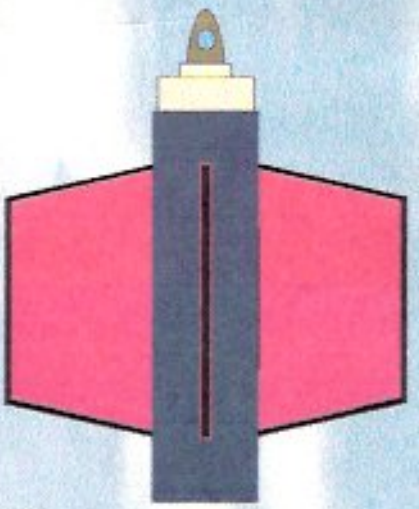
TERMINATOR

LIFT KIT 1.6" #RL1

This is a Component System Rocket Kit.



Height 6"

Diameter 1.6"

Weight 1.5 oz

Power Estes "D" through Aerotech "E"

A MACH-I BODY KIT
is required to launch
this kit.

This LIFT KIT is designed to work with all MACH-I 1.6" BODY KITS.

No recovery wadding is needed.

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LIFT-KIT ASSEMBLY INSTRUCTIONS

Items required: fine sand paper (220 or finer), ruler, epoxy, CA glue, glue brushes, and razor knife.

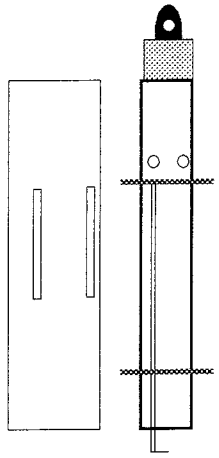
Contents: 4 BALSA-PLY™ fins, 2 BALSA-PLY™ centering rings, 1 BALSA-PLY™ recovery tang, 1 BALSA-PLY™ plug (cut out from centering ring), 1 thick coupler tube, 1 large thin coupler tube, 1 wire engine holder, 1 paper engine stop ring, 1 engine housing tube (with holes), 1 body tube (with slots), 1 parachute, 1 swivel snap, 1 piece of line, 1 adhesive backed paper, 1 plastic launch lug tube.

1) Glue plug to bottom of the thick tubing coupler. Glue tang into the tubing coupler, down to the plug. Seal tang with epoxy. Glue tubing coupler, tang assembly up, into the top of the engine housing. Top has holes. **Bottom of plug should be flush to the top of the holes.**

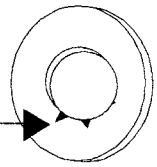
2) Glue engine stop ring, 2.5" up from the bottom, to the inside of the engine housing.

3) Mark two lines around the engine housing tube, one 1" up from bottom, and the other 4 3/8" up from bottom. The 4 3/8" mark should correspond with the top of the slot in the body tube. The slots are offset towards the top.

4) Mark a line lengthwise up the tube using a tube marking guide or a door trim.



5) Cut two notches, the size of the wire, into the inside of the centering rings for the engine holder. The notches should be 1/4" apart.



6) Slide upper centering ring (with engine holder in notches) onto engine housing to the line at 4 3/8". The line should be just visible below the centering ring.

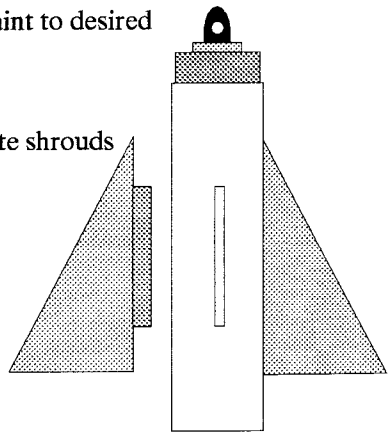
7) Slide lower centering ring onto engine housing up to the 1" line. This ring can cover the line. The engine holder should be parallel to the lengthwise mark and extend 1/4" below the engine housing.

8) Epoxy centering rings and wire into place (do not glue the wire below the lower centering ring).

9) Insert engine housing assembly into LIFT-KIT tube. Turn until the engine holder wire is not under a fin slot. The bottoms of both tubes should be level. The upper centering ring should be flush to the top of the fin slots. Epoxy into place

10) Glue large tubing coupler into top of LIFT-KIT tube. Large outer coupler should be set 1/8" shorter than inner coupler.

11) Epoxy fins into slots. Wood grain should be parallel to leading edge. Sand edges to be smooth and round. Seal with epoxy. Stick adhesive backed paper around launch lug tube, epoxy to body and fin. Paint to desired finish.



12) Tie a loop of line, about 2", to the recovery tang. Loop onto swivel snap. Snap onto parachute shrouds and body kit recovery line.

Always inspect your rocket before each launch.
Always launch in accordance with NAR safety codes.
SAFETY BEGINS WITH YOU!

MACH-I pub. #LKI

LAUNCH INSTRUCTIONS
ALWAYS REFER TO NAR SAFETY INSTRUCTIONS!

This is not a toy!
This model rocket should only be used in accordance with NAR safety codes!
If you are not familiar with the NAR or it's safety codes write to:
National Association of Rocketry PO Box 117, Altoona, WI 54720.

Snap the parachute shrouds and the body recovery line to the lift kit swivel.

Put parachute and extra lines loosely into the body kit inner tube.

Gently slide the lift kit couplers into the body kit. DO NOT FORCE!

If the lift kit and body kit are snug work the parts together or sand with very fine sandpaper until they are easily put together and separated. Soap the couplers if necessary.

Now load the engine and proceed as specified by the engine manufacturer, and NAR safety codes.

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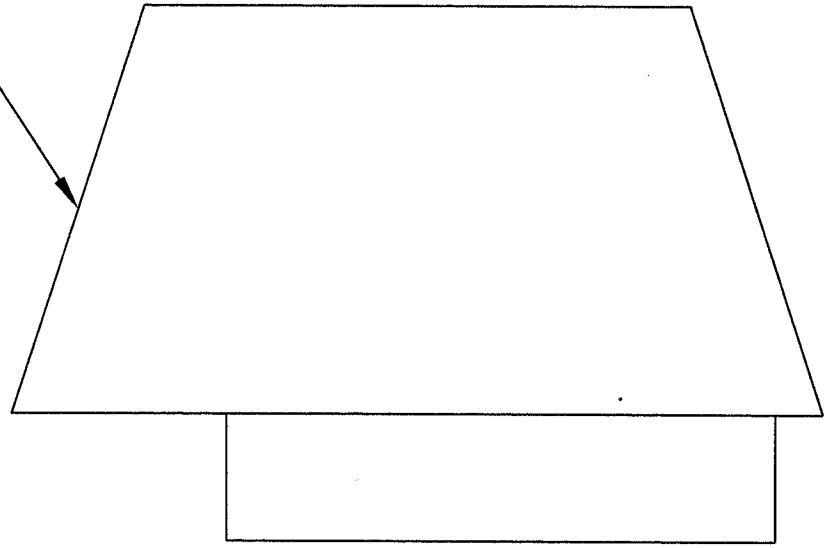
MADE IN CHINA

3/32" PLY

LEADING
EDGE



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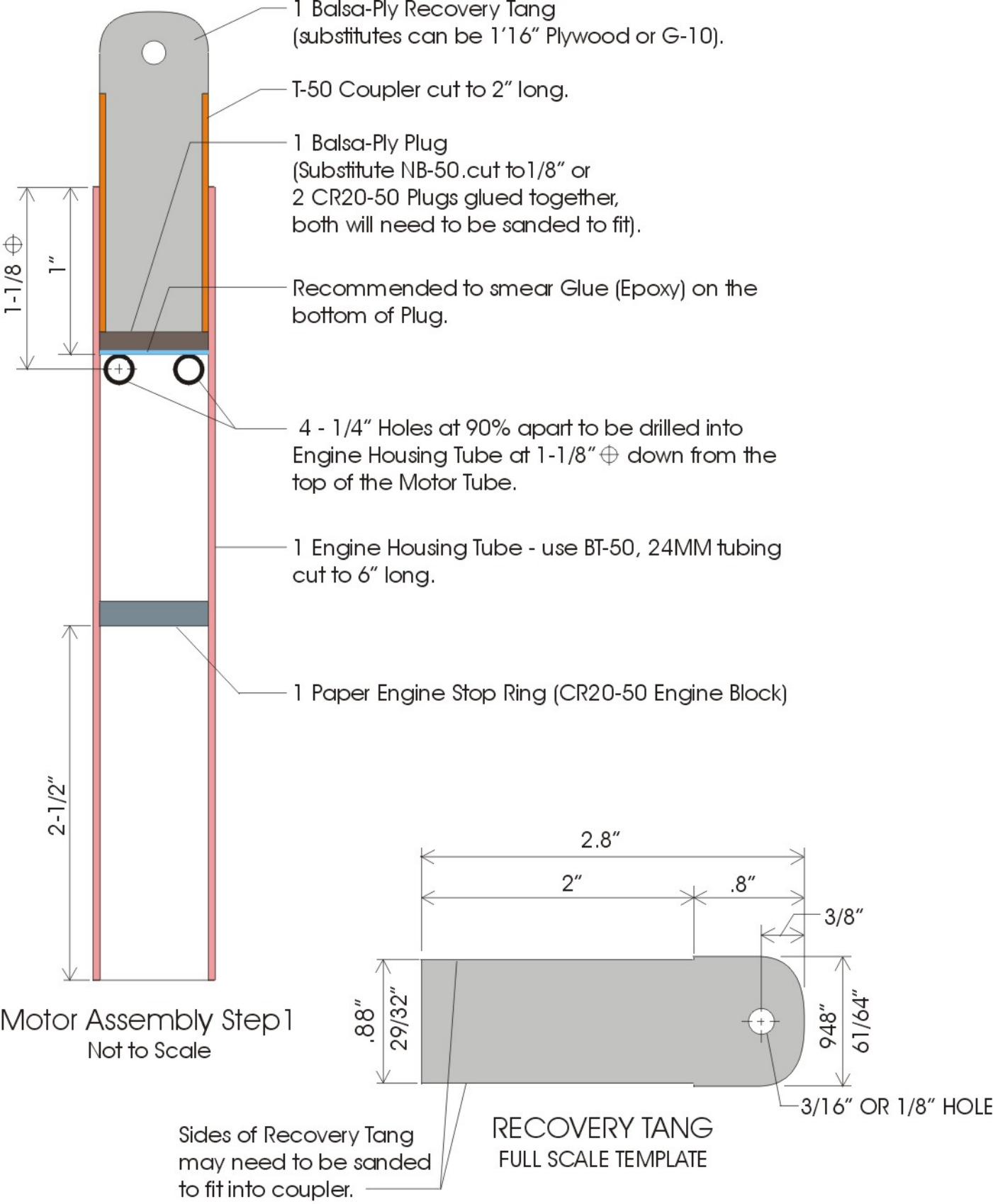
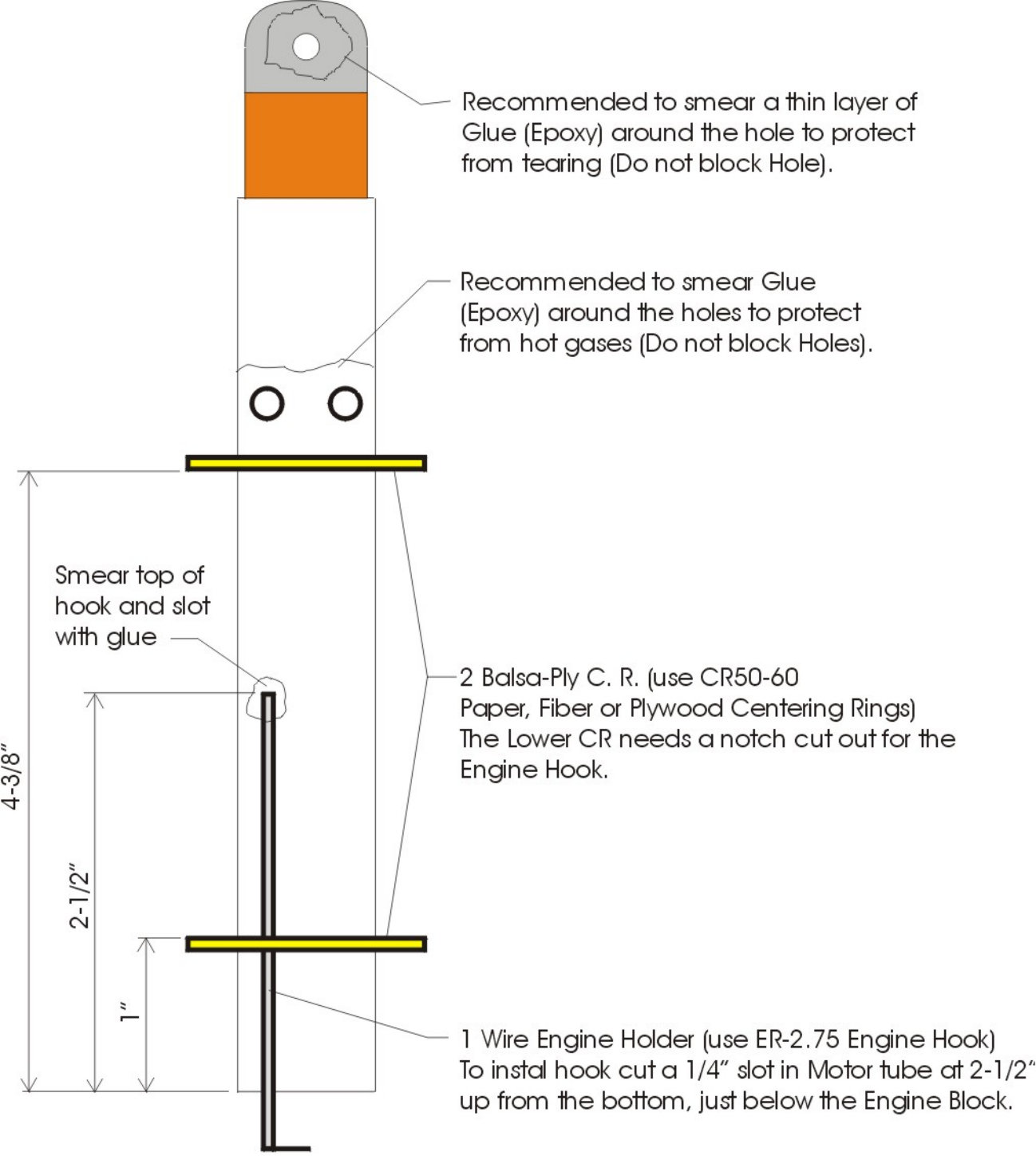


Motor Assembly Step1
Not to Scale

RECOVERY TANG
FULL SCALE TEMPLATE

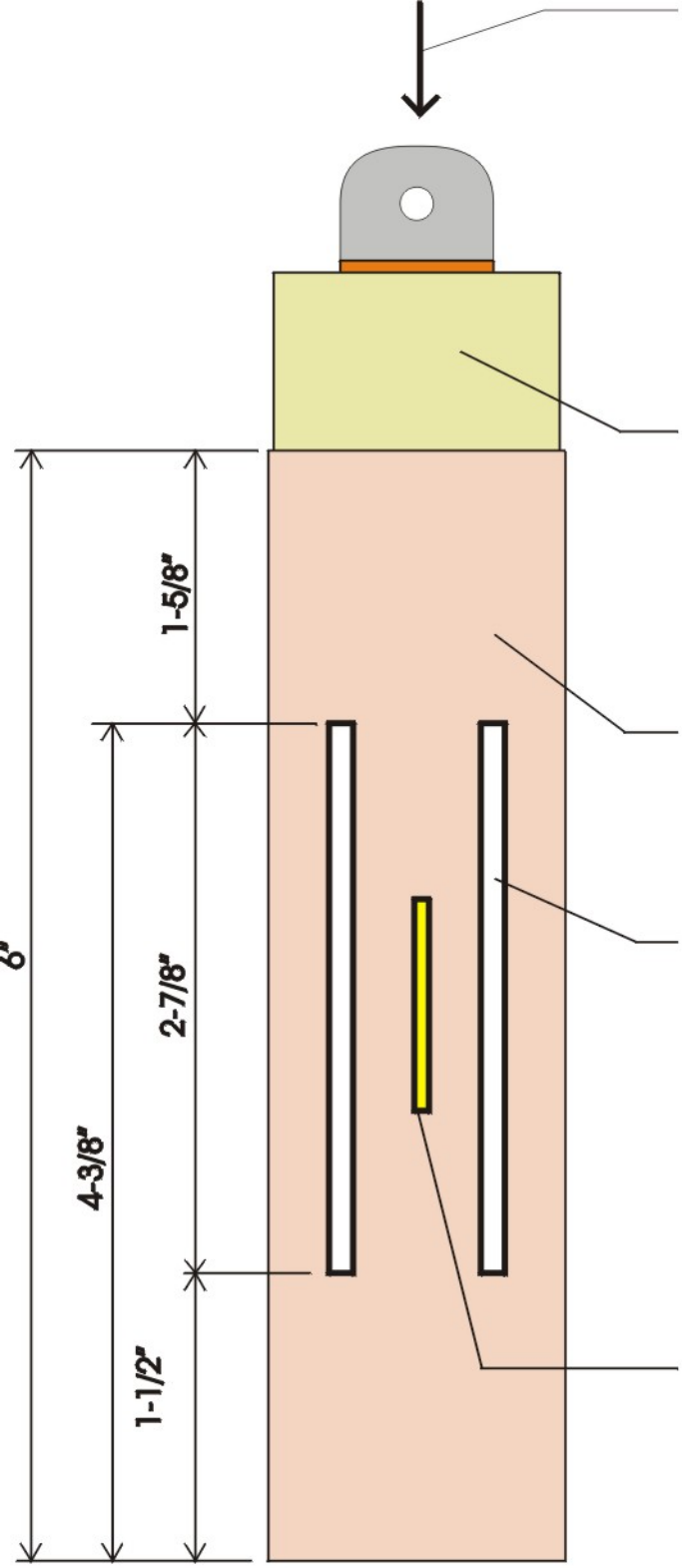
Mach-1 Lift-Kit Diagram #1



Motor Assembly Step2

Not to Scale

Mach-1 Lift-Kit Diagram #2



Recommended when gluing the Motor Assembly into BT-60 Body Tube (Slots need to be cut first) that you slide the Assembly in from the top down to were the bottom of the Motor Assembly is flush with the bottom of the body tube. This is done so the Coupler can be slid all the way down to the upper CR50-60 Centering Ring.

1 C60-4 Coupler cut to 2-1/2" long. Recommended to smear Glue (Epoxy) on the inside of coupler before installing it into the BT-60 Body Tube, to prevent Hot gases from burning through the sides of Coupler and Tube.

1 BT-60 Body Tube 6" Long, with slots to be cut into the Body Tube.

The 4 Slots are equally spaced around the tube and are started from 4-3/8"up from the bottom of the tube down to 1-1/2" from the Bottom of tube, the slots are 2-7/8" Long, the width of the slots are determined by the fin stock used.

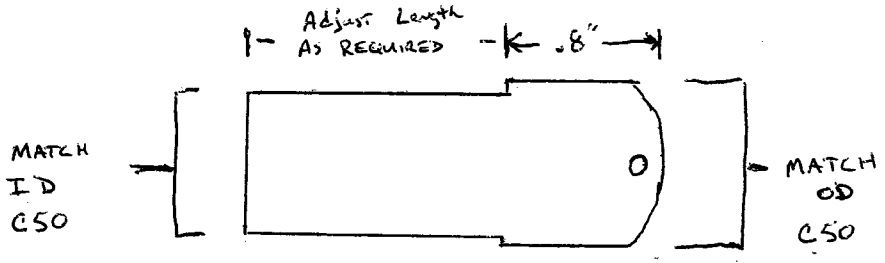
The 3/16" Launch Lug Placement is not specified in Mach-1 Lift-Kit plans. Recommend because you can use different Lift-Kits with Body-Kits that 2 launch Lugs be used. Because of the CG (Center of Gravity), one Launch Lug should be placed at the center of the Lift-Kit between the fins, the other Launch Lug should be placed on the Body-Kits about 3 to 4 inches up from the bottom of the Body Tube.

Motor Assembly Step 3
Not to Scale

Mach-1 Lift-Kit Diagram #3

Mach-I Industries Terminator Lift Kit
Parts List

1. 4 3/32" Balsa Ply fins (1/16" Basswood)
2. 2 Balsa-Ply Centering Rings (CR50-60)
3. 1 Balsa Ply Recovery Tang (use 1/16" ply cut to pattern shown)
4. 1 Balsa Ply Plug (use NB50, cut to 1/8" thick, sanded to fit inside BT50 coupler)
5. 1 Thick Coupler Tube (C50-4, cut to 2" length)
6. 1 Large Thin Coupler Tube (C60-4, cut to 2 ½" length)
7. 1 Wire Engine Holder (EH-2.75)
8. 1 Paper Engine Stop Ring (CR20-50)
9. 1 Engine Housing Tube with Holes (BT-50, 6 inches long. 4 holes 90% apart, 1" from forward end)
10. 1 Body Tube with Slots (BT-60, 6 inches long. Forward end of slot 4 3/8 inches from aft end of body tube. Slot length is 2 7/8 inches)
11. 1 Parachute (18" plastic)
12. 1 snap swivel
13. 1 piece of line (Use Kevlar, 10" long)
14. 1 adhesive backed paper (not required is using a standard style launch lug)
15. 1 plastic launch lug (use 3/16 X 2 inch launch lug)



Recovery Tang