

Removing and installing power steering pump (vehicles with 10-cylinder petrol engine)

Power steering pump - exploded view:

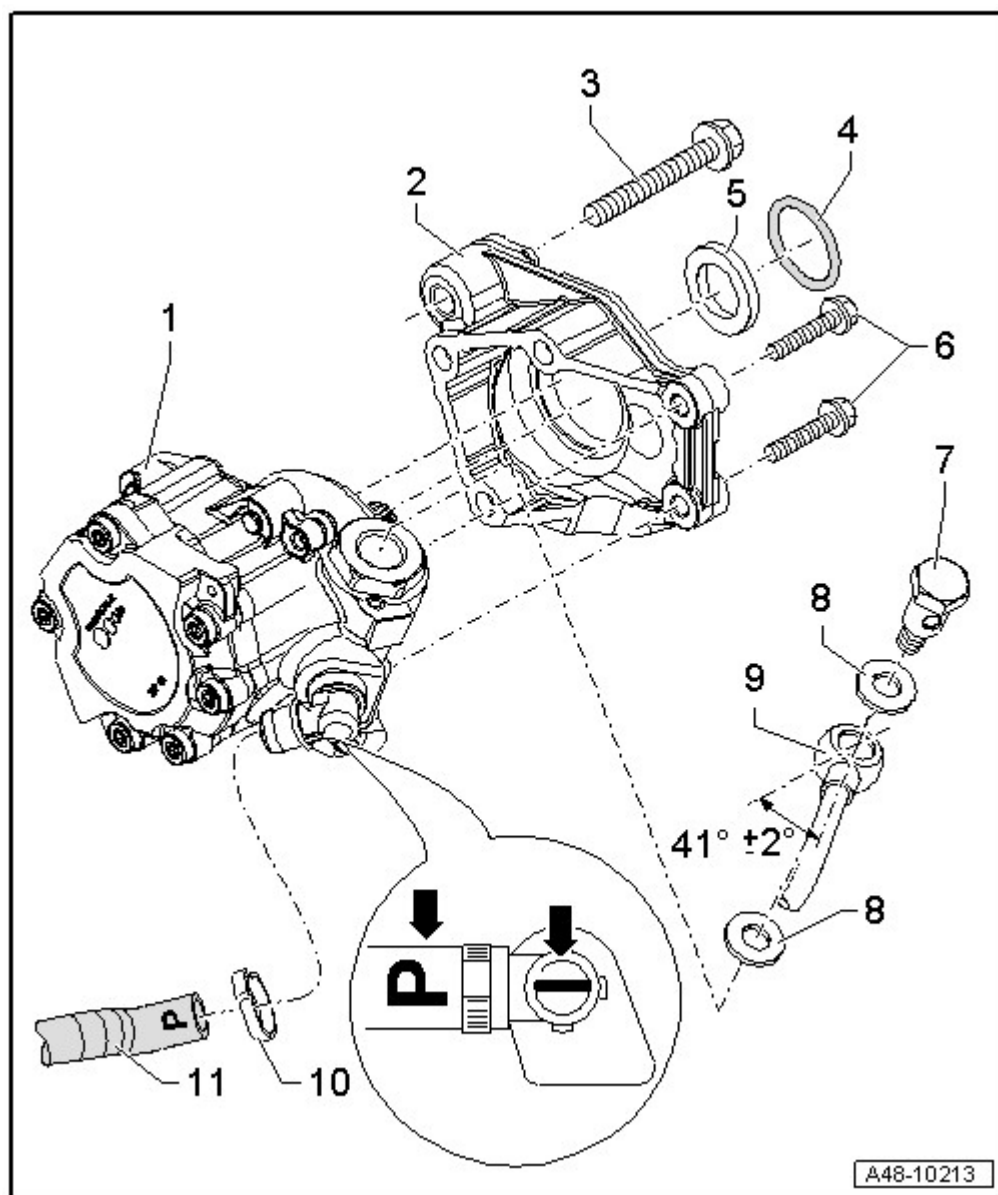


Note

- ◆ Renew seals.
- ◆ Do not re-use hydraulic fluid which has been drained off.
- ◆ Use only hydraulic fluid.
- ◆ When installing new power steering pump, always renew oil seal and O-ring for pump → *Rep. gr.15.*

1 - Power steering pump

- Fill with hydraulic fluid before installing



- Checking delivery pressure → Chapter
- Removing and installing → Anchor

2 - Bracket

- Bracket and power steering pump are combined as one component and must not be separated

3 - Bolt

- ❑ Securing bolt for: gearbox/ engine/ bracket/ power steering pump
- ❑ Tightening torque →Rep. gr.37

4 - O-ring

- ❑ Renewing →Rep. gr.15

5 - Oil seal

- ❑ Renewing →Rep. gr.15

6 - Bolt, 22 Nm

7 - Banjo bolt, 50 Nm

8 - Seal

- ❑ Always renew

9 - Pressure line

- ❑ Note correct position: Angle between pipe connection and shaft of power steering pump is approx. 41°

10 - Hose clip

- ❑ Tighten using hose clip pliers -V.A.G 1275- or locking pliers for steering box -VAS 6199-
- ❑ Always renew

11 - Suction hose

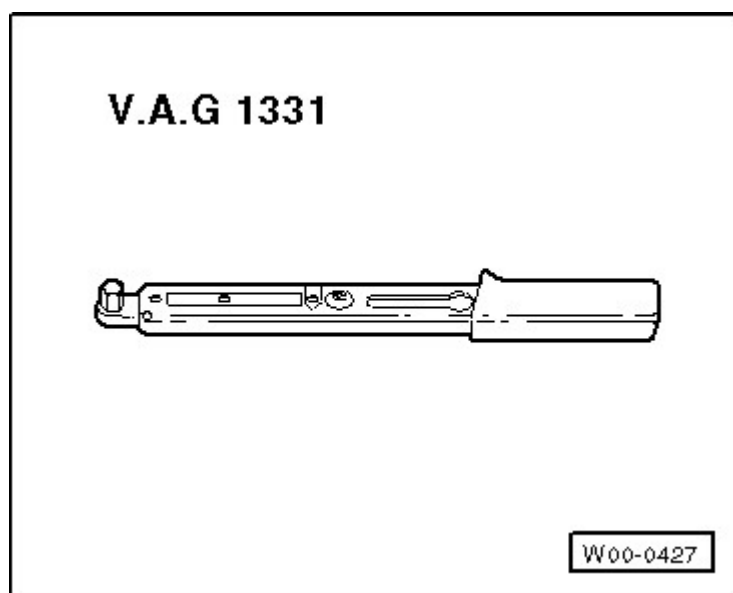
- ❑ Marking -P- on suction hose must be aligned with seam on power steering pump

Removing and installing power steering pump:

Removing

Special tools and workshop equipment required

- ♦ Torque wrench -V.A.G 1331-



- ♦ Torque wrench -V.A.G 1332-

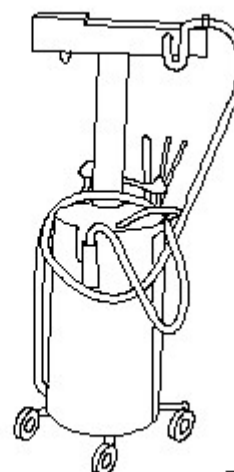
V.A.G 1332



W00-0428

- ♦ Used oil collection and extraction unit - V.A.G 1782-

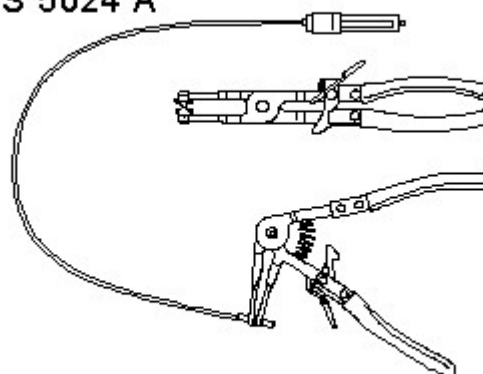
V.A.G 1782



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- ♦ Spring-type clip pliers -VAS 5024 A-

VAS 5024 A



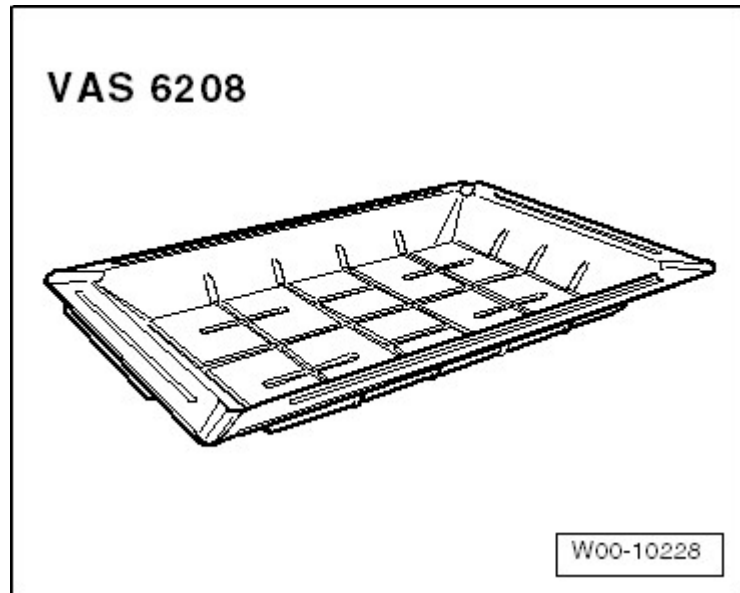
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- ♦ Drip tray for workshop hoist -VAS 6208-

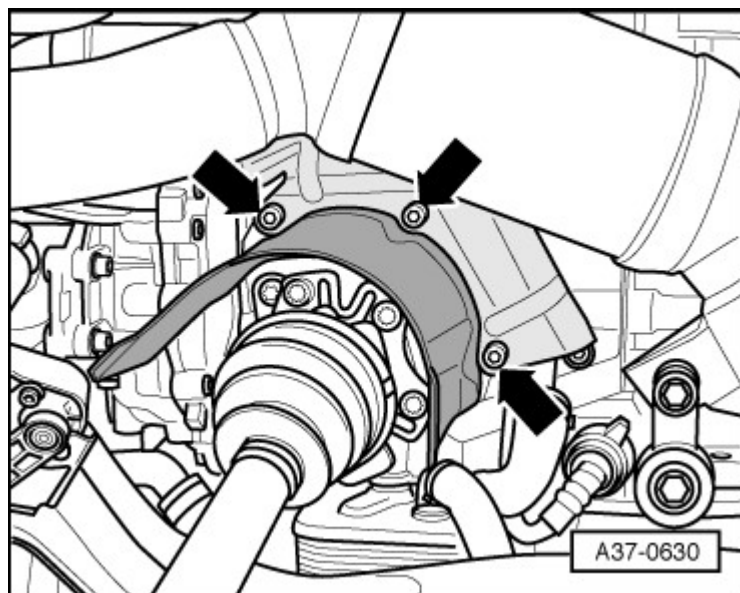
General notes

There is no provision for repairing the power steering pump. If problems are reported, trace the fault by means of a pressure test and a leakage test. Renew the power steering pump if there is a fault.

- ♦ Always check steering system for leaks if fluid level is low in reservoir.
- ♦ If leakage is visible at the pipe connections first tighten connections and wipe dry, then check for leaks again.
- ♦ The power steering pump is supplied without fluid filling. Prior to installation, the pump must therefore always be filled with hydraulic fluid and turned by hand. Otherwise, there is a possibility of pump damage or noise while driving.
- ♦ Renew oil seal and O-ring for power steering pump prior to installation.

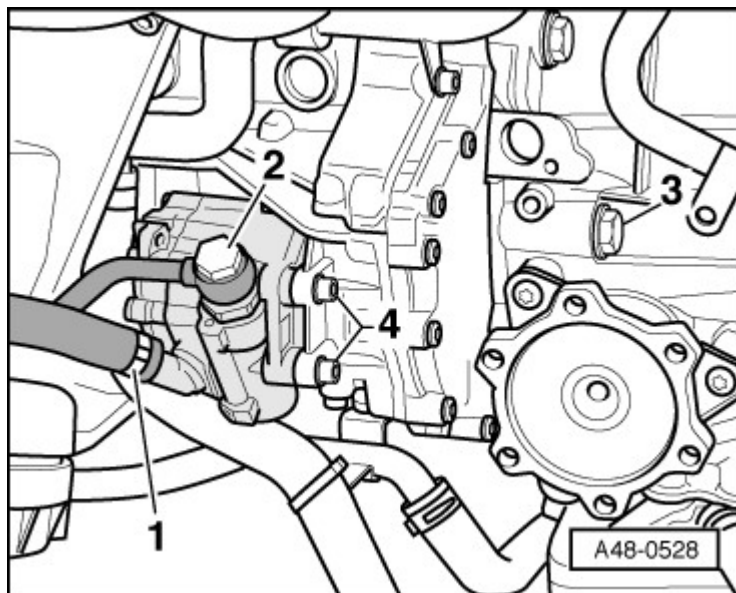


- Position vehicle on lifting platform
→ Chapter.
- Extract hydraulic fluid from reservoir with used oil collection and extraction unit -V.A.G 1782-.
- Remove engine →Rep. gr.10.
- Leave engine in place on scissor-type assembly platform -VAS 6131- with gearbox attached.
- Remove catalytic converter (left-side)
→Rep. gr.26.
- Remove heat shield for drive shaft (left-side) -arrows-.
- Unbolt drive shaft from gearbox flange (left-side).
- Remove front wheel (left-side).
- Place drip tray for workshop hoist -VAS 6208- underneath to catch hydraulic fluid.

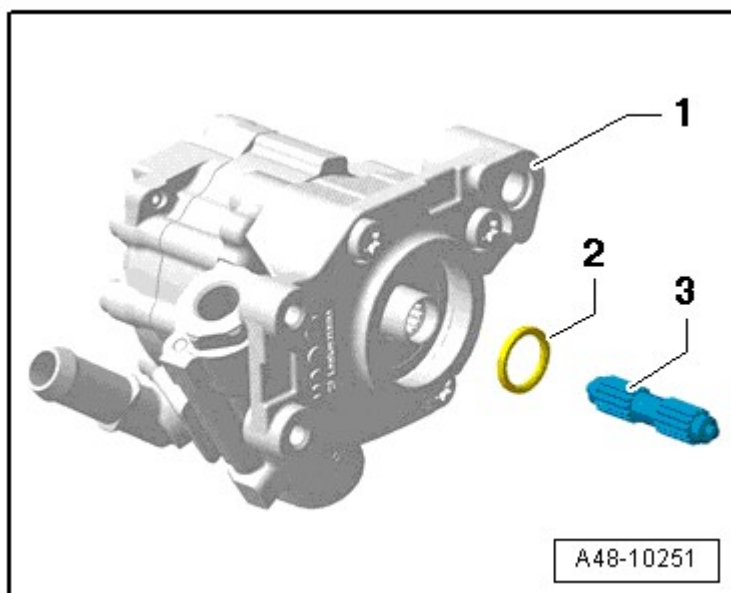


- Detach hose clip from suction hose -1-.
- Disconnect suction hose from power steering pump.

- Unscrew pressure pipe -2- from power steering pump.
- Remove bolts -4-.
- Remove bolt -3-.
- Detach power steering pump.



- If power steering pump -1- is renewed, seal -2- and drive shaft -3- must also be renewed.

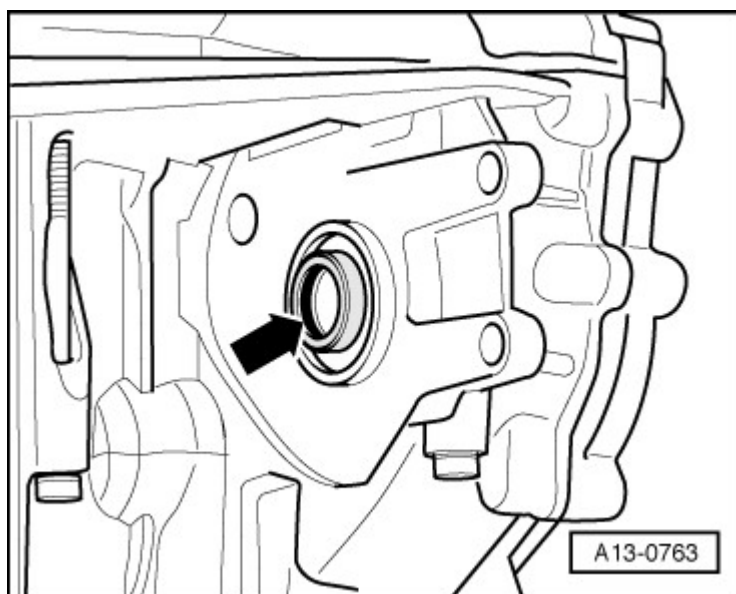


- Renew oil seal and O-ring for power steering pump -arrow- →Rep. gr.15.

Installing

Installation is carried out in the reverse sequence. Note the following points:

- ♦ Renew gaskets and seals.
- ♦ Clean off fluid in engine compartment where necessary.
- ♦ Always renew O-rings on suction line and drive shaft for power steering pump.
- ♦ Before fitting a new power steering pump, put in hydraulic fluid at the inlet and turn pump by hand until fluid flows out at the pressure outlet.
- ♦ Hose connections and hoses must be free of oil and grease before fitting.



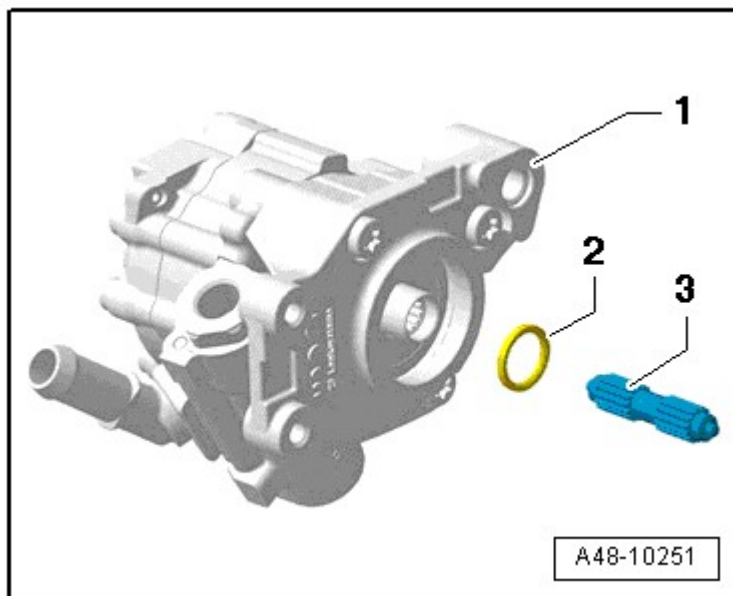
- ♦ Secure all hose connections with the correct type of hose clips (same as original equipment) → [Electronic parts catalogue „ETKA“](#).

- Fit components of power steering pump as illustrated and install pump on engine.

1 - Power steering pump

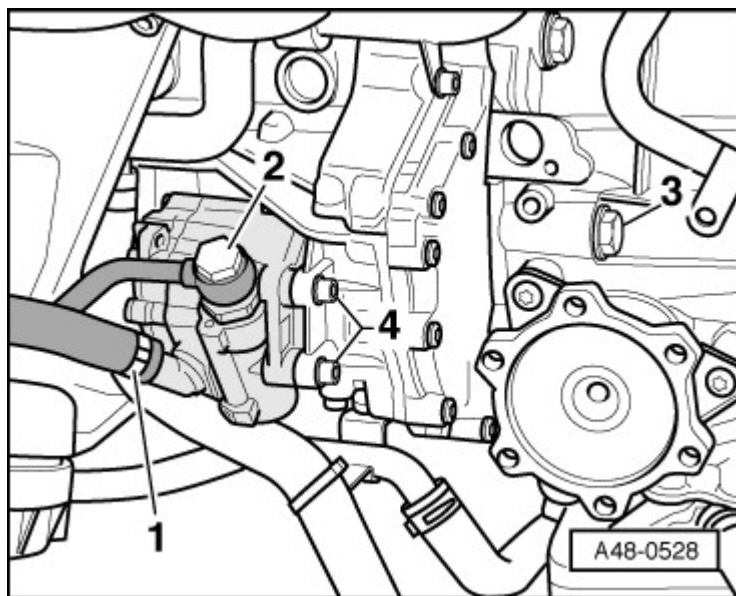
2 - Seal

3 - Drive shaft; grease splines of drive shaft all round on both ends before re-installing. For correct version, refer to → [ETKA - Electronic parts catalogue](#).



- Connect pressure pipe -2- to power steering pump → [Item](#).
- Tighten bolts -4- → [Item](#).
- Tighten bolt -3- → [Item](#).
- Connect suction hose -1- to power steering pump and secure with hose clip.
- Fill up with hydraulic fluid.

Installation position of suction hose on power steering pump → [Chapter](#)



- Clean off fluid from subframe where necessary.
- Attach drive shaft → [Chapter](#).
- Install catalytic converter (left-side) → [Rep. gr.26](#).
- Install engine → [Rep. gr.10](#).
- Tighten subframe bolts to torque but not to extra angle (only tighten bolts fully after checking wheel alignment).



WARNING

All bolts and nuts must be fully tightened according to specifications before the vehicle is driven on public roads.

- Bleed steering system → [Chapter](#).

- Check hydraulic fluid level → Chapter.
- Check steering system for leaks
→ Chapter.
- Set down vehicle on its wheels
→ Chapter.
- Check and adjust wheel alignment
→ Chapter.