DOT #: 620.281-050 CLAIM #



#### KING COUNTY ON SITE JOB ANALYSIS

JOB TITLE Mechanic/Automotive Machinist I (Heavy Duty)

JOB CLASSIFICATION Heavy Duty Mechanic

**DOT TITLE** Mechanic, Industrial Truck (any industry)

**DOT NUMBER** 620.281-050

**DEPARTMENT** Natural Resources and Parks

**DIVISION** Solid Waste

#### # OF POSITIONS IN THE DEPARTMENT WITH THIS JOB TITLE 14

#### **JOB STATUS**

Full Time Career Service.

#### ADDRESS OF WORKSITE

11645 228<sup>th</sup> Ave. SE Maple Valley, WA 98038

**CONTACT'S NAME** Steven Smith

**CONTACT'S PHONE** 206-296-0483

**EMPLOYER JOB TITLE** Solid Waste Supervisor

**DATE COMPLETED** 9/10/02

VRC NAME Jeff Casem

**DATE REVISED** 5/14/09

#### **WORK HOURS**

6:00am to 2:30pm or 2:30 pm to 11:00pm.

## **OVERTIME**

Optional, once every fourth weekend. Fair Labor Standards Act, Non-Exempt (hourly).

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#### JOB DESCRIPTION

Performs maintenance service for a wide variety of machinery, automotive and heavy equipment. Lubes various vehicles and equipment and performs preventative maintenance. Performs overhaul and repair work on various County automobiles, heavy trucks, tractors, trailers, backhoes, loaders, and other automotive and construction related equipment

#### ESSENTIAL ABILITIES FOR ALL KING COUNTY JOB CLASSIFICATIONS

- 1. Ability to demonstrate predictable, reliable, and timely attendance.
- 2. Ability to follow written and verbal directions and to complete assigned tasks on schedule.
- 3. Ability to read, write & communicate in English and understand basic math.
- 4. Ability to learn from directions, observations, and mistakes, and apply procedures using good judgement.
- 5. Ability to work independently or part of a team; ability to interact appropriately with others.
- 6. Ability to work with supervision, receiving instructions/feedback, coaching/counseling and/or action/discipline.

#### JOB SPECIFIC REQUIREMENTS

Demonstrate high level of knowledge to diagnose and repair both simple and complex mechanical devices/systems. Maintain current knowledge of mechanics and mechanical test equipment. Capable of troubleshooting mechanical and engine system problems and direct repairs.

## **ESSENTIAL FUNCTIONS** Listed in order of importance

- Performs mechanical, electrical and hydraulic overhaul and repair work on automobiles, light and heavy trucks, tractors, mowers, trailers, backhoes, loaders, buses, electric busses and other automotive, construction, road repair, maintenance, wastewater related equipment and other mechanicalrelated equipment.
- 2. Performs scheduled preventative maintenance.
- Troubleshoots and diagnoses major and minor mechanical, hydraulical and electrical problems in all types of equipment.
- 4. Fabricates, installs, adjusts, replaces or rebuilds systems, components and related parts.
- 5. Mounts various types of new and used systems or equipment on new/used vehicles or equipment.
- 6. Documents maintenance, repairs and problems on work orders. May prepare reports and maintain records.
- 7. Provides technical assistance, direction and advice to other workers, and give quidance on complex mechanical repair projects.
- 8. Installs and fabricates a variety of metal fixtures.
- 9. Installs, overhauls, rebuilds and performs preventative maintenance on large industrial engines and systems.

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10. Troubleshoots and evaluates equipment repair needs; plans strategies, parts, tools, and equipment needs.

- 11. Opens and closes work orders and schedules inspections. Uses a computer terminal.
- 12. Trains apprentices to perform technical tasks.
- 13. Plans and coordinates repairs with other areas such as radiator shop.
- 14. Performs oil servicing, sampling, greasing.
- 15. Repairs machine drums and rotors.
- 16. Installs, repairs, maintains and designs automotive plumbing systems.
- 17. Performs preventive and emergency maintenance on various County vehicles.
- 18. Performs safety inspections on various County Vehicles.
- 19. Drives oversized 3½ ton Ford F800 Class 6 truck with an automatic transmission to transport large parts and pieces of machinery.
- 20. Maintains maintenance records.
- 21. Changes oil, filters, brakes, and fluids on various County vehicles.
- 22. Steam and pressure washes various County vehicles.
- 23. Test-drives various County vehicles.

## TOOLS, MACHINES, EQUIPMENT, PRODUCTS, AND SERVICES USED

Hand and power tools, such as wrenches, ratchets, screw drivers, saws, cutters, clamps, drills, impact wrench, compressed air tools, pliers, vice-grips, floor jack, torch, steam cleaner, pry bars, laptop computer, parts washer, cut-off saw, stools, creepers, various county trucks and vehicles, steel toed boots, forklift, dusk mask, column lift, utility cart, batteries, respirator and hammers.

#### PHYSICAL DEMANDS AS JOB IS TYPICALLY PERFORMED

Continuously = occurs 66-100% of the time
Frequently = occurs 33-66% of the time
Occasionally = occurs 1-33% of the time
Rare = may occur less than 1% of the time
Never = does not ever occur (such demands are not listed)

## This job is classified as

Medium

#### Standing

Occasionally to continuously on landfill/garbage, cement, asphalt and gravel surfaces for 10 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs while repairing and maintaining County vehicles and equipment. Standing varies according to duties performed.

#### Walking

Frequently on landfill/garbage, cement, asphalt and gravel surfaces for distances of up to 150 yards for up to 10 minutes at a time for up to 4 hours total in a work shift. Most commonly occurs while traversing between buildings and equipment.

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## Sittina

Frequently on a stool or automobile seat for up to 10 minutes at a time for up to 3 hours total in a work shift. Most commonly occurs while driving county vehicles, operating County equipment and performing bench work.

## Climbing stairs

Occasionally for up to 45 seconds at a time while climbing 24 steps for up to 6 minutes total in a work shift. Most commonly occurs while walking between the vehicle parking lot and the work site.

## Climbing

Rare on heavy equipment, tractors, ladder and trucks to heights of up to 6 feet for up to 10 seconds at a time for up to 5 minutes total in a work shift. Most commonly occurs while entering and exiting large vehicles and machinery.

#### **Balancing**

Continuously on uneven ground, landfill/garbage, heavy machinery and trucks at heights of up to 6 feet for up to 30 minutes at a time for up to 7 hours total in a work shift. Most commonly occurs while repairing broken down machinery in the landfill.

## **Bending/Stooping**

Continuously on landfill/garbage, cement, asphalt and gravel surfaces for up to 20 minutes at a time for up to 6 hours total in a work shift. Most commonly occurs while leaning over the engine compartment of heavy machinery and vehicles when performing maintenance and repairs.

#### Kneeling

Frequently on landfill/garbage, cement, asphalt and gravel surfaces for up to 5 minutes at a time for up to 3.5 hours total in a work shift. Most commonly occurs while replacing brakes and working on lower areas of vehicles and heavy machinery. The worker may be able to alternate kneeling with crouching or bending/stooping.

#### Crouching

Frequently on landfill/garbage, cement, asphalt and gravel surfaces for up to 5 minutes at a time for up to 3.5 hours total in a work shift. Most commonly occurs while replacing brakes and working on lower areas of vehicles and heavy machinery. The worker may be able to alternate crouching with kneeling bending/stooping.

#### Crawling

Rare on landfill/garbage, cement, asphalt and gravel surfaces for up to 10 seconds at a time for up to 1 minute total in a work shift. Most commonly occurs while inspecting the underside of heavy machinery or vehicles. Crawling may be reduced by utilizing a creeper.

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## **Operating Controls with Feet**

Frequently for up to 1.5 hours at a time for up to 3 hours total in a work shift while driving various vehicles and heavy equipment. Vehicles and equipment may have a manual transmission, which requires repeatedly pressing a clutch pedal with the left foot.

## Reaching above shoulder height

Occasionally for 1 minute at a time for up to 2 hours total in a work shift while working on the underside of a vehicle or piece of machinery. Vehicles may be elevated with a column lift.

## Reaching at waist to shoulder height

Continuously for up to 2.5 hours at a time for up to 6.5 hours total in a work shift while driving and performing maintenance and repairs on heavy machinery and vehicles.

## Reaching at knee to waist height

Continuously on landfill/garbage, cement, asphalt and gravel surfaces for up to 20 minutes at a time for up to 6 hours total in a work shift. Most commonly occurs while leaning over the engine compartment of heavy machinery and vehicles when performing maintenance and repairs.

## Reaching at floor to knee height

Frequently on landfill/garbage, cement, asphalt and gravel surfaces for up to 5 minutes at a time for up to 3.5 hours total in a work shift. Most commonly occurs while replacing brakes and working on lower areas of vehicles and heavy machinery.

#### Lifting 1-10 pounds

Frequently for up to 2 minutes at a time for up to 4.5 hours total in a work shift. Most commonly occurs with weights of 2-5 pounds while utilizing hand tools and manipulating various machine parts.

## Carrying 1-10- pounds

Frequently for distances of up to 150 yards for up to 5 minutes at a time for up to 2.5 hours total in a work shift. Most commonly occurs with weights of 2-5 pounds while transporting various hand tools and machinery parts between the tool bench and the machinery.

#### Lifting 11-20 pounds

Frequently for up to 2 minutes at a time for up to 4.5 hours total in a work shift. Most commonly occurs with weights of 12-15 pounds while utilizing air tools and manipulating various machine parts.

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## Carrying 11-20 pounds

Frequently for distances of up to 150 yards for up to 5 minutes at a time for up to 2.5 hours total in a work shift. Most commonly occurs with weights of 12-15 pounds while transporting various hand tools and machinery parts between the tool bench and the machinery.

## Lifting 21-50 pounds

Occasionally for up to 10 seconds at a time for up to 1.25 hours total in a work shift. Most commonly occurs with weights of 35-50 pounds while manipulating various machine parts such as brake assemblies and drums.

## Carrying 21-50 pounds

Occasionally for distances of up to 15 feet for up to 30 seconds at a time for up to 15 minutes total in a work shift. Most commonly occurs with weights of 35-50 pounds while moving various machine parts such as brake assemblies and drums.

## Lifting 51-100 pounds

Rare for up to 5 seconds at a time for up to 2 minutes total in a work shift. Most commonly occurs with weights of 75 pounds while manipulating, removing or installing a clutch assembly or a flywheel.

## **Pushing and Pulling**

Occasionally for distances of up to 100 feet for up to 1 minute at a time with a force of up to 100 pounds for up to 1 hour total in a work shift while using a pry bar, utility cart, floor jack, wrenches, ratchets, torque and wrenches as well as when manipulating wires, hoses and machine parts.

#### Handling

Frequently for up to 1.5 hours at a time for up to 4.5 hours total in a work shift while using hand tools such as wrenches, ratchets, screw drivers, clamps, drills, pliers, vice-grips, and hammers.

#### **Operating Controls with Hands**

Frequently for up to 1.5 hours at a time for up to 1.5 hours total in a work shift while driving various vehicles and heavy equipment. Vehicles and equipment may have a manual transmission, which requires shifting gears. Some equipment, such as a backhoe, may have hand controls as well.

## **Fingerina**

Occasionally for 10 minutes at a time for up to 2 hours total in a work shift while writing, typing, working on small automotive parts, turning screws and bolts with fingers, adjusting clamps and hoses, and stripping and manipulating wires.

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## Feeling

Occasionally for 5 minutes at a time for up to 2 hours total in a work shift while sensing heat from engine, or feeling for screws, nuts, and bolts on vehicles.

## **Talking**

Occasionally for 15 minutes at a time for up to 2 hours total in a work shift while conversing about duties, and giving and receiving directions and instructions.

## Hearing

Occasionally for 15 minutes at a time for up to 2 hours total in a work shift while conversing about duties, listening for mechanical failures of vehicles, and giving and receiving directions and instructions.

## Tasting/Smelling

Occasionally for up to 5 minutes at a time for up to 20 minutes total in a work shift while troubleshooting equipment failure.

## Near acuity—clarity of vision at 20 inches or less

Frequently for 2 hours at a time for up to 4 hours total in a work shift while visually inspecting small automotive parts.

## Far acuity—clarity of vision at 20 feet or more

Frequently for 2 hours at a time for up to 4 hours total in a work shift while visually inspecting trailers and large equipment as well as driving various vehicles and machinery.

#### Depth perception—three dimensional vision

Frequently for 2 hours at a time for up to 4 hours total in a work shift while operating heaving machinery, driving automobiles, traversing uneven ground and identifying moving machinery as well as stepping over obstacles such as hoses and engine parts.

#### Color vision—ability to identify and distinguish colors

Occasionally for up to 5 minutes at a time for up to 1 hour total in a work shift while identifying colors of wires and fluids.

## Field of vision—observing an area that can be seen up and down or right or left while eyes are fixed on a given point

Frequently for up to 2.5 hours at a time for up to 6.5 hours total in a work shift while driving vehicle and equipment as well as identifying potential hazards such as moving machinery.

## Night vision--seeing after sundown with minimal or no supplemental light sources

Frequently for up to 5 hours at a time for up to 5 hours total in a work shift while working after sundown on the swing shift.

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#### **TEMPERAMENTS**

Performing repetitive or short-cycle work: Occasionally

Performing a variety of duties: Continuously

Working alone or apart in physical isolation from others: Rare

Working effectively under stress: Occasionally

Attaining precise set limits, tolerances, and standards: Continuously

Working under specific instructions: Continuously

Working with others: Continuously

Making judgements and decisions: Occasionally- Frequently

#### **ENVIRONMENTAL FACTORS**

Mechanics primarily work on concrete floors but also work on slight inclines and uneven surfaces inside and out of doors in foul weather conditions. Mechanics are occasionally exposed to vehicle exhaust, cleaning chemicals, oils, gasoline, diesel fuel, and hydraulic fluid. The noise level is moderately loud to loud.

## Workers are exposed to

Outside weather: Frequently Extreme heat: Occasionally

Wet: Frequently

Humidity/dampness: Frequently

Fumes: Frequently Odors: Continuously Dusts: Continuously

Mists: Rare Gases: Rare

Moving mechanical parts: Continuously

Vibration: Frequently

Working in high, exposed places: Occasionally

#### POTENTIAL MODIFICATIONS TO JOB

The worker can utilize a utility cart to reduce carrying, use a breathing apparatus to reduce dust inhalation, and use hearing protection to reduce loud noises.

Signature & title of evaluator	Date	
Signature & title of contact	 Date	
Signature & title of employee	 Date	

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# HEALTH CARE PROVIDER SECTION Check all that apply

	The employee is released to perform the described duties without restrictions on performance or work hours.
	The employee is released to perform the described duties on a reduced schedule. The recommended schedule is:
	☐ Temporary until ☐ Permanent as of
	The employee is released to perform the described job with the following modifications:
	Temporary until Permanent as of
	The employee is not released to perform the described duties due to the following job functions:
	Temporary until Permanent effective
	The employee is unable to work in any capacity.  A release to work is:   anticipated by   Not expected
The I	imitations are due to the following objective medical findings:
Printe	ed or typed name and phone number of Health Care Provider
Signa	ature of Health Care Provider Date