

TIDESMARINE Upper Rudder Bearing - Low Profile

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".

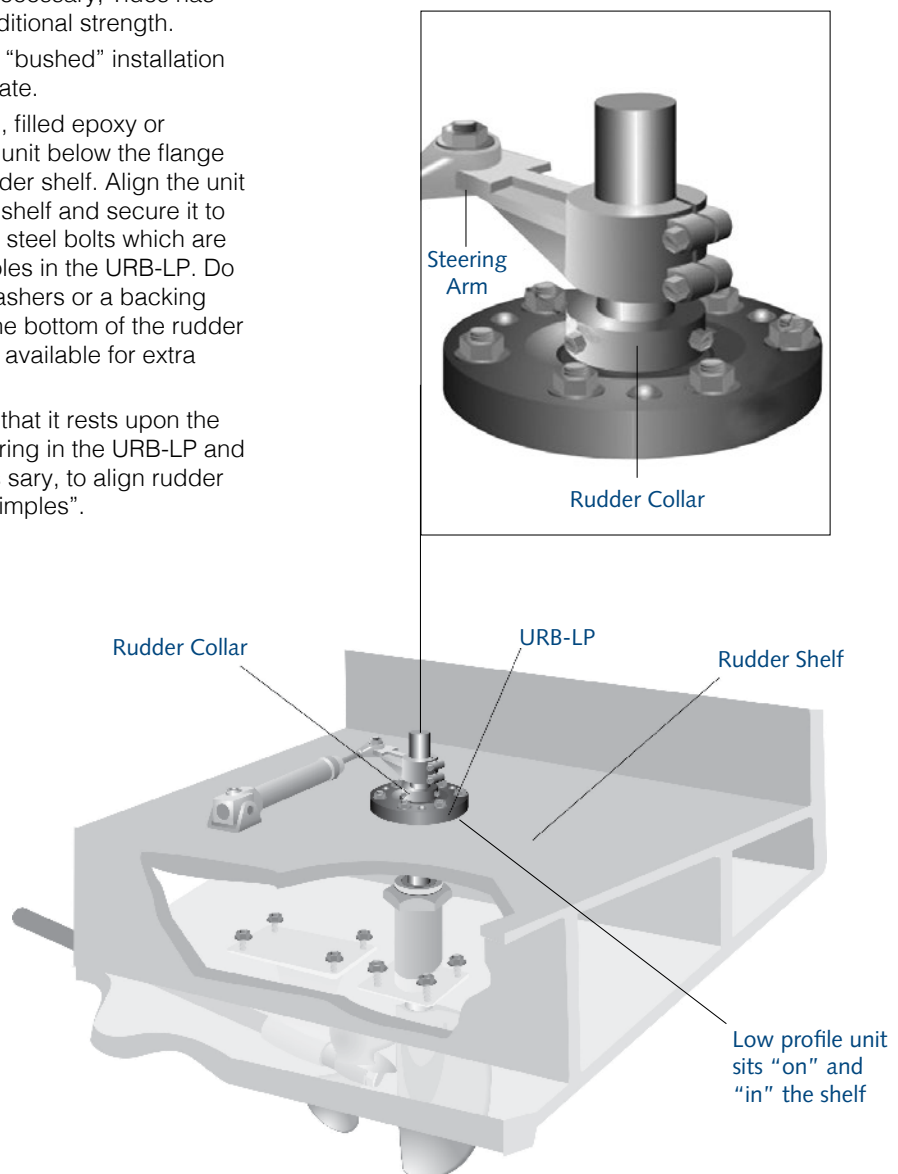
12. Remove the blocking from the rudder and verify that the rudder swings freely.

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 on next page for detail.

Bronze Rudder Stock Note:

Bronze rudder stock diameters may run slightly under nominal. If necessary, Tides will machine the bore of the ball-type bearing to match your installation accordingly.



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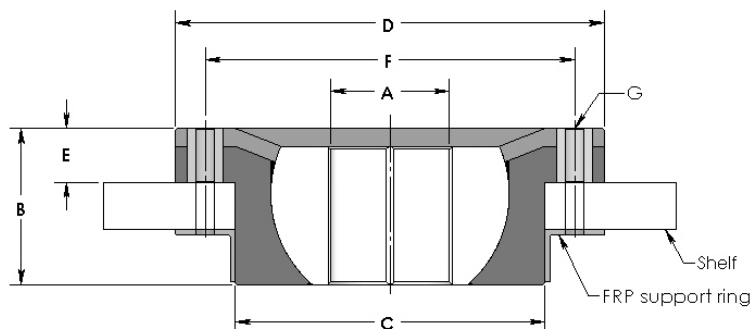
Before placing your order, there are several measurements you need to take/confirm.

Measure the exact diameter of your rudder stock (.000"). Locate this measurement in the table below.

Next, note the flange height of your part (measurement E) in the table. Verify there is enough room between the rudder shelf and the deck / miscellaneous construction above to install the unit (generally, 1 ½ x the overall height of the unit (Measurement B)).

Then, using the barrel diameter measurement in Column C, confirm there is sufficient clear space on the shelf around the rudder stock to locate the URB-LP.

Finally, check the position and mounted height of other steering components to determine if any adjustment will be necessary once the URB-LP is in place.



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Specifications (dimensions in inches)

RUDDER STOCK OD	ASSEMBLY HEIGHT	BARREL OD	FLANGE DIAMETER	FLANGE HEIGHT	BOLT CENTER	# OF BOLTS IN FLANGE	PART NUMBER
A	B	C	D	E	F	G	
1	2	4 1/2	6 1/2	3/4	5 1/2	6	URB-LP-1000
1 1/4	2	4 1/2	6 1/2	3/4	5 1/2	6	URB-LP-1250
1 3/8	2	4 1/2	6 1/2	3/4	5 1/2	6	URB-LP-1375
1 1/2	2	4 1/2	6 1/2	3/4	5 1/2	6	URB-LP-1500
1 3/4	2	4 1/2	6 1/2	3/4	5 1/2	6	URB-LP-1750
2	3	5 1/2	7 1/2	5/8	6 1/2	6	URB-LP-2000
2 1/4	3	5 1/2	7 1/2	5/8	6 1/2	6	URB-LP-2250
2 1/2	3.275	6 1/2	9	3/4	7 3/4	8	URB-LP-2500
2 3/4	3.275	6 1/2	9	3/4	7 3/4	8	URB-LP-2750
3	2 9/32	6 1/2	9	3/4	7 3/4	8	URB-LP-3000
3 1/2	4	8	11	1 1/2	9 1/2	8	URB-LP-3500
4	4 1/8	8 1/2	11 1/2	1 1/2	9 1/2	8	URB-LP-4000
4 1/2	4 1/8	8 1/2	12	1 1/2	10 1/4	8	URB-LP-4500
5	4 1/4	9	12 1/2	1 1/2	10 3/4	10	URB-LP-5000

If you are replacing a standard part (ex: URB-LP-1000), please specify its size/configurations when ordering because there are numerous variations for the same shaft size. You may not have the standard model.



GENERAL
Marine
SERVICES

156 Beaumont Street · Westhaven · Auckland · New Zealand

Sales Ph +64 9 309 0048 · sales@generalmarine.co.nz

Service Ph +64 9 368 0938 · service@generalmarine.co.nz

www.generalmarine.co.nz