

SB-10044288-3203

SI B12 22 11
Engine Electrical Systems

May 2013
Technical Service

This Service Information bulletin supersedes SI B12 22 11 **dated January 2013.**

NEW designates changes to this revision

SUBJECT

N63: Engine Malfunction Warning Due to Vapor Forming in the Fuel System

MODEL

F07, F10, F12, and F13 with the N63 engine produced to approximately 6/2011

SITUATION

The Engine Malfunction warning is displayed and the Service Engine Soon (MIL) Lamp is on.

This situation may occur when starting the engine at operating temperature after a “hot-soak” period. It is more likely to occur during months with cooler ambient temperatures and winter fuel is available.

The following fault code is stored in the DME.

110001 – Cylinder injection cutout: pressure too low in high-pressure system

And additionally in isolated cases fault:

11A002 – Fuel high-pressure system, fuel pressure: minimum pressure undershot

CAUSE

This problem can occur if vapor forms in the fuel system due to excessive temperatures and fuel quality characteristics. Areas using winter fuel blends with high ethanol content are perhaps more susceptible in having this situation to occur.

CORRECTION

Perform the recommended test plan(s) using only the most current version of ISTA/D.

Based upon the results of the test plan(s), if no problem is found and the low side pressure supply is correct, then perform the following repairs.

Vehicles without the Improved Fuel Supply Module (In-tank Electric Fuel Pump):

NEW Replace the fuel pump supply module and then perform the following conversion, using the latest version of ISTA/P.

Target integration level: F0xx-12-07-533 or higher

Conversion: control fuel feed pressure

This will add the E-Word (KV01) to the vehicle order (VO) and install DME calibration which will increase the low side supply pressure to 5.9 BAR when necessary to prevent vapor formation.

In addition, further DME software improvements were implemented with integration level F0xx-12-07-533 and higher in order to reduce under hood temperatures under certain driving conditions with an optimized auxiliary fan strategy.

Vehicles with the Improved Fuel Supply Module (In-tank Electric Fuel Pump):

The fuel supply modules **were improved** starting in mid-June 2011 production with the parts stock cleared of the early design parts.

Production solution with both the improved fuel supply module and the initial DME software calibration changes were introduced beginning 9/2011.

The new supply modules have the improvements needed to ensure long term durability when operated at an increased output pressure.

This is now the only replacement part available and is **identified** by the letter “A” at the end of the bar code / part label (located on top of the part) or by a “Green” dot on the box.

Perform the following conversion using the latest version of ISTA/P only.

Target integration level: F0xx-12-07-533 or higher

Conversion: control fuel feed pressure

IMPORTANT!

The ISTA/P conversion to increase the fuel feed pressure can **only** be performed once the latest fuel supply module has been installed or found to already be installed by the presence of the “A” on the bar code / part label.

Note: When the ISTA system message displays: Battery voltage only “XX.XX” V. Please connect charger. Please note the displayed battery voltage reading in the repair order comments section. This documentation is not necessary when part of an approved Technical Service repair procedure; the battery charger is required to be attached before performing the Vehicle Test.

PARTS INFORMATION

Part Number	Description	Quantity
16 11 7 260 636	Supply module	1

WARRANTY INFORMATION

Covered under the terms of the BMW New Car/SAV Limited Warranty or the BMW Certified Pre-Owned Program.

Specific eligible repairs **may** also be covered by the terms of the Federal, State or BMW Emissions Warranty.

To determine if any **applicable** Federal, State or BMW Emissions Warranty coverage applies **prior** to performing repairs, please see SI B01 02 11 for “Emissions Warranty Coverage” and refer to the “Glossary of Emission Coverage” attachment for more information.

The BMW Certified Pre-Owned Limited Warranty applies to BMW CPO vehicles that are still within the BMW

Certified Pre-Owned Limited Warranty, but beyond the Emissions Warranty coverage that applies.

Based upon the results of the test plan(s), if no problem is found and the low side pressure supply is correct, replace the fuel pump supply module and program/encode the vehicle.

Defect Code:	13 53 09 39 00	
Labor Operation:	Labor Allowance:	Description:
00 00 006	Refer to KSD2	Performing “vehicle test” (with vehicle diagnosis system – checking faults)
and if necessary, also		
61 21 528	Refer to KSD2	Charging battery
and		
61 00 730	Refer to KSD2	Programming / encoding control unit(s)
and		
16 14 610	Refer to KSD2	Removing and installing or replacing fuel pump
and as necessary		
See KSD2 - Main Group “16”	Refer to KSD2	Extracting fuel from the fuel tank and filling (Select the applicable Plus work labor operation (16 00 610 to 16 00 680) that applies to the amount of fuel extracted – 10 liter increments)

Note: The replacement of the fuel pump supply module under Defect Code 13 53 09 39 00, as outlined in this SIB, does not require a “Diagcode.”

Program/Encode the vehicle without the replacement of the Fuel Supply Module (Improved Pump Previously Installed)

Defect Code:	10 12 00 19 00	
Labor Operation:	Labor Allowance:	Description:
00 00 006	Refer to KSD2	Performing “vehicle test” (with vehicle diagnosis system – checking faults)
and if necessary, also		
61 21 528	Refer to KSD2	Charging battery

and		
61 00 730	Refer to KSD2	Programming / encoding control unit(s)
and		
F07		
52 26 637	Refer to KSD2	Removing and installing or replacing backrest frame for right rear seat: check the bar code / part label – no pump replacement necessary
or		
F10, F12 and F13		
52 24 505	Refer to KSD2	Removing and installing or replacing rear seat: check the bar code / part label – no pump replacement necessary

Labor operation code 00 00 006 is a Main labor operation. If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead.

Refer to KSD2 for the corresponding flat rate unit (FRU) allowance. Enter the Chassis Number, which consists of the last 7 digits of the Vehicle Identification Number (VIN). Click on the “Search” button, and then enter the applicable flat rate labor operation in the FR code field.

NEW If a control module was working properly and/or had no related faults stored prior to vehicle programming and it fails to program correctly or requires initialization, this additional work must be claimed with separate labor operations under the defect code listed above; refer to KSD2.

Other Repairs

NEW If performing other ISTA diagnostics and related test plans results in eligible and covered work, claim this work with the applicable defect codes below, or a defect code and the labor operations listed in KSD2.

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