

STEP 6

Remove shock cord from motor tube so it extends out the FW of the booster. Insert into fire blanket slit, slide blanket down on top of motor tube. Tie double knot onto the bulkhead screw eye.

STEP 7

Attach the parachute to the shock cord at a point about 1/3 of the length of the shock cord from the payload. To do this, take the chute shroud line loops in one hand and, with the other hand, take the chute and go around the shock cord, passing the chute through the shroud line loops. When the chute is pulled through tightly it will form a knot.

STEP 8

Lightly sand plastic nose cone with fine sandpaper to remove molding seam line. Also sand airframe and fins to produce a smooth finish.

FINISH

Spray rocket with primer, sand and repeat until smooth finish is obtained. Spray rocket with paint of choice, let dry. Apply protective clear coat.

Attention!

This rocket is recommended for low to mid power rocket motors D — G impulse. Depending on your flying field and finished weight, this is a very versatile kit. Always check stability to ensure stable flight; the Center of Gravity (CG) must be forward of the Center of Pressure (CP) in flight ready condition.

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GRADUATOR™

FLYING MODEL ROCKET KIT



D-G
Capable Impulse

DIAMETER 2.56"
HEIGHT 40"
WEIGHT 13oz

Scan here for complete details!



Featuring:

- 2.56" Pre-Slotted Airframe
- 21" Rip-Stop Nylon Parachute
- Payload Section
- Kevlar Shock Cord Mount
- Elastic Shock Cord
- 29mm MMT
- Fire Resistant Blanket
- Launch Lug
- Hardware



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PK-16
HAND MADE
IN THE
USA





LOC GRADUATOR

- 20" Slotted Booster
- 10" Payload Section, coupler, bulkhead
- Polypropylene Nose Cone
- 21" Parachute
- 2 Screw Eyes
- Kevlar Shock Cord Mount
- Elastic Shock Cord
- 29mm Motor Tube
- 1/8" Fin Set
- 2 1/4" Centering Rings
- 1/4" Launch Lug
- Fire Resistant Blanket

Due to the high thrust motors that can be flown in this rocket, epoxy is recommended!

Before beginning construction, read over instructions to become familiar with the proper construction steps. **TEST FIT ALL PARTS!** Light sanding may be necessary to obtain proper fit.

STEP 1

Rough sand the motor tube to ensure proper adhesion OR remove the outer glassine wrap. Slide the one ring onto the motor tube so the tube is 1/8" exposed from the ring. OR measure out where the FWD of the fin tab will be, some choose to sandwich their rings to the fin tabs. Insert other ring on other end of motor tube so 1/8" of the motor tube protrudes. Tack rings into place with epoxy, allow to cure. Epoxy fillet both sides where the ring meets the motor tube. Allow to cure.

STEP 2

Install one screw eye into the FWD ring (the one with the hole). Epoxy fillet where the screw meets the ring on both sides. Allow to cure.

Take one end of the red Kevlar shock cord mount and double knot to the screw eye on the FWD ring. Put a dab of epoxy on the knot. Allow to cure. Tie a loop on the opposite end.

Take one end of the elastic shock cord and tie a double knot to the Kevlar loop. Bunch up the shock cord and feed down toward the AFT of the motor tube. This will keep it clear of epoxy in the next steps.

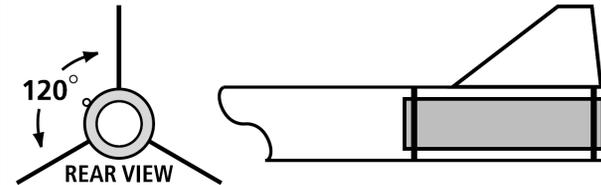
STEP 3

Slather epoxy up the AFT of the airframe between each fin slot, a few inches. Insert motor mount assembly up the airframe. Slide all the way up the airframe until the MMT is slightly recessed in the AFT of the airframe. Once cured epoxy fillet the AFT ring where the ring meets the airframe. Also where the motor tube meets the ring. Allow to cure.

STEP 4

Reposition airframe laying down. Apply a generous bead of epoxy to the root edge of one fin and insert in the fin slot. Allow to cure before moving onto the next fin. When all fins are epoxied in place, apply an external fillet to each fin to airframe joint.

CROSS SECTION OF CENTERING RINGS/ MOTOR MOUNT TUBE ASSEMBLY IN MAIN AIRFRAME.



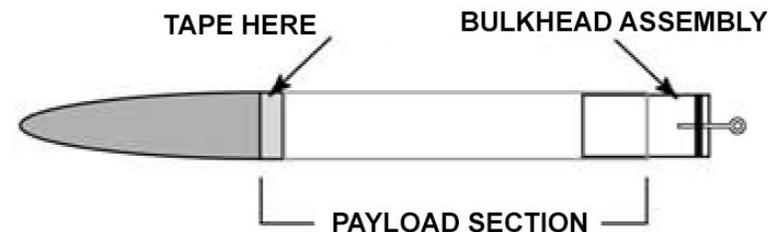
STEP 5

Install the screw eye into the bulkhead. Epoxy fillet both sides of the screw eye to the bulkhead, allow to cure.

Install the bulkhead 1/8" recessed into the coupler. Epoxy fillet each side where the bulkhead meets the coupler. Allow to cure.

OPTIONAL—you may retain the coupler with screws or plastic rivets. This will leave the possibility of adding an electronics bay in the future for dual deployment flights.

Slather epoxy 1" into one end of payload. Insert the coupler 1/2 way with screw eye toward the AFT. Allow to cure.



STEP 6

Cut the launch lug in half at an angle, making them aerodynamic. Find the high point of the airframe between fins. Mark a straight perpendicular line up 12" from the AFT of the airframe. Epoxy one lug 2" up from the AFT of the airframe. Epoxy another at least 10" FWD. Allow to cure.