

Technical product information

Topic	New Continental GT / GTC, New Flying Spur and Bentayga Speed - Low Oil Pressure Warning During Early Vehicle Life
Market area	Bentley: worldwide (2WBE)
Brand	Bentley
Transaction No.	2058423/4
Level	EH
Status	Released for publishing
Release date	29-Oct-2020

New customer code

Object of complaint	Complaint type	Position
information, navigation, communication, entertainment -> symbolic warning indicators -> oil pressure loss warning	functionality -> activates	

New workshop code

Object of complaint	Complaint type	Position
vehicle service -> IT systems -> SVM (software version management)	control units, services -> error message	

Vehicle data

New Continental GT / GTC

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		*	*	*
3S41BB	2019	E		*	*	*
3S41BB	2020	E		*	*	*
3S41BB	2021	E		*	*	*

Bentayga Speed

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
4V14G9	2020	E		*	*	*
4V14G9	2021	E		*	*	*

Flying Spur

Sales types

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

Documents

Document name
master.xml

Customer statement / workshop findings

Warning on the Driver Instrument Panel (DIP) - *Oil pressure too low*

DTC's relating to oil pressure may also be stored within the Master ECU.

Diagnostic Trouble Codes (DTC) "P052400: Engine Oil Pressure Too Low" and/or "P15AA00: Engine oil pressure - Lower limit not reached" stored in the Master Engine Control Unit (ECU)

Technical background

CAUTION: DO NOT CONTINUE WITH THIS DOCUMENT IF THE ENGINE EXHIBITS ANY ABNORMAL MECHANICAL NOISE OR HAS AN ENGINE LUBRICATING OIL LEAK – SEEK FURTHER ADVICE THROUGH A NEW OR EXISTING DISS QUERY

Production change

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Measure

VERY IMPORTANT: Prior to conducting the onward instructions, the following symptoms MUST be evident

- Warning on Driver Instrument Panel (DIP) "*Oil pressure too low*"

And/or

- Diagnostic Trouble Codes (DTC) "P052400: Engine Oil Pressure Too Low" and/or "P15AA00: Engine oil pressure - Lower limit not reached" stored in the Master Engine Control Unit (ECU)

Should any of the aforementioned not be evident and the symptoms cannot be reproduced – No further action should be taken unless the issue can be reproduced or demonstrated by the customer

In the event the symptom/s are evident please conduct the onward Diagnosis Instructions

Diagnosis Instructions

With a confirmed Customer complaint of low oil pressure warning displayed on the DIP and Diagnostic Trouble Codes "P052400: Engine Oil Pressure Too Low" and/or "P15AA00: Engine oil pressure - Lower limit not reached" stored in the Master ECU - Raise a full technical DISS query and proceed with this document, ensuring a detailed customer description regarding the issue is added or included to new or the existing DISS query

Step 1

Is this a repeat visit for the same low oil pressure concern? Yes

– Continue to Step 2

No – Follow ALL remaining instructions to completion

- Using the Bentley approved diagnostic tool take a vehicle Diagnostic log and attach to the DISS query.
- Read and record Measured Values *IDE02756* and *IDE02757* as follows:

NOTE: - Measured Values *IDE02756* – "*Number of manual engine starts*" and *IDE02757* – "*Number of automatic engine starts*" are currently only available for Continental and Flying Spur series vehicles, DO NOT attempt to record Measured Values for Bentayga.

Using the Bentley approved diagnostic tool.

- Select "Start Diagnosis" and follow the on screen prompts.
- Select "Control units" and then "Engine Control Module 1 (01 – Engine Control Module 1)" – Figure 1.

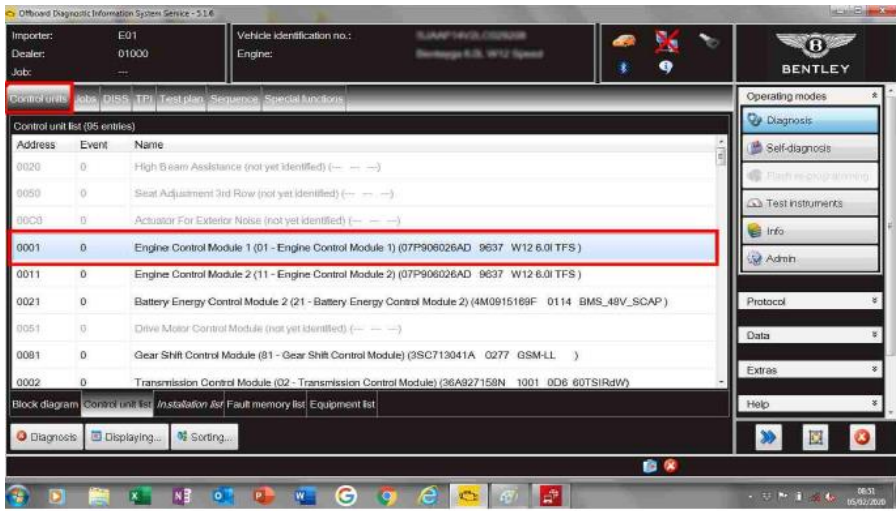


Figure 1

- “Rightclick” on “Engine Control Module 1 (01–Engine Control Module 1)” and select “Guided functions” – Figure2.

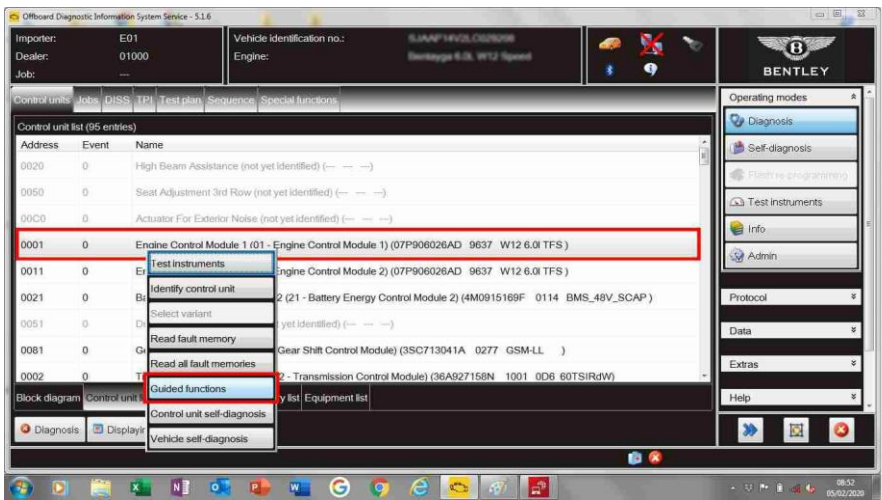


Figure 2.

- Select “Read measured values” and then “Execute” – Figure3.

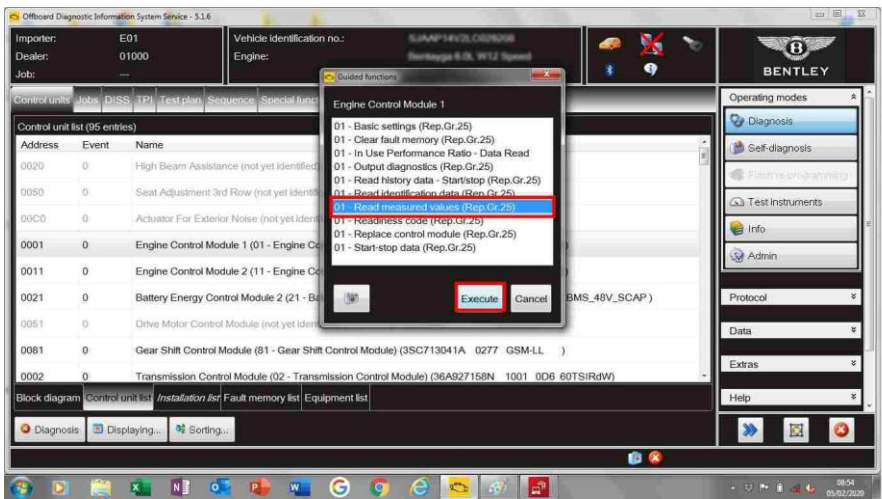


Figure 3

- Select “IDE02756” and “IDE02757” and then “OK” – Figure 4.

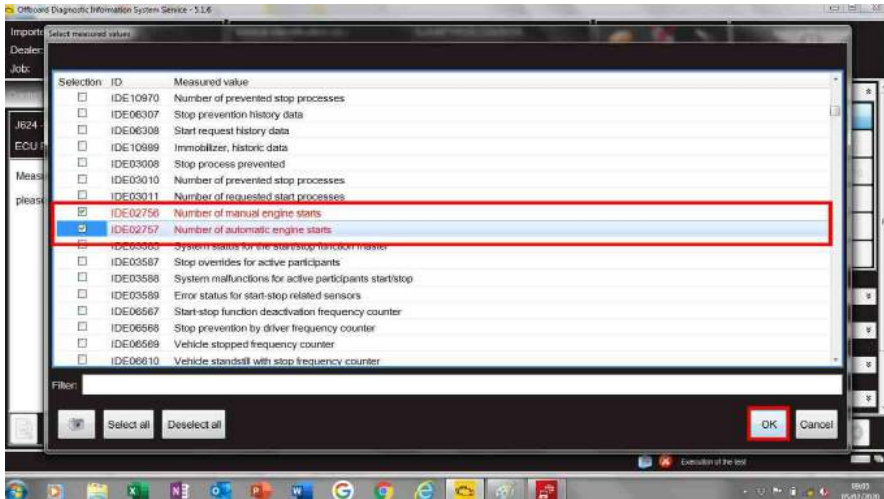


Figure 4

- Note the values of "IDE02756" and "IDE02757" and add this information to the DISS query, select "OK" – Figure 5.

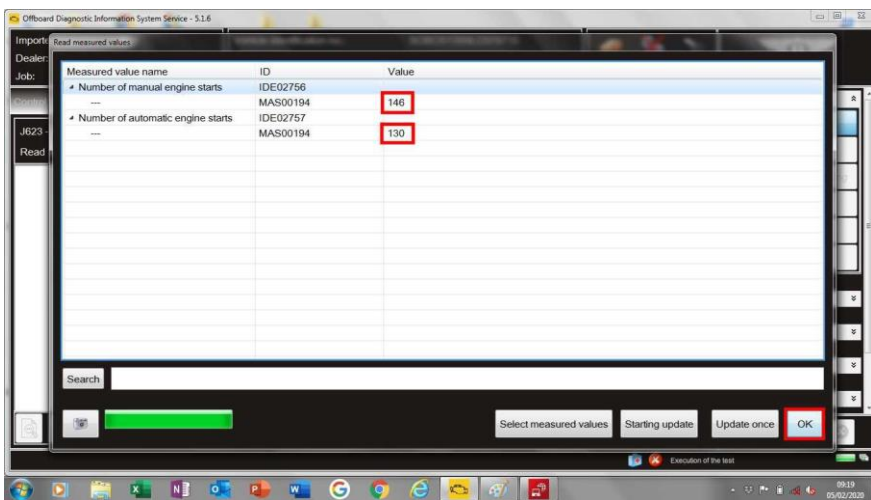


Figure 5

- Select "Done/Continue" and then exit the application – Figure 6.

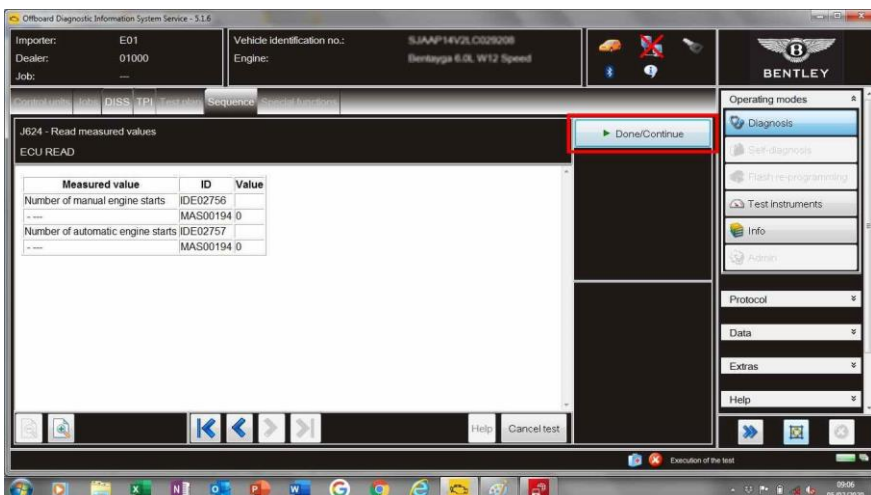


Figure 6.

- Check and confirm the engine lubricating oil level is correct, refer to *Repair Group 17 Engine Lubrication / 6.0L W12 TSI / Engine oil – To check* – add result to the DISS query.
- Measure the actual engine lubricating oil pressure, refer to *Repair Group 17 Engine Lubrication / 6.0L W12 TSI / Engine oil pressure – To check* - add result to the DISS query.

Oil pressure values are:

Engine Speed	Minimum Oil Pressure (bar)	Permissible Tolerance (bar)

600 rpm (idle)	1.3	+/- 0.3
2000 rpm	1.6	+/- 0.3

Note: Always refer to the Electronic Workshop Manual (Elsa-Pro) for current minimum oil pressure values.

Is the oil pressure low?

Yes – Proceed to Step 2

No – Conduct a road test, as follows:

- The road test should be a minimum of 30km (18.6 miles)
- Drive the vehicle until normal Engine coolant operating temperature is achieved of 90°C
- The following procedure will cycle the engine lubricating oil pump from low duty to high duty:-
- Observing local highway rules and regulations, find a safe and suitable location to conduct the following:-
- Place the transmission selector lever into Manual gear mode “M”, proceed to drive the vehicle, use the steering wheel gear selector paddles to select gears, when in second gear gently accelerate from 1500rpm to 4500rpm holding second gear, repeat this procedure fifteen times.
- Using transmission Drive mode “D” and sport mode, observe local highway rules and regulations, accelerate from standstill whilst depressing the accelerator pedal a maximum 25 to 50% of travel - repeat five times. *Do not use 100% accelerator pedal input during this test.*



Caution: For New Continental Series vehicles

- If Sport mode is selected on the drive dynamics control, the Electronic Stability Control (ESC) is switched off, if the driver has selected manual gear mode “M” the transmission will not automatically up shift to the next gear.

Has the issue cleared?

Yes – No further action is required.

No – Proceed to Step 2

Step 2

Refer to *Repair Group 17 Engine Lubrication / 6.0L W12 TSI / Engine oil and filter – To renew.*

- The engine lubricating oil should be drained through a fine gauze filter, once fully drained check the engine oil filter and fine gauze filter for contaminants or particles IMPORTANT – Regardless of findings place the engine oil filter and gauze filter into a clean sealed container and retain for possible analysis IMPORTANT: Take clear photos of any contaminants or particles found
- Remove the Valve for Oil Pressure Control N428 (Refer to Figure 7 for fitting location) - When the valve has been removed carefully examine it and the associated location on the engine for any signs of internal contamination, debris or damage.

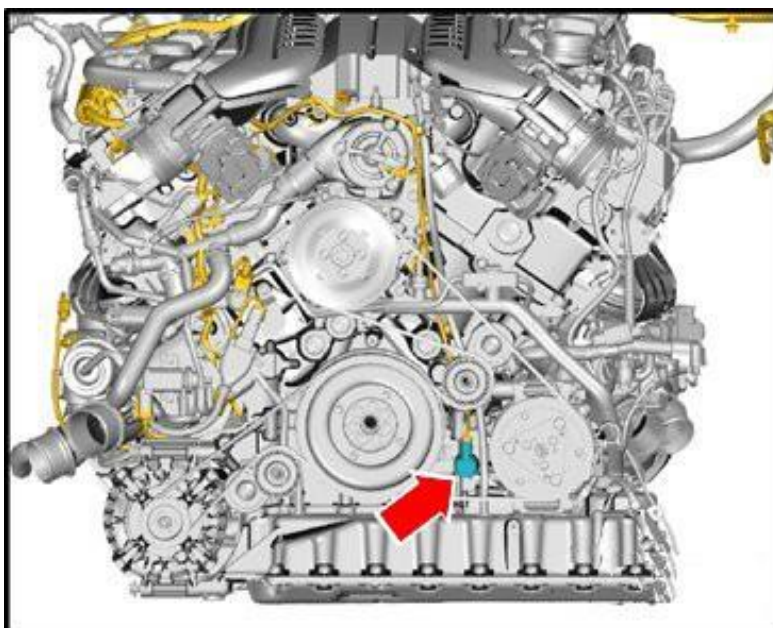


Figure 7

- Should NO contamination, debris or damage be found – Refit N428
- Replace engine lubrication oil and filter - Refer to Repair Group 17 Engine Lubrication / 6.0L W12 TSI / Engine oil and filter – To renew.

Was debris found in the Engine oil – Oil filter or Oil pressure control valve?

Yes - Seek further advice via the DISS query.

No – Carry out a road test as follows:

- The road test should be a minimum of 30km (18.6 miles)
- Drive the vehicle until normal Engine coolant operating temperature is achieved of 90°C.
- The following procedure will cycle the engine lubricating oil pump from low duty to high duty:-
- Observing local highway rules and regulations, find a safe and suitable location to conduct the following:-
- Place the transmission selector lever into Manual gear mode “M”, proceed to drive the vehicle, use the steering wheel gear selector paddles to select gears, when in second gear gently accelerate from 1500rpm to 4500rpm holding second gear, repeat this procedure fifteen times.
- Using transmission Drive mode “D” and sport mode, observe local highway rules and regulations, accelerate from standstill whilst depressing the accelerator pedal a maximum 25 to 50% of travel - repeat five times. *Do not use 100% accelerator pedal input during this test.*



Caution: For Continental Series vehicles

If Sport mode is selected on the drive dynamics control, the Electronic Stability Control (ESC) is switched off, if the driver has selected manual gear mode “M” the transmission will not automatically up shift to the next gear.

Is the Low oil pressure warning resolved?

Yes – No further action required.

No - Seek further advice via the DISS query.

Warranty accounting instructions

Warranty Type - 110 or 910

Damage Service Number - 1719

Damage Code - 0010

Labour Operation Codes - See table

Description	Labour Operation Code	Time
ODIS Diagnostic log	01 50 00 00	Time taken from ODIS log
ODIS Measured values - to read	01 50 00 00	Time taken from ODIS log
Engine Oil level check - 12-cylinder, Petrol engine - Dipstick	17 01 01 01	10TU
Engine Oil level check – Infotainment touch screen	17 01 01 02	10TU
Oil pressure check	17 03 01 50	10 TU
New Continental GT New Continental GTC New Flying Spur Engine Oil and oil filter change - Includes - Strut remove + reinstall	17 01 17 00	140TU
<u>Bentayga</u> Engine Oil and oil filter change - Includes – Noise damping remove and reinstall	17 01 17 00	90 TU
Road test	01 21 00 00	(50 TU)
Oil control valve - To remove and refit • Placing front end module into service position	17 05 19 00 50 38 09 00	(100 TU) (550 TU)

• If required - Claim for calibrating Driver Assist Systems - use the Workshop Manual procedure and labour codes in Elsa/Saga.		
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Parts information

Refer to the Electronic Part Catalogue (ETKA) for current part information.