

Embroidery

Practical Guide for Selecting Multi-Needle Hoops

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Identifying and Installing the Frame Holder



The Frame Holder is the part that attaches to the machine and the hoop (frame) slides into the frame holder. Different hoops use different frame holders. The Array comes with two frame holders, the white "A" frame holder and the grey "B" frame holder. The four hoops that come with the machine use the "A" frame holder. The "B" frame holder is for some of the optional hoops such as

the Continuous Frame. There are two small-ish thumbscrews on the top of the "A" frame

holder (red circle) that attach the frame holder to the machine. These small thumbscrews are also used to attach the "B" frame. Remove them from their storage location on the right side of the holder (photo right) and attach the frame holder to the machine. To use different size hoops, the large thumbscrew (green circle) is loosened and the Frame Holder slides to accommodate the size of the frame The machine will automatically identify the hoop and display a grey boundary box on the edit screen.



Practical Knowledge:

The multi-needle machine reads a sensor on the frame holder to know what type and size of frame is on the machine.

Loosen the larger thumbscrew (green circle) on the left side of the frame when adjusting for different widths of frames and re-tighten.

Finger tighten the large thumbscrew well.

The machine will not read the hoop when the large thumbscrew is loose.

There are different frame holders for different kinds of hoops and a letter on the holder identifies the frame holder.

The "A" frame holder is for the frames (hoops) that came with the machine.

The "B" frame holder is for optional frames that did not come with the machine such as the sleeve and border hoops.

The "C" frame holder is for the optional round embroidery frames.

The "E" frame holder is for the Compact hoops.

The "F" frame holder is for the Magnetic Hoops.

Most specialty frames are available as a set with the frame holder specific for them and individually.

Some specialty hoops will come as a set with the specialty frame holder specific for that machine. Many hoops (including the standard set that came with the machine) are also available individually without the specialty frame holder. When buying a new specialty hoop, make sure to purchase the set when buying that type of hoop for the first time. Additional specialty hoops are used when production hooping multiple items. Two sets of hoops allow the user to hoop the next item while actively embroidering an item of the same type and allow for increased production when running an embroidery business.

Most specialty frame holders attach with just the two small thumbscrews, however the cap frame uses a special "driver" that requires two additional screws on the underside to secure it for embroidery. Securely fasten the cap frame driver to the machine with four thumbscrews that come with the cap frame set. There are two small thumbscrews on the top and two larger thumbscrews on the bottom (see photos

below). Remove and **relocate** the two small thumbscrews on the top and just loosen the two larger thumbscrews on the bottom.







Carefully slide the cap frame driver onto the machine. The square opening fits into the freearm of the machine. Don't hit the needles with the top of the cap frame driver. (**Don't hit the needles with the cap frame driver!**) Align the loosened large thumbscrews on the bottom of the cap frame driver and the top holes onto the pegs. The small thumbscrews will fit into the v-shaped slots to the right of the holes on the top of the cap frame driver.





Finger-tighten the thumbscrews to secure the cap frame driver. The cap frame driver should just clear the free-arm of the machine. To adjust the height of the cap frame driver, follow the explicit instructions in the user manual.

(Yes, open the user manual because it also has great drawings.) The final step is to install the little black plastic needle plate spacer that came with the machine to the needle plate. Periodically check that the spacer has not popped off and fallen to the floor to be vacuumed up never to be found again.

For additional information on using the Cap Frame Set, please see the Sewing Tech Talk Handout, "A Practical Guide for Installing and Using the Cap Frame Set"

The Standard Hoops

The standard hoops that come with the machine are ideal of any embroidery project and work especially well for any hard-to-hoop item. The inner ring of the hoop connects to the machine and the inner hoop holds the item allowing it to fit over the free-arm of the machine. Four hoops come with the Array and each hoop is available separately.

The Flat Frame

The flat frame allows the project to hoop with the bulk of the item over the arms of the machine because the outer hoop is connected to the machine. (Standard hoops for the multi-needle connect on the inner hoop.) It is best for larger



or thicker projects that need extra support while embroidering. Use the "A" frame holder for this hoop.

The Border Frame

The border frame is a clamp style hoop and allows items to easily re-hoop by gliding the fabric through the hoop. After positioning fabric, press down on the sides of the frame to clamp the fabric in place. To re-hoop, release the clamps and slide the fabric to the next position. Use the "B" frame holder for this hoop.



The Flat Brim Cap Frame



The cap frame set (and additional cap frame alone) is an improved design over the previous cap frame. The frame allows stitching up to 6-10 mm (35% closer than other cap frames) from the brim. The snap-on hoop allows you to embroider along the curve of any cap with a sewing area of $60 \text{mm} \times 130 \text{mm} (2 38^{\circ} \times 5 1/8^{\circ})$. The cap frame is available

separately from the set allowing the user to hoop a hat while embroidering another.

The Compact Frame Set

The Compact Frame Set is used for embroidering small areas and hard-to-hoop places. This set uses a specialty frame holder "E" and the set includes four frames, 44mm x 30mm, 70mm x 30mm, 70mm x 40mm and 33mm x 74mm. Use frame holder "D" for these hoops.



The Magnetic Flash Frames

The magnetic Flash frame is available in 100mm x 100mm (4" x 4") and 130mm x 180mm (5" x 7"). (A larger 8" x 14" version is available for 10 needle machines.) The hoop has 4 powerful magnets for use with projects up to 2 mm thick. The magnets are strong enough o prevent fabrics from shifting during embroidery and the hooping process is very easy with this clamp hooping system. Use this hoop for hard-to-reach areas, speed re-hooping and delicate fabrics that may suffer from hoop burn. Use the "F" frame holder for these hoops and additional hoops are available separately.



The Circle Frames

The Round or Circle Frames are used for both hard to reach areas and curved items. The round shape allows for even tension on the hooped design making them ideal for right-chest logos on knit fabrics. The set includes 4", 5" and 6" round hoops. The set includes frame holder "C".



The Sleeve Frame

The sleeve frame has an embroidery area of 70mm x 200mm (3" x 8") and is perfect for hard-to-reach areas such as sleeves, children's clothing and tote bags. A Tubular Frame Table is an optional accessory that fits onto the machine and helps support heavier projects. Use frame holder "B" for this hoop.

