

# Mechanical Technician – Subsidiary 4

## APS Benchmark Listings

---

Sub.No.	Bench- mark	Department	Working Title Job Title	Know-How				Creativity/ Problem Solving		Responsibility		Total Points
				Prof./ Cont.	Comp. Div.	H.R. Skills	Points	%	Points	Profile	Points	
<b>Mechanical Technician (Point Range 192 - 227)</b>												
004	<a href="#">044AM15</a>	Forestry and Parks	Mechanical Technician	D	I	1	132	25	33	R1	38	203

Last Reviewed October 2023

## Subsidiary 4 Benchmark Evaluation - 044AM15

### Identification Section

<b>Working Title:</b>	Mechanical Technician
<b>Department:</b>	Forestry and Parks
<b>Division, Branch/Unit:</b>	Forestry, Wildfire Management, Wildfire Telecoms & Facilities
<b>Reports To:</b>	Mechanical Supervisor
<b>Levels to D.M.:</b>	5
<b>Job Description:</b>	<a href="#">044AM15</a>
<b>Minimum Recruitment Standards:</b>	See the <a href="#">Minimum Recruitment Standards</a> for Mechanical Technican
<b>Pay Grade:</b>	<a href="#">044AM</a> – Mechanical Technician

### Comments on Role

The Mechanical Technician performs maintenance, diagnostics and repairs to mechanical equipment used by the Wildfire Management Branch (WMB). This includes various pumps, chainsaws, brush saws and generators and additional equipment such as lawn equipment, all-terrain vehicles, and other mechanical equipment. All work is performed to WMB standards and manufacturer specifications to ensure reliable fire suppression equipment is readily available for wildfire management programs.

### Evaluation

Knowledge	Creativity / Problem Solving	Responsibility	Total Job Points
D I 1 132	25% 33	R1 38	203

### Comments on Evaluation

- **Knowledge:**

- **Professional/Content Knowledge:**

- The position is required to have a journeyperson level trade certificate in a related field. The journeyperson trade certificate is required to certify repairs. Working knowledge of internal combustion engines including 2-stroke and 4-stroke principals of operation, diesel engines, carburetor, and fuel injection systems, point and electronic ignition systems is required to diagnose, repair, and test the fire equipment. The position also requires applied knowledge of hand and air operated tools, diagnostic skills and proper repair procedures including engine rebuilding skills.

**Complexity and Diversity:**

The position must understand how the wildfire branch uses equipment for firefighting so the position can repair and modify the equipment that comes into the warehouse and/or in the field.

**Human Relations Skills:**

The rating of "1" is supported as the purpose of communication is to exchange information about the uses and repairs to equipment. A "2" rating is not supported because the position is not supervising or influencing the behavior of others.

**▪ Creativity/Problem Solving:**

The position organizes its day-to-day tasks and is provided with little information on why equipment is not operational. Solutions for repairing equipment are known, answers can be found in body of knowledge, manuals, and assistance from co-workers and/or supervisor, supporting the 25%. The position works on diverse equipment ranging from chainsaws to generators and is often required to fabricate modifications. A rating of "29%" is not supported because thinking is not guided by substantially diversified guidelines, past practices, but fewer precedents.

**▪ Responsibility:**

The "R1" rating reflects the focus of the job is service delivery through the repair and maintenance of wildfire management equipment.

**Last Reviewed: October 2023**

## Subsidiary 4 Benchmark

### Job Description – 044AM15

#### Purpose

*(Brief summary of the job, covering the main responsibilities, the framework within which the job has to operate and the main contribution to the organization.)*

The Mechanical Technician performs maintenance, diagnostics and repairs to mechanical equipment used by the Wildfire Management Branch. This includes various pumps, chainsaws, brush saws and generators. Additional equipment used by the Department such as lawn equipment, all-terrain vehicles and other mechanical equipment may also be serviced. All work is performed to WMB standards and manufacturer specifications so that reliable fire suppression equipment is readily available for wildfire management programs.

#### Responsibilities and Activities

*(The purpose of the job can be broken down in different responsibilities and end results. Each end result shows what the job is accountable for, within what framework and what the added value is. Normally a job has 4-8 core end results. For each end result, approximately 3 major activities should be described.)*

##### Perform in-house maintenance, repairs and certification on a variety of mechanical equipment used by the Wildfire Management Branch (WMB):

- Diagnose defective equipment and make repairs as required to ensure the equipment is serviceable for deployment on wildfires.
- Provide field support for wildfire operations including the manning of mobile repair trailers and equipment service at off-site facilities during large fires.
- Perform inspection and testing of externally serviced equipment to ensure quality compliance.
- Assist other WMB areas as requested.

##### Perform preventative maintenance on mechanical equipment at Ministry operated facilities that are key to Wildfire operations:

- Assist with the creation of thorough maintenance schedules for all Branch owned mechanical equipment.
- Perform scheduled maintenance and testing of off-site equipment.
- Assist Facilities staff with the installation and upgrades to mechanical equipment at Ministry owned sites.

##### Maintain workspace tools and equipment:

- Assist with the completion of work site equipment inspections, cleaning and maintenance.
- Assist with inventory control, including order lists, stocking and audits of part inventories.
- Provide innovation advice to optimize repair services of the WSC Mechanical Section.

##### Research equipment and repair part options for the efficient continuance of repair services:

- Identify equipment part sources and external repair service providers.
- Participate with equipment research projects relative to the interests of the Wildfire Management Branch.
- Test and evaluate new equipment and components for future use by the WMB.
- Provide technical advice to equipment users and other stakeholders as requested.

##### Complete administrative responsibilities:

- Complete work orders to record the labor, parts and type of repairs done on equipment certified for use.

- Daily complete inspection records, time exceptions and expense account information as necessary.
- Use the Internet for identification of replacement parts and equipment service documentation.
- Participate in both on-line and in person training as required. Complete annual Performance Agreements, ongoing performance reviews and other GOA correspondence.
- Adhere to all GOA and WSC policies.

## Scope

*(List specific information that illustrates what internal or external areas the job impacts, and the diversity, complexity, and creativity of the job.)*

Decisions made by the Mechanical Technician effects the reliability and longevity of serviced equipment. Current and future costs of repairs are also influenced by repair decisions. Workloads are affected by repair quality because proper repairs minimize premature equipment failures.

### Typical problems solved:

- Diagnosing out of service equipment without problem history.
- Identifying substandard equipment performance and making the necessary repairs.
- Maintaining repair volumes and turnaround times throughout the year.

### Types of guidance available for problem solving:

Work experience and shared knowledge from other team members is advantageous for expediting proper repairs. Service manuals ensure thorough and standardized equipment repairs.

## Knowledge, Skills and Abilities

*(Provide a list of the most important knowledge factors, skills and abilities including knowledge about practical procedures, specialized techniques, etc.; analytical and conceptual skills and abilities; and skills needed for direct interaction with others not only diplomas and degrees. Specific training if it is an occupational certification/registration required for the job.)*

### Qualifications:

- Must have Journeyman level trade certificate as an Outdoor Power Equipment Technician, Automotive Service Technician or Heavy Equipment Technician with verifiable previous work-related experience.
- Current First Aid & CPR, and Defensive Driving is necessary along with knowledge of OH&S, MSDS and WHMIS regulations.

### Knowledge:

- Good working knowledge of internal combustion engines including 2-stroke and 4-stroke principals of operation, diesel engines, carburetor and fuel injection systems, point and electronic ignition systems is necessary. The ability to read and comprehend service and repair manuals is required.
- Applied knowledge of hand and air operated tools is needed. Diagnostic skills and proper repair procedures including engine rebuilding skills are required.
- Knowledge of the variety of specialized equipment used in wildfire management is preferred.

### Skills and Abilities:

- Good computer skills are required to complete daily correspondence, reporting and equipment research activities.
- Training and experience in welding (MIG & TIG) and machining is also advantageous.

- Position requires good written and verbal English language skills.
- Must be physically fit, without mobility limitations and capable of lifting up to 60 pounds.

## Contacts

*(The main contacts of this position and the purpose of those contacts.)*

- Mechanical Supervisor - for work priorities, daily operations and guidance.
- Co-workers - exchanging information and assistance when necessary to complete job functions.
- Equipment users - to inform those staff on the proper use and maintenance of the equipment and to gain information for diagnosing equipment problems.
- Warehouse staff - to assist with various supply, service and shipping/receiving needs.
- Telecommunication and Facilities staff - to assist with off-site equipment maintenance.
- Equipment manufacturers/suppliers - for equipment information, service procedures and specifications.

## Supervision Exercised

No supervision.