



SIB 12 04 22

2023-03-08

DELIVERY STOP: REPLACING THE FRONT ELECTRIC DRIVE UNIT

This Service Information bulletin (Revision 4) supersedes SI B12 04 22 dated December 2022

What's New:

- Revised HV course requirements in Procedure
- Parts Information

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 Sports Activity Vehicle	October 5, 2022 – November 10, 2022

AFFECTED VEHICLES

Vehicles which require this Campaign to be completed will show it as “Open” when checked either in AIR, the "Service Menu" of DCSnet (Dealer Communication System), ISPA Next or Warranty Vehicle Inquiry.

Do not deliver to a customer, a New, Certified Pre-Owned or Used vehicle subject to a Delivery Stop, until the vehicle is repaired. Do not use or sell replacement equipment/parts subject to a Delivery Stop.

SITUATION

BMW AG has issued a Delivery Stop (effective December 1, 2022) on certain Model Year 2023 BMW iX SAV vehicles that were produced between October 5, 2022 and November 10, 2022.

A bearing in the front electric drive unit could fail due to a manufacturing defect, resulting in a noise while driving.

CORRECTION

Replace the front electric drive unit (aka “HEAT”, which stands for the German acronym for Highly integrated electric drivetrain topology- Hochintegrierte Elektrifizierte Antriebs-Topologie)

PROCEDURE**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”.

Additional Information:

Scheduled Maintenance, or Quality Certification 1 (Pre-Delivery Inspection) on Electric or Hybrid vehicles does not require HV technical training.

Prior to disconnecting, or the removal of any HV component, the HV system needs to be disabled and secured (by means of the HV Disconnect Switch) by a properly trained technician, who has a minimum HV Qualification level after completing the Technical Training Course ST1824 (Alternative Drive Part 1). Once the vehicle’s HV system is disabled (the “Blitz” - lightning bolt icon 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.



High Voltage Battery removal and rework can ONLY 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”).

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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”

The complete front electric drive unit is replaced; see repair instructions **12 35 521** “Replace front highly-integrated electric drive topology completely (after vehicle diagnosis)”.

Important Note:

The replacement front electric drive unit comes pre-filled with fluid, eFluid transmission oil PN 83 22 5A1D718.

Contrary to the repair instructions, there is no need for a wheel alignment and replacement of the radial shaft seals. The repair instructions will be updated accordingly with the next release.

PARTS INFORMATION

Important Note:

Only a very limited number of drive units are available at the start of this technical campaign, they are allocated by priority.

The removed drive unit must be returned as soon as possible as a special damaged component.

Parts list for replacing the complete drive unit.

Part Number	Description	Quantity
31 10 6769907	Screw with shim	2
07 11 9908648	Hexagon bolt	2
33 32 6760340	Torx screw with washer	2
22 11 6893773	Multi- purpose bolt	2
07 11 9908648	Hexagon screw with washer	5

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33 30 6782246	Hexagon screw with washer	2
31 20 6795249	Shouldered bolt with compression spring	2
33 13 1214961	Retaining ring	1
07 11 9904956	Hexagon bolt	2
07 11 9909673	Hexagon bolt	4
31 10 8835359	Screw	2
07 14 8835360	Combination nut	2
37 10 6789678	Flanged hexagon nut	2
31 10 6765451	Combination nut	2
31 10 6789333	Outside torx bolt	2
07 14 9323312	KOMBI oval-head self-tapping screw	1
32 30 6778609	Torx bolt	1
34 10 6864424	Torx screw with washer	4
07 14 7398300	Hexagon bolt	4
31 11 6899302	Multi-purpose bolt	14
12 33 5A57F64	RP eDrive motor	1
07 14 9455119	Multi-purpose bolt	6
61 27 9487465	Screw	4

Bulk Materials - Sublet

Part Number	Description	Quantity
83 19 5A32851	HT-12 Antifreeze RTU (Bulk 1/10 Liter) (Pre-mix)	As needed
Or:		
83 19 2468442	BMW Antifreeze/Coolant (1 Gallon Concentrate) - HT-12	As needed

Part Retention

The parts replaced to perform and submit for this repair procedure are the property of BMW NA.

Your center is responsible for the proper identification, storage, and documentation of these parts. They must be held in a secure retention area until notification of claim payment is made by BMW NA through DCSnet.

If these replaced parts are requested to be returned, a corresponding DCSnet Part Return tag will generate.

Any requested parts that are not received by the WPRC in accordance with Section 6 of the Warranty Policy and Procedure Manual may be subject to debit.

CLAIM INFORMATION

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.

When the above applies, submit for Work Package # 1 or # 2 below for replacing the electric drive unit (complete) and to perform and submit for updating the vehicle to the required I-level or higher

For any other open programming and encoding Technical Campaigns, please be sure to also perform any additional before and/or after work (including attaching labels) that is required or close them as outlined in the corresponding Service Information Bulletin.

Reimbursement for this Action will be via normal claim entry utilizing the applicable work package information below and the part numbers listed above.

Defect	0012920500	I20 Replace electric front axle drive unit
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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 73 767	Replacing the electric drive unit (complete) with programming and encoding the vehicle control units, includes Carrying out vehicle test (00 00 556/61 21 528)	Refer to AIR

Or:

The vehicle arrives at your center and this 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
# 2	00 73 186	Replacing the electric drive unit (complete) with programming and encoding the vehicle control units, includes Carrying out vehicle test (00 00 006/61 21 528)	Refer to AIR

Only one of the flat rate labor operation codes listed above can be used for claim submission and reimbursement. 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: B12 04 22 WP 1), unless otherwise required by State law.

Sublet – Bulk Materials (RO and Claim Comments Required)

Sublet Code 4	Up to \$50.00	Reimbursement for the repair-related bulk material (Do not use the BMW part number for claim submission)
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Sublet reimbursement calculation for claiming the applicable repair-related bulk material (BMW part number) is at the dealer net price amount for the quantity used plus your center's handling.

BMW Antifreeze/Coolant: Claim the corresponding sublet dollar amount for the quantity needed to replace what was drained. The one-gallon concentrate part number quantity for a 50/50 coolant/water solution.

Enter this material cost in sublet and itemize the amount on the repair order and in claim comment section.

Programming and Encoding - Vehicle Control Units (RO and Claim Comments Required)

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 Defect Code in this bulletin with the labor operations in AIR 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 Defect Code and labor operations (including the diagnosis that applies*) in AIR that apply.

*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.

Alternative Mobility Solution (AMS) for Vehicle Owners (RO and Claim Comments Required)

This Action repair qualifies for Alternative Mobility Solution (AMS) expense reimbursement, claim this item under the Defect Code noted above as follows:

Sublet Code 2 - Itemize the AMS sublet amount on the repair order and in the claim comment section.

Please refer to [SI B01 29 16](#) for additional information.

FEEDBACK REGARDING THIS BULLETIN

Technical Feedback	To submit feedback for the technical topics 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

