



SUBJECT

N20 – The Service Engine Soon Light is On with DME Fault 118602 Stored

MODEL

F22 (2 Series Coupe)

F23 (2 Series Convertible)

F25 (X3)

F26 (X4)

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)

With the N20 engine and MEVD172P DME produced from 3/2013 to 7/2016

F10 (5 Series Sedan)

With the N20 engine and MEVD172P DME produced from 7/2013 to 7/2016

SITUATION

The Service Engine Soon light is on (MIL) with only the following oxygen sensor fault stored.

- 118602 - Oxygen sensor before catalytic converter, fine mixture control: exhaust gas after catalytic converter too lean

CAUSE

An actual engine related problem and/or DME software diagnostic

PROCEDURE

1. Perform the following test plan as recommended with the latest version of ISTA.

Note:

This test plan will be revised in ISTA 3.56.0 to include the complete procedure below.

ABL_DIT_AT1214_TVD_LV1N - Oxygen sensor before catalytic converter

- Electrical system troubleshooting of oxygen sensor before catalytic converter
- Oxygen sensor heating troubleshooting
- Troubleshooting, function of oxygen sensor before catalytic converter
- Mixture control troubleshooting
- Check lines and plug connections
- Functional check of oxygen sensor heating after repair

It is important to complete all the above steps in the test plan and ensure that none of the following may be a cause of the fault:

- Tank ventilation system
 - Intake, exhaust, and crankcase breather systems tight and without any leaks – check with a smoke tester
 - Injection
 - Air mass sensor (HFM)
 - Ignition
 - Crankshaft and camshaft sensors
 - Throttle valve
2. If no faults are stored for any of the other components listed and the leak tests are inconclusive replace the pre-catalyst oxygen sensor (only if not previously replaced).
 3. Program the vehicle using ISTA/P 3.59.0 or higher

Target integration level: **F0xx-16-07-501 or higher**

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.

IMPORTANT NOTE: Until the release of ISTA/P 3.59.0 (late June 2016), an IRAP solution is available.

- The vehicle is already at the most current software integration level.
- Submit a PuMA case entitled “IRAP – N20 Fault 118602”.

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	DME Software Diagnostic Issue Only
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 KSD2 as “Charging battery”)
And, as necessary:		
61 00 006	Work time (WT)	Performing vehicle diagnosis – test module
And:		
61 00 730	Refer to KSD2	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.

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

Work time labor operation code 61 00 006 is not considered a Main labor operation; however, it does require an individual punch time and an explanation on the repair order and in the claim comments.

Vehicle Programming and Coding

When properly functioning control modules fail to program or further initialization procedures are needed, please claim this additional repair work under the defect code listed in this bulletin by using the applicable KSD2 labor operations.

If other failed control modules need to be repaired before programing, or other stored faults need to be addressed before programing to avoid a control module failure, such repair work cannot be claimed using the above defect code.

Other Repairs

If the diagnosis and repair of these other failed control modules qualify for coverage separately, then please submit for these repairs using the appropriate defect code and labor operations in KSD2.

This also applies to qualifying repairs that were performed based on the results of the ISTA diagnostics and the completion of the recommended test plan(s).

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