



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

Electronic  
Specialties,  
Incorporated

- Since 1967 -

*OVER 50 years in business!*



10 NEW  
PRODUCTS  
INSIDE!!!

See first four pages



PROFESSIONAL HAND HELD  
TEST EQUIPMENT

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



**Electronic Specialties,  
Incorporated**  
- Since 1967 -

**NEW  
Products!!!**

# #149 UNIVERSAL TEST CONNECTOR KIT - 54 Piece

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

This comprehensive test kit features a wide variety of adapter sets. 149 enables connection to almost every automotive and vehicle connector, both foreign and domestic, including:

- 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**

**Includes  
Storage  
Case**

**Flat spade  
Round  
Micro64  
- round & square  
Micro50  
Deutch  
- three sizes**

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 very wide testing coverage and quicken the test process.

**Includes:**

- 2.2mm Female Flat Terminal 2 pcs.
- 2.5mm Female Flat Terminal 2 pcs.
- 3.0mm Female Flat Terminal 2 pcs.
- 7.7mm Female Flat Terminal 2 pcs.
- 3.55mm Female Round Terminal 2 pcs.
- 4.5 mm Female Round Terminal 2 pcs.
- 2.2mm Male Round Terminal 2 pcs.
- 3.55mm Round Terminal 2 pcs.
- 1.0mm Male Flat Terminal 2 pcs.
- 1.5mm Male Flat Terminal 2 pcs.
- 1.8mm Male Flat Terminal 2 pcs.
- 2.2mm Male Flat Terminal 2 pcs.
- 2.8mm Male Flat Terminal 2 pcs.
- 4.8mm Male Flat Terminal 2 pcs.
- Micro 64 Square Male Terminal 2 pcs.
- Micro 64 Square Female Terminal 2 pcs.
- Micro 64 Round Male Terminal 2 pcs.
- Micro 64 Round Female Terminal 2 pcs.
- Deutsch size 14 Male Terminal 2 pcs.
- Deutsch size 14 Female Terminal 2 pcs.
- Deutsch size 16 Male Terminal 2 pcs.
- Deutsch size 16 Female Terminal 2 pcs.
- Deutsch size 20 Male Terminal 2 pcs.
- Deutsch size 20 Female Terminal 2 pcs.
- Micro 50 male terminal 2 pcs.
- Micro 50 female terminal 2 pcs.
- 48" Stacking Banana Plug Leads 2 pcs.





Electronic Specialties,  
Incorporated

- Since 1967 -

**NEW  
Products!!!**

## #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 (2 pcs)
- 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 for safe keeping



## #182 48V LOADpro Dynamic

### Test Leads

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

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 48 Volt system, pressing the switch applies a load of approximately 1 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.



### 48 VOLT EXPANDED

#### Applications:

48v Lift Trucks  
Scissor Lifts  
Mast Lifts  
Work Platforms  
Golf Carts  
Automotive  
Heavy Duty  
Marine  
RV  
Equipment

### Applications:

Automotive    Heavy Duty  
Marine        RV  
Equipment    Agriculture  
Off-Road      Motorcycle

## #616 Spoon Probe Backprobers

### FEATURES:

- Curved probes allows back probing of round electrical connectors, especially weather pack style.
- Another great option for non-intrusive testing
- Tap readings and scope signals without damaging electrical connectors and harnesses
- Connects to standard size 4mm banana plug test leads, such as ES part #142-1
- Max test current 10 Amps





**Electronic Specialties,  
Incorporated**  
- Since 1967 -

**NEW  
Products!!!**

## #684 400 Amp DC/AC 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 TESTING FUNCTIONS:

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



## #901 CODE BUDDY+ CAN OBD II Code Reader

- Code Buddy+ retrieves both OBDII & manufacturer specific trouble codes & pending codes
- Displays I/M readiness status, retrieves VIN numbers, Calibration ID's and clears codes
- Easy to read, backlit LCD display shows trouble code definitions (no look up table)
- Reads Generic Codes, Pending Codes & Manufacturer Specific Codes
- Multi-lingual English, Spanish, French German & more.

- COVERAGE:**
- Supports CAN and all OBD protocols
  - Works on all US, European and Asian vehicles 1996 and newer

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

- Extended length test leads - 10 feet long
- Works with most DMM's in the field
- Alligator clips screw off / on for more secure connection
- Test leads 120" length
- 1000 Volts max - CATIII
- Maximum 10 Amps



## #619 Wire Piercing Clips

- Tap voltage readings on insulate wires - no wire stripping
- Pierces wire insulation sized from 22 to 14 awg, sharp needle minimizes insulation damage
- Contact needle is screwed in/out from the bottom



**WWW.ESITEST.COM**

Member **autocare**  
ASSOCIATION  
Independence drives us.



**Electronic Specialties,  
Incorporated**  
- Since 1967 -

**NEW  
Products!!!**

## #804 EZ Test™ 10 Pc Back Probe Kit

### FEATURES:

- 10 piece kit designed for backprobing, diagnostic testing & electrical troubleshooting
- Standard 4mm banana plug, works test kits in the field
- 2 pcs Spoon Probe Backprobers for round connectors (#616)
- 4 pcs of Mini Back Probes/Wire Piercers (#618)
- 2 pcs Flexible Automotive Back Probe Pins (142-5)
- 2 pcs Shielded Alligator Clips (#143-1)
- **Storage case included for safe keeping**



### Applications:

*Automotive Equipment    Heavy Duty Agriculture    Marine Off-Road    RV Motorcycle*

## #805 EZ Test™ Automotive Test Probe Kit

### FEATURES:

- 6 pc Test Probe Kit appropriate 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 most other test equipment
- Includes standard 4mm banana plug test leads (#142-1), which connect with most test adapters- all brands
- Max test current 10 Amps
- Includes: #142-1, #142-4, #142-6 and Storage Case





ELECTRONIC SPECIALTIES, INC.



**MODEL #180 LOADpro® Dynamic Test Leads**

**LOADpro® Finds these problems FAST!**

**PATENTED**

- High Corrosive Resistance
- Shorts to ground
- Open Circuits



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

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.



**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.

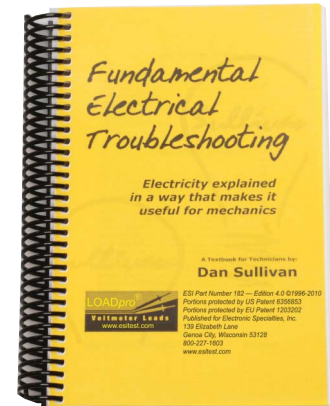
**BONUS KIT!**  
**#181 LOADpro Bundle**  
• includes #180 & #182

**#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
- Battery draws explained
- Corrosion causes
- Voltage drop explained
- How-to-read schematics



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

**SHORT BUDDY® Helps you find these problems!**

- Locating Shorts To Ground
- Intermittent shorts
- Intermittents caused by loose connections

**PATENTED**

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



**Blowing Fuses??** Short Buddy helps you 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, a real time saver. While you wiggle, pull, and grab wires, Short Buddy is always watching the current level. If your tug causes the dead short again, Short Buddy opens the circuit for 10 seconds, **then re-applies power to the circuit.**  
**Another big feature!** If the circuit current changes by more than approximately .3 Amps, you'll hear an audible beep. **If you pull on the "problem" wire or connector,** you'll hear the beep. When working under the dash or in a difficult area this is a huge help. Great tool for shorts, intermittent drop outs and flaky grounds & connections. A real time saver.



- 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

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

**GO WITH ES FOR QUALITY TEST INSTRUMENTS**



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

**PATENTED**

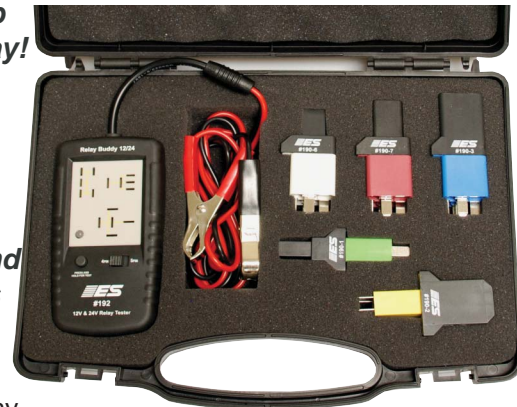
## #192 Diagnostic Relay Buddy 12/24



- 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

## #193 Diagnostic Relay Buddy 12/24

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



### 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

## #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.

**NEW PRODUCT!**

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

# MODEL #903 Code Buddy PRO

- OBDII Code Scanner w/Live Data & Diagnostic Monitors
- **OBDII CODE SCANNER** all protocols including CAN
- Displays trouble codes and definitions
- Reads **LIVE DATA STREAM**
- Reads diagnostic monitor test data - Mode \$06
- Views **FREEZE FRAME DATA**
- Retrieves vehicle information (VIN, CIN & CVN)
- Displays O2 sensor test data
- Clears codes, turns off **MIL** and resets monitors
- Displays **I/M readiness**
- Built-in OBDII fault code lookup library
- Reads **Hard, Pending & Historic codes**
- Retrieve Vehicle Information - **VIN NUMBER & CALIBRATION ID**
- Determines the cause of the Check Engine Light (MIL)

Works with all 1996 and later OBDII compliant US, European and Asian vehicles

**Multi-Lingual English/Spanish/French/German/Dutch**



**#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!



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

- 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

**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, instruction manual and carrying case. **Inductive RPM pick-up** features a five position, adjustable sensitivity switch.



**MODEL #585K INCLUDES CARRYING CASE**

- 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

- TEST RANGES:**
- DC Volts: 0-320mV, 3.2V, 32V, 320V, 1000V
  - AC Volts: 0-3.2V, 32V, 320V, 1000V
  - DC Amps: 0-320uA, 3.2mA, 32mA, 320mA, 10A
  - AC Amps: 0-320uA, 3.2mA, 32mA, 320mA, 10A
  - Ohms: 0-320, 3.2K, 32K, 320K, 3.2M, 32M
  - RPM 4: 0-3200 RPM, 12,000 RPM x 10
  - RPM 2/DIS: 0-3200 RPM, 6,000 RPM x 10
  - Dwell: 2 cyl, 3 cyl, 4 cyl, 5 cyl, 6 cyl, 8 cyl
  - Duty Cycle: 1.0%-90%
  - Frequency: 0-320Hz, 3200Hz, 32kHz
  - Temp: -20C to 320C, -20C to 750C, -4F to 320F, -4F to 1400F
  - Continuity: Audible Beep
  - Diode: Diode Test

**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 DVD training showing 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 DVD** - One hour of multimeter training and testing tips - 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"**



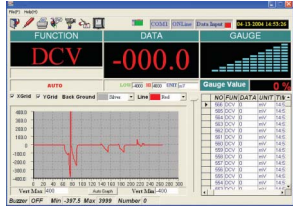


### #595 PRO AUTOMOTIVE METER W/PC INTERFACE

**HYBRID SAFE!**

#595 features a **huge LCD display with 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



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.

SEE WEB PAGE FOR FULL SPECIFICATIONS AND TEST RANGES!

- 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.**

**HYBRID SAFE!**

**Blow Mold Storage Case Included**



### #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.

- 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**

**Zippered Storage Case Included**

SEE WEB PAGE FOR FULL SPECIFICATIONS AND TEST RANGES!

### #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 **desired 20 Amp test range.** Kit includes zippered carrying case, test leads, **temp probe instructions** and 9 volt battery.

SEE WEB PAGE FOR FULL SPECIFICATIONS AND TEST RANGES!

**Zippered Storage Case Included**





### #485 SELF CALIBRATING TRUE RMS DMM w/1 hour DVD



#### • Patented Self Calibration Function • Includes 1 Hour Training DVD 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 DVD with 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!



#### 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

SEE WEB PAGE FOR FULL SPECIFICATIONS AND TEST RANGES!

### #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 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 - #309 FUSE BUDDY® TESTERS

### Model 309 Fuse Buddy Mini Kit



**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. 309 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 309)
- 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 & #309 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



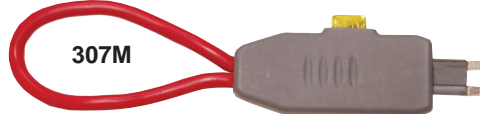
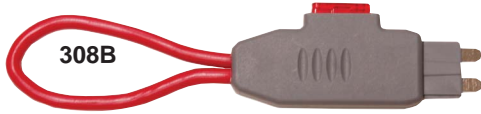
**GO WITH ES FOR QUALITY TEST INSTRUMENTS**



MODEL #307, #308 & new #312 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**, no more hand made adapters.
- 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 #312 Kit Includes Adapters for new Micro Fuses, plus Mini....this works on all three fuse types, Micro, Mini & ATO Includes Storage Pouch!



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 for testing 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 for testing 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 with 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**

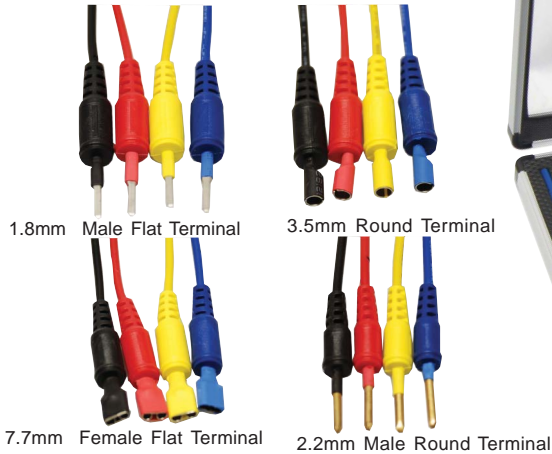


### MODEL #146 54 Piece AUTOMOTIVE TEST CONNECTOR KIT

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 - new!

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.

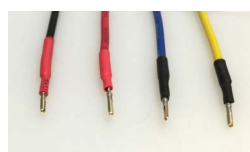
Square Terminal - Female



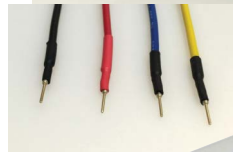
Square Terminal - Male



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 - new!

This test kit features a variety of Deutsch 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.

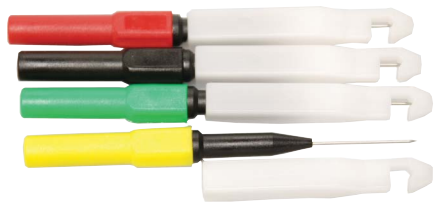
**Includes:**

- 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



- 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

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

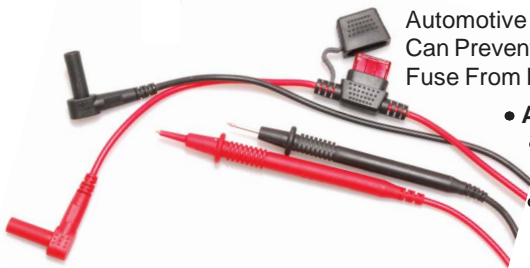


### #142-4 Crocodile Clips

- 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



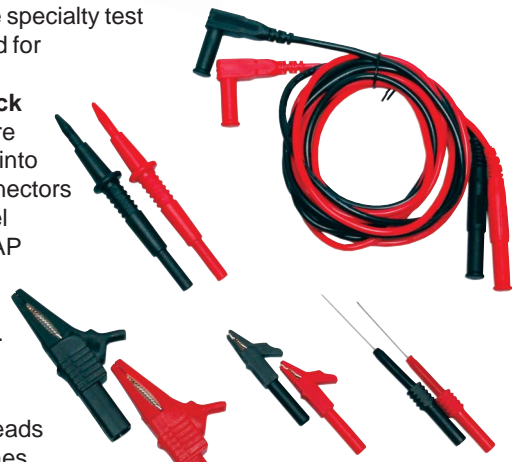
- Works with most test lead kits & DMM's
- High quality probes
- 1000 Volts max - CATIII
- Maximum 5 Amps
- Includes 2 clips
- *Compare to Pomona 5913!*
- **Can be used with 142-1**

### 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:**

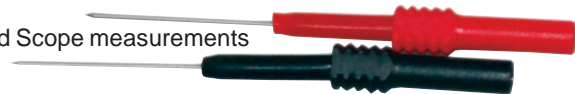
- One set of Interconnect Leads - length 64"
- Test Probes
- Flexible Silicon Back Probe Pins
- Bed of Nails Type Wire Piercing Clips
- Heavy Duty Insulation Piercing Clips
- Large Crocodile Clips
- Deluxe roll-up Storage Pouch



### #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

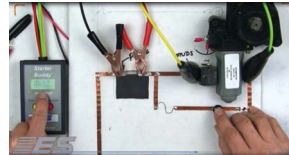
#165 Starter Buddy

**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 a training DVD with three 15 min videos.*

**Specifications:** - Tests 12 and 24 volt systems - Uses vehicle battery for power - Includes training DVD - 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 12 volt 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



#112 CHROME ADVANCE TIMING LIGHT

*Chrome timing light built for heavy duty use. The timing advance function allows precise tuning and diagnostic work.*

- Xenon flash tube & focused fresnel lens combines for brilliant flash
- Measures ignition spark advance from 0-70 degrees
- 12 volt DC operation - reverse polarity protection
- Accurate up to 8,000 RPM
- Removable/replaceable lead set
- Field replaceable flash tube



#150 INDUCTIVE TIMING LIGHT

- Precision focussed flash tube
- Removable/replaceable cable set
- 12 volt DC operation - reverse polarity protection
- For all 12V ignitions systems
- Accurate up to 8,000 RPM
- Field replaceable flash tube

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



#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







**#EST-75 HIGH TEMP IR THERMOMETER - PRO MODEL**

- EXTREME HIGH TEMP RANGE, UP TO 1832°F
- Long distance to spot ratio of 12 to 1
- Zippered carrying case included

Temperature Range: -58° to 1832°F & (-50° to 1000°C)  
 Accuracy: ± 1.5% of reading  
 Distance to Spot Ratio: 12 to 1  
 Carrying Case & 9 Volt Battery Included

**#EST-100 IR THERMOMETER ADAPTER**

Interface to your Multimeter  
 Temperature range:  
 -22° to 1022°F (-30° to 550°C)  
 Accuracy: ± 2% of reading  
 Distance to Spot Ratio: 8 to 1



Made in USA!

**#703 COMPRESSION TESTER**

- Features:**
- Tester screws into 14 mm spark plug hole on outboard engines and similar
  - Use to check for low compression
  - Measures up to 200 Psi or 14 Kgs
  - Check for burnt valves, scored cyl's, leaking head gaskets, broken valve springs, rings & damaged pistons

**#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-35 IR THERMOMETER**

- Continuous Max Hold Feature
  - Built-in Laser pointer
  - Backlit Display
  - Data Hold & Auto Power-Off
  - Carrying case included
  - Front panel controls, not under handle
- Temperature Range: -22° to 500°F/-30° to 260°C  
 Distance to Spot Ratio: 8 to 1  
 Resolution: 0.1 °F/°C  
 Basic Accuracy: ±2%

**#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
- Very simple & easy to use - saves time!



**#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)





### #720 DIGITAL BATTERY TESTER

- Tests battery condition using patented dynamic resistance technology
- Results display **actual CCA capacity of battery** w/pass/fail diagnosis
- LED's indicate the following:
  1. OK
  2. OK & RECHARGE
  3. RECHARGE & RETEST
  4. BAD FAIL
  5. BAD CELL
- Tester **removes surface charge** prior to battery test resulting in **more accurate results**

#### PATENTED TECHNOLOGY

#### Specifications:

CCA Test range: 200-1200 CCA  
 State of Health: Actual Battery CCA displayed  
 Rating Systems: SAE, DIN, EN, IEC & CA(MCA)  
 Tests Discharged: Down to 1.5 Volts  
 Temperature Compensation



### #725 BATTERY & STARTING/CHARGING SYSTEM TESTER

- 6 & 12 V Battery Tester - 12 & 24 V Charging System Tester
- Tests battery condition and the starting/charging system
- Guided test sequence covers - battery, cranking volts and charging system
- Charging system test checks the alternator voltage and the AC ripple voltage for bad diodes
- Test results include the **State of Health %**, **State of Charge %** and **actual CCA capacity**
- Diagnosis of battery condition also displayed
- 2 line LCD display in 7 languages
- Tests discharged batteries down to 1.5V

#### PATENTED TECHNOLOGY

#### Specifications:

Batteries Tested: 6 and 12 Volt  
 Charging Systems: 12 and 24 Volt  
 State of Health: Actual Battery CCA and %age  
 State of Charge: Battery Voltage and %age  
 CCA Test range: 40-2000 CCA  
 Rating Systems: SAE, DIN, EN, IEC & JIS  
 Tests Discharged: Down to 1.5 Volts  
 Temperature Compensation



State of Charge Display



State of Health Display

### #710 - 500 AMP CARBON PILE LOAD TESTER

The #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 160 Amp hour
- 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**, simply activate the switch once for **10 second 100 Amp load**. The #706 also tests charging voltage & relative starter current draw.

#### 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



### #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





ELECTRONIC SPECIALTIES, INC.

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

- 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: 13.85V
RATED: 258SAE
MEASURED: 217SAE
GOOD & PASS

STATE OF HEALTH
■■■■■■■■ 87%
STATE OF CHARGE
■■■■■■■■ 100%

CLIENT:
TEST DATE:
BY:
    
```



## #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 and 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 - new!



- **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
- **HOUR 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

## #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



### 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  |                     |

## #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

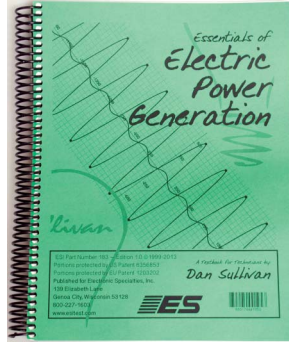
### Features:

- **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



**GO WITH ES FOR QUALITY TEST INSTRUMENTS**

**#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 - new!**

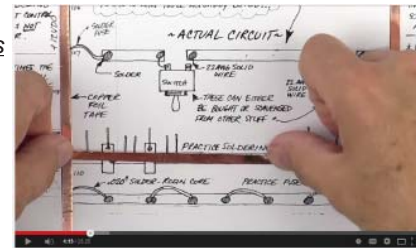
This is a hands-on training system in which you apply, solder and install all the parts. Dan Sullivan takes you step-by-step through the first 10 training cards by way of his YouTube videos....*the last 6 are your challenge!* **OVER 6 HOURS OF VIDEO TRAINING, YOU LEARN AT YOUR OWN PACE!** Kit includes 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 [electronspecialties](#) to find the videos*

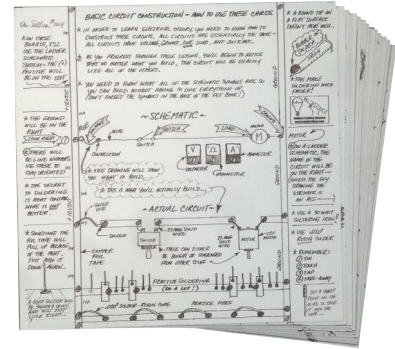
**16 Training Cards:**

- **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 - OVER 50 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

[www.esitest.com](http://www.esitest.com) • email: [info@esitest.com](mailto:info@esitest.com)

Member

