



EstesRockets.com

QCC EXPLORER™

3221

AGES
10+



Skill Level

EXPERT

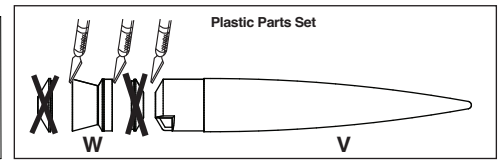
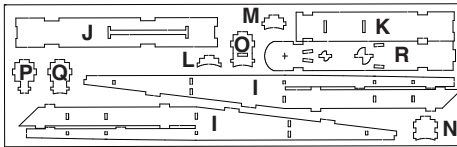
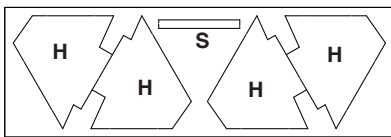
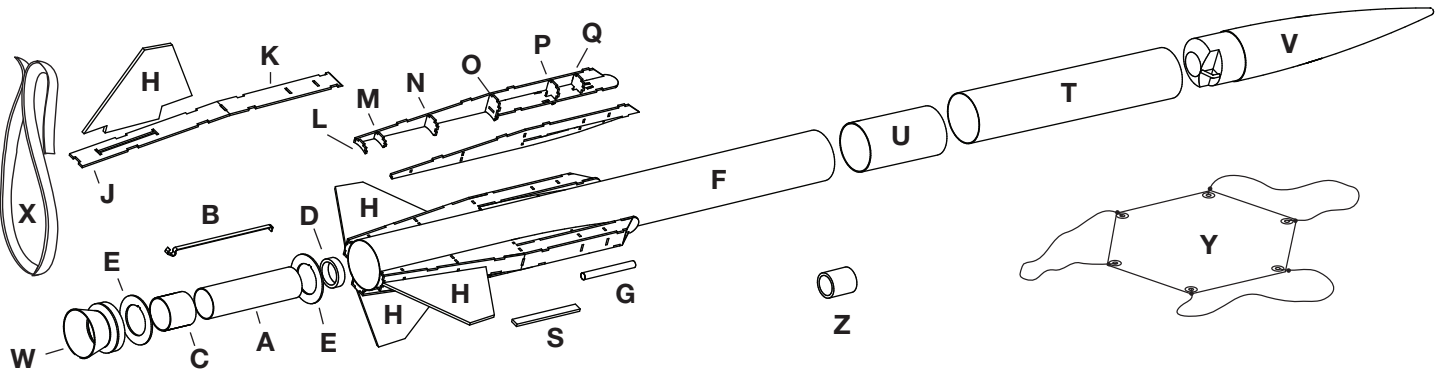
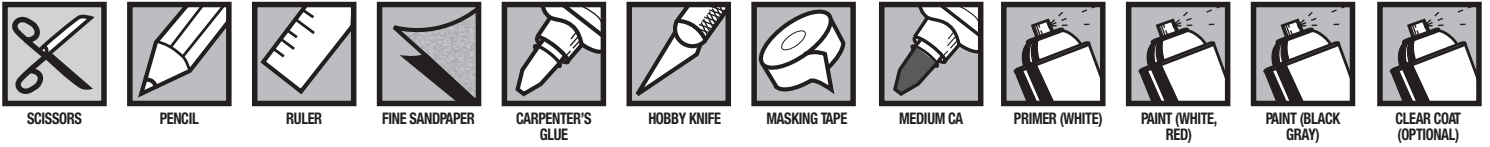
MODEL ROCKET INSTRUCTIONS

KEEP FOR FUTURE REFERENCE

IMPORTANT: Please record date found on decal and keep for future reference. _____

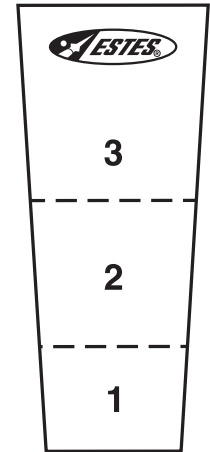
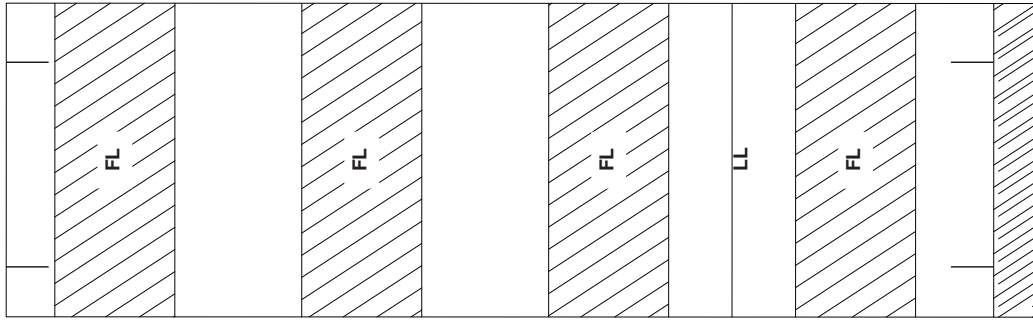
READ ALL INSTRUCTIONS. Make sure you have all parts and supplies. Test fit all parts before applying glue. Refer to your glue manufacturer's dry times during build.

SUPPLIES



Part	Qty	Description	Part Number
A	1	Engine Tube	031320
B	1	Engine Hook	035022
C	1	Engine Hook Retainer	030160
D	1	Engine Block	030164-2
E	2	Laser Cut Centering Ring Set	030119
F	1	18" (45.7 cm) Body Tube	030396
G	1	Launch Lug	038166
H	4	Laser Cut Balsa Fins	066359
		Laser Cut Balsa Sheet Includes:	066358
I-R	4	Laser Cut Balsa	
S	1	Fin Spacer Tool	
T	1	Upper Body Tube	030487
U	1	Red Tube Coupler	031777
		Plastic Parts Set	072665
V	1	Nose Cone	
W	1	Tail Cone	
X	1	Shock Cord	038363
Y	1	Parachute	035802
Z	1	Orange E to D Engine Spacer	035005
	1	Waterslide Decal (not shown)	066360

TUBE MARKING GUIDE & SHOCK CORD MOUNT

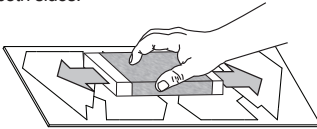


NOTE:

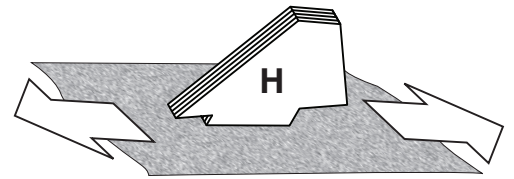
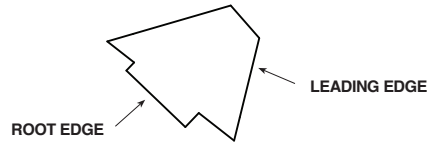
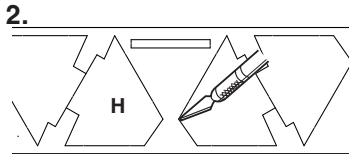
Make a copy if you want to keep instructions.

PREPARE FINS

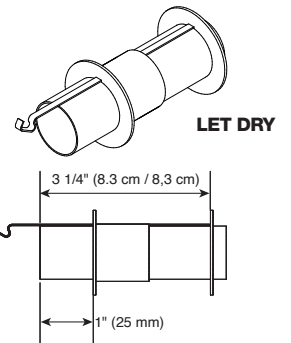
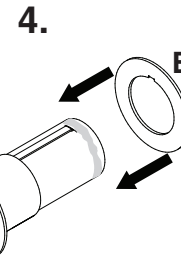
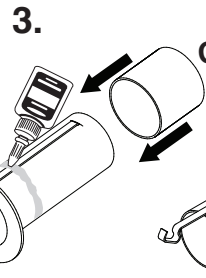
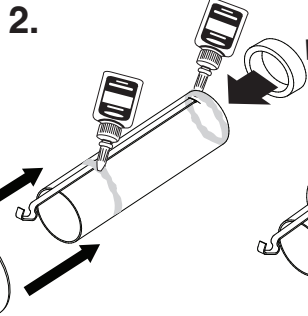
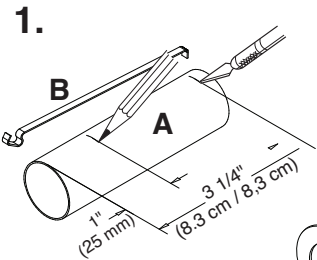
1. Sand both sides.



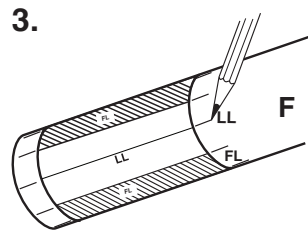
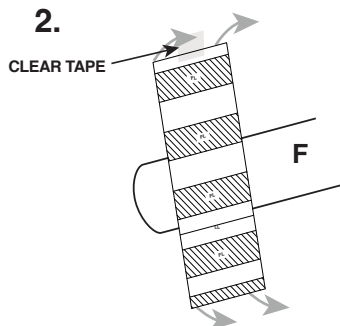
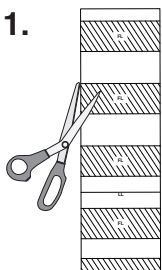
3. Sand edges smooth. Round leading edges. DO NOT round root edges.



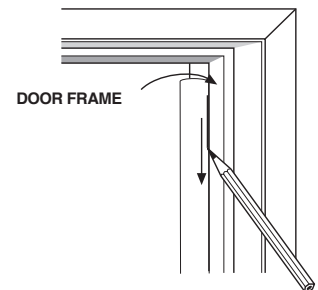
ASSEMBLE ENGINE MOUNT



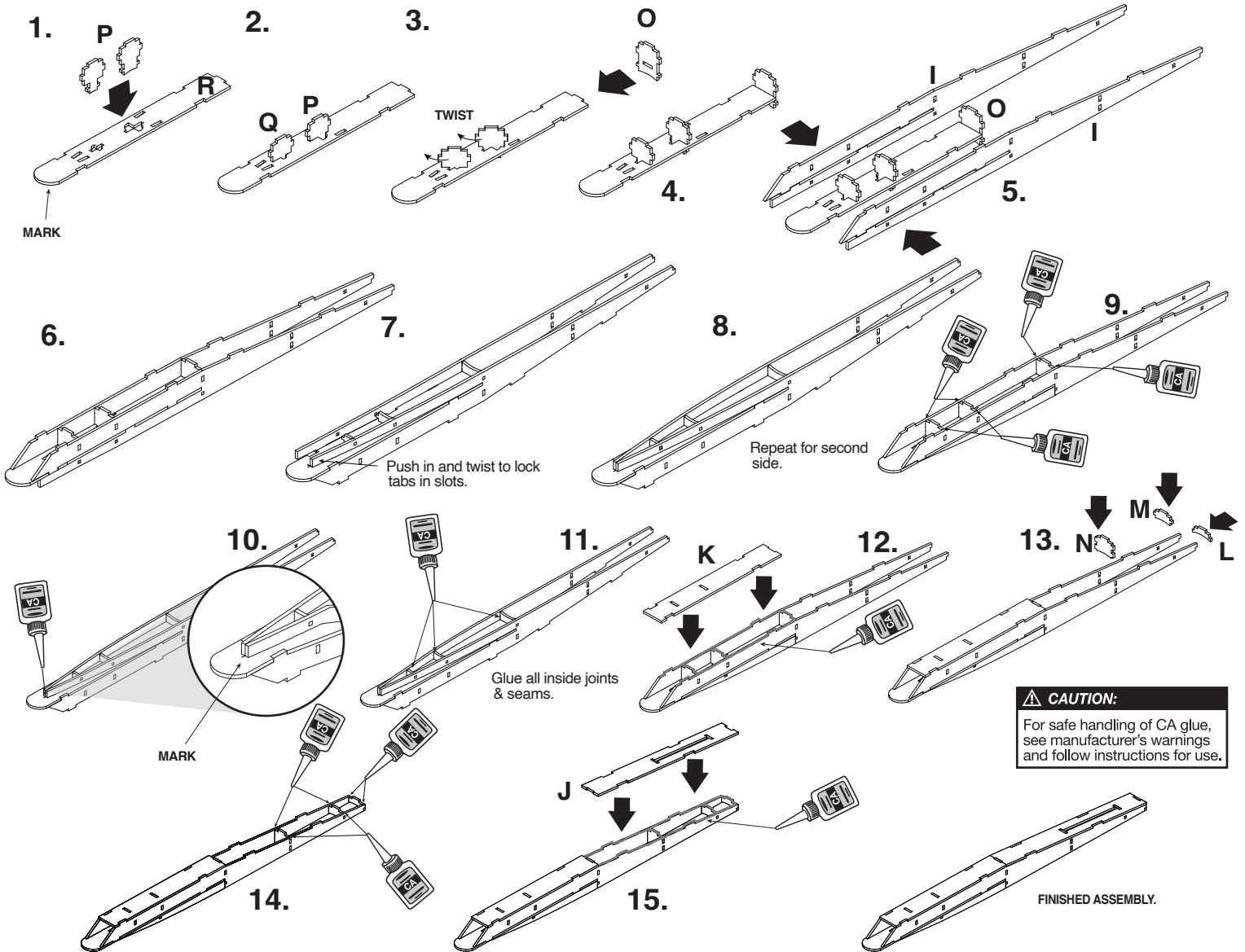
MARK TUBE



4. Remove guide. Use a door frame to extend all lines.

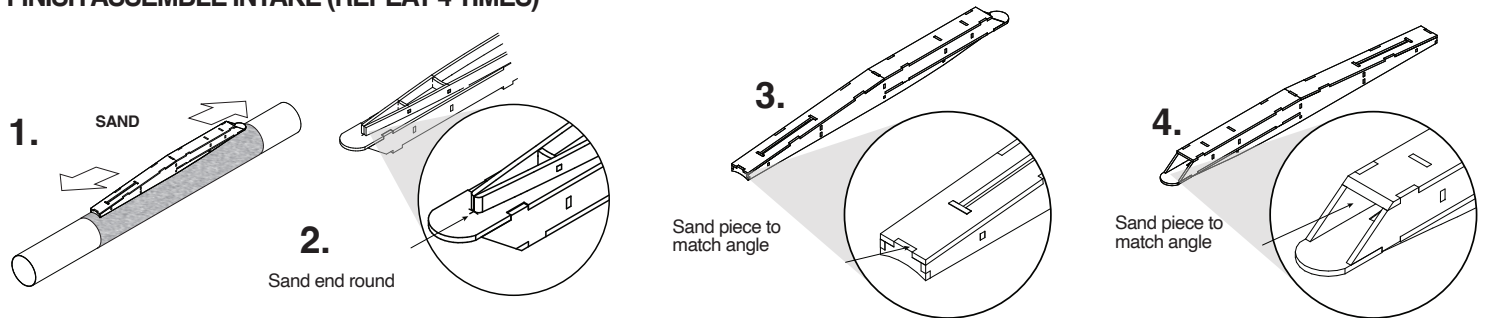


ASSEMBLE INTAKE (REPEAT 4 TIMES)

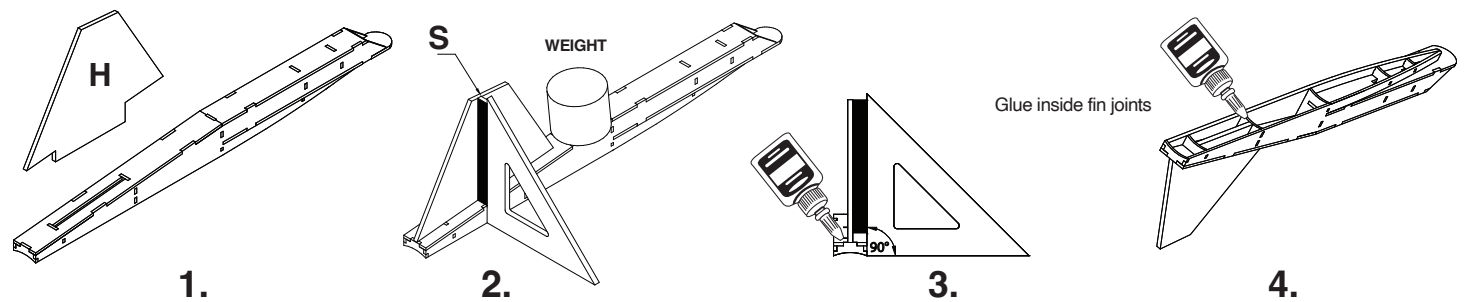


CAUTION:
For safe handling of CA glue, see manufacturer's warnings and follow instructions for use.

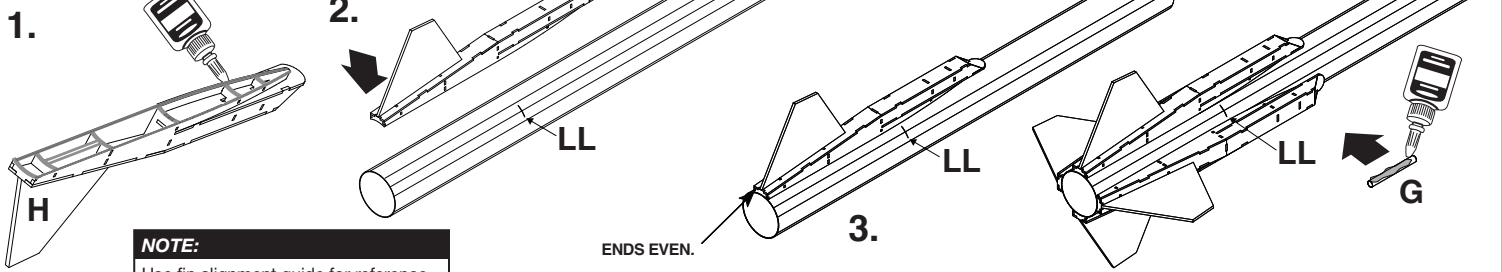
FINISH ASSEMBLE INTAKE (REPEAT 4 TIMES)



ASSEMBLY FINS (REPEAT 4 TIMES)

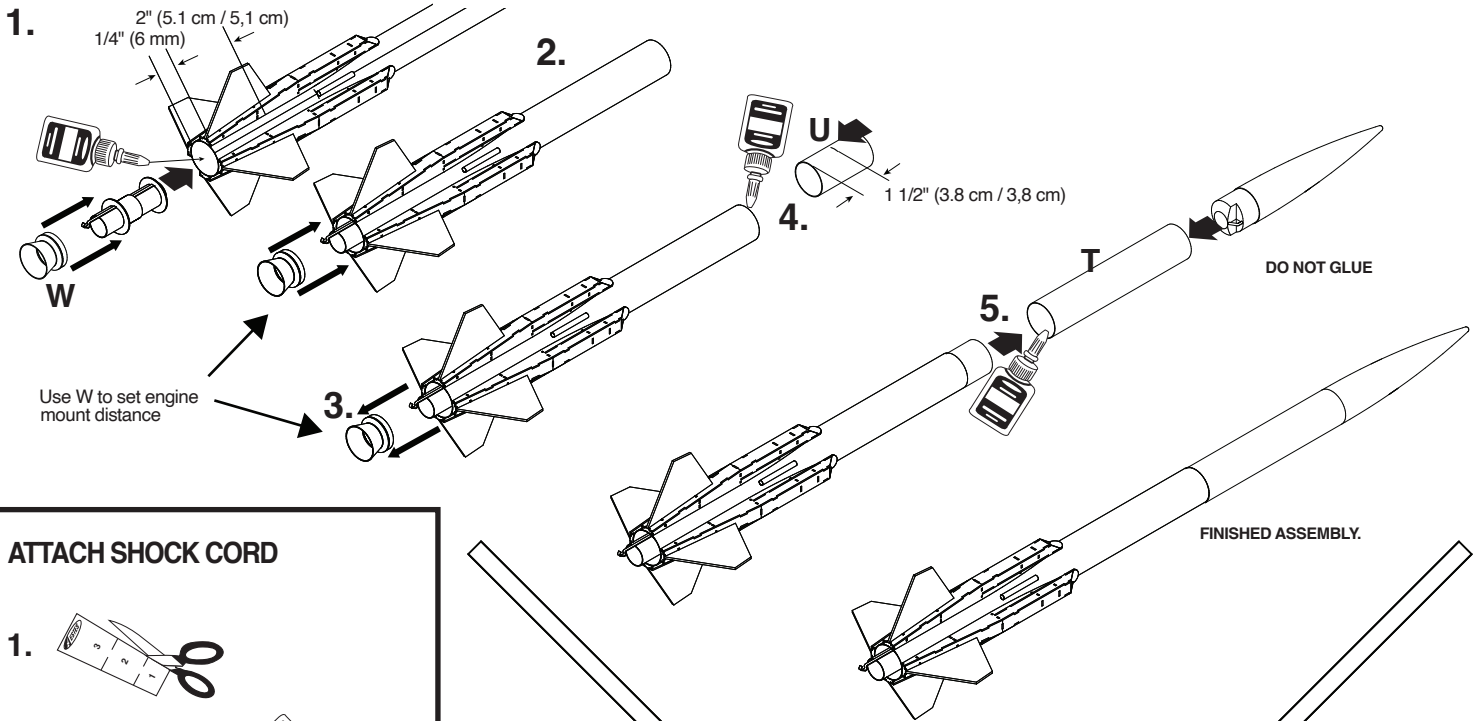


ATTACH INTAKE (REPEAT 4 TIMES)

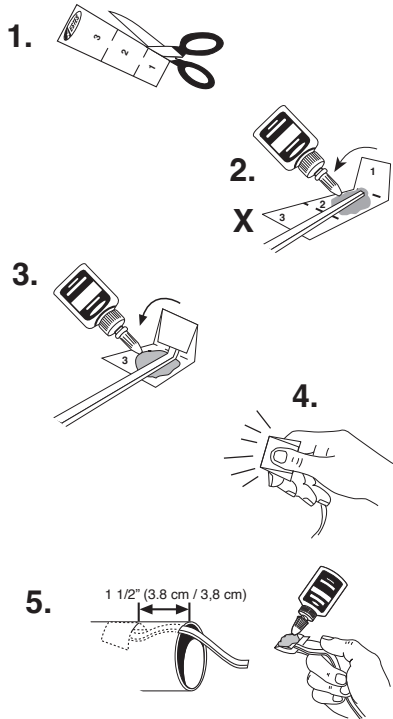


NOTE:
Use fin alignment guide for reference.

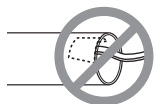
FIN ASSEMBLY



ATTACH SHOCK CORD



Hold until glue sets. Let dry.



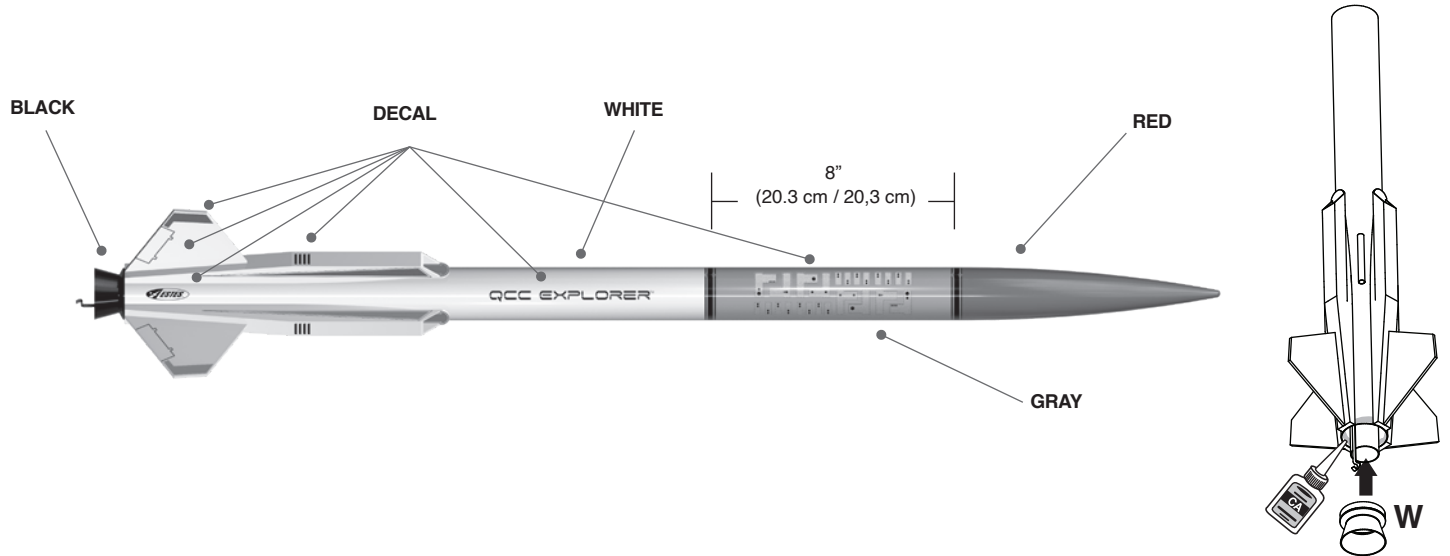
ROCKET FINISHING

Spray rocket with white primer, let dry & sand. Repeat until rocket is smooth, then paint. Apply decals after paint is dry. OPTIONAL: Clear coat entire rocket when paint dries.

1. Cut decals from sheet, trimming close to edge.
2. One at a time, place in warm water until decal curls and begins to relax.
3. Remove and position on rocket, sliding decal away from backing material.
4. Blot with clean paper towel. Let set overnight.

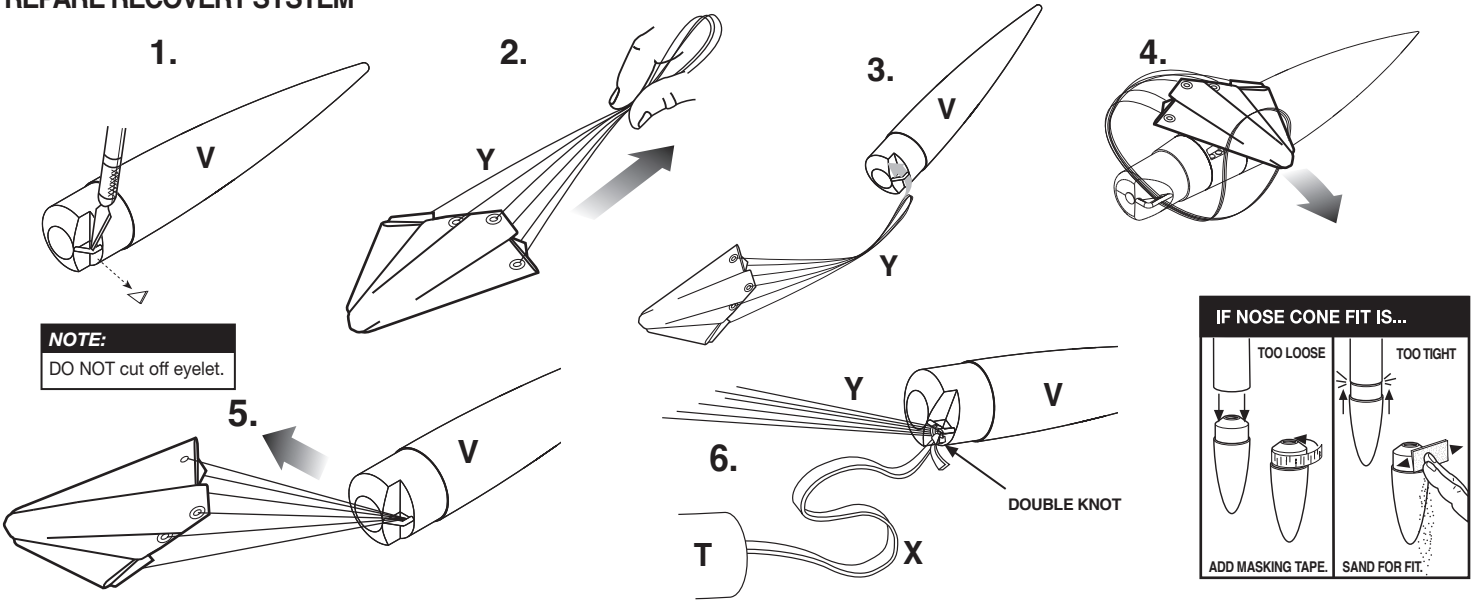
CAUTION:

See manufacturer's warnings and instructions before using spray finishing products.

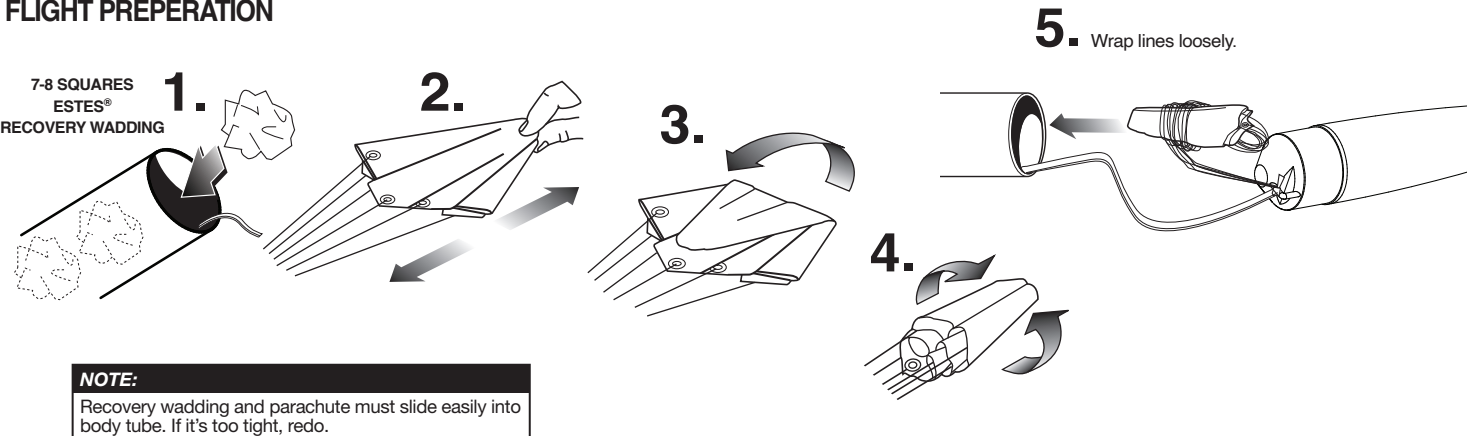


Please refer to packaging image for suggested paint scheme.

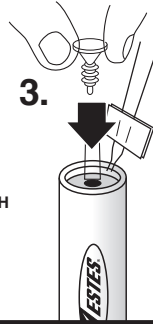
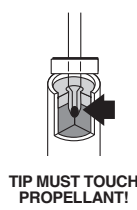
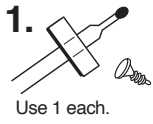
PREPARE RECOVERY SYSTEM



FLIGHT PREPERATION



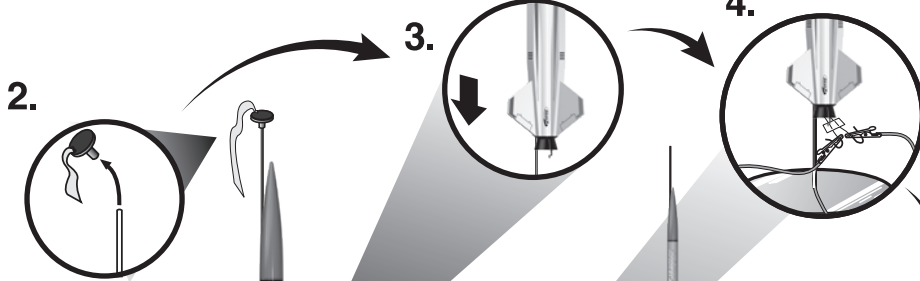
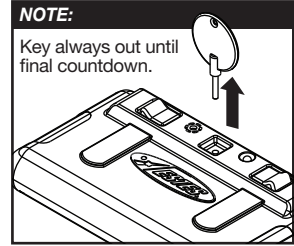
PREPARE ENGINE



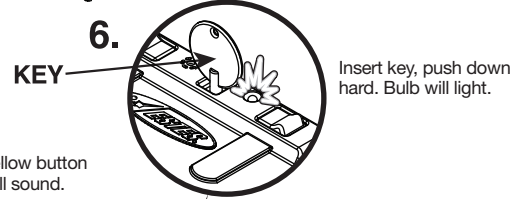
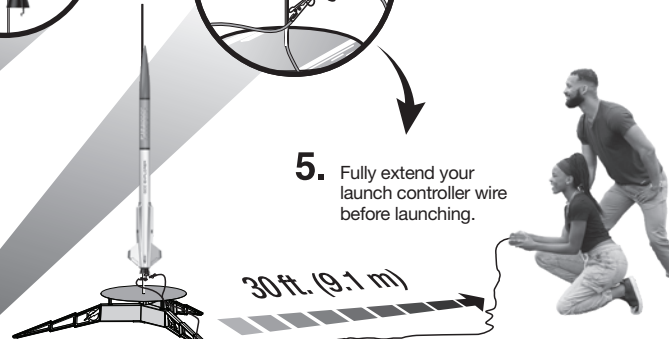
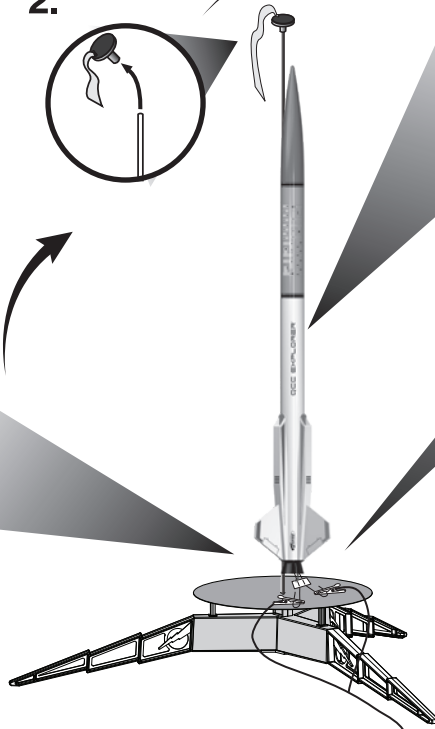
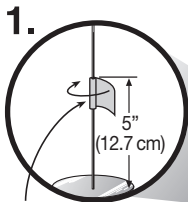
NOTE:
If you are using a D engine, insert the orange spacer, then the engine

WARNING: FLAMMABLE
To avoid serious injury, read instructions & NAR Safety Code included with engines. **PREPARE YOUR ENGINE ONLY WHEN YOU ARE OUTSIDE AT THE LAUNCH SITE PREPARING TO LAUNCH.** If you do not use your prepared engine, remove the starter before storing your engine.

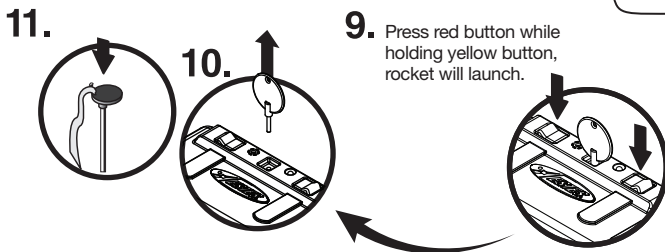
COUNTDOWN & LAUNCH



NOTE:
E engines require E Launch Controller or Pro Series II Launch Controller.



NOTE:
Estimated weight: 5 oz. (142 g)



- ESTES® LAUNCH SUPPLIES NEEDED (Sold Separately)**
- Porta-Pad® E Launch Pad
 - Requires 3/16 in. (5mm) Maxi™ Rod*
 - E Launch Controller or Pro Series II Launch Controller
 - Recovery Wadding
 - Starters (with engines)
 - Plugs (with engines)
 - Estes® Engines: C11-3 (first flight), D12-5, E12-4*, E12-6*

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.

