

Water Pump: Service and Repair

Water Pump Replacement (LF1)

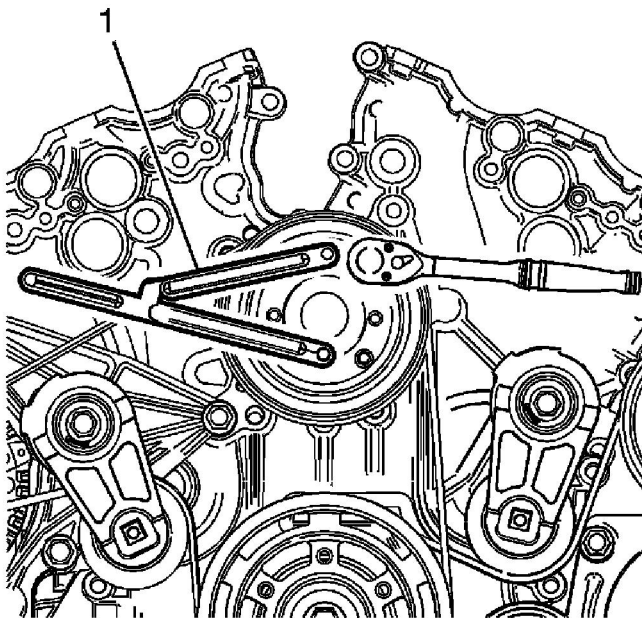
Tools Required

EN 46104 - Water Pump Pulley Holder

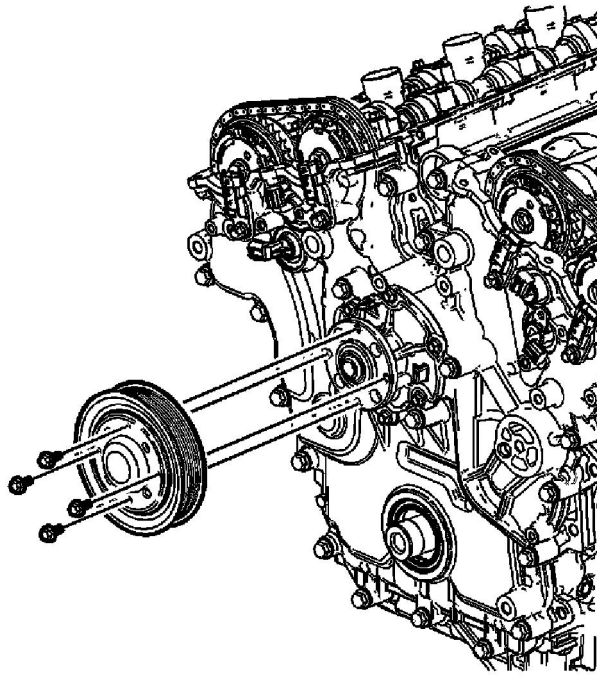
For equivalent regional tools refer to Special Tools (See: Cooling System/Tools and Equipment)

Removal Procedure

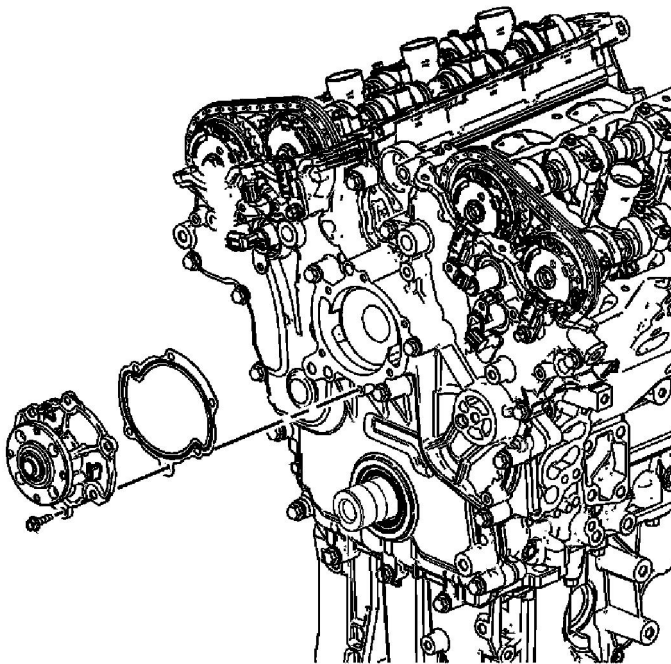
1. Drain the cooling system. Refer to Cooling System Draining and Filling (Static) (See: Cooling System/Service and Repair/Cooling System Draining and Filling (Static))Cooling System Draining and Filling (GE 47716) (See: Cooling System/Service and Repair/Cooling System Draining and Filling (GE 47716))
2. Remove the generator drive belt. Refer to Drive Belt Replacement (See: Drive Belts, Mounts, Brackets and Accessories/Drive Belt/Service and Repair)



3. Use the EN 46104 - water pump pulley holder to retain the pulley.

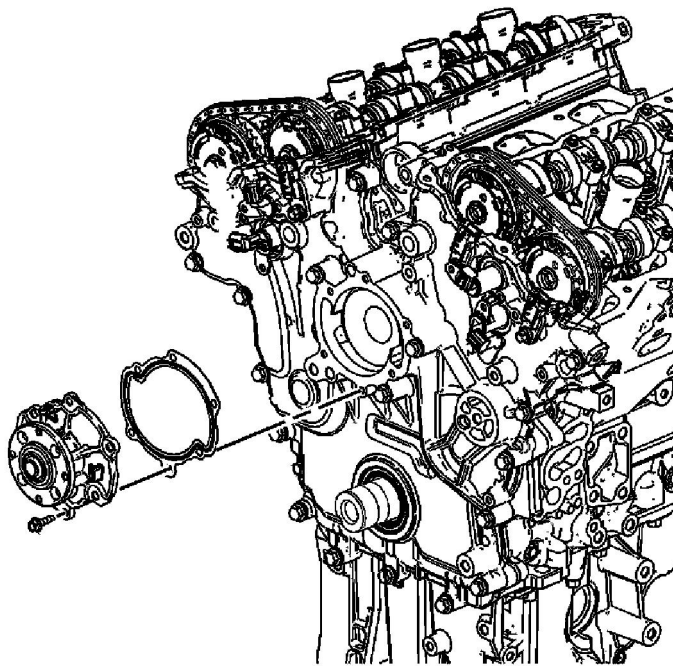


4. Remove the water pump pulley bolts.
5. Remove the water pump pulley.



6. Remove the water pump bolts.
7. Remove the water pump.
8. Remove and DISCARD the water pump seal.
9. Carefully clean the water pump sealing surfaces.

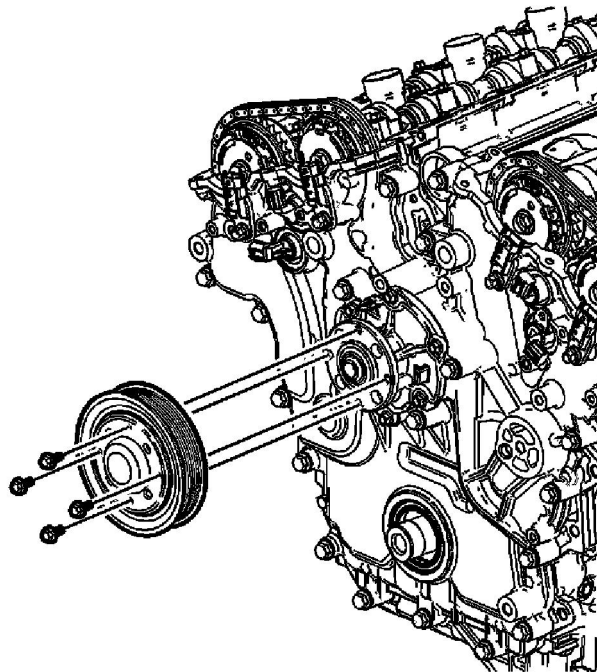
Installation Procedure



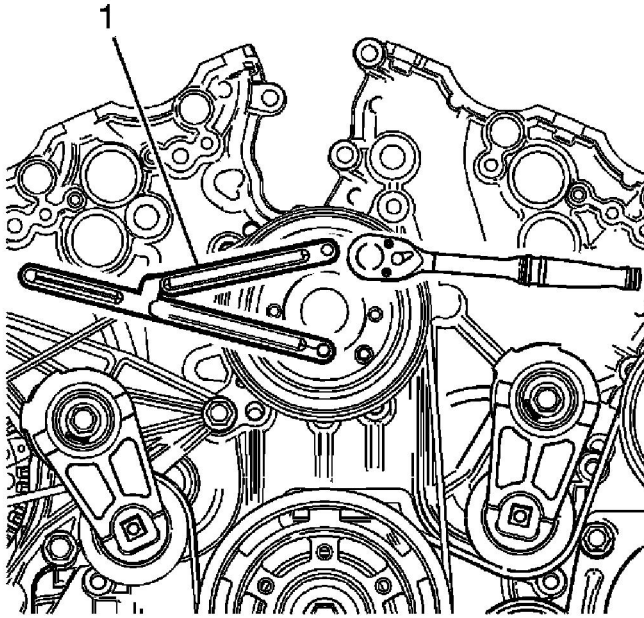
1. Install a NEW water pump seal.
2. Install the water pump.

Caution: Refer to Fastener Caution (See: Service Precautions/Vehicle Damage Warnings/Fastener Caution)

3. Install the water pump bolts and tighten to **10 Nm (89 lb in)**.



4. Install the water pump pulley and the water pump pulley bolts.



5. Use the EN 46104 - water pump pulley holder to hold the pulley.
6. Install the water pump pulley bolts and tighten to **12 Nm (108 lb in)**.
7. Install the generator drive belt. Refer to Drive Belt Replacement (See: Drive Belts, Mounts, Brackets and Accessories/Drive Belt/Service and Repair)
8. Fill the cooling system. Refer to Cooling System Draining and Filling (Static) (See: Cooling System/Service and Repair/Cooling System Draining and Filling (Static))Cooling System Draining and Filling (GE 47716) (See: Cooling System/Service and Repair/Cooling System Draining and Filling (GE 47716))