

HOW TO REMOVE RUST-Part 2 POWDER-COAT

e electrostaticMAGIC
hobby powder coating systems & accessories

▼ The suspension arm after de-rusting. The surface rust will wipe off easily.



▼ The earth wire is clipped to the steel component so that it can be given a negative charge.



▼ The charged powder is attracted onto the oppositely charged component.



▼ Powder is attracted by the residual charge on the steel object. Once complete, touch the end of the gun to the earth to discharge the gun.



▲ The ElectrostaticMagic system. There is a footswitch operated charging unit, a powder gun and a powder cup.

▼ The steel must be free from rust and thoroughly degreased. Acetone, thinners, meths or panel wipe will be fine.



▼ The earth wire must be connected directly to the component not to the supports. A good connection is essential.



▼ A cloud of powder can be seen around the suspension arm. The matt appearance is due to a layer of powder on the surface.

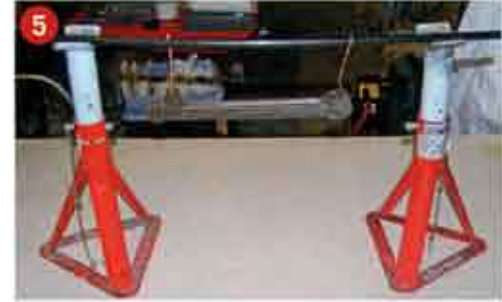


▼ You cannot use the oven in the kitchen. Unpleasant fumes are produced during the curing process. I have a second-hand domestic oven in the utility room which I got for £30 on eBay.



▲ The powder picks up the static charge as it is blown over the spikes. The cone spreads the stream of powder.

▼ The object needs to be suspended so that it can be sprayed with the powder.



▼ The foot switch, under my left hand, is pressed to charge up the object as the powder is sprayed.



▼ The area covered by the earth clip needs to be coated. It must be removed carefully to avoid disturbing the powder.



▼ The suspension arm is suspended well away from the oven sides. If you touch the powder before it is cured it will rub off and leave an uncoated area.





▲ The oven is set to 180deg C. When the powder melts to a gloss finish, start timing. It needs 10 minutes to fully cure.

perfect for all the small components needed in my motorcycle rebuild.

The surface finish I am

producing easily matches that of the larger professionally finished components. ElectrostaticMagic suggests a number of ways of

▼ The finished coatings, top to bottom, are Hammerite, Rustseal and powder-coat.



▲ This is the finished object ready to go and having been allowed to fully cool. The whole process took about 40 minutes.

curing the coating on larger objects too, but so far I have only used the process on smaller items which can be cured in my oven. A point worth considering is that powder-coating produces no solvent

emissions. All the material sprayed onto the component ends up in the final coating. Even the overspray can be easily swept up and even re-used if it is uncontaminated. <<<

