



ELECTRONIC/ELECTRO-MECHANICAL ASSEMBLER

FC: MA145
PG: EEMA-II
FLSA:NON EXEMPT

PC: 151
BU: 01
Updated: June 2013

DEFINITION

Under general supervision, disassembles, repairs, modifies and fabricates electronic, electrical and electro-mechanical components, assemblies and harnesses; performs testing and inspection under prescribed routines; maintains records of work performed; performs related work as assigned.

CLASS CHARACTERISTICS

This is a sub-journey level class in component repair, performing the more standardized or limited repairs of a variety of components as diagnosed and specified by higher level crafts or supervisory personnel. Incumbents may work with a high level of independence on standardized and repetitive tasks, or under closer supervision on more specialized work or testing.

The distinction between the Electronic/Electro-Mechanical Assembler I and II, the II requires Surface Mount Technique (SMT) certification. The Electronic/Electro-Mechanical Assembler I will perform work using Surface Mount Techniques.

REPORTS TO

EXAMPLES OF DUTIES

Repairs or assembles printed circuit boards, installing or replacing soldered capacitors, resistors, diodes and similar parts.

Replates traces, electro-cleaning old traces and replacing with nickel and gold.

Rewires, reconfigures and repairs cradles, wiring harnesses and assemblies.

Installs or replaces switches, pins and plugs.

Removes and replaces damaged or obsolete mechanical parts and components such as housing, bearings and etc..

Operates drill press to press out and fit bearings and related parts; reads and follows written and oral instructions, procedures, manuals, prints, diagrams and schematics.

Discusses work to be performed or difficult repairs, with technicians, mechanics and supervisory personnel.

Secures required parts and materials per specification including grades of solder and gauges of wire; cleans, scrapes and prepares surfaces for work.

Selects per specification and operates appropriate tools and equipment including soldering irons, pliers, crimpers, grinders, sanders, presses, wrenches, sockets, vises and clamps.

Measures and cuts wires to length; cleans and removes flux and excess solder; applies sealants or protective coatings and lubricants as needed per usage of equipment.

Operates voltage and ohm meters, power supplies and related components to produce proper wave forms as measured by oscilloscope under direction of technicians.

Maintains logs and records of work performed, parts installed and serial numbers; may pick up and deliver parts using District vehicles.

QUALIFICATIONS

Knowledge of:

Basic principles and repair of electrical and electronic circuitry, parts and components.
Basic principles and repair of electro-mechanical and mechanical parts and components
Techniques of soldering, trace plating and surface preparation.
Use and care of hand and power tools common to the trade.
Basic testing and measuring tools and equipment.
Grades of solder and wire and their application.

Skill in:

Repairing and assembling printed circuit boards.
Electrical wiring assemblies and harnesses, and/or electro-mechanical parts and components.
Operating and taking care of hand and power tools common to the trade.
Operating basic testing and measurement equipment used in the trade.
Understanding and following oral and written instructions.
Reading and understanding blueprints, diagrams, procedures, manuals, schematics and parts lists.
Keeping records of work performed.

Other Requirements:

Must possess color vision to distinguish parts and wiring, physical strength to lift up to 30 pounds and the physical capability to perform the work required; some positions require a valid California driver's license and a satisfactory driving record to deliver parts.

MINIMUM QUALIFICATIONS

Equivalent to graduation from high school and two years of experience in electronic or electro-mechanical assembly. Surface Mount Technique (SMT) certification required.
Appropriate trade or technical school course work is desirable.