Hoop Sensor Adjustment

Or How to make your machine recognize your hoop correctly
Hoop Sensor
• Turn off your machine. Hold down all 3 buttons on the LCD screen then turn on the machine. The next screen select “Main Board Test Mode”, picture 1a. Next screen select “A/D Test”, picture 1b. The next screen is where all the work is, picture 1c.

• At the right side you’ll see “Hoop Type”. There will be either LL or S next to it. Below the “Hoop Type” you’ll see two gray buttons with some numbers next to them, LL & S. Install your large hoop, making sure everything is tight as if you were going to embroider. As you install the hoop, watch the numbers change next to the LL gray button. Once the large hoop is in place select the LL button. The numbers now by the “Hoop Type” & LL should be the same.

• Repeat above moving the left arm all the way to the right and press the SS button.

• Now remove the arms and the screen should then say “CAP”. If you see Cap, then you have done this correctly and all is ready to go.
• Picture 1a
• Picture 1b
• Picture 1c
Replacing the Automatic Needle Threader
• Turn off your machine. You will remove five (5) screws on the right side of the machine. Take the needle screw tool (small allen wrench) and place it in the hole of each plastic cover on the right side of the machine. You will need to remove all 5 covers. Then remove the screws and carefully remove the white case.
• Once the cover is removed, turn the machine back on and select a design. Proceed thru all the screens to the sewing screen. Select needle #1. This will move the needle case to the left and give you room to remove the needle threader.

• Make sure you have good lighting for the area to be worked on. Look closely at your new threader. You will see a small plastic piece sticking out with a tab at the end of it. Now look at the silver shaft, you will see where this tab fits, into a groove. Use the small screwdriver that came with the machine.
Place the screwdriver at the large of the threader and push to the left and slide the threader off of the two shafts, Pic5. You may have to lift the small tab out of the groove while doing this. **CAUTION!!** There is a small spring the threader is hiding. Do not lose this spring. You’ll see it as the threader slides off the shaft.
• Now remove the lower screw on the left side of the machine. This will allow you to slightly move that side of the case to let you wiggle the needle threader out. Take your time, don’t try to rush this step.
**Install**

7. Make sure the spring is still there. Slide the needle threader back on both shafts. The longer shaft will move some, don’t worry. It can’t go anyplace with the case in the way. If you follow the silver long shaft you will see a large end with an allen setscrew in it, Pic4.

Pic 4
There is a hole in the arm it fits through which is larger than the shaft but not so large that the large end will fall through. The large end will fit right in the hole when you are done. Hold pressure on the large end while you press on the threader. Push the threader on until that little tab falls into the groove of the shaft. It’s a snug fit on the shafts. When the threader is in place over both shafts and locked in place the large end of the silver shaft should be in the hole.

Replace the case screw and plastic cover. You should double check to make sure the threader is in the correct position.
There is a slide on the right side of the machine. Move the slide down and watch the needle threader. Make sure it goes thru the eye of needle number 1. You may want to turn the machine on and check each needle. The needle should be snug against the right side of the threader to be in the correct position. If the threader does not go into the needle correctly, double check the needle position by loosening the needle screw, push the needle up and tighten the screw. If the needle looks bent, replace the needle. If all the needles are in correctly and the threader does not align, then do the following.
In the area of the slide there are two Philips head screws. Loosen these screws and slightly move the plate and check the needle threader again using the slide. This should only be done if you have replaced all the needles and the threader is still not working correctly.

If this still isn’t working correctly, then call your nearest authorized Brother dealer and take your machine to them to make the adjustment.
Re-Centering your hoops

Occasionally your hoops may lose center. If this happens you will need to do the following:

Locate your largest hoop and hoops grid. Make sure your hoop arms are on the machine.

Press and hold the ON button, trim button and threader button at the same time and turn on the machine.

Press MAIN BOARD test mode
Press X Y Motor test
Put the largest hoop on the machine. Put the grid in the hoop. The center hole in the grid should line up with the needle hole on the machine.

Press move origin position. If the holes do not line up, use the up & down and left & right arrows directly under the Move origin button. Move left/right, press SAVE. Move up/down, press SAVE. You must press and let go of the button. It will not move the hoop if you hold the button. It makes tiny moves.
Accessories for your PR-600/EMP6
There are three (3) after market accessories available for your machines. They are:

HoopTech Quick Change or FastFrames window system and the HoopTech clamping system. The Quick Change or FastFrames uses “sticky paper”. The sticky paper is placed under the window. Put the frame on your machine like you are putting on your regular hoop. You then place the item you want to embroider on the sticky paper. Use your trace button to make sure your design will fit in the area and embroider away.
The original bag clamp has 7 windows available. The sizes are:

<table>
<thead>
<tr>
<th>Size</th>
<th>Image</th>
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<tbody>
<tr>
<td>6” x 5”</td>
<td><img src="image1.jpg" alt="Image" /></td>
</tr>
<tr>
<td>5” round</td>
<td><img src="image2.jpg" alt="Image" /></td>
</tr>
<tr>
<td>4” x 4”</td>
<td><img src="image3.jpg" alt="Image" /></td>
</tr>
<tr>
<td>2” x 4”</td>
<td><img src="image4.jpg" alt="Image" /></td>
</tr>
<tr>
<td>3” x 5”</td>
<td><img src="image5.jpg" alt="Image" /></td>
</tr>
<tr>
<td>2” round</td>
<td><img src="image6.jpg" alt="Image" /></td>
</tr>
<tr>
<td>5” x 3”</td>
<td><img src="image7.jpg" alt="Image" /></td>
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The new clamp is larger and has two windows that are larger than the original clamp. The new window sizes are:

- **8” x 5”**
- **11” x 5”**
Each clamp has its own purpose. The smaller clamp is mainly used for purses, back packs, gym bags, etc. where the design is smaller.

The larger clamp and windows will now allow you to do longer names, etc. on blankets that are hard to hoop, on the side of the gym bag, diaper bag and on the zipper tab opening on other bags and larger designs.
Your machine does not recognize these hoops, so it is important that you use the trace feature of your machine to make sure the design will fit within the window. First move the design to the bottom half of the screen. It is recommended that you do trace before you put the item in the clamp. This way you can see the needle hole on the throat plate to make sure the design will fit. You should also keep in mind that the design should be roughly ½” smaller than the window you are using to allow for the space needed for the embroidery foot.

Each product has its uses. For some it will be window size, for others it will be ease of use for a particular project.
The HoopMaster is a great accessory to add to your business. This hooping aid allows you to always hoop in the same place for each garment. Hooping will be quicker and more consistent for all your jobs. No more chasing your hoop across the table when hooping your projects. You also get a free-style hooping base so you can hoop hat backs, bags, child shirts, etc.