



N63R Map Thermostat Faults

New information provided by this revision is preceded by this symbol  .

This Service Information bulletin replaces SI B12 13 16 **dated July 2016**

What's New:

- Checking for the correct index number on the thermostat (See Procedure)
- Warranty defect code and labor operations updated (See Warranty Information)

MODEL

G12 (750i sedan)	 With the N63R engine
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SITUATION

The Service Engine Soon light is on with one or more of the following fault codes:

- 1D2009 - characteristic map thermostat: clamped closed
- 10921B - characteristic map thermostat, stroke sensor: short circuit to ground
- 1D2008 - characteristic map thermostat: clamped open
- 1D2401 - characteristic map thermostat, actuation: short circuit to B+
- 10921A - characteristic map thermostat, stroke sensor: short circuit to B+
- 1FB201 - Check Control message (ID 257): Engine too hot! Drive gently
- 1FB301 - Check Control message (ID 39): Engine overheated. Stop carefully
- 1D2404 - characteristic map thermostat, actuation: line disconnection
- 1D2402 - characteristic map thermostat, actuation: short circuit to ground

In severe cases there may be no communication with the DME (MASTER DME – control unit description file DME8FF_R)

CAUSE

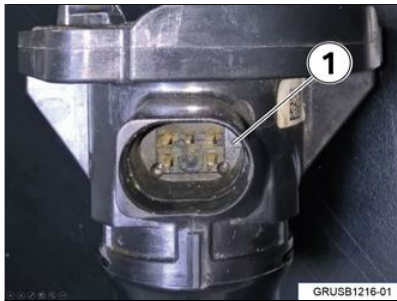
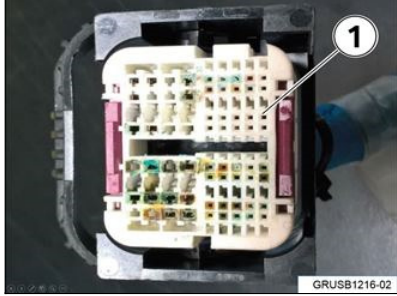
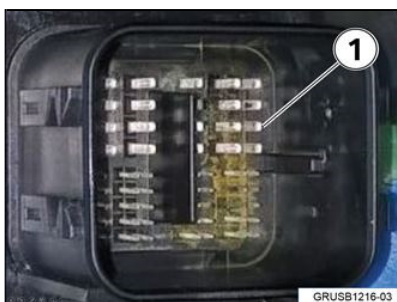
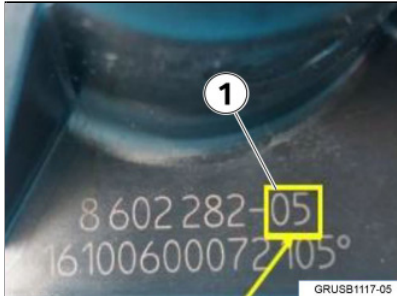
Coolant is leaking past the map thermostat electrical connector.

CORRECTION

Replace contaminated components.

PROCEDURE

	1. Remove the connector for the map thermostat (1) and check
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 GRUSB1216-01	for coolant. Is coolant present in the engine wiring sensor harness for cylinders 1-4? YES - replace the map sensor thermostat (PN 11 53 8 602 282) and the sensor harness (PN 12 51 8 654 414). Go to step 2. NO - continue diagnosis by performing the associated test plan in ISTA/D.
 GRUSB1216-02	2. Check the wiring harness connector at the DME for coolant (1). Is there any coolant at the DME harness connector? YES – Continue to step 3. NO – Repair is complete.
 GRUSB1216-03	3. Check the DME and PDM connector sockets for coolant contamination (1). Is there any contamination at the electrical connectors for the DME or PDM? YES- Submit a TC case to the TC DME group for DME and PDM parts replacement approval NO- Repair is complete.
 GRUSB1117-05	UPDATE! Check the index number (1) on the new thermostat (PN 11 53 8 602 282). Improved service parts have an index number UPDATE! “05” or later. Do not install a thermostat with an index lower than “05”.

PARTS INFORMATION

Part Number	Description	Quantity
11 53 8 602 282	Thermostat	1
12 51 8 654 414	Wiring harness, engine sensor module 1-4	1

Refer to ETK	DME	1 if needed
Refer to ETK	PDM	1 if needed

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.

Defect Code:	UPDATE! 1153129600	
Labor Operation:	Labor Allowance:	Description:
00 00 006	Refer to KSD2	UPDATE! Performing "vehicle test" (with vehicle diagnosis system – checking faults) (Main work)
Or:		
00 00 556	Refer to KSD2	UPDATE! Performing "vehicle test" (with vehicle diagnosis system – checking faults) (Plus work)
And:		
61 21 528	Refer to KSD2	Connect an approved battery charger/power supply(indicated in KSD2 as "Charging battery")
And:		
11 53 500	Refer to KSD2	Removing and installing/replacing coolant thermostat

If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead.

If the front underguard is already removed, then use labor operation 11 53 502, or if the engine coolant is already drained, then use 11 53 700.

And, as necessary:

UPDATE! Labor Operation:	Labor Allowance:	Description:
12 51 802	Refer to KSD2	Remove and install / replace wiring harness section, sensor system module cylinder 1-4 (Plus work)

And, as necessary:

Labor Operation:	Labor Allowance:	Description:
12 14 555	Refer to KSD2	Replace the DME 1-4
And:		
61 00 730	Refer to KSD2	Programming/encoding control units

And, as necessary:

Labor Operation:	Labor Allowance:	Description:
12 63 586	Refer to KSD2	Replace the PDM

Refer to KSD2 for the corresponding flat rate unit (FRU) allowances.

And, as necessary:

Sublet – Bulk Materials

Sublet Code 4	See sublet reimbursement calculation below	Reimbursement for the repair-related bulk materials (BMW part number, please do not use the part numbers for claim submission)
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Sublet reimbursement calculation (BMW part numbers):

UPDATE ! **BMW Antifreeze/Coolant for the amount needed to replace what was drained with a “50/50 coolant/water solution” at dealer net plus your center’s handling.**

For claiming the “used quantities” of other repair-related bulk materials is at dealer net plus your center’s handling.

Enter this material cost in sublet and itemize the amount on the repair order and in claim comment section.

UPDATE ! **Vehicle Programming and Coding**

When ISTA/P automatically reprograms and codes all the vehicle’s control modules that “currently do not have” the latest software and if one or more control module failures occur “during” this programming procedure:

- Please claim this “consequential” control module-related repair work under the defect code listed in this bulletin with the applicable KSD2/AIR labor operations.

UPDATE ! **Other Repairs**

Control module failures that occurred “prior” to performing this programming procedure:

- When “covered” under an applicable limited warranty, claim this control module-related repair work using the applicable defect code and labor operations in KSD2/AIR.

UPDATE ! **Overlapping Labor – Associated and/or Other Repairs**

If invoicing the KSD2 flat rate labor operation codes for other repair work results in overlapping labor, for those flat rate labor operations that are affected, you can now:

- Replace the stated KSD2 “FRU allowance” with a “reduced FRU value” to eliminate the overlapping labor.

For help in identifying the overlapping labor, please refer to the AIR FRU Plausibility Check (Overlapping Labor Tool) that is located in the AIR Client.

Eligible other repair work being claimed under a different defect code will require separate punch times.

On the repair order and in the claim comment section, please identify and itemize those labor operations being claimed with a “reduced FRU value.”

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