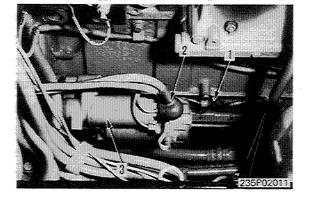
# REMOVAL OF STARTING MOTOR ASSEMBLY



Disconnect the cable from the negative (-) terminal of the battery.

- 1. Disconnect connector (1).
- 2. Disconnect wiring (2).
- 3. Remove starting motor assembly (3).

## INSTALLATION OF STARTING MOTOR ASSEMBLY



 Carry out installation in the reverse order to removal.

#### REMOVAL OF ALTERNATOR ASSEMBLY

Serial No.: 11001 - 12000

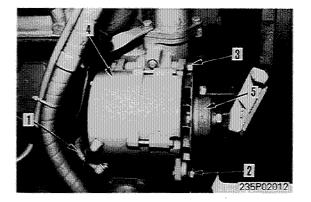
- Disconnect the cable from the negative (-) terminal of the battery.
- 1. Disconnect 3 alternator wires (1).
- 2. Remove bolt (2) of adjustment plate, then loosen mount bolt and nut (3).
- **3.** Move alternator assembly (4) towards cylinder block, then loosen belt tension, and remove belt (5) from alternator assembly.
- Remove mount bolt and nut (3), then remove alternator assembly. <u>\*1</u>

#### INSTALLATION OF ALTERNATOR ASSEMBLY Serial No.: 11001 – 12000

Carry out installation in the reverse order to removal.

**%**1

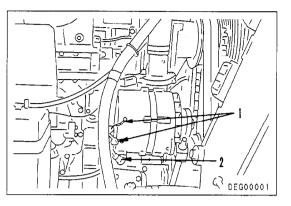
Adjust the fan belt tension.
 For details, see TESTING AND ADJUSTING, table of judgement standard value.

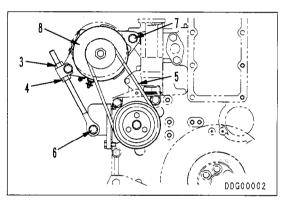


#### **REMOVAL OF ALTERNATOR ASSEMBLY**

Serial No.: 12001 and up

- Disconnect the cable from the negative (-) terminal of the battery.
- 1. Open engine side cover.
- 2. Disconnect alternator wiring (1) and (2).
- Remove locknut (3), and turn adjustment nut (4), then remove V-belt (5).
- 4. Remove mounting bolts (6) and (7), then remove alternator assembly (8).





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# INSTALLATION OF ALTERNATOR ASSEMBLY

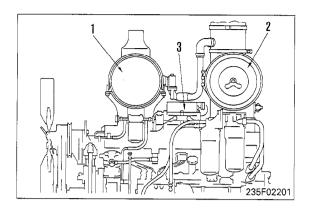
Serial No.: 12001 and up

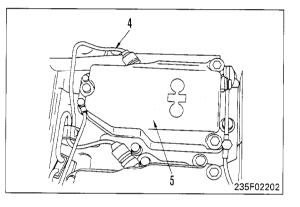
- Carry out installation in the reverse order to removal.
- ★ After installing the V-belt, adjust the tension of the belt.
  For details, see TESTING AND ADJUSTING,

"Testing and adjusting of belt tension".

### REMOVAL OF NOZZLE HOLDER ASSEMBLY

- Remove engine hood, then remove muffler assembly (1), air cleaner assembly (2), and intake connector (3).
- 2. Disconnect delivery tube (4). 😿 1
- 3. Remove cover (5). 🔀 2
- 4. Loosen locknut (6). 💥 3
- **5.** Remove connector (7).  $\boxed{3}$
- 6. Remove holder (8). 💥 5
- Use a slide hammer, or screw in bolt (Thread dia. = 10 mm, Pitch = 1.5 mm), then remove nozzle holder (9) using a bar.





### INSTALLATION OF NOZZLE HOLDER ASSEMBLY

- Carry out installation in the reverse order to removal.
- \* 1

Sleeve nut: 23.5 ± 1.0 Nm (2.4 ± 0.1 kgm)

₩2

 $f_{\rm substantial}$  Mounting bolt: 4.9 ± 1.0 Nm (0.5 ± 0.1 kgm)

\* 3

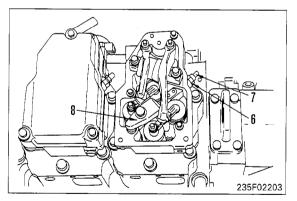
<u>∫</u> Locknut: 36.8 ± 2.5 Nm (3.75 ± 0.25 kgm)

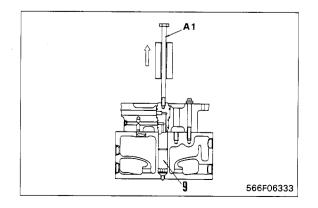
₩ 4

 $6 \pm 100$  Connector: 36.8 ± 2.5 Nm (3.75 ± 0.25 kgm)

\* 5

روب Mounting bolt: 66.2 ± 7.4 Nm (6.75 ± 0.75 kgm)

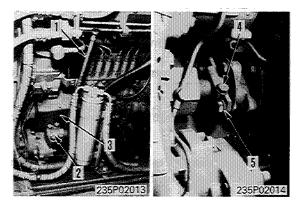


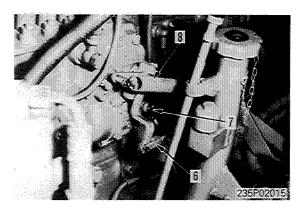


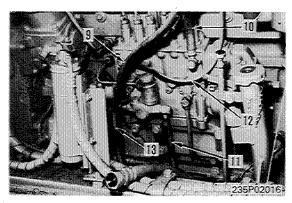


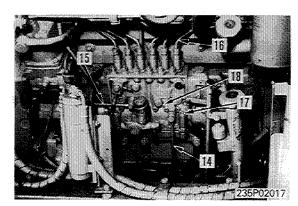
#### REMOVAL OF FUEL INJECTION PUMP ASSEMBLY

- 1. Open engine right side cover.
- 2. Remove oil gauge pipe (1), hose flange (2), and rotation guard (3).
  - ★ When removing the rotation guard, be careful not to let the spacer on the inside fall out.
- Remove coupling lock bolt (4), then remove bolt (5), and disconnect coupling. [x 1]
- Disconnect fuel control rod (6) and stop motor cable (7), and remove spring (8).
- 5. Disconnect fuel hoses (9), (10), and (11), and fuel return hoses (12) and (13).
- Remove lubrication tubes (14) and (15), and disconnect 6 fuel injection pipes (16). X
- Remove 4 mounting bolts (17), then remove fuel injection pump assembly (18). 3









## INSTALLATION OF FUEL INJECTION PUMP ASSEMBLY

 Carry out installation in the reverse order to removal.

\* 1

Coupling lock bolt:  $78.5 \pm 4.9$  Nm (8 ± 0.5 kgm)

#### \* 2

Lubrication tube (14):  $29.4 \pm 4.9$  Nm  $(3 \pm 0.5$  kgm) Lubrication tube (15):  $22.5 \pm 2.9$  Nm  $(2.3 \pm 0.3$  kgm) Fuel injection pipe sleeve nut:  $23.5 \pm 1.0$  Nm  $(2.4 \pm 0.1$  kgm)

#### \* 3

Adjust fuel injection timing. For details, see TESTING AND ADJU

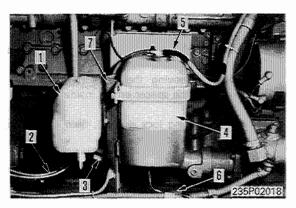
For details, see TESTING AND ADJUSTING, Adjusting fuel injection timing.

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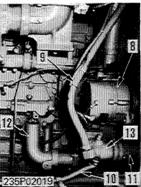
#### 30-5 ②

#### REMOVAL OF WATER PUMP ASSEMBLY

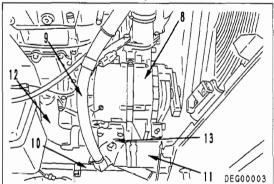
- 1. Drain engine cooling water.
- 2. Disconnect 2 hoses (2) and 2 connectors (3) of washer tank (1).
- 3. Disconnect hose (5) and connector (6) of reservoir tank (4).
- 4. Remove washer tank (1) and resevoir tank (4) together with mounting bracket (7).
- Remove alternator assembly (8).
  For details, see REMOVAL OF ALTERNATOR ASSEMBLY.
- 6. Disconnect hoses (9), (10), and (11).
- 7. Remove tube (12) and connectors (13).



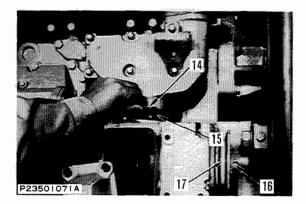
Serial No.: 11001 - 12000



Serial No.: 12001 and up



- 8. Pull out spring (14), then twist tube (15) with a bar and push up.
- 9. Remove bolt (16), then remove pulley (17).
- **10.** Remove mounting bolts (18), then remove water pump assembly (19).



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