



Technical Service Bulletin

27 48V MHEV Electrical System Fault with DTC U046900 / 34763

27 24 73 2073284/2 June 5, 2024. Supersedes Technical Service Bulletin Group 27 number 24-68 dated March 9, 2024 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A6, A7, A8, Q7, and Q8	2019 - 2025	All	Not Applicable
A8 e quattro	2020 - 2021		
A6 allroad, S6, S7, S8, SQ7, SQ8, and RS Q8	2020 - 2025		
A7 e quattro	2021 - 2022		
RS 6 Avant, and RS 7	2021 - 2025		

Condition

Customer states:

- Electrical system fault appears in the instrument cluster. If the customer continues driving, there is a risk that the vehicle could lose power when the battery becomes excessively discharged.

Workshop findings:

One or more of the following DTC(s) may be stored relating to the Engine Electronics, -J623- (address word 0001) and Brake Electronics, -J104- (address word 0003):

Engine Electronics, 0001:

- U046900:** Lost Communication with Starter/Generator Control Module – **Symptom: 34763**
- U002900:** Sensor/Hybrid CAN No Communication
- U002800:** Sensor/Hybrid CAN Faulty

Brake Electronics, 0003:

- C054A00:** Brake Servo Pressure Sensor
- C11EC04:** Brake Servo Pressure Sensor

Technical Background

Replacing the 48V Starter/Generator will not fix this problem. The DTC “U046900: Lost Communication with Starter/Generator Control Module – symptom: 34763” is only stored due to some other electrical system problem on the vehicle CAN bus, but the Starter/Generator is not the cause for the concern. This is often documented in the expanded ambient conditions of the event memory using the value “Starter generator, actual mode 48V = 8”.



Technical Service Bulletin

DTC memory entry	
Number:	U046900: Invalid Data Received From Starter / Generator Control Module
Error type 2:	passive/sporadic
Symptom:	34763
Status:	00100000
Standard ambient conditions:	
Starter generator, number of restarts	26060.0
Starter generator, number of first starts	760.0
Starter generator, number of comfort stops	31480.0
Starter generator, engine control module condition state machine	Gen
Param_TestProgrXExChpdEiuFhobBysCicaNfr6SpUBYTE4	
Starter generator, actual mode 48V	8
Starter generator, thermal load	86 %

Figure 1: Starter generator, actual mode 8.



NOTICE

If the Starter Generator (diagnostic address 00CC) cannot be reached in ODIS, this does not mean that the component is faulty.

Production Solution

Not applicable.

Service

Replacing the 48V Starter/Generator will not fix the problem. The sensor faults in the Engine electronics, Brake Electronics, and the communication error faults must be processed to find the root cause.

A potential fault on these sensors can influence the vehicle data bus system. As a result, the Engine Electronics commands the 48V Starter/Generator to freewheel and the electrical system faults may then occur as the battery will not be charged.

Fault Codes U002900 and U002800 in the diagnostic address 0001 indicate the following causes:

- Communication connectors have not been plugged in or fastened correctly, pins are failing (bent, widened), or there are short circuits in the wires.
- Incorrect attempts to swap connectors (failure to connect vehicle ground cables)



Technical Service Bulletin



Figure 2: Connector failures

Warranty

This TSB is informational only and not applicable to any Audi Warranty.

Additional Information

All part and service references provided in this TSB (**2073284**) are subject to change and/or removal. Always check with your Parts Department and/or ETKA for the latest information and parts bulletins. Please check the Repair Manual for fasteners, bolts, nuts, and screws that require replacement during the repair.

©2024 Audi of America, Inc. All rights reserved. The information contained in this document is based on the latest information available at the time of printing and is subject to the copyright and other intellectual property rights of Audi of America, Inc., its affiliated companies, and its licensors. All rights are reserved to make changes at any time without notice. No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, nor may these materials be modified or reposted to other sites without the prior expressed written permission of the publisher.