



Bore: .590  
Stroke: .540  
Displacement: .15  
RPM with 8-4 prop: 12,000  
Weight: 4 oz.  
Fuel Consumption: .25 oz. min.

## MOUNTING

Your Fox 15 should be mounted using a firewall type aluminum mount such as Fox part number 50201, or hardwood beam motor mounts, not balsa wood. Firmly attach using 3-56 or 4-48 screws. The mount in turn should be securely fastened to the plane so it will absorb the vibrations without coming loose.

## FUEL TANK

A good engine run is completely dependent upon a good tank installation. For control line models the tank should be firmly directly in back of the motor and with the center line of the tank directly in line with the needle valve. The tank outlet should be connected to the needle valve body by means of flexible fuel tubing. Both these items are available in the Fox product line.

## RECOMMENDED FUEL, PLUG AND PROPELLER

The Fox 15 runs best on our Missile Mist fuel. Lower priced fuel in many cases does work satisfactorily, but for the highest power output, steadiest run, and easiest starting, we recommend Missile Mist fuel. The propeller to use is 8" diameter 4" pitch. The Fox 15 uses a Fox standard short glow plug.

## WARNING

Always keep clear of the propeller. It is possible for a propeller to cut a finger off, or for a piece to come off and put an eye out.

## WARNING

Model airplane fuel is both flammable and extremely poisonous. Use the same safety precautions that you would with a can of gasoline or a bottle of poison.

## BREAK IN

Your Fox 15 may be difficult to start at first. This will improve with further running. So do not be disappointed but be patient until you have run a few tanks of fuel through the motor.

## STARTING THE MOTOR

1. Set the model level and fill the tank.
2. Remove the needle valve - then screw it in three full turns.
3. Rotate the propeller until the exhaust port is uncovered.
4. Inject four or five drops of fuel into the cylinder with your filler syringe.
5. Flip the motor over a couple of times, then connect your battery.
6. Start cranking 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 fires a time or two but does not take off, it is probably flooded. When this happens, close the needle valve and continue cranking until the motor clears. Then open the needle valve and crank, **DO NOT CHOKE**. 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

A model airplane motor, unlike an automobile motor, has no throttle. Speed is reduced by giving the motor too much fuel. A motor with too much fuel will run slower, and miss every other revolution. This is called 4-cycling. It is much easier to run with the motor in this condition, than it is to run with too little fuel. The needle valve should be adjusted to the richest position which will give you sufficient power for the flight and still keep running.

## GLOW PLUG

Ignition occurs automatically when the piston brings the fuel mixture upon 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 occasionally to be a standard part of your operating expense.

## WARNING

There is always the possibility you may lose control of your model. Do not fly in any location where your model might strike people or do property damage should this occur.

## WARNING

Never fly a control line model within 200 feet of power lines. Death by electrocution is possible if your model comes near power lines. Direct contact is not necessary.

## WARNING

A model airplane motor can get hot enough to cause a serious burn. Do not touch the motor right after it has been running.

## IN CASE OF A CRACK-UP

From time to time you will undoubtedly have some crash landings. Whenever this occurs, do not attempt to turn the motor over until it has been cleaned.

## DISASSEMBLY AND CLEANING

1. Remove the motor from the airplane.
2. Brush off exterior parts with solvent.
3. Remove the cylinder head, spacer, and rear cover.
4. Immerse motor in solvent and rotate the crankshaft until it is clean.
5. Check and if the motor does not turn freely, it should be disassembled the rest of the way and inspected for damage.
6. Lift out cylinder liner. If you are unable to do this with your fingers only, then drop a glow plug gasket onto the piston, turn crank to bottom dead center, slide gasket into exhaust port slightly, then turn crank 180 degrees. This will lift the liner.
7. Remove rod and crank pin.
8. To remove wrist pin, press forward. The back wrist pin hole is tapered for press fit.
9. To remove needle body, press on needle valve and with wood pusher.

## TO REASSEMBLE

Reverse the procedure above using care to not cross-thread the parts. Replace gaskets for best results. Piston should have baffle on the bypass side of the case. Turn motor over before tightening screws. It should be free. Check again after screws are tightened. If motor binds any noticeable amount, loosen, shift parts slightly, then try again.

NOTE: If you remove the spacer from under the head be especially careful the piston does not hit the head. It may be necessary to use two head gaskets to gain clearance.

## FACTORY SERVICE

In the event you are unable to make a satisfactory repair, we recommend you package up the motor and send it to us at 5305 Towson Avenue, Fort Smith, Arkansas 72901. We do not make estimates, but do assure you that no repair, exclusive of shipping charges, will exceed one-half the price of a new motor.