

Electronic Specialties, Incorporated

- Since 1967 -

55+ years in business!!!





Electronic Specialties, Incorporated

- Since 1967 -

NEW Products!!!

#194 SUPER RELAY BUDDY

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

FEATURES:

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

#195 SUPER RELAY BUDDY® PRO KIT



FULL DETAILS AND DEMO VIDEO AT www.esitest.com

#683 HIGH ACCURACY LOW CURRENT CLAMP METER

PATENTED

- 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



Electronic Specialties, Incorporated

- Since 1967 -

NEW Products!!!



#316 RELAY FUSE BUDDY

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







SPECIFICATIONS:

• Operating range: 20 Amps continuous - 30 Amps momentary

• For 12 and 24 volt applications

Resolution: 0.1 Amps

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

#187 LOADpro® & Back Probe Kit

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

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

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







- Shorts to ground
- Open Circuits

#616 Spoon Probe Backprobers

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

Connects to standard 4mm size banana plug test leads,

such as ES part #142-1





Electronic Specialties, Incorporated

- Since 1967 -

NEW Products!!!

#149 UNIVERSAL TEST CONNECTOR KIT - 54 Piece

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

Flat spade type male/female - several sizes Round terminals male/female

Micro 64 terminals - square male/female

Micro 64 terminals - round male/female

Deutsch terminals - size 14 male/female

Deutsch terminals - size 16 male/female

Deutsch terminals - size 20 male/female

New Micro 50 terminals - male/female

OUR MOST COMPREHENSIVE KIT - 26 DIFFERENT CONNECTORS! Includes 2x of each connector



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

- Since 1967 -

NEW Products!!!

#185 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

FEATURES:

LOAD pro® 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.

Clamp on current measurements up to 400 Amps

• Backlit LCD display - Includes zippered stoage case



#684 400 Amp AUTO-RANGING CLAMP METER **10 TEST FUNCTIONS:**

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



Auto-ranging digital multimeter built-in

CATIII 600V safety rating, 4000 count LCD

#804 EZ *Test*[®] 10 pc. **Back Probe Kit**

• 10 piece kit designed for backprobing, diagnostic testing& troubleshooting

• Standard 4mm banana plug, works with test kits in the field

• INCLUDES:

2 pcs Spoon Probes (#616)

4 pcs Mini Back Probes/Wire Piercers (#618)

2 pcs Flexible Silicon Back Probes (#142-5)

2 pcs Shielded Alligator Clips (#143-1)

Storage case included for safe keeping

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



- 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











NEW Product!!!

#550 EV Insulation Tester

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

Features:

Meets IEC10101, CATIII 1000V Large dual display LED backlighting Test Hold function for easy operation Over Range indication Low battery indication

Includes (6) AA batteries, test leads & case Specifications: Range

Voltage AC: 0-750V 1V Voltage DC: 0-1000V 1V

Resistance: 2000 0-200, .1 Ohm Insulation Resistance: 200M, 2000M 100k Test Voltage:

250V-200MegOhm 500V-200MegOhm 1000V-2000MegOhm

Resolution

Continuity Test: Audible Beep≤40 Ohm Test Current <200mA

THE FOLLOWING PARTS CAN LEAK HIGH VOLTAGE TO GROUND:

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

MODEL #180 LOADpro® Dynamic Test Leads

LOADpro® Finds these problems FAST!

- High Corrosive Resistance
- Shorts to ground
- Open Circuits

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

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



LOAD*pro*® 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

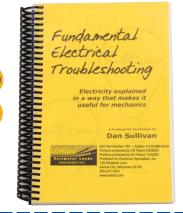
give an effective connection and creates difficulties in completing manufacturer specific voltmeter tests.

#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
- · Battery draws explained
- Voltage drop explained
 - How-to-read schematics



FS FOR QUALITY TEST INSTRUMENTS



Diagnostic Relay Buddy® - 12/24V Relay Tester

#193 Diagnostic Relay Buddy 12/24

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

#192 Diagnostic Relay Buddy 12/24



#190 Relay Buddy®

- Original Relay Buddy, tests 12V relays

- Green Light -relay

is good

- Red Light -

relay is bad

• Tests both 12V and 24V Relays!

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

Specifications:

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

#190-4 Shielded Relay Adapters

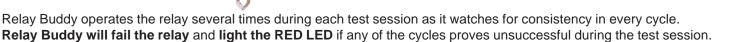
- Three pack of adapters allows testing of shielded relays....same 3 relays tested by Relay Buddy.

#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**





#191 Relay Buddy® PRO Test Kit



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

#230 Short Buddy® - Audible Trouble Shooter

Blowing Fuses?? Short Buddy helps find the short!

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

PATENTED

- 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





GO WITH **ES** FOR QUALITY TEST INSTRUMENTS

#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 accomodate 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 Continuity Beep
- **Analog Bargraph** Built-in TemperatureF/C
- Peak Min/Max
- Backlit 5000 count LCD
- **CATIII 600 Volts**
- 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 0-50nF, 500nF, 5uF, 50uF, 500uF, 5mF Capacitance:

10-100kHz AC Frequency: -4F to 1400F, -20C to 760C Temperature:

Continuity: Audible Beep 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, instructions 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:

Fundamental

Troubleshooting

Electrical

0-320mV, 3.2V, 32V, 320V, 1000V DC Volts AC Volts 0-3.2V, 32V, 320V, 1000V DC Amps AC Amps Ohms

0-320uA, 3.2mA, 32mA, 320mA, 10A 0-320uA, 3.2mA, 32mA, 320mA, 10A 0-320, 3.2K, 32K, 320K, 3.2M, 32M 0-3200 RPM, 12,000 RPM x 10 0-3200 RPM, 6,000 RPM x 10 RPM 2/DIS

2 cyl, 3 cyl, 4 cyl, 5 cyl, **Duty Cycle** Frequency

6 cyl, 8 cyl 1.0%-90% 0-320Hz, 3200Hz, 32kHz

-20C to 320C, -20C to 750C -4F to 320F, -4F to 1400F Audible Beep **Diode Test**

HYBRID

Mete

MODEL #TMX-589 TECH METER KIT





TEST RANGES:

DC Volts: AC Volts: DC Amps: AC Amps: Ohms: Capacitance:

0-400mV, 4V, 40V, 400V, 1000V 0-400mV, 4V, 40V, 400V, 1000V 0-400uA, 4000uA, 40mA, 400mA, 10A 0-400uA, 4000uA, 40mA, 400mA, 10A 0-400, 4K, 40K, 400K, 4M, 40M 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:

Continuity: Audible Beep **Diode Test: Diode Test** Audible Continuity: Beep

Peak Min/Max: 1 mS (1000 samples per second) Auto Power Off: 30 minutes

Shock/Drop Test: 6.5 Feet (2 meters)

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

INCLUDES: TMX-589 - True RMS Digital Mulitmeter - CATIII 1000V safety - Waterproof/Dustproof to IP67 Standards LOAD pro - 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

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

#595 PRO AUTOMOTIVE METER W/PC INTERFACE

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

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



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.

- 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



Another good choice for the professional

#590 PROFESSIONAL AUTOMOTIVE DMM

automotive technician, #590 puts the right capabilities in your hands. For example, #590 tests the on-time of fuel injectors using the Ms pulse width test function.

This DMM is completely auto-ranging, making it an easy and efficient tool to use.

Zippered Storage Case Included

SEE WEB PAGE FOR FULL SPECIFICATIONS AND TEST RANGES!

Features:

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

#582 DELUXE DMM WITH AMP SHUTTERS - new!

Features:

- 33 Test Ranges, 11 Test Functions
- Huge 2 Inch LCD great visibility
- Amp shutters prevent blown fuses
- Backlit display for use in dark areas Measures Temp in both F and C, temp probe included
- 10 Meg/Ohm Input Impedance
- 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

SPECIFICATIONS AND TEST RANGES!



HYBRID

SAFE!

Blow Mold

Storage Case Included



#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.**



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:

Diode Test:

#501 DIGITAL MINI MULTIMETER

0-60mV, 600mV, 6V, 60V, 600V DC Volts: AC Volts: 0-60mV, 600mV, 6V, 60V, 600V DC Amps: 0-600uA, 6000uA, 60mA, 600mA, 6A, 10A

0-600uA, 6000uA, 60mA, 600mA, AC Amps: 6A. 10A

0-600, 6K, 60K, 600K, 6M, 600M Ohms: Capacitance: 0-10nF, 100nF, 1uF, 10uF, 100uF 40mF, 100mF

0.1 ~ 99.9% **Duty Cycle:** 9.99Hz - 10MHz Frequency:

-58F to 1400F, 302F to 1292F -50C to 150C, 150C to 700C Type K Temp: Continuity:

Audible Beep

#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.



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

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

Features:

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

#385A ENGINE ANALYZER/DMM

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

Features:

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



SEE WWW.ESITEST.COM 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.

- 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!



Model 309A Fuse Buddy Mini Kit



NEW IMPROVED ADATPER SET ALLOWS BETTER ACCESS TO SIDE BY SIDE FUSES

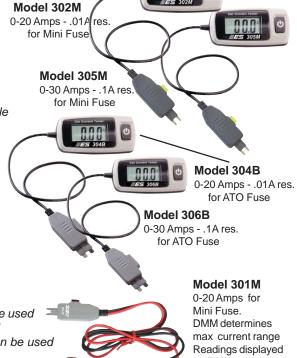
Guess what? There is a new fuse size called "Micro". There are now three fuses commonly in use, ATO, Mini and new Micro. This kit includes 306B (ATO), with adapters for testing Mini and Micro. 309A Mini Kit includes a clear storage pouch to keep the small fittings in order.

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

 Can test circuit current up to 20 OR 30 Amps - an easy way to check fuel pump amperage.

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

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





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: ±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 Ciruits 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: ±2% of reading
 - Measurement range: 0 to 80 Amps / 48 Volts DC



GO WITH FS FOR QUALITY TEST INSTRUMENTS



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

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

Fuel Pumps
 Battery Drains
 Blower Motors
 Shorts

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



NEW IMPROVED ADATPER SET ALLOWS BETTER ACCESS TO SIDE BY SIDE FUSES

Duty Cycle

Continuity

Diode

Temperature -4F to 1832F &

-20C to 1000C

0-.5%-99.0% Audible Beep

Diode Test



MODEL #655 HIGH CURRENT PROBE/DMM

307M

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 Test Leads Included
- Temp probe included
- Continuity Beep
- Overload Protection
- Clamp opening 1.5 inches
- Carrying Case included

TEST RANGES:

0-40A, 400A, 1000A DC Amps 0-40A, 400A, 1000A AC Amps DC Volts 0-400mV, 4V, 40V, 400V, 600V AC Volts

0-400mV, 4V, 40V, 400V, 600V 0-400, 4k, 40k, 400k, 4M, 40M 0-5Hz, 50Hz, 500Hz, 5kHz, Frequency

50kHz, 100kHz

0-40nF, 400nF, 4uF, 40uF, 100uF Capacitance

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:

Ohms

- 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 0-400, 4k, 40k, 400k, 4M, 40M 0-10Hz, 100Hz, 1000Hz, 10kHz, Ohms Frequency 100kHz, 1000kHz, 10MHz

Capacitance 0-4nF, 40nF, 400nF, 4uF, 200uF 0-5%-99.0% **Duty Cycle Diode Test**

Diode 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

0-400mV, 4V, 40V, 400V, 600V DC Volts 0-400mV, 4V, 40V, 400V, 600V **AC Volts** 0-400, 4k, 40k, 400k, 4M, 40M Frequency 0-5Hz, 50Hz, 500Hz, 5kHz,

50kHz, 500kHz 5MHz, 10MHz

Capacitance 0-40nF, 400nF, 4uF,

Duty Cycle Continuity

40uF, 100uF 0-.5%-99.0% **Diode Test** Audible Beep







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 capabiltiy 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.

hms 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

MODEL #640 D.V.A. ADAPTOR

Features:

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







SEE 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.











18 Piece MICRO 64 TEST CONNECTOR KIT MODEL #147

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.



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



14 Piece Deutsch TEST CONNECTOR KIT

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

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

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

Includes:

Size 14-16 AWG connector, Female - 2 pcs. Size 14-16 AWG connector, Male - 2 pcs. Size 16-18 AWG connector Female - 2 pcs. Size 16-18 AWG connector Male - 2 pcs. Size 20-24 AWG connector Female - 2 pcs.

Size 20-24 AWG connector Male - 2 pcs. 48" Stacking Banana Plug Leads2 pcs.





#618 Mini Back Probes/Wire Piercers

Great for backprobing weather pack style connectors

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

#629 Test Leads w/Screw off Alligator clips



· Works with most DMM's in the field

- Alligator clips screw off / on for more secure connection
- Test leads 48" length
- 1000 Volts max CATIII
- Maximum 10 Amps

#142-1 Interconnect Test Leads - new!



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

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

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

#142-4 Crocodile Clips - new!

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



#134 FUSE LEAD Automotive Test Leads

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

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

#142-3 Heavy Duty Insulation Piercing Probes

MODEL #142 PRO Automotive Test Lead Kit



- · 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



Includes:

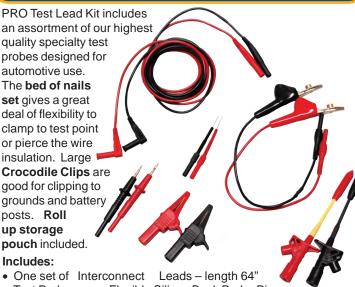
- One set of Interconnect Leads length 64"
- Flexible Silicon Back Probe Pins Test Probes
- Bed of Nails Type Wire Piercing Clips
- Heavy Duty Insulation Piercing Clips
- Large Crocodile Clips Deluxe roll-up Storage Pouch

- Interconnect Leads - length 64 inches
- Test Probes
- Flexible Silicon Back Probe Pins
- Shielded Alligator 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

#635 CATIII Automotive Test Lead Set



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

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

#165 Starter Buddy®

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

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

Starter Buddy includes three 15 min training videos at www.esitest.com

Specifications: - <u>Tests 12 and 24 volt systems</u> - Uses vehicle battery for power <u>Includes training videos</u> - <u>Includes Zippered Carrying Case</u> - 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, racing engines and other small engine timing.
Don't accept a copy.

Made in USA!

Features:

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

#125 DIGITAL TACH/ADVANCE TIMING LIGHT

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



#150 INDUCTIVE TIMING LIGHT

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

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

#162 DIGITAL TIRE PRESSURE GUAGE

- Digital tire pressure readings!
- Reads in PSI, KPa & Bar
- Built-in LED Flashlight

Backlit LCD display

- Res: 0.1 PSI 0.01 Bar 1 KPa
- Measurement range:
- 5 to 100 PSI
- 0.4 to 6.80 Bar
- 35 to 680 KPa

Uses (2) "AAA" Batteries



#846 - 70 Pc. Diagnostic Test and Terminal Set

NEW Product!!!



FEATURES:

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

#EST-45 IR THERMOMETER

 High temperature range: -22° to 932°F (-30° to 500°C)

Accuracy: ± 1% of reading Distance to Spot Ratio: 12 to 1

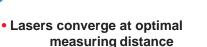
Emissivity = 0.95

Requires 2xAA Batteries









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



- 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



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

#222 TRAILER BUDDY - 7 Pin Round

Lighting Circuits Tested:

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



383 -095



FS FOR QUALITY TEST INSTRUMENTS



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

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

SYSTEMS TESTER

Six Language Menu Uses 4x AA batteries



sample test report



NEW Product!!!

FEATURES:

#425 DIGITAL BATTERY & ELECTRICAL

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

SPECIFICATIONS:

CCA Test Range: 200 to 1200 CCA

State of Health: Actual Battery CCA displayed

• Rating systems: SAE, DIN, IEC, EN and CA

Tests discharged: Down to 7 volts

Batteries tested: Lead Acid, AGM spiral,

AGM flat, Gel

LED's indicate the following:

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

#710 - 500 AMP CARBON PILE LOAD TESTER

#710 will perform variable load testing on 12 volt batteries rated as high as 1000 Cold Cranking Amps. Use this battery tester to

simulate actual cranking loads.

Also tests alternator

charging voltage and relative starter current draw.

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







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





#706 DIGITAL BATTERY TESTER

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

Features:

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



MODEL #700 BATTERY TESTER

The #700 has an internal loading capacity of 100 amps. It is a great tool for finding batteries that can't stand up to the load of today's

automotive accessories. Also tests relative starter current draw and charging voltage.

Features:

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



MODEL #332 PRO LASER TACHOMETER

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

Features:

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

#329 SMALL ENGINE TACH



- 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**

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

#333 PRO LASER / CONTACT TACHOMETER

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)
- · Meters per minute
- Inches per minute Feet per minute Yards per minute Revolutions
 - Length in Meters Length in Inches
- Length in Feet · Length in Yards

MODEL #328 EZ Tach +PLUS

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







#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, Fequency, 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. Standy Power, Breakers



Page 94

#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.

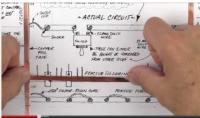
At youtube search bivideo7 or electronspecialties to find the videos

16 Training Cards:

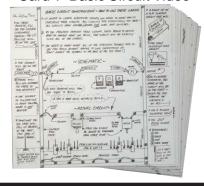
- Basic Circuit Construction
- Measuring Resistance in Series
- Measuring Resistance in Parellel
- Measuring Voltage
- Measuring Amperage
- Rheostats & Potentiometers
- Series Circuits
- Parallel Circuits
- Relays~Electromagnetic Switches
- Diodes~General Theory
- Diodes~Electrical Check Valves
- LED's-Light 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**





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

www.esitest.com

email: info@esitest.com