



# SAFE MACHINE DESIGN IN BODY ART

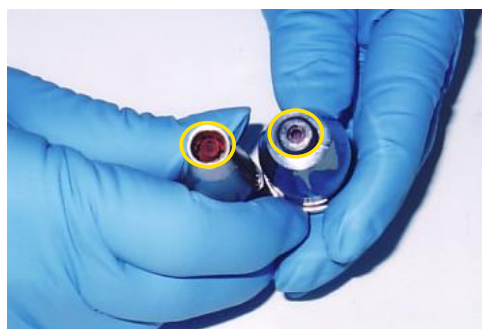
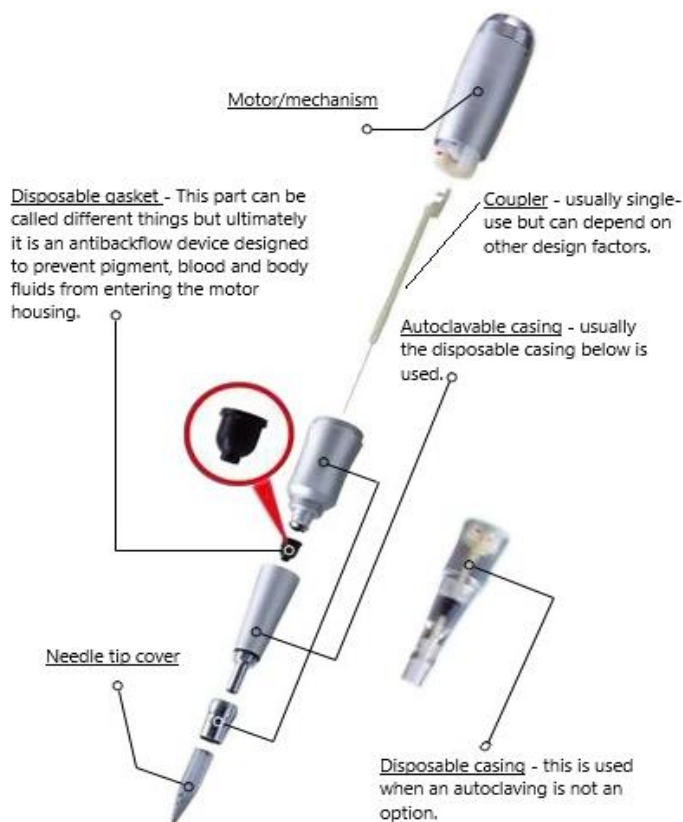


[www.sdcountybodyart.org](http://www.sdcountybodyart.org)

The use of unsafe machines in body art can cause cross-contamination resulting in infections such as Hepatitis B, Hepatitis C, HIV and a wide variety of bacterial infections. Cross-contamination in body art can result in mild infections to severe illness and when left untreated, may be fatal. Even mild infections can commonly result in skin scarring and damage to the tattoo.

## PERMANENT COSMETICS MACHINES

There are many different tattooing machines used by permanent cosmetic technicians. Some machines are safe, and some are not. A safe machine design in permanent cosmetics includes pre-sterilized and disposable parts such as those pictured below. These parts must be changed between customers to avoid issues of cross-contamination. The only part that is not disposable, and therefore must be disinfected between each use, is the motor section. Before use, and after disinfecting, a barrier is placed on the outside of the machine and used during the procedure. This is to protect the client from any possible contaminants still present on the motor exterior.



Permanent Cosmetic machines that allow pigment to travel back up into the motor would not be considered safe, such as the one pictured to the left. When blood and other potentially infectious material (OPIM) cannot be removed, the machine can cause a cross-contamination by inoculating the next client during a procedure.

## THE DISPOSABLE NEEDLE CARTRIDGE



The design of the disposable needle cartridge itself can increase safety and hygiene since the unit is designed to enclose the needle. For this reason, they are generally considered to be safer for the artist to handle when breaking down, that less ink, blood and OPIM lands on the machine during use, and the protected needle is less likely to become contaminated during set-up.

## TATTOO MACHINES

The traditional coil or rotary machine is considered safe, when used properly. Most of these machines and power cords cannot be autoclaved, therefore the practitioner must use an appropriate new barrier (machine bag & power-cord bag or barrier) on the disinfected machine and cord between customers. Needles, needle tubes, rubber bands and grommets must be changed between customers with new, pre-sterilized equipment.

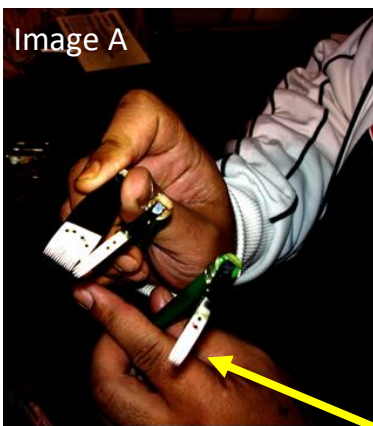


## HAND TOOLS

Machine and clip cord with proper barriers



Hand tools can be either disposable or may have re-usable handles. Handles that are re-usable must be cleared by the department before use to ensure that they can be used safely. Usually this involves handles being autoclaved between uses and the use of disposable cartridges.



The hand-made tools (to the left) would not be considered safe. The “needle groups” indicated by the arrow in Image A are made from bone and the handle is wood; both of which are absorbent and therefore cannot be disinfected. Image B shows ink (and possibly other infectious material) that remains on the device after use that cannot be properly cleaned off or disinfected.

***Prevent damage to your artwork and help protect your customers from blood-borne and skin infections by using safe machines and equipment.***