

## ANGLE MEASUREMENT INSTRUCTIONS USING AIRFOIL TEMPLATE

DOC#: *R70E Template Instructions Rev0*

### Required Tools

Torque wrench

Airfoil Template (included)

Digital Level/Protractor

For AN hex head bolts:

$\frac{1}{2}$ " wrench

$\frac{1}{2}$ " socket

For Metric hex head bolts:

13mm wrench

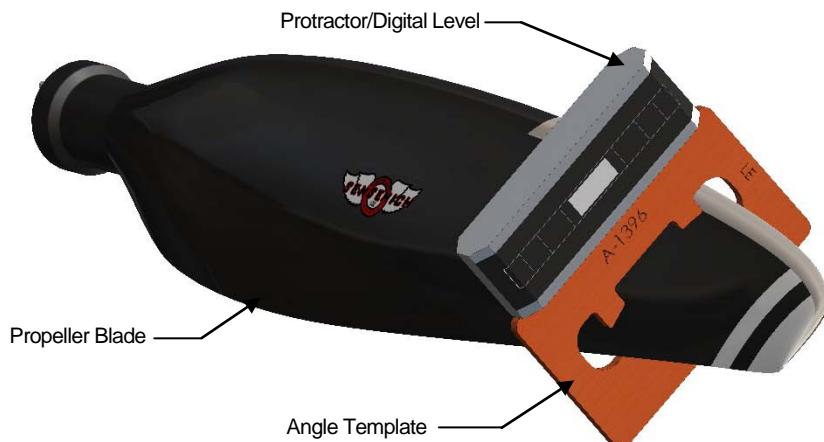
13mm socket

## **SETTING PITCH**

Sensenich has supplied an airfoil template for those who wish to obtain a specific propeller blade angle. Although this tool is NOT required to obtain proper propeller pitch, it can be utilized to fine tune aircraft performance.

1. Chock the aircraft wheels to prevent movement.
2. Rotate the propeller until it is parallel or level to the ground.
3. Note the general airfoil shape of the cutout on the template and the side marked "LE". The side marked "LE" matches the leading edge of the propeller blade. Match the shape of the cutout with the shape of the blade airfoil and gently slide the airfoil template onto the blade until it will not move any longer.

**Note: Do not force the template too far onto the blade as it may damage the blade finish.**



**Figure 1. Blade, Template, and Protractor**

4. Loosen the clamping bolts until the blades rotate in the hub. Ensure the blades do not wobble in the hub when rotating.
5. Place the digital level/protractor on the template and rotate the blade until the desired angle is achieved.
6. Tighten the corresponding (2) clamping bolts, taking care to maintain an even gap between hub halves by tightening the bolts a quarter turn back and forth.
7. Remove the template from the propeller blade and rotate the propeller to bring the next blade around to the exact same location the first blade was measured.
8. Repeat steps 3 thru 6 for the corresponding blade.
9. When both blades are set to the intended angle, finish tightening all six hub clamp bolts to the specified torque contained in the instruction manual using the implied criss-cross pattern.