

Symptom-based workshop manual

Service

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3

Transmission Symptom - Yellow Warning Message, Jammed Claw Clutch, P1D2E00, 00ABC8 (SY 86/20)

Change overview:

| Release | Date | Change |
|---------|-----------|--|
| 0 | 6/29/2020 | First publication |
| 1 | 7/20/2020 | Update of Work Procedure |
| 2 | 2/9/2024 | Document completely revisedAffected order types and model years added |

Model Line: Taycan (Y1A / Y1B / Y1C)

Model Year: As of 2020 up to 2024

Concerns: Automatic transmission

Symptom: The customer complains about an active yellow warning message "Transmission faulty - driving permitted".

The vehicle no longer changes into 2nd gear, but can still be moved forwards and backwards. From a speed of 50 km/h (30 mph), the warning message "Transmission faulty - reduced driving possible" appears on the instrument cluster.

The following fault memory entry is stored in the fault memory of the DME control unit:

P1D2E00 - Shift monitoring, claw clutch, timeout during disengagement (00ABC8)

Cause: The symptom is caused by radial jamming of the claw clutch (claw clip) in the automatic transmission.

Remedial Action:

If a complaint is made, perform an actuator test and, if necessary, release the jammed claw clutch with a manual torque load.

Required tools

Tools: • **P90999 - PIWIS Tester 4**

• Battery charger with a current rating of **at least 90 A**, e.g., **VAS 5908 90-A battery charger**. For further information about the battery chargers to be used, see the corresponding Workshop Manual. ⇒ Workshop Manual '270689 Charging vehicle electrical system and battery'

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Review claw clutch clamps



Information

Always make sure that the power supply on the vehicle is not interrupted while working with the PIWIS Tester. A battery charger with a current rating of at least 90 A must be connected to the vehicle battery.

The PIWIS Tester instructions take precedence and in the event of a discrepancy these are the instructions that must be followed. Deviations may occur with later software releases.

The procedure described here has been structured in general terms; different text or additions may appear in the PIWIS Tester.

Work Procedure: 1 Connect and switch on the battery charger.

2 Place original remote control in emergency start tray.



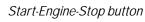
Information



Place remote control in emergency start tray

Switch on ignition: Press the Start-Engine-Stop \Rightarrow Start-Engine-Stop button -1 - button without stepping on the brake pedal.

- 3 Connect PIWIS Tester to the vehicle and start. Switch on the ignition.
- 4 Carry out actuator test for servo motor (clutches).
 - 4.1 Select the DME control unit in the control unit selection screen (⇒ "Overview" menu).
 - 4.2 Select the "Actuator tests" menu.



- 4.3 Select the 'Campaign' function and press F12" ('Next') to confirm your selection.
- 4.4 Select sequence for "Servo motor (clutches) select "F1 Help" and confirm with F12" (Next).
- 4.5 Observe preconditions for actuator testing under F1".

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4.6 Start the check from "Shift_Positon" by selecting value "2nd gear" and confirm with •F8".

| Assessment | | Action |
|------------|---|--|
| (√) | Check is performed and the 2nd gear is | Claw clutch not jammed. |
| | engaged. | Delete passive fault "P1D2E00 - Shift monitoring, claw clutch, timeout during installation (00ABC8)". |
| | | Continue with Step 5. |
| (X) | Check is not performed and the 2nd gear is | Release jammed claw clutch manually. |
| | not engaged. | Continue to \Rightarrow Technical Information '270689 manually release the jammed clutch'. |

- 5 Erase fault memory.
- 6 Switch off ignition. Disconnect the PIWIS Tester from the vehicle.

Manually release the jammed clutch



Information

- A jammed claw clutch can be released by a high torque drive in the transmission.
- High torques can only be transferred on a dry and paved road.
- The torque load can be achieved by accelerating several times with different loads (pedal positions) and driving modes (no high speeds are necessary).
- 1 Have a second person to operate the PIWIS Tester during the test drive.
- 2 Review transmission position while driving.
 - 2.1 Select the DME control unit in the control unit selection screen (\$\Rightarrow\$"Overview" menu).
 - 2.2 Select the "Actual values input signals" menu.
 - 2.3 Select the "G_Transmission" function and press F12" ('Next') to confirm your selection.
 - 2.4 Select actual value "G030_Transmission position, actual position from sensor value" and confirm with •F12" (Next).



Information

Under 'Value' either "R / 1st gear" or "2nd gear" is displayed. If under 'Value' "2nd gear" is displayed, the claw clutch has been freed.

2.5 Load vehicle at a suitable location with high torque requirements, changing between the different loads and checking whether the transmission is shifting into second gear.

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In rare cases, it may be necessary to carry out a Launch Control start (racing start) several times in Sport+ mode by pressing the accelerator pedal several times after starting up.

It is mandatory to observe the respectively valid statutory regulations (road traffic regulations). Please also see the ⇒ Betriebsanleitung in the chapter "Launch Control".

| Assessment | | Action |
|------------|--|--|
| (v) | The automatic transmission changes to 2nd gear. | Delete passive fault "P1D2E00 - Shift monitoring, claw clutch, timeout during installation (00ABC8)". Switch off ignition. Disconnect the PIWIS Tester from the vehicle. |
| (X) | The automatic transmission does not change to 2nd gear. | Jammed claw clutch cannot be released. Replace the automatic transmission. For procedure, see: ⇒ Workshop Manual '373527 Removing and mounting automatic transmission' |

Labor position and PCSS encryption

Labor positions:

| APOS | Labor operation | I No. |
|----------|--|-------|
| 38380100 | Check the C1 clutch | |
| 38384100 | Repair clutch C1 | |
| 37354101 | Check and replace automatic transmission | |

PCSS encryption:

| Location (FES5) | 38380 | Clutch 1 |
|-------------------|-------|---------------------|
| Damage type (SA4) | 1712 | sticks / gets stuck |

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