1710 NW Independence HWY
Albany, OR 97321
541-990-2485

Tach Pod w/Ring

This product is intended to generate a square wave tach pulse using a tiny "pod" circuit that attaches to any FIE band-clamp mag drive with a welded-on steel, female cross on the mag drive shaft top. The pod attaches to the drive housing using the standard timing pointer holes, senses the magnets passing inside the drive and a standard signal is generated for use by tachometers, rev limiters, data loggers, RPM switches, etc. For best results, use an **ALUMINUM** cross driver on your magneto, not steel!

Installation of magnet ring

On most drives utilizing a gear on the bottom, the gear will need to be removed and the shaft pulled up and out of the drive far enough to place the supplied ring on the 1.800" diameter shaft top. Note the two thrust washers between the drive shank and the gear. Don't forget to put them back! Orient the ring so that the set screw points are poking at the thickest sections of material between the legs of the cross pattern. A smear of Silicone or loc-tite is suggested on the ring inner diameter and on the two 1/4-20" set screws before they are tightened firmly.

Installation of Tach Pod

Remove the stamped steel timing pointer (if present) from the side of the mag drive bowl. Use the two supplied #6-32 socket head cap screws and lock-washers to secure the pod to the bowl. **NOTE:** Don't skip the washers! The washers ensure the correct engagement of the two screws. Without them, the screws could rub on moving parts inside. A bit of loc-tite or silicone on the threads is suggested.

Programming your devices

Set your tachometer devices to **"4 CYLINDER"** operation. Sometimes this is a programmable option, other times you must cut wire loops on the device for 4 cylinder operation. Since this unit utilizes 4 magnets per revolution and the magneto spins at HALF engine speed, it emulates 4 cylinder operation.

Connections

RED – 12 VDC (9 to 18 volts is acceptable)
BLACK – Ground or battery negative
GREEN – Tach signal out

When connected, the tiny red LED on the side of the tach pod will be illuminated between magnets and as magnets pass the sensor, the LED will turn OFF. At cranking speed, you should see the LED blinking as magnets pass it. At idle speed, the LED will appear to be on all the time.

The circuit will create a square wave pulse output that is approximately whatever the input on the RED wire is. Example: connected to 16VDC, the unit will output a 16VDC square wave pulse. Make sure your input voltage to this unit matches the requirements of the tach device you're connected to.

Troubleshooting: Using a voltmeter set to read 12VDC, connect between BLACK (Ground) and GREEN (Signal out). When the LED is ON, you should get a reading of approximately 12VDC (when the RED wire of the unit is connected to 12V). As the magnets pass and the LED turns OFF your meter should read very close to 0.000.

To test your new tach system, connect your mag drive tach pod as above. Spin the mag drive with a cordless drill (out of the engine and without a magneto on it) while watching your tach device(s) and the LED on the tach pod.