INCH-POUND

MIL-F-8975B

AMENDMENT 4

7 DECEMBER 1998

SUPERSEDING

AMENDMENT 3

31 May 1994

MILITARY SPECIFICATION

FASTENER, BLIND, HIGH STRENGTH, INSTALLATION FORMED CORROSION RESISTANT STEEL, HEAT RESISTANT STEEL AND TITANIUM GENERAL SPECIFICATION FOR

This amendment forms a part of Military Specification MIL-F-8975, dated 29 September 1982, and is approved for use by all departments and agencies of the Department of Defense

PAGE 1

Change paragraph 2.1 to the following:

2.1 <u>General.</u> The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

Replace paragraph 2.1.1 with the following:

- 2.2 Government documents.
- 2.2.1 <u>Specifications, standards, and handbooks</u>. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation (see 6.2).

PAGE 2

Change the heading "MILITARY" to read "DEPARTMENT OF DEFENSE"

Remove MIL-I-6866 and title.

Remove MIL-L-8937 and title.

Remove MIL-STD-105 and title.

Remove MIL-STD-1312 and title.

Change the paragraph "(Copies of specifications, standards, drawings...." to:

(Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Defense Automated Printing Service, 700 Robbins Avenue, building 4D, Philadelphia, PA 19111-5094.)

PAGE 2 (Continued)

Change paragraph 2.2 to the following:

2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are those of the documents cited in the solicitation (see 6.2)

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Under American National Standards Institute add the following document:

ANSI/ASQC Z1.4 Sampling Procedures and Tables for Inspection by Attributes

(Copies of American Society for Quality Control documents may be obtained from the American Society for Quality Control, P.O. Box 3005, 611 E. Wisconsin Avenue, Milwaukee, WI 53201-4606.)

Add the following document type after the ANSI documents:

American Society for Testing and Materials

ASTM E1417 Standard Practice for Liquid Penetrant Examination

(Copies of ASTM documents may be obtained from the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.

Add the following document type after the ASTM section:

National Aerospace Standards

NASM 1312 Fastener Test Methods

(Copies of National Aerospace Standards Committee documents may be obtained from the Aerospace Industries Association, 1250 Eye Street NW, Washington, DC 20005.

Replace paragraph 2.3 with the following:

2.4 Order of precedence. In the event of conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

Replace Paragraphs 3.2 and 3.2.1 with the following paragraphs and delete paragraph 3.2.2.

- 3.2. <u>Verification of Compliance</u>. Manufacturers shall verify that fasteners furnished under this specification meet specified requirements (see 4.3).
- 3.2.1 <u>Retention of Verification of Compliance</u>. Manufacturers shall maintain on file certified test reports (see 4.3.1) available for inspection by the procuring activity.

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Paragraph 3.3.7

Replace MIL-L-8937 with MIL-L-46010 and delete the last sentence in its entirety.

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Change paragraph 4.2 to the following:

- 4.2 <u>Classification of inspections</u>. The inspection requirements specified herein are classified as follows:
 - a. Verification of Compliance. (see 4.3).
 - b. Quality Conformance inspection (see 4.4).

Change paragraph 4.3 to the following:

- 4.3 <u>Verification of Compliance</u>. Manufacturers shall verify in writing that fasteners comply with or exceed the following requirements:
 - Type I Preload, sheet take-up, and tension-tension fatigue as specified in paragraphs 3.4.2, 3.4.3, and 3.4.5 respectively.
 - Type II Sheet take-up, tension-tension fatigue, vibration, and metallurgical as specified in paragraphs 3.7.3, 3.7.5, 3.7.6, and 3.7.8 respectively.

Change paragraph 4.3.1 to the following:

4.3.1. <u>Certified Test Reports.</u> Manufacturers shall maintain on file certified test reports indicating that both Verification of Compliance and Quality Conformance tests are met. Each report shall be available to the buyer upon request.

Delete paragraph 4.3.1.1

Delete paragraph 4.3.1.2.

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Delete paragraph 4.3.2

In paragraph 4.4.2, change MIL-STD-105 to ANSI/ASQC Z1.4.

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In paragraph 4.5.2, change MIL-I-6866 to ASTM E1417.

Paragraph 4.5.3

Change the first sentence to the following:

Tensile strength tests and tensile preload tests shall be performed in accordance with NASM 1312, Test Methods 8 and 16 except load deflection curves are not required..

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In paragraph 4.6.2 change MIL-STD-1312 to NASM 1312.

In paragraph 4.6.3 change MIL-STD-1312 to NASM 1312.

In paragraph 4.6.4 change MIL-STD-1312 to NASM 1312.

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In paragraph 4.7.2 change MIL-STD-1312 to NASM 1312.

In paragraph 4.7.3 change MIL-STD-1312 to NASM 1312.

In paragraph 4.7.4 change MIL-STD-1312 to NASM 1312.

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Add 6.2.2:

"6.2.2. <u>Acquisition of rivets manufactured prior to issuance of Amendment 3.</u> Unless otherwise specified, Amendment 3 is applicable to rivets manufactured after 31 May 1994."

Delete Paragraph 6.3.

Renumber paragraphs 6.4, 6.4.1, and 6.4.2 to 6.3, 6.3.1, and 6.3.2 respectively.

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TABLE I. Delete title in its entirety and substitute:

"Tolerances on roundness and concentricity of heads, Type I, Class 1 & 2."

TABLE I, add the 1/8 inch size as follows:

Nominal Diameter	Flush Head	Protruding Head
1/8	.010	.015

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TABLE II: Delete in its entirety and substitute:

TABLE II. <u>Visual inspection tabulation Type I, Class 1 & 2.</u>

	Spindle Position		Blind Head Dia		Collar Position
Nominal Diameter	"B" MAX (See Fig 1)	"C" MAX (See Fig 1)	(Min)		"A" Max (See Fig 1)
	Class 1 and 2	Class 1 and 2	Class 1	Class 2	Class 1 and 2
1/8	.010	.010	.154	N/A	.015 <u>1</u> /
5/32	.010	.010	.195	.235	.017
3/16	.010	.010	.238	.275	.022
1/4	.015	.015	.315	.350	.029
5/16	.020	.015	.373	.410	.037
3/8	.025	.020	.448	.485	.045

1/ Class 1 only

TABLE III: Delete in its entirety and substitute:

TABLE III. Mechanical properties (shear, tensile and tensile preload), Type I, Class 1 & 2.

Nominal Diameter	Single Shear Strength (lbs min)			e Strength os min)	Tensile Preload (lbs min)	
	Class 1	Class 2	Class 1	Class 2	Class 1	Class 2
1/8	1,222	N/A	675	N/A	N/A	N/A
5/32	1,980	1,825	1,150	900	115	90
3/16	2,925	2,690	1,690	1,400	169	140
1/4	5,000	4,650	2,900	2,100	290	210
5/16	7,200	6,675	4,170	3,600	417	360
3/8	10,380	9,550	5,970	5,600	597	560

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TABLE IV: Delete in its entirety and substitute:

TABLE IV. Mechanical properties (tension-tension fatigue, sheet take-up and spindle retention), Type I, Class 1 and 2.

Nominal Diameter	Tension-Tension Fatigue Loads (lbs)			Sheet Take-Up (min)	Spindle Retention (lbs min)	
	Clas	ss 1	Class 2		Class 1 & 2	Class 1 & 2
	High	Low	High	Low		
1/8	N/A	N/A	N/A	N/A	N/A	250 <u>1</u> /
5/32	519	52	405	41	.012	575
3/16	760	76	630	63	.015	845
1/4	1300	130	945	95	.020	1,440
5/16	1875	188	1620	162	.025	2,080
3/8	2690	269	2520	252	.032	2,980

1/ Class 1 only

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Remove Table VI.

PAGES 17-20.

Renumber paragraphs VII, VIII, IX, X, X1, XII, and XIII to VI, VII, VIII, IX, X, XI, and XII respectively.

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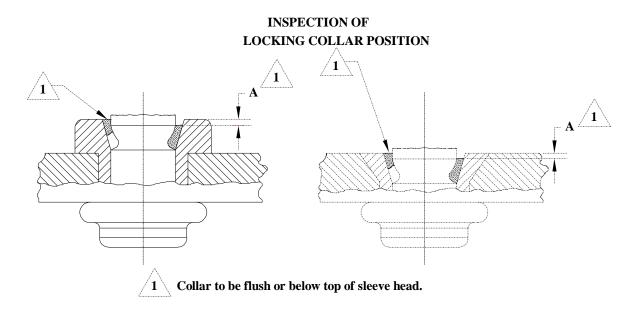
Remove Table XIV.

PAGE 22

Renumber Table XV to table XIII.

PAGE 23

Figure 1. Delete in its entirety and substitute:



INSPECTION OF SPINDLE POSITION

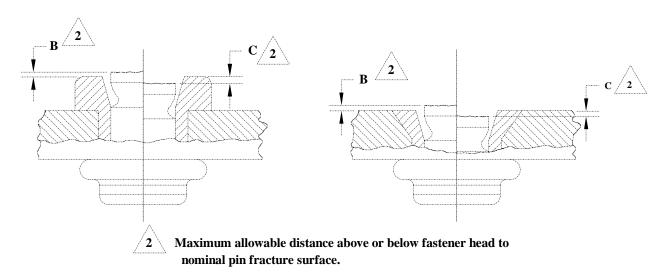


FIGURE 1. Visual inspection illustration, Type I.

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After line 7 add:

"MIL-F-8975/6 and /7 fasteners utilize single action (Non-Shifting) tooling:

MIL-F-8975/6	Nominal Size	Huck Manufacturing Company	Nose Assembly Part
&7	(Diameter)	Tool Part No. or Equal	Number or Equal
		•	•
-05		223	99-680
-05		230	99-680
-05		352	99-680
-05	5/32	206	99-904
-05		206	99-904-2
-05		609-1	99-853
-05		115	99-680
-05		2400	99-680
-06		223	99-681
-06		230	99-681
-06		352	99-681
-06	3/16	206	99-905
-06		206	99-905-2
-06		609-1	99-854
-06		115	99-681
-06		2400	99-681
-08		115	99-951
-08		207	99-906
-08		245	99-591
-08		353	99-591
-08	1/4	354	99-591
-08		610-1	99-679
-08			99-838
			99-865
-08		611-1	99-682
-08		612-1	99-682
			99-838
			99-865
			99-838
			99-865
-08		2500	99-591
-08		4801	99-591
-08		5901	H99-662
-10		116	99-663
-10		245	99-823
	5/16	4801	99-823
		5901	H99-663

NOTE: <u>Changes from previous issue</u>. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:

Army - AV Air Force - 99

Review Activities:

Army - AR, MI Navy - SH, OS Air Force - 82 Preparing Activity: DLA - IS (Project No. 5320-0938)