

ELECTROPLATING WITH A BRUSH



BARVIC

BRUSH ZINC

SUITABLE FOR
IRON, STEEL, ZINC, COPPER, BRASS

VW6

HEALTH & SAFETY

Please read and observe all safety warnings within this booklet and contained on labels attached to some products supplied.

Wear gloves if coming into contact with the solution.

Wear eye protection at all times whilst brushing the solution.

Do not eat, drink or smoke whilst operating the system. Do not allow children near to any of the materials or equipment. Please wash your hands after handling any of the equipment or chemicals.

The kit consists of the following:-

- 1) 1 litre Bright plating solution.
- 1) 1 litre Passivate solution.
- 1) Zinc applicator brush.
- 1) Electronic control unit.
- 1) Power supply unit.
- 1) Work tray.
- 1) Barvic scourer pack.
- 1) Instruction booklet.

In addition to the above list you will require a container of clean water for rinsing off the work after plating is completed and a heat gun or hair-drier to dry off the finished work.

This system has been developed from the **BARVIC** plating systems, which use a tank of solution to house the parts being plated.

The chemicals are similar to those in other **BARVIC** systems, but are very special to this particular kit and must not be used with any other system. The chemicals supplied have been pre-mixed and are ready to use from the bottle. This system allows parts to be plated on the bench or 'in situ,' for example a part on a vehicle, which may be impractical to remove or will not easily fit into a tank. With this system the zinc is brushed directly onto the metal providing a, rust-resistive surface which can be polished or painted. Imperfections, which show up later, can be re-treated as required by re-applying more zinc with this system, following the proper preparations of cleaning and scouring.

The electrical supply is extremely low voltage and current and is not hazardous. Follow the simple instructions on the next page and with very little practice you will obtain excellent results.

PREPARATION

The metal to be plated must first be prepared to accept the plating to its surface. The plating metal produced by the system during the plating process will not attach itself to the item to be plated if the surface has not been properly prepared. The surface to be plated must be completely free of rust, dirt, grease, paint, oil, etc. Any spots or areas not clean will not be plated. Pitted areas will possibly need to be bead-blasted to produce a clean surface.

Wire brushing, emery paper, wire-wool are other accepted cleaning processes. Plating will not cover scratches or other surface imperfections so fully finish all surfaces to the required Standard of finish before attempting to plate.

SCOURING

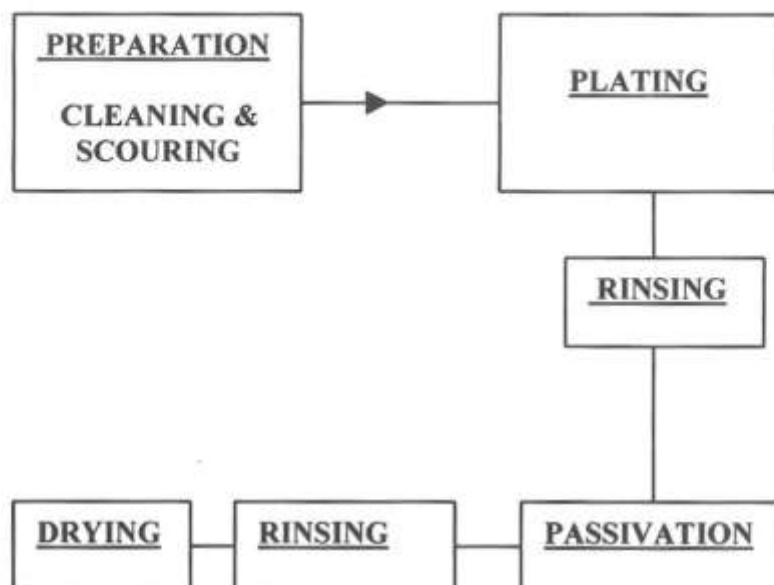
The final part of the preparation is to scour the surface with BARVIC SCOURER, this will remove any surface contaminants and ensure that the plating metal will adhere properly to the surface. Using a toothbrush for small items or a clean scrubbing brush for larger items, dip the brush into clean water and then into the scourer powder. Rub the scourer into all crevices and ensure the whole area to be plated has been scoured then rinse thoroughly with clean water, aim to achieve a continuous film of water over the surface, without globules forming, a surface on which globules form is usually oily. When rinsed clean, plate immediately before rust or other contamination can form.

THE PLATING PROCESS

Arrange the worktray provided so as to be beneath the item to be plated. This will ensure that all drips of solution from the brush will fall into the tray. Pour a small amount of plating solution into the tray, **sufficient to fully load the plating brush**. Connect the electronic control unit to the plating brush red lead; connect the black lead by the clip to the metal to be plated. Plug the control unit into the mains supply. Test the connections by dipping the brush into the solution and applying the brush to the item being plated, this completes the electrical circuit and the indicator on the control unit should flash. Flashing will occur at all times when plating is taking place to indicate a completed circuit. **Keeping the brush loaded** with solution paint lightly over the surface many times; each coating will build upon the item so that the more coatings applied the thicker the final plating. Keep the brush moving whilst in contact with the work. Try to make an even number of passes over all areas to maintain even plating. Ensure all surfaces are adequately covered. It is not possible to see the thickness of the plating so it is important to systematically cover all areas evenly. As a rough guide around 50/60 passes with the brush over a surface will provide a good protective thickness of plating but only two or three passes over the same area will provide a decorative finish on some surfaces. When you are satisfied that you have applied a satisfactory plating, the whole of the area plated and the surrounding areas affected by the solution **must be washed with clean water to remove all traces of the plating solution**. Using a container of water and the rinsing brush, **not the plating brush**, thoroughly wash and rinse the whole area. Rinse the tray to remove all traces of solution. The tray will be needed for the next stage in the process :- **passivation**.

PASSIVATION

To lock the surface molecules and maintain a successful plated surface it is necessary to treat the newly plated surface with an application of passivate solution. Pour a little of the passivate solution into the worktray, position the worktray beneath the item being treated so as to catch any drips from the brush. Using the dry rinsing brush, paint the passivate solution over the newly plated surface so as to coat the area for approximately 30 seconds then rinse off with clean water using the same rinsing brush. The whole area should now be dried off as quickly as possible using a heat-gun or hairdrier to complete the process. The newly plated area can, if required be painted.



WHEN PLATING IS COMPLETED

All parts need to be thoroughly washed and rinsed to remove all traces of plating solution, which is **very corrosive**. Failure to properly clean the equipment will result in corrosion of any metal parts and cause permanent damage. Dry all components thoroughly before storing.

The electronic control unit should be kept well away from the solutions at all times and should be stored separately from the other parts of the kit to avoid corrosion taking place whilst in storage.

The solutions should be stored out of reach of children and only in the bottles provided, ensuring that all labels are intact.

ALWAYS

Observe and obey all labels and warnings.

Wear protective gloves when using the solutions.

Wear eye protection when painting with the solutions.

Wash hands thoroughly after using the system.

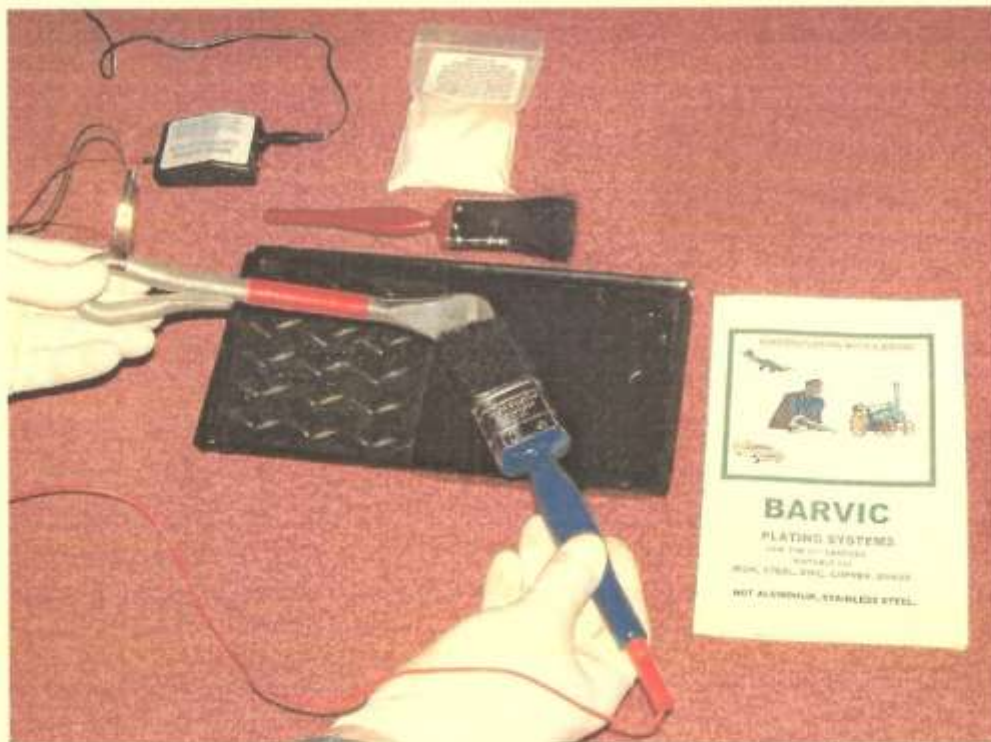
NEVER

Eat, drink or smoke when using the system.

Allow children or pets near the system or the components at any time.

CLEANLINESS

It is vital that all items of equipment and solutions are kept clean and free from contamination or poor plating will result. Oil or grease is sure to cause problems.



OTHER BARVIC PRODUCTS

NICKEL PLATING KIT.

Decorative on iron, steel, copper, brass etc.

ZINC PLATING KIT.

Protective plating on iron, steel, copper, brass etc

Complete kits together with all consumables as separate items are available for home workshop plating with pure nickel or zinc.

SUPERBRIGHT PLATING KIT

Chrome-like finish on iron, steel, copper, brass, zinc etc.

For further information, contact :-
Frost Auto Restoration Techniques,
Crawford Street,
Rochdale OL16 5NU
Tel. 01706 658619
Fax. 01706 680338.
V.A.T. Reg. GB 425 7873 24.
e-mail order@frost.co.uk
Web. www.frost.co.uk