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## Cold Weather Care for Your Machines

[www.westsidetractorsales.com](http://www.westsidetractorsales.com)



Winter evokes images of cold winds and frozen ground. In northern climates, these images are a harsh reality, especially for those in construction who need to battle the elements on a daily basis in order to accomplish their jobs. Not only are there less hours of daylight to work, but the cold means it takes longer for equipment to warm up.

Removing snow off the machine can be time consuming. Snow not removed from a machine melts and then freezes on surfaces during the night, making for a slippery situation by morning.

Time and effort must be spent in making sure you have proper lighting and wipers on all of your equipment. Lighting and wipers not only help to accomplish their task, but can also help in evading possible hazards.

Servicing your equipment during the winter is extremely important if it is a production machine that needs to run each morning. Fuel additives need to be maintained, and fuel filters replaced often. Fuel gets denser as the temperatures drops. A partially plugged filter may work fine at the end of one day, but in the morning when the fuel is cold, it will fail due to the change in viscosity. Draining water separators each night is a good practice.

Letting the machine idle for long periods of time does more harm to the oil than working the machine, so if it's idling a lot, plan on servicing the machine more often.

Hydraulic systems that are closed loop will not heat up just by starting the machine. In order for the hydraulic system to warm up, the machine functions must be cycled at a reduced RPM until the oil gets above 70 Degrees Fahrenheit.

Frozen material around your under carriage can cause serious damage. The mud and debris frozen around the rollers can cause them not to turn. When you travel with the machine, the tracks will slide over the surface and flat spot the rollers. This also applies to articulation joints of a loader. The frozen debris can shear lines, wiring, and sensors when it is turned. Make sure the areas are cleaned each night.

Using ether (starting fluid) to start a machine can be a complicated job at best. If the system is not designed for ether, it would be best not to use it. Some systems use a glow plug during the cranking cycle, and if you use ether, it will ignite long before the piston gets to top dead center causing damage. It could also explode in the intake manifold, creating pressures that the manifold is not designed for. Some people will tell you that once you use ether, the machine will be addicted to it. What happens is the sudden stop of the piston if too much is used. This will put a slight bend in the connecting rods or cause breakage of the rings. This will shorten the stroke of the engine, or create cylinder leakage. When this occurs you no longer have the same amount of heat produced from compression, which is why you need ether after that to get it to start.

*Written by John Driscoll, Service Manager and Trainer for West Side Tractor Sales and Rail Construction Equipment*



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**Are your machines ready for the season? Call today for details on West Side's Snow Prep Package.**