SI B61 04 14
General Electrical Systems

March 2014
Technical Service

SUBJECT
Replacement Procedure for Body Domain Controller (BDC)

MODEL
F15 (X5)

SITUATION
When replacing a BDC control unit, terminal 15 is not recognized by ISTA and ISTA/P when the ignition is on.

CAUSE
Software in the BDC

PROCEDURE
When replacing a BDC, the following procedure must be performed to properly complete the BDC replacement.

1. Install the new BDC.

2. Turn the ignition on (only the instrument cluster telltale lights will be illuminated).

3. Start an ISTA/P session.

4. When the ISTA/P message "Unable to determine a valid value for the voltage at terminal 15" appears, select **"Ignition is switched on."**

5. In the next step, the vehicle order could not be read out from the vehicle and needs to be downloaded. Download the vehicle order by selecting "Online." If the online download feature is not working, request the VO via PuMA to be downloaded to a USB stick.

6. Once the vehicle order is loaded, ISTA/P will prompt for the factory (plant) I-Level. This can be obtained from the key read or via PuMA. **It is important that the correct I-Level be entered or further programming problems can occur.**

7. Once the factory I-Level is entered, ISTA/P states "A valid value could not be determined for terminal 15 voltage." Select **"Voltage (term. 15) correct"** in order to continue.

8. Accept the measures plan to program the BDC gateway.

9. After the BDC gateway is programmed, all functions inside the vehicle should be active.

10. Select "Continue session." When asked if control units have been replaced, mark the BDC as being replaced.

11. Perform a complete coding of the vehicle.

    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).

12. If the vehicle does not crank over after BDC replacement, the start lock is active and must be deactivated. Perform the ISTA test plan "Reset starter lock" which can be accessed via the following path: "Service

function / 01 Engine / Engine start / Reset starter interlock".

With the release of ISTA/P 2.53 (July 2014), this procedure will no longer be necessary.

Covered under the terms of the BMW New Vehicle/SAV Limited Warranty or the BMW Certified Pre-Owned Program.

Defect Code:	61 38 27 02 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	Connect an approved battery charger/power supply (indicated in KSD2 as "Charging battery")
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 control module(s) fail to reprogram or initializations are required, the additional work must be claimed using separate labor operations found in KSD2 under the defect code listed above.