35 Gearbox malfunction message in cluster (DTCs P17D800, P179D00, P174000, P174C, P174B, P174F, P179C, P174A, P174E)

35 13 13 2030477/4 July 12, 2013. Supersedes Technical Service Bulletin Group 35 number 13-10 dated May 7, 2013 for reasons listed below.

Model(s)	Year	VIN Range	Vehicle-Specific Equipment
S4 / S5	2010-2013	All	S-Tronic 7 speed transmission
RS5	2013	All	S-Tronic 7 speed transmission
S6 / S7	2013	All	S-Tronic 7 speed transmission

Condition

REVISION HISTORY				
Revision	Date	Purpose		
4	-	Revised <i>Condition</i> (Added "Expanded environmental conditions" criteria) Revised <i>Service</i> (Added "Expanded environmental conditions" instructions) Revised <i>Header Data</i> (Added MY2013 S4, S5, RS5, S6 and S7)		
3	5/7/2013	Revised Warranty (Corrected Damage Code)		
2	12/7/2012	Revised Service (Removed mechatronics replacement for fault P179D00)		
1	8/10/2012	Original publication		

- The following message appears in the information display: "Gearbox malfunction: you can continue driving".
- One or more of the following fault entries are stored in the transmission control module, J217 (address word 02):
 - DTC P17D800 (Torque limitation due to clutch temperature)
 - DTC P179D00 (Coolant oil valve electrical error)
 - DTC P174C (Valve 1 in the sub-gearbox 1, electric fault)
 - DTC P174B (Valve 4 in the sub-gearbox 1, electric fault)
 - DTC P174F (Valve 4 in the sub-gearbox 2, electric fault)
 - DTC P179C (Main pressure valve, electric fault)
 - DTC P174A (Valve 3 in the sub-gearbox 1, electric fault)

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- DTC P174E (Valve 3 in the sub-gearbox 2, electric fault)
- DTC P174000 (Clutch temperature monitoring)

In the expanded environmental conditions one or several of the following codes are logged:

- 1F68 1F2C 1F5A 1F5B 1F5C
- 1F5D 1F5E 22EB 22EC 1F5F

Fault codes and expanded environmental conditions codes must match *exactly* or this TSB should not be followed. The instructions to obtain the expanded environmental conditions are shown below

Technical Background

Poor internal contact area on circuit board will lead to faults. Oil additives can cause the plastic circuit plates to delaminate, causing contact loss.

Production Solution

Improved circuit board for mechatronics unit.

Service

Confirm that this TSB applies by checking the expanded environmental conditions codes:

- 1. Connect the scan tool to the vehicle.
- 2. Using ODIS Self Diagnosis:
 - Start Diagnosis.
 - Select tab "Control Module List".
 - Scroll down list to "02 Transmission Control Module".
 - Right-click to select "02 Transmission Control Module".
 - Select "Guided Functions" from pop-up menu (Figure 1).
 - Select "Read Measuring Value Block (RG.34)".
 - Select "Perform" (Figure 2).
 - Select option "Select measuring values individually".
 - Scroll down list to "IDE04347 Expanded environmental conditions"

Control mod	dule list (69	entries)
Address	Fault	Name
10	0	Parking Assistance 2 (10 - Parallel Parking Assistance / Parking Aid) (4H0
	0	High Beam Assistance (Not yet
	0	Special Function 2 (Not yet iden
	0	Air Conditioning Compressor (N
-10		Check DTC memory
90	0	Read all DTC memories
	0	Actuator For Exterior Noise (No Guided Functions
01	0	Engine Control Module 1 (01 - E Control module OBD 4G0906014B
51	0	Drive Motor Control Module (No
02	0	Transmission Control Module (02 - Transmission Electronics (0B5 S tronic
22	0	All Wheel Control (22 - All-wheel drive (Quattro Sport)) (4H0907163A 00
42	0	Door Electronics Driver Side (42 - Door Electronics, Driver's Side) (4G895

Figure 1. "Guided Functions" Selection

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- Select the very top position of "Expanded environmental conditions" (Figure 3).
- Select "OK" to obtain the values.

Cancel Cancel Control Module Control Module Control Module Control Module Control Module Control Module Control Module/Mechatronic replacing (RG.34) Control Module/Mechatronic replacing (RG.34) Control Module, coding (RG.34) Control module, coding

Figure 2. Read Measuring Value Block selection

Measured values selection				
Salacti	ID	Measuredualue		
001001	IDE03009	Start process requested		
	IDE00258	Gear Shift Lock Solenoid Control Circuit		
	IDE04347	Expanded environmental conditions		
	IDE04347	Expanded environmental conditions		
	IDE04347	Expanded environmental conditions		
	IDE04347	Expanded environmental conditions		
	IDE04347	Expanded environmental conditions		
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	IDE04347	Expanded environmental conditions		

Figure 3. Selection of top position of "Expanded environmental conditions"

3. Read the value of the "Expanded environmental conditions" (Figure 4).

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• If the last 4 digits match one of codes listed in the *Condition* section of this TSB, this TSB applies and the repair below should be performed.

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• If the last 4 digits do not match one of codes listed in the *Condition* section of this TSB, this TSB does not apply. A TACS case should opened using the normal Transmission Repair Authorization.

Read measu	red values				
Address 02	ID IDE04347	Measured value Expanded environmental conditions	Value 004F8B	Unit	Target value
1			Start update Description	To the tes	t plan Ok

Figure 4. Example of "Expanded environmental conditions". In this example, the last four digits do not match the codes listed in the Condition section, so this TSB would not apply.

If the TSB applies, perform the following repair:

- Remove the mechatronics unit per instructions in Elsa: Repair Manual >> Transmission >> S-Tronic Transmission >> 35 Gears, Shafts >> Removal and Installation >> DSG Transmission Mechatronic J743.
- Replace the circuit board per instructions in Elsa: Repair Manual >> Transmission >>S-Tronic Transmission Internal Components >> 35 Gears, Shafts >> Removal and Installation >> DSG Transmission Mechatronic J743 Circuit Boards.
- 3. Reinstall the mechatronics unit per instructions in Elsa: *Repair Manual >> Transmission >> S-Tronic Transmission >> 35 Gears, Shafts >> Removal and Installation >> DSG Transmission Mechatronic J743.*



Be sure to follow all cautions and warnings noted in the Elsa Repair Manual.

Tip: If the connector locks are damaged when the circuit board is replaced, the mechatronics unit must be replaced. Once connected, the circuit board cannot be removed and used again.

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Warranty

Claim Type:	Use applicable claim type. If vehicle is outside any warranty, this Technical Service Bulletin is informational only.		
Service Number:	3511		
Damage Code:	0040		
Labor Operations:	Remove and install Mechatronics	3511 1900	220 TU
	Remove and install printed circuit	3511 3799	40 TU
Diagnostic Time:	GFF to perform adaptation procedure.	0150 0000	Time stated on diagnostic protocol (Max 40 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 #2030477/4		

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

Part Number	Part Description	Quantity
0B5398009C	Repair Kit: Printed circuit foil for valve body	1
0B5315105TA	Oil pipe with seal	1
0B5321371E	Pan Gasket	1

Additional Information

All parts and service references provided in this TSB (2030477) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.

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