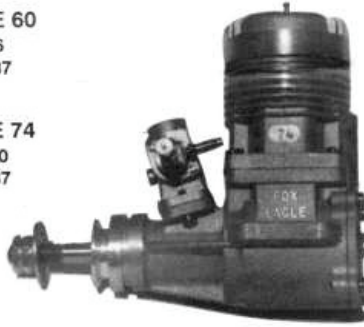


OWNERS MANUAL
FOR FOX EAGLE 60 AND FOX EAGLE 74 MOTORS
REVISED MAY 1994

FOX EAGLE 60
Bore - .906
Stroke - .937

FOX EAGLE 74
Bore - 1.000
Stroke - .937



MESSAGE FROM FOX MFG. CO.

We are very proud of these motors and we want yours to give you the best possible service. Please read this Owners Manual in its entirety and follow our instructions to the best of your ability. If you have any questions not covered here, please feel free to call us at 501-646-1656

NOTEWORTHY FEATURES OF YOUR FOX EAGLE 4

The Eagle 4 cylinder can be turned so the exhaust faces left, right or to the rear without any internal changes.

The tilt down muffler can be exchanged for a tilt up muffler at a \$3.00 service charge, providing that it hasn't been used.

Your fox Eagle 4 has been test run at the factory, and the carburetor adjustments set for normal use.

SUITABLE MODELS:

Your Eagle 4 is suitable for all model airplanes calling for this size motor. In addition, it's big prop capabilities make it suitable for some larger models calling for motors in the 80 to 120 range.

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.

INSTALLATION:

Your Fox motor mounts in the normal manner. If your airplane calls for a firewall mount, we recommend one that is very rigid. If your plane is designed with a hardwood beam type mount, be sure they are well braced between the two beams, and the beams are gusseted to the firewall, and, preferably, to one another. Flimsy motor mounts will allow the engine to vibrate excessively and may damage the model and cause foaming of the fuel tank. Also, excessive vibration can cause glow plug failure. If a cowling is used, provisions should be made for both air inlet and outlet. We do not advise using shock type mounts for normal sport type flying.

PROPELLERS TO USE:

We recommend that you use only hardwood propellers and stay away from the plastic ones. The reason is, that if you should be so unlucky as to put your hand in the propeller arc, the wood propeller will not hurt you so bad. Now - about the sizes to use: An 11" Dia x 8" Pitch ranging up to a 14" Dia x 6" Pitch is the practical range. For a 5 ft. sport model we suggest an 11-8 or 11-9 prop. For a 6 or 7 foot model we suggest a 12-6 or 12-7 prop. For an 8 or 9 foot model we suggest a 13-5 or 13-6 prop. 14-4, 14-5 and 14-6 can be used also.

Where quiet operation is important, lean toward the slower running props. Rounding the blade tips also helps.

WARNING:

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

FUEL TO USE:

Fox 60 and 74 size motors are designed to run on fuel with 5% Nitro and castor oil base of 18% to 20% to provide maximum lubrication and cooling. Castor oil, unlike other lubricants, will not vaporize when the motor is hot. Nitro content of more than 5% is only recommended for cold temperature, or high altitudes, where starting the motor might be a problem.

WARNING:

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

GLOW PLUGS:

This series motors all use the long thread glow plug. We recommend our RC Long because it gives a more reliable idle.

E-Z CARB INSTRUCTIONS - TO START YOUR MOTOR:

Mount your motor securely on a mount that does not put a strain on the mounting lug. #4-40 screws are the size to use. The fuel supply should be so positioned that the fuel level is no more than 1/4" below the fuel nipple. The fuel line should not be higher than the fuel level at any point. Use Fox medium size fuel line.

All Fox E-Z carburetors are pre-set from the factory.

For easy starting, you may need to fine tune your engine to your own specifications.

To set the high speed needle, screw needle in to bottom (do not over tighten). Then screw needle out three turns for starting point.

To set idle air adjustment screw, screw it in until point of screw is midway of air inlet hole. To fine adjust idle, turn screw in to richen and out to lean.

BREAK IN:

Your Fox Eagle 4 has been test run at full power and should fly your airplane with no problem. The idle, however, will become more reliable as the motor accumulates running time. When you install the muffler, it is important that both screws be tightened tight. A bit of loctite on the threads isn't a bad idea either.

Gaskets squeeze down with heating and cooling. For this reason it is important to tighten the head screws, cylinder base screws, rear cover screws and carburetor mounting screws tight after a half hour of running time. We recommend you use a proto #9684 screwdriver for the cylinder base screws and a proto #9682 screwdriver for the other screws. Most cheap imported screwdrivers fit the recess so poorly that a stripped recess is often the result.

WARNING:

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

ABOUT NOISE:

Don't aggravate your neighbors if you want to continue to enjoy your hobby. The muffler we supply reduces the sound level to an acceptable level for most rural flying fields. For flying in congested areas, we strongly urge you to reduce both the prop noise and the exhaust noise with a Fox Quiet Muffler.

WHEN THINGS DON'T GO SO WELL:

Motor Won't Start

- Sub-Standard Fuel
- Bad Plug
- Fuel Tank Empty
- Fuel Line Collapsed, Leaky, or Off
- Weak or Dead Battery

Motor Won't Keep Running with Glow Plug Heater Removed

- Insufficient Nitro for Weather
- Bad Plug - Or Plug Carboned up by Inferior Fuel
- Too Rich a Setting
- Water in Fuel

Motor Goes Lean and Quits after Couple Minutes Running

- Hole in Flopper Tube in Tank
- Too Lean a Carburetor Setting

Glow Plug Burns Out Every Flight

- Over Voltage - Should Glow Orange and Not White
- Excessive Vibration - Loose Motor Mount or Unbalanced Spinner, or Plastic Propeller Flexing
- Crumpled Glow Plug Element - By Cranking with a Flood in Case

NOTE:

More Glow plugs are burned out from resistor type power panels than any other cause. An under capacity rheostat adjusted to 1.1 volts when it is hot can easily pass 1.6 or 1.7 volts when it is first connected. This of course will blow a plug in a few seconds.

IN CASE OF A CRASH, DO NOT TURN THE PROP OVER YET!

First - Remove from rest of model

Second - Wash under hot water faucet

Third - Remove plug and rear cover and wash in stoddard solvent.

Fourth - Now check and if it turns over freely, it is probably not hurt.

OTHERWISE, PROCEED TO DISASSEMBLE:

Dis-assembly of the Eagle 4 is obvious and straightforward except that the thrust washer must be removed before removing the crank. This is best accomplished by wrapping the thrust washer with several turns of masking tape. Then hold the thrust washer with pliers around the tape and rap the end of the crank with a wood block or fibre mallet. The crank and case should fall free. Next hold the case in one hand and again rap the end of the crankshaft with a piece of wood or fibre mallet. This should strip the taperlock off the crank. Inspect all parts - discard any that appear damaged or worn. New parts can be obtained directly from the factory by calling (501) 646-1656 during business hours. When re-assembling, use care to get the oil hole in the rod facing the prop. When re-assembling the crank in the case it is imperative that the taperlock is pushed hard against the shoulder on the crank. An easy way to do this is to push the taperlock as far as you can by hand, then put the front prop washer on backwards, then a prop, then the nut. Tightening the nut will bottom the taper lock. If repairs are more than you want to handle and you desire us to rebuild it for you, mail directly to us. We will dis-assemble the motor; replace all necessary parts, test run and return the motor to you, charges collect. We also accept Visa and Mastercard. It has not proven practical to make any sort of estimates. We will assure you, however, that our charges will never be more than 50 percent of the factory list price of a new motor.

| MAY 1, 1994 PARTS FOR FOX MOTORS | FOX EAGLE 4 RING 16600 & 26600 | FOX EAGLE 4 ABC 26700 | FOX EAGLE 4 ABC FOR PIPE 26800 | FOX 74 RING 17400 & 27400 | FOX 74 ABC 27500 |
|---|---|--------------------------------------|---|--|--------------------------------------|
| CRANKCASE for R.C. MOTORS | 26601 30.00 | 26601 30.00 | 26601 30.00 | 26601 30.00 | 26601 30.00 |
| CYLINDER CASTINGS | 26525 28.00 | 26525 28.00 | 26525 28.00 | 27425 32.00 | 27425 32.00 |
| CYLINDER HEAD (OR CLAMP) | 26202 15.00 | 26202 15.00 | 26202 15.00 | 26202 15.00 | 26202 15.00< |
| CYLINDER HEAD BUTTON | 26643 12.00 | 26643 12.00 | 26643 12.00 | 27443 12.00 | 27443A 12.00 |
| CYLINDER LINER | 26503 26.00 | 26005 B MATCHED ASSY. 75.00 | 26005 P MATCHED ASSY. 85.00 | 27403 28.00 | 27405 B MATCHED ASSY. 85.00 |
| PISTON | 26504 16.00 | | | 27404 18.00 | |
| WRIST PIN | 26606 6.00 | | | 27406 6.00 | |
| WRIST PIN KEEPERS (PK. 3) | 26040 2.00 | | | 26040 2.00 | |
| CONNECTING ROD | 26507 20.00 | | | 26507 20.00 | |
| PISTON RING | 25018 5.00 | - | - | 27418 5.00 | - |
| CRANKSHAFT (NORMAL) | 27408 32.00 | 27408 32.00 | 27408 32.00 | 27408 32.00 | 27408 32.00 |
| CRANKSHAFT (REVERSE) | 27428 34.00 | 27428 34.00 | 27428 34.00 | 27428 34.00 | 27428 34.00 |
| THRUST WASHER (THE ONE IN BACK OF PROP) | 26509 10.00 | 26509 10.00 | 26509 10.00 | 26509 10.00 | 26509 10.00 |
| THRUST WASHER TAPER LOCK | 26505 4.00 | 26505 4.00 | 26505 4.00 | 26505 4.00 | 26505 4.00 |
| REAR COVER | 26611 12.00 | 26611 12.00 | 26611 12.00 | 26611 12.00 | 26611 12.00 |
| PROP NUT (PKG. OF 2) | 26012 2.00 | 26012 2.00 | 26012 2.00 | 26012 2.00 | 26012 2.00 |
| PROP WASHER | 26013 3/00 | 26013 3/00 | 26013 3/00 | 26013 3/00 | 26013 3/00 |
| SCREW & GASKET SET | 26614 5.00 | 26614 5.00 | 26614 5.00 | 26614 5.00 | 26614 5.00 |
| REAR MAIN BEARING | 26642 22.00 | 26642 22.00 | 26642 22.00 | 26642 22.00 | 26642 22.00 |
| FRONT MAIN BEARING | 26043 12.00 | 26043 12.00 | 26043 12.00 | 26043 12.00 | 26043 12.00 |
| MUFFLER NORMALLY SUPPLIED | 90262 25.95 | 90262 25.95 | - | 90262 25.95 | 90262 25.95 |
| MUFFLER OPTIONAL TILT UP | 90263 25.95 | 90263 25.95 | - | 90263 25.95 | 90263 25.95 |
| QUIET MUFFLER TILT DOWN | 90362 49.95 | 90362 49.95 | - | 90362 49.95 | 90362 49.95 |
| QUIET MUFFLER TILT UP | 90363 49.95 | 90363 49.95 | - | 90363 49.95 | 90363 49.95 |

| MAY 1, 1994 PARTS FOR FOX MOTORS | FOX EAGLE 4 RING 16600 & 26600 | FOX EAGLE 4 ABC 26700 | FOX EAGLE 4 ABC FOR PIPE 26800 | FOX 74 RING 17400 & 27400 | FOX 74 ABC 27500 |
|--|---|--------------------------------------|---|--|-----------------------------|
| CARBURETOR RC COMPLETE | 27050B E-Z 35.00 | 27050B E-Z 35.00 | 27050B E-Z 35.00 | 27050B E-Z 35.00 | 27050B E-Z 35.00 |
| THROTTLE BARREL & CASTING MATCHED ASSEMBLY ONLY | 27059B 22.00 | 27059B 22.00 | 27059B 22.00 | 27059B 22.00 | 27059B 22.00 |
| IDLE STOP SCREW & SPRING OR IDLE AIR ADJUSTMENT SCREW | 23662 3.00 | 23662 3.00 | 23662 3.00 | 23662 3.00 | 23662 3.00 |
| HIGH SPEED NEEDLE | 27064 2.50 | 27064 2.50 | 27064 2.50 | 27064 2.50 | 27064 2.50 |
| SERVO ATTACHING SCREW WITH LOCK WASHER | 27065 2.50 | 27065 2.50 | 27065 2.50 | 27065 2.50 | 27065 2.50 |
| SERVO ARM | 24066 3.00 | 24066 3.00 | 24066 3.00 | 24066 3.00 | 24066 3.00 |
| FRICITION CLIP FOR NEEDLES (2) | 24067 3.00 | 24067 3.00 | 24067 3.00 | 24067 3.00 | 24067 3.00 |
| #6-40 KNURLED NUT | 27070 2.50 | 27070 2.50 | 27070 2.50 | 27070 2.50 | 27070 2.50 |
| CARBURETOR JET WITH FUEL NIPPLE INSTALLED | 27071 16.00 | 27071 16.00 | 27071 16.00 | 27071 16.00 | 27071 16.00 |
| CAM SCREW | 24072 3.00 | 24072 3.00 | 24072 3.00 | 24072 3.00 | 24072 3.00 |
| FUEL NIPPLE | 90503 3.00 | 90503 3.00 | 90503 3.00 | 90503 3.00 | 90503 3.00 |
| JET MOUNTING SCREWS (2) | 27074 2.50 | 27074 2.50 | 27074 2.50 | 27074 2.50 | 27074 2.50 |
| MOUNTING SCREWS & GASKET | 24075 2.50 | 24075 2.50 | 24075 2.50 | 24075 2.50 | 24075 2.50 |

**GOOD LUCK, AND ENJOY YOUR FOX MOTOR -
IT IS ONE OF THE FINEST BUILT ANYWHERE.**