

# RUST

*What to do about it  
How to prevent it*

Whether you're restoring or maintaining, driving or garaging your Traction, rust is one of those things you will probably put off doing something about for as long as you can. If you do succumb, the rust will probably eat heavily into your wallet as well.

Because the Traction has no chassis, the fully integral body shell gets its strength from lots of angles and boxes all welded together. Rust doesn't have to bite very deeply into the thin sheet metal for whole sections to become weak. It is usually on the parts you seldom see that rust gets a hold. Rust is promoted by corrosive fall-out from industry, moisture retained in seams and caked up mud, condensation inside box sections, and even airborne agricultural chemicals.

Killing rust and protecting metal against it in the future is possible, but it is a long and messy job. It is not something to be done for a couple of dollars and half a days work. It is necessary to remove seats, carpets, and trim — the best time of course is at the start of a complete restoration.

The first and most arduous job is cleaning the car down, stripping off all the bituminous goo, mud, grease, etc. — steam cleaning is the quickest and easiest, or you can try blowtorch and scraper and lots of care on the bitch-uminous goo. Rust in any structural part must be cut out and a new section welded in — plastic and fibreglass are a definite health hazard here. What you do with rusty doors, boots, etc., is up to you and your conscience.

In parts where the rust isn't serious, the best treatment is to remove as much as possible with wire brushing and emery paper, then apply a rust neutralising liquid over affected areas to dissolve and convert the rust. There is a great difference between brands — One I have used and can recommend is Ferropro Rust Converter. This is brushed on, left, and washed off. Parts should be out of direct sun or wind to prevent drying out too quickly. Preparation must be stressed — rust converters can't be expected to penetrate thick layers of rust and scale — sometimes the top layer can be converted, and forms an impervious layer to further treatment.

When this treatment is complete, a rust preventative primer should be applied. Ferropro make one for use with the converter, or one for use on all bare metal including treated areas is Brolite Portetch, a metal etching primer with rust preventative properties. Both are compatible with any type of paint. Some other types are only compatible with enamel. (Portetch must be used with Portetch Thinner).

Having treated the underside, mudguards, inside the doors, boot, interior floor, etc., you are now ready to tackle the greatest danger spots — inside the box sections — the sills and front 'forks'. One problem is their inaccessibility — you can't hose off any converter or get in to brush on any rust-killing paint. Another problem is what to put inside the sections. I don't know of any do-it-yourself treatment available here which will stop the rust and go on protecting. Does anyone know of such a product? Because of the terrifically corrosive properties of de-icing salt on British roads, there are several products there made especially for this type of job. Finnigan's Waxoyl is claimed to completely stop the spread of rust. You may write to Finnigan's Ltd. (CRW) Eltringham Works, Prudhoe, Northumberland, U.K. Waxoyl may be applied with an adapted garden-type spray, or Finnigans supply a special spray for about \$2. It may be necessary to drill a couple of small holes for access — these must be in the centre of a vertical surface so as not to affect structural strength, and should be plugged when the job is completed. It is interesting to note that Rolls-Royce tried two methods of preventing condensation — sucking all the air out and sealing the section, and filling them with dried nitrogen, but both failed.

Having completed this large task, you will be interested in the best ways of preventing its recurrence. Forget the old wives tale about aluminium paint preventing rust — it doesn't. Waxoyl may also be used under the mudguards under the car, and inside the doors. If you are using Portetch, you have a choice of subsequent finishes. On an exterior panel the sequence might be: Portetch ( 2 coats ), Primer-surfacer (approx. 3 sanded coats), perhaps spray putty if necessary, then your normal finishing coats of lacquer/acrylic/enamel. Under the car and mudguards, an ideal sequence might be: Portetch (2), primer, normal finishing coat, then either chassis black or underbody sound deadener or both. These last two are bituminous and should not be applied over bare metal, except on a Holden, where it really doesn't matter. This is because they eventually dry out and trap moisture. A finish which is extremely tough and has a deep gloss is two-part polyurethane paint. The extent of its use depends on your budget, at about \$15 - 20 for 2 litres (1 litre colour, one hardener). It is ideally suited to the engine bay (acid, brake fluid resistant) and suspension components.

This article is not intended to be exhaustive — if you know other products, methods, services relating to this article, share your knowledge with other Tractionists.

*Kym Harding*