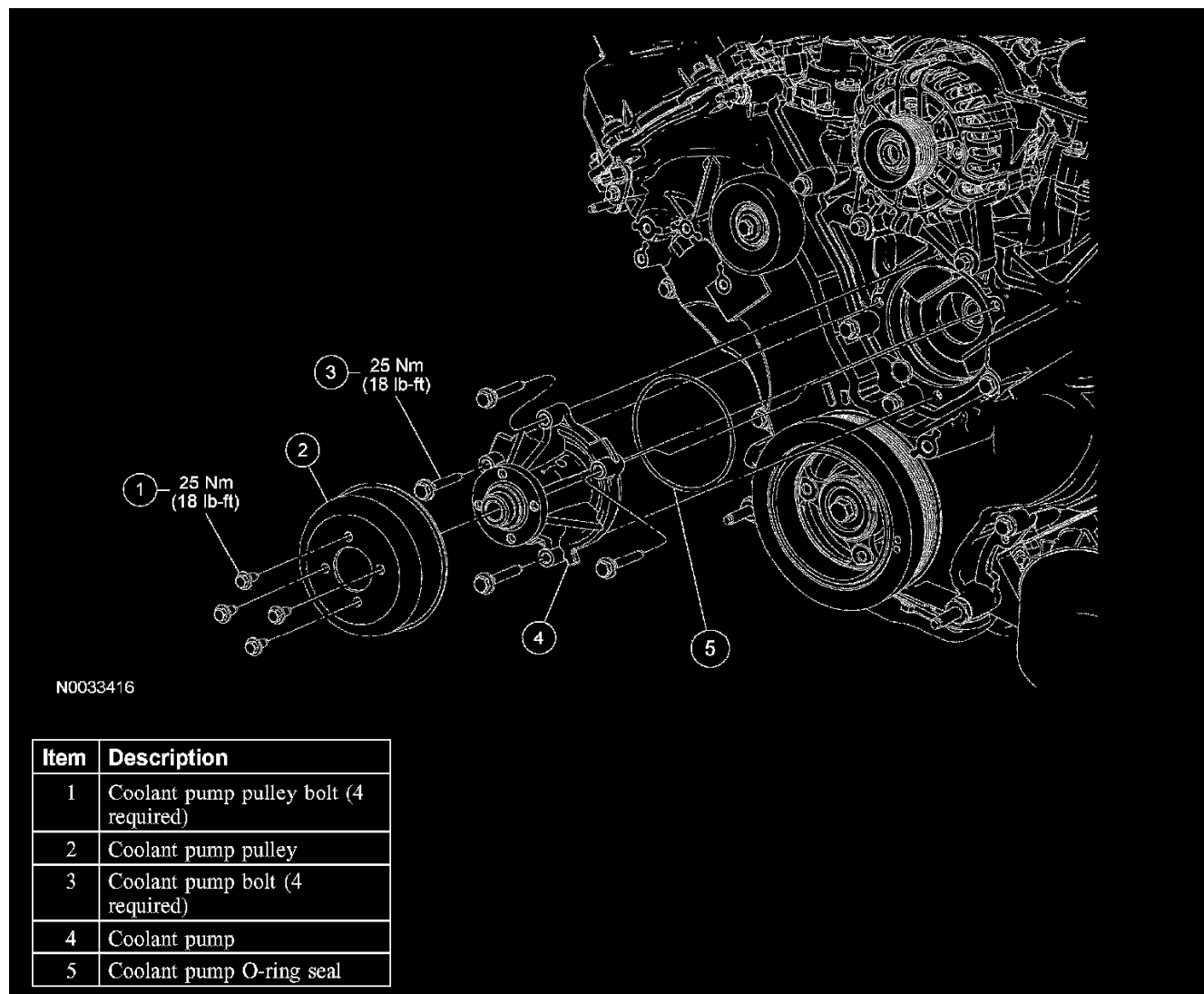


## Water Pump: Service and Repair

Coolant Pump - 4.6L, 5.4L and 6.8L

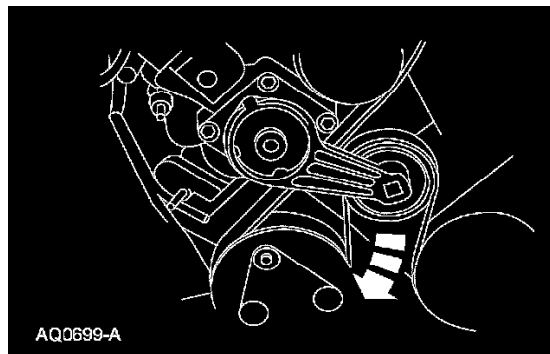
Material	
Item	Specification
Motorcraft Premium Gold Engine Coolant VC-7-A (in California, Oregon and New Mexico VC-7-B, in Canada CVC-7-A) or equivalent (yellow color)	WSS-M97B51-A1
Motorcraft Metal Surface Prep ZC-31	—

### Material



### Removal

1. Remove the fan and fan clutch.
2. Loosen the 4 coolant pump pulley bolts.



3. Rotate the tensioner **clockwise** and remove the accessory drive belt from the coolant pulley.
4. Remove the 4 bolts and the coolant pump pulley.
5. Remove the 4 coolant pump bolts and the coolant pump.
  - ^ Discard the coolant pump O-ring seal.
  - ^ Clean the sealing surfaces with metal surface prep. Follow the directions on the packaging.

### Installation

1. **NOTE:** Lubricate the new O-ring seal with clean engine coolant prior to installation into the cylinder block.

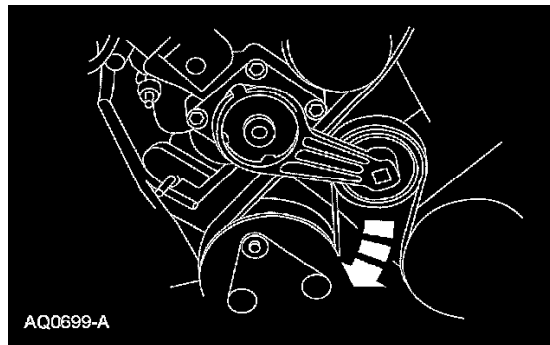
Install a new O-ring on the coolant pump.

2. **CAUTION:** Do not rotate the coolant pump housing once the coolant pump has been positioned in the cylinder block. Damage to the O-ring seal will occur.

Position the coolant pump and install the 4 bolts.

^ Tighten to **25 Nm (18 ft. lbs.)**.

3. Position the coolant pump pulley onto the coolant pump and install the bolts finger tight.



4. Rotate the tensioner **clockwise** and install the accessory drive belt onto the coolant pulley.
5. Tighten the coolant pump pulley bolts.
  - ^ Tighten to **25 Nm (18 ft. lbs.)**.
6. Install the fan and fan clutch.