

THE UNIVERSITY OF TOLEDO MEDICAL CENTER STERILE PROCESSING DEPARTMENT PROCEDURE

**SUBJECT: DAILY FUNCTION TESTS FOR LEAKS
AND VACUUM (BOWIE-DICK TEST)**

PROCEDURE NO: SP3-8

PROCEDURE STATEMENT

Sterile Processing and the OR will run daily function tests in all Steam, Hi-Vac sterilizers when in use.
Reference: AAMI ST79:2010.

PURPOSE OF PROCEDURE

To provide a daily operational check of mechanical air removal for high vacuum steam sterilizers.

PROCEDURE

1. A: SPD Only: SPD will run a daily Bowie-Dick Test immediately after running a leak test.
The leak test will be considered a failure if the rate of leakage is 1.0mm of pressure or over.
The range of acceptable leakage is 0.0mm up to 0.9mm of pressure.
SPD will monitor each day's leak test results. When the leakage over a period of days steadily increases to above 0.9mm, the sterilizer will be taken out of service and Biomedical Engineering will be notified. The sterilizer will be checked and repairs will be made.

B: The OR will run the Bowie-Dick test as the first load after midnight third shift, daily. The George Isaac Surgery Center will run the test Sunday through Thursday, after all surgeries are finished for the day.
2. The Bowie-Dick test will be run as an empty load. The sterilizer will be set on a Bowie – Dick/Dart Test cycle 3 1/2 minutes at 270 degrees F.
3. Obtain a Bowie-Dick Test card from the storage cabinet.
4. Place the test card into the holder and place on the bottom shelf of the sterilizer immediately above the drain.
5. SP only: Prepare cycle record in SPM.
6. Run cycle. When complete, remove the test card from the sterilizer. Interpret the results as follows:
 - A. Satisfactory: A complete and even color change of the chemical indicator From Pink to Green.
 - B. Unsatisfactory: A distinct lack of color change or an incomplete or uneven color change on the sheet.
7. SPD: Optically scan the test card and Cycle printout into the Computerized Sterilization management system OR/ George Isaac: Attach test to back of test sheet and log as required.
8. If the first test fails, check the drain for debris and the sterilizer for correct settings. Run another test. If the second test fails, notify the supervisor on duty or designated person on duty. Remove the sterilizer from service and contact Biomedical Engineering.

Reviewed/Revised

1999, 2002, 2005, 2006, 2007, 2008, 2009, 2010, 2014, 2/2016