

## Installation recommendations for water pumps

1. Do not carry out repair work with the motor running.
2. Before removing the water pump, allow the cooling system to cool and then drain completely. After removing the coolant pump, all sealing surfaces must be thoroughly cleaned to remove any gasket residues or engine sealants. In addition, cleaning and rinsing through of the coolant system is recommended. All cooling system components and assemblies are to be checked and if necessary renewed.  
**Caution:** Drained coolant may not be reused. Coolant is classified as hazardous waste.
3. Attach a new water pump with a new gasket and screw on. The securing screws are to be tightened to the torque specified by the vehicle manufacturer. The free-running of the pump should be checked.  
**Caution:** If a silicon gasket is used, the specified cure time must be adhered to before the cooling system is filled with coolant.
4. The fan should be checked for damage and, if necessary, replaced. In vehicles having a visco-fan coupling, its correct functioning should be checked.  
**Caution:** A damaged visco-fan coupling will lead to early failure of the new water pump.
5. Check the drive belt(s) for wear, deformation or hardening and replace if necessary. It is, however, recommended that a new drive belt is used in any case when replacing the water pump. When fitting the belt, ensure that it is tensioned according to the vehicle manufacturer's settings to avoid bearing damage in the driven units  
**Caution:** The belt tensioner must always be checked for correct functioning and replaced if necessary.
6. Ensure that any coolant hoses and hose clips are in good condition and have been correctly seated.
7. Fill up with new coolant.  
**Caution:** The coolant system may only be filled using coolant approved by the manufacturer.
8. The coolant system must be bled according to the vehicle manufacturer's instructions.  
**Caution:** In this phase it is possible that slight leaking may occur around the drainage hole.
9. After a test run, the whole coolant system must be checked for leaks and all coolant hoses and hose clips checked for correct seating. Once the engine has cooled, check the coolant level again.

**Please refer to your vehicle's workshop manual for any special removal and fitting instructions. Fitting may only be performed by suitably trained personnel.**