EstesRockets.com

LIBERTY STAR™

0691



AGES 10+

Skill Level

BEGINNER

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.*

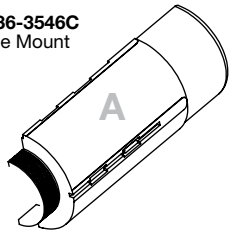
SUPPLIES



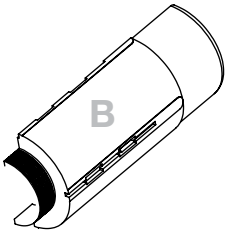
CLEAR TAPE



PLASTIC CEMENT



072936-3546C
Engine Mount



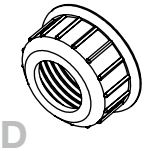
072936-3546C
Engine Mount

030397
Main Body Tube

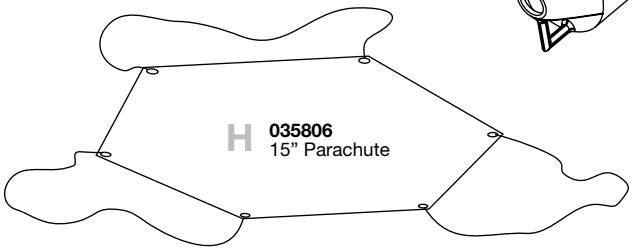
065249
Launch Lug

085902
Body Tube Assembly

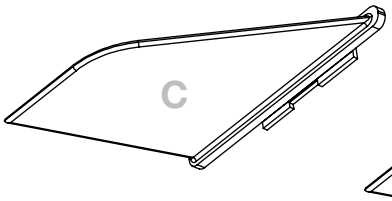
072305-3546C
Nose Cone



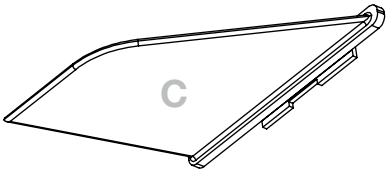
072938-3546C
Engine Retainer Cap



035806
15" Parachute



072939-286C
Fin



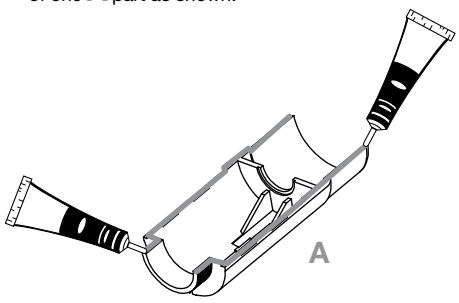
072939-WHT X3
Fin

090001-0691
Self-Stick Decal Sheet

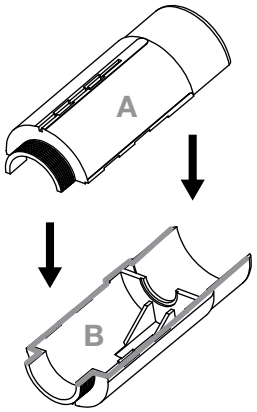


ASSEMBLE FIN CAN

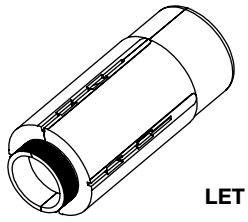
1. Apply plastic cement to the edges of one **A** part as shown.



2. Join both **A** parts together.

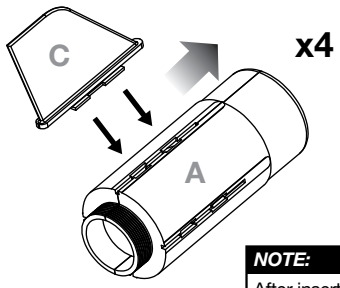


3. Hold together until cement starts to set.



LET DRY

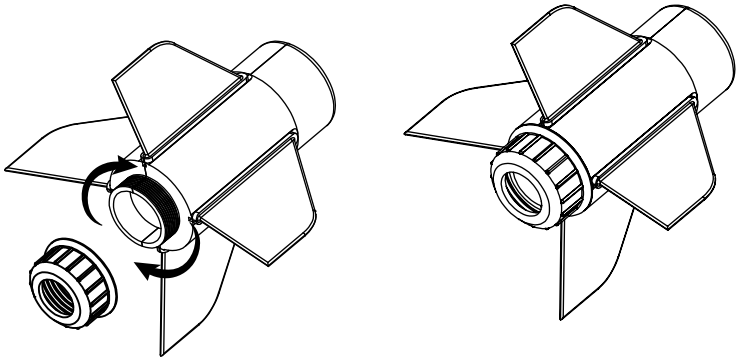
4. Insert the fins into the slots and slide upward towards the top of the fin can. Repeat for all fins.



NOTE:

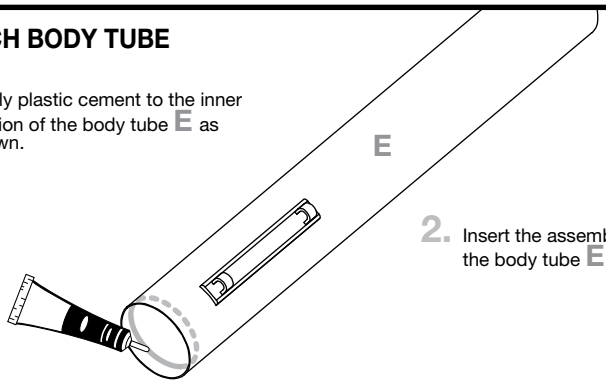
After inserting fin into slots, push upward until the bottom of the fin edge is flush with bottom of fin can.

5. Screw the Retainer Cap onto the fin can as shown.

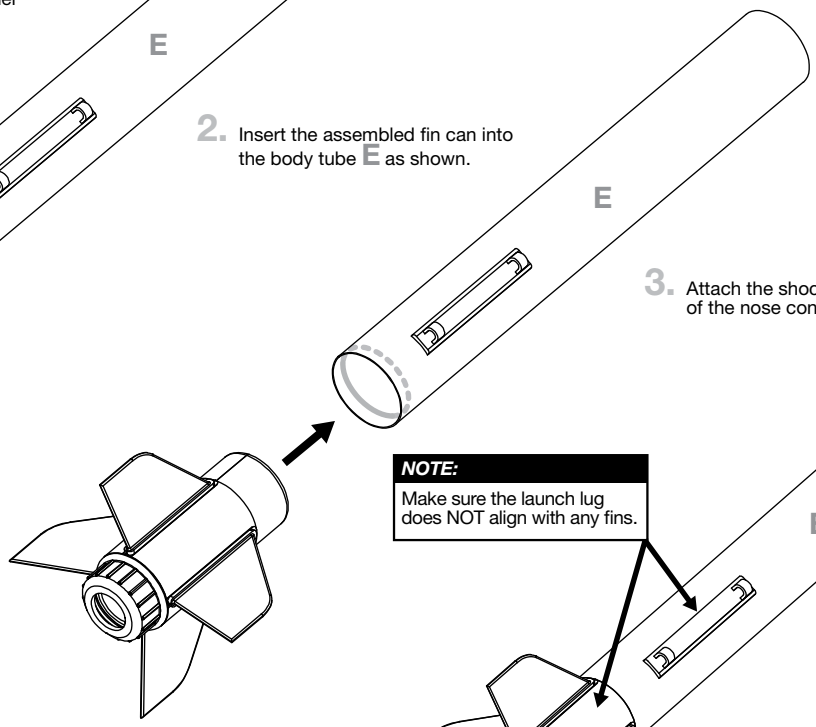


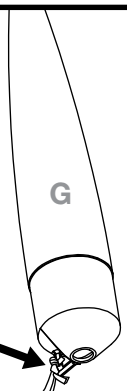
ATTACH BODY TUBE

1. Apply plastic cement to the inner portion of the body tube **E** as shown.



2. Insert the assembled fin can into the body tube **E** as shown.





DOUBLE KNOT

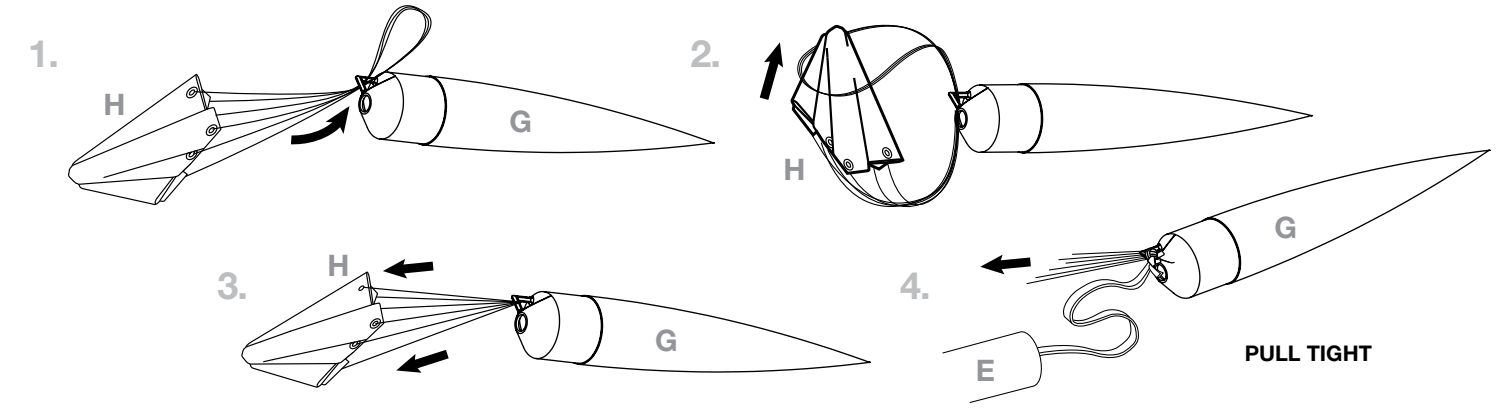
3. Attach the shock cord to eyelet of the nose cone and tie double knot.

NOTE:

Make sure the launch lug does NOT align with any fins.

LET DRY

PREPARE RECOVERY SYSTEM



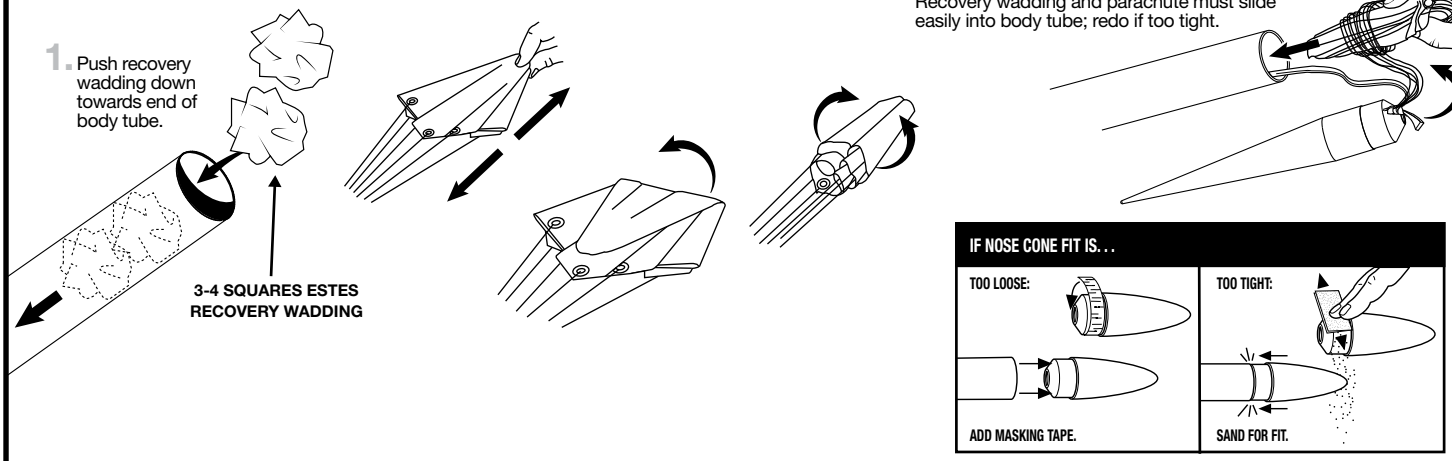
PREPARE FLIGHT RECOVERY

1. Push recovery wadding down towards end of body tube.

3-4 SQUARES ESTES RECOVERY WADDING

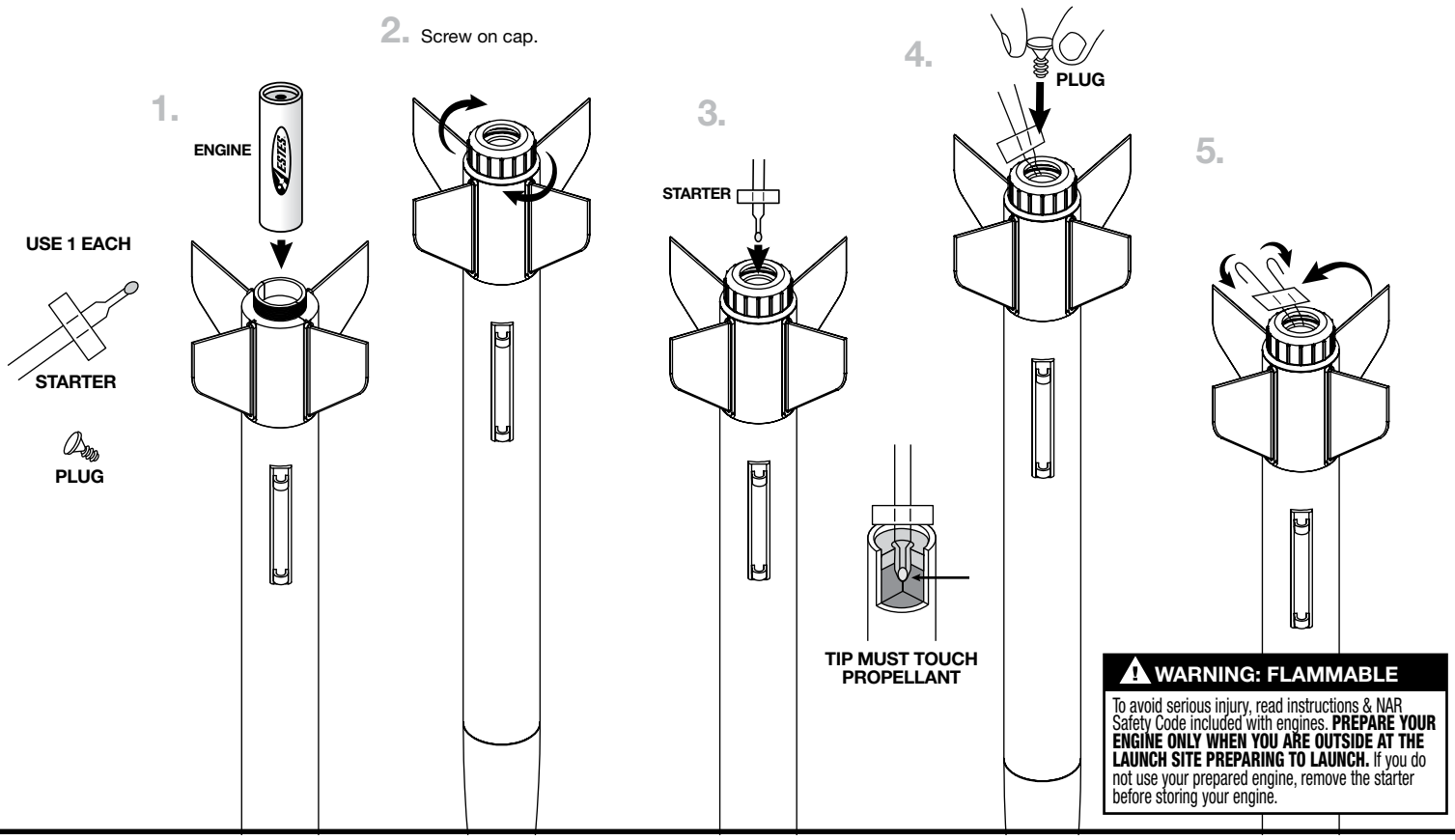
2. Fold parachute as shown.

3. Wrap lines loosely and insert into body tube. Recovery wadding and parachute must slide easily into body tube; redo if too tight.



IF NOSE CONE FIT IS...	
TOO LOOSE: ADD MASKING TAPE.	TOO TIGHT: SAND FOR FIT.

PREPARE ENGINE



⚠ WARNING: FLAMMABLE

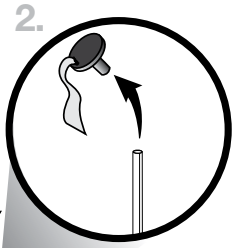
To avoid serious injury, read instructions & NAR Safety Code included with engines. **PREPARE YOUR ENGINE ONLY WHEN YOU ARE OUTSIDE AT THE LAUNCH SITE PREPARING TO LAUNCH.** If you do not use your prepared engine, remove the starter before storing your engine.

NOTE:
Key always out until final countdown!

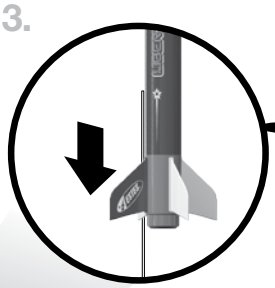


NOTE:
Estimated weight: 1.6 oz. (44.4 g)

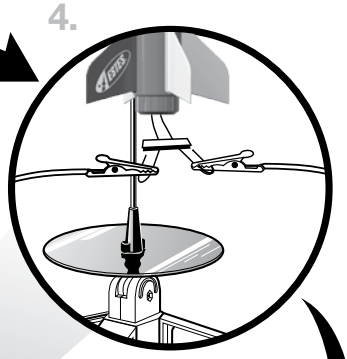
2.



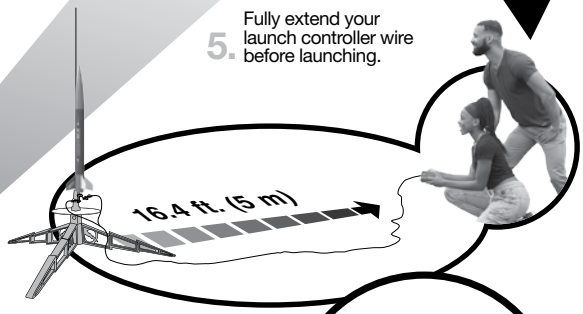
3.



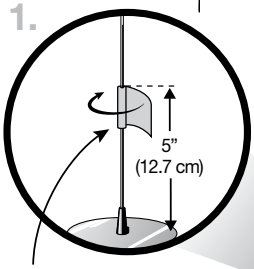
4.



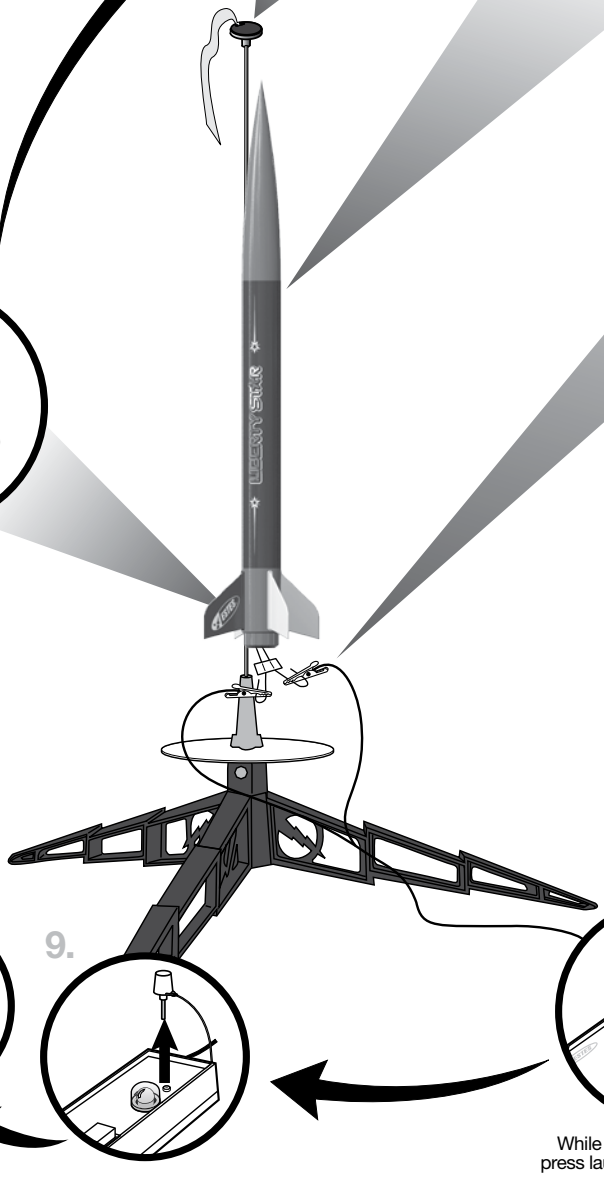
5. Fully extend your launch controller wire before launching.



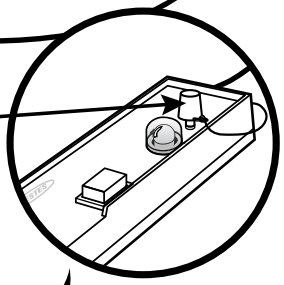
1.



MASKING TAPE



6.



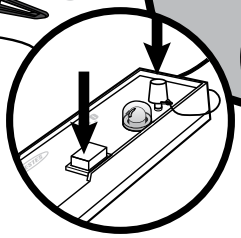
KEY

7.



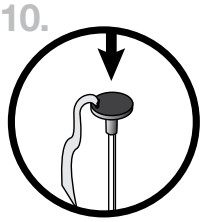
Insert key, push down hard. Bulb will light.

8.



9.

10.



While holding key down firmly, press launch button until LIFTOFF!

NOTE:
Estimated weight: 3.5 oz (99.2 g)

ESTES® LAUNCH SUPPLIES NEEDED:
(Sold Separately)

- Porta-Pad®II Launch Pad or Porta Pad® E Launch Pad
- E Beam® or Pro Series II® Launch Controller
- Recovery Wadding
- Starters (with engines)
- Plugs (with engines)
- Estes® Engines: C11-5, D12-5

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.

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