

IMPORTANT SAFETY INFORMATION FOR EMPLOYERS OF BASIC LEVEL II PARTICIPANTS

The Commercial Vehicle Wheel Service (CVWS) training program is offered in response to a regulation that requires individuals to become trained and certified to perform certain tasks. Training is required due to the potential safety hazards that are associated with servicing the tires and wheels of trucks, trailers and buses. Workers and their employers must be aware of these potential hazards to avoid injury that can be fatal.

This document describes the specific hazards relating to the type of work being performed by workers who are enrolled into the various training streams offered by the CVWS training program. Employers should also review the workplace safety issues as shown in this document and ensure that each issue is properly addressed.

Training Stream: Basic II. – Inflation & Checking

This training stream is appropriate for drivers and other individuals with job descriptions requiring them to re-inflate tires and/or perform checks of wheel fastener security, but not to perform any other work related to tires or wheels.

Training Participants' learning will consist of:

- Modules 1-5 of "Practical Tire & Wheel Service" Training Manual
- Demonstration of proper use of tire inflation equipment
- Practice using tools and safe methods for tire inflation
- Demonstration of tools and methods for checking wheel fastener security
- Practice using tools and methods for checking wheel fastener security
- Knowledge examination delivered online
- Receipt of a certificate of training from the Ministry of Training, College and Universities

Potential workplace issues for Basic Level II Participants

General Workplace Safety

Participants Will Learn:

- The potential hazards associated with inflated tire and rim assemblies and unsafe practices that must be avoided.
- Ontario's Occupational Health and Safety Act gives a worker the right to refuse work that he or she believes is unsafe.

Important Workplace Safety Issues:

- This training helps Participants identify hazards and unsafe practices, and this knowledge may potentially cause issues to be identified that need to be addressed by the employer.
- Improper tire and wheel service procedures can cause injuries that can be fatal.
- Improper tire and wheel service procedures can cause wheels to detach from vehicles that can cause damage, or injuries that can be fatal.



Tire Inflation Equipment

Participants Will Learn:

- No person should service any tire, rim or wheel without proper training.
- An accurate tire pressure gauge should be used to check tire pressure.
- A tire with pressure below 80% of its normal pressure cannot be safely re-inflated. When a tire is suspected of being damaged because it has been operated in an under-inflated or over-loaded condition, it must be demounted and inspected for damage.
- Inflation or re-inflation of a tire must be done using a hose with a clip-on chuck, a built-in gauge and enough length for the user to operate it while standing outside of the trajectory zone of the tire.

Important Workplace Safety Issues:

- No employer should require any worker to service any tire, rim or wheel without proper training.
- Workers that are not trained should not inflate tires.
- Accurate tire pressure gauges must be available for use by the worker(s).
- Employers need to provide workers with the normal tire inflation pressure values for all tire applications.
- Employers need to provide workers with the values that represent 80% of normal tire inflation pressure values for all tire applications.
- Employers need to provide workers with the correct type of tire inflation equipment to be used in the workplace.

Checking Wheel Fastener Security

Participants Will Learn:

- Improper installation of the wheel components can cause wheel fasteners to loosen after the vehicle begins operating.
- Wheel component and vehicle manufacturers recommend re-checking wheel fasteners 80 to 160 km (50 to 100 miles) after installation.
- Wheel component and vehicle manufacturers recommend re-checking wheel fasteners every 16,000 km (10,000 miles) when a vehicle is in service, and further state that individual fleet experience may dictate shorter intervals or allow longer intervals.
- Wheel fastener security is checked by applying a pre-determined amount of torque to each fastener.
- Rechecking fasteners is a meaningless exercise when wheel nuts have been

Important Workplace Safety Issues:

- Improper installation of the wheel components can cause wheel fasteners to loosen after the vehicle begins operating.
- Proper installation of wheels and wheel fasteners includes proper cleaning and inspection of the parts, using only quality replacement parts, proper assembly of the components, including lubrication when required, and proper tightening of the fasteners.
- All installation steps must be properly addressed to avoid potential wheel failure.
- Problems may exist between outboard brake drums and wheel hubs that can affect wheel security - and that addressing these problems may require a technician.
- Wheel fastener security needs to be checked after installation.
- Wheel fastener security needs to be

installed improperly.

- An accurate torque wrench must be used to check fasteners.
- Torque wrenches used to tighten or re-check wheel fasteners must be checked and calibrated periodically.
- Wheel fasteners must be checked using the same torque value that is used to install them.
- When wheel fastener security is checked, the wheel must also be visually inspected.
- Wheel nuts normally should not rotate at all when they are rechecked.
- Wheel nuts that rotate $\frac{1}{4}$ turn or more when checked, require further inspection.

checked as part of a preventive maintenance program.

- Wheel fastener security needs to be checked with a torque wrench.
- There is no substitute for a proper wheel installation. An improper installation can remain hidden even when fasteners are checked after installation.
- A worker who checks wheel fasteners after they are installed must be trained on the correct procedures.
- A calibrated torque wrench must be available to a worker who is expected to check wheel fastener security.
- A torque wrench must be set to the correct value to be used to check wheel fasteners.
- Any wheel fastener that is found to be less than fully secure requires further follow up. A worker needs to have a process for reporting problems.