

## Technical product information

<b>Topic</b>	W12 TSI Camshaft Phaser Position Related DTC
<b>Market area</b>	Bentley: worldwide (2WBE),Hongkong-Macau (5HK)
<b>Brand</b>	Bentley
<b>Transaction No.</b>	2051219/1
<b>Level</b>	EH
<b>Status</b>	Approval
<b>Release date</b>	

### New customer code

Object of complaint	Complaint type	Position
information, navigation, communication, entertainment -> symbolic fault indicators -> emission control fault indicator	functionality -> activates	

### New workshop code

Object of complaint	Complaint type	Position
engine -> cylinder head, valve gear -> camshaft actuation valve	functionality -> without function / defect	

## Vehicle data

### Bentayga W12 TSI

#### Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
4V14A9	2017	E	SUV BY636 447/W128AG	DDBB	QTZ	QUS
4V14A9	2017	E	SUV BY636 447/W128AG	DDBB	RGQ	QUS
4V14A9	2017	E	SUV BY636 447/W128AG	DDBB	SHT	QUS
4V14A9	2018	E	SUV BY636 447/W128AG	DDBB	QTZ	QUS
4V14A9	2018	E	SUV BY636 447/W128AG	DDBB	RGQ	QUS
4V14A9	2018	E	SUV BY636 447/W128AG	DDBB	SHT	QUS

## Documents

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

## Customer statement / workshop findings

Customer reporting "Emission Control Warning Indicator" displayed. Engine running rough.

## Technical background

## Production change

## Measure

In the event of the following fault codes, carry out the additional checks listed below prior to undertaking any further work:

### Fault codes:

P001100: A Camshaft Position (Bank1) Timing over-advanced or System Performance

P002400: B Camshaft Position (Bank2) Timing over-advanced or System Performance

P002100: A Camshaft Position (Bank2) Timing over-advanced or System Performance

P000A00: "A" Camshaft Position Slow Response (Bank 1)

P000D00: "B" Camshaft Position Slow Response (Bank 2)

P052A00: Cold Start "A" Camshaft Position Timing Over-Advanced

P054C00: Cold Start "B" Camshaft Position Timing Over-Advanced

### Additional checks

1. Ensure the electrical integrity of all VVT related systems is confirmed including all connections and pins.
2. Following the ELSA-PRO procedure, confirm the engine oil pressure.
  - a. If oil pressure is good then proceed to step 3.
  - b. If the oil pressure is low, the root cause is likely not phaser related and therefore further investigation is required. If necessary please raise a DISS technical query.
3. Replace the engine oil and filter, idle the vehicle for 30mins to get engine hot, clear all DTCs and drive the vehicle to see if the fault can be reproduced;
  - a. If no fault occurs, retest the vehicle from cold. If still no fault occurs, the root cause is likely not phaser related and therefore further investigation is required. If necessary please raise a DISS technical query.
  - b. If the fault reoccurs, proceed to step 4.
4. Replace all four camshaft phasers and camshaft control solenoids.

### To replace the camshaft phasers and camshaft control solenoids.

Remove the engine and transmission. Refer to "Engine – To remove and fit".

Replace the camshaft phasers. Refer to "Camshaft phasing – To remove and fit".

Replace the camshaft control solenoids. Refer to "Camshaft control solenoids (Bank 1 and 2) - To remove and fit".

**Note.** If the procedures are not yet available in Elsapro then please raise a DISS technical query.