

Fox 15 R/C

Fox 15 R/C SPECIFICATIONS

Type: Air-cooled, single-cylinder, side-exhaust two-stroke-cycle, with crankshaft rotary valve and crossflow scavenging.

Bore: 0.590 in. (14.99 mm)

Stroke: 0.540 in. (13.72 mm)

Displacement: 0.1476 cu in. (2.419cc)

Nominal Compression Ratio (full stroke): 7.5:1

Speed Control: Fox 2 needle automatic mixture control carburetor.

Checked Weights: 125 grams (4.41 oz) bare, 153.5 grams (5.41 oz) with muffler.

Mounting Dimensions:

Crankcase width: 24 mm

Length from prop driver face: 55 mm

Height above CL (less glow plug): 51.2 mm

Bolt hole spacing: 31.75x12.7 mm (1¼ x ½ in.)

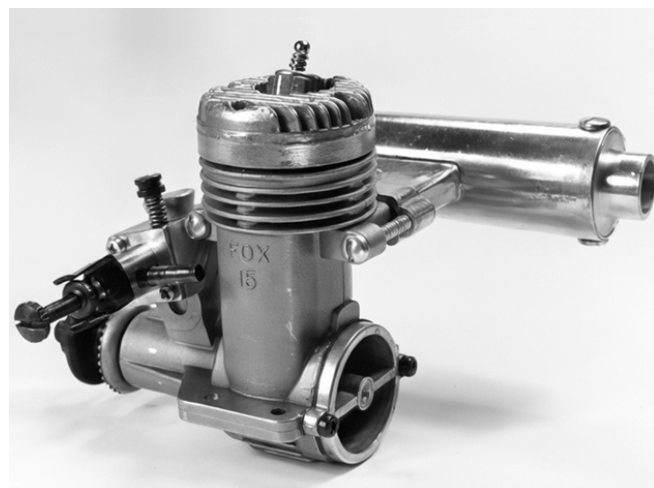
Manufacturer's Claimed Power Output: Not stated. (See text.)

Manufacturer: Fox Manufacturing Company, 5305 Towson Ave., Fort Smith, AR 72901.

The old-established Fox company currently offers a choice of two engines in the .15 cu. in. class. The more advanced of the two, the Schnuerle-scavenged 15BB, was dealt with in the December 1985 M.A.N.

The other one, described here, is a much simpler engine, but is one that performs a vitally important function. The Fox 15 is by far the lowest-priced .15 size engine on the U.S. market and, these days, when we are quite used to seeing new engines that cost hundreds of dollars, it is as well to remember that young beginners still need low cost motors. The Fox 15 can be bought for little more than half the price of most other engines of the same displacement.

Why is it cheaper? Like many Fox engines, the 15 does not win any medals for a fancy outside appearance, but there is no lack of quality where it really matters. The fact that the Fox 15 can be so competitively priced, comes we would guess, from the fact that its major tooling costs must have been written off ages ago. Although it seems hard to believe, this engine had its origins in the Fox 15X of 1962.



Current Fox 15 R/C is the latest of a long line of Fox low priced engines, here equipped with appropriate Fox muffler.

Faithful readers of the M.A.N. "Engine Review" columns who still happen to have their 1962 issues handy (!) can check this by referring to the July and December issues of that year for test reports on, respectively, the free-flight/ control line model 15X and the throttle equipped 15 R/C.

There have, of course, been periodic updates (an improved 15 R/C was tested for the November 1970 M.A.N.) particularly in regard to the speed control system. Early models had pivoted exhaust baffles linked to the carburetor, until these were made obsolete by the adoption of mufflers. And to facilitate muffler installation, the engine's body casting has twice been modified with the addition of attachment lugs.



Latest Fox 15 R/C is fitted with new two needle carburetor providing automatic mixture control.

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Fox 15 uses traditional crossflow porting with lapped cast-iron piston running in steel cylinder sleeve.

The latest change has been the switch to a twin needle type automatic mixture control carburetor like that fitted to the more expensive 15BB R/C model.

Looking at the engine as a whole, it is, as the photos show, a simple and straight-forward design. A single casting embraces the crankcase, cylinder jacket and front housing and this uses an alloy having good bearing properties thereby eliminating the need for a bronze bushing for the 3/8 in. diameter crankshaft journal. The drop-in leaded-steel cylinder sleeve is generously ported and the lapped Meehanite piston, which has a straight baffle on a flat head, is coupled to the connecting-rod with a pressed-in wrist-pin. The cylinder-head forms a wedge shaped combustion chamber and is fitted with a Fox short-reach idle-bar glow plug.

In past M.A.N. tests, Fox 15s have been run on various fuels and with different compression-ratios. Unlike some of the more recent large Fox engines, which have been set up to run on straight methanol/castor-oil fuels, the 15s like a medium nitro fuel. They have performed well on Fox Missile-Mist fuel and the last 15 R/C to be tested produced 0.29 bhp at just under 15,000 rpm, when running on Missile-Mist and a 0.010 in. head gasket, as fitted to the current model. The recommended prop size for general use is an 8 x 4.



Main casting with carburetor disassembled. Muffler is an optional extra and contains a slotted outlet tube to reduce noise.

Finally, a word about the Fox's big brother, the Eagle-III. If, after reading Dan Santich's favorable comments in the April M.A.N., you still have any doubts about how well one of these can perform, just fish out your old copies of M.A.N., and check our full test report on the Eagle III in the October 1981 issue. Then newly on the market, a much improved redesign of the Eagle II, the Eagle III more than held its own, power wise, with contemporary imports, especially for the way it handled big props.



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