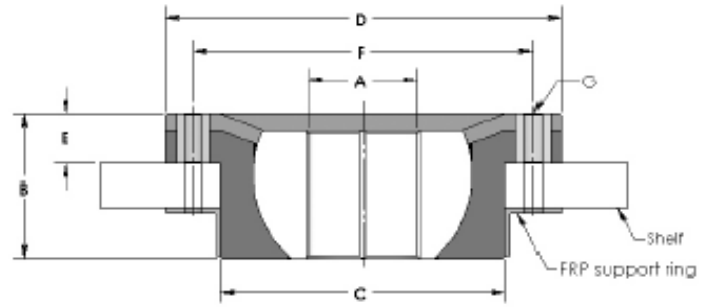


# TIDES MARINE

## URB-LP Installation Overview

The following is a brief description of the installation procedures associated with the URB-LP. Installation instructions are included with each unit and should be followed closely.



1. Block the rudder securely in position.
2. Remove steering arm and quadrant from rudder stock.
3. Disconnect rudder collar and remove.
4. Remove existing rudder bearing.
5. Slide the URB-LP onto the stock and into position on the rudder shelf.
6. Using the unit as a template, trace the diameter of the base onto the rudder shelf so that a clearance hole can be cut.
7. Remove the unit and, using a jig saw, cut a clean hole through the rudder shelf.
8. Align/rotate the URB-LP so that new bolt holes can be drilled through the shelf. If necessary, Tides has backing plates available for additional strength.
9. Drill through the shelf using the "bushed" installation holes in the URB-LP as a template.
10. Apply a bed of medium-bodied, filled epoxy or Chockfast® to the barrel of the unit below the flange and place in the hole in the rudder shelf. Align the unit with the pre-drilled holes in the shelf and secure it to the rudder shelf using stainless steel bolts which are sized to match the "bushed" holes in the URB-LP. Do not under size. Large fender washers or a backing plate should be used against the bottom of the rudder shelf. Tides has backing plates available for extra strength.
11. Reposition the rudder collar so that it rests upon the flat surface of the ball-type bearing in the URB-LP and secure. Use washers, as necessary, to align rudder collar with original set screw "dimples".
12. Remove the blocking from the rudder and verify that the rudder swings freely.
13. Reassemble the other steering components.

**NOTE: To be properly installed, the "barrel" portion of the URB-LP must be at least 50% supported. See diagram above right for detail.**

