CENTURI PYTHON FIGHTER

SKILL LEVEL 3

1 MODEL KIT
Paint and Glue not included
1 MODÈLE RÉDUIT
Peinture et Colle non comprises

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

- Futuristic Space Fighter Design
- Altitudes over 1,000 feet!
- Colorful Streamer Recovery
- Die-Cut Balsa Fins
- Molded Plastic Nose Cone
- Quick Release Engine Mount
- Big 2 Color Decal

Centuri

FLYING MODEL ROCKET

SPECIFICATIONS
Length: 14.875" (37.78 cm)
Dia.: .976" (24.8 mm)
Weight: 1.25 oz. (35.4 g)

RECOMMENDED ENGINES
1/2A6-2, A8-3 (First Flight), B6-4, B8-5, C6-3, C6-5

Made in U.S.A. Centuri Engineering Co., Inc., Penrose, CO 81240

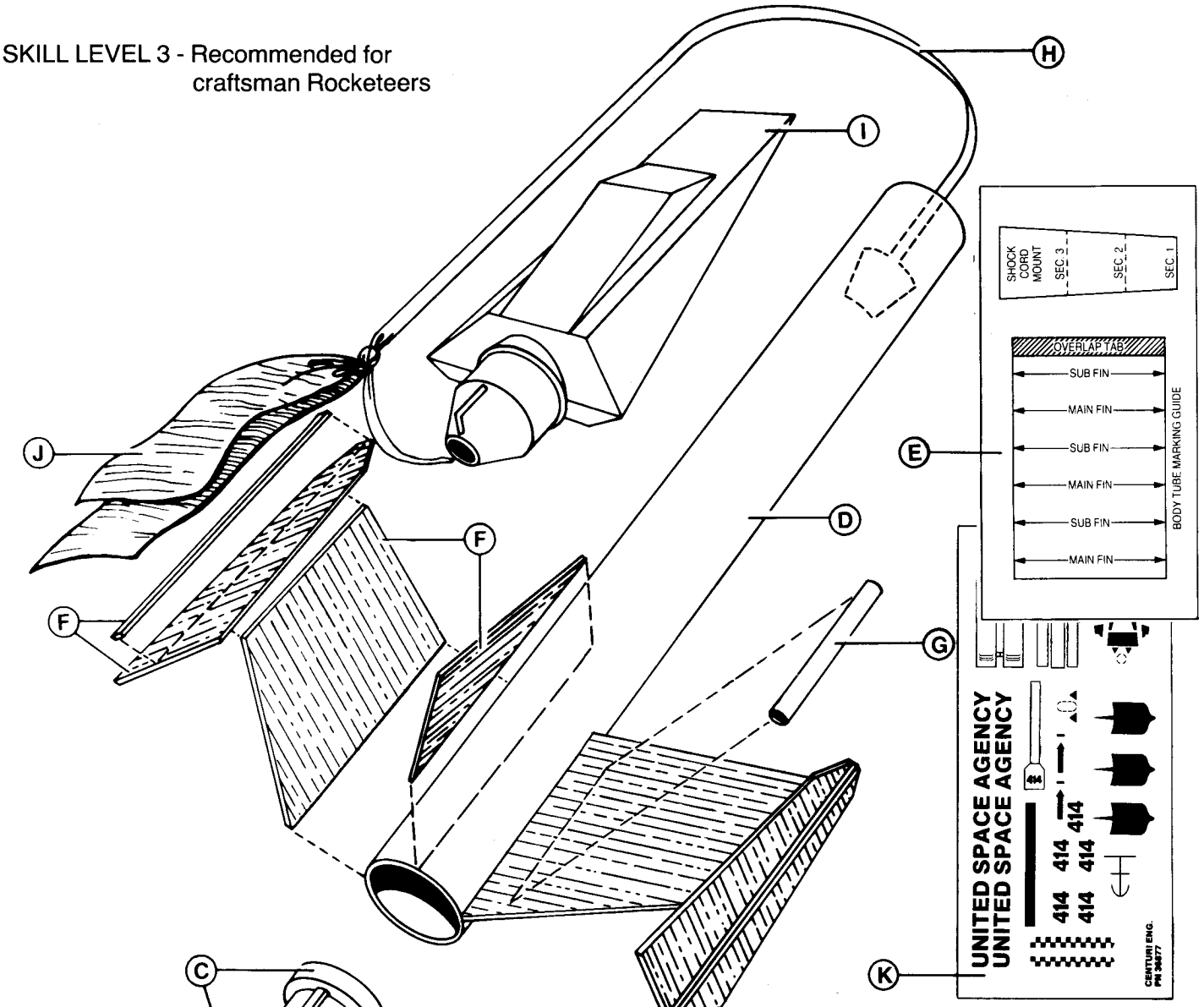
#5358

CENTURI
PYTHON FIGHTER

SKILL LEVEL 3 - Recommended for craftsman Rocketeers

BEFORE YOU START

Read all instructions before beginning construction 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.



TOOLS AND MATERIALS

In addition to the parts included in this kit you will need: Scissors, household white glue (Elmer's Titebond, or similar), pencil, ruler, fine or extra-fine grit sandpaper, sanding sealer, a medium-size modeling paint brush, modeling knife with sharp blade, grey enamel spray paint, and flat clear spray paint.

PARTS LIST — KIT NO. 5358

A	1	Engine Mount Tube (Type BT-20J)	30326
B	1	Engine Hook (Type EH-2)	35025
C	2	Adapter Rings (Type AR-2050)	30164
D	1	Body Tube (Type BT-50P)	30365
E	1	Pattern Sheet (Type SP-5358)	81803
F	1	Die-Cut Balsa Fin Sheet (Type BF-5358)	32799
G	1	Launch Lug (Type LL-2A)	38175
H	1	Shock Cord (Type SC-1)	85730
I	1	Plastic Nose Cone (Type PNC-50)	71000
J	1	Plastic Streamer (Type RS-20)	38278
K	1	Decal (Type KD-5358)	36877

RECOMMENDED ENGINES:
1/2 A6-2, A8-3, B4-2, B4-4
B6-4 B8-5, C6-3, C6-5, C5-3
First Flight A8-3

CENTURI ENG. CO., INC.
BOX 350
PENROSE, CO. 81240

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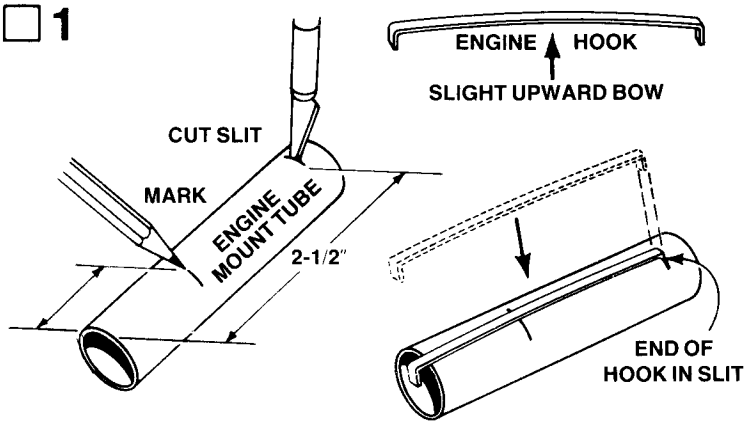
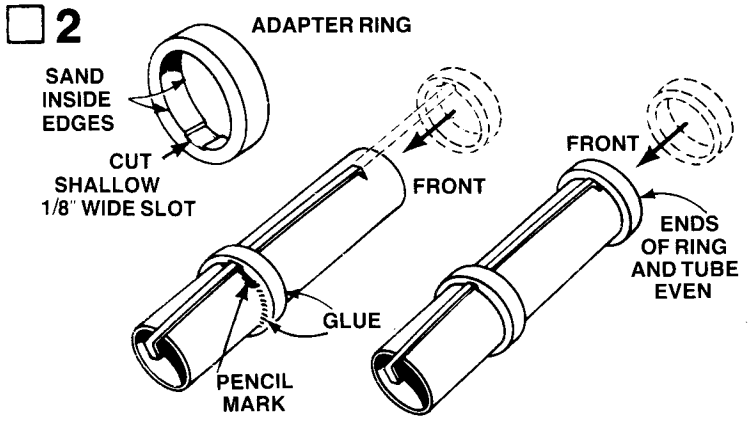
ASSEMBLY INSTRUCTIONS

☐1



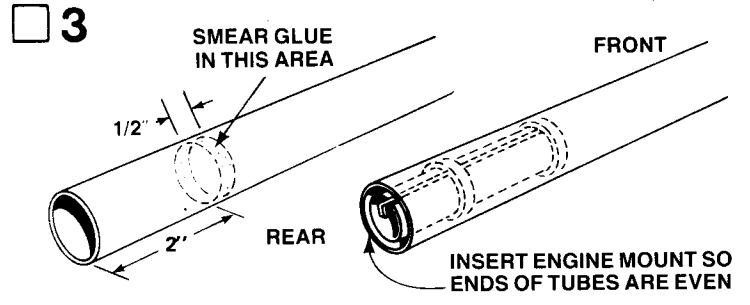
Mark the engine mount tube (part A) at 1" and 2-1/2" from one end. Cut a 1/8" long slit at the 2-1/2" mark. Gently bend the engine hook back (part B) so that it bows upward very slightly in the middle. (Study the drawing. - Don't bend the wrong way.) Insert one end of the engine hook into the slit in the tube.

☐2



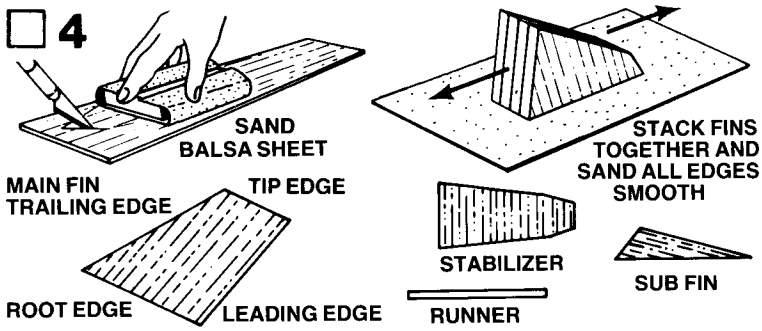
Sand the inside edges of the two adapter rings (part C) to remove burrs. The rings should slide easily onto the engine mount tube. Cut a very shallow 1/8" wide slot inside one adapter ring so it will fit over the engine hook. Slip the ring onto the front end of the engine mount tube and slide it down to the 1" mark. Make sure the engine hook runs straight down the tube, then apply glue to both sides of this adapter ring. Apply glue around the front end of the engine mount tube and slide the remaining adapter ring into place (front of ring even with the end of the tube).

☐3



The engine mount unit will be pushed into place so that the rear of the engine mount unit (end with engine hook projecting) is even with the rear of the body tube. Test-fit the engine mount unit several times by smoothly inserting and removing it. Once this can be smoothly and easily done, remove the engine mount unit. Apply a ring of glue around the inside of the rear of the main body tube (part D) about 2" to 2-1/2" from the end of the tube. Make certain that the engine hook is to the rear and insert the engine mount unit with one smooth motion. Do not pause, or the glue may "lock" with the engine mount unit in the wrong place.

☐4



Fine-sand the balsa die-cut sheet (part F). Free the fin edges with a sharp knife, then carefully remove the die-cut fins from sheet. Stack the fins in groups as shown and sand all sides. Lightly sand both sides of each fin. Leave all edges square.

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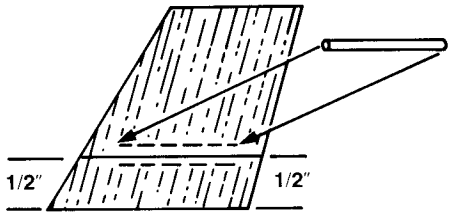
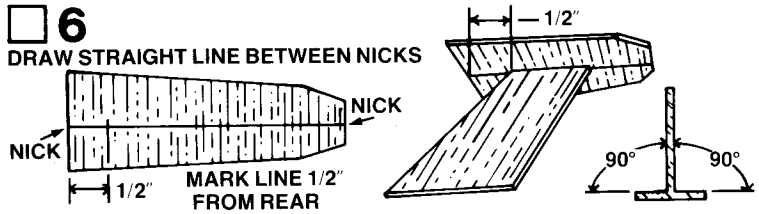


Mark one of the main fins 1/2" from the root edge at two points and draw a line connecting the two points. Glue the launch lug (part G) on the line, centered on the fin as shown.

☐6



Rub glue into the tip edge of each of the three main fins and allow to dry. Draw a line on each of the three stabilizers connecting the two "nick" marks. Mark each line 1/2" from the rear of the stabilizer. Glue the tip edge of each main fin to a stabilizer so that the fin is centered over the line and the rear of the tip edge is at the mark. Adjust the fins so that they project straight away from the stabilizers at 90 degree angles. Set the units on the stabilizers and allow to dry.

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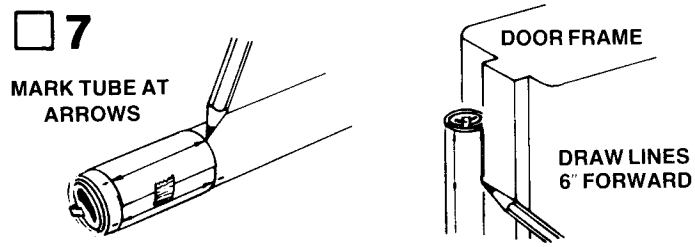
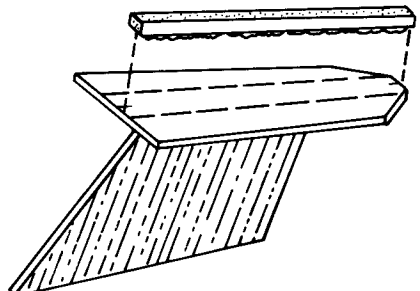


Cut out the tube marking guide from the pattern sheet (part E) and wrap it around the rear of the body tube. Align the guide marks and tape the guide together. Mark the body tube at each of the arrow points. Remove the guide. Draw straight lines connecting each pair of marks. A door frame inside edge may be used for a guide as shown. Extend the lines 3" forward from the rear of the tube.

☐8



Glue the runners to the stabilizers over the "nicks" as shown. Sand the ends of the runners even with the ends of the stabilizers.

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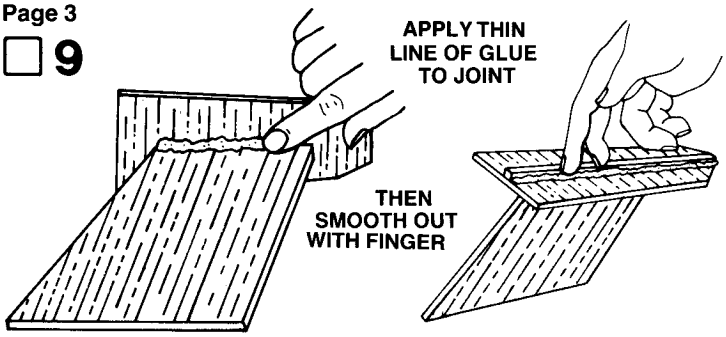
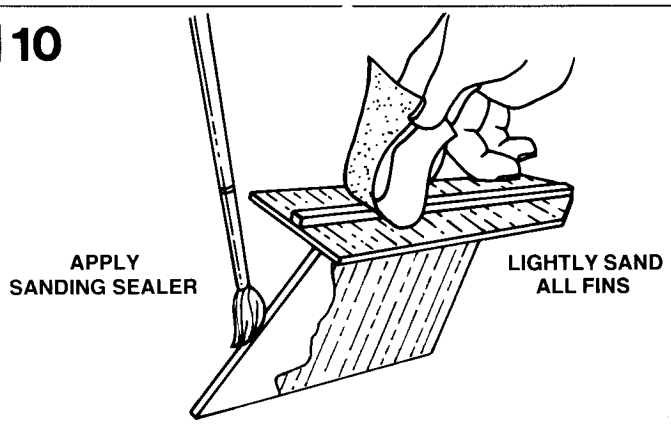


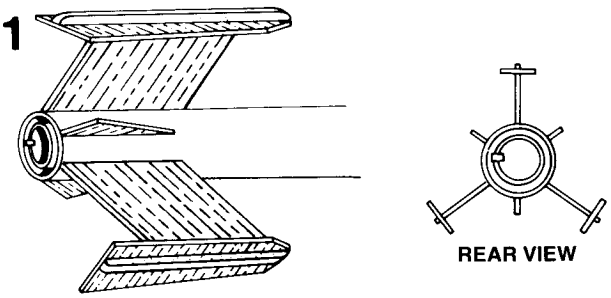
After the glue on the fin units has dried, apply a glue reinforcement to each glue joint, including the launch lug. Apply a line of glue to each joint on both sides and smooth out with your finger. Lay the fin units on their sides until the glue dries.

☐ 10



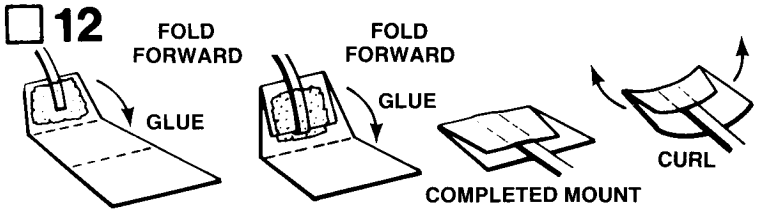
After the glue has dried apply a coat of sanding sealer to each fin unit and sub fin. When the sealer is dry, lightly sand all the sealed surfaces. Repeat the sealing and sanding process until the balsa grain is filled and smooth. Proper application of sanding sealer makes the rocket look better and reduces drag so that the rocket will fly higher. However, this step is not essential to make a safe attractive rocket.

☐ 11



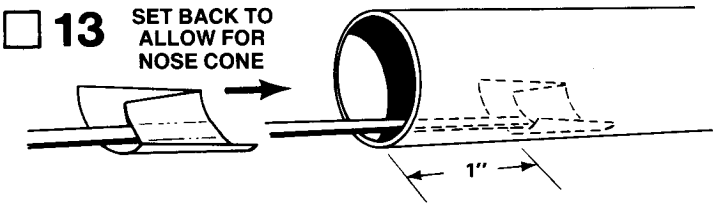
Sand the root edges of the sub fins and the main fin units to remove any sanding sealer. Rub glue into these edges and allow to dry. Glue a sub fin to each alternate (every other) fin line so that the rear of each fin is at the rear of the body tube. Adjust the fins so that they project straight away from the body tube. Glue the main fins to the remaining fin lines so that they are at the rear of the body tube and project straight away from the body tube. Check to make sure the fins alternate correctly as shown. DO NOT set the rocket on its fins while the glue is wet.

☐ 12



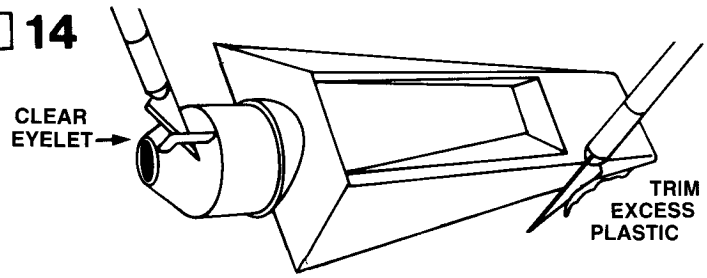
Cut out the shock cord mount. Fold on dotted lines, then unfold and apply glue to Section 1. Lay the end of the shock cord (part H) into the glue. Fold over and apply glue to the back of Section 1 and the exposed portion of Section 2. Fold again to complete mount. Curl the edges of the mount up so it will match the contour of the body tube and hold with your fingers until the glue sets.

☐ 13



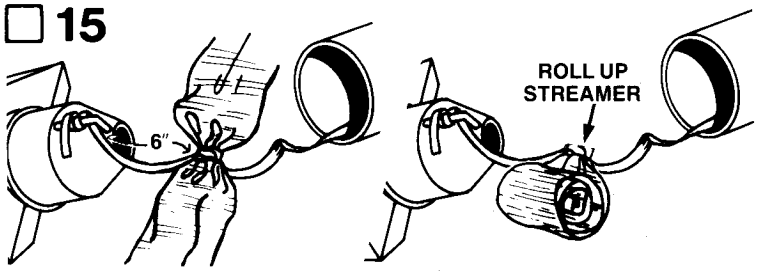
Apply glue to the side of the shock cord mount which will go against the body tube. Press the shock cord mount firmly into position about 1" to 2"from the front edge of the tube to allow clearance at the front of the tube for the nose cone to socket into place. Slide the shock cord mount into the tube and press it firmly against the body tube. To insure a good bond use a stick or your finger to smear a film of glue over the mount and surrounding area in the body tube. Again firmly press the shock cord mount against the body tube and rub the glue over the mount and the body tube surface around it.

☐ 14



Trim or sand any excess plastic from around the sides of the nose cone (part I). Use a sharp knife to remove any excess plastic from the inside of the molded eyelet at the rear of the nose cone. Wash the nose cone with lukewarm soapy water, rinse well, and dry.

☐ 15

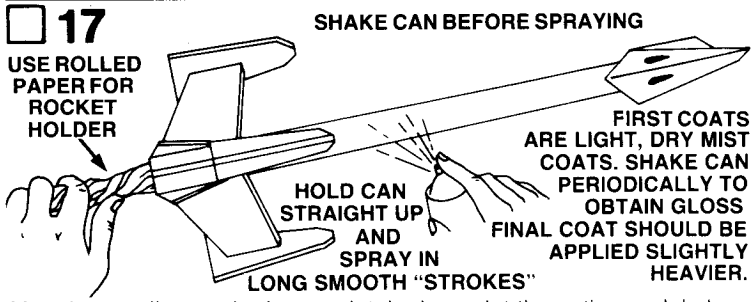


Tie the shock cord around the middle of the streamer (part J) about 6" from the end of the shock cord as shown. Tie the free end of the shock cord to the nose cone. Fold the streamer twice and roll until it fits in the body tube. Pack the shock cord into the body tube and push the nose cone into place.

☐ 16

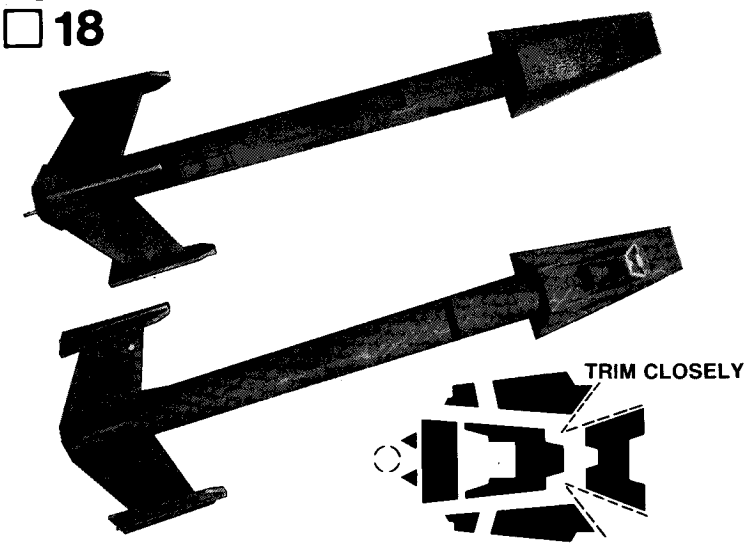
When the glue on the fin joints has dried, apply a glue reinforcement to each fin/body tube joint. Holding the model level, apply a line of glue to both sides of each fin joint and on both sides of the launch lug. Smooth out the glue with your finger. IMPORTANT -- Keep the model level until the glue dries.

☐ 17



After the sanding sealer is completely dry, paint the entire model gloss grey. Let this coat dry overnight. Follow instructions on spray can for best results. We recommend spray enamel. Do not paint the model with lacquer paint. Lacquer will mar the finish of the plastic nose cone. Spray the model with several light coats of paint to avoid "runs". Allow the rocket to dry for 2 to 4 hours before applying decals. For added detail, the laser cannon inlets can be painted black. The runners on the stabilizers can be painted silver.

☐ 18



NOTE: **Adjust** the nose cone so that the launch lug will be on the underside of one of the top fins. This will prevent the launch lug from obstructing one of the decals.

Trim closely around the canopy decal as shown. This will help the decal to form around the canopy.

When all paint is dry, apply the decals (part K) in the positions shown. (A) Cut only one decal at a time from sheet. (B) Submerge decal in lukewarm water until decal slides on backing paper (usually 15 to 30 seconds). (C) Gently slide decal from backing paper onto model. (D) Move decal into exact position and carefully blot away excess water with a soft cloth. (E) If the decal "sticks" before you have it in position, apply water over the decal with a brush. This will permit the decal to be moved. (F) smooth out all wrinkles and air bubbles before the decal dries. We recommend that the completed model be sprayed with Testor's "Dull-Cote". This is a clear flat spray paint that kills the decal shine and protects the model's finish.

LAUNCHING COMPONENTS

To launch your rocket you will need the following items:

—A model rocket launching system

—Flameproof recovery wadding

1/2A6-2, A8-3, B4-2, B4-4, B6-4, B8-5, C6-3, C6-5, C5-3 model rocket engines.

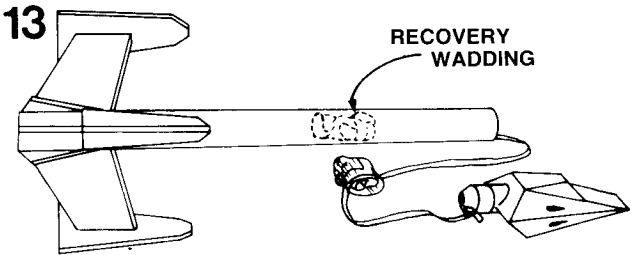
Be sure to follow the HIAA-NAR* Model Rocket Safety Code when carrying out your model rocket activities.

*HIAA—Hobby Industry of America

*NAR—National Association of Rocketry

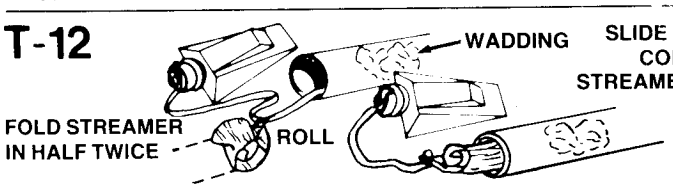
COUNTDOWN CHECKLIST

T-13



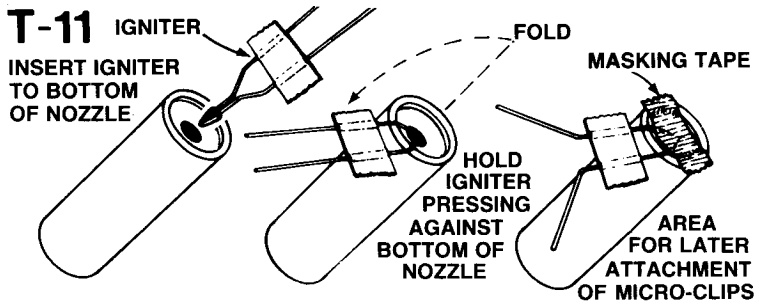
Pack 3 or 4 squares of loosely crumpled recovery wadding into the body tube. Usually this will fill the body tube for a distance equal to about 1-1/2 times its diameter.

T-12



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

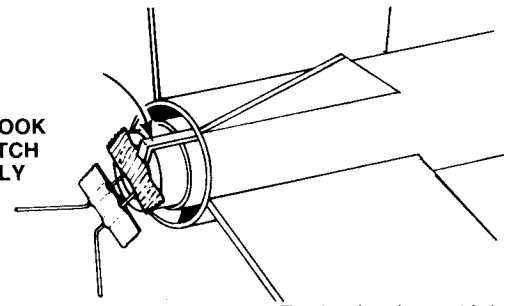
T-11



Select an engine and install an igniter as directed in the engine instructions. The engines recommended for use with this rocket are the 1/2 A6-2, A8-3, B4-2, B4-4, B6-4, B8-5, C6-3, C6-5, and C5-3.

Use an A8-3 engine for your first flight

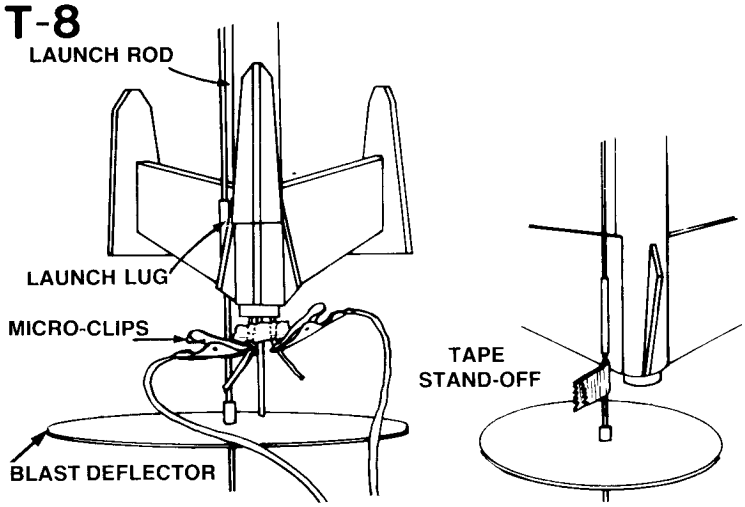
T-10



Insert engine into rocket engine mount. Engine hook must latch securely over end of the engine.

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

T-8



Slide launch rod through rocket launch lug and place rocket on 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 protective tape on igniter 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!!

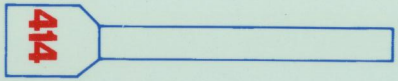
Repeat Countdown Checklist for each flight.

MISFIRE PROCEDURE

Disarm the launch panel. Wait one minute before approaching the rocket on the launch pad. Remove the rocket, clean the igniter residue from the nozzle of the engine, and carefully install a new igniter. Repeat the Countdown Checklist.

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.

UNITED SPACE AGENCY
UNITED SPACE AGENCY



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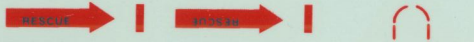

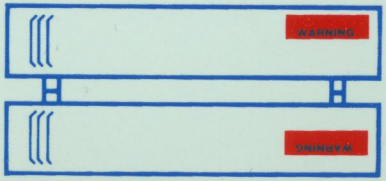

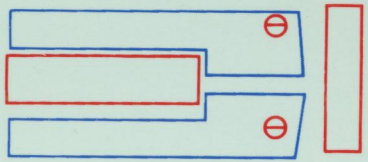

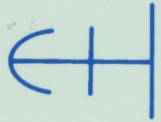

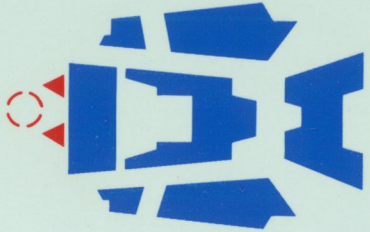

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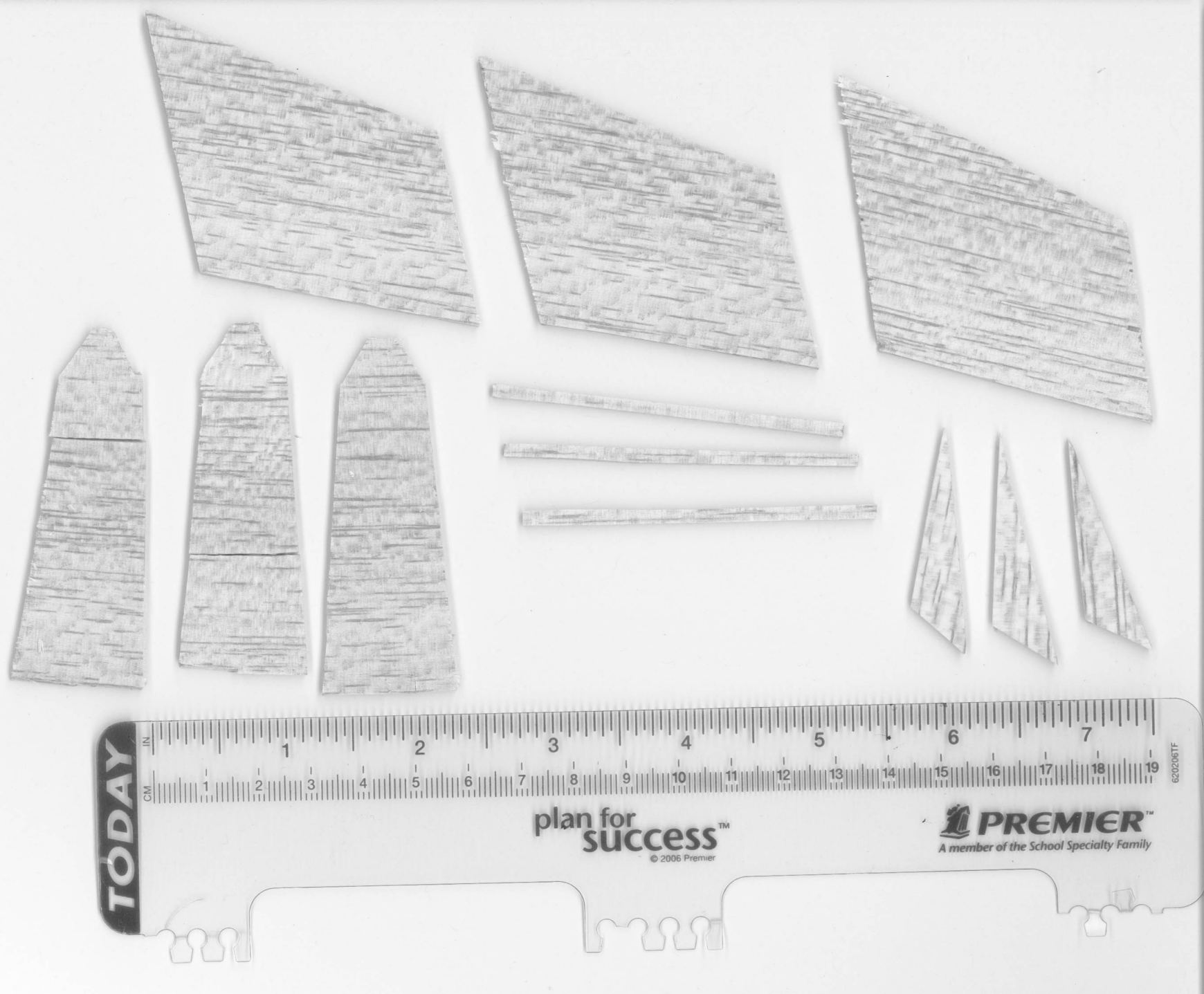
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SHOCK CORD MOUNT
SEC. 3
SEC. 2
SEC. 1

OVERLAP TAB
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MAIN FIN
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MAIN FIN
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MAIN FIN
BODY TUBE MARKING GUIDE

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