This Service Information bulletin supersedes SI B12 05 09 **dated April 2009.**

NEW designates changes to this revision

SUBJECT
N54 E60, E61- Misfire Faults Are Stored due to DME Software Errors

MODEL
E60, E61 (5 Series) with the N54 engine produced u p to 3/09

SITUATION
The Service Engine Soon (MIL) lamp comes on and **only** misfire faults are stored.

The most common faults which occur are those affecting bank one cylinders: 29CD, 29CE and 29CF, respectively.

In these situations, the misfire faults could occur at full operating temperatures - most frequently after driving for an extended period of time.

If the DME adaptations are cleared, the vehicle may run and perform normally once more, but under certain circumstances the misfire faults may reoccur.

CAUSE
DME software calibration error(s), depending on the DME variant installed, affecting vehicles produced or programmed from 3/2008 up to 4/2009, as described below.

CORRECTION
Situation A

For vehicles which were produced up to 3/2008 with the **MSD80** DME, a software error was introduced which, under certain driving conditions, could cause random misfire faults primarily on the bank one cylinders.

This DME software calibration error affects vehicles with **MSD80** which were programmed using Progman V29.2 – V31.2 from approximately 4/2008 – 1/2009.

Situation B

For vehicles which were produced after 3/2008 with the **MSD81** DME, a software error was present which, under certain driving conditions, could cause misfire faults **only** on bank one cylinders 1, 2, or 3.

This situation could also affect earlier vehicles originally equipped with MSD80, but which had the DME replaced between 8/2008 and 4/2009 with an MSD81 (the only available replacement part).

For both situations, program the vehicle using **ISTA/P 2.33.0** or a later version.

Note that ISTA/P will automatically reprogram and code all programmable control modules that do not have the latest software.

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

After programming, perform the recommended ISTA post-work to clear the DME adaptations.

IMPORTANT:

A misfire fault can be caused by a variety of mechanical reasons, any of which could affect cylinder combustion efficiency.

All other MIL-relevant faults should be investigated prior to programming.

If misfire faults return, continue to troubleshoot all other possible causes by following the recommended test plans.

For N54 misfire faults occurring during a cold start, refer to SI B13 04 09 for additional diagnostic information.

WARRANTY INFORMATION
Covered under the terms of the BMW New Vehicle Limited Warranty or the emissions defect warranty as applicable.

NEW **Defect Code: 10 42 04 42 00**

Labor Operation:	Labor Allowance:	Description:
61 00 801*	Refer to KSD	Programming / encoding control unit(s) without CAS
61 00 811*	Refer to KSD	Programming / encoding control unit(s) with CAS

*Main Work - use this labor operation number when this is the only repair being performed, or if this is the main repair when performed along with other repairs at the same time. If this is not the main repair, refer to KSD for the associated (+) labor operation code.