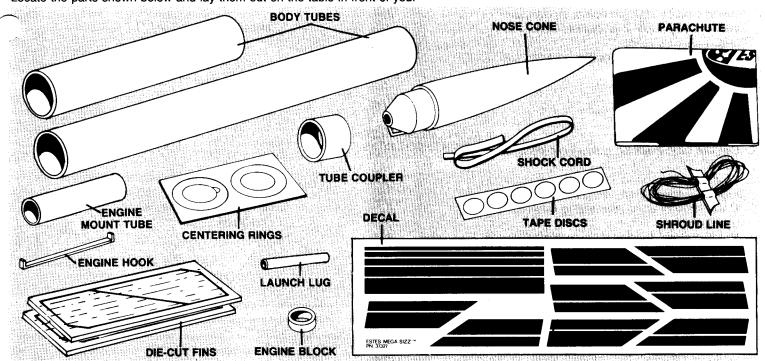


# **PARTS AND SUPPLIES**

Locate the parts shown below and lay them out on the table in front of you.



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



# ROCKET ASSEMBLY

# 1

- A. Cut 1/8 inch wide slit in engine mount tube 1/4 inch from one end.
- B. Cut out hold-down strap from display panel.
- C. Apply 1½ inch long line of glue to tube as shown. Push one end of engine hook into slit and press the main part of the hook into the glue.
- Apply glue to one side of hold-down strap and wrap it tightly around middle of tube over engine hook.
- E. Smear glue around inside of front end of engine mount tube. Insert engine block and push in until it stops at engine hook.

# 2

- Separate the adapter rings from the diecut card.
- B. Glue rings to engine mount tube as illustrated. The notched ring should be placed over engine hook.
- C. Let this assembly dry completely.

# 3

- A. Using a piece of scrap balsa, smear glue inside body tube 2½ inches from one end.
- B. Push engine mount in until tube ends are even.
- C. Add glue fillet as shown.

#### 4

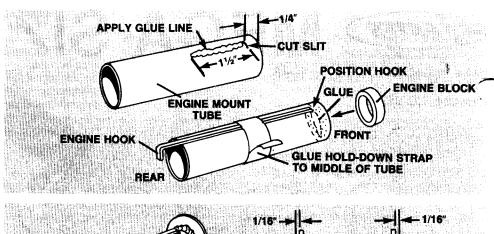
- A. Cut out tube marking guide from back of panel.
- B. Wrap guide around the tube and mark tube at arrows. Remove guide.
- Draw straight lines connecting each pair of marks.
- D. Extend launch lug line full length of tube.

# 5

- A. Fine sand balsa die-cut sheets. Carefully remove fins by freeing edges with sharp knife.
- B. Stack fins together. Sand all edges smooth.

# 6

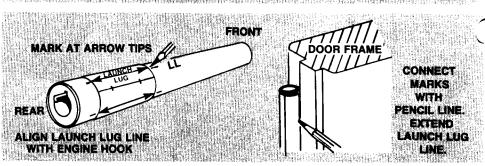
- A. Apply a small amount of glue to root edge of a fin. Glue fin on alignment lines. Repeat for other fins. Let each fin dry several minutes before applying the next fin.
- B. Looking at the rocket from the rear, the fins should be in the positions shown with the trailing edge of each fin even with the end of the tube.

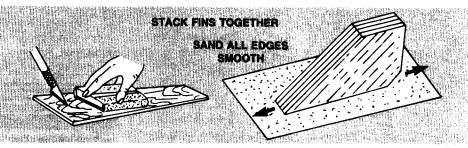


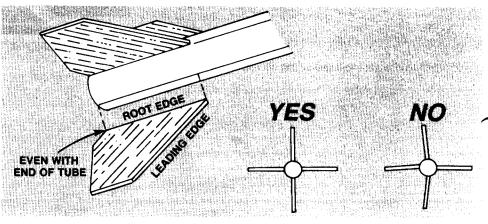


SMEAR GLUE IN THIS AREA

INSERT ENGINE MOUNT SO RING IS 1/18" IN FROM BODY TUBE END. ADD GLUE FILLET







7

A. Mark coupler tube 3/4 inch from end.

B. Apply glue to inside edge of body tube as shown and insert coupler to 3/4 inch mark. Let glue dry before proceeding.

 Apply glue to one end of remaining body tube and insert exposed coupler into body tube until both body tube ends are touching.



A. Cut launch lug in half to give two equal pieces 1 inch in length.

B. Glue one lug on launch lug line 1 inch from end of body tube and then glue remaining lug on line 10 inches from end of tube as shown.

# 9

 A. Cut shock cord mount from front of instructions.

- B. Crease on dotted lines by folding. Spread glue on section 1 and lay end of shock cord into glue. Fold over and apply glue to back of first section and exposed part of section 2. Lay shock cord as shown and fold mount over again.
- C. Clamp unit together with fingers until glue sets.

# **40**

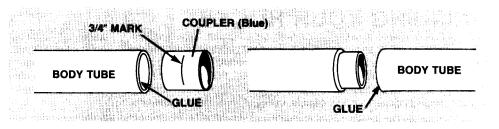
- Apply glue inside front of body tube to cover an area no less than 2 to 3 inches from end. The glued area should be same size as shock cord mount.
- B. Press mount firmly into glue as shown.
- C. Hold until glue sets.

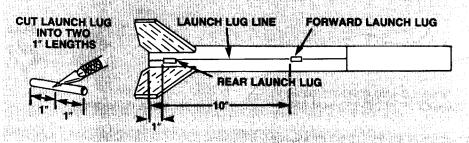
#### 11

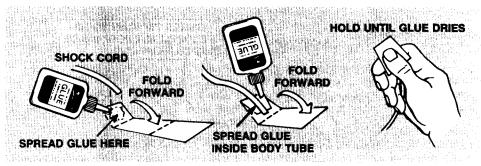
- A. Apply glue reinforcement to each fin/body tube joint and each side of launch lugs. Smooth out glue with finger.
- B. Support rocket as shown until glue dries.

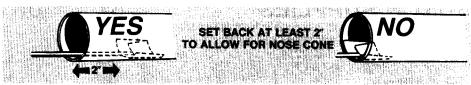
# 12

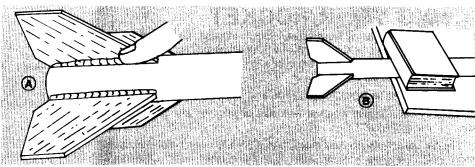
- A. Cut out parachute on edge lines.
- B. Cut three 35 inch lengths of shroud line.
- C. Form small loops with shroud line ends and press onto sticky side of tape discs.
- D. Attach tape discs with line ends to top of parachute as shown.
- E. <u>Firmly</u> press tape discs into place until both tape discs and parachute material are molded around shroud line loops.
- F. Pass shroud line loops through eyelet on nose cone. Pass parachute through loop ends and pull lines against the nose cone.
- G. Tie free end of shock cord to nose cone eyelet.

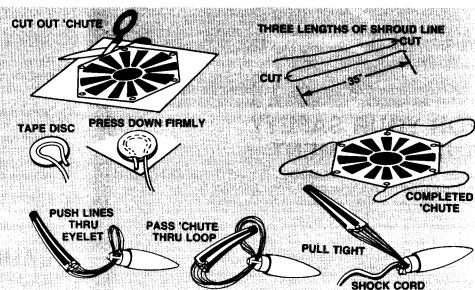








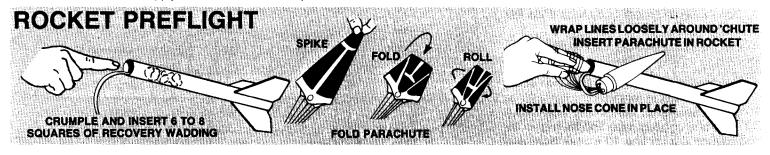


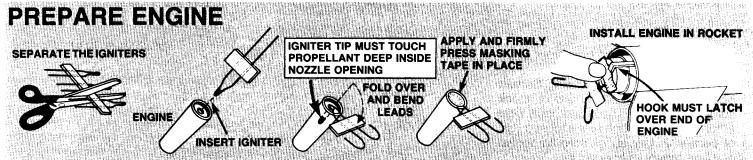


# FINISHING YOUR ROCKET

Apply sanding sealer to wood parts with small brush. When sealer is dry, lightly sand all sealed surfaces. Repeat sealing and sanding until balsa grain is filled and smooth. When sanding sealer and glue are completely dry, paint model with spray enamel. Follow instructions on spray can for best results. Let paint dry overnight before masking to paint second color. To apply decals, cut each out, dip in lukewarm

water for 20 seconds, and hold until it uncurls. Refer to photograph on front page and/or on front of panel for decal placement. Slip decal off backing sheet and onto model. Blot away excess water. For best results, let decals dry overnight and apply a coat of clear spray paint to protect decals.





# **LAUNCH SUPPLIES**

To launch your rocket you will need the following items:

- -Estes Electrical Launch System and Launch Pad
- -Estes Recovery Wadding No. 2274
- -Recommended Engine: D12-5 ONLY

# **FLYING YOUR ROCKET**

Choose a large field away from power lines, tall trees, and low flying aircraft. Try to find a field at least 500 feet square. The larger the launch area, the better your chance of recovering your rocket. Football fields and playgrounds are great.

Launch area must be free of dry weeds and brown grass.

Launch only during calm weather with little or no wind and good visibility.

Don't leave parachute packed more than a minute or so before launch during cold weather [colder than 40° Fahrenheit (4° Celsius)]. Parachute may be dusted with talcum powder to prevent sticking.

# **MISFIRES**

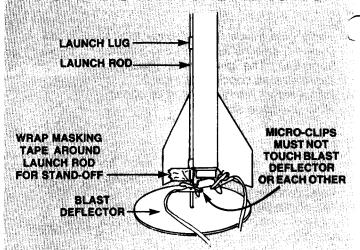
Failure of the rocket engine to function properly is nearly always caused by a failure to install the igniter correctly. This failure permits the igniter to heat and burn into two pieces without igniting the engine.

# FOR YOUR SAFETY AND ENJOYMENT

Always follow the NAR-HIA\* MODEL ROCKETRY SAFETY CODE while participating in any model rocketry activities.

\*National Association of Rocketry-The Hobby Industry of America

# **COUNTDOWN AND LAUNCH**



- (10) REMOVE SAFETY KEY to disarm the launch controller.
- Remove safety cap and slide launch lugs over launch rod to place rocket on launch pad. Make sure the rocket slides freely on the launch rod.
- Attach micro-clips to the igniter wires. Arrange the clips so they do not touch each other or the metal blast deflector. Attach clips as close to protective tape on igniter as possible.
- Move back from your rocket as far as launch wire will permit, (at least 15 feet).
- (6) INSERT SAFETY KEY to arm the launch controller.

Give audible Countdown 5...4...3...2...1

# LAUNCH!!!PUSH AND HOLD LAUNCH BUTTON UNTIL ENGINE IGNITES

Remove safety key-Replace cap on rod.



# Estes Kit #1998 Mega Sizz List of Major Parts and Fin Template

Part #	Description	Comments
BT-60	Upper Body Tube – 7" long	
BT-60	Main Body Tube - 18" long	
PNC-60RL	Nose Cone	
TC-60	Tube Coupler	
BFS-40	Four Fins are made from 1/8" hard balsa	
BT-50	Motor mount tube – 2.75" long	
CR-5060	Motor Mount Centering Rings (2)	Thick cardboard (white)
LL-2B	Launch Lugs – 3/16" x 2" long	Cut into two equal pieces
	Plastic parachute – 6 sided x 18" diameter	
EH-X	Motor Hook – 2.75" long	
CR-2050	Motor Block	Spiral wound paper (brown)
	Shock cord – 1/8" rubber by 18"	Use 24-30 inches 1/8" elastic

