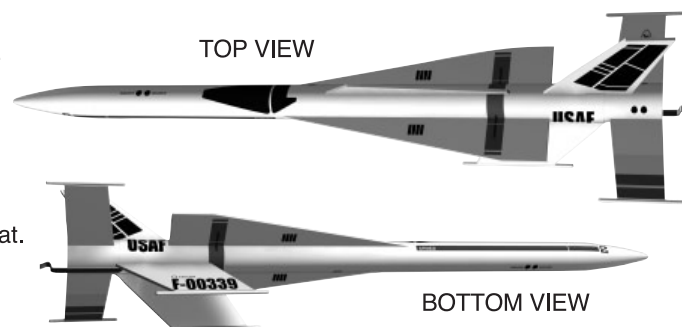


## ROCKET FINISHING

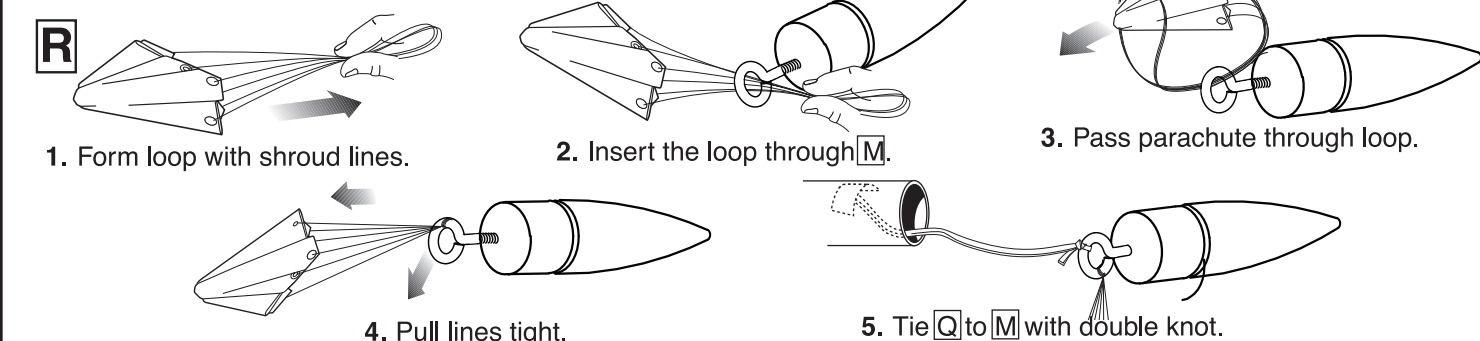
NOTE: We have found Testors spray primers (Testors #2948 White Primer), Testors One Coat Lacquer spray paints (color of your choice), Testors Model Master spray paints (color of your choice) and Testors Gloss Lacquer (#1961) to be excellent for providing a long lasting and durable finish on your rocket. Always be sure to spray your models outside or in a well ventilated area.

### Steps for a Quality Finish:

1. Stuff shock cord into body tube and hold in place with paper.
2. Lightly sand body tube, fins and nose cone with fine sandpaper (#320 or #400 grit).
3. Apply glue fillets to fins and launch lug.
  - A. Allow glue to dry overnight.
4. Use a stick inserted into the engine tube end of the rocket for painting.
5. Hold the nose cone by the screw eye with a clip or pliers for painting.
6. We recommend a good filler/primer to be applied to the balsa fins and nose cone before painting.
  - A. Sand smooth between applications.
7. Apply 1-2 light coats of white primer to rocket body and nose cone. Lightly sand with fine sandpaper (#320 or #400 grit) between coats.
  - A. Allow to dry between each coat.
8. Apply gloss white to rocket body and nose cone.
  - A. Let dry overnight (24 hours is best).
9. Apply waterslide decals as shown.
  - A. Cut the decal to be applied from the decal sheet, trimming close to the decal edge.
  - B. Hold the decal in warm water until decal begins to curl.
  - C. Remove the entire decal, position in place and slide the decal backing material from under the decal and onto the model as close to final position as possible.
  - D. Gently blot out excess water with a clean paper towel.
  - E. Allow decals to set overnight before applying protective clear coat.
10. When decals are dry, spray rocket body and nose cone with a light coat of Testors Gloss Lacquer (#1961). This will provide added protection and shine to your Crossbow SST™ rocket!



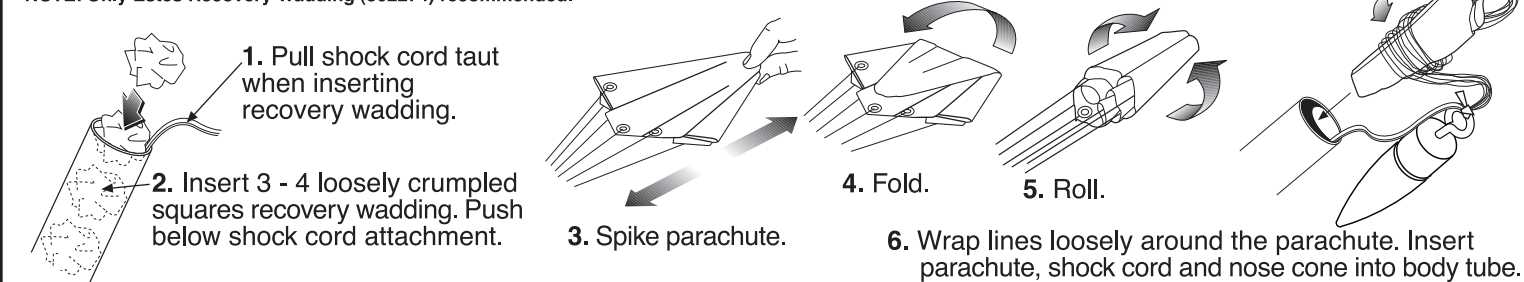
## RECOVERY SYSTEM ATTACHMENT



NOTE: Recovery wadding and streamer must slide easily into body tube. If too tight, redo.

## PREPARE FLIGHT RECOVERY

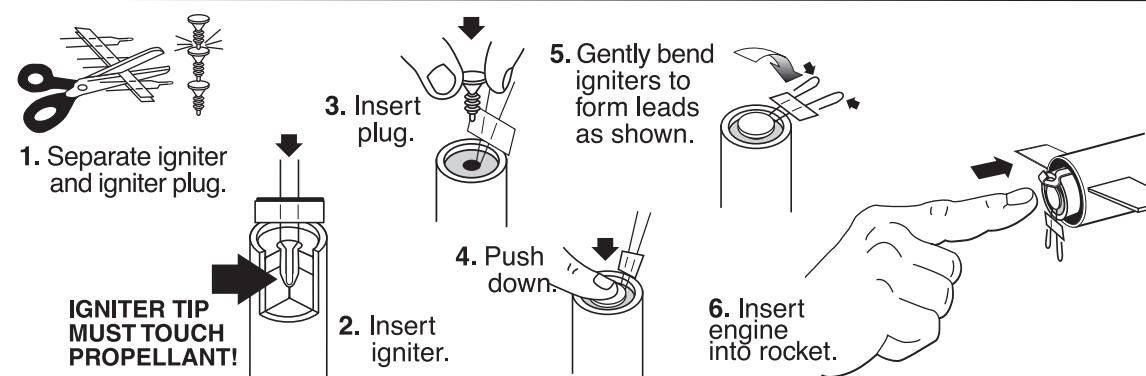
NOTE: Only Estes Recovery Wadding (302274) recommended.



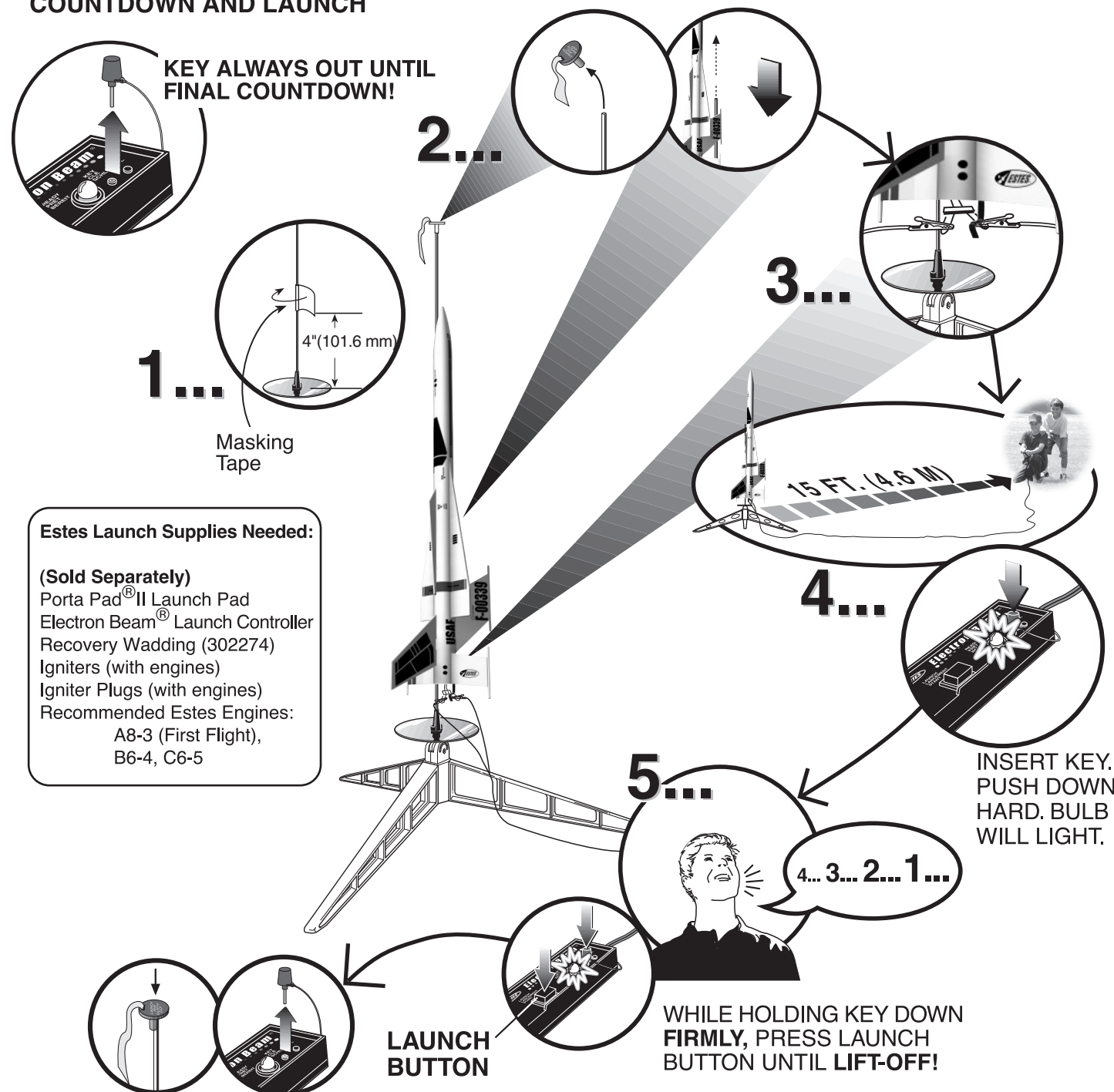
## PREPARE ENGINE

### 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 Needed:

(Sold Separately)  
 Porta Pad® II Launch Pad  
 Electron Beam® Launch Controller  
 Recovery Wadding (302274)  
 Igniters (with engines)  
 Igniter Plugs (with engines)  
 Recommended Estes Engines:  
 A8-3 (First Flight),  
 B6-4, C6-5

## PRECAUTIONS



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 lugs. 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 enclosed 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.



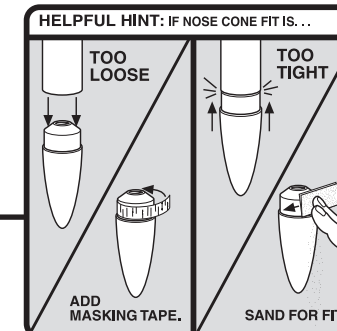
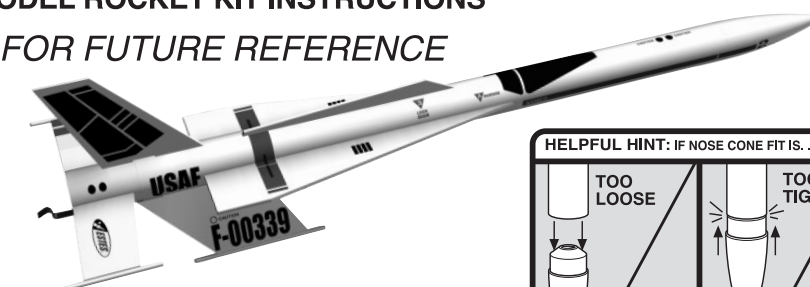
# CROSSBOW SST™

#7207

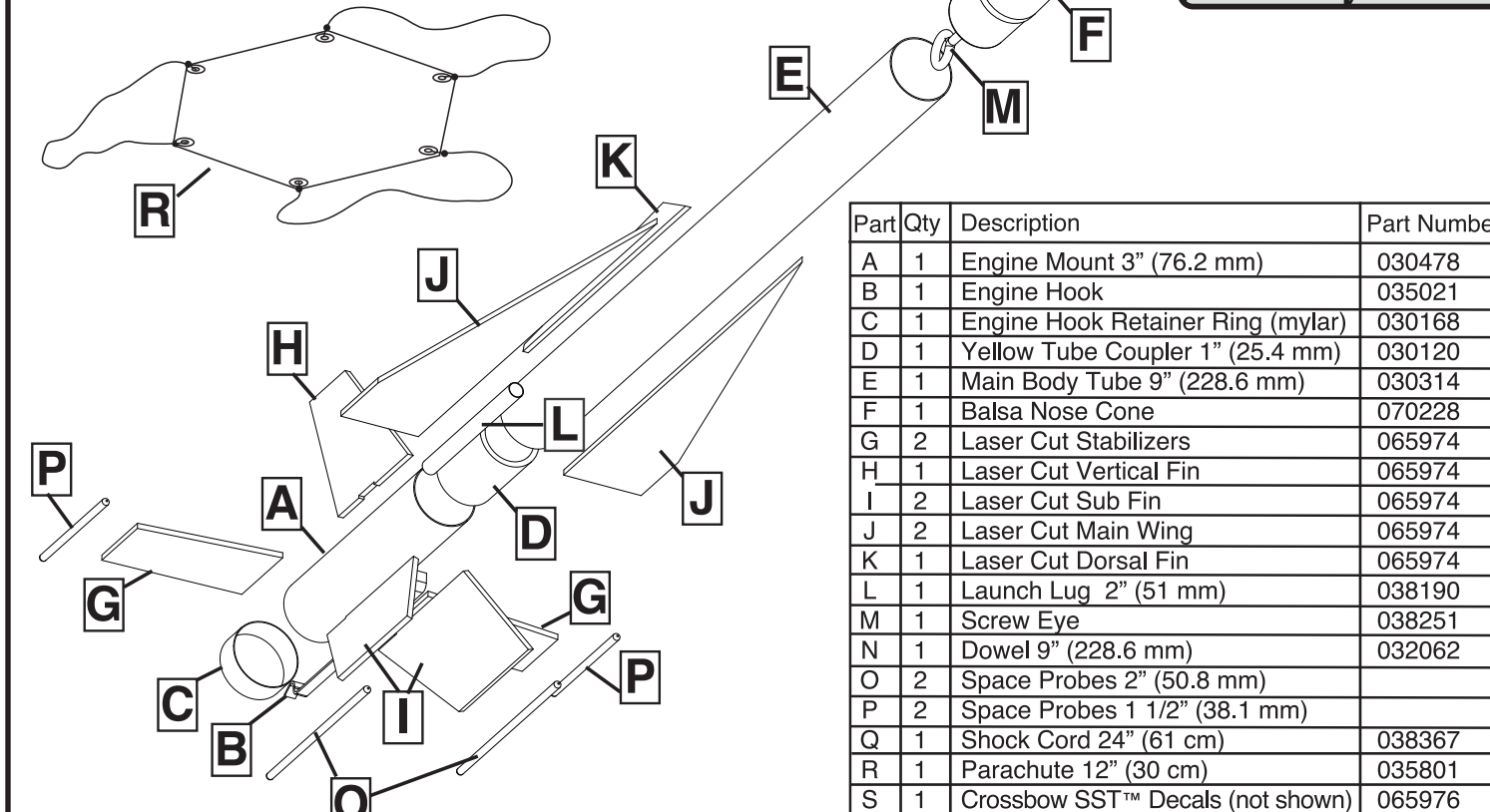
Estes-Cox Corp.  
 1295 H Street, PO Box 227  
 Penrose, CO 81240-0227  
 Printed in USA



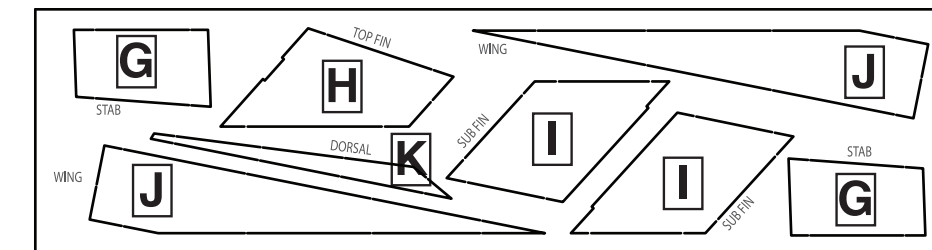
ASSEMBLY TIP:  
 Read all instructions before beginning work on your model. Make sure you have all parts and supplies.



NOTE: Test fit all parts together before applying glue. If parts don't fit properly, sand as required for precision assembly.

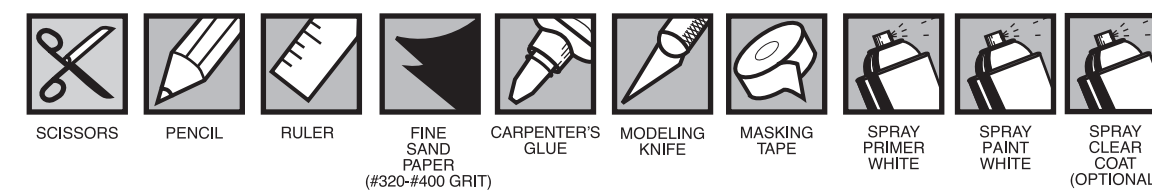


Part	Qty	Description	Part Number
A	1	Engine Mount 3" (76.2 mm)	030478
B	1	Engine Hook	035021
C	1	Engine Hook Retainer Ring (mylar)	030168
D	1	Yellow Tube Coupler 1" (25.4 mm)	030120
E	1	Main Body Tube 9" (228.6 mm)	030314
F	1	Balsa Nose Cone	070228
G	2	Laser Cut Stabilizers	065974
H	1	Laser Cut Vertical Fin	065974
I	2	Laser Cut Sub Fin	065974
J	2	Laser Cut Main Wing	065974
K	1	Laser Cut Dorsal Fin	065974
L	1	Launch Lug 2" (51 mm)	038190
M	1	Screw Eye	038251
N	1	Dowel 9" (228.6 mm)	032062
O	2	Space Probes 2" (50.8 mm)	
P	2	Space Probes 1 1/2" (38.1 mm)	
Q	1	Shock Cord 24" (61 cm)	038367
R	1	Parachute 12" (30 cm)	035801
S	1	Crossbow SST™ Decals (not shown)	065976



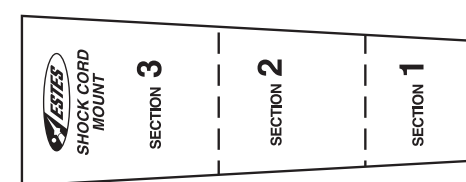
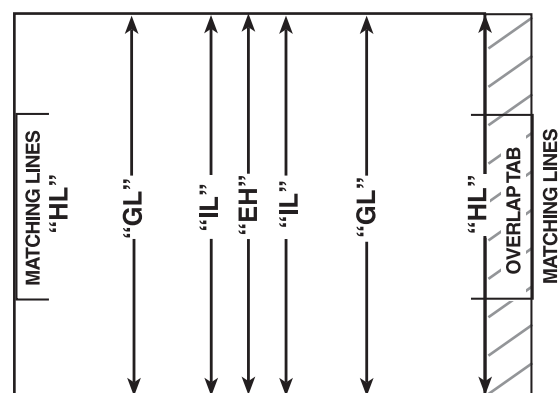
## SUPPLIES

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

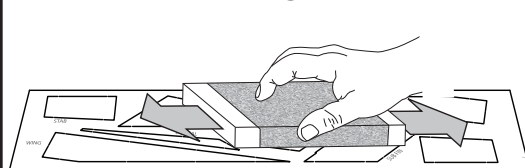




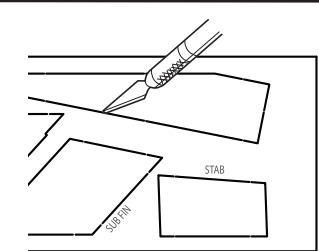
## TUBE MARKING GUIDE AND SHOCK CORD MOUNT (Make a copy if you want to keep instructions.)



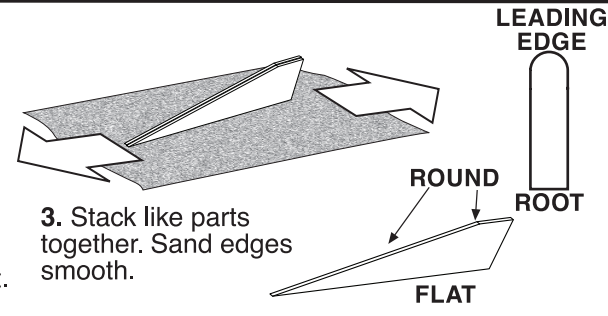
## FIN PREPARATION



1. Sand both sides of balsa sheets with fine sandpaper (#320 or #400 grit).



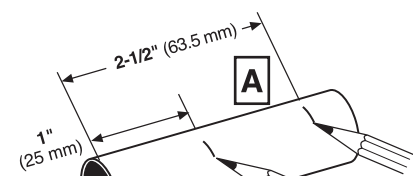
2. Cut Balsa Parts from sheet.



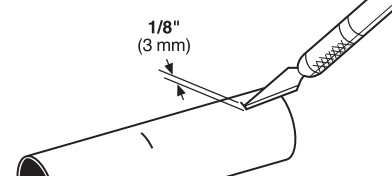
3. Stack like parts together. Sand edges smooth.

4. Sand leading edge round.

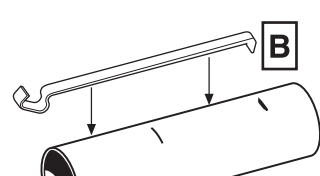
## ENGINE MOUNT ASSEMBLY



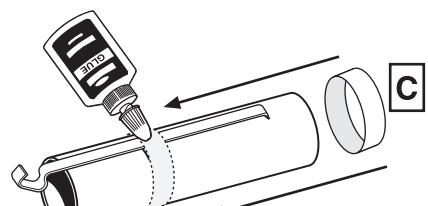
1. Measure and mark **A**.



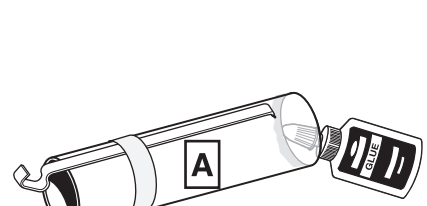
2. Cut slit at mark.



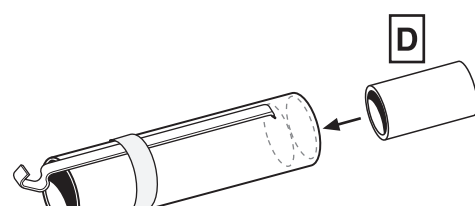
3. Insert **B** in slit.



4. Apply ring of glue at mark. Slide **C** to mark.

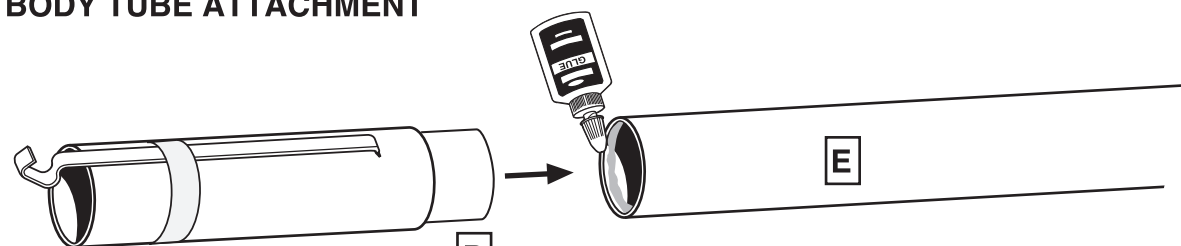


5. Apply glue in end of **A**.



6. Insert **D** until it stops. Let dry.

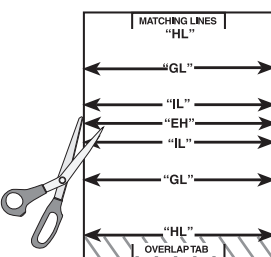
## LOWER BODY TUBE ATTACHMENT



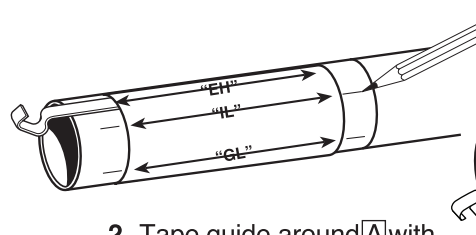
1. Apply glue inside of **E**.

2. Slide **D** into **E**. Wipe excess glue. Let dry.

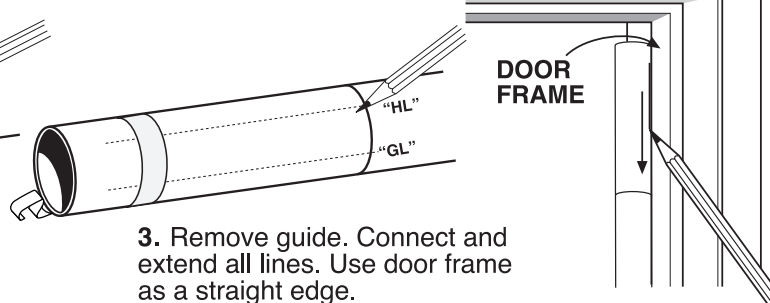
## TUBE MARKING



1. Cut tube marking guide from instructions.

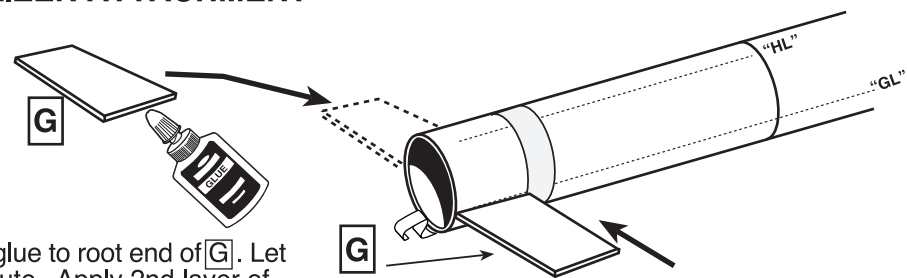


2. Tape guide around **A** with "EH" centered over **B**. Mark "HL", "GL" and "IL" at arrows.



3. Remove guide. Connect and extend all lines. Use door frame as a straight edge.

## STABILIZER ATTACHMENT

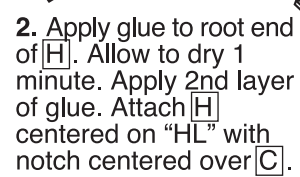
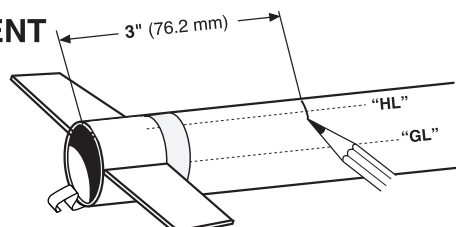


1. Apply glue to root end of **G**. Let dry 1 minute. Apply 2nd layer of glue. Position over "GL" even with end of **E**. Check alignment using guide. Let dry.

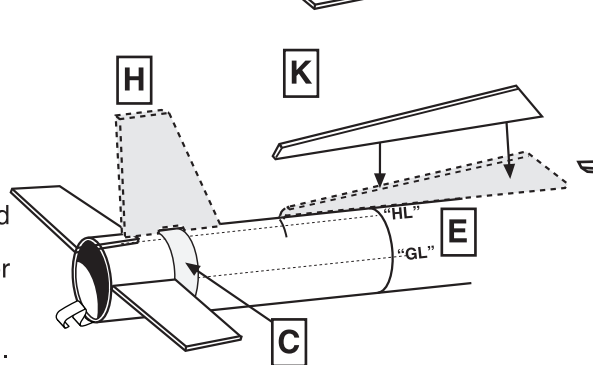
2. Repeat for other **G**. Let dry.

## VERTICAL FIN ATTACHMENT

1. Measure and mark on "HL".

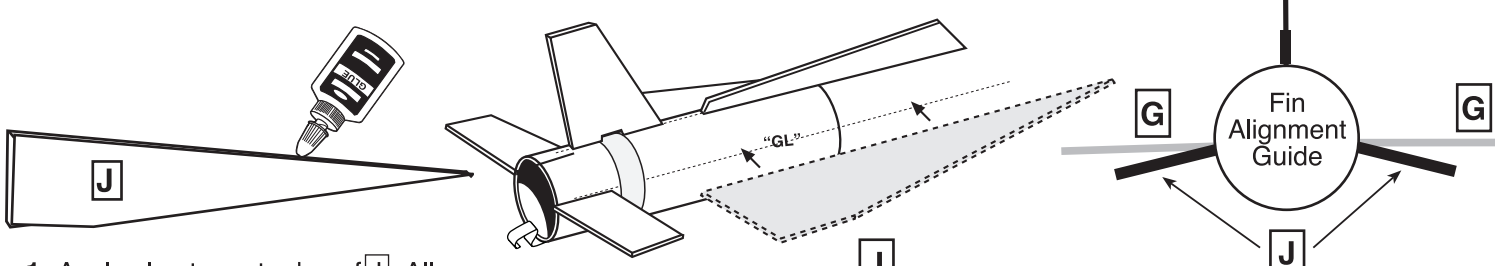


2. Apply glue to root end of **H**. Allow to dry 1 minute. Apply 2nd layer of glue. Attach **H** centered on "HL" with notch centered over **C**.



3. Apply glue to root edge of **K**. Allow to dry 1 minute. Apply 2nd layer of glue. Attach **K** centered on "HL" and forward of mark.

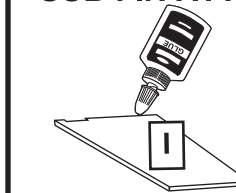
## MAIN WING ATTACHMENT



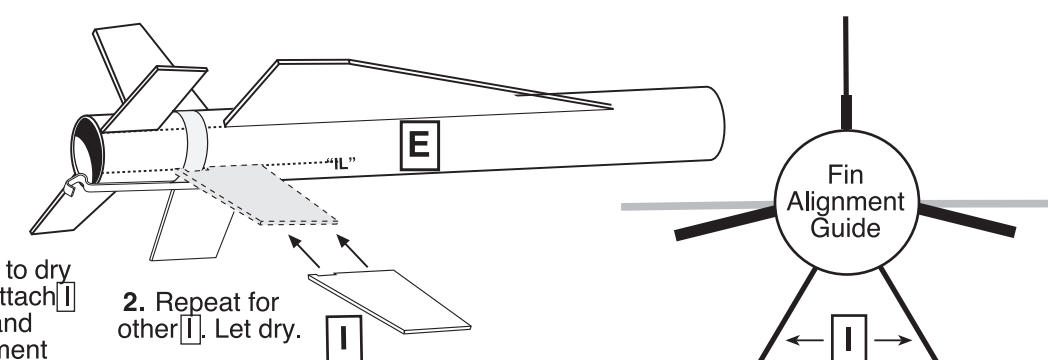
1. Apply glue to root edge of **J**. Allow to dry 1 minute. Apply 2nd layer of glue. Attach **J** centered on "GL" at mark and angled slightly down. Use fin alignment guide for fin attachment accuracy.

2. Repeat for other **J**. Let dry.

## SUB FIN ATTACHMENT

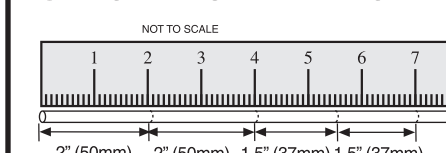


1. Apply glue to root end of **I**. Allow to dry 1 minute. Apply 2nd layer of glue. Attach **I** centered on "IL" with notch over **C** and angled down. Let dry. Use fin alignment guide for fin attachment accuracy.

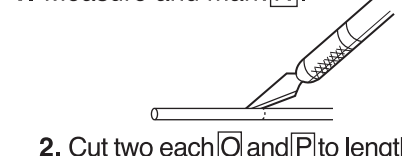


2. Repeat for other **I**. Let dry.

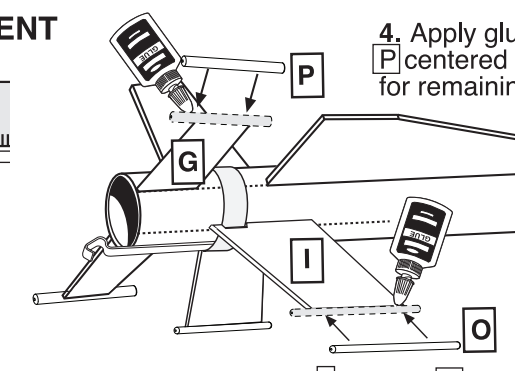
## SPACE PROBE ATTACHMENT



1. Measure and mark **N**.



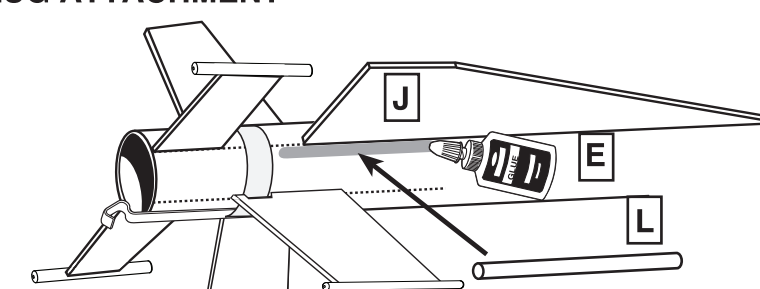
2. Cut two each **O** and **P** to length.



3. Apply glue to end of **I**. Position **O** centered on end. Let dry. Repeat for remaining **I**.

4. Apply glue to end of **G**. Position **P** centered on end. Let dry. Repeat for remaining **G**. Let dry.

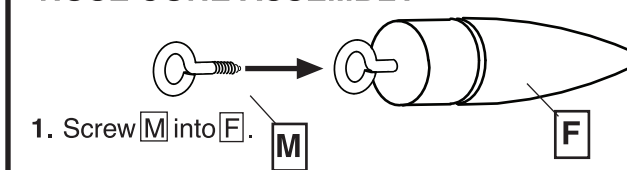
## LAUNCH LUG ATTACHMENT



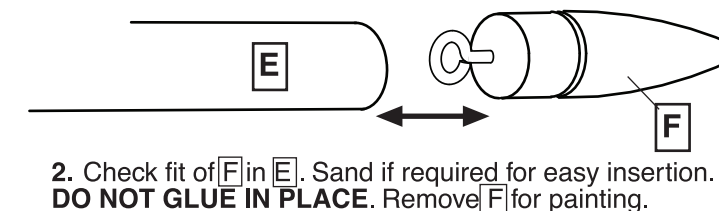
1. Apply glue along bottom of **J**.

2. Position **L** centered in glue forward of **C**. Let dry.

## NOSE CONE ASSEMBLY

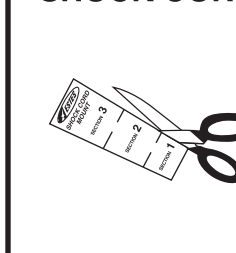


1. Screw **M** into **F**.

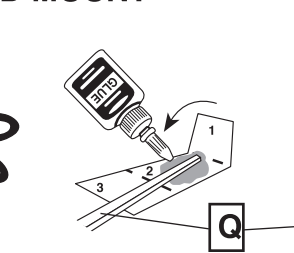


2. Check fit of **F** in **E**. Sand if required for easy insertion. **DO NOT GLUE IN PLACE.** Remove **F** for painting.

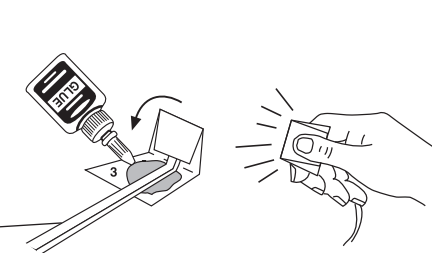
## SHOCK CORD MOUNT



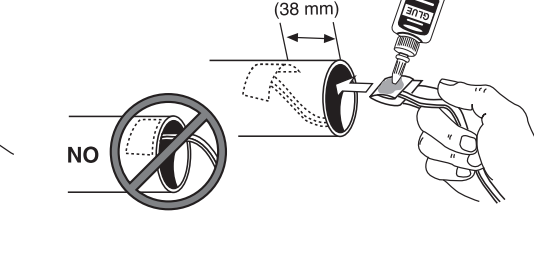
1. Cut shock cord mount from instructions.



2. Apply glue to mount. Place **Q** on Section 2. Fold forward.



3. Apply glue, fold forward and squeeze tight!



4. Apply glue to shock cord mount. Insert in body tube. Hold until glue sets. Let dry.