



# Water Pumps

Refer to the authorized original equipment service manual for detailed installation instructions. If you do not have the experience, proper tools or manuals, please seek the services of a qualified technician.



Replacement  
**TIME:**

3 hrs

## COMMON SYMPTOMS

- Leaks from shaft seal
- Engine overheating
- Damaged housing or broken shaft
- Grinding noise

## MYTH BUSTER

**Myth:** All modern coolants are the same.

**Busted: False.** Coolant formulas aren't always the same. Coolant is over 95 percent ethylene glycol, but vehicle manufacturers may use coolant with slightly different additives and dyes. Some coolant manufacturers produce a universal coolant that is promoted as being compatible with all O.E. applications. However, it is recommended that the same coolant, as specified by the vehicle manufacturer, be utilized whenever the cooling system needs to be topped off or if the entire system is being flushed and refilled.

## BEFORE YOU INSTALL

- Carefully inspect all moving components for cracks, looseness, or missing components. Replace any component suspected of problems.
- Using water only, the wrong coolant, an improper mixture, contaminated coolant, depleted coolant, or poor water quality can result in corrosion and seal damage, leading to premature water pump failure.

## TIPS

- Replace defective fan clutch, bent or broken cooling fan, and cracked or damaged hoses.
- Tighten all fasteners and fittings to O.E. specifications – DO NOT OVERTIGHTEN.
- Prevent debris from entering the cooling system
- Ensure gasket mounting surfaces are clean and free of debris
- Thoroughly flush the entire cooling system and refill with O.E.-approved coolant.
- Ensure radiator cap and thermostat are operating properly.
- Ensure airflow through radiator is unrestricted
- Adjust belts to the proper tension and check belt tensioner (as applicable).
- Bleed the cooling system using the O.E.-specified procedure.

## BEST MAINTENANCE PRACTICES

- A cooling system maintenance check should be performed at least once every two years.
- A hydrometer can be used to measure specific gravity of coolant.
- A refractometer can be used to determine coolant concentration and freeze point.
- Check cooling system with a pressure tester to identify leaks.



**SKILL  
LEVEL:**

Service Technician

**B**

or higher

GOT QUESTIONS ABOUT THIS PART?  
**CALL 888-280-8324**

Monday-Friday