



EstesRockets.com

SUPER ORBITAL TRANSPORT™ 7314



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.

SUPPLIES



SCISSORS



PENCIL



RULER



YELLOW GLUE



PLASTIC CEMENT



HOBBY KNIFE



MASKING TAPE/
PAINTER'S TAPE



PRIMER (WHITE)



BLACK, WHITE



CLEAR COAT
(OPTIONAL)



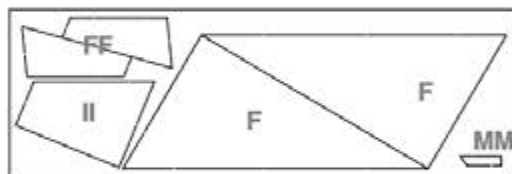
WAX PAPER



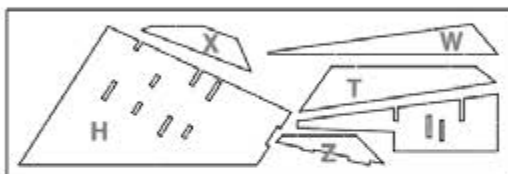
FINE SANDPAPER



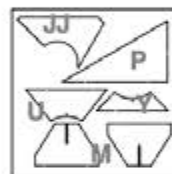
SANDING BLOCK



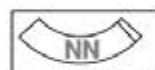
090051A-7314
Laser cut balsa



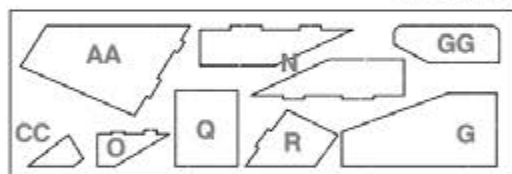
090051B-7314
Laser cut balsa x2



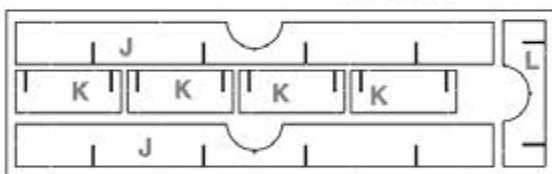
090052B-7314
Laser cut card stock



090058-7314
Printed index stock



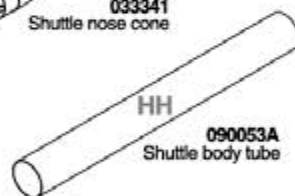
090051C-7314
Laser cut balsa x2



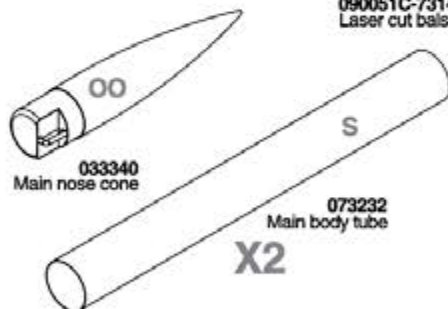
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Laser cut card stock



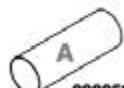
033341
Shuttle nose cone



090053A
Shuttle body tube



033340
Main nose cone



090053B
Engine mount tube



030164-2
Engine block green



030166-2
Green ring



030480
Black retainer ring



035021
Engine hook



030175-5
Tube coupler red



038166
Launch lug 3/16 in.



090053C
Rear tube



032054
Wood dowel



085704
Clay



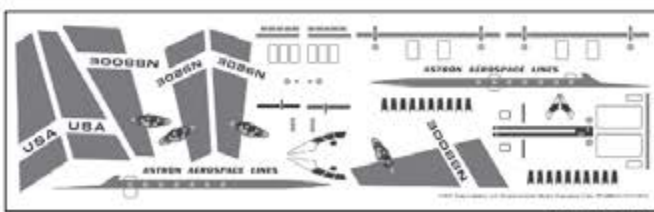
038175
Launch lug 1/8 in. x 1 1/4 in.



038363
Shock cord



035802
Parachute



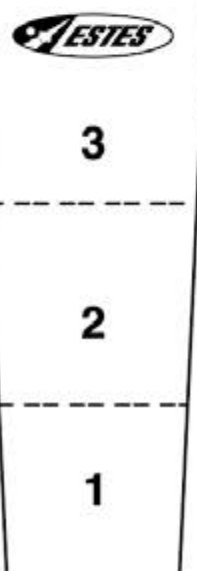
090001A-7314
Water slide decal



090001B-7314
Water slide decal

SHOCK CORD MOUNT

Make a copy if you want to keep instructions.



ASSEMBLE ENGINE MOUNT

1. Cut slot in C with hobby knife.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

ASSEMBLE WINGS

1. Carefully remove with hobby knife.
- NOTE:** Assemble wing units over wax paper.
- 2.
 - 3.
 4. Carefully remove with hobby knife.
 - 5.
 - 6.

ASSEMBLE ENGINE NACELLES AND LOWER WING FIN

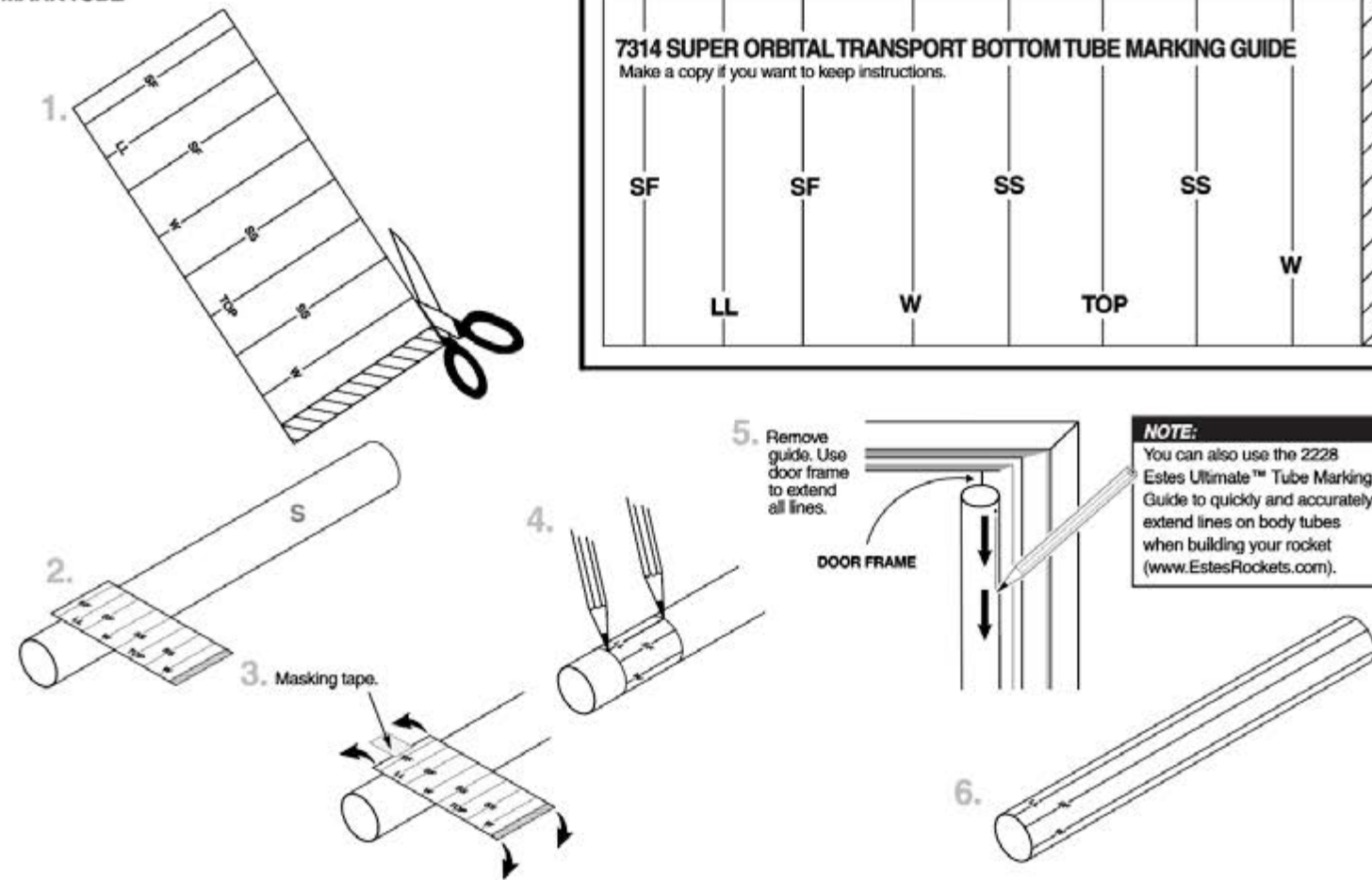
1. Carefully remove with hobby knife.
- 2.
3. Carefully remove with hobby knife.
- 4.
5. Use P to support N upright at a 90° angle, then remove.
- 6.
- 7.
8. Use P to support O upright at a 90° angle, then remove.
- 9.
10. Use P to support N upright at a 90° angle, then remove.
- 11.
- 12.
- 13.
- 14.
15. Use P to support R upright at a 90° angle, then remove. LET DRY.
- 16.

MARK TUBE

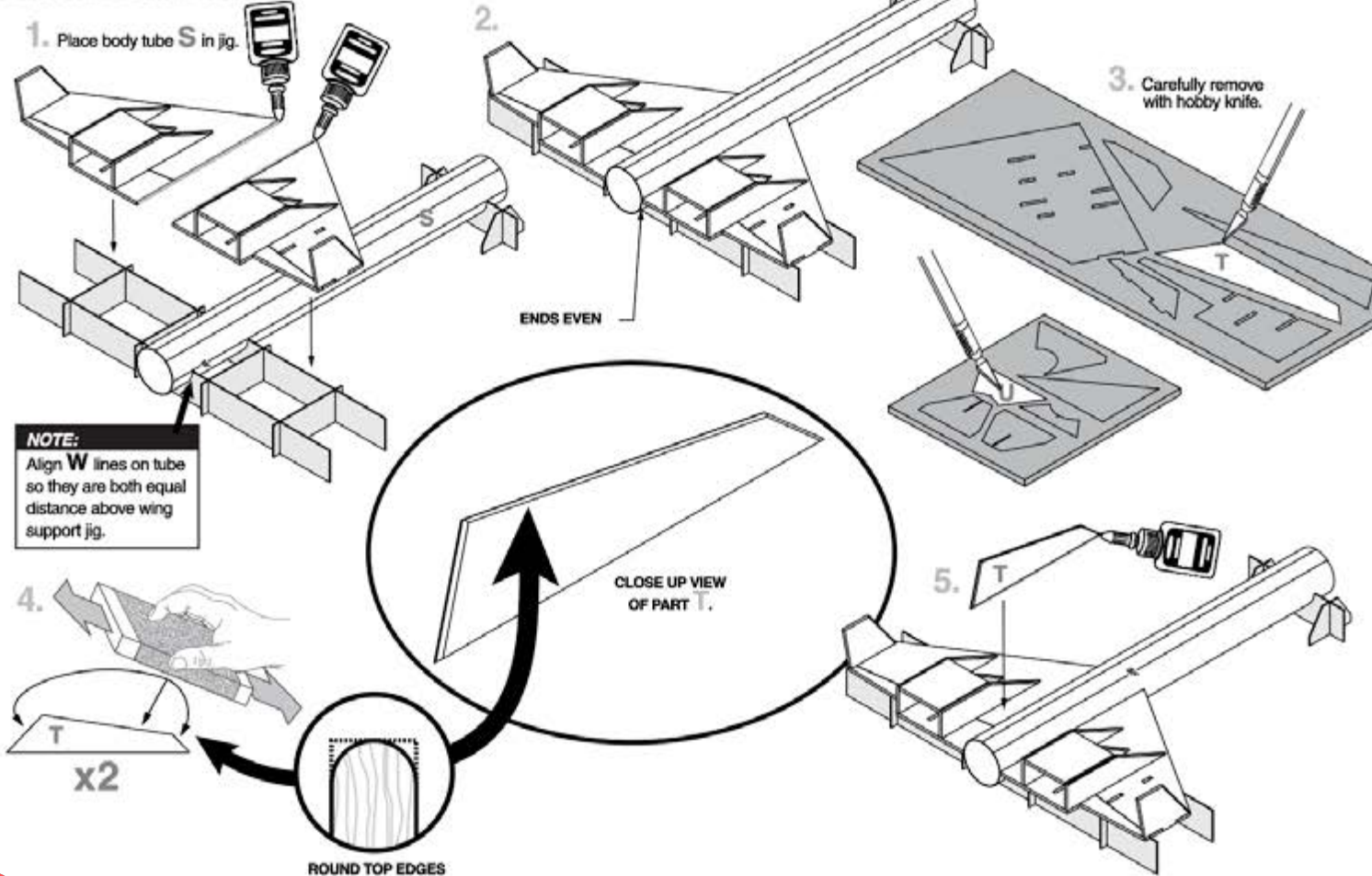
7314 SUPER ORBITAL TRANSPORT BOTTOM TUBE MARKING GUIDE

Make a copy if you want to keep instructions.

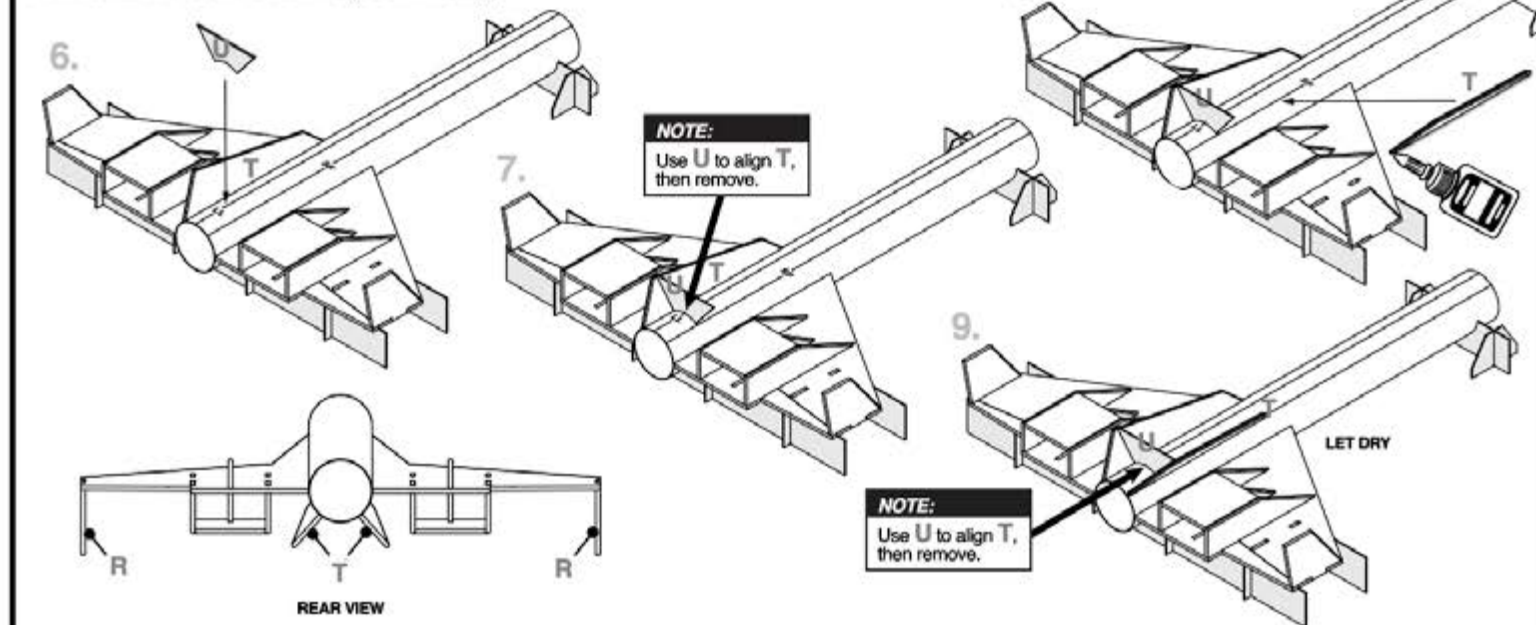
SF	SF	SS	SS	
LL	W	TOP	W	



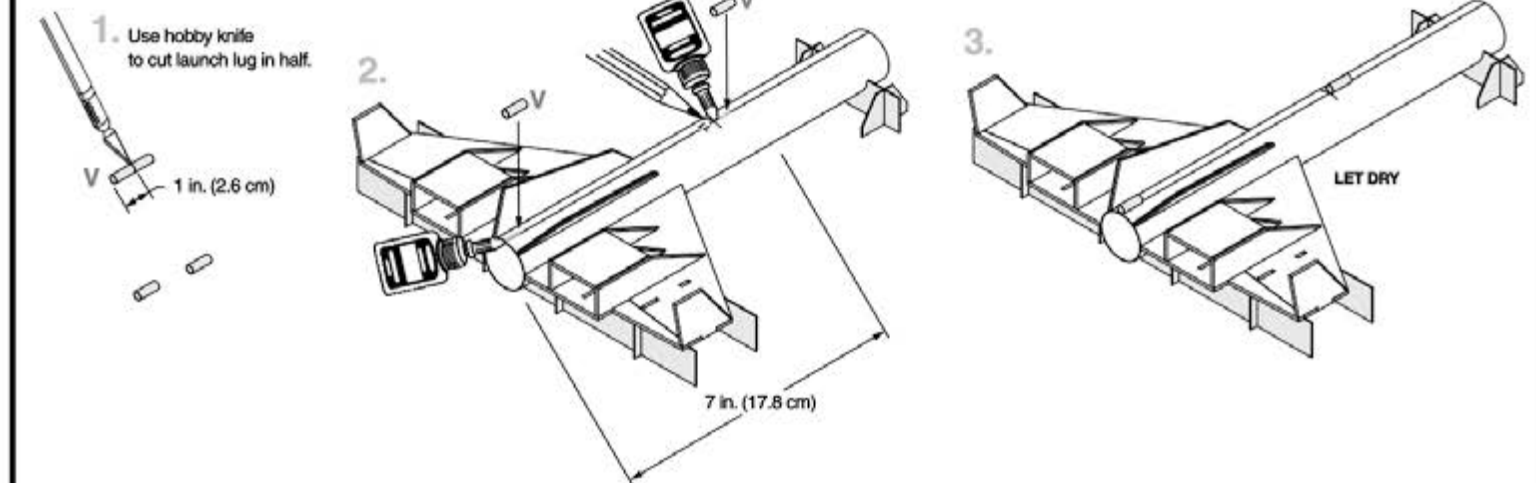
ATTACH MAIN COMPONENTS



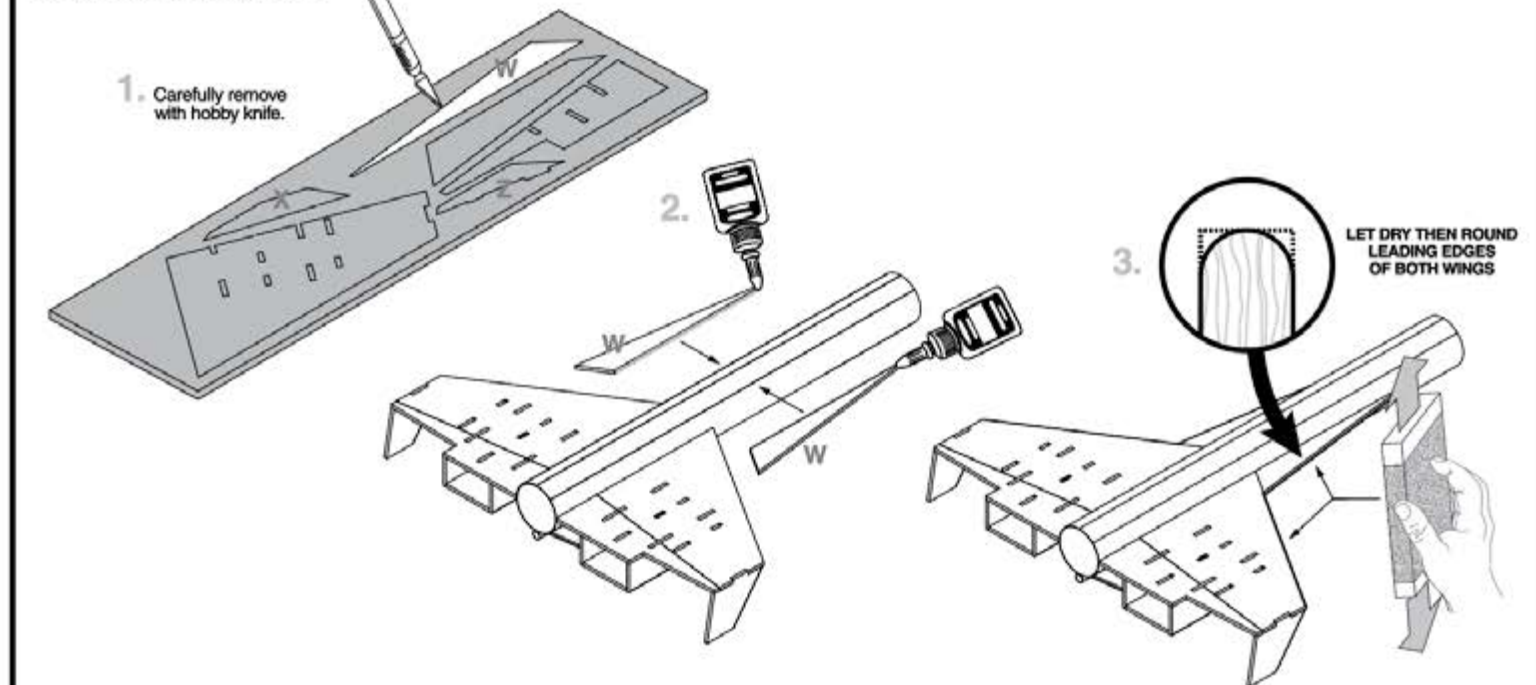
ATTACH MAIN COMPONENTS (CONTINUED)



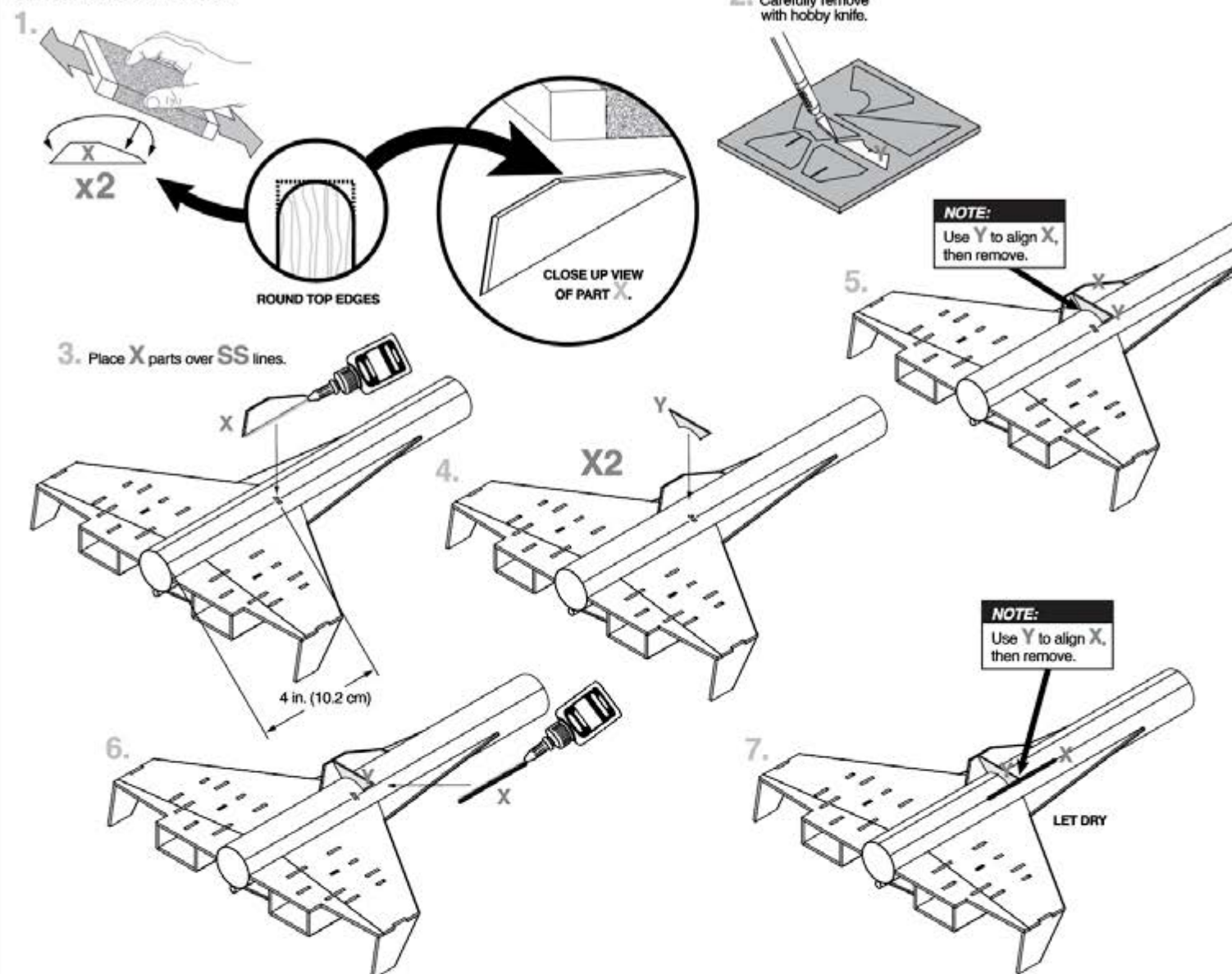
ATTACH LAUNCH LUG



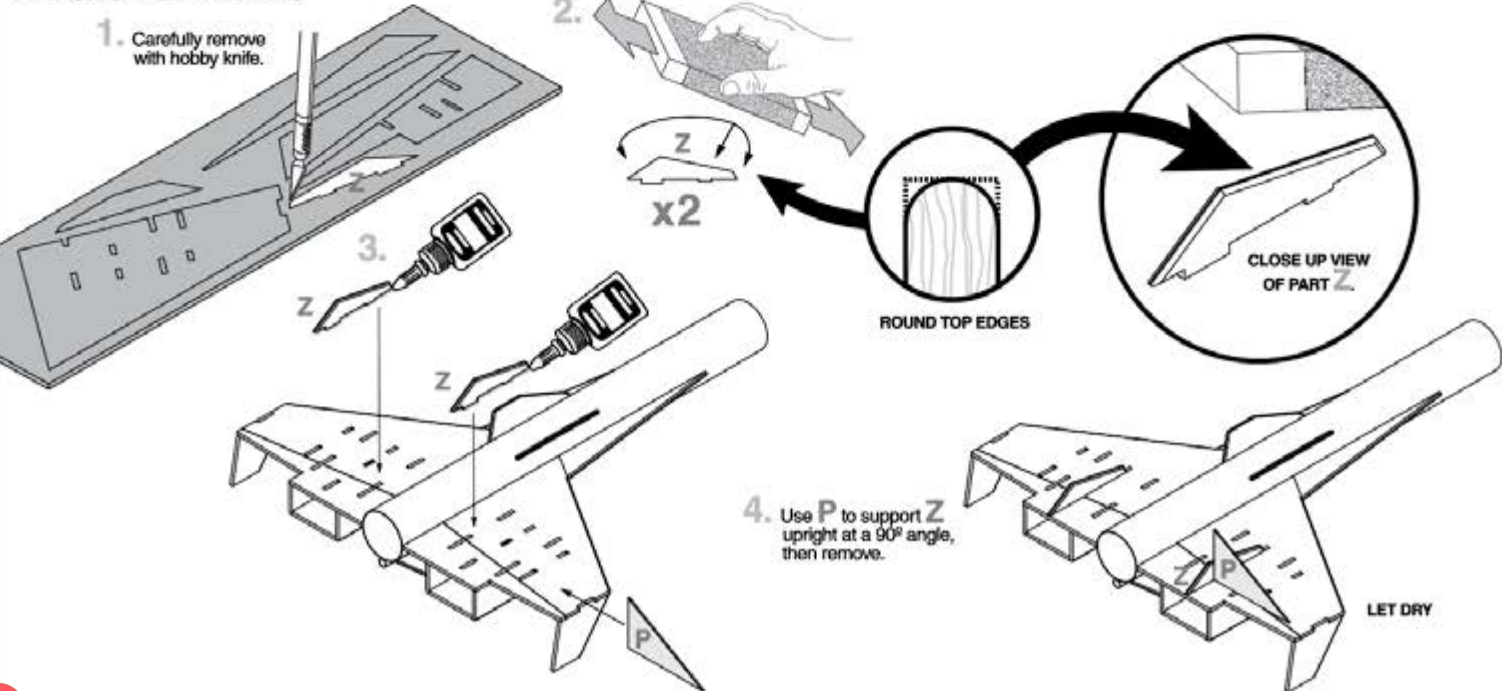
ATTACH WING EXTENSIONS



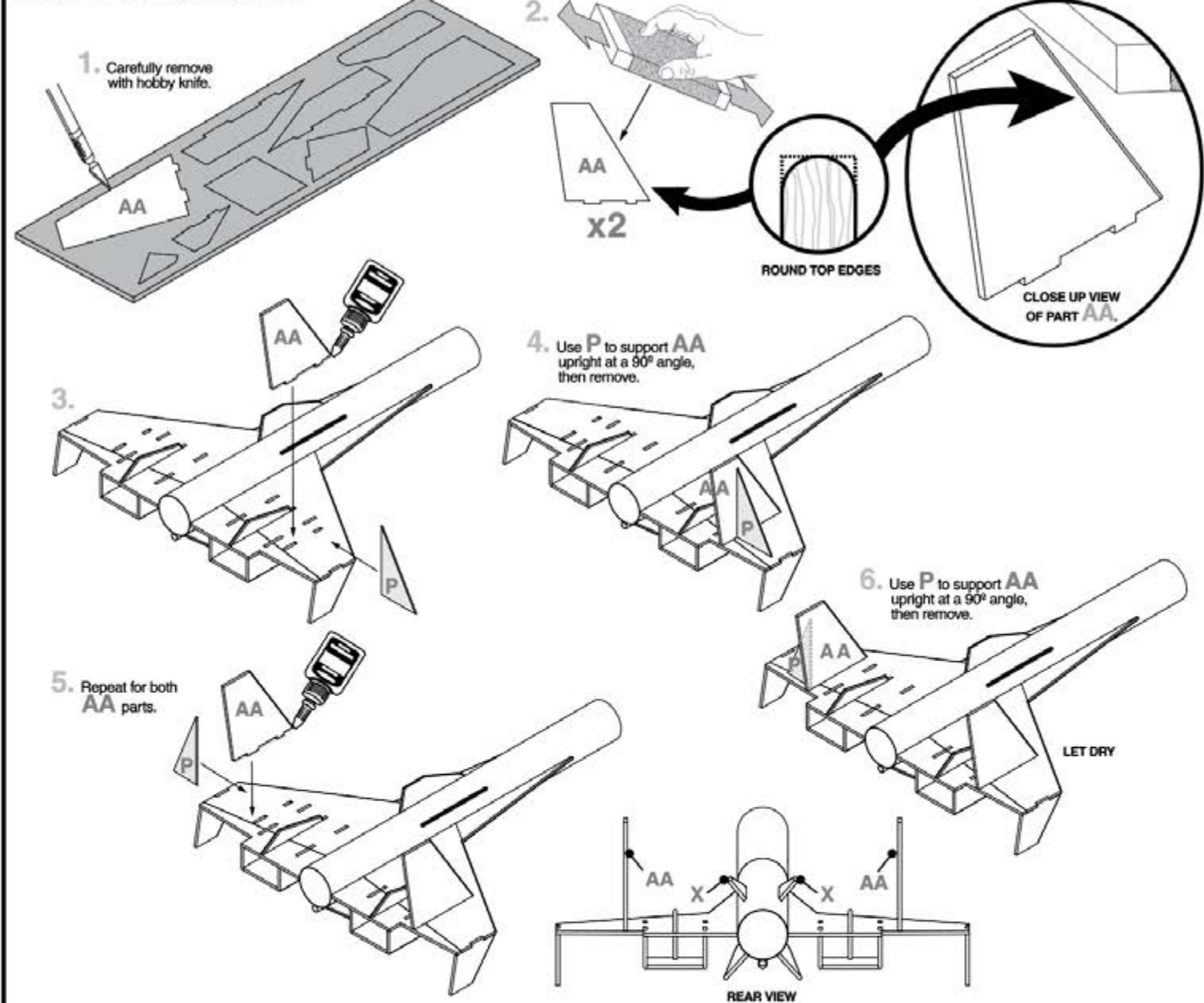
ORBITAL SUPPORT FINS



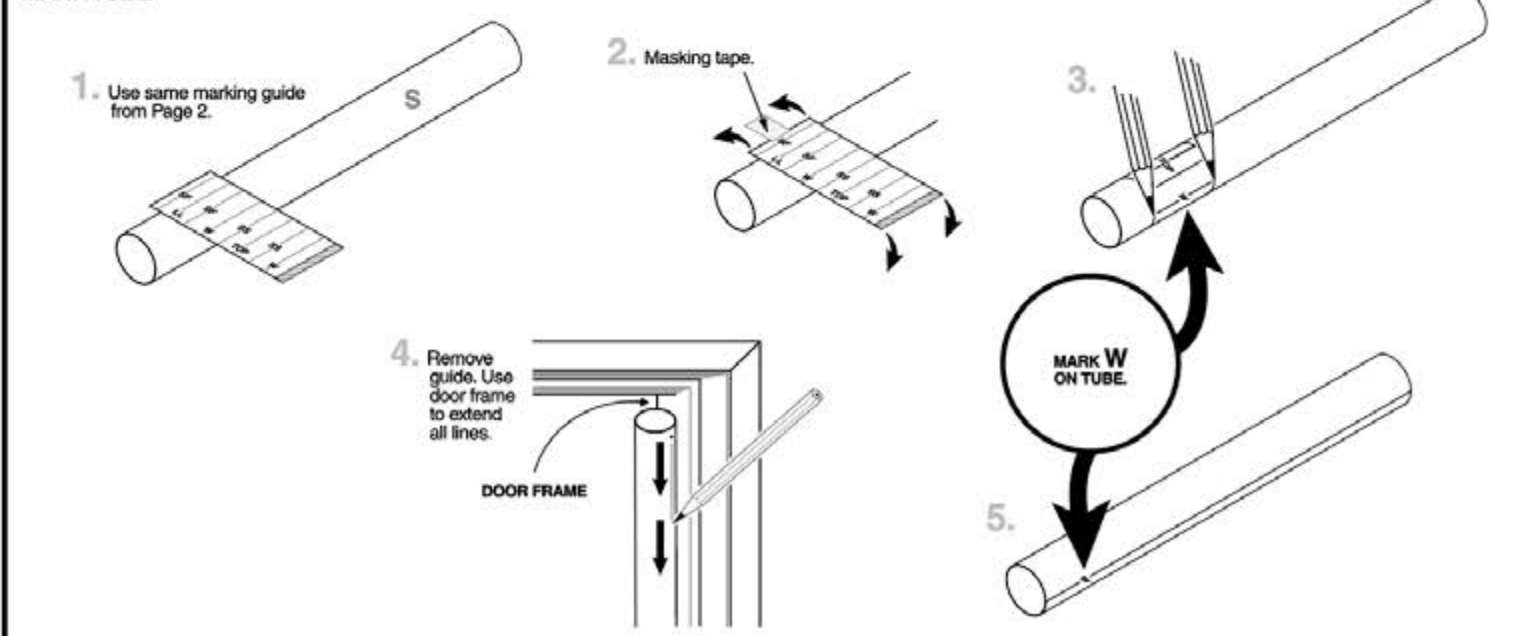
ATTACH UPPER WING FINS



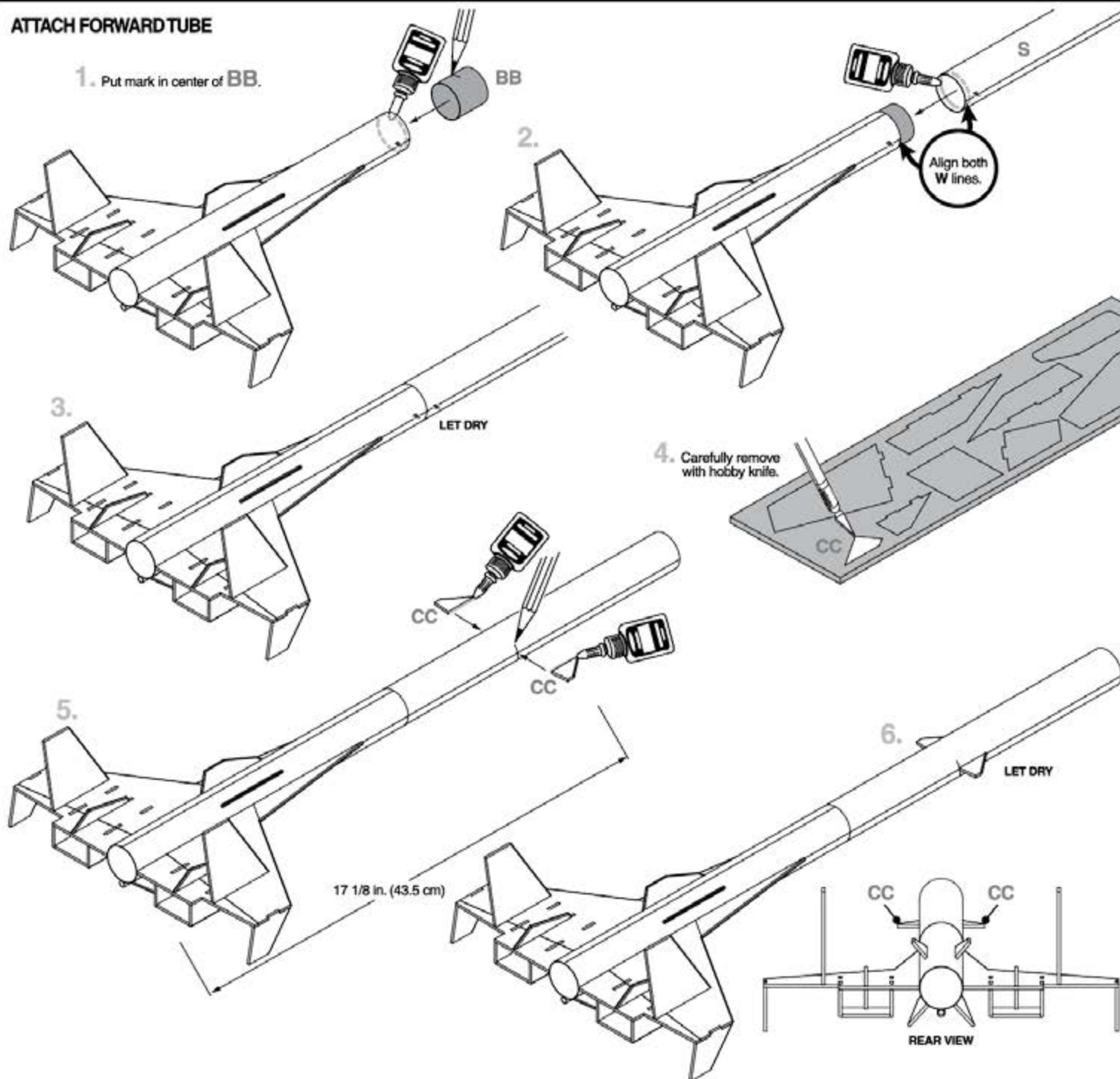
ATTACH LARGE FIN STABILIZERS



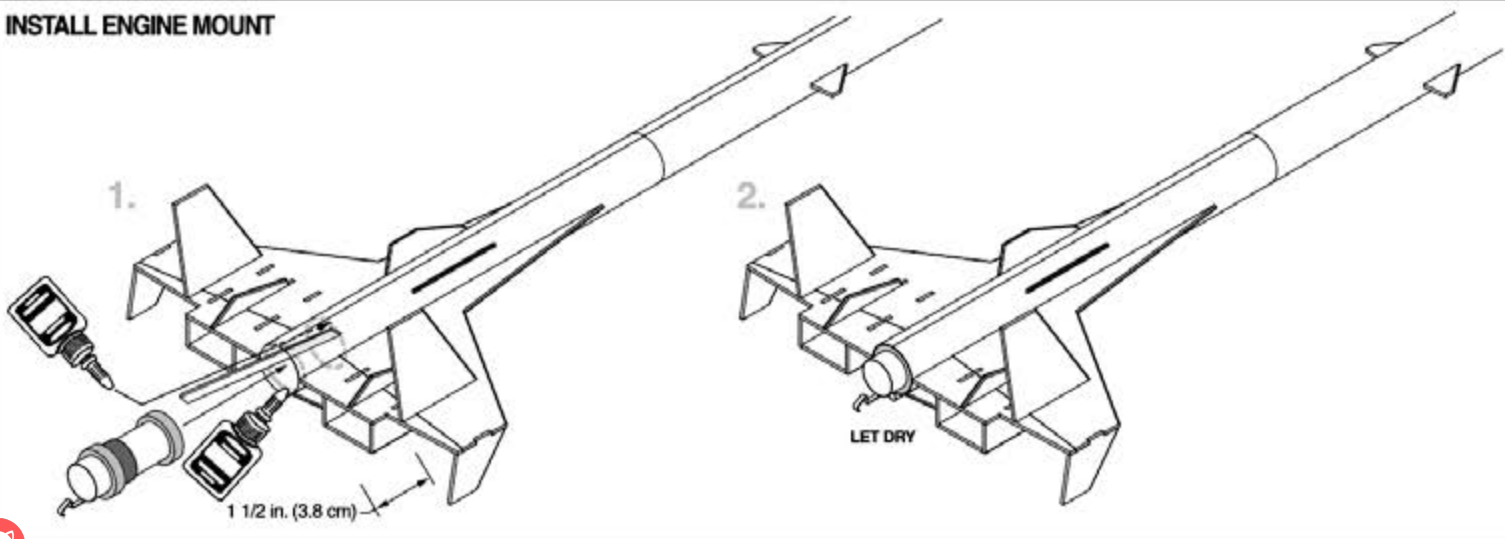
MARK TUBE



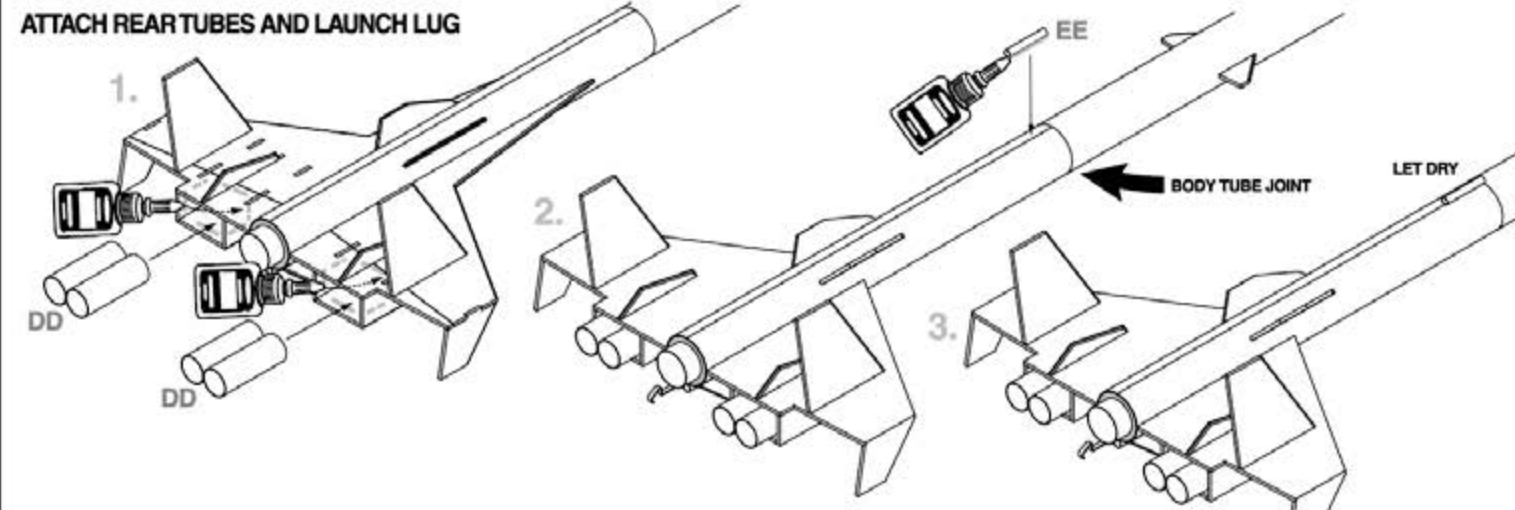
ATTACH FORWARD TUBE



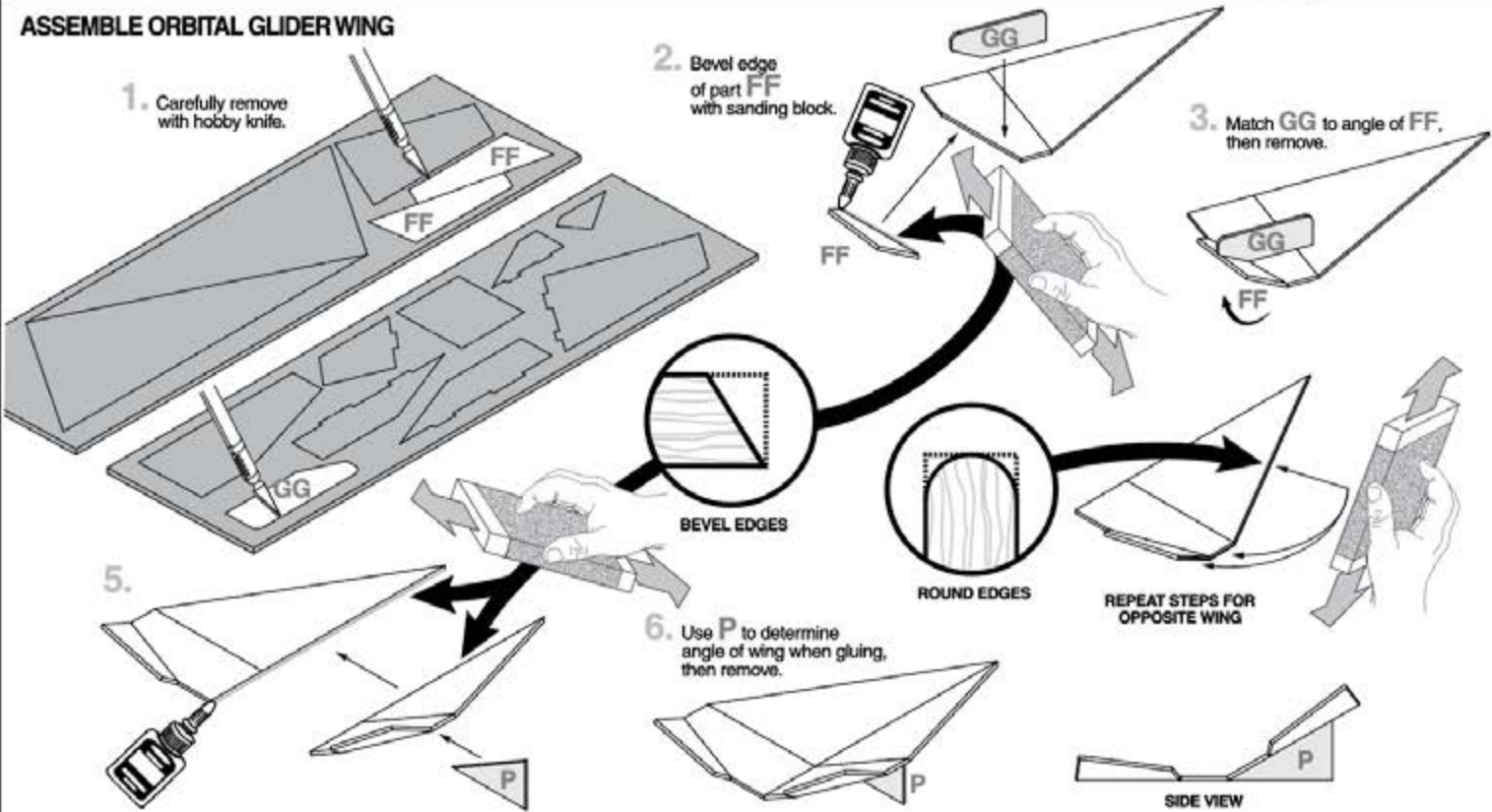
INSTALL ENGINE MOUNT



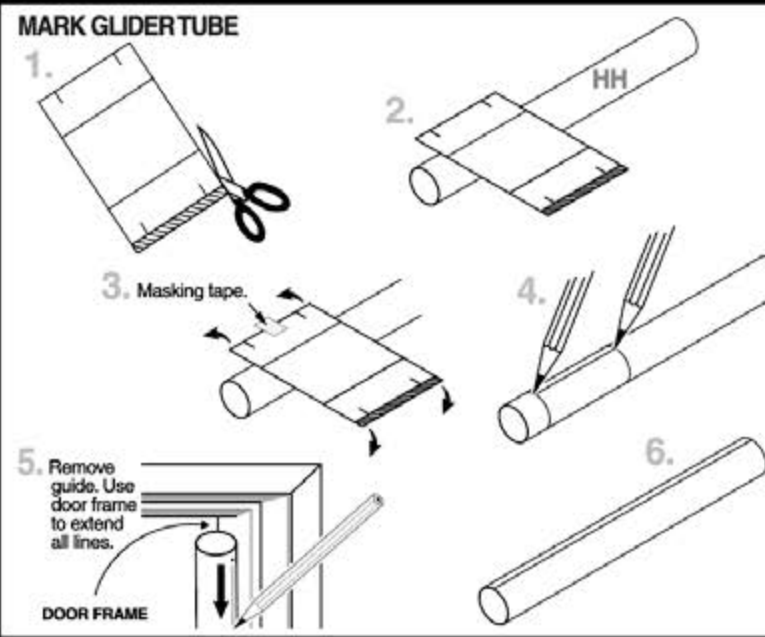
ATTACH REAR TUBES AND LAUNCH LUG



ASSEMBLE ORBITAL GLIDER WING

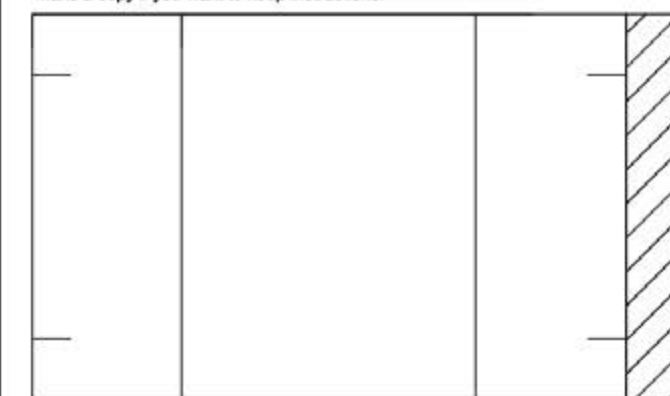


MARK GLIDERTUBE



7314 SUPER ORBITAL TRANSPORT GLIDER TUBE MARKING GUIDE

Make a copy if you want to keep instructions.



ASSEMBLE GLIDER

1. Align line on tube HH with center of wing.

2. Carefully remove with hobby knife.

3.

4.

5. Use JJ to support II upright at a 90° angle, then remove.

ENDS EVEN

ROUND TOP EDGES

CLOSE UP VIEW OF PART II.

ASSEMBLE PAPER SHROUDS

1. Carefully remove with hobby knife.

NOTE: Roll the paper stock around a solid object such as a broom handle to get it to bend in a circular fashion.

2.

3. NN B

4.

5. ENDS EVEN

LET DRY

ATTACH GLIDER LAUNCH LUG

1. Apply glue to the motor.

2. Use sand paper to round one end of LL.

3. Attach LL to MM.

4. Attach LL to MM.

5. Attach LL to MM.

1. 4 7/16 in. (113 cm) START GLIDE TESTS WITH BALANCE POINT HERE

2. Gently toss glider over grass area. ADD CLAY WEIGHT TO TAIL

3. ADD CLAY WEIGHT TO NOSE

4. PERFECT

1. Remove excess plastic with hobby knife.

NOTE: Do not cut off eyelet.

2.

3.

4.

5.

DOUBLE KNOT

pp

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

2. 5-6 SQUARES ESTES® RECOVERY WADDING

3.

4.

5. Wrap shroud lines loosely and insert parachute into body tube.

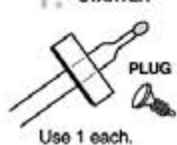
6. Insert nose cone into body tube.

7.

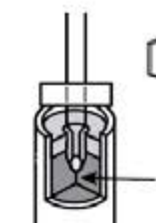
NOTE:
Recovery wadding and parachute must slide easily into body tube. If too tight, redo.

PREPARE ENGINE

1. STARTER



Use 1 each.



TIP MUST TOUCH PROPELLANT!

3. Insert starter all the way into engine nozzle.

4.

5.

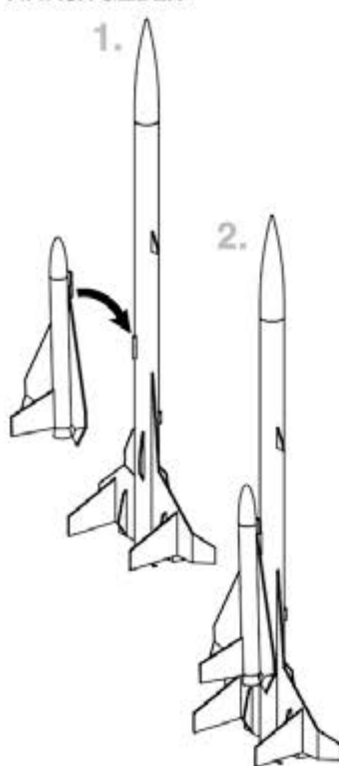
6.

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.

LAUNCH PROCEDURE

ATTACH GLIDER



NOTE:

Key always out until final countdown!



2.

3.

4.

5.

ESTES® LAUNCH SUPPLIES NEEDED

(Sold Separately)

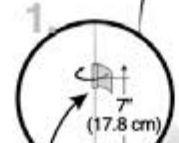
- Porta-Pad® II Launch Pad
- Electron Beam Launch Controller
- Maxi™ Launch Rod
- Recovery Wadding
- Starters (with engines)
- Plugs (with engines)
- Estes® Engines: C11-3, D12-5

NOTE:

Fully extend your launch controller wire before launching.

NOTE:

Estimated weight : 5 oz. (141.7 g)



MASKING TAPE

10.

9.

8.

7.

KEY

6.

Insert key, push down hard. Bulb will light.

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

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. Football fields and playgrounds are great. Launch only with little or no wind and good visibility. Always follow the National Association of Rocketry 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.