



This Service Information Bulletin (Revision 4) replaces SI B12 13 18 **dated March 2021**.

What's New (Specific text highlighted):

- Models: F34 (3 Series Gran Turismo) added
- Specific engine variants updated
- Procedure: Integration level changed
- Parts
- Warranty Information updated

MODEL

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)	F34 (3 Series Gran Turismo)	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 B46O, B48M, B58M 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 4.27.10 or higher.

PROCEDURE

Determine the vehicle's current I-level by either using AIR or the Key reader/ISPA NEXT application.

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.

If no other faults are stored in the vehicle or the other faults have already been rectified, then go to step 3.

Program the vehicle using ISTA 4.27.10 (released early Dec. 2020) or higher to integration level 20-11-500 or higher.

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

For information on programming and coding with ISTA, refer to CenterNet / TIS / Technical Documentation / Programming and Diagnostics / Programming Documentation.

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 adaptations.

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.

PARTS INFORMATION

None required when the programming/encode and the adaption procedure applies and it is successfully performed and completed.

WARRANTY INFORMATION

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

Select one of these open Technical Campaigns to perform and submit for updating the vehicle's software to the required I-level or higher.

Please be sure to perform any additional before and/or after work (including attaching labels) as required by the open campaigns on the vehicle. Close any remaining open programming and encoding Campaign repairs as outlined in the corresponding Service Information Bulletin.

Only if the above situation does not apply, the BMW software solution is then:

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

This repair is also covered by the terms of the Federal Emission Warranty for all affected vehicles, and when applicable, concurrently by the State-specific Emissions Warranty (dependent on the vehicle's model year and state of registration).

Defect Code:	1042033800	Throttle response with hot engine Shaking
---------------------	-------------------	--

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	Support voltage of the vehicle electrical system / recharge vehicle electrical system 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

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.

As applicable to your center, please refer to **SI B01 01 20** or **B01 07 20** for claiming your diagnosis work time, job/repair work time (WT), RO/Claim WT and/or repair explanation procedures, unless otherwise required by State law.

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

This procedure automatically reprograms and encodes any vehicle control modules that do not have the latest software I-level.

If one or more control modules fail during the reprogramming procedure, claim the required consequential repair work procedures to address this issue (including performing the IRAP Control Unit Recovery first as required, refer to the SIB in AIR) under the Defect Code in this bulletin with the labor operations in AIR that apply.

Please explain the additional work procedures that were performed (The why and the what) on the repair order and in the claim comments.

For covered repairs that address control module failures that occurred prior to performing this reprogramming procedure, claim this work with the Defect Code and labor operations (including diagnosis) in AIR that apply.

Based on which one applies to your center, please refer to **SI B01 01 20** or **B01 07 20** for claiming your diagnosis work time, job/repair work time (WT), RO/Claim WT and/or repair explanation procedures, unless otherwise required by State law.

Other Repairs

If other eligible and covered work is performed based on the response from the TSARA case and/or because of performing the ISTA diagnostics and related test plans, claim this work with the applicable Defect Code and the labor operations listed in AIR (including diagnosis).

QUESTIONS REGARDING THIS BULLETIN

Technical inquiries	Submit feedback at the top of this bulletin
Warranty inquiries	Please contact the Warranty department by either using the Live Chat that's available in the Warranty Documentation Portal or through IDS by selecting Coverage, Policy, Coding Questions and Mileage Corrections
Parts inquiries	Submit an IDS ticket to the Parts Department