

Endoscope Wet Leak Test and Maintenance of the Leak Tester

1. Purpose

This procedure details the process for wet leak testing of used endoscopes prior to manual cleaning.

Note some endoscopes require to be dry leak tested first - refer to (PRO 179-35).

2. Responsibilities

This work is carried out by staff trained and competent in the methods of wet leak testing appropriate to the endoscope being tested.

Management should ensure that the endoscope manufacturer's instructions and this procedure are available and followed. Management should ensure that staff are trained on this procedure. Management take any required action when there is a non-conformance confirmed (PRO 179-200).

All staff shall adhere to Standard infection control precautions listed in the **National Infection Prevention and Control Manual** (NIPCM) Health Protection Scotland www.nipcm.hps.scot.nhs.uk/

3. Procedure

3.1 Inspection for damage

- inspect the endoscope for damage prior to immersion in water during the leak test;
- if the endoscope is found to be damaged, follow (PRO 179-60/PRO 179-520R);
- if the endoscope inspection is satisfactory continue with the wet leak testing.

3.2 Wet leak testing

- remove all buttons and valves, then place in the wash sink;
- ensure water-proof cap is correctly located, as per manufacturer's instructions, and secure;
- fill the sink with water to the level indicator on the upstand overflow tube or sink;
- connect the compatible leakage tester to the venting connector on the endoscopes waterproof cap;
- switch on the leakage tester;

- place the distal end of the endoscope into the sink, move the hand controls to bend the distal end in all directions and observe for any bubbles in the water;
- slowly lower the endoscope into the water and continue to watch for leaks while the endoscope is fully immersed. Bubbles emerging at any section of the endoscope can indicate a leak.
- if there is no leak;
 - switch off the leakage tester and open the pin on the leakage tester connection to the maintenance unit;
 - wait 30 seconds to allow the endoscope to deflate;
 - lift the endoscope connector and leakage tester out of the water;
 - disconnect the leakage tester from the venting connector of the endoscope and dry;
 - ensure the water proof cap is secure before placing the endoscope into the wash sink.
- if there is a leak;
 - remove the endoscope from sink and inform the manager and re-test if necessary
 - switch off the leakage tester and open the pin on the leakage tester connection to the maintenance unit;
 - wait 30 seconds to allow the endoscope to deflate;
 - lift the endoscope connector and leakage tester out of the water;
 - disconnect the leakage tester from the endoscope venting connector and dry;
 - undertake a non immersion manual wash on the endoscope;
 - place the endoscope into a cleaned endoscope tray with lid;
 - quarantine the endoscope to prevent it being used;
 - complete the associated non conformance record form (PRO-179-520R);
 - pass to the manager for action (PRO-179-60).

3.3 Maintenance of the wet leakage tester

- maintain the wet leakage tester in accordance with the manufacturer's instructions;
- carry out a daily test for airflow;
- wipe down the unit surface with a suitable detergent solution as per the manufacturer's instructions at the start of the day and at the end of the endoscope list;
- clean the unit cable and connector after each use;

- periodically inspect the unit for signs of damage or deterioration including the connectors or the external tubing used with its connectors.