

Crankshaft Rear Seal with Retainer Plate

Special Tool(s) / General Equipment

	303-F070 Support Bar, Engine TKIT-1999A-F/LT TKIT-1999A-FM/FLM
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Materials

Name	Specification
Motorcraft® High Performance Engine RTV Silicone TA-357	WSE-M4G323-A6

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. With the vehicle in NEUTRAL, position it on a hoist.
Refer to: Jacking and Lifting - Overview (100-02 Jacking and Lifting, Description and Operation).

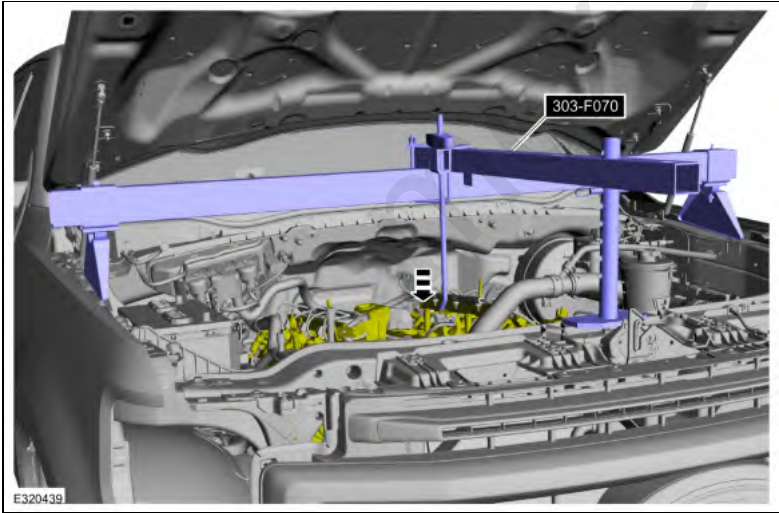
2. Release the fuel system pressure.
Refer to: Fuel System Pressure Release (310-00C Fuel System - General Information - 7.3L 2V DEVCT V8 (239kW/320PS) (J0), General Procedures).

3. Disconnect the battery ground cable.
Refer to: Battery Disconnect and Connect (414-01 Battery, Mounting and Cables, General Procedures).

4. Drain the engine cooling system.
Refer to: Engine Cooling System Draining, Vacuum Filling and Bleeding (303-03D Engine Cooling - 7.3L 2V DEVCT V8 (239kW/320PS) (J0), General Procedures).

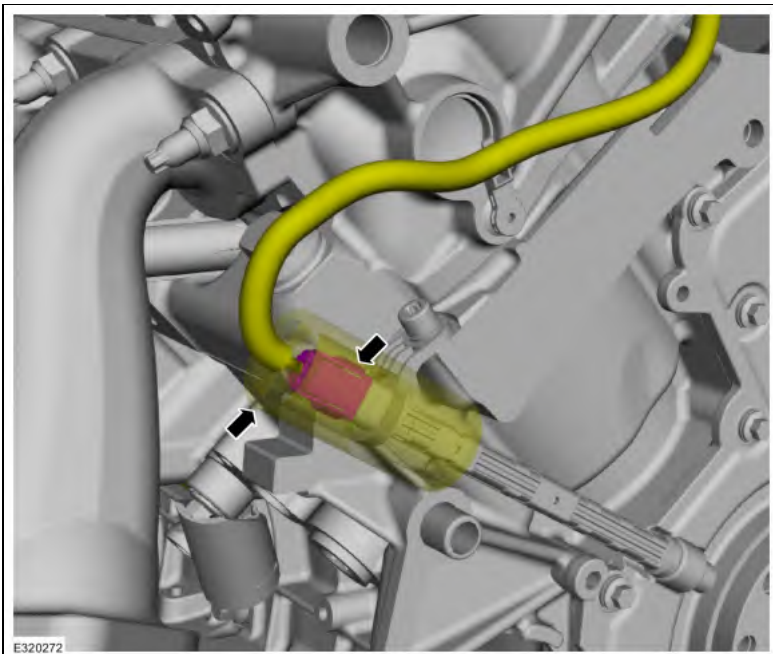
5. Remove the oil pan.
Refer to: Oil Pan (303-01C Engine - 7.3L 2V DEVCT V8 (239kW/320PS) (J0), Removal and Installation).

6. Lower the engine onto the engine mounts.
Remove Special Service Tool: 303-F070 Support Bar, Engine.

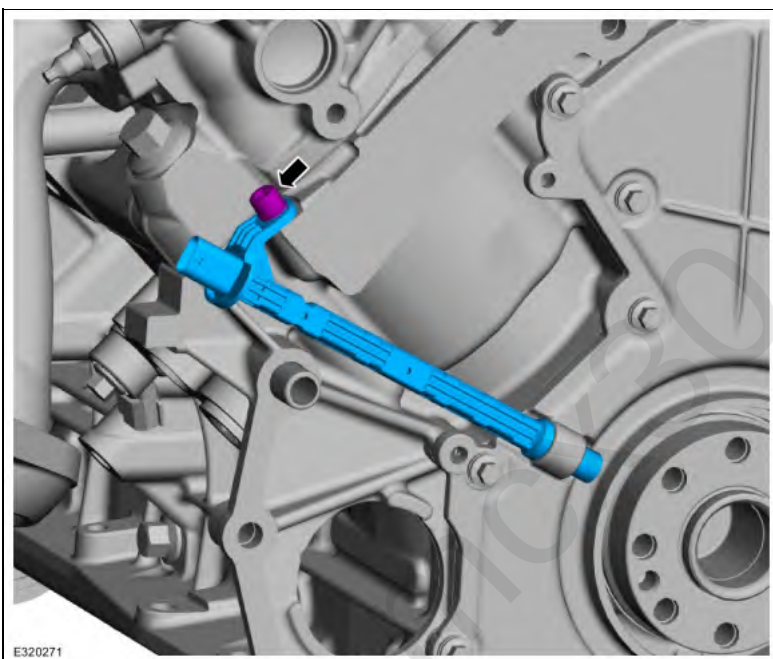


7. Remove the rear crankshaft seal.
Refer to: Crankshaft Rear Seal (303-01C Engine - 7.3L 2V DEVCT V8 (239kW/320PS) (J0), Removal and Installation).

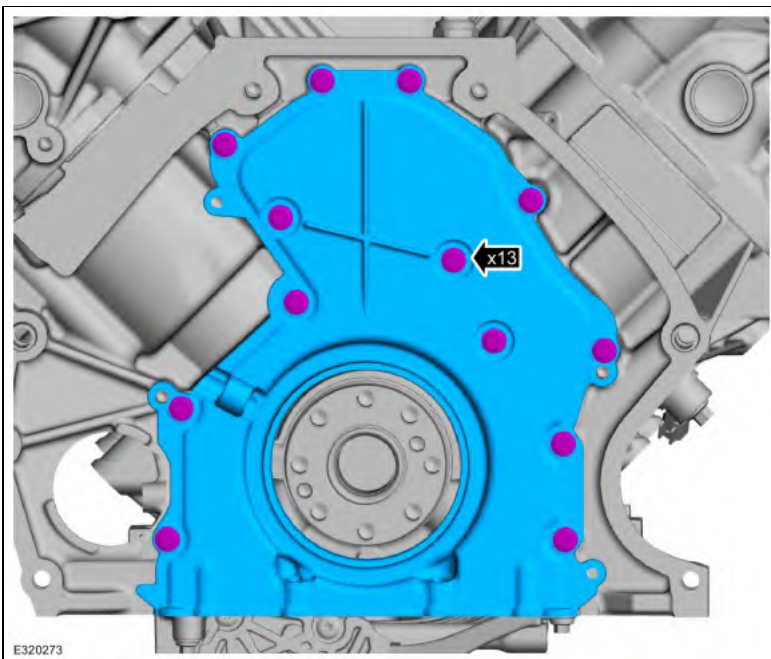
8.
 - Reposition the wiring harness insulator.
 - Disconnect the engine CKP electrical connector.



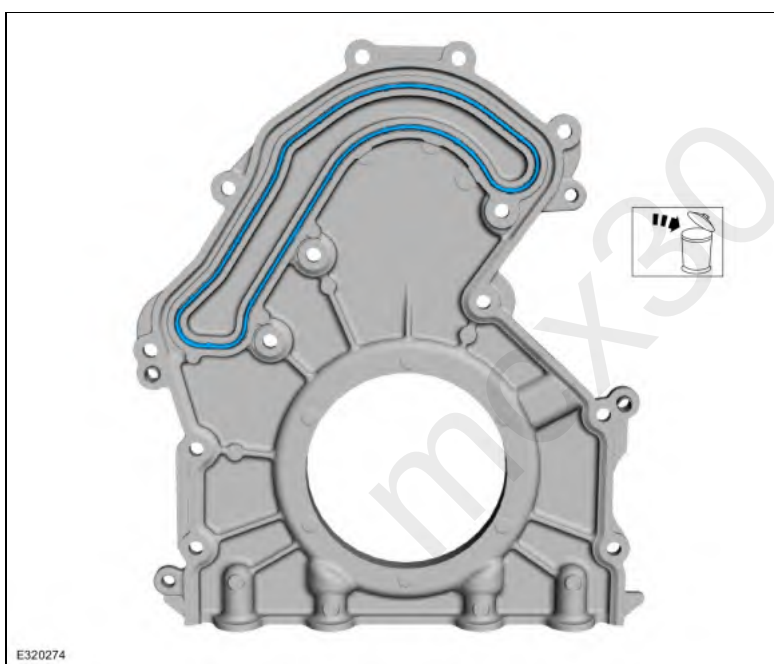
9. Remove the bolt and the CKP sensor.



10. Remove the bolts and the rear crankshaft seal retainer plate.

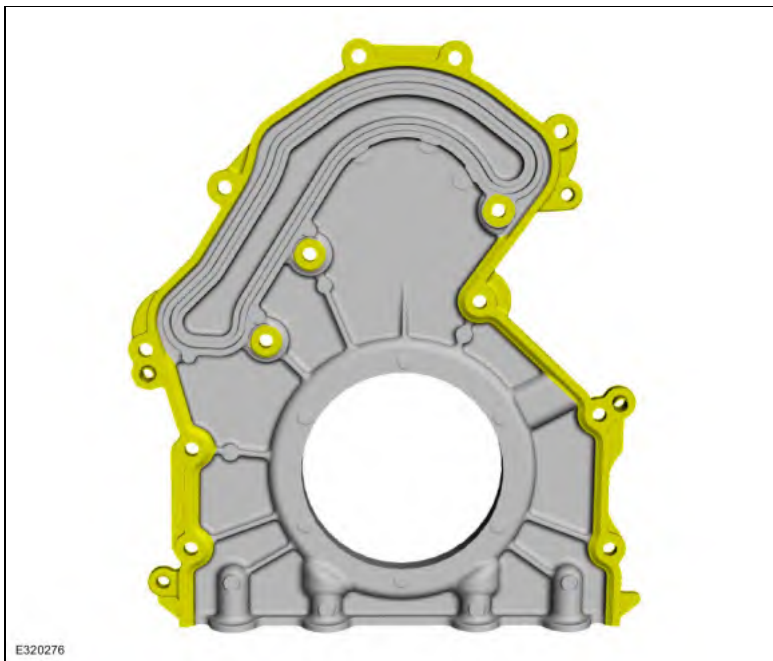


11. Remove and discard the gasket.



12. Clean and prepare the RTV sealing surfaces.

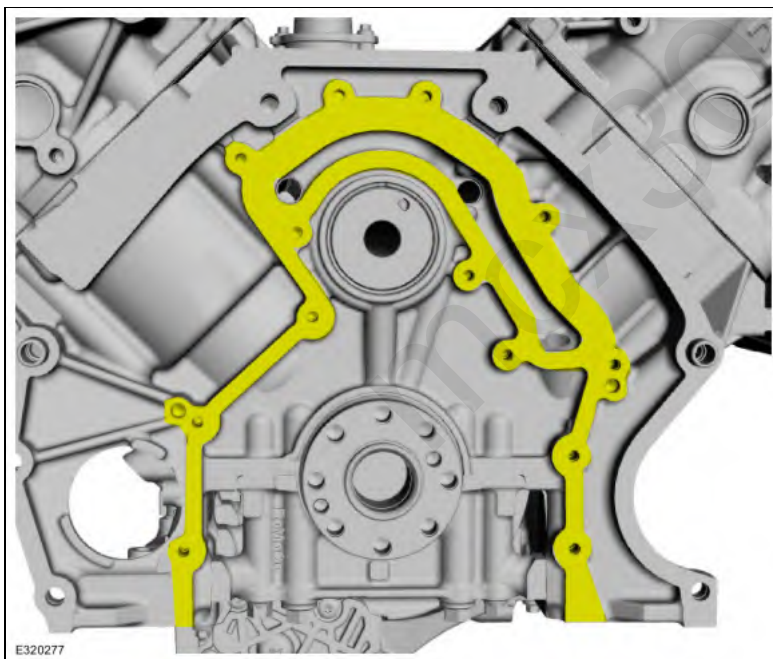
Refer to: RTV Sealing Surface Cleaning and Preparation (303-00 Engine System - General Information, General Procedures).



13. **NOTICE:** Place clean, lint-free shop towels over exposed engine cavities. Carefully remove the towels so foreign material is not dropped into the engine. Any foreign material (including any material created while cleaning gasket surfaces) that enters the oil passages may cause engine failure.

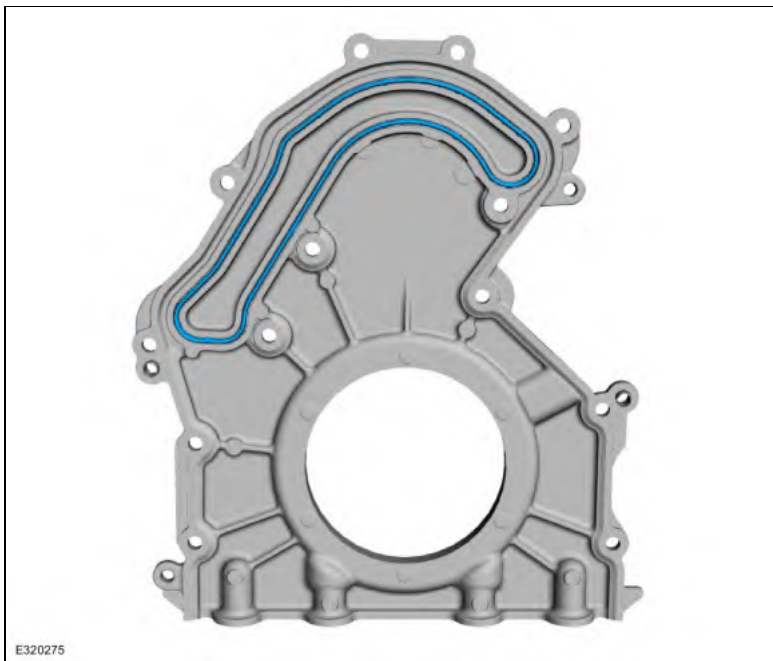
Clean and prepare the RTV sealing surfaces

Refer to: RTV Sealing Surface Cleaning and Preparation (303-00 Engine System - General Information, General Procedures).



Installation

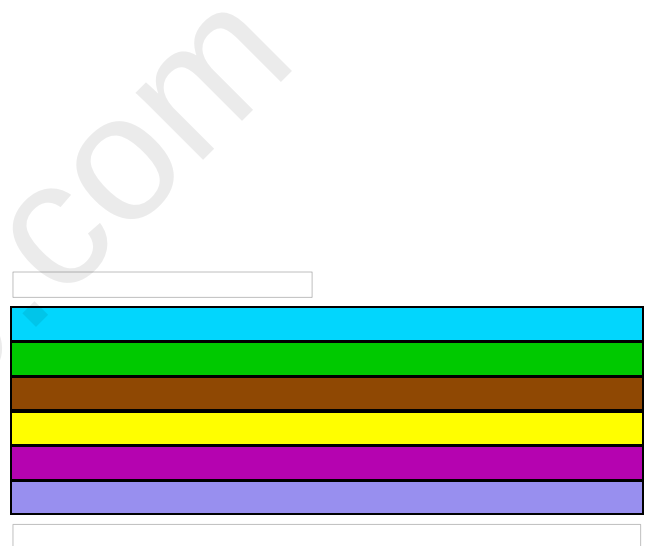
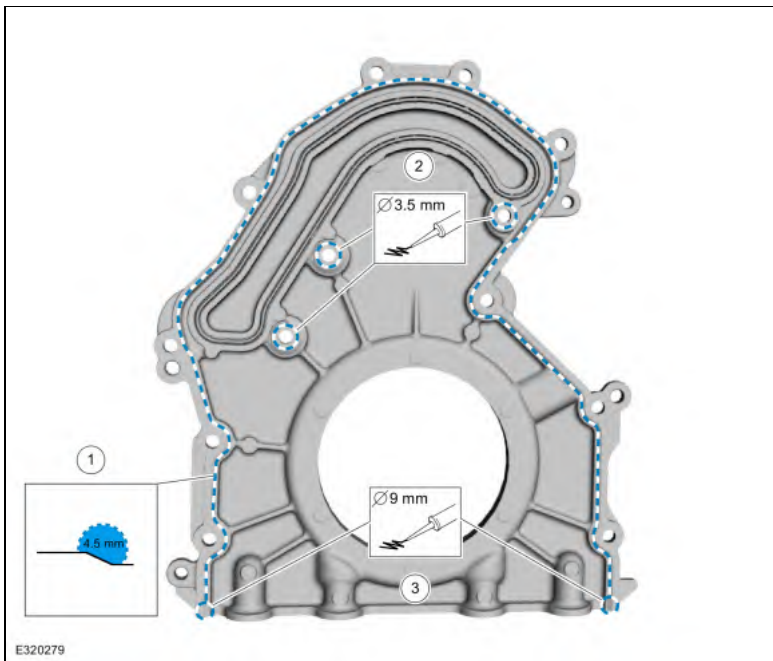
1. Install a new gasket.



2. **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 rear crankshaft seal retainer plate and bolts must be installed within 10 minutes of applying the sealer. The bolts must be tightened within 15 minutes of installing the rear crankshaft seal retainer plate. Failure to follow this procedure can cause future oil leakage.

1. Apply a 4.5 mm (0.18 in) bead of Motorcraft® High Performance Engine RTV Silicone to the chamfer of the rear crankshaft seal retainer plate sealing surfaces.
Material: Motorcraft® High Performance Engine RTV Silicone / TA-357 (WSE-M4G323-A6)
2. Apply a 3.5 mm (0.14 in) bead of Motorcraft® High Performance Engine RTV Silicone to the rear crankshaft seal retainer plate sealing surfaces of the inner bolt bosses.
Material: Motorcraft® High Performance Engine RTV Silicone / TA-357 (WSE-M4G323-A6)
3. Apply 9 mm (0.35 in) drops of Motorcraft® High Performance Engine RTV Silicone to the joints as indicated.
Material: Motorcraft® High Performance Engine RTV Silicone / TA-357 (WSE-M4G323-A6)

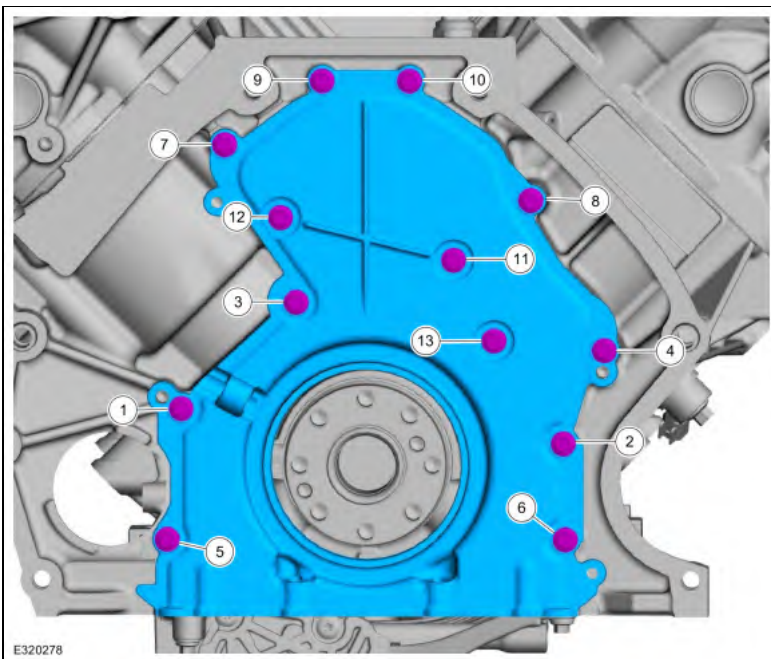


3. Install the rear crankshaft seal retainer plate and the bolts. Tighten in sequence.

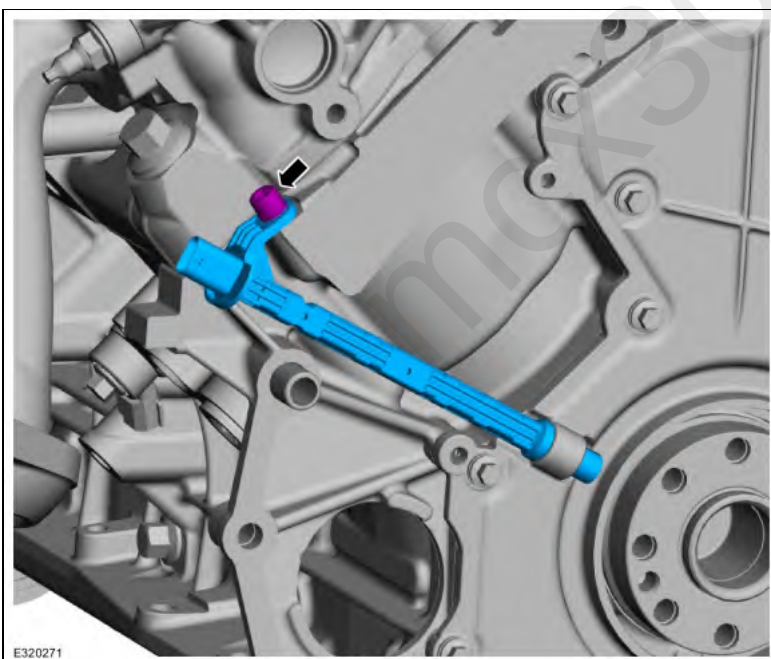
Torque:

Stage 1: 89 lb.in (10 Nm)

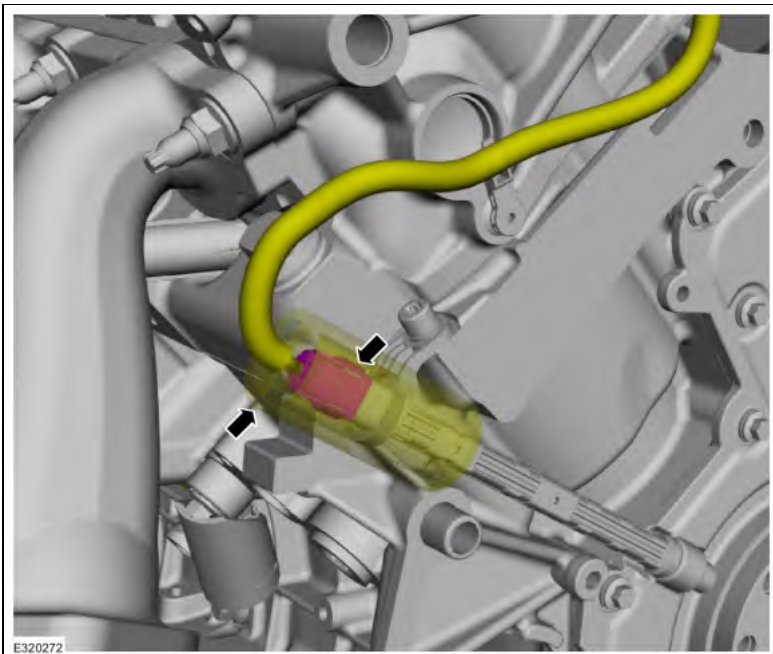
Stage 2: Tighten an additional : 45°



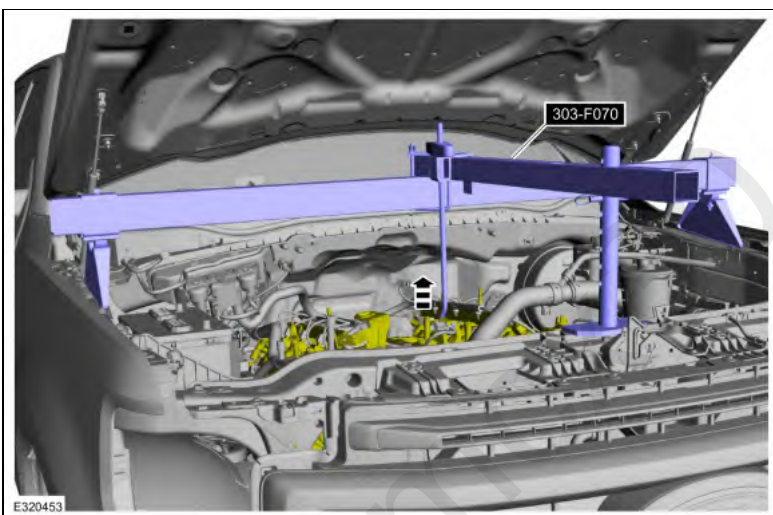
4. Install the CKP sensor and the bolt.
Torque: 89 lb.in (10 Nm)



- 5.
- Connect the engine CKP electrical connector.
 - Position the wiring harness insulator.



6. Install the rear crankshaft seal.
Refer to: Crankshaft Rear Seal (303-01C Engine - 7.3L 2V DEVCT V8 (239kW/320PS) (J0), Removal and Installation).
7. Raise the engine 100 mm (4 in.).
Install Special Service Tool: 303-F070 Support Bar, Engine.



8. Install the oil pan.
Refer to: Oil Pan (303-01C Engine - 7.3L 2V DEVCT V8 (239kW/320PS) (J0), Removal and Installation).
9. Fill and bleed the engine cooling system.
Refer to: Engine Cooling System Draining, Vacuum Filling and Bleeding (303-03D Engine Cooling - 7.3L 2V DEVCT V8 (239kW/320PS) (J0), General Procedures).
10. Connect the battery ground cable.
Refer to: Battery Disconnect and Connect (414-01 Battery, Mounting and Cables, General Procedures).
11. Pressurize the fuel system.
Refer to: Fuel System Pressure Release (310-00C Fuel System - General Information - 7.3L 2V DEVCT V8 (239kW/320PS) (J0), General Procedures).
12. Use the Powertrain Control Module (PCM) Misfire Monitor Profile Correction routine in the diagnostic scan tool.
13. Start and check the exhaust system for leaks.