



EstesRockets.com

PRO SERIES II

SO LONG™

9722

AGES
18+



Skill Level

ADVANCED

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.

SUPPLIES



SCISSORS



PENCIL



RULER



FINE SANDPAPER



EPOXY



YELLOW GLUE



CLEAR TAPE



HOBBY KNIFE



MASKING TAPE



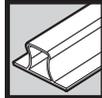
WHITE PRIMER



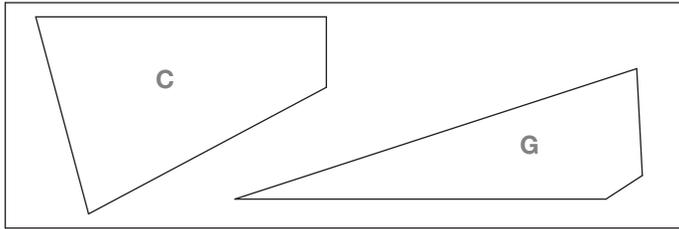
CLEAR COAT (OPTIONAL)



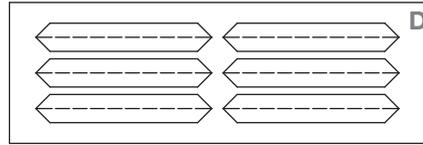
WHITE & BLACK PAINT



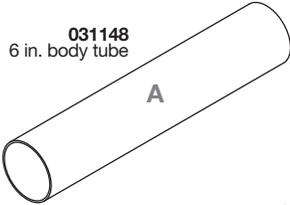
SANDING BLOCK



090051-9722 Laser cut balsa **x3**



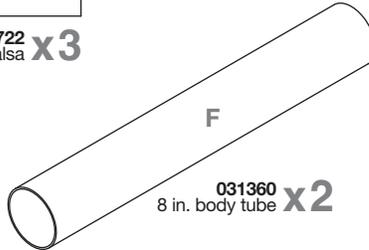
090057-9722 Printed index stock



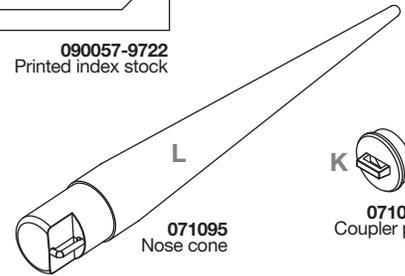
031148 6 in. body tube



031361 Green ring **x2**



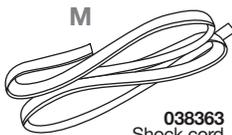
031360 8 in. body tube **x2**



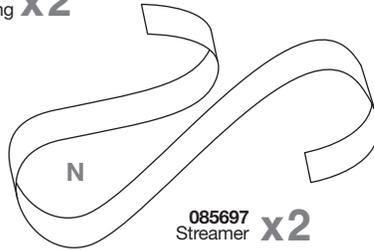
071095 Nose cone



071096 Coupler pin

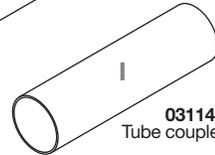
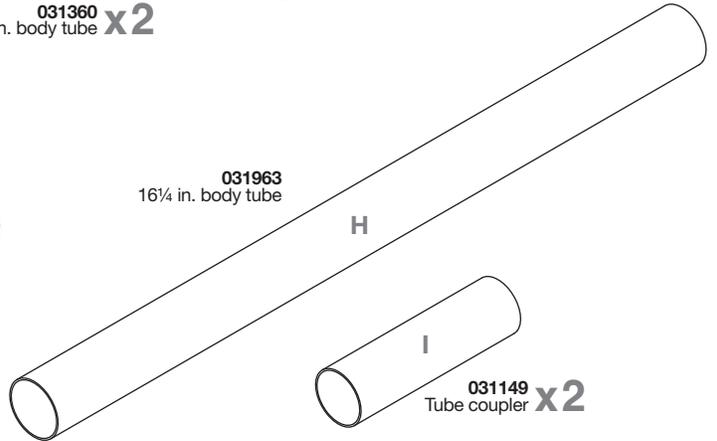


038363 Shock cord



085697 Streamer **x2**

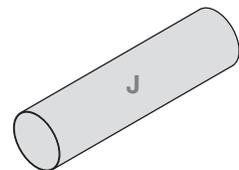
031963 16 1/4 in. body tube



031149 Tube coupler **x2**



090001B-9722 Waterslide decal



031150 29mm yellow spacer tube **x2**



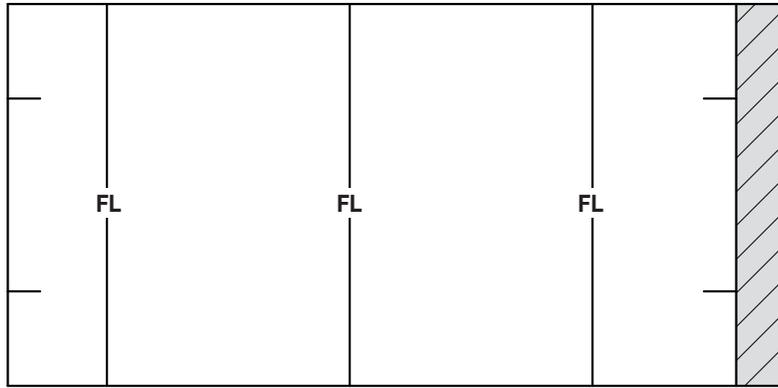
090001A-9722 Waterslide decal



038181 Launch lug **x2**

TUBE MARKING GUIDE AND SHOCK CORD MOUNT

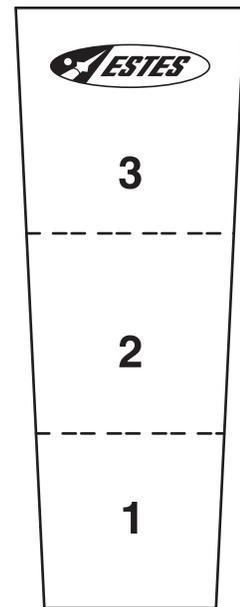
Make a copy if you want to keep instructions.



TUBE MARKING GUIDE

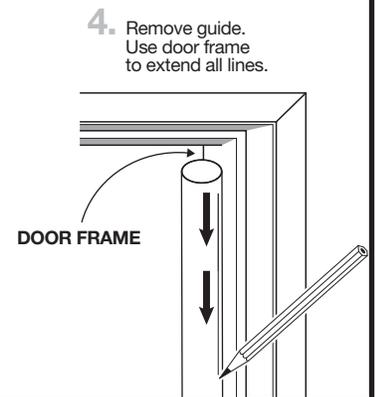
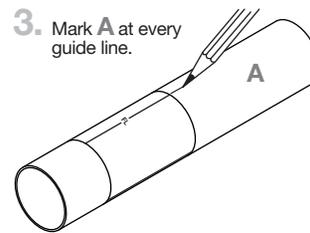
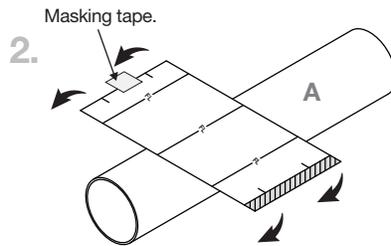
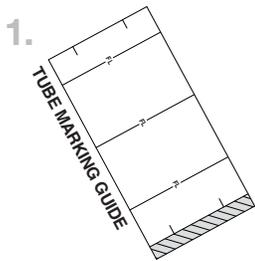
NOTE:

Make a copy if you want to keep instructions.



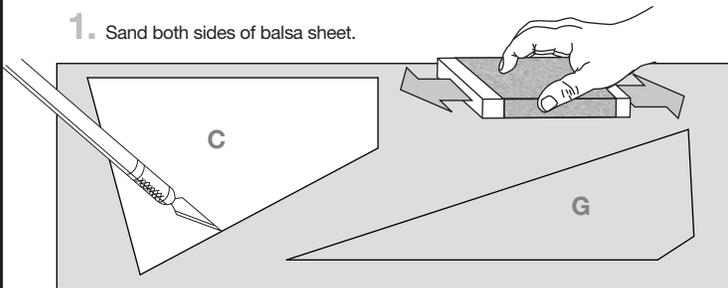
SHOCK CORD MOUNT

MARK BOOSTER BODY TUBE



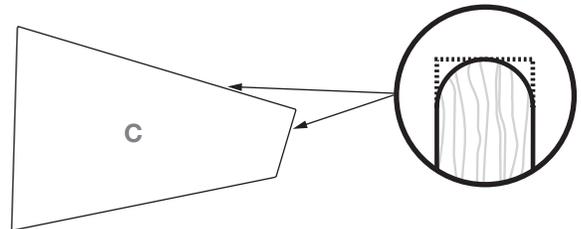
PREPARE BOOSTER FINS

1. Sand both sides of balsa sheet.

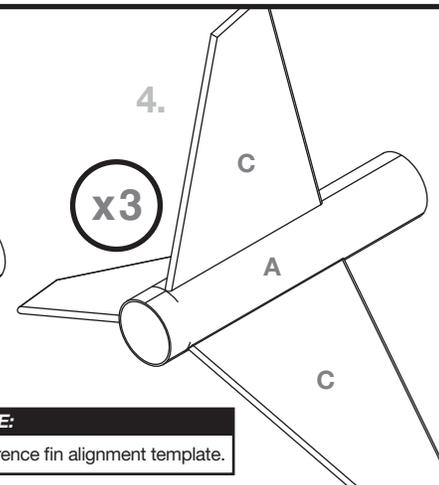
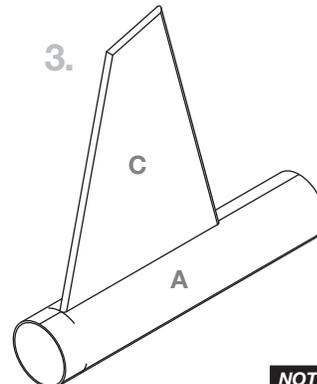
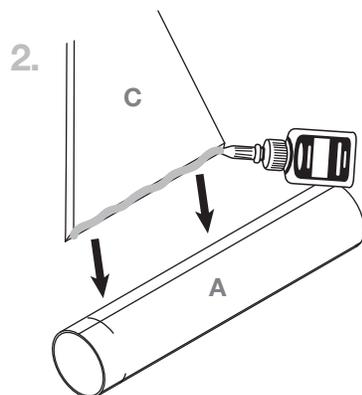
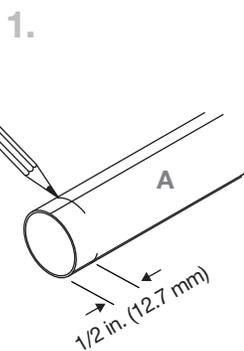


2. Carefully remove all C pieces with a hobby knife.

3. Round the leading edges of all C pieces.



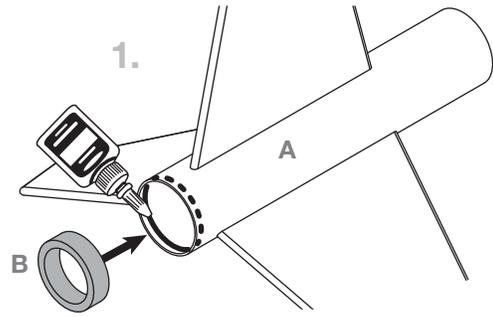
ATTACH BOOSTER FINS



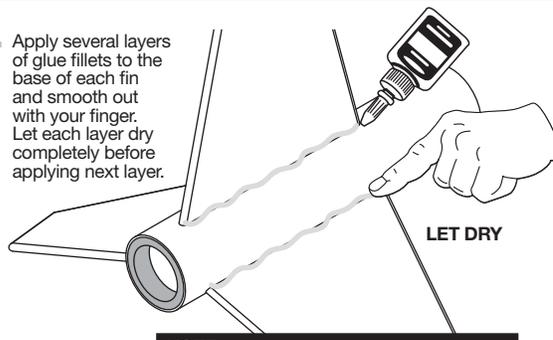
NOTE:

Reference fin alignment template.

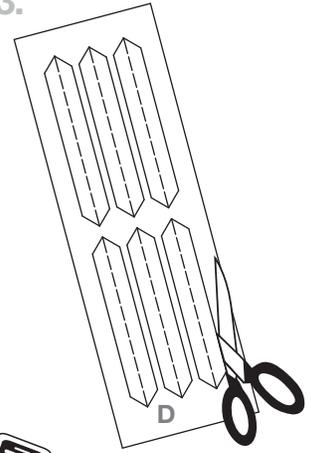
COMPLETE BOOSTER STAGE ASSEMBLY



2. Apply several layers of glue fillets to the base of each fin and smooth out with your finger. Let each layer dry completely before applying next layer.



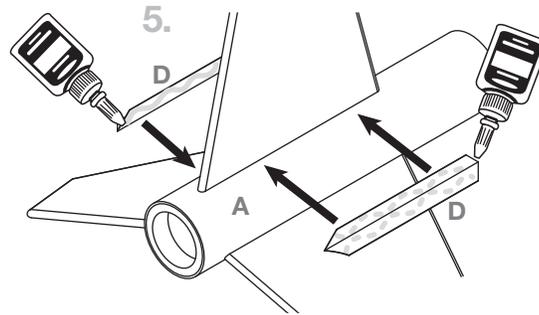
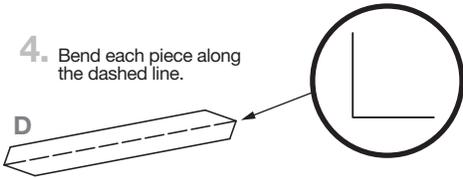
3.



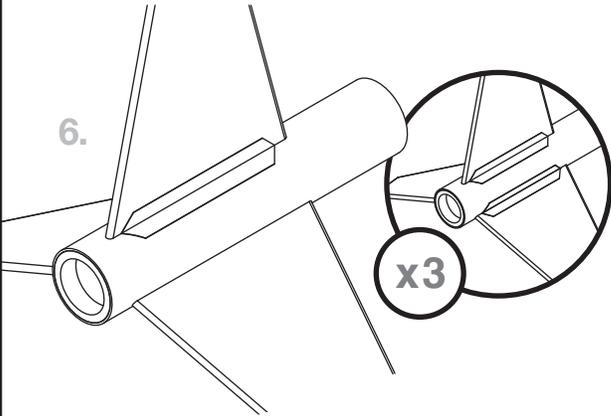
NOTE:

Be sure the ends of parts A and B are flush.

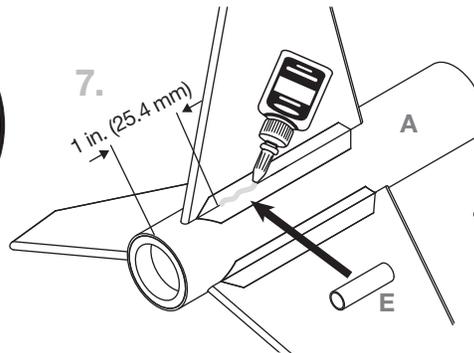
4. Bend each piece along the dashed line.



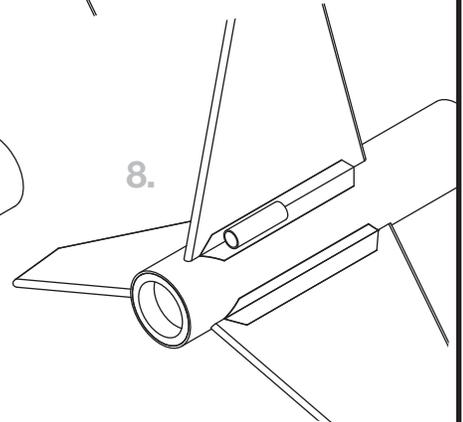
6.



7.



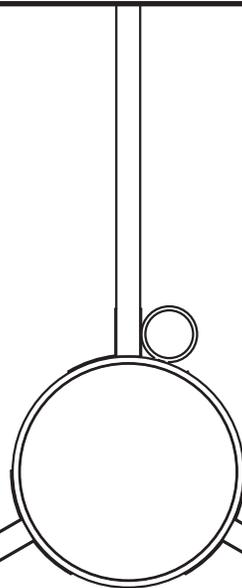
8.



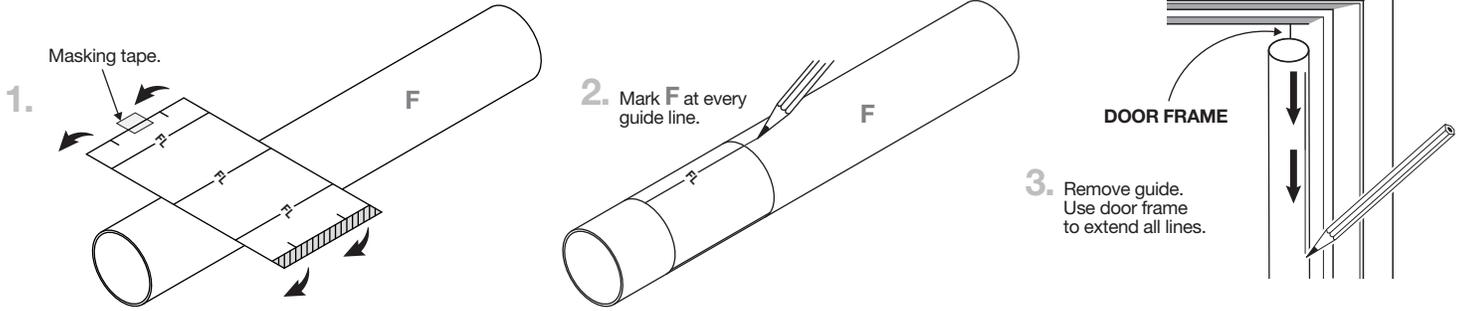
FULL SIZED FIN ALIGNMENT TEMPLATE

SAFETY NOTE:

Proper fin alignment is important for a stable and safe flight. Use the included template while constructing both the rocket fin and booster fin assembly.

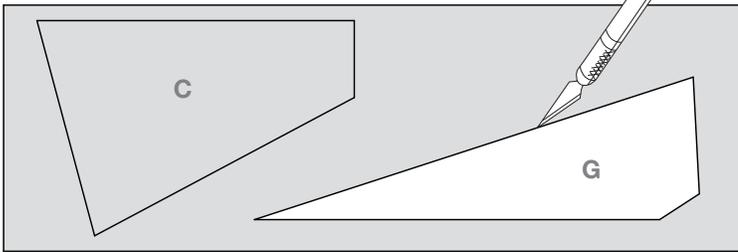


MARK UPPER STAGE BODY TUBE

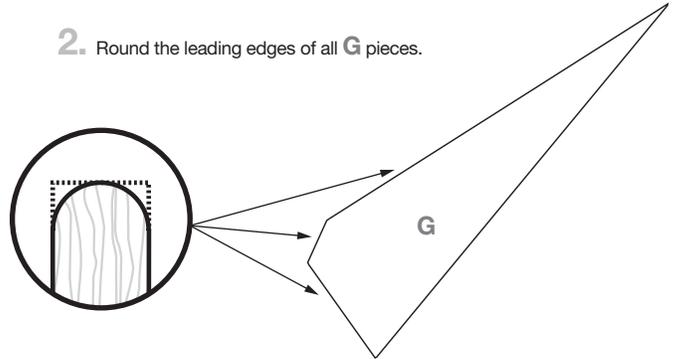


PREPARE AND ATTACH UPPER STAGE FINS

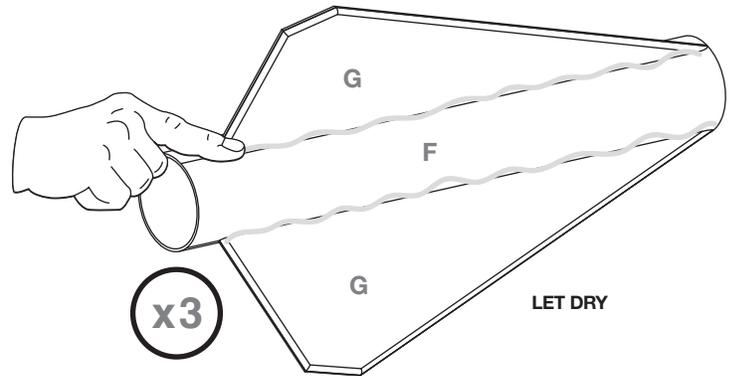
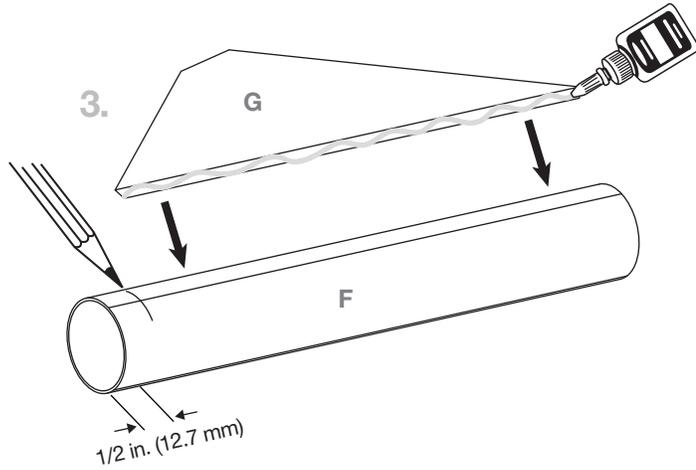
1. Carefully remove all G pieces with a hobby knife.



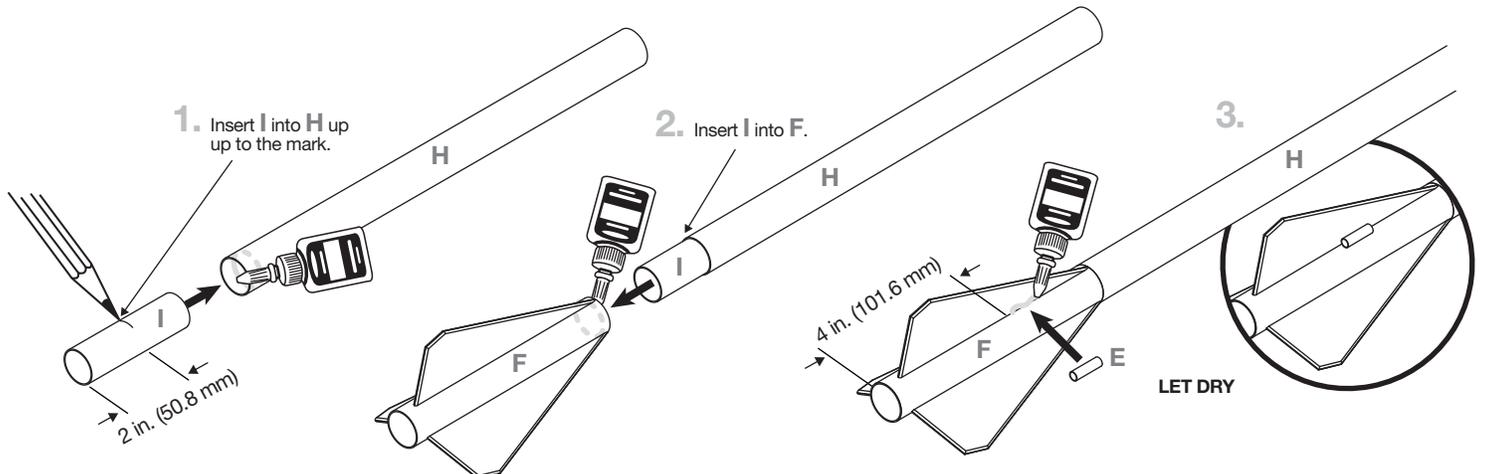
2. Round the leading edges of all G pieces.



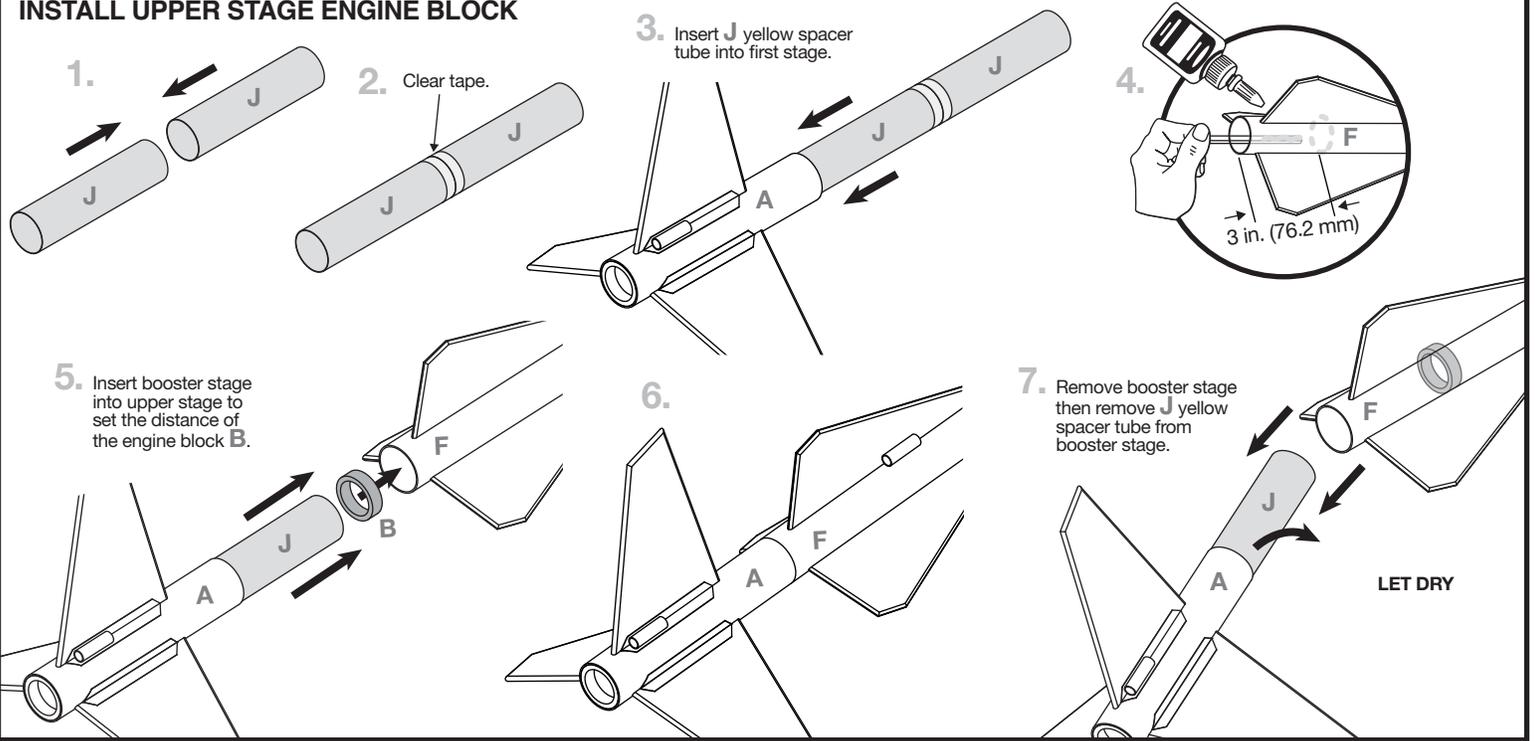
4. Apply several layers of glue fillets to the base of each fin and smooth out with your finger. Let each layer dry completely before applying next layer.



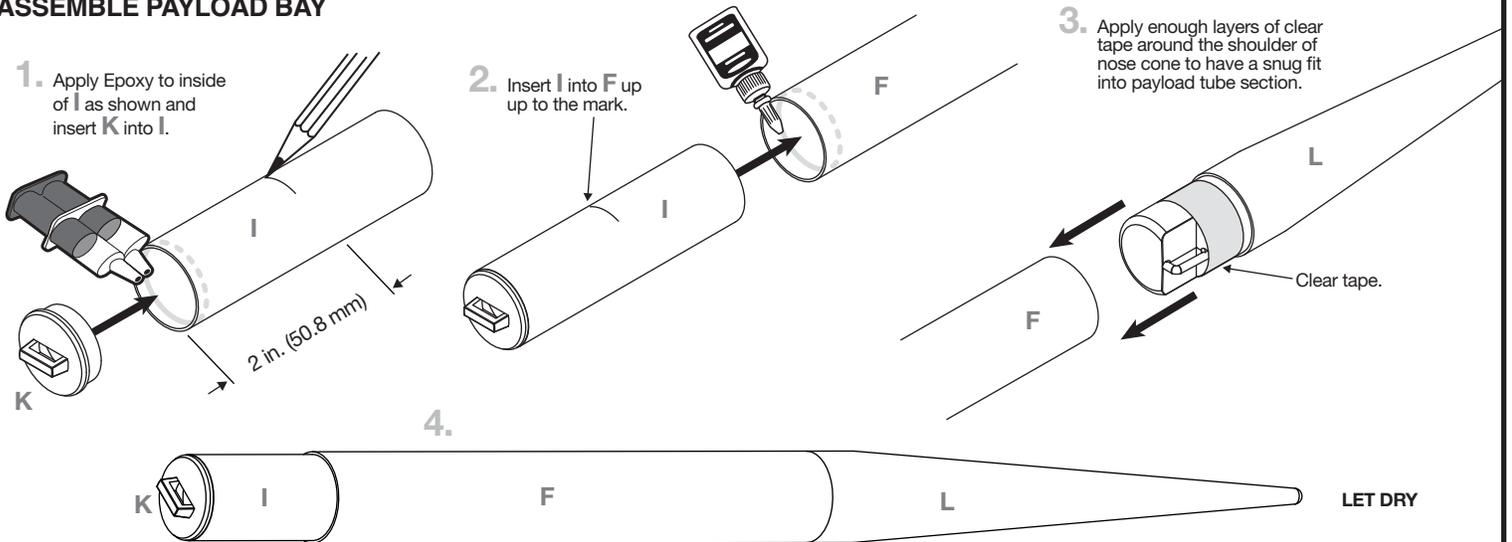
COMPLETE UPPER STAGE BODY TUBE ASSEMBLY



INSTALL UPPER STAGE ENGINE BLOCK



ASSEMBLE PAYLOAD BAY



ROCKET FINISHING

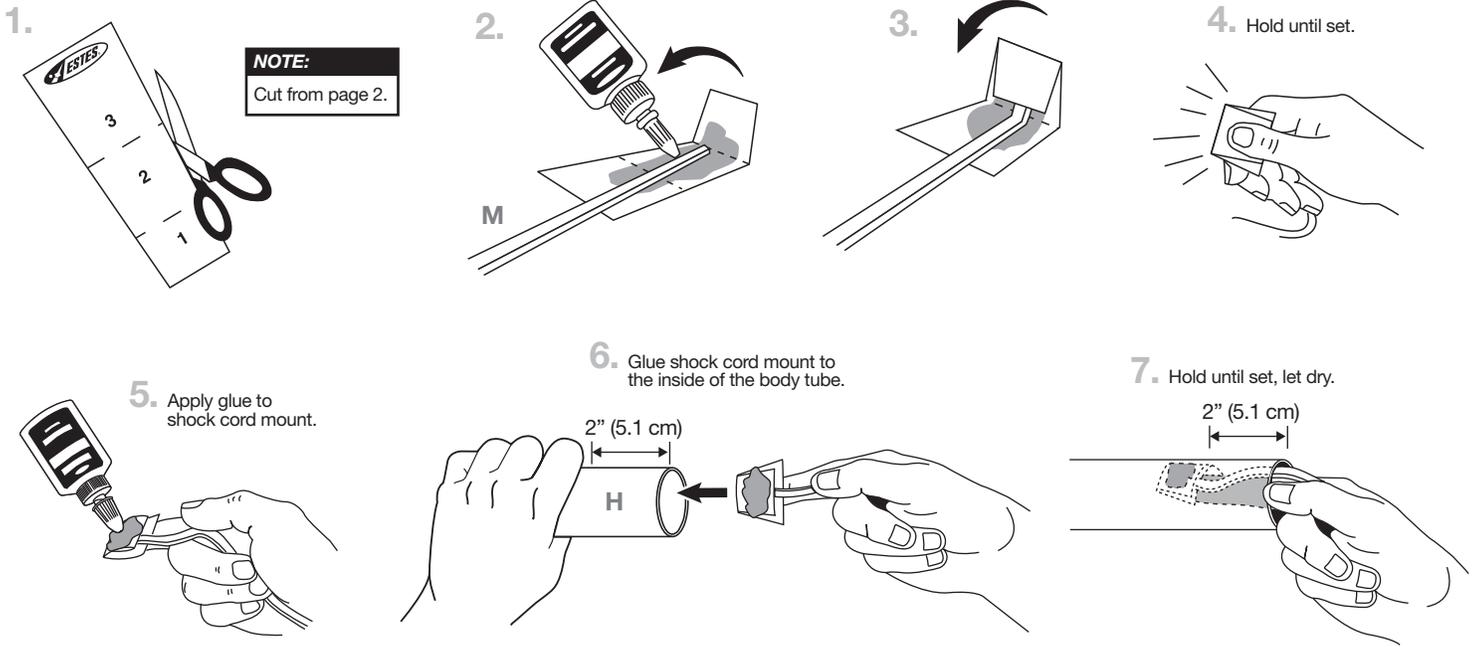
1. Spray rocket with white primer, let dry, and sand. Repeat until rocket is smooth.
2. Paint entire rocket white.
3. Mask off rocket except for one fin on the booster stage, one fin on the upper stage, and payload bay.
4. Paint fins and payload bay black. Apply decals only after paint is dry.
5. Cut decals from sheet, trimming close to edge.
6. One at a time, place in warm water until decal curls and begins to relax.
7. Remove and position on rocket, sliding decal away from backing material.
8. Blot with clean paper towel. Let set overnight.
9. OPTIONAL: Apply protective clear coat.



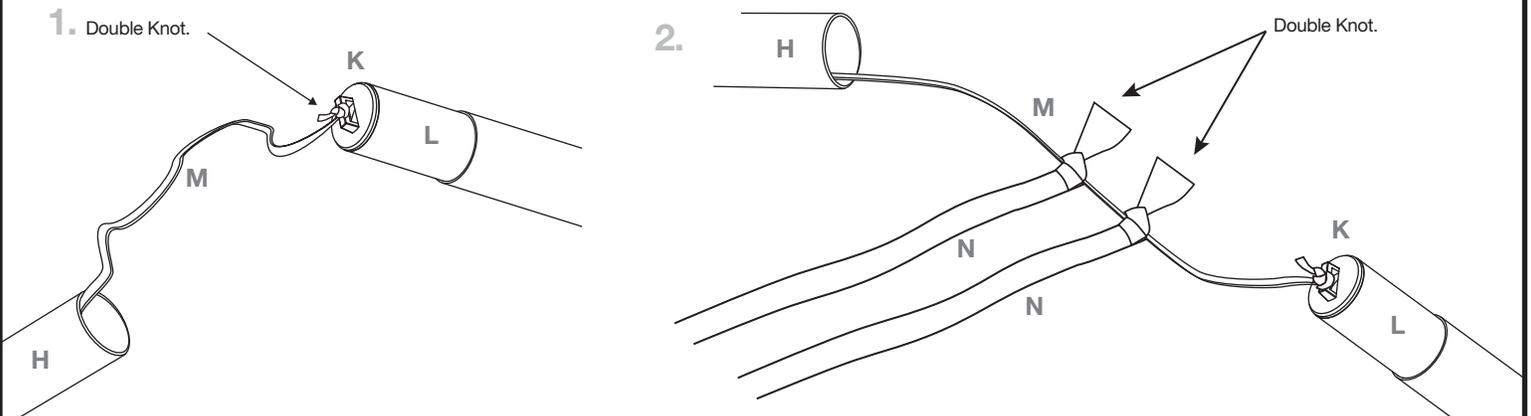
NOTE:

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

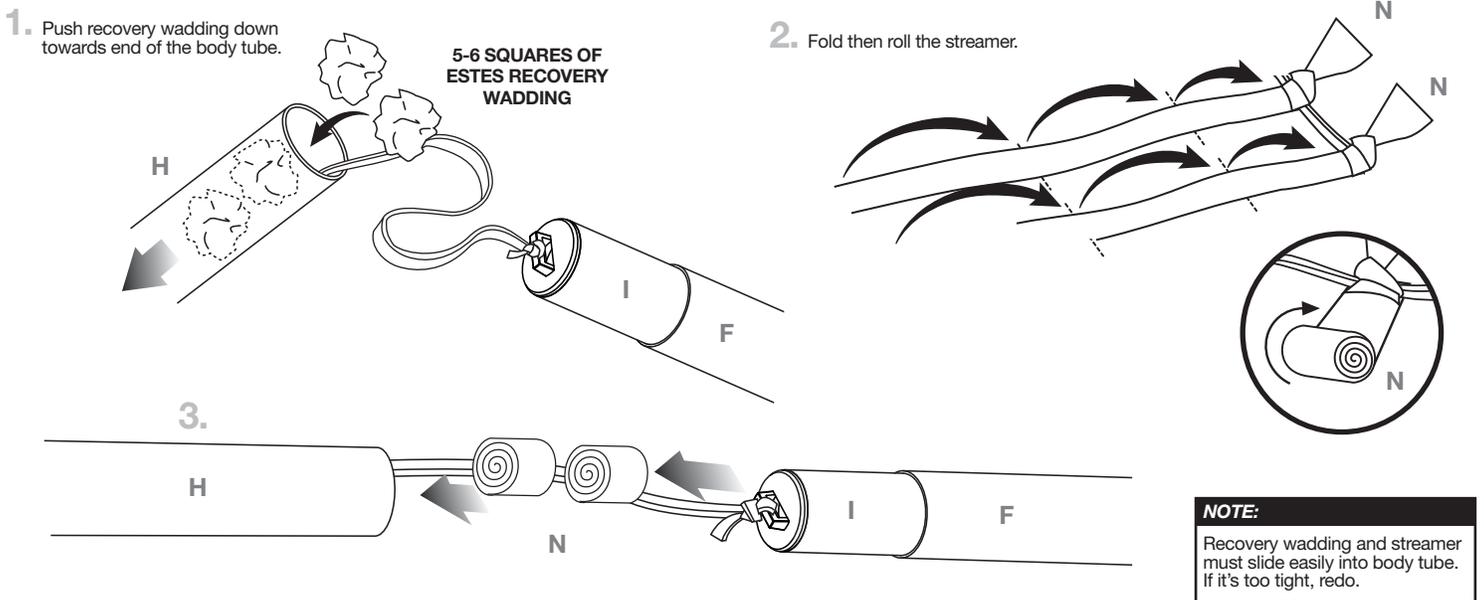
ATTACH SHOCK CORD



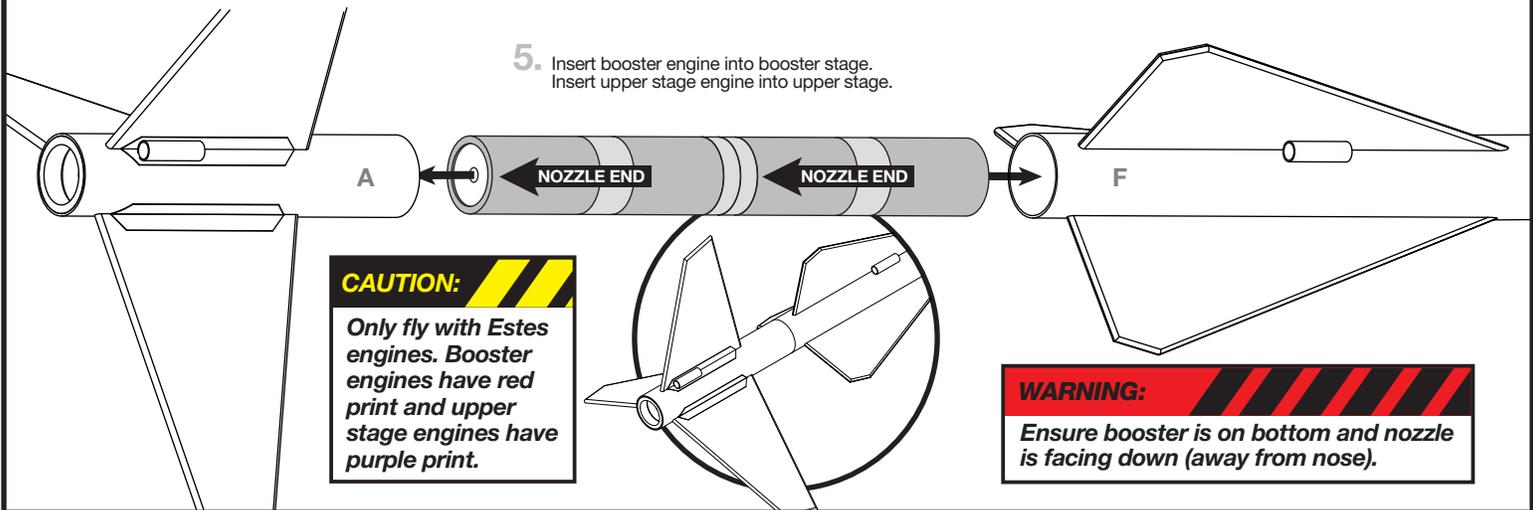
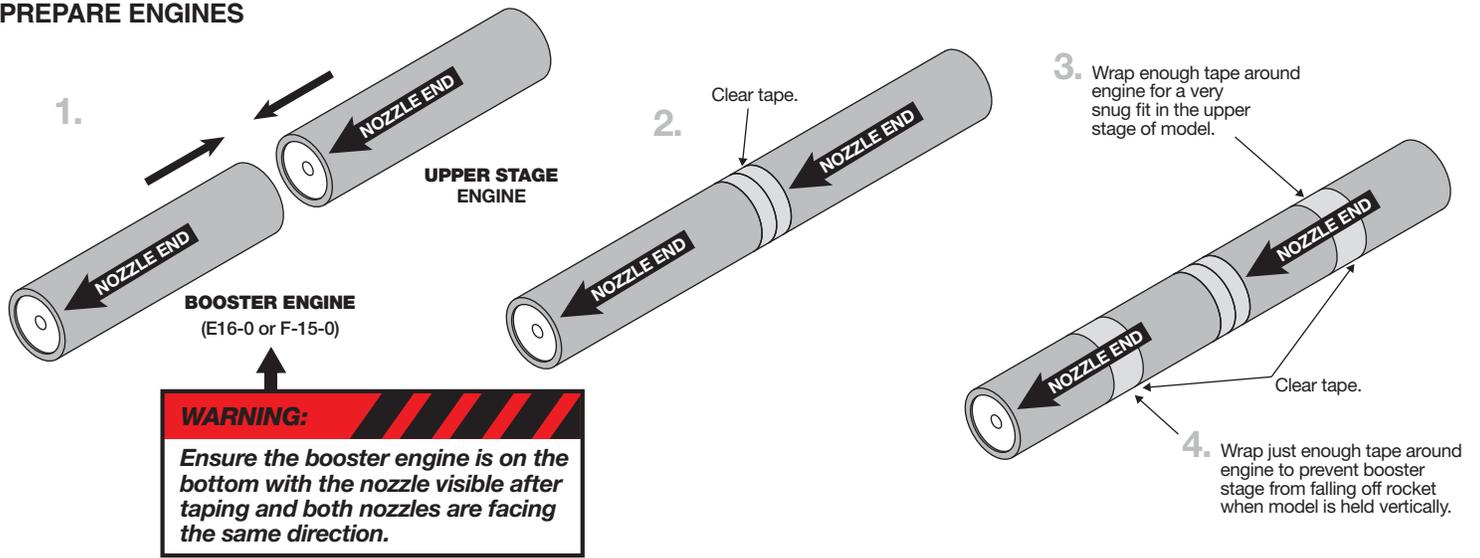
ATTACH NOSE CONE AND DOUBLE STREAMERS



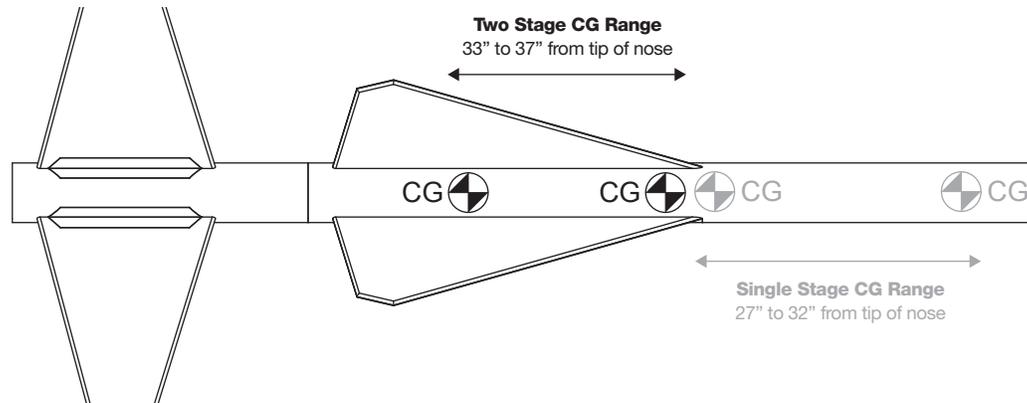
PREPARE FLIGHT RECOVERY



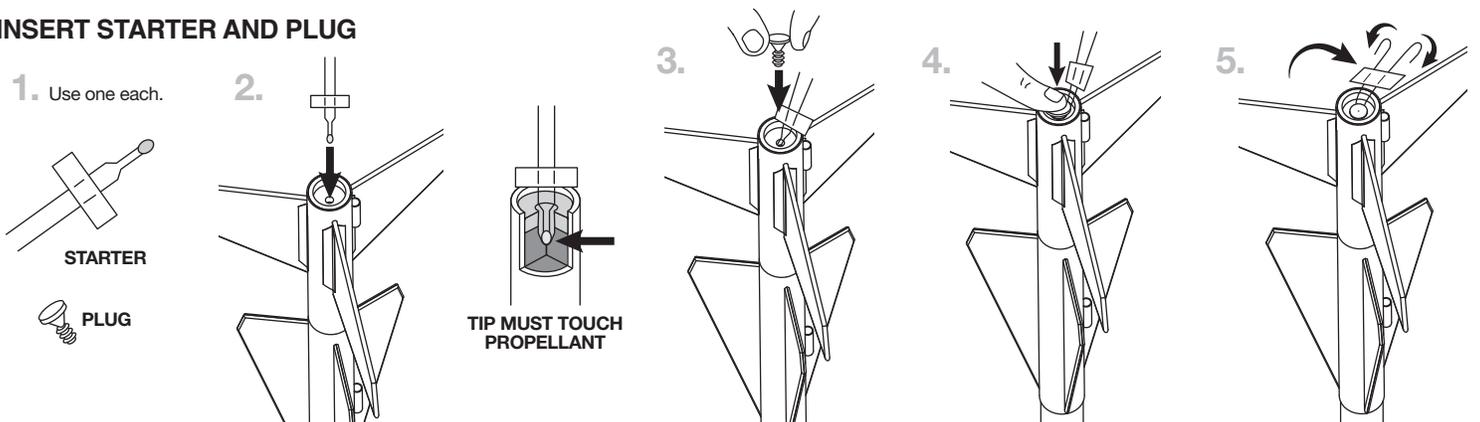
PREPARE ENGINES



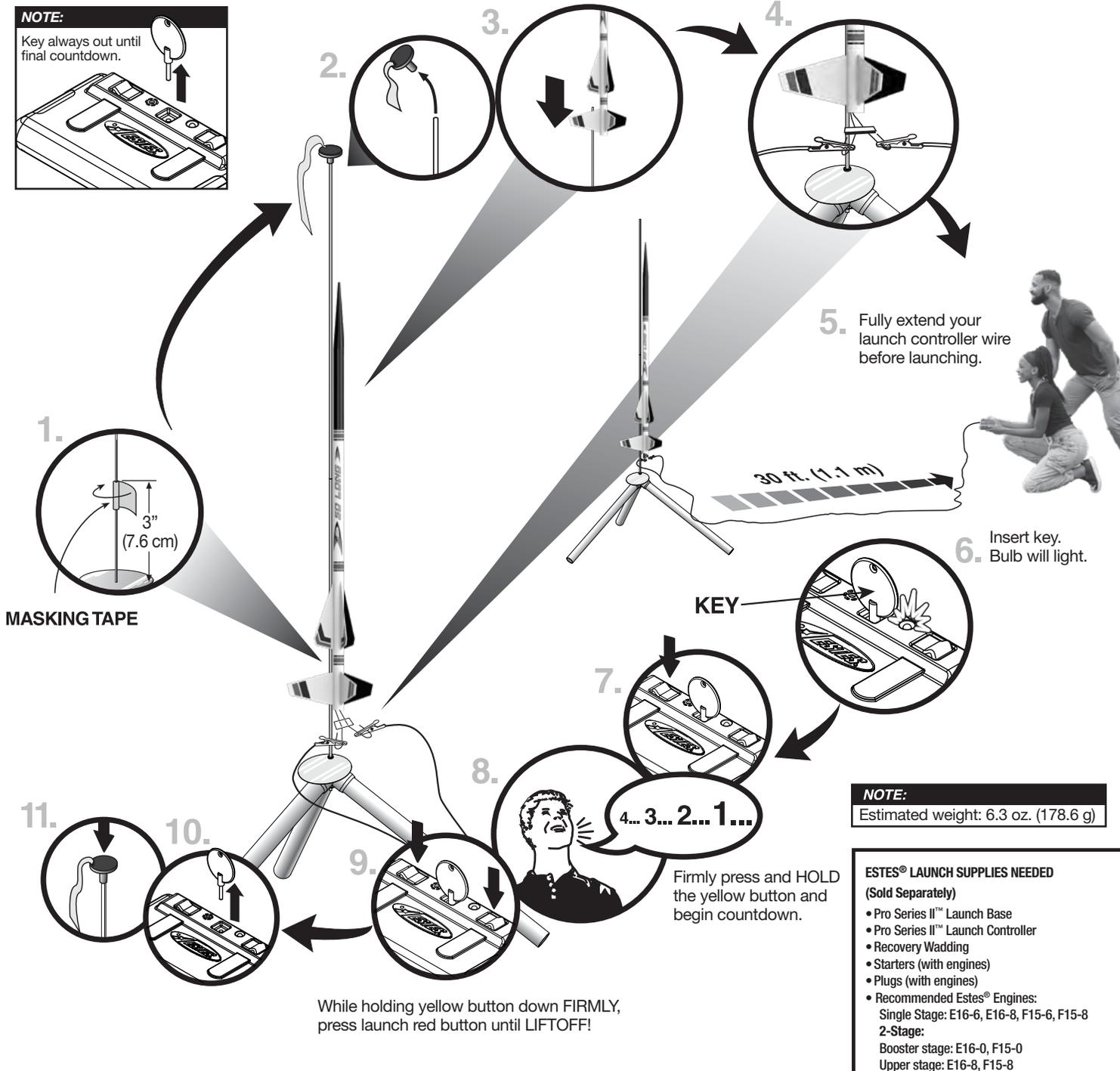
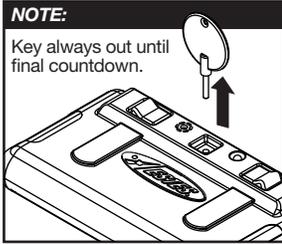
CENTER OF GRAVITY DIAGRAM



INSERT STARTER AND PLUG



COUNTDOWN AND LAUNCH



NOTE:
Estimated weight: 6.3 oz. (178.6 g)

- ESTES® LAUNCH SUPPLIES NEEDED (Sold Separately)**
- Pro Series II™ Launch Base
 - Pro Series II™ Launch Controller
 - Recovery Wadding
 - Starters (with engines)
 - Plugs (with engines)
 - Recommended Estes® Engines:
 - Single Stage: E16-6, E16-8, F15-6, F15-8
 - 2-Stage:
 - Booster stage: E16-0, F15-0
 - Upper stage: E16-8, F15-8

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.

