

2010 Ford Pickup F150

2010 ENGINE Engine Cooling - F150

COOLANT PUMP

Material

MATERIAL SPECIFICATIONS CHART

Item	Specification
Motorcraft® Metal Surface Prep ZC-31-A	-
Motorcraft® Premium Gold Engine Coolant with Bittering Agent (US); Motorcraft® Premium Gold Engine Coolant (Canada) VC-7-B (US); CVC-7-A (Canada); or equivalent	WSS-M97B51-A1

Coolant Pump - All except 6.2L (2V)

NOTE: 5.4L (3V) shown in illustration, 4.6L (2V) and 4.6L (3V) similar.

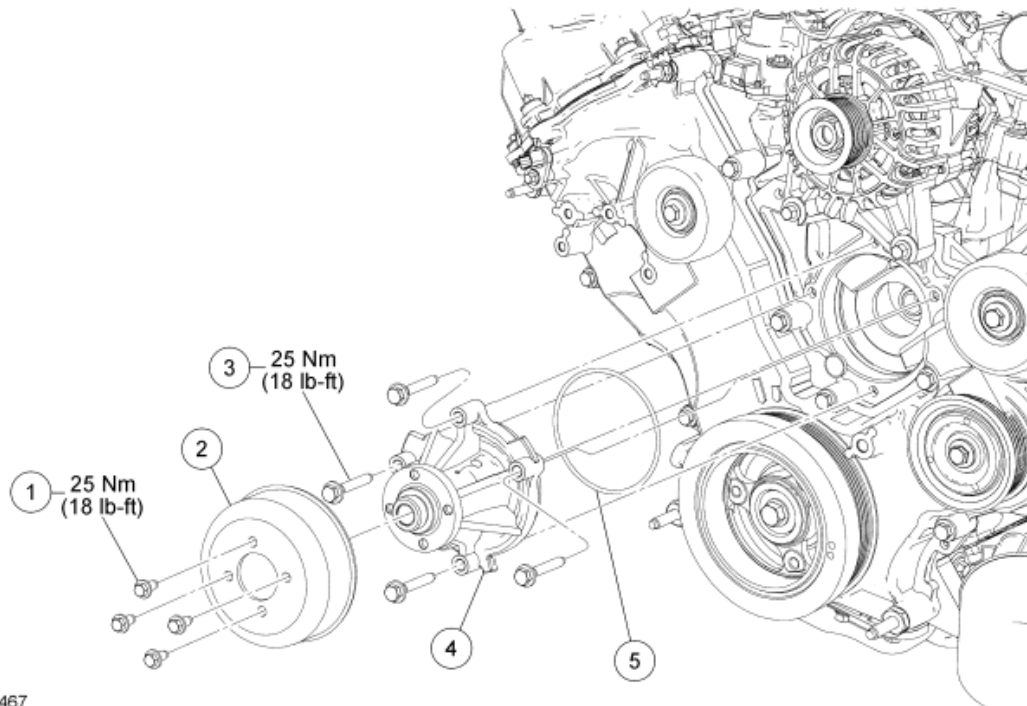
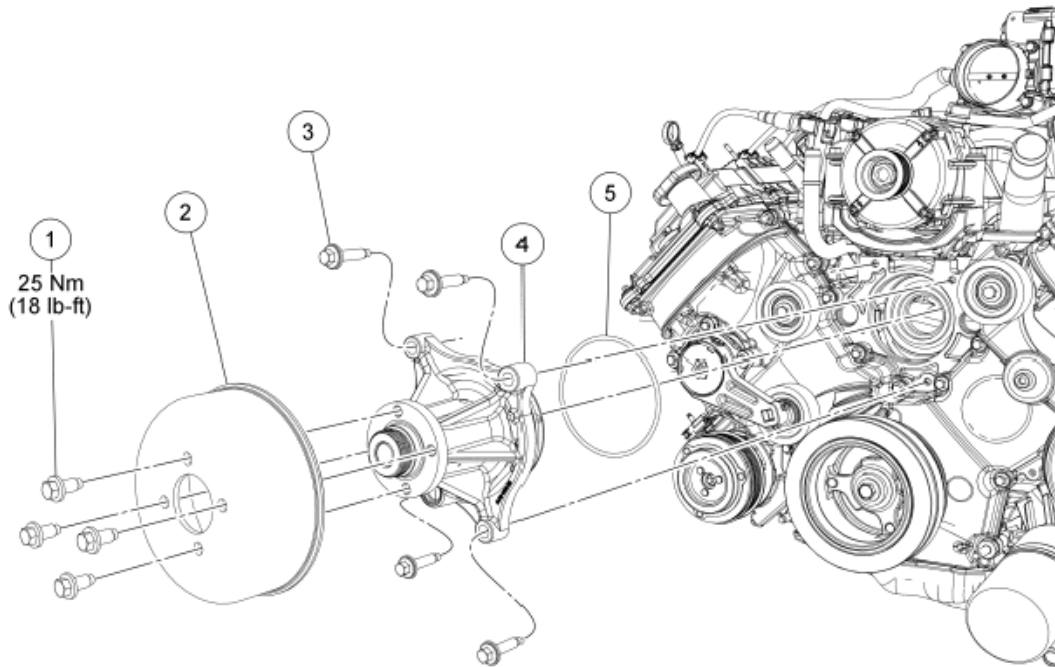


Fig. 14: Identifying Coolant Pump Component With Torque Specifications - 6.2L (2V)
Courtesy of FORD MOTOR CO.

ITEM DESCRIPTION CHART

Item	Part Number	Description
1	N806282	Coolant pump pulley bolt (4 required)
2	8A528	Coolant pump pulley
3	N806177	Coolant pump bolt (4 required)
4	8501	Coolant pump

5	391108	Coolant pump O-ring seal
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Coolant Pump - 6.2L

N0110078

Fig. 15: Identifying Coolant Pump Components With Torque Specifications - 6.2L
 Courtesy of FORD MOTOR CO.

ITEM DESCRIPTION CHART

Item	Part Number	Description
1	N806282	Coolant pump pulley bolt (4 required)
2	8A528	Coolant pump pulley
3	W503297	Coolant pump bolt (4 required)
4	8501	Coolant pump
5	391108	Coolant pump O-ring seal

Removal

1. Drain the cooling system. For additional information, refer to **COOLING SYSTEM DRAINING, FILLING AND BLEEDING**.
2. Remove the Air Cleaner (ACL) outlet tube. For additional information, refer to **INTAKE AIR DISTRIBUTION & FILTERING**.
3. Loosen the 4 coolant pump pulley bolts.
4. Remove the accessory drive belt. For additional information, refer to **ACCESSORY DRIVE**.
5. Remove the 4 bolts and the coolant pump pulley.

6. Remove the 4 bolts and the coolant pump. Discard the O-ring seal.
7. Inspect the sealing surfaces and clean with metal surface prep. Follow the directions on the packaging.

Installation**4.6L (2V), 4.6L (3V) and 5.4L (3V) engines**

NOTE: Align the bolt holes with the bosses prior to insertion of the coolant pump and insert the pump straight into the coolant pump cavity. Do not rotate the coolant pump once installed in the coolant pump cavity or damage to the O-ring seal can occur, causing the coolant pump to leak.

NOTE: Install a new O-ring seal and lubricate with clean engine coolant.

1. Install the coolant pump and 4 bolts.
 - Tighten to 25 Nm (18 lb-ft).

6.2L (2V) engines

NOTE: Align the bolt holes with the bosses prior to insertion of the coolant pump and insert the pump straight into the coolant pump cavity. Do not rotate the coolant pump once installed in the coolant pump cavity or damage to the O-ring seal can occur, causing the coolant pump to leak.

NOTE: Install a new O-ring seal and lubricate with clean engine coolant.

2. Install the coolant pump and 4 bolts. Tighten the 4 bolts in a criss-cross pattern in 3 stages.
 - Stage 1: Finger-tighten the bolts.
 - Stage 2: Tighten the bolts to 20 Nm (177 lb-in).
 - Stage 3: Tighten the bolts an additional 45 degrees.

All engines

3. Install the coolant pump pulley and loosely install the 4 bolts.
4. Install the accessory drive belt. For additional information, refer to **ACCESSORY DRIVE**.
5. Tighten the 4 coolant pump pulley bolts.
 - Tighten to 25 Nm (18 lb-ft).
6. Install the **ACL** outlet pipe. For additional information, refer to **INTAKE AIR DISTRIBUTION & FILTERING**.
7. Fill the engine cooling system. For addition information, refer to **COOLING SYSTEM DRAINING, FILLING AND BLEEDING**.