



Technical Service Bulletin

87 Noise from the air conditioning compressor when the AC is active

87 23 49 2063467/5 August 9, 2023. Supersedes Technical Service Bulletin Group 87 number 22-31 dated August 11, 2022, for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
e-tron quattro	2019 2021 – 2023	All	Not Applicable
e-tron Sportback quattro	2020 - 2023		
e-tron S quattro	2022 – 2023		
Q8 e-tron, and Q8 e-tron Sportback	2024		

Condition

REVISION HISTORY		
Revision	Date	Purpose
5	-	Revised header (add model year 2024 Q8 e-tron)
4	08/12/2022	Revised <i>Service</i> (Additional inspection areas added) Revised <i>Warranty</i> (Updated SRT) Revised header (add Model Year 2023)
3	4/20/2022	Revised <i>Technical Background</i> (Additional problem location added) Revised <i>Service</i> (Additional inspection areas added) Revised <i>Warranty</i> (Correction of labor operation number)

Customer states:

- The customer describes a noise heard in the cabin when the air conditioning system is active particularly when the air conditioning compressor is running. When the air conditioning system is turned off the noise is eliminated.

Workshop findings:

This symptom is easily reproduced. Further, the source of the noise is confirmed as not emanating from inside the cabin.

Technical Background



Technical Service Bulletin

The source of this noise may be due to direct contact between adjacent refrigerant lines (Figure 1) or between a refrigerant line and the Bowden cable clip for the front hood release in the front motor compartment (Figure 2). When the air conditioning compressor is operating the noise created by the vibration is transferred from this point of contact and into the cabin.

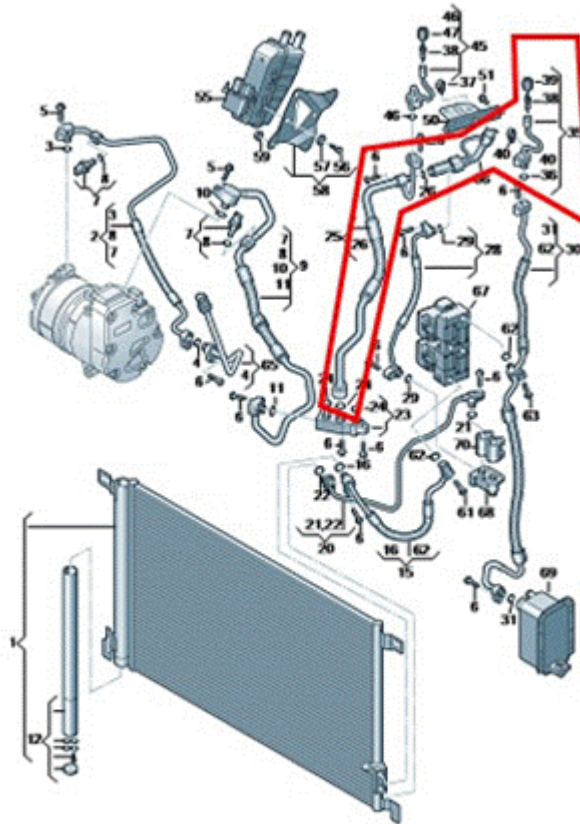


Figure 1. The refrigerant lines possibly make contact.



Technical Service Bulletin

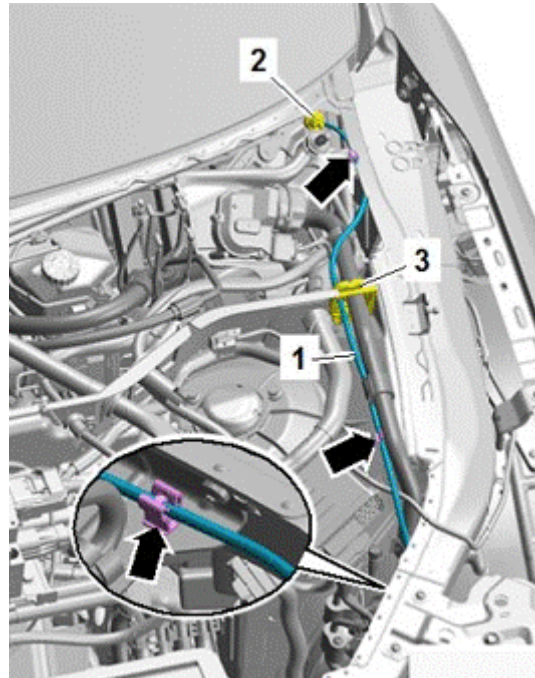


Figure 2. Location of the Bowden cable clip for the front hood release.

Production Solution

Not applicable.

Service



Technical Service Bulletin

1. Figure 3 shows refrigerant lines close enough to make contact and elicit vibration transfer and noise.



Figure 3. The refrigerant lines are making contact.

2. Figure 4 shows a close-up view of the point of contact.



Figure 4. Point of contact.



Technical Service Bulletin

3. These refrigerant lines must be separated and, if necessary, retained in a separated position using a hose holder, clip, or tie-wrap (Figure 5).

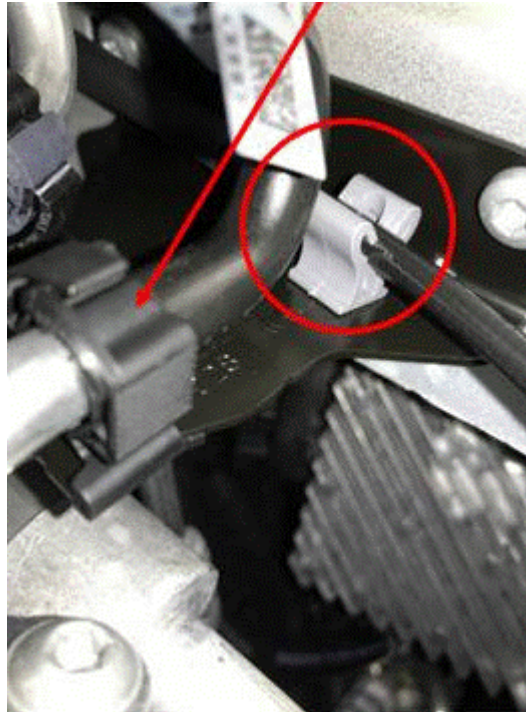


Figure 5. The area in the motor bay where contacting lines are located.

4. Figure 6 shows properly separated refrigerant lines.

Figure 6. Refrigerant lines retained in a separated position.

5. An additional point of contact may be found between the refrigerant line containing the service port and the clip that retains the Bowden cable for the front hood release. If contact is found here these components must be separated and secured in a separated position. The retaining clip for the refrigerant line allows the line to slide within it. This is to be considered when securing the line away from the clip for the Bowden cable.





Technical Service Bulletin

Figure 7. Point of contact between refrigerant line and Bowden cable clip.

6. Figure 8 shows an additional point of contact possible at the coaxial refrigerant line where it crosses the refrigerant line containing the service port. Again, separate and secure these lines in a separated position.



Figure 8. Point of contact between coaxial refrigerant line and the refrigerant line containing the service port.

7. In some cases the compressor isolator spring is not indexed correctly in the rubber mounting causing an incorrectly seated compressor isolator assembly. Inspect the isolator / spring assembly for proper fit of the spring to the isolator at the top and bottom seating areas. Figure 9 shows a poorly seated isolator showing a gap between the rubber isolator and the mounting bracket.

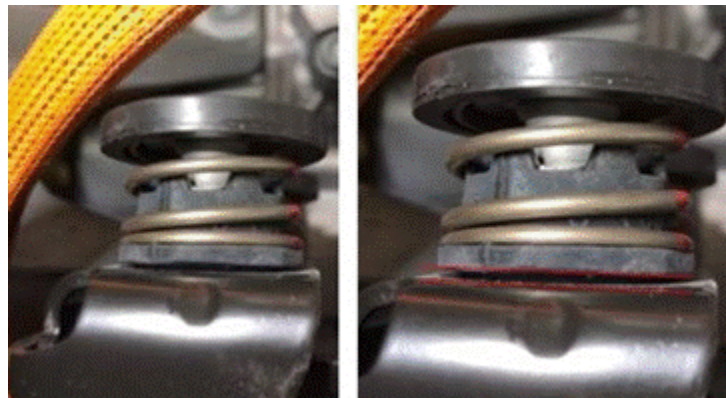


Figure 9. Poorly seated compressor isolator / spring assembly.



Technical Service Bulletin

8. The spring and / or rubber mount may need to be twisted to correct the spring to rubber mount index allowing the isolator assembly to lie flat against the bracket. Figure 10 shows a properly seated isolator / spring assembly.



Figure 10. Correctly seated compressor isolator / spring assembly.

9. An additional possible point of line contact is the service port mounting block in Figure 11.



Figure 11. Service port mounting interference with adjacent line.



Technical Service Bulletin

- 10 Correct this by pushing the service port in the direction of the arrow with just enough force to create a permanent clearance as shown in Figure 12.

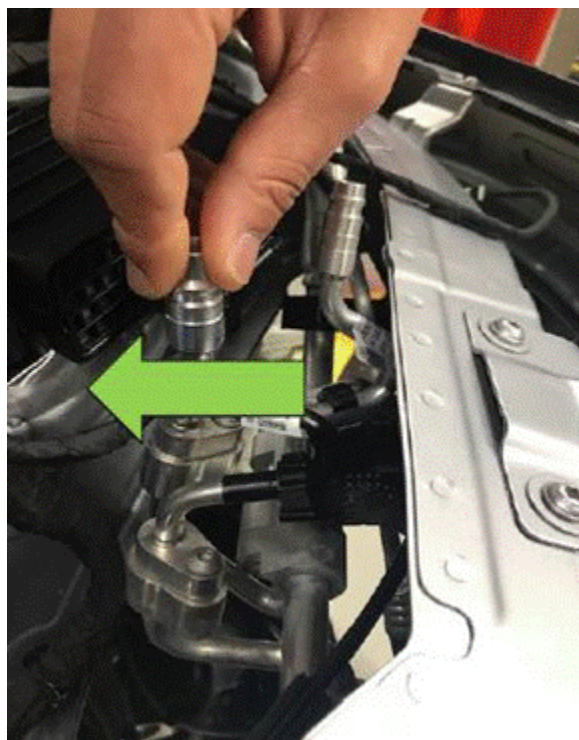


Figure 12. Creating a permanent gap between the service port mounting and the adjacent line.

Warranty

Claim Type:	<ul style="list-style-type: none">• 110 up to 48 Months/50,000 Miles.• G10 for CPO Covered Vehicles – Verify Owner.• If the vehicle is outside any warranty, this Technical Service Bulletin is informational only.		
Service Number:	8744		
Damage Code:	0020		
Labor Operations:	Front storage compartment remove and reinstall	7007 1900	See SRT with associated operations
	Separate contacting refrigerant lines and secure if necessary	8744 1399	40 TU
Diagnostic Time:	GFF	No allowance	0 TU



Technical Service Bulletin

	Road test prior to the service procedure	No allowance	0 TU
	Road test after the service procedure	No allowance	0 TU
Claim Comment:	As per TSB 2063467/5		

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.

Additional Information

©2023 All part and service references provided in this TSB (2063467) are subject to change and/or removal. Always check with your Parts Department and/or ETKA for the latest information and parts bulletins. Please check the Repair Manual for fasteners, bolts, nuts, and screws that require replacement during the repair.

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