External Repair

Now the tank has been sealed from the inside. Lets see how we can protect the external surface with POR15 products.

The receipe for this is to have the surface in bare metal, degrease it with Marine Clean, prepare the metal using Metal Ready, priming the metal surface with POR15 Rust preventative paint and finally applying Blackcote durable paint.

Let's start

First we need to strip the tank in bare metal. I have used a regular paint remover product which needs 1 or 2 applications on the tank paint to remove.

Applying a layer of paint remover soon eats away the paint. No more than 2 or 3 minutes are required to scrap the paint off using a regular metal scrapper.

Stripping away the paint takes quite some time due to the shape of the tank. Be sure to wear a mask as the smell of the paint remover is very annoying especially if working indoors. Unfortunately I had to work inside my home storeroom as it was winter with freezing temps outside.

Working steadily removes original paint. Notice the patches on the tank bottom; there has been rust forming around the patches most probably due to the fact that soldering destroyes the zinc coat that the metal had. Also rust has been forming in places not affected during patching; this rust would eventually appear sometime during the future. I have also rubbed the surface using coarse sandpaper in order to rough the surface as POR15 paints stick better to rough surfaces.

Since the tank has been stripped and no traces of old paint exist, we must clean it using Marine Clean.

Surface is now perfectly degreased

Metal Ready to prepare the surface for rust preventative paint. Leave the liquid for approx. 15 mins and then rinse the tank with warm water and be sure to have it completely dry.

Stir the paint thorougly and then transfer paint to a second container or cup using a plastic spoon. Never ever use the brush directly on the paint can; these paints are not as the regular ones as POR paints dry because of moisture and not of thinner evaporation. Thats why you must transfer paint to another container because the can should be rapidly closed due to moisture.

These photos show the first layer of paint drying. This paint stretches as it dries and it gives you the notion of powdercoating. Once dry the paint becomes rock solid, shiny and smooth.

A second layer of paint after some days. The tank is now sealed from atmospheric air causing rust to develop. You can leave the tank like that as the tank is not directly exposed to sunlight; the only drawback of Rust Preventative Paint is that the paint weakens in UV light. However applying 2 layers of BlackCote will give the tank a perfect finish

Here is BlackCote, the final layer. Notice the small plastic cup in front of the tank. The same principle of using the paint from a cup and not from the can also applies in BlackCote.

First layer of BlackCote ...

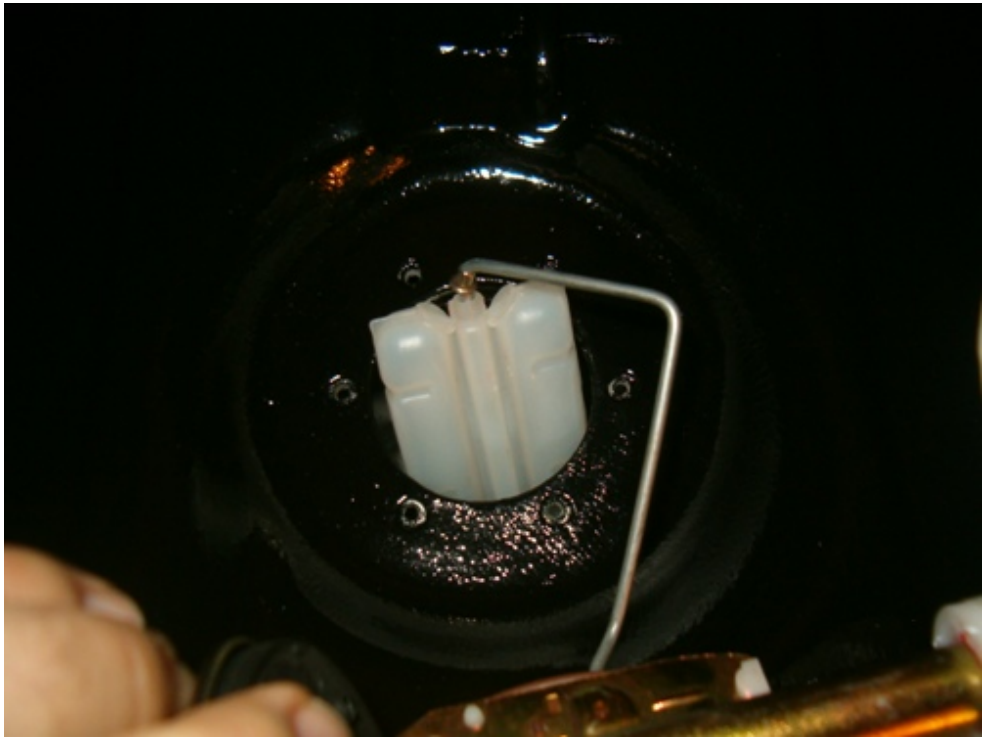
and after some days a second final layer.

Fuel tank external surface is now ready counting 2 layers of Rust Preventative paint and 2 layers of BlackCote. I think I have done the best possible to keep the tank for ages to come

---

Lets now mount the various bits that attach to the tank

I was lucky to find in Italian eBay a new fuel sending unit. These items have become extinct many years ago.



New stainless steel bolts from the hardware store have been acquired and it is high time to have the sender unit installed. First insert the floating device ...

then with great caution the plastic filter ...

and finally position the sender unit to the correct place.

Install all six bolts and tighten them in equal torque in cross order.

Use a shrink tube so that the the metal keepers do not ruin the fuel lines

Hot air makes it shrink once for ever.

Then install the fuel lines. I have used clic clamps mainly for their perfect and equal tightening around the rubber hose.One rubber piece of 12 mm ID for the fuel supply and one piece of 8mm ID for the fuel return. Black nylon pipe is for the supply and grey nylon pipe for the return.

Also 12 mm rubber line for the fuel line extension towards the fuel pump.

Install rubber pads that act like a thick gasket between the tank and the chassis.

Double sided tape will keep them safely in place.

Rubber stripe like in the photo above needs to be installed on the tank upper side. This is the surface that is placed against the floor.

You can glue it using the proper adhesive

This is the final look of the tank upper side. Two long rubber strips and two smaller ones preventing the fuel lines from touching the floor. Also the blueish hose seen on the right of the tank is the fuel relief hose intended to remove air from the tank during refuelling.

Then procced in installing a rubber strip on the edges of the tank. This rubber piece is used as door seal in older cars; you can find it easily in stores specialising in window glass etc.

Press it all the way in; this part will touch the car floor and it will act like a soft overlapping point.

Tank is now ready for installation. It will be a bolt on job by removing the temporary one and installing this one directly.