



**ELECTROLYTIC STRIPPING  
& METAL ETCHING**

**WILL STRIP  
CHROME, NICKEL, ZINC, ETC.**

**FROM  
IRON, STEEL, COPPER, NICKEL, BRASS**

5L

## **STRIPPING**

*There are many different types of **plating** on many different **metals**, It is important therefore to bear this in mind whilst using this system and to constantly oversee the effects on each item being treated.*

### **Immersion for longer than necessary will result in the base metal being eaten away.**

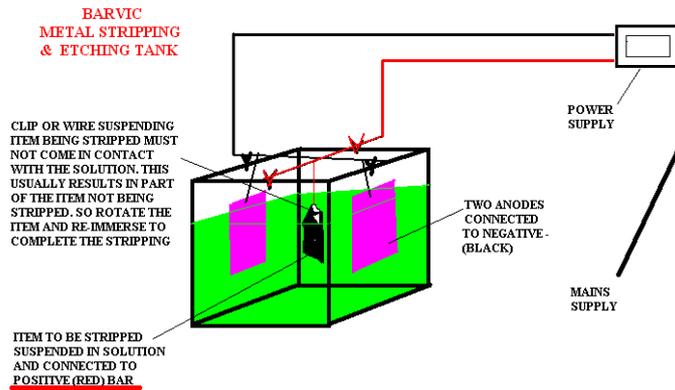
Some plating is very thin and will be removed completely within seconds of being lowered into the solution. Items should not be treated in the tank for longer than required to strip the existing plating. The items being treated can be removed from the tank at any time rinsed in cold water, scrubbed to remove loosened deposits and if necessary returned to the tank for further treatment. Items that have heavier plating will take longer to strip. Some items will be found to have layers of different metals, which will all be stripped in turn. Chromium plated car mascots door handles and hinges for example are often made from zinc castings which are then copper plated, nickel plated and finally chromium plated.

The system has been designed to provide an easy and safe method for the amateur to remove old and damaged plating at low cost. All the latest developments in chemicals and electronics have been integrated into the design to produce excellent results. The system utilises modern electronic control of the plating current to the tank. There is no danger of electric shock as the voltages and currents involved are extremely low. The current is fixed at a safe level at all times and the power supply has built in protection to ensure complete safety at all times. It is very important to observe and obey all warnings given in these instructions and displayed on labels on some products provided.

**The solution is a fairly strong acid and should be treated with care, it is very corrosive and the dry salts or the dissolved solution should not come into contact with the skin. Gloves, eye protection and mask should be worn. Wash your hands frequently whilst using the system. Do not eat drink or smoke whilst using the system. Keep pets and children well away at all times. Do not inhale the gasses given off during the process.**

Dissolve 1 Kg. of the dry salts into the 10 litre plastic tank using **5 litres of hot water and stir until fully dissolved** . It is not necessary to submerge the whole item at once; the item can be stripped in two or more sections as required. The items suspended in the solution must be suspended in such a way that the wire conductor suspending the item does not enter the solution, this usually means that part of the item escapes the stripping process initially. That part will need to be treated later by rotating the item and re-immersing into the solution.

**USE ONLY IN A WELL VENTILATED AREA**



Connect the wiring as shown in the diagram above. Install the ballast lamp supplied, into the socket on the power supply. The anodes hang from and are connected to the **black negative** rod. The item(s) to be stripped are suspended from and connected to the **red positive** rod. When the power is applied a stream of fine bubbles will be emitted from the anodes and illumination will be observed from the ballast lamp on the power supply.

**WARNING, THIS LAMP WILL GET VERY HOT IN USE.**

Remove and store the lamp in its box after use. Lamp type 12 volt 20 watt.

Some plated items have non uniform thickness of plating, or areas of well adhered plating and areas where the plating is more easily removed. This can result in areas where the base metal is reached before all the plating has been removed from another area. When this happens more current can flow in the areas where the plating has already been removed which can cause the rest of the plating to not be removed, and also the base metal where the plating has been removed to be attacked more by the stripping solution. To avoid or minimise this the items being stripped should be rotated so that only plated areas are in contact with the stripping solution. This allows current to only flow through those plated areas causing the plating there to be removed and preventing further attack on the exposed base metal. On awkwardly shaped items areas of exposed base metal can be varnished to prevent attack and only allow current to flow through the plated areas.

## **ETCHING**

It is preferable to “etch” the surfaces of metals prior to plating with nickel or zinc. Items which have been stripped with this system will already be etched but items that have been polished and prepared for plating should be etched so as to provide a better surface to accept new plating.

Proceed as for stripping, connect and suspend items as before but etching takes a much shorter time than stripping, Aim to achieve a fine, mat surface for best results. This takes seconds rather than minutes.

## **WHEN STRIPPING IS COMPLETED.**

Dismantle the various parts, rods clips leads etc. wash thoroughly in hot water to remove all traces of solution.

Remove the anodes in the same way, wash in hot water and store for future use. Store the solution for future use in a sealed plastic or polythene container, clearly marked as to its contents.

## **ALWAYS**

Observe all labels & warnings

Wear a mask and gloves provided when handling the salts or the resultant solution.

Wash you hands after using the system.

## **NEVER**

Inhale the dust from the salts.

Inhale gasses given off during the process.

Eat, drink or smoke whilst using the system.

Allow children near the system or it's components at any time.

## **CLEANLINESS**

It is vital that the equipment and solutions are kept clean and free from contamination filter out any sludge which will build up in use. Cover tanks between sessions and store solutions in clearly marked, sealed containers when out of use.