Assembly Procedures
1. Lay hub on a horizontal surface with openings of shank sockets (Fig. 3) facing up. This is normally the discharge side of the assembly.
2. Lay blade shank in socket with discharge side of the blade up. The discharge side of the blade is the side with the angle setting mark. Line up the index mark on the blade with the proper angle mark on the end of the shank socket (Figs. 2 and 4) on the underside of assembly.
3. Place cap over blade shank with beveled end toward center. Install U-bolts and elastic nut stops. Before tightening lock nuts, pull the blade outward to set the key against the keyway and check angle setting (Fig. 3).
4. Tighten elastic stop nuts evenly and torque to the following foot-pounds:

<table>
<thead>
<tr>
<th>PROPELLER DIA.</th>
<th>HUB DIA.</th>
<th>U-BOLT SIZE</th>
<th>TORQUE (FT/LBS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>54&quot; – 72&quot;</td>
<td>14&quot;</td>
<td>1/2&quot;</td>
<td>20</td>
</tr>
<tr>
<td>81&quot; – 96&quot;</td>
<td>18&quot;</td>
<td>3/4&quot;</td>
<td>45</td>
</tr>
</tbody>
</table>

5. Check angle setting to be sure it has not changed during assembly. If so, loosen lock nuts and reset angle. Tighten nuts again to proper torque. Do not over-tighten. Be sure to tighten U-bolts evenly.

Setting Angle With Protractor (optional)
Under most conditions, the preceding assembly procedure using the index marks is of sufficient accuracy. When greater accuracy is desired, use a level bubble protractor. Before the final tightening of the nuts, set the protractor on the angle setting mark. (The hub and blade assembly must be level for accurate setting.) Adjust the angle by tapping the shank end with a mallet. Tighten lock nuts to proper torque. Again check the angle setting. Rotate propeller to check angle on each blade in the same location.
These capscrews force the taper bushing into the hub which in turn compresses the bushing onto the shaft. This makes a positive clamping fit. The torque must not exceed 24 ft. lbs. for Q bushings and for R bushings.

WARNING

Do not attempt to pull bushings flange flush with hub end. There should be 1/8" to 1/4" clearance when tightened.

Removing Propeller Assembly From Shaft

1. Remove all three capscrews and self-locking nuts from propeller and hub assembly.
2. Start capscrews into the threaded holes in the bushing flange.
3. Tighten each bolt part of a turn successively to force the propeller off the bushing.
4. Pull the bushing off the shaft. If the assembly has been in place some time, it may be necessary to use a wheel puller to remove the bushing. Never use a wheel puller on the propeller.

For propeller dimensions, see drawing R-8709.