PK-49

HEAVY DUTY BEAUTY™

Height: 47.5”
Weight: 32 oz.
Diameter: 4.00”

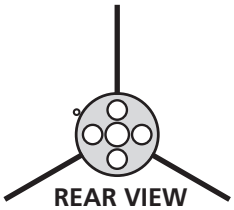
Flights to over 2,000 ft.

Motor Suggestions:
F50-6, G80-7,
(5 motor option, F50-10, plus 4 D12-0),
H97-M, H123-M

Kit Features Include:

- Heavy Duty Airframe Tubing
- Precision Cut Plywood Fins & Rings
- Pre-marked Airframe
- Plastic Nose Cone
- Nylon Parachute Recovery

To prevent possible shipping damage, a tube coupler may have been inserted into the slotted end of the main airframe. Remove the tube coupler and discard or keep for future projects.


REAR VIEW

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!***

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LOC/PRECISION™ ADVANCED ROCKETRY KITS AND COMPONENTS

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THANK YOU FOR CHOOSING LOC/PRECISION!

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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-49 HEAVY DUTY BEAUTY ASSEMBLY INSTRUCTIONS

PARTS LIST

PNC-3.90
34" Airframe BT-3.90
1 Motor Mount Tube MMT-1.14
2 Centering Rings CR-3.90-1.14
4 Motor Mount Tubes MMT-0.95
Added Coupler for shipping.
Launch Lug LL-50 and/or LL-25
Shock Cord Mount
Nylon Elastic Shock Cord
Nylon Parachute LHPC-36
3 Plywood Fins

◊ Due to the high thrust motors that can be flown in this kit, it is strongly recommended that epoxy be used throughout its entire construction.
◊ Before beginning construction, read over assembly instructions to become familiar with the proper construction sequence. Check rear and side exposed views (shown at bottom of instructions) carefully for fin positions and motor mount/centering ring placement inside the main airframe.
◊ TEST FIT PARTS BEFORE BONDING TOGETHER WITH GLUE!!!! It may be necessary to lightly sand some parts to obtain a proper fit.
◊ The following items will be needed for the construction & finishing of this kit: 12" ruler, Modeling knife, Pen or pencil, Masking tape, Sanding sealer, Paint brushes (assorted sizes), Sandpaper (medium & fine), Primer and paint, Yellow Carpenter's Glue or Epoxy (5 or 15 minute).

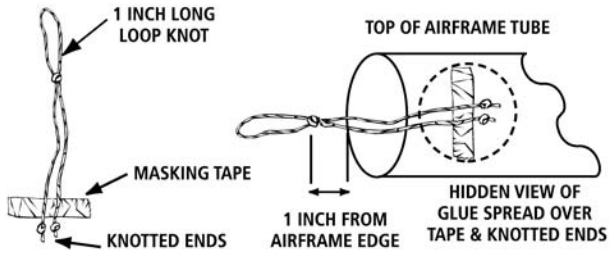
Main Airframe Assembly Instructions

1. Take the long length of motor mount tubing (29mm) and epoxy a centering ring 1/8" in on each end of it. Use epoxy sparingly on the bottom centering ring, which has the four outboard motor mount tube holes in it, as the other motor mount tubes must pass through it. Set aside to dry.
2. Place the 4 short lengths of motor mount tubing (24mm) into the 4 holes in the bottom centering ring. Have them protruding out 1/8" from the bottom centering ring and make sure that they are parallel to the main 29mm motor mount tube. When the position of the 4 outboard motor mount tubes is correct, epoxy them to the bottom centering ring. Also at this time, give the top centering ring a good fillet coat of epoxy. Let dry in an upright position.
3. With the motor mount tube/centering ring assembly in a horizontal position, place a continuous bead of epoxy lengthwise, in the valley joints, where the 4 motor mount tubes meet the main 29mm motor mount tube. Do one valley joint at a time, allowing it to dry before proceeding to the next one.
4. Apply a continuous bead of epoxy around the inside of pre-slotted airframe, 20" up from its slotted end. DO NOT GET ANY EPOXY IN THE FIN SLOTS! Take the assembled motor mount (single hole centering ring end first) and push it straight up into the epoxied end of the pre-slotted airframe, until the bottom centering ring is 1/8" below the pre-slotted airframe's edge. Position of the motor mount tube assembly in relation to the fin slots is NOT critical for this multi-motored vehicle. Set in an upright position to dry. When dry, turn assembly upside down and give exposed bottom centering ring a light layer of epoxy for additional strength. Set aside to dry.
5. Sand all fins smooth and round off the leading and trailing edges of them using medium, then fine sandpaper.
6. Test fit the fin tabs (which protrude out from the fin's root edge) into the airframe's fin slots. Sand fin tabs, if necessary for proper fit. Place the fin tab in the slot and keep the airframe in a horizontal position while drying. Make sure that the fin is straight up from the airframe tube. When dry, repeat this procedure with the remaining fins.
7. Sight in the high point (center of the airframe's diameter) of the airframe between any 2 fins and from 10" up from the airframe's aft end, make a small pencil mark. From this mark, make a straight line up about 6" 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 cure in the horizontal position.
8. Give all fin and launch lug joints ADDED epoxy fillets for MAXIMUM strength.

Shock Cord Mount Instructions

LOC/PRECISION'S Shock Cord Mount is easy to make and install, yet is very strong! This mounting system makes shock cord attachment quick and easy. Follow instructions carefully!

1. Take the length of nylon braided cord and at its center make a 1" long loop knot and pull it tight. Make a knot a 1/4" away from the end of EACH of the two loose ends.
2. Cut a piece of masking tape 1/4" wide by 1 1/4" long. This is centered crosswise just ahead of the two knots.
3. Carefully place the two knotted loose ends of the Shock Cord Mount, with tape attached, inside the top of airframe tube so that the 1" long loop knot is protruding out about 1" from the airframe tube's edge. Using a small piece of wooden dowel, press the masking tape down firmly around the inside of the airframe tubing. The masking tape will keep the Shock Cord Mount in place while gluing.
4. Place a generous bead of epoxy over the knotted ends and length of masking tape. Spread the epoxy around until they are completely covered and place the airframe in a horizontal position to dry. REPEAT STEP 4 UNTIL A SMOOTH EPOXY LAYER IS ACHIEVED OVER THE MASKING TAPE AND KNOTTED ENDS.



Main Airframe Assembly Instructions, Continued

9. Seal fins and launch lug with sanding sealer using a brush. Sand lightly between coats to fill pores and obtain a smooth finish. Lightly sand plastic nose cone with fine sandpaper to remove molding seam line. At this time, remove any plastic flash that was molded into the nose cone eyelet. This is necessary for shock cord attachment.
10. When you are satisfied with the smooth sanded finish of your model, it is ready to prime and then paint in the color or colors of your choice.
11. When the paint is completely dry, take one end of the shock cord and pass it through the loop of the shock cord mount. Secure it with a double knot. Take the other end of the shock cord and pass it through the eyelet of the plastic nose cone and also secure it with a double knot. Place a SMALL drop of epoxy on both knots to keep them permanently secured.
12. Attach the parachute to the shock cord at a point about 1/3 of the length of the shock cord from the nose cone. 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.
13. Select a motor for first flight. Because of all the different motor combinations available (with varying motor lengths), this kit uses no motor blocks. Instead, wrap 1/2" wide masking tape around the nozzle end of each motor to a diameter equal to that of the motor mount tube. This will keep the motor from pushing forward upon ignition. Friction fit the motor in place by wrapping masking tape around the motor in two places for a snug fit in the motor mount tube. This will prevent the motor from ejecting rearward upon activation of the ejection charge.
14. The 24mm outboard motors DO NOT assist in the activation of the recovery system. When using either two or four of these booster (0-delay) motors, place epoxy over the exposed motor tops. Let the epoxy cure before installing the 24mm outboard motors in their motor mount tubes using the previous described method.
15. Remember to use enough recovery wadding to protect the chute and shock cord from the hot ejection gases.
16. Always follow motor manufacturer's instructions for motor use and ignition, and launch this vehicle on calm, windless days to insure safe recovery.

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