

MPX-95 DPM Kit DK-1

Using the DPM Kit

- To ensure safe usage with a full understanding of this product's performance, please be sure to read through this manual completely.
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Contents

	Contents	1
Usir	ng the DPM Kit	3
	Getting Started	
	What This Document Assumes	4
	Features	4
	Checking the Included Items	5
	Using the Vise	6
	Using the Pinching Vise	6
	Using the Movable Center Vise	9
	2D Symbol Imprinting	15
	Installing the 2D Symbol Library	15
	Creating Imprint Data	17
	2D Symbol Imprinting	22
	Appendix	25
	Imprinting Location	25
	Location of Serial Number Label	26

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Using the DPM Kit

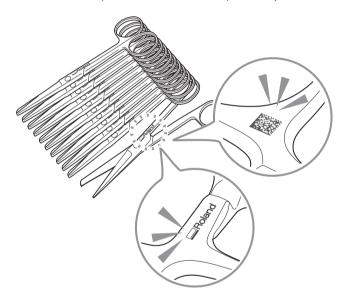
Getting Started

What This Document Assumes

- This document describes how to use the MPX-95 optional kit.
- Refer to the MPX-95 User's Manual for information such as important notes and basic usage guidelines for using the MPX-95.

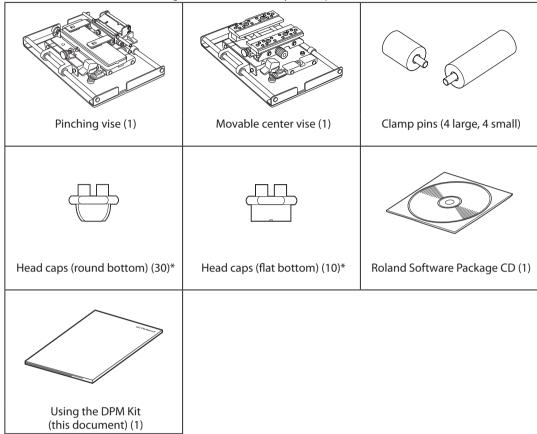
Features

- The DPM Kit allows you to add numbering to medical instruments and industrial products efficiently.
- With the DPM Kit, you can directly imprint thin medical instruments that cannot be easily secured as well as on variously shaped instruments.
- Using the software included with this kit in addition to the software included with the printer (METAZA-Studio) makes it possible to create and imprint 2D symbols.



Checking the Included Items

The DPM Kit contains the following items. Make sure they are all present and accounted for.



*About the shape of head caps

There are two different types of head caps with a different shape. Select the one appropriate for the imprint surface.

Round bottom type



This head cap can easily track curved surfaces or slopes, making it suitable for imprinting on these surfaces. This head cap, however, tends to wear out faster than flat bottom type caps.

Flat bottom type

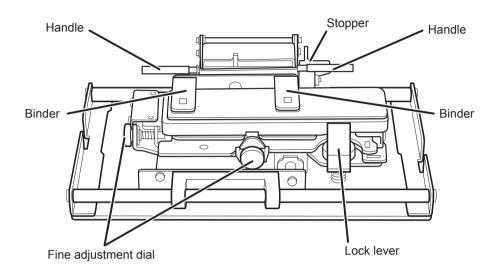


This type is suitable for imprinting on flat surfaces. As this head cap cannot track curved surfaces or slopes well, it is unsuitable for imprinting on these surfaces. This type has high wear resistance against imprint surfaces and can be used for a long time.

Using the Vise

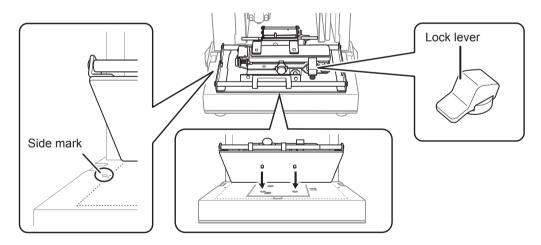
Using the Pinching Vise

Names of Components



Mounting to a Metal Printer

With the lock lever side facing toward you, insert the protrusions on the bottom of the pinching vice into the holes on the base table or base plate. Side marks for aligning the position are also included.



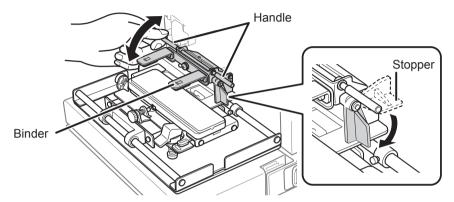
* This illustration shows a base table and a base plate being used together. The installation procedure is the same even when using only a base plate.

Securing the Material

Procedure

With the binder lifted up, lower the stopper.

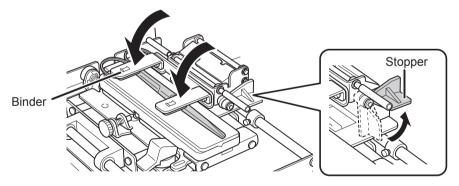
When raising or lowering the binder, be sure to hold it by the handle.



Place the instrument to be imprinted on the table of the vise.

Follow the instructions below to determine the position of the instrument.

- The area to be imprinted must be within the resin sheet on the table.
- The area to be imprinted must be 10 mm (0.39 in.) or more away from the outline of the binder.
- **3** After lifting the stopper with the binder lifted up, lower the binder.



IMPORTANT

Verify that the instrument is secured in a manner that you cannot easily move it.

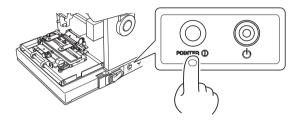
Adjusting the Position

Procedure



Press the laser pointer button.

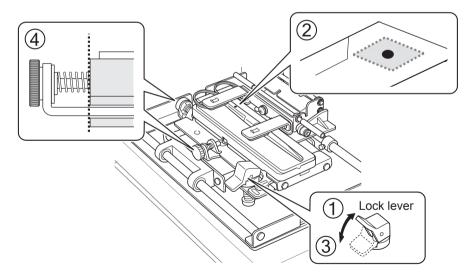
The laser pointer is irradiated. If the machine is idle for 5 minutes, the laser pointer is automatically turned off.



Adjust the vise unit position.

Move the unit so that laser pointer points to the center of the area to be imprinted on the material.

- (1) Raise the lock lever.
- ② Move the table so that the laser pointer points to the center of the area to be imprinted.
- (3) Lower the lock lever.
- 4 Adjust the vise unit position using the adjustment dial.

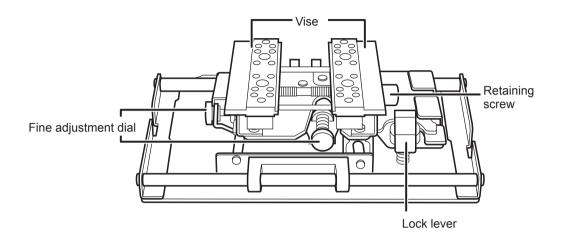


MEMO

The position to which the laser pointer points coincides with the center of the work area in METAZAStudio. By making the position to which the laser pointer points coincide with the center of the area to be imprinted, you can print with the exactly same layout as the one displayed on the METAZAStudio's work area.

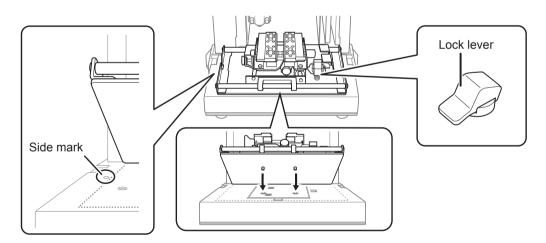
Using the Movable Center Vise

Names of Components



Mounting to a Metal Printer

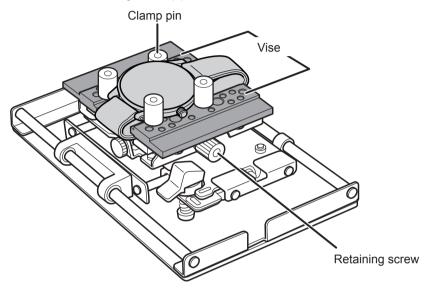
With the lock lever side facing toward you, insert the protrusions on the bottom of the movable center vise into the holes on the base plate or base table. Side marks for aligning the position are also included.



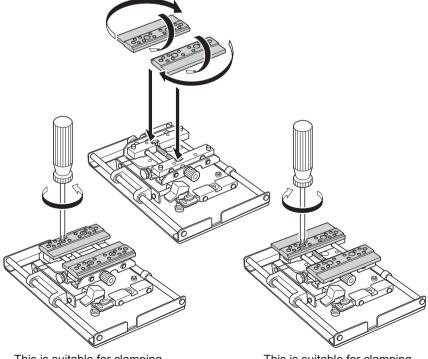
* This illustration shows a base table and a base plate being used together. The installation procedure is the same even when using only a base plate.

Securing the Material 1: Securing with a Vise

- Clamp the material in place in the vise, and tighten the retaining screw enough to keep the material from easily coming loose. Be careful not to overtighten, because doing so may damage the material.
- Using the vise in combination with the clamp pins provides even greater stability.
- P.11 "Conditions for using the clamp pins"



• You can also vary the orientation and front and back sides of the vise when using it. Use it in a way matched to the size and shape of the material.

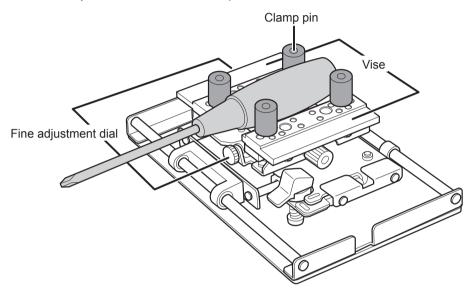


This is suitable for clamping plate-shaped material.

This is suitable for clamping cylindrical material.

Securing the Material 2: Securing with Clamp Pins

- Secure the material in place using the clamp pins mounted in the holes on the vise. The position of the vise can be adjusted using the retaining screws even when using the clamp pins. Be careful not to overtighten, because doing so may damage the material.
- You can also vary the orientation and front and back sides of the vise even when using the clamp pins. Use it in a way matched to the size and shape of the material.



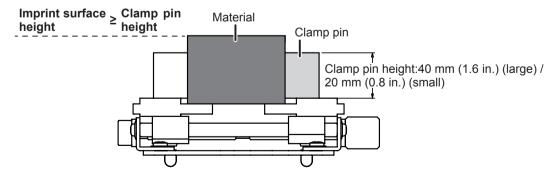
Conditions for using the clamp pins

When using the clamp pins, failing to adhere to the following conditions will result in the head coming into contact with the clamp pins during imprinting.

Be sure to configure the machine with the following conditions in mind.

When the imprint surface height is as tall as or taller than the clamp pin height

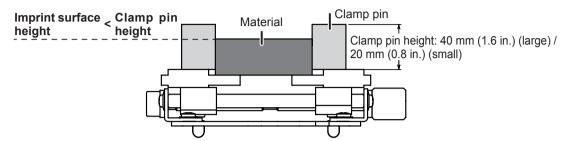
The conditions regarding areas that can be imprinted, material height, and similar points are the same as for when clamp pins are not being used. For more information, refer to the User's Manual.

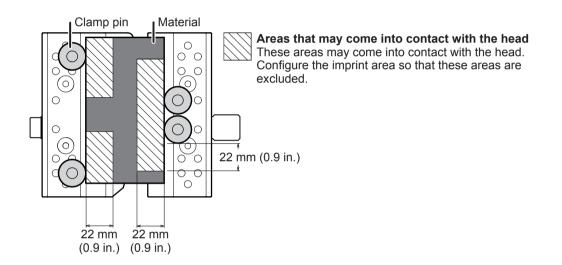


* After securing the material, check whether the imprint surface height is as tall as or taller than the clamp pin height.

When the imprint surface height is lower than the clamp pin height

The area that can be imprinted will be limited. Set the imprint area according to the illustration below.



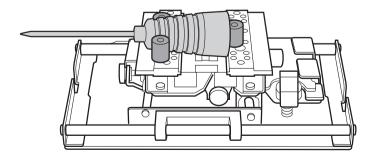


MEMO: Clamp pin usage example

• Clamp pins come in large and small sizes. Use the equipment according to the size and shape of the material.

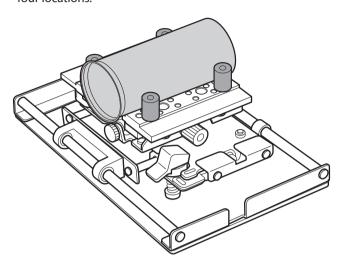
Secure in 3 places

To prevent material that moves easily from moving, secure the material using the clamp pins in three locations.



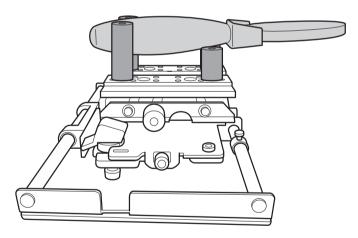
Secure in 4 places

To prevent material that moves easily from moving, secure the material using the clamp pins in four locations.



Securing using both large and small clamp pins

Using a combination of the larger and smaller clamp pins makes it easier to secure the material in a horizontal position even if the bottom surface of the material is not flat.



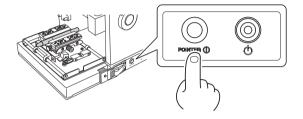
Adjusting the Position

Procedure



Press the laser pointer button.

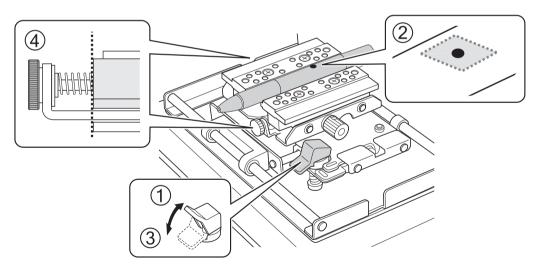
The laser pointer is irradiated. If the machine is idle for 5 minutes, the laser pointer is automatically turned off.



2 Adjust the vise unit position.

Move the unit so that laser pointer points to the center of the area to be imprinted on the material.

- (1) Raise the lock lever.
- 2 Move the table so that the laser pointer points to the center of the area to be imprinted.
- (3) Lower the lock lever.
- (4) Adjust the vise unit position using the adjustment dial.



MEMO

The position to which the laser pointer points coincides with the center of the work area in METAZAStudio. By making the position to which the laser pointer points coincide with the center of the area to be imprinted, you can print with the exactly same layout as the one displayed on the METAZAStudio's work area.

2D Symbol Imprinting

Installing the 2D Symbol Library

IMPORTANT

Install the library after verifying that the computer meets the following requirements. If the requirements are not met, installation will not complete properly.

- · METAZAStudio (Ver. 2.20 or later) installed
- · No metal printer USB cable connected

Procedure

- log on to Windows as an administrator or as a member of the Administrators group.
- Insert the Roland Software Package CD into the computer.
 When the automatic playback window appears, click [Run menu.exe]. If the [User Account Control] window appears, click [Allow] or [Yes]. The install menu appears automatically.
- 3 Click [Install].



Installation starts. Proceed by following the on-screen instructions.

IMPORTANT

- A window will appear asking for the serial number. Find and enter the serial number attached to the bottom of the included movable center vise or pinching vise. (The serial numbers for the movable center vise and the pinching vise are the same.)
- P.26 "Location of Serial Number Label"
- The entered serial number can be verified in the [About] dialog box. If the serial number is not correct, reinstall the software.
- P.16 "Checking the Serial Number"

Perform the following actions if the screens shown below appear during installation.

Windows 10

Click [Install].



Windows 7

Click [Install this driver software anyway].



Windows 8.1 Click [Install].



- Follow the displayed instructions and continue with the installation.
- **9** When installation finishes, click of the setup menu.
- **6** Remove the Roland Software Package CD from the computer.

Checking the Serial Number

Start METAZAStudio, and then click [Help] > [Version] from the menu. The [Version] dialog box opens.



Creating Imprint Data

The method of preparing print data for variable imprinting is explained below. Imprinting a different object on each material after changing part of the print data is called "variable imprinting." When performing variable imprinting, you no longer need to create new data each time you load a material. You can continue to print different data without interruption.

IMPORTANT

Continuous imprinting with varying data can only be done with material that is the same composition and size.

A CSV file is required to perform variable imprinting.

You can create a CSV file using database files. For information on creating a CSV file, contact the administrator of the databases.

1. Create a "variable field."

MEMO: What is a variable field?

A variable field is a frame within which you can place 2D symbols or text. With variable imprinting, data within the variable field is replaced with other data during imprinting.

Starting METAZAStudio.

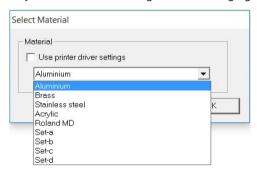
The [Select Material] dialog box appears.



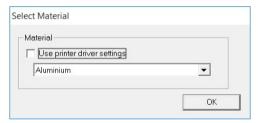
In the [Select Material] dialog box, select the material of the instrument to be imprinted.

Uncheck the [Use printer driver settings] checkbox to select the material type. To use material that is not included in the list, you can register the material.

If you use the driver settings without changing them, check the [Use printer driver settings] checkbox.



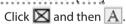
Click [OK].

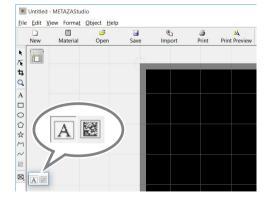


Click the Insert Frame icon.

In the case of [2D Symbol] Click \boxtimes and then \boxtimes .

In the case of [Text]

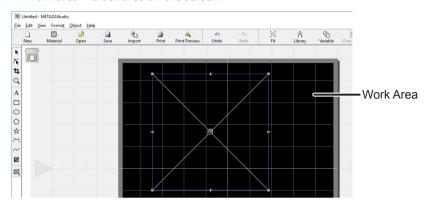




Drag the mouse (move while holding down the left button of the mouse) diagonally downward on the work area* in METAZAStudio.

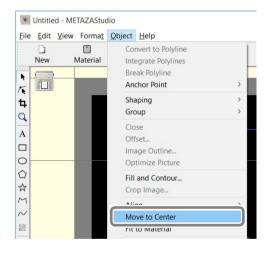
A variable field within which you can place 2D symbols or text is created.

* Work area = black area on the screen



6 Click [Object] > [Move to Center].

The center of the variable field moves to the center of the work area.



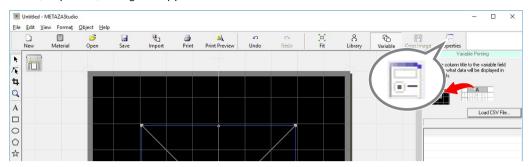
IMPORTANT: This work is important, being related to the actual imprint position.

In the machine, the center point of the imprint is defined as the imprint reference point. The "center of the work area" in METAZAStudio coincides with the reference point in the imprint operation. Consequently, making the "center of the variable field" coincide with the center of the work area means making the "center of the variable field" coincide with the "reference point in the actual imprint operation."

Though you can imprint without making the center of the variable field coincide with the "reference point in imprinting operation," making these points coincide with each other ensures the ease of placing text and images to be imprinted at the desired location.

Click

The [Properties] dialog box appears.

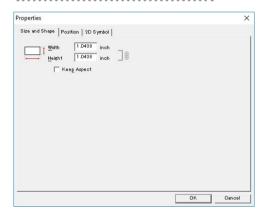


If the Variable field is not selected, you cannot click 📄 . If you cannot click 📄 , click 🔪 and then click (select) the Variable field.

Configure the settings for properties including the size of the variable field.

The setting items you can specify are different between [2D Symbol] and [Text]. For details on each setting, refer to the help for METAZAStudio ("Commands] > "[Object] menu" > "Properties" > "[Properties] dialog box").

[Properties] dialog box for 2D symbol



[Properties] dialog box for text



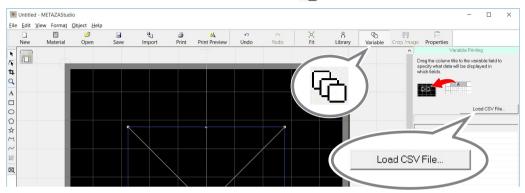
After making the settings, click [OK].

2. Place a 2D symbol or text inside the variable field.

Click [Load CSV File].

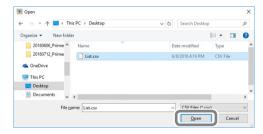
The [Open...] dialog box appears.

If the "Variable Printing" window is not displayed, click 습.



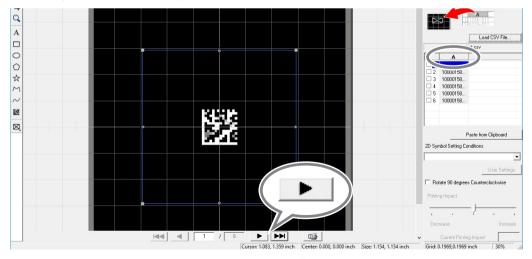
Specify a CSV file and click [Open].

The specified CSV file is imported into METAZAStudio.



Drag and drop the column title of the imported CSV file into the variable field.

The 2D symbol or text is displayed in the variable field.



You can display each symbol in turn by clicking ______. If you want to change the size or location of the Variable Field or the cell size of the 2D symbol, open the [Properties] dialog box ____ and change the settings.

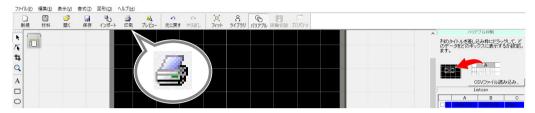
2D Symbol Imprinting

Procedure

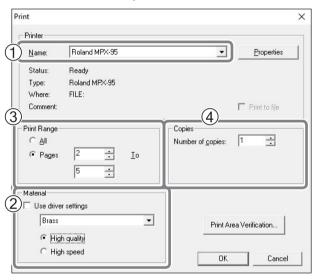


Click 🚄.

The [Print] dialog box appears.



Set and confirm the preferences below.



1	Printer name	Roland MPX-95
2	Material	Select the material of the instrument to be imprinted, and specify your pre- ferred priority on printing quality (priority of quality or speed). The selection made when creating new imprint data is reflected in the material setting.
3	Print range	To restrict records* to be imprinted, specify the records (page) that you wish to print. For example, to imprint only the 2nd to 5th records, select [Pages] and specify from page "2" to page "5."
4	Copies	If you imprint the same instrument at multiple locations, specify multiple number of copies. For example, if you wish to imprint the front and back sides of the instrument, specify "2" as the number of copies.

^{*}Record: This refers to individual data included in the data for variable imprinting.

P.17 "Creating Imprint Data"



Click [OK].

Imprinting starts.

When imprinting multiple pages or multiple copies, the message shown in the figure appears after printing starts. Wait until imprinting is finished, and then go on to the next step.



IMPORTANT

If the 2D Symbol Library is not installed correctly, imprinting will not be possible. (The [Print] dialog box becomes disabled (grayed out).) Install the 2D symbol library from the included Roland Software Package CD.

When imprinting is finished, replace the instrument (material) to be imprinted, or change the instrument's orientation.

IMPORTANT

When replacing the instrument to be imprinted (material) or changing the set position, make sure to align the position using the laser pointer button.

Click [OK].

Imprinting of the next page starts.



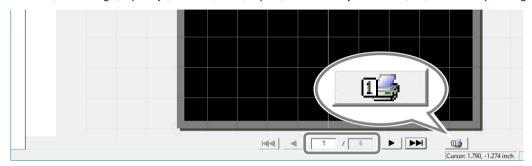
Depending on your type of 2D symbol reader, the reader may be unsuitable for the 2D symbol and thus unable to read the 2D symbol imprinted by the machine. For information on 2D symbol readers suitable for the machine, consult your authorized Roland DG Corp. dealer.

To Imprint Only the Record Being Displayed:

Click 4

The [Print] dialog box appears.

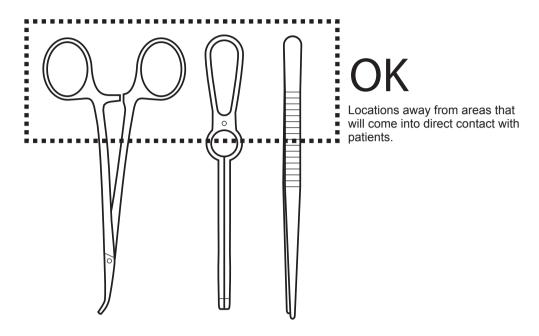
The number (page number) of the record being displayed in METAZAStudio is specified as the page under [Print Range]. Specify [Material] and [Copies] as necessary and click [OK] to start imprinting.



Appendix

Imprinting Location

Accessories Made From Medical-grade Steel

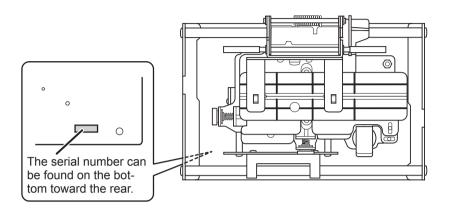


POINT

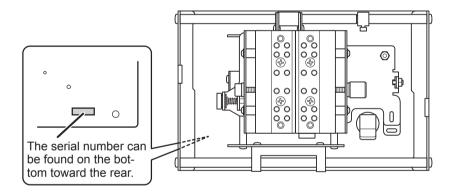
Adjust the shape and size of the 2D symbol to suit the imprint location.

Location of Serial Number Label

Pinching Vise



Movable Center Vise





— Roland

