

**Eliminating Symptoms in Body Interior: Reworking Wire Harness on Transfer Case Servo Motor (Warning message "Fault All-wheel drive system" in the instrument cluster)/SY1916)**

**General information**

**Symptom**

The warning message "Fault All-wheel drive system" is displayed in the instrument cluster. Fault codes can be stored in the fault memory of the all-wheel drive control unit.

**Causes and remedial action**

**Cause** Due to incorrect sealing of the electric plug connection on the transfer case servo motor, moisture can get into the connector. As a result, the contacts can become corroded.

Model Year: **As of 2011 up to 2017**

**Remedial Action** In the event of a customer complaint, check the plug connection on the servo motor and the servo motor itself for damage:

- If the electric plug connection on the transfer case servo motor is corroded, replace section of cable including electric plug connection using a repair kit.
- If the servo motor is damaged, replace section of cable including electric plug connection and transfer case servo motor.

**Tools:** - PIWIS Tester  
- Charger

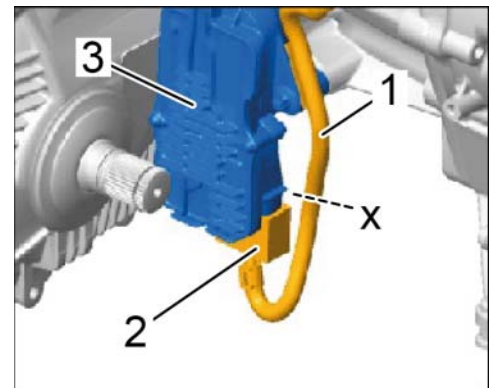
**Repairing electric plug connection on transfer case servo motor**

Parts Info: **Cayenne (V6) Tiptronic**  
**Cayenne S (V6) Tiptronic**  
**Cayenne S Hybrid/S E-Hybrid**  
**Cayenne GTS (V6) Tiptronic**

Part No.	Designation	Qty.
000.043.989.70	⇒ Transfer case cable repair kit	1 ea.

- Work Procedure: 1 Lift the vehicle. ⇒ *Workshop Manual '4X00IN Lifting the vehicle'*
- 2 Release and disconnect electric plug connection ⇒ *Repairing electric plug connection on transfer case servo motor -2-* on the transfer case servo motor ⇒ *Repairing electric plug connection on transfer case servo motor -3-*. ⇒ *Workshop Manual '397819 Removing and installing servo motor on transfer gear'*

- 3 Disconnect wire harness ⇒ *Repairing electric plug connection on transfer case servo motor -1-* in the marked area ⇒ *Repairing electric plug connection on transfer case servo motor -X-*.
- 4 **Attach new** electric wire harness with electric plug connection ⇒ *Repairing electric plug connection on transfer case servo motor -2-* to the wire harness ⇒ *Repairing electric plug connection on transfer case servo motor -1-* (20 lines). ⇒ *Workshop Manual '9X00IN Ordering and repairing electric plug connections'*
- 5 Plug electric plug connection ⇒ *Repairing electric plug connection on transfer case servo motor -2-* into the transfer case servo motor ⇒ *Repairing electric plug connection on transfer case servo motor -3-*.
- 6 Lower the vehicle.
- 7 PIWIS Tester must be connected to the vehicle.
- 8 Read out and erase fault memory.
- 9 Disconnect the PIWIS Tester from the vehicle.



*Repairing electric plug connection on transfer case servo motor*

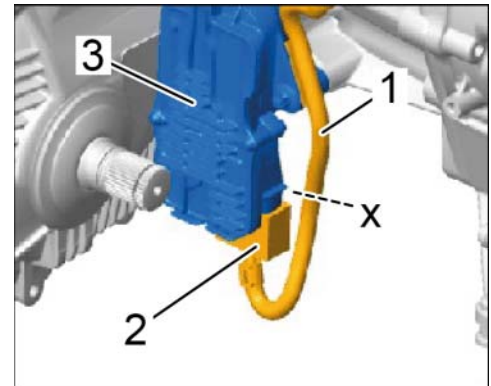
### Repairing electric plug connection on transfer case servo motor

Parts Info: **Cayenne S (V8) Tiptronic**  
**Cayenne Turbo/Turbo S (V8) Tiptronic**  
**Cayenne GTS (V8) Tiptronic**

Part No.	Designation	Qty.
000.043.989.94	⇒ Transfer case cable repair kit	1 ea.

- Work Procedure: 1 Lift the vehicle. ⇒ *Workshop Manual '4X00IN Lifting the vehicle'*
- 2 Release and disconnect electric plug connection ⇒ **-2-** on the transfer case servo motor ⇒ **-3-**. ⇒ *Workshop Manual '397819 Removing and installing servo motor on transfer gear'*
  - 3 Disconnect wire harness ⇒ **-1-** in the marked area ⇒ **-X-**.
  - 4 **Attach new** electric wire harness with electric plug connection ⇒ *Repairing electric plug connection on transfer case servo motor -2-* to the wire harness ⇒ *Repairing electric plug connection on transfer case servo motor -1-* (20 lines). ⇒ *Workshop Manual '9X00IN Ordering and repairing electric plug connections'*

- 5 Plug electric plug connection ⇒ *Repairing electric plug connection on transfer case servo motor -2-* into the transfer case servo motor ⇒ *Repairing electric plug connection on transfer case servo motor -3-*.
- 6 Lower the vehicle.
- 7 PIWIS Tester must be connected to the vehicle.
- 8 Read out and erase fault memory.
- 9 Disconnect the PIWIS Tester from the vehicle.



*Repairing electric plug connection on transfer case servo motor*

**Invoicing**

Invoicing: **Scope 1: Replacing electric line incl. electric plug connection on the transfer case servo motor**

The work involved is invoiced under the labor operation:

APOS	Labor operation	I No.
39784146	Repairing transfer case servo motor	

For invoicing and documentation using PQIS, enter the following coding:

Location (FES5)	39780	Servo motor f. transfer case
Damage type (SA4)	3319	Plug connections corroded

Invoicing: **Scope 2: Replacing transfer case servo motor and electric line incl. electric plug connection on transfer case servo motor**

The work involved is invoiced under the labor operation:

APOS	Labor operation	I No.
39785546	Replacing transfer case servo motor	

For invoicing and documentation using PQIS, enter the following coding:

Location (FES5)	39780	Servo motor f. transfer case
Damage type (SA4)	3319	Plug connections corroded

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