



# renegade

KIT NO. 1271

## ASSEMBLY INSTRUCTIONS

match lines

FIN CENTER

SP-71  
RENEGADE FIN  
SPACING GUIDE

FIN CENTER

LAUNCH LUG CENTER

FIN CENTER

match lines

**A**

**I**

**O**

**P**

**N**

**L**

**B**

**A**

**C**

**K**

**L**

**K**

**H**

**D**

**F**

**E**

**H**

**G**

**R**

**M**

ESTES renegade

### PARTS LIST

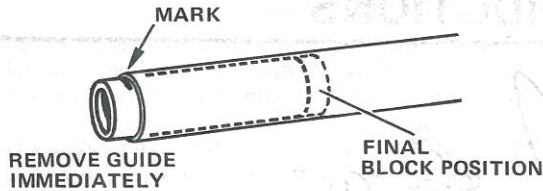
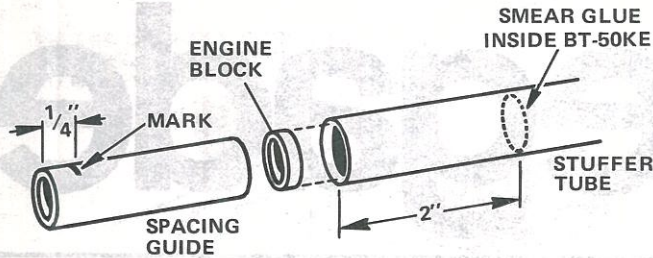
<b>A</b>	<b>1</b>	Fin Spacing Guide SP-71 (on back of bag panel) .....	<b>83163</b>
<b>B</b>	<b>1</b>	Body Tube BT-60 (18" long) .....	<b>30396</b>
<b>C</b>	<b>1</b>	Body Tube BT-60HE (8-1/2" long) .....	<b>30410</b>
<b>D</b>	<b>1</b>	Body Tube BT-50KE (15" long) .....	<b>30364</b>
<b>E</b>	<b>1</b>	Body Tube BT-52AG .....	<b>30378</b>
<b>F</b>	<b>1</b>	Engine Block AR-2050 .....	<b>30164</b>
<b>G</b>	<b>1</b>	Engine Hook EH-2 .....	<b>35025</b>
<b>H</b>	<b>1</b>	Ring Set TA-71 .....	<b>30053</b>
<b>I</b>	<b>1</b>	Plastic Nose Cone (PNC-60AH) .....	<b>71043</b>
<b>J</b>	<b>1</b>	Shock Cord SC-2MF (36" long) .....	<b>85742</b>
<b>K</b>	<b>1</b>	Die Cut Balsa Fin Sheet BF-71 .....	<b>32237</b>
<b>L</b>	<b>2</b>	Launch Lug LL-2AM .....	<b>38176</b>
<b>M</b>	<b>1</b>	Decal Sheet KD-71 (Water Transfer) ...	<b>37071</b>
<b>N</b>	<b>1</b>	Parachute PK-18A .....	<b>85566</b>
<b>O</b>	<b>1</b>	Shroud Line SLT-108 .....	<b>38239</b>
<b>P</b>	<b>1</b>	Set of 6 Tape Discs TD-3F .....	<b>38406</b>
<b>Q</b>	<b>1</b>	Stage Coupler JT-60C .....	<b>30266</b>
<b>R</b>	<b>1</b>	Engine Block Spacer EC-6 .....	<b>35012</b>

In addition to the materials included in this kit, you will need: White glue; model knife or single edge razor blade; pencil; ruler; sandpaper; paints; and masking tape.

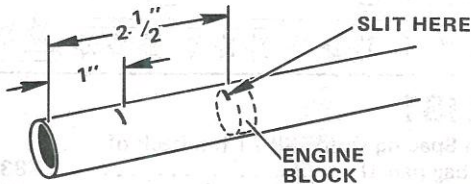
### IMPORTANT:

Read all instructions before beginning work on your Renegade. When you are thoroughly familiar with the construction sequence, begin construction. Check off each step as you complete it. Use white glue for all glue joints.

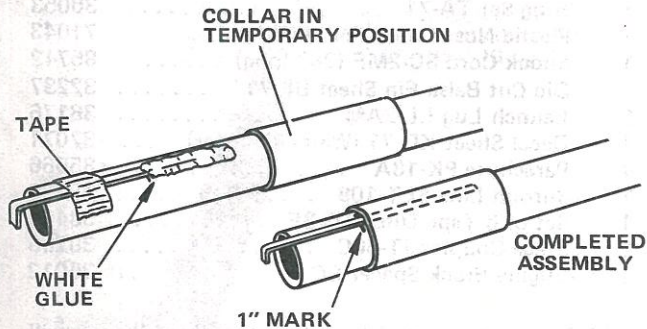
**ESTES INDUSTRIES**  
A SUBSIDIARY OF DAMON  
PENROSE, COLO. 81240



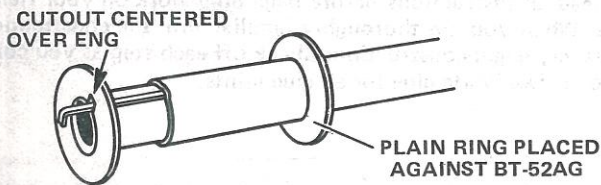
**1** Mark engine block spacer (part R) 1/4" from one end. Use your finger or a stick to smear a band of glue inside stuffer tube (part D) about 2" from one end. Insert engine block (part F) into this end and use spacer to push engine block into place (with mark on spacer even with end of tube) with one smooth movement. Remove guide immediately.



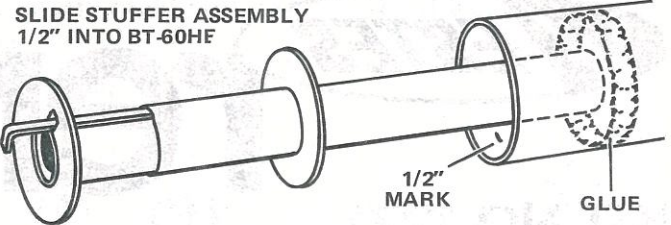
**2** Cut a 1/8" slit in stuffer tube 2-1/2" from engine block end (even with rear edge of engine block). Mark stuffer tube 1" from this end. Temporarily tape engine hook (part G) in place.



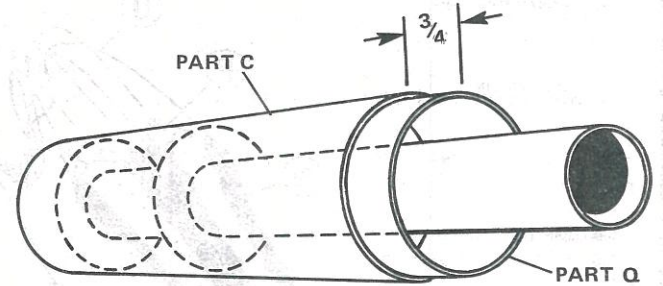
**3** Apply a heavy line of glue on engine hook from slit to 1" mark. Slip engine hook retainer (part E) onto forward end of stuffer tube and slide it back over engine hook to the 1" mark. Wipe away any excess glue and remove tape from engine hook.



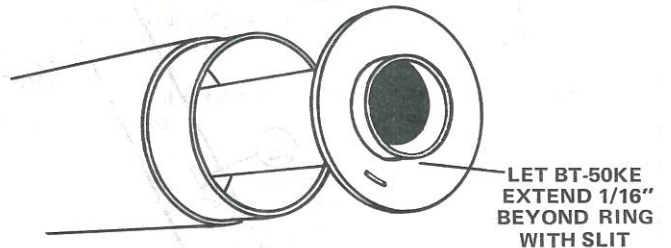
**4** Remove centering rings from ring set (part H) and glue two of the rings on stuffer tube as shown. One ring has a cutout for the engine hook and should be placed at engine hook end of tube. Place plain ring against engine hook retainer and glue. Save third ring (with 5/16" long slit) for later use.



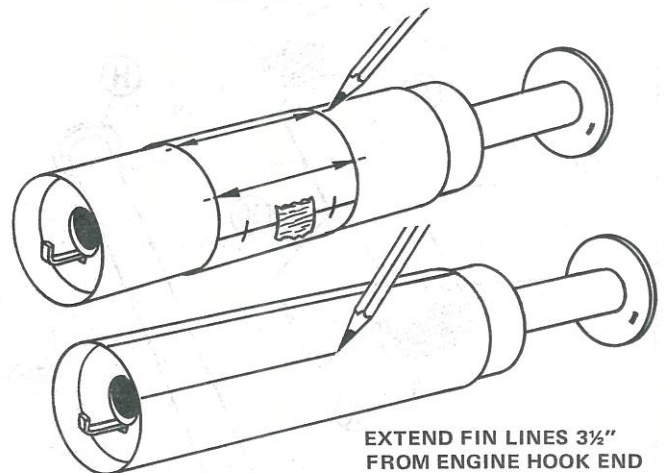
**5** Mark inside of body tube (part C) 1/2" from one end. Smear a band of glue inside part C about 2" from marked end. Insert assembly from step 4 into part C from marked end until rear centering ring is even with 1/2" mark. Apply glue to rear ring/tube joints. After glue is fully dry, apply a second coat of glue to ring/tube joints at each of the two ends.



**6** Glue stage coupler (part Q) into forward end of part C. Part Q should extend 3/4" beyond end of part C. Wipe off any glue on exposed portion of part Q.



**7** Glue centering ring (with slit in it) onto end of stuffer tube as shown. This ring was saved in step 4.



**8** Cut out fin spacing guide (part A). Wrap guide around the 8-1/2" long body tube (part C) and tape ends together with alignment marks matched. Mark body at each arrow point. Use a pencil because ink will show through paint. Remove spacing guide and connect each set of marks with a straight line. Fin lines should extend 3-1/2" from engine hook end of tube. The launch lug line should be extended to both ends of tube.