



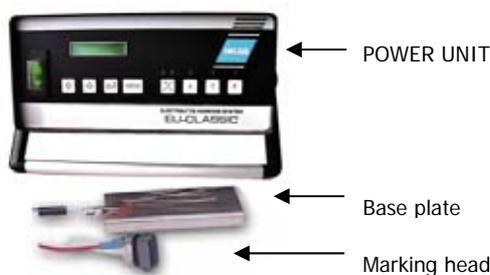
The etching system works by passing a low-voltage current (only about 8V) through a pre-printed stencil.

The current is transferred through the gaps in the stencil using a harmless electrolyte fluid. The imprint on the stencil is transferred onto the product in around 2-3 seconds by pressing the marking head onto the part, with the stencil in between.

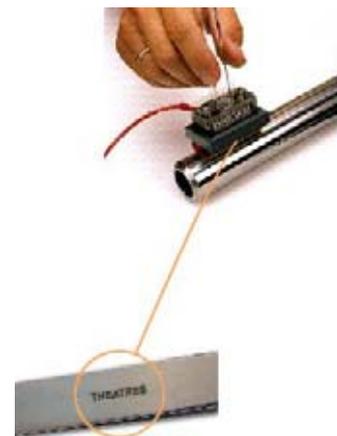
Therefore, the mark is actually etched into the part and is therefore very durable. However, this process does not create any stress points, raise the surface or damage the part.

Following is a description on how the system is used.

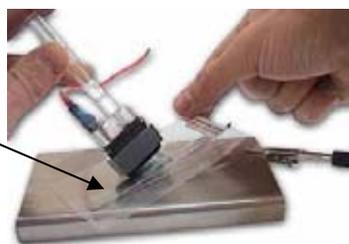
- 1. Plug everything in and switch it on**
- 2. Print your stencil or choose a long-life pre-printed stencil**
- 3. Wet the marking stamp with some fluid**
- 4. Mark the part using the required stencil**



EU300 Classic with base plate and marking head



STENCIL



Marking the part with a permanent stencil



To start, you need to connect the relevant bits and pieces, as illustrated below:



Firstly, plug in the relevant cables:

- Connect the power plug to a power socket
- Plug the red and blue wires into the sockets at the back of the unit
- Connect the footswitch into the relevant socket (the bottom socket)



Clip the blue lead alligator clip to a metal plate *or*.....



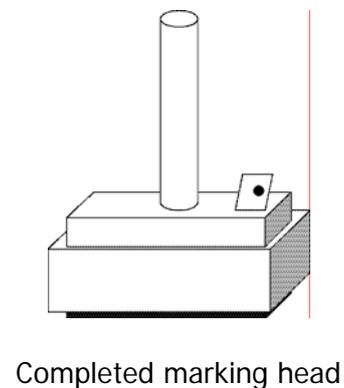
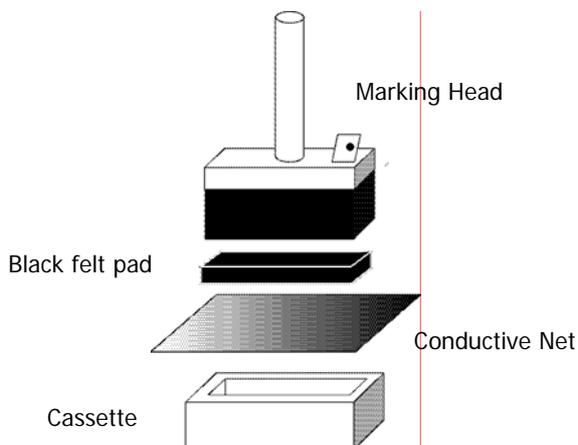
.....directly onto the part



Clip the red lead to the marking head. The marking head holds a felt pad and a thin mesh which improves the print quality

The marking head is prepared as follows:

1. Cut a small piece of Black Felt 44/F to the same size as the area of your marking head.
2. Cut a piece of Conductive Net to overlap the marking head on all sides.
3. Clip the cassette over the marking head so that it holds the Conductive Net and Black Felt 44/F in place.





To switch the unit on:

- 1) Plug the power socket into a single phase 240V socket
- 2) Switch the unit on (green toggle switch)
- 3) Ensure AC blackmarking is selected on the front panel by the symbol "~" – see diagram
- 4) Switch on the timer on the front panel (identified by the symbol "T")
- 5) Select the required voltage (V) by pressing the arrow next to "menu" and adjust with the up and down arrows
- 6) Select the required marking time (MT) by pressing the arrow next to "menu" again and adjust with the up and down arrows
- 7) Press "menu" after completing any adjustments to return to etching.



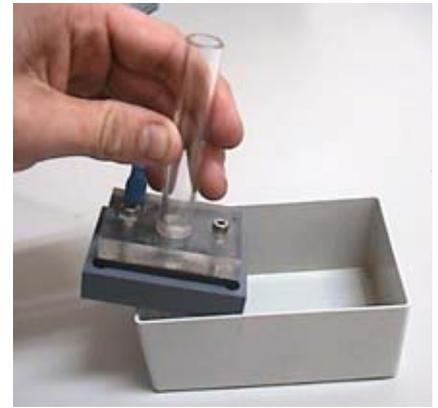
Before marking we need to apply some "electrolyte".

This liquid (known as "electrolyte") is used to transfer the low-voltage current through the gaps in the stencil (the imprint).

*Electrolyte is **not** classed as a hazardous substance, it is safe to come into contact with this liquid and only small amounts are required.*

Simply wet the marking head with electrolyte. The electrolyte usually only needs to be re-applied every 10-15 etchings.

You may prefer to use a small container and dip the marking head into it, then "squeegee" against the side of the contained so that it is well wetted but not dripping.



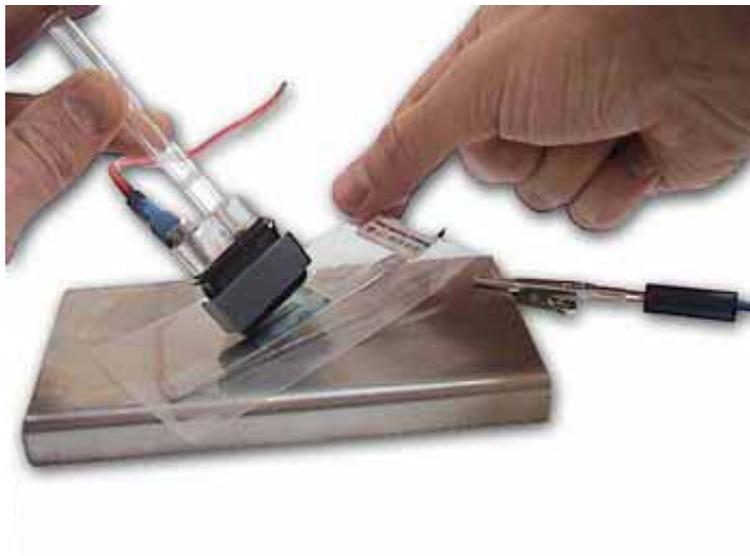


Once you have:

1. Plugged everything in & switched it on
2. Printed your stencil or selected a long-life pre-printed stencil
3. Wet the marking stamp with some fluid

.....you simply place the part to be marked on the base plate (or touch the clip to it), position your stencil and press the marking head down on the imprint in the stencil.
Press the footswitch and the mark is completed in the required time.

NOTE... for this illustration we have used a single permanent stencil in a plastic frame



After all marking is done, remove excess electrolyte from part with water (wet cloth) to avoid further corrosion.



The process is fast and easy, the machine is uncomplicated and running costs are low. We hope this has provided a good explanation on how etching works.

SUMMARY:

1. Prepare the marking head as per the diagram
2. Connect the red & black leads to the red & black sockets on the back of the unit.
3. Clip the blue alligator lead onto the base plate (or to the part direct)
4. Plug the power socket into a single phase 240V socket
5. Connect the footswitch to the back of the unit
6. Switch the unit on (green toggle switch)
7. Ensure AC blackmarking is selected on the front panel by the symbol "~" – see diagram
8. Switch on the timer on the front panel (identified by the symbol "T")
9. Select the required voltage (V) by pressing the arrow next to "menu" and adjust with the up and down arrows
10. Select the required marking time (MT) by pressing the arrow next to "menu" again and adjust with the up and down arrows
11. Press "menu" after completing any adjustments to return to etching.
12. Moisten the marking head pad in the electrolyte.
13. Place the stencil over the product
14. Press the marking head onto the product and press the footswitch
15. After all marking is done, remove excess electrolyte with water to avoid further corrosion.

CAUTIONS

- ⊕ The marking head should never contact the base plate, product or negative lead directly. This will cause a short circuit and possibly damage the machine, burn the stencil, conductive net, felt and product.
- ⊕ The marking head should not overlap the stencil and make direct contact with the product or base plate. This will cause a short circuit and burn the stencil, conductive net, felt and product. In this case a stencil cover should be used, or the stencil should be masked.
- ⊕ Do not tip used electrolyte back into the fresh supply. Use a separate bottle or dispose of the amount.
- ⊕ Electrolyte left on metal products will cause corrosion. Therefore ensure no electrolyte is spilled on the power unit and wash excess electrolyte off with water.