



MiniEtch EU80 Hospital Setup Guide

SETUP GUIDE
STENCIL OPTIONS
CARRY CASE
TROUBLESHOOTING GUIDE

V1 2004

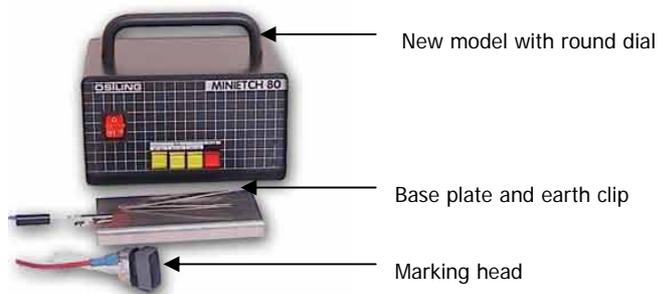


The etching system works by passing a low-voltage current (only about 8V) through a pre-printed stencil. The current is transferred through the gaps in the stencil using a harmless electrolyte fluid. The imprint on the stencil is transferred onto the product in around 2-3 seconds by pressing the marking head onto the part, with the stencil in between.

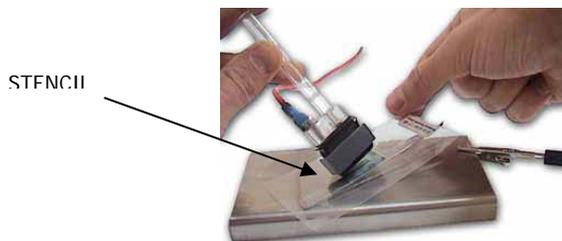
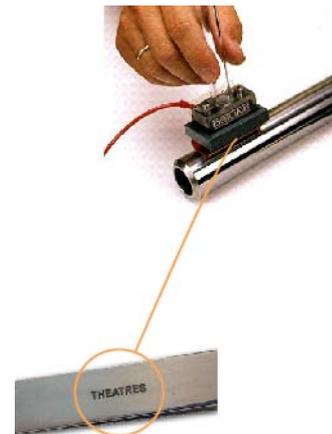
Therefore, the mark is actually etched into the instrument and is therefore very durable. However, this process does not create any stress points, raise the surface or damage the instrument and has been used for many years to mark instruments by instrument manufacturers worldwide.

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**



EU80 with base plate and marking head



Marking the part with a permanent stencil



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



Firstly, connect the power plug to a power socket. Plug the red and blue wires into the sockets at the back of the unit



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



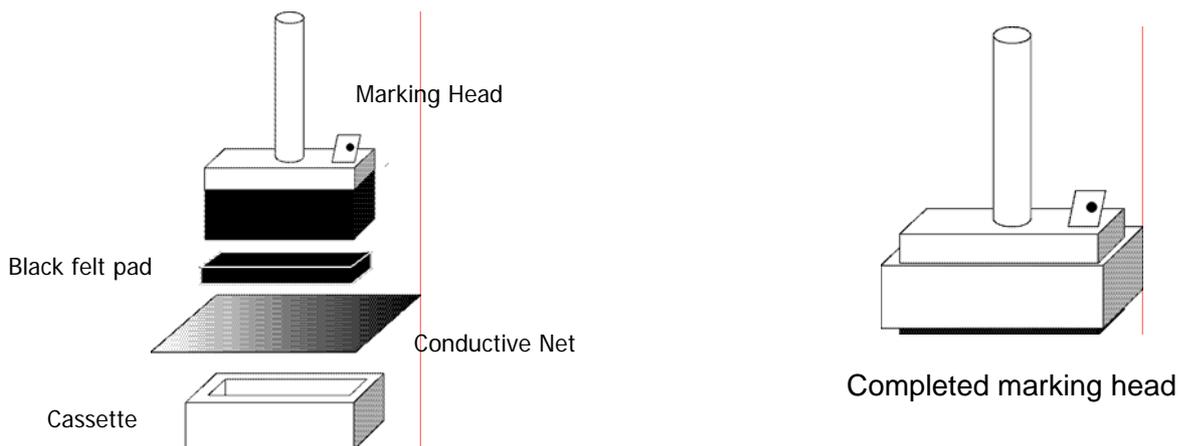
.....directly onto the instrument



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 (red toggle switch)
- 3) Select 8V on the front panel (yellow keys) (or dial on new model)



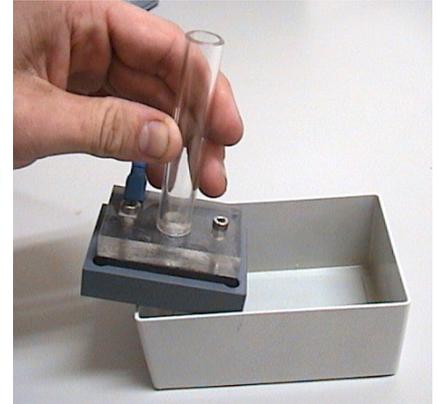
Before marking we need to apply some "electrolyte".

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 instrument 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.

The mark is completed in 2-3 seconds.

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



After marking is done, remove excess electrolyte from part



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.

We would be happy to hear from you if you have any further questions or if you require an on-site demo with our next visit to your area (** this may not always be possible in all states).

SUMMARY:

1. Prepare the marking head as per the diagram
1. Connect the red & black leads to the red & black sockets on the back of the unit.
2. Clip the blue alligator lead onto the base plate (or to the instrument direct)
3. Plug the power socket into a single phase 240V socket
4. Switch the unit on
5. Select 8V on the front panel
6. Moisten the marking head pad in the electrolyte.
7. Place the stencil over the product
8. Press the marking head onto the product for approximately 1-3 seconds
9. 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.



Stencil Options

Depending on the information you need to mark onto the instrument, there are a number of different stencils available. A stencil contains the message you wish to transfer onto the part.

Your options include:

1. Permanent Stencil Strips
2. PT hand-held fibre paper ribbon printer
3. Serial numbering (or date marking) stencil
4. Disposable Fibre Paper stencil sheets
5. Alphanumeric combination sheet

A combination of options may offer the best solution to your requirements.



Permanent Stencil Strips

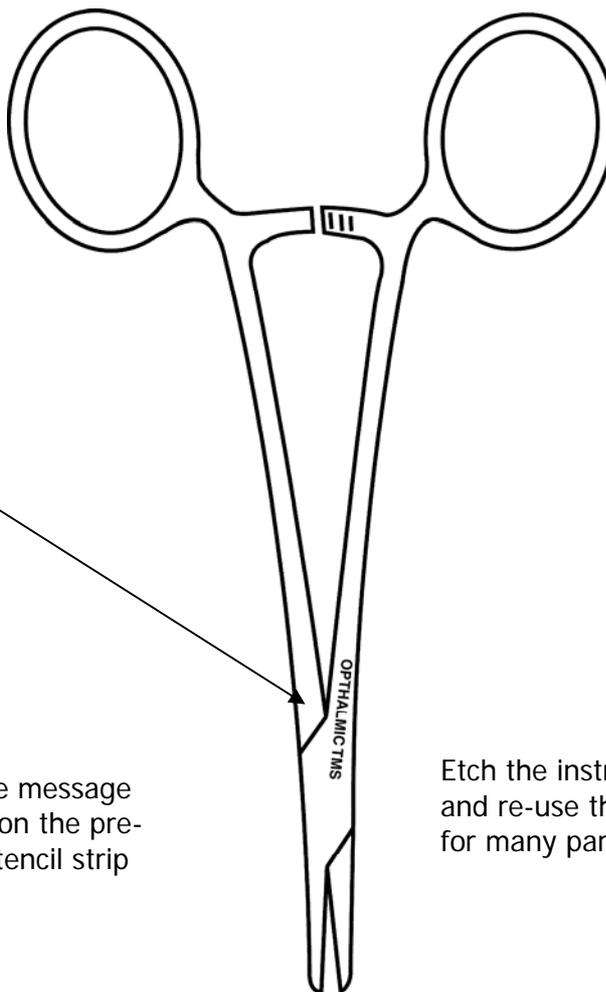
THEATRE TMS
THEATRE TMS
CSSD TMS
ORTHO TMS
OPHTHALMIC TMS
GYNAE TMS
UROLOGY TMS
GENERAL TMS
VASCULAR TMS
E.N.T. TMS
DENTAL TMS
ENDOSCOPY TMS
ANAES TMS
PAEDIATRIC TMS
A & E TMS
CLINICS TMS
MATERNITY TMS
INTENSIVE CARE TMS
TMS SET #1
TMS SET#2
TMS SET#3
TMS SET#4
TMS SET#5
TMS SET #1
TMS SET#2
TMS SET#3
TMS SET#4
TMS SET#5
TMS SPARE SET #01
TMS SPARE SET #02

Permanent stencils are PRE-PRINTED by us with a special material - using the list of messages you specify. Simply e-mail, fax or post us your list and we will manufacture these stencils.

The permanent stencils are used for messages which repeat fairly often (such as marking "THEATRES" or "ORTHOPAEDIC"). Each message can mark 1000-3000 parts!

Permanent stencils are usually produced in strips containing 30 of your messages (25 characters each). As a standard we use a font size of 1.5mm high (6 pt). However, should you wish more messages or different sizes, this is easily done by us, simply specify what you require.

These stencils offer the best quality printing and avoid having to re-print commonly used stencils.



Select the message required on the pre-printed stencil strip

Etch the instrument and re-use the stencil for many parts



PT hand-held fibre paper ribbon printer

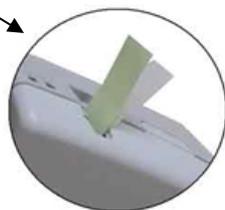
This is a hand-held printer which prints the message on an 18mm x 3metre ribbon (contained inside the printer). Various font sizes are available.

Simply type the message and press "print", then tear off the ribbon with the print. The print will mark 5-10 parts.

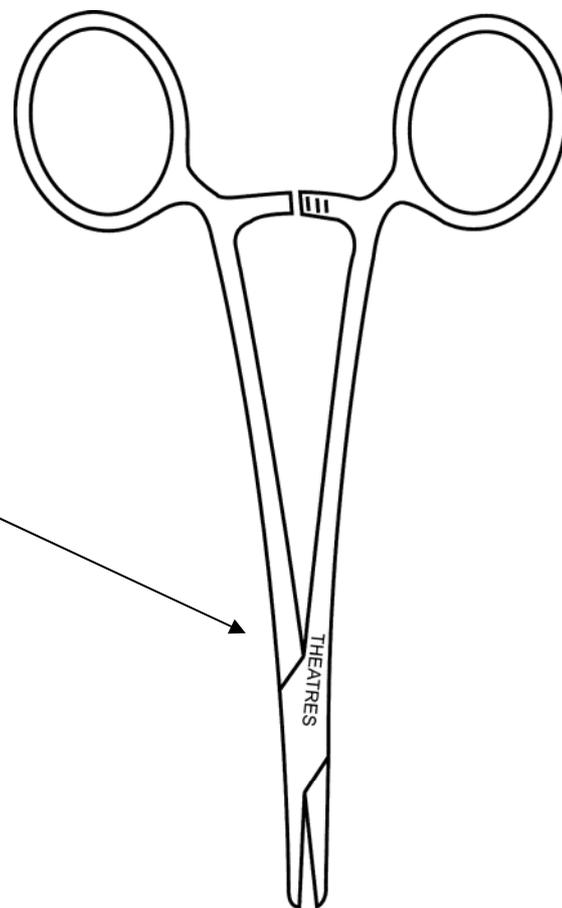
As an additional bonus, this unit can also print adhesive labels for labelling shelves and folders etc, (although we recommend you never use adhesive labels on surgical instruments)



Print the paper stencil ribbon with the hand-held PT printer



The ribbon is contained inside the printer



Etch 5-10 instruments and discard the used portion of the ribbon

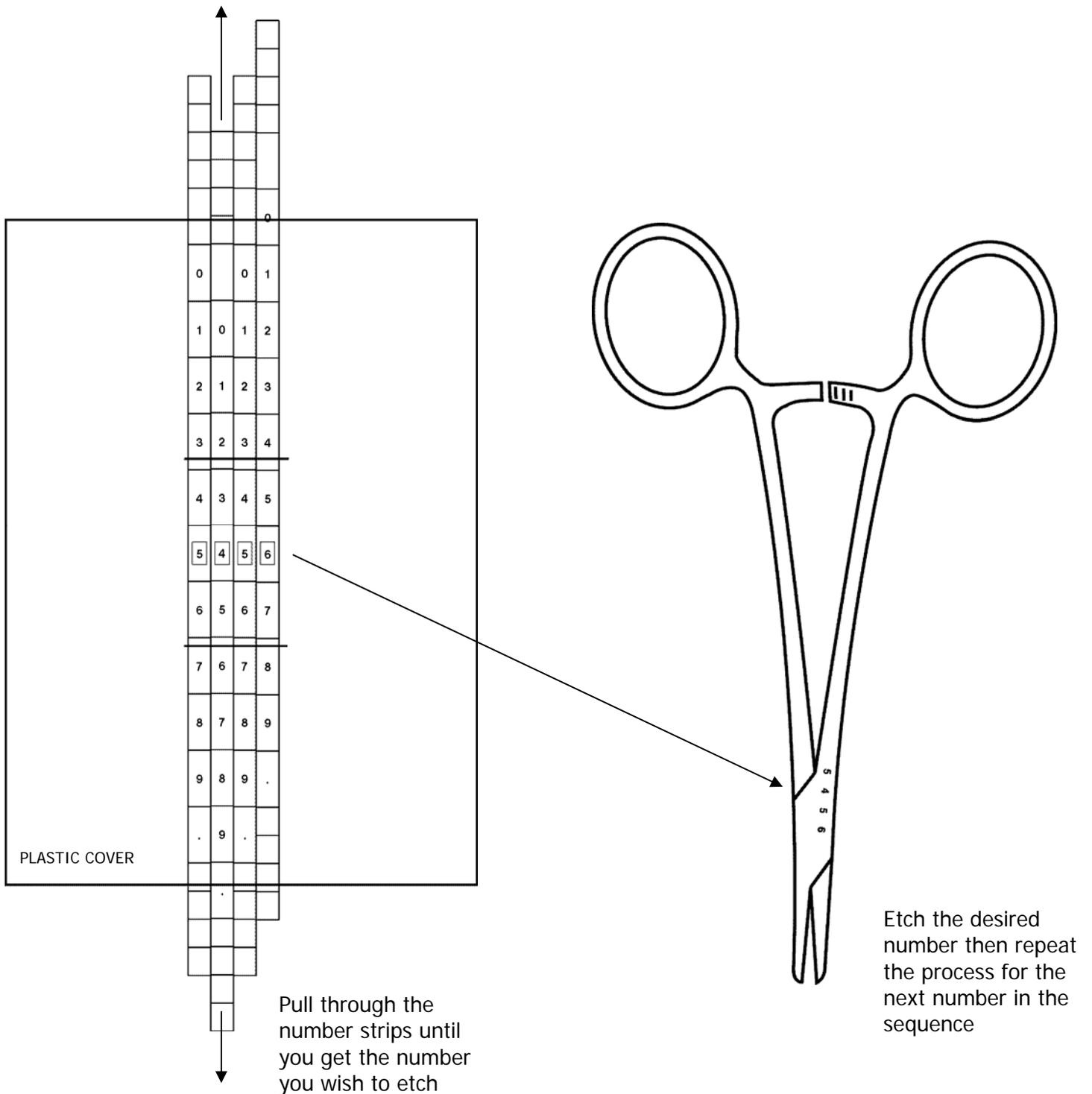


Serial numbering (or date marking) stencil

The numbering stencil works by mounting special numbered stencil strips into a plastic cover.

The desired message is obtained by pulling the individual strips until the number appears in the small window cutouts (like the dating stamps in a library) This number can then be etched onto the instrument, and to advance to the next number, simply pull through the next strip.

These types of stencils can be made to order according to the sizes attached.





Numbering strips available

		SXLTSTR6 ALPHABETICAL LETTERING STRIP 1.5mm (6 pt) Arial BOLD				
		SXLTSTR8 ALPHABETICAL LETTERING STRIP 2.0mm (8 pt) Arial BOLD				
A		SXLTSTR115 ALPHABETICAL LETTERING STRIP 3.0mm (11.5 pt) Arial BOLD				
B	A	SXNUMSTR6 NUMBERING STRIP 1.5mm (6 pt) Arial BOLD				
C	B	A	SXNUMSTR8 NUMBERING STRIP 2.0mm (8 pt) Arial BOLD			
D	C	B	SXNUMSTR115 NUMBERING STRIP 3.0mm (11.5 pt) Arial BOLD			
E	D	C	0	.	SX11.59.4000 CUSTOM STRIP 1.5, 2.0 & 3.0mm Arial BOLD 4 OR LESS, ANY COMBINATION	
F	E	D	1	0	.	
G	F	E	2	1	0	
H	G	F	3	2	1	ABC
I	H	G	4	3	2	SAM
J	I	H	5	4	3	TIB
K	J	I	6	5	4	LID
L	K	J	7	6	5	SML
M	L	K	8	7	6	LGE
N	M	L	9	8	7	PAT
O	N	M	/	9	8	TMS
P	O	N	/	9		ABS
Q	P	O	/			T34
R	Q	P				
S	R	Q				
T	S	R				
U	T	S				
V	U	T				
W	V	U				
X	W	V				
Y	X	W				

Pricing of the variable stencil will depend on the type of strip required and the number of digits required.

More sizes are available (standard sizes shown) and strips can further be customised to suit your requirements (logos/symbols etc...)

Please contact Trend for a quote based on your requirements.



Disposable Fibre Paper stencil sheets

20 sheets included in hospital starter package

Fibre Paper stencils can be printed in-house (by you) by the following methods:

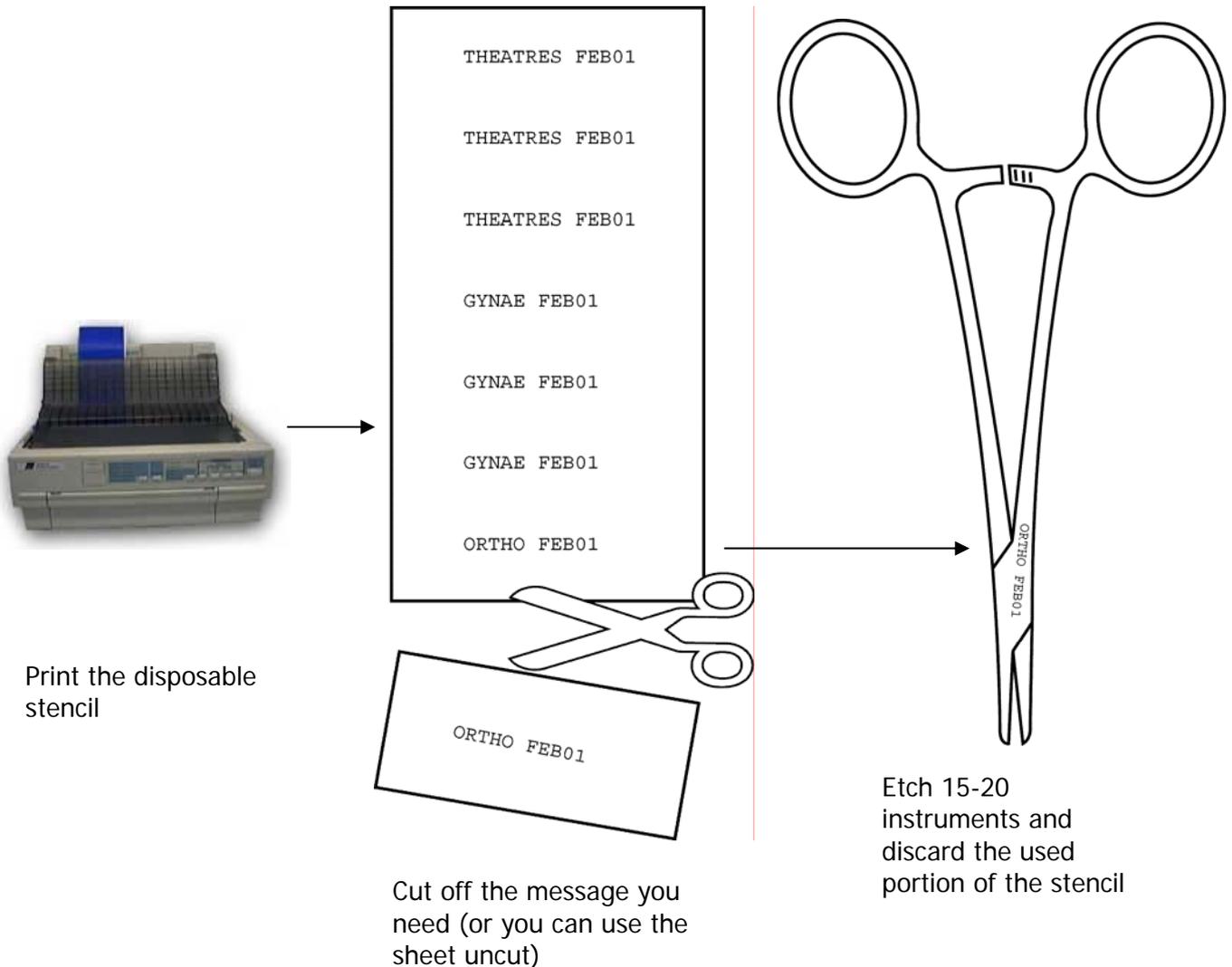
1. Manual impact typewriter
2. Computer dot-matrix printer
3. Metal Stamp
4. Hand-written with empty ballpoint or other pointed object

The stencil is used to etch the instrument(s). Usually one printed message will etch 10-15 instruments. After use, the portion of the sheet that was used can be discarded.

SPECIAL OFFER.....

When using a dot-matrix printer, Trend can supply a dos-based program to improve the quality of the imprint and add useful functions such as multiple prints and serial numbers.

This software is free of charge with your order. Please let us know if we should send this to you.





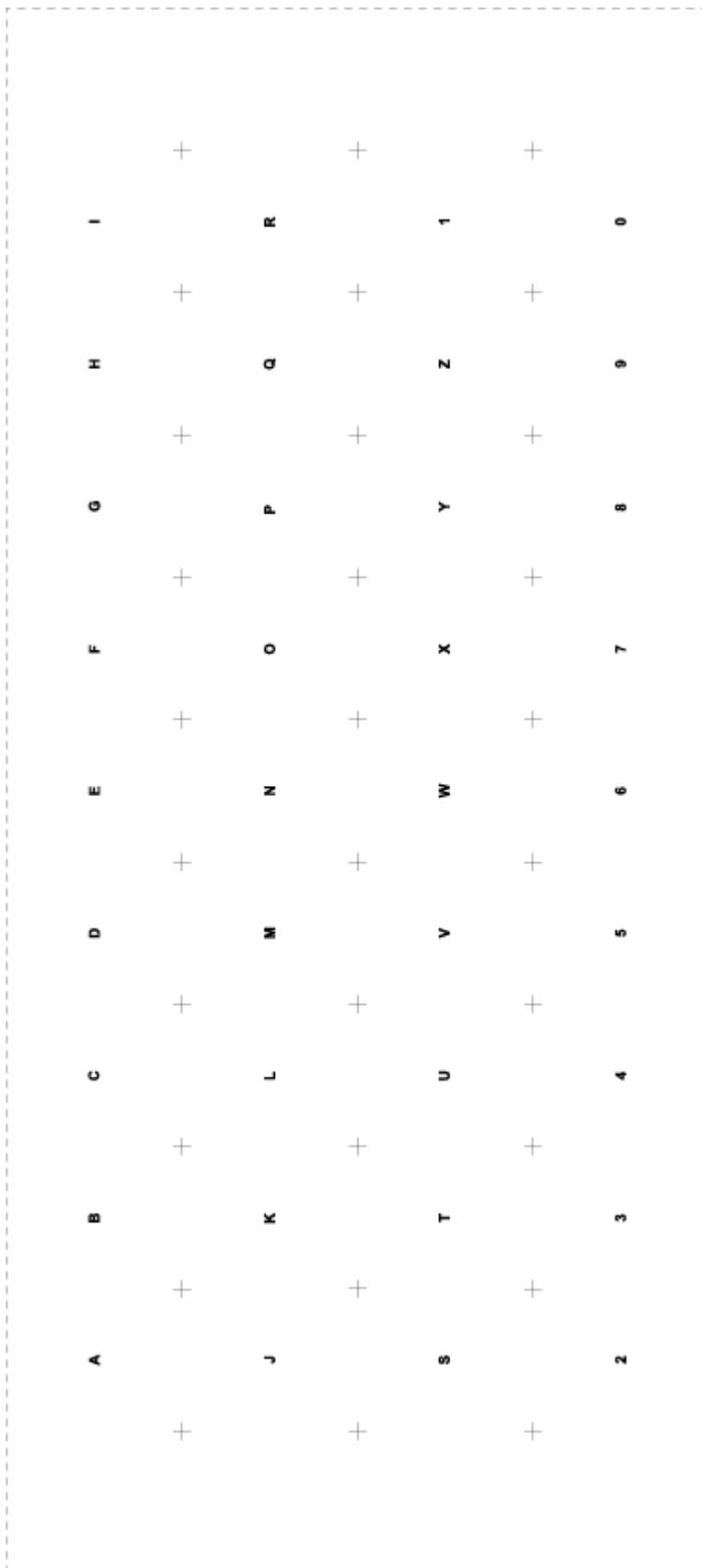
Alphanumeric Combination Sheet

The Alphanumeric combination sheet contains a copy of the letters A-Z and the numbers 0-9.

Each letter can be etched separately to generate any possibility of Alphanumeric codes onto the part.

Standard sizes are 1.5mm (6pt) ARIAL BOLD, 2.0mm (8pt) ARIAL BOLD, 3.0mm (11.5pt) ARIAL BOLD although you can specify any other size required.

For pricing please contact Trend





Lockable Aluminium carry/storage case

Now available, the aluminium carry case is designed to be used for secure storage and transport of the EU80 and EU100 etching units. It features a sturdy aluminium case with foam padding and compartments for the equipment and accessories.



(Accessories and etcher not included)



TROUBLESHOOTING GUIDE

Please follow the procedure below should you encounter difficulties with the EU80 MINIETCH etching unit.

Symptoms:

- ⊕ The etching quality is poor
- ⊕ No print on the part at all
- ⊕ "Ghost" mark on the part rather than black mark

Common causes:

- ⊕ Connections loose/poor contacts
- ⊕ Surface material/coating not compatible
- ⊕ Dry marking pads
- ⊕ Incorrect power setting
- ⊕ No power to/from unit (unit not plugged in/fuse)
- ⊕ New permanent stencil not yet worn in

Testing:

1. Check machine settings/connections

- ⊕ 8V selected (3 green lights + AC selected for EU100 models)
- ⊕ Red power light on
- ⊕ Red lead plugged in to red socket and to marking head
- ⊕ Blue lead plugged in to black socket and to earthing plate

2. Check felt pad/electrolyte

- ⊕ Felt pad feels "spongy"
- ⊕ Felt pad is wet
- If encountering difficulties it is advisable to change you felt pad and conductive net.

3. TEST-MARK

- ⊕ Select a PERMANENT TEST STENCIL*
- ⊕ Marking time should be approx. 2-3 seconds only.
- ⊕ Follow procedure below to make a comparison mark onto a stainless steel sample plate (or directly to the base-plate).

*These are available from Trend if requested. Alternatively use a known good stencil

