

EMPLOYEE:

CLAIM #



Job Analysis Form

ALTERNATE FORMAT AVAILABLE

JOB TITLE Electronics Technician

JOB CLASSIFICATION Electronics Technician

DOT TITLE Electronics Technician

DOT NUMBER 003.161-014

DEPARTMENT Transportation

DIVISION Transit

OF POSITIONS IN THE DEPARTMENT WITH THIS JOB TITLE 17

CONTACT'S NAME & TITLE Cary Jacobson, Lead Electronic Technician

CONTACT'S PHONE 206-684-2775

ADDRESS OF WORKSITE

1555 Airport Way South
Seattle, WA 98134-1614

VRC NAME Kyle Pletz

DATE COMPLETED 2/17/05

VRC NAME Peter Hu

DATE REVISED 6/9/09

WORK HOURS

Day shift: 6:30am-3:00pm and Swing shift: 2:30pm-11:00pm; Monday through Friday.

OVERTIME (Note: Overtime requirements may change at the employer's discretion)
Optional, approximately once per week. Availability of overtime is based upon seniority.

JOB DESCRIPTION

Remove and replace various types of simple and complex electronic devices on electric and diesel-powered transit vehicles and other equipment. Troubleshoot and repair faulty and malfunctioning components. Maintain records of repairs, calibration of test equipment and ensure that routine preventative maintenance is done on schedule. Approximately 40-60% of the job duties are performed in the yard.

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

A minimum of two years experience/education troubleshooting and repairing electronic equipment is required. A high school diploma/GED with two additional years of specialized electronic education, OR an Associates degree from a community college in electronics technology or equivalent is required. Some additional years of experience may be substituted for education. A valid Washington State driver's license is also required. Must have class A or B Commercial Driver's license. Must be able to perform physically demanding work including bending/stooping, kneeling, lying down and working in awkward postures on a frequent basis.

ESSENTIAL FUNCTIONS

1. Diagnoses electrical and electronic malfunctions on transit coaches and other equipment. Removes, replaces or repairs defective components and wiring.
2. Bench tests electronic components and circuits to locate defects and causes of malfunctions; Performs repairs to the component level.
3. Tests and installs new electronic equipment and devices as required.
4. Sets up and operates various types of specialized electronic test equipment such as oscilloscopes, data recorders and signal generators.
5. Performs routine electrical and electronic preventative maintenance on vehicles.
6. Ensures proper operation and performs preventive maintenance of test equipment.
7. Inputs and extracts computer data as required.
8. Performs other related duties as assigned.
9. Removes, repairs, and replaces electronic equipment in use on transit vehicles and other associated systems.
10. Maintains records of repairs, calibrations, and tests performed on transit equipment.
11. Understands and adheres to all prescribed safety procedures.

PERSONAL PROTECTIVE EQUIPMENT USED

Eye protection, hearing protection, safety vest, steel-toe boots, 1000-volt rated boots, gloves, anti-fatigue mat, kneeling mat and fall protection.

OTHER TOOLS & EQUIPMENT USED

Various small and large hand tools, power tools, air tools, drills, grinders, electronic test equipment such as ohmmeters, oscilloscope, etc., custom test equipment, ladder, harness, jib crane, industrial truck, ½" impact gun, parts cleaner, various battery packs, CD-ROM, DVD equipment, KVM switches, digital recording devices, cameras, computer, laptop computer, flat screen monitor, tire chains, forklift, pallet jack, carts, push bull, bicycle, fare-boxes, heat gun, various automobile and bus parts, soldering iron, and tricycle.

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

Heavy—exerting 50-100 pounds of force occasionally, and/or 25-50 pounds of force frequently, and/or 10-20 pounds of force constantly to move objects.

Standing

Health Care Provider initials if restricted _____

Frequently to continuously on anti-fatigue mat, cement, rubber, bus floor and metal surfaces for up to 1-1.5 hours at a time for up to 5.5-7 hours total in a work shift. Most commonly occurs while removing components from coaches and performing bench duties. When performing propulsion duties and repairs the employee stands continuously, as the coach is often hoisted on a lift. Standing can be reduced by utilizing a stool when performing some shop work.

Walking

Health Care Provider initials if restricted _____

Frequently to continuously on anti-fatigue mat, cement, rubber, bus floor and metal surfaces for distances of up to ¼ mile for up to 15 minutes at a time for up to 5.5-7 hours total in a work shift. Most commonly occurs while traversing within the garage area as well as to/from the coaches in the yard. When performing propulsion duties and repairs the employee may walk continuously within the garage area. Walking in the yard can be reduced by utilizing a tricycle, bicycle or shop truck.

Sitting

Health Care Provider initials if restricted _____

Frequently to continuously on the ground, stool, automobile seat or office chair for up to 1.5 hours at a time for up to 5.5-6 hours total in a work shift. Most commonly occurs while working on video surveillance units, performing bench work and trouble shooting various pieces of electronic equipment. The employee commonly sits on the floor of a bus and uses a laptop placed on one of the seats.

Climbing stairs

Health Care Provider initials if restricted _____

Occasionally for up to 30 seconds at a time while climbing up to 23 steps for up to 30 minutes total in a work shift. Most commonly occurs while entering/exiting coaches (1-3 steps), traversing to/from the camera shop (19 steps), and to/from the roof access (23 steps).

Climbing

Health Care Provider initials if restricted _____

Occasionally on ladders and coaches to heights 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 while performing repairs on the rooftop of trolleys as well as when working on ceiling cameras in coaches.

Balancing

Health Care Provider initials if restricted _____

Frequently on slippery or uneven surfaces for up to 15 minutes at a time for up to 4 hours total in a work shift. Most commonly occurs while performing repairs in awkward postures, installing tire chains in the snow and entering/exiting coaches with wet floors. Some work is performed on the top of trolleys (fall protection is required when performing these duties).

Bending neck up

Health Care Provider initials if restricted _____

Occasionally to frequently for up to 15 minutes at a time for up to 2-5 hours total in a work shift. Most commonly occurs while working on ceiling cameras and destination signs as well as when working on propulsion equipment when the trolley is hoisted off the ground.

Bending neck down

Health Care Provider initials if restricted _____

Frequently for up to 30 minutes at a time for up to 5.5 hours total in a work shift. Most commonly occurs while performing bench duties, working on power supplies and working on the rooftop of trolleys as well as removing/replacing recording devices in coaches (some are on the floor and some are behind the drivers seat approximately 14 inches off the floor).

Bending/Stooping

Health Care Provider initials if restricted _____

Occasionally to frequently for up to 10 minutes at a time for up to 2-3 hours total in a work shift. Most commonly occurs while working on power supplies, rooftop components of trolleys and fair boxes as well as removing/replacing recording devices in coaches (some are on the floor and some are behind the drivers seat approximately 14 inches off the floor). The employee also needs to bend/stoop to connect diagnostic equipment cables to recording devices and electronic equipment. Bending/stooping can be reduced on some occasions by alternating with kneeling or squatting. The employee may choose to lie down in order to perform some video surveillance repair and diagnostic work on equipment in low areas. Commonly the employee may need to lie on the floor of a coach to reach around the back side and plug in an Ethernet cable.

Kneeling

Health Care Provider initials if restricted _____

Occasionally to frequently for up to 10 minutes at a time for up to 2-3 hours total in a work shift. Most commonly occurs while working on power supplies, rooftop components of trolleys and fair boxes as well as removing/replacing recording devices in coaches (some are on the floor and some are behind the drivers seat approximately 14 inches off the floor). The employee also needs to bend/stoop to connect diagnostic equipment cables to recording devices and electronic equipment. Kneeling can be reduced on some occasions by alternating with bending/stooping or squatting. The employee may choose to lie down in order to perform some video surveillance repair and diagnostic work on equipment in low areas. Commonly the employee may need to lie on the floor of a coach to reach around the back side and plug in an Ethernet cable.

Squatting

Health Care Provider initials if restricted _____

Occasionally to frequently for up to 10 minutes at a time for up to 2-3 hours total in a work shift. Most commonly occurs while working on power supplies, rooftop components of trolleys and fair boxes as well as removing/replacing recording devices in coaches (some are on the floor and some are behind the drivers seat approximately 14 inches off the floor). The employee also needs to bend/stoop to connect diagnostic equipment cables to recording devices and electronic equipment. Squatting can be reduced on some occasions by alternating with kneeling or bending/stooping. The employee may choose to lie down in order to perform some video surveillance repair and diagnostic work on equipment in low areas. Commonly the employee may need to lie on the floor of a coach to reach around the back side and plug in an Ethernet cable.

Operating Controls with Feet

Health Care Provider initials if restricted _____

Occasionally for up to 1 hour at a time for up to 2 hours total in a work shift while driving coaches within the yard as well as between transit bases, operating a push bull and driving a forklift. On a rare occasion the employee may need to drive a County van (with automatic transmission) in inclement weather in order to install chains on coaches.

Reaching above shoulder height

Health Care Provider initials if restricted _____

Frequently for up to 15 minutes at a time for up to 4 hours total in a work shift while working on ceiling cameras which includes installation of cameras, removal of cameras, alignment of cameras, removal of lenses and alignment of lenses. The employee also reaches above the shoulder while working on destination signs.

Reaching at waist to shoulder height

Health Care Provider initials if restricted _____

Continuously for up to 1.5 hours at a time for up to 6 hours total in a work shift while performing bench duties, utilizing a computer and using a laptop while sitting on the floor of a coach.

Reaching at knee to waist height

Health Care Provider initials if restricted _____

Continuously for up to 5 hours at a time for up to 6 hours total in a work shift while working on fare boxes, video equipment and battery packs.

Reaching at floor to knee height

Health Care Provider initials if restricted _____

Continuously for up to .5 hours at a time for up to 6 hours total in a work shift while working on fare boxes, video equipment and battery packs. Video equipment devices on some coaches are on the floor, under seats and behind seats which requires awkward postures to reach. Commonly the employee may need to lie on the floor of a coach to reach around the back side and plug in an Ethernet cable.

Lifting 1-10 pounds

Health Care Provider initials if restricted _____

Frequently & Highly Repetitive for up to 10 minutes at a time for up to 5 hours total in a work shift. Most commonly occurs with weights of 1-7 pounds while manipulating various hand tools, laptop computer, flat screen monitor, electronic testers, small tool bin and electronic components.

Carrying 1-10 pounds

Health Care Provider initials if restricted _____

Occasionally for distances of up to ¼ mile for up to 15 minutes at a time for up to 2 hours total in a work shift. Most commonly occurs with weights of 1-7 pounds while transporting hand tools, testing equipment, laptop and flat screen monitor to and from coaches. Carrying can be reduced by utilizing a tricycle with a tool basket on the back.

Lifting 11-20 pounds

Health Care Provider initials if restricted _____

Occasionally for up to 2 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs with weights of 12-16 pounds while manipulating tool bin, laptop computer with case and peripherals, electronic components and various coach parts.

Carrying 11-20 pounds

Health Care Provider initials if restricted _____

Occasionally for distances of up to ¼ mile for up to 20 minutes at a time for up to 1 hour total in a work shift. Most commonly occurs with weights of 12-16 pounds while transporting tool bin, laptop computer with case and peripherals, electronic components and various coach parts. Carrying can be reduced by utilizing a tricycle in the yard and a cart in the garage.

Lifting 21-50 pounds

Health Care Provider initials if restricted _____

Occasionally for up to 1 minute at a time for up to 30 minutes total in a work shift. Most commonly occurs with weights of 28-48 pounds while manipulating transit surveillance system (28 pounds) as well as coach components such as a blower (30 pounds) or card cage (30-48 pounds).

Carrying 21-50 pounds

Health Care Provider initials if restricted _____

Occasionally for distances of up to 30 feet for up to 30 seconds at a time for up to 10 minutes total in a work shift. Most commonly occurs with weights of 28-48 pounds while transporting transit surveillance systems (28 pounds) as well as coach components such as a blower (30 pounds) or card cage (30-48 pounds). The employee can reduce carrying by utilizing a tricycle in the yard and a cart in the garage.

Lifting 51-100 pounds

Health Care Provider initials if restricted _____

Rarely for up to 20 seconds at a time for up to 5 minutes total in a work shift. Most commonly occurs with weights of 53-84 pounds while manipulating coach parts including a cap bank (84 pounds), diode bridge (56 pounds) and roof contactor (53 pounds). The employee may also need to perform a two-person lift of a 133 pound chopper, 116 pound diode bridge, and 170 pound inverter tray. Anything over 50 pounds is performed with a two-person lift.

Pushing and Pulling

Health Care Provider initials if restricted _____

Occasionally to Frequently for distances of up to 200 feet for up to 2 minutes at a time with a force of 10-20 pounds for up to 2-3 hours total in a work shift while utilizing a cart, manipulating panels and using hand tools (such as wrenches and ratchets) as well as when pushing and pulling digital video recorders, propulsion components and digital video systems on racks. The employee also pushes and pulls when driving a coach or County vehicle.

Handling

Health Care Provider initials if restricted _____

Continuously and highly repetitive for up to 1 hour at a time for up to 6 hours total in a work shift while using hand tools, cranking seats in order to reach digital video recorders, manipulating cameras, crimping wires, manipulating files and driving.

Operating Controls with Hands

Health Care Provider initials if restricted _____

Occasionally to frequently for up to 1 hour at a time for up to 2-3 hours total in a work shift while driving a coach or County vehicle (with automatic transmission), using a computer mouse and using electronic testing equipment.

Fingering

Health Care Provider initials if restricted _____

Continuously & Highly Repetitive for up to 30 minutes at a time for up to 7 hours total in a work shift while using electronic testing equipment, using small hand tools, manipulating cables (such as Ethernet

and laptop) for diagnostic purposes, crimping wires, manipulating wires, soldering and performing electronic repairs.

Feeling

Health Care Provider initials if restricted _____

Frequently for up to 15 minutes at a time for up to 4 hours total in a work shift while working on equipment blindly. Some digital video records require that the claimant blindly plug in an Ethernet cable in to the back of the unit; the employee may be standing, kneeling, bending/stooping or lying down when performing this. There are also several units which require removal/installation of bolts that cannot be seen.

Talking

Health Care Provider initials if restricted _____

Occasionally for up to 5 minutes at a time for up to 1.5 hours total in a work shift while conversing with co-workers and supervisors.

Hearing

Health Care Provider initials if restricted _____

Frequently for up to 2 hours at a time for up to 5 hours total in a work shift while conversing with co-workers and supervisors as well as when identifying potential hazards such as moving machinery, moving coaches and back up alarms.

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 performing work on digital video recorders, performing computer diagnostics of equipment, soldering, visual inspection of electronic components and reading wiring diagrams.

Working with Heightened Awareness

Health Care Provider initials if restricted _____

Frequently for up to 2 hours at a time for up to 5 hours total in a work shift while identifying potential hazards such as moving machinery, moving coaches and back up alarms. The employee also works on and with equipment that carries an electrical charge of over 700 volts DC which requires working with heightened awareness to avoid electrocution.

ENVIRONMENTAL FACTORS

Work is performed in a transit base setting. Work is performed indoors in a shop as well as in the yard on buses. Some work is performed outdoors or in shop areas that do not have regulated temperatures. Employees are potentially exposed to vehicle exhaust, cleaning chemicals, high voltage electrical systems, oils, gasoline, diesel fuel, moving vehicles and hydraulic fluid.

The noise level is

HCP Initials if Restricted

Approximately 40-110 decibels. The noise is caused by coaches and air tools.

Work environment may include the following exposure(s):

HCP Initials if Restricted

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

KING COUNTY JOB ANALYSIS COMPLETED ON: 2/17/05

JOB TITLE: Electronics Technician

EMPLOYEE:

VRC: Kyle Pletz

DOT #: 003.161-014

CLAIM #

Fumes: Occasionally-Frequently

Odors: Occasionally-Frequently

Dusts: Occasionally-Frequently

Mists: Rare

Gases: Rare

Moving mechanical parts: Frequently

Vibration: Occasionally

Working in high, exposed places: Rare

POTENTIAL MODIFICATIONS TO JOB

Utilize a cart or tricycle to reduce carrying.

Install Ethernet pigtailed to reduce awkward postures, bending/stooping, kneeling and crouching.

KING COUNTY JOB ANALYSIS COMPLETED ON: 2/17/05
JOB TITLE: Electronics Technician
EMPLOYEE:
VRC: Kyle Pletz

DOT #: 003.161-014
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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.

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