

INSTALLATION MANUAL OF SKY 100

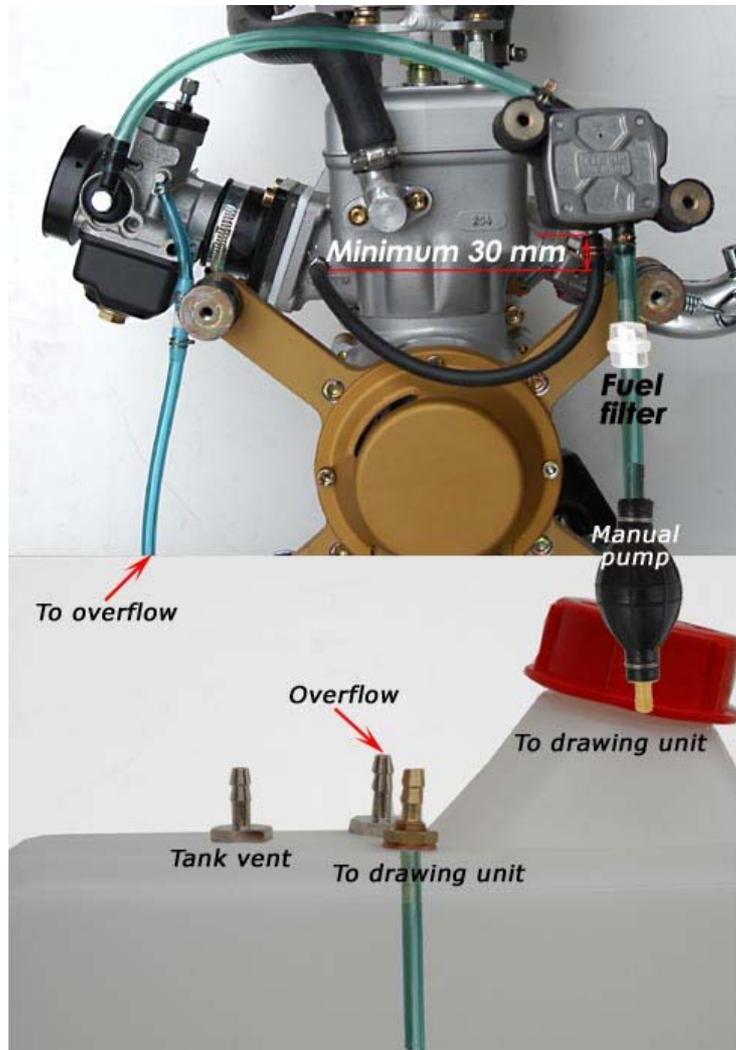
- Single-cylinder with liquid cooling.
- Displacement 102 cc.
- Output power 18 HP @ 10200 RPM.
- Peak recommended speed 10600 RPM.
- Bore 55 mm.
- Stroke 43 mm.
- Mechanical reduction gear 1:4.
- Thrust 60 Kg with three blades, 122 cm @ 10400 RPM
- Dell'Orto PHBL22BS carburetor
- Total weight with liquids 13 Kg
- EGT temp 550° C
- CHT temp 170° C
- Max liquid temp 95° C
- Mixture 3%
- Water-based cooling fluid + 50% anti-frost
- Reduction gear oil SAE 75-90 50cc..
- Candle NGK BR7ES – B7ES

ENGINE PARTS

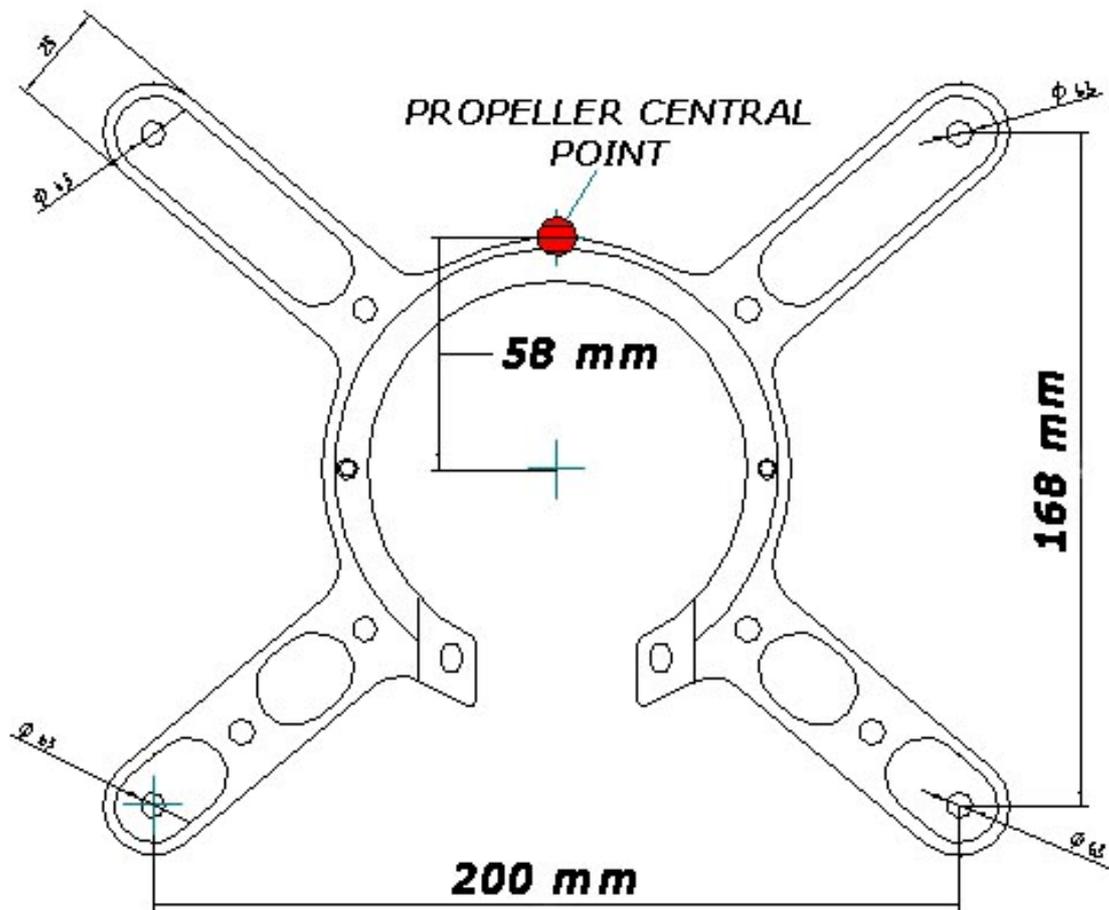


FUEL LOOP

When installing Sky 100 on the frame, adopt the necessary precautions with the fuel feeding loop, which should be arranged in the position shown in the figure:
(Fix the fuel pump using a silent block).



ENGINE SUPPORTING AXLE



RECOMMENDED PROPELLER

Engine tests have been carried out using a three-blade propeller suited for the 1/4 reduction gear of Sky 100.

Before using different types of propellers, make sure that their speed is within the range **10300 – 10700 rpm.**

Radiator liquid

Add fluid to the radiator as described below.

Open cap **B**, open cap **A** of the plastic tank and add fluid in the recommended quantity until it comes out of cap **B** (verify that the loop is full by applying a light pressure to the pipes). Close cap **B** and check the level of fluid in the plastic tank.

Open cap **A** to drain the fluid. Open cap **C** and allow the fluid to flow out (making sure it does not flow over the clutch or is released externally).

A- Cap for liquid filling

B- Cap for air venting

C- Cap for water discharge



COLD START OF SKY 100

Pump gasoline into the carburetor (A), lift the starter, start the motor and return the starter to its original position. Warm the engine for a few minutes, frequently changing its speed.



RUNNING IN

The initial running in of Sky 100 is performed by the manufacturer.

The running in phase will have to be completed by the customer in flight conditions. During the running in test, use maximum speed very sparingly and change the speed frequently. The running in test should last at least 5 hours.

OIL REPLACEMENT

Reduction gear oil: SAE 75-90 Quantity 50cc

After removing the propeller, disassemble the reduction gear by loosening bolts 1 – 2 – 3 – 4 along with the oil filling cap (A). Place the reduction gear in an horizontal position to facilitate the discharge of the oil, add new oil in the recommended amount and tighten the cap A.

Reassemble the reduction gear by tightening bolts 1-2-3-4 (with a torque of 17 Nm/12 lbf. Ft.) using thread blocks like Loctite 243 (average)

