

INCH-POUND

MIL-P-10971E
AMENDMENT 3
3 April 1992
SUPERSEDING
AMENDMENT 2
30 August 1985

MILITARY SPECIFICATION

PIN, SPRING, TUBULAR (COILED AND SLOTTED)

This amendment forms a part of MIL-P-10971E, dated 23 May 1969, and is approved for use by all Departments and Agencies of the Department of Defense.

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2.1 Under Federal Specifications: Add "PPP-H-1581 - Hardware, (Fasteners and Related Items), Packaging Of".

* Under Federal Specifications Delete: "QQ-C-533 - Copper-Beryllium Alloy Strip".

Under Military Specifications: Delete "MIL-H-3982 - Hardware (Fasteners and Related Items), Packaging Of".

Under Military Standards: Add "MIL-STD-1312-6 - Fasteners, Test Methods, Method 6, Hardness".

* Under Military Standards: Delete "MIL-STD-109 - Quality Assurance Terms and Definitions".

* Under Military Standards: Delete "MS9047 - Pin-Spring, Steel, Phosphate Finish".

* Under Military Standards: Delete "MS9048 - Pin, Spring, Steel, Cadmium Plated".

Under Military Standards: Delete "MS33547 - Pins, Spring, Functional Limitations of a Design Standard".

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2.2 Line 13: Delete and substitute "400 Commonwealth Drive, Warrendale, PA 15096-0001".

* Line 17: Delete and substitute "Aerospace Industries Associations of America, Inc, 1250 Eye Street, N.W. Washington, DC 20005-3922".

Add "American Society of Mechanical Engineers

ANSI/ASME B18.8.2 Taper Pins, Dowel Pins, Straight Pins, Grooved Pins, and Spring Pins (Inch Series).

(Application for copies should be addressed to the American Society of Mechanical Engineers, Inc. 345 East 47th Street New York, NY 10017)

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ASTM

* ASTM B 194 – Copper-Beryllium Alloy, Plate, Sheet, Strip and Rolled Bar”.

ASTM B 565 – Rivets and Cold Heading Wire and Rods, Testing of Aluminum and Aluminum Alloy

(Application for copies should be addressed to ASTM, 1916 Race Street, Philadelphia, PA 19103-1187”).

* 3.1.1 Delete: ”MS9047” and ”MS9048”

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*3.1.3 Delete ”QQ-C-533” and substitute ”ASTM B 194”.

*3.2 Delete ”MS9047” and ”MS9048”.

*3.4.1.2 Delete and substitute ”3.4.1.2 Cadmium Plating – Cadmium plating shall be in accordance with QQ-P-416, Type II, Class 2 or AMS 2400-2 as specified in the applicable specification sheet”.

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*4.1.1 Delete in its entirety

4.2.4 Delete in its entirety

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*4.3.2.1.1 Add: ”except for 0.125 diameter pin and smaller. Pin size 0.125 and smaller shall install satisfactorily in the minimum hole size except the sides of the slot may touch”.

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4.3.4 Delete and substitute: ”4.3.4 Packaging inspection. The sampling and inspection of the preservation – packaging, packing and container marking shall be in accordance with the requirements of PPP-H-1581”.

4.4.3.1 Delete and substitute: ”4.4.3.1 Type I, slotted pins. Slotted pins shall be tested for hardness in accordance with MIL-STD-1312-6, Method 6, Hardness. The hardness shall be within the hardness limits of 3.5”.

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4.4.3.2 Delete and substitute: ”4.4.3.2 Type II, coiled pins: Coiled pins shall be tested for hardness on the inside surface of the outside half coil of the pin in accordance with MIL-STD-1312-6, Method 6. Hardness. The hardness shall be within the hardness limits of 3.5”.

4.4.4f. Add new sentence as follows: ”Test fixtures conforming to ASTM B 565 or ANSI/ASME B18.8.2 shall be used to determine shear values specified in Tables I and II herein.

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5. Delete in its entirety and substitute:

”5. PACKAGING

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5.1 Packaging requirements. The requirements for packaging shall be in accordance with PPP-H-1581 (see 6.2)".

6.1 Delete "See MS 33547 for functional limitations" and substitute" (For functional limitations see 6.4)".

6.2 e and f. Delete and substitute: "e. Applicable levels of packaging (see 5.1)".

6.4 Delete in its entirety and substitute new paragraph as follows:

"6.4 Functional limitations. Functional limitations of spring pins conforming to MIL-P-10971 are specified in MS 33547. It is essential that proper performance of spring pins be taken into consideration when used in the design and construction of military equipment".

"6.5 Standard hardness conversion tables. Standard hardness conversion data is specified in ASTM E140, Standard Hardness Conversion Tables for Metals. ASTM E140 states, "Conversion of hardness values should be used only when it is impossible to test the material under the conditions specified, and when conversion is made it should be done with discretion and under controlled conditions. Each type of hardness test is subject to certain errors, but if precautions are carefully observed, the reliability of hardness readings made on instruments of the indentation type will be found comparable. Differences in sensitivity within the range of a given hardness scale (for example, Rockwell B) may be greater than between two different scales or types of instruments. The conversion values now in use are only approximate and may be inaccurate for specific application. Note 1.5. The values stated in inch-pound units are to be regarded as the standard".

The margins of this amendment are marked with asterisks to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment 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 amendment.

Custodians:

Army - AR
Navy - OS
Air Force - 99

Preparing activity:

Army - AR

(Project 5315-0467)

Review activities:

Army - AT, MI
Air Force - 82
DLA - IS
NSA - NS

User activities:

Army - AV, ME
Navy - SA, SH