



SUBJECT

Fault Code 21F046 Stored in SME

MODEL

I01 (i3 and i3 REx)

Produced to 6/30/14

SITUATION

The following fault is stored in the high-voltage battery management electronics (SME):

- 21F046 – HVS heating: Heating element short circuit

This fault is not typically present. When the fault is stored, no check control messages or functional problems are evident.

CAUSE

Software or hardware error in the SME

PROCEDURE

Only properly trained personnel, who have passed all applicable technical training courses, should perform any maintenance or repairs on any Hybrid or Electric Vehicle. Work performed by unqualified persons may result in severe injury or damage to the vehicle. Additional information may be found in REP 61 00... Observe safety instructions when handling electric vehicles.

- If FC **21F046** is **not** currently present and is stored 5 times or less, it can be ignored and the fault cleared.
- If FC **21F046** is currently present or is stored more than 5 times, replace the safety box located in the high-voltage battery.

NOTE: If the safety box must be replaced, refer to [SI B00 03 06](#) to determine if a TC PuMA case is required prior to replacement.

PARTS INFORMATION

Part Number	Description	Quantity
61 27 8 635 848	Safety Box (without SA 4T9)	1 (if necessary)
61 27 8 635 849	Safety Box (with SA 4T9)	1 (if necessary)

WARRANTY INFORMATION

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

Defect Code:	61 27 04 02 00	
Labor Operation:	Labor Allowance:	Description:
00 00 006	Refer to KSD2	Performing "vehicle test" (with vehicle diagnosis system – checking faults)

and		
61 25 910	Refer to KSD2	Recharging high-voltage battery unit (to high voltage charging unit)

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.

When FC 21F046 is stored more than 5 times:

Covered under the terms of the BMW i Lithium-ion High-Voltage Battery Limited Warranty for a period of 8 years/100,000 miles, whichever occurs first.

Labor Operation:	Labor Allowance:	Description:
61 25 510	Refer to KSD2	Remove and Install high-voltage battery unit
and		
61 27 551	Refer to KSD2	Replace Safety Box (voltage battery unit remove and after diagnosis)

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.

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