



This Service Information bulletin supersedes SI M17 10 12 **dated October 2012.**

NEW designates changes to this revision

SUBJECT

Engine Cranks, No Start and/or Engine Coolant Temperature Faults

MODEL

All with the N18 engine

Produced from 3/2012 to 8/2012

SITUATION 1

The engine either exhibits a crank, no start or a hard start (long crank), usually on a cold engine. No faults may be stored in the DME.

SITUATION 2

The Service Engine Soon lamp is illuminated, with one or more of the following fault codes stored:

- 0x2943 coolant temperature sensor, signal change too fast
- 0x2937 coolant temperature sensor, electrical: short circuit to positive
- 0x2936 coolant temperature sensor, electrical: short circuit to earth
- 0x293A coolant temperature sensor, plausibility, cold start: temperature too high
- 0x2947 coolant temperature sensor, signal: fixed on low

CAUSE

Poor solder contacts in the engine coolant temperature sensor integrated into the engine thermostat housing

PROCEDURE 1

Fault codes are stored:

- Retrofit a remote engine temperature sensor.

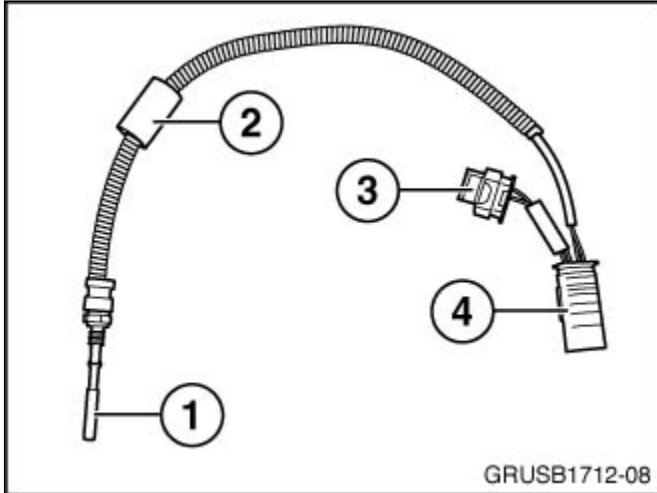
PROCEDURE 2

If no fault codes are stored:

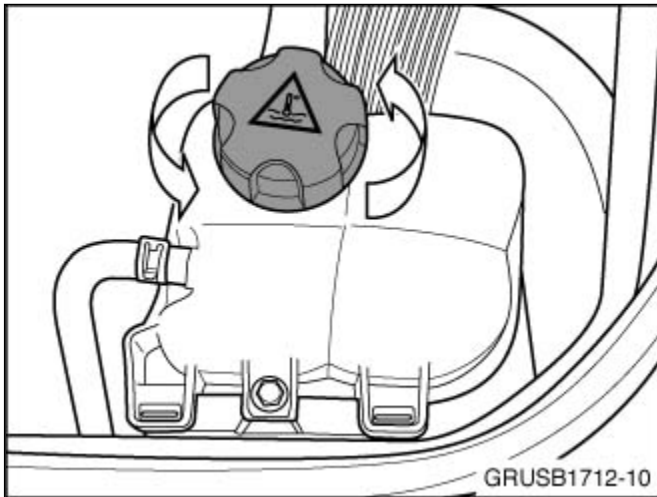
- Read out the ambient air temperature and engine coolant temperature in the DME through Diagnostic Query.
- If the vehicle has been sitting overnight, these two temperatures should be within $\pm 2^{\circ}$ C.
- If the engine coolant temperature is still showing an engine at operating temperature, the engine coolant temperature sensor has failed, retrofit a remote engine temperature sensor.

NEW This procedure requires the installation of a new engine temperature sensor, with integrated wire harness, installed in place of the thermostat bleeder screw.

NEW Remove the fresh air intake tube and the charge air intake tube from the air box to the turbo to gain access to the engine harness at the thermostat.

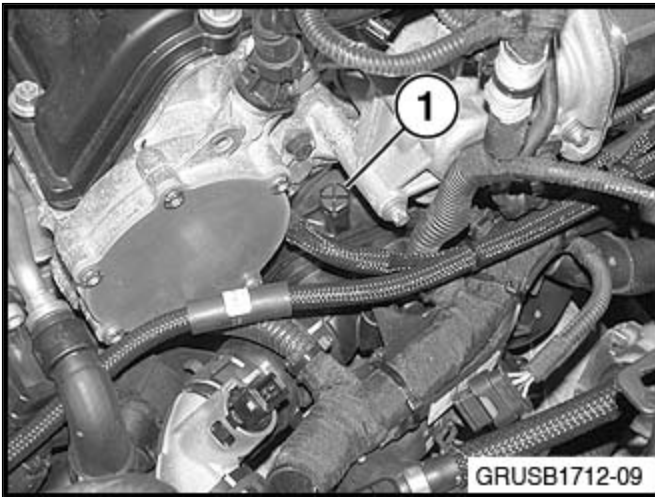
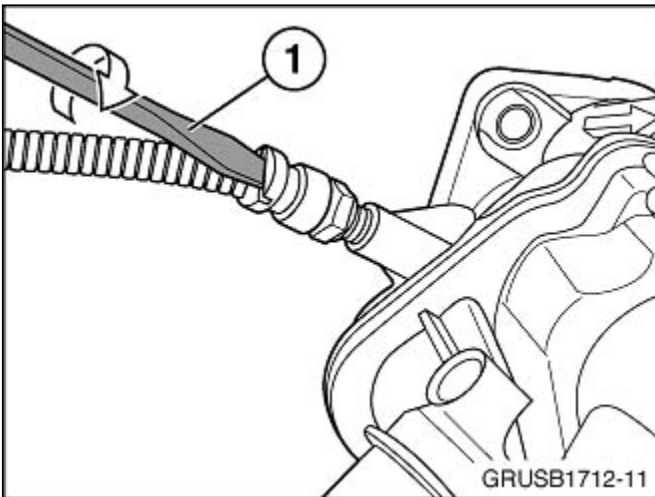


The improved sensor (P/N 13 62 8 603 908) includes the temperature probe (1) and insulating sleeve (2), a two-pin female connector (3) for the map thermostat, and a four-pin connector (4) for the engine harness.

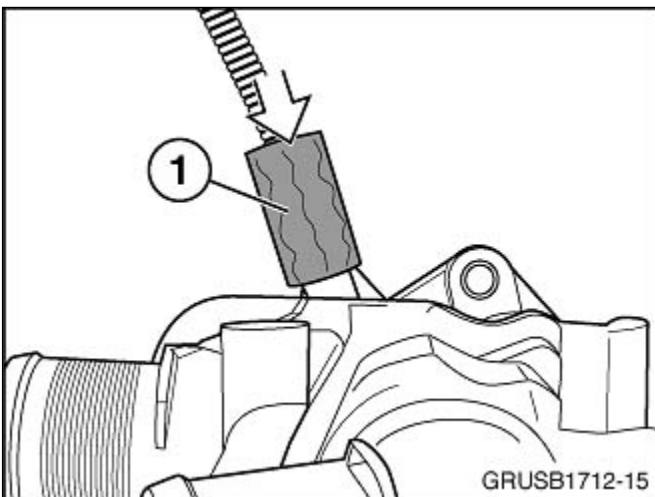


Relieve the coolant pressure by removing the reservoir cap, and then re-tighten.

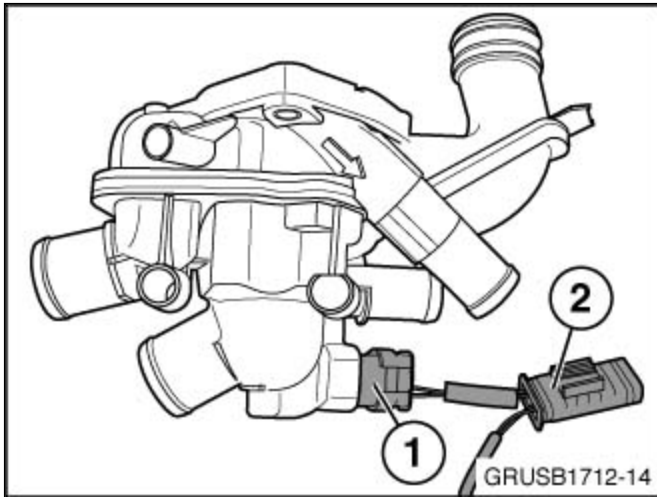
Remove the bleeder screw (1) from the thermostat. This screw will not be reused.



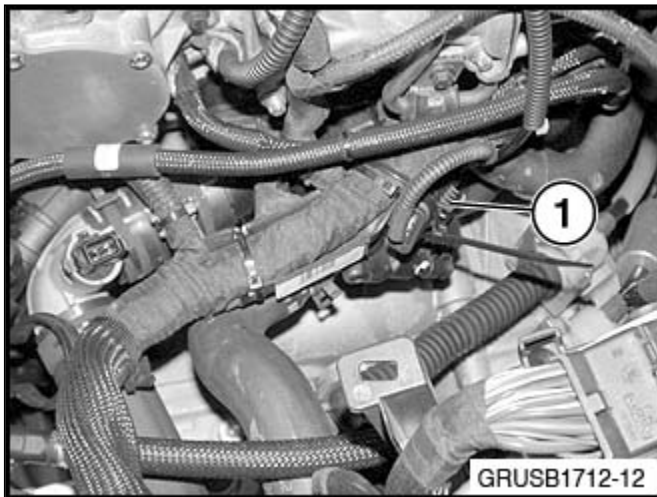
The back of the temperature sensor is slotted to accept a bladed screwdriver (1). Install the sensor into the bleeder screw hole, and torque to 2Nm.



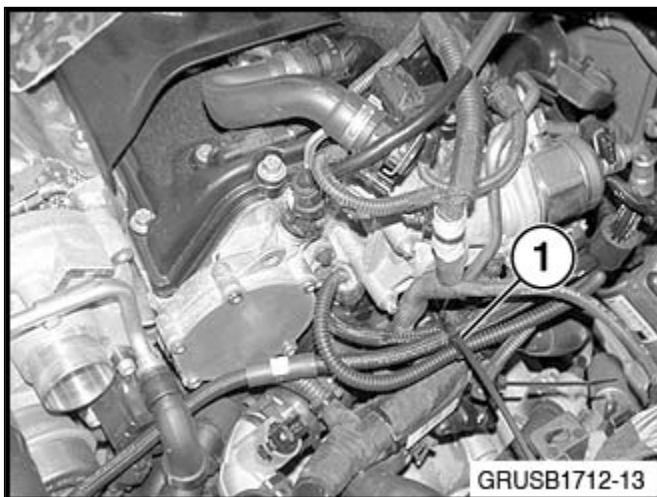
Slide insulating sleeve (1) onto the temperature sensor. The sleeve must completely cover the sensor.



Install the two-pin female connector (1) into the thermostat and the four-pin male connector (2) into the engine wiring harness.



Secure the connector (1) with a cable tie to the engine wiring harness.



Secure the wiring from the temperature sensor (1) with a cable tie.

Reinstall the intake components and vent/refill the cooling system (Repair Instruction 17 00 039).

Note: This repair procedure involves draining a small quantity of coolant; refill the drained quantity with new MINI Long-term Antifreeze/Coolant (50/50 mixture). Do not reuse the drained coolant.

PARTS INFORMATION

Part Number	Description	Quantity
13 62 8 603 908	Temperature sensor	1
61 13 8 383 722	Cable tie	2

NEW WARRANTY INFORMATION

Covered under the terms of the MINI New Passenger Car Limited Warranty or the MINI NEXT Certified Pre-Owned Limited Warranty.

Defect Code: 13 62 02 11 00

Labor Operation:	Labor Allowance:	Description:
00 00 006	Refer to KSD2	Performing “vehicle test” (with vehicle diagnosis system – checking faults)
and if necessary, also		
61 21 528	Refer to KSD2	Charging battery
and		
11 99 000	4 FRU	Install temperature sensor
and		
Sublet Code 4	See sublet reimbursement calculation below	Reimbursement for replacing the drained quantity of antifreeze/coolant (bulk container reference P/N 82 14 0 031 133, one gallon container. Do not use this part number for claim submission)

Labor operation code 00 00 006 is a Main labor operation. If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead.

Refer to KSD2 for the corresponding flat rate unit (FRU) allowance. Enter the Chassis Number, which consists of the last 7 digits of the Vehicle Identification Number (VIN). Click on the “Search” button, and then enter the applicable flat rate labor operation in the FR code field

Sublet calculation: MINI antifreeze/coolant (bulk container reference P/N 82 14 0 031 133 only) -- partial refill/used quantity (50/50 mixture) at dealer net plus handling. Enter this material cost in sublet and itemize the amount in the claim comment section.