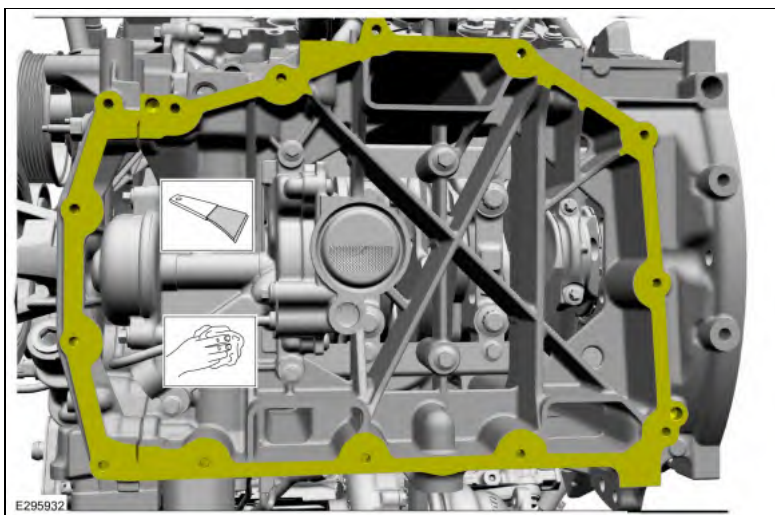
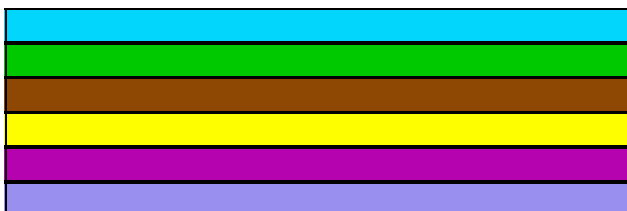
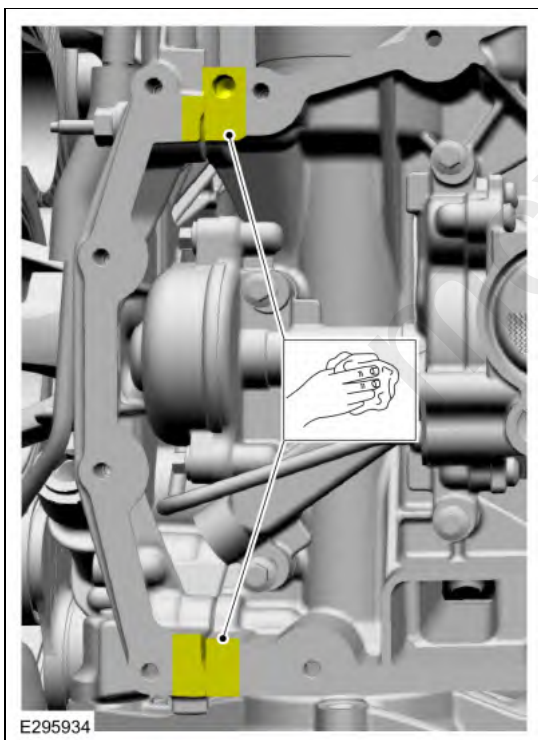




Installation

1. To install, reverse the removal procedure.
2. Refer to: RTV Sealing Surface Cleaning and Preparation (303-00 Engine System - General Information, General Procedures).
 Material: Motorcraft® Silicone Gasket Remover / ZC-30-A
 Material: Motorcraft® Metal Surface Prep Wipes / ZC-31-B
 Material: Motorcraft® Metal Brake Parts Cleaner / PM-4-A, PM-4-B



3. **NOTICE:** Failure to use Motorcraft® High Performance Engine RTV Silicone may cause the engine oil to foam excessively and result in serious engine damage.

NOTE: The oil pan must be installed within 10 minutes of applying the sealer and the bolts must be installed and tightened to 2-5 Nm (18-44 lb-in) within 15 of applying the sealer. Final tightening of the bolts must be completed within 60 minutes of applying the sealer. Failure to follow this procedure can cause future oil leakage.

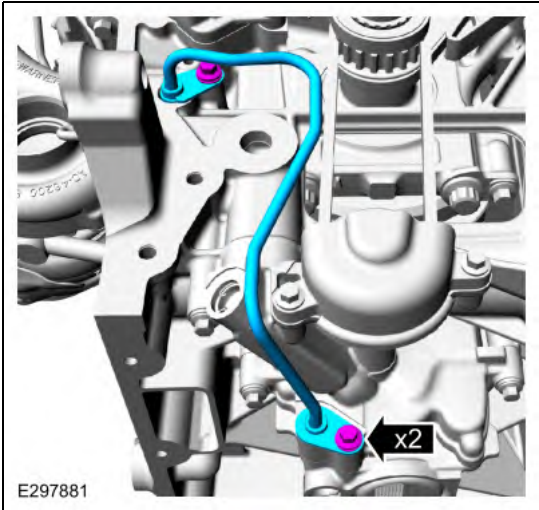
1. Install a new gasket.
2. Apply 18 mm (0.7 in) drops of sealant.
 Material: Motorcraft® High Performance Engine RTV Silicone / TA-357 (WSE-M4G323-A6)

Oil Pump

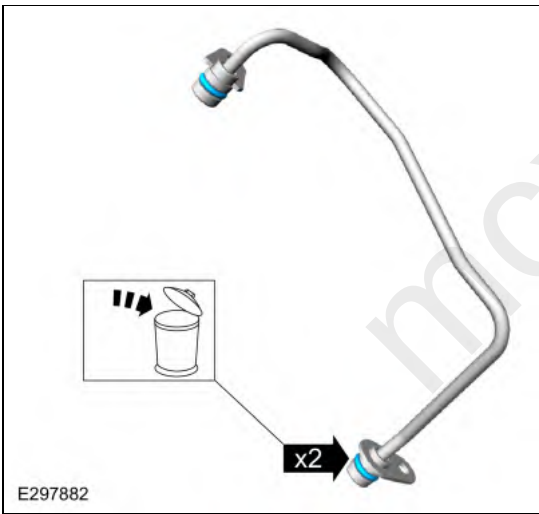
Removal

NOTICE: During engine repair procedures, cleanliness is extremely important. Any foreign material, including any material created while cleaning gasket surfaces, that enters the oil passages, coolant passages or the oil pan, can cause engine failure.

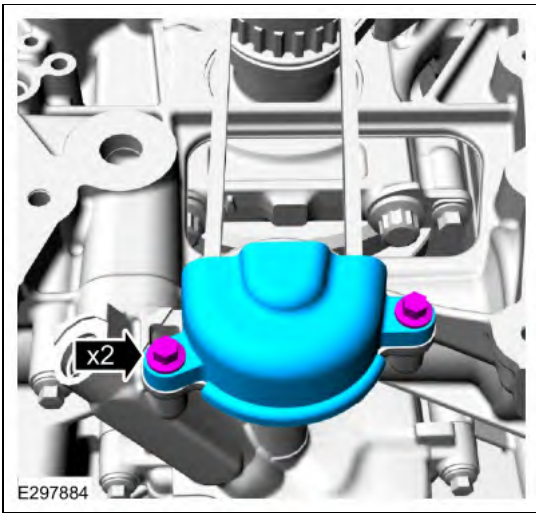
1. Remove the engine front cover.
Refer to: Engine Front Cover (303-01B Engine - 3.0L EcoBoost, Removal and Installation).
2. Remove the bolts and the oil pump return tube.



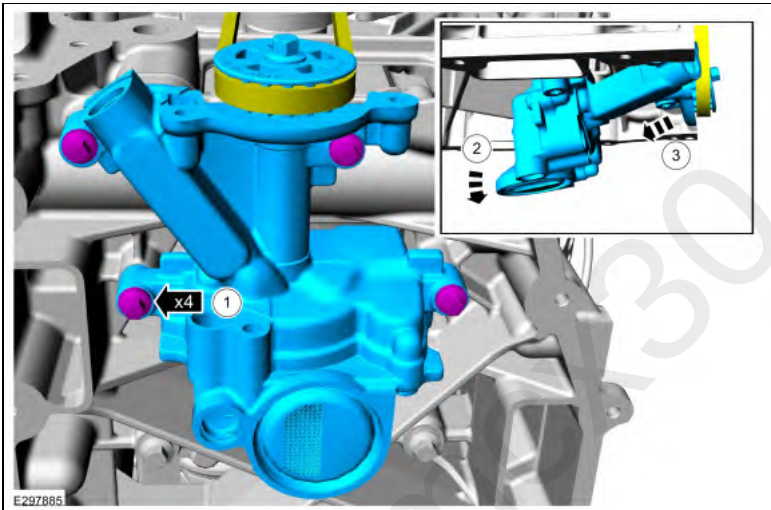
3. Remove and discard the O-ring seals.



4. Remove the bolts and the splash shield.



5.
 1. Remove the oil pump bolts.
 2. Lower the rear of the oil pump assembly.
 3. Separate the oil pump sprocket from the oil pump drive belt.



Installation

1. Prime the oil pump. Add 2 tablespoons of clean engine oil to the oil pump and rotate the oil pump by hand.
2. **NOTE:** Make sure the oil pump drive belt teeth are engaged in the crankshaft sprocket prior to installing the oil pump.
 1. Install the oil pump sprocket into the oil pump drive belt.
 2. Raise the rear of the oil pump assembly into the installed position.
 3. Install the oil pump bolts.

Torque:
 Stage 1: 89 lb.in (10 Nm)
 Stage 2: 45Å°