



## **JOB DESCRIPTION**

Salary Grade: 6 CUPE 1328
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**Job Title:**

**A.V. Technician – Audio Visual Repairs**

### **PRIMARY FUNCTION**

The primary function of this job is the maintenance and repair to audio visual equipment in use with the TCDSB system using high level test equipment and schematics. Responds to queries on audio visual from teachers, students and other Board personnel.

### **MAIN RESPONSIBILITIES**

1. Performs maintenance and repair (mechanical and electrical) to a variety of audio visual equipment used in schools and at the C.E.C. by performing tasks such as:
  - repairing such equipment as camcorders, V.C.R.s, T.V, mixers and mixer amplifiers, cassette recorders, compact disc players, radios, video cameras, effects generators, speaker systems, vector scopes, T.V. distribution systems, test equipment, laminating machines, overhead projectors etc.
  - utilizing different types of tools and test equipment such as hex key set, wrenches, oscilloscope (to view the signal), voltage meter, analog meter, power supply, audio generator (to check waves on screen and thereby pin point problems with audio equipment), frequency counter, gauges to check tape height and tension, dental probes, hooks, cutters, tweezers, heat and solder gun, solder sucker, pliers, screw drivers, magnifying glass, spot light etc.
  - accessing service manuals and schematic diagrams to gain additional information on the equipment (e.g. part names and numbers etc)
  - operating the equipment to view the malfunction, opening up the machine and to spot problem by sight, disassembling item in sequence and replacing part, rebuilding part or substituting with “makeshift” part to remedy problem

- cleaning, unjamming, lubricating and testing where necessary with air hose, vacuum, cotton swabs and alcohol
  - trouble shooting to component level as opposed 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 heat gun and soldering iron and sucker to remove defective parts (e.g. chips, transistors, diodes etc.) or repairing them
  - completing repair tag with date of repair and nature of repair, keeping a copy and return tag with repaired item
  - communicating with the request or for clarification/further information and responding to telephone enquiries on status of repair jobs
2. Modifies equipment to suit school needs by:
- adjusting equipment for hearing impaired students and staff e.g. install jack in T.V. to enable the use of FM system
  - modifying audio equipment, as required
  - manufacturing “make-shift” parts e.g.: pins, glue, pieces of metal, solder etc. for older equipment if replacement parts are 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 e.g. 3 speed, tuner, cable ready etc.
  - opening up the equipment to evaluate construction e.g. 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
  - stamping 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.
6. Assists other Audio Visual staff e.g. assisting with the editing of film; technical problems 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 diploma in electronic technology or equivalent
- 1 – 2 years related experience

### **EFFORT**

- The complexity of 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. Creativity required when modifying or adding a specific operation to a particular piece of equipment when required.
- Physical exertion required when lifting equipment (approximately 2 – 30 lbs). Job requires visual concentration when inspecting repairs and assembling printed/tracing circuit boards. Finger dexterity required when soldering wiring and making repairs. Required to stand for long periods of time while working on large items (65% - 90%).

### **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 the machines, injury to the technician, inconvenience user and financial loss to the Board
- Contacts with department staff in performance of duties. Contacts with other personnel (e.g. technical support staff; principals; teachers etc.) in the Board and schools, suppliers/providers.

### **WORKING CONDITIONS**

- Limited work space. Exposure to fumes from various repair and cleaning materials as solder, glue, contact cleaner and lubricant.
- Stress from restricted time lines. Stress from frustration as a result explaining a function or equipment use over the phone with users who are unfamiliar with it.