

SIB 12 13 18

2020-03-19

## DME FC 21A02D - COMBUSTION CONTROL: VALVE LIFT AT IDLE

This Service Information Bulletin (Revision 3) replaces SI B12 13 18 dated September 2019.

What's New (Specific text highlighted):

- Procedure
- Warranty

# **MODEL**

E-Series	Model Description
F22	2 Series Coupe
F23	2 Series Convertible
F30	3 Series Sedan
F31	3 Series Sports Wagon
F32	4 Series Coupe
F33	4 Series Convertible
F36	4 Series Gran Coupe
G01	X3 Sports Activity Vehicle
G12	7 Series Sedan
G30	5 Series Sedan
G32	6 Series Gran Turismo

All with B46, B58 and XB1H engines.

# **SITUATION**

The vehicle will run rough or hesitate when accelerating from a stationary position, and the following fault code is stored in DME fault memory.

FC 21A02D – Combustion control: valve lift correction when at idle

## **CAUSE**

A software error in the Digital Motor Electronics (DME).

## CORRECTION

Update the vehicle software using ISTA 4.10.20 or higher.

## **PROCEDURE**

1. If other faults are stored in the vehicle then perform the applicable test plans for those faults first and repair the vehicle as recommended.

Do not replace any parts to specifically address DME FC 21A02D – Combustion control: valve lift correction when at idle.

- 2. If no other faults are stored in the vehicle or the other faults have already be been rectified, then go to step 3.
- 3. Program the vehicle using ISTA 4.10.20 or higher to integration level 18-03-520 or higher.
- 4. When the vehicle programming is complete the "Reset Valvetronic list adaption" and "Learning Valvetronic limit positions" test plans must be performed using the following paths in ISTA/D:

Both of the test plans listed below must be completed after vehicle programming, or the fault will return.

If the fault returns, repeat these two test plans before contacting the TSARA hotline.

If you are contacting the TSARA hotline for additional assistance, please specify what date the test plans were already performed on the prior visit.

Do not replace any parts before contacting the TSARA hotline.

# Perform the Reset Valvetronic Lift Adaptation Test Plan

Select "Vehicle management"

Select "Service functions"

Select "Powertrain"

Select "Engine electronics"

Select "Reset Adaptations" Run ABL

Select "Reset Valvetronic lift adaptation" and follow the prompts on the screen to clear the Valvetronic adaptions.

# Perform the Valvetronic Lift Adaptation Test Plan

Select "Vehicle management"

Select "Service functions"

Select "Powertrain"

Select "Engine electronics"

Select "Adjustment programs"

Select "Valvetronic lift adaptation" and follow the prompts on the screen to calibrate the Valvetronic system.

# WARRANTY INFORMATION

During this workshop visit, the affected vehicle may also show one or more programming and encoding Technical Campaign repairs open. The programming and encoding procedure may only be invoiced one time.

Update the vehicle to the required I-level or higher by performing and submitting for one of the open Technical Campaigns instead. Please be sure to also perform any additional work (before and/or after) the campaign repairs require and/or close the remaining open programming and encoding Technical Campaign repairs as outlined in the corresponding Service Information Bulletin.

Then, either in conjunction with performing these open Technical Campaign repairs or as a standalone repair (vehicles without an open programming and encoding Technical Campaigns), perform and claim the Reset Valvetronic list adaption and Learning Valvetronic limit positions test plans as outlined below.

Covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks:

	T
Defect Code:	1042315900

## In conjunction with performing a Programming and Encoding Technical Campaign repair

Labor Operation	Description	Labor Allowance
11 99 000	Work time for performing Reset Valvetronic lift adaptations and Valvetronic lift adaptation test plans	6 FRU

Or, as a:

# Standalone repair (vehicles without an open Programming and Encoding Technical Campaign Repair)

Labor Operation	Description	Labor Allowance
00 00 006	Performing vehicle test (with vehicle diagnosis system – checking faults) (Main work)	Refer to AIR
Or:		
00 00 556	Performing vehicle test (with vehicle diagnosis system – checking faults) (Plus work)	Refer to AIR
And:		
61 21 528	Connect an approved battery charger/power supply (indicated in AIR as Charging battery)	Refer to AIR
And:		
61 00 730	Programming/encoding control unit(s)	Refer to AIR
And:		
11 99 000	Work time for performing Reset Valvetronic lift adaptations and Valvetronic lift adaptation test plans	6 FRU

And, additionally for the:

#### e-Vehicles

Labor Operation	Description	Labor Allowance
61 25 910	Recharging high-voltage battery unit (to high voltage charging socket)	Refer to AIR

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

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

Work time labor operation code 11 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. However; it still requires an explanation on the repair order and in the claim comments section.

## Programming and Encoding - Vehicle Control Units (RO and Claim Comments Required)

The programming procedure automatically reprograms and encodes all vehicle control modules which do not have the latest software I-level. If one or more control module failures occur during this programming procedure:

• Please claim this consequential control module-related repair work (including performing the IRAP Control Unit Recovery procedure first as required, refer to the SIB in AIR) under the defect code listed in this bulletin with the applicable AIR labor operations.

Please explain this additional work (The why and what) on the repair order and in the claim comments section

For control module failures that occurred prior to performing this programming procedure:

• When covered under an applicable limited warranty, claim the applicable test plan and the corresponding control module-related repair work using the applicable defect code and labor operations in AIR (including diagnosis with separate punch times).

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