SI B 12 55 06
Engine Electrical Systems

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

MODEL
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.

WARRANTY INFORMATION
For information only.