



Don't Fear Laparoscopic Instruments



BY RICK SCHULTZ

Laparoscopic instruments are expensive and can be intimidating—and they are also very difficult to clean. Because of this, many Sterile Processing (SP) technicians don't have a high comfort level when cleaning laparoscopic sets. Two major factors must be completely understood prior to cleaning laparoscopic sets: how the laparoscopic instrument functions and is used, and how the laparoscopic instrument should be properly taken apart.

To make it easier to clean and test laparoscopic instruments, please review the following frequently-asked questions.

What are the three generations of laparoscopic instruments?

First generation

The first generation style does not come apart or have a cleaning port.



Second generation

The second generation has a cleaning port that can be flushed with a syringe or an ultrasonic irrigation machine.

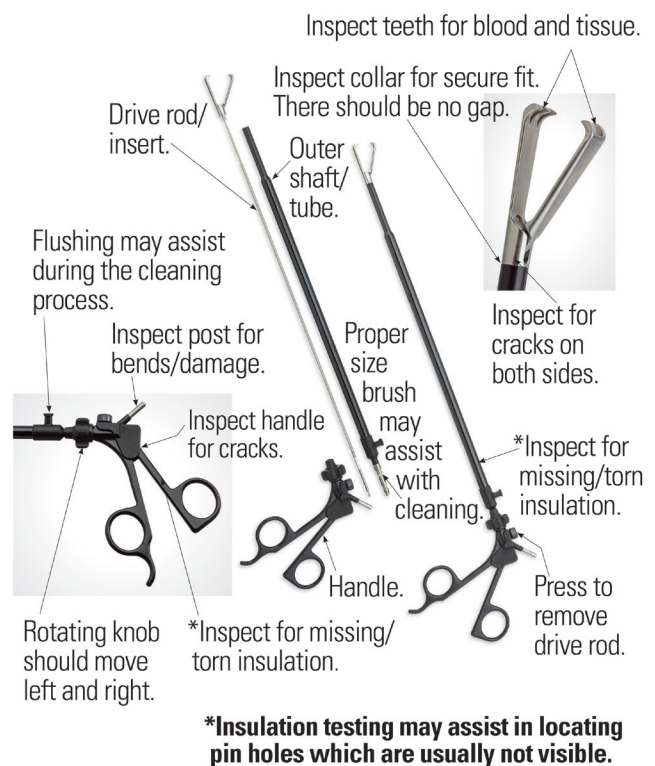


Third generation

The third generation style can be completely disassembled for cleaning.



Laparoscopic Claw Forcep, 10 mm



**Q: What is the difference between single-action and double-action jaws?**

A: A single-action jaw has a stationary (non-moving) bottom jaw, while the double-action design has two moving jaws.

**Q: How often should the insulation be tested on a laparoscopic instrument?**

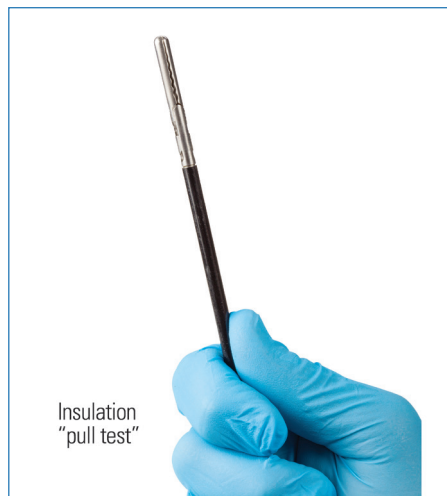
A: To reduce the risk of thermal burns, insulation should be visually inspected and checked with an insulation tester every time the instrument comes through the assembly area of the Sterile Processing department.


Q: How are laparoscopic instruments tested for tears and pinholes?

A: Loose insulation can be tested using a laparoscopic insulation tester, which will detect pinholes and tears in the insulation, and exposed metal.

Q: How is loose laparoscopic insulation visually tested?

A: To test the insulation visually, inspect the entire shaft for nicks or cuts. Next, lightly pull back on the insulation. If the insulation slides back, the instrument is in need of re-insulation.

**Q: What are the most difficult-to-clean areas on a laparoscopic instrument?**

A: The most challenging areas to clean are the jaws and distal working portion (linkage). This is where blood and fluids can hide. Manual cleaning and the use of an ultrasonic irrigator will assist in cleaning these areas. 

Q: Why does our repair vendor not fix laparoscopic instruments when they are on location?

A: This likely indicates that the technicians are either not trained on laparoscopic instrument repair or the company does not want to stock laparoscopic instrument parts on the repair vehicle because they are very expensive. In either case, it might be time to find a new repair vendor.



RICK SCHULTZ, the Instrument Whisperer™, is an author, inventor, lecturer, and the retired Chief Executive Officer of Spectrum Surgical Instruments Corp. He served as contributing editor of HSPA's *Central Service Technical Manual* (fifth, sixth, seventh, eighth editions). Schultz authored the textbooks *Inspecting Surgical Instruments: An Illustrated Guide* and *The World of Surgical Instruments: The Definitive Inspection Textbook*, which was released in June 2018. In October 2021, Schultz published the veterinary medicine textbook *The World of Surgical Instruments for Animal Health*. Schultz was named HSPA's Educator of the Year in 2002 and the American Hospital Association Educator of the Year in 2006. 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 Sterile Processing professionals at HSPA's annual conferences and conducts Operating Room personnel lectures across the country.