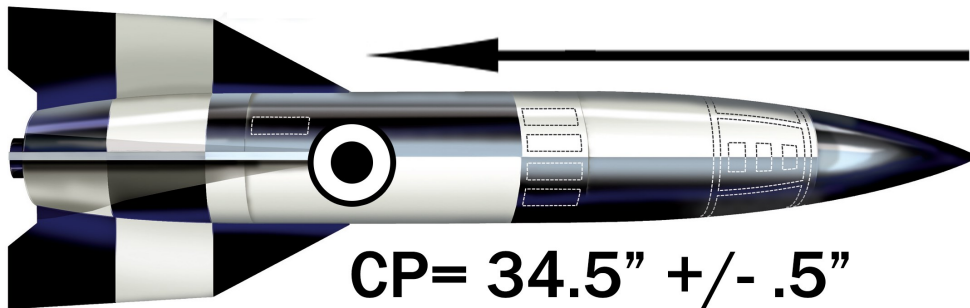


STEP 13

With the rocket finished, you will need to decide what motors you'll be flying your V2 on. Select a range of motors and in your simulation software you can add a mass object to the cone and simulate launches. An average amount of nose weight ballast to add 8oz. A safe balanced weight with motor loaded you should have a 1 caliber (4") between the Center of Pressure (CP) and the Center of Gravity (CG). Either use the center hole in the cone to pour ballast/epoxy down, or drill another. It is recommended to wash the cone out with dish soap and hot water to help the epoxy adhere prior to adding epoxy/ballast.

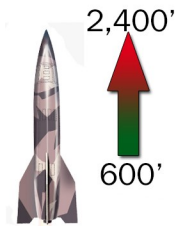


Sim!

This rocket is recommended for high power rocket motors I through J impulse. Depending on your flying field and finished weight, this is a very versatile kit. The Rocksim file is available on the V2 product page on our website. 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.

Since Yank Aeronautics LLC dba LOC PRECISION cannot control the use of its products once sold, the buyer assumes all risks and liabilities there from, and accepts and uses LOC Precision products on these conditions.

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2,400'

600'

V2

H - J

Capable Impulse

DIAMETER 5.5"

HEIGHT 48"

WEIGHT 80oz

Featuring:

- 5.5" Pre-Slotted Tail Cone
- Polypropylene Nose Cone
- 50" Rip-Stop Nylon Parachute
- 18' Tubular Nylon Shock Cord
- 38mm Motor Mount
- Rail Guides/Launch Lug Hardware

* THIS KIT IS RECOMMENDED FOR THOSE WITH PREVIOUS MODEL ROCKET BUILDING EXPERIENCE!



435A Factory Street, Plymouth, WI 53073
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LOCprecision.com





LOC 5.5" V2

- 15" Airframe
- Pre-Slotted Tail Cone
- Tail Cone Shoulder Ring
- CR-300-152 AFT Ring
- 5.5" Long Nose Cone
- 50" Parachute
- 18' Tubular Nylon Shock Cord
- 38mm x 14" Motor Mount Tube (MMT)
- 5.5" V2 Fin Set
- 1010 Rail Guides—1/2" Launch Lug
- Hardware—1 Quick Link, Eye Bolt Assembly

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.

JB Weld, a thick, two part epoxy is recommended for the entire fin/tail cone assembly as it bonds to both plastic and wood.

- STEP 1** Using sandpaper, sand the outside of the main airframe. Rough sand and or remove the glassine wrap from outside of the 38mm motor tube. Lightly sand the plastic nose cone and tail cone to remove molding seam line. When sanded it is good practice to rinse the inside of the cones with hot soapy water to remove mold release agents.
- STEP 2** Install eye bolt into 1/4" lasered hole in FWD centering ring. Epoxy nut to ensure it stays in place. Allow to cure.
- STEP 3** Position the AFT centering ring into AFT of the tail cone flush with its bottom edge. Apply a continuous bead of epoxy around the inside of the tail cone where the AFT centering ring meets the tail cone. JB Weld is suggested here. Allow to cure.

- STEP 4** Insert tail cone ring into tail cone. Pull back the ring until it snaps and meets the tail cone shoulder. Epoxy fillet the shoulder ring to the tail cone on both AFT and FWD sides. Allow to cure.
- STEP 5** Insert the 38mm MMT so 1.8" protrudes from the AFT. Insert fin to check the fit. When satisfied with the fit, remove fin.
- STEP 6—JB Weld is suggested—**Rough up the tail cone where the fins will attach. 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 JB Weld fillet to each fin to tail cone joint.
- STEP 7** Slather epoxy onto the upper 1/2" of exposed FWD end of motor tube. Insert FWD ring onto FWD of motor tube so that 1/4" of motor tube is exposed from ring. Flip tail cone assembly upside down to cure.
- STEP 8** JB Weld epoxy the 15" airframe to the assembled MMT/tail cone. Be sure **NOT TO** get excess epoxy in MMT! Apply epoxy fillet to FWD ring where it meets the airframe.
- STEP 9** Fill tube spirals if desired. Another method is to prime with buildable/sandable primer. Prime, sand and repeat for a smooth finish.
- STEP 10** Attach shock cord to forward ring eye bolt. Pass loop through eye bolt, then pass shock cord through it's own loop as shown.
- STEP 11** Modify the nose cone as shown. Drill 1/2" or so holes on opposite sides and feed shock cord through. Connect a quick link to the sewn end, then back over the shock cord. This will be your main parachute deployment. You can also attach the main 50" parachute shroud lines to the quick link. Knot the shrouds to the quick link.
- STEP 12** Install the rail guides into the booster with provided screws. Drill a hole smaller than the screw so the screw threads into it. Drop a small amount of epoxy in drilled hole, thread the rail guide and screw in the hole, rotate rocket 180 degrees & allow to cure. | Repeat for the forward rail guide. Ensure to back the FWD rail guide screw with something that will shroud the screw from interfering with recovery getting caught.
- 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.

