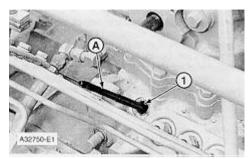
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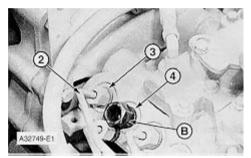
#### Fuel Injection Pumps (SENR7410-04)

# Remove Fuel Injection Pumps

	Tools Needed	A	В	С
5P9697	Timing Pin	1		/-
8S4613	Wrench		1	
8S2244	Extractor			1



**1.** Remove the plug from location (1). Install Tool (A) in the hole with the square end down. Move the governor control to the "ON" position until the track steps against tool (A). The racks are now in center (zero) position.



2. Disconnect lines (2) from the fuel injection pumps. Remove washers (3). Put caps on all fuel openings

**3.** Remove bushings (4) with Tool (B).

4. Remove fuel injection pump with Tool (C). Remove spacer (8).

**NOTE:** When injection pumps, spacers and lifters are removed from the injection pump housing, keep the parts of each pump together so they can be installed back in their original location.

5. Disassemble the fuel injection pump. Remove ring (6). Make a separation of bonnet (5) from the plunger and barrel assembly (7).

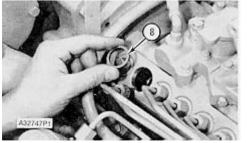
#### NOTICE

Be careful when the injection pumps are disassembled. Do not cause damage to the surface on the plunger. The plunger and barrel for each pump are made as a set. Do not put the plunger of one pump in the barrel of another pump. If one part has wear, install a complete new pump assembly. Be careful when the plunger is put into the bore of the barrel.

**6.** Remove the gear segment, washer and spring from the barrel.

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7. Remove the ring, spring, collar, and valve from the barrel.



**8.** Remove spacer (8) from the fuel injection pump bore. Keep spacer (8) with respective fuel injection pump.

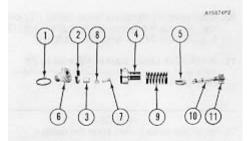
## Install Fuel Injection Pumps

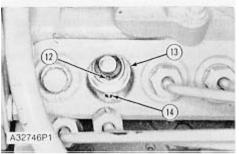
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Tools Needed		Α	В	С
5P9697	Timing Pin	1		
8S4613	Wrench		1	
8S2244	Extractor			1

**NOTE:** Make sure the fuel racks are in the center (zero) position before the fuel injection pumps are installed.

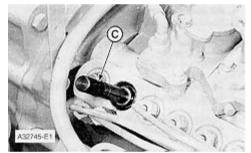




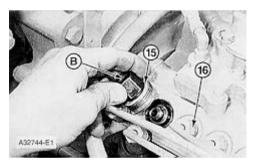
P-000890C4 1. Put plunger (10), washer (5) and spring (9) in position on barrel (4). Put check valve assembly (7), spring (3) and collar (8) in position in bonnet (6). Connect barrel (6) and barrel (4) together with ring (2). Keep seal (1) with bonnet for use at installation.

2. Put spacer (13) into position in the pump housing bore. Make sure the correct spacer is with each pump.

**3.** Put the space in gear segment (11) in alignment with the groove in barrel (4)



4. Put the injection pump straight down into the housing bore so the space in gear segment (11) is in alignment with pin (12) and the groove in barrel (4) is in alignment with dowel (14). Use Tool (C) to install the pump. ial Green



5. Install seal (1) and bushing (15) in the pump housing bore. If the pump is in the correct position, bushing (15) will turn into the threads of the pump housing with the fingers until it is even with the housing. Tighten bushing (15) to a torque of 205 ± 14 N·m (150 ± 10 lb ft).

**6.** Install washers (16).

7. Connect the fuel lines to the injection pumps and tighten the fuel line nuts to a torque of 40 ± 7 N·m (30 ± 5 lb ft) with tool (D).

8. Check for correct installation of the injection pumps with the engine stopped. See Injection Pump Installation in Testing and Adjusting.

### NOTICE

If one or more of the injection pumps have been installed wrong, damage to the engine is possible if cautions are not taken when the engine is first started. Make preparation to close off the air intake to stop the engine, if necessary.

9. Remove Tool (A) and install the plug in the pump housing.

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