



This Service Information bulletin supersedes SI B24 01 08 **dated March 2008**.

NEW designates changes to this revision

SUBJECT

E65, E66 with 6HP26 - Diagnosis for EGS FC 4F81

MODEL

E65, E66 with N62TU and ZF 6HP26, produced from 03/05 up to 10/06

E65, E66 with N73 and ZF 6HP26, produced from 03/05 up to 10/06

SITUATION

"Transmission warning light" is illuminated and the transmission enters failsafe mode. Fault code 4F81 (Ratio monitoring, clutch A), in some cases combined with the subsequent faults 507B/507C (Parking gear sensor implausible signal) or 507D (Parking gear incorrectly disengaged), are stored in the EGS control module.

CAUSE

Possible causes:

- Low transmission fluid level; or
- **NEW** Internal transmission pressure leak caused by a defective adapter seal (rectangular) between the transmission housing and the Mechatronic.

CORRECTION

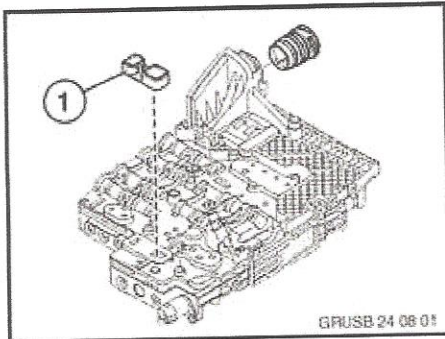
On a customer complaint basis only, follow the procedure below:

1. Check the transmission fluid level and top up, if needed, using transmission fluid Shell M-1375.4 (P/N 83 22 0 142 516). For the filling procedure, refer to TIS RA 00 11 500.
2. Clear the EGS code fault memory and test-drive the vehicle after the transmission fluid level has been corrected. If the fault codes listed above do not return again after the test-drive, release the vehicle to the customer.
3. If the initial transmission fluid level was correct, or the fault codes listed above returned after topping up and test-driving, remove the transmission's Mechatronic and check its adapter seal (black, rectangular shaped) for cracks. Refer to TIS RA 24 34 561 for instructions on removal and reinstallation of the Mechatronic.

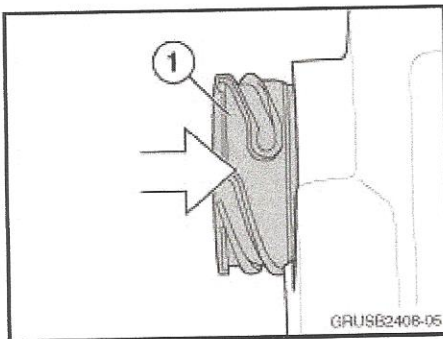
IMPORTANT:

Prior to the transmission oil pan removal, drain and save the long-fill transmission fluid.

NEW

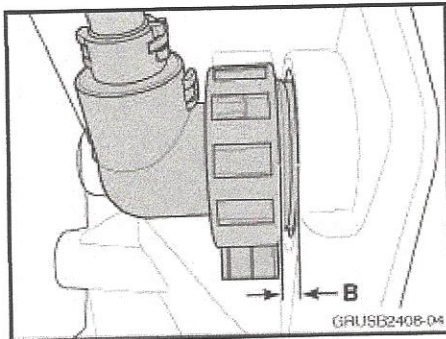


- 4. In case the Mechatronic adapter seal (rectangular) (1) is found to be defective (cracks, seal damage, etc.), replace it with the new part (P/N 24 34 7 588 727).
- 5. Reinstall the Mechatronic and an oil pan, using a new oil pan gasket (P/N 24 11 7 520 712) and the new Mechatronic sealing sleeve (round), P/N 24 34 7 519 357.
- 6. Fill and adjust the transmission fluid, using the previously-saved Shell M-1375.4 (P/N 83 22 0 142 516). For the filling procedure, refer to TIS RA 00 11 500.

**Important**

Make sure to push the sealing sleeve firmly into the housing assembly before closing the white locking tab of the Mechatronic.

To ease the sleeve installation, use some lubrication (e.g., transmission fluid) on both sleeve's o-rings.



After installation, the correct distance between the transmission harness connector and the housing surface (B) should not exceed 3 mm.

In case the sealing sleeve is not inserted correctly, an intermittent connection problem between the Mechatronic and the vehicle harness connector will occur, resulting in various EGS communication faults (e.g., FC 5079 "Serial wire message missing"; FC 507A "Serial line signal plausibility"); "Gearbox Emergency Program" light illumination; and the transmission entering failsafe mode.

7. If the internal Mechatronic adapter seal does not exhibit any signs of damage, contact Automatic Transmission Enhanced Technical Support (TeileClearing) for further diagnostic instructions. Submit the "regular technical support" PuMA case, referencing SI B24 01 08 in its title.

PARTS INFORMATION

Part Number	Description	Quantity
24 34 7 588 727	Mechatronic adapter seal (rectangular)	1
NEW 24 34 7 519 357	Mechatronic sealing sleeve (round)	1

24 11 7 520 712

Oil pan gasket

1

WARRANTY INFORMATION

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

Defect Code: 24 00 30 66 00

Labor Operation:	Labor Allowance:	Description:
24 34 561*	20 FRU	Remove/reinstall Mechatronic
Sublet 4	Topping transmission fluid with Shell M-1375.4	\$4.00

*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.

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