Installation Instructions for Samson Sports tower mirror assembly

Tools Needed:
- 3/16 allen wrench
- 5/16 allen wrench
- 7/16 wrench

The mirror assembly should have the following parts:

The tower mirror assembly will come with the tower clamp (C.N.C. machined for your exact tubing size), the mirror arm, stainless self locking nut, Cipa Xtreme 3 lens mirror, and 3/8 allen bolt or optional quick release handle.

Installing the mirror onto the arm:

Begin by placing the mirror face down on a soft towel. Install the mirror arm over the stud sticking out of the rear of the mirror housing. Place the flat washer and stainless self-locking nut on to the stud. You should be able to tighten the nut a few turns by hand. Once the nylon locking material starts to thread onto the stud, you will have to use a 7/16 wrench. Sometimes the stud may spin as you try tightening the nut. You can prevent the stud from turning by placing the mirror face down on a towel and pulling up on the arm. The arm will rotate on the convex plastic protrusion on the back of the mirror casing. If you apply constant pressure on the arm, it will put the stud into a bind and prevent the stud from spinning. You should tighten the nut 2-3 additional turns after you tighten it as much as you can with your fingers.

To position the mirror assembly in the correct placement on the tower it will be helpful to have one person sitting in the driver seat and another person on the outside of the boat. Remove four allen head screws using a 3/16 allen wrench from the tower clamp. *Note the two 5/16" allen head bolts inside the clamp (Fig 3). These two allen bolts must be loose while you are adjusting the mirror arm placement on your tower. It will make it easier to adjust the mirror, arm and clamp if the 2 screws inside the tower clamp are loose and the bolt (or handle) that attach the mirror arm to the clamp are loose. You don’t want the bolts so loose that the mount is flopping around. Tighten the bolts just enough so you can adjust the arm and rotate the tower clamp with moderate force.
With a person sitting in the driver seat, position the mirror so that the driver will have a good view behind the boat when they look into the center lens. If the 2 bolts inside the clamp are loose and the handle (or bolt) that attach the arm to the clamp are loose, you should be able to adjust the clamp and arm into proper position. Once you have the mirror positioned, gently remove the clamp from the tower without twisting the clamp. Hold the clamp in one hand and tighten the two allen bolts inside the clamp with a 5/16 allen wrench. Make sure you do not rotate the mirror arm on the clamp as you are tightening the bolts. Once they are tight, place the mirror assembly back on the tower and check to make sure the driver can still view behind the boat from the center lens. Install the four smaller allen screws into the cap of the clamp and tighten. Tighten the handle (or bolt) that attaches the arm to the clamp. (If your mirror came with the optional quick release handle, tighten the handle as tight as you can.)

**Adjusting the mirror head**

Once the mirror is secured to the tower you can adjust the mirror head up and down and side to side. Start by sitting in the driver seat as you would sit normally. Adjust the center lens first. Using both hands grab the outside ends of the mirror housing. Twist the mirror housing up or down to adjust the angle of the center lens. (Do not push on the center lens to adjust it.) You can adjust the mirror side to side and up and down by moving the entire mirror and housing (you do not need to loosen any bolts to adjust the mirror). It will take quite a bit of force—much more than adjusting the rear view mirror in your car. Once you have adjusted the center lens, you can adjust the outside lenses by pushing on the corners of the side lenses. As the rider goes out of view in the center lens as they are cutting across the wake, you want to have the outside lenses adjusted so that you can see him/her when they are outside the wake.