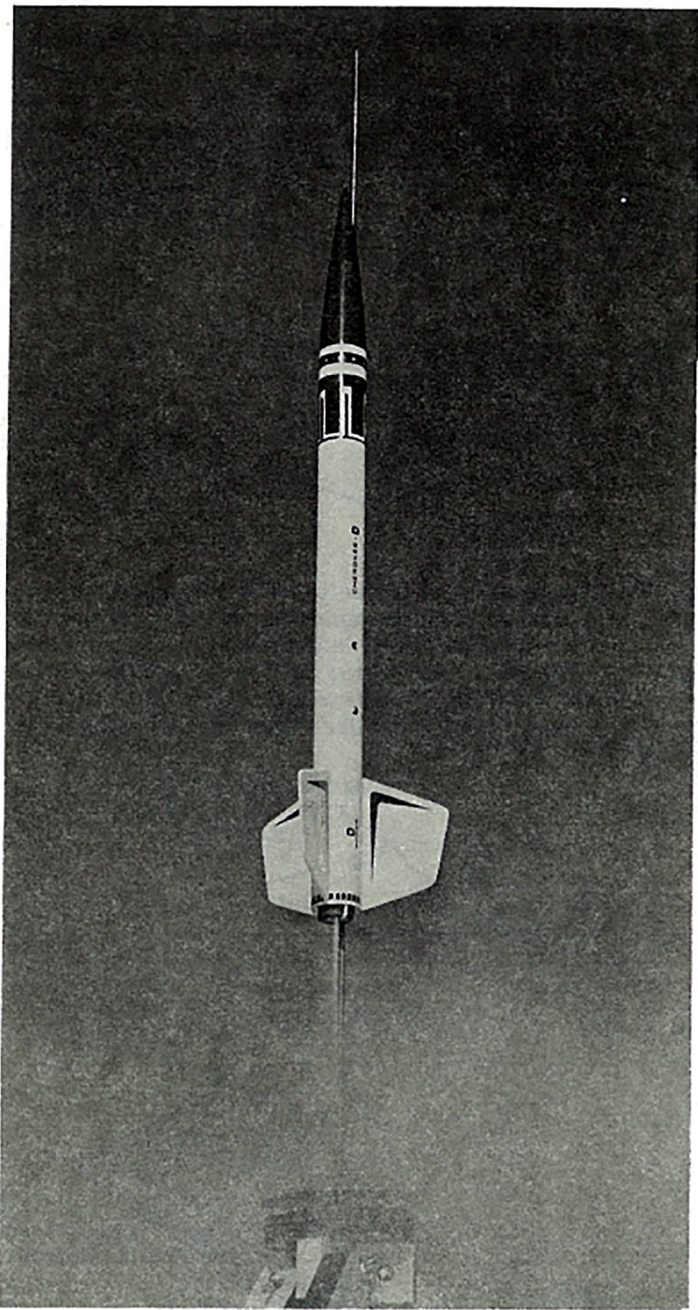




CHEROKEE-D

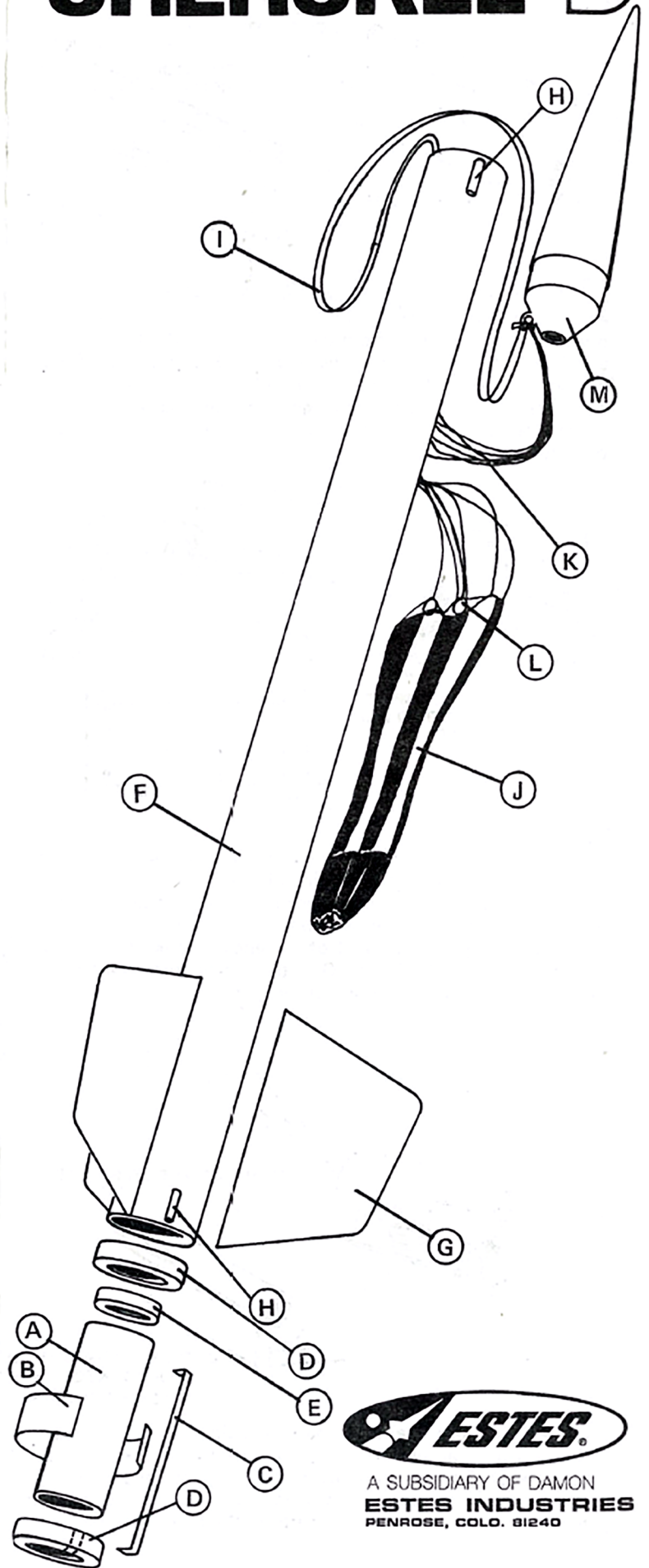


PARTS LIST

		PART NO.
A	1 Engine Mount Tube type BT-50J	30362
B	1 Pattern Sheet type SP-47.....	83053
C	1 Engine Hook type EH-2	35025
D	2 Adapter Rings type AR-5055	30166
E	1 Engine Block type AR-2050	30164
F	1 Body Tube type BT-55	30382
G	1 Die-Cut Balsa Sheet type BF-47	32220
H	1 Launch Lug type LL-2A	38175
I	1 Shock Cord type SC-1	85730
J	1 Parachute type PK-18A	85566
K	1 Shroud Line SLT-108 (108'')	38239
L	6 Tape Discs type TD-3F	38406
M	1 Nose Cone type PNC-55AC	71070
N	1 Decal type KD-47	37045
O	1 Shock Cord Mount (type SCM-50) (Not shown) ..	84444

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

IMPORTANT: Check to be sure your kit is complete, then read the entire assembly instructions before beginning to build your rocket. Mark off each step as you complete it.



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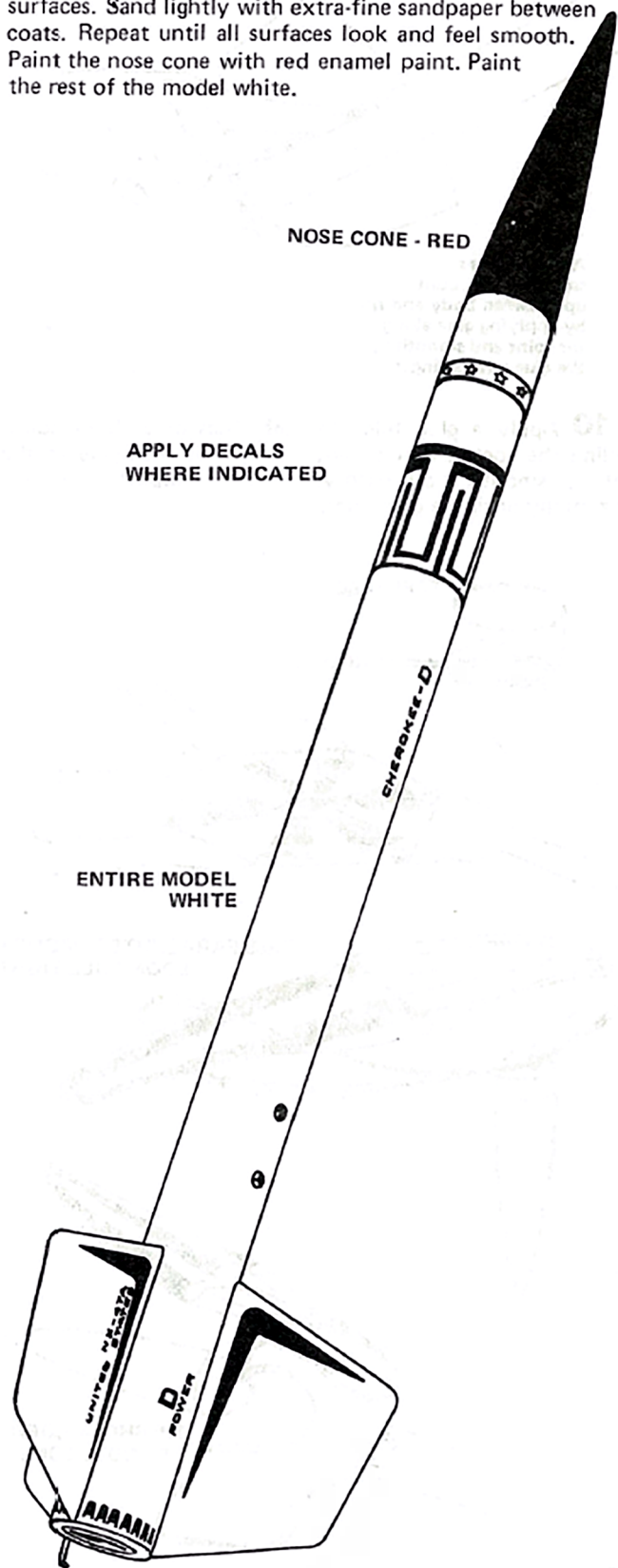
PAINT SCHEME

12 Apply two or more coats of sanding sealer to all balsa surfaces. Sand lightly with extra-fine sandpaper between coats. Repeat until all surfaces look and feel smooth. Paint the nose cone with red enamel paint. Paint the rest of the model white.

NOSE CONE - RED

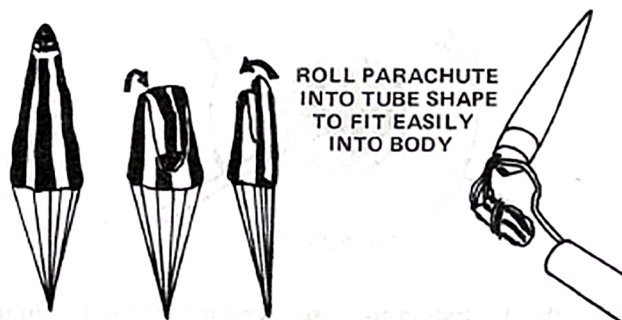
APPLY DECALS WHERE INDICATED

ENTIRE MODEL WHITE



COUNTDOWN CHECKLIST

14 Pack six or seven squares of loosely crumpled recovery wadding into the body tube.



ROLL PARACHUTE INTO TUBE SHAPE TO FIT EASILY INTO BODY

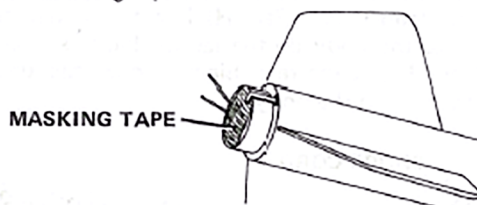
13 Fold the parachute into a triangular shape. Roll 'chute tightly as shown and wrap shroud lines loosely around it. If 'chute is too large, unroll it and repack until it slides easily into rocket. A fit that is too tight may prevent parachute from ejecting properly.

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.

12 Pack shock cord neatly into rocket.

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.



11 Select an engine and install an igniter as directed in the engine instructions. Engines recommended for use with this rocket are D12-5 and D12-7 or (with adapter EM-2050, Cat. No. 3154) B6-4 and C6-5.

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

9 Disarm the launch panel--remove safety key.

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

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

6 Arm the launch panel--insert safety key.

5 4 3 2 1 LAUNCH !!

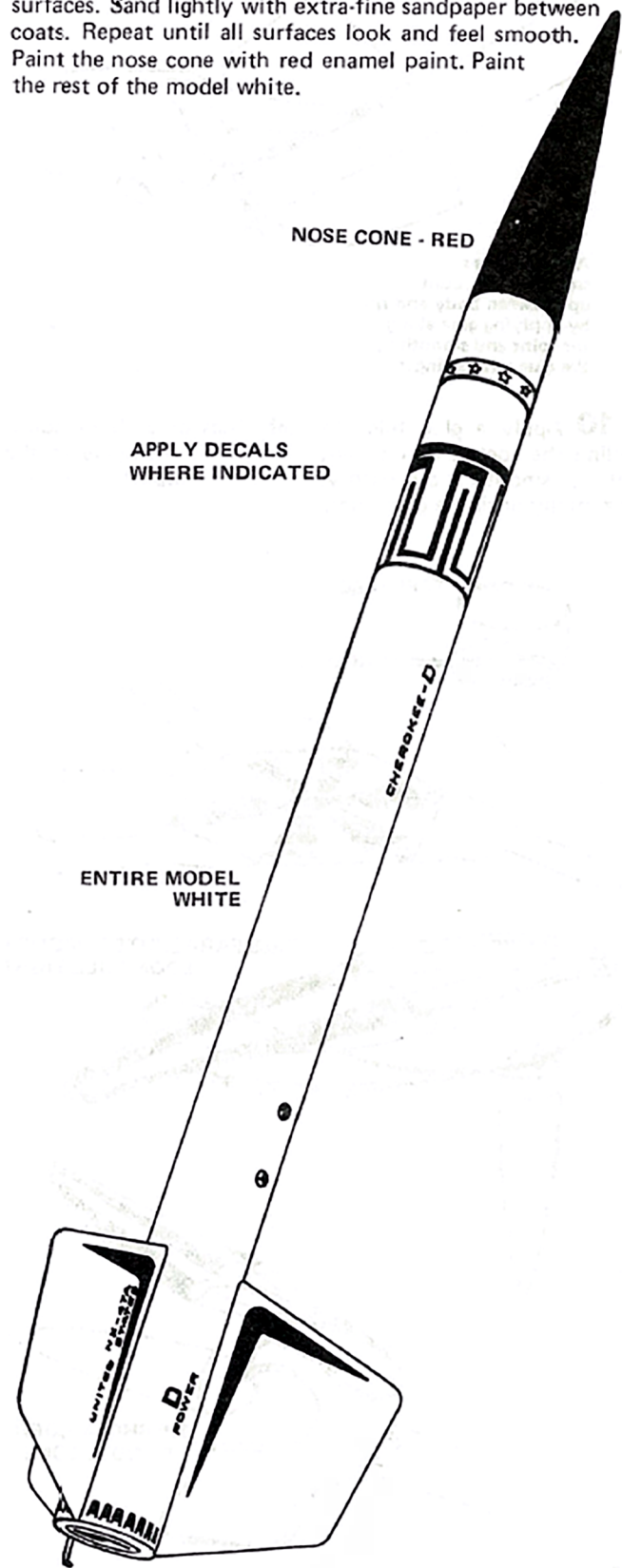
MISFIRE PROCEDURE

Occasionally the igniter will heat and burn in two 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.

13 When all paint is dry, apply decals (Part N). Cut out a decal section, dip it in lukewarm water for 10 seconds, and hold it until it uncurls. Slip the decal off the backing sheet and onto the model in the correct position. Blot away excess water. For best results, let the model dry overnight, then apply a coat of clear spray to protect the decals.

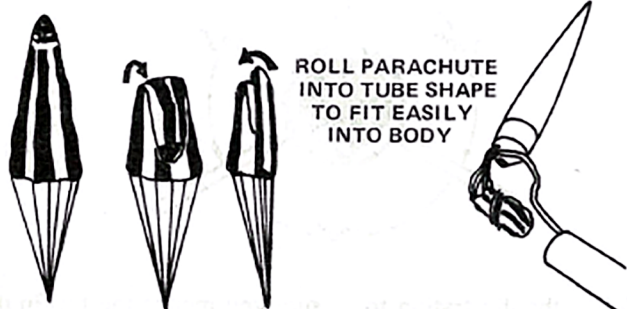
PAINT SCHEME

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COUNTDOWN CHECKLIST

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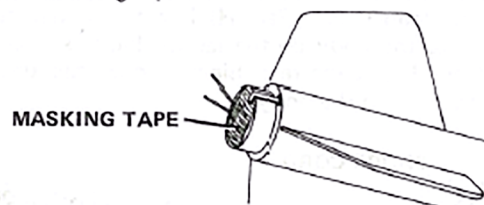
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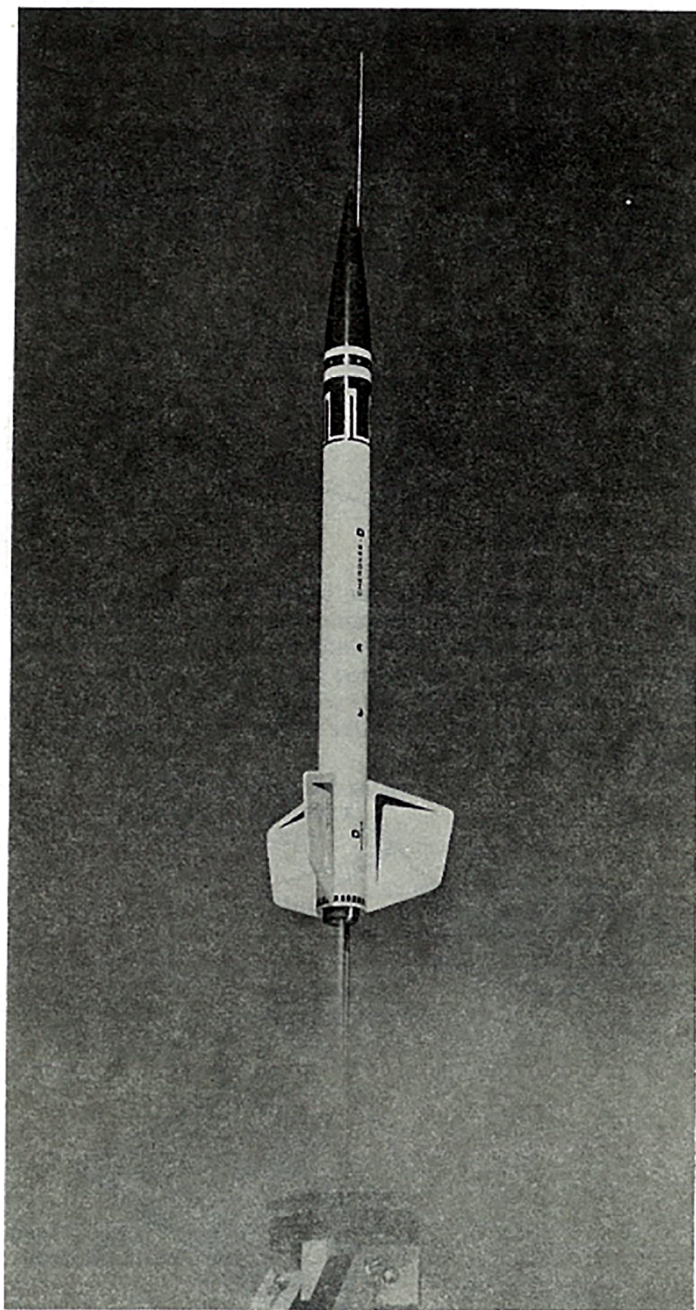
6 Arm the launch panel--insert safety key.

5 4 3 2 1 LAUNCH !!

MISFIRE PROCEDURE

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83050



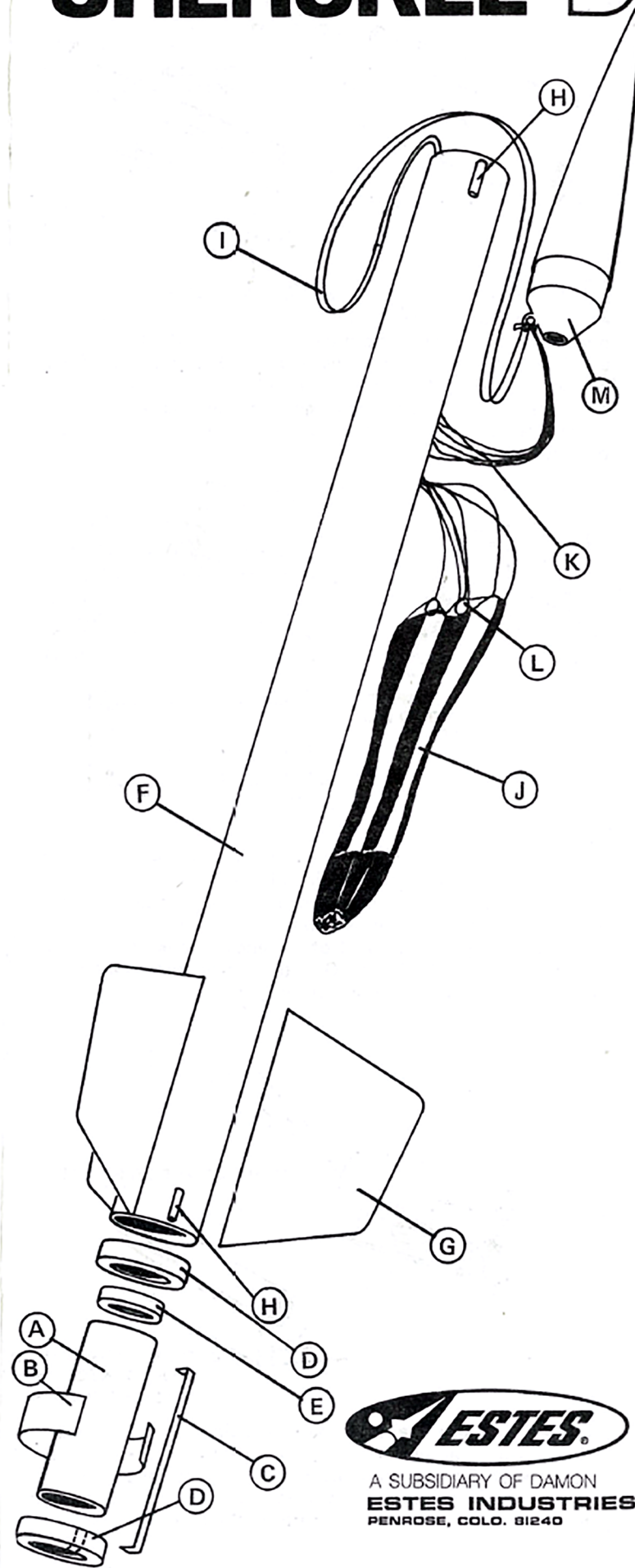
PARTS LIST

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N 1 Decal type KD-47	37045
O 1 Shock Cord Mount (type SCM-50) (Not shown)	84444

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

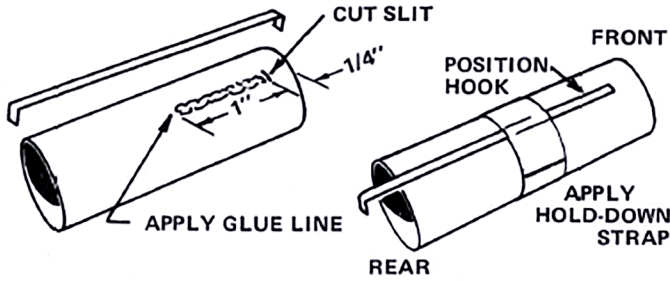
IMPORTANT: Check to be sure your kit is complete, then read the entire assembly instructions before beginning to build your rocket. Mark off each step as you complete it.

CHEROKEE-D

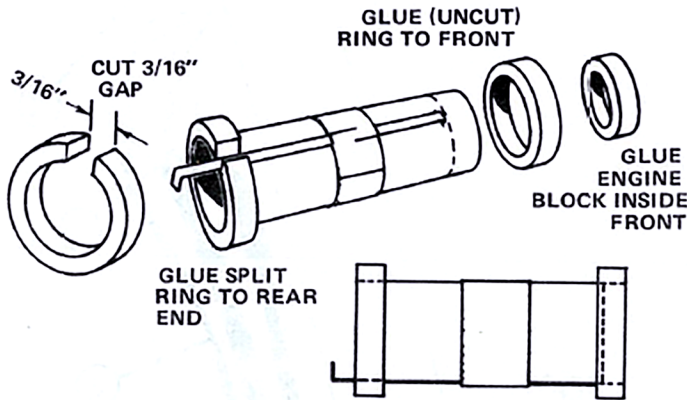


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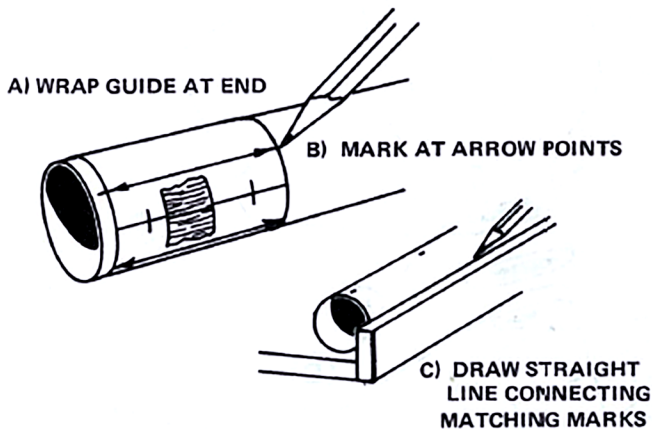
ASSEMBLY INSTRUCTIONS



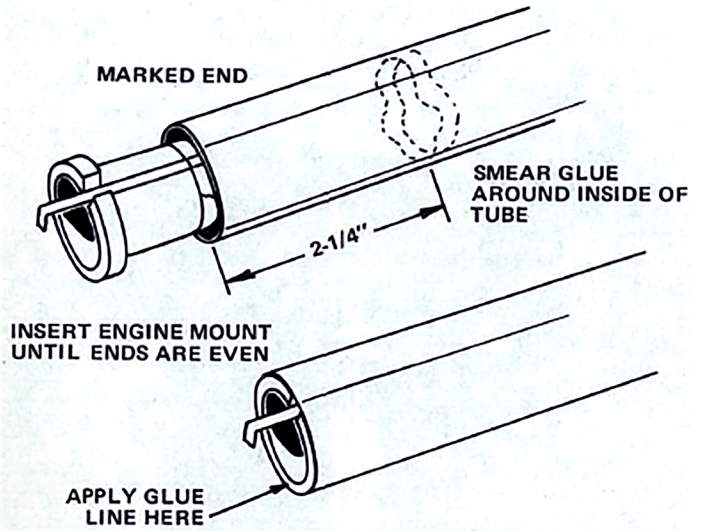
- 1** Mark the engine mount tube (Part A) 1/4" from one end. Cut a 1/8" long slit in the tube at the mark as shown. Cut out the hold-down strap from the pattern sheet (Part B). Apply a 1" long line of glue to the tube as shown. Push one end of the engine hook (Part C) into the slit and press the main part of the hook into the glue. Apply glue to one side of the hold-down strap and wrap it tightly around the middle of the tube over the engine hook.



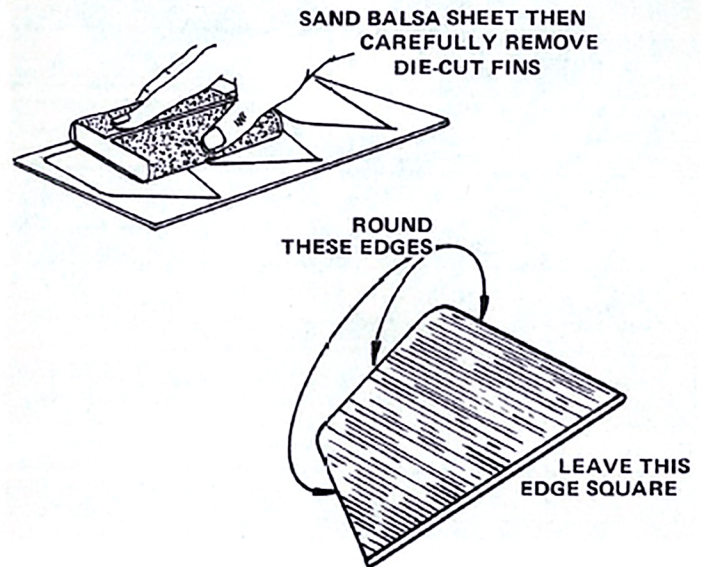
- 2** Cut a 3/16" gap in one adapter ring (Part D). Glue it to the end of the engine mount tube from which the engine hook projects. Make sure the engine hook is centered in the gap and free to move up and down. Glue the other (uncut) adapter ring against the end of the engine hook at the other end of the tube (the front). Glue the engine block (Part E) inside the tube against the hook at the front.



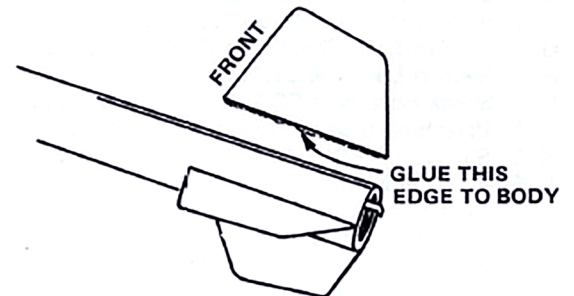
- 3** Cut out the tube marking guide from the pattern sheet. Wrap it around the body tube (Part F) at one end. Mark at each of the arrow points. Remove the guide and draw a straight line connecting each matching pair of marks. Extend the launch lug line the entire length of the tube.



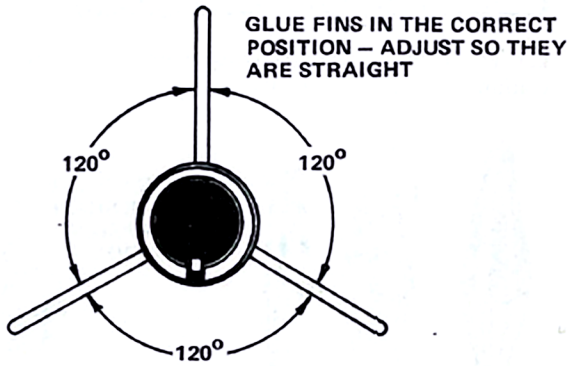
- 4** Smear glue around the inside of the body tube approximately 2-1/4" from the same end marked in the previous step. Insert the engine mount into this end of the body tube until the rear edge of the slotted ring is even with the end of the tube and the free end of the engine hook projects from the body as shown. Apply a thin line of glue around the ring/tube joint.



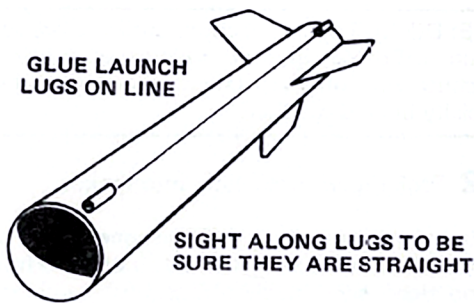
- 5** Fine-sand the balsa sheet (Part G), then carefully remove the die-cut fins from the sheet. Free the edges with a sharp knife. Sand the leading, tip, and trailing edges of each fin to a rounded shape. Make sure the root edge remains square.



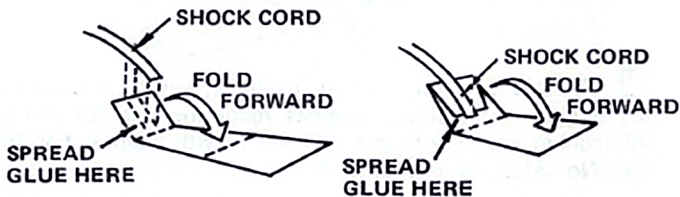
- 6** Rub a line of glue into the root edge of each fin and allow to dry. Apply another line of glue to each fin and glue the fins to the body on the alignment lines drawn in Step 3.



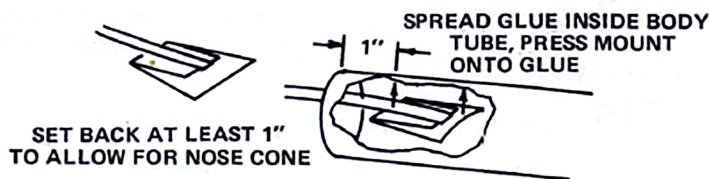
Refer to the illustration to be sure you mount the fins in the correct position. Adjust the fins so they project straight away from the body tube. Do not rest the rocket on its fins while the glue is wet.



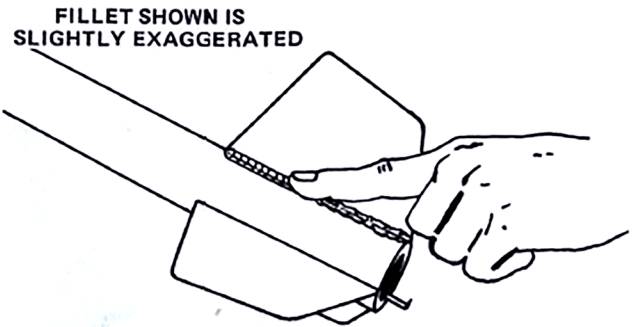
7 Cut the launch lug (Part H) into two equal lengths. Glue these lugs to the body on the launch lug line, one lug at the front and one lug at the rear. Sight through the lugs to be sure they are straight on the body.



8 Cut out the shock cord mount (part O). Pre-fold it on the dotted lines to crease and then flatten again. Apply glue to section 1 and lay the shock cord (part I) 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.

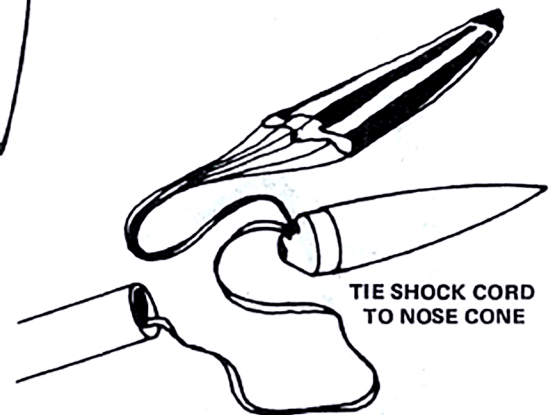
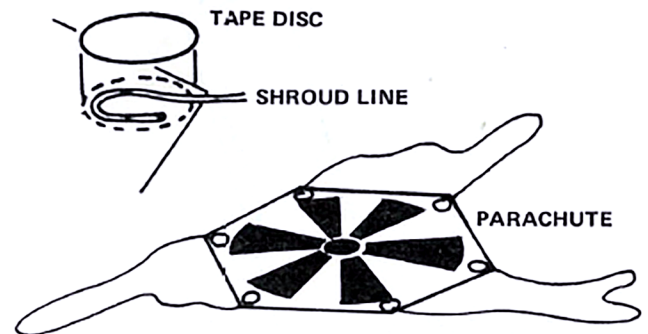


9 Apply glue to the inside of the body tube at the front over an area about 1" to 2" from the end. The glued area should be the same size as the shock cord mount. Press the mount into the glue as shown and hold in place until the glue sets.



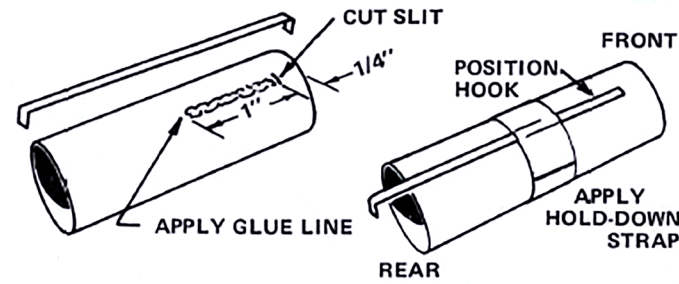
A FILLET is a smooth joint, built up between body and fin by applying glue along the joint and smoothing the glue with a finger.

10 Apply a glue fillet to both sides of each fin joint. Holding the rocket horizontally, apply a line of glue to the joint and smooth it out with your finger. Support the rocket horizontally until the glue dries.

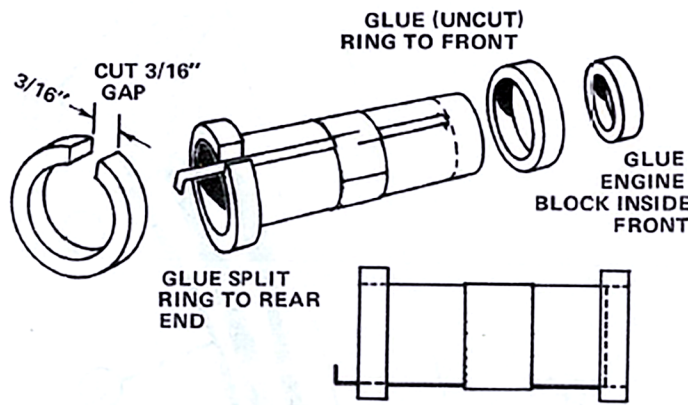


11 Cut out the parachute (Part J) on its edge lines. Cut three 36" lengths of shroud line cord (Part K). Attach the line ends to the top surface of the parachute with tape discs (Part L) as shown. Pass the shroud line loops through the ring on the nose cone (Part M). Pass the parachute through the loop ends and draw the lines tight against the ring. Set the knot with a drop of glue. Tie the free end of the shock cord to the nose cone.

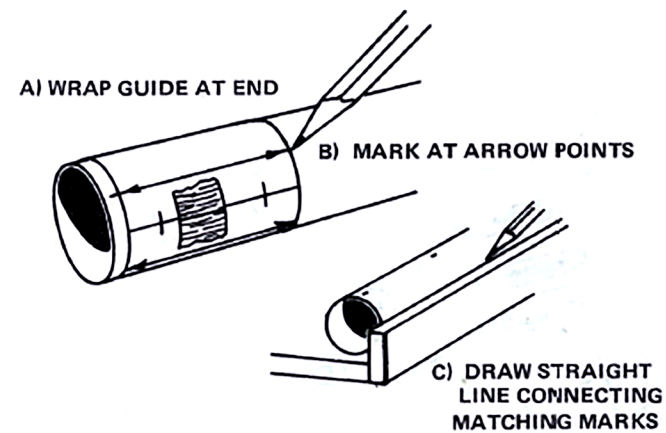
ASSEMBLY INSTRUCTIONS



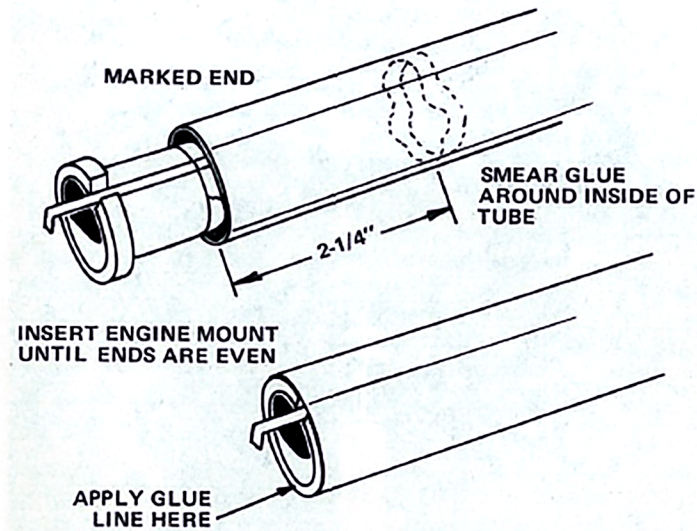
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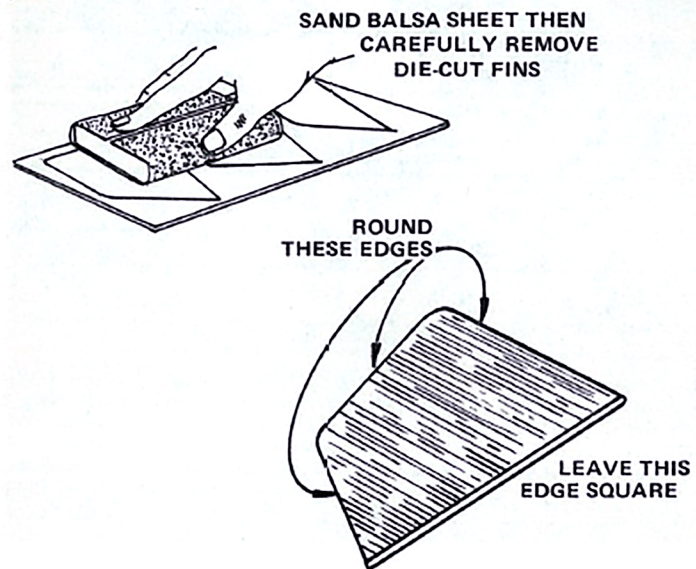
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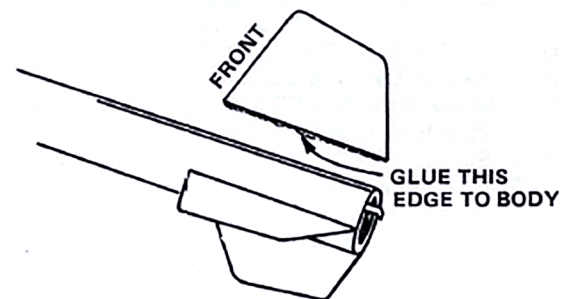
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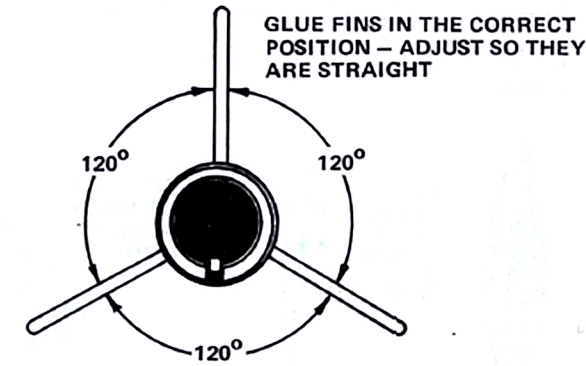
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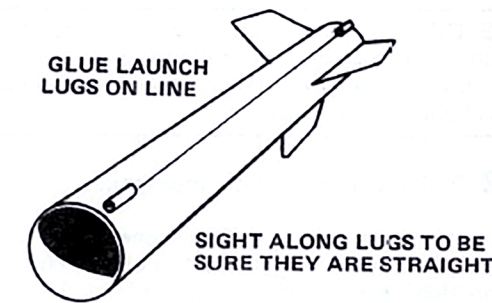
5 Fine-sand the balsa sheet (Part G), then carefully remove the die-cut fins from the sheet. Free the edges with a sharp knife. Sand the leading, tip, and trailing edges of each fin to a rounded shape. Make sure the root edge remains square.



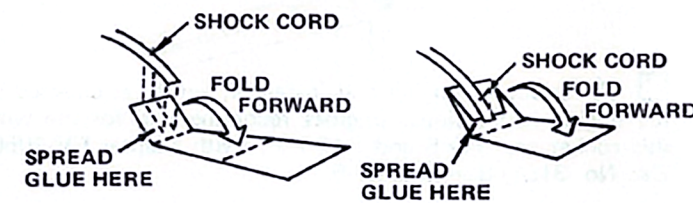
6 Rub a line of glue into the root edge of each fin and allow to dry. Apply another line of glue to each fin and glue the fins to the body on the alignment lines drawn in Step 3.



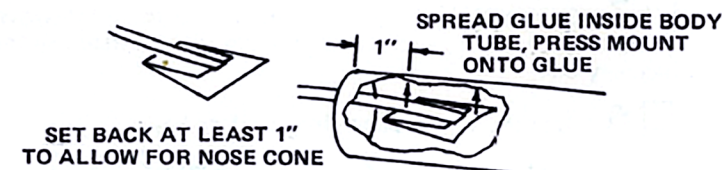
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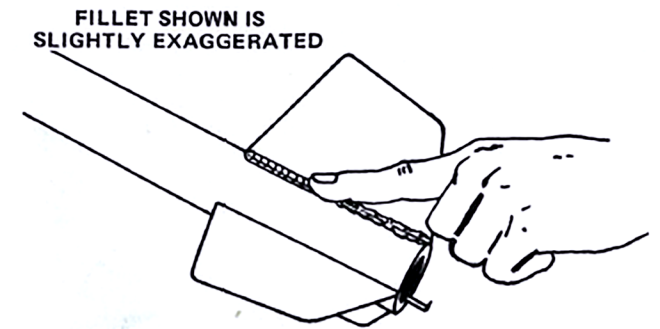
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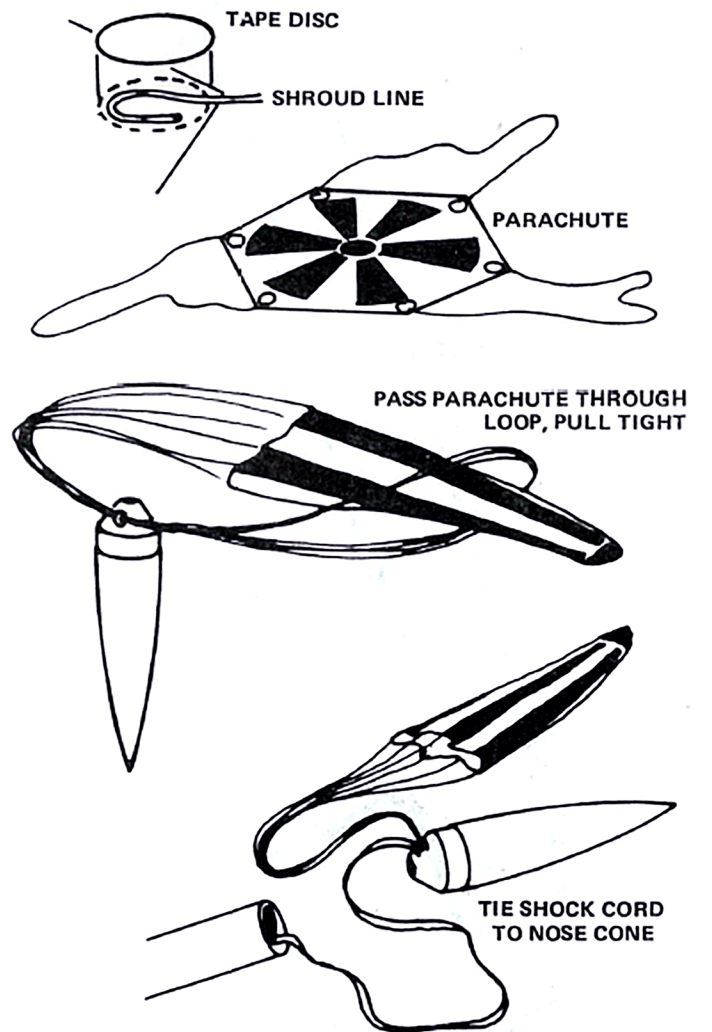


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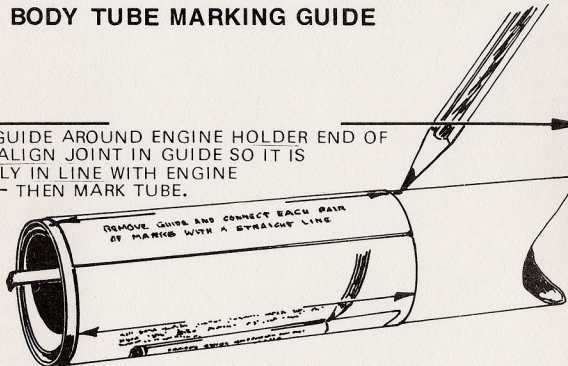


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BODY TUBE MARKING GUIDE

WRAP GUIDE AROUND ENGINE HOLDER END OF TUBE. ALIGN JOINT IN GUIDE SO IT IS DIRECTLY IN LINE WITH ENGINE HOOK — THEN MARK TUBE.

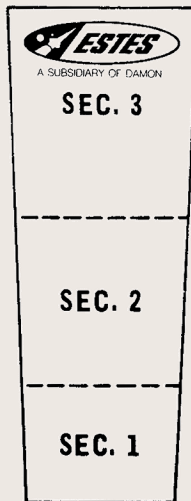


MARK BODY TUBE AT EACH ARROW POINT

REMOVE GUIDE AND CONNECT EACH PAIR OF MARKS WITH A STRAIGHT LINE

HOLD DOWN STRAP

CHEROKEE-D
SP - 47

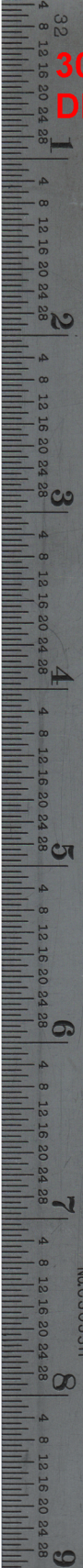


SHOCK CORD MOUNT

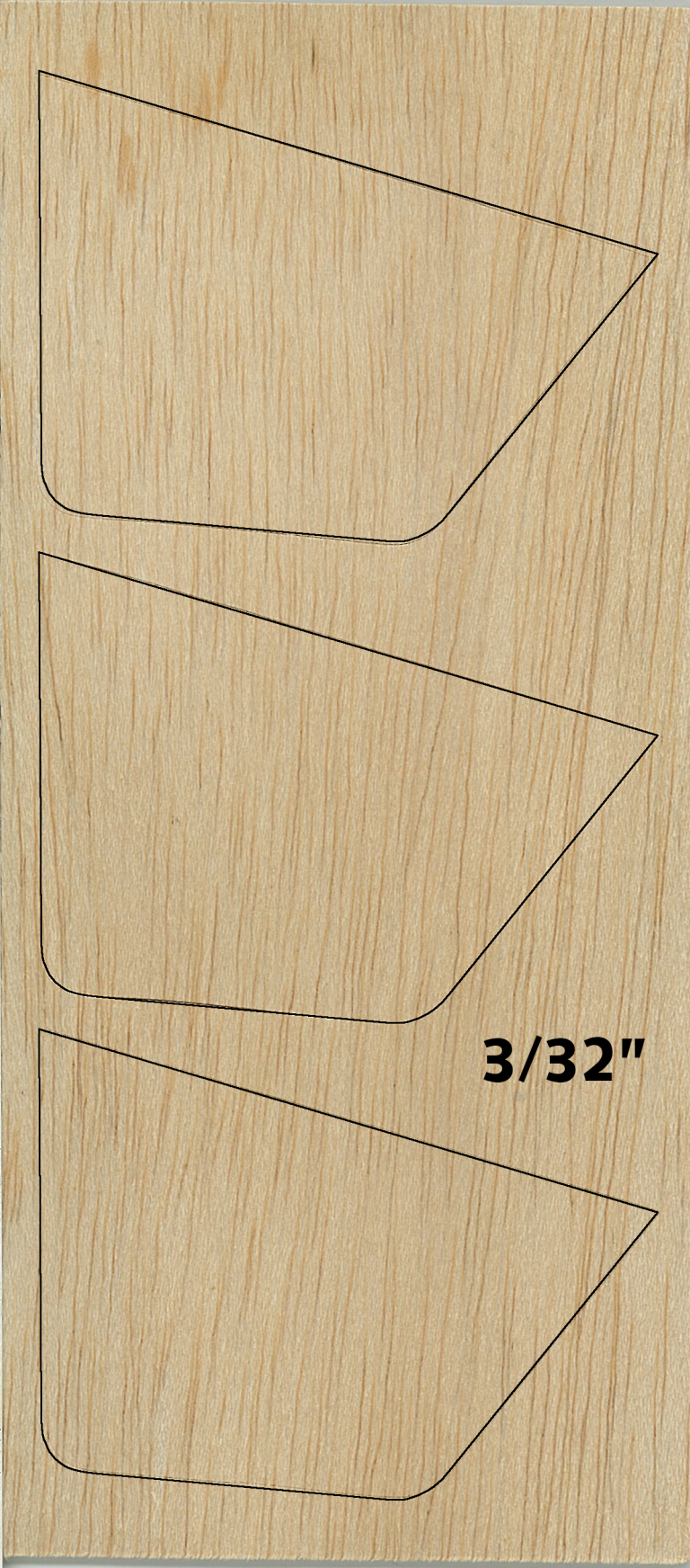


600
DPI

300
DPI



No.C0303SR



3/32"

Whales Rule Maui Waters - Dec



January
February
March
April
May
June
July
August
September

300
DPI

1 2 3 4 5 6
4 8 12 16 20 24 28

7 8 9 10 11 12 13 14 15
4 8 12 16 20 24 28

5970LT NR

AAAAAAAAAA
AAAAAAAAAA
1234567890
1234567890



NASA

NASA



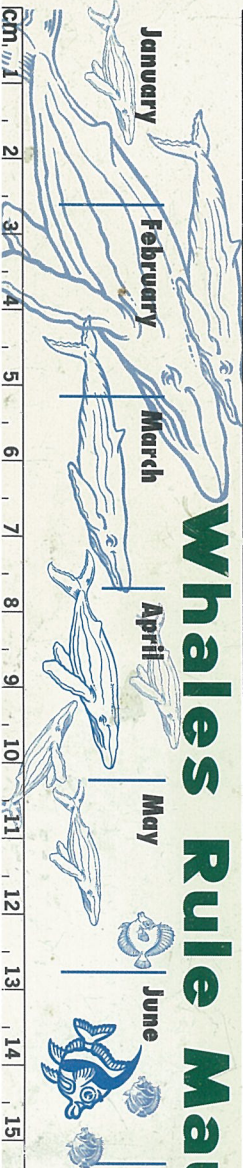
CHEROKEE -

NX-47A
UNITED STATES

POWER

UNITED STATES
NX-47A

INCHES 1 2 3 4 5 6



January

February

March

April

May

June

Whales Rule Mau



300
DPI

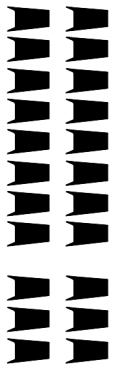
KD-47
37045

NASA



1 2 3 4 5 6 7 8 9 0

NASA



CHEROKEE -

NX-47A
UNITED STATES

POWER

NX-47A
UNITED STATES

Estes K-47/1247 Cherokee-D notes

This kit has gone through many changes over the years. Current as of this writing, the Cherokee-E #2408, available at Hobby Lobby, is the same as the later version of the Cherokee-D with an upgraded motor mount to allow it to use the longer 24mm 'E' motors and a longer airframe.

There are 3 versions of this kit included in this post. The Pre-Damon "Astron", the early "Damon", and the later "Damon". I believe there was a version prior to the "Astron" version posted here due to the fact that it came with a cardstock pattern for the fins. This would indicate the builder was to cut the fins out from blank balsa stock yet the version I have also includes a die-cut fin sheet. If anyone has the earlier version please consider sending scans to update this posting.

- Nose cone
 - All versions prior to the later Damon used the balsa BNC-55AC, the later version changed to the plastic PNC-55AC, (71070).
- Body tube
 - All versions prior to the later Damon used the 16.35" long BT-55V, the later version changed to the 18" long BT-55. The stock photo was never updated so they all show the short version.
- Fins
 - The Astron version had 2 piece fins and were die-cut on 3" wide balsa stock. All Damon versions were die-cut on 4" wide balsa stock. All were 3/32" thick. The die has a small error where one of the fins, center, appears to have a slight concave at the tip. This is not consistent with the other 2 fins. This can be clearly seen on the scan with the outline overlay.
- Recovery system
 - All versions call out the PK-18A. As seen in the parts layouts, the Astron checkerboard switched over to the Damon logo parachute even though the early Damon package found on line shows the Astron chute in the Damon package.
- Decals
 - The pre-Damon version has the Astron orbit logo and the later Damon version have the Damon logo. The Damon version replaced the KD-47 with part number 37045.
- Other
 - All balsa nose cone versions came with a screw eye that is absent on the plastic nose cone versions.
 - The pre-Damon version came with a snap swivel missing on all later versions.
 - The pre-Damon version came with a wood dowel lug standoff missing on all later versions.
 - The pre-Damon and early-Damon versions used tape for the hook retainer; the later Damon version came with a hold down strap on the pattern sheet.
 - The early-Damon parts layout shows the pre-Damon decal yet it came with the Damon logo decal.
 - The early-Damon packaging still had the Astron orbit logo on the face card but had the Damon logo on the hang tag.

PARTS LIST KIT NO. 1247 - Cherokee-D (Later Damon)

Quantity	Description	Type	Number	Detail1	Detail2	Detail3	Detail4	Comment
	PAPER BODY TUBE	BT-50J	30362	2.75" long	0.950" ID	0.976" OD	0.013" wall	Glassine
	Pattern Sheet	SP-47	83053	5.5" wide	6.5" long	Cardstock		Scan
	ENGINE HOLDER	EH-2	35025	2.8" long	.100" wide	.025" thick		Reg. & D
	CENTERING RINGS	AR-5055	30166	.977" ID	1.27" OD	0.25" long	BT-50 in BT-55	Set of 2
	CENTERING RINGS	AR-2050	30164	0.25" long	0.737" ID	0.949" OD	0.106" wall	Green
	PAPER BODY TUBE	BT-55	30382	18" long	1.283" ID	1.325" OD	0.021" wall	Glassine
	Die-Cut Balsa	*BF-47	32220	4" wide	9" long	3/32" thick		Scan
	LAUNCH LUG	LL-2A	38175	5/32" ID	1/8" rod	1.25" long		Mylar
	Shock Cord	SC-1	85730	18" long	1/8" wide			Rubber
	Parachute	PK-18A	85566	18" dia.	18" x 6 Shrouds	LDPE plastic	Org/Blk/Wht	Damon Logo
	Shroud Line	SLT-108	38239	108"	.020" diameter	Twisted cotton		For 18" to 24"
	Tape Disc	TD-3F	38406	1/2" dia.	Paper	Self-Stick	WO/Center Hole	Set of 6
	PLASTIC NOSE CONE	PNC-55AC	71070	5.4" long	1.325" dia.	.5" shoulder	White	Blow molded
	Decal Sheet	KD-47	37045	4.5" wide	6" long	Red/Blk	Waterslide	Scan
*	BALSA FIN STOCK	BFS-30(4x9)	N/A	4" wide	9" long	3/32" thick	0.09375	

