



www.estesrockets.com

FLYING MODEL

# ROCKET™

SKILL LEVEL 2

## POLARIS™

- FLIES TO 700 FT. (213 M)!
- HUGE ATTACK MISSILE!
- ONE ROCKET - MANY DESIGNS

**GO WILD!**

DESIGN YOUR OWN  
WILD LOOK  
AS SHOWN!



**WIN**  
Rocket Stuff!  
Details Inside

Length: 18.75 in. (47.6 cm)  
Diameter: 1.33 in. (33.8 mm)  
Weight: 3.0 oz. (85.4 g)  
Recovery: 12 in. (30 cm)  
Parachute

Recommended Engines:  
A8-3, B4-4, B6-4  
(First Flight), C6-5

Assembly required.  
Glue, finishing supplies and  
launch supplies - not included.

1 MODÈLE RÉDUIT.  
PEINTURE ET COLLE  
NON COMPRIS.

ESTES INDUSTRIES  
1295 H Street  
Penrose, CO 81240

MADE IN CHINA

EST 2174



Official Rockets of  
U.S. Space Camp®  
800-63-SPACE



# POLARIS™

www.estesrockets.com

FLYING MODEL ROCKET KIT EST 2174  
INSTRUCTIONS

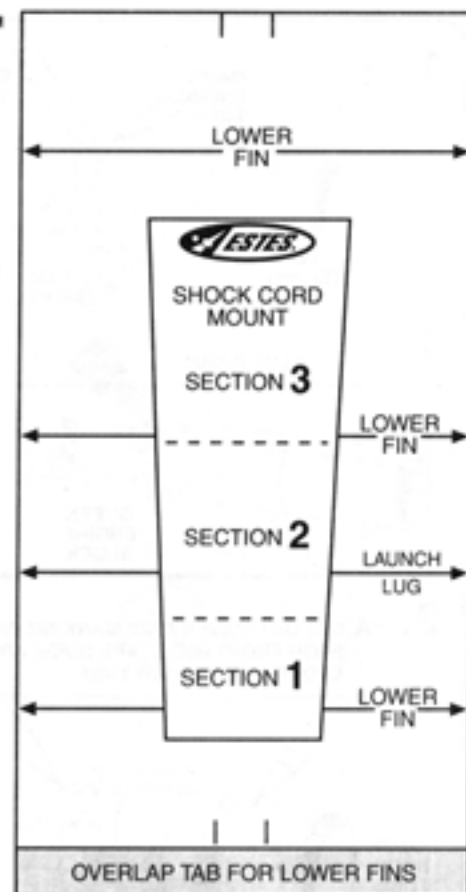
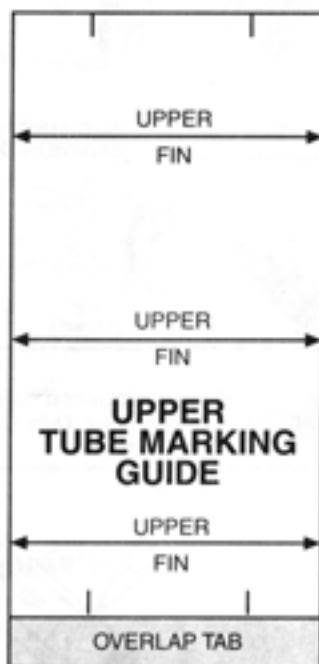
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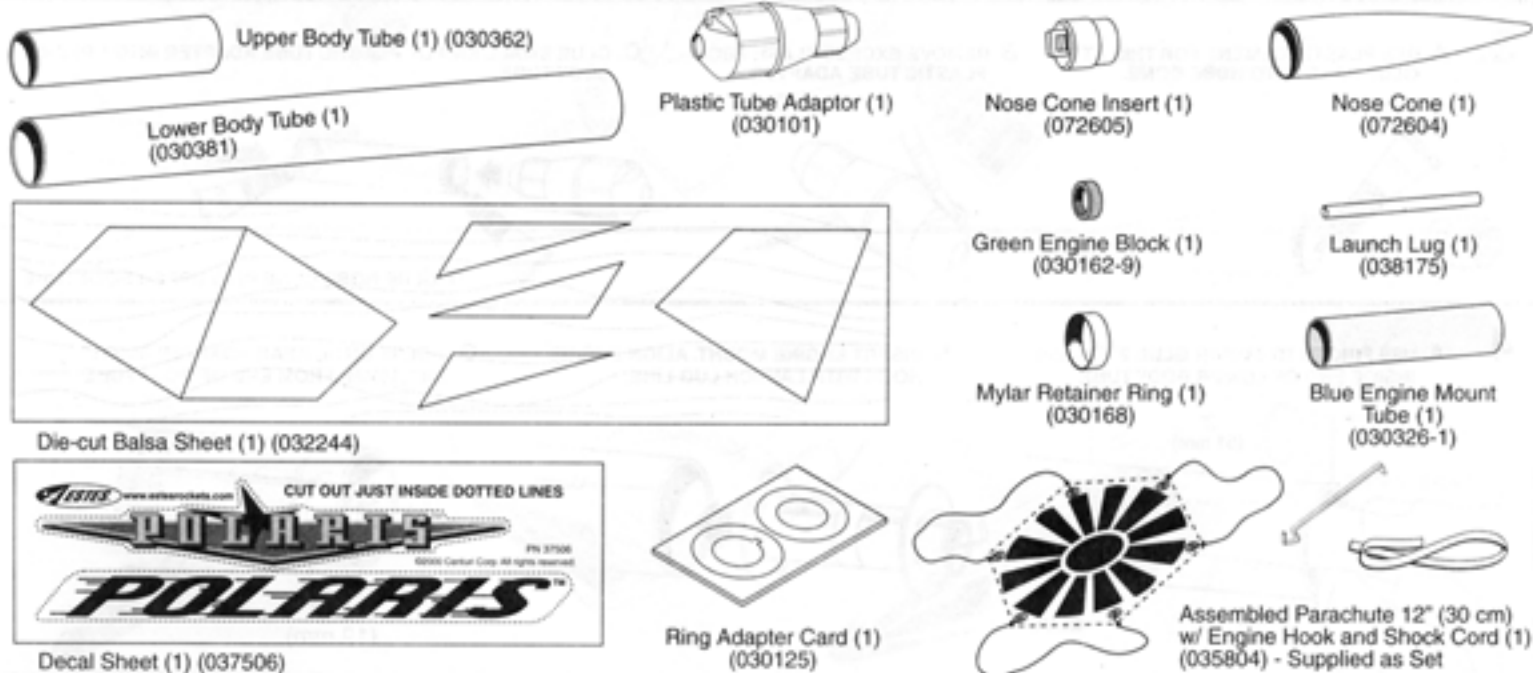
## ASSEMBLY TIP

Read all instructions before beginning work on your model. Make sure you have all parts and supplies.  
**TEST-FIT ALL PARTS TOGETHER BEFORE APPLYING ANY GLUE.** If any parts don't fit properly, sand as required for precision assembly.



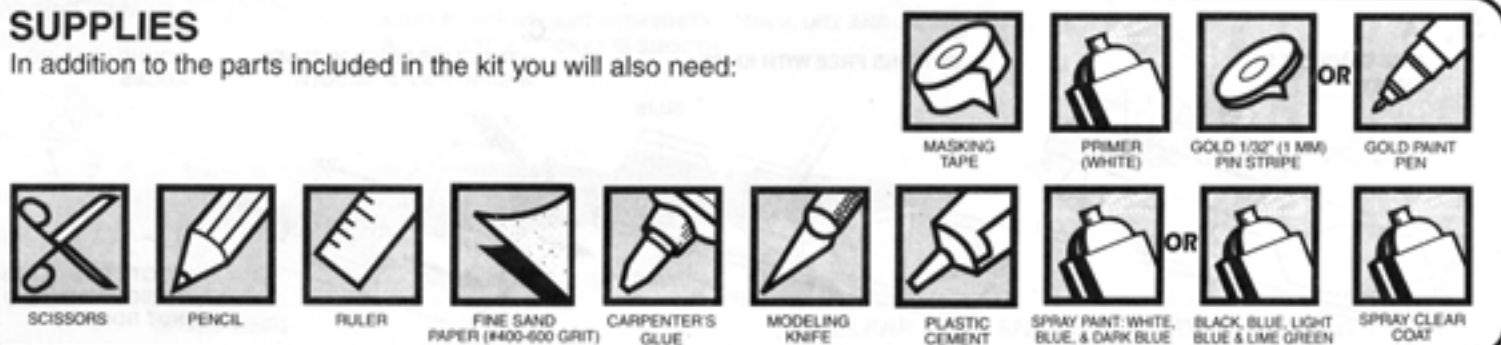
## PARTS

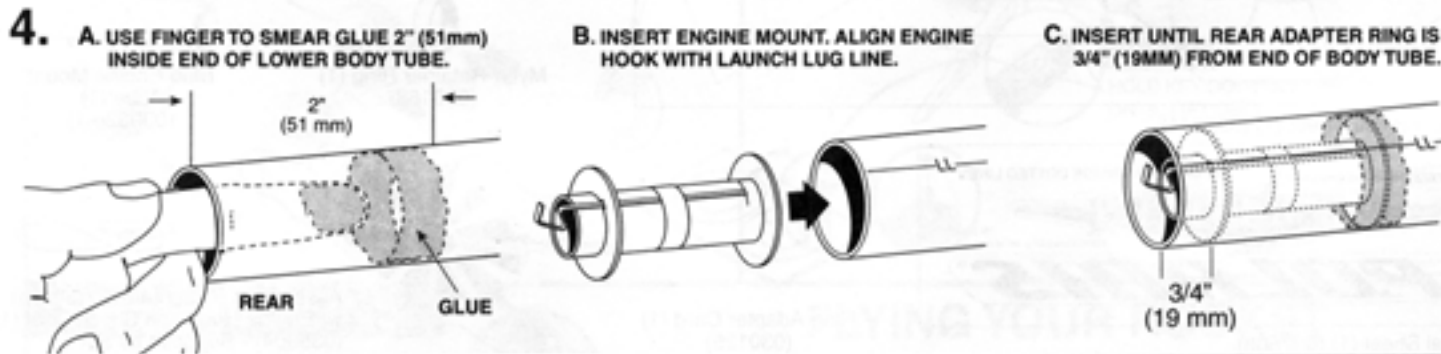
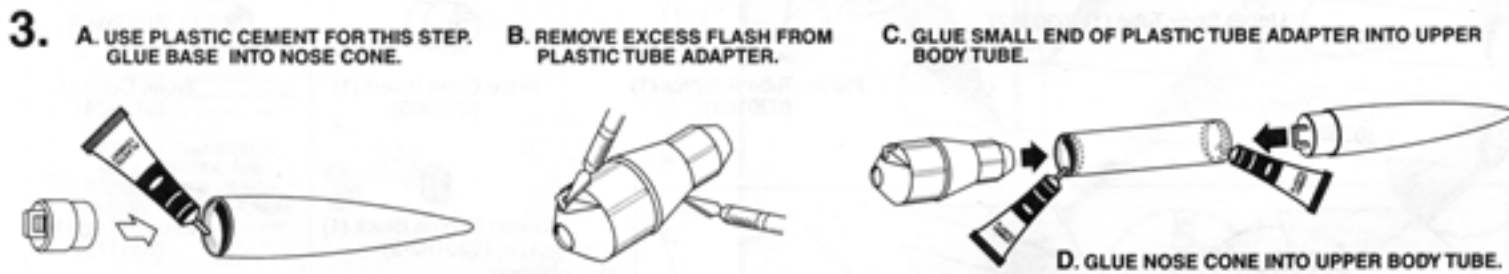
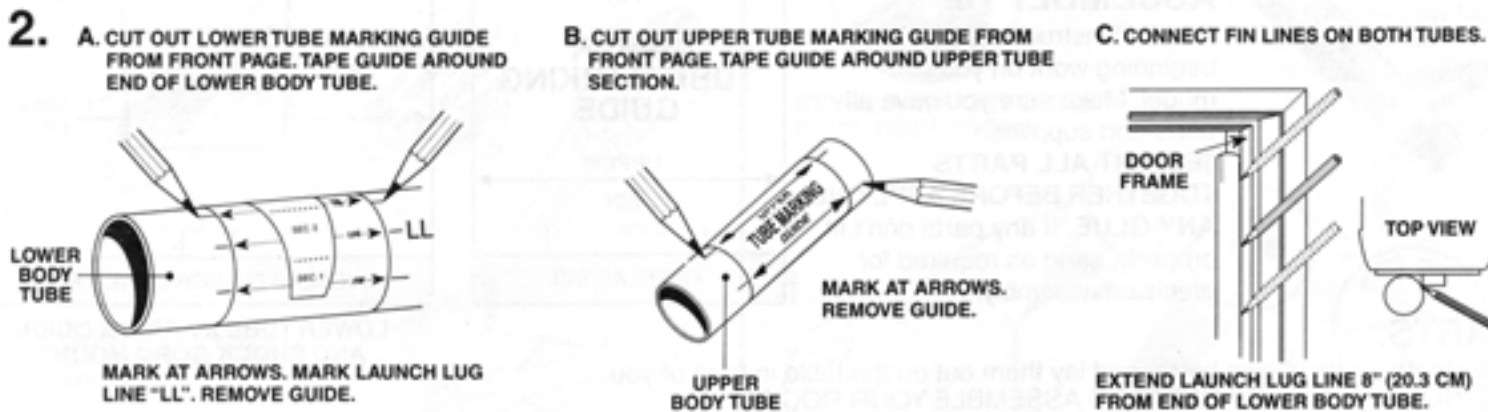
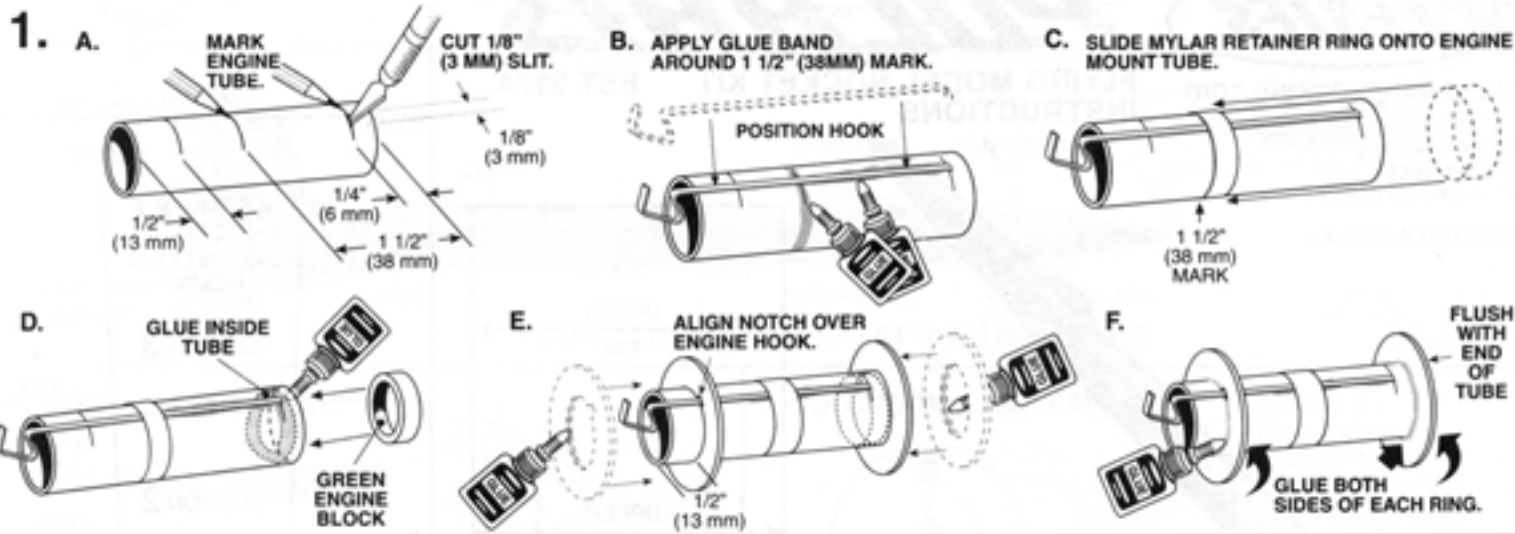
Locate the parts shown below and lay them out on the table in front of you.  
**DO NOT USE THIS DRAWING TO ASSEMBLE YOUR ROCKET.**



## SUPPLIES

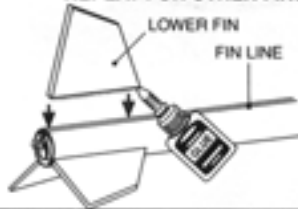
In addition to the parts included in the kit you will also need:





6. A.

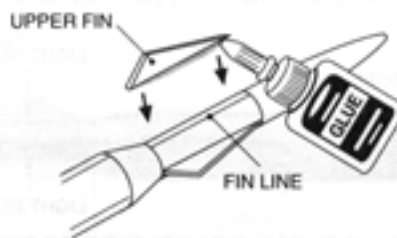
APPLY THIN LAYER OF GLUE. WAIT 1 MINUTE. APPLY 2ND THIN LAYER AND ATTACH FIN CENTERED ON FIN LINE. REPEAT FOR OTHER FINS.



FINS PROJECT STRAIGHT FROM THE BODY.

B.

REPEAT STEP A FOR UPPER FINS.



C.

SUPPORT ROCKET UNTIL GLUE DRIES.

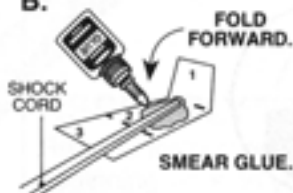


7.

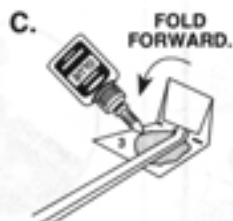
A. CUT OUT SHOCK CORD MOUNT FROM LOWER TUBE MARKING GUIDE.



B.



C.



E.

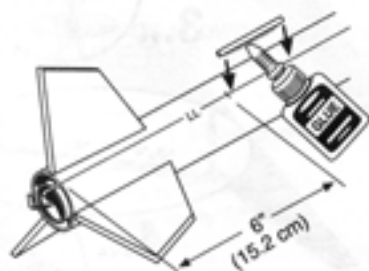


8. A.

ATTACH LAUNCH LUG.

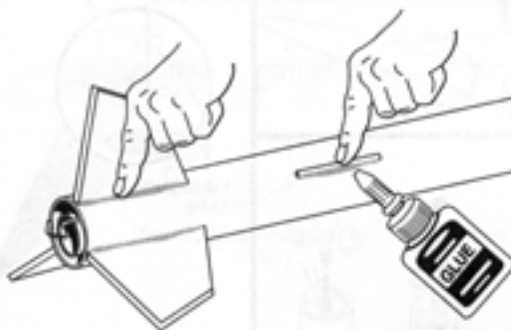
NOTE:

PROCEED WITH THE NEXT STEP ONLY AFTER THE GLUE ON FINS AND LAUNCH LUG IS THOROUGHLY DRY.



B.

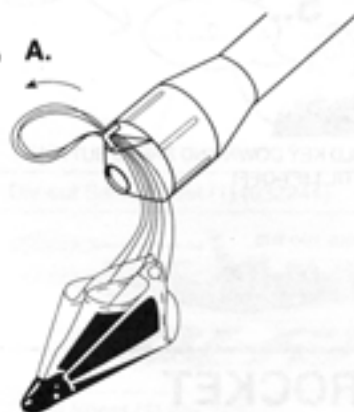
APPLY GLUE FILLETS TO ALL FIN AND LAUNCH LUG/BODY TUBE JOINTS.



C. SMOOTH WITH FINGERTIP.

D. ALLOW GLUE TO DRY.

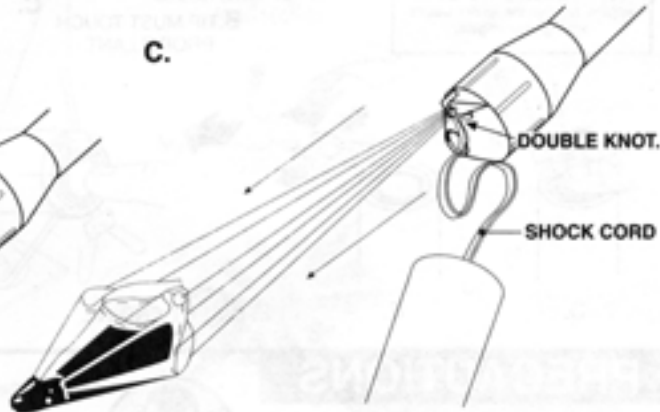
9. A.



B.



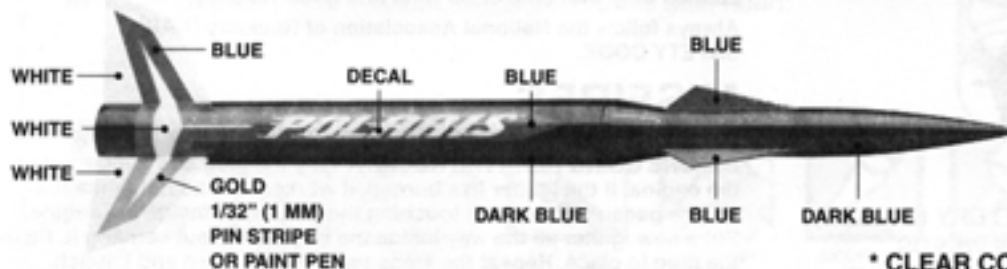
C.



"CONVENTIONAL" PAINT SCHEME

FIRST SPRAY ROCKET WITH WHITE PRIMER, DRY AND SAND. REPEAT UNTIL ROCKET IS SMOOTH.

DECAL

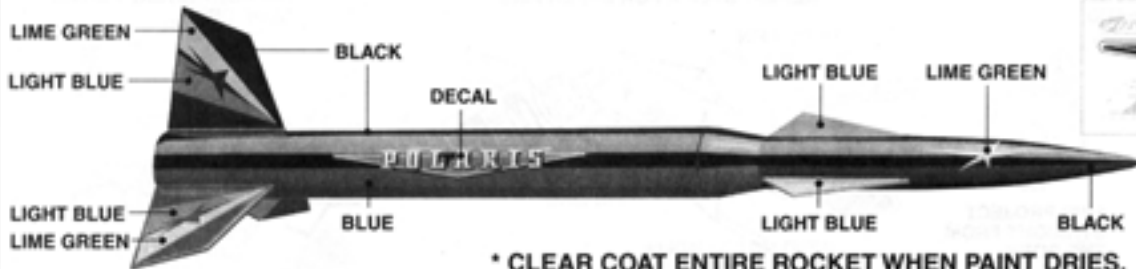


\* CLEAR COAT ENTIRE ROCKET WHEN PAINT DRIES.

**"WILD"  
PAINT SCHEME**

FIRST SPRAY ROCKET WITH WHITE PRIMER, DRY AND SAND. REPEAT UNTIL ROCKET IS SMOOTH.

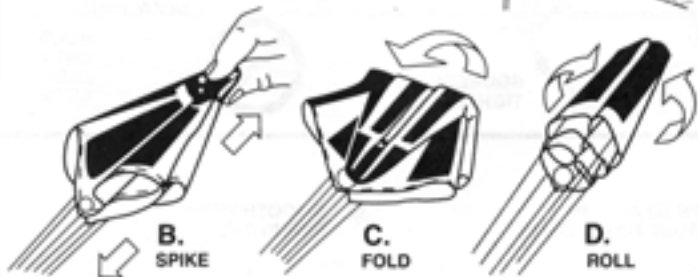
DECAL



\* CLEAR COAT ENTIRE ROCKET WHEN PAINT DRIES.

**ROCKET PREFLIGHT**

**A.**  
INSERT 3 OR 4 LOOSELY CRUMPLED SQUARES OF RECOVERY WADDING.



**E.**  
WRAP LINES LOOSELY, INSERT 'CHUTE, SHOCK CORD AND NOSE CONE SECTION.



**COUNTDOWN AND LAUNCH**



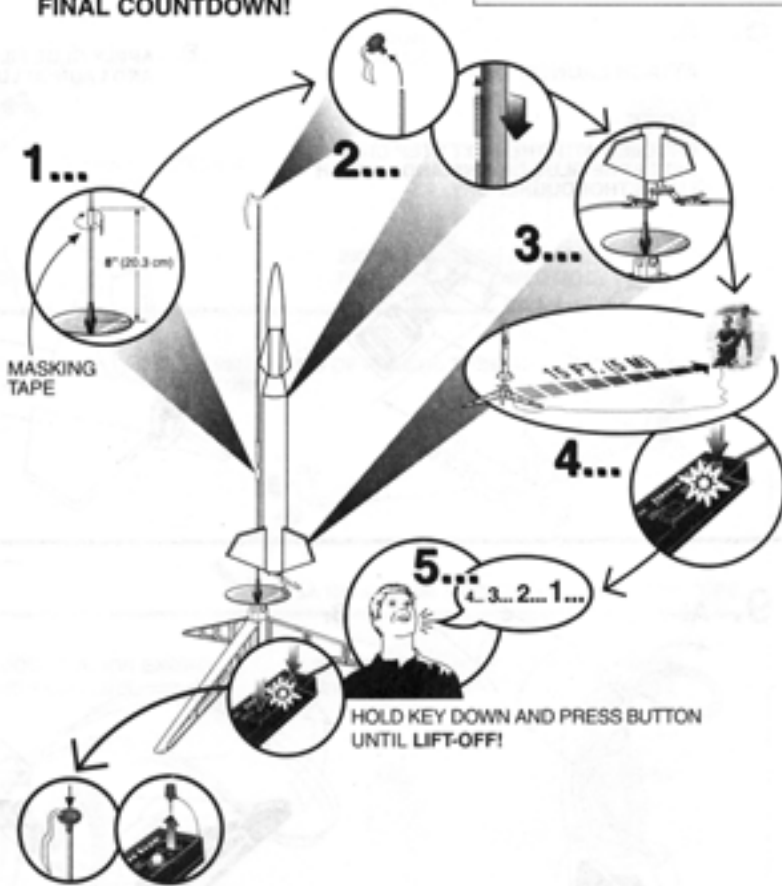
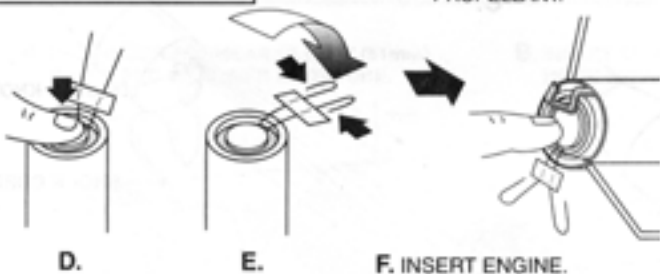
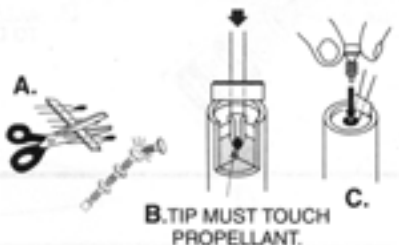
KEY ALWAYS OUT UNTIL FINAL COUNTDOWN!

**LAUNCH SUPPLIES**  
(Sold Separately)

- Estes® Porta Pad® II and Electron Beam® Controller
- Recovery Wadding
- Igniters (with Engines)
- Igniter Plugs (with Engines)
- Estes® Engines: A8-3, B4-4 B6-4 (First Flight), C6-5

**ENGINE PREP**

**WARNING: FLAMMABLE**  
Before proceeding 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 igniter before storing your engine.



**PRECAUTIONS**

NAR Safety Code



NO DRY GRASS OR WEEDS

**FLYING YOUR ROCKET**

Choose a large field (500 ft. [152 m] square) free of dry weeds and brown grass. The larger the launch area, the better your chance of recovering your rocket. Football fields and playgrounds are great. Launch only with little or no wind and good visibility.

Always follow the National Association of Rocketry (NAR) SAFETY CODE.

**MISFIRES**

**TAKE THE KEY OUT OF THE CONTROLLER. WAIT ONE MINUTE BEFORE GOING NEAR THE ROCKET!** Take the plug and igniter out of the engine. If the igniter has burned, it worked but did not ignite the engine because it was not touching the propellant inside the engine. Put a new igniter all the way inside the engine without bending it. Push the plug in place. Repeat the steps under Countdown and Launch.



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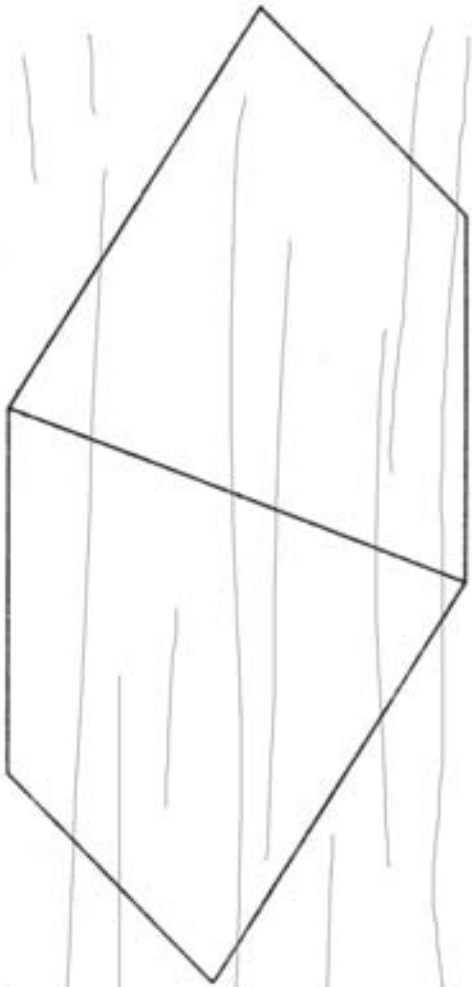
# POULARIS™

Printed in China

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*Estes Polaris #2174*



*3/32" x 3" x 12"*