

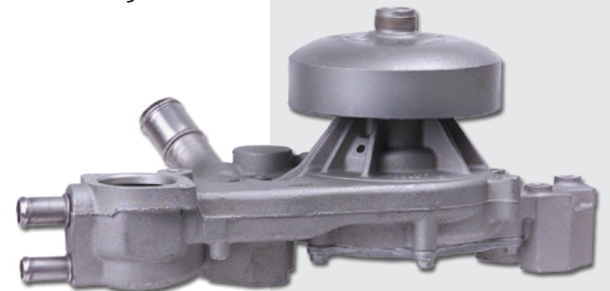
New WATER PUMP

Building on decades of experience using reverse engineering to remanufacture automotive pumps, CARDONE engineers have meticulously designed our CARDONE New Water Pumps to match O.E. performance. Each unit is 100% leak and hub-pull tested to ensure reliability. Supplied with O.E.-grade unitized seals, CARDONE New Water Pumps provide O.E. performance you can rely on.

- 100% leak testing and hub-pull testing ensures reliable performance.
- O.E.-supplied NEW unitized seals ensure long-lasting, trouble-free performance.
- The proper O.E. specified bearing design is installed to meet the specific radial and axial load requirements of each application. This ensures longer bearing life and reliable performance.
- Thermostat seal and mounting gasket are supplied for ease of installation (where applicable).

Good Maintenance Practices

- A cooling system maintenance check should be performed at least once every two years.
- Consult vehicle's service manual for specific guidelines on cooling system.
- A hydrometer can be used to measure specific gravity of coolant.
- A refractometer can be used to determine coolant concentration and freeze point.



- Product Description
- Features and Benefits
- Good Maintenance Practices
- Signs of Wear and Troubleshooting
- FAQs

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- Check coolant level. Adjust level if necessary with correct coolant mixture.
- Use diluted coolant or a 50/50 mix of concentrated coolant and distilled water.
- Check cooling system with a pressure tester to identify leaks.
- Visually inspect hoses, engine cooling fan operation and water pump drive belt.
- Check if radiator cap is maintaining system pressure.
- Check thermostat to ensure proper opening and closing.

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Signs of Wear and Troubleshooting

- Leaks from shaft seal
- Damaged housing or broken shaft
- Engine overheating
- Grinding noise
- Cavitation - inferior coolant allows bubbles to form on the cast aluminum housing creating pits, or cavities affecting water flow

FAQs

After mounting the pump on the vehicle and running the engine, the shaft broke. The shaft was blue. Does this mean the pump burned up?

- The pump did not burn up, however the shaft broke due to a stress fracture caused by:
 - Excessively high temperatures
 - Improperly torqued mounting bolts
 - Bent or distorted pulley(s)
 - Cracked fan bent, not mounted squarely
 - Defective fan clutch, improperly tightened belt(s)

I just replaced the water pump and my engine is overheating. Is the pump defective?

- The engine overheating could be due to components other than the water pump. The following steps should be taken before checking the pump. Flush the system. Check hoses, clamps and seals. Check radiator cap and thermostat. Check for proper and sufficient coolant. Check for cracks, warpage and other damage.

Do I need identification off of the original pump to get the correct replacement?

- For most modern vehicles, knowing the engine size is sufficient to locate the correct replacement water pump. However, with some older passenger vehicles and medium duty applications, you may need an identification number that is either stamped on the original casting or attached on a metal tag. You may also need a specific dimension off of the original pump to correctly identify the replacement pump. Always refer to the catalog for details on how to correctly identify the water pump for your application.

The impeller on my original pump looks pitted. Is this caused by cavitation?

- Yes, the mostly likely cause is cavitation. When inlet pressures of a water pump fall below the design specifications due to a leak or inadequate coolant levels, tiny vapor bubbles can form in the coolant at the center of the impeller. When coolant containing these bubbles is forced into a high-pressure environment on the other side of the impeller, these bubbles collapse, creating tiny shock waves and points of high temperature. These shock waves can lead to surface corrosion on the impeller over time. To prevent cavitation, be sure the cooling system is operating at the correct coolant level and pressure.

Product Description

Features and Benefits

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