



#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!** On the reverse side of this page is the parts list you'll need to build the circuits and systems on each card....you'll need to purchase the parts or you can scavenge them.

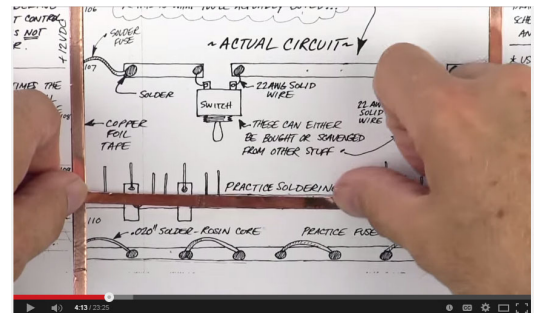
**NEW
Product!!!**

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.**



"I've done my best to put my 30 years of experience and my 32-hour Electrical Diagnostics class into these 16 cards. I have faith in you and if you work hard, you'll improve your skills and knowledge and become the electrical tech you want to be." - Dan Sullivan



Card 1- Basic Circuit Video



**Electronic Specialties,
Incorporated**

- Since 1967 -



Applications:
Automotive
Heavy Duty
Marine
RV
Equipment

Sullivan Training Systems Hands-On-Line Training Cards Radio Shack or other source and other parts required

Only buy what you need. If you already have some of these things, you don't need to repeat them. You DO need the small diameter solder. You DO need a low-wattage soldering iron. The copper foil is cheapest from stained glass suppliers.

Some of these parts can be scavenged from your work or other sources - and some are not required. Some can be reused on different cards, or you can buy more if you want to keep the boards you've already built intact.

You can see what you need for each card and only buy the things you need for each one. (I suppose I should've listed these by each card, huh?)

From anywhere...

1 roll Copper Foil - 1/4" wide (stained glass) Various P/N
4 each Tail light Bulbs (or equivalent) 1157

Required from Radio Shack (or other)

P/N

1 roll	22AWG Solid wire	278-1221
1 each	15-30W Soldering Iron	640-2055
1 roll	Solder (0.032")	640-0005
1 pkg	10 Ohm 10A Ceramic Resistors	271-0132
1 oka	50 Ohm 10A Ceramic Resistors	271-0133
1 pkg	1/2W Resistor Assortment	271-0306
1 each	5K Ohm Potentiometer	271-1720
1 each	25 Ohm Potentiometer	271-0265
1 each	9V-18V Motor	273-0256
1 pkg	Assorted diodes	276-1653
1 pkg	Assorted LEDs	276-1622
2 each	Relay	275-0001
1 pkg	Green lamp	272-0337
1 oka	Red lamp	272-0332

Optional from Radio Shack (or other)

Part Number

1 pkg	Copper microclips	270-373
1 pkg	Switches, 2P1T, toggle	275-403
1 pkg	Switch, momentary	275-0644 (or 0646)