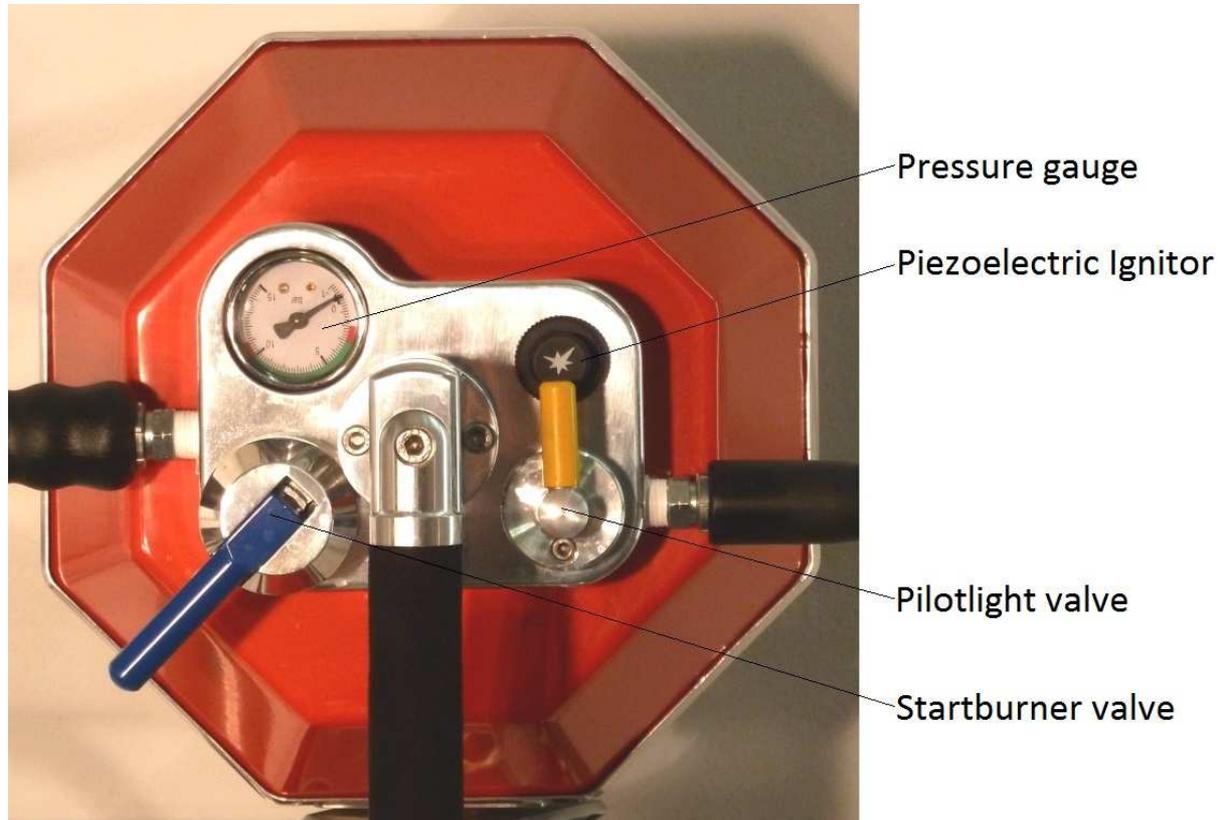


Directions for FB 7 burner (see also Appendix A)

Valve block with operating elements



The FB 7 is a burner that shows high power performance especially in low pressure ranges connected with a low acoustic pressure level. The piezo electric ignitor should be below the burner handle when the basket is lying on the ground for inflation. This position makes sure that the blue lever of the startburner valve is very well accessible on the right hand side above the burner handle. On the left side of the double burner there is the silent burner valve (red lever). Like with every burner the best basis for starting the hot inflation is a taut, cold inflated envelope. A well outspread envelope on the ground helps cold inflating the envelope and removes the wrinkled fabric that hinders the inflation. The main burner has a wide flame in the lying position caused by the new burner technology. This system with its advantages demands a different way of handling the burner during inflation. There are a few points to be obeyed in handling the burner which are recommended by Schroeder fire balloons GmbH.

- Position of the startburner lever on the right side above the burner handle for better use
- avoid using the startburner for a long period of time without the corresponding mainburner
- Never inflate with half full cylinders or down a hill. The dip tube will supply the burner with vaporized Propane only. That causes an overheating of the coils because there is no liquid gas to cool them down. This leads to glowing coils, total power loss, an extreme noise level and down cooling of the cylinders caused by the vaporization of the Propane within the cylinder.

If the inflation down hill is inevitable, one crew member must lift the basket as far as liquid Propane exits the jet ring of the burner. The Power of liquid Propane is more than 100 times higher than the power of vaporized Propane.



How to operate the FB 7 during inflation:

The coils of the burners are cold when inflation starts. That causes too much liquid gas to exit the burner. In order to avoid that, following approved method is to apply:

Phase I

Heat with blue startburner. Time of intervals 5 to 10 seconds in the beginning (depends on the size of the envelope and the pressure of the Propane). Heat with generous breaks to allow the complete expansion of the envelope.

Phase II

Open the startburner valve completely for a longer period of time with additional and occasional use of the main burner of the same burner side. That means that the startburner valve stays open for 10 to 30 seconds (depending on the envelope size and the fuel pressure) and the main burner is used at the same time for short intervals of some seconds. More liquid Propane is fed into the coil by using the main burner valve in order to maintain the necessary cooling for the coil.

Phase III

This approach ensures a well preheated burner. The flame should now be slim and powerful, using the main burner valve only. The last phase of heating can be conducted with the main burner only. After some inflations and enough collected experience the pilot knows when Phase III begins and the burner is adequately preheated and ready for main burner use only.

During the following flight a differing power between the two burners is noticeable in the beginning. This is a usual result of the inflation. During flight the main burner valves are being used only. As notified before, the valves must be fully opened when used. This avoids extreme vaporization coldness in the valves. Due to coldness the o-rings become stiff and start leaking after a certain period of time. Due to not fully opened valves and the extreme coldness there might also occur a small flame burning around the jet ring caused by cold liquid rest gas in the coil that vaporizes very slow.

Compared to the FB 6, the power of the FB 7 allows this burner to be used as double burner up to 5000 m3 envelopes (see matrix below).

Envelopesize [m³]	5000															
BURNER	FB 7 double – or triple burner															
DEFLATION SYSTEM	Parachute or Parachute & Velcro or PARAQUICK															
BASKET SIZE	VII / 7					VIII / 8					VIII / 9					
EMPTY WEIGHT est. [kg]	284 bis 360					306 bis 395					312 bis 415					
MAX: WEIGHT [kg]	1575															
CYLINDERS [Qty.]	12	11	9	7	4	14	12	10	9	6	15	14	12	11	9	6
OCCUPANTS [Qty.]	3	4	5	6	7	4	5	6	7	8	4	5	6	7	8	9
max. basket payload [kg] (occupants & cylinders)	815					975					1065					
Min. landing mass [kg] including fuel reserve	780															