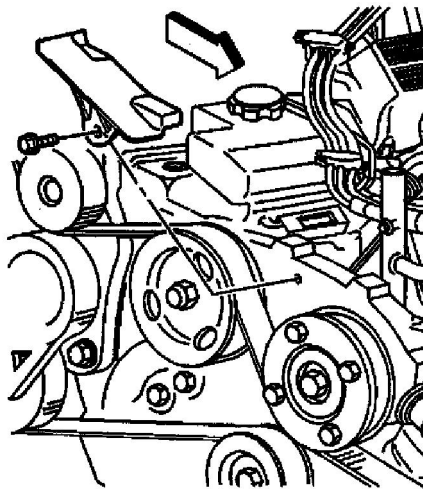


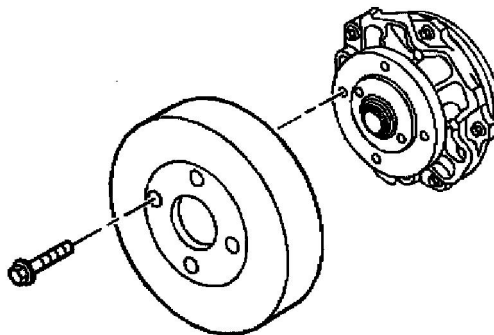
## Water Pump: Service and Repair

### Water Pump Replacement

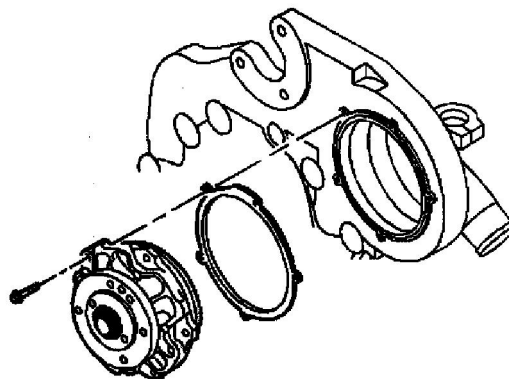
#### Removal Procedure



1. Drain the cooling system until the coolant is below the level of the water pump. Refer to Draining and Filling Cooling System.
2. Remove the drive belt guard.
3. Loosen the water pump pulley bolts.
4. Remove the drive belt. Refer to Drive Belt Replacement.



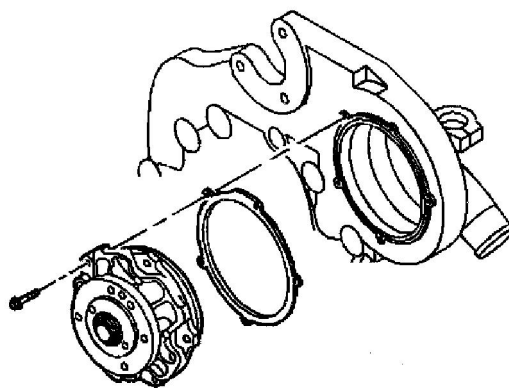
5. Remove the water pump pulley bolts.
6. Remove the water pump pulley.



7. Remove the water pump bolts.
8. Remove the water pump.

9. Remove the water pump gasket.
10. Clean the water pump mating surfaces.

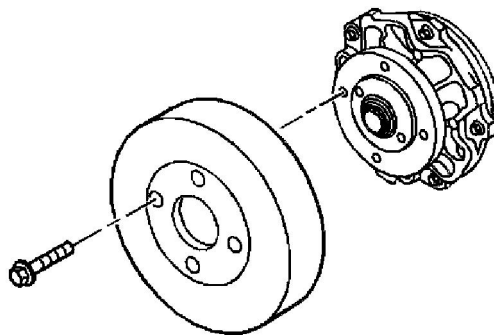
## Installation Procedure



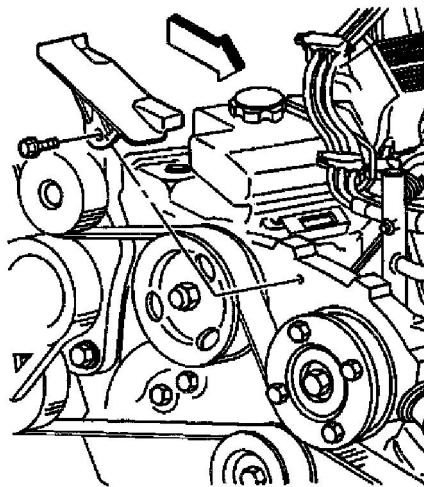
1. Install the water pump gasket.
2. Install the water pump.

**Notice:** Refer to Fastener Notice in Service Precautions.

3. Install the water pump bolts.  
^ Tighten the bolts to **10 Nm (89 inch lbs.)**.



4. Install the water pump pulley. Loosely install the mounting bolts.
5. Install the drive belt. Refer to Drive Belt Replacement.
6. Install the water pump pulley bolts.  
^ Tighten the bolts to **25 Nm (18 inch lbs.)**.



7. Install the drive belt guard.
8. Fill the cooling system. Refer to Draining and Filling Cooling System.
9. Inspect the cooling system for leaks.