

Optimice SOP - Flat Filter Media Replacement



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Introduction

The flat filter assembly consists of a filter medium, which is sandwiched between two layers of stainless mesh. A blue and white plastic retaining clip holds the three layers in place on the cage body. Filter life varies based on facility conditions, cage usage, and sterilization frequency. **As a general guideline, cage filter paper is designed for up to 70 autoclave cycles and should be replaced at least every 2 years.**



Figure 1

Animal Care Systems sells a custom tool to remove the retaining clip; however, a standard two-position pair of slip-joint pliers is sufficient (Figure 1). Use the pliers' wide setting.

Removal

1. Grip the plastic retaining clip by the center hoops (Figure 2).
2. Squeeze gently and pull until the clip releases (Figure 3). Only a small amount of pressure is necessary; maximizing pressure makes removal more difficult.



Figure 2



Figure 3

3. Once the clip is removed, tilt the cage, and press gently on the stack of filter components from the inside of the cage base (Figure 4), and remove the outer, coarser stainless mesh (Figure 5).
4. Remove the used filter medium (Figure 6).

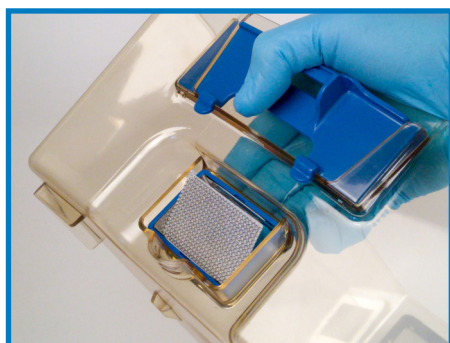


Figure 4

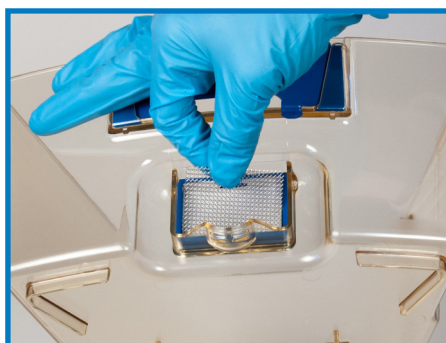


Figure 5

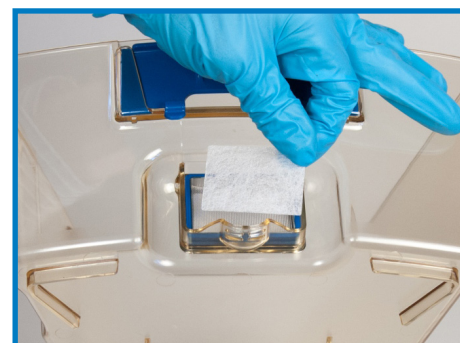


Figure 6

Reinstallation

1. Place a new filter medium down onto the fine stainless mesh (Figure 8). **The fine stainless mesh must face the interior of the cage.** Filter damage will result if the mesh positions are reversed.
2. Replace the coarse mesh onto the filter medium (Figure 8).

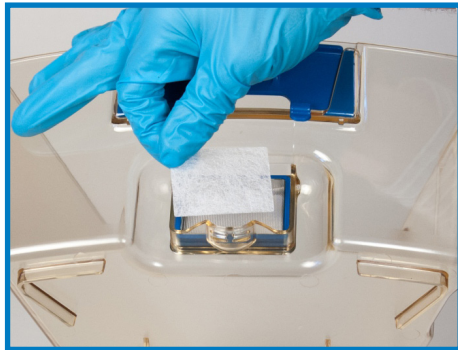


Figure 7

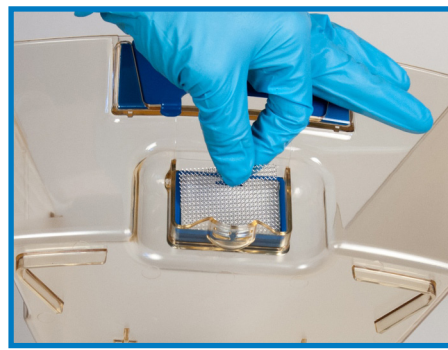


Figure 8

3. Position the retaining clip straight and even into the filter frame, and then press evenly against the retaining clip on the opposing corners or on the center of the top and bottom edges (Figure 9) until it locks into place (Figure 10). There is an audible snap that signifies the clip is secure.

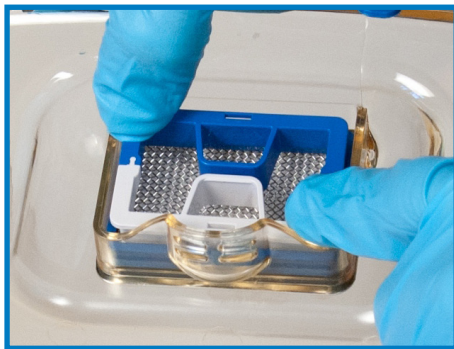


Figure 9



Figure 10



Figure 10: Not seated



Figure 11: Seated



If no sound is heard, the clip is not fully seated (Figure 10).

The retaining clip must audibly snap into place (Figure 11).

Repeat the process for the cage's other filter.

The retaining clip's colors can be used to track which filters have been replaced; flip retaining clips (so the other color is up or down) to indicate a new filter medium.