



How to test bonds » Lead integrity » MIL-STD-883 method 2004.7 lead integrity

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1. PURPOSE

This test is designed to check the resistance of the device with threaded mounting stud to the stress caused by tightening the device when mounting.

2. APPARATUS

The torque test requires suitable clamps and fixtures, and a torsion wrench or suitable method of applying the specified torque.

3. PROCEDURE

The device shall be clamped by its body or flange. A flat steel washer of a thickness equal to six thread pitches of the stud being tested and a new class 2 fit steel nut shall be assembled in that order on the stud, with all parts clean and dry. The specified torque shall be applied without shock to the nut for the specified period of time. The nut and washer shall then be disassembled from the device, and the device then examined for compliance with the requirements.

1. Failure criteria

The device shall be considered a failure if any of the following occurs:

- a. The stud breaks or is elongated greater than one-half of the thread pitch.
- b. It fails the specified post-test end point measurements.
- c. There is evidence of thread stripping or deformation of the mounting seat.

4. SUMMARY

The following details shall be specified in the applicable acquisition document:

- a. The amount of torque to be applied ([see 3](#)).
- b. Length of time torque is to be applied ([see 3](#)).
- c. Measurements to be made after test ([see 3](#)).

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