

## Lubrication and Maintenance

Job No.
0-9

In order to guarantee the safety of operation and the trouble-free performance of the engine, lubrication and maintenance operations have to be carried out after a certain number of kilometers covered. These operations are listed in the service booklets or owner's manuals (with indication of the respective distance covered and/or the operating hours).

The built-in engine OM 636 VI-E is used for a large number of purposes. The requirements and operating conditions are therefore often extremely different.

The lubrication and maintenance operations specified in Section B are in our opinion necessary under normal operating conditions. However, there can be extraordinary conditions which demand extensive lubrication and maintenance operations. **During operation under unfavorable conditions (e.g. extreme atmospheric pollution at combines or in the building trade) the air filters have to be checked and if necessary cleaned every 2 to 3 days, sometimes even daily, and the radiator has to be checked for the free passage of the cooling air.**

A daily oil and water level check has to be conducted on all engines and motor oil or water must be refilled, if necessary.

An omission of the expert, regular, and well-timed conduction of the maintenance operations, as well as broken lead seals on tachometer, on the operating time indicator, and on the injection pump release us from all our warranty liabilities according to our terms of sale.

In order to obtain a better adaptation to the prevailing conditions the maintenance can be conducted according to the operating time, the fuel consumption and/or the covered mileage.

Our experts or our contractors will gladly advise you on the maintenance most practicable for you.

The maintenance of the engines which are installed in tractors, machinery, aggregates, and similar, is as a rule handled by the owners.

Therefore, it is important to point out again and again the specified lubrication and maintenance operations, in order to guarantee a faultless functioning of the engines over longer periods.

## A. Lubricating Points

### Engine Lubricating Oil:

With the engines OM 621 and the recent types of the OM 636 engine, the oil filler nipple is on the cylinder head cover. With the old types 636.912, 636.915 and partly 636.916, the oil filler with breather tube is located at the side of the crankcase.

(Filling capacity for OM 621: max. 4 lit. min. 2.5 lit.; for the OM 636 engines depending on the design of the oil pan and the oil filter, see page 0-1/11 to 0-1/31)

### Injection Pump:

With model OM 636: filler pipe with oil dip stick on pump housing for lubricating the injection pump camshaft and its bearings.

(Filling capacity of the OM 636 engines: fill up to the oil level mark on the oil dip stick)

A cap oiler on the governor housing for lubricating the control linkage.

(Filling capacity approx. 1 cm<sup>3</sup>)

With model OM 621, the oil is filled into the opening of the unscrewed breather filter; fill in while pumping with the pneumatic governor until the oil just starts to flow out from the oil level check bore.

When pumping with the centrifugal governor, check the oil level on the level stick of the governor.

### Air Filter:

Fill housing of oil bath air filter with motor oil up to level check.

(capacity approx. 0.25 lit.)

Moisten the metal fiber in the filter cover of wet filter with oil (see Job No. 09-8).

(Oil quantity approx. 50 g)

### Fan Hub:

(if installed in model OM 636) no maintenance.

(capacity approx. 40 cm<sup>3</sup>)

### Water Pump:

Version without lubricating nipple: Filler cap and inspection plug at pump housing for filling and checking the oil quantity in the pump housing.

(capacity approx. 10 cm<sup>3</sup>)

Version with lubricating nipple:  
(partly on OM 636)

Lubricating nipple at water pump housing to lubricate with grease the pump shaft bearing.

(capacity at initial filling approx. 45 g)

### Generator:

Cap oiler to lubricate the rear ball bearing (if installed).

### Starter:

A hole in housing to lubricate the pinion bearing (only on built-in engines).

### Blower:

(if installed) Oil filler at blower housing.

(capacity approx. 0.125 lit.)

### Bearings and Joints of Throttle Duct, Control Linkage, and Stop Control Cable:

Lubricate all seats and joints with oil can.