



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



# **#194 SUPER RELAY BUDDY**<sup>®</sup>

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:

elay Budd

- 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)

FULL DETAILS AND DEMO VIDEO AT 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
- Resolution: 1mA AC/DC - Accuracy - +2% of reading

- Sampe rate: 2 times per second -Power: 9V battery FULL DETAILS AND DEMO VIDEO AT 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

**#195 SUPER RELAY BUDDY<sup>®</sup> PRO KIT** 





such as ES part #142-1



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



# **#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

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

#### 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







Electronic Specialties, Incorporated

# NEW Products!!!

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

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

LOAD*pro*<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 stoage case

#### 10 TEST FUNCTIONS:

- DC Amps AC Amps
- DC Volts
- Ohms 
   Continuity
- Frequency Duty Cycle

AC Volts

Capacitance
 Diode Test

# <u>#804 EZ *Test*</u> <u>10 pc.</u> <u>Back Probe Kit</u>

- 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

# <u>#805 EZ Test</u> 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







<u>**t**</u> <u>10 pc.</u> <u>Kit</u> ed for backprobing, diagnostic test pa plug, works with test kits in the field





# **#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.

100k

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: 2000 0-200, .1 Ohm Insulation Resistance: 200M, 2000M Test Voltage: 250V-200MegOhm

Continuity Test:

- 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<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 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.

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

# SteadyPin Probe Tips

LOADpro<sup>®</sup> 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.

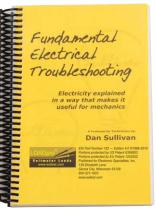
## #182 Fundamental Electrical Troubleshooting

## #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 Corrosion causes
- Finding shorts to ground Voltage drop explained
- · Battery draws explained How-to-read schematics

**FS** FOR QUALITY TEST INSTRUMENTS





PATENTED

500V-200MegOhm 1000V-2000MegOhm

Audible Beep < 40 Ohm Test Current <200mA

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

**HUDIO** 





- Red Light relay is bad

devices. 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<sup>®</sup> PRO Test Kit



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

## #230 Short Buddy<sup>®</sup> - Audible Trouble Shooter

other powered

cooling fans.

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

GO WITH **EST** FOR QUALITY TEST INSTRUMENTS

- Settable Amp Levels of 10, 15, 20, 25 and 30 Amps Specifications: - 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



instructions manual and carrying case. Inductive RPM pick-up features a five position, adjustable sensitivity switch. 'n **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 MODEL #585K 10 Meg/Ohm Input Impedance **INCLUDES**  Dual fuse protection CARRYING Safety leads & jacks CASE Built-in tilt stand 9V battery installed TEST RANGES: 0-320mV, 3.2V, 32V, 320V, 1000V **DC Volts** Dwell 2 cyl, 3 cyl, 4 cyl, 5 cyl, AC Volts 0-3.2V, 32V, 320V, 1000V 6 cyl, 8 cyl DC Amps 0-320uA, 3.2mA, 32mA, 320mA, 10A **Duty Cycle** 1.0%-90% AC Amps 0-320uA, 3.2mA, 32mA, 320mA, 10A 0-320Hz, 3200Hz, 32kHz Frequency -20C to 320C, -20C to 750C -4F to 320F, -4F to 1400F Ohms 0-320, 3.2K, 32K, 320K, 3.2M, 32M Temp 0-3200 RPM, 12,000 RPM x 10 **RPM 4** 0-3200 RPM, 6,000 RPM x 10 **RPM 2/DIS** Continuity Audible Beep Diode Test Diode Sullivan MODEL #TMX-589 TECH METER KIT Troubleshooting System brigtherideas con ech Mete **TEST RANGES:** DC Volts: 0-400mV, 4V, 40V, 400V, 1000V 0-400mV, 4V, 40V, 400V, 1000V 0-400uA, 4000uA, 40mA, 400mA, 10A AC Volts: Fundamental DC Amps: Electrical AC Amps: 0-400uA, 4000uA, 40mA, 400mA, 10A Ohms: 0-400, 4K, 40K, 400K, 4M, 40M Troubleshooting Capacitance: 0-40nF, 400nF, 4uF, 40uF, 400uF 4mF, 40mF Frequency: 0-4Hz, 40Hz, 400Hz, 40kHz, 400kHz, 10MHz -4F to 1400F, -20C to 760C -22F to 1022F, -30C to 550C Type K Temp: IR Temp: Dan Sullivan 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) **HYBRID** TECH METER KIT - Techs want more information! With TMX-589, you get it! One hour of video training SAFE! that shows how to use and get the best results from your investment. You spoke, we listened! INCLUDES: TMX-589 - True RMS Digital Mulitmeter - 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 on TMX-589 product page

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

GO WITH

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"

FOR QUALITY TEST INSTRUMENTS



## 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

#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

SEE WEB PAGE FOR FULL

**HYBRID** 

SAFE!

SPECIFICATIONS AND

**TEST RANGES!** 

- 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**
- **Desireable 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

GO WITH

**SPECIFICATIONS** AND TEST RANGES!



• True RMS accuracy on AC Volts and Amps

6000 Count LCD, w/extended backlighting

Relative Change, Data Hold, Auto Power-Off

• 1 Hour TRAINING DVD by Dan Sullivan

• 43 Test Ranges, 11 Test Functions

Measures temp via K-type probe

Zippered Carrying Case Included

**Built-in Temperature F/C** 

Auto & Manual Ranging

## #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. **GO TO THE 485 PRODUCT PAGE FOR** ALL 10 VIDEOS.

Sullivan Troubleshooting System

#### #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:

**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

TEST RANGES:

DC Volts:

AC Volts:

DC Amps:

AC Amps:

Capacitance:

**Duty Cycle:** 

Frequency:

Continuity:

Diode Test:

Type K Temp:

Ohms:

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.

0-60mV, 600mV, 6V, 60V, 600V

0-60mV, 600mV, 6V, 60V, 600V

6A, 10A

6A. 10A

0.1 ~ 99.9%

9.99Hz - 10MHz

Audible Beep

**Diode Test** 

0-600uA, 6000uA, 60mA, 600mA,

0-600uA, 6000uA, 60mA, 600mA,

0-600, 6K, 60K, 600K, 6M, 600M

0-10nF, 100nF, 1uF, 10uF, 100uF 40mF, 100mF

-58F to 1400F, 302F to 1292F -50C to 150C, 150C to 700C

#### Features:

• 16 Test Ranges, 6 Functions

**Fuse protected** 

FOR FULL

**SPECIFICATIONS** 

AND TEST RANGES!

- **Removable Test Leads Protective Holster Included**
- Safety leads & jacks

SEE WWW.ESITEST.COM

## #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.

#380 DIGITAL MULTIMETER

#### 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

#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

GO WITH **EST** FOR QUALITY TEST INSTRUMENTS

- 10 Meg/Ohm impedance

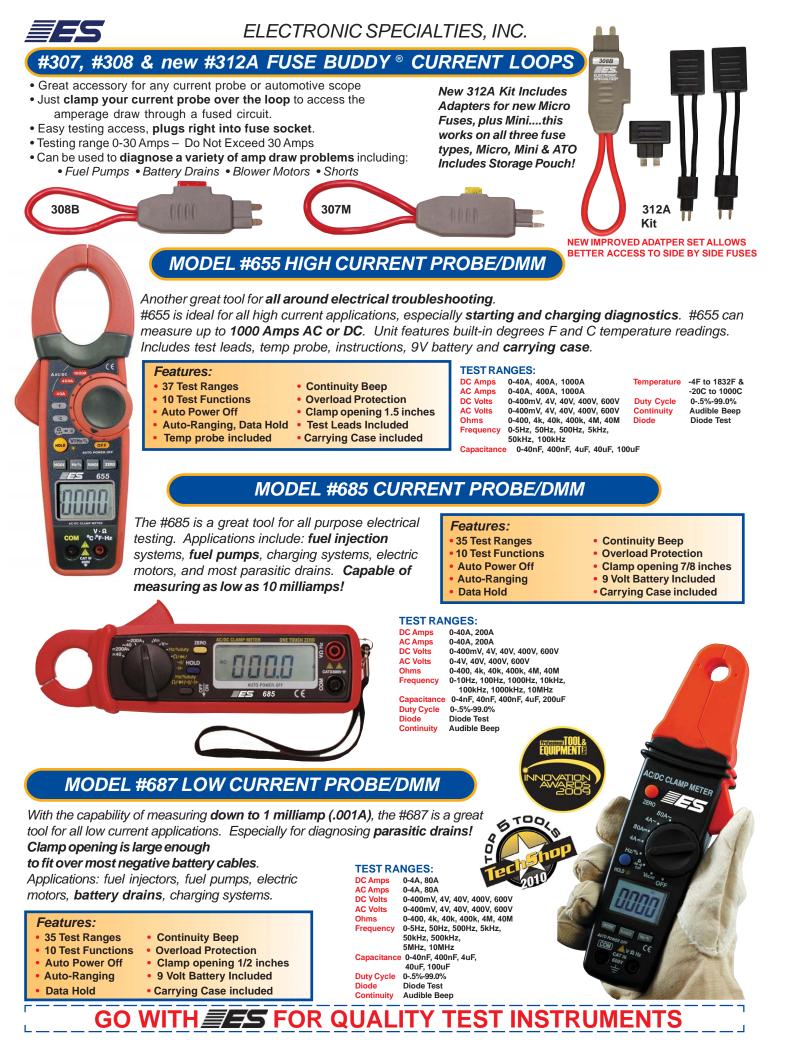
SEE WEB PAGE FOR **FULL SPECIFICATIONS** AND TEST RANGES!



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: +2% of reading







## 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

AC Amps (resolution .01A) 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 #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.

DVA Volts DC Volts AC Volts DC Amps Ohms

0-2V, 20V, 40V, 200V, 400V 0-2V, 20V, 40V, 200V, 400V 0-20V, 40V, 200V, 400V 0-10A x1, x10, x100, x1000

GO WITH **EES** FOR QUALITY TEST INSTRUMENT

#### 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

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

#### Features:

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

# Made in USA!

SEE WWW.ESITEST.COM FOR FULL SPECIFICATIONS AND TEST RANGES!



## 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.
3.8mm Male Flat Terminal 4 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 - Male Round Terminal - Female





Round Terminal - Male

SEE 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. Includes:

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. 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 Leads2 pcs.

# GO WITH EES FOR QUALITY TEST INSTRUMENTS



- · 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

#### 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

## #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 #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"
- Flexible Silicon Back Probe Pins Test Probes
- Bed of Nails Type Wire Piercing Clips
- Heavy Duty Insulation Piercing Clips
- Large Crocodile Clips
   Deluxe roll-up Storage Pouch

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

#142-5 Automotive Back Probe Pins

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

#### #635 CATIII Automotive Test Lead Set

Overview Video

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

#### #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

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

#### #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, Features:

ES INDUCT

**R QUALITY TEST INSTRU** 

racing engines and other small engine timing. Don't accept a copy. Made in USA!



- 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



#### #162 DIGITAL TIRE PRESSURE GUAGE

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

GO

- Measurement range: - 5 to 100 PSI - 0.4 to 6.80 Bar - 35 to 680 KPa
- Uses (2) "AAA" Batteries

#### #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

- Set includes two Premium Test Probes, two Large Crocodile Clips & Two Test Leads with straight banana jacks Test leads 52" Operational ES
- · Works with most DMM's in the field

• High Quality - IEC Saftey Rating of CATIII 1000V

• 6 Piece Set Rated for 10 Amps

• Safe for use on Hybrids & Electric Vehicles

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

#### FEATURES:

• 52 piece variety of terminal adapters enable connection to most vehicle harness connectors, both foreign and domestic

NEW

Product!!!

- 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: <u>+</u> 1% of reading Distance to Spot Ratio: 12 to 1 Emissivity = 0.95 **Requires 2xAA Batteries** 

#### #EST-67 TWIN LASER **IR THERMOMETER**

358. 383 895

RAILER BUDI

SEE OUR WEB SITE ESITEST.COM FOR FULL **SPECIFICATIONS** AND TEST **RANGES!** 

 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

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

GO WITH

- A A A A • #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

### **#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** 

#### #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)

**ES** FOR QUALITY TEST INSTRUMENTS





Test batteries in 5 different ratings

Voltmeter range: 1.5V to 30V

6.5 Foot Test Cable (80 inches)

**INCLUDES BLOW MOLD CASE** 

40~2.000

40~2,100

25~1,300

30~1,500

Battery Type No.

### #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

EN:

DIN:

IEC:

JIS:

SAE (CCA):

- Very Wide Testing Range tests batteries sized from 40 to 2,000 CCA
- Built-in Printer print the results forpermanent 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)

Six Language Menu 2. AGM Flat Plate Uses 4x AA batteries Backlit LCD Display - easy to read Includes 2 rolls of printer paper - replacement paper part #726-1

# **#425 DIGITAL BATTERY & ELECTRICAL** SYSTEMS TESTER

#### FEATURES:

• Tests a wide range of 12 Volt batteries, guickly and accurately. AGM included.

BY:

- 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:

NEW

Product!!!

REPLA

- 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

GO WITH **EST** FOR QUALITY TEST INSTRUMENTS





## **#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 #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

## #333 PRO LASER / CONTACT TACHOMETER

· Meters per minute

Dual function Laser Photo & ContactTachometer. 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)
- 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!

GO

- Built-in LED Flashlight illuminates work area
- Backlit LCD display Accuracy ±10 RPM ES FOR QUALITY TEST INSTRUM

## 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:

5

- 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



#### #329 SMALL ENGINE TACH



- 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 maintnance**
- Includes battery, mounting velcro, battery and instructions
- · For complete specs, see website

#### #325 EZ-TACH DIGITAL AUTOMOTIVE TACHOMETER

000

#### 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 **Electric Power Generation.** Power Gensets, 3 Phase, Fequency, RPM, Flashing Seneration the Field, Governor Basics · Safety Basics, Arc Flash, Cable Routing, Conduit • Loadbanking, Why?, What?, Cable Connections, **Testing and Procedures** Dan Sullivan

THERE

**E**5

- Power Factor explained, Basic Concepts, Data Plate vs. Load, RV Gensets
- Prime Power vs. Standy Power, Breakers

### #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

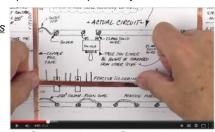
scavenge them. At youtube search bivideo7 or electronspecialties to find the videos

16 Training Cards:

- Basic Circuit Construction
- Measuring Resistance in Series
- Measuring Resistance in Parellel
- 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.

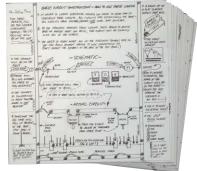
**Applications: Automotive** Heavy Duty Marine RV Equipment





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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 email: info@esitest.com www.esitest.com



ΝΕИ

Product:

# **ELS200 Pro Auto Test Lead Kit**

ELS200 Pro Auto Test Lead Kit includes our premium set of interchangeable specialty test probes. The interconnect lead set features an extended length of 64 inches. Kit also includes a quality set of cable/wire piercing clips and large Crocodile Clips for clipping to grounds and battery terminals. In addition, the four back probes/ wire piercers are great for sliding into automotive connectors like those on fuel injectors and MAP sensors. Includes quad fold storage pouch to keep your leads organized. Compatible with most DMM's & scopes.

# **Includes:**





Electronic Specialties, Incorporated

TWO NEW Products!

# **180CLR LOADpro<sup>®</sup> Clear - Dynamic Test Leads**

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

- High Corrosive Resistance
- Shorts to ground
- Open Circuits

LOAD*pro*<sup>®</sup> is now available with clear housing. This test lead performs a voltage drop test with the push of a button. On a 12 Volt system, pressing the switch applies a load of approx .5 Amps on the circuit. This simple test finds problems in corroded wires/ connections and shortsto ground. Watch our videos 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

LOAD*pro*<sup>®</sup> 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.

# 180VM LOADpro<sup>®</sup> + Volt Meter

Watch our videos at youtube.com Just type: "ElectronSpecialties" into the search box

LOAD*pro<sup>®</sup>* is now available as a complete kit. 180VM adds a portable volt meter for quick deployment.

If you don't have a DMM, no problem, this kit includes everything you need!

Or, if you'd prefer not to use your regular DMM with LOAD*pro*<sup>®</sup>, this can take it's place.

Voltmeter features: 0.1V resolution

- Includes one set LOADpro<sup>®</sup> test leads and one Fuse Buddy Volt Meter





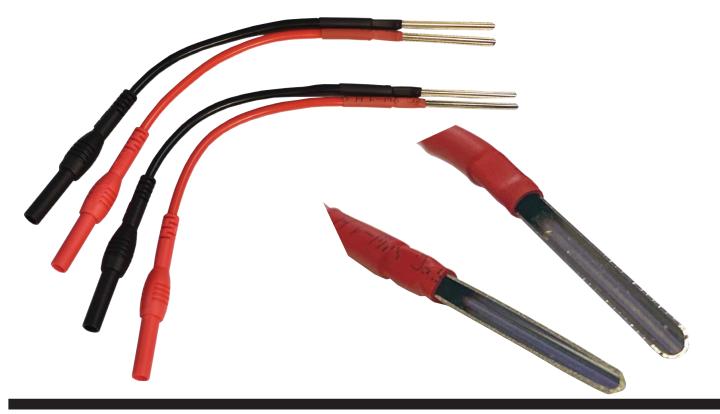
# 616-2 Dual Radius Spoon Probes

616-2 includes two sets of spoon probes. Each has a different radius, allowing for better choice of fitment. When back probing round connectors, you select the smaller or larger radius, whichever matches closest.

This new back probe set is designed with a curved radius allowing easier and noninstrusive tapping of live readings. When back probing round connectors, it is paramount to use a curved probe in order to make better contact. Better and more secure contact reduces false readings, improves accuracy, your decision making and saves time.

# **Features:**

- One set of smaller radius spoon probes
- One set of larger radius spoon probes
- Designed for back probing round pin connectors
- Curved back probe makes better and easier contact
- 4mm banana jack for use with standard test lead sets
- Works spefically with ES brand 142-1 Interconnect Test Leads



WWW.ESITEST.COM

Applications: Automotive Heavy Duty Industrial HVAC Electrical Marine