

Previous Screen

< Product: GEN SET ENGINE
 Model: 3208 GEN SET ENGINE 30A
 Configuration: 3208 GENERATOR SET ENGINE 30A00210-05099

Disassembly and Assembly 3208 GENERATOR SET ENGINE

Media Number -SEN2535-01

Publication Date -01/06/1988

Date Updated -11/10/2001

Fuel Transfer Pump

SMCS - 1256-011; 1256-012

Remove Fuel Transfer Pump

Tools Needed		A	B	C
2P8315	Bracket Assembly*	1		
3P1544	Pin		1	
FT1632	Bolt**			1

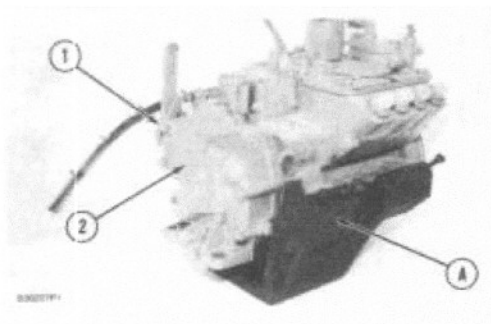
*Part of 6V3116 Adapter Group. Minor modifications may be necessary for mounting 3208 Governor Housings. See the August 16, 1982, Service Magazine.

**Part of 5P4203 Sleeve Metering Field Service Tool Group.

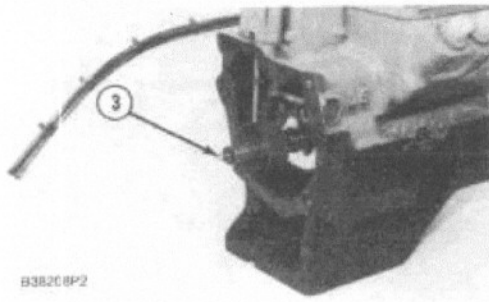
NOTE: The following photos show a TYPICAL EXAMPLE and are not an exact representation of the 3208 Generator Set. However, the procedures are the same.

Start By:

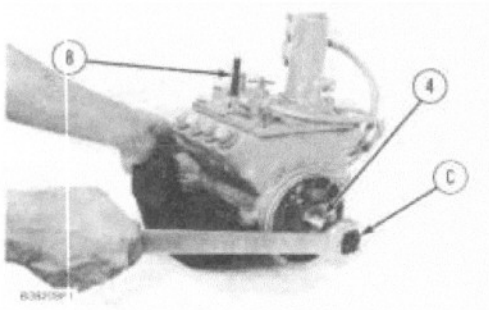
- a. remove fuel injection pump housing and governor



1. Install the fuel injection pump housing on tool (A).
2. Remove seven bolts (1) and governor housing (2).



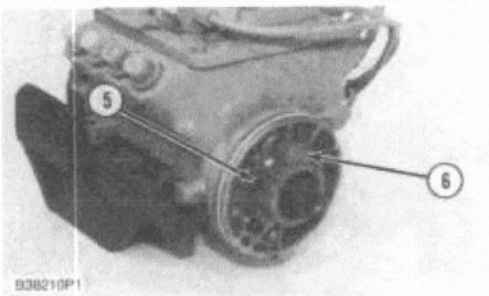
NOTE: The fuel injection pump housing has a thrust washer for the fuel injection pump camshaft. The thrust washer is behind the flange for the flyweights on the camshaft. To hold the thrust washer in place, governor shaft (3) and the camshaft must be held in toward the fuel transfer pump any time sleeve (4) is removed.



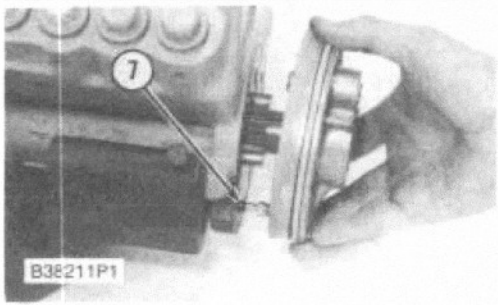
3. Remove the plug from the cover, and install tool (B) in the hole as shown. Turn the injection pump camshaft until tool (B) can be pushed into the groove (slot) in the camshaft.

NOTE: Any time the drive sleeve is removed from the camshaft, a new one must be installed. The camshaft has serrations (splines) that cut grooves into the drive sleeve when it is installed to give a positive drive connection. If a formerly used drive sleeve is installed again, it can slip on the camshaft.

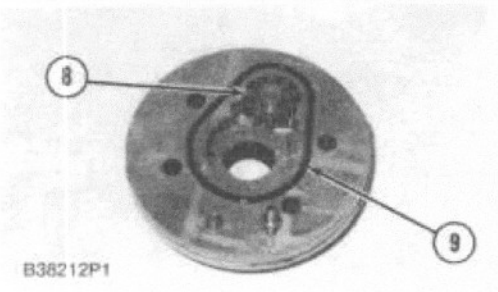
4. Install tool (C) in the threads of sleeve (4). Tighten the bolt until the sleeve can be removed.



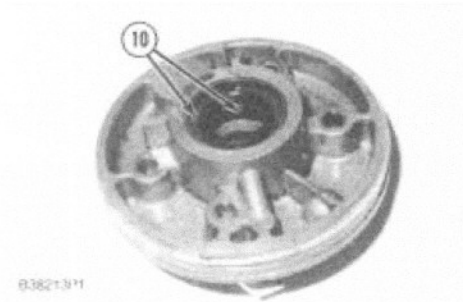
5. Remove four bolts (5) and fuel transfer pump body (6) from the housing.



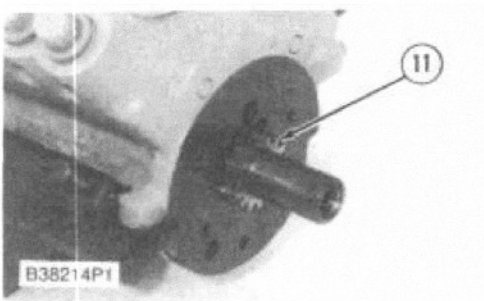
6. Disconnect drain line (7) from the fitting on the back of fuel transfer pump body.



7. Remove gear (8) and O-ring seal (9) from the pump body.



8. Remove seals (10) from the pump body.



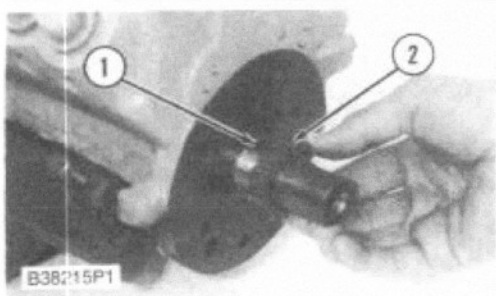
9. Remove drive gear (11) and the key from the camshaft.

Install Fuel Transfer Pump

Tools Needed		A	B	C	D	E
2P8315	Bracket Assembly*	1				
1P510	Driver Group		1			
6V3071	Seal Guide**			1		
S1603	Bolt (1/2"-20 NF x 1 1/2 in.)				1	
4B4280	Washer				1	
3P1544	Pin**					1

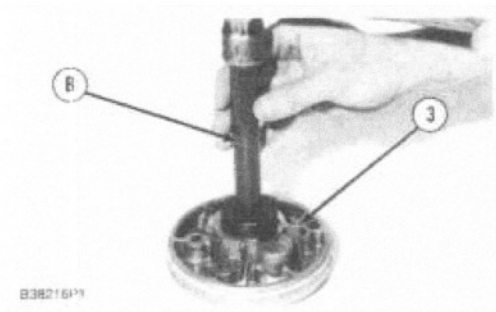
*Part of 6V3116 Adapter Group.

**Part of 5P4203 Sleeve Metering Field Service Tool Group.



NOTE: The fuel injection pump camshaft must be held in toward the fuel transfer pump during installation of the fuel transfer pump parts to hold the camshaft thrust washer in its counterbore. The thrust washer will be damaged when the sleeve is installed on the camshaft if it is not in the correct position.

1. Install key (1) and drive gear (2) on the shaft.

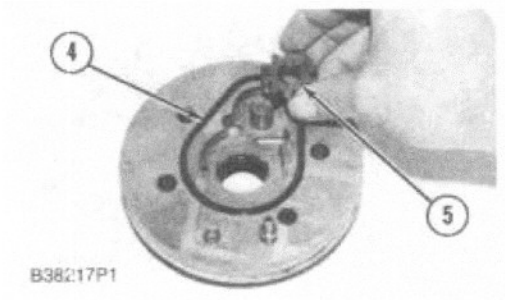


2. Put No. 3 Aviation Permatex on the outside diameter of the seals for body (3).

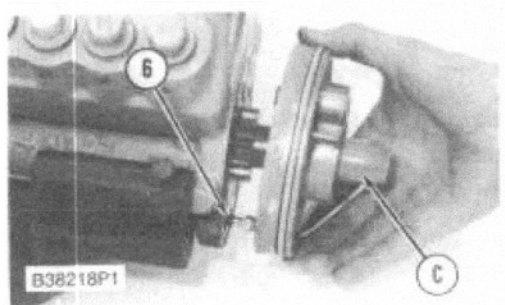
3. Use tooling (B) to install the first seal in the body with the lip down and the second seal with the lip up. Install the first seal to a depth of 11.51 ± 0.25 mm ($.453 \pm .010$ in.) and the second seal to a depth of 0.76 ± 0.25 mm ($.030 \pm .010$ in.).

4. Remove the extra permatex from the body and seals after installation. Be sure the drain hole between

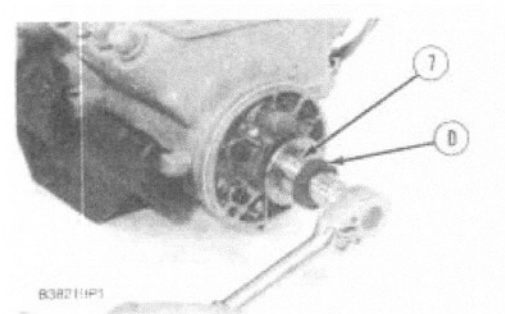
the seals is open.



5. Install O-ring seal (4) and gear (5) on the body.



6. Install tool (C) in the end of the fuel injection pump camshaft. Connect drain line (6) to the fitting on the back of the body, and put the body in position on the fuel injection pump housing. Install the bolts that hold the body in place.



7. Install tool (E) in the camshaft so it will not turn.

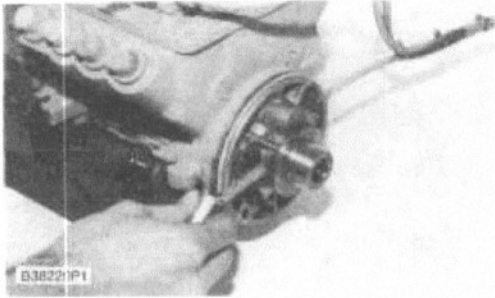
NOTICE

Do not hit the sleeve to install. Damage to the governor will be the result.

8. Put a new sleeve (7) on the camshaft.

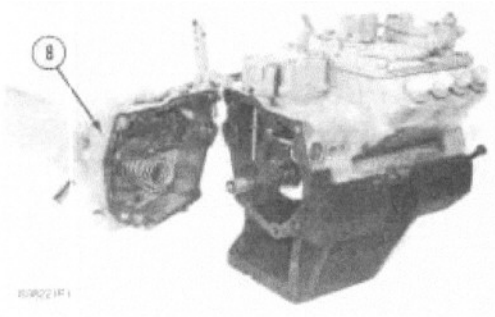
NOTE: A new drive sleeve must be installed because a used drive sleeve can slip on the camshaft.

9. Tighten the sleeve into position on the shaft with the 4B4280 Washer of tooling (D) approximately 6.4 mm (.25 in.). Tighten the sleeve the remainder of the way with the 9N5022 Washer until the sleeve is at bottom. This is the washer which is on the tachometer drive shaft.

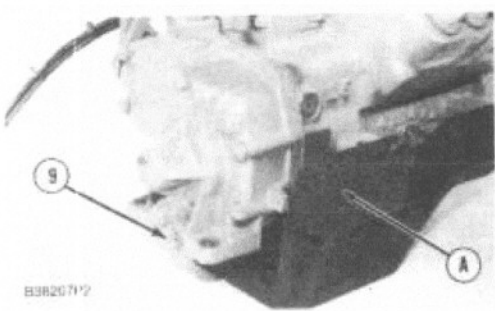


10. Use a feeler gauge to check the end play of the camshaft after the sleeve is installed. The end play of the camshaft must be 0.58 ± 0.46 mm ($.023 \pm .018$ in.).

11. Remove tool (E) from camshaft.



12. Be sure the governor springs and gasket are in position on governor housing (8). Install the governor housing on the fuel injection pump housing.



13. Be sure bolt (9) has the washer and O-ring seal on it when installed.

14. Remove the fuel injection pump housing from tool (A).

End By:

a. install fuel injection pump housing and governor