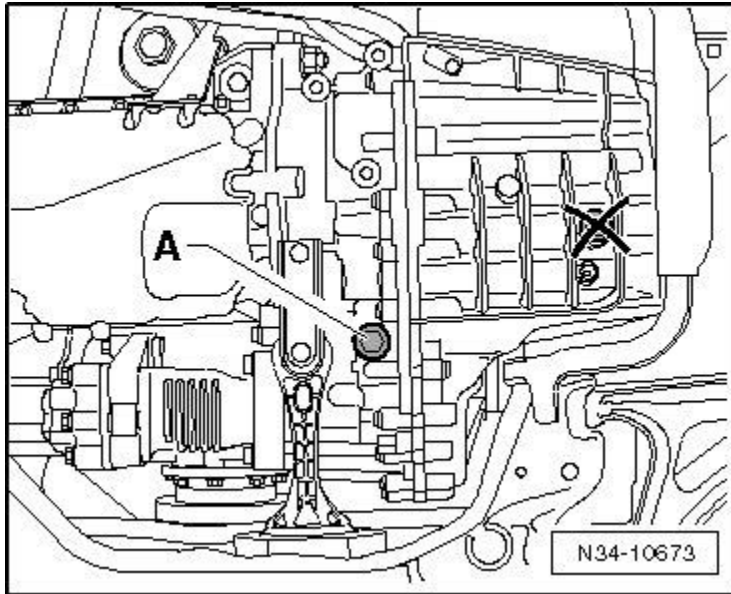


Mechatronic, with Transmission Removed

Always make sure that no dirt enters an open transmission. Dirt entering can cause a transmission malfunction with open Direct Shift Gearbox (DSG) Mechatronic (J743) and/or oil pump.

Mechatronic, removing

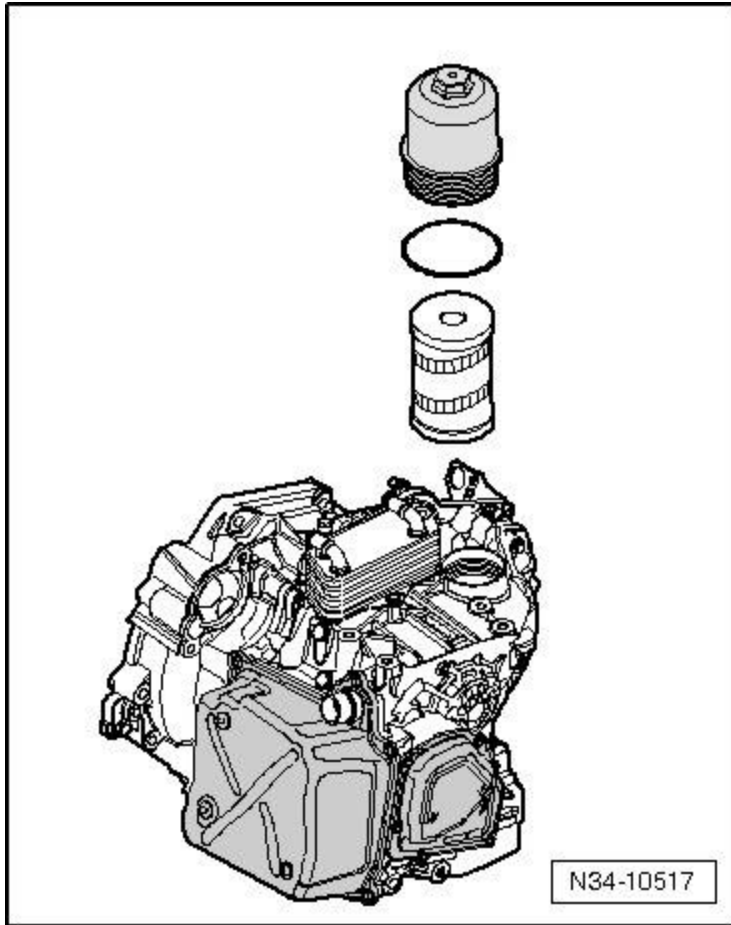
- Remove bolt - A - near pendulum support.



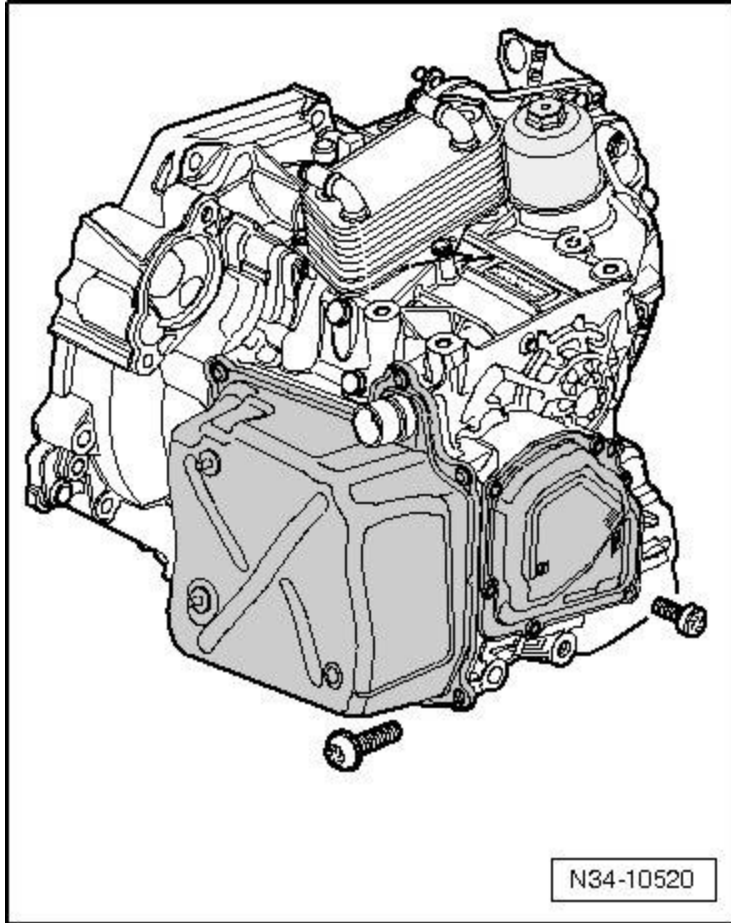
Up to transmission production date "September 20, 2004", transmissions with two bolts were installed.

A plastic overflow tube is located in this hole (with 8 mm hex socket head, torque specification: 3 Nm). Its length determines the oil level in transmission.

- Remove this oil tube.
- Drain oil.
- Hand-tighten overflow tube to 3 Nm.
- Remove filter.



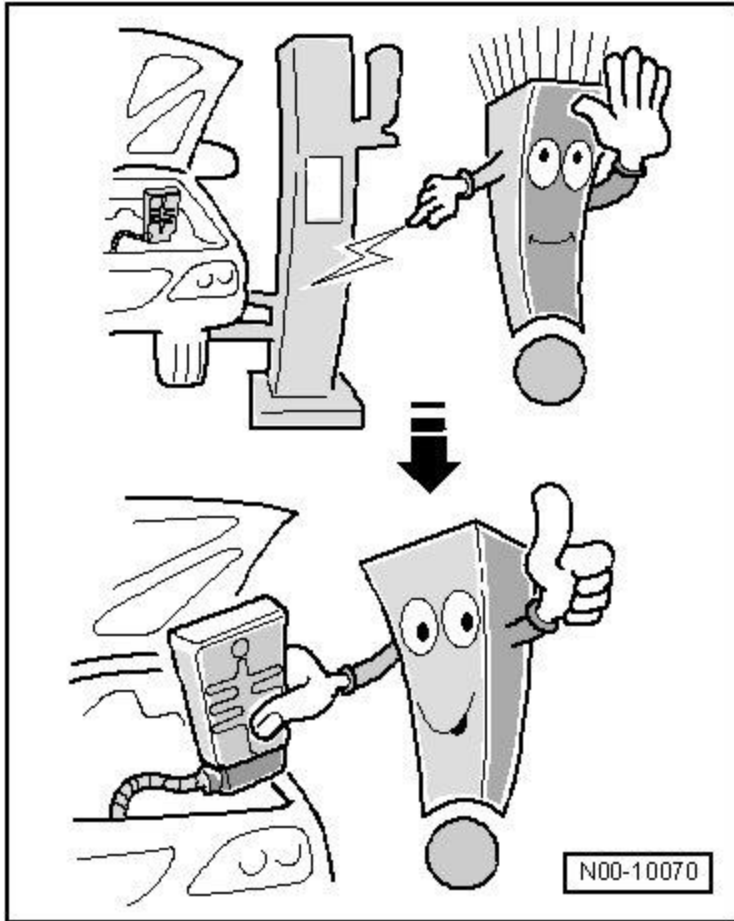
- Insert new filter with seat facing downward and tighten housing to 20 Nm.
- ☒ After repairing, you do not have to change filter again when filling oil.
- Remove both - **covers** -.



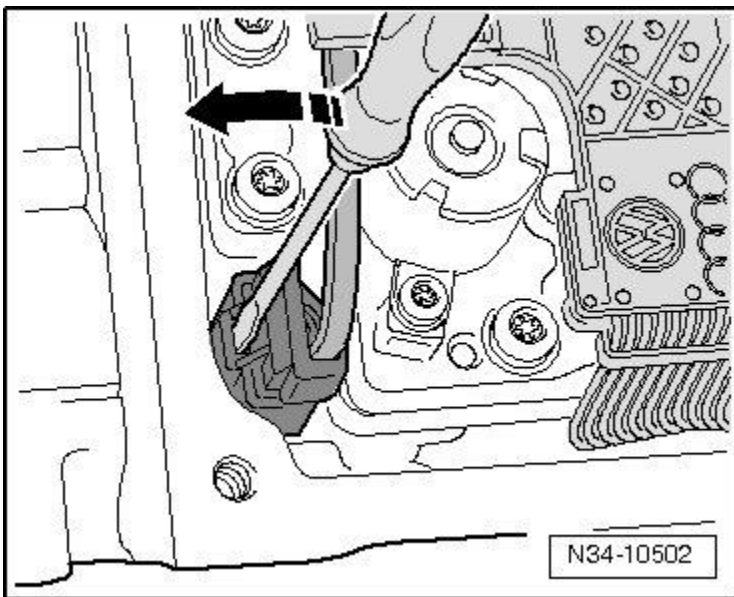
Small oil pump cover and large cover bolts must always be replaced.

Large cover seal must also be replaced.

Before handling Mechatronic, touch a grounded object again.

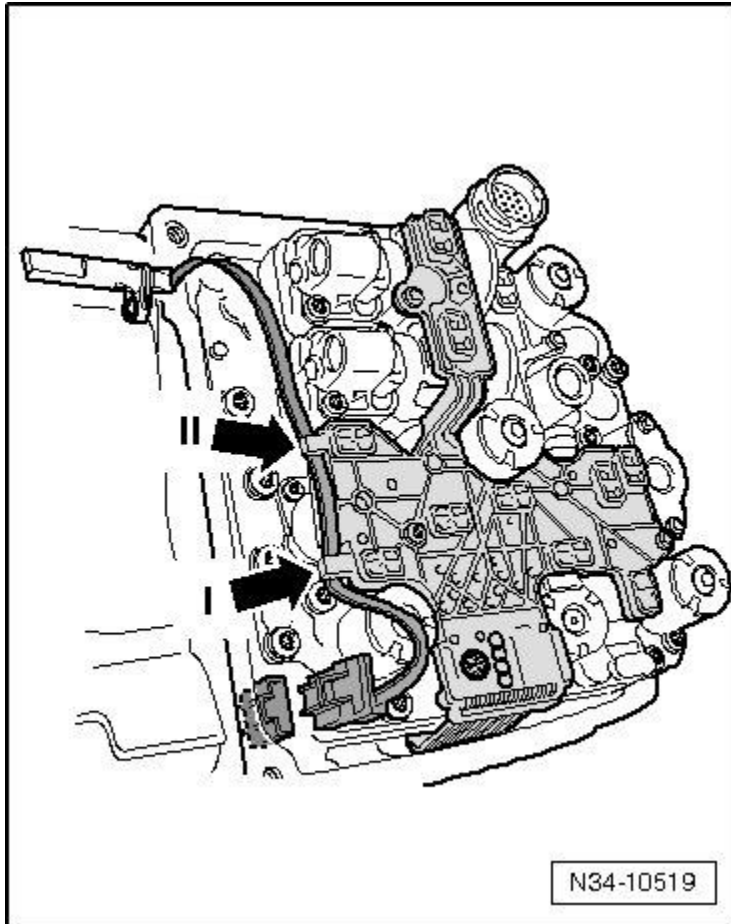


- Carefully release connector with a screwdriver in direction of - **arrow** -.

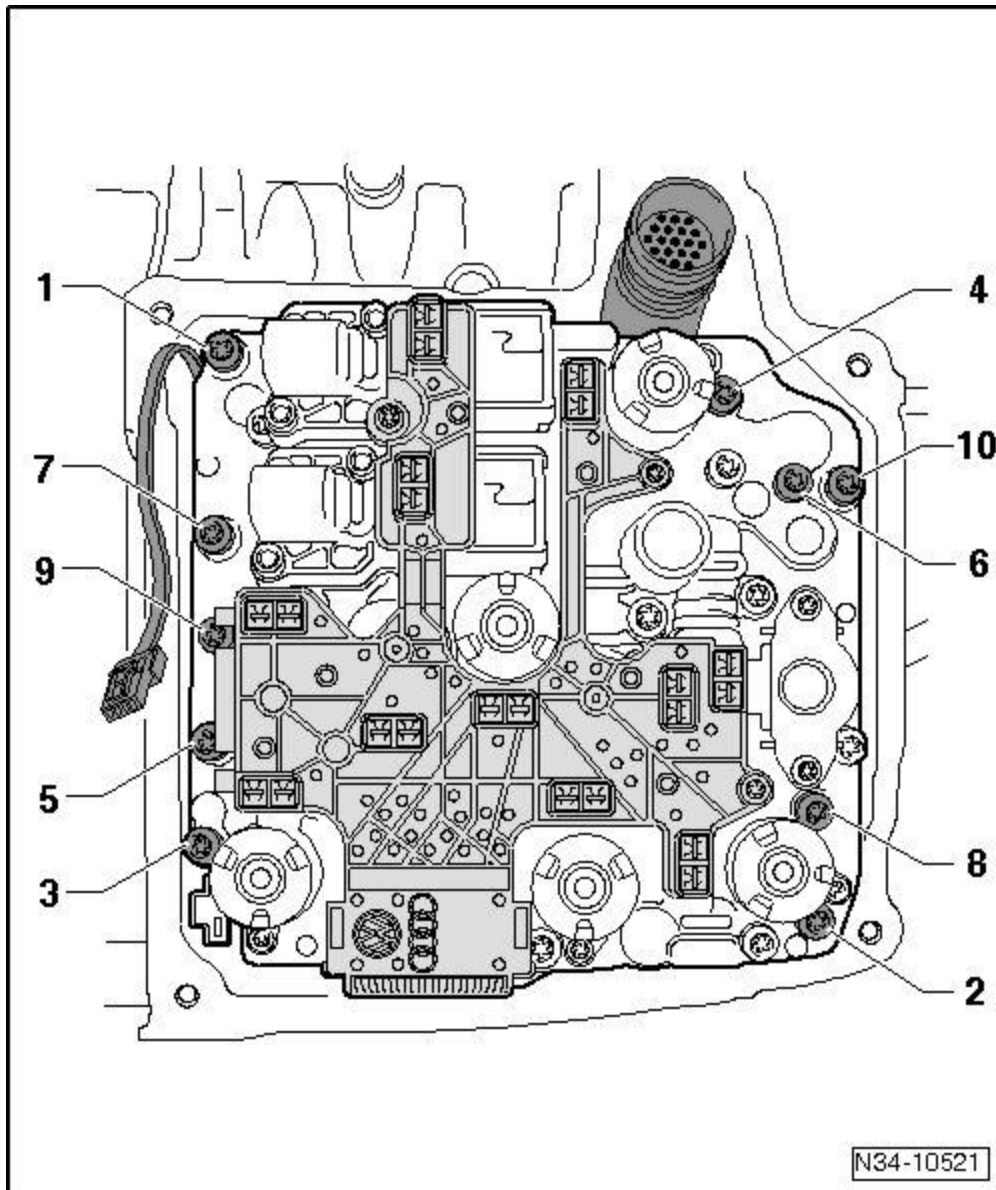


⌘ Do not pull on wire!

- Remove connector.
- Remove line from lower clamp - **arrow I** -.

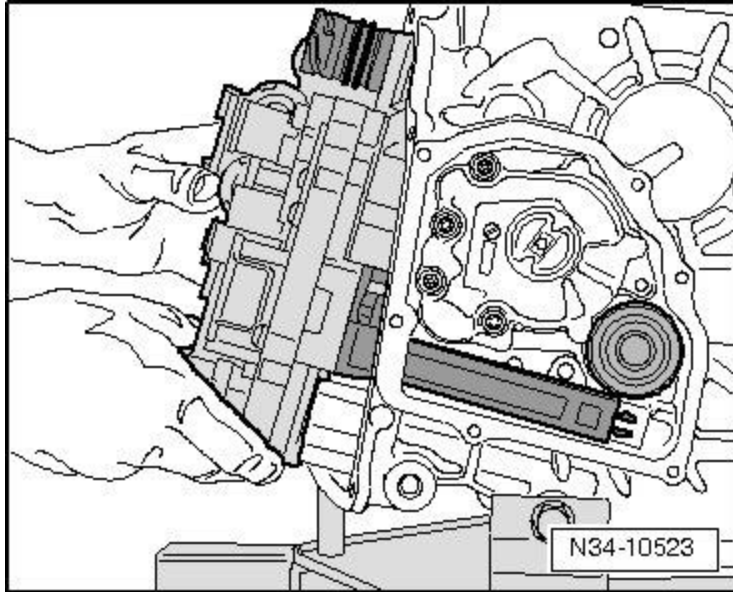


- Remove from second clamp - **arrow II** - and lay aside. Do not kink line.
- Remove - **bolts** - diagonally. Begin with bolt - **1** -.



All 10 - **bolts** - must be replaced

- Remove Direct Shift Gearbox (DSG) Mechatronic (J743).

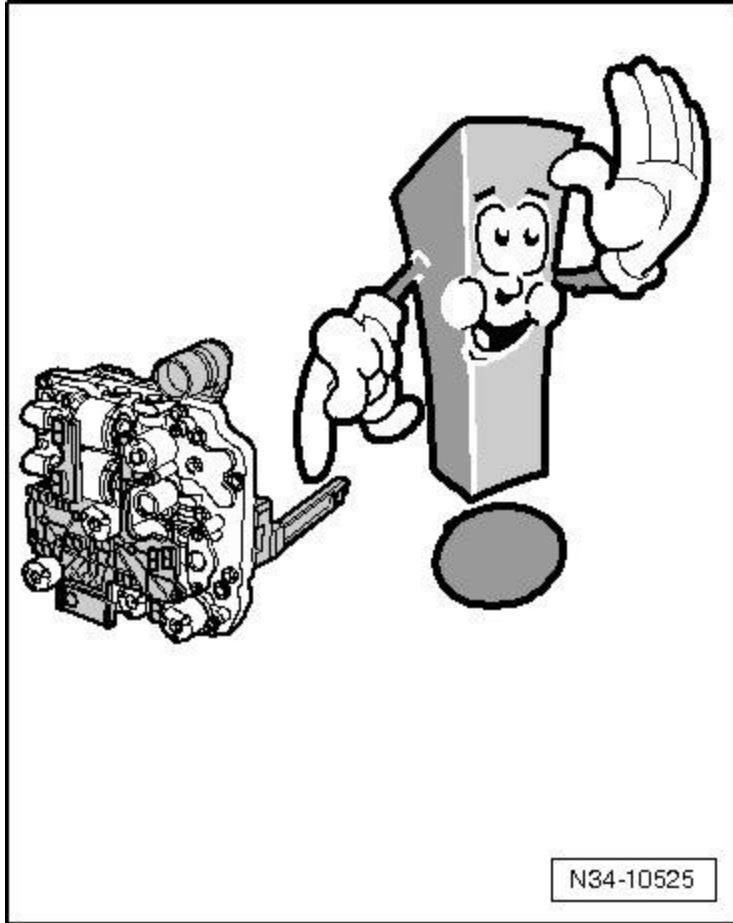


When handling Mechatronic, be particularly aware of the long sensor arm.

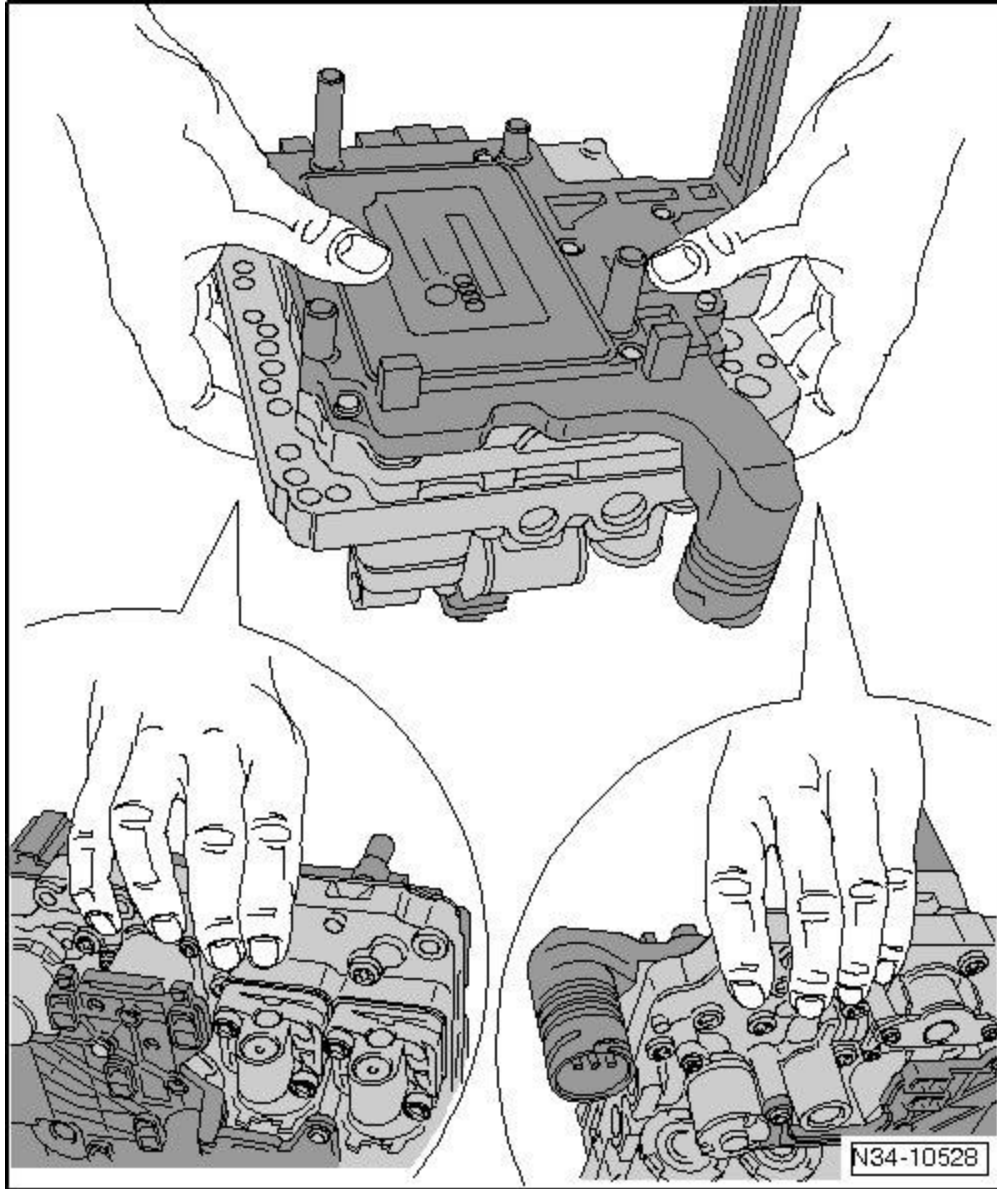
CAUTION!

Never lift the Mechatronic by, or allow it to rest on, the sensor arm.

If arm is damaged, Mechatronic must be replaced.



Store Mechatronic properly

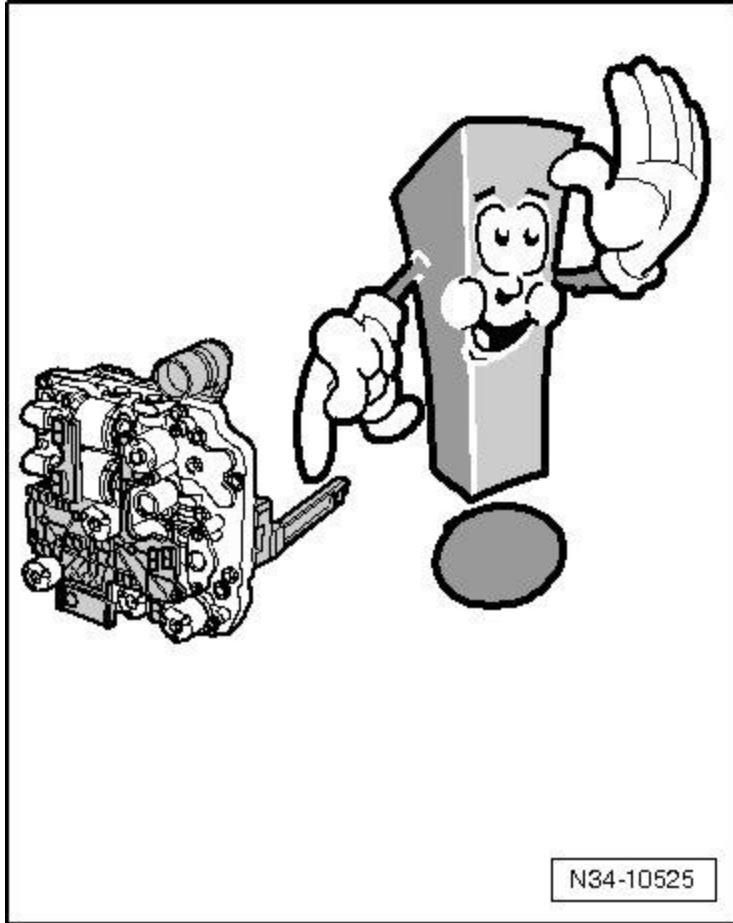


Mechatronic, installing

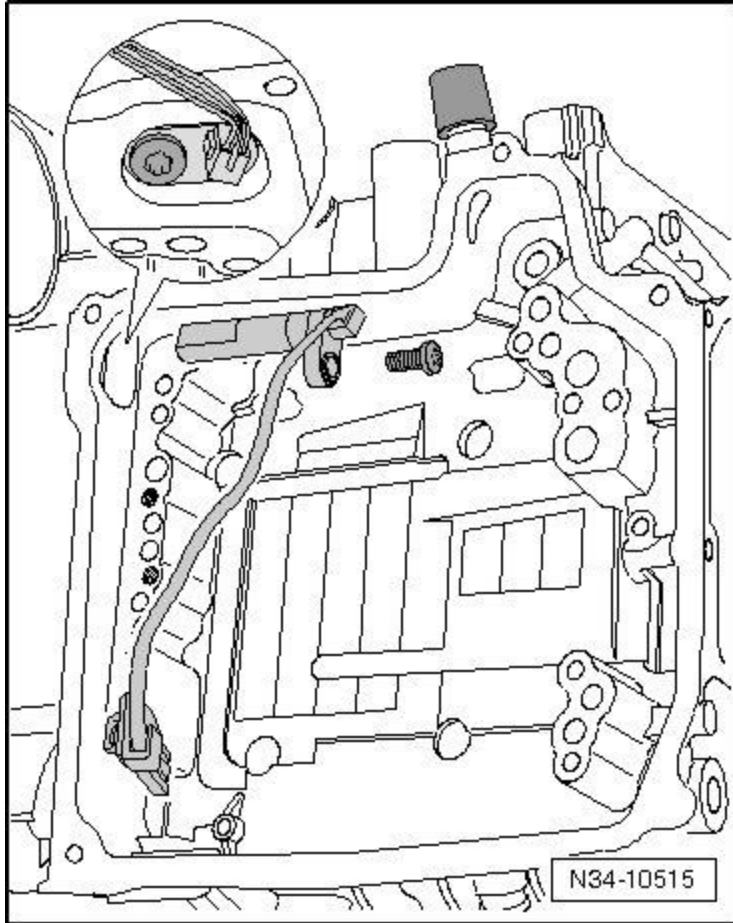
CAUTION!

Never lift the Mechatronic by, or allow it to rest on, the sensor arm.

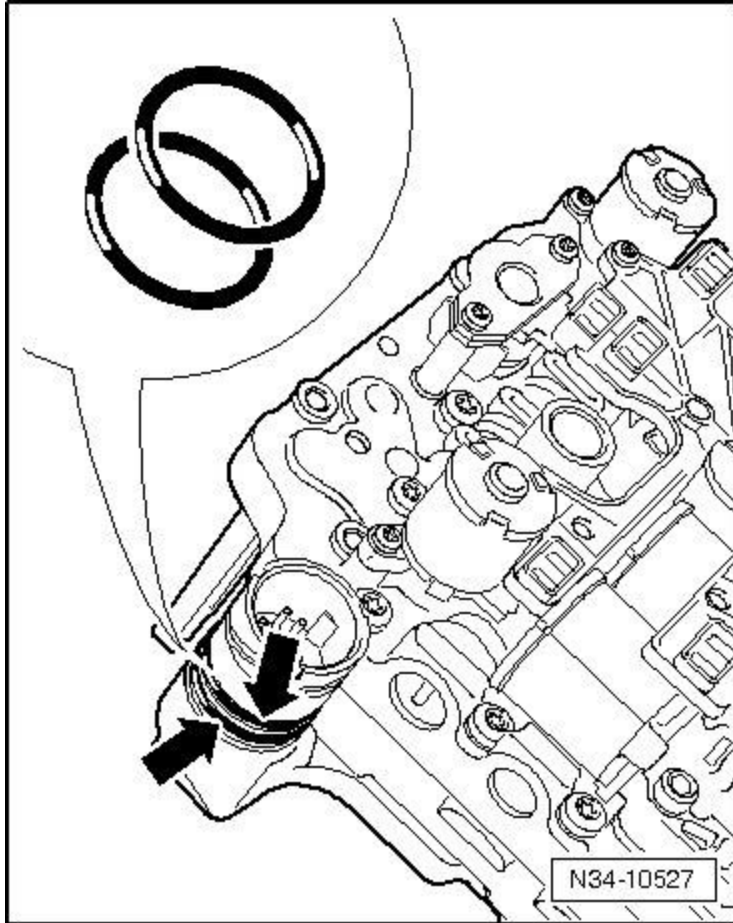
If arm is damaged, Mechatronic must be replaced.



- Before installing, make sure that the Transmission Input Speed (RPM) Sensor (G182) and [Clutch](#) Oil Temperature Sensor (G509) are installed.

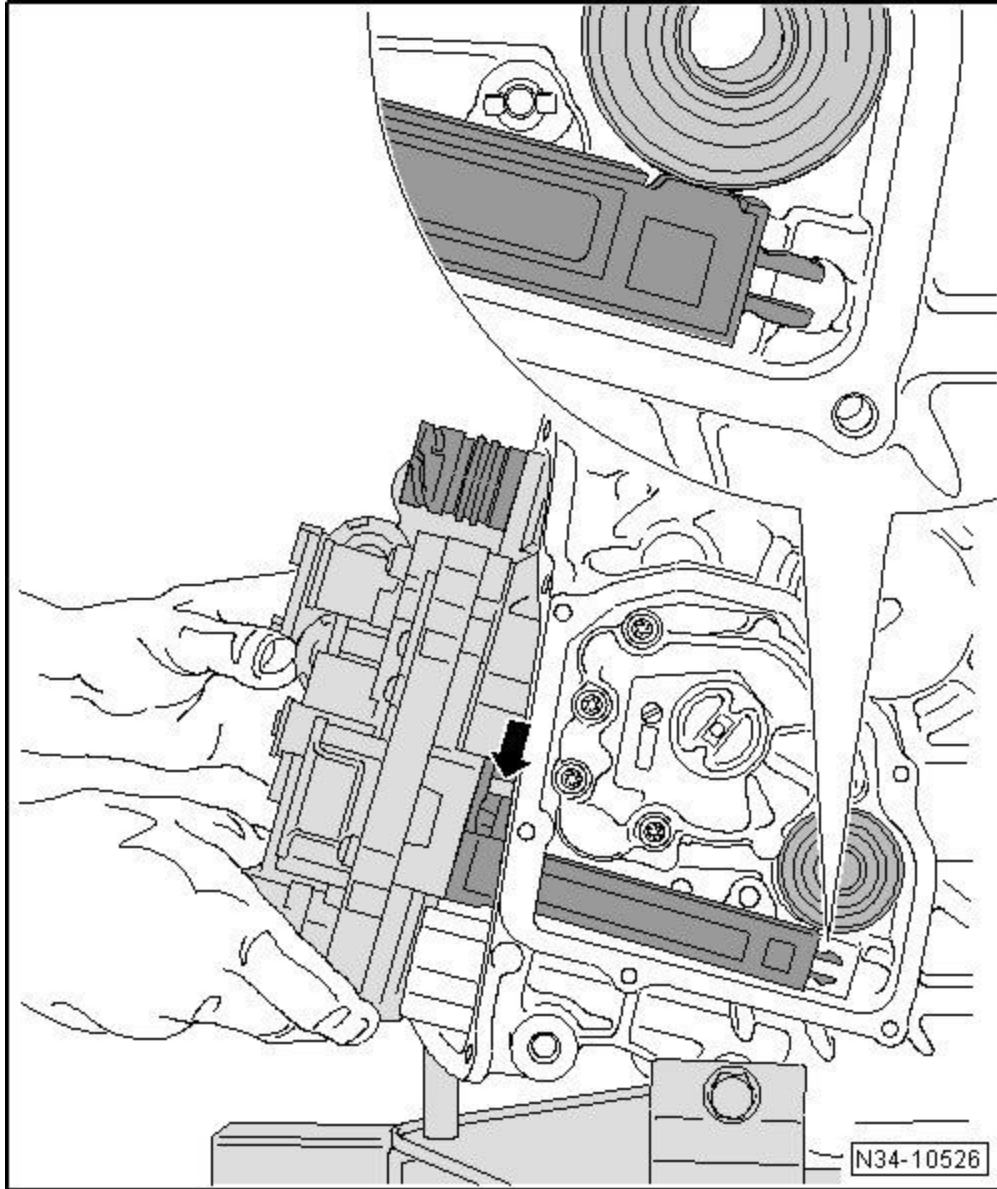


- Replace both - **O-rings** - at Mechatronic connection if an old Mechatronic is reinstalled.



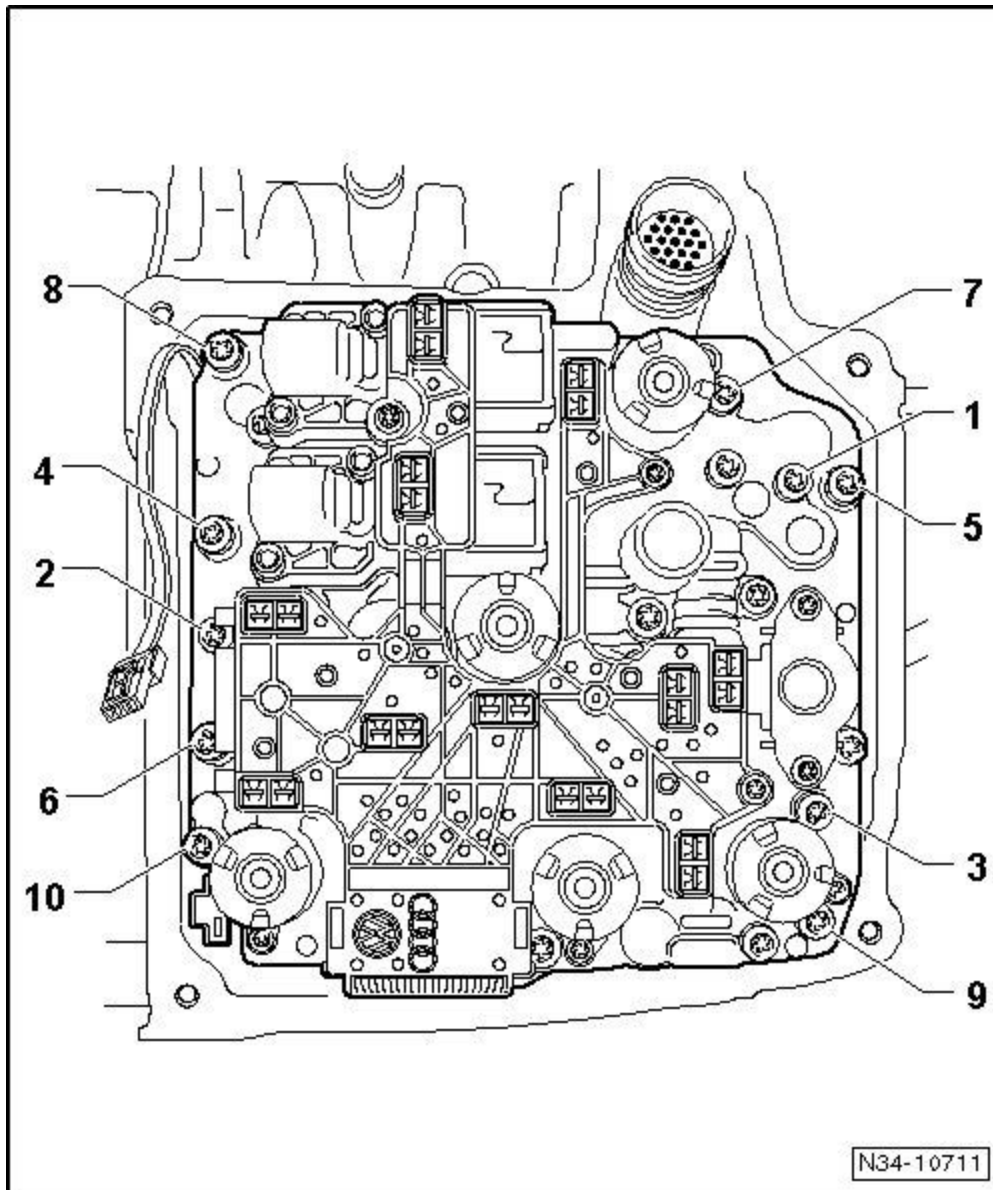
(A new Mechatronic already has new O-rings)

- Coat O-rings with direct shift transmission oil.
- Carefully place Mechatronic on alignment pin - **arrow** -. Ensure sensor arm finds location.

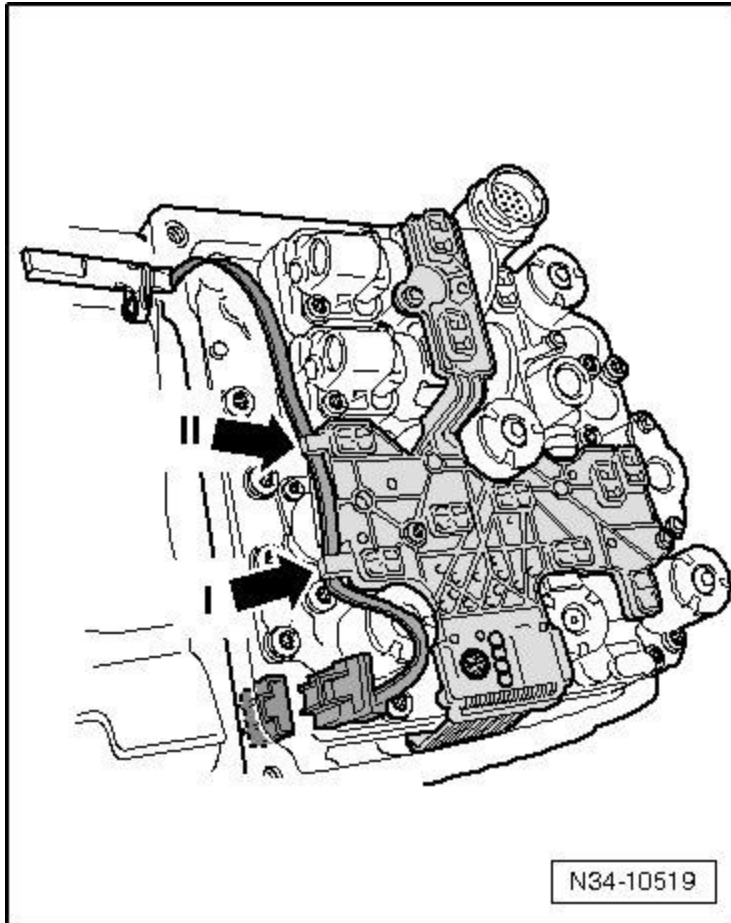


⌘ Do not pinch line.

All 10 - **bolts** - must be replaced.



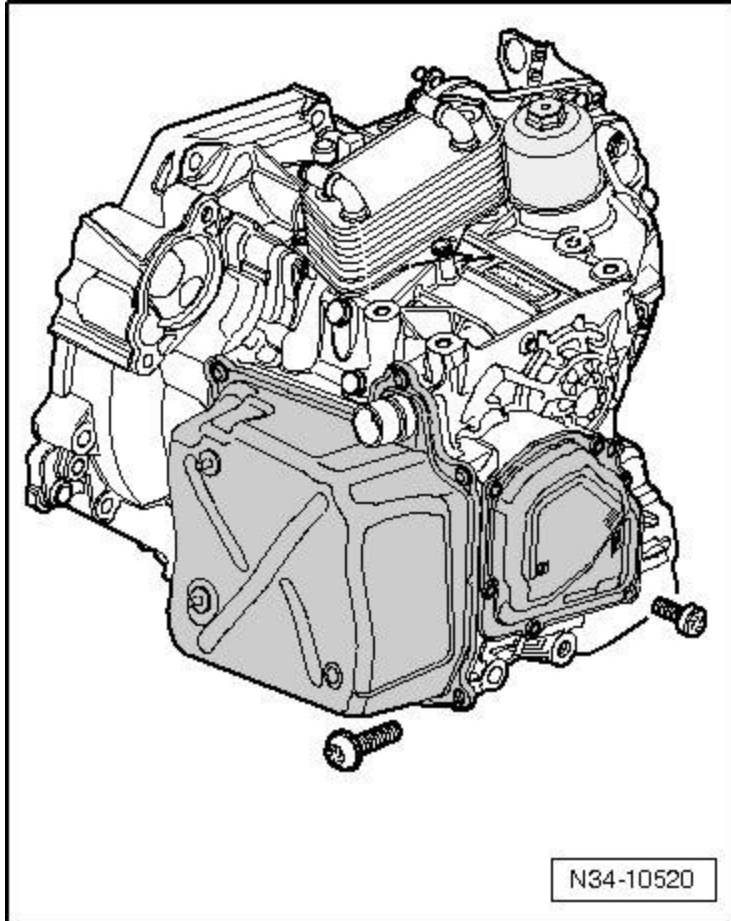
- First install all - **bolts** - by hand.
- Then diagonally tighten all 10 - **bolts** - to 5 Nm, finally rotate an additional 90° in same sequence. Begin with bolt - **1** -.
- Install Transmission Input Speed (RPM) Sensor (G182) and [Clutch](#) Oil Temperature Sensor (G509) line first in clamp - **II** -. Then in clamp - **I** -.



- Press connector onto Mechatronic.

Small oil pump cover and large cover bolts must always be replaced.

- **Seal** - on large - **cover** - must also be replaced.



- Tighten cover bolts diagonally to 10 Nm.

After installing transmission

- Fill oil without replacing filter --> [Transmission, Changing Oil, Filter and Adjusting Oil Level] [See: Service and Repair\Procedures\Transmission, Changing Oil, Filter and Adjusting Oil Level.](#)
- Perform basic measurement on Direct Shift Gearbox (DSG) Mechatronic (J743).