

EMPLOYEE:

CLAIM #



## Job Analysis Form

ALTERNATE FORMAT AVAILABLE

**JOB TITLE** Mechanic/Auto Machinist I **JOB CLASSIFICATION** Mechanic/Auto Machinist I

**DICTIONARY OF OCCUPATIONAL TITLES (DOT) NUMBER** 620.261-010

**DOT TITLE** Automobile Mechanic

**DEPARTMENT** Transportation

**DIVISION** Fleet

**# OF POSITIONS IN THE DEPARTMENT WITH THIS JOB TITLE** 4

**CONTACT'S NAME & TITLE** Bob Toppen, Manager

**CONTACT'S PHONE** 206-296-8159

### ADDRESS OF WORKSITE

155 Monroe Avenue Northeast, Bldg G  
Renton, WA 98056

**VRC NAME** Kyle Pletz

**DATE COMPLETED** 7/31/09

### WORK HOURS

6:00am to 2:30pm Monday through Friday or 9:00am to 7:30pm (Monday through Thursday or Tuesday through Friday), 40 hours per week.

**OVERTIME** (Note: Overtime requirements may change at the employer's discretion)

Required on a rare occasion, in accordance with business demand. Normally there are only a few hours of overtime per month, but during inclement weather (snow and ice removal) overtime can increase.

### JOB DESCRIPTION

Performing mechanical, electrical, hydraulic and preventive maintenance overhaul and repair work on a variety of vehicles and stationary equipment or related components.

### 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 judgment.
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**

- Knowledge of system theory, operation, troubleshooting, maintenance and repair of all types and sizes of gasoline and diesel engines, accessories and associated systems; of brakes, suspension, running gear and associated systems; of electrical, hydraulic and air systems, accessories and associated equipment; and of mounted or stationary systems and equipment
- Knowledge of industrial and shop safety rules, procedures and equipment
- Knowledge of the use of electrical, electronic, hydraulic and mechanical test equipment
- Knowledge of the operation of vehicles and equipment and mounted systems necessary to troubleshoot, test for proper operation of integral or installed systems and proper maintenance
- Knowledge of technical terms used in light and heavy equipment repair
- Basic knowledge of computer operation
- Communications skills (oral and written)
- Skill in using maintenance, operations and parts manuals to assist in preventive maintenance
- Skill in the use and care of hand and power tools

## **ESSENTIAL FUNCTIONS**

1. Perform mechanical, electrical and hydraulic overhaul and repair work on automobiles, light and heavy trucks, tractors, mowers, trailers, backhoes, loaders, buses, electric buses and other automotive, construction, road repair, maintenance, wastewater related equipment and other mechanical-related equipment.
2. Perform scheduled preventive maintenance.
3. Troubleshoot and diagnose major and minor mechanical, hydraulic and electrical problems in all types of equipment.
4. Fabricate, install, adjust, replace or rebuild systems, components and related parts.
5. Mount various types of new and used systems or equipment on new/used vehicles or equipment.
6. Document maintenance, repairs, problems on work orders. May prepare reports and maintain records.
7. Provide technical assistance, direction and advice to other workers, and give guidance on complex mechanical repair projects.
8. Install and fabricate a variety of metal fixtures.
9. Install, overhaul, rebuild and perform preventive maintenance on large industrial engines and systems.
10. Troubleshoot and evaluate equipment repair needs; plan strategies, parts, tools and equipment needs.
11. Open and close work orders and schedule inspections. Use computer terminal.
12. Train apprentices to perform technical tasks.
13. Plan and coordinate repairs with other areas such as radiator shop.
14. Perform oil servicing, sampling, greasing.
15. Repair machine drums and rotors.
16. Install, repair, maintain and design automotive plumbing systems.
17. When working as Lead Mechanic/Automotive Machinist, in addition to the above:

- Determine work to be done, assign staff, schedule and coordinate the work.
- Direct, coordinate and assist mechanics in their regular duties.
- Maintain shop records such as work orders, warranty, rebuild-part information, complete work orders and other materials.

**NON-ESSENTIAL FUNCTIONS**

Obtaining an ASE certification.

**PERSONAL PROTECTIVE EQUIPMENT USED**

Eye protection, ear protection, fall protection, foot protection, breathing protection, hand protection, face protection, head protection safety vest and welder helmet.

**OTHER TOOLS & EQUIPMENT 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 as well as a computer.

**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  
Rarely = may occur less than 1% of the time  
Never = does not ever occur (such demands are not listed)

Highly Repetitive = Repeating the same motion every few seconds with little or no variation for more than two hours total per day.

**This job is classified as**

Medium—exerting 20 to 50 pounds of force occasionally, and/or 10-25 pounds of force frequently, and/or up to 10 pounds of force constantly.

**Standing**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally on landfill/garbage, cement, asphalt, uneven ground, equipment and gravel surfaces for up to 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**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently on landfill/garbage, cement, asphalt, uneven ground, equipment 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.

**Sitting**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently on a stool or automobile seat for up to 45 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**

Health Care Provider initials if restricted \_\_\_\_\_

Rare for up to 45 seconds at a time while climbing 24 steps for up to 4 minutes total in a work shift. Most commonly occurs while walking to and from the parts storage area.

**Climbing**

Health Care Provider initials if restricted \_\_\_\_\_

Rare on ladder and ladder/platform combination to heights of 4-6 feet for up to 10 seconds at a time for up to 5 minutes total in a work shift. Most commonly occurs while using a ladder/platform combination to access engine compartment of vehicle. The employee may also climb on a box truck to access a roof vent.

**Balancing**

Health Care Provider initials if restricted \_\_\_\_\_

Continuously on uneven ground, uneven ground 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 oversized light duty vehicles.

**Bending neck up**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently to Continuously & Highly Repetitive for up to 15 minutes at a time for up to 5-6 hours total in a work shift. Most commonly occurs while working on vehicles that are on a lift as well as when working on oversized light duty vehicles.

**Bending neck down**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently to Continuously & Highly Repetitive for up to 15 minutes at a time for up to 5-6 hours total in a work shift. Most commonly occurs while performing bench work, performing engine work and when working on lower areas of vehicles such as brakes, wheels and suspension.

**Bending/Stooping**

Health Care Provider initials if restricted \_\_\_\_\_

~~Occasionally~~ on cement, asphalt, equipment, uneven 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 vehicles when performing maintenance and repairs.

Deleted: Occasionally

**Kneeling**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently on cement, asphalt, equipment, uneven 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. The worker may be able to alternate kneeling with crouching or bending/stooping.

**Squatting**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently on cement, asphalt, equipment, uneven 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. The worker may be able to alternate crouching with kneeling bending/stooping.

**Crawling**

Health Care Provider initials if restricted \_\_\_\_\_

Rare on cement, asphalt, equipment, uneven and gravel surfaces for up to 10 seconds at a time for up to 4 minutes total in a work shift. Most commonly occurs while inspecting the underside of vehicles. Crawling may be reduced by utilizing a creeper.

**Operating Controls with Feet**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently for up to 45 minutes at a time for up to 3 hours total in a work shift while driving various vehicles. Vehicles and equipment may have a manual transmission, which requires repeatedly pressing a clutch pedal with the left foot.

**Reaching above shoulder height**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently for up to 10 minutes at a time for up to 4 hours total in a work shift while working on the underside of a vehicle. Vehicles may be elevated with a lift/hoist.

**Reaching at waist to shoulder height**

Health Care Provider initials if restricted \_\_\_\_\_

Continuously & highly repetitive 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 vehicles.

**Reaching at knee to waist height**

Health Care Provider initials if restricted \_\_\_\_\_

Continuously on cement, asphalt, equipment, uneven 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 vehicles when performing maintenance and repairs.

**Reaching at floor to knee height**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently on cement, asphalt, equipment, uneven 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.

**Lifting 1-10 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

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**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally 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 vehicles.

**Lifting 11-20 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

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 such as alternator, starter, etc.

**Carrying 11-20 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally 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 vehicle.

**Lifting 21-50 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

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 wheels, tires, batteries and exhaust systems, cylinder heads, etc.

**Carrying 21-50 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

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 wheels, tires, batteries and exhaust systems, cylinder heads, etc.

**Lifting 51-100 pounds**

Health Care Provider initials if restricted \_\_\_\_\_

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**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently 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 3 hours 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**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently for up to 45 minutes 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 as well as when driving.

**Operating Controls with Hands**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 45 minutes at a time for up to 1.5 hours total in a work shift while driving various vehicles, using a computer mouse and using various diagnostic equipment. Vehicles and equipment may have a manual transmission, which requires shifting gears.

**Fingering**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently & highly repetitive for up to 10 minutes at a time for up to 3 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/manipulating wires.

**Feeling**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for up to 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**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently for up to 15 minutes at a time for up to 3 hours total in a work shift while conversing about duties, and giving and receiving directions and instructions. The employee also talks when dealing with vendors and using the tech line for warrantee work.

**Hearing**

Health Care Provider initials if restricted \_\_\_\_\_

Frequently for up to 15 minutes at a time for up to 3 hours total in a work shift while conversing about duties, listening for mechanical failures of vehicles, listening for moving vehicles and giving and receiving directions and instructions. The employee also hears when dealing with vendors and using the tech line for warrantee work.

**Seeing**

Health Care Provider initials if restricted \_\_\_\_\_

Continuously for up to 2 hours at a time for up to 7 hours total in a work shift while inspecting automotive parts, trailers and large equipment as well as driving various vehicles. The employee also utilizes vision when traversing uneven ground, identifying moving machinery and stepping over obstacles such as hoses and engine parts as well as identifying colors of wires and fluids.

**Working with Heightened Awareness**

Health Care Provider initials if restricted \_\_\_\_\_

Occasionally to Frequently for up to 5 minutes at a time for 2.5-3 hours total in a work shift while identifying potential safety hazards such as moving machinery, overhead hazards and trip hazards as well as when diagnosing vehicle failures and using plasma cutting torch or welder in an area where there may be flammable or combustible materials such as gasoline in close proximity.

**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.

**The noise level is**

HCP Initials if Restricted

Approximately 90 decibels. The noise is caused by trucks/equipment, air tools.

**Work environment may include the following exposure(s):**

HCP Initials if Restricted

- Outside weather: Frequently
- Non-weather related temperatures below 55 degrees: Rare
- Non-weather related temperatures above 75 degrees: Frequently
- Wet: Frequently
- Humidity/dampness: Occasionally
- Fumes: Occasionally
- Odors: Occasionally
- Dusts: Continuously


Mists: Occasionally	<input type="checkbox"/>
Gases: Rare	<input type="checkbox"/>
Moving mechanical parts: Continuously	<input type="checkbox"/>
Vibration: Frequently	<input type="checkbox"/>
Working in high, exposed places: Frequently	<input type="checkbox"/>
Toxic or caustic chemicals: Occasionally	<input type="checkbox"/>
Confined spaces: Rare	<input type="checkbox"/>
Other: Bio hazards (Animal Control, Sheriff's Office and Wastewater vehicles)	<input type="checkbox"/>

**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.  
A creeper can be used to reduce crawling.  
The employee can alternate between kneeling and squatting as needed.

**SIGNATURES**

Signatures on this page are obtained before the document becomes available for use and are not required each time the document is reused. Obtained signatures are kept on file at King County Safety & Claims. The Health Care Provider signature section is separate and appears on the following page.

Kyle Pletz, VRC, Vocational Consultant  
Printed name & title of VRC evaluator

\_\_\_\_\_  
Signature of VRC evaluator

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed name & title of contact

\_\_\_\_\_  
Signature of contact

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed name & title of employee

\_\_\_\_\_  
Signature of employee

\_\_\_\_\_  
Date

**HEALTH CARE PROVIDER SECTION**

Check all that apply

- The employee is released to perform the described duties without restrictions on performance or work hours as of \_\_\_\_\_.
  
- The employee is released to perform the described duties on a reduced schedule as of \_\_\_\_\_. 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 limitations are due to the following objective medical findings:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Printed or typed name and phone number of Health Care Provider

\_\_\_\_\_  
Signature of Health Care Provider

\_\_\_\_\_  
Date