



This Service Information bulletin supersedes SM B11 203 03 **dated December 2004.**

SUBJECT

N62 Engine - Rough Idle at Operating Temperature

MODEL

E60 (5 Series) 545i

E63 and E64 (6 Series) 645Ci and 645Cic

E65 and E66 (7 Series) 745i and 745Li

SITUATION

Intermittently, engine idle is rough after engine has reached normal operating temperature. There are no other driveability complaints and no faults stored in DME fault memory.

CAUSE

Insufficient Valvetronic adaptation.

PROCEDURE

On a customer complaint basis, verify condition, then perform the N62 Ignition and Injection Test using DISPlus V44.0 and MKA adapter 12 1 310 (see SI B04 32 01, May 2002). If all aspects of the N62 MKA Ignition and Injection Test are OK, proceed to procedure A.

Procedure A:

1. Select "Function Selection".
2. Select "Service Functions".
3. Select "Drive".
4. Select "Engine Management ME9".
5. Select "Test Runs".
6. Select "Idling Quality".
7. Select "Test Plan".
8. Select right arrow.
9. Select "(1) Eccentric Shaft Calibration"

The Test Plan will check the calibration of the eccentric shafts and display the calibration angle. If the calibration angle is not within specification, follow the on-screen prompts to make necessary adjustment. After the calibration has been completed, and the Test Plan has been terminated verify the engine idle quality. If the engine idle quality has improved, take no further action. If the idle quality has not been improved, proceed to Procedure B.

1. Select "Function Selection".
2. Select "Service Functions".
3. Select "Drive".
4. Select "Engine Management ME9".
5. Select "Test Runs".
6. Select "Idling Quality".
7. Select "Test Plan".
8. Select right arrow.
9. Select "(5) Minimum lift adjustment".
10. Allow vehicle to reach operating temperature. (The test plan will not let you continue without achieving this temperature level.) Arrow to the right when the screen indicates the vehicle is at operating temperature.
11. The next screen will show background information concerning the effects of valve lift adjustment. Select right arrow after reading this information.
12. The screen will then indicate the current valve lift (example: 0.3mm or 0.8mm). Select the appropriate lift adjustment and then arrow to the right.
13. The tester will make the adjustment and ask if this adjustment should be permanently programmed. If the engine idle quality did improve, then answer "Yes" and arrow to the right.
14. The screen now confirms the adjustment has been programmed.
15. Selecting the right arrow will end the test plan.

Note: Whenever the minimum valve lift is changed a calibration of the eccentric shafts must be performed.

16. Select "(1) Eccentric Shaft Calibration"

The Test Plan will check the calibration of the eccentric shafts. The Test Plan will then display the calibration angle. If the calibration angle is not within specification, follow the on-screen prompts to make necessary adjustment. If the calibration is within specification, take no further action.

To confirm new minimum lift setting:

Select "DME" in Control Unit Functions. Then under "Diagnosis Requests", select "Minimum Valve Lift", then "Display". The minimum valve lift is displayed.

After following this procedure, test the vehicle duplicating the conditions stated by the customer. Please provide feedback via PuMA.

WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle Limited Warranty.

Refer to KSD for proper defect code and labor allowance for work performed.

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