

Spare Parts Requirements - Transfer Case/Transfer Case Control Unit: Note link between transfer case and control unit software (26/18)

Revisions: This bulletin replaces bulletin dated April 17, 2018.

This revision includes changes to the following:
 - Under Differentiation: Table was revised.
 - Work Procedures where revised.

Model Year: **As of 2014 up to 2018**

Model Line: **Macan**

Subject: **Transfer case and transfer case control unit** (all-wheel drive control unit)

Information:



Information

"Gas nitrocarburizing (GNC)" is now used to coat the clutch plates on the transfer case.

The software in the related transfer case control unit must be updated accordingly.

⇒ A mixed installation – transfer case with GNC plates and control unit software with an old data version or vice versa – is not permitted.

Likewise, a cross installation (with another vehicle) is not permitted.

In the event of a customer complaint about the symptom or generally, if the transfer case or the related transfer case control unit needs to be replaced, the following information and special points must always be observed.

The relevant procedure must be followed, depending on which components need to be replaced.

Date of Introduction: From March 2018, the new transfer case with GNC-coated plates is installed during production.

- Tools:
- **9900 - PIWIS Tester 3** with test software **version 37.200.020** (or higher) installed
 - **Battery Charger/Power Supply** - Suitable for AGM Type batteries, recommended current rating of 90A fixed voltage 13.5V to 14.5V.

Differentiation: For the **display in PIWIS Tester 3**:

In the control unit overview ⇒ select '**All-wheel drive**' control unit ⇒ 'F12' ⇒ '**Extended identifications**':

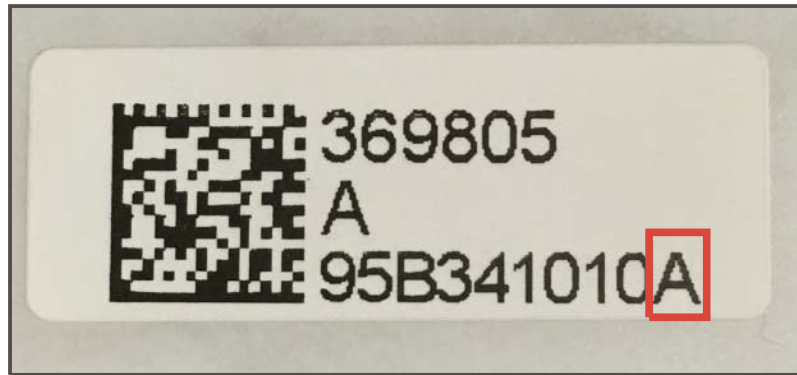
	Transfer case without GNC (old)	Transfer case with GNC – NEW –
Display in the PIWIS Tester: ⇒ Porsche Part No. of control unit • after commissioning:	95B.927.755.BJ	95B.927.755. CB
Display in the PIWIS Tester: ⇒ Software version of control unit • after commissioning	1204	1360
- Sticker on transfer gear (⇒ <i>Part number sticker (on transfer case)</i>) - and lasered on the underside	95B.341.010	95B.341.010. A
Display in the PIWIS Tester: ⇒ PR number* in the vehicle order (Additional menu – •F7")	- without -	LU2 – Transfer gear reinforced
Porsche Spare Parts Catalog (PET2)	95B.341.010	95B.341.010. A



Information

* PR number:

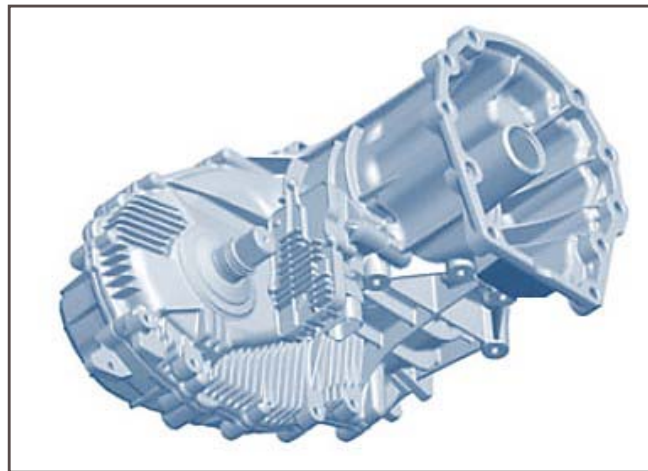
- The PR number can be read out using PIWIS Tester 3: In the 'Control unit overview' ⇒ •F7" - Additional menu ⇒ Maintenance of vehicle data
- The PR number is written automatically during commissioning of the new control unit.
- This is already written during production for vehicles produced from calendar week 12/2018.
- The relevant software is programmed using the PIWIS Tester based on the PR number.



Part number sticker (on transfer case)

Variant 1: **Replacing transfer case and transfer case control unit** (together, ⇒ *Transfer gear with control unit*).

The relevant transfer case control unit is already fitted on a new transfer case. **PIWIS Tester 3** selects the correct data record and sets the PR number LU2 automatically.



Transfer gear with control unit

1 Preliminary work:

- 1.1 Connect a battery charger with a current rating of **at least 90 A**.
- 1.2 Switch on the ignition.

- 1.3 **9900 - PIWIS Tester 3** with software version **37.200.020** (or higher) installed must be connected to the vehicle communication module (VCI) via the **USB cable**. Then, connect the communication module to the vehicle and switch on the PIWIS Tester.
- 1.4 On the PIWIS Tester start screen, call up the ⇒ **'Diagnostics'** menu.
The diagnostic application is then started and the control unit selection screen is populated.

2 Replacing all-wheel drive control unit (transfer case control unit) including transfer case:

2.1	Control units 'Overview'	All-wheel drive control unit	select	•F12"
2.2	'Maintenance/ repairs'	Replacement work on the transfer case	select	•F12"
2.3	Control unit replacement including transfer case		select	•F12"
2.4	Control unit replacement including transfer case: This procedure is used for replacing the control unit including transfer case. The following steps are performed:			•F12"
		<ul style="list-style-type: none"> • Writing vehicle identification number (VIN) • Automatic programming • Automatic coding • Erasing fault memories 		
2.5	'Start' function			•F8"
3	Teaching engine immobilizer:			
3.1	Control units 'Overview'	Calling up Additional menu		•F7"
3.2		Immobilizer commissioning	select	•F12" •F12"
4	Calibrating Porsche Doppelkupplung (PDK) control unit:			
4.1	Control units 'Overview'	'Porsche Doppelkupplung (PDK)'	select	•F12"

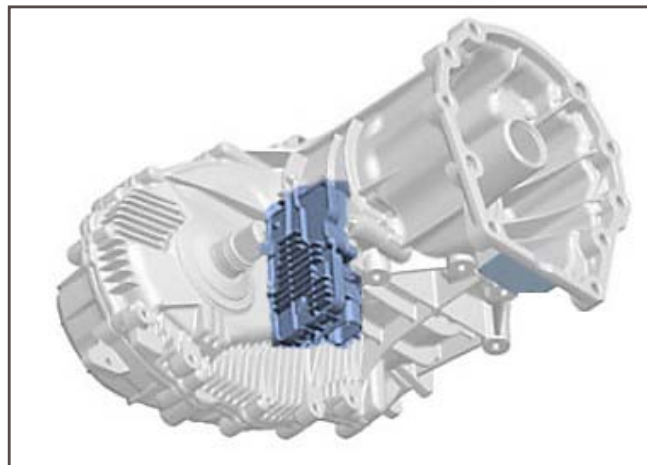
4.2	'Maintenance/ repairs'	Calibrating	select	•F12" •F12"
4.3		'Calibration after replacing transmission mechanism components'	select	•F12" •F12"

5 **Subsequent work:**

- 5.1 Read out and erase fault memory.
- 5.2 Switch off the ignition.
- 5.3 Disconnect the PIWIS Tester from the vehicle.
- 5.4 Switch off and disconnect the battery charger.

End of remedial action.

Variant 2: **Replacing only the transfer gear control unit:**



Control unit without transfer case

1 **Preliminary work:**

- 1.1 Connect a battery charger with a current rating of **at least 90 A**.
- 1.2 Switch on the ignition.

- 1.3 **9900 - PIWIS Tester 3** with software version **37.200.020** (or higher) installed must be connected to the vehicle communication module (VCI) via the **USB cable**. Then, connect the communication module to the vehicle and switch on the PIWIS Tester.
- 1.4 On the PIWIS Tester start screen, call up the ⇒ **'Diagnostics'** menu.
The diagnostic application is then started and the control unit selection screen is populated.

2 Replacing all-wheel drive control unit (transfer case control unit):

2.1	Control units 'Overview'	All-wheel drive control unit	select	•F12"
2.2	'Maintenance/ repairs'	Replacement work on the transfer case	select	•F12"
2.3	Control unit replacement		select	•F12"
2.4	Control unit replacement: The procedure is used for replacing the control unit. In this case, the "old" transfer case remains installed. The following steps are then performed:			
		<ul style="list-style-type: none"> • Reading data • Replacing control unit • Writing data • Automatic programming • Automatic coding • Erasing fault memories 		•F12"
2.5	'Start' function			•F8"

5 Subsequent work:

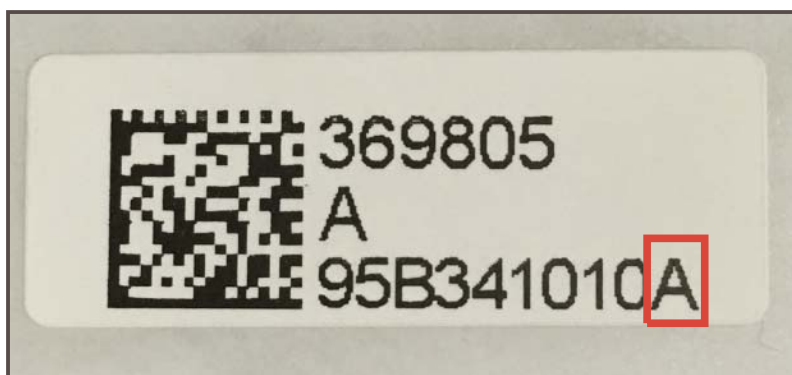
- 5.1 Read out and erase fault memory.
- 5.2 Switch off the ignition.
- 5.3 Disconnect the PIWIS Tester from the vehicle.
- 5.4 Switch off and disconnect the battery charger.

End of action required.

Variant 3:

Replacing Porsche Doppelkupplung (PDK) together with the transfer case:

Part number on the new (replacement/reconditioned) transfer case (sticker with part number ⇒ *Part number sticker (on transfer case) -Index-*) must be checked:



Part number sticker (on transfer case)

- a) **Part number** of the new **transfer gear does not correspond to the new type** ⇒ **Part number ends with 010 and has no index** (no letter, e.g. "A")

⇒ **The transfer case on the new PDK must be replaced by a transfer gear with the new part number (with index letter).**

⇒ **See** ⇒ *Workshop Manual '396519 Removing and installing transfer gear'* and the new software is installed,

⇒ **see** ⇒ *Workshop Manual '373455 Replacing Porsche Doppelkupplung (PDK)'*

- b) Part number of the new transfer case corresponds to the new type ⇒ **Part number has index letter** (⇒ *Part number sticker (on transfer case)-red frame- "A"*)

⇒ **The transfer case can remain on the new PDK and can be installed in the vehicle.**

⇒ **See** ⇒ *Workshop Manual '373455 Replacing Porsche Doppelkupplung (PDK)'*

Parts Info: Porsche Doppelkupplung (PDK):

Vehicle type:	Part No. of 'Porsche Doppelkupplung (PDK)':
Macan Turbo	9A7.300.040.PX.000 ⇒ Porsche Doppelkupplung (PDK)
Macan S	9A7.300.040.QX.000 ⇒ Porsche Doppelkupplung (PDK)
Macan GTS	9A7.300.040.RX.000 ⇒ Porsche Doppelkupplung (PDK)
Macan Basis R4 (185 kW)	9A7.300.040.SX.000 ⇒ Porsche Doppelkupplung (PDK)

Macan Turbo Performance	9A7.300.040.TX.000 ⇒ Porsche Doppelkupplung (PDK)
Macan Basis R4 (174 kW)	9A7.300.041._X.000 ⇒ Porsche Doppelkupplung (PDK)

Invoicing: The work involved is invoiced under the labor operation:

APOS	Labor operation	I No.
39135550	Replacing transfer case control unit	
39655550	Replacing transfer case	

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

Location (FES5)	39650	Transfer case
Damage type (SA4)	1313	vibrating, shaking

- References:
- ⇒ *Workshop Manual '396555 Replacing transfer gear'*
 - ⇒ *Workshop Manual '391355 Replacing transfer gear control unit (with integrated servo motor)'*
 - ⇒ *Workshop Manual '396519 Removing and installing transfer gear'*
 - ⇒ *Workshop Manual '373455 Replacing Porsche Doppelkupplung (PDK)'*

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