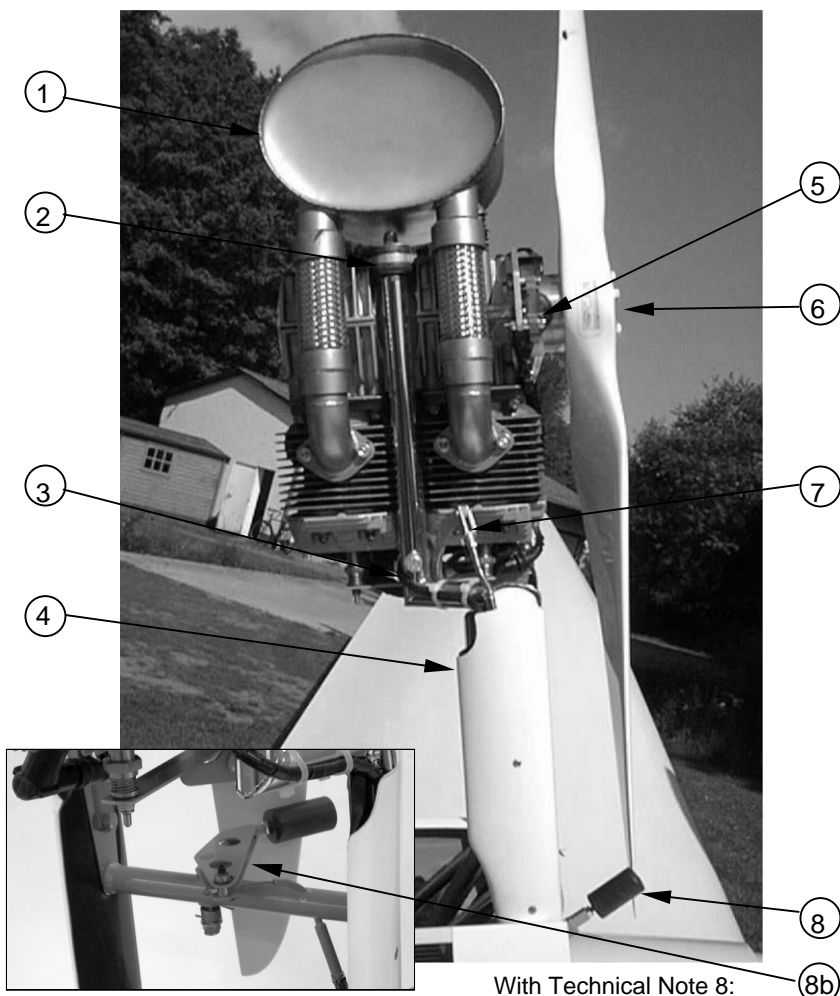


2.13 Power-plant

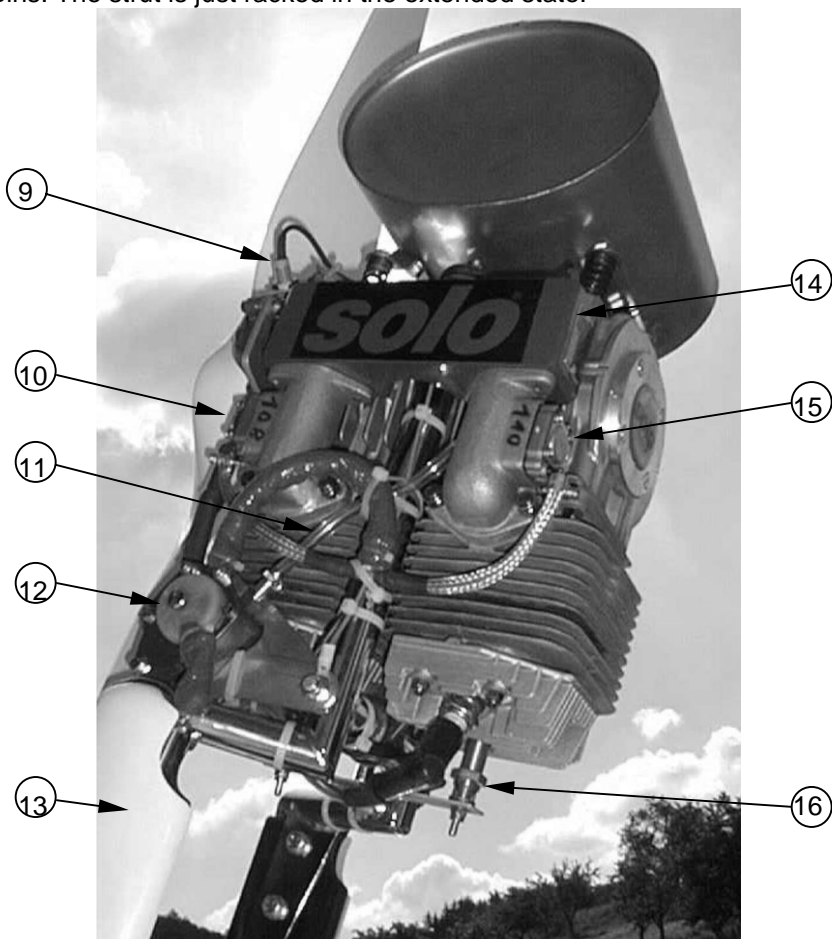
2.13.1 Description of Components

Power-plant Configuration

The propeller is bolted with five screws M8x1 (6) to the crankshaft of the engine (Solo 2350) and secured with lock wire. The engine is mounted on three rubber bearings (2, 3) at the engine mount carrier.



The pneumatic fuel pump (12) and the lever (7) for actuating the decompression valves are mounted on this likewise. The engine mount carrier is supported on two CRP-swords. An electric spindle (25) moves the whole unit out of the engine bay. Nearby a gas spring (27) takes most of the weight. A limit switch (26) confirms the extended state of the power-plant. In the extended state, a toggle strut (30) holds up the engine installation and supports itself on the cross tube between the lift pins. The strut is just racked in the extended state.



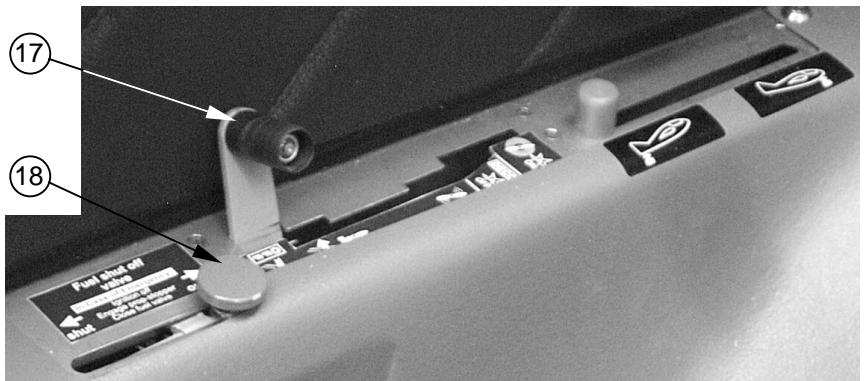
The bowden cable (4) for the decompression valves (16) and the pilotages for ignition and rev measurement lay under the right-hand FRP-fairings. The fuel pipe is hidden under the left-hand FRP-fairing (13). During extension of the engine, the FRP-fairings push the bay doors open, first via two spring loaded clamps (31), than through a separator (28). Rubber chords pull the flaps close again.

The propeller stopper (8) is also operated through a bowden cable. There are three variants: two variants are mounted at the base of the right CRP-sword. One pivots away sideways, the other backwards. The latter has to have a conical shape. The third variant (8b) is mounted atop the CRP swords. For propellers with a diameter of less than 1.2m, propeller stopper (8b) is necessary.

The limit switch (29) for the retracted state and the refuelling connector (24) with cover is located in the front part of the engine bay.

Engine Operating Element in Cockpit

The main switch (21) for the engine electric, the power-plant instrument (22) and a mirror (19) is located in the instrument panel. Left-hand next to the seat pan is the control console with the power-plant lever (17) and the fuel cock (18).

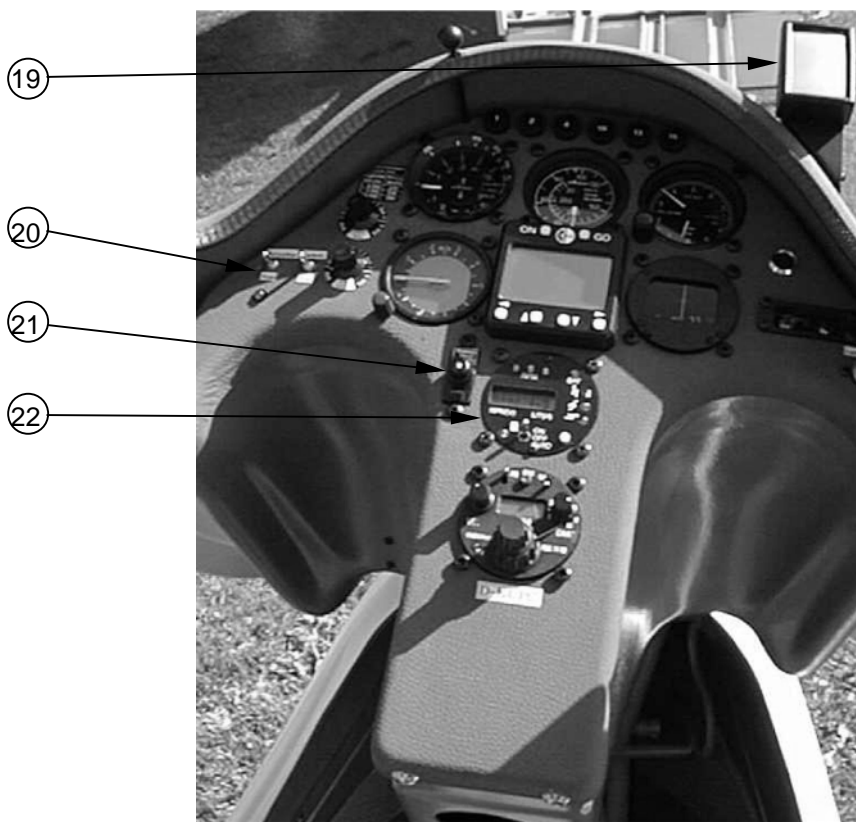


A fuel pump is attached for refuelling, which can be operated over a switch (20) in the instrument panel

Fuel Systems and Tanks

The engine is fed from a fuel tank, which is left-hand next to the landing gear box. On ground, the fluid level in the tank can be controlled through a slit in the fairing, when the seatback is removed. Removing some screws first the seat pan and then the fairing can be removed. Thereby, the fuselage tank, the fuel filter and the electric primer-pump is accessible. The head of the capacitive fuel level sensor is located on the fuselage tank. Ventilation and drainer are located under the left landing gear door in front of the main wheel.

The electric refuelling pump can be found behind the landing gear box. To access it, remove the cover in the engine bay behind the spindle.



(26)



(30)



(30) is reduced to half size.

This placard is affixed behind the backrest next to the viewing slot of the fuselage tank; location in accordance with the markings on the tank.

Fig. 9.2-2 Tank filler neck

(31)

Super (min 95RON/ROZ) or Avgas 100 LL	
Mixing-ratio with 2-stroke oil Castrol RS 2T: Other oils see Flight Manual section 2.4	1:40
Fuel Capacity:	
Fuselage tank	= 6 Ltrs 1.58 US Gal.
if installed:	
Wing tank left	= <input type="text"/> Ltrs <input type="text"/> US Gal.
Wing tank right	= <input type="text"/> Ltrs <input type="text"/> US Gal.
Non usable fuel = 0,3 Ltrs 0.08 US Gal.	