

## Estes 7315

# Estes 7315 Blue Origin New Shepard Builder Kit Instruction Manual

Model: 7315 | Brand: Estes

## INTRODUCTION

The Estes 7315 Blue Origin New Shepard Rocket Builder Kit is designed for intermediate model-rocket enthusiasts, ages 10 and up (supervision recommended for ages under 12). This kit allows you to build a 1/66th-scale model of Blue Origin's New Shepard launch vehicle, capable of reaching altitudes up to 700 ft. when powered by Estes engines (sold separately).

## WHAT'S INCLUDED

- Blue Origin New Shepard rocket kit
- Waterslide decals
- 15-inch parachute



# WHAT'S INCLUDED

- ★ Blue Origin New Shepard rocket kit
- ★ Waterslide decals
- ★ 15-inch parachute



## Length

11.8" (30 cm)



## Diameter

1.64" (42 mm)



## Weight

1.9 oz. (53.9 g)



1-hour assembly time

The kit contains all necessary components for assembly, including the rocket body, fins, nose cone, engine retainer, waterslide decals, and a 15-inch recovery parachute.

## ASSEMBLY & SETUP

The estimated assembly time for this kit is approximately 1 hour, not including glue and paint drying time.

### Required Tools and Supplies (Sold Separately):

- Masking primer tape
- Pencil
- Ruler
- Yellow glue
- Hobby knife
- Medium CA glue
- Wax paper
- Scissors
- Clear coat (optional)
- White paint
- Fine sandpaper

- Sand block



Before beginning assembly, ensure you have all the necessary tools and supplies, such as various glues, cutting tools, and finishing materials.

## OPERATION & LAUNCH

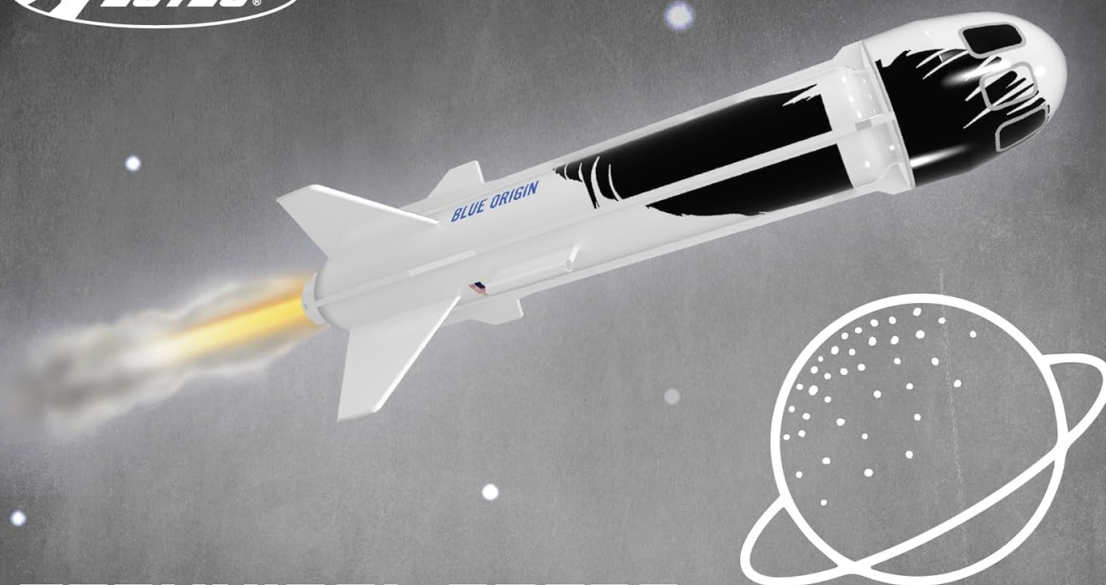
### Engine Selection

The Blue Origin New Shepard rocket is compatible with Estes B4-4, B6-4, and C6-5 rocket engines. The C6-5 engine allows the model to reach its maximum projected altitude of 700 ft. Always refer to the rocket's packaging or instructions for a list of acceptable engines.

### Pre-Launch Checklist

- Ensure the launch area is free of obstructions, dry weeds, brown grass, or highly flammable materials.
- Launch only during calm weather with little or no wind and good visibility.
- Always check with your local city government for any special regulations that may apply to your area.
- Follow the NAR (National Association of Rocketry) model-rocket safety code during operation.





## TECHNICAL SPECS



### Recommended Engines

B4-4, B6-4, C6-5



### Projected Max Altitude

700' (213 m)



### Launch System

Porta-Pad II



### Recovery System

15" (38.1 cm) Parachute



### Fin Material

Laser-Cut Balsa Wood

The rocket's technical specifications indicate compatibility with specific Estes engines for optimal flight performance.



## ***WE IGNITE IMAGINATIONS***

Since 1958, Estes has created educational rocket kits designed for an unforgettable launch experience. As a family-owned company, we have grown to offer exciting STEM products that engage aspiring rocketeers and the future minds of aerospace.

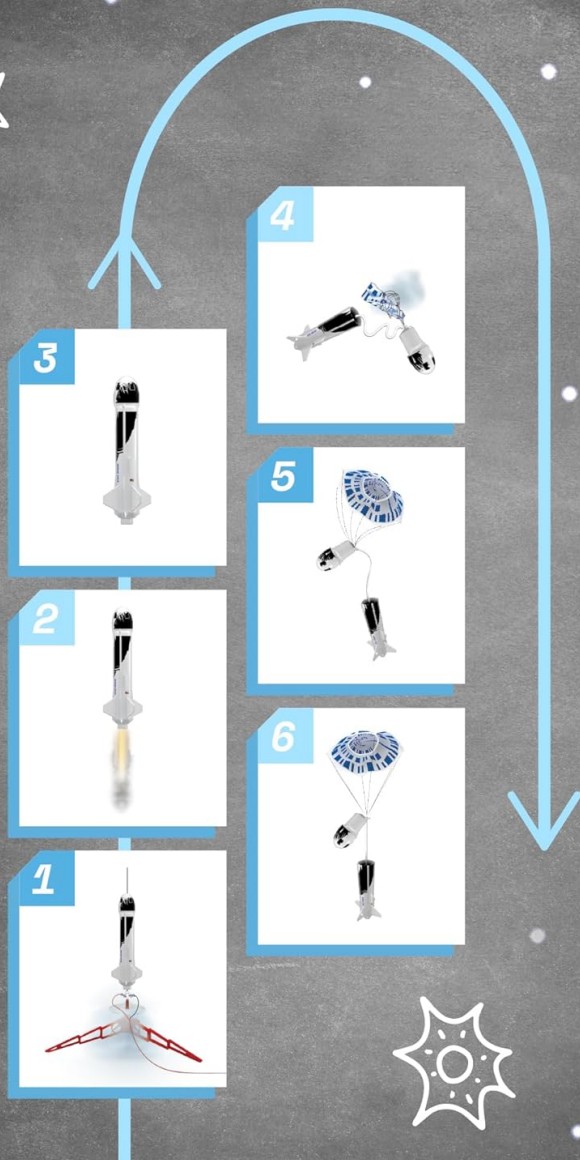
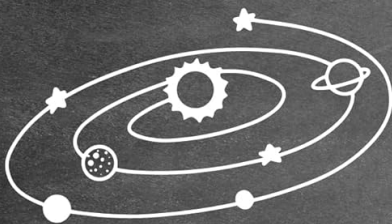
The flight sequence involves a safe launch, ascent, engine burnout, parachute deployment, and gentle descent for recovery.





# FLIGHT SEQUENCE

- ✦ Safety first! Don't forget to perform a pre-launch check.
- ✦ Prepare for takeoff in a large open area free of dry weeds or brown grass.
- ✦ Always follow the National Association of Rocketry (NAR) safety code.



Proper launch site dimensions are crucial for safety, ensuring sufficient clear space for rocket flight and recovery.

## RECOVERY SYSTEM

The kit includes a 15-inch parachute for safe recovery. Recovery wadding (sold separately) is essential to protect the parachute from the hot ejection charge of the engine.

### Using Recovery Wadding

Insert recovery wadding into the body tube above the engine before each flight to prevent the hot ejection gases from damaging the parachute.

## MAINTENANCE

After each flight, inspect your rocket for any damage to the fins, nose cone, or body tube. Ensure the recovery system (parachute and shock cord) is intact and free of tears or tangles. Clean any residue from the engine mount area. Store the rocket in a cool, dry place to prevent material degradation.

## TROUBLESHOOTING

## Common Issues and Solutions:

### Rocket Fails to Launch:

- Check connections: Ensure the launch controller clips are securely attached to the igniter wires.
- Battery check: Verify that the launch controller has fresh batteries (4 AA batteries required, sold separately).
- Igniter placement: Make sure the igniter is fully inserted into the engine nozzle and held in place by the igniter plug.

### Rocket Flies Erratically:

- Fin alignment: Confirm that the fins are securely attached and properly aligned.
- Center of pressure: Ensure the rocket's components are assembled correctly to maintain proper flight stability.

### Parachute Fails to Deploy:

- Wadding: Verify that recovery wadding was used and properly packed to protect the parachute.
- Engine: Ensure the correct engine type was used and that it functioned properly.

## SPECIFICATIONS

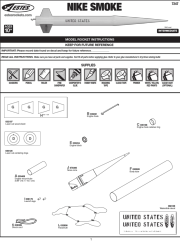
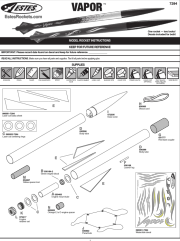
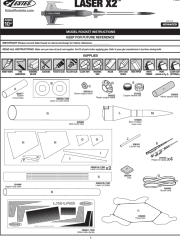
Brand	Estes
Age Range (Description)	10 and up with adult supervision under 12 years old
Color	Multicolor
Theme	Sport
Item dimensions L x W x H	12 x 2 x 3 inches
Material	Plastic
Seasons	All Seasons
Included Components	rocket, parachute
Number of Pieces	2
Paint Type	Acrylic
Style	Modern
Model Name	Blue Origin New Shepard Model Rocket Kit
Art Craft Kit Type	Model Rocket Kit
UPC	047776073159
Global Trade Identification Number	00047776073159
Manufacturer	Estes Industries

<b>Product Dimensions</b>	12 x 2 x 3 inches
<b>Item Weight</b>	6.9 ounces
<b>ASIN</b>	B0B286CRSD
<b>Item model number</b>	7315
<b>Manufacturer recommended age</b>	10 years and up
<b>Release date</b>	May 24, 2022

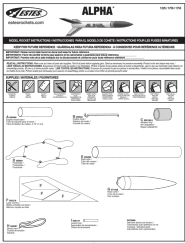
## WARRANTY & SUPPORT

For warranty information and customer support, please refer to the official Estes website or contact their customer service directly. You can also visit the [Estes Store on Amazon](#) for additional resources and product information.

## Related Documents - 7315

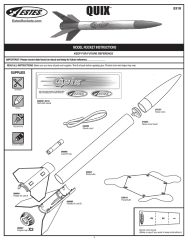
	<p><a href="#">Estes Nike Smoke Model Rocket Instructions (7247)</a></p> <p>Detailed assembly and launch instructions for the Estes Nike Smoke model rocket (model number 7247). Includes parts list, supplies needed, step-by-step building guide, finishing tips, and safety precautions.</p>
	<p><a href="#">Estes Vapor Model Rocket Kit Assembly and Launch Instructions</a></p> <p>Comprehensive instructions for assembling, finishing, and launching the Estes Vapor model rocket kit (Model 7294), including parts list, step-by-step assembly, painting guides, and safety precautions.</p>
	<p><a href="#">Estes Laser X2™ Model Rocket Assembly Instructions (Model 7320)</a></p> <p>Comprehensive assembly guide for the Estes Laser X2™ model rocket kit (Model 7320). This document provides detailed, step-by-step instructions, a complete parts list, supply requirements, painting and decal application guidance, and essential launch and safety procedures.</p>





[Estes Alpha Model Rocket Instructions - Assembly and Launch Guide](#)

Comprehensive assembly and launch instructions for the Estes Alpha model rocket (Models 1225, 1756, 1753). Includes parts list, step-by-step building guide, finishing tips, recovery system preparation, engine setup, launch procedure, and safety precautions.



[Estes Quix Model Rocket Instructions](#)

Step-by-step assembly and launch instructions for the Estes Quix model rocket. Includes parts list, assembly diagrams, and safety precautions.



[Estes Saturn V Skylab Model Rocket Kit Assembly Instructions](#)

Detailed assembly instructions for the Estes Saturn V Skylab model rocket kit (item #1973), including parts lists, step-by-step construction, painting guides, decal application, and launch preparation. This guide provides a comprehensive overview for building the iconic model rocket.