

# Technical Service Bulletin

|                        |                                                                                                        |
|------------------------|--------------------------------------------------------------------------------------------------------|
| <b>Topic</b>           | Bentayga V8 Kovomo - DTC P310B00 with Symptom Code 2638 - Check Engine Lamp - Fuel Pressure Regulation |
| <b>Market area</b>     | Bentley: worldwide (2WBE)                                                                              |
| <b>Brand</b>           | Bentley                                                                                                |
| <b>Transaction No.</b> | 2058484/10                                                                                             |
| <b>Level</b>           | EH                                                                                                     |
| <b>Status</b>          | Released for publishing                                                                                |
| <b>Release date</b>    | Nov 22, 2022                                                                                           |

## Diagnostic trouble codes

| Diagnostic address        | Diagnostic trouble code                                                   | Fault symptom | Storage state |
|---------------------------|---------------------------------------------------------------------------|---------------|---------------|
| 0001 - Engine electronics | P310B00: Fuel low pressure regulation Fuel pressure outside specification |               | static        |
| 0001 - Engine electronics | P310B00: Fuel low pressure regulation Fuel pressure outside specification |               | Intermittent  |

## New customer code

| Object of complaint                                        | Complaint type           | Position |
|------------------------------------------------------------|--------------------------|----------|
| engine -> engine operation                                 | functionality            |          |
| engine -> engine operation -> engine output characteristic | functionality -> misfire |          |

## New workshop code

| Object of complaint                                          | Complaint type                                                   | Position |
|--------------------------------------------------------------|------------------------------------------------------------------|----------|
| engine -> operation, engine control -> engine control module | functionality -> misfire                                         |          |
| engine -> operation, engine control -> engine control module | control modules, services -> with fault stored in the DTC memory |          |
| engine -> operation, engine control -> engine control module | control modules, services -> measured value too high             |          |
| engine -> operation, engine control -> engine control module | electrical -> ground connection damaged                          |          |
| engine -> fuel supply -> low pressure fuel pump, tank side   | functionality -> irregular                                       |          |
| engine -> operation, engine control -> engine control module | control modules, services -> error message                       |          |

# Vehicle data

## Bentayga Series - V8 Kovomo

### Sales types

| Type   | MY   | Brand | Designation | Engine code | Gearbox code | Final drive code |
|--------|------|-------|-------------|-------------|--------------|------------------|
| 4V14D9 | 2018 | E     |             | *           | *            | *                |
| 4V14D9 | 2019 | E     |             | *           | *            | *                |
| 4V14D9 | 2020 | E     |             | *           | *            | *                |
| 4V14D9 | 2021 | E     |             | *           | *            | *                |
| 4V14D9 | 2022 | E     |             | *           | *            | *                |
| 4V14D9 | 2023 | E     |             | *           | *            | *                |
| ZV14D9 | 2023 | E     |             | *           | *            | *                |

# Documents

| Document name              |
|----------------------------|
| <a href="#">master.xml</a> |



## Condition

Engine warning lamp is illuminated within the Driver Instrument Panel (DIP) in conjunction with the DTC as detailed below:

- ***"P310B00 with symptom code 2638 - Low Fuel Pressure Regulation"***

There may also be multiple DTC's and symptoms present due to fuel pressure regulation or fuel supply issues in conjunction with the afore mentioned symptom/DTC

## Technical Background

NOTE: The retailer must attempt to request as much information as possible regarding when the issue occurred

### Pre-conditions. For example:

- Driving at low speed in traffic
- Warning lights
- Driveability at the time the issue occurred - During idle or driving?
- If during idle, how long had the car been idling?
- Details when the vehicle was last refuelled and the grade of fuel used
- When the issue occurred, How was the car unlocked and started? Keyless entry or entry by using the remote key fob

IMPORTANT: All received information must be added to a new or existing technical DISS query

The operative should refer to the "Measure" section to determine the correct analysis and repair procedure.

## Revision history

### TPI 2058484/7

- Removal of country matrix from the Production change section

### TPI 2058484/8

- Additional request to gather information from the customer (Technical background section)
- Measure section amended to include further checks prior to replacing the fuel delivery module
- Measure section revised to request the operative first confirms the ASAM 2D/ODX data record as shown in Figure 1

NOTE: The ASAM 2D/ODX data record suffix letter check is required to confirm the ASAM 2D/ODX data record suffix letter which will then confirm the applicable procedure (depending on suffix letter) in the example shown the suffix letter is 'E'



CAUTION: Please be aware there is a section within the Measure section which must be followed if the suffix letter is 'J'



Figure 2

**IMPORTANT:** Before proceeding - Have you confirmed the **ASAM 2D/ODX data record?**

**NO - Please go back to Step 3 to confirm the ASAM 2D/ODX data record**

**Yes - Please continue from Step 4 to completion**

4) Allow the engine to cool down to ambient temperature

5) Once cool, Referring to Figure 3 - Navigate to the following IDE's

Selection

[IDE00186]\_Fuel low pressure, actual value

[IDE00202]\_Low fuel pressure, specified value

[IDE00357]\_Fuel temperature

Figure 3

- Before conducting the next steps take a screen shot of the values of the IDE's shown in Figure 3 and attach a current ODIS log to a new or existing technical DISS query

**Ensure the vehicle is parked within a well ventilated area, exhaust extraction must be used if in the workshop**

6) Allow the engine to idle for a minimum of 10 minutes (ensuring the vehicle is in a well ventilated area using exhaust extraction if in the workshop)

- Using ODIS monitor the Fuel low pressure, actual value readings every 60 seconds for a further 10 minutes

7) Attach the Fuel low pressure, actual value readings to a new or existing DISS query

8) Allow the engine to idle for a minimum of 10 minutes

9) Using ODIS - Check the "Adaption of Fuel Pump (FP)" value within the fault memory

**To check the "Adaption of Fuel Pump (FP)" value within the fault memory, refer to Engine control Unit "01 – Engine Control Module 1" - From "Extended ambient conditions" note the value of the "Adaption of Fuel Pump (FP)" - Figure 4**

10) Take a screen shot from ODIS showing the Adaption of fuel pump vale (FP) and attach the current ODIS log to a new or existing technical DISS query

#### Initial system test with fault memory entries

Address: 0001 System name: 01 - Engine Control Module 1 Protocol variant: UDS/ISOTP (Ereignisse: 1)

+ Identification:

- Event memory entries (Data source: Vehicle):

##### Entry in fault memory

Number:

Fault type 2:

Symptom:

Status:

P310B00: Low Fuel Pressure regulation Fuel pressure outside specification  
passive/sporadic  
2638  
10101000

##### - Standard ambient conditions:

Date:

Time:

Mileage (DTC):

Priority:

Frequency counter:

Unlearning counter / driving cycle:

05/11/19

09:52:18

92

2

8

255

##### - Extended ambient conditions:

Engine speed

Normed load value

Vehicle speed

Coolant temperature

Intake air temperature

Ambient air pressure

Voltage terminal 30

602.0

7.05882366

0

73

15

1010

14.92

1/min

%

km/h

°C

°C

mbar

V

Dynamic environmental data

20 96 28 11 CE 11 94 11 C8 11 AE 11 C9

F9 E4 11 A4 26 66 12 8A A2 15 9F 44 D4

15 A0 44 A4

Unlearning counter according OBD

40

Low fuel pressure, specified value

450.0

kPa

Fuel low pressure, actual value

452.6

kPa

Adaptation of Fuel Pump (FP)

-156.4

kPa

Fuel pump, specified value

14.99999

%

Fuel temperature

73.5

°C

Fuel high pressure, actual value

8.81

MPa

Fuel pressure rail 2

8.786

MPa

Figure 4

11) In the event the value is between minus 100 to 200 kPa - the Fuel Delivery Module within the fuel tank (Figure 5) should be replaced - Refer

to Repair Group 20 Fuel supply, gas operation / 4.0L V8 TSI / Fuel pump, fuel level sensors, and jet pump (RH) - To remove and fit.

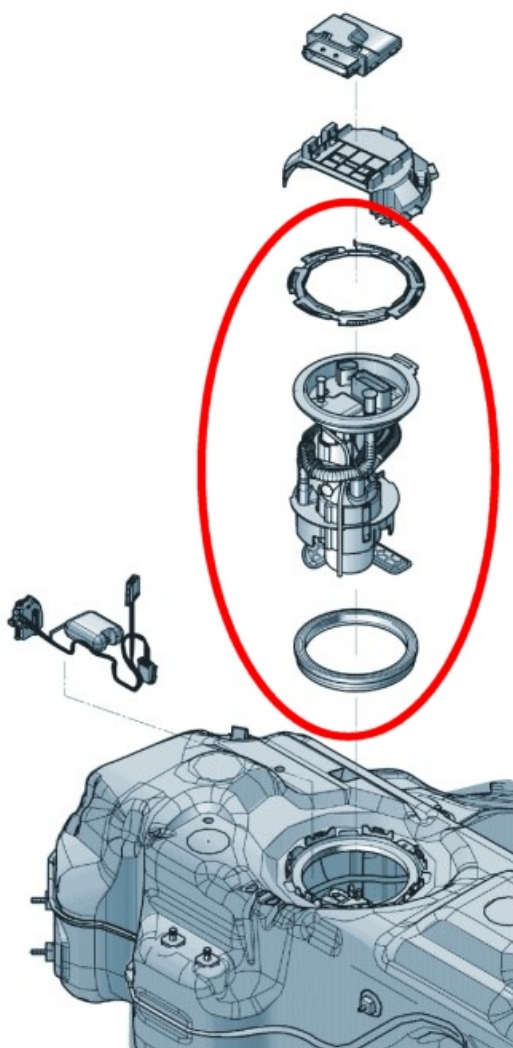


Figure 5

**IMPORTANT:** Once the fuel delivery module has been replaced, the operative should attach a clear of the manufacture information as per the example shown in Figure 6

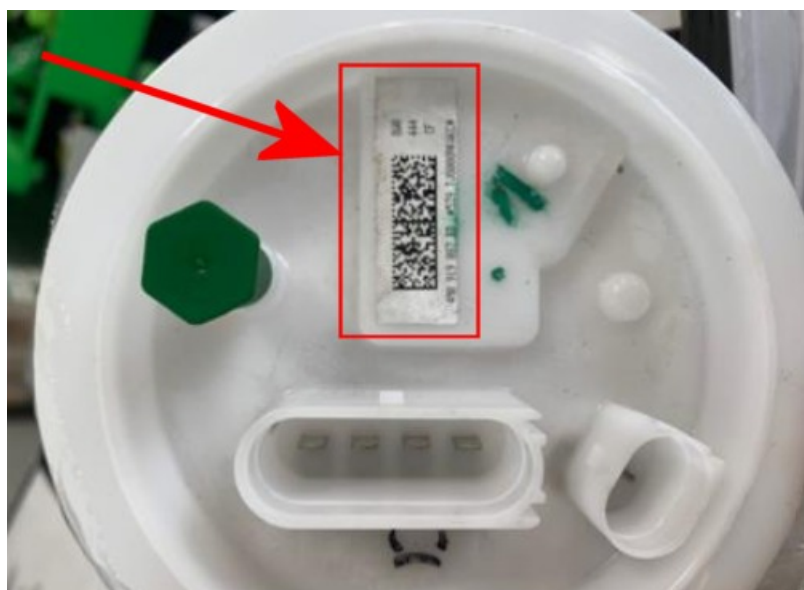


Figure 6

## Warranty

Warranty type - 110 or 910

Damage Service Number 20 66

Damage Code 01 00

**Time to conduct the low pressure fuel system check**

Labour Operation Code 20 03 01 00 (use 99 index until 22/9/22)

Time 50 TU

**Diagnosis time**

Labour Operation Code 01 50 00 00

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

**Time to replace the fuel delivery module**

Labour Operation Code 20 66 19 50

Time 50 TU

**Time to remove and refit the rear seats (4 seat)**

Labour Operation Code 68 16 19 01

Time 190 TU

**Time to remove and refit the rear seats (5 seat)**

Labour Operation Code 72 48 20 05

Time 100 TU

**Time to remove and refit the seat sill panel**

Labour Operation Code 68 05 19 00

Time 20 TU

**Time to remove and refit the boot side trim panel**

Labour Operation Code 70 03 19 00

Time 40 TU

**Required Parts and Tools**

For the latest part information always refer to the Electronic Parts Catalogue – ETKA.