# **CATERPILLAR®**

# Service Repair Manual

# **Models**

3054 Industrial Engine



### **Service Information System**

Shutdown SIS

Previous Screen

■ Product: INDUSTRIAL ENGINE

Model: 3054 INDUSTRIAL ENGINE 5YS

Configuration: 3054 Industrial Engine 5YS00001-UP

# **Disassembly and Assembly** 3054 and 3056 Industrial and Generator Set Engines

Media Number -SENR5547-04 Publication Date -01/02/2004

Date Updated -25/02/2004

i01091508

# **Fuel Injection Pump - Install**

**SMCS - 1251-012** 

**S/N - 2PW1-UP** 

**S/N - 3GW1-UP** 

**S/N - 5YS1-UP** 

**S/N -** 7MS1-UP

## **Installation Procedure**

Table 1

Required Tools			
Tool	Part Number	Part Description	Qty
A	150-3992	Timing Pin (1)	1
	150-3993	Timing Pin (2)	1

<sup>(1)</sup> The timing pin is required in order to install Bosch fuel injection pumps.

## **NOTICE**

Keep all parts clean from contaminants.

Contaminants may cause rapid wear and shortened component life.

<sup>(2)</sup> The timing pin is required in order to install Lucas and Stanadyne fuel injection pumps.

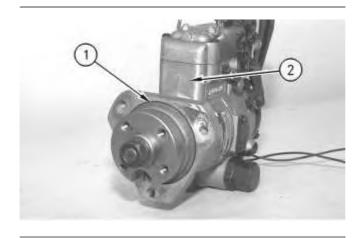


Illustration 1 g00567719

Typical example

- 1. Check the condition of O-ring seal (1) from fuel injection pump (2). If the seal is worn or damaged, use a new part for replacement.
- 2. Lightly lubricate O-ring seal (1) with clean engine oil. Install O-ring seal (1) on fuel injection pump (2).

### **NOTICE**

The number 1 cylinder must be at the top center position on the compression stroke before the fuel injection pump is installed. If the crankshaft needs to be rotated, the fuel injection pump must be mounted temporarily or the loose gear could cause damage to the front housing.

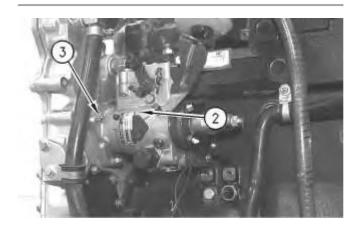


Illustration 2 g00567718

Typical example

3. Put fuel injection pump (2) in position on the engine. Ensure that the timing gear is aligned with the hub of fuel injection pump (2). Install three nuts (3) and tighten the nuts to a torque of 28 N·m (21 lb ft).

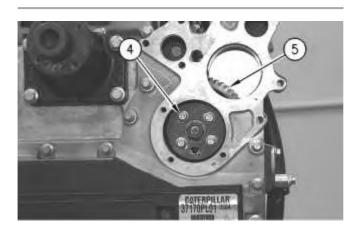


Illustration 3 g00567717

Typical example

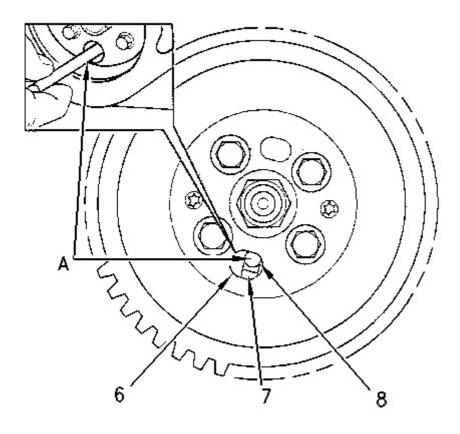


Illustration 4 g00567737

- 4. Position gear (5) on the shaft of the fuel injection pump.
- 5. Put the timing gear plate in position and install four bolts (4). Tighten the four bolts finger tight.

**Note:** The fuel injection pump gear will only fit in one position. Install the gear with the letters "C" and "M" facing away from the engine.

**Note:** The location of Tool (A) for Bosch fuel injection pumps will be located toward the top of the fuel injection pump. The location of Tool (A) for Lucas and Stanadyne fuel injection pumps will be located toward the bottom of the fuel injection pump.

6. Install Tool (A) through hole (6) in the timing gear and hole (7) in the hub. Push Tool (A) into position in hole (8) in the fuel injection pump body. If Tool (A) can be fully seated, the fuel injection pump timing is correct. No resistance should be felt when the timing pin is inserted into hole (8) of the fuel injection pump body.

### **NOTICE**

The fuel injection pump may be supplied with the fuel injection pump shaft in the locked position. The drive shaft of the fuel injection pump must not be rotated without the spacer in position under the locking screw. Damage to the drive shaft of the fuel injection pump will result.

- 7. When the timing plate is installed, rotate gear (5) by hand in a counterclockwise direction in order to remove the backlash between gear (5) and the idler gear. Do not rotate the crankshaft or the fuel injection pump shaft. Tighten bolts (4) to a torque of 28 N·m (21 lb ft).
- 8. Remove Tool (A) from the fuel injection pump gear.

### **End By:**

- a. Install the fuel injection lines. Refer to Disassembly and Assembly, "Fuel Injection Lines Remove and Install".
- b. Install the water pump. Refer to Disassembly and Assembly, "Water Pump Install".

Thank you so much for reading.

Please click the "Buy Now!"

button below to download the complete manual.



After you pay.

You can download the most perfect and complete manual in the world immediately.

Our support email: ebooklibonline@outlook.com