# **Technical product information**

Topic	Lateral valve guide - Diagnosis requirements - W12 engine only			
Market area	et area Bentley: worldwide (2WBE)			
Brand	Bentley			
Transaction No.	2054888/2			
Level	EH			
Status	Approval			
Release date				

#### New customer code

Object of complaint	Complaint type	Position
engine -> engine operation	noise, vibration	
engine -> engine operation	functionality	
engine -> starter, ignition system, preheater system	functionality	
engine -> engine operation -> engine refinement	functionality -> misfire	

## **Vehicle data**

### **Continental Series W12 and Flying Spur W12**

#### Sales types

Туре	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
39*1**	2012	Е		*	*	*
39*1**	2013	Е		*	*	*
39*1**	2014	Е		*	*	*
39*1**	2015	Е		*	*	*
39*1**	2016	Е		*	*	*
39*1**	2017	E		*	*	*
39*1**	2018	Е		*	*	*
4W21**	2014	Е		*	*	*
4W21**	2015	Е		*	*	*
4W21**	2016	E		*	*	*
4W21**	2017	Е		*	*	*
4W21**	2018	Е		*	*	*

### **Documents**



#### Customer statement / workshop findings

Customer reports misfires/check engine warning lamp illuminated within the Drivers Instrument Panel (DIP)

#### Technical background



The Retailer <u>Must</u> ensure that TPI 2051187/- Poor Engine Running Complaints (Misfires) has been conducted, the instructions within the Measure section of this TPI must only be conducted when <u>All</u> other methods of misfire diagnosis have been conducted as detailed within TPI 2051187/-

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You must ensure that all compression and cylinder leak down results are attached in the event that lateral valve guide wear is evident

Hint: Please also refer to the video located on the Bentley Hub reference TPI 2054888/-

#### **Production change**

Not applicable

#### Measure

#### Lateral valve guide diagnosis



The use of safety glasses is recommended for the duration of this procedure



Prior to carrying out the lateral valve guide check, the operative must ensure that the fuel system is fully depressurised as per Rep.Gr 20 Fuel system - To depressurise

The operative must ensure that all safety precautions regarding depressurising the fuel system are strictly adhered to CAUTION: No fuel should be present in any of the fuel lines or hoses

- 1) Remove the applicable cylinder head camshaft cover Refer to Repair manual Rep.Gr 15 **IMPORTANT**: Should only one cover require removal for example Bank 1 it is imperative the electrical connections are disconnected from all of the ignition coils on Bank 2
- A second operative is required to film/record the movement of the valves whilst the engine is being rotated
- The engine should be rotated by the starter motor
- 2) Whilst the engine is being rotated the operative must use a recording device which has a slow motion video function, please refer to the attached video within this TPI which shows an example of what is expected from the video as regards quality and content
- 3) Should lateral valve guide wear be identified the retailer should raise a DISS query

**IMPORTANT:** You must ensure that all compression and cylinder leak down results are attached within the DISS query in the event that lateral valve guide wear is evident. The video showing lateral valve guide wear should also be included/attached to the DISS query