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# U.S. ARMY patriot

M-104

## FLYING MODEL ROCKET KIT EST 2056/1248 INSTRUCTIONS

KEEP FOR FUTURE REFERENCE

### ASSEMBLY TIP

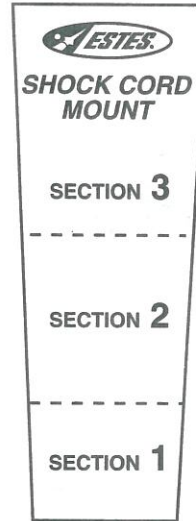
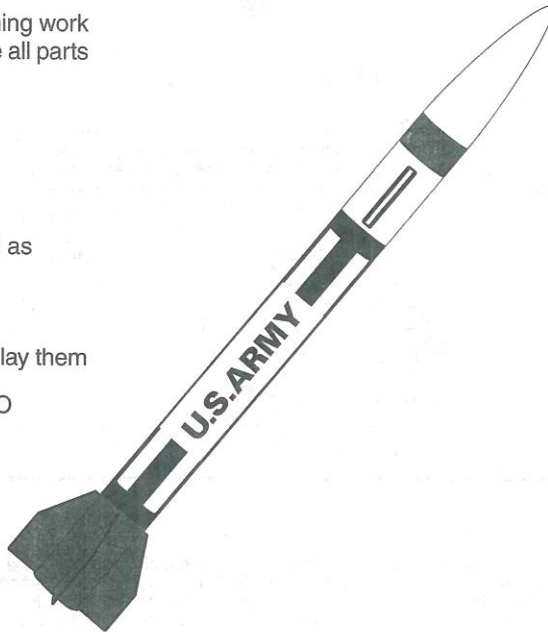
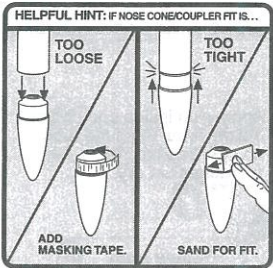
Read all instructions before beginning work on your model. Make sure you have all parts and supplies.

### TEST-FIT ALL PARTS TOGETHER BEFORE APPLYING ANY GLUE.

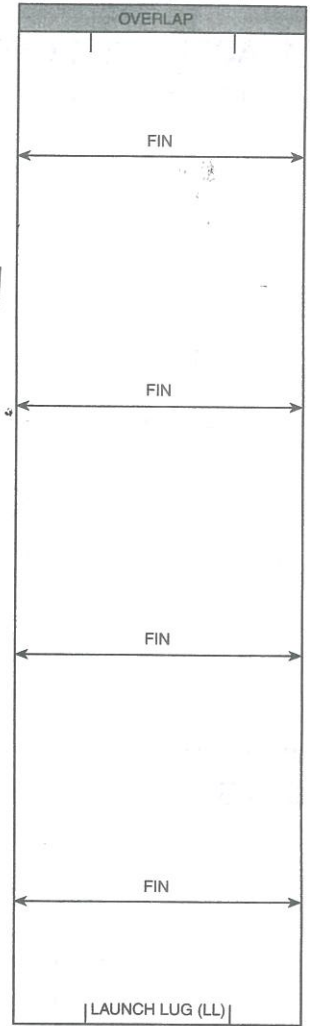
If any parts don't fit properly, sand as required for precision assembly.

### PARTS

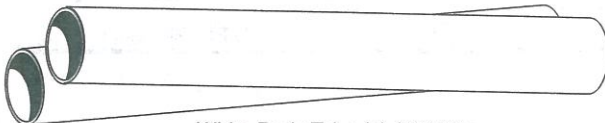
Locate the parts shown below and lay them out on the table in front of you. DO NOT USE THIS DRAWING TO ASSEMBLE YOUR ROCKET.



Shock Cord Mount



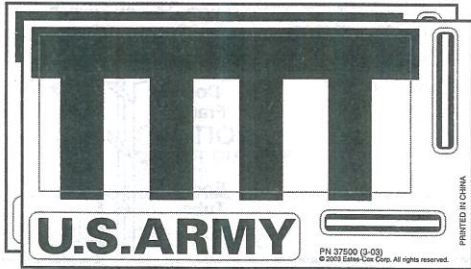
Tube Marking Guide



White Body Tube (2) (30414)



Yellow Body Tube (1) (30426)



Decal Sheet (2) 37500



Blue Engine Mount Tube (1) (30326-1)



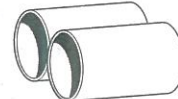
Nose Cone (1) (72057)



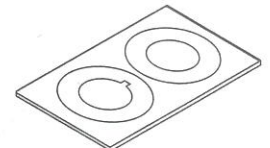
Mylar Retainer Ring (1) (30168)



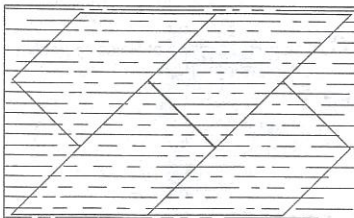
Engine Hook (1) (35021)



Red Tube Coupler (2) (30176-5)



Centering Ring Card (1) (30128)



Die-Cut Balsa Sheet (1) (32220)



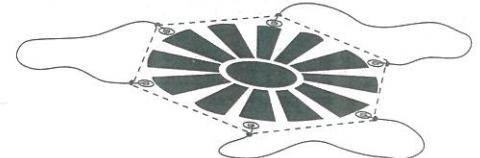
Operation Enduring Freedom Sticker (1) (60586)



Green Engine Block (1) (30162-2)



Shock Cord (1) 1/8" x 18" (38374)



Launch Lug (1) (38178)

Assembled Parachute 12" (30 cm) (1) (35801)

### 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



MASKING TAPE



SPRAY PRIMER (WHITE)



SPRAY PAINT: (RED)

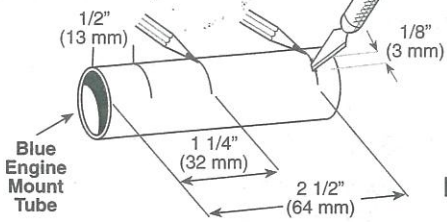


SPRAY CLEAR COAT (OPTIONAL)

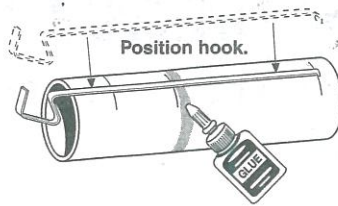
## 1. ASSEMBLE ENGINE MOUNT

**A.** Mark Engine Tube.

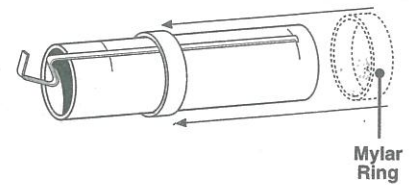
**B.** Cut 1/8" (3 mm) slit at 2 1/2" (64 mm) mark.



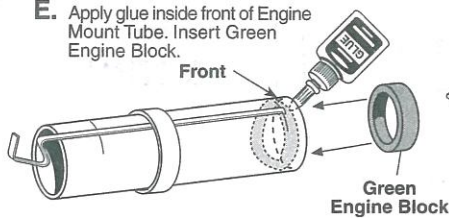
**C.** Apply glue around tube just ahead of the 1 1/4" (32 mm) mark. Insert engine hook end into slit.



**D.** Slide Mylar Retainer Ring onto Engine Mount Tube up to 1 1/4" (32 mm) mark.



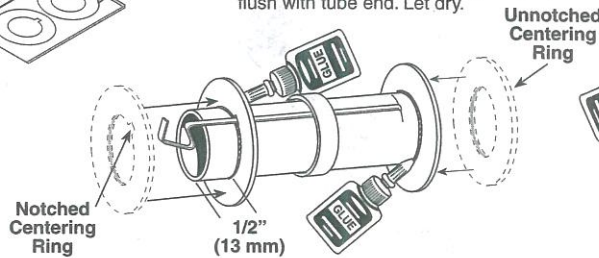
**E.** Apply glue inside front of Engine Mount Tube. Insert Green Engine Block.



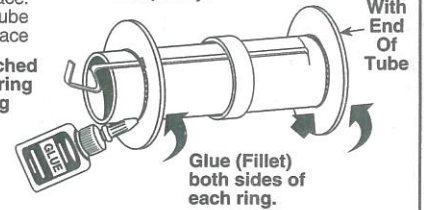
**F.** Carefully remove Die Cut Rings with a hobby knife.



**G.** Apply glue around tube at 1/2" (13 mm) mark and slide notched Centering Ring into place. Let glue set. Apply glue around end of tube and slide unnotched Centering Ring in place flush with tube end. Let dry.

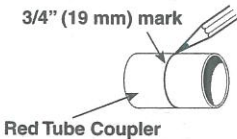


**H.** Apply glue fillets to both sides of Centering Rings. Let glue dry completely.

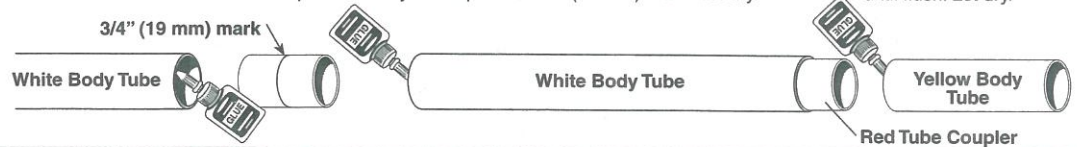


## 2. ASSEMBLE BODY TUBES

**A.** Mark red coupler (2) tubes at the 3/4" (19 mm) mark from end.



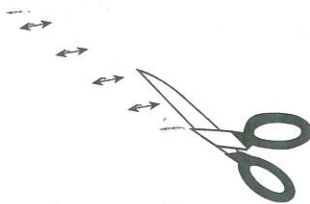
**B.** Apply glue inside White Body Tube as shown. Insert red coupler into body tube up to the mark. Let dry. Apply glue inside second White Body Tube as shown and push together until flush. Let dry. Apply glue inside other end of White Body Tube. Insert Red Coupler into body tube up to the 3/4" (19 mm) mark. Let dry.



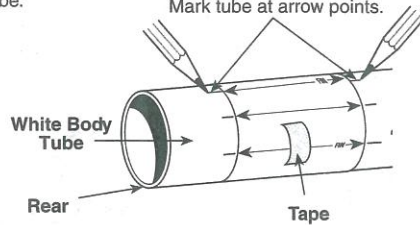
**C.** Apply glue inside one end of Yellow Tube. Push the tube coupler into the Yellow Tube until flush. Let dry.

## 3. MARK FIN AND LAUNCH LUG LINES

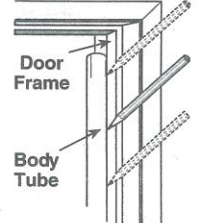
**A.** Cut out Tube Marking Guide. Wrap and tape around the rear section of the White Body Tube.



**B.** Mark at arrows, mark Launch Lug Line "LL". Mark tube at arrow points.

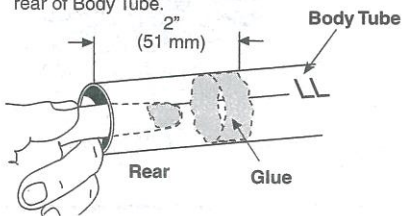


**B.** Using a door frame as a guide, extend Fin Lines 4" (102 mm) from rear of body. Extend Launch Lug Line 8" (203 mm).

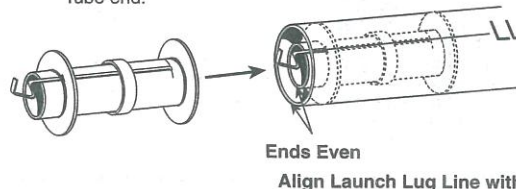


## 4. INSERTING ENGINE MOUNT

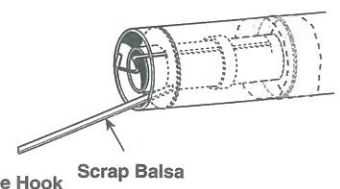
**A.** Use finger to smear glue 2" (51 mm) inside rear of Body Tube.



**B.** Align Engine Hook with Launch Lug line and insert Engine Mount until Engine Tube is even with Body Tube end.

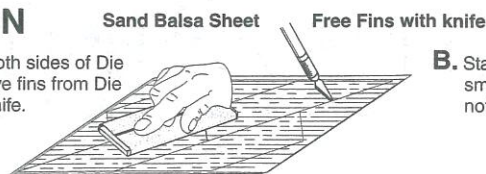


**C.** Use a scrap piece of Balsa to apply a glue fillet to Centering Ring/Body Tube joint. Let dry.



## 5. FIN PREPARATION

**A.** Using fine sand paper, sand both sides of Die Cut Fin Sheet. Carefully remove fins from Die Cut Sheet using a modeling knife.



**B.** Stack Fins together. Sand all edges smooth. Leave edges square, do not round them.

