



## **JOB DESCRIPTION**

Salary Grade: 6 CUPE 1328
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Job Title:

A.V. Technician – C.E.C.

### **PRIMARY FUNCTION**

The primary purpose of this job is the maintenance and repair to Audio Visual Equipment in use in the schools and through the Board using high level test equipment and schematics. Responds to queries on A.V. equipment from teachers, students and other Board personnel.

### **MAIN RESPONSIBILITIES**

1. Performs maintenance and repair to a variety of Audio Visual equipment used in schools and at the C.E.C., by performing such tasks as:
  - repairing such equipment as: Camcorders, V.C.Rs (3/4, 1/2 inch and Super VHS), T.V. and VCR Combination, Mixers and Mixer Amplifiers, Cassette Records, Compact Disc Players, Radios, Video Cameras, Effects Generators, Speaker Systems, Vector Scopes, Laser Discs, T.V. Distribution Systems, Test Equipment etc.
  - utilizing different types of test equipment and tools such as: oscilloscope, voltage meter, analog meter, power supply, audio generator, frequency counter, gauges to check tape height and tension, dental probes, hooks, cutters, pliers, tweezers, heat and solder gun, solder sucker, pliers, screw drivers, magnifying glass, spot light etc.
  - picking up the equipment and cleaning areas where necessary (eg: heads, rollers) with air hose, vacuum, cotton swabs and alcohol
  - reading repair tag to identify problem and contacting the repair requester for clarification and further information
  - operating the equipment to view the malfunction, opening up the machine and trying to spot problem by sight

- accessing service manuals and schematic diagrams to gain additional information on the equipment
- utilizing test equipment i.e. oscilloscope to view the signal (manual indicates what signal should look like) in case of bad signal check the sources; checking voltages (voltage meter) on different points on the circuit board (schematic in manual indicates proper voltages for each point); utilizing Audio Generator to check waves on screen and thereby pin point problems with audio equipment etc.
- troubleshooting to component level as opposed to replacing entire circuit boards/modules etc.
- obtaining a fully functioning piece of equipment (in cases where no service manual is available) to take note of the correct signals and voltages
- utilizing a heat gun and soldering iron and sucker to remove defective parts (eg: chips, transistors, diodes etc.) or repairing them.

2. Modifies equipment to suit school needs by:

- adjusting equipment for hearing impaired students and staff eg: install jack in T.V. to enable the use of FM system
- modifying audio equipment, as required
- manufacturing 'make shift' parts eg: pins, glue, pieces of metal, solder etc., for older equipment if replacement parts are not available.

3. Functions as a member of an evaluation team for the purpose of selecting the best tender proposal by:

- reviewing tender specifications and recommending changes as required
- reviewing equipment to ensure that it meets tender specifications eg: 3 speed, tuner, cable ready etc.
- opening up the equipment to evaluate construction eg: too much plastic and in the wrong areas would mean frequent damage etc.

4. Maintains written records by:

- listing all repairs on Repair Tags, signing it and keeping copy to be filed
- recording in Video Service Ledger repairs on all equipment listing complaint, work done, school or department, repair tag number and the date
- stamp sticker on equipment with date of work completion.

5. Answering telephone queries from schools and other Departments as to the status of equipment in for repairs or seeking assistance on certain difficulties they are experiencing with equipment, eg: how to do a slide show, tape in VCR and unit not functioning etc.

6. Assists other Audio Visual staff eg: assisting with editing of film; assisting the A.V. Technician, Repair with technical problems etc., and maintains a current up-to-date

knowledge of all aspects of the technical repair field by taking courses, reading materials etc.

7. Assists with the maintenance of repair supplies by sourcing generic manufacturers and thereby avoiding brand name costs etc.
8. Performs other related duties as assigned or required.

### **SKILL**

- 3 years Electronic Technology Diploma or equivalent.
- 1 – 2 years related experience

### **EFFORT**

- The complexity in the job is in trying to find the source of the trouble with broken equipment and utilizing a variety of testing machines effecting repairs as quickly as possible. Complexity in employing the know-how of the operation and function of the equipment and its various components to facilitate repair. Complexity in working with increasingly more complex equipment and more 'minuscule' circuit board components.
- Physical effort required in the daily handling of Audio Visual Equipment (approximately 2 – 30 lbs.). Job requires concentration when tracing Board Circuits and fine soldering.

### **RESPONSIBILITY**

- Independence of action in selecting method/route of identifying and isolating problem in the equipment
- Improper repairs to equipment could result in damage to machine, inconvenience to user and financial loss to the board
- Contact with section staff in performance of duties, other contacts with teachers, administrators, and parts suppliers.

### **WORKING CONDITIONS**

- Exposure to fumes from various repair and cleaning materials as solder, glue, contact cleaners and lubricants
- Frustration resulting from attempted repairs to equipment by unqualified Board personnel. Required to use safety equipment such as safety glasses.
- Limited working place.