

# Historex Agents

Manufactured in UK

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Name and Address in Block Capitals

## THE PYROGRAVURE

### AN AID TO BETTER PLASTIC MODELLING

The Pvrogravure is simple and safe to use. It can be used by both the advanced and novice modeller.

The Pyrogravure is an electrically heated needle. It is used to add and enhance detail on plastic models. In operation it softens the plastic on touch and the needle tip is used to etch and shape detail into the surface of the model. The Pyrogravure is supplied together with a special transformer which is built into a three pin plug. Integral with this is a long flex, onto which is attached the pen-like stylus. It is no larger than a felt tip pen and is very light. It heats up very quickly, uses only 41/2 volts, and can be left on for the duration of a modelling session without harm.

In operation the instrument is as simple to use as a pencil. All you need is a little patience. No great pressure is required. The heat generated by the needle is sufficient to soften the plastic and enable the modeller to etch detail into the surface of the plastic. Quick, light movements will create lightly etched lines and slower, deliberate, strokes will make deeper impressions. A short period of practice on odd scraps of sprue and plastic card will soon indicate the effects that can be achieved.

If you are working on thick sections of plastic such as the torso of a figure or a horse there may be a certain amount of heat loss through the conductivity of the plastic. This is easily remedied by lifting the instrument from the model at the end of each stroke. Continuous work on small pieces of plastic is no trouble at all Hair manes and tails. These features are ideal for Pvrogravure treatment. Use the tool as if it were a paintbrush, stroking the plastic into curls or strands as desired. The needle will tend to follow the moulded detail of the model, although it needs very little pressure to overcome this tendency. Work a little slower, allowing the heat of the needle to do the work. Lift the needle at the end of each stroke. There will usually be a wisp of plastic trailing off. This is easily removed at the end of the exercise by rubbing with a finger or by snipping with scissors.

If you are holding the model in one hand use both hands pressed together for more control. It may be more suitable to hold the model firmly in a jig, leaving both hands free for even greater control. Animal skins such as sheepskin. Make short circular movements to simulate the curling hair of the animal. Try and avoid wisps of plastic at the end of each stroke by keeping the needle close to the work. Hold the needle more at right angles to the model so that only the tip is in contact with the plastic. Fringes on colours, standards, tassels, epaulettes, etc. Use short straight strokes removing the needle at the end of each stroke. Remove the resulting wisps at the end of the operation. It is also possible to draw in the embroidered detail on the face of regimental colours if they are made from plastic card. Fur crests and flouncers. Coat the area with liquid sprue (offcuts of sprue dissolved in Winsol) and on top of this attach small pieces of very thin plastic card or shavings of sprue maintaining the general shape of the item. The next step, before the liquid sprue completely sets off, is to use the Pyrogravure as a stabbing instrument. A light but deliberate action is required, pressing the tool into the surface of the plastic in a straight back and forward movement. It takes patience as many strokes are required to cover the whole area. The backward movement should remove the tool completely from the model. Long wisps will result which can be trimmed back to give the desired effect. Plumes and tufts can be treated in exactly the same way. Ostrich feathers and aigrettes should be detailed in the same way as hair, but the wisps need not be cut back quite so close. Red Indian war bonnets and the long drooping feather plumes of military headdress need short, quick strokes, picking at the edges of the feathers to give an etched effect. Additional plastic may be added to models by using the Pvrogravure as a welding instrument. It is not suitable for attaching small items such as buckles, but moustaches and sideburns can be added by using thin slivers of plastic. Hold the plastic against the model and press the tip of the needle into the point of contact. Wait a second then draw the tool away in the direction of the curl. 'Work up' as described for hair. It should be remembered that the Pvrogravure only moves the surface of the plastic, it does not add to it. If facial hair is to be added to a bare face then a certain amount of plastic should be added to give body to the effect. Embroidery and lace. The laced collar and cuffs and richly decorated coats of the 17th and 18th centuries can be achieved by lightly tracing the designs on the surface of the plastic. Use very light, swift and continuous movements without breaking contact with the model. Rivets and welded plate for AFV's can be simulated with the Pyrogravure. For etching straight lines on plastic card use a wooden straight edge (it absorbs less heat) and scribe lines using light direct strokes. Do not stop half way or the warm needle will cut a deeper line. The needle can be used to pierce the plastic card so that a plastic rod may be inserted and sub sequentially be cut back to simulate rivets. Alternatively the needle can be used to raise tiny pips that will suffice for rivets in smaller scales. Hold the needle at right angles to the card and carefully touch the plastic with the tip then withdraw immediately but slowly. A little wisp will be produced which is rubbed off with a finger leaving a small raised dome. The difficulty of this process is to maintain the same time and pressure for each rivet.

As you gain more experience you will appreciate just how much can be achieved with the Pvrogravure. It can be used to detail bricks and stonework on plastic card, for instance, as well as being used for conversion work in much the same manner as a soldering iron is used for metal figures. It is important that the instrument is cleaned after use. This follows the general rule for all modelling tools. Careful maintenance will ensure a long life. It will usually be sufficient to wipe the needle with a soft rag while it is still warm. However, small particles may persist in sticking to the needle and these may be removed, after the instrument has cooled, with a little methylated spirit applied with a soft cloth. The flex attaching the tool to the plug should not be allowed to lay across the hot needle and avoid storing the instrument with the flex in a tight fold. A loose coil is more suitable.

*by Stanley Catchpol*

The Pyrogravure is made to British Standard Specifications and is absolutely -safe for protracted operation.

**Pyrogravure £36.50 + £1.00 (postage UK)**

An adaptor is available for overseas use but the Pvrogravure will only operate on 220/250, volts.

**Adaptor £3.25**

(Postage rates apply to the UK Overseas postage will be charged at cost – please specify air or surface)

Web Site [www.Historex-Agents.co.uk](http://www.Historex-Agents.co.uk)

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