

May 2014 Technical Service

SUBJECT

N20: Cold Engine Start May Take Several Attempts to Stay Running

MODEL

F10 (5 Series Sedan)

Produced to 7/2013

F25 (X3)

Produced to 4/2013

F30 (3 Series Sedan)

Produced to 7/2012

All with the N20 engine with a vacuum- operated turbocharger waste gate actuator (EU5 variant)

SITUATION

The engine cuts off immediately after a cold start and may require several starting attempts before it stays running.

This starting difficulty can occur at temperatures below 0°C during the winter months and in regions of the country where winter fuel is used.

No faults are stored in the DME and the engine performs normally once it is running.

Later production N20 engines which use an electrically operated turbocharger waste gate actuator are not affected (EU6 variant). The attachment illustrates the differences.

CAUSE

Unfavorable DME software combined with winter fuel quality

CORRECTION

Do not replace any parts. In vehicles produced prior to 3/2012, the spark plugs may also need to be changed due to DME software changes introduced with integration levels of F0xx-12-07-500 and later.

More information about this spark plug part change can be found in <u>SI B12 05 14</u>.

Program the vehicle, including a complete vehicle coding, using ISTA/P 2.52.3 or a more recent version.

| Model | New Target Integration Level | |
|---|------------------------------|--|
| F10 (5 Series Sedan) F010-14-03-503 or higher | | |
| F25 (X3) | X3) F025-14-03-503 or higher | |
| F30 (3 Series Sedan) | F020-14-03-503 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.

WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle/SAV Limited Warranty or the BMW Certified Pre-Owned Limited Warranty

This repair is also covered by the terms of the Federal and/or State Emissions Warranty (vehicle model year and state of registration dependent) that applies to BMW models 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 11 00 09 00 | |
|---------------------|------------------|---|
| | | |
| 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 KSD 2 as Charging battery) |
| And | | |
| 61 00 730 | Refer to KSD2 | Programming/encoding control unit(s) |

Labor operation code 00 00 006 is a Main labor operation. 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) allowance. Enter the Chassis Number, which consists of the last 7 digits of the Vehicle Identification Number (VIN). Click on the "Search" button, and then enter the applicable flat rate labor operation in the FR code field.

If a control module fails to program correctly or initializations are required, the additional work must be claimed using separate labor operations found in KSD2 under the defect code listed above.

ATTACHMENTS

View PDF attachment **B120414_EU5_EU6**.

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