SIB 61 26 23   2023-10-26
SERVICE ACTION: COMBINED CHARGING UNIT

Please perform the procedure outlined in this Service Information on all affected vehicles before customer delivery. In the event the customer has already taken delivery of the vehicle, please perform the procedure the next time the vehicle is in the shop.

⊠	THIS REPAIR IS MOBILE FRIENDLY

MODEL

E-Series	Model Description	Production Date
i20	iX M60 Sports Activity Vehicle (SAV), Battery Electric Vehicle	February 18, 2022 – October 23, 2023

SITUATION

There may be erroneous fault entries for the electric fan (E-FAN) in the Combined Charging Unit (CCU) in iX M60 Sports Activity Vehicles built from February 18, 2022 – October 23, 2023.

CAUSE

Erroneous fault codes are stored in the CCU-

- BA0072 - electric fan, shutdown path test: failed
- 224F8F - Feature: Service requirements coming soon

Additionally, these may be accompanied by a yellow Check Control message (CCM) "Visit BMW workshop". This CCM may have disappeared the next time the vehicle was started.

These erroneous faults may be due to an error in the CCU software.

CORRECTION

Program the CCU.

Important Warning for Working on the High-Voltage (HV) systems on BMW Group vehicles:

Only properly trained personnel, who passed all applicable HV Technical Training Courses, should perform repairs which require disconnecting, or removal of High Voltage battery components on any Hybrid or Electric Vehicle. Work performed on High Voltage systems by unqualified persons may result in severe injury or damage to the vehicle. Additional safety information is found in Repair Instruction 61 00… "Observe safety instructions when handling electric vehicles".

Prior to disconnecting, or the removal of any HV component, the HV system needs to be disabled and secured (by means of the HV Service Disconnect Switch and lock out) by a properly trained HV technician, who has a minimum HV Qualification level after completing the Technical Training Course "ST2324 High Voltage Drivetrain Systems" which as of 1/2023* includes ST1824 Alternative Drive Part 1.

* Note: As of January 2023, the HV component portion of the "ST2205 Generation 5 High-voltage class" (except for the High Voltage Battery) has been merged into "ST2324 High Voltage Drivetrain Systems".

Up to Generation 4 Vehicles once vehicle's HV system is disabled (the "Blitz" - lightning bolt icon is displayed in instrument cluster, see below), a technician without HV Certification may remove a HV component (e.g., EH Heater, EKK Compressor, EME Control Unit, et.), except for the High Voltage Battery.

For Generation 5 Vehicles however, the specific vehicle training is required to diagnose, remove, and service any HV component, and it is NOT allowed for non HV certified technicians to work on the high voltage system.

High Voltage Battery removal and rework can <u>ONLY</u> be performed by a High-voltage Certified Technician with a HV Battery Certification level corresponding to a specific Electric or Hybrid vehicle, for example:

To repair GEN4 HV battery of G05 PHEV a certification from Technical Training Course "ST2006 – SP44 HV Battery" or equivalent ST1825 – Alternative Drive Part 2 is required (or as of 1/2023 the equivalent "ST 2325 for High Voltage Battery Systems").
And
To repair A GEN5 HV battery the Technical Training Course "ST2205 Generation 5 High-voltage class" is required or as of 1/2023* the equivalent "ST 2325 for High Voltage Battery Systems".

*Note: As of January 2023, the "ST2205 Generation 5 High-voltage stand-alone class" has been merged into "ST2324 for High Voltage Drivetrain Systems" and "ST2325 for High Voltage Battery Systems."

PROCEDURE

Program the complete vehicle using ISTA 4.43.4x (released October 12, 2023) to I-level **I020-23-11-520**, or higher.

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

- Do **NOT** plug in the high-voltage battery charger.

- **Always connect a BMW-approved 12 Volt battery charger/power supply (SI B04 23 10) when performing programming**

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

- Follow the Measures Plan and program the complete vehicle

- Depending on the rework list, carry out a vehicle test and delete the fault memory, if required

- Disconnect the 12 Volt battery charger/power supply

Note:
No further system change is required after the integration of the programming in ISTA 4. Please check the rework list accordingly!

ISTA 4.43.4x with installed service data package is required for the programming/encoding.
The fault elimination is included from I-level I020-23-11-520 or higher (available from ISTA 4.43.4x, released Oct. 12, 2023

PARTS INFORMATION
None required.

CLAIM INFORMATION
Vehicle Programming and Encoding

During this workshop visit, the affected vehicle may also show one or more programming and encoding Technical Campaign repairs open, the programming and encoding procedure may only be invoiced one time.

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Select one of these open Technical Campaigns to perform and submit for updating the vehicle to the required I-level or higher.

Please be sure to also perform any additional before and/or after work (including attaching labels) as required by the open campaigns on the vehicle. Close any other open programming and encoding Campaign repairs as outlined in the corresponding Service Information Bulletin.

As determined by the above, reimbursement for this Service Action will be via normal claim entry utilizing the work package information below that applies.

Repair Code:	0061140800	i20 Program Combined Charging Unit (CCU)

Completion before the first vehicle delivery to a customer or the vehicle is already in the workshop

Work Pkg	Labor Operation	Description (Plus work)	Labor Allowance
# 1	00 75 618	Programming and encoding the vehicle control units, includes Carrying out vehicle test	9 FRU
Or:			
# 2	00 75 619	Programming and encoding the vehicle control units was performed in conjunction with **another campaign/repair prior to or during this workshop visit** (vehicle is already at the specified Target integration level or higher, no repair is necessary)	1 FRU

Or:

The vehicle arrives at your center and this Service Action shows open (No other Main work will be performed or claimed during this workshop visit)

Work Pkg	Labor Operation	Description (Main work)	Labor Allowance
# 3	00 75 094	Programming and encoding the vehicle control units, includes Carrying out vehicle test	11 FRU
Or:			
# 4	00 75 095	Programming and encoding the vehicle control units was performed in conjunction with **another campaign/repair prior to this workshop visit** (vehicle is already at the specified Target integration level or higher, no repair is necessary)	1 FRU

Only one of the flat rate labor operation codes listed above can be used for claim submission/reimbursement purposes. Also, only one Main work flat rate labor operation code can be claimed per workshop visit.

Claim Repair Comments

Only reference the SIB number and the work package (Pkg) number performed in the RO technician notes and the claim comments (For example: B61 26 23 WP 1), unless otherwise required by State law.

Programming and Encoding – Additional Work (RO and Claim Comments Required)

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This procedure automatically reprograms and encodes any vehicle control modules that do not have the latest software I-level.

If one or more control modules fail during the reprogramming procedure, claim the required consequential repair work procedures to address this issue (including performing the IRAP Control Unit Recovery first as required, refer to the SIB in AIR) under the Repair Code in this bulletin with the labor operations that apply.

Please explain the additional work procedures that were performed (The why and the what) on the repair order and in the claim comments.

For covered repairs that address control module failures that occurred prior to performing this reprogramming procedure, claim this work with the Repair Code and labor operation codes (including the diagnosis*) that applies.

*Based on which one applies to your center, please refer to **SI B01 01 20 or B01 07 20** for the applicable procedure for documenting, claiming, and explaining, on the RO and in the claim comments, your diagnosis work time (WT), job/repair work time (WT), and the vehicle repairs your center performed, unless otherwise required by State law.

FEEDBACK REGARDING THIS BULLETIN

Technical Feedback	To submit feedback for the technical topic of this bulletin: Submit your feedback in the rating box at the top of this bulletin
Warranty Feedback	To submit feedback for the CLAIMS section of this bulletin: Submit an IDS ticket to the Warranty Department, or use the chat available in the Warranty Documentation Portal
Parts Feedback	To submit feedback for the PARTS section of this bulletin: Submit an IDS ticket to the Parts Department