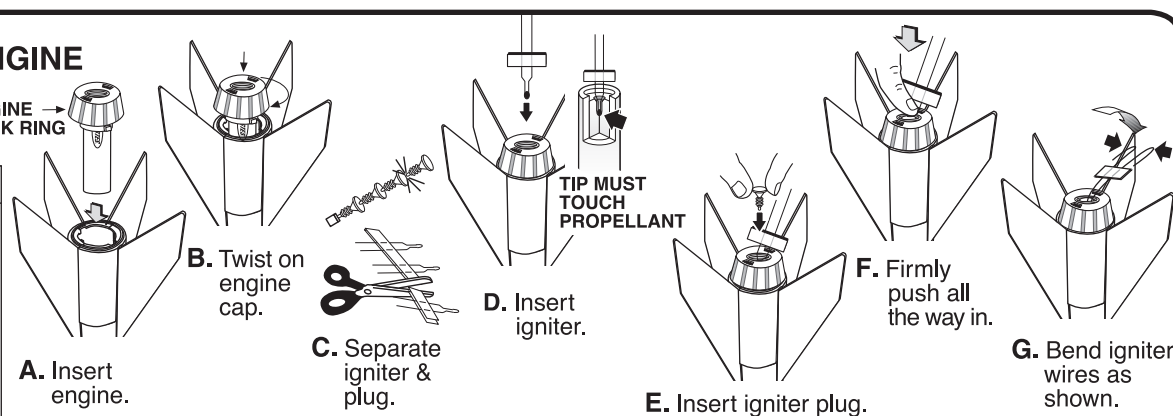


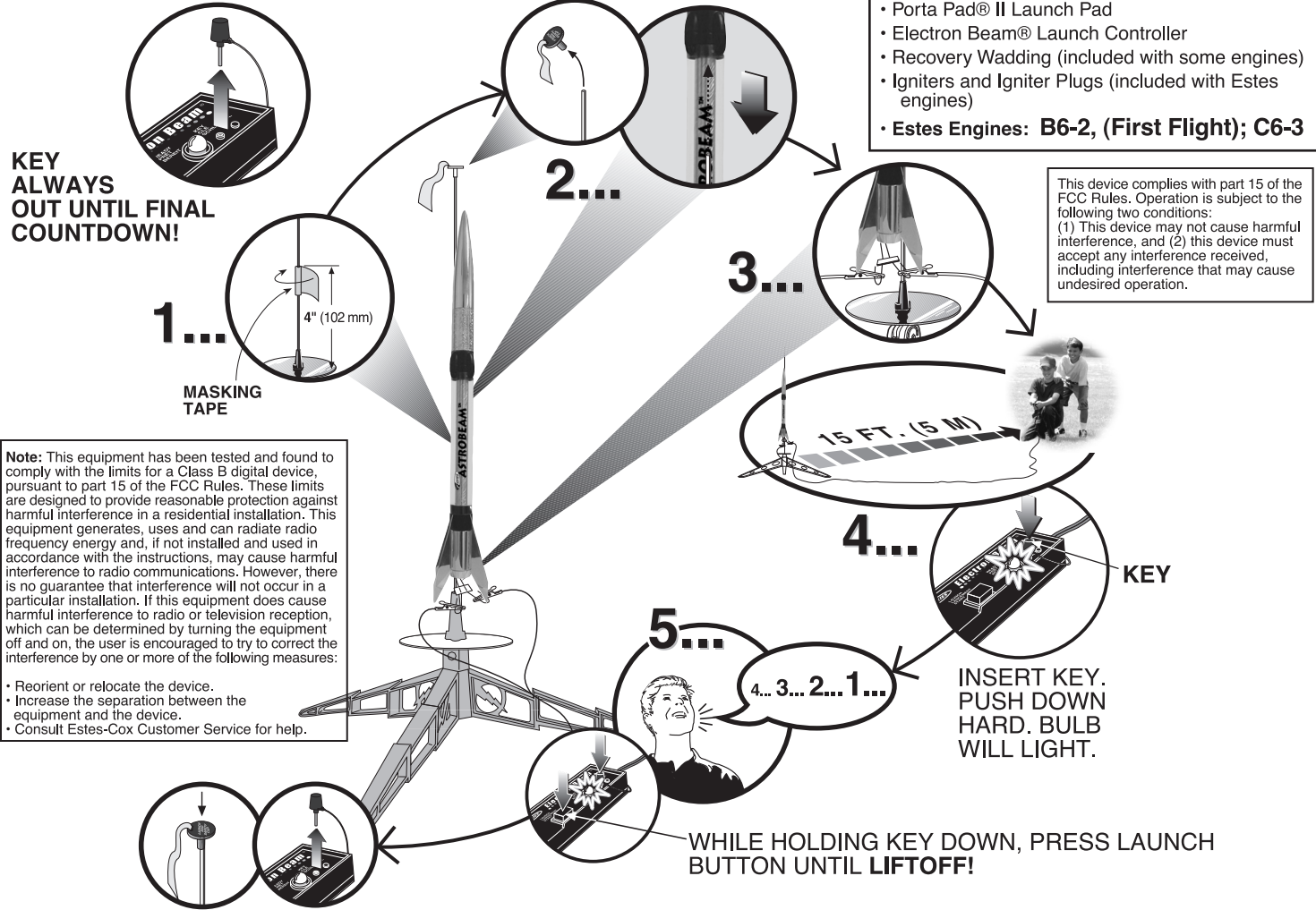
# 10. PREPARE ENGINE

## WARNING: FLAMMABLE

To avoid serious injury, read instructions & NAR Safety Code included with engines. **PREPARE ENGINE ONLY WHEN YOU ARE OUTSIDE AT THE LAUNCH SITE PREPARING TO LAUNCH!** If you do not use your prepared engine, remove the igniter before storing engine.



# COUNTDOWN AND LAUNCH



- ### ESTES LAUNCH SUPPLIES
- (Sold Separately)
- Porta Pad® II Launch Pad
  - Electron Beam® Launch Controller
  - Recovery Wadding (included with some engines)
  - Igniters and Igniter Plugs (included with Estes engines)
  - Estes Engines: **B6-2, (First Flight); C6-3**

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:  
 (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the device.
- Increase the separation between the equipment and the device.
- Consult Estes-Cox Customer Service for help.

# 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 (NAR) SAFETY CODE.

### MISFIRES

TAKE THE KEY OUT OF THE CONTROLLER. WAIT ONE MINUTE BEFORE GOING NEAR THE ROCKET! Disconnect the igniter clips and remove the engine. Take the plug and igniter out of the engine. If the igniter has burned, it worked but did not ignite the engine because it was not touching the propellant inside the engine. Put a new igniter all the way inside the engine without bending it. Push the plug in place. Repeat the steps under Countdown and Launch.

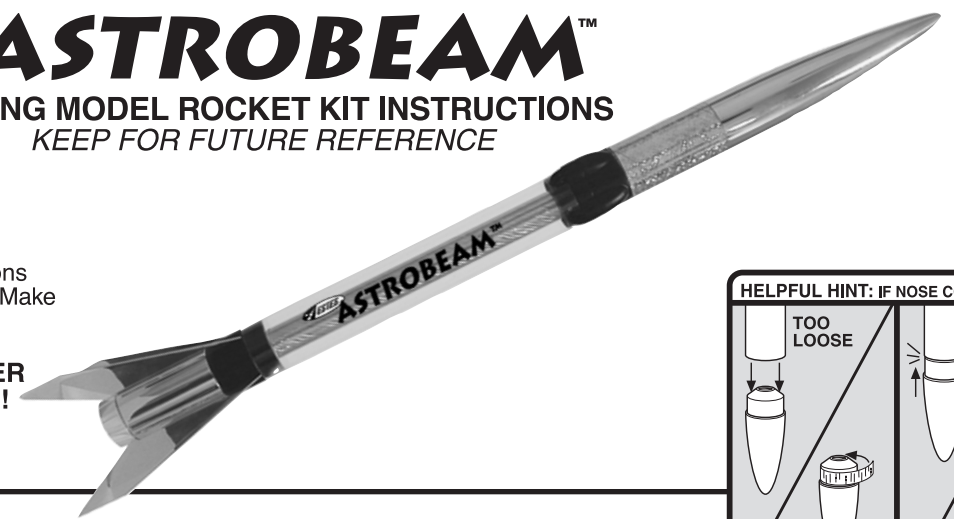
www.estesrockets.com  
 ESTES-COX CORP.  
 1295 H Street, PO Box 227  
 Penrose, CO 81240-0227  
 PRINTED IN CHINA

# ASTROBEAM™

## FLYING MODEL ROCKET KIT INSTRUCTIONS

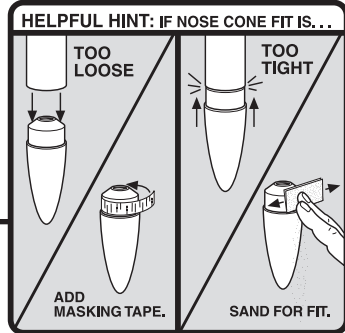
KEEP FOR FUTURE REFERENCE

#1417

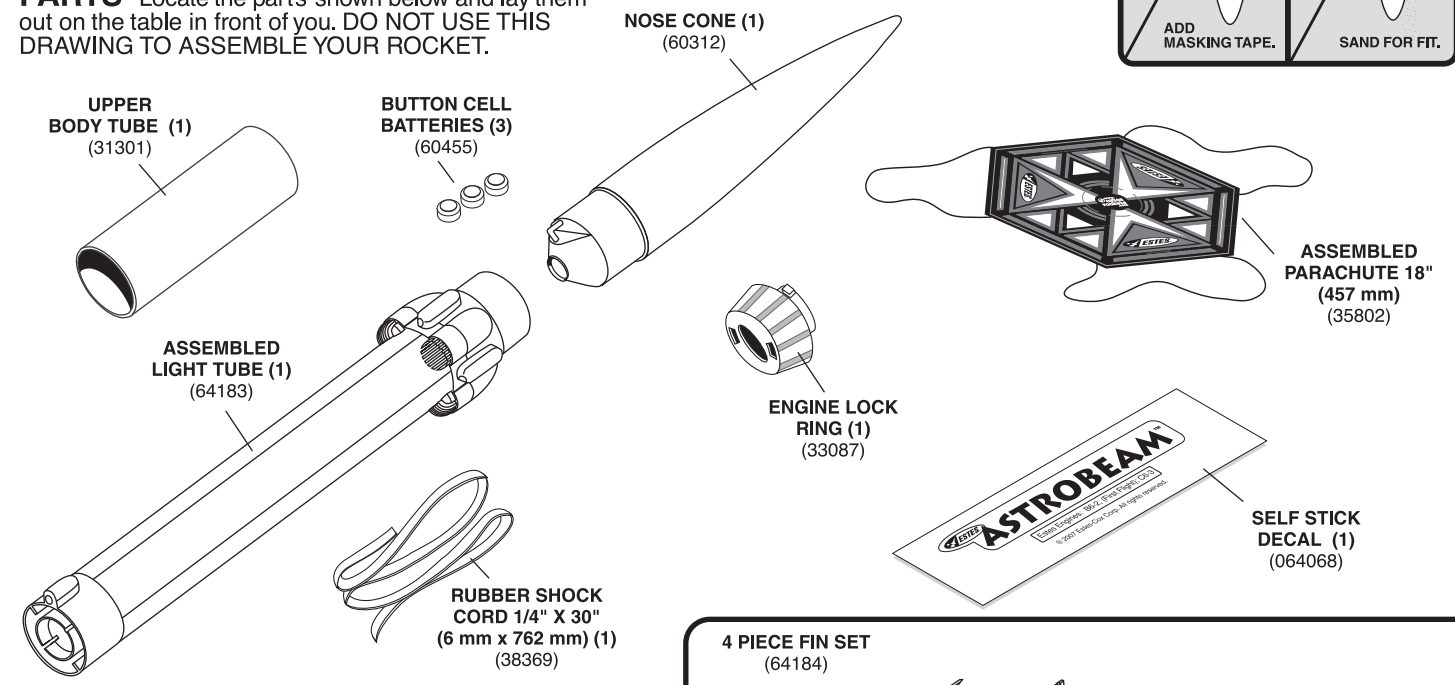


**ASSEMBLY TIP:** Read all instructions before beginning work on your model. Make sure you have all parts and supplies.

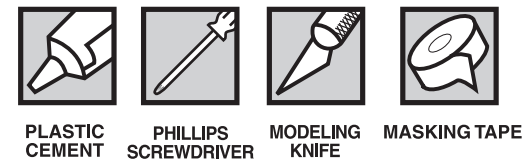
**TEST FIT ALL PARTS TOGETHER BEFORE APPLYING ANY GLUE!** If any parts don't fit properly, sand as required for precision assembly.



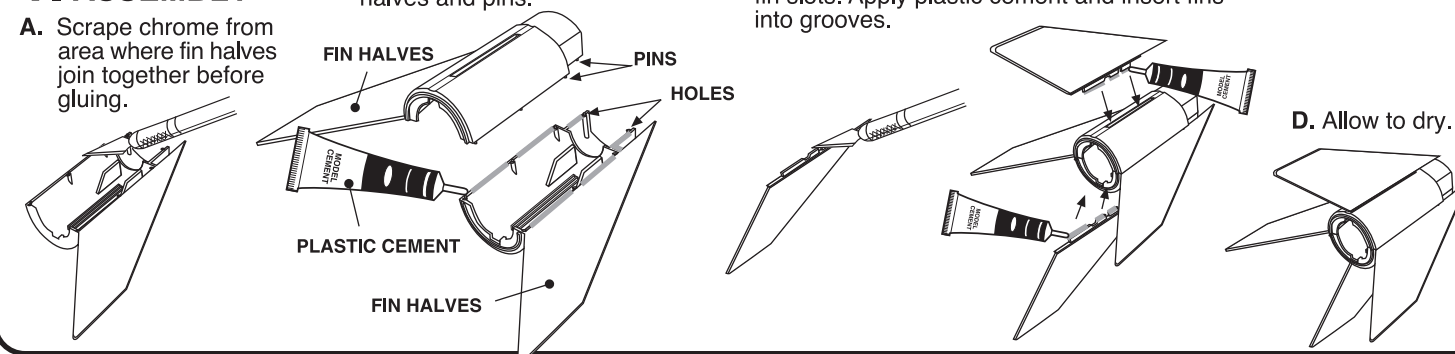
**PARTS** Locate the parts shown below and lay them out on the table in front of you. **DO NOT USE THIS DRAWING TO ASSEMBLE YOUR ROCKET.**



**SUPPLIES** In addition to the parts included in the kit you will also need:



# 1. ASSEMBLY



## 2. SHOCK CORD ATTACHMENT

**A.** Locate Lighted Body Tube (LBT) center section.

**B.** Locate the 1/4" x 30" rubber shock cord and trim one end to form an angle as shown.

**C.** Insert one end of shock cord through the molded loop.

**D.** Tie a double knot at the end of the shock cord.

Labels: TRIM, SHOCK CORD, DOUBLE KNOT

## 3. ATTACHING THE UPPER BODY TUBE

**A.** Slip the rubber shock cord through the upper body tube. Apply plastic cement to upper body tube and press onto lighted body tube. Do not get cement on shock cord.

Labels: SHOCK CORD

## 4. GLUE LBT SECTION TO FIN ASSEMBLY

**A.** Apply plastic cement to inner part of LBT coupler.

**B.** Make sure launch lugs are centered between fins.

**C.** Align fins with notches on LBT section and press fin assembly in place.

**D.** Allow cement to dry.

Labels: LAUNCH LUG, NOTCH, FIN

## 5. APPLY DECALS

**A.** Peel one self-stick decal at a time from the backing sheet and carefully apply to the model.

**B.** Refer to the instructions and package photos for placement.

**C.** You can remove any air bubble by poking a tiny hole in the label and gently rubbing the air bubble out.

Labels: ASTROBEAM

## 6. ATTACH NOSE CONE AND PARACHUTE

**A.** Clean the eye of the nose cone.

**B.** Tie shock cord to nose cone.

**C.** Form loop with parachute shroud lines.

**D.** Lay shock cord over loop about 3/4" (19 mm) from nose cone.

**E.** Pass parachute through loop.

**F.** Pull tight.

**CAUTION:** DO NOT CUT EYE OF NOSE CONE OFF!

Labels: DOUBLE KNOT, (19 mm)

## 7. HOW TO USE THE LIGHTED BODY TUBE ROCKET (LBTR).

**A.** Push the on/off button once to turn on. (There are five flash settings to choose from.)

**B.** Push the on/off button to change to the next flashing sequence.

**C.** After turning on your LBTR, the flashing display will remain active for 10 minutes, then automatically turn off.

**D.** To turn the LBTR off, push the on/off button down and hold for three seconds, until two LED's light. Then release button. When the two LED's go out, the flashing unit is turned off until your next flying session.

**E.** When the button is pressed a sixth time it automatically turns off.

**Caution:** Changes or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the LBT section.

Labels: ON/OFF BUTTON

## 8. PREPARE RECOVERY SYSTEM

**A.** Begin by inserting four pieces of wadding into the center tube of the LBTR.

**B.** Add one more piece of wadding in the upper body tube section.

**C.** Spike parachute.

**D.** Fold.

**E.** Roll.

**F.** Wrap shroud lines loosely. Insert parachute, shock cord and nose cone into body tube.

**IMPORTANT:** Wadding must be in place and slide freely for recovery system to work properly. Only Estes wadding (302274) recommended.

\* When prepping your chute after folding the chute lengthwise, fold in half. Doing so will make the chute more compact and able to fit into the upper body tube location.

## 9. TO REPLACE THE LBTR BATTERIES

**A.** Remove the 2 screws holding the light controller.

**B.** Carefully remove the upper section to reveal the batteries.

**C.** Carefully remove the batteries noting the polarity.

**D.** Place the new batteries as indicated.

**E.** Replace the upper section carefully and insert and tighten the 2 screws.

**F.** Press the button to check for proper function.

**NOTICE:** USES L1154 OR EQUIVALENT BUTTON CELLS