



EstesRockets.com

MINI MOD™

0643/0663/1739/3241

AGES
10+



Skill Level

BEGINNER

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.

SUPPLIES



YELLOW GLUE



RULER



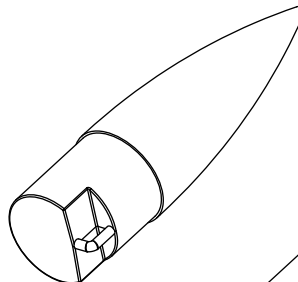
PENCIL



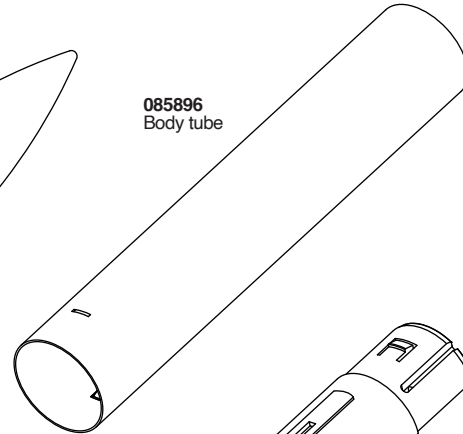
CLEAR TAPE



090001-0643
Self-stick decal



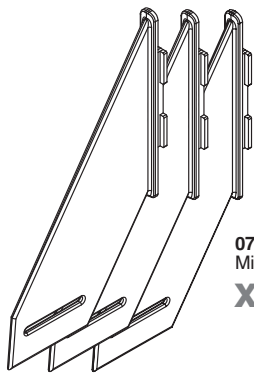
033314-YELLOW
Nose cone



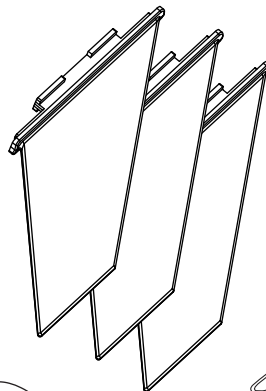
085896
Body tube



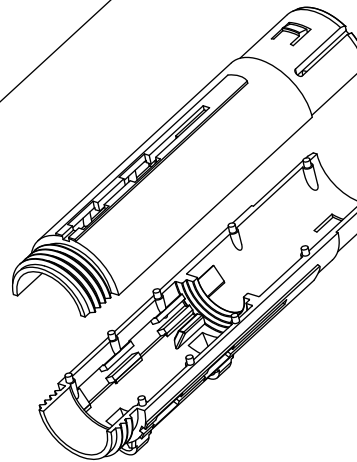
073224
Shock cord
mount



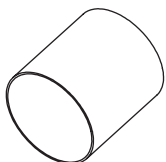
073242-BLUE
Mini fin
x3



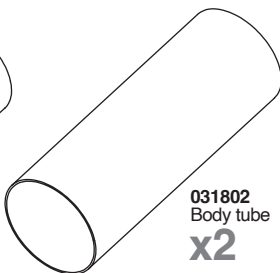
072030-BLUE
Mini fin
x3



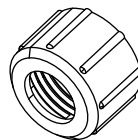
073220-YELLOW
Engine mount fin
can unit
(1 fin slot)



030173
Coupler
x2



031802
Body tube
x2



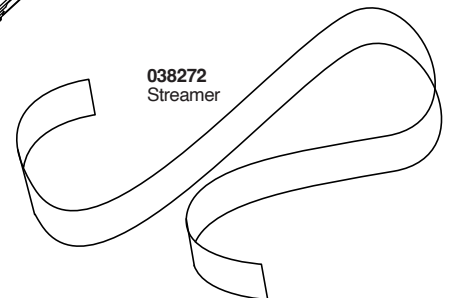
073223-BLUE
Engine retainer
cap



038265
Snap swivel



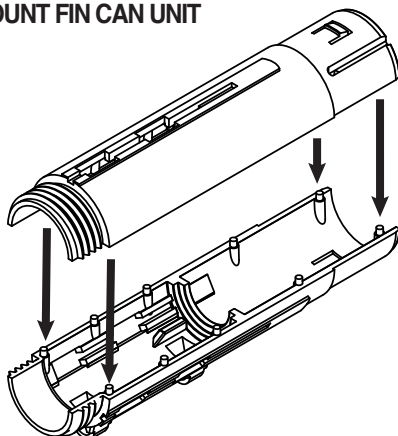
038367
Shock cord



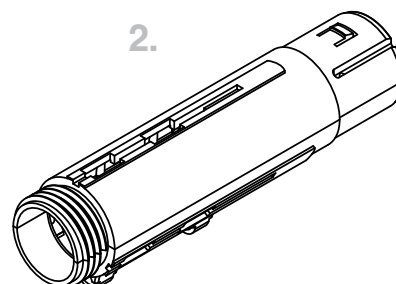
038272
Streamer

ASSEMBLE ENGINE MOUNT FIN CAN UNIT

1. Press fin can halves together.



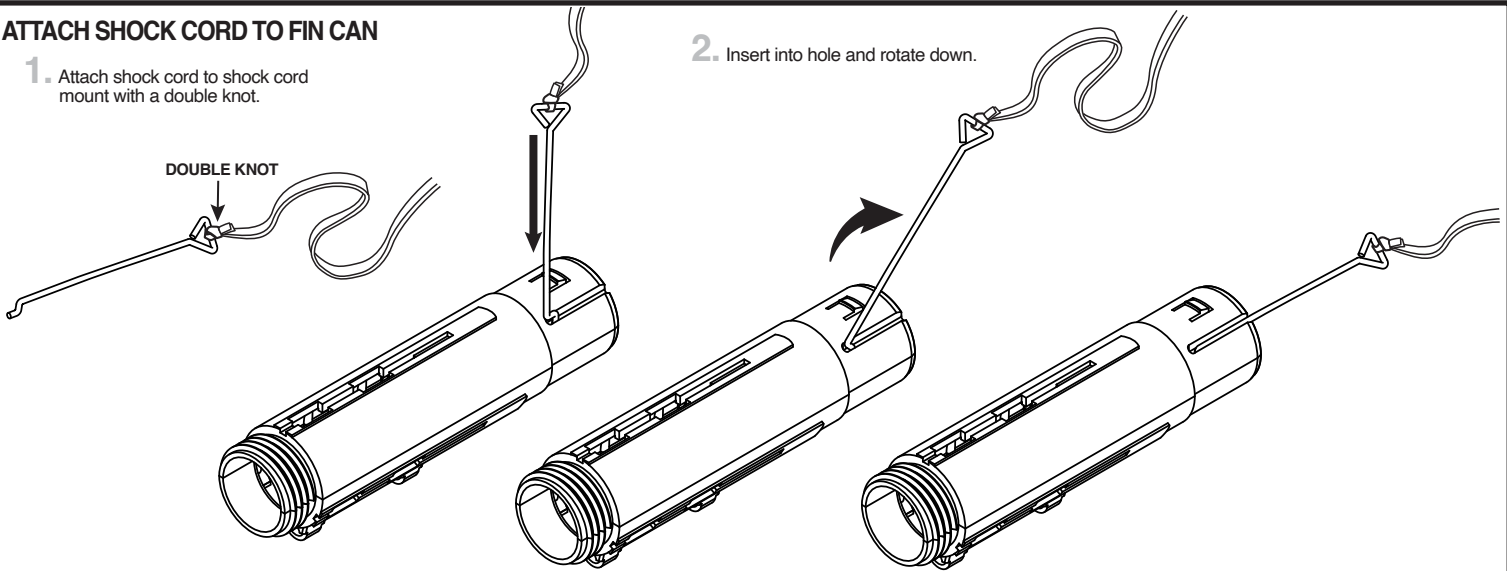
2.



ATTACH SHOCK CORD TO FIN CAN

1. Attach shock cord to shock cord mount with a double knot.

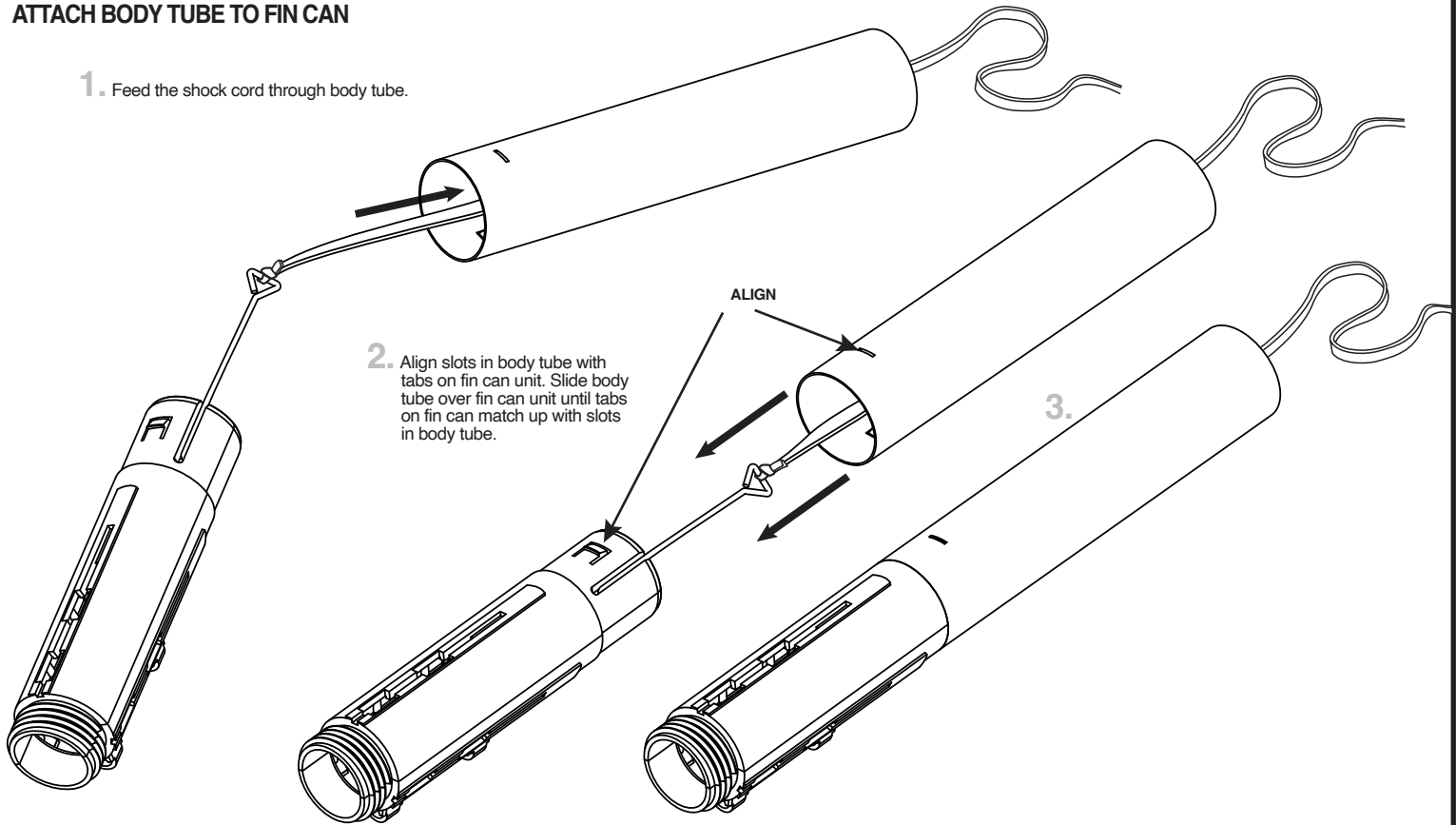
2. Insert into hole and rotate down.



ATTACH BODY TUBE TO FIN CAN

1. Feed the shock cord through body tube.

2. Align slots in body tube with tabs on fin can unit. Slide body tube over fin can unit until tabs on fin can match up with slots in body tube.



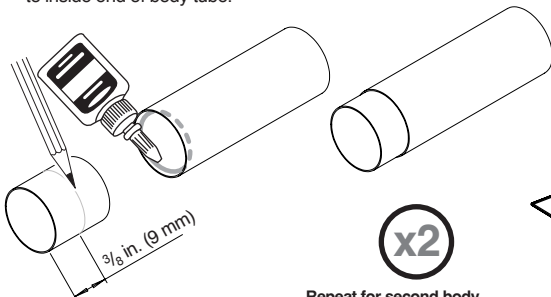
ATTACH ADDITIONAL BODY TUBES (optional)

1. Mark coupler halfway up the coupler. Apply glue to inside end of body tube.

2. Insert coupler into body tube up to marked line.

NOTE:

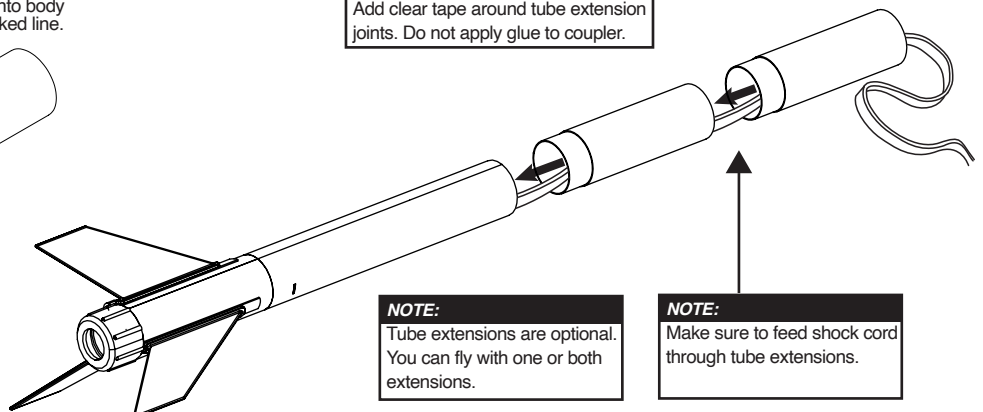
Add clear tape around tube extension joints. Do not apply glue to coupler.



Repeat for second body tube and coupler.

LET DRY

x2



NOTE:

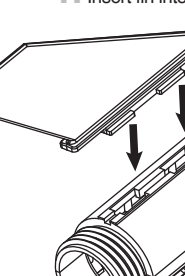
Tube extensions are optional. You can fly with one or both extensions.

NOTE:

Make sure to feed shock cord through tube extensions.

ATTACH FINS

1. Insert fin into slot.



3. Slide fin forward until it stops.



x3

Repeat for remaining fins.

ATTACH FINS

1. Insert fin into slot.
- 2.
3. Slide fin forward until it stops.
4. Screw engine retainer cap onto fin can unit.

x3
Repeat for remaining fins.

ATTACH FINS

1. Insert fin into slot.
- 2.
3. Slide fin forward until it stops.
4. Screw engine retainer cap onto fin can unit.

NOTE:
Steps are the same for the alternate fins.

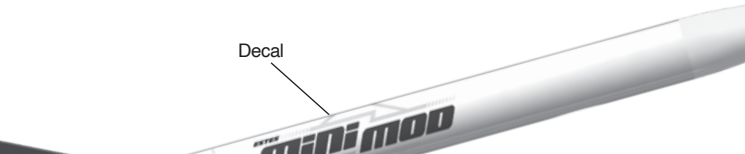
WARNING:
Do NOT mix fin types.

SAFE FLIGHT CONFIGURATIONS



The diagram illustrates six safe flight configurations for a rocket, labeled 1 through 6. Each configuration shows a rocket with its main engine and four boosters. Configuration 1 shows the rocket in a vertical position. Configuration 2 shows the rocket in a vertical position with the left booster removed. Configuration 3 shows the rocket in a vertical position with the right booster removed. Configuration 4 shows the rocket in a vertical position with the left booster removed. Configuration 5 shows the rocket in a vertical position with the right booster removed. Configuration 6 shows the rocket in a vertical position with the left booster removed.

APPLY DECALS



Decal

ATTACH THE NOSE CONE AND STREAMER

1. Attach shock cord to fishing swivel using a double knot, then clip to nose cone.

2. Tie the streamer to the shock cord.


NOTE:
To add or remove extensions, unclip shock cord from nose cone.

IF NOSE CONE FIT IS...

ATTACH THE NOSE CONE AND STREAMER

1. Attach shock cord to fishing swivel using a double knot, then clip to nose cone.
2. Tie the streamer to the shock cord.

NOTE:
To add or remove extensions, unclip shock cord from nose cone.

IF NOSE CONE FIT IS...

The diagram illustrates the assembly of the nose cone and streamer. It is divided into two main sections, 1 and 2, showing the step-by-step process. Section 1 shows a shock cord being attached to a fishing swivel using a double knot, then clipped to the nose cone. Section 2 shows a streamer being tied to the shock cord. A note indicates that extensions can be added or removed by unclipping the shock cord from the nose cone. The diagram also includes a dimension of 3" (7.6 cm) for the distance between the shock cord and the streamer.

PREPARE FLIGHT RECOVERY

1. Push recovery wadding down towards end of body tube.

2.

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

3.

NOTE: Fold then roll.

4.

2-3 SQUARES ESTES® RECOVERY WADDING

TOO LOOSE

TOO TIGHT

ADD MASKING TAPE.

SAND FOR FIT.

PREPARE FLIGHT RECOVERY

1. Push recovery wadding down towards end of body tube.

2.

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

3.

NOTE: Fold then roll.

4.

2-3 SQUARES ESTES® RECOVERY WADDING

TOO LOOSE

TOO TIGHT

ADD MASKING TAPE.

SAND FOR FIT.

PREPARE FLIGHT RECOVERY

1. Push recovery wadding down towards end of body tube.

2.

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

3.

NOTE: Fold then roll.

4.

2-3 SQUARES ESTES® RECOVERY WADDING

TOO LOOSE

TOO TIGHT

ADD MASKING TAPE.

SAND FOR FIT.

PREPARE FLIGHT RECOVERY

1. Push recovery wadding down towards end of body tube.

2.

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

3.

NOTE: Fold then roll.

4.

2-3 SQUARES ESTES® RECOVERY WADDING

TOO LOOSE

TOO TIGHT

ADD MASKING TAPE.

SAND FOR FIT.

PREPARE FLIGHT RECOVERY

1. Push recovery wadding down towards end of body tube.

2.

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

3.

NOTE: Fold then roll.

4.

2-3 SQUARES ESTES® RECOVERY WADDING

TOO LOOSE

TOO TIGHT

ADD MASKING TAPE.

SAND FOR FIT.

PREPARE FLIGHT RECOVERY

1. Push recovery wadding down towards end of body tube.

2.

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

3.

NOTE: Fold then roll.

4.

2-3 SQUARES ESTES® RECOVERY WADDING

TOO LOOSE

TOO TIGHT

ADD MASKING TAPE.

SAND FOR FIT.

PREPARE FLIGHT RECOVERY

1. Push recovery wadding down towards end of body tube.

2.

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

3.

NOTE: Fold then roll.

4.

2-3 SQUARES ESTES® RECOVERY WADDING

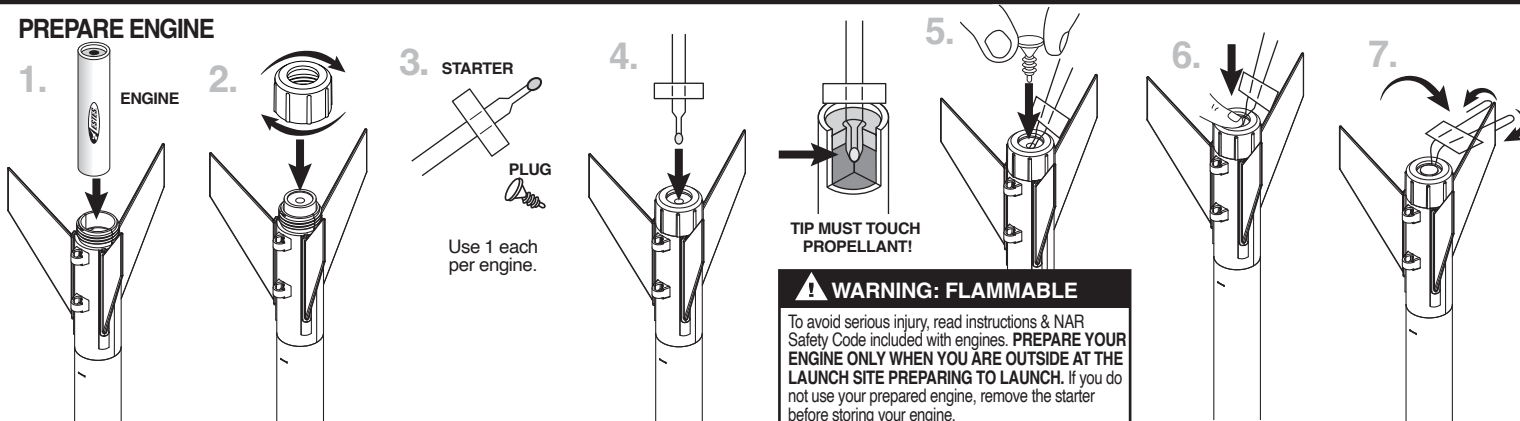
TOO LOOSE

TOO TIGHT

ADD MASKING TAPE.

SAND FOR FIT.

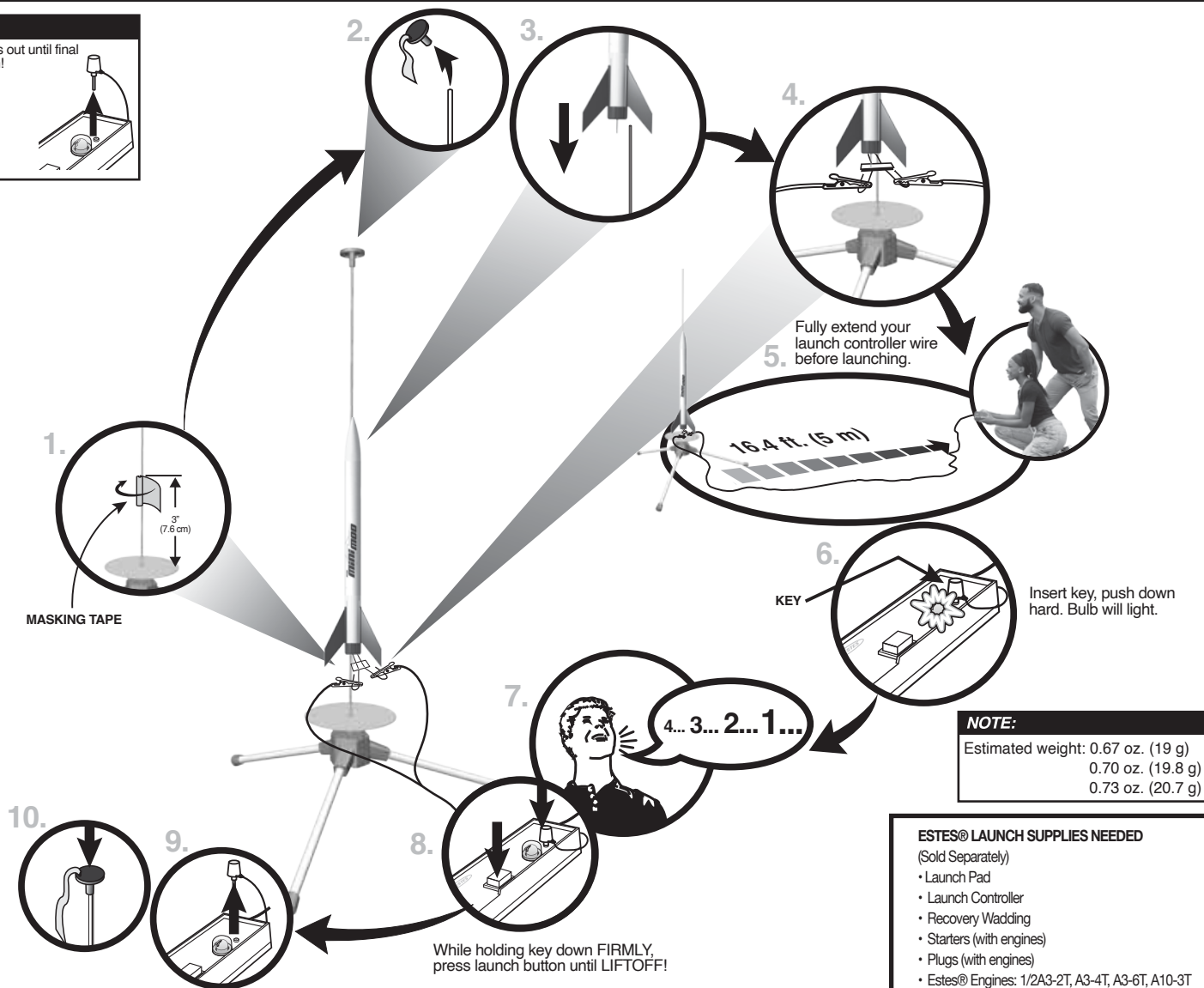
PREPARE ENGINE



COUNTDOWN AND LAUNCH

NOTE:

Key always out until final countdown!



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.