# IOS
INNOVATIVE ONCOLOGY
SOLUTIONS

<u>Indications For Use: IOS S-Type and U-Frame Thermoplastic Masks (White)</u>

1. Ensure the water bath or oven is set to the optimal water bath temperature for IOS masks of **149-158 degrees Fahrenheit**. Do not exceed 170-degrees.

2. Lay a clean towel on an easily accessible work bench close to the water bath.

3. Prepare ice packs or cooling mitts, if applicable.
   ** Note: Ice packs and cooling mitts are optional and will speed up the set time of the masks.

4. Position the patient on the appropriate base plate.

5. Insert the pins into the mask, pressing the pins into the frame and then ensuring they are retracted to prepare for baseplate coupling.
   ** Note: If the pins are not fully retracted in the frame prior to docking, the mask will not dock and the pin spreaders may sustain damage.
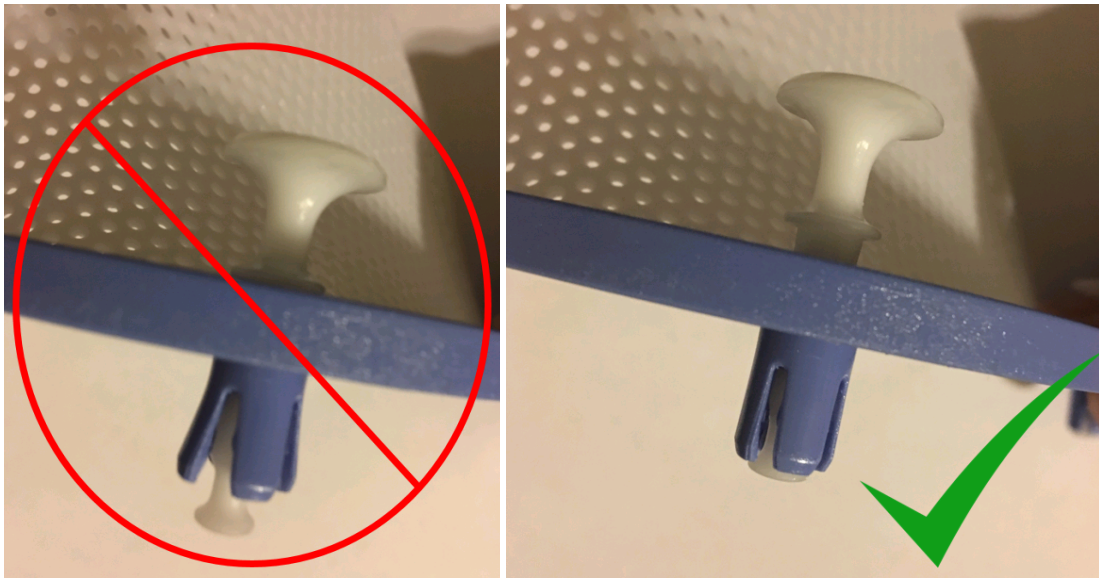
6. Heating -- Two Methods:
   a. <u>Water Bath</u>
      i. Place the mask into the water bath. For HN&S masks, ensure that ample water is in the water bath to submerge the mask without needing to wedge the mask in the bottom of the bath.
   ■ For 2.4mm masks, allow 2.5 minutes of soak time for optimal performance.
   ■ For 3.0mm masks, allow 3 minutes of soak time for optimal performance.

   b. <u>Dry-Heat Oven</u>
      i. Place mask on the oven rack and close oven.
      ii. Heat mask for 3-10 minutes, until thermoplastic is translucent. Oven time varies by model, so refer to the oven manufacturer's guidelines for additional information. Newer ovens will be faster.

** Note: IOS masks are treated with a non-stick coating to prevent them from sticking to most materials; however, if the mask is wedged in the bottom of the bath then adhesion of the bottom of the mask to the side of the water bath could occur.

7. Remove the mask from the water bath/oven, place it onto the towel and pat dry as necessary, flipping the mask and repeating the process to ensure excess water is removed (water bath only). Work swiftly. For optimal performance, the in-air time of the masks should be limited to approximately 15 seconds.

8. Apply the mask on the patient, hooking the mask over the patient's contours to try and incorporate as many rigid body structures as possible (nose, chin, cheeks, neck, shoulders, etc). Continue molding until the mask holds its shape on the patient.

   ** Note: Optionally for more even stretching of the mask, try pre-stretching both lateral sides of the mask slightly above the patient before securing it to the base plate.

9. Cool the mask. As with all thermoplastic masks, the longer the mask is left on the patient, the less it will shrink. Optimally, the mask would be cooled for 10-15 minutes without the use of cooling techniques, and 8-10 minutes with the use of ice packs and cooling mitts.

10. Remove the mask from the patient and store in an appropriate cool storage area away from direct sunlight.

   ** Note: The pins in all IOS S-Type masks are slightly elongated, designed to lock securely into the baseplate channel. For expedited removal of the mask, it is suggested that the mask be removed vertically off of the patient rather than at an angle to avoid the pins hanging in the baseplate docking channel.