





EstesRockets.com

# PRO SERIES II SO LONG™

9722

AGES  
18+



Skill Level

**ADVANCED**

## MODEL ROCKET INSTRUCTIONS

### KEEP FOR FUTURE REFERENCE

**IMPORTANT:** Please record date found on decal and keep for future reference. \_\_\_\_\_

**READ ALL INSTRUCTIONS.** Make sure you have all parts and supplies. Test fit all parts before applying glue. Refer to your glue manufacturer's dry times during build.

### SUPPLIES



SCISSORS



PENCIL



RULER



FINE SANDPAPER



EPOXY



YELLOW GLUE



CLEAR TAPE



HOBBY KNIFE



MASKING TAPE



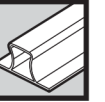
WHITE PRIMER



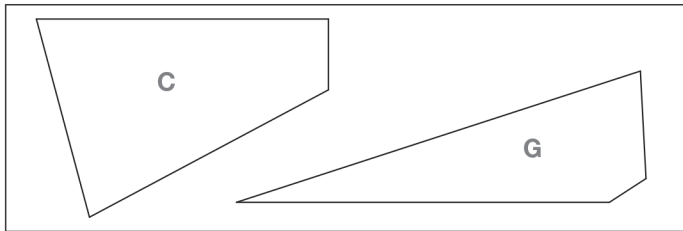
CLEAR COAT (OPTIONAL)



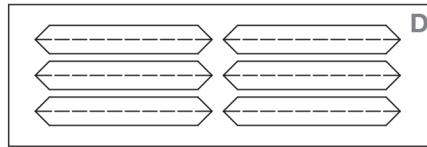
WHITE & BLACK PAINT



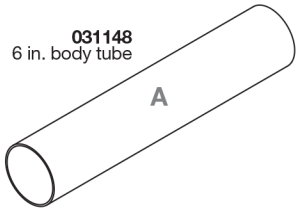
SANDING BLOCK



090051-9722 Laser cut balsa **x3**



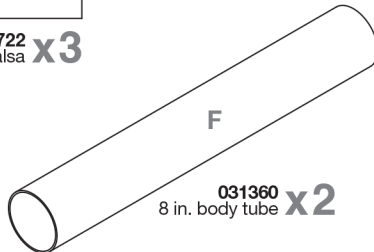
090057-9722 Printed index stock



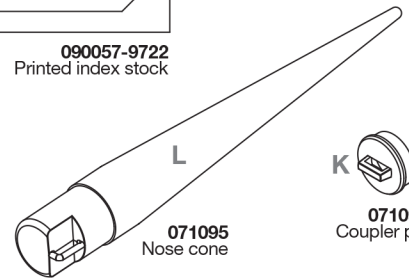
031148 6 in. body tube



031361 Green ring **x2**



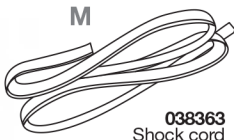
031360 8 in. body tube **x2**



071095 Nose cone



071096 Coupler pin

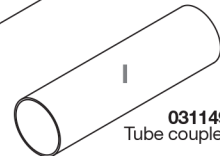
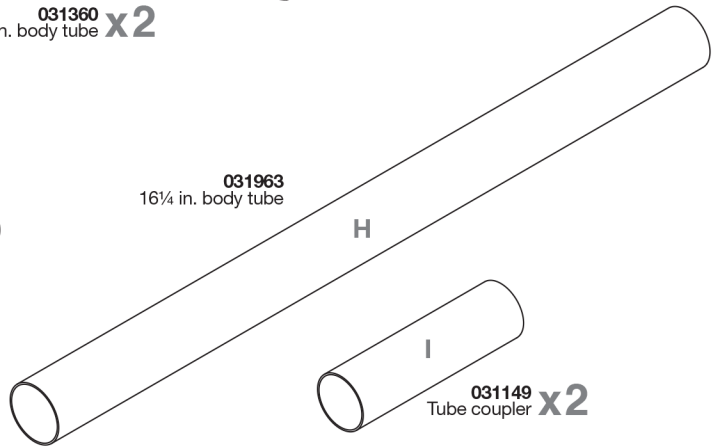


038363 Shock cord



085697 Streamer **x2**

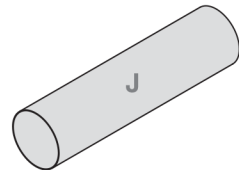
031963 16 1/4 in. body tube



031149 Tube coupler **x2**



090001B-9722 Waterslide decal



031150 29mm yellow spacer tube **x2**



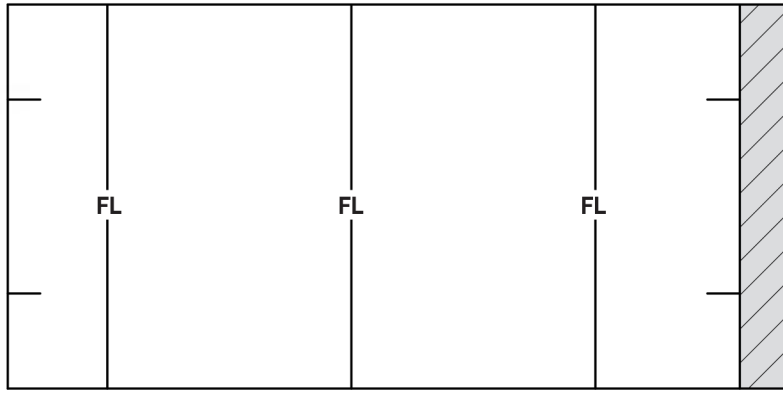
090001A-9722 Waterslide decal



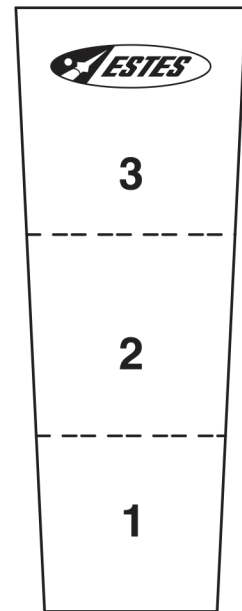
038181 Launch lug **x2**

# TUBE MARKING GUIDE AND SHOCK CORD MOUNT

Make a copy if you want to keep instructions.



TUBE MARKING GUIDE

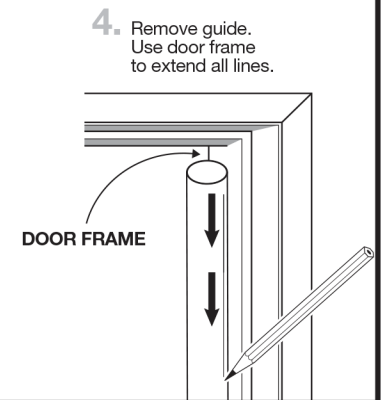
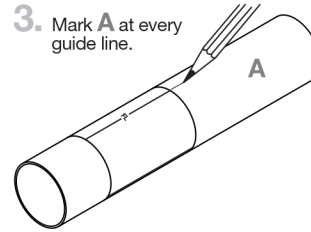
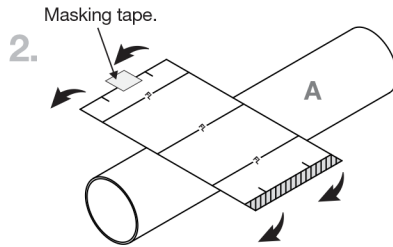
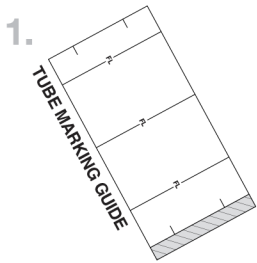


SHOCK CORD MOUNT

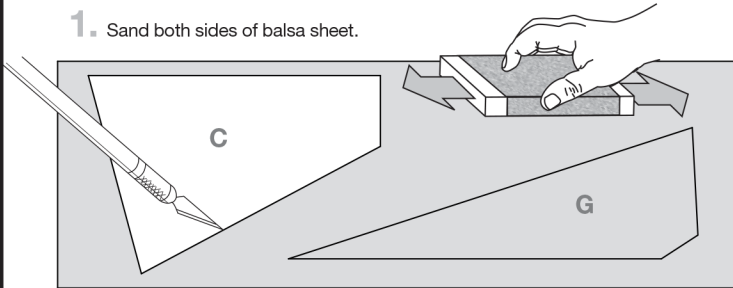
**NOTE:**

Make a copy if you want to keep instructions.

## MARK BOOSTER BODY TUBE

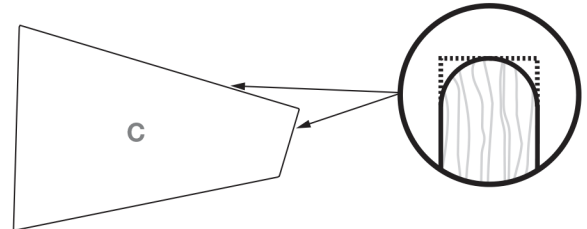


## PREPARE BOOSTER FINS

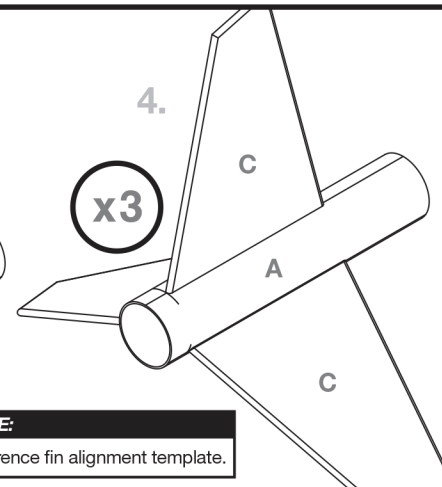
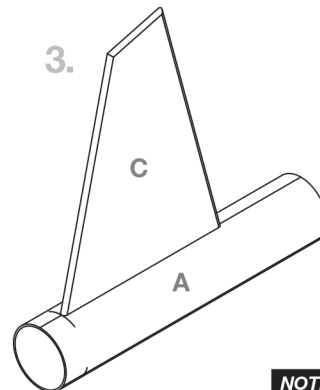
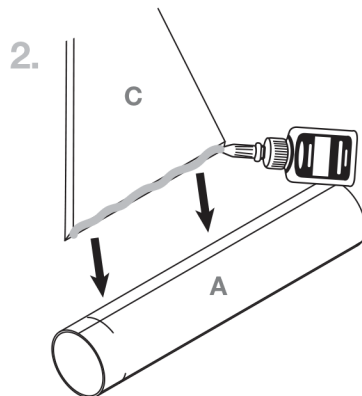
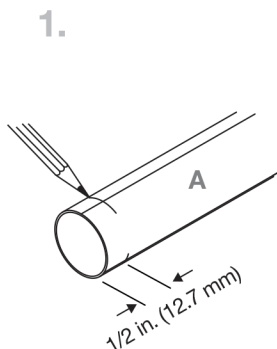


2. Carefully remove all C pieces with a hobby knife.

3. Round the leading edges of all C pieces.



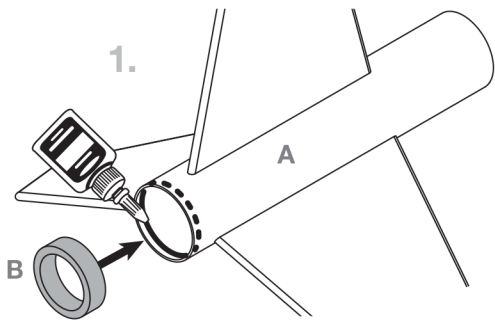
## ATTACH BOOSTER FINS



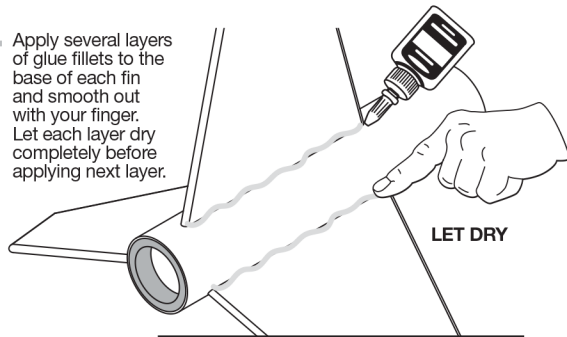
**NOTE:**

Reference fin alignment template.

## COMPLETE BOOSTER STAGE ASSEMBLY

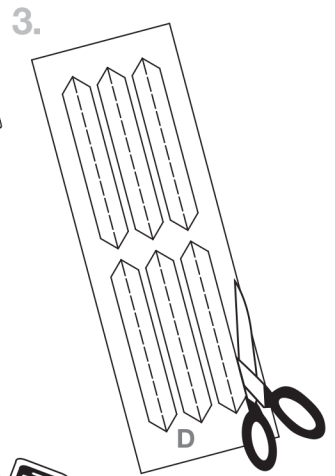


2. Apply several layers of glue fillets to the base of each fin and smooth out with your finger. Let each layer dry completely before applying next layer.

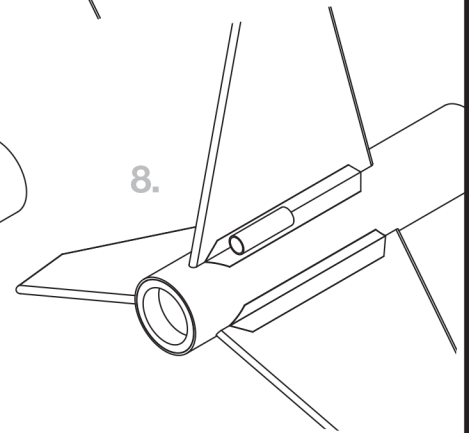
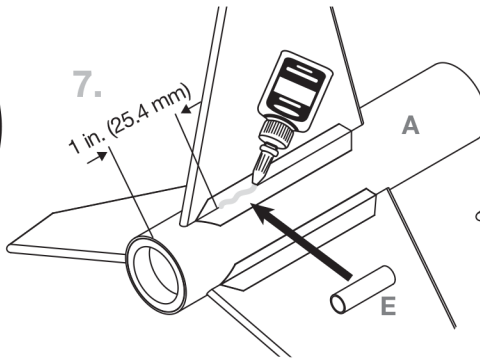
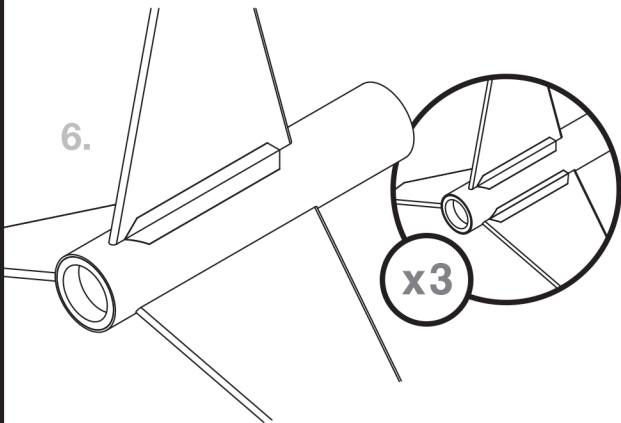
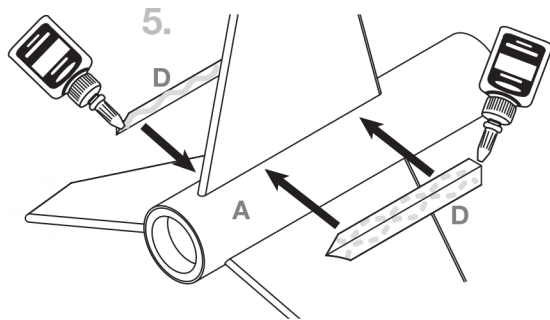
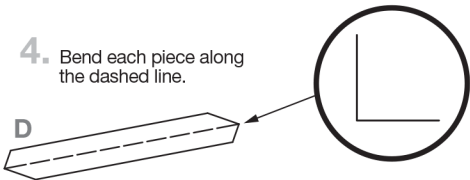


**NOTE:**

Be sure the ends of parts A and B are flush.



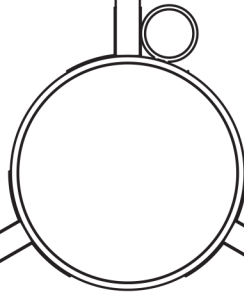
4. Bend each piece along the dashed line.



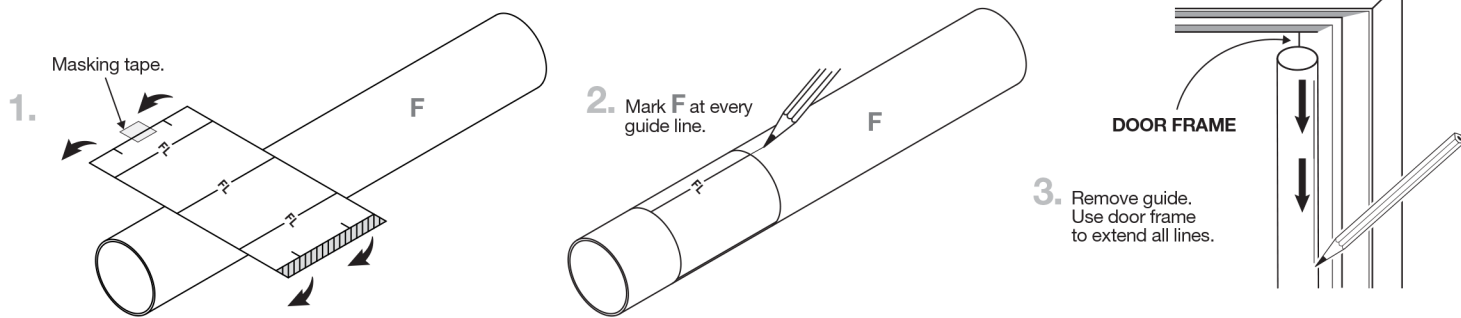
## FULL SIZED FIN ALIGNMENT TEMPLATE

**SAFETY NOTE:**

Proper fin alignment is important for a stable and safe flight. Use the included template while constructing both the rocket fin and booster fin assembly.

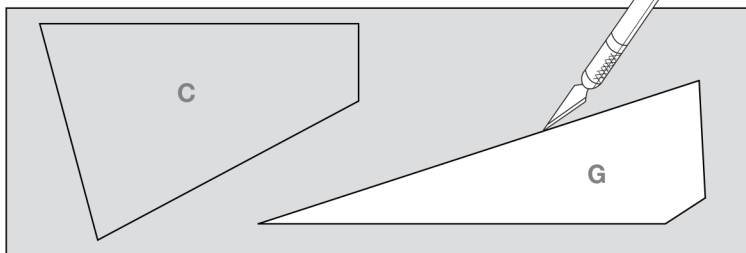


## MARK UPPER STAGE BODY TUBE

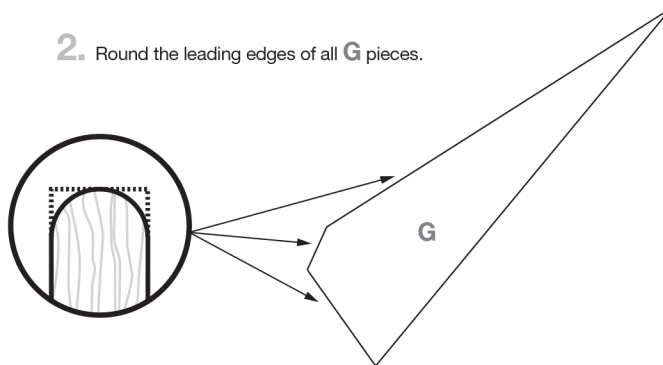


## PREPARE AND ATTACH UPPER STAGE FINS

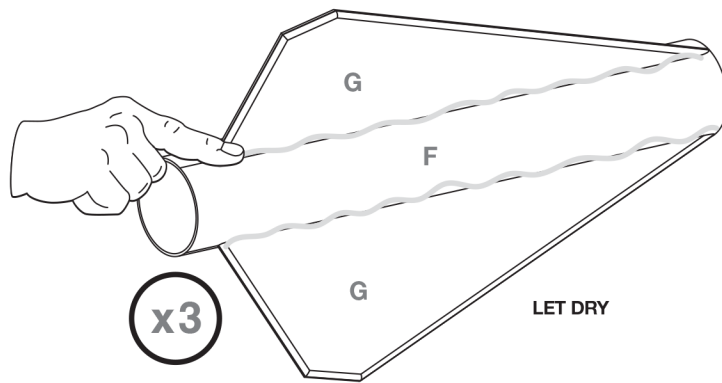
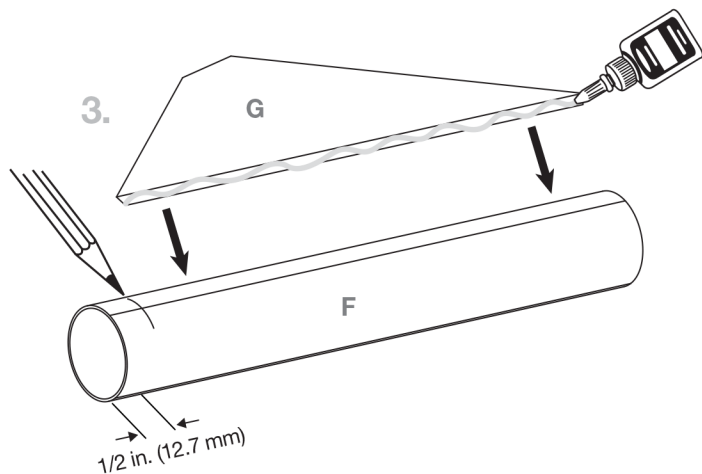
1. Carefully remove all G pieces with a hobby knife.



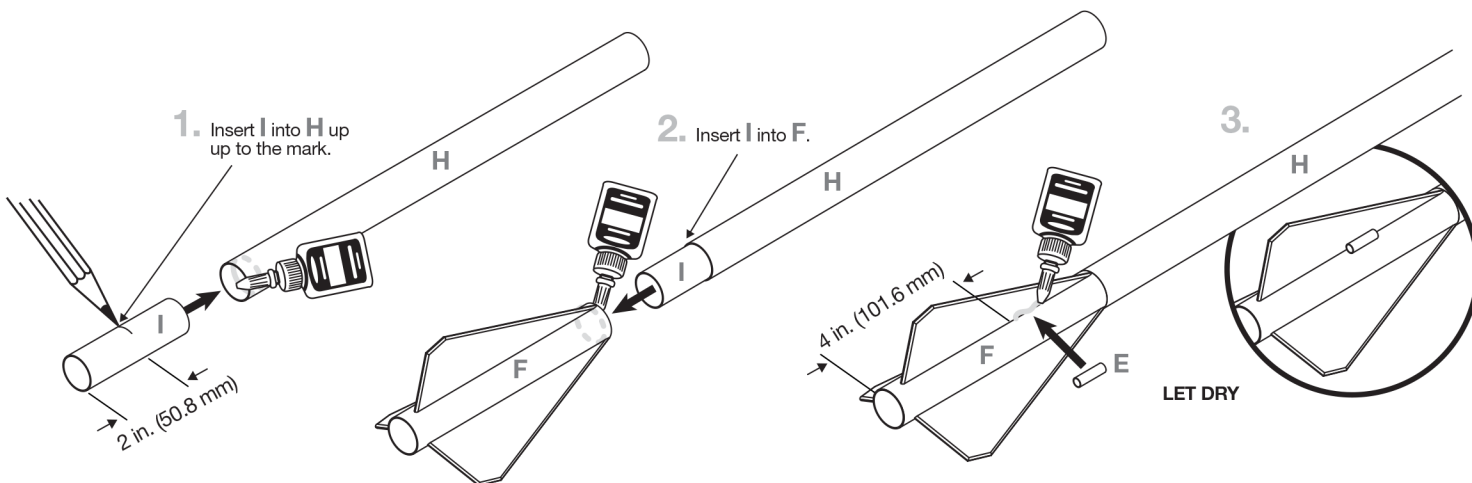
2. Round the leading edges of all G pieces.



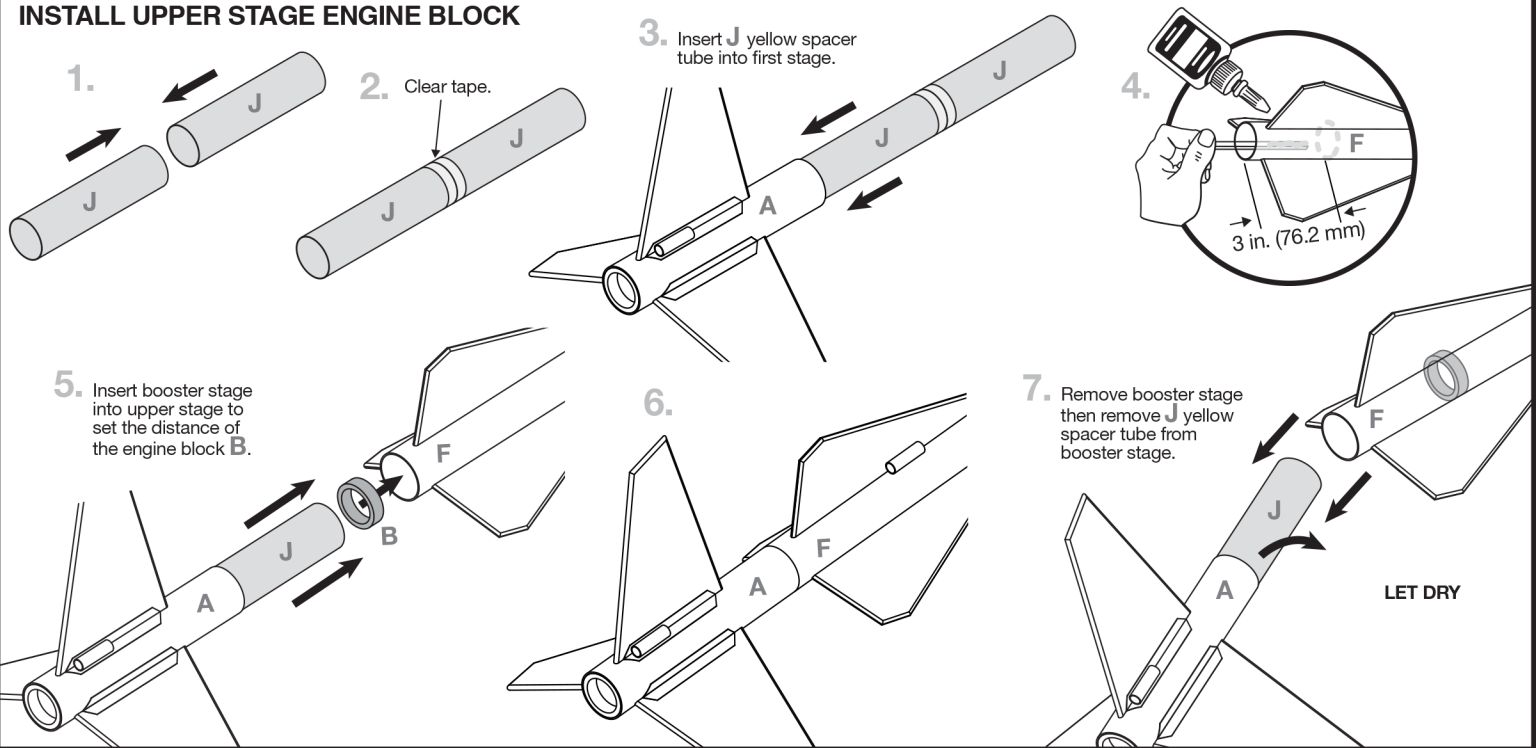
4. Apply several layers of glue fillets to the base of each fin and smooth out with your finger. Let each layer dry completely before applying next layer.



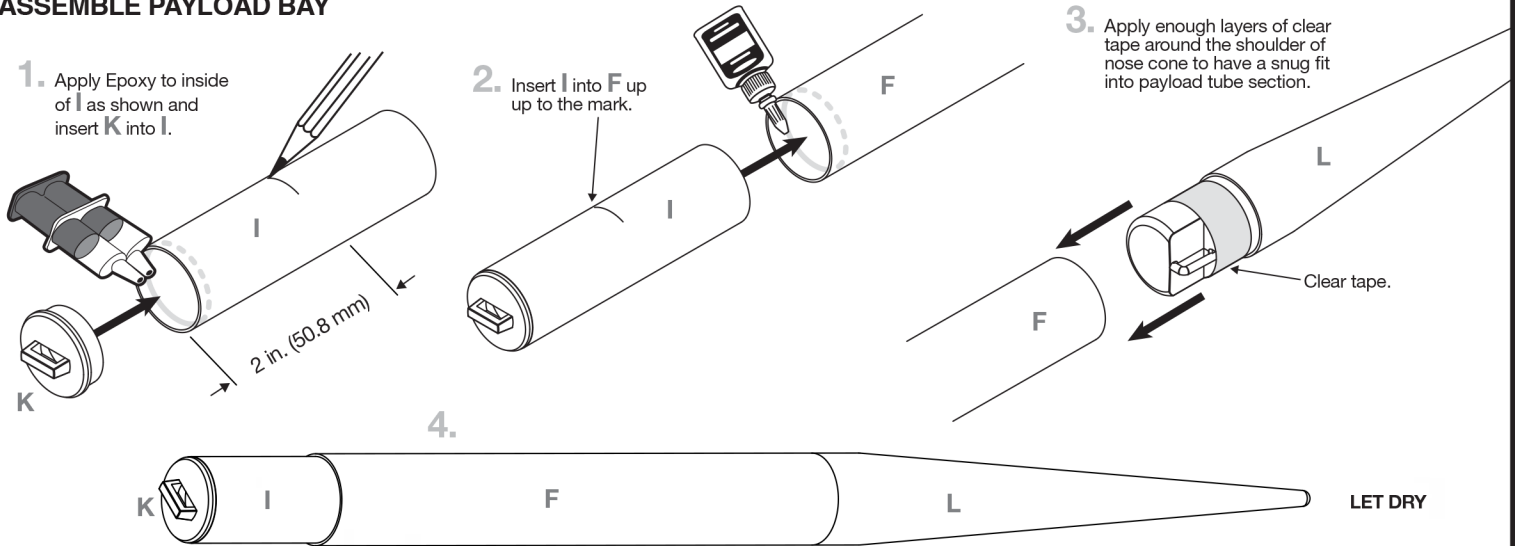
## COMPLETE UPPER STAGE BODY TUBE ASSEMBLY



## INSTALL UPPER STAGE ENGINE BLOCK

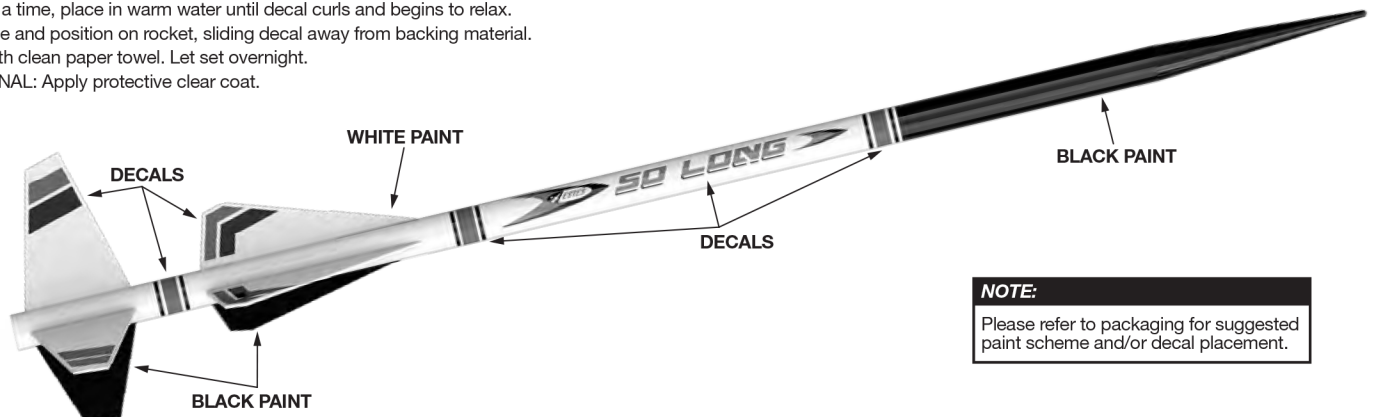


## ASSEMBLE PAYLOAD BAY



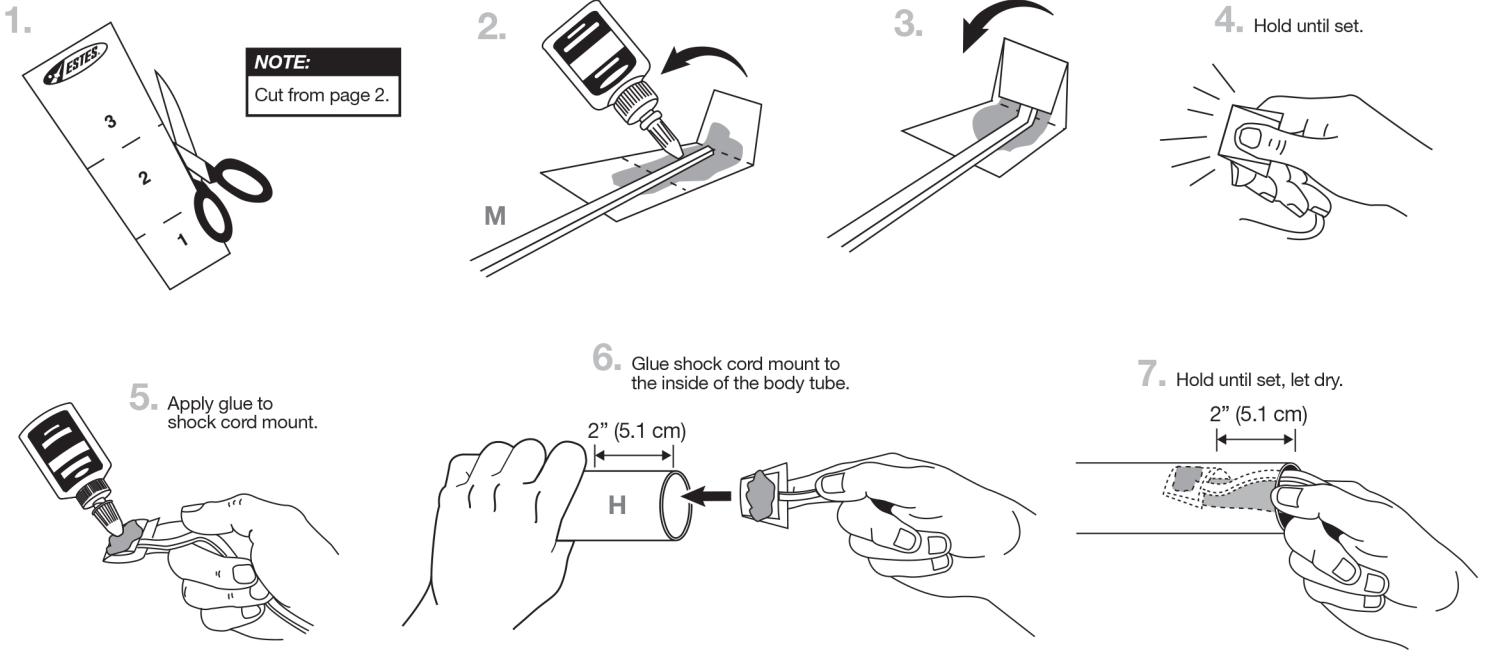
## ROCKET FINISHING

1. Spray rocket with white primer, let dry, and sand. Repeat until rocket is smooth.
2. Paint entire rocket white.
3. Mask off rocket except for one fin on the booster stage, one fin on the upper stage, and payload bay.
4. Paint fins and payload bay black. Apply decals only after paint is dry.
5. Cut decals from sheet, trimming close to edge.
6. One at a time, place in warm water until decal curls and begins to relax.
7. Remove and position on rocket, sliding decal away from backing material.
8. Blot with clean paper towel. Let set overnight.
9. OPTIONAL: Apply protective clear coat.

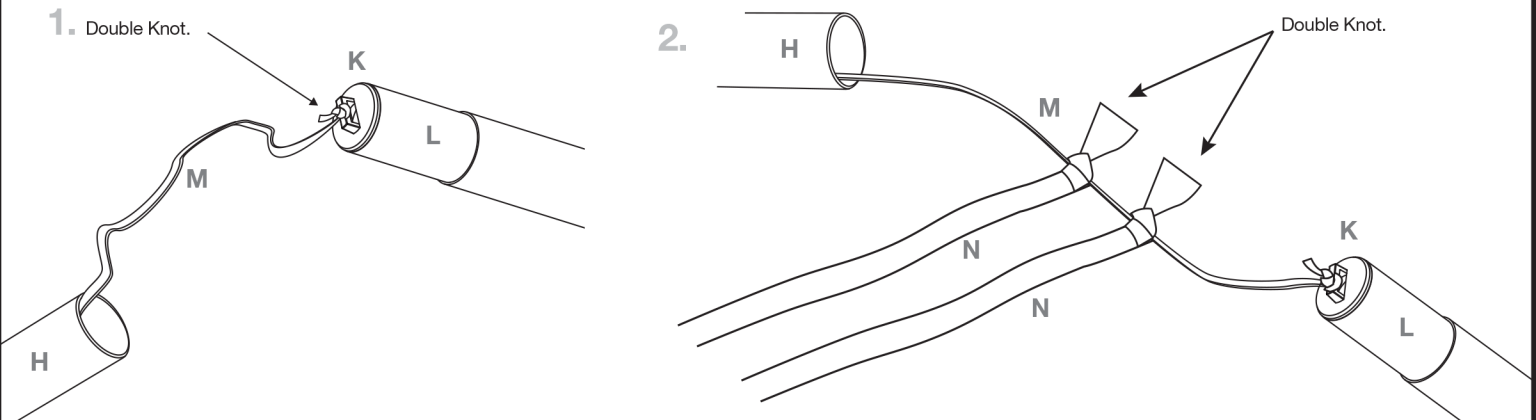


**NOTE:**  
Please refer to packaging for suggested paint scheme and/or decal placement.

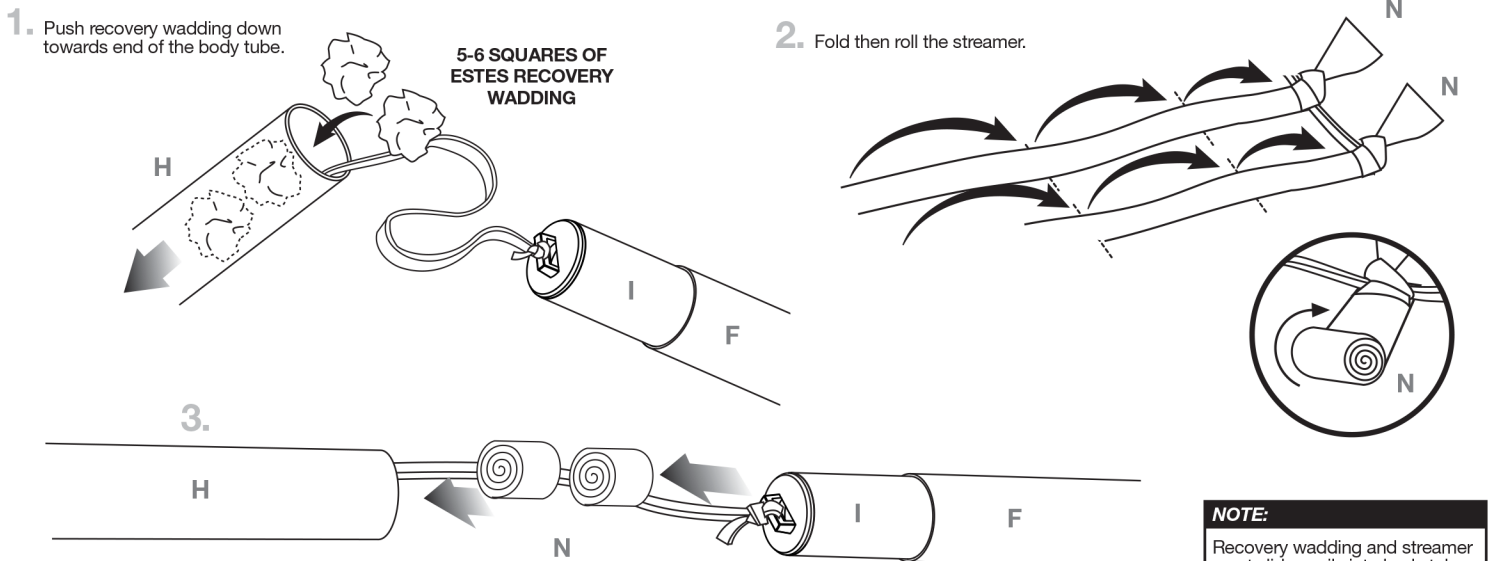
## ATTACH SHOCK CORD



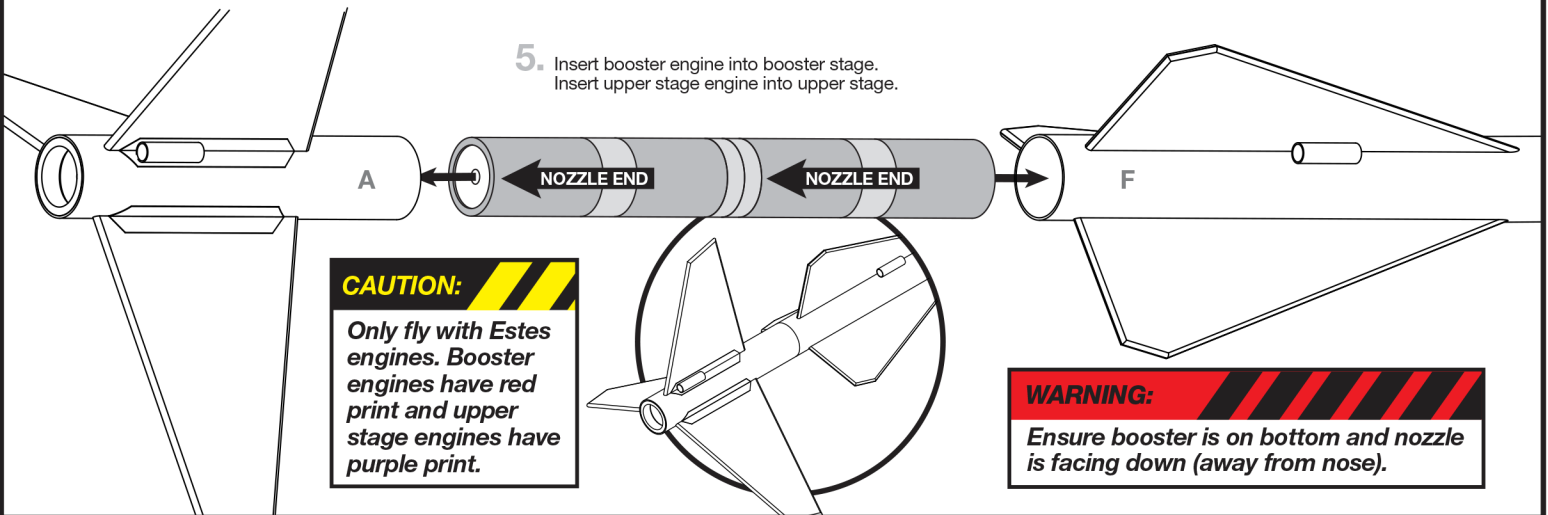
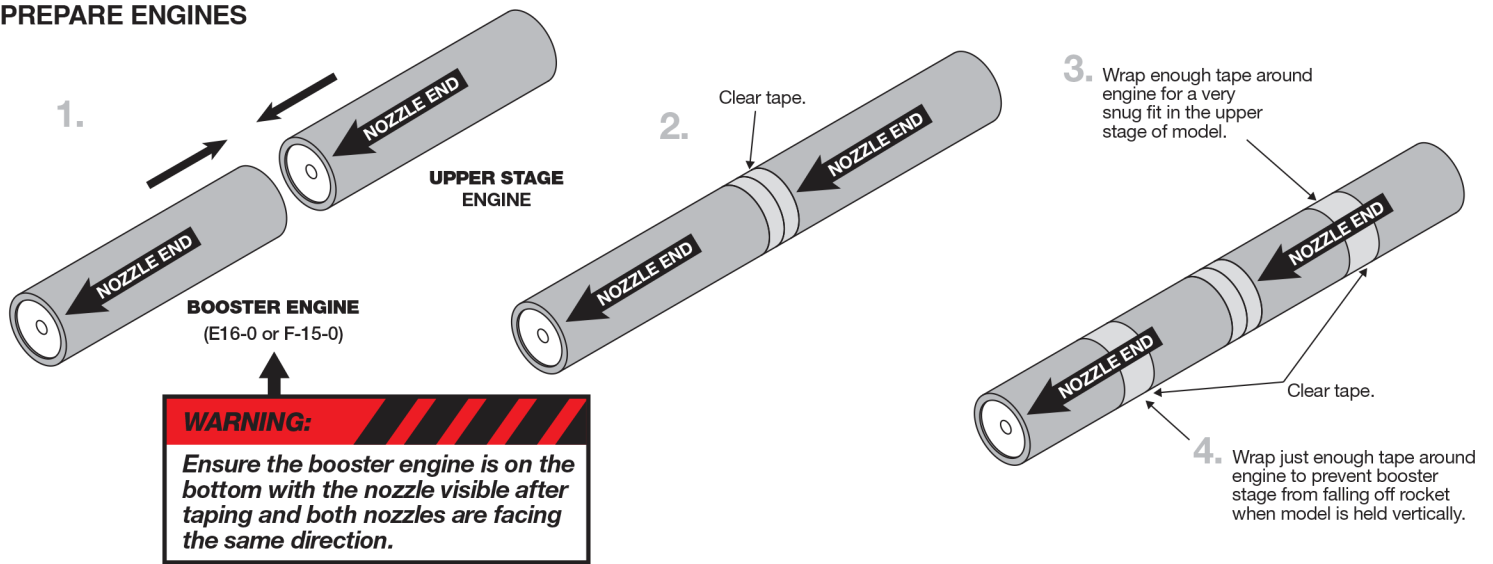
## ATTACH NOSE CONE AND DOUBLE STREAMERS



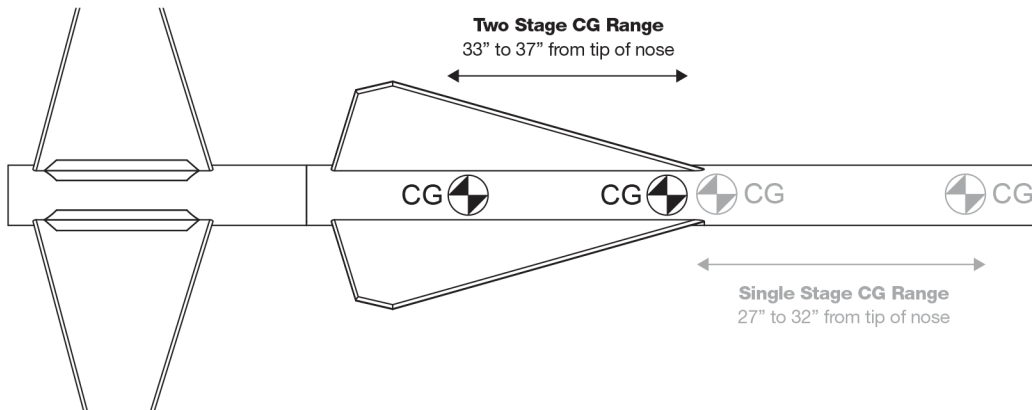
## PREPARE FLIGHT RECOVERY



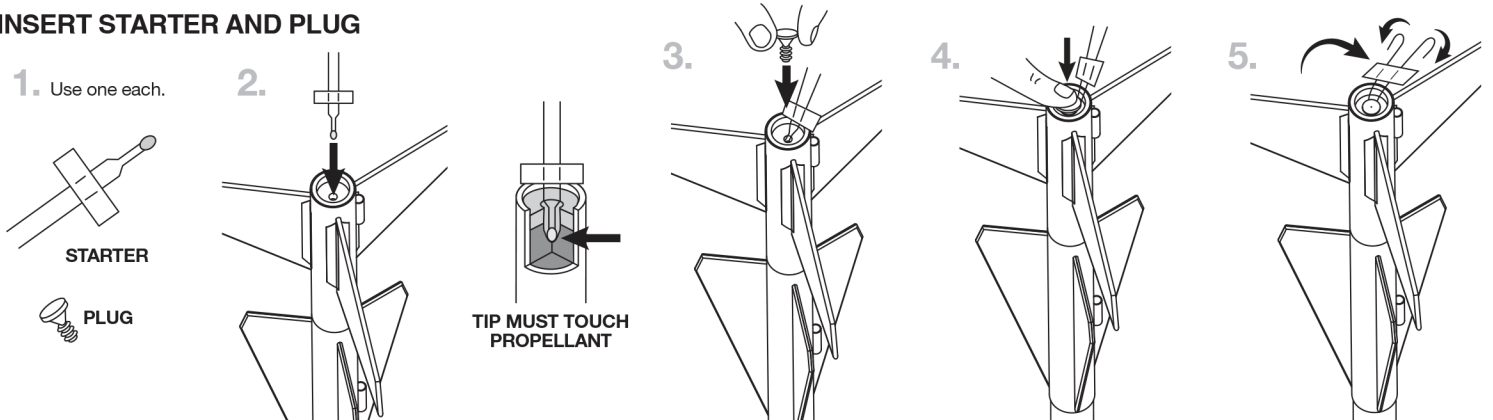
## PREPARE ENGINES



## CENTER OF GRAVITY DIAGRAM

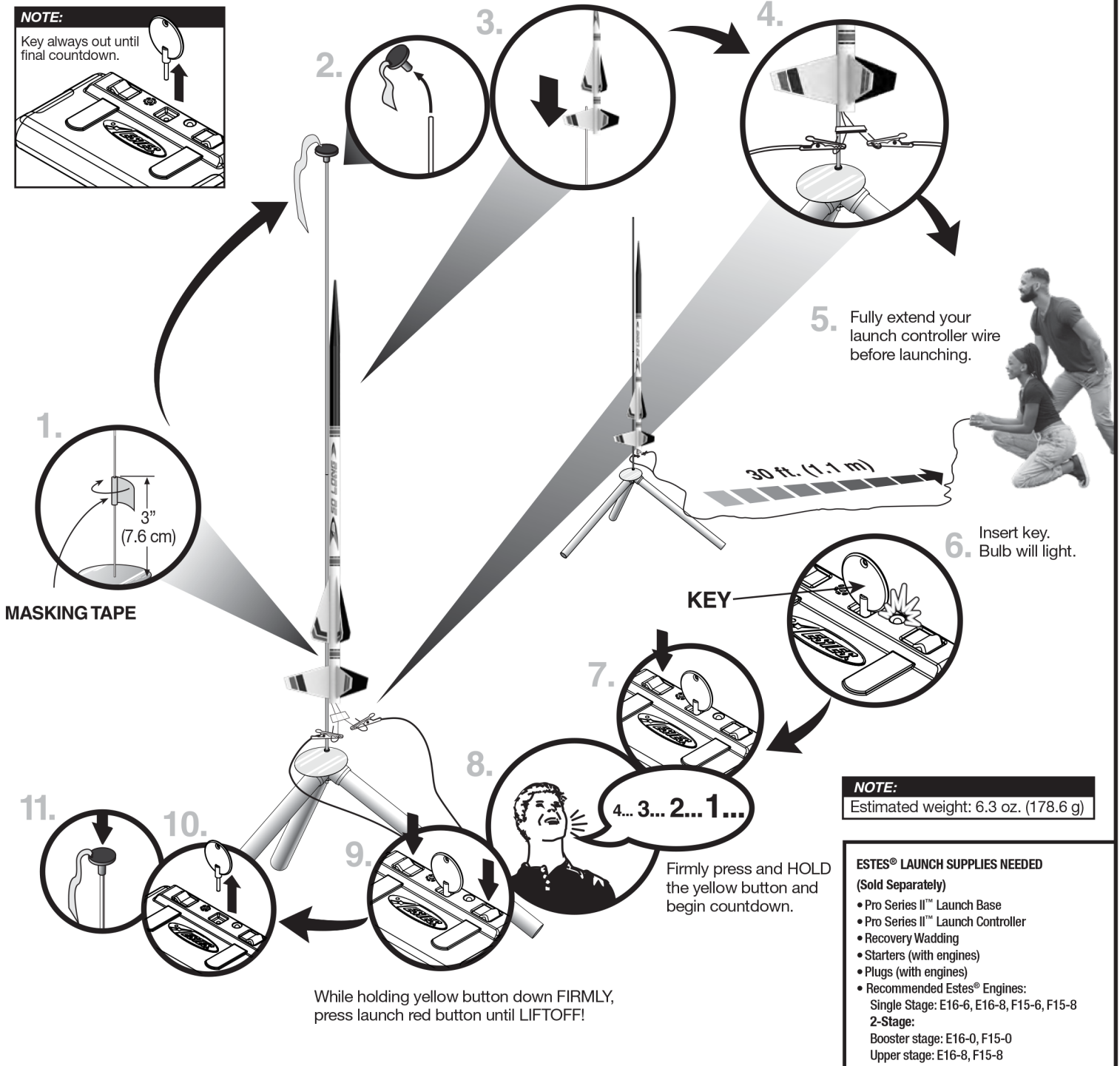
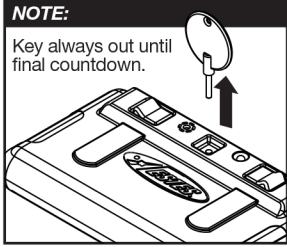


## INSERT STARTER AND PLUG





# COUNTDOWN AND LAUNCH



## PRECAUTIONS



NAR SAFETY CODE



NO DRY GRASS OR WEEDS

**PRE-LAUNCH CHECK** For safety, never launch a damaged rocket. Check the rocket's body, nose cone and fins. Also, check the engine mount, recovery system and launch lug(s). Repair any damage before launching the rocket.

**FLYING YOUR ROCKET** Choose a large field (1000 ft. [305 m] square) free of dry weeds and brown grass. The larger the launch area, the better your chance of recovering your rocket. Launch only with little or no wind and good visibility. Always follow the National Association of Rocketry (NAR) SAFETY CODE (enclosed).

**MISFIRES TAKE THE KEY OUT OF THE CONTROLLER. WAIT ONE MINUTE BEFORE GOING NEAR THE ROCKET.** Disconnect the micro-clips and remove the engine. Take the plug and starter out of the engine. A burned starter means the starter tip was not touching engine propellant. Install a new starter; be sure the tip is touching propellant inside the engine. Push the plug in place. Repeat steps under Countdown and Launch.

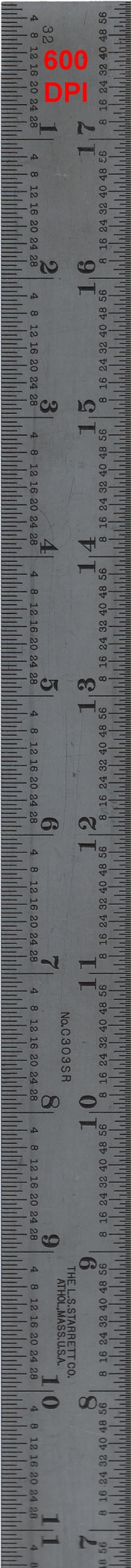


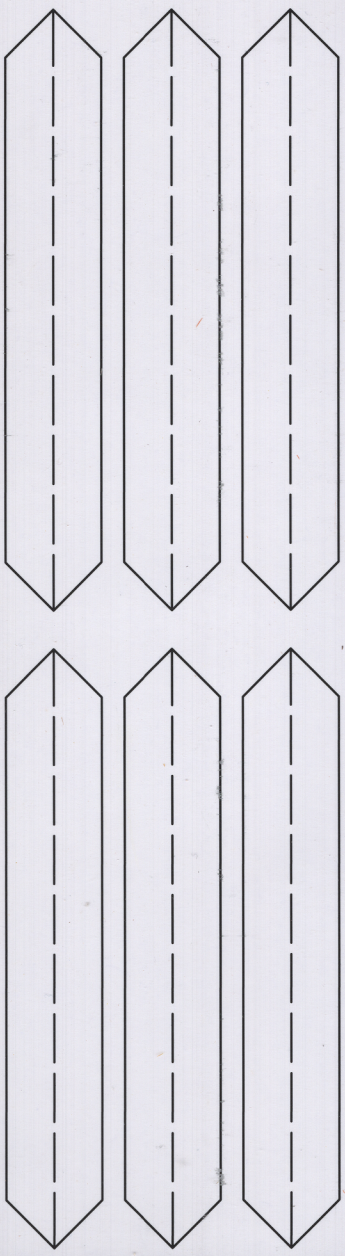
**1/8" Hard  
Balsa  
Make 3**

**600  
DPI**

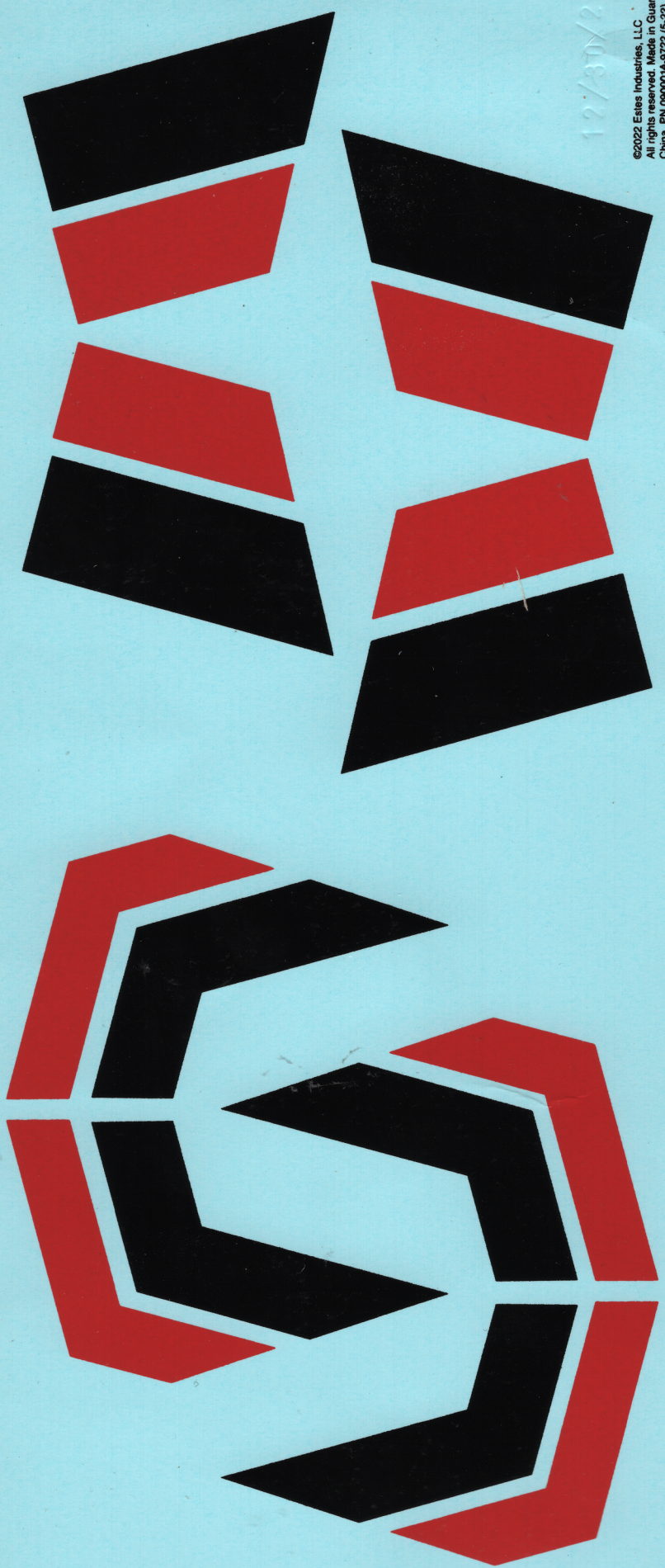
NO. C303SR

THE U.S. STARETT CO.  
ATHOL, MASS., U.S.A.



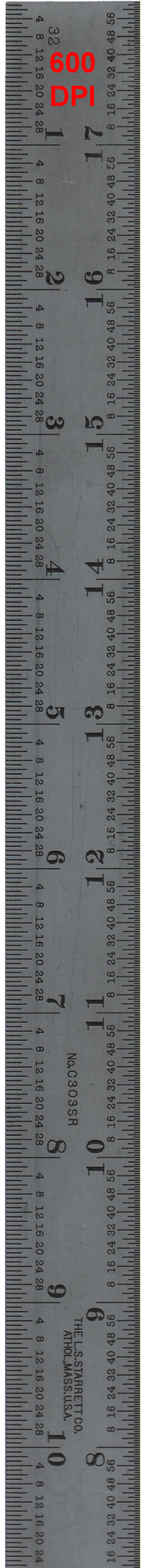


32  
609  
DPI



12/31/22

©2022 Estes Industries, LLC  
All rights reserved. Made in Guangdong,  
China. PN 080001A-9722 (5-22)



600  
DPI

No.0303SR

THE L.S. STARRETT CO.  
ATHOL, MASS., U.S.A.

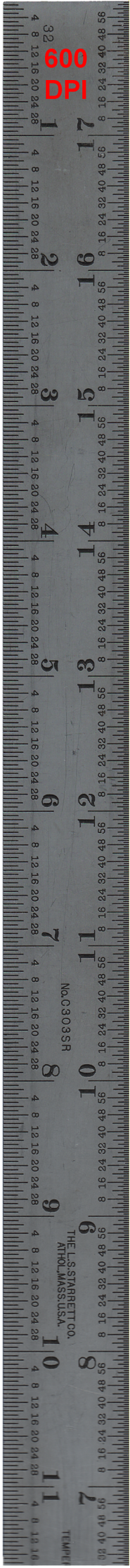


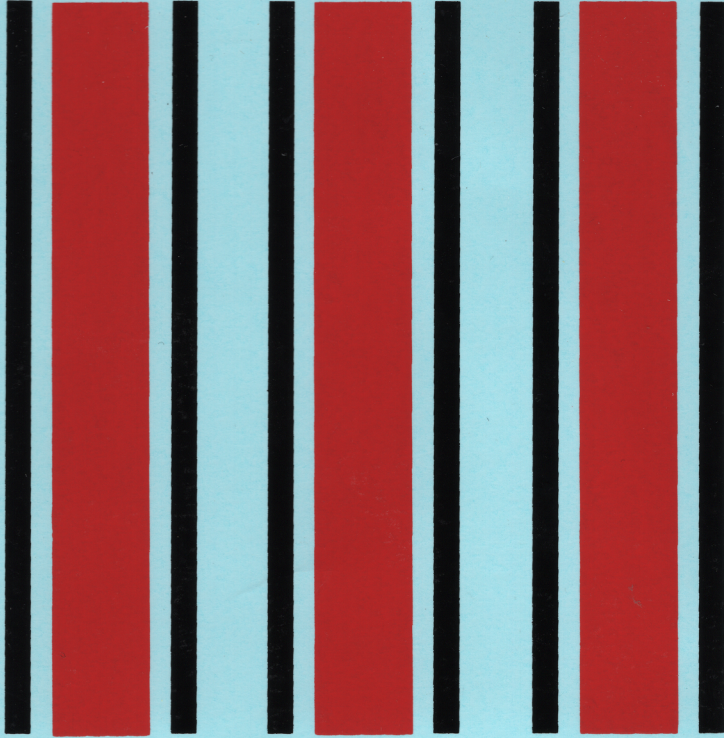
**500 LONES**



12/30/22

©2022 Estes Industries, LLC  
All rights reserved. Made in Guangdong,  
China. PN 090001B-9722 (5-22)





32  
4 8 12 16 20 24 28  
1

600  
DPI

4 8 12 16 20 24 28  
2

4 8 12 16 20 24 28  
3

4 8 12 16 20 24 28  
4

32  
4 8 12 16 20 24 28 32 40 48 56  
17

4 8 12 16 20 24 28 32 40 48 56  
16

4 8 12 16 20 24 28 32 40 48 56  
15

4 8 12 16 20 24 28 32 40 48 56  
14

4 8 12 16 20 24 28 32 40 48 56  
1



ESTES

65<sup>th</sup>

Anniversary

EST. 1958

Summer '23

PARTS LIST KIT NO. 9722 - So Long								
Quantity	Description	Type	Number	Detail1	Detail2	Detail3	Detail4	Comment
1	Heavy Body Tube	N/A	31148	6" long	1.14" ID	1.22" OD	0.04" wall	White
2	Green ring	N/A	31361	0.32" long	0.84" OD	1.12" OD	0.14" wall	Green
3	Lasercut balsa	N/A	090051-9722	12" long	4" wide	1/8" thick	Hard Balsa	Scan
1	Printed index stock	N/A	090057-9722	7" long	2" wide	67 lb	Index Stock	Scan
2	Launch Lug	N/A	38181	1" long	0.26" ID	0.32" OD	0.03" wall	White
2	Heavy Body Tube	N/A	31360	8" long	1.14" ID	1.22" OD	0.04" wall	White
1	Heavy Body Tube	N/A	31963	16.25" long	1.14" ID	1.22" OD	0.04" wall	White
2	Tube Coupler	N/A	31149	4" long	1.08" ID	1.12" OD	0.02" wall	White
2	SPACER TUBE (29 mm)	N/A	31150	4.5" long	1.12" OD	1.10" ID	0.01" wall	Yellow
1	Coupler pin	N/A	71096	0.35" long	1.12" OD	0.1" lip	0.25" shoulder	Fits inside Coupler
1	Nose cone	N/A	71095	8" long	1.22" OD	1.12" base OD	1 3/8" base length	0.75" to transistion
1	Shock Cord	SC-2(50)	38363	50" long	1/4" wide			Rubber
2	Streamer	N/A	85697	36" long	2" wide	Flo. Orange	Nylon	
1	Waterslide Decal	N/A	090001A-9722	15" long	4.5" wide	Red, Blk	Waterslide	Scan
1	Waterslide Decal	N/A	090001B-9722	12" long	1.5" wide	Red, Blk	Waterslide	Scan









PRO SERIES II™

# SO LONG™

— FLYING MODEL ROCKET KIT —

SOARS UP TO  
**3600 ft**  
**1097 m**  
 On F15-0 & F15-8  
 Other engines you  
 can use:

Rocket Only: E16-6, E16-8, F15-6, F15-8  
 TWO STAGE:  
 Rocket: E16-8, F15-8  
 Booster: E16-0, F-15-0

**HIGHEST FLYING  
 ESTES MODEL ROCKET  
 EVER!!!**



**IMPORTANT LAUNCH INFORMATION:**  
 In order to launch your Pro Series II rocket, you will need a launch controller with 30 feet of wire, such as our 2230 Estes Launch Controller. In addition to the launch controller, you will need a sturdy launch pad with a 1/4" (6.4 mm) launch rod, or you can purchase our 3552 Estes Pro Series II Launch Pad.

Length:	46.2 in. 118 cm
Diameter:	1.21 in. 31 mm
Recovery:	Streamer

EstesRockets.com

12/30/22  
**EST9722**  
  
 0 47776 09722 3

PN 90002-9722 (12-22)  
 © 2022 Estes Industries, LLC.  
 All Rights Reserved.

AGES  
**18+**

## QTY: 1

BEGINNER INTERMEDIATE **ADVANCED** EXPERT MASTER