

Technical product information

Topic	DTC P0B2500 logged within address 0021 (Battery Energy Control Module 2) - Dynamic ride system warning visible
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),Japan E03 Bentley Japan (6E03),Korea, (South) E08 Bentley South Korea (6E08),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.	2068946/5
Level	EH
Status	Approval
Release date	

Event memory entries

Diagnostic address	Event memory entry	Fault type	Fault status
0021 - Battery management 2	P0B2500: Hybrid/EV Battery "A" Voltage Low		static
0021 - Battery management 2	P0B2500: Hybrid/EV Battery "A" Voltage Low		Intermittent

New customer code

Object of complaint	Complaint type	Position
running gear -> shock absorber/suspension control -> roll compensation	functionality -> defective function sequence	
running gear -> adaptive suspension, pitch and roll compensation	functionality	
information, navigation, communication, entertainment -> symbolic control indicators -> warning lamp for electronic stabilisation programme (ESC)	functionality -> activates	

Vehicle data

Bentayga/New Continental GT/C and New Flying Spur

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
3S3*	2018	E		*	*	*
3S3*	2019	E		*	*	*
3S3*	2020	E		*	*	*
3S3*	2021	E		*	*	*
3S3*	2022	E		*	*	*
3S3*	2023	E		*	*	*
3S3*	2024	E		*	*	*
3S4*	2019	E		*	*	*
3S4*	2020	E		*	*	*
3S4*	2021	E		*	*	*
3S4*	2022	E		*	*	*
3S4*	2023	E		*	*	*
3S4*	2024	E		*	*	*
4V1*	2017	E		*	*	*
4V1*	2018	E		*	*	*
4V1*	2019	E		*	*	*
4V1*	2020	E		*	*	*
4V1*	2021	E		*	*	*
4V1*	2022	E		*	*	*
4V1*	2023	E		*	*	*
4V1*	2024	E		*	*	*
ZG2*	2020	E		*	*	*
ZG2*	2021	E		*	*	*
ZG2*	2022	E		*	*	*

ZG2*	2023	E		*	*	*
ZG2*	2024	E		*	*	*
ZV1*	2023	E		*	*	*
ZV1*	2024	E		*	*	*

Documents

Document name
master.xml

DTC P0B2500 logged within address 0021 (Battery Energy Control Module 2) - Dynamic ride system warning visible

Customer statement / workshop findings

Customer statement:

Bentley dynamic ride system fault is displayed within the Drivers Instrument Panel (DIP)

Workshop findings:

DTC P0B2500 - Hybrid/EV Battery "A" Voltage low is stored within address 21- Battery Energy Control Module 2

Technical background

Possible internal fault with the super capacitor

- In the event that DTC P0B2500 is evident the operative must follow the steps within the Measure section to completion

NOTICE

Note for vehicles with DTC P0B2500 evident:

The instructions within the Measure section must be conducted to completion regardless of vehicle status (PDI or post vehicle handover) Do Not erase the DTC and handover the vehicle back to the customer as DTC P0B2500 could return

Revision history - 2068946/5

- LOT codes amended to numerically match the steps within the Measure section
- Measure section amended to request feedback is provided via DISS if one or both of the super capacitor terminals / harness connector were found to be loose

Production change

Not applicable

Measure

WARNING

This vehicle uses a 48 volt system, please refer to "48 volt system - safety precautions" before working on the 48 volt system

- 1) Referring to Rep.Gr 27 - Deactivate the 48 volt system - Refer to 48 volt system - To activate and deactivate
- 2) Referring to Rep.Gr 27 - Check the security of the super capacitor positive and negative terminals (Figure 1) as follows:
 - Remove the caps (A) from the terminals
 - Check the security of the positive and negative terminals (B) are as described within Rep.Gr 27
 - In the event that one or both terminals are not secure the operative must secure the loose terminal(s) to the correct torque as detailed within Rep.Gr 27 - Super capacitor

NOTICE

In the event one or both terminals were not secure please respond via the open DISS query or raise a new DISS query, in this scenario a response from Product Support is not required the operative should continue with the remaining instructions

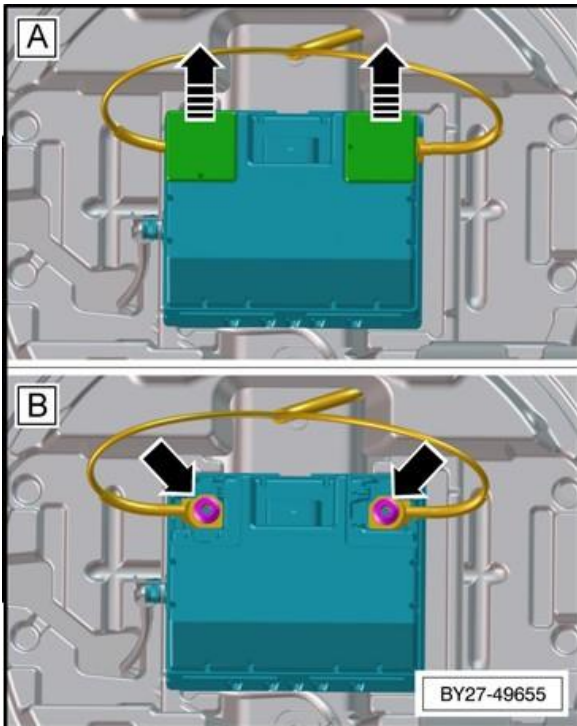


Figure 1

3) Referring to Figure 2 - Check the security of the harness connector

- In the event the harness connector is not secure the operative must secure the connector

NOTICE

Should an issue be identified with the connector or super capacitor which doesn't allow the connector to be secured, please respond via the open DISS query or raise a new DISS query and wait for a response before conducting any further work

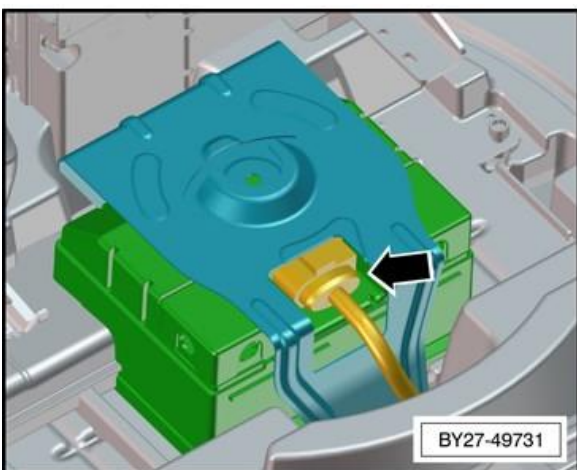


Figure 2

4) Referring to Rep.Gr 27 - Activate the 48 volt system. Refer to 48 volt system - To activate and deactivate

5) In the event the super capacitor positive and / or negative terminals were found **not to be secured to the correct torque specification and required securing** the operative must conduct step 6 and steps 7

However

In the event the super capacitor positive and / or negative terminals **were found to be secured to the correct torque specification** please go directly to step 7

6) Conduct a short road test

NOTICE

A road test should only be conducted if the super capacitor positive and / or negative terminals were not secure

7) Read the following MVB's to check the difference between the **highest cell voltage** and the **lowest cell voltage** (Figure 3)

21-Battery Energy Control Module 2 -> MVB -> IDE08217 and IDE8218

Measured value name	ID	Value
maximum voltage for battery cells	IDE08217	
value	MAS02985	
[L.O.]_Formula		
[L.O.]_Test_Program_Cell_voltage		1.851 V
[L.O.]_Cell_voltage_Textual		numerical value, no text
index 1	MAS01234	
[L.O.]_Cell_index_Textual		numerical value, no text
minimum voltage for battery cells	IDE08218	
value	MAS02985	
[L.O.]_Formula		
[L.O.]_Test_Program_Cell_voltage		1.78 V
[L.O.]_Cell_voltage_Textual		numerical value, no text
index 1	MAS01234	
[L.O.]_Cell_index_Textual		numerical value, no text

Figure 3

- If there is a difference of **0.5v** or more between the **highest** cell voltage and **lowest** cell voltage **and** the fault code '**P0B2500: Hybrid/EV Battery "A" Voltage low**' is stored in **address 21-Battery Energy Control Module 2** - Referring to the applicable Rep.Gr 27 - Replace the super capacitor

Warranty accounting instructions

Warranty type 110 or 910

Damage service number 93 50

Damage code 00 40

Bentayga

De-energise and re-energise the 48 volt system (Step 1)

93 10 00 00 - 30 TU

Time to conduct steps 2,3,4,5 and 7

93 50 19 00 - 20 TU

Diagnosis time

01 50 00 00 as per ODIS log (Must not exceed - 10 TU)

Time to conduct a short road test (Step 6)

Labour Operation Code 01 21 00 01 - 30 TU

NOTICE

A road test should only be conducted if the super capacitor positive and negative terminals were secure

New Flying Spur and New Continental GT and GTC

De-energise and re-energise the 48 volt system (Step 1 and 4)

93 10 00 00 - 30 TU

Time to conduct steps 2,3,5 and 7

93 50 19 00 - 40 TU

Diagnosis time

01 50 00 00 as per ODIS log (Must not exceed - 10 TU)

Time to conduct a short road test (Step 6)

Labour Operation Code 01 21 00 01 - 30 TU

NOTICE

A road test should only be conducted if the super capacitor positive and negative terminals were originally found to be secure

Parts information

Refer to the ETKA parts catalogue