

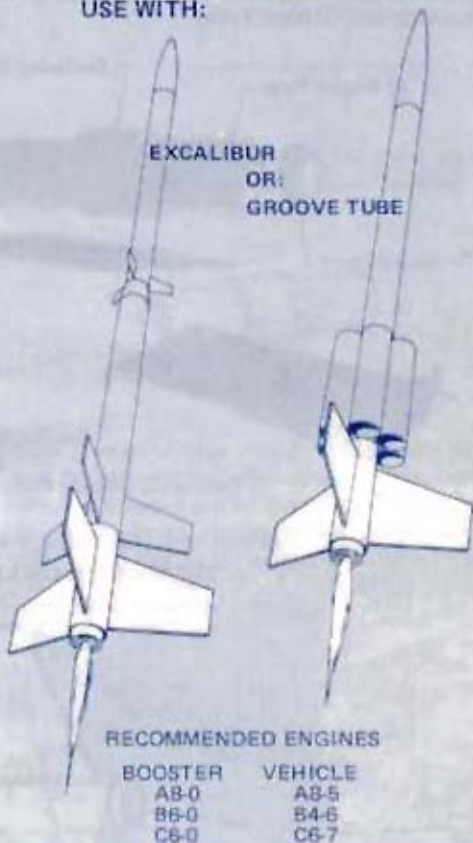


FLYING MODEL ROCKET ACCESSORY

No.8 BOOSTER UNIT

Catalog No. KBB-8

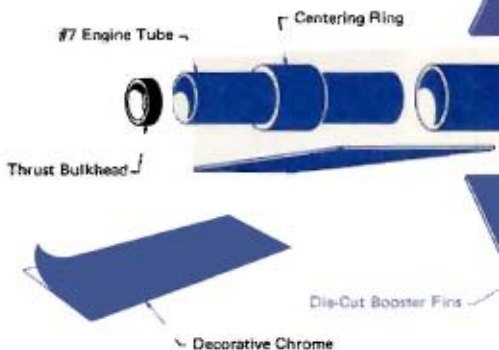
REAL TWO STAGE ACTION!
SAFE, TUMBLE RECOVERY!
USE WITH:



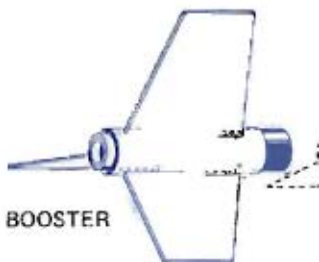
**NOTE: BUILD THE MAIN VEHICLE FIRST;
THEN ASSEMBLE THIS BOOSTER TO FIT IT.**

NOTE: IT IS IMPORTANT TO BUILD THE MAIN VEHICLE FIRST; THEN ASSEMBLE THIS BOOSTER UNIT TO FIT THE VEHICLE.

This #8 Booster unit is designed to fit the Centuri Excalibur to convert it to real two-stage action. It may also be flown with the Centuri Groove Tube . . . or even with some "custom" own-design rockets, as long as their engine mounts are similar to the mounts in the Excalibur and Groove Tube.

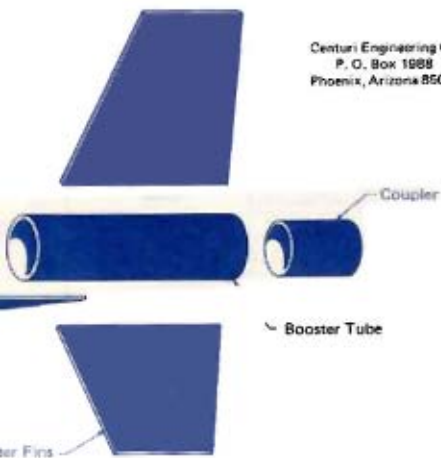


AFTER YOU HAVE BUILT YOUR MAIN VEHICLE
THE BOOSTER UNIT FROM THE PARTS

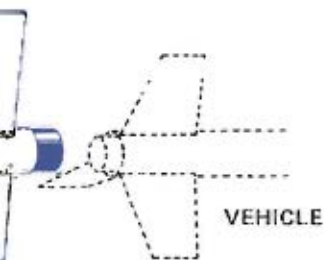


ASSEMBLY INSTRUCTIONS

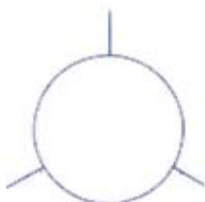
Centuri Engineering Co.
P. O. Box 1988
Phoenix, Arizona 85001



FOR MAIN VEHICLE, START ASSEMBLING
FROM THE PARTS IN THIS PACKAGE.



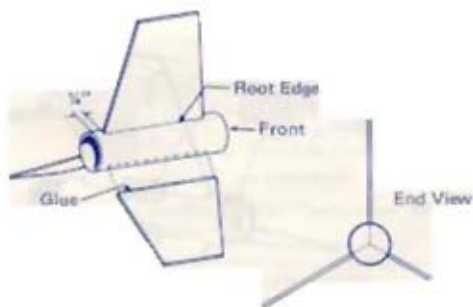
- 1** Stand the booster tube on its fin guide below, and mark the three fin positions. Using any convenient door jamb, partially open drawer or molding extend the marks into straight lines along the length of the tube.



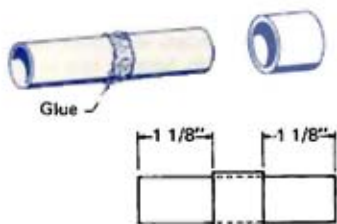
**#8 FIN
GUIDE**



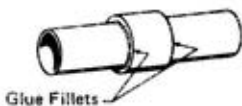
- 2** Identify the root edge of the fins, and run a neat bead of glue along that edge. Position fin along a drawn line on the booster tube, $\frac{1}{4}$ " from end of tube. Remove fin, allow glue a moment to become tacky. Add fresh glue to fin and reposition in place. Repeat with remaining fins and check for neat alignment.



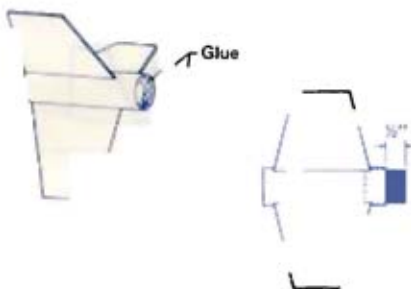
- 3 Run a bead of glue around the middle of the engine tube. Slide the centering ring into place, positioning it in the middle of the tube.



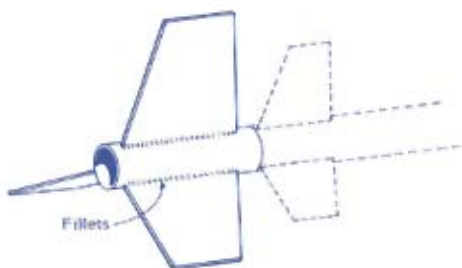
- 4 Run a bead of glue around the joint on each side of centering ring. Smooth into neat fillets with your finger.



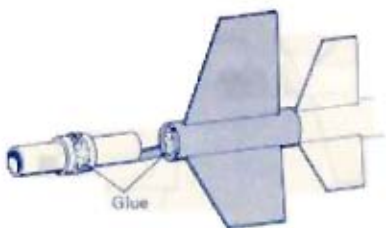
- 5 Run a bead of glue around the outside of one end of the coupler. Run another glue bead inside the forward end of the booster tube. Insert coupler halfway into tube, leaving $\frac{1}{2}$ " sticking out. Align the parts neatly.

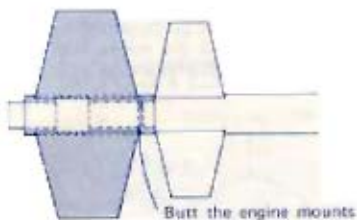


- 6** When the assembly is dry enough to handle, insert the coupler end into the bottom of your upper stage vehicle for ease of handling. Run a fine bead of glue along each fin joint, and smooth into neat fillets with your finger. This is necessary for the booster fins to withstand lift off and ejection stresses. Allow unit to dry, standing rocket upright and checking alignment again.



- 7** Run beads of glue around the centering ring, and around the inside middle section of booster tube. Insert the centering ring/engine tube assembly all the way into the booster tube, until you feel it butt up against the main vehicle's engine mount. The thrust bulkhead will be glued in place in a later step.

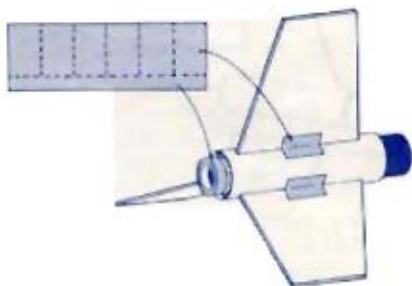




- 8** Spray-paint the booster unit with a fast drying enamel . . . choose a high-visibility color that looks attractive with the rest of the rocket. Be sure to mask off the coupler area to avoid paint build up.



- 9** When the paint has dried, cut the pressure-sensitive chrome as shown, and apply to the fin unit.



Insert the appropriate engines into the booster and the vehicle, as explained in the enclosed Technical Report . . . Then glue the thrust bulkhead in place, and remove engines.

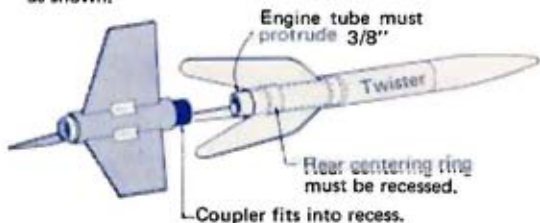
Read the Technical Report through to understand multi-staging principles. The booster engine will need to be wrapped with tape for a friction-fit.

RECOMMENDED ENGINES

Booster (1st Stage)	Sustainer (2nd Stage)	Approximate Altitudes in Ft.	Purpose
A8-0	A8-5	500 - 800	Use this combination for first test flights and medium sized launch areas.
B6-0	B4-6	1000 - 1400	Medium High Altitudes for general flying and large launch areas.
C6-0	C6-7	1600 - 2200	Extremely High Altitudes and very large launch areas.

Once you have completed the #8 booster unit for the Excalibur and Groove Tube, you can try using it on other rockets.

The Centuri TWISTER, TOMAHAWK, and HONEST JOHN may be used with the booster unit if their engine mounts are modified. The booster will not fit these models unless the engine mount is rebuilt or modified as shown.



The booster can also be used with "Own-Design" models built from Centuri custom parts.

Use your imagination and have fun! . . . but be sure to experiment safely. An experimental model rocket can be a lot of fun, but it should never be considered a toy!

Here's to blue skies and happy times . . . May the Rocket-Eating Tree never cross your path.

