

PIA-TEST METHOD-6016E 18 October 2010

Superseding PIA-TEST METHOD-6016D 04 August 2007

The following commercial specification is originally adopted from the military document. Revision A includes all known accepted revisions, amendments, notices, and Department of Defense (DoD) engineering changes previously developed for this item. Revision B and forward include changes adopted by DoD and Industry to reflect technology and design evaluation.

STRENGTH AND ELONGATION BREAKING OF CORDAGE; NON-SPLICED SPECIMEN METHOD

The Parachute Industry Association makes this document available for use by the Industry and Government organizations that wish to apply this specification to their products.

1. SCOPE

1.1 <u>Scope</u>. This method is intended for determining the breaking strength and elongation of cordage that does not require eye-splices to be tested.

2. TEST SPECIMEN

2.1 <u>Specimen</u>. The specimen shall be a single length of the finished cordage not less than 24 inches (610 mm) long.

3. NUMBER OF DETERMINATIONS

3.1 <u>Number of determinations</u>. Unless otherwise specified in the procurement document, five specimens shall be tested from each sample unit.

4. APPARATUS AND METHODS CITED

- 4.1 Apparatus. The apparatus for determining the breaking strength and elongation shall be as described in ASTM D 5034, except that the flat clamps shall be replaced with smooth clamps of spool or drum type, and the speed of the machine before the application of load to the specimen shall be 6 ± 1 inch per minute (152 ± 25 mm/min.). Types of split drum clamps to be used are flat drums for flat cords and flat or grooved drums for round cords; round cords are not to exceed the width of the grooved drums. In addition to meeting the requirements in ASTM D 5034, the apparatus shall have a test bed that is long enough to allow the test specimen to be fully extended to break without the need for readjustment.
 - 4.1.1 Ink marker. The ink marker is for marking specimen to determine elongation.
- 4.1.2 <u>Scale and dividers</u>. A pair of dividers opening a distance not less than 12 inches (305 mm) and a scale graduated in divisions of 0.01 inch (0.3 mm).

DISTRIBUTION STATEMENT: All Rights Reserved. No Part of this publication may be reproduced without prior written permission from Parachute Industry Association. Additional copies may be purchased on-line from the PIA Store at: www.pia.com.