

Technical Service Bulletin



50 Creaking noises heard when body twists during braking or steering maneuvers

50 23 11 2061672/3 February 21, 2023. Supersedes Technical Service Bulletin Group 50 number 21-08 dated September 22, 2021, for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A6, and A7	2019 – 2021	All	Not Applicable
A6 allroad, S6, and S7	2020 – 2021		
RS 6 Avant, A7 e quattro, and RS 7	2021		

Condition

REVISION HISTORY		
Revision	Date	Purpose
3	-	Updated <i>Warranty</i> (Updated Labor Operations)
2	09/22/2021	Revised <i>Service</i> (Added required diameter of steel rod) Revised <i>Warranty</i> (Updated SRT)
1	12/16/2020	Initial publication

Customer states:

- A creaking type noise is heard in the floor area.
- The noise can be generated during strong braking or steering maneuvers where the vehicle body is twisted.

Workshop findings:

- Diagnosis locates the source of the noise from the floor area specifically radiating from the footwell to the area under the seat.

Technical Background

During a cornering or hard braking maneuver the longitudinal members can make contact with their internal support plates.

Production Solution

There has been an improvement in the construction of the longitudinal member assembly.



Service

1. Duplicate the noise on a test drive preferably with the customer so that the conditions under which this symptom presents are clearly identified. If this noise is duplicated on the test drive confirmation that the source of the noise is from the longitudinal member and that the repair described in this TSB will be effective can be achieved as follows.
2. Begin your diagnosis by loosening the front most bolt on the subframe mounting as indicated in Figure 1. The bolt only needs to be loosened several turns, but not removed.



Figure 1. Front most bolt on subframe to be loosened.



Note:

As specified in the repair manual, it is necessary to replace all loosened subframe bolts at the conclusion of the entire repair.

3. In many cases an audible 'cracking' noise can be heard in the course of loosening and tightening the subframe bolt (Figure 2).

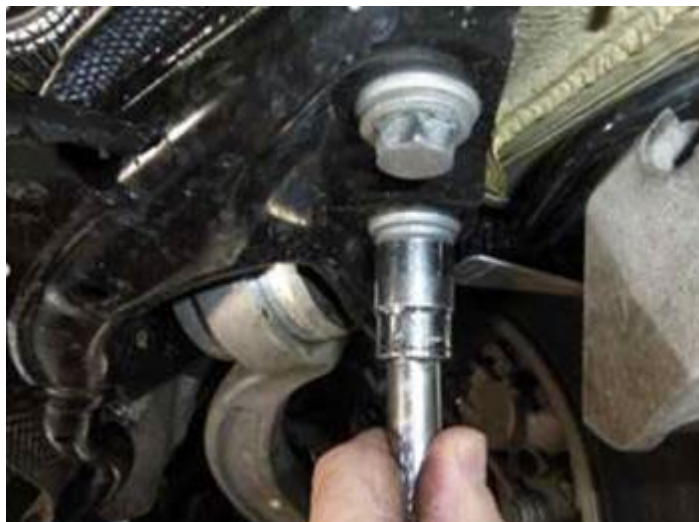




Figure 2. Loosening the front most subframe bolt.

4. Test drive the vehicle. If no change or elimination of the noise is achieved during this diagnostic step, the repair in this TSB will not be effective and diagnosis must continue outside the scope of this repair procedure. If the noise characteristics do, in fact, change or if the noise is eliminated proceed as follows.

5. Duplication of this noise is difficult when the vehicle is cold. If you suspect that the cold is preventing duplication of this symptom warm up the longitudinal member/body in the area of the rear transverse link bolted connection with a hot air blower set for an outlet temp of approximately 550°C (1022 °F) (Figure 3).



Figure 3. Warming the area of the body near the rear transverse link.

6. Warm the surface to approximately 65 °C (149°F) (Figure 4).



Figure 4. Surface temperature warmed to 65° C (149°F).



7. Allow the surface temperature to cool to approximately 30 °C (86°F) then test drive the vehicle again.



Figure 5. Surface temperature cooled to approximately 30° C (86°F).

8. Merely lowering the vehicle from the hoist can immediately elicit the noise symptom after this warming process.
9. With the symptom confirmed, lower the center cover plate on the affected side. Remove the first body plug aft of the bolted connection for the transverse link (Figure 6).



Note:

Replace the body plug removed in this step with 8K0 805 267.



Figure 6. Body plug removed.



10. In order to provide appropriate access to the affected area inside the longitudinal member remove sections of the acoustic foam in the longitudinal member area with long needle nosed pliers. It is not necessary to remove all of the acoustic foam and the small amount removed for this procedure will not need to be replaced (Figure 7).



Figure 7. Remove a portion of the acoustic foam.

11. An improvised tool for this modification will be fabricated. Obtain a steel rod 8mm in diameter and 60 cm long (Figure 8).



Figure 8. Tool to be fabricated.



12. Grind the tip of one end of the rod into a chisel shape. The length of the grind should be 15mm +/-3mm on each side as shown in Figure 9.



Figure 9. Ground the tip of the steel rod.

13. Insert the chisel end of the steel rod into the body opening, through the remaining acoustic foam and far enough to engage the longitudinal member support (Figure 10).



Figure 10. Insert the steel rod.



14. The drawing in Figure 11 shows a cut-away of the area where the longitudinal member support and the longitudinal member housing make contact.

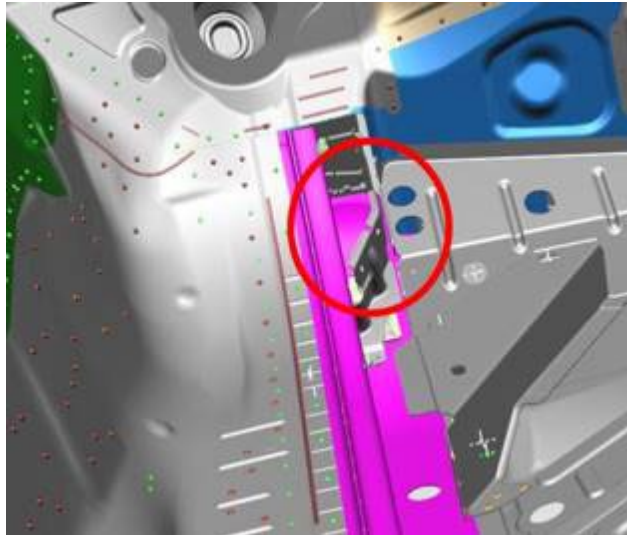


Figure 11. Cut-away drawing of the inside of the longitudinal member.

15. Figure 12 shows an opened longitudinal member and support.



Figure 12. Opened longitudinal member and support.



16. Insert the steel rod to the point of contact indicated by the red arrow shown in Figure 13.

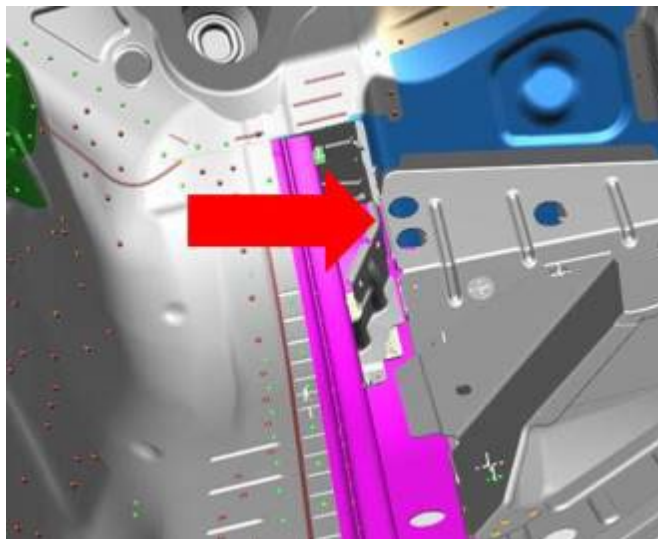


Figure 13. Point of contact for the steel rod.

17. The yellow line in Figure 14 shows the position the steel rod will realize after insertion and engagement with the longitudinal member support.

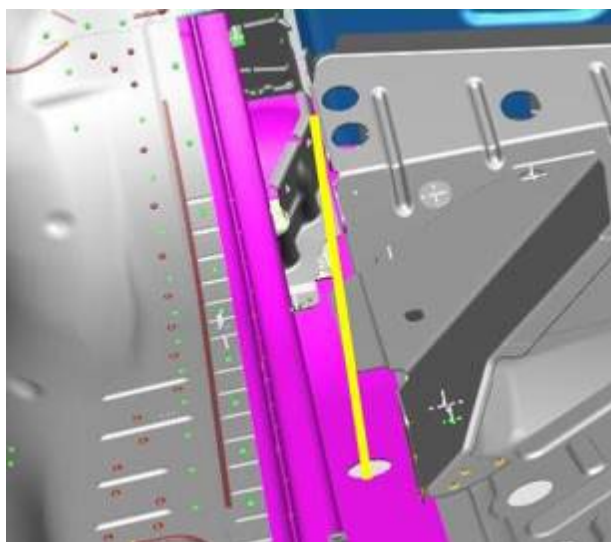


Figure 14. Direction of insertion of the steel rod.



18. The chisel end of the steel rod must be inserted as shown in Figure 15 with the wedge engaged consistent with the space formed by the longitudinal member support to the longitudinal member housing.

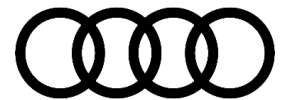


Figure 15. *Correct engagement of the chisel end of the steel rod.*

19. Figure 16 shows an incorrect engagement of the chisel end.



Figure 16. *Incorrect engagement of the chisel end.*



20. Using a hammer drive the steel rod a distance of 4 – 5 cm. Ensure the correct distance measure and mark this distance on the steel rod with tape (Figure 17). Remove the tool when finished.



Figure 17. Driving the steel rod into the longitudinal member support.

21. Perform a final test drive to confirm elimination of the noise by duplicating the driving conditions specified by the customer. Ensure that the noise has been eliminated to the customer's satisfaction by driving with the customer at the time they take possession of the vehicle after the repair.

Warranty

Claim Type:	<ul style="list-style-type: none"> • 110 up to 48 Months/50,000 Miles. • If the vehicle is outside any warranty, this Technical Service Bulletin is informational only. 		
Service Number:	5079		
Damage Code:	0010		
Labor Operations:	Center cover plate remove and reinstall	5193 1900	See SRT with associated operations
	Modify longitudinal member	5079 4199	80 TU
	Or		
	Center cover plate remove and reinstall – Both sides	5193 2000	See SRT with associated operations


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	Modify both longitudinal members	5079 5099	130 TU
Diagnostic Time:	GFF	No allowance	0 TU
	3 Road tests prior to the service procedure	0121 0199	30 TU
	Road test after the service procedure	0121 0004	10 TU
Claim Comment:	As per TSB 2061672/3		

All warranty claims submitted for payment must be in accordance with the *Audi Warranty Policies and Procedures Manual*. Claims are subject to review or audit by Audi Warranty.

Required Parts and Tools

Always check with your Parts Department and/or ETKA for the latest information and parts bulletins.		
Part Number	Part Description	Quantity
See ETKA	Fasteners, Bolts, Nuts, and Screws as needed per the Repair Manual	See ETKA/ELSA
8K0805267	Drain tube grommet	02
N 91247202	 Bolt hex head	02

Additional Information

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