

SI B61 03 14 General Electrical Systems February 2016 Technical Service

This Service Information bulletin supersedes SI B61 03 14 dated May 2015.

SUBJECT Check Control Messages Related to Battery Charge during Cold Ambient Temperatures

MODEL F01 (7 Series)

F02 (7 Series LWB)

F04 (ActiveHybrid 7)

F06 (6 Series Gran Coupe)

F07 (Gran Turismo)

F10 (5 Series Sedan)

F10H (ActiveHybrid 5)

F12 (6 Series Convertible)

F13 (6 Series Coupe)

F15 (X5)

NEW F15 (PHEV)

NEW F25 (X3)

NEW F26 (X4)

NEW F22 (2 Series Coupe)

NEW F23 (2 Series Convertible)

F30 (3 Series Sedan)

F30H (ActiveHybrid 3)

F31 (3 Series Sports Wagon)

F32 (4 Series Coupe)

F33 (4 Series Convertible)

F34 (3 Series Gran Turismo)

F36 (4 Series Gran Coupe)

NEW SITUATION

On cold days (an outside ambient temperature below 15°F), customers may notice a check control message related to the battery displayed on the instrument cluster and the control information display.

NEW CAUSE

The check control message (ID 229) is caused by a heavily discharged battery.

The check control message is triggered when the current state of charge (SoC) of the battery approaches the minimum SoC that is required to start the vehicle (start capability limit).

NEW CORRECTION

Reprogram the vehicle using ISTA/P 3.57 (15-11-501) or higher (decreases the sensitivity of the CC messages by 10% at less than 15 F).

NEW INFORMATION

Under these conditions, the vehicle starts. Various power management faults can be stored:

- 213901 Power management: Reduction or shutdown of individual electrical consumer
- 8040BD Reset or deactivation of Terminal 30F
- 8040B9 De-activation of terminal 30B: Top start capability limit reached
- 8020E8 Reset or deactivation of terminal 30F
- 800E89 FRM: start capability limit reached with lights active during stationary mode
- 93076B Deactivation of terminal 30B: upper start capability limit reached
- 93076A Deactivation of terminal 15: upper start capability limit reached, but deactivation preventer active
- 93076C Deactivation of terminal 30B: upper start capability limit reached, but deactivation preventer or legal loads active
- 930769 Deactivation of terminal 15: upper start capability limit reached

In low outside ambient temperatures, the start capability limit of the vehicle is higher. Therefore it takes more energy from the battery to start a cold engine. Without the early warning of the check control message, the current state of charge would drop below the start capability limit and the vehicle would not start.

The vehicle's intelligent power management system actively takes measures to increase the charge of the battery, such as increasing idle speed and reducing or shutting down certain electrical consumers.

NOTE: When the outside temperatures drop below 46°F, the charging system is switched to full charge.

NEW PROCEDURE

- 1. Consult with the customer to find out which conditions the vehicle was in when the check control message was displayed (ambient temperature, parked outside or in a garage, etc.)
- 2. Perform energy diagnosis to identify why the battery is discharged. Troubleshoot according to the results of the test plan using the latest version of ISTA. ISTA contains an improved energy diagnosis test plan that is constantly being updated.
- 3. Troubleshoot all power management faults that are stored in the vehicle.
- 4. Check the condition of the battery (E Series vehicles: use the external battery tester; F Series vehicles: use the Energy Diagnosis test plan). Charge or replace the battery as needed.

NOTE: "Unfavorable Driving Profile" occurs when the vehicle is driven mostly on short trips (less than three miles), and the charging system cannot keep up with the discharging of the battery because of low ambient temperatures. For vehicles that are identified as having an "Unfavorable Driving Profile," it is recommended that the customer use a suitable battery trickle charger (a newly released 4.3-amp battery charger would be recommended in cold climate conditions in order to maintain optimum battery performance. See the attached Aftersales bulletin for more information). All vehicles that are identified with an "Unfavorable Driving Profile" are covered under warranty, per SI B61 13 05, if the battery needs to be tested, recharged or replaced and the vehicle is still covered under the warranty period.

5. Program the vehicle using ISTA/P 3.57 (15-11-501) or higher.

The following changes in the power management software will occur after the vehicle software is updated. This should reduce the number of erroneous CC messages that occur during cold winter months.

Vehicles with sensitivity of CCM decreased	Engines Affected	Production date when changes were made
F15 (X5)	N57	Jul-15
F15 PHEV	N20+E-machine	Nov-15
F01x, F1x	N63T	Jul-15
F2x, F3x, F25	N20	Jul-15
All other Fxx vehicles	All	Nov-14

Note that ISTA/P will automatically reprogram and code all programmable control modules that do not have the latest software. For information on programming and coding with ISTA/P, refer to CenterNet / Aftersales Portal / Service / Workshop Technology / Vehicle Programming.

Always connect a BMW approved battery charger/power supply(SI B04 23 10).

6. 6. Provide the information in the attached flyer to the customer.

WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks.

Covered under the terms of the BMW Certified Pre-Owned Program when the issue is caused by a covered item, and it is not caused by a battery that requires replacement.

Defect Code:	10 42 31 59 00		
Labor Operation:	Labor Allowance:	Description:	
00 00 006	Refer to KSD2	Performing "vehicle test" (with vehicle diagnosis system – checking faults)	
And:			
61 21 528	Refer to KSD2	Charging battery	
And:			
61 20 502	Refer to KSD2	Perform battery energy diagnosis	
And, as necessary:			
61 00 006	Work time (WT)	Performing vehicle diagnosis – test module	
And:			
61 00 730	Refer to KSD2	Programming/encoding control unit(s) (F models only)	

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.

Work time labor operation code 61 00 006 is not considered a Main labor operation. However, it does require an individual punch time and an explanation in the claim comments section.

Vehicle Programming and Encoding

If a control module was working properly and it fails to program correctly or requires initialization, please claim this additional work with the applicable KSD2 labor operations under the defect code listed above.

The diagnosis and repair of vehicles "arriving" with failed control modules or stored faults which will cause them to fail during programming cannot be claimed under the defect code listed in this bulletin.

Other Repairs

If other eligible and covered work is performed "prior" to programming and coding the vehicle, claim this work with the applicable defect code and labor operations listed in KSD2.

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