

**Customer Complaint - Vibration/Jerking During Acceleration: Checking Transfer Gear (SY 132/17)**

Revision: This bulletin replaces bulletin Group 3 132/17, dated February 5, 2018.

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

Model Line: **Macan**

Information:



**Information**

- Currently, the **Porsche Doppelkupplung (PDK)** is increasingly being replaced together with the transfer case.
- When checked by the supplier, the Porsche Doppelkupplung (PDK) is found to be "OK". It was **mainly only the transfer case that was defective**.

⇒ **Before doing any other work, the following test steps and procedures must be observed.**



**Information**

The "transfer case" is designed as an active all-wheel drive system that is dynamically adapted to the respective driving state.

**Power transmission** between the front and rear axle is controlled electronically via the "all-wheel drive servo motor (transfer case)" and the **multi-plate clutches integrated in the transfer case**.

⇒ **On all-wheel drive vehicles, the drive train can become strained** at low speeds and when the steering is turned sharply **when "Off-road mode" is activated, depending on design**.

- **Under extreme conditions**, the drive train can also become strained **when "Off-road mode" is deactivated**.
- **Customers** with little experience with all-wheel drive vehicles **can interpret this behavior as a fault**, which in turn can **result in incorrect diagnoses** in the workshop.

Action required: **Customer complaint to be checked:**

- **Rough-running engine** or
- the **vehicle vibrates** or
- the **engine jerks under load/during acceleration**.

**NOTICE**

**Driving with connectors on chassis components or control units disconnected.**

- **Bearings in transfer case can be damaged.**

⇒ **Drive vehicle only at a maximum speed of 30 mph (50 km/h).**

- ⇒ Do not drive vehicle in the upper load range or at full throttle.
- ⇒ During Diagnosis of a vibration, a defective front axle shaft can cause a vibration and is masked when the Transfer case is disconnected as torque is no longer applied to the front drive system in the same manner.

1 Carry out the test procedure under the following conditions:

- On a **straight stretch**
- from **speeds less than 10 mph (20 km/h)**
- accelerate the vehicle in the partial load range.

During this test procedure, if:

- **jerking can be felt**, the test procedure under ⇒ (below) must also be carried out in order to determine the exact cause.
- **no jerking is felt**, see the information below about normal vehicle behavior:



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2 **Disconnect connector on center differential lock** (plug connection on transfer gear servo motor).

2.1 Carry out the test procedure under the following conditions:

- On a **straight stretch**
- from **speeds less than 10 mph (20 km/h)**
- accelerate the vehicle in the partial load range.

2.2 Re-connect connector on center differential lock.

⇒ **If the problem is no longer present** (when the connector on the center differential lock is disconnected),

the hang-on transfer gear must be replaced, see ⇒ *Workshop Manual '396555 Replacing transfer box'* Re-program all-wheel drive control unit



### Information

The **Porsche Doppelkupplung (PDK)** is thus reliably ruled out as the component responsible for causing the problem and **must not be replaced together with the transfer case**.

⇒ **If the problem is still present (when the connector on the center differential lock is disconnected), try to find the cause of the problem in the double clutch transmission or drive train area.**

**End** of remedial action.

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

APOS	Labor operation	I No.
39655550	Replacing transfer case	

References: ⇒ *Workshop Manual '396555 Replacing transfer box'*

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