

Technical product information

Topic	W12 TSI Camshaft Phaser Position Related DTC
Market area	Bentley: worldwide (2WBE)
Brand	Bentley
Transaction No.	2051219/9
Level	EH
Status	Released for publishing
Release date	09-Nov-2022

New customer code

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

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

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
4V14A9	2017	E		*	*	*
4V14A9	2018	E		*	*	*
4V14A9	2019	E		*	*	*
4V14A9	2020	E		*	*	*
4V14A9	2021	E		*	*	*
4V14A9	2022	E		*	*	*
4V14A9	2023	E		*	*	*
4V14G9	2020	E		*	*	*
4V14G9	2021	E		*	*	*
4V14G9	2022	E		*	*	*
4V14G9	2023	E		*	*	*

New Continental GT/GTC and New Flying Spur W12

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
3S31BB	2018	E		*	*	*
3S31BB	2019	E		*	*	*
3S31BB	2020	E		*	*	*
3S31BB	2021	E		*	*	*
3S31BB	2022	E		*	*	*
3S31BB	2023	E		*	*	*
3S41BB	2019	E		*	*	*
3S41BB	2020	E		*	*	*
3S41BB	2021	E		*	*	*
3S41BB	2022	E		*	*	*
3S41BB	2023	E		*	*	*
3S41EB	2021	E		*	*	*
3S41EB	2022	E		*	*	*
3S41EB	2023	E		*	*	*

ZG21BB	2020	E		*	*	*
ZG21BB	2021	E		*	*	*
ZG21BB	2022	E		*	*	*
ZG21BB	2023	E		*	*	*
ZG26BB	2023	E		*	*	*

Documents

Document name
master.xml

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.