

Technical product information

Topic	Engine coolant - Overheat condition - Warning evident within the DIP - DTC's P2B6500 and P2B8600 are evident
Market area	Australia E04 Bentley rest Asia and Australia (6E04),China 723 Volkswagen (Anhui) Automotive CO (6723),China 796 VW Import Comp. Ltd (Vico), Beijing (6796),Germany E02 Bentley rest Europe (6E02),Japan E03 Bentley Japan (6E03),Korea, (South) E08 Bentley South Korea (6E08),United Arab Emirates E06 Bentley Middle East and Africa (6E06),United Kingdom E01 Bentley UK (6E01),United States E05 Bentley USA and rest America (6E05)
Brand	Bentley
Transaction No.	2066669/3
Level	EH
Status	Released for publishing
Release date	28-Sep-2023

Event memory entries

Diagnostic address	Event memory entry	Fault type	Fault status
0001 - Engine electronics	P2B6500: Coolant Pump "B" Air in System		static
0001 - Engine electronics	P2B8600: Coolant Pump "A" Overspeed/Air in System		static
0011 - Engine Electronics 2	P2B6500: Coolant Pump "B" Air in System		static
0011 - Engine Electronics 2	P2B8600: Coolant Pump "A" Overspeed/Air in System		static

New customer code

Object of complaint	Complaint type	Position
engine -> cooling, lubrication	functionality	
engine -> cooling system	functionality	
engine -> cooling system -> coolant expansion tank	leaks -> coolant leak	

Vehicle data

W12 - New Continental GT/GTC & New Flying Spur

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
3S31BB	2018	E		*	*	*
3S31BB	2019	E		*	*	*
3S31BB	2020	E		*	*	*
3S31BB	2021	E		*	*	*
3S31BB	2022	E		*	*	*
3S31BB	2023	E		*	*	*
3S31BB	2024	E		*	*	*
3S31EB	2020	E		*	*	*
3S31EB	2021	E		*	*	*
3S31EB	2022	E		*	*	*
3S31EB	2023	E		*	*	*
3S31EB	2024	E		*	*	*
3S41BB	2019	E		*	*	*
3S41BB	2020	E		*	*	*
3S41BB	2021	E		*	*	*
3S41BB	2022	E		*	*	*
3S41BB	2023	E		*	*	*
3S41BB	2024	E		*	*	*
3S41EB	2020	E		*	*	*
3S41EB	2021	E		*	*	*
3S41EB	2022	E		*	*	*
3S41EB	2023	E		*	*	*
3S41EB	2024	E		*	*	*

ZG21BB	2020	E		*	*	*
ZG21BB	2021	E		*	*	*
ZG21BB	2022	E		*	*	*
ZG21BB	2023	E		*	*	*
ZG21BB	2024	E		*	*	*
ZG26BB	2023	E		*	*	*
ZG26BB	2024	E		*	*	*

Documents

Document name
master.xml



Customer statement / workshop findings

Customer statement

- Engine cooling system overheating

And/or

- Coolant loss

And/or

- Warning light in Drivers Information Panel (DIP) as Figure 1

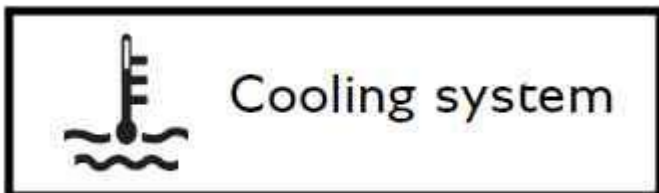


Figure 1

Workshop findings

The following DTC's may also be evident within 0001 and/or 0011

- P2B6500 and/or P2B8600

Technical background




NOTE: Should the symptoms or a combination of the symptoms mentioned within the Customer statement/workshop findings section be evident, the operative should consider the instructions within Measure section of this TPI

Production change

-

Measure

 **CAUTION:** The operative must ensure the engine has cooled sufficiently before carrying out this procedure



CAUTION: The operative must wear eye protection for the duration of this procedure



It is imperative the instructions are strictly followed, the steps must be conducted to ensure the coolant system is to specification before conducting any repair work or replacement of parts

1) Referring to Rep.Gr 19 - Conduct a coolant system pressure test **NOTE: Depending on the amount of coolant which has been lost the coolant system may have to be filled and the coolant bleed process conducted before carrying out the pressure test**

Were any issues found after conducting step 1 (Coolant pressure test)?

No - Conduct step 2

Yes - Raise a DISS query ensuring all applicable information is attached to the DISS query for example: Current ODIS log, photographs/videos, clears symptom description **NOTE:** The operative must wait for a reply from Product Support before conducting any further work

2) Referring to Figure 2 - Locate the vent hose shown (975 122 447H)

POS	PART NUMBER	DESCRIPTION	REMARK	QTY	MODEL
6	975 122 447 H	Vent hose		1	
7	36A 131 159	Support bracket	D=7,7	1	
8	N 906 867 01	Spring band clamp	14X12	1	
9		Coolant regulator housing with thermostat see illustration, item: 121-000,1			
10	971 819 334 F	Heating hose		1	
11		Spring band clamp	25X12 for this use: 99951265609	1	
12	971 815 555 A	Heating hose		1	
13		Spring band clamp	25X12 for this use: 99951265609	1	
14	971 819 259 A	Bracket for coolant pipe		1	
15	971 907 624 A	Solenoid valve		1	

Figure 2

- The vent hose has an internal check valve, the valve is positioned within the vent hose at the location shown in Figure 3 (Circled)



Figure 3

- Referring to Figure 4 - The coolant flows in the direction shown (Arrows) in the event the internal check valve is faulty the flow of the coolant will be restricted (***Causing the symptoms described within the customer findings/workshop findings section***)



Figure 4

3) The operation/condition of the check valve can be confirmed as follows:

- Referring to Figure 5 - Disconnect the vent hose from the Thermostat housing

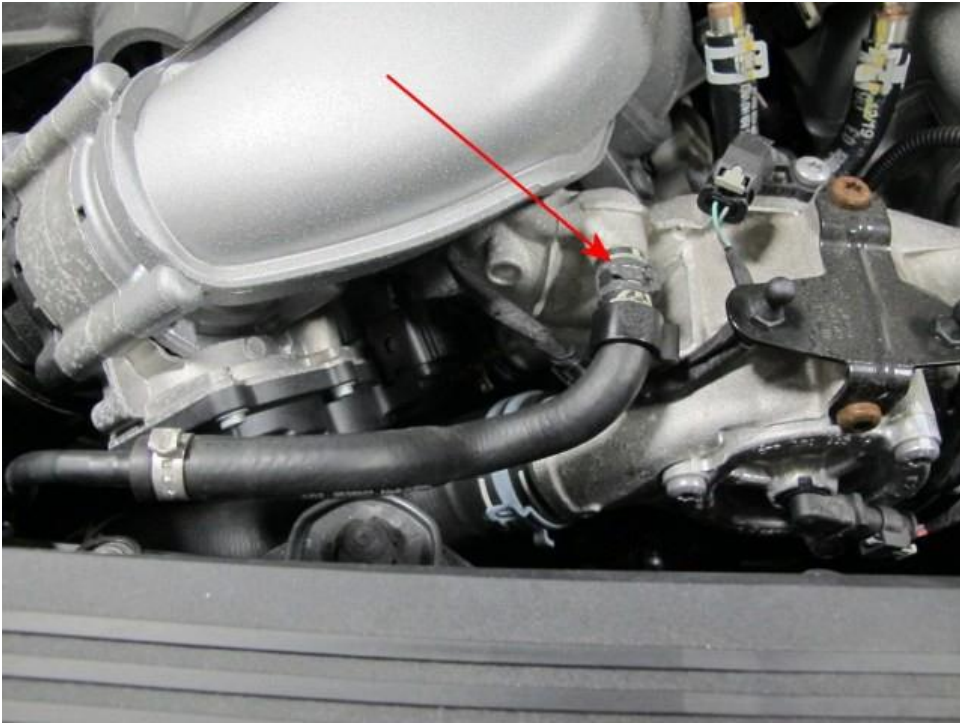


Figure 5

- Referring to Figure 6 - To minimise coolant loss, temporarily fit a blanking plug over the stub pipe

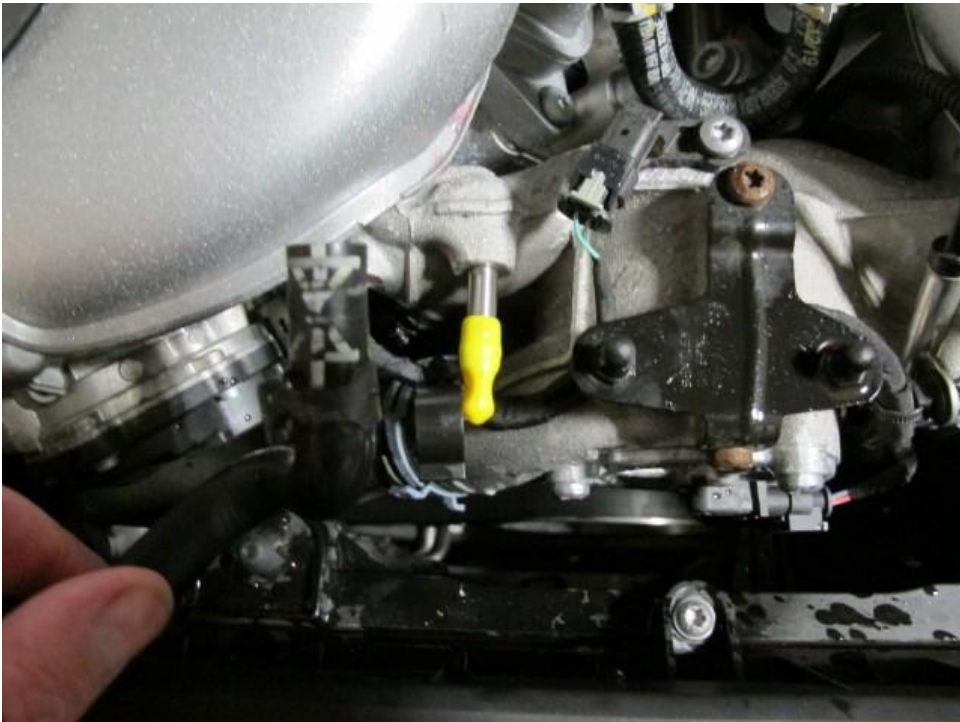


Figure 6

4) Referring to Figure 7 - Remove the coolant reservoir cap (Point A)

- Open the service clip on the bleeder valve (Point B)

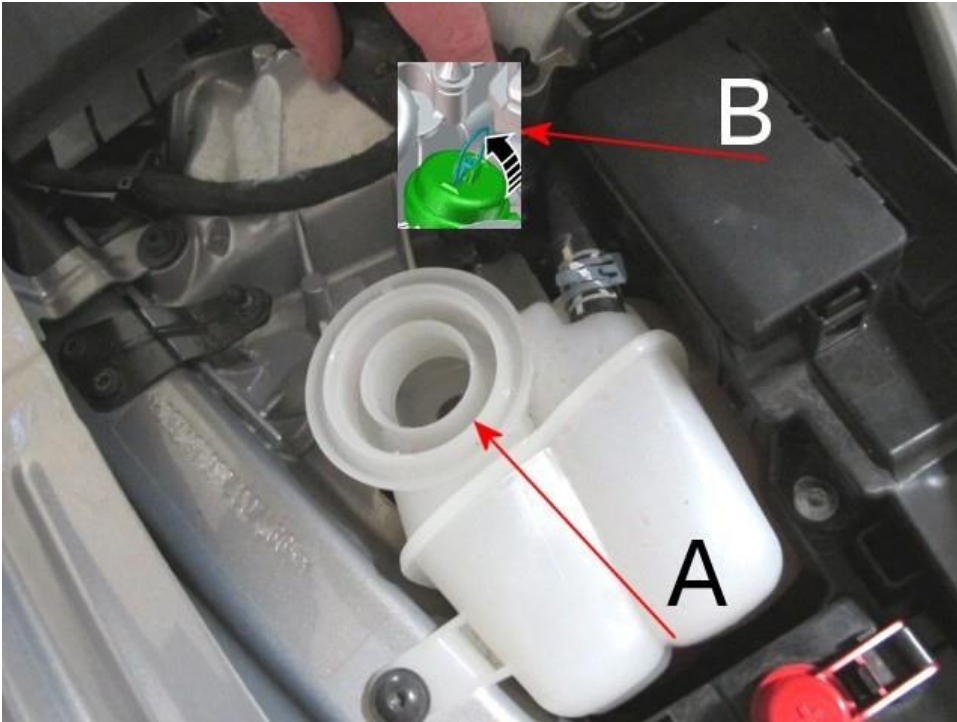


Figure 7

5) Referring to Figure 8 - Apply light air pressure into hose (Arrow)



Figure 8

Does the air flow through the vent line without any restrictions?

No - Go to step 4

Yes - Raise a DISS query and await feedback before conducting any further work

4) Replace the vent line

- Once the vent line has been replaced - Referring to Rep.Gr 19 - Bleed the coolant system
- Erase all applicable DTC's
- Conduct a road test - On return check to confirm that no coolant related DTC's are evident

Warranty accounting instructions

Warranty Type 110 or 910

Damage Service Number 19 44

Damage Code 00 10

Time to pressure test the coolant system

Labour Operation Code 19 01 01 00

Time 10 TU

Time to replace the vent hose

Labour Operation Code 19 62 19 07

Time 40 TU

Time to top up and bleed the coolant system

Labour Operation Code 01 50 00 00

Time As per DIS log (Must not exceed 50 TU)

Road test

Labour Operation Code 01 21 00 00

Time 50 TU

Parts information

Description	Part Number	Quantity
Vent hose	975 122 447H	1
Springband clamp (Thermostat housing)	Refer to ETKA	1