



INTERMITTENT HEATER OUTPUT

MODEL

F60 PHEV (MINI Cooper S E Countryman ALL4)
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SITUATION

Intermittently the vehicle has no heater output, and the following fault code is stored in the IHKA:

Fault code	Control module	Text
E70C3A	IHKA	Electric auxiliary heater: EDH does not respond

Additional fault codes can also be stored:

Fault code	Control module	Text
E7147F	IHKA	Message OBD (LIN timeout, 0x11, AC-LIN4) receiver IHKA, transmitter electric heater
E71482	IHKA	Message OBD (LIN timeout, 0x13, AC-LIN4): receiver IHKA, sender of electric A/C compressor



Note: In some cases the customer may also complain of a check engine light (MIL).

CAUSE



IHKA software, faulty electric heater (EH) or faulty communication between EH and IHKA.

CORRECTION

Replace the EH and program the vehicle if required.

PROCEDURE

1. Replace the EH per Repair Instructions 64 12 320 "Removing and installing/replacing electrical heating".

 <p>TYP 010000577-SE01 03W3B 000758 9893001-01 EDH-03ΩDBK</p> 	 <p>Note: Verify the correct part number is being installed!</p>
GRUSB6419-08	

2. Program the vehicle with ISTA 4.14.1x (I-Level 18-11-520) or higher.

- **Always connect a MINI-approved battery charger/power supply ([SI M04 08 09](#)) when performing programming.**
- For information on programming and coding with ISTA, refer to CenterNet / TIS / Technical Documentation / Programming and Diagnostics / Programming Documentation

3. If the I-Level is currently 18-11-520 or higher:

- Do not program the vehicle
- Continue diagnosis with ISTA

PARTS INFORMATION

Part Number	Description	Quantity
64 12 9 893 001	Flow heater electr.	1

Bulk Materials

Part Number	Description	Quantity
82 14 0 031 133	Coolant (1 Gallon concentrate)	Sublet as needed

WARRANTY INFORMATION

Defect Code	6412191100	Electric auxiliary heater/PTC occasional failure
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Refer to the Attachment for Warranty Information.

INTERMITTENT HEATER OUTPUT

WARRANTY INFORMATION

Covered under the terms of the MINI New Passenger Car Limited Warranty or the MINI NEXT/MINI Certified Pre-Owned Limited Warranty.

Defect Code	6412191100	Electric auxiliary heater/PTC occasional failure
Labor Operation:	Labor Allowance:	Description:
00 00 006	Refer to AIR	Performing vehicle test (with vehicle diagnosis system – checking faults) (Main work)
Or:		
00 00 556	Refer to AIR	Performing vehicle test (with vehicle diagnosis system – checking faults) (Plus work)
And:		
61 21 528	Refer to AIR	Connect an approved battery charger/power supply (indicated in AIR as Charging battery)
And:		
61 25 910	Refer to AIR	Recharging high-voltage battery unit (to high voltage charging socket)
And:		
64 12 821	Refer to AIR	Replace electrical heating (after vehicle diagnosis)

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

And, if necessary:

Labor Operation:	Labor Allowance:	Description:
61 00 730	Refer to AIR	Programming/encoding control unit(s)

Refer to 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 modules, the programming procedure may only be invoiced one time.**

And, as necessary:

Sublet – Bulk Materials

Sublet Code 4	See sublet reimbursement calculation below	Reimbursement for the repair-related bulk materials (Please do not use the part number(s) for claim submission)
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Sublet reimbursement calculation for claiming the used quantities of repair-related bulk materials (MINI part numbers) is at dealer net plus your centers handling.

MINI Antifreeze/Coolant: Claim the corresponding dollar amount for the quantity needed to replace what was drained with a 50/50 coolant/water solution.

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

Programming and Encoding - Vehicle Control Units

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 AIR labor operations.

Please explain this additional work (The why and what) on the repair order and 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 AIR.

Other Repairs

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