



Technical Service Bulletin

37 Transmission malfunction, DTC P17F600, P17F500, P17F400, U008000, and/or U010100 stored in the TCM or ECM

37 19 90 2053878/6 November 8, 2019. Supersedes Technical Service Bulletin Group 37 number 19-89 dated October 22, 2019 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
A6, A7	2019	000001 - 121296	3.0TFSI

Condition

REVISION HISTORY		
Revision	Date	Purpose
6	-	Revised <i>Warranty</i> (Correcting Diagnostic Time)
5	10/22/2019	Revised <i>Service</i> (Updated Step 1)
4	08/14/2019	Revised header (Updated VIN break) Revised <i>Condition</i> (Added DTCs)

Customer states:

- A transmission malfunction indicator is displayed in the instrument cluster.
- Multiple other warnings might be displayed in the instrument cluster.

Workshop findings:

One or more of the following DTCs may be stored in the transmission control module (TCM), J217 (address word 0002):

- **DTC P17F600** (Parking lock solenoid Electrical error).
- **DTC P17F500** (Parking lock solenoid Open circuit).
- **DTC P17F400** (Parking lock solenoid Short circuit to ground).
- **DTC U008000** (Vehicle Communication Bus F).

The following DTC may be stored in the engine control module (ECM), J623 (address word 0001):

- **DTC U010100** (Lost Communication with TCM).

The following DTC may be stored in the data bus diagnostic interface, J533 (address word 0019):

- **DTC U11B000** (FlexRay data bus branch 2 faulty) as sporadic or static.



Note:



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Additional DTCs may be stored in various control modules relating to function restrictions, missing messages, lost communication with the TCM, and/or the power steering control module J500.

Technical Background

The transmission harness can come in contact with the transmission crossmember and could be damaged.

The body harness containing the FlexRay circuit to the transmission may rub against the mounting bracket of the driver assist systems control module, J1121 (address word 00A5).

Production Solution

Optimized transmission wiring harness and routing implemented in production.

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Service

General Inspection

1. Inspect for damage to the transmission harness (Figures 1 - 4).
 - Thoroughly inspect the transmission wiring harness and routing to determine if the routing is the new or the original concept (Figures 1, 7, and 8).
 - Inspect the body harness and transmission harness for damage near the areas indicated in Figure 1.
 - Harness damage can be very subtle. Even a light chafing of the harness wrap can cause the DTCs.

If **transmission harness damage** is found and/or the original routing concept is in place, proceed to step 3.

If **body harness damage** is found regardless of the transmission harness routing, create a TAC case for further instruction. Include photos of the original harness routing, area of damage, close up of damage and a clear description of your findings.

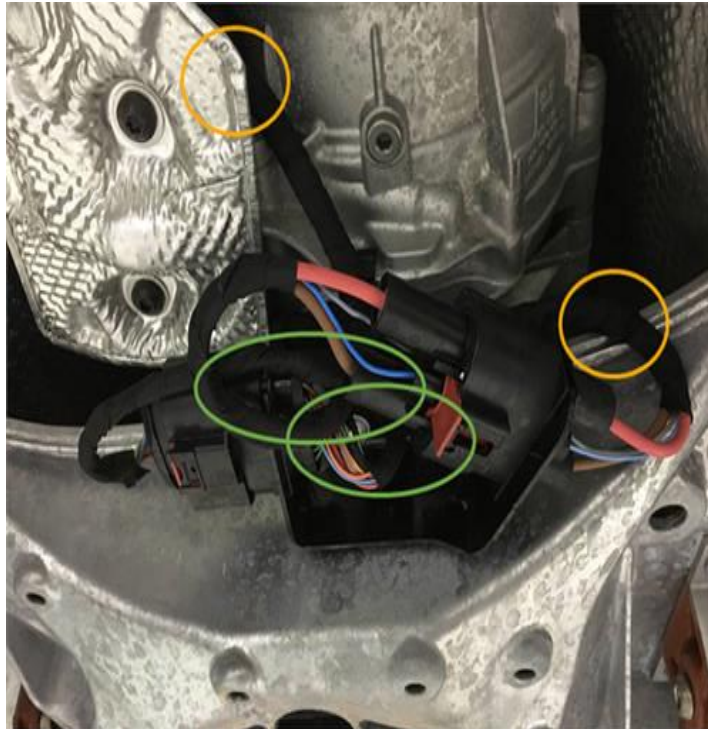


Figure 1. Common areas for harness damage. Also depicted is the original routing concept.



Figure 2. Example of a small rip in the protective tape.



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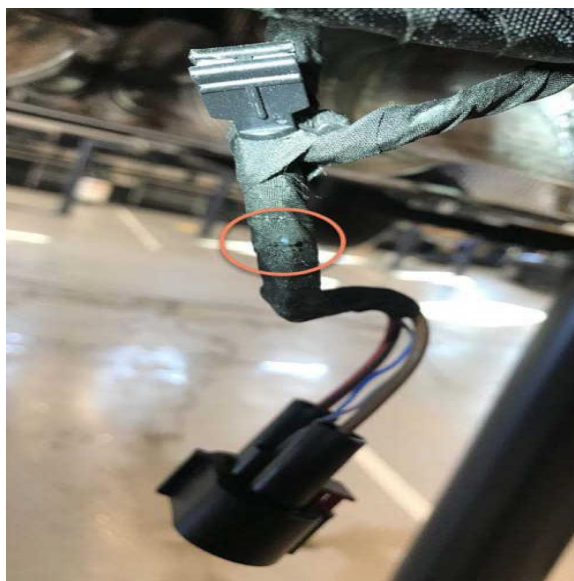


Figure 3. The damage on the original harness might be difficult to spot.



Figure 4. The cause of the DTC may be as small as a pinhole.

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2. If there is **no damage** found as described above **and** the new harness routing concept is present, proceed with standard diagnosis and repair procedures.

 Note:

If there is no damage found and DTC U11B000 (FlexRay data bus branch 2 faulty) is stored, inspect the area shown in Figure 5 and 6.

If damage is found in this area then create a TAC case, include photos, and a clear description of your findings.

 **Tip:** The J1121 is located under the driver's seat. For this reason, thoroughly inspect the harness as described in step 1 first.



Figure 5. The area where the body harness may rub.



Figure 6. Shows the rub mark on the wiring harness.

Transmission harness replacement and routing instructions:

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3. Replace the original transmission harness with a new part and reroute the transmission harness. The transmission harness should not be repaired.
- Remove the original transmission harness in the vehicle.
 - Wrap the exposed wires on the new transmission harness as shown in Figure 7.
 - Mount and route the new transmission harness as shown in Figure 8.

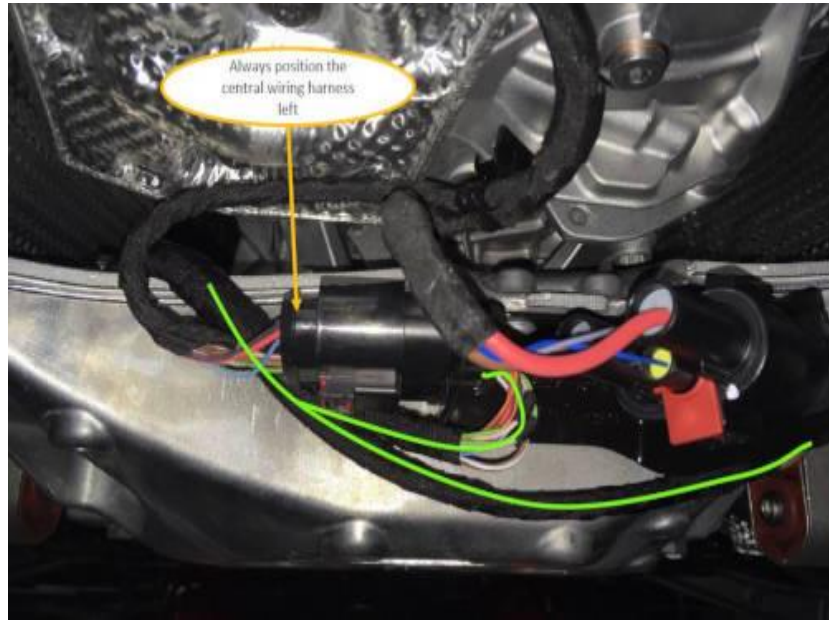


Figure 7. New routing and wrapping of the aft part of the transmission harness.



Figure

8. Routing and mounting of the transmission harness behind the crossmember.

4. The crossmember is shown dismounted in Figure 8 to show the new mounting points more clearly.



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For mounting and installation of the new transmission harness, the crossmember does not have to be disassembled.

Warranty

Claim Type:	• 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:	9781		
Damage Code:	0024		
Labor Operations:	Inspect the transmission harness	9781 9999	40 TU
	Reroute the transmission harness	9709 9999	80 TU
	For repairs to the body harness only:		
	Repair wiring loom (depends on the number of cables)	9709 41XX	See SRT
Diagnostic Time:	GFF	0150 0000	Time stated on the diagnostic protocol (Max 50 TU)
	Road test prior to the service procedure	No allowance	0 TU
	Road test after the service procedure	0121 0004	10 TU
Claim Comment:	As per TSB #2053878/6		

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

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
4K0971769A	Transmission Wiring Harness	01
N10729301	Tape	Up to .2

Tool Number	Tool Description
VAS 1978B	Wire Harness Repair Set
VAS 61XX	ODIS Service with VAS tester

Additional Information

All parts and service references provided in this TSB (2053878) are subject to change and/or removal.

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