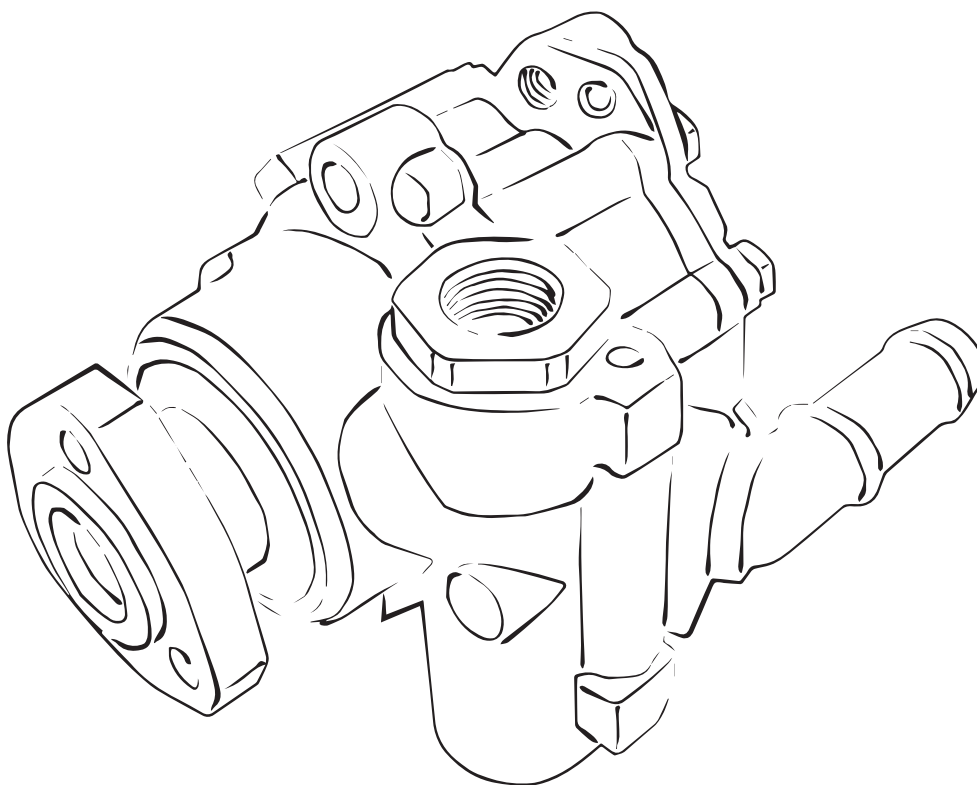




JP•Group a/s[®] 
AUTOMOTIVE



**STEERING PUMP
INSTALLATION MANUAL**

Congratulations on the purchase of your new steering pump!

Below you will find our installation instructions and what precautions you should observe during installation.

1. Read this manual carefully and follow the instructions during the work process. Damages caused by incorrect installation will not be covered by the warranty.
2. After replacing parts in the hydraulics of the steering system, it is necessary to flush the system. The system is then cleaned of impurities from the hoses, the pump, and debris that have entered the system during the change of steering parts. The new hydraulic oil must be the same type as the car manufacturer recommends.
3. It is recommended to replace the power steering hoses because they deteriorate from the inside. External inspection is not sufficient. It is advisable to fit a magnetic filter in the hose between the steering rack and the pump reservoir.
4. Collect all used oil and dispose it in an environmentally correct manner.
5. On gasoline engines, switch off ignition + to the ignition coil or remove the fuel pump's fuse or relay.

On older diesel engines, disconnect the stopping function's electromagnetic valve.

On newer diesel engines, see below:

CDI Disconnect the cam sensor (at the valve cover).

JTD Disconnect the crank sensor (at the flywheel or the pulley).

HDI Disconnect the cam sensor (at the valve cover – pulley side).

TDI/SDI Remove the ignition relay in the fuse box.

TDCI Mondeo, - Remove the relay K163 in the fuse box at the battery.

 Focus, - Remove the relay K4 in the relay box.

 Transit, - Remove the fuse P93 in the fuse box at the battery.

6. Drain the system and remove the old pump. Clean the pump reservoir, unless it is integrated in the pump.
7. Place the hose from the pump inlet in a waste container. Fill oil in the reservoir and let it run through the hose until clean oil emerges.
8. Place the inlet hose from the steering rack in a waste container. Fill the pump reservoir with new oil – crank the engine – fill the oil reservoir. Continue filling and cranking until the oil from the hose is clean. Get assistance from a colleague who fills up the reservoir while you are cranking. The pump must never run without oil.
9. The inlet hose from the reservoir are placed in a waste container. Close the reservoir connection to avoid oil spill. Fill the pump reservoir with new oil – crank the engine – fill the oil reservoir. Continue filling and cranking until the oil from the hose is clean. Get assistance from a colleague who fills up the reservoir while you are cranking. The pump must never run without oil.
10. Fit the reservoir inlet hose. Make sure that all hoses are fitted with the correct torque. Refer to the car manufacturer specifications.
11. Fill the pump reservoir to the recommended level. Don't fit the lid for the reservoir yet.
12. Now the system needs bleeding. While the car is on the bridge (with no weights on the wheels), start the engine and cycle the steering wheel several times from far left to far right. Lower the car until it is on the floor and repeat the procedure.
13. If necessary, fill the reservoir and put on the lid.