

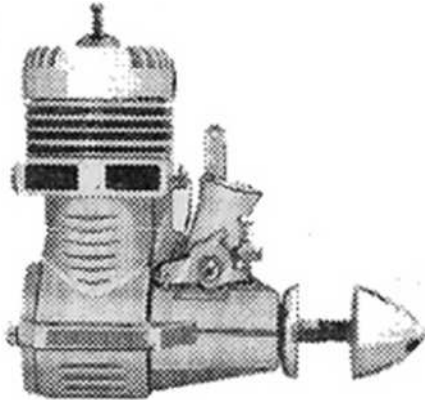
Fox 15 R/C

Revised May 1970

FOX 15R/C OWNERS MANUAL

FOX MANUFACTURING CO.

FORT SMITH, ARKANSAS



Bore: .590
Stroke: .540
Displacement: .15
Weight: 4 ½ oz

ATTENTION EXPERIENCED MODELERS - Most of our problems are with experienced modelers who use fuel plugs, propellers and handling techniques that have worked well for them previously, but which may not necessarily suit the Fox 15RC. Please follow our recommendations first.

RECOMMENDED FUEL, PLUGS AND PROPELLERS - The Fox 15RC runs best on Missile Mist Fuel. Lower nitro fuels do not keep the plug warm at high speeds, which in turn encourages an overlean setting. Use an 8" diameter 4" pitch propeller for all ordinary size airplanes. An oversize propeller adversely affects carburetion. The Fox Shieldmaster RC Plug with short threads works best.

BREAK IN - The amount of running necessary to properly break in a 15RC varies from motor to motor. If the motor will not hold a maximum power setting without sagging after 10 or 15 minutes running we recommend that you help the process along by dabbing very small quantities of lustrax down the intake while the motor is running at the maximum power that it will hold. Lustrax is an ultra fine polishing compound and the particles will float in a normal oil film thickness. They remove material only on the protrusions that form surface roughness.

STARTING THE MOTOR - Your Fox 15RC is purposely fit very tight in order to give a long service life. This tightness may cause some difficulty the first few starts. However, this can be minimized by following this procedure:

1. Mount the engine firmly. Preferably in some sort of a test stand.
2. Block the throttle control in the full open position.
3. Mount the fuel tank so that the fuel is level with the carburetor body.
4. Prime the motor with approximately 5 drops of fuel thru the exhaust.
5. Connect the glow plug and start cranking sharply. The motor should give a short burst and run dry. Open the needle valve return and repeat. Keep repeating until the motor keeps running. Once you get the motor running try to keep it running for 5 or 10 minutes.

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CARBURETOR ADJUSTMENTS - A Fox 15RC carburetor meters directly into the manifold assuring maximum suction. There are two jets, a low speed which feeds in all throttle positions and a high speed jet which starts feeding at about one quarter throttle position and gradually opens with the butterfly valve. Once the motor is fairly well broken in you can start working to improve the low speed adjustments. The high speed jet is adjusted by the needle valve on the exhaust side. The low speed mixture is adjusted by screwing the brass hose fitting on the opposite side in or out. It is locked with a lock nut which doubles for a left hand actuating arm lock. The best low speed adjustment is obtained with the mixture sufficiently lean so that the engine will die when the fuel tank is lowered 3".

INSTALLATION INFORMATION - Your Fox 15RC should be mounted on rugged, rigid wood mounts. A flimsy mount will accentuate all sorts of vibration problems and fuel flow problems.

The fuel bottle on the Fox 15RC need not be mounted as critically as in other engines. In fact starting is easier if the bottle is sufficiently high so that the fuel lies in the fuel line.

PERIODIC ADJUSTMENTS - After the first few runs we recommend you complete this procedure:

1. Tighten the head screws, rear cover screws and the motor mount screws.

Check your low speed carburetor mixture and speed adjustments by holding the airplane nose up and nose down with the motor running at low speed. If it dies with the motor nose up richen the low speed mixture (turn brass jet out slightly) if it dies nose down lean the low speed mixture slightly.

CLEANING THE MOTOR - Everyone likes a spic and span motor. This can best be accomplished by brushing the motor and motor compartment with stoddard solvent after every flying session to remove all grime, goo and dirt. With a detergent fuel like Missile Mist there is no need to clean the interior of the motor except in the event it gets a snootfull of dirt in a crack up. In this case we recommend that you remove the motor from the airplane and remove the rear cover and glow plug only. The motor can then be immersed in a container of stoddard solvent, swished around and rotated, which should wash out all the dirt. If the motor does not turn freely it is reasonable to assume some sort of damage has occurred.

IN CASE REPAIRS ARE NEEDED - The design of the Fox 15RC is straight-forward and you can make most repairs your self. Dis-assemble the motor by removing the rear cover, cylinder head and lifting out the cylinder liner before attempting to remove the connecting rod from the crank-pin. To remove the carburetor body; Remove the high speed needle valve, spring, tut and actuating arm. The barrel then will slip out toward the exhaust side. You may have trouble obtaining the parts you need as many Dealers do not stock the complete line of parts. Prompt service can be had on parts by ordering directly from the factory. List the part both by name and number and enclose the proper amount of money. In the event you are unable to effect satisfactory repairs yourself, we will undertake repairing your motor, only with the understanding that no estimates can be given, no discounts can be given to Dealers and that we are authorized to make whatever repairs we feel necessary to put the motor in first class operating condition. We will as sure you that the repairs for a model Fox 15RC will not exceed \$8.00 plus postage and COD fees.

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PARTS LIST

| | | |
|---------------------|--------|------|
| Crankcase | 1501RC | 6.00 |
| Cylinder Head | 1502X | 2.00 |
| Cylinder & Piston | 1504X | 4.00 |
| Wrist pin | 1506 | .50 |
| Connecting rod | 1507 | 1.00 |
| Crankshaft | 1508 | 3.50 |
| Thrust washer | 1509 | .50 |
| Rear Cover | 1511 | 1.00 |
| Prop Nut | 1512 | .25 |
| Prop Washer | 1513 | .25 |
| Screw & Gasket Set | 1514X | .40 |
| Head Gasket | 1515 | .25 |
| Needle Valve | 716 | .50 |
| Needle Valve Spring | 717 | .25 |
| Throttle Body | 1519C | 4.00 |
| Exhaust Valve | 1520C | 2.00 |
| Low Speed Jet | 1521 | .75 |
| Wire Link | 1524 | .25 |

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