### MECP Basic Installation Technician Job Description - 2017



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## Position Summary - MECP Basic Installation Technician

The MECP Basic level Installation Technician position involves carefully and correctly installing and configuring entry level aftermarket electronic products in a wide range of vehicles with at least some supervision, assisting experienced technicians on other, more complex installations, dealing directly with customers before, during, and after the installation in a courteous manner, as well as maintaining a clean and functional workshop environment.

## **Full Description - MECP Basic Installation Technician**

# MECP Basic Installation Technician Duties and Responsibilities

- Install direct replacements of in-dash audio/video source units retaining functionality of existing factory installed electronics and features with the use of wire harness and antenna adapters, dash kits, and other commercially available integration devices.
- Install speakers in factory supplied locations, either direct replacement or with adapters so fit and function are factory like.
- Install audio amplifiers with high current power wiring, proper circuit protection, signal input, and output wiring configurations.
- Install subwoofers into pre-fabricated enclosures. Properly wire single and dual voice coil subwoofers to the required resistance configuration for the amplifier(s).
- Install plug-and-play interface and adapter devices for adding various source components such as portable media players, DVD players, Satellite or HD Radio, etc.
- Install communication antennas for GPS, Satellite Radio, Telematic Systems and other devices without compromising the exterior fit and finish of the vehicle.

#### Knowledge, Skills, and Ability

- Knowledge of taking voltage (AC and DC), low current (<10a), resistance and continuity measurements on vehicle electrical systems and aftermarket mobile electronics equipment with a digital multimeter (DMM) and what the expected normal results should be.
- Knowledge and understanding of Ohm's Law and Watt's Law and basic math (addition, subtraction, multiplication, and division) to combine with electrical measurements taken using a DMM.
- A thorough knowledge of electronic components such as automotive SPDT relays, silicon diodes, resistors, and switches is required even if the application of them in aftermarket installations is not yet second nature to the candidate. The candidate should know what the electronic components do.
- Knowledge and understanding of series and parallel wiring practices and load calculations.
- Knowledge of inductors and capacitors with regard to general installation considerations.
- Knowledge of various commercially available installation accessories such as dash kits, wiring harnesses, antenna adapters, speaker adapters, line output converters, specialty interfaces for OEM premium audio system replacements, audio patch cables, high current power/ground wiring, circuit protection devices, etc.
- General knowledge of security system components and general functionality (including brain, siren, sensors, input/outputs, programmable features, etc.) even if not yet prepared to install without supervision. The individual should be aware enough to be shown the installation procedures to discover how the components work together in a completed installation.

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- General knowledge of remote starter system components (such as high current ignition wiring and transponder interface devices) and important installation considerations (such as hood pin/brake switch safety and common programmable features) even if not yet prepared to install without supervision. The individual should be aware enough to be shown the installation procedures to discover how the components work together in a completed installation.
- General knowledge of mobile video and rear seat entertainment system components and how they interconnect. Also a general knowledge of direct replacement headrest and overhead video screens install.
- General knowledge of Bluetooth applied to hands free communication devices for the vehicle.
- General knowledge of the Global Positioning System (GPS) operation and how common devices that receive a GPS signal operate in an in-vehicle application.
- Skill to use a personal computer, internet browser, and various technical support software resources.
- Skill to disassemble vehicle interiors without damaging the vehicle or the interior components or where to locate information if disassembly procedure is unknown or not evident.
- Ability to establish priorities and work with supervision, ask for clarification when necessary.
- Ability to diagnose and resolve common installation errors through routine troubleshooting before calling on technical support resources.

#### **Credentials and Experience**

- No professional experience is necessary although may be expected by some employers.
   This is intended to be an entry level position.
- Candidate should have personal experiences with his/her own installations.
- Candidate should possess a current MECP Basic Installation Technician certification.
- Training at an installation related school or program is a plus.
- Previous professional installation experience is a plus.

#### **Special Requirements**

- Willing to work weekends, holidays, and shift overtime as required by the employer.
- In most states or provinces, the individual will be required to supply his/her own basic installation tools.

#### Notes about MECP Basic Installation Technician Certification

- MECP Basic level certification is intended for individuals with minimal experience installing aftermarket 12v vehicle electronics.
- The exam contains five key topic areas and 150 total questions.
- Passing score on the MECP Basic level exam is 70% or greater in each of the five sections.
- The certification is valid for two (2) years.
- MECP certified technicians are granted a certificate with a CEA License number that can be validated at any time by contacting <u>mecp@mecp.com</u> as a free service to potential employers or clients.
- Prospective employers are encouraged to place any candidates with MECP Basic certification, but limited professional experience in a supervised work environment for at least 60 days to ensure the best employee development and retention.