Electronics Trainer (1820)
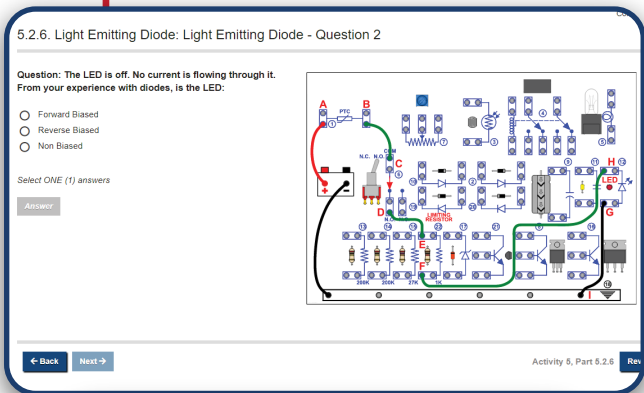
The Electronics Trainer (model 1820) is an in-depth, hands-on study of automotive electronics.
Provides real world troubleshooting practice and competency testing.
Hands-on and Computer Based Instruction.
The internal fault board offers 14 different computer controlled hard faults.

The internal fault board communicates with the optional Interactive Keypad (1802C),
the Electronics CBI software (1820SC), or the optional ATech Lab System (ALS16)
with the Classroom Management Program (CMP).

Electronics CBI Software (1820SC)

Classroom Management Program (CMP)

- The Electronics Trainer (1820) includes a USB drive containing the Student Manual, Instructor Guide and an on-site copy license to allow for the reproduction of instructional materials for use in the classroom.

- The Electronics CBI software (1820SC) includes an Operations Manual containing instructions for the CBI software and a detailed description of the fault capabilities.

- The Classroom Management Program (CMP) is required for the 1820SC software to operate and is sold separately

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Walton, Ky 41094**

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Electronics CBI software (1820SC)

ATech Training™

PROGRESS VIEW

ACTIVITY PROGRESS		TROUBLESHOOT	EXAM
⊞ Polarity	Begin 0 / 18	0 / 0 Go!	Start Exam
⊞ Digital Multimeter	Begin 0 / 21	N/A	
⊞ Diode Fundamental	Begin 0 / 44	N/A	
⊞ Diode As Rectifier	Begin 0 / 35	0 / 0 Go!	Start Exam
⊞ Light Emitting Diode	Begin 0 / 28	0 / 0 Go!	Start Exam
⊞ Clamping Diode	Begin 0 / 26	0 / 0 Go!	Start Exam
⊞ Zener Diode	Begin 0 / 37	0 / 0 Go!	Start Exam
⊞ Transistor Basic	Begin 0 / 72	0 / 0 Go!	Start Exam
⊞ Transistor Circuit	Begin 0 / 64	0 / 0 Go!	Start Exam
⊞ Transistor as Amplifier	Begin 0 / 23	0 / 0 Go!	Start Exam

This program consists of thirteen student activities with animations, all desgined to present the fundamentals of automotive electronics.

Electronics CBI software Activity List:
- Polarity
- Digital Multimeter
- Diode Fundamentals
- Diode as a Rectifier
- Light Emitting Diode (LED)
- Clamping Diode
- Zener Diode
- Transistor Basic
- Transistor Circuit
- Transistor as Amplifier
- Capacitors
- Photo Resistor
- Combination Electronics

8.4.1. Transistor Basic: Transistors - Question 3

Question: A TRANSISTOR has two electrical paths: a small current in the control path and a large current in the load path. What device is a TRANSISTOR similar too?

○ A two pole single throw switch
○ A relay
○ A two pole double throw switch

Select ONE (1) answers

[Answer]

Transistors

Collector
Base
Emitter
Transistors have three leads

⏸ Pause   ↻ Replay

11. Troubleshoot: TROUBLESHOOT

Connection status

Fault in component number?
○ #1 – PTC
○ #5 – Bulb
○ #6 – Switch
○ #9 – Capacitor
○ #16 – Transistor
○ #18 – Ground circuit
○ #22 – Limiting resistor
○ #23 – No faulted component

Fault type?
○ Open
○ High Resistance
○ Short to Ground
○ Short to Voltage
○ No Fault

[Answer]

[← Back] [Next Fault →]   [Exit Troubleshooting]   Activity 11, Troubleshoot   [Review Status]

Classroom Management Program (CMP)

The CMP allows an instructor to:

- Assign each student a unique I.D. number and password
- Student's performance is recorded to their account
- Student's information can be exported into a CSV file
- The instructor can insert faults for troubleshooting

ATech Lab System | Home

127.0.0.1:5000

ATech Training.

HOME

🏠 HOME
⚙ MANAGE
🖥 CBI
🎚 ATECH LAB SYSTEM
❓ HELP

Welcome, Admin!

ATech Classroom Management Program

ATech CMP works with ATech's trainer boards to:
- Communicate with the trainers via serial port on Windows
- Allow instructors to send faults to the boards
- Track student responses as they are entered

Exam mode: ⬤ Preset: Select a Preset ▾ [Apply Preset]

23: No fault

System Requirements:
- Windows 10 Professional or Enterprise (32/64 bit) (Windows 10 Education is not supported)
- Processor: 1 GHz (gigahertz) or faster
- Ram: 512MB
- Available USB port (for software installation)
- Hard Drive Space: **1820SC**: 575MB and **CMP**: 244MB

- The **CMP** & **1820SC** uses an internet browser for its User Interface. Use one of the following browsers:
- Chrome or Firefox (Internet Explorer & Microsoft Edge are not compatible with either software)

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