

MIL-W-43342E  
14 December 1982  
SUPERSEDING  
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3 August 1973

## MILITARY SPECIFICATION

### WEBBING ASSEMBLIES; GENERAL SPECIFICATION FOR

This specification is approved for use by all Departments and Agencies of the Department of Defense.

#### 1. SCOPE

1.1 Scope. This document covers requirements for miscellaneous cotton and nylon webbing assemblies used in rigging for airdrop operations.

#### 2. APPLICABLE DOCUMENTS

2.1 Government documents. Unless otherwise specified, the following documents of the issue in effect on date of invitation for bids or request for proposal, form a part of this document to the extent specified herein.

#### SPECIFICATIONS

##### FEDERAL

T-T-871	- Twine, Cotton, Wrapping
UU-P-268	- Paper, Kraft, Wrapping
PPP-B-601	- Boxes, Wood, Cleated-Plywood
PPP-B-636	- Boxes, Shipping, Fiberboard

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: US Army Natick Research and Development Laboratories, Natick, MA 01760 by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

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## MILITARY

- MIL-I-6903 — Ink, Marking (for Parachutes and Other Textile Items)
- MIL-H-7195 — Hardware, Parachute, General Specification For
- MIL-L-10547 — Liners, Case, and Sheet, Overwrap; Water-Vaporproof or Waterproof, Flexible

## STANDARDS

## FEDERAL

- FED-STD-595 — Colors
- FED-STD-751 — Stitches, Seams and Stitchings

## MILITARY

- MIL-STD-105 — Sampling Procedures and Tables for Inspection by Attributes
- MIL-STD-129 — Marking for Shipment and Storage
- MIL-STD-130 — Identification Marking of US Military Property
- MIL-STD-1188 — Commercial Packaging of Supplies and Equipment

## DRAWINGS

## US ARMY NATICK RESEARCH AND DEVELOPMENT LABORATORIES

- 11-1-0129 — Strap, Parachute Release
- 11-1-0484 — Strap, Parachute Release, Multiple Cut
- 11-1-0527 — Connector Strap, Extraction
- 11-1-0892 — Strap, Tiedown, Cargo, Heavy Duty
- 11-1-1775 — Strap, Platform Retainer
- 11-1-2582 — Adapter Web, Extraction Parachute 22 Ft.
- 11-1-2619 — Shear Strap

## AIR FORCE

- 50C 7421 — Strap, Tiedown 15 Ft.
- 54C 6056 — Strap, Engine Restraint
- 66D 1659 — Adapter Web, Extraction parachute
- 68C 0380 — Adapter Web, Extraction Parachute

(Copies of documents required by manufacturers in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting officer.)

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2.2 Order of precedence. In the event of a conflict-between the text of this document and the references cited herein, the text of this document shall take precedence.

### 3. REQUIREMENTS

3.1 First article. When specified, a sample shall be subjected to first article inspection (see 4.3, 6.2 and 6.4).

3.2 Materials. Unless otherwise specified herein, all materials shall be as specified on the drawings. Hardware requirements shall be in accordance with MIL-H-7195 (see 6.5).

3.2.1 Marking medium. Unless otherwise specified on the drawing, the marking shall be Blue, Color No. 15102 of FED-STD-595, using marking ink in accordance with MIL-I-6903.

3.3 Construction. Webbing assemblies shall be fabricated to conform to the construction details of the applicable drawings and as specified herein

3.3.1 Measuring and cuttin of webbing. Unless otherwise specified on the applicable drawing, all webbing shall be measured and cut while substantially free of tension. Rolls of tightly wound nylon webbing should be unwound, and the webbing allowed to relax a minimum of 12 hours prior to use.

#### 3.3.2 Stitches and stitching.

3.3.2.1 Machine stitching. Unless otherwise specified on the drawing, all machine stitching shall be type 301, conforming to FED-STD-751. Thread breaks, bobbin runouts, or two or more consecutive skipped stitches shall be overstitched a minimum of 1 inch beyond ends of each defect, except for type 304 or 308 stitching, which shall be overstitched two or three stitches. Runoff areas shall be restitched to conform to the required stitch pattern. Backstitching is not required when ends of type 301 stitching are turned under in a hem or held down by other stitching. Thread tension shall be maintained so that there will be no loose stitching and the lock will be imbedded in the materials sewed. All thread ends shall be trimmed.

3.3.2.2 Automatic machinery stitching. Stitching patterns produced by automatic machines may be utilized in lieu of those specified, providing the basic design and size of the pattern, the size of the thread, and the number of stitches per inch are as specified on the drawing. A minimum of three tie-in, overlapping, or back stitches shall be used to secure the ends.

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3.3.3 Wax dipping or searing. Unless otherwise specified on the applicable drawing, all exposed ends of cotton webbing shall be dipped a minimum of 1/2 inch in a melted mixture of 50 percent beeswax and 50 percent paraffin, maintained at a temperature of  $180 \pm 20^{\circ}\text{F}$ . All exposed ends of nylon webbing shall be seared smooth, even, and free of sharp edges.

3.4 Marking. Using the marking medium specified in 3.2.1, all marking, unless otherwise noted, shall be in characters 1/2 inch high at the location specified on the applicable drawings.

3.4.1 Identification marking. Unless otherwise specified in the contract, or purchase order, all assemblies shall be marked for identification in accordance with MIL-STD-130.

3.5 Workmanship. The workmanship shall conform to the quality established by this document.

#### 4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by the Government. The Government reserves the right to perform any of the inspections set forth in the document where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements

4.2 Classification of inspection. The inspection requirements specified herein are classified as follows:

1. First article inspection (see 4.3).
2. Quality conformance inspection (see 4.4).

4.3 First article inspection. When a first article is required (see 6.2), it shall be examined for the defects specified in 4.4.3. The presence of any defect shall be cause for rejection of the first article.

4.4 Quality conformance inspection. Unless otherwise specified, sampling for inspection shall be performed in accordance with MIL-STD-105.

4.4.1 Component and material inspection. In accordance with 4.1, components and materials shall be inspected in accordance with all the requirements of referenced documents unless otherwise excluded, amended, modified, or qualified in this document or applicable purchase document.

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4.4.2 In-process inspection. Inspection shall be performed at appropriate stages of fabrication to determine conformance to the requirements of this documents. The Government reserves the right to exclude from consideration for acceptance any material for which in-process inspection has indicated nonconformance.

4.4.3 End item visual examination. The end item shall be examined for the defects listed in table I. The lot size shall be expressed in units of one end item. The sample unit shall be on end item. The inspection level shall be II and the acceptable quality level (AQL), expressed in terms of defects per hundred units, shall be 1.5 for major defect, and 10.0 for total (major and minor combined) defects.

TABLE I. Visual defects

Examine	Defect	Classification	
		Major	Minor
Materials	Color not as specified		X
Construction and assembly	Component missing, not assembled or joined as specified	X	
Cleanness	Dirt, grease, oil, or other foreign matter		X
	Thread ends not trimmed throughout		X
Stitches and stitching	Not type of stitch specified	X	
	One stitch per inch under or over minimum or maximum specified		X
	Two or more stitches per inch under or over minimum or maximum specified	X	
	Thread breaks, runoffs, or two or more consecutive skips in stitching not overstitched or restitched as specified		X

NOTE: Variation in the number of stitches per inch caused by the operator speeding up the machine and pulling fabric to sew over heavy places, heavy seams, or in turning corners shall be classified as follows:

- (a) Within the major defect classification — minor defect
- (b) Within the minor defect classification — no defect

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TABLE I. Visual defects (cont'd)

Examine	Defect	Classification	
		Major	Minor
Stitches and stitching (cont'd)	Loose tension, resulting' in loose top or bobbin thread; or tight tension, resulting in tightness or puckering of material at stitch line		X
	Any row of stitching missing	X	
	Needle chews	X	
	Stitching pattern not as specified	X	
	Stitch margin or gage not as specified		X
	Ends of stitching not secured as specified (except where turned under in a hem or held down by other stitching)		X
Webbing, duck, tape or thread (as applicable)	Exposed ends not waxed or seared as specified		X
	Cut, tear, hole, abrasion marks, or thin weak place	X	
	Edge beaded or corded		X
	Not type or size specified	X	
Hardware	Component fractured or malformed protective finish omitted; corroded areas; burrs or sharp edges	X	
Identification marking	Omitted, illegible, incorrect, wrong color, improper location, or not as specified		X

4.4.4 End item dimensional examination. The end item shall be examined for conformance to dimensions specified in applicable specifications or drawings. Any dimension not within the specified tolerance shall be classified a defect. The lot size shall be expressed in units of one end item. The sample unit shall be one end item. The inspection level shall be S-3 and the AQL, expressed in terms of defects per hundred units, shall be 6.5.

4.4.5 Packaging inspection. An examination shall be made to determine that preservation, packing, and marking comply with section 5 requirements. Defects shall be scored in accordance with table II. The sample unit shall be one shipping container fully packaged except that it need not be closed. Examination for closure defects listed in table 11 shall be made on shipping containers fully packaged. The

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lot size shall be the number of containers in the end item inspection lot. The inspection level shall be S-2 and the AQL, expressed in terms of defects per hundred units, shall be 2.5.

TABLE II. Packaging defects

Examine	Defect
Marking (interior and exterior container)	Omitted; incorrect; illegible; of improper size, location, sequence, or method of application.
Materials	Component missing, damaged, defective, or not as specified.
Workmanship	Inadequate application of components such as improper application of barrier material, insecurely tied bundles, improper taping. Bulged or distorted container.
Contents	Number of adapter, bridle, or strap assemblies per bundle is more or less than specified. <u>1/</u>
Weight	Weight of contents of shipping container exceeds maximum specified.

1/ Two bundles from each shipping container in the sample shall be examined for this defect.

## 5. PACKAGING

5.1 Preservaiton. Preservation shall be level A or Commercial, as specified (see 6.2).

5.1.1 Level A. Each adapter, bridle, or strap shall be coiled or lap folded and securely tied twine conforming to type I or II, ply as applicable of T-T-871.

5.1.2 Commercial. Each adapter, bridle, or strap shall be preserved in accordance with MIL-STD-1188.

5.2 Packing. Packing shall be level A, B, or Commercial, as specified (see 6.2).

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5.2.1 Level A packing. Adapters, bridles, or straps, preserved as specified in 5.1, shall be packed in a snug-fitting shipping container conforming to style RSC-L, grade V2s of PPP-B-636; or overseas type, style A or I, type 2 load of PPP-B-601, as specified (see 6.2). The inside of each fiberboard shipping container shall be fitted with a box liner conforming to type C1?, class weather-resistant, variety DW, grade V15c of PPP-B-636. Each fiberboard container shall have the contents completely covered on the top and bottom with a sheet of 30-pound minimum basis weight kraft paper conforming to type I, grade B of UU-P-268. Each fiberboard container shall be closed in accordance with method III, waterproofed in accordance with method V, and reinforced as specified in the appendix of PPP-B-636. Each wood container shall be waterproofed with a sealed case liner conforming to type I or II, grade C of MIL-L-10547; and closed and reinforced in accordance with the appendix of PPP-B-601. The weight of the contents of each shipping container shall not exceed 65-pounds for fiberboard containers nor 150 pounds for wood containers.

5.2.2 Level B packing. Adapters, bridles, or straps, preserved as specified in 5.1, shall be packed in a snug-fitting fiberboard shipping container conforming to style RSC-L, type CF (variety SW) or SF, class domestic, grade 275 of PPP-B-636. The inside of each container shall be fitted with a box liner conforming to type CF, class domestics variety DW, grade 275 of PPP-B-636. Each container shall have the contents completely covered on the top and bottom with a sheet of 30-pound minimum basis weight kraft paper conforming to type I, grade B of UU-P-268. Each shipping container shall be closed in accordance with method II as specified in the appendix of PPP-B-636. The weight of the contents of each shipping container shall not exceed 65 pounds.

5.2.2.1 Weather-resistant fiberboard containers. When specified (see 6.2), the fiberboard shipping container shall be a grade V3c, V3s, or V4s fiberboard box fabricated in accordance with PPP-B-636 and closed in accordance with method III as specified in the appendix of the container specification.

5.2.3 Commercial. Adapters, bridles, or straps, preserved as specified in 5.1, shall be packed in accordance with MIL-STD-1188.

5.3 Marking. In addition to any special marking required by the contract or purchase order, interior packs and shipping containers shall be marked in accordance with MIL-STD-129 or MIL-STD-1188, as applicable. Each interior pack shall have attached a manila colored paper shipping tag for the identification information.

## 6. NOTES

6.1 Intended use. The webbing assemblies covered by this document consisting of adapters, bridles, or straps, usually equipped with hardware, are used to rig, lash or restrain miscellaneous equipment or supplies to be airdropped.



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6.2 Ordering data. Acquisition documents should specify the following:

- (a) Title, number and date of this document.
- (b) Webbing assembly required.
- (c) Stock number.
- (d) When a first article is required (see 3.1, 4.3, and 6.4).
- (e) Selection of applicable levels of preservation and packing (see 5.1 and 5.2).
- (f) When weather-resistant grade fiberboard shipping containers are required for level B packing (see 5.2.2.1).
- (g) Type of shipping container desired for level A packing (see 5.2.1).

6.3 Standard samples. For access to standard shade samples, address the contracting activity issuing the invitation for bids.

6.4 First article. When a first article sample is required, it shall be inspected and approved under the appropriate provisions of DAR 7-104.55. The first article should be a preproduction sample. The first article should consist of one unit. The contracting officer should include specific instructions in all acquisition documents regarding arrangements for inspection and approval of the first article.

6.5 Recycled material. It is encouraged that recycled material be used, when practical, as long as it meets the requirements of the document (see 3.2).

6.6 Changes from previous issue. Asterisks are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:

Army - GL  
Navy - AS  
Air Force - 99

Preparing activity:

Army - GL  
Project No. 1670-0507

Review activity:

Army - AV

User activities:

Navy - MC  
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