# **Fuel Injection Pump Remove and Install**

## **Fuel Injection Pump Remove**

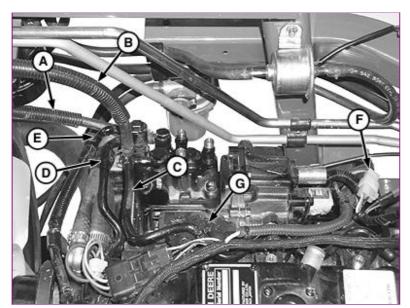
1. **IMPORTANT:** 

> Never steam clean or pour cold water on injection pump while the pump is running or warm. Doing so can damage the pump.

Clean injection lines and area around the injection pump with cleaning solvent or a steam cleaner.

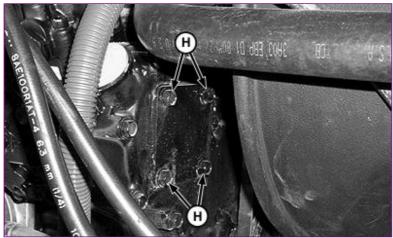
- 2. Remove radiator, fan, and belt.

  - <u>See Radiator Remove and Install</u><u>35D (S.N. -254999)</u>. (Group 0510.)
    <u>See Radiator Remove and Install</u><u>35D (S.N. 255000</u>). (Group 0510.)
    <u>See Radiator Remove and Install</u><u>50D (S.N. -274999)</u>. (Group 0510.)
    <u>See Radiator Remove and Install</u><u>50D (S.N. 275000</u>). (Group 0510.)
- 3. Remove intake manifold. See Intake Manifold Remove and Install . (Group 0400.)
- 4. Lower air conditioning compressor.

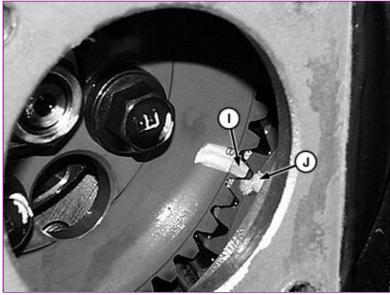


5.

RG13396A-UN: Remove Fuel Lines And Coolant Lines.



RG13397A-UN: Injection Pump Gear Cover



RG13398A-UN: Injection Pump Gear Timing Marks

### LEGEND:

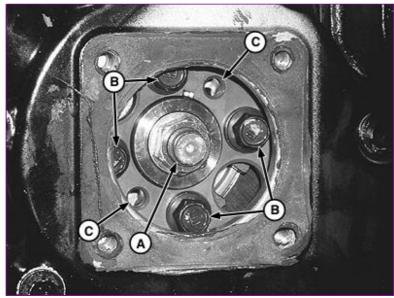
- A Fuel Inlet Line
- **B** Fuel Return Line
- C Injector Return Line
- D Coolant Line
- E Coolant Line F - Fuel Shutoff Solenoid Wire Connector
- G Foam Spacer
- H Cap Screw (4 used) I - Pump Gear Timing Mark
- J Idler Gear Timing Mark

Disconnect fuel inlet line (A), fuel return line (B), and injector return line (C).

- 6. Disconnect coolant lines (D and E).
- Disconnect fuel shutoff solenoid wire connector (F). 7.
- 8. Remove foam spacer (G).
- Remove cap screws (H) and remove injection pump gear access cover. 9.
- 10. NOTE:

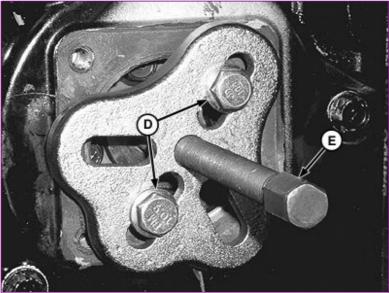
For all the timing marks to become aligned, engine may need to be rotated up to fifty-two times.

Rotate engine in the direction of rotation until mark (I) on pump gear aligns with mark on idler gear (J) (both identified by a stamped letter B). Use chalk or paint to mark injection pump gear to idler gear.

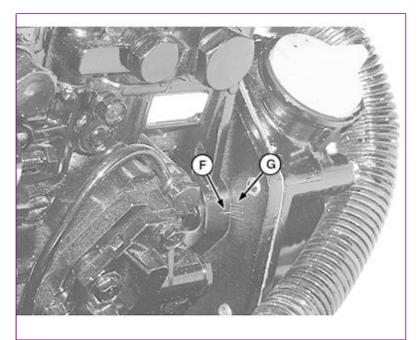


11.

RG13399A-UN: Injection Pump Timing Gear



RG13400A-UN: Injection Pump Timing Gear Puller



TX1062018A-UN: Injection Pump Timing Marks

### LEGEND:

- A Timing Gear Nut and Washer
- B Cap Screw (4 used)
- C Threaded Puller Holes
- D Puller Cap Screw (2 used)
- E Gear Puller
- F Injection Pump Timing Mark
- G Gear Cover Mounting Plate Timing Mark

Remove gear retaining nut and washer (A).

#### 12. **IMPORTANT:**

Do not loosen or disturb cap screws (B) securing gear to the hub. Gear to hub adjustment is pre-set to comply with strict EPA emissions requirements and is not adjustable. This procedure is done at the pump manufacturer and cannot be duplicated in the field.

Install puller (E) into threaded holes (C) on gear using cap screws (D).

### 13. **IMPORTANT:**

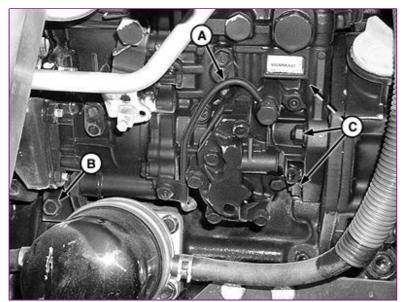
Engine must not be rotated when timing gear is removed from injection pump shaft. Engine should only be rotated when timing gear is securely fastened to pump or engine damage could result.

Remove gear and hub assembly from injection pump shaft. Gear will stay inside timing cover.

#### 14. **IMPORTANT:**

Marks must be made on the injection pump and the gear cover mounting plate to correctly install the pump. If marks are not made, there will be no way to properly time the injection pump.

Note position of timing marks on gear cover mounting plate (G) and injection pump (F). Pump must be installed at the exact same timing mark as when removed. Scribe a line as accurately and straight as possible at the pump flange mark (F) onto the gear cover mounting plate.



15.

RG13402A-UN: Injection Pump Mounting Points

#### LEGEND:

- A External Lube Line
- B Cap Screw
- C Nut (3 used)

Remove external lube line (A) from pump.

16. Remove cap screw (B).

#### 17. **IMPORTANT**:

Marks must be made on the injection pump and the gear cover mounting plate to properly install pump. You must also record the injection pump timing number marked on the pump to correctly install the pump. If marks are not made and the timing number not recorded, there will be no way to properly time the injection pump.

Remove pump flange mounting nuts (C) and remove pump.

#### 18. NOTE:

The injection pump timing number is stamped on the engine side of the fuel injection pump housing. Treat this number as though there is a decimal point between the two digits. (Example 68 = 6.8).

Find and record pump timing number stamped on pump. This number will be needed if pump is being replaced or recalibrated.

#### **IMPORTANT:**

DO NOT attempt to service the injection pump or governor. If unit is in need of repair, it must be serviced by a qualified EPA/CARB certified fuel injection repair shop. If replacement is necessary, replace entire unit. Do not rotate engine while injection pump is removed. If engine is rotated, the timing gear cover must be removed to ensure correct timing.

# **Pump Installation**

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