

Technical product information

Topic	Bentayga deployable sill step malfunction
Market area	Bentley: worldwide (2WBE),Hongkong-Macau (5HK)
Brand	Bentley
Transaction No.	2044536/9
Level	EH
Status	Approval
Release date	

New customer code

Object of complaint	Complaint type	Position
whole vehicle -> accessories -> sill tube	component / consumables -> cracked/broken	
body fixtures and fittings -> special vehicles: equipment -> entry step for door aperture	functionality -> defective function sequence	

New workshop code

Object of complaint	Complaint type	Position
body fixtures and fittings -> special vehicles: equipment -> entry step for door aperture	component / consumables -> deformed	front left
body fixtures and fittings -> special vehicles: equipment -> entry step for door aperture	component / consumables -> deformed	rear left
body fixtures and fittings -> special vehicles: equipment -> entry step for door aperture	component / consumables -> deformed	front right
body fixtures and fittings -> special vehicles: equipment -> entry step for door aperture	component / consumables -> deformed	rear right

Vehicle data

Bentayga

Sales types

Type	MY	Brand	Designation	Engine code	Gearbox code	Final drive code
4V1*	2017	E		*	*	*
4V1*	2018	E		*	*	*
4V1*	2019	E		*	*	*
4V1*	2020	E		*	*	*

Documents

Document name
master.xml
diagnostic.pdf

Customer statement / workshop findings

Deployable sill step accessory malfunctions.

Technical background

This TPI is specifically written to record key information, reach a logical diagnosis and ultimately a problem resolution when presented with a deployable sill step malfunction. Please report via DISS all findings during your investigation and rectification process.

Production change

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Measure

When presented with a deployable sill step malfunction the following should be incorporated into your diagnosis procedure.

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Note: The following checks are the minimum information required when submitting any DISS query. Raising a DISS query is mandatory for all sill step concerns.

Perform checks 1-10 and record results, this should be done prior to carrying out any rectification work.

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Note: The following checks are the minimum information required when submitting any DISS query.

Raising a DISS query is mandatory for sill step concerns.

Record the current status of the system.

1. Detail of existing or reported failure mode, please also try to obtain information of the failure from the customer (Did the step try to stow? Where was the vehicle? Was the ground level? Was the door fully closed? Etc.)

- No function
- Fails to stow: left side / right side / both
- Fails to deploy: Left side / right side / both
- Noise or rough action
- Rattle
- Incomplete stow (drop / loose at centre linkage)
- Other

2. Quantify the level of grit and road debris in or on the hinge systems with a description and Photographs of all hinges.

3. Note any mechanical damage, supply Photographs if damage is present.

4. Security of system, is everything correctly secured? Over-check fastener torque of hinges, motor and steps.

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Note: Refer to Repair Group 66 - Exterior equipment – Accessories – Deployable sill steps – to fit, for current torque figures.

Description	Size	Torque
Sill step to hinge	M8 x 25mm	22 Nm
Hinge to body	M8 x various	14 Nm
Rear hinge bolt through body brace	M10 x 35mm	49 Nm
Drive motor to centre hinge	M6 x 10mm	8 Nm
Drive spindle wedge key centre hinge	M6	12 Nm

5. Measure electrical current draw at motors.

- During deployment – attach a Video showing result on meter.
- During stow – attach a Video showing result on meter.

6. Remove both sill step motors and measure the deployment resistance – figure 1 - Refer to Repair Group 66 - Exterior equipment – Accessories – Deployable sill steps – to fit. Video the procedure and provide results.

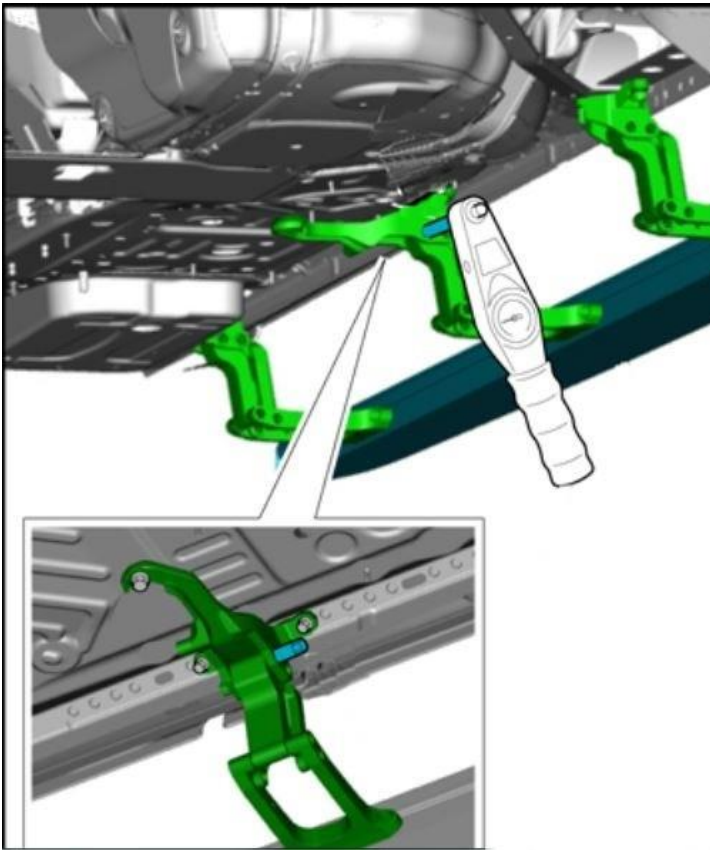


Figure 1

7. Confirm installation process, provide Six Photographs showing hinge fitment to sills.

Referring to Rep.Gr 66 – Ensure the instructions are strictly adhered to, The operative **MUST** ensure the rivets/EJOT nuts below the rear hinge have been removed as failure to remove the rivets/EJOT nuts will have an effect on the operation of the sill steps

VERY IMPORTANT: Please ensure a Photograph of the area shown in Figure 2 is provided confirming the rivets/EJOT nuts have been removed

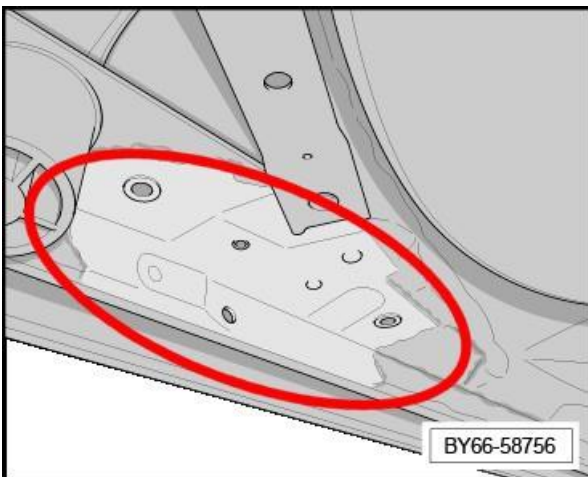


Figure 2

8. Log position of all shims, Photograph.

9. Check and record Sill Step Control Module audible fault and LED blink codes (see attached document)

IMPORTANT NOTE Regarding the following:

Critical failure – Operation time exceeded with x11 blink codes

This issue occurs when the time to stow (or deploy) has exceeded the maximum limit. This is in order to stop a perpetual feed to the motors with no movement, leading to motor/loom damage.

Generally the step is still in the main stow zone and not able to reach the home zone, where it recognises it is stowed. It can look as if it is stowed, at first sight.

Causes:

- Possible object jammed in the linkage. Generally this should cause a bounce back or over-current failure, but it is worth visually inspecting

for anything that may be evident

- Linkage full of mud / crud / road grit.
- Damage to the system that has caused linkage to misalign. This can increase the wind-back torque causing a slow stow.

TIP: With an 'old motor' system this can also be the sign that the motors are tired and need updating. This should only be the case on a car with very high usage patterns or poor alignment.

*10. Check vehicle battery condition using battery tester VAS6161 or similar Bentley approved tool, refer to **Repair Group 27 – Measure and record charging voltage.***