How to install your New Water Pump

Follow the simple step-by-step instructions below:

- Handle your new water pump with care.
- Never strike shaft. This can damage the shaft or bearing.
- Always check fan, pulleys, belts and fan clutch when installing new water pump.

CAUTION:

- **Avoid Dangerous burns and scalds! Let the engine cool down before attempting repairs!**
- **For your protection, the hood should be closed when revving engine.**

Installation Instructions:

Before beginning work on the vehicle

Be sure the vehicle is in park or neutral, and the wheels are blocked to prevent the vehicle from moving

1. Disconnect the ground cable from the battery.
2. Drain and flush the cooling system of ALL sediment. Failure to flush the cooling system prior to installation of the new water pump is a major cause of premature failure. Contaminated coolant will cause seal failure and void the warranty.
3. Remove old Water Pump, clean impeller cavity in engine block and clean gasket surface.
4. Compare the old water pump to the new water pump to verify the correct replacement part.
5. Tighten steel back plate bolts on the new water pump where applicable.
6. Install the new water pump. Tighten bolts in a crossing pattern unless otherwise instructed. Tighten to vehicle manufacturer torque requirements.
7. Turn pump shaft by hand once installed to check for free rotation.
8. Inspect all hoses, belts, pulleys, idler pulleys, and belt tensioners for wear, damage or deterioration, and replace as necessary.
9. Reinstall hoses, belts, tensioners and pulleys. Ensure that belt(s) and pulleys properly align.
10. Remove thermostat. Check thermostat, radiator cap and replace if necessary.
11. Fill radiator with new coolant/distilled water mixture (per vehicle manufacturer requirements) and check for leaks. Purge system of air.
12. Check fan blades. If bent, cracked or if rivets are loose, replace the entire fan. DO NOT try to straighten or repair a fan! Even a small imbalance can break the water pump shaft due to centrifugal forces generated during operation.
13. Check the fan clutch for loss of oil, looseness or wobble (if equipped with fan clutch).
14. Install the fan clutch. Make sure it seats flat on pump hub. Use lock washers and tighten bolts evenly. DO NOT STRIKE SHAFT.
15. Spin the fan blade by hand. If you cannot turn the fan by hand or if there is a rough feeling as you turn the fan, the fan clutch must be replaced.
16. Tighten fan belts to manufacturer recommended tension.
17. Check motor mounts, shroud and radiator for looseness. Make sure fan does not come into contact with shroud.
18. Reconnect the battery
19. Start engine and run until operating temperature is reached. Check for leaks and smooth operation.
20. Shut off engine and let it cool. "Top Off" radiator coolant. Check reservoir for recommended proper fill level

NOTE:

Many things can cause water pump failure including:
The use of silicone sealants on formed rubber gaskets. Defective crooked or unbalanced fans, defective or unbalanced fan clutches, excessive (too-tight) fan belt tension, dirty cooling systems, insufficient clearance between fan and shroud or radiator, loose or broken motor mounts.
CHECK EVERYTHING WHEN YOU HAVE THE CHANCE TO HELP AVOID FUTURE WATER PUMP FAILURES.