



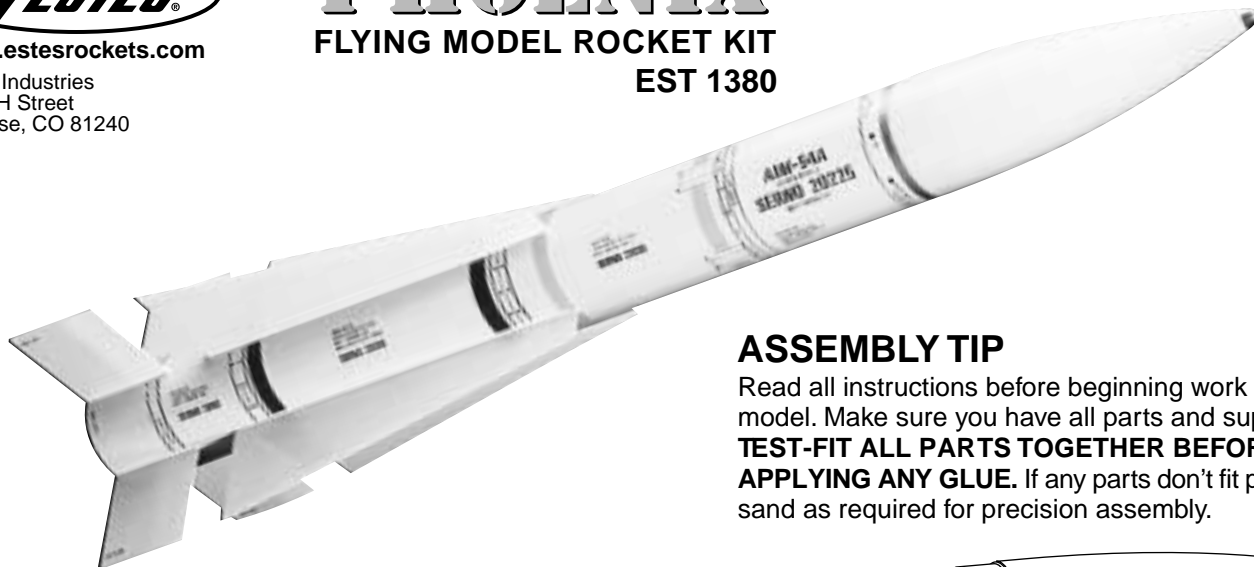
PHOENIX™

FLYING MODEL ROCKET KIT

EST 1380

www.estesrockets.com

Estes Industries
1295 H Street
Penrose, CO 81240



ASSEMBLY TIP

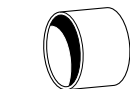
Read all instructions before beginning work on your model. Make sure you have all parts and supplies.
TEST-FIT ALL PARTS TOGETHER BEFORE APPLYING ANY GLUE. If any parts don't fit properly, sand as required for precision assembly.

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.



Body Tube 2600 (2)
(030437)



Tube Coupler 80L (1)
(030278)



Green Engine Block
(1) (030164-2)



Clay Weights (2 Sets)
(2 pcs per set) (085705)



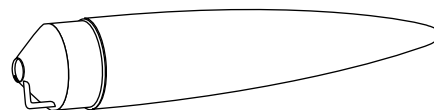
Engine Mount Tube (1)
(031278)



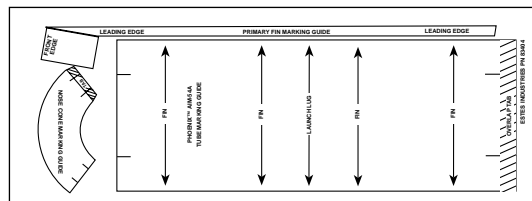
Black Hook Retainer
Tube (1) (030160)



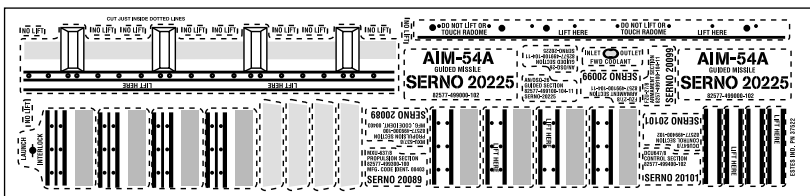
Yellow Spacer Tool (1)
(035004)



Nose Cone (1) (071035)



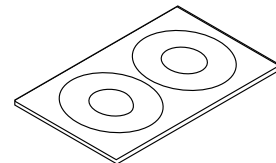
Pattern Sheet (1) (083404)



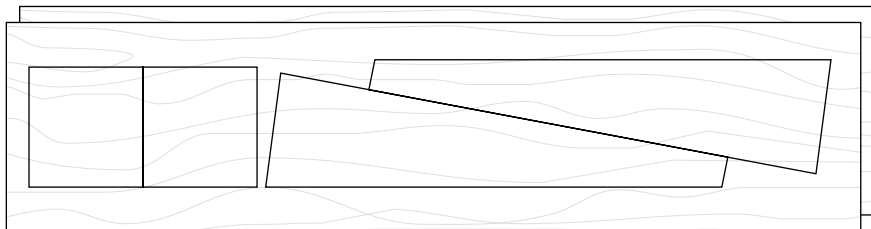
Decal Sheet (1) (037522)



Shock Cord Mount (1)
(084444)



Centering Rings (1)
(030052)



Die-cut Balsa Sheet (2)
(032390)



Launch Lug (1)
(038166)



Engine Hook (1)
(035021)



Shock Cord (1)
(038383)



Assembled Parachute
18" (46 cm) (1)
(35802)

SUPPLIES

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



SCISSORS



PENCIL



RULER



FINE SAND
PAPER
(#400-600 GRIT)



CARPENTER'S
GLUE



MODELING
KNIFE



PRIMER
(WHITE)



SPRAY PAINT:
(CLEAR)



SPRAY PAINT:
(GLOSS
WHITE)



MASKING
TAPE

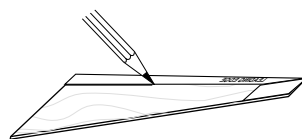
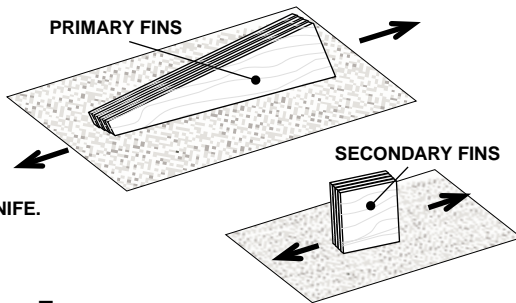
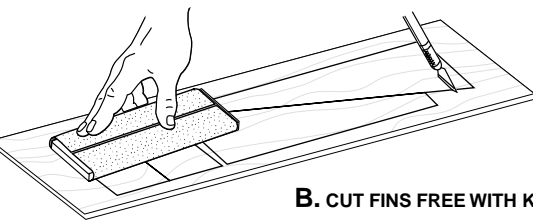


PAINT PEN
(SILVER)

1. A. FINE SAND ALL BALSA SHEETS.

C. STACK LIKE FINS AND SAND.

D. CUT OUT PRIMARY FIN MARKING GUIDE FROM PATTERN SHEET.



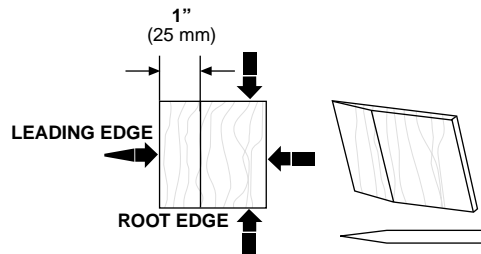
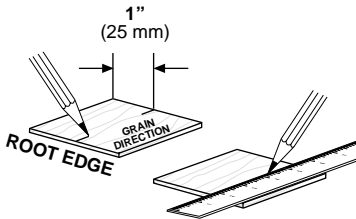
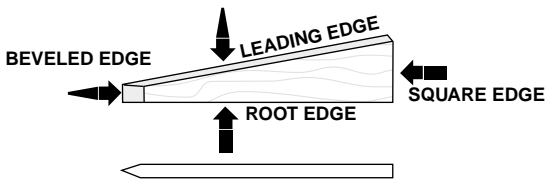
B. CUT FINS FREE WITH KNIFE.

PLACE PATTERN ON FINS AS SHOWN. TRACE PATTERN WITH PENCIL ON BOTH SIDES OF EACH FIN.

E. SAND BEVELED EDGE INTO EACH FIN. FOR BEST RESULTS, SAND FROM PENCIL LINE TO EDGE OF FIN WITH SANDING BLOCK.

F. MARK BOTH SIDES OF EACH FIN.

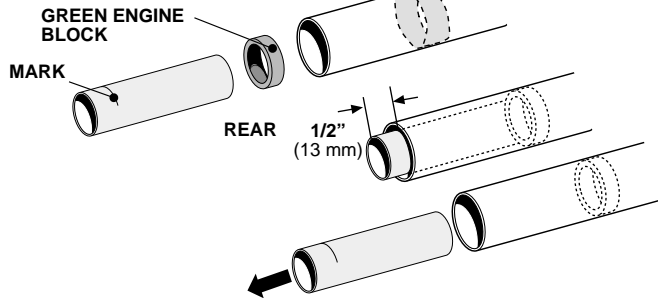
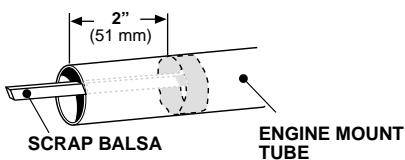
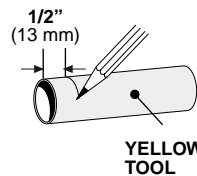
G. SAND EACH FIN AS SHOWN.



2. A.

B. USE SCRAP BALSA TO SMEAR GLUE 2" (51 mm) INSIDE ENGINE MOUNT TUBE.

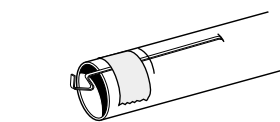
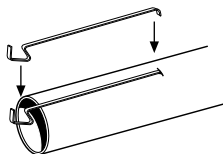
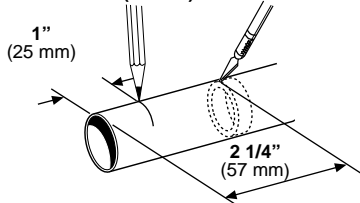
C. PUSH ENGINE BLOCK INTO ENGINE MOUNT TUBE WITH SPACER TOOL UP TO MARK. REMOVE SPACER TOOL.



D. MARK ENGINE MOUNT TUBE AT 1" (25 mm) AND 2 1/4" (57 mm) FROM REAR END. CUT 1/8" (3 mm) SLIT AT 2 1/4" (57 mm) MARK.

E. POSITION HOOK.

F. TEMPORARILY TAPE HOOK INTO PLACE.

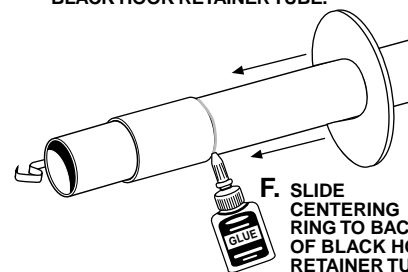
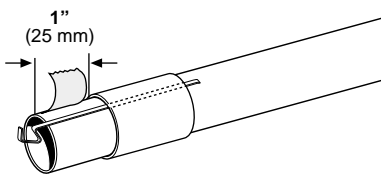
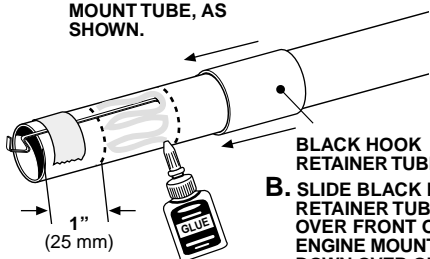


3. A.

A. APPLY GLUE AROUND ENGINE MOUNT TUBE, AS SHOWN.

C. REMOVE TAPE.

E. APPLY GLUE BAND BEHIND BLACK HOOK RETAINER TUBE.



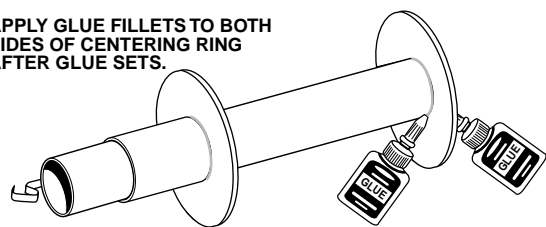
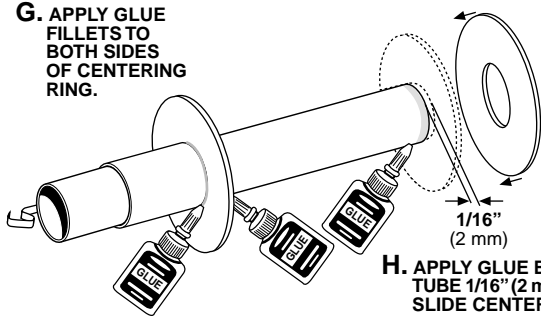
B. SLIDE BLACK HOOK RETAINER TUBE OVER FRONT OF ENGINE MOUNT TUBE DOWN OVER GLUE TO 1" (25 mm) MARK.

D. WIPE AWAY EXCESS GLUE.

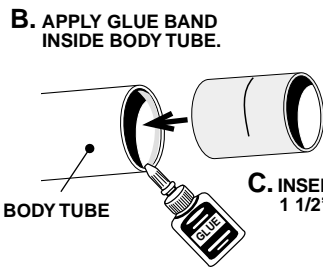
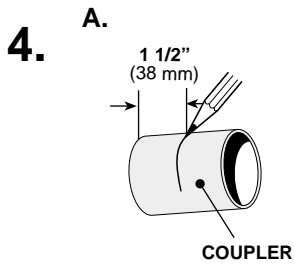
F. SLIDE CENTERING RING TO BACK OF BLACK HOOK RETAINER TUBE.

G. APPLY GLUE FILLETS TO BOTH SIDES OF CENTERING RING.

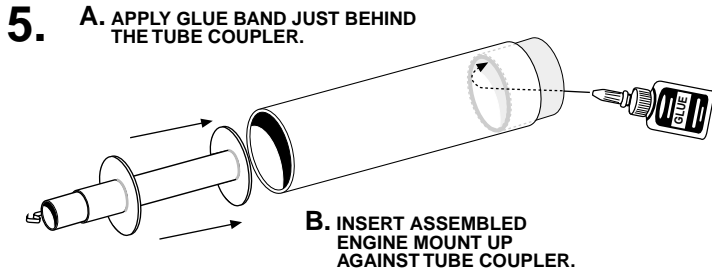
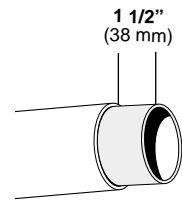
I. APPLY GLUE FILLETS TO BOTH SIDES OF CENTERING RING AFTER GLUE SETS.



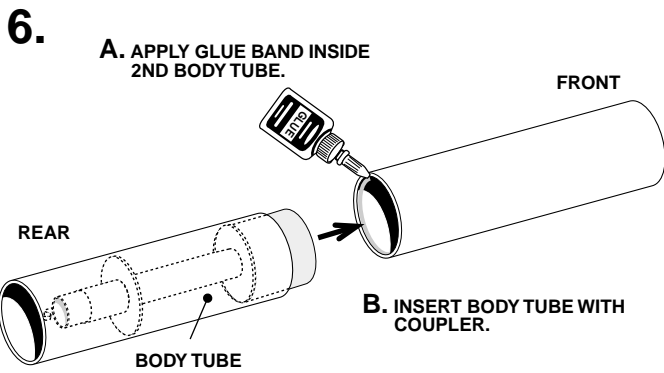
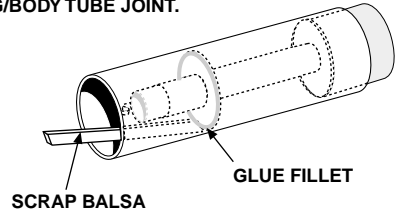
H. APPLY GLUE BAND AROUND TUBE 1/16" (2 mm) FROM END. SLIDE CENTERING RING ON.



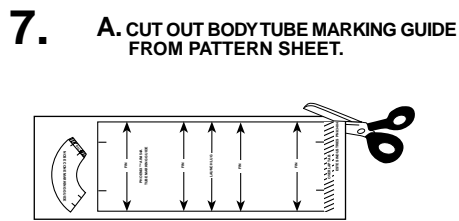
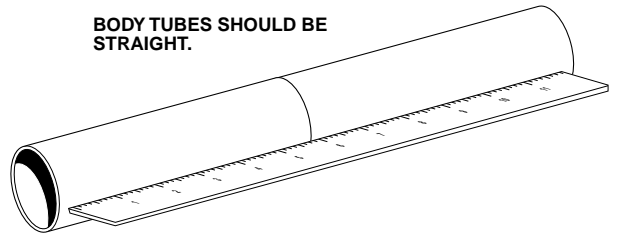
C. INSERT COUPLER UP TO 1 1/2" (38 mm) MARK.



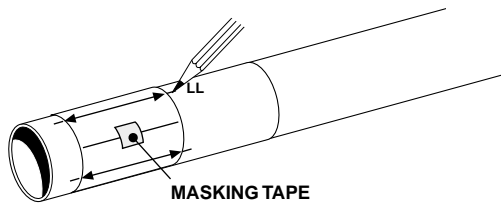
C. APPLY GLUE FILLET TO CENTERING RING/BODY TUBE JOINT.



BODY TUBES SHOULD BE STRAIGHT.

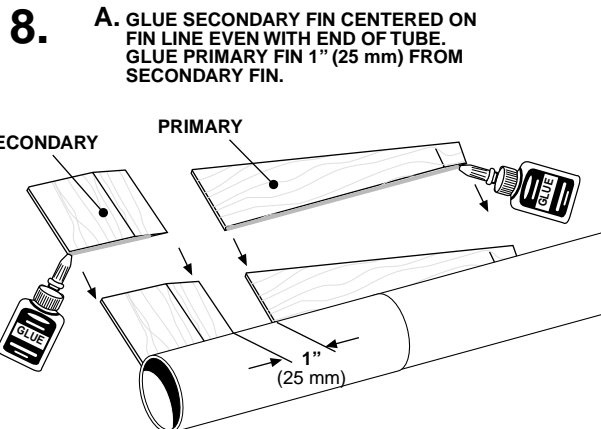
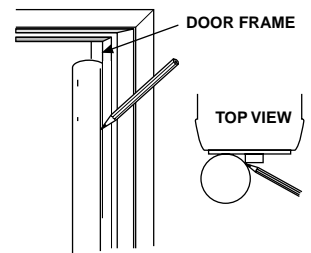


B. TAPE GUIDE AROUND END OF BODY TUBE. ALIGN LAUNCH LUG LINE WITH ENGINE HOOK.



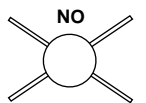
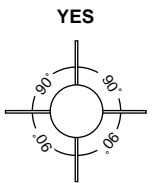
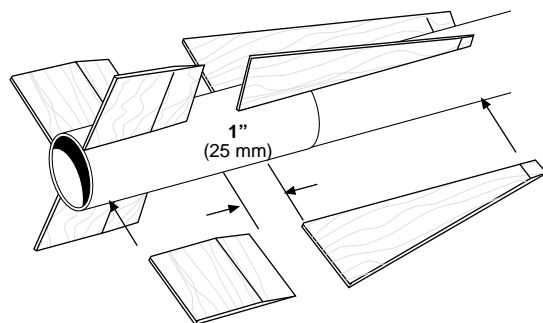
MARK AT ARROWS. MARK LAUNCH LUG LINE 'LL'. REMOVE GUIDE.

C. EXTEND ALL LINES ENTIRE LENGTH OF TUBE.



B. REPEAT FOR REMAINING FINs.

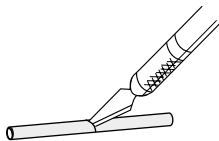
ALIGN FINs 90° FROM ONE ANOTHER.



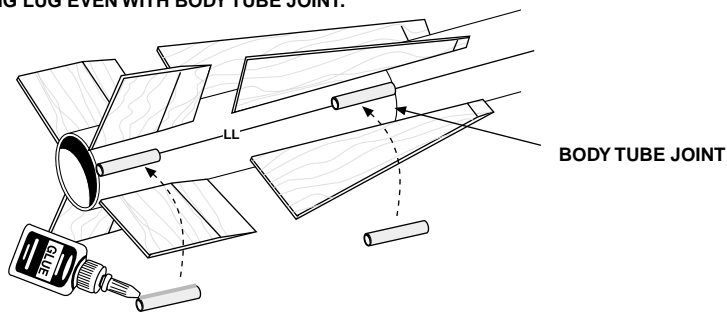
C. LET GLUE DRY.

9.

A. CUT LAUNCH LUG INTO TWO EQUAL LENGTHS.

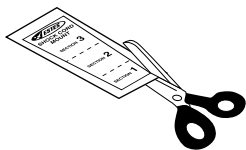


B. GLUE ONE LUG ON 'LL' LINE EVEN WITH REAR OF TUBE. GLUE REMAINING LUG EVEN WITH BODY TUBE JOINT.

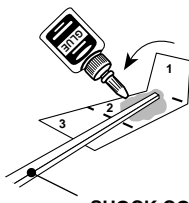


10.

A. CUT OUT SHOCK CORD MOUNT.

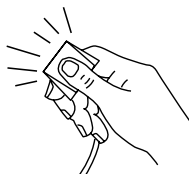
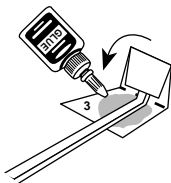


B. GLUE & FOLD.

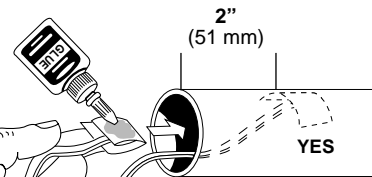


SHOCK CORD

C. GLUE & FOLD.



D. SQUEEZE TIGHTLY.



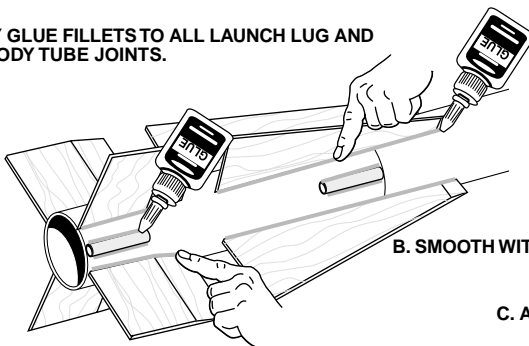
E. GLUE MOUNT INSIDE BODY TUBE. HOLD UNTIL GLUE SETS.



11.

PROCEED WITH THIS STEP ONLY AFTER THE GLUE ON FINS AND LAUNCH LUGS ARE THOROUGHLY DRY.

A. APPLY GLUE FILLETS TO ALL LAUNCH LUG AND FIN/BODY TUBE JOINTS.

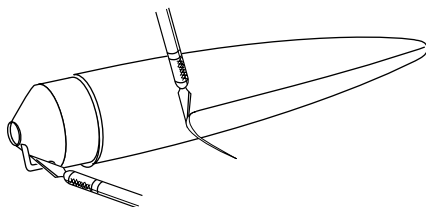


B. SMOOTH WITH FINGER TIP.

C. ALLOW GLUE TO DRY.

12.

A. CAREFULLY REMOVE FLASH FROM EYELET AND EXCESS FLASH FROM NOSE CONE.

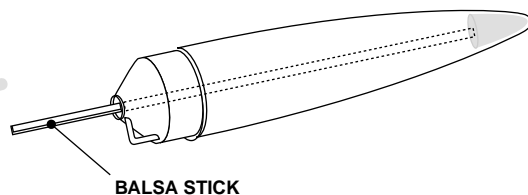


B. FORM CLAY INTO 'SNAKES'.



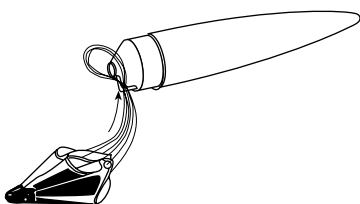
CLAY WEIGHTS

C. DROP 'SNAKES' THROUGH HOLE IN NOSE CONE. USE SCRAP Balsa STICK TO PUSH ALL THE CLAY INTO NOSE CONE TIP.

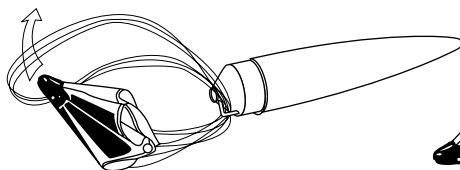


BALSA STICK

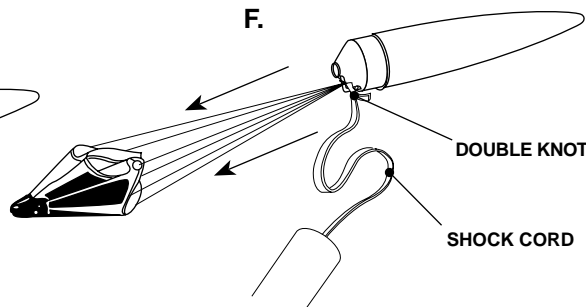
D.



E.



F.



DOUBLE KNOT.

SHOCK CORD