

# Rust Fighter

RESTORATION  
TIPS

*Rust can destroy your classic ~ unless you prevent it*

**UNLESS** the perfect rust prevention programme has been carried out somewhere in your classic, corrosion is eating away at the vitals. Worst of all, it isn't always easily detected and the disease can be munching on the unprotected metal on the other side of your panels. After a time, what looks like delamination ~ bubbles, bulges and even eruptions ~ show up and you know you've got trouble.

It only takes **one** winter of neglect for the problem to become expensive. Nipping rust in the bud as soon as it's spotted can be a considerable saving, even if you simply take temporary measures.

Look around the windscreen edges, under bright trim, wherever there are seams joining panels, especially on the inside of the front guards, front and rear. Look under any damp carpets, in the spare wheel well and inside the front and rear wheel arches.

Unless you have effective counter-measures in place, the process will inevitably return to nature all those unprotected metals susceptible to corrosion. Specifically, this applies to most of the metals that make up the components of all motorcars.

## **The hi-tech bit**

It's moisture and air combining on bare

metal that causes the problem; keep one or both away from your classic and she'll be beautiful for ever. By and large it's a question of sealing the metal from water and air.

On the outside, it's fairly easy ~ just keep a good coat of paint bonded to the metal in such a way that delamination just won't happen because you're keeping the air and water away. Seal with quality wax, too. Accidents break the seal, and if you do

have one, ensure that the protective seal inside, as well as outside, has been reset.

However, it's on the hidden *insides* of a car where the damage starts ~ in those dark places inside the inner and outer sills, or in the box sections and double skins that monocoque bodies use for a chassis. The latter are usually made of panel steel and there isn't a lot of meat for the tin worm to munch through. You can count on it that, in the days of no rustproofing, (which is the era most of our cars come from), inside these places there is always nothing but nude tin.

Some areas are high risk because of the abrasive action of road grit, constant dampness, or damage to protective



*Rust works as hard as you do ... it's a constant battle!*

finishes ~ such as grazes in chrome, paint and underseal. These cracks, chips and grazes give direct access to the metal, and must be resealed immediately.

## **Rust killers**

The hi-tech material that interests me is the group known as rust-converters/killers. As the name implies, they don't prevent rust, they act on the rust already there. Invariably liquid and often looking like water, they kill existing corrosion, leaving a surface ready for a primer or a similar sealer and awaiting final action in the form of paint or a preventer. It's important that loose rust be removed because it may well cause the chemical action to be only skin deep, with continuing infection carrying on inside no matter what the sealants you have used.

## **Iceberg revealed!**



OLD ADAGES FREQUENTLY HAVE FUNDAMENTAL TRUTHS; 'RUST NEVER SLEEPS' HIGHLIGHTS THE URGENCY REQUIRED TO DEAL WITH CORROSION ~ THE MAJOR EXPENSE IN MOST MONOCOQUE BODIED CARS. PENN MCKAY WORKS THROUGH THE OPTIONS

Collin of ClassiCar Restorations (Auckland) pumping in rust-preventing fluid



## Anti-rust weapons

- A compressor ~ can be bought, hired or borrowed
- Purpose built gun with flexible hose, dispenser end-piece and reservoir for getting into those hidden dark places ~ readily available and cheap from any paint panel supply shop
- Drill bit of the minimum outside diameter of the above flexible hose
- An oil can with a long flexible neck
- Several coarse paintbrushes
- Tools and devices for removing loose rust, ranging from wire brushes to rust removing discs for power tools
- Your favourite rust-killer
- Your favoured rust preventer, so long as it's a 'creeper'

Their action involves a chemical reaction with the rust that converts it back to a form of metal. The problem is, however, that rust-killers by themselves are only temporary ~ as well, most of them have to be washed off within 24 hours because they can have an adverse reaction with subsequent treatments. So really you shouldn't use such rust-killers inside where you can't give them the wash treatment.

Where you can wash, you can also get at the tin with the ultimate, in my opinion, rust preventer ~ POR-15. It can be applied over bare metal, rust-killed metal or primed metal. Best of all is over Metal Ready, a one-step preparer specifically for use with POR-15.

If you're going to paint over the Metal Ready you must wash it over after it's dried, in common with most of those preparations. POR-15 paint's impervious surface is extremely resistant and, when applied properly, is virtually impossible to remove. Restoration shops commonly use it on inner panels as they piece freshly-restored bodies together ~ and you can still them spray with Dynol-type treatments.

But if the Metal Ready is simply going into sills and so on, spray it in and just leave it to dry, then spray in your creeping preventer. POR-15 also has a rust

preventer that's a creeper like Shell Ensis MD ~ called 'SW2', it's not cheap but does a great job, goes a long way, travels everywhere and dries like varnish.

Rust preventers such as Ensis are different; they're also mandatory in those hidden places. The paramount qualities of a good preventer will be flexibility ~ never goes hard ~ air and water impermeability, and the ability to creep into the tightest little spaces; wherever dampness and air goes, so must a good preventer. To do this it displaces moisture.

### Prevention is the very best measure

Properly carried out, it leads to peace of mind. It's something any owner can do a lot to help, and if you have a compressor, you can do the *lot* just as effectively as any professional.

You must locate the right places and how to get into them, and that means knowing your way through the body. There are charts available for many older cars, showing where the best entry points are for rust prevention fluid. Dynol have a superb set of them, see your Dynol agent and ask him to let you look. But if you're experienced you'll be able to work out most of it for yourself. If not, and you can't find a chart, go and see an expert panel-beater or club member who is familiar with the various panels that make up your car.

In particular, you need to know where the best access points are for getting into the inner and outer sills, and all the other inner and outer panels are in the lower half of the car ~ in between them are the vital areas, especially if water and dust can get trapped in the gaps.

### Restoring without rust

When you buy a new car nowadays, a great deal of preventive work has already been carried out but when you're into a restoration of an earlier car, you've almost certainly spent plenty on removing the rust damage so the incentive is greatest for beating the tin worm to your fresh metal.

The best time is when a shell has arrived back from the painters; it's immediately accessible and uncluttered by trim and you can often actually see the goodness getting into the right places. By applying such measures over a couple of hot days, the creeping is greatly aided by the heated tin. The second hot day is so that the whole process can be repeated allowing the second coat to stick to that still tacky



With panels opened up during your restoration, excellent

preventative work can be undertaken

first coat. A fully operational car is much more complicated because it's so easy to miss places and to get the rust preventer onto carpets and trim. So this can be a difficult job, but if you remove seats and carpets and study how best to carry it out, you can still do an effective job.

In both cases you need to figure out which drain holes are to be sealed temporarily to let the liquid travel, and you also need to figure out where you need to drill holes to gain access into the panels, especially where there are several panels coming into close proximity ~ such as the inner and outer sills. It's not the easy places that give the trouble, it's those secret places where road dust and moisture prove such a great breeding ground for rust.

You can also do a lot of good with an oilcan with a long flexible spout or with a proprietary spray can ~ but that's an expensive way to do a whole car. With an oil can and a five-litre container of Shell Ensis MD, theoretically you can get into every part of the car, but you would have to drill the odd hole, for instance for inner and outer sills ~ there are many places where a creeping preventer like Ensis will stop rust absolutely.

The bottom line is this: with modern treatments it's perfectly feasible to stop all rusting totally.

Just be thorough!

