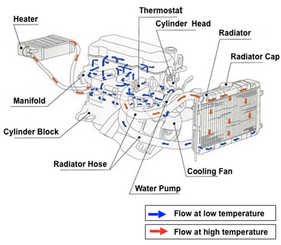
GMB

WATER PUMP QUICK GUIDE

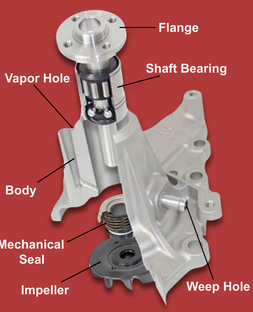
Water Pump Function



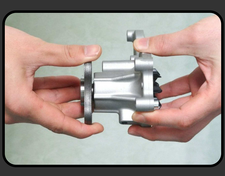
The water pump is located between the engine and the radiator and circulates coolant through the engine block using a belt pulley system.

Structure & Mechanisms Of Water Pumps

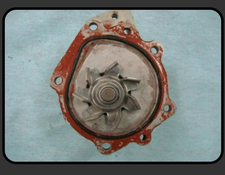
Flange (Hub)	Pulley and/or fan clutch are mounted on a flange belt or timing belt drives the bearing shaft at a higher RPM than engine RPMs.
Shaft Bearing	These are Ball/Double Ball/Roller types.
Body	Aluminum with die-cast, gravity-cast and cast-iron.
Mechanical Seal	Dynamic rotation seal keeps rotor closed tightly. The approached and lubricated liquid turns into vapor.
Impeller	Made of pressed steel, cast-iron, or resin. Rotation drives coolant into the water jacket.
Weep Hole	Mechanism to discharge vapor.



Water Pump Replacement Precautions



DO NOT dry turn the water pump or you may damage the carbon.



DO NOT apply liquid sealant to o-ring or you may get a leak.

Inspect and adjust pulley and timing belts and listen for abnormal noises to indicate a faulty belt.

Water Pump Install Procedure

1. Flush radiator and engine
2. Remove water pump
3. Clean remaining gaskets and mounting surface
4. Apply liquid sealant to both sides of new gasket
5. Install new water pump and tighten mounting bolts
6. Install belt on water pump pulley, adjust tension
7. Refill radiator with new coolant
8. Bleed air completely
9. Check for leaks
10. You're done!

Common Problems

Leaks

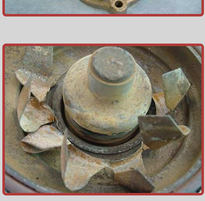
Clean engine mounting surfaces and gaskets, apply sealant to both sides of gasket, tighten mounting bolts, and look for fractured gaskets.

Noise

Proper install and regular maintenance should prevent any rumbling, whining, or squeaking.

Overheating

Freezing, corrosion, and prolonged use can cause overheating. Regularly maintain and never use recycled coolant.



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