Technical product information

Topic	New Flying Spur Hybrid - 12 volt battery draining during the charging of the high voltage battery
Market area	Australia E04 Bentley rest Asia and Australia (6E04),China 723 Volkswagen (Anhui) Automotive CO (6723),China 796 VW Import Comp. Ltd (Vico), Beijing (6796),Germany E02 Bentley rest Europe (6E02),United Arab Emirates E06 Bentley Middle East and Africa (6E06),United Kingdom E01 Bentley UK (6E01),United States E05 Bentley USA and rest America (6E05)
Brand	Bentley
Transaction No.	2068627/4
Level	EH
Status	Approval
Release date	

New customer code

Object of complaint	Complaint type	Position
electrical power, electric system, data transfer -> power supply	functionality	
electrical power, electric system, data transfer -> battery management -> charging high-voltage battery	functionality -> defective function sequence	

Vehicle data

New Flying Spur Hybrid

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
ZG23GB	2022	E		*	*	*
ZG23GB	2023	E		*	*	*
ZG23GB	2024	E		*	*	*
ZG25GB	2023	E		*	*	*
ZG25GB	2024	E		*	*	*

Documents

Document name
master.xml

Customer statement / workshop findings

The 12 volt battery is draining during the charging of the high voltage battery

Technical background

Revision history - TPI 2068627/4

Repair guidelines regarding the procedure which must be followed in the event that Static DTC U042300 is evident within address C5 (Thermal Management control unit) after the On Board Charger (AX4) has been replaced

WARNING

VERY IMPORTANT: This vehicle uses a high voltage system and MUST only be worked on by suitably qualified personnel

CAUTION

VERY IMPORTANT: Please ensure all guidelines within the repair manual are strictly followed before and whilst conducting any work on vehicles with a high voltage system

In the event the issue is as described within the Customer statement/Workshop findings section the operative must refer to the instructions within the Measure section of this TPI

Production change

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Measure

1) Raise a Technical DISS query stating the following:

- The 12 volt battery is draining during the charging of the high voltage battery when the using high voltage charging socket

Hint: The operative is not required to wait for feedback via DISS, please continue with the onward instructions to completion

2) Referring to Rep.Gr 93 - Carry out an Inspection and classification of the Hybrid battery unit AX1

VERY IMPORTANT: In the event that the classification result of the battery is 'Normal' the operative should conduct the remaining steps of this TPI from step 3

However

If the classification result of the battery is either 'Danger' or 'Warning' then move the car to the quarantine area and raise a DISS immediately, the operative MUST NOT continue with any other work unless instructed via the open DISS query

3) De-energise the high voltage system - **RepGr 93 - Electric Drive - De-energising high - voltage system**

IMPORTANT: In the event that any of the plugs shown in Figures 1 and 2 are found not to be secure (primary and secondary latch are not fully locked into position) the operative must respond via the open DISS query and await feedback before conducting any further work

4) Referring to Figure 1 point A - Check and confirm the primary and secondary latches are fully locked in position

- Referring to point B and inset - Check and confirm the primary and secondary latches are fully locked in position
- Referring to the inset - Check and confirm the primary and secondary latches (red and black) are fully locked in position

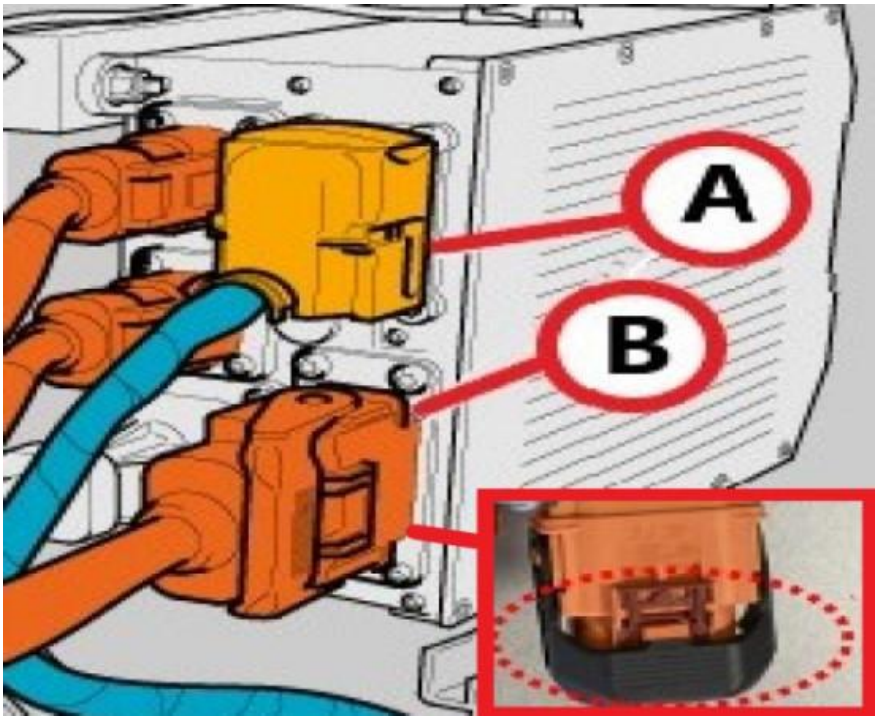

Figure 1

- Referring to Figure 2 (Points A,B and C) Check and confirm the primary and secondary latches are fully locked in position

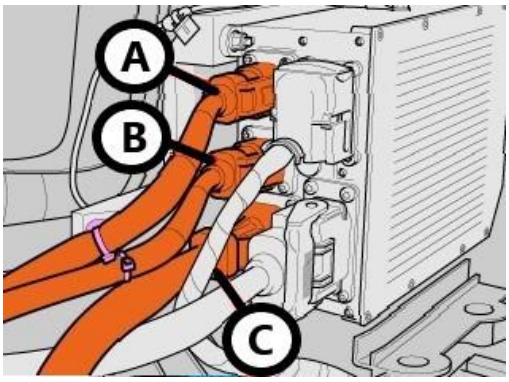

Figure 2

Should any issues be found, the operative MUST respond via the open DISS query ensuring all findings are included within the DISS, the operative must await feedback before conducting any further work

However

If no issues are found the operative should continue from step 5

5) Referring to the applicable wiring diagram - Disconnect the 12V and the high voltage connections from the On Board Charger (AX4)

6) Conduct a visual check of the On Board Charger (AX4) plugs/terminals

7) Conduct a visual check of the On Board Charger (AX4) connections and pins

Should any issues be found, the operative MUST respond via open DISS query with all findings and await feedback before conducting any further work

However

If no issues are found the operative should continue from step 8 to completion

8) Replace the On Board Charger (AX4) Refer to Rep.Gr 93 - Charging unit 1 for high voltage battery AX4 - To remove and refit

9) Re-energise the high voltage system - **RepGr 93 - Electric Drive - De-energising high - voltage system**

10) Check the operation of the charging system to confirm the system is operating to specification

IMPORTANT: In the event that DTC U042300 is evident in address C5 (Thermal management control unit) the operative should conduct the

instructions from step 11 to completion

However

In the event that DTC U042300 **Is Not** evident within address C5 (Thermal management control unit) No further action is required

- The DTC can be deemed as sporadic in this instance **however** the DTC can only be cleared by using the Self Diagnosis
- Prior to clearing the DTC check there are no relevant warnings on the Drivers Instrument Panel (DIP) and it is operating to specification

11) Navigate to Self-diagnosis session (Figure 3)

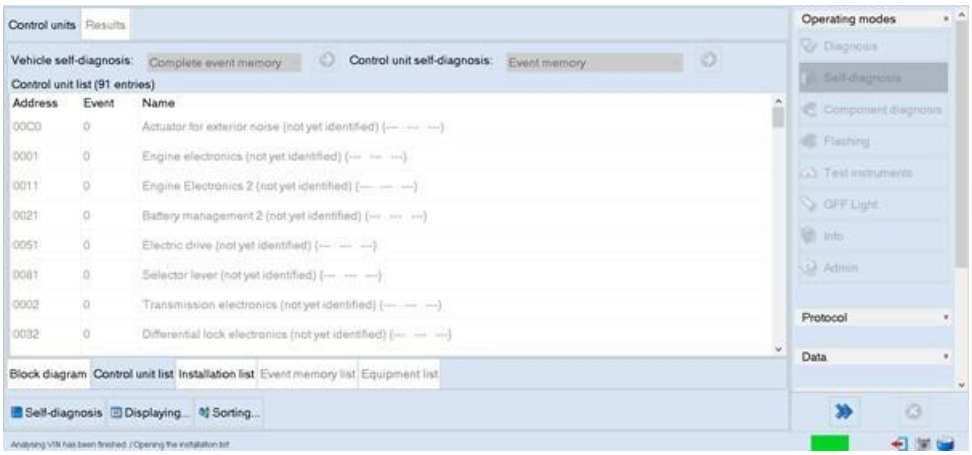

Figure 3

- Referring to Figure 4 - Identify Address C5 (Thermal Management control unit)
- Read the event memory with the commands at the top of the display

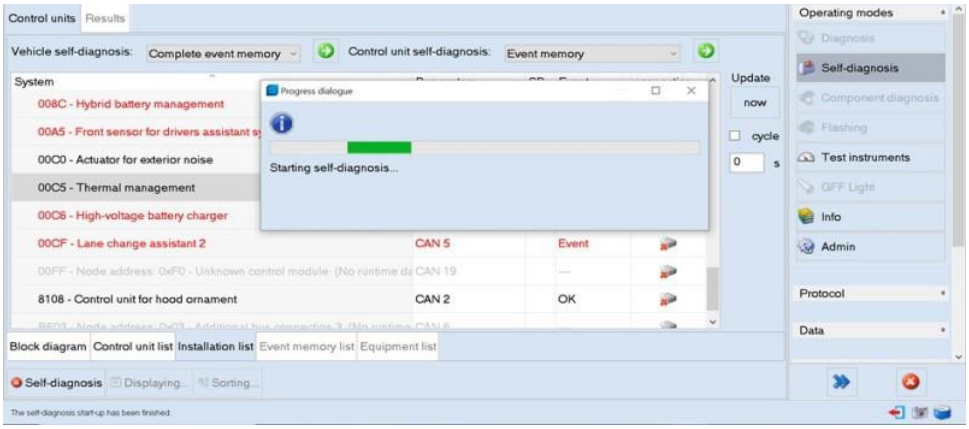

Figure 4

- Referring to Figure 5 - Delete the event by using the delete commands (CIRCLE)

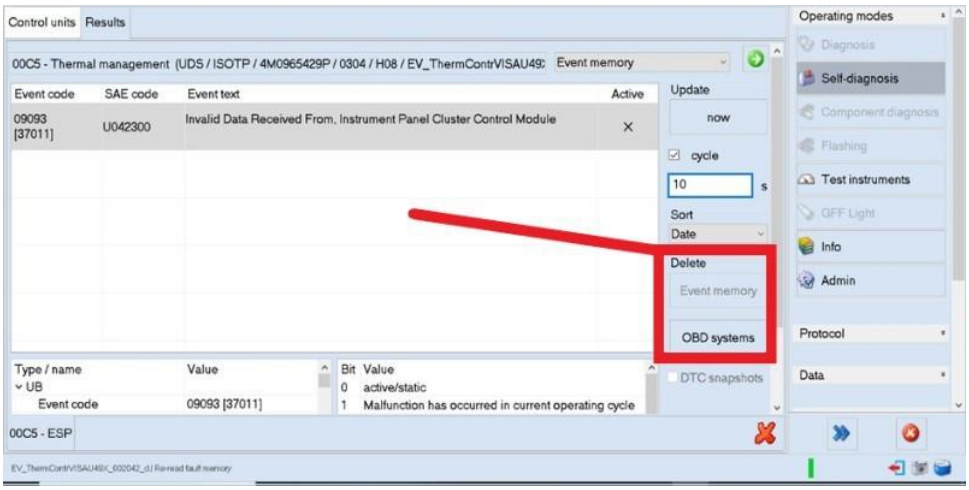

Figure 5

- The DTC should now be deleted (Figure 6)

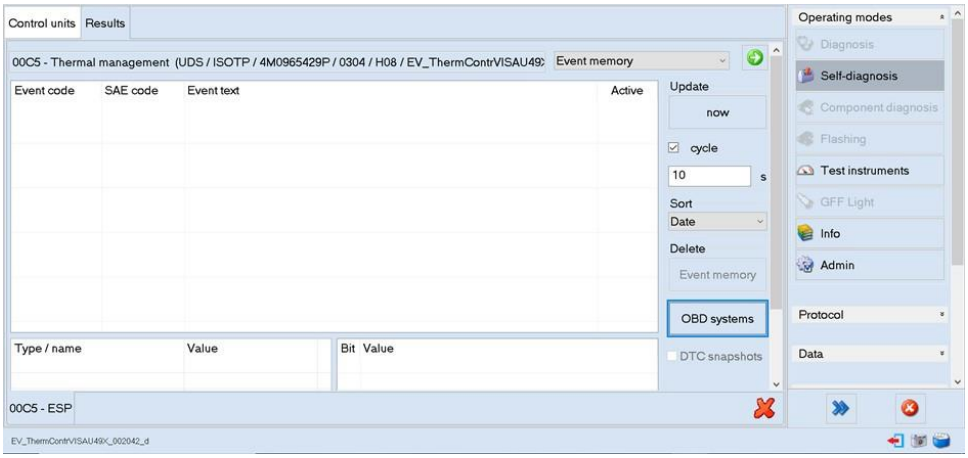

Figure 6

In the event that there is a new charging complaint after the replacement of the On Board Charger (AX4)

Or

DTC U042300 is evident within address C5 (Thermal management control unit)

Or

Related DTC's are logged the operative MUST update the existing DISS query or raise a new technical DISS query and await feedback before conducting any further work

NOTICE

NOTE: A road test is not required therefore warranty claims for a road test will not be approved

Warranty accounting instructions

Warranty type 110 or 910

Damage service number 93 52

Damage code 00 40

Time to De - energise and Re - energise the high voltage system

Labour

Labour Operation Code 93 10 00 00

Time 30 TU

Time to replace the Charging unit 1 for high voltage battery (AX4)

Labour

Labour Operation Code 93 52 19 80

Time 170 TU

Diagnosis time

Labour

Labour Operation Code 01 50 00 00

Time As per ODIS log (must not exceed 50 TU)

NOTICE

Warranty claims for a road test will not be approved

Parts information

Refer to the ETKA parts catalogue

The high voltage coolant system Anti tamper lock for the high voltage coolant reservoir cap MUST always replaced as per the ETKA parts catalogue