



N55 - ENGINE MALFUNCTION WARNING DUE TO VAPOR FORMING IN THE FUEL SYSTEM

This Service Information bulletin supersedes SI B12 05 16 **dated April 2016**

MODEL

F07 (5 Series Gran Turismo)	F10 (5 Series Sedan)	F12 (6 Series Convertible)	F13 (6 Series Coupe)
With the N55 engine produced to 3/2012 (with the Continental high pressure fuel pump)			

SITUATION

The Engine “Drivetrain Malfunction” Check Control warning is displayed and the Service Engine Soon (MIL) Lamp may also be on.

In areas where winterized fuel is used, this situation may occur after prolonged periods of engine idling or “stop and go” driving.

Additional symptoms that may be present:

- rough running
- poor engine performance
- difficulty in starting the engine.

Either or both of the following fault codes can be stored in the DME.

11A002 – Fuel high pressure, plausibility: Pressure too low

11AC02 – Fuel high pressure, plausibility, cold start: Pressure too low

In addition any of the following faults may also be stored:

119404 - Rail pressure sensor, signal: Permanently stuck

118001 - Mixture control: mixture too lean

118401 - Mixture control: mixture too lean; large deviation

CAUSE

Vapor formation in the fuel system from fuel quality characteristics of certain winter fuel blends along with high engine compartment temperatures.

CORRECTION

Replace low pressure fuel pump along with revised DME software (control strategy of the new low pressure fuel pump).

PROCEDURE

UPDATE!

1. Perform the recommended test plans using the latest version of ISTA.
2. Check production date on fuel delivery module.

Remove the rear seat and service cover to inspect the production date of the fuel delivery module as shown in the attachment.

Follow ISTA repair instruction – REP 16 14 200 (also attached).

Is the production date code on the module label earlier than “01/10/13” (October 1, 2013)?

YES - replace fuel delivery module and then go to step 3.

NO – Go to step 3.

3. Using ISTA/P 3.59.0 or higher, perform the conversion to change the DME software for fuel delivery pressure regulation.

Conversion, control fuel feed pressure

New target integration level: **F0xx 16-07-501** or higher

This will add the E-Word (KV01) to the vehicle order (VO) and install DME software which regulates the low-side supply pressure up to 5.8 bar under certain conditions to prevent vapor formation.

Note that ISTA/P will automatically reprogram and code all programmable control modules that do not have the latest software.

Always connect a BMW approved battery charger/power supply ([SI B04 23 10](#)).

For information on programming and coding with ISTA/P, refer to Centernet / Aftersales Portal / Service / Workshop Technology / Vehicle Programming.

PARTS INFORMATION

Part Number	Description	Quantity
16 11 7 341 301	Fuel delivery module	1

WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks or the BMW Certified Pre-Owned Program.

This repair is also covered by the terms of the Federal and/or State-specific Emissions Warranty (dependent on the vehicle's model year, state of registration and its inclusion on the "model-specific" list of covered components) that applies to the BMW model(s) listed.

The BMW Certified Pre-Owned Limited Warranty applies to BMW vehicles that have and are still within the BMW Certified Pre-Owned coverage period, but beyond Emissions Warranty coverage that applies.

Defect Code:	10 42 31 59 00	
Labor Operation:	Labor Allowance:	Description:
00 00 006	Refer to KSD2	Performing "vehicle test" (with vehicle diagnosis system – checking faults)
And:		
61 21 528	Refer to KSD2	Connect an approved battery charger/power supply (indicated in KSD 2 as Charging battery)
And, as necessary:		
61 00 006	Work time (WT)	Performing vehicle diagnosis – test module
And:		
61 00 730	Refer to KSD2	After performing item "A" or "B" below - Programming / encoding control unit(s)

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

And:

A. Fuel Supply Module "Inspection Only" (Replacement "is not" required, claim with the above)

F07

Labor Operation:	Labor Allowance:	Description:
52 25 637	Refer to KSD2	Removing and installing seat-backrest frame for right rear seat (Electric – Sub

		group "25")
Or:		
52 26 637	Refer to KSD2	Removing and installing seat-backrest frame for right rear seat (Manual Electric – Sub group "26")

Or, for the:

F10, F12 and F13

Labor Operation:	Labor Allowance:	Description:
52 24 505	Refer to KSD2	Removing and installing or replacing rear seat (Sub group "24")

Or, for the:

F10 with the Through-Load System Option

Labor Operation:	Labor Allowance:	Description:
52 26 505	Refer to KSD2	Removing and installing or replacing rear seat (Sub group "26")

And:

Labor Operation:	Labor Allowance:	Description:
16 99 000	1 FRU	Work time to check the fuel delivery module's date production date

Work time labor operation code 16 99 000 is not considered a Main labor operation. Also, since the "work time" FRU allowance to be claimed is specified, a separate punch time is not required.

Or:

B. Replacing the Fuel Supply Module "is" Required (Claim separately)

Covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks or the BMW Certified Pre-Owned Program.

This repair is also be covered by the terms of the State-specific Emissions Warranty (dependent on the vehicle's model year, state of registration and its inclusion on the "model-specific" list of covered components).

The BMW Certified Pre-Owned Limited Warranty applies to BMW vehicles that have and are still within the BMW Certified Pre-Owned coverage period, but beyond Emissions Warranty coverage that applies.

Defect Code:	16 14 04 12 00	
Labor Operation:	Labor Allowance:	Description:
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)
And:		
16 14 610	Refer to KSD2	Removing and installing or replacing fuel pump(s) (not including extracting and refiling fuel)

Refer to KSD2 for the corresponding flat rate unit (FRU) allowances.

Vehicle Programming and Coding

Control module failures that occur during programming:

- Please claim these consequential repairs under the defect code listed in this bulletin and use the applicable KSD2 labor operations.

Other Repairs

Control module failures that occur prior to programming and/or additional work is performed as a result of performing the ISTA diagnostics and related test plans:

- When covered under an applicable limited warranty, claim these repairs using the applicable defect code and labor operations in KSD2.

ATTACHMENTS

View PDF attachment [B120516 Fuel delivery module inspection.](#)

View PDF attachment [B120516 REP 16 14 200.](#)

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