

FOX COMBAT SPECIAL MARK VI
OWNERS MANUAL - JAN 1987

WARNING

The Fox Mark VI Combat Special is designed specifically for flying fast and slow combat models. This is a specialized form of modeling and should not be undertaken by someone that has not had considerable experience flying control line models, and never by a juvenile without adult supervision.

GENERAL

The Mark VI Combat Special has an efficient operating range of 18,000 to 24,000 RPM. We suggest that you start flying with a propeller having about 8 1/2" diameter and about a 6" pitch. We urge you to use a hardwood propeller as plastic propellers are prone to fail, and should you accidentally get your hand in a moving plastic propeller, you will be more severely hurt than you would be with a wood propeller.

WARNING

Always keep clear of the propeller as it is possible for a piece to come off and put your eye out.

RECOMMENDED GLOW PLUG

We recommend the Fox standard long glow plug.

RECOMMENDED FUELS

The Fox Mark VI Combat Special has been set up to operate best on a fuel containing from 40% to 50% nitro. It is important that the fuel contain at least 10% castor oil, as synthetics will vaporize and cannot lubricate the upper cylinder. We realize that some synthetic is necessary in high-nitro mixes, but get at least 10% or 12% castor oil in your fuel, and add synthetic to bring the total to 20%

WARNING

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

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. Never, Never fly your model anywhere near power lines. Death by electrocution is possible through arcing, even though your model isn't within 50 feet of a high voltage line.

BREAK IN

Your motor is delivered with the piston fit rather tightly. Bench break in is not necessary, but you should understand that a few flights are necessary for the engine to get to its best. The composite piston-chrome liner in this motor wears very slowly, and if after a dozen or so flights your motor is still tight, you may wish to lap the piston a bit. A small bit of Garnet is included for this purpose. To use, make a paste with oil and work the piston in from the bottom of the cylinder with the piston inverted. Be cautious - we sell lots of pistons to people who get over-enthusiastic on this lapping business.

GENERAL INFORMATION

The Fox Combat Special crank has been ported so that the port closes at 58 degrees past top dead center. This is about the optimum porting for slow combat use. Depending on how small a propeller you intend to use, and how hard you intend to run it, the closing side of the port can be ground to delay the timing. It appears that the 58 degrees as delivered is optimum for about 18,000 RPM. The optimum for 25,000 RPM is about 64 degrees.

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.

DISASSEMBLY PROCEDURE

The Mark VI Combat Special is disassembled in the same manner that the previous models were. The only significant difference is that the roll pin locking the wrist pin is not easily removed and not easily replaced. We have found it necessary to make a holding fixture to hold the piston and use an arbor press with a piloted guide in order to insert the roll pin, so we recommend that you do not remove this unless absolutely necessary. The bearings are fitted noticeably tighter than the earlier series. To remove the rear main, it will probably be necessary to warm the case and place a block of wood on the rear cover and rap quite vigorously.

IN CASE REPAIRS ARE NEEDED

The design of the Fox Combat Special Mark VI is simple, and you should be able to make most repairs yourself. Oversize pistons are available so you can order a replacement piston without having to replace the liner. These motors are custom made and sold direct only. Parts can be obtained only from the factory, and no discounts can be given. Parts can be obtained by calling 501-646-1656.

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