### Logiciel tuneboy



This is a list of every tune we currently have for the Aprilia's using the Sagem ECU.

Tune Number	Base Tune	Description
790412	790412	RST Futura, 2001 Mapping.
180901	180901	RST Futura, 2002 Mapping.
120401	120401	RST Futura, 2003 Mapping.
790329	790329	Caponord Tune build date(29 Mar 2001)
921123	921123	Caponord Tune build date(22 Nov 2001)
020108	020108	Caponord Tune build date(08 Jan 2002)
050115	050115	Caponord Tune build date(15 Jan 2003)
050428	050428	Caponord Tune build date(28 Apr 2003)

### Virtual Dash

The TuneBoy program has four screens, the first screen provides a virtual dash, this displays data such as RPM, throttle position, engine temp, air pressure and build related info like the VIN, build date, last serviced date and the base tune loaded in the ECU.



#### Sensor Data

The second screen on the TuneBoy program is the *sensor data* screen, this screen shows all the current sensor info from the ECU, this includes injector pulse time, ignition timing temp sensor values as well as sensor voltage readings. This screen can be very helpful in tracking down a sensor or ignition coil that is starting to fail.



#### **Error Codes**

The error codes screen will list any errors that the ECU has detected, these are shown with the problem code *Pnnnn* and a line of text explaining what caused the error.

Current running info at the time of the first error is displayed in the freeze frame data at the bottom of the screen.

∬ TuneBoy ¥2.3
File Tools
Virtual Dash Sensor Data Error Codes Test Modes
P0351 IGNITION COIL 1 MALFUNCTION P1351 IGNITION COIL 1 OPEN CIRCUIT/SHORT CIRCUIT TO GROUND P0353 IGNITION COIL 3 MALFUNCTION P1353 IGNITION COIL 3 OPEN CIRCUIT/SHORT CIRCUIT TO GROUND P0352 IGNITION COIL 2 MALFUNCTION P1352 IGNITION COIL 2 OPEN CIRCUIT/SHORT CIRCUIT TO GROUND P0505 Idle Control System Malfunction
Clear all errors Freeze Frame data from error P0351   RPM 1163 Throttle Position 11.372549 MIL ON   Refresh Calculated Load 96 Manifold Pressure 748 Ignition Advance 12   Engine Temp 30 Bike Speed Air Temp 31

#### **Test Modes**

The last screen is the *Test Modes* screen, this screen allows you to start the system tests in the ECU, for example the thermo fan test will run the thermo fan for a number of seconds allowing

you to check that the fan does not have a fault, other tests include the idle stepper motor, purge valve, rev counter and the fuel pump.

۶	₽ TuneBoy ¥2.3				
File	Tools				
	Virtual Dash	Sensor Data	Error Codes	Test Modes	
		This test will cause the m	ev counter to read either 3750 RPM	4 or 7500 RPM	
	Test Tacho		depending on the ECU type, If it does not then it may need to be calibrated		
	Test Cooling Fan	This test will run the coo	This test will run the cooling fan for about 15 seconds.		
Test Fuel Pump		This test will prime the fu to 15 seconds.	This test will prime the fuel pump, Listen for the pump priming, This should last for 10 to 15 seconds.		
	Idle Stepper Motor Test	t Clicking as it moves.	This will run the idle stepper motor through all positions, Listen for the stepper motor clicking as it moves.		
	Purge valve test	This will release the purg	e valve on the carbon canister (Ca	lifornian models only)	
Successfully unlocked					

The TuneBoy consists of a cable to connect your laptop or PC to your bike's ECU and suite of software packages to provide a vast array of functionality.

## **TuneBoy Cable**

The TuneBoy Cable connects to your laptop's or PC's 9pin serial port, approximately 1m long and has a connector specific to the make of your bike. Mulitple connectors are available if you own more than one make of bike. USB connectivity is also supported using a <u>KeySpan USA-19QW unit</u> converter which is available to buy here.

# **TuneBoy Diagnostics**

TuneBoy Diagnostics provides all the key diagnostics required to analyse faults caused by or logged by the ECU. The key features are:

- Virtual dashboard realtime representation of the dashboard
- Sensor Data realtime sensor readings
- Error Codes access to the error codes stored in the ECU
- Test Modes key tests for the ECU to perform

# **TuneBoy Tune Editor**

TuneBoy Tune Editor is a powerful tool, enabling you to change nearly all aspects of your bike's ECU mapping. This enables you to overcome many of the shortcomings in the standard manufacturer mappings, which are predominantly due to noise and emission regulations. The key features are:

- Fuel Map ability to change the amount of fuel injected
- Ignition Map ability to change the ignition curve
- Air/Fuel Ratio ability to change the target AFR ratios
- 3D Graphing ability to graph maps for visual analysis

### **System Requirements**

## **Minimum Requirements**

- Microsoft Windows 2000/XP
- Pentium Processor or equivalent
- 32MB of RAM
- CD-ROM drive
- 50MB of disk space
- USB Port

### Comparison

**Tuning Method** 

Tuning Type

### 

### Re-engineers ECU output Hardware

Retunes ECU directly Software

neBoy





Return to Features



<sup>1</sup> Depending on licenses purchased <sup>2</sup> Emulates PCIII to use PCIII Tuning Link

### **Fitment**



Model	Year		
ETV 1000 Caponord	2002 onwards	Buy Now	<u>Tunes</u>
RST 1000 Futura	2003 onwards	Buy Now	<u>Tunes</u>
SXV/RXV	2006 onwards	Buy Now	<u>Tunes</u>



Model	Year		
Tornado Tre 900	2003 onwards	Buy Now	<u>Tunes</u>
TRIUMPH			
Model	Year		
Daytona 675	2006 onwards	Buy Now	<u>Tunes</u>
Daytona 955i	1999 - 2001	Buy Now	<u>Tunes</u>
Daytona 955i NS/CE	2002 onwards	Buy Now	<u>Tunes</u>
Daytona T595	1997 - 1998	Buy Now	<u>Tunes</u>
Rocket III	2005 onwards	Buy Now	<u>Tunes</u>
Speed Four	2002 onwards	Buy Now	<u>Tunes</u>
Speed Triple 1050	2005 onwards	Buy Now	<u>Tunes</u>
Speed Triple 955i	1999 - 2001	Buy Now	<u>Tunes</u>
Speed Triple 955i NS	2002 - 2004	Buy Now	<u>Tunes</u>
Speed Triple T509	1997 - 1998	Buy Now	<u>Tunes</u>
Sprint RS	1999 onwards	Buy Now	<u>Tunes</u>
Sprint ST	1999 - 2004	Buy Now	<u>Tunes</u>
Tiger 885i	1999 - 2000	Buy Now	<u>Tunes</u>
Tiger 955i	2001 onwards	Buy Now	<u>Tunes</u>
ГТ600	2000 - 2002	Buy Now	<u>Tunes</u>

### **Downloads**

The TuneBoy application suite includes all the tools you need to use the TuneBoy kits.

For detailed feature lists, please click here.

# **Downloading and Installing**

To download the TuneBoy application suite, click the <u>Download</u> <u>Now</u> link. When prompted, click **Open**.

File Do	wnload 🛛 🔀
?	Some files can harm your computer. If the file information below looks suspicious, or you do not fully trust the source, do not open or save this file.
(	Would you like to open the file or save it to your computer? Open Save Cancel More info Wavays ask before opening this type of file

Download			
Filename:	TuneBoy.msi		
Version:	3.1		
Published:	10/09/2006		
Download Size: 4.75MB			
Download Now			
USB Drivers			
Available Tunes			
BaudTest Utility			

Once downloaded, click unzip to extract setup files to C:\TuneBoy Setup.



Using Windows Explorer, locate C:\TuneBoy Setup and double click setup.exe.

## **Release History**

- v2.3.4 3D graphing for tables
- v2.3 PowerCommander emulation
- v2.2 Ability to backup ECU
- v2.1 Additional tuning tables added
- v2.0 Ability to download tune changes
  - Ability to import PCIII maps

### v1.0 - Initial release providing diagnostics

Features	DynoJet PCIII	TuneBoy tune editor
Modify fuel map via fuel trim table	Y	Y
Modify ignition map	Ν	Y
Change rev limit	Ν	Y
Change thermo fan settings	Ν	Y
Modify air fuel targets used in ECU	Ν	Y
Change idle speed	Ν	Y
Change warm up fuel for cold starting	Ν	Y
Diagnose faults	Ν	Y
Run ECU test procedures	Ν	Y
Modify fuel mapping using DynoJet tuning link	Y	Y
Change when the ECU uses O2 sensor for closed loop mode	Ν	Y
Data logger	Ν	Y
Flaws	DynoJet PCIII	TuneBoy tune editor
Adds another point of failure in the system	Y	Ν
Causes closed loop mode to function incorrectly ( <u>*Note1</u> )	Y	Ν
Causes fueling problems at high altitude	Y	Ν

One of the main advantages of the TuneEdit program is that you are changing what the ECU is trying to do, the PCIII on the other hand is trying to change things after the ECU has done its calculations. This can cause problems (See below)

A key feature of the TuneEdit program is the ability to change the air/fuel targets in the ECU, many of the standard Triumph maps have areas where the ECU is intentionally making the fueling lean to help pass ride by noise tests. By simply changing the target air fuel ratio you can remove flat spots in the power curve without needing to put the bike on a dyno.

The ECU also uses these air fuel targets to control when the ECU runs in closed loop mode (Closed loop means adjusting fuel values based on feedback from the O2 sensor in the exhaust). If the air fuel target is 14.5/1 then the ECU will run in closed loop mode.

### Note 1:

If you try and adjust the map (with a PCIII) in an area where the ECU runs in closed loop, the ECU will trim the map based on the feedback from the O2 sensor, this will in effect remove any adjustments that you have made with the PCIII. Not only that but it may cause other parts of the map to run lean because of the amount of trim it has had to apply to remove the PCIII trims. As you can imagine this is not a good situation.

On the other hand with TuneEdit you change an area from 14.5/1 to 13.5/1 by simply changing the target value, changing this value from 14.5/1 will stop the ECU from using closed loop mode in that area.

Check the <u>Makes and Models supported</u> to see if your bike is supported and to download the latest tunes.

335 euros le 03/01/2007 ou 225£