Best Built BB-5S Engraving Guide
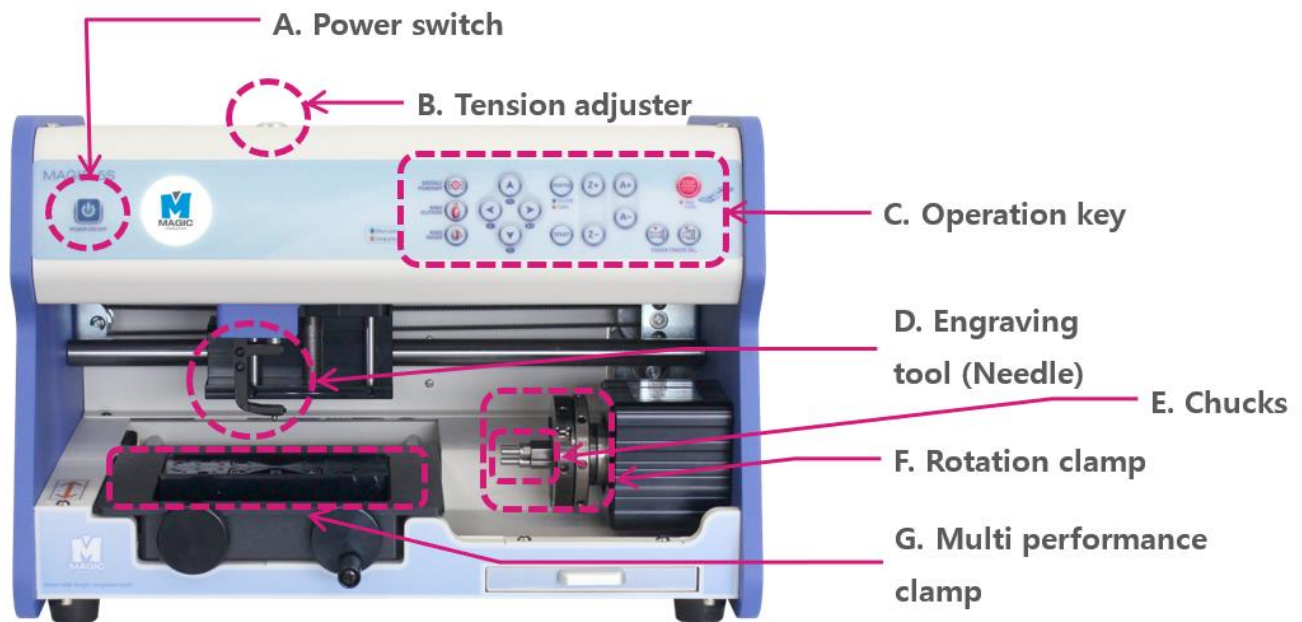
WARNING!!!

This machine can seriously injure you!

Always use caution, and NEVER put your finger between the needle and the rotation clamp while the needle is moving. In case of emergency, the red Stop button (🛑) on the engraver will stop the machine and send the needle back to its origin point.


A. Power switch

B. Tension adjuster

C. Operation key

D. Engraving tool (Needle)

E. Chucks

F. Rotation clamp

G. Multi performance clamp

Contents

*These sections must be performed every time you turn on the engraver.

Starting the Engraver

1. Turn on the engraver and wait for it to finish its self-test sequence.
2. From the desktop, open the Magic Art ( ) program and wait for the engraver to connect. The engraver will beep and there will be an engraver icon ( ) in the top right of the program under "Device(s)".
   a. If the engraver doesn't connect, or gives a connection error message, close the program and switch the USB port the engraver is plugged in to on the computer. Then retry step 2.
3. With the Magic Art program open, click on the file (File) button located in the top left of the program. Then click on the open (Open…) button to open the file finder (shown below).
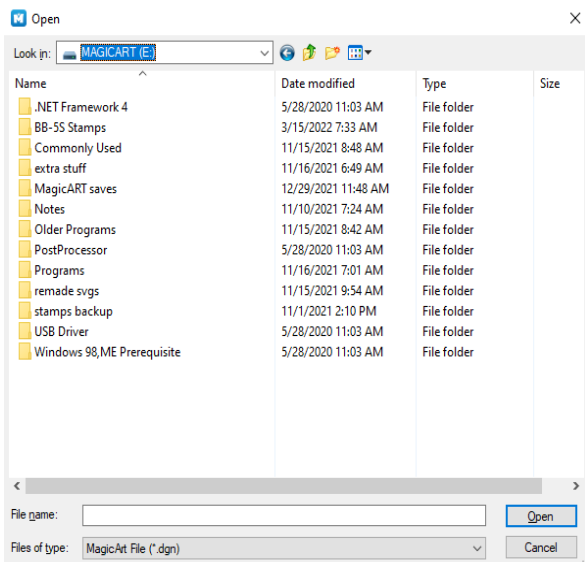
4. In the file finder, open the drop-down menu and open MAGICART (E:).
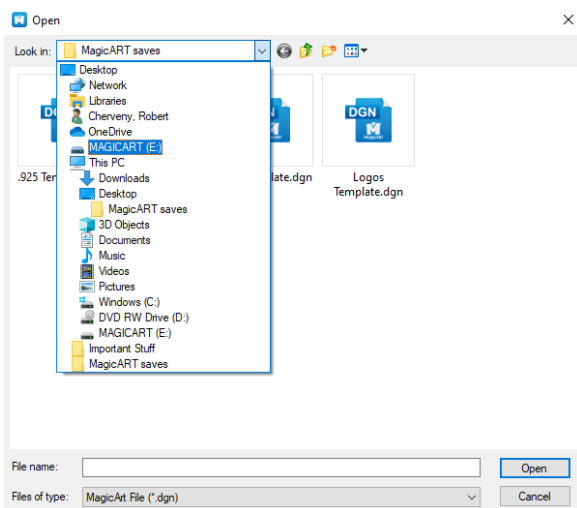
5. Open Magic Art saves.
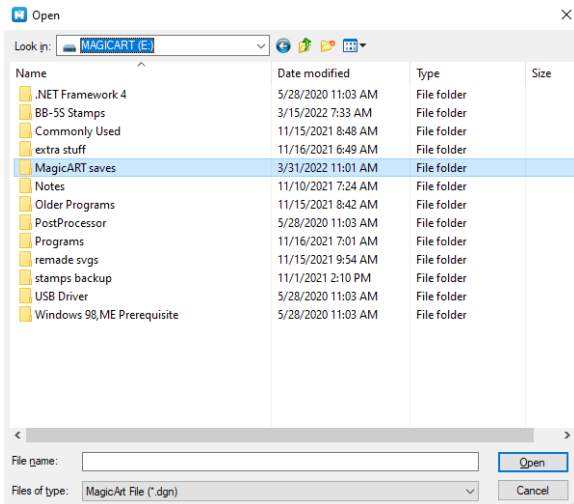
6. Open all templates using steps 3 and 4.

Centering the Laser Pointer

1. Select the middle stamp of either 10K, 14K, or .925.

2. Click the engraver icon ( ) in the top right of the program to pull up the engraving menu (shown below).

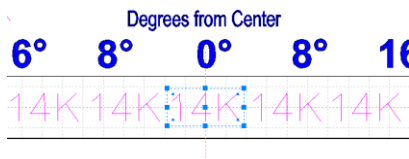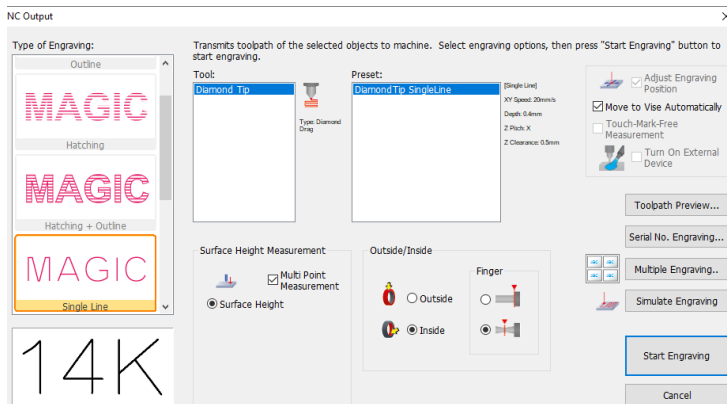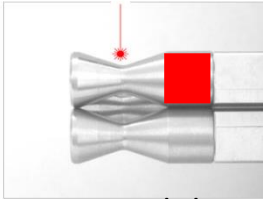3. Click the Start Engraving button and wait for the laser pointer on the machine to turn on.

4. Once the laser is on, press the "Pointer" button on the engraver and use the arrow keys to center the laser pointer on the marked chuck as shown below, with the marked chuck on top.

5. Note: Read this entire step before proceeding.

   Press and hold the start button on the engraver to set the center point, but **AS SOON AS THE NEEDLE BEGINS MOVING, PRESS THE STOP BUTTON!!!** If there is no ring in the machine while an engraving is being made, the rotation clamp could break!

Laser Pointer Modes

1. When engraving, the laser pointer has two modes. The first mode will be automatically selected when you send a job to the engraver. This setting will show four points that mark the outside edges of the stamp, as shown below. The arrow keys on the engraver will move the laser to each of the four points.

2. The second setting on the laser is accessed by pressing the Pointer Button ( ). This setting constantly shows the center point of the stamp, as shown below.

Pre-Stamp Placement Markings

1. When you engrave a ring, the engraver will mark the ring, showing the length and position of your stamp. After you position the laser pointer and hit start, the needle will make 1-5 marks, depending on the size of the stamp. The marks will indicate how long the stamp will be but will not indicate how tall the stamp will be. This can be seen in the example below.

If the marks show that the stamp is not placed in the center, hit the Stop button ( ).

Engraving

Note: Try on a practice ring first, so that you understand how the laser pointer effects the stamp placement. The stamp will be placed inside the ring, as close to the laser as it can.
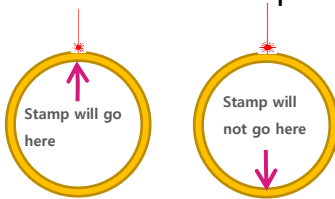
1. Check the job bag for which stamp/stamps the ring is supposed to have. Consult the Logo Guide (pg. 9) for the abbreviations and extra information.
2. Use the loupe to check the shank and gallery of the ring for all the stamps that job needs. If a stamp is faint but still visible with the loupe, it will pass. Just mark the stamp with a sharpie. If all stamps are present, send that job back to the cell it came from.
3. Figure out what work needs done to the ring.
   a. If the ring has a partial stamp (a stamp that is partially faded or removed, resulting in the inability to read the entire stamp), mark the partial stamp with a blue or green sharpie, put the ring in a fresh poly bag, and mark the poly bag with "FS" (fill stamp). Then, send the job back to the cell it came from.
   b. If the ring is missing the metal type and/or OS stamp, select the template in Magic Art that has the stamp you need (.925 Template.dgn : Page1 10K Template.dgn : Page1 14K Template.dgn : Page1).
   c. If the ring is missing a brand stamp, select the Logo Template in Magic Art (Logos Template.dgn : Page1) and move the correct logo to the grid.
   d. If the ring is missing a CERT/GSI/GSL number, select the logo template in Magic Art (Logos Template.dgn : Page1) and move the text box (Arial Text) to the grid. Quickly double click the text box to edit it.
4. Look at the ring to determine where the stamp needs placed. A stamp should rarely go directly in the center of a ring and should never go in any divots or canals the ring may have. A stamp should also never be placed right next to another stamp, unless there is no other free space on the ring.
5. Place the ring in the rotation clamp with the center of the shank on the marked chuck. You can use the "A+" and "A-" buttons on the engraver to rotate the clamp if needed for easier placement. Tighten the rotation clamp to hold the ring still by turning the textured part of the clamp. Be careful not to tighten the clamp too much, because that could scratch or damage the ring.
   a. If the ring won't stay in the rotation clamp or won't sit in a position that gives a good engraving angle, take it to the laser engraver.

6. Select the stamp you need to put in the ring.
7. Click the engraver icon ([BB-5S]) in the top right of the program to pull up the engraving menu (shown below).
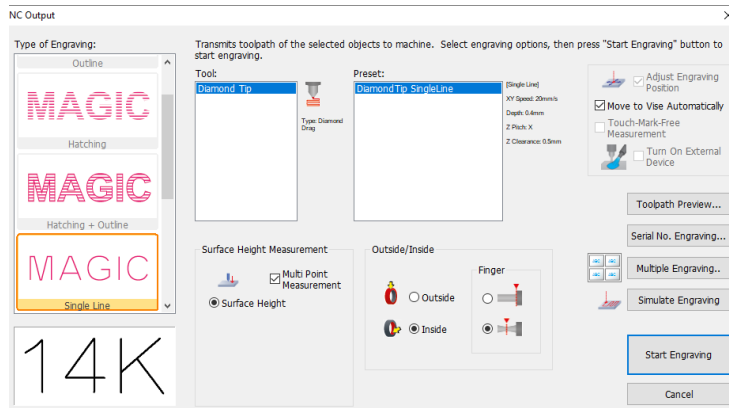
8. Click the Start Engraving button and wait for the laser pointer on the machine to turn on.
9. Push the Pointer button (POINTER) on the machine, then use the right and left arrow keys on the engraver to center the laser pointer on the shank.
10. Do one last check that the ring doesn't move in the chucks.
11. Press and hold the start button until the engraver gives a long beep. The engraver will then make the stamp on the ring.
    a. If you see that the stamp is partial before you take it out of the Rotation Clamp, do not take it out of the clamp. Select the stamp in Magic Art then click the Single Line Toolpath (A) button. It will pull up the Toolpath Menu.
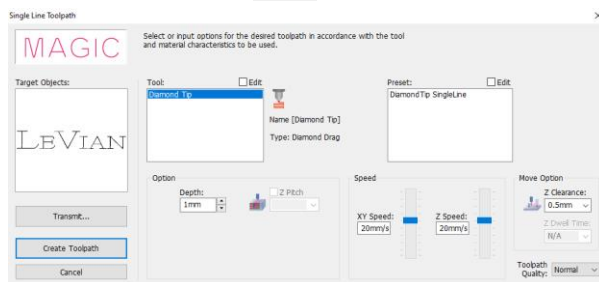
Click Transmit. Do not move the laser pointer, just press and hold Start. The engraver will remake the stamp in the exact same spot.
12. After the ring is done being engraved, remove it from the engraver.
    a. If the stamp you just did is still a partial stamp, or stamped in an incorrect position, put the ring in a fresh poly bag marked with "FS" and send the job back to the cell it came from.
    b. If the stamp you just did is good, put it back in the bags it came in, and send it back to its cell.

Stamp Details Flowchart

Step 1

Does the job have a metal type?
- **Yes** → Continue with step 2.
- **No** → Enter the SKU in the store websites listed in Sellers Websites (pg. 10) to find the metal type. → Ask a manager to find the metal type for you.

Step 2

Is the job DND, customer, or an online order?

DND → Is it POT?
- **Yes** → Is the job a Leo or Past Present Future?
  - **Yes** → The job needs to have both the brand and metal type.
  - **No** → The job needs just the metal type
- **No** → Does the job have a CERT card?
  - **Yes** → Stamp the job according to the CERT card.
  - **No** → Does the job have a brand available?
    - **Yes** → The Job needs to have both the brand and metal type.
    - **No** → Does the label have an "A" or a "Z" in the top right corner?
      - **A** → The job needs to have "Magic Glo" and the metal type.
      - **Z** → The job needs to have "Zp" and the metal type.

Customer → Does the job need a custom engraving?
- **Yes** → Ask a manager for guidance on what to stamp.
- **No** → Does the job have a brand or metal type listed?
  - **Both a brand and metal type are listed.** → The job needs to have both the brand and metal type.
  - **Only the metal type is listed.** → The job only needs the metal type.
  - **Neither is listed.** → Ask a manager to find the brand and metal type

Online Order → Is the job Previously Owned?
- **Yes** → Does the job have Lab Created Diamonds?
  - **Yes** → Is the job a Leo or Past Present Future?
    - **Yes** → The job needs to have the Lab Created stamp, the brand and metal type.
    - **No** → The job needs the Lab Created stamp and the metal type.
  - **No** → Is the job a Leo or Past Present Future?
    - **Yes** → The job needs to have both the brand and metal type.
    - **No** → The job needs just the metal type.
- **No** → Does the job have Lab Created Diamonds?
  - **Yes** → Does the job have a CERT card?
    - **Yes** → Stamp the job according to the CERT card.
    - **No** → Does the job have a brand listed?
      - **Yes** → The job needs to have the Lab Created stamp, the brand and metal type.
      - **No** → The job needs the Lab Created stamp and the metal type.
  - **No** → Does the job have a CERT card?
    - **Yes** → Stamp the job according to the CERT card.
    - **No** → Does the job have a brand listed?
      - **Yes** → The job needs to have both the brand and metal type.
      - **No** → The job needs just the metal type

Step 3

Is the job OS?
- **Yes** → The job needs to have the OS symbol.
- **No** → The job should not have the OS symbol.

Brand	Stamp	Abbreviation
Magic Glo	MAGIC GLO	No logo, pink bag with "A" in top right corner
Zale's Product	Zp	No logo, clear bag with "Z" in top right corner
Adrianna Papell	ADRIANNA PAPELL	AP
Celebration Grand	CELEBRATION	Cel, Cel Ideal
Chosen	CHOSEN®	JCHN
Disney	Disney	D.E., Enchanted, Dis
Emmy London	emmy	Emmy London
Ever Us	Ever Us	EU
LeVian	LeVian	LEV
Marilyn Monroe	Marilyn Monroe	MM
Neil Lane	Neil Lane	NL
Past Present Future	Past Present Future	PPF
The Leo	THE LE	The Leo

The Leo First Light	FIRST LIGHT	Non-Leo First Light FL
Tolkowsky	T O L K O W S K Y	Tolkowsky, TOLK
Vera Wang Love	VERA WANG LOVE	VW
Vera Wang Wish	VERA WANG WISH	VW WISH
Wonder Woman		WW

Seller's Websites

- Zale's

  https://www.zales.com/view-all-jewelry/c/0110060000?cid=SEM-goo-zales-E-Commerce+-+Brand+-+General+-+Core+-+Exact&gclsrc=aw.ds&ds_rl=1246147&ds_rl=1252053&gclid=EAIaIQobChMIjeL74aGi9AIVRGxvBB3TOAEUEAAYASAAEgKg0_D_BwE

- Zale's Outlet

  https://www.zalesoutlet.com/?cid=SEM-goo-zales+outlet-E-Commerce+-+Brand+-+General+-+Exact&gclid=Cj0KCQiAkNiMBhCxARIsAIDDKNV7qNG5HQVPxSNF90eu9L7M8INxM3fd3HXTcO2HJxV2SjHdXB5PnwEaAh3tEALw_wcB&gclsrc=aw.ds

- Kay

  https://www.kay.com/?cid=SEM-goo-kay-E-Commerce+-+Brand+-+General+-+Core+-+Exact&gclsrc=aw.ds&&gclid=EAIaIQobChMIoJ7f9KGi9AIVr3NvBB2kwwUNEAAYASAAEgLb1_D_BwE

- Jared

  https://www.jared.com/?cid=SEM-goo-jareds-E-Commerce+-+Brand+-+General+-+Core+-+Exact&gclsrc=aw.ds&ds_rl=1246150&ds_rl=1252059&gclid=EAIaIQobChMItdPg7qGi9AIVF2xvBB0j-A5cEAAYASAAEgKSHfD_BwE

Calibrating the Laser Pointer

1. Replace the Wide Width Chucks ( ) with the Flat Chucks ( ).
2. Place a practice ring on the Rotation Clamp as shown below.
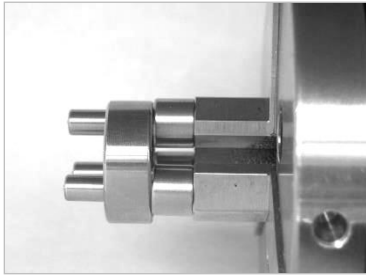
3. Press the Ring Outside button ( ) on the engraver.
4. Press and hold the Pointer button ( ) until you hear a long beep. A cross mark will be engraved on the outside of the practice ring.
5. Use the arrow keys on the engraver to center the laser pointer in the middle of the cross mark.
6. Press the start button once and wait for the needle to lower. Then, press and hold the Start button until you hear a long beep.
7. Press the Ring Inside button ( ) on the engraver.
8. Replace the Flat Chucks with the Wide Width Chucks, and re-center the laser pointer.

Changing the Engraving Bit

Note: When the bit starts to go bad, stamps will start being messy or look more illegible. If you want to double check the status of your bit, take it to any microscope or use a high-powered loupe. Check the tip of the bit, and if it is rounded, that bit is no good for stamping.

1. Press the Medal/Pendant button ( ) on the engraver. This will move the needle to above the Multi Performance Clamp.
2. Find a 1.5mm L-wrench. There should be one in the drawer of the engraver.
3. Use the L-wrench to loosen the screw on the tip of the needle arm enough for the Engraving Bit ( ) to come out.
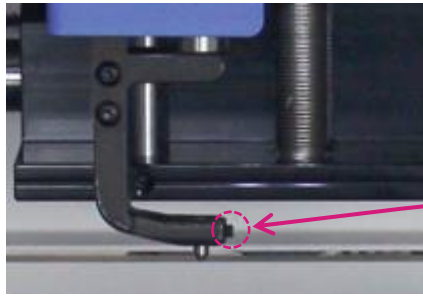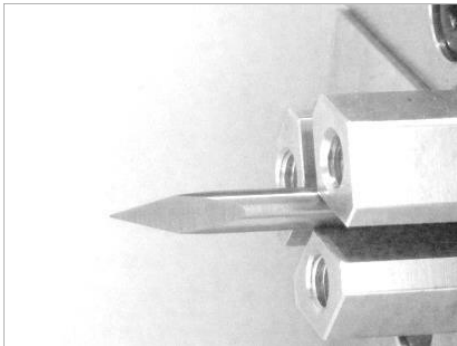
Engraving Bit
Screw

4. Put the new Engraving Bit in the needle arm. If the new bit has one flat side, that side needs to be against the screw. Also, the top of the new bit should be flush with the top of the needle arm.
5. Tighten the screw on the needle arm and dispose of the old Engraving Bit.

Rotation Clamp Origin Point

1. Remove the chucks from the Rotation Clamp.
2. Place a pointed object, such as an engraving bit, in the Rotation Clamp.

3. Press the Inside Engraving button ( ).
4. Use the Z axis buttons (Z+ Z–) to line up the tip of the engraving bit with the tip of the pointed object. You can use the right arrow button (▶) to move them closer together, if needed.
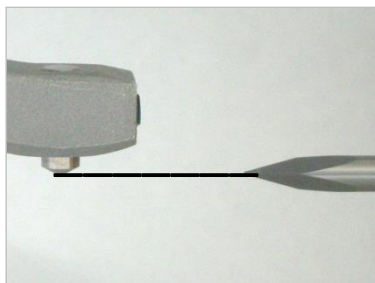
5. Press and hold the start button (START) to set the origin point.

Turning off the Engraver

1. Close the Magic Art program. If a notification pops up asking if you want to save any changes, select no.
2. Close any other programs or websites.
3. Press the Windows key. Select Power, then Sleep.
4. Press the power button on the engraver.