

**MAINTENANCE AND OPERATION OF YOUR  
MP JET CARBURETTERS STN-1**

The STN-1 MP JET carburetters are modern two-needle carburetters of the micro size. The STN-1 type is designed for the use in the MP JET engines of the "BB" series (the crankshaft is embedded in the ball bearings). Observance of the directions stated here will ensure you operating without problems, achieving of a good output and a corresponding service life of the engine and carburetter.

We thank you for having bought our product and hope that it will quite comply with your requirements.

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**A. SPECIFICATION**

A carburetter with a metal sleeve valve, which moves on a helix, it allows adjustment of the maximum speed with the main needle and the idle speed with the idle needle. The transient regime has been fixed by the producer and it can be only partly affected by the idle needle.

The adjusting elements: a) main needle (maximum speed)  
b) idle needle (idle mixture ratio speed)  
c) valve fixing screw (idle speed level)

**B. ADJUSTMENT**

The basic adjustment has been done by the producer, therefore we do not recommend turning unnecessarily especially the idle needle. It will make the first start and the adjustment of the engine easier. The basic position of the main needle is three revolutions "open".

Setting procedure: a) adjust the gas pushrod stroke so that in the "maximum speed" position the valve is entirely open, in the "idle speed" position there is about a 1 mm slot left open. In these end position the pushrod must be not get bent (the servo stroke does not have to be unnecessarily high). In the idle position leave a light reserve for regulating the speed by trimming the RC set. Remember that the valve fixing screw serves only for arresting the valve axial position, the idle speed level is set by the end position of the servo or the trim. Use the valve fixing screw as the stop element just cases of controlling the pushrod with your hand (on the test stand for example).  
b) connect the fuel installation including the fuel filter.  
c) adjust the basic position of the main needle, open the valve entirely (maximum speed).  
d) start the engine.  
e) adjust the maximum speed with the main needle.  
f) start lowering the speed by closing the valve until the moment when the engine still runs reliably.  
g) without any movement of the valve, adjust the highest possible speed with the idle needle and then let the idle needle loose by about 5 degrees.  
h) open the valve again entirely and start closing it until the moment again when the engine still runs reliably. After that make the end adjustment according to the instruction under g). Repeat instructions f), g), h) until you have adjusted the minimum and maximum speeds.

Notice: 1) while doing the end adjustment with the idle needle **no axial pressure** must be developed on the valve (against the limitation spring), otherwise a non definable affecting of the adjustment happens.  
2) after each end adjustment with the idle needle it is necessary to speed up and slow down so that the valve spring can optimally limit all the adjustment plays.  
3) the idle needle is very sensitive, a 90 degree turn can cause a change of several thousand r.p.m.  
4) always adjust the carburetter for flying with the model resting at a 45 degree angle with the nose up.

**Important remark!** proceed with the diesel engine as said under e) as follows: with the compression lever and the main needle adjust the maximum speed. Then let the compression lever loose by about 10-20 degrees and make the fuel mixture lightly rich. The speed will drop a bit (300-500), but the engine will run easily and be better regulated.

**C. GUARANTEE**

Full guarantee for manufacturing and material defects lasts 12 months from the purchase date. Transmit the defective carburetter direct to the manufacturer's address. Describe briefly the troubles, if possible let know their probable causes. Provided that the defect will pertain to the guarantee for manufacturing and material defects, the defect will be repaired free. If the guarantee will not apply to the defect, MP JET s.r.o. will inform of the repair extent and price.