

## Technical product information

<b>Topic</b>	Turbo Charger Under-boost - DTC P029900 is evident in 0001   V8 Kovomo   All Models
<b>Market area</b>	Bentley: worldwide (2WBE),China 796 VW Import Comp. Ltd (Vico), Beijing (6796)
<b>Brand</b>	Bentley
<b>Transaction No.</b>	2079115/2
<b>Level</b>	EH
<b>Status</b>	Released for publishing
<b>Release date</b>	March 27 2026

### Event memory entries

Diagnostic address	Event memory entry	Fault type	Fault status
0001 - Engine electronics	P029900: Turbo/Super Charger Underboost		Intermittent
0001 - Engine electronics	P029900: Turbo/Super Charger Underboost		static

### New customer code

Object of complaint	Complaint type	Position
engine -> induction system, charging systems, vacuum systems	leaks	

## Vehicle data

### V8 Kovomo Variants

#### Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
3S3*	2018	E		*	*	*
3S3*	2019	E		*	*	*
3S3*	2020	E		*	*	*
3S3*	2021	E		*	*	*
3S3*	2022	E		*	*	*
3S3*	2023	E		*	*	*
3S3*	2024	E		*	*	*
3S4*	2019	E		*	*	*
3S4*	2020	E		*	*	*
3S4*	2021	E		*	*	*

3S4*	2022	E		*	*	*
3S4*	2023	E		*	*	*
3S4*	2024	E		*	*	*
4V1*	2018	E		*	*	*
4V1*	2019	E		*	*	*
4V1*	2020	E		*	*	*
4V1*	2021	E		*	*	*
4V1*	2022	E		*	*	*
4V1*	2023	E		*	*	*
4V1*	2024	E		*	*	*
4V1*	2025	E		*	*	*
4V1*	2026	E		*	*	*
ZG2*	2020	E		*	*	*
ZG2*	2021	E		*	*	*
ZG2*	2022	E		*	*	*
ZG2*	2023	E		*	*	*
ZG2*	2024	E		*	*	*
ZV1*	2023	E		*	*	*
ZV1*	2024	E		*	*	*
ZV1*	2025	E		*	*	*

## Documents

<b>Document name</b>
<a href="#">master.xml</a>



Connection offline

Transaction No.: **2079115**

## Technical product information

/2

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## Customer statement / workshop findings

### **Customer Statement:**

The engine warning light comes on and the vehicle loses power.

### **Workshop Findings:**

Customer statement can be verified and the following entries may be logged within the engine control unit.

- P029900: Turbo/Super Charger Under-boost, passive/sporadic.

## Technical background

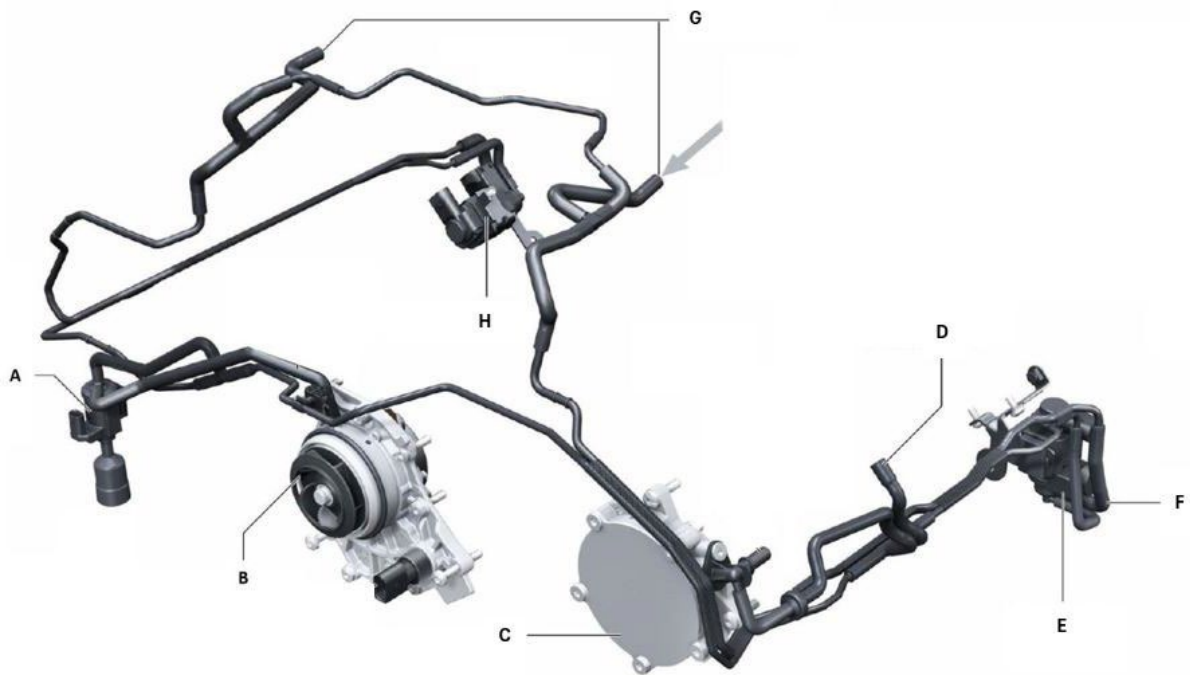
The wastegate actuator relies on vacuum pressure to regulate turbocharger boost. If vacuum is not maintained, the wastegate may remain open, preventing the turbocharger from generating full boost. This can trigger engine protection mode, limiting performance and displaying warnings in the DIP. Refer to the measure section for guided fault-finding steps.

## Production change

Not Applicable

## Measure

**Vacuum System Layout – Use for illustration purposes only**



A) Switch valve for mechanical coolant pump	B) Coolant Pump	C) Vacuum pump	D) Connection for vacuum reservoir
E) Boost pressure control solenoid 1	F) Outlet (Vacuum pressure input)	G) Connection for Vacuum unit/turbo charger	H) Boost pressure control solenoid 2

### Step 1 – Wastegate Vacuum Test

Connect a vacuum hand pump with gauge directly to the wastegate actuator.

- Apply vacuum and monitor whether the actuator maintains pressure steadily.
- If vacuum drops: Suspect a leak in the actuator, replace actuator.

### NOTICE

Provide video evidence via a full technical DISS query that the actuator does not hold vacuum prior to part replacement.

### Step 2 – Boost Pressure Control Solenoid Check

Locate the boost pressure control solenoids.

Inspect the electrical connectors for:

- Corrosion

- Loose pins
- Incorrect positioning

Activate the solenoid using ODIS and listen for the activation click:

- If click is heard: Proceed to Step 3.

 **NOTICE**

**If no clear audible click is detected, record audio or video evidence for DISS and warranty submission, then proceed to Step 3.**

**Step 3 – Inspect the entire vacuum line system for coolant and/or oil contamination and potential blockages**

- If no oil contamination and/or coolant is found continue to step 4.
- If oil contamination is found replace the vacuum pump and relevant vacuum system lines and solenoids.

 **NOTICE**

**If oil confirmation is present, record photographic evidence for DISS and warranty submission prior to part replacement.**

**Step 4 – Coolant Pump Vacuum Integrity Check**

Verify the coolant pump holds vacuum using a vacuum gauge:

- Pull vacuum directly from the pump for a minimum of 5 minutes.
- If it does not hold vacuum, replace the coolant pump and solenoid.

**If coolant is present:**

Replace the affected vacuum lines and the relevant vacuum solenoids.

 **NOTICE**

**Provide video evidence via DISS that if the coolant pump does not hold vacuum prior to part replacement**

**Step 5 – System Reassembly and Road Test**

- Reassemble all components.
- Clear Diagnostic Trouble Codes (DTCs) using ODIS.
- Conduct a road test under load conditions.
- Monitor boost pressure during the test.

- Check for any recurrence of fault codes or warning messages on the Driver Information Panel.
- If the fault reoccurs, include evidence of all checks completed on new or existing DISS query.
- Confirm that full boost is achieved and engine performance is fully restored.

## Warranty accounting instructions

Warranty type - 110 or 910

Damage service number - 21 65

Damage code - 00 55

### **Diagnosis Time**

Labour operation code - 21 65 01 95 (*Live on 26.02.2026, use 21 65 01 99 prior to this date*)

Time Must not exceed - 120 TU

### **Road Test**

Labour operation code - 01 21 00 01

Time - 30 TU



**If any parts need to be replaced, refer to the warranty accounting instructions in ElsaPro. This is required due to the wide range of vehicle specifications and symptom scenarios.**



### **NOTICE**

**All claims will be checked by the Warranty team, any claims which are not deemed as applicable will be cancelled. In the event that parts are replaced parts without the required attachments or the parts are found to be not at fault warranty claims will be liable for rejection**

## Parts information

Refer to ETKA parts catalogue