

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://www.fleet.ford.com/truckbbas/topics/2012/modGuide.html>

https://www.fcausfleet.com/assets/docs/dodge-charger_pursuit-pdf/2016_DG_Charger_Pursuit_.pdf

<http://www.gmfleet.com/resources/fleet-guide.html>

https://www.fedsig.com/resource-library?resource_category%255B%255D=260&product_category=All&title_selective=All&sort_by=title&sort_order=ASC

<https://sigmasafety.ca/2013/07/24/sae-demystified/>

www.powersource.net www.autoshop101.com

www.wattco.net

LEARNING OBJECTIVES FOR THE L-1 EXAM

1. Definition and Terms
 - a. Light Emitting Diode (LED)
 - b. Global Positioning System (GPS)
 - c. SIR/SRS-Restraint Systems
 - d. Wig-Wags
 - e. Radio Frequency Interference (RFI)
 - 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. Liquid Crystal Display (LCD)
 - m. Wire Gauge
 - n. Impedance
 - o. Digital Multi-meter (DMM)
 - p. Cold Cranking Amps(CCA)
 - q. Memory Saver Device
 - r. Ignition Off Draw (IOD)
 - s. Hertz (HZ)
 - t. Society of Automotive Engineers (SAE)
 - u. Convolute / Split Loop
 - v. 4 Wheel Anti Lock Brake (4WAL)
 - w. Tire Pressure Monitoring System (TPMS)
 - x. Anode
 - y. Fuse Element Cartridge
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
 - dd. K-9
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 inverter
 - i. Diodes
 - j. Capacitor
 - k. Ohm's Law

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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