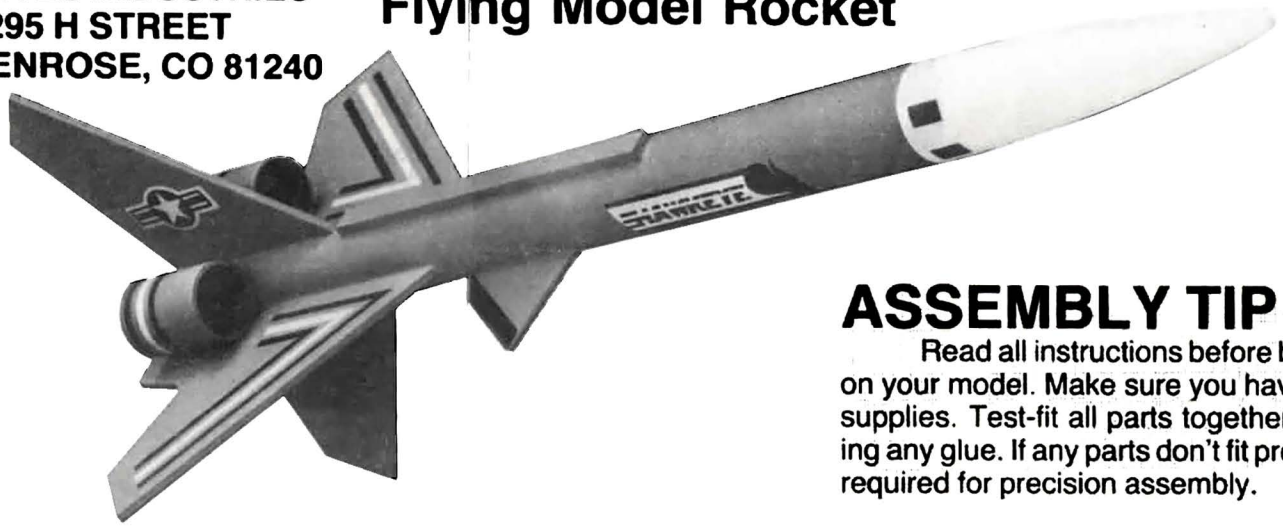

SHOOTER

A DAMON COMPANY
ESTES INDUSTRIES
1295 H STREET
PENROSE, CO 81240

SHAWKETE™

Flying Model Rocket

#0873



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.

MODELING KNIFE

SCISSORS

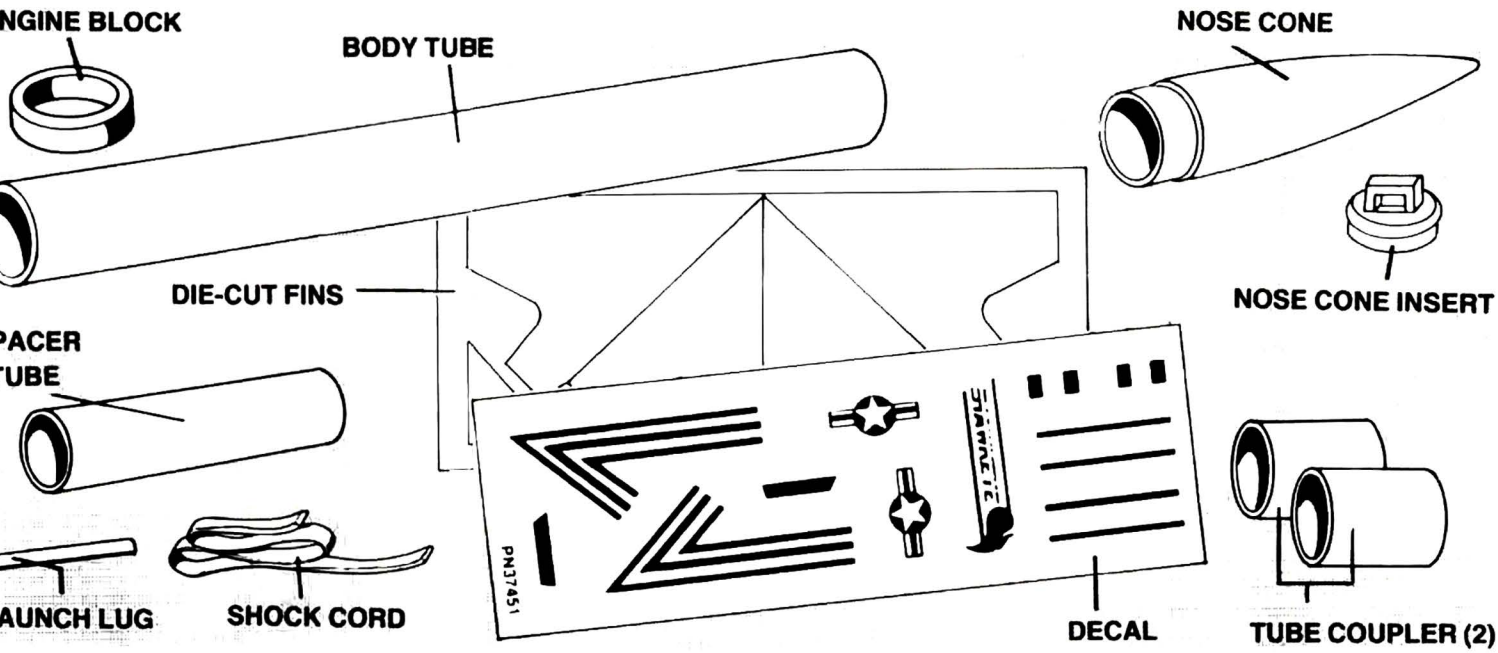
PENCIL

RULER

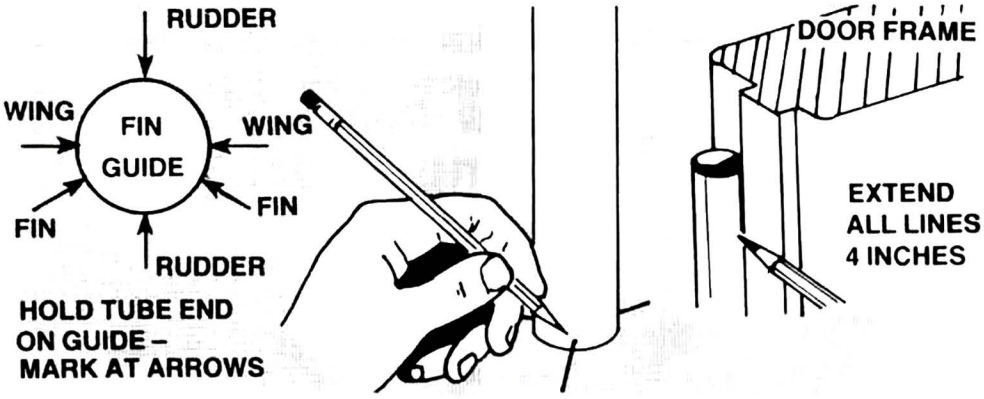
WHITE GLUE

PLASTIC CEMENT

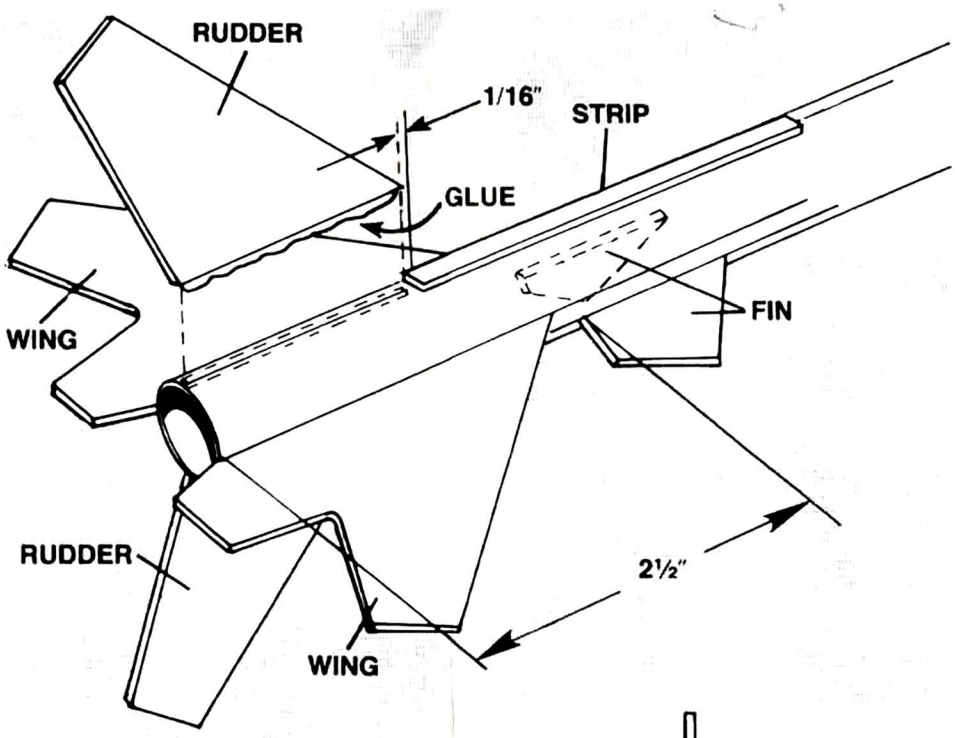
ENAMEL SPRAY PAINT
(Gray & White)



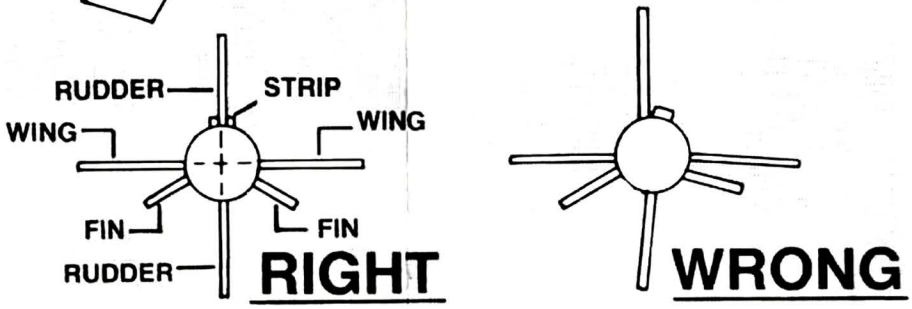
1 A. Stand the body tube upright on the fin guide and mark all the fin positions.
B. Find a groove such as a door jamb or open drawer.
C. Extend the marks approximately 4 inches down the length of the body tube.



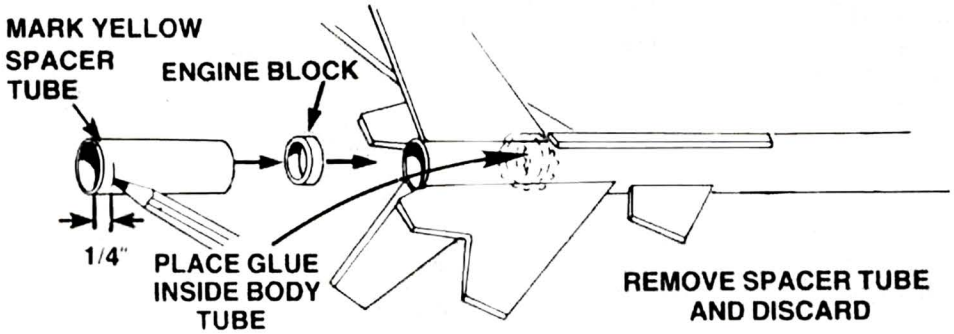
2 Glue die-cut parts onto body tube in positions shown.
A. Put a small line of white glue along the correct edge of a die-cut part and place on body tube pencil line.
B. REMOVE, allow 15 seconds for glue to become tacky.
C. Add a bit more glue and reposition die-cut part.
D. Repeat with remainder of die-cut parts.



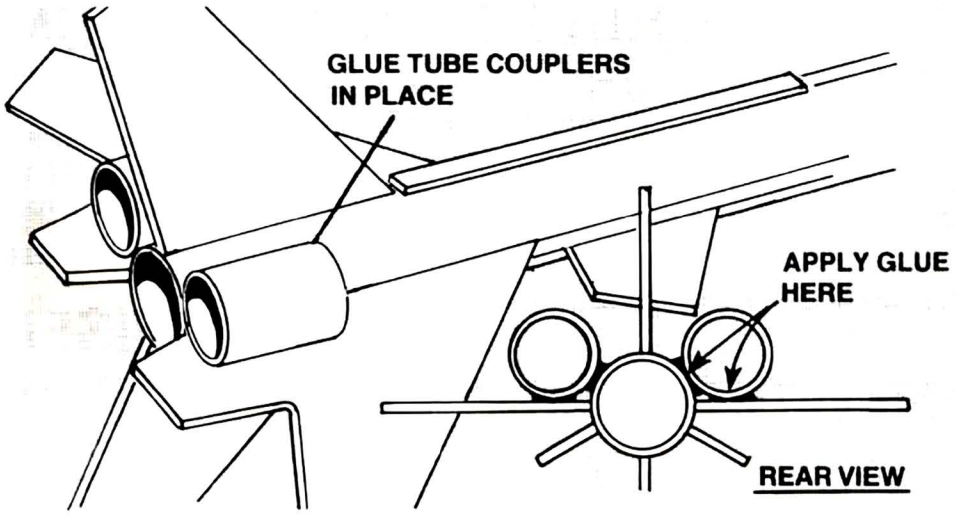
3 Make sure the parts are positioned as straight as possible. If they are crooked, remove them and try fitting them again. Use the fin guide to aid in checking alignment.



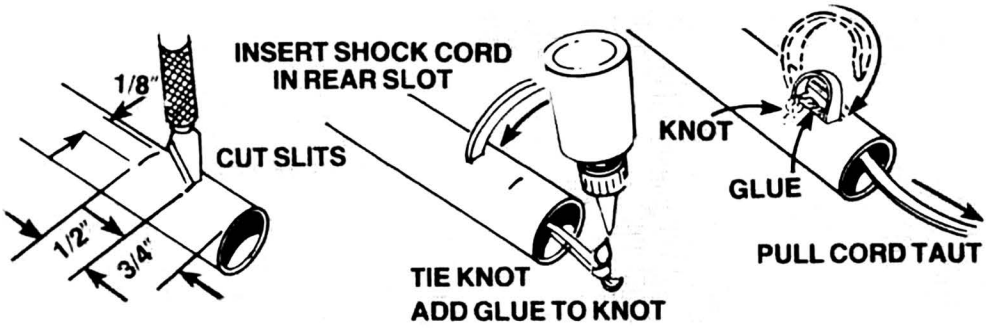
4 A. Mark spacer tube 1/4 inch from one end
B. Place a ring of glue on the inside of the body tube about 1½ inches from the rear of the rocket.
C. Insert engine block into end of tube.
D. Use the spacer tube to push engine block into the tube until mark is even with end of tube.
E. Remove spacer tube quickly before glue sets and discard it.



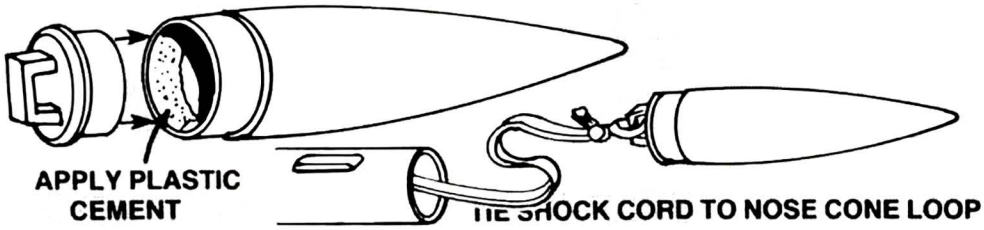
5 A. Set a tube coupler in position, without glue against the wing-body tube joint.
B. Note where the parts touch.
C. Remove the coupler, apply glue to it, and reposition in the proper place.
D. Repeat for the other coupler.
E. Allow the glue to dry.



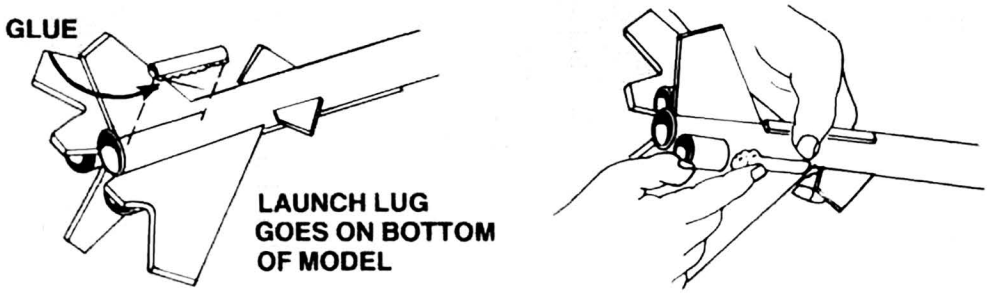
6 A. Cut two slits in bottom forward end of body tube as shown.
B. Insert shock cord into rear slot and tie knot in end. Apply glue to knot.
C. Pull knot back inside tube.
D. Insert other end of shock cord into forward slot.
E. Put glue on tube between slits and pull cord taut.



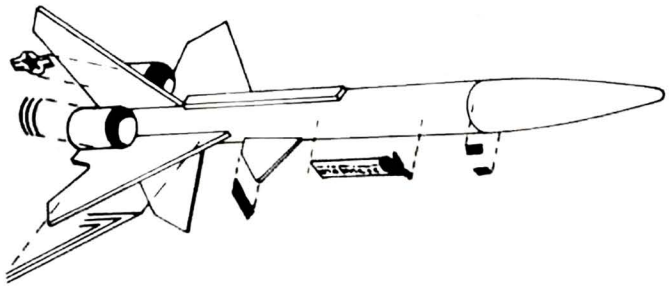
7 A. Assemble nose cone and nose cone insert with plastic cement.
B. When dry, tie free end of shock cord to nose loop with double knot.



8 A. Run a line of glue along one side of the launch lug, and place the lug against the bottom rudder/body tube joint.
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.



9 Paint the rocket gray. Paint nose cone white. After the paint is dry, apply decals. 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.



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.

LAUNCH SUPPLIES

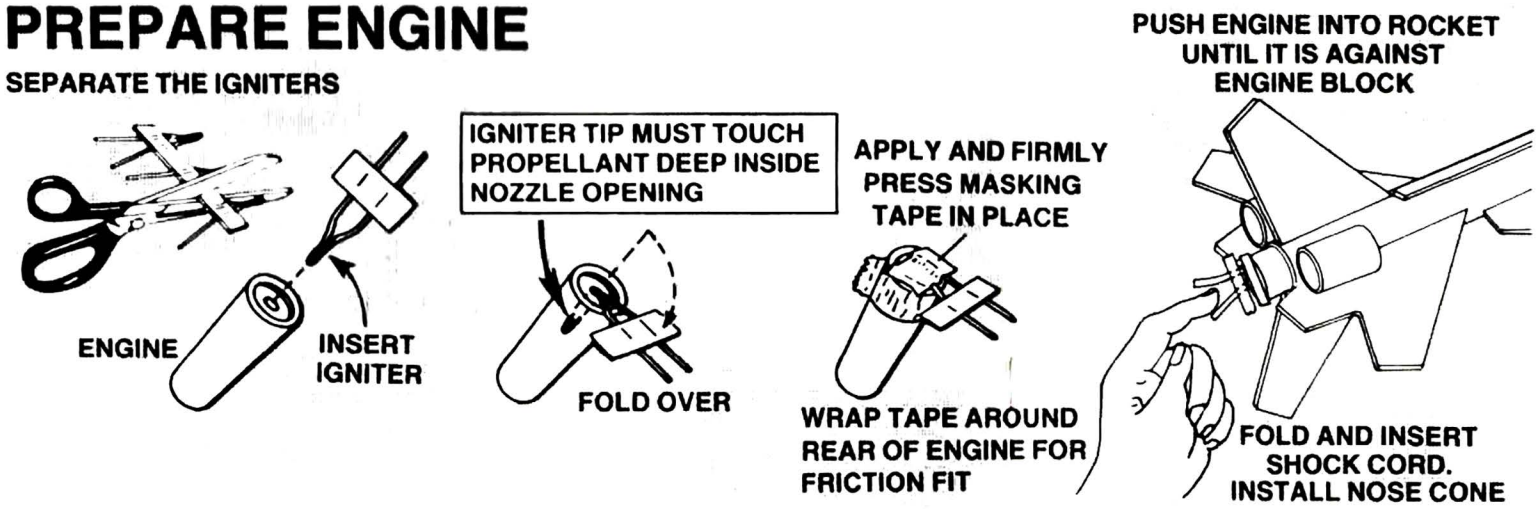
To launch your rocket you will need the following items:
—An Estes model rocket launching system
—Recommended Engines: 1/2A3-2T, A3-4T, or A10-3T
Use 1/2A3-2T engine for your first flight, to become familiar with your rocket's flight pattern.

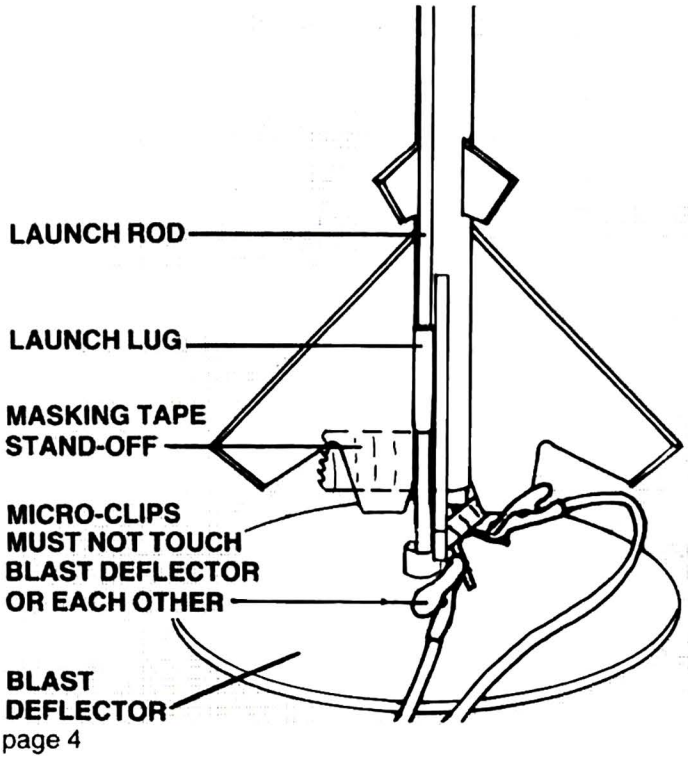
Use only Estes products to launch this rocket.

MISFIRES

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

PREPARE ENGINE





COUNTDOWN AND LAUNCH

(5) REMOVE SAFETY KEY to disarm the launch controller.

(4) 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.

(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.

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ASSEMBLY TIP

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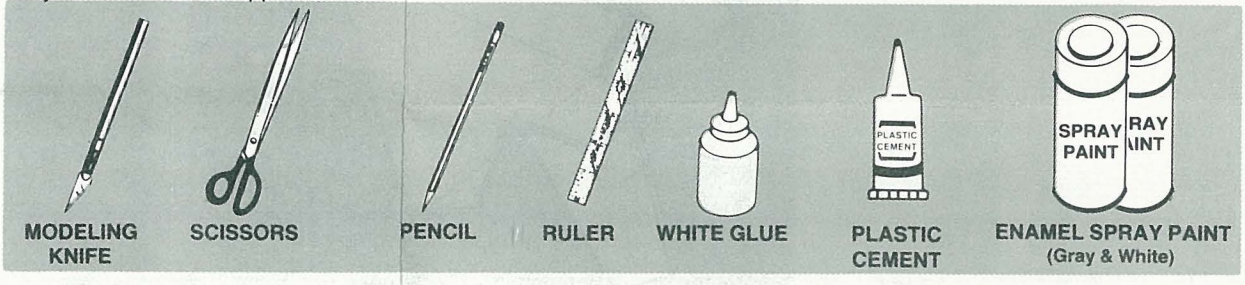
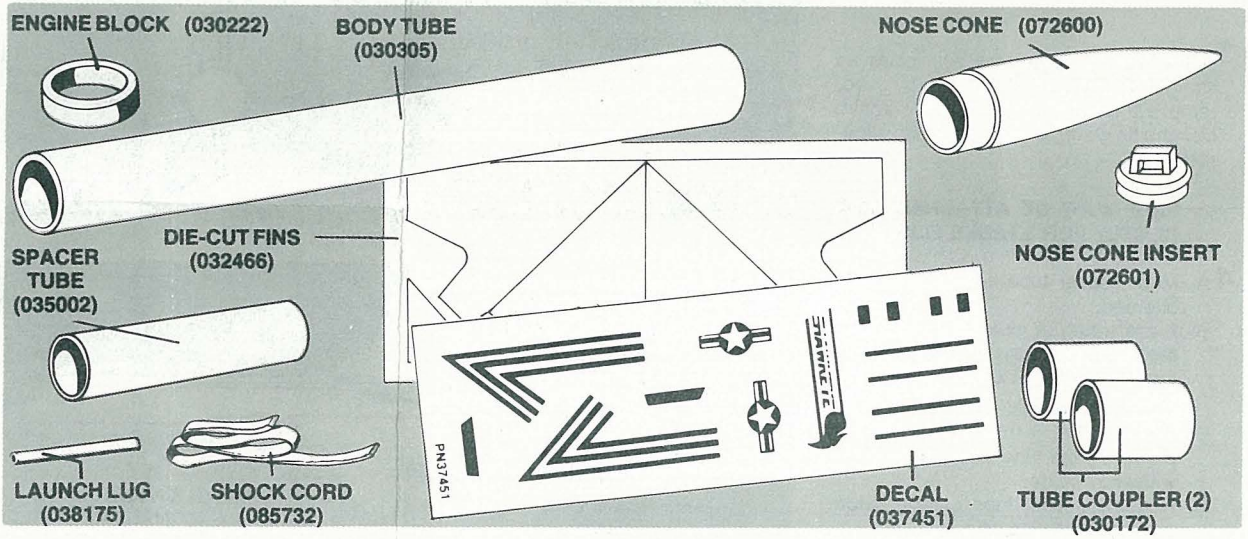
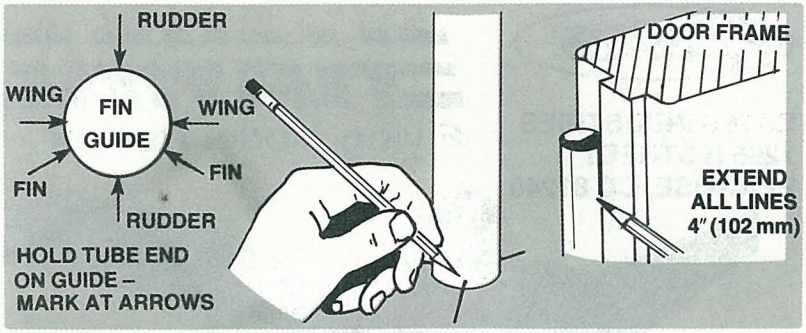




1 A. Stand the body tube upright on the fin guide and mark all the fin positions.
B. Find a groove such as a door jamb or open drawer.
C. Extend the marks approximately 4″ (102 mm) down the length of the body tube.



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A. Put a small line of white glue along the correct edge of a die-cut part and place on body tube pencil line.
B. REMOVE, allow 15 seconds for glue to become tacky.
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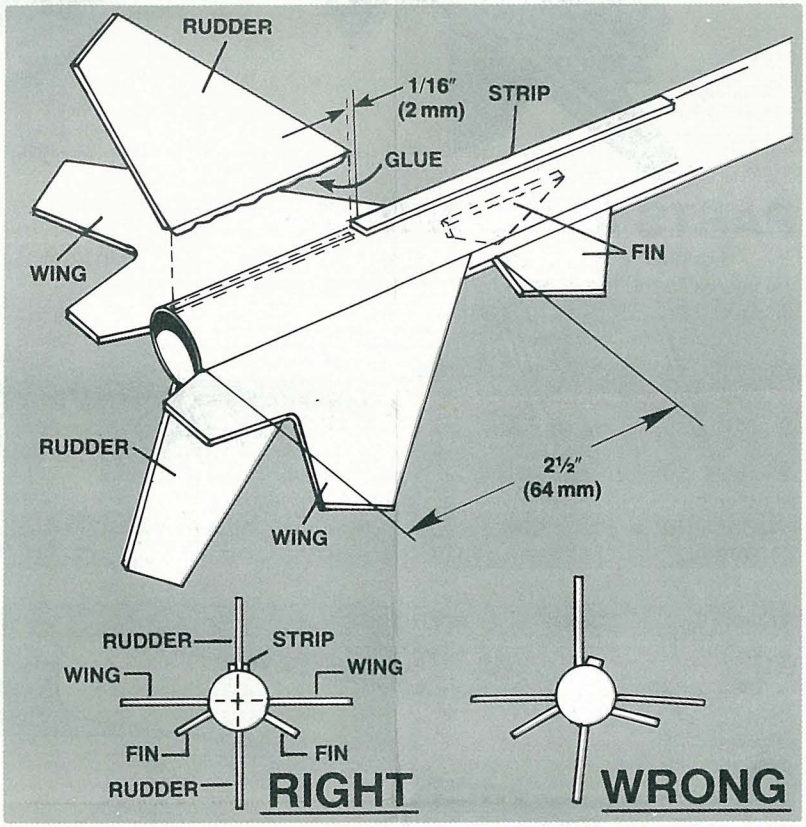
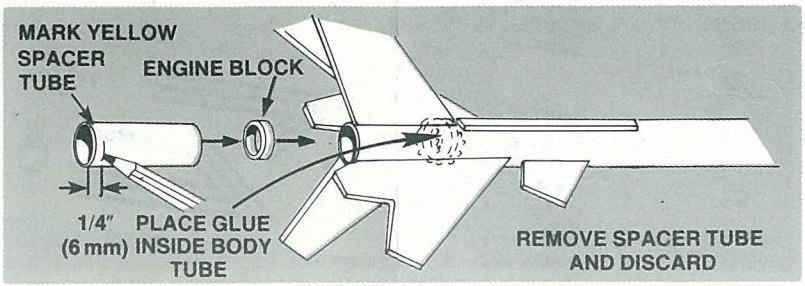


3 Make sure the parts are positioned as straight as possible. If they are crooked, remove them and try fitting them again. Use the fin guide to aid in checking alignment.

FINS MUST BE ATTACHED CORRECTLY FOR STABLE FLIGHT!

4 A. Mark spacer tube 1/4″ (6 mm) from one end.
B. Place a ring of glue on the inside of the body tube about 1½″ (38 mm) 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.



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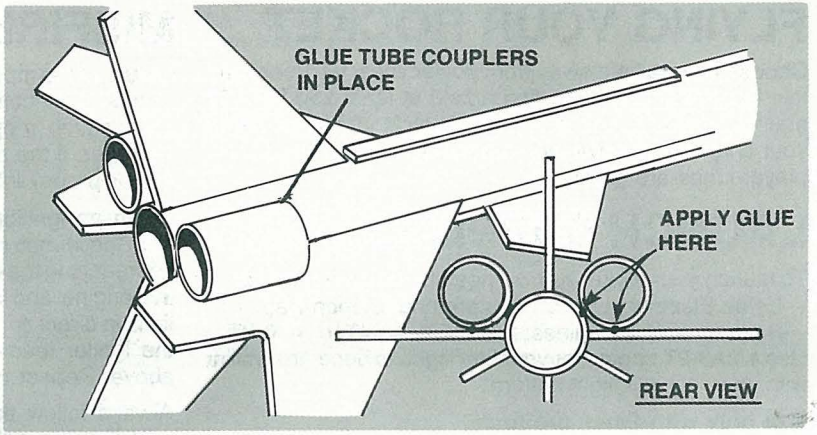

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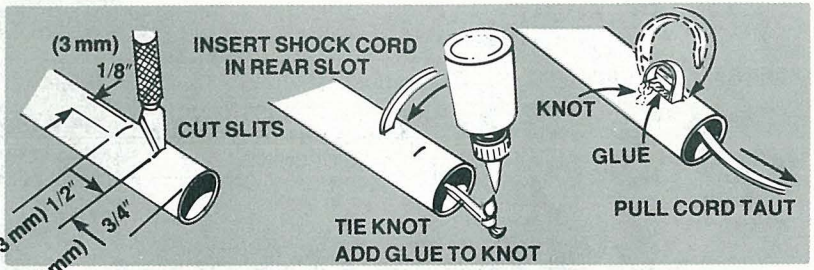

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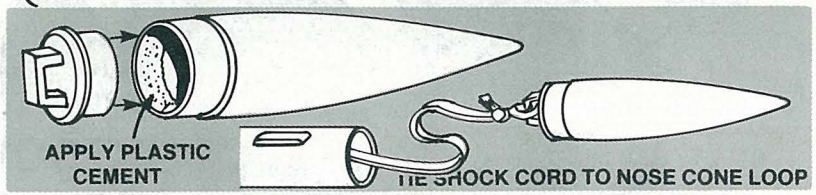
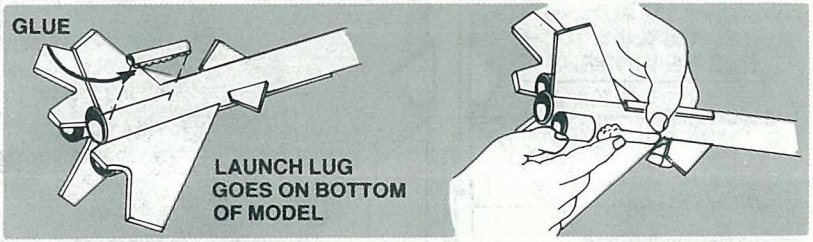
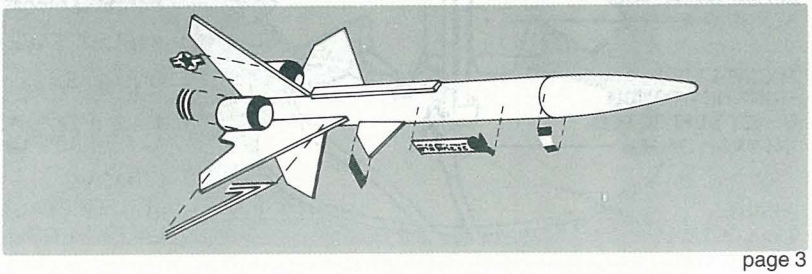


8 A. Run a line of glue along one side of the launch lug, and place the lug against the bottom rudder/body tube joint.
B. Smooth out the excess glue.
C. Now run a small line of glue along both sides of each body tube-fin joint.
D. Smooth out the excess glue with your fingertips. Allow to dry.



9 Paint the rocket gray. Paint nose cone white. After the paint is dry, apply decals. 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.



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 SUPPLIES

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

Use only with Estes products.

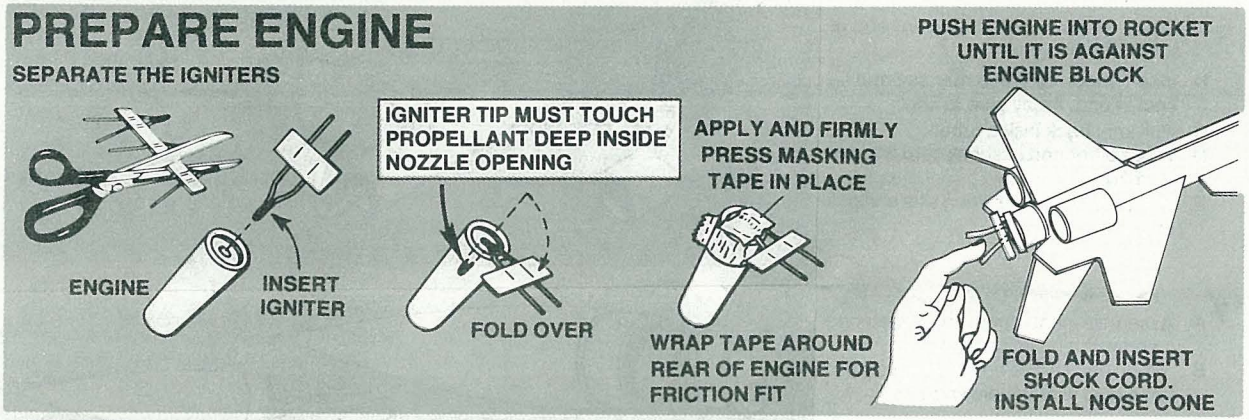
MISFIRES

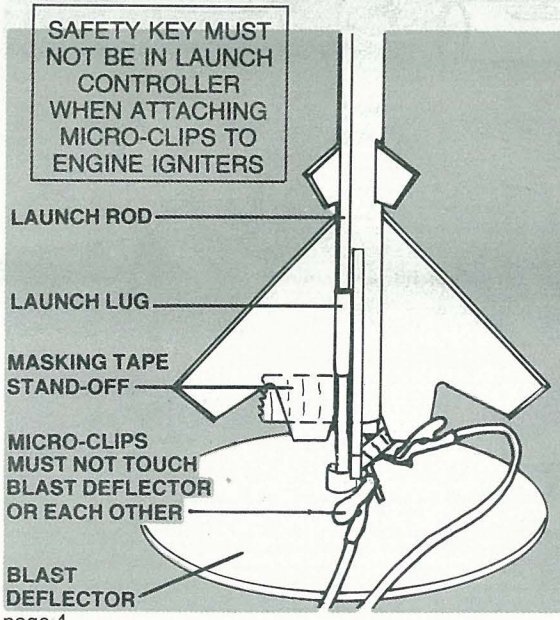
Failure of the model rocket engine to ignite is nearly always caused by incorrect igniter installation. An Estes igniter will function properly even if the coated tip is chipped. However, if the coated tip is not in direct contact with the engine propellant, it will only heat and not ignite the engine.

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.

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

PREPARE ENGINE





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).

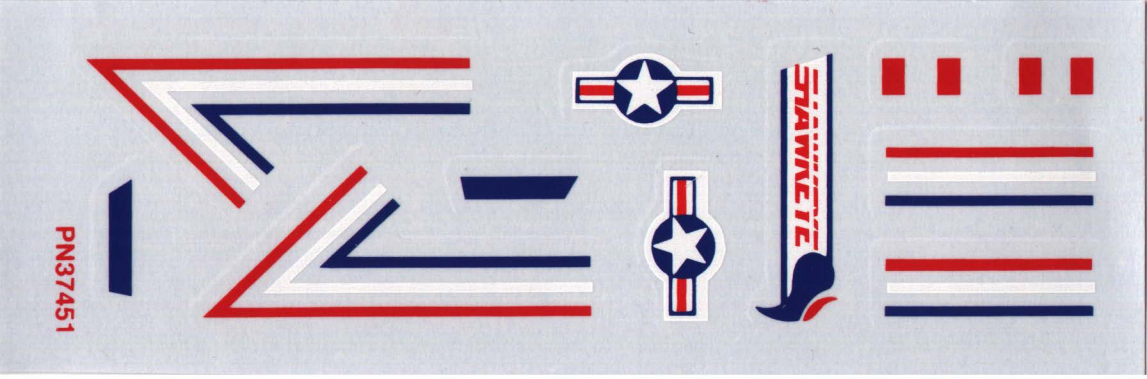
⑥ INSERT SAFETY KEY to arm the launch controller.

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.

1/16"


PN37451
HAWKEYE

PARTS LIST KIT N0. 0873 - Hawkeye								
Quantity	Description	Type	Number	Details1	Details2	Details3	Details4	Comment
1	PAPER BODY TUBE	BT-5?	30303	6" long	0.515" ID	0.541" OD	0.013" wall	*1 Wrong number on plan
2	STAGE COUPLER	JT-5C	30252	0.455" ID	0.513" OD	0.75" long	fits BT-5	*2 Wrong number on plan
1	PLASTIC NOSE CONE	PNC-5A	72600	2.125" long	.544" dia.	.375 shoulder	BT-5 - Ogive	Injection Molded
1	NOSE CONE INSERT	PIN-5A	72601				Glue on	Base with shock cord attachment
1	ENGINE BLOCK	EB-5B	3130/30222	.512" OD	.49" ID	.188" thick	fits BT-5	
1	SPACER TUBE	?	35002					Same size as mini-motor
1	LAUNCH LUG	LL-2A	2321/38175	5/32" ID	1/8" rod	1-1/4" long		
1	Shock Cord	SC-1A	85732	1/8" x 9"				Rubber
1	Die-Cut Fin sheet	FF-0873	32466	2.5" wide	5.5" long	1/16" thick	Fibercard	Scan
1	Decal	TK-0873	37451	2" wide	6" long	Red/White/Blu	Waterslide	Scan
*1 The main body tube for this kit is 6" long but the plans show number 030305 which is 4" long. The correct number is 030303.								
*2 The plans show number 030172 for the JT-5C couplers. The correct number for JT-5C is 030252.								


HAWKEYE
FLYING
MODEL
ROCKET
#0873
#0873
Model Rocket


Flying
Model Rocket
HAWKEYE™
FLYING
MODEL
ROCKET
SKILL LEVEL 2
ESTES
#0873


Fly Estes
Model Rockets
COASTING
RECOVERY
MODEL ROCKET
FLIGHT SEQUENCE
LIFT-OFF
MINIMUM RECOMMENDED LAUNCH
SITE DIAMETER IN FEET
FULL 1 YEAR WARRANTY & SAFETY
CODE ENCLOSED.
ESTES IND., 1295 H ST., PENROSE, CO 81240

HAWKEYE™

FLYING MODEL ROCKET

SKILL LEVEL 2
For the Experienced Modeler

ESTES

Length:
8.5 in.
(21.6 cm)

Dia:
.541 in.
(13.7 mm)

Weight:
.42 oz. (12 g)

Recommended Engines:
1/2A3-2T (First Flight), A3-4T, A10-3T

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

#0873

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