

Technical product information

Topic	Engine Cooling System over cooling - DTC P218100 - V8 Kovomo
Market area	Bentley: worldwide (2WBE)
Brand	Bentley
Transaction No.	2060205/6
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, lubrication -> engine coolant temperature control	functionality -> too slow	
engine -> cooling, lubrication	functionality	
engine -> cooling system	functionality	

New workshop code

Object of complaint	Complaint type	Position
engine -> operation, engine control -> engine control unit	control units, services -> with event log entry	

Vehicle data

Bentayga Series

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
4V14D9	2018	E		*	*	*
4V14D9	2019	E		*	*	*
4V14D9	2020	E		*	*	*
4V14D9	2021	E		*	*	*
4V14D9	2022	E		*	*	*
4V14D9	2023	E		*	*	*
ZV14D9	2023	E		*	*	*

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		*	*	*
3S32CB	2022	E		*	*	*
3S32CB	2023	E		*	*	*
3S34CB	2023	E		*	*	*
3S42CB	2020	E		*	*	*
3S42CB	2021	E		*	*	*
3S42CB	2022	E		*	*	*
3S42CB	2023	E		*	*	*
3S44CB	2023	E		*	*	*
ZG22CB	2020	E		*	*	*
ZG22CB	2021	E		*	*	*
ZG22CB	2022	E		*	*	*
ZG22CB	2023	E		*	*	*
ZG24CB	2023	E		*	*	*

Documents

Document name
master.xml

Customer statement / workshop findings

Customer statement

- Emission Control Lamp illuminated on the Driver Instrument Panel (Figure 1)
- The time to reach the correct engine coolant operating temperature has increased.



Figure 1

Workshop findings

- Diagnostic Trouble Code (DTC) '**P218100 - Cooling System Performance**' is stored in the Engine Control Module (ECM), the vehicle "warm up" time is longer when compared to other vehicles of the same type.

Technical background

It is possible for the engine coolant Thermostat to corrode over time, this corrosion is due to an adverse reaction of the Thermostat material with the engine coolant.

The corrosion and subsequent build-up of debris prevents the correct operation of the thermostat when closing, resulting in over cooling. The ECM triggers a DTC when the target engine temperature is outside of the specified parameter.



IMPORTANT NOTE: The instructions within the Measure section must only be followed if DTC **P218100 - Cooling System Performance** is stored within the ECM.

Production change

Under investigation.

Measure

1) With a confirmed customer complaint of MIL activation, accompanied with DTC '**P218100, Cooling System Performance**' proceed to replace the engine coolant thermostat (Figure 2) - Refer to **19 - Engine cooling - Coolant regulator (Thermostat insert) (V8 biturbo) - To remove and fit.**



TIP: Within the quoted Rep.Gr procedures there are single use items which must be replaced and not reused. Ensure that new replacements are available prior to starting this procedure



IMPORTANT: Ensure all procedures within the Repair manual are followed including full wheel alignment and calibrations

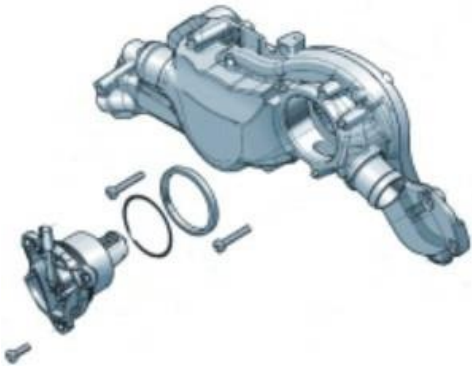


Figure 2

2) On completion conduct a road test to confirm the issue is resolved

Warranty accounting instructions

Warranty type 110 or 910
 Damage service number 19 58
 Damage code 00 10

Benatayga - Up to and including 20 M/Y

Time to replace the Coolant regulator (Thermostat)

Labour operation code 19 58 19 50
 Time 10 TU

Time to position the front end module into service position

Labour operation code 50 38 09 20
 Time 550 TU's

Bentayga - 21 M/Y onwards

Time to replace the Coolant regulator (Thermostat)

Labour operation code 19 58 19 50
 Time 10 TU

Time to position the front end module into service position

Labour operation code 50 38 09 20
 Time 630 TU's



IMPORTANT: Ensure all procedures within the Repair manual are followed including full wheel alignment and calibrations

Time to replace the Coolant regulator (Thermostat) depending on model

New Continental GT/C

Labour operation code 19 58 19 00
 Time - 190 TU's

New Flying Spur

Labour operation code 19 58 19 00
 Time - 140 TU's

Road test

Labour operation code 01 21 00 00
 Time 50 TU

Parts information

Refer to the electronic parts catalogue (ETKA).