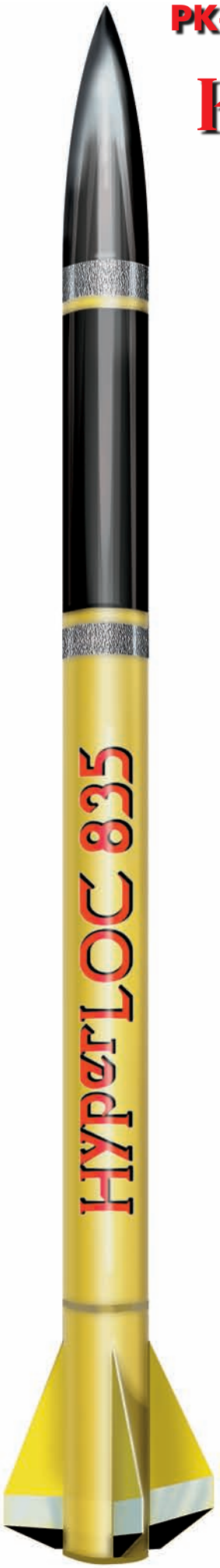
PK-77

HyperLOC 835™



Height: 74”
Weight: 60 oz.
Diameter: 4.00”

Flights to over 4,300 ft.

Motor Suggestions:

HyperTEK® Hybrid I, J and K 54mm tanks

Single Use: I-65-14
Reloadable: J90-10, J135-L

Kit Features Include:

- Heavy Duty Airframe Tubing
- Pre-slotted Airframe
- 54mm Motor Tube
- Precision Cut Plywood Fins
- Precision Cut Plywood Centering Rings
- Extended Electronics Bay
- Bulkhead Plate Assembly
- Plastic Nose Cone
- Nylon Parachute Recovery

Download the FREE graphic at
www.locprecision.com

A FULL COLOR CATALOG DISPLAYING OUR
36+ MID AND HIGH POWER KITS
IS ALSO AVAILABLE - ASK YOUR DEALER
OR CALL LOC/PRECISION TODAY!

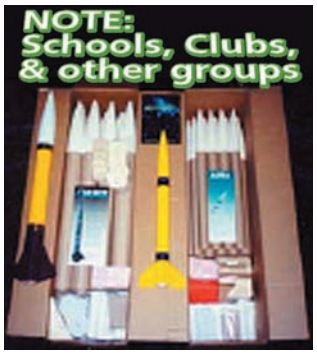
Since LOC/PRECISION Cannot Control The Use Of Its Products Once Sold, The Buyer Assumes All Risks And Liabilities There From, And Accepts And Uses LOC/PRECISION Products On These Conditions.

LOC/PRECISION™ ADVANCED ROCKETRY KITS AND COMPONENTS

PO Box 470396, Broadview Heights, Ohio, 44147 USA Tel: 440-546-0413
Fax: 440-546-7942 www.locprecision.com

THANK YOU FOR CHOOSING LOC/PRECISION!

876957001182



LOC/PRECISION MULTI-PACKS are now available for this and other LOC/PRECISION models. For more information on launching model rockets in your area contact the National Association of Rocketry (NAR) at www.nar.org or the Tripoli Rocketry Association at www.tripoli.org

OTHER KITS AVAILABLE:


PK-1 AURA


PK-3 WEASEL


PK-4 LIL' NUKE


PK-5 NUKE PRO MAXX


PK-7 STARFIGHTER 152


PK-8 LEGACY


PK-12 ONYX


PK-16 GRADUATOR


PK-20 VIPER III


PK-24 VIPER IV


PK-25 ISIS


PK-26 SHADOWHAWK


PK-27 TWEED-B


PK-28 STARBURST


PK-48 LOC-IV


PK-45 NORAD PRO MAXX


PK-46 BULLET


PK-50 FANTOM


PK-51 FANTOM-EXL


PK-57 3.90 V2

PK-77 *HyperLOC ™ - 835*

Assembly Instructions

PARTS LIST:

1 main 54 mm motor mount tube	2 parachutes	1 payload section
1 EB-3.90 electronics bay assy.	1 fin set	1 main airframe
1 shock cord mount centering ring	1 ½" launch lug	2 shock cords
3 main centering rings	1 overflow tube	1 plastic nosecone
1 shock cord mount hardware set	1 main airframe extension	1 tube coupler

* DUE TO THE HIGH THRUST MOTORS THAT CAN BE USED IN THIS KIT, IT IS STRONGLY RECOMMENDED THAT EPOXY BE USED THROUGHOUT ITS ENTIRE CONSTRUCTION!

* Before beginning construction, read over assembly instructions to familiarize yourself with the proper construction sequence.

* TEST FIT PARTS BEFORE BONDING TOGETHER WITH EPOXY!! It may be necessary to lightly sand some parts to obtain a proper fit.

* The following items will be needed for the construction and finishing of this kit: 5 or 15 minute epoxy, 12" ruler, Sandpaper (course, medium and fine), Sanding sealer, Primer and paint, Paint brushes (assorted sizes), Modeling knife, Pen or pencil, Masking tape.

1. Rough-up with course grit sandpaper the root edges of the fins, the outer diameter of the motor mount tube and the main airframe where epoxy is to be placed for better epoxy adhesion. The glassine layer can be completely removed from the motor mount tube for maximum adhesion.
2. The shock cord mount centering ring has a 3/8" hole in it for the shock cord mount bolt. Place one of the flat washers on top of the hole and push the threaded portion of the eye bolt through it. From the bottom of this centering ring, tightly secure the eye bolt using the remaining flat washer and nut. Epoxy both sides of the mount bolt and let dry This will be mounted in the airframe extension tube after step 12.
3. Place ALL THREE main centering rings onto the main 54mm motor mount tube. Position the TWO outer main centering rings so that the main 54mm motor mount tube protrudes 1/8" beyond them and lightly epoxy in place and let dry. Position the MID-LOWER main centering ring 4-5/8" away from the bottom centering ring and lightly epoxy in place and let dry. USE THE ROOT EDGE OF ONE FIN FOR CHECKING THIS DISTANCE! The object is to sandwich the fins between these 2 rings for maximum epoxy surface area and increased strength.
4. Check the completed centering ring/motor tube assembly inside the main airframe for fit. If necessary, lightly sand centering ring outer diameters.
5. Apply a continuous bead of epoxy approximately 12" into the rear of the main airframe assembly and slide the front motor mount up to the epoxy. Apply another continuous bead of epoxy behind the front centering ring approximately 5.5" into the rear of the main airframe so that once completely inserted the second ring contacts this bead and continue sliding the motor mount assembly forward until within 2" of its destination. Apply another bead of epoxy at ½" end of the airframe tube and slide the motor mount assembly into its final position. Be careful to clean out any excess epoxy from the fin tab area. Set aside to cure in an upright position.
6. Make a mark 11" from the aft end of the motor mount tube along the airframe and drill the overflow tube hole using a 3/8" drill bit making sure to extend the hole from the outside airframe and into the motor mount tube.
7. Epoxy the ¼" launch lug through the airframe until it is just touching the inside of the motor mount tube and allow to cure.
8. Cut the ¼" launch lug flush with the airframe and sand smooth. The inside of the motor mount will also need to be smooth. A piece of sandpaper glued to a dowel makes a good reamer for the inside of the motor tube.
9. Sand all fins smooth and round off the leading and trailing edges of them, using medium then fine sandpaper.
10. Place epoxy on the fin root edge and position one fin directly into its slot and onto the main 54mm motor mount tube. Make sure that the fin root edge is completely parallel to the airframe and that the fin is perpendicular to its diameter. Place in a horizontal position while curing. When dry, repeat this procedure with the remaining fins. When all fins are attached, give the fin and main centering ring added epoxy fillets for maximum strength and let cure.
11. Epoxy the shock cord mounting ring assembly 3.5" from the top of the main airframe taking care to insure the eyebolt is facing up.
12. Complete the main airframe assembly by applying a continuous bead of epoxy around the inside of one end of the 11" main airframe extension section tube about 1" in from its edge. Push the tube coupler straight up into the epoxied airframe extension tube, about 1/2 the couplers' length When the epoxy sets, apply a continuous bead of epoxy around the inside of the main airframe approximately 1" from its edge and push the exposed tube coupler into the main airframe until it seats against the shock cord mounting ring assembly and let dry. If desired, the epoxy used in this step can be replaced with mechanical fasteners (not included) so that the main airframe can be broken down into smaller sections for ease of transport.
13. Sight in the high point (center of airframes' diameter) of the airframe between any two fins and from 5" up from the airframes' bottom edge, make a small pencil mark. From this mark, make two separate STRAIGHT lines 5" long. The first 5" line starts from the mark and the second line starts 20" from the mark. Cut the 2 launch lugs at an angle to reduce drag. Epoxy the two launch lugs directly on the two lines. Make sure that they are in a straight line to each other and parallel to the main airframe. Set aside to dry in a horizontal position.
14. Give all fin and launch lug joints added epoxy fillets for maximum strength.
15. Assemble the EB-3.90 electronics bay assembly using the instructions provided.
16. Seal the launch lugs with sanding sealer using a brush. Sand lightly between coats to fill pores and obtain a smooth finish.
17. Lightly sand plastic nose cone with fine sandpaper to remove molding seam line.
18. When you are satisfied with the smooth sanded finish of this model, it is ready to prime and then paint in the color or colors of your choice.
19. When the paint is completely dry, pass one end of the "drogue" shock cord through the eyebolt of the main airframe section and pass the other end through its loop sliding the complete length through to form a strong, tight loop attachment. Attach a quick link through the other end of the cord and attach it to the bolt eye of the electronics bay. The quick link nut is threaded to open up and attaches to the shock cord mount bolt. Secure in place by tightening the nut. This method of shock cord attachment provides easy shock cord access plus convenient transportation breakdown.
20. To connect the nose cone, slide one end of the "main" shock cord through the nose cone mount and pass the other end through its loop sliding the complete length through to form a tight loop attachment. Connect the other end to the opposite side of the EB-3.90 electronics bay using a quick link through its eyebolt. This end of the assembly can be friction fit into the payload tube or secured with mechanical devices (such as screws or bolts -not provided) or epoxied permanently. Note: if it is to be epoxied permanently, make certain the access wing nuts are protruding out of the end opposite the nose cone to insure easy access and remember that your arms will need to be long enough to fit ejection charges through the wall into the bay.
21. The parachute is attached to the shock cord 3" away from the bolt eye of the payload section. Using ALL the chutes' shroud line ends TIGHTLY tie a double knot around the shock cord. ALWAYS CHECK DOUBLE KNOT RIGHT BEFORE LAUNCHING!!
22. Select a motor recommended for first flight. Because of the different motors available (with varying motor lengths), this kit uses no motor block. Instead, wrap 2" wide masking tape around the nozzle end of the motor to a diameter equal to that of the motor mount tube. This will keep the motor from pushing forward upon ignition. Wrap masking tape around the motor in two places until a snug fit is achieved inside the motor mount tube. This will prevent the motor from ejecting rearward upon ejection charge activation.
23. Always follow motor manufacturers' instructions for motor ignition and launch this vehicle on calm, windless days to insure safe recovery.
24. NOTE: 54mm to 38mm and 54mm to 29mm MOTOR MOUNT ADAPTERS can be SPECIAL ORDERED FROM LOC.

Rockets By Melissa, Inc. dba **LOC PRECISION** PO BOX 470396, BROADVIEW HEIGHTS, OH 44141 Telephone: 440-546-0413 Fax 440-546-7942
WWW.LOCPRECISION.COM