



EstesRockets.com

# LIBERTY BELL 7 MERCURY REDSTONE

1921

AGES  
**10+**



Skill Level

**ADVANCED**

## MODEL ROCKET INSTRUCTIONS

### KEEP FOR FUTURE REFERENCE

**IMPORTANT:** Please record date found on decal and keep for future reference. \_\_\_\_\_

**READ ALL INSTRUCTIONS.** Make sure you have all parts and supplies. Test fit all parts before applying glue.

### SUPPLIES



SCISSORS



PENCIL



RULER



FINE SANDPAPER



YELLOW GLUE



HOBBY KNIFE



CLEAR TAPE



PLASTIC CEMENT



PRIMER (WHITE)



PAINT (WHITE)



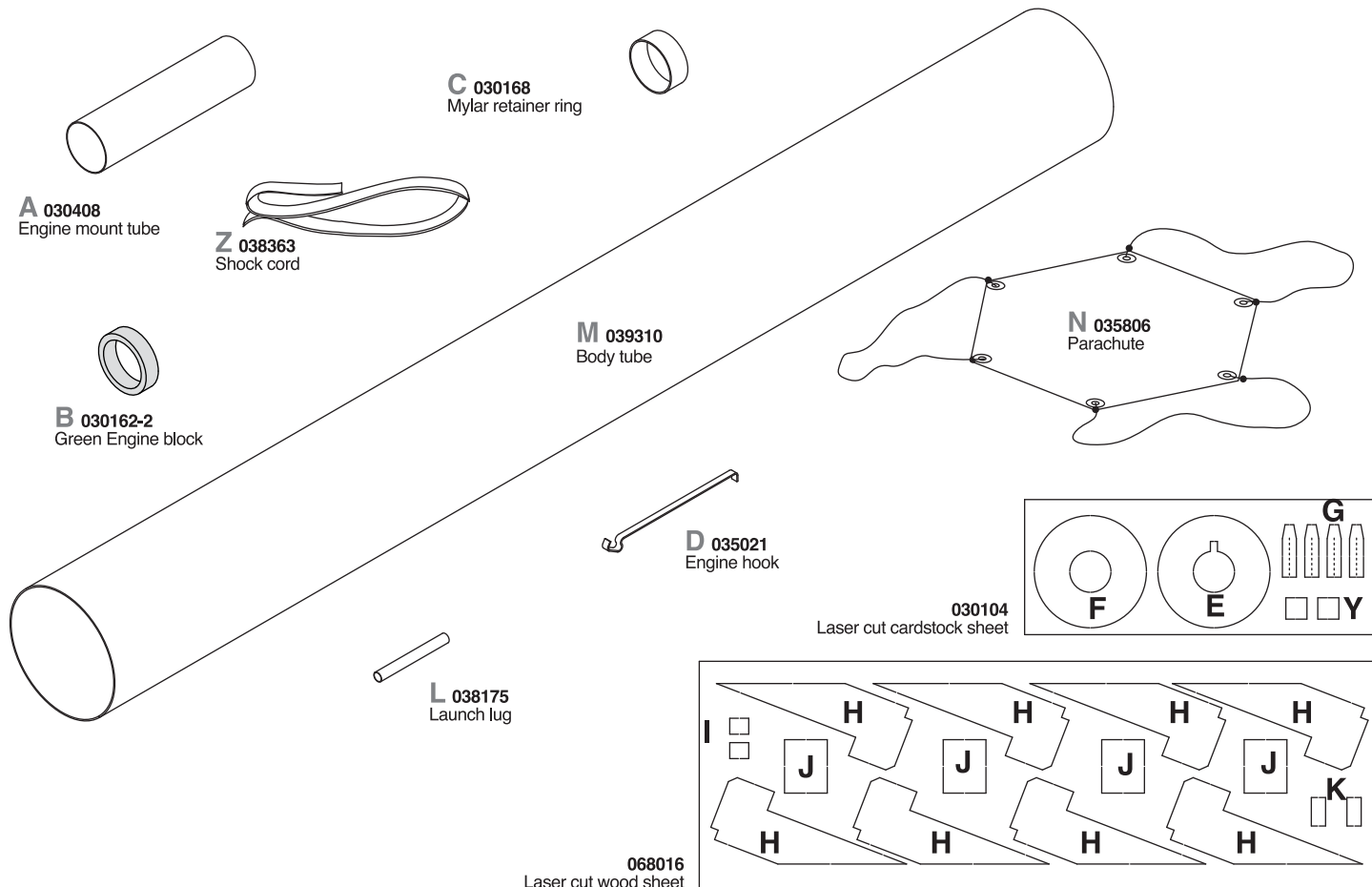
PAINT (BLACK)



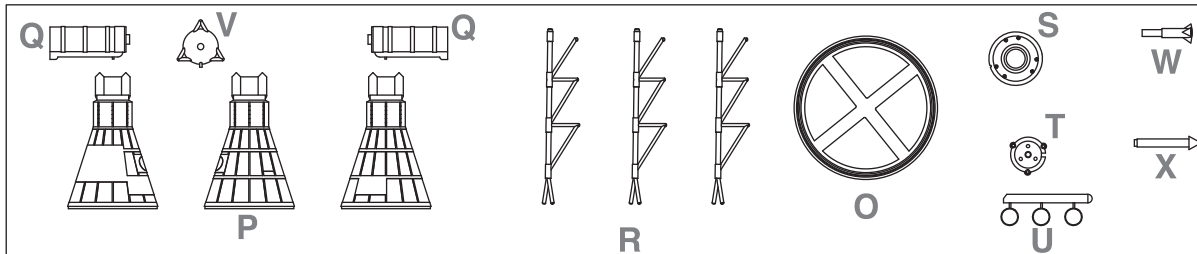
CLEAR COAT (OPTIONAL)



WEIGHT

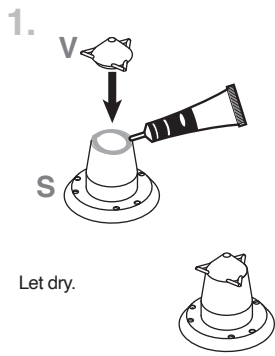


**034125**  
Plastic parts set

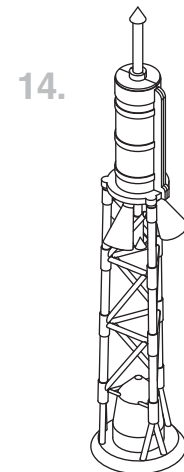
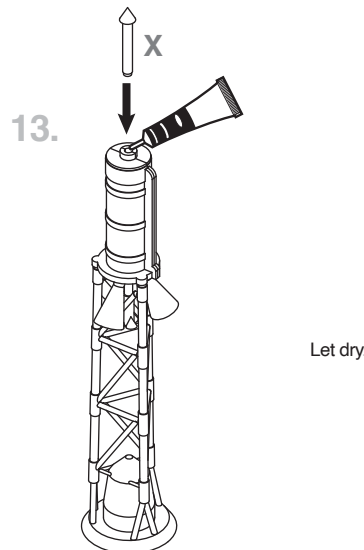
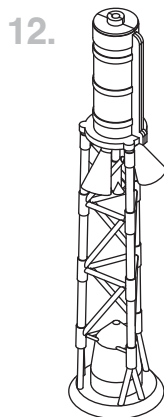
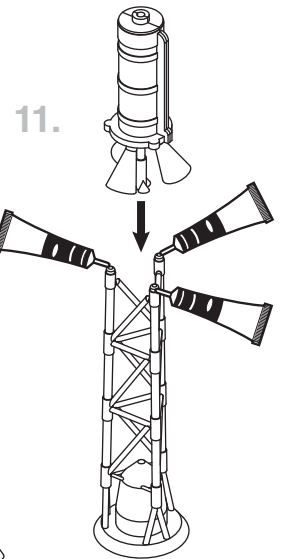
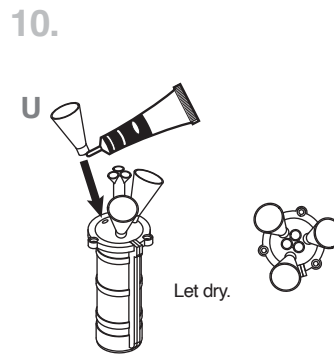
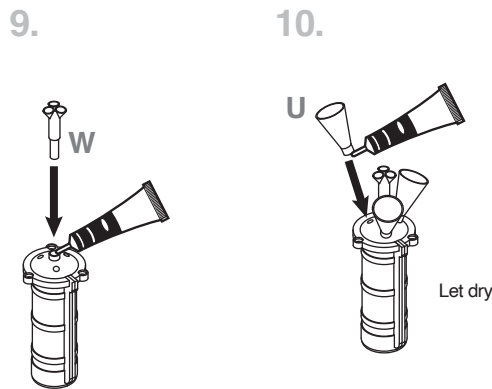
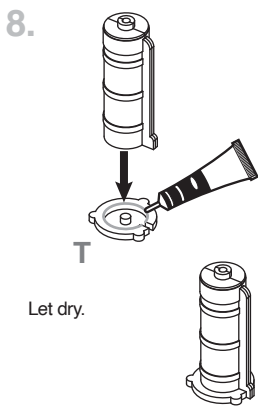
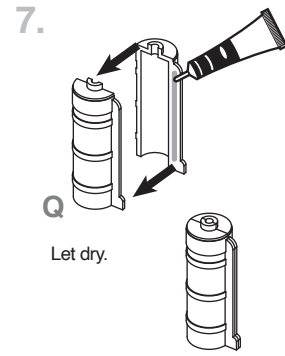
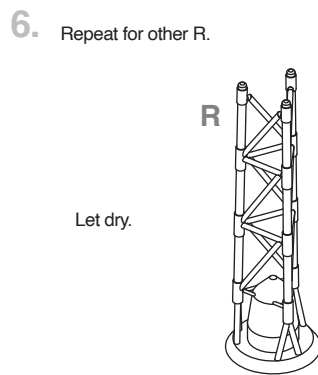
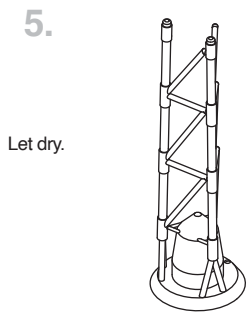
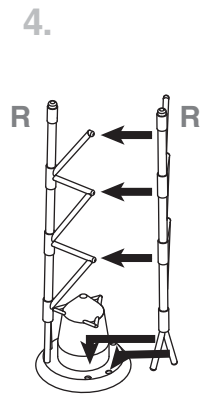
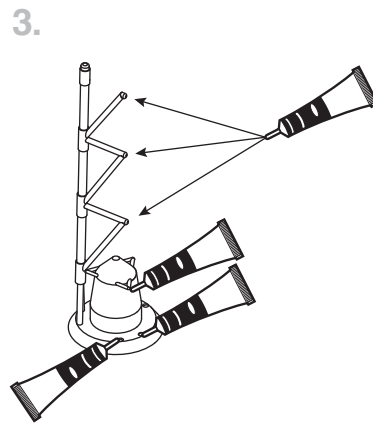
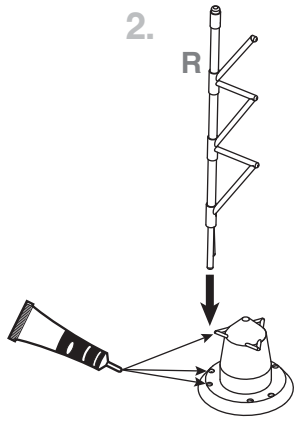


**067145**  
Waterslide decal (not shown)

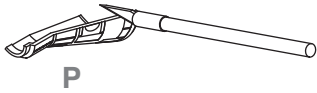
# ASSEMBLE TOWER AND CAPSULE



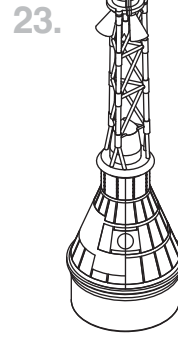
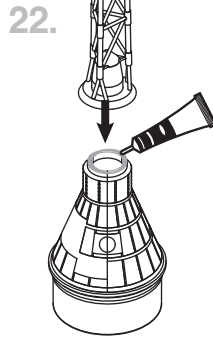
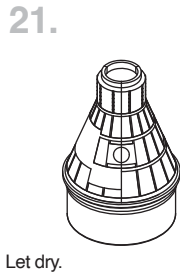
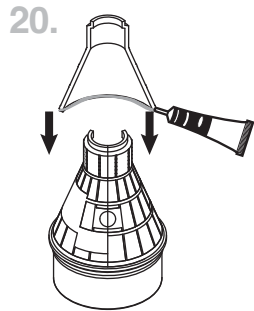
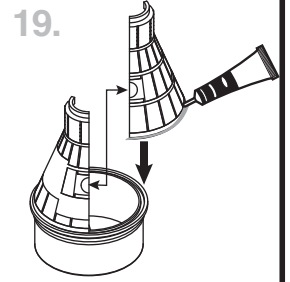
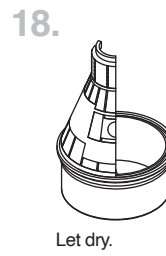
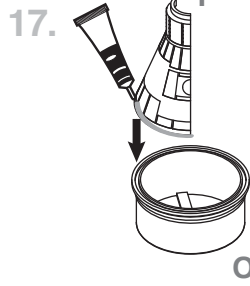
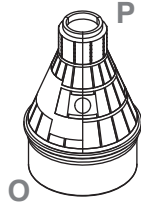
**CAUTION:**  
For safe handling of plastic glue, see manufacturer's warnings and follow instructions for use.



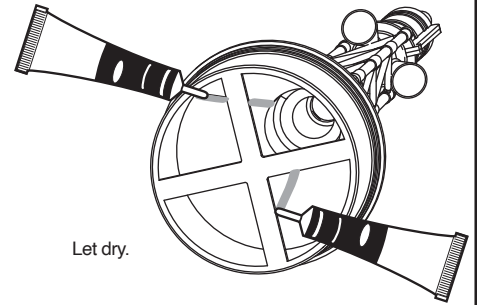
15. Scrape sides flat.



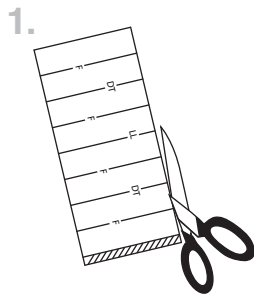
16. Test fit O and P.



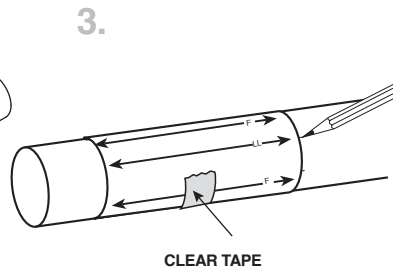
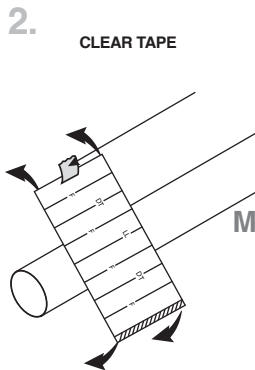
24. Glue inside seam.



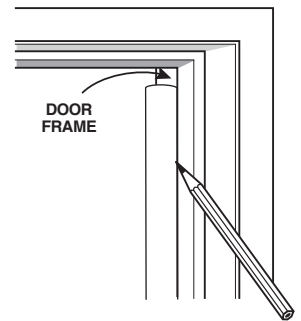
### TUBE MARKING



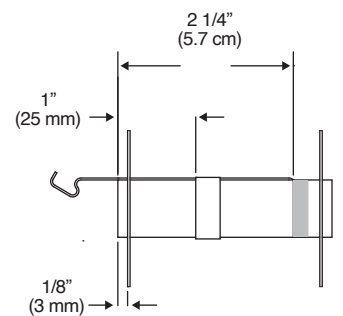
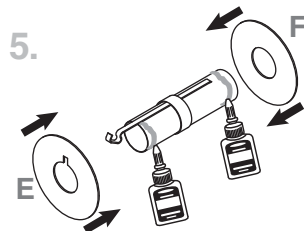
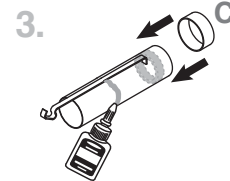
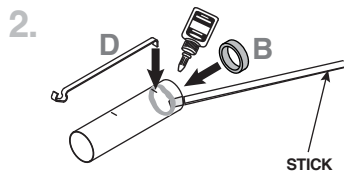
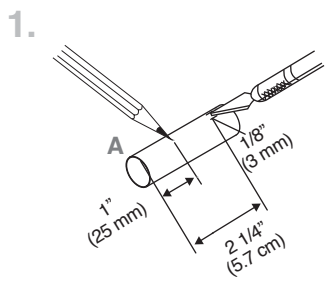
**NOTE:**  
Cut from page 4.



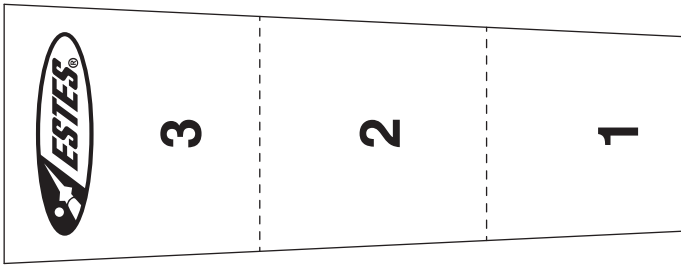
4. Remove guide.  
Use a door frame to extend all lines.



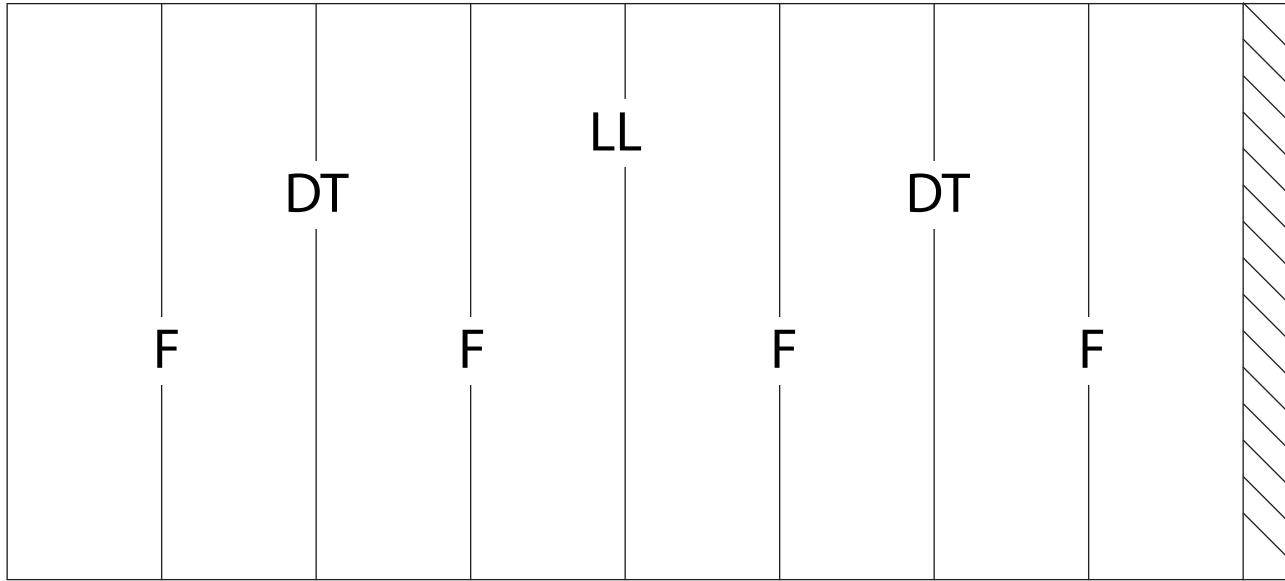
### ASSEMBLE ENGINE MOUNT



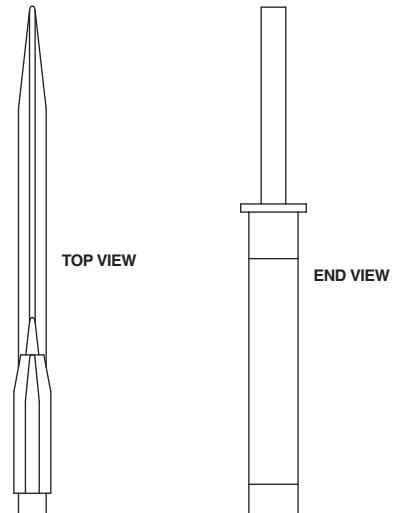
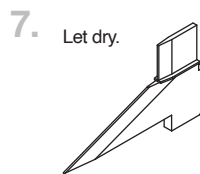
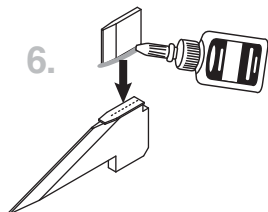
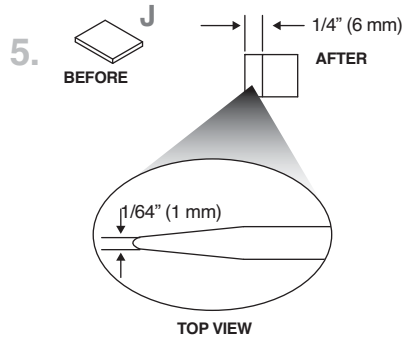
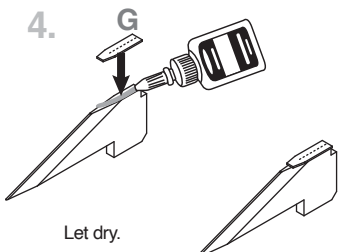
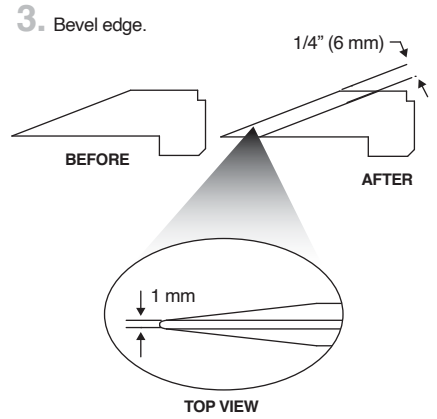
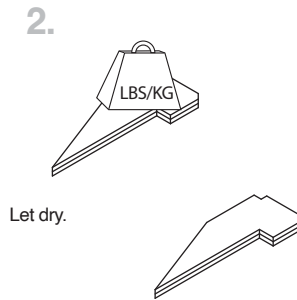
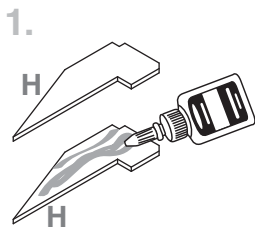
TUBE MARKING GUIDE & SHOCK CORD MOUNT



**NOTE:**  
Make a copy if you want to keep instructions.

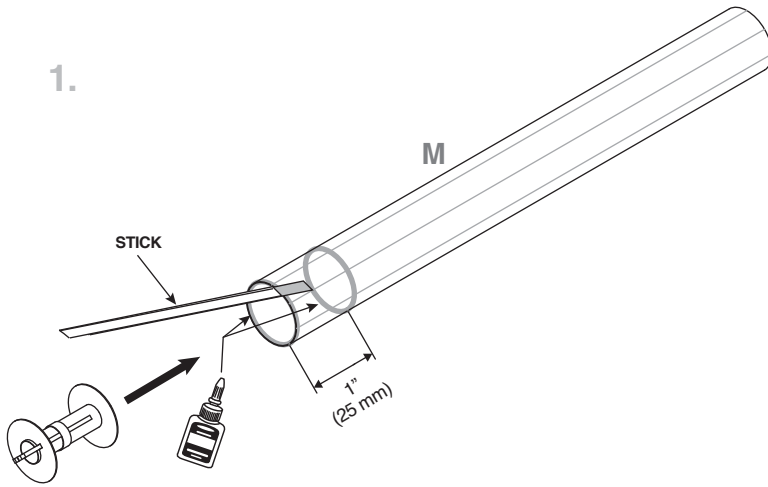


ASSEMBLE FINS

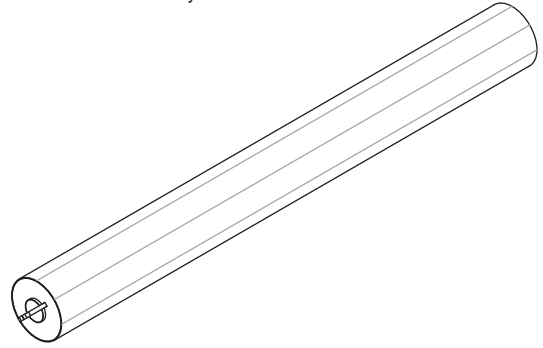


## INSTALL ENGINE MOUNT

1.

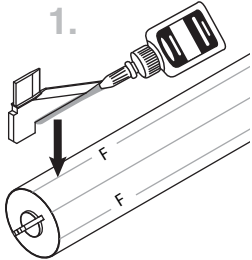


2. Let dry.

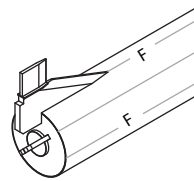


## ATTACH FINS

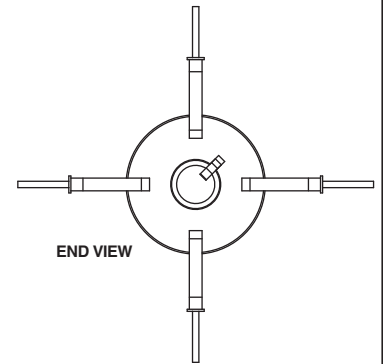
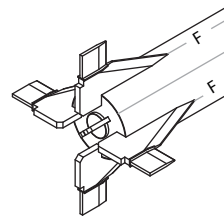
1.



2. Let dry.

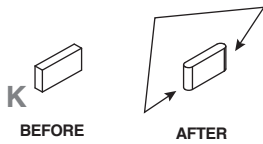


3. Repeat for remaining fins.

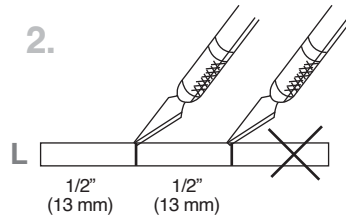


## ASSEMBLE AND INSTALL LAUNCH LUGS

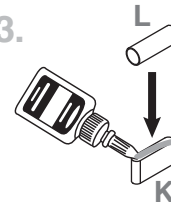
1. Round edges



2.



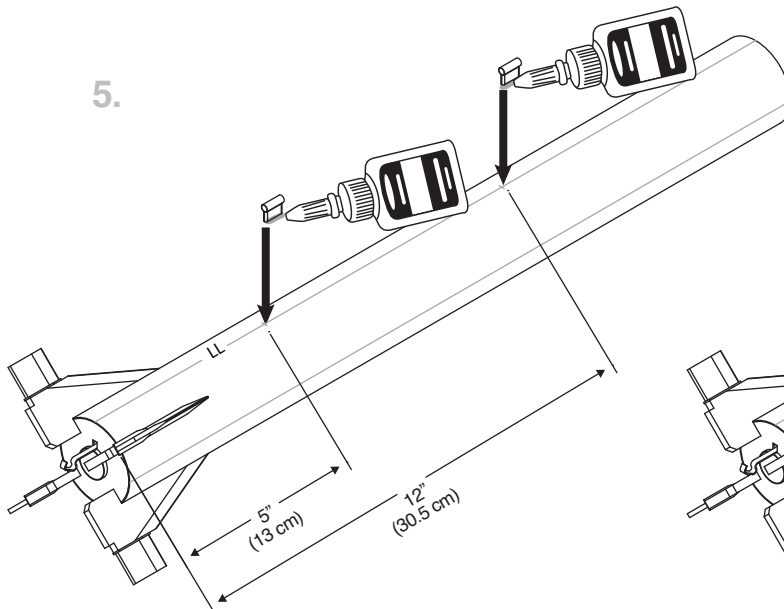
3.



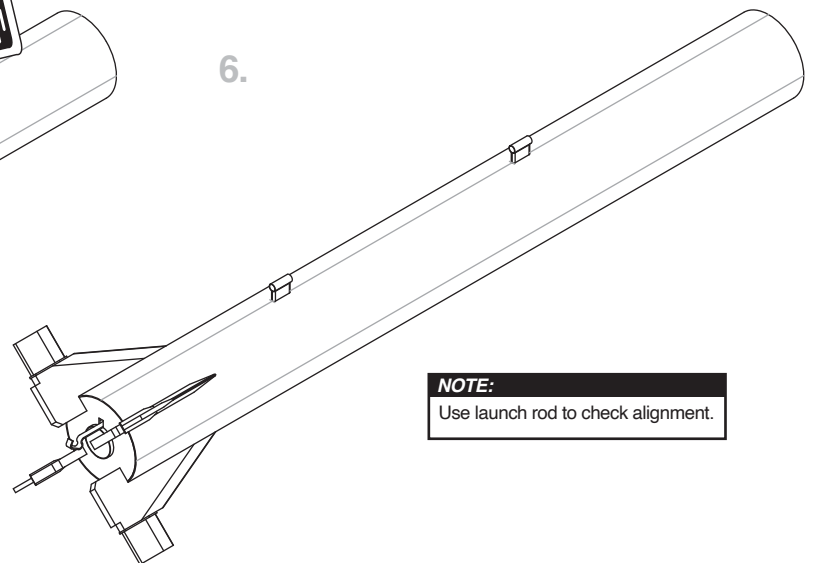
4. Let dry.



5.



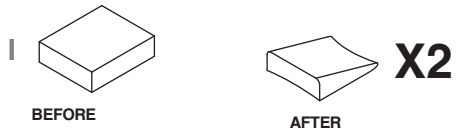
6.



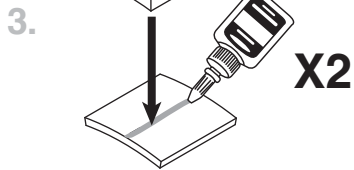
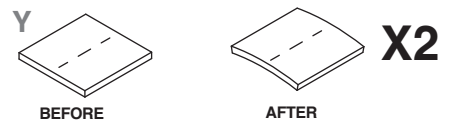
**NOTE:**  
Use launch rod to check alignment.

**ASSEMBLE DETAIL PARTS**

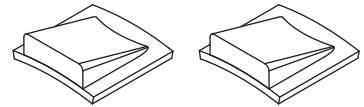
1. Shape I.



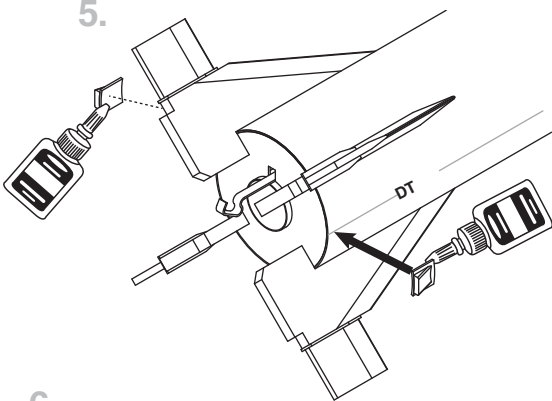
2. Bend Y slightly.



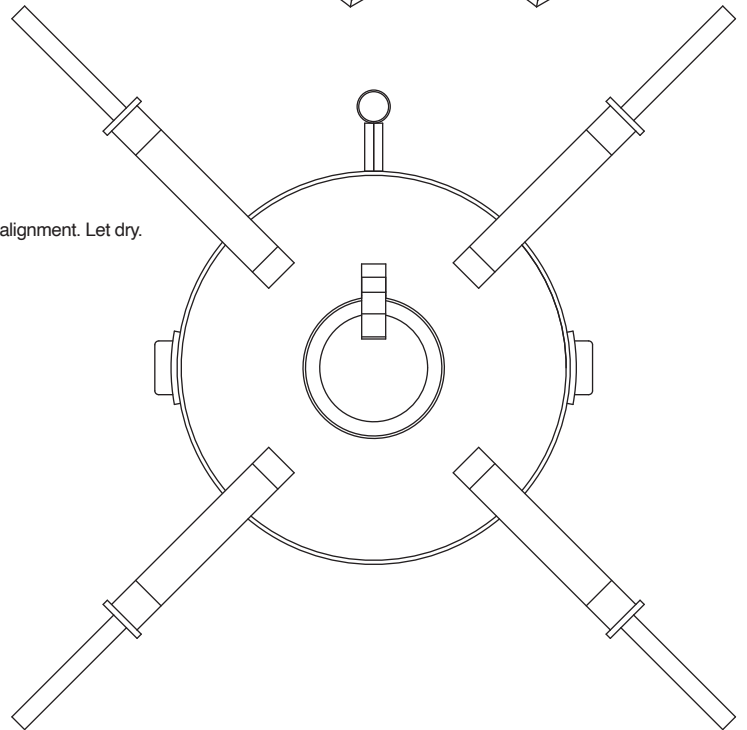
4. Let dry, repeat for remaining I and Y.



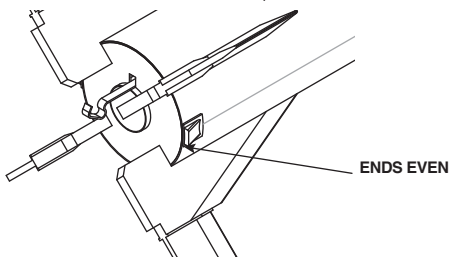
5.



7. Check alignment. Let dry.

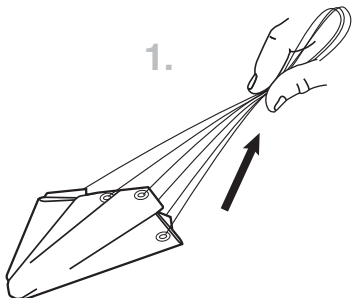


6.

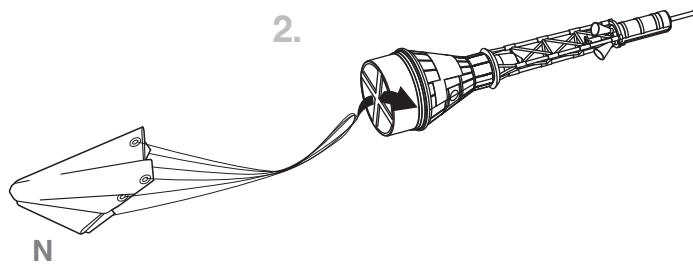


**PREPARE RECOVERY SYSTEM**

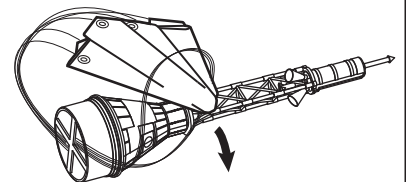
1.



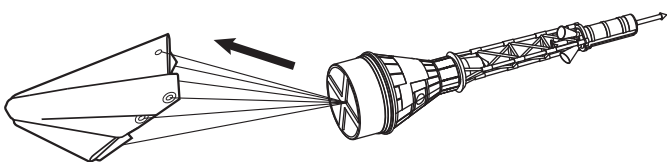
2.



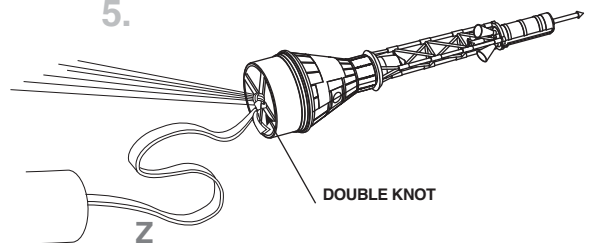
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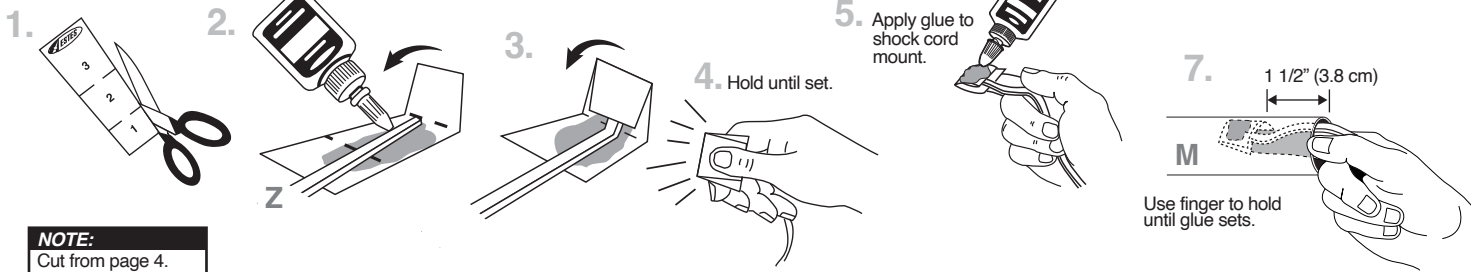
4.



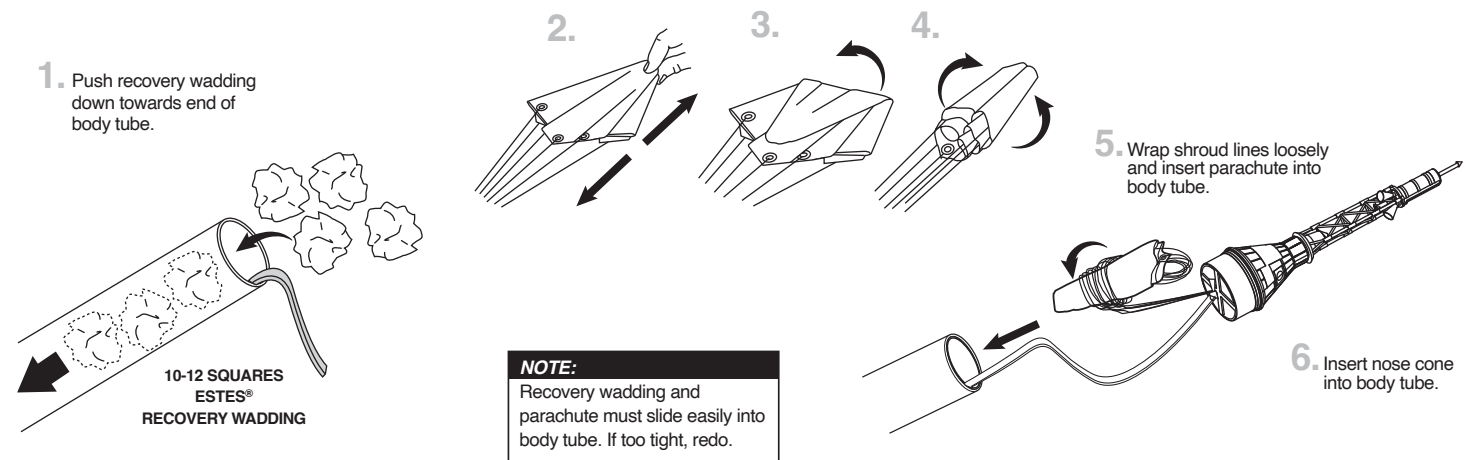
5.



## INSTALL SHOCK CORD



## PREPARE FLIGHT RECOVERY



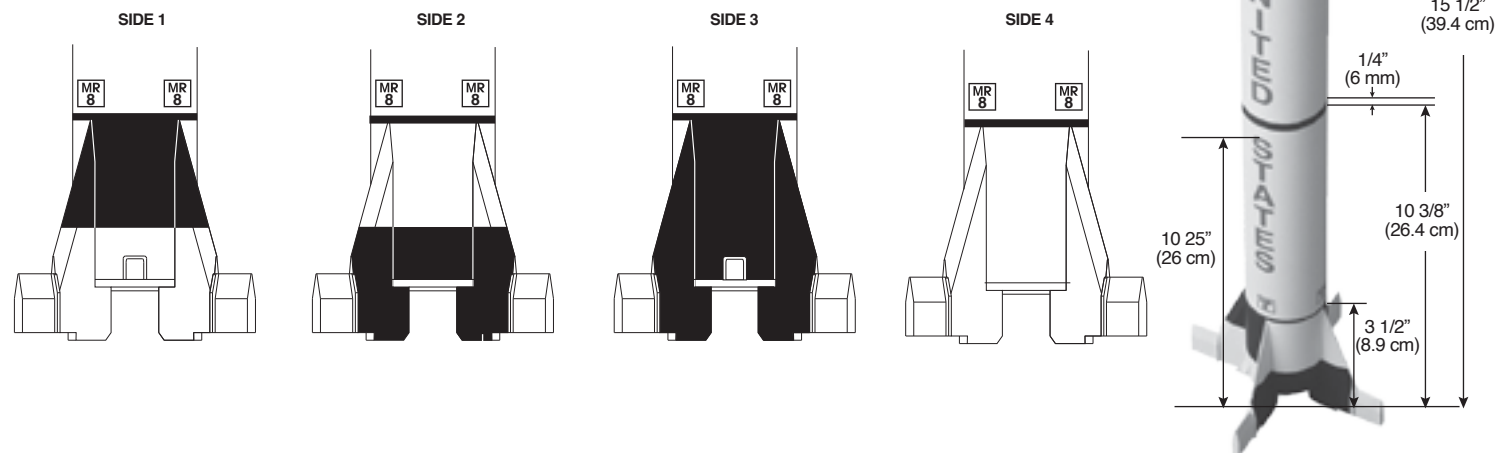
## ROCKET FINISHING

**NOTE:**  
Please refer to packaging for suggested paint scheme and/or decal placement.

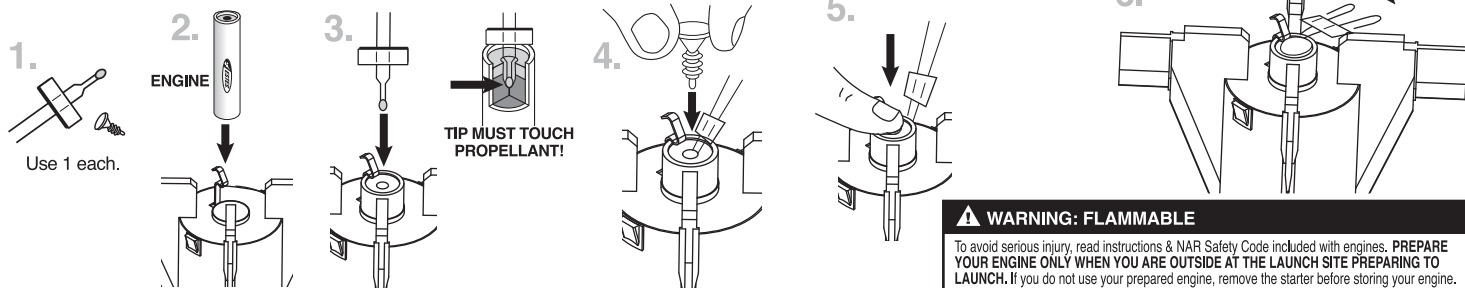
1. Spray rocket with white primer, let dry, and sand. Repeat until rocket is smooth, then paint. Apply decals after paint is dry.
2. Cut decals from sheet, trimming close to edge.
3. One at a time, place in warm water until decal curls and begins to relax.
4. Remove and position on rocket, sliding decal away from backing material.
5. Blot with clean paper towel. Let set overnight.
6. OPTIONAL: Apply protective clear coat.

**CAUTION:**  
See manufacturer's warnings and instructions before using spray finishing products.

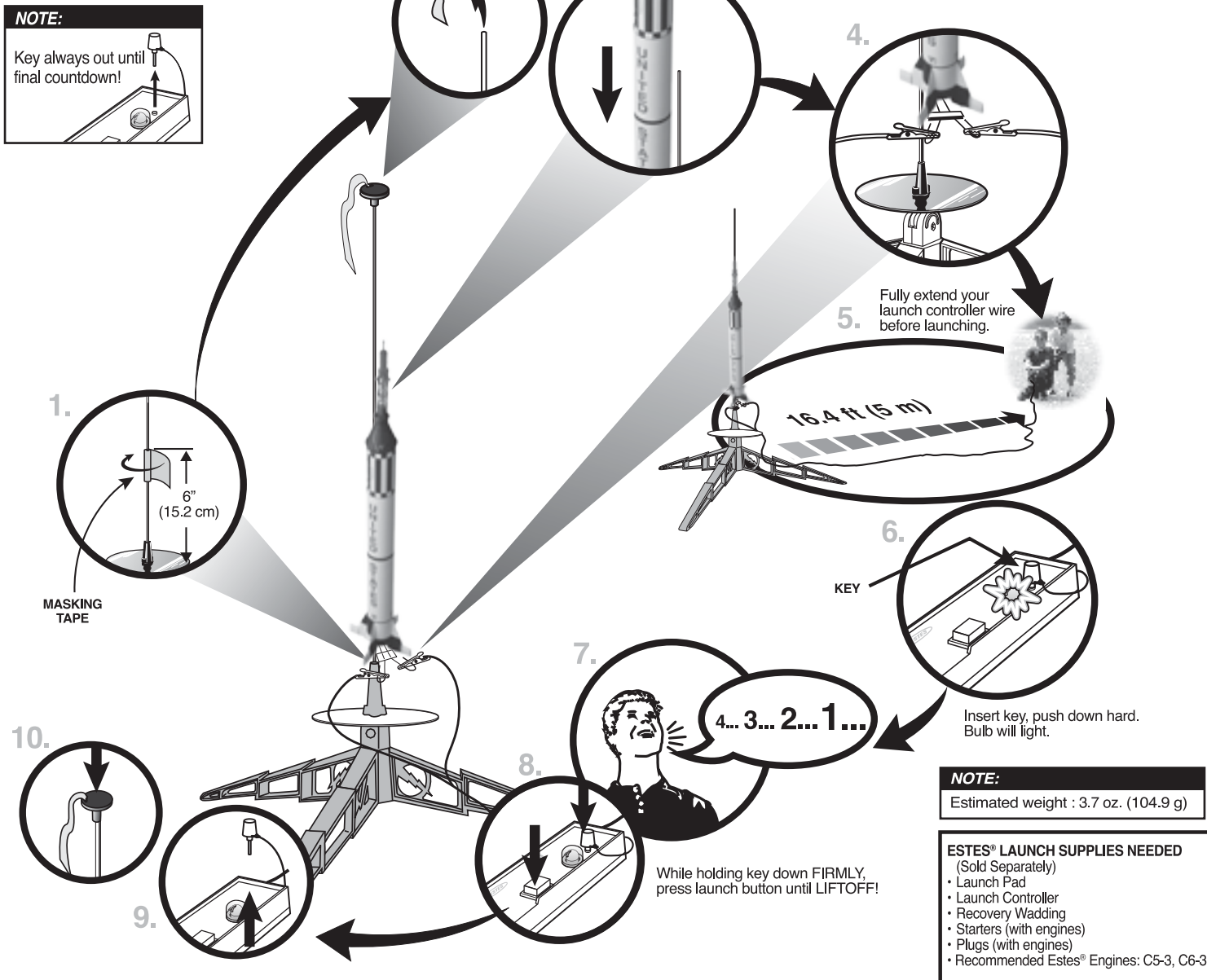
## FIN PAINT PATTERN



## PREPARE ENGINE



## COUNTDOWN AND LAUNCH



## PRECAUTIONS



NAR SAFETY CODE



NO DRY GRASS OR WEEDS

**PRE-LAUNCH CHECK** For safety, never launch a damaged rocket. Check the rocket's body, nose cone and fins. Also, check the engine mount, recovery system and launch lug(s). Repair any damage before launching the rocket.

**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.** Disconnect the micro-clips and remove the engine. Take the plug and starter out of the engine. A burned starter means the starter tip was not touching engine propellant. Install a new starter; be sure the tip is touching propellant inside the engine. Push the plug in place. Repeat steps under Countdown and Launch.