



# Electric water pumps

## GENERAL INSTALLATION INSTRUCTIONS

### The manufacturer-specific repair instructions must be observed for all of the following instructions!

1. Check whether the new water pump is identical to the old water pump.

2. The entire cooling system must be completely drained and then thoroughly rinsed before the new water pump is fitted!

It may be necessary to flush the system several times!

**Note:** Do not yet remove the old water pump for the flushing process(es) and flush with it!

Drained coolant must not be reused!

3. Check all relevant components (e.g.: clamps and hoses) of the cooling system and replace faulty or defective components.

4. All sealing surfaces must be cleaned and free of grease. Remove all sealing residue and do not damage the sealing surfaces.

5. Fit the new water pump with the seal(s) supplied (do not apply any lubricants such as grease or oil to the seal(s), if necessary moisten with coolant) and tighten the fastening screws, first hand-tight and then with torque (**sequence and torques according to the vehicle manufacturer's specifications**). If the water pump has to be installed with liquid sealant, make sure that it is applied evenly. The prescribed flash-off time must be adhered to. Only then fill the cooling system with new coolant

**When using sealant, always follow the specific instructions of the vehicle manufacturer!**

6. The water pump must be centered and the shaft must be able to rotate freely.

7. Check the drive belt (e.g. toothed belt or V-ribbed belt) and all other parts of the belt drive (e.g. belt tensioner, idler pulley, overrunning alternator pulley) for damage and wear. If necessary, replace defective or worn parts.

8. Install and tension drive belts according to specifications! Incorrect installation will result in damage to the driven units!

9. Ensure that all hoses and connections are connected correctly! The cooling system can then be filled. Only coolant additives approved by the vehicle manufacturer may be used.

10. Bleed the cooling system and check for leaks.

In most cases, even after filling with a vacuum filler, the air must be vented once again. This is done using a suitable diagnostic tester with the corresponding tester function.

A small amount of leakage may occur in the short term due to run-in.

11. A test drive or test run is strongly recommended. The operating temperature must be reached. In some cases, the fan also starts up.

12. Finally, check the entire cooling system again for leaks. Check the coolant level when the engine has cooled down.

#### **Additional information:**

For a water pump with:

#### **a) Timing belt pulley**

If you hear noises, check the belt tension and belt wear!

#### **b) Viscous coupling**

The clutch must be checked for wear and damage before installation and replaced if necessary. A faulty viscous coupling can lead to damage in the surrounding area!

When installing, make sure that the seat is centered, the connection is tight and the mounting surfaces are clean.