



King County

# Job Analysis Form

ALTERNATE FORMAT AVAILABLE

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**JOB TITLE** Mechanic

**JOB CLASSIFICATION** Mechanic

**DICTIONARY OF OCCUPATIONAL TITLES (DOT) NUMBER** 620.281-050

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

**DEPARTMENT** Transportation

**DIVISION** Transit

**# OF POSITIONS IN THE DEPARTMENT WITH THIS JOB TITLE** 39

**CONTACT'S NAME & TITLE** Mike Eeds, Supervisor, Vehicle Maintenance

**CONTACT'S PHONE** (206) 684-2714

## ADDRESS OF WORKSITE

Seven (7) separate base locations; addresses throughout King County. These include Atlantic, Bellevue, Central, East, North, Ryerson and South Base.

**VRC NAME** Kyle Pletz

**DATE COMPLETED** 12/19/01

**VRC NAME** Peter Hu

**DATE REVISED** 05/18/09

## WORK HOURS

Days, shifts and route may vary.

## OVERTIME

Optional, in accordance with business demand. Note: Overtime requirements may change at the employer's discretion.

## JOB DESCRIPTION

Mechanical repair and maintenance work on complex gasoline, electrical, and diesel powered buses, trolleys and other motorized equipment, including hydraulic, electrical and pneumatic systems and 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, and 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**

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**

1. Ability to demonstrate high level of knowledge to diagnose and repair both simple and complex mechanical devices/systems.
2. Ability to follow written and verbal directions and to complete assigned tasks on schedule.
3. Obtain/maintain WA State class A Commercial Driver's license to operate and drive equipment such as a forklift, buses, heavy duty wreckers, push tractors and shop trucks.
4. Perform necessary heavy mechanic work required to keep a fleet of transit coaches and equipment operating.
5. Inspect, diagnose and repair mechanical, hydraulic, pneumatic and electrical defects in gasoline, electrical diesel powered buses, trolley carts, trucks, cars and other heavy motorized mechanical equipment.
6. Align wheels; adjust, repair and rebuild brakes; and perform other mechanical or electrical repairs. Repair pumps, lights, steering gears and alternators. Repair and maintain heavy steering and suspension systems.
7. Drive Wrecker truck in order to tow in disabled coaches. Diagnose and evaluate disabled vehicles to determine appropriate field of repair or procedures.
8. Repair and maintain electrical and mechanical units and accessories or electrical and diesel powered transit coaches using electrical diagrams.
9. Operate drill presses, brake turning lathes, hydraulic presses and welding equipment.
10. Must work at heights requiring fall protection equipment

## **NON-ESSENTIAL FUNCTIONS**

1. Maintain records of orders, completed repairs, time worked and materials used; input and extract data using a computer terminal, as required.
2. Chain up vehicles in inclement weather and retrieve stuck bus to operational position, depending on the weather condition.
3. Wash and charge batteries, check readings, place on charger and mark as good or defective.

## **PERSONAL PROTECTIVE EQUIPMENT USED**

Hand and power tools, such as wrenches, ratchets, screw drivers, saws, cutters, clamps, drills, impact wrench, compressed air tools, pliers, vice-grips, and hammers. Operates vehicles including buses and wreckers.

### **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)

**This Job is Classified as**

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

**Standing**

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

Frequently to continuously on flat, cement surfaces for 60 minutes at a time for up to 6 hours total in a work shift. Most commonly occurs while repairing and maintaining buses. Standing varies according to duties performed.

**Walking**

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

Frequently on flat cement surfaces for distances of 10-200 feet for 20 minutes at a time for up to 5 hours total in a work shift. Most commonly occurs while moving from one work area to another and moving tools and materials on carts. Also may occasionally walk on uneven ground while repairing or towing buses out in the field.

**Sitting**

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

Occasionally on car seat, bus seat, or workbench for 30 minutes at a time for up to 2 hours total in a work shift. Most commonly occurs while driving buses or wreckers.

**Climbing**

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

Occasionally on a ladder to heights of 15 feet for 10 minutes at a time for up to one hour total in a work shift. Most commonly occurs while repairing parts near/on the top of the bus.

**Balancing**

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

Rarely for up to 5 seconds at a time, at heights of up to 1.5 feet, for up to 20 seconds total in a work shift. Most commonly occurs while adjusting exterior mirrors of buses.

**Bending/Stooping**

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

Occasionally on flat cement surfaces for five minutes at a time for up to one half hour total in a work shift. Most commonly occurs working on low areas of vehicles.

**Kneeling**

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

Occasionally on flat cement surfaces or uneven ground for 10 minutes at a time for up to one half hour total in a work shift. Most commonly occurs while putting chains on vehicles in inclement weather and fixing or maintaining low areas of vehicles.

**Crouching**

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

Occasionally on flat cement surfaces or uneven ground for five minutes at a time for up to one half hour total in a work shift. Most commonly occurs while putting chains on vehicles in inclement weather and fixing or maintaining low areas of vehicles.

**Operating Controls with Feet**

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

Occasionally for 20 minutes at a time for up to two hours total in a work shift while operating a motor vehicle.

**Reaching Above Shoulder Height**

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

Occasionally for 5 minutes at a time for up to two hours total in a work shift while working on buses on hydraulic lift.

**Reaching at Waist to Shoulder Height**

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

Occasionally for 5 minutes at a time for up to two hours total in a work shift while working on vehicles on hydraulic lift.

**Reaching at Knee to Waist Height**

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

Occasionally for 5 minutes at a time for up to one hour total in a work shift while working on vehicles on hydraulic lift.

**Reaching at Floor to Knee Height**

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

Occasionally for 5 minutes at a time for up to 30 minutes total in a work shift while fixing or maintaining low areas of vehicles.

**Lifting 1-10 pounds**

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

Frequently for 20 minutes at a time for up to 6 hours total in a work shift. Most commonly occurs with weights of three to five pounds while using hand tools and vehicle parts.

**Carrying 1-10 pounds**

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

Frequently for 5 minutes at a time for up to 5 hours total in a work shift. Most commonly occurs with weights of three to five pounds while using hand tools and vehicle parts.

**Lifting 11-20 pounds**

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

Occasionally for one to two minutes at a time for up to 2 hours total in a work shift. Most commonly occurs with weights of 15 pounds while using power tools and vehicle parts.

**Carrying 11-20 pounds**

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

Occasionally for 5 minutes at a time for distances up to 100 feet, up to 1 hour total in a work shift. Most commonly occurs with weights of 15 pounds while transporting vehicle parts. Carts are available.

**Lifting 21-50 pounds**

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

Occasionally for 5 seconds at a time for up to 30 minutes total in a work shift. Most commonly occurs with weights of 30 pounds while placing vehicle parts on a cart to various work areas.

**Carrying 21-50 pounds**

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

Rare for 5 seconds at a time for distances up to 15 feet for up to 10 minutes total in a work shift. Most commonly occurs with weights of 30 pounds while carrying vehicle parts to cart in order to transport them to a different work area. Any item over 50 pounds should be lifted with the available hoists and lifts.

**Pushing and Pulling**

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

Frequently of wrenches and ratchets with a force of 50 pounds for up to 4 hours in a work shift. Also pushes carts for distances of 10-100 feet at a time with a force of 20 pounds for up to one hour total in a work shift while transporting various tools and vehicle parts from one area of the shop to another.

**Handling**

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

Continuously for 2 hours at a time for up to 8 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**

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

Continuously for two hours at a time for up to 8 hours total in a work shift while using hand and power tools, such as wrenches, ratchets, screw drivers, clamps, drills, impact wrench, compressed air tools, pliers, vice-grips, and hammers.

**Fingering**

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

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

**Talking**

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

Continuously for 2 hours at a time, for up to 8 hours total in a work shift while using the microphone to notify passengers of upcoming stops and streets. Also, speaks with passengers and answers questions.

**Feeling**

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

Occasionally for five minutes at a time for up to two 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 \_\_\_\_\_

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

**Hearing**

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

Occasionally for 15 minutes at a time for up to two 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**

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

Occasionally for 5 minutes at a time for up to 1 hour total in a work shift while smelling vehicles for burning oil, leaking fluids, or electrical malfunctions.

**Near acuity-clarity of vision at 20 in or less**

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

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

**Color vision-identify/distinguish colors** Health Care Provider initials if restricted \_\_\_\_\_

Occasionally for 15 minutes at a time for up to 2 hours total in a work shift while repairing and maintaining color-coded electrical wires. Also need to be able to identify red and green warning lights that indicate whether or not the 600-volt electrical power lines for the electrical buses are active. Fire exit routs are marked with a red line.

**TEMPERAMENTS**

- Performing repetitive or short-cycle work: Frequently
- Performing a variety of duties: Continuously
- Working under specific instructions: Continuously
- Working with others: Frequently
- Making judgments and decisions: Frequently

**ENVIRONMENTAL FACTORS**

Upholsters 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

**Noise Level**

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

The noise level is approximately 50-90 decibels. The noise level is moderately loud and is caused by traffic, the coach engine and passengers.

**The Work Environment may include the following exposure(s):**

- Outside weather: Occasionally
- Extreme cold: Rare
- Extreme heat: Rare
- Wet: Occasionally
- Fumes: Occasionally
- Odors: Occasionally
- Moving mechanical parts: Frequently
- Vibration: Occasionally
- Working in high, exposed places: Frequently

HCP Initials if Restricted


**POTENTIAL MODIFICATIONS TO JOB**

- Anti-fatigue mats.
- Orthopedic shoes may increase comfort during long periods of standing and walking.

KING COUNTY JOB ANALYSIS COMPLETED ON: 12/19/01

JOB TITLE: Mechanic

EMPLOYEE:

DOT #: 620-281-050

CLAIM #

## 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's Safety & Claims Management Division office. The Health Care Provider signature section is separate and appears on the previous page.

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Printed name & title of VRC evaluator

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Signature of VRC evaluator

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Date

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Printed name & title of contact

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Signature of contact

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Date

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Printed name of employee

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Signature of employee

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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:

Health Care Provider Name (Printed or Typed)

Telephone Number

Health Care Provider Signature

Date

Health Care Provider Section