



## TECHNICAL BULLETIN TL - 18 (REV. A)

**DATE:** MAY 29, 2002  
**MODEL YEAR:** 1999 AND AFTER  
**ENGINE MODEL:** FE6TA 24-VALVE  
**BULLETIN #:** TL - 18 (REV. A)

FILE IN THE TOOL SECTION OF THE TECHNICAL BULLETIN BINDER (DISCARD PREVIOUS TECH. BULLETIN TL-18 DATED 4/12/2000)

### **1999 MODEL YEAR AND AFTER FE6TA 24-VALVE ENGINE REAR MAIN OIL SEAL CHANGE**

#### **CHANGE NOTICE**

The former two-piece rear main oil seal (oil seal plus wear ring) has changed to a one-piece seal in the 1999 model year and after FE6TA 24-valve engine beginning with engine serial number 210123.

#### **SERVICE NOTICE**

The old rear main oil seal (part number 12270Z5501) and wear ring (part number 12260Z5501) are no longer available and have been replaced by the new one-piece rear main oil seal (part number 12270Z5503). The new oil seal requires a new installation tool, Kent-Moore tool number J-44590.

**NEW ONE-PIECE REAR MAIN OIL SEAL PART NUMBER 12270Z5503**

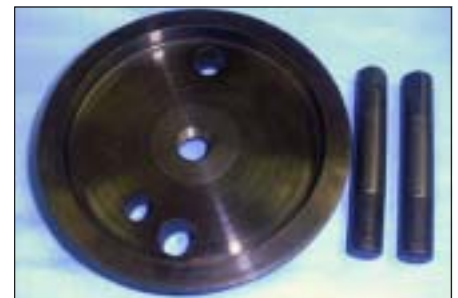


**METAL SLINGER SIDE  
FACES FRONT OF ENGINE**



**RUBBER-COATED SIDE  
FACES INSTALLATION TOOL**

**INSTALLATION TOOL**



**KENT-MOORE TOOL  
NUMBER J-44590**

The new one-piece rear main oil seal is assembled with an integral wear ring during manufacturing.

**CAUTION:** Do not disassemble the two components of the new one-piece rear main oil seal.

#### **TOOL NOTICE**

The oil seal installation tool, Kent-Moore tool number J-44590, was designed specifically for the new one-piece rear main oil seal. The tool was shipped to all full line UD Truck Dealers in February, 2000.

**CAUTION:** The former oil seal installation tool, J-43617, used with the former two-piece rear main oil seal *cannot* be used with the new one-piece rear main oil seal. Using the former installation tool will position the new seal incorrectly within the flywheel housing.

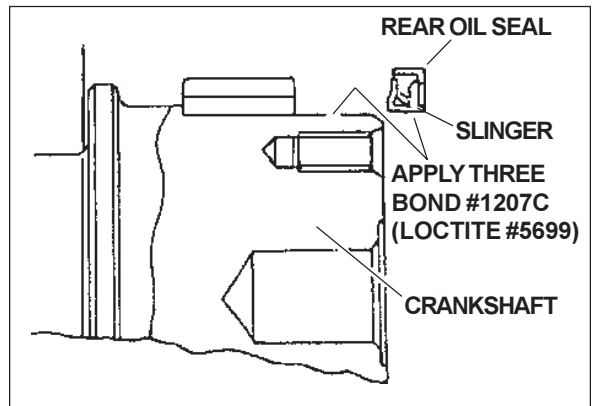
**PROCEDURE**

1. After removing the transmission, clutch assembly (if applicable) and engine flywheel, use a suitable pry bar or screwdriver to remove the old rear main oil seal from the bore in the flywheel housing.
2. Carefully position a small chisel at an angle on the crankshaft wear ring and *lightly* strike it with a small hammer to break the wear ring.

**CAUTION:** Do not strike the chisel hard. If the chisel nicks the surface of the crankshaft, the nicks must be removed before proceeding.

3. Install the two guide pins in the crankshaft to help guide the oil seal installation tool.

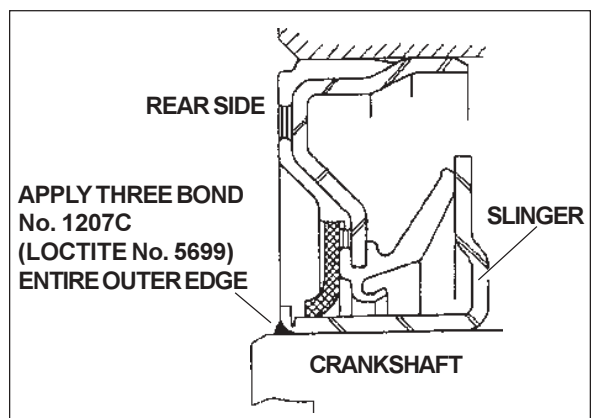
4. Apply a light coat of clean engine oil to the lip of the new rear main oil seal. Do not apply oil to the outer housing of the seal. Apply the recommended sealer (Three-Bond #1207C or Loctite #5699) to the outer edge of the crankshaft in the area where the installed seal is seated.



5. Position the seal on the installation tool with the flat, metal slinger surface of the seal facing the front of the engine. Align the seal in the flywheel housing bore as straight and as flush as possible. Install the driving handle, J-8092, on the oil seal installation tool and carefully drive the seal into the bore of the flywheel housing. The installation tool will position the oil seal top surface flush with the edge of the flywheel housing bore.

**NOTE:** Drive the seal onto the crankshaft slowly. Do not apply excessive force. Do not separate the outer seal from the slinger portion of the seal.

6. After seating the replacement seal, apply the recommended sealer to the entire outer edge of the slinger-to-crankshaft contacting surface.



<b>THE INFORMATION CONTAINED IN THIS BULLETIN SHOULD NOT BE CONSIDERED THE BASIS FOR WARRANTY CLAIMS</b>					
FOR THE INDICATED PERSONNEL BELOW, PLEASE READ, INITIAL, AND ROUTE TO THE FOLLOWING:					
<b>X</b>	SERVICE MANAGER	<b>X</b>	WARRANTY MANAGER	<b>X</b> SERVICE TECHNICIANS INITIAL BELOW:	
<b>X</b>	PARTS MANAGER	<b>X</b>	SHOP FOREMAN		