



EstesRockets.com

BELLATRIX

1113/1866

AGES
10+



Skill Level

INTERMEDIATE

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. Refer to your glue manufacturer's dry times during build.

DESIGNER RECOMMENDATIONS:

- Wall line count 2-3.
- Infill density 7-10%.
- Position all parts with the top pointed up.
- For the Bellatrix and Rigel rockets, turn on supports from print bed only
- Filament Type: PLA, PETG, or ABS

SUPPLIES



YELLOW GLUE



PENCIL



HOBBY KNIFE



RULER

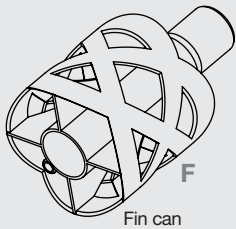


FINE SANDPAPER

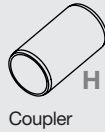


CA GLUE

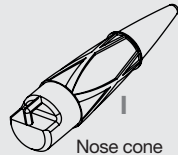
Parts to be 3D printed



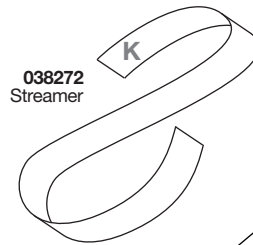
Fin can



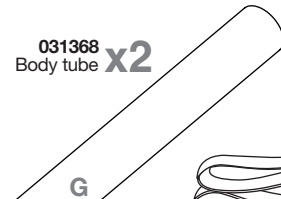
Coupler



Nose cone



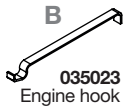
038272
Streamer



031368
Body tube x2



038367
Shock cord



035023
Engine hook



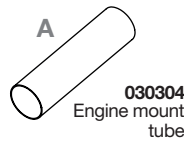
030222-4
Yellow engine block



030162-2
Green ring x2



030167
Mylar ring



030304
Engine mount tube

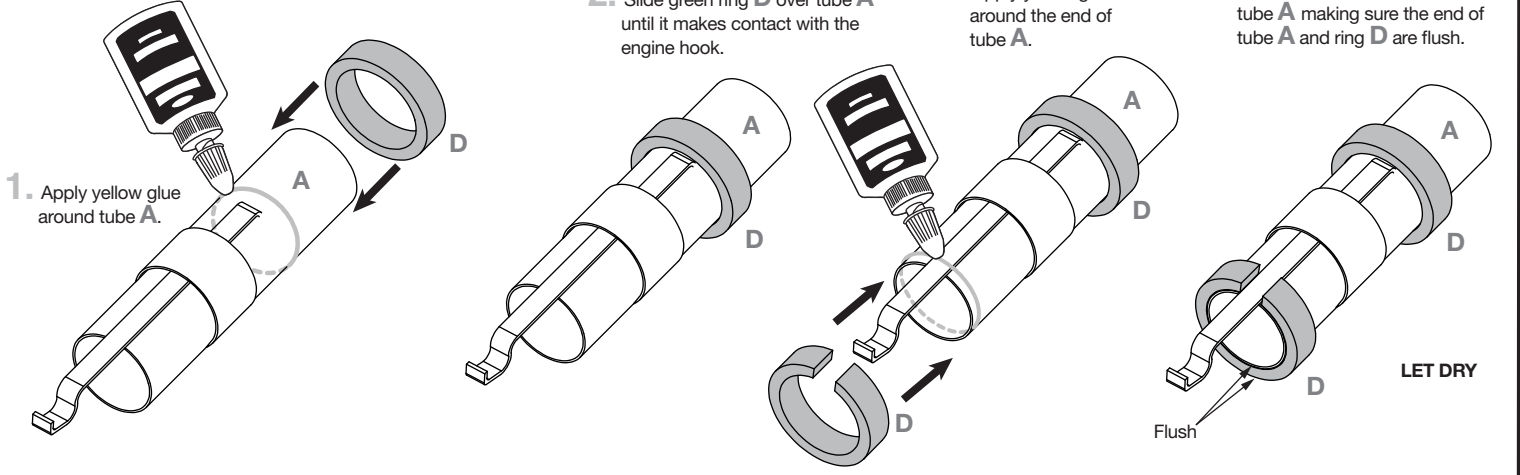


090001-1866
Self stick decals

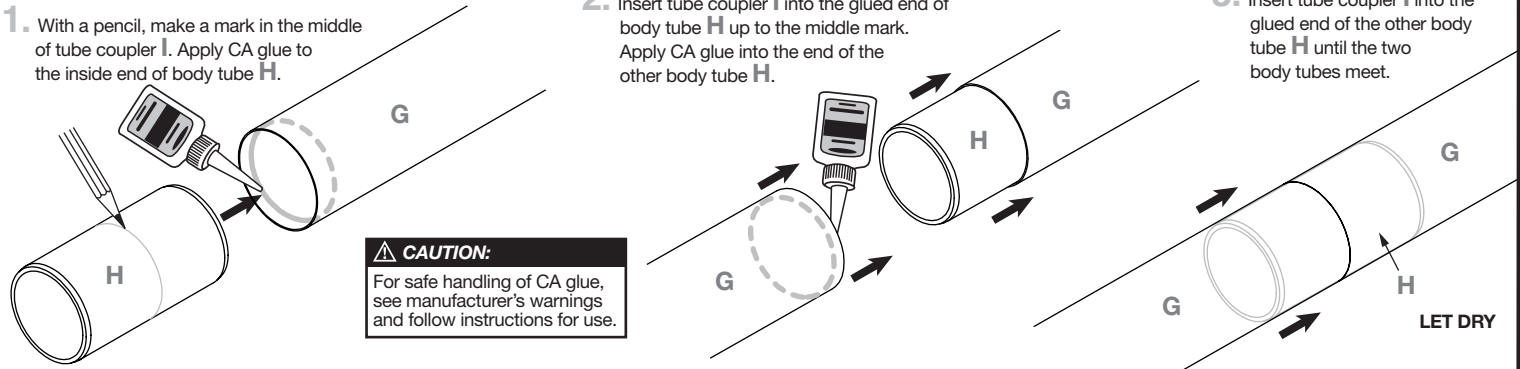
ASSEMBLE ENGINE MOUNT

1. Cut an $\frac{1}{8}$ in. slot into **A** $\frac{1}{2}$ in. from the end.
2. Insert engine hook **B** into the slot in **A**.
3. Apply yellow glue around tube **A**.
4. Slide mylar ring **C** over tube **A** and engine hook **B**.
5. Apply yellow glue into the end of tube **A**.
6. Insert engine block **E** into tube **A** until it makes contact with the engine hook.
7. Cut a notch $\frac{1}{4}$ in. wide in ONE of the green rings **D**.

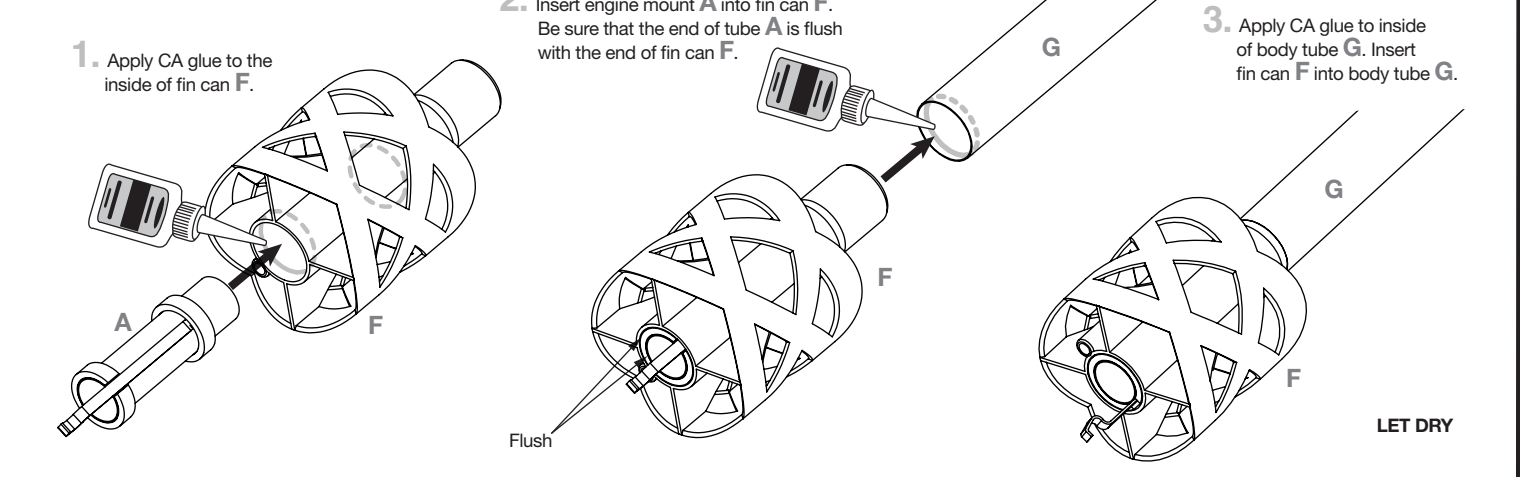
ASSEMBLE ENGINE MOUNT (CONTINUED)



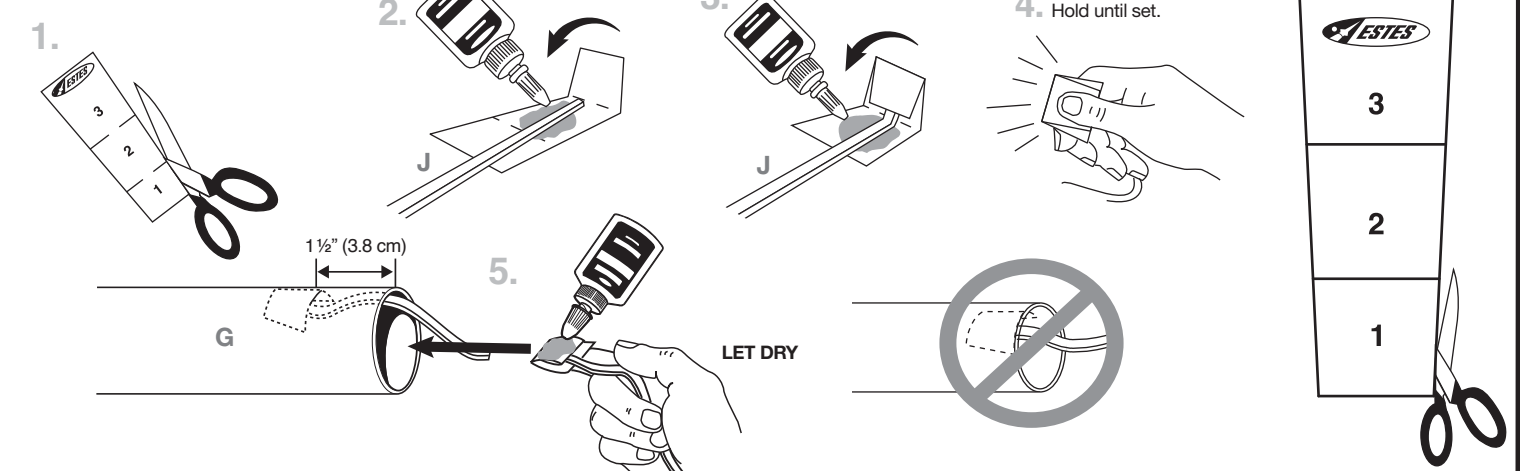
ASSEMBLE BODY TUBES



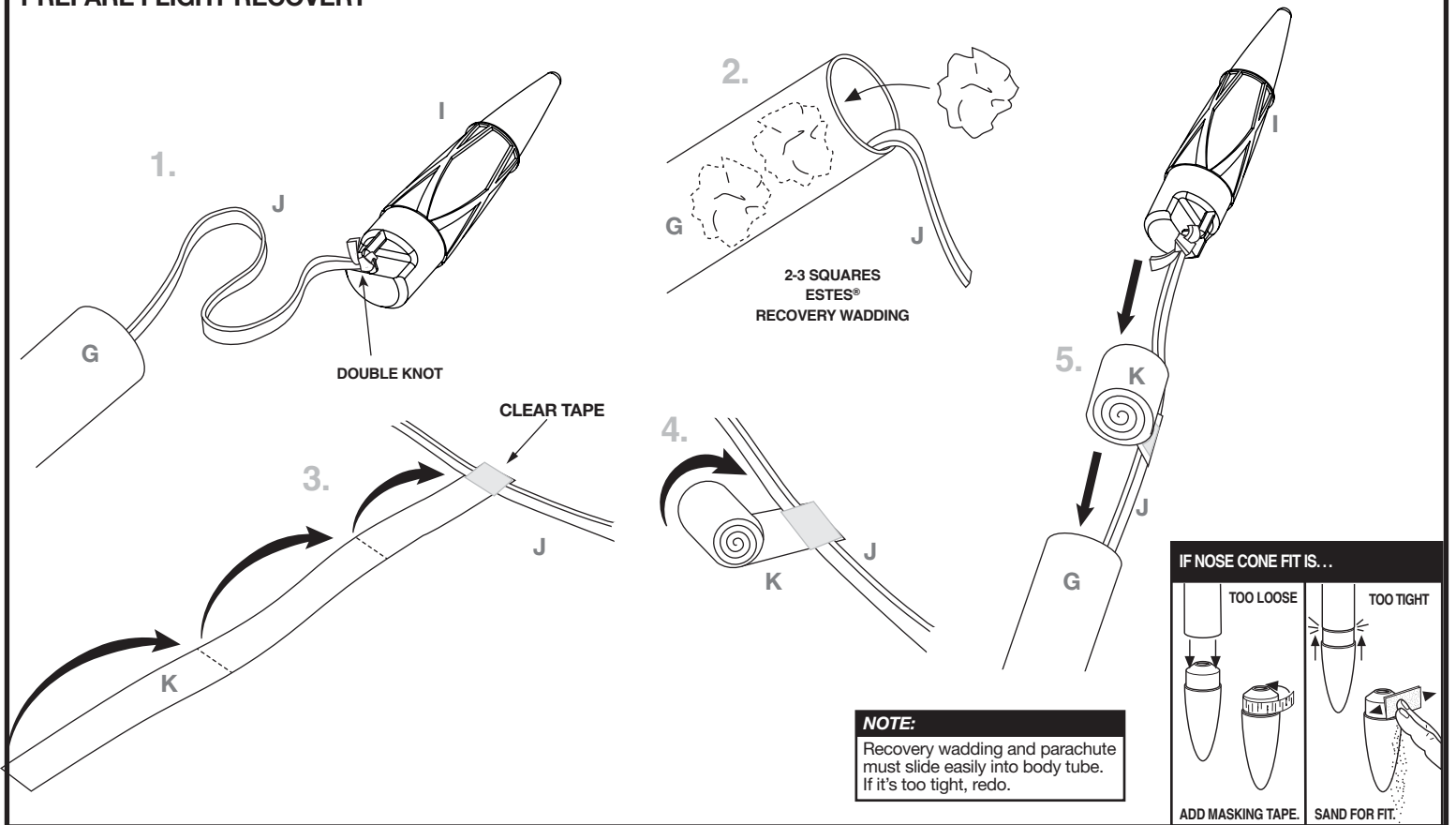
INSTALL ENGINE MOUNT



INSTALL SHOCK CORD

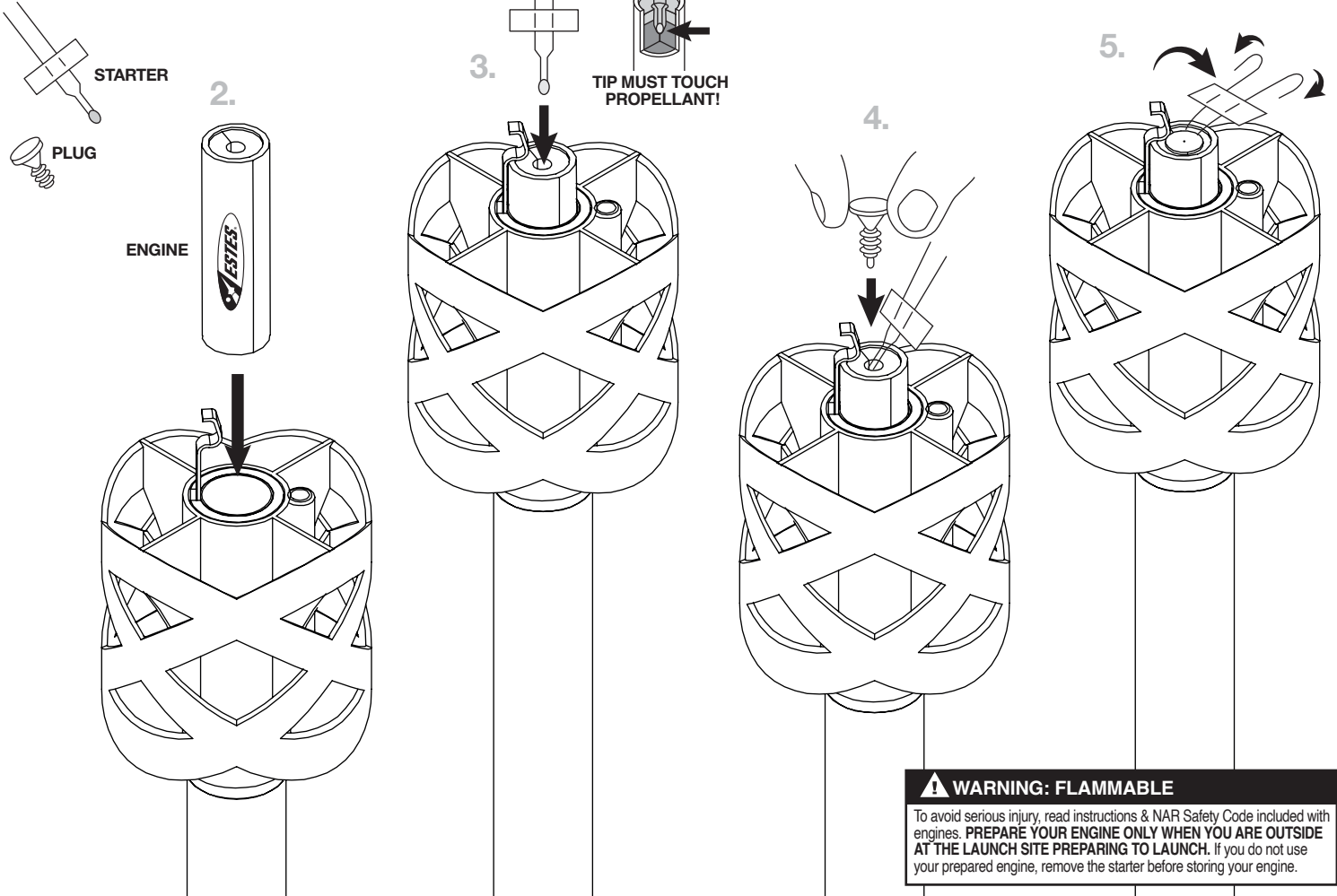


PREPARE FLIGHT RECOVERY



PREPARE ENGINE

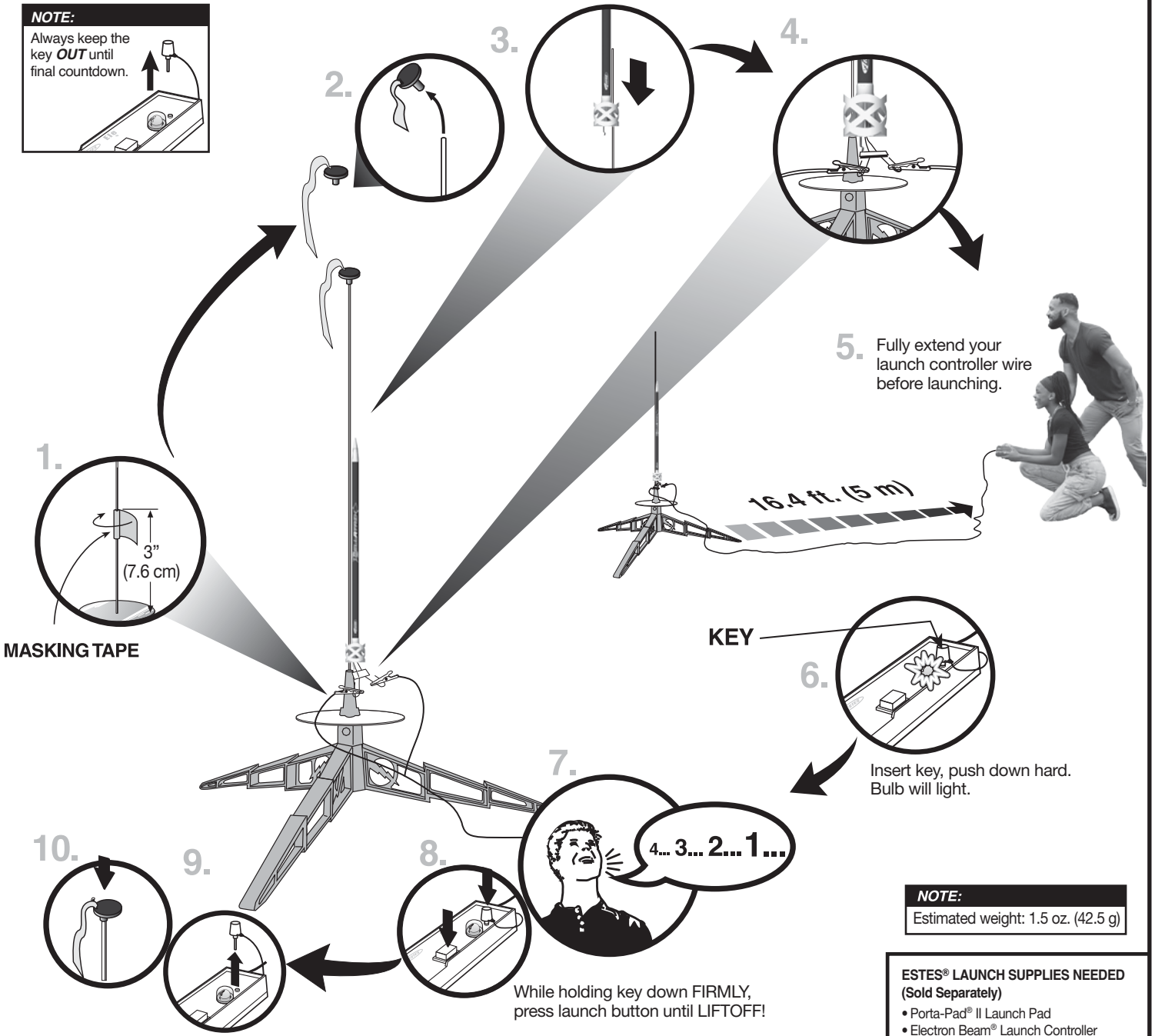
1. Use one each.



COUNTDOWN AND LAUNCH

NOTE:

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



5. Fully extend your launch controller wire before launching.

KEY

Insert key, push down hard. Bulb will light.

NOTE:

Estimated weight: 1.5 oz. (42.5 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: 1/2A3-2T, A3-4T, 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 (1000 ft. [305 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.

