



Electronic  
Specialties,  
Incorporated

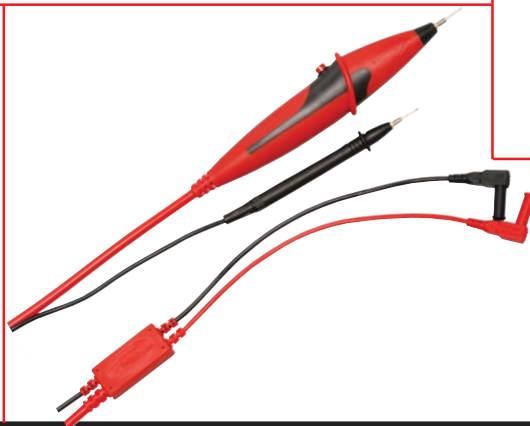
For Automotive, Marine, Small Engine,  
HVAC & Industrial Technicians

- Since 1967 -

**55+ years in business!!!**



19 NEW  
PRODUCTS  
INSIDE!!!



**PROFESSIONAL HAND HELD  
TEST EQUIPMENT**



**Electronic Specialties,  
Incorporated**

- Since 1967 -

**NEW  
Products!!!**

## #194 SUPER RELAY BUDDY®



**Super Relay Buddy** is the next generation tester for 12 volt automotive relays. It applies a 7 amp load to the relay and looks for excessive voltage drop. Test results are displayed by the green, red or yellow LED. Super Relay Buddy #194 can test 6 different types of relays, while The Pro Kit #195 can test 10 different relays. Super Relay Buddy's most significant feature is the 7amp load during the test. This function will help find many relays which only fail under a significant load, ensuring a higher diagnostic success rate.

**PATENTED**

### FEATURES:

- Improved test finds bad relays effectively
- Full 7+ amp load flags intermittently failing relays
- Automatic 10 cycle test of the relay
- Checks 7 different 12 volt relays (#194)
- PRO KIT Checks 10 different 12 volt relays (#195)
- Easiest & fastest way to check relays
- Adapters expand test coverage (#195)

## #195 SUPER RELAY BUDDY® PRO KIT



**FULL DETAILS AND DEMO VIDEO AT [www.esitest.com](http://www.esitest.com)**

## #683 HIGH ACCURACY LOW CURRENT CLAMP METER

- Highly accurate and precise measurements
- Superior zeroing circuit, very low drift or bounce
- Large clamp size for ground cables
- 1 milliamp (0.001A) to 60 A test range
- Great for parasitic drains - Backlit LCD display
- Auto Power-Off after 15 minutes of non-use

### Specifications:

- Test Range: 0-600mA, 6.00A, 60.0A AC/DC - Sample rate: 2 times per second  
- Resolution: 1mA AC/DC - Accuracy - ±2% of reading -Power: 9V battery



**FULL DETAILS AND DEMO VIDEO AT [www.esitest.com](http://www.esitest.com)**

## #425 DIGITAL BATTERY & ELECTRICAL SYSTEMS TESTER



### FEATURES:

- Tests a wide range of 12 Volt batteries, quickly and accurately...AGM included.
- Results display **actual CCA capacity of the tested battery.**
- **Also tests the starting/charging system for low cranking voltage and faulty charging voltages.**

### SPECIFICATIONS:

- CCA Test Range: 200 to 1200 CCA
- State of Health: Actual Battery CCA displayed
- Rating systems: SAE, DIN, IEC, EN and CA
- Tests discharged: Down to 7 volts
- Batteries tested: Lead Acid, AGM spiral, AGM flat, Gel

LED's indicate the following:

1. OK
2. OK & Recharge
3. Recharge & Retest
4. Bad Fail
5. Bad Cell

**WWW.ESITEST.COM**



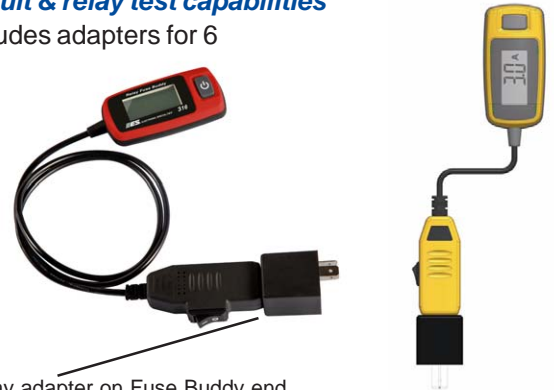
# Electronic Specialties, Incorporated

- Since 1967 -

**NEW  
Products!!!**

## #316 RELAY FUSE BUDDY®

- Is it a circuit problem or a relay problem?  
Relay Fuse Buddy can help diagnose the case
- **In-circuit bypass switch controls power downstream of relay**
- Displays live circuit current - 20 amps continuous - 30A momentary
- Turn on/off DC motors, fuel injectors, fuel pumps & see the amp draw
- **Enhances your circuit & relay test capabilities**
- Wide coverage - includes adapters for 6 different relays



### **SPECIFICATIONS:**

- Operating range: 20 Amps continuous - 30 Amps momentary
- For 12 and 24 volt applications
- Resolution: 0.1 Amps

Plug relay adapter on Fuse Buddy end.  
Six adapters included in the kit.

## #187 LOADpro® & Back Probe Kit

LOADpro® helps diagnose electrical problems. This popular tool is now available with 4mm tip adapters (NEW) and an assortment of back probes and clips. This new kit includes the following:

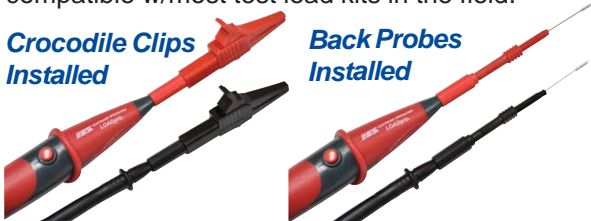
- LOADpro® Test Leads
- LOADpro® Tip Adapters
- Flexible Silicon Back Probes
- Spoon Probe Curved Back Probes
- Large Crocodile Clips
- Push-on Alligator Clips



The new LOADpro® adapter tips are equipped with standard 4mm banana plugs and are compatible w/most test lead kits in the field.

**Crocodile Clips Installed**

**Back Probes Installed**



**LOADpro® Finds these problems FAST!**

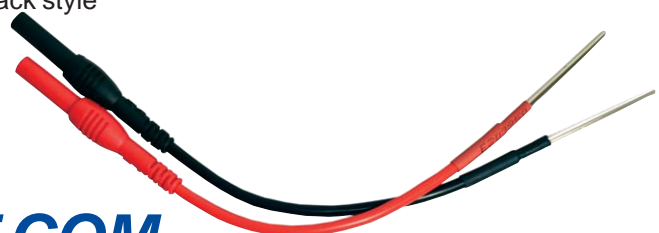
- High Corrosive Resistance
- Shorts to ground
- Open Circuits

## #616 Spoon Probe Backprobers

- Curved probes for back probing electrical connectors, like weather pack style
- Max test current 10A
- Great option for non-intrusive testing.
- **Tap readings and scop signals without damaging electrical connectors and harnesses**

Connects to standard 4mm size banana plug test leads,

such as ES part #142-1



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- Since 1967 -

**NEW  
Products!!!**

## #149 UNIVERSAL TEST CONNECTOR KIT - 54 Piece

This comprehensive test kit features a variety of terminal adapter sets. 149 enables connection to almost every automotive and vehicle connector, both foreign and domestic. Terminal adapters connect via the included 48 inch stacking banana plug test leads.

**Flat spade type male/female - several sizes**

**Round terminals male/female**

**Micro 64 terminals - square male/female**

**Micro 64 terminals - round male/female**

**Deutsch terminals - size 14 male/female**

**Deutsch terminals - size 16 male/female**

**Deutsch terminals - size 20 male/female**

**New Micro 50 terminals - male/female**

**OUR MOST COMPREHENSIVE KIT - 26 DIFFERENT CONNECTORS!**

**Includes 2x of each connector**



## #1351 16 Pc. Spade Terminal Test Lead Set

### **FEATURES:**

- 7 different sizes of flat/spade type connector terminals
- Tests circuits via fuse panels, distribution box, harness connections & more
- **Works with Multimeters and digital oscilloscopes**
- Includes 48" stacking banana plug test leads
- Male spade sizes (2 ea.): 1.0MM, 2.2MM, 2.8MM 4.8MM
- Female spade sizes (2 ea.): 2.2MM, 3.0MM, 7.7mm
- Storage case included



## #904 Code Buddy PRO+

### **Features:**

- **OBDII CODE SCANNER**- all protocols including CAN
- Displays trouble codes and definitions
- Reads **LIVE DATA STREAM**
- Retrieves vehicle information (VIN, CIN & CVN)
- Clears codes, turns off **MIL** and resets monitors
- Displays **I/M readiness**
- Reads **Hard, Pending & Historic codes** and definitions
- Works on 1996 & later OBDII compliant US, EU & Asian vehicles
- Easily determines the cause of the "Check Engine Light (MIL)"
- Small in size and conveniently fits in hand



## #619 Wire Piercing Clips



- Tap voltage readings on insulated wires
- Pierces wire insulation from 22 to 14 awg
- Contact needle screwed in/out from bottom

## #629-10 Ten Foot Test Leads w/Screw Off Alligator Clips

- Extended length - 10 feet long
- Alligator clips screws on/off
- 1000 Volts max - CATIII



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Products!!!**

## #185 48V LOADpro<sup>®</sup> Dynamic Test Leads

**NEW 48 VOLT VERSION! Use on 12V to 48V circuits!**

LOADpro<sup>®</sup> Finds these problems FAST!

- High Corrosive Resistance
- Shorts to ground
- Open Circuits

LOADpro<sup>®</sup> performs voltage drop test with the push of a button. On a 48V system, it applies a 1 Amp load on the circuit. This simple test finds problems in corroded wires/connections and shorts to ground. Watch our video and you'll spend less time diagnosing wiring problems. Start doing voltage drops now! Diagnose faster and earn more \$\$\$\$. Works with your existing DMM.



## #684 400 Amp AUTO-RANGING CLAMP METER

### FEATURES:

- Clamp on current measurements up to 400 Amps
- Auto-ranging digital multimeter built-in
- CATIII 600V safety rating, 4000 count LCD
- Backlit LCD display - Includes zippered storage case

### 10 TEST FUNCTIONS:

- DC Amps
- DC Volts
- Ohms
- Frequency
- Capacitance
- AC Amps
- AC Volts
- Continuity
- Duty Cycle
- Diode Test



## #804 EZ Test<sup>®</sup> 10 pc. Back Probe Kit

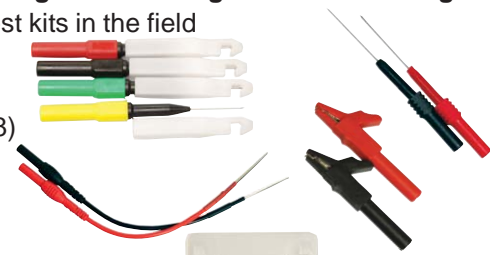
- 10 piece kit designed for backprobing, diagnostic testing & troubleshooting
- Standard 4mm banana plug, works with test kits in the field

### INCLUDES:

- 2 pcs Spoon Probes (#616)
- 4 pcs Mini Back Probes/Wire Piercers (#618)
- 2 pcs Flexible Silicon Back Probes (#142-5)
- 2 pcs Shielded Alligator Clips (#143-1)

Storage case included for safe keeping

Applications: Automotive - Heavy Duty - RV Equipment - Agriculture - Off Road - Motorcycle



## #805 EZ Test<sup>®</sup> Automotive Test Probe Kit

- 6 piece Test Probe Kit good for automotive, heavy-duty, marine, equipment, small engine, etc.
- Quality probes will provide trustworthy readings
- Great starter kit, connects to DMM's, digital scopes and other test equipment
- Includes standard 4mm banana plug test leads (#142-1), which connect with most test adapters - all brands

Includes #142-1, #142-4, #142-6 and Storage Case for safe keeping



[WWW.ESITEST.COM](http://WWW.ESITEST.COM)



ELECTRONIC SPECIALTIES, INC.

**NEW  
Product!!!**

## #550 EV Insulation Tester

550 checks high voltage circuits on EV's and Hybrids for leaks to ground. It can supply 250V, 500V and 1000V test voltages for doing complete insulation testing. You can not easily test for high volt leakage without a high volt test source. 550 is auto-ranging and can measure up to 2000 MegaOhm with resolution of 1 K Ohm.

### Features:

- Meets IEC10101, CATIII 1000V
- Large dual display LED backlighting
- Test Hold function for easy operation
- Over Range indication
- Low battery indication
- Includes (6) AA batteries, test leads & case

### Specifications:

	Range	Resolution
Voltage AC:	0-750V	1V
Voltage DC:	0-1000V	1V
Resistance:	0-200, 2000	.1 Ohm
Insulation Resistance:	200M, 2000M	100k
Test Voltage:	250V-200MegOhm 500V-200MegOhm 1000V-2000MegOhm	
Continuity Test:	Audible Beep ≤40 Ohm	
	Test Current ≤200mA	

### THE FOLLOWING PARTS CAN LEAK HIGH VOLTAGE TO GROUND:

- Battery pack
- Power inverter
- DC-DC converter
- High voltage AC compressor
- Power steering pump
- Electric Motor
- High voltage cables & connectors



## MODEL #180 LOADpro® Dynamic Test Leads

### LOADpro® Finds these problems FAST!

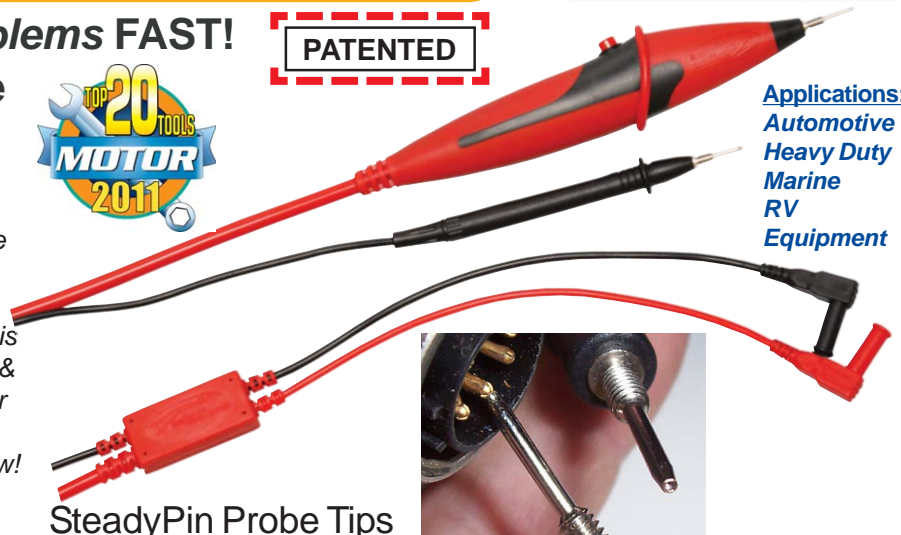
- High Corrosive Resistance
- Shorts to ground
- Open Circuits

LOADpro® performs voltage drop test with the push of a button. On a 12 Volt system, pressing the switch applies a load of approximately .5 Amps across the circuit. This simple test finds problems in corroded wires & connections and shorts to ground. Watch our video and you'll spend less time diagnosing wiring problems. Start doing voltage drops now! Diagnose faster and earn more \$\$\$.

Works with your existing DMM.



PATENTED



Applications:  
Automotive  
Heavy Duty  
Marine  
RV  
Equipment

### SteadyPin Probe Tips

LOADpro® features SteadyPin probe tips. Instead of a pointed probe, SteadyPin tips have a small recess at the tip that allows the probe to sit firmly on a male ECM or connector pin. Traditional pointed probes fail to give an effective connection and creates difficulties in completing manufacturer specific voltmeter tests.



### BONUS KIT!

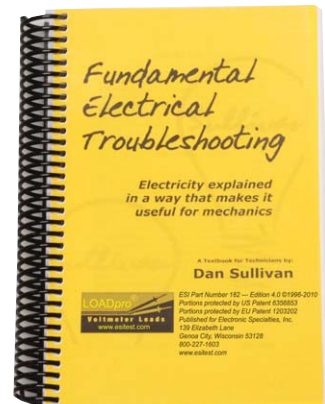
- #181 LOADpro Bundle
- includes #180 & #182

## #182 Fundamental Electrical Troubleshooting

## #184 Fundamental Electrical Troubleshooting - Spanish

200 pg. guide to every aspect of electrical troubleshooting...written by a mechanic, easy to read.

- Batteries/Testing explained
- Relays, potentiometers, resistors, solenoids
- Voltmeters explained
- Finding shorts to ground
- Corrosion causes
- Voltage drop explained
- Battery draws explained
- How-to-read schematics



**GO WITH ES FOR QUALITY TEST INSTRUMENTS**

**Diagnostic Relay Buddy® - 12/24V Relay Tester**

**PATENTED**

**#192 Diagnostic Relay Buddy 12/24**



- Tests both 12V and 24V Relays!
- 3 Diagnostic Trouble Codes help define the cause of the bad relay!
- Quick off-the-car relay tester.
- Checks relay coil & switch contacts - Fails bad relays!
- Automatic test with Good/Bad indication
- Available as stand alone #192 and in kit form #193 with 5 adapters for expanded testing.

**Specifications:**

- Tests 12V & 24V relays - Settable to 4 and 5 pin relay
- 3 Diagnostic Trouble Codes - Uses vehicle 12V battery for power
- Switch contact are loaded to detect excessive resistance
- Green Light if relay is good - Red Light if relay is bad + one of 3 possible trouble codes

**#193 Diagnostic Relay Buddy 12/24**

**PRO TEST KIT** (includes 190-4 & 190-5)



**#190 Relay Buddy®**

- Original Relay Buddy, tests 12V relays
- Green Light -relay is good
- Red Light - relay is bad



**#190-4 Shielded Relay Adapters**

- Three pack of adapters allows testing of shielded relays....same 3 relays tested by Relay Buddy.

**#190-5 New Relay Adapters**

- Two pack of adapters allows testing of two new relay types - commonly used for fuel pumps and other powered devices.

**#190-8 MAXI Relay Adapter**

- Adapter allows testing of heavy duty 4-pin MAXI relays -used on branch power circuits and cooling fans.

Relay Buddy operates the relay several times during each test session as it watches for consistency in every cycle. **Relay Buddy will fail the relay and light the RED LED** if any of the cycles proves unsuccessful during the test session.

**#191 Relay Buddy® PRO Test Kit**



- Pro Test Kit includes Relay Buddy tester and 5 test adapters (190-4 & 190-5) for expanded coverage

**#230 Short Buddy® - Audible Trouble Shooter**

**Blowing Fuses??** Short Buddy helps find the short! This unique tool **connects at the fuse panel** and becomes in series with the test circuit. **A system of audible beeps** helps you find the problem and permit hands free troubleshooting. **Have a dead short?** Short Buddy gives you continuous re-set/re-power capability. While you wiggle, pull, and grab wires, if your tug causes the dead short again, Short Buddy opens the circuit for 10 seconds, **then re-applies power to the circuit.** Great tool for shorts, intermittent drop outs and flaky grounds & connections. A real time saver.



**PATENTED**

**Specifications:**

- Settable Amp Levels of 10, 15, 20, 25 and 30 Amps
- Automatically opens the circuit in the event of overload
- In Auto mode, circuit gets re-powered in 10 seconds
- In Manual mode, user re-sets power to circuit





# #688 PREMIUM TRUE RMS CLAMP METER



We've greatly improved the zero drift on the low DC amps function along with **enlarging the clamp size** to accommodate **larger ground cables**. The significant amount of feedback from our end user customers has contributed greatly in building this premium low current clamp meter. Great tool for **parasitic drain testing** - **accurate down to 1 mA**. These features will be unmatched, absolute top quality instrument!

### TEST RANGES:

- DC Amps: 0-5000mA, 80A
- AC Amps: 0-5000mA, 80A
- DC Volts: 0-500mV, 5V, 50V, 500V, 600V
- AC Volts: 0-500mV, 5V, 50V, 500V, 600V
- Ohms: 0-500, 5K, 50K, 500K, 5M, 50M
- Capacitance: 0-50nF, 500nF, 5uF, 50uF, 500uF, 5mF
- Frequency: 10-100kHz AC
- Temperature: -4F to 1400F, -20C to 760C
- Continuity: Audible Beep
- Diode Test: Diode Test

### Features:

- .75 inch (19mm) clamp size
- Continuity Beep
- Analog Bargraph
- Built-in Temperature F/C
- Peak Min/Max
- Backlit 5000 count LCD
- Min/Max
- True RMS accuracy
- CATIII 600 Volts
- Carrying Case included

# MODEL #585K DELUXE AUTOMOTIVE METER

#585K is a professional grade DMM used for **diagnosing electrical, computer and engine problems** on any vehicle. Our **best selling** meter, #585K is **auto-ranging on DC Volts, AC Volts and Ohms**. The kit includes two sets of test leads, RPM pick-up, **temperature probe**, protective holster, 9 volt battery, instructions manual and carrying case. **Inductive RPM pick-up** features a five position, adjustable sensitivity switch.



**MODEL #585K INCLUDES CARRYING CASE**

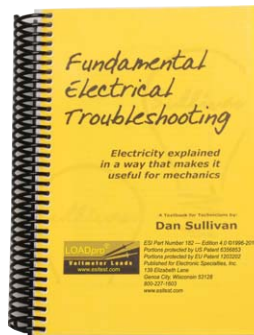
### TEST RANGES:

- |           |                                   |            |  |
|-----------|-----------------------------------|------------|--|
| DC Volts  | 0-320mV, 3.2V, 32V, 320V, 1000V   | Dwell      | 2 cyl, 3 cyl, 4 cyl, 5 cyl, 6 cyl, 8 cyl |
| AC Volts  | 0-3.2V, 32V, 320V, 1000V          | Duty Cycle | 1.0%-90%                                 |
| DC Amps   | 0-320uA, 3.2mA, 32mA, 320mA, 10A  | Frequency  | 0-320Hz, 3200Hz, 32kHz                   |
| AC Amps   | 0-320uA, 3.2mA, 32mA, 320mA, 10A  | Temp       | -20C to 320C, -20C to 750C               |
| Ohms      | 0-320, 3.2K, 32K, 320K, 3.2M, 32M |            |  |
| RPM 4     | 0-3200 RPM, 12,000 RPM x 10       | Continuity | Audible Beep                             |
| RPM 2/DIS | 0-3200 RPM, 6,000 RPM x 10        | Diode      | Diode Test                               |

### Features:

- 45 Test Ranges, 14 Test Functions
- RPM for DIS & standard ignitions
- Dual display w/analog bargraph and digital readings
- Built-in temperature readings
- RPM pick-up & temperature probe included
- 10 Meg/Ohm Input Impedance
- Dual fuse protection
- Safety leads & jacks
- Built-in tilt stand
- 9V battery installed

# MODEL #TMX-589 TECH METER KIT



### TEST RANGES:

- |                     |  |
|---------------------|--|
| DC Volts:           | 0-400mV, 4V, 40V, 400V, 1000V              |
| AC Volts:           | 0-400mV, 4V, 40V, 400V, 1000V              |
| DC Amps:            | 0-400uA, 4000uA, 40mA, 400mA, 10A          |
| AC Amps:            | 0-400uA, 4000uA, 40mA, 400mA, 10A          |
| Ohms:               | 0-400, 4K, 40K, 400K, 4M, 40M              |
| Capacitance:        | 0-40nF, 400nF, 4uF, 40uF, 400uF, 4mF, 40mF |
| Frequency:          | 0-4Hz, 40Hz, 400Hz, 40kHz, 400kHz, 10MHz   |
| Type K Temp:        | -4F to 1400F, -20C to 760C                 |
| IR Temp:            | -22F to 1022F, -30C to 550C                |
| Continuity:         | Audible Beep                               |
| Diode Test:         | Diode Test                                 |
| Audible Continuity: | Beep                                       |
| Peak Min/Max:       | 1 mS (1000 samples per second)             |
| Min/Max:            | Min-Max @ normal sample rate (2 per sec)   |
| Auto Power Off:     | 30 minutes                                 |
| Shock/Drop Test:    | 6.5 Feet (2 meters)                        |



**TECH METER KIT** - Techs want more information! With TMX-589, you get it! One hour of video training that shows how to use and get the best results from your investment. You spoke, we listened!

**INCLUDES:** TMX-589 - True RMS Digital Multimeter - **CATIII 1000V** safety - **Waterproof/Dustproof to IP67 Standards**

**LOADpro** - Loads the circuit to find corrosion and resistance in the wiring - fast diagnosis - **OEM approved tool** - patented

**FET Book** - 200 pgs of Fundamental Electrical Troubleshooting tips and insight. A must have for any technician!

**Training Videos** - One hour of training at [www.esitest.com](http://www.esitest.com) on TMX-589 product page

- 10 separate videos by Dan Sullivan - leading trainer **Compass** - Used for Alternator and solenoid diagnostics

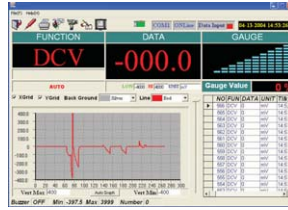
**Bryan Lewis** (2 time super tech champ) ~ "No matter what skill level you have, this kit will build your confidence and provide an easier way to diagnose electrical circuits without piercing wires"

## #595 PRO AUTOMOTIVE METER W/PC INTERFACE

#595 features a **huge LCD display w/bargraph** for easy viewing. It can be **interfaced to your PC or notebook** computer for data usage.

### Features:

- CAT III 1000 Volt rated - safe to use w/Hybrids
- 58 Test Ranges, 16 Test Functions
- Huge Backlit LCD display w/analog bargraph
- Ms Pulse Width for fuel injector on-time
- Max/Min better diagnostic capability
- 4 Step adjustable trigger levels
- USB PC Interface - cord included
- Desirable 20 Amp fused test range
- **Hard Storage Case for safe storage**



595 PC Interface test screen



**HYBRID SAFE!**

**Blow Mold Storage Case Included**

SEE WEB PAGE FOR FULL SPECIFICATIONS AND TEST RANGES!

## MODEL #597IR PREMIUM AUTOMOTIVE METER (#597 No IR Thermometer)

Our premium automotive DMM. Two models available - #597IR includes IR Thermometer and #597 is without IR thermometer. #597 is equipped for advanced automotive diagnostics. #597 is **CAT III 1000 Volt safety rated** & **waterproof to IP67 standards**. #597IR includes EST-100 IR Thermometer Adapter.

### Features:

- CAT III 1000 Volt rated - safe to use w/Hybrids
- Waterproof to IP67 standards
- 48 Test Ranges, 18 Test Functions
- EST-100 IR Thermometer w/8:1 distance ratio
- Backlit LCD display with analog bargraph
- 1 Ms Peak Min/Max function for glitch capture
- Ms Pulse Width for fuel injector on-time
- Desirable 20 Amp Fused Test Range
- Also measures temp via K-type probe

**Peak Min/Max function measures transient voltages as fast as 1 Millisecond.** #597 features a **desirable 20 Amp test range.**

**Blow Mold Storage Case Included**

SEE WEB PAGE FOR FULL SPECIFICATIONS AND TEST RANGES!

**HYBRID SAFE!**



## #590 PROFESSIONAL AUTOMOTIVE DMM

Another good choice for the professional automotive technician, #590 puts the right capabilities in your hands. For example, #590 tests the **on-time of fuel injectors using the Ms pulse width test function.** This DMM is completely **auto-ranging**, making it an easy and efficient tool to use.

**Zippered Storage Case Included**

SEE WEB PAGE FOR FULL SPECIFICATIONS AND TEST RANGES!

### Features:

- 48 Test Ranges, 15 Test Functions
- Auto-ranging
- Modern design, protective rubber boot and case are all one piece
- Huge 2 inch high LCD display with backlighting, easy to see digits!
- Ms Pulse Width for fuel injector on-time
- Desirable 20 Amp fused test range
- Auto Power-Off, saves batteries
- Relative change function, Data Hold
- Built-in Temperature readings
- Includes zippered storage case



## #582 DELUXE DMM WITH AMP SHUTTERS - new!

### Features:

- 33 Test Ranges, 11 Test Functions
- Huge 2 Inch LCD - great visibility
- Amp shutters prevent blown fuses
- Backlit display for use in dark areas
- Measures Temp in both F and C, temp probe included
- 10 Meg/Ohm Input Impedance
- Desirable 20 Amp test range
- Dual fuse protection
- Safety leads & jacks
- Built-in tilt stand, 9V battery installed

Professional grade DMM - manual ranging style. Features innovative amp shutters **which prevent mistaken operation**, ensuring safer useage and **less blown fuses**. A dangerous condition can exist if a DMM is left on Amps test function, then grabbed some time later and used to measure high voltage. The amp shutters on #582 prevent this from happening. All around great DMM with **desireable 20 Amp test range**. Kit includes zippered carrying case, test leads, **temp probe** instructions and 9 volt battery.

**Zippered Storage Case Included** SEE WEB PAGE FOR FULL SPECIFICATIONS AND TEST RANGES!



## #485 SELF CALIBRATING TRUE RMS DMM w/1 hour of training videos



### • Patented Self Calibration Function • Includes 1 Hour of Training by Dan Sullivan

This self-calibrating DMM leverages new technology via the use of high stability, low temperature coefficient resistors in the resistors network. With **self-calibration**, DMM accuracy can endure for longer periods of time. A self-calibration multimeter is an undoubtedly **more accurate, more reliable** measurement tool. Just press the button to CALIBRATE. Unit includes an hour of first class training By Dan Sullivan, DMM guru. **10 different videos**, one for each major function on the DMM - we show you how to use it!

**TRAINING VIDEOS CAN BE ACCESSED AT OUR WEBSITE [www.esitest.com](http://www.esitest.com). GO TO THE 485 PRODUCT PAGE FOR ALL 10 VIDEOS.**



#### Features:

- True RMS accuracy on AC Volts and Amps
- 43 Test Ranges, 11 Test Functions
- 1 Hour TRAINING DVD by Dan Sullivan
- 6000 Count LCD, w/extended backlighting
- Built-in Temperature F/C
- Relative Change, Data Hold, Auto Power-Off
- Measures temp via K-type probe
- Auto & Manual Ranging
- Zippered Carrying Case Included

#### TEST RANGES:

- DC Volts: 0-60mV, 600mV, 6V, 60V, 600V
- AC Volts: 0-60mV, 600mV, 6V, 60V, 600V
- DC Amps: 0-600uA, 6000uA, 60mA, 600mA, 6A, 10A
- AC Amps: 0-600uA, 6000uA, 60mA, 600mA, 6A, 10A
- Ohms: 0-600, 6K, 60K, 600K, 6M, 600M
- Capacitance: 0-10nF, 100nF, 1uF, 10uF, 100uF, 40mF, 100mF
- Duty Cycle: 0.1 ~ 99.9%
- Frequency: 9.99Hz - 10MHz
- Type K Temp: -58F to 1400F, 302F to 1292F, -50C to 150C, 150C to 700C
- Continuity: Audible Beep
- Diode Test: Diode Test

## #480A AUTO-RANGING DMM



*High precision Auto-ranging DMM that can help you troubleshoot all types of electrical problems. Includes test leads, protective holster, instruction manual and two AA batteries.*

#### Features:

- 43 Test Ranges, Auto-Ranging
- 10 Test Functions
- Auto Power-Off, Data Hold
- Dual Fuse Protection
- 10 Meg/Ohm Input Impedance

## #501 DIGITAL MINI MULTIMETER



*This is an economical DMM that can't be beat. #501 has the capabilities of full range units. Its low price will surprise you! Includes test leads, holster, instructions & installed battery.*

#### Features:

- 16 Test Ranges, 6 Functions
- Fuse protected
- Removable Test Leads
- Protective Holster Included
- Safety leads & jacks

## #385A ENGINE ANALYZER/DMM

#385A has many of the necessary features required for today's automotive diagnostics. **Use frequency readings to test crankshaft and camshaft sensors**, for example. The #385A comes equipped with an RPM pick-up, probe test leads, alligator clip test leads, **protective holster**, instructions and installed 9V battery. Inductive RPM pick-up features a five position, **adjustable sensitivity** switch.

#### Features:

- 25 Test Ranges, 9 Test Functions
- Easy RPM readings
- Inductive RPM pick-up included
- 10 Meg/Ohm Input Impedance
- Dual Fuse Protection
- Built-in tilt stand
- 10 Meg/Ohm Input Impedance



**SEE [WWW.ESITEST.COM](http://WWW.ESITEST.COM) FOR FULL SPECIFICATIONS AND TEST RANGES!**

## #380 DIGITAL MULTIMETER



#380 has the **compact design** & the functions you need for overall convenience. Its capabilities are **equal to many higher priced DMM's**. Comes with test leads, **protective holster**, instructions and installed 9 volt battery.

#### Features:

- 20 Test Ranges, 7 Test Functions
- 10 Amp test range
- Continuity beeper
- Fully fuse protected
- 10 Meg/Ohm impedance



**SEE WEB PAGE FOR FULL SPECIFICATIONS AND TEST RANGES!**

## #301M - #302M - #303B - #304B - #305M - #306B - #309A FUSE BUDDY® TESTERS

### Model 309A Fuse Buddy Mini Kit



**NEW IMPROVED ADAPTER SET ALLOWS BETTER ACCESS TO SIDE BY SIDE FUSES**

**Guess what? There is a new fuse size called "Micro". There are now three fuses commonly in use, ATO, Mini and new Micro. This kit includes 306B (ATO), with adapters for testing Mini and Micro. 309A Mini Kit includes a clear storage pouch to keep the small fittings in order.**

- Tests all three fuse sizes: Micro, Mini & ATO circuits
- Plug in Fuse Buddy and read circuit amp draws
- Easy test connection into fused circuits
- Can be used on circuits up to 30 Amps
- Resolution 0.1 Amps

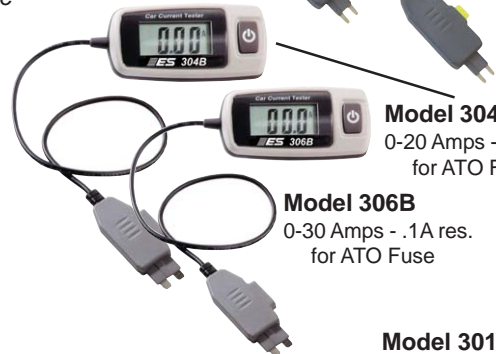
- Can test circuit current up to 20 OR 30 Amps - an easy way to check fuel pump amperage.
- Clever design allows easy connection into fuse sockets.
- FUSE BUDDY's are available as a stand alone Tester or DMM Adapter, for both Mini & ATO fuses (also Micro, see 309A)
- Fuse Buddy ends are molded into the shape of the fuse itself.
- During testing the fuse is removed and replaced into the Fuse Buddy. This way, the circuit being tested maintains fuse protection.
- #302M & #304B can even be used to test for parasitic drains!
- #305M, #306B & #309A can be used to test blower motors!

### Model 302M

0-20 Amps - .01A res. for Mini Fuse

### Model 305M

0-30 Amps - .1A res. for Mini Fuse



### Model 304B

0-20 Amps - .01A res. for ATO Fuse

### Model 306B

0-30 Amps - .1A res. for ATO Fuse

### Model 301M

0-20 Amps for Mini Fuse. DMM determines max current range. Readings displayed on DMM or scope

### Model 303B

0-20 Amps for ATO Fuse. DMM determines max current range. Readings displayed on DMM or scope



## #310 FUSE BUDDY® PRO TEST KIT

**THREE TESTERS IN ONE!! 3 interchangeable test functions.**

- 1) 30 Amp MINI - Circuit Amperage Testing
- 2) 30 Amp ATO - Circuit Amperage Testing
- 3) 30 Amp All Purpose Amperage Testing

**310 Fuse Buddy Pro can read circuit amp draws on both ATO & Mini fused circuits up to 30 Amps. As an added bonus, the Fuse Buddy Pro can be used as an all purpose amp meter with the included 30A test clips.**

- Check blower motor, fuel pump & A/C Compressor amperage draws
- Installing an auto-resetting circuit breaker allows you to check for intermittant shorts and monitor the current draw at the same time
- Features **ANALOG BAR GRAPH, DATA HOLD** and **AUTO POWER-OFF**
- Range: 0-30 Amps - Resolution: .1A (100 mA) - Accuracy:  $\pm 2\%$  of reading



## MODEL #315 MAX FUSE BUDDY® KIT

**Max Fuse Buddy can test up to 80 AMPS on MAXI circuits. There are numerous Heavy Duty & Automotive applications. With supplied adapters, #315 can also work with MINI and ATO circuits. Top 20 Tool Winner in 2009!**

- Can measure up to 80 Amps DC on MAXI, MINI & ATO fused circuits
- **MAX FUSE BUDDY test applications include:**
  - Anti-Lock Brake Circuits
  - Car Stereo Circuits
  - Branch Power Circuits
  - Rear Window Defogger Circuits
  - Heavy Duty Equipment Circuits
  - Fire Engine Water Pumps
- Unit features **PEAK HOLD** and **DATA HOLD** functions
- Deluxe LCD display features full **ANALOG BAR GRAPH**
  - Resolution: .1A (100 mA) - Accuracy:  $\pm 2\%$  of reading
  - Measurement range: 0 to 80 Amps / 48 Volts DC



**GO WITH ES FOR QUALITY TEST INSTRUMENTS**

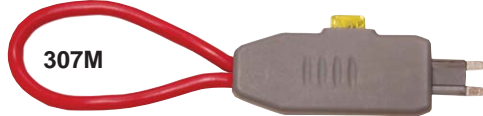
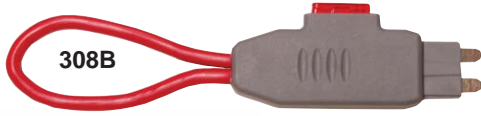
## #307, #308 & new #312A FUSE BUDDY® CURRENT LOOPS

- Great accessory for any current probe or automotive scope
- Just **clamp your current probe over the loop** to access the amperage draw through a fused circuit.
- Easy testing access, **plugs right into fuse socket.**
- Testing range 0-30 Amps – Do Not Exceed 30 Amps
- Can be used to **diagnose a variety of amp draw problems** including:
  - Fuel Pumps • Battery Drains • Blower Motors • Shorts

**New 312A Kit Includes Adapters for new Micro Fuses, plus Mini....this works on all three fuse types, Micro, Mini & ATO Includes Storage Pouch!**



**NEW IMPROVED ADAPTER SET ALLOWS BETTER ACCESS TO SIDE BY SIDE FUSES**



## MODEL #655 HIGH CURRENT PROBE/DMM

Another great tool for **all around electrical troubleshooting.** #655 is ideal for all high current applications, especially **starting and charging diagnostics.** #655 can measure up to **1000 Amps AC or DC.** Unit features built-in degrees F and C temperature readings. Includes test leads, temp probe, instructions, 9V battery and **carrying case.**

### Features:

- 37 Test Ranges
- 10 Test Functions
- Auto Power Off
- Auto-Ranging, Data Hold
- Temp probe included
- Continuity Beep
- Overload Protection
- Clamp opening 1.5 inches
- Test Leads Included
- Carrying Case included

### TEST RANGES:

DC Amps	0-40A, 400A, 1000A	Temperature	-4F to 1832F & -20C to 1000C
AC Amps	0-40A, 400A, 1000A	Duty Cycle	0-5%-99.0%
DC Volts	0-400mV, 4V, 40V, 400V, 600V	Continuity	Audible Beep
AC Volts	0-400mV, 4V, 40V, 400V, 600V	Diode	Diode Test
Ohms	0-400, 4k, 40k, 400k, 4M, 40M		
Frequency	0-5Hz, 50Hz, 500Hz, 5kHz, 50kHz, 100kHz		
Capacitance	0-40nF, 400nF, 4uF, 40uF, 100uF		



## MODEL #685 CURRENT PROBE/DMM

The #685 is a great tool for all purpose electrical testing. Applications include: **fuel injection systems, fuel pumps, charging systems, electric motors, and most parasitic drains.** **Capable of measuring as low as 10 milliamps!**

### Features:

- 35 Test Ranges
- 10 Test Functions
- Auto Power Off
- Auto-Ranging
- Data Hold
- Continuity Beep
- Overload Protection
- Clamp opening 7/8 inches
- 9 Volt Battery Included
- Carrying Case included

### TEST RANGES:

DC Amps	0-40A, 200A
AC Amps	0-40A, 200A
DC Volts	0-400mV, 4V, 40V, 400V, 600V
AC Volts	0-4V, 40V, 400V, 600V
Ohms	0-400, 4k, 40k, 400k, 4M, 40M
Frequency	0-10Hz, 100Hz, 1000Hz, 10kHz, 100kHz, 1000kHz, 10MHz
Capacitance	0-4nF, 40nF, 400nF, 4uF, 200uF
Duty Cycle	0-5%-99.0%
Diode	Diode Test
Continuity	Audible Beep



## MODEL #687 LOW CURRENT PROBE/DMM

With the capability of measuring **down to 1 milliamp (.001A)**, the #687 is a great tool for all low current applications. Especially for diagnosing **parasitic drains!** **Clamp opening is large enough to fit over most negative battery cables.** Applications: fuel injectors, fuel pumps, electric motors, **battery drains, charging systems.**

### Features:

- 35 Test Ranges
- 10 Test Functions
- Auto Power Off
- Auto-Ranging
- Data Hold
- Continuity Beep
- Overload Protection
- Clamp opening 1/2 inches
- 9 Volt Battery Included
- Carrying Case included

### TEST RANGES:

DC Amps	0-4A, 80A
AC Amps	0-4A, 80A
DC Volts	0-400mV, 4V, 40V, 400V, 600V
AC Volts	0-400mV, 4V, 40V, 400V, 600V
Ohms	0-400, 4k, 40k, 400k, 4M, 40M
Frequency	0-5Hz, 50Hz, 500Hz, 5kHz, 50kHz, 500kHz, 5MHz, 10MHz
Capacitance	0-40nF, 400nF, 4uF, 40uF, 100uF
Duty Cycle	0-5%-99.0%
Diode	Diode Test
Continuity	Audible Beep





ELECTRONIC SPECIALTIES, INC.

## MODEL #695 LOW CURRENT PROBE FOR GRAPHING METERS, SCOPES & DMM's



Great tool for **accurate measurement of low current**. Works with your graphing meter or lab scope to view **current waveforms** on fuel injectors, fuel pumps, primary ignition coils and more. Also works well with digital multimeters. **Resolution of 10 milliamps** is low enough for **most parasitic drain testing**. Clamp opening of 1/2 inch is large enough to clamp over most negative battery cables for those parasitic drain tests.

**TEST RANGES:**  
DC Amps 0-20A, 80A (resolution .01A)  
AC Amps 0-20A, 80A (resolution .01A)

### Features:

- Compatible with many lab scopes and graphing multimeters
- Use to generate current waveforms for diagnostic analysis
- Enhances the capability of your digital multimeter
- Jaw opening of 1/2 inch clamps over most negative battery cables
- Low battery indication, Auto Power-Off

## MODEL #697 CURRENT PROBE - 400 AMPS

Use this instrument to **test starting and charging systems**. It can even be used to test **relative compression** when used with your lab scope or graphing meter. Unit is designed for **use with digital multimeters, lab scopes or graphing meters**. Output of the probe is 1mV/Amp.

### Features:

- Great tool to test starting and charging systems
- One touch zero adjust and low battery indication
- Works with digital multimeters, scopes or graphing meters
- High current measuring capability, up to 400 Amps AC/DC
- Unit also features Auto Power-Off - saves batteries

**TEST RANGES:**  
DC Amps 0-40, 400A (resolution .1A)  
AC Amps 0-40, 400A (resolution .1A)



## #698 HIGH CURRENT PROBE - 1000 AMPS

Unit is designed for use with digital multimeters, lab scopes or graphing meters. **Ideal unit for high current applications like heavy duty starting and charging systems.**

### Features:

- Measures 0 to 1000 Amps DC or AC
- Great tool to test starting & charging systems
- Jaw opening is 2.125 inches
- Zero Adjust Knob
- Zippered Carrying Case Included

**TEST RANGES:**  
DC Amps 0-600A, 1000A (resolution .1A)  
AC Amps 0-600A, 1000A (resolution .1A)



## MODEL #640 D.V.A. ADAPTOR

### Features:

- Read peak volts on CD ignition coils w/your existing DMM
- Adapts standard digital multimeter into peak reading voltmeter
- OEM tool for several outboard engine manufacturers
- Fits most DMM's

## MODEL #530 D.V.A. /PEAK READING MULTIMETER

#530 was **designed in conjunction with the industry's leading outboard engine manufacturers**. The #530 is used to **diagnose problems in CD (capacitive discharge) ignition systems**. An essential tool for the professional marine service technician.

**TEST RANGES:**  
DVA Volts 0-2V, 20V, 40V, 200V, 400V  
DC Volts 0-2V, 20V, 40V, 200V, 400V  
AC Volts 0-20V, 40V, 200V, 400V  
DC Amps 0-10A  
Ohms x1, x10, x100, x1000

### Features:

- Analog multimeter with peak reading capability
- Fuse protected and includes a spare fuse
- Complete with battery and storage case
- Use to diagnose defective CD ignition coils



Made in USA!



SEE [WWW.ESITEST.COM](http://WWW.ESITEST.COM) FOR FULL SPECIFICATIONS AND TEST RANGES!

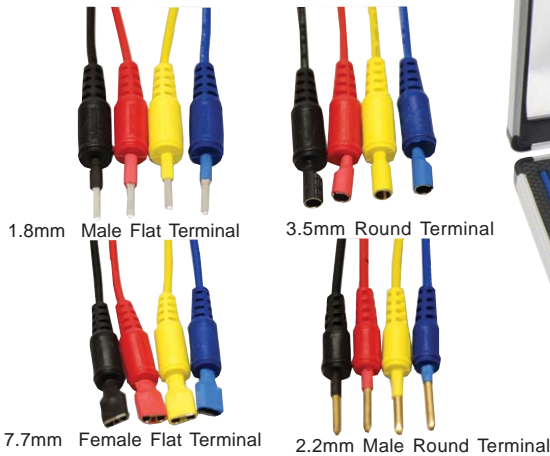
GO WITH **ES** FOR QUALITY TEST INSTRUMENTS

## MODEL #146 54 Piece AUTOMOTIVE TEST CONNECTOR KIT

This comprehensive test kit features a variety of terminal adapter sets which enable connection to most automotive vehicle connectors, both foreign and domestic. Terminal adapters connect via the included 48 inch stacking banana plug test leads. Connection to most DMM's and scopes is no problem. Kit is designed to provide wide testing coverage and quicken the test process.

**Includes:**

- 2.7mm Female Flat Terminal 4 pcs.
- 3.0mm Female Flat Terminal 4 pcs.
- 3.2mm Female Flat Terminal 4 pcs.
- 7.7mm Female Flat Terminal 4 pcs.
- 3.55mm Female Round Terminal 4 pcs.
- 2.2mm Male Round Terminal 4 pcs.
- 3.55mm Round Terminal 4 pcs.
- 1.0mm Male Flat Terminal 4 pcs.
- 1.5mm Male Flat Terminal 4 pcs.
- 1.8mm Male Flat Terminal 4 pcs.
- 2.2mm Male Flat Terminal 4 pcs.
- 2.8mm Male Flat Terminal 4 pcs.
- 4.8mm Male Flat Terminal 4 pcs.
- 48" Stacking Banana Plug Leads 2 pcs.



## MODEL #147 18 Piece MICRO 64 TEST CONNECTOR KIT



Test connector kit featuring a variety of terminal adapter sets which enable connection to **Micro64** terminals - primarily found on GM & Benz vehicles as well as some EU/Asian/Domestic vehicles. Adapters connect via the included 48 inch stacking banana plug test leads. Connection to most DMM's and scopes is no problem. Kit is designed to provide a quality & secure test connection while quickening the test process.

**Includes:**

- Square Micro64 Terminal, Female - (4)
- Square Micro64 Terminal, Male - (4)
- Round Micro64 Terminal, Female - (4)
- Round Micro64 Terminal, Male - (4)
- 48" Stacking Banana Plug Leads - 2 pcs.

Square Terminal - Female



Square Terminal - Male



Round Terminal - Female



Round Terminal - Male



SEE [WWW.ESITEST.COM](http://WWW.ESITEST.COM)  
FOR FULL SPECIFICATIONS  
AND TEST RANGES!



## #148 14 Piece Deutsch TEST CONNECTOR KIT

This test kit features a variety of Deutsche style terminal connector sets. Deutsch connectors are found in agricultural, construction, automotive, motorcycles and industrial applications.

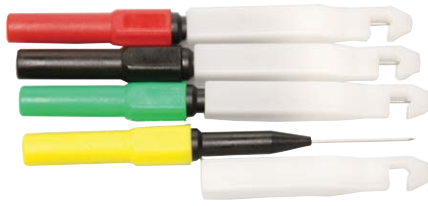
Proper fitting and electrical connection are critical to attaining valid test results. This kit was designed to provide a quality test connection, while quickening the process. Stacking banana plug test leads (included) allow testing of live circuits.

Included are three different size connector sets, with both male and female fittings. Connection to testing instruments is made via the included 48 inch stacking banana plug test leads.

**Includes:**

- Size 14-16 AWG connector, Female - 2 pcs.
- Size 14-16 AWG connector, Male - 2 pcs.
- Size 16-18 AWG connector Female - 2 pcs.
- Size 16-18 AWG connector Male - 2 pcs.
- Size 20-24 AWG connector Female - 2 pcs.
- Size 20-24 AWG connector Male - 2 pcs.
- 48" Stacking Banana Plug Leads 2 pcs.

#618 Mini Back Probes/Wire Piercers



- Great for backprobing weather pack style connectors
- Handy for piercing & tapping readings on smaller gauge wires - using included probe adapters
- **Can be used with #142-1**
- Set includes four probes - red, black, green, yellow

#629 Test Leads w/Screw off Alligator clips



- Works with most DMM's in the field
- Alligator clips screw off / on for more secure connection
- Test leads 48" length
- 1000 Volts max - CATIII
- Maximum 10 Amps

#142-1 Interconnect Test Leads - new!



- Connects with numerous test adapters
- **Length 64 inches CATIII 1000V**
- Terminates with straight female banana plug - standard 4mm

#142-2 Bed of Nails Test Clips - new!

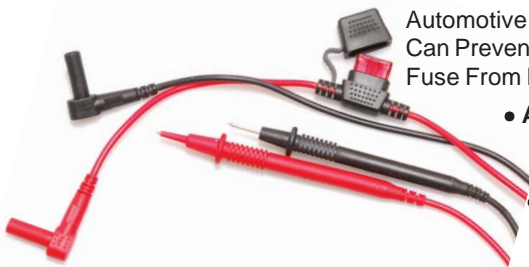
- Great for tapping live readings
- Compatible w/many test lead kits
- **Can be used with 142-1 test leads**



#142-4 Crocodile Clips - new!

- Large size - clips to battery post
- Compatible w/many test lead kits
- **Use w/ #142-1- CATIII 1000V**

#134 FUSE LEAD Automotive Test Leads



Automotive **Fuse Holder In-Line** Can Prevent Your DMM's Internal Fuse From Blowing - **TIME SAVER!**

- **ATC Fuse Holder In-Line**
- **Provides extra overload protection**
- **Can prevent your DMM's internal fuse from blowing**

#142-3 Heavy Duty Insulation Piercing Probes



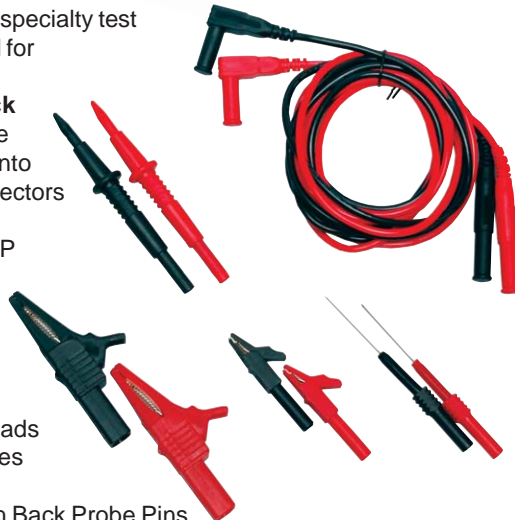
- Works with most test lead kits & DMM's
- High quality probes
- 1000 Volts max - CATIII
- Maximum 5 Amps
- Includes 2 clips
- *Compare to Pomona 5913!*
- **Can be used with 142-1**

MODEL #143 Automotive Test Lead Kit

Test Lead Kit includes our basic set of interchangeable specialty test probes designed for automotive use. The **flexible back probing pins** are great for sliding into automotive connectors like those on fuel injectors and MAP sensors. **Roll up storage pouch** included.

**Includes:**

- One set of Interconnect Leads - length 64 inches
- Test Probes
- Flexible Silicon Back Probe Pins
- Shielded Alligator Clips
- Large Crocodile Clips
- Deluxe roll-up Storage Pouch

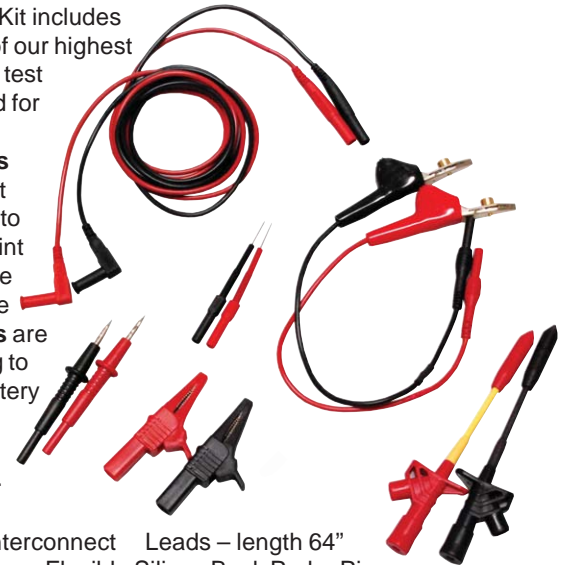


MODEL #142 PRO Automotive Test Lead Kit

PRO Test Lead Kit includes an assortment of our highest quality specialty test probes designed for automotive use. The **bed of nails set** gives a great deal of flexibility to clamp to test point or pierce the wire insulation. Large **Crocodile Clips** are good for clipping to grounds and battery posts. **Roll up storage pouch** included.

**Includes:**

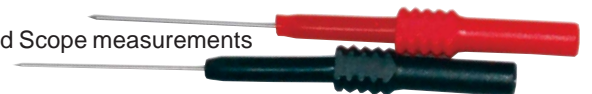
- One set of Interconnect Leads - length 64"
- Test Probes
- Flexible Silicon Back Probe Pins
- Bed of Nails Type Wire Piercing Clips
- Heavy Duty Insulation Piercing Clips
- Large Crocodile Clips
- Deluxe roll-up Storage Pouch



#142-5 Automotive Back Probe Pins

Flexible 1.5 inch silicon pins provide easy back probing connections for DMM and Scope measurements

- Great for **back-probing harness connectors** and automotive sensors
- **Flexible silicon** bends for difficult areas
- **Can be used up to 30 Volts**
- Connects to test leads w/removable ends- **Can be used with 142-1 test leads**
- Length 3.75 inches



**#146-P Stacking Banana Plug Test Leads**



- Stackable 3-way banana plug test lead
- **High flexibility wire** - 48 inches length
- Use with numerous test adapters

**#635 CATIII Automotive Test Lead Set**



- High Quality - IEC Safety Rating of CATIII 1000V
- Safe for use on Hybrids & Electric Vehicles
- 6 Piece Set Rated for 10 Amps
- Set includes two Premium Test Probes, two Large Crocodile Clips & Two Test Leads with straight banana jacks
- Test leads 52"
- Works with most DMM's in the field

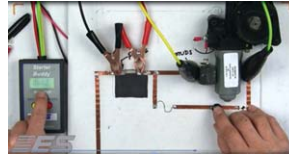
**#165 Starter Buddy®**

**Starter Buddy Diagnoses:** • Starter & Solenoid • Positive Cable • Negative Cable • Battery (under load)

**Starter Buddy** tests the health of the vehicle's electrical starting/cranking circuit. Slow cranks & no cranks are most likely caused by excessive voltage drops (resistance). **If excessive resistance exists**, Starter Buddy will help you quickly locate and diagnose which part of the circuit has the issue. **Just 3 connections and a 3 second cranking test diagnose the problem.** 12 foot test leads allow safe connections and control of the cranking test from the driver's seat.

*Starter Buddy includes three 15 min training videos at [www.esitest.com](http://www.esitest.com)*

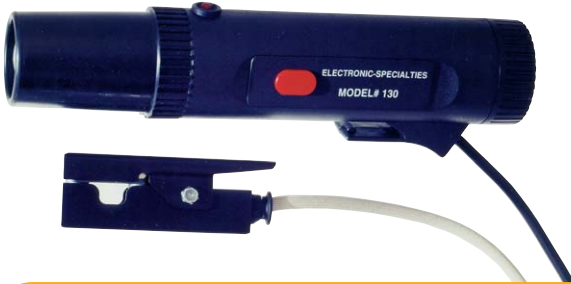
**Specifications:** - Tests 12 and 24 volt systems - Uses vehicle battery for power  
**Includes training videos - Includes Zippered Carrying Case - Made in USA!**



Operational Overview Video



**#130 SELF-POWERED INDUCTIVETIMING LIGHT**



**The original battery powered timing light, built with quality to last. There's no need to connect to a 12volt battery for power. Unit is powered by two "D" cell flashlight batteries. Great tool for marine, snowmobile, industrial, racing engines and other small engine timing. Don't accept a copy. Made in USA!**

**Features:**

- Accurate up to at least 14,000 RPM
- For 2 or 4 cycle engines, all ignition systems
- Protective sleeve withstands high temps (1200F)
- Available with 10, 20, 30, 40 or 50 ft. lead lengths
- Standard lead length 4 feet
- Bright flash at all speeds • Batteries included

**#125 DIGITAL TACH/ADVANCE TIMING LIGHT**

- **Professional 12V Timing Light** with High Visibility LED display
- Very bright display indicates: **Tach (RPM) - Degrees Advance**
- Measures ignition spark advance from 0-90 degrees
- 2 & 4 Stroke Tach reads engine speed up to 9,999 RPM
- **Brilliant Xenon flash** at all speed - Detachable/replaceable cables



**#150 INDUCTIVE TIMING LIGHT**



**Hard working timing light accurate up to 8,000 RPM. Bright flash. Break and shock resistant housing.**

- Precision focused flash tube
- Removable/replaceable leads
- For all 12V systems
- Field replaceable flash tube
- Trigger switch prolongs tube and circuit life

**#162 DIGITAL TIRE PRESSURE GAUGE**

- Digital tire pressure readings!
- **Reads in PSI, KPa & Bar**
- Backlit LCD display
- **Built-in LED Flashlight**
- Res: 0.1 PSI - 0.01 Bar - 1 KPa
- Measurement range:
  - 5 to 100 PSI
  - 0.4 to 6.80 Bar
  - 35 to 680 KPa
- Uses (2) "AAA" Batteries



# #846 - 70 Pc. Diagnostic Test and Terminal Set

**NEW  
Product!!!**



### FEATURES:

- 52 piece variety of terminal adapters enable connection to most vehicle harness connectors, both foreign and domestic
- 10 piece interchangeable test lead set with probes, alligator and crocodile and clips
- 8 piece back probe set allows tapping of sensor signals and live readings. **Includes new Spoon Probes**
- Clear storage case included & helps you stay organized
- **Works with Multimeters and digital scopes**
- Includes 48" stacking banana plug test leads
- Kit is designed to provide wide testing coverage and quicken the test process

### #EST-45 IR THERMOMETER

- **High temperature range:**  
-22° to 932°F (-30° to 500°C)
- Accuracy:** ± 1% of reading
- Distance to Spot Ratio:** 12 to 1
- Emissivity = 0.95**
- Requires 2xAA Batteries**



### #EST-67 TWIN LASER IR THERMOMETER



- Lasers converge at optimal measuring distance
- Temp Range:** -58° to 1022°F (-50° to 500°C)
- Distance to Spot Ratio:** 12 to 1
- **Continuous Max Hold Feature**
- **Fast response time (150 Ms) for quick work**
- **High Accuracy Rating of ±1%**
- **Carrying Case Included**

SEE OUR WEB  
SITE [ESITEST.COM](http://ESITEST.COM)  
FOR FULL  
SPECIFICATIONS  
AND TEST  
RANGES!



### #EST-65 IR THERMOMETER

- **High quality construction**
- **High temperature range:**  
-58° to 1022°F (-50° to 500°C)
- **Carrying case included**
- Accuracy:** ± 2% of reading
- Distance to Spot Ratio:** 8 to 1
- Emissivity = 0.95**
- 9 Volt Battery Included**

### #220 TRAILER BUDDY - 4/5 Pin Flat



- **#220 Tests 4 & 5 Pin Flat connector wiring**
- **#222 Tests 7 Pin Round connector wiring**
- Each signal from vehicle emits a unique tone
- Loud beep can be heard over shop noise
- One person - complete test in 60 seconds!
- Just apply brakes, turn signals, running lights, engage reverse and listen.
- **#222 also verifies 12 V charging signal as well as trailer brake signal**
- Greatly reduces time spent verifying vehicle trailer wiring

### #222 TRAILER BUDDY - 7 Pin Round

#### Lighting Circuits Tested:

- Left Turn Signal
- Right Turn Signal
- Brake
- Running Lights
- Reverse
- 12V Charging (#222)
- Trailer Brake Signal (#222)



**GO WITH ES FOR QUALITY TEST INSTRUMENTS**

## #726 BATTERY & ELECTRICAL SYSTEM TESTER W/ PRINTER ~ TESTS NEW START/STOP BATTERIES

- Accurate Battery & Electrical System Tester - Programmed test for **new Start/Stop Batteries**
- 3 Testers in ONE! ~ 1) 6 & 12 Volt Battery Tester + 12V Start/Stop Battery Test  
2) 12 & 24 Volt Charging System Tester 3) Alternator-Starting-Charging System Tester
- Very Wide Testing Range - tests batteries sized from 40 to 2,000 CCA
- **Built-in Printer - print the results for permanent service records**
- Removable/Replaceable Cable Set
- Patented Dynamic Resistance Technology

Tests 4 types of Starting Batteries

1. Regular Flooded Lead Acid
2. AGM Flat Plate
3. AGM Spiral
4. VRLA/GEL

Tests 2 types of Start/Stop batteries

1. EFB (ENHANCED FLOODED)
2. AGM Flat Plate

Backlit LCD Display - easy to read

Includes 2 rolls of printer paper - replacement paper part #726-1

Test batteries in 5 different ratings

SAE (CCA): 40~2,000  
EN: 40~2,100  
DIN: 25~1,300  
IEC: 30~1,500  
JIS: Battery Type No.

Voltmeter range: 1.5V to 30V  
6.5 Foot Test Cable (80 inches)

**INCLUDES BLOW MOLD CASE**

Six Language Menu  
Uses 4x AA batteries

*sample test report*

```

TEST REPORT
==BATTERY TEST==
REGULAR FLOODED
SOC: 12.58V
RATED: 668SAE
MEASURED: 662SAE
IR: 4.68mΩ

GOOD & PASS

STATE OF HEALTH
■■■■■■■■ 100%
STATE OF CHARGE
■■■■■■■ 98%

CLIENT:
TEST DATE:
BY:
    
```



**NEW Product!!!**

## #425 DIGITAL BATTERY & ELECTRICAL SYSTEMS TESTER



### FEATURES:

- Tests a wide range of 12 Volt batteries, quickly and accurately. AGM included.
- Results display **actual CCA capacity of the tested battery.**
- **Also tests the starting/charging system for low cranking voltage and faulty charging voltages.**

### SPECIFICATIONS:

- CCA Test Range: 200 to 1200 CCA
- State of Health: Actual Battery CCA displayed
- Rating systems: SAE, DIN, IEC, EN and CA
- Tests discharged: Down to 7 volts
- Batteries tested: Lead Acid, AGM spiral, AGM flat, Gel

LED's indicate the following:

1. OK
2. OK & Recharge
3. Recharge & Retest
4. Bad Fail
5. Bad Cell

## #710 - 500 AMP CARBON PILE LOAD TESTER

#710 will perform **variable load testing** on 12 volt batteries rated as high as **1000 Cold Cranking Amps**. Use this battery tester to simulate **actual cranking loads**. Also tests alternator charging voltage and relative starter current draw.

The #710 features **large dual meters** which display the battery voltage and load current simultaneously during the test.



### Features:

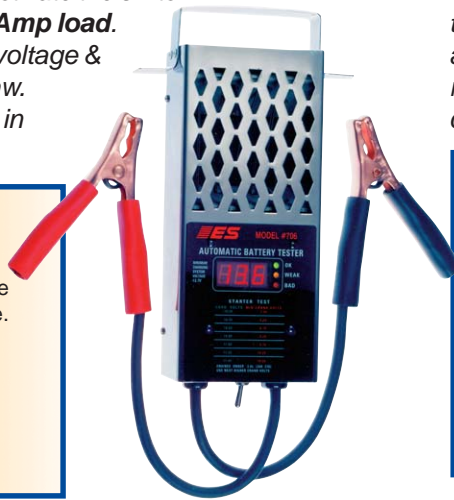
- 500 Amp adjustable load carbon pile
- Tests batteries rated as high as 1000 CCA or 160AH
- 15 second test with audible tone
- Can also test alternators, regulators and starters
- 500 amp side terminal clamps & heavy duty stranded copper cables
- Meters are color coded for simple pass or fail diagnostics
- Includes temperature compensation chart

## #706 DIGITAL BATTERY TESTER

**Automatic test**, simply activate the switch once for **10 second 100 Amp load**. #706 also tests charging voltage & relative starter current draw. We assemble this tester in Wisconsin, USA.

### Features:

- DIGITAL DISPLAY - "OK", "WEAK" or "BAD"
- AUTOMATIC TEST - Audible beep when test is complete.
- Unit indicates "CHG" if the pre-test state of charge is not sufficient for proper battery testing.
- 2 Year Warranty. Unique design = longer warranty.



## MODEL #700 BATTERY TESTER

The #700 has an **internal loading** capacity of **100 amps**. It is a great tool for finding batteries that **can't stand up to the load** of today's automotive accessories. Also tests relative starter current draw and charging voltage.

### Features:

- Internal 100 Amp loading capacity
- Tests battery voltage, relative starter current draw, charging voltage and battery condition
- Heavy duty cable and copper plated clamps
- Convenient handle for carrying & hanging with heat protection



## MODEL #332 PRO LASER TACHOMETER

**Safe & accurate measurement of RPM** in almost any environment. **Just aim the laser beam** at a reflective mark placed on a rotating device and the RPM reading is displayed. Measures up to **99,999 RPM** in 1 RPM increments. Useful on **diesel engines & others** where inductive tachs can't be used. Other uses include generators, compressors, **industrial engines**, fans, gears and more. **Zippered case**, reflective tape, instructions & 9V battery included.

### Features:

- TEST RANGE: 0-99,999 RPM
- High intensity laser beam, detects RPM from up to 6 feet away
- Memory function saves maximum and minimum RPM readings
- Reflective tape included



## #329 SMALL ENGINE TACH



## #333 PRO LASER / CONTACT TACHOMETER

**Dual function Laser Photo & Contact Tachometer**. Photo RPM measurements are taken via the laser photo method. Contact functions - **rotation, distance and frequency** measurements are taken w/ accessory heads. **Zippered case**, **3 contact adapters**, tape, instructions & 9V battery included.

### Features:

- 0-99,999 RPM - 12 Different Measurement Modes
- High intensity laser beam, detects RPM from up to 6 feet away
- Memory function saves up to 10 min/max/avg date records
- Reflective tape and 3 contact accessories included



- **MULTI-FUNCTION** instrument, IP67 Water Proof/Dust Proof, can be mounted permanently on vehicle
- RPM Range: - 0 to 20,000 RPM
- **MAX RPM**: viewable & resettable
- **HOURLY METER & ENGINE/JOB TIMER**  
TOTAL - records total engine run time  
JOB - records work related time  
SERVICE - reminder for maintenance
- Includes battery, mounting velcro, battery and instructions
- For complete specs, see website

### CONTACT MEASUREMENT MODES:

- RPM(contact)
- Frequency(Hz)
- Meters per minute
- Inches per minute
- Feet per minute
- Yards per minute
- Revolutions
- Length in Meters
- Length in Inches
- Length in Feet
- Length in Yards

## MODEL #328 EZ Tach +PLUS

- Measures RPM on a wide **variety of engines** from string trimmers to automotive.
- Reads **engine revolutions** from **0 to 20,000 RPM**
- Picks up RPM signal wireless or with supplied inductive pickup
- **Great for setting idle speeds!**
- Built-in LED Flashlight illuminates work area
- **Backlit LCD display** - Accuracy  $\pm 10$  RPM



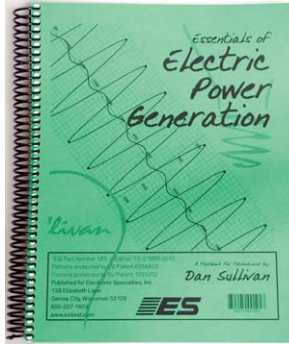
## #325 EZ-TACH DIGITAL AUTOMOTIVE TACHOMETER

### Features:

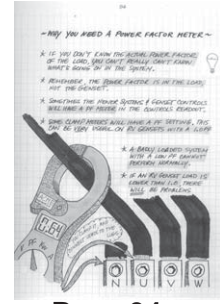
- **No wires, no cables, or fragile antennas!**
- Conventional and DIS ignition capability
- 0-12,000 RPM on conventional ignitions
- 0-6,000 RPM on DIS ignitions
- Good for Automotive PRM, for small engine see #328
- Low Battery Indication
- Just clamp over any spark plug wire!
- EZ-Tach gives accurate RPM readings quick and easy



### #183 ESSENTIALS OF ELECTRIC POWER GENERATION



- 125 pages - full 8.5 x 11 inch page size - of everything you need to know about **Electric Power Generation.**
- Gensets, 3 Phase, Frequency, RPM, Flashing the Field, Governor Basics
- Safety Basics, Arc Flash, Cable Routing, Conduit
- Loadbanking, Why?, What?, Cable Connections, Testing and Procedures
- **Power Factor explained**, Basic Concepts, Data Plate vs. Load, RV Gensets
- Prime Power vs. Standby Power, Breakers



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### #186 HANDS ON-LINE ELECTRICAL TRAINING CARDS

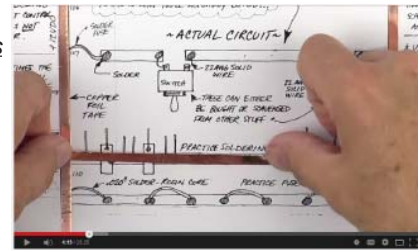
This is a hands-on training system in which you apply, solder and install all the parts. Dan Sullivan takes you step-by-step through the first 10 training cards by way of his YouTube videos....*the last 6 are your challenge!* **OVER 6 HOURS OF VIDEO TRAINING, YOU LEARN AT YOUR OWN PACE!** Kit includes a list of the parts you'll need to build the circuits and systems on each card....you'll need to purchase the parts or you can scavenge them.

*At youtube search bivideo7 or electronicspecialties to find the videos*

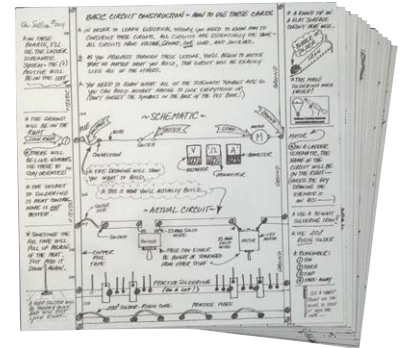
#### 16 Training Cards:

- **Basic Circuit Construction**
- **Measuring Resistance in Series**
- **Measuring Resistance in Parallel**
- **Measuring Voltage**
- **Measuring Amperage**
- **Rheostats & Potentiometers**
- **Series Circuits**
- **Parallel Circuits**
- **Relays~Electromagnetic Switches**
- **Diodes~General Theory**
- **Diodes~Electrical Check Valves**
- **LED's~Light Emitting Diodes**
- **Starting System**
- **Brakes & Turn Signals**
- **HVAC~Blower Fan & A/C Clutch**
- **Reversing Relays~Window Motors, etc.**

**Applications:**  
Automotive  
Heavy Duty  
Marine  
RV  
Equipment



Card 1- Basic Circuit Video



**Electronic Specialties,  
Incorporated**

**- Since 1967 - 55+ YEARS!!! -**

**WARRANTY:** Each item is covered by a one year limited warranty. Any ES brand product that fails during the first 12 months of use due to faulty material or workmanship will be replaced or repaired at our discretion, free of charge. See price list for complete details on warranty procedures.

#### Contact Information:

Electronic Specialties, Inc.

139 Elizabeth Ln.

Genoa City, WI 53128

800-227-1603 • 262-279-1400 • Fax 262-279-1300

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