

Technical Service Bulletin

Topic	E-Machine temperature fault DTC P0A2E00 Bentayga and Flying Spur (Hybrid) 20-23MY
Market area	Bentley: worldwide (2WBE),China 796 VW Import Comp. Ltd (Vico), Beijing (6796)
Brand	Bentley
Transaction No.	2077783/1
Level	EH
Status	Released for publishing
Release date	May 22, 2025

Diagnostic trouble codes

Diagnostic address	Diagnostic trouble code	Fault symptom	Storage state
0051 - Electric drive	P0A2E00: Drive Motor "A" Temperature Sensor Circuit Intermittent		static

New customer code

Object of complaint	Complaint type	Position
information, navigation, communication, entertainment -> malfunction display symbols -> fault display for electric motor	functionality -> activates	

Vehicle data

Bentayga PHEV and Flying Spur Hybrid

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
4V14F9	2020	E	SUV PHEV BY636PH330/V6 8AG	DCBE	SAT	RZQ
4V14F9	2020	E	SUV PHEV BY636PH330/V6 8AG	DCBE	UDT	RZQ
4V14F9	2020	E	SUV PHEV BY636PH330/V6 8AG	EALD	VPK	RZQ
4V14F9	2020	E	SUV PHEV BY636PH330/V6 8AG	EALD	VFM	RZQ
4V14F9	2020	E	SUV PHEV BY636PH330/V6 8AG	EALD	UDT	RZQ
4V14F9	2020	E	SUV PHEV BY636PH330/V6 8AG	EALA	VFN	RZQ
4V14F9	2020	E	SUV PHEV BY636PH330/V6 8AG	EALA	UDT	RZQ
4V14F9	2020	E	SUV PHEV BY636PH330/V6 8AG	DCBE	VPK	RZQ
4V14F9	2020	E	SUV PHEV BY636PH330/V6 8AG	DCBE	VFN	RZQ
4V14F9	2020	E	SUV PHEV BY636PH330/V6 8AG	DCBE	VFM	RZQ
4V14F9	2021	E	SUV PHEV BY636PH330/V6 8AG	DCBE	SAT	RZQ
4V14F9	2021	E	SUV PHEV BY636PH330/V6 8AG	EALD	VFM	RZQ
4V14F9	2021	E	SUV PHEV BY636PH330/V6 8AG	EALD	UDT	RZQ
4V14F9	2021	E	SUV PHEV BY636PH330/V6 8AG	EALA	VFN	RZQ
4V14F9	2021	E	SUV PHEV BY636PH330/V6 8AG	EALD	VPK	RZQ
4V14F9	2021	E	SUV PHEV BY636PH330/V6 8AG	DCBE	VPK	RZQ
4V14F9	2021	E	SUV PHEV BY636PH330/V6 8AG	DCBE	VFN	RZQ
4V14F9	2021	E	SUV PHEV BY636PH330/V6 8AG	DCBE	VFM	RZQ
4V14F9	2021	E	SUV PHEV BY636PH330/V6 8AG	DCBE	UDT	RZQ
4V14F9	2021	E	SUV PHEV BY636PH330/V6 8AG	EALA	UDT	RZQ
4V14F9	2022	E	SUV PHEV BY636PH330/V6 8AG	DCBE	SAT	RZQ
4V14F9	2022	E	SUV PHEV BY636PH330/V6 8AG	DCBE	UDT	RZQ
4V14F9	2022	E	SUV PHEV BY636PH330/V6 8AG	EALD	VPK	RZQ
4V14F9	2022	E	SUV PHEV BY636PH330/V6 8AG	EALD	VFM	RZQ
4V14F9	2022	E	SUV PHEV BY636PH330/V6 8AG	EALD	UDT	RZQ
4V14F9	2022	E	SUV PHEV BY636PH330/V6 8AG	EALA	VFN	RZQ
4V14F9	2022	E	SUV PHEV BY636PH330/V6 8AG	EALA	UDT	RZQ
4V14F9	2022	E	SUV PHEV BY636PH330/V6 8AG	DCBE	VPK	RZQ
4V14F9	2022	E	SUV PHEV BY636PH330/V6 8AG	DCBE	VFN	RZQ
4V14F9	2022	E	SUV PHEV BY636PH330/V6 8AG	DCBE	VFM	RZQ
4V14F9	2023	E	SUV PHEV BY636PH340/V6 8AG	EALD	UDT	RZQ
4V14F9	2023	E	SUV PHEV BY636PH340/V6 8AG	DCBE	UDT	RZQ
4V14F9	2023	E	SUV PHEV BY636PH340/V6 8AG	DCBE	VFM	RZQ
4V14F9	2023	E	SUV PHEV BY636PH340/V6 8AG	DCBE	VFN	RZQ

4V14F9	2023	E	SUV PHEV BY636PH340/V6 8AG	EALD	VFM	RZQ
4V14F9	2023	E	SUV PHEV BY636PH340/V6 8AG	EALA	UDT	RZQ
4V14F9	2023	E	SUV PHEV BY636PH340/V6 8AG	EALA	VFN	RZQ
4V14F9	2023	E	SUV PHEV BY636PH340/V6 8AG	DCBE	VPK	RZQ
4V14F9	2023	E	SUV PHEV BY636PH340/V6 8AG	EALD	VPK	RZQ
ZG23GB	2022	E	Saloon (MSB) BY631PH400/V6 8AG	DGPF	UNS	UQQ
ZG23GB	2023	E	Saloon (MSB) BY631PH400/V6 8AG	DGPF	UUR	UQQ
ZG23GB	2023	E	Saloon (MSB) BY631PH400/V6 8AG	DGPF	UUR	UZX
ZG25GB	2023	E	Saloon S BY631PH400/V6 8AG	DGPF	USS	UQQ
ZG25GB	2023	E	Saloon S BY631PH400/V6 8AG	DGPF	USS	UZX

Documents

Document name
master.xml

.....

Condition

MIL and/or HV warning message on DIP. DTC stored in 0051 Power Electronics P0A2E00: Drive Motor "A" Temperature Sensor Circuit.

MIL warning in USA region only, HV warning shown in all other regions.

Technical Background

The fault is associated with temperature jumps in the E-Machine temperature sensor. This occurs as a result of sudden changes in resistance in the crimp of the temperature sensor at high temperatures.

E-Machine temperature sensor part replacement is required to resolve the fault. Replacement of E-Machine is not required.

Refer to the measure section for part replacement procedure.

Production Solution

Vehicles are fitted with new level part number in production.

Service

DANGER

Prior to working on High Voltage vehicles. Always refer to ElsaPro for guided functions and related warnings for De-energising the High Voltage System. The high-voltage system must be de-energised by a suitably qualified person.

1. De-energise the high-voltage system. Refer to ElsaPro, Repair Group 93 – “De-energising high-voltage system” to do so.

2. Remove the electric drive temperature sensor.

Refer to ElsaPro Repair Group 93 – ‘Temperature sensor for front electric drive motor remove+install’ for temperature sensor removal procedure.

NOTICE

For Flying Spur vehicles ONLY - The removal of the engine and automatic transmission assembly is necessary in order to remove the Drive motor temperature sender G712. Refer to ElsaPro Repair Group 10 ‘engine + gearbox remove + install’.

3. Install the new level electric drive temperature sensor.

Use figure 1 to help identify old and new level parts. Pay particular attention to the markings shown.

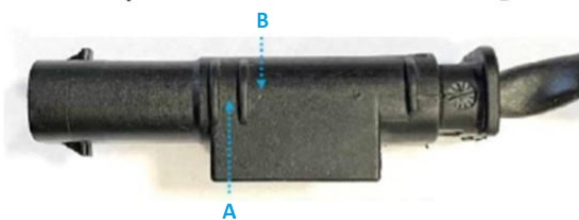


Figure 1

Markings shown by **A** (*indentation between the rib*) = New level parts

Markings shown by **B** (*Indentation to the right of the rib*) = Old level parts

NOTICE

Correct part identification is critical to ensure compatibility and reliable system operation after installation.

Refer to ElsaPro Repair Group 93 – ‘Temperature sensor for front electric drive remove+install’ for temperature sensor install procedure.

4. Re-energise the high-voltage system. Refer to ElsaPro, Repair Group 93 – “Re-energising high-voltage system” to do so.

5. Once the new level temperature sensor is installed and predecessor operations have been followed as per ElsaPro. Take the vehicle on a test to ensure complete operation and no faults.

Warranty

Warranty Type – 110 or 90

Damage Service Number – 93 45

Damage Code – 00 21

Labour

Flying Spur

Time to De-energise the high-voltage system

Labour Operation Code – 93 10 00 00

Time – 30 TU

Time to Remove + Install Engine and Gearbox

Labour Operation Code – 10 85 19 30

Time – 1800 TU

Time to Replace Electric Drive Temperature sensor

Labour Operation Code – 93 45 19 80

Time – 170 TU

Road test

Labour operation code 01 21 00 01

Time – 30 TU

Bentayga

Time to De-energise the high-voltage system

Labour Operation Code – 93 10 00 00

Time – 30 TU

Time to Replace Electric Drive Temperature sensor

Labour Operation Code – 93 45 19 80

Time – 180 TU

Road test

Labour operation code 01 21 00 01

Time – 30 TU

Required Parts and Tools

Bentayga – 0D7 398 002

Flying Spur – 0DS 317 073

Refer to ETKA parts catalogue