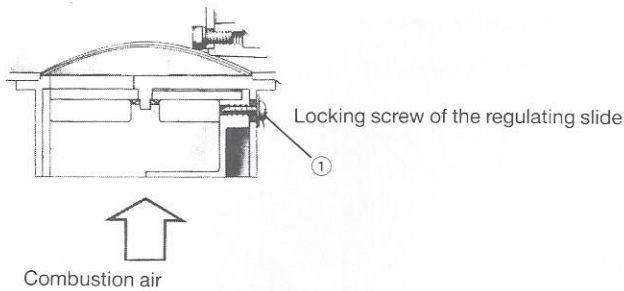


3.3 Combustion air intake — regulation (22)

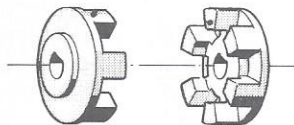


Description: The regulation of the combustion air at the intake socket serves to relate exactly the combustion air quantity to the fuel quantity atomized by the high-pressure atomizer nozzle.

Checks: In case the intake socket is loose, it has to be exchanged completely.

3.4 Clutch (4)

Description: The clutch represents the mechanical connection between motor and combustion air fan.



Checks: Before re-using the clutch, it has to be checked for cracks and the condition of the flat portion in the hole. Too much play on the shaft produces loud continuous noise.

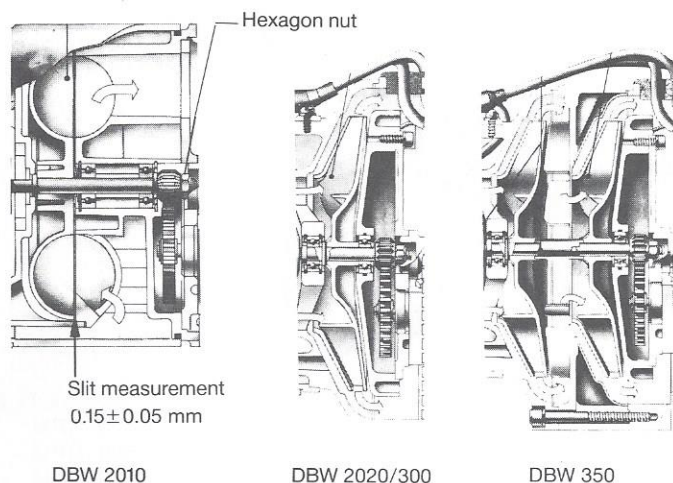
3.5 Combustion air fan (5)

Description: The combustion air fan forwards the air necessary for the combustion. There exist different fan types:

DBW 2010	— lateral canal fan
DBW 2020/300	— radial fan
DBW 350	— two-stage radial fan.

Checks: The impeller has to be checked for dirt deposits, grinding traces and cracks.

Only DBW 2010: The looseness of the impeller has to be checked. The narrow point of the split between impeller and fan case (measurable with a spy) has to be set to 0.15 ± 0.05 mm with a hexagon nut on the shaft.

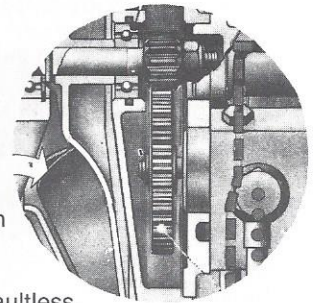


Only DBW 2020/300: The hub of the impeller has to be checked for cracks, and the cover disc (backwell) as to its stability.

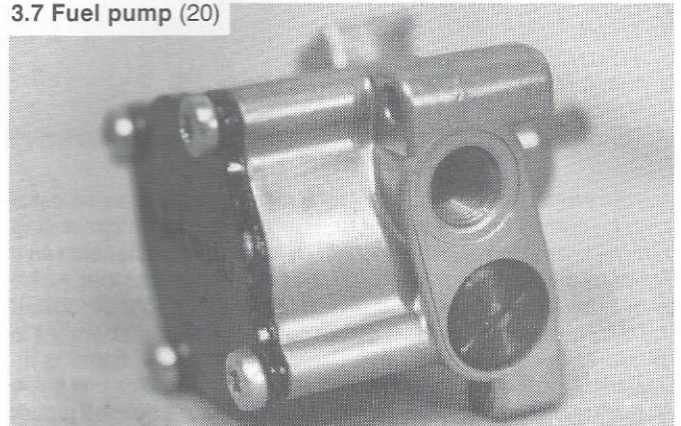
3.6 Toothed gearing

Description: The gears drive the fuel pump with a gear ratio of 1:3.5.

Checks: If signs of wear are showing within the sector of the toothed gearing as well as at the flat portion of the entrainer in the hole of the biggest gear, the gears have to be exchanged. If the gears are still faultless, it is recommended to re-lubricate with grease Isoflex LDS 18 of Kübler — max. 0.5 cm^3 , evenly distributed within the gears sector.



3.7 Fuel pump (20)



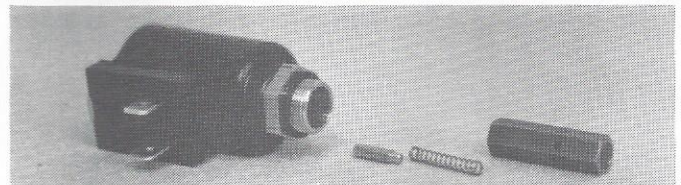
Description: The fuel pump (single-staged toothed pump) delivers the fuel from the tank to the heater and brings it to a pressure of 8 – 0,5 bar (116 – 7 psi) for DBW 2010, $10 \pm 0,5$ bar (145 \pm 7 psi) for DBW 2020, 300, 350.

Checks: When mounted, the following measures can be taken:

1. check the cover sealing and the fuel connections for tightness;
2. check the pressure regulation valve if dirty; an obstructed air relief drill hole may be cleaned with compressed air; in case the dirt is pressed into the O-ring of the regulation piston, the pressure regulating valve has to be exchanged;
3. check the strainer on the suction side fuel intake for dirt and clean if necessary;
4. set the pump pressure (see also item 6.18).

In order to control the shaft packing and the entrainer disc, the fuel pump has to be dismantled.

3.8 Solenoid valve (6)



Description: The solenoid valve interrupts the fuel supply when the heater is switched off. When there is no current, the solenoid valve is closed.

Checks: The electrical function and the tightness of the solenoid valve have to be controlled. The opening voltage is for

heater 12V	8 V
heater 24V	17 V.

A leaky zero adjustment (solenoid valve) and a dripping atomizer nozzle are indicated by after-smoking during the purge cycle (there may also happen a short after-smoking if the space between the solenoid valve and the nozzle is emptied; this is normal).

The gasket disc on the armature has to be controlled as to damage; exchange the armature if necessary.