



# SERVICE MANUAL

TRUCKS

**L 385**

*Export Service Department*

AKTIEBOLAGET

**VOLVO**

GÖTEBORG, SWEDEN

always be kept clean.

## FUEL SYSTEM

### Fuel

A specified list of the required properties of diesel fuel does not need to be given in this book. It should be pointed out, however, that the diesel fuel oils supplied by the wellknown oil companies meet the required standards.

It is up to the driver to make sure that the properties of the fuel are not deteriorated in any way by careless treatment. In all too many cases, impurities are allowed to contaminate the fuel oil when the vehicle is being tanked.

Since diesel fuel oil is not usually in such a clean condition as gasoline, our engines are fitted with a particularly effective filter system consisting of a pre-filter and two large fuel filters. The capacity of these filters is such that all particles liable to cause damage to the components in the injection system are removed (particles larger than  $1/1000$  mm = 0.00004") but the filters are not able to accept an unlimited quantity of impurities.

Everything possible must be done to ensure that the amount of impurities coming into the tank is as small as possible. When filling the tank with fuel, always use clean containers. The fuel should also be cleaned by pouring it through an U-lax filter or a fine strainer (50 meshes per inch) with a cloth element every time the tank is filled. Before filling is carried out, the fuel tank cap and the parts around it should be carefully cleaned.

Before closing the filler cap make sure that it is clean and that the air-venting hole is not blocked. When tanking is carried out at a gas station with large tanks there is usually not so much risk that an abnormally high quantity of impurities come into the tank but if tanking is carried out from drums, the fuel should always be filtered in the way described above.

When tanking from drums, the drums should always be allowed to stand still for some time so that any impurities have time to sink to the bottom. The drum should always be tilted slightly backwards from the drain cock (1 inch per 3 ft.) so that impurities and sludge cannot collect around the cock.

### Fuel Tank

#### Removing and Fitting .....

1. Drain off any fuel that may be in the tank.
2. Disconnect the suction and return pipes at the fuel tank. Disconnect the electric cables for the fuel gauge.

3. Loosen the bands retaining the fuel tank on the frame. Lift off the fuel tank.
4. Fit in reverse order to that used when removing.

When fitting make sure that the felt strips come into their right position and that the fuel pipeline screw unions are thoroughly tightened before the retainer bands are complete tightened.

#### Repair of Fuel Tank .....

Great care should be taken when working with the fuel tank. The gas that forms in a tank is extremely inflammable and sparks or an open flame can easily cause an explosion. If it is necessary to use an open flame on or near the fuel tank, the tank should first be cleaned in an alkali bath for at least one hour and then be rinsed out with hot water and blown dry with compressed air.

If there are any leaks in the fuel tank it should be repaired by soldering but the tank should be removed and flushed with warm water for at least ten minutes before soldering work is commenced. The point to be soldered should first be thoroughly cleaned and tinned. An electric soldering iron should preferably be used.

Keep the tank flushed with compressed air while soldering is being carried out to prevent the accumulation of gases and the possibility of an explosion.

#### Feed Pump with Hand Primer Pump

##### Removing .....

1. Clean the fuel injection pump, the feed pump and the fuel lines thoroughly externally.
2. Disconnect the pipeline to the fuel filters and the pipe connection to the pre-filter.
3. Remove the four nuts retaining the feed pump on the fuel injection pump and then lift off the feed pump.

##### Disassembly .....

1. Set up the pump in a suitable way in a vise.
2. Remove the six nuts holding the cover and pump housing together. Remove the cover (Fig. 1-101).
3. Remove the pressure valve housing (4) and take out the ball (3). Fig 1-102.
4. Unscrew the connection tube nipple (4), the seal ring (3), the valve disk (2) and the valve spring (1). See Fig. 1-103.
5. Remove the nut from the push rod and then take off the nut washer, the plunger, the support washer diaphragm and the inner support washer. When removing the push rod