

OWNER'S MANUAL

FOX 60 FALCON & 60RC FALCON

WARNING

The Fox Falcon 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.

SUITABLE MODELS

The Fox Falcon 60RC was specifically designed and built to power radio controlled models weighing from 4 to 10 pounds and having a wingspan of 48" to 84". 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. The Fox Falcon 60 Control Line motor is intended for large control line models of 48" to 70" span and 21/2 to 5 pounds weight. It is also ideal for large free flight models.

MOUNTING

Your Fox Falcon should be mounted as rigidly as possible. If your airplane has beam mounts be sure that the beams are securely bonded to the firewall. If your airplane uses a firewall mount, we recommend you use the 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.

FUEL TO USE

The Fox Falcon was designed to operate on Missile Mist, which is a 25% Nitro fuel. With this fuel your Falcon has a broad needle valve tolerance, broad weather tolerance, and produces approximately 1-1/8 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.

PROPELLERS TO USE

The Fox Falcon runs quite well on a wide variety of propellers, however, nearly everyone eventually winds up using an 11" diameter, 7" pitch propeller. Only Maple, Cherry or other hardwood propellers should be used. Tighten your propeller nut very tight. Do not use plastic propellers on your Falcon unless you wish to lose a hand.

GLOW PLUGS

The Fox Falcon 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. The glow plug stays warm better with the idle bar in a vertical position. You may want to mark your plug and play with gaskets to get the idle bar in this position.

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 (large) and a low speed (small) mixture 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 throttle closed and back off 1/4 turn. Adjust high speed for maximum RPM with throttle wide open and 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.

DISASSEMBLY PROCEDURE

The carburetor, cylinder head and rear cover are removed in the obvious manner. To remove the piston, rod or crankshaft, the cylinder must first be lifted off, then the snap ring and wrist pin must be removed. After the piston and wrist pin are removed, the piston can be lifted out and the rod removed.

PERIODIC INSPECTIONS

The Fox Falcon uses a fibre gasket under the cylinder flange, and also the head gasket is fibre. These settle for the first hours of use, and the head screws should be tightened every couple of flights.

FACTORY SERVICE

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

FOX FALCON 60 AND FALCON 60RC PARTS LIST

NAME	PART NO.	PRICE
Crankcase (Falcon)	15901	9.00
Crankcase (RC)	25901	9.00
Cylinder Head	15902	4.50
Cylinder Liner	15903	6.00
Piston	15904	5.00
Connecting Rod	15907	4.00
Wrist Pin	15906	1.00
W.P. Snap Ring (2)	15940	.25 pk
Piston Rings (2 req'd)	26018	1.25 ea
Crankshaft	15908	9.00
Thrust Washer	13509	.75
Rear Cover	15911	3.00
Prop Nut	13512	.25
Prop Washer	13513	.40
Screw and Gasket Set	15914	1.00
Carburetor Assembly (RC)	25950	12.00
Needle Valve Assy (Falcon)	14010	2.00
Mixture Needle (Falcon)	14016	.90
Carburetor Venturi (Small)	15931	1.50
Carburetor Venturi (Large)	15932	1.50



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