Government of
Northwest Territories

IDENTIFICATION

Department	Position Title	
Infrastructure	Heavy Equipment Mechanic	
Position Number	**Community**	**Division/Region(s)**
33-7752	Hay River	Highways/South Slave

PURPOSE OF THE POSITION

The Heavy Equipment Mechanic provides support to ensure that all heavy and light, mobile and fixed, equipment that is used for maintaining the department's infrastructure is maintained, repaired, or reconditioned in a timely, efficient, dependable and orderly manner, in accordance with manufacturer's specifications and departmental policy and procedures, Highway Standards, Airport Standards and all recommended Industry Practices and General Safety Regulations.

SCOPE

Reporting to the Supervisor, Maintenance Facility-South Slave the incumbent is responsible for providing maintenance and repair services for the department's mobile equipment fleet and providing warehouse services to the department's highway maintenance camps and airports.

Utilizing the Computerized Maintenance/Inventory Management system (Webworks) the Heavy Equipment Mechanic implements a planned service, maintenance and repair program for mobile equipment and stationary power units at the Hay River Highway Maintenance facility.

RESPONSIBILITIES

1. **Entering work orders for maintenance and completed repair activities by:**
    - Ensuring completeness, accuracy and compliance to the established (Webworks) data entry procedures, standards, guidelines and policies.
    - Ensuring work orders created in (Webworks) are completed on a timely and efficient basis to allow for on-going evaluation of equipment condition.
    - Ensuring the availability of information required through support of (Webworks) for cost effective fleet management and compliance of required data entry of maintenance activities.

2. **Reconditioning components that have a shorter lifespan than the equipment frames or bodies, to restore the components to original specified capability by:**
    - Analyzing and inspecting failure to determine cause and extent of repairs as necessary;
    - Dismantling components such as engines, transmissions, differentials, electrical equipment, hydraulic systems, air systems, etc.;
    - Measuring surfaces and refurbishing by polishing;
    - Identifying parts within a component;
    - Reassembling components and adjusting to original specifications.
3. **Repairing equipment that has failed mechanically to restore it to its original specified capability, by:**
    - Analyzing failure to determine cause and extent of repairs needed;
    - Dismantling equipment;
    - Inspecting and measuring for worn and failed components;
    - Identifying parts required and preparing parts orders;
    - Replacing components;
    - Reassembling equipment and adjusting to original OEM specifications;
    - Cleaning and painting components or whole equipment.
4. **Servicing equipment to reduce incidence of early or untimely failure by:**
    - Conducting preventative maintenance servicing using the preventative maintenance program;
    - Adjusting components in accordance with service manuals;
    - Cleaning components;
    - Checking or replacing fluid and filters.
5. **Performing other duties such as:**
    - Welding, brazing and soldering;
    - Completing service reports and time cards;
    - Maintaining shop equipment and tools;
    - Assisting operators by relating required maintenance procedures;
    - Keeping work area clean and free of safety hazards;
    - Participates in the Departmental Occupational Health and Safety Program.
6. **Travelling to field maintenance camps on the NWT highway system to provide service and repairs to mobile fleet as required.**
7. **Recondition, rebuild, and repair equipment with a dollar value of $100.00 to $60,000.00 in parts and materials per unit.**
    - Control the extent and nature of repairs within the original estimates. Where during the course of the work, the mechanic finds cost estimates will increase they will bring this to the attention of the Supervisor, Maintenance Facility for review.

8. **Preventative maintenance checks; A, B, & C with a dollar value of $100.00 to $2,000.00 dependent of level of PM and type of equipment.**
    - Determine the timing and requirement for level of PM for the particular unit and proceed at own discretion.
    - Prepare condition reports of a particular unit that can lead to repair in the amounts shown above or recommend for surplus and replacement of the unit.
    - Complete the condition reports based on the observations from inspection, experience and knowledge and make recommendations for repair or replacement to the Supervisor, Maintenance Facility.
9. **Prepare condition reports of a particular unit that can lead to repair in the amounts shown above or recommendation for surplus and replacement of the unit. Replacement costs of mobile equipment range from $1,000.00 to $500,000.00.**
    - Complete the condition reports based on the observations from inspection, experience and knowledge and make recommendations for repair or replacement to the Supervisor, Maintenance Facility.

WORKING CONDITIONS

Physical Demands

All of the duties require some level of physical effort. Most include strenuous physical effort for the full duration of the workday. The effort would include heavy lifting, stretching, reaching, operation of tools and other heavy equipment. Both upper and lower body physical strength and agility are required.

Environmental Conditions

Although most of the duties are conducted within a heated and ventilated workshop, there will be some requirement to conduct these duties in the field, out of doors, in extreme summer/winter conditions and in remote locations. All duties will include exposure to fumes, fuels, oils, lubricants, other solvents, and somewhat dangerous or hazardous working conditions.

Sensory Demands

All five senses are deployed in all duties to investigate and determine the nature of problems in equipment servicing and repair. Attention of all senses, in particular hearing, sight, smell, must be paid during the course of the work, to ensure the safety of the HEM and co-workers.

Mental Demands

Creativity, innovation and well thought out approaches to heavy equipment servicing and repair are required in all duties to ensure economic and efficient maintenance of the equipment.

KNOWLEDGE, SKILLS AND ABILITIES

- Knowledge of standard heavy equipment repair methods, tools, equipment and techniques. Includes use of diagnostic equipment
- Knowledge of all equipment, from heavy to light, mobile equipment to stationary units such as generator sets.
- Ability to understand apprenticeship theory, training and interpret service, repair and parts manuals.
- Ability to diagnose and repair light-trucks, medium trucks, large engines (Gasoline and Diesel), generators, water pumps, gas and gas-power tools etc.
- Ability to understand apprenticeship theory, training, and interpret service and parts manuals
- Ability to sign off equipment, train apprentice mechanics and carry out duties of the job efficiently
- Ability to locate and diagnose mechanical problems
- Ability to interpret diagrams and specifications
- Ability to operate equipment for test purposes.
- Ability to complete written estimates, shop repair orders, condition reports and other reports associated with equipment service and repair.
- Effective communication with supervisor and clients to perform the required work.

Typically, the above qualifications would be attained by:

- Minimum Grade 12 education
- Journeyman Heavy Equipment Mechanic Certification with Interprovincial Red Seal.
- Valid Class 3 driver's License with Air brake endorsement

ADDITIONAL REQUIREMENTS

Position Security

- ☑ No criminal records check required
- ❑ Position of Trust – criminal records check required
- ❑ Highly sensitive position – requires verification of identity and a criminal records check

French language (check one if applies)

- ❑ French required (must identify required level below)
  Level required for this Designated Position is:
  ORAL EXPRESSION AND COMPREHENSION
  Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐
  READING COMPREHENSION:
  Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐
  WRITING SKILLS:
  Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐
- ❑ French preferred

Aboriginal language: Choose a language

❑ Required ❑ Preferred