

# CITY OF CHATTANOOGA

## Classification Specification Title: Heavy Equipment Mechanic 3

**Department: Public Works**

**Pay Grade: GS.10**

**Supervision Received From: Fleet Shift Supervisor**

**FLSA Status: Non-Exempt**

**Supervisory Responsibility For: None**

**Established: 4/5/24**

**Revision Date: 4/2/25**

### CLASSIFICATION SUMMARY:

Incumbents in this classification are responsible for serving as a lead to lower level fleet staff and performing the full range and most complex duties related to the fabrication, maintenance and/or repair of City vehicles and equipment. Duties include troubleshooting and diagnosing vehicle and equipment problems, training lower level fleet staff and performing complex repairs. Work is performed under limited supervision.

**SERIES LEVEL:** The Heavy Equipment Mechanic 3 is the third level of a three level fleet services series.

### ESSENTIAL FUNCTIONS:

*(The following duties ARE NOT intended to serve as a comprehensive list of all duties performed by all employees in this classification, only a representative summary of the primary duties and responsibilities. Incumbent(s) may not be required to perform all duties listed and may be required to perform additional, position-specific duties.)*

Serves as a lead to lower-level fleet maintenance staff to include assigning and monitoring work, training staff on work methods and procedures and providing direction.

Overhauls, repairs, and maintains a wide variety of light and heavy vehicles and equipment and their component systems and computerized automotive systems; troubleshoots, diagnoses, and performs major repairs and overhauls to engines, involving inspection and replacement of broken or worn parts such as pistons, piston rings, valves, bearings, fittings, wrist pins, shafts, mufflers, blades, chains, cylinder heads and gaskets.

Diagnoses, repairs, cleans, adjusts, and installs fuel, ignition, electrical and cooling systems involving routine to complex repair and replacement of such parts as fuel pumps, starter motors, distributors, generators/alternators, voltage regulators, wiring, switches, batteries, radiators, thermostats, and water pumps.

Diagnoses, repairs, overhauls, and rebuilds transmission systems and engines including such parts as clutches, standard transmissions, differential units, front and rear axles, gears, bearings, universal joints, and hydraulic units; removes, repairs, and replaces tires and wheels; diagnoses, adjusts steering mechanisms and other controls.

Performs preventive maintenance on equipment, trucks, automobiles and other vehicles and equipment which includes changing oil and lubricating parts; fueling vehicles and equipment; road testing vehicles; inspecting vehicles in the shop and field; modifying, fabricating, and installing new parts using welding equipment; maintaining and repairing small gasoline engines and similar equipment.

Installs and repairs auxiliary emergency lights, cameras and/or other related equipment.

Reads and interprets manuals, drawings, and specifications; estimates labor, material and equipment and orders parts required to complete assignments.

Picks up and delivers parts and equipment to and from vendors and/or applicable job sites. Completes forms and keeps accurate maintenance records.

Stores, maintains records and arranges for disposal of hazardous waste materials such as oil, tires, batteries and other supplies and equipment related to the work.

Uses and maintains a full set of hand, power and shop tools and equipment related to the work; observes safe work methods and utilizes safety equipment related to the work.

Performs welding, cutting and fabrication of metal materials for heavy and light equipment repairs and/or modifications.

Monitors and maintains inventory of applicable fleet maintenance supplies, inventory, and equipment.

Assists in cleaning and maintaining fleet shop area.

Must meet regular attendance requirements.

Must be able to maintain good interpersonal relationships with staff, co-workers, managers and citizens.

Must accomplish the essential functions of the job, with or without reasonable accommodations, in a timely manner.

Performs other duties as assigned.

This position is deemed essential during inclement weather situations, and must report to or remain at work, even when administrative closings are announced, as determined by the Department Head.

#### DEPARTMENT SPECIFIC DUTIES:

When working as a Heavy Equipment Mechanic 3:

Performs diagnostic tests to identify and rebuild/repair malfunctions on all diesel, gasoline and electric equipment (refuse trucks, brush collection trucks, sweepers; dump trucks, tractors,

mowers, leaf collection systems, salt spreaders, and construction equipment). Makes repairs to include overhaul of major and minor sub-systems. Diagnose hydraulic malfunctions, engines, repairs pumps, cylinders and control valves.

Overhauls pumps, actuators, transmissions, compressors, vacuum and electric controls and components. May weld and cut parts using welding equipment. Tests overhauled equipment to ensure operating efficiency. Installs and repairs air-conditioning components.

Performs diagnostic tests and repairs/overhauls complete brake and steering systems. Performs inspections and serviceability/reliability checks/repairs/rebuilds on all brake, steering and driveline components. Performs in-depth preventative maintenance inspections and makes repairs to ensure reliability and safety.

Performs diagnostic tests and repairs on emission control systems. Must be able to make electrical system servicing and repairs on the majority of vehicles and equipment assigned.

Performs accurate documentation on repair work orders. Has ability to correctly open, document and close repair work orders. Correctly charges parts to work orders, completes all required documentation. Utilizes laptop computers to complete, verify parts/labor and inputs comments to detail repairs made.

Ensure a SAFE work environment, identifies/correct safety infractions, walks and talks safety. Wears PPE as required, performs job risk assessments.

Performs emergency road services to equipment outside the garage. Prepares and maintains records and reports relating to work accomplished. Performs other related work as required and assigned by supervisor.

Performs major and minor mechanical repairs and adjustments on power drive, brakes, steering mechanisms, and electrical, cooling and related systems on light and heavy motorized equipment and vehicles.

Repairs and adjusts hydraulic and vacuum operated systems; replaces hydraulic motors, hoses and fittings; installs and adjusts power takeoffs.

Performs welding, fabrication and machine work incidental to completion of repair assignments.

Performs service calls for landfill equipment and on road equipment.

Adjusts and makes repairs to diesel engines; adjusts or repairs valves, carburetors, generators and related units; replaces all worn or defective parts. Performs daily housekeeping duties to ensure a clean and organized shop.

When working as a Fire Apparatus Mechanic 3,

Performs preventive and corrective maintenance on vehicles and equipment. Files repair reports with the Shift Supervisor. Performs routine service duties, i.e. relines brakes, performs tune-ups and oil changes, replaces filters, lubricates chassis, replaces antifreeze, air filters, drive belts, and tires. Performs general repairs, tests and recharges/replaces batteries, replaces water pumps, fuel pumps, radiators, brake air lines, hydraulics, electrical wiring, headlights and warning lights.

Diagnoses problems with fire department vehicles, radios, apparatus and other types of equipment. Performs metal fabrication, fabricates high pressure hoses, fittings, hydraulic hoses and conducts field repairs as needed. Conducts welding on steel and aluminum, ensures repairs are made as required. Assembles plumbing and pumping apparatus. Repairs electric generators. Rebuilds air, water and hydraulic valves. Reviews technical drawings for compliance with NFPA.

Conducts preventive maintenance inspection/repair records, pump service test forms, emergency generator maintenance. Maintains emergency generators and makes repairs as required. Sets up tools and equipment; procures parts and supplies for repairs, cleans shop area, parts room, restrooms and office. Delivers apparatus to outside repair shops as necessary. Makes emergency repairs at fire scenes as necessary. Performs other related duties as required.

**MINIMUM QUALIFICATIONS:** High School Diploma or GED and five (5) years of preventive maintenance experience required. Any combination of vocational/technical training in equipment or automotive mechanics and/or experience may be combined to satisfy the required experience, or any combination of equivalent experience and education.

**LICENSING AND CERTIFICATIONS:** Valid Driver's License.

When working as a Heavy Equipment Mechanic 3, attainment of any five (5) T Series ASE Certifications (one must be T4). Valid TN Class B or Class A CDL Required.

When working as a Fire Apparatus Mechanic 3, attainment of ASE Certifications T4 (Brakes);T5 (Suspension and Steering); T2 (Diesel Engines); T3 (Drive Train); T6 (Electrical Systems) in addition to EVT EXAM F1 (Maintenance, Inspection, and Testing of Fire Apparatus); F2 (Design & Performance Standards of Fire Apparatus); F3 (Fire Pumps and Accessories) and F4 (Fire Apparatus Electrical Systems). \*\* The Above Qualifications are the Requirements for an EVT Level 2 Technician\*\* Valid TN Class B or Class A CDL Required.

**KNOWLEDGE & SKILLS:** Knowledge of welding techniques; braking, electrical and hydraulic systems; electrical circuit operations; advanced methods, techniques, parts, tools and materials used in the maintenance and repair of diesel and gasoline powered vehicles; diagnostic devices utilized in identifying vehicle and/or equipment malfunctions; the operation and maintenance of a wide variety of hand, power, shop tools and equipment common to the field; safe work methods and safety regulations pertaining to the work; shop mathematics and tire changing techniques.

Skill in prioritizing and assigning work; welding, cutting and modifying equipment and vehicle body parts; fabricating parts; performing major vehicle and equipment repairs; maintaining and repairing vehicles and equipment; detecting and diagnosing complex vehicle and equipment malfunctions; performing vehicle maintenance activities to applicable vehicles and equipment; operating and maintaining a wide variety of hand, power and shop tools and equipment used in the work; understanding and following oral and written instructions; preparing records and

reports; reading and interpreting manuals, specifications and drawings and establishing and maintaining effective working relationships with other employees and those contacted in the course of the work.

The City of Chattanooga provides an annual tool reimbursement of \$1,200.00 after the first completed year of employment as an Heavy Equipment Mechanic 3 in addition to providing uniforms and safety boots at no cost to the employee.

**PHYSICAL DEMANDS:** Positions in this class typically require climbing, balancing, stooping, kneeling, crouching, reaching, standing, walking, pushing, pulling, lifting, fingering, grasping, feeling, talking, hearing, seeing and repetitive motions.

**WORK ENVIRONMENT:** Medium Work: Exerting up to 50 pounds of force occasionally, and/or up to 20 pounds of force frequently, and/or up to 10 pounds of force constantly to move objects.

**SPECIAL REQUIREMENTS:**

Safety Sensitive: Y

Department of Transportation - CDL: Y (Only for Heavy Equipment Mechanic/Fire Apparatus Mechanic)

Child Sensitive: N

The City of Chattanooga, Tennessee is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the City will provide reasonable accommodations to qualified individuals with disabilities and encourage both prospective and current employees to discuss potential accommodations with the employer.