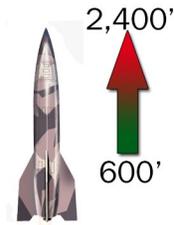


LOC PRECISIONTM

ADVANCED ROCKETRY KITS AND COMPONENTS



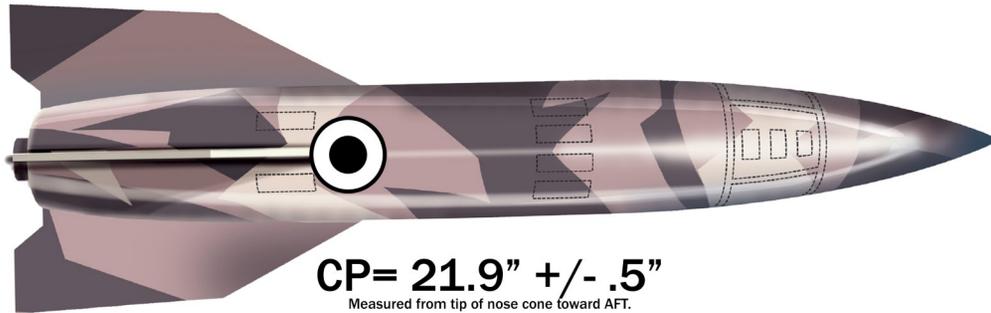
F-1
Capable Impulse

DIAMETER 4"
HEIGHT 33.75"
WEIGHT 41.5oz

Featuring:

- 4" Pre-Slotted Tail Cone
- Polypropylene Nose Cone
- 28" Rip-Stop Nylon Parachute
- 12' Nylon Shock Cord
- 38mm Motor Mount
- Launch Lugs
- Hardware

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



Sim!

This rocket is recommended for high power rocket motors J through M 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 it's 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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LOC 4" V2

- 11" Airframe
- 4" Pre-Slotted Tail Cone
- Tail Cone Shoulder Ring
- CR-256-152 AFT Ring
- 4" Nose Cone
- 28" Parachute
- 12' Nylon Shock Cord
- 38mm x 11" Motor Mount Tube (MMT)
- 4" V2 Fin Set
- LL-25 Launch Lug
- Hardware—1 Quick Links, 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.

SCOTCHWELD 1838, a thick, two part epoxy by 3M 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 the tail cone shoulder ring. Epoxy nut to ensure it stays in place.

STEP 3

Position the bottom centering ring onto the bottom of the tail cone flush with its bottom edge. Apply a continuous bead of epoxy around the inside of the tail cone where the bottom centering ring sets and let dry. SCOTCHWELD 1838 is suggested here.

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 1.125" protrudes from the AFT. Insert fin to check the fit. If you plan on using an aluminum motor retainer...you'll need add another 3/8" for mounting. Remove fin.

STEP 6—SCOTCHWELD 1838 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 SCOTCHWELD fillet to each fin to tail cone joint.

STEP 7

Epoxy the 11" airframe to the assembled MMT/tail cone. Be sure **NOT TO** get excess epoxy in MMT! Fill tube spirals if desired. Another method is to prime with buildable/sandable primer. Prime, sand and repeat for a smooth finish.

STEP 8

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 9

Knot shock cord through the loop in the nose cone approximately 3' from the end. Attach quick link to the sewn shock cord loop and parachute to the quick link. Make a knot in the paracord.

STEP 10

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 is 120 grams (4.23oz). 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).

STEP 11

Sight in the high point (center of airframe's diameter) of the airframe between any two fins. Make a small pencil mark 10.5" from the fins' bottom edge. From this mark, make a straight line up about 4" long. Cut the launch lug at an angle to reduce drag. Epoxy the launch lug directly on this line, making sure that it is parallel to the airframe. Set aside to dry in a horizontal position.

STEP 12

Give launch lug outer joints added epoxy fillets for maximum strength.

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.

