



DIY Sunshade/Bimini Extension

The whole setup is (2) 5' EMT conduit poles and (1) PVC spreader pole, the sunshade, (6) carabiners, (2) CamJams, and (2) T-connectors. Takes less than 5 mins to set up or take down.

This will fit perfectly for a Chaparral Vortex 203. Since other boats are different, you might have to modify this to fit your particular needs but in general this should work for you. You might need a larger or smaller sunshade, or longer or shorter poles. Just take a few measurements from where you plan on placing everything and adjust accordingly.

Note that you can get all the materials from Amazon easily except the EMT & PVC tubing. I linked to Home Depot to show you the conduit I used, but you can get it at Ace Hardware along with the eye bolts.

You will need the following tools:

- 2lb hammer
- Scissors
- (4) zip ties
- Lighter or flame (to seal paracord ends)
- Heat Gun (optional, only if you use the heat shrink)

Materials

6x8 sunshade x1 (\$39) - any 6x8 sunshade would work, make sure it has grommets

[Sunshade](#)

Wrap-It Storage Straps - x1 (\$14) - purchase 1 pack of 6 straps

[Wrap It Straps](#)

Carabiner Clip 3.5" x1 (\$11.76) - purchase 1 pack of 4 carabiners

[Carabiner Clips](#)

3/4" Rubber Feet x 1 (\$4.49) - purchase 1 pack of 4 rubber feet

[Rubber Feet](#)

Golberg 750lb Paracord 5mm x 1 (\$9.49) - purchase 1 pack of 25 feet

[Paracord](#)

Nite Ize CamJam XT x 2 (\$14.96) - purchase 2 of these total

[CamJams](#)

Nite Ize #4 Carabiners, plastic x2 (\$12.50) - purchase 2 of these total

[Plastic Carabiners](#)

6' PVC Pipe, 1/2" size (\$6.54) - purchase (1) stick, 10' long

[PVC Pipe](#)

Maker Pipe T-Connector, 3/4" x 2 (\$13.89) - purchase 2 of these total

[T-Connectors](#)

1/2" x 4" Eye bolt with nut, x2 (8.00) - purchase 2 of these total

[Eye Bolts](#)

3/4" x 10' EMT Conduit x1 (\$8.78) - purchase (1) 10' stick of conduit

[Conduit](#)

Optional:

Heat Shrink Tubing Kit x1 (\$4.99) - purchase 1 kit

[Heat Shrink Tubing](#)

Total for materials: \$149 plus tax/shipping (if you don't have Prime)

Assembly Instructions on the Next Page

Assembly/Installation

- 1) First assemble your two conduit poles. Cut the 10' EMT conduit stick into two equal 5' halves. Now take the nut off the 1/2" Eye Bolt and use a 2-lb hammer (wear gloves and eye pro!) to start the nut into the end of the first conduit.

If you start with the nut at an angle and hit it once or twice, it will cut little edges into the conduit. Then set the nut flat in the top of the conduit and give it a good tap to start it, and then set it flush inside the conduit with the hammer. Yes, it falls off and hits the floor a couple times, but it will set in there nicely. In over four years now of use it hasn't budged the slightest. See picture:

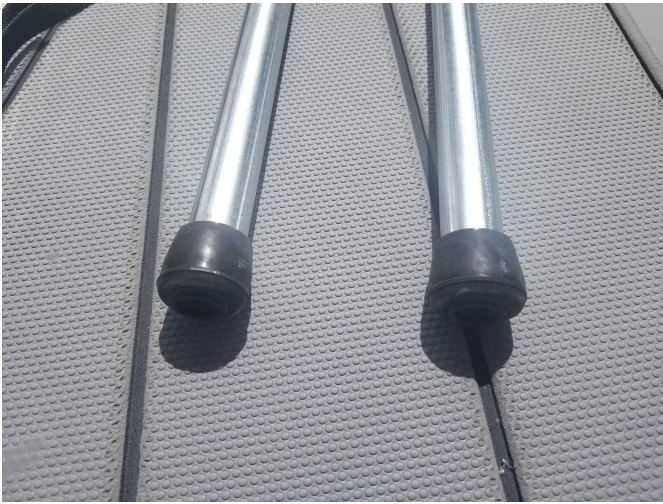


- 2) Now screw the Eye Bolt into the nut.



- 3) Now turn the conduit stick upside down and install a rubber foot on the end. It takes a little work to get it on there, but once it's on it will be good and snug.

Repeat the steps above for the second conduit piece, and now you have both your poles assembled.



- 4) Attach a T-Connector at the top of each support pole, just under the eye bolt. You want the open ends of the T-Connectors to face each other when the support poles are in use at the back of the boat, this is where your spreader bar will go. Tighten the T-Connectors completely. See orientation in the photo below.



- 5) Next take two or three (one in the center of the tower is helpful) of the Wrap It Straps velcro straps and secure them around the top of your wake tower. You might have to experiment with

the positioning as far as width and whether to use the front or back bar. I use the front bar, it offers better support as your sunshade will rest on top of the back bar to reach the front bar.



- 6) Attach the (4) carabiners to the four corners of your sunshade. Pull one end of the sunshade between your bimini top and the top of the wake tower, and clip the carabiners on each sunshade corner to the Wrap It Straps. Note when you take the shade down, you can just leave the Wrap It Straps in place if you wish. Install the sunshade where the 6' is the width, and the 8' is the length headed from your wake tower towards the back of the boat. Note in the photo below I was using a different sunshade and carabiner. You will use the nicer metal carabiners in my materials list.



- 7) Pull the sunshade towards the end of the boat you are shading.

- 8) Now clip the two carabiners you just installed to the Eye Bolts of the poles. Set the feet of the poles against the body of the boat, ideally the same width as the sunshade. At the rear of the boat, mine set just to the outside of the transom seats. At this point the sunshade will try to sag and the tops of the poles will move towards each other, but we'll fix that with the spreader bar.



- 9) At the top of the pole, tie an end of the paracord around the bottom of the Eye Bolt and finish with a neat, tight knot ([see photo back in Step 4](#)). You won't need to tie and untie this knot each time. Leave about 2 to 3" tail from the knot. Pull the paracord down until you can get to your cleat or other tie off point, tension the sunshade, and then cut the paracord about 12" longer than this point. Seal the cut end with a flame.
- 10) Now clip one of the Nite Ize CamJams to one of the Nite Ize plastic carabiners and clip the carabiner to the boat cleat (the plastic won't harm the cleat). Feed the loose end of the paracord into the CamJam but don't tighten the paracord yet.



- 11) Repeat steps 9-11 for the other side.

- 12) Now insert the PVC pipe into the T-Connector on each side. The first time you set this up you'll want to measure the length of PVC pipe you'll need. The ½" PVC diameter allows you to slip it into the ends of the ¾" T-Connectors without loosening the T-Connectors each time.
- 13) After you get the PVC spreader bar in place, use (3) zip ties to connect the end of the sunshade to the spreader bar using the 3 grommets in the sunshade (does not apply to the less expensive gray model). Make sure after you tighten the zip ties you cut the ends of the zip ties FLUSH.



- 14) Once you have everything assembled, tighten the paracord by pulling the loose end up in the Cam Jam. Setting up the sunshade each time should only take a couple minutes. I leave my Wrap It Straps in place on the wake tower, so I just have to pull out the sunshade (carabiners still attached at all 4 corners and spreader bar zip tied to one end), pull out the 2 support poles, attach the CamJams to the cleats, and then connect everything up. The paracord will stay tied to the eyelets at the top of the pole, the spreader bar stays zip tied to the sunshade, and the CamJams stay on the end of the paracord with the plastic carabiner attached...you do not need to take all this apart after the initial setup.
- 15) To disassemble, just disconnect the spreader bar and carabiners from the two support poles and roll up the sunshade back to the wake tower. Disconnect the 2 carabiners from the velcro at the tower and put it all in the ski locker. Be careful when working on the swim deck, if you drop anything after it's unattached you could lose it in the water.

Scroll down for a few more photos







