



SIB 13 04 20

2020-05-11

TANK VENTILATION AND MIXTURE CONTROL FAULTS STORED IN THE DME

This Service Information Bulletin (Revision 01) replaces SI B13 04 20 **dated April 2020**.

What's New (Specific text highlighted):

- Diagnostic procedure modified.
- TSARA case information added.

MODEL

F22 (2 Series Coupe)	F23 (2 Series Convertible)	F30 (3 Series Sedan)	F32 (4 Series Convertible)
F33 (4 Series Convertible)	F34 (3 Series Gran Turismo)	F36 (4 Series Gran Coupe)	F39 (X2 Sports Activity Coupe)
F48 (X1 Sports Activity Vehicle)	G01 (X3 SAV)	G02 (X4 SAC)	G05 (X5 SAV)
G07 (X7 SAV)	G12 (7 Series Sedan)	G20 (3 Series Sedan)	G30 (5 Series Sedan)
G32 (6 Series Gran Turismo)	I01 (i3)	I12 (i8 Coupe)	I15 (i8 Roadster)

Vehicles produced up to March 2019 and with the following engine variants:

B36X, B38X, B46X, B48X, B58X, IB1, XB1X

Note: The “X” in the engine designation represents all of the applicable engine variants.

SITUATION

The Engine Malfunction Warning is illuminated and one or more of the following faults are stored in the DME.

All models:

FC 191C02 – Fuel tank ventilation system, 2nd discharge point: malfunction

FC 195014 – Differential pressure sensor, tank vent valve, signal: fixed

FC 118001 – Mixture control: mixture too lean

FC 118401 – Mixture control: mixture too lean, large deviation

I01 only:

FC 124103 – Mixture control: mixture too lean

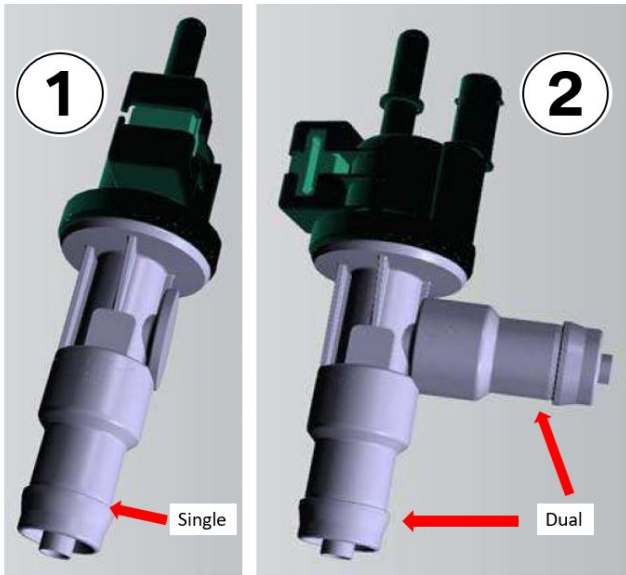
FC 124101 – Mixture control: Mixture lean, large deviation

CAUSE

Internal mechanical defect in the tank ventilation valve.

The defect can also result in a very loud clicking noise when the valve is cycling.

PROCEDURE



This procedure affects tank ventilation valves with **single** and **dual** discharge points.

Single (1)

Dual (2)



1. Inspect the discharge point(s) of the tank ventilation valve using a borescope.

The valves may have different reed valve designs.

The reed valve dimple should be centered in the discharge port.

Note the **GREEN** arrow.

The reed valve in this photo is **good**.

Do not replace the valve.



OR-

The reed valve center with vanes should be centered in the discharge port.

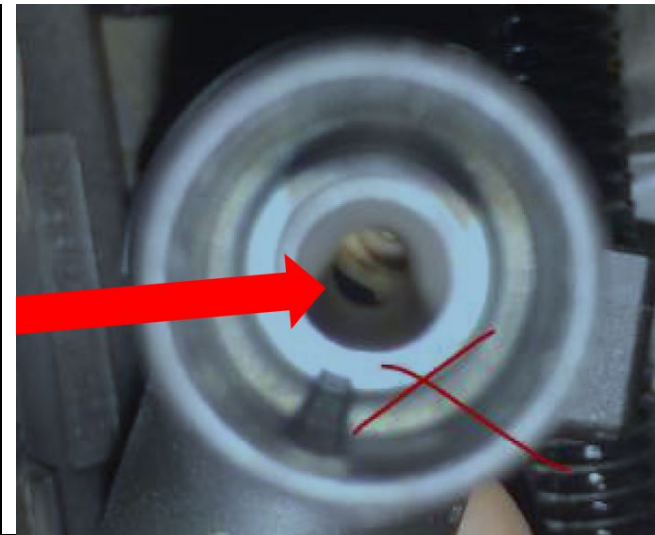
Note the **GREEN** arrow.

The reed valve in this photo is **good**.

Do not replace the valve.

OR

The edges of the reed valve can be ripped or torn apart.



It is very important to inspect the valve very closely using a borescope so that any damage is not overlooked.

Note the **RED** arrow.

The valve must be replaced.

2. If no problems are detected with the valve itself, then the valve must be activated via the applicable test plan for the fault stored. The clicking sound that the valve causes needs to be compared to the video linked below.

If the clicking resembles the “**Good**” sound file, then the valve does not need be replaced.

If the clicking resembles the “**Defective**” sound file, then you must install a new valve (for reference) and activate it before replacing the valve. If the noise is excessive when comparing to the sound file and the new part, then the valve should be replaced.

Use the vehicle’s VIN in ETK to determine what tank ventilation valve part number needs to be used for the sound comparison.

3. Check the vehicle’s current I-level by either using AIR or the Key reader/ISPA NEXT application.

- if the current I level of the vehicle is not already at **16-07-500 or higher**, program the vehicle with the current version of ISTA

4. If a defect is not identified using the steps provided in this bulletin, tperform the applicable test plans for the faults stored in the vehicle.

5. Certain models and engine variants require TeileClearing authorization before the tank ventilation can be replaced. Submit the TeileClearing case with “Tank Ventilation Valve” in the subject line for these vehicles. Provide the photos or video of the defective areas when creating the case to speed resolution time. Submit the case and wait for a response. Refer to **B00 03 06** for additional details.

PARTS INFORMATION

Obtain and confirm the part numbers for your specific vehicle by entering the chassis number in either ETK or AIR which takes into account specific equipment and/or options.

Part Number	Description	Quantity
Refer to ETK using the VIN of the vehicle	Tank ventilation valve	1

WARRANTY INFORMATION

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

Defect Code:	1390011500	Tank ventilation system valve (activated carbon)
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permanent malfunction		
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		
13 99 000	Performing step 1	2 FRU
Or:		
13 99 000	Performing steps 1 and 2	5 FRU
And, if necessary		
61 00 730	Programing/encoding control unit(s) (Step 3)	Refer to AIR

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

And, when applicable:

TeileClearing Authorization-

Labor Operation	Description	Labor Allowance
00 58 677	TeileClearing lump-sum fee Associated work	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 13 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).

Other Repairs

If other eligible and covered work is performed as a result of performing the ISTA diagnostics and related test plans, claim this work with the applicable defect code and the labor operations that are listed in AIR (including diagnosis with separate punch times).

Supporting Materials

Videos

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