

October 2014
Technical Service

This Service Information bulletin supersedes SI B12 02 12 dated February 2012.

www.designates changes to this revision

SUBJECT

N54 and N54T Engines: Various Drivability Complaints and Service Engine Soon Lamp Illuminated

MODEL

- E82 (1 Series Coupe)
- E88 (1 Series Convertible)
- E90 (3 Series Sedan)
- E92 (3 Series Coupe)
- E93 (3 Series Convertible)
- E60 (5 Series Sedan)
- E61 (5 Series Sports Wagon)
- E71 (X6)
- E89 (Z4)
- F01 (7 Series Sedan)
- F02 (7 Series Sedan LWB)

NEW INFORMATION

Various drivability complaints and/or misfire faults may be attributed to the formation of intake valve and port carbon deposits.

PROCEDURE

Perform the applicable test plan for the faults stored. If a misfire fault is not stored in the DME and only a drivability complaint is received, perform the misfire test plan using the path described below:

Select "Function Structure."

Select "01 Drive."

Select "Engine electronics, quality control valve MSV."

Select "Misfire detection."

Select "Start search."

Perform the steps identified in the test plan as directed. If the result of the test plan states "Evaluation of the fault pattern indicates coking in the intake ports," refer to the intake valve and intake port cleaning procedure section of this document to clean the intake valve and intake ports.

INTAKE VALVE AND INTAKE PORT CLEANING PROCEDURE

- 1. Remove the intake manifold per Repair Instruction 11 61 050, "Removing and installing intake plenum."
- 2. Clean the intake valves using the BMW Group Carbon Blaster tool, P/N 81 29 2 208 034 (see SI B04 12 11 for additional tool information). Refer to the attached procedure for tool safety, operation and detailed cleaning instructions.
- 3. If the results of the test plan are inconclusive, review the applicable Service Information bulletins for the most likely root cause.

SI B13 04 09 - N54 - Diagnosis of Cold Start Rough Running with Misfire Faults

<u>SI B12 55 06</u> - N54 - Diagnosis for DME FC 29DC/29F2/2FBF

SI B12 05 09 - N54 E60, E61 - Misfire Faults Stored due to DME Software Errors

SI B12 06 09 - N54 E9x, E82, E88 - Misfire Faults Stored Due to DME Software Error

SI B11 03 08 - Crankcase Ventilation System Diagnosis and Measurement

NEW PARTS INFORMATION

This section only applies to vehicles that require cleaning the intake valve and intake ports.

Refer to the applicable Service Information bulletin or ETK if carbon cleaning was not the root cause for the complaint.

Reuse the strut brace bolts.

Part Number	Description	Quantity
11 61 7 547 242	Intake gaskets	1 (set of 6)

Carbon Blaster Walnut Shells:

Replacement media, 20/30 SAE or 0.45-0.80 mm walnut shells can be sourced locally or through one of the following distributors:

MARCO® Corporate – (800) 252-7848, ext. 284 - marcousa.com/index.cfm

Trinity Tool Company – (800) 587-4626 - www.trinco.com

McMASTER-CARR® – www.mcmaster.com

Refer to EPC for applicable gaskets and bolts.

NEW WARRANTY INFORMATION

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

Defect Code:	11 34 00 76 00	
Labor Operation:	Labor Allowance:	Description:
00 00 006	III	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:		
11 61 550	Refer to KSD2	Remove and reinstall intake manifold
and		
11 99 000	10 FRU	Work time to manually clean intake valves/ports

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.

Even though work time labor operation code 61 00 006 ends in "006," it is not considered a Main labor operation.

Work time (WT) labor operation 61 00 006 requires an individual punch time and explanation in the claim comment section.

Even though work time labor operation code 11 99 000 ends in "000," it 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.

Sublet - Bulk Materials

Sublet Code 4	\$25.00	Reimbursement for the repair-related bulk materials
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Sublet Allowance: \$25.00 (Partial quantity allowance for bulk/locally sourced materials, 20/30 or 0.45- 0.80 mm walnut shells)

Enter this material cost in sublet and itemize the amount in the claim comment section.

Other Repairs

If performing ISTA diagnostics and related test plans results in other eligible and covered work, claim this work with the applicable defect code and labor operations listed in KSD2.

ATTACHMENTS

View PDF attachment B120212 BMW Group Carbon Blaster N54.

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