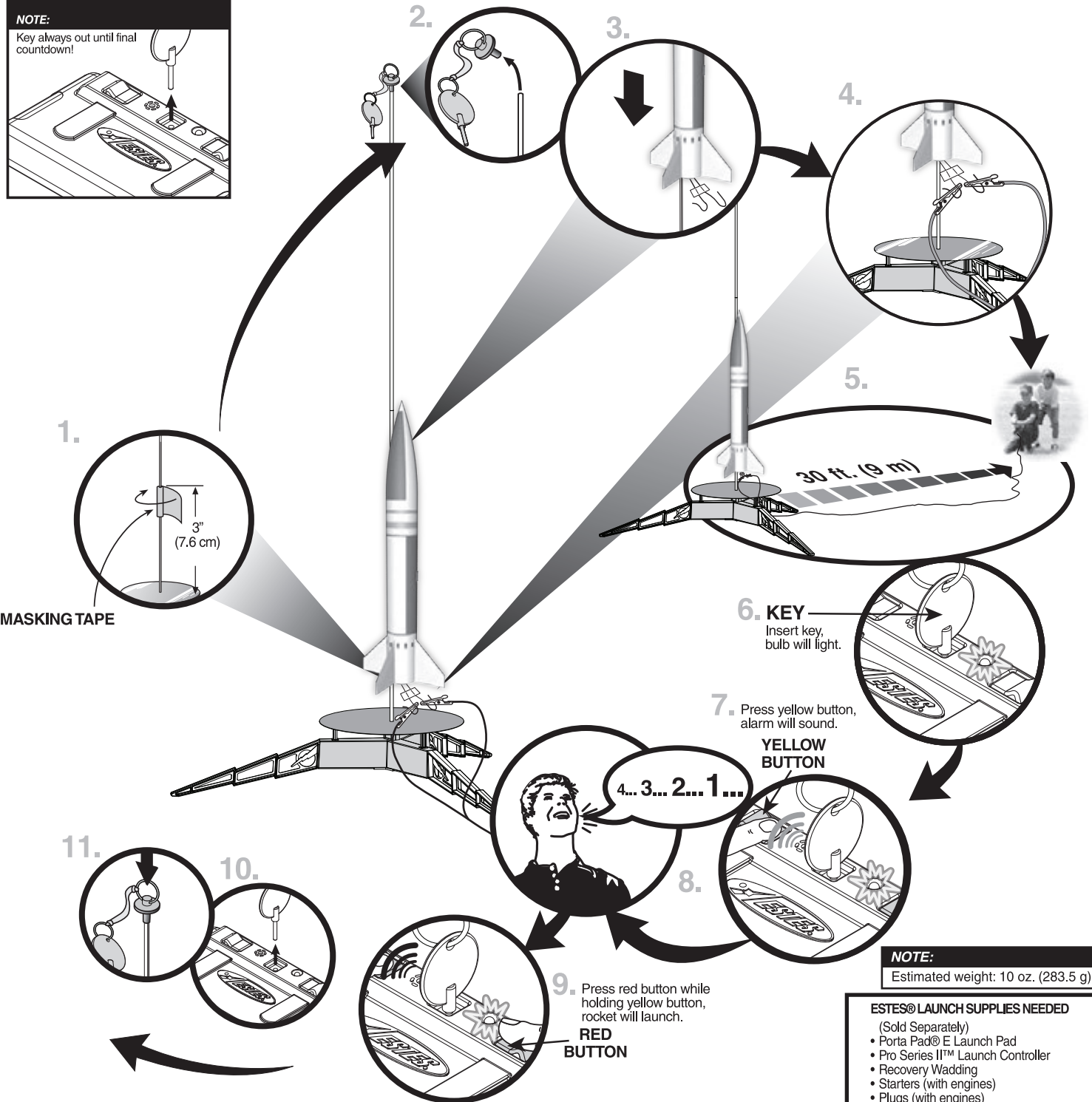


**COUNTDOWN AND LAUNCH**



- ESTES® LAUNCH SUPPLIES NEEDED**  
(Sold Separately)
- Porta Pad® E Launch Pad
  - Pro Series II™ Launch Controller
  - Recovery Wadding
  - Starters (with engines)
  - Plugs (with engines)
  - Estes® Engines: E16-4, F15-4, F15-6

**PRECAUTIONS**



**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 SAFETY CODE (enclosed).

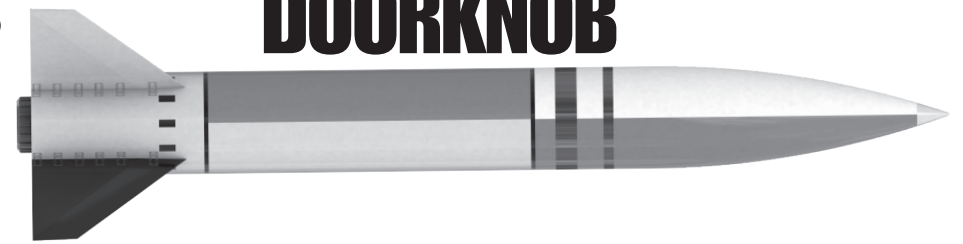
**MISFIRES TAKE THE KEY OUT OF THE CONTROLLER. WAIT ONE MINUTE BEFORE GOING NEAR THE ROCKET.** Disconnect the micro-clips and remove the engine. Take the plug and starter out of the engine. A burned starter means the starter tip was not touching engine propellant. Install a new starter; be sure the tip is touching propellant inside the engine. Push the plug in place. Repeat steps under Countdown and Launch.



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**DOORKNOB**

9720



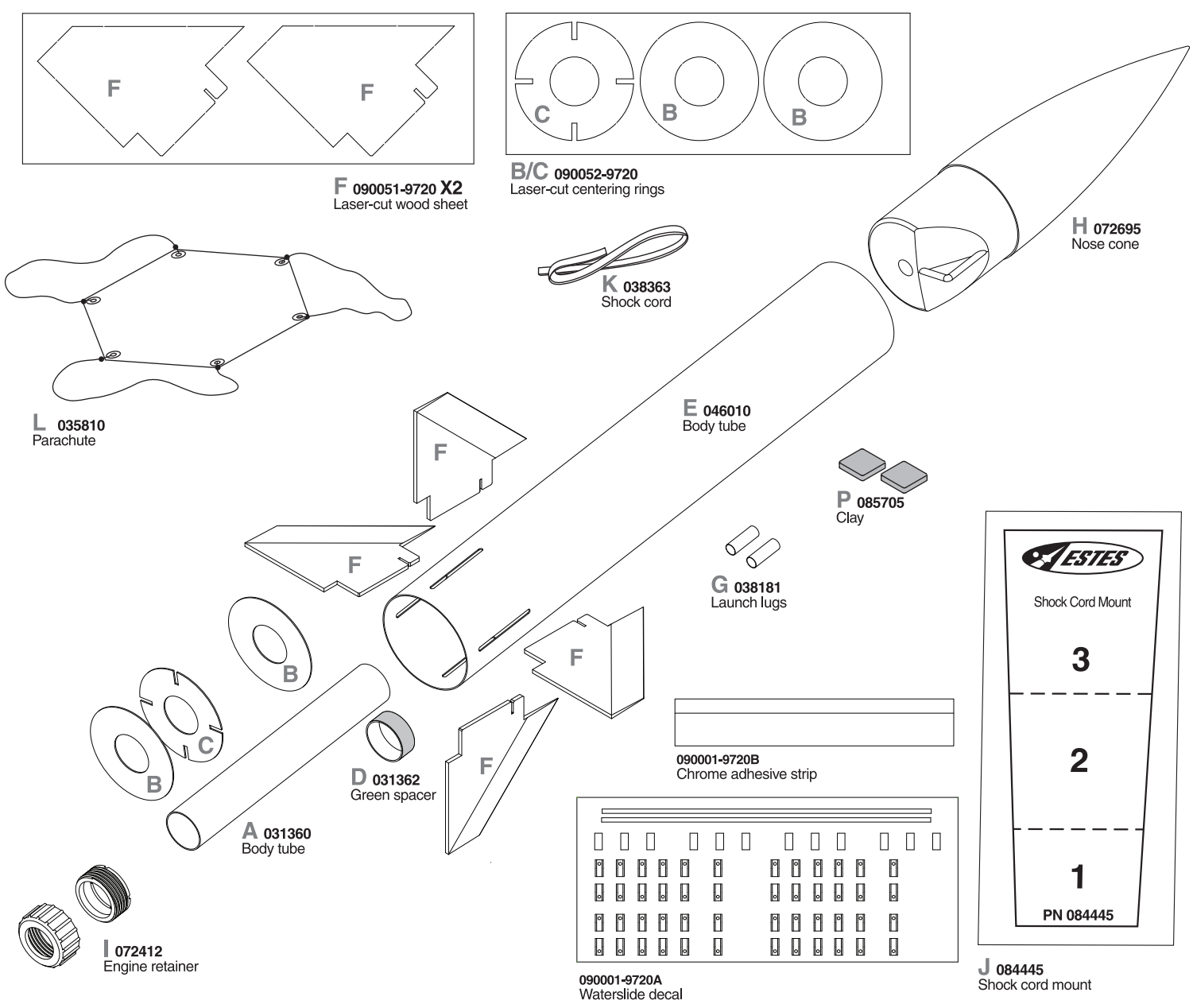
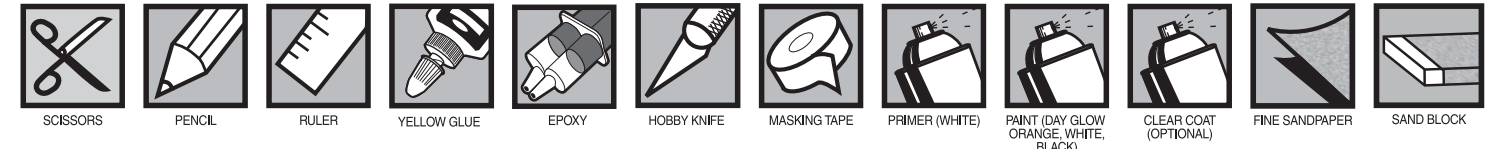
**MODEL ROCKET INSTRUCTIONS**

**KEEP FOR FUTURE REFERENCE**

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

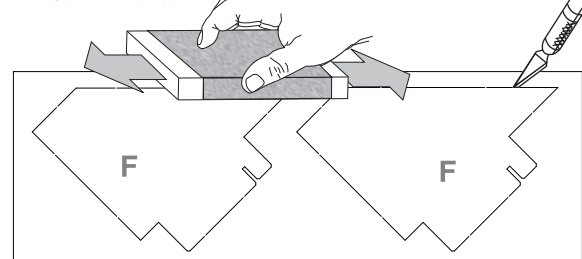
Read all instructions. Make sure you have all parts and supplies. Test fit all parts before applying glue.

**SUPPLIES**



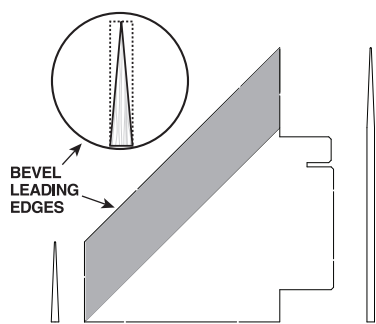
**PREPARE FINS**

1. Sand both sides.

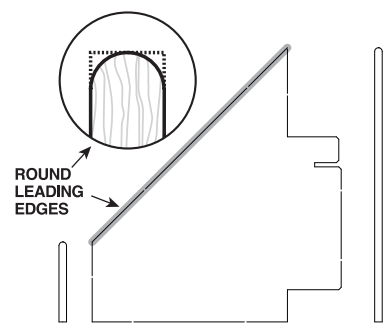


2. Use hobby knife to remove fins from wood sheet..

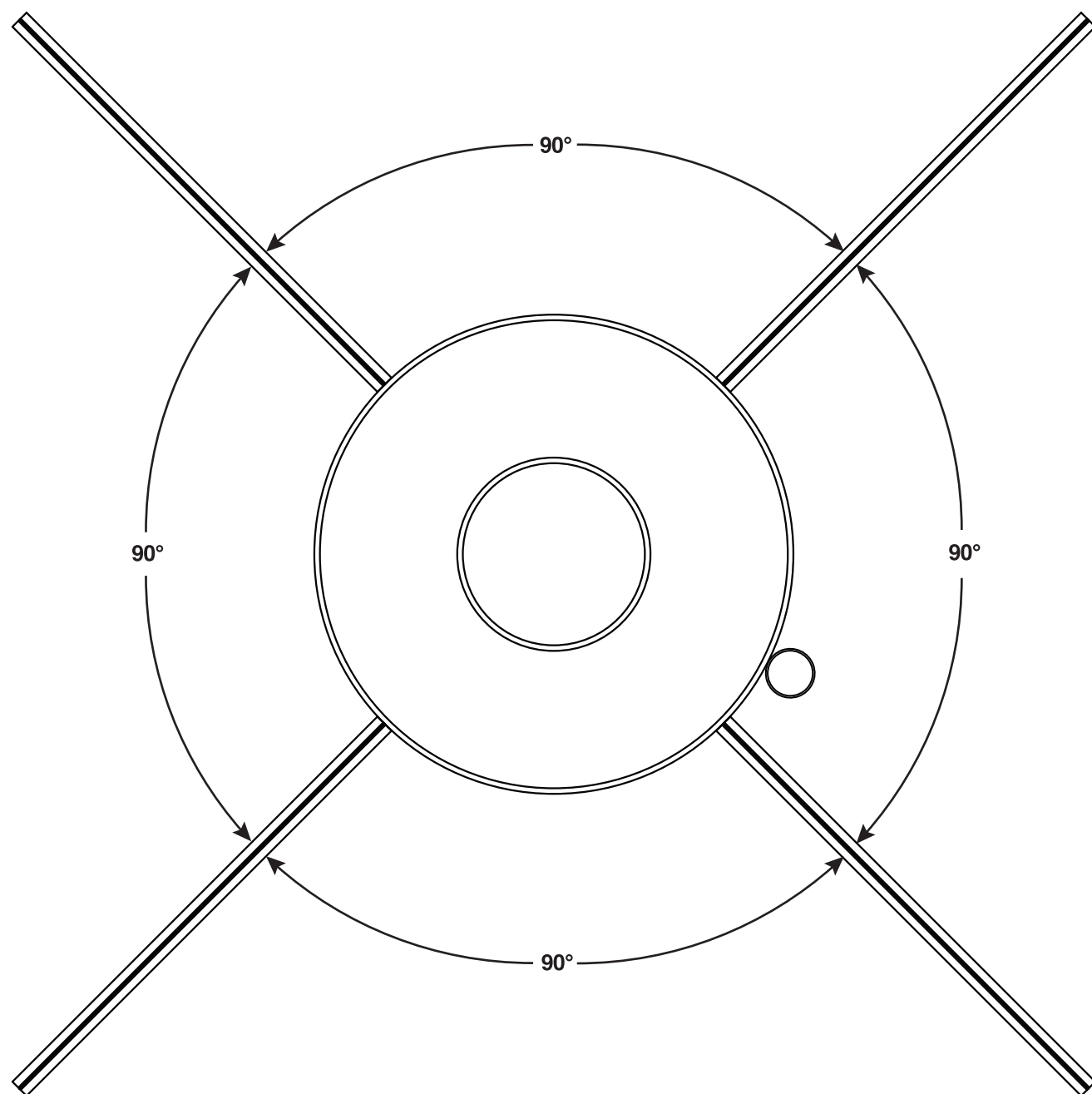
**SCALE SHAPED FIN**



**OPTIONAL SPORT MODEL SHAPED FIN**

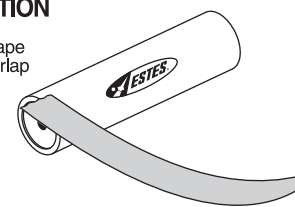


**FULL SIZE FIN ALIGNMENT GUIDE**

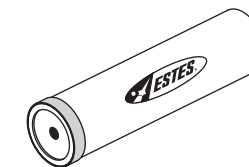


**PREPARE ENGINE RETENTION**

1. Wrap 6 to 8 layers of masking tape over nozzle end of engine. Overlap end of engine by 1/4" (6 mm).

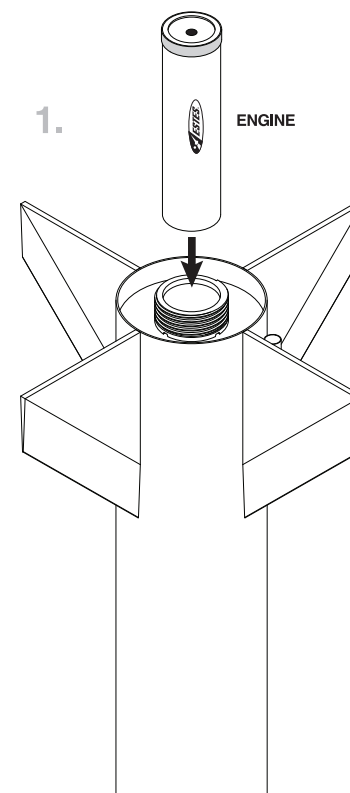


2. Trim off excess tape.

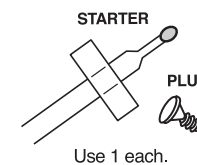
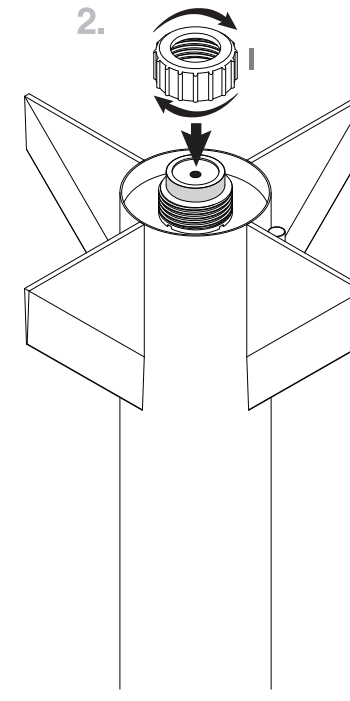


**PREPARE ENGINE**

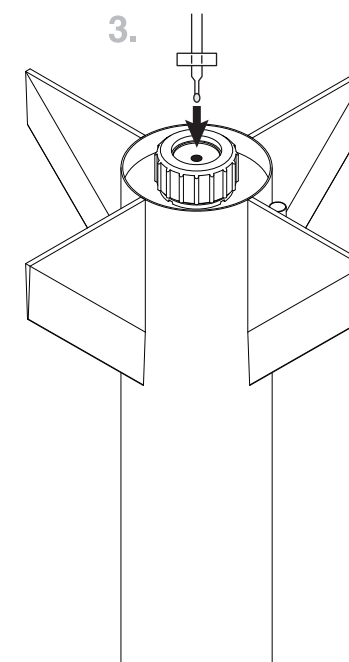
1.



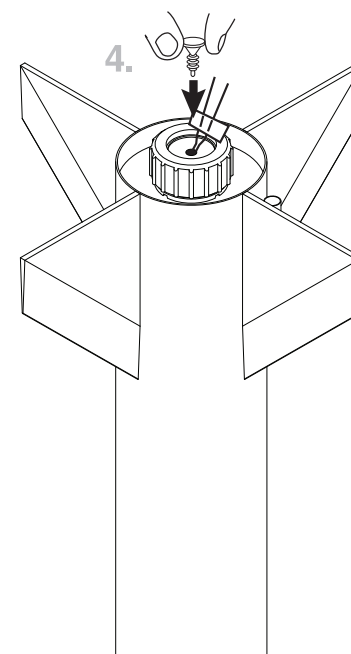
2.



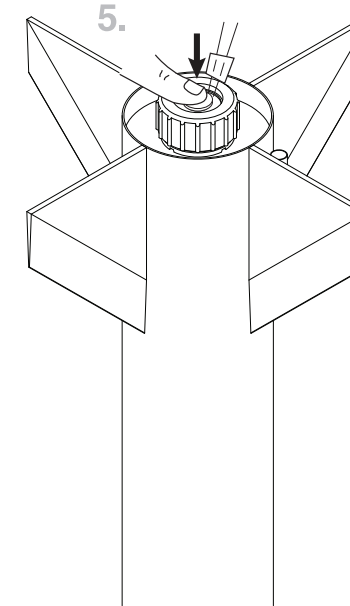
3.



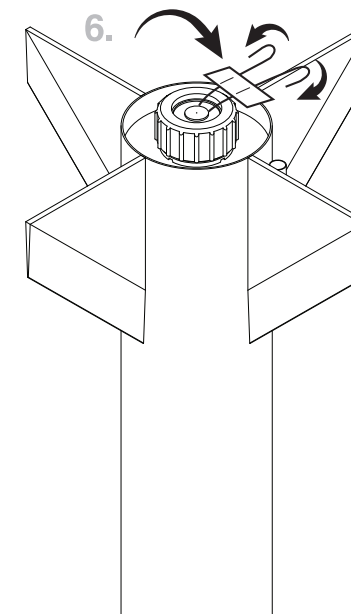
4.



5.



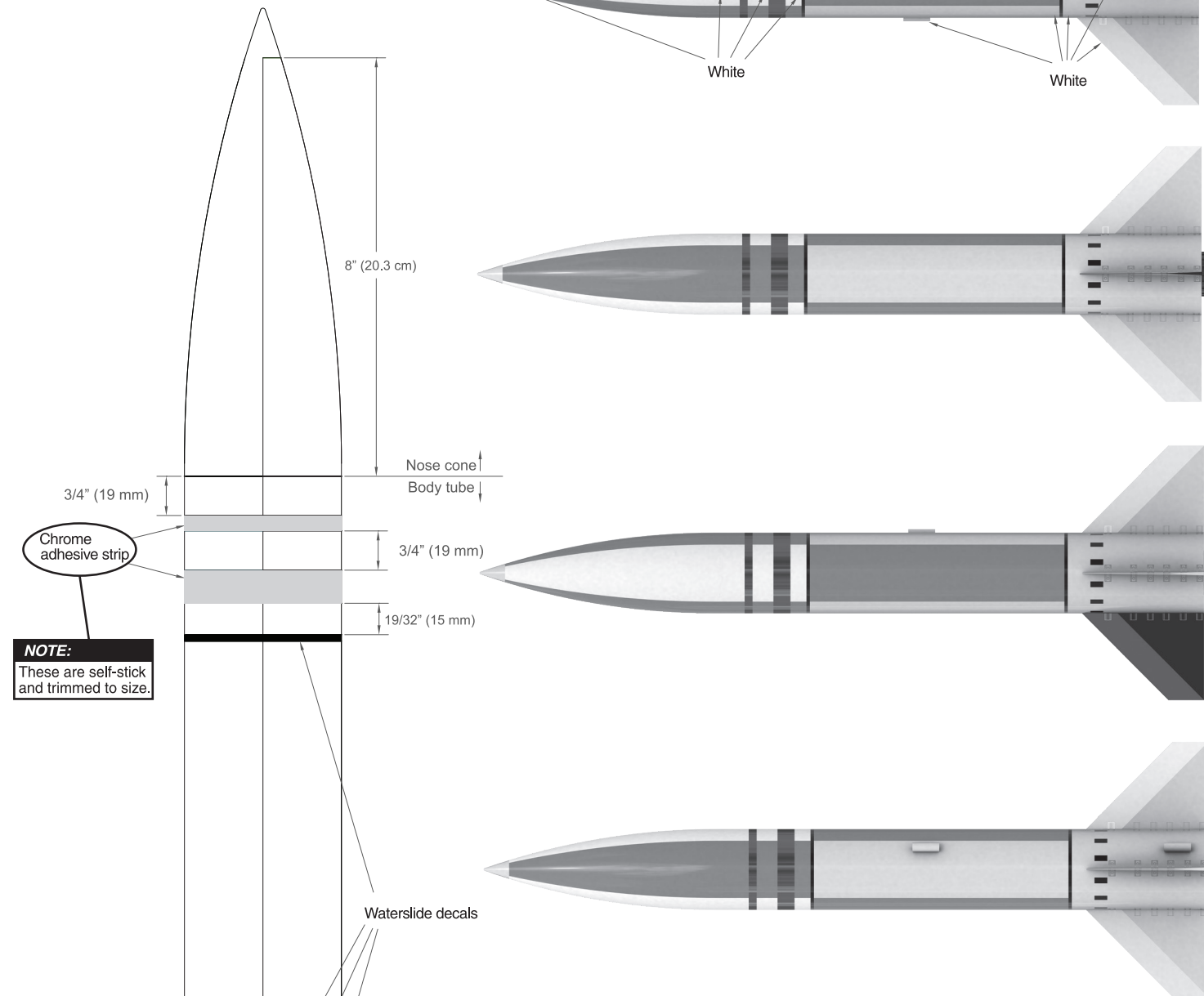
6.



**WARNING: FLAMMABLE**  
To avoid serious injury, 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 starter before storing your engine.

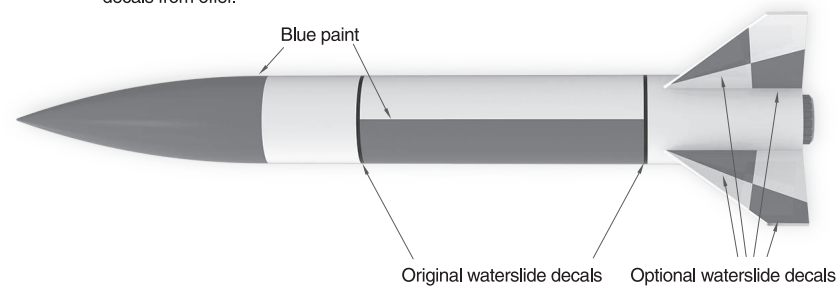
## ROCKET FINISHING

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

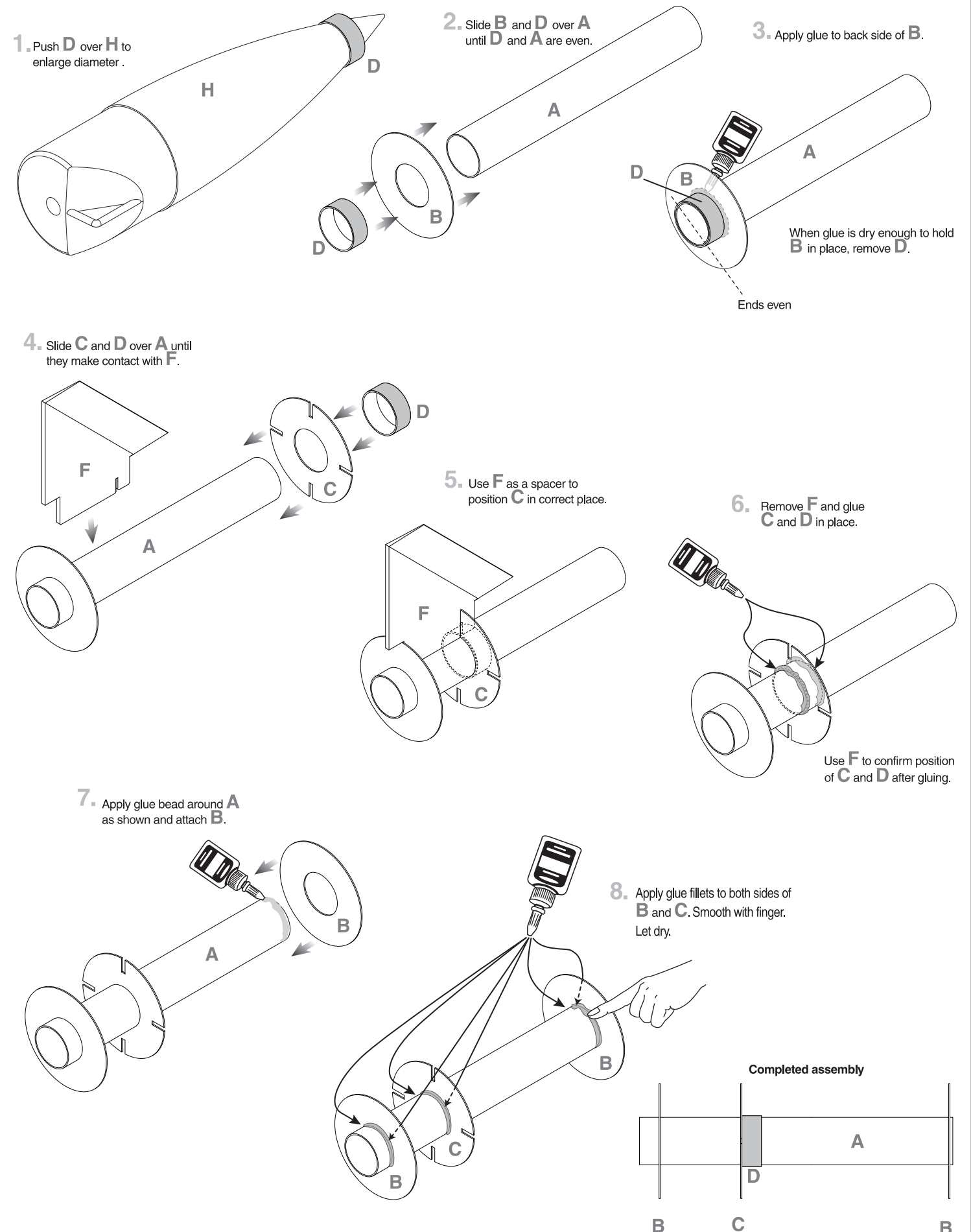


## FREE WATERSLIDE DECAL OFFER!

Go to [EstesRockets.com/9720decal](http://EstesRockets.com/9720decal)  
 Fill out the form and we'll send you your free waterslide decal! While supplies last.  
 Limit one offer per rocket purchased.  
 Design shown uses the black waterslide decals included and the free waterslide decals from offer.

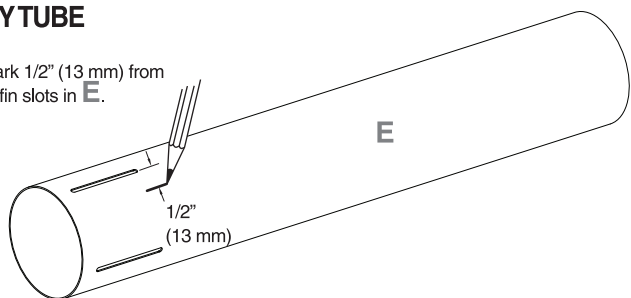


## ASSEMBLE ENGINE MOUNT

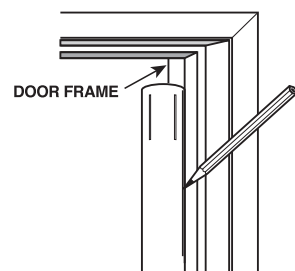


### MARK BODY TUBE

1. Make a mark 1/2" (13 mm) from one of the fin slots in E.



2. Use door frame to extend line to end of tube.



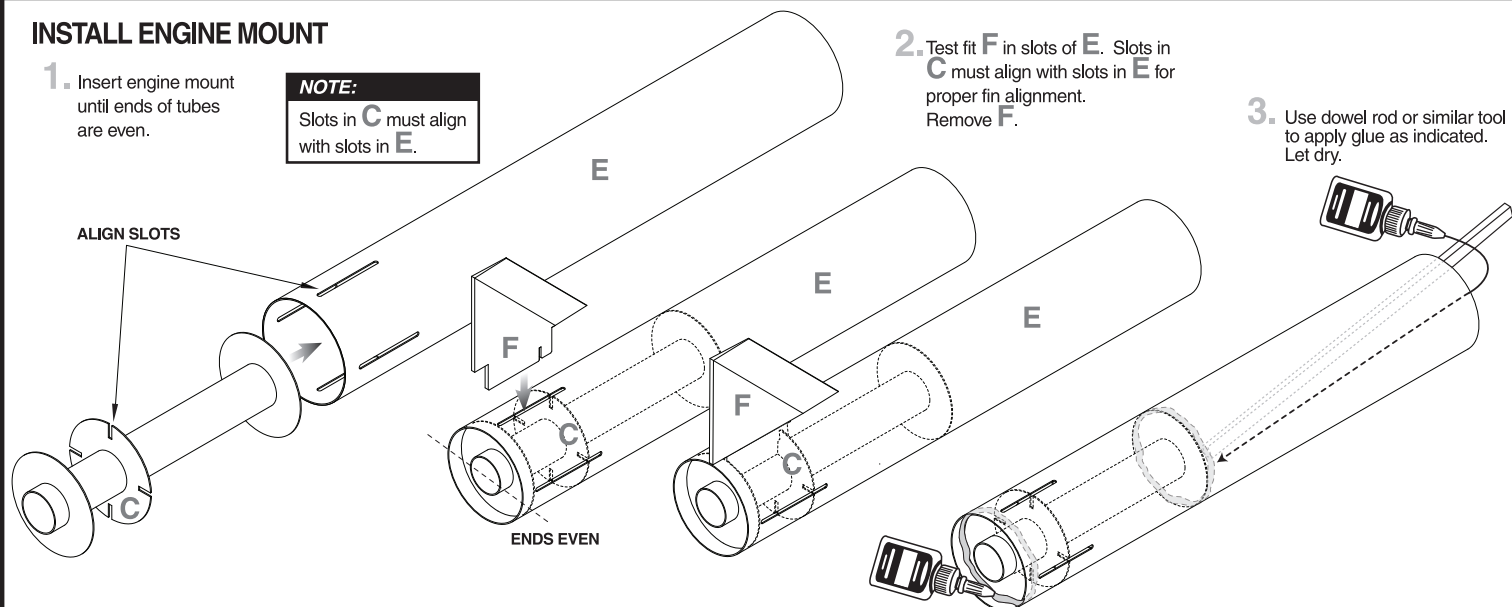
### INSTALL ENGINE MOUNT

1. Insert engine mount until ends of tubes are even.

**NOTE:**  
Slots in C must align with slots in E.

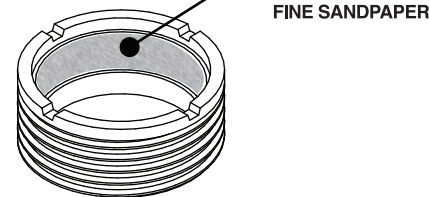
2. Test fit F in slots of E. Slots in C must align with slots in E for proper fin alignment. Remove F.

3. Use dowel rod or similar tool to apply glue as indicated. Let dry.

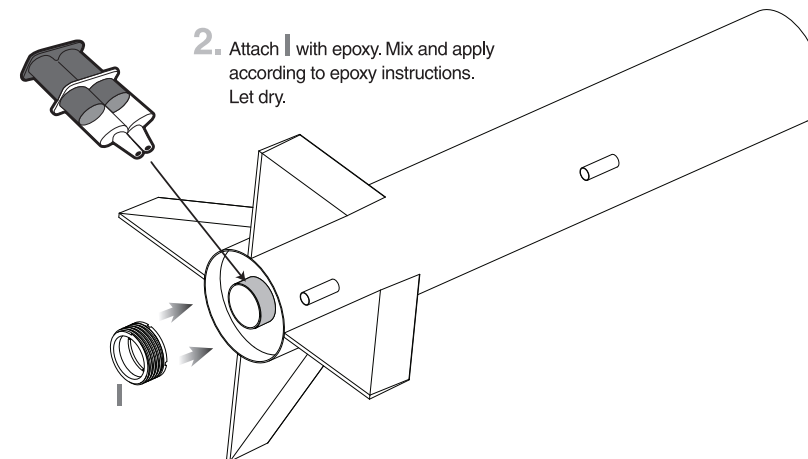


### ATTACH ENGINE RETAINER

1. Rough up inside surface with sandpaper.

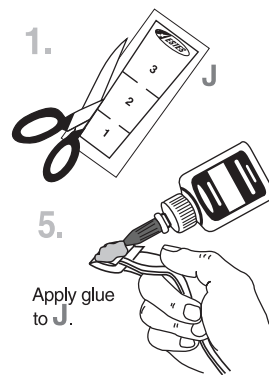


2. Attach I with epoxy. Mix and apply according to epoxy instructions. Let dry.

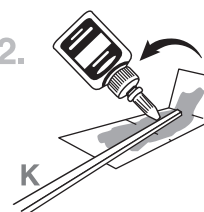


### ATTACH SHOCK CORD

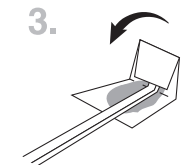
- 1.



- 2.



- 3.

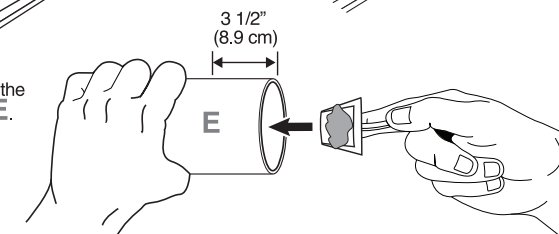


Hold until set.

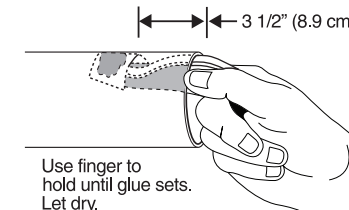
- 5.

Apply glue to J.

6. Glue J to the inside of E.



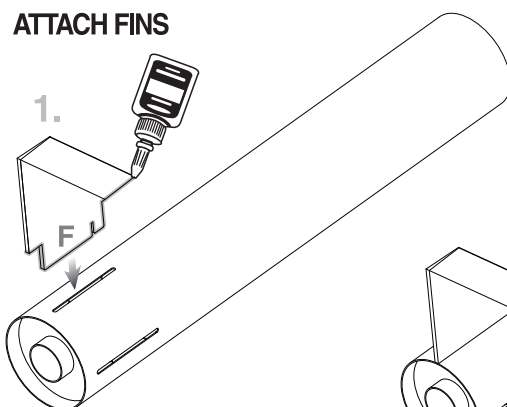
- 7.



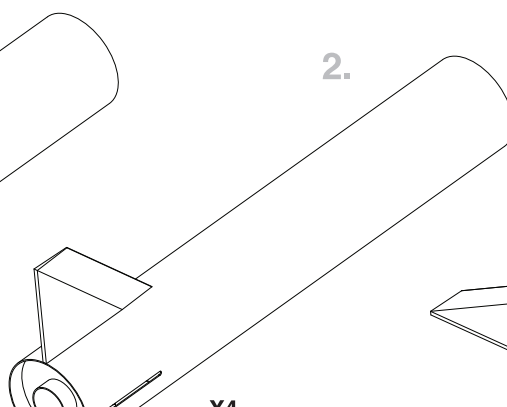
Use finger to hold until glue sets. Let dry.

### ATTACH FINS

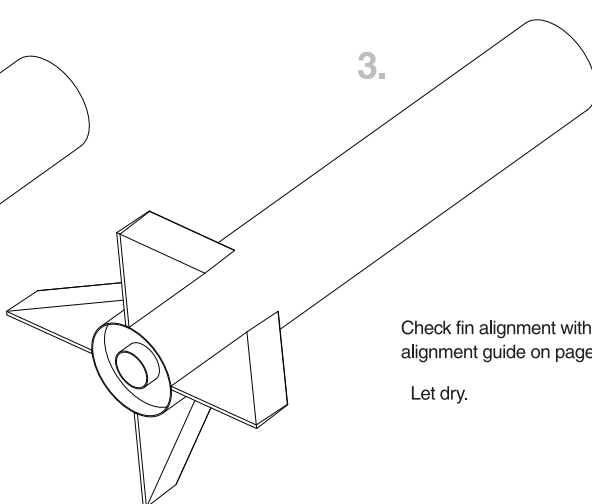
- 1.



- 2.



- 3.

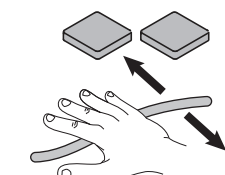


X4

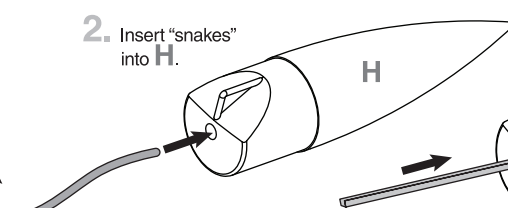
Check fin alignment with alignment guide on page 2.  
Let dry.

### INSTALL CLAY NOSE WEIGHT

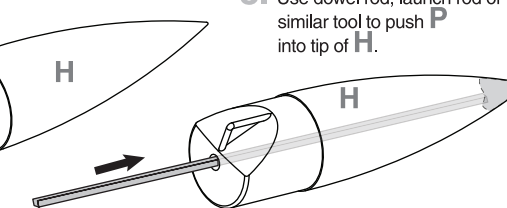
1. Roll P into "snakes".



2. Insert "snakes" into H.

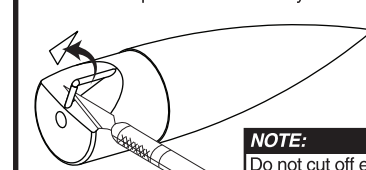


3. Use dowel rod, launch rod or similar tool to push P into tip of H.



### PREPARE NOSE CONE

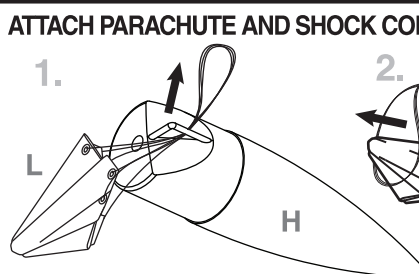
1. Remove plastic from inside eyelet.



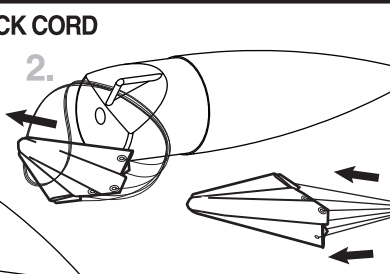
**NOTE:**  
Do not cut off eyelet.

### ATTACH PARACHUTE AND SHOCK CORD

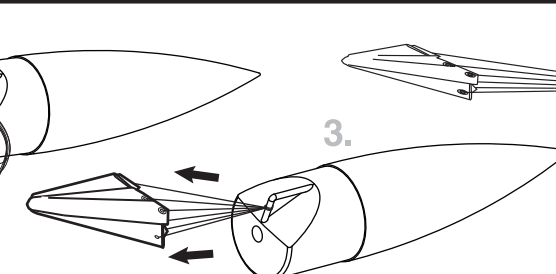
- 1.



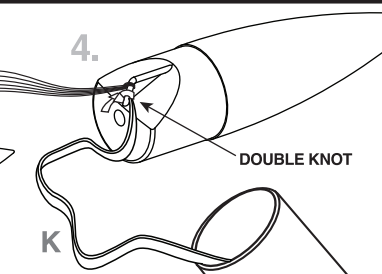
- 2.



- 3.



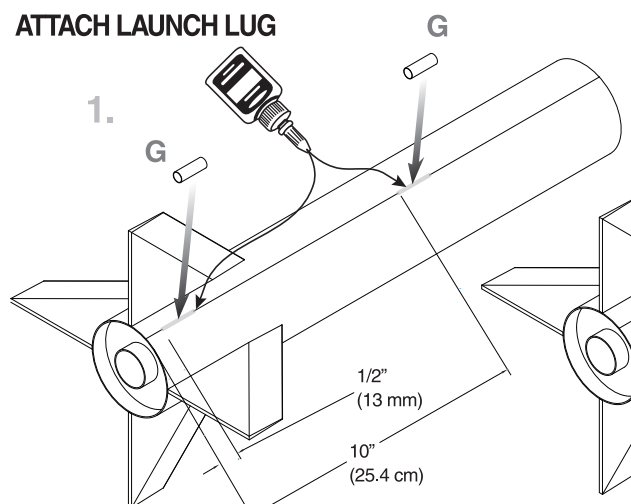
- 4.



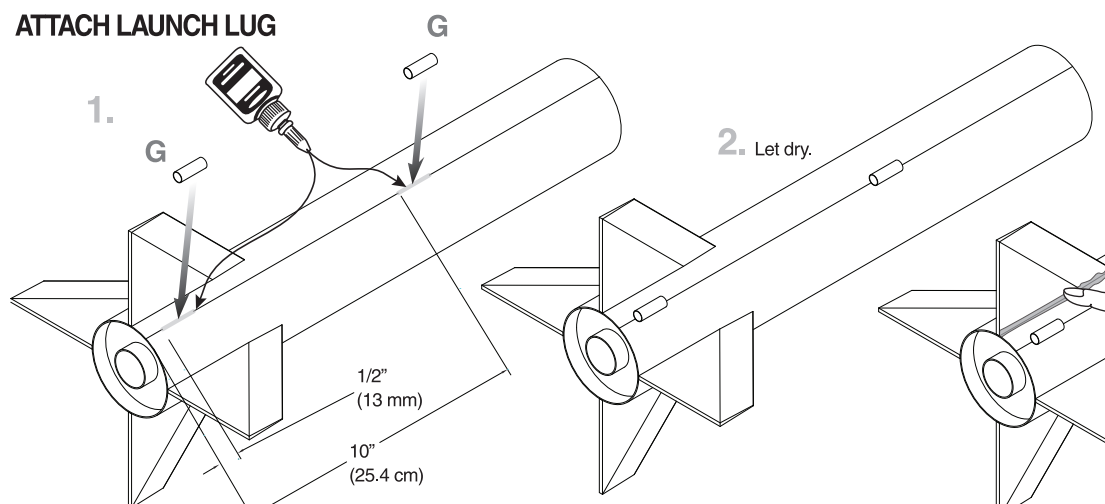
DOUBLE KNOT

### ATTACH LAUNCH LUG

- 1.



2. Let dry.

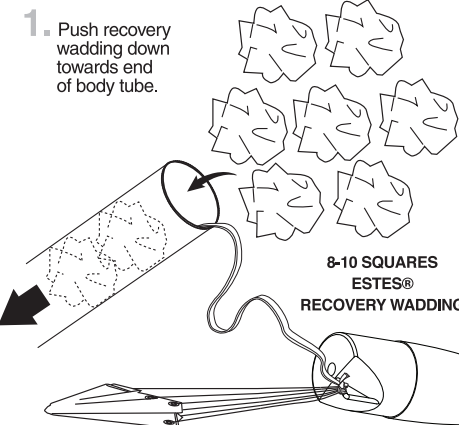


3. Apply glue fillets to all joints. Smooth with finger. Let dry.

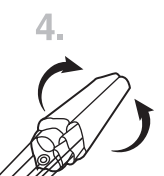
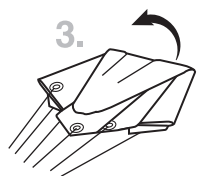
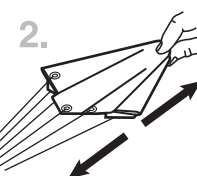
1/2" (13 mm)  
10" (25.4 cm)

### PREPARE FLIGHT RECOVERY

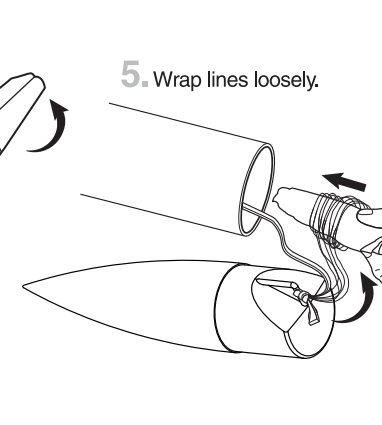
1. Push recovery wadding towards end of body tube.



8-10 SQUARES  
ESTES®  
RECOVERY WADDING



5. Wrap lines loosely.



**NOTE:**  
Recovery wadding and parachute must slide easily into body tube. If too tight, redo.