

**SUBJECT****Sunroof Gets Stuck or Moves in Small Steps****MODEL**

F30

F31

F34

Produced to November 1, 2013

**SITUATION**

During opening or closing the sunroof, one or more of the following situations may occur:

1. The sunroof becomes stuck
2. One-touch open and close no longer works
3. The sunroof moves in small steps.

**CAUSE**

Software error in the sunroof control module (FZD)

Some or all of the following fault codes may be stored:

0x030212 - SHD: Activation timeout, no block recognition

0x030214 - SHD: Zero position passed, loss of calibration

0x030215 - SHD: Invalid characteristic curve, not normalized

0x030216 - SHD: 90% motor temperature threshold exceeded

0x030217 - SHD: Motor operation interrupted by overheating

0x030218 - SHD: Motor does not start due to overvoltage or undervoltage

0x030219 - SHD: Errors in the checksum coding

0x03021C - SHD: Not initialized due to invalid marginal conditions (motor driver)

0x030220 - SHD: System not normalized

0x801A02 - Coding: Control unit is not coded

**PROCEDURE**

Do not replace any parts!

1. Perform a vehicle test using diagnostic tools and check for fault codes

**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. Complete all related test plans.
3. If the issue is not corrected after completing related test plans, initialize the sunroof as outlined in step 4.
4. The sunroof can be initialized using one of the methods listed below:
  - a. Perform the initialization test plan using ISTA diagnostic tools: Service function / 03 Body / Locking and security function / Slide/tilt sunroof / Initialize slide/tilt sunroof / Start search

OR

- b. Press and hold the sunroof switch in the vent position until the sunroof stops moving
5. If the sunroof fails to initialize, a reset of the FZD module for 2 minutes must be done. Perform the reset using one of the methods listed below:
    - a. Remove fuses 20, 28 and 62 in the front power distribution box and then reinstall them.

OR

- b. Disconnect the FZD. Follow Repair Instruction REP 61 31 043, “Removing and installing roof switch cluster front.”

OR

- c. Disconnect the negative cable from the battery.
6. Initialize the sunroof again as outlined in step 4; then retest the sunroof functionality.

**WARRANTY INFORMATION**

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

<b>Defect Code:</b>	<b>61 31 74 02 00</b>	
<b>Labor Operation:</b>	<b>Labor Allowance:</b>	<b>Description:</b>
00 00 006	Refer to KSD2	Performing vehicle test
and if necessary, also		
61 21 528	Refer to KSD2	Charging battery
and, as necessary		

61 00 006	Work time (WT)	Performing vehicle diagnosis – test module.
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Labor operation code 00 00 006 is a Main labor operation. If you are already using a Main labor code for another repair; use the Plus code labor operation 00 00 556 instead.

and

#### Procedure Step 4

Labor Operation:	Labor Allowance:	Description:
61 00 006	Work time (WT)	Performing vehicle diagnosis – test module
or		
61 00 830	Refer to KSD2	Initializing sunroof

and

#### Procedure Step 5 (if necessary)

Labor Operation:	Labor Allowance:	Description:
61 99 000	1 FRU	Work time for removing fuses 20, 28 and 62 and reinstalling them
or		
61 31 543	Refer to KSD2	Removing and installing roof switch cluster
or		
61 20 900	Refer to KSD2	Disconnecting and connecting negative battery cable

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 for each occurrence.

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

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.

A labor operation code can be claimed one time under the defect code listed above. If a repair procedure is repeated or has multiple steps, claim this labor time with the work time (WT) labor operation that applies. Itemize

and explain the FRU amounts in the claim comments.

### **Other Repairs**

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

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