



SUBJECT

High Battery Discharge Warning: Battery Needs Replacement

MODEL

F01

F02

Produced from 9/2009 to 7/2012 with N63 engine

SITUATION

After the vehicle is started, a Check Control message “High Battery Discharge Warning” is displayed in the Central Information Display (CID).

Various power supply and power management faults are stored, including the following:

CAS – “930769 Deactivation of terminal 15: upper startability limit reached”

CAS – “93076A Deactivation of terminal 15: upper startability limit reached, but deactivation preventer or legal load/consumer active”

CAS – “93076B Deactivation of terminal 30B: upper startability limit reached”

CAS – “93076C Deactivation of terminal 30B: upper startability limit reached, but deactivation preventer or legal load/consumer active”

JBE – “8020E8 Reset or deactivation of terminal 30F”

DME – “213901 Power management: reduction or deactivation of individual electrical loads/consumers”

CAUSE

The battery has become heavily discharged or is faulty. The following reasons can contribute to a prematurely failing battery:



- Unfavorable driving profile – excessive short trips
- Excessive terminal 30B after run – normal coolant pump or electric fan operation
- Extremely cold temperatures
- Vehicle faults – closed circuit draw, sleep mode preventer or frequent wakeups

PROCEDURE

1. Perform energy diagnosis and follow the recommendations of the test plan as per [SI B61 13 05](#).

2. Test the battery:

- a. For vehicles up to September 2010, use the BMW battery tester. Refer to [SI B61 11 09](#).
 - b. For vehicles after September 2010, use the advance onboard diagnostics with ISTA. Refer to [SI B61 02 11](#).
3. If the results of the battery tests indicate that the battery needs replacement, continue to the next step. If the results of the battery test state to recharge the battery, ensure that you are charging the battery sufficiently before testing. This can take from 1 to 6 hours, depending on the size and discharge state of the battery. As a rule of thumb, if the battery was heavily discharged quickly, it should be charged quickly. If the battery was discharged over a long period, it should be recharged slowly. Refer to the operating manual that came with your battery charger on proper settings. These manuals can be found in [SI B04 23 10](#).
 4. Replace the originally equipped 90 AH AGM battery with a 105 AH AGM battery. Refer to ISTA Repair Manual “61 00 ... Notes for disconnecting and connecting battery.”

<p>NEW</p>  <p>GRUSB6113-07</p>	<p>Important Note: Before mounting the battery in place, bend the metal tab down flush with the battery tray. In some cases, a longer battery vent tube must also be installed in order to facilitate the larger battery.</p>
<p>NEW</p>  <p>GRUSB6113-01</p>	<p>Before mounting the battery in place, make sure the battery vent hose is connected as indicated by the arrow. The short end of the elbow should be connected to the battery to gain some extra clearance. Record the matrix and supplier code from the label of the battery for entry in the next step. The original battery hold-down clamp can be used with the new battery.</p>

5. Register the new battery using ISTA. Refer to [SI B61 15 12](#). Select “Enter battery replacement: higher/lower capacity.”
6. Submit a PuMA case with the subject “B61 03 13 105 AH battery” to get a modified Vehicle Order (VO). The modified VO will have A090 removed and A105 added.
7. Once the VO is downloaded from PuMA, start an ISTA/P programming session and import the new VO into the vehicle.
8. Select “Complete Coding” and program the entire vehicle with the current version of ISTA/P.
9. 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.

10. Check the functionality of the vehicle and make sure the “Battery Discharge” CC message is not displayed.

Important note: All subsequent battery replacements on these vehicles will require installation of the 105 AH AGM Battery.

PARTS INFORMATION

Part Number	Description	Quantity
61 21 7 648 317	105 AH AGM Battery	1
NEW 61 21 1 377 745	Hose	1 if needed

WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle/SAV Limited Warranty.

Defect Code:	61 21 00 12 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		
61 20 502	Refer to KSD2	Performing battery energy diagnosis
and		
61 00 006	Work time (WT)	Performing vehicle diagnosis – test module (this includes the battery test procedure for vehicles produced 9/2010 and later per SI B61 02 11)

or		
61 99 000	2 FRUs	Work time to use the BMW battery tester on vehicles produced prior to 9/2010.
and		
61 21 518	Refer to KSD2	Replacing the 90 AH AGM battery with the 105 AH AGM battery (Procedure Step #3 and #4)
and		
61 00 730	Refer to KSD2	Programming / encoding control unit(s)

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.

If a control module fails to program correctly or initializations are required, the additional work must be claimed with separate labor operations under the applicable defect code listed above; refer to KSD2.

Even though work time labor operation code 61 00 006 ends in “000,” it is not considered a Main labor operation.

Work time (WT) labor operation 61 00 006 requires an individual punch time.

Even though work time labor operation code 61 99 000 ends in “000,” it is not considered a Main labor operation.

NEW Other Repairs

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

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