

## WASSERPUMPEN WATER PUMPS

# Water Pump Fitment Instructions

To get the best performance out of your Water Pump, follow carefully the simple Instructions step

by step given below:

- Before removing the old Water Pump, flush cooling system thoroughly of all sediment, rust, scale, etc.
- Disconnect fan, fan clutch, and check fan blades for cracks, bend, loose rivets etc. If found defective, replace entire fan.
- Remove old Water Pump, clean impellor cavity in engine block and gasket surface. Tighten Water Pump back plate mounting bolts where applicable.
- nstall the new Water Pump with due care. DO NOT STRIKE SHAFT as it would damage bearings. Tighten bolts evenly in a crossing pattern.
- Turn Pump shaft by hand for free rotation.
- Reinstall hoses, belts and check thermostat radiator cap. Replace if they show signs of sticking or leaking.
- Fill Radiator with fresh coolant and check for leak. Purge cooling system of air to avoid Water Pump running dry.
- Check fan clutches (if used) for loss of oil, looseness, or wobble. A bad or misaligned clutch will damage the Water Pump.
- Check belts for cracks, frayed edges, missing sections. Replace belt if found defective.
- ighten fan belts to factory recommended tension.
- Check fan clearance at blade tip between shroud and radiator.
- Run engine for 15 to 20 minutes and check for leaks and smooth operation.
- Recheck to correct coolant level and recheck all previous steps to ensure Pump installation. This will ensure good performance over the life of the Water Pump.

### CAUTION

Never stand in line or near engine fan when running the engine. For your own protection, the vehicles hood should be closed when running the engine.

### NOTICE

Chemicals used in some antifreeze recycling systems contain a coagulation which can harden and become abrasive when combined with rust. If coolant recycling system isused, these chemicals must be completely purged from the engine and cooling system, before replacing the Water Pump. Manufacturer's instructions must be followed explicitly for recycling system.





# Corrective and Preventive Methods against Water Pump Failures

Water Pumps do not require any direct maintenance. The maintenance and service of coolant, belt tensioner and fan conditioning will normally maximize the life and efficiency of Water Pump.

By adopting certain simple commonsense rules the Water Pump failures can be prevented to a great extent.

#### DO NOT OVERTIGHT BELTS

Over tightening would cause shaft deflection resulting serious failures. Hence manufacturers instructions must be followed for this.

#### DO NOT STRIKE BEARING SHAFT

During installation it may be required to tap the Pump for alignment. But do not tap the bearing shaft as it might damage bearing ball race and or ball leading to noisy operation and or premature failure. DO NOT straighten bent fan blades. Loose rivets in blades and stress cracks can go undetected and cause complete failure. If fan breaks it may cause serious personal injuries and vehicle damage.

#### ENSURE

Fan is seated square with Pump shaft as otherwise wobbling of fan may cause bearing failure.

#### ENSURE

Periodic inspection of hoses, coolant recovery tank, coolant levels so that no contaminants that can cause oxidation and sludge build-up are present. Sludge built up in the cooling system is primary cause of seal failure and also reduces the efficiency of the cooling system.

#### ENSURE

Proper functioning of thermostat which is responsible for regulating the coolant flow into the engine block. A sticky thermostat can stop or restrict coolant flow to the engine.

#### ENSURE

For proper fitment and handling as unbalance and vibratory forces can develop from pulley and may lead to failure of Pump.