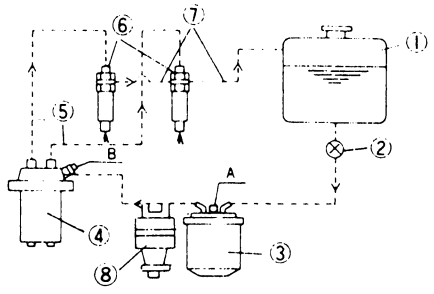
2. Construction and Handling

.1 Fuel System

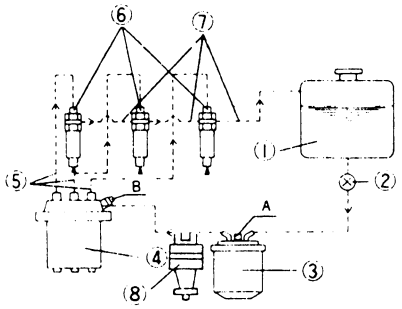
■ Fuel system

Fuel system is as shown in Fig. 1. The fuel flows in the direction shown by arrow marks. To bleed air trapped in the fuel, first loosen the vent plug A of the fuel filter. Tighten the plug when no more air bubbles are in the fuel which flows out from the vent. Then proceed to the plug B of the fuel injection pump and vent the system in the same manner as A.

M-15



M-25



1. *Fuel tank*
2. *Fuel cock*
3. *Fuel filter*
4. *Fuel injection pump*
5. *Injection pipe*
6. *Nozzle holder*
7. *Overflow pipe*

A: Vent plug, filter

8. *Fuel pump*

Fig. 1. Fuel System

■ Fuel-filter

The fuel filter is of the cartridge type shown schematically in Fig. 2. Under normal conditions it should only have to be replaced every 400 hours. To install, apply a small amount of fuel to the packing and tighten securely by hand. For removal, the use of a filter wrench..

1. *Fuel filter*
2. *Cover*
3. *Pipe coupling*
4. *Vent plug*
5. *"O" ring*
6. *"O" ring*
7. *Element*

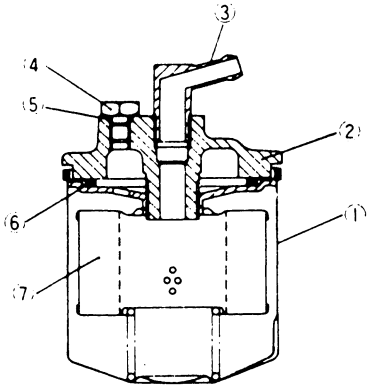
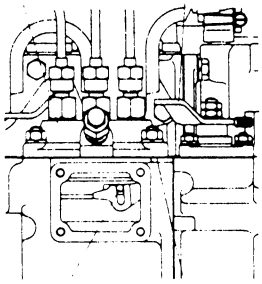


Fig. 2. Fuel Filter

■ Fuel injection timing

Fuel injection timing is adjusted by changing the number of shims used between the pump and the gear case it fits into. See Fig. 3. One shim corresponds to approximately 1.5 degrees in crank angle. Therefore, injection will take place 1.5 degrees later when a shim is added and 1.5 degrees earlier when a shim is removed. The timing is correct when the mark punched on the rear end plate lines up with the "F1" marked on the flywheel. See Fig. 4.

Fuel injection pump *Speed control lever*



Control rack pin *Injection timing adjust shims*

Fig. 3. Adjustment of Injection Timing

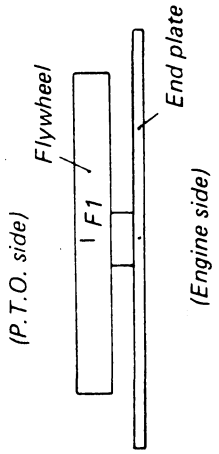


Fig. 4. Inspection of Injection Timing