



EstesRockets.com

AGES
10+

K25 ASTRON ALPHA™

1221



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



HOBBY KNIFE



FINE
SANDPAPER



SANDING
BLOCK



SCISSORS



YELLOW GLUE



RULER



SOFT LEAD
PENCIL



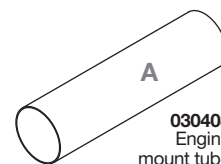
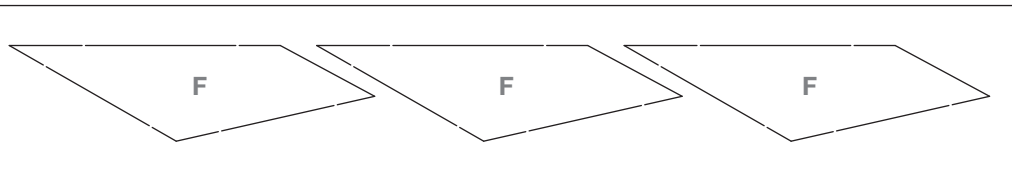
WHITE
PRIMER



RED & WHITE
PAINT



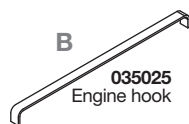
CLEAR COAT
(OPTIONAL)



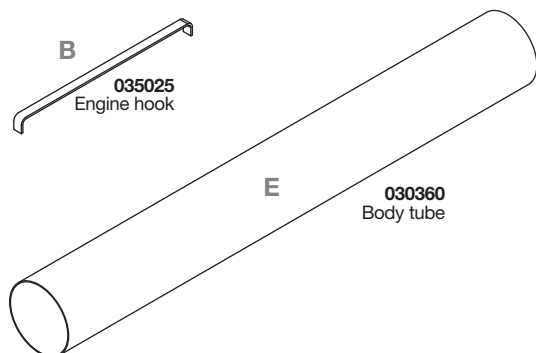
030408
Engine
mount tube



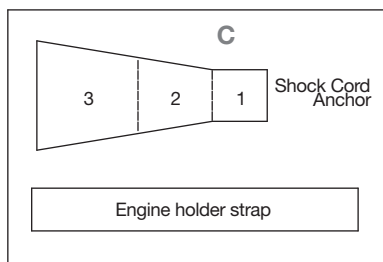
038251
Screw eye



035025
Engine hook

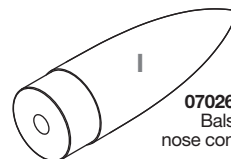


030360
Body tube



090051-1221
Laser cut balsa fins

090057-1221
Printed index stock



070262
Balsa
nose cone



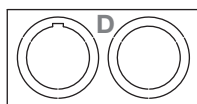
038175
Launch lug



Wood dowel



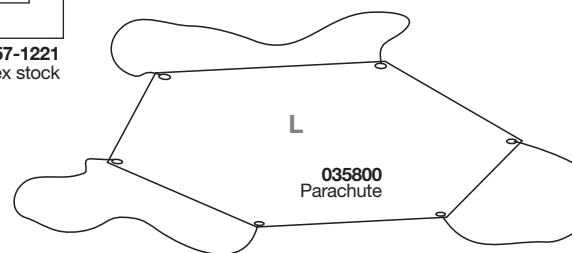
090001-1
Estes logo decal



090052-1221
Laser cut
spacer rings



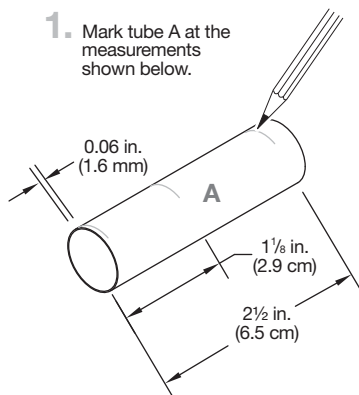
038367
Shock cord



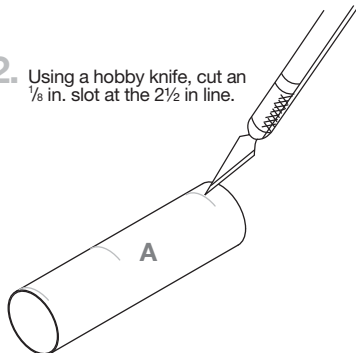
035800
Parachute

ASSEMBLE ENGINE MOUNT

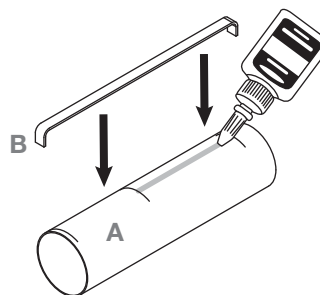
1. Mark tube A at the measurements shown below.



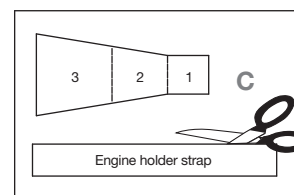
2. Using a hobby knife, cut an 1/8 in. slot at the 2 1/2 in. line.



3. Place a bead of glue between the 1 1/8 in. and 2 1/2 in. marks.

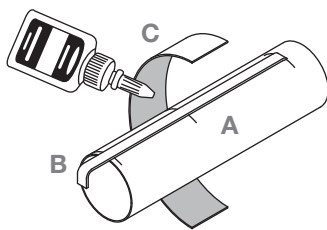


4. Cut out engine holder strap from index stock C.

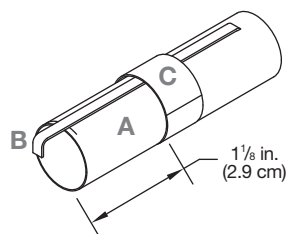


ASSEMBLE ENGINE MOUNT (CONTINUED)

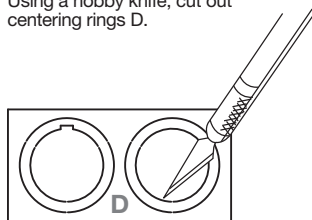
5. Apply a thin layer of glue to inside of engine holder strap.



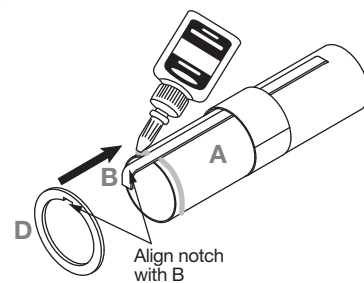
6. Wrap the engine holder strap around tube A aligning it with the 1 1/8 in. mark.



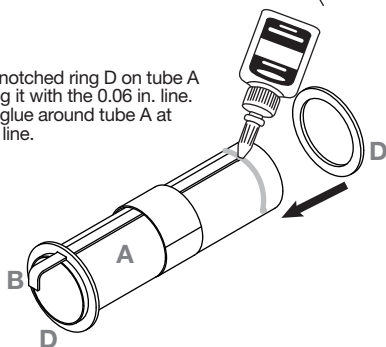
7. Using a hobby knife, cut out centering rings D.



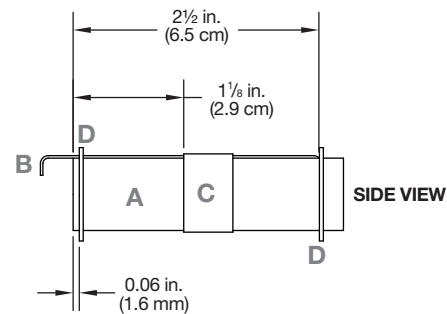
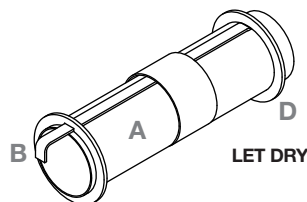
8. Apply glue around tube A at the 0.06 in. line.



9. Place notched ring D on tube A aligning it with the 0.06 in. line. Apply glue around tube A at 2 1/2 in. line.

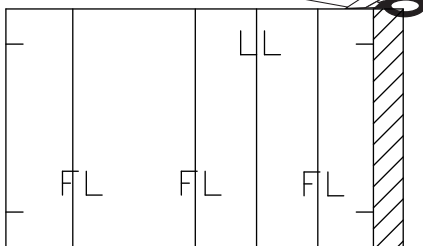


10. Place ring D on tube A until it rests against B.

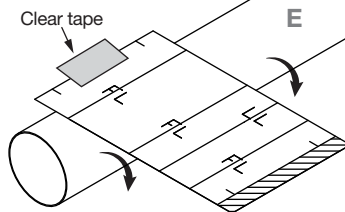


MARK BODY TUBE AND ATTACH FINS

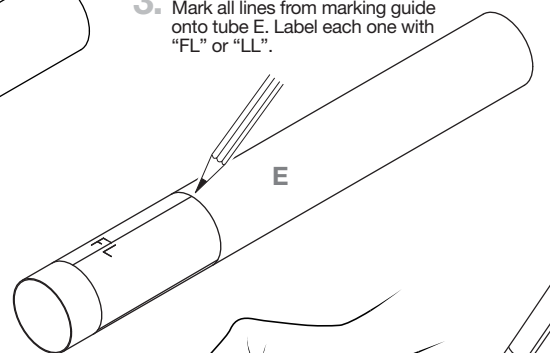
1. Cut out this fin marking guide from page 3.



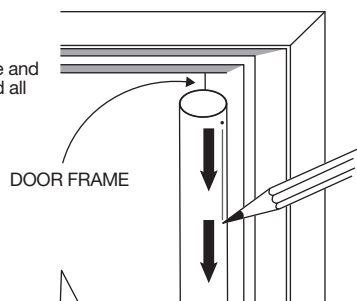
2. Wrap marking guide around tube E. Use clear tape to secure in place.



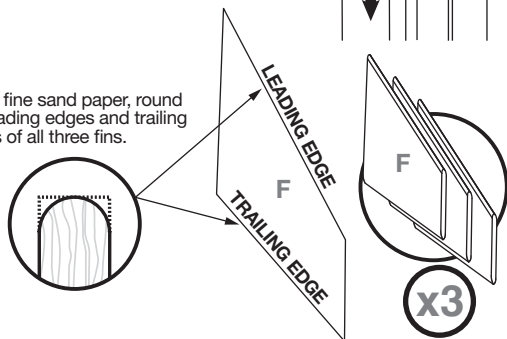
3. Mark all lines from marking guide onto tube E. Label each one with "FL" or "LL".



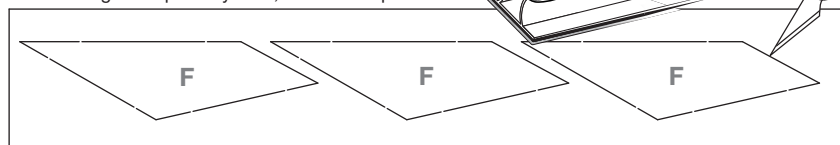
4. Remove the marking guide and use a door frame to extend all lines on the body tube E.



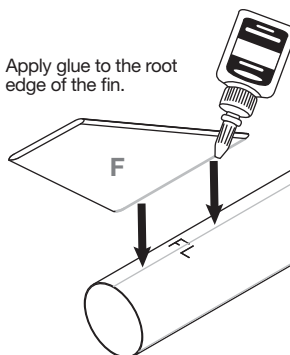
6. Using fine sand paper, round the leading edges and trailing edges of all three fins.



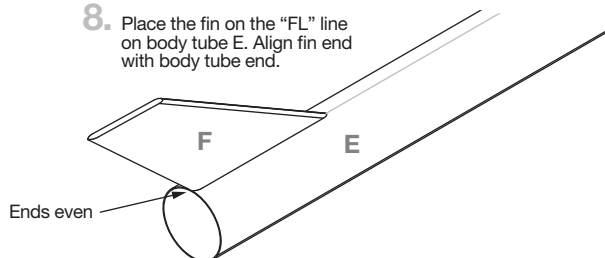
5. Sand both sides of balsa sheet. Using a sharp hobby knife, cut out all F pieces.



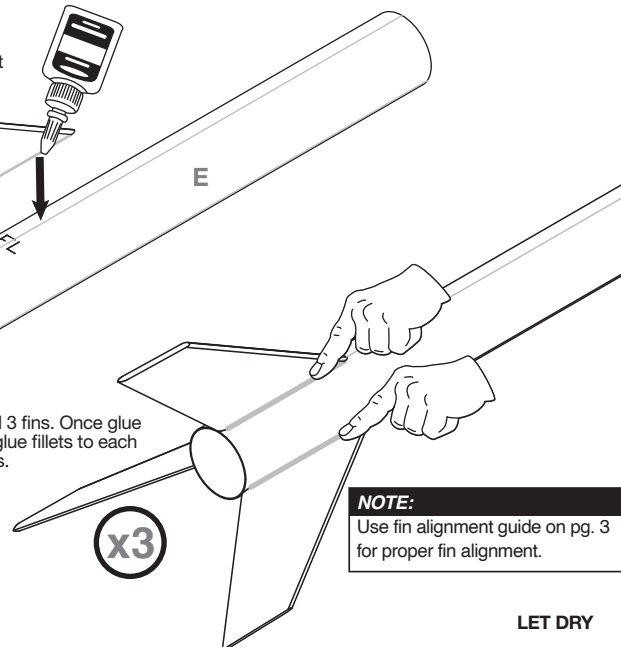
7. Apply glue to the root edge of the fin.



8. Place the fin on the "FL" line on body tube E. Align fin end with body tube end.

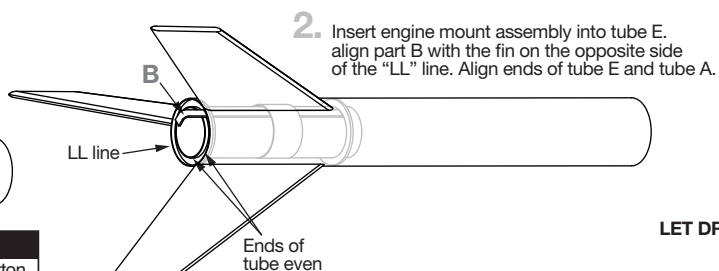
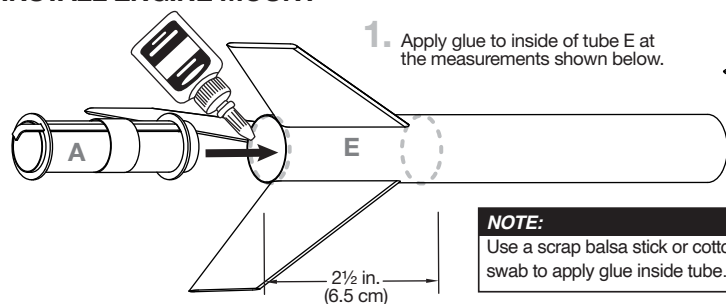


9. Repeat for all 3 fins. Once glue dries, apply glue fillets to each side of all fins.



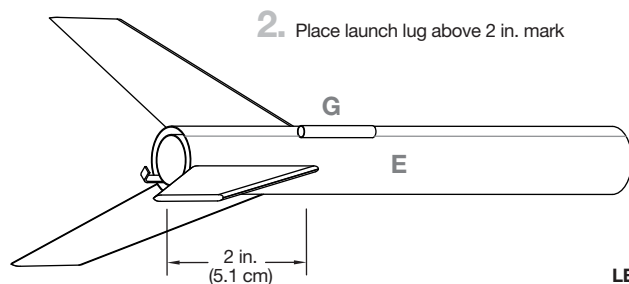
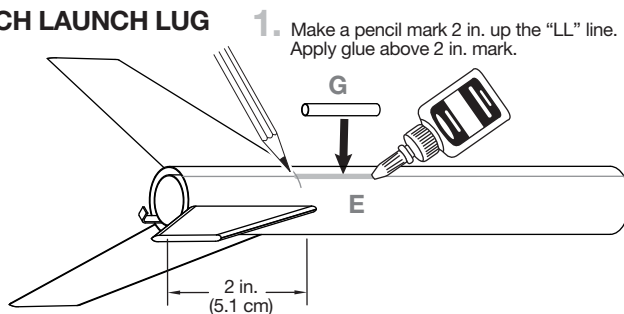
NOTE:
Use fin alignment guide on pg. 3 for proper fin alignment.

INSTALL ENGINE MOUNT



LET DRY

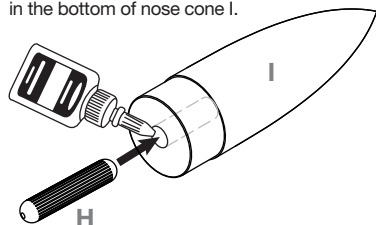
ATTACH LAUNCH LUG



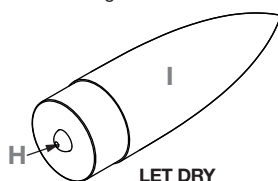
LET DRY

PREPARE NOSE CONE

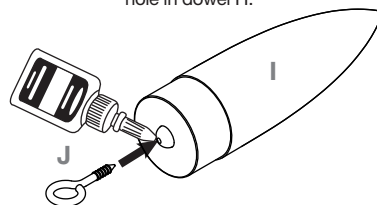
1. Place a drop of glue into the hole in the bottom of nose cone I.



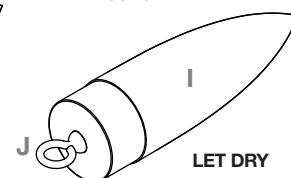
2. Insert dowel H into hole of the nose cone. Be sure the hole in the dowel is facing out.



3. Place a drop of glue into hole in dowel H.



4. Screw J into hole in dowel H.

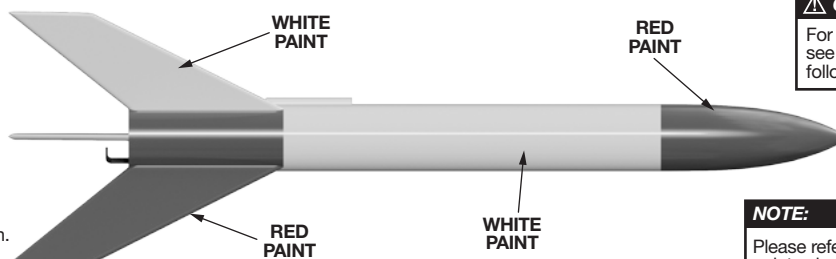


PAINT AND DECALS

PAINT COLORS

White Paint
Red Paint

1. Spray rocket with white primer, let dry, and sand. Repeat until rocket is smooth.
2. Paint entire rocket white.
3. Mask off rocket as needed for red paint application.
4. OPTIONAL: Apply protective clear coat.



CAUTION:

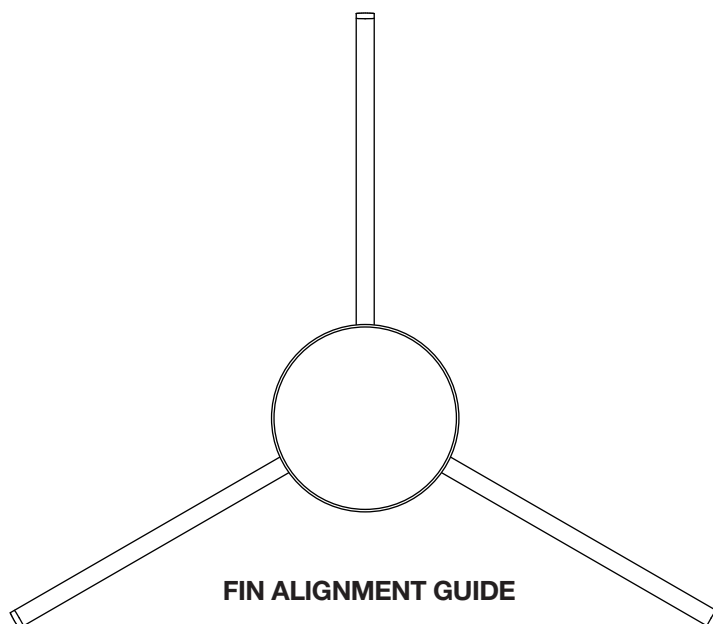
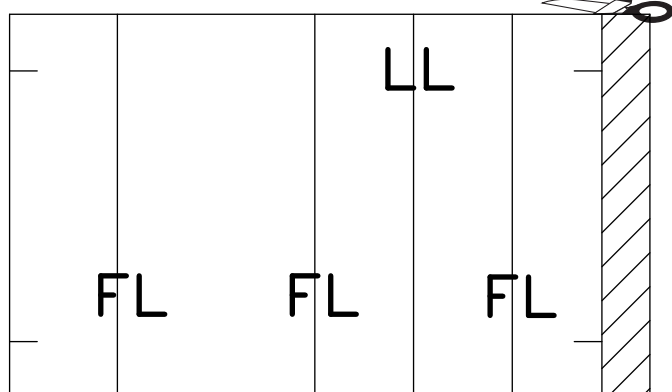
For safe handling of spray paints, see manufacturer's warnings and follow instructions for use.

NOTE:

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

GUIDES (CUT THIS SECTION OFF IF DESIRED)

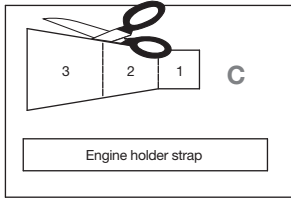
FIN MARKING GUIDE



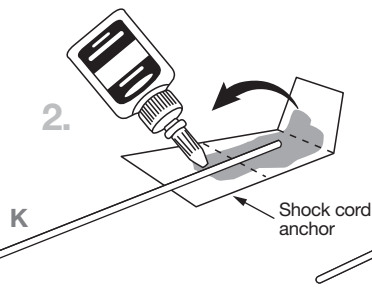
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INTENTIONALLY
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ASSEMBLE RECOVERY SYSTEM

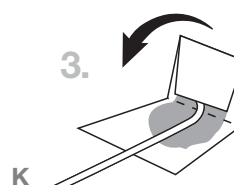
1. Cut out shock cord anchor from index stock C.



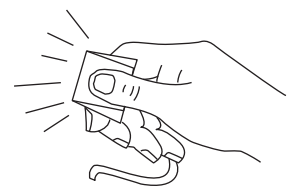
2.



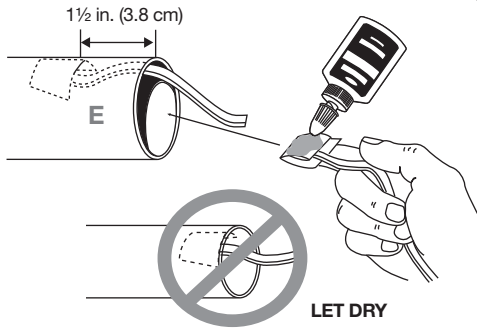
3.



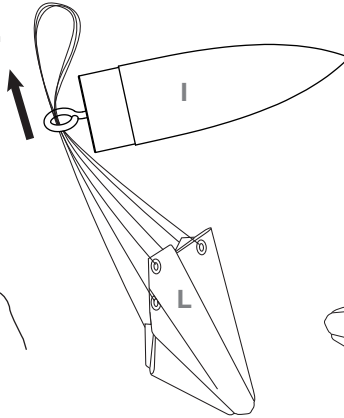
4. Hold until set.



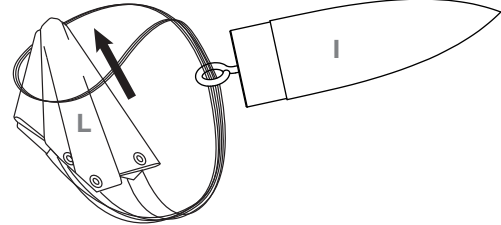
5. Apply glue to shock cord anchor and insert into body tube E 1½ in. from the end. Hold until set.



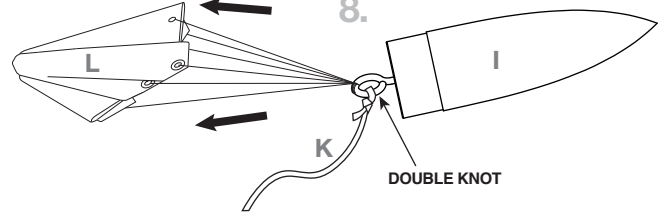
6.



7.

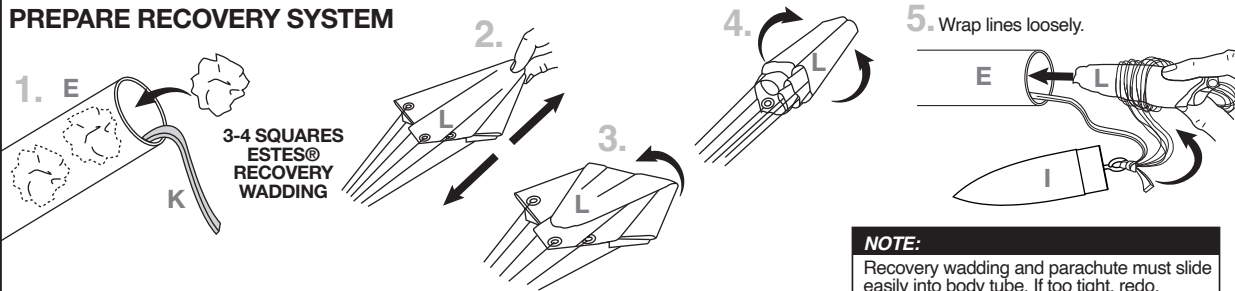


8.

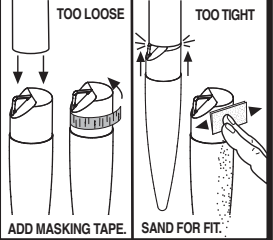


DOUBLE KNOT

PREPARE RECOVERY SYSTEM

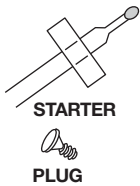


IF NOSE CONE FIT IS...



PREPARE ENGINE

USE 1 EACH



1.

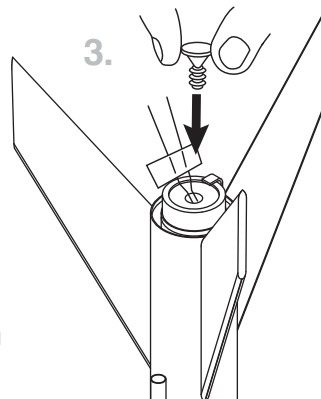


ENGINE

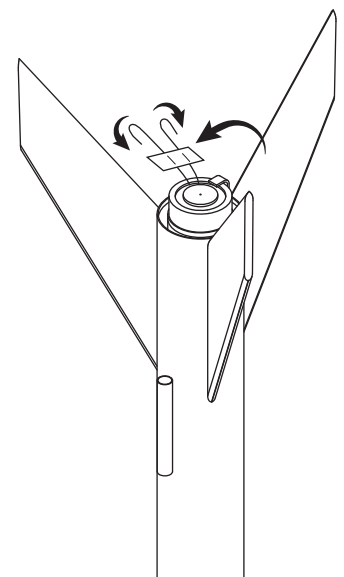
2.



3.



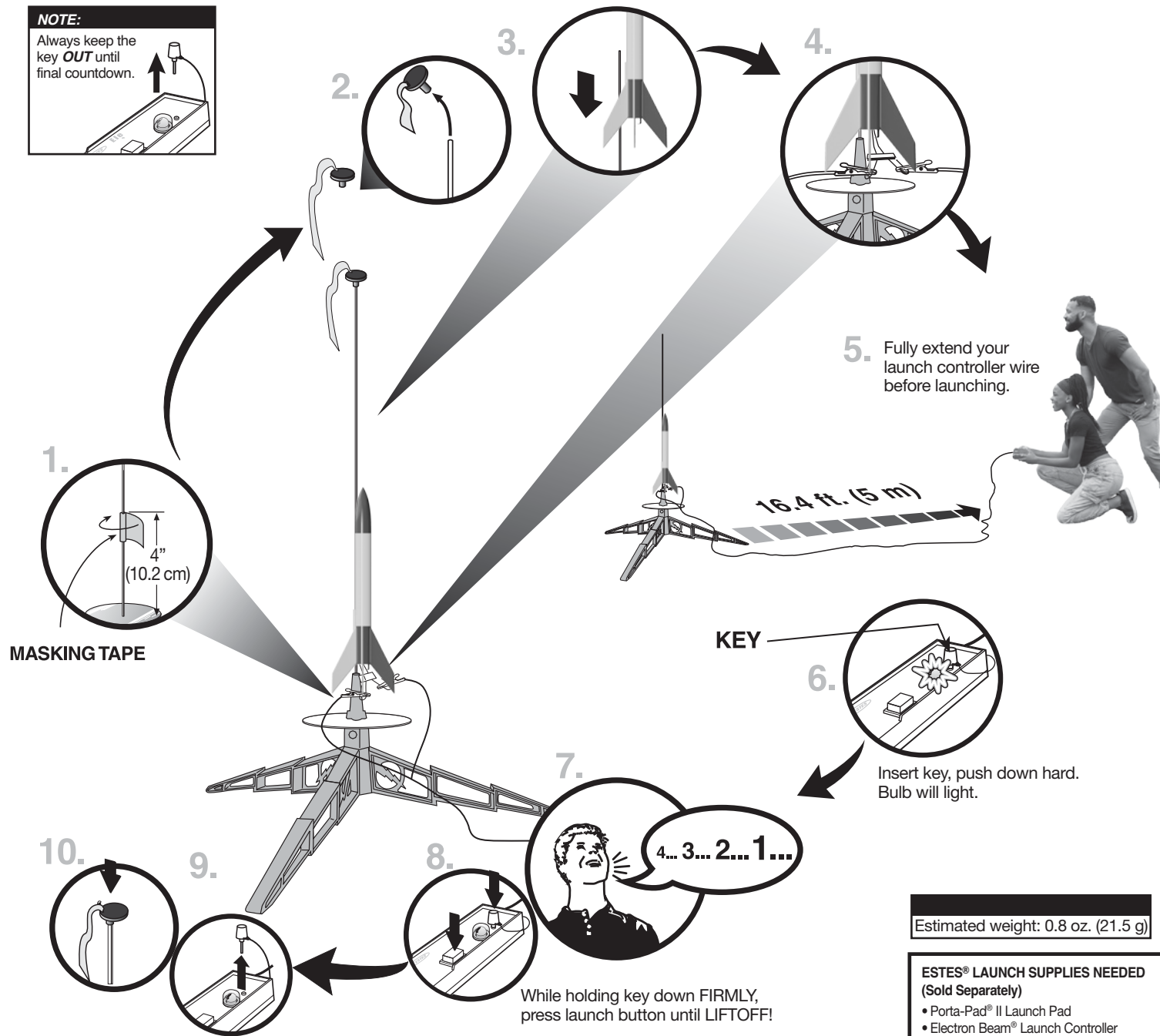
TIP MUST TOUCH PROPELLANT



⚠ 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.

COUNTDOWN AND LAUNCH

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



Estimated weight: 0.8 oz. (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: A8-3, B6-4, C6-5, C6-7

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.

