

Snow and Ice Equipment Maintenance

Pre & Post Season Equipment Preparation

Follow the steps below before using equipment for the first time this winter season to help prevent malfunctions and prolong equipment life.

Hydraulic System Inspection Service

- Change operation fluid in both main power units and angle cylinders.
- Inspect hoses for dry rot, cracks, or pressure bubbles and couplers if applicable.
- Clean out or replace internal filters or strainers.
- Check all fittings to make sure they are tight and are not leaking.

Electrical Systems

- Inspect all connections to plows and vehicle harnesses for broken terminals.
- Coat each connection with dielectric grease.
- Check solenoid operation and connection.
- Test vehicle batteries and replace if necessary.
- Inspect vehicle lighting including wiring and sockets on headlights, taillights, stop lights, and turn signals.

General Areas of Service

- Grease all moving/pivot points.
- Adjust trip springs and replace if needed.
- Check and tighten “nuts & bolts” on both plow assembly and vehicle mount.
- Inspect/replace cutting edge.
- Adjust plow lights.
- Order replacement parts for all types of plows.

Maintenance During the Season

Remember the following steps to follow during the winter for maximum performance and fewer opportunities for serious damage:

- Thoroughly clean and wash all equipment. Use a pressure washer or car wash as an easy option to ensure that equipment looks its best and is functioning properly.
- While cleaning, look for structural problems.

Cracks are usually first shown by paint/powder coat cracking and rusting at joints. Look for bent, twisted, or distorted parts and schedule repairs.

- Regularly check for electrical problems including frayed and crushed wires, loose connections, damaged plugs or pins, broken bulbs, corroded or water-filled motors, and bad batteries, alternators and solenoids.
- Mount, load, and test all spreaders. Calibrate them and place calibration cards on each truck’s visor.

Take care of repairs and replacing parts as soon as possible to prevent further damage. Establish a repair and maintenance plan and checklist to use for inspecting equipment after each major event. The Salt Institute’s *Snowfighters Handbook* has a good template for this. Spending time before, during, and after each season for equipment maintenance will help prevent damage to equipment, increase employee safety, and save time and money.

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S-A-L-T-E-D Advice for Storage

Safety means good visibility for operators, warning signs at entrance and security fencing.

Accessibility means easy access for equipment and delivery trucks, space big enough for front-end loaders to maneuver, room for a 20-ft. extension of the pad in front of storage buildings, and doors large enough to accommodate equipment.

Legality means complying with local zoning ordinances and any required discharge permits.

Tidiness means keeping buildings well maintained, good housekeeping around the storage site and screening the storage site with fencing or plants.

Economics means permanent covered storage and locating the storage site to avoid long distance hauling.

Drainage means good drainage away from the stockpile, sloping bituminous pads (1/4 inch per foot downward from the center), continuing runoff, installing retention curbs if necessary and disposing of salt brine in conformance with applicable federal and state regulations and local ordinances.