



# Care and Maintenance of Tissue and Dressing Forceps

**A**LTHOUGH TISSUE AND dressing forceps have a relatively basic design, they require careful inspection to ensure surgeon satisfaction and patient safety. It is important to first understand the answers to the following frequently asked questions.

**Q:** What is the difference between tissue forceps and dressing forceps?

**A:** Tissue forceps have teeth (e.g., 1x2, 2x3, 3x4) that are designed to grasp and manipulate tissue. Dressing forceps have serrations instead of teeth, and are designed to grasp and hold gauze and dressing during a surgical procedure.

### Tissue Forcep

Inspect for blood and tissue.  
Inspect for missing tooth.



### Dressing Forcep

Inspect serrations for blood and tissue.



**Q:** Why do some forceps have a gold handle?

**A:** Similar to handles on a needle holder and rings on a scissor, gold on a forcep indicates it has tungsten carbide jaws. In addition to grasping tissue, the tungsten carbide jaws are used to grasp a suture needle.

**Q:** What are atraumatic forceps?

**A:** Atraumatic forceps are designed to minimize damage and trauma to the tissue. The most common styles are Cooley and Debakey.



**Q:** The Operating Room (OR) places forceps on the side of the tray. Is this acceptable?

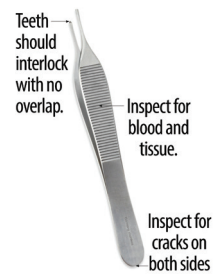
**A:** Yes. However, placing forceps on the side of the tray is a practice occasionally used in the OR to organize and quickly pass the forcep to the sterile field. It is important to use caution to prevent the tips from going through the holes in the bottom of the tray; this may result in damage, such as bending and breaking off teeth. Damage to the forcep could be prevented by placing a towel inside the tray, on the sterile field, so forceps cannot pass through the holes in the bottom of the tray.



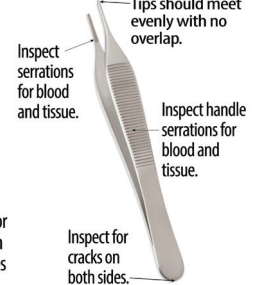
### INSPECTING FORCEPS

Forcep inspection begins at the proximal end, where the forcep is held. Inspect the base of the forcep where the two halves are joined. Cracks commonly occur at the rivet and move to the edge. Inspect the handle and tips for blood and tissue. Dressing forceps must be inspected in the serrations, while the teeth of tissue forceps must be closely examined for bioburden. Finally, inspect the distal tips to ensure they meet evenly and don't overlap. If the tips are out of alignment, remove the forcep from the tray and send it out for repair.

### Tissue Forcep



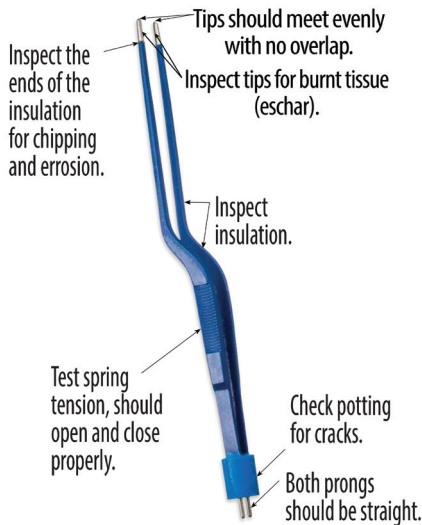
### Dressing Forcep



When inspecting bipolar forceps, the technician must also inspect the insulation. If cuts or tears in the insulation are detected, the instrument must immediately be removed from service and sent out for repair. The plastic base, often referred to as the "potting," must



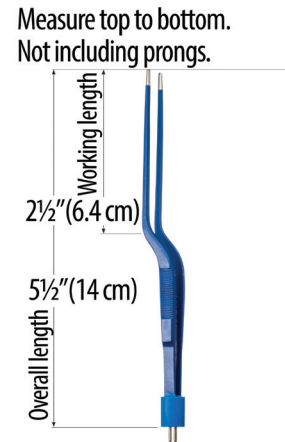
be inspected for cracks and to ensure the prongs are straight. This inspection is extremely important because electrical current flows through the forcep to allow for coagulation.



### Bayonet Tissue Forcep, 1 x 2



### Bayonet Bipolar Forcep



### MEASURING FORCEPS

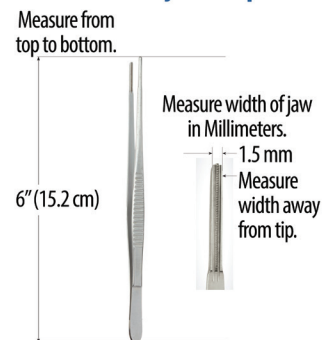
For accurate tray assembly, forceps must be measured properly. It is necessary to measure the overall length, and some patterns, such as a DeBakey tissue forcep, also require measuring the tip width. The middle of the jaw is the proper place to measure. A DeBakey forcep is available in tip sizes of 1.5mm, 2mm, 2.5mm and 3mm. The instrument count sheet should list these measurements. If only “small,” “medium” and “large” DeBakeys are listed, there is a strong possibility the incorrect forcep will be put into the tray.

### CLEANING FORCEPS

A nylon surgical instrument cleaning brush can be used for tissue and dressing forceps, while a nylon brush should only be used on bipolar forceps to prevent damage to the insulation and also to the non-stick distal tips. Brushing must be done under the surface of the water to prevent aerosolization, and brushing should be performed in the same direction(s) as the serrations. For example, DeBakey forceps require brushing in both directions since they have both horizontal and longitudinal serrations. If brushing is not done in both directions, blood and tissue will remain on the forcep, which poses a patient safety risk.

The distal tip of a bipolar forcep, many times, has a protective coating on the tips to prevent burnt skin from sticking. This

### DeBakey Forcep



burnt skin is know as eschar, which can be difficult to remove. Never use a scalpel blade (to scrape) or a wire brush. This damages the non-stick coating. **C**



**RICK SCHULTZ**, the Instrument Whisperer™, is an author, inventor and lecturer, and the retired Chief Executive Officer of Spectrum Surgical Instruments Corp. He served as contributing editor of IAHCSSM's Central Service Technical Manual (Fifth, Sixth, Seventh, Eighth Editions) and authored the textbook, *Inspecting Surgical Instruments: An Illustrated Guide*. Schultz was named IAHCSSM's Educator of the Year in 2002, and in 2006, was named American Hospital Association Educator of the Year. In 2007, he was named by Healthcare Purchasing News as one of the 30 Most Influential People in Healthcare Sterile Processing. Schultz currently provides educational lectures to Central Service professionals at IAHCSSM's annual conferences and conducts operating room personnel lectures across the country.