

Technical Service Bulletin

91 SOS Warning Displayed On Instrument Cluster

91 16 95 2046155/1 December 12, 2016.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A4	2017	All	With connected gateway

Condition

- Customer may report a SOS warning message is displayed on the instrument cluster (Figure 1)
- DTC B105313 GSM antenna Open Circuit stored in connected Gateway Module (databus onboard diagnostic interface) (address word 0019)



Figure 1. SOS warning in instrument cluster.

Technical Background

Poor connection in the coaxial wiring from the Gateway Module J533 to the external R263 antenna.

Production Solution

Not applicable.

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Service

1. Verify the customer concern.
2. Install new antenna and bracket to correct poor connection to Gateway Module J533.
3. Gain access to the right rear body harness by removing the following. Consult repair manual for instructions:
 - Rear Shelf
 - D-Pillar Trim Panel - Right
 - C-Pillar-Trim Panel - Right
 - Side Cushion – Right
 - Rear Seat Belt Guide – Right
 - Rear Sill Panel – Right
 - Rear Bench Seat
4. Insulate the mounting points for the new antenna bracket (8W0035596):
 - Right mounting hole (Figure 2)
 - Cut three, 1 inch long strips of adhesive tape (D373125A2)
 - Forward and rear facing sides of mounting hole: place one of the 1 inch strips (Figure 2A)
 - Left and right sides of mounting hole: cut the remaining 1 inch strip in half, making two 1/2 inch strips. Place one of the 1/2 inch strips on the left side and the other on the right side of the mounting hole (Figure 1C)



Tip: Make sure the adhesive tape (D373125A2) wraps around the mounting hole and secures to the rear of the panel (Figure 2B and Figure 3B).

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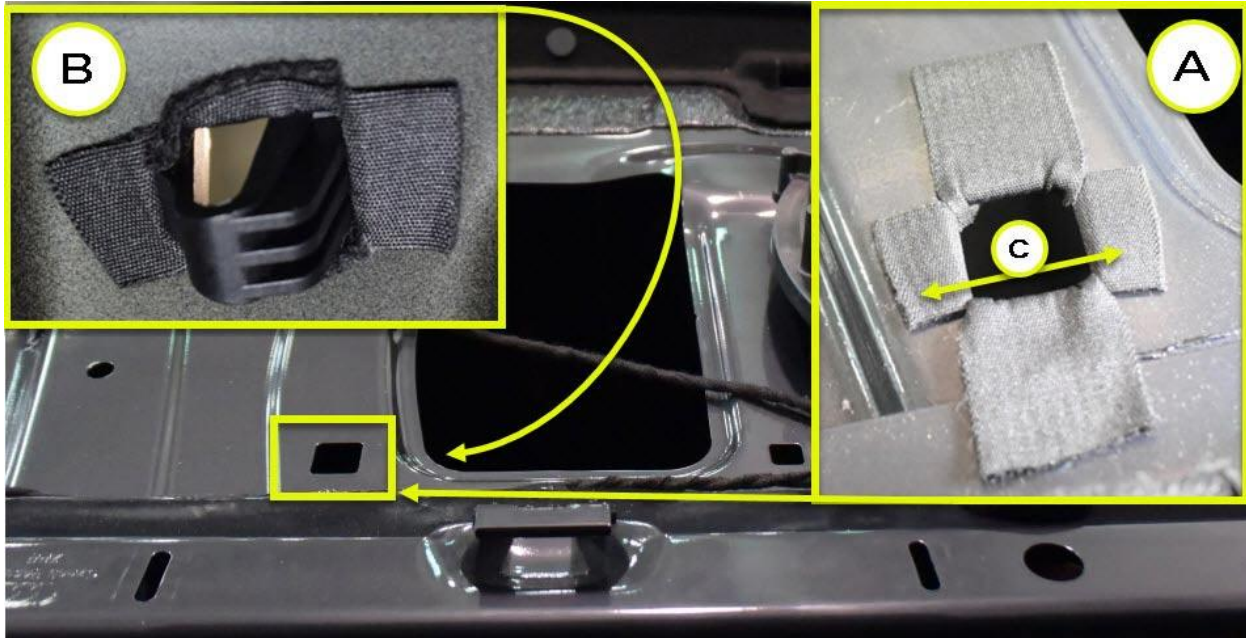


Figure 2. Add adhesive tape to insulate right mounting points for the new antenna bracket.

Left mounting hole (Figure 3):

- Cut one, 1 inch long strip of adhesive tape (D373125A2)
- Cut this strip in half, creating two 1 inch strips
- On the left side of the mounting hole, wrap one of the strips around the opening (Figure 3A)

On the right side of the mounting hole lay the other strip down. Strip should face front to back. 50% of the strip's width should overlap the mounting hole (Figure 3C).

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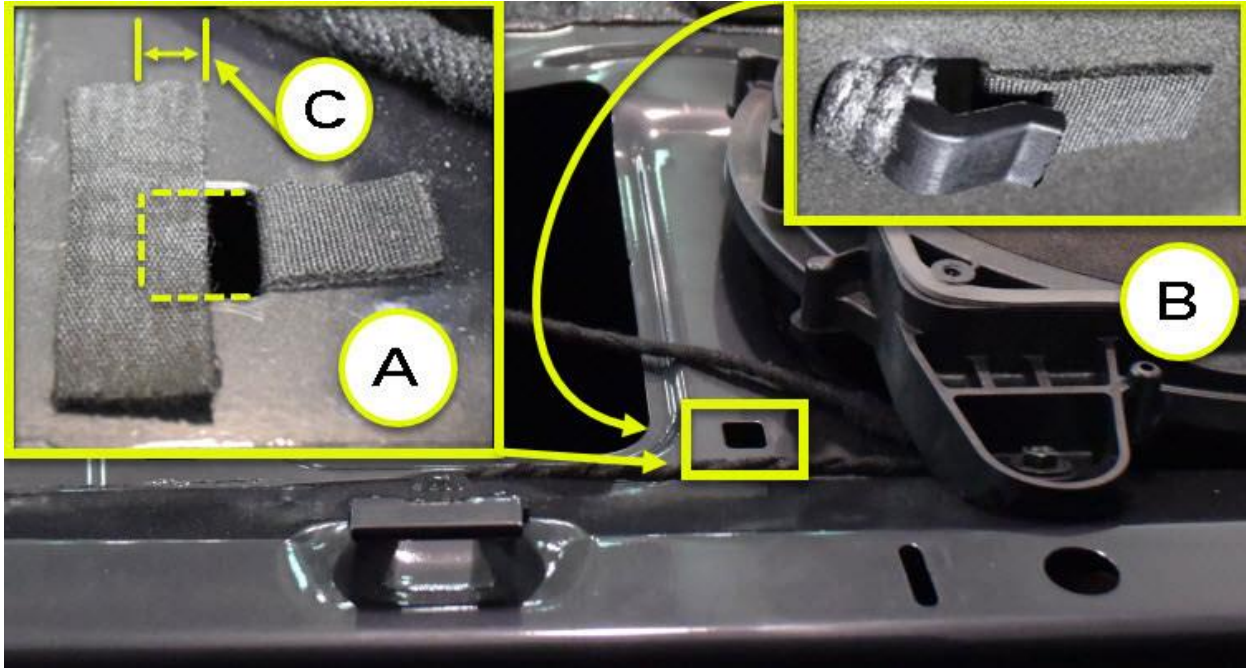


Figure 3. Add adhesive tape to insulate left mounting points for the new antenna bracket.

5. Install the new antenna (4M0035504):
 - Clip the new antenna (4M0035504) into the new antenna bracket (8W0035596)
- Secure the new assembly into the mounting holes (Figure 4):
- Insert new antenna bracket (8W0035596) into the left mounting hole (Figure 4A)
 - Rotate the new antenna bracket down into the right mounting hole (Figure 4B)
 - Ensure the locking tab is fully pressed forward (Figure 5B)

Make sure all areas of the rear shelf that come in contact with the mounting bracket are covered with the adhesive tape. If not, remove the antenna bracket and adjust the tape applied in step 3 so that all areas of the antenna bracket that come into contact with the rear self are insulated (Figure 5).

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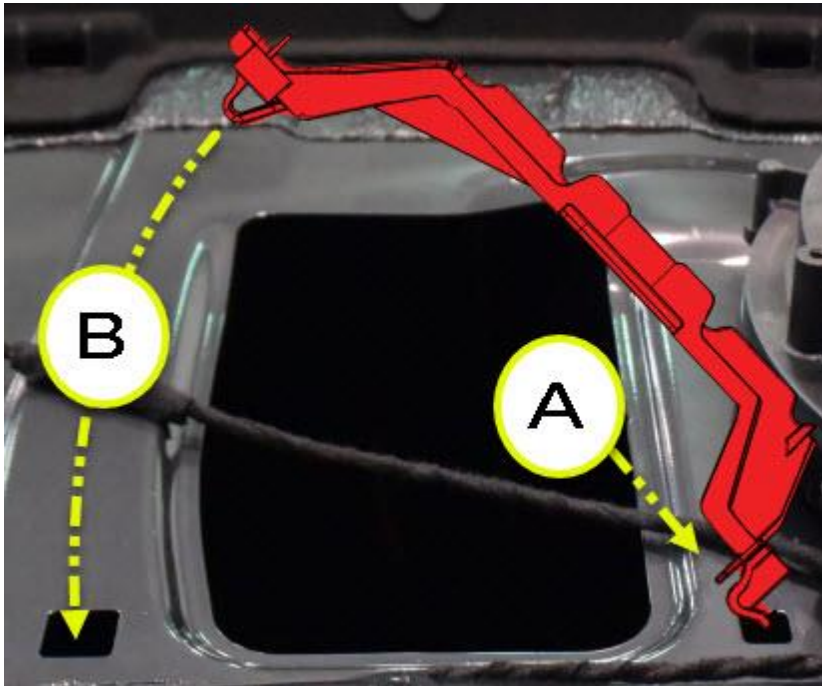


Figure 4. Install the new mounting bracket by inserting the retaining tab (A) into the left mounting hole. Rotate the bracket down into the right mounting hole (B).

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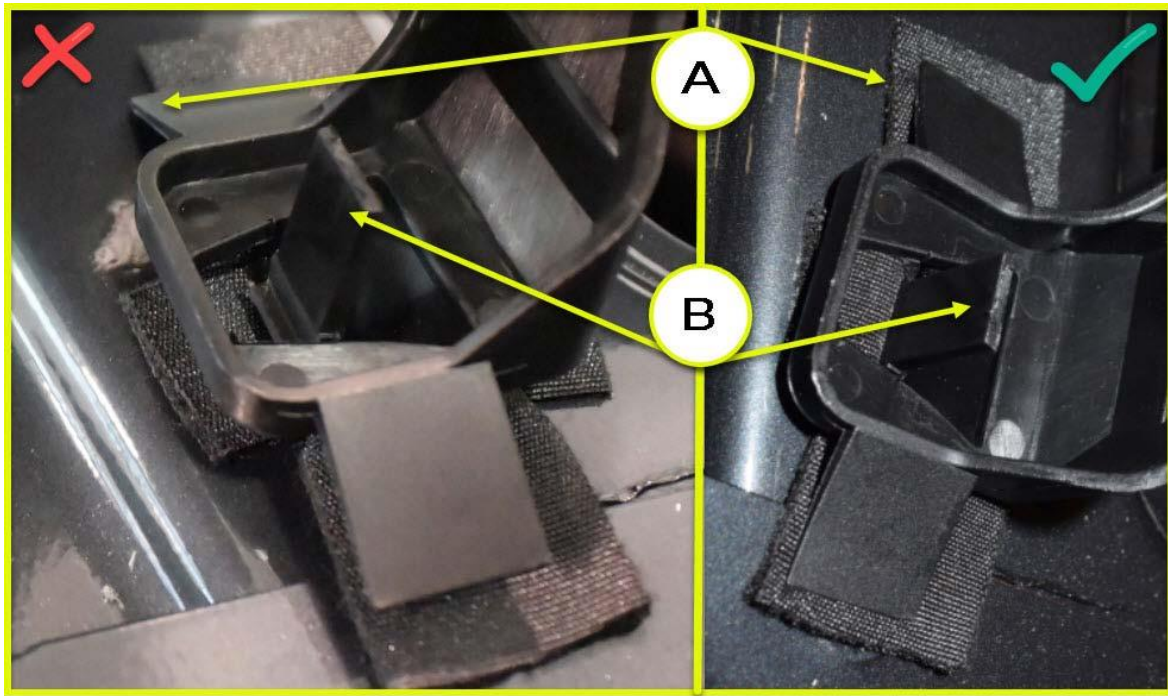


Figure 5. Ensure the locking tab of the mounting bracket is fully locked by pushing it forward (B). Make sure all mounting surfaces are covered with the adhesive tape (A).

6. Prep the new pre-made coaxial wire (000098655) by unrolling it. Ensure that there are no kinks or bends during this process.
7. Install new coaxial wire (000098655) on the rear deck lid:
 - Plug the Fakra connector onto the new antenna
 - Route coaxial cable along the path indicated by the dashed line in (Figure 6)
 - The coaxial line will run along the sheet metal stamp indent, as shown by the dashed line (Figure 7)
 - To avoid possible noises, wrap a strip of adhesive tape (D373125A2) around the coaxial wire where it comes into contact with the sheet metal (Figure 6A)
 - Secure the new coaxial wire (000098655) to the existing harness body clips (Figure 6B) by wrapping a piece of cloth tape (N10729301) on each side of the body clip

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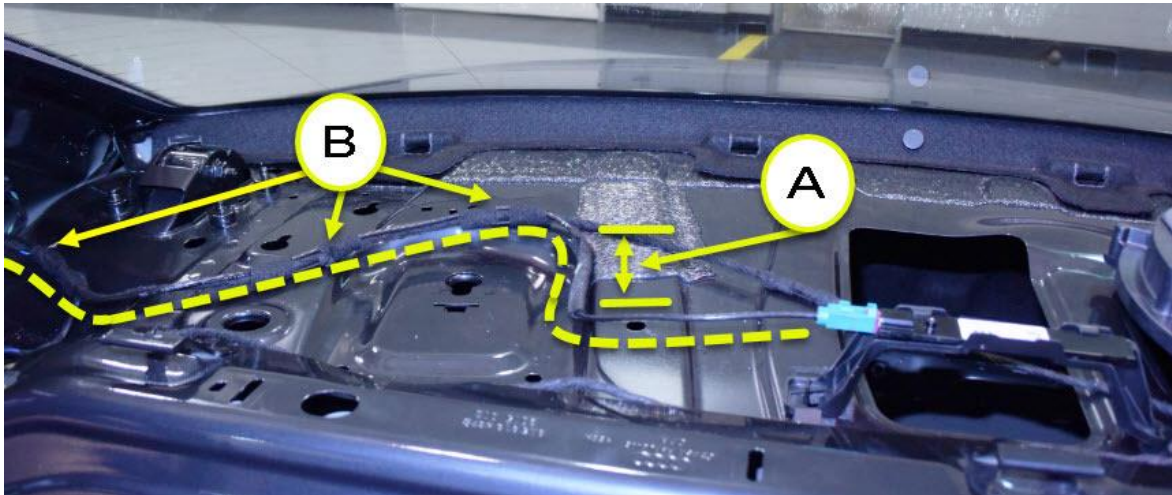


Figure 6. Routing path of the new coaxial wire (000098655) is shown by the dashed line. Wrap a strip of adhesive tape (D373125A2) around the coaxial wire where it comes into contact with the sheet metal (A). Secure the new coaxial wire to the existing harness body clips wrapping a piece of cloth tape (N10729301) on each side of the body clip.



Figure 7. The coaxial line will run along the sheet metal stamp indent, as shown by the dashed line.

8. Attach the new coaxial wire (000098655) along the right rear of the vehicle:
 - Route the new coaxial wire (000098655) along the path shown by the dashed line (Figure 8)
 Secure the new coaxial wire (000098655) to the existing harness body clips:
 - Wrap a piece of cloth tape (N10729301) on each side of the body clips (Figure 8A)
 - Wrap a piece of cloth tape (N10729301) on the lower side of the body clip (Figure 8B)
 - Replace the existing plastic zip tie (Figure 8C)

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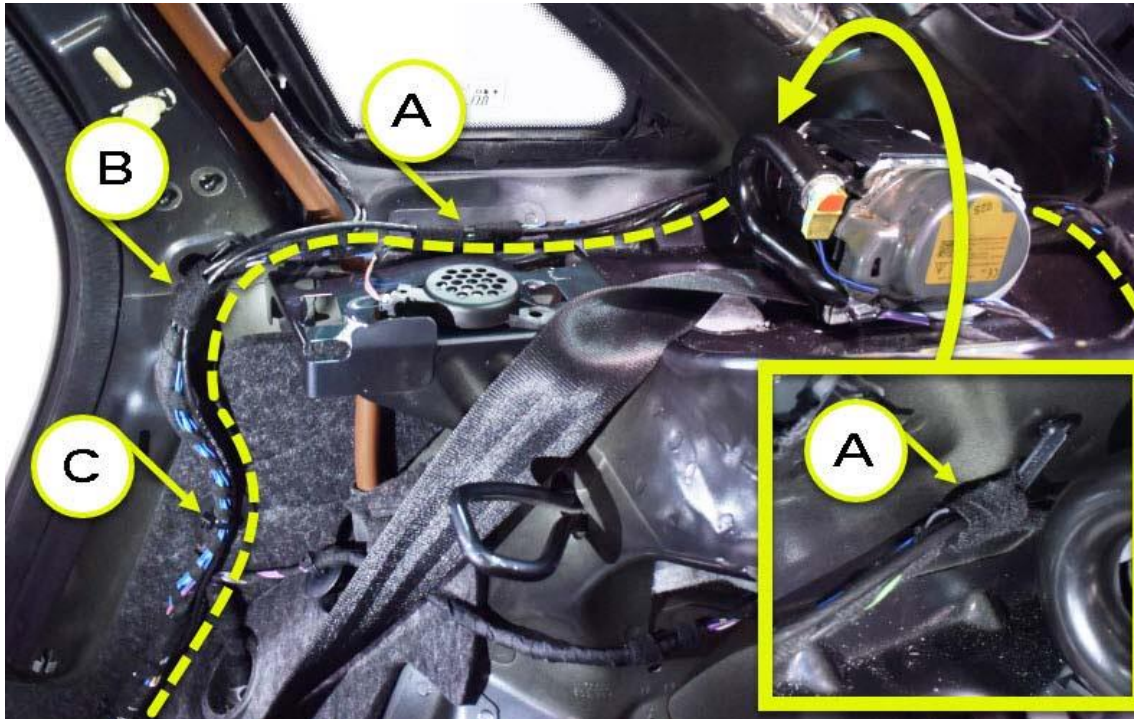


Figure 8. Route the new coaxial wire (000098655) along the path shown by the dashed line. Secure the new coaxial wire to the existing harness body clips and wrap with cloth tape.

9. Route the new coaxial wire (000098655) along the right of the vehicle:
 - Route the new coaxial wire (000098655) along the path shown by the dashed line (Figure 9)
 - Secure the new coaxial wire (000098655) to the existing harness body clips by replacing the existing plastic zip tie (Figure 9A)

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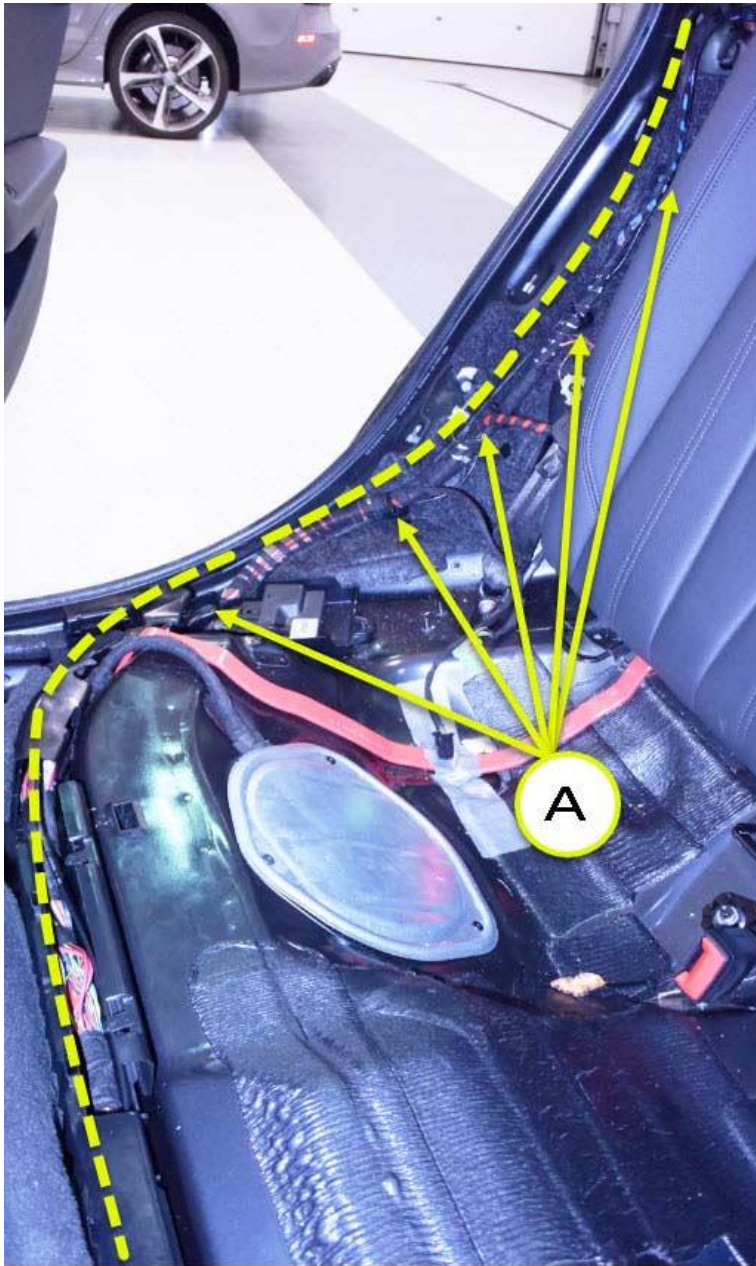


Figure 9. Route the new coaxial wire (000098655) along the path shown by the dashed line. Secure the new coaxial wire to the existing harness body clips by replacing the exiting plastic zip ties (A).

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10. Route the new coaxial wire (000098655) along the front of the rear seat:

- Route the new coaxial wire (000098655) inside the plastic conduit, along the path shown by the dashed line in Figure 8.



Tip: There is enough room inside the plastic conduit to feed the wire up without opening the conduit (Figure 10).



Figure 10. There is enough room inside the plastic conduit to feed the wire without opening it.

11. Install the connector housing for antenna (6Q0035608K) onto the new coaxial wire (000098655) and connect to Gateway:

- Remove the locking tab from the single Fakra connector on the new coaxial wire (000098655) (Figure 11)

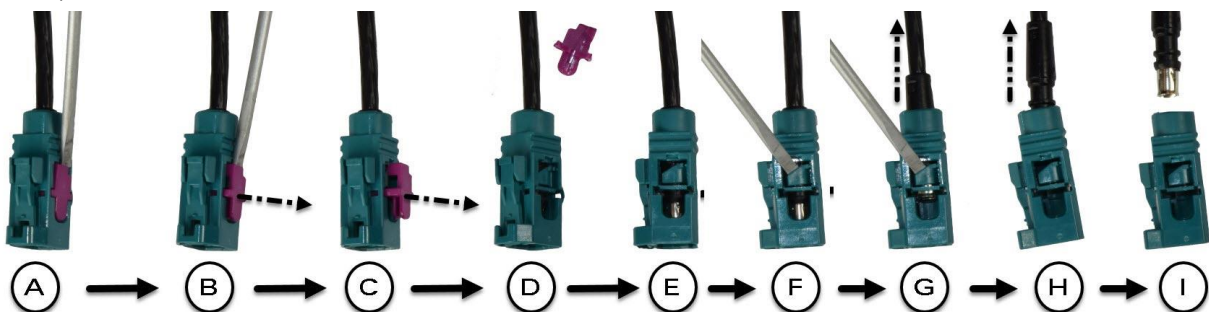


Figure 11. Remove coaxial wire from single Fakra connector. Lift locking pin (A, B, and C). Locking pin removed (D and E). Lift primary locking tab (F). With primary locking tab lifted, pull coaxial wiring from Fakra housing (G). Remove coaxial wiring from Fakra housing (H and I).

- Install the new connector housing for antenna (6Q0035608K) onto the new coaxial wire (000098655) (Figure 12)
- Make sure the coaxial wire is fully seated in pin 2 of the connector

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- You will hear an audible “click” (Figure 12C) when the coax wire is fully seated
- When installing the locking tab of the new connector housing for antenna (6Q0035608K), you will hear two clicks as it seats. First “click” (Figure 12F). Second “click” (Figure 12G)

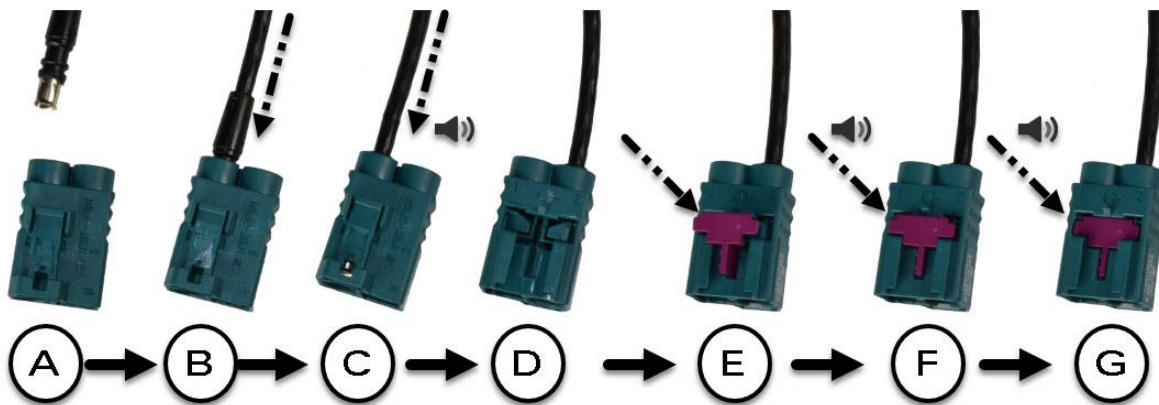


Figure 12. Insert coaxial wire into Fakra connector on Pin2 (A and B). When coaxial wire is fully seated, there will be an audible “click” noise as the primary locking tab engages (C). Install the locking pin into the Fakra connector (E). There will be one audible “click” noise at the first detent (F). There will be a second audible “click” noise at the second detent (G).

12. Remove the original coaxial line from vehicle harness:
 - Unplug the original pink connector from the gateway (Figure 13A)
 - Where the coaxial wire enters the main harness, cut it off (Figure 13B)

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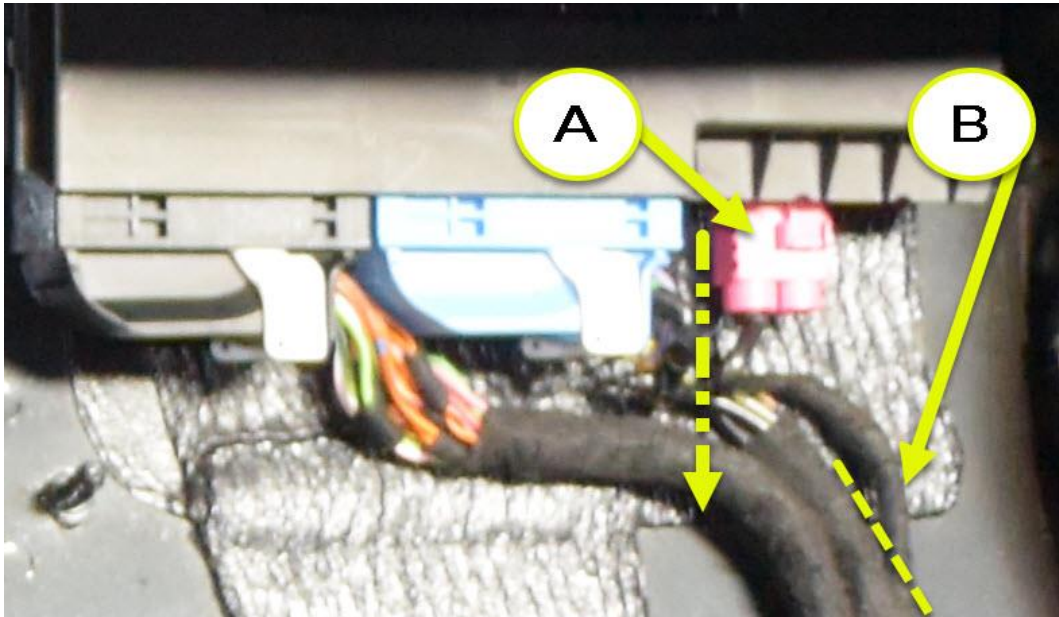


Figure 13. Unplug the original pink coaxial connection from the Gateway Module (A). Follow the coaxial wiring back to where it enters the harness and cut it off at the cut line shown by the dashed line (B).

13. Complete routing of the new coaxial wire (000098655) to the Gateway Module J533:

- Open the three tape points (Figure 14B)
- Open the two plastic zip tie points (Figure 14A)
- Route the coaxial wire along the path shown (Figure 14)
- Plug the new connector into the Gateway Module J533

Secure the new coaxial wire to the existing harness by:

- Installing new plastic zip ties (Figure 14A)
- Re-tape the harness at points shown with cloth tape (N10729301) (Figure 14B)

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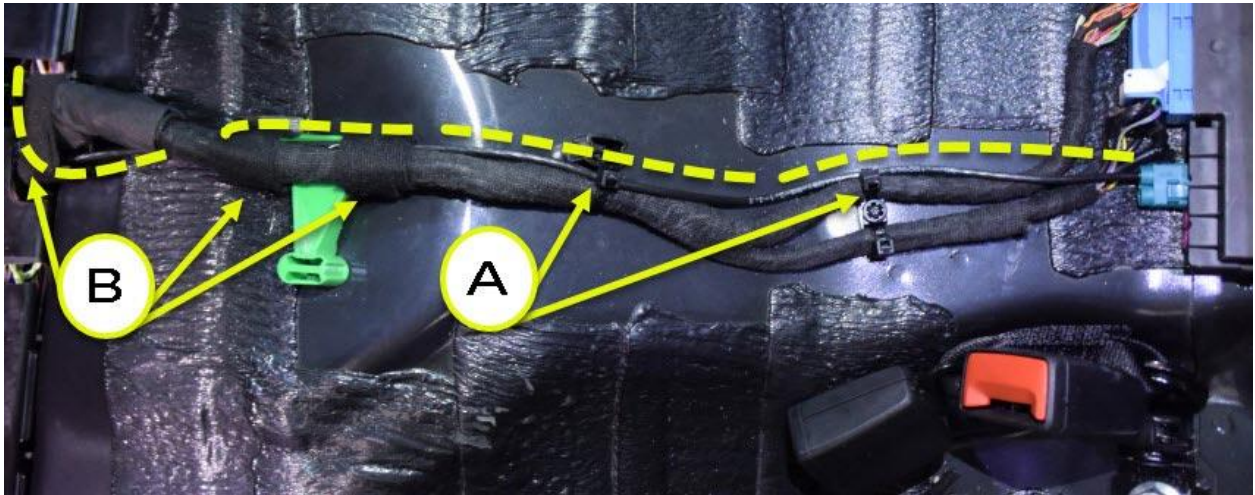


Figure 14. Cut the fabric tape at B. Route the new coaxial wire along the path shown by the dashed line and re-tape the harness.

14. Reinstall all components that were removed to perform the repair.
15. Clear DTC memory.
16. Perform a key cycle and verify that no SOS warnings are present.



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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 vehicle is outside any warranty, this Technical Service Bulletin is informational only. 		
Service Number:	9725		
Damage Code:	0028		
Labor Operations:	Central wiring harness repair	9709 4199	60 TU
	C-Pillar trim remove + reinstall	7068 1900	90 TU
Diagnostic Time:	GFF or (when applicable) GFF – Checking and clearing fault codes included in existing labor operations	0150 0000	Time stated on diagnostic protocol (Max 60 TU)
	Road test prior to service procedure	No allowance	0 TU
	Road test after service procedure	0121 0004	10 TU
	Technical diagnosis at dealer's discretion (Refer to Section 2.2.1.2 and Audi Warranty Online for DADP allowance details)		
Claim Comment:	As per TSB #2046155/1		

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.



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Required Parts and Tools

Part Number	Part Description	Quantity
6Q0035608K	Connector housing for antenna	01
8W0035596	Holder for antenna booster	01
4M0035504	Antenna booster	01
000098655	Antenna connecting cable 4000mm	01
N 10729301	Cloth Tape	Consumable; accounting under warranty/goodwill not permitted.
D373125A2	Adhesive Tape	Consumable; accounting under warranty/goodwill not permitted.

Additional Information

All parts and service references provided in this TSB (2046155) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.

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