



MODEL

I12 (i8)

SITUATION

- Red Check Control message (CCM) " Drive: Check as soon as possible"
- Fault Code 21F0E3 "High-voltage electrical system: Insulation resistance below threshold (fault)" stored in the battery management electronics (SME)

CAUSE

Extreme moisture in the high-voltage battery may lead to sporadic isolation faults.

CORRECTION

Verify location of source of fault using ISTA, repair as directed.

PROCEDURE

1. Identify the location of the fault using the associated test plan "ABL_DIT_AT6100_HVISO12".

Was the location of fault indicated as being in the high voltage battery?

YES- continue to next step.

NO- Go to step 3.

2. Check the current I-Level of the vehicle.

Is the I-Level 16-03-502 or less?

YES – program with ISTA/P version 3.59.2 (I-Level 16-07-503) or more recent.

NO- contact technical support via PuMA.

3. **Was the fault able to be isolated to a specific component other than the battery?**

YES- Replace faulty component as indicated by the test plan.

NO- contact technical support via PuMA.



Note: Prior to replacing any HV components, refer to [SI B00 03 06](#) to determine if a TC PuMA

case is required.

WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks.

Defect Code

64 11 23 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)
And:		
61 00 730	Refer to KSD2	Programming / encoding control unit(s)
And:		
61 21 528	Refer to KSD2	Connect an approved battery charger/power supply (indicated in KSD2 as "Charging battery to EME")

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.

Vehicle Programming and Encoding

If a control module was working properly and it fails to program correctly or requires initialization, please claim this additional work with the applicable KSD2 labor operations under the defect code listed above.

The diagnosis and repair of vehicles "arriving" with failed control modules or stored faults which will cause them to fail during programming cannot be claimed under the defect code listed in this bulletin.

Eligible and Covered Work/Repairs

To submit a claim for the repair of a verified defect in materials or workmanship, please following the established and applicable warranty policy and procedures together with the using corresponding defect code and labor operations provided in the KSD2.