L-1 Law Enforcement Vehicle Installation Technician April 2016

Suggested Reference Materials:
Law Enforcement Preparation Guide may be downloaded from the EVT web site at www.evtcc.org , Exams and Preparation, or go directly to page by typing in:
http://www.evtcc.org/pdf_files/LawEnforcementPrepGuide.pdf
Auto Electricity & Electronic Technology, by James Duffy. Goodheart-Wilcox 1-708-687-5000 or the book can be ordered from www.Amazon.com
OR
Heavy Duty ProClinic Manual by Interstate Battery call Jeff Barron at 469.221.4655 for your local interstate dealer ordering information

Internet Resources:
https://fleet.ford.com/truckbbas/topics/2012/modguide.html
https://www.fleet.chrysler.com/v7fleet/StaticFiles/files/Police_Maintenance_Overview_Book.pdf
http://gmfleet.com.wpsegment1.gm.com/content/dam/gmfleet/global/master/nscwebsite/en/Home/Shared_Resources/PDFs/2014-municipal-guide.pdf
http://www.gmfleet.com/content/dam/gmfleet/global/master/nscwebsite/en/Home/Shared_Resources/PDFs/2015-police-tahoe-9c14wd-specificationguide.pdf
https://sigmasafety.ca/2013/07/24/sae-demystified/

www.whelen.com www.3m.com www.powersource.net
www.pro-gard.com www.fedsig.com/support www.setina.com
www.wattco.net www.autoshop101.com

LEARNING OBJECTIVES FOR THE L-1 EXAM

1. Definition and Terms
   a. LED
   b. GPS
   c. SIR/SRS systems
   d. Wig-wags
   e. R.F. Interference
   f. Traffic Pre-emptive systems
   g. Ohms Law
   h. Lo-Jack Tracking System
   i. Strobes
   j. Anti-lock Brake System (ABS)
   k. Voltage drop
   l. LCD
   m. Wire Gauge
   n. Impedance
   o. DMM-Digital Multi-meter
   p. CCA
   q. Memory saver device
   r. Electrical terminology
   s. IOD
   t. HZ
   u. SAE

2. Installation
   a. Trunk
   b. Partition/Prisoner Compartment
   c. Push bumper
   d. Plastic seat/floor liner
   e. Fire extinguisher
   f. Gun cases
   g. Light bar
   h. Wig-wag headlights
   i. Strobes
   j. Traffic pre-emption systems
   k. Radio
   l. Computer
   m. Weapons release
   n. Video camera and recorder
   o. Chargers (flash light, radio)
   p. Battery timer
   q. Alarm systems
   r. Radar
   s. GPS
   t. LED
   u. Siren & Speakers
   v. Control module/switch
   w. Load management
   x. Antennas
   y. Power inverter
   z. Dash & Dash lights
   aa. Slide out tray
   bb. Occupant restraint system
   cc. Pillar mounted spotlight

3. Basic Electrical
   a. Parallel and series circuits
   b. Wiring
   c. Relays
   d. Switches
   e. Diagnostic equipment/tools and procedures
   f. Circuit protector
   g. Battery and charging systems
   h. A/C power invertor
   i. Diodes
   j. Capacitor

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4. Troubleshooting and Repair of Auxiliary Equipment
    a. Light bar
    b. Wig-wags
    c. LED.
    d. Pre-emptive systems
    e. Strobes
    f. Radio
    g. Computer
    h. Weapons release
    i. Video camera and recorder
    j. Chargers (flashlight, radio)
    k. Load Management
    l. Sirens and speakers
        (1) Mounting requirements
    m. Programming lights
    n. R.F. Interference
    o. Battery timer
    p. Spare tire
        (1) Tire-pressure monitoring