U.S. DEPARTMENT of COMMERCE Office of the Secretary



Home > HR Practitioners > Classification & Position Management > PD Library

# Maintenance Mechanic 09

# WG-4749-09

NOTE: THE SENTENCE IN PART I DESCRIBING THE PURPOSE OF THE POSITION AND PARTS II AND III IN THEIR ENTIRETY ARE PERMANENT PARTS OF THE LIBRARY AND MAY NOT BE CHANGED OR EDITED IN ANY WAY.

# I. INTRODUCTION

This position is located

The incumbent serves as a journey level maintenance mechanic.

Office of Human Resources Management

# **II. MAJOR DUTIES AND RESPONSIBILITIES**

The maintenance mechanic performs a variety of tasks involved in the upkeep of buildings, grounds and related structures, fixtures, and utilities. The duties are performed within at least two of the following trades: painter, plumber, carpenter, pipefitter, electrical equipment repair, and plaster.

## **III. FACTOR LEVELS**

Factor 1: Skill and Knowledge

The trades involved require a knowledge of shop mathematics to plan, compute, and layout projects; the ability to interpret and apply building plans and blueprints; skill in the use of tools and equipment common to the trade. Knowledge, skills, and abilities in at least two trades, which include:

A. Plumbing. Knowledge of the installation and operation of various supply, disposal, and utility systems and equipment, such as water and gas systems, fire sprinkler equipment, and water closets.

B. Carpentry. Knowledge of wood and wood substitute materials and construction techniques; skill in the construction techniques and operation of general and precision carpentry and woodworking equipment to produce the requested finished product. Ability to interpret complex instructions, sketches, blueprints, and building codes.

C. Electrical. Ability to install and operate electrical fixtures, wiring, and controls and read and follow wiring diagrams. Skill in removing and replacing electrical fixtures and controls; making repairs; rearranging old or installing new outlets, relays, switches, and light fixtures; testing circuits; measuring, cutting, and bending wire and conduit to specified lengths and angles. Knowledge of mechanical theory and pneumatic and hydraulic principles to repair electro-mechanical devices.

D. Painting. Skill in accepted surface preparation and coating methods and techniques; matching, tinting, toning, blending and applying coating materials and agents. Ability to read and apply directions to mix, use and apply various materials, solvents, and precoating agents.

E. Plastering. Knowledge and skill in a variety of plastering methods and techniques, including construction and application of molded plaster cornices, plaster panels, and trim.

F. Pipefitting. Knowledge and ability to install and operate various high-pressure piping systems and equipment.

G. Air conditioning. Knowledge of the principles and theories of the refrigeration cycle, temperature measurement, and refrigerant properties. Skill in constructing, operating, and servicing a variety of domestic air

conditioning units and systems, power sources, and cooling units.

H. Heating. Knowledge of combustion, heat transfer and circulation principles; fuel characteristics; heating surfaces, combustion chambers; basic pipefitting techniques and rigging setups; pneumatics, electricity, and basic electronics. Familiarity with the construction and operation of heating systems. Skill in determining condition of system parts and components; installing, aligning, adjusting, and repairing oil, gas, and coal burners, heating boiler components, and other burning mechanisms; performing routine maintenance.

I. Masonry. Knowledge of laying a variety of brick, block, and stone in construction or repair; skill to accurately line up courses that are horizontally and vertically straight; ability to spread mortar to obtain even distribution and thickness between courses; skill to spread mortar, set brick and block, and finish mortar joints so that the repaired portion matches the undamaged portion of the structure.

### Factor 2: Responsibility

The incumbent works under the guidance of the supervisor and/or work leader. The supervisor assigns work orally or through work orders. Minimum direct supervision is received and incumbent determines the extent of repairs needed and exercises judgment in selecting the methods, techniques, and procedures to use in completing assignments. The incumbent makes complete and difficult determinations of materials and methods to be employed. The incumbent is expected to recognize and refer situations or problems which require higher level guidance. A high degree of precision is required in all areas of work. Guides for proper completion of assignments include work orders, oral instructions, blueprints, sketches, specifications, and accepted trade practices and standards. Accomplishments are reviewed through periodic inspections, written reports, and/or occupants' complaints. Work may be checked upon completion through comparison with trade standards.

### Factor 3: Physical Effort

The work requires a considerable amount of standing, stooping, bending, kneeling, climbing, and working in tiring and/or uncomfortable positions. The incumbent may work from ladders and scaffolding. When operating equipment, the worker may be under a great deal of strain from constant reaching, bending, turning, and moving of hands, arms, feet, legs, and by the vibration and jerking of the equipment. The incumbent carries, lifts, and handles parts and equipment weighing up to 50 pounds and may occasionally exceed 50 pounds.

### Factor 4: Working Conditions

The work is performed inside and outside with exposure to all kinds of weather. The work area may be dirty, wet, dusty, and greasy, with inadequate lighting, heat, or ventilation. Incumbent is subject to cuts, abrasions, burns, broken bones, electrical shock, infections, bites, exposure to inhalation or harmful chemical fumes, irritation of eyes, skin and respiratory tract, and the hazards of operating power tools and equipment. Discomfort is encountered when wearing protective clothing, gloves, or eye goggles.

This position is non-exempt from coverage under the FLSA.

## **IV. UNIQUE POSITION REQUIREMENTS**

(Last Updated: October 19, 1994)

Website Feedback About OHRM Contact Us DOCHROC FOIA Site Map Privacy Policy Commerce Homepage Careers at Commerce Commerce Employees HR Practitioners