#### 37 Incorrect coding in control module after software update (DTC P1749 stored in TCM)

37 14 36 2037151/1 July 14, 2014.

| Model(s) | Year        | VIN Range | Vehicle-Specific Equipment |
|----------|-------------|-----------|----------------------------|
| A8       | 2013 - 2014 | All       | 4.0TFSI                    |

## Condition

- After an SVM update, the following DTC appears in the Transmission Control Module (TCM) J217 (address word 02):
  - DTC P174900 (Automatic transmission control module incorrect code)
- There are no performance issues, and the MIL is not illuminated. The fault is only noticed when the TCM fault memory is interrogated.

## **Technical Background**

The self-coding function of the TCM may not complete during a software update.

### **Production Solution**

Not applicable.

### **Service**

The coding cannot be changed with Guided Fault Finding or Guided Functions. Use the following ODIS instructions to manually code the TCM with the scan tool.

- 1. Before proceeding, confirm that DTC P174900 is stored in the TCM. If there is no record of the fault, the warranty claim will not be reimbursed.
- 2. In the Control Modules tab in ODIS, select "Transmission Control Module".
- 3. Right-click to select "Transmission Control Module" again, which will open a pop-up menu.

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4. Select "Control module OBD" (Figure 1).

| 01       | U          | Gear Shint Control Module (of -  | Selector Lever) (4m 18211 | SIA 0005 GSM-LL       |
|----------|------------|----------------------------------|---------------------------|-----------------------|
| 02       | 1          | Transmission Control Module (f   |                           | s) (4H1927158EG 1     |
| 22       | 0          | All Wheel Control (22 - All-whee | Measurement               | 1907163A 0013 4 V     |
| 42       | 0          | Deer Fleetreeles Driver Side (4) | Identify control module   | Side) (41/0050702D    |
| 42       | 0          | Door Electronics Driver Side (4. | Select version            | - Side) (4H0959/93R   |
| 52       | 0          | Door Electronics Passenger Sid   | Check DTC memory          | assenger's Side) (4H0 |
| 62       | 0          | Door Electronics Rear Left (62   | Read all DTC memories     | (4H0959795D 0273      |
| 72       | 0          | Door Electronics Rear Right (72  | Guided Functions          | ar) (4H0959795D 02    |
| Networki | ng diagram | Control module list              | Control module OBD        |                       |
| O Diag   | nosis 🔳 (  | Display 💐 Sorting                | Vehide OBD                |                       |

Figure 1. Selecting "Control module OBD".

5. In the **OBD functions** menu (Figure 2), select "Code" then "Perform".

| Adaptation                  | ^ |
|-----------------------------|---|
| Code                        |   |
| Code Bus master             |   |
| DTC Memory                  | - |
| Basic setting               | - |
| Identification              |   |
| Measured Values             |   |
| Output diagnostic test mode |   |
| Access authorization        | - |
|                             |   |
|                             |   |

Figure 2. ODB functions menu

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 A message appears with the warning: "The operation to read the date failed." (Figure 3). Select "Ok" to continue.

 The coding menu will be displayed. Highlight "[LO]\_Block 5", then select "Binary coding" (Figure 4).



Figure 3. Warning message

| System ID 0BK 40TFSIUSA | •                | 0027111071 |
|-------------------------|------------------|------------|
| Parameter name          | Current value    | Entry      |
| [LO]_Block 0            | [VO]_not defined |            |
| [LO]_Block 1            | [VO]_default     |            |
| [LO]_Block 2            | [VO]_default     |            |
| [LO]_Block 3            | [VO]_default     |            |
| [LO]_Block 4            | [VO]_default     |            |
| [LO]_Block 5            | [VO]_default     |            |
| Filter:                 |                  |            |

Figure 4. Coding menu

8. The binary coding screen appears. Select the row for Byte no. 2 to open the **Binary coding input** pop-up menu (Figure 5).

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| vstem ID | 0BK 40TESIUSA     |                      |           | Se Binary c | oding input   | ×       |
|----------|-------------------|----------------------|-----------|-------------|---------------|---------|
| Byte no. | Current hex value | Current binary value | Hex input |             | Current value | Entry   |
| 0        | 00                | 00000000             | Tickinpa  | Hex         | 00            | 00      |
| 1        | 00                | 00000000             |           | Binary      | 0000000       | 0000000 |
| 2 3      | 00                | 00000000             |           |             |               |         |

Figure 5. Binary coding input pop-up menu

- 9. In the pop-up menu, enter "01" in the Hex Entry field (top-right field), then select "Apply".
- 10. The coding menu will now show the changes ready to be made in the row for Byte no. 2 (Figure 6), under "Hex input". Select "Apply" on the bottom of the screen.

| 02 - Transr | mission Control Module | UDS/ISOTP/4H192      | 7158EG / 1002 / | H16 / EV_TCMALX51011 / 002022) | Adaptation |
|-------------|------------------------|----------------------|-----------------|--------------------------------|------------|
| System ID   | 0BK 40TFSIUSA          | •                    |                 |                                |            |
| Byte no.    | Current hex value      | Current binary value | Hex input       | Binary input                   |            |
| 0           | 00                     | 00000000             |                 |                                |            |
| 1 🗟         | 00                     | 00000000             |                 |                                |            |
| 2           | 00                     | 0000000              | 01              | 00000001                       |            |
|             |                        |                      |                 |                                |            |
|             |                        |                      |                 |                                |            |

Figure 6. Coding changes ready to be made

 A pop-up menu with the message: "Do you really want to perform the coding?" appears (Figure 7). Select "Yes" to continue.



Figure 7. Coding pop-up screen

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Page 4 of 6

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- A pop-up menu with the message: "The encoding string could not be checked for errors. Do you want to save anyway?" appears (Figure 8). Select "Yes".
- 13. One or more additional pop-up messages appear. Select "OK" for each message.



#### Figure 8. Error checking pop-up

| System ID | 0BK 40TFSIUSA     | •                    | 😋 Progress dialog  |                       |
|-----------|-------------------|----------------------|--|-----------------------|
| Byte no.  | Current hex value | Current binary value | Warning after writing the binary code.   |                       |
| 0         | 00                | 0000000              | You cannot reset the control module from t   | he program.           |
| 1         | 00                | 00000000             | <ul> <li>Please do so manually, if necessary.</li> <li>One of the possible effects: the new code of</li> </ul> | cannot be determined. |
| 2         | 00                | 00000000             |  |                       |
|           |                   |                      | 12   | Ok                    |

#### Figure 9. Pop-up messages

14. After the pop-up messages have been cleared, the updated coding will be displayed under "Current hex value" (Figure 10).

| ary input |
|-----------|
|           |
|           |
|           |
|           |



- 15. Clear the P1749 fault from the memory.
- 16. Perform an SVM specified-actual.

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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:   | 3730  |                   |   |  |  |  |
| Damage Code:      | 0039  |                   |   |  |  |  |
| Labor Operations: | Code the TCM  | 3730 2599         | 50 TU   |  |  |  |
| Diagnostic Time:  | GFF   | 0150 0000         | Time stated on<br>diagnostic<br>protocol<br>(Max 40 TU) |  |  |  |
|                   | Road test prior to service procedure  | No allowance      | 0 TU  |  |  |  |
|                   | Road test after service procedure   | No allowance      | 0 TU  |  |  |  |
|                   | Technical diagnosis at dealer's discretion<br>(Refer to Section 2.2.1.2 and Audi Warranty Online for                  | DADP allowance of | details)  |  |  |  |
| Claim Comment:    | As per TSB #2037151/1   |                   |   |  |  |  |

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.

## **Additional Information**

All parts and service references provided in this TSB (2037151) are subject to change and/or removal. Always check with your Parts Department and service manuals for the latest information.

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