**Job Class Profile:** Heavy Equipment Technician (Lead Hand)

**Pay Level:** CG-30  **Point Band:** 676-689

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**JOB SUMMARY**

The Heavy Equipment Technician (Lead Hand) is responsible for the overall mechanical safety of a fleet of buses and ensures that vehicles are maintained and repaired as per manufacturer’s procedures, specifications, government legislation and school board policy and performs skilled journeyperson level work associated with the identification, repair and maintenance of buses.

**Key and Periodic Activities:**

— Performs inspections of vehicles (Government Safety Inspections, Brake Inspections) to ensure compliance with all applicable Acts, regulations and standards. Issues inspection certificates.
— Performs preventative maintenance and servicing on vehicles.
— Performs general vehicle repairs and maintenance. Performs on road service calls.
— Acts as a lead hand and performs activities such as opening/closing building; ensuring work area is maintained in a clean and safe manner; organizing and planning work tasks for each day; monitoring work performance to ensure work is completed on time and in a safe manner; assisting Busing Foreman with the daily operation of buses; providing advice and guidance to bus drivers on problems and issues that may arise; researching information on new vehicles; delivering buses to various locations in the district; completing purchase orders and work orders; liaising with a variety of officials from Dept of Municipal Affairs, Highway Enforcement Officers, Manager of Student Transportation and mechanics.
— Performs building maintenance. Performs snow clearing duties, when required.
— Travels around district, when required.

**SKILL**

**Knowledge**

**General and Specific Knowledge:**
— Highway Traffic Act
— Safe Work Procedures
— Current technological trends in the service industry
— CSA Standards
— Motor Vehicle Inspection Regulations
— Policies and Procedures
Formal Education and/or Certification(s):

Years of Experience:
— Minimum: 4 to 5 years

Competencies:
— Ability to operate a computer to access information on vehicle repair and maintenance
— Ability to use diagnostic software to diagnose and troubleshoot vehicle problems
— Ability to proofread, edit and format work orders and inspection documents
— Ability to follow basic instructions and work processes
— Ability to apply established techniques to the completion of activities
— Ability to develop new solutions to deal with new problems
— Ability to provide advice to others on how to solve a problem
— Ability to write straightforward text such as work orders, inspection forms, etc.
— Ability to repair or calibrate machinery
— Ability to plan, organize, direct and control work activities
— Ability to operate school buses and heavy equipment

Interpersonal Skills
— A range of interpersonal skills used include listening to information from other people and asking questions to get information regarding proper repair procedures; providing routine information and direction to employees; gaining the cooperation of others to complete work and solve problems and providing expert advice or counselling to employees in the performance of daily tasks.
— The most significant contacts are with mechanics to offer advice and/or direction in the maintenance and repair of newer and more complex school buses; Manager of Student Transportation to deal with daily issues such as budgeting, operation and maintenance of school board fleet; and Highway Enforcement Officers as it relates to compliance with Motor Vehicle Inspections and Safety Regulations.

EFFORT

Physical Effort
— The demands of the job regularly results in considerable fatigue, requiring periods of rest.
— Lifting or moving tires, rims, brake drums, etc which weigh over 50 lbs is a constant requirement.
— Stands for extended periods of time to complete tasks. Standing on ladders or uneven objects such as drag links for several hours while maintaining physical balance is also required. Sitting while completing brake repairs, walking and climbing are also a regular requirement. Constantly working in awkward or cramped positions or body movements when repairing such things as heater motors, seat covers and performing electrical work under dashes and lying
Manual or physical activities include constant fine finger or precision work; using hand tools that require accurate control and steadiness; using gross motor skills; using machinery or equipment that requires very controlled movement; operating heavy equipment; and using equipment that requires rapid physical movement and reflexes.

### Concentration

- **Visual** concentration is required when diagnosing and repairing vehicle systems; ensuring the work area is clean and safe; organizing the flow of buses in and out of the garage and when planning the weekly work schedule.
- **Auditory** concentration requires listening to specific noises such as bearing, brake, driveline and engine noises to diagnose specific problems with a school bus.
- **Other sensory demands** include smell to diagnose engine problems such as coolant, fuel, exhaust, drive line leaks and electrical components burning.
- Alertness and concentration are required when performing repetitive tasks such as brake inspections and higher than levels of attentiveness or alertness for the health and safety of others is required when welding and cutting to ensure that no flammable materials are in the area; when hoisting vehicles to ensure that jack stands are used to prevent the vehicle from falling; and when using a hydraulic press to ensure a cage is in place to prevent objects from flying, etc.
- **Time pressures and deadlines** are experienced with the requirement to complete bi-annual government safety inspections within a specific timeframe and to complete repair and maintenance work on school buses as quickly as possible to avoid any disruptions to the busing service. **Interruptions and lack of control over work pace** are experienced when vehicles break down and there are no spare parts or additional buses available.
- **Exact results and precision** are required when performing brake repairs, inspections and testing to ensure that school buses meet Provincial and Manufacturer’s standards.

### Complexity

- Work involves overseeing the repair and maintenance of a school bus fleet which involves performing a series of tasks and activities that are different but allow the use of similar skills and knowledge.
- A typical problem or challenge is diagnosing a vehicle problem and determining the most appropriate service required to repair the problem. Troubleshooting and diagnosis requiring analysis and development of new solutions is increasing with the introduction of new makes and models of buses to the fleet and advancing computer technology.
- Reference material to assist in addressing problems, challenges and issues include service manuals, manufacturer support, Highway Traffic Act, various standards, management, Bussing Foreman, other mechanics and lead hands.

### RESPONSIBILITY

**Accountability and Decision-Making**

- Works in a structured environment and tasks and activities are highly monitored or controlled.
- Have authority to determine if a school bus is mechanically sound and issue an inspection.
Certificate as required under the Highway Traffic Act; to place a school bus with defects out of service; and to call a tow truck, if required. Supervisory approval would be required for large financial decisions such as high cost repairs of a bus.

- Discretion and independence of action is exercised when disposing of hazardous materials and when determining if a part should be repaired or replaced even though it may meet manufacturer guidelines.

**Impact**

- Work results can have a positive impact within the immediate work area, department, organization and on the general public and students as well as on equipment, finances, health and safety and corporate image when school buses are properly repaired and maintained.

- Mistakes or errors can result in increased financial costs related to repairs or replacement of parts; accidents or mechanical problems with buses if not repaired and maintained properly; delays in student transportation and health and safety issues for students and the general public as well as a negative impact on the corporate image.

- Errors are typically identified and resolved within hours of problem identification. Quality assurance checks are performed to ensure the bus is mechanically fit and safe to return to service.

**Development and Leadership of Others**

- Acts as a lead hand and provides direction to technicians and apprenticeship students by providing on-the-job training, advice/guidance, direction and feedback to employees/manager.

**WORKING CONDITIONS**

**Environmental Working Conditions**

- There is a requirement to wear safety equipment such as safety boots, glasses, coveralls, gloves, respirators, and rubber clothing. Special precautions including proper ventilating systems and the use of jack stands are also required.

- The likelihood of injury or illness resulting from hazards in the job is significant. Total disability is limited.

- Works in a garage environment and are exposed to unusual/distracting noise from air tools, running engines, compressors, power tools, etc; dust from grinding/cutting brakes; road dirt; garbage in buses; fumes from engine exhaust, paint, grinding, fuel, chemicals, etc; limited ventilation and lighting; vibration from air and power tools and engines; hazardous chemicals such as paints, solvents, fuels, coolant, etc; toxic substances such as paint thinners, penetrating fluids, etc; odours from exhaust and chemicals; dangerous heights when working on roof of bus and depth when working in a pit; wet or slippery floors; electrical shocks when using power tools, welding machines, etc; awkward or confining workspaces when performing various types of repair work; fire when welding and cutting; physical danger when working under hoisted vehicles; sharp objects such as knives, saws, grinders, drills, etc; adverse weather when working outside and travel to perform repairs on the road.