



Scarborough Fire Department Scarborough, Maine



Standard Operating Guidelines

Book:	Routine Operations
Chapter:	Apparatus Operations
Subject:	2115 - Certification of Snowplow Operators
Revision Date:	11/6/2015
Approved by:	<i>B. Michael Thurlow</i>

PURPOSE

The purpose of this policy is to develop a standardized operator training and certification policy to ensure that operators of snowplowing apparatus are properly trained and understand the department's snowplowing operations. The policy sets minimum requirements for certification and establishes a measurable process for employees to demonstrate proficiency in snowplow apparatus operations.

POLICY

- A. The Scarborough Fire Department shall have an operator's certification process for drivers of snowplow apparatus.
- B. The Deputy Chief of Operations will submit a list of candidates to be authorized to operate snowplow apparatus to the Fire Chief annually.
- C. The Fire Chief will certify any or all on this list as certified operators. This list will become the approved Snowplow Operator Roster for the department for that year.
- D. Request for operator training for a student candidate must be submitted to the Deputy Chief of Operations. The Deputy Chief of Operations may authorize the candidate to train with an approved instructor upon receipt of their request. The training objectives are listed in the procedure portion of this SOP.
- E. An authorized operator may be removed from the Department Operator Roster at any time by the Fire Chief.

SCOPE

It is the goal and intent of the Scarborough Fire Department to provide timely, efficient and cost-effective snow removal on the ramps and parking areas of each fire department facility. This will be achieved by implementation and execution of the procedures outlined in this policy. It is the intention of the Scarborough Fire Department to provide adequate parking space and safe access to and from each station and onto the roadway during winter storms.

TRAINING QUALIFICATIONS

- A. Instructor qualifications:
 - a. An instructor shall be a person who by possession of a recognized degree, standing or skill, and who by knowledge, training, and experience have demonstrated the ability to effectively teach cognitive and practical skills, and has been appointed by the Fire Chief to conduct the operator training.
- B. Student qualifications
 - a. Possession of a valid driver's license.
 - b. Have the approval of the Fire Chief.

TRAINING PROCESS

- A. Visit the Fisher website and view the mount and dismount video.
<http://www.fisherplows.com/fe/showroom/xtremev>
- B. Correctly demonstrate the proper mounting and dismounting of the plow for the instructor.
- C. Read and understand the procedures in this SOP.
- D. Meet with the Deputy Chief of Operations to understand where to pile the snow by driving the plow truck to each station and verifying the correct locations.
- E. Before it snows, walk around the stations, dry hydrants, tanks and draft sites you will be plowing to check for obstacles that will become hidden when snow is on the ground. Look for things such as bumper stops, speed bumps, curbs, sidewalk edges, shrubs, water drains, fire hydrants, fences, bollards, and pipes sticking up from the ground. To prevent damage to the area being plowed as well as to the snowplow and truck, mark any obstructions that will be hard to see when there is snow on the ground.

PRE-STORM PROCEDURES

- A. Properly attach plow or verify plow has been properly attached.
- B. Perform plow truck check list (attached).
- C. Check the snowplow to make sure all bolts are tight and that it has been mounted properly. Look for cracked welds and hydraulic fluid leaks. Make sure the plow lights and turn signals are aligned properly and are in good working order.

STORM PROCEDURES

- A. At the onset of a snow storm, the Deputy Chief of Operations or his designee shall have the plows mounted on the trucks by trained personnel.
- B. As the storm develops and 2½ to 3 inches of snow has accumulated, the plow truck drivers may begin to plow their assigned routes or stations.
- C. Plow trucks must use the yellow warning lights while plowing.
- D. Plow trucks shall only operate code 3 for critical incidents and then only at prudent speeds when the plow is attached.
- E. After the snow event is over, or sooner if requested, the plow trucks may plow out holding tanks and draft sites. Pressurized hydrants are not to be plowed without approval from the Operations Chief.

PLOW PROCEDURES

- A. Always wear a seat belt when operating a motor vehicle and never plow with your head out the window.
- B. When transporting a plow, position the blade so as not to block the plow headlights or your vision and angle the blade to the right (toward the curb). This will reduce the chance of catching a curb or a snowbank that could pull your vehicle into it.
- C. Do not exceed the posted speed limit under any circumstances when transporting a plow.
- D. When transporting a plow and while plowing, check the temperature gauge often. If the vehicle overheats, stop and correct the problem. If overheating occurs while transporting, stop and adjust blade position to allow more airflow to the radiator.
- E. When moving in reverse, don't solely rely on the vehicle mirrors. Turn around and look where you're going occasionally and use the backup camera system if the truck has one.
- F. When plowing in dirt or gravel, lower the plow shoes. This will raise the blade so you don't scrape the surface away. When plowing on asphalt or concrete, raise the plow shoes so that you scrape as close to the surface as possible.
- G. Plan your plowing pattern so that you are driving forward as much as possible.
- H. Come to a complete stop before shifting from forward to reverse and vice-versa.
- I. Wait until the transmission engages before accelerating.
- J. Accelerate slowly, allowing the wheels to grip the road surface for better traction. Avoid spinning the tires.
- K. To start a pass, start the vehicle in motion, then drop the blade.
- L. Never pile snow on someone else's property without the approval of the Deputy Chief of Operations.
- M. Never pile snow on a street or sidewalk.
- N. Never push snow across a road, it is illegal.
- O. If a significant amount of snow is expected, plow with the storm rather than letting snow accumulate.
- P. Do not stack snow by the road which may block the visibility of vehicles coming or leaving the parking lot or apparatus apron.
- Q. Use caution when plowing next to parked cars--as the snow can push you into the car.
- R. When possible have sidewalks and doorways shoveled before you start plowing so that the snow can be plowed away.
- S. As you come to the end of a pass, lift off from the accelerator while starting to use the brake. At the same time, start to raise the blade to help stack the snow--and to make it easier on the electrical system.
- T. Push the banks back far enough to accommodate future snowfalls.
- U. Plow snow during low-traffic hours if possible and always be cautious of cars and people in the lots.
- V. After plowing, let the vehicle idle for ten minutes or more to allow the transmission cooler time to cool the transmission fluid.
- W. When you're finished plowing, lower the blade to the ground and turn the plow control off for safety. This will also take stress off the hydraulic components.
- X. Remove the plow as soon as practical after the storm is over and the station yards are cleaned up.

PLOWING TIPS and TERMINOLOGY

- A. **Angle-Position:** In this position the blade is angled to either left or right side of the vehicle. Use this position for windrowing or widening after the first pass.
- B. **How to Windrow:** With the blade angled to the left or right side of the vehicle, make consecutive passes--each time throwing the snow forward and to the side. This technique is useful to clear large areas such as parking lots.
- C. **Straight-Position:** In this position the blade is positioned directly in front of the vehicle. Use this position for back dragging, removing a large windrow or cleaning up at the end of the job.
- D. **Deep Snow:** In deep snow raise the plow several inches off the ground to shear off the top layer. If you have a Power-V Plow, use the V-position for the first pass. Then change to the Scoop or Angle-position to widen things out. You should push just enough snow with each pass to get the job done efficiently without overloading your equipment. A good rule of thumb is to use a full blade width for two inches of snow or less, three quarters of the blade for four inches of snow and a half blade for six inches of snow or more.
- E. **Wet Snow:** Once you start, finish the job. Wet snow left in windrows overnight can freeze making it difficult to clear. Also plowing with the storm is critical for wet heavy snow events instead of waiting for the storm to end.
- F. **V Position:** In this position the blades are retracted toward the truck. This position is normally used for making the first pass. It's ideal for plowing a lane through deep snow or punching through snowdrifts and hard-packed banks or windrows left by city and county plows.
- G. **Scoop-Position:** This position is used for carrying or controlling the snow--with the blades pushed out to form an inverted V shape. It's most useful for clearing parking lots or other large areas where snow must be pushed straight ahead--and not to the side. It's also useful for cleanup work at the end of the job. You'll find the Scoop-position to be the most useful for many plowing situations. And it's also a great time-saver.

RESPONSIBILITIES

It is the responsibility of all members of the Scarborough Fire Department who operate plow equipment to adhere to this policy.

REFERENCES

Fisher Plows

Plow Truck Check List

Perform This Check Before Plowing Commences

Date _____ **Employee Number** _____ **Employee Name** _____

Do Not Plow if Any Item is Not Checked

- Vehicle's tire pressures are correct
- Engine belts no cracks and tight
- Hoses not leaking
- Engine oil full
- Brake fluid full
- Transmission fluid full
- Battery full, terminals clean
- Radiator coolant full
- Windshield washer fluid full
- Vehicle windshield wipers are good
- Defrosters are working properly
- Vehicle & plow headlights operate
- Brake lights operate
- Turn signals operate
- Warning lights operate
- Look under the vehicle for obvious signs of leaking fluid
- Fuel tank is full