

MX-5 Protecting the bottom

When I came into possession of my new MX-5 like most enthusiasts, in the forefront of mind was how best to look after this dream machine, as it is my intent to keep it long term. Not only did I wish to give it the best protection on top, also I felt the need to look after the bottom, the underside that is, including all of the mechanical bits. Not just protection but also to make it easier to keep clean.

Reading the owners manual the degree of protection during production is not totally clear although "cavities and under-body" are claimed to be treated, the only evidence as far as I could see is just protection along the line of joints, a thick rubber grey and black hard underseal, as well as the "protective" paint!

While one might feel that Mazda could do more, the basic design of good drainage in most areas works well but as we all know does not protect against the ravages of winter salted roads, particularly here in Scotland, where this can be as much as 6 months of the year and is increasingly problematic with the additive, molasses I believe, which makes it stick like glue and also becoming a fine adhering dust on the road as they dry.

To me it seems such a waste not to get out with the top down on a clear dry winter days and anyway for many it is not a matter of choice with the need to use the car daily. So to my mind this has to be an essential treatment to retain the condition and appearance for the future, and save on the possible massive expense of major bodywork and parts replacement so clearly shown in the August 09 issue of STHT "Matter of tRUST".

The owners manual does recommend that additional protection should be considered and to seek the advice of a specialist. This could be expensive so I looked at doing what I could

myself. I started with mainly the under-body and the obvious, previously vulnerable areas to include primarily the wheel arches, sills and side panels and cavities. So if you have a reasonably new, or old good condition import what I share here may be an incentive to have a go yourself! The only initial problem for me was how exactly to begin!

I sought the advice of our local experts. Steve Gunn suggested an annual good clean and spray coat of silicon. In fact as this was so simple I did this immediately and provided good, if only external, protection until I decided on something longer lasting.

Yes, there are many approaches that can be made, good old oil, rocket, WD40 or Waxoyl based products. Oil based oils are great, but they are still hydrophilic ('water loving') as well as attracting dust and dirt so need regular cleaning and reapplication. Some Waxoyls can be very thick on application and can overly change the look and requiring lots of masking of inspection areas that should be left clear, e.g. the body supporting areas of suspension struts.

OK, you don't look at the underbelly all the time but I felt the need to retain the original look as well as protecting. To that end I asked the advice of our local mechanical genius, Mark Guest who put me onto Dinitrol. It is expensive but it is also comprehensive, quick and easy to apply. It is more like a thick coat of paint, goes a long way so material cost alone is less than £100 available in both air spray and aerosol cans.

I used 5 different products for the various areas with actual application tasks being relatively quick and simple, while the preparation, although not difficult, was the most time-consuming ..as always!

What follows is the method I used specific to the Mk3 so there will be slight variations to your own



Stripped items



Rear wing



Rear suspension

Disclaimer: Any work you do to your car is entirely your own responsibility. If you are in any doubt you should check the technical advice with an independent qualified person who has seen your car. The MX-5 Owners Club, its officers, the editor and author accept no responsibility for any damage caused to your person or property as a result of you following or not following the advice offered in any articles.

This a brief summary:

- Thoroughly hot wash/steam clean
- Jack car and support
- Remove wheels
- Remove all plastic and metal shielding
- Comprehensive detail clean degrease
- Remove all cavity plugs
- Corrosion treatment
- Touch up painting, on cross-members and stone chip damaged areas
- Blanking and shielding from overspray and areas that must be revealed
- Treating
- Reassembly
- Enjoy!

Products Used:

General;

- Gunk 2 x cans
- Dr X's Muc Off cleaner 1 x can
- Hammerite smooth spray black 1 x can
- Simoniz Very High Temperature Paint black/matt gray 1 x can

Dinitrol;

- Rust converter RC900 400ml 1 x can
- Metallic hard brown for high salt areas 500ml 1 x can aerosol
- Corromax 3125 soft brown penetrating, cavity 1000ml 2 x can spary
- Car 4941 black hard, underbody 1000ml 1 x can spray. (30% used)
- Corroheat 4010 clear hard heat resistant 500ml 4 x cans aerosol
- Spray gun and 400mm hose with multi-directional applicator nozzle for cavities (equivalent required with all aerosol kits)
- Set of cavity drilled access points plugs (not necessary for Mk 3)

Available individually or in kits of both spray and aerosol cans from Rejel Automotive www.rejel.com

Graham Keates shares with us his experience of protecting his car from the threat of rust.

model or year and this is not comprehensive as there are other less critical cavities I intend to treat in the future, such as areas in the boot, under the bonnet and even the doors, although I have never heard of problems with doors on the MX.

I jacked the car as high as possible in stages by supporting on 4 stands ensuring the weight is distributed evenly by packing which also spreads the load. Checking all was stable I then removed the wheels. Robbie Marsh's technical tips on jacking in the April issue of STHT was very useful information here.

I removed all of the plastic and metal shielding from the wheel arches and underbody. Most of this is simply a case of releasing and removing the plastic screw fixing, and a number of screws and larger nuts and bolts for the metal shielding. The bulb changing section of the owner manual gives an idea of how simple a task this is. That said, I found I had to cut in half the plastic shielding behind the front suspension unit just behind the main strut in order to fully remove. Also a small cut was needed to remove the carpet-like shielding from the rear arch.

I used Gunk to clean the mechanical parts and a bicycle cleaner, as it is acid and solvent free, called Muc Off to clean elsewhere, rinsing with lots of water using a garden hose with rose head. Messy but essential to give a clean uncontaminated surface to take the treatment. Then I removed all the plastic and rubber cavity access plugs. There are lots of them! The ones along the underside of the sills were coated in the rubber underseal. I used a sharp knife to cut through the rubber then removed the plugs retaining the coating of underseal. I then cleaned off any corrosion and treated with rust converter before touching up any areas as necessary with a Hammerite spray can, blanking off all areas where I did not want the treatment to go, particularly engine bay and hinge area of the doors.



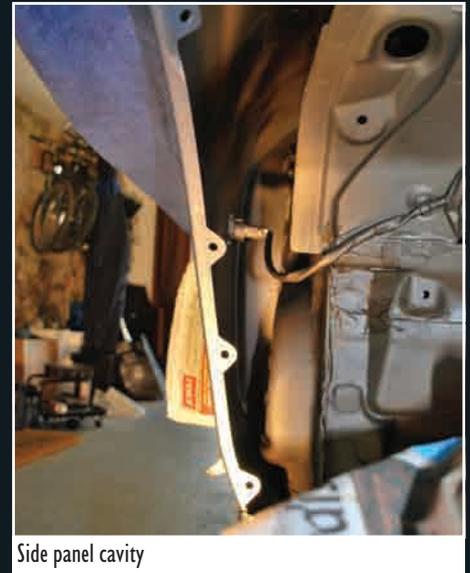
Front suspension



Suspension well shielded from overspray of wheel arch treatment then lacquered



Sill cavity access



Side panel cavity



Shielding for inner side panel cavity which is open at door hing. See below



Note revealed area of strut left clear/lacquered



Blanking and final preparation then treatment



Drain cavity access

Equipment:

- Trolley Jack
- Axle stands x 4
- Air Compressor and spray gun (not required with all aerosol kits).
- Scissors
- Screw driver
- Set of small socket spanners.
- Box knife
- Garden hose with rose spray head.
- Head torch
- Protective, gloves, mask and goggles.
- Old news papers
- Cleaning equipment.



All underbelly lacquered



Exhaust painted black



Only evidence of treatment visible on front crossmember

for longer particularly if this finish is occasionally re-instated after erosion or flaking. Not absolutely necessary but, well ..it IS an MX-5 after all !!

Additionally, I painted the rear exhaust box with black manifold paint as well as the hub area and rims of all the brake discs.

Please note, I did not find a need to drill any additional access holes

Finally I started the straight-forward task of treating four areas; cavities, underbody, wheel arch areas and all the mechanical parts. I treated the cavities in the sills, behind the side panel, all cross members, the main body stiffening channels, wing/wheel arch and tucked away in the area of the fuel tank inner cavities where the drain tubes exit.

For wheel arches and the inside of the front side panels I used the special anti-salt wheel arch treatment. For the obvious areas missed during production I used normal underbody seal leaving areas such as drains or such as need to be revealed for inspection purposes clear. I touched up the many bits missed in the area of the exhaust box particularly the body stiffening tubes to the rear. Finally I treated all other areas, including parts that have to be revealed, the whole of the underbelly, all mechanical parts, pipes, well everything apart from the exhaust and drains with clear engine lacquer. Why?... well, to prevent rust, and yes maybe over the top...! but I believe it will make it easier to clean and retain the look

to cavities. Also it is recommended to spray all areas with the soft brown penetrating prior to application of hard treatment although I did not feel the need for this as on the Mk 3 all the joints are sealed at manufacture.

With earlier models or imports you may have to look at doing both of these particularly if you have some areas of corrosion, and if you decide to do this you may need more of the brown soft penetrating treatment than I used. On my Mk 3 with only 18 months since delivery there was virtually no corrosion other than that which must have been present on assembly on mechanical parts, particularly the front and rear sub-frames on which, along with all the internal areas, I applied the brown soft penetrating oil treatment.

The whole task could easily be completed in a weekend and made even easier with access to a hydraulic jacking lift or service pit. I have done just what in my opinion was essential thus not a comprehensive treatment. I did not treat

the outside of the outer sill. This on the Mk3 is difficult to see as covered by the plastic side pods. I did think of removing these but believe it needs specialist tools. That said, the inside cavity in past models is where the corrosion starts and there is easy access as Mazda have made improvements on drainage and access to the areas which may prove problematic but the anticorrosive protection is clearly minimal in some surprising areas although adequate to cover the corrosion guarantee but not a guarantee that the red stuff will not appear while hopefully not penetrating!!

Over time I still think the rear wheel arch and possibly the rear section of the sills will be the areas affected on the Mk3 if the manufactures recommendation of further preventative treatment is not followed. I would recommend that this advice is followed and by doing it myself the expense is little more than the cost of a few tanks of petrol and missing out on a few days top-down motoring in this superb little motor!

Time the job so you don't miss a run with this excellent club and enjoy more on the winter days without those road salt damage worries.

If anyone would like to add to this I think a dedicated forum topic might be a good idea as there is so much input spread over the various forums within the club. If you would like more detail on my experience please contact me direct - ghkeates@googlemail.com or through the OC forum.

Rejel is offering members a 10% discount on all Dinitrol products they supply, just quote your membership number. The Dinitrol aerosol kit reference is DINGKMX5KIT1 and the spray kit reference is DINGKMX5KIT2



Web: www.dinitrol.co.uk

