Sensenich Propeller Mfg. Co.

PROPELLER INSTALLATION INSTRUCTIONS FOR SENSENICH FIXED PITCH METAL PROPELLERS USING FLANGED SHAFT DRIVE BUSHINGS.

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WARNING: Any propeller installation should only be accomplished by an FAA certified mechanic!

Before Installation:

- **a) Thoroughly clean the surfaces of the crankshaft flange and pilot stub, the rear / mounting face of the propeller, and the pilot bore. Carefully examine each surface and especially examine the end of the crankshaft pilot stub. Even minor nicks or burrs must be smoothed.**

- **b) Make sure the propeller attaching bolts, and the threads in the drive bushings or retaining nuts are clean and dry.**

- **c) Be certain that magneto switch is off, and that both magnetos are grounded.**

Propeller Installation:

- **a) The propeller may be mounted with or without a spinner. If a spinner is being used, the rear bulkhead may be installed between propeller and engine flange, between propeller and spacer, or between spacer and engine flange.**

- **b) When re-installing the spacer, make sure at least 3/4 inch but not more than 1-1/4 inch of dowel is protruding from the spacer. The spacer pins are a press fit and we recommend using a press to install the spacer to your propeller. If a press is not available, place the propeller**

on a flat surface, align the pin holes with the pins in the spacer, and covering the spacer with a block of wood or some other material that will not mar the surface, use a 5 lb. hammer to pound the spacer on until it is tight against the propeller face. Alternate hits between the two sides of the spacer where the pins are installed. NOTE: THE PINS ARE VERY TIGHT (BY DESIGN) AND IT WILL TAKE SEVERAL HITS TO ATTACH THE SPACER.

- **c) After the spacer is tight against the back of the propeller hub, check that equal amounts of the dowel pins are in the propeller and spacer. If there are not, use a 7/16 diameter steel rod and hammer to equal the pin lengths in the propeller and spacer. The dowels are 2 inches in length.**

- **d) To remove a spacer, support the blades, as close to the hub as possible, so that the spacer is 2 inches above the floor. Use a steel rod, no larger than 7/16 diameter, and a hammer to pound out the spacer dowel pins. Alternate between the two pin holes so that the spacer does not get cocked and bind. NOTE: THE PINS ARE VERY TIGHT (BY DESIGN) AND WILL REQUIRE QUITE A FEW HITS.**

- **e) Check the propeller and spacer bolt hole alignment by dropping one of the propeller attaching bolts into each hole. The bolt should go freely through the assembly without any binding, if not check that the spacer is properly positioned on the propeller (see step c above).**

- **f)Locate the propeller on the engine flange. Refer to the airframe or engine manufacturers documentation for proper positioning of the propeller on the engine flange.**

- **g) Place a washer on each attaching bolt and insert the bolts through propeller holes, engaging the bolts by hand into the threads of the crankshaft flange bushings. If the bolts do not thread in easily, something is wrong. Remove the propeller and recheck the bolt threads and flange bushing threads for damage or foreign material.**

- **h) Torque the attaching bolts according to the torque decal on the side of the propeller hub. If the decal is not**

present refer to the chart below. Apply torque in small increments, working diagonally across the bolt circle until reaching the recommended torque.

i) Install 0.040 inch diameter stainless steel lock wire in propeller bolt heads locking bolt heads together. It is recommended that bolts be wired in pairs, twisting the wire between the bolt heads.

ATTACHING BOLT DIAMETER	RECOMMENDED WRENCH TORQUE
3/8 inch	23 to 25 lb-ft (280 to 300 lb-in)
	(31.6 to 33.9 newton-meters)
7/16 inch	40 to 45 lb-ft (480 to 540 lb-in)
	(54.2 to 61.0 newton-meters)
1/2 inch	60 to 65 lb-ft (720 to 780 lb-in)
	(81.3 to 88.1 newton-meters)