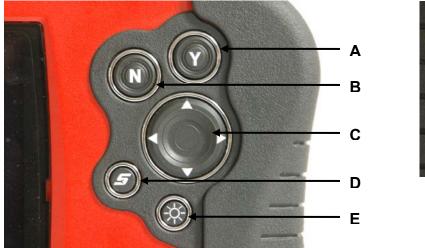
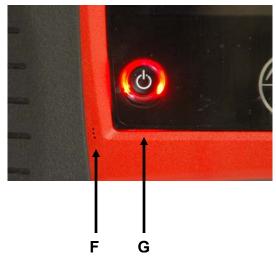
# LET'S EXPLORE

# THE FRONT





### A – Y Control Button

The Y control button will allow you to select highlighted items.

### **B** – N Control Button

The **N** control button is primarily an exit or a back button and can also perform other functions depending upon the screen.

### C – Thumb Pad

The **Thumb Pad** simulates movement and allows you to navigate the cursor in all four directions on the monitor. Use the left, right, up and down arrows on the **Thumb Pad** to highlight the monitor menus, buttons or icons.

### **D** – Programmable S Button

The **S Button** utility is used to program the Vantage Pro to perform one of the following functions;

- Freeze/Run
- Print Page
- Save Bitmap

Refer to page 31 for further information.

### E – Brightness / Contrast

Turns display monitor ON and OFF.

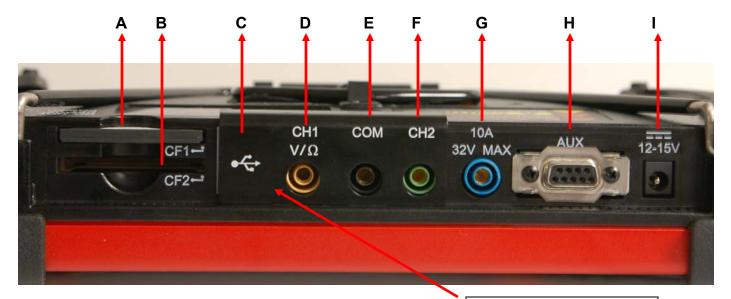
### F – Continuity Beeper

### **G** – Power Button

The **Power** button on the front of the unit powers the Vantage Pro unit off or puts it in Standby mode.

Red glowing light around the power button indicates the Vantage Pro is in Standby Mode. Press any button for immediate usage.

# THE TOP



**A** – Compact Flash Slot 1 (CF1) Contains All Operating Software (Do Not Remove) Slide Cover to reveal USB Ports

**B** – Compact Flash Slot 2 (CF2)

Slot for compact flash "Smart Media" card. The SmartMedia card may also be used as a hard drive as well as storage for captured snap shots.

C – USB Ports

Plug-N-Play USB Connector for Printer (PCL 3 & Higher), Keyboard, and/or Mouse.

**D** – Channel 1 (Yellow)\* Analog Scope Channel

**E** – Common Ground (Black) Common ground for all connectors

**F** – Channel 2 (Green)\* Analog Scope Channel

G – Shunt Amps Channel

Slide Cover to reveal USB Ports

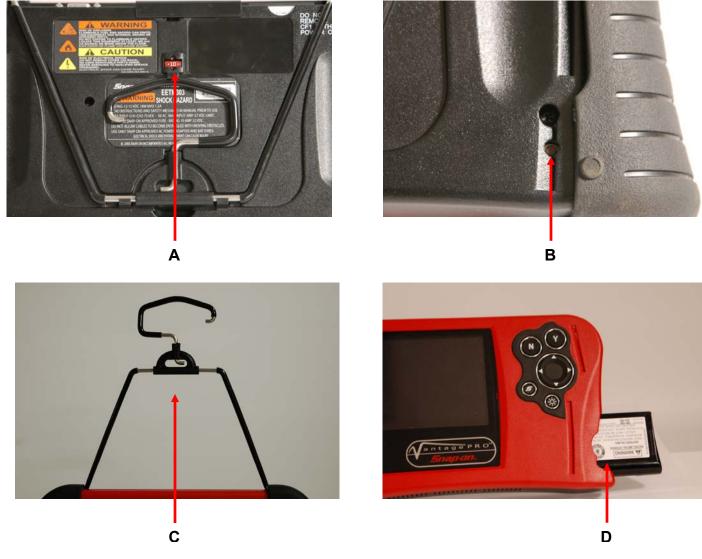
H – Aux Port (DB9 PIN Female Connector)

The Aux Port serves as a connector for an inductive RPM pickup or pressure/vacuum probe (optional split lead adapter is required).

I – DC Power Adapter Input

# When channels 1 or 2 are selected, the background screen and signal will change colors to mirror the corresponding channel

# THE BACK



### $\mathbf{A}-\text{Fuse}$ (10 Amp)

The Vantage Pro unit uses one 10-amp mini fuse to protect the amp circuit.

### **B** – Emergency Restart

If your Vantage PRO<sup>™</sup> unit freezes or will not power off, you can perform an emergency restart.

### **C** – Vantage Pro Stand

The Vantage Pro Stand allows 45 degree viewing. The stand is located on the back side of the unit. The stand can also be extended to a hanging position by pressing the left side towards the right and rotating forward.

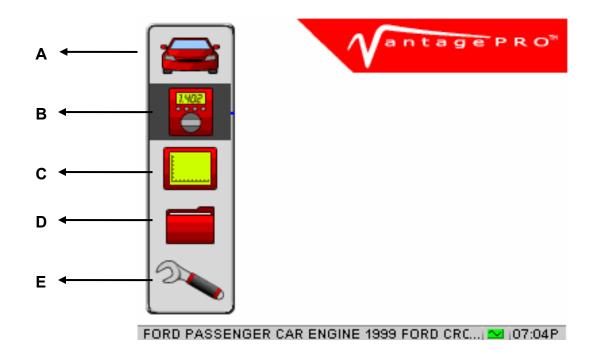
### **D** – Battery Pack

Powers up the display device. Located at the bottom of the unit behind the right handgrip.

The battery pack is recharged by an external battery charger.



# MAIN MENU



A – The **INFO** icon provides access to the following;

Component Testing, of which consist of;

- Fast-Track® Component Test module that consists of the New Vehicle ID, Previous Vehicles, and Component Test menu.
- Power User Test with or without help
- Features and Benefits of the Vantage Pro
- How To... Built in on-screen Automotive Training Courses
- A-Z Index The **A-Z Index** option provides a list of over 100 meter capabilities and automotive electronic terms and images.

 $\mathbf{B}$  – The MULTIMETER icon provides access to the Graphing and Digital Meter menus.

C – **The SCOPE** icon allows you to operate the Vantage Pro unit as a 2-channel lab scope or a two-channel ignition scope and scope Presets.

**D** – The **SAVED DATA** icon allows you to load, edit, delete, copy and move files that are stored in memory. This function also allows you to manage the saved files on your system utilizing internal storage memory and an external CompactFlash® storage card.

E – The **UTILITIES** icon provides access to system information and various tool adjustment controls that affects overall functionality of the Vantage Pro unit.

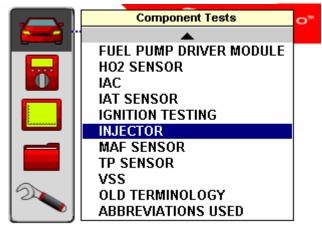
### Summary of Diagnosis Using The Vantage Pro (cont.)

Let's take Advantage of the Vantage Pro

### Configure the Vantage Pro to diagnose a 2001 Ford Mustang 4.6 Liter

### Suspect Component....Injector

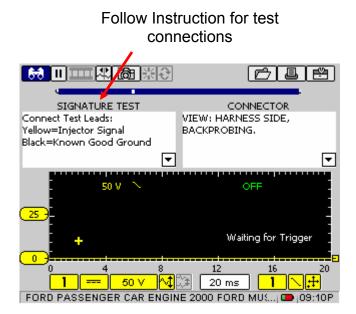
### Component Tests.....Injector



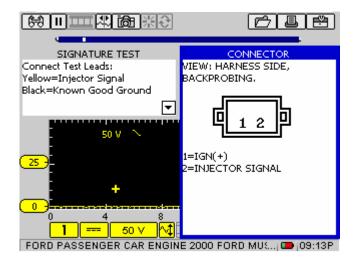
FORD PASSENGER CAR ENGINE 2001 FORD MUS... M 10:00P

# TESTS P R O\* PULSE WIDTH TEST PULSE WIDTH TEST RESISTANCE TEST SIGNATURE TEST CURRENT RAMP TEST CURRENT RAMP TEST

FORD PASSENGER CAR ENGINE 2001 FORD MUS... | 🔤 | 10:01P



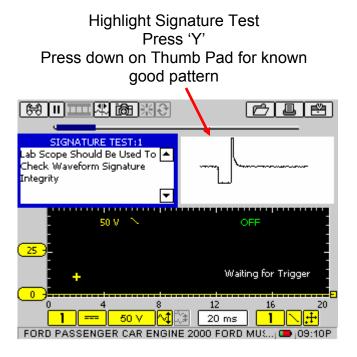
### Down and right on Thumb Pad to highlight connector Press 'Y'



Tests.....Signature Test

### Summary of Diagnosis Using The Vantage Pro (cont.)

Taking Advantage of the Vantage Pro (cont.)



Ok let's diagnose this Injector!

Highlight the Freeze/Run Icon

Press 'Y'

┍┓

**^‡**₿€

FORD PASSENGER CAR ENGINE 2000 FORD MUS... | D 09:18P

OFF

16

1

12

20 ms

SIGNATURE TEST:1

Lab Scope Should Be Used To 🔺

\_\_\_\_

50 V

50 V

Check Waveform Signature

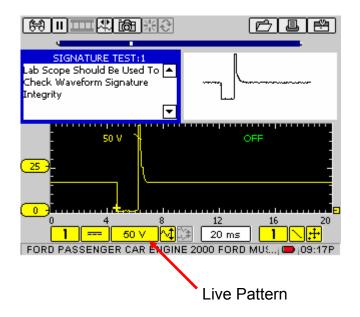
Integrity

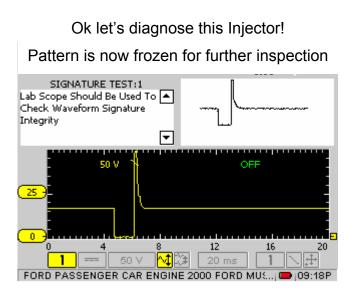
25

0

Ok let's diagnose this Injector!

The Injector pattern is looking good as compared to know good pattern.



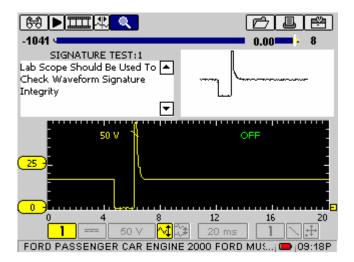


### Summary of Diagnosis Using The Vantage Pro (cont.)

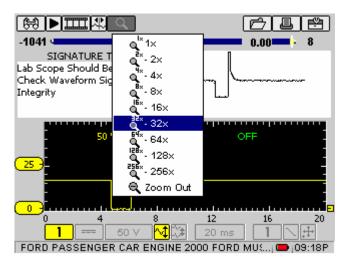
Taking Advantage of the Vantage Pro (cont.)

Ok let's diagnose this Injector!

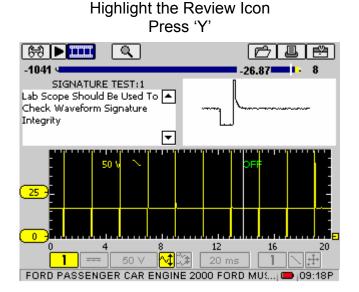
Highlight Zoom Press 'Y'



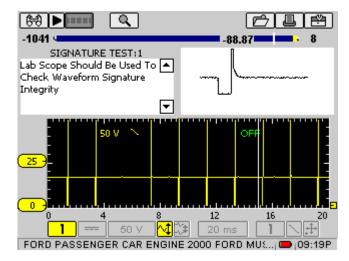
Zoom out 32x Zooming out allows you to see more and inspect every frame of data.



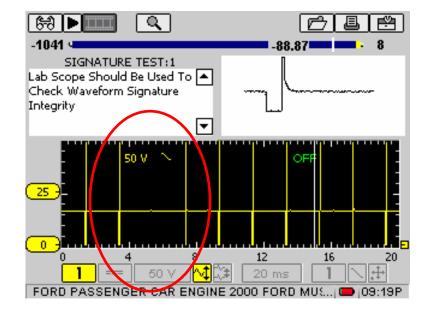
The Vantage Pro has the ability to record up 57 hrs of data automatically Let's take advantage of that feature



Using the Thumb Pad Scroll to the left to review what was recorded



Summary of Diagnosis Using The Vantage Pro (cont.)



### **Confirmation!**

### Congratulations you just confirmed what was causing fault P0204 and P0304

The Injector Driver within the Powertrain Control Module (PCM)

### SUMMARY

Your Vantage Pro has over 45.000 pre-programmed vehicle configurations, with over 2+million individual component test.

The days of testing with a known good part are in the past; with the Vantage Pro you have the ability to test that suspect component with a choice of confirmation tests including connector pin-outs and specifications.

The art of diagnosing includes; using the Scan Tool to direct you to the failed system and/or component, using Component Description to educate you on how that component functions within that system and a selection of tests to evaluate that component prior to ordering a replacement.

### **Confirm Before You Condemn**