

**SUBJECT****N20/N26: Engine Fails to Run on Repeated Cold Start****MODEL**

E84 (X1)

Produced to 8/2012

E89 (Z4)

Produced to 8/2012

F10 (5 Series Sedan)

Produced to 8/2012

F30 (3 Series Sedan)

Produced to 8/2012

All with either the N20 or N26 engines

SITUATION

The engine turns over but does not start on a repeat cold-starting attempt.

For example, on the first cold start the engine may start normally, but if shut off right away, the engine may then fail to start and remain running on the next repeated attempts.

CAUSE

Unfavorable DME software in combination with the NGK SILZKBR8B8S spark plug

CORRECTION

Beginning in 3/2012, a modified spark plug, NGK SILZKBR8C8S, was introduced into production in the N20 and N26 engines.

The earlier NGK SILZKBR8B8S spark plug, used from the start of production, was then discontinued.

The spark plug for these engines has been superseded again by a NGK SILZKBR8D8S, as shown in the ETK and the list below.

A change in the DME software was necessary in order to be compatible with either of newer NGK SILZKBR8C8S or NGK SILZKBR8D8S spark plugs.

This DME software change was introduced into production beginning in 7/2012.

This revised DME software would also have been included for those vehicles produced prior to 7/2012 when programmed using ISTA/P 2.47.1 or higher (E89x-12-07-5xx or F0xx-12-07-5xx or higher depending on the model).

The combination of the earlier NGK SILZKBR8B8S spark plug and the later DME software (or vice versa) could

lead to a problem during a repeated cold start.

PROCEDURE

If this situation is reported by the customer, it will be necessary to check both the current software integration level and the fitted spark plugs. The current Integration level is easily checked with the Key Reader, and the part numbers for the referenced spark plugs are listed above.

- For vehicles produced prior to 3/2012 with the early NGK SILZKBR8B8S spark plugs fitted, the vehicle integration level must be lower than E89x-12-07-5xx or F0xx-12-07-5xx.

If this is not the case, the spark plugs must be changed to the newer spark plug, and the vehicle programmed using the latest version of ISTA/P.

- For vehicles with either the modified NGK SILZKBR8C8S or NGK SILZKBR8D8S spark plugs fitted, the current vehicle integration level must be E89x-12-07-5xx or F0xx-12-07-5xx or higher.

If this is not the case, the vehicle must be programmed using the latest version of ISTA/P.

For information on programming and coding with ISTA/P, refer to CenterNet / Aftersales Portal / Service / Workshop Technology / Vehicle Programming.

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.

PARTS INFORMATION

Part Number	Description	Quantity
12 12 0 038 704	NGK SILZKBR8B8S spark plug	NLA
12 12 0 038 896	NGK SILZKBR8C8S spark plug	NLA
12 12 0 039 664	NGK SILZKBR8D8S spark plug	4

WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle/SAV 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 the BMW models listed.

Defect Code:	10 11 00 05 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 KSD2 as Charging battery)
and		

12 12 521	Refer to KSD2	Removing and installing or replacing all spark plugs
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And

E84 (X1) and E89 (Z4)

Labor Operation:	Labor Allowance:	Description:
61 00 710	Refer to KSD2	Programming/encoding control unit(s) (not including CAS)
Or		
61 00 720	Refer to KSD2	Programming/encoding control unit(s) (with CAS)

Or

F10 (5 Series Sedan) and F30 (3 Series Sedan)

Labor Operation:	Labor Allowance:	Description:
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 control module(s) fail to reprogram or initializations are required, the additional work must be claimed using separate labor operations found in KSD2 under the defect code listed above.

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