

MIL-G-43411D  
17 March 1982  
SUPERSEDING  
MIL-G-43411C  
26 August 1977

## MILITARY SPECIFICATION

### GLOVES, BARBED TAPE - WIRE HANDLERS'

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

#### 1. SCOPE

1.1 Scope. This specification covers the requirements for one type and size of leather glove stitched with thread and steel staples.

#### 2. APPLICABLE DOCUMENTS

2.1 Issues of documents. The following documents, of the issue in effect on date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein:

#### SPECIFICATIONS

##### FEDERAL

V-T-285	- Thread, Polyester
KK-L-2004	- Leather, Cattlehide, Deerskin and Horsehide, Chrome Tanned
UU-P-268	- Paper, Kraft Wrapping
CCC-C-419	- Cloth, Duck Cotton, Unbleached, Plied Yarns, (Army and Numbered)
CCC-C-458	- Cloth, Flannel, Cotton
DDD-L-20	- Label; for Clothing, Equipage, and Tentage (General Use)

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: U.S. 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.

FSC 8415

MIL-G-43411D

- DDD-B-1199 - Binding, Textile, Cotton, Bias-Cut
- PPP-B-636 - Boxes, Shipping, Fiberboard

STANDARDS

FEDERAL

- FED-STD-191 - Textile Test Methods
- FED-STD-311 - Leather; Methods of Sampling and Testing
- 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-147 - Palletized Unit Loads for 40" x 48" Pallets

(Copies of specifications, standards, drawings and publications required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

2.2 Other publications. The following documents form a part of this specification to the extent specified herein. Unless otherwise indicated, the issue in effect on date of invitation for bids or request for proposal shall apply:

NATIONAL MOTOR FREIGHT TRAFFIC ASSOCIATION, INC., AGENT

National Motor Freight Classification

(Application for copies should be addressed to the American Trucking Associations, Inc., Traffic Department, 1616 P Street, N.W., Washington, DC 20036.)

UNIFORM CLASSIFICATION COMMITTEE, AGENT

Uniform Freight Classification

(Application for copies should be addressed to the Uniform Classification Committee, Room 1106, 222 South Riverside Plaza, Chicago, IL 60606.)

MIL-G-43411D

### 3 REQUIREMENTS

3.1 Guide samples. Guide samples are furnished solely for guidance and information to the contractor (see 6.3). Variations from this specification may appear in the sample, in which case this specification shall govern.

#### 3.2 Materials.

3.2.1 Leather, cattlehide (split). The leather shall be chrome tanned, flesh split cattlehide conforming to type VIII of KK-L-2004.

3.2.1.1 Thickness. The thickness of leather glove parts shall be not less than 3 ounces (1.2 mm) nor more than 4 ounces (1.6 mm) except for gauntlet where leather with a minimum thickness of 2-1/2 ounces (0.9 mm) may be used. Note: An ounce is equivalent in thickness to 1/64 inch (0.4 mm). Thickness determinations shall be conducted as specified in 4.2.2.2.

3.2.1.2 Color. The color of all leather components shall be cream or light gray. All leather components used in each pair of gloves shall be of the same color.

3.2.2 Canton flannel (cotton). The lining for the palm shall be unbleached flannel conforming to type IV, class 2 of CCC-C-458.

3.2.3 Gauntlet lining. The gauntlet lining shall be either unbleached cotton duck, conforming to type I, number 8, hard texture, of CCC-C-419 or unbleached cotton fabric composed of two thicknesses securely laminated together. The laminated fabric shall be composed of a cotton twill face fabric weighing not less than 3.7 ounces per square yard (125.4 g/m<sup>2</sup>) and a plain weave cotton backing fabric weighing not less than 1.7 ounces per square yard (57.6 g/m<sup>2</sup>). The finished fabric (laminated) shall contain not less than 14 ounces (397 g) of natural rubber, synthetic rubber, or synthetic resin and weigh not less than 19.4 ounces per square yard (657.7 g/m<sup>2</sup>). Fabric tests shall be conducted as specified in 4.2.1.

- \* 3.2.3.1 Alternate gauntlet material. As an alternate to the material specified in 3.2.3, the gauntlet may consist of two fabrics laminated together with synthetic resin, synthetic rubber or natural rubber. Each fabric shall be plain weave construction of cotton or spun polyester yarns. Each fabric shall weigh not less than two ounces per square yard when tested as specified in 4.2.1. The finished laminated fabric shall conform to the following requirements when tested as specified in 4.2.1.

MIL-G-43411D

<u>Characteristic</u>	<u>Requirement</u>
Overall weight, oz/sq yd	
Minimum	16.0
Maximum	19.0
Breaking strength lbs (min)	
Warp direction	100
Filling direction	120
Tearing strength grams (min)	
Warp direction	2200
Filling direction	2600
Stiffness, centimeters	
(Warp direction only)	
Minimum	16.0
Maximum	20.0
Weight of resin or rubber, oz/sq yd (min)	12.0

3.2.4 Binding. The binding shall be 1 inch (25.4 mm) width bias-cut tape conforming to type I, class 1, bleached, or class 2, dyed of DDD-B-1199. Also acceptable will be unbleached bias-cut binding conforming to type I of DDD-B-1199 except that the minimum yarns per inch (/cm) requirement shall apply only to the sum of the warp yarns per inch (/cm) and filling yarns per inch (/cm). When dyed binding is used, the color shall approximate the color of the leather. The colorfastness requirements of DDD-B-1199 shall not apply.

3.2.5 Thread, polyester. The thread for stitching shall be polyester thread, natural color, size No. FF, conforming to type I, class 1, subclass A of V-T-285.

3.2.6 Staples, wire steel. The staples for stitching and reinforcement shall be formed of flat steel wire, having a corrosion-resistant finish. The finished dimensions of the staples shall be as shown in table I.

MIL-G-43411D

TABLE I. Staples (finished dimensions)

Thickness of staple	Thickness inches(mm) min	Width inches(mm) min	Length of crown inches(mm) min	Length of legs
Stitching	0.029 (0.74)	0.040 (1.01)	0.250 (6.40)	To clinch properly <u>1/</u>
Reinforcement	0.022 (0.56)	0.078 (1.98)	0.250 (6.40)	To clinch properly <u>1/</u>
Fourchette joining	0.024 (0.61)	0.060 (1.52)	0.250 (6.40)	To clinch properly <u>1/</u>

1/ The leg length of the formed staple shall be such as to insure a clinch of 1/16 inch (2 mm) minimum or 1/8 inch (3 mm) maximum after the staple has penetrated the leather being sewed.

3.3 Design. The gloves shall be all leather of Clute pattern, four finger and thumb design with lined gauntlet and lined palm. The palm shall be one piece which includes the four fingers. The one piece palm shall include the front and back of the index finger and the front of the 2nd, 3rd, and 4th fingers and thumb reinforcement extension patch. There shall be three fourchettes to form the backs of the 2nd, 3rd, and 4th fingers. Thumb shall be butterfly, of two pieces, and staple stitched. Thumb to palm seam shall be covered with a strap of leather, stapled with a double row of reinforcement staples. Two reinforcing patches shall be stapled to the thumb (one patch is an extension of the palm, the other is a separate part). There shall be twelve 1/4 inch  $\pm$  1/16 (6 mm  $\pm$  2 mm) width strips of leather stapled to the palm side extending from the finger tips and crotches, along the entire exposed length area to the thumb, or to wrist seam, as applicable. The palm side shall be lined from finger tips and thumb tip to gauntlet joining seam. The gauntlet shall be attached to hand portion with one row of polyester thread stitching and one row of stitching staples. The gauntlet shall be bound on the top edge with binding. The closing seam shall be staple stitched.

3.4 Patterns. Standard patterns will be furnished by the Government. The standard patterns shall not be altered in any way and are to be used as a guide for making the contractor's working patterns or dies. The working patterns or dies shall be identical to the standard patterns.

MIL-G-43411D

3.4.1 Pattern parts. The pattern parts for the leather and the lining components shall be as indicated below. No pattern is furnished for the 1/4 inch (6 mm) wide reinforcement strips.

<u>Leather component</u>	<u>Parts per glove</u>	<u>Lining component</u>	<u>Parts per glove</u>
Palm	1	Palm	1
Gauntlet back	1	Gauntlet back	1
Gauntlet front	1	Gauntlet front	1
Thumb strap	1	Thumb	1
Thumb patch	1		
Small finger	1		
Ring finger	1		
Large finger	1		
Thumb	2		

3.5 Figure. Figure 1 is furnished for information only. To the extent of any inconsistencies between the written specification and the figure, the written specification shall govern.

3.6 Identification label. Each glove shall have an identification label conforming to type III or IV, class 5 of DDD-L-20 and the label shall show fastness to laundering as specified therein.

### 3.7 Construction.

3.7.1 Stitches, seams and stitchings. Stitches, seams, and stitching types specified in this specification shall conform to FED-STD-751. All stitching, except metal staple stitching, shall conform to type 301. Thread tension shall be maintained so there will be no loose tension resulting in a loose bobbin or top thread or excessively tight stitching resulting in puckering of the materials sewn. The stitches per inch (/cm) for thread stitching shall be 6 to 8 (2.5 to 3 cm). Ends of all seams and stitching produced with 301 stitch type, when not caught by staple or stitching shall be backtacked not less than 1/2 inch (13 mm). Thread breaks shall be secured by stitching each side of the break not less than 1/2 inch (13 mm).

3.7.2 Repairs of type 301 stitching. Repairs of stitching shall be as follows:

a. When thread breaks or bobbin run-outs occur during sewing, the stitching shall be repaired by restarting the stitching a minimum of 1/2 inch (13 mm) back of the end of stitching.

MIL-G-43411D

b. Thread breaks, two or more consecutive skipped stitches or runoffs noted during the inspection of the item (in-process or end item) shall be repaired by over stitching. The stitching shall start a minimum of 1/2 inch (13 mm) back of the defective area, continue over the defective area and continue a minimum of 1/2 inch (13 mm) beyond the defective area onto the existing stitching. Loose or tight stitching shall be repaired by removing the defective stitching without damaging the material and restitching in the required manner. 1/

1/ When making the above repairs, the ends of stitching are not required to be backstitched.

3.7.3 Manufacturing operations requirements. The gloves shall be manufactured in accordance with the operation requirements as shown below. The contractor is not required to follow the exact sequence of operations.

#### 3.7.3.1 Cutting.

3.7.3.1.1 Leather components. The glove and reinforcement leather parts shall be clicker cut. All leather shall be cut with the length direction (wrist to finger tip direction) in the butt to head direction of the leather.

3.7.3.1.2 Fabric components. All fabric components shall be cut with the cuff to finger tip direction of component in warp direction.

3.7.3.2 Staple stitching. Stitching type staples shall be used to close the glove and to attach the gauntlet to the palm and to the back of glove. Fourchettes type staples shall be used to join the three fourchettes together and the index finger to fourchette. Reinforcement type staples shall be used for all other stapling operations. Unless otherwise specified (see 3.7.3.4, 3.7.3.7 and 3.7.3.10) length dimension of the crown of the staple shall run in the length direction of the seam. The staples used to close the glove, join fourchettes, and join fourchette to index finger shall clinch on the outside back of glove. All other staples shall clinch inside the glove. Unless otherwise specified (3.7.3.6) the distance between the crown of the staple and edge of leather shall be 1/16 to 1/8 inch (2 to 3 mm). Unless otherwise specified (3.7.3.7) the distance between the staples shall be 1/8 to 1/4 inch (3 to 6 mm).

3.7.3.3 Lining (palm section). The inside of palm, face of thumb and fingers shall be lined with canton flannel specified in 3.2.2. The flannel shall be securely caught in entire length of closing side seam, the gauntlet joining seam, thumb to palm joining seam and at the tips of fingers and thumb.

MIL-G-43411D

3.7.3.4 Palm-reinforcement strips (see Figure 1). The palm of each glove shall be reinforced with 12 strips of leather, each  $1/4 + 1/16$  inch ( $6 + 2$  mm) wide, which shall be attached with reinforcement type metal staples placed along the entire length of the strips (the crown length dimension shall be perpendicular to the length dimension of strip). The strips shall run the entire length of the palm extending to within  $3/16 + 1/16$  inch ( $5 + 2$  mm) of the staple stitching around fingertips and crotches. The staple (on each strip) nearest the fingertips or crotches shall be located  $1/4 + 1/8$  inch ( $6 + 3$  mm) from the stitching around fingertips or crotches. The staples shall go through the leather and lining before being clinched.

3.7.3.5 Join fourchettes. Join small finger to ring finger, ring finger to large finger, and large finger to back of index finger with fourchette type joining staples. The seam shall extend from finger crotches to end of fourchettes using outseam construction.

\* 3.7.3.6 Gauntlet. The gauntlet shall be two pieces of leather. Both pieces shall be lined with the fabric specified in 3.2.3 or 3.2.3.1. The side seam of gauntlet on thumb side shall be overlapped and stitched with staples, LSa-1 seam type,  $1/8$  to  $3/16$  inch (3 to 5 mm) gage. The top raw edge of gauntlet shall be bound with bias binding (see 3.2.4). The raw edges of the binding shall be turned in and caught within the binding and shall be stitched, catching the lining with polyester thread, seam type BSc-1, stitch type 301. The leather gauntlet and lining shall be attached to hand portion of glove across wrist with one row of polyester thread stitching  $1/8$  to  $3/16$  inch (3 to 5 mm) from edge of leather and one row of stitching type staples  $1/8$  to  $3/16$  inch (3 to 5 mm) from the thread stitching. The seam type shall be LSa-2 with the gauntlet overlapping the palm and fourchettes  $1/2$  to  $5/8$  inch (13 to 16 mm).

3.7.3.7 Attach reinforcement patch to front thumb piece. The large reinforcement patch shall be placed on the front thumb piece (piece nearest palm) so there is a  $3/8 + 1/16$  inch ( $10 + 2$  mm) margin between edge of thumb nearest palm and edge of reinforcement patch. The margin shall be maintained from thumb crotch to end of reinforcement patch nearest wrist. Attach reinforcement patch with not less than 38 staples randomly distributed as shown in Figure 1. The staples shall catch the lining when clinched.

3.7.3.8 Attach front thumb piece. From thumb crotch to end of palm, lap front thumb piece  $1/4$  to  $3/8$  inch (6 to 10 mm) over palm and staple together with 3 staples.

3.7.3.9 Attach back thumb piece. From thumb crotch to end of index finger, lap back thumb piece  $1/4$  to  $3/8$  inch (6 to 10 mm) over back of index finger and staple together with 3 staples.



MIL-G-43411D

3.7.3.10 Join front thumb piece, back thumb piece and palm reinforcement extension patch. Beginning at thumb crotch and continuing for a distance of approximately 2 inches (51 mm) toward tip of thumb, lap front thumb piece 1/16 to 1/8 inch (2 to 3 mm) over back thumb piece. Center palm reinforcement extension patch over the lapped thumb pieces with equal portions of the patch overlapping the front and back thumb pieces. With the three pieces in position, staple them together with 7 reinforcement staples. One leg of each staple shall pass through the reinforcement piece and back thumb piece, the other leg shall pass through the front reinforcement piece, and front thumb piece with the crown of the staple positioned across the length of seam. The first staple shall be approximately 1/2 inch (13 mm) from thumb crotch. Attach the edges of the reinforcement extension patch to front and back thumb pieces with 8 to 10 reinforcement staples.

3.7.3.11 Attach thumb strap. Beginning at wrist, center thumb strap over the seam joining the front of thumb to palm and the seam joining back of thumb to index finger. Using reinforcement type staples, join one edge of thumb strap to front of thumb, to reinforcement extension patch and back of thumb, then join other edge of strap to palm to reinforcement extension patch and back of index finger.

3.7.3.12 Closing. The hand portion shall be closed by outseam stitching with stitching type staples using seam type SSa-1, 1/8 to 3/16 inch (3 to 5 mm) from edge.

3.7.3.13 Marking (identification label). The identification label (see 3.6) shall be applied to the inside back of each gauntlet.

3.8 Measurements. The finished gloves shall conform to the measurements shown in table II.

TABLE II. Finished measurements

Location	Inches (mm)	Tolerance	
		(inches)	(mm)
Overall length	14 (356)	$\pm$ 1/2	(13)
Length (from tip of index finger to thumb crotch)	4-5/8 (118)	$\pm$ 1/8	(3)
Length (From tip of second finger to bottom of gauntlet at wrist)	8-7/8 (225)	$\pm$ 1/4	(6)
Length of gauntlet (from wrist to top of gauntlet)	5 (127)	$\pm$ 1/4	(6)
Width (Across palm at thumb crotch)	5-1/2 (139)	$\pm$ 1/8	(3)
Width of gauntlet at opening	8-1/2 (216)	$\pm$ 1/4	(6)

MIL-G-43411D

3.9 Forming. The finished gloves shall be boarded on heated forms of correct size and all seams shall be worked out and smooth.

3.10 Pairing. The gloves shall be matched, paired and tacked together with thread or non-corrosive soft metal staples. Tacking shall be done with a non-corrosive soft metal staple or not less than two stitches using a cord thread just below the gauntlet opening, approximately 1/2 inch (13 mm) from the closing seam which will permit the pair to be pulled apart without tearing the leather.

3.11 Replacement of defective components. During the spreading, cutting and manufacturing process, components having material defects or damages that are classified as defects in 4.2.2.1 and 4.2.2.2 shall be removed from production and replaced with nondefective and properly matched components.

3.12 Workmanship. The finished gloves shall conform to the quality of product established by this specification. Occurrence of defects shall not exceed the applicable acceptable quality levels.

#### 4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract, 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 specification where such inspections are deemed necessary to assure supplies and services conform to prescribed requirements.

4.1.1 Certificate of compliance. The contractor shall submit a certificate of compliance stating that the staples specified in 3.2.6 are steel and have a corrosion-resistant finish. Where certificates of compliance are submitted, the Government reserves the right to check test such items to determine the validity of the certification.

4.2 Quality conformance inspection. Sampling for inspection shall be in accordance with the provisions of MIL-STD-105 except where otherwise indicated hereinafter.

- \* 4.2.1 Component and material inspection. In accordance with 4.1 above, components and materials shall be inspected in accordance with all the requirements of referenced specifications, drawings and standards unless otherwise excluded, amended, modified or qualified in this specification or applicable purchase documents. In addition, testing shall be performed on fabric components listed in

MIL-G-43411D

table III or IIIa as applicable for the characteristics shown. The test methods listed in table III and IIIa shall be in accordance with FED-STD-191, wherever applicable. Testing for all requirements listed in table III are applicable to the sample unit. The sample unit shall be 1 linear yard (0.91 m) full width of roll. The sample size shall be as follows:

<u>Lot size (yards)</u>	<u>Sample size</u>
800 or less	2
801 up to, and including 22,000	3
22,001 and over	5

The lot shall be unacceptable if one or more sample units fail to meet any requirements.

TABLE III. Fabric component tests

<u>Component</u>	<u>Characteristic</u>	<u>Requirement reference</u>	<u>Test method</u>
Face fabric	Material identification	3.2.3	1200 <u>1/</u>
	weight (oz. per sq. yd.)	3.2.3	5041 <u>1/</u>
	(g/m <sup>2</sup> )		
	Weave	3.2.3	Visual
Backing fabric	Material identification	3.2.3	1200 <u>1/</u>
	Weight (oz. per sq. yd.)	3.2.3	5041 <u>1/</u>
	(g/m <sup>2</sup> )		
	Weave	3.2.3	Visual
Finished fabric	Weight (oz. per sq. yd.)	3.2.3	5041
	(g/m <sup>2</sup> )		

1/ Unless otherwise specified, a certificate of compliance shall be submitted and will be acceptable for the stated requirements.

MIL-G-43411D

\* TABLE IIIa. Alternate fabric test

Component	Characteristic	Requirement paragraph	Test method
Cotton or polyester fabric (before lamination)	Material identification	3.2.3.1	1200 <u>1/</u>
	Weight (oz per sq yd)	3.2.3.1	5041
	Weave	3.2.3.1	Visual
Finished laminated fabric	Total weight (oz per sq yd)	3.2.3.1	5041
	Breaking strength	3.2.3.1	5100
	Tearing strength	3.2.3.1	5132
	Stiffness	3.2.3.1	5204
Rubber or resin material	Material identification	3.2.3.1	<u>1/</u>
	Weight (oz per sq yd)	3.2.3.1	<u>2/</u>

1/ Unless otherwise specified a certificate of compliance shall be submitted and will be acceptable for the stated requirement.

2/ The weight of the rubber or resin shall be determined by subtracting the weight of the two fabrics obtained before they are laminated from the overall weight of the fabric obtained after lamination.

4.2.2 Examination of the end item. The defects found during examination of the gloves shall be classified in accordance with 4.2.2.1 and 4.2.2.2. The applicable inspection levels and acceptable quality levels shall be as indicated in 4.2.2.3. The sample unit for this examination shall be one glove and selection of the sample shall be by pairs. Defects for pairing shall be classified as a single defect. The lot size shall be expressed in terms of one glove.

4.2.2.1 Visual examination of gloves. The gloves shall be examined for defects in pairing, color, design, construction, material, workmanship and marking as indicated in table IV.

NOTE: Defects designated by as asterisk shall be scored as major when seriously affecting serviceability, and minor when affecting serviceability, but not seriously.

MIL-G-43411D

TABLE IV. Classification of defects

Examine	Defect	Classification	
		Major	Minor
Pairing	Not properly mated, i.e., two gloves for same hand	X	
	Not tacked together or not tacked together as specified		X
	Wide variation in color in the pair		X
Color	Not as specified		X
	Color not uniform or shaded parts clearly noticeable		X
	All leather components not of same color		X
Design	Characteristic not in accordance with the specified requirements (unless otherwise classified herein)	X	
Cleanness	Spot or stain		X
Material	Hole, cut, tear or rip	X	
	Component not fabricated of specified material	X	
Leather, general	Not split cattlehide		X
Quality of leather	Not soft and pliable	X	
	Hole, (except pinholes) cut or rupture	X	
	Three or more pinholes		X
	Spongy or flanky leather		*
	Brittle or bony area, weak or thin spot, or abraded area	X	
	Open vein		*
	Any scar such as brand, healed grub mark or other healed damage		*
Gauntlet	Hole, cut or tear	X	
	Multiple floats, loose ends, smashes, or slubs		X
	Broken or missing end, or pick		X
Canton flannel	Hole, cut or tear	X	
	Multiple floats, loose ends, smashes or slubs		X
	Not napped		X

MIL-G-43411D

TABLE IV. Classification of defects (cont'd)

Examine	Defect	Classification	
		Major	Minor
Metal staples	Missing	X	
	Not clinched securely	X	
	Sharp burr or metal silver		X
	Not specified size	X	
Staples (metal) stitching	Not clinched	X	
	Not spaced as specified		*
	Not clinched on inside of glove or on back of glove (as applicable)	X	
	Length of clinch less than specified		X
	Margin not as specified		*
Construction and workmanship	Component or operation omitted	X	
General (applicable to all components unless otherwise indicated herein)	Component misplaced not serving purpose intended	X	
	Component missing	X	
	Component or assembly damaged	X	
	Component not securely affixed, e.g. gauntlet loosely attached to hand portion of glove	X	
	Workmanship damage, e.g. scissors or knife cut	X	
	Mend in leather, e.g. patch	X	
	Needle chew	X	
	Open seam	X	
	NOTE: A seam shall be considered open when one or more stitches joining a seam are broken or when two or more skipped stitches or run-offs occur.		
Seams and stitching (thread)	Not specified seam type	X	
	Repair of seam not as specified		X
	Not specified stitch type	X	
	Puckered seam		X

MIL-G-43411D

TABLE IV. Classification of defects (cont'd)

Examine	Defect	Classification	
		Major	Minor
Seams and stitching (thread) (cont'd)	Row of stitching, omitted	X	
	Loose stitch tension resulting in a loosely secured seam	X	
	Tight stitch tension resulting in cutting of leather or breaking of stitches when normal pull is applied	X	
	Ends of stitching, not backstitched as specified		X
	Gage or margin of stitching irregular or not as specified		*
	Part caught in unrelated row of stitching	X	
	One or two stitches per inch less than specified		X
	Three or more stitches per inch or more stitches per inch less than specified	X	
	More than the specified maximum number of stitches per inch, damaging leather	X	
	More than the specified maximum number of stitches per inch, not damaging leather		X
Assembly detail	Glove not neatly laid off		X
	Not specified seam construction	X	
	Finger distorted or twisted affecting comfort of wearer	X	
	Thread ends not trimmed throughout glove		X
	Gauntlet not lined	X	
	Inside of palm, face of fingers and thumb not lined	X	
	Leather strips starting at finger tips or crotch not positioned from staple stitching within specified limits	X	
Marking			
	Missing, incomplete, incorrect, not legible, not specified size, not in proper location, or not accomplished in specified manner		X

MIL-G-43411D

4.2.2.2 Dimensional examination. The gloves shall be examined for dimensional defects including thickness (weight) of leather. Any dimension that is not within the established tolerance shall be classified a defect. Leather thickness shall be measured in accordance with Method 1011 of FED-STD-311.

4.2.2.3 Inspection levels and acceptable quality levels. The inspection levels and acceptable quality levels expressed in defects per hundred units shall be as follows:

<u>Examination</u>	<u>Inspection level</u>	<u>AQL</u>	
		<u>Major</u>	<u>Minor</u>
4.2.2.1 Visual examination	II	2.5	6.5
4.2.2.2 Dimensional examination	S-3	-	4.0

4.2.3 Packaging inspection. An examination shall be made to determine that preservation-packaging, packing and marking comply with the section 5 requirements. Defects shall be scored in accordance with the list below. The sample unit shall be one shipping container fully prepared for delivery with the exception that it need not be closed. Examination for closure defects listed below shall be made on shipping containers fully prepared for delivery. The lot size shall be the number of shipping containers in the end item inspection lot. The inspection level shall be S-2 and the AQL shall be 2.5 defects per hundred units.

<u>Examine</u>	<u>Defect</u>
Marking (exterior or interior)	Ommitted; incorrect; illegible; of improper size, location sequence, or method of application.
Materials	Component missing, damaged or not as specified.
Workmanship	Inadequate application of component, such as incomplete closure of container flap, loose strapping, improper taping or inadequate sampling.
Content	Bulged or distorted container. Number of bundles per shipping container is more or less than required. Number per bundle is more or less than required. <u>1/</u>

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



MIL-G-43411D

4.2.4 Examination for palletization. An examination shall be made to determine that the palletization complies with the section 5 requirements. Defects shall be scored in accordance with the list below. The sample unit shall be one palletized unit load fully prepared for delivery. The lot size shall be the number of palletized unit loads in the end item inspection lot. The inspection level shall be S-1 and the AQL shall be 6.5 defects per hundred units.

<u>Examine</u>	<u>Defect</u>
Finished dimension	Length, width, or height exceeds specified maximum requirements.
Palletization	Not as specified. Pallet pattern not as specified. Interlocking of loads not as specified. Load not bonded with required straps as specified.
Weight	Exceeds maximum load limits.
Marking	Omitted; incorrect; illegible; of improper size, location, sequence or method of application.

## 5. PACKAGING

5.1 Preservation-packaging. Preservation-packaging shall be level A or C as specified (see 6.2).

5.1.1 Level A. Five pairs of gloves shall be evenly stacked in a bundle. Each pair of gloves shall be alternately reversed finger tip to cuff. Each bundle of gloves shall be securely tied with cotton tape or twine.

5.1.2 Level C. Gloves shall be packaged to afford adequate protection against physical damage during shipment from the supply source to the first receiving activity. The package and the quantity per package shall be the same as normally used by the contractor for retail distribution.

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

5.2.1 Level A packing. Forty pairs of gloves, preserved-packaged as specified in 5.1, shall be packed in a fiberboard shipping container conforming to style RSC-L, grade V2s of PPP-B-636. The inside of each fiberboard container shall be fitted with a taped box liner conforming to type CF, class weather-resistant, variety DW, grade V15c of PPP-B-636. Gloves bundled as specified in 5.1.1 shall be packed flat two in length, two in width and two in depth within a shipping container. Inside dimensions of each shipping container shall approximate 28 inches (710 mm) in length, 17 inches (430 mm) in width and 8-1/2 inches (220 mm) in depth. Approximate

MIL-G-43411D

dimensions are furnished as a guide only. Each container shall have the contents completely covered on the top and bottom with a sheet of 30-pound minimum basis weight ( $49 \text{ g/m}^2$ ) kraft paper conforming to type I, grade B of UU-P-268. Each 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 except that inspection shall be in accordance with 4.2.3.

5.2.2 Level B packing. Forty pairs of gloves, preserved-packaged as specified in 5.1, shall be packed in a 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 fiberboard container shall be fitted with a taped box liner conforming to type CF, class domestic, variety DW, grade 275 of PPP-B-636. Gloves bundled as specified in 5.1.1, shall be packed flat two in length, two in width and two in depth within a shipping container. Inside dimensions of each shipping container shall approximate 28 inches (710 mm) in length, 17 inches (430 mm) in width and 8-1/2 inches (220 mm) in depth. Approximate dimensions are furnished as a guide only: Each container shall have the contents completely covered on the top and bottom with a sheet of 30-pound minimum basis weight ( $49 \text{ g/m}^2$ ) kraft paper conforming to type I, grade B of UU-P-268. Each container shall be closed in accordance with method II as specified in the appendix of the container specification except that inspection shall be in accordance with 4.2.3.

5.2.2.1 Weather-resistant fiberboard containers. When specified (see 6.2), the shipping container shall be a grade V3c or V3s fiberboard box fabricated in accordance with PPP-B-636 and closed in accordance with the appendix of the container specification except that inspection shall be in accordance with 4.2.3.

5.2.3 Level C. Gloves, packaged as specified in 5.1, shall be packed in a manner to insure carrier acceptance and safe delivery at destination at the lowest transportation rate for such supplies. The quantity per shipping container shall be the same as that normally used by the contractor for retail distribution. Containers shall be in accordance with Uniform Freight Classification or National Motor Freight Classification, as applicable.

5.3 Palletization. When specified (see 6.2), gloves packed as specified in 5.2 shall be palletized in accordance with load type I of MIL-STD-147. Each prepared load shall be bonded with primary and secondary straps in accordance with bonding means K and L. Pallet patterns shall be in accordance with the appendix of MIL-STD-147 and the inspection shall be in accordance with 4.2.4. If the container is of a size which does not conform to any of the pallet patterns specified in MIL-STD-147, the pallet pattern used shall first be approved by the contracting officer.

MIL-G-43411D

5.4 Marking. In addition to any special marking required by the contract, shipping containers shall be marked in accordance with MIL-STD-129.

## 6. NOTES

6.1 Intended use. Gloves, leather, barbed tape-wire handlers' are for use in handling barbed tape and barbed wire or similar materials.

6.2 Ordering data. Purchasers should exercise any desired options offered herein and procurement documents should specify the following:

- (a) Title, number and date of this specification.
- (b) Selection of applicable levels of packaging and packing (see 5.1 and 5.2).
- (c) When weather-resistant grade fiberboard shipping containers are required for level B packing (see 5.2.2.1).
- (d) When palletization is required (see 5.3).

6.3 Samples. For access to samples, address the procuring activity issuing the invitation for bids or request for proposal.

6.4 Changes from previous issue. The margins of this specification are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

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### Review activities:

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Navy - MC  
DLA - CT

### User activity:

Navy - YD

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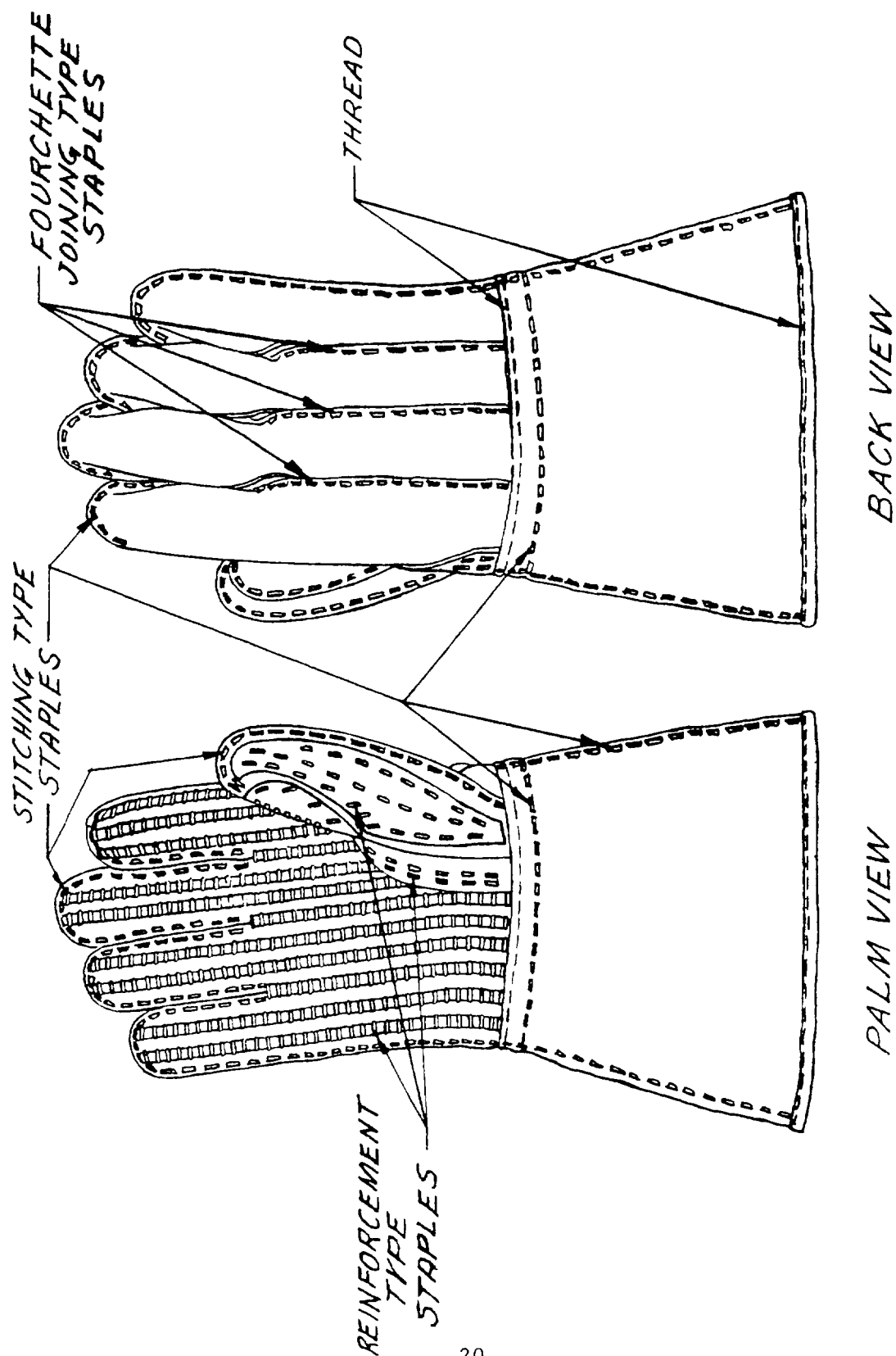


FIG 1, GLOVES, LEATHER; BARBED TAPE-WIRE HANDLERS'

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