EQUIPMENT MECHANIC II

JOB DESCRIPTION

Classification Responsibilities: An Equipment Mechanic II performs skilled maintenance and repair work in one of the following areas:

Fire Assignment: An Equipment Mechanic II in Fire completes apparatus inspections and performs specialized, journey-level mechanical maintenance and repair work on all types of complex firefighting apparatus and related equipment, which include but are not limited to ladder trucks, engine trucks, crash trucks, air/light trucks, rehabilitation (rehab) trucks, hazardous materials (haz mat) trucks, command vans, systems on brush trucks, etc. Duties include: reviewing the apparatus maintenance logs; communicating with the driver operators, and using manual techniques or computerized systems to diagnose operational problems on all types of firefighting apparatus and heavy equipment; troubleshooting problems with a variety of complex hydraulic and electrical systems on firefighting apparatus; reviewing repair work to be completed with the Lead Fire Mechanic and then prioritizing repairs for efficient work flow and to minimize apparatus down time; performing equipment repair and maintenance on firefighting apparatus and road testing apparatus; repairing and maintaining firefighting systems, pumps, and valves on the apparatus; repairing and maintaining fire auxiliary equipment, including generators, small engines, foam systems, etc.; modifying, welding, fabricating parts such as equipment and tool mounts, brackets, and shelving; performing oil changes and replacing filters and fluids as part of the preventative maintenance service on fire apparatus; completing minor tire repairs or replacing tires; steam cleaning fire apparatus in order to clearly view the areas or parts to be inspected or repaired; and cleaning their work areas and the maintenance shop. This class performs related duties as required.

Fleet Assignment: An Equipment Mechanic II in Fleet Services performs skilled maintenance and repair work of heavy-duty equipment, including diesel-powered equipment. Work requires a high degree of technical knowledge as well as the ability to exercise independent judgment in determining the method of repair. Work involves diagnosing and repairing electrical and hydraulic systems and performing major repairs on a wide range of vehicles, including heavy construction and refuse equipment. This class is also responsible for performing related duties as required.

Distinguishing Features:

Fire Assignment: An Equipment Mechanic II in Fire is subject to on-call assignments when off duty and may be expected to work flexible hours involving shift work or weekends. Incumbents may also be called out for a major fire or other emergency. Direction is received from the Lead Fire Mechanic or Fire Maintenance and Resource Superintendent.

Fleet Services Assignment: An Equipment Mechanic II in Fleet is distinguished from the Equipment Mechanic I by the greater difficulty and diversity of the tasks performed. Incumbents may be assigned to a shift that includes nights, weekends, and holidays, and work is subject to rotational stand-by. The Equipment Mechanic II in Fleet receives supervision and work assignments from a Shop Foreman or Shop Supervisor, and work is reviewed through spot check observation, conferences, problems encountered, and overall results achieved. Employees are required to use the appropriate safety equipment and procedures in performing assignments. Employees in this class may progress by

noncompetitive promotion to a Senior Equipment Mechanic II after successfully completing original City probation, being employed a minimum of one year as a City of Mesa Equipment Mechanic II, meeting the specific criteria-based promotion requirements, and meeting the minimum qualifications of the Senior Equipment Mechanic II classification. This class is FLSA nonexempt.

QUALIFICATIONS

Employee Values: All employees of the City of Mesa are expected to uphold and exhibit the City's shared employee values of Knowledge, Respect, and Integrity.

Minimum Qualifications Required. Any combination of training, education, or experience equivalent to a minimum of five years' experience as a journey-level mechanic, including some (6 months - 1 year) experience in heavy-duty equipment maintenance or repair, or as a City of Mesa Equipment Mechanic I.

Fire Assignment: Must become an Arizona certified Emissions Inspector within six months after hire. Must obtain fire apparatus Emergency Vehicle Technician (EVT) F1 and F2 certifications within one year of hire.

Fleet Services Assignment: Three Automotive Service Excellence (ASE) Medium/Heavy-Duty Truck certifications are required within one year of hire.

Special Requirements. Must possess a valid Class D Arizona Driver's License by hire or promotion date. Incumbent must possess their own hand tools and rollaway box. Must meet the qualifications to wear a tight-fitting respirator by passing a medical evaluation in accordance with Code of Federal Regulations (CFR) 1910.134 by hire or promotion date and must maintain certification ***(by assignment)***.

Substance Abuse Testing. Due to the safety and/or security sensitive nature of this classification, individuals shall be subject to pre-employment or pre-placement alcohol, drug and/or controlled substance testing as outlined in City policy and procedures. Certain positions within this class are subject to Department of Transportation (DOT) Federal Motor Carrier Safety Administration (FMCSA) drug and alcohol testing as outlined in 49 CFR Part 382 ***(Fleet Services Assignment)***.

Preferred/Desirable Qualifications.

Fire Assignment: Experience in the repair and maintenance of fire apparatus or fire pumps and valves. Fire apparatus EVT F1 through F4 certifications and ASE Auto/Heavy Truck certification.

Fleet Services Assignment: Extensive experience in the repair and maintenance of Heavy-Duty Trucks, Refuse Trucks, or Heavy-Duty Construction Equipment. Certification as an ASE Master Medium/Heavy Truck Technician.

ESSENTIAL FUNCTIONS

Communication:

Fire Assignment: Communicates with coworkers, supervisors, and department personnel to establish and maintain effective working relationships. Communicates with driver operators regarding apparatus

and equipment performance. Reviews repair work to be completed with the Lead Fire Mechanic. Prepares accurate work records of maintenance work.

Fleet Services Assignment: Communicates with other City employees in order to locate disabled vehicles during service calls. Writes comments on repair orders to exchange information and reports progress during the course of repair work.

Manual/Physical:

Fire Assignment: Uses manual techniques or computerized systems to diagnose operational problems on all types of firefighting apparatus and heavy equipment. Tests, troubleshoots, adjusts, repairs gasoline and diesel engines, fuel systems, transmissions, brake components, hydraulic and electrical systems, water pumps, and other related mechanical devices. Performs equipment repair and maintenance on firefighting apparatus. Performs major and minor repairs (example: in chassis engine overhauls and brake system and pump repairs) and preventative maintenance (oil changes, lubrication, wheel bearings, etc.) on fire pumps, components, and other complex fire apparatus and fire auxiliary equipment (such as generators and small engines on fire apparatus and equipment) to ensure performance under emergency conditions. Makes brake and clutch adjustments and repairs. Repairs and maintains firefighting systems, pumps, and valves on the apparatus. Repairs and maintains fire auxiliary equipment, including generators, small engines, foam systems, etc. Modifies, welds, fabricates parts such as equipment and tool mounts, brackets, and shelving. Performs oil changes and replaces filters and fluids as part of the preventative maintenance service on fire apparatus. Completes minor tire repairs or replaces tires. Steam cleans fire apparatus in order to clearly view the areas or parts to be inspected or repaired. Cleans work areas and the maintenance shop. Operates vehicles and equipment requiring a standard Arizona Driver's License to road test maintenance and repair work. Keeps accurate maintenance work records. Uses appropriate Personal Protective Equipment (PPE). Meets scheduling and attendance requirements.

Fleet Services Assignment: Repairs and adjusts gasoline and diesel engines, fuel systems, transmissions, and other mechanical devices. Overhauls in-chassis engines and brake systems. Tests, adjusts, and repairs fuel systems, transmissions, brake components, and other mechanical devices. Performs vehicle emissions testing on gas or diesel engines. Sets hydraulic pressures to manufacturer specifications. Troubleshoots and repairs hydraulic and electrical problems, including: stuck valves, damaged pumps, and bypassing cylinders. Removes and installs hydraulic cylinders and components. Measures distances to determine wear values, such as brake drums and internal engine components, and to correct mechanical discrepancies. Operates vehicles and equipment requiring a standard Arizona Driver's License to road test equipment. Uses screwdrivers, wrenches, air-powered tools, etc., in completing repair work. Detects air leaks while inspecting air brakes. Detects vapors from hydraulic, motor, and transmission oils, brake fluids, diesel fuel, gasoline, etc. Inspects equipment and vehicles to assist in problem diagnosis. Traces electrical systems. Works with brake cleaners and solvents. Cleans work area and equipment. Uses a respirator when performing duties requiring exposure to hazardous fumes and/or when working in a confined space. Moves refuse to gain access to the area behind packer blades in performing repair work. Must be physically able to safely lift a minimum of 50 pounds. Moves heavy (50 - 800 pounds) objects, such as transmissions, engines, etc., with the assistance of a forklift or other device. Works in small, cramped areas, at heights greater than ten feet, in repairing lighting systems on

vehicles and performing operational and safety inspections on aerial manlift equipment. Works in a variety of weather conditions in performing field safety inspections and road service calls. Works around or uses potentially hazardous materials requiring the use of specialized equipment. Meets scheduling and attendance requirements.

Mental: Diagnoses operational problems on heavy-duty equipment, such as engines, transmissions, brakes, hydraulic systems, etc., in order to determine the source of a problem. Comprehends, interprets, and makes inferences, and applies knowledge from shop service manuals to follow recommended repair procedures. Reviews apparatus maintenance logs ***(Fire Assignment)***. Troubleshoots hydraulic and electrical problems. Prioritizes repairs for efficient workflow and to minimize apparatus down time

(Fire Assignment). Prioritizes own work assignments. Reads and interprets schematic drawings in diagnosing and correcting wiring problems. Learns job-related material regarding electrical and hydraulic systems through on-the-job training. Learns proper repair techniques as recommended by the manufacturer in classroom settings.

Knowledge and Abilities: (The knowledge and abilities listed may not apply to all positions.)

Knowledge of:

the hazards and safety precautions of the mechanic's trade;
the methods, materials, tools, and standard practices of the heavy-duty mechanic's trade;
the principles of operation of internal combustion and diesel engines;
steering and suspension systems, and electrical systems and equipment;
the operating and maintenance requirements of heavy-duty equipment;
the installation and repair of major systems, including: air conditioning, air brakes, and air systems;
the state gas or diesel engine emissions testing requirements;
the techniques and practices of gas and arc welding;
water hydraulics (examples: water pumps, valves, governors, and relief valve systems) ***(Fire Assignment)***;
modern procedures and methods of automotive maintenance and repair ***(Fire Assignment)***;
the procedures and methods of maintaining and repairing fire truck and pumps ***(Fire Assignment)***; and
automotive and other firefighting equipment and apparatus ***(Fire Assignment)***.

Ability to:

diagnose and repair operational problems on heavy-duty equipment;
understand and effectively carry out verbal and written instructions;
prepare and maintain accurate work records of maintenance work;
perform specialized journey-level mechanical maintenance and repair work on all fire equipment, complex firefighting apparatus, and related equipment ***(Fire Assignment)***;
perform manual/physical essential functions of the class;
meet scheduling and attendance requirements; and
establish and maintain effective working relationships with management, coworkers, supervisors, and user departments.

The duties listed above are intended only as general illustrations of the various types of work that may be performed. Specific statements of duties not included does not exclude them from the position if the work is similar, related, or a logical assignment to the position. Job descriptions are subject to change by the City as the needs of the City and requirements of the job change.

Revised 12/22
NF/yf/lr
CS4228.DOCX
EEO-SCW
JOB FCTN-MEC
INCREMENTS 81-200

PAY GRADE: 50
IND-8380
SWORN-No