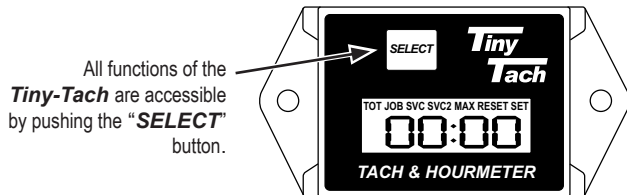


# Tiny-Tach™ Mag Tach for Alternators

## Display Operating Instructions

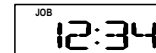


All functions of the **Tiny-Tach** are accessible by pushing the **“SELECT”** button.

### JOB TIMER

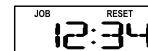
A **RESET FUNCTION** used for interval tracking.

**JOB** = Hours of operation since the timer was reset.



To view **“JOB”** time push the **“SELECT”** button once.

To reset **“JOB”** time: Push and Hold **“SELECT”** button until display shows **“RESET”** and show hours that have accumulated on the current job.



When you **RELEASE** the **“SELECT”** button the **“JOB”** display will reset to **“00:00”**. You will begin to record the next job interval.



**INITIAL SETUP:** Determine the Pulley Speed Ratio from table below.

**To Set Pulley Speed Ratio:** Slowly press and release **“SELECT”** button until the **“F”** is displayed and hold until **“SET”** is displayed. Then toggle between ratio settings (1.000 - 1.848).



After 30 seconds the display will reset.

## Crankshaft to Alternator Pulley Speed Ratios for FOCS engines 17.3.10 By RKL

		Alternator Pulley O.D.			
		12V 45A (Marelli) PN 1157.269	12V 80A (Iskra) PN 1157.332	12V 40A (Denso) PN 1157.326	12V 33A (Iskra) PN 1157.261
		24V 35A (Iskra) PN 1157.383	12V 45A (Cheng Duo) PN 1157.397	12V 45A (Bosch) PN 1157.391	
		69mm O.D. (2.71 IN)	68mm O.D. (2.68 IN)	62.7mm O.D. (2.47 IN)	73.0mm O.D. (2.87 IN)
CRANK PULLEY O.D.	88.5mm O.D. (3.48 IN)	<b>1.297</b>	<b>1.290</b>	<b>1.418</b>	<b>1.242</b>
	94.5mm O.D. (3.72 IN)	<b>1.384</b>	<b>1.376</b>	<b>1.514</b>	<b>1.326</b>
	108.5mm O.D. 4.27 IN)	<b>1.588</b>	<b>1.597</b>	<b>1.737</b>	<b>1.521</b>
	115.5mm O.D. (4.54 IN)	<b>1.690</b>	<b>1.681</b>	<b>1.848</b>	<b>1.619</b>

**LIMITED WARRANTY:** Design Technology, Inc. warrants that for a period of ONE (1) YEAR from the time of purchase it will repair or replace the Tiny Tach at no charge, if it fails to function properly due to defect in materials or workmanship. Damage to the wires and cables by improper care or use is expressly excluded from this warranty. All implied warranties are limited to the use of this instrument as directed above and Design Technology, Inc. does not assume or authorize anyone to assume for it any other obligation. The instrument should be returned, prepaid to Design Technology, Inc.



**Design Technology, Inc.**  
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# Tiny-Tach™ Mag Tach for Alternators

**Mag Tach for Alternators** can be used as a complete Service Tracking device for most Diesel engines with alternators. It is programmable for different alternators, and reads the revolution from the engine.

## Specifications:

- Activation:** Pulses from the ignition trigger the tach. No time is logged when the engine is not running. Sampling time; less than 1 sec.
- Operating Temp:** -10 to 140 degree F (-20 to 60 degree C)
- Display modes:**
- Total Hours (TOT):** Displayed any time the engine is not running and external power is hooked up to the tach (optional). The hours can be manually viewed during operation. Displayed in hours and minutes up to 200 hours. Over 200 hours, only full hours - max 19,999 hours.
  - RPM:** Displayed any time the engine is running. The tach can be programmed for different pulses per revolution; 1 spark per revolution (default), 1 spark for every two revolutions and 2 sparks per revolution. Max 20,000 rpm.
  - Max RPM (MAX):** Displays the maximum RPM recorded. Display can be manually reset.
  - Job:** Indicates the amount of time that has been accumulated since the function was last reset. Displayed in hours and minutes up to 200 hours. Can be manually reset.
  - Service (SVC):** Programmable service counter from 0 to 50 hours in 5 hour increments. Default set to 25 hours. Displays how much time remains ("count down") until service. Displayed in hours and minutes.
  - Service2 (SVC2):** Programmable service counter from 0 to 250 hours in 10 hour increments. Default set to 50 hours. Displays how much time remains ("count down") until service. Displayed in hours and minutes.

## Installation:

Install the tach at an appropriate location. The design allows for either a flush panel mount or a surface mount. Avoid any hot surfaces. A general guide line is if you think you can place your hand on the intended mounting surface without discomfort while the equipment is running at full operating temperature it may be a suitable mounting location. DO NOT MOUNT METER TO ANY FUEL TANK OR CRANKCASE OF AN ENGINE.

