

June 2016 **Technical Service**

N63TU Engine: Engine Oil Consumption

New information provided by this revision is preceded by this symbol \(\frac{\text{VPDATE}}{\text{PDATE}}\).



This Service Information bulletin supersedes SI B11 04 13 dated November 2014.

MODEL

F01 (7 Series Sedan)	`	F06 (6 Series Gran Coupe)	F07 (5 Series Gran Turismo)
F12 (6 Series Convertible)	F13 (6 Series Coupe)	Produced from 6/2012 to 12/2012	

SITUATION

The customer complains that the "low engine oil" message is displayed too frequently.

CAUSE

The cause is related to, but not limited to, one or more of the following components and systems shown below:

- Turbocharger
- Crankcase ventilation
- Engine gasket leaks
- Internal engine tolerances and sealing
- Improper filling or topping up

Use the troubleshooting procedure below to help identify the cause.

PROCEDURE

1. The crankcase ventilation system utilized in these engines cannot be measured with consistency because the system does not incorporate a regulating valve (spring with diaphragm). The crankcase pressure is regulated by an orifice in the crankcase ventilation tubes, and the vacuum will vary with crankcase pressure changes. Checking the operation of this unregulated system can only be performed by visually inspecting for loose connections or cracks in the system components. Generally active leakages will have an oily residue surrounding that affected area. The use of a smoke machine may also be helpful when trying to locate leakages in this system.

If the system appears to be operating properly, proceed to the next step.

2. Remove the intake boots from the turbochargers. Inspect the turbochargers for excessive engine oil; refer to the attachment for identification of acceptable levels of engine oil. If the levels are unacceptable, enter a TC Engine PuMA case for authorization of the turbocharger (s). Photos of the engine oil will need to be attached to each TC case.

If the engine oil residue level is acceptable when compared to the attachment, proceed to step 3.

3. Submit a TC Engine Case with "N63TU Engine Oil Consumption" in the subject line and wait for a response.

UPDATE: Do not replace any internal engine components or any components that require TeileClearing authorization.

The TC case description must contain the following information:

- Whether there is evidence of external leaks
- Crankcase ventilation system inspection results
- Photos of the turbo oil residue inside turbo(s)
- Detailed history of engine oil top-up, e.g., date, mileage and amount of engine oil added on each visit
- Oil consumption measurement results which include date and mileage of the start and end of the measurement

MEASURING OIL CONSUMPTION

$\label{eq:Vehicles} We hicles with N63TU-Measuring oil level electronically using the oil level test plan in ISTA/D$

Applicable models and I-levels:

- F01 and F02 with the N63T with I-Level F001-13-03-501 or higher
- F06, F07, F12 and F13 with I-Level F010-13-03-501 or higher

Test plan path:

- 1. Select "Service Function."
- 2. Select "Drive."
- 3. Select "Motor Electronics."
- 4. Select "Motor Oil."
- 5. Select "Oil Level."
- 6. Select "Continue."

7. Follow the steps as directed in the test plan to complete the measurement.

The test plan will identify the actual oil level, and will advise the amount of engine oil needed to correctly fill the engine when conducting an oil consumption test. After topping up the engine oil, perform the test plan one more time to ensure the oil level is correct. The vehicle must be driven 1,000 miles or until the next low engine oil message appears (whichever comes first). The oil level test plan must be performed again to identify the consumption level in the distance driven.

Always refer to ISTA/D for the recommended oil type and the amount required, using the VIN number of the vehicle.

Manual oil consumption measurement

If the vehicle has an I-Level that does not match or is higher than the l-Levels mentioned above, the engine oil must be drained, measured and the engine oil refilled.

The vehicle must be driven 1,000 miles or until the next low engine oil message appears (whichever comes first). The oil must be drained again and measured to identify consumption level.

Always refer to ISTA/D for the recommended oil type and the amount required, using the VIN number of the vehicle.

WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks or the BMW Certified Pre-Owned Program as applicable:

- For the cases described under paragraph 1 and 2: Claim this work with the applicable defect code(s) and labor operations listed in KSD2.
- For the case described in paragraph 3: TeileClearing will guide you through the appropriate repair or replacement of engine components.

If TeileClearing directs you replace the complete engine, please use defect code 11 25 02 69 00 for your claim submission unless directed otherwise.

ATTACHMENTS

View PDF attachment **B110413 Turbo Oil Leakage**.

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