

## Mate Enumerator™ Sequential Numbering Tool

### **Operating Instructions**

The Mate Enumerator™ Sequential Numbering Tool is a versatile assembly, with intricate internal mechanisms. Follow these simple operating instructions to achieve the maximum benefit from your investment.

The operating instructions are divided into the following sections:

Tool Length Adjustment
 Sequential Number Mode
 Fixed Number Mode
 Adjusting the Number
 Maintenance
 Page 1
 Page 2
 Page 3
 Page 4

#### Tool Length Adjustment:

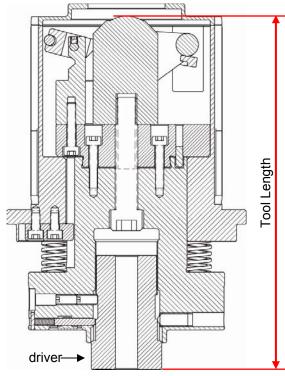
In order to prevent inadvertent over penetration of the tool, the length adjustment of the Mate Enumerator is set by the factory for the maximum recommended material thickness 0.236(6.00) and the minimum machine shut height of 7.972(202.50). You will need to adjust the length of the tool, prior to use.\*

Note: The press must be set up as you would for a forming tool. The Enumerator requires a minimum stroke length of 0.300(7.62) to advance the numbers and prevent the stripper from dragging on the sheet.

#### **Tool Length Adjustment Procedure:**

- Position Mate Enumerator on bench, with number wheels upwards (as shown in diagram).
- Remove stripper. Use a 3mm hex wrench.
- Measure distance from bench, or bottom of driver to tip of characters on stamping head.
- Turn assembly on its side.
- Adjust tool length for your machine and material application See table below.
  - · Decrease Tool Length
    - Rotate driver clockwise in 0.002(0.05) increments.
    - One complete revolution = 0.040(1.00)
  - Increase Tool Length
    - Rotate driver counter clockwise in 0.002(0.05) increments.
    - One complete revolution = 0.040(1.00)
- Measure distance from bench, or driver to tip of characters on stamping head. Adjust as required.
- Re-install stripper. Use a 3mm hex wrench.
- Install into punch press.





#### \*Use table to calculate length for your machine and the material thickness of your application

	Finn-Power Users	Amada Users
Machine Shut Height minus 0.020(.50)	7.972(202.50)	8.051(204.50)
Minus Material Thickness**	_	_
Equals Recommended Tool Length	=	=

#### Warning:

Over-travel (length set too long) could result in damage to the tool.

Page 1

<sup>\*\*</sup> maximum material thickness 0.236(6.00)



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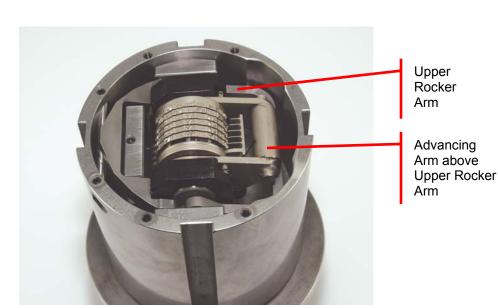
#### **Sequential Number Mode:**

Use this mode to create sequential numbers. The Mate Enumerator™ will advance by one number for each complete stroke the tool makes. The operator can set the starting number (see page 4) and the depth of penetration (see page 1).

Use the following procedure to change **from fixed mode to sequential mode.** 

- Position Mate Enumerator on bench, with number wheels upwards.
- Remove stripper. Use a 3mm hex wrench.
- Turn assembly on its side.
- Loosen central draw bolt to release stamp head assembly. Use a 10mm hex wrench.
- Position Mate Enumerator on bench, with number wheels upwards.
- Flip the upper rocker arm over the lower rocker arm. (photo 1)
- Remove stamping head. (photo 2)
- Flip the upper rocker arm over in the holder. (photo 3)
- Re-install the stamp head assembly, making sure the spring loaded advancing arm of the stamp head assembly is positioned above the upper rocker arm. (photo 4)
- Turn the assembly on its side, while holding the stamp head assembly in place.
- Tighten central draw bolt. Use a 10mm hex wrench. (photo 5)
- Position Mate Enumerator on bench, with number wheels upwards.
- Re-install stripper plate. Use a 3mm hex wrench.

When using the sequential mode, the advancing arm must be positioned above the upper rocker arm of the stamping head assembly. (see below)













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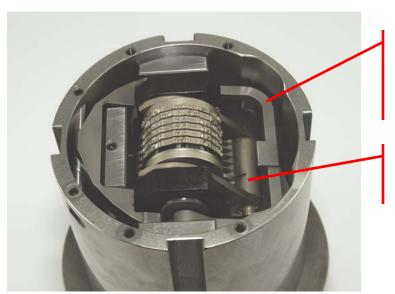
#### **Fixed Number Mode:**

Use this mode to create fixed numbers. The operator can set the desired number (see page 4) and the depth of penetration (see page 1).

Use the following procedure to change from sequential mode to fixed mode.

- Position Mate Enumerator on bench, with number wheels upwards.
- Remove stripper. Use a 3mm hex wrench.
- Turn assembly on its side.
- Loosen central draw bolt to release stamp head assembly. Use a 10mm hex wrench.
- Position Mate Enumerator on bench, with number wheels upwards. (photo 1)
- Remove stamp head assembly. (photo 2)
- Flip the upper rocker arm over the lower rocker arm. (photo 3)
- Re-install the stamp head assembly, making sure that the upper rocker arm is positioned above the spring-loaded advancing arm of the stamp head assembly. (photo 4)
- Flip the upper rocker arm so that it rests on the top of the advancing arm. See main photo below.
- Turn the assembly on its side, while holding the stamp head assembly in place.
- Tighten central draw bolt. Use a 10mm hex wrench. (photo 5)
- Position Mate Enumerator on bench, with number wheels upwards.
- Re-install stripper plate. Use a 3mm hex wrench.

When using the fixed mode, the upper rocker arm must be positioned above the advancing arm of the stamping head. (see below)



Upper Rocker Arm above Advancing Arm

Advancing Arm













## Mate Enumerator™ Sequential Numbering Tool

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#### **Adjusting the Number:**

The Mate Enumerator™ uses a self contained stamp head assembly, which contains up to six numeric stamp wheels with numerals from 0-9. Each wheel can be manually rotated to achieve the required starting number. Use the following procedure to adjust the wheels.

- Position Mate Enumerator on bench, with numerical stamp wheels upwards.
- Position the tip of the flat bladed screwdriver on the wheel to be adjusted.
- Rotate the wheel to select the appropriate number, by pressing the tip of the screwdriver against the face of the stamp wheel.
  - The numeric stamp wheels move in one direction only, allowing the numbers to increase one-at-a-time: 0, 1, 2, 3 etc.
  - The stamp head assembly will prevent the numbers from being decreased. Do not try to decrease the number, as this may result in damage to the stamp head assembly.
  - Use caution to prevent damage to the face of the stamp wheel.



#### **Routine Maintenance:**

The Enumerator will need periodic lubrication for optimal operation. Refer to the following recommendations.

- Position Mate Enumerator on bench, with numerical stamp wheels upwards and remove the stripper.
- Lubricate the four bearing points (the areas that fully fit around the pins) with hydraulic oil. DTE 26 or suitable alternative. (see photo)
- Lubricate the lever arm contact areas, the area where the lever contacts the guide pin, and the spot where the upper rocker arm contacts the advancing arm of the stamping head with any molybdenum disulphide fortified grease, or suitable alternative. (see photo)
- Lubricate the numbering wheels by adding a few drops of lightweight oil between each wheel. Let unit sit for several minutes before installing into a punch press.

