Technical Service Bulletin

19 HV battery charging is very slow, DTC P31C500 is stored in the high-voltage battery charger

19 21 23 2064025/2 September 22, 2021. Supersedes Technical Service Bulletin Group 19 number 21-21 dated July 16, 2021 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
Audi e-tron quattro, Audi e-tron sportback	2021	All	Not Applicable

Condition

REVISION HISTORY		
Revision	**Date**	**Purpose**
2	-	Revised *Service* (Updated Step 1 and 2)
1	07/17/2021	Initial publication

Customer states:

- The battery charging is very slow.
- After charging for 30 minutes or more the estimated charging time display changes from a normal time to an excessively long time (for example 36 hours or more when connected to a level 2 charger or DC fast charger).

Workshop findings:

- The customer's concern can be duplicated.

The following DTC may be stored High-voltage battery charger, J1050 (address word 00C6):

- **DTC P31C500** (Temperature sensor coolant inlet excessive).

Technical Background

Incorrect calibration of the cooling system control valve in production can result in an excessive temperature in the cooling system. This can affect the charging speed (among other things).

Production Solution

Improved tolerances and quality checks at the supplier.

Technical Service Bulletin

Service

If the DTC P31C500 is stored in the high-voltage battery charger, J1050 (address word 00C6) and the workshop findings specified above also apply, proceed as follows to avoid repeat repairs:

1. Check the vehicle history to determine whether the DTC relating to the coolant valves are stored or have previously been stored in the thermal management control module, J1024 (address word 00C5).

   If yes, perform the output diagnosis for the specific valve that stored a DTC previously. If the values do not change during output diagnosis test mode replace the corresponding valve according to the Elsa Repair Manual including bleeding the cooling system.

2. If there is no history of a DTC relating to the coolant valves stored in the thermal management control module, J1024 (address word 00C5) perform the following:
   - Starting with coolant valve 2 (N633) and if necessary continue with coolant valve 4 (N635) and coolant valve 3 (N634).
   - Perform the output diagnosis test for the valves. If the values do not change during output diagnosis test mode replace the corresponding valve according to the Elsa Repair Manual instructions including bleeding the cooling system.

3. After completing the repair recheck the high-voltage battery and verify that it charges at a normal rate and that DTC P31C500 has not been set again.

Warranty

Claim Type:	• 110 up to 48 Months/50,000 Miles. • G10 for CPO Covered Vehicles – Verify Owner. • If the vehicle is outside any warranty, this Technical Service Bulletin is informational only.		
Service Number:	1985		
Damage Code:	0040		
Labor Operations:	Replace coolant valve	9384 19XX	See SRT with associated operations
	Coolant inspected + added	1938 3550	See SRT with associated operations

Diagnostic Time:	GFF	0150 0000	Time stated on the diagnostic protocol (Max 100 TU)
	Road test prior to service procedure	No allowance	0 TU
	Road test after service procedure	No allowance	0 TU
Claim Comment:	As per TSB #2064025/2		

All warranty claims submitted for payment must be in accordance with the *Audi Warranty Policies and Procedures Manual*. Claims are subject to review or audit by Audi Warranty.

Required Parts and Tools

Always check with your Parts Department and/or ETKA for the latest information and parts bulletins. **Only replace the actual valve that is defective.**		
Part Number	**Part Description**	**Quantity**
See ETKA	Coolant, Fasteners, Bolts, Nuts, and Screws as needed per the Repair Manual	See ETKA/ELSA
4KE963375J	Coolant valve 2 (N633) **(Only replace if the valve fails testing)**	01
4KE963375N	Coolant valve 4 (N635) **(Only replace if the valve fails testing)**	01
4KE963375H	Coolant valve 3 (N634) **(Only replace if the valve fails testing)**	01

Additional Information

All parts and service references provided in this TSB (2064025) are subject to change and/or removal.