

Technical product information

Topic	Bentley dynamic ride system warning - DTC P0B2500: Hybrid/EV Battery "A" Voltage low' stored (48 volt system)
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.	2068946/4
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		*	*	*
3S4*	2019	E		*	*	*
3S4*	2020	E		*	*	*
3S4*	2021	E		*	*	*
3S4*	2022	E		*	*	*
3S4*	2023	E		*	*	*
4V1*	2017	E		*	*	*
4V1*	2018	E		*	*	*
4V1*	2019	E		*	*	*
4V1*	2020	E		*	*	*
4V1*	2021	E		*	*	*
4V1*	2022	E		*	*	*
4V1*	2023	E		*	*	*
ZG2*	2019	E		*	*	*
ZG2*	2020	E		*	*	*
ZG2*	2021	E		*	*	*
ZG2*	2022	E		*	*	*
ZG2*	2023	E		*	*	*
ZV1*	2023	E		*	*	*

Documents

Document name
master.xml

Customer statement / workshop findings

Customer statement:

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

Workshop findings:

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

Technical background

Possible internal fault with 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 which have DTC P0B2500 evident during PDI: 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 as DTC P0B2500 can return

Revision history - 2068946/3

- Header data updated to request the super capacitor harness connector and super capacitor positive and negative terminals are checked for security as detailed within the Measure section of this TPI

Production change

Not applicable

Measure

WARNING

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

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

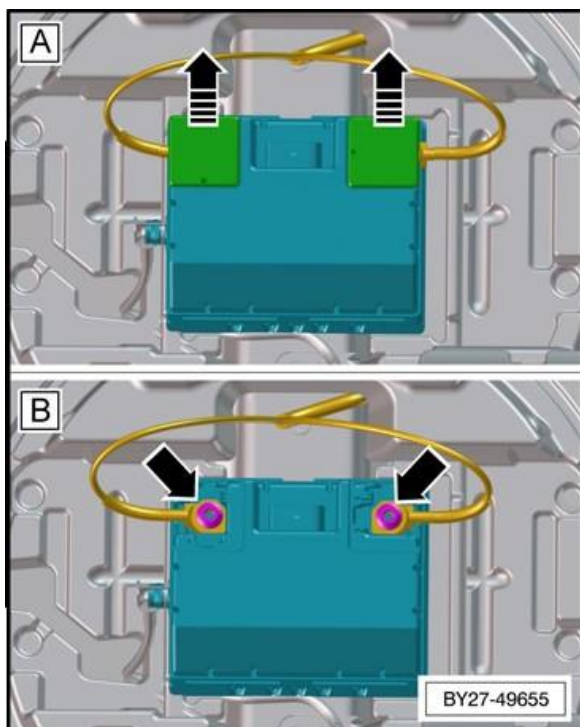


Figure 1

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

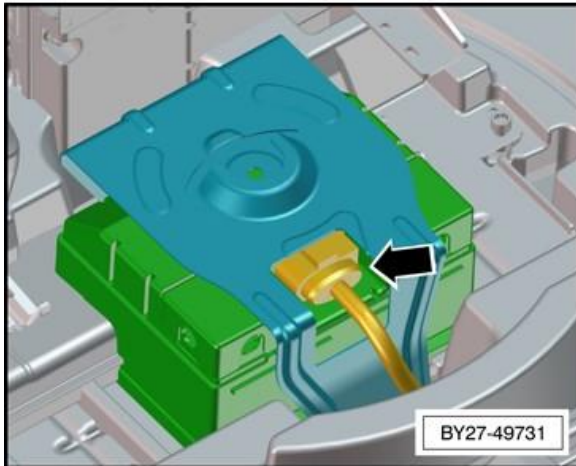


Figure 2

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 negative terminals were found not to specification the operative must conduct step 6 and steps 7
However

In the event the super capacitor positive and negative terminals were secure please go directly to step 7

6) Conduct a short road test

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

Labour operation code 93 50 19 00

Time - 20 TU

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

Power electronics removed and installed - 93 50 19 50 - 10 TU

New Flying Spur

Labour operation code - 93 50 19 00

Time - 20 TU

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

Power electronics removed and installed - 93 50 19 50 10 TU

New Continental GT/C

Labour operation code 93 50 19 00

Time - 20 TU

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

Power electronics removed and installed - 93 50 19 50 - 10 TU

All models

De-energise and re-energise the high voltage system - 93 10 00 00 - 30 TU

Time to conduct a short road test

Labour Operation Code 01 21 00 99

Time 25 TU

Parts information

Refer to the ETKA parts catalogue