CESSNA 177 CARDINAL (IF 165 KIT)

90% Ready-To-Fly and 100% electrifying performance.

If you're looking for a high performance electric plane with low assembly time, you'll be obsessed with the Cessna 177 Cardinal. We've assembled over 90% of its components at the factory — so you can get into the air almost immediately, and enjoy high tech features like:

- Powerful RC-260S motor with 4300 RPM capability
- A unique automatic cut-off system that senses when the battery weakens and shuts off the motor, saving necessary power for the servos. This also disengages the prop, allowing it to freewheel during the glide-in stage
- 90% factory-installed for simple, lightning-fast assembly.
 4ll tools included
- Strong 4.8 volt battery and 15 minute quick-charger also included
- No receiver battery required...reduces weight, improves performance
- Also available with battery and motor only charger not included. (IF 160)



MRC takes Radio-Control to the seas

Questions and answers for the experts. Here are some of the most asked questions about MRC radio-controlled boats. MRC boats boast asked questions are some of the most asked questions about MRC radio-controlled boats.

and high performance enjoyment.

Q: What do I need to build an MRC radio-controlled boat?

A: Most people need only a hobby knife, scissors, quick drying glue, screwdrivers, an awl or drill and pliers...tools you probably have already. MRC does include some special tools plus helpful hints so that even beginners can build any kit successfully.

Q: What special equipment do I have to buy to get these boats running?

A: The minimum you'll need is a 2-channel R/C system plus a battery and slow charger package. If you intend to use the boat frequently, a quick charger or another battery or both are a worthwhile investment.

Q: Is any painting necessary for these kits?

A: No, painting is not necessary. But by applying your own design with enamel paints — such as painting your boat's lower hull in a different hue — you can make the boat much more distinctive.

Q: Where can I use my MRC boat?

 \mathbf{A} : Any weed-free pond, lake or stream is ideal.

Q: Can you recommend any other fun activities for these high performance craft?

A: You bet! Try making your boat into a water ski tow boat and tow a doll on water skis...or using it to retrieve lost fishing lures. Best yet, challenge your friends to a race (after they see your boat it won't be long until they get one). With MRC's exciting radio-controlled boats there's a sea of possibilities for fun and excitement. Dive into the fun today.

EXCALIBUR 40 HAWK Deep Vee design that's easy to build, and exciting to run.

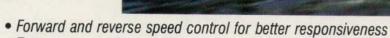
Totally realistic in detail and performance.

The Excalibur is MRC's almost-ready-to-float power boat that's a thrill to watch and a thrill to control. With its deep vee design, Mabuchi RS-540S motor and choice of not one but two props, this ship is one of the best reasons yet for getting into R/C boating.

The MRC Excalibur 40 Hawk...the hottest thing on the waterfront.

Performance features of the Excalibur:

- Superbly detailed hull made of rugged ABS plastic
- . Chrome fittings and precise decals for authenticity
- · RS-540S motor for fast performance, extended runs
- 3:1 gear box for better performance



- · Two props: one for speed, one for extended cruising
- · All running hardware included in kit except radio and battery



STOREBRO ROYAL CRUISER A solid performer that doesn't skimp on the details.

Sail away with this beautifully detailed replica of the Swedish Storebro Royal Cruiser 40 Baltic. All the details are there...from the custom deck fittings to the chrome wipers and horns. The performance is there too, because it comes with a powerful RS-380 motor and 3:1 gear reduction unit that drives a hefty 50mm × 50mm prop.

The 40 Baltic. It's an almost-ready-to-float kit that not only looks great...but performs like the real thing.

Cruise through these features:

- RS-380 motor for longer, smoother cruises
- 50mm x 50mm prop that churns the water
- 3:1 gear reduction for accurate performance
- One piece hull for good looks, rugged performance
- Chrome fittings that are realistic down to the last detail, as well as authentic-looking decals

WELLCRAFT PORTOFINO DEEP VEE

High performance and high class looks.

Take it from package to pond in minutes.

When the Portofino hits the pond a hush falls over the rowd. From the chrome-like handrails to the meticulously rafted cockpit fittings, its striking ornamentation is eminiscent of a finely detailed yacht. But a sluggish ruiser she's not — just fire up that RS 540 racing motor and you'll feel the fury within. Leave lesser boats in your take as the Portofino's deep vee racing hull slips and lices through the pack. You'll be amazed at the silky mooth handling, lightning speed and fast assembly of his awesome Ready-To-Float racer.

eatures include:

Powerful RS 540 motor Gear reduction system for extended running time ABS hull and superstructure for super longevity



(Photo shown here is full size Portofino provided courtesy of

MRC-2033 Engines

A reputation built on power, reliability and service.

MRC-Rossi engines are backed by MRC's years of experience in the model airplane field, their outstanding customer service and Rossi's longstanding reputation for power designs and manufacturing perfection. First we introduced the popular R.40 engine, probably the most consistently powerful Schnuerle-ported side exhaust engine ever made in its size. Now our new "3+2" engines are on their way to establishing new power records of their own. It's all part of our continuing efforts to make MRC-Rossi the powerful powerplants for all applications, including planes, boats, cars and copters.

The following are some of the most frequently asked questions and answers about the MRC-Rossi engines.

Q: When I buy an MRC-Rossi engine, what do I get with it?

A: Each engine comes with one glow plug (or a glow head as in the case of the R.15's), an instruction manual with an exploded parts diagram, and an extra head gasket/shim in most cases.

Q: What is the extra head shim used for?

A: Rossi engines are built so that they can get the most power with 5% or less nitromethane. Here in the U.S.A. where nitromethane is more plentiful, MRC-Rossi suggests adding a head shim to the engine. By the way, if you haven't added a head shim to your Rossi engine and it suffers from vibration problems, try adding the head shim; in most cases excessive compression is the cause of such vibration.



Who says power has to be accessible only to a lucky few? Thousands of modelers have found that the Rossi .40 has the guts to slug it out against other comparable side exhaust Schneurle ported .40's. Glow plug and muffler included.



High RPM's plus reliability are the forte of this .21 marine engine. The proper size flywheel plus a glow plug to get you started come with this new "3+2" technology engine.



Winning car races can be as easy as 1-2-3 with this ABC .21 engine. A slide carburetor with an upwardsangled needle valve allows quick tuning and the redesigned pistoncylinder-crankcase gets your car up to speed faster than ever before.



Few front intake side exahust ABC .60's have consistently been a perennial favorite of modelers as this Rossi .60. Add a tuned pipe and adapter, and you are ready for the most demanding aerobatics.



Helicopter flyers can keep their cool longer with this ABC-type .60 engine with heat sink head. An output of 2.2 HP ensures good power at any RPM.



By using a rear valve intake, rear exhaust, an ABC piston and cylinder, plus the 3+2 style porting, this Rossi .61 adds a new definition to the word "excitement". The 3+2 porting adds an extra percentage of power especially in those tough vertical maneuvers where lesser engines will lean out and starve.



Ducted fan jet modelers, take heart. This latest version of Rossi's famous .65 fan jet engine brings new horsepower levels plus better efficiency to your jet stable.



We know there's no replacement for power and reliability combined. This .90 marine engine has what it takes. It features a dual crankshaft, a roller bearing on the lower stem of the connecting rod, plus a Schneurle ported ABC piston and cylinder to bring your boat home in First Place.



The .91 cubic inch marine racing class will get a new threat this year — the Rossi .90 rear valve 3+2 engine for boats. 3+2 porting delivers more power with less throttle variation and the ABC piston-cylinder set holds up under the stress of racing.

MRC <u>specifications</u> and applications.

DESCRIPTION	SIZE		HORSEPOWER	RPM LIMIT	WEIGHT	
	CC/Cu. In				GRAMS/OUNCES	
R21 Front Intake RC ABC Buggy	3.5	.21	1.85	35,000	310	10.93
R21 Front Intake RC ABC Air-Cooled Head RE for Cars	3.5	.21	1.60	29,000	240	8.46
R60 Front Intake RC Ringed Piston	10.	.61	2.1	16,000	540	19.00
R90 Front Intake RC Ringed Piston RE	15.00	.90	4.	16,000	940	33.15
R91 Front Intake RC ABC Cylinder	15.00	.90	3.9	15,500	940	33.15
R40 Front Intake RC ABC With Muffler	6.5	.40	1.95	17,000	425	14.99
R90 Front Intake RC ABC RE	15	.90	4.	16,000	940	33.15
R21 Front Intake RC ABC RE for Airplanes	3.5	.21	1.5	21,000	210	7.4
R21 Front Intake ABC Speed and Free I Light	3.5	.21	1.98	30,000	310	10.93
R61 Front Intake ABC for Airplanes	10	.61	2.68	17,000	565	19.92
R65 RV RC ABC Marine	10.85	.65	4.10	24,500	950	33.50
R65 RV ABC Marine Tined Pipe Cylinder RE with Flywheel	10.83	.65	4.	24,500	850	29.98
R60 Front Intake RC ABC	10	.61	2.2	17,000	540	19
R90 RV RC ABC RE	15	.90	4.2	16,500	980	34.56
R21 Front Intake ABC Marine Tuned Pipe Cylinder	3.5	.21	1.98	30,000	315	11.11
	R21 Front Intake RC ABC Buggy R21 Front Intake RC ABC Air-Cooled Head RE for Cars R60 Front Intake RC Ringed Piston R90 Front Intake RC Ringed Piston RE R91 Front Intake RC ABC Cylinder R40 Front Intake RC ABC With Muffler R90 Front Intake RC ABC RE R21 Front Intake RC ABC RE R21 Front Intake RC ABC RE for Airplanes R21 Front Intake ABC Speed and Free I Light R61 Front Intake ABC for Airplanes R65 RV RC ABC Marine R65 RV ABC Marine Tined Pipe Cylinder RE with Flywheel R60 Front Intake RC ABC R90 RV RC ABC RE	R21 Front Intake RC ABC Buggy R21 Front Intake RC ABC Air-Cooled Head RE for Cars R60 Front Intake RC Ringed Piston R90 Front Intake RC Ringed Piston RE R91 Front Intake RC ABC Cylinder R40 Front Intake RC ABC With Muffler R90 Front Intake RC ABC With Muffler R91 Front Intake RC ABC RE R92 Front Intake RC ABC RE R93 Front Intake RC ABC RE R94 Front Intake RC ABC RE for Airplanes R95 RV RC ABC RE for Airplanes R95 RV RC ABC Marine R95 RV RC ABC Marine R96 RV ABC Marine Tined Pipe Cylinder RE with Flywheel R99 RV RC ABC RE R90 RV RC ABC RE R90 RV RC ABC RE R90 RV RC ABC RE	R21 Front Intake RC ABC Buggy R21 Front Intake RC ABC Air-Cooled Head RE for Cars R60 Front Intake RC Ringed Piston R90 Front Intake RC Ringed Piston RE R91 Front Intake RC Ringed Piston RE R40 Front Intake RC ABC Cylinder R40 Front Intake RC ABC With Muffler R90 Front Intake RC ABC With Muffler R90 Front Intake RC ABC RE R21 Front Intake RC ABC RE R21 Front Intake RC ABC RE for Airplanes R21 Front Intake ABC Speed and Free I Light R65 RV RC ABC Marine R65 RV ABC Marine R65 RV ABC Marine Tined Pipe Cylinder RE with Flywheel R60 Front Intake RC ABC R60 RV RC ABC RE	R21 Front Intake RC ABC Buggy 3.5 .21 1.85 R21 Front Intake RC ABC Air-Cooled Head RE for Cars 3.5 .21 1.60 R60 Front Intake RC Ringed Piston 10. .61 2.1 R90 Front Intake RC Ringed Piston RE 15.00 .90 4. R91 Front Intake RC ABC Cylinder 15.00 .90 3.9 R40 Front Intake RC ABC With Muffler 6.5 .40 1.95 R90 Front Intake RC ABC RE 15 .90 4. R21 Front Intake RC ABC RE 15 .90 4. R21 Front Intake ABC Speed and Free I Light 3.5 .21 1.5 R21 Front Intake ABC Speed and Free I Light 3.5 .21 1.98 R61 Front Intake ABC for Airplanes 10 .61 2.68 R65 RV RC ABC Marine 10.85 .65 4.10 R65 RV ABC Marine Tined Pipe Cylinder RE with Flywheel 10.83 .65 4. R60 Front Intake RC ABC RE 15 .90 4.2	CC/Cu. In R21 Front Intake RC ABC Buggy 3.5 .21 1.85 35,000 R21 Front Intake RC ABC Air-Cooled Head RE for Cars 3.5 .21 1.60 29,000 R60 Front Intake RC Ringed Piston 10 .61 2.1 16,000 R90 Front Intake RC Ringed Piston RE 15.00 .90 4. 16,000 R91 Front Intake RC ABC Cylinder 15.00 .90 3.9 15,500 R40 Front Intake RC ABC With Muffler 6.5 .40 1.95 17,000 R90 Front Intake RC ABC RE 15 .90 4. 16,000 R21 Front Intake RC ABC RE for Airplanes 3.5 .21 1.5 21,000 R21 Front Intake ABC Speed and Free I Light 3.5 .21 1.98 30,000 R61 Front Intake ABC for Airplanes 10 .61 2.68 17,000 R65 RV RC ABC Marine 10.83 .65 4.10 24,500 R65 RV ABC Marine Tined Pipe Cylinder RE with Flywheel 10 .61 2.2 17,000 R60 Front Intake RC ABC	CC/Cu. In GRAMS. R21 Front Intake RC ABC Buggy 3.5 .21 1.85 35,000 310 R21 Front Intake RC ABC Air-Cooled Head RE for Cars 3.5 .21 1.60 29,000 240 R60 Front Intake RC Ringed Piston 10. .61 2.1 16,000 540 R90 Front Intake RC Ringed Piston RE 15.00 .90 4. 16,000 940 R91 Front Intake RC ABC Cylinder 15.00 .90 3.9 15,500 940 R40 Front Intake RC ABC With Muffler 6.5 .40 1.95 17,000 425 R90 Front Intake RC ABC RE 15 .90 4. 16,000 940 R21 Front Intake RC ABC RE for Airplanes 3.5 .21 1.5 21,000 210 R21 Front Intake ABC Speed and Free I Light 3.5 .21 1.98 30,000 310 R61 Front Intake ABC Marine 10 .61 2.68 17,000 565 R65 RV ABC Marine Tined Pipe Cylinder RE with Flywheel 10.83 .65 4.

MODEL #	DESCRIPTION	SIZE		HORSEPOWER	RPM LIMIT	WEIGHT	
		CC/Cu	. In			GRAMS/OUNCES	
14.15B	R15 Front Intake Combat RE	2.5	.15	1.15	28,000	160	5.64
14.15	R15 Front Intake Free Flight RE	2.5	.15	1.15	28,000	160	5.64
14.90	R90 RV RC Ringed Piston Marine RE with Flywheel	15	.90	5.6	21,000	1220	43.03
14.90/5	R90 RV RC ABC for Airplanes	15	.90	5.5	22,000	840	29.62
15.61/5	R61 RV ABC Speed	10	.61	3.10	25,000	590	20.81
15.90/5	R90 RV RC ABC Marine	15	.90	5.98	22,000	976	34.42
15.60	R60 Front Intake RC ABC for Helicopter with Heat Sink Head	10	.61	2.2	15,000	570	20.1
15.90	R90 RV RC ABC Tuned Pipe Cylinder Marine RE with Flywheel	15	.90	5.9	22,000	1220	43.03
15.81	R81 Front Intake RC ABC Cylinder RE	13	.80	3.3	16,500	640	22.57
17.65/5	R65 RV ABC Speed	11	.65	3.60	24,500	590	20.81
18.90	R90 RV RC ABC Double Crankshaft and Roller Bearing Marine	15	.90	5.9	21,000	1200	42.32
20.21/5	R21 Front Intake RC ABC (for S.G. Cars)	3.5	.21	1.85	40,000	310	10.93
20.65/5	R65 RV RC ABC for Duct Fan for Jets	10.85	.65	4.30	25,000	790	27.86
21.61/5	R61 RV RC ABC Tuned Pipe	10.	.61	3.10	25,000	590	20.81
23.65/5	R65 RV RC ABC Normal Cylinder	11	.65	3.60	24,500	590	20.81

MRC free flight airplanes

These free flight aircraft were engineered to spark your interest in model aviation. There's no radio needed, and the prices are designed to get you effortlessly into the sport of flying. These kits are easily assembled with utilizing the latest aerodynamic construction and materials.

MUSTANG P-51D (Kit IM002)

 Model of famous American fighter plane
 Prepainted polystyrene foam body and wings
 Attractive decals
 Direct-rubber power drive
 Comes with instructions, painting guide and display stand

THE CITABRIA (Kit IM005)

- A scale model of a famous aerobatic airplane (Citabria is airbatic spelled backwards) Polystyrene wings and body build quickly, offer scale-like appearance
- Direct-rubber power drive is easy to use by hand or with a power winder Lightweight wire landing gear Extra rubber bands and propeller provided Comes with instructions and painting guide

RYAN STA (Kit IM006)

- FABULOUS SCALE MODEL of classic airplane Can be built as a display piece or flying model Comes with rubber-driven, gear reduction prop drive for efficient flights
- Wheel pants, wheels and wire struts included for scale realism
 Self-adhesive decals
 Two different size propellers for varied flight conditions
 Step-by-step instructions and painting guide included







MRC's high performance two-channel radio

MRC knows R/C cars and boats. We also know what you need in a radio system to get the most performance and enjoyment from your hobby. So we designed a feature filled 2-channel system from our High Performance Series. Its quality features include: Transmitter with a collapsible antenna, and a carrying handle mounted on a suregrip case. The stick knobs are knurled for non-slip handling and each stick is mounted on a single axis, self-centering gimbal for smooth control. The click trims next to each stick allow for fine adjustments. The throttle stick also features a neutral position adjustment to adapt the system for gas models. The transmitter boasts an easy reading battery meter, recessed On-Off switch, and an easily accessible battery panel. A charging jack is included. There's also servo reversing, a feature to make installation in any model a breeze. Both the transmitter and compact receiver have interchangeable crystals for quick frequency changes. The servos are quick and provide powerful torque.

MRC's High Performance Series 2-Channel Radio...advanced engineering at a not so advanced price.



(Available on 27 and 75 Mhz frequencies)

America's Rockets from MRC

New technology that takes you to the outer limits of fun and excitement



MRC entered the space race and blasted rocket technology into a new dimension. Using Computer-Aided-Design (CAD) and engineering expertise, we created three series of high performance craft — Beginners Series, Expert Series and Almost-Ready-To-Fly Series — and engineered performance and safety features never before available:

- Innovative Engine Trajectory Tracking Exhaust Formula for easy, reliable tracking
- Exclusive omni-directional Launch Pad System that lets you blast-off on uneven ground or during some windy conditions
- Exclusive Power Blast Igniters with advanced pyrotechnic coating that assures reliable ignition
- Specially treated, high fiber recovery wadding for safer, more dependable operation
- Peel-and-stick decals more convenient to use and more authentic in appearance than any previously available
- Computer-Aided Designs that help rockets achieve 200-300MPH launch speeds and altitudes of up to 1800 feet
- · A complete range of high-thrust engines
- A host of high-tech accessories



The first tool kit designed for the R/C hobbyist

MRC's finely crafted, precision master tool kit is the first ever created specifically for the R/C hobbyist. It includes most of the tools you'll ever need to build, maintain and modify a radio-controlled buggy...all specially crafted to negotiate those tight squeezes and work in hard-to-reach places many other tools can't.

Some of the high quality tools include:

- Serrated, non-slip pliers with vinyl-coated handles spring loaded for unparalleled sensitivity
- · Vinyl-coated diagonal cutters with spring loaded handles
- Heat-treated stainless steel precision tweezers a full 5" long, yet thin, strong and light
- Phillips head and slot head screwdrivers with thick, easy-grip handles for extra torque
- Allen wrenches, box wrench, hand drill, awl, utility knife with 12 free replacement blades and more
- "Plus" type screwdrivers uniquely designed to fit R/C cars



MODEL RECTIFIER CORPORATION 2500 Woodbridge Avenue, Edison, NJ 08817 USA Phone: (201) 985-7800 • Telex: 844472

For maximum enjoyment and safety, be sure to read and follow assembly and operating instructions included with each product.

As a result of product improvement, designs and specifications are subject to change without notice. Prices subject to change without notice.

2/87/500M