

FOX MANUFACTURING CO.
Owner's Manual
Fox 10

SUITABLE MODELS - Your Fox 10 is suitable for model airplanes designed for motors up to 15 size. In the event you are not sure here are some good rules to thumb.

Control Line Models - 1 1/2 lbs. is about max.

Radio Control Models - 4 lbs. is about max.

MOUNTING - Your Fox 10 should be mounted on hardwood beam motor mounts, not balsa, and firmly attached with 3-56 or 3-48 screws. The motor mount in turn should be securely glued and gusseted to the plane so that they will absorb the vibration without becoming loose.

FUEL TANK - A good engine run is completely dependent upon a good tank installation. For Control Line models the tank should be mounted directly in back of the motor and with the centerline of the tank directly in line with the needle vale when in normal flight.

PROPELLER - we recommend a 7" diameter 4" pitch prop for small models and an 8" diameter 3" pitch for larger models. Large Radio Control models may fly better on a 9" diameter 3" pitch prop.

FUEL TO USE - Usually Missile Mist is your best bet. On very hot days or to obtain better low speed characteristics Fox Superfuel may work better.

PROCEDURE FOR STARTING THE MOTOR

1. Set the model level and fill the tank.
2. Turn the needle valve in until it becomes tight and back it out 6 turns.
3. Open the exhaust valve.
4. Rotate the prop until the exhaust port is uncovered.
5. Inject four or five drops of fuel into the cylinder with your syringe.
6. Flip the motor over a couple of times and then connect one battery lead to the center post in the head and the other lead to any convenient place on the motor.
7. Start to crank the motor counter-clockwise looking from the front. You should crank with a quick flipping motion, swinging your fingers out of the path of the blade as the propeller passes over compression. The motor should start. If the motor gives a short, sharp burst, there is not enough fuel, Give the needle valve a half turn counter-clockwise and try again. If the motor gives a "Bloop" type of sound it is flooded. You should turn the needle valve a half turn clockwise and try again. Much of the trick in starting a motor is to determine whether it is getting too much or too little fuel. An expert can tell this by the sound as he flips the motor over.

NEEDLE VALVE ADJUSTMENT - The needle valve controls the amount of fuel the motor gets. It is desirable to adjust the needle so the engine always gets a little more fuel than it really needs at all times. Too rich (too much) a run does no harm, but too lean a run may burn out the Glow Head and even overheat the motor so the piston is ruined.

GLOW HEAD - Ignition occurs automatically when the piston brings the fuel mixture up on compression and it is subjected to a red hot platinum coil. This platinum coil is extremely fragile and will often burn out or be broken by particles of dust that go through the motor. It is impractical to guarantee these coils and you should consider replacement of the Glow Head occasionally to be a standard part of your operating expense.

EXHAUST VALVE - Speed reduction is accomplished by restricting the exhaust. If your Fox 10 does not run slow enough with the Valve closed, pressure is escaping either around the Valve or up between the cylinder and top of the casting. The exhaust can be tightened by carefully filing the small end of the Exhaust Valve Bushing.

DIS-ASSEMBLY - We generally recommend that you do not dis-assemble your Fox 10. However, you will not harm it provided you do it correctly. We cannot assume responsibility for parts ruined by incorrect assembly.

1. Remove from airplane - Remove prop and needle valve.
2. Using a crescent wrench unscrew the Head.
3. If you must remove the cylinder wrap several turns of pasteboard around upper fins. Grasp with pliers and with your left hand unscrew the case.
4. If necessary to remove the needle body - it presses out by pushing on the needle end. Use a piece of wood for a pusher.
5. The piston and rod are permanently assembled.

TO RE-ASSEMBLE - Reverse this procedure. Use new gaskets.

Happy Flying!