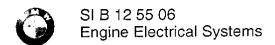
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January 2007 **Technical Service**

This Service Information bulletin supersedes S.I. B12 55 06 dated December 2006.

NEW designates changes to this revision

SUBJECT

E90, E92 with N54 - Diagnosis for DME FC 29DC/2FBF

NEW E90, E92 with N54 produced 06/06 up to 12/01/06

SITUATION I

Customer may complain of the following:

- "Vehicle looses power while driving"; or "Vehicle runs poorly";
- Service Engine Soon light may be illuminated;
- GT1/DIS diagnosis shows fault code 29DC (Cylinder injection cut-out, pressure too low in high pressure system), 2FBF (Fuel pressure on-release injection, pressure too low), also in conjunction with 29F1 (Fuel high pressure, plausibility) and 29F2 (Fuel high pressure, fuel pressure undershot).
- In some cases, also misfire faults for various cylinders (e.g. FC 20D1, 29CF, 29D2, 29CE, 29D0, 29CC) are stored in MSD80.

Important:

If only fault codes 29F1/29F2 are stored in DME, refer to SI B12 16 06 (November 2006).

SITUATION II

Customer may complain of:

- Excessive cranking time before engine starts (5-6 seconds) on cold start, or after hot soak,
- In most cases GT1/DIS diagnosis shows fault code 29DC, and/or 2FBF.

NEW CAUSE

Sensitivity of the high pressure injection pump (HHP) diagnostic software.

NEW CORRECTION

On a customer complaint basis only, and when the listed above fault codes are stored in DME memory:

• 1. Check vehicle's integration level.

- 2. If the integration level is found to be "E089-06-09-540", or lower, then reprogram/recode complete vehicle using PROGMAN V24.02, or higher (target integration level "E089-06-12-510", or higher).
- 3. Test drive vehicle after programming to verify effectiveness of the repair.

In case, vehicle was already reprogrammed with V24.02 (to the integration E089-06-12-510) and fault codes 29DC, and/or 2FBF/29F1/29F2 are found to be stored in DME; or a high pressure injection pump faults are coming during back during test drive after V24.02 reprogramming then:

- 1. Perform all applicable DIS/GT1 test plans, mainly B1214_ DI6KHDR/NDR (high pressure fuel system, rail pressure sensor, volume control valve test), and B1612_STR/SPG/VER (low pressure fuel system check). Test modules may be accessed using the path: Function selection; Drive; Motor Electronics; then High-pressure/Low-pressure fuel system; Test plan.
- 2. Make sure that a FASTA data is transmitted after completion of all appropriate test modules.
- 3. Replace the high pressure fuel pump, when prompted by the results of DIS/GT1 test plans. For the pump replacement procedure refer to RA 13 51 017 found in BMW TIS.
- 4. After replacement, clear adaptation values of the high pressure flow control valve in the DME. Refer to SI B12 16 06 for adaptation reset procedure.

NOTE:

Currently, the high pressure fuel pumps (HHP) are in extremely short supply. Until the further notice, follow the procedure below when ordering a replacement part:

- 1. Submit a PuMA case to the Technical Hotline/Drivetrain with title indicating "N54 HPP failure".
- 2. Based on the results of executed test modules and vehicle integration level, Technical Hotline specialist will provide you with an authorization to replace a high pressure fuel pump.
- 3. Then, your Parts Department needs to place an order for PN 13 53 7 537 320, using the PuMA case number as your purchase order number.
- 4. IMPORTANT:

PUMA CASES WITHOUT A FASTA DATA, OR CASES WHERE THE APPROPRIATE TEST MODULES WERE NOT PERFORMED, ARE NOT GOING TO BE PROCESSED.

PARTS ORDERS WITHOUT A PUMA CASE WILL BE CANCELLED.

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