





STAR DART #0860

Estes Industries
1295 H Street
Penrose, CO 81240

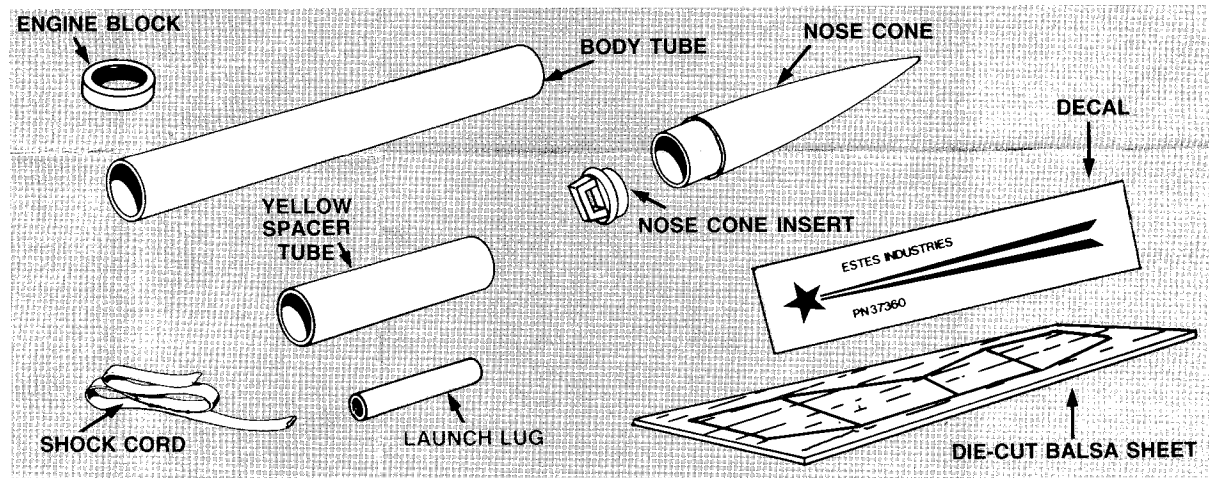
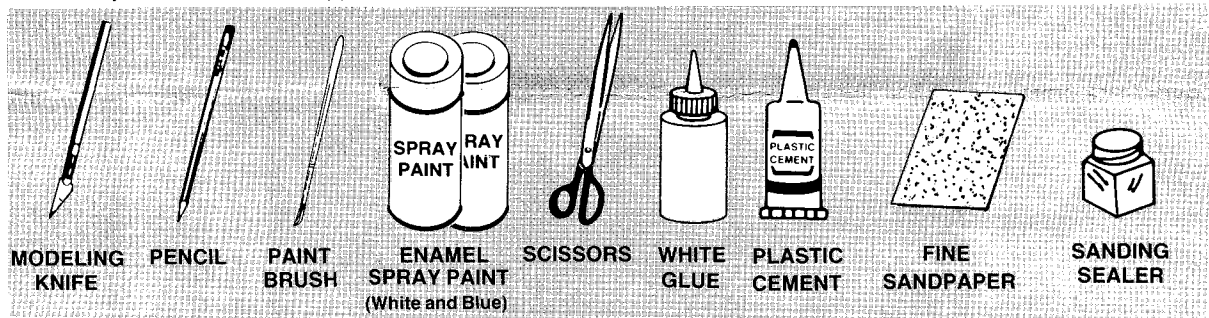


ASSEMBLY TIP

Read all instructions before beginning work on your model. Make sure you have all parts and supplies. Test-fit all parts together before applying any glue. If any parts don't fit properly, sand as required for precision assembly.

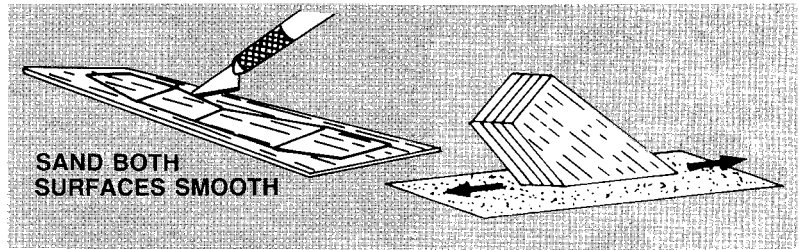
PARTS AND SUPPLIES

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 need the supplies shown.



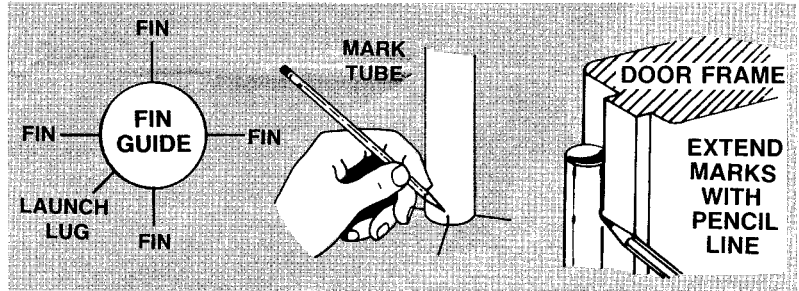
1.

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



2.

- A. Stand the body tube upright on the fin guide and mark all the fin positions.

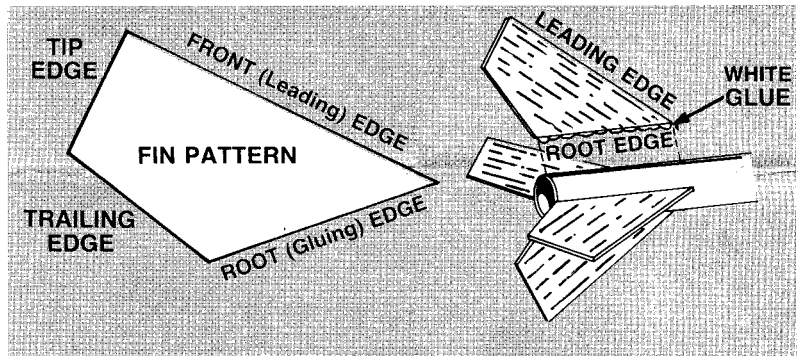


3.

- A. Find a groove such as a door jamb or open drawer.
- B. Extend the marks approximately 2-3 inches down the length of the body tube.

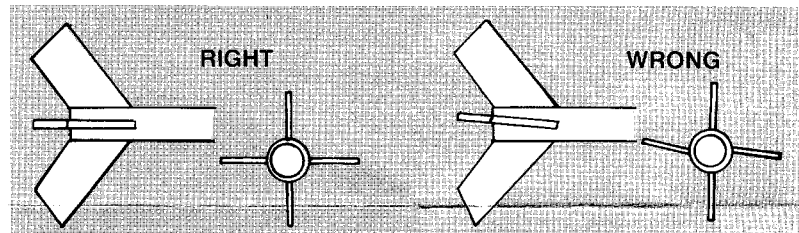
4.

- A. Glue fins to body tube on lines.
- B. Put a **SMALL** line of white glue along the fin edge.
- C. Place the fin on the body tube.
- D. **REMOVE**, allow about 15 seconds for glue to become tacky.
- E. Add a bit more glue, stick fin back on.



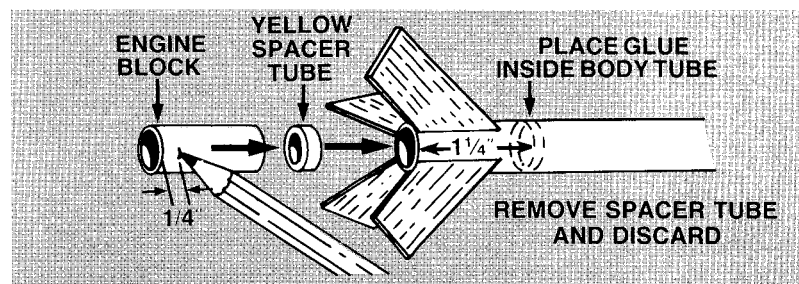
5.

- A. Make sure the fins are positioned as straight as possible.
- B. If they are crooked, remove them and try fitting them again.
- C. Use the fin guide to aid in checking fin alignment.



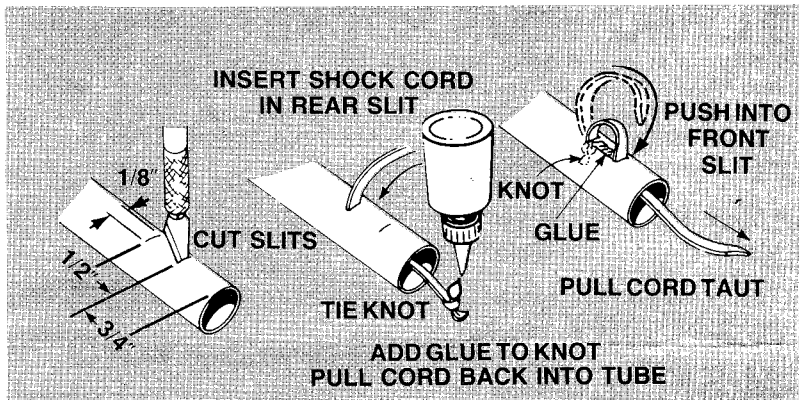
6.

- A. Mark spacer tube 1/4 inch from one end.
- B. Using a balsa scrap, place a ring of glue on the inside of the body tube about 1 1/4 inches from the rear of the rocket.
- C. Insert engine block into end of tube.
- D. Use the spacer tube to push engine block into the tube until mark is even with end of tube.
- E. Remove spacer tube quickly before glue sets and discard it.



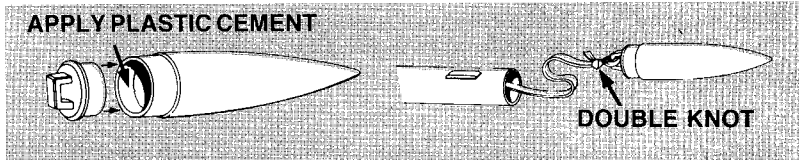
7.

- A. Cut two 1/8 inch wide slits in forward end of body tube as shown.
- B. Cut angle on both ends of shock cord.
- C. Insert one end of shock cord into rear slit and push through forward end of tube about 3 inches.
- D. Tie double knot close to end of shock cord.
- E. Put drop of glue on knot and pull cord back into tube so knot is against slit.
- F. Pass other end of shock cord through forward slit. NOTE: be sure the cord is not twisted.
- G. Run a line of glue on body tube between slits and pull cord down onto glue.



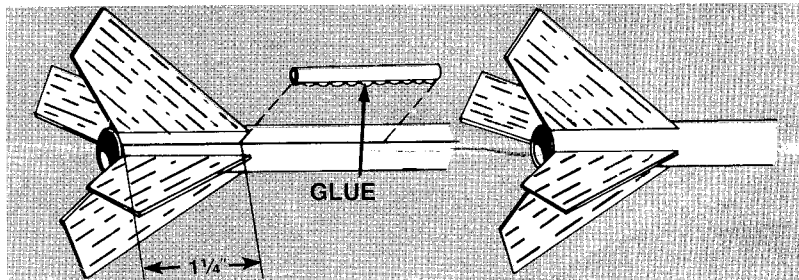
8.

- A. Assemble nose cone and nose cone insert with plastic cement.
- B. When dry, tie free end of shock cord to nose loop with double knot.



9.

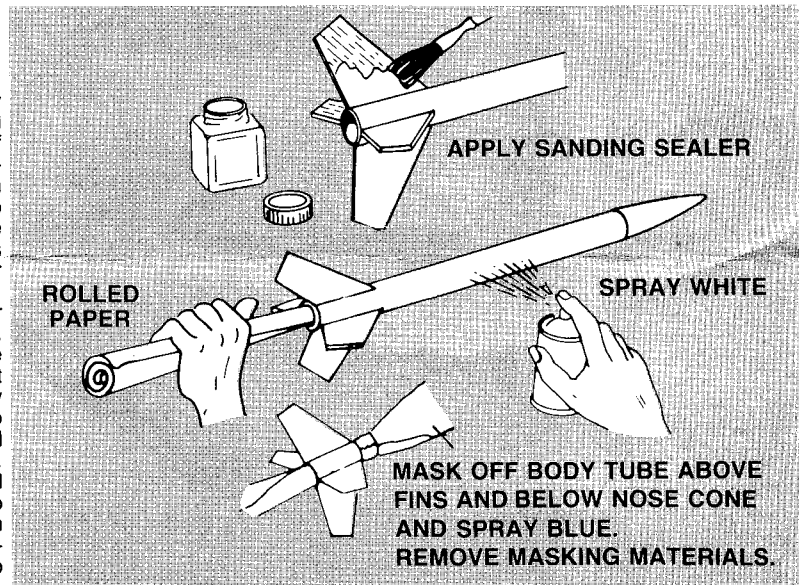
- A. Run a line of glue along one side of the launch lug, and place launch lug on tube 1/4 inch from rear. Lug should be between two fins and straight.
- B. Smooth out the excess glue.
- C. Now run a small line of glue along both sides of each body tube/fin joint.
- D. Smooth out the excess glue with your fingertips. Allow to dry.



FINISHING YOUR ROCKET

When all glue on the outside of the body is dry, prepare the balsa fins of the model for painting. Apply at least two coats of sanding sealer to all exposed balsa surfaces. Let dry and sand thoroughly with extra-fine sandpaper after each coat. Do this until the tiny grain lines in the wood are filled and everything looks and feels smooth. If you do not have sanding sealer you can skip this step.

Insert a sheet of rolled-up newspaper or heavy paper into rocket body as shown. Apply two or three light coats of gloss white enamel spray paint to the entire rocket. Let this dry overnight. When dry, mask off body tube from the leading edge of the fins to the nose cone. Paint the entire fin area and the nose cone with blue enamel spray paint. Refer to photo on front of instructions and photo on panel for decal placement. To apply decals, cut each out, dip in lukewarm water for 20 seconds, and hold until it uncurls. Slip decal off backing sheet and onto model. Blot away excess water.



FLYING YOUR ROCKET

Choose a large field away from power lines, tall trees, and low flying aircraft. Try to find a field at least 250 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.

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.

LAUNCH SUPPLIES

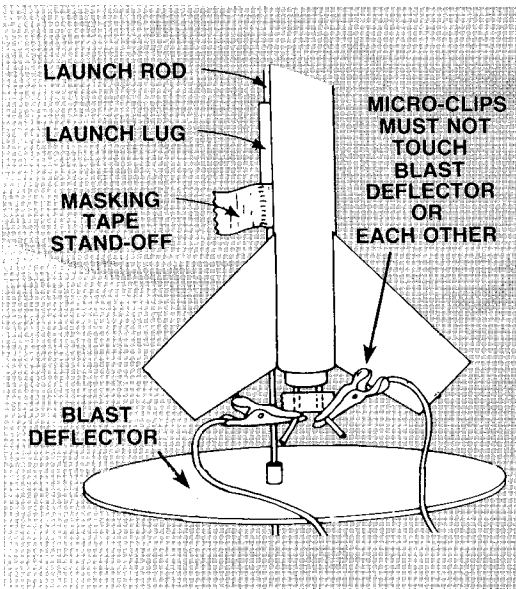
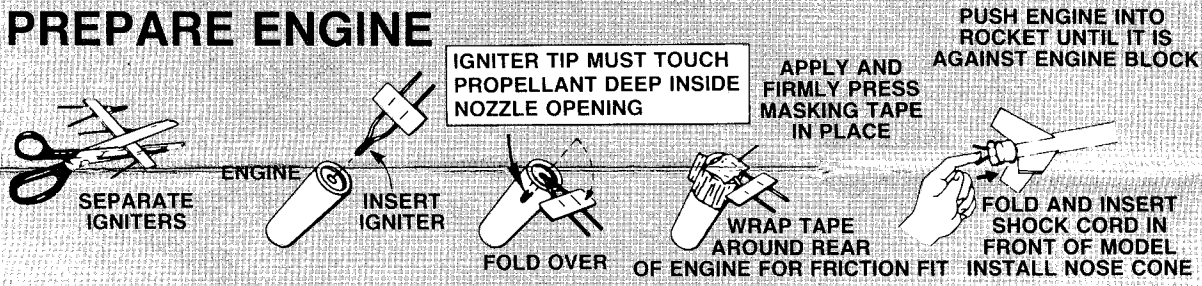
To launch your rocket you will need the following items:
—An Estes model rocket launching system
—Recommended Engines: 1/2A3-2T, 1/2A3-4T, A3-4T, and A10-3T
Use 1/2A3-2T engine for your first flight to become familiar with your rocket's flight pattern.

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

PREPARE ENGINE

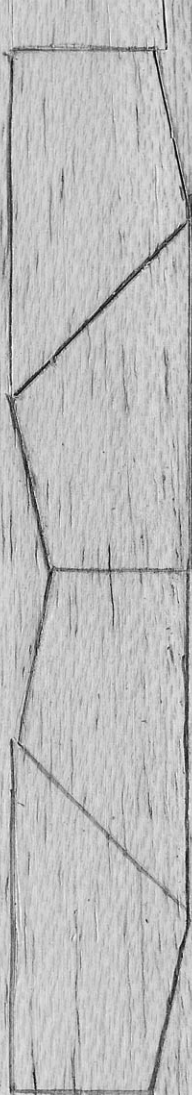


COUNTDOWN AND LAUNCH

- 5 REMOVE SAFETY KEY to disarm the launch controller.
- 4 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.
- 3 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.
- 2 Move back from your rocket as far as launch wire will permit, (at least 15 feet).
- 1 INSERT SAFETY KEY to arm the launch controller.

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

Remove safety key—Replace cap on rod.





ESTES INDUSTRIES

PN 37360

STAR DART

FLYING MODEL ROCKET

SKILL LEVEL 1

For The Beginning Modeler

Length: 8.4 in. (21.34 cm)

Dia.: 5/16 in. (13.74 mm)

Weight: 225 gr. (6.37 g)

Recommended Engines:

1.2A3-3T (First Flight),

1.2A3-4T, A3-4T, A10-3T



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This is a model
kit requiring
assembly.
Glue and
finishing
supplies,
launch system
and engines
for flight are
not included.

#0860



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