ESTES®

estesrockets.com

# 1:200 Scale SATURN V™

2160



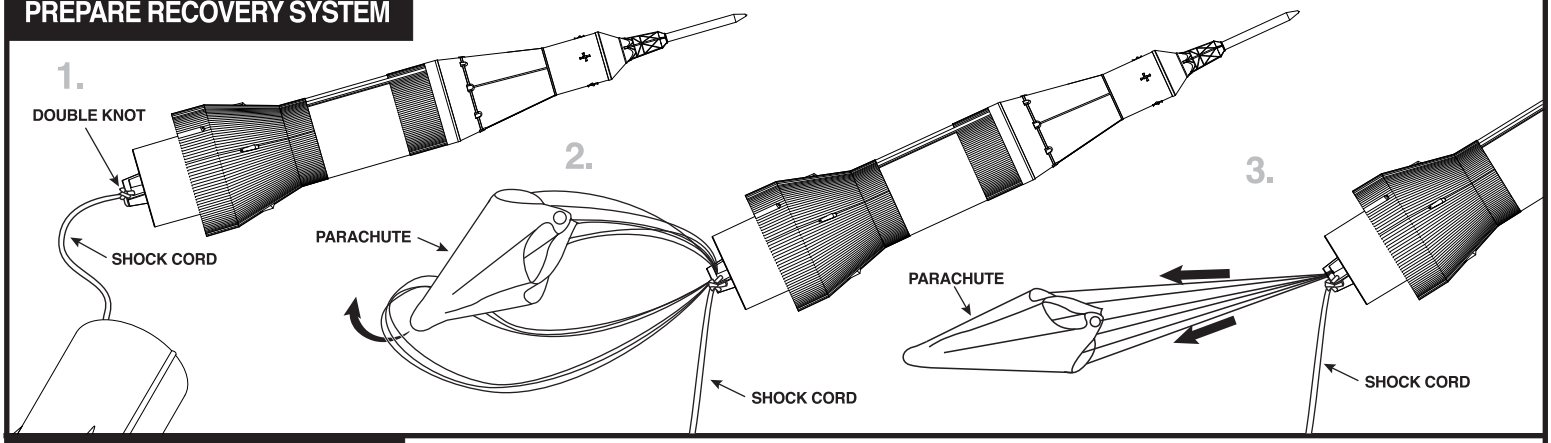
## READY TO FLY MODEL ROCKET INSTRUCTIONS

**KEEP FOR FUTURE REFERENCE**

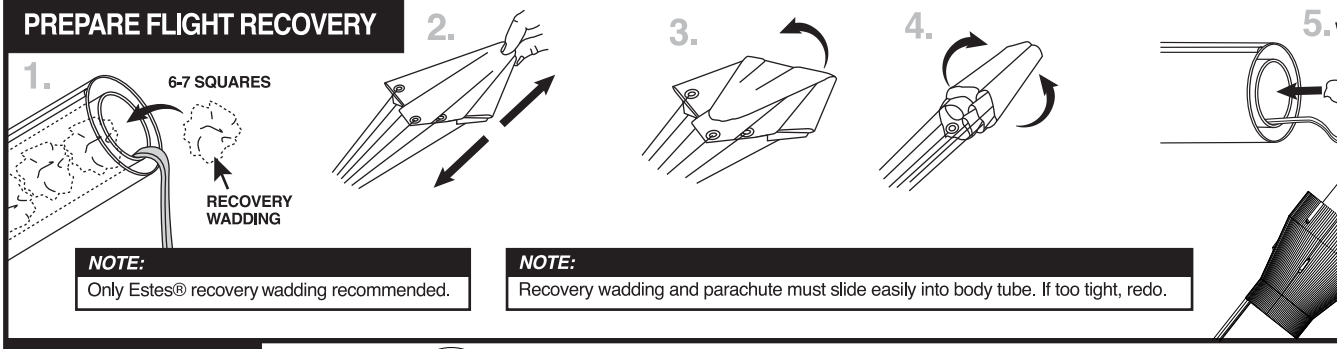
**IMPORTANT: Please record date found on box near barcode, and keep for future reference. _____**

***Read all instructions carefully.***

## PREPARE RECOVERY SYSTEM



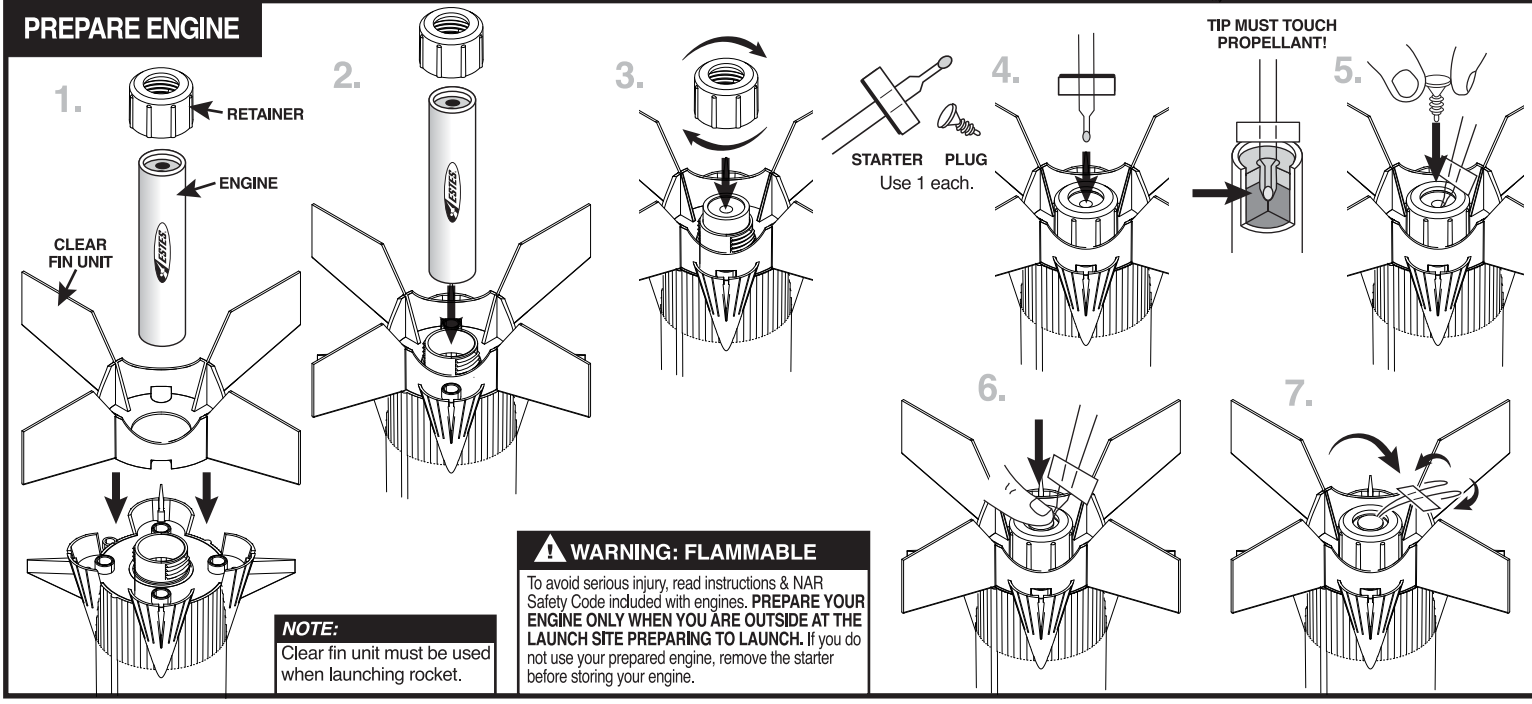

## PREPARE FLIGHT RECOVERY




***NOTE:***
Only Estes® recovery wadding recommended.

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

## PREPARE ENGINE




***NOTE:***
Clear fin unit must be used when launching rocket.

**⚠ 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!



**ESTES LAUNCH SUPPLIES NEEDED (Sold Separately)**
- Launch Pad
- Launch Controller
- Recovery Wadding
- Starters (with engines)
- Plugs (with engines)
- Recommended Estes® Engine: C6-3

**NOTE:**
Estimated weight: 5 oz. (141.7 g)

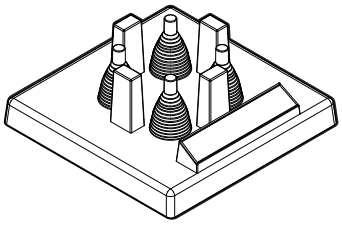



**NOTE:**
Extend launch controller wire the 15+ feet before launching.

**NOTE:**
Clear fin unit must be used when launching rocket.

Insert safety key. Press HARD! (If bulb does not light, you are not pressing hard enough.)

Continue to hold safety key down FIRMLY. Count down. Press launch button. LIFTOFF!



Stand included for display purposes only

## 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.
**MISFIRES** TAKE THE KEY OUT OF THE CONTROLLER. WAIT ONE MINUTE BEFORE GOING NEAR THE ROCKET! Disconnect the micro-clips from the starter. Remove the engine from the rocket. Remove the plug and starter from the engine. If the starter is burned, it was not inserted correctly; it must touch the propellant inside the engine. Insert a new starter all the way inside the engine without bending it. Then insert the plug to hold the starter firmly in place. Repeat the steps under COUNTDOWN AND LAUNCH.

22 PAP

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PN 090004-2160 (12-18)

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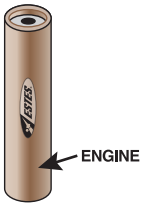
1:200 Scale
# SATURN V

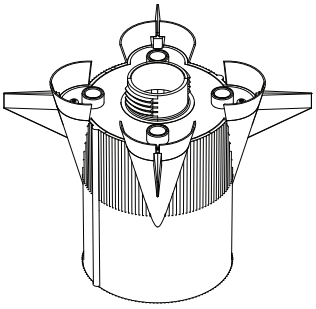
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**Supplement to instructions supplied. Read and follow both.**

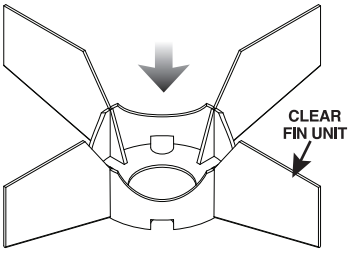
## PREPARE ENGINE

1.

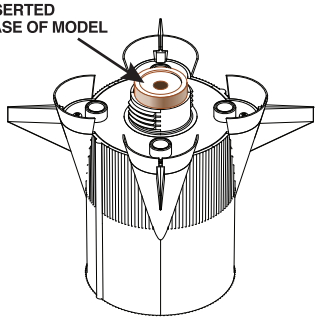


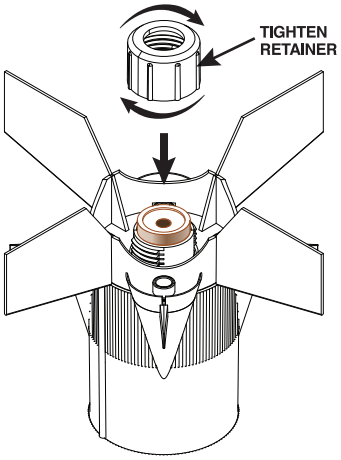
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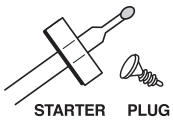



ENGINE MUST BE
FULLY INSERTED
INSIDE BASE OF MODEL



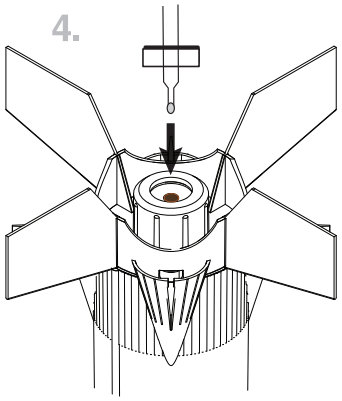
3.



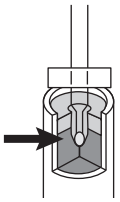




Use 1 each.

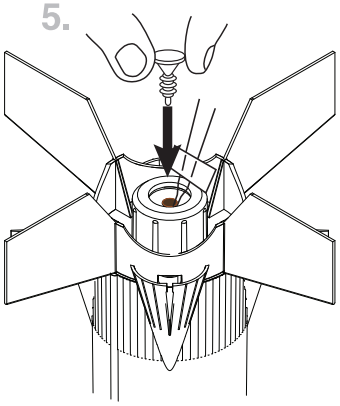
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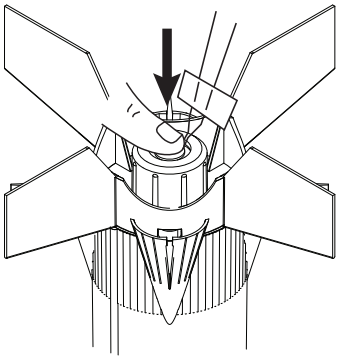
TIP MUST TOUCH
PROPELLANT!



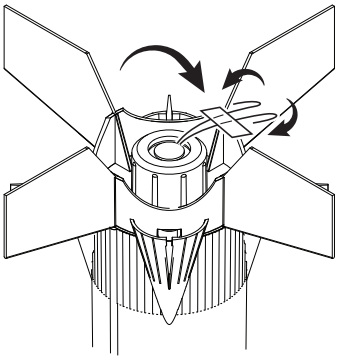
5.



6.



7.

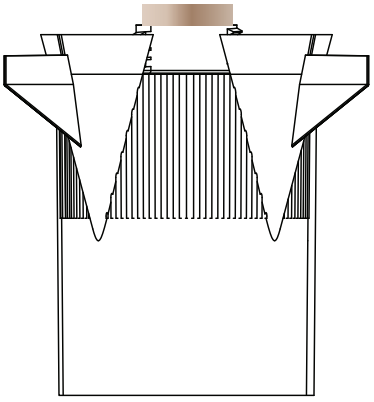


**NOTE:**
Clear fin unit must be used when launching rocket.

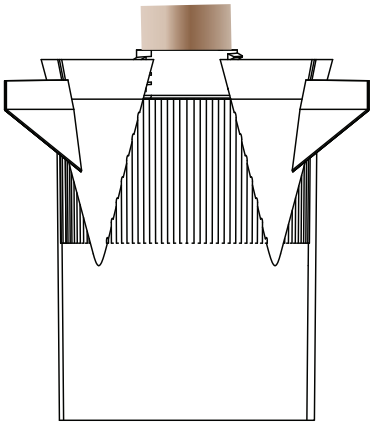
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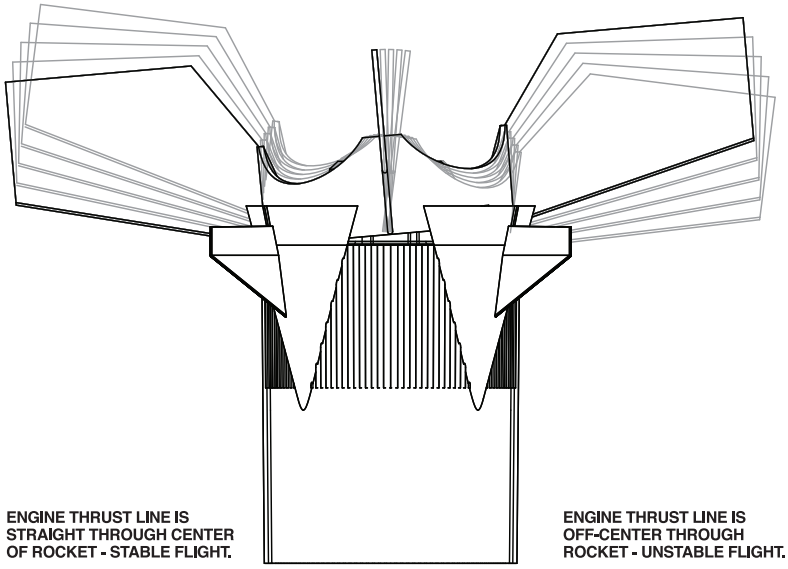
FULLY INSERTED ENGINE



NOT FULLY INSERTED ENGINE



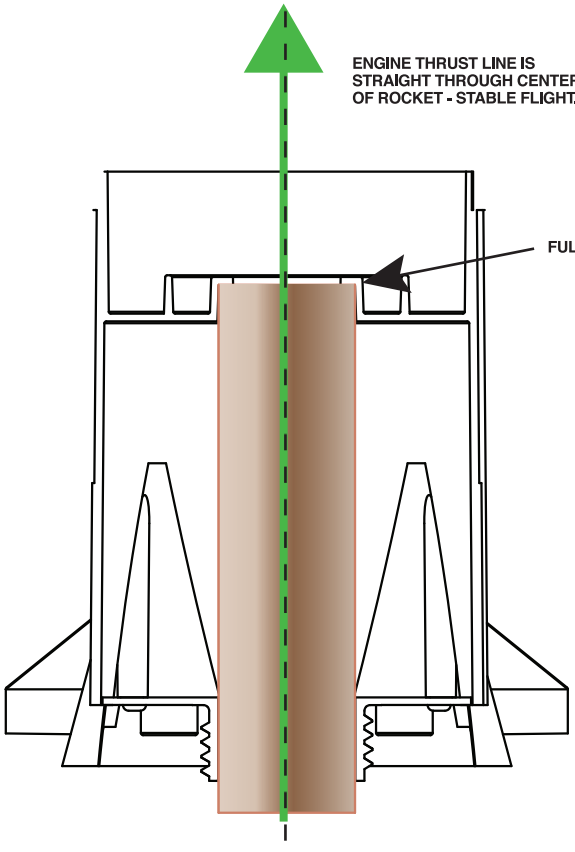
CLEAR FIN UNIT WILL WOBBLE
IF ENGINE IS NOT FULLY INSERTED.



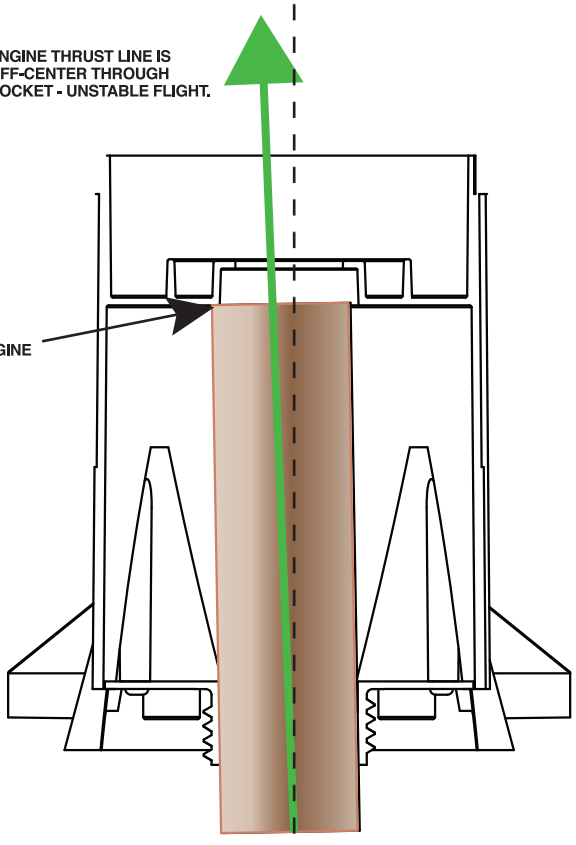
ENGINE THRUST LINE IS
STRAIGHT THROUGH CENTER
OF ROCKET - STABLE FLIGHT.

ENGINE THRUST LINE IS
OFF-CENTER THROUGH
ROCKET - UNSTABLE FLIGHT.

FULLY INSERTED ENGINE



NOT FULLY INSERTED ENGINE



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