

Technical Journal

TITLE:

GHCA Fault Diagnosis and Replacement VST Operation

REF NO: TJ 37630.5.0	ISSUING DEPARTMENT: BBURGARD - Brian Burgard	CAR MARKET: United States and Canada	
PARTNER: 3 US 7510 Volvo Car USA, LLC		ISSUE DATE: 2026-03-20	STATUS DATE: 2026-03-27
FUNC GROUP: 3234	FUNC DESC: onboard charger, high voltage	Page 1 of 3	

Rows beginning with * are modified

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DESCRIPTION:

* Added DTC GCCC - P2D778C

* Modified Model Year and Structure Week range to define an end.

If a vehicle shows the symptom of not being able to charge the HV battery via AC Charging, please follow the advice under "Service".

CSC Customer Symptom Codes

Code	Description
YN	High voltage battery/Discharged/poor charge
YM	On board charger/No/reduced/incorrect function/While driving
YL	Plug-in charging/No/reduced/incorrect function/With external AC-cable
YZ	Plug-in charging/No/reduced/incorrect function/With external DC-cable
YW	Charging socket/LED indicates fault/reduced charging/Unsure when/at all times

DTC Diagnostic Trouble Codes

ECU	DTC	Fault Type
GHCA	B3A1D19	Permanent
GHCA	B3A1D47	Permanent
GHCA	B3A1D56	Permanent
GHCA	B3A1D78	Permanent
GHCA	P06AB11	Permanent
GHCA	POD2600	Permanent

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ECU	DTC	Fault Type
GHCA	P0E8592	Permanent
GHCA	P0E8B16	Permanent
GHCA	P0E8B68	Permanent
GHCA	P29BC16	Permanent
GHCA	P29BC98	Permanent
GHCA	P2DB701	Permanent
GHCA	P2E2F17	Permanent
GHCA	P2E9117	Permanent
GHCA	P2E9119	Permanent
GHCA	U359116	Permanent
GHCA	U359192	Permanent
GHCA	U35C794	Permanent
GCCC	U01BB00	Permanent
GHCA	B3A1D04	Permanent
GCCC	P2D778C	Permanent

Vehicle Type

Type	Eng	Eng Desc	Sales	Body	Gear	Steer	Model Year	Plant	Chassis range	Struc Week Range
359							2025-2025		-	202402-202545

SERVICE:

Confirm the following:

1. DC charging still works; only AC charging does not.
2. One of the DTCs mentioned in this TJ is set.

If both criteria are fulfilled, proceed with this TJ. Otherwise, continue with VIDA fault tracing.

* Note: The GHCA does not handle DC charging. Therefore, GHCA replacement will not resolve DC charging issues. Communication with DC chargers is ma GCCC.

Task to perform:

Replace the GHCA according to VIDA.

FAQ: Customer Questions About AC Charging Issues:

1. Q: My AC charging no longer works. Is there anything I can do to fix it myself?
A: If AC charging doesn't work, the car needs a workshop check. DC fast charging works as a temporary solution.
2. Q: Could my home or public charger have caused this fault?
A: No, this is not caused by your home or public charger. You can keep using the chargers after the car has been serviced.
3. Q: Is this a common issue?
A: It is not widespread, but in some cases, it has occurred repeatedly and can be linked to rapid fluctuations in the power supply under certain grid conditions.

4. Q: Will reducing the amperage during AC charging help prevent this issue from happening again?
A: No. This hardware fault is not related to amperage (charging power). It's triggered by certain power grid conditions, regardless of the amperage you select.
5. Q: How can I prevent this from happening again? Can DC charging (mentioned as a temporary solution) also cause this fault?
A: The only way to completely avoid this fault is to use DC fast charging instead of AC charging. DC charging bypasses the component affected by certain grid conditions during AC charging. Therefore, DC charging cannot cause this specific fault.

Abbreviations:

AC - Alternating Current

DC - Direct Current

* GCCC - Grid Communication Charging Controller

GHCA - Grid to High Voltage Converter A

Failing Part: GHCA

Warranty claim info:

To get a warranty claim accepted for a job described in this TJ, use only the corresponding VST OP number stated in this TJ.

Please note that fault tracing is not eligible for separate reimbursement under this TJ. Any fault tracing VST operation numbers will be rejected. Note that the TJ number must be stated in the repair order text.

VST Operation Number

VST Operation NO.	Description
98786-2	GHCA replacement acc. to TJ
98821-3	Software download acc. to TJ
97733-3	High voltage battery disconnect/connect and insulations measurement acc. QB/TJ
98801-2	General reimbursement acc. to TJ

LABOR TIME:

Labor time subject to change without notice.

VEHICLE REPORT:

Yes, please submit a Vehicle Report if the service solution described in this TJ has no effect. Use the concern area "Vehicle Report Polestar" and the sub-concern area "Support Needed Polestar", use function group 3234.

* Also submit a vehicle report if the replaced GHCA's serial number starts with "300" (ignore leading zeros) and is equal to or greater than **000030073988**. Use concern area "Vehicle Report Polestar" and sub concern area "Support Needed Polestar", use function group 3234.