

7.

 **NOTE:** Do not use wire brushes, power abrasive discs or 3M™ Roloc® Bristle Disk (2-in white, part number 07528) to clean the sealing surfaces of the engine block. These tools cause scratches and gouges that make leak paths. They also cause contamination that causes premature engine failure. Remove all traces of the gasket.

Make sure that the mating faces are clean and free of foreign material. Refer to: RTV Sealing Surface Cleaning and Preparation . Use the General Equipment: Plastic Scraper

Material

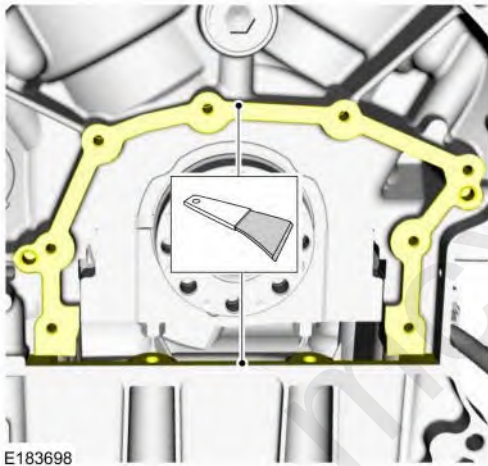
: Motorcraft® Silicone Gasket Remover / ZC-30-A

Material

: Metal Brake Parts Cleaner / PM-4-A, PM-4-B

Material

: Motorcraft® Metal Surface Prep / ZC-31-B



REMOVAL AND INSTALLATION > CRANKSHAFT REAR SEAL > INSTALLATION

1.

 **NOTE:** 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 crankshaft rear seal retainer must be installed and the bolts tightened

within 10 minutes of sealant application.

Apply 5 mm (0.196 in) bead of silicone sealant.

Material

: Motorcraft ® High Performance Engine RTV Silicone / TA-357 (WSE-M4G323-A6)



2.

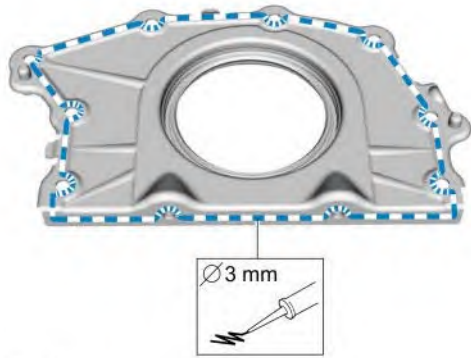
 **NOTE:** Failure to use Motorcraft ® High Performance Engine RTV Silicone may cause the engine oil to foam excessively and result in serious engine damage.

 **NOTE:** The crankshaft rear seal retainer must be installed and the bolts tightened within 10 minutes of sealant application.

Apply 3 mm (0.11 in) bead of silicone sealant.

Material

: Motorcraft ® High Performance Engine RTV Silicone / TA-357 (WSE-M4G323-A6)



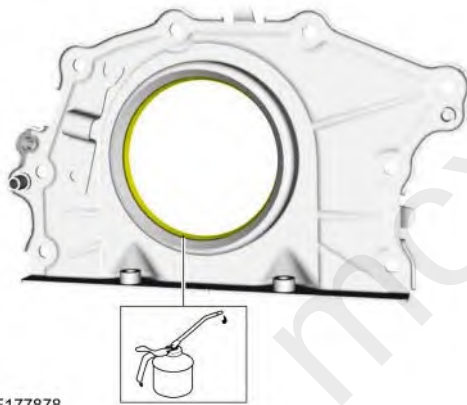
E177877

3.

Lubricate the crankshaft rear seal with clean engine oil.

Material

: Motorcraft® SAE 5W-20 Premium Synthetic Blend Motor Oil / XO-5W20-QSP
(WSS-M2C945-A)



E177878

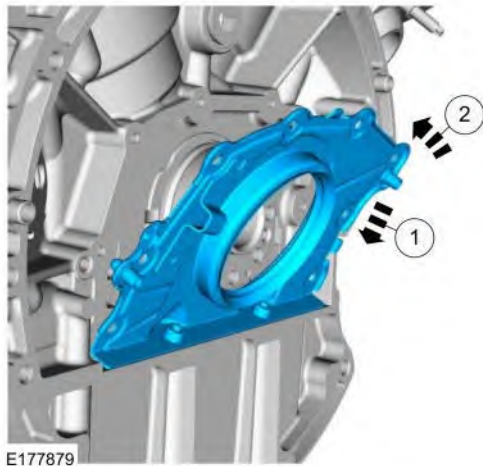
4.

1.

Install the crankshaft rear seal retainer at an angle above the oil pan flange to avoid scraping off the sealer.

2.

Tilt the seal retainer up and onto the rear of the cylinder block.



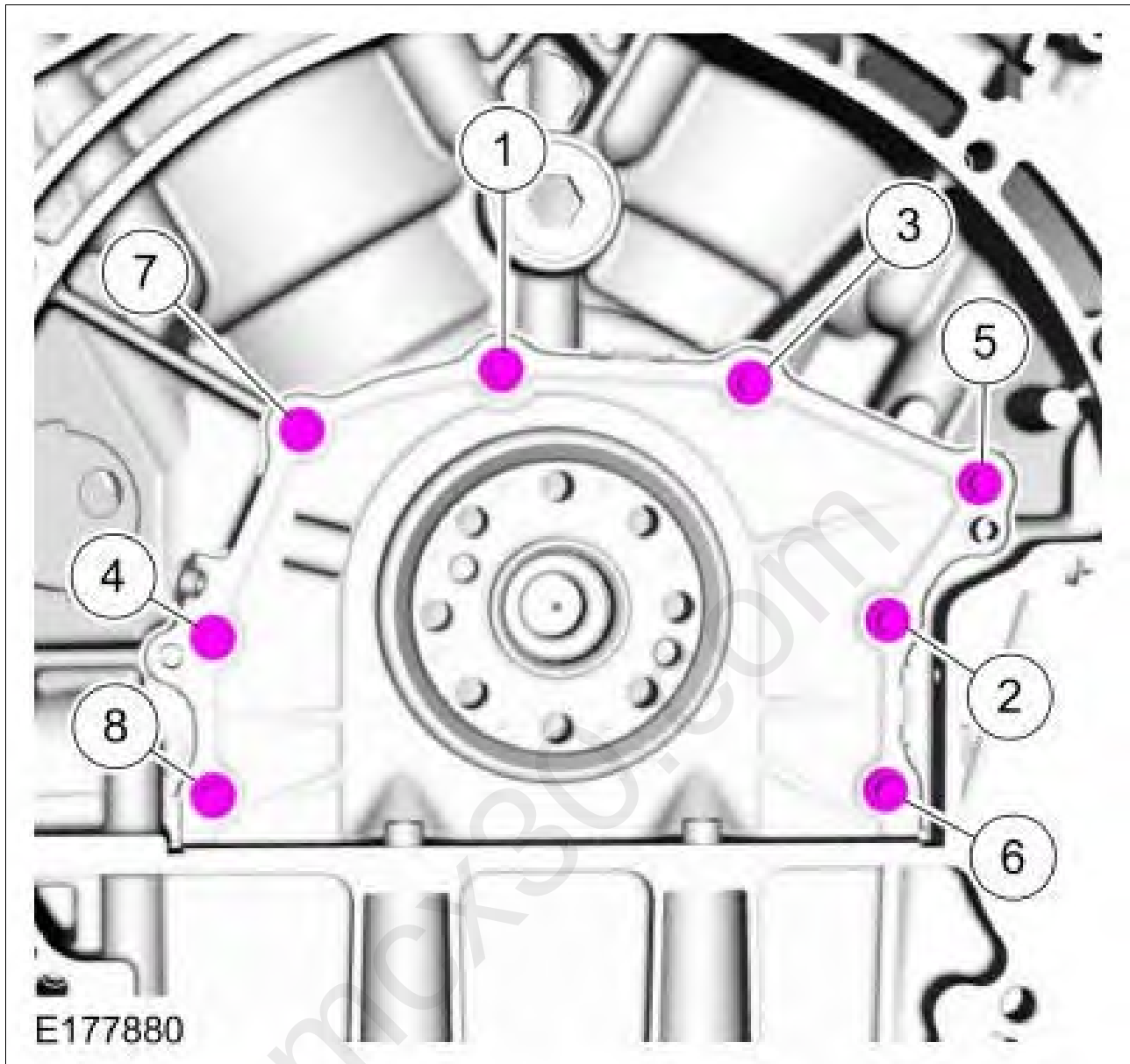
5.

Install the bolts and tighten in sequence shown.

Torque

: 89 lb.in (10 Nm)

Fig 1: Crankshaft Rear Seal Retainer Bolts Tightening Sequence



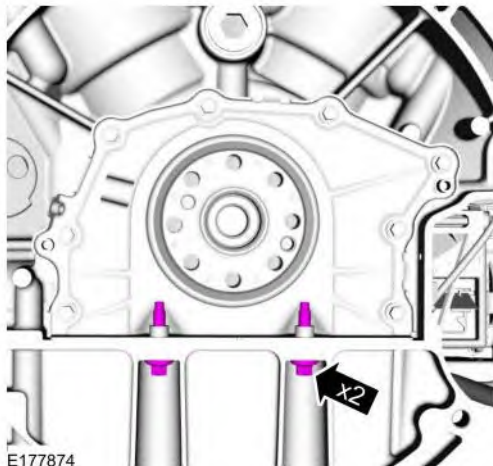
Courtesy of FORD MOTOR CO.

6.

Install oil pan-to-crankshaft rear seal bolts.

Torque

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

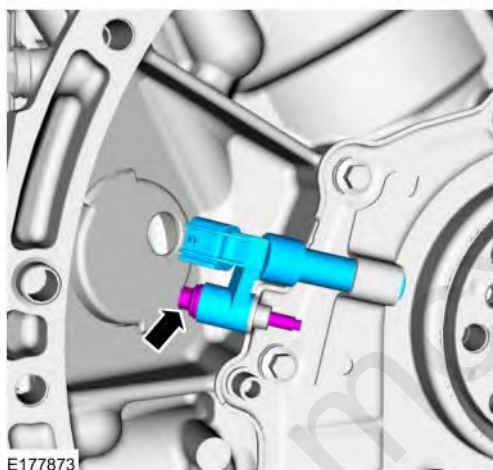


7.

Install the CKP sensor and the bolt.

Torque

: 89 lb.in (10 Nm)



8.

Connect the CKP sensor electrical connector.