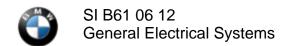
#### SB-10043714-5076



February 2012 **Technical Service** 

## **SUBJECT**

## The Airbag Warning Lamp Is Illuminated and SZL Fault Codes Are Stored

#### **MODEL**

E60, E61 (5 Series) vehicles produced from March 1, 2003 to August 31, 2005

E63, E64 (6 Series) vehicles produced from March 1, 2003 to August 31, 2005

E65, E66 (7 Series) vehicles produced from March 1, 2004 to August 31, 2008

### **SITUATION**

The airbag warning lamp is illuminated along with various check control messages. The SZL (Steering Column Switch Center) may contain one or more of the following faults stored:

- "94E7 Steering when angle sensor: Relative wiper angle defective"
- "5EF4 Steering angle sensor: Internal control unit"
- "94E6 Steering wheel angle sensor: Wiper 2 outside range"
- "94E4 Steering wheel angle sensor: maximum steering wheel lock range exceeded"

#### **CAUSE**

SZL hardware error

#### **PROCEDURE**

1. Perform a vehicle test using ISTA (Integrated Service Technical Application) and note the fault codes stored in the SZL.

**Note:** When the ISTA system message displays:

Battery voltage only "XX.XX" V. Please connect charger.

Please note the displayed battery voltage reading in the repair order comments section.

2. If one or more of the fault codes listed above is stored, delete the fault memory.

Note: only delete the fault memory after all other faults in the vehicle have been diagnosed.

3. With the engine running and the steering wheel in the center position, turn the wheel left to full lock; then back right to full lock; and then back to the center position.

Repeat this step "two times".

- 4. Carry out a road test for approximately 3 miles at a speed above 10 mph (try to select a course where the steering wheel is turned often).
- 5. Read the fault memory from the vehicle again. If the faults listed above return, replace the SZL as per ISTA Repair Instructions: "61 31 006 Removing and installing/replacing fixture for steering column stalk".
- 6. Program the vehicle using the latest version of ISTA/P.

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 / Workshop Technology / Vehicle Programming.

## **PARTS INFORMATION**

Part Number	Description	Quantity
Refer to ETK	Switch unit steering column	1

### WARRANTY INFORMATION

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

<b>Defect Code</b>	61 12 55 02 00	
<b>Labor Operation:</b>	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 if necessary, also		
61 00 006	Work Time (WT)	Step 2: Performing vehicle diagnosis – test module
and		
61 00 009	Work Time (WT)	Steps 4 and 5: Road test as outlined and re-read fault memory – Troubleshooting Electrical/Electronic system
and if necessary also		
61 31 528	Refer to KSD2	Replacing support for switch on steering column
and		
61 00 710	Refer to KSD2	Programming/encoding control unit(s)

(not including CAS)

or

61 00 720 Refer to KSD2 Programming/encoding control unit(s) (including CAS)

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.

Even though work time labor operation code 61 00 006 ends in "006," 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 00 009 ends in "009," it is not considered a Main labor operation.

Work time (WT) labor operation 61 00 009 – requires an individual punch time.

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

# **Other Repairs**

As outlined in the Procedure section "Step 2", if performing the ISTA diagnostics and related test plans results with other eligible and covered work, claim this work with the applicable defect code and labor operations listed in KSD2.

[ Copyright © 2012 BMW of North America, LLC ]