



## AOT Temporary Job Specifications

### Maintenance and Skilled Trades

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## **Transportation Intern Maintenance Worker**

Job Code: 82000T

Pay Grade: 12

Occupational Category: Maintenance and Skilled Trades

Effective Date: 02/04/2018

### **Class Definition:**

Entry and training-level maintenance work for the Agency of Transportation (AOT), for persons in high school or vocational education program. Duties and work environment are controlled for compliance with youth labor laws. The Transportation Intern Maintenance Worker (TIMW) performs a number of laboring and semi-skilled tasks while being closely supervised by higher-level maintenance workers. As the TIMW completes training and gains skills, greater work independence is expected. The TIMW gains basic skills and knowledge in the use of tools and through required on-the-job training, advances that knowledge and applies these developed skills to road maintenance and repair work.

### **Examples of Work:**

Training-level maintenance work for the Agency of Transportation. On-the-job training is provided as employees work under close supervision. The TIMW assists with tasks such as repair and installation of guard guardrails, sealing cracks, patching potholes, bridge washing, sweeping, flagging traffic, mowing, repairing road shoulders, cleaning the roadside, cutting trees and brush, cleaning drainage systems, assisting with snow and ice control, repair and maintenance of trucks and equipment, and other related duties as required. As the TIMW develops skills, supervision is reduced. Incumbents in this job class will not be expected, nor allowed, to perform duties prohibit by State and Federal laws.

### **Environmental Factors:**

Duties require working in extreme outdoor weather conditions. Employees may be required to report to work outside of their work schedule and if so, must be reachable by phone. Dangers are present when work is performed near heavy equipment, hazardous materials, and roadside litter. Employees may be exposed to blood and airborne pathogens. Hazards are always present when working on the roads as traffic passes. An incumbent must be able to use tools and equipment commonly used in routine maintenance work as well as lift materials commonly used in routine maintenance work. Overtime work may be required, particularly during the winter months.

### **Knowledge, Skills and Abilities:**

Awareness of the methods, practices, tools, and materials used in road maintenance and repair work.

Ability to follow complex verbal and written instructions.

Ability to operate computers and computerized equipment.

Ability to apply skills learned from on-the-job and classroom training to road maintenance and repair work.

Ability to use basic math.

### **Minimum Qualifications:**

Must be actively pursuing a high school diploma or equivalent

**Special Requirements:** An incumbent must live within reasonable proximity of assigned workstation.

## **AOT Maintenance Worker Trainee**

Job Code: 81150T

Pay Grade: 12

Occupational Category: Maintenance and Skilled Trades

Effective Date: 03/06/2016

### **Class Definition:**

Maintenance work at an entry level for the Agency of Transportation. The intent of this position is to provide "On the Job Training" to persons newly entering the workforce or the highway maintenance industry. An Incumbent performs a number of laboring and semi-skilled tasks. An employee in this class is supervised by higher-level maintenance workers. As an incumbent completes training and gains skills, greater work independence is expected. An AOT Maintenance Worker Trainee will gain skill and knowledge of the use of basic hand and power tools.

### **Examples of Work:**

Employees are provided on-the-job training and work under close supervision. An employee assists with tasks such as repair and installation of guardrails bridge washing; sweeping; flagging traffic, mowing, repairing road shoulders, cleaning the roadsides, cutting trees and brush, cleaning drains, and assist with operator maintenance and inspections. As an employee develops skills, supervision is reduced.

### **Environmental Factors:**

Duties require the ability to work in extreme outdoor weather conditions. An employee must be available for considerable overtime during heavy snowfall or other emergencies. All employees may be required to report to work outside of their work schedule and must be reachable by phone. Dangers are present when work is performed near heavy equipment, hazardous materials, and roadside litter. May be exposed to blood or airborne pathogens. An incumbent must be able to use tools and lift materials commonly used in routine maintenance work. Participation in a random drug and alcohol-testing program is required before driving vehicles or operating equipment. Overtime work is required, particularly during the winter months, and is considered a condition of employment.

### **Knowledge, Skills and Abilities:**

Awareness of the methods, practices, tools, and materials used in road maintenance and repair work.

Ability to use basic math.

Ability to read and write.

Ability to understand and carry out oral and written instructions.

### **Minimum Qualifications:**

Completion of the eighth grade

**NOTE:** Preference will be given to candidates with a high school diploma or equivalent.

**NOTE:** Current, valid driver's license required.

## **Transportation Aide I**

Job Code: 14800T

Pay Grade: 12

Occupational Category: Science, Technology, Engineering and Mathematics

### **Class Definition:**

This is a pre-entry level class to the Vermont Agency of Transportation's Technician series. Work assignments are routine and involve repetitive activities in construction inspection, soils and aggregate testing, field surveys, video log activities, crash data entry, updating of Functional Class maps, conducting turning movement counts, pavement marking, sign installation and mapping. Work is performed under the close supervision of a higher-level technician, engineer, or administrative person. There are no supervisory responsibilities.

### **Examples of Work:**

The following activities are indicative of the levels of difficulty and responsibilities involved: Inspects topsoil, seeding and mulching operations. Performs basic level rod duties on field surveys. Assists with subsurface investigations. Operate and control the paint guns on the marking truck and install and remove signposts and signs. Conduct turning movement counts at roadway intersections. Prepare simple drawings, displays and graphics. Perform chemical analysis of cements, pozzolans and admixtures. Compiles maps and route logs to be used in the field by the Video log Technician. Drive the ARAN survey van for video logging operation.

### **Knowledge, Skills and Abilities:**

Working knowledge of basic mathematics including addition, subtraction, multiplication and division of whole and fractional numbers and computation and computation of areas and volumes of regular shapes.

Working knowledge of commonly used weights and measures.

Keyboarding skills and general computer skills.

Good communication skills.

Skill in the operation of a handheld calculator.

Ability to learn quickly the routine technical work of the unit to which assigned.

Ability to establish and maintain effective working relationships.

Working knowledge of Vermont Agency of Transportation rules, regulations, policies, and procedures as they pertain to project assignments.

Working knowledge of procedures for performance of assigned activities.

Ability to perform assigned activities in a timely and satisfactory manner.

### **Environmental Factors:**

Duties are performed in office, laboratory, and field settings. Class incumbents may be required to carry equipment weighing up to 40 pounds, traverse rough wooded terrain and or steep terrain, travel in boats or work on structures above ground level. Duties may also require exposure to extreme weather conditions.

### **Minimum Qualifications:**

High school diploma or equivalent.

**NOTE:** Current, valid driver's license required.

## **Transportation Aide II**

Job Code: 14810T

Pay Grade: 14

Occupational Category: Science, Technology, Engineering and Mathematics

### **Class Definition:**

This is a pre-entry level class to the Vermont Agency of Transportation's technician series for persons with one year of post-high school education and or experience performing engineering support tasks. Work assignments are routine and involve repetitive activities in construction inspection, soils and aggregate testing, bituminous plant inspection, Portland Cement Concrete inspection, research data collection, analysis and reduction, chemical analysis of cements and other materials, design of simple bridges or culverts, field surveys, videoing activities, crash data entry, updating of Functional Class maps, conducting turning movement counts and mapping. Work is performed under general supervision of a higher-level technician, engineer, or administrative person. New assignments are performed under close supervision. There are no supervisory responsibilities.

### **Examples of Work:**

The following activities are indicative of the levels of difficulty and responsibilities involved: Inspecting topsoil, seeding, and mulching operations. Performs basic level rod duties and some instrument work on field surveys. Assists with subsurface investigations. Take samples of bituminous concrete mixture from haul vehicles and perform tests. Conduct sampling, testing and inspection of concrete making, materials, mid inspection of concrete production at batch plants. Perform ongoing field data collection on pavement life and bridge deck corrosion. Perform chemical analysis of cements, pozzolans and admixtures. Assigned as field team leader on two or more person turning movement counts at roadway intersections. Design simple bridges or culverts. Prepare or check bridge plan sheets. Calculate design quantities. Prepare displays and graphics. Compile maps and route logs to be used in the field by the Video log Technician. Drive the ARAN survey van for video logging operation.

### **Knowledge, Skills and Abilities:**

Working knowledge of basic mathematics including solving equations with one unknown and calculations of areas and volumes of regular shapes.

Working knowledge of commonly used weights and measures.

Keyboarding skills and general computer skills.

Ability to communicate effectively orally and in writing.

Ability to maintain logs and records and to prepare clear effective reports.

Skills in the operation of handheld calculator.

Ability to learn quickly the routine technical work of the unit to which assigned.

Ability to establish and maintain effective working relationships.

Working knowledge of Vermont's Agency of Transportation rules, regulations, policies and procedures as they pertain to project assignments.

Ability to gather and analyze technical data.

Ability to read and understand specifications and reference manuals.

Working knowledge of basic drafting techniques and equipment.

Working knowledge of procedures for performance of assigned activities.

Ability to perform assigned activities in a timely and satisfactory manner.

### **Environmental Factors:**

Duties are performed in office, laboratory, and field settings. Class incumbents may be required to carry equipment weighing up to 40 pounds, traverse rough wooded terrain and or steep terrain, travel in boats or work on structures above ground level. Duties may also require exposure to extreme weather conditions.

**Minimum Qualifications:**

One (1) year of post-high school education.

OR

High school diploma or equivalent AND one (1) year of experience performing engineering support tasks.

OR

Two (2) seasons working for the Agency of Transportation as a Transportation Aide I.

**NOTE:** Current, valid driver's license required.

## **Transportation Apprentice Maintenance Worker**

Job Code: 82010T

Pay Grade: 14

Occupational Category: Maintenance and Skilled Trades

Effective Date: 09/07/2014

### **Class Definition:**

Entry and training-level maintenance work for the Agency of Transportation (AOT). The Transportation Apprentice Maintenance Worker (TAMW) performs a number of laboring and semi-skilled tasks while being closely supervised by higher-level maintenance workers. As the TAMW completes training and gains skills, greater work independence is expected. The TAMW gains basic skills and knowledge in the use of hand and power tools and through required on-the-job training, advances that knowledge and applies these developed skills to road maintenance and repair work.

### **Examples of Work:**

Training-level maintenance work for the Agency of Transportation. On-the-job training is provided as employees work under close supervision. The TAMW assists with tasks such as repair and installation of guardrails, sealing cracks, patching potholes, bridge washing, sweeping, flagging traffic, mowing, repairing road shoulders, cleaning the roadside, cutting trees and brush, cleaning drains and with operator maintenance and inspection. As the TAMW develops skills, supervision is reduced. Operates equipment and non-CDL required vehicles. Once the CDL is attained, the ATMW will drive all other AOT vehicles, and maintain and inspect vehicles. Performs related duties as required.

### **Environmental Factors:**

Duties require working in extreme outdoor weather conditions. All employees may be required to report to work outside of their work schedule and must be reachable by phone. Dangers are present when work is performed near heavy equipment, hazardous materials, and roadside litter. Employees may be exposed to blood and airborne pathogens. Hazards are always present when working on the roads as traffic passes. An incumbent must be able to use tools and equipment commonly used in routine maintenance work as well as lift materials commonly used in routine maintenance work. Participation in a random drug and alcohol-testing program is required prior to operation of vehicles or operating equipment. Overtime work is required, particularly during the winter months, and is considered a condition of employment.

### **Knowledge, Skills and Abilities:**

Awareness of the methods, practices, tools, and materials used in road maintenance and repair work.

Ability to follow complex verbal and written instructions.

Ability to operate computers and computerized equipment.

Ability to apply skills learned from on-the-job and classroom training to road maintenance and repair work.

Ability to use basic math.

### **Minimum Qualifications:**

High school diploma or equivalent.

**NOTE:** Current, valid driver's license required.

**Special Requirements:** An incumbent must live within reasonable proximity of assigned workstation.

Possession of a Commercial Driver's License (CDL) is required for the successful completion of original probation.

Transportation Apprentice Maintenance Workers may be promoted to Transportation Journeyman Maintenance Worker upon completion of at least one year of work experience/training as a TAMW, satisfactory performance evaluation(s),

demonstrated knowledge of road maintenance and repair work, and completion of all VTrans Training Center (VTTC) required coursework within the Job Development Plan (JDP).



## **Transportation Journeyman Maintenance Worker**

Job Code: 82011T

Pay Grade: 16

Occupational Category: Maintenance and Skilled Trades

Effective Date: 09/07/2014

### **Class Definition:**

Maintenance work for the Agency of Transportation involving a variety of tasks relating to the state transportation system. Incumbents are often responsible for routine maintenance and repair work. Duties typically require the use of a variety of tools and vehicles. Overtime work is required, particularly during the winter months, and is considered a condition of employment. A newly hired employee must complete all VTTC training requirements for the Job Development Plan (JDP) and demonstrate knowledge and skills in a minimum of six areas of maintenance or construction activities. Work is performed under the supervision of an AOT Area Maintenance Supervisor or higher-level maintenance worker.

### **Examples of Work:**

Operates and maintains the highway maintenance equipment and vehicles. Performs year-round maintenance duties that may include: backhoes; loaders, skid steers, excavators, bulldozers, guardrail pounder, Servo-lift truck, tanker trailer truck, equipment trailer hauler, bucket truck, heavy snow- blower; roller; grader, and large snow plow truck, with or without wing spreader. Does basic paving, painting, patching potholes and surfaces, bridge washing, sweeping, flagging traffic, mowing, repairing road shoulders, cleaning the roadsides, cutting trees and brush, and cleaning drains. May oversee the work crews. Performs routine maintenance and daily inspections on equipment assigned. Duties may involve serving as a member of a work crew and using laboring, and hand tools and power equipment to complete assigned tasks. Inspects sections of highways for hazardous conditions and encroachments and reports them to the supervisor. May assist with or perform bridge construction and repair, or airport or railroad crossing maintenance. Prepares and repairs culverts, guardrails, and ditching. Performs computer operations. Performs related duties as required.

### **Environmental Factors:**

Duties require the ability to withstand exposure to extreme outdoor weather. An incumbent must be available for considerable overtime during heavy snowfall or other emergencies. Employees may be required to report to work outside of their work schedule and must be reachable by phone. An employee must be able to use tools and lift materials commonly used in routine maintenance work. Normal dangers associated with work on or near heavy equipment, hazardous materials, and debris from roadside litter are present. May be exposed to blood or airborne pathogens. Hazards are always present when working on roads with moving traffic. Participation in a random drug and alcohol-testing program is required. Overtime work is required, particularly during the winter months, and is considered a condition of employment.

### **Knowledge, Skills and Abilities:**

Knowledge of proper use of laboring and hand and power tools and equipment used in transportation maintenance and construction activities.

Knowledge of transportation repair and maintenance methods.

Ability to operate and maintain the highway maintenance equipment and vehicles required to perform year-round maintenance duties.

Ability to keep records of time and materials involved in assigned role.

Ability to establish and maintain effective working relationships with other employees.

Ability to deal appropriately with the public.

Ability to communicate effectively as required in the class role.

Ability to use basic math.

Ability to perform a variety of maintenance or construction activities in equipment and repair and maintenance methods.

Ability to understand and follow complex oral and written instructions.

Ability to operate computers and computerized equipment.

Ability to apply skills learned from on-the-job experience and classroom training to road maintenance and repair work.

**Minimum Qualifications:**

High School diploma or equivalent AND two (2) years or more of work experience in construction, equipment operation, or related manual labor INCLUDING EITHER one season or more of operating a snowplow with wings OR six (6) months or more operating medium or heavy equipment, such as graders, rollers, and backhoes.

OR

One (1) year or more as a Transportation Apprentice Maintenance Worker.

**NOTE:** A Class B Commercial Driver's License (CDL) is required.

**Special Requirements:** An incumbent must live within reasonable proximity of assigned workstation. Possession of a Class A Commercial Driver's License and Tanker Endorsement is required within the first six months of employment. An incumbent must complete all VTTC required coursework within the JDP (Job Development Plan) for this position within one year or be enrolled.

## **AOT Maintenance Equipment Specialist**

Job Code: 81180T

Pay Grade: 18

Occupational Category: Maintenance and Skilled Trades

Effective Date: 09/13/2009

### **Class Definition:**

Maintenance work for the Agency of Transportation involving a variety of tasks relating to the maintenance of the State's transportation system. Incumbents are often responsible for routine maintenance and repair work. Duties typically require the use of a variety of tools and vehicles. Employees must meet all the training requirements and demonstrate the ability to operate and maintain various types of heavy equipment. Work is performed under the supervision of an AOT Area Maintenance Supervisor.

### **Examples of Work:**

Serves as operator and trainer of specialized work crews engaged in transportation maintenance activities, such as using laboring, and hand tools and power equipment, repairing bridges, sealing pavement cracks, paving, painting, patching potholes and surfaces, ditching, grading, bridge washing, sweeping, flagging traffic, mowing, repairing road shoulders, cleaning the roadsides, cutting trees and brush, cleaning drains. Operates large or small trucks, with or without snowplow and wings, primarily during winter months. Operates and maintains heavy equipment related to transportation maintenance including loaders, tractors, bulldozers, graders, rollers, and other specialized equipment. Responsible for training other workers on the operation and maintenance of all heavy equipment. Performs routine maintenance and inspections on assigned equipment. May act as a lead worker or overseer of specialized work crews. Performs related duties as required.

### **Environmental Factors:**

Duties require the ability to withstand exposure to extreme outdoor weather. An incumbent must be available for considerable overtime during heavy snowfall or other emergencies. Employees may be required to report to work outside of their work schedule and must be reachable by phone. An employee must be able to use tools and lift materials commonly used in routine maintenance work. Normal dangers associated with work on or near heavy equipment, hazardous materials, and debris from roadside litter are present. May be exposed to blood or airborne pathogens. Hazards are always present when working on roads with moving traffic. Participation in a random drug and alcohol-testing program is required. Overtime work is required, particularly during the winter months, and is considered a condition of employment.

### **Knowledge, Skills and Abilities:**

Knowledge of the operation, use, and maintenance of equipment used in transportation maintenance activities.

Ability to operate and maintain highway maintenance equipment and vehicles required to perform year-round maintenance duties.

Knowledge of the occupational hazards and safety precautions necessary in the operation of heavy equipment.

Knowledge in all maintenance district functions.

Ability and willingness to train others in the operation of heavy equipment.

Ability to understand, communicate, and carry out oral and written instructions.

Ability to keep basic records of equipment usage, fuel used, time distribution, and materials involved in assigned role.

Ability to work long hours in all types of climatic conditions.

Ability to make arithmetical calculations.

Ability to establish and maintain effective working relationships.

Ability to deal appropriately with the public.

Ability to communicate effectively as required in the class role.

Ability to perform basic computer operations.

**Minimum Qualifications**

High School diploma or equivalent AND two (2) years or more of transportation maintenance or construction experience INCLUDING one (1) year or more in the operation and maintenance of heavy equipment and one season of operating a snowplow with wing.

OR

One (1) year or more of experience as an AOT Maintenance Worker IV with the State of Vermont.

**NOTE:** A Commercial Driver's license (Class A CDL) is required with tanker endorsement.

**Special Requirements:** An incumbent must live within reasonable proximity of assigned workstation.

## **AOT Motor Equipment Mechanic I**

Job Code: 80100T

Pay Grade: 15

Occupational Category: Maintenance and Skilled Trades

Effective Date: 10/10/2010

### **Class Definition:**

This Class describes an apprentice level mechanic performing mechanical service work on automobiles; light, medium, and heavy trucks; snowplow and spreader systems; heavy construction equipment; and other miscellaneous equipment used by the Agency of Transportation. Work is performed under the close supervision of a shop foreman or a higher-level mechanic or technician.

### **Examples of Work:**

Engine and drive-train fluid and filter changes, belt changes. Hydraulic system fluid and filter changes. Vehicle and equipment lubrication. Installation and removal of decals and vehicle accessories. Learning basic torch and welding skills. Learning basic use of scan and diagnostic tools. Learning fundamentals of the Fleet Management System. Operation of vehicles and equipment. Performs other related duties as assigned.

### **Environmental Factors:**

Duties are typically performed in a district garage or motor shop, where normal motor shop hazards exist. Incumbents may be required to make emergency road repairs at any time of day and in inclement weather; such work may present additional hazards. Incumbents must be physically able to use tools and lift parts and materials common to working on heavy vehicles and equipment. Incumbents may be exposed to blood or airborne pathogens. Once incumbents have obtained a commercial driver's license, they are required to participate in a random drug and alcohol-testing program. Overtime work may be required.

### **Knowledge, Skills and Abilities:**

Working knowledge of and basic skill in applying the general practices and procedures in automotive and equipment service work.

Working knowledge of and basic skill in the use of typical tools automotive and equipment service tools.

Physical ability to perform mechanical service work.

Ability to learn the use of torches and welding equipment.

Ability to maintain basic records for repair work done.

Ability to learn and use various shop-related computer applications.

Ability to understand and follow instructions.

Ability to establish and maintain effective working relationships.

Ability to learn and follow shop safety and hazardous material expectations.

### **Minimum Qualifications:**

High school diploma or equivalent.

**NOTE:** Current, valid driver's license required.

### **Preferred Qualifications:**

High school or trade school courses in automobile repair, physics, chemistry and mathematics. Work experience in the service of vehicles and equipment.

Experience in general vehicle and equipment service work.

**Special Requirements:** Incumbents must obtain a Commercial Driver's License instructional (learner) permit within 60

days of employment. Incumbents must obtain a Vermont State Inspection License within 60 days of employment. Incumbents must obtain a Class B Commercial Driver's License, with air-brake certification, within 6 months of employment. Incumbents must provide their own hand-tools.

## **AOT Motor Equipment Mechanic II**

Job Code: 80110T

Pay Grade: 18

Occupational Category: Maintenance and Skilled Trades

Effective Date: 10/10/2010

### **Class Definition:**

This class describes a journeyman level mechanic performing mechanical service work on automobiles; light, medium, and heavy trucks; snowplow and spreader systems; heavy construction equipment; and other miscellaneous equipment used by the Agency of Transportation. Routine work is performed independently; complex work is performed under the supervision of a Regional Supervisor or a higher-level mechanic or technician.

### **Examples of Work:**

All service work typically expected of a Motor Equipment Mechanic I. Minor repair and replacement of engine, drivetrain, and exhaust components. Minor repair and replacement of hydraulic system components. Minor repair and replacement of brake and suspension system components. Minor repair and replacement of electrical and wiring components. Minor body repairs, spot painting, equipment pin replacement. Motor vehicle inspections. Basic welding and torch use. Basic use of scan and diagnostic tools, basic troubleshooting. Oversight and training of lower level mechanics. Operation of vehicles and equipment requiring a CDL. Providing assistance to parts inventory control. Recording of service work in the state's Fleet Management System, opening work orders, coding jobs correctly. Performs other related duties as assigned.

### **Environmental Factors:**

Duties are typically performed in a district garage or motor shop, where normal motor shop hazards exist. Incumbents may be required to make emergency road repairs at any time of day and in inclement weather; such work may present additional hazards. Incumbents must be physically able to use tools and lift parts and materials common to working on heavy vehicles and equipment. Incumbents may be exposed to blood or airborne pathogens. Incumbents are required to participate in a random drug and alcohol-testing program. Overtime work may be required.

### **Knowledge, Skills and Abilities:**

Working knowledge of and skill in applying standard methods, tools, equipment, practices and procedures in automotive, truck, and equipment service work.

Working knowledge of the principles of internal combustion engines and power-train systems of motor vehicles.

Working knowledge of electrical and brake systems on motor vehicles.

Working knowledge of DMV Inspection provisions, regulations, and laws.

Working knowledge of safety and hazardous materials practices.

Ability to read plans, manuals, service bulletins, and specifications of significant complexity.

Ability to safely use torches and weld.

Physical ability to perform service work.

Ability to maintain records for repair work done.

Ability to learn and use basic shop-related computer applications.

Ability to understand and follow instructions.

Ability to establish and maintain effective working relationships.

### **Minimum Qualifications**

High school diploma or equivalent AND three (3) years or more of experience in the maintenance and service of light, medium, and/or heavy duty vehicles and equipment.

OR

One (1) year or more as a Motor Equipment Mechanic I.

**NOTE:** Current, valid driver's license required.

**Special Requirements:** Incumbents must obtain a Commercial Learner's Permit within sixty (60) days of employment. Incumbents must obtain a Vermont Inspection Mechanic Certification within sixty (60) days of employment. Incumbents must obtain a Class A Commercial Driver's License, with air-brake certification and tanker endorsement, within six (6) months of employment. Incumbents must provide their own hand tools.



## **AOT Motor Equipment Mechanic III**

Job Code: 80120T

Pay Grade: 20

Occupational Category: Maintenance and Skilled Trades

Effective Date: 01/16/2011

### **Class Definition:**

This class describes a master level mechanic performing mechanical service work on automobiles; light, medium, and heavy trucks; snowplow and spreader systems; heavy construction equipment; and other miscellaneous equipment used by the Agency of Transportation. Work is performed with significant independence under the general supervision of a Regional Supervisor.

### **Examples of Work:**

All service work typically expected of a Motor Equipment Mechanic II. Major repair, rebuild, and replacement of engine and drive-train components. Major repair, rebuild, and replacement of hydraulic system components. Major repair and replacement of brake and suspension system components. Major repair and replacement of electrical components. Major body repairs, significant painting, equipment pin and bushing replacement. Service of mechanical components of specialized equipment (e.g. bucket trucks, guard rail pounders). Preparation of accident damage estimates. Advanced welding and touch use. Skilled design, fabrication, and machining. Intermediate use of scan tools and diagnostic equipment; intermediate troubleshooting. Basic use of technical service bulletins and parts and service information. Inspection of equipment for abuse and/or neglect. Spreader system calibration and basic troubleshooting. Coordination of work performed by outside service vendors. Operation of, and training in the use of, specialized equipment (if trained). Development of, and presentation of training material. Service recording and basic research in the state's Fleet Management System. Performs other related duties as assigned.

### **Environmental Factors:**

Duties are typically performed in a district garage or motor shop, where normal motor shop hazards exist. Incumbents may be required to make emergency road repairs at any time of day and in inclement weather; such work may present additional hazards. Incumbents must be physically able to use tools and lift parts and materials common to working on heavy vehicles and equipment. Incumbents may be exposed to blood or airborne pathogens. Incumbents are required to participate in a random drug and alcohol-testing program. Overtime work may be required.

### **Knowledge, Skills and Abilities:**

Advanced knowledge of and skill in applying standard methods, tools, equipment, practices and procedures in automotive, truck, and equipment service work.

Advanced knowledge of the principles of internal combustion engines and power-train systems of motor vehicles.

Advanced knowledge of electrical and brake systems on motor vehicles.

Working knowledge of DMV Inspection provisions, regulations, and laws.

Working knowledge of safety and hazardous materials practices.

Ability to perform assigned tasks properly and in a timely manner.

Ability to read plans, manuals, service bulletins, and specifications of significant complexity.

Ability to safely use torches and weld.

Physical ability to perform service work.

Ability to maintain records for repair work done.

Ability to understand and follow instructions.

Ability to establish and maintain effective working relationships.

### **Minimum Qualifications**

High School Diploma or equivalent AND Six (6) or more years of experience in the maintenance and service of light,

medium, and/or heavy duty vehicles and equipment at the journeyman's level.

OR

Three (3) years or more of experience as a Motor Equipment Mechanic II.

**NOTE:** Current, valid driver's license required.

**Special Requirements:** Incumbents must obtain a Commercial Learner's Permit within sixty (60) days of employment. Incumbents must obtain a Vermont Inspection Mechanic Certification within sixty (60) days of employment. Incumbents must obtain a Class A Commercial Driver's License, with air-brake certification and tanker endorsement, within six (6) months of employment. Incumbents must provide their own hand tools.

## **Bridge Maintenance Worker I**

Job Code: 84140T

Pay Grade: 16

Occupational Category: Maintenance and Skilled Trades

Effective Date: 08/12/2012

### **Class Definition:**

Skilled work involving maintenance and repairs of bridge structures. An incumbent may be assigned supervision of small work crews from time to time. Work is performed under the supervision of the Transportation Area Maintenance Supervisor.

### **Examples of Work:**

Builds or constructs forms for the pouring of concrete necessary for various types of bridge or building repair projects. Places, handles, and finishes concrete and masonry materials. Erects various types of scaffolds, staging and other temporary work platforms needed for bridge or building repairs. Computes quantities required to perform work. Supervises assigned helpers and assures that proper work procedures are followed, and appropriate safety precautions are taken. Operates trucks and light equipment in routine maintenance activities. Performs winter maintenance activities and may operate a plow, with or without wings, during the winter season. Performs related duties as required.

### **Environmental Factors:**

Duties require the ability to climb, to lift weights exceeding fifty pounds, and the ability to withstand exposure to extreme outdoor weather conditions. Incumbents are required to be available for considerable overtime during periods of heavy snowfall or other emergency situations. Incumbents are required to participate in a random drug testing program.

### **Knowledge, Skills and Abilities:**

Considerable knowledge of the methods, practices, tools, materials, and equipment used in general carpentry and structural maintenance or repair, including use of acetylene torch and arc welder.

Ability to work in high places.

Ability to keep records.

Ability to compute quantities of materials required to perform tasks.

Familiarity with the erection and maintenance of structural steel.

Must be able to read and write.

### **Minimum Qualifications:**

Completion of eighth grade or higher AND four (4) years or more of experience in construction, maintenance, or repair work INCLUDING one (1) year or more involving the use of concrete or structural steel.

OR

Successful completion of an accredited vocational or technical course of study in construction and maintenance related topics AND two (2) years or more of experience in construction, maintenance, or repair work INCLUDING one (1) year or more involving the use of concrete or structural steel.

**NOTE:** Current, valid driver's license required.

**Special Requirements:** Class B Commercial Driver's License required within the first 6 months of employment. An incumbent must live within reasonable proximity of assigned workstation.

## **Bridge Maintenance Worker II**

Job Code: 81200T

Pay Grade: 19

Occupational Category: Maintenance and Skilled Trades

Effective Date: 08/25/2013

### **Class Definition:**

Bridge maintenance work involving repair and construction of bridge -building structures for the Agency of Transportation. An incumbent performs a number of labor-intensive tasks. An incumbent is assigned supervision of small work crews. Work is performed under the supervision of a Bridge Maintenance Mechanic III, AOT Area Maintenance Supervisor, or Transportation General Maintenance Supervisor.

### **Examples of Work:**

Works with concrete, steel and masonry materials and completes structural repairs on bridges and buildings. Erects various types of scaffolds, staging and other temporary work platforms needed for bridge or building repairs. Computes quantities necessary to perform work. Supervises work crews and assures that proper work procedures are followed and appropriate safety precautions are taken. Performs repairs and daily preventive maintenance on equipment. Performs work in high places, near swift and deep waters, and high traffic areas. Operates trucks and light equipment in routine maintenance activities. Makes preparations for future projects during winter months, including lining up equipment and materials and constructing formwork. Works on facility and building improvement projects. Performs winter maintenance activities and may operate a plow, with and without wings, during the winter season. Constructs emergency bridges, as needed. Performs related duties as required.

### **Environmental Factors:**

Duties require the ability to climb, work in high places, near swift and deep waters and high traffic areas, and to lift and carry materials and equipment weighing up to one hundred pounds. Exposure to extreme outdoor weather conditions can be anticipated. Air supplied or cartridge type respirators are required. Incumbents are required to be available for considerable overtime during periods of heavy snowfall or other emergency situations, and are considered a condition of employment. Dangers associated with work on or near heavy equipment, hazardous materials, and roadside litter are commonly present. May be exposed to blood and airborne pathogens. Participation in a random drug and alcohol-testing program is required.

### **Knowledge, Skills and Abilities:**

Working knowledge of the methods, practices, tools, materials, and equipment used in general carpentry and structural maintenance construction or repair, including use of acetylene torch and arc welder.

Ability to work in high places.

Ability to keep records.

Ability to compute quantities and order materials necessary to complete the work.

Ability to build and erect various scaffolds, staging, and other temporary platforms.

### **Minimum Qualifications:**

High School diploma or equivalent AND five (5) years or more of highway maintenance, construction or bridge-building maintenance repair experience, INCLUDING two (2) years or more involving the use of concrete or structural steel.

OR

High School diploma or equivalent AND successful completion of an accredited vocational or technical course of study in construction and maintenance related topics AND three (3) years or more of highway maintenance, construction or bridge-building maintenance repair experience, INCLUDING two (2) years or more involving the use of concrete or structural steel.

**NOTE:** Class B Commercial Driver's License required.

**Special Requirements:** Class A Commercial Driver's License with air brake certification and tanker endorsement within the first 6 months of employment. An incumbent must live within reasonable proximity of assigned workstation.

## **Bridge Maintenance Worker III**

Job Code: 81210T

Pay Grade: 21

Occupational Category: Maintenance and Skilled Trades

Effective Date: 08/12/2012

### **Class Definition:**

Maintenance and supervisory work for the Agency of Transportation involving maintenance, repair, and construction of bridge-building structures within the Maintenance District. Direct supervision of assigned employees, including selection of crew and work assignments. Incumbent participates in project planning, and executes maintenance repair and construction of bridges, buildings and drainage structures work, including supervision of work performed, oversight of equipment care and maintenance, and bridge-building operations. Work is performed under the supervision of a Transportation General Maintenance Supervisor.

### **Examples of Work:**

Assumes first level responsibility for maintenance repair and construction work on bridges and buildings. Conducts daily and long-range planning. Supervises, plans, and assigns work crews working with concrete, steel and masonry material to conduct work on bridge and buildings. Supervises and trains employees constructing framework for concrete, erecting scaffolding, staging and other temporary work platforms. Ensures proper safety practices are used during laboring activities when using hand and power equipment, or other equipment. Responsible to train employees in the proper use of fall protection, use of respirators, handling of hazardous materials, traffic control signing, proper lifting techniques of parts and materials, blood borne pathogen awareness, and safe equipment operation. Performs winter maintenance activities and may supervise employees during winter maintenance activities. Plans daily schedules, assigns work crews, and provides instruction for work to be performed in daily and on-going projects. Arranges for equipment and materials needed to perform work. Coordinates delivery of materials to assigned area. Supervises routine maintenance and inspections on assigned equipment. Supervises hired labor and equipment. Inspects work in progress and upon completion. Performs and supervises facility and building improvement projects. Tracks and keeps records of equipment and material usage, daily work activities, time reports, and accomplishment reports. Operates all bridge crew equipment on a regular basis, and may be required to operate equipment in emergency situations. May recommend candidates for promotion. Promotes teamwork. Keeps employees apprised of new and updated policies and procedures, provides training, as necessary. Make recommendations to correct deficiencies. Performs computer operations, to include data entry into the Vermont Maintenance Activity Tracking System (VTMATS), running various reports. Constructs emergency bridges, as needed. Performs related work as required.

### **Environmental Factors:**

Duties require the ability to climb, work in high places, near swift and deep waters, and high traffic areas. An employee must be able to use tools and lift materials commonly used in routine bridge and maintenance work, and to withstand exposure to extreme outdoor weather conditions. Air supplied or cartridge type respirators are required. Incumbents are required to be available for considerable overtime during periods of heavy snowfall or other emergency situations and is considered a condition of employment. Dangers associated with work on or near heavy equipment, hazardous materials, and roadside litter is present. May be exposed to blood and airborne pathogens. Hazards are always present when working on roads with moving traffic. Participation in a random drug and alcohol-testing program is required.

### **Knowledge, Skills and Abilities:**

Working knowledge of the methods, practices, tools, materials, and equipment used in general construction and structural maintenance or repair, including the use of acetylene torch and arc welder.

Ability to work in high places.

Ability to keep records.

Ability to compute quantities and order materials required to perform work.  
Ability to build and erect various scaffolds, staging, and other temporary platforms.  
Ability to use layout tools such as transits, lines, and levels.

**Minimum Qualifications:**

High School diploma or equivalent AND five (5) years or more of experience in bridge or building maintenance, repair, or construction INCLUDING BOTH two (2) years or more working with concrete or structural steel in bridge or building repair or construction AND one (1) year or more as a crew leader or supervisor.

OR

Successful completion of an accredited vocational or technical course of study in construction and maintenance related topics AND three (3) years or more of experience in bridge or building maintenance, repair, or construction INCLUDING BOTH two (2) years or more working with concrete or structural steel in bridge or building repair or construction AND one (1) year or more as a crew leader or supervisor.

OR

One (1) year or more of experience as a Bridge Maintenance Mechanic II.

**NOTE:** Class B Commercial Driver's License required.

**Special Requirements:** Class A Commercial Driver's License with air brake certification and tanker endorsement within the first 6 months of employment. An incumbent must live within reasonable proximity of the assigned workstation.