

## **NEVER OIL ENGINE !**

### **What can I do if my motor doesn't run?**

- Dismantle the operating cylinder and clean the piston and working cylinder with a dry cloth. Clean out the brass cylinder down to the bottom. Reassemble the motor and check proper functioning.
- The connection rods have to be slightly laterally moveable and should not jam. Do not pull the screw too tight since the connection rod can jam if you do.
- Make sure that the rocker arm can swing freely (Remove the connection rods to test this). Any friction can bring the model to a halt.
- Make sure that the gap between flywheels and ball bearings is approximately 0,2mm wide so as to prevent braking of the bearings.

### **How should I glue the bearings?**

- Degrease the ball bearings and bore holes with ethyl alcohol and a cloth before setting the bearing aside. Dip a needle in superglue (wear protective goggles and gloves to prevent injuries) and guide the needle tip along the bore holes so as to apply only a thin coat of glue. Put the side frame over the bearing with the countersink facing downward. The spacing is correct if the side frame rests directly on the table. After a short time the bearing is attached. Glue is very dangerous, be careful please!!

### **Does the motor need to be lubricated?**

- Too much oil will bring the motor to a halt, forcing you to disassemble and completely clean it again. Oil must only be applied to the displacement axis after the first test run. Greasing can bring the motor to a halt!
- Ceramic past should only be applied wafer-thin after the first test run. Too much ceramic paste leads to the motor not starting up (see 1.).
- Use of other lubricants voids the guarantee!

### **How do I regulate the rotation speed?**

- The rotational frequency depends on the packing length and the vertical and horizontal distance to the heating cylinder. The engine should only be operated with ethyl alcohol (94%). Use of other fuels voids the guarantee. Tea candles are not appropriate since they soot the motor.