



ESTES INDUSTRIES
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DELUXE SUPER SHOT™

FLYING MODEL ROCKET KIT INSTRUCTIONS

KEEP FOR FUTURE REFERENCE.

ASSEMBLY TIP: Read all the instructions before beginning work on your model. TEST FIT all parts before applying any glue. If any parts don't fit properly, sand as required for precision assembly.

SUPPLIES REQUIRED:



HOBBY KNIFE



PLASTIC CEMENT



CARPENTER'S GLUE



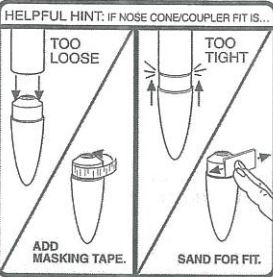
MASKING TAPE



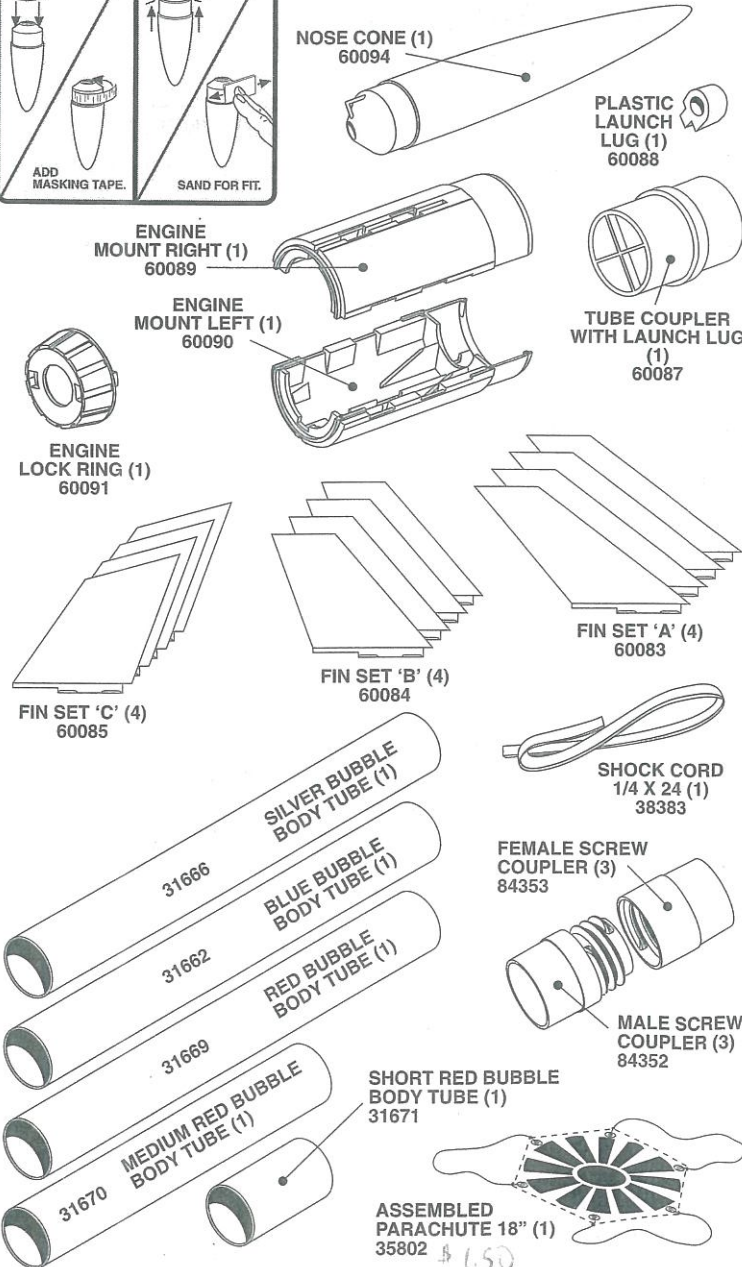
FINE SAND PAPER
(400-600 Grit)

ALL GLUED AREAS ARE SHADED IN GRAY

PARTS LAYOUT

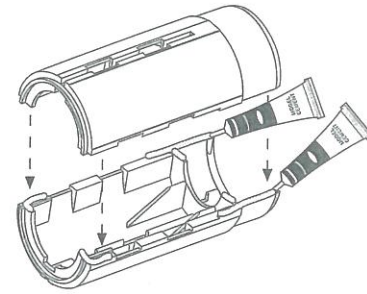


Locate the parts shown below and lay them out on the table in front of you. DO NOT USE THIS DRAWING TO ASSEMBLE YOUR ROCKET.

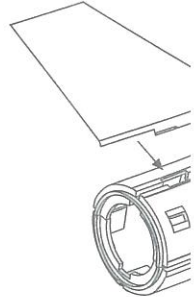


1.

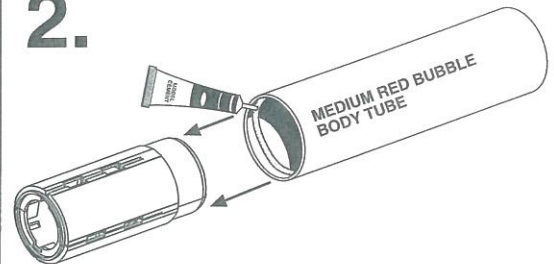
A. Cement the two plastic Engine Mount Panels together. Let dry.



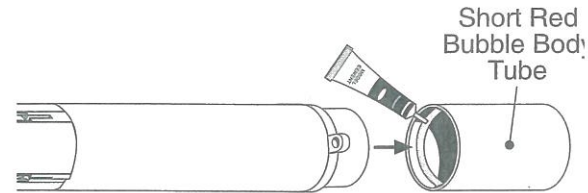
B. Test fit Fins into engine mount to scrape any excess glue off with a Hobby knife.



2.



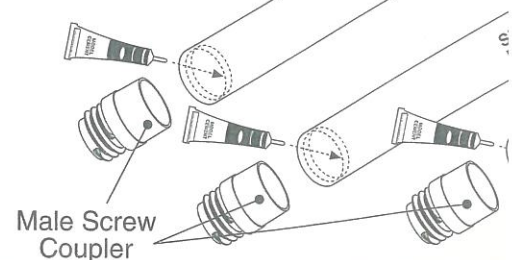
A. Apply a ring of cement just inside the end of the MEDIUM Red Bubble Body Tube, and slide onto the engine mount assembly.



C. Apply a ring of cement just inside the end of the SHORT Red Bubble Body Tube and slip onto the Tube Coupler.

3.

A. Apply a ring of cement just inside one end of the Red Bubble Body Tube. Insert a MALE Screw Coupler into the body tube. Repeat with a ring of cement inside the other end of the Red Bubble Body Tube and insert the FEMALE Screw Coupler. Repeat the same process for the Silver Bubble Body Tube.



C. Cement Plastic Launch Lug into slot on Engine Mount as shown.

s. You may need is plastic [flash] fe. DO NOT GLUE.

IMPORTANT! USE A LAUNCH ROD TO ALIGN THE FRONT AND REAR LAUNCH LUGS.

Tube Coupler

ALIGN LAUNCH LUGS (SEE DRAWING ABOVE)

B. Apply a ring of just inside the upper end of the Medium Red Bubble Body Tube and slide the Tube Coupler into the tube. Before glue sets, align the Launch Lug on the Coupler with the Launch Lug on the Engine Mount.

Female Screw Coupler

D. Apply a ring of cement just inside the upper end of the Short Red Bubble Body Tube. Slide a FEMALE Screw Coupler into the Body Tube.

Female Screw Coupler

ER BUBBLE BODY TUBE

BLUE BUBBLE BODY TUBE

B. Apply a ring of cement just inside one end of the Blue Bubble Body Tube. Insert a MALE Screw Coupler into the Body Tube.

4.

A. Carefully cut Shock Cord Mount from last page of instructions.

B. Smear glue. Fold forward.

C. Smear glue. Fold forward.

D. Squeeze tightly until glue sets.

E. Apply glue to back of Shock Cord Mount. Press mount into front of Blue Bubble Body Tube assembly and hold until glue sets. **Insert at least 1-1/2" (3.8 cm) from end.** Let glue dry completely.

1-1/2" (3.8 cm)

YES

5.

A. Clean flash from eyelet and seams of Nose Cone.

B. Form loop with Shroud Lines.

CAUTION: DO NOT CUT OFF EYELET OF NOSE CONE.

C. Push loop through eyelet of Nose Cone.

D. Pass Parachute through loop.

E. Pull tight.

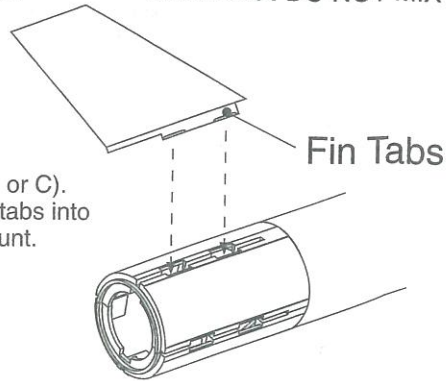
F. Tie Shock Cord to the Eyelet of the Nose Cone with a double knot.

Shock Cord

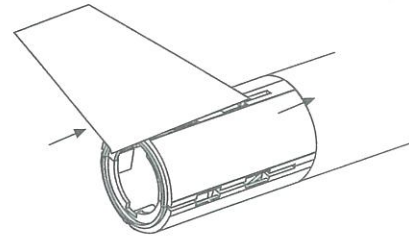
FIN ATTACHMENT:

WARNING: DO NOT MIX FIN SHAPES ON ROCKETS.

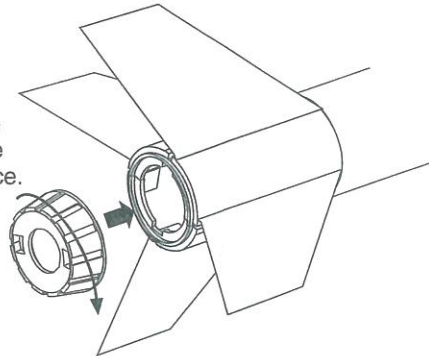
- A. Choose a set of Fins (A,B or C).
One at a time, slip the fin tabs into
the slot on the Engine Mount.
DO NOT GLUE.
(FIN SET B SHOWN)



- B. Slide Fin up to secure onto the
Engine Mount. **DO NOT GLUE!**



- C. Align the 'lugs' on the Engine Lock Ring
with the matching slots on the end of the
Engine Mount and slip together. Turn the
Engine Lock Ring clockwise to lock in place.
DO NOT GLUE!



To remove Fins, remove Engine Lock
Ring and slide fin back and remove.

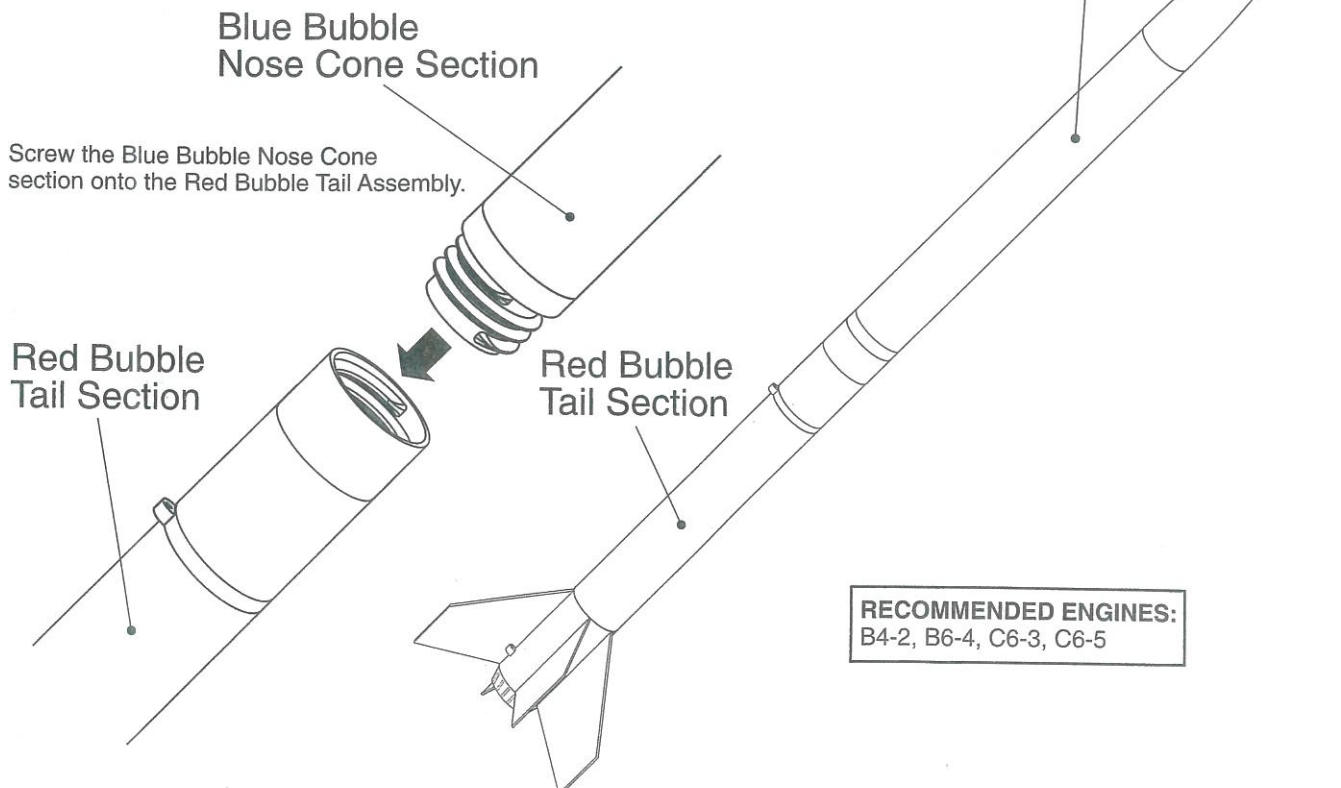
NOTE:

Fins can only be installed or removed
when the Engine Lock Ring is removed.

BODY SECTIONS:

2 Section Rocket

You can easily change the length of your rocket by screwing different Body
Tube sections together. You can fly a 2 section, 3 section or 4 section rocket.



Blue Bubble
Nose Cone Section

Blue Bubble
Nose Cone Section

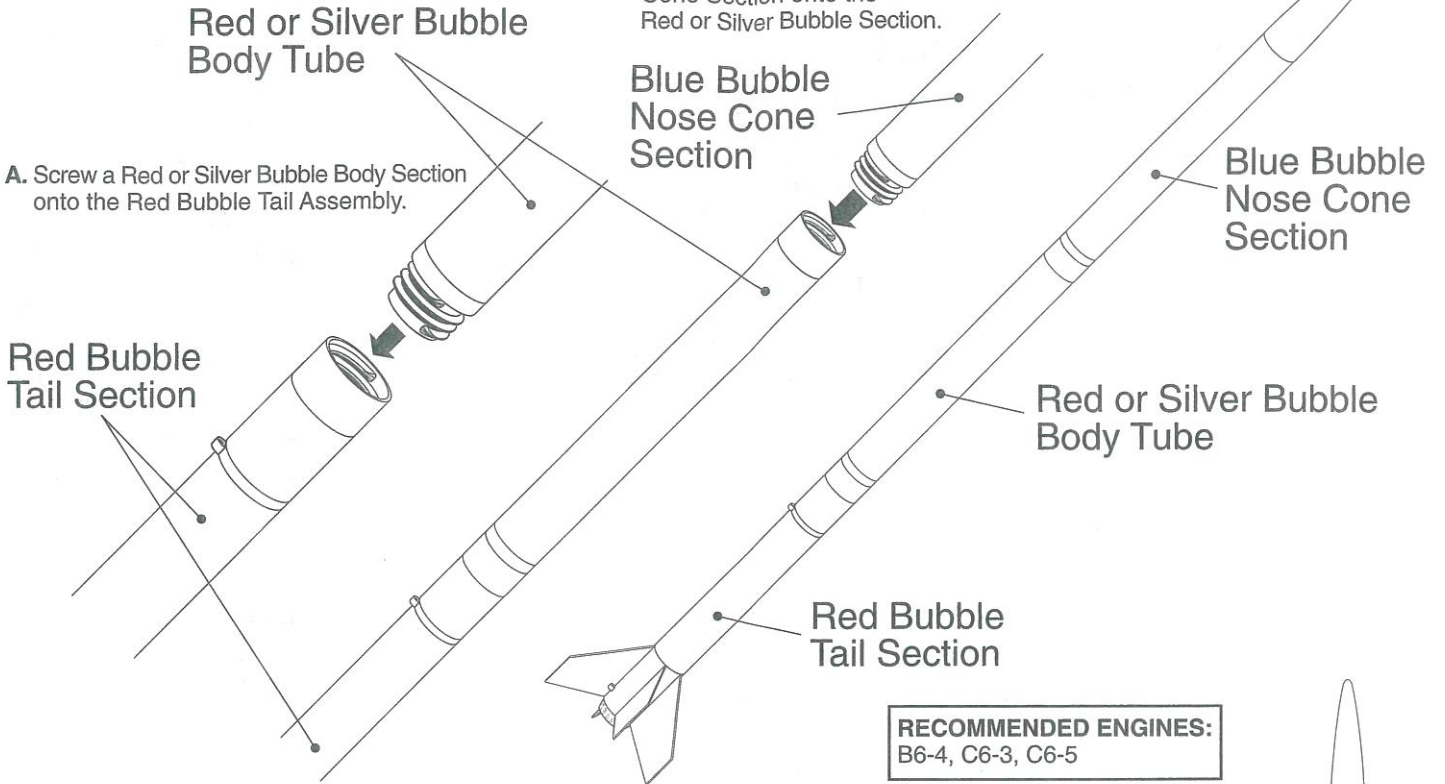
Screw the Blue Bubble Nose Cone
section onto the Red Bubble Tail Assembly.

Red Bubble
Tail Section

Red Bubble
Tail Section

RECOMMENDED ENGINES:
B4-2, B6-4, C6-3, C6-5

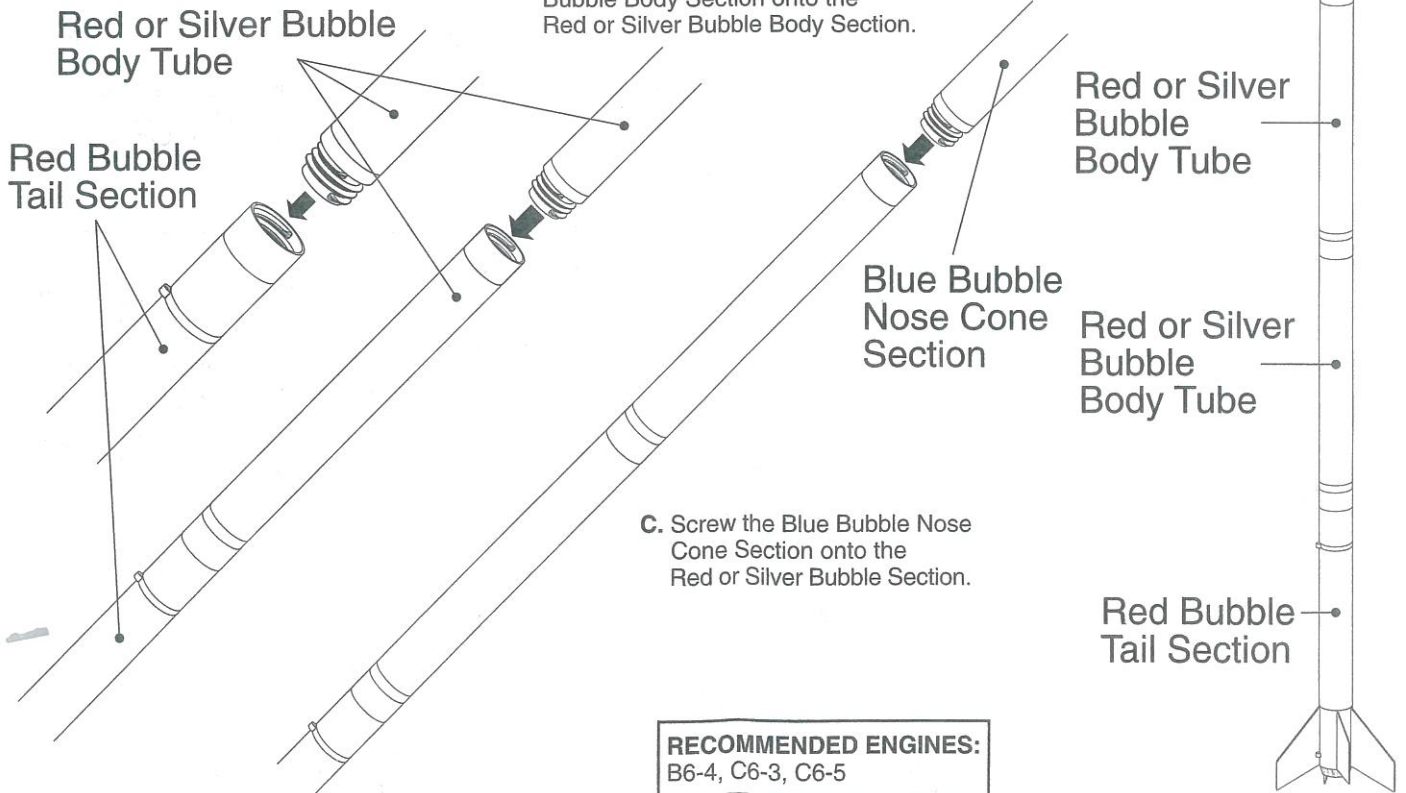
3 Section Rocket



4 Section Rocket

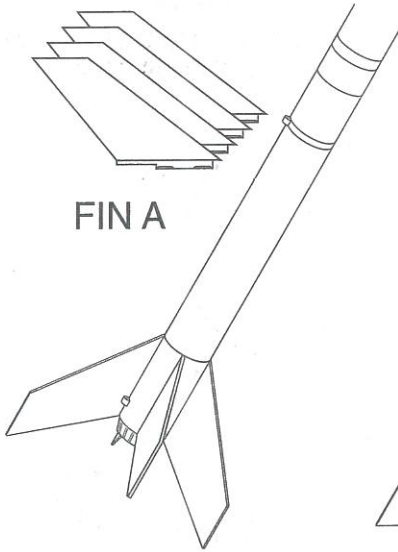
A. Screw a Red or Silver Bubble Body Section onto the Red Bubble Tail Assembly.

B. Screw the remaining Silver or Red Bubble Body Section onto the Red or Silver Bubble Body Section.

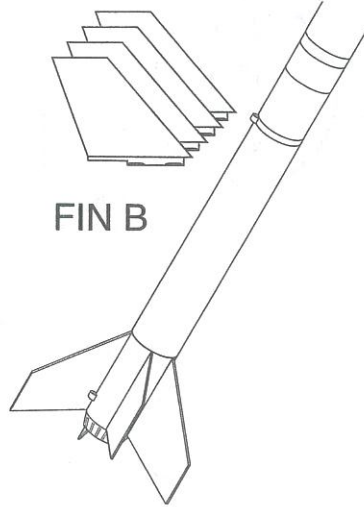


RECOMMENDED ROCKET CONFIGURATIONS:

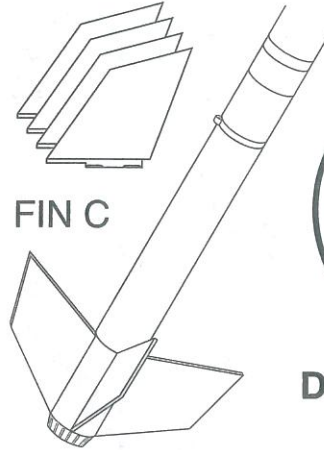
You can choose to fly your various rocket configurations on 3 different fin shapes to experiment with different flight profiles. ONLY use the same fin shape on a rocket configuration. DO NOT MIX FIN SHAPES ON A ROCKET.



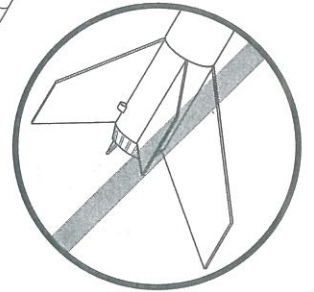
FIN A



FIN B



FIN C

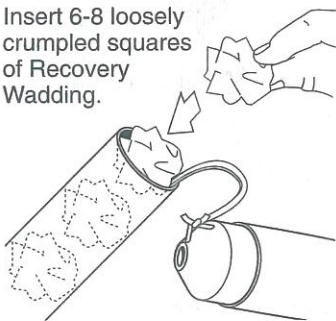


DO NOT MIX FINS

NOTE:
DO NOT FLY YOUR ROCKET
WITH LESS THAN 4 FINS

ROCKET PREFLIGHT

A. Insert 6-8 loosely crumpled squares of Recovery Wadding.



B. Spike

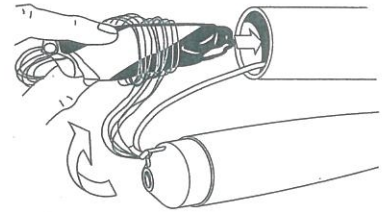


C. Fold



D. Roll

E. Wrap lines loosely around rolled 'chute. Insert 'chute and Shock Cord into Body Tube and slip Nose Cone into place.

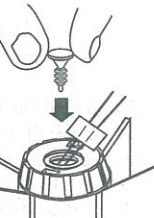
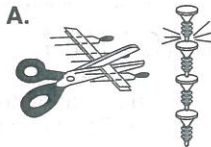


ENGINE PREP AND LOADING

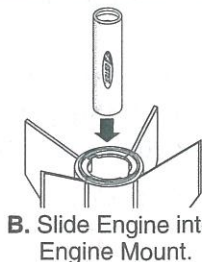
WARNING: FLAMMABLE
Before proceeding read instructions & NAR Safety Code included with engines.

PREPARE YOUR 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 your engine.



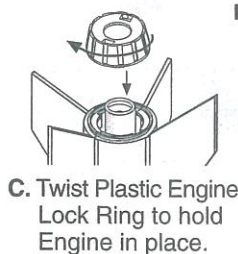
E. Insert Igniter Plug.



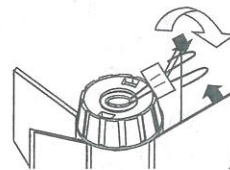
B. Slide Engine into Engine Mount.



F. Firmly push all the way in.

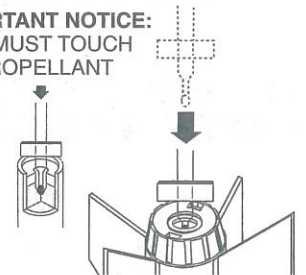


C. Twist Plastic Engine Lock Ring to hold Engine in place.

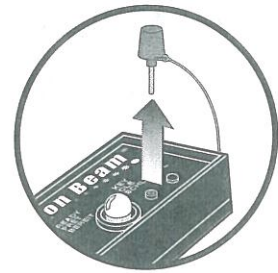
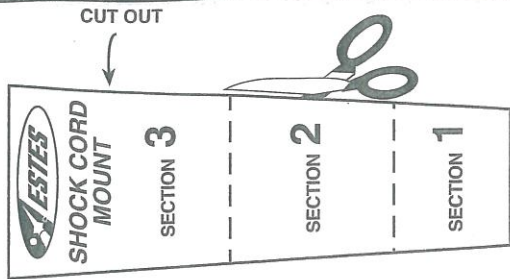


G. Bend Igniter Wires back.

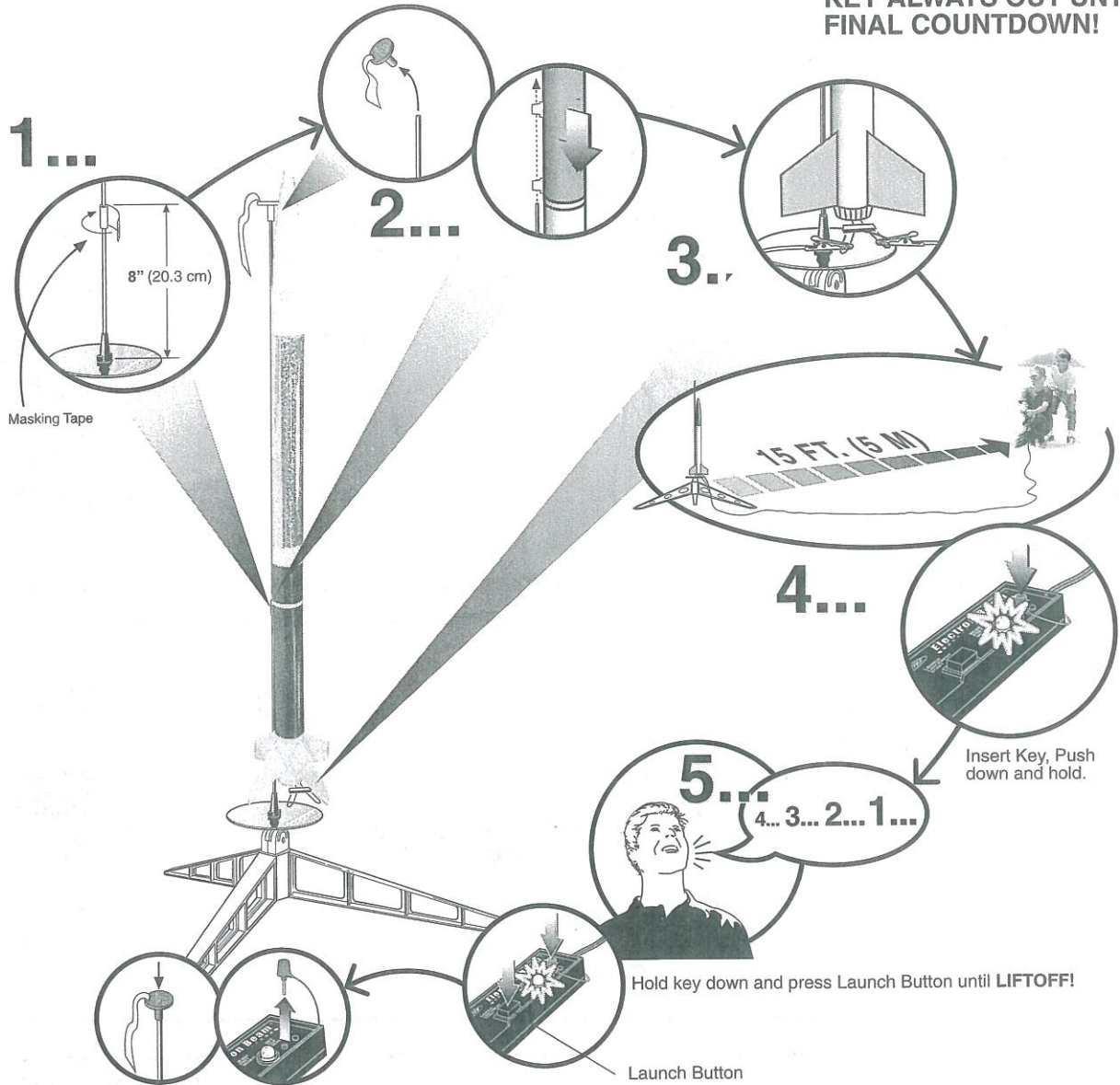
IMPORTANT NOTICE:
TIP MUST TOUCH PROPELLANT



D. Insert Igniter all the way into Engine.



KEY ALWAYS OUT UNTIL FINAL COUNTDOWN!



PRECAUTIONS

NAR Safety Code



FLYING YOUR ROCKET

Choose a large field (500 ft. [152 m] square) free of dry weeds and brown grass. The larger the launch area, the better your chance of recovering your rocket. Football fields and playgrounds are great. Launch only with little or no wind and good visibility.

Always follow the National Association of Rocketry (NAR) SAFETY CODE

MISFIRES

TAKE THE KEY OUT OF THE CONTROLLER. WAIT ONE MINUTE BEFORE GOING NEAR THE ROCKET! Take the plug and igniter out of the engine. If the igniter has burned, it worked but did not ignite the engine because it was not touching the propellant inside the engine. Put a new igniter all the way inside the engine without bending it. Push the plug in place. Repeat the steps under Countdown and Launch.