

AEON

by Tim Breland

Parts List:

Fliskits Part #:	Description	Qty.
BT-70-175	BT70 Body Tube	2
NCB-70AJ	Balsa Nose Cone	1
CPL-70-04	Tube Coupler	1
CPL-70-0125	Stage Coupler	1
EMK-24-70	Engine Mount Kit	1
EMK5-124-413-70	5 Engine Mount Kit	1
Recovery Materials	Screw Eye, Shock Cord, Chute	
Launch Lugs	3/16" - 1/4" lugs	
Fin Material	1/8" Balsa Stock	

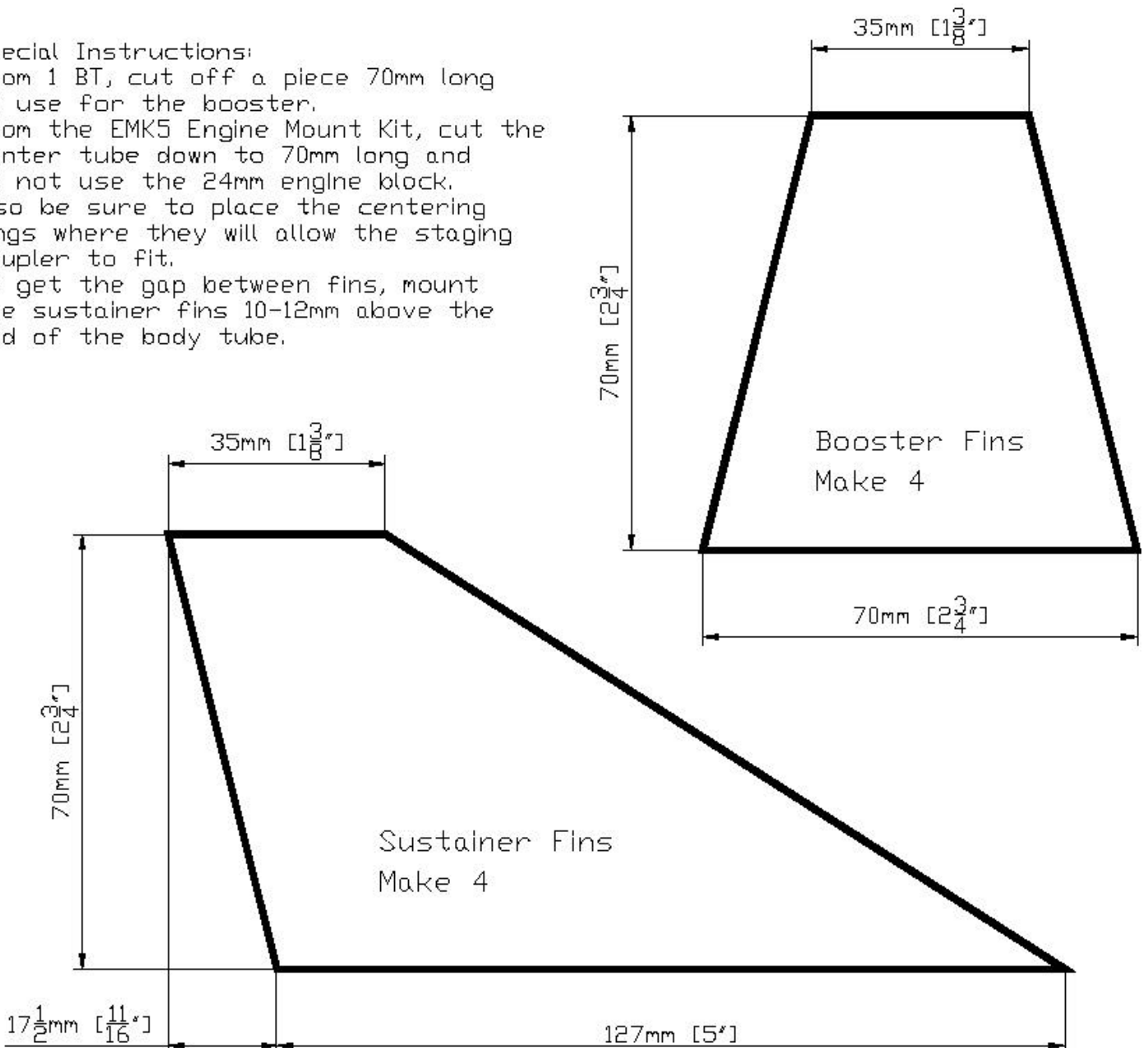
Special Instructions:

From 1 BT, cut off a piece 70mm long to use for the booster.

From the EMK5 Engine Mount Kit, cut the center tube down to 70mm long and do not use the 24mm engine block.

Also be sure to place the centering rings where they will allow the staging coupler to fit.

To get the gap between fins, mount the sustainer fins 10-12mm above the end of the body tube.



AEON Construction Notes:

Sustainer:

Starting with 2 BT70 tubes standard 17.5" in length, I cut a 70mm long piece from 1 tube to use as the booster. The remainder of that tube was coupled to the other tube to make the sustainer body, with a balsa nose cone on top. The sustainer got a standard 24mm motor mount, making sure to put the aft centering ring about 1" from the end to allow room for the staging coupler. This motor mount is 4" long with an engine block in place allowing it to hold and Estes E size motor.

The sustainer fin pattern is in the pdf file. 4 fins were cut from some high quality 1/8" balsa. Some may prefer thicker balsa or even plywood, but I wanted to keep the weight down. The fins were mounted with the root end about 10mm up from the end of the body tube. This was done just for the look of a gap between the sustainer and booster fins.

A basic recovery system was installed; 4' piece of 1/4" elastic attached with the tri-fold method and to a screw eye in the nose cone.

An 18" mylar chute from Rockethead Rockets was my choice of recovery.

Booster:

For the booster I started by assembling the 5 motor cluster mount. The central tube included with the kit was cut down to 70mm long. This kit includes 4 centering rings. I left the forward CR out due to the shorter central tube, and to allow room for the staging coupler. I also left out the central motor block to allow for staging. The motor mount was then glued into the 70mm piece of BT that I cut earlier, flush with the end. I then glued the staging coupler into the forward end. Again, 4 fins were cut from 1/8" balsa and attached to the booster (pdf file has pattern).