<u>Instructions</u> for use of the SCHLEY-insemination syringe

The insemination syringe is made up of the following parts:



A glass tip (1) passes through the perforated screw cap (2). A 4-6mm silicon pressure seal (3) is slid on some 3mm past the open end and serves for sealing and stability. The supporting, perforated screw cap (2) is screwed onto the threaded casing with an observation slit (4), which contains the graduated syringe barrel (5). The piston (6) is attached to the threaded spindle (7).

A screw-cap (8) is screwed onto the other end of the syringe case. The syringe is controlled with the control knob (9). The parts 6-9 are attached to each other to make up a unit. The graduated barrel, piston and winding-spindle should be lubricated with silicon grease.

The assembled threaded piston (6), graduated syringe(5) and cap (8) are pushed into the syringe casing(4). The syringe casing is then pushed over and cap (8) tightened. The syringe becomes stable when the casing (4), glass tip (1) and sealing (3) have been compressed, when the screw-cap (2) has been tightened.

Filling of the syringe

Sterile saline solution is used. The solution can be bought at a chemists as sterile infusion solution (also in small quantities). The syringe can be filled as follows: The solution is filled directly into the graduated syringe with help of a normal disposable syringe (5-20 ml) and long needle or catheter. The tip of the filling catheter must be pushed as far down into the graduated syringe as possible. Bigger air bubbles must be avoided by flicking the sides.

Insemination tip

The described syringe is the normal size for sterilized glass tips with a diameter of 1.5 mm. The 4-6 mm long silicon tube used as the pressure seal (3) should also be sterilized before being pushed onto the wide end of the glass tip (1). The wide end of the glass tip is then pushed about 1-5 mm into the syringe-cylinder (5) and attached. It is important for successful use that no air bubbles are found in the syringe-cylinder.

When using a filled and tightened syringe, the liquid column in the drawn, thin capillary tip must be able to be halted in every position and react precisely to every movement of the spindle without any other unwanted movements in the liquid column.

After use, suspend in disinfectant solution and don't let it dry out.

As a rule the main problem with use of the syringe is a "flutter and jump" of the liquid column in the capillary opening of the glass tip, so that the taking up of the sperm is made impossible. There are many reasons for this fault. Listed here are some hints:

Faults		Help
1.	Air bubbles.	Remove air bubbles, check Air seal is tight. Consider using pre-boiled saline.
2.	Syringe piston sticks.	Use the original piston with the original cylinder, lubricate with silicon grease.
3.	Pressure seal is too short, and not airtight.	Use a longer piece of silicon tube (4-6mm).
4.	Too much play, in the screw-cap.	Lubricate the winding spindle with silicon grease. Faulty thread.
5.	Periodic sticking of the spindle.	Syringe cylinder has side pressure from the mount screw.
	Don't turn up the screw-caps	too much.

Don t turn up the screw-caps too much. Use longer pressure seal. Winding spindle must be in perfect order.