Micro to Nano
Innovative Microscopy Supplies

Technical Support Bulletin

Operator's manual for DM11 electric engraver

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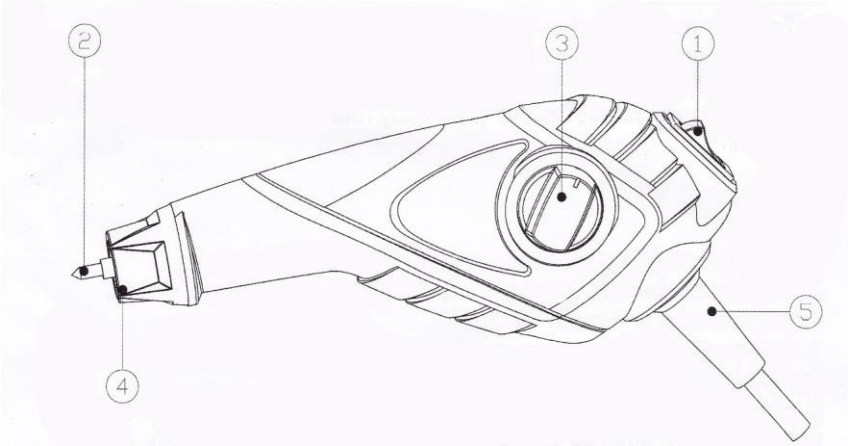

1. On/off switch
2. Engraving tip
3. Stroke adjustment dial
4. Tip release screw
5. Power cord

Caution
Thoroughly read and understand all instructions before using this tool. This tool has an **S2:30 min** rating which indicates that the maximum operating time is 30 minutes, followed by a complete cool down of the tool.

Always wear safely glasses when using this tool.

Product description
The DM11 electric engraver is a lightweight, handheld electric engraver using a tungsten carbide tip. The oscillating tip moves with 6000 stroke/minute and includes a 5-position depth control. It can be used to engrave numbers and identification marks in a variety of samples, tools, sample holders, etc. Engravings can be made in metals, plastics, ceramics, glass and wood.

Specifications

Engraving tip vibration:	6000 stroke/minute
Depth control:	5 position switch
Vibration:	7.5m/s2
Dimensions:	180 x 50 x 70 cm
Power lock switch:	yes
Tungsten carbide tip:	Ø3.2 x 22 mm (Ø1/8" x 7/8")
Weight:	350 g
Power rating:	13W
Power supply:	230V / 50Hz
Power plug:	Standard European Schuko plug

Installing an engraver tip
Warning: Disconnect the DM11 engraver from the power supply before making any adjustments or maintenance procedures.
1 – Loosen the tip release screw (4) by turning it anti-clockwise with a flat head screwdriver.
2 – Remove used engraving tip. To fit a new engraving tip (2), insert the tip through the centre of the hole in the engraving head, ensuring the tip fully enters the housing. A new tip should protrude approximately 8.5mm from the end of the housing.

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3 – Tighten the tip release screw (4) fully by rotating in a clockwise direction using a flat head screwdriver.

Operation

1 – Before using the engraver, you must ensure that there is an engraving tip installed.
2 – Connect the engraver to a suitable mains power supply and while holding the engraver firmly, push the on/off switch (1) in the on position (I) with your thumb.
3 – Hold the engraver at an angle, like you would hold a pen. Do not press down hard while engraving; use light pressure while guiding the engraving tip over the work to be completed.
4 – When finished lift the engraving tool of the surface.
5 – Push the on/off switch (1) in the off (O) position to switch of the engraver.

Adjusting the depth of engraving

1 – The stroke depth adjustment dial (3) is located on the side of the engraver. It controls the stroke length and therefore the engraving depth.
2 – For finer markings turn the stroke adjustment dial (3) anti-clockwise to position '1'.
3 – For a deeper, thicker mark turn the stroke adjustment dial (3) clockwise to position '5'.
4- Select the stroke adjustment appropriate for the material and the required marking.

Note: It is recommended that you practice on scrap material before you start engraving parts.

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