

Oval Mast Spreader Bracket Set w/compression tube

Part #: D109B

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PARTS (See photo below or at: http://www.chipford.com/images/spreader_kit.jpg)

2 - Spreader Brackets w/Tang

4 - Clevis Pins

1 - Mast Compression Tube

4 - 3/32 X 1" SS Cotter Pins

2 - 1/8 X 2" SS Cotter Pins

2 - 5/16-18 Nylock Nuts

2 - 5/16-18 X 4" Hex Head Cap Screws (Warning: I discovered that 4" was too long and had to replace them with 3 1/2" length.)

STEPS:

1) Remove the spreaders. Mark the old spreader brackets "P" (port) and "S" (starboard) with arrows pointing forward.

2) Remove the old spreader brackets (six screws each).

3) Align new spreader brackets over the six holes on both sides of mast, perfectly opposite each other, and mark center holes. Remove brackets.

4) Center-punch marks on mast. Using 1/8" drill bit, drill pilot holes.

5) Using progressively larger drill bits up to 1/4", widen holes until bit is long enough to reach through mast to hole on opposite side. Drill through opposite side hole.

6) Finally, using a 5/16" bit, drill from one side through mast to other side.

Now you are ready to attach the hardware.

7) Attach the compression tube to a length of garden hose or narrow PVC pipe at least 14' long. (I used garden hose: I drilled a 1/2" hole an inch down from its bare end, inserted the compression tube, slit the hose from its end to the tube on each side of the hose, then wrapped the end with a thin rubber band; but I'm told the tube can be taped to the end of a PVC pipe as well. Remember, when you're done, the hose/pipe must be removed leaving the compression tube behind, attached to the mast.)

8) Measure the distance from the mast base to the 5/16" holes you just drilled, then measure it on the hose/pipe and mark it, so when it's inside the mast you can tell when the compression tube has reached the bracket hole.

9) Feed the hose/pipe up through the base of the mast (be aware of any interior mast wiring) until the mark on the hose/pipe aligns with the mast base.

10) With a helper working the hose/pipe at the mast base, place a new bracket with the spreader hole over the hole you drilled. Using an awl or thin screw driver as your helper works the hose/pipe, find the compression tube through the bracket and hole. Once you do, insert a 5/16" hex head cap screw into the bracket/mast hole, through the tube, and out the opposite hole. Attach the opposing bracket over the bolt and fasten the Nylock nut just tight enough to hold the brackets and bolt in place.

11) Align the brackets against the mast, mark the higher holes, then pivot the brackets out of the way.

12) Follow steps 4 through 6 above, then insert second 5/16" hex head cap screw into the hole. Tighten both Nylock nuts. (This is where I found my bolts to be 1/2" too long.)

13) Remove the old cotter pins/clevis pins from the old brackets to free the shrouds -- one at a time -- and attach the shrouds appropriately to the new brackets on the mast (remember, you marked the old brackets in Step 1) using the new 1" cotter pins.

14) Remove the hose/pipe from the mast base by firmly pulling until it breaks free from the compression tube.

15) Attach the spreaders using the new 2" cotter pins.

Congratulations, project accomplished!

