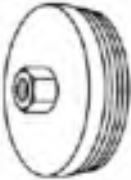


Crankshaft Rear Seal with Retainer Plate

Base Part Number: Base Part Number: 6K301

Special Tool(s) / General Equipment

 E129694	100-001 (T50T-100-A) Slide Hammer
 E133913	205-153 (T80T-4000-W) Handle
 ST2980-A	303-1250 Seal Installer, Rear Main TKIT-2006UFFLM
	303-519 (T95P-6701-EH) Remover, Crankshaft Rear Oil Seal TKIT-1995-FH/FLMH TKIT-1995-LMH/MH
Plastic Scraper	

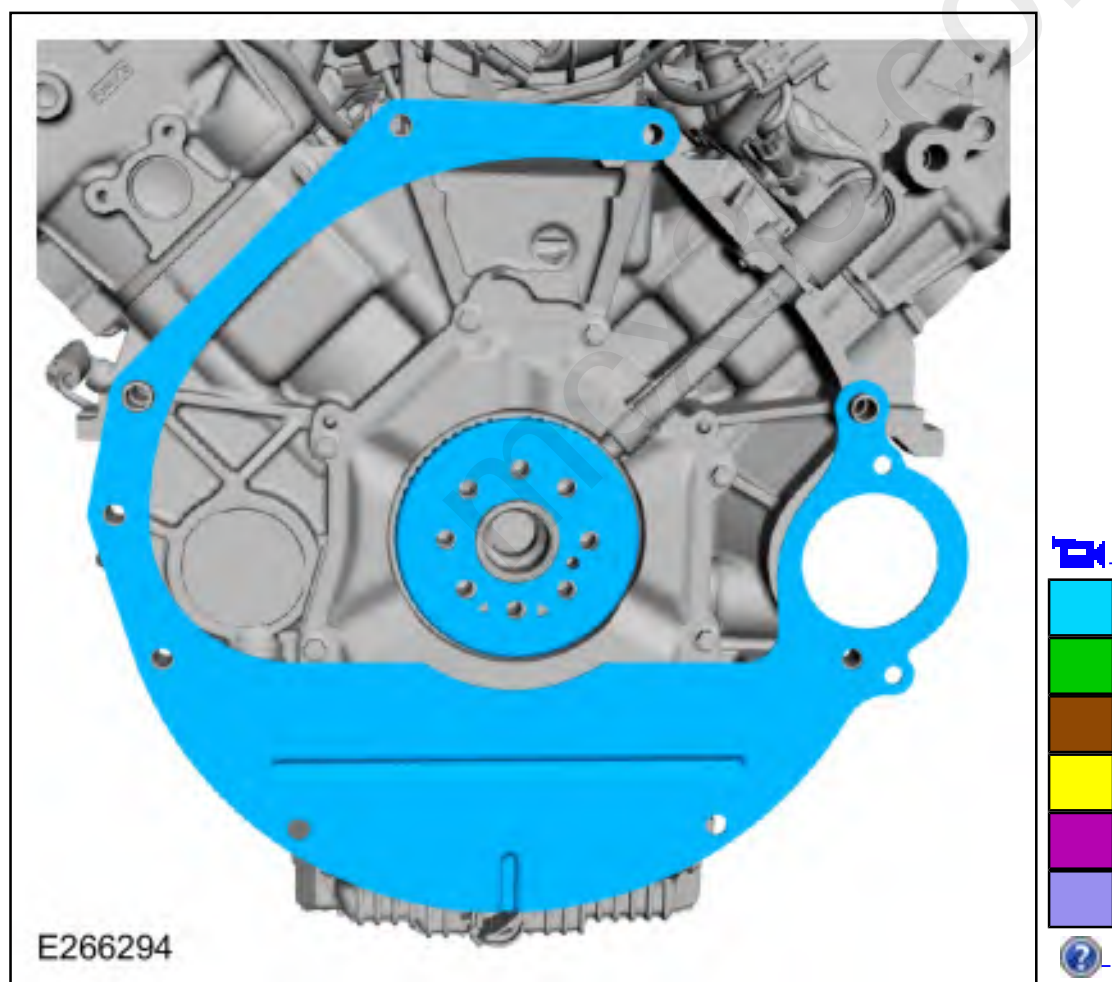
Materials

Name	Specification

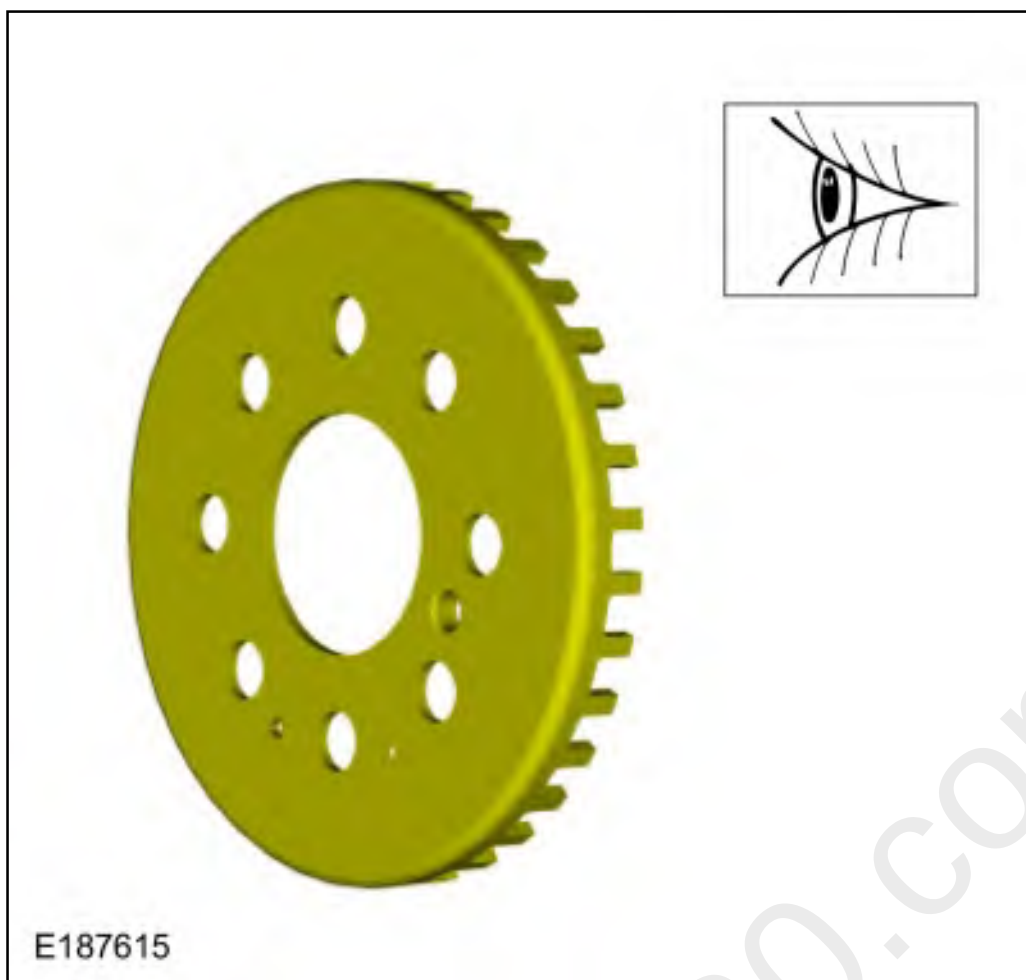
Motorcraft® Silicone Gasket Remover ZC-30-A	-
Motorcraft® Metal Surface Prep Wipes ZC-31-B	-
Motorcraft® Silicone Gasket and Sealant TA-30	WSE-M4G323-A4
Motorcraft® Metal Brake Parts Cleaner PM-4-A, PM-4-B	-

Removal

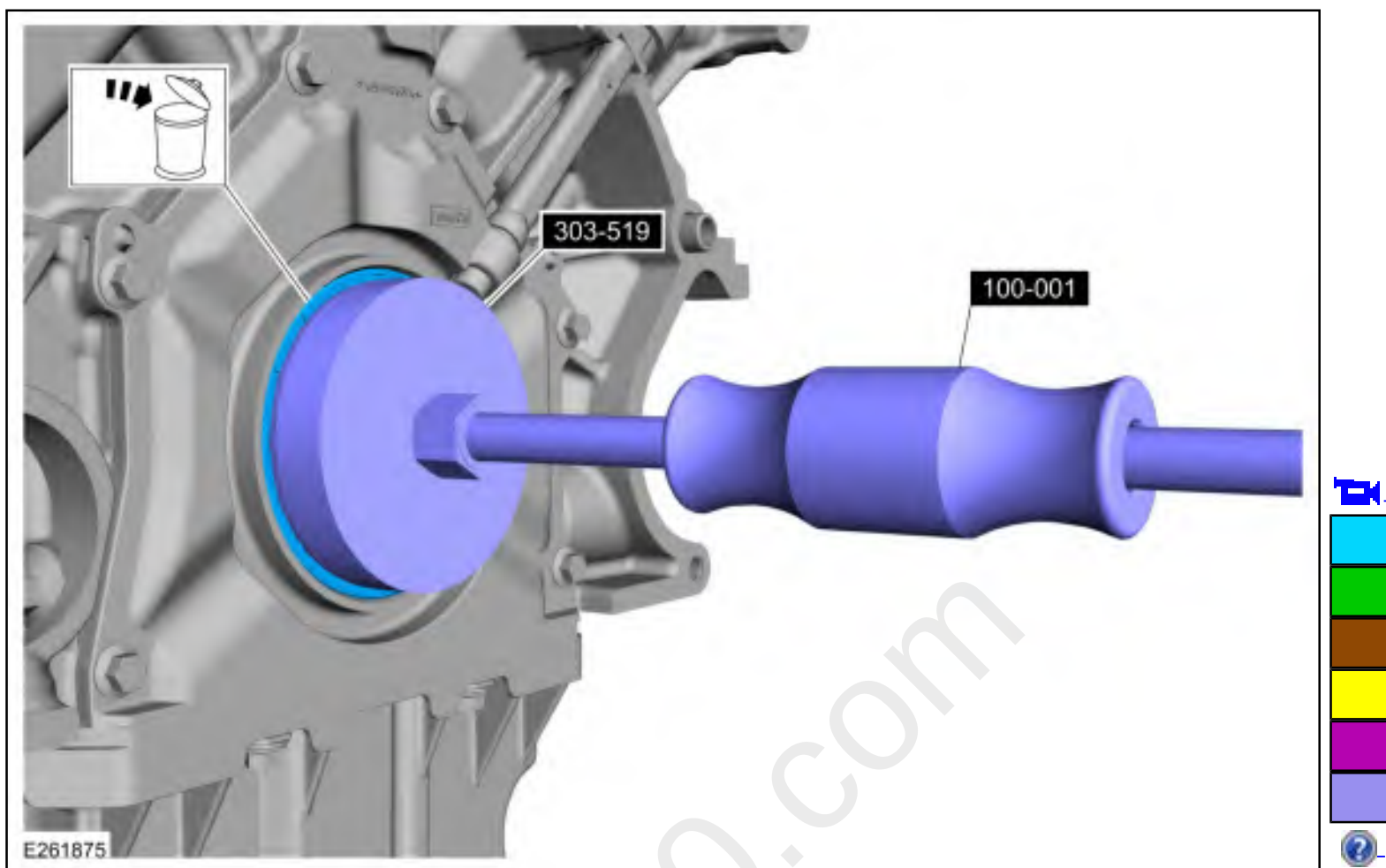
1. Remove the flexplate.
Refer to: Flexplate (303-01 Engine - 5.0L 32V Ti-VCT) .
2. Remove the crankshaft sensor ring and the engine-to-transmission spacer plate.



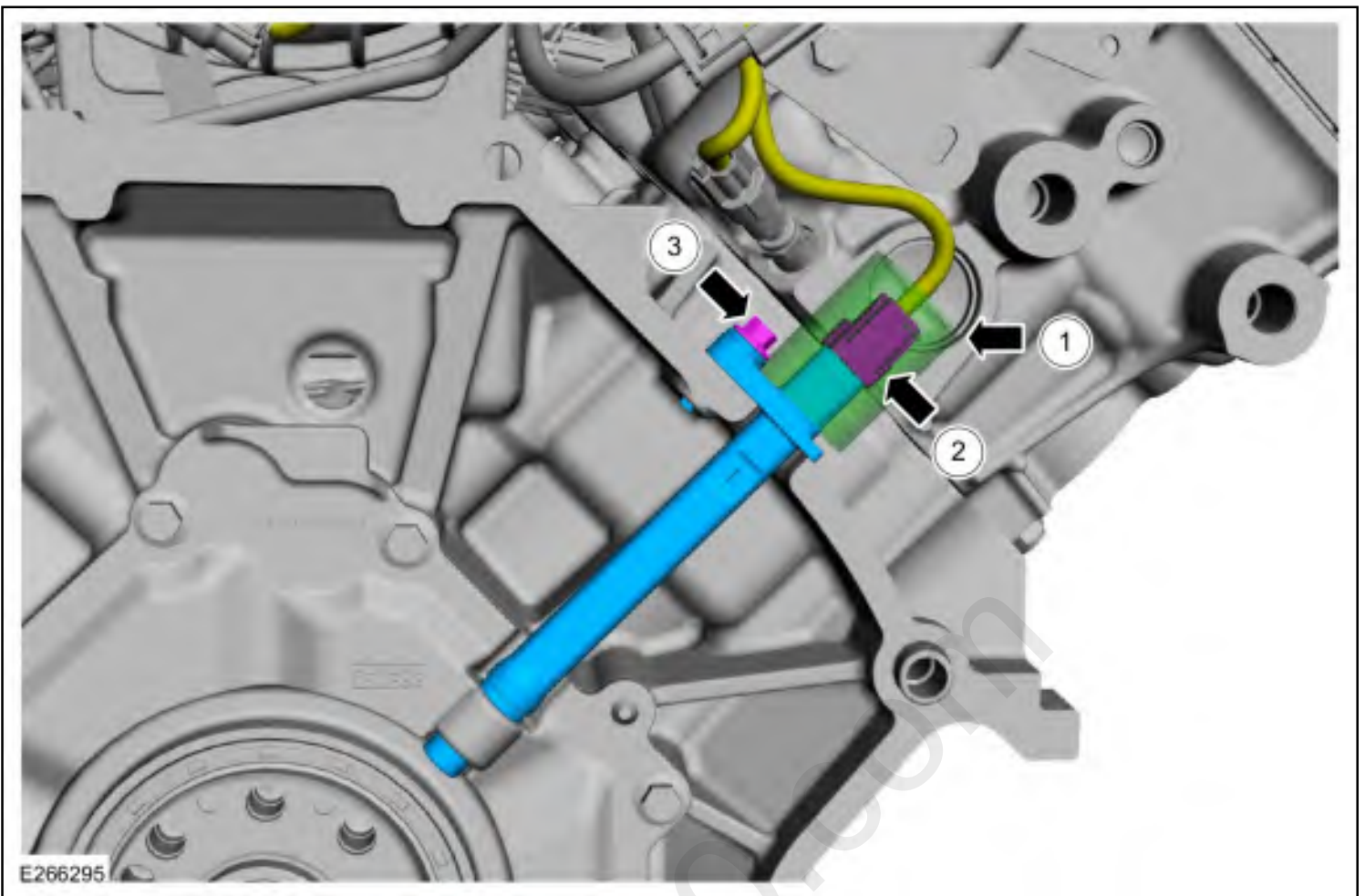
3. Inspect the crankshaft sensor ring for damage. If the crankshaft sensor ring has been dropped or has any visual damage, it must be discarded.



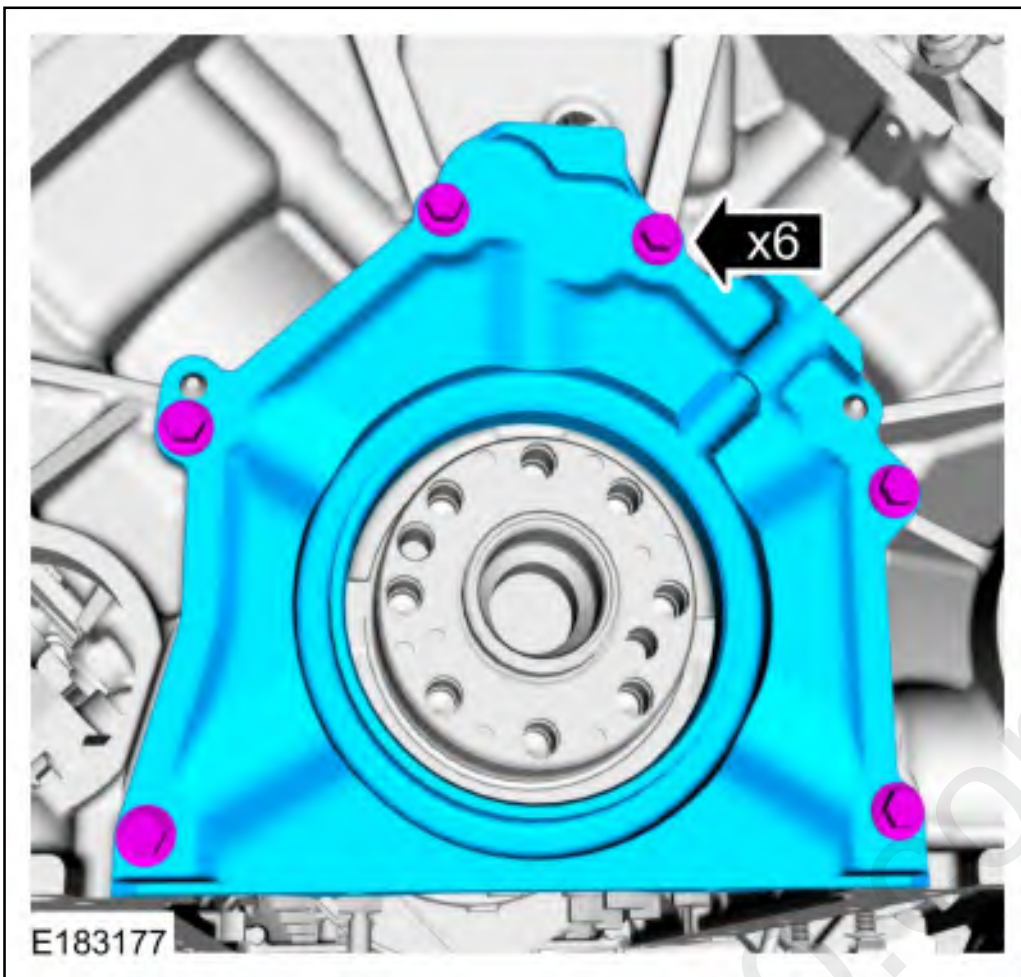
4. Using the special tools, remove and discard the crankshaft rear seal.
Use Special Service Tool: 303-519 (T95P-6701-EH) Remover, Crankshaft Rear Oil Seal. , 100-001 (T50T-100-A) Slide Hammer.



1. Slide the insulator off of the electrical connector.
2. Disconnect the CKP sensor electrical connector.
3. Remove the bolt and the CKP sensor.



6. Remove the oil pan.
Refer to: Oil Pan (303-01 Engine - 5.0L 32V Ti-VCT) .
7. Remove the bolts and the crankshaft rear seal retainer plate.



8. **NOTICE:** Do not use metal scrapers, wire brushes, power abrasive discs or other abrasive means to clean the sealing surfaces. These tools cause scratches and gouges which make leak paths. Use a plastic scraping tool to remove all traces of old sealant.

Clean and inspect the mating surface.

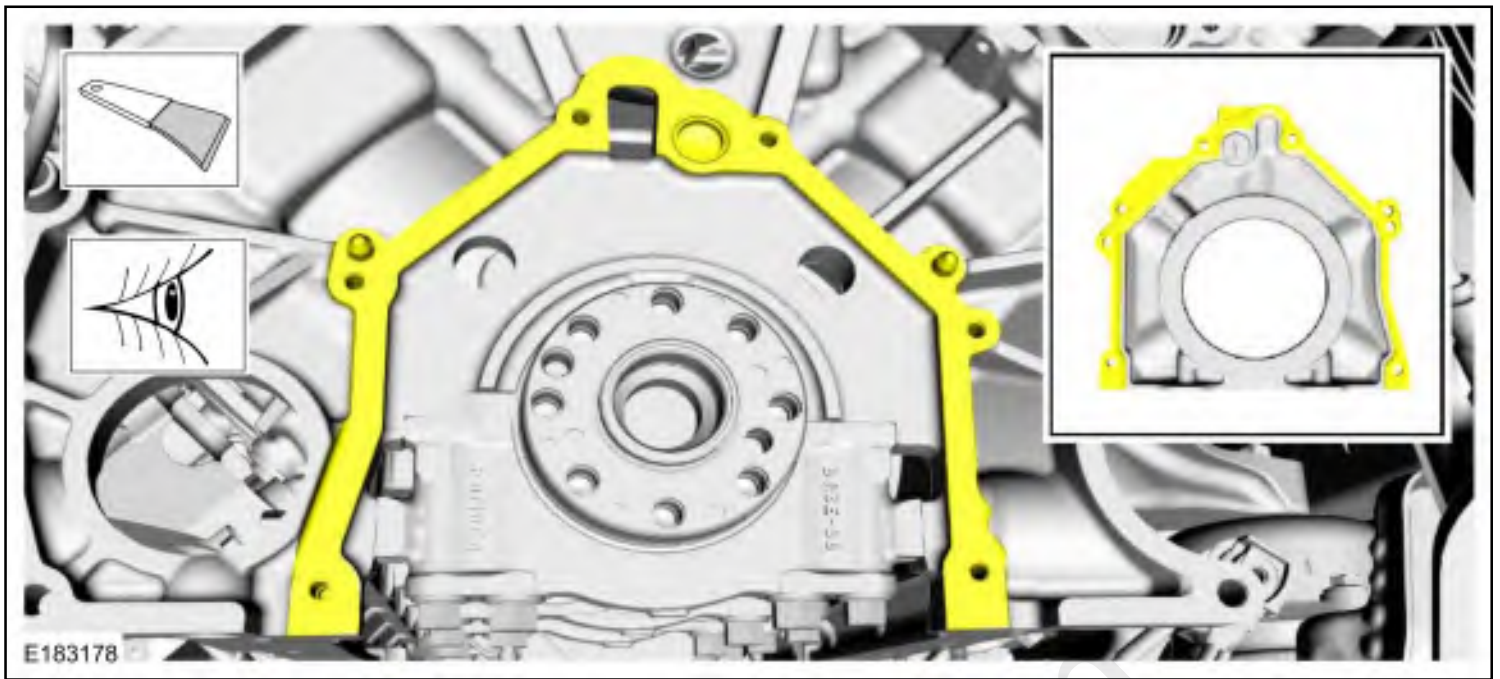
Refer to: [RTV Sealing Surface Cleaning and Preparation](#) (303-00 Engine System - General Information, General Procedures).

Use the General Equipment: Plastic Scraper

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

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

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

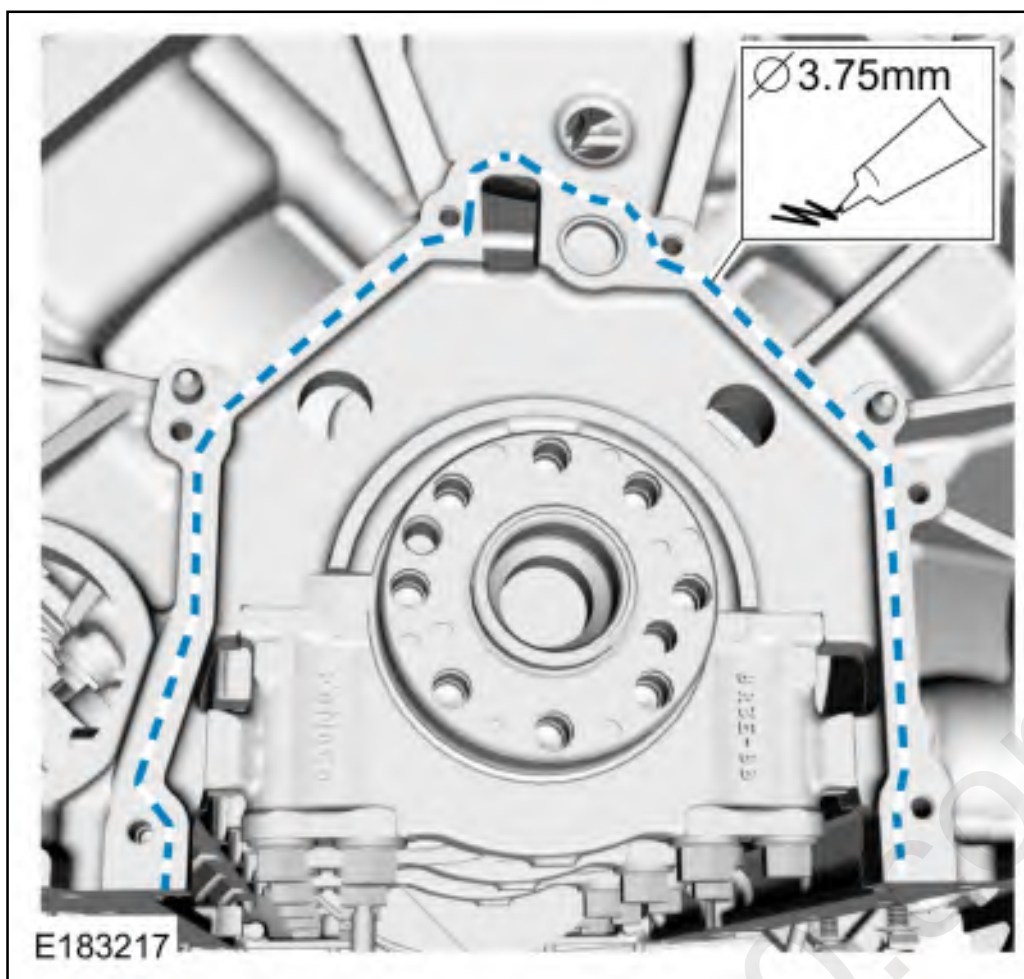


Installation

1. **NOTE:** *If the rear crankshaft seal retaining plate is not secured within 4 minutes, the sealant must be removed and the sealing area cleaned. Failure to follow this procedure may cause future oil leaks.*

Apply a 3.75 mm (0.147 in) bead of silicone gasket and sealant to the rear crankshaft seal retainer mating surface on the engine block.

Material: Motorcraft® Silicone Gasket and Sealant / TA-30 (WSE-M4G323-A4)

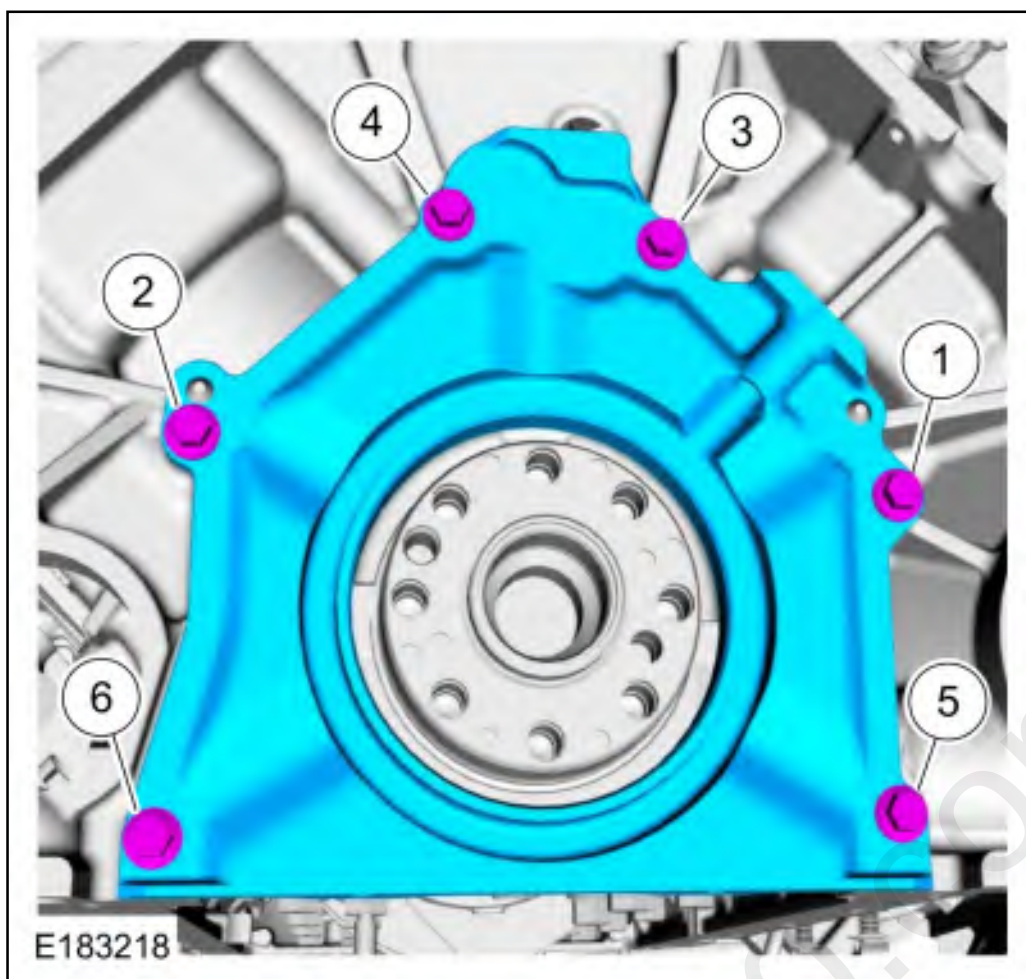


2. Install the crankshaft rear seal retainer plate and the bolts.

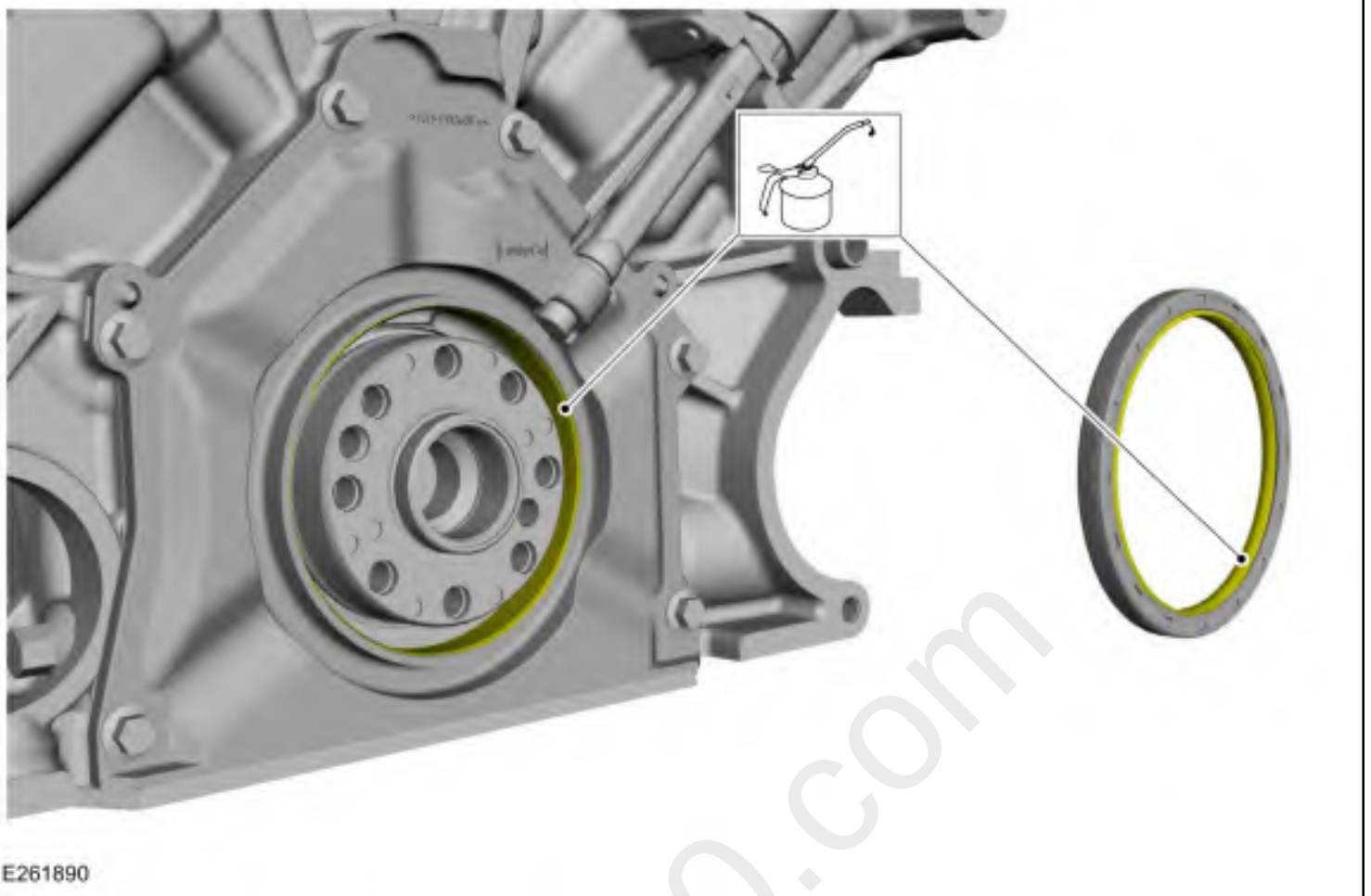
Torque:

Stage 1: 89 lb.in (10 Nm)

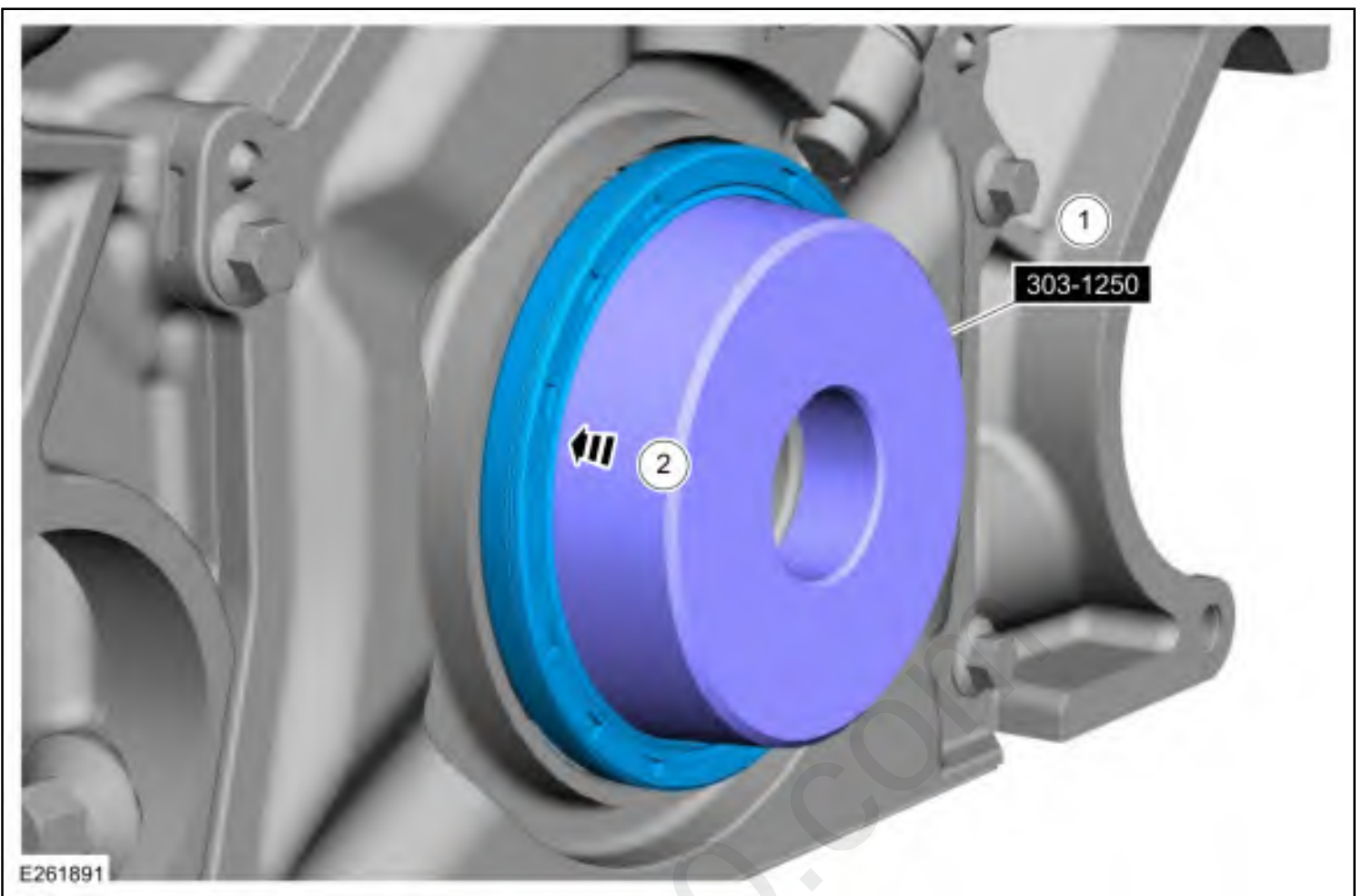
Stage 2: 30°



3. Lubricate the crankshaft rear seal bore and the seal lips with clean engine oil.

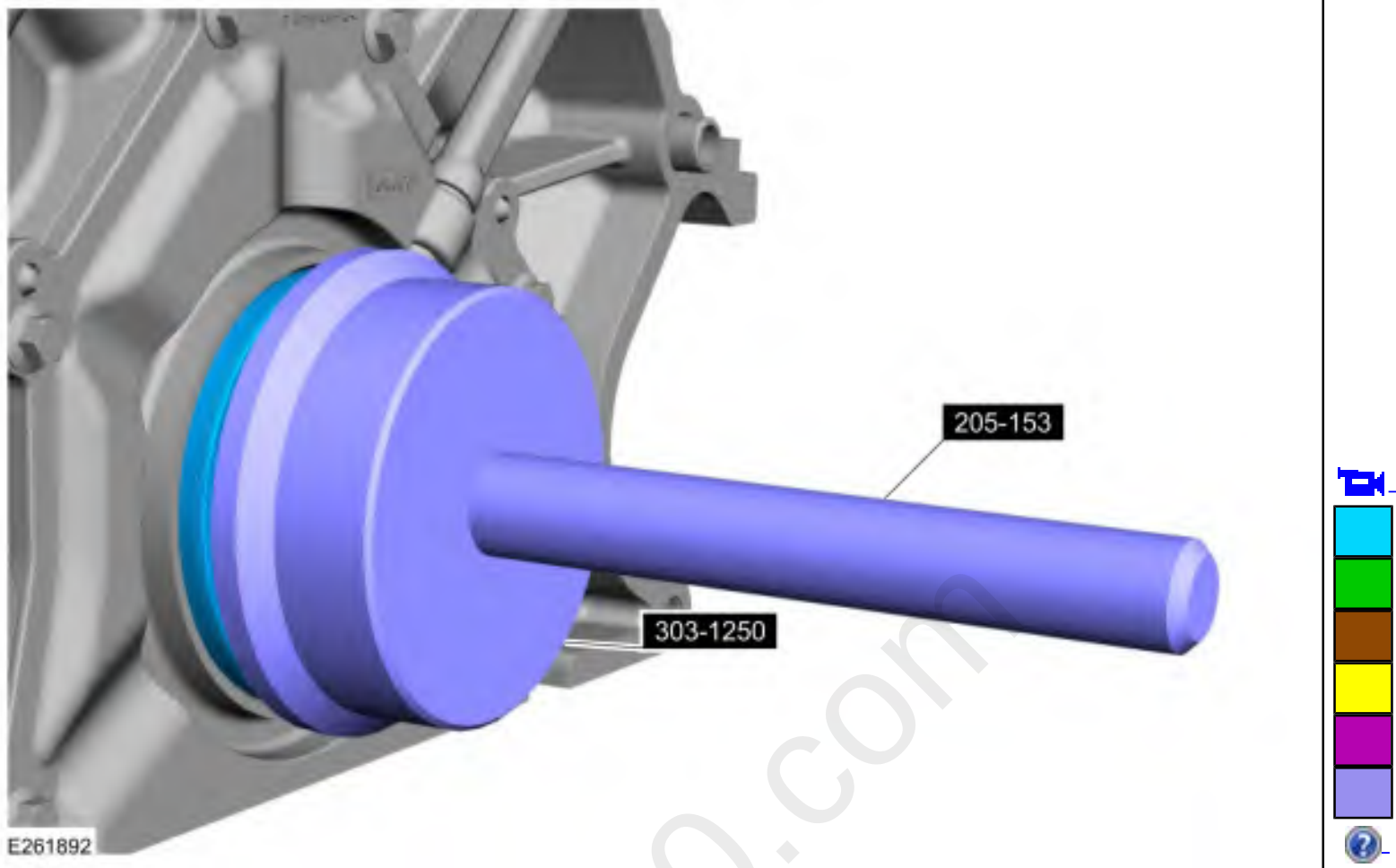


- Position the special tool onto the end of the crankshaft.
Use Special Service Tool: 303-1250 Seal Installer, Rear Main.
- Slide the new crankshaft rear seal onto the tool.



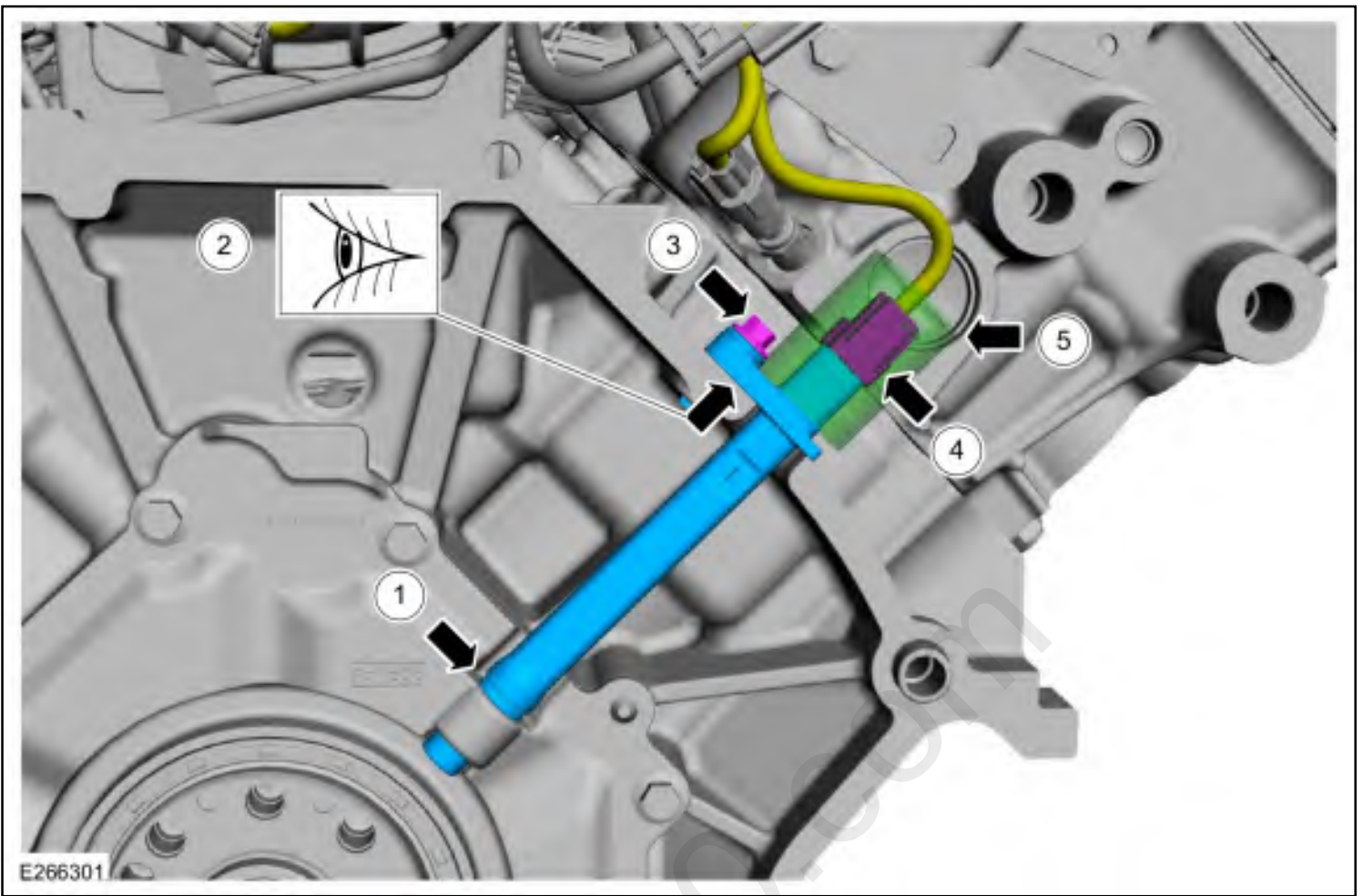
5. Using the special tools, install the crankshaft rear seal.

Use Special Service Tool: 205-153 (T80T-4000-W) Handle. , 303-1250 Seal Installer, Rear Main.

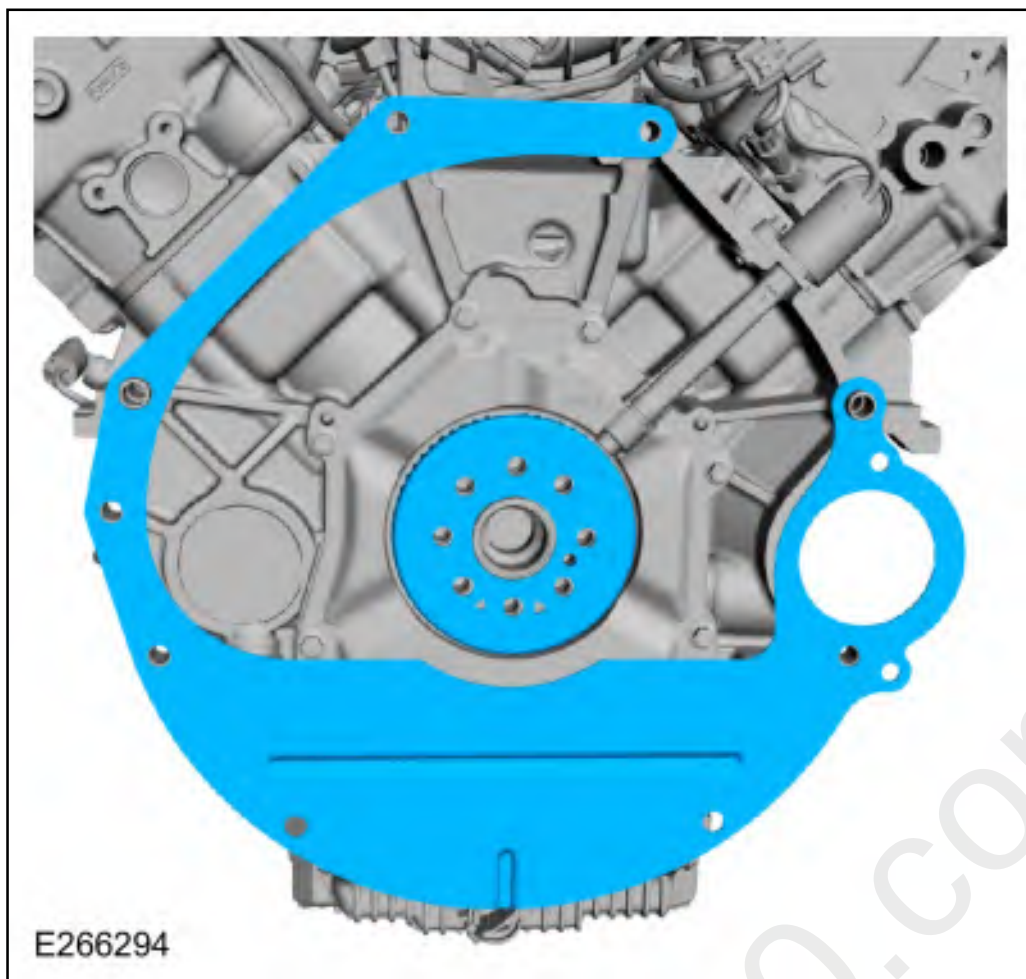


6. **NOTICE:** The CKP sensor must be positioned into the crankshaft rear seal retainer plate and be flush against the boss on the engine block before the bolt is installed. If the CKP sensor is installed incorrectly, the CKP sensor can be damaged.

- Install the CKP sensor into the crankshaft rear seal retainer plate.
- Make sure the CKP sensor is flush with the engine block boss.
- Install the bolt.
Torque: 89 lb.in (10 Nm)
- Connect the CKP sensor electrical connector.
- Slide the insulator onto the electrical connector.



7. Install the oil pan.
Refer to: Oil Pan (303-01 Engine - 5.0L 32V Ti-VCT) .
8. Install the crankshaft sensor ring and the engine-to-transmission spacer plate.



9. Install the flexplate.

Refer to: Flexplate (303-01 Engine - 5.0L 32V Ti-VCT) .