

## Fabricating a rudder support for Hot Tamale #477

Use a 36" piece of 1/4" SS rod - <\$6; requires one cut.

1. Create an 80° acute angle bend 1 1/4" from one end of the rod.
2. Hold the rudder in its upright position and measure the distance between the support hole on the upper posterior edge of the rudder and the outside of the tiller hinge pin on the top of the rudder cheek plates. Add 3/4" to this measurement: this will be the OD length of your support rod-**After both bends are made on the rod.** (The 3/4" ensures you can connect the rod to the tiller hinge pin once the rudder is upright.) I would hold off on cutting the rod until you are certain you have made it long enough for both bends.
3. Using the measurement from Step 2 create a circular bend with 3/4" diameter ID **perpendicular from the plane of the first bend.** This bend is a little larger than the tiller hinge pin spacer which is 5/8". I held the rod in a vise and "wrapped" the heated portion around a 3/4" diameter bolt used as a form. Create a 15° bend 2" from the same end on the same plane.
4. Cut the rod on the backside of the circular bend.
5. Use the remaining piece to fabricate the handle by bending both ends on the same plane back to form a flattened "C" leaving 1/2" space between ends.
6. Weld this piece 5-6" from the top, or tiller end, of the support rod on the same plane as the first bend. (Step 1)
7. Using a wire brush or steel wool, clean up the oxidation residue from heating the bends and weld.

I found I could do all the work myself except the final weld. I used a propane torch to heat the rod to the point at which I could effectively bend it as needed. 1/4" SS rod can be found many places; I used Jamestown Distributors:

<http://www.jamestowndistributors.com/userportal/search.do?freeText=Stainless%20Steel%20Rod&page=GRID&history=>

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Pictures follow on next pages:

Picture 1.



Picture 2.

