



SIB 64 05 23

2023-05-01

CHECK ENGINE LIGHT ON FROM MISSING MESSAGE DTC IN IHKA

<input checked="" type="checkbox"/>	THIS REPAIR IS MOBILE FRIENDLY
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MODEL

E-Series	Model Description	Production Date	Affected Option Code
G01	X3 Sports Activity Vehicle	June 27, 2018, to April	Hybrid equipped with XB1H or XB1G engine
G30	5 Series Sedan	13, 2023	

SITUATION

Check Engine Light is illuminated, check control message indicates “bring in for service”. The faults themselves and the Malfunction Indicator Lamp (MIL) have no functional effect on the vehicle.

There are multiple missing message fault codes (DTC) stored in the integrated automatic heating/air conditioning system (IHKA) control unit.

These faults may include:

E71402 - No message (powertrain 2 data, 0x3F9), receiver IHKA, transmitter DME/DDE / CCU
E71409 - No message (refrigerant circuit pressure status, 0x2D2), receiver IHKA, transmitter BCP / BDC-central gateway module
E7143A - No message (air conditioning compressor control, 0x38C), receiver IHKA, transmitter EME
E7143D - No message (high-voltage battery 1 status, 0x1FA), receiver IHKA, transmitter SME
E71440 - No message (status of valve for high-voltage battery cooling, 0x389), receiver IHKA, transmitter EME
E7144E - No message (OBD diagnosis, engine 0x397), receiver IHKA, transmitter DME/DDE / CCU
E7144F - No message (OBD diagnosis, engine control, electrical, 0x3E8), receiver IHKA, transmitter EME
E71450 - Message (release, power, functions air-conditioning 1, 0x2DF) missing, receiver IHKA, transmitter EME
E71453 - No message (high-voltage battery 2 status, 0x112), receiver IHKA, transmitter SME go to ACSM

CAUSE

Software in the IHKA control module.

On-Board Diagnostics (OBD) requires monitoring of the multiple battery cooling control modules communication to the engine control module. If communication is interrupted, a Check Engine Light can result.

CORRECTION

Program/encode the IHKA control module.

The missing message faults will no longer appear, unless relevant, once the vehicle is updated with ISTA 4.40.4x to I-Level 23-03-540.

PROCEDURE

Determine the vehicle's current integration level (I-level) by either using AIR or the Key Reader ISPA Next/AWP (Aftersales Workplace) applications.

1. Is the current vehicle I-level lower than:

Model	Target integration level
G01 / G30	S15A-23-03-540

YES: Proceed to Step 2

NO: Further diagnosis with ISTA is needed

2. Program the vehicle using ISTA 4.40.4x or higher (released April 5, 2023).

Model	Target integration level
G01 / G30	S15A-23-03-540

After the programming has been fully completed, check the functionality of the system.

Note: 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 TIS / Technical Documentation / Diagnostics and Programming / Programming Documentation.

PARTS INFORMATION

Part exchange of the IHKA control unit does not provide a solution.

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.

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.

Only when the above does not apply, the BMW software solution is then:

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

Defect Code:	6411230200	Control unit of front heating and air conditioning system Software error / internal device fault
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Refer to AIR for the corresponding flat rate unit (FRU) allowances.

Labor Operation	Description	Labor Allowance
00 00 006	Carrying out vehicle test (Main work)	Refer to AIR
Or:		
00 00 556	Carrying out vehicle test (Plus work)	Refer to AIR
And:		
61 21 528	Supporting voltage of the vehicle electrical system / recharging vehicle battery	Refer to AIR
And, as needed:		

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Or:		
00 58 500*	Diagnosis Worktime Flat Rate	2 FRU
And:		
61 00 730	Program/encode control unit(s), includes deleting the fault memory	Refer to AIR

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, or exclude (including 61 21 528) when the Vehicle Test is included in another repair.

Work time labor operation codes 61 00 006 and 00 58 500 are not considered Main labor operations.

Vehicle Programming and Encoding – Additional Work (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.

Other Repairs

If other eligible and covered work is performed because of performing the ISTA diagnostics and related test plans, claim this work with the applicable defect code and the labor operations listed in AIR (including diagnosis that applies*).

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

