

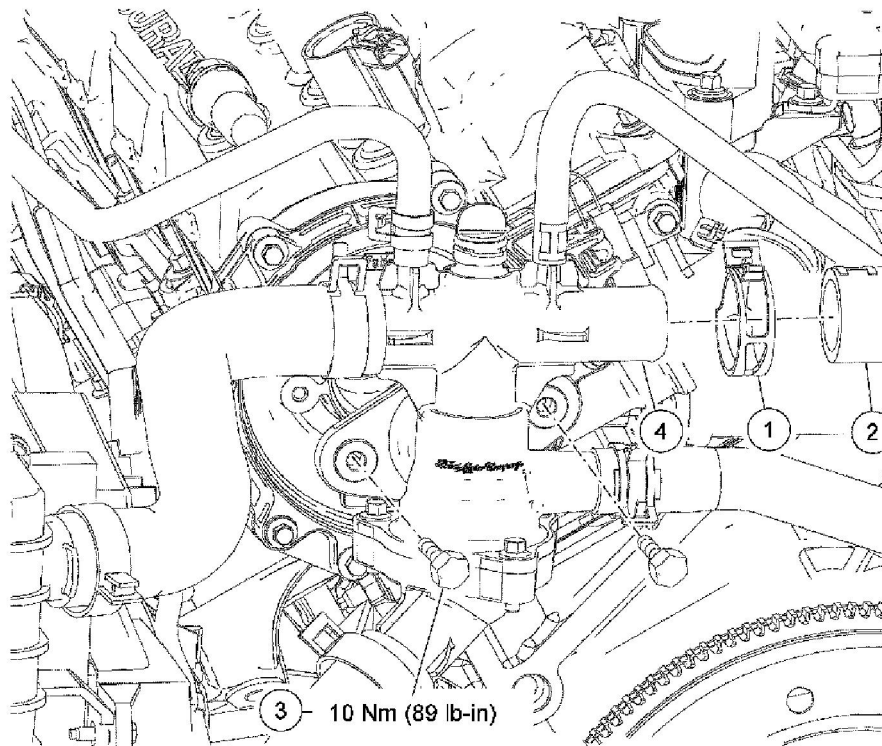
Water Pump: Service and Repair

Coolant Pump

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

Material

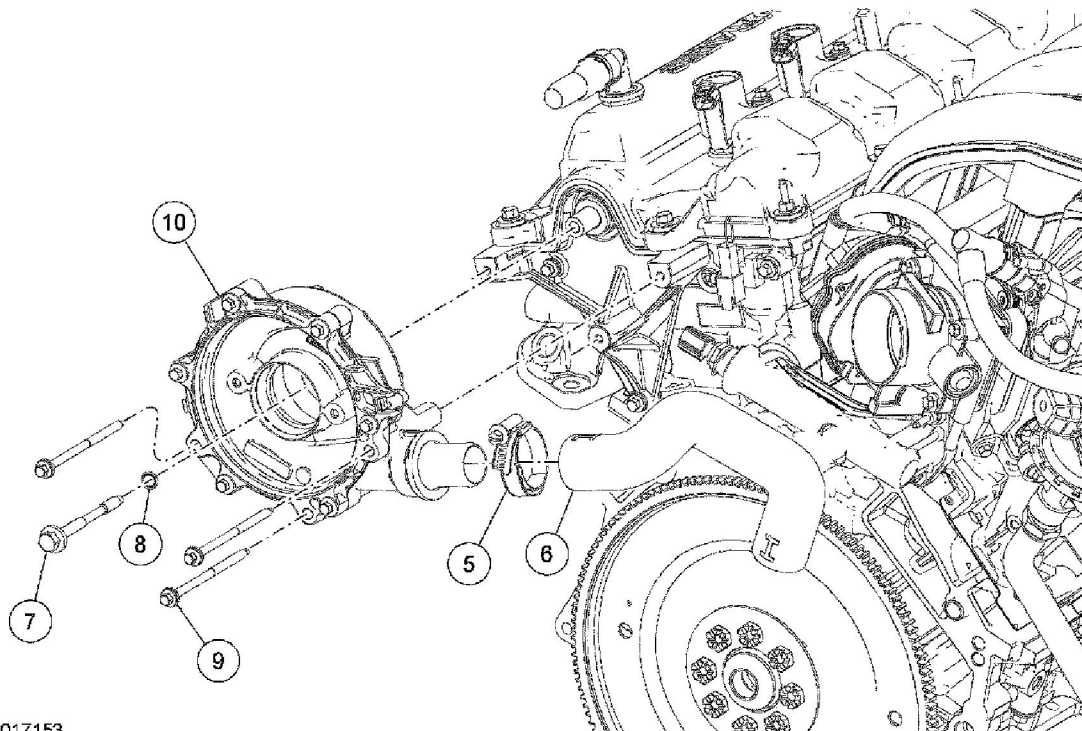


N0000215

Item	Description
1	Thermostat housing-to-bypass tube hose clamp
2	Thermostat housing-to-bypass tube hose

(Continued)

Item	Description
3	Thermostat housing bolt (2 required)
4	Thermostat housing



N0017153

Item	Description
5	Coolant pump hose clamp
6	Coolant pump hose
7	Center coolant pump bolt
8	Center coolant pump bolt sealing washer
9	Outer coolant pump bolt (3 required)
10	Coolant pump

Removal and Installation

1. Drain the cooling system.
2. Remove the air cleaner assembly.
3. Disconnect the thermostat housing-to-bypass tube hose and position aside.
 - ^ To install, tighten to **5 Nm (44 inch lbs.)**.
4. Remove the 2 thermostat housing bolts and position aside the thermostat housing.
 - ^ Discard the O-ring seal.
 - ^ To install, tighten to **10 Nm (89 inch lbs.)**.
5. Disconnect the coolant pump hose and position aside.
6. **CAUTION:** The center coolant pump uses a sealing washer and must be replaced whenever the bolt is removed.

Remove the 4 coolant pump bolts and the coolant pump.

^ To install, tighten in the following sequence:

- Tighten the coolant pump center bolt to **4 Nm (35 inch lbs.)**.
- Loosely install the 3 coolant pump outer bolts.
- Tighten the coolant pump center bolt to **25 Nm (18 ft. lbs.)**.
- Tighten the 3 coolant pump outer bolts to **10 Nm (89 inch lbs.)**.

7. To install, reverse the removal procedure.

^ Install a new sealing washer on the center coolant pump bolt.

^ Install a new O-ring seal on the thermostat housing and lubricate with clean engine coolant.

8. Fill and bleed the cooling system.