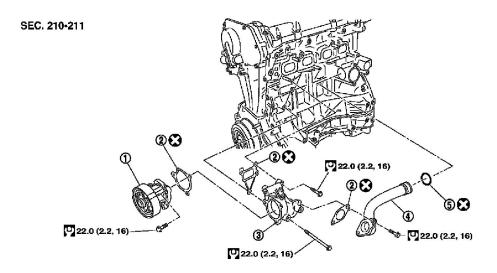
2010 Nissan-Datsun Altima L4-2.5L (QR25DE)

# Water Pump: Service and Repair

#### WATER PUMP

#### Removal and Installation



Water pump
Water pipe

- 2. Gaskets
- 5. O-ring

3. Water pump housing

#### **WARNING:**

Never remove the radiator cap when the engine is hot. Serious burns could occur from high pressure coolant escaping from the radiator.

#### **CAUTION:**

- When removing water pump assembly, be careful not to get coolant on drive belt.
- Water pump cannot be disassembled and should be replaced as a unit.
- After installing water pump, connect hose and clamp securely, then check for leaks using radiator cap tester.

#### REMOVAL

1. Drain engine coolant from the radiator. Refer to See: Cooling System/Coolant/Service and Repair.

#### **CAUTION:**

#### Perform when the engine is cold.

- 2. Remove drive belt. Refer to See: Drive Belts, Mounts, Brackets and Accessories/Drive Belt/Service and Repair/Removal and Replacement/Removal and Installation.
- 3. Remove front air duct. Refer to See: Tune-up and Engine Performance Checks/Air Cleaner Housing/Service and Repair.
- 4. Remove generator and generator bracket. Refer to See: Starting and Charging/Charging System/Alternator/Service and Repair.
- 5. Remove RH wheel and tire assembly. Refer to See: Maintenance/Wheels and Tires/Service and Repair/Adjustment.
- 6. Remove fender protector side cover RH. Refer to See: Body and Frame/Fender/Front Fender/Front Fender/Front Fender/Service and Repair/Coupe (Coupe models) or See: Body and Frame/Fender/Front Fender/Front Fender Liner/Service and Repair/Sedan (Sedan models).
- 7. Remove engine ground strap.
- 8. Remove the water pump.

#### **CAUTION:**

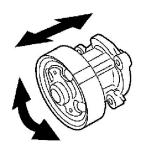
- Handle the water pump vane so that it does not contact any other parts.
- Water pump cannot be disassembled and should be replaced as an assembly.

### NOTE:

If it is necessary to remove the water pipe, the exhaust manifold and three way catalyst assembly must be removed. Refer to See: Exhaust System/Catalytic Converter/Service and Repair.

### INSPECTION AFTER REMOVAL

## 2010 Nissan-Datsun Altima L4-2.5L (QR25DE)



- Visually check that there is no significant dirt or rusting on the water pump body and vane.
- Check that there is no looseness in the vane shaft, and that it turns smoothly when rotated by hand.
- If the water pump does not perform properly, replace the water pump assembly.

### INSTALLATION

Installation is in the reverse order of removal.

- When inserting water pipe end to cylinder block, apply a neutral detergent to O-ring. Then insert it immediately.

## INSPECTION AFTER INSTALLATION

- After installation refill engine coolant and check for leaks. Refer to See: Cooling System/Coolant/Service and Repair and See: Cooling System/Coolant/Testing and Inspection.