



Wintergreen Fire and Rescue Standard Administrative Policy	
Subject:	Tire Chains
Reference Number:	ADM 04-009
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Signature of Approval	Curtis Sheets, Chief

Purpose:

To maintain the safety of our fleet, personnel, patients, and to ensure a reliable response to an emergency, this SAP will serve as a guideline to understand the need for, describe the installation procedure, and subsequent use of tire chains on our fleet.

Policy:

Wintergreen Fire and Rescue is a unique agency with unique challenges. Our highest call volume often comes during times of inclement weather in harsh mountainous terrain. We've invested a large sum of money to lessen the risks associated with these challenges by outfitting our fleet with additional traction devices. We currently have 3 types of these devices available for use in our fleet in addition to four-wheel drive:

Conventional lock chains with or without V-bars

- Require the installer to remove "slack" manually and require the use of 4 or more straps per tire.

Cam-lock chains with or without V-Bars

- Uses a special tool to remove slack by shortening the side chain. Do not require straps

"On-Spots"

- Use when conditions are spotty or minor. These do not work as well as conventional chains in reverse, harsh breaking or if you're stuck. On-spots work on light ice, freezing rain, packed snow, and light powder.

*****If chains are being used, 4x4 should be engaged on vehicles equipped*****
All chains are stamped with a unit number on the lock

Installation/Removal:

1. If Road Maintenance has been activated for snow removal, the shift supervisor will need to check side streets to see if conventional chains are needed. When the shift supervisor determines that conventional chains are needed, they shall be installed on the 1st out Engine, Tanker 62, Squad 1, and the 1st or 2nd out Ambulance. Tire chains should remain on these vehicles until *all* roads in the first due area are cleared and the supervisor has determined it is safe to remove them. The 1st out fire apparatus should be the last unit to have chains removed.
2. Tire chains are **required** on the above apparatus as well as the forward tandem axle on Tanker 62, 1 response vehicle per station, and Attack 61 & 62 if winter weather

conditions become severe. This may include snow over 6 inches or heavy ice. This will be at the supervisor's discretion.

Dos and Don'ts of Chain Use:

- Don't run On Spots and Tire chains together. This will severely damage the On-Spot system.
- Don't exceed 30mph. Speed greatly reduces chain life and increases risk of breaking links, which will cause damage to vehicles.
- Tire chain removal should not be rushed. It's much quicker to remove the chains than to install them. It's also OK to run chains on bare roads for short distances such as to a property call.
- Driving on dry roads with chains can cause a vehicle to slide when braking hard.
- Don't run loose chains!! Remove all slack with cams or straps. If straps pull "V's" in the side chain, it's too loose!
- Do tighten a second time after driving a short distance then check for tightness from time to time.
- Do tighten, refasten or remove loose chains before they wrap around the axle of the vehicle.
- Do install chains on drive wheels. Usually the rear of a tandem set. Power divider engages the forward tandem.
- Do use tensioners or straps on conventional lock chains. (Most of our chains have CAMS. These chains do not require straps if they're installed properly.)
- Do not modify chains. All chains in the fleet have been sized and fit to a specific unit with allowances made for new tread depths.
- Do not pile chains in buckets or bins as this allows chains to rust. It is recommended to carry chains on the unit only when operating in winter weather while not running chains or while running the on-spots.
- Do place chains back on the rack according to unit markings when appropriate.

Special Considerations:

Tanker 62

- Weighs nearly 66,000lbs. The same as Truck 61...Very Heavy!
- Chaining only the rear drive axle will not give the operator sufficient breaking traction
- Chains are to be used on the **REAR** drive axle as well as on the forward tandem
- Exhaust break should be OFF when possible.
- Power divider to be used only when stuck or imminently stuck and turned OFF ASAP

Squad 1

- Tire step must be removed at the beginning of November in order to install chains
- Exhaust break **MUST** be turned **OFF** whenever driving in inclement weather

Ambulances

- It's recommended that these chains be installed *without* the use of a step block. Using the block causes the inside tire to bulge and prevents the side chain from being placed in the proper location.

Review the following informational publications and videos on installation of the various types of chains.

Cam Lock chains <https://www.youtube.com/watch?v=oH3rL6tqUj0>

Cable Chains <http://www.tirechain.com/CABLE-INTRUCTIONS.HTM>

This is dangerous work. Supervisors should ensure this work is done properly. Work in teams and be careful.