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DUNION FORMER FURK	IGHINEE	/ ว			

Launchables™ Starter Set 9

HOW DO I START MY OWN ESTES ROCKET FLEET?

The best way to begin model rocketry is with an Estes flying model rocket Starter Set or Launch Set. You can either start with a Ready To Fly Starter Set or Launch Set, that has a fully constructed model rocket, or an E2X® Starter Set or Launch Set that requires assembly prior to launching. Both types of sets come complete with an electrical launch controller, adjustable launch pad, flight supplies and an information booklet to get you out and flying in no time. Starter Sets include engines, Launch Sets let you choose your own engines (not included). You'll need four "AA" alkaline batteries and perhaps glue, depending on which set you select.

HOW EASY AND HOW MUCH TIME DOES IT TAKE TO BUILD MY ROCKETS?

Estes model rocket kits range from ready to fly in just minutes to those that provide many enjoyable hours of building fun. Estes kits are classified into five categories.

READY TO FLY (RTF): No paint, glue or modeling skills required. Rocket comes assembled and is ready for liftoff in just minutes

E2X® ROCKET KITS: No paint or special tools needed. E2X® kits contain parts that are colored and easy to assemble. Simply glue the parts together as per the instructions, apply the self-adhesive decals, attach the recovery system and you are ready to blast off! Assembly takes as little as 1 hour.

SKILL LEYEL 1 ROCKET KITS: Requires some painting, gluing and sanding. Features die cut balsa fins, slotted body tubes, plastic nose cones and self-adhesive decals. Step by step instructions make building very easy. Assembly takes at least an afternoon.

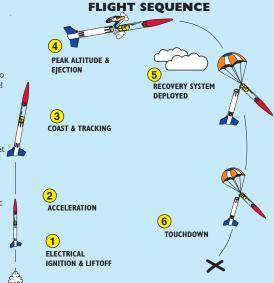
SKILL LEVEL 2 ROCKET KITS: First tier of more advanced kits. Requires beginner skills in model rocket construction and finishing. Features die cut or laser cut balsa or plastic fins, plastic nose cones and unfinished body tubes. Assembly time may take a complete day.

SKILL LEVEL 3 ROCKET KITS: Second tier of more advanced kits. Requires moderate skills in model rocket construction and finishing. Features multiple die cut or laser cut balsa fins and parts, unfinished body tubes, complex designs and plastic nose cones. Assembly time may take a couple of days.

HOW DO ESTES MODEL ROCKETS WORK?

Estes model rockets are activity kits designed of lightweight materials such as paper tubing, balsa wood and plastic. Balsa or plastic fins are glued to the body tube for guidance and stability. A model rocket engine holder is also part of the rocket to keep the engine in place during thrust.

Estes was the first to develop a mass-produced model rocket engine and has produced the engines for over 45 years. The Estes model rocket is propelled into the air by an electrically ignited model rocket engine. After its acceleration, the rocket continues upward emitting tracking smoke as it coasts. At the rocket's peak altitude (also called apogee), a recovery device, such as a plastic parachute or streamer, is deployed to return the rocket gently to earth. The rocket can then be prepared for another flight.



WHERE DO I FLY ESTES MODEL ROCKETS?

The chart on page 5 tells you what size field to use for each size engine. Each engine size is designated by a letter and is up to twice as powerful as the letter before it. See the engine section (pages 34-36) of this catalog for more information.

HOW DID IT ALL GET STARTED?

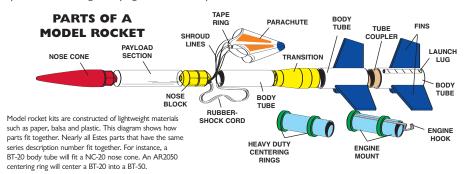
In the mid-1950's when the space age began, flying rockets became very popular. However, there were no safe propellants readily available to launch rockets. In 1958 Vernon Estes developed the first safe mass-produced model rocket engine. The Estes rocket engine was destined to make model rocketry one of the most popular outdoor activities enjoyed today. Estes products have changed with the times and you can see all the exciting rockets, planes and specialty items in this catalog or on the web @ www.estesrockets.com. ROCKET TIPS

WHAT DO I NEED TO KNOW?

In this catalog, each description lists important INFORMATION:

- · Something fun about the rocket.
- Specifications how tall, wide and heavy.
- What engines we recommend.
- How high, on the largest engine recommended, the rocket flies (in feet and in meters). Maximum altitudes are projections only, your rocket's actual performance may vary.
- The sort of recovery system that brings the rocket back parachute, streamer or other.
- The type of fin material plastic, balsa or card stock.

Remember - Estes model rocket kits offer you a wide spectrum of building and flying. Best of all, they are all fun!



PLEASE READ: IMPORTANT STUFF!

Estes model rocketry is recommended for ages 10 years and up. Adult supervision is recommended for those under 12 years of age. Unless otherwise specified all models require assembly. Engines, launch system, glue and finishing supplies are not included with model rocket kits unless specified otherwise.

USE ONLY WITH ESTES PRODUCTS

Caution: Use of any Estes product with any other brand-name rocket product containing any defect or causing any damage may void the Estes warranty.



most cas ccer or football fie great launch area

FIESTES: WARRANTY

Your Estes product is warranted against defects in materials or workmanship for a period from the date of original purchase. Any Estes product, which, because of a manufacturing mistake, malfunctions or proves to be defective within the period noted in the warranty provided with the product will be repaired or replaced, at Estes' option and at no charge to you, provided it is returned to Estes with proof of purchase.

This warranty does not cover incidental or consequential damage to persons or property caused by the use, abuse, misuse, failure to comply with operating instructions or improper storage of the warranted products. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

For repair or replacement under this warranty, please return the defective part of your Estes product with proof of purchase to: Estes Industries, Customer Service Department, 1295 H Street, Penrose, Colorado 81240. Tel. 719-372-6565 Fax 719-372-3419.



N.A.R.* MODEL ROCKET SAFETY CODE

Effective February 10, 2001

- **I. MATERIALS.** I will use only lightweight, non-metal parts for the nose, body, and fins of my rocket.
- **2. MOTORS.** I will use only certified, commercially-made model rocket motors, and will not tamper with these motors or use them for any purposes except those recommended by the manufacturer.
- **3. IGNITION SYSTEM.** I will launch my rockets with an electrical launch system and electrical motor igniters. My launch system will have a safety interlock in series with the launch switch, and will use a launch switch that returns to the "off" position when released.
- **4. MISFIRES.** If my rocket does not launch when I press the button of my electrical launch system, I will remove the launcher's safety interlock or disconnect its battery, and will wait 60 seconds after the last launch attempt before allowing anyone to approach the rocket.
- **5. LAUNCH SAFETY.** I will use a countdown before launch, and will ensure that everyone is paying attention and is a safe distance of at least 15 feet (4.6 m) away when I launch rockets with D motors or smaller, and 30 feet (9 m) when I launch larger rockets. If I am uncertain about the safety or stability of an untested rocket, I will check the stability before flight and will fly it only after warning spectators and clearing them away to a safe distance.
- **6. LAUNCHER.** I will launch my rocket from a launch rod, tower, or rail that is pointed to within 30 degrees of vertical to ensure that the rocket flies nearly straight up, and I will use a blast deflector to prevent the motor's exhaust from hitting the ground. To prevent accidental eye injury, I will place the launcher so that the end of the launch rod is above eye level or will cap the end of the rod when it is not in use.

- **7. SIZE.** My model rocket will not weigh more than 53 ounces (1500 grams) at liftoff and will not contain more than 4.4 ounces (125 grams) of propellant or 71.9 pound-seconds (320 N-sec) of total impulse. If my model rocket weighs more than one pound (453 grams) at liftoff or has more than 4 ounces (113 grams) of propellant, I will check and comply with Federal Aviation Administration regulations before flying.
- **8. FLIGHT SAFETY.** I will not launch my rocket at targets, into clouds, or near airplanes, and will not put any flammable or explosive payload in my rocket.
- **9. LAUNCH SITE.** I will launch my rocket outdoors, in an open area at least as large as shown in the accompanying table, and in safe weather conditions with wind speeds no greater than 20 miles per hour (32 km/h). I will ensure that there is no dry grass close to the launch pad, and that the launch site does not present risk of grass fires.

LAUNCH SITE DIMENSIONS

Installed Total Impulse	Equivalent Motor Type	Minimum Site Dimensions		
•		Feet	Meters	
.00 - 1.25	1/4A, 1/2A	50	15	
1.26 - 2.50	A	100	30	
2.51 - 5.00	В	200	60	
5.01 - 10.00	C	400	120	
10.01 - 20.00	D	500	150	
20.01 - 40.00	E	1,000	300	
40.01 - 80.00	F	1,000	300	
80.01 - 160.00	G	1,000	300	
160.01 - 320.00	Two G's	1,500	450	

- **10. RECOVERY SYSTEM.** I will use a recovery system such as a streamer or parachute in my rocket so that it returns safely and undamaged and can be flown again, and I will use only flameresistant or fireproof recovery system wadding in my rocket.
- **II. RECOVERY SAFETY.** I will not attempt to recover my rocket from power lines, tall trees, or other dangerous places.

As a member of the Estes Model Rocketry Program, I promise to faithfully follow all rules of safe conduct as established in the above code.

Signature_	
0 -	

Important Note: "G" engines must be sold to and used by adults (18 and up) only.

To launch large model rockets weighing more than one lb. (453 g) including propellant or rockets containing more than 4 oz. (113 g) but no more than 4.4 oz. (125 g) of propellant (net weight), you must notify and perhaps obtain authorization from the Federal Aviation Administration (FAA). Check your telephone directory for the office nearest you or contact Estes Industries for further information.

*National Association of Rocketry



READY TO FLY STARTER SETS

READY TO FLY (RTF) STARTER SETS

- Fully constructed and decorated rocket
- Complete launch system with flight supplies
- Ready to fly in minutes



U.S.ARMY

EVERY STARTER SET INCLUDES LAUNCH EQUIPMENT & FLIGHT SUPPLIES!

4 "AA" Alkaline Batteries required - not included.



Estes model rocketry is recommended for ages 10 years and up. Adult supervision is recommended for those under 12 years of age. Must be 14 to purchase in California or New Jersey.

INCLUDES FREE KODAK® 110 COLOR FILM!



RTF STARTER SETS

1434 MAX TRAX®

Track how high this rocket flies. The Max Trax® features an electronic altitude-tracking capsule that automatically calculates and displays how high the rocket traveled in feet and meters. SPECS:

Length: 17 in. (43.2 cm) **Dia.:** 1.35 in. (34.3 mm)

Wt.: 2.6 oz. (73.9 g)
Recovery: Rocket - 12 in. (30 cm) Parachute; Capsule - Streamer

Fins: Plastic molded

Max. Altitude: 600 ft. (183 m)

Recommended Engines: B4-2, B6-2, B6-4, C6-3, C6-5

(Includes two engines)

1825 PATRIOT™

The Patriot[™] dominates the skies. This classic scale-like model rocket is built ready-to-fly and looks like the genuine surface-air defense missile used by the U.S. Army.

Length: 18.0 in. (46 cm) Dia.: 1.35 in. (34.3 mm)

Wt.: 2.7 oz. (75 g) **Recovery:** 12 in. (30 cm) Parachute

Fins: Plastic molded

Max. Altitude: 600 ft. (183 m)

Recommended Engines: A8-3, B4-4, B6-4, C6-5

(Includes two engines)

1827 NSA STARSHIP™

\$33.99

"Penrose, we have liftoff!" Explore new worlds with the NSA Starship™. Like those launched at the cape, this readyto-fly model rocket soars high into the sky then deploys a parachute to return to earth.

SPECS:

Length: 18.0 in. (46 cm) Dia.: 1.35 in. (34.3 mm)

Wt.: 2.7 oz. (75 g) **Recovery:** 12 in. (30 cm) Parachute Fins: Plastic molded Max. Altitude: 600 ft. (183 m)

Recommended Engines: A8-3, B4-4, B6-4, C6-5

(Includes two engines)

1848 SNAPSHOT[®]

\$44.99

Take fantastic photos from 500 feet high! The Snapshot™ camera rocket is factory assembled and ready to launch. Includes a FREE roll of Kodak® 110 color print film. Film developing available locally.

SPECS:

Length: 18.0 in. (46 cm) Dia.: 1.35 in. (34.3 mm)

Wt.: 3 oz. (86.2 g) **Recovery:** 12 in. (30 cm) Parachute Fins: Plastic molded

Max. Altitude: 500 ft. (152 m)

Recommended Engine: C6-5 ONLY (Includes two engines)

1889 SPEED FREAK™

How FAST does your rocket fly? Track the speed of the Speed Freak™ using the 'Advanced Velocity Tracking Technology' capsule. The capsule contains a digital speedometer that records the speed of your rocket, flight after flight.

SPECS:

Length: 17 in. (43.2 cm) **Dia.:** 1.35 in. (34.3 mm) **Wt.:** 2.61 oz. (74 g)

Recovery: Rocket - 12 in. (30 cm) Parachute; Capsule - Streamer

Fins: Plastic molded

Max. Altitude: 600 ft. (183 m)

Recommended Engines: B4-2, B6-2, B6-4, C6-3, C6-5

(Includes two engines)



E2X® STARTER SETS







3





Estes model rocketry is recommended for ages 10 years and up. Adult supervision is recommended for those under 12 years of age. Must be 14 to purchase in California or New Jersey.



E2X® STARTER SETS®

- Almost ready to fly rocket
- Assembled parachute
- Self-adhesive decals
- Complete launch system with engines
- Colored parts



LAUNCHABLES TM STARTER SET



Colors may vary.



E2X® STARTER SETS

1406 ALPHA III®

\$25.99

Features a bright molded one piece fin unit and nose cone and engines for two fantastic parachute recovered flights.

Length: 12.25 in. (31.1 cm) **Dia.:** 0.98 in. (24.9 mm)

Wt.: 1.2 oz. (34 g)

Recovery: 12 in. (30 cm) Parachute Fins: One piece plastic molded Max. Altitude: 1100 ft. (335 m)

Recommended Engines: 1/2Á6-2, A8-3, A8-5, B4-4, B6-4,

B6-6, C6-5, C6-7 (Includes two engines)

1431 MINI SUPER SHOT"

\$20.99

Features two mini-engine powered rockets that can be ready to fly in an hour. Also includes special mini-rocket launch pad.

Length: Space Bus™ - 5.25 in. (13.3 cm) **Space Hauler™** - 5.38 in. (13.7 cm) **Dia.: Space Bus[™]** - 1.0 in. (25.4 mm) **Space Hauler[™]** - 0.75 in. (19.1 mm) Wt.: Space Bus[™] - 0.74 oz. (21.2 g) Space Hauler[™] - 0.67 oz. (18.9 g)

Recovery: Streamer Fins: Plastic molded

Max. Altitude: Space Bus™ - 700 ft. (213 m)

Space Hauler™ - 760 ft. (231 m)

Recommended Engines: 1/4A3-3T, 1/2A3-4T, A3-4T, A10-3T (Includes two engines)

1452 LAUNCHABLES™

\$37.99

A complete starter set that includes two exciting model rockets, the Black Diamond™ that streaks over 1400 feet high and the Astron® Outlaw™ that's almost two feet tall. The Astron® OutlawTM assembles in less than an hour, the Black DiamondTM is easy to build and finish. (Includes two engines)

Black Diamond™ (Skill Level I)

SPECS:

Length: 12.1 in. (30.7 cm) Dia.: 0.736 in. (18.7 mm) Wt.: 0.6 oz. (17 g) Recovery: Streamer Fins: Die cut card stock

Max Altitude: 1470 ft. (448m) Recommended Estes Engines: 1/2A6-2, A8-3, A8-5, B4-4,

B6-4, B6-6, C6-5, C6-7

Astron® Outlaw™ (E2X®)

SPECS:

Length: 21.5 in. (54.6 cm) Dia: 1.35 in. (34.3 mm) Wt: 2.4 oz. (69.1 g)

Recovery: 12 in. (30 cm) Parachute

Fins: Plastic molded

Max Altitude: 600 ft. (183m)

Recommended Estes Engines: A8-3, B4-4, B6-4, C6-5

^{*} All starter sets require 4 - "AA" alkaline batteries not included



READY TO FLY LAUNCH SETS

OPERATION SEARCH & DESTROYTM





SR.71 BLACKEIRING

READY TO FLY LAUNCH SETS

- Fully constructed and decorated rocket
- Complete launch system
- Ready to fly in minutes
- Select your own engines sold separately

ESTES LAUNCH SETS

U.S.AIR FORCE

Launch Sets are a great way to get started in model rocketry! They include a rocket (or two), versatile launch pad and reliable launch controller. Plus, you get to choose what Estes rocket engine(s) you'd like to use to launch your new rocket(s) by purchasing them separately.



Estes model rocketry is recommended for ages 10 years and up. Adult supervision is recommended for those under 12 years of age.

SUPER SHOTTM ROCKET RACE





READY TO FLY LAUNCH SETS

1886 OPERATION SEARCH & DESTROY™ \$45.99

Burn up the atmosphere in the SR-71 Blackbird™ Mach 3 spy plane. Then send in the thunder with the terrain-tracking, bunker-buster AGM-86B™ Cruise Missile! Both rockets are fully assembled with authentic décor and USAF markings. (Engines not included – sold separately)

SPECS:

SR-71 Blackbird™
Length: 19 in. (48.3 cm)
Wingspan: 9.3 in. (23.5 cm)
Wt.: 2.4 oz. (67.3 g)

Wt.: 2.4 oz. (67.3 g)

Recovery: 18 in. (46 cm) Parachute

Max. Altitude: 600 ft. (183 m)

Recommended Engines: B4-2, B6-2, B6-4, C6-3

AGM-86B™ Cruise Missile Length: 9 in. (22.9 cm) Wingspan: 6 in. (15.2 cm)

Wt.: 1.4 oz.

Recovery: 12 in. (30 cm) Parachute **Max. Altitude:** 200 ft. (61 m)

Recommended Engines: A3-4T, A10-3T

Produced under license from Boeing Management Company. Boeing, McDonnell Douglas, McDonnell, Douglas, North American Aviation, their distinctive liveries, logos, and product markings are among the trademarks owned by Boeing.

1888 SUPER SHOT™ ROCKET RACE \$25.99

3...2...1...RACE! First one off the dueling launch pad wins! Load up the Slash™ and Streak™ with a mini engine and you're off to the races. These factory-decorated speedsters fly 700 feet high and can be raced over and over. Deluxe carrying case converts into dueling launch pad. (Engines not included – sold separately)

SPECS:

Slash™ & Streak™ Length: 5.25 in. (13.3 cm) Dia.: 0.63 in. (18mm) Wt.: 0.32 oz. (9 g)

Recovery: 9 in. (22.9 cm) Streamer **Max. Altitude:** 700 ft. (213 m)

Recommended Engines: 1/4A3-3T, 1/2A3-4T, A3-4T,

A10-3T

1891 SPACESHIPONE™

\$40.99

Join the new 'Race into Space' and fly a scale replica of SpaceShipOne™, the Ansari X PRIZE winner. Designed by Burt Rutan of Scaled Composites, this is the first privately funded manned spacecraft to reach outer space. (Engines not included – sold separately)

SPECS:

Length: 13 in. (33 cm)
Wingspan: 6.5 in. (16.5 cm)

Recovery: 12 in. (30 cm) Parachute Max. Altitude: 400 ft. (12 m)

Recommended Engines: B4-2, B6-2, C6-3

X PRIZE is a registered trademark of the X PRIZE Foundation and is used by permission. SpaceShipOne is a registered trademark of Mojave Aerospace Ventures and is used by permission. Virgin and Virgin Galactic are registered trademarks of Virgin Enterprises LTD and are used by permission.

1893 RIPTIDE™

\$26.99

Soar to new heights with the cool-looking Riptide™ ocket! This ready to fly rocket flies over 600 feet into the air and features chrome fins and nose cone. (Engines not included – sold separately)

SPECS:

SPECS:

Length: 18 in. (46 cm) **Dia.:** 1.35 in. (34.3 mm) **Wt.:** 2.7 oz. (75 g)

Recovery: 12 in. (30 cm) Parachute **Max. Altitude:** 600 ft. (183 M)

Recommended Engines: A8-3, B4-4, B6-4, C6-5



E2X® LAUNCH SETS





E2X® LAUNCH SETS

- Almost ready to fly rocket assembles in minutes!
- Factory colored parts and assembled parachute
- Complete launch system
- Select your own engines sold separately



TASER





E2X® LAUNCH SETS

1480 AIR SHOW™

\$45.99

Create your own air show by launching two supersonic jets together! Watch as they return by circling overhead displaying an exciting mid-air extravaganza! This set comes with the two jet gliders, launch equipment and reusable flight case. (Engines not included - sold separately)

Length: 16.5 in. (41.9cm) Wingspan: 12 in. (30 cm)

Wt.: 4.7 oz. (133 g)

Recovery: Engine Pod – 12 in. (30 cm) Parachute; Jets-Glide

Max. Altitude: 350 ft. (107 m) Recommended Engines: B6-2, C6-3

1481 TASER™

The Taser™ is an easy to build rocket kit. There's no painting because all the parts are precolored. Just assemble the rocket, apply the decal and you're ready to launch. (Engines not included - sold separately)

SPECS:

Length: 18 in. (45.7 cm) **Dia.:** 0.98 in (24.8 mm) **Wt.:** 1.5 oz. (42.5 g) **Recovery:** 12 in. (30 cm) Parachute

Fins: Plastic molded

Max. Altitude: 1,000 ft. (305 m)

Recommended Engines: A8-3, B4-4, B6-4, B6-6, C6-7

1483 TANDEM-X™

The Tandem-X™ Launch Set offers Xtra value! The Crossfire ISX[™] is a Skill Level 1 kit that will streak over 1,200 feet. The Amazon™ is an E2X® kit that's almost 3 feet tall! (Engines not included - sold separately)

SPECS:

Amazon™ (E2X®) **Length:** 33.6 in. (85 cm) Dia.: 1.35 in. (34.3mm) Wt.: 3.3 oz. (94 g) Fins: Plastic molded

Recovery: 18 in. (46 cm) Parachute **Max. Altitude:** 644 ft. (196 m)

Recommended Engines: B4-2, B4-4, B6-2, B6-4, C6-3, C6-5

Crossfire ISX™ (Skill Level I) Length: 15.6 in. (40 cm)

Dia.: 0.98 in. (24.8mm) Wt.: 1.3 oz. (37 g) Fins: Plastic molded

Recovery: 12 in. (30 cm) Parachute **Max. Altitude:** 1,208 ft. (368 m)

Recommended Engines: 1/2A6-2, A8-3, B4-2, B4-4, B6-2, B6-4, C6-3, C6-5

1484 WICKED STREAK SST™

\$16.99

No fuss, no muss! Simply snap the Wicked Streak SST™ together and get out and launch this wicked rocket in minutes. (Engines not included - sold separately)

SPECS:

Length: 10.2 in. (26 cm) **Dia.:** 0.885 in. (22.5 mm) Wt.: 1.14 oz. (32.3 g) Fins: Plastic molded

Recovery: 12 in. (30 cm) Hi-viz Streamer

Max. Altitude: 350 ft. (107 m)

Recommended Engines: 1/2A3-2T, A3-4T, A10-3T



READY TO FLY ROCKETS

- Great First Rocket!
- No Painting
- No Assembly Required
- Engines and launch equipment sold separately







Estes model rocketry is recommended for ages 10 years and up. Adult supervision is recommended for those under 12 years of age.

E2X® ROCKET KITS **E2X* ROCKET SETS** Easy to Assemble • No Painting Self-adhesive decals Engines and launch equipment sold separately HIGH FLYING FIN DESIGN انتالن PENFURMANCE LIN DEZIEN

READY TO FLY (RTF) ROCKETS

1847 CRUISE MISSILE™

\$13.59

Imagine the thrill of launching this realistic model of America's most potent strategic weapon. Ready to fly in just minutes. **SPECS: Length:** 9.0 in. (22.9 cm)

Dia.: 1.0 in. (25.4 mm)

Wt.: 1.4 oz. (40 g) **Recovery:** 12 in. (30 cm) Parachute

Fins: Plastic molded

Max. Altitude: 200 ft. (61 m)

Recommended Engines: A3-4T, A10-3T

1887 SUPER SHOT™ MINI RTF COMBO \$10.29

Shred the skies with the Sting Ray™ and Shark Attack™! These sleek, high-speed fliers scream to 700 feet high and return on a hi-viz orange streamer.

SPECS: Sting Ray™ & Shark Attack™ Length: 5.25 in. (13.3 cm)

Dia.: 0.69 in. (18mm)

Wt.: 0.32 oz. (9 g); Recovery: Streamer

Fins: Plastic molded Max. Altitude: 700 ft. (213 m)

Recommended Engines: 1/4A3-3T, 1/2A3-4T, A3-4T, A10-3T

1890 X-15®

The Estes X-15® RTF rocket is a high-flying 1:44 scale-like version of the North American Aviation rocket plane. The original plane was used in a NASA research program between 1959 and 1968. It was used to explore hypersonic flight and technologies needed for space flight.

SPECS: Length: 13.5 in. (34.3 cm) **Wingspan:** 5 in. (12.7 cm) **Dia.:** 1.12 in. (28.4 mm) **Wt.:** 3.2 oz. (90.2 g)

Recovery: 18 in. (46 cm) Parachute Max. Altitude: 600 ft. (183 m) Recommended Engines: B4-2, B6-2, C6-3

E2X® ROCKET KITS

0803 BANDITO

\$6.59

The high-flying Bandito™ sport rocket can be easily assembled in under an hour. Includes pre-colored slotted body tube and plastic parts and screams into the sky on mini-engines.

SPECS: Length: 11.2 in. (28.4 cm) Dia.: 0.736 in. (18.7 mm)

Wt.: 0.60 oz. (17 g)

Recovery: 12 in. (30 cm) Parachute Fins: Plastic molded

Max. Altitude: 600 ft. (183 m) Recommended Engines: 1/4Á3-3T, 1/2A3-2T, A3-4T, A10-3T

0804 FIREHAWK"

\$6.59

The Firehawk™ is a high performance, quick-to-build rocket that streaks over 500 feet high on mini-engines. Includes pre-colored body tube and plastic parts. Builds in less than 30 minutes.

SPECS: Length: 11.2 in. (28.4 cm) **Dia.:** 0.736 in. (18.7 mm)

Wt.: 0.65 oz. (18.4 g) Recovery: 12 in. (30 cm) Parachute

Fins: Plastic molded Max. Altitude: 550 ft. (168 m)

Recommended Engines: 1/4A3-3T, 1/2A3-2T, A3-4T, A10-3T

0806 FIRESTREAK SST™

An Estes original! The first-ever snap together rocket. No fuss, no muss, simply snap the Firestreak SSTTM together and get out and launch this hot looking rocket in minutes.

SPECS: Length: 10.2 in. (26 cm) **Dia.:** 0.885 in. (22.5mm) Wt.: 1.14 oz. (32.3 g)

Recovery: Streamer Fins: Plastic molded Max. Altitude: 350 ft. (107 m)

Recommended Engines: 1/2A3-2T, A3-4T, A10-3T





Estes model rocketry is recommended for ages 10 years and up. Adult supervision is recommended for those under 12 years of age.

X PRIZE is a registered trademark of the X PRIZE Foundation and is used by permission.



0807 LUCKY SEVEN

\$7.99

The Lucky Seven is a stellar-looking version of the Acceleration Engineering X Prize competition spaceship. Blasting 200 feet in the air and powered by an Estes mini-engine. Recovered with a colorful, fully assembled parachute. Easy assembly. 1:50 scale.

SPECS: Length: 7.9 in. (20 cm) **Dia.:** 1.37 in. (41.6 mm) **Wt.:** 1.5 oz. (43.4 g) **Recovery:** 12 in. (30 cm) Parachute

Fins: Plastic molded

Max Altitude: 200 ft. (61 m) Recommended Engine: A10-3T

0886 GNOME

\$8.39

Eye-dazzling, chrome rocket soars to heights of 800 ft. (244 m). The GnomeTM comes with a colored one piece fin unit for quick assembly. Be ready to launch in less than an hour. **SPECS: Length:** 10.3 in. (26.0 cm)

Dia.: 0.54 in. (13.8 mm) **Wt.:** 0.4 oz. (12 g) Recovery: Streamer

Fins: One piece plastic molded Max. Altitude: 800 ft. (244 m)

Recommended Engines: 1/2A3-2T, 1/2A3-4T, A3-4T, A10-3T

1256 ALPHA III®

\$14.99

The very first Estes E2X® rocket! One piece fin unit for easy construction. Millions have started with this classic design.

SPECS: Length: 12.3 in. (31.1 cm)

Dia.: 0.98 in. (24.8 mm) **Wt.:** 1.2 oz. (34 g) **Recovery:** 12 in. (30 cm) Parachute Fins: One piece plastic molded Max. Altitude: 1100 ft. (335 m)

Recommended Engines: 1/2Á6-2, A8-3, A8-5, B4-4, B6-4,

B6-6, C6-5, C6-7

1260 NO. 2 ESTES SKY WRITER® \$8.39

This fun rocket looks like a wooden pencil. It "sky writes" up to 1100 ft. (335 m) in the air. The No. 2 Estes Sky Writer® comes with colored body tubes, fins and nose

cone, so assembly is quick and easy. **SPECS: Length:** 26 in. (66 cm) Dia.: 0.98 in. (24.8 mm)

Wt.: 1.5 oz. (41.3 g)

Recovery: 12 in. (30 cm) Parachute Fins: One piece plastic molded Max. Altitude: 1100 ft. (335 m)

Recommended Engines: A8-3, B4-4, B6-4, C6-5

1262 COSMIC COBRA™

The Cosmic Cobra™ features a two-way recovery system. The booster returns to earth using a 12 in. (30 cm) parachute, while the nose cone helicopters down gently using rotor blades. **SPECS: Length:** 19.5 in. (49.5 cm)

Dia.: 1.35 in. (34.3 mm)

Wt.: 3.1 oz. (88 g)

Recovery: Booster - 12 in. (30 cm) Parachute; Nose Cone -Helicopter

Fins: Two piece plastic molded Max. Altitude: 530 ft. (162 m)

Recommended Engines: B4-2, B6-2, B6-4, C6-3, C6-5

1300 BLUE NINJA™

\$15.69

The Blue Ninja[™] is the biggest rocket in the E2X® class! It is over 30 in. (76.2 cm) tall and is powered by a "C11" or "D" engine. The Blue Ninja™ comes with shiny blue prismatic body tubes and colored fins and nose cone.

SPECS: Length: 31.3 in. (79.5 cm)

Dia.: 1.64 in. (41.6 mm) **Wt.:** 5.1 oz. (145.4 g)

Recovery: 18 in. (46 cm) Parachute

Fins: Plastic molded

Max. Altitude: 780 ft. (238 m) Recommended Engines: C11-3, D12-3

Requires 3/16 in. (5 mm) Maxi™ launch rod (302244) -

sold separately.



Estes model rocketry is recommended for ages 10 years and up. Adult supervision is recommended for those under 12 years of age.



1327 ASTROCAM® 110

\$22.99

The AstroCam® 110 is back and better than ever! The aerial camera nose cone has a newly designed shutter release that makes it even easier to use. Includes a FREE roll of Kodak Gold 110 film. Launch it on a B6-4 for close -up low altitude photos or take it to the limit on a C6-7 for high altitude shots.

SPECS .:

Length: 18.4 in. (46.7 cm) **Dia.:** 1.35 in. (34.3 mm)

Wt.: 2.7 oz. (76.4 g) **Recovery:** 12 in. (30 cm) Parachute Fins: Plastic molded Max Altitude: 500 ft. (152 m) Film: 110 ASA 400

Recommended Engines: B6-4, C6-7

2181 CHROME DOMES" **GOLD SERIES**

\$11.49

Catch some attention! Chrome Domes™ - Gold Series rockets feature gold chrome plated fins and nose cone. The body tube comes in a variety of prismatic colors (each color sold separately).

Length: 18 in. (45.7 cm)

Dia.: 1.35 in. (34.3 mm)

Wt.: 2.7 oz. (75 g) **Recovery:** 12 in. (30 cm) Parachute Fins: Two piece plastic molded

Max. Altitude: 600 ft. (183 m) Recommended Engines: A8-3, B4-4, B6-4, C6-5

2183 SHUTTLE XPRESS*

\$14.69

New wave of fighter technology. The Shuttle Xpress™ carries two fighter shuttles to battle. At apogee, it releases the two fighter shuttles that glide back to earth. The booster is recovered by a 12 in. (30 cm) Parachute.

SPECS.:

Length: 17.69 in. (44.9 cm) Dia.: 1.35 in. (34.3 mm) Wt.: 3.2 oz. (89.7 g)

Recovery: Booster - 12 in. (30 cm) Parachute; Shuttles - Glide

Fins: Plastic molded

Max. Altitude: 586 ft. (179 m) Recommended Engines: B4-2, B4-4, B6-2, B6-4, C6-3, C6-5

2186 EAGLE" BOOST GLIDER

This easy-to-assemble boost glider is ready for the next boost glider contest. The assembly of the glider and power pod is nearly foolproof and takes the complexity out of trimming and launching rocket boosted gliders.

Length: 24.8 in. (62.9 cm) Wingspan: 13 in. (33 cm) Dia.: 0.74 in. (18.8 mm)

Wt.: 3.4 oz. (97.1 g) **Recovery:** 30 in. (76 cm) Streamer & Glider

Fins: Die cut foam Max Altitude: 500 ft. (152 m)

Recommeded Engines: B4-2, B6-2, C6-3

See first hand what it looks like from your rocket's point-of-view to be blasted off and then recovered. The easy-to-use video camera allows you to capture digital movies from liftoffs to landings. Save the movies to your laptop or PC using the included software and USB cable. Resolution is 320 x 240 Pixels (CIF).

Length: 36 in. (91.4 cm) **Dia:** 1.64 in. (41.7 mm) **Wt:** 7.6 oz. (215 g)

Recovery: 18 in. (46 cm) Nylon Parachute

Fins: Plastic molded

Max Altitude: 600 ft. (183 m)

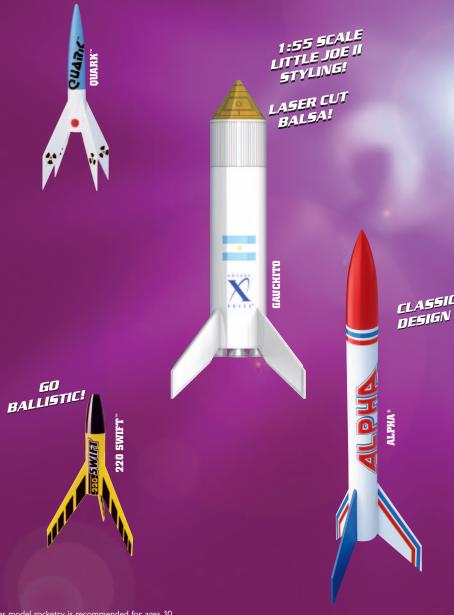
Recommended Engines: D12-3, D12-5

Requires Windows-based computer, with CD-ROM and USB port. Requires one 'AAA' alkaline battery - sold separately. Requires 3/16 in. (5 mm) Maxi™ launch rod (302244) - sold separately.



www.estesrockets.com

- Quick and easy to build kits with sanding, cutting and painting required
- Some kits feature a Through-The-Tube Fin System
- Engines and launch equipment sold separately





0802 OVARK"

\$5.29

Mini-engine powered mighty mite. With incredibly simple construction (only seven parts), a little spray paint and decals, and whoosh - out-a-sight flights to 700 ft. (213 m). Quick featherweight recovery for this micro rocket.

SPECS.

Length: 5.2 in. (13.2 cm) **Dia.:** 0.54 in. (13.7 mm) Wt.: 0.1 oz. (3 g) Recovery: Featherweight Fins: Die cut balsa

Max. Altitude: 700 ft. (213 m)

Recommended Engines: 1/4A3-3T, 1/2A3-4T, A3-4T, A10-3T

0809 GAUCHITO

\$10.49

A Pablo de Leon creation with a retro-looking Little Joe II design. Entered in X Prize competition lifts-off to 300 feet into the air using an Estes mini-engine. Laser cut balsa parts. 1:55 scale.

SPECS:

Length: 8.6 in. (21.8 cm) Dia.: 1.54 in. (39.1 mm) **Wt.:** 1.08 oz. (30.6 g) (**Recovery:** 12 in. (30 cm) Parachute

Fins: Laser cut balsa

Max Altitude: 300 ft. (92 m)

Recommended Engines: 1/2A3-2T, A3-4T, A10-3T

0810 220 SWIFT"

\$3.99

This fun and easy to build "itty-bitty" rocket really scoots through the sky. The 220 Swift™ is sleek and launches on mini-engines then tumbles back to earth.

SPECS: Length: 4.5 in. (11.4 cm) Dia.: 0.54 in. (13.7 mm) Wt.: 0.094 oz. (2.7 g) Recovery: Featherweight

Fins: Die cut balsa Max. Altitude: 750 ft. (260 m)

Recommended Engines: 1/4Á3-3T, 1/2A3-4T, A3-4T, A10-3T

1225 ALPHA®

\$11.99

For over 36 years, the Alpha® has been the first choice for millions of rocket modelers. Easy to build, rugged high performance, parachute recovery - the perfect rocket to get you started! SPECS:

Length: 12.3 in. (31.2 cm) Dia.: 0.98 in. (24.9 mm) Wt.: 0.8 oz. (23 g)

Recovery: 12 in. (30 cm) Parachute Fins: Die cut balsa

Max. Altitude: 1000 ft. (305 m)

Recommended Engines: 1/2A6-2, A8-3, A8-5, B4-4, B6-4, B6-6, C6-5, C6-7

1261 BABY BERTHA™ \$7.29

A miniature version of one of the most popular kits of all time, the Big Bertha®. The Baby Bertha™ soars to 575 ft. (175 m). SPECS:

Length: 12.75 in. (32.4 cm) Dia.: 1.64 in. (41.6 mm) Wt.: 1.6 oz. (45.3 g)

Recovery: 12 in. (30 cm) Parachute

Fins: Die cut balsa

Max. Altitude: 575 ft. (175 m)

Recommended Engines: A8-3, B4-4, B6-4, C6-5

1292 WIZARD™

No tricks here - the Wizard™ is an easy to build high-performance kit. A great first or second kit that promises real excitement and fun!

SPECS:

Length: 12 in. (30.5 cm) Dia.: 0.74 in. (18.8 cm) Wt.: 0.5 oz. (14.2 g) Recovery: Streamer Fins: Die cut balsa

Max. Altitude: 1692 ft. (516 m)

Recommended Engines: 1/2Á6-2, A8-3, A8-5, B4-4, B6-4, B6-6, C6-5, C6-7





Estes model rocketry is recommended for ages 10 years and up. Adult supervision is recommended for those under 12 years of age.



1301 STORMCASTER

\$13.69

Go big on a small budget! Powered by the "C11" engine, this big rocket can also be used with a "D" engine. The StormCaster™ is over 30 in. (76.2 cm) tall. It flies up to 930 ft. (283 m).

SPECS:

Length: 30.25 in. (76.8 cm) Dia.: 1.64 (41.6 mm);

Wt.: 2.9 oz. (80.8 g) Recovery: 18 in. (46 cm) Parachute

Fins: Die cut balsa

Max. Altitude: 930 ft. (283 m)

Recommended Engines: C11-3, D12-5 Requires 3/16 in. (5 mm) MaxiTM launch rod (302244) -

sold separately.

1381 YANKEE™

A rocket with All-American performance - screams to 1850 ft. (564 m) altitude! Comes with cool self-adhesive decals, for that red, white and blue look.

SPECS:

Length: 11 in. (27.9 cm) Dia.: 0.74 in. (18.8 mm)

Wt.: 0.4 oz. (12 g) Recovery: Streamer Fins: Die cut balsa;

Max. Altitude: 1850 ft. (564 m) Recommended Engines: 1/2A6-2, A8-3, A8-5, B4-4, B6-4,

B6-6, C6-5, C6-7

1948 BIG BERTHA® \$17.79

Burly, big and beautiful! Over the decades this is the first big (two feet tall) rocket for many modelers. Slow, realistic lift-offs from this true classic.

SPECS:

Length: 24 in. (61 cm) **Dia.:** 1.64 in. (41.6 mm)

Wt.: 2.2 oz. (62 g) **Recovery:** 18 in. (46 cm)

Fins: Die cut balsa

Max. Altitude: 500 ft. (152 m) Recommended Engines: B4-2, B4-4, B6-2, B6-4, C6-5

Fantastic rocket with 48 possible fin configurations. Features

die cut card fins, decals and streamer recovery. Super high flights.

SPECS:

Length: 12.1 in. (30.7 cm) **Dia.:** 0.74 in. (18.8 mm) **Wt.:** 0.6 oz. (17 g)

Recovery: Streamer Fins: Die cut card stock Max. Altitude: 1698 ft. (518 m)

Recommended Engines: 1/2A6-2, A8-3, A8-5, B4-4, B6-4,

B6-6, C6-5, C6-7

2056 U.S. ARMY PATRIOT M-104

A classic 1:10 scale model rocket of the desert hero and mother of all air defense missiles. Based on the U.S. Army's M-104 surface-air missile. Blasts 600 feet high!

SPECS:

Length: 21.3in. (54.1 cm)

Dia.: 1.637 in. (41.6 mm)

Wt.: 1.95 oz. (55 g)

Recovery: 12 in. (30 cm) Parachute

Fins: Die cut balsà

Max. Altitude: 600 ft. (183 m)

Recommended Engines: A8-3, B4-4, B6-4, C6-5





Estes model rocketry is recommended for ages 10 years and up. Adult supervision is recommended for those under 12 years of age.





2171 SIZZLER®

\$11.49

Burn up the sky with the Sizzler®! This rocket scorches through the atmosphere with flights over 1600 ft. (500 m)!

Length: 11.75 in. (29.8 cm) Dia.: 0.74 in. (18.8 mm)

Wt.: 0.8 oz. (23.8 g) **Recovery:** 12 in. (30 cm) Parachute

Fins: Die cut balsa

Max. Altitude: 1686 ft. (514 m)

Recommended Engines: 1/2Á6-2, A8-3, A8-5, B4-4, B6-4,

B6-6, C6-5, C6-7

2178 HI-FLIER®

\$5.79

Keep an eye on this one! The Hi-Flier® rocket is a high altitude rocket. It soars over 1600 ft. (488 m), and is recovered by a bright orange streamer.

SPECS:

Length: 12 in. (30.5 cm) **Dia.:** 0.74 in. (18.8 mm) Wt.: 0.82 oz. (23.2 g) Recovery: Streamer Fins: Die cut balsa

Max. Altitude: 1690 ft. (515 m)

Recommended Engines: 1/2A6-2, A8-3, A8-5, B4-4, B6-4,

B6-6, C6-5, C6-7

\$28.79

2189 RUBICON Designed after the Space Transport X Prize spacecraft, the mighty rocket blasts-off on a powerful "D" engines reaching 450 feet in altitude. Once at peak altitude, a fully assembled 18 in. parachute is ejected for a slow, safe recovery. 1:11 scale. SPECS:

Length: 22.9 in. (58.2 cm) **Dia.:** 3.21 in. (81.5 mm) Wt.: 7.3 oz. (206.9 grams) Recovery: 18 in. (45 cm) Parachute

Fins: Plastic molded

Max. Altitude: 450 ft. (137 m)

Recommended Engines: D12-3, D12-5 Requires 3/16 in. (5 mm) Maxi[™] launch rod (302244) -

sold separately.

2193 EAGLE

\$16.29 A highly detailed X Prize spaceship from the Vanguard Spacecraft team. The Eagle soars 500 feet into the sky! Includes multiple display nozzles and laser cut balsa parts.

SPECS:

Length: 19.5 in. (49.5 cm) Dia.: 1.637 in. (41.6 mm) Wt.: 3.0 oz. (85.0 g)

Recovery: 12 in. (30 cm) Parachute Fins: Plastic molded & Laser cut balsa

Max. Altitude: 500 ft. (152 m)

Recommened Engines: B4-2, B6-4, C6-3, C6-5





 Requires more skill in building and painting
 Assembly time may take a complete day
 Engines and launch equipment -sold separately HIGH FLYING NEWL

36 D SQUAREDTM

Estes model rocketry is recommended for ages 10 years and up. Adult supervision is recommended for those under 12 years of age.



1302 CC EXPRESS

\$14.69

The CC Express™ is a high-flying, two-stage rocket powered by "D" engines. It soars to 1790 ft. (546 m) in the air.

SPECS: Length: 28.38 in. (72.1 cm)

Dia.: 1.33 in. (33.7 mm) Wt.: 2.7 oz. (75.3 g)

Recovery: 18 in. (46 cm) Parachute

Fins: Die cut balsa

Max. Altitude: 1790 ft. (546 m)

Recommended Engines: Single Stage - D12-5 Two-Stage: Booster - D12-0; 2nd Stage - D12-7 Requires 3/16 in. (5 mm) Maxi[™] launch rod (302244)

sold separately.

2117 SCREAMING EAGLE®

\$14.99

Experience the thrill of flying at Mach 2.5 (2 1/2 times the speed of sound) with the Screaming Eagle®! This cool-looking rocket looks great just sitting in the hangar, but screams to be out flying with other eagles. The Eagle is a superbly detailed model with awesome markings that will be the envy of all rocketeers. Decorate it with waterslide decals.

SPECS: Length: 16.75 in. (42.5 cm)

Dia.: 1 in. (25.4 mm)

Wt.: 2.3 oz. (65.2 g)
Recovery: 12 in. (30 cm) Parachute Max. Altitude: 600 ft. (183 m)

Recommended Engines: A8-3, B4-4, B6-4, C6-5

2119 36 D SQUARED™

What a beauty! This is the one you've been dreaming about! It's got the full package. Sleek, yet full body design, a payload section, laser cut fins and waterslide decals. This rocket launches on two Estes D size model rocket engines and is recovered by a large 24 in. parachute.

SPECS: Length: 36 in. (91.4 cm) Dia.: 2.217 in. (56.3 mm)

Wt.: 5.7 oz. (162 g) **Recovery:** 24 in. (61 cm) Parachute Max. Altitude: 800 ft. (244 m)

Recommended Engines: 2 each D12-3, 2 each D12-5, 2

each D12-7

(DO NOT MIX ENGINE SIZES WHEN LAUNCHING)

IMPORTANT: Requires 3/16 in. (5 mm) Maxi[™] launch rod (302244) - sold separately.

The Estes E™ Controller (#2230) is recommended to launch this two-engine cluster - sold separately.

2123 EGGSCALIBER™

\$16.99

The only rocket that lets you launch eggs on four different engines sizes using the same rocket! Eggscaliber™ includes a special engine adapter to launch an egg on B & C engines or remove it to launch an egg on D and E engines. Its transparent capsule section also lets you see the egg before and after flights. We've also included a set of decals to decorate your egg into your favorite 'eggstronaut'.

SPECS: Length: 20 in. (51 cm) Dia.: 1.35 in. (34.2 mm)

Wt. (without egg): 2.6 oz. (74 g)

Recovery: 12 in. (30 cm) Parachute and 18 in. (46 cm) Parachute:

Max. Altitude: 610 ft. (186 m)

Recommended Engines: With egg - B6-2, C6 - 3, C11-3, D12-3, E9-4; Without egg - B4-2, B6-2, C6-5, D12-5, E9-6. Requires 3/16 in. (5 mm) Maxi[™] launch rod (302244) sold separately.

2179 GUARDIAN™

\$11.49

The Guardian™ rocket simulates a ground-to-air missile. This multi-finned guardian of the sky soars over 700 ft. (213 m). **SPECS: Length:** 19.13 in. (48.6 cm);

Dia.: 1.33 in. (33.8 mm);

Wt.: 2.4 oz. (68.6 g);

Recovery: 12 in. (30 cm) Parachute; Fins: Die cut balsa;

Max. Altitude: 723 ft. (220 m);

Recommended Engines: A8-3, B4-4, B6-4, B6-6, C6-5





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Virgin and Virgin Galactic are registered trademarks of Virgin Enterprises LTD and are used by permission.

Estes model rocketry is recommended for ages 10 years and up. Adult supervision is recommended for those under 12 years of age.



2190 COSMOS MARINER

\$31.19

The Estes Cosmos Mariner is a boosted glider version of the sleek X Prize rocket plane from the Lone Star Space Access team. The rocket plane blasts off 250 ft. into the air using a powerful "D" engine. Laser cut balsa parts. 1:67 scale.

SPECS:

Length: 18 in. (46 cm) **Wingspan:** 13.5 in. (34.3 cm) **Dia.:** 1.637 in. (41.6 mm) **Wt.:** 8.6 oz. (243.6 g)

Recovery: Glide & 18 in. (46 cm) Parachute

Fins: Laser cut balsa

Fins: Laser cut balsa

Max. Altitude: 250 ft. (76 m) Recommended Engine: D12-3

Requires 3/16 in. (5 mm) MaxiTM Rod (302244) -

sold separately.

2191 SPACESHIPONE*

\$17.49

The famous Scaled Composites X Prize winning spacecraft, designed by Burt Rutan. Based on the first privately manned spaceship to reach outer space. It blasts 400 feet into the air and uses an Estes B or C engine. Laser cut balsa parts. 1:30 scale.

SPECS:

Length: 13.0 in. (33 cm)
Wingspan: 6.5 in. (16.5 cm)
Dia.: 2.0 in. (50.8 mm)
Wt.: 3.0 oz. (85.0 g)

Recovery: 12 in. (30 cm) Parachute **Fins:** Laser cut balsa

Max. Altitude: 400 ft. (122 m)
Recommended Engines: B4-2, B6-2, C6-3

2192 THUNDERSTAR

\$19.69

Designed by Starchaser Industries, the Thunderstar X Prize entry uses a cluster of two Estes engines to reach 1,000 feet in the air. At apogee, a fully assembled 18" parachute is deployed allowing for a safe recovery. Laser cut balsa parts. 1:41 scale.

SPECS:

Length: 26.5 in. (67.3 cm) **Dia.:** 1.637 in. (41.6 mm) **Wt.:** 2.75 oz. (78.1 g)

Recovery: 18 in. (46 cm) Parachute

Fins: Laser cut balsa

Max. Altitude: 1000 ft. (305 m)

Recommended Engines: 2×A8-3, 2×B4-4, 2×B6-4, 2×C6-5 (DO NOT MIX ENGINE SIZES WHEN LAUNCHING)

7000 BULL PUP 12D*

\$14.69

Sport scale version of the USAF AGM-12D Bull Pup. Plastic tail cone and authentic color decals! Great first scale model.

SPECS:

Length: 15.6 in. (39.6 cm); **Dia.:** 1.33 in. (33.8 mm) **Wt.:** 1.8 oz. (51 g);

Recovery: 12 in. (30 cm) Parachute; **Fins:** Die cut balsa;

Max. Altitude: 675 ft. (206 m);

Recommended Engines: A8-3, B4-4, B6-4, C6-5



SCALE MODEL OF

THE

WORLD'S

FASTEST JET!

- The construction and flying of these kits require a higher level of skill
- Assembly may take a couple of days
- Engines and launch equipment sold separately



PIVOT MECHANISM!

SCISSOR WING TRANSPORT

CLASSIC KIT! LASER CUT BALSA!

Estes model rocketry is recommended for ages 10 years and up. Adult supervision is recommended for those under 12 years of age.

AWESOME STAGE LAUNCHES!



0



1265 SCISSOR WING TRANSPORT[™] \$20.99

This classic rocket boosted glider with revolutionary swingwing recovery is back! Launches as a rocket - recovers as a glider! New and improved pivot mechanism for increased transition reliability. Laser cut balsa parts.

transition reliability. Laser cut balsa parts. **SPECS: Length:** 23.4 in. (59.4 cm)

Wingspan: 16 in. (40.6 cm)

Dia.: 0.98 in. (24.9 mm) **Wt.:** 3.1 oz. (89.1 g) **Recovery:** Glide & 12 in. (30 cm) Parachute

Fins: Laser cut balsa

Max. Altitude: 750 ft. (229 m)

Recommended Engines: B4-4. B6-2, C6-3

1382 COMANCHE-3"

\$19.79

A "D" engine powered booster stage rocket that roars to ultra high altitudes - over half a mile (805 m) high! Updated with laser cut balsa fins and water slide decals.

SPECS: Length: 41 in. (104.1 cm)

Dia.: 0.98 in. (24.9 mm) Wt.: 2.1 oz. (59 g)

Recovery: Booster-Tumble; Main Stage-Two Streamers

Fins: Laser cut balsa

Max. Altitude: 2660 ft. (811 m)
Recommended Engines: Single Stage Flights - A8-3, B4-4, B6-4, C6-5; Three Stage Flights - Booster: D12-0 Second

Stage: C6-0; Third Stage: B6-6, C6-7. Requires 3/16 in. (5 mm) Maxi[™] launch rod (302244) - sold separately.

1942 SR-71 BLACKBIRD™

\$19.99

Build and fly the world's fastest manned jet! This SR-71 Blackbird $^{\text{TM}}$ is a scale model and includes authentic looking "Blackbird Skin", plastic components and decals.

SPECS: Length: 19.0 in. (48.3 cm)

Dia.: 0.976 in. (24.8 mm) Wt.: 3.2 oz. (90.7 g)

Recovery: 18 in. (46 cm) Parachute

Fins: Die cut balsa

Max. Altitude: 600 ft. (183 m)

Recommended Engines: B4-2, B6-2, B6-4, C6-5

2109 RENEGADE™

\$15.79

Going staged is awesome! Witness a magnificent lift-off with the RenegadeTM. It's over two feet tall and can be launched as a single stage or two-stage rocket.

SPECS: Length: 26.6 in. (67.6 cm)

Dia.: 1.637 in. (41.6 mm) Wt.: 4.3 oz. (120.9 g)

Recovery: 12 in. (30 cm) Parachute

Fins: Die cut balsa

Max. Altitude: 850 ft. (260 m)

Recommended Engines: Single Stage - A8-3, B4-4, B6-4, C6-5; Two-Stage: Booster - C6-0; 2nd Stage - A8-5, B6-4,

B6-6, C6-5, C6-7

2110 OUTLANDER™

\$20.99

Get ready to explore the outer rim of the galaxy with the Outlander™. It's stellar-looking design and decals compliment the unique 'Chute & Lander recovery system.

SPECS: Length: 12.5 in. (31.8 cm)

Dia.: 4.375 in. (111.1 mm) Wt.: 4.2 oz. (120.2 g)

Recovery: 18 in. (46 cm) Parachute

Fins: Die cut balsa

Max. Altitude: 200 ft. (61 m)

Recommended Engines: B4-2, B6-2, C6-3

2188 CANADIAN ARROW

\$25.29

The Canadian Arrow team V-2 based X Prize rocket stands over two feet tall and includes laser cut balsa parts. It is safely recovered with a colorful, fully assembled 18-inch parachute. 1:24 scale.

SPECS: Length: 26.8 in. (67.9 cm)

Dia.: 2.60 in. (60.5 mm) **Wt.:** 5.3 oz. (150 g)

Recovery: 18 in. (46 cm) Parachute

Fins: Laser cut balsa

Max. Altitude: 500 ft. (152 m)

Recommended Engines: D12-3, D12-5 Requires 3/16in. (5 mm) Maxi™ launch rod (302244)

- sold separately.

STED "E" ENGINE POWERED ROCKET KITS

w.estesrockets.com FLIES OVER 1,400 FT. धानध E-Z TO BUILD Improved!

- · Estes "E" engines sold separately
- For ages 18 and up. Adult supervision required for ages under 18

Requires Estes Porta-Pad® E Launch Pad (2238) and E™ Launch Controller (2230) for use sold separately

1950 ELIMINATOR™

\$25.99

Reach new heights with this quick-build, high-flying sport rocket. The Eliminator™ comes with colored body tubes. nose cone and fin unit, so no painting is required.

SPECS:

Skill Level: 2

Length: 30.8 in. (78.2 cm) **Dia.:** 1.35 in. (34.3 mm)

Wt.: 4.6 oz. (130 g)
Recovery: 12 in. (30 cm) Parachute

Fins: One piece plastic molded

Max. Altitude: 1420 ft. (433 m)

Recommended Engines: D12-5, D12-7, E9-6, E9-8

1951 EXECUTIONER®

\$46.99

Huge rocket stands over 3 ft. (0.9 m) tall! The ExecutionerTM comes with laser cut fins and a slotted body tube for precise fin alignment.

SPECS:

Skill Level: 3

Length: 38.5 in. (97.8 cm) **Wt.:** 8.1 oz. (230 g) **Recovery:** 24 in. (61 cm) Parachute

Fins: Laser cut birch wood Max. Altitude: 590 ft. (180 m)

Recommended Engines: D12-3, E9-4, E9-6

2162 BIG DADDY™

\$28.49

The Big Daddy™ has been re-designed to fly twice as high using Estes E engines. It also can fly on D's as well. Laser cut fins, waterslide decals and a contemporary new look, may just answer the question...

"Who's Your Daddy?" SPECS:

Skill Level: 2

Length: 19 in. (48.3 cm) **Dia.:** 3 in. (76.2 mm)

Wt.: 5.3 oz. (150 g)
Recovery: 24 in. (61 cm) Parachute
Max. Altitude: 900 ft. (274 m)

Recommended Engines: C11-3, D12-3, D12-5, E9-4,

2196 SPACESHIPONE™

\$65.99

This SpaceShipOne™ is a large, 1:15 scale version of the famous Ansari X PRIZE winner. It's launched by a powerful Estes E engine and is an actual replica of Burt Rutan's design. It blasts 600 feet into the atmosphere and is recovered with an 18 inch nylon parachute.

SPECS:

Skill Level: 3

Length: 26 in. (66 cm) **Wingspan:** 12.8 in. (32.5 cm) **Dia.:** 4 in. (102 mm)

Wt.: 11 oz. (311 g)
Recovery: 18 in. (46 cm) Nylon Parachute
Max. Altitude: 600 ft. (183 m)

Recommended Engines: E9-4, E9-6





BLURZZ™ ROCKET POWERED RACERS 9114 DRAGSTER ASST.

\$32.49

Shred some tread with Rocket Powered Racers and experience the thrill of racing at scale speeds close to the speed of sound! The racers operate on any smooth stretch of asphalt or concrete. They're powered by an Estes solid fuel rocket engine and stop at the end of the track by parachute. The entire racetrack sets up in just minutes and packs up into its own carrycase when the racing is over. SPECS:

Length: 14 in. (35.6 cm); Wheelbase: 4.5 in. (11.4 cm); Recommended Engine: Blurzz™ A10-PT Race Engine ONLY

2040 – Red Dragster 2041 – Blue Dragster 2042 - Green Dragster

9120 FUNNY CAR W/ DIGITAL SPEEDOMETER (CAR ONLY) ASST.

How fast can you go? These funny cars can track their speed with a digital speedometer embedded in the roof of the car. Requires Blurzz™ Rocket Powered Race Set and Blurzz™ A10-PT Race Engine – each sold separately. SPECS:

Length: 9.38 in. (23.8 cm); Wheelbase: 5.25 in. (13.3 cm); Recommended Engine: Blurzz™

A10-PT Race Engine: Bur 22.11 A10-PT Race Engine ONLY 2043 – Red/Orange Funny Car 2044 – Blue/White Funny Car 2045 – Yellow/Black Funny Car

Rocket - powered racers are for ages 12 and over only.



New!













ESTES MODEL ROCKET ENGINES

The famous model rocket engines that made model rocketry the great activity it is today. Estes model rocket engines have been proven consistent and reliable in more than 315,000,000 launches.

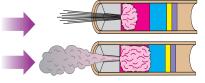
- The concept of a factory assembled model rocket engine is the foundation of this scientific and educational activity!
- 3% of all Estes engines are static-tested at the factory for reliability and adherence to performance specifications.
- All engines comply with the code requirements of the National Fire Protection Association and are certified by the National Association of Rocketry.

A8-3 ESTES MODEL ROCKET ENGINE PAPER CASING CLAY NOZZLE CL AV RETAINER CAP PROPELLANT FOR **EJECTION CHARGE** DELAY FOR LIFTOFF AND ACCELERATION COAST PHASE AND TO ACTIVATE

RECOVERY SYSTEM

HOW DOES A MODEL ROCKET ENGINE WORK?

- I. When engine is ignited, it produces thrust and boosts rocket into sky.
- 2. After propellant is used up, delay is activated, producing tracking smoke and allowing rocket to coast.
- 3. After delay, ejection charge is activated, deploying recovery system.





WHAT SIZES ARE AVAILABLE?

Estes engines are available in a wide variety of sizes and power levels:

TYPE	TOTAL IMPULSE	ENGINE TYPES
1/4A	0.313 - 0.625	Mini
1/2A	0.626 - 1.25	Standard, Mini
A	1.26 - 2.50	Standard, Mini
В	2.51 - 5.00	Standard
C6	5.01 - 10.00	Standard
C11	5.01 - 10.00	"D" Size
D	10.01 - 20.00	"D" Size
E	20.01 - 30.00	"E" Size

WHAT DO THE DIFFERENT COLOR ENGINES MEAN?

Each type of engine is printed in a different color:

Single Stage - Green

Upper Stage - Purple (Upper stage engines can be used as single stage engines in lightweight rockets.)

ejection charge.)

3.75 in. (9.5 cm) long -Booster - Red (Booster engines contain no delay or E9-4 ESTES. Plugged - Blue (Plugged engines are used for R/C gliders and contain no delay or ejection charge.) "E" ENGINE Each engine has a letter-number-number code. (e.g., B6-4)

Letter: B Number: 6: Number: 4 B6-4 OS ESTES 0

B = TOTAL IMPULSE

This letter is the total power (in Newton-seconds) produced by the engine. Each succeeding letter has up to twice the total power as the previous letter. (Example: "B" engines have up to twice the power of "A" engines, which results in approximately twice the altitude the rocket will reach.)

6 = AVERAGE THRUST

This number shows the engine's average push or how fast the engine powers the rocket to go. The higher the number, the faster the speed. It is measured in Newtons (4.45 Newtons = 1 lb.).

| 1.75 in. (4.4 cm) | long 0.5 in. (13 mm) A10-3T SESTES _ diameter MINI ENGINE - 2.75 in. (7.0 cm) long 0.69 in. (18 mm) **B6-4** ESTES. diameter STANDARD ENGINE _ 2.75 in. (7.0 cm) _ long 0.95 in. D12-3 ESTES (24 mm) diameter "CII" & "D" ENGINE

0.95 in.

(24 mm)

diameter

4 = TIME DELAY

This number gives you the time delay in seconds between the end of the thrust phase and ignition of the ejection charge. Engine types ending in "0" have no time delay or ejection and are used for booster stages and special purposes only. Engines ending in "P" have no time delay or ejection charge and the forward end is "Plugged".

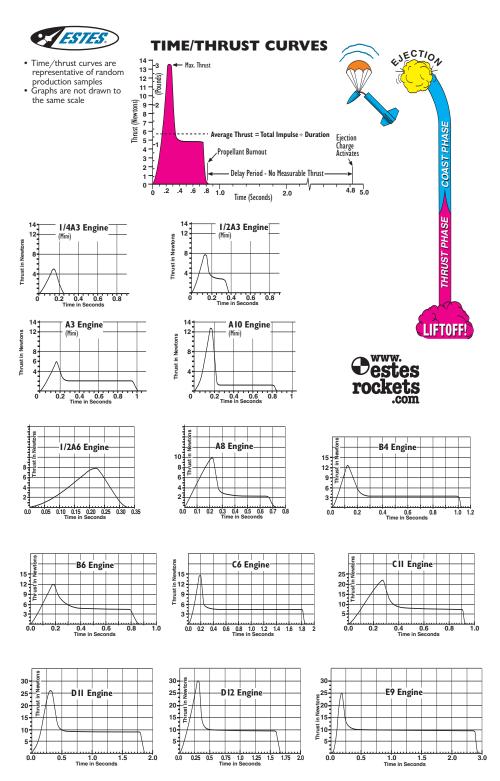


ENGINE CHART

- Delays have a tolerance of plus or minus 10% or 1 second, whichever is greater.
- All Estes engines come complete with igniters and patented igniter plugs (Pat. No. 5,410,966 and 5,509,354). The Estes Igniter Plug makes engine ignition extremely reliable.
- Do not fly a rocket/engine combination whose liftoff weight exceeds the recommended maximum liftoff weight.

Prod. No.	Engine Type	Total Impulse	Time Delay	Ma Lift \		Ma Thr		Thrust Duration	Init Wei		Prope		Retail Price
		N-sec	Sec.	Oz.	g	Newtons	Lbs.	Sec.	Oz.	g	Oz.	g	\$
SING	GLE STAGE EN	IGINES (GREEN	LABE	L)								
1502	1/4A3-3T	0.625	3	1.0	28	4.9	1.1	0.25	0.20	5.6	0.03	0.85	\$7.29
1503	1/2A3-2T	1.25	2	2.0	57	8.3	1.9	0.3	0.20	5.6	0.06	1.75	\$7.29
1507	A3-4T	2.50	4	2.0	57	6.8	1.5	0.6	0.27	7.6	0.12	3.50	\$7.29
1511	A10-3T	2.50	3	3.0	85	13.0	2.9	0.8	0.28	7.9	0.13	3.78	\$7.29
1593	1/2A6-2	1.25	2	2.0	57	8.9	2.0	0.3	0.53	15.0	0.06	1.56	\$7.29
1598	A8-3	2.50	3	3.0	85	10.7	2.4	0.5	0.57	16.2	0.11	3.12	\$7.29
1601	B4-2	5.00	2	4.0	113	13.2	3.0	1.1	0.70	19.8	0.29	8.33	\$7.79
1602	B4-4	5.00	4	3.5	99	13.2	3.0	1.1	0.74	21.0	0.29	8.33	\$7.79
1605	B6-2	5.00	2	4.5	127	12.1	2.7	0.8	0.68	19.3	0.22	6.24	\$7.79
1606	B6-4	5.00	4	4.0	113	12.1	2.7	0.8	0.71	20.1	0.22	6.24	\$7.79
1613	C6-3	10.00	3	4.0	113	15.3	3.4	1.6	0.88	24.9	0.44	12.48	\$8.59
1614	C6-5	10.00	5	4.0	113	15.3	3.4	1.6	0.91	25.8	0.44	12.48	\$8.59
1622	C11-3	10.00	3	6.0	170	22.1	4.9	0.8	1.14	32.2	0.39	11.00	\$10.49
1666	D12-3	20.00	3	14.0	396	32.9	7.4	1.6	1.49	42.2	0.88	24.93	\$12.29
1667	D12-5	20.00	5	10.0	283	32.9	7.4	1.6	1.52	43.1	0.88	24.93	\$12.29
1673	E9-4	30.00	4	15.0	425	25.0	5.6	2.8	2.00	56.7	1.27	35.80	\$17.49
1674	E9-6	30.00	6	12.0	340	25.0	5.6	2.8	2.00	56.7	1.27	35.80	\$17.49
UPP	ER STAGE EN	GINES (P	URPLE	LABE	L)								
1504	1/2A3-42	1.25	4	1.0	28	8.3	1.9	0.3	0.21	6.0	0.06	1.75	\$7.29
1599	A8-5	2.50	5	2.0	57	13.3	3.0	0.5	0.62	17.6	0.11	3.12	\$7.29
1607	B6-6	5.00	6	2.5	71	12.1	2.7	0.8	0.78	22.1	0.22	6.24	\$7.79
1615	C6-7	10.00	7	2.5	71	15.3	3.4	1.6	0.95	26.9	0.44	12.48	\$8.59
1668	D12-7	20.00	7	8.0	226	32.9	7.4	1.6	1.55	44.0	0.88	24.93	\$12.29
1675	E9-8	30.00	8	10.0	283	25.0	5.6	2.8	2.00	56.7	1.2	35.80	\$17.49
ВОО	STER STAGE	ENGINES	(RED	LABE	L)								
1616	C6-0	10.00	None	4.0	113	15.3	3.4	1.6	0.80	22.7	0.44	12.48	\$8.59
1665	D12-0	20.00	None	14.0	396	32.9	7.4	1.6	1.44	40.9	0.88	24.93	\$12.29
PLUG	GED ENGINES	FOR USE	WITH	ROCKE	T POW	ERED R	ACERS	& R/C RC	CKET	GLIDE	RS (BL	UE LAI	BEL)
1505	A10-PT	2.50	None	3.0	85	13.0	2.9	0.8	0.26	7.4	0.13	3.78	\$7.29
1669	D11-P	20.00	None	16.0	453	27.6	6.2	1.8	1.55	44.0	0.88	24.93	\$12.29
1676	E9-P	30.00	None	15.0	425	25.0	5.6	2.8	2.0	56.0	1.27	35.80	\$17.49

The data listed above is from randomly chosen production samples. NOTE: The "T" designates a mini engine.





MODEL ROCKET ACCESSORIES

1463 DESIGNER'S SPECIAL	302274 RECOVERY WADDING		
Includes 6 each of A8-3, B6-4, C6-3, C6-5 engines, 30 igniters and 75 sheets of recovery wadding.	302278 SHOCK CORDS & MOUNT PACK \$4.29		
2230 E [™] LAUNCH CONTROLLER\$31.99 Comes complete with safety key and 30 ft. (9 m) of cable. Requires 4 "AA" alkaline batteries - not included. Adult supervision is required for anyone under 18 when launch-	Contains two 1/8 in. x 18 in. (3 mm x 450 mm), and or 1/4 in. x 36 in. (6 mm x 910 mm) rubber shock cords (enough for four shock cords). Includes mounts and instructions.		
ing "E" engine powered rockets. 2238 PORTA-PAD® E LAUNCH PAD \$31.99	30230I MODEL ROCKET IGNITERS Dependable, easy-to-use Estes igniters in a convenient six pack. It's always a good idea to have a few spares.		
Quick assembly - no glue or tools required. Includes a 1,74 in. (6 mm) launch rod, but can accommodate a 3,716 in. (5 mm) Maxi TM launch rod - not included. Adult supervision required for anyone under 18 when launching "E" engine powered rockets.	302320 LAUNCH LUG PACK		
302215 PORTA-PAD® II LAUNCH PAD \$25.79 Quick assembly - no glue or tools required! Comes complete with blast deflector and standoff, two-piece 1/8 in. (3 mm) launch rod, safety cap and key. Porta-Pad® II can	303143 ENGINE HOOK ACCESSORY PACK\$5.29 Hooks fit mini engines (one), regular and "D" engines (three) and "E" engines (two). Includes spacer for "E" engine hooks.		
accommodate a 3/16 in. (5 mm) Maxi [™] launch rod - not included.	303I58 REGULAR ENGINE MOUNT KIT		
302220 ELECTRON BEAM® LAUNCH CONTROLLER \$28.79 Launch controller comes complete with safety key and 17 ft. (5.2 m) of cable. Requires four "AA" alkaline batteries - not included.	303I59 D AND E ENGINE MOUNT KIT\$9.99 Heavy duty engine mounts for "D" and "E" engines. Fits BT-55, 60 and 80 tubes.		
302227 TUBE MARKING GUIDE\$10.29 Easy way to mark fin and launch lug placement lines. Also includes a fin gluing jig.	NOSE CONE ASSORTMENTS Each package of nose cones contains a variety of		
302232 ALTITRAK™\$25.49 Measure altitude with this easy to use device. Follow the rocket in the sights to apogee, release the trigger to lock	shapes. Some are one piece, others two-piece. All har eyelets for shock cord and shroud line attachments.		
the reading.	303160 NC-5 NOSE CONE ASSORTMENT (5 pack) \$8.99		
302233 EMERGENCY REPAIR KIT	303161 NC-20 NOSE CONE ASSORTMENT (4 pack) . \$8.99		
ery wadding, 12 in. (30 cm) assembled parachute, shroud lines, launch lugs, shock cords and launch rod safety cap.	303162 NC-50 NOSE CONE ASSORTMENT (5 pack) . \$8.99		
302241 BLAST DEFLECTOR PLATE\$5.59	303163 NC-55 NOSE CONE ASSORTMENT (4 pack). \$11.29		
Replaces that worn-out deflector.	303164 NC-56 NOSE CONE ASSORTMENT (4 pack) . \$8.69		
302243 1/8 in. (3 mm) TWO-PIECE LAUNCH ROD . \$11.49 Replacement rod; ideal for most rockets.	303165 NC-60A NOSE CONE ASSORTMENT (4 pack) \$8.79		
302244 3/16 in. (5 mm) TWO-PIECE MAXI™ LAUNCH ROD \$13.99 Launch rod with extra strength and length for larger rockets.	303168 NC-80B NOSE CONE (I pack)\$6.29		
302264 I2 in. (30 cm) PARACHUTE (Assembled) \$5.79 302267 I8 in. (46 cm) PARACHUTE (Assembled) \$6.39 302271 24 in. (61 cm) PARACHUTE (Assembled) \$6.79	303I96 LARGE TUBE COUPLER PACK		

BODY TUBES

High quality spiral wound paper tubes. Use tube couplers to connect tubes of the same diameter. Four tubes per package with BT-5 & BT-20, three per package with BT-50, BT-55, and BT-60 & two per package in BT-80.

Product Number	Body Tube Size	Inside Dimension in./mm	Outside Dimension in./mm	Length in./cm	Retail Price
303084	BT-5	0.518/13.2	0.544/13.8	18.0/45.7	\$6.89
303085	BT-20	0.710/18.0	0.736/18.7	18.0/45.7	\$6.99
303086	BT-50	0.950/24.1	0.976/24.8	18.0/45.7	\$7.69
303087	BT-55	1.283/32.6	1.325/33.7	18.0/45.7	\$7.69
303089	BT-60	1.595/40.5	1.637/41.6	18.0/45.7	\$8.69
303090	BT-80	2.588/65.7	2.600/66.0	14.2/36.1	\$8.69



ESTES PLANES



SKY RANGERS® R/C JET

55 IN (140 cm) WINGSPAN



AIR FORCE I PRESIDENTIAL R/C AIRLINER

Produced under license from Boeing Management Company. Boeing, McDonnell Douglas, McDonnell, Douglas, North American Aviation, their distinctive liveries, logos, and product markings are among the trademarks owned by Boeing.

TAKES AWESOME PICTURES!



XB-39 EAGLEYE® DIGITAL CAMERA R/C PLANE

Eagleye is a registered trademark of ETI. LLC and used with permission.

TWIN ELECTRIC DUCTED FAN JET PRESIDENTIAL VIP R/C AIRLINER





ESTES PLANES

4112 SKY RANGERS® R/C JET

\$109.99

Scale looks like of the famous Blue Angels. Electric ducted fan. Single channel control. Crash resistant EPP foam construction. Includes 2 flight batteries. Complete and ready to fly. Includes charger and radio system. Ages 12+.

Wingspan: 30 in. (75.2 cm) Length: 25 in. (63.5 cm) Freq: 27.145 MHz Range: 750 ft. (229 m)

Requires 6 - AAA batteries - sold separately.

4120 PRESIDENTIAL VIP R/C AIRLINER

\$164.99

Air Force 2 look-a-like! Easy 2 channel control. Thrust vector steering provides trouble free flight control. Includes 2 flight batteries. Complete and ready to fly. Ages 12+.

Wingspan: 55 in. (140 cm) **Length:** 34 in. (86.4 cm) Freq: 27.145 MHz **Range:** 1000 ft. (305 m)

Requires 6 - AAA batteries - sold separately.

4123 AIR FORCE I PRESIDENTIAL R/C AIRLINER

\$204.99

Fly the President's plane! One of the largest RC airplanes available and powered by 4 electric ducted fan jet engines! Flight control is made simple by using a unique 'Thrust Vectoring' technique... electronically control the speed of the engines for full function control! Includes a launch system for perfect takeoffs, two flight batteries and a charger that can be used at home or at the field. Ready to fly in minutes!. Ages 12+.

SPECS:

Wingspan: 42 in. (107 cm) **Length:** 40 in. (101.6 cm) Freq.: 27.145 MHz Range: 1000 ft. (304.8 m)

Requires 8 - AA alkaline batteries - sold separately.

4127 XB-39 EAGLEYE DIGITAL CAMERA R/C PLANE

Take some of the most fantastic digital pictures ever from an eagle's eye view with this amazing R/C model airplane. Designed for anyone to fly, this giant size, twin engine (ducted fan jet engines) jet can reach heights of 1000 feet and snap up to 26 digital pictures on command along the way. Camera pod snaps off the plane for easy download of your pictures to your computer. Includes a simple to use takeoff system, two rechargeable flight batteries, a charger that operates at home or the flying field, a 4 function controller, software, USB cable and two button cell batteries for camera. Camera's resolution is 72 dpi. Ages 12+.

SPECS:

Wingspan: 55 in. (140 cm) **Length:** 34 in. (86.4 cm) Freq.: 27.145 MHz Range: 1000 ft. (304.8 m)

Requires 6 - AAA alkaline batteries - sold separately.

4130 OUICKFIRE™ R/C AIRPLANE \$59.99

A revolutionary new way to fly R/C! The QuickFire[™] is a catapult launched R/C airplane that flies over and over again without needing to charge a single battery, burn out a motor or break a propeller! Simply attach it to the included catapult launch system, pull back and let it fly. Includes 2 channel push button controller. Ages 12+.

SPECS:

Wingspan: 32 in. (81.3 cm) **Length:** 14 in. (35.6 cm) Freq.: 27.145 MHz **Range:** 200 ft. (60.96 m)

Requires 1 – 9 volt transistor battery and 3 'AAA' alkaline

batteries- sold separately.



ESTES PLANES





SKY RANGERS® F4U CORSAIR®



4014 FLIGHT MASTER* RAVENTM 4016 FLIGHT MASTER* CONDORTM \$8.49 \$8.49

Wind 'em up...toss 'em into the wind...and let the flying adventures begin! Easy to build, scale looking, rubber band powered. Ages 8+.

SPECS:

Wingspan: 15 in. (38.1 cm) **Length:** 13 in. (33 cm)

4022 AERO X™ INTERCEPTOR™ \$44.99

This mini-sized R/C Mobile Launcher drives around the house, room to room, to launch its AeroXTM plane with a simple push of buttons. The plane is electric powered and charges in seconds while on the Interceptor™ launcher. Designed to fly in most any room of the house, it's light and durable enough to bounce off walls and ceilings and keep on flying! You can even fly it out-doors on calm days. Ages 8+.

SPECS:

Mobile Launcher: **Length:** 7 in. (17.78 cm) **Width:** 4.5 in. (11.43 cm) Freq.: 27.145 MHz **Electric Free Flight Plane:** Wingspan: 9.25 in. (23.5 cm) **Length:** 7.75 in. (19.69 cm)

Requires 4-AA alkaline batteries - sold separately.

Aero X is a TM of Hosung and is used by permission.

4105 SKY RANGERS* F4U CORSAIR* \$60.99

Fly one of the most famous fighters in the world! This scale RC version of an F4U Corsair WW II Fighter is fitted with a new state-of- the-art electronics package that lets even a beginner fly like a pro. Features like motor 'on/off' control, out of range protection and an electronic steering control that prevents over controlling the plane during flight to make you an 'Ace' in no time. Also includes a launch system for perfect takeoffs every time and a charger to use at the field. Ages 12+.

SPECS:

Wingspan: 20.25 in. (51.44 cm) **Length:** 16 in. (40.64 cm) Freq.: 27.145 MHz

Range: 500 ft. (152.4 m) Requires 6 - 'C' and 6 - 'AAA' alkaline batteries - sold separately.

CORSAIR is a registered trademark of Northrop-Grumman and used under

4116 SKY RANGERS® PEE WEE FIGHTER

\$40.99

Miniature scale. Perfect for small park flying. Single channel control. Charges in less than 1 minute. Complete and ready to fly! Ages 10+.

Wingspan: 14 in. (35.6 cm) **Length:** 12in. (30.5 cm) Freg: 27.145 MHz Range: 300 ft. (91m)

Requires 1-9 Volt & 6 - C size batteries - sold separately.





ESTES EDUCATOR™ PRODUCTS



FOR MORE DETAILS AND INFORMATION ON OUR MODEL ROCKET EDUCATIONAL SUPPLIES,
SEE THE ESTES EDUCATOR™ CATALOG OR VISIT US AT: **www.esteseducator.com**

ESTES EDUCATOR™ MODEL ROCKET BULK PACKS

12 rockets per pack, complete with 12 sets of instructions and extra parts.

E2X® SERIES

 I750 Gnome™ Bulk Pack (See page 17 for rocket description)
 \$54.99

 I751 Alpha III® Bulk Pack (See page 17 for rocket description)
 \$99.99

 I764 Generic E2X® Bulk Pack (Pictured below)
 \$90.99

IGNITE THE
IMAGINATION™
OF YOUR
STUDENTS!

SKILL LEVEL I

 I754 Wizard™ Bulk Pack (See page 21 for rocket description)
 \$60.99

 I755 Viking™ Bulk Pack (See page 23 for rocket description)
 \$50.99

 I756 Alpha® Bulk Pack (Pictured below)
 \$84.99

GENERIC E2X® BULK PACK (E2X® Series) SPECS: Length: 15 in. (38.1

Length: 15 in. (38.1 cm)
Dia.: 0.98 in (24.8 mm)
Wt.: 1.3 oz. (36 g)
Recovery: 12 in. (30 cm)
Parachute

Fins: One piece plastic molded Max. Altitude: 1100 ft. (335 m) Recommended Engines: 1/2A6-2, A8-3, A8-5, B4-4, B6-4. B6-6. C6-5. C6-7.



ALPHA® BULK PACK (Skill Level I)

SPECS:

Length: 12.3 in. (31.2 cm)
Dia.: 0.98 in (24.9 mm)
Wt.: 0.8 oz. (23 g)
Recovery: 12 in. (30 cm)
Parachute
Fins: Die cut balsa

Max. Altitude: 1000 ft. (305 m) Recommended Engines: 1/2A6-2, A8-3, A8-5, B4-4, B6-4, B6-6, C6-5, C6-7.

ESTES EDUCATOR™ MODEL ROCKET ENGINE BULK PACKS

Includes 24 engines and igniter plugs, 30 igniters and a package of recovery wadding - 75 sheets. (Pictured at right)
See pages 34-36 for engine descriptions.

1788 1/2A3-4T Bulk Pack	\$43.99
I781 A8-3 Bulk Pack	\$54.99
1783 B6-4 Bulk Pack	\$55.99
1784 B6-0/B6-6 Bulk Pack (12 each)	\$62.99
1789 C6-5 Bulk Pack	\$64.99
1672 Blast-Off® Flight Pack	\$54.99
(Includes 6 each: A8-3, B6-4, C6-3, C6-5)	



ESTES EDUCATOR™ MODEL ROCKET ENGINE BULK PACK

CURRICULA

2852 Ignite the Imagination™ Curriculum Guide \$10.99

(Pictured at right)

- For grades 5-8.
- Hands-on activities on model rockets and space.
- National Education Standards incorporated.

FREE ADDITIONAL CURRICULA, TECHNICAL PUBLICATIONS AND SOFTWARE AVAILABLE AT:



IGNITE THE IMAGINATION™
CURRICULUM GUIDE



ESTES SPECIALTY PRODUCTS





EXTREME AIR SHOW!











AIR POWER ACTION HERO







SHOCKWAVETM
PLAY PUCK



ESTES SPECIALTY PRODUCTS

1860 AIR POWER ACTION HERO

\$44.49 The Estes Air Power Action Hero is a Special Forces rocket that blasts high into the sky. Slide the action hero rocket onto the launch tube, pressurize the system with a few pumps, push the button and blast off! Set comes complete with Special Forces rocket and air power launch system. Ages 10+.

SPECS:

Rocket Length: 10.5 in. (27 cm) Max. Altitude: 10 Stories High

Recovery: Bounce

1861 AIR POWER BLAST JETS®

\$49.99

Blast Jets® are air rocket-launched airplanes! Create an extreme air show! Two super-flying jets are thrust over 7 stories into the sky on the back of a booster rocket. The jets separate from the rocket and circle overhead for incredible flight times. Booster rocket has a foam nose cone for "Bounce-Back" recovery. Includes complete air powered launch system, booster rocket and two jets. Ages 10+.

Blast Jet: Wingspan: 6.5 in. (16.5 cm)

Length: 5.75 in. (14.6 cm)

Rocket: Length: 11.25 in. (28.6 cm) Max. Altitude: Over 7 Stories High

Recovery: Bounce

1876 HYDROGEN FUEL ROCKET

A revolutionary new way to launch rockets! Converts water into hydrogen fuel for unlimited launches. Sends a rocket (included) 250 feet (76 m) into orbit. Includes hydrogen generating launch pad, remote launch controller & one ready to fly rocket. Ages 10+ with adult supervision for those under 12.

SPECS:

Launch Platform Length: 20.5 in. (52 cm)

Rocket Length: 11 in. (28 cm) Recovery: Bounce

Max Altitude: 200 ft. (61 m)

Propellant: Hydrogen fuel from water **Power Supply:** 6-"D" alkaline batteries - sold separately.

8304 KICK DIS™ POWER PUCK **LIGHTS & SOUNDS**

This fast moving 7-1/2 inch puck flashes lights and blasts sounds as it hovers on a cushion of air! Play indoors or out, on sidewalks, driveways, floors or low-pile carpet! Play soccer, hockey, bowling or create all sorts of fun and games. Includes wall charger & rechargeable battery. Ages 7+. **Dia.:** 7.5" (19.1 cm)

8306 SHOCKWAVE LIGHTS & SOUNDS PLAY PUCK

\$17.49

Hit this wild 4-inch play puck and watch the lights and sounds blast as it slides across the floor! Four super bright strobes light up and four screaming sounds blast from the puck. Hit it, kick it, and slap it for hours of fun. Official play-

book included. Ages 6+. **Dia.:** 4 in. (10.2 cm).

Includes 3 "AAA" batteries.





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