

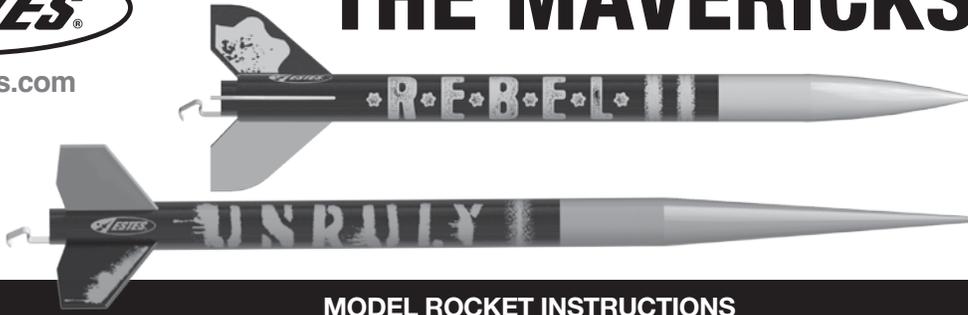


estesrockets.com

# THE MAVERICKS™

1366

AGES  
10+



Skill Level

**INTERMEDIATE**

## MODEL ROCKET INSTRUCTIONS

### KEEP FOR FUTURE REFERENCE

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

### CAUTION:

May not apply to all kits. For safe handling of plastic cement, epoxy, spray adhesive, CA glue, CA accelerator, paint/finishing materials, see manufacturer's warnings and follow instructions for use. To avoid injury, use extreme caution when using hobby knife, scissors, drills, and any cutting tools.

### SUPPLIES



SCISSORS



HOBBY KNIFE



PENCIL



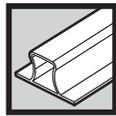
RULER



YELLOW GLUE



FINE SANDPAPER



SANDING BLOCK



MASKING TAPE



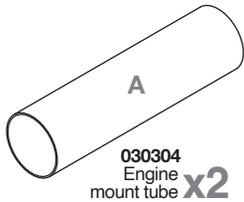
WHITE PRIMER



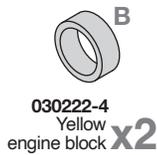
PAINT  
(listed on pg 4)



CLEAR COAT  
(optional)



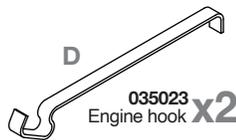
030304  
Engine  
mount tube x2



030222-4  
Yellow  
engine block x2



030162-2  
Green  
centering rings x4



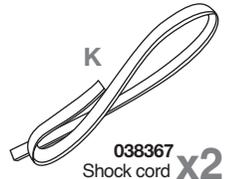
035023  
Engine hook x2



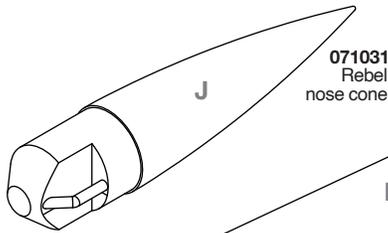
030167  
Mylar ring x2



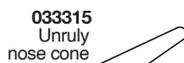
038175  
Launch lug x2



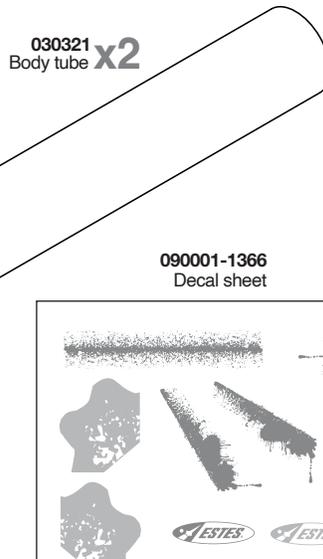
038367  
Shock cord x2



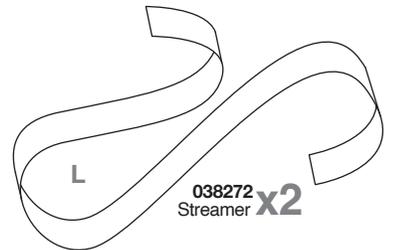
071031  
Rebel  
nose cone



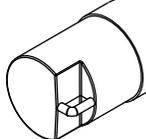
033315  
Unruly  
nose cone



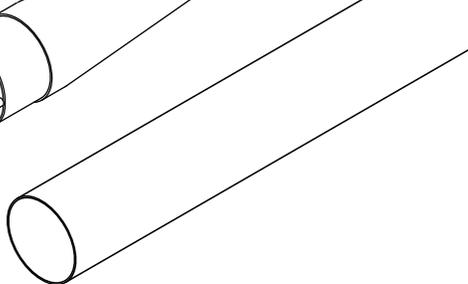
030321  
Body tube x2



038272  
Streamer x2

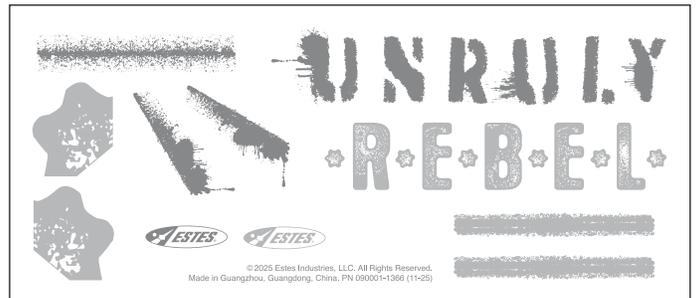


071031  
Rebel  
nose cone

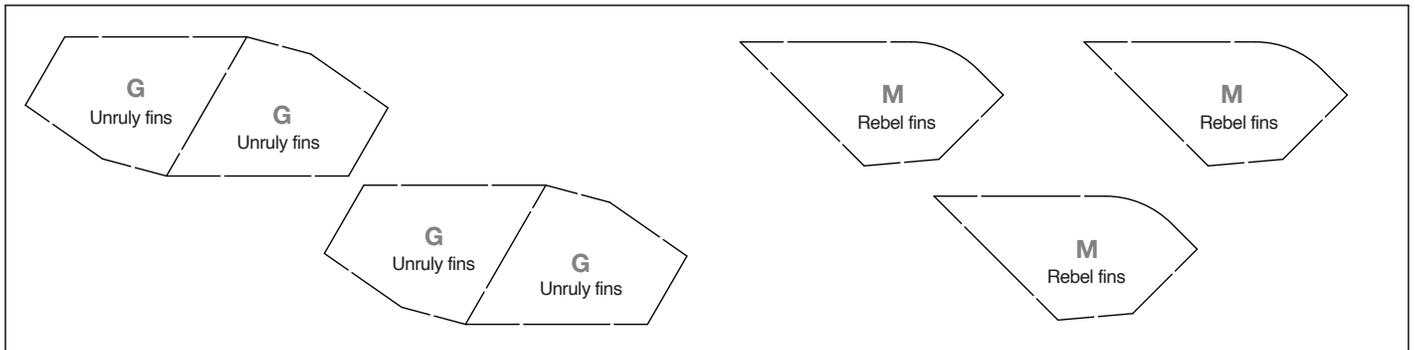


030321  
Body tube x2

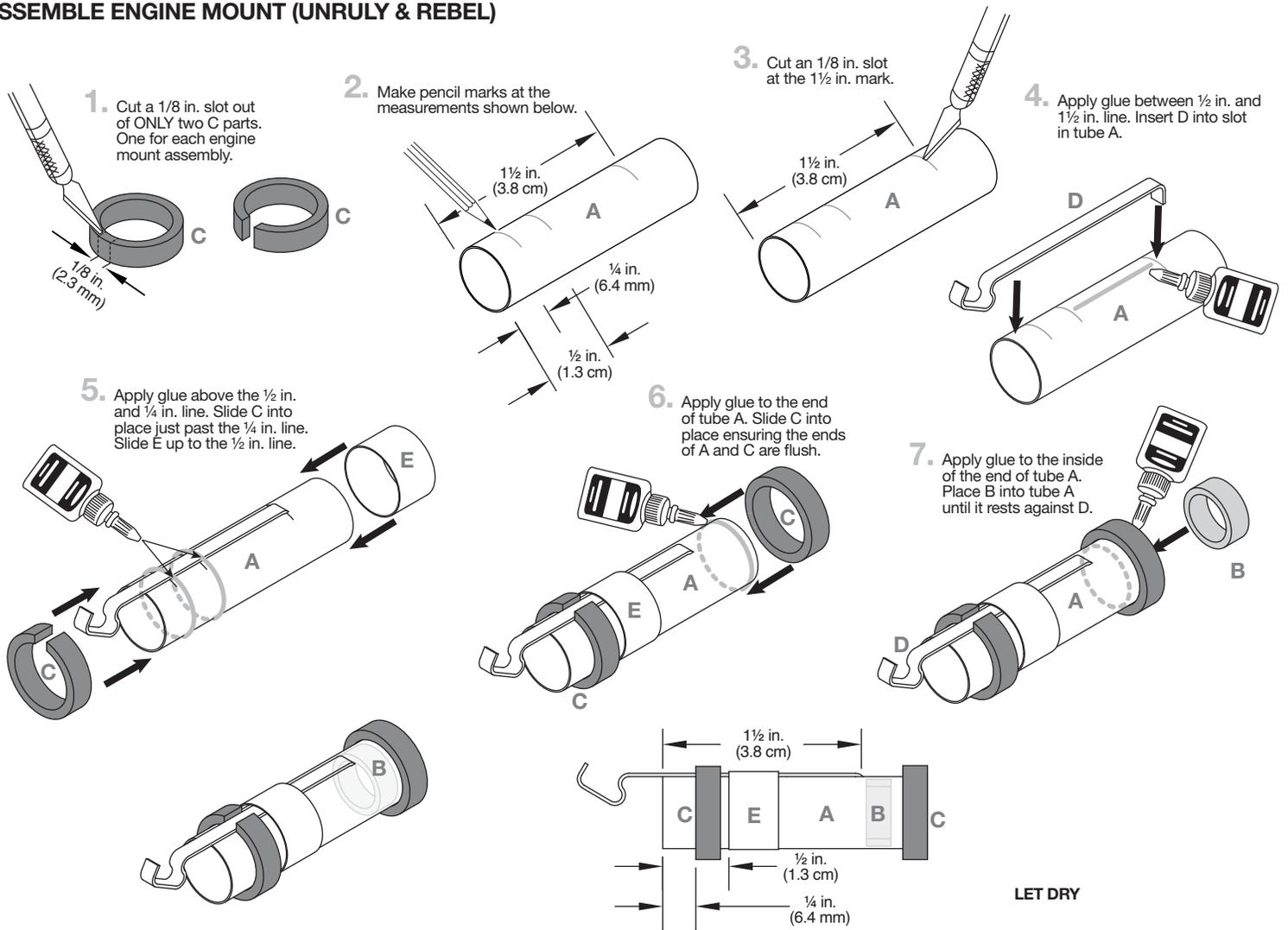
090001-1366  
Decal sheet



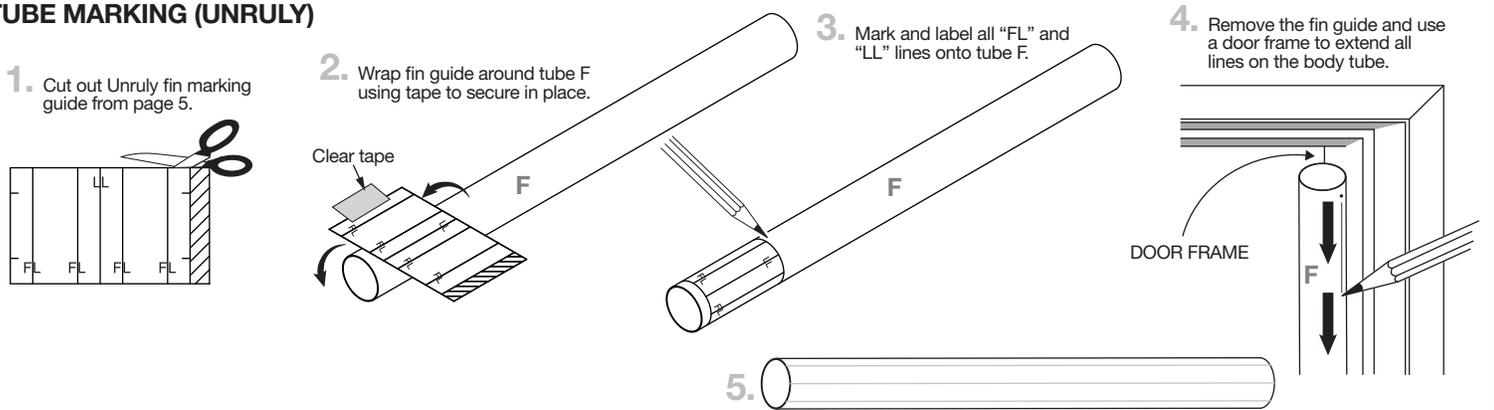
090051-1366  
Laser cut balsa sheet



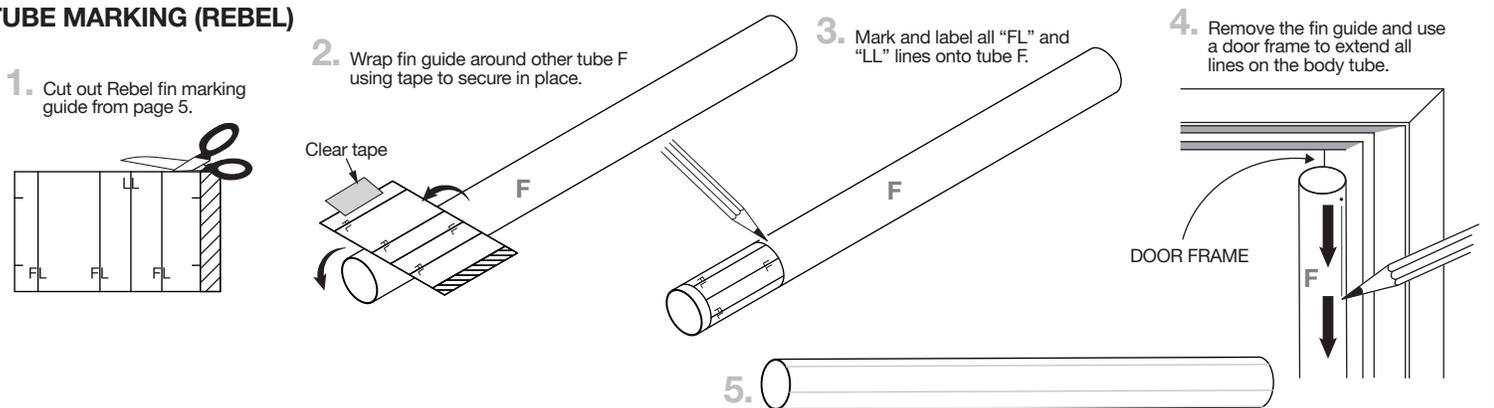
## ASSEMBLE ENGINE MOUNT (UNRULY & REBEL)



## TUBE MARKING (UNRULY)

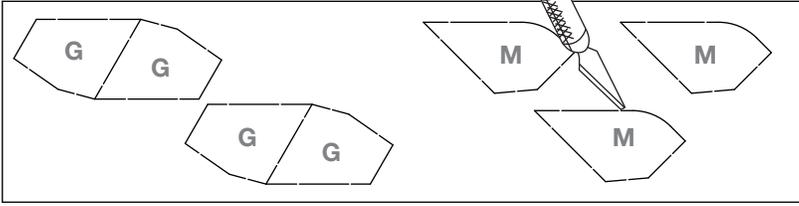


## TUBE MARKING (REBEL)

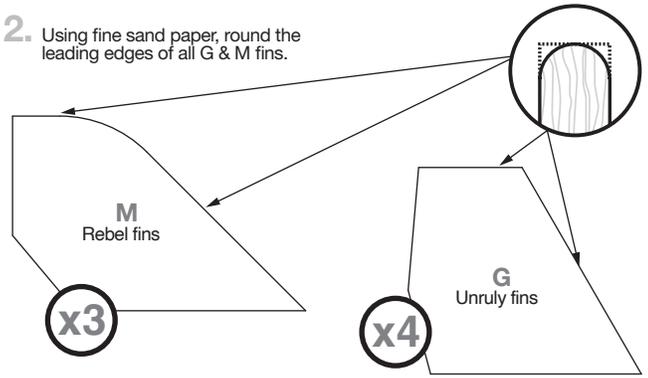


## PREPARE FINS (UNRULY & REBEL)

1. With a sharp hobby knife cut out all fins.

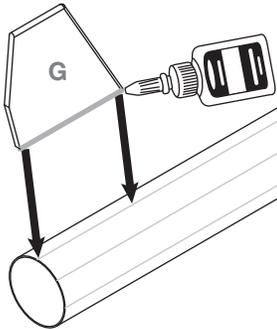


2. Using fine sand paper, round the leading edges of all G & M fins.

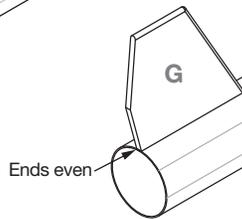


## ATTACH FINS & LAUNCH LUG (UNRULY)

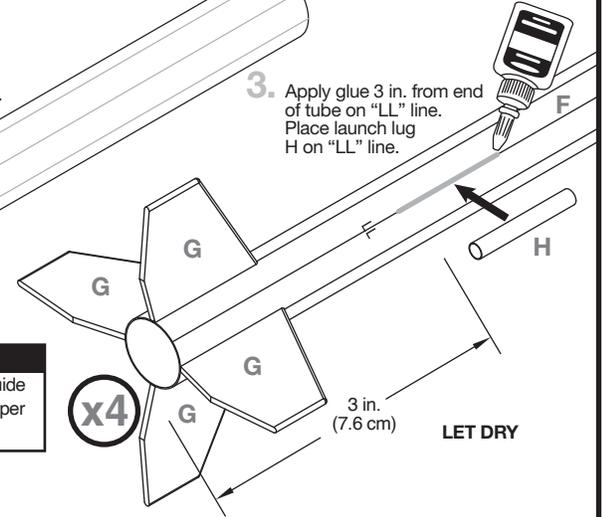
1. Apply glue to the root edge of the fin.



2. Place fin on "FL" line. Align fin end with tube end.



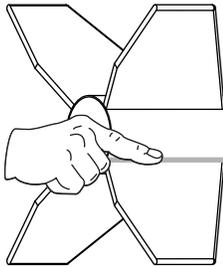
3. Apply glue 3 in. from end of tube on "LL" line. Place launch lug H on "LL" line.



**NOTE:**

Use the fin alignment guide on page 5 to ensure proper fin alignment.

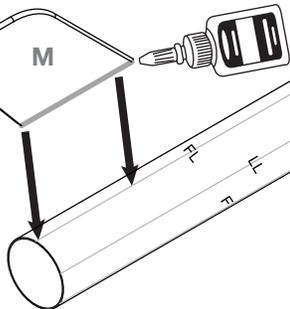
4. Apply glue fillets to all fin and launch lug joints.



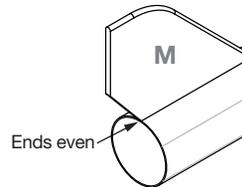
LET DRY

## ATTACH FINS & LAUNCH LUG (REBEL)

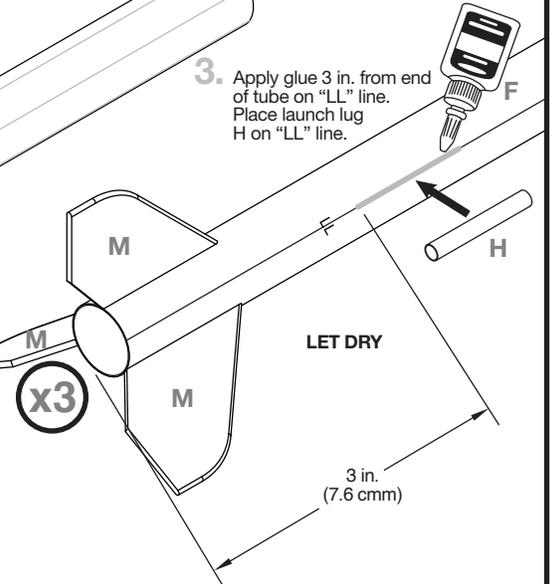
1. Apply glue to the root edge of the fin.



2. Place fin on "FL" line. Align fin end with tube end.



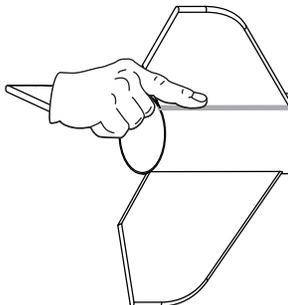
3. Apply glue 3 in. from end of tube on "LL" line. Place launch lug H on "LL" line.



**NOTE:**

Use the fin alignment guide on page 5 to ensure proper fin alignment.

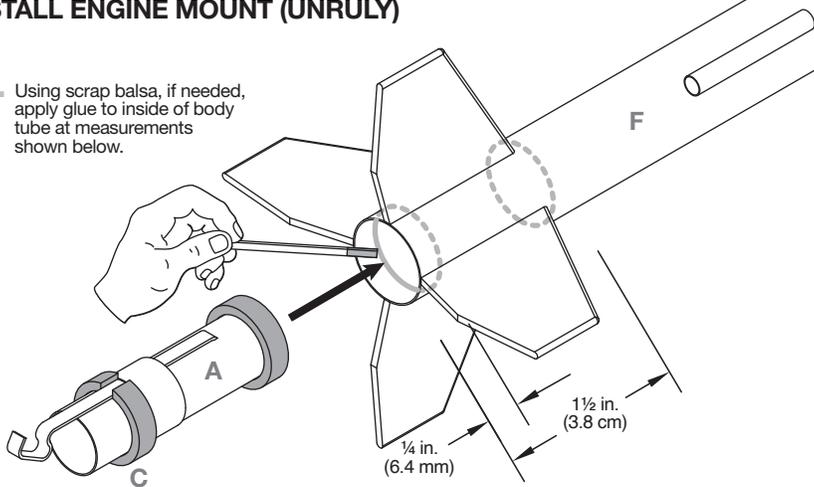
4. Apply glue fillets to all fin and launch lug joints.



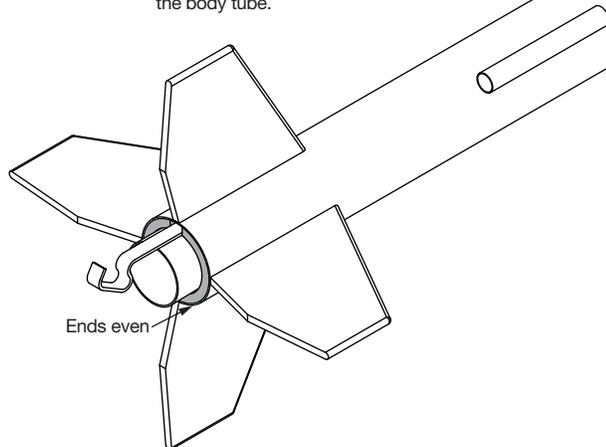
LET DRY

## INSTALL ENGINE MOUNT (UNRULY)

- Using scrap balsa, if needed, apply glue to inside of body tube at measurements shown below.

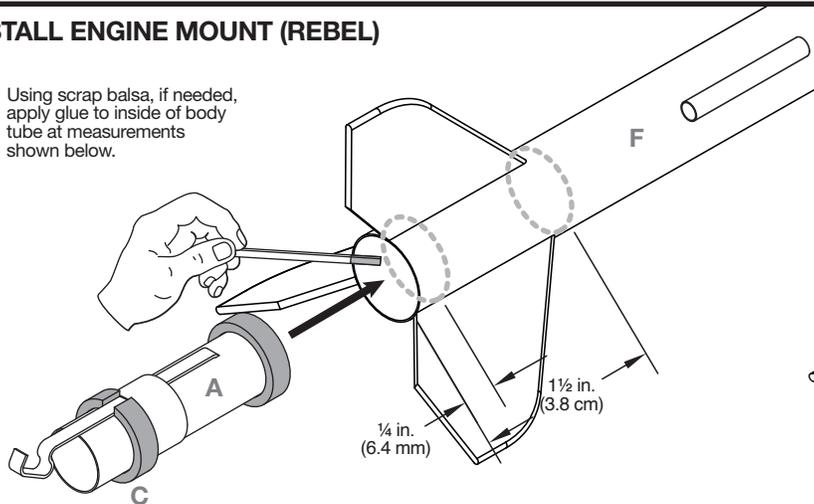


- Insert engine mount into body tube until end of C is flush with the end of the body tube.

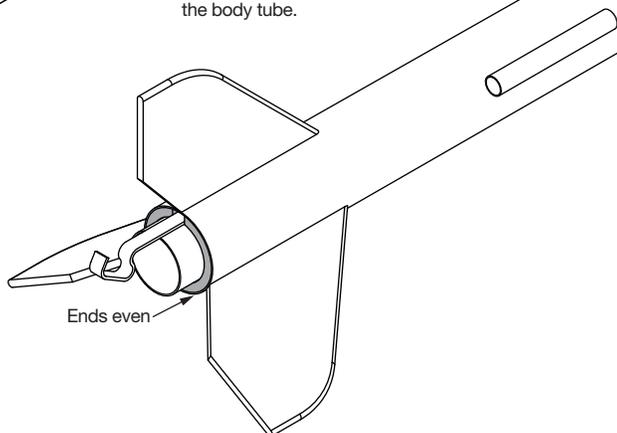


## INSTALL ENGINE MOUNT (REBEL)

- Using scrap balsa, if needed, apply glue to inside of body tube at measurements shown below.



- Insert engine mount into body tube until end of C is flush with the end of the body tube.



## PAINT AND DECALS (UNRULY & REBEL)

### PAINT COLORS

Black Paint  
Green Paint  
Yellow Paint

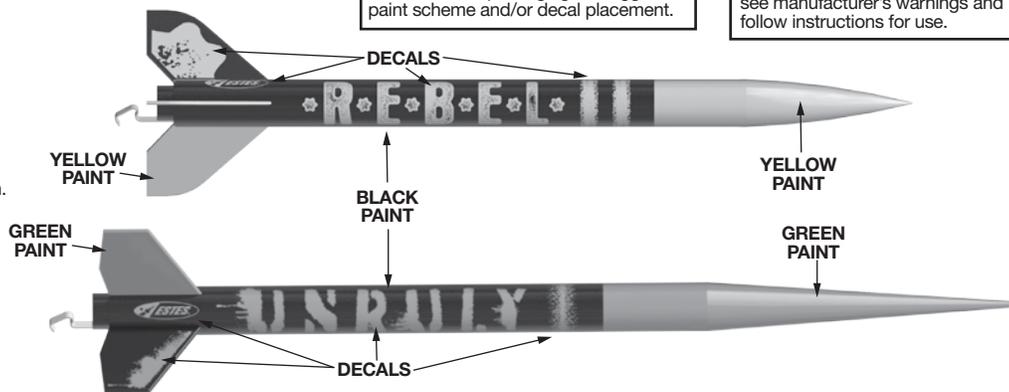
- Spray rocket with white primer, let dry, and sand. Repeat until rocket is smooth.
- Paint entire Unruly green. Paint entire Rebel yellow.
- Mask off rockets as needed for black paint application.
- Apply decals only after paint is dry.
- Cut decals from sheet, trimming close to edge.
- One at a time, place in warm water until decal curls and begins to relax.
- Remove and position on rocket, sliding decal away from backing material.
- Blot with clean paper towel. Let set overnight.
- OPTIONAL: Apply protective clear coat.

### NOTE:

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

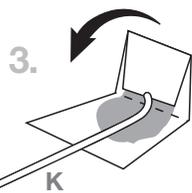
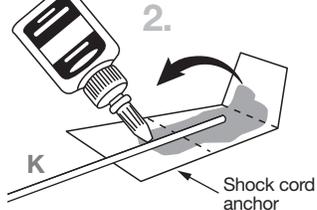
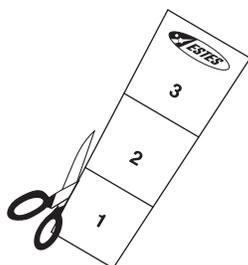
### CAUTION:

For safe handling of spray paints, see manufacturer's warnings and follow instructions for use.



## INSTALL RECOVERY SYSTEM (UNRULY & REBEL)

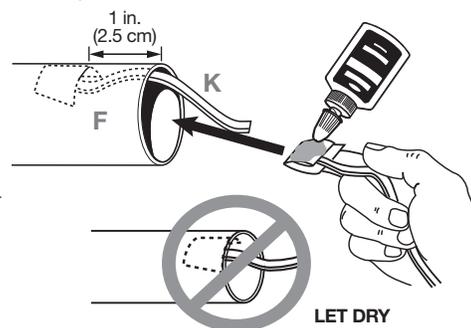
- Cut out shock cord anchor from page 5.



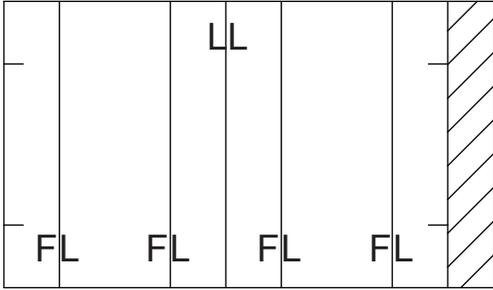
- Hold until set.



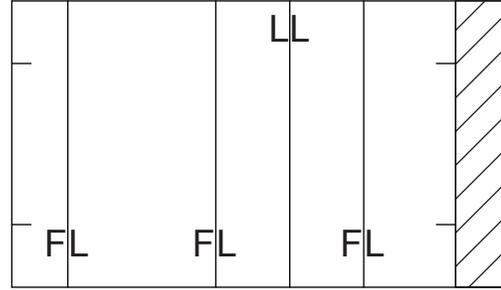
- Apply glue to shock cord anchor and insert into body tube 1 in. from the end. Hold until set.



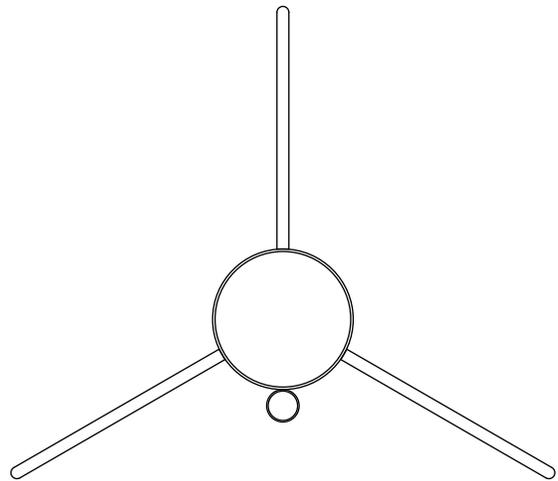
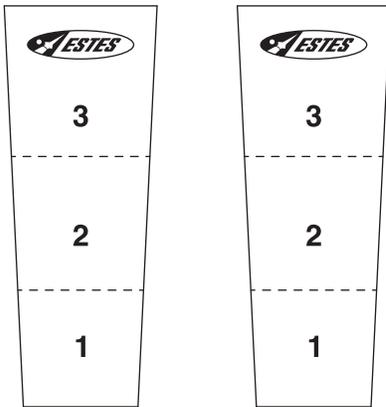
### UNRULY FIN MARKING GUIDE



### REBEL FIN MARKING GUIDE

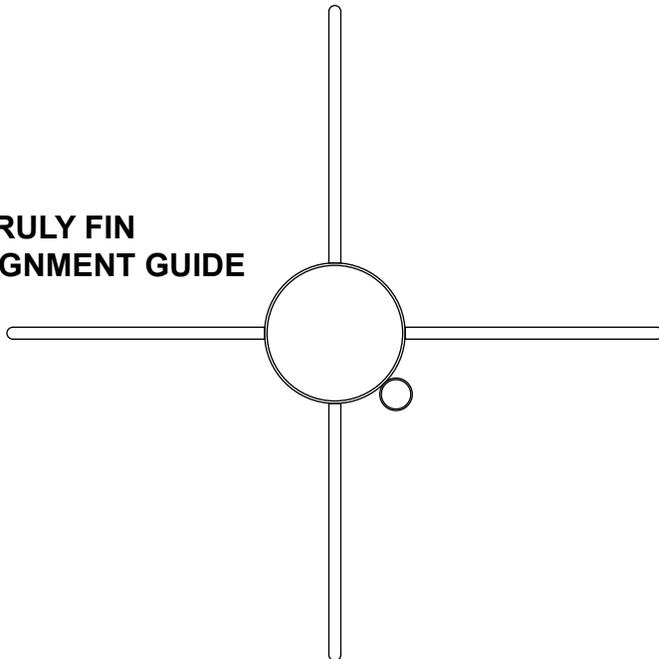


### SHOCK CORD ANCHORS



**REBEL FIN  
ALIGNMENT GUIDE**

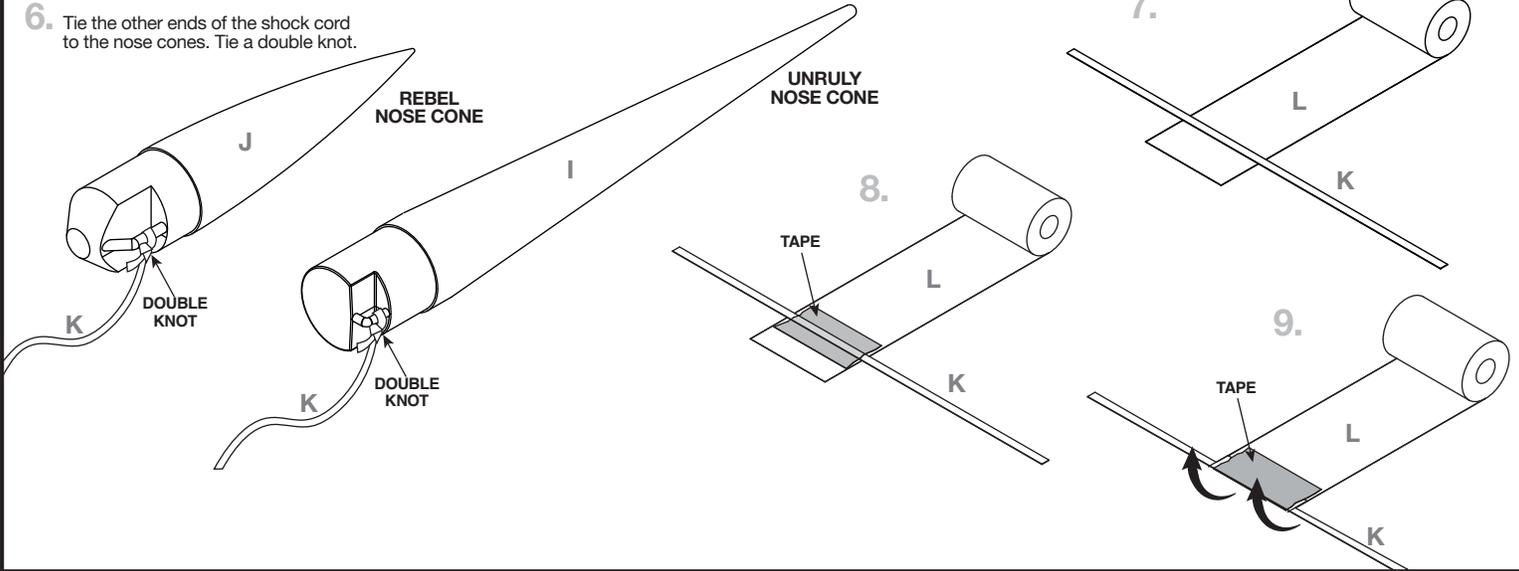
**UNRULY FIN  
ALIGNMENT GUIDE**



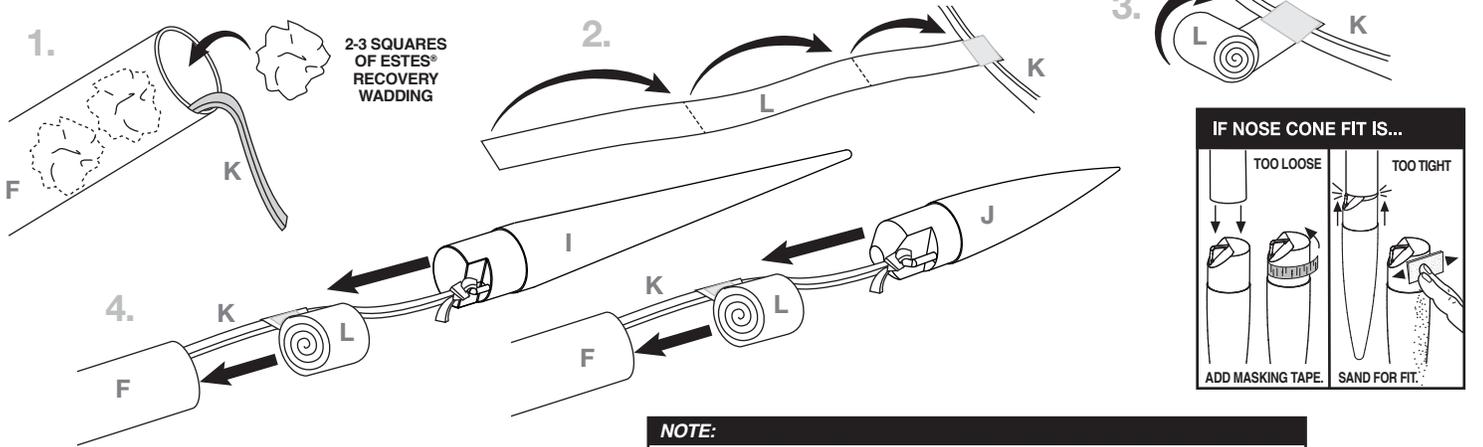
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## INSTALL RECOVERY SYSTEM (UNRULY & REBEL) CONTINUED

6. Tie the other ends of the shock cord to the nose cones. Tie a double knot.

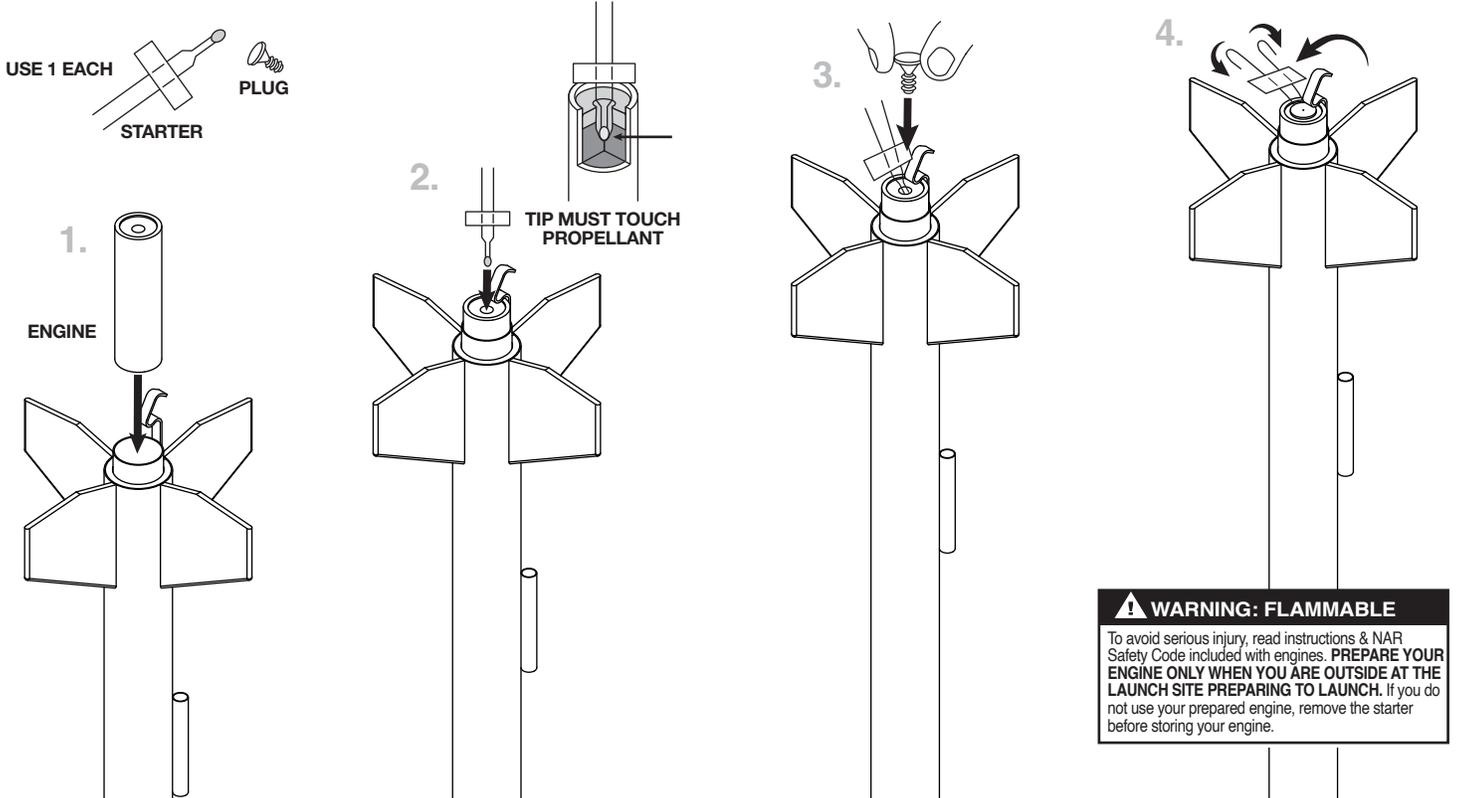


## PREPARE RECOVERY SYSTEM (UNRULY & REBEL)



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

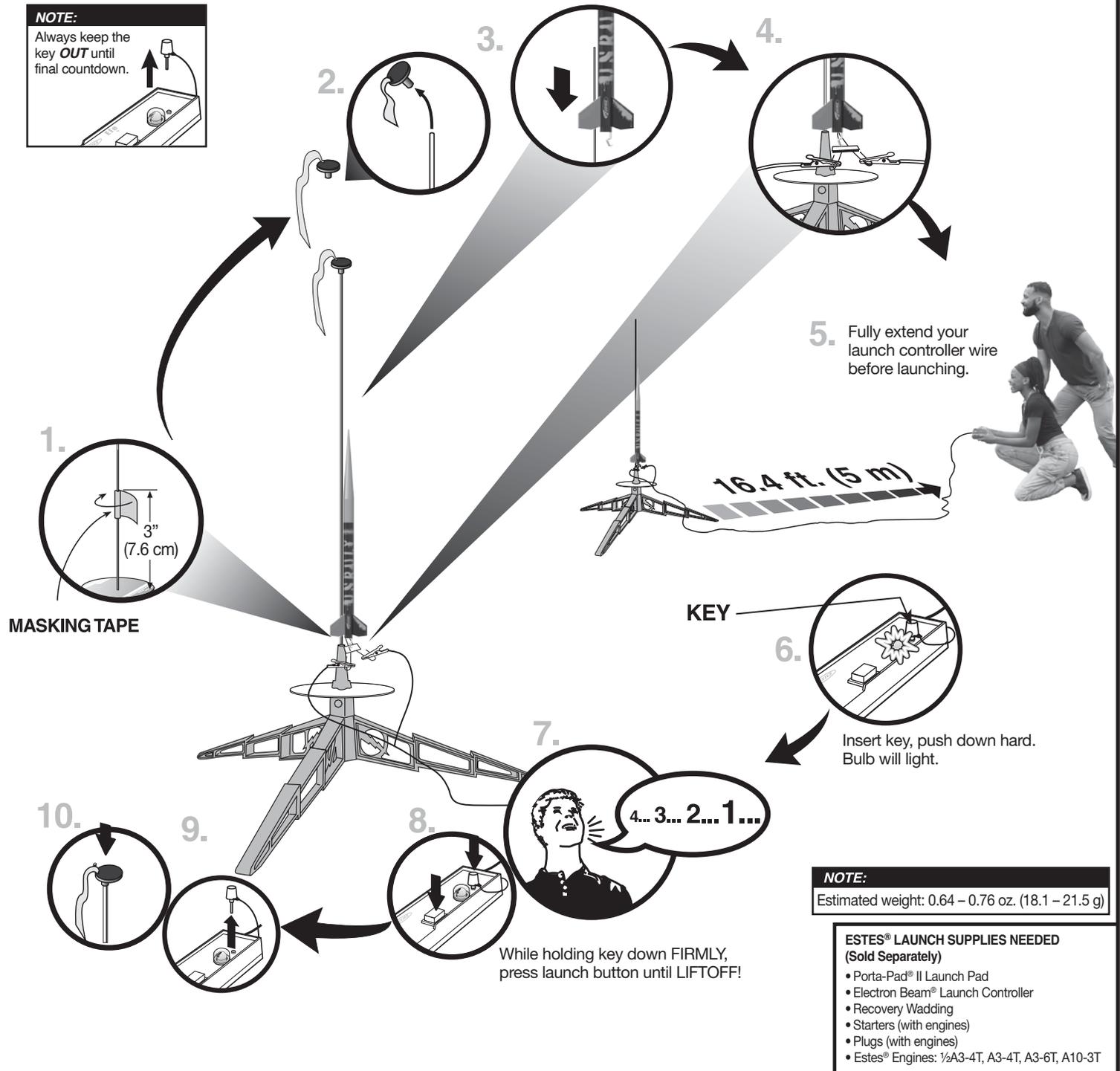
## FLIGHT PREPARATION (UNRULY & REBEL)



# COUNTDOWN AND LAUNCH

**NOTE:**

Always keep the key **OUT** until final countdown.



**NOTE:**  
Estimated weight: 0.64 – 0.76 oz. (18.1 – 21.5 g)

- ESTES® LAUNCH SUPPLIES NEEDED (Sold Separately)**
- Porta-Pad® II Launch Pad
  - Electron Beam® Launch Controller
  - Recovery Wadding
  - Starters (with engines)
  - Plugs (with engines)
  - Estes® Engines: ½A3-4T, A3-4T, A3-6T, A10-3T

## 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. Launch only with little or no wind and good visibility. Always follow the National Association of Rocketry (NAR) 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.

