## **Job Hazard Analysis**

**Automotive Wheel Balancing** Machine

Assessment Date: 02-28-14

**Building or Location: North Mankato Campus** 

Revision Date: 04-12-17 **Department or Program: Auto Mechanics** 

Description of Individual Tasks or Assignments:

Balancing Automotive Wheels

**Used when Performing Task:** 

Tools, Equipment, or Machinery
Wheel Balancing Machine, Wheel Weight Hammer, Lead Wheel Weights

Hazard Type(s) Associated with Task or Assignment:					Specific Hazard Exposure:	Check if Exposure Recommends or Requires a Style of PPE?
1	Impact	<b>Example:</b> Person(s) can strike an object, or be struck by a moving or flying/falling object (e.g., fragments, chips, particles, sand, dirt/debris).				
2	Penetration or Cut	Example: Person(s) can strike an object, be struck by an object, or fall upon an object or tool that would cut or otherwise break the skin.	X		posure to cuts and abrasions from metal fragments when cleaning tire by hand. (e.g., hand and finger injuries)	X
3	Crush or Pinch	Example: An object(s) or equipment/machine may crush or pinch a body or body part	X	Potential exposure to crushing and pinching hazard from dropping tires (e.g., injuries to feet), potential exposure to spinning/moving parts (e.g., entanglement injuries)		X
4	Chemical or Harmful Dust	Example: Exposure to chemicals (i.e., hazardous substances and harmful physical agents), infectious agents from spills, splashing, physical contact, and/ or exposure to dusts, vapors, fumes, or gases that could cause illness, irritation, burns, asphyxiation, breathing/vision difficulty, sensitization, infection, or other toxic health effects (i.e., acute or chronic). Note: "May also have or create ignition potential."	X	Potential exposure to Lead (e.g., illness)		
5	Heat	<b>Example:</b> Exposure to radiant heat sources, sparks, and splashes or spills of hot material				
6	Light (optical) Radiation	<b>Example:</b> Exposure to strong light sources, glare, or intense light exposure which is a byproduct or a process. Note: "This category may also include hazards presented from lack of light (e.g., working in dark spaces/areas)."				
7	Electrical Contact	<b>Example:</b> Exposure, contact, or proximity to live or potentially live electrical objects.				
8	Ergonomic/ Human Factors	Example: Working in cramped spaces, repetitive movements, awkward postures, vibration, heavy lifting, etc Note: "This category may also include unique hazards presented from tasks that require demanding or challenging degrees of mental and/or physical effort to be exerted by an individual. See <a href="https://physical.org/Physical.org/">Physical Effort Definition/Examples</a> category for further explanation of physical effort."	X		posure to repetitive movements, lifting light to moderately, and bending (e.g., Back and other Muscular Skeletal	
9	Environmental	<b>Example:</b> Exposure to noisy environments, hot or cold work environments, poor weather conditions, working at a height, and any other conditions in the workplace that could cause danger, discomfort, and/or negative health effects.				

## **Job Hazard Analysis**

JHA Name:

**Automotive Wheel Balancing** Machine

South Central

Revision Date: 04-12-17 Assessment Date: 02-28-14 **Building or Location: North Mankato Campus Department or Program: Auto Mechanics** 

Description of Individual Tasks or Assignments:

Tools, Equipment, or Machinery
Used when Performing Task:
Wheel Balancing Machine, Wheel Weight Hammer, Lead Wheel Weights

_	issignments.		esed when I efforming Task.					
Personal Protective Equipment Requirements:								
Eyes & Face:								
Head & Ears:								
Whole Body:								
Feet:	Safety Shoes (Recommend when lifting tires)							
Hands:	Recommend 1	Recommend leather gloves when handling known sharp edged metal in conjunction with wheel balancing activities						
Respiratory:								
Other:	"Note: Personnel must change from loose clothing, tie back long hair, and take off jewelry that could become entangled or snagged in moving parts"							

Other Control Measures or Requirements (Engineering & Administrative Controls):

#2) Penetration or Cut Hazards: The main task involving potential cuts or abrasions relates to manipulating tires by hand, and checking rims for sharp foreign objects prior to balancing. Personnel should never clean or wipe tires or rims by hand; personnel should use a brush to sweep dirt/debris away or use water to wash the tire. #4) Chemical or Harmful Dust Hazards: Personnel should receive Right-to-Know training (e.g., regarding chemical & physical hazards). SDS should be provided/available for all hazardous chemicals. Lead wheel weights are a hazardous material, and personnel must practice good hygiene practices (i.e., hand washing) to prevent lead exposure. #8) Ergonomic Hazards: Personnel should receive Ergonomics training (including warning signs and conditions of ergonomic/human factors hazards). "Note: Wheel Balancing Machines are only operated for very short periods of times in most College environments in comparison to other General Industry applications. Miscellaneous Considerations: Only authorized persons shall operate wheel balancing machines or handle lead wheel weights. When personnel are finished working on wheel balancing machines (and before leaving the wheel balancing machine for any reason) the power must be shut off. Stop the wheel balancing machine immediately if odd noises or excessive vibration occurs. Wheel balancing machines must be de-energized and locked/tagged from use by approved energy isolation control procedures prior to performing maintenance or service. Note: only "authorized" employees who are trained in the requirements of the College's Lockout/Tagout Plan will perform lockout/tagout procedures and/or the related maintenance or service work. Wheel weights are a hazardous material and they should be handled appropriately per regulatory requirements. Wheel weights must be disposed of appropriately (i.e., hazardous waste). " Note: Specific information and requirements for handling, labeling, and disposing of waste materials will be discussed in the "Waste Management Plan." Operators of tools, equipment, and machinery should read and follow all Manufactures' recommendations/ requirements (e.g., inspections, servicing/maintenance, safe usage, etc...). Any tools, equipment, or machinery found damaged, defective, or otherwise unsafe should immediately be removed from service and not used until repaired or replaced. Personnel should always consult their Supervisors on the selection and use of PPE for the tasks being performed.

## **Physical Effort Definition/Examples**

1.) Physical Mobility- Movement from place to place on the job, considering distance and speed 2.) Physical Agility- ability to maneuver body while in place or in static position 3.) Physical Strength (Light to Moderate)- Ability to handle routine office materials and tools 4.) Physical Strength (Moderate to Heavy)- Ability to handle 50lbs+ objects, considering frequency 5.) Dexterity- skill and ability in using hands, fingers, and feet 6.) Physical Balance- ability to maintain balance and physical control 7.) Coordination- harmonious functioning of body parts (e.g., eye/hand, hand/foot, etc...) 8.) Endurance- ability to sustain a prolonged stressful effort or activity with limited opportunity to rest

Note: "This JHA provides only the minimum PPE/safety requirements necessary to safely complete the task or assignment, and the JHA only covers the hazards or exposures that are most likely to be encountered. Nothing within this JHA bars or restricts personnel from requesting higher degrees of PPE or control to mitigate workplace hazards. In addition, South Central College personnel (e.g., employees and students) are required to complete any applicable safety or on-the-job trainings required prior to performing their positions or participating in their programs of study. Finally, South Central College personnel should consult their supervisors/instructors, the college's written safety programs/policies, and/or the Safety Administrator whenever they have questions or concerns."

Certification: This document certifies a hazard assessment was conducted meeting the provisions specified under 29 CFR 1910.132 (d) and South Central College College's related safety programs and policies.

Name: Al Kluever

Date: 04-12-17