



Twin Tec *User Instructions for Operating Statistics Software*

CAUTION: CAREFULLY READ INSTRUCTIONS BEFORE PROCEEDING. NOT LEGAL FOR SALE OR USE IN CALIFORNIA OR ON ANY POLLUTION CONTROLLED VEHICLES.

OVERVIEW

The Operating Statistics program runs under Microsoft Windows XP/Vista/7. This software allows engine manufacturers and tuners using our motorcycle ignitions to download operating statistics from an ignition module and examine the data to help administer warranty programs. **For the TC88A module, you must use TC88A Log software.**

Using the software requires the Twin Tec USB Interface P/N 18014 for PC connectivity. The USB interface is compatible with Windows XP/Vista/7. The PC must have a free USB port. If you have an older PC without USB capability, you cannot use the software. For USB driver installation, COM port configuration, and module connections, please refer to the USB interface instructions.

Please note that Operating Statistics cannot access restricted private label products other than those authorized.

PC REQUIREMENTS

We recommend a laptop with Pentium processor and super VGA display (SVGA with 1024 x 768 pixel resolution) running Windows XP/Vista/7. Data display is graphics intensive and a high speed Pentium processor is recommended. Processors slower than 300 MHz will exhibit sluggish program loading and response. The PC must have a CDROM drive for program loading and an available USB port.

The Operating Statistics program includes a print command that prints downloaded data. The program has been tested with Hewlett-Packard laser and inkjet printers and Epson inkjet printers. We recommend using a color inkjet printer.

SOFTWARE INSTALLATION

The software is supplied on CDROM media or in the form of a compressed file downloaded from our website. The installation process uses InstallShield. This industry standard installer is based the new Microsoft Windows Installer service that greatly

reduces potential problems such as version conflicts and allows for application self-repair.

Before proceeding with installation, shutdown any other applications that may be running. For Windows Vista, you must disable the User Account Control (UAC) during installation. If you are not familiar with the UAC, please refer to the Vista UAC Tech Note on our website's Tech FAQ for details.

Use the Windows Explorer or the Run command from the Windows Start Menu to launch setup.exe in the Operating_Statistics folder on the CDROM or the setup.exe file downloaded from our website. InstallShield will install the software in an appropriate folder under Program Files.

The Op_Stat.cfg file contains access codes for restricted private label products. You will only be able to access those products for which this file contains valid access codes.

Once InstallShield has completed the installation, Operating Statistics will appear on the Windows Start Menu. You can then launch it just as you would any other Windows program.

RUNNING THE PROGRAM

Connect the USB interface. Turn the ignition key and engine run/stop switches on to provide power to the ignition. Do not start the engine.

If the engine or ignition has been removed from the motorcycle, you can do bench top testing by using an adapter harness that includes a small 12 volt DC power supply. Use adapter P/N EVO-ADAPT for all Model 1005-1007 ignitions and P/N TC88-ADAPT for all TC88 ignitions.

After the program is launched, the main screen appears. The program uses COM1 as the default port. In most cases, you will have configured the USB interface to use a different COM port, such as COM5. Use the Port Setup command on the Communications menu to select the correct COM port. The program will remember the new port setup. Click on the Read Statistics button to download data from the ignition module.

The data is fairly self-explanatory. Total hours represents the total time that the engine was running. ID represents the firmware identification. This field typically includes the manufacturer, model number, program revision and author's initials, and date. Note that the date is not a manufacturing date code, just the date for the particular firmware release.

Elapsed time is displayed for 13 RPM bands from idle to 6999 RPM. Note that elapsed time data is rounded off during each engine run, so the sum of the elapsed time figures may not precisely match the total hours. The program also displays the maximum engine RPM, time at the RPM limit (in seconds for better resolution) and the number of engine starts.

Clicking on the Clear Data button clears all data displayed on the screen. Clicking on the Print Statistics button prints a report. When you click on this button, a small data entry screen pops up and allows you to add a serial number or comment that will appear on the printout. You can also use the Print command from the File menu.

The elapsed time data in the various RPM bands can be displayed in the form of a histogram chart by clicking on the Histogram button. Color coding of the bars helps to interpret the data. The idle RPM band is blue, normal operating RPM bands are green and high RPM bands are yellow and red. The chart is

automatically scaled for best display. You can print the chart along with a complete statistics report by using the Print Command from the File menu at the top of the chart window.

The user data field allows you to enter up to 32 alphanumeric characters. User data is stored in the module EEPROM and can be used to represent information such as a serial number. User data is automatically read and displayed whenever you click on Read Statistics. If no valid user data has previously been written to a module, some garbage characters may appear in this field. You can enter new data or edit the existing data. When you click on the Write User Data button, the data is written to the module.

Newer units will also display elapsed time at wide open throttle (WOT). Ignitions for Evolution® series engines record elapsed time at WOT when the VOES input is not active (green LED not illuminated) corresponding to high manifold pressure. TC88 ignitions record elapsed time at WOT when the manifold pressure exceeds 22 In-Hg.

Revision 7.0 and higher Model 1005 ignitions also display elapsed time in various color coded temperature bands up to 150 degree C. Significant elapsed time in the yellow or red bands indicates that the engine is running excessively hot and that the life expectancy of the ignition module will be reduced.

Figure 1 - Operating Statistics Program Main Screen

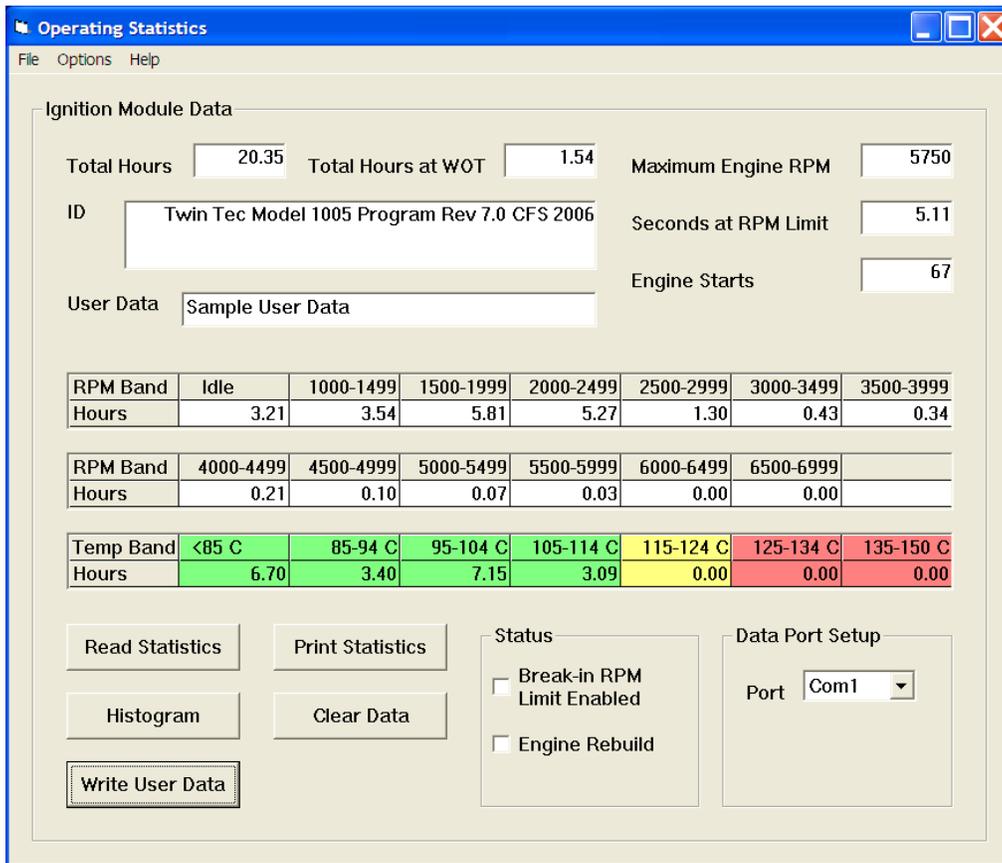
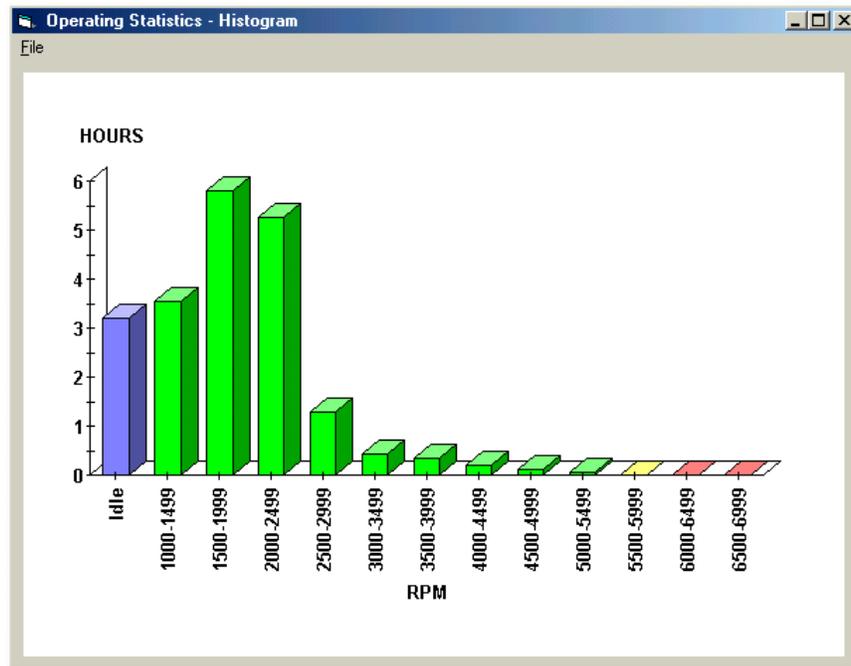


Figure 2 - Operating Statistics Histogram Chart



TROUBLESHOOTING FLOWCHART

communication problems are user error or PC compatibility issues.

Follow the troubleshooting flowchart shown below. Experience has shown that most

Troubleshooting Flowchart

