CUSTOMIZER™ MINI LAUNCH SET INSTRUCTION MANUAL #1497

PLEASE REVIEW ALL OF THE ASSEMBLY INFORMATION BEFORE STARTING ANY OF THE POSSIBLE ROCKET COMBINATIONS.

ASSEMBLY TIP: Read all instructions before beginning work on your model. Make sure you have all parts and supplies.

TEST FIT ALL PARTS TOGETHER BEFORE APPLYING ANY GLUE!
If any parts don’t fit properly, sand as required for precise assembly.

Thank you for purchasing the Estes Customizer™ Mini Launch Set. This one-of-a-kind set lets you combine the various parts to create a single large rocket or two smaller rockets. To utilize every existing part, you will need to create a set that you read and review.

After you have reviewed each and every rocket and made your customized rocket choice, refer to the Exploded View Assembly Chart for the required assembly steps found in the Customizer™ Mini Launch Set Instruction Manual. The manual has detailed drawings, measurements, and instructions for each assembly required to complete your customized rocket. After completing your Customizer™ Mini rocket, you can create a more personalized custom rocket using the supplied self-stick decals.

How to use the Parts Template, Exploded View Assembly Chart and Customizer Mini™ Launch Set Instruction Manual.

1. First, match each of the parts with the Parts Template.
2. Check out each of the 12 rocket combinations in the Exploded View Assembly Chart and review each of the rockets and specifications (length, weight, engine used and maximum altitude prediction) in the column at the right to determine the best customized rocket for you.
3. Refer to the Customizer™ Mini Launch Set Instruction Manual for each detailed assembly step referred to in the Exploded View Assembly Chart.
4. DRY ASSEMBLE (no glue) each of the 12 rockets. Do this to see how the parts fit together, to gain some experience with the various assembly techniques before actually assembling and gluing your rocket. This process will also help you decide which rocket(s) you want to create with your Customizer™ Mini rocket parts.
5. Carefully following the instructions, charts and templates will ensure that your customized model rocket reflects the creative rocket scientist in you.

SUPPLIES: In addition to the parts included in the kit you will also need:

- SCISSORS
- PENCIL
- RULER
- FINE SANDPAPER (0000-4000 grit)
- CARPENTER’S GLUE
- MODELING KNIFE
- PLASTIC CEMENT
- MASKING TAPE
Assembly Quiz:
Once you have familiarized yourself with the assembly sequences and decided on the rocket(s) of your choice, take this short quiz. If you answered 8 of 10 questions with Yes, you're ready to build your very own Customizer Mini™ rocket(s).

1. Have you read the entire Customizer Mini™ instruction manual and studied each of the sub-assemblies? Yes___ No___
2. Have you used the Parts Template to identify each of the parts supplied? Yes___ No___
3. Do you understand the numbering sequence at the beginning of each step in the instruction manual and how those numbers relate to the various rocket combinations? Yes___ No___
4. Using the Exploded View Assembly Chart, have you reviewed the product specifications of each rocket and understand the performance capabilities of each? Yes___ No___
5. Have you DRY ASSEMBLED (no gluing) each of the rocket combinations that interest you to see how the various parts and sub-assemblies fit together? Yes___ No___
6. Do you understand that certain rocket parts combinations can provide you with 2 rockets? Yes___ No___
7. Do you understand that certain rocket parts combinations will provide you with just one complete rocket with some parts left over? Yes___ No___
8. Have you read “Prepare Parachute”, “Prepare Streamer”, “Prepare Engine” and “Countdown & Launch” in the manual and understand how to load your parachute, model rocket engine and igniter? Yes___ No___
9. Have you read the launch assembly instructions and understand how to assemble your Mini Launch Pad? Yes___ No___
10. Have you read the launch assembly instructions and understand how to install the four AA alkaline batteries in the Electron-Beam® Launch Controller? Yes___ No___

**Customizer™ Mini Instruction Manual**

**NOTE: ALL GLUED AREAS ARE SHOWN IN RED**

**ENGINE MOUNT ASSEMBLY**

**NOTE: USED FOR ROCKETS 1, 2, 3, 4, 5 AND 6.**

1. Measure and mark A
2. Cut slit at mark.
3. Insert C in slit.
4. Slide B even with end of A
5. Apply glue both sides of B
6. Apply glue inside end of B until it stops. Let dry.

**PARACHUTE AND SHOCK CORD ATTACHMENT**

**NOTE: USED FOR ROCKETS 1, AND 2.**

1. Form loop.
2. Push loop through eyelet.
3. Pass through loop.
4. Double inside the eyelet.

**CUSTOMIZE YOUR ROCKET!**

**NOTE: USED FOR ALL ROCKETS.**
Create your own custom look! Now that you have completed final assembly of your Customizer Mini™ rocket, arrange any of the radical decals included in your set into your personal design. Mix and match the easy to apply decals and express yourself! Create your very own totally unique rockets.

**PREPARE PARACHUTE**

**NOTE: USED FOR ROCKETS 1, 2, 3, 4, 5 AND 6.**

1. Insert 3-4 squares of loosely crumpled recovery wadding into body tube.
2. Spike.
3. Fold.
4. Roll.
5. Wrap lines loosely around the parachute. Insert parachute, shock cord and nose cone into body tube.

**PREPARE STREAMER**

**NOTE: ONLY EXTRA WADDING (M22770) RECOMMENDED.**

1. Tear one piece of wadding into 4 equal sections. Insert loosely crumpled recovery wadding into body tube.
2. Fold in thirds.
3. Roll tightly.
4. Insert B and nose cone into E.

**PREPARE ENGINE**

**WARNING: FLAMMABLE**
To avoid serious injury, read instructions & safety guide. Cold propellant and engines may cause injury. PREPARE ENGINE ONLY WHEN YOU ARE OUTSIDE AT THE LAUNCH SITE. PREPARING TO LAUNCH? If you do not use your prepared engine, remove the igniter before storing engine.

1. Separate igniter and plug.
2. Insert igniter.
3. Insert igniter plug. Firmly push all the way in!
4. Push down.
5. Gently bend igniter to form leads as shown.
6. Insert engine and igniter into rocket.
CLEAR PAYLOAD ASSEMBLY
NOTE: USED FOR ROCKETS 9 AND 10.

1. Apply tape to [or] snug fit in end of E.
2. Apply ring of cement in end of E. Slide into F.
3. Test fit. If loose, apply tape around base of E, DO NOT GLUE E.
4. Assembled Payload Section.

YELLOW TUBE PAYLOAD ASSEMBLY
NOTE: USED FOR ROCKETS 11 AND 12.

1. Apply tape to [or] snug fit in end of E.
2. Apply ring of cement in end of E. Slide into F.
3. Test fit. If loose, apply tape around base of E, DO NOT GLUE E.
4. Assembled Payload Section.

PARACHUTE OR STREAMER ATTACHMENT
NOTE: USED FOR ROCKETS 3, 4, 5 AND 6.

A
1. Form loop.
2. Pass parachute through loop.
3. Pull lines tight.

B
1. Tie S double knot to F.
2. Cut a 1" (25 mm) long piece of masking tape. Lick over end of S and tape S to U.

C
1. Tie J or K double knot to S.
2. Cut a 1" (25 mm) long piece of masking tape. Lick over end of J and tape S to U.

INSTALL SHOCK CORD MOUNT
NOTE: USED FOR ROCKETS 1, 2, 3, 4, 5 AND 6.

1. Cut shock cord mount from instructions.
2. Apply glue to Section 2. Place in glue. Fold forward.
3. Apply glue and fold forward, Squeeze tight.
4 BLACK BODY TUBE ASSEMBLY - WITH ENGINE HOOK
NOTE: USED FOR ROCKETS 7, 8, 9, 10, 11 AND 12.
1. Measure and mark H.  
2. Cut slits at marks.  
3. Insert in slit.
4. Apply ring of cement where shown.  
5. Slide even with end of F.  
See side view.  
Wipe excess cement. Let dry.
6. Slide H over past slit.  
Make sure beveled side faces forward.  
7. Insert in slit. Pull S through slit until 1/4 (6 mm) of S remains.  
8. Apply ring of cement forward of slit.  
Make sure that slot in S is aligned with exposed F. Slide S forward of mark and over exposed F. Let dry.

5 BLACK BODY TUBE ASSEMBLY – NO ENGINE HOOK
NOTE: USED FOR ROCKETS 5 AND 6.
1. Slide H half way on F.  
2. Apply ring of cement to end of F.  

6 BLACK AND YELLOW CONE ASSEMBLY
A NOTE: USED FOR ROCKETS 1 AND 2.
B NOTE: USED FOR ROCKETS 7 AND 8.
C NOTE: USED FOR ROCKETS 3, 4, 5, AND 6.
1. Apply cement to inside of K or M. Insert F. Let dry.  
2. Apply cement to inside of L or N. Insert F. Let dry.  
3. Apply ring of cement to end of F.  
Slide F into F. Wipe excess cement. Let dry.

7 ATTACH TUBE ADAPTER
A NOTE: USED FOR ROCKETS 3 AND 4.
1. Slide S through base of F.  
Tie with double knot.  
2. Apply ring of cement to inside of S. Insert F.  
B NOTE: USED FOR ROCKETS 5 AND 6.
1. Slide S through base of F.  
Tie with double knot.  
2. Apply ring of cement to inside of S. Insert F.  
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NOTES: