BLAZER™ Flying Model Rocket

#1956

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.

- WHITE GLUE
- PENCIL
- PLASTIC CEMENT
- SCISSORS
- RULER
- ENGINE BLOCK
- BODY TUBE
- NOSE CONE
- NOSE CONE INSERT
- SPACER TUBE
- DECAL
- DIE-CUT FINS
- SHOCK CORD
- STREAMER
- LAUNCH LUG
1. Stand the body tube upright on the fin guide and mark all the fin positions.

2. 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.

3. A. Put a small line of white glue along the fin edge.
   B. Place fin on the body tube on pencil line.
   C. REMOVE, allow 15 seconds for glue to become tacky.
   D. Add a bit more glue, stick fin back on.

4. 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.

5. A. Mark spacer tube 1/4 inch from one end.
   B. Place a ring of glue on the inside of the body tube about 2 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.

6. A. Cut out shock cord mount.
   B. Crease on dotted lines by folding.
   C. Spread glue on section 1 and lay end of shock cord into glue.
   D. Fold over and apply glue to back of first section and exposed part of section 2.
   E. Lay shock cord as shown and fold mount over again.
   F. Clamp unit together with fingers until glue sets.
7. A. Apply glue to inside front of body tube to cover an area no less than 1 inch to 2 inches from end.
   B. The glued area should be same size as shock cord mount.
   C. Press mount firmly into glue as shown. Hold until glue sets.

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.
   C. Using a double knot, tie shock cord around middle of plastic streamer about 2 inches from end of shock cord.

9. A. Run a line of glue along one side of the launch lug, and place the lug against any one of the body tube/fin joints.
   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.

10. 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
- Estes Parachute Recovery Wadding (No. 2274)
- Recommended Engines: A8-3, A8-5, B4-4, B6-4, B8-5, C6-5, or C6-7
Use an A8-3 engine for your first flight to become familiar with your rocket’s flight pattern.

Be sure to follow the HIA-NAR* Model Rocketry Safety Code when carrying out your model rocket activities.

Use only Estes products with this rocket.

*National Association of Rocketry and Hobby Industry Association
**ROCKET PREFLIGHT**

- Crumple and insert 2 squares of recovery wadding.
- Fold streamer 3 times.
- Roll tightly.
- Insert streamer, shock cord, and nose cone into rocket body.

*NOTE:* If streamer fits too tightly into body, remove and re-roll. A too-tight fit could cause an ejection malfunction during flight.

**PREPARE ENGINE**

- Separate the igniters.
- Insert igniter.
- Igniter tip must touch propellant deep inside nozzle opening.
- Fold over.
- Wrap tape around rear of engine for friction fit.
- Apply and firmly press masking tape in place.
- Engine must fit tightly to obtain proper streamer deployment.
- Push engine into rocket until it is against engine block.

**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.

**COUNTDOWN AND LAUNCH**

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

**LAUNCH!!** Push and hold launch button until engine ignites.

Remove safety key—Replace cap on rod.
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<tr>
<th>Quantity</th>
<th>Description</th>
<th>TYPE</th>
<th>NUMBER</th>
<th>Details1</th>
<th>Details2</th>
<th>Details3</th>
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<tr>
<td>1</td>
<td>Plastic Nose Cone</td>
<td>PNC-20A</td>
<td>072602</td>
<td>2-7/8&quot;</td>
<td>.736&quot;</td>
<td>.5&quot;</td>
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<td>38175</td>
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<td>Fits 1/8&quot; rod</td>
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BLAZER™
FLYING MODEL ROCKETS

SKILL LEVEL 1
For the Beginning Modeler.

- 1000' Flights
- Streamer Recovery
- NO PAINTING REQUIRED!

Length: 12.75 in. (32.4 cm)
Diameter: 7/32 in. (1.8 mm)
Weight: 1 oz. (20 g)

Recommended Engines:
A8-3 (First Flight), A8-5, B4-4, B6-4,
B6-5, C8-8, C6-7

NO. 1956

A DAMON COMPANY

Este's Model Rocketry

FLIGHT SEQUENCE

This kit has been designed specifically for use only with
Este's model rocket engines.

MINIMUM RECOMMENDED LAUNCH SITE DIAMETER IN FEET

<table>
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<tr>
<th>Engine</th>
<th>Max. Alt.</th>
<th>Site Code</th>
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<tr>
<td>D</td>
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<td>D9</td>
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<tr>
<td>E</td>
<td>400'</td>
<td>C2</td>
</tr>
<tr>
<td>F</td>
<td>800'</td>
<td>B2</td>
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<tr>
<td>G</td>
<td>1600'</td>
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LAUNCH SITE MUST BE FREE OF OBSTRUCTIONS AND HIGHLY FLAMMABLE MATERIALS.

FULL 1 YEAR WARRANTY & SAFETY CODES ENCLOSLED.

Plastic bags can be dangerous. To avoid danger of suffocation, keep this bag away from babies and children.

Este's IND., 1295 H St., Penrose, CO 81240
Made in USA 1989

USE ONLY ESTES PRODUCT TO LAUNCH THIS MODEL ROCKET.
FLYING MODEL ROCKET

SKILL LEVEL 1
For The Beginning Modeler.

- 1000' Flights
- Streamer Recovery

NO PAINTING REQUIRED!

Length: 12.75 in. (32.4 cm)
Dia: .736 in. (18.7 mm)
Weight: .71 oz. (20 g)

Recommended Engines:
A8-3 (First Flight),
A8-5, B4-4, B6-4,
B8-5, C6-5,
C6-7

A DAMES COMPANY

#1956

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