

RUST PROTECTION

Winter elements can compromise equipment; take steps to protect your investment



By GREG LAWRIE

Since the introduction of pre-emergent salts, rust has become an added cost of doing business for snow and ice management business owners. Not taken into account were the effects these salts would have on vehicles and infrastructure. These salts are able to stick to the vehicles longer and are more active at lower temperatures. As a result, equipment is experiencing body rot, parts failures and wiring harness

issues, all because of corrosion. Staying on top of corrosion issues can extend the life of the vehicles and equipment, reduce repair costs and downtime, and project a clean, professional, rust-free image in the marketplace.

Choosing the Right Process

When it comes to protecting your fleet and equipment, there are three general theories:

- 1 Eliminate salt from ever coming in contact with vehicles and equipment.
- 2 Wash salt off vehicles and equipment after every snow event or whenever they come in contact with salt.

- 3 Coat the vehicles and equipment with a rust preventive product.

Realistically, keeping your vehicles and equipment out of the salt is very unlikely. That leaves you with the latter two options to combat the effects of corrosion: clean your fleet with a salt removal product after every event, spray your fleet with some type of rust control product, or combine these two processes.

In theory, washing your vehicle after every event sounds great. After all, it is the salt that is causing the corrosion on the vehicle. Salt speeds up the effects of corrosion by attracting moisture, which in

DETAILED TREATMENT

Snow removal equipment requires a comprehensive protection approach using the correct materials in the appropriate areas.

ROC 40 A light oil that penetrates into hard to reach areas, lifts and displaces moisture leaving a coating of protection

ROC50 A tackified oil that has more body and is primarily used in high traffic areas where penetration is not as important as staying power such as on the frame rails and under carriage of large trucks

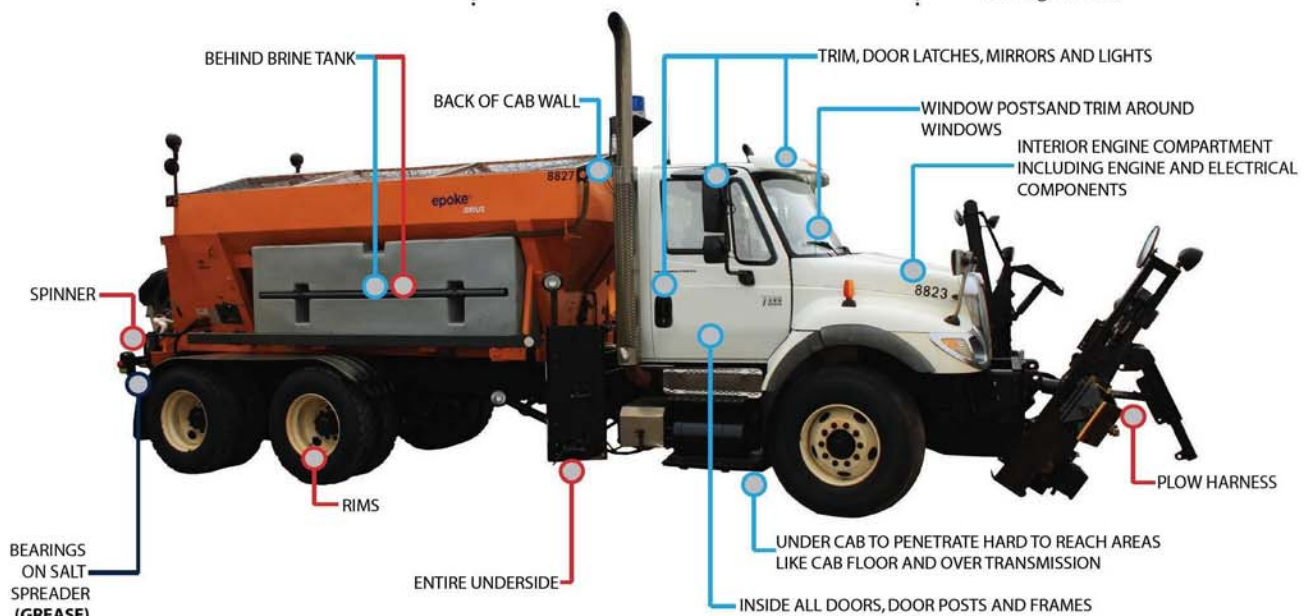


DIAGRAM COURTESY OF GREG LAWRIE

turn, causes electricity to flow more abundantly between metals. Salt removal on its own requires a closer look. The time required after every event to wash vehicles is very costly; and unless done properly, cabs, doors, fenders, wiring, and various areas under the vehicles may be left unwashed. Another way of looking at it? You are pushing the salts into your vehicle. Creating barriers between metal and moisture (rust prevention) adds a layer of protection.

Salt removal products are beneficial for products that have excessive salt build-up, such as spreaders and salt trucks. They are also very effective at removing salt stains from ceramic flooring and the exterior of vehicles in order to keep a clean and professional appearance.

Choose the right product

In general, three types of products are used to control corrosion:

1 Cathodic protection (CP)

Cathodic protection basically reduces the corrosion rate of a metallic structure by reducing its corrosion potential, by bringing the metal closer to an immune state. CP is commonly used on pipelines, water vessels and metal structures. Although some have tried to use CP to protect vehicles, it is important to keep in mind that the corrosive environment in which those vehicles are used is different from that of stationary structures. The effectiveness of CP on vehicles has been widely debated.

2 Wax and tar products

During the mid-1980s, wax and tar products dominated the rust control industry. They were seen as having great coverage that could withstand the elements. However, these products do not penetrate hard-to-reach areas. They also dry out and crack, which allows salt and moisture to get trapped

between the product and the metal surface and accelerates corrosion. Reapplying yearly is ineffective, since these products will not penetrate areas that have been left exposed because of cracking or shrinkage of prior applications. If you use wax or tar products, make sure the vehicle is dry, since these products will sit on water and accelerate corrosion.

3 Oil products

Oiling has been used for many years. It penetrates hard-to-reach areas and neutralizes the harmful effects of rust. Oiling a rusty vehicle will help stop the corrosion process in its tracks. For oiling to work, it should be done yearly or as required. When it comes to oiling, the less viscous (thinner the oil), the better its ability to penetrate hard-to-reach areas. On the other hand, the more viscous (heavier) the oil, the longer it will protect the treated metal,

Continued on page 54

PROFITABILITY *Driven*

No matter what the conditions, Hiniker professional grade snowplows are ready to help you **reach new levels of productivity and performance!**

V-PLOWS: Trip-edge designs give smooth operation and effective protection. Double acting cylinders provide positive moldboard position control.

C-PLOWS: Get the heavy-duty performance of the Hiniker trip-edge conventional plow plus the added versatility of a high performance backdrag plow. An amazing time-saver in driveways, parking lots and loading docks.

SCOOP PLOWS: High capacity concave shape captures snow to efficiently clear lots and parking areas. Angles left or right for conventional plowing.

CONVENTIONAL PLOWS: 30 inch tall high-curvature blades roll deep snow off quickly and efficiently. Commercial plowers will appreciate the extra strength and efficient design.



Torsion-Trip V-Plow

SPREADERS: Snow removal contractors looking for additional profits will find them in ice control. Spread ice control materials quickly and easily with an efficient Hiniker Spreader. Choose between OHV gas engine or dual-motor electric hopper spreaders, or new stainless steel tailgate spreader models!



**TRIP-EDGE
C-PLOWS**



**TORSION-TRIP
SCOOP PLOWS**



**SKID-STEER
SNOW PUSHER**



**TRIP-EDGE
CONVENTIONAL PLOWS**



TAILGATE SPREADERS

HINIKER COMPANY 1-800-433-5620 • www.hiniker.com

