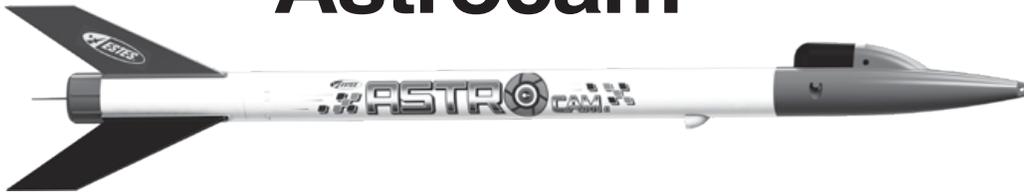




EstesRockets.com

Astrocam®

7308



MODEL ROCKET INSTRUCTIONS

KEEP FOR FUTURE REFERENCE

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

READ ALL INSTRUCTIONS. Make sure you have all parts and supplies.



090001-5325
Self-stick decal

073211/212
Engine mount
fin can unit
(1 fin slot)

031393
Body tube

073217
Camera/
memory card

072840
Nose cone

073209/210
Shock cord mount/anchor

073113
String

067112
Rubber Bands
X6

038364
Shock cord

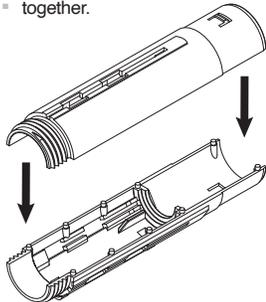
072697
Engine retainer cap

072700/926
Fins
(2 fin slots)

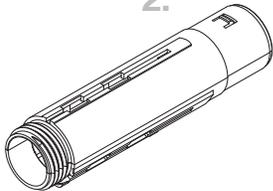
035806
Parachute

ASSEMBLE ENGINE MOUNT FIN CAN UNIT

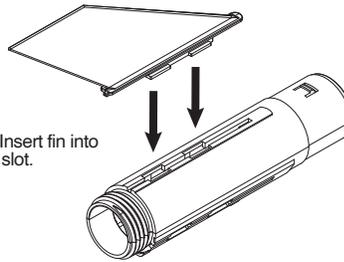
1. Press firmly together.



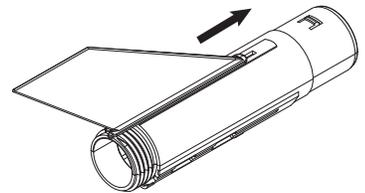
2.



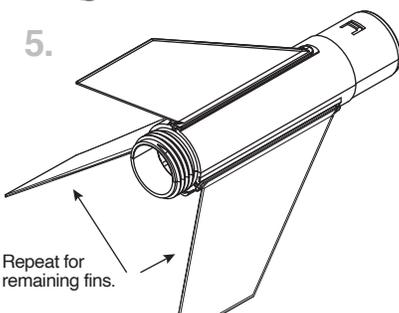
3. Insert fin into slot.



4. Slide fin forward until it stops.

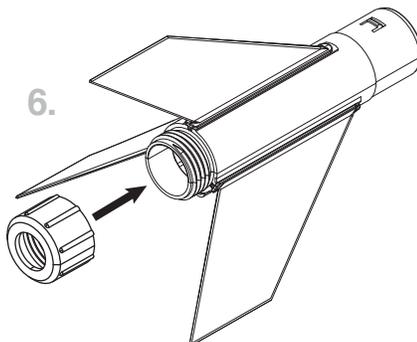


5.

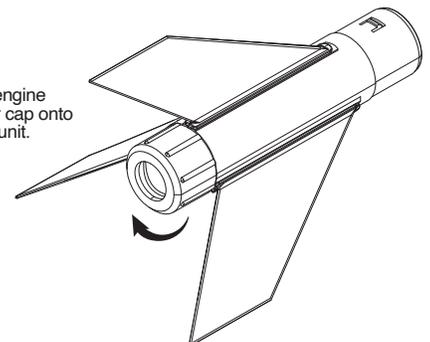


Repeat for remaining fins.

6.

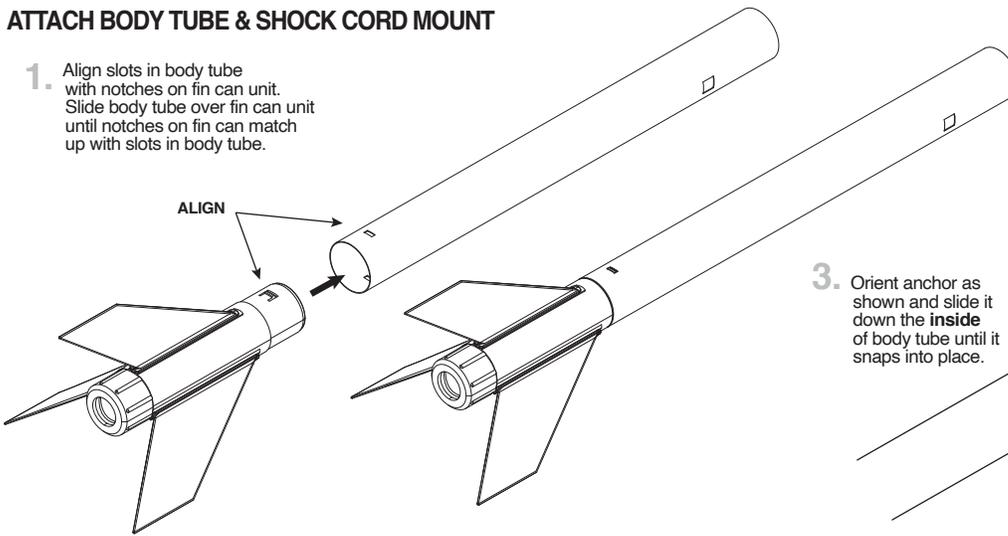


7. Screw engine retainer cap onto fin can unit.



ATTACH BODY TUBE & SHOCK CORD MOUNT

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



2. Insert mount through square hole.

ROUND END TO FRONT

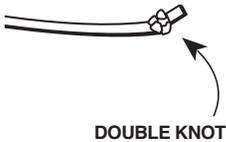
3. Orient anchor as shown and slide it down the **inside** of body tube until it snaps into place.

NOTE:

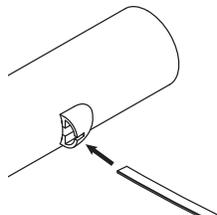
You may need a pen or pencil to help push anchor in place.

INSTALL SHOCK CORD

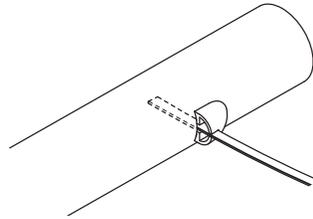
1. Tie double knot in end of shock cord.



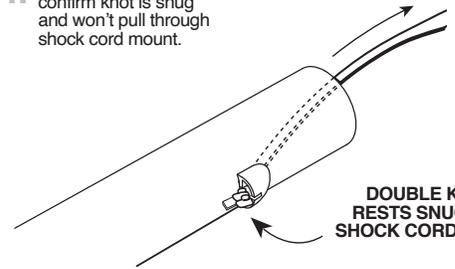
2. Insert **unknotted** end of shock cord through opening of shock cord mount.



3.

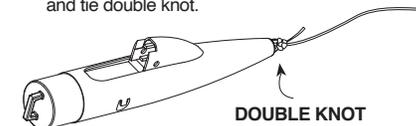


4. Pull on shock cord to confirm knot is snug and won't pull through shock cord mount.



ATTACH PARACHUTE AND SHOCK CORD

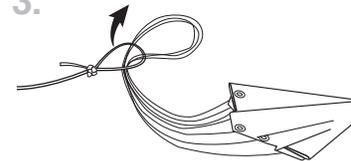
1. Attach single string to top of nose cone and tie double knot.



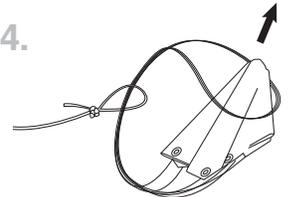
2. On opposite end of single string make a small loop and tie double knot again.



3.



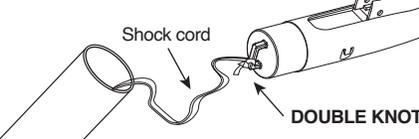
4.



5.



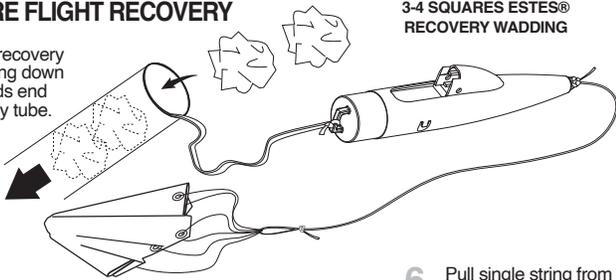
6. Attach shock cord to bottom of nose cone and tie double knot.



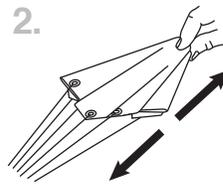
PREPARE FLIGHT RECOVERY

3-4 SQUARES ESTES® RECOVERY WADDING

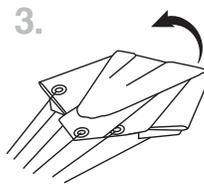
1. Push recovery wadding down towards end of body tube.



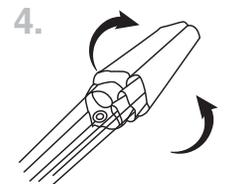
2.



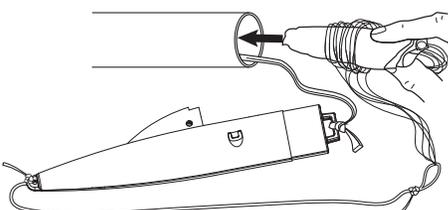
3.



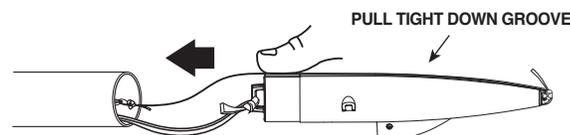
4.



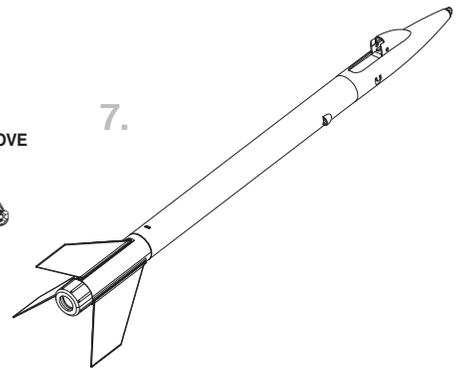
5. Wrap shroud lines loosely and insert parachute into body tube



6. Pull single string from top tight down groove on bottom of nose cone and hold with thumb while inserting into body tube



7.



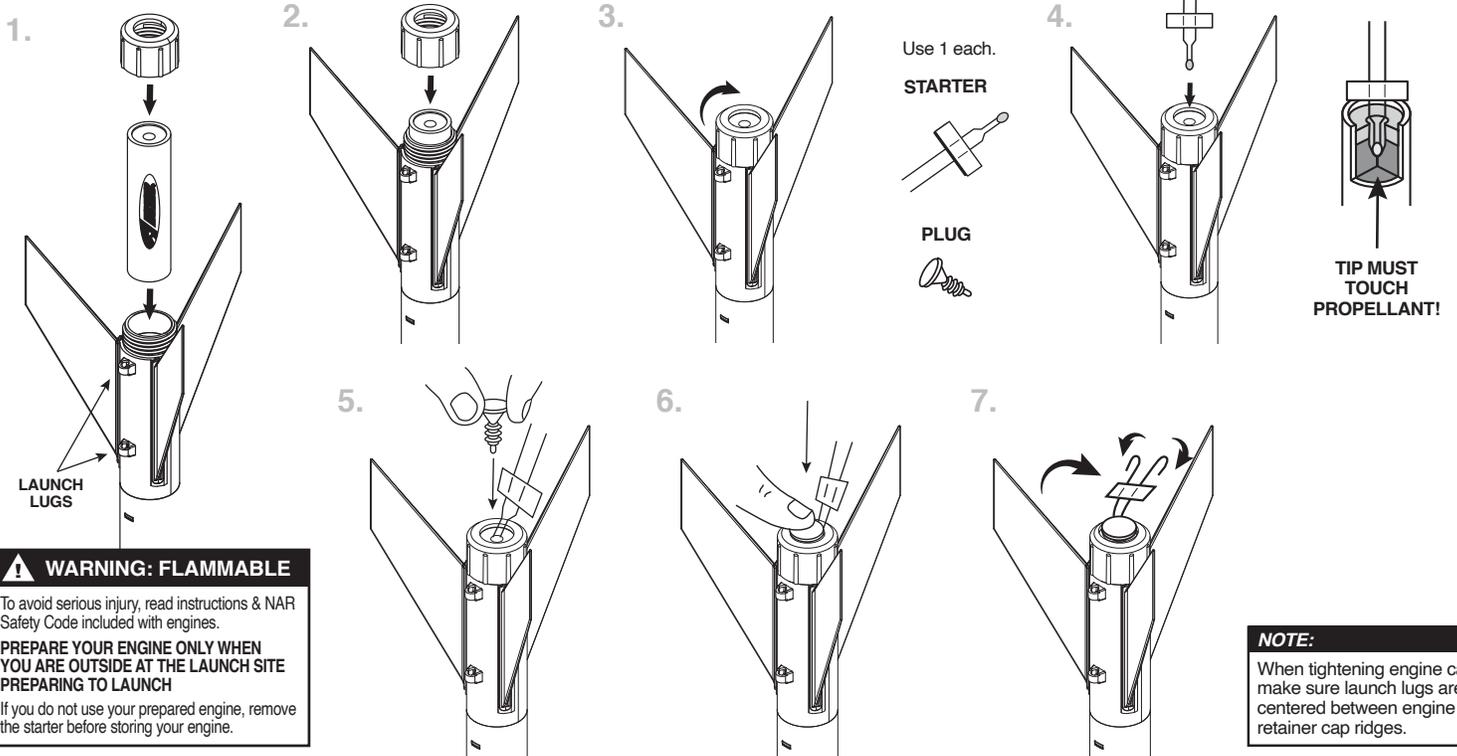
NOTE:

Recovery wadding and parachute must slide easily into body tube. If too tight, redo.

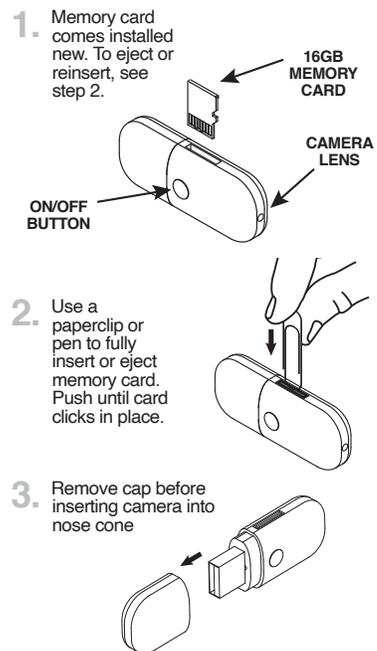
APPLY DECALS



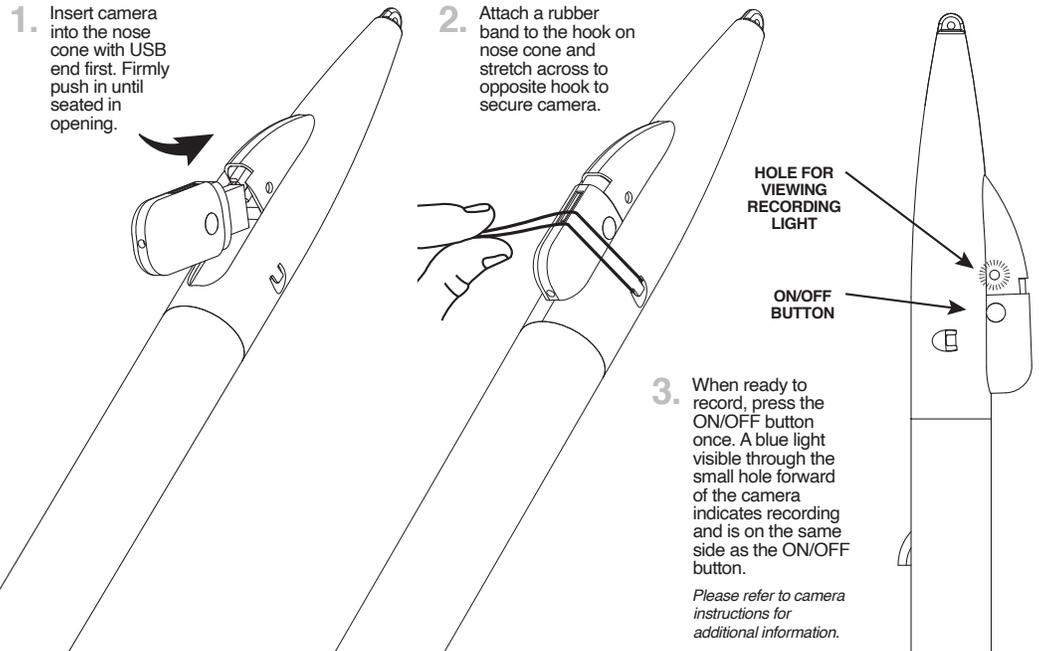
PREPARE ENGINE



PREPARE CAMERA



INSERT CAMERA



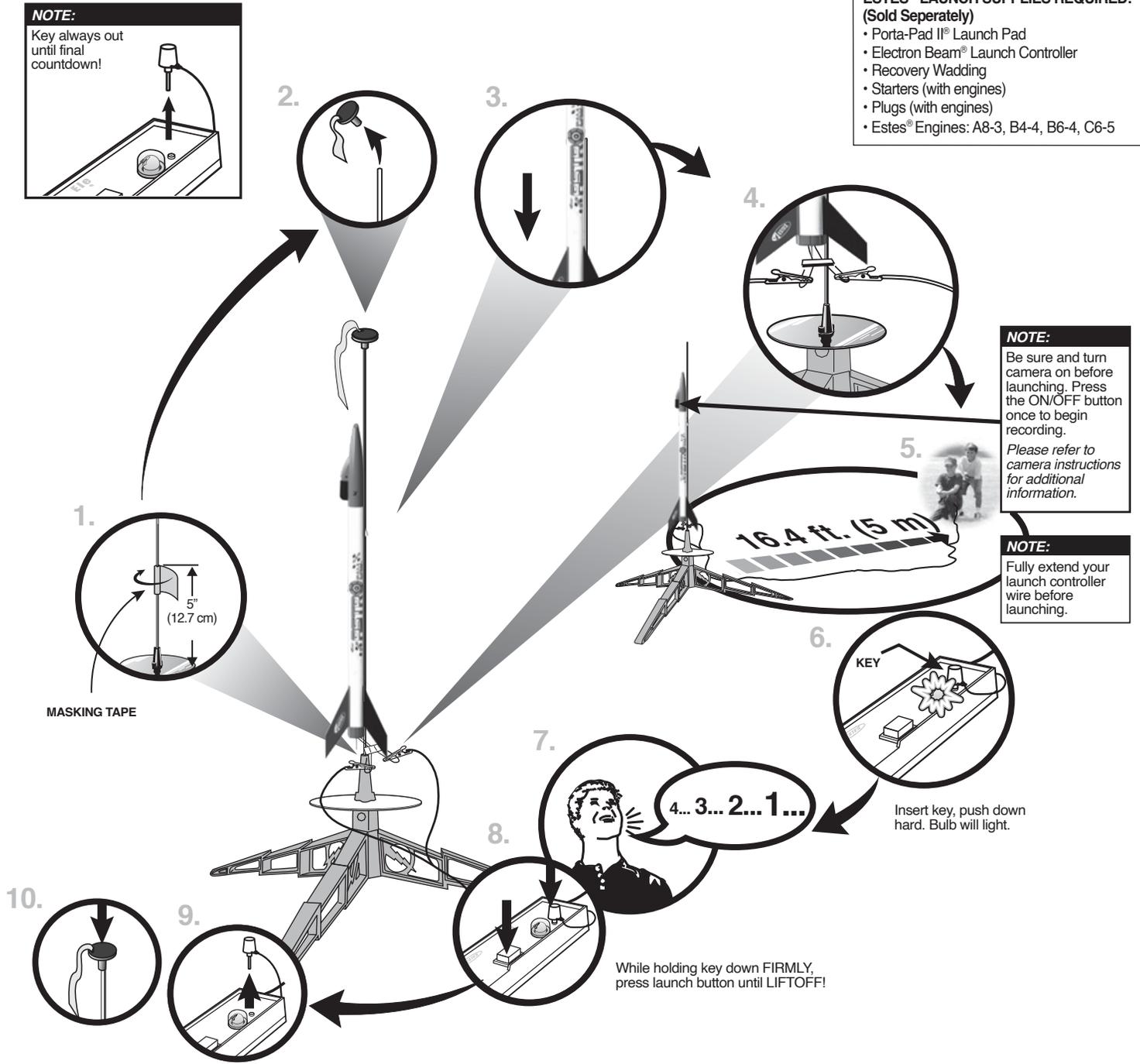
COUNTDOWN AND LAUNCH

NOTE:

Key always out until final countdown!

ESTES® LAUNCH SUPPLIES REQUIRED:

- (Sold Separately)**
- Porta-Pad II® Launch Pad
 - Electron Beam® Launch Controller
 - Recovery Wadding
 - Starters (with engines)
 - Plugs (with engines)
 - Estes® Engines: A8-3, B4-4, B6-4, C6-5



NOTE:
Be sure and turn camera on before launching. Press the ON/OFF button once to begin recording.
Please refer to camera instructions for additional information.

NOTE:
Fully extend your launch controller wire before launching.

NOTE:
Estimated weight: 1.5 oz. (42.6 g)

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.

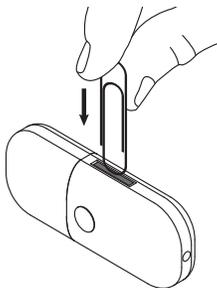
FLYING YOUR ROCKET: Choose a large field (500 ft. [152 m] square) free of dry weeds and brown grass. The larger the launch area, the better your chance of recovering your rocket. Football fields and playgrounds are great. Launch only with little or no wind and good visibility. Always follow the National Association of Rocketry (NAR) SAFETY CODE (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.



Removing/Inserting Memory Card

The memory card comes installed in the camera. To eject the memory card, use a paper clip or pen. Gently press down until you feel a click and the memory card will pop out. To reinstall, use paper clip or pen and gently push into slot.



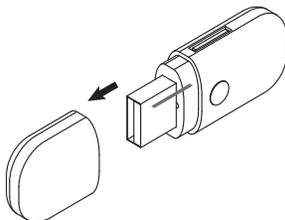
Viewing Recorded Video

Remove cap from the camera body housing. Insert USB connector into computer port.

For optimal viewing performance transfer .AVI file to your local computer's hard disk drive and open in Windows Media Player.

Additional software may be required.

For assistance please call (719) 372-6565 ext. 216 for Customer Service
Mon - Fri, 7:30AM - 3:30PM



This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.

—Increase the separation between the equipment and receiver.

—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

—Consult the dealer or an experienced radio/TV technician for help.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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Estes Industries, LLC, 1295 H Street, Penrose, CO, 81240. Made in Guangdong, China.

PN 090004-5325B (5-20)

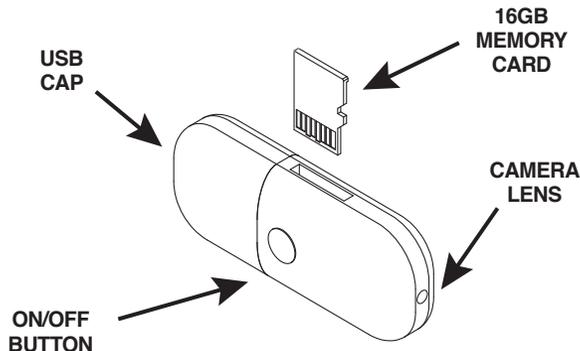


Astrocam® Rocket Camera

073217

CAMERA INSTRUCTIONS

KEEP FOR FUTURE REFERENCE. READ ALL INSTRUCTIONS.



Video Format:	.AVI
Video Resolution:	1920 x 1080, 16:9
Picture Format:	.JPG
Picture Resolution:	2560 x 1440
Frame Rate:	30 fps
Battery Charge Life:	40 minutes

USB 2.0

The 16GB memory card will provide approximately 90 minutes of recording time.
The Astrocam® can support 1 memory card up to 128GB.

Battery Charging

Charge before first use. Insert USB connector into port in computer or other 5V USB charger port. Blue LED slowly blinks. Charging time is two to three hours.

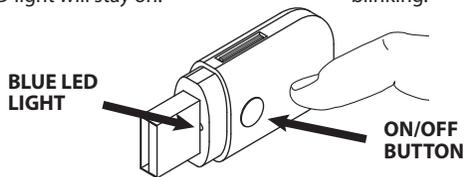
Video Camera Usage

1. To Turn Camera On:

Press ON/OFF button for two seconds. Blue LED light will stay on.

2. To Begin Filming:

Press ON/OFF button. Blue LED light begins blinking.



3. To Stop Recording:

Press ON/OFF button. Blue LED light stays on.

4. To Turn Camera Off:

Press ON/OFF button for two seconds. Blue LED will blink slowly 3 times and power off.

Still Picture Usage

To Turn Camera On: Press ON/OFF button for two seconds. Blue LED light will stay on.

Press ON/OFF button quickly two times. Blue LED will blink indicating a photo has been taken.

LED Light Indicator

Standby:

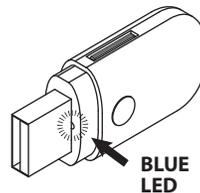
Light stays on.

No Memory Card:

Light shuts off after blinking three times.

Memory Card Full:

Light shuts off after blinking six times.



Low Battery:

Light will turn off after one half second. After two attempts to turn on camera, light will turn off and stay off.

Charge Battery:

Light blinks slowly. When fully charged, light remains on.

Video Recording:

Light blinks.

Set Date and Time

When new from factory or when using a brand new memory card, start by doing the following. Press ON/OFF button for two seconds. Blue LED light will stay on. Press ON/OFF button for two seconds to turn camera off. This procedure will create the files needed on the memory card for the next step. Insert USB connector into USB port on computer. Select the drive letter that corresponds to the removable storage device. Open the time text document (time.txt). Change the date and time numbers to your current date and time. You must use the same format as displayed year/month/day. Click on "File", click "Save", click "File", then click "Exit". Remove camera from USB port. Turn on camera, turn off camera. Your videos should now display the correct date and time.