



Tiny Tach Installation

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The Tiny Tach is a computer controlled RPM counter that measures the time between two ignition pulses to calculate RPM. It also stores the engine run-time similar to a Hobbs meter. When the engine is running, the Tiny Tach shows the actual RPM and when the engine is stopped, it shows the engine run-time since the meter was installed or reset. The Tiny Tach is powered by a small internal battery so no electric power from the plane is required.

To sense the ignition pulse, the Tiny Tach has a sensor wire which works as an antenna for EMP pulses. Several twists of this sensor wire around an unshielded spark plug cable is all that is needed to measure the EMP. However, our Slick magneto harness wires are shielded for radio noise reduction so to properly measure EMP, the Tiny Tach sensor wire must be attached to the unshielded furl inside the harness cap.

First detach the harness from the magneto by removing the 3 screws. You will see the spring balanced contacts for the ignition wiring lines. Between the #1 and #4 wires, drill a 1/16th inch diameter hole. Countersink the hole on both sides.



I did not use the original sensor wire from the Tiny Tach since it is very stiff and the risk of the wire breaking is high. Instead, I used a short length of highly flexible isolated wire with heat-shrink tubing over it. Pull the #1 spark plug wire end from its seated position in the harness cap and wrap the tach sensor wire 2-3 times around the unshielded end as shown in the following picture.



Now insert the sensor wire through the small hole and secure it with a few dabs of silicone sealant.



Push the #1 wire back into position on the magneto harness cap. Connect the flexible sensor wire to the original sensor wire with electronic solder and isolate the solder point with heat-shrinkable tubing. Be sure the complete sensor wire (original wire plus the flexible wire that was added) is no longer than the original length since extra length may cause problems with the Tiny Tach module.

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