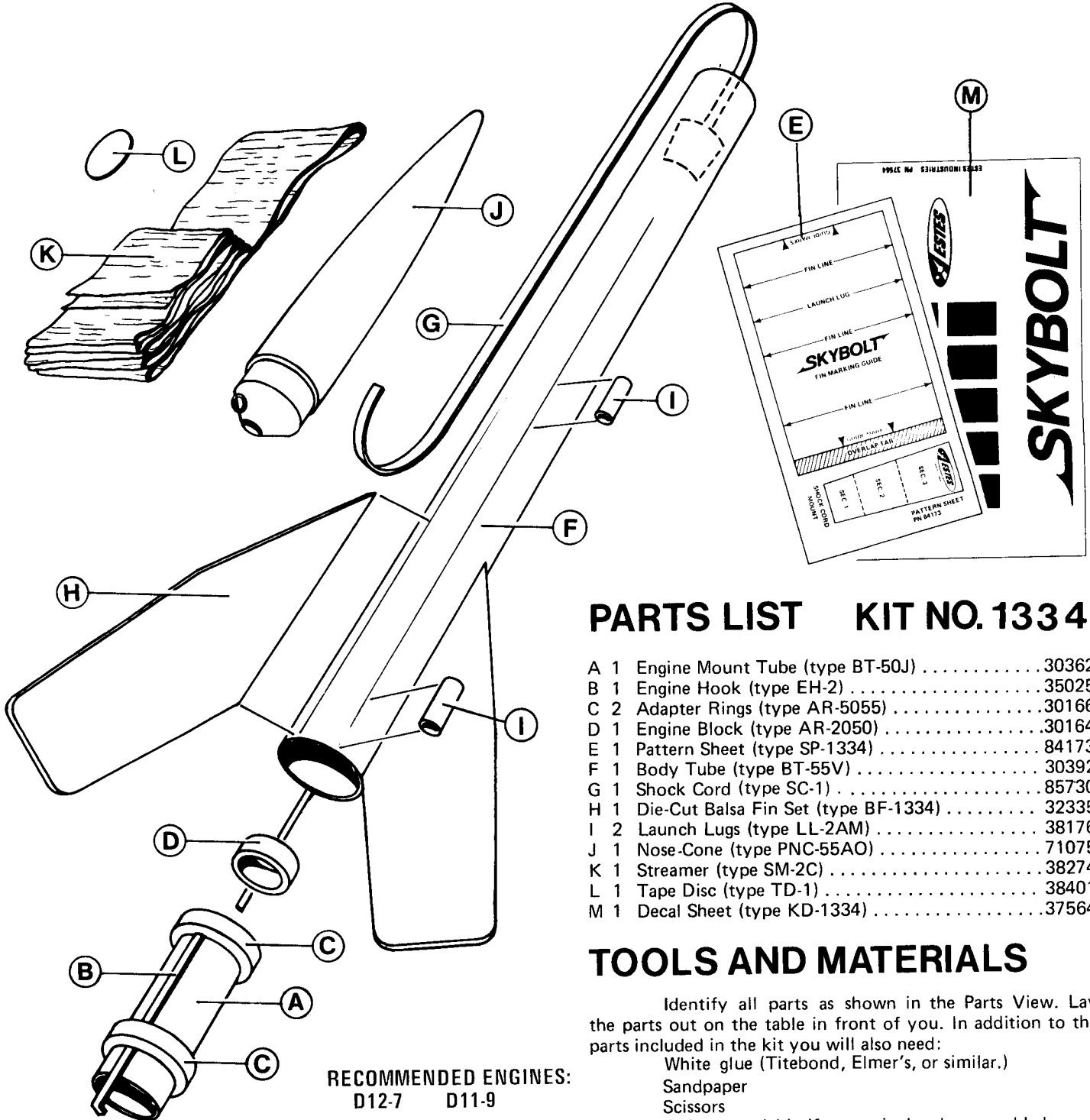


SKYBOLT

BEFORE YOU START

SKILL LEVEL 2 – Recommended for Intermediate Rocketeers.

Read all instructions before beginning work on your model. Make sure you have all parts and materials. When you are thoroughly familiar with the assembly procedure, begin construction. Check off each step as you complete it. In each step, test-fit the parts together before applying any glue. If some part doesn't fit properly, sand lightly or build up as required for precision assembly.



PARTS LIST KIT NO. 1334

A	1	Engine Mount Tube (type BT-50J)	30362
B	1	Engine Hook (type EH-2)	35025
C	2	Adapter Rings (type AR-5055)	30166
D	1	Engine Block (type AR-2050)	30164
E	1	Pattern Sheet (type SP-1334)	84173
F	1	Body Tube (type BT-55V)	30392
G	1	Shock Cord (type SC-1)	85730
H	1	Die-Cut Balsa Fin Set (type BF-1334)	32335
I	2	Launch Lugs (type LL-2AM)	38176
J	1	Nose-Cone (type PNC-55AO)	71075
K	1	Streamer (type SM-2C)	38274
L	1	Tape Disc (type TD-1)	38401
M	1	Decal Sheet (type KD-1334)	37564

TOOLS AND MATERIALS

Identify all parts as shown in the Parts View. Lay the parts out on the table in front of you. In addition to the parts included in the kit you will also need:

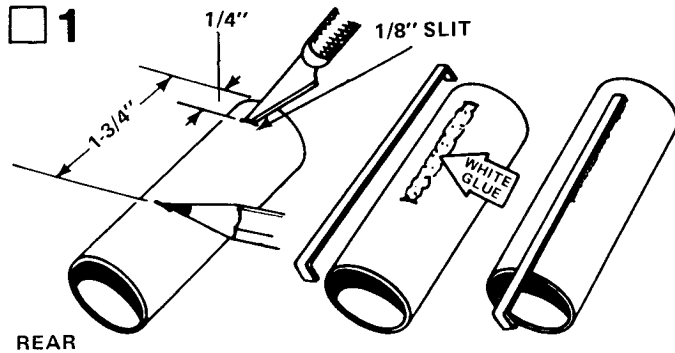
- White glue (Titebond, Elmer's, or similar.)
- Sandpaper
- Scissors
- A sharp model knife, or a single-edge razor blade.
- A ruler and pencil.
- Sanding sealer and small paint brush.
- Gloss white paint and blue paint (Spray paint is recommended.)

RECOMMENDED ENGINES:
D12-7 D11-9



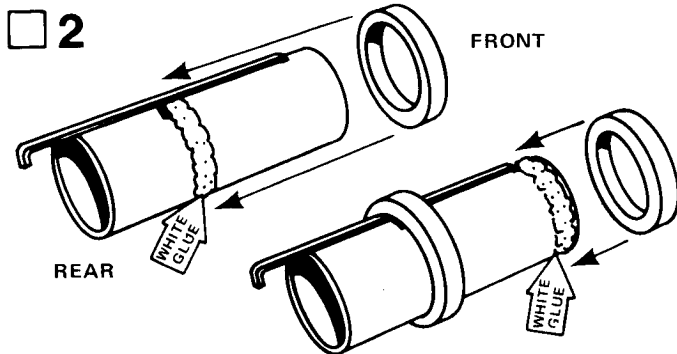
ESTES INDUSTRIES
PENROSE, CO 81240 USA

ASSEMBLY INSTRUCTIONS



REAR

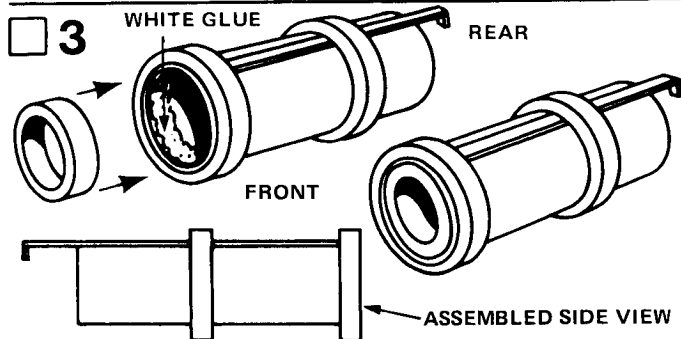
Mark the engine mount tube (part A) 1/4" and 1-3/4" from one end. Cut a 1/8" long slit in the tube at the 1/4" mark. Apply a line of glue between the two marks. Push one end of the engine hook (part B) into the slit as shown. Press the main part of the hook into the glue.



REAR

FRONT

Apply a line of glue around the tube just forward of the 1-3/4" mark. Slide one of the adapter rings (part C) onto the tube from the forward end, over the engine hook, and up to the 1-3/4" mark. Apply a line of glue around the tube just forward of the engine hook. Slide the remaining adapter ring onto the forward end of the tube until it just touches the engine hook.



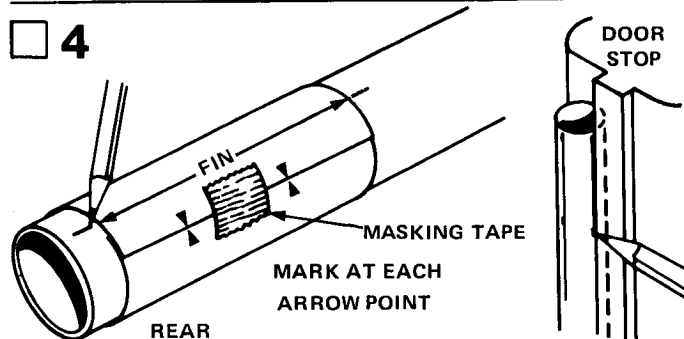
WHITE GLUE

REAR

FRONT

ASSEMBLED SIDE VIEW

Smear a line of glue around the inside of the forward end of the engine mount tube and push the engine block (part D) in until it stops against the engine hook. Set the unit aside to dry.



REAR

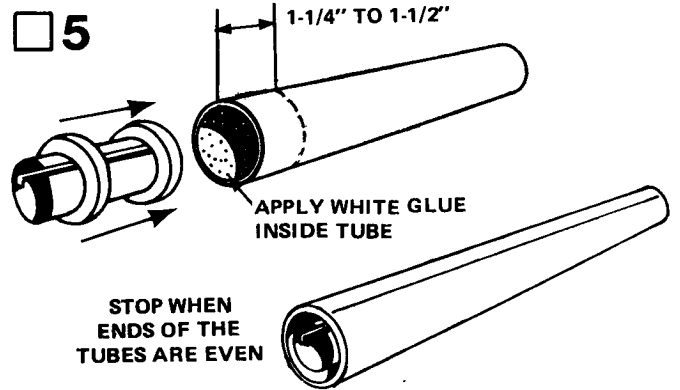
MARK AT EACH
ARROW POINT

DOOR
STOP

MASKING TAPE

FIN

Cut out the body marking guide from the pattern sheet (part E). Wrap it around one end of the rocket body tube (part F). Match the printed guide marks and tape guide in place. Mark the tube at each arrow point. Remove the guide. Place the body tube against the inside edge of a door frame as shown. Draw a line about 4" long from the tube end through each pair of fin line marks. Draw a line about 10" long through the launch lug marks. Label this launch lug line. You may prefer to use a ruler to connect the tube marks and draw the alignment lines.



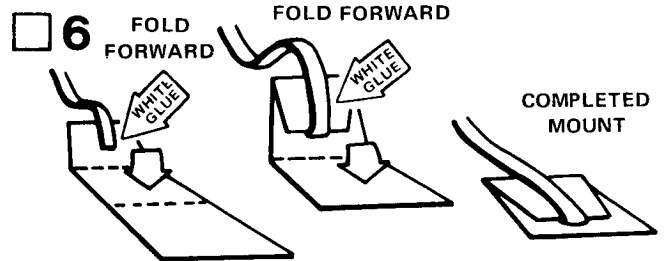
5

1-1/4" TO 1-1/2"

APPLY WHITE GLUE
INSIDE TUBE

STOP WHEN
ENDS OF THE
TUBES ARE EVEN

Smear a line of glue around the inside of the rear end of the body tube. The glue line should be about 1-1/4" to 1-1/2" from the end of the tube. Push the engine mount in right away -- but be sure the mount is turned so the hook will stick out of the end of the tube. Push the engine mount in with one smooth motion until the ends of the tubes are even. Position the engine mount so that the engine hook is centered between two fin alignment lines.



6

FOLD
FORWARD

FOLD FORWARD

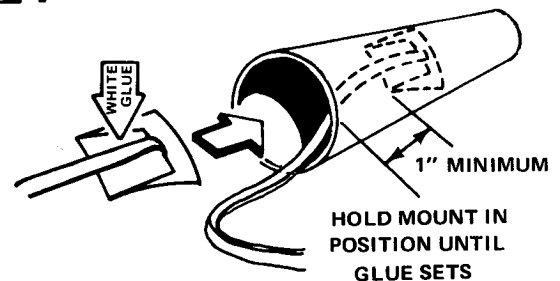
WHITE GLUE

WHITE GLUE

COMPLETED
MOUNT

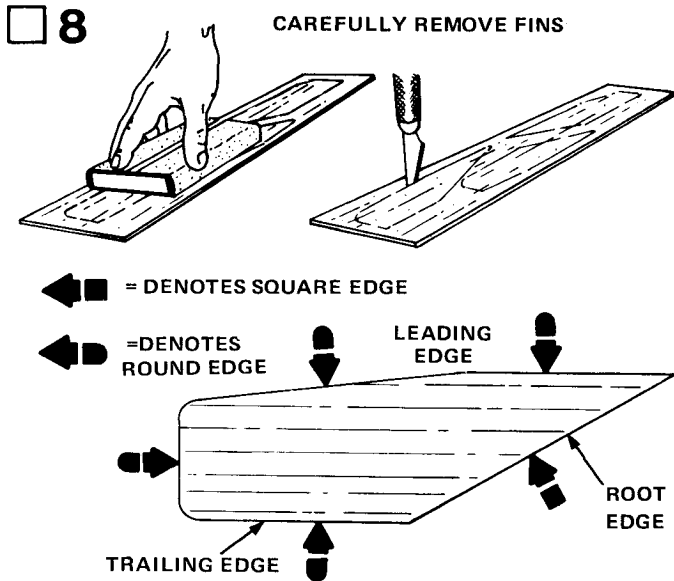
Cut out the shock cord mount from the pattern sheet. Crease it on the dotted lines by folding. Spread glue on the first section (1) and lay the end of the shock cord (part G) into the glue. Fold over and apply glue to the back of the first section and the exposed part of section (2). Lay the shock cord as shown and fold over again. Clamp the unit together with your fingers until the glue sets.

7

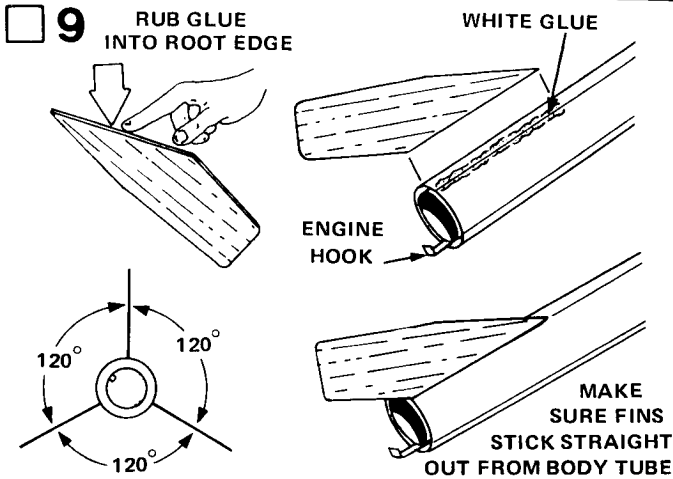


HOLD MOUNT IN
POSITION UNTIL
GLUE SETS

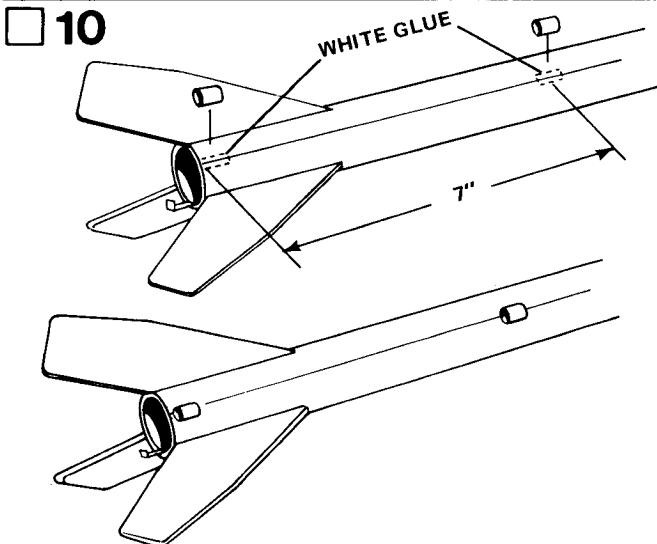
Smear glue over the back side of the shock cord mount as shown. Hold the mount so its wide end enters the tube first, and press it into place in the front of the body tube. Make sure the front of the mount is at least 1" from the tube end to allow for the nose cone. Hold the mount in place until the glue sets.



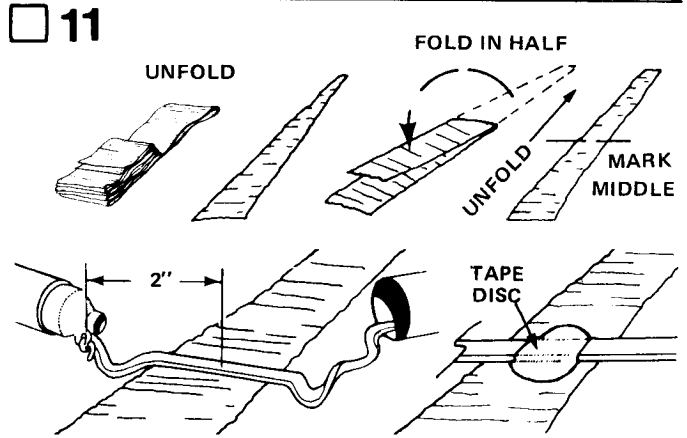
Fine-sand both sides of the balsa sheet (part H). Carefully remove the fins from the sheet using a sharp knife. Sand all fin edges round except the root edge (the edge which glues to the rocket body). The root edge of each fin must be square.



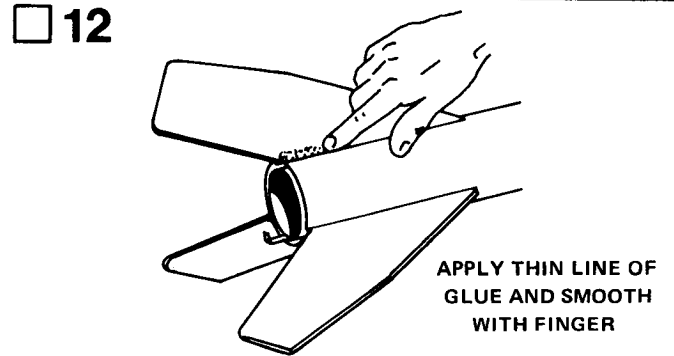
Rub a line of glue into the root edge of each fin and allow to dry. Glue the fins to the body on the alignment lines. The rear of each fin should be even with the rear of the body tube. Adjust the fins so they stick straight out from the body. Do not set the rocket on its fins while the glue is drying.



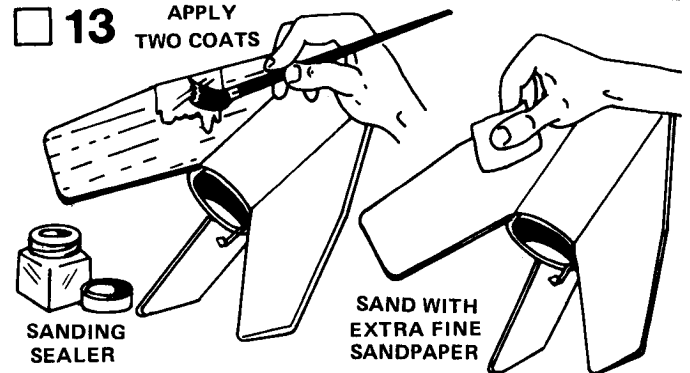
Glue the two launch lugs (part I) to the body tube. Center them on the launch lug alignment line. Glue one launch lug even with the rear of the body tube. Glue the remaining launch lug 7" from the rear of the body tube.



Tie the free end of the shock cord to the nose cone (part J). Unfold the streamer (part K) and fold lengthwise to find its center. The streamer should be secured to the shock cord about 2" from the nose cone, as shown. Lay the shock cord across the center of the streamer and secure with the tape disc (part L). Fold the streamer twice lengthwise and roll until it fits into the body tube. Place the remainder of the shock cord and the nose cone into the body tube while completing the Skybolt.



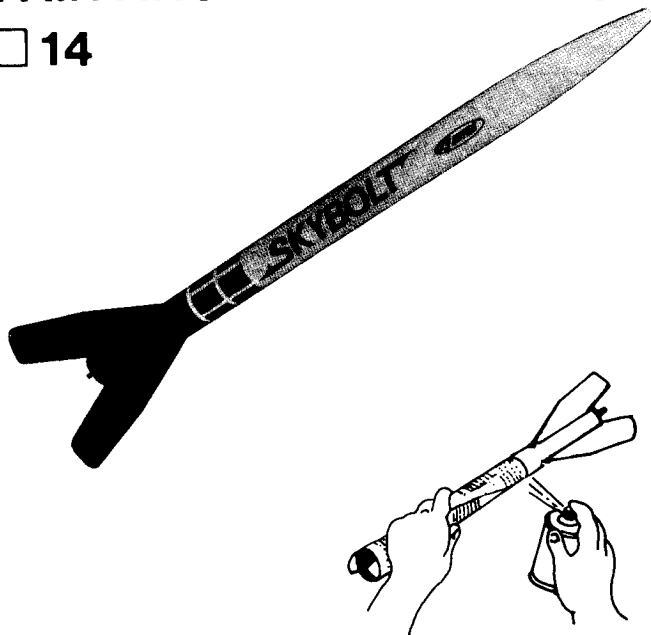
When the fin joints have dried, apply glue reinforcements to each joint. Holding the model level, apply a narrow line of glue to both sides of each fin joint. Smooth out the glue with your finger. **IMPORTANT** -- Keep the model level until the glue dries.



When all glue on the outside of the body is dry, prepare the balsa parts 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 holes in the wood are filled and everything looks and feels smooth.

PAINTING AND DETAILING

□ 14



Paint the entire model with two coats of gloss white. Mask and paint the fins and body tube 1" from the front of the fins bright blue.

□ 15

When all paint is completely dry, apply decals (part M) in the positions shown. To apply the decals, cut out a decal section, dip it in lukewarm water for 10-20 seconds, and hold it until it starts to uncurl. Slip the decal off the backing sheet and onto your model. Blot excess water away with a damp cloth. When all decals are in place, let the model dry overnight. After drying, apply a coat of clear spray to protect the decals.

LAUNCHING COMPONENTS

To launch your rocket you will need the following items:
 An Estes model rocket launch system.
 Parachute recovery wadding (Estes Cat. No. 2274).
 Estes D12-7 and D11-9 model rocket engines.

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

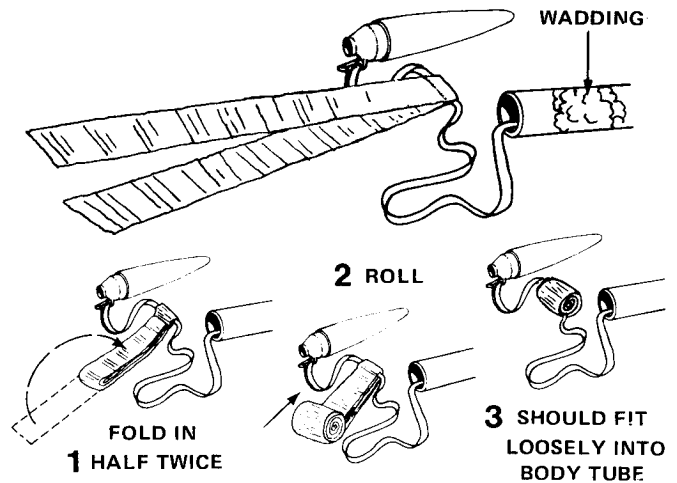
*HIAA -- Hobby Industry Association of America
 NAR -- National Association of Rocketry.

COUNTDOWN CHECKLIST

T-13 Pack 3 or 4 squares of loosely crumpled recovery wadding into the rocket body.

T-12

Nose cone should separate easily from rocket body tube, but should not be extremely loose. If fit is too tight, sand inside of body tube and shoulder of nose cone with fine sandpaper. If fit is too loose, add a wrapping of transparent tape or masking tape to the shoulder of the nose cone.



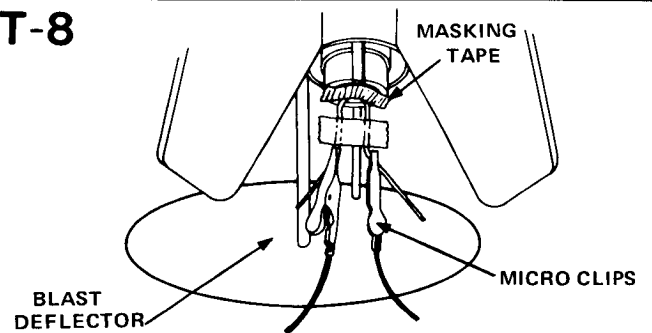
Fold the streamer in half lengthwise. Fold again, then roll until the streamer fits loosely into the rocket body. Pack the shock cord neatly into the rocket body. Slide nose cone into place.

T-11 Install an igniter in an engine as directed in the engine instructions.

T-10 Insert engine into rocket engine mount. Engine hook must latch securely over end of engine.

T-9 Disarm the launch panel -- REMOVE SAFETY KEY.

T-8



Slide the launch rod through the rocket launch lugs and place the rocket on the launch pad. Make sure the rocket slides freely on the launch rod. Clean the micro-clips and attach them to the igniter wires. Arrange the clips so they do not touch each other or the metal blast deflector. Attach clips as close to the engine nozzle as possible.

T-7 Clear the launch area, alert recovery crew and trackers. Check for low flying aircraft and unauthorized persons in the recovery area.

T-6 Arm the launch panel -- INSERT SAFETY KEY!

-5-4-3-2-1-LAUNCH!!

Repeat Countdown Checklist for each flight.

MISFIRE PROCEDURE

Occasionally the igniter will heat and burn into two pieces without igniting the engine. This is almost always caused by a failure to install it correctly. REMOVE SAFETY KEY from launch panel, remove the model, clean the igniter residue from the engine nozzle, and install a new igniter. Repeat the Countdown Checklist.

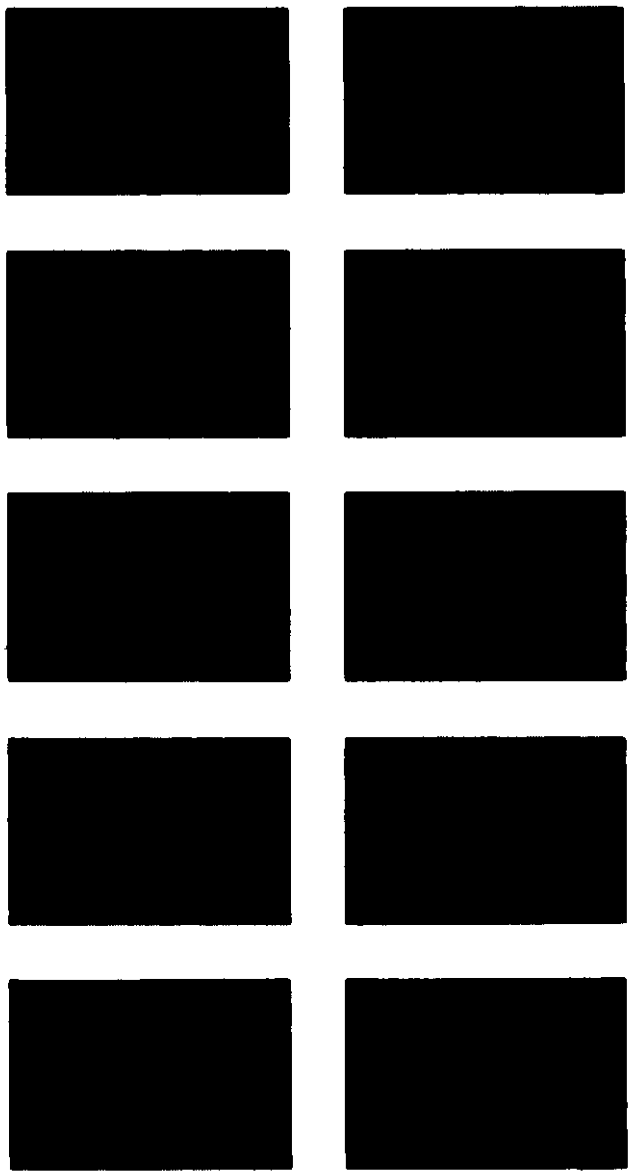


SHOCK CORD
MOUNT



PATTERN SHEET
PN 84173





SKYBOLT

SKYBOLT

FLYING MODEL ROCKET

SKILL LEVEL 2

1-Beginner 2-Intermediate 3-Optimum
4-Advanced 5-Expert

Super "D" engine powered high performance sport model. Spectacular flights over 1,000 feet plus dramatic recovery with 90" long fluorescent streamer. Easy to assemble and finish with die-cut hole film, plastic nose, and unique kit decals.



Flies over 1,000 feet!

Specifications
Length: 23" (58.4 cm)
Diameter: 1.325" (33.8 mm)
Weight: 1.75 oz. (50 g)
90" Streamer Recovery

Recommended Engines
D12-7 (First Flight)
D11-8

This is a hobby kit requiring assembly. Recommended for ages 10 to adult. Engines, launch system, glue and finishing supplies are not included. Adult supervision is suggested for those under 12 years of age when flying model rockets.



ESTES INDUSTRIES
GENUINE, CO. STEREO USA



1334