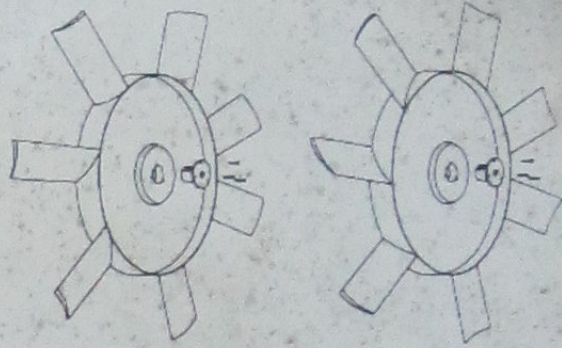


INSTALLATION INSTRUCTIONS FOR MOUNTING AIRFOIL CAST ALUMINUM IMPELLERS



Bushings supplied by Airfoil Impellers have had the original bolts replaced by longer ones than were originally provided by the bushing manufacturer. If the bushing you are using has not been supplied by Airfoil, see the specifications below for Hex Head Bolt size that is required. *Use of improper bolt size will result in stripped bolt holes on the impeller!*

1. Make sure shaft is clean and bore of bushing is clean. Clean and remove any burrs or nicks.
2. Align un-threaded holes of bushings with threaded holes in the impeller. Align the shaft key with the black balancing line in the impeller when possible.
3. Using a **torque wrench**, gradually and evenly tighten bolts 1/4 turn at a time rotating from bolt to bolt using extreme caution to prevent the bushing from being drawn into the impeller at an angle. Verification of tracking at the outer diameter of the blade on the trailing edge should show blades tracking within 1/16". **Do Not Use An Impact Wrench!** All tightening must be done by hand.

<u>Bushing</u>	<u>Torque</u>	<u>Hex Bolt Size</u>
H	8 Ft. Lb.	1/4-20 X 1
P	10 Ft. Lb.	5/16-18 X 1-1/4
Q	15 Ft. Lb.	3/8-16 X 2

Note: If a pop is heard while tightening, it is possible the blade has been cracked at the bolt holes. Do not attempt to use the blade if this has occurred. Remove the blade and inspect the bore of the blade for a crack running along the thread hole of the blade. If a crack exists, call the factory immediately.

4. If the bushing is equipped with a set screw over the removable key way, tighten the set screw with a 1/8" allen wrench.

5. **Caution: Do Not Attempt To Pull The Head Of The Bushing Flush With The Casting!** There should be a clearance of 1/8" to 1/4" when the bushing is properly tightened. In no case should the impeller be used if the bushing head is in contact with the impeller. Contact the factory immediately if this occurs.



6. Be Sure All Tools And Hardware Are Clear Of Unit.

Manually rotate the blade to assure clearance between the blade and the housing. There should be a minimum clearance of 1/16" at any point. A minor motor position change or shaft & bearing position change may be required in order to obtain proper clearance. Reinstall guard, and jog starter to assure the blade does not touch housing. Once clearance is assured, unit is ready for operation. The unit should be felt for vibration. Any vibration in excess of a tingling feeling to the fingers should be noted and Airfoil should be contacted.