

## SPEV K-59

Designed by Bill Simon

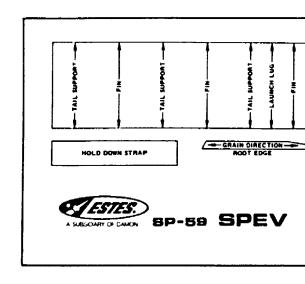
## PARTS LIST

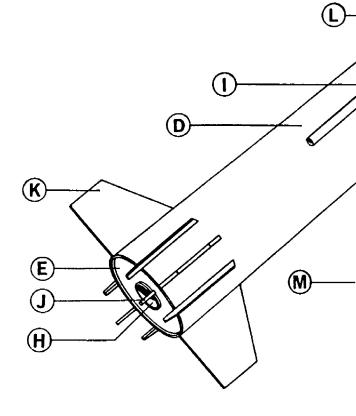
(A)	1	Balsa Nose Cone	BNC-52G
(B)	1	Balsa Adapter	TA-5260C
(C)	1	Body Tube	BT-52\$
(D)	1	Body Tube	BT-70H
(E)	1	Paper Adapter	RA-2070
(F)	1	Body Tube	BT-60FG
(G)	1	Balsa Adapter	TA-6070
(H)	1	Body Tube	BT-20J
(1)	1	Launch Lug	LL-2B
(J)	1	Engine Hook	
(K)	1	Balsa Fin Stock	BF\$-30
(L)	1	Screw Eye	SE-2
(M)	1	Shock Cord	SC-3
(N)	1	Parachute	PK-18A
(O)	1	Shroud Line	SLT-108
(P)	1	Tape Discs (Strip of 6)	TD-3F
(Q)	1	Decal	KD-59
(R)	1	Pattern Sheet	

In addition to the materials above, you will need scissors, a sharp knife or single edge razor blade, sandpaper and paint or dope.

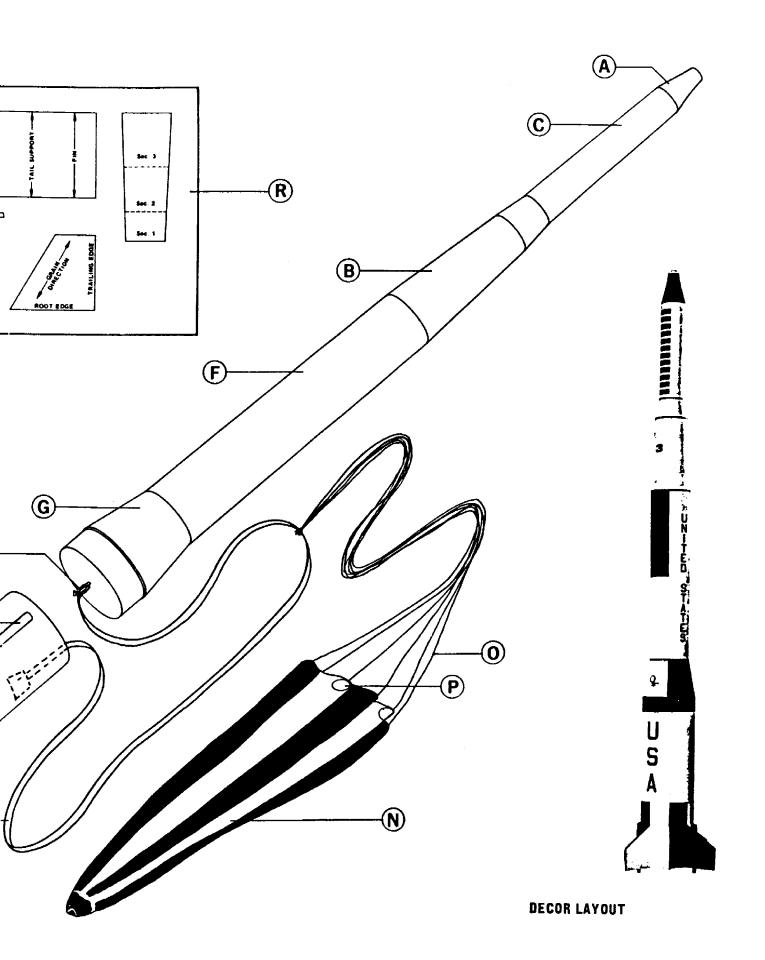
### NOTE:

Read the entire assembly instructions carefully before beginning work on your rocket. Then start construction, following each step in order, checking off each step in order, checking off each step as it is completed.







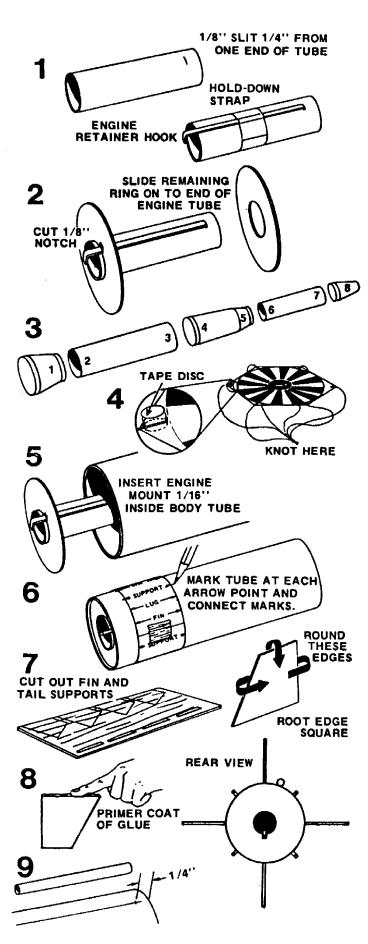


# ASSEMBLY INSTRUCTIONS

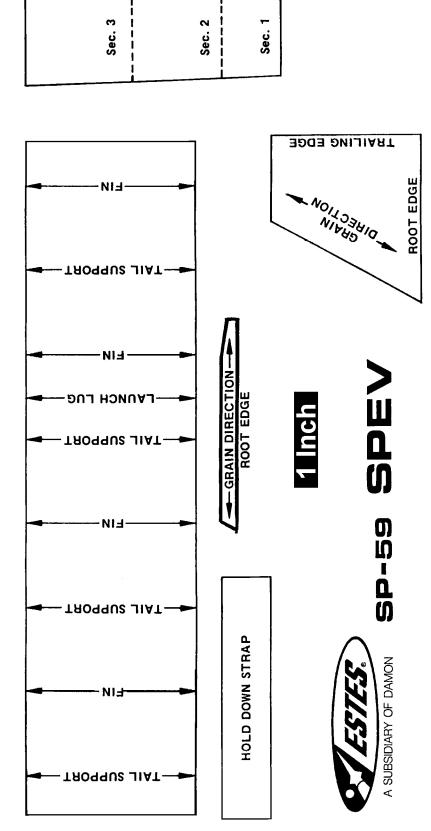
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1 Cut a 1/8" long stit in the side of the BT-20J engine holder tube 1/4" from one end. Insert one end of the engine retainer into this hole and lay the body of the retainer down on the tube as shown. Cut out the engine holder strap from the pattern sheet, apply glue to one side, and wrap it tightly around the middle of the tube and engine retainer as shown.
☐ 2 Cut a 1/8" square notch in one ring. Slide the notched ring onto the end of the engine mount tube from which the hook projects. Slide the other ring onto the opposite end of the tube. Apply a line of glue at the ring tube joint on both sides of each ring. Let this assembly dry.
☐ 3 Glue the forward airframe components together in the order shown. Spread glue around the inside of one end of the center section body (BT-60FG). Quickly slide the small end of the large adapter into place so the tube is fully seated on the shoulder of the adapter ALL THE WAY AROUND. Follow the same procedure for the remaining joints.
4 Cut out the parachute on the edge lines marked on the plastic. Cut six 18" lengths of shroud line and attach one to each corner of the 'chute with a tape disc as shown. Tie the free ends of the lines together.
☐ 5 Apply a line of glue around the inside of the main body 2" from one end. Insert the engine mount assembly, unnotched ring first, until the notched ring is 1/16" inside the rear of the body. Apply a line of glue to the joint between the rear ring and the body. Set the tube on its forward end while the glue dries.
☐ 6 Cut out the body tube marking guide. Wrap it around the rear of the body so its ends match. Mark the tube at each arrow point. Remove the guide and draw a straight connecting line matching front and rear marks. Draw the launch lug line forward the length of the tube.
☐ 7 Cut out the fin and tail support patterns. Trace four out- lines of each on the fin stock as shown. Cut out the parts with a sharp knife and sand the edges as Illustrated.
8 Rub a priming coat of glue into the root edge of each fin and tail support and allow to dry. Glue the tail supports to the body next to EVERY OTHER alignment line (don't count the launch lug line). Each support should project 5/16" past the rear of the body. Glue the fins to the body next to the appropriate remaining lines. Adjust the fins so they stick straight away from the body and let the glue set. NOTE: When gluing ins and supports in place, always attach them to the body on the SAME side of their alignment lines for proper spacing.
9 Glue the launch lug to the body on the launch lug line so

the lug is perfectly straight on the body.



	10
☐ 10 Insert the screw eye into the base of the large adapter. Remove the eye and squirt a small amount of glue into the hole. Re-insert the screw eye.	INSERT SCREW EYE, REMOVE AND SQUIRT GLUE INTO HOLE
11 Cut out the shock cord mount. Pre-fold it on the dotted lines. Apply glue to section 1 and lay the shock cord end into the glue. Fold this first section over. Spread glue over 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.	SPREAD GLUE HERE  FOLD FORWARD  SPREAD GLUE HERE  SHOCK CORD  FOLD FORWARD
☐ 12 Apply glue to the inside of the body tube at the front over an area about 1" to 1-3/4" from the end. The glued area should be the same size as the shock cord mount. Press the mount into the glue and hold it until the glue sets.	PRESS MOUNT ONTO GLUE 1" TO 1-3/4" INSIDE BODY TUBE
☐ 13 Apply a glue fillet to each fin/body joint and to the launehing lug joint as shown. The fillets should be smooth and bubble-free. Support the rocket horizontally while the glue dries.	13 FORM FILLETS
☐ 14 Tie the free end of the shock cord to the screw eye. Tie the parachute to the shock cord about 1/3 of the way back from the screw eye.	
□ 15 Apply two or more coats of sanding sealer to all balsa surfaces. Sand lightly with extra fine sandpaper between coats. Repeat until all pores are filled and the surfaces smooth. Give the rocket two light base coats of white. Follow with a heavier coat of flat white to give a smooth finished surface. After the white has dried overnight, cover over with masking tape and typing paper the areas which are to remain white. Press the tape down carefully at its edges. Spray the exposed areas with flat black and (carefully) remove the masking. When this is dry, apply decals as shown in the decor drawing.	ATTACH PARACHUTE ONE THIRD OF WAY DOWN SHOCK CORD
COUNTDOWN	
CHECKLIST	
11 Crumple five squares of recovery wadding very loosely and pack them into the body from the top. Form the parachute into a "spike", fold it in quarters and wrap shroud and shock cord around parachute, loosely cup another square of wadding around it, and place it in the body and slide the adapter into place.	FORM SPIKE
☐ 10 Select an engine and install an igniter as directed in the engine instructions. Insert engine into rocket.	WRAP SHROUD LINES
9 Disarm the launch panel.	
☐ 8 Place rocket on launcher. Clean the micro-clips and attach them to the igniter.	WADDING
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.	
5 4 3 2 1 LAUNCH!	2332-72









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## PREPARATION AND RECOVERY TIPS

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