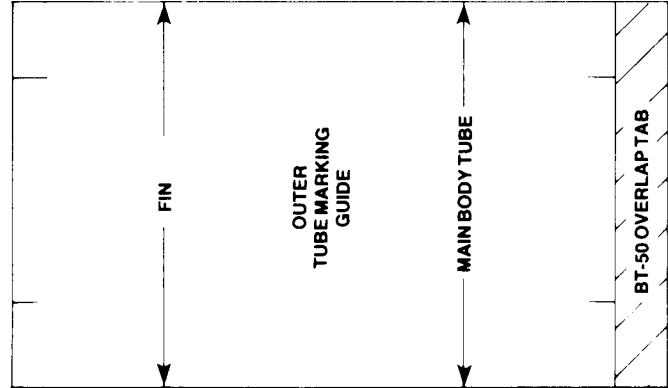
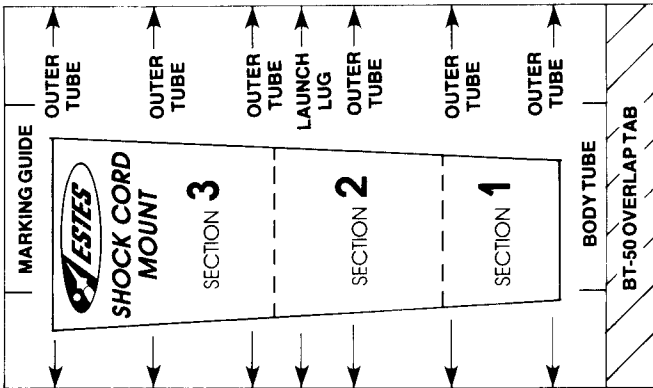




ESTES INDUSTRIES
1295 H Street
Penrose, CO 81240 USA

SUPERNEON™

FLYING MODEL ROCKET #2050

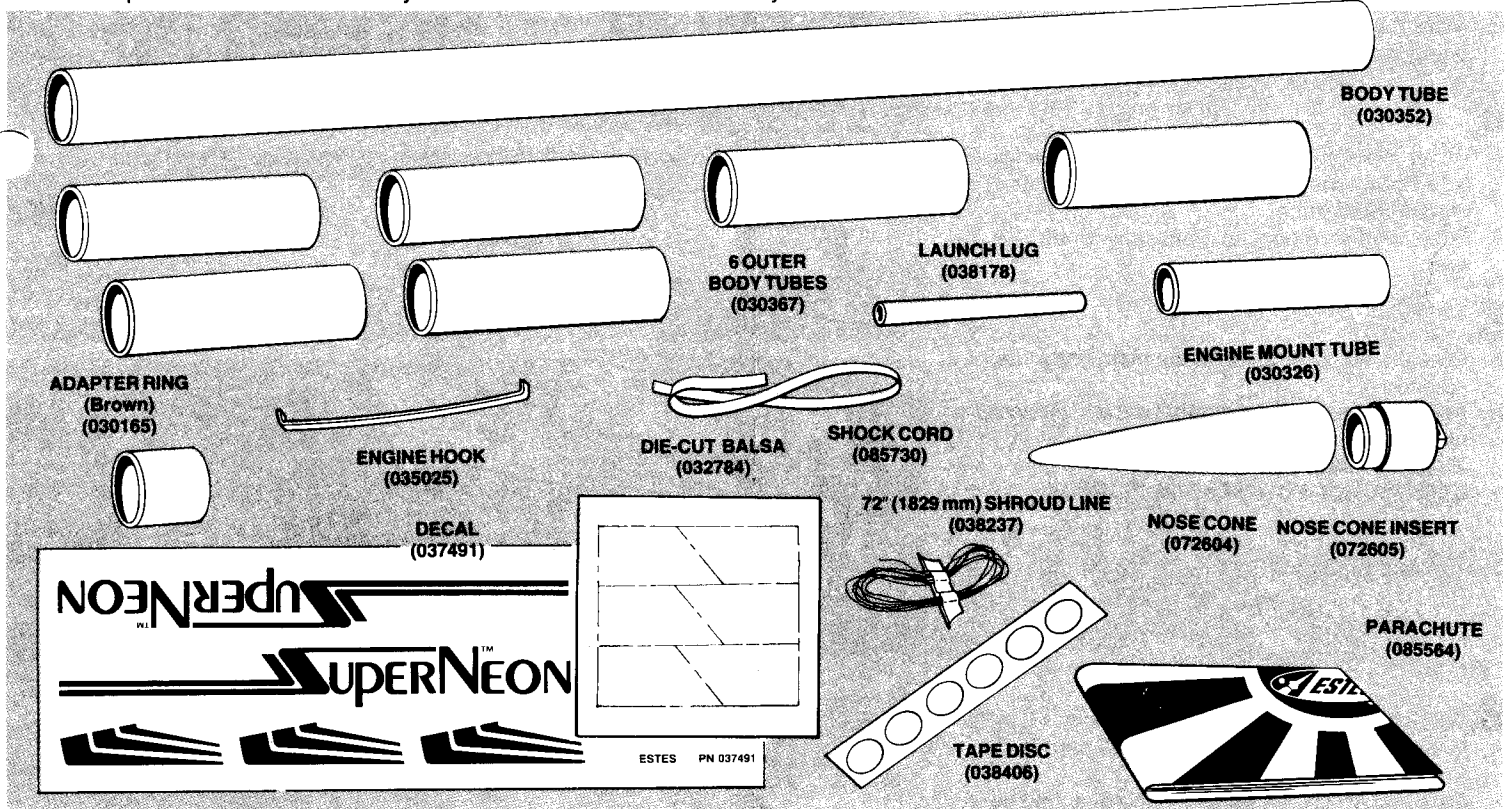


ASSEMBLY TIP

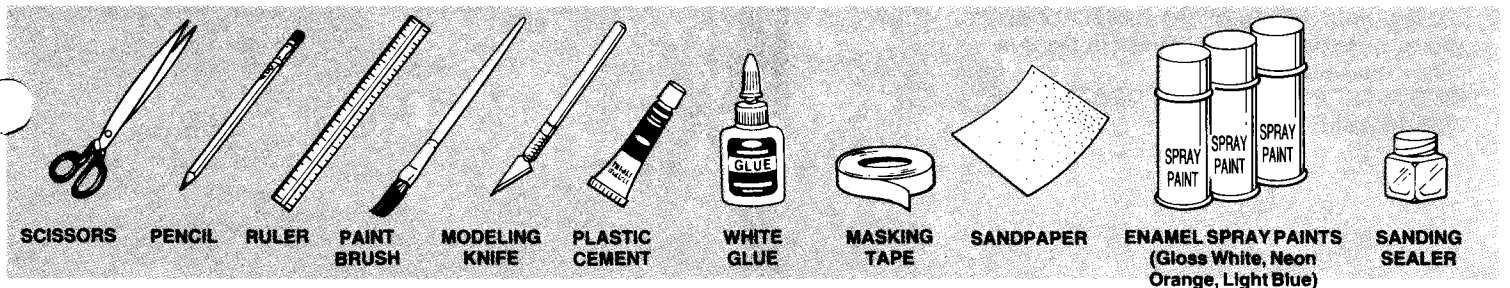
Read all instructions before beginning work on your model. Make sure you have all parts and supplies. Test-fit all parts together before applying any glue. If any parts don't fit properly, sand as required for precision assembly.

PARTS AND SUPPLIES

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



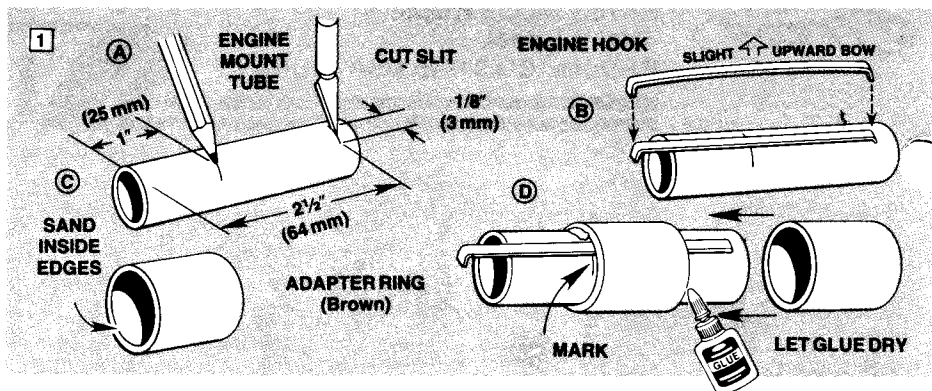
In addition to the parts included in the kit, you will also need:



ROCKET ASSEMBLY

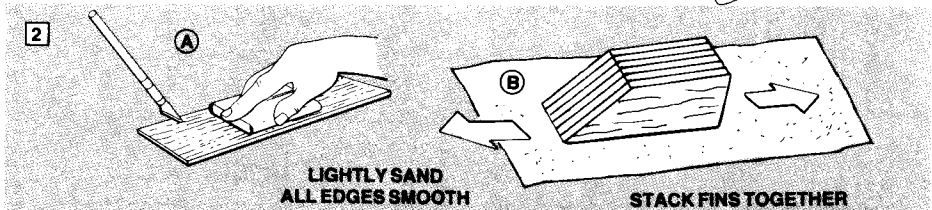
1.

- Mark engine mount tube 1" (25 mm) and 2½" (64 mm) from one end and then cut 1/8" (3 mm) long slit at 2½" (64 mm) mark.
- Insert one end of engine hook into slit.
- Sand inside edges of adapter ring.
- Slide adapter ring onto tube as shown to the 1" (25 mm) mark and then glue both ends of ring to tube.



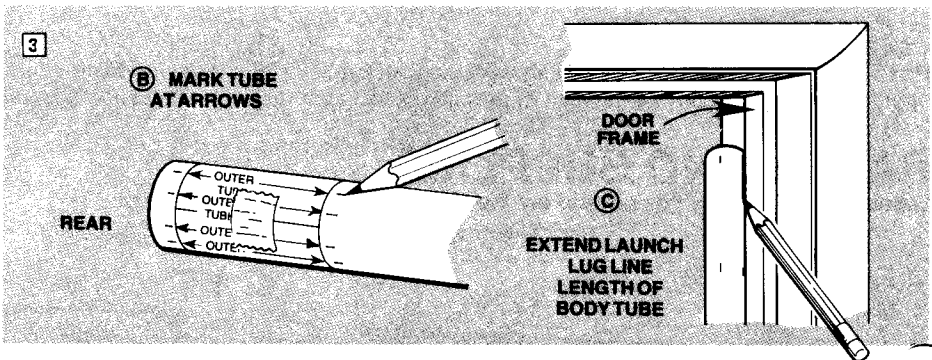
2.

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



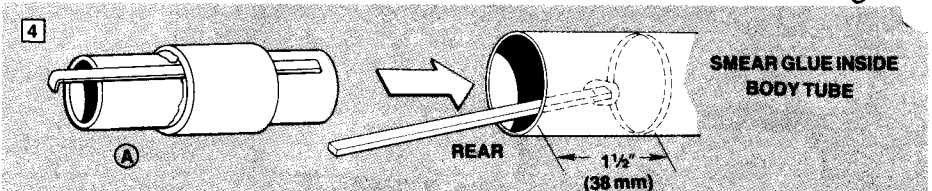
3.

- Cut out tube marking guides from front of instructions.
- Wrap body tube marking guide around main body tube and mark tube at arrows. Remove guide and save.
- Draw straight lines connecting each pair of marks.
- Extend launch lug lines full length of tube.
- Mark the six outer tubes in the same manner using the outer tube marking guide.



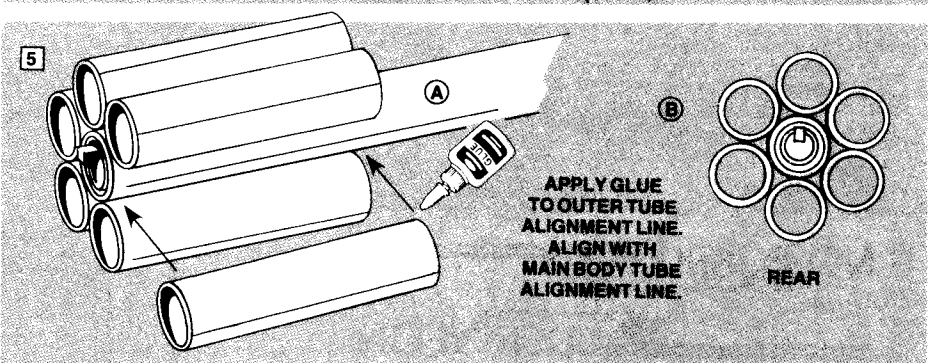
4.

- Using a piece of scrap balsa, smear glue inside body tube 1½" (38 mm) from rear end of main body tube.
- Push engine mount in until tube ends are even.



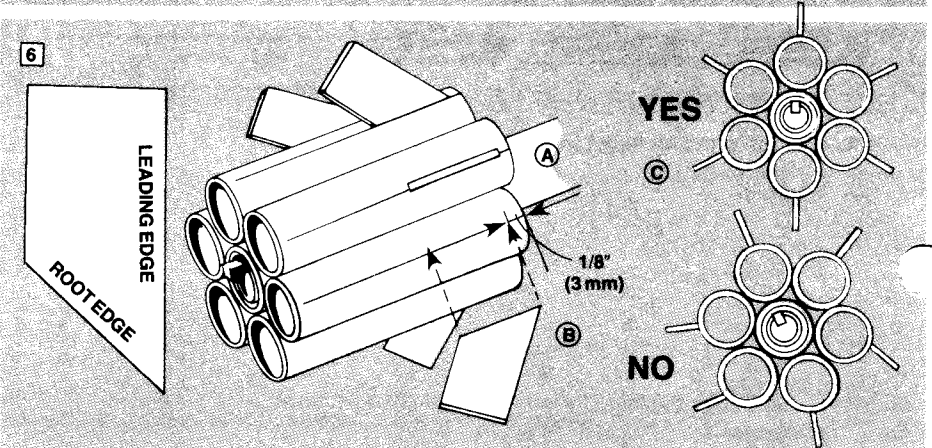
5.

- Glue the six outer tubes to the main body tube as shown.
- Adjust tubes to project straight out and straight along tube.
TUBES MUST BE ATTACHED CORRECTLY FOR STABLE FLIGHT!

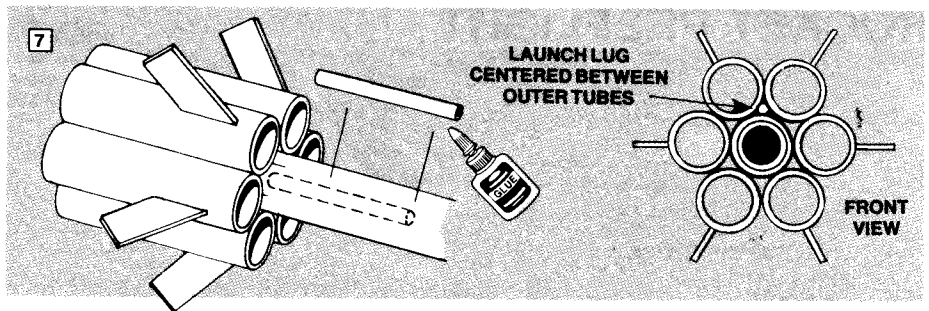


6.

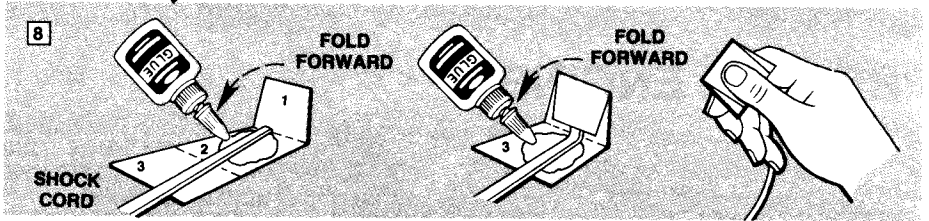
- Mark each fin alignment line 1/8" (3 mm) from front of each outer tube.
- Glue fins on alignment lines, one at a time as shown. Let each fin dry several minutes before applying the next fin.
- Looking from the rear of the rocket, the fins should be in the positions shown in the illustration marked YES.
FINS MUST BE ATTACHED CORRECTLY FOR STABLE FLIGHT!



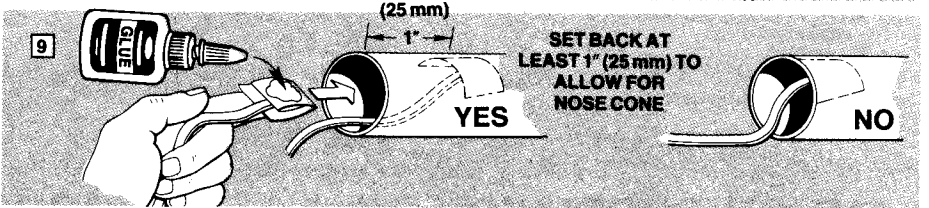
7. Glue launch lug on its alignment line just in front of outer tubes as shown.



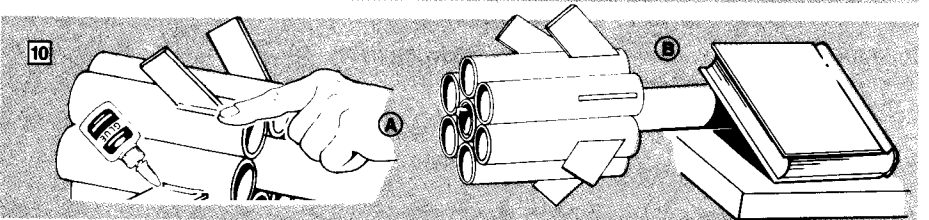
8. Cut shock cord mount from main body tube marking guide. Crease on dotted lines by folding. Spread glue on section 2 and lay end of shock cord into glue at a slight diagonal as shown. Fold section 1 forward. Apply glue to section 3. Fold forward again. Clamp firmly with your fingers until glue sets.



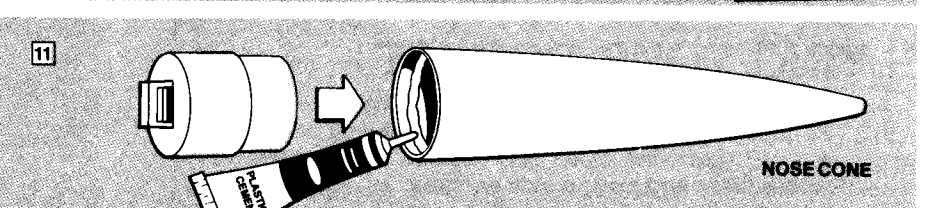
9. Apply white glue to shock cord mount as shown. Position shock cord mount 1-2" (25-51 mm) inside body tube and press until glue sets.



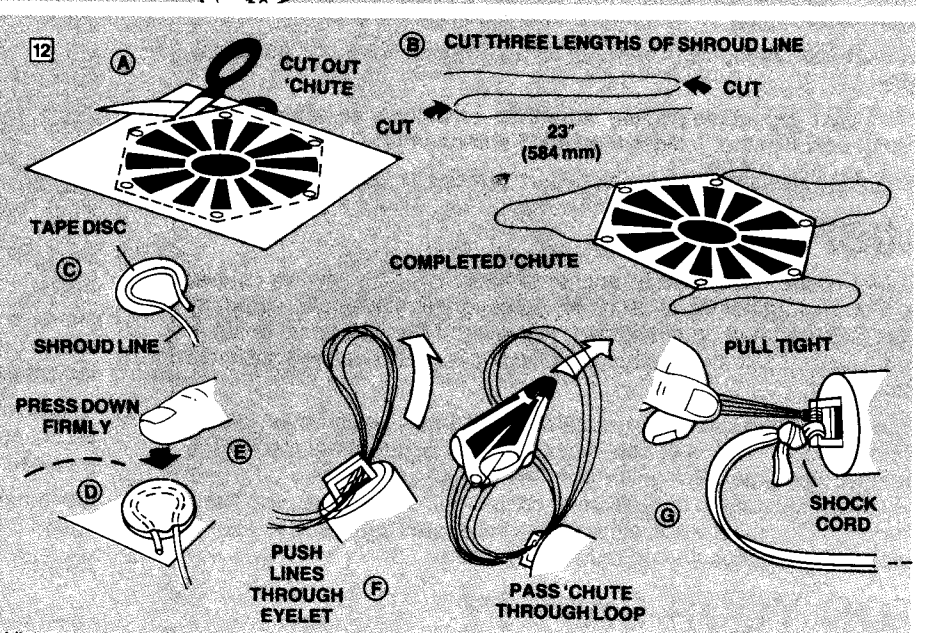
10. A. Apply glue reinforcement to each fin/body tube joint and each of launch lug sides. B. Support rocket as shown until glue dries.



11. Apply plastic cement to inside edge of nose cone and then insert nose cone insert as shown.



12. A. Cut out parachute on edge lines. B. Cut three 23" (584 mm) 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. Firmly 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 adapter. Pass parachute through loop ends and pull lines against the adapter eyelet. G. Tie free end of shock cord to adapter eyelet.

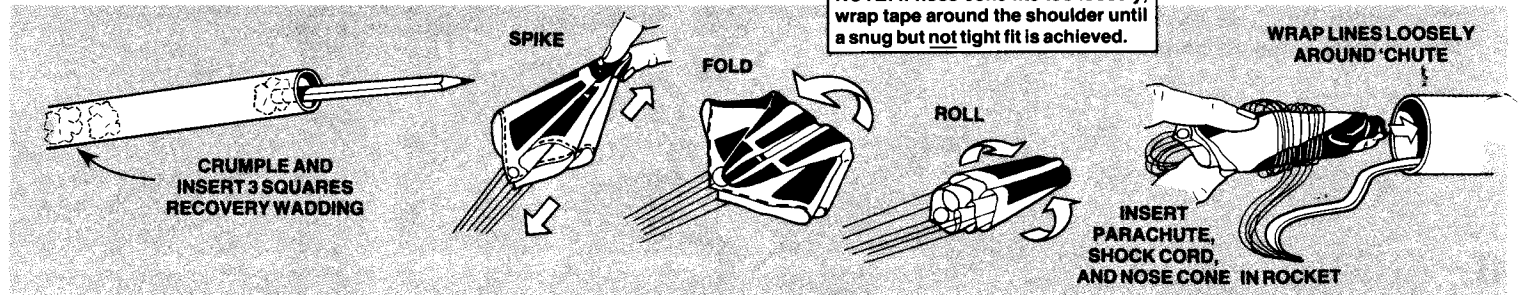


FINISHING YOUR ROCKET

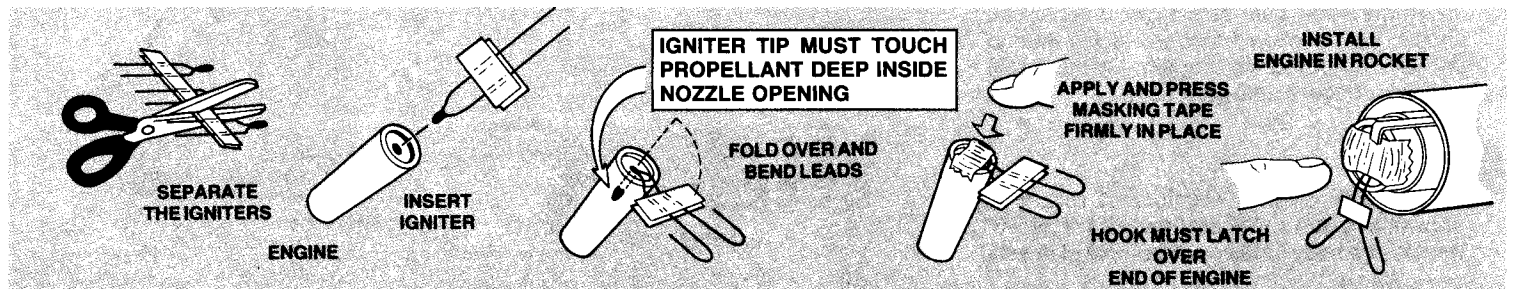
Apply sanding sealer to wood parts with small brush. When sealer is dry, lightly sand all sealed surfaces. Repeat sealing and sanding until balsa grain is filled and smooth. When sanding sealer and glue are completely dry, paint model with gloss white enamel spray paint. Follow instructions on spray can for best results. Let paint dry overnight before applying the second and third colors. Refer to panel photograph for color locations.

To apply decals, cut each out, dip in lukewarm water for 20 seconds, and hold until it uncurls. Refer to photograph on 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.

ROCKET PREFLIGHT



PREPARE ENGINE



LAUNCH SUPPLIES

To launch your rocket, you will need the following items:

- An Estes Launch System
- Estes Recovery Wadding No. 2274
- Recommended Estes Engines: A8-3, B4-4, B6-4, B8-5 or C6-5.

To become familiar with your rocket's flight pattern, use an A8-3 engine for your first flight.

Use only Estes products to launch this rocket.

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 (76 meters) 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 avoid sticking.

MISFIRES

Failure of the model rocket engine to ignite is nearly always caused by incorrect igniter installation. An Estes igniter will function properly even if the coated tip is chipped. However, if the coated tip is not in direct contact with the engine propellant, it will only heat and not ignite the engine.

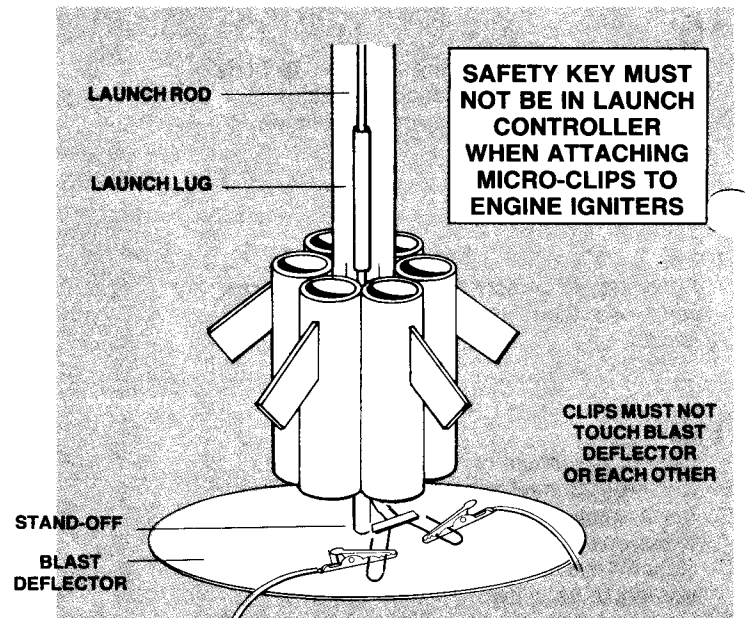
When an ignition failure occurs, remove the safety key from the launch control system and wait one minute before approaching the rocket. Remove the expended igniter from the engine and install a new one. Be certain the coated tip is in direct contact with the engine propellant, then tape the igniter leads firmly to base of engine as illustrated above. Repeat the countdown and launch procedure.

FOR YOUR SAFETY AND ENJOYMENT

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

*National Association of Rocketry

COUNTDOWN AND LAUNCH



- 10 BE CERTAIN SAFETY KEY IS NOT IN LAUNCH CONTROLLER.
- 9 Remove safety cap and slide launch lug over launch rod to place rocket on launch pad. Make sure the rocket slides freely on the launch rod.
- 8 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.
- 7 Move back from your rocket as far as launch wire will permit (at least 15 feet - 5 meters).
- 6 INSERT SAFETY KEY to arm the launch controller.

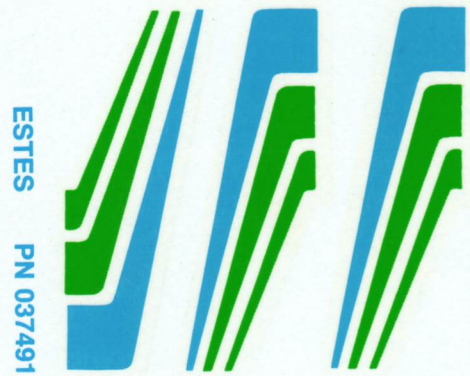
Give audible countdown 5...4...3...2...1

LAUNCH!! PUSH AND HOLD LAUNCH BUTTON UNTIL ENGINE IGNITES

REMOVE SAFETY KEY FROM LAUNCH CONTROLLER. REPLACE SAFETY KEY AND SAFETY CAP ON LAUNCH ROD.

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ESTES PN 037491