



SUBJECT

N51, N52, N52K and N52T Engines: Various Eccentric Shaft Sensor Faults stored in the DME – Diagnostic Hints

MODEL

E60 (525i/528i/530i Sedan)

E61 (530i Sports Wagon)

E70 (X5 3.0)

E82 (128i Coupe)

E83 (X3 3.0si)

E85 (Z4 3.0i Roadster)

E86 (Z4 3.0i Coupe)

E88 (128i Convertible)

E89 (Z4 sDrive3.0i Roadster)

E90 (325i/328i/330i Sedan)

E91 (325i/328i Sports Wagon)

E92 (328i Coupe)

E93 (328i Convertible)

F10 (528i Sedan)

F25 (X3)

With N51, N52, N52K, N52T engines

SITUATION

The customer may complain about one of the following:

- Rough engine running
- Engine cannot be started (crank no start)

- Check Engine Light illuminated

One or more of the following faults may be stored in the DME:

- 2A37 – Valvetronic, eccentric shaft sensor plausibility
- 2A47 – Valvetronic, eccentric shaft, signal plausibility
- 134E08 – Eccentric shaft plausibility (on F10, F25 vehicles only)

CAUSE

The VVT eccentric shaft sensor connector, and/or DME connector may have oil contamination due to oil leakage at the VVT sensor gasket.

PROCEDURE


1. Connect a battery charger and perform a vehicle test.
2. If any of the listed above fault codes are stored, unplug the VVT eccentric shaft sensor connector (X60253) and inspect for engine oil contamination.

Was oil found in the VVT sensor connector or the VVT sensor engine harness connector?

NO – This bulletin does not apply. Perform applicable ISTA test plans for the faults stored.

YES – Proceed to step 3.

Component identification:

| | |
|---|--|
|  | <p>VVT sensor connector located in in the center of the cylinder head cover.</p> |
| | |



VVT sensor engine harness connectors
(X60253)

3. Inspect the DME and DME electrical harness connector.

Was oil found in the DME connector and or the DME electrical harness connector?

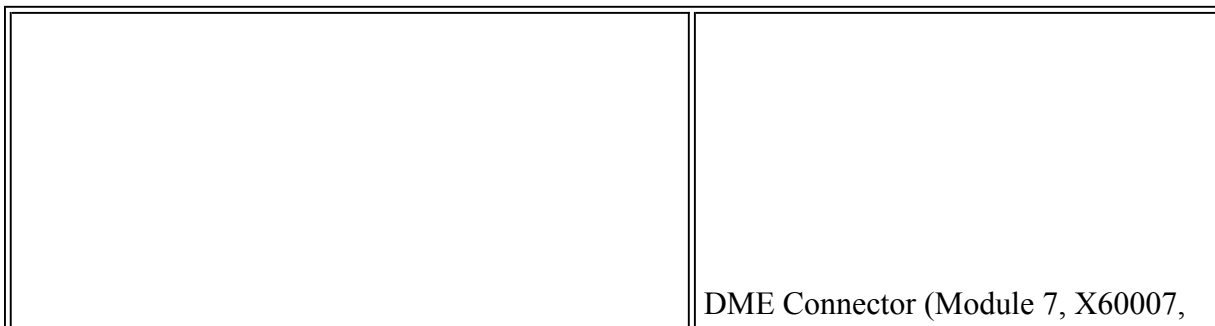
NO – Replace the following:

- Engine electrical harness
- VVT Sensor
- Cylinder head cover gasket

YES – Replace the following:

- DME
- Engine electrical harness
- VVT Sensor
- Cylinder head cover gasket

Component identification:



DME Connector (Module 7, X60007,



26 pins)



DME engine harness connector.

PARTS INFORMATION

| Part Number | Description | Quantity |
|-----------------|--|----------|
| 11 37 7 524 879 | VVT Eccentric shaft sensor | 1 |
| 11 12 7 528 242 | VVT Eccentric shaft sensor gasket | 1 |
| Refer to ETK | Engine electrical harness (E-Series vehicles only) | 1 |
| 12 54 7 619 142 | Valvetronic servomotor harness (F10 and F25 only) | 1 |
| 11 12 7 581 215 | Cylinder head cover gasket set (profile gasket) | 1 |

Refer to the ETK and the repair instructions for one time use fastener and component information regarding additional screws, gaskets and seals.

WARRANTY INFORMATION

For information only

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