

E-Z-JAX Materials List

System Type: 3 Line (3L) 4 Line (4L) Heavy Duty (HD)
 Line Type: Std White Color
 Fasteners: Machine Screws Sheet Metal Screws Rivets SS Rivets
 Control: Mast Cockpit
 Blocks: Cheek Blocks Bullet Blocks

Hardware				
Part No.	Quantity	Part Description	Quantity Fasteners	Fastener Part No.
1	2	Cheek Blocks	6/10 (3L)/(4L,HD)	11
1 Alt	2	Bullet Blocks	6 (w 2/Eyestraps)	11
2	2	4" Cleats (3L,4L)	5	12
2 Alt	2	5" Cleats (HD)	5	13
3	3/4 (3L)/(4L,HD)	Eyestraps	7/9	11
4	1/2 (3L,4L)/(HD)	Loctite	n/a	n/a
Shock Cord Keeper Kit				
5	1	Keeper Kit	-	-
5a	2	Shock Cords w/Hooks	n/a	n/a
5b	2/3 (Mast/Cockpit)	Small Eyestraps	5/7	10
5c	5	Hog Rings	n/a	n/a
Lines				
6	2	Lines A, spliced to rings A	Control Lines	
7	2	Lines B, spliced to rings B	Sail Restraining Lines	
8	2	Lines C, spliced to rings C	Sail Restraining Lines	
8 Alt	2	Lines C, with eyesplice each end	Sail Restraining Lines – Shortest Lines in a 3L System	
9	2	Lines D, with eyesplice each end.	Sail Restraining Lines – Shortest lines, only provided in a 4L/HD System	
Fastners				
Part No.	Machine Screws	Sheet Metal Screws	Wood Screws	Rivets
10	8-32 x 5/16" pan head	#8 x 3/8" pan head	#10 x 1/2" pan head	AD54
11	10-24 x 5/16" pan head	#10 x 3/8" pan head	#10 x 3/4" pan head	AD64
12	8-32 x 1" flat head	#8 x 1" flat head	#8 x 1-1/4" flat head	n/a
13	10-24 x 1-1/4" flat head	#10 x 1-1/4"	#8 x 1-1/4" flat head	n/a

E-Z-JAX[®]

INSTRUCTIONS FOR INSTALLATION

THIS KIT FOR _____ E-DIMENSION WITH _____ LINES EACH SIDE OF BOOM

TOOLS NEEDED:

electric drill	claw hammer	Phillips screwdriver
center punch	masking tape	pliers (hog ring or slip joint)
tape measure	vise	

PLUS:

FOR MACHINE SCREWS:

#25 drill bit (0.1495 in)	10-24 (National Course) tap
#29 drill bit (0.1360 in)	8-32 NC tap

FOR SHEET METAL SCREWS:

5/32" and 9/64" drill bits

FOR POP RIVETS:

POP rivet gun	#11 (0.191 in) and #20 (0.161 in) drill bits
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1. GENERAL: Check parts in package against packing list. Sketch "A" shows how the system looks when deployed for use; sketch "B" when retracted. All lines in this kit are spliced to the exact length to fit the sail foot, or "E" dimension marked above. If you haven't already measured the foot of your sail, check it before installing the E-Z-JAX to make sure it is within 6 inches of the E-dimension shown on the top of this page.

Measurements along the boom to locate the eye straps, shown on sketch "A", are **critical** for proper deployment and retraction of the E-Z-JAX system. Sail restraining lines **must be outside** of reefing and other lines attached to the boom when E-Z-JAX system is in deployed (raised) position. Use Loctite 242 on stainless steel screws in contact with aluminum to prevent loosening and to reduce corrosion.

CAUTION: If you have **internal halyards** or lines inside your boom, be extremely careful when drilling to avoid hitting these lines. With **sheet metal screws**, be sure to cut off the ends and round smooth with a file or grinder before final installation.

2. INSTALLING CHEEKBLOCKS:

WARNING! When working aloft, be sure everyone is out of the danger area below you! For your own safety make sure bosun's chair and halyard fastenings are secure and winch operator and tailer are properly instructed.

Measure the distance from the top of the boom to the lower spreaders. If the boom to spreader height is greater than the sail foot, then you may choose to mount the cheek blocks on each side of the mast as close as possible under the spreaders, allowing a clear path down the mast to where the cleats will be above the boom. This will give you the minimum control angle required for operation of the system. If the boom to spreader height is less than the sail foot, mount the cheekblocks about half way up the mast as measured from boom to top of mast. Enough "A" line is provided to permit mounting the cheekblocks approximately _____ feet above boom.

To save time on mast, make a masking tape template for each cheekblock to take up with you. After applying the prepared templates, mark holes accurately and deeply with center punch before drilling. For machine screws use #25 drill and 10-24 NC tap. For sheet metal screws use 5/32" bit and lubricate screws before driving. For POP Rivets, use #11 drill bit. Install blocks with fasteners provided. (10-24 machine screws, #10 sheet metal screws, or AD64 rivets.) With sheet metal screws, cut the threads with unmodified screws but use only pre-rounded screws in the final installation. **TIP: It is a good idea to mount hardware with a single screw or rivet before drilling the other holes, using the block, cleat or eyestraps itself as a drilling guide - this insures proper alignment.** Don't forget the Loctite 242. While still on the mast, pass the ends of control lines "A" bow-wards through the blocks to helper below.

3. INSTALLING CLEATS. Even with optional cockpit deployment, it is a good idea to place cleats on mast so control can be exercised from there also. Locate cleats on mast at a convenient level above boom as in sketches. Mark holes with center punch. For machine screws use #29 drill bit and 8-32 NC tap (**HD systems use #25 & 10-24 NC tap**). For sheet metal screws, use 9/64" drill (**HD systems use 5/32"**) and lubricate screws before driving. Install cleats with screws provided. Pass end of control lines "A" through the legs of the cleat and tie off with figure 8 knot.

4. INSTALLING EYESTRAPS. Refer to sketch "A". Measure along boom from the aft face of the mast distance X_1 _____ to first eyestraps. From this first eyestraps, measure distance X_2 _____ to center of second eyestraps, distance X_3 _____ from center of second to center of third, and for 4-line systems, X_4 _____ from center of third to center of fourth. In most cases the last two or three distances will be identical. Location of eyestraps, is **critical to proper retraction and stowing of E-Z-JAX sail control system.** Mark each eyestraps location with a piece of masking tape. For oval or flat bottom booms, or those with a track in the bottom, preferred location is on the bottom centerline of the boom, each eyestraps holding lines for both port and starboard sides. **TIP: On a calm day, consider raising the sail to gain better access to the bottom of the boom.**

Eyestraps should be mounted at **right angles to the boom centerline** for maximum strength. While eyestraps are usually supplied preformed to fit as nearly as possible, it may be necessary to fine tune their shape to fit the curvature more exactly. One way is to place the eyestrap tab in a vise and bend slowly with a claw hammer, or pliers, being careful not to bend the center of the strap. Bend one tab at a time. On booms with bottom tracks, if there is insufficient room to mount straps at right angles, they may be placed lengthwise in the track.

If a mainsheet bail or vang is in the way, that individual eyestrap may be located a few inches fore or aft to clear the obstruction. Doing so will cause one of the rings to move closer to its neighbor when in the retracted position. The amount of movement fore or aft from the measured position should not exceed 4". An alternative to moving an individual eyestrap is to use a pair of eyestraps at the desired position, one on each side of the boom. This won't affect the position of the rings. In either case, all other eyestraps should be left as originally measured.

Measure and mark all locations before starting center punching. If in doubt, tape eyestraps in position with lines on one side in place and check location of rings with system in retracted position. When sure, proceed.

Follow same procedure in drilling and tapping as described for attaching cheekblocks to the mast. Install eyestraps using 10-24, #10 screws or AD64 rivets provided. **Before fastening eyestraps, be sure to attach eyesplices to eyestrap. There should be two eyesplices on each eyestrap. Also, before fastening eyestraps, pass sail restraining lines through their proper ring, (Line "B" through Ring "A", etc.) and outside of other lines attached to the boom.**

5. INSTALLING KEEPER SYSTEM. Follow the detailed instructions in the keeper package. Remember that the retracted system, when stretched taut along the boom after installation, can be adjusted higher as desired, by tightening the control lines.

6. OPERATION CHECK. Be sure rings line up properly when retracted, as in Sketch "B". All lines should be taut along the bottom of the boom when the system is in the fully retracted position, with the rings held snugly about 7" apart. If they are not, one or more of the eyestraps may be improperly placed or the shock cords may not be tight enough. With the cockpit deployment option, the system should release with a firm pull on the control lines from the cockpit.

USE OF THE E-Z-JAX SYSTEM

RAISING SAIL. You can raise your main while the E-Z-JAX system is retracted, thus avoiding any possibility of catching battens in the lines. In this scenario, you would go out with your sail only partially tied and the system retracted, then complete the untying and raise the sail without deploying the system until later, when ready to drop the sail.

Alternatively, you may elect to deploy the system and untie the sail while still at the dock or anchored, then raising the sail when you are ready, with the system still deployed. In this case especially, you will want to be headed into the wind as the sail is being raised to avoid catching a batten in the lines.

WHILE SAILING. You will normally want to retract the E-Z-JAX system while you are sailing. A crew member can do this quickly by going to the mast, uncleating the control lines, securing the two sides of the system on the keeper hooks, and then recleating the control lines. If you do not have cockpit control, and you anticipate that going forward may later be hazardous, you may elect to sail with the system deployed but loosened.

DROPPING SAIL. This is what it's all about! When you are ready to drop your sail, whether to come in or to anchor for a lunch stop, a crew member can quickly deploy the system by going to the mast, unhooking the keeper on each side, and tightening and recleating the control lines. It is important to be dead on the wind for easiest dropping, otherwise you may have to help the sail ease itself down into the system. But once it's there, it needs no more attention until you are ready to get under way again or to put the boat to bed.

CAUTION. E-Z-JAX systems are not designed nor intended to take the place of topping lifts. Do not allow the weight of the boom and dropped sail to bear on the E-Z-JAX system.

**MADE IN U.S.A. - Under U.S. Patent 5,327,842
For help call 1-877-585-9162**

