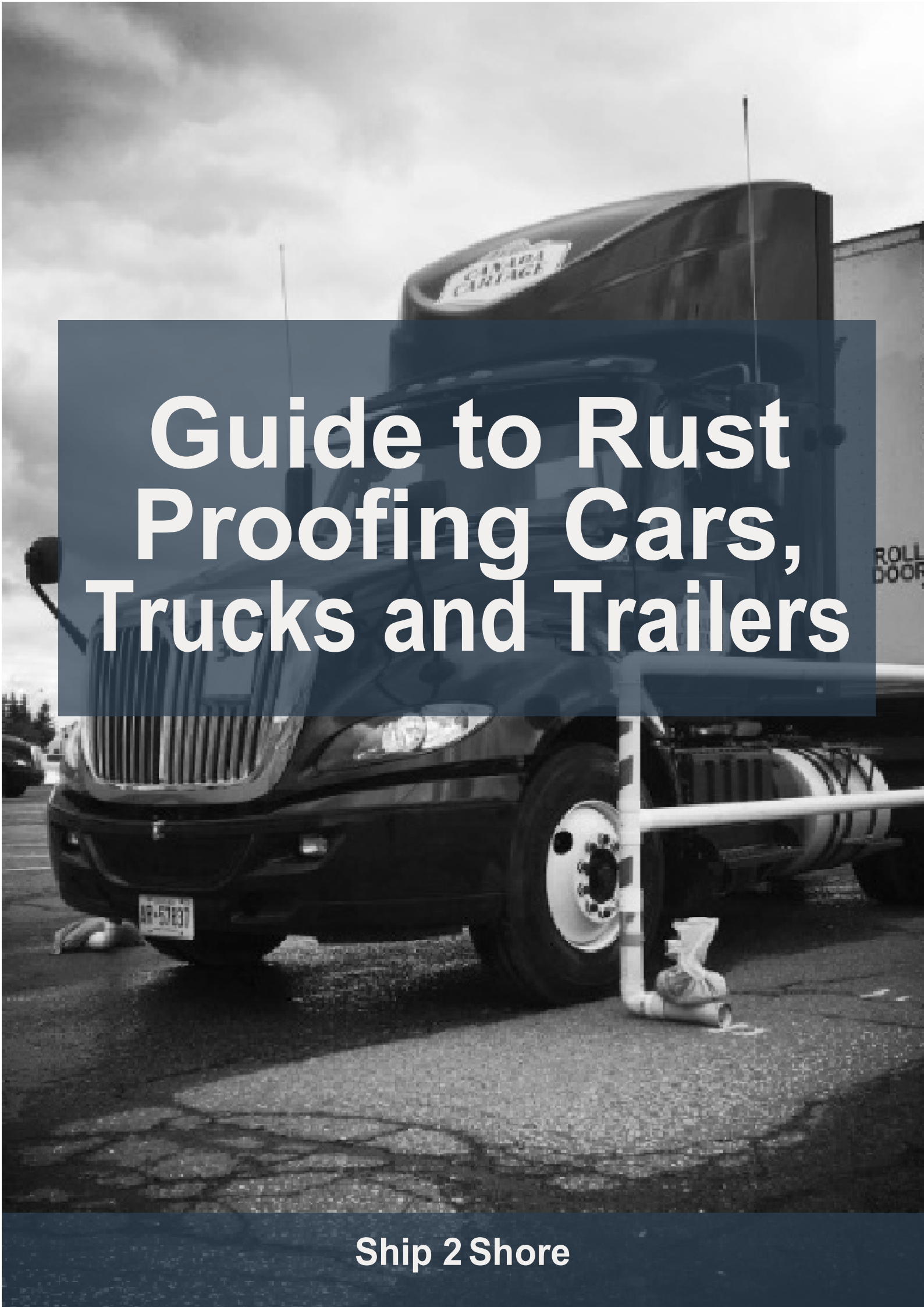


Guide to Rust Proofing Cars, Trucks and Trailers

Ship 2 Shore

Rust Proofing Guide

Rust Proofing Trucks, Trailers and cars with Ship 2 Shore

This is a guide, the object is to establish S-2-S PLID (thin) in all crevice, crack, seam and boxed areas, top coat these areas and all other appropriate areas with Industrial.

Cover windshield and wipers with a seat cover before spraying

AVOID GETTING ANY S2S ON THE WINDSHIELD OR WIPER BLADES.

If it gets on the blades they will need replacement, if it gets on the windshield scrub immediately with a strong dish detergent (or glass cleaner).

Windows without wipers are not a problem.

Ship 2 Shore - **PLID** (thin) Highly penetrating, rust inhibitor - extreme pressure lubricant - dielectric.

Ship 2 Shore - **Industrial** - thick - rust inhibitor, penetrates - lubricates - dielectric

Most rusting occurs on the inside of enclosed areas where moisture and contaminants collect, these areas tend to be around the lower 6 inches of the vehicle body.

Example: Interior of fender braces, cab frames & mounts, doors (at the bottom), crevices between fender liners and main body, fender braces, between double frames, under floor mats, cab floor corners etc. where contaminants collect. tailgate interiors.

These areas require an inhibitor that will penetrate & displace moisture.

Rust Proofing Guide

First we cover the windshield (we use a sheet, a mechanics seat cover works) insure the wiper blades are covered or remove them while applying) windows without wipers can be easily cleaned.

DO NOT: spray upward inside the doors, if it gets on the window felts you know it for a long time :(

Apply Ship 2 Shore PLID where there are deep seams or crevices to penetrate including inside of pickup truck/car frames. We generally complete the underside first, if there should be a little dripping not a problem, your doing the top side (:-)

Ship 2 Shore Industrial is used to top coat these & coat all other appropriate areas.

DOORS: If necessary remove inner panels, spray S 2 S PLID onto the door latch and window winder mechanism, (avoid window felts) spray all inner panels being a little more generous on the lower seams. For extended performance apply S2S Industrial to the latch, window winder, rear view mirror mounts and all the rest of the flat panels etc.

CAB INTERIOR: Lift floor mats and apply a generous layer of S2S PLID around the inner seams, apply a generous layer of S2S Industrial all over the floor and seams, replace the floor mat with a new one if it has holes in it.

FRONT QUARTER PANELS: apply S2S PLID to the inner seams, apply Industrial to most everything else, top coat the inner seams.

CHASSIS AND DOUBLE FRAMES: Spray S2S PLID in between the double frames trimmer wand where ever possible. Apply S2S industrial over the rest of the frames.

Gravel boxes can also be treated.

Rust Proofing Guide

Coat internals of electrical connections with Industrial., particularly

the rear wiring harnesses.

Depending on your experience & how thorough you are required to be.

Corrosion in Alternators: Spray the interior of the alternator with PLID, yes directly into the alternator

Motor should be off.

Apply Industrial into all electrical connections, remove tail lights coat terminals etc. as well as the pocket area.

Soak the fuse panel with PLID.

Apply industrial to exterior fire wall electrical connections, remove battery cable end clean and apply industrial re-attach.

HEADS UP!!

Battery connections growing mushrooms (heavy corrosion)?

You may have heard lots of reasons here is the real cause:

Battery tops are some what brittle, if you loosen the bolt holding the battery cable clamp with one wrench you can easily put force on the battery post causing a hair line crack to occur between the battery post and the battery top, this breaks the seal between the top and the post now the battery post works like a wick and the battery acid migrates up the post to the battery cable end causing all the havoc.

Rust Proofing Guide

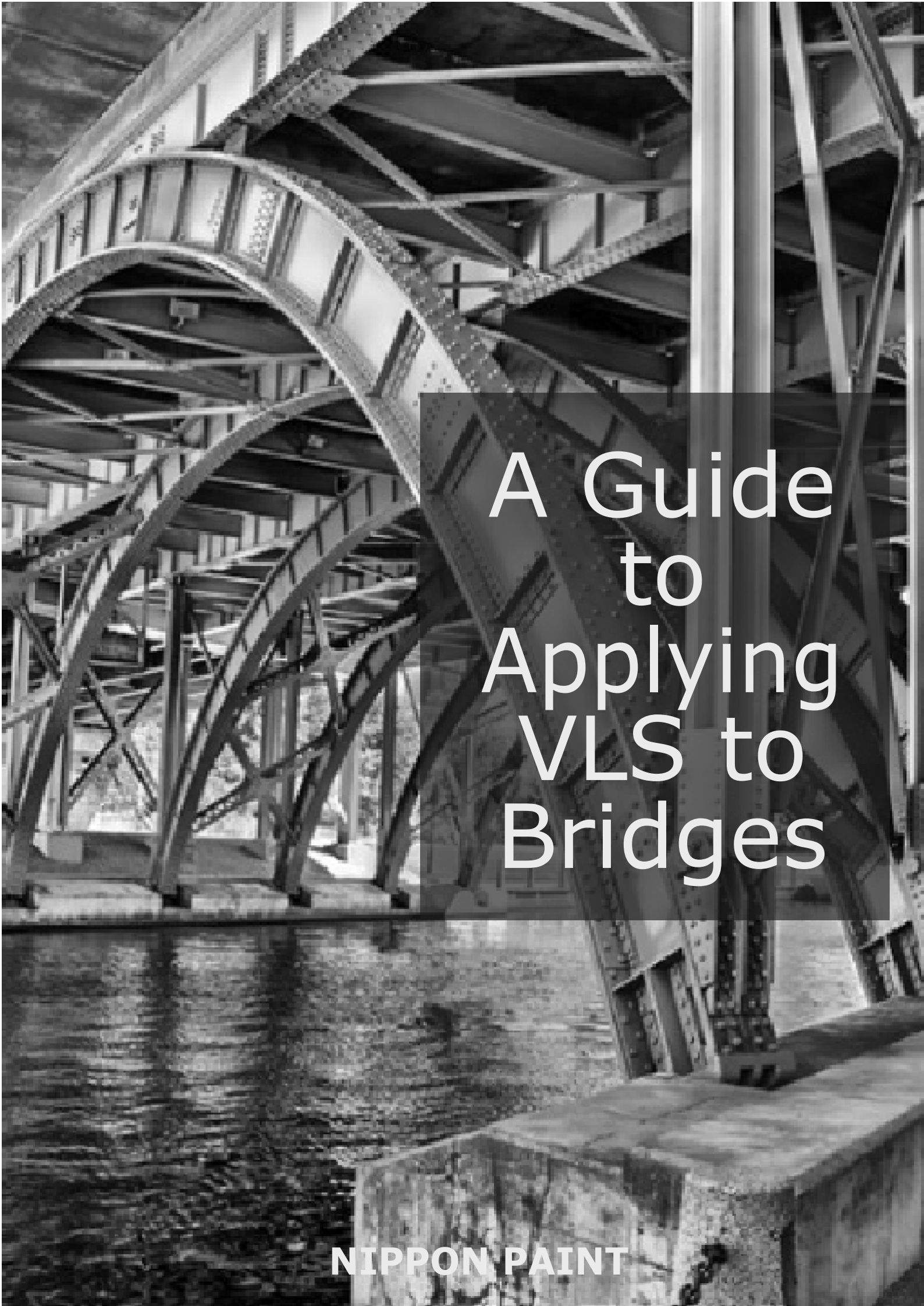
Prevention: Use two wrenches when undoing the bolt, one holds the bolt and takes the strain while the other turns the nut. Be careful you do not put force on the post.

Clean the cable ends, posts, and if necessary disassemble the bolt together wire ends & clean up all bolts.

Apply Ship-2-Shore Industrial to everything during assembly and re-connection.

Apply a big dob of Ship-2-Shore Industrial on the battery top around and on the post, this should deal with the growth of corrosion.

You do not have to be concerned about the transfer of electrons across the top of the battery with Ship-2-Shore on it.



A Guide to Applying VLS to Bridges

NIPPON PAINT

A Guide to Applying VLS to Bridges

Guide to Treating Bridges

VLS is available in a Thin film and a long lasting Thick film, both products should be used in the process.

Start with the Thin Film, it can be placed in pump sprayers, it is thin enough to spray this way, airless sprayer will also work. Saturate all cracks, welds and bolts with the thin film first, it is going to act as more of a penetrant than the thicker formula and must be applied to these areas first to ensure deep penetration.

If there are areas of heavy scaling, ideally they should be blasted off. If this is not possible, soak them with VLS THIN and leave it for about 30 days until all the scaling falls off on its own.

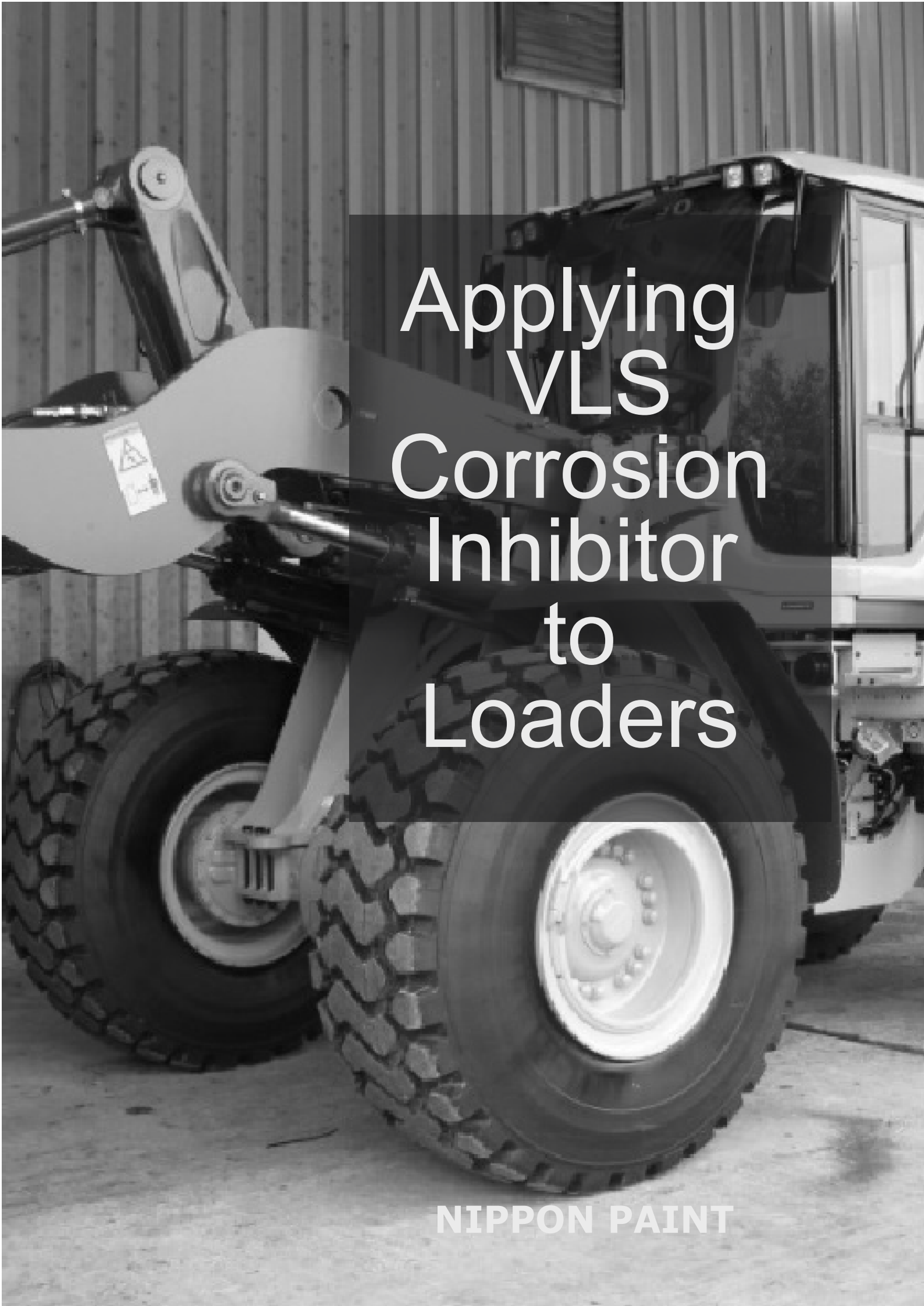
Once all the cracks, welds, bolts and scaling have been treated with VLS THIN, coat the rest of the metal with the industrial formula. It can be sprayed with an airless sprayer (must be at least room temperature to flow), it can also be painted on with a brush. There is no time required between applying VLS THIN and VLS THICK, this is a wet film and it never dries.

Not recommended for traffic areas, ideal for under side of the bridge and beams.

Depending on the environment the protection should last years, 15 to 25 or more. They way to tell if it is still working is to do a finger test, if you feel a wet film on the metal it is still on the metal it means VLS is still working.

A Guide to Applying VLS to Bridges

Checking a 23 year old Application, it is still wet and working!



Applying VLS Corrosion Inhibitor to Loaders

NIPPON PAINT

LOADER APPLICATION

VLS APPLICATION GUIDE TO LOADERS

Cover the windshield & any others that have wipers, insure wiper blades are also covered.

Remove floor mats spray a heavy coating here ensuring cracks, seams and crevices receive a good shot.

With your pump system if you want to get fussy many of the cab structural members can easily be accessed with the small wand up near the interior top of the cab, a generous application in these will insure the product migrates all the way to the bottom of the enclosed reinforcement, you can also drill an access hole.

Under the fenders: there are often boxed fenders over here if they are closed so you can not access the inside of them it is a good idea to drill a small (3/8 or so, usually one per brace is adequate) access hole at the lowest point, water runs in, water runs out. Use these holes as access holes to apply a generous shot of VLS to coat the insides and over lap areas (seams).

Hood interior: spray boxed hood braces and a light coat on any other surfaces that looks like it could use it.

Open all electrical plugs that may be subjected to corrosion, put a blob of VLS into each connector and close up. If the alternator is subject to corrosion (without the engine running (if using a spray bomb of VLS THIN propellant is flammable) spray VLS THIN to coat the interior of the alternator, spray the fuse panel so VLS gets into every nook and cranny. You may also sometimes use a spray bomb for this.

Cab top interiors - take down sun visor and use holes to spray interior.

LOADER APPLICATION

If you need to get detailed, the work light cases are made of steel, pop the light out and coat inside of the case, wire connectors and don't forget the exterior wiring plug often just below these lights.

Option to keep the machine looking new:

Coat all exterior metal where nobody walks, hydraulic hose ends and any thing else that looks like it could use a shot.

Once done and put in service DON'T WASH THE MACHINE until the season is over (and only then if needed for cosmetic, or mechanical reasons).

Once washed the washed surface may require a re application of VLS.

Once a year spray the alternator and perhaps other small stuff, like hinges etc.

If not covered, clean side windows immediately when done using a strong solution of dish detergent or glass cleaner.

Soap & water clean up. No need to flush the pump system.

If difficulty spraying on a cold day, warm sprayer and contents.

FIRST YEAR: VLS does not penetrate far on it's own so sometimes in a really tight seam a shot of VLS THIN top coated with VLS THICK will help to insure coverage particularly in very aggressive spots. (under fender seams for instance).

VLS THICK & THIN

Applicators Guide for Inner Hulls - Ships, Barges, Tugs

VLS if applied indiscriminately causes a messy surface and is not appreciated by Lloyds, T.C., CSI's and others.

We are endeavouring to obtain these organizations approval, your co-operation is appreciated.

VLS is a high quality, high performance rust inhibitor, it is imperative it be applied using a great deal of applicator discretion so as not to make a mess.

Spray gun settings: use a 12 to 15 thou. spray tip Turn the pressure down until the product sprays gently, this reduces misting in the air.

On **Barge floors** only the cracks, seams, crevices and the flat part of the floor should be coated, the top of the floor joists do not usually have a severe rust problem and this is where people walk when inside so, don't apply product here unless there is a definite reason, unusual circumstances or a cat walk or plank walks are to be installed.

Barge walls & Deck Heads: It is good practice to apply VLS **THIN** into the seam between the outer skin and the longitudinal, deck head, deck reinforcements and other crevices, (VLS **THIN** will penetrate deeply into these areas protecting the structural integrity), top coat these areas and all other flat metal with VLS **THICK** using discretion if it maybe walked on.

Voids - Inspectors may need to crawl through these areas so where they must crawl or go in if the existing coating is mostly in fair condition but the lower section is rusty then apply a heavy (4 mils or so) coat of VLS **THICK** to the lower section as needed. If deemed necessary apply a light coat over the existing coating or only apply coatings. to areas that have problems usually the cracks, seams, welds etc. leaving a clean, uncoated path for inspectors to walk.

Note:

When coating extremely old porous metal double up on the coating thickness - VLS has a tendency to penetrate right into the pores of the metal leaving nothing on the surface.

Applicators Guide for Inner Hulls - Ships, Barges, Tugs

Ballast Tanks:

Remove flaky rust scale (needle gun is fine) Apply VLS THICK.

Apply an extra heavy coat in the bottom foot or so of the tank.

Here water sloshes around, this lower area may need coating every few years but there should be no preparation required.

Very easy maintenance.

Optional: Apply VLS THIN to all cracks, seams and crevices to penetrate In then coat everything with VLS THICK.

Caution: Provide ventilation and wear an approved organic mist respirator when spraying in enclosed spaces.
Refer to MSDS sheet.

The information contained here in is thought to be correct, the writer assumes no liability for errors, omissions etc.

NIPPON PAINT (SINGAPORE) PTE LTD
1, First Lok Yang Road,
Jurong
Singapore 629728