Connection offline

Technical product information

Topic	Service Info: Engine Control Module (ECM) 5V Reference Circuits
Market area	Bentley: worldwide (2WBE),China 796 VW Import Comp. Ltd (Vico), Beijing (6796)
Brand	Bentley
Transaction No.	2081243/1
Level	EH
Status	Released for publishing
Release date	March 17 2026

Event memory entries

Diagnostic address	Event memory entry	Fault type	Fault status
0001 - Engine electronics	P069700: Sensor Reference Voltage "C" Circuit Open		static
0001 - Engine electronics	P069900: Sensor Reference Voltage "C" CircuitHigh		static
0001 - Engine electronics	P064300: Sensor Reference Voltage "A" Circuit High		static
0001 - Engine electronics	P064100: Sensor Reference Voltage "A" Circuit Open		static
0001 - Engine electronics	P069800: Sensor Reference Voltage "C" Circuit Low		static
0001 - Engine electronics	P065300: Sensor Reference Voltage "B" Circuit High		static
0001 - Engine electronics	P064200: Sensor Reference Voltage "A" Circuit Low		static
0001 - Engine electronics	P065200: Sensor Reference Voltage "B" Circuit Low		static
0001 - Engine electronics	P065100: Sensor Reference Voltage "B" Circuit Open		static

New customer code

Object of complaint	Complaint type	Position
electrical power, electric system, data transfer -> data bus systems -> diagnostic connector	component / consumables -> missing	
vehicle service -> service, maintenance -> general inspection	service: process -> with determination of concern	
vehicle service -> vehicle diagnosis -> vehicle data logger	service: process -> analysis insufficient/missing	

Vehicle data

Bentayga Series - V8 Variants

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
4V14D9	2018	E		DCUA	RWH	QUT
4V14D9	2019	E		DCUA	RWH	QUT
4V14D9	2020	E		DCUA	RWH	QUT
4V14D9	2021	E		DCUA	RWH	QUT
4V14D9	2022	E		DWRA	VNR	WDP
4V14D9	2022	E		DCUA	RWH	QUT
4V14D9	2022	E		DWRA	VNV	WDP
4V14D9	2022	E		DWRA	RWH	QUT
4V14D9	2022	E		DWRA	VNV	QUT
4V14D9	2024	E		DWRA	VNV	WDP
4V14D9	2024	E		DWRA	VNR	WDP
4V14D9	2024	E		DWRA	RWH	QUT
4V14D9	2024	E		DWRA	VNV	QUT
4V14D9	2025	E		DWRA	VNV	QUT
4V14D9	2025	E		DWRA	VNR	WDP
4V14D9	2025	E		DWRA	RWH	QUT
4V14D9	2025	E		DWRA	VNV	WDP
4V14D9	2026	E		DWRA	VNV	WDP
4V14D9	2026	E		DWRA	RWH	QUT
4V14D9	2026	E		DWRA	VNV	QUT
4V14D9	2026	E		DWRA	VNR	WDP
4V15D9	2024	E		DWRA	RWH	QUT
4V15D9	2024	E		DWRA	VNV	QUT
4V15D9	2024	E		DWRA	VNR	WDP
4V15D9	2024	E		DWRA	VNV	WDP
4V15D9	2025	E		DWRA	VNV	WDP
4V15D9	2025	E		DWRA	RWH	QUT
4V15D9	2025	E		DWRA	VNR	WDP
4V15D9	2025	E		DWRA	VNV	QUT
4V15D9	2026	E		DWRA	RWH	QUT
4V15D9	2026	E		DWRA	VNR	WDP
4V15D9	2026	E		DWRA	VNV	QUT
4V15D9	2026	E		DWRA	VNV	WDP

4V15J9	2026	E		DWNA	VQF	WDP
4V15J9	2026	E		DWNA	VQF	QUT
4V15K9	2026	E		DWNG	VQF	WDP
ZV14D9	2024	E		DWRA	VNV	QUT
ZV14D9	2025	E		DWRA	VNR	WDP

Continental GT/GTC - V8 Variants

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
3S32CB	2021	E		CVDA	UUR	TFM
3S32CB	2021	E		CVDA	TUP	TFM
3S32CB	2021	E		CVDA	UPC	TFM
3S32CB	2021	E		CVDA	TPT	RVC
3S32CB	2021	E		CVDA	UUR	WDX
3S32CB	2021	E		CVDA	TUP	RVC
3S32CB	2022	E		CVDA	UUR	WDX
3S32CB	2022	E		CVDA	UPC	TFM
3S32CB	2022	E		CVDA	TPT	RVC
3S32CB	2022	E		CVDA	TUP	TFM
3S32CB	2022	E		CVDA	TUP	RVC
3S32CB	2022	E		CVDA	UUR	TFM
3S32CB	2024	E		CVDA	TUP	TFM
3S32CB	2024	E		DWMA	UUR	WDX
3S32CB	2024	E		CVDA	TUP	RVC
3S32CB	2024	E		CVDA	UUR	TFM
3S32CB	2024	E		CVDA	UUR	WDX
3S32CB	2024	E		CVDA	UPC	TFM
3S32CB	2024	E		DWMA	UUR	TFM
3S32CB	2024	E		CVDA	TPT	RVC
3S34CB	2024	E		CVDA	UUR	WDX
3S34CB	2024	E		CVDA	UPC	TFM
3S34CB	2024	E		DWMA	UUR	TFM
3S34CB	2024	E		CVDA	TPT	RVC
3S34CB	2024	E		CVDA	TUP	RVC
3S34CB	2024	E		DWMA	UUR	WDX

3S34CB	2024	E		CVDA	UUR	TFM
3S34CB	2024	E		CVDA	TUP	TFM
3S42CB	2021	E		CVDA	UUR	TFM
3S42CB	2021	E		CVDA	UUR	WDX
3S42CB	2021	E		CVDA	TUP	RVC
3S42CB	2021	E		CVDA	TPT	RVC
3S42CB	2021	E		CVDA	TUP	TFM
3S42CB	2021	E		CVDA	UPC	TFM
3S42CB	2022	E		CVDA	UUR	WDX
3S42CB	2022	E		CVDA	UPC	TFM
3S42CB	2022	E		CVDA	UUR	TFM
3S42CB	2022	E		CVDA	TUP	TFM
3S42CB	2022	E		CVDA	TUP	RVC
3S42CB	2022	E		CVDA	TPT	RVC
3S42CB	2024	E		CVDA	TUP	TFM
3S42CB	2024	E		CVDA	TUP	RVC
3S42CB	2024	E		DWMA	UUR	TFM
3S42CB	2024	E		DWMA	UUR	WDX
3S42CB	2024	E		CVDA	TPT	RVC
3S42CB	2024	E		CVDA	UPC	TFM
3S42CB	2024	E		CVDA	UUR	WDX
3S42CB	2024	E		CVDA	UUR	TFM
3S44CB	2024	E		CVDA	UPC	TFM
3S44CB	2024	E		CVDA	UUR	WDX
3S44CB	2024	E		CVDA	UUR	TFM
3S44CB	2024	E		CVDA	TUP	TFM
3S44CB	2024	E		CVDA	TUP	RVC
3S44CB	2024	E		DWMA	UUR	WDX
3S44CB	2024	E		DWMA	UUR	TFM
3S44CB	2024	E		CVDA	TPT	RVC

Flying Spur - V8 Variants

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code

ZG22CB	2021	E		CVDA	UPC	TFM
ZG22CB	2021	E		CVDA	UUR	RVH
ZG22CB	2021	E		CVDA	UUR	TFM
ZG22CB	2022	E		CVDA	UUR	TFM
ZG22CB	2024	E		DWMA	UUR	TFM
ZG22CB	2024	E		CVDA	UUR	TFM
ZG24CB	2024	E		DWMA	UUR	TFM
ZG24CB	2024	E		CVDA	UUR	TFM

Documents

Document name
master.xml

Connection offline

Technical product information	Transaction No.: **2081243/1**
Service Info: Engine Control Module (ECM) 5V Reference Circuits	Release date: 13 Mar 2026

Customer statement / workshop findings

This TPI provides supplementary technical information to support diagnosis of ECM 5V reference circuit DTCs. It details the sensors associated with each reference circuit (A, B, and C) and outlines relevant guidance to assist in isolating faults when any of the following DTCs are stored in the Engine Electronics (diagnostic address: 0001)

- Sensor Reference Voltage “A” Circuit – Open / High / Low (P0641, P0643, P0642)
- Sensor Reference Voltage “B” Circuit – Open / High / Low (P0651, P0653, P0652)
- Sensor Reference Voltage “C” Circuit – Open / High / Low (P0697, P0699, P0698)

The information contained within this TPI is intended solely to support improved diagnostic accuracy by identifying which sensors are linked to each 5V reference circuit.

Technical background

The ECM provides regulated 5V reference and ground to multiple engine sensors using three independent circuits (A, B, C). A fault occurring anywhere within a circuit may cause the ECM to detect a concern affecting the entire circuit, rather than isolating the specific sensor involved.

See sensor reference list below including the ECM pin providing 5V (also see wiring diagram in ElsaPro/I-wire for more information).

Circuit A Sensors

- Oil pressure sender – A22
- Low pressure fuel pressure sender – A21
- Charge pressure sender – B1
- Charge pressure sender 2 – B2
- Intake manifold pressure sender – B6
- Intake manifold pressure sender 2 – B7
- Fuel rail pressure sender – B3
- Fuel rail pressure sender 2 – B4

Circuit B Sensors

- Camshaft Hall sender – D1
- Camshaft Hall sender 2 – D3
- Camshaft Hall sender 3 – D2

- Camshaft Hall sender 4 – D4
- OPF Bank 2 pressure sensor – F37
- OPF Bank 2 temperature sensor – F36
- Accelerator pedal module (Sensor 1) – F32

Circuit C Sensors

- Engine speed (crankshaft) sender – C1
- Throttle valve module – C3
- Throttle valve module 2 – C4
- Accelerator pedal module (Sensor 2) – F27
- Charcoal filter pressure sensor – E1
- Charcoal filter pressure sensor 2 – E2
- OPF Bank 1 pressure sensor – E4
- OPF Bank 1 temperature sensor – E8

Production change

Not applicable - This document is provided for diagnostic clarification only

Measure

CAUTION

Disconnect the battery following the Workshop Manual before unplugging ECM connectors. Do not apply external voltage to any 5V reference supply. Avoid backprobing unless using approved breakout leads. Handle OPF sensors and throttle modules with care to prevent damage.

Diagnostic Procedure

1. Review all stored DTCs to assist in identifying the sensor associated with the concern.

2. Determine which 5 V reference circuit (A, B, or C) is implicated based on the stored DTC(s).

Perform a visual inspection of the wiring harness for all sensors on the affected circuit.

Check for: chafing, crushing, heat damage, oil contamination, corrosion, and water ingress.

Inspect all connector pins and terminals for signs of damage or poor contact.

3. Carry out repairs as required, which may include:

Replacement of the affected sensor.

Wiring harness repair in accordance with standard repair procedures.

4. If the concern remains after completing the above checks and repairs, submit a full technical DISS request with all diagnostic findings and supporting information.

Warranty accounting instructions

As this TPI is Service Information Only, no automatic warranty actions are associated.

In the event that any parts are required to be replaced please refer to the warranty accounting instructions with Elsa pro this is due to the numerous vehicle specification and symptom scenarios.