



Leakage Testing

Perform leakage testing prior to reprocessing each scope. Omitting this step or performing it improperly can lead to fluid invasion—turning a minor repair into a major one. It can also create an infection control hazard by allowing microbes to pass in or out of the scope through an undiscovered tear. Every original equipment manufacturer has different protocols for leakage testing. Post the leakage testing protocols in your reprocessing area, and make sure you and your staff are familiar with them.

For Olympus scopes, follow these protocols:

- Perform leakage testing prior to reprocessing
- Check performance of leakage tester and air supply
- Ensure water-resistant cap on videoscope is dry and functioning properly
- Turn on MU-1 or air supply
- Connect scope to leakage tester unit
- Pressurize scope
- Immerse entire scope in clean water
- Perform a visual inspection for leaks
- Manipulate angulation controls and switches
- Remove scope from water and turn off MU-1 or air supply
- Disconnect leakage tester from air supply to depressurize scope

Common leakage testing errors:

- Using incorrect type of leakage tester unit
- Using detergent solution instead of clean water
- Not checking integrity of the water cap
- Using a wet water-resistant cap
- Not fully pressurizing the scope prior to immersion
- Not completely immersing the scope
- Using a sink that is too small
- Failing to angulate knobs in all directions or manipulate switches
- Not completely depressurizing the scope
- Improperly sequencing the leakage testing steps

Checking the leakage tester unit:

Inspect the air supply tube for:

- Cracks
- Missing or worn O-rings
- Missing or worn pins

Check the air supply source to ensure:

- Water-resistant cap is correctly and tightly connected to the scope's electrical connector
- The leakage tester connector cap is tightly connected to the water-resistant cap

Areas where leaks can occur with water resistant caps:

- Cracks
- Seals and areas where glue has deteriorated
- Missing screws
- Missing or loose leakage tester port pins

What to do if you discover a leak:

If you discover a leak in your endoscope, LEAVE THE LEAKAGE TESTER "ON" and follow Olympus instructions for proper handling and shipping. Endoscopes must be reprocessed prior to returning them for repair.

