# INSTRUCTIONAL EQUIPMENT REQUEST 2016-2017

Internal Use

IE #: \_Fall 47

Total \$: 22,869.84

OC 20 2016

Requester Name:  SECTION 1: SUMM  Brief Title of the Reques  Applied electrical trainir	IARY INFOR!		on Name:
Equipment Location Bu			Room: 817
SECTION 2: EQUI		CRIPTION  An Upgrade	□ New Equipment/Technology
technology to LPC from We are requesting a classro boards will allow students to training aids, these boards a effective. These training bo the early 1990's. Our curre groups, as opposed to indiv with our Snap On digital vol	n what is currentle oom set (25) of Snape build and test auto allow students to phoards will be a replace nt boards are mostly vidually. These train lit-ohm meters, which will find a brochunds owill make availa	ly in place:  p On applied electrical circuit invisically build the circuit cement for our current y incomplete. Many arning boards will be an ush are also a classroom ure describing the electable a sample training be	trical trainers that we are asking for. If further board that is kept in the Building 800 tool room.
If applicable, describe of making specific referent None applicable.	the legal requiren	ment, mandate, or s quirement or regula	afety concern for purchase of this equipment ation:

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### SECTION 3: LPC MISSION STATEMENT AND LPC PLANNING PRIORITIES

#### LPC MISSION STATEMENT:

LPC is an inclusive learningcentered institution providing educational opportunities and support for completion of students' transfer, degree, basic skills, career-technical, and retraining goals.

#### LPC PLANNING PRIORITIES:

- Establish regular and ongoing processes to implement best practices to meet ACCJC standards.
- Provide necessary institutional support for curriculum development and maintenance.
- Develop processes to facilitate ongoing meaningful assessment of SLOs and integrate assessment of SLOs into college processes.
- Expand tutoring services to meet demand and support student success in Basic Skills, CTE, and Transfer courses.

#### Specify how the equipment supports LPC's Mission Statement and Planning Priorities:

Each one of the auto classes that we offer at LPC contain at least one lesson on automotive electronics. Some classes are even more electronics-intensive. With this in mind, we will be using these electronic training boards across our entire program. Purchase of these boards will support LPC's mission statement by providing educational opportunities and support for a student's career technical and career training goals.

#### SECTION 4: EDUCATIONAL ITEMS – PROGRAM REVIEW

#### Specify the educational programs this equipment supports:

Automotive Technology.

If this equipment is included in your Program Review, please include the exact wording. If equipment is not included, explain why:

While this equipment is not specifically mentioned in our Program Review, we did not know that this equipment existed at the time of the Program Review's submission. We discovered this new style of electronic training board within the last 2 months, and it has instantly gone to the top of our needs list.

#### SECTION 5: TEACHING AND LEARNING

#### Describe in detail the impact this equipment will have on teaching:

In addition to the training boards themselves, this set also includes a student manual, an instructor's guide, and a number of Power Point presentations. We believe that these additional materials will make for a more cohesive and simple to understand presentation when presenting such complex concepts that are associated with automotive electronics.

#### Describe in detail the impact this equipment will have on learning:

The biggest impact we believe these boards will have on learning comes from merely having a complete classroom set that each student will be able to use by him- or herself. As mentioned previously, these boards will also complement our already existing classroom set of Snap On digital volt-ohm meters, which we believe will also aid in learning, as students will also be able to earn a third party certification upon completion of the lessons that they can take with them when applying for jobs in the automotive industry.

Each academic year, this equipment will impact:  $\frac{10/12}{2}$  # of classes/sections  $\frac{288}{2}$  # of students

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SECTION 6	<b>5</b> :	OUTCOMES	(SLOs)
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Using your documented SLOs, specify how the equipment will enable student learning outcomes to be achieved?

As automotive electronics are an important part of every class that we offer, nearly every class has an SLO that relates to automotive electronic training. As mentioned previously, we believe purchase of these new training boards will greatly enhance our students' ability to grasp complex electronic topics. Therefore, we believe that SLO's will improve as well.

#### What are the consequences related to learning outcomes if request is not funded?

Students will continue to use our old, incomplete electronic training boards, forcing them to team up and work as a group with the training boards. We believe this kind of group work will have a detrimental effect on the electronics-related SLO's.

#### SECTION 7: TOTAL COST OF OWNERSHIP (FINANCIAL & SUSTAINABILITY

#### What is the potential life span of the requested equipment?

Our current training boards are in need of replacement, and are 25 years old. We expect these new training boards to last just as long, if not longer, because they are smaller, more robust in construction, and will be stored in tool boxes that are part of the request. These will also not go obsolete, as we expect the principles of voltage resistance and amperage not to change any time soon.

If new storage is needed, describe the storage, location, and costs: (Specific storage costs should be detailed in the "Part A: Initial Start-up Costs" section below.)

No new storage is needed. We already have a space cleared in Room 817.

What will be required to maintain the equipment, such as regular servicing or upkeep? (Specific on-going costs should be detailed in the "Part B: On-Going Annual Operating Costs" sections below as applicable.)

No regular maintenance or servicing is needed. Any issues that should arise should be covered by Snap On's warranty.

Explain how this equipment meets or exceeds basic sustainability efforts and/or provides renewable resources to the college:

While this equipment provides no direct renewable resources to the college, these boards were chosen because they are a robust quality piece of equipment that should last for decades, thus exceeding basic sustainability requirements.

#### Part A: Initial Start-up Costs

Item	Cost	<b>Comments</b>
Equipment or Materials	20,885.70	
Taxes (9.5%)	1,984.14	
Shipping or Delivery Charge	0.00	
Installation Costs *	0.00	
Miscellaneous Costs:	0.00	
Facilities Modifications	0.00	
Operator Training	0.00	
Maintenance & Repair Training	0.00	
Other:	0.00	
Vendor Discount		Snap On gives a substainial 40-60% off list price for schools which is already factored into the price
Grand Total:	22,869.84	

Part B: On-Going Annual Operating Costs

Item	Cost	<u>Comments</u>
Annual Service or Maintenance	0.00	
Estimated Parts Replacement Per Year	0.00	
Outside Standardization or Calibration Costs	0.00	
Storage Costs	0.00	
New Supply Costs	0.00	
Miscellaneous Costs:	0.00	
Maintenance & Repair Labor	0.00	
Other:	0.00	
Annual Operating Costs:	0.00	

#### Indicate the source of funding for on-going annual operating costs:

We have an annual maintenance and repairs budget that can cover any replacement of a trainer or two if it werent covered under Snap On's excellent warranty offered to schools.

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## Snap-on Industrial

Submit To: Snap-on Industrial A Division of IDSC Holdings, LLC PO BOX 9004 Crystal Lake, IL 60039-9004

(877)740-1900

Delivery To: 200051182

LAS POSITAS COLLEGE ATTN: RECEIVING DEPARTMENT 3000 CAMPUS HILL DRIVE

LIVERMORE, CA 94551

ATTN: James Weston

#### Quote

mber 213816 Type Quote Number

Date: 10/3/2016

Customer # 200051182

Valid Until: 12/2/2016

Cust PO# SNA4810 Elect Trainer

Ship Via UPS GROUND

Terms NET 45 DAYS

Fax/Mobile: N/A / (916)204-4075

Sales Rep | 014827 Bob Paredes, Phone: (916)204-4075

E-mail bob.paredes@snapon.com Bill To: 300868117

CHABOT-LAS POSITAS C.C.D.

ATTN: RECEIVING DEPARTMENT

3000 CAMPUS HILL DRIVE

LIVERMORE, CA 94551

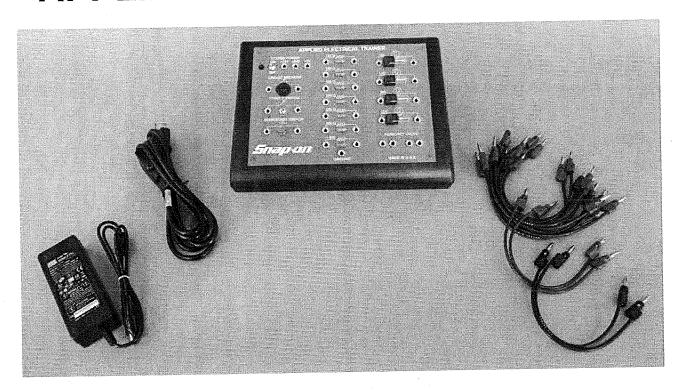
Item	Description	Qnty	List Price	Unit Price	Total
SNA4810	SNAP-ON ELECTIRCAL TRAINER 40IN FLIP LID, 6DRW RED	25 2	750.00 1,695.00	750.00 1,067.85	18,750.00 2,135.70
KRSC46HPBO 40IN FLIP LID, 6DRW RED  Tax and freight shown are estimates.  Applicable tax and freight will be charged to the Customers account.		Total List	\$22,140.00	Sub Total Tax	\$20,885.70 \$1,984.14
The sale of product is subject to Snap-on Industrial's standard terms and conditions of sale. Placement of an order is Customer's assent to these terms and conditions and Snap-on hereby objects to any additional and/or different terms may be contained in any Customer forms or other documents. No such additional terms will be of any force or effe		vnicn		Freight Total	\$0.00 \$22,869.84

The sale of product is subject to Customer meeting Snap-on Industrial's credit approvals. Financing through Snap-on Credit LLC is available on most purchases. Ask your Sales Rep for more information.

Page 1 of 1 Federal ID: 36-4070294 Total Weight: 701.00 Lbs



# SNA4810 APPLIED ELECTRICAL TRAINER



The AET contains the following components and capabilities:

- Power Supply With Dual Voltages (12V and 5V)
- Eleven 'Loads' Including Both Resistors and Lamps
- ON/OFF Switch With Indicator Light
- Banana Jacks for Making Wire Connections
- Connector Wires in Three Colors for Building Circuits
- Auxiliary Jacks to Insert an Additional Component
- Toggle and Momentary Switches
- Two Ground Connection Points
- Circuit Breaker for Device Protection
- Courseware Including Student Manual,
   Instructor Guide, and presentation (.ppt) slides

Using this electrical trainer, Students can learn the areas of:

- Voltage
- Current
- Resistance
- Power
- Voltage Drop
- Series Circuits
- Parallel Circuits
- · Series-Parallel Circuits
- Meter Usage Including Prefix Conversion
- Ohm's Law Voltage/Current and Resistance/Current Relationships
- Ohm's Law Value Calculations
- Diagnostic Testing

This training unit also has the flexibility to allow instructors to create their own circuits and/or tests for measurement and evaluation



EDUCATION



## SNA4810 APPLIED ELECTRICAL TRAINER



## The Applied Electrical Trainer (AET)

is a self-contained training device for the study of electricity and electrical circuits.

#### Using this Applied Electrical Trainer, can learn the areas of:

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- Resistance
- Power
- Voltage Drop
- Series Circuits
- Parallel Circuits
- Series-Parallel Circuits
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- Ohm's Law Voltage / Current & Resistance / Current Relationships
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- Diagnostic Testing





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- Courseware including student manuals and instructor guides

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LAS POSITAS COLLEGE Equipment, Apparatus and Service Requisition		#R			
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STOCK NUMBER)	LINN.	QTY	UNIT PRICE	H	TOTALS
	ea	25	\$750.00	\$	18,750.00
Item # SINA4610 Silap Oil Electrical Trainer	ea	2	\$1,067.85	\$	2,135.70
Item# KRSC46nr bO 401N iip Eig, op ive ive i				\$	1
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SOD Falanes 510-204-4015	Subtotal			↔	20,885.70
Comments:	Tax		\$ 0.0950	\$	1,984.14
BT#	Shippir	ıg (if a	Shipping (if available):		
Original invoices and receipts must be attached for payment. Include current taxes unless incorporated in price.			TOTAL COST	\$	22,869.84
ACCOUNT #	Busine	Business Øffice	eo		
Supervisor/ Coordinator/ Director					

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