



EstesRockets.com

WACKY WIGGLER™

1405

AGES
10+



Skill Level

INTERMEDIATE

MODEL ROCKET INSTRUCTIONS

KEEP FOR FUTURE REFERENCE

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



CAUTION:

May not apply to all kits. For safe handling of plastic cement, epoxy, spray adhesive, CA glue, CA accelerator, paint/finishing materials, see manufacturer's warnings and follow instructions for use. To avoid injury, use extreme caution when using hobby knife, scissors, drills, and any cutting tools.

SUPPLIES



HOBBY KNIFE



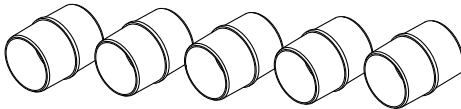
PLASTIC CEMENT



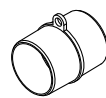
FINE SANDPAPER



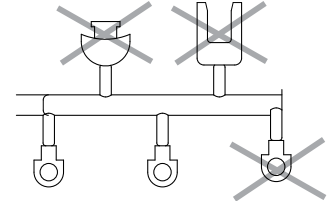
MASKING TAPE



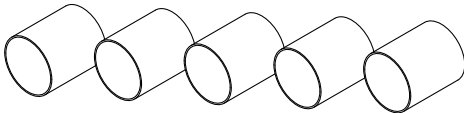
060411-802C Green
Tube Coupler
x5



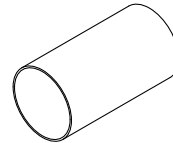
060413-802C Green
Tube Coupler with
Launch Lug



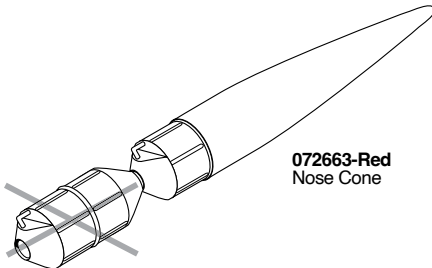
060412-Red
Launch Lugs (use 2)



031687
Body Tube Sections
x5

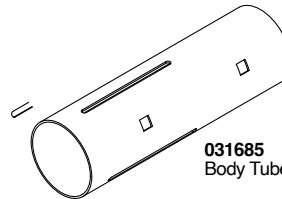


031686
Body Tube



072663-Red
Nose Cone

Not Used



031685
Body Tube



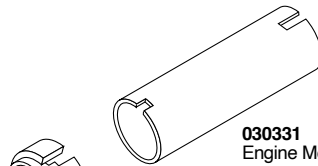
060412-Red
Front Engine Ring



035021
Engine Hook



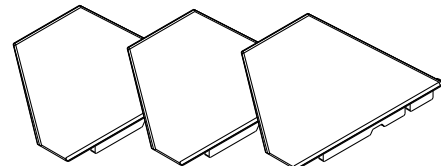
060407
Braided Cord (1 spare)
x2



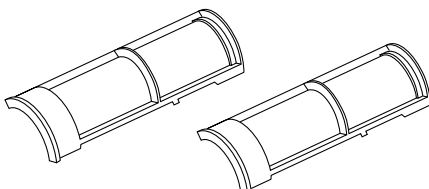
030331
Engine Mount Tube



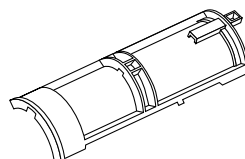
060412-Red
Rear Engine Ring



060412-Red
Fins
x3

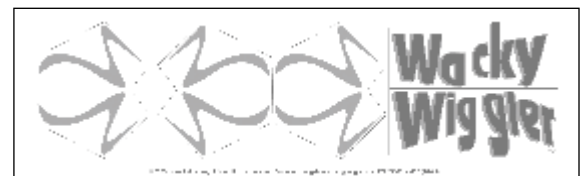


060412-Red
Engine Mount Section
x2



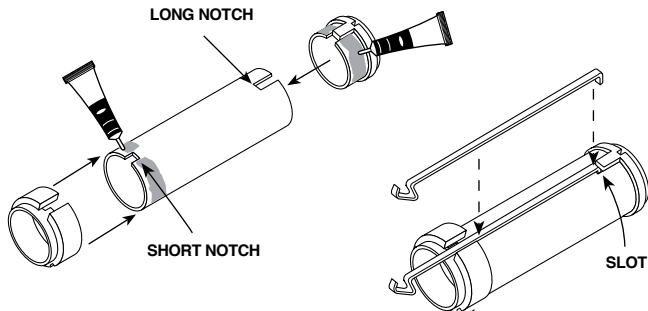
060412-Red
Notched Engine Mount Section

090001-1405
Self-Stick Decal



ASSEMBLE ENGINE MOUNT

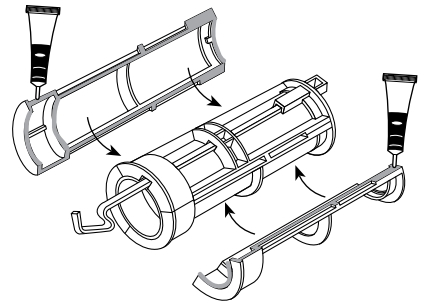
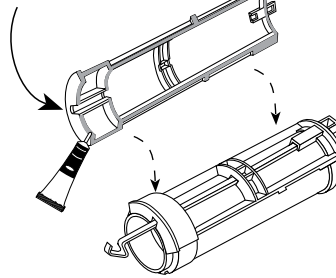
1. Apply plastic cement. Line up notches.



2. Attach engine hook. Push front tab through slot in tube.

3. Apply plastic cement to underside of notched engine mount section and attach.

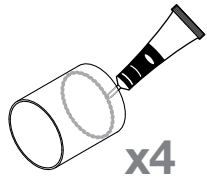
IMPORTANT! THIS NOTCH GOES OVER ENGINE HOOK!



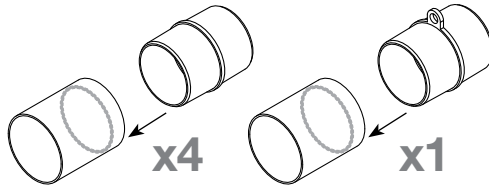
4. Attach the remaining sections with plastic cement. Let dry.

ASSEMBLE BODY TUBE SECTIONS

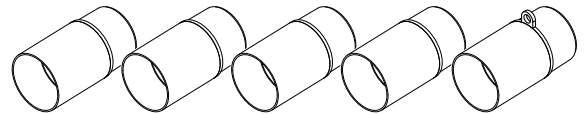
1. Apply plastic cement inside body tube.



2. Insert tube coupler.

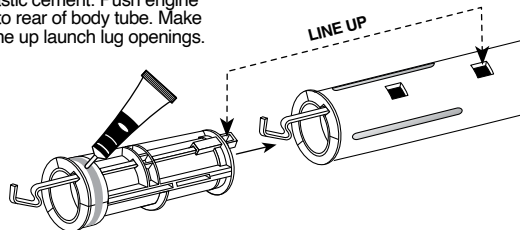


3. Let dry.



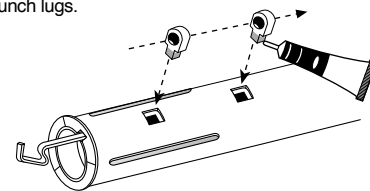
INSTALL ENGINE MOUNT, LAUNCH LUGS & FINS

1. Apply plastic cement. Push engine mount into rear of body tube. Make sure to line up launch lug openings.

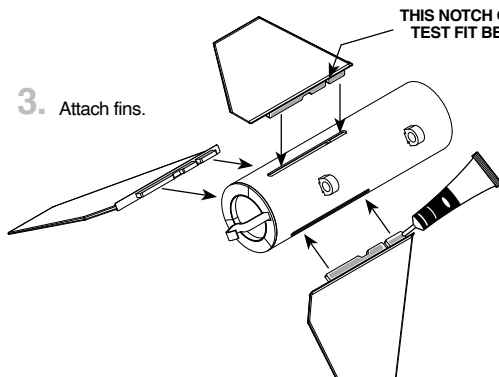


2. Attach launch lugs.

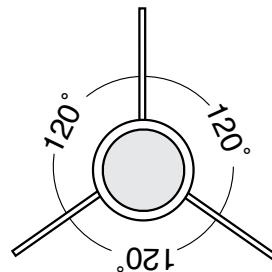
HOLES PARALLEL WITH BODY TUBE



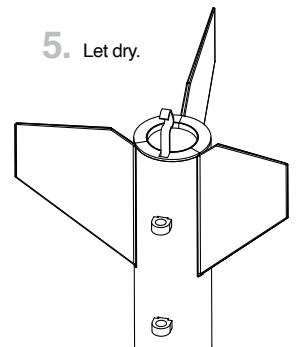
3. Attach fins.



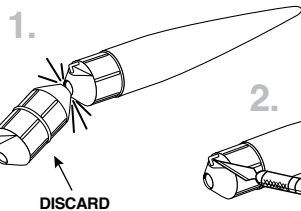
4. Repeat for all fins. Check alignment.



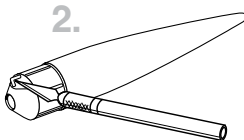
5. Let dry.



ASSEMBLE NOSE CONE SECTION

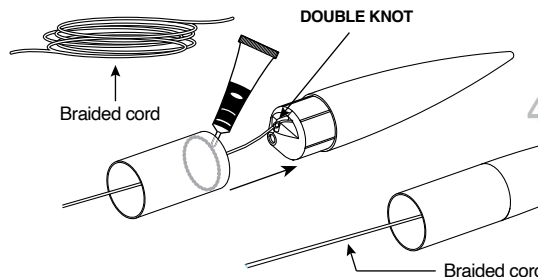


2.



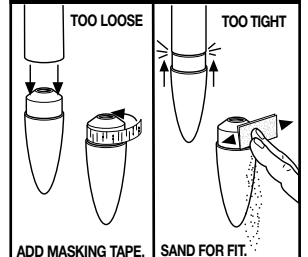
NOTE:
Do not cut off eyelet.

3. Tie braided cord around nose cone eyelet using a double knot. Attach body tube to nose cone.



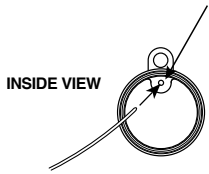
4.

IF NOSE CONE FIT IS ...

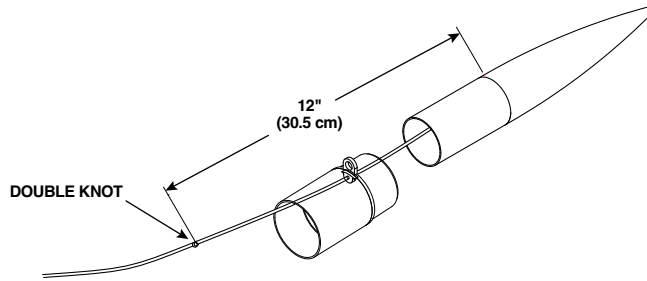


ASSEMBLE ROCKET BODY

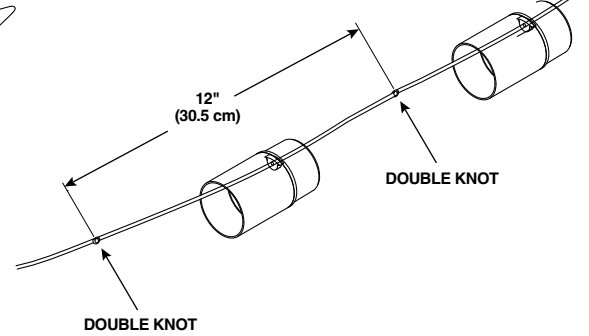
1. Pass cord through small hole.



2.

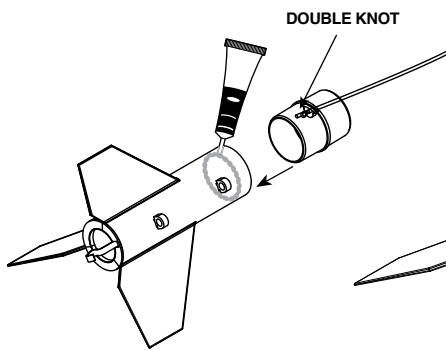


3. Repeat for the 4 remaining sections. Keep knots spaced at 12" (30.5 cm).

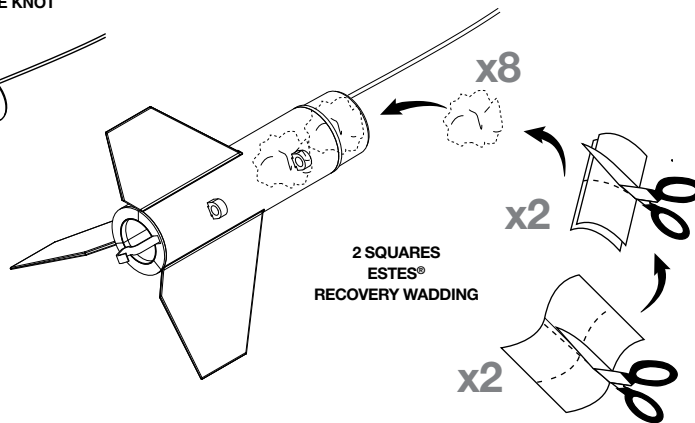


ATTACH REMAINING TUBE COUPLER

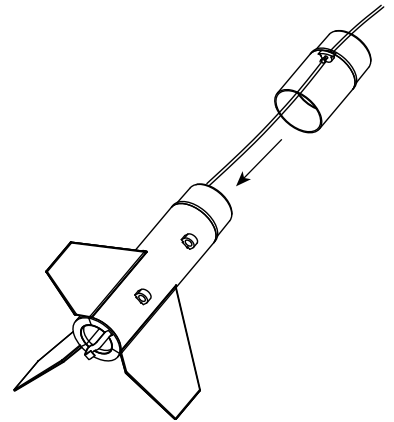
1. Apply plastic cement inside lower body tube. Insert coupler. Let dry.



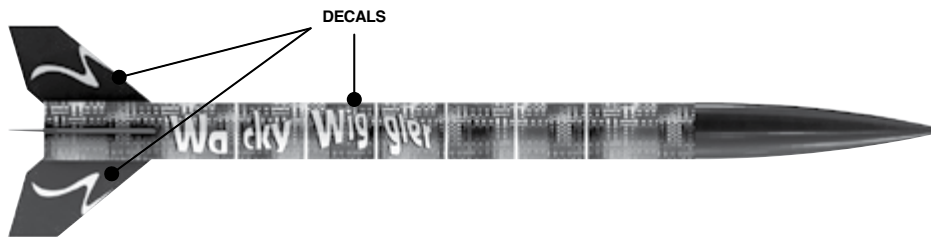
2. Cut two squares of recovery wadding into eight pieces. Insert into body tube.



3. Push braided cord into body tube sections and connect sections.

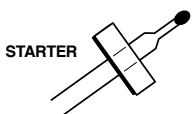


APPLY DECALS

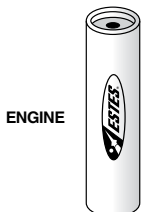


PREPARE ENGINE

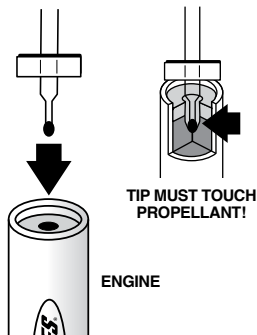
1. Use one each.



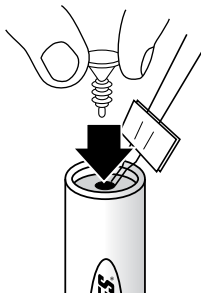
PLUG



2.



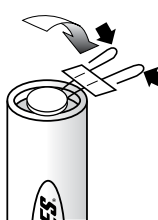
3.



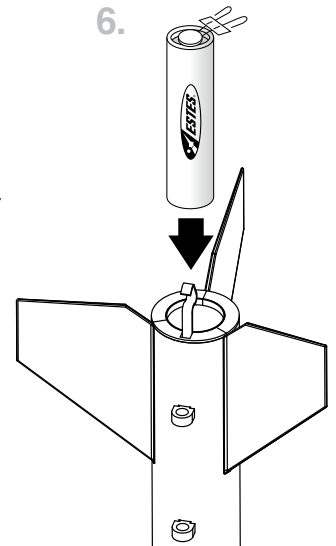
4.



5.



6.



⚠ 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.

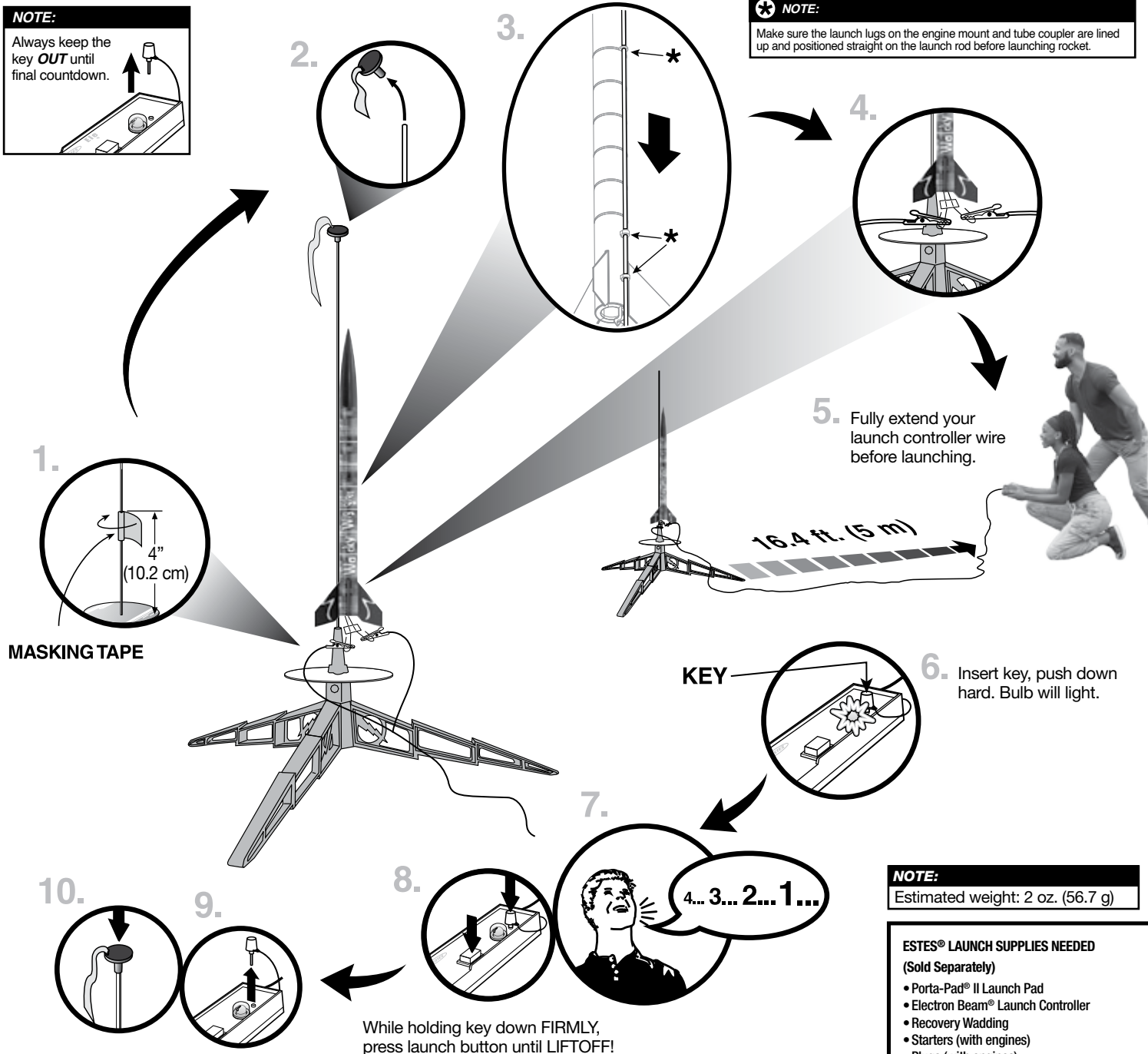
COUNTDOWN AND LAUNCH

NOTE:

Always keep the key **OUT** until final countdown.

NOTE:

Make sure the launch lugs on the engine mount and tube coupler are lined up and positioned straight on the launch rod before launching rocket.



NOTE:

Estimated weight: 2 oz. (56.7 g)

ESTES® LAUNCH SUPPLIES NEEDED (Sold Separately)

- Porta-Pad® II Launch Pad
- Electron Beam® Launch Controller
- Recovery Wadding
- Starters (with engines)
- Plugs (with engines)
- Recommended Estes® Engines: 1/2 A6-2, A8-3, A8-5, B4-4, B6-4, C6-3, 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(s). 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. 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.