ESTES!

INSPIRATION THROUGH GENERATIONS

# TABLE OF CONTENTS

Introduction 3	Engines 42
Skill Key 5	Thrust Curves Chart 46
Model Rocket Basics 6	Kerbal 47
Engine Basics 8	Scale Rockets 48
Starter Sets 10	Pro Series II Rockets 56
Launch Sets 12	Educator Beginner Bulk Packs 70
STEM Sets 18	Educator Intermediate Bulk Packs . 72
Beginner Rockets 20	Educator Engine Bulk Packs 74
Intermediate Rockets 26	Launch Supplies 78
Advanced Rockets	Apparel & Gifts 82
Expert Rockets	NAR Safety Code 85
Designer Signature Series 40	Index/Warrantv

For more than 67 years, Estes Industries has been a pioneer in the world of model rocketry, inspiring generations with its innovative designs and accessible kits. From its early models like the Astron Shrike to replicas of today's cuttingedge rockets like the Falcon 9, Estes has played a vital role in shaping the hobby of rocketry and fueling the imagination of space enthusiasts everywhere.

Our theme for this year is "Inspiration Through Generations" and celebrates this rich legacy. Each kit and launch represent more than just a model—it's one small step in a customer's journey toward flight and exploration. The catalog highlights how rocketry can spark collaboration, bring communities together, and inspire the next generation of scientists, engineers, and dreamers.

Whether you're a seasoned rocketeer or a newcomer, I invite you to see what Estes has to offer. Whether you're bonding with family, teaching kids about STEM, or joining a local rocketry club, the sky is the starting point for discovery, learning, and connection.

Mallay

Mallory Langford | President | Estes Industries

ESTES



#### **DUR VISION:**

To ignite the imagination of every generation by being the most trusted source for model rocketry.

#### **DUR MISSION:**

To create safe, successful rocketry experiences for customers everywhere, from their backyards and school yards to worlds beyond.

### THE FOUNDATIONS OF ROCKETRY

Estes was established by Vern and Gleda Estes 67 years ago, and it has carried a proud tradition of safe, exciting, and reliable launches. They established the best practices for motor manufacturing, model rocket design, and safe rocket flight. We use those same principles today and they have led model rocketry to an outstanding safety record. Millions remember the moment they first pressed launch and we're proud to be a part of your journey.



# NAVIGATE DUR CATALOG WITH EASE!

The information found on this page will assist you on your journey through the Estes 2025 Catalog! Here you will find how the product information is presented, what it means, as well as the skill level and product number. We hope a quick understanding will help you make an informed decision to find the right product for you. Let's launch right in!

#### For pricing & purchase please visit EstesRockets.com



This is our example rocket. It is also featured on page 26.

#### Nike Smoke (18 mm)

Length: 22.9 in. (58.2 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute Projected Altitude: 650 ft. (198 m) Recommended Engines: B6-4 & C6-5

#00724







#### BEGINNER

Perfect for the first time flyer or quick weekend fun. Little to no build experience required. Some kits have snap together, pre-colored parts and easy to apply decals. Some glue may be required. Build Time: Under 1 hour



#### INTERMEDIATE

Here's is your first model rocketry challenge. Kits may include laser cut balsa or card stock fins and/or parts. Some sanding and gluing is required as well as finishing of your rocket with primer/paint and applying the rockets decals. Build Time: 1-4 hours



#### **ADVANCED**

You have knowledge of intermediate builds under your belt and are ready for the next step!
Builds are usually more involved with multiple parts. Finishing is more complex and may
require multiple paints and/or masking. Build Time: 4-8 hours



#### EXPERT

You're a pro and ready for more! Kits in this catagory may require lengthy or complex building steps. These kits will test your skills and require an advanced knowledge of rocket building. Advanced finishing knowledge required. Build Time: 6+ hours



#### MASTER

You are ready for the ultimate challenge! You have expert knowledge with complex kit builds as well as working with multiple materials. A keen eye for detail and precision will be required as these kits test all of your skills! Build Time: 8+ hours

#### MODEL ROCKET BASICS

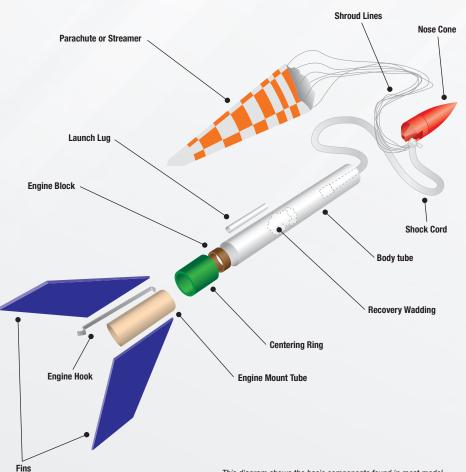
#### What is a Flying Model Rocket?

Estes flying model rockets are safe activity kits made of lightweight materials such as paper tubing, balsa wood, and plastic. Fins attached to the body tube help provide guidance and stability.

An engine mount assembly holds the engine in place during rocket flight in most models.

#### How Does a Model Rocket Work?

The Estes model rocket is propelled into the air safely 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 parachute or streamer, is deployed to return the rocket gently to earth. The rocket can then be prepared for another flight.



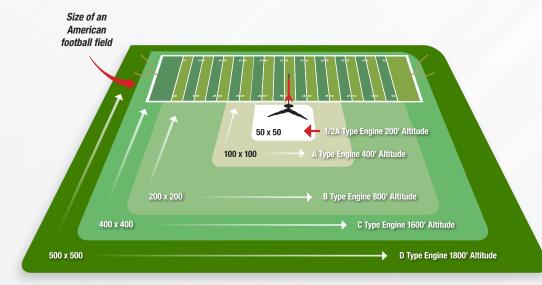
# This diagram shows the basic components found in most model rocket kits. Model rocketry is recommended for ages 10 to adult. Adult supervision is suggested for those under 12 years of age.

#### LAUNCH SITE BASICS

#### Where to Safely Launch Model Rockets

The chart below tells you what size field to use for each size engine. For launch information, look at the "NAR Model Rocket Safety Code" (Pg. 85). You should always check with your local city government for any special regulations that may apply to your area. Generally speaking, you can fly most Estes model rockets in a clear area the size of a football field or soccer field. Launch in little or no wind, and make sure there is no dry grass close to the launch pad or in the flying field. Each engine size is designated by a letter and is up to twice as powerful as the letter before it. See the engine section (Pgs. 42- 46) of this catalog for more information.

LAI	JNCH SITE DIMENS	SIONS
Installed Total Impulse (N-sec)	Equivalent Motor Type	Minimum Site Dimensions (ft.)
0.00 - 1.25	1/4 A, 1/2 A	50 X 50
1.26 - 2.50	Α	100 X 100
2.51 - 5.00	В	200 X 200
5.01 - 10.00	C	400 X 400
10.01 - 20.00	D	500 X 500
20.01 - 40.00	E	1000 X 1000
40.01 - 80.00	F	1000 X 1000



#### Recommended Launch Site Area

Minimum launch site dimension for circular area is diameter in feet, and for rectangular area is shortest side in feet. Choose a large field away from power lines, buildings, tall trees and low flying aircraft. The larger the launch area, the better your chance of recovering your rocket. Make sure the launch area is free of obstructions, dry weeds, brown grass or highly flammable materials. Football fields, parks and playgrounds are great. Launch only during calm weather with little or no wind and good visibility. The diagram above shows the smallest recommended launch areas.

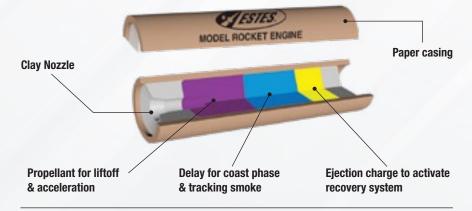
#### **ENGINE BASICS**

#### What is a Model Rocket Engine?

Estes model rocket engines are used to safely launch a model rocket into the air. They are factory-assembled and comply with the safety requirements of the National Association of Rocketry. They are single use and range in power from A to F sizes. The engine is started using an electrical launch system that is powered by alkaline batteries.

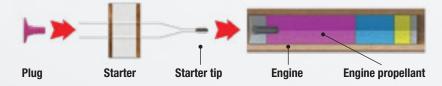


#### Components of a Model Rocket Engine

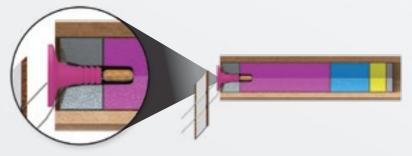


#### How to Prepare Your Rocket Engine for a Safe Launch

1 Use the plug to secure the starter into the engine nozzle of your rocket engine.



Make sure the starter is inserted into the engine nozzle and touches the propellant, then insert the plug.

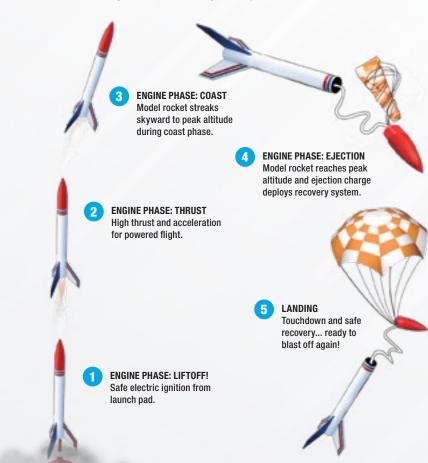


#### How Does a Model Rocket Engine Work?

- When the engine is started, it produces thrust and boosts the rocket into the sky.
- After the propellant is used up, the delay is activated, producing tracking smoke and allowing the rocket to coast.
- 3 After the delay is used, the ejection charge is activated, which deploys the recovery system, such as a parachute or streamer.



#### Model Rocket Engine Phase & Flight Sequence



Thanks to the recovery system, you can enjoy the thrill of launching Estes rockets over and over! Every launch, however, requires a new engine as engines can only be used once.

# STARTER SETS!



Scan to Shop Now!

Start Your Estes Experience Here!

#### Here's what's in the box:

One or two Estes model rockets (either in a parts kit or almost ready to fly), model rocket engines, one launch pad, one launch controller, and required flight supplies. For any additional launches, you will need to purchase additional Estes Engines and flight supplies.

#### AstroCam® Starter Set

Length: 20 in. (50.8 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 900 ft. (274 m) Recommended Engines: A8-3, B4-4, B6-4, C6-5

#005325



SNAP TOGETHER NO GLUE REQUIRED





Everything You Need to Launch Included!"

PTHENR X

FLYNG MODEL NOCHT

STARTER SET

#### Athena™ Length: 17 i

Xtreme™

Length: 17 in. (43.2 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1125 ft. (343 m) Recommended Engines: A8-3, B4-4, B6-4, C6-5

Projected Altitude: 1600 ft. (488 m) Recommended Engines:

Athena X<sup>™</sup> Starter Set

Length: 16.8 in. (42.7 cm) Diameter: 0.74 in. (19 mm) Recovery: Streamer

1/2 A6-2, A8-3, A8-5,

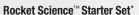
B4-4, B6-6, C6-5, C6-7

#005304



Includes 2 Engines!





Length: 12.6 in. (32 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1100 ft. (335 m) Recommended Engines: 1/2 A6-2, A8-3, B4-4, B6-4, B6-6, C6-5, C6-7

#005326

Includes **3** Engines and an Altitude Tracker!



# LAUNCH SETS!

# Almost Ready-To-Fly Kits for Easy Weekend Fun for the Entire Family!



Scan to Shop Now!

#### Here's what's in the box:

One or two Estes model rockets (either in a parts kit or almost ready to fly), (1) Estes Electron Beam® Launch Controller, (1) Estes Porta-Pad® II Launch Pad\*, recovery system, and instructions for assembly and use.

\*New Mini Launch Sets use the (2244) Mini Launch Pad & Controller.

#### Here's what's not in the box:

Recommended model rocket engines, plugs, starters, recovery wadding, tools, construction and finishing supplies for the rockets, and 4 new AA 1.5V alkaline batteries for the launch controller.



Includes everything you see here!

\*Launch Controller requires 4-AA alkaline batteries sold separately.

### MINI ROCKET LAUNCH SETS!

Start your rocketry experience with one of our new mini launch sets! We've reinvented some of our most popular rockets into easy-to-assemble mini versions, complete with a launch pad and controller, for an easy trip to the launch pad. Ideal for smaller launch areas such as parks and school yards and a perfect way to introduce kids and new flyers to this exciting hobby!



#### Mini Alpha™ Launch Set

Length: 9.2 in. (23.5 cm)
Diameter: 0.74 in. (19 mm)
Recovery: Streamer
Projected Altitude: 690 ft. (210 m)
Recommended Engines:
1/2 A3-2T, A3-4T, A10-3T

#002458



#### Mini Bertha™ Launch Set

Length: 9.9 in. (25.3 cm)
Diameter: 0.74 in. (19 mm)
Recovery: Streamer
Projected Altitude: 650 ft. (198 m)
Recommended Engines:

1/2 A3-2T, A3-4T, A10-3T

#002469



13

## MINI ROCKET LAUNCH SETS Cont.



#### Mini Max™ Launch Set

Length: 8.8 in. (22.3 cm)
Diameter: 0.98 in. (25 mm)
Recovery: Streamer
Projected Altitude: 300 ft. (91 m)
Recommended Engines:
1/2 A3-2T, A3-4T, A10-3T

#002445

Note: Painting Required. Rockets that require gluing, priming, sanding and/or painting but are easy to build, fall under our Intermediate level.





#### Star Hopper™ Launch Set

Length: 7.4 in. (18.8 cm) Diameter: 0.74 in. (19 mm) Recovery: Streamer Projected Altitude: 400 ft. (122 m) Recommended Engines: 1/2 A3-2T, A3-4T, A10-3T

#002427







#### Taser™ Launch Set

Length: 17 in. (43.2 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1100 ft. (335 m) Recommended Engines: A8-3, B4-4, B6-4, B6-6, C6-5, C6-7

#001491





Length: 12.1 in. (30.7 cm)
Diameter: 0.98 in. (25 mm)
Recovery: Parachute
Projected Altitude: 1150 ft. (351 m)
Recommended Engines:
1/2 A6-2, A8-3, A8-5, B4-4,
B6-4, B6-6, C6-5, C6-7

#001427

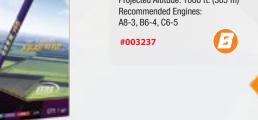






D.O.R.M 18™ Launch Set

Length: 20.3 in. (51.6 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1000 ft. (305 m) Recommended Engines: A8-3. B6-4. C6-5





#### Rascal<sup>™</sup> & HiJinks<sup>™</sup> Launch Set



#### Rascal™

Length: 14.5 in. (36.8 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1100 ft. (335 m) Recommended Engines: A8-3, B4-4, B6-4, C6-5, C6-7 Sold Separately: A10-3T w/ Engine Adapter

#### HiJinks™

Length: 14.5 in. (36.8 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1100 ft. (335 m) Recommended Engines: A8-3, B4-4, B6-4, C6-5, C6-7 Sold Separately: A10-3T w/ Engine Adapter

#001499



#### Tandem-X™ Launch Set



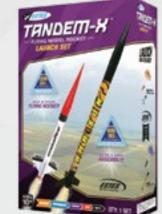
#### Amazon™

Length: 29.4 in. (74.7 cm) Diameter: 1.35 in. (34 mm) Recovery: Parachute Projected Altitude: 600 ft. (183 m) Recommended Engines: B4-2, B4-4, B6-2, B6-4, C5-3, C6-3, C6-5

#### Crossfire™ ISX

Length: 15.6 in. (39.6 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1150 ft. (351 m) Recommended Engines: A8-3. B4-4. B6-4. C6-5. C6-7

#001469





#### **NO ASSEMBLY REQUIRED!**

#### Riptide<sup>™</sup> Launch Set

Length: 18 in. (45.7 cm) Diameter: 1.35 in. (34 mm) Recovery: Parachute Projected Altitude: 675 ft. (206 m) Recommended Engines: B4-4, B6-4, C6-5

#001403





#### Flash® Launch Set

Length: 16.2 in. (41.1 cm) Diameter: 1.1 in. (28 mm) Recovery: Parachute Projected Altitude: 925 ft. (282 m) Recommended Engines: A8-3, B4-4, B6-4, C6-5, C6-7

#001478







#### Luna Dart™ Launch Set

Length: 21.2 in. (53.8 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1000 ft. (305 m) Recommended Engines: A8-3, B6-4, C6-5











# Products designed to IGNITE the thrill of learning!

At Estes, we believe in the power of knowledge and using our products to inspire generations to follow their dreams into the industries of science, aerospace technology, engineering, and mathematics. With this in mind, the Estes Product Development and Education teams set out to develop a unique spin on our regular starter sets to incorporate more exciting STEM activities. These STEM kits include booklets that outline mission challenges and tasks to get kids engaged in learning science principles while having fun and getting hands on with flying model rockets!



#### EXCITING HELICOPTER PRECOVERY

#### Roto Rocket™

Height: 24.9 in. (63 cm)
Diameter: 0.98 in. (25 mm)
Recovery: Parachute (Body tube)
Heli-Blades (Nose Cone)
Projected Altitude: 500 ft. (152 m)
Recommended Engines:
C5-3, C6-3

000648



ITH 3 DIFFERENT FINS

INCLUDES 2 SETS OF BLADES!



#### Tri-Flyer™

Height: 26.1 in. (66 cm)
Diameter: 0.98 in. (25 mm)
Recovery: Parachute
Projected Altitude: 400 ft. (122 m)
to 900 ft. (274 m)
Recommended Engines:
B4-4, B6-2, B6-4, C5-3, C6-3

#000647



3 FIN STYLES INCLUDED!

- Everything You Need to Launch INCLUDED!\*
- Includes Booklet with 5 Unique STEM Activities
  - Launch Again & Again for Hours of Fun!\*
    - Quick & Easy to Build

\* Controllers Require 4 - AA Batteries (Not Included). Purchase of additional engines required to launch after the included engines have been used - available at EstesRockets.com



## Space 2 Inspire

Length: 20.4 in. (51.8 cm)
Diameter: 1.64 in. (41.7 mm)
Recovery: Parachute
Projected Altitude: 450 ft. (137 m)
Recommended Engines:
C5-3, C6-3





# BEGINNER ROCKET KITS

Our Easiest Rockets to Build & Fly!





Length: 12.1 in. (30.7 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1150 ft. (351 m) Recommended Engines: 1/2 A6-2, A8-3, A8-5, B4-4, B6-4, B6-6, C6-5, C6-7

#001256



ALSO AVAILABLE IN A BULK PACK See Pg. 70

# NEW

DEBITEON >

#### **Orbitron**™

Length: 26.2 in. (67 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute Projected Altitude: 950 ft. (290 m) **Recommended Engines:** C11-3, C11-5, D12-5, D12-7

Payload Ready

For Your Choice

of Pilot!

#007002



**Unique Angled Fins** For Spinning Launch Action!

### NEW

#### Solar Twirl™

Length: 26.1 in. (66.3 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 900 ft. (274 m) Recommended Engines: B4-4, B6-4, C5-3, C6-3

#001323



Includes 2 Sets of Blades (3° & 6°) to **Experiment With!** 

#### Roto Rocket™

Length: 24.9 in. (63.2 cm) Diameter: 0.98 in. (25 mm) Recovery: Heli Blades / Parachute Projected Altitude: 500 ft. (152 m) Recommended Engines: C5-3, C6-3

#001322





#### Orion 3D Kit™

This kit comes with body tubes, parachutes and parts you need to build an engine mount. Download .stl files from the Estes website to print your 3D plastic parts to complete your rocket. 3 unique rocket options to choose from.



Scan for more information!



#### Star Hopper™

Length: 7.4 in. (18.8 cm)
Diameter: 0.74 in. (19 mm)
Recovery: Streamer
Projected Altitude: 400 ft. (122 m)
Recommended Engines:
1/2 A3-2T, A3-4T, A10-3T

#007303



ALSO AVAILABLE IN A BULK PACK See Pg. 71

# Perfect Two Stage Beginner Rocket w/ Payload!

### NEW

#### Cosmic Cascade™

Length: 25.7 in. (65.3 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1600 ft. (488 m) Recommended Engines:

Single Stage Rocket:

A8-3, B6-4, C6-5 Two Stage

Rocket: A8-5, B6-6, C6-7 Booster: A8-0, B6-0, C6-0

#001321



Note: Does Not Include Decals
This kit was purposely left as a blank
canvas so that the user could create their
own custom artwork on the bodytubes.

**ALSO AVAILABLE IN A BULK PACK**See Pg. 70

#### Mini Alpha™

Length: 9.2 in. (23.4 cm) Diameter: 0.74 in. (19 mm) Recovery: Streamer Projected Altitude: 690 ft. (210 m) Recommended Engines: 1/2 A3-2T, A3-4T, A10-3T

#002098



#### Mini Bertha™

Length: 9.9 in. (25.3 cm) Diameter: 0.74 in. (19 mm) Recovery: Streamer Projected Altitude: 650 ft. (198 m) Recommended Engines: 1/2 A3-2T, A3-4T, A10-3T

#002099



SNAP TOGETHER NO GLUE REQUIRED



#### Illusion™

Length: 19.5 in. (49.5 cm)
Diameter: 0.98 in. (25 mm)
Recovery: Parachute
Projected Altitude: 1125 ft. (343 m)
Recommended Engines:
A8-3, B4-4, B6-4, C6-5, C6-7

#007299



#### Cosmic Cargo™

Length: 16.7 in. (42.4 cm)
Diameter: 0.98 in. (25 mm)
Recovery: Parachute
Projected Altitude:1000 ft. (305 m)
Recommended Engines:
A8-3, B6-4, C6-5

Payload

Ready!

#001324



Note: Does Not Include Decals
This kit was purposely left as a blank
canvas so that the user could create thei
own custom artwork on the bodytubes.

ALSO AVAILABLE IN A BULK PACK See Pg. 71



#### Firehawk™

Length: 11.2 in. (28.4 cm)
Diameter: 0.74 in. (19 mm)
Recovery: Parachute
Projected Altitude: 550 ft. (168 m)
Recommended Engines:
1/4 A3-3T, 1/2 A3-2T, A3-2T,
A3-4T, A3-6T, A10-3T





#### LEAPER™

Height: 7.7 in. (19.6 cm)
Diameter: 0.54 in. (14 mm)
Diameter w/ Legs: 23.4 in. (59.4 cm)
Recovery: Featherweight/Tumble
Projected Altitude: 75 ft. (23 m)
Recommended Engines:
A10-0T, A10-PT

#007297



Length: 25.9 in. (65.8 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1100 ft. (335 m) Recommended Engines: A8-3, B4-4, B6-4, C6-5, C6-7

#000814



#### Starship Octavius™

Length: 20 in. (50.8 cm)
Diameter: 0.98 in. (25 mm)
Recovery: Parachute
Projected Altitude: 1100 ft. (335 m)
Recommended Engines:
A8-3, B4-4, B6-4, C6-5, C6-7

#007284



#### **Power Patrol™**

Length: 20.5 in. (25.3 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1100 ft. (335 m) Recommended Engines: A8-3, B4-4, B6-4, C6-5, C6-7

#002481



#### **AstroCam®**

Camera Included!

Length: 20 in. (50.8 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 900 ft. (274 m) Recommended Engines: A8-3, B4-4, B6-4, C6-5

#007308



#### Universal Astrocam<sup>®</sup>

Camera Only Accessory

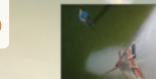
- Fits Most Estes Rockets
- 16GB Memory Card
- Records HD Video & Audio
- Up to 90 Minutes Recording Time
- USB-A Connector for Easy Download to your computer!

#002208

#### Athena™

Length: 17 in. (43.2 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1125 ft. (343 m) Recommended Engines: A8-3, B4-4, B6-4, C6-5

#002452



FROM LIFTOFF..



TO RECOVERY!

#### MAV™

Height: 12.7 in. (32.3 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute Projected Altitude: 250 ft. (76 m) Recommended Engines: C5-3, C6-3



# INTERMEDIATE ROCKET KITS

Take the Next Step in Model Rocketry with Rockets That Are Fun and Easy to Build!



Scan to Shop Now!

# NEW

#### Nike Smoke (18 mm)

Length: 22.9 in. (58.2 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute Projected Altitude: 650 ft. (198 m) Recommended Engines: B6-4 & C6-5

#007247

#### Hi-Flier®

Length: 12 in. (30.5 cm) Diameter: 0.74 in. (19 mm) Recovery: Streamer Projected Altitude: 1500 ft. (457 m) Recommended Engines: 1/2 A6-2, A8-3, A8-5, B4-4, B6-4, B6-6, C6-5, C6-7 Sold Separately: A10-3T w/ Engine Adapter

#002178



#### Big Bertha®

Length: 24 in. (61 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute Projected Altitude: 500 ft. (152 m) **Recommended Engines:** B4-2, B4-4, B6-2, B6-4, C6-5

#001948



Two of Estes' best selling and iconic rockets of all time true classics!

#### Alpha®

Length: 12.3 in. (31.2 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1000 ft. (305 m) Recommended Engines: 1/2 A6-2, A8-3, A8-5, B4-4, B6-4, B6-6, C6-5, C6-7 Sold Separately: A10-3T w/ Engine Adapter

#001225

ALSO AVAILABLE IN A BULK PACK See Pg. 73

#### Luna Bug™

Length: 3.6 in. (9.1 cm) Diameter: 0.54 in. (14 mm) Recovery: Featherweight Projected Altitude: 800 ft. (244 m) Recommended Engines: 1/4 A3-3T. 1/2 A3-2T. 1/2 A3-4T. A3-2T, A3-4T, A3-6T, A10-3T

#000816



STATES

UNITED

#### Mini Max™

Length: 8.8 in. (22.4 cm) Diameter: 0.98 in. (25 mm) Recovery: Streamer Projected Altitude: 300 ft. (91 m) Recommended Engines: 1/2A3-2T, A3-4T, A10-3T

#002100

Der Red Max™

Recovery: Parachute

#000651

Length: 16.3 in. (41.4 cm)

Diameter: 1.64 in. (42 mm)

Projected Altitude: 600 ft. (183 m) Recommended Engines: B4-2, B4-4, B6-2, B6-4, C6-5

WANT IT EVEN BIGGER?

See Pro Series Pg. 62

Length: 16.4 in. (41.6 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1200 ft. (366 m) Recommended Engines:

#### ALSO AVAILABLE IN A BULK PACK See Pg. 72

Wizard™ Length: 12 in. (30.5 cm) Diameter: 0.74 in. (19 mm)

Recovery: Streamer

Recommended Engines:

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

Sold Separately:

#001292

1/2 A6-2, A8-3, A8-5, B4-4,

A10-3T w/ Engine Adapter

Projected Altitude: 1600 ft. (488 m)

K-35 Astron Constellation™

1/2A6-2, A5-4, A8-3, B6-4, C6-5

#001235



Length: 3.8 in. (9.7 cm) Diameter: 0.54 in. (14 mm) Recovery: Featherweight Projected Altitude: 800 ft. (244 m) Recommended Engines: 1/4 A3-3T, 1/2 A3-2T, 1/2 A3-4T, A3-2T, A3-4T, A3-6T, A10-3T

#001345

Mosquito™



Recovery: Parachute Projected Altitude: 575 ft. (175 m) Recommended Engines: A8-3, B4-4, B6-4, C6-5

Length: 12.8 in. (32.5 cm)

Diameter: 1.64 in. (42 mm)

Baby Bertha™

#001261



#### **Lunar Scout**™

Height: 4 in. (10 cm) Diameter: 0.74 in. (19 mm) Recovery: Featherweight Projected Altitude: 200 ft. (61 m) Recommended Engines: 1/2 A3-2T, A3-2T, A3-4T, A10-0T, A10-3T

#007290



8111

#### FLY YOUR FAVORITE EGG IN THE ROCKET PAYLOAD!

#### Green Eggs™

Length: 23.6 in. (59.9 cm)
Diameter: 1.8 in. (46 mm)
Recovery: Parachute
Projected Altitude w/ Egg: 825 ft. (251 m)
Projected Altitude w/o Egg: 1050 ft. (320 m)
Recommended Engines:
w/ Egg: C11-3, D12-3
w/o Egg: C11-5, D12-5

#007301



ALSO AVAILABLE IN A BULK PACK See Pg. 73

#### Mean Machine™

It's so tall, we had to split it in half for easy transport and storage!

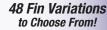
Length: 79 in. (200.7 cm)
Diameter: 1.64 in. (42 mm)
Recovery: Parachute
Projected Altitude: 700 ft. (213 m)
Recommended Engines:
D12-3, D12-5, E12-4, E12-6
Requires (Sold Separately):
3/16 in. Maxi™ Launch Rod
See Page: 78

#001295



Note: Advanced Skill Build The Mean Machine is an Advanced Skill Kit but shown here for visual space purposes.

#### VAILABLE ILK PACK Pg. 73





#### Viking™

Length: 12.1 in. (30.7 cm)
Diameter: 0.74 in. (19 mm)
Recovery: Streamer
Projected Altitude: 1600 ft. (488 m)
Recommended Engines:
1/2 A6-2, A8-3, A8-5, B4-4,
B6-4, B6-6, C6-5, C6-7
Sold Separately:
A10-3T w/ Engine Adapter

#001949



#### Ripley Rocket™

Length: 13.1 in. (33.3 cm) Diameter: 0.74 in. (19 mm) Recovery: Streamer Projected Altitude: 600 ft. (183 m) Recommended Engines: 1/2A3-2T, A3-4T, A3-6T, A10-3T

#000653

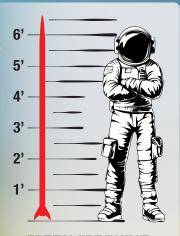


The Mean Machine stands at over 6 ½ feet tall and disassembles in the middle for easy transportation and storage!



Twist the 2 halves of the Mean Machine body tube in opposite directions and then pull apart.





**MEAN MACHINE** 

ALSO AVAILABLE IN A BULK PACK See Pg. 72

#### Crossfire ISX™

Length: 15.6 in. (39.6 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1150 ft. (351 m) Recommended Engines: A8-3, B4-4, B6-4, C6-5, C6-7

#007220



REEN 6995

# ADVANCED ROCKET KITS

Scan to Shop Now!

Take Your Skills to the Next Level with These Exciting & Challenging Builds!

> ARCAS (All-Purpose Rocket for Collecting Atmospheric Soundings) was developed in 1957 by the Atlantic Research Corporation in partnership with the U.S. Office of Naval Research and the Air Force Research Center with the purpose of measuring high-altitude winds. By 1960 more than 400 ARCAS rockets were launched. This 1:6 scale-like model of the original boasts a max altitude of 550 ft. on Estes A engines.

#### Mini ARCAS™

Length: 14.5 in. (36.8 cm) Diameter: 0.74 in. (19 mm) Recovery: Streamer Projected Altitude: 550 ft. (167 m) Recommended Engines: 1/2A3-2T, A3-4T, A3-6T, A10-3T

#002441



#### Vesta Intruder™

Length: 25.2 in. (64 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute Projected Altitude: 650 ft. (198 m) Recommended Engines: C11-3. D12-5

Requires (Sold Separately): 3/16 in. Maxi™ Launch Rod See Page: 78

#007312



One Rocket... Two Different Looks! The Vapor includes both decal sheets for you to choose!

> With its impressive size and power, the Big Daddy rocket has been a hit with model rocket enthusiasts! This Daddy flies well on Estes C & D engines for those who prefer suborbital flights or is ready to pierce the sky on Estes E engines!

#### Big Daddy™

Length: 19 in. (48.3 cm) Diameter: 3 in. (76 mm) Recovery: Parachute Projected Altitude: 900 ft. (274 m) Recommended Engines: C11-3, D12-3, D12-5, E12-4, E12-6 Requires (Sold Separately):

3/16 in. Maxi™ Launch Rod See Page: 78

#002162



#### Vapor™

Length: 45.2 in. (114.8 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute Projected Altitude: 900 ft. (274 m) Recommended Engines: D12-5, E12-6 Requires (Sold Separately):

3/16 in. Maxi™ Launch Rod See Page: 78

#007294



ARCAS

#### Hi-Flier® XL

Length: 31 in. (78.7 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute Projected Altitude: 1325 ft. (404 m) Recommended Engines: C11-3, D12-5, D12-7, E12-6, E12-8 Sold Separately: C5-3, C6-3 w/ Engine Adapter Requires (Sold Separately): 3/16 in. Maxi™ Launch Rod See Page: 78

#003226



✓ Fii-Fiier XI

During the Tazz recovery, the rocket spins back to earth while the engine mount separates and gently descends with an attached streamer!

#### Tazz™

Length: 16.6 in. (42.2 cm) Diameter: 0.98 in. (25 mm) Recovery: Streamer, Spin Projected Altitude: 700 ft. (213 m) Recommended Engines: A8-3, B6-2, B6-4, C5-3, C6-3

#007282



#### Boosted Bertha™

A sport rocket at its core, this multistage flying model rocket can reach altitudes of 1000 feet! A colorful 18 inch parachute provides a soft landing, so the Boosted Bertha can be quickly prepared for another launch.

Length: 28.2 in. (71.6 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute, Tumble Projected Altitude: 1000 ft. (305 m) Recommended Engines: Rocket Only: B4-2, B4-4, B6-2, B6-4, B6-6, C6-5, C6-7 Two Stages: Rocket: A8-3, A8-5, B4-4, B6-4, B6-6, C6-5, C6-7 Booster: A8-0, B6-0, C6-0

#001946



#### Nike-X

Length: 23.4 in. (59.4 cm) Diameter: 1.33 in. (34 mm) Recovery: Parachute Projected Altitude: 600 ft. (183 m) Recommended Engines: A8-3, B4-4, B6-4, C6-5

#007259



NIKE-X

# EXPERT ROCKET KITS

Scan to Shop Now!

Put Your Skills to the Ultimate Test and Enjoy the Satisfaction of a Build Done Well!

The Orbital Transport is an Estes classic, flown and treasured by rocketeers since the early days of rocketry. It was originally designed by Wayne Kellner and introduced to the nation in the late '60s, proving to be one of Estes' most popular models. After it was taken out of production, rocketeers quickly bought out the remaining kits, and they've been begging for its return ever since. Scaled up from the original, it's bigger and better than ever - this is the *Super* Orbital Transport!

#### Black Star Voyager™

Length: 39.7 in. (100.8 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute Projected Altitude: 1100 ft. (335 m) Recommended Engines: D12-3, E12-4

#007222



#### Interceptor™

Length: 26 in. (66 cm)
Diameter: 1.33 in. (34 mm)
Recovery: Parachute
Projected Altitude: 525 ft. (160 m)
Recommended Engines:
B4-2, B6-2, B6-4, C6-5

#001250



0

0

### Super Orbital Transport™

Length: 31.3 in. (80 cm) Diameter: 1.33 in. (34 mm) Recovery: Parachute, Glider Projected Altitude: 800 ft. (244 m) Recommended Engines: C11-3, D12-5

Requires (Sold Separately): 3/16 in. Maxi™ Launch Rod See Page: 78



#### SA-2061 Sasha™

Inspired by Russian military design, this scale-like model rocket is sure to enthuse the most dedicated rocketeer. A masterful build, this high flying booster model rocket can reach heights of 2300 feet when powered by E model rocket engines in both stages.

Length: 31.5 in. (80 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute, Tumble Projected Altitude: 2300 ft. (701 m) Recommended Engines: Rocket Only: C11-3, C11-5, D12-5, E12-6 Two Stages: Rocket: D12-5, D12-7, E12-8 Booster: D12-0, E12-0 Requires (Sold Separately): 3/16 in. Maxi™ Launch Rod

#### See Page: 78 #007271

#### DARC-1™

Length: 9.3 in. (23.6 cm) Diameter: 0.74 in. (19 mm) Wingspan: 6.9 in. (17.5 cm) Recovery: Parachute Projected Altitude: 400 ft. (122 m) Recommended Engines: B6-2, C5-3, C6-3

#### #007307



# MULTI-STAGE ROCKET FLIGHT SEQUENCE

#### Comanche-3™

The Comanche-3 is a 3 stage model rocket that uses a first stage booster engine to get the rocket moving vertically. When the booster engine uses up its propellant, it then ignites the secondstage engine. The first stage separates from the second stage and it tumbles to the ground. After the second stage is ignited, it carries the rocket higher until it uses up its propellant, and then it ignites the third stage. The second stage separates from the upper third stage, and it tumbles to the ground. The third stage then accelerates to its maximum height (or apogee), and an ejection charge at apogee deploys the recovery system.

Length: 41 in. (104.1 cm) Diameter: 0.98 in. (25 mm) Recovery: Streamer(s), Tumble Projected Altitude: 2250 ft. (686 m) Recommended Engines: Rocket Only: A8-3, B4-4, B6-4, C6-5 Two Stages: Rocket: B4-4, B6-4, B6-6, C6-5, C6-7 Booster: B6-0, C6-0 Three Stages: Rocket: B6-6, C6-7 Booster: B6-0, C6-0 Booster: C11-0, D12-0

#### #007245



STAGE 3 - Upper Stage

STAGE 2 - Booster Stage

STAGE 1 - Booster Stage

# STREAMER RECOVER COAST PHASE **BOOSTER** SEPARATES AND TUMBLES THIRD STAGE. **ROCKET ENGINE IGNITES** BOOSTER **SEPARATES** AND TUMBLES SECOND STAGE. **BOOSTER IGNITES** FIRST STAGE. **BOOSTER IGNITES** LIFTOFF!

The Designer Signature Series is a series of kits designed by some of the most famous pioneers of model rocketry. Some are re-introductions of lesser-known classics and others are never-before-seen designs that never made it out of the R&D room. Every serious model rocket collector will want the complete series for their own museum!



Bill Simon was a creative writer and lead designer for Estes in the '60s and early '70s, and he presided over a golden age of rocketry. His designs, such as the Drifter, Farside, and Cobra, have gone on to become the cornerstones of treasured collections, and his work has taught a generation of rocketeers.

The Belt Object Survey Ship (B.O.S.S.) was designed nearly 40 years ago, but the prototype never made its way to release. Bill Simon created this in partnership with Estes after his departure from the company. It was designed at a time where people were hungry for spaceflight innovations, and nuclear propulsion and solar power felt like the best way forward.

This B.O.S.S. rocket uses one tail fin, two engine pod assemblies, and a large circular plate to stabilize the rocket - a rare asymmetrical structure and a challenging build. We've matched the artistry of this design with high-quality components to bring you the latest in the Estes Designer Series.



(Belt Object Survey Ship)

Length: 27.8 in. (70.6 cm) Diameter: 1.33 in. (34 mm) Recovery: Parachute Projected Altitude: 600 ft. (183 m) Recommended Engines: B4-4, B6-4, C6-5

#007316





In 1960, Vern Estes, founder of Estes Industries, designed the Astron Scout<sup>™</sup>, which was the first Estes model rocket packaged for sale as a complete kit. During a span of more than 20 years, Estes sold tens of thousands of Astron Scout kits, inspiring countless young people to pursue technical careers.

#### Orange Bullet™

Length: 5.9 in. (15 cm) Diameter: 0.74 in. (19 mm) Recovery: Featherweight Projected Altitude: 500 ft. (152 m) Recommended Engines: 1/2 A6-2, A8-3

#007295



The Orange Bullet was the prototype for the famous Astron Scout. The original design included metal weights glued to the end of the fins to shift the center of gravity after the engine ejected for a tumbling recovery system. While that approach worked, Vern achieved the same effect by using the weight of the rocket engine itself!



G. Harry Stine (NAR #02) is known as the "Father of Model Rocketry" and founder of the National Association of Rocketry (NAR). He was one of the original pioneers that founded the hobby right alongside Vern Estes.

#### Antar™

Length: 23.2 in. (58.9 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute Projected Altitude: 450 ft. (137 m) Recommended Engines: B6-2, B6-4, C6-5

#007310



G. Harry Stine was also a talented writer and visionary who believed that mankind would soon travel to and live in space. He wrote several fiction books in the early 1950's including best sellers Starship Through Space and Contraband Rocket. Many of the characters in his books were based on real people he met while working at White Sands. His stories also needed spaceships that didn't exist yet so he created them. Athena, Fafnir, Vittoria, Absyritis were all designed with incredible detail by a fictional company Hueco Spacecraft Inc.

# ENGINES

Our world famous model rocket engines have made model rocketry safe since 1958!

Estes model rocket engines have been proven safe, consistent, and reliable in more than 500 million launches. Thousands of 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, California Fire Marshal, and are certified by the National Association of Rocketry.







#### LETTER = 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.)

#### FIRST NUMBER = AVERAGE THRUST

This number shows the engine's average thrust 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 = 1lb.).

#### SECOND NUMBER = TIME DELAY

This number gives you the time delay in seconds between the end of the thrust phase and the 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.





#### **Each Engine Type is Color Coded**



Booster - Red

Booster engines contain no delay or ejection charge.



Plugged engines are used for rocketpowered racers and contain no delay or eiection charge.

### ENGINE TYPES - PERFORMANCE CHART



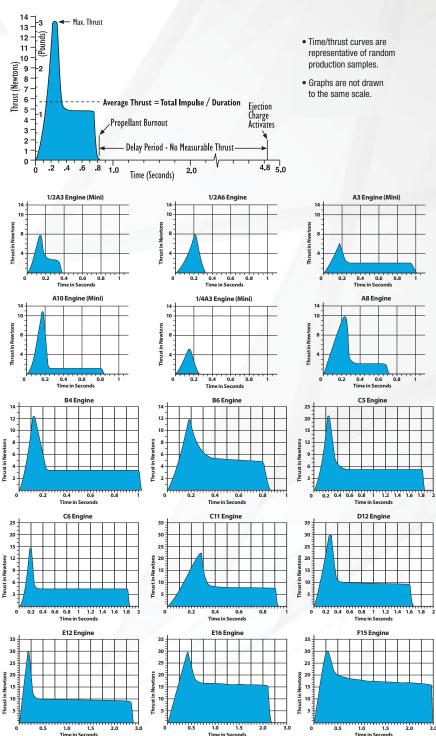
								Т		I			_				_			— <sub>I</sub>							_				$\neg$	_		$\neg$	$\overline{}$	_		_	_	Т			Т					$\neg$
QTY Per Pack			4	4	4	4	4	4	3	က	3	က	က	က	3	က	3	2	2	2	2	3	3	2	2	2	2		4	3	က	က	2	2	m (	7 6	7	4	3	က	3	2	2	3	2	2		4
Diameter	mm		13	13	13	13	13	13	18	18	18	18	18	18	18	18	18	24	24	24	24	24	29	29	29	29	29		13	18	18	3	24	24	7.7	R2 00	64	13	18	18	18	24	24	24	29	59		13
Propellant Weight	g		1.3	1.9	3.3	3.3	3.3	3.5	2.7	4.1	9.2	9.2	6.5	6.5	11	12.2	12.2	12.4	12.4	24.2	24.2	36.9	36.9	09	09	40	40		1.9	4.1	6.5	12.2	12.4	24.2	36.9	00	2	3.5	4.1	6.5	12.2	12.4	23.8	36.9	09	40		3.5
Propellar	20		0.02	0.02	0.12	0.12	0.12	0.12	0.10	0.14	0.27	0.27	0.23	0.23	0.39	0.43	0.43	0.44	0.44	0.85	0.85	1.30	1.30	2.12	2.21	1.41	1.41	-	0.07	0.14	0.23	0.43	0.44	0.85	1.30	1 41	<u>-</u>	0.12	0.14	0.23	0.43	0.44	0.84	1.30	2.12	1.41		0.13
/eight	g		5.9	6.4	7.1	7.4	7.7	8.1	13.6	15.5	18.6	19.2	17.3	17.8	23.6	23.4	24.0	32.1	33.4	44.5	45.7	61.2	63.2	101.5	103.7	81.0	82.7	Ť	9.9	15.7	18.2	24.3	33.8	46.0	63.5	104.4	3	6.8	13.5	15.7	21.4	29.2	40.4	58.1	94.0	73.2		6.83
Initial Weight	Z0		0.21	0.23	0.25	0.26	0.27	0.29	0.48	0.55	99.0	0.68	0.61	0.63	0.83	0.83	0.85	1.13	1.18	1.57	1.61	2.16	2.23	3.59	3.66	2.86	2.92		0.23	0.55	0.64	0.85	1.19	1.62	2.24	2.09	5.33	0.24	0.47	0.55	92.0	1.03	1.43	2.05	3.32	2.58	KAGEKS	0.26
Thrust Duration	Sec		0.25	0:30	09:0	09:0	09:0	0.80	0.30	0.50	1.10	1.10	0.80	0.80	1.85	1.60	1.60	0.80	0.80	1.60	1.60	2.70	2.70	3.45	3.45	2.09	2.09		0.30	0.50	0.80	1.60	0.80	1.60	2.70	3.43	200.7	0.80	0:30	08.0	1.60	0.80	1.60	2.60	3.45	2.09	OWERED RA	0.80
hrust	rps	ENGINES	1.1	1.9	1.5	1.5	1.5	2.9	2.0	2.4	3.0	3.0	2.7	2.7	4.6	3.4	3.4	4.9	4.9	7.4	7.4	6.9	6.7	5.7	5.7	5.9	5.9	IGINES	1.9	3.0	2.7	3.4	4.9	7.4	[.]	7.0	SECTION IN	2.9	3.0	2.7	3.4	4.9	7.4	7.0	5.7	5.9	FOR USE WITH ROCKET-POWERED	2.9
Max Thrust	Newtons	STAGE EN	4.90	8.30	08.9	08.9	08.9	13.00	8.90	10.70	13.20	13.20	12.10	12.10	20.40	15.30	15.30	22.10	22.10	32.90	32.90	30.60	29.60	25.26	25.26	26.44	26.44	STAGE ENGINES	8.30	13.30	12.10	15.30	22.10	32.90	31.80	07.07	CTARE	13.00	13.30	12.10	15.30	22.10	32.90	31.30	25.26	26.44	E WITH F	13.00
Lift Wt	g	SINGLE	28	57	57	57	22	85	22	85	113	66	127	113	227	113	113	170	142	396	283	482	397	595	482	266	453	UPPER	28	22	71	71	113	5.26	340	306		113	85	113	113	170	396	454	539	509	FOR US	85
Est Max Lift Wt	ZO		1.0	2.0	2.0	2.0	2.0	3.0	2.0	3.0	4.0	3.5	4.5	4.0	8.0	4.0	4.0	0.9	5.0	14.0	10.0	17.0	14.0	21.0	17.0	20.0	16.0		1.0	2.0	2.5	2.5	4.0	0.8	12.0	13.0	0.1	4.0	3.0	4.0	4.0	0.9	14.0	16.0	19.0	18.0	GINES	3.0
Time Delay*	Sec		3	2	2	4	9	3	2	3	2	4	2	4	3	3	5	3	2	3	5	4	9	4	9	4	9		4	2	9	_	_	,	∞ ο	∞ α	Þ	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	PLUGGED ENGINES	NONE
Total Impulse	N-sec		0.625	1.25	2.50	2.50	2.50	2.50	1.25	2.50	5.00	5.00	5.00	5.00	10.00	10.00	10.00	10.00	10.00	20.00	20.00	30.00	29.50	49.61	49.61	33.68	33.68		1.25	2.50	2.00	10.00	10.00	20.00	29.80	33.68	90.00	2.50	2.50	5.00	10.00	10.00	20.00	28.80	49.61	33.68	PLU	2.50
Engine Type			1/4A3-3T	1/2A3-2T	A3-2T	A3-4T	A3-6T	A10-3T	1/2A6-2	A8-3	B4-2	B4-4	B6-2	B6-4	C2-3	Ce-3	Ce-5	C11-3	C11-5	D12-3	D12-5	E12-4	E12-6	F15-4	F15-6	E16-4	E16-6		1/2A3-4T	A8-5	9-9g	2-90	C11-7	D12-7	E12-8	F15-8		A10-0T	A8-0	B6-0	0-90	C11-0	D12-0	E12-0	F15-0	E16-0		A10-PT
NEW** Prod. No.			10010	10011	10012	10013	10014	10015	10016	10017	10018	10019	10020	10021	10022	10023	10024	10025	10026	10027	10028	10029	10030	10031	10032	10033	10034		10035	10036	10037	10038	10039	10040	10041	10042	2500	10044	10045	10046	10047	10048	10049	10050	10051	10052		10053
OLD Prod. No.			1502	1503	1506	1507	1508	1511	1593	1598	1601	1602	1605	1606	1617	1613	1614	1522	1523	1566	1567	1692	1693	1651	1652	1696	1697		1504	1599	1607	1615	1524	1568	1694	1608	0601	1510	1600	1608	1616	1521	1565	1691	1650	1695		1505

<sup>\*\*</sup>Estes is changing our engine packaging to a new re-sealable flexi bag. This change will continue to rollout in 2025 at different times of the year based on inventory levels of current engine stock. During this change, the old product numbers will be updated to correspond with the new bag packaging for that engine type. Customers will stable to search by the old PN or new PN on EstesRockets com until further notice.

Delays have a tolerance of 1.5 seconds or 20%, whichever is greater. The data listed above is from randomly chosen production samples.

There are four mini-engines per package. All other engines are two or three per package. NOTE. The 'T' designates a mini-engine, All Estes engines come complete with starters and starter plugs. The Estes starter plug makes engine ignition extremely reliable.

### ENGINE TIME / THRUST CURVES





# SCALE MODEL ROCKETS

This collection is a scale modeler's dream that brings together both the hobby of model rocketry and history. For over 66 years, Estes has produced the finest scale replicas of rockets and missiles.

Scale model rockets come in a variety of skill ranges that vary from ready to fly Beginner rockets to Master level build kits. RTF (ready to fly) rockets are great for home or office display and are also easily prepared for flight. Intermediate level builds are for those who want to get hands on with a scale model that requires building, painting, and applying decals as they grow their rocketry building knowledge in preparation for more complex kits.

Advanced, Expert, and Master level kits require an advanced knowledge of model rocket building as hobbyist work with handcrafted or molded detailed parts. These rockets often require rocketeers to have mastered a variety of skills in assembly, painting and launching techniques in order to successfully complete these exciting rockets.

# SPACE SHUTTLE

1:200 SCALE FLYING MODEL ROCKET

### Bring a piece of American Spaceflight history home

The Space Shuttle was the workhorse of the American space program from its introduction in 1981 until its retirement in 2011. Operating for over thirty years, Space Shuttles Columbia, Challenger, Discovery, Atlantis and Endeavor flew 135 missions carrying 355 individual astronauts from 16 nations into space. Shuttle missions launched numerous satellites, interplanetary probes, and the Hubble Space Telescope, conducted science experiments in orbit, participated in the Shuttle-Mir program with Russia, and constructed and serviced the International Space Station (ISS). The Space Shuttle fleet's total mission time was 1,330 days.





Shop Now!

#### **Space Shuttle**

Length: 10.9 in. (27.7 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute & Glider Projected Altitude: 600 ft. (183 m) Recommended Engines:



# **BLUE ORIGIN**

#### ESTES. BLUE ORIGIN. AND CLUB FOR THE FUTURE

We are providing a piece of history that inspires kids to dream of a future filled with the wonders of space exploration; that's why a portion of every dollar from the Estes New Shepard will go to support Club for the Future, Blue Origin's foundation that inspires future generations to pursue careers in STEM, and why Estes is proud to partner with them.

#### THE NEW SHEPARD

In 1961, Alan Shepard made history as the first American in space. A decade later, he walked on the moon and pushed the boundaries of space exploration so that we can reach for the planets beyond. From this legacy, Blue Origin furthers our dreams of reaching new frontiers with the New Shepard rocket.

#### **Builder Kit**

- . Launches Up to 700 ft.
- · Larger Fins for Added Stability!
  - Fun to Build!

#### Ready to Fly

- 1/66th Scale Model
- Payload Capable
- Custom Display Stand



Length: 11.8 in. (30 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute Projected Altitude: 700 ft. (213 m) Recommended Engines: B4-4, B6-4, C6-5

#007315





Length: 10.3 in. (26.3 cm) Diameter: 1.78 in. (45 mm) Recovery: Parachute Projected Altitude: 400 ft. (122 m) Recommended Engines: C5-3, C6-3

#002198



# SPACEX

### FALCON 9

A BEAUTIFUL ADDITION TO ANY COLLECTION



Estes is pleased to present this licensed, flying reproduction of the Falcon 9 rocket and Crew Dragon Spacecraft. Fully assembled and ready to fly or display straight from the box, you will enjoy the accuracy of this 1:100 scale model of the groundbreaking launch vehicle. The rocket includes clear plastic fins for stability, and looks great both in flight and on its custom display stand.

- Highly Detailed 1:100 Scale Falcon 9 & Crew Dragon Spacecraft
- Collectors Edition High End **Custom Packaging**
- . Estimated Max Altitude: 300 ft.

#002161

Learn More



#### ALMOST READY TO FLY DISPLAY KITS

The Estes 1:200 scale replica of this rocket portrays the Project Artemis Block 1 configuration, the first in the proposed series of heavy lift launch vehicles. Pre-assembled, pre-finished, and ready to launch, this highly detailed model realistically reproduces the features and markings of America's next generation rocket for deep space missions.

#### NASA SLS

Length: 19.4 in. (49.3 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute Projected Altitude: 350 ft. (107 m) Recommended Engines: C5-3, C6-3

> Model features clear plastic fins to

be used for display!



1:200 scale Apollo 11 Saturn V model is almost 2 feet tall and comes fully assembled with many scale details and markings carefully reproduced for exceptional realism. This historical model of the Saturn V is suitable for display or launch.

#### stabilize flights and can 50th Anniversary Saturn V

Length: 21.8 in. (55.4 cm) Diameter: 1.98 in. (50 mm) Recovery: Parachute Projected Altitude: 200 ft. (61 m) **Recommended Engines:** C5-3, C6-3



Model features a

clear plastic fin unit to

stabilize flights and a

custom display stand!

The Estes commemorative

#### U.S. Army Patriot M-104

#### 1:10 Scale

Length: 21.3 in. (54.1 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute Projected Altitude: 600 ft. (183 m) Recommended Engines: B4-4, B6-4, B6-6, C6-5

#002056



#### **Black Brant II**

#### 1:13 Scale

Length: 24.9 in. (63.2 cm) Diameter: 1.33 in. (34 mm) Recovery: Parachute Projected Altitude: 1300 ft. (396 m) Recommended Engines: C11-3, D12-5, D12-7 Requires (Sold Separately):

3/16 in. Maxi™ Launch Rod See Page: 78

#007243



### Mini Honest John

#### 1:24 Scale

ARMY

Length: 11.75 in. (29.8 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 325 ft. (99 m) Recommended Engines: 1/2 A3-2T. A3-4T. A10-3T

#002446



#### **Bull Pup 12D**

#### 1:9 Scale

Length: 15.6 in. (39.6 cm) Diameter: 1.33 in. (34 mm) Recovery: Parachute Projected Altitude: 675 ft. (206 m) Recommended Engines: A8-3, B4-4, B6-4, C6-5

#007000



S. AIR FORCE

Mercury-Redstone 4 was the second U.S. human spaceflight, on July 21, 1961. The suborbital Project Mercury flight was launched with a Mercury-Redstone Launch Vehicle, MRLV-8. The spacecraft, Mercury capsule #11, was nicknamed Liberty Bell 7. It was piloted by astronaut Virgil "Gus" Grissom.

#### **Mercury Redstone 4 Liberty Bell 7**

#### 1:34 Scale

Length: 28.6 in. (72.6 cm) Diameter: 2.05 in. (52 mm) Recovery: Parachute Projected Altitude: 200 ft. (61 m) Recommended Engines: C5-3, C6-3

#001921



The Saturn V permitted weights of up to 280,000 pounds to be placed in Earth Orbit. The Saturn V launched the nearly 100,000 pound Apollo 11 spacecraft into lunar trajectory which resulted in the first manned lunar landing in July 1969. The Apollo-Saturn V was 363 feet tall and weighed 6,000,000 pounds when fully fueled.

#### Saturn V

#### 1:100 Scale

Length: 43.25 in. (110 cm) Diameter: 3.94 in. (100 mm) Recovery: Parachute x 3 Projected Altitude: 350 ft. (107 m) Recommended Engines: E16-4, F15-4

Requires (Sold Separately): 1/4 in. Launch Rod See Porta-Pad®E pg. 78 or PS II Launch Base pg. 65

#001967





# NEW

From 1971 to 1974, the Athena H family of rockets played a crucial role in helping the United States gain a better understanding of the effects of ballistic re-entry on spacecraft. The Athena H towered 61 feet tall with a diameter of 3.34 feet. The 30,000-pound rocket was launched into space with over 94,000 pounds of thrust. With a total of 18 flights, the Athena H proved its worth to the Air Force and Army.

#### PRO SERVESIII

#### Athena H

#### 1:18 Scale

Length: 33.8 in. (85.8 cm) Diameter: 2.2 in. (56.3 mm) Recovery: Nylon Parachute Projected Altitude: 1200 ft. (366 m) Recommended Engines: \*D12-3, \*E12-3, E16-4, F15-4 \*Requires 9753 (24mm-29mm) Engine adapter

Requires (Sold Separately): 1/4 in. Launch Rod See Porta-Pad®E pg. 78 or PS II Launch Base pg. 65

#009725





The Estes Saturn 1B is a stunning 1:100 recreation of this rocket of the Apollo era. Designed to test Apollo hardware, it later served as crew launch vehicle for Skylab and the Apollo Soyuz Test Project. Build and launch this Master-Level kit for spectacular lift-offs and dazzling dual parachute recoveries.

#### Saturn 1B

#### 1:100 Scale

Length: 26.8 in. (68.1 cm) Diameter: 2.62 in. (67 mm) Recovery: Parachute x2 15 in., 18 in. Projected Altitude: 1000 ft. (305 m) Recommended Engines: C11-3, D12-3, E12-4, E12-6

#007251



N

т

ED

ATES



# POWERED BY OUR LARGEST ENGINES!

### **PRO**SERIES II

Estes Pro Series II products are bigger and better than ever, giving you all the power you need to reach towering heights! Experience the awesome power of rockets that fly on our 29 mm engines!

#### **IMPORTANT INFORMATION**

Estes Pro Series II can be enjoyed by adult flyers of all skill levels. Kits in this category range from Beginner to Expert. Beginner & Intermediate kits may still require some building knowledge with plastic molded parts and the use of epoxy glues. Advanced and Expert kits should only be attempted by hobbyist with the acquired skills for kits of this type.

#### **LAUNCH INFORMATION**

In order to launch your Pro Series II rocket, you will need a launch controller with 30 feet of wire, such as our 2240 Pro Series II Launch Controller. In addition to the launch controller, you will need a sturdy launch pad with a 1/4" (6.4 mm) launch rod, or you can purchase our 3552 Estes Pro Series II Launch Pad. See Page 65



Estes Pro Series II rocket kits are for adult rocketeers. Anyone under the age of 18 using these products should be supervised by an adult at all times.

The Black Brant XII is a four-stage, solid propellant sounding rocket consisting of a Talos 1st stage, Taurus 2nd stage, Black Brant 3rd stage, and Nihka 4th stage. The actual vehicle is capable of lifting 1000 lbs to a 500 km altitude or 250 lbs to approximately 1400 km. Originally Built by Bristol Aerospace, the Black Brant family continues to be one of the most popular sounding rockets of all time.

#### PRO SERIESH

#### **Black Brant XII** 1:14 Scale

Length: 54.6 in. (139 cm) Diameter: 2.22 in. (56 mm) Recovery: Nylon Parachute Projected Altitude: 1100 ft. (335 m) **Recommended Engines:** E16-6, F15-6







### PRO SERIES II

# NEW

From 1971 to 1974, the Athena H family of rockets played a crucial role in helping the United States gain a better understanding of the effects of ballistic re-entry on spacecraft. The Athena H towered 61 feet tall with a diameter of 3.34 feet. The 30,000-pound rocket was launched into space with over 94,000 pounds of thrust. With a total of 18 flights, the Athena H proved its worth to the Air Force and Army.

#### PROSERIESIII

#### Athena H

Length: 33.8 in. (85.8 cm) Diameter: 2.2 in. (56.3 mm) Recovery: Nylon Parachute Projected Altitude: 1200 ft. (366 m) **Recommended Engines:** \*D12-3, \*E12-3, E16-4, F15-4 \*Requires 9753 (24mm-29mm) Engine adapter





#### PRO SERIESH

#### Nike Smoke

Length: 41.8 in. (106.2 cm) Diameter: 3 in. (76 mm) Recovery: Nylon Parachute Projected Altitude: 600 ft. (183 m) Recommended Engines: E16-4. F15-4

#009704



### POWERED 84 OUR LARGEST ENGINES!

### PROSERIES II

# NEW

A standout in the Pro Series II line, the Vogel is designed for the expert rocketeer seeking a unique build challenge. This impressive two-stage rocket combines precision engineering with high-altitude performance. Its name, derived from the German word for bird, reflects the rocket's graceful yet powerful ascent through the sky. Perfect for those looking to push their model rocketry skills to the next level!

#### PRO SERIES II

#### Voqel™

Length: 64.5 in. (163.8 cm) Diameter: 2 in. (50.8 mm) Recovery: Nylon Parachute x2 Projected Altitude: 2000 ft. (610 m) Recommended Engines: Rocket Only: D12-3\*, E12-4\*, E16-6, F15-6 Two Stages: Rocket: D12-5\*, E12-6\*, E16-6, F15-6 Booster: E16-0, F15-0 \*Requires 9753 (24mm-29mm) Engine adapter

#009728



ALSO AVAILABLE IN A BULK PACK See Pg. 77



#### PRO SERIESII

#### Optima Pro™

Length: 48.5 in. (123.2 cm) Diameter: 2.5 in. (63.5 mm) Recovery: Nylon Parachute Projected Altitude: 750 ft. (229 m) Recommended Engines: E16-4, F15-4, F15-6

#009727



STATES

UNITED

59

### PRO'SERIES II

PRO SERIES II

Super Big Bertha™

Length: 36.8 in. (93.5 cm)

Diameter: 2.6 in. (66 mm)

Recommended Engines:

Projected Altitude: 1200 ft. (366 m)

D12-3, E12-4 w/ Engine Adapter

A

Recovery: Parachute

E16-4, F15-6

#009719

Sold Separately:

A

### POWERED 84 OUR LARGEST ENGINES!

# **PROSERIES II**

#### PRO SERIES II

#### Star Orbiter™

Length: 45.2 in. (114.8 cm) Diameter: 1.64 in. (42 mm) Recovery: Parachute Projected Altitude: 1800 ft. (549 m) **Recommended Engines:** E16-6, F15-8 Sold Separately: D12-3, E12-4 w/ Engine Adapter

#009716



#### PROSERIESII |

#### Doorknob

#### 1:5.3 Scale

Length: 26.9 in. (68.3 cm) Diameter: 3 in. (76 mm) Recovery: Nylon Parachute Projected Altitude: 1100 ft. (335 m) Recommended Engines: E16-4, F15-4, F15-6 Sold Separately: D12-3, E12-4 w/ Engine Adapter

#### #009720



The Doorknob was a sounding rocket manufactured by Lacrosse Rocket Motors for the project Hardtack **Nuclear Test Series.** 



#### **PROSERIESII**

#### **Great Goblin™**

Length: 33.5 in. (85 cm) Diameter: 3 in. (76 mm) Recovery: Nylon Parachute Projected Altitude: 880 ft. (268 m) Recommended Engines: E15-4, F15-6



# ESTES.

# PROSERIES II

#### PRO SERVESIII

#### So Long™

Length: 46.2 in. (118 cm)
Diameter: 1.21 in. (31 mm)
Recovery: Streamer
Projected Altitude: 3600 ft. (1097 m)
Recommended Engines:
Rocket Only: E-16-6, E16-8, F15-6,
F15-8
Two Stages:
Rocket: E16-8, F15-8

#009722

Booster: E16-0. F15-0



#### PRO SERIESII

#### **Der Big Red Max**™

Length: 29.9 in. (75.9 cm) Diameter: 3 in. (76 mm) Recovery: Skull & Bones Parachute Projected Altitude: 1100 ft. (335 m) Recommended Engines: E16-4, F15-4

#009721



The So Long is the highest flying two-stage rocket that we have ever produced!

### ACCESSORIES FOR BIG ROCKETS!

## PRO SERIES II

# TAKE YOUR ROCKETRY TO THE NEXT LEVEL!

#### PROSERIESH.

#### **LAUNCH RAIL**

Estes' all new, lightweight, and easy to transport Pro Series II Launch Rail is the perfect choice for rocket enthusiasts looking for affordable solutions to launch mid to high powered rockets!

- Compatible with all 1010 rail buttons and rail guides
- Sturdy enough to launch our biggest rockets!
- Six foot long aluminum adjustable rail
- · Rail pivots for easy rocket loading

#### #002311

Available Only at EstesRockets.com



#### PRO SERIES II

#### **Aramid Cord**

Heavy duty flame resistant cord for large rocket recovery systems.

100 lb. 200 lb. 300 lb. #003140 #003141 #003142

Available Only at EstesRockets.com

#### PRO SERIES III

#### F15-4 Bulk Pack

ncludes:

(8) F15-4 Engines (10) Starters (8) Large Engine Plugs

001707

Available Only at EstesRockets.com



### **PROSERIES II**

### **PRO**SERIES II



#### PRO SERIES III

#### **Pro Series Parts Assortment**

- (1) BT70 Plastic Blow Mold Nose Cone
- (1) BT80 Plastic Blow Mold Nose Cone
- (2) BT70 24" Body Tube
- (2) BT80 24" Body Tube
- (2) BT70 3" Tube Coupler
- (2) BT80 3" Tube Coupler
- (1) BT70 to BT80 Plastic Blow Mold Adapter
- (2) 24mm 3.5" Engine Mount Tubes
- (2) 24mm Engine Retainer Set
- (2) 29mm Engine Retainer Set
- (1) 24mm to 29mm Engine Adapter Set
- (1) BT70 24mm Centering Rings
- (1) BT80 24mm Centering Rings
- (1) BT70 29mm Centering Rings
- (1) BT80 29mm Centering Rings
- (2) BT70 Plywood Bulk Head
- (2) BT80 Plywood Bulk Head
- (2) Bulk Head Screw Eye
- (4) 12"x4"x1/8" Balsa Sheets
- (1) 18" Red Nylon Parachute
- (1) 15" Red Nylon Parachute
- (1) BT-70 Fin Marking Template
- (1) BT-80 Fin Marking Template
- (2) 29mm 8" Engine Mount Tubes
- (2) Shockcord Mounts
- (2) Shock Cords
- (4) Rail Guides

#### #009987

Available Only at EstesRockets.com



Engine Adapter Set (24mm - 29mm) #009753



#### **Shock Cord Accessory Pack**

3 heavy-duty elastic shock cords; 1/2 in. (13 mm) x 96 in. (243.8 cm)

#003172



#### E2X® Booster

For use with 2" (51mm) body tubes Recommended Engine: F15-0

#009752

#### **PS II Recovery Wadding**

Approximately 216 sheets for larger rockets. Can also be used in any Estes rocket.

#003556



- Audible Continuity (Easily hear if the starter is connected correctly)
- Two hands required for launch (Even with the Safety Key left inserted, the rocket will not launch without both buttons pressed)
- Requires 6 1.5V "C" size alkaline batteries (sold separately)
- Includes 4 wire leads with micro clips for multi-engine clusters
- Includes JST style plug for alternate battery use (8-10 cell 1000mAh NimH or 3 cell LiPo (11.1V) battery

#002240

#### PRO SERIES II

#### Launch Base

- Stands 18 inches off the ground!
- Sturdy enough to launch our biggest Pro Series rockets
- Two-piece 1/4 in. (6 mm), 5' (152.4 cm) Launch Rod

#003552

#### Engine Configurations for a Cluster Launch

Config. 1 - Single Engine

010

Config. 2 - Two Engine

Config. 3 - Three Engine

Config. 4 - Four Engine





The NAR Safety Code requires all rockets that launch with motors larger than a "D" to be launched from thirty (30) feet. We suggest using the 2240 Pro Series II launch controller. It is also capable of launching cluster engine configurations (see Config. 1-4 above).



# **Choose Estes Lesson Plans to Engage Your Students in STEM!**

Develop 21st century skills with your students through lesson plans that promote communication, creativity, collaboration, and critical thinking.

Use our free resources to gain confidence and effectively teach STEM topics while promoting real world learning.

Create lifelong memories in your classroom with hands on learning that inspires and ignites creativity. Aerospace careers start with Estes.

#### **Our Free Lesson Plans Include:**

- A range of topics including STEM, ELA & History
- Assessments
- NGSS and Common Core Standards
- Slide Presentations

Student Portfolios



Model Rocketry is an excellent STEM activity that gets students out of the classroom and into the sky! Students use all the elements of STEM to collect, analyze and communicate data. I've been teaching rocketry for over six years and it's the best activity every year!

> Find all of our resources at edu.estesrockets.com

# Take learning to new heights.



Inspire your students to imagine the limitless possibilities in aerospace with our line of model rocketry education products.

# **Get Started**

These are the items you need to teach rocketry in your classroom:



# How to choose the right experience for your students:

#### Age

Younger students (Grades 4-6) need beginner rockets that are simple to assemble. They're not quite ready for the challenge of gluing on individual fins yet, so choose one of our beginner bulk packs. Grades 7-12 are ready for the intermediate rockets!

#### **Time**

Consider the amount of time needed to build a rocket, for glue to dry, and how long it will take to prep the rockets before launch. Our snap together rockets are ready to fly in minutes! Our intermediate rockets require a longer glue drying time.

#### Flving Field Size

The available field size will determine which rocket(s) and engine(s) will be best for your launch. Smaller fields will require smaller engines such as 1/2 A or A. Bigger fields = bigger engines!

# **A Few Tips**

- PREPARE Build a rocket and launch it ahead of time! It's helpful to have that experience before you launch with your students.
- ORGANIZE Get your supplies together and encourage students to keep track of all their rocket parts. Sometimes, there can be many pieces and organization is key!
- BE FLEXIBLE Sometimes lessons don't go according to plan. Have backup activities ready in case things change.
- CONNECT STEM and rocketry go hand in hand. Use every opportunity to connect rockets to the science or math concepts you are teaching.
- **ENCOURAGE** The more excited you are, the more your students will be. Launching rockets is fun and creates memories your students will carry with them forever.



# **Educator Bulk Packs BEGINNER**







#### Color the Sky™ **Bulk Pack**

Length: 19.8 in. (50.3 cm) Diameter: 1.63 in. (42 mm) Recovery: Parachute Recommended Engines: B4-2, B6-2, B6-4, C6-5

Pack of 12

#001715

Only available at edu.estesrockets.com

**ONE PIECE MOLDED FIN UNIT** 

#### Cosmic Cascade™ **Bulk Pack**

Length: 25.7 in. (65.3 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Projected Altitude: 1600 ft. (488 m) Recommended Engines:

Single Stage Rocket:

Two Stage Rocket: A8-5, B6-6, C6-7 A8-3, B6-4, C6-5 Booster: A8-0, B6-0, C6-0

Pack of 12

#001764



Our first two stage beginner rocket perfect for those looking for sky piercing flights! Large launch fields recommended!

Only available at edu.estesrockets.com

PLASTIC SNAP IN FINS





#### Alpha III® **Bulk Pack**

Length: 12.1 in. (30.7 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Recommended Engines: 1/2 A6-2, A8-3, A8-5, B4-4, B6-4, B6-6, C6-5, C6-7

Pack of 12

#001751

**ONE PIECE MOLDED FIN UNIT** 

#### **Cosmic Ray® Bulk Pack**

Length: 13.3 in. (33.7 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute **Recommended Engines:** A8-3, A8-5, B4-4, B6-6, C6-5, C6-7

Pack of 12

#001112

Create your own custom deco design!

PLASTIC SNAP IN FINS: NO GLUING!



Only available at edu.estesrockets.com

#### Star Hopper™ **Bulk Pack**

Length: 7.4 in. (18.8 cm) Diameter: 0.74 in. (19 mm) Recovery: Streamer Recommended Engines: 1/2 A3-2T, A3-2T, A3-4T, A10-3T

Pack of 12

#001721

**PLASTIC SNAP IN FINS:** NO GLUING!

#### **Cosmic Cargo® Bulk Pack**

Length: 16.7 in. (42.4 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute **Recommended Engines:** A8-3, A8-5, B4-4, B6-6, C6-5, C6-7

Pack of 12

#001752

Create your own custom deco design! Includes added payload section!



Only available at edu.estesrockets.com

**PLASTIC SNAP IN FINS: NO GLUING!** 

# Educator Bulk Packs INTERMEDIATE







#### **AVG Bulk Pack**

Includes 4 of each - Alpha, Viking, and Generic E2X rockets. Recommended Engines: 1/2 A6-2, A8-3, A8-5, B4-4, B6-4, B6-6, C6-5, C6-7

> Pack of 12 #001753

#### INDIVIDUAL FINS THAT GLUE ONTO THE BODY TUBE

#### Wizard<sup>™</sup> Bulk Pack

Length: 12 in. (30.5 cm) Diameter: 0.74 in. (19 mm) Recommended Engines: 1/2 A6-2, A8-3, A8-5, B4-4, B6-4, B6-6, C6-5, C6-7 Sold Separately: A10-3T w/ Engine Adapter

Pack of 12

#001754





#### INDIVIDUAL FINS THAT GLUE ONTO THE BODY TUBE



#### Viking™ Bulk Pack

Length: 12.1 in. (30.7 cm) Diameter: 0.74 in. (19 mm) Recommended Engines 1/2 A6-2, A8-3, A8-5, B4-4, B6-4, B6-6, C6-5, C6-7 Sold Separately: A10-3T w/ Engine Adapter

Pack of 12

#001755

48 FIN VARIATIONS!
INDIVIDUAL FINS THAT GLUE ONTO
THE BODY TUBE

#### Alpha® Bulk Pack

Length: 12.3 in. (31.2 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute Recommended Engines: 1/2 A6-2, A8-3, A8-5, B4-4, B6-4, B6-6, C6-5, C6-7 Sold Separately: A10-3T w/ Engine Adapter

Pack of 12

#001756



INDIVIDUAL FINS THAT GLUE ONTO THE BODY TUBE

#### Green Eggs<sup>™</sup> Bulk Pack

An egg lofting rocket designed for the unique needs of teachers. Uses our "mighty" C11 rocket engines to safety lift the extra weight of an egg and keep it well within an average school yard for safe recovery.

> Length: 23.6 in. (59.9 cm) Diameter: 1.8 in. (46 mm) Recovery: Parachute Recommended Engines: w/egg: C11-3, D12-3 w/o egg: C11-5, D12-5

> > Pack of 12

#001718

INDIVIDUAL FINS THAT GLUE ONTO THE BODY TUBE

#### **Orbis 3D™ Bulk Pack**

This kit comes with body tubes, parachutes and parts you need to build an engine mount. Download .stl files from the Estes website to print your 3D plastic parts to complete your rocket. Nine different design options.

#### 3D printer and filament NOT included

Length: 10 - 12 in. (25.4 - 30.5 cm) Recovery: Parachute Recommended Engines: A8-3, B4-4, B6-4, C6-5

#001706

#### Students 3D print these parts!



# **Engine Bulk Packs**

Every launch requires engines, recovery wadding, starters, and plugs. These convenient engine bulk packs include enough of each for multiple launches. Choose from a variety of engine sizes. We advise using the smallest recommended engines for the first launches. Learn more about how to find the perfect engine on pg. 43.



#001788	1/2A3-4T Engines (24); 30 starters; 24 plugs; 72 sheets wadding
#001781	A8-3 Engines (24); 30 starters; 24 plugs; 72 sheets wadding
#001783	<b>B6-4 Engines</b> (24); 30 starters; 24 plugs; 72 sheets wadding
#001784	<b>B6-0 &amp; B6-6 Engines</b> (12 each); 30 starters, 24 plugs; 72 sheets wadding
#001789	C6-5 Engines (24); 30 starters; 24 plugs; 72 sheets wadding
#001726	C11-3 Engines (12); 20 starters; 16 plugs; 144 sheets wadding
#001786	D12-5 Engines (12); 20 starters; 16 plugs; 144 sheets wadding
#001672	<b>Blast-Off® Flight Pack</b> A8-3, B6-4, C6-3, C6-5 Engines (6 each); 30 starters; 28 plugs; 72 sheets wadding

# **Accessories**

#### **Lifetime Launch System**

Designed for teachers and students to withstand the rigors of multiple launches.

Stands 18 inches off the ground for easy launch preparation.

- · Tiltable launch rod.
- Includes both 1/8 in. & 3/16 in. launch rods
- Two-hand safety feature in the launch controller.
- Includes a Pro Series II controller, 30 feet of cable and two different size launch rods

#### #002310

The Lifetime Launch System comes with a lifetime warranty available to read at: www.estesrockets.com/lifetime-launch-system-warranty



# Includes fully color-coded cutaway for engine component identification.

#### **Phantom**<sup>™</sup>

The Phantom is a STEM education tool and is used in classrooms nationwide!

It demonstrates the various parts of a model rocket to your students!

> Length: 12.1 in. (30.7 cm) Diameter: 0.98 in. (25 mm) Recovery: Parachute (for demo) Projected Altitude: Non-Flying Model Recommended Engines: Included cutaway engine only.

> > #001207

#### **Altimeter**

The Estes Altimeter records heights in onefoot increments up to 10,000 feet (+/- 3 feet). It weighs about 1/2 oz. with a 0.625 diameter. It easily hooks onto the nose cone of your rocket and inserts into the body tube right above the parachute.

#002246



- Store up to 10 flights
- · Battery included

74 edu.estesrockets.com

### **How High Did It Fly?**

Part of the fun in launching a model rocket is knowing how high it goes. The Estes AltiTrak is a favorite, easy-to-use rocketry tool that provides fairly accurate measurements of flight altitudes.

The AltiTrak works like a protractor, providing the angle between the baseline and the triangle's hypotenuse (a big math word for the straight line between the person using the AltiTrak and the rocket when it's at peak altitude).

If you measure the baseline as given in the instructions, the AltiTrak also provides your rocket's altitude. The AltiTrak is great for students' science experiments and for teachers' math lessons!

#### AltiTrak™

Measure altitude with this easy-to-use device. Follow the rocket in the sight to apogee, and release the trigger to lock the reading.

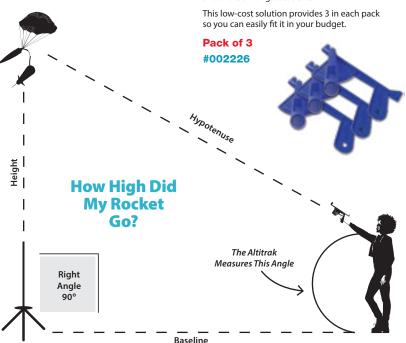
#### #002232



#### Mini AltiTrak<sup>™</sup>

The mini AltiTrak provides a technology solution for students to track, graph and analyze data.

Their small size makes them easy to transport and share amongst students.



# Promote Engineering Thinking & Design

Introducing new products that are geared toward promoting more critical thinking and the application of science related skills. First is our introduction of the Vogel™ Pro Series II rocket that is specifically designed to be a challenging build with two stage capabilities for High School or College level students.

#### PRO SERIES III

#### Vogel<sup>™</sup> Bulk Pack\*

Length: 64.5 in. (163.8 cm)
Diameter: 2 in. (50.8 mm)
Recovery: Nylon Parachute x2
Projected Altitude: 2000 ft. (610 m)
Recommended Engines:
Rocket Only: D12-3\*, E12-4\*, E16-6, F15-6
Two Stages:

Rocket: D12-5\*, E12-6\*, E16-6, F15-6 Booster: E16-0, F15-0

\*Requires 9753 (24mm-29mm) Engine adapter

#### Pack of 6

#### #001743

\*Note: This is a challenging Expert level rocket intended for High School & College Students. See "Pro Series II" Pg. 59 for more details about this exciting new rocket!



#### **Thrust Stand**\*

Easily conduct static tests to gather force data over time, allowing creation of detailed Thrust-Time curves. These graphs are essential for analyzing engine performance, enabling determination of total impulse, average thrust, maximum thrust, thrust duration, and time to maximum thrust.

#### #002300

\*Vernier Go Direct Force and Acceleration Sensor sold separately \*Engines sold separately

Only available at edu.estesrockets.com



### LAUNCH EQUIPMENT AND SUPPLIES

In order to safely and successfully launch your rocket time after time, you'll need the essentials which are a launch base, launch rod, blast plate, and launch controller. Different sized launch bases and launch rods are used to accommodate different sized rockets.

Perfect for beginners and smaller rockets!

#### Porta-Pad® II & Electron Beam® Launch Controller

Quick assembly - no glue or tools required! Launch rod angle is adjustable. Comes complete with blast deflector, standoff, two-piece 1/8 in. (3 mm) launch rod, and safety cap. Pad can accommodate a 3/16 in. (5 mm) Maxi<sup>TM</sup> launch rod - not included. Launch controller comes assembled with safety key and 15 ft. (4.6 m) of cable. Requires 4 new 1.5V AA alkaline batteries - not included.

#002222

(Sold Separately)

Porta-Pad® II Launch Pad

#002215

(Sold Separately)

**Electron Beam® Launch Controller** 

#002220



#### **Blast Deflector Plate**

Replaces that worn-out deflector. For use with 2215 Porta-Pad® II.

1/8 in. (3 mm)

most rockets. #002243

#002241



## Comes assembled with safety key and 30 ft. (9.7 m) of cable.

Requires 4 new 1.5V AA alkaline batteries - not included.

E Launch Controller

#002230

#### Porta-Pad® E Launch Pad

Quick assembly - no glue or tools required. Launch rod angle is adjustable. Includes a three-piece 1/4 in. (6 mm) launch rod, but can accommodate a 3/16 in. (5 mm) Maxi™ launch rod - not included.

#002238

Designed for launching larger rockets!

# Two Piece Maxi™ Launch Rod 3/16 in. (5 mm)

Launch rod with extra strength and length for larger rockets.

Two Piece Launch Rod

Replacement rod ideal for

#002244

#### Mini Launch Pad & Controller

Just the right size Launch Pad for launching mini engine powered rockets. Requires 4 new 1.5V AA alkaline batteries - not included

#002464

The Estes model rocket starter is the basic ignition device used to start the combustion process in the rocket engine.





#### StarTech™ Model Rocket Starters

The StarTech starters stay true to the design of the original, with one key addition. The small nichrome wire, the one that heats the propellant at launch, has been dipped in a specially-crafted chemical compound that reacts with the heat of the wire to create a large burst of heat and pressure that ensures ignition. Never misfire again! Includes 6 starters.

#002303

Shock cords hold the body tube and nose cone of a model rocket together once they separate during the ejection phase. The shock cord is made of an elastic material to help absorb the shock placed upon the rocket when the recovery system ejects, then opens — creating drag during the recovery phase.



#### **Shock Cords & Mount Pack**

Includes three 1/8 in. x 36 in. (3 mm x 91.4 mm) and one 1/4 in. x 36 in. (6 mm x 91.4 mm) rubber shock cords (enough for four shock cords). Includes shock cord mounts and instructions.

#002278

Estes starter plugs are used to safely secure your model rocket starters to your Estes engines during ignition. Different colored starter plugs are designed to accommodate different sized engines. They are a convenient way to ensure the success of your rocket launches; they are reusable.

#### Mini Engine Plugs

1/4A3, 1/2A3, A3, and A10 (20 pack)

#002250



#### **Standard Engine Plugs**

1/2A6, A8, B4, B6, and C6 (20 pack)

#002251



#### **Large Engine Plugs**

C11, D12, E9, E12, E16 and F15 (20 pack)

#002252



Model rocket recovery wadding is placed inside the rockets body tube to protect the recovery system from intense heat and gases during the rocket engine's ejection stage. All Estes recovery wadding is flame resistant, ensuring the safety of your rocket's flight.



#### **Recovery Wadding**

Required in most Estes rockets. Contains approximately 72 squares – enough for about 18-25 flights!

# **ACCESSORIES** Find our full listing of accessories, parachutes, building supplies and more at EstesRockets.com

#### Contains over 100 parts so you can design and build the rockets of your dreams!

Experiment with your own designs. Includes enough parts to build at least 8 complete rockets. Just add some glue and your imagination!

#### Designer's Special™



#### **BUILDING TOOLS**

Now you can make exact, easy measurements when attending to your fleet of Estes model rockets. Tube marking guides and fin alignment tools help make your hobby rocket endeavors fast, efficient, and fun! These are must-have items for the advanced model rocket enthusiast.



The Tube Marking Guide Allows for Accurate and Consistent Fin Placement When Building Your Rocket.

#### **Tube Marking Guide**

The tube marking guide is an easy way to mark your fin and launch lug placement. The marking guide is a must for any rocket builder!



#### **Ultimate<sup>™</sup> Tube Marking Guide**

Accurately mark your body tubes for a variety of rocket-assembly purposes!

#002228



The Ultimate Tube Marking Guide Helps Mark Body Tubes of All Different Sizes.

### **Fin Alignment Guide**

Fast and accurate fin alignment for three- or fourfinned rockets.

#002231



Never misalign rocket fins again!



#### **Tube Cutting Guides**

Assorted sizes: BT-5, BT-20, BT-50, BT-55, and BT-60 (hobby knife not included).

# APPAREL

Show off your favorite rockets and fly in style all year round!



Front



#### **Der Red Max Long Sleeve Tee**

Much like the rockets in the renowned series, this shirt exudes distinction with its sleek, streamlined design. The eye-catching appearance pays homage to the bold and adventurous essence of the Der Big Red Max.

Sizes: Small, Medium, Large, 2XL, 3XL, 4XL

#10004-S



#### Alpha Hoodie

Embark on a cosmic journey with the Alpha Zip Up Hoodie, a tribute to the iconic Estes Alpha rocket that revolutionized model rocketry in 1962. This hoodie captures the spirit of exploration and innovation that defined the historic era.

Sizes: Youth XL, Small, Medium, Large, XL

#10011-S



Adorned with the iconic yellow color of the Bertha rockets, this shirt combines comfort and style. Whether you're at the launch site or out and about, the Big Bertha™ T-shirt is the perfect addition!

Sizes: Youth Small, Small, Medium, Large, 2XL,

#10011-S



#### Saturn V Tee

Celebrate the legacy of space exploration with our exclusive Saturn V model rocket T-shirt, designed for rocketry enthusiasts and space aficionados!

Sizes: Youth XL, Small, Medium, Large, 2XL, 3XL, 4XL

#10010-YXL

#### **NASA SLS Hoodie**

Featuring double-needle stitching at the waistband and cuffs, the sweatshirt promises not only interstellar style but also lasting durability. The double-lined hood, complete with a dyed-to-match drawcord, provides a cozy haven, embodying the spirit of cosmic exploration.

Sizes: Youth XL, Small, Medium, Large, XL, 2XL, 3XL, 4XL

#10002-S



#### **Estes Booney Hat**

Made from supplex nylon and featuring an adjustable chin cord, this Estes Booney Hat is perfect for the launch site! The 3" all around brim provides unrivaled shade on launch day.

Sizes: One Size Fits Most

#002970

Visit EstesRockets.com to See Our Full Selection of Apparel & Gifts!



### GIFTS AND MORE!



#### Saturn V & Saturn 1B 500 Pc Puzzle

Introducing the NASA Saturn V & Saturn 1B 500 Piece Puzzle from Estes — a unique addition to our product lineup that combines fun and history in one thrilling challenge! This high-quality, 500-piece puzzle features sharp, vibrant graphics of the iconic Saturn V and Saturn 1B rockets, two of the most powerful and significant rockets ever built!

#### #000510



#### Estes 2025 Calendar

Stay organized throughout the year while enjoying high-quality photographs that celebrate the legacy of Estes Rockets. Whether you're planning your next launch or simply admiring the artistry of these models, the 2025 Estes Calendar is the perfect addition to your home or office.

#### #002867



Jeb w/ Ornament Rocket

#000502





Artwork Posters & More!
See All Our Gifts @ EstesRockets.com!





Estes encourages membership in the

#### NATIONAL ASSOCIATION OF ROCKETRY

https://www.nar.org

#### MODEL ROCKET SAFETY CODE

(Basic Version - Effective August 2012)

- **1. Materials.** I will use only lightweight, non-metal parts for the nose, body, and fins of my rocket.
- 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 away when I launch rockets with D motors or smaller, and 30 feet 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. When conducting a simultaneous launch of more than ten rockets I will observe a safe distance of 1.5 times the maximum expected altitude of any launched rocket.
- 6. Launcher. I will launch my rocket from a launch rod, tower, or rail that is pointed to within 30 degrees of the 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 launchers 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 1500 grams (53 ounces) at liftoff and will not contain more than 125 grams (4.4 ounces) of propellant or 320 N-sec (71.9 pound-seconds) of total impulse.
- 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. 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 (N-sec)	Equivalent Motor Type	Minimum Site Dimensions (ft.)
0.00-1.25	1/4A, 1/2A	50
1.26-2.50	Α	100
2.51-5.00	В	200
5.01-10.00	С	400
10.01-20.00	D	500
20.01-40.00	E	1000
40.01-80.00	F	1000
80.01-160.00	G	1000
160.01-320.00	Two Gs	1500

- 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 flame-resistant or fireproof recovery system wadding in my rocket.
- 11. Recovery Safety. I will not attempt to recover my rocket from power lines, tall trees, or other dangerous places.

84 EstesRockets.com

### INDEX

#### **Accessories | Building Supplies | Apparel**

Altimeter 2246	75	Kerbal -Jeb w/ Ornament Rocket 0502	84	PS II Parts Assortment 9987	64
Altitrak 2232	76	Lifetime Launch System 2310	75	PS II Recovery Wadding 3556	64
Blast Deflector Plate 2241	78	Mini AltiTrak 2226	76	PS II Shock Cord Pack 3172	64
Designer's Special 1980	80	Mini Launch Pad & Controller 2244	78	Recovery Wadding 2274	79
E Launch Controller 2230	78	Model Rocket Starters 2303	79	Saturn V & Saturn 1B Puzzle 0510	84
Electron Beam Launch Controller 2220	78	Porta-Pad II Launch Pad 2215	78	Shock Cord & Mount Pack 2278	79
Engine Plugs 2250, 2251, 2252	79	Porta-Pad E Launch Pad 2238	78	Thrust Stand 2300	77
Estes Apparel	82	PS II Aramid Cord 3140, 3141, 3142	63	Tube Cutting Guides 2315	81
Estes 2025 Calendar 2867	84	PS II E2X Booster 9752	64	Tube Marking Guide 2227	81
Estes Tumblers 2365	84	PS II Engine Adapter Set 9753	64	Two-Piece 1/8 in. Launch Rod 2243	78
Fin Alignment Guide 2231	81	PS II Launch Base 3552	65	Two-Piece 3/16 in. Maxi Launch Rod 2244	78
Kerbal -Val w/ Moondog 0500	47	PS II Launch Controller 2240	65	Ultimate Tube Marking Guide 2228	81
Kerbal -Val w/ Ornament Rocket 0501	84	PS II Launch Rail 2311	63	Universal Astrocam 2208	25

#### Our Full Line of Rocket Accessories can be found at EstesRockets.com

#### **Engines**

All Engine Packs (See Chart)	45	Engine Codes	43	Engine Thrust Curves	40
<b>Engine Bulk Pa</b>	acks				
1/2 A3-4T Engines 1788	74	B6-4 Engines 1783	74	C6-5 Engines 1789	74
A8-3 Engines 1781	74	Blast-Off Flight Pack 1672	74	D12-5 Engines 1786	74
B6-0 & B6-6 Engines 1784	74	C11-3 Engines 1726	74	F15-4 Engines 1787	62

#### **Launch Sets**

Alpha III 1427	15	Mini Bertha 2469	13	Star Hopper 2427	14
D.O.R.M. 18 3237	15	Mini Max 2445	14	Tandem-X 1469	16
Flash 1478	17	Pathfinder 3238	12	Taser 1491	15
Luna Dart 3236	17	Rascal & HiJinks 1499	16		
Mini Alpha 2458	13	Riptide 1403	17		

#### **Rocket Education Bulk Packs**

Alpha Bulk Pack 1756	73	Cosmic Cascade Bulk Pack 1764	70	Viking Bulk Pack 1755	72
Alpha III Bulk Pack 1751	70	Cosmic Ray Bulk Pack 1112	71	Vogel Bulk Pack 1753	77
AVG Bulk Pack 1753	72	Green Eggs Bulk Pack 1718	73	Wizard Bulk Pack 1754	72
Color the Sky Bulk Pack 1715	70	Orbis 3D Bulk Pack 1706	73		
Cosmic Cargo Bulk Pack 1752	71	Star Hopper Bulk Pack 1721	71		

#### **STEM & Starter Sets**

AstroCam 5325	10	Rocket Science 5326	11	Space 2 Inspire 9428	19
Athena X 5304	11	Roto Rocket STEM Kit 0648	18	Tri-Flyer STEM Kit 0647	18

#### **Rockets**

Alpha 1225	27	Great Goblin Pro Series II 9724	61	Power Patrol 2481	25
Alpha III 1256	20	Green Eggs 7301	30	Ripley Rocket 0653	31
Antar 7310	41	Hi-Flier 2178	26	Roto Rocket 1322	21
AstroCam 7308	25	Hi-Flier XL 3226	34	SA-2061 Sasha 7271	38
Athena 2452	25	Illusion 7299	23	Saturn V Anniversary Edition 2160	52
Athena H Pro Series II 9725	55 & 58	Interceptor 1250	37	Saturn V 1:100 1969	55
Baby Bertha 1261	28	Jeb w/ Kerbal Rocket 9726	47	Saturn 1B 7251	54
Big Bertha 1948	27	K-35 Astron Constellation 1235	29	So Long Pro Series II 9722	62
Big Daddy 2162	33	Long Ranger 0814	24	Solar Twirl 1323	21
Black Brant II 7243	53	Luna Bug 0816	26	SpaceX Falcon 9 2161	51
Black Brant XII Pro Series II 9723	57	Mean Machine 1295	31	Space Corps DARC-1 7307	38
Black Star Voyager 7222	37	Mercury Redstone 4 1921	54	Space Corps Lunar Scout 7290	29
Blue Origin New Shepard 2198	50	Mini Alpha 2098	22	Space Corps Vesta Intruder 7312	32
Blue Origin New Shepard BK 7315	50	Mini ARCAS 2441	32	Space Shuttle 9991	49
BOSS - Bill Simon Rocket 7316	40	Mini Bertha 2099	22	Star Hopper 7303	22
Boosted Bertha 1946	35	Mini Honest John 2446	53	Star Orbiter Pro Series II 9716	61
Bull Pup 12D 7000	53	Mini Max 2100	28	Starship Octavius 7284	24
Cosmic Cascade 1321	22	Mosquito 1345	29	Super Big Bertha Pro Series II 9719	60
Cosmic Cargo 1324	23	NASA SLS 2206	52	Super Orbital Transport 7314	36
Comanche-3 7245	39	Nike Smoke 7247	26	Tazz 7282	34
Crossfire ISX 7220	30	Nike Smoke Pro Series II 9704	58	U.S. Army Patriot M-104 2056	53
Der Red Max 0651	28	Nike-X 7259	35	Vapor 7294	33
Der Big Red Max Pro Series II 972	62	Optima Pro - Pro Series II 9727	59	Venture 3239	21
Destination Mars MAV 7283	24	Orbiton 7002	20	Viking 1949	30
Destination Mars Leaper 7297	24	Orion 3D Rockets 1113	21	Vogel Pro Series II 9728	59
Doorknob Pro Series II 9720	60	Orange Bullet 7295	41	Wizard 1292	29
Firehawk 0804	23	Phantom 1207	75		

#### **ESTES WARRANTY STATEMENT**

Estes model rocket products are warranteed against defects in materials or workmanship for one year from the date of the original purchase. If the Estes product, because of a manufacturing mistake, malfunctions or proves to be defective within the one-year warranty period, it will be repaired or replaced, at Estes' option and at no charge to you.

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 contact us at EstesRockets.com or by mail at Estes Industries, LLC, Customer Service Department, 1295 H Street, Penrose, Colorado 81240-9698. For customer service, call (719) 372-5214.



WARNING: This product can expose you to silica, which is known to the state of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

All Estes model rocket engine packaging carries this warning.

WARNING: Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the state of California to cause cancer, Avoid inhalling wood dust or use a dust mask or other safeguards for personal pretection. For more information go to www.P65Warnings.ca.gov/wood.

© 2025 Estes Industries, LLC 1295 H Street, Penrose, CO 81240-9698 All rights reserved. Printed in USA. PN-2929 (1-25)

Availability may be subject to change without notice.

Color of products may vary.

Estes Rockets that contain wood parts/components carry this warning.

