

Technical product information

Topic	W12 TSI - Engine MIL light illuminated with numerous DTC's within 0001 including - P032700 and/or P033200
Market area	Russische Föderation (5RU),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),Korea, (South) E08 Bentley South Korea (6E08),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)
Brand	Bentley
Transaction No.	2065398/1
Level	EH
Status	Approval
Release date	

Event memory entries

Diagnostic address	Event memory entry	Fault type	Fault status
0001 - Engine electronics	P032700: Knock Sensor 1 Circ. Low Input		Intermittent
0001 - Engine electronics	P033200: Knock Sensor 2 Circ. Low Input		Intermittent
0001 - Engine electronics	P033200: Knock Sensor 2 Circ. Low Input		static
0001 - Engine electronics	P032700: Knock Sensor 1 Circ. Low Input		static

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		*	*	*
4V14G9	2020	E		*	*	*
4V14G9	2021	E		*	*	*
4V14G9	2022	E		*	*	*

New Flying Spur W12

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
ZG21BB	2020	E		*	*	*
ZG21BB	2021	E		*	*	*
ZG21BB	2022	E		*	*	*

New Continental GT/GTC 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		*	*	*
3S41BB	2019	E		*	*	*
3S41BB	2020	E		*	*	*
3S41BB	2021	E		*	*	*
3S41BB	2022	E		*	*	*

Documents

Document name
master.xml

Customer statement / workshop findings

Customer statement

- MIL light displayed
- Engine not refined when running

Workshop findings

The two most common DTC's are as follows:

- P032700 - Knock sensor 2 Circuit Low input - address 01 (Engine control module 1)
- P033200 - Knock sensor 1 Circuit Low input - address 01 (Engine control module 1)

Please note: The DTC's listed are the two most common DTC's (seen to date) although other DTC's may be evident depending on the failure mode (including the boost control solenoid and crankcase ventilation heater DTC's)

The symptom/issue can relate to a section of the engine wiring harness which has been damaged due to contact with the Bank 1 cylinder head as shown in Figure 1



Figure 1

- The issue to date has only been evident on Bank 1 - within address 0001 (Engine control module 1)
- NOTE: in the event the DTC's or symptoms relate to Bank 2, please raise a DISS query and await feedback before conducting any further work

Technical background

In the event the symptoms and/or DTC's are evident the operative should refer to the instructions within the Measure section

Production change

Not applicable

Measure

- 1) Referring to Rep.Gr 24 - Remove the right hand (Bank 1) Throttle body -J338-

IMPORTANT: Ensure any exposed engine components (e.g air intake, electrical connections) are suitably protected/bunged to prevent swarf/debris from entering the engine/components

2) Referring to Figure 2 - Remove the harness tape in the location shown, check for any damaged/broken wiring



Figure 2

3) Using the applicable wiring diagram conduct wiring integrity checks to confirm any wiring issues

TIP: Overlaying the suspected damaged wiring can be done to confirm the issue, the overlayed wiring **MUST NOT** be left in place.

4) The example shown in Figure 3 shows an example of damaged wiring - Referring to Rep.Gr 97 to repair the damaged wiring

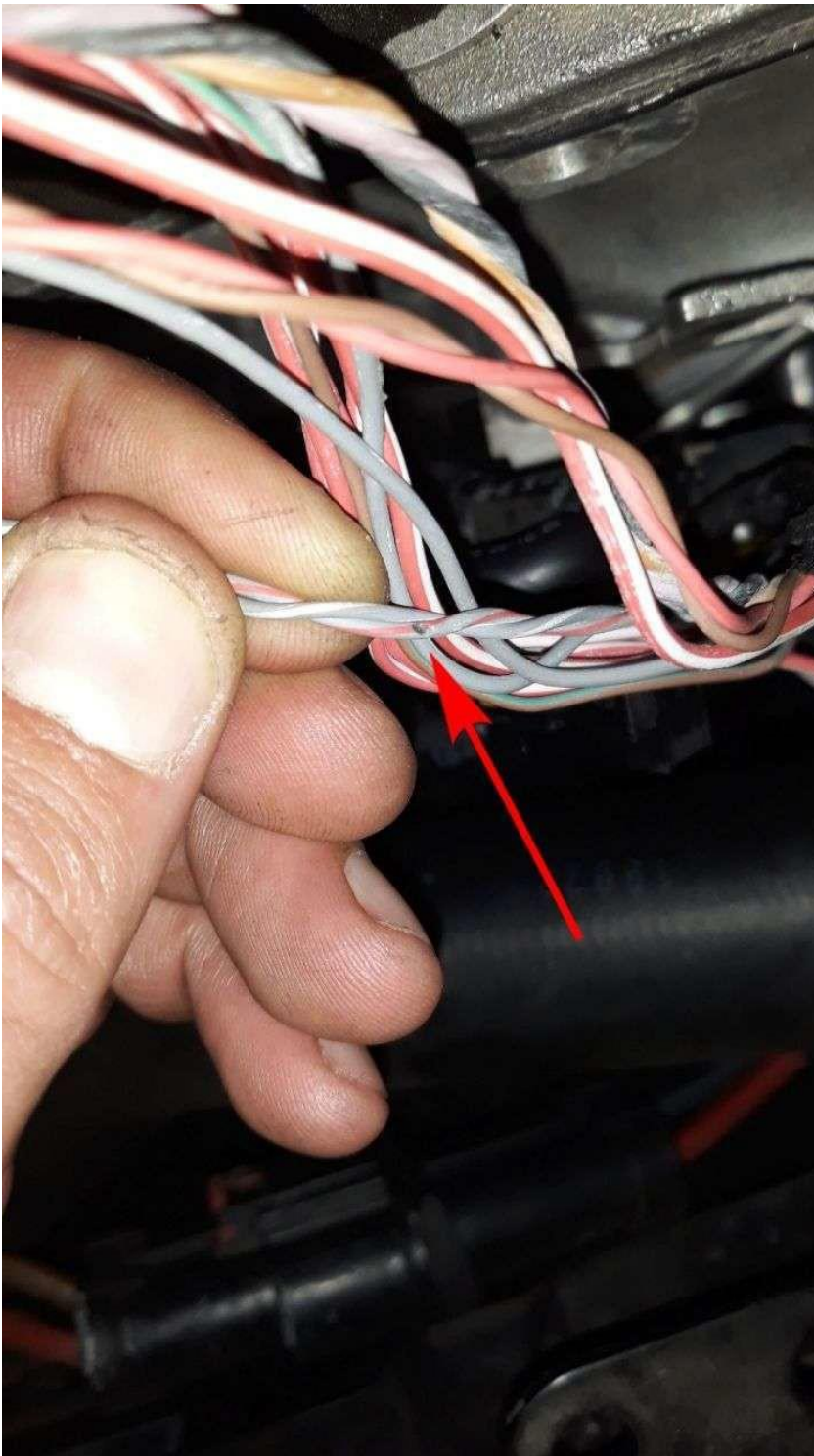


Figure 3

5) Wrap/insulate the repaired harness using suitable harness tape

6) Referring to Figure 4 - Suitably protect the surrounding area and components to eliminate the risk of swarf/debris causing any issues when conducting step 7

7) Using a smooth hand file, gently remove the sharp edge shown in Figure 4 to eliminate any future issues

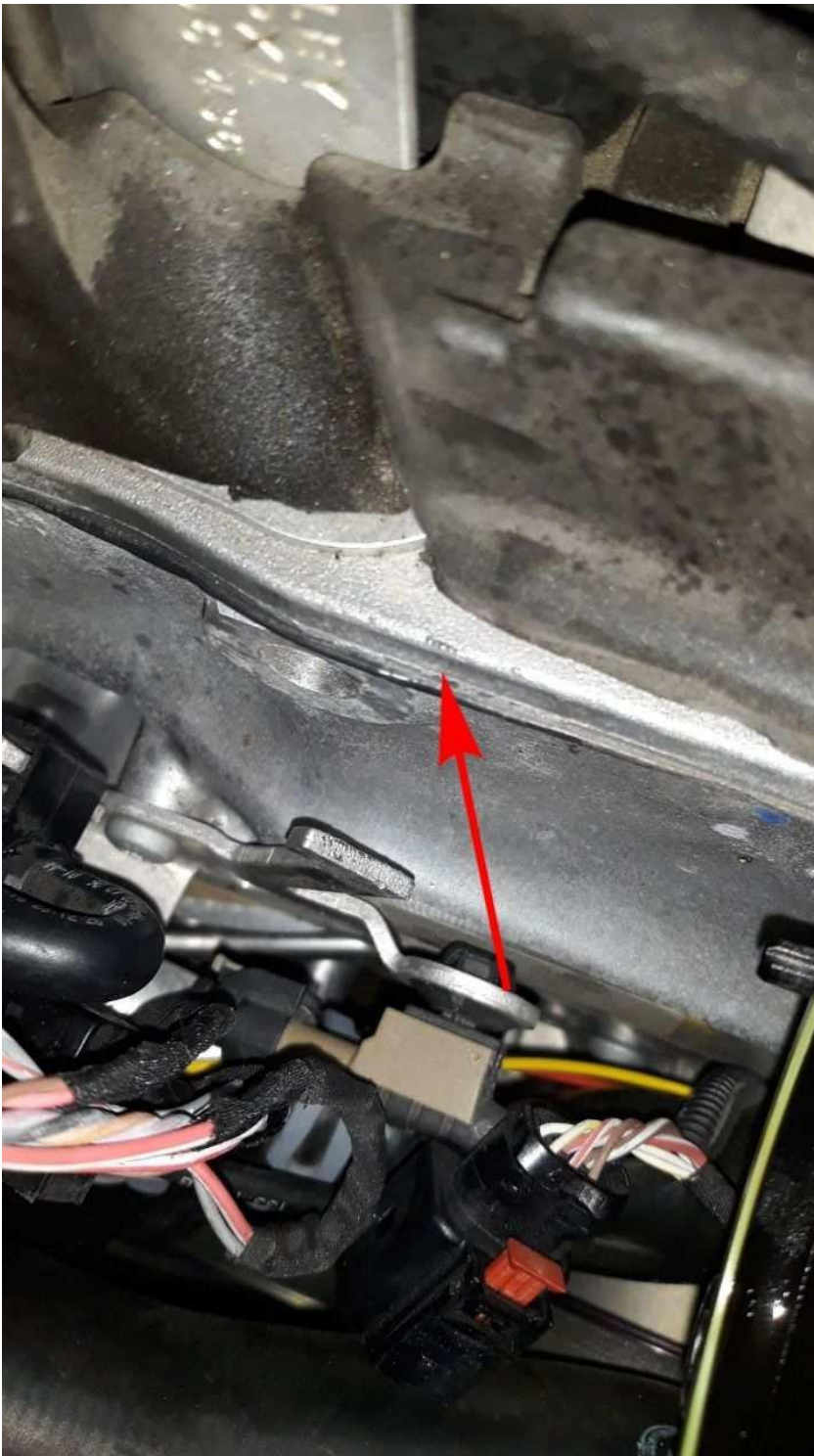


Figure 4

- Remove any previously fitted protection/bungs
- Refit all previously removed parts

8) Erase all applicable DTC's

Warranty accounting instructions

Time to conduct wiring repair(s)

Warranty type 110 or 910

Damage service number 15 70

Damage code 00 10

Labour

Labour operation code 970941** NOTE: The last 2 digits ** and time units depend on number of cables repaired state 'claim as per Elsa for number of cables repaired'

Time to remove and refit the Bank 1 throttle body - New Continental GT/GTC and New Flying Spur

Labour operation code 24 34 19 00

Time 40 TU

Time to remove the sharp edge from Bank 1 cylinder head

Labour operation code 15 70 41 00 (Use 99 index until 17/02/22)

Time 10 TU

Time to remove and refit the Bank 1 throttle body - Bentayga

Labour operation code 24 34 19 00

Time 30 TU

Guided Fault finding

Labour operation code 01 50 00 00

Time As per ODIS log

Wiring checks

Labour operation code 97 09 01 00

Time 30 TU