

Technical product information

Topic	Knock/clunk noise from the rear of the vehicle (Rear axle)
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.	2064477/5
Level	EH
Status	Released for publishing
Release date	03-Oct-2023

New customer code

Object of complaint	Complaint type	Position
power transmission -> operation, shift and power flow control	noise, vibration	
running gear -> running gear, springs, shock absorbers -> axle housing (subframe)	visual appeal / surface -> corrosion	rear
power transmission -> power distribution, power flow -> power flow -> axle drive power flow	functionality -> without function / defect	rear
power transmission -> power distribution, power flow	functionality	

Vehicle data

New Flying Spur

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
ZG2*	2020	E		*	*	*
ZG2*	2021	E		*	*	*
ZG2*	2022	E		*	*	*
ZG2*	2023	E		*	*	*
ZG2*	2024	E		*	*	*

New Continental GT

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		*	*	*

New Continental GTC

Sales types

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

Documents

Document name
master.xml

Customer statement / workshop findings

Knock/clunking noise heard from the rear of the vehicle when changing direction at low speed

Technical background

Ensure the fault is as described within the Customer statement

Refer to the videos on the Bentley Hub referencing TPI 2064477/-

In the event the knock/clunk is as shown within the videos the instructions within the Measure section should be followed noting the following:



Video number 4 for TPI 2064477/- (on the Bentley Hub) specifically relates to the symptom described within step 3 of the Measure section (Heatshield in contact with the rear differential)

Production change

Not applicable

Measure

1) Raise a new DISS query or respond on a previously open query ensuring the following detail is attached:

- Vehicle speed when the issue is evident
- With or without steering wheel input/movement?
- Ambient conditions when the issue is evident
- Engine coolant temperature
- Referring to the vehicle repair history, Are there any previously reported disassembly and/or issues regarding the rear axle area?
- Confirm the vehicle has no non-factory spec items fitted (such as aftermarket wheel assemblies, bodykits, exhausts etc.)
- Carry out a comparison check with a vehicle of the same specification, Does the comparison car have the same symptom/noise?

2) Conduct a visual inspection of the rear sub frame checking for the following:

- Damage
- Leaks
- Signs of impact and/or out of specification assembly

3) Referring to Figures 1 and 2

- Check to confirm the heat shields are not in contact or have witness marks showing evidence of contact with the rear differential and/or surrounding components



NOTE: In the event the issue shown regarding the heatshield is evident, the operative should rectify (relocate the heatshield) and retest

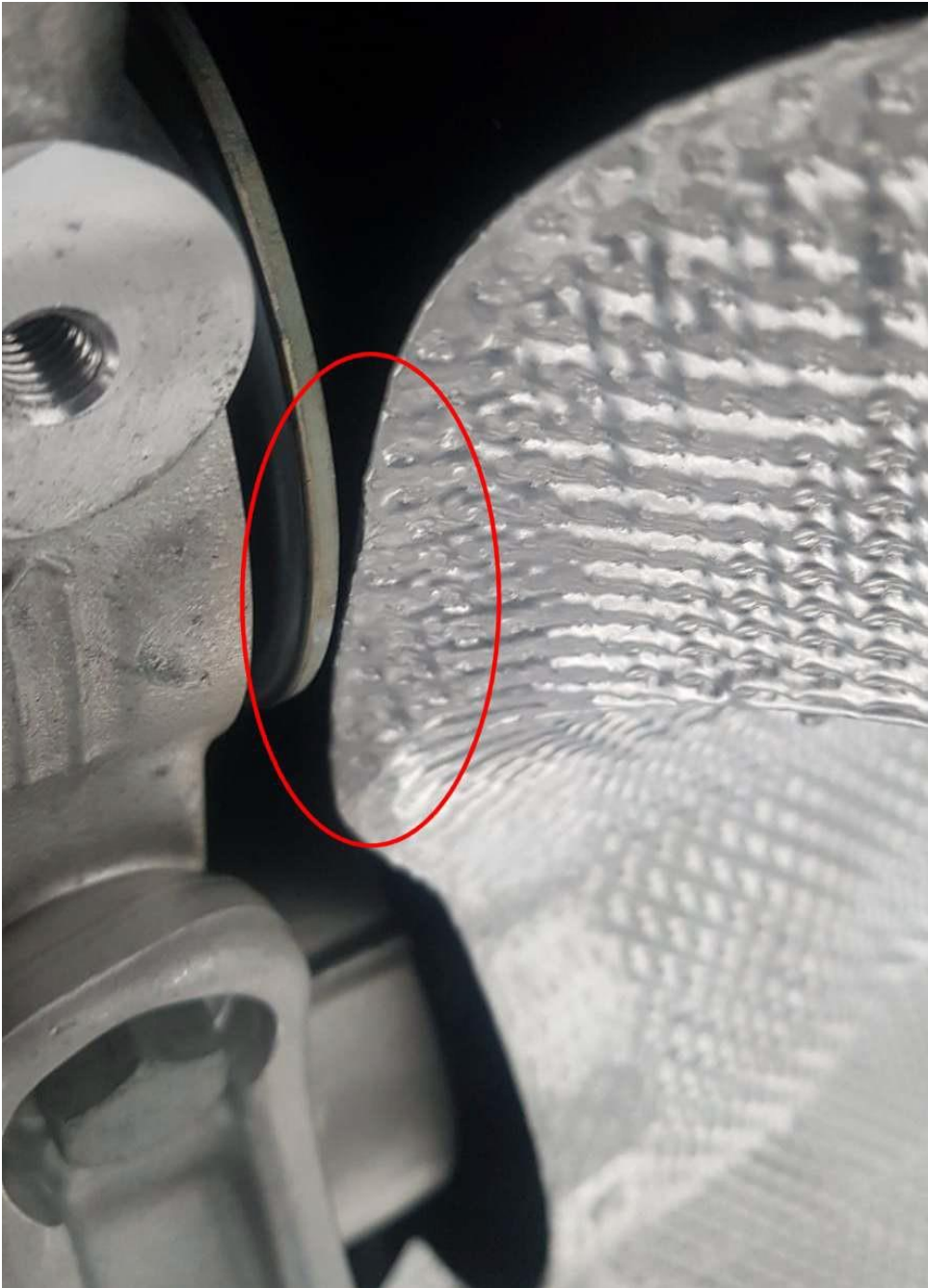


Figure 1

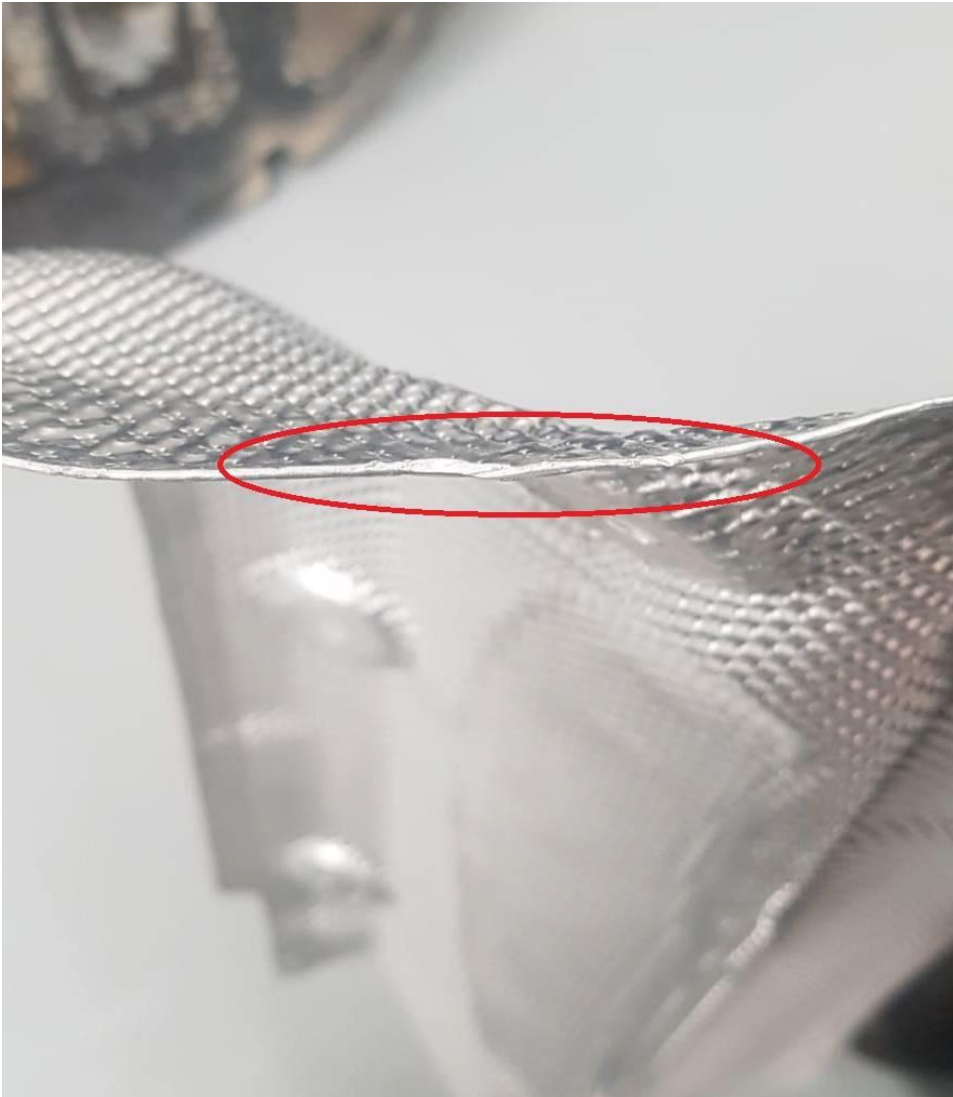


Figure 2

4) Carry out a full inspection of the propeller shaft - Examine the propeller shaft from front to rear checking the following:

- Excessive play at the joints
- Propeller shaft centre mount
- Leakage
- Dimensional accuracy
- Security
- Damage
- Signs of contact with external objects



In the event the propeller shaft is suspected to be at fault, the operative should Refer to Rep.Gr 39 - Fit a known good propeller shaft (Ensure single use items are replaced as Rep.Gr guidelines)

- **Reassess to check the noise is no longer evident**

5) With reference to TPI 2056407/- ("Running Gear Noise Identification") Capture video recordings inside and outside vehicle as follows:

- Use **WT 10437 (Chassis Ear Tool)** to identify the source of problem by attaching the clamp and module assemblies to the areas of concern. For example, front and rear of the differential casing, as well as the upper control arms on the suspension (see Figures 1 to 3 for examples)



IMPORTANT: Ensure secure fitment of the clamp and module assemblies, ensuring there is no clash with exhaust system

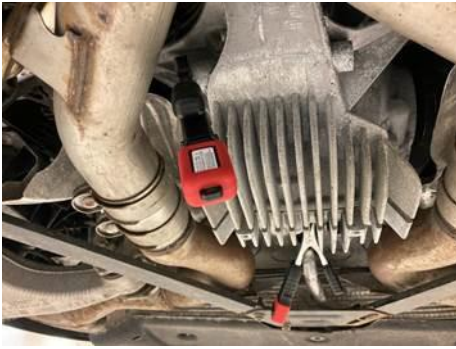


Figure 1



Figure 2



Figure 3



For vehicles with rear wheel steering only

- Select snow chain mode
- Attempt to replicate the reported complaint, If the problem is no longer evident investigate all bushes and mounts related to the rear axle steering rack assembly, ensure all observations are attached/included within a new or existing DISS query

All variants continued:

6) Raise the suspension height and attempt to replicate the problem

- If the problem is no longer evident, conduct further investigations to the rear drive shafts including inspections of the drive shaft boots for signs of grease leakage
- Confirm the brake calliper fixings, hub assemblies, upright fixings and bushings are secure as per the applicable Rep.Gr
- Confirm all above are performing to specification



If the issue is suspected to be from the differential assembly, take sample of the oil and assess for debris and/or discolouration

7) Submit the DISS query ensuring the following:

- All requested information is attached to the query

- All steps 1 to 5 have been conducted

NOTE: Do not carry out any further work until instructed by Product Support