



This Service Information bulletin supersedes SI B12 07 06 dated **June 2009**.

Changes to this revision are identified by a black bar

MODEL

E90, E91 (3 Series) all models equipped with N52 engine	E60, E61 (5 Series) all models equipped with N52 engine	Vehicles produced up to March 2006	E83 equipped with N52K produced up to September 2008
---	---	------------------------------------	--

SITUATION

The customer complains that the "Service Engine Soon" lamp is illuminated while driving. DME fault code 2EF4 Thermostat Map Cooling is stored. In some instances, the customer also complains about insufficient vehicle heating.

CAUSE

E83 Vehicles

DME software calibration error

E60 Vehicles

1. DME software error
2. Internal leakage in the radiator causing an insufficient heating effect

E90 Vehicles

1. An unsatisfactory weld causes interference between the thermostat and the plastic housing. This condition applies only to BEHR Map Thermostats (black plastic housing). Thermostats manufactured by WAHLER (silver aluminum housing) are not affected.
2. Internal leakage in the radiator causing an insufficient heating effect

PROCEDURE

E83 Vehicles

1. Reprogram the DME with ISTA/P 2.31.1 or higher.

E60 Vehicles

1. Run the vehicle to operating temperature; a short ten-minute drive may be needed.
2. Connect the vehicle to DIS Plus or GT1 to monitor the Engine Coolant Temperature Sensor and Radiator Output Temperature Sensor.
3. Allow the vehicle to idle for approximately 5 minutes in the workshop; record the values of the two temperature sensors.
4. A difference of 20 Celsius should exist between the two temperatures. If the temperature difference is less than 20 Celsius, replace the radiator and reprogram the vehicle with Progman 23.0 or higher. If the temperature difference is greater than 20 Celsius, only reprogram the vehicle with Progman V23.0 or higher.

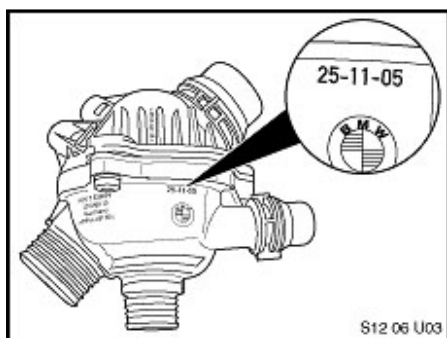
Example: The engine temperature = 95 Celsius and the radiator outlet temperature = 67 Celsius.

E90 Vehicles

1. Run the vehicle to operating temperature; a short ten-minute drive may be needed.
2. Connect the vehicle to DIS Plus or GT1 to monitor the Engine Coolant Temperature Sensor and Radiator Output Temperature Sensor.
3. Allow the vehicle to idle for approximately 5 minutes in the workshop; record the values of the two temperature sensors.
4. A difference of 20 Celsius should exist between the two temperatures. If the temperature difference is less than 20 Celsius, replace the radiator. If the temperature difference is greater than 20 Celsius, proceed to step 5.

Example: The engine temperature = 95 Celsius and the radiator outlet temperature = 67 Celsius.

5. Verify the production date of the thermostat. Thermostats produced prior to November 25th, 2005, are affected. The production date of the part can be found above the BMW Roundel on the plastic housing.



Example: 25-11-2005 = 25th day of November 2005

NOTE: Removing the thermostat from the vehicle is not necessary to view the production date. The production date can be seen from the top of the engine bay, looking downward, using a droplight or flashlight.

6. If affected, replace the thermostat in accordance with Repair Instruction RA 11 53 000, Removing and installing/replacing coolant thermostat (N52).

Note: BMW recommends filling the cooling system for protection against freezing down to -4F (-37C). This means an antifreeze ratio of 50% antifreeze and 50% water. In severely cold areas, the antifreeze can be increased to 60%, which provides freezing protection down to -62F

(-52C). Do not exceed a 60% ratio of antifreeze.

The specified antifreeze ratio is important, since an insufficient amount would impair antifreezing and corrosion-inhibiting protection. An excessive amount would not improve freezing protection, but would instead reduce freezing protection. At all times, the antifreeze and water should be premixed before pouring into the engine. If premixing is not performed, damage will occur to the water pump assembly.

PARTS INFORMATION

Part Number	Description	Quantity
17 11 7 534 914	E60, E61 Radiator with Automatic Transmission	1
17 11 7 534 915	E60, E61 Radiator with Manual Transmission	1
17 11 7 562 079	E90, E91 Radiator with Automatic Transmission	1
17 11 7 559 273	E90, E91 Radiator with Manual Transmission	1
11 53 7 536 655	E90, E91 Coolant Thermostat	1


WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle Limited Warranty, or the Certified Pre-Owned program.



Defect Code:

11 53 12 96 00



E83 Vehicles

Labor Operation:	Labor Allowance:	Description:
 12 14 715	Refer to KSD	Reprogram and recode control unit(s)

E60 and E61 Vehicles

61 00 811	Refer to KSD	Reprogram and recode control unit(s)
17 11 001*	Refer to KSD	Replacing radiator
 Sublet Allowance	Up to 1 liter of antifreeze	\$4.25
 Sublet Code	4	

E90 and E91 Vehicles

Labor Operation:	Labor Allowance:	Description:
11 53 500	Refer to KSD	Replacing thermostat
or		
17 11 001*	Refer to KSD	Replacing radiator
 Sublet Allowance	Up to 1 liter of antifreeze	\$4.25
 Sublet Code	4	

*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.