

OWNER'S MANUAL FOR THE FOX EAGLE 60

WARNING

The Fox Eagle has several unconventional features with which you should familiarize yourself before attempting to operate or disassemble this motor. Ten minutes spent reading this manual through now could save you much grief later on.

SUITABLE MODELS

The Fox Eagle was specifically designed and built to power large pattern type radio controlled models. It can, of course, be used for free flying, control line, boats, and a multitude of other uses, but all information given in this manual assumes you are going to fly it in a conventional pattern type airplane.

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.

MOUNTING

Your Fox Eagle should be mounted as rigidly as possible. If your airplane has beam mounts be sure the beams are securely bonded to the firewall. If your airplane uses a firewall mount, we recommend you use a Fox mount. 6-32 screws are recommended. Should you experience vibration problems the thing to do is beef up the fuselage front end structure to raise the natural frequency above the engine RPM.

PROPELLERS TO USE

The Fox Eagle runs quite well on a wide variety of propellers, however, nearly everyone eventually winds up using an 11" diameter, 8" pitch propeller. Only Maple, Cherry or other hardwood propellers should be used. Gum wood and other soft wood propellers will mash down under the torque necessary to hold the Eagle's power and could possibly come off in flight. Tighten your propeller nut very tight. Do not use plastic propellers on your Eagle unless you wish to lose a hand.

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.

GLOW PLUGS

The Fox Eagle is supplied with a Fox 1.2 volt Long RC plug. This plug operates on Ni-Cad or dry cell voltage and will burn out if connected to a lead-acid battery. For those who prefer using lead-acid booster batteries Fox makes a 2 volt plug (black body). The 2 volt plug is somewhat less durable due to the longer, thinner element.

FUEL TO USE

The Fox Eagle was designed to operate on Missile Mist, which is a 25% Nitro fuel. With this fuel your Eagle has a broad needle valve tolerance, broad weather tolerance, and produces approximately 1-1/4 horsepower in normal flight. Home brewed mixtures containing little or no Nitro will run the motor but power output is reduced, the broadness of the needle setting is greatly reduced, and the likelihood of burning your motor up on an overlean run is greatly increased.

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.

CARBURETOR ADJUSTMENTS

Two throttle actuating arms are provided. Either one can be used, and they can be rotated to any position by loosening the 1/4-32 nut. A high speed and a low speed mixture adjusting needle is provided, both screw in to lean – out to richen. Adjustments should be made when the motor is hot and with approximately 1/4 tank of fuel. Adjust low speed for maximum RPM with the throttle closed and back off 1/4 turn. Adjust high speed for maximum RPM with the throttle wide open and the nose of airplane pointed up. Should your airplane tend to lean out in the air, point the tank vent forward so it picks up ram air. Do not use plastic fuel line or rubber fuel line with I.D. smaller than .080 diameter. The intermediate range is fixed and the motor should be sent to the factory if it does not function satisfactorily for you.

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.

PERIODIC INSPECTIONS

Many people have flown Eagles several hundred flights without attention, however, if you want to be sure to fly, we recommend that you perform the following checks on your Eagle every 50 flights:

1. Tighten all screws as tight as practical.
2. Replace the glow plug with a new one.
3. If you have been using a muffler, we recommend that you remove the muffler and run a tank of fuel through it at wide open throttle to wash and burn away some of the accumulated carbon. Regarding carbon, there are a number of synthetic oils on the market that will scour away the carbon. Our experience has been that they also scour away metal and result in a prematurely worn out motor. We suggest that you do not worry about a little carbon deposit

DISASSEMBLY PROCEDURE

The carburetor, cylinder head, and rear cover are removed in the obvious manner. To remove the piston and crankshaft assembly, the cylinder must first be lifted out, then the snap ring and wrist pin must be removed from the access hole in the rear. Special tools are normally required for this. After the piston and wrist pin are removed, the piston can be lifted out and the rod removed. The thrust washer wedges on a taper lock. The thrust washer must be worked forward and the taper lock freed before the crankshaft will slide back through the bearing.

REASSEMBLY PROCEDURE

Reassembly is best accomplished by starting the piston into the cylinder up to the point where the wrist pin hole is just exposed. The sleeve can then be used to lower the piston into position for maneuvering the wrist pin in. Snap rear snap ring into position. This is a difficult procedure without the proper tools, and for this reason it is recommended that you return the motor to the factory for repairs involving piston removal.

FACTORY SERVICE

We want your Fox Eagle to perform well for you. Technical advice can be obtained directly from Duke Fox by phoning Area Code 501-646-1656. If your motor has become worn or crashed, and you desire our factory service, mail it directly to us. We will disassemble the motor, replace all necessary parts, test run the motor and return it to you charges collect. It has proven impractical to make any sort of estimate of repairs. We will assure you however, that our charges will never be more than 60 percent of the list price of a new motor.

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.

FOX 60 EAGLE PARTS LIST

NAME	PART NO.	PRICE
Crankcase	26001	14.00
Cylinder Head	26002	7.00
Cylinder Liner	26003	9.00
Piston	26004	7.00
Connecting Rod	26007	7.00
Wrist Pin	26006	1.50
W.P. Snap Rings (2)	26040	0.50
Piston Rings (2)	26018	1.50
Crankshaft	26008	15.00
Thrust Washer	26009	2.50
Thrust Washer Wedge Lock	26005	1.00
Rear Cover	26011	4.00
Prop Nut	26012	0.50
Prop Washer	26013	0.75
Screw and Gasket Set	26014	1.25
Carburetor Assembly	26050	14.00
Throttle Casting	26060	6.50
Throttle Barrel	26061	6.50
Idle Stop Screw and Spring	26062	0.50
Low Speed Needle and Spring	26063	1.00
High Speed Needle	26064	1.00
Idle Stop Arm	26065	2.00
Servo Arm (2)	26066	0.75
Spring Clip – High Speed Needle	26068	0.50
Spacer – Spring Clip	26069	0.50
¼-32 Nuts (2)	26070	0.50
Bearing – Rear Main	26042	5.00
Bearing – Front Main	26043	4.00



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