

Tech Tip

Steering Racks



English | Dansk | Deutsch | Română | Suomalainen

IMPORTANT: Prior to installation flush the steering system

Flush the steering system thoroughly

This application suffers from high wear rate that contaminates the oil. Failure to flush the system correctly and thoroughly before fitting a new steering rack may result in premature failure of the pump as well.

Failure due to contaminated oil is NOT covered by warranty.

- > Residual dirt negatively affects the performance of the power steering pump and valves
- > Abrasion causes blockages and leaks
- > Oxidation due to a combination of air and heat reduces the viscosity of the hydraulic fluid

Further Fault Diagnosis

It is not enough to just replace the defective part. By flushing the system also the cause of the failure can be found. Check the hydraulic oil for contamination. For example, metal chips in the oil are always an indicator of abrasion in the power steering pump. This pump urgently needs to be replaced, even if only the steering rack was leaking. Plastic in the oil can be caused by the wear of the plastic sealing rings in the steering box. Replace the sealing rings, too, to avoid blockages in the system. Rubber in the oil indicates peeling of the hydraulic hoses. This can also clog the system. It is essential to also replace the hoses, too!

Always dispose of old hydraulic oil through a professional recycler!

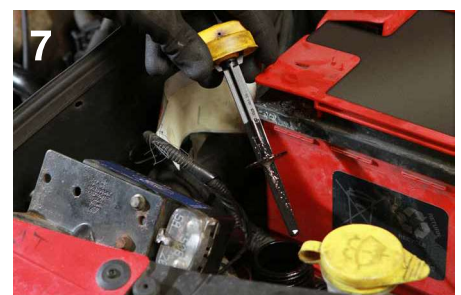
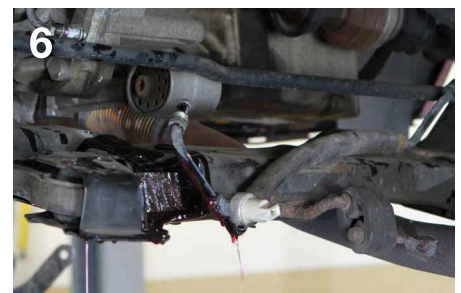


Flushing after failure of the steering rack

Before you start, you need the manufacturer's specifications for the servo oil. Have available all the necessary tools and equipment that you need to carry out all the work steps professionally.

Caution: When flushing, only use fluid which has been approved by the manufacturer or which corresponds to manufacturer's guidelines! Never use petrol, diesel, water-soluble or chemical cleaning agents.

1. Disassemble the defective steering rack in accordance with the manufacturer's instructions.
2. **Fill in hydraulic fluid**
Fill the storage tank up with fresh hydraulic fluid and allow it to flow through the return pipe and into a collection container.
3. **Operate starter**
Ensure that the engine does not start when operating the starter.
Make sure that the vehicle manufacturer's instructions are followed at all times to prevent damage from the ignition or injection system.
4. Afterwards, temporarily seal the return pipe.
5. Fill up collection container with hydraulic fluid and guide the pressure hose into the fluid.
6. **Run hydraulic fluid through**
This is the most important step to ensure that the new pump does not malfunction prematurely.
Rev up the engine (without starting it!) and keep filling up with hydraulic fluid. Provided that clean, clear fluid runs into the container, pour another 2 to 3 litres of fluid into the system until old fluid and dirt has been completely removed.
7. **Watch filling level**
Important: Remain aware of the filling level in the storage tank!
The pump must not take in air, as this can cause damage. Flushing of the pressure side is thus complete.
8. **Check hydraulic fluid**
Monitor the fluid that has been flushed out. If there is no sign of other parts being defective, then assemble the new steering rack according to the manufacturer's instructions. Afterwards, air bleed the system, adjust the toe and camber in accordance with the recommendations of the vehicle manufacturer and then take the car for a test drive.



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