BMW SI B12 08 18   March 2018
Engine Electrical Systems   Technical Service

ROUGH RUNNING AND VARIOUS VANOS FAULTS STORED

MODEL

F22 (2 Series Coupe)	F23 (2 Series Convertible)	F30 (3 Series Sedan)	F31 (3 Series Sport Wagon)
F32 (4 Series Coupe)	F33 (4 Series Convertible)	F34 (3 Series Gran Turismo)	F36 (4 Series GC)
F39 (X2)	F48 (X1)	G01 (X3)	G12 (7 Series)
G30 (5 Series Sedan)	G32 (6 Series Gran Turismo)	I12 (i8)	

With the B38T, B46M, B46O, B58M, XB1H, or XB2H engine produced to 3/14/18

SITUATION

The check engine light is illuminated and the vehicle may run rough at idle and while driving.

Only the following integration levels are affected:

- 17-07-5xx

- 17-11-5xx

One or more of the following faults can be stored in the Digital Motor Electronics (DME):

- 130E20 - Intake camshaft: Angular offset to the crankshaft out of tolerance

- 130104 - VANOS, intake: Control fault, camshaft jams

- 130715 - VANOS, intake: Control fault, camshaft jams

- 130108 - VANOS, intake: Control fault, position not reached

- 130713 - VANOS, intake: Control fault, position not reached

- 130F20 - exhaust camshaft: Angular offset to the crankshaft out of tolerance

- 130308 - VANOS, exhaust: Control fault, position not reached

- 130714 - VANOS, exhaust : Control fault, position not reached

- 130304 - VANOS, exhaust : Control fault, camshaft jams

- 130716 - VANOS, exhaust: Control fault, camshaft jams

- 13070B - VANOS, intake, cold start: not controllable

- 130709 - VANOS, intake, cold start: Position not reached

- 13070C - VANOS, exhaust, cold start: not controllable

- 13070A - VANOS, exhaust, cold start: Position not reached

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

CORRECTION
Update the vehicle software using ISTA 4.

PROCEDURE
For conditions that are similar to the situation described:

1. Perform diagnosis with the latest version of ISTA

2. Program the vehicle using ISTA 4 to the appropriate level shown below:

The following I-levels are contained in **ISTA 4.10.1x** or higher:

Model	Target I-level
F22 (2 Series Coupe)	**F020-18-03-511** or higher
F23 (2 Series Convertible)	
F30 (3 Series Sedan)	
F31 (3 Series Sport Wagon)	
F32 (4 Series Coupe)	
F33 (4 Series Convertible)	
F34 (3 Series Gran Turismo)	

Model	Target I-level
F39 (X2)	**F056-18-03-512** or higher
F48 (X1)	

Model	Target I-level
I12 (i8)	I001-18-03-511 or higher

The following I-levels are contained in **ISTA 4.10.2x** or higher:

Model	Target I-level
G01 (X3)	**S15A-18-03-520** or higher
G12 (7 Series)	
G30 (5 Series Sedan)	
G32 (6 Series Gran Turismo)	

Note that ISTA Next 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 (SIB04 23 10).

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

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.

Defect Code:	1136019600	
Labor Operation:	Labor Allowance:	Description:
00 00 006	Refer to KSD2	Performing "vehicle test" (with vehicle diagnosis system – checking faults) (Main work)
Or:		
00 00 556	Refer to KSD2	Performing "vehicle test" (with vehicle diagnosis system – checking faults) (Plus work)
And:		
61 21 528	Refer to KSD2	Connect an approved battery charger/power supply (indicated in KSD2 as "Charging battery")
And:		
61 00 730	Refer to KSD2	Programming/encoding control unit(s)

And, additionally for the:

I12 (i8)

Labor Operation:	Labor Allowance:	Description:
61 25 910	Refer to KSD2	Recharging high-voltage battery unit (to high voltage charging socket)

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 KSD2/AIR for the corresponding flat rate unit (FRU) allowances.

During the same workshop visit, if a vehicle also requires another Technical Campaign or repair that also includes programming and encoding the control units, the programming procedure may only be invoiced one time.

Vehicle Programming and Encoding

A. 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 under the defect code listed in this bulletin with the applicable KSD2/AIR labor operations.

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

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

• When "covered" under an applicable limited warranty, claim this control module-related repair work using the applicable defect code and labor operations (including diagnosis) in KSD2/AIR.