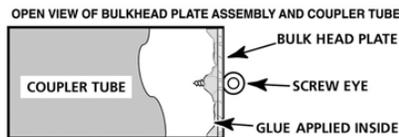


STEP 5

Lightly sand airframe exterior on each side of the fin slots. This will remove the glassine layer of the airframe. This will help the epoxy bond to the airframe to the fin, and create good adhesion. Apply a generous bead of epoxy to the root edge of one fin, insert into 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. When cured, remove tape from ID of the airframe. Sand if necessary to remove excess epoxy.

STEP 6

Install screw eye into bulkhead, epoxy in place. Allow to cure. Insert bulkhead into coupler recessed 1/8", epoxy in place. Allow to cure. Slather epoxy in payload tube 1" in the circumference of the airframe. Insert coupler half it's length into payload. Allow to cure.



STEP 7

Cut the launch lug in half at a 45 degree angle, making them aerodynamic. Find the high point of the airframe between fins. Mark a straight perpendicular line up 10" from the AFT of the airframe. With the angle pointed to the FWD end of the rocket, epoxy one lug 2" up from the AFT of the airframe. Epoxy another at least 8" FWD of the 2" mark. Allow to cure. Add epoxy fillets to each side of each lug. Allow to cure.

STEP 8

On FWD end of the Kevlar coming from the MMC, tie a .5" loop. Insert Kevlar into slit in fire resistant blanket and seat on top of motor mount. Take one end of elastic



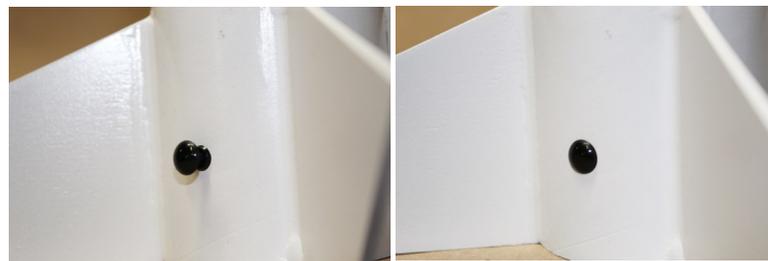
shock cord and tie a double knot. On FWD end, pass the shock cord through the loop in the cone. Tie a double knot 6" from end securing cone in place. At the end of the shock cord tie a double knot onto the recovery swivel. Pass parachute shroud lines through other end of swivel, pass parachute through shroud lines, and pull tight.

STEP 9

Lightly sand plastic nose cone with fine sandpaper to remove molding seam line. Also sand airframe and fins to produce a smooth finish. Fill airframe spirals if you choose. Another proven method is to prime the rocket, sand, prime/sand — repeat. Filler primer is popular, used in this process. Repeat until a smooth surface is obtained. Paint rocket with paint of choice. Apply vinyl decals to your liking. Apply a protective clear coat to the finished model.

STEP 10

Insert Motor Can and secure with plastic rivets.



ACCESSORIES

Your LOC Precision 2.56" MMC Compatible kits can be outfitted with different Motor Can mounts. Scan for more information ----->

NOTE: Other MMC configs may require modifications to the rocket to ensure stability! IE: nose weight to be added.



Motor	Estimate Altitude
1x-D15T-4	230
2x-D16-4	350
4x-C6-5	470
1x-E23T-5	530
1xE-16W-7	550
4x-C12-6	670
2x-D13W-7	690
1x-E-28T-4	715
1x-E15W-4	720
1x-F12J-5	775
1x-F24-7	885
3x-D12-7	900
1x-F27R-8	910
1x-F62T-6	945
4x-D16-8	950
1x-F35W-8	1080
1x-F20W-7	1260
1x-F50T-9	1430
1x-F25W-9	1470
1x-F40W-10	1580
1xG-33J-7	1980
1x-G40W-7	2050

ATTENTION! ACHTUNG!

This rocket is recommended for low to intro mid power rocket motors 4xC — 1xG 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.

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.



LOC MMC HARPOON

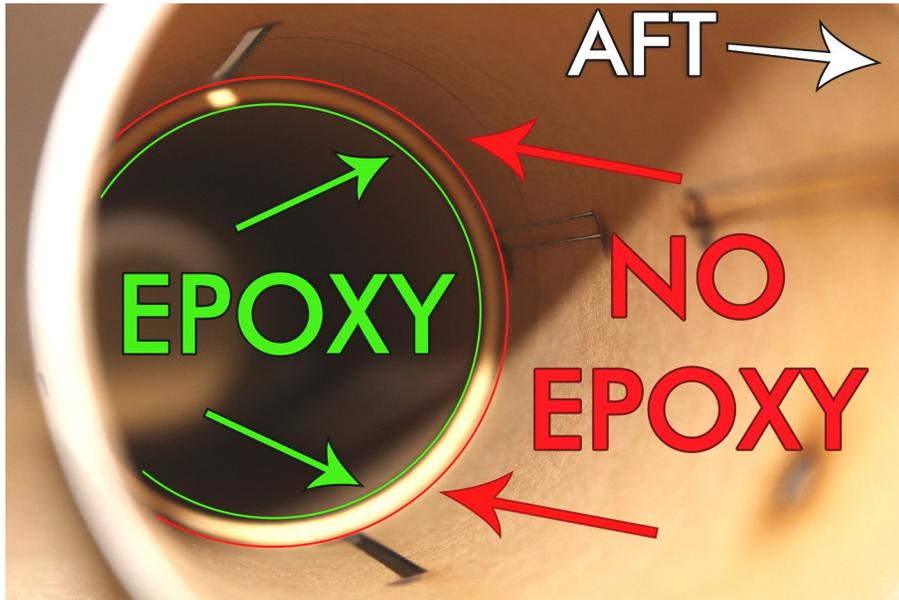
- 2.56" Slotted Airframe + Payload
- Polypropylene Nose Cone
- 28" Parachute
- 12' Elastic Shock Cord
- 1X29mm Modular Motor Can (MMC)
- Motor Can Thrust Ring
- 2x1/8" Laser Cut Fin Set
- 1/4" Launch Lug
- Recovery Swivel
- Fire Resistant Blanket
- Vinyl Decal set

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

Insert motor can thrust ring into AFT (slotted end) of airframe. Insert motor can coupler. Flush up end of coupler with AFT of airframe. Remove coupler.



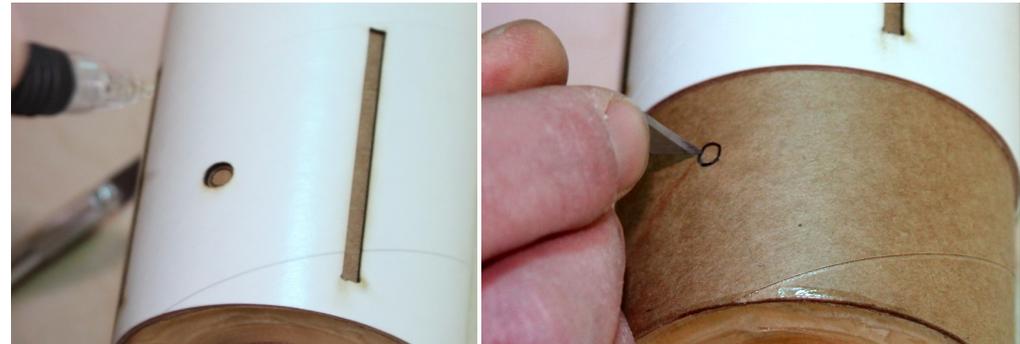
STEP 2

Refer to above picture. With thrust ring in position, apply epoxy to the FWD end of the ring with a stick. **BE SURE** to keep the AFT side of the ring and airframe clear of epoxy. We need to be able to slide the motor can in and out easily. If need be you can layer the inside of the airframe with wax paper when applying epoxy. Slather epoxy the circumference of the FWD end of thrust ring, allow to cure.

STEP 3 Assembly instructions for 1x29mm modular motor can (MMC).

After preparing the parts for assembly, mark motor tube 1/8 of an inch from both ends, the centering rings line up on the INSIDE of these marks. (Or adjust the AFT ring placement for use with your preferred motor retention) Once you have the centering rings aligned and motor tube is flush. The centering ring with the hole, will be the forward centering ring for the motor mount. When satisfied with the alignment, epoxy both center rings in place, allow epoxy to cure. Apply fillets to both sides of the centering rings. Install engine blocks in the FWD end of each motor tube. Epoxy in place on FWD end of motor tube. Allow to cure. Place small amount of epoxy on the screw eye and thread into the hole in the forward centering ring, allow epoxy to cure. After the screw eye has cured place a small amount of epoxy on the bottom threads to prevent it from coming loose. Tie one end of the provided Kevlar shock cord to the eyebolt and use a drop of CA glue to secure the knot. Once the completed motor mount assembly has cured, test fit the assembly into the provided coupler tube and sand if necessary. Apply a bead of epoxy inside the coupler, just before where the FORWARD centering ring will rest, partially slide the motor mount assembly into place, apply a bead of epoxy just before where the AFT centering ring will rest. Install the motor mount assembly into the coupler tube, ensuring the AFT end of the motor mount tube and the coupler tube are flush. When the epoxy has cured, apply fillets to both ends where the centering rings meet the coupler. Take the complete Motor Can Assembly and insert it into the AFT end of the main airframe. Ensure the coupler is flush with the airframe tubing. Mark holes for the plastic rivets on the Motor Can tube. Remove the Motor Can Assembly and carefully cut the holes with an Exacto knife. This can also be done by using a 13/64 drill bit. Reinsert to check fit and alignment. **Remove Motor Can for painting and finishing.**

STEP 4



Using painters tape or masking tape, seal off the fin slots inside the airframe. This will prevent epoxy from getting in the inner diameter of the airframe.

