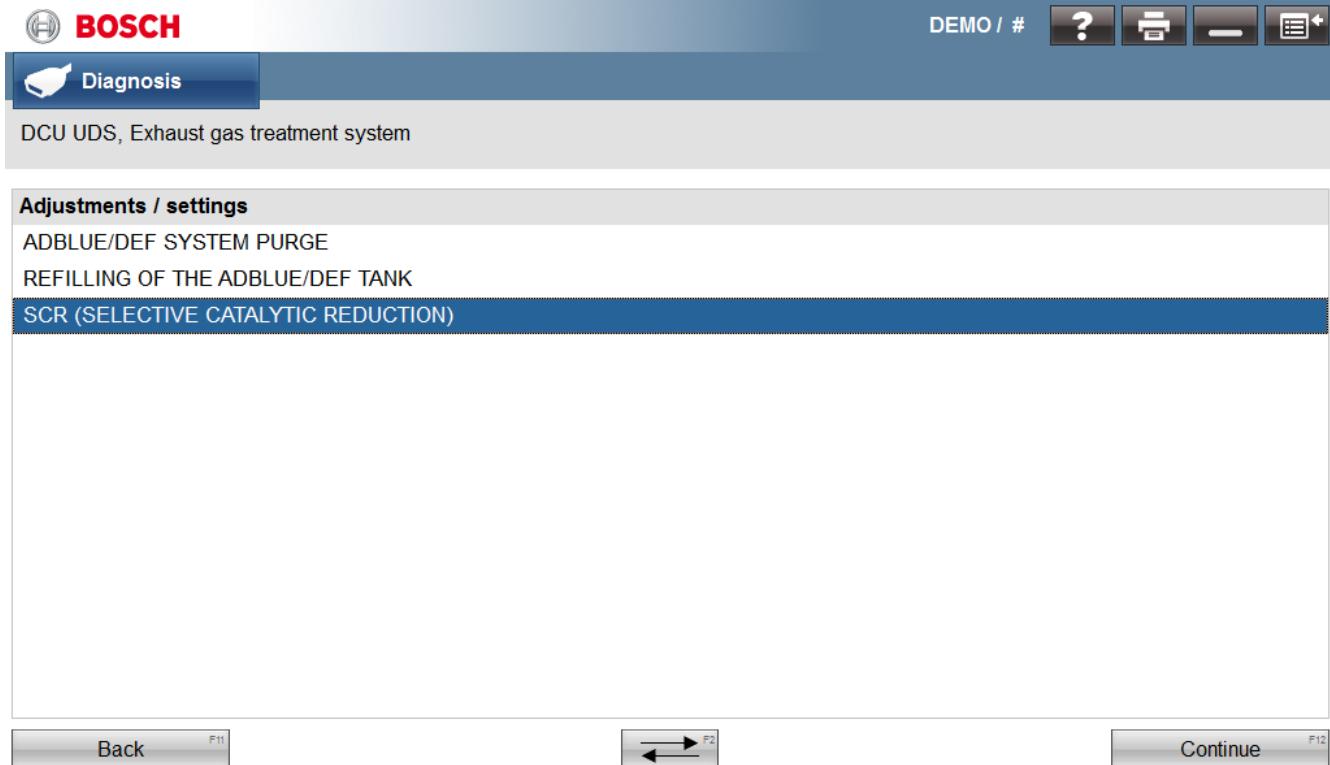
The screenshot shows the Bosch Diagnosis software interface. At the top, there is a header with the Bosch logo, 'DEMO / #', and several icons. Below the header, a blue bar displays 'Diagnosis' and 'TCM HSCAN, Transmission'. The main area is titled 'Actuators' and lists various solenoid valves: CLUTCH A SOLENOID VALVE, CLUTCH B SOLENOID VALVE, CLUTCH C SOLENOID VALVE, CLUTCH D SOLENOID VALVE, CLUTCH E SOLENOID VALVE, PRESSURE CONTROL SOLENOID VALVE, and TORQUE CONVERTER CLUTCH SOLENOID VALVE. The 'PRESSURE CONTROL SOLENOID VALVE' is highlighted with a blue background. At the bottom, there are navigation buttons: 'Back' (F11), a central button with arrows (F2), and 'Continue' (F12).

Transit T-Series 3.2L Powerstroke:

- System Checkings: Adblue/DEF Metering Test

DCU (Dosing Control Unit) component activations:

- Reductant Pump
- Reductant Tank Heater
- Reductant line Heater Control
- Reductant Injector Heater
- Reductant Reverting Valve
- SCR Maintenance Reset.



New Wiring Diagrams:

- Ford UDS BCM (Body Control Module). F-250/550; F-650/750; Transit T-Series.
- Ford UDS ABS (Anti-Lock Brake System). Transii T-Series. 3.2L 3.5L 3.7L
- Ford UDS DCU (Dosing Control Unit), Transit T-Series. 3.2L 3.5L 3.7L
- HSCAN PCM (Powertrain Control Module) 5.4L.
- HSCAN PCM (Powertrain Control Module), esquema eléctrico F-250/550. 5.4L (2007 - 2005).

New Troubleshooting Guides:

- F-650/750 6.7L Diesel Powerstroke.
- F-250/550 6.8L Gas.
- F-650/750 6.8L Gas.

The screenshot shows the Bosch ESI[truck] software interface. At the top, there's a red header bar with the Bosch logo and the word "BOSCH". Below it is a blue navigation bar with icons for Diagnosis, Troubleshooting, Fault Info, and other functions. The main content area displays a fault code: "CODE:P06A6_3 Reference voltage. Sensor A. Functional fault." Under the "Troubleshooting" tab, there's a section titled "General troubleshooting information" with the instruction: "It is suggested to perform the troubleshooting in the sequence mentioned below." Below this, a list of troubleshooting steps is provided, each preceded by a downward-pointing arrowhead:

- Step 1: Disconnect the component.
- Step 2: Check the wiring and the connections (damaged contacts, dirt, corrosion etc.) as well as the line voltage and resistances.
- Step 2.1: 5 V supply voltage.
- Step 3: Check wiring and connections.
- Step 4: Check the air intake pressure sensor.
- Step 5: Check the performance of the EGR valve.
- Step 6: Check the pressure sensor for the exhaust gases.
- Step 7: Check the crankshaft sensor.
- Step 8: Check the function of the intake air flap.

At the bottom of the screen, there are several buttons: "Back" (F11), "Print" (F2), and "Technical documents" (F3). There are also standard window control buttons (minimize, maximize, close) in the top right corner.

4.2 GMC/CHEVROLET

Sierra / Silverado / Cheyenne / Express / Savana

Engine Code L5P:

Component activations:

- Fuel transfer pump.
- Intake air flow valve motor.
- Intake air flow valve position.
- Engine oil pressure control solenoid valve.
- Cooling fan.
- A/C relay.
- A/C compressor clutch relay.
- Fuel heater relay.
- Malfunction indicator lamp.

System Checkings:

- Generator.
- Cylinder Cutout.

- Fuel Pressure Regulator.
- Engine Speed.
- Exhaust Aftertreatment Fuel Injector Flow Test.

System Maintenances:

- DPF Regeneration.
- Enable DPF Automatic Regeneration.
- DOC (Diesel Oxidation Catalyst) Reset.
- DPF / SCR Catalytic Converter Reset
- Oil Life.
- Fuel Filter.
- DPF Differential Pressure Sensor Reset.

The screenshot shows the Bosch Diagnosis software interface. At the top, there is a header with the Bosch logo, a demo number input field, and standard window control buttons (minimize, maximize, close). Below the header, a navigation bar includes a 'Diagnosis' icon and the text 'ECM Duramax L5P (6.6 I - V8) HSCAN, Electronic Diesel Control, common rail'. The main content area is titled 'Adjustments / settings' and lists several maintenance items: ACTIVATE AUTOMATIC DPF REGENERATION, DOC (DIESEL OXIDATION CATALYST) MAINTENANCE, FUEL FILTER, OIL SERVICE LIFE, PARTICULATE FILTER PRESSURE DIFFERENTIAL SENSOR, and PARTICULATE FILTER REGENERATION. A blue horizontal bar at the bottom of this list contains the text 'RESET OF THE DPF/SCR CATALYTIC CONVERTER ASSEMBLY'. At the bottom of the screen are three buttons: 'Back' (F11), a central navigation button with left and right arrows, and 'Continue' (F12).

New Wiring Diagrams:

- GM HSCAN - (Engine Code: L20) 4.8L V8
- GM HSCAN - SASM (Steering Wheel Angle Sensor Module)
- GM HSCAN - Trailer Brake Control Module (RP1210)
- GM HSCAN - Power Take-Off Module (RP1210)

4.3 HINO

Aisin A465 Transmission_Hino

- System display.

EDC Hino, J08E (K Line)

- Common-Rail pressure injection procedure
- New activations and live data

EDC J08E (CAN)

- New wiring diagrams configurations
- Troubleshooting guide by fault codes
- Common-Rail pressure injection procedure
- Air purgue procedure in the fuel filter

EDC Hino, J05E (CAN)

- New wiring diagrams configurations
- Troubleshooting guide by fault codes
- Procedures to inspect the health status of the turbocharger, DPF filter and MAF sensor.

EDC Hino, J05D

- Operation data
- Troubleshooting guide by fault codes

BCU (Burner Control Unit) Hino

- System display.

Meter Hino

- Technical data

ABS Hino

- New wiring diagrams configurations
- Troubleshooting guide by fault codes
- System display.

AdBlue Denox 2.2 Hino DCU (Urea SCR)

- System display.
- AdBlue/DEF liquid inspection procedure

4.4 ISUZU

Modelo Reach

- Maintenance resets

Mimamori

- Troubleshooting guides step by step

4HE1-TC & 4HE1-XS/XN (K Line)

- Troubleshooting guides step by step

4HK1-TC USA (CAN)

- Wiring diagram for 2016 and newer vehicles

Isuzu HSCAN SA 7E0 – (LY6/L96) 6.0L V8

- Wiring diagram configuration (2005 – 2007).
- Guías de reparación a errores del sistema.

Isuzu GM transmisión 6L90

- Wiring diagrams configurations
- Troubleshooting guide by fault codes

Aisin A465 Transmission_Isuzu

- Wiring diagrams configurations
- Troubleshooting guide by fault codes

Isuzu Hydraulic ABS/ASR (K Line)

- Wiring diagrams configurations
- Troubleshooting guide by fault codes

4.5 MERCEDES BENZ

Mercedes Sprinter with Engine OM651 (2013 - ...)

- Intake Air System procedure
- Fuel Filter Heater
- Amount of recirculated exhaust gases

Mercedes Sprinter with Engine OM642 (2010 – 2012)

- SCR System Reset
- Temperature sensor before SCR Catalyst

The screenshot shows the Bosch Diagnosis software interface. At the top, there is a header with the Bosch logo, a 'Diagnosis' button, and various icons for 'DEMO / #', help, print, and exit. Below the header, it says 'CDI6, Electronic Diesel Control, common rail'. The main window displays a tree structure under 'Adjustments / settings'. The 'LAMBDA SENSOR' option is highlighted with a blue selection bar. Other options visible include 'PARAMETER', 'SERVICE', 'EXHAUST GAS TREATMENT SYSTEM' (with 'DIESEL PART. FILTER' and 'EXHAUST GAS RECIRCULATION ACTUATOR'), 'FUEL SYSTEM', 'INTAKE AIR SYSTEM', and 'PARTICULATE FILTER REGENERATION'. At the bottom, there are buttons for 'Back F11', a central navigation arrow labeled 'F2', and 'Continue F12'.

```

    Adjustments / settings
    └─ PARAMETER
        └─ INJECTOR CODE
    └─ SERVICE
        └─ EXHAUST GAS TREATMENT SYSTEM
            └─ DIESEL PART. FILTER
            └─ EXHAUST GAS RECIRCULATION ACTUATOR
        └─ LAMBDA SENSOR
            └─ PARTICULATE FILTER PRESSURE DIFFERENTIAL SENSOR
            └─ SCR SYSTEM FAULT MEMORY
        └─ FUEL SYSTEM
        └─ INTAKE AIR SYSTEM
        └─ PARTICULATE FILTER REGENERATION

```

New Model: Mercedes Benz Metris:

- Engine System M274: MED40. Reading Fault + Live Data.
- Electronic Ignition Lock
- EGS/VGS4NAG2
- Automatic Cab Climate
- SAM Signal Actuation Module
- Electric Power Steering
- Steering Control module
- ESP 9 LEI diagnostic system
- Instrument Cluster
- Battery Sensor
- DBE Overhead control panel
- ISM Intelligent Servo Module
- MFL Module
- OBF Module
- FSCU (Fuel Sensing control Unit)
- Radio

The screenshot shows the Bosch Diagnosis software interface. At the top, there is a header bar with the Bosch logo, a search bar labeled "DEMO / #", and several icons for help, print, and navigation. Below the header is a yellow status bar with the text "Switch on ignition.". The main area has two main sections: "Select system group" on the left and "Select system" on the right. The "Select system group" section contains a list of vehicle systems with checkboxes, with "ALL" selected. The "Select system" section lists various vehicle components with their corresponding abbreviations. At the bottom, there are several buttons: "System Info" (F2), "Model Info" (F3), "System overview" (F4), "DTC Lookup" (F5), and "Continue" (F12). A "Search" button is also present.

| Select system group | Select system |
|--|----------------------------|
| <input checked="" type="checkbox"/> ALL | Overhead control panel DBE |
| <input type="checkbox"/> Air conditioning EGS/VGS4NAG2 | |
| <input type="checkbox"/> Anti-theft protection EPS | |
| <input type="checkbox"/> Audio system ESP 9 | |
| <input type="checkbox"/> Brakes EZS | |
| <input type="checkbox"/> Electronic module FSCU4 | |
| <input type="checkbox"/> Engine IBS | |
| <input type="checkbox"/> Instrumentation IC | |
| <input type="checkbox"/> Mainframe ISM | |
| <input type="checkbox"/> Steering KLA | |
| <input type="checkbox"/> Tire pressure monitoring ME40 | |
| <input type="checkbox"/> Transmission | |

4.6 MITSUBISHI-FUSO USA

Fuso_EDC 7 C4-6-6 (MR 4M4 / 4M50 CAN)

- DPF regeneration

The screenshot shows the Bosch Diagnosis software interface. At the top, there is a header with the Bosch logo, a demo mode indicator, and standard window control buttons (minimize, maximize, close). Below the header, a blue bar labeled "Diagnosis" contains a stethoscope icon. The main content area displays the text "PARTICULATE FILTER REGENERATION - EDC 4M4 / 4M50 (CAN), Electronic Diesel Control, common rail". A large circular progress indicator with dots is followed by the text "PROCESSING...". Below this, a table lists various diagnostic parameters with their current values, minimum values, and maximum values. At the bottom, there are four buttons: "Cancel F11", "Info F2", "F3" (with a left-right arrow icon), and "Continue F12".

| Name | ACTUAL VALUE | MIN VALUE | MAX VALUE |
|--|--------------|-----------|-----------|
| TEST STATUS | ON | n/a | n/a |
| ENGINE SPEED | 1132 rpm | 0 | 4000 |
| EXHAUST GAS TEMPERATURE DOWNSTREAM OF THE PARTICULATE FILTER (DPF) | 123.8 °F | 32 | 1832 |
| EXHAUST GAS TEMPERATURE UPSTREAM OF THE PARTICULATE FILTER (DPF) | 977 °F | 32 | 1832 |

Fuso_TCM – DUONIC Control Unit

- Learning shifting process

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Main new functionalities by brand – Off-Highway

See www.boschdiagnostics.com for new coverage details.

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