



SME FC'S 21F156 & 21F1F7

MODEL

F15 PHEV (X5 xDrive40e)	F30 PHEV (330e iPerformance)
G12 PHEV (740e xDrive iPerformance)	G30 PHEV (530e iPerformance)

SITUATION

The following codes are saved in the battery management electronics (SME) fault memory:

- 21F156 - High-voltage battery, preloading: Safety box, precondition not fulfilled
- 21F1F7 - High-voltage battery, preloading: temporarily blocked due to overheating

No indications of a problem are detectable by the customer.

CAUSE

SME software error.

CORRECTION

Reprogram the vehicle.

PROCEDURE

For conditions that are similar to the situation described:

1. Check the fault codes stored in the SME fault memory.

In addition to the codes mentioned above, is "21F1F6 - High-voltage battery, switch contactors: Switch-off after a fault." saved in the fault memory?

YES- continue diagnosis with ISTA.

NO – go to next step.

2. Check the current integration level (I-Level) of the vehicle

Is the integration level at or below that listed in the following table?

Model	Target integration level
F15	17-03-5xx
F30, G12, G30	16-11-5xx

YES- go to next step.

NO – delete the SME fault memory. Repair is complete.



Note: Do not replace the SME.

3. Program the vehicle using the most current version of ISTA.

Note that ISTA will automatically reprogram and code all programmable control modules that do not have the latest software.

Always connect a BMW-approved battery charger/power supply (SI [B04 23 10](#)).

For information on programming and coding with ISTA, refer to CenterNet / TIS / Technical Documentation / Diagnostics and Programming / Programming Documentation.

WARRANTY INFORMATION

Covered under the terms of the BMW New Vehicle Limited Warranty for Passenger Cars and Light Trucks or the BMW Certified Pre-Owned Program.

Defect Code	6127050200	
Labor Operation:	Labor Allowance:	Description:
00 00 006	Refer to KSD2	Performing “vehicle test” (with vehicle diagnosis system – checking faults) (Main work)
Or:		
00 00 556	Refer to KSD2	Performing “vehicle test” (with vehicle diagnosis system – checking faults) (Plus work)
And:		
61 21 528	Refer to KSD2	Connect an approved battery charger/power supply (indicated in KSD2 as Charging battery)
And:		
61 25 910	Refer to KSD2	Recharging high-voltage battery unit (to high voltage charging socket)
And:		
61 00 730	Refer to KSD2	Programming/encoding control unit(s)

If you are using a Main labor code for another repair, use the Plus code labor operation 00 00 556 instead of 00 00 006.

Refer to KSD2/AIR for the corresponding flat rate unit (FRU) allowances.

During the same workshop visit, if a vehicle also requires another Technical Campaign or repair that also includes programming and encoding the control units, the programming procedure may only be invoiced one time.

Vehicle Programming and Encoding

A. The programming procedure automatically reprograms and encodes all vehicle control modules which do not have the latest software i-level. If one or more control module failures occur “during” this programming procedure:

- Please claim this “consequential” control module-related repair work under the defect code listed in this bulletin with the applicable KSD2/AIR labor operations.

Please explain this additional work (The why and what) on the repair order in the claim comments section.

B. For control module failures that occurred “prior” to performing this programming procedure:

- When “covered” under an applicable limited warranty, claim this control module-related repair work using the applicable defect code and labor operations (including diagnosis) in KSD2/AIR.

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