

Technical product information

| | |
|------------------------|---|
| Topic | Engine overheating - Warning on the DIP - V8 Kovomo |
| Market area | Bentley: worldwide (2WBE) |
| Brand | Bentley |
| Transaction No. | 2061369/1 |
| Level | EH |
| Status | Approval |
| Release date | |

New customer code

| Object of complaint | Complaint type | Position |
|--|------------------------------|----------|
| engine -> cooling, lubrication -> engine coolant temperature control | functionality -> faulty | |
| engine -> cooling system | functionality | |
| engine -> cooling system -> engine cooling fan | noise, vibration -> too loud | |
| lighting system, signalling -> sound signals -> "coolant level" acoustic warning | functionality -> activates | |

Vehicle data

Bentayga - New Continental GT/C and New Flying Spur

Sales types

| Type | MY | Brand | Designation | Engine code | Gearbox code | Final drive code |
|--------|------|-------|-------------|-------------|--------------|------------------|
| 3S32CB | 2020 | E | | * | * | * |
| 3S32CB | 2021 | E | | * | * | * |
| 3S42CB | 2020 | E | | * | * | * |
| 3S42CB | 2021 | E | | * | * | * |
| 4V14D9 | 2018 | E | | * | * | * |
| 4V14D9 | 2019 | E | | * | * | * |
| 4V14D9 | 2020 | E | | * | * | * |
| 4V14D9 | 2021 | E | | * | * | * |
| ZG22CB | 2021 | E | | * | * | * |

Documents

| Document name |
|----------------------------|
| master.xml |

Customer statement / workshop findings

- Customer reports an engine overheat warning on the DIP
- Engine overheats
- Unusual cooling fan operation at high temperatures
- There are no signs of coolant leaks both internally or externally

Technical background

To heat the engine as quickly as possible during cold starting, delivery of coolant by the coolant pump is interrupted in the warm-up phase by the solenoid for the mechanical coolant pump

For illustration purposes only:

Figure 1 Shows the Bentayga Solenoid (Arrow)

Figure 2 Shows the New Continental GT/ GTC and Flying Spur solenoid (Arrow)

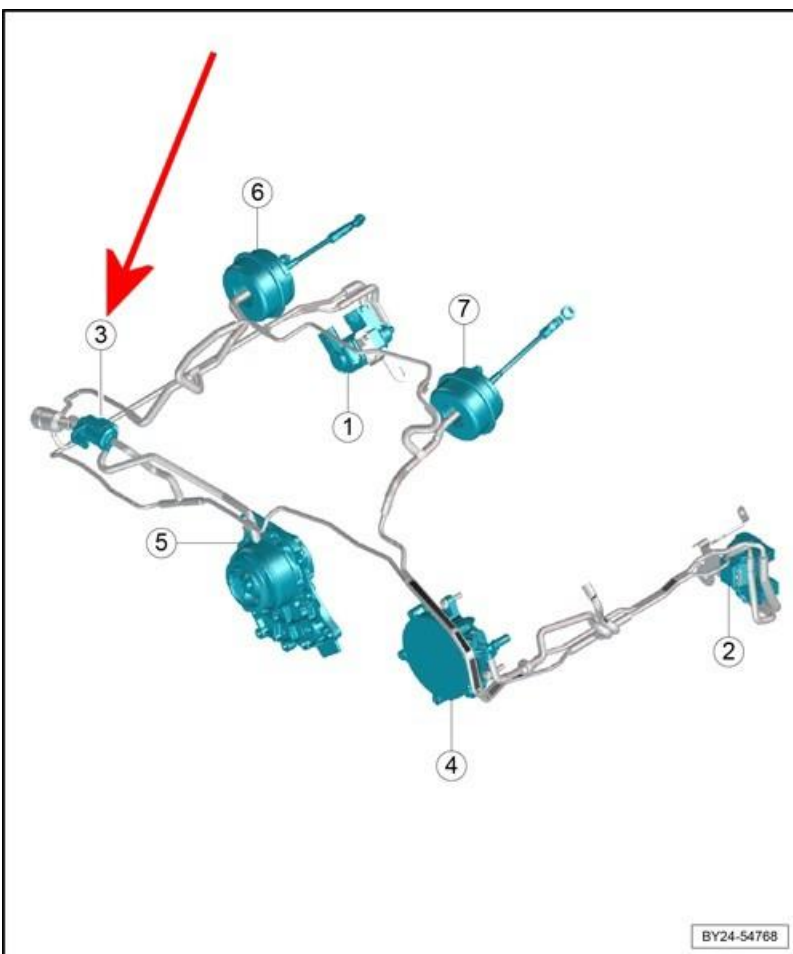


Figure 1

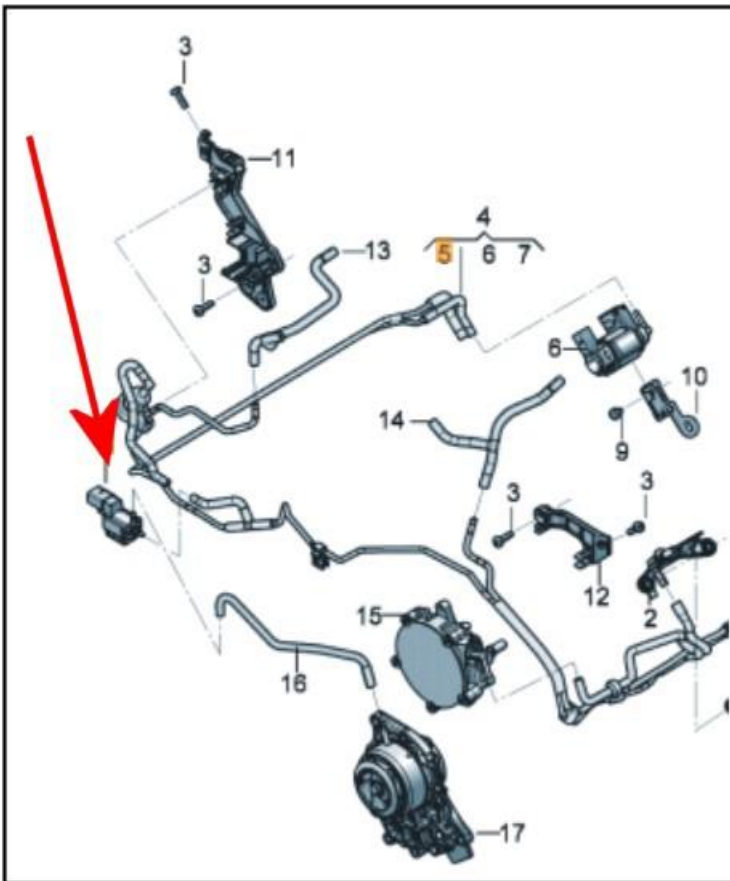


Figure 2

The solenoid is designed to cut off the vacuum supply to the coolant pump when the engine reaches the maximum temperature, the vacuum cut off allows the engine to start circulating coolant by retracting a sleeve which is situated around the coolant pump impeller.

When the solenoid is at fault (sticking open) the vacuum supply is constant, this allows the sleeve to stay in position around the impeller which leads to the symptoms described within the Customer statement/Workshop findings section of this TPI

Production change

Not applicable

Measure

1) Check and confirm the solenoid valve is sticking open and supplying a constant vacuum

TIP: Use a Mityvac or similar vacuum tool to check and confirm there are no vacuum related issues/leaks present within the system

Should the symptom be as described and there is no issues with the vacuum system other than a constant vacuum being supplied to the coolant pump the solenoid is at fault and must be replaced

The operative must raise a DISS query ensuring all information is attached to the DISS query including an up to date ODIS log

Do Not conduct any further work until advised by Product Support via the open DISS query