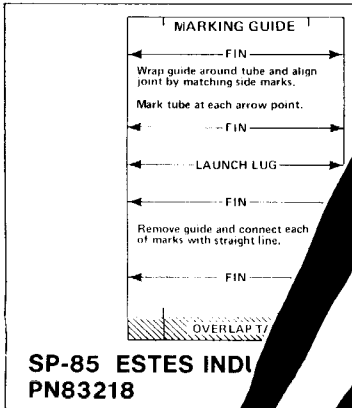


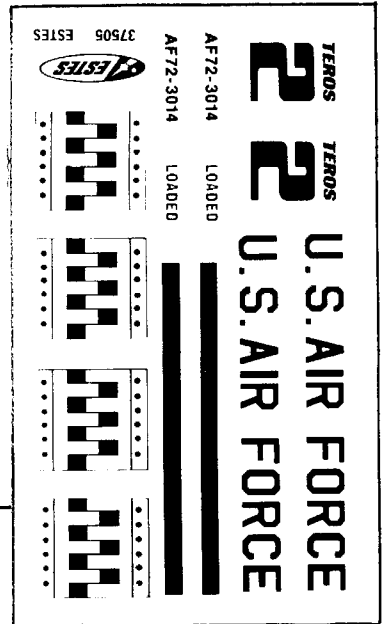
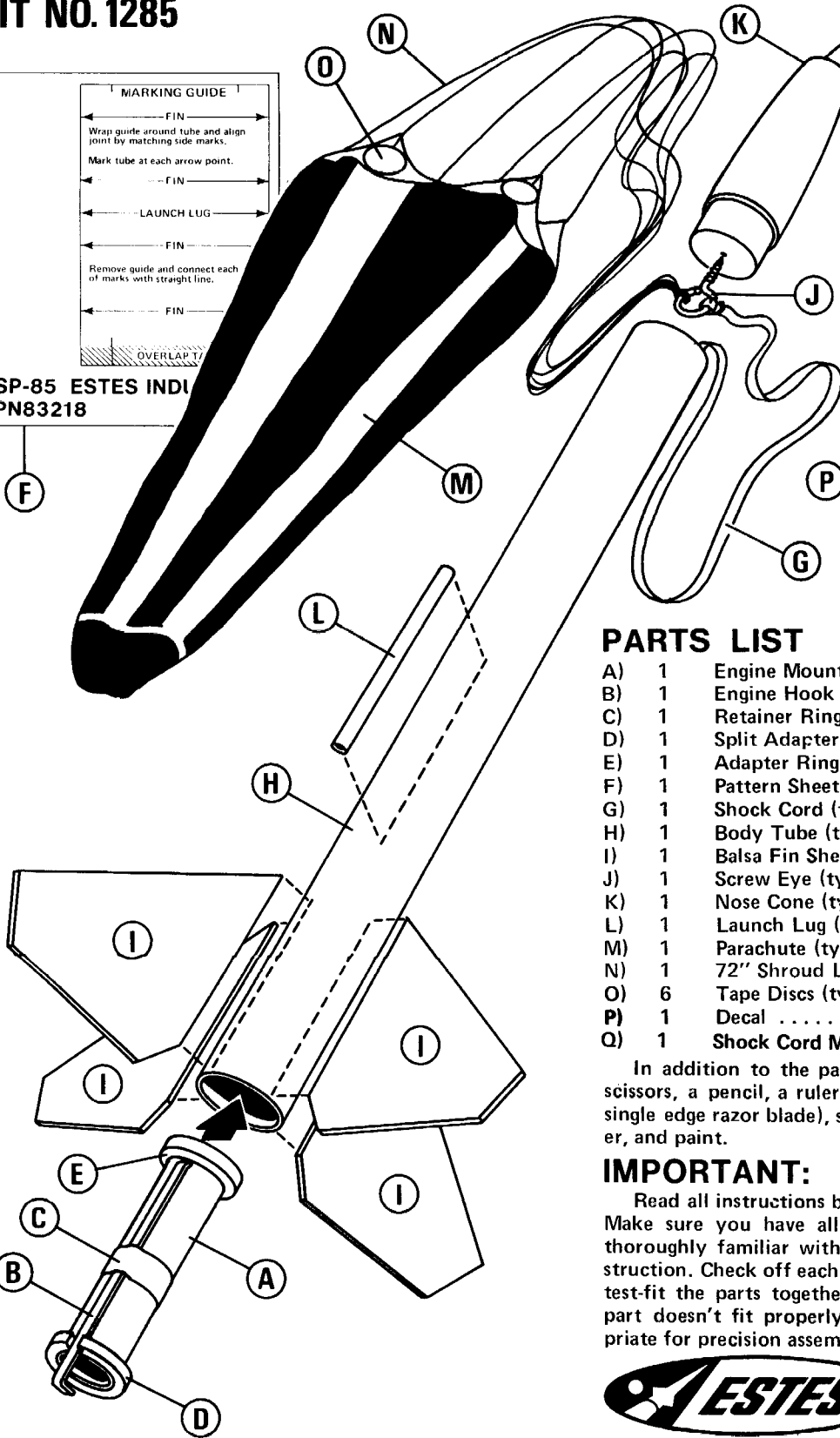


TEROS

KIT NO. 1285



SP-85 ESTES INDUSTRY
PN83218



PARTS LIST

		PART NO.
A)	1 Engine Mount Tube (type BT-20J)	30326
B)	1 Engine Hook (type EH-2)	35025
C)	1 Retainer Ring (type HR-20)	30168
D)	1 Split Adapter Ring (type AR-2050S)	80425
E)	1 Adapter Ring (type AR-2050)	30164
F)	1 Pattern Sheet (type SP-85)	83218
G)	1 Shock Cord (type SC-1)	85730
H)	1 Body Tube (type BT-50W)	30372
I)	1 Balsa Fin Sheet (type BF-L5)	32258
J)	1 Screw Eye (type SE-2A)	38252
K)	1 Nose Cone (type BNC-50BC)	70258
L)	1 Launch Lug (type LL-2B)	38178
M)	1 Parachute (type PK-12A)	85564
N)	1 72" Shroud Line Cord (type SLT-72)	38237
O)	6 Tape Discs (type TD-3F)	38406
P)	1 Decal	37505
Q)	1 Shock Cord Mount (SCM-50) (Not shown)	84444

In addition to the parts included in this kit you will need scissors, a pencil, a ruler, white glue, a sharp model knife (or single edge razor blade), sandpaper, masking tape, sanding sealer, and paint.

IMPORTANT:

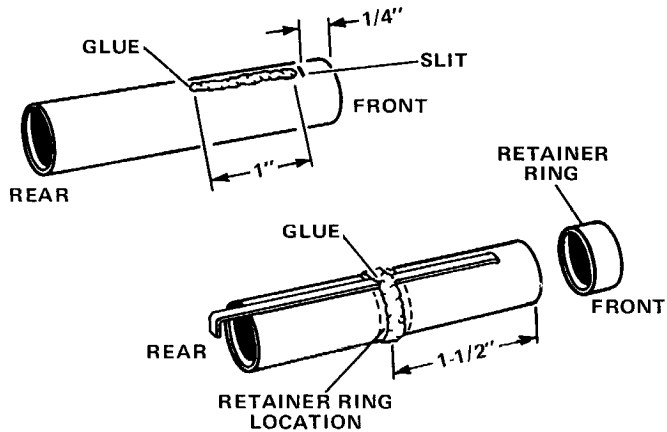
Read all instructions before beginning work on your model. Make sure you have all parts and materials. When you are thoroughly familiar with the assembly procedure, begin construction. Check off each step as you complete it. In each step, test-fit the parts together before applying any glue. If some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



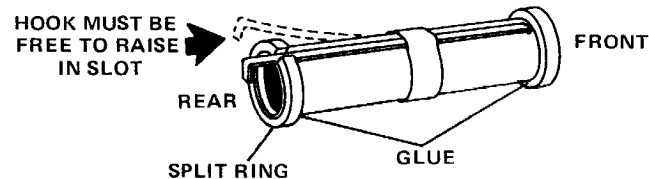
A SUBSIDIARY OF DAMON

ESTES INDUSTRIES
PENROSE, COLO. 81240

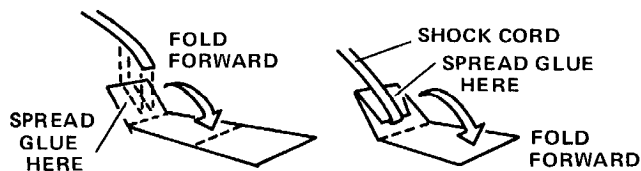
TEROS ASSEMBLY INSTRUCTIONS



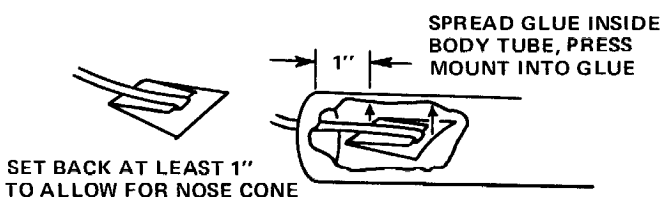
1 Cut a 1/8" long slit in the engine mount tube (part A), 1/4" from one end as shown. Apply a 1" long line of glue to the tube as shown. Push one end of the engine hook (part B) into the slit and press the main part of the hook into the glue. Apply a line of glue around the middle of the tube and slide the retainer ring (part C) over tube and hook onto the glue.



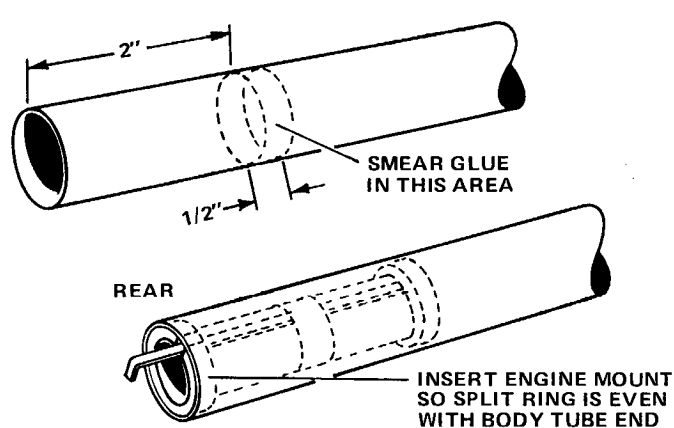
2 Glue the split adapter ring (part D) to the engine mount tube even with the rear end (the end with the over-hanging hook) so the slot is over the hook. Avoid getting glue in the slot. Glue the other ring (part E) to the front of the engine mount against the end of the hook as shown.



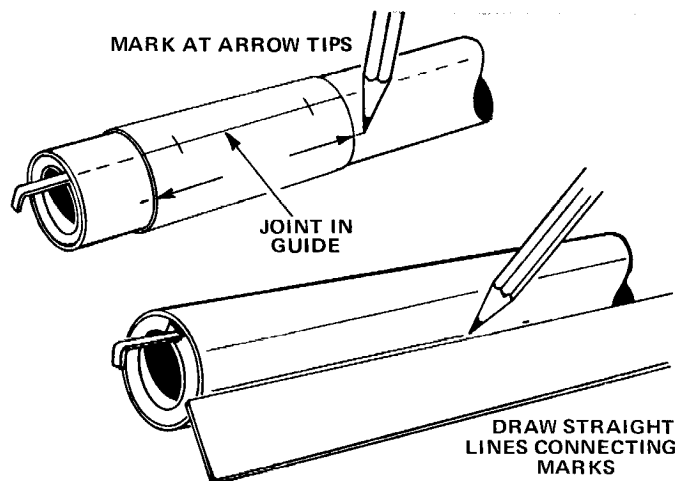
3 Cut out the shock cord mount (part Q). Crease it on the dotted lines by folding. Spread glue on the first section (1) and lay the end of the shock cord (part G) into the glue. Fold over and apply glue to the back of the first section and the exposed part of section 2. Lay the shock cord as shown and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



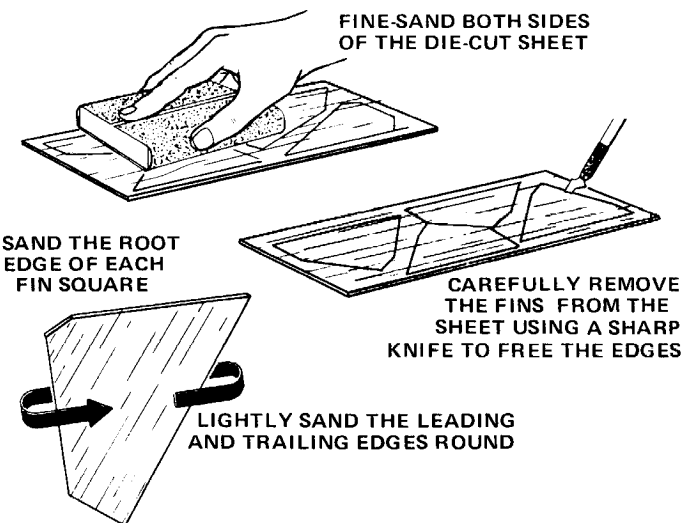
4 Apply glue to the inside of the body tube (part H) at one end over an area about 1" to 2" from one end. The glued area should be the same size as the shock cord mount. Press the mount into the glue as shown and hold it until the glue sets.



5 Smear glue around the inside of the other end of the body tube to cover an area about 2" to 2-1/2" from the end of the tube. Immediately insert the engine mount unit, being careful to position it so the engine 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 (and the split ring) are even.

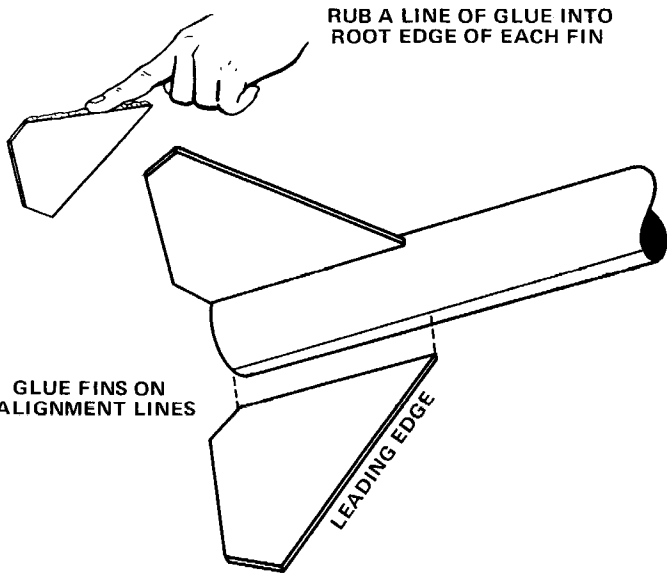


6 Cut out the body tube marking guide from the pattern sheet. Wrap it around the rear of the body so the joint in the guide is in line with the engine hook. Mark the tube at each arrow point, front and rear. Draw a straight line connecting each matching front and rear mark. (Use a ruler when drawing lines.) Extend the launch lug line forward 5".



7 Fine-sand the balsa sheet (part I), then carefully remove the die-cut fins from the sheet. Free the edges with a sharp knife. Sand the leading and trailing edges of the fins round. Leave the root edge square.

RUB A LINE OF GLUE INTO ROOT EDGE OF EACH FIN

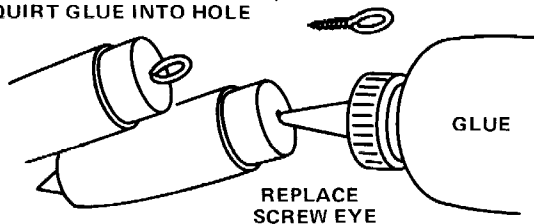


GLUE FINS ON ALIGNMENT LINES

LEADING EDGE

8 Rub a line of glue into the root edge of each fin and allow to dry. Glue the fins to the body on the fin alignment lines drawn in step 6. Refer to the illustration to be sure you position the fins correctly. Adjust the fins so they project straight away from the body tube. Do not set the rocket on its fins while the glue is wet.

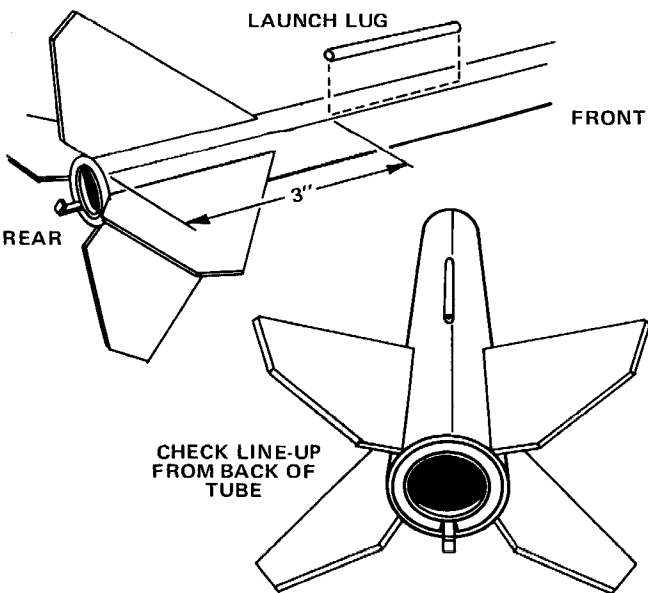
INSERT SCREW EYE, REMOVE, SQUIRT GLUE INTO HOLE



REPLACE SCREW EYE

GLUE

9 Insert the screw eye (part J) into the base of the nose cone (part K). Remove screw eye and squirt a small amount of glue into the hole. Re-insert the screw eye.



LAUNCH LUG

FRONT

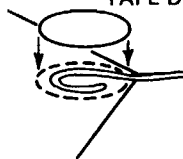
3"

REAR

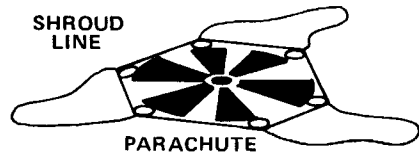
CHECK LINE-UP FROM BACK OF TUBE

10 Glue the launch lug (part L) to the body on its line. The rear of the lug should be 3" from the rear of the body. Align it straight on the body.

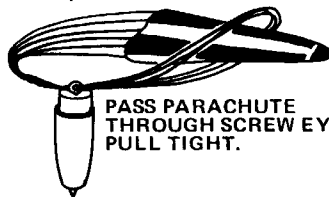
TAPE DISC



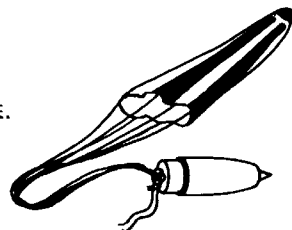
SHROUD LINE



PARACHUTE

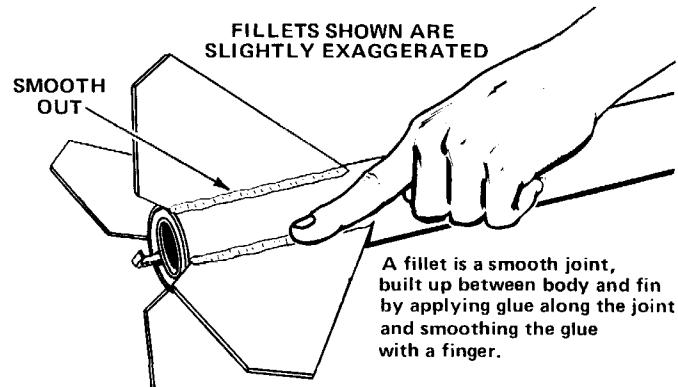


PASS PARACHUTE THROUGH SCREW EYE. PULL TIGHT.



TIE SHOCK CORD TO NOSE CONE

11 Cut out the parachute (part M) on its edge lines. Cut three 24 inch lengths of shroud line (part N). Attach line ends to the top of the parachute with tape discs (part O) as shown. Pass the shroud line loops through the screw eye at the rear of the nose cone. Pass the parachute through the loop ends and draw line tight against the screw eye. Set the knot with a drop of glue. Tie the free end of the shock cord to the screw eye.

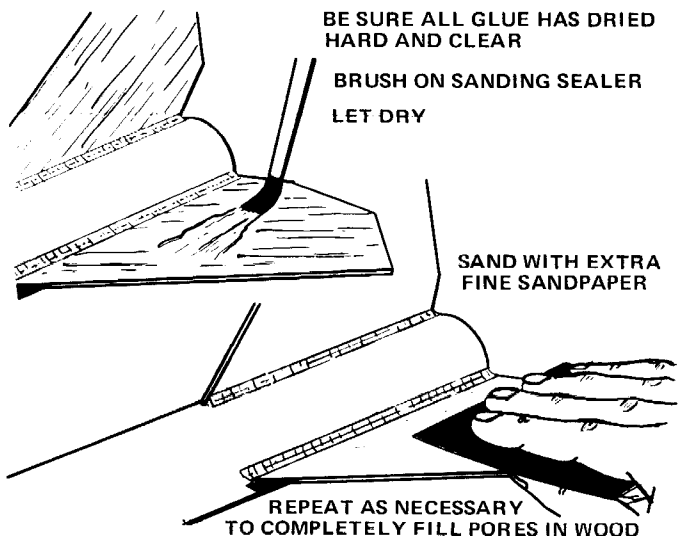


FILLETS SHOWN ARE SLIGHTLY EXAGGERATED

SMOOTH OUT

A fillet is a smooth joint, built up between body and fin by applying glue along the joint and smoothing the glue with a finger.

12 Apply a glue "fillet" to each fin joint. Holding the rocket horizontally (level), apply a line of glue to both sides of each joint. Smooth out the glue with your finger. Keep the rocket level until the glue dries.



BE SURE ALL GLUE HAS DRIED HARD AND CLEAR

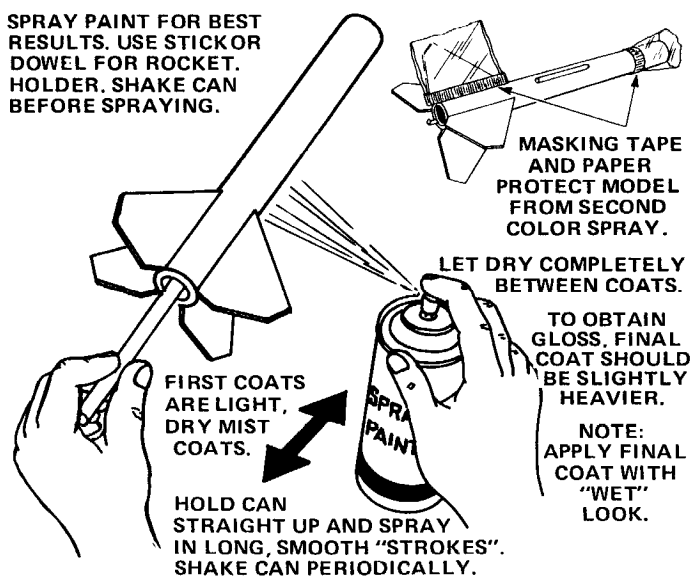
BRUSH ON SANDING SEALER LET DRY

SAND WITH EXTRA FINE SANDPAPER

REPEAT AS NECESSARY TO COMPLETELY FILL PORES IN WOOD

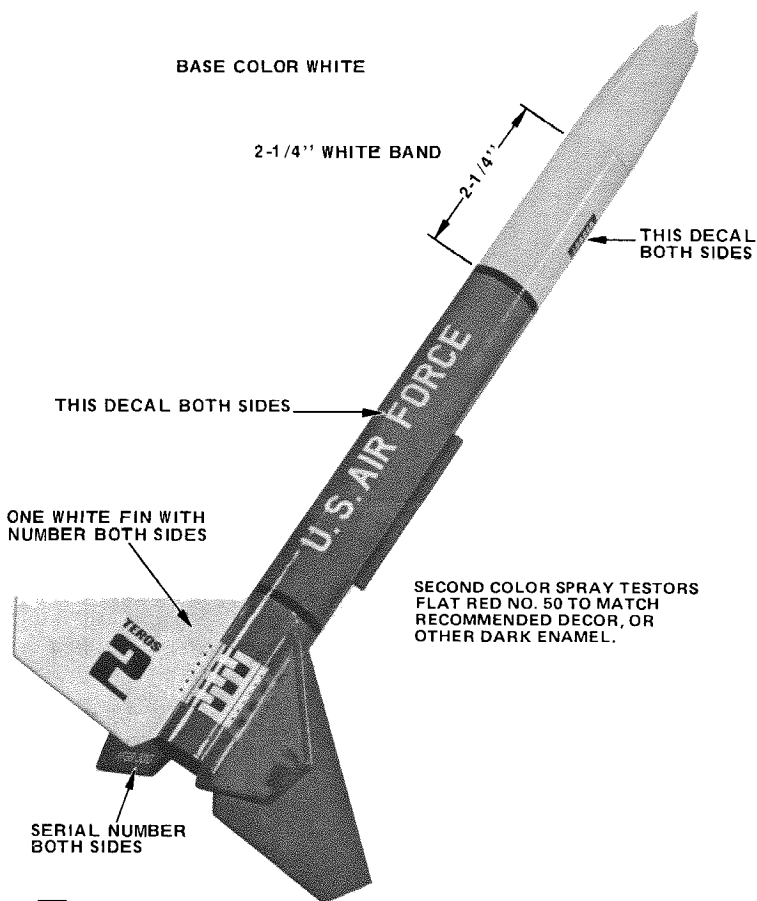
13 When all glue on the outside of the body is dry, prepare the fins for painting. Apply at least two coats of sanding sealer to the fins. Let dry and sand lightly between coats. Do this until the tiny holes in the wood are filled and everything looks and feels smooth. For best results let the model dry overnight.

SPRAY PAINT FOR BEST RESULTS. USE STICKOR DOWEL FOR ROCKET. HOLDER, SHAKE CAN BEFORE SPRAYING.



14 After the sanding sealer is completely dry, paint the entire model white. Let the white dry overnight. Apply masking tape and paper to cover and protect the areas which will remain white. (See the Decor Layout illustration.) paint three fins and the exposed body red. Carefully remove the masking tape and paper as soon as the paint is dry.

DECOR LAYOUT

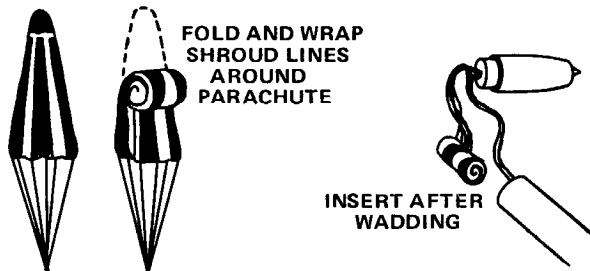


15 When all paint is dry, apply decals (part P) in the positions shown. To apply the decals, cut out the decal, dip it in lukewarm water for 10-20 seconds, and hold it until it starts to uncurl. Slip the decal off the backing sheet and onto your model. Blot excess water away with a damp cloth. Let model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

COUNTDOWN CHECKLIST

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

T-14 Pack four squares of loosely crumpled recovery wadding into body tube.

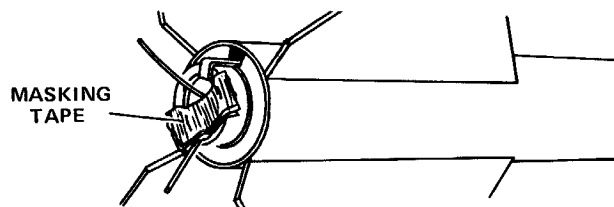


T-13 Fold the parachute into a triangular shape. Roll chute tightly as shown and wrap shroud lines around it. If chute is too large, unroll it and repack until it slides easily into rocket. A fit that is too tight may prevent parachute from ejecting properly.

NOTE: DO NOT pack parachute until you are actually ready to launch. For maximum parachute reliability, lightly dust the chute with ordinary talcum powder before each flight, especially in cold weather.

T-12 Pack shock cord neatly into rocket, then slide nose cone into place. Nose cone should separate easily from rocket body tube, but should not be extremely loose. If it is too tight, sand inside of body tube end and shoulder of nose cone with extra fine sandpaper.

If nose cone is too loose, add a wrapping of transparent tape or masking tape to the shoulder of the nose cone.



T-11 Select an engine and install an igniter as directed in the engine instructions. Engines recommended for use with this rocket are the 1/2A6-2, A8-3, B4-4, B6-4, B14-5, and C6-5 made by Estes.

Use an A8-3 engine for your first flight.

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

T-9 Disarm the launch panel--remove safety key.

T-8 Place rocket on launch pad, making sure rocket slides freely on launch rod. Clean the micro-clips and attach them to the igniter.

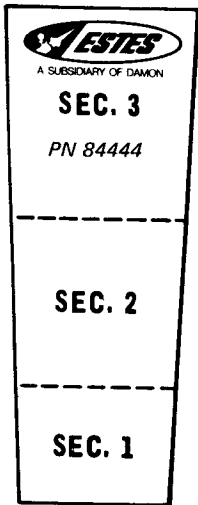
T-7 Clear the launch area, alert recovery crew and trackers. Check for low flying aircraft and unauthorized persons in the recovery area.

T-6 Arm the launch panel--insert safety key.

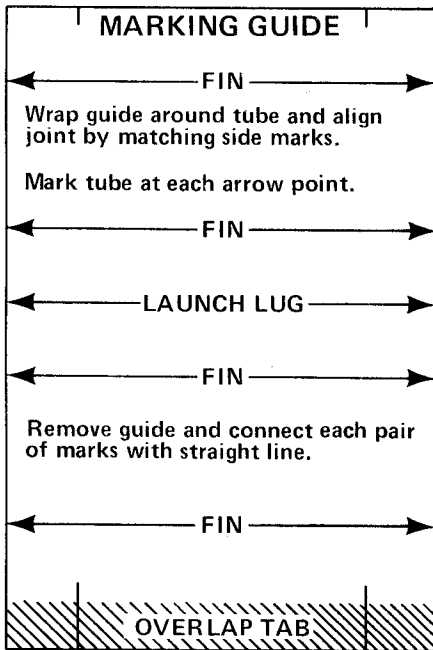
5 4 3 2 1 LAUNCH!!

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. Disarm the launch panel, remove the model, clean the igniter residue from the nozzle, and install a new igniter. Follow the launching procedure again.

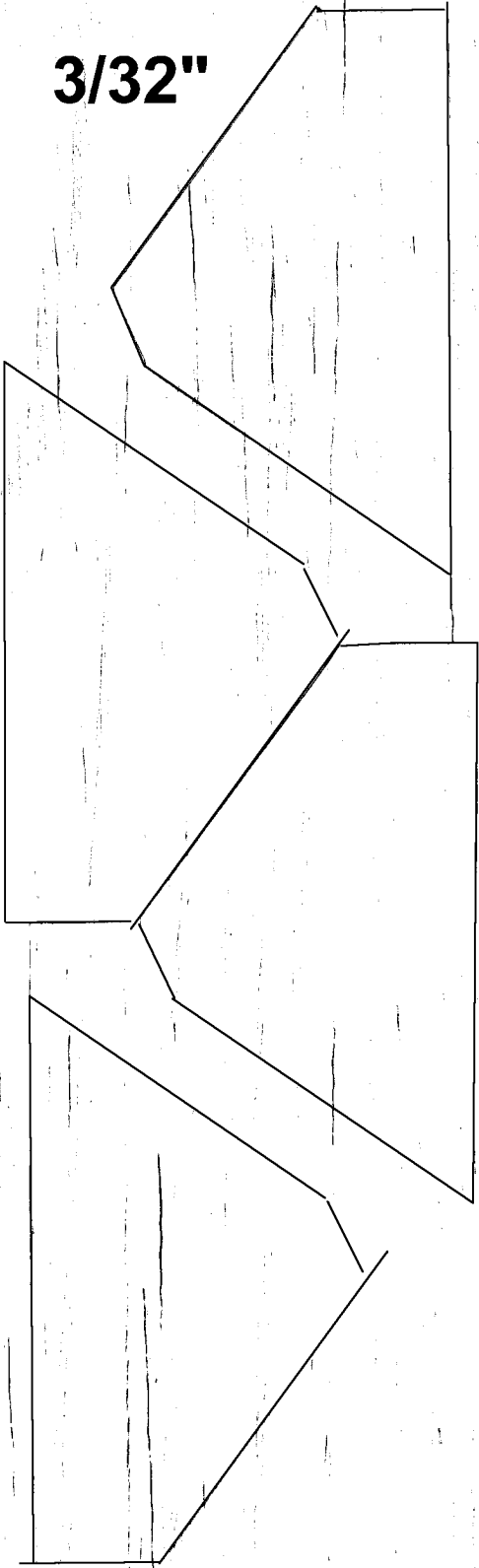


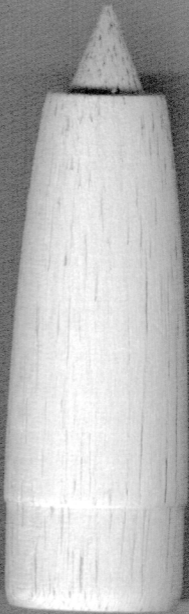
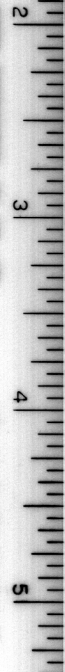
**SHOCK CORD
MOUNT
SCM-50**



**SP-85 ESTES INDUSTRIES
PN83218**

3/32"





TEROS

22

TEROS

22

U.S. AIR FORCE

U.S. AIR FORCE

AF72-3014

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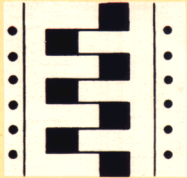
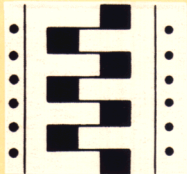
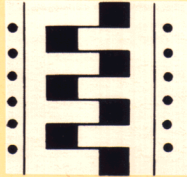
AF72-3014

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37505

ESTES



Kit Number	Kit Name	Old Part#	New Part#	Description	Length	I.D.	O.D.	Thickness	Material	color
1285	Teros	BT-20J	30326	Engine Mount Tube	2.75"	.710"	.736"	.013"	Paper	Brown
1285	Teros	EH-2	35025	Engine Hook	2.75"				Metal	
1285	Teros	HR-20	30168	Retainer Ring	.3"	.767"			Mylar	White
1285	Teros	AR-2050S	80425	Split Adapter Ring	2.5"	.736"	.950"		Paper	Brown
1285	Teros	AR-2050	30164	Adapter Ring	2.5"	.736"	.950"		Paper	Brown
1285	Teros	SP-85	83218	Pattern Sheet					Paper	White
1285	Teros	SC-1	85730	Shock Cord	22"			1.8"	Rubber	White
1285	Teros	BT-50W	30372	Body Tube	9.5"	.950"	.976"	.013"	Paper	Brown
1285	Teros	BF-L5	32258	Balsa Fin Sheet				3/32"	Balsa	
1285	Teros	SE-2A	38252	Screw Eye	.75"	5/32"	9/32"		Metal	
1285	Teros	BNC-50BC	70258	Nose Cone	2.55" T-S				Balsa	
1285	Teros	LL-2B	38178	Launch Lug	2.375"		1/8"		Mylar	White
1285	Teros	PK-12A	85564	Parachute			12"		Plastic	Red/Wht/Blk
1285	Teros	SLT-72	38237	Shroud Line Cord	72"					
1285	Teros	TD-3F	38406	Tape Discs			.5"		Self-Stick	
1285	Teros	KD-85?	37505	Decal						Blk/Wht
1285	Teros	SCM-50	84444	Shock Cord Mount					Paper	

TEROS



- Supersonic Missile Design
- Scram Jet Nose Cone
- 12" Recovery Parachute
- Realistic Decals
- Die-Cut Beta Fins



SKILL LEVEL

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

SPECIFICATIONS

Length 12" (305mm)
Body Dia. 0.875" (22.1mm)

Wt. 12.075 oz. (340g)
12" Parachute Recovery

RECOMMENDED ENGINES

1046-2 A8-3 B6-4 B6-4
B14-5 C8-5
Use A8-3 for first flight.

This is a hobby kit requiring construction. Launch system, engine and glue are not included with this kit.

#1285



ESTES INDUSTRIES
PHOENIX, COLORADO