



N63T – CHECK ENGINE LIGHT (MIL) ON AFTER A HOT ENGINE RESTART

MODEL

F01 (7 Series Sedan)	F02 (7 Series Sedan LWB)	F06 (6 Series Gran Coupe)	F07 (Gran Turismo)
F12 (6 Series Coupe)	F13 (6 Series Convertible)	F15 (X5)	F16 (X6)
ALPINA B7	With the N63T engine		

SITUATION

The check engine light (MIL) may come on after a hot engine restart.

When this happens the engine may have a longer cranking time before starting.

The following faults are stored in the DME:

- 20A504 – Turbocharger coolant pump, actuation: Line disconnection
- 133011 – Valvetronic, supply voltage: Malfunction
- 133013 – Valvetronic 2, supply voltage: Malfunction
- 1F0515 - Valvetronic, supply voltage: Line disconnection
- 1F050F – Valvetronic 2, supply voltage: Line disconnection

The ISTA test plans are inconclusive as the circuits check as good and this problem may be difficult to reproduce.

CAUSE

This problem is caused by air in the cooling system which tends to collect in the area of the turbocharger electric coolant pump.

When the engine is shut off the turbocharger coolant pump impeller continues to spin down in the air pocket.

This subsequently generates a voltage that is fed back to the DME causing the faults to be stored.

CORRECTION

Inspect and bleed the cooling system thoroughly and ensure that all connections are tight.

PROCEDURE

For conditions that are similar to the situation described:

1. Follow all test plans as recommended in ISTA.
2. Check all cooling system connections for tightness to prevent air from being drawn into the cooling system. This includes:
 - turbocharger cooling lines.
 - crimped hose / line fittings
3. Replace the turbocharger cooling lines if necessary.



Note: Repair instruction: 11 53 091 to replace the turbocharger cooling lines will be added in a future ISTA release.

4. Bleed the cooling system as described in repair instruction 17 00 039.

WARRANTY INFORMATION

This service information bulletin provides technical, diagnostic and/or repair-related information.

Eligible and Covered Work/Repairs

To submit a claim for a repair with a verified defect in materials or workmanship, including diagnosis, please following the established and applicable warranty policy and procedures together with the using corresponding defect code and labor operations provided in the KSD2.

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