

CITY OF OVERLAND PARK POSITION DESCRIPTION

TITLE:	Equipment Mechanic, Senior	BAND/LEVEL:	Tech II
DEPARTMENT:	Public Works	JOB NO:	7320
DIVISION:	Fleet Maintenance Division	DATE:	02/15/2016
REPORTS TO:	Supervisor, PW Fleet Maintenance	FLSA STATUS:	NE
FULL-TIME: XX	PART-TIME:	TEMPORARY:	COST CENTER: 341

REPLACES: Equipment Mechanic, Senior

DATE: 2/8/2013

JOB SUMMARY STATEMENT:

This is an advanced journey-level mechanic position that maintains and services complex types of automotive equipment, including performing routine and major mechanical repairs to gasoline, diesel, and other power-driven heavy equipment. Trouble shoots and determines corrective action to complex mechanical and electrical problems. Performs major maintenance and repair work on automobile and heavy duty truck chassis, drive train, air conditioning and exhaust emission systems. Fabricates, modifies or repairs automotive components as applicable. Where assigned, completes maintenance and repair work on emergency response vehicles such as fire apparatus and ambulances. Researches parts information and assists in their ordering. Inputs and retrieves information/data using computerized fleet management software. Assists in emergency operations, including snow removal.

DUTIES AND RESPONSIBILITIES:

1. Inspects and diagnosis causes of malfunctioning diesel and gasoline powered vehicles and/or construction equipment, including mechanical, electrical, hydraulic and/or pneumatic systems. Diagnostic work includes identifying the reason (root cause) for a malfunction and determining the proper repair methods. Problems encountered will be those of a more complex nature such as those involving intricate electrical wiring schematics, those where a matrix of possible causes to a failure exist and those involving elaborate operating systems such as sensor operated hydraulics on asphalt milling and paving equipment).
2. Conducts preventative maintenance inspections to check/test vehicles and equipment for function and safe operation. Checks lighting systems, body condition, doors, windows, front ends, bumpers, glass and mirrors, tailgates, frames, tanks, batteries, radios, instruments and gauges, fire extinguishers, heaters and air conditioners, horns, brakes, windshield wipers, springs, oil and water levels, belts, fans and water pumps, hoses radiators, clutches, and numerous other parts and operating systems for proper operation. Utilizes lifts, jacks, welding equipment, and acetylene torch in operations.
3. Performs field site vehicle and equipment repairs using mobile tools and equipment. Safely operates hydraulic lifting cranes and/or vehicle lifting devices to stabilize and safely secure vehicles in the field before commencing with any work.
4. Utilizes computerized fleet management software to track equipment/vehicle maintenance and history. Inputs data including parts, hours, and mechanic notes.
5. Performs manual tune ups on non computerized gasoline and diesel powered engines. Performs all aspects of repairs to gasoline and diesel powered engines such as removal and replacement of minor bolt on parts and major internal engine components up to and including the entire engine assembly from the vehicle chassis.
6. Utilizes computerized diagnostic tools to interface with onboard vehicle electronics and identify malfunctioning systems and/or performance tune up needs.
7. Performs welding of steel and aluminum. Utilizes various welding equipment such as stick, MIG and TIG welders.
8. Creates shop drawings for parts and/or equipment to be fabricated or modified. Utilizes shop drawings to order materials, performs the work, tests the design and makes further adjustments as may be necessary.
9. Repairs, and/or rebuilds malfunctioning hydraulic components such as pumps, motors and cylinders. Determines the extent of problems through testing and disassembling parts and equipment. Cleans and inspects parts and replaces

damaged or worn parts. Reassembles and installs parts and equipment. Operates and tests systems.

10. Repairs, replaces and/or adjusts engine subassemblies such as bolt on water pumps, alternators or air compressors. Checks for proper operating conditions and where defects occur determines whether adjustment, repair or replacement of the bolt on parts is required. Performs required work and confirms proper system operation.
11. Inspects and diagnosis electrical problems including common 12 volt DC circuits, multi-plex wiring systems and small voltage electronics such as engine management computers. Removes and replaces and/or repairs electrical assemblies or wiring harnesses as determined. Installs electrical devices and wiring systems in vehicles and equipment.
12. Inspects vehicle air brake systems for leaks, worn parts, and defective components. Rebuilds or replaces brake system components. Inspects hydraulic brake systems, including fluid levels, pedals, drums, backing plates, and linings. Repairs or replaces defective components, such as leaking lines and master cylinders. Adjusts brakes manually and bleeds air from system.
13. Inspects and repairs light equipment such as saws, water pumps, jackhammers, etc. Checks equipment for obvious defects and cleans before disassembling. Gathers tools and disassembles equipment. Obtains needed parts and reassembles to working order. Tests equipment for proper operation.
14. Replaces tires on equipment and vehicles. Checks tires periodically to ensure proper wear and tear.
15. Assists the Fleet Supervisor in the writing of specifications for new equipment and vehicle purchases. Where assigned will inspect new equipment and/or vehicles for compliance with the specifications as well as maintenance/repair work performed outside vendors.
16. Serves as the primary installer of internally fabricated and/or modified component equipment such as snow plow attachments, hydraulic systems, electrical controls and/or emergency service vehicle equipment. Where assigned this will also include new components purchased from outside vendors. Ensures installed component equipment safely functions and will provide durable service. Where applicable fabricates supplementary needed custom parts or researches the availability of new or used manufactured components.
17. Assists other mechanics in diagnosing and completing maintenance and/or repair work. Will be the responsible lead, where assigned, to organize the work and determine proper work methods.
18. Assists the Fleet Maintenance Supervisor in ensuring work is performed in a safe manner. Uses proper safe work methods and maintains awareness of shop work area safety requirements.
19. Participates in snow and ice control operations including operating snow plowing equipment where assigned.
20. The employee must work the days and hours necessary to perform all assigned responsibilities and tasks including snow duty. Must be available (especially during regular business hours or shifts) to communicate with subordinates, supervisors, customers, vendors and any other persons or organization with whom interaction is required to accomplish work and employer goals.
21. The employee must be punctual and timely in meeting all requirements of performance, including, but not limited to, attendance standards and work deadlines; beginning and ending assignments on time; and scheduled work breaks, where applicable.

GENERAL QUALIFICATIONS

EDUCATION & SPECIAL LICENSE(S)/CERTIFICATIONS:

Basic education with formal technical training in the maintenance and repair of gas and diesel powered equipment, welding, hydraulic powered equipment or a combination of an equivalent level of training and experience. Must possess a valid Class A commercial driver's license with air brake and tanker endorsements. Must maintain an insurable driving record.

Must possess one of the following;

- ASE Master Certification in Heavy Duty Truck and EVT F1, or
- ASE Master Certification in Automobile and EVT F1, or
- EVT Certification Level II in either Fire Apparatus or Ambulance.

EXPERIENCE:

Two to three years experience at the Equipment Mechanic level, performing automotive maintenance and repair, or an equivalent level of experience.

SKILLS:

1. Welding.
2. Engine repair.
3. Equipment repair.
4. Good oral and written communication skills.
5. Good listening skills.
6. Manual dexterity.
7. Ability to work independently.
8. Working knowledge of all machines and equipment in the work area.
9. Computer literacy.

MENTAL REQUIREMENTS:

1. Mechanical aptitude.
2. Ability to assess situation and make recommendations.
3. Ability to break down complex procedures into individual steps.
4. Ability to work in hectic environment with distractions and interruptions.
5. Ability to read and comprehend vehicle maintenance and repair manuals.
6. Ability to use manual or computerized equipment to diagnose automotive repairs.
7. Alpha/numeric recognition.
8. Logical reasoning.
9. Ability to analyze safety situation.

PHYSICAL REQUIREMENTS:

1. Ability to drive/operate City vehicles.
2. Work in environment with high noise levels.
3. Ability to operate various tools and equipment necessary for the repair and maintenance of vehicles and machinery.
4. Mobility to inspect equipment and vehicles in the various work sites around the City.
5. Visual stamina and acuity to detect defects in parts and equipment.
6. Ability to work at heights up to 40 feet
7. Ability to distinguish colors.
8. Ability to distinguish smells.
9. Ability to adjust to temperature changes.
10. Ability to work in cramped conditions.
11. Hand and eye coordination adequate to operate power tools and equipment safely and effectively.
12. Exposure to exhaust noises and fumes.

SEE ESSENTIAL FUNCTIONS BELOW FOR ADDITIONAL PHYSICAL REQUIREMENTS

SUPERVISORY RESPONSIBILITY (Direct & Indirect):

None

The preceding job description has been designed to indicate the general nature and level of work performed by employees within this classification. It is not designed to contain or be interpreted as a comprehensive inventory of all duties, responsibilities, and qualifications required of employees assigned to this job.

ESSENTIAL FUNCTIONS

ACTIVITY	DURATION	DESCRIPTION
Standing	Constant	level surface; primarily concrete surface
Walking	Frequent	level surface; primarily concrete surface
Sitting	Occasional	
Driving	Occasional	vehicles (standard and automatic transmission); forklift
Bending	Frequent	various postures required to complete requirements
Stooping	Frequent	various postures required to complete requirements
Twisting	Frequent	various postures required to complete requirements
Kneeling	Up to Frequent	various postures required to complete requirements
Squatting	Up to Frequent	various postures required to complete requirements
Crawling	Occasional	various postures required to complete requirements
Stairs	Occasional	
Ladders	Occasional	4 foot & 8 foot ladder

LIFTING	WEIGHT	HEIGHT	FREQUENCY	DURATION	DESCRIPTION
Absorbent material	25 lbs.	0-50 inches	variable	occasional	two hand lift
Air compressor	35 lbs.	0-55 inches	variable	occasional	two hand lift
Hub	58 lbs.	24-0 inches	variable	occasional	two hand lift
Brake Drum	112 lbs.	0-24 inches	variable	occasional	two hand lift
Miscellaneous tools	0-10 lbs.	0-60 inches	variable	frequent	one or two hand lift

** This is a list of observed essential functions on one date only that provides a sample range of occupational requirements; there are other items that are required to be lifted as a requirement of this position. Frequencies will be variable and dependent on type of work that is required at given time.*

CARRYING	WEIGHT	DISTANCE	FREQUENCY	DURATION	DESCRIPTION
Absorbent material	25 lbs.	0-100 ft.	variable	occasional	two hand carry
Air compressor	35 lbs.	40 ft.	variable	occasional	two hand carry
Hub	58 lbs.	10 ft.	variable	occasional	two hand carry
Brake Drum	112 lbs.	10 ft.	variable	occasional	two person carry
Miscellaneous tools	0-10 lbs.	100 ft.	variable	frequent	one or two hand carry

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PUSHING	FORCE	FRQUNCY/DUR	DESCRIPTION
Air compressor vacuum / charger	18.5 lbs.	occasional	horizontal force; two hand push
Tire from ground level	38 lbs.	occasional	vertical force; two hand push
Torque required to utilize tools	variable	variable	one or two hand requirement

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PULLING	FORCE	FRQUNCY/DUR	DESCRIPTION
Air compressor vacuum / charger	18.5 lbs.	occasional	horizontal force; two hand pull
Torque required to utilize tools	variable	variable	one or two hand requirement

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REACHING	DURATION	DESCRIPTION
Below Knee Height	frequent	type of job dependent
Below Waist Height	frequent	type of job dependent
Forward > 2 Feet	frequent	type of job dependent
Above Shoulder Height	frequent	type of job dependent
Lateral Reach	frequent	type of job dependent

*

Duration is rated on highest observed required level of performance; certain requirements may be at a lesser level.

FINE MOTOR	DURATION	DESCRIPTION
Gripping	frequent	type of job dependent
Pinching	frequent	type of job dependent
Wrist Flexion & Extension	frequent	type of job dependent
Wrist Lateral Deviations	frequent	type of job dependent
Pronation & Supination	frequent	type of job dependent

*

Duration is rated on highest observed required level of performance; certain requirements may be at a lesser level.

Proprioception Requirements: Mechanics are required to be able to identify / assemble / disassemble items (nuts, bolts, washers, etc.) with bilateral hands / fingers without having a direct line of site to the item.