



## **Tilt helm mounting instructions**

### **( Zeiger tilt helm is patent pending )**

Determine the desired mounting location on the dashboard. Make sure that the lever on the left side of the tilt helm will not interfere with any switches, gauges, etc.

Using the aluminum dash spacer as a template, mark the 4 bolt holes that will mount the helm to the steering valve, which will go behind the dash. The tilt helm should be mounted with the lever on the left hand side of the unit. For reference, the two top holes will be on a horizontal plane and the two bottom holes will be directly vertical to the hole above it. The helm should not be mounted with the 4 holes in the 12, 3, 6, and 9 o'clock positions, as the helm will not tilt up and down vertically.

Mark the center of the large center hole through which the shaft will protrude through the dash. This center hole must be 2 ½ inches in diameter. If the hole is smaller, the tilt column housing could interfere with the dash. A 2 ½ diameter hole saw works well to cut the center hole. Also, this hole must be concentric with the 4 bolt holes to be sure that the tilt mechanism will operate freely.

Drill the 4 mounting holes with a 7/16 drill keeping the holes perpendicular to the dash to ensure proper mounting. Also cut the 2 ½ diameter hole in the center at this time.

Clean out each of the holes. Make sure that the mounting surface behind the dash is flat and free from anything that may cock the steering valve upon installation. It is important that the outside and inside dash surfaces are parallel to each other to keep the splined shaft 90 degrees to the bezel in assembly.

The tilt helm unit is designed to have a minimum thickness of 2 inches between the mounting surface of the bezel and the mounting surface of the steering valve including the dash board. Ideally, this dimension should be 2 inches to 2 1/8 inches thick. For example, if the dash thickness is 1 inch , the 1 inch thick aluminum spacer provided to go behind the dash makes this dimension 2 inches. If the dash thickness is 1/2 inch , an additional 1/2 inch spacer will be needed in addition to the 1 inch aluminum spacer provided. If this dimension falls below 2 inches, the shaft could bottom out in the steering valve and the unit will not function properly. Keep in mind that the dash and any spacers made of a soft material can crush during tightening of the bolts. What starts out at a 2 inch dimension may end up less after tightening the bolts.

Remove steering hub from tilt assembly. Apply a little blue thread locker to the 3/8 mounting bolts ( 4 ).With a second person holding the steering valve and spacer (s ) behind the dash , slide the tilt helm through the 2 1/2 hole and engage the splined shaft into the steering valve. Turn the bolt that is held into the bezel and begin threading it into the steering valve. Once the bolt is started into the valve , continue putting the remaining 3 bolts into the valve and snug evenly going in a criss-cross pattern until the bolts are tight and the unit is secure against the dash.

Move the lever on the left side of the tilt unit in an upward position and check the tilting action to be sure that the unit will go up and down. The lever will engage in each position one at a time once the lever is released. Make sure that the lever is engaged in an adjustment slot before running the boat.

### **Install steering hub and tighten nut.**

Install steering wheel, etc.

See drawing.



