

**SUBJECT****FC 20A503: Turbocharger Coolant Pump, Self-diagnosis****MODEL**

I12 (i8)

**SITUATION**

The customer complains that the Check Control Message “Drive Check” (ID49) is displayed in the CC. The corresponding fault code 20A503 (Turbocharger coolant pump: signal implausible) is stored in the DME. The vehicle does not exhibit any drivability issues.

**CAUSE**

DME diagnostic software

**CORRECTION**

The improved DME software will be available with integration level I001-15-11-500 (planned for November 2015).

Until then, proceed as follows:

1. Clear the fault memory.
2. Activate the turbocharger coolant pump using the appropriate ISTA/D test plan, following the path:  
  
Function Structure / Drive / Engine Electronics / Engine cooling / Auxiliary coolant pump / Thrust bearing cooling / Turbocharger coolant pump
3. If the activation is successful and the fault 20A503 is NOT stored again in the DME memory, the vehicle can be released. No further repairs are needed at this time.
4. If fault code 20A503 returns during test plan activation, continue ISTA/D diagnosis. Most likely, the auxiliary coolant pump will need to be replaced.

**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.

<b>Defect Code:</b>	<b>10 42 31 59 00</b>	<b>(Without auxiliary coolant pump replacement)</b>
<b>Labor Operation:</b>	<b>Labor Allowance:</b>	<b>Description:</b>
00 00 006	Refer to KSD2	Performing “vehicle test” (with vehicle diagnosis system – checking faults)
<b>And:</b>		
61 21 528	Refer to KSD2	Connect an approved battery charger/power

		supply (indicated in KSD2 as “Charging battery”)
And, as necessary:		
61 00 006	2 FRU	Performing vehicle diagnosis – test module (Work time - WT)

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) allowances.

Work time labor operation code 61 00 006 is not considered a Main labor operation. Also, since the “work time” FRU allowance to be claimed is specified, a separate punch time is not required.

### **Vehicle Programming and Encoding**

If a vehicle control module or component was working properly and/or had no related faults stored prior to vehicle programming and it fails to program correctly and/or requires initialization, this additional work must be claimed with separate labor operations under the defect code listed above; refer to KSD2.

Repairs to address control modules and/or components with pre-existing conditions are not eligible to be claimed under the defect code listed in this bulletin.

### **Additional or Other Repairs**

If performing ISTA diagnostics and related test plans results in other eligible and covered work, claim this work with the applicable defect code and labor operations listed in KSD2.

If the auxiliary coolant pump requires replacement, please submit for this repair under the corresponding defect code for that component.

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