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step-by-step

## WATER PUMP BASICS

Getting to the heart of your cooling system

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**Photo 1**

Disconnect the negative battery post. The next step is to drain the cooling system. On the bottom of the radiator is a drain petcock. Use a suitable container to collect coolant.



**Photo 2**

Locate the water pump and remove coolant hoses by loosening clamps. Be prepared for more coolant to drain from hoses.



**Photo 3**

Break loose but do not remove pulley bolts before releasing belt tension. The tension will prevent the pulley from spinning as you try to loosen the bolts.

**Photo 4**

Remove belt tension on the pulley by adjusting tensioner and loosening any attached accessories. In this case, the v-belt in use is shared by the alternator.

**Photo 5**

Fully remove drive pulley bolts then remove pulley and belt to reveal the water pump.

**Photo 6**

Loosen water pump bolts. Important! Take note of bolt length and mounting location. This is crucial as the bolts extend into the engine and can cause serious damage if too long or reinstalled in the wrong location.

**Photo 7**

Use a scraper to free mating surface of all old gasket material and sealant.

**Photo 8**

Compare the old and new water pumps and be absolutely certain that the lengths of the bolts are the same. Use anti-seize compound on the bolts to prevent galling and aid in assembly. Keep compound off the first few threads.

**Photo 9**

Place a new gasket on the pump and install. Tighten bolts to recommended torque. Reverse removal procedure. Don't forget to close the radiator drain petcock.

**Photo 10**

Add a 50/50 mix of coolant to the radiator leaving an inch or more of space before the top of the filler hole. Start engine and turn on heater. As vehicle warms up add coolant to purge cooling system of air pockets. Use caution, as coolant will become hot. Replace radiator cap.

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