MINI BERTHA™

2099/2469/5332

EstesRockets.com



AGES 10+

Skill Level
BEGINNER

MODEL ROCKET INSTRUCTIONS

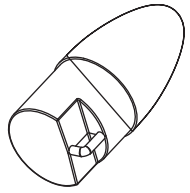
KEEP FOR FUTURE REFERENCE

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

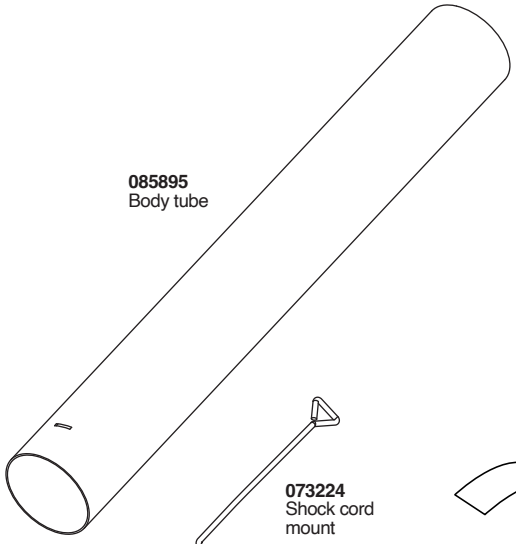
Read all instructions. *Make sure you have all parts and supplies.*



090001-2469
Self-stick decal



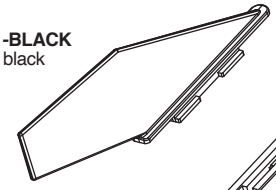
073229-BLACK
Nose cone

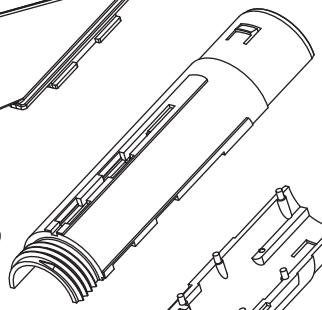


085895
Body tube

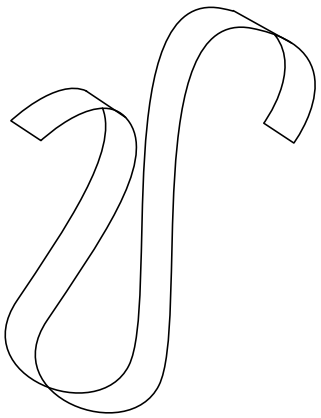
032409-YELLOW
Engine mount fin can unit

072031-BLACK
Mini fin black



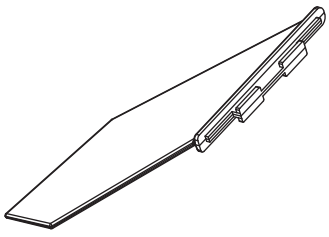


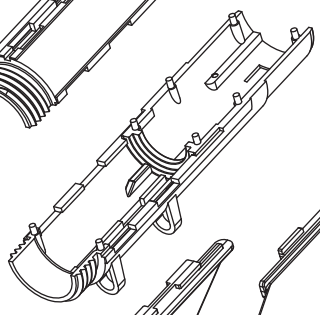
073224
Shock cord mount

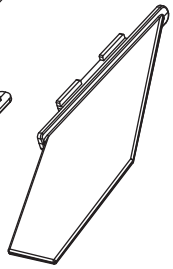


038272
Streamer

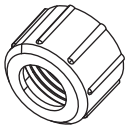
032410-YELLOW
Engine mount fin can unit



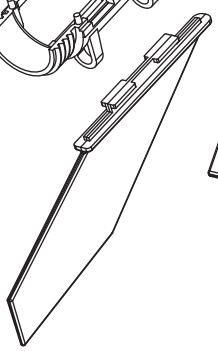


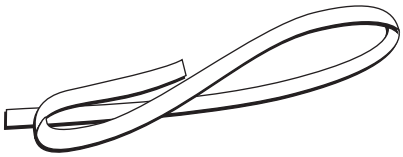


072031-YELLOW
Mini fin yellow
x3



073223-YELLOW
Engine retainer cap

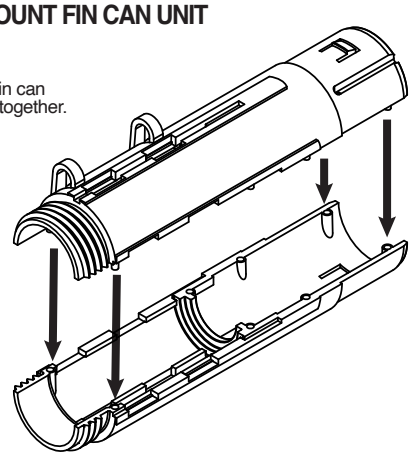




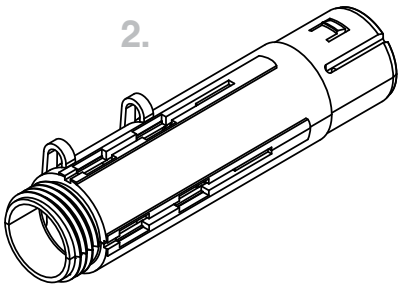
038366
Shock cord

ASSEMBLE ENGINE MOUNT FIN CAN UNIT

1. Press fin can halves together.



2.

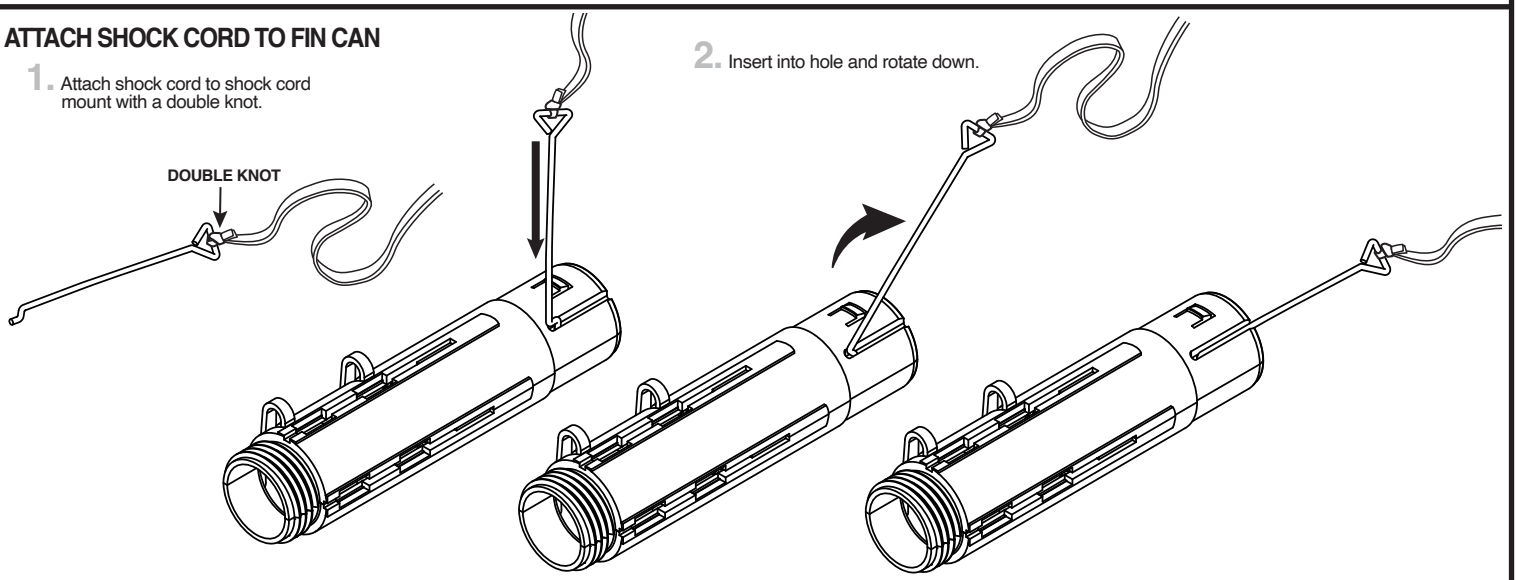


ATTACH SHOCK CORD TO FIN CAN

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

DOUBLE KNOT

2. Insert into hole and rotate down.



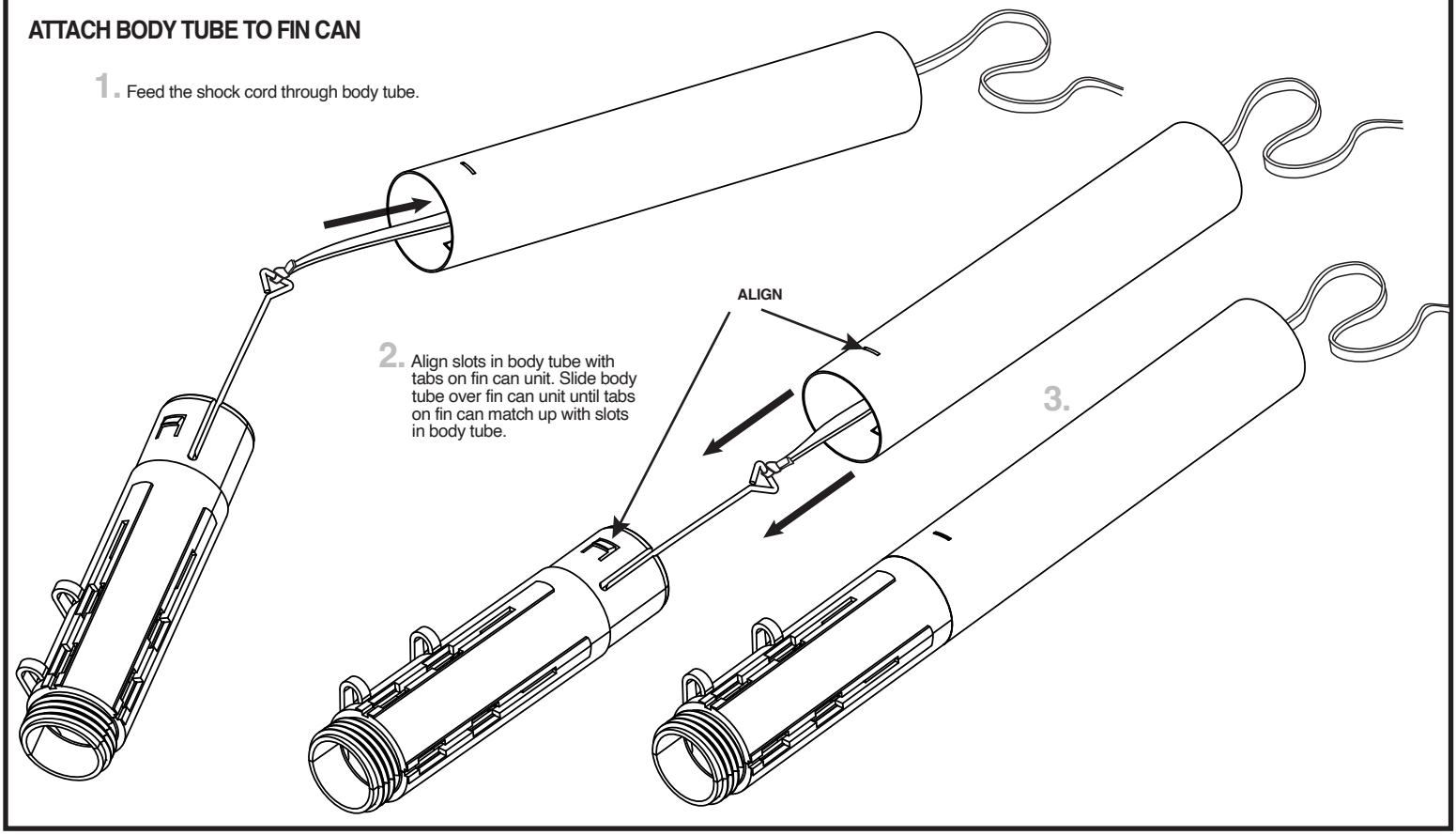
ATTACH BODY TUBE TO FIN CAN

1. Feed the shock cord through body tube.

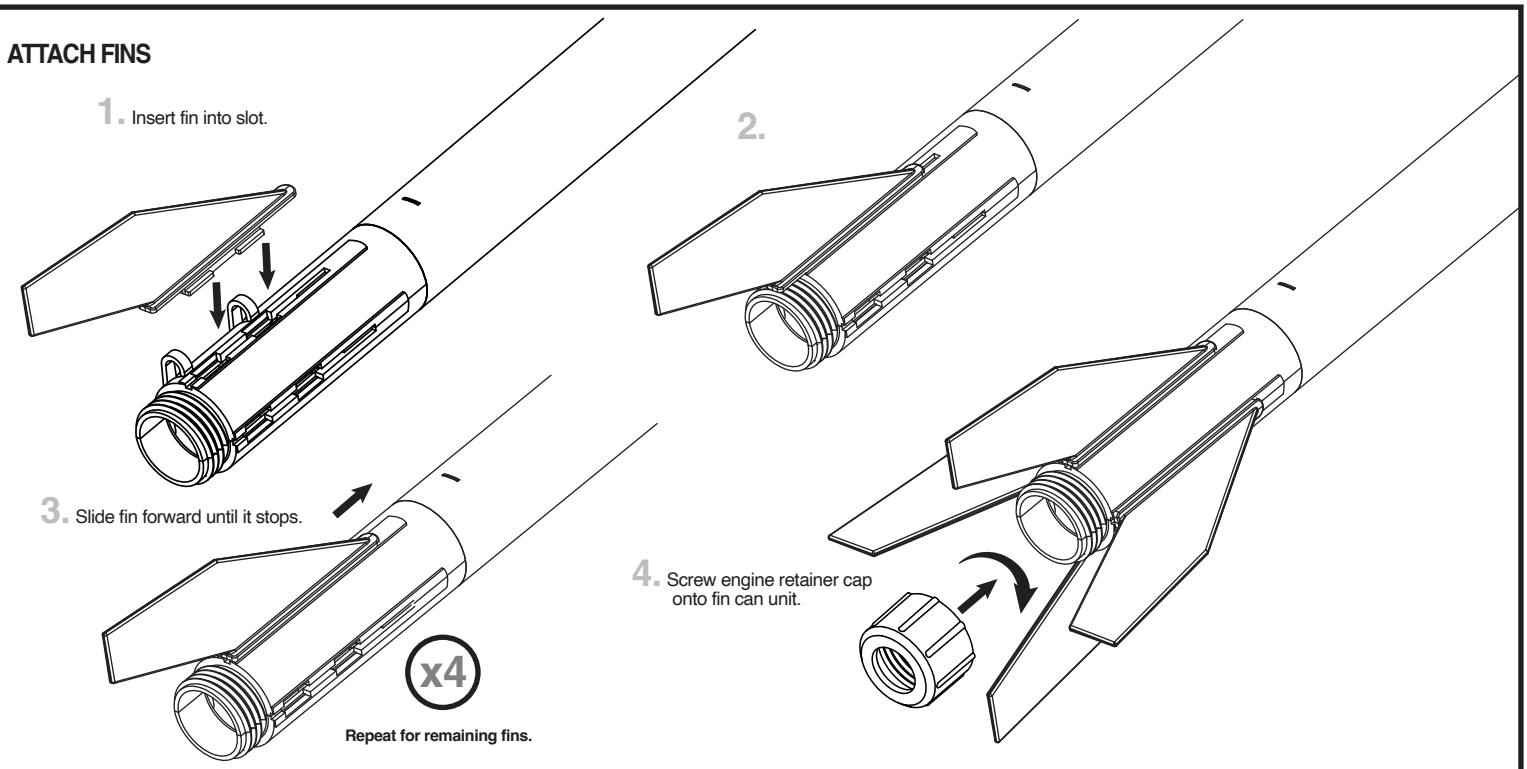
ALIGN

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.

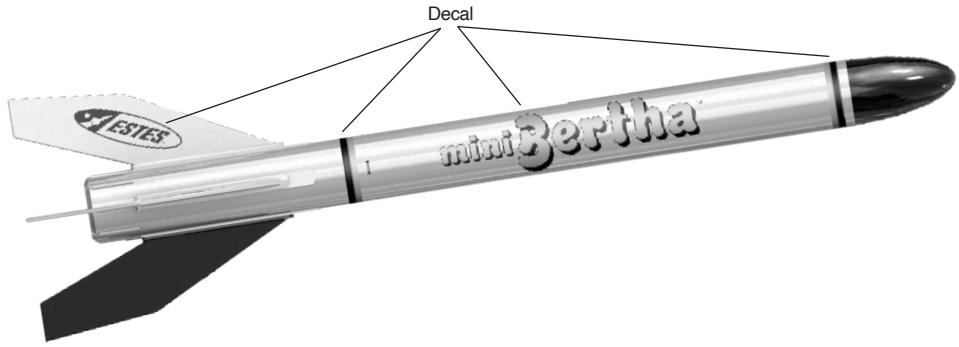
3.



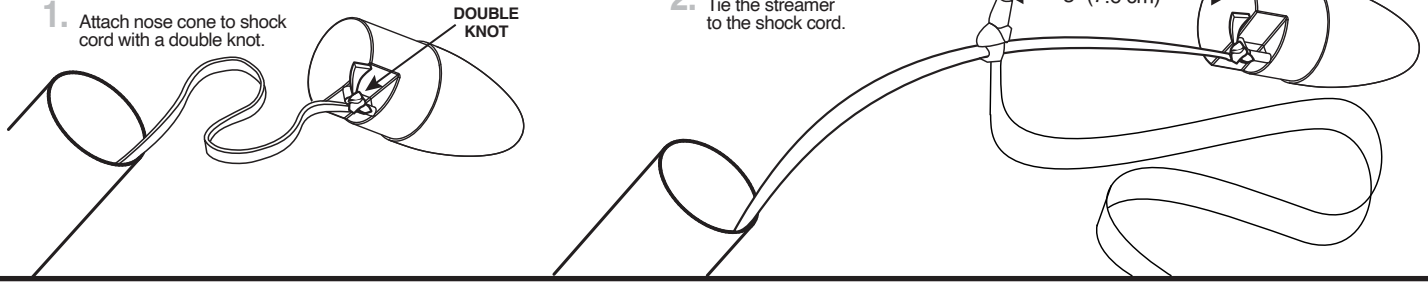
ATTACH FINS



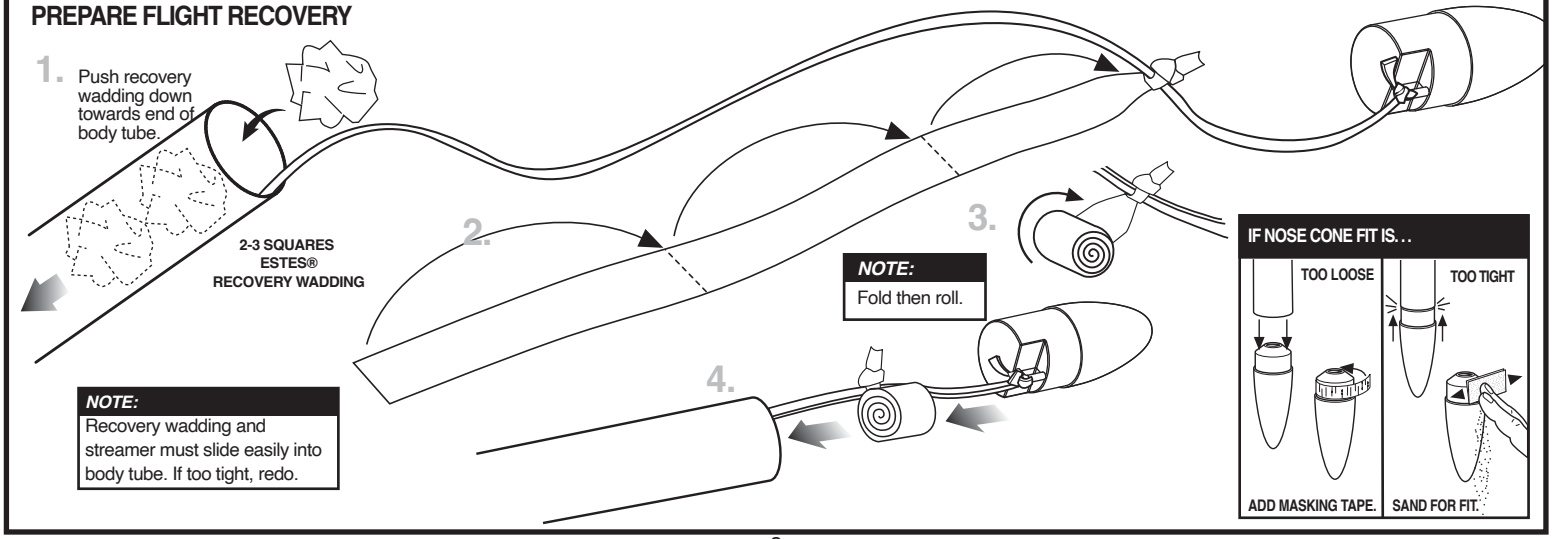
APPLY DECAL



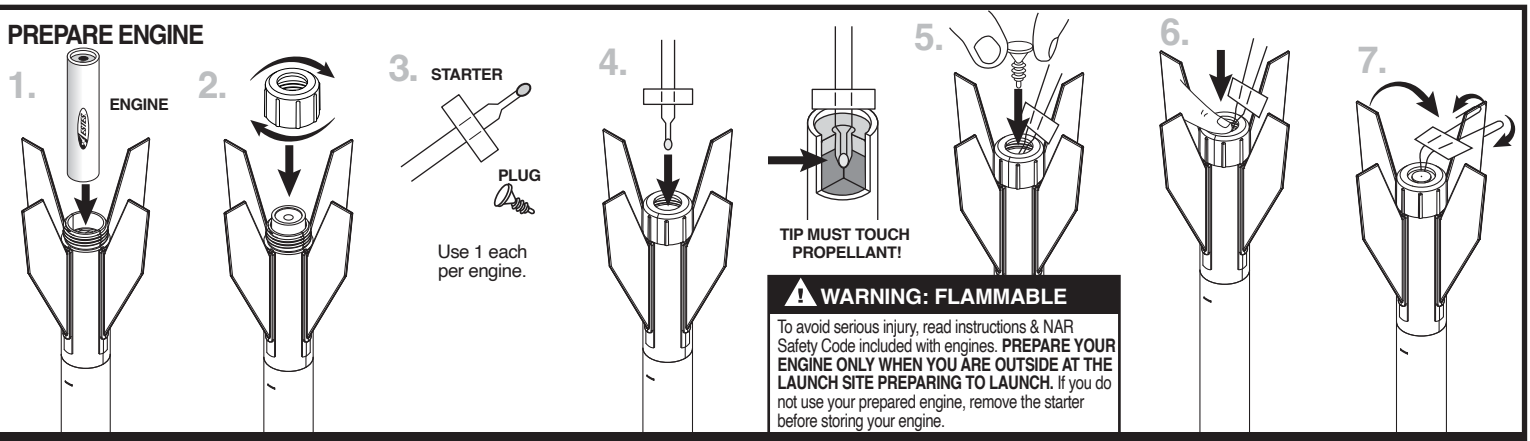
ATTACH THE NOSE CONE AND STREAMER



PREPARE FLIGHT RECOVERY



PREPARE ENGINE



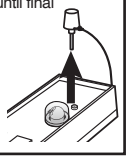
⚠ WARNING: FLAMMABLE

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 AND LAUNCH

NOTE:

Key always out until final countdown!



NOTE:

Estimated weight: 0.61 oz. (17.3 g)

ESTES® LAUNCH SUPPLIES NEEDED

(Sold Separately)

- Launch Pad
- Launch Controller
- Recovery Wadding
- Starters (with engines)
- Plugs (with engines)
- Estes® Engines: 1/2A3-2T, A3-4T, A10-3T

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.

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PN 090004-2469 (8-25)