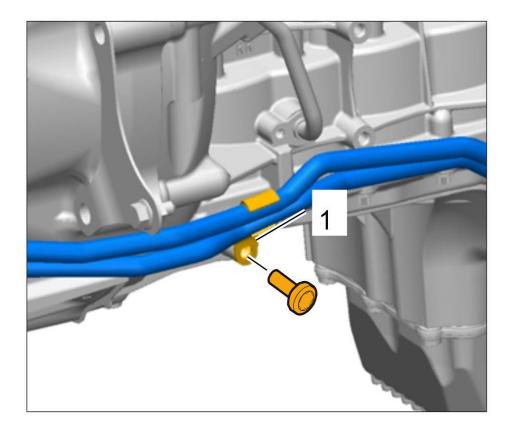
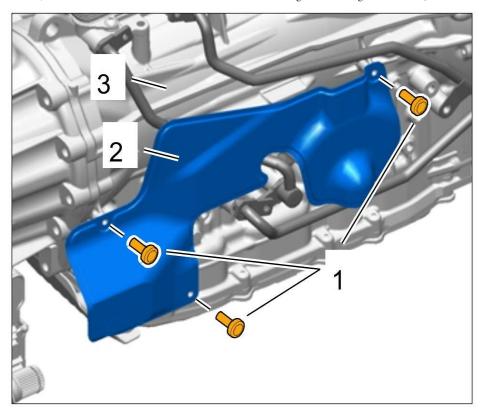
Engine/transmission assembly

1. Detach holder -1- for ATF lines at the rear of the engine.



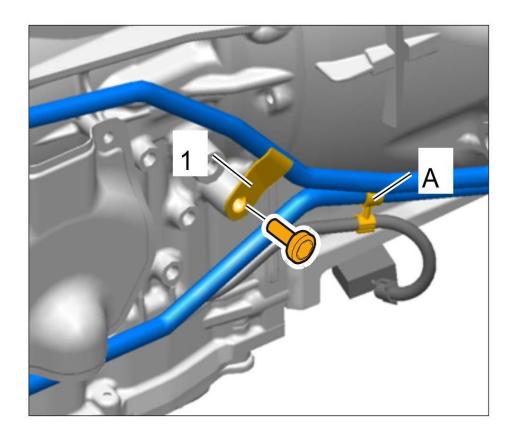
Holder for ATF lines at rear of engine

2. Loosen fastening screws -1- for the heat shield -2- at the automatic transmission -3-.



Heat shield for automatic transmission

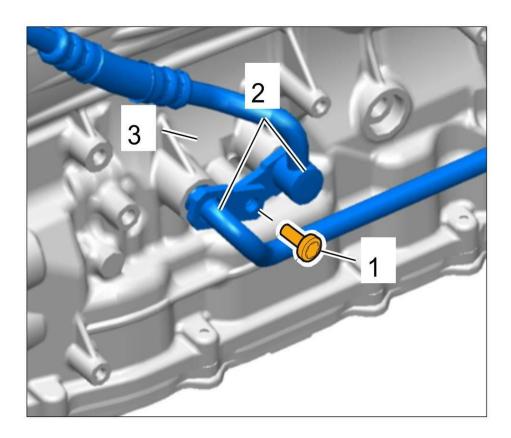
3. Detach holder -1- for ATF lines at the front of the transmission.



Holder for ATF lines at front of transmission.

- 4. Unclip ATF lines -A-.
- 5. Place a suitable container underneath to catch emerging ATF.

Loosen the fastening screw -1- for the ATF lines -2- at the bottom of the transmission -3-.



Detaching ATF lines at bottom

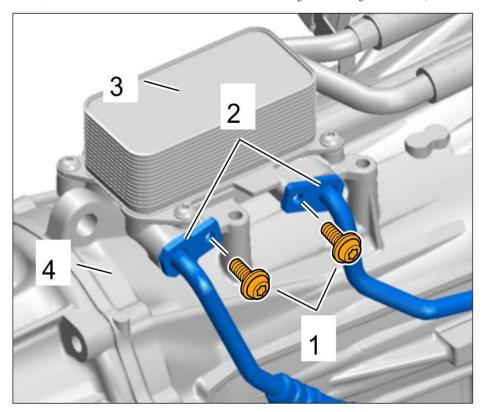
6. Remove rear ATF line.

Close off the ATF lines and transmission bores using suitable stoppers.

7. Place a suitable container underneath to catch emerging ATF.

Loosen the front fastening screw -1- for the ATF lines -2- on the ATF heat exchanger -3- and pull it out.

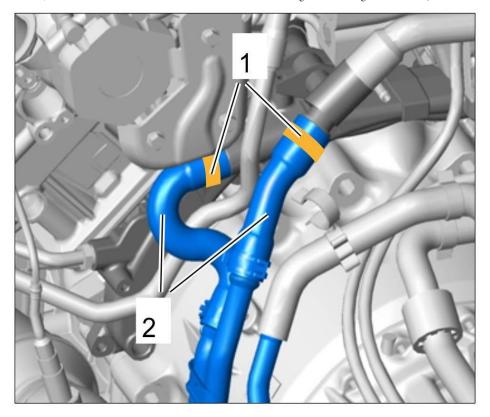
Close off the ATF lines and bores in the heat exchanger using suitable stoppers.



ATF lines at top

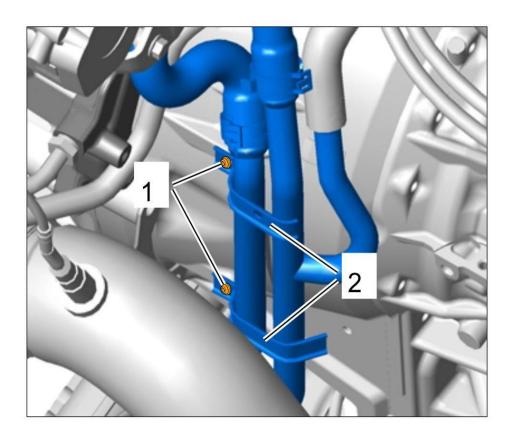
8. Loosen clamps -1- for the coolant hoses -2- on the left of the transmission.

Pull off coolant hoses.



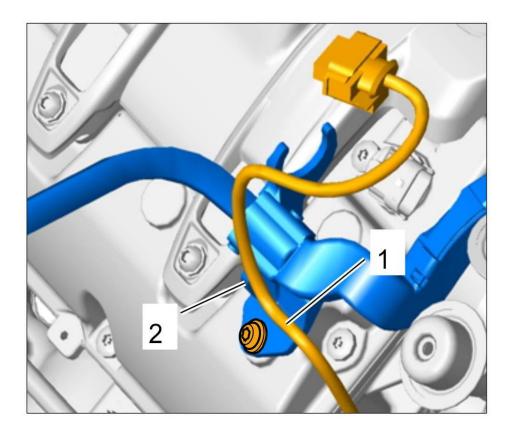
Coolant hoses on left

9. Unscrew fastening screws -1- for the coolant line holder -2-, bend holder to one side.



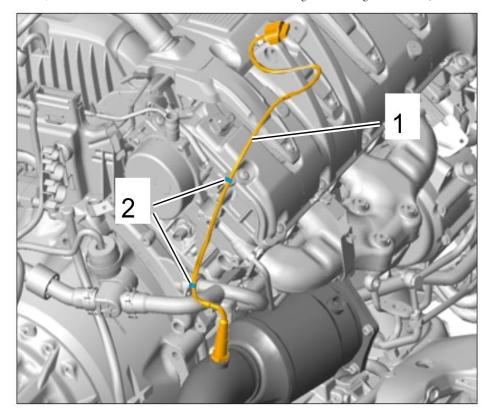
Holder for coolant lines

10. Unclip the wire harness -1- for the oxygen sensors on the left cylinder head cover out of the holder -2-.



Wire harness for left oxygen sensor

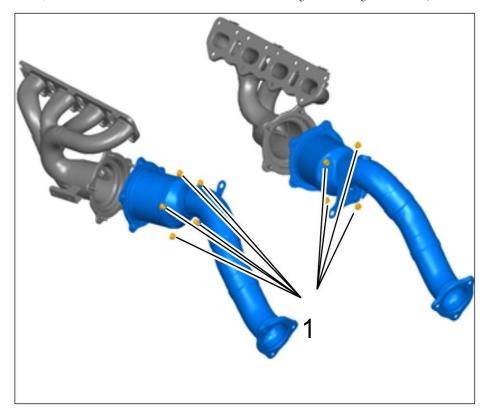
11. Unclip the wire harness -1- for the oxygen sensors on the right out of the holders -2-.



Wire harness for right oxygen sensor

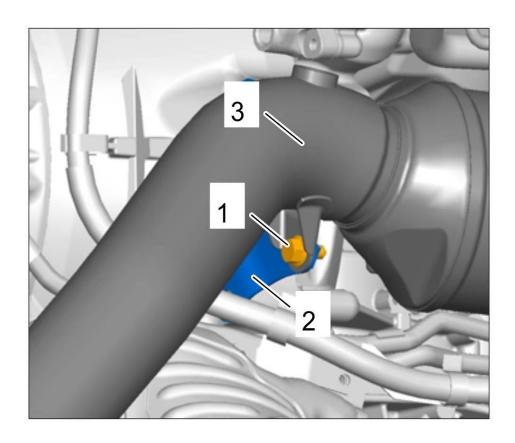
12. Spray the fastening screws on the primary catalytic converter with penetrating oil and leave to take effect.

Loosen the fastening screws -1- on the catalytic converter.



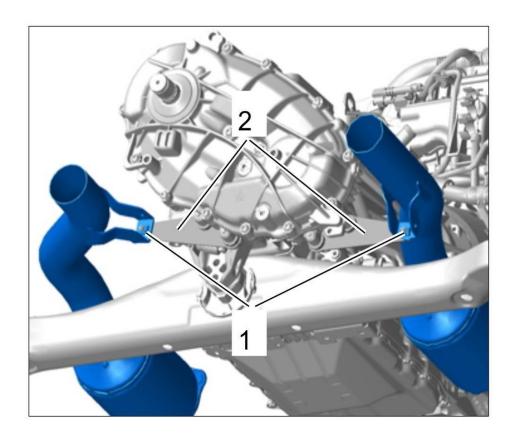
Primary catalytic converters

13. Loosen the fastening screws -1- for the holders -2- of the left and right primary catalytic converters -3-.



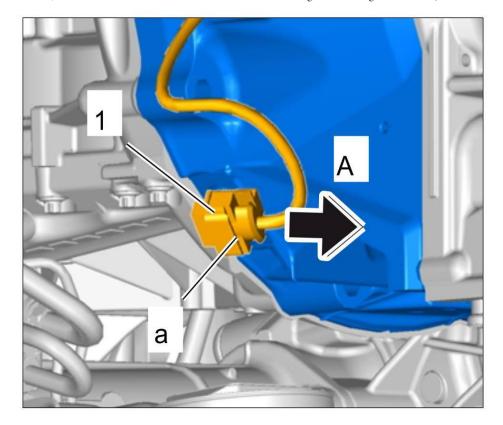
Holder for primary catalytic converter

14. Loosen the fastening screws -1- on the left and right for the rear holders -2- of the catalytic converters on the transmission.



Holder for catalytic converters

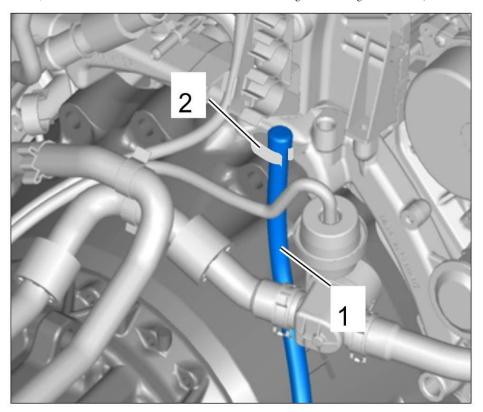
- 15. Remove the catalytic converters and set them aside.
- 16. Remove the front cardan shaft.
- 17. Release the electric plug connection -1- of the crankshaft pulse sender at the bottom of the transmission -a- and pull it off -A-.



Plug connection for crankshaft pulse sender

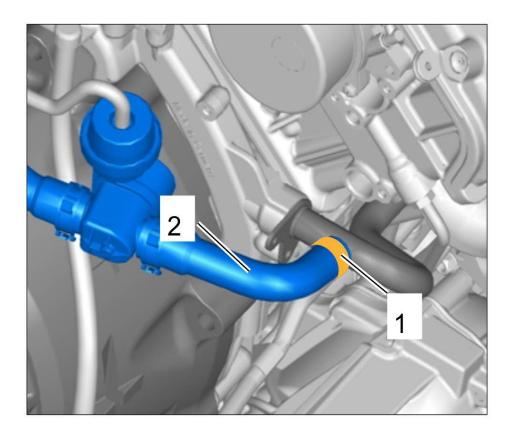
Loosen the tie-wrap at the coolant line holder on the left if necessary.

18. Unclip the hose -1- for the transmission vent from the holder -2-.



Transmission vent hose

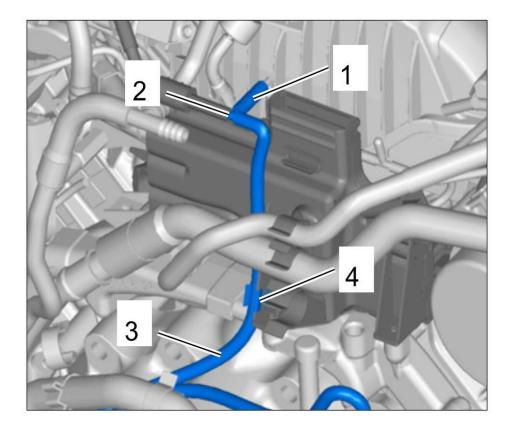
19. Loosen the clamp -1- for the coolant hose -2- to the ATF heat exchanger on the right and pull off the hose from the connection piece.



Right coolant line

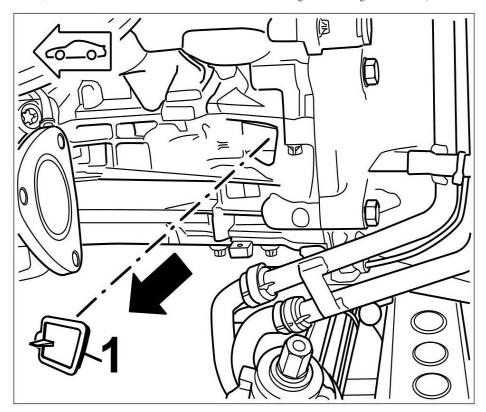
20. Pull off vacuum hose -1- for the vacuum supply at the T-piece -2-.

Unclip the vacuum line -3- from the holder -4-.



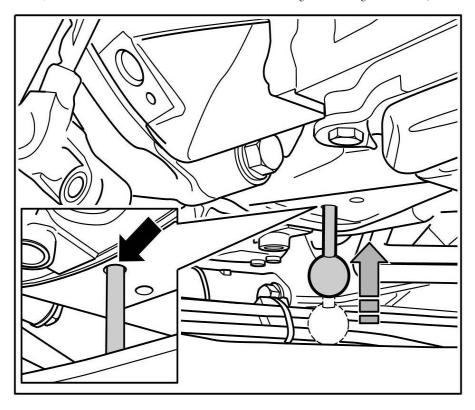
Vacuum supply

21. Remove plug -1- used to seal the converter assembly opening.



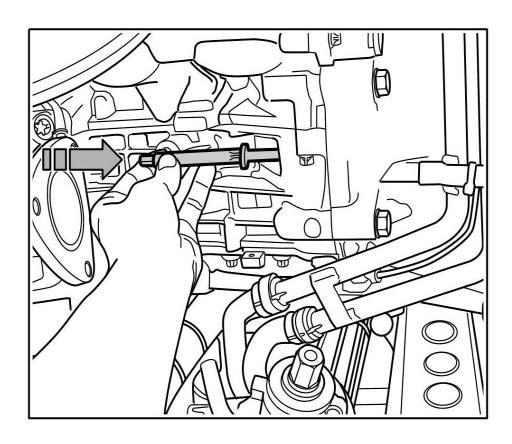
Removing plug used to seal converter assembly opening

- 22. Remove converter screws. Follow the steps below to do this.
- 23. Turn crankshaft clockwise using special tool socket-wrench insert 97140.
- 24.Insert special tool **locating pins 95950** into the front bore on the converter bell housing **-arrow-** and hold upwards with light pressure until it engages when the crankshaft is turned.



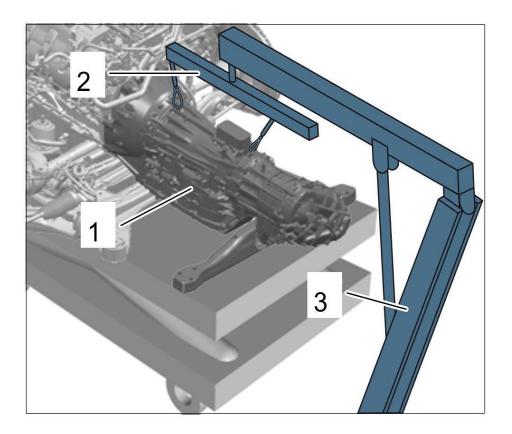
Disconnecting converter screws

25. Position special tool **bit insert 96880** on converter screw through opening in the engine block, connect bit snapon head and special tool **insert 96870** one after the other.



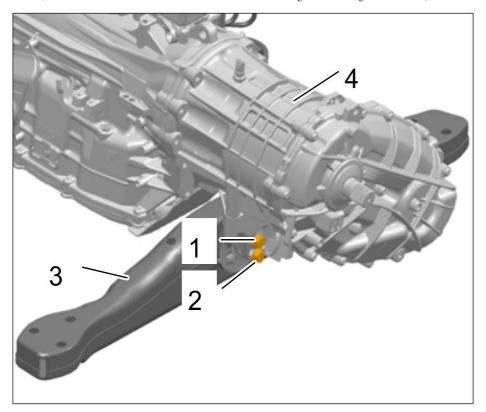
Opening for converter screws

- 26. Remove special tool locating pins 95950 before loosening the converter screws.
- 27. Unscrew converter screw and twist out.
- 28. Complete the steps described above for the other five screws.
- 29. Attach the transmission -1- using suspension device 2024 A -2- to the workshop crane -3-.



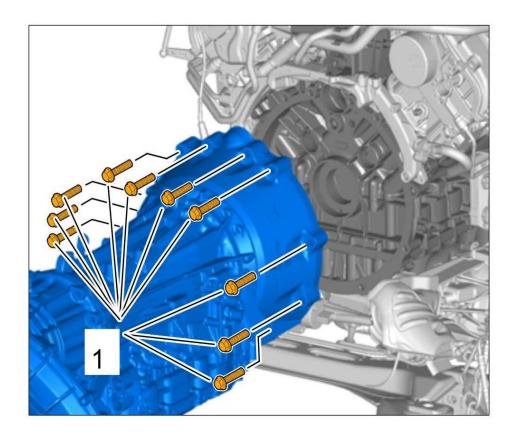
Suspending transmission

30. Raise the transmission -4- by a few centimeters and remove the fastening screws -1, 2- from the transmission support -3-.



Rear transmission cross member

31. Loosen the fastening screws -1- for the transmission to the engine.



Loosening transmission from engine

32. Remove transmission from engine. Press the torque converter off the drive plate with a screwdriver if necessary.

Mounting transmission

WARNING

Danger of objects or loads falling down

- Risk of squashing or crushing
- -Secure components to prevent them from falling down.

Information

- Screws which are tightened with a torque angle must be replaced with new ones.

Information

- A second fitter is required.
- Replace converter screws.

Information

The tightening specifications for the basic engine are stored centrally.

Tightening torques and assembly instructions for other assemblies (e.g. chassis, electrics, transmission or body) or for peripheral engine equipment can be found in the corresponding documents.

Information

- The sealing rings at the ends of the ATF lines on the transmission and cooler sides must be replaced before installation.
- 1. Fix engine to the crankshaft with special tool fixing pins 9595.