

www.TinyTach.com

2A OPERATING INSTRUCTIONS

INITIAL SETUP (skip if RPM reading is correct) The default setting 360° should work for most engines.

All functions of the $TINY-TACH_{TM}$ are accessible by pushing the "SELECT" button.



Model 2A Initial Setup:

- Push "SELECT" button several times until display shows 360° "DO NOT RELEASE BUTTON" until "SET" appears in the upper right corner of display. Once "SET" appears release and press "SELECT" button to toggle through all degree settings.
- Stop at correct degree setting for your engine (i.e. 360°, 120°, 90° etc.) see figure1
- Wait for 30 seconds and the display will return to "TOT" Total Hours.
- $TINY-TACH_{TM}$ is now ready to use.



TIP: Most single cylinder air cooled engines idle around 1400 RPM, if the RPM displayed is too low set the value to "720", If the RPM is too high set the value to a lower Degree number "180" or lower.

▲ To Decrease RPM Reading	 45° = 8 sparks per revolution 60° = 6 sparks per revolution 90° = 4 sparks per revolution 120° = 3 sparks per revolution
	 180° = 2 sparks per revolution 360° = 1 spark per revolution 720° = 1 spark per 2 revolution

Figure1

METER OPERATION

When the engine is started, the display will indicate the RPM of the engine. When the engine is shut down, the display will show hours and minutes.

TOTAL TIME

^{IVI} (123 Hours 45 Minutes)

TOT = Total Hours of operation.

- This is always displayed when the engine is off.
- TOT time CANNOT be reset.

RPM



Typical RPM display when engine is running.

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.

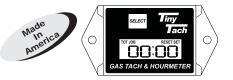
To reset "JOB" time: Push and Hold "**SELECT**" button until display shows "**RESET**" and show hours that have accumulated on the current job.



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







- 0 to 19,999 RPM Display
- 1/2 Second RPM Update
- Resettable Job Timer
- Total Hours

*TINY-TACH*TM **2A - Adjustable Model**

Can be used on most engines from single cylinder lawn mowers up to V8 engines.

User Adjustable spark setting from 1 spark to 8 sparks per revolution.



Design Technology, Inc. 768 Burr Oak Drive, Westmont, IL 60559 (630) 920-1300



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Connecting the Wires

The TINY-TACH_{TM} meter can Surface Mount Flush Panel Mount be mounted in the desired location using either sheet (((Quartz))) Accura<u>cy</u> linv-Tiny-(((Quartz))) Accuracy ach metal screws or by using lach double sided tape. For best \oplus \square 1.540 RPM MIN results when using tape, be sure to clean off any dirt, DIGITAL TACH & HOURMETER DIGITAL TACH & HOURMETER grease and oil from the 2.045 desired mounting location using a suitable solvent such 2.500 as denatured alcohol. WRAP RED WIRE 3-4 TURNS AROUND SPARK PLUG WIRE -NOTE: CUT OFF EXCESS WIRE ONLY AFTER THE UNIT IS READING CORRECTLY Find a suitable route to run Can be Recessed into Panel the pick-up wire to the spark plug wire. It is not critical Do not CUT how the wire is routed. It can the BLACK wire be put into existing wire harnesses or wrapped around COIL UP ANY EXTRA WIRE (DO NOT CUT WIRE) and taped to metal supports. AND SECURE AWAY FROM EXTREME HEAT AND MOVING PARTS CAUTION ATTACH WHITE WIRE TO ENGINE GROUND, LOOSEN CONVENIENT BOLT ON ENGINE OR FRAME **KEEP WIRE CLEAR OF** THEN SLIP SOLDER LUG UNDER **EXTREMELY HOT ENGINE** PARTS SUCH AS THE MUFFLER, AND MOVING PARTS.

Wire damage (cuts or burns) will cause the wire to short and your *TINY-TACH*TM will stop working. *Wire damage is not covered under warranty.*

The RED WIRE should be slipped over an insulated section of the spark plug wire using about 3* turns. **PLEASE BE CERTAIN YOU DO NOT WRAP THE RED WIRE TOO CLOSE TO THE SPARK PLUG THAT ENGINE VIBRATION WILL ALLOW IT TO COME INTO DIRECT CONTACT WITH THE METAL PORTION OF THE SPARK PLUG**. Most engines have a spark plug cap and will prevent this from happening. After the connections are made, any excess wire can be coiled up and taped to a convenient area.

* If the signal is not strong enough, you can add one wrap at a time until your signal is clear. The signal strength is controlled by the number of wraps (too many wraps will pick up electronic noise and give a faulty reading.)

WARRANTY: Design Technology, Inc. warrants that for a period of one year from time of purchase it will repair or replace the *TINY-TACH*_{TM}, without charge, if it fails to function properly due to a defect in workmanship or materials in the instrument. *Damage caused to the wires and cables by improper care or use is expressly excluded from this warranty*. Used *TINY-TACH*_{TM} purchased through a 3rd party reseller will be warranted at the discretion of Design Technology, Inc.

The *TINY-TACH*TM should be returned, prepaid to: **Design Technology, Inc., 768 Burr Oak Drive, Westmont, IL 60559**. In order to assure that you receive the correct model for your application, we request that you please enclose a short note describing the problem, the type of engine and number of cylinders. Thank you. We hope you enjoy using your new *TINY-TACH*TM



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Technical Support
630-920-1302