EZ BALANCER 'LITE'

Parts List

2ea. Aluminum Angle Base Frame Members.

1ea. 1/2"x1" Aluminum Angle Cross Frame Member.

2ea. Aluminum Uprights.

2ea. Aluminum Cradles.

2ea. Bronze Bushings.

4ea. Rubber Cradle Guards.

2ea. 1/4-20 Cradle Bolts.

2ea. 1/4-20 Cradle Hex Nuts.

2ea. 1/4-20 Cradle Nylon Insert Stop Nuts.

6ea. 10-32 Bolts.

6ea. 10-32 Nuts.

6ea. Lock Washers.



Please note: The hardware and accessories listed may not be the same as shown. We are always improving the product.

Tools Required

Black Hills Manufacturing

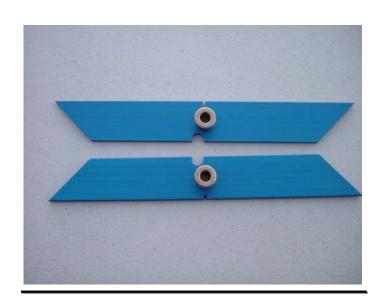
7/16" Wrench or Socket.
Pliers, Needle Nose and Regular.
Phillips Screw Driver.
Hammer.

Black Hills Manufacturing @outlook.com

www.ezbalancer.com

NOTE: The EZ Balancer Lite is limited to 20 pounds maximum.

Step 1 ASSEMBLY OF UPRIGHTS & CRADLES





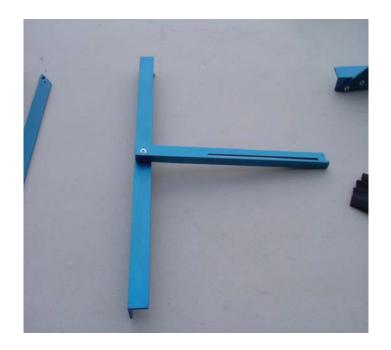
Insert a Bronze Bushing in each cradle. Do not forget that one is a left and one is a right. The notch below the Bushing opening should be oriented one to the left and one to the right. Do the layout as in the picture above and you should have no problem.

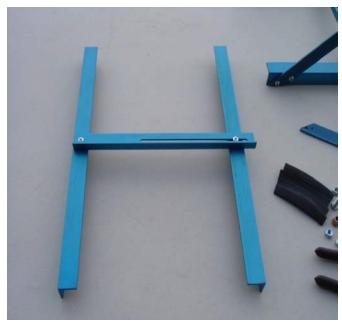
The Anti-rotation pins have been installed from the factory. When assembled to the cradles and that assembly to the base angles, the pins will face outward from the balancer as shown in the picture above.

Please remove the <u>RED</u> rubber pin shipment covers before installing the cradles. They are only used to protect the parts during shipping.

Insert the 1/4-20 bolt through the upright with the threaded portion sticking out along with the anti-rotation pin. Thread on the 1/4-20 hex nut and tighten. Place the cradle over the bolt with the "Notch" of the cradle going "UP". Be certain that the anti-rotation pin is in the lower slot of the cradle and that the cradle is parallel with the bottom angle of the upright as this is how the limiter action works. Add the nylon insert 1/4-20 stop nut. Tighten until the cradle cannot move. Loosen the stop nut just slightly until the cradle moves freely but does not have any slop. Again, remember that you need a left and a right assembly.

Step 2 ASSEMBLY OF THE BASE FRAME





Assemble the base frame as shown above. Place a 10-32 bolt through the hole provided in the cross angle. Place the cross angle on one of the base angles with the bolt going through the hole provided. Beneath the Base Angle Member, place a lock washer and a 10-32 hex nut. Repeat this at the other end of the cross angle going through the slot and the other base angle. At this point, align the base angles so they are parallel and the ends are in alignment to form a perfect rectangle. Tighten all the nuts to hold the assembly together.

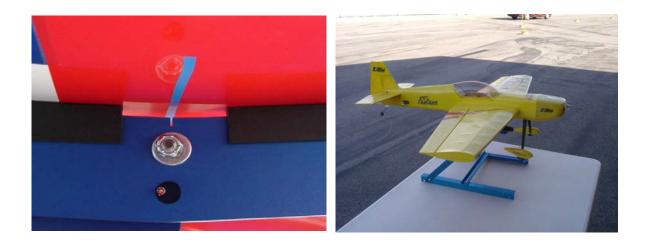
Step 3 ASSEMBLY OF UPRIGHTS TO BASE FRAME



Install the right hand Upright Assembly to the outside of the right side of the Base Frame using 2ea. 10-32 bolts, 2ea. lock washers, and 2ea. 10-32 hex nuts. Make certain that the upright angles inward towards the center of the frame assembly and that the cradle is on the outside of the Upright Assembly. This will give you the maximum width between the cradles. Repeat this procedure for the left side again making certain that the Upright Assembly has the Cradle to the outside.

At this point, all that is left is to install the Cradle Rubber Guards aligning the outside edge of the rubber with the outside edge of the Cradle. This should leave a gap between the Cradle Guards so you can easily see the C.G. notch in the center of the Cradles.

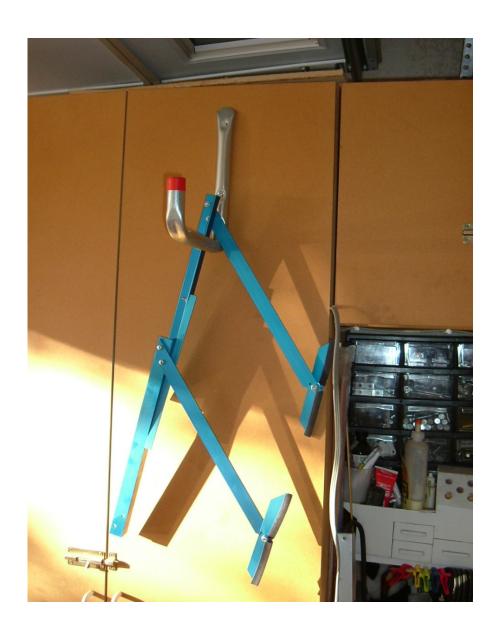
Step 4 BALANCING FOR THE CENTER OF GRAVITY (C.G.)



Now comes the fun part, balancing the model. We recommend that you put a piece of fine-line tape on the wing where the manufacturer calls out for the C.G. location, or where you want it to be if you like it different than that recommended. In lieu of fine line tape, a piece of masking tape with a pencil mark on it will also work just fine. Place the model on the balancer and align these marks with the notches on the cradles. Make certain that the model swings freely. Don't worry, the limiters will not allow it to swing far enough to fall off. At this point you are virtually hands-free. Please note the picture on the left above is from the EZ Balancer II, but the procedure is identical.

Level the model so it looks as if it is flying. If it stays in that position when released and you cannot easily tip it by just touching the nose or tail, you are done and the model is balanced. If not, add weight to the high side until it does stay in the level position. Keep putting the model into the level position and releasing after adding weight. If you add enough weight to make the model start to swing back from the nose down or nose up position, it will be too much weight and will cause the model to swing to the other extreme. We always try to balance the model with weight that already exists for it such as the batteries, smoke pumps, etc. If you absolutely need more weight, then of course, go ahead and add it.

NOTE: The EZ Balancer Lite is limited to 20 pounds maximum.



To store the EZ Balancer, slightly loosen the nuts on the Cross Frame Member, then, using a Pantograph type of movement, push the Base Frame Members towards each other until they are touching.

You can now hang the unit on the wall or slide it under a cabinet for storage when not in use.