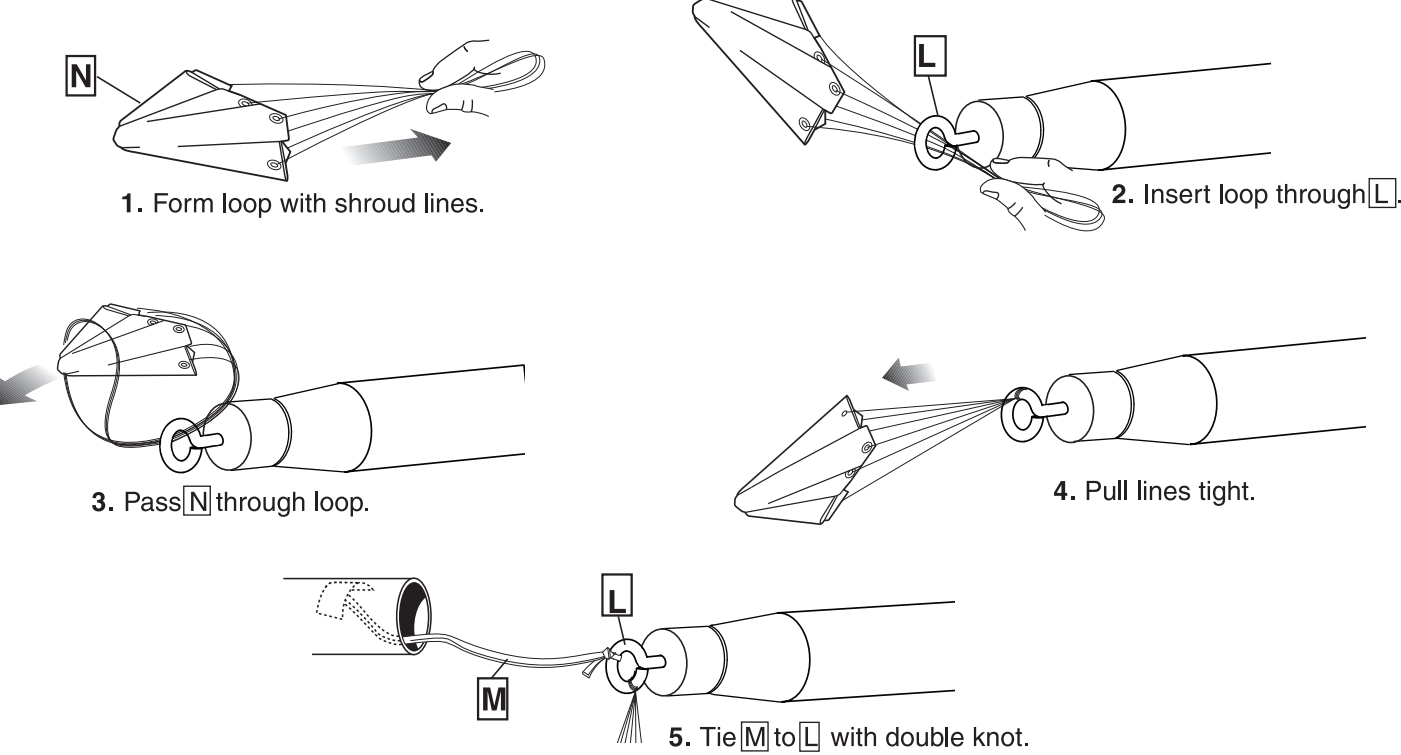
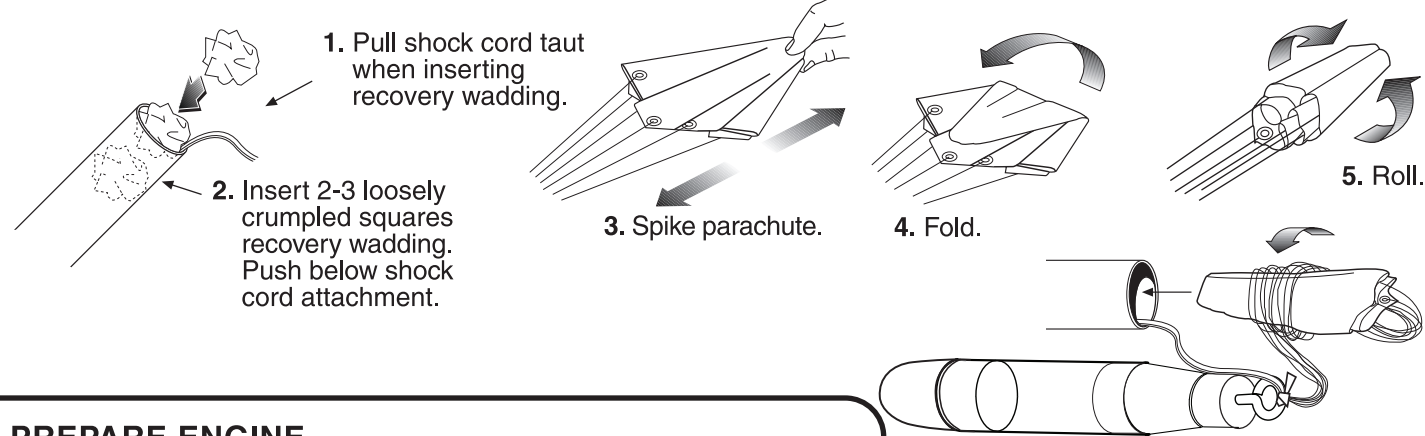


RECOVERY SYSTEM ATTACHMENT



PREPARE FLIGHT RECOVERY

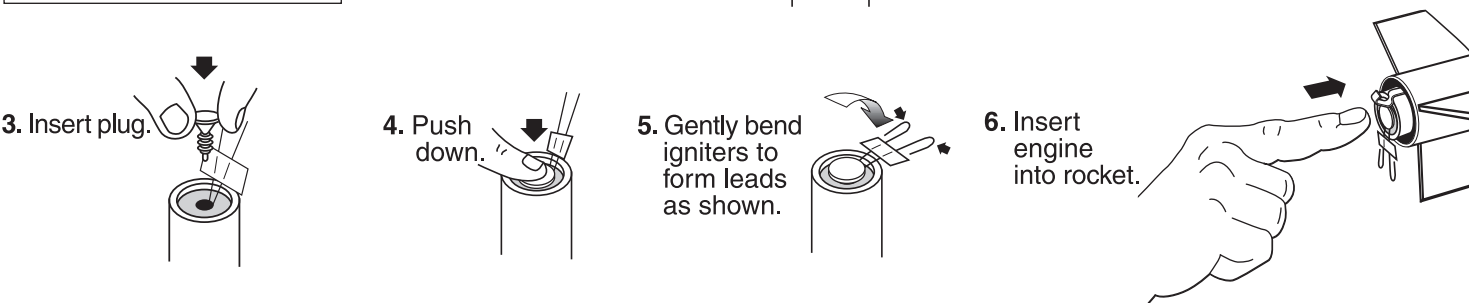
NOTE: Only Estes Recovery Wadding (302274) recommended.



NOTE: Recovery wadding and parachute must slide easily into body tube. If too tight, repack.

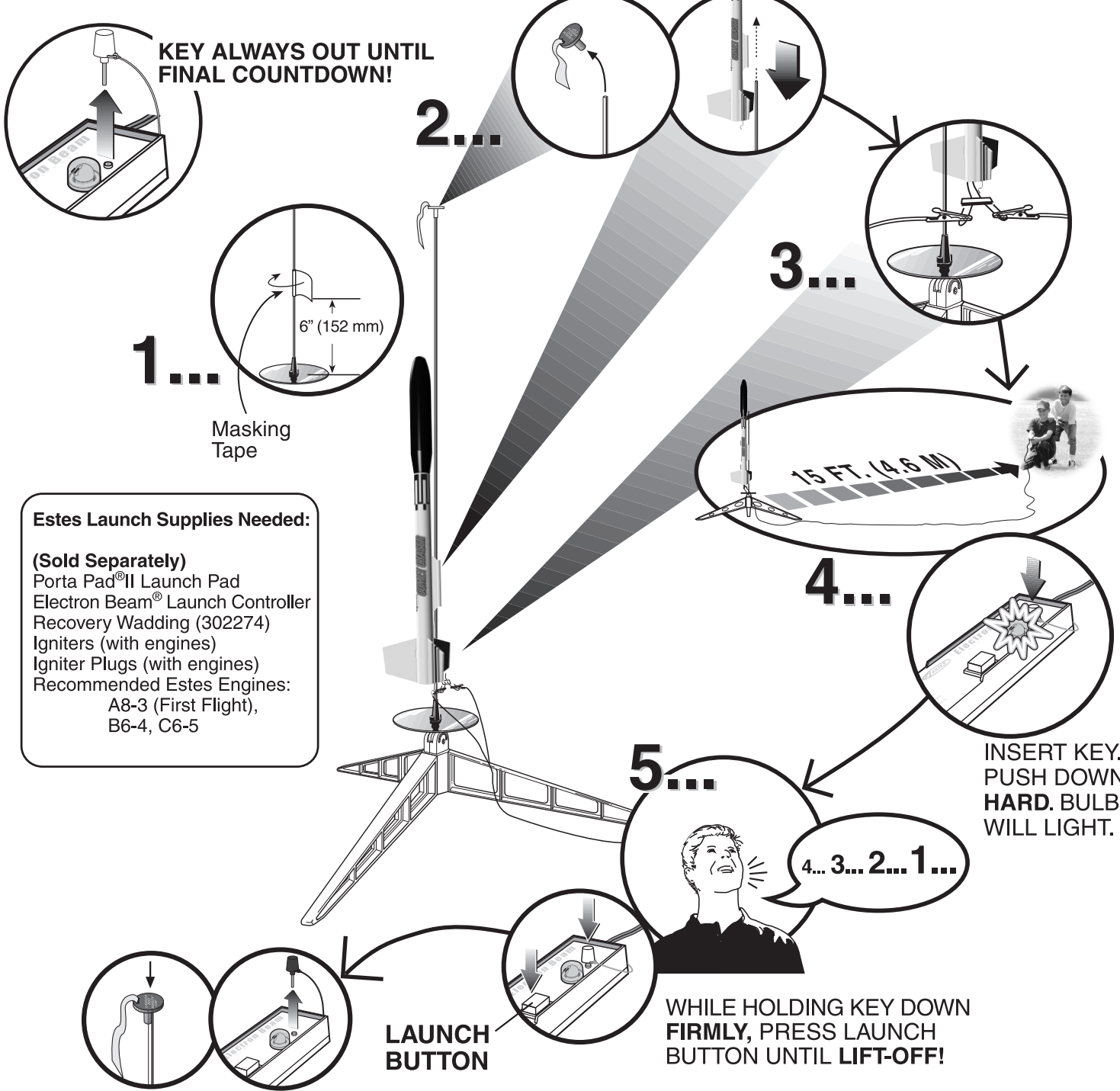
PREPARE ENGINE

WARNING: FLAMMABLE
To avoid serious injury, read instructions & NAR Safety Code included with engines.
PREPARE 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 engine.



IGNITER TIP MUST TOUCH PROPELLANT!

COUNTDOWN AND LAUNCH



Estes Launch Supplies Needed:

(Sold Separately)
Porta Pad®II Launch Pad
Electron Beam® Launch Controller
Recovery Wadding (302274)
Igniters (with engines)
Igniter Plugs (with engines)
Recommended Estes Engines:
A8-3 (First Flight),
B6-4, C6-5

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. Repair any damage before launching the rocket.

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 enclosed National Association of Rocketry (NAR) SAFETY CODE.

MISFIRES

TAKE THE KEY OUT OF THE CONTROLLER. WAIT ONE MINUTE BEFORE GOING NEAR THE ROCKET! Disconnect the igniter clips and remove the engine. 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.



COMET CHASER™

FLYING MODEL ROCKET KIT INSTRUCTIONS #7202/3202
KEEP FOR FUTURE REFERENCE

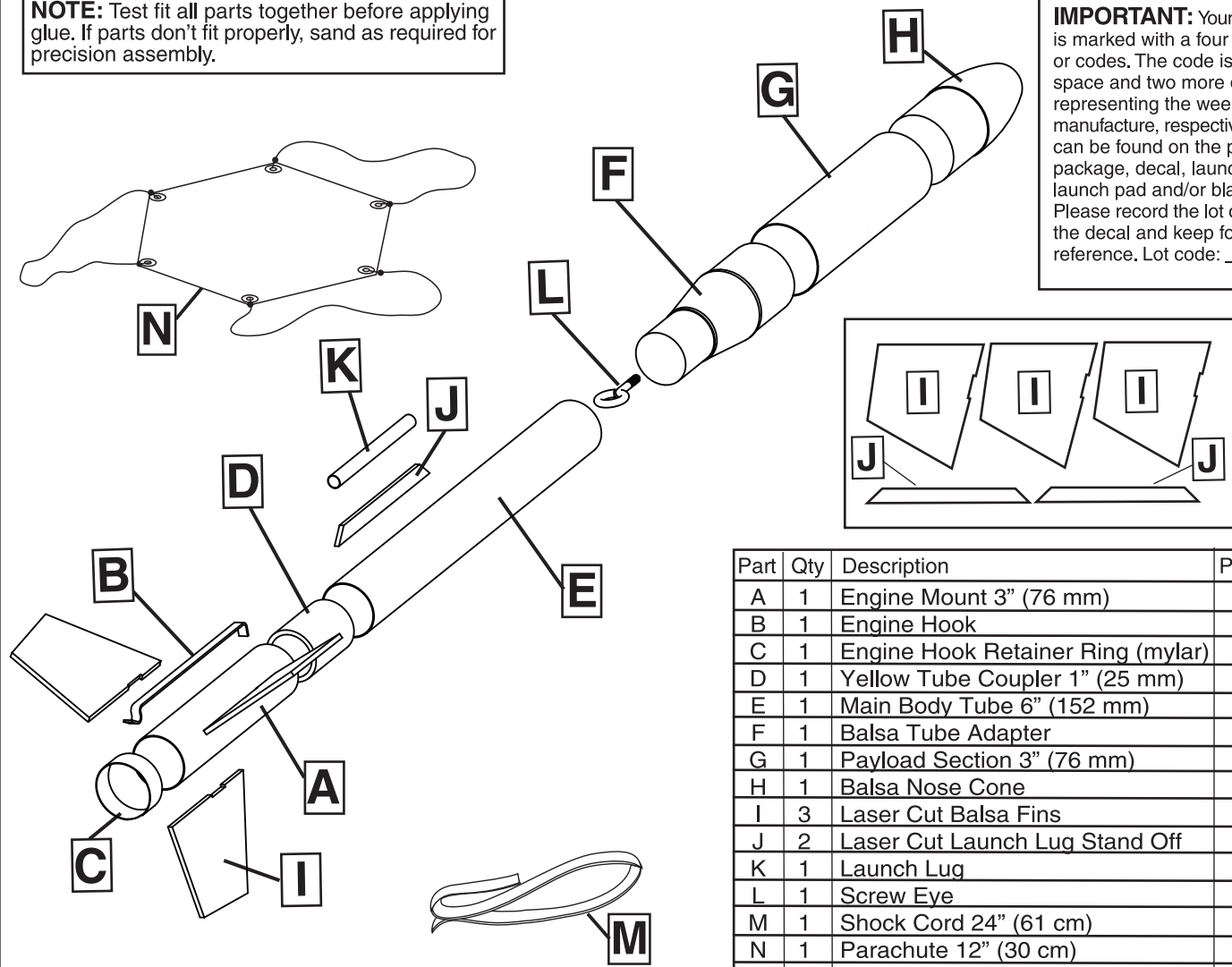


ASSEMBLY TIP: Read all instructions before beginning work on your model. Make sure you have all parts and supplies.

www.estesrockets.com

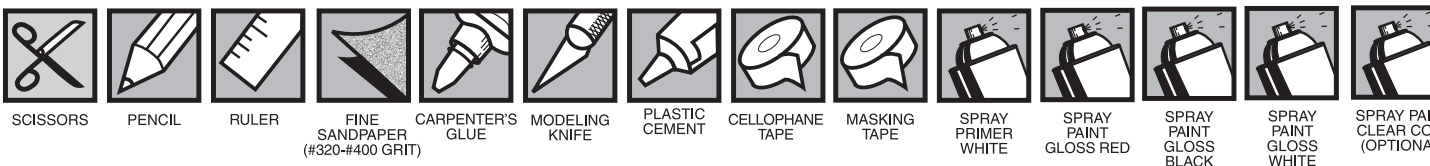
NOTE: Test fit all parts together before applying glue. If parts don't fit properly, sand as required for precision assembly.

IMPORTANT: Your Estes product is marked with a four digit lot code or codes. The code is two digits, a space and two more digits representing the week and year of manufacture, respectively. Lot codes can be found on the product package, decal, launch controller, launch pad and/or blast deflector. Please record the lot code found on the decal and keep for future reference. Lot code: _____



Part	Qty	Description	Part Number
A	1	Engine Mount 3" (76 mm)	030478
B	1	Engine Hook	035021
C	1	Engine Hook Retainer Ring (mylar)	030168
D	1	Yellow Tube Coupler 1" (25 mm)	030120
E	1	Main Body Tube 6" (152 mm)	030327
F	1	Balsa Tube Adapter	070008
G	1	Payload Section 3" (76 mm)	031305
H	1	Balsa Nose Cone	070256
I	3	Laser Cut Balsa Fins	065954
J	2	Laser Cut Launch Lug Stand Off	
K	1	Launch Lug	038190
L	1	Screw Eye	038251
M	1	Shock Cord 24" (61 cm)	038367
N	1	Parachute 12" (30 cm)	035815
O	1	Decal (not shown)	065956

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



TUBE MARKING GUIDE AND SHOCK CORD MOUNT

(Make a copy if you want to keep instructions.)

MATCHING LINES

Fin

EH

Fin

Fin

OVERLAP TAB

MATCHING LINES

SECTION 3

SECTION 2

SECTION 1

FIN PREPARATION

1. Sand both sides of balsa sheet with fine sandpaper (#320 or #400 grit).

2. Cut **I** and **J** from sheet.

3. Stack fins together. Sand edges smooth. Do not sand root edge round.

4. Sand leading edge round.

ENGINE MOUNT ASSEMBLY

1. Cut tube marking guide from instructions.

2. Tape guide around **A**. Mark "FL" and "EH" at arrows.

3. Remove guide. Connect and extend all lines. Use door frame as a straight edge.

4. Measure and mark on "EH" line.

5. Cut slit at mark.

6. Insert **B** in slit.

7. Apply ring of glue at mark. Slide **C** to mark.

8. Apply ring of glue in end of **A**.

9. Insert **D** until it stops. Let dry.

LOWER BODY TUBE ATTACHMENT

1. Place **E** in door frame. Draw straight line on **E**. Label "EH".

2. Apply ring of glue inside **E**.

3. Align "EH" on engine mount assembly with "EH" on **E**. Slide **D** into **E**. Wipe excess glue. Let dry.

FIN ATTACHMENT

1. Apply glue to root edge of **I**. Allow to dry 1 minute. Apply 2nd layer of glue.

2. Attach **I** centered on fin line. NOTE: make sure fin notch is centered over **C**. Repeat for other **I**. Let dry.

Fin Alignment Guide

Use fin alignment guide for fin attachment accuracy.

LAUNCH LUG ATTACHMENT

1. Apply glue to wide side of **J**. Press remaining **J** in place. Let dry.

2. Sand all sides of **J** smooth.

3. Apply glue to long edge of **J**.

4. Position **J** centered over "LL" just forward of body tube joint. Let dry.

5. When dry, glue **K** centered on **J**.

PAYLOAD SECTION ASSEMBLY

1. Screw **L** into **F**.

2. Test fit **F** in **G**. Sand **F** as necessary to fit.

3. Remove **F** for painting. DO NOT GLUE AT THIS TIME.

NOSE CONE ASSEMBLY

1. Test fit of **H** in **G**. Sand as necessary to fit. DO NOT GLUE IN PLACE.

2. Remove **H** for painting.

SHOCK CORD INSTALLATION

1. Cut shock cord mount from instructions.

2. Apply glue to Section 2. Place **M** on glue. Fold forward.

3. Apply glue and fold forward.

4. Squeeze tight!

5. Apply glue to shock cord mount and insert in body tube. Hold until glue sets. Let dry.

ROCKET FINISHING

NOTE: We have found Testors spray primers (Testors #2948 White Primer), Testors One Coat Lacquer spray paints (color of your choice), Testors Model Master spray paints (color of your choice) and Testors Gloss Lacquer (#1961) to be excellent for providing a long lasting and durable finish on your rocket. Always be sure to spray your models outside or in a well ventilated area.

Steps for a Quality Finish:

1. Insert shock cord into body tube and hold in place with paper.

2. Lightly sand main rocket section, tube adapter and nose cone with fine sandpaper (#320 or #400 grit).

3. Apply glue fillet to fins and launch lug joints.

a. Let glue dry overnight.

4. Use a stick inserted into the engine tube end of the rocket for painting.

5. Hold the payload section by the screw eye with a clip or pliers for painting.

6. Insert small nail into base of nose cone and hold with clip or pliers for painting.

7. We recommend a good filler/primer to be applied to the balsa fins, tube adapter and nose cone before painting.

8. Apply 1-2 light coats of white primer to rocket body and nose cone. Lightly sand with fine sandpaper (#320 or #400 grit) between coats. Allow to dry between each coat.

9. Apply gloss white to main rocket section.

a. Let dry overnight (24 hours is best).

10. Spray nose cone and payload section gloss black.

a. Let dry overnight (24 hours is best).

11. Apply masking tape and protective cover at base of single fin, covering white paint. Spray fin gloss red.

12. Apply waterslide decals.

a. Cut the decal to be applied from the decal sheet, trimming close to the decal edge.

b. Hold the decal in warm water until decal begins to curl.

c. Remove the entire decal, position in place and slide the decal from the backing material and onto the model as close to final position as possible.

d. Gently blot out excess water with a clean paper towel.

e. Let decals set overnight before applying protective clear coat.

13. When decals are dry, spray entire rocket (main body, payload section and nose cone separately) with a light coat of Testors Gloss Lacquer (#1961). This will provide added protection and shine to your Comet Chaser™ rocket!

14. Apply cement to inside of (G).

15. Attach nose cone to (G) with small piece of cellophane tape.

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