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**BMW 3-Series (92-98) & Z3 (96-98) Haynes Online Manual**

## 22 Power steering pump - removal and installation

### Removal

- 1 Chock the front wheels, then jack up the rear of the vehicle and support it on axle stands.
- 2 Release the drivebelt tension and unhook the drivebelt from the pump pulley, noting that the pulley retaining bolts should be loosened prior to releasing the tension (see [Chapter 1](#) ).
- 3 Unscrew the retaining bolts and remove the pulley from the power steering pump, noting which way it is installed.
- 4 Using brake hose clamps, clamp both the supply and return hoses near the power steering fluid reservoir. This will minimize fluid loss during subsequent operations.
- 5 Mark the fittings to ensure they are correctly positioned on reassembly, then loosen and remove the feed and return pipe fitting bolts and recover the sealing washers. Be prepared for fluid spillage, and position a suitable container beneath the pipes while unscrewing the bolts. Plug the pipe ends and steering pump orifices, to prevent fluid leakage and to keep dirt out of the hydraulic system.
- 6 On 4-cylinder engines, loosen and remove the bolt securing the pump to the adjuster strap and the pump pivot bolt, then remove the pump from the engine unit.
- 7 On 6-cylinder engines, loosen and remove the bolts securing the power steering pump front and rear mounting brackets in position, and remove the pump from the engine.
- 8 If the power steering pump is faulty, seek the advice of your BMW dealer as to the availability of spare parts. If spares are available, it may be possible to have the pump overhauled by a suitable specialist, or alternatively obtain an exchange unit. If not, the pump must be replaced.

### Installation

**Note:**

New feed pipe fitting bolt sealing washers will be required on installation.

**9** Where necessary, transfer the rear mounting bracket to the new pump, and securely tighten its mounting bolts.

**10** Prior to installation, ensure that the pump is primed by injecting the specified type of fluid in through the supply hose fitting and rotating the pump shaft.

**11** On 4-cylinder engines, maneuver the pump into position and install the pivot bolt and adjuster strap bolt, tightening them **lightly** only at this stage.

**12** On 6-cylinder engines, maneuver the pump into position and install its mounting bolts, tightening them to the specified torque.

**13** Position a new sealing washer on each side of the pipe hose fittings and install the fitting bolts. Tighten the fitting bolts to the specified torque.

**14** Remove the hose clamps and install the pump pulley. Ensure the pulley is the right way around, and securely tighten its retaining bolts.

**15** Install the drivebelt and adjust the drivebelt tension (see [Chapter 1](#) ).

**16** On completion, lower the car to the ground and bleed the hydraulic system (see [Section 23](#) ).