

## Technical product information

|                        |                                                                                                                                                                                                                                                                                                                                           |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Topic</b>           | Bentayga/New Flying Spur - DTC P0C4A00 Hybrid/EV Battery Pack Coolant Pump "A" Control Performance within address 8C                                                                                                                                                                                                                      |
| <b>Market area</b>     | Australia E04 Bentley rest Asia and Australia (6E04),China 796 VW Import Comp. Ltd (Vico), Beijing (6796),Germany E02 Bentley rest Europe (6E02),Japan E03 Bentley Japan (6E03),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) |
| <b>Brand</b>           | Bentley                                                                                                                                                                                                                                                                                                                                   |
| <b>Transaction No.</b> | 2066246/3                                                                                                                                                                                                                                                                                                                                 |
| <b>Level</b>           | EH                                                                                                                                                                                                                                                                                                                                        |
| <b>Status</b>          | Approval                                                                                                                                                                                                                                                                                                                                  |
| <b>Release date</b>    |                                                                                                                                                                                                                                                                                                                                           |

### Event memory entries

| Diagnostic address               | Event memory entry                                                   | Fault type | Fault status |
|----------------------------------|----------------------------------------------------------------------|------------|--------------|
| 008C - Hybrid battery management | P0C4A00: Hybrid/EV Battery Pack Coolant Pump "A" Control Performance |            | Intermittent |
| 008C - Hybrid battery management | P0C4A00: Hybrid/EV Battery Pack Coolant Pump "A" Control Performance |            | static       |

### 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

### Bentayga Hybrid

#### Sales types

| Type   | MY   | Brand | Designation | Engine code | Gearbox code | Final drive code |
|--------|------|-------|-------------|-------------|--------------|------------------|
| 4V14F9 | 2019 | E     |             | *           | *            | *                |
| 4V14F9 | 2020 | E     |             | *           | *            | *                |
| 4V14F9 | 2021 | E     |             | *           | *            | *                |
| 4V14F9 | 2022 | E     |             | *           | *            | *                |
| 4V14F9 | 2023 | E     |             | *           | *            | *                |

### New Flying Spur Hybrid

#### Sales types

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

## Documents

| Document name |
|---------------|
| master.xml    |

Bentayga/New Flying Spur - DTC P0C4A00 Hybrid/EV Battery Pack Coolant Pump "A" Control Performance within address 8C

## Customer statement / workshop findings

### Customer statement

- Speed limitation noticeable when driving in EV mode (Restricting the vehicle speed to approximately 30mph/48kph) - Refer also to the video on the Bentley Hub referencing TPI 2066246/-
- No other warnings are evident within the DIP

### Workshop findings

- DTC P0C4A00 Hybrid/EV Battery Pack Coolant Pump "A" Control Performance within Address 8C Battery Regulation Control Unit

## Technical background



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



**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, refer to the instructions within the Measure section of this TPI

### Revision history

**TPI 2066246/2** - Additional details added within the Measure section step 4 regarding the location of J1141 high Voltage battery coolant pump relay

## Production change

-

## Measure

1) 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 2

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

2) Run a full diagnostic log and check if DTC's are present in 8C Battery Regulation Control unit. If P0C4A00 DTC is logged, check if the following Extended ambient conditions are evident within the ODIS log as shown below

- **Power reduction status**

***Batt\_limited\_performance\_active***

- ***Pump for HV battery coolant, Status***

***Speed\_limitation\_because\_of\_dry\_running***

NOTE: If the **Power reduction status** is '**Batt limited performance active**

And/Or

The **Pump for High Voltage (HV) battery coolant status** is 'Speed limitation because of dry running' this suggests a HV coolant system issue is causing the EV drive speed limitation issue

- Should the afore mentioned DTC and/or extended ambient conditions be evident - Continue to step 3

3) Referring to Rep.Gr 19 - Check the High Voltage coolant reservoir level

- Referring to Rep.Gr 19 - Check to confirm there are no coolant leaks on the high voltage coolant system



In the event a coolant leak is identified, the operative must respond via the open DISS query and await feedback before conducting any further work

Or

Should no issues be found the operative should continue with the remaining instructions

4) Referring to Rep.Gr 19 - Replace the V590 Coolant pump and the J1141 High Voltage battery coolant pump relay



**HINT: The J1141 High Voltage battery coolant pump relay is located as follows**

- Engine compartment
- Fuse holder SU
- Part number - 4H0 951 253C
- Referring to Rep.Gr 19 - Ensure the High Voltage coolant drain, fill and bleed is conducted to completion

5) Conduct a road test - Check to confirm issue is now resolved by driving the vehicle in EV Drive mode



Should the issue be resolved no further action is required

Or

In the issue is not resolved, the operative **MUST** respond via the open DISS query and await feedback before conducting any further work

### Warranty accounting instructions



Due to numerous possible symptoms which could be evident, please refer to Labour operations section within Elsa pro for all applicable codes/times

- Each claim will be reviewed individually by the Bentley Warranty team

### Parts information

Any part numbers quoted within this TPI are correct at the time publishing, always refer to the ETKA parts catalogue,



*In the event that the high voltage coolant system Anti tamper lock for the high voltage coolant reservoir cap was removed please ensure the lock is always replaced as per the ETKA parts catalogue*