



Technical Service Bulletin

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

19 21 24 2064025/3 October 19, 2021. Supersedes Technical Service Bulletin Group 19 number 21-23 dated September 22, 2021 for reasons listed below.

| Model(s) | Year | VIN Range | Vehicle-Specific Equipment |
|---|-------------|-----------|----------------------------|
| Audi e-tron quattro, Audi e-tron sportback | 2021 - 2022 | All | Not Applicable |

Condition

| REVISION HISTORY | | |
|------------------|------------|---|
| Revision | Date | Purpose |
| 3 | - | Revised header (Added Model Year 2022) |
| 2 | 09/22/2021 | Revised <i>Service</i> (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.



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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: | <ul style="list-style-type: none">• 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 |



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| | | | |
|-------------------------|--------------------------------------|--------------|---|
| 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 #2064025/3 | | |

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.

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