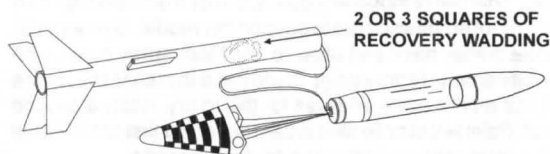




orbit III

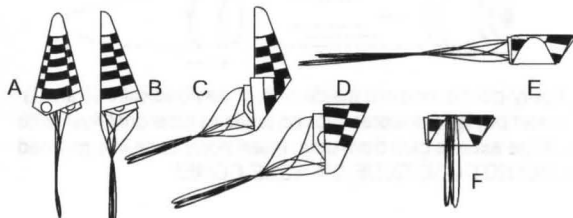
- 14** Cut decal into two part parts. Trim as close as possible to decal. Peel backing away and place decal on model.



2 OR 3 SQUARES OF RECOVERY WADDING

- 15** Use 2 squares of recovery wadding. Insert loosely crumpled recovery wadding deep into body tube. **This is a very important step and must not be skipped!** You are now ready to proceed to next step and fold parachute.

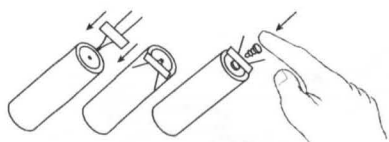
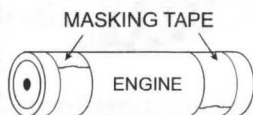
16 ALL PARTS EXCEPT PARACHUTE OMITTED FROM DRAWING TO SHOW FOLDING



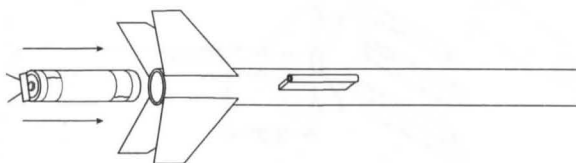
- A - Pull parachute to form a spike.
 B - Fold parachute in half.
 C - Fold bottom half.
 D - Fold top part to bottom.
 E - Roll parachute.
 F - Wrap shroud lines around chute.

Insert shock cord into tube followed by folded parachute.

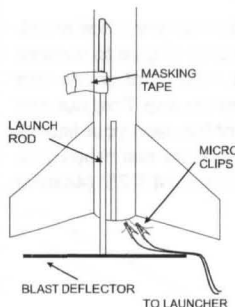
- 17** Wrap masking tape around engine on top and bottom. Depending on fit of engine, you may need to add or remove some tape.



- 18** Select a A8-3 engine for your first launch. This will give you an approximate altitude of 200 to 300 feet. Carefully insert igniter into engine and bend igniter. Use an engine plug or masking tape to secure igniter in place.



- 19** Insert engine into rocket. It should be a **secure fit**, but engine should still be removable.



MISFIRES

A misfire occurs if after 15 seconds, the rocket does not liftoff. The most typical cause of misfire is igniter. Wait at least a full minute before approaching a rocket after a misfire. Remove rocket, take out engine and reinstall another igniter. Make sure igniter is installed correctly and repeat launch procedure.

- 1 Remove Safety Key.
- 2 Remove safety cap and place rocket on launch pad.
- 3 Attach micro clips, making sure they don't touch each other or blast deflector.
- 4 Step back 15 feet (5 meters)
- 5 Insert safety key, make sure everyone is aware of the launch and give an audible countdown.
 5--4--3--2--1 LAUNCH
PRESS BUTTON UNTIL ROCKET IGNITES.

DO NOT ALLOW MICRO-CLIPS TO TOUCH EACH OTHER OR BLAST DEFLECTOR!

- 20** Slide launch lug over launch rod. Make sure safety key is out of launcher, and hook up micro clips to igniter. Don't let micro clips touch themselves, launch rod, or engine clip. Stand back at least 15 feet, and look around to make sure that everyone is aware of launch. Insert safety key and hold button for 3-4 seconds. If rocket does not take off after 15 seconds, you either have a misfire or low batteries. Remove safety key and wait another 15 seconds. Walk over, remove rocket, and try another igniter. Repeat launch procedure again.

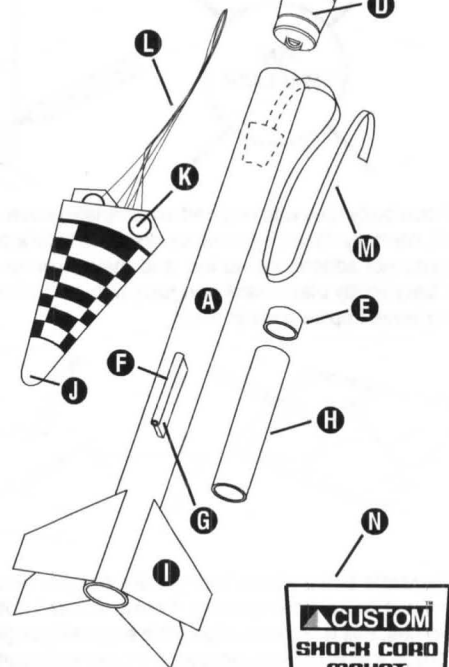
VISIT OUR WEBSITE

WWW.CUSTOMROCKETCOMPANY.COM

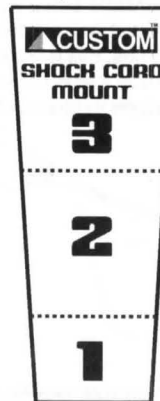
CUSTOM

- A BT-209 BODY TUBE
- B PC-50 INJECTION NOSE CONE
- C RED PAYLOAD TUBE
- D PAYLOAD REDUCER
- E ENGINE BLOCK
- F LUG125 SHORT LAUNCH LUG
- G LUG STAND OFF
- H YELLOW DUMMY ENGINE TUBE
- I BALSA FINS
- J 12" PARACHUTE
- K TD-6 TAPE DISK
- L SL-72 SHROUD LINES
- M SC-1 SHOCK CORD
- N SHOCK CORD MOUNT
- O DECAL (NOT SHOWN)

Recommended Engines:
 Single Stage: A8-3, B4-4,
 B6-4, C6-5



This kit requires, white glue, plastic cement glue, fine sandpaper, sanding sealer, scissors, and a hobby knife or razor blade. White primer, gloss white, gloss black enamel spray paint is recommended for finishing. Engines, launch pad, and launch controller, are not included in this kit and must be purchased separately.



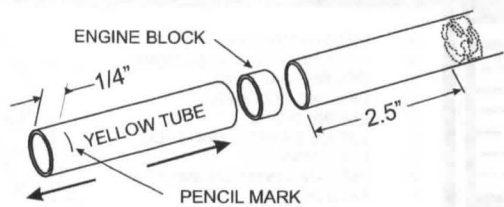
ORBIT III

ORBIT III

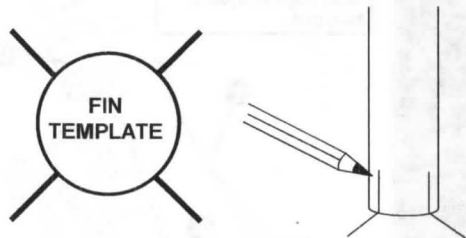


CUSTOM

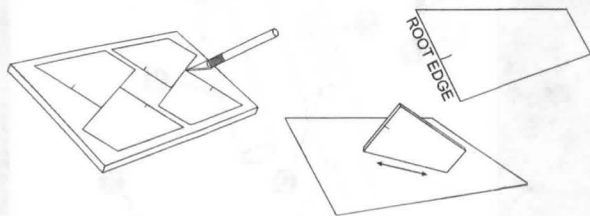
www.customrocketcompany.com



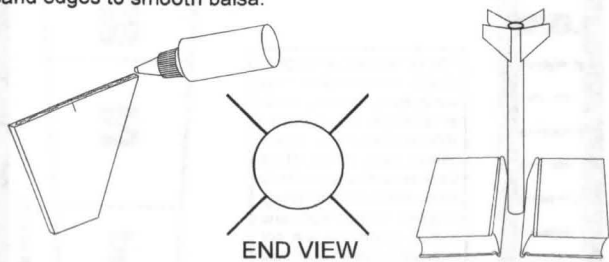
1 Measure 1/4" (6 mm) from end of yellow tube (Part H) and place mark with a pencil. Apply a ring of white glue 2.5" (64 mm) inside on end of long body tube. Insert engine block (Part E) into end that has glue. Push engine block with yellow tube until you reach 1/4" mark on yellow tube. Quickly pull yellow tube out of body tube. Yellow tube can then be discarded.



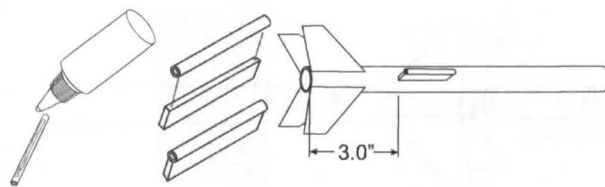
2 Place body tube with ring end on template above. With a pencil, carefully draw alignment marks. Don't use a pen because paint may not adhere well to ink, and may show up underneath paint. Very lightly place marks on tube with a pencil as you don't want to leave impressions in tube.



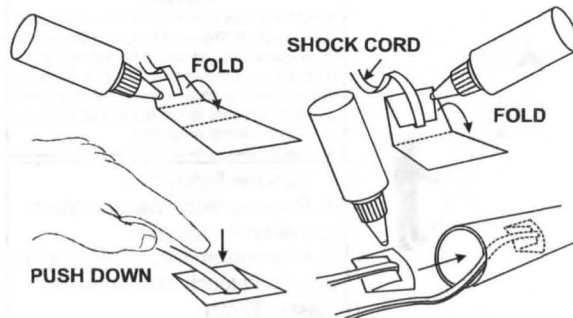
3 Separate balsa with a hobby knife or razor blade. This will protect balsa from splitting. Locate a small notch on each edge of fins; this is the root edge. This edge will get glued to body tube. Place a sheet of fine sandpaper on a smooth surface. Lightly sand edges to smooth balsa.



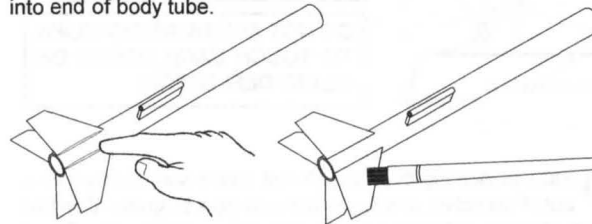
4 Start with one fin at a time. Apply a drop of white glue and spread it out with your index finger. Glue should cover all of root edge on fin. Glue this fin to fin alignment mark on body tube as shown. Bottom edge of fin should be even with tube. Hold fin until glue starts to set. Continue with other fins in same way. To help support model, place rocket gently between two books.



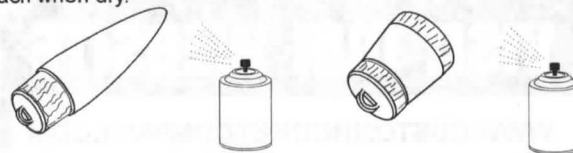
5 Measure 3" (76 mm) from end of rocket. Make a mark with pencil so that it's between fins as shown above. Apply a drop of white glue to launch lug and spread it out with your index finger. Glue launch lug to standoff, then glue standoff to body tube at 3" mark.



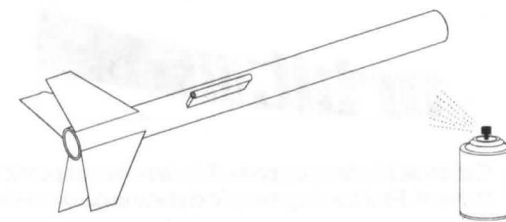
6 Cut shock cord mount (Part N) from front of instruction sheet. Locate shock cord (Part M). Apply a drop of glue to number one and put end of shock cord into glue. Fold number one into number two, then apply glue to back of number one. Fold number two into number three. Squeeze the mount between your fingers until glue starts to set. When mount is dry, apply two drops glue to side that has Custom logo. Insert mount at least 1.75" (44 mm) into end of body tube.



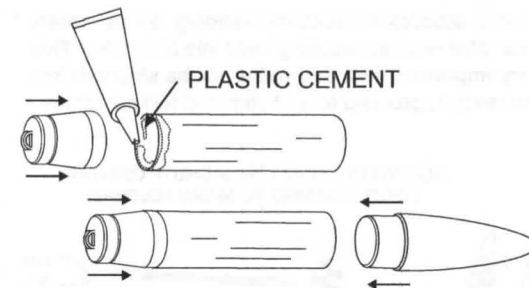
7 To create a strong bond between fins and tube, a fillet of glue is needed. Create a fillet by adding a drop of white glue and spreading it along joint between fin and tube. This should be done for each side of fins. After glue has dried, it's time to seal balsa grain with sanding sealer. Next, lightly sand balsa surface with fine sandpaper. Then brush on a thin coat of sanding sealer to each side of fins. After this coat has dried, sand balsa again with fine sandpaper. Apply a second and third coat, sanding between each when dry.



8 Wrap masking tape around shoulder of nose cone and payload reducer. Apply a coat of white primer. After primer has dried, spray with three coats of gloss black enamel spray paint.

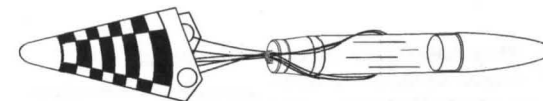
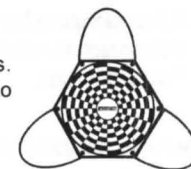


9 After fin sealer has dried, wipe model down with a clean rag. This will remove any dust left over from sanding. Use a dowel, or rolled newspaper to support the model. Spray model with white primer paint and allow to dry. Next, spray model with gloss white enamel spray paint. Try to get a thin coat over entire model. Put model aside and wait for this to dry. Apply a second light coat. Paint will start to fill in areas missed by first coat. Follow up with a third coat and allow this to dry overnight.

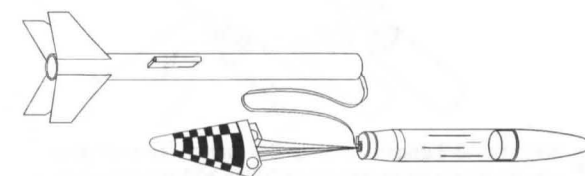


10 Apply plastic cement inside end of payload tube (Part C). Insert payload adapter into red payload tube until flush with tube. Wipe excess glue from tube. Insert nose cone into payload tube. DO NOT USE GLUE ON NOSE CONE!

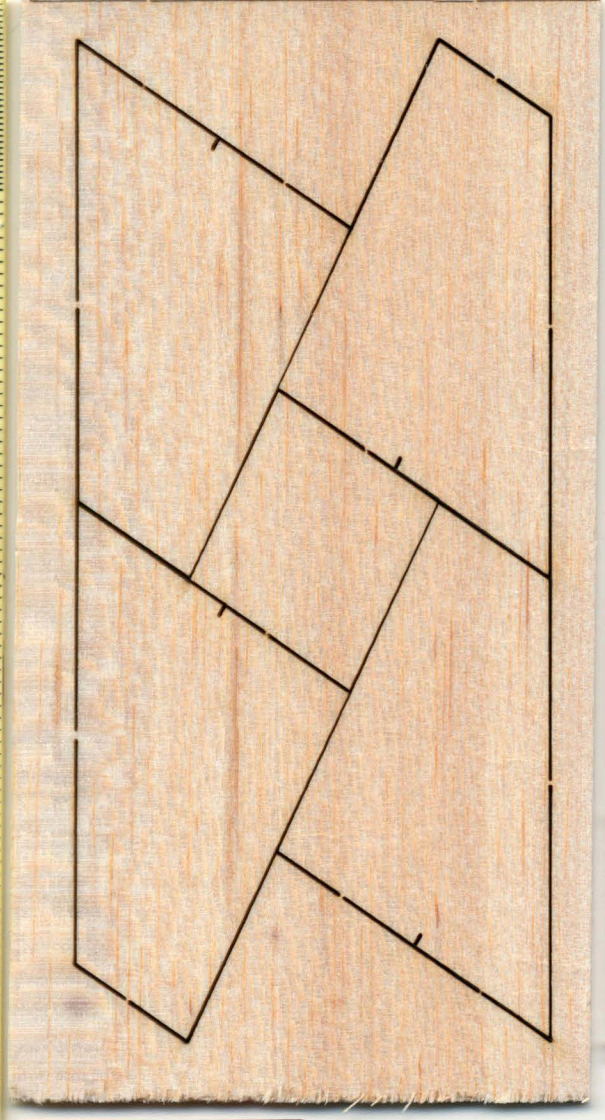
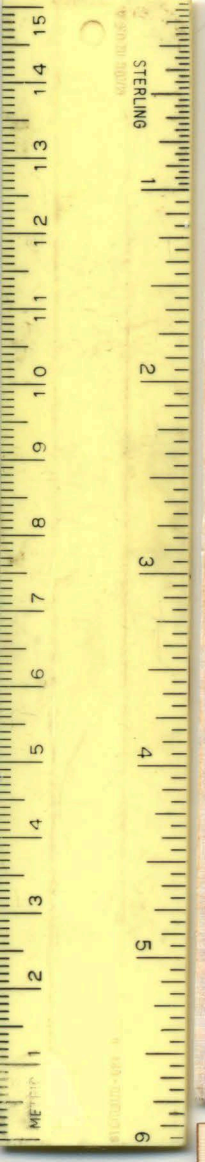
11 Cut out parachute with scissors. Follow instructions on parachute to assemble.



12 Pass shroud lines through eyelet on payload section. Slide payload section through loop in shroud line and pull tight.



13 Tie end of shock cord to eyelet on nose cone.



BT-20 tube is 9"

Clear red BT-50 payload tube 4"

Balsa fins are $\frac{3}{32}$ "

Basswood lug standoff is $1\frac{1}{2}$ " x $\frac{5}{16}$ " x $\frac{1}{8}$ "

orbit

- Payloader!
- Pressure-sensitive decals
- 12" Parachute recovery
- Laser-cut balsa fins
- Plastic nose cone
- Simple paint scheme
- Achieve flights over 900 feet!

Length: 16.50" (42 cm)
Dia.: 0.736" (18.7 mm)
Payload: 0.576" (14.6 mm)
Weight: .98 oz (28 g)
Engines: A8-3 A8-4 A8-4
C8-5

**SKILL
LEVEL 1**

**Flying
Model
Rocket**

