



www.estesrockets.com

ESTES-COX CORP.
1295 H Street
Penrose, CO 81240
PRINTED IN CHINA

COMANCHE-3™

3 STAGE HIGH ALTITUDE FLYING MODEL ROCKET KIT INSTRUCTIONS

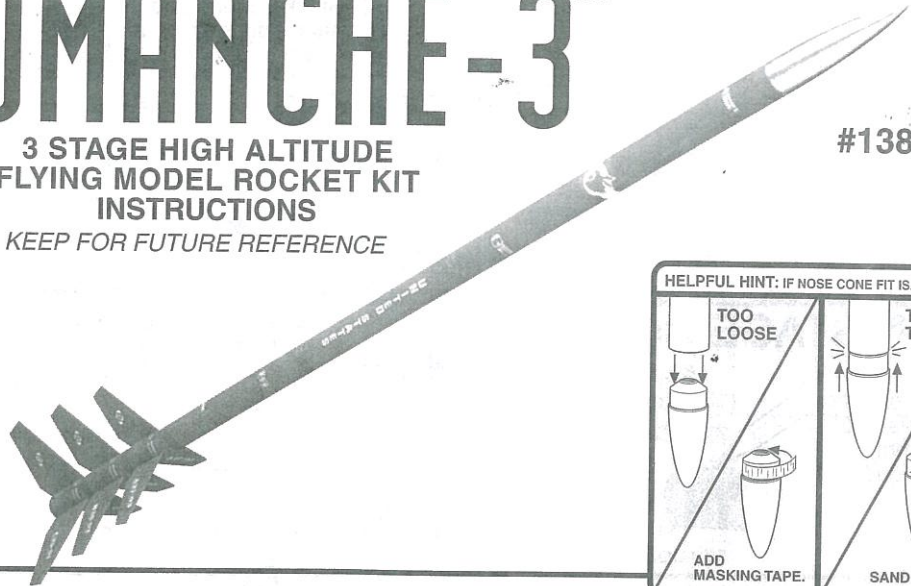
KEEP FOR FUTURE REFERENCE

#1382

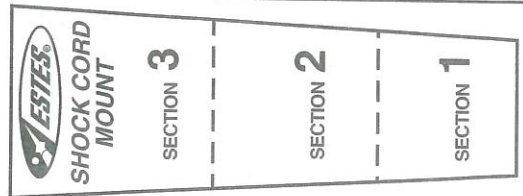
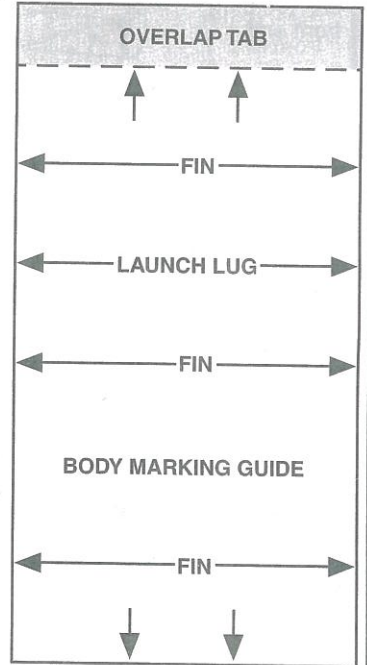
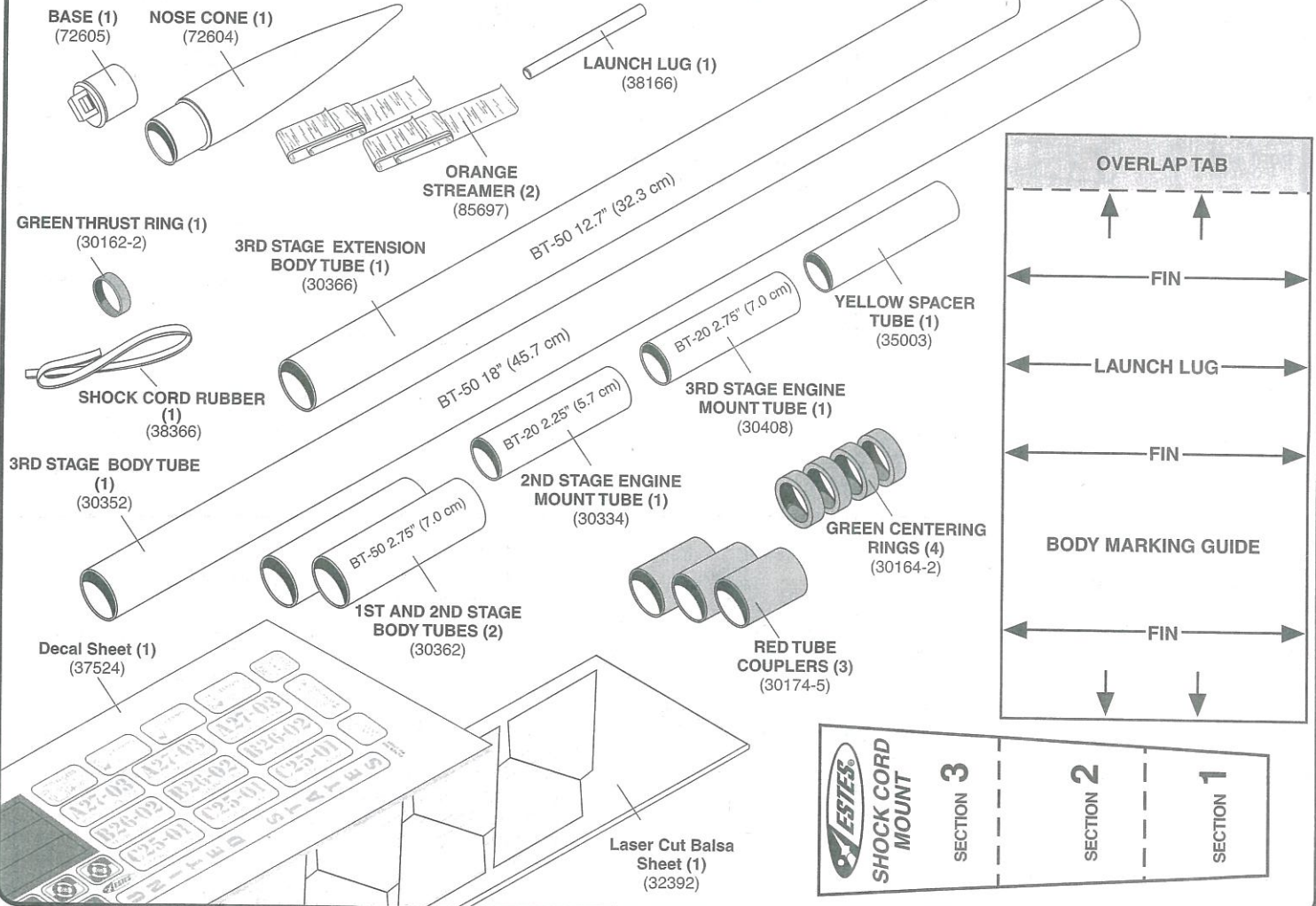
ASSEMBLY TIP: Read all instructions before beginning work on your model. Make sure you have all parts and supplies.

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.**

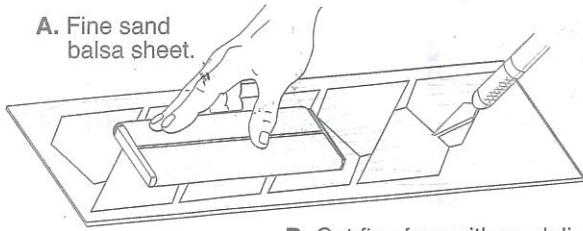


SUPPLIES In addition to the parts included in the kit you will also need:



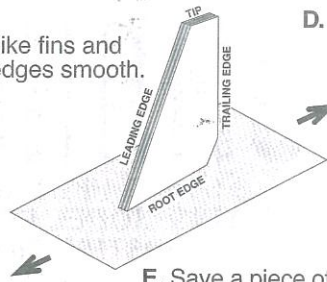
1.

A. Fine sand balsa sheet.

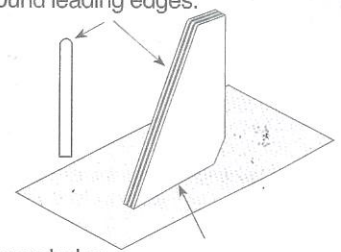


B. Cut fins free with modeling knife.

C. Stack like fins and sand edges smooth.



D. Round leading edges.

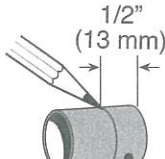


E. Save a piece of scrap balsa to use as a glue applicator.

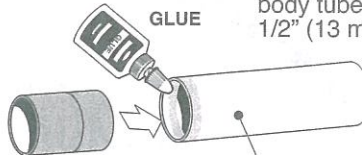
ROOT EDGE GLUES TO BODY TUBE.

2. 1ST STAGE BODY

A. Mark one red coupler 1/2" (13 mm) from end.

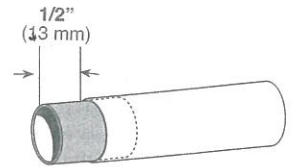


RED COUPLER



1ST STAGE BODY TUBE
1" (25 mm) DIA. x 2 3/4" (70 mm) LONG

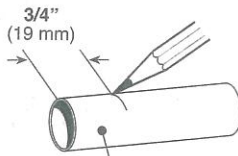
B. Apply glue just inside one end of body tube and insert coupler to 1/2" (13 mm) mark. Let dry.



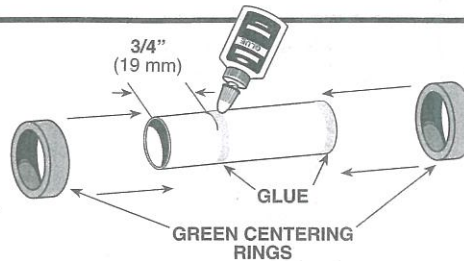
C. Completed 1st stage body tube.

3. 2ND STAGE BODY

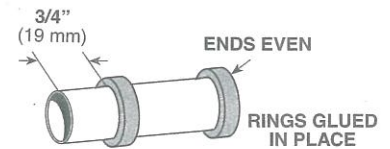
A. Mark engine mount tube 3/4" (19 mm) from end.



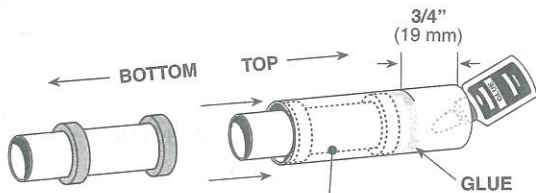
2ND STAGE ENGINE MOUNT TUBE
3/4" (19 mm) DIA. x 2 1/4" (57 mm) LONG



B. Apply glue just past 3/4" (19 mm) mark and at end of tube as shown.

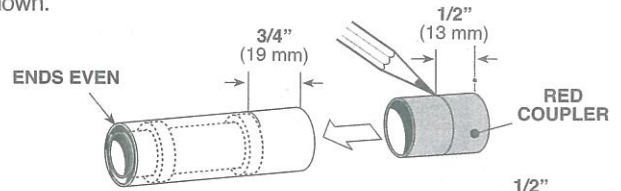


C. Slide green centering rings in place as shown. Let dry.

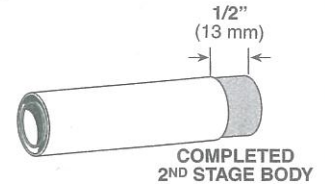


BODY TUBE 1" (25 mm) DIA. x 2 3/4" (7.0 cm) LONG

D. Apply glue 3/4" (19 mm) inside remaining BT-50 body tube and insert engine mount assembly until flush (ends even).



E. Mark red coupler 1/2" (13 mm) from end. Apply glue inside end of body tube and insert coupler to 1/2" (13 mm) mark. Let dry.



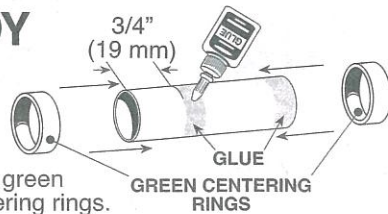
COMPLETED 2ND STAGE BODY

4. 3RD STAGE BODY

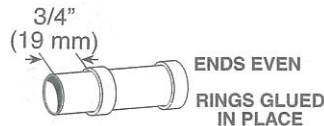
3/4" (19 mm)

A. Mark engine mount tube.

3RD STAGE ENGINE MOUNT TUBE
3/4" (19 mm) DIA. x 2 3/4" (70 mm) LONG



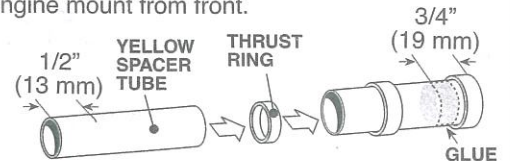
B. Glue green centering rings.



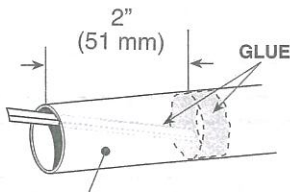
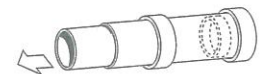
ENDS EVEN
RINGS GLUED IN PLACE

C. Mark yellow spacer tube 1/2" (13 mm) from end.

D. Apply glue 3/4" (19 mm) inside engine mount from front.

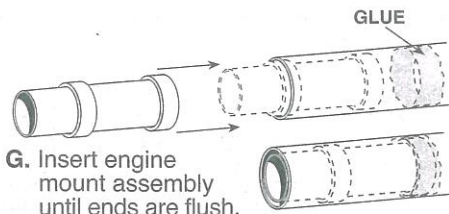


E. Insert green thrust ring, then yellow spacer tube until 1/2" (13 mm) mark is even with end of tube. Remove spacer tube immediately. Let dry.

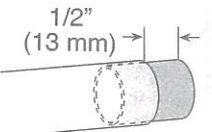
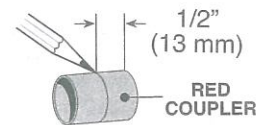


3RD STAGE BODY TUBE 18" (45.7 cm) LONG

F. Use a piece of scrap balsa to smear glue 2" (51 mm) inside body tube.



G. Insert engine mount assembly until ends are flush.



F. Glue coupler into front of body tube (opposite end of engine mount assembly).