

GGG-K-266b

April 2, 1964

SUPERSEDING

Int. Fed. Spec. GGG-K-00266a (GSA-FSS)

February 11, 1963 and

Fed. Spec. GGG-K-266

October 25, 1954

FEDERAL SPECIFICATION
KEY, COWL FASTENER

This specification was approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

1. SCOPE

1.1 This specification covers one type of key for use in locking and unlocking cowl fasteners on airplanes or other equipment as required.

1.1.1 *Federal specification coverage.* Federal specifications do not include all varieties of the commodity as indicated by the title of the specification, or which are commercially available, but are intended to cover only those generally used by the Federal Government.

2. APPLICABLE SPECIFICATIONS AND STANDARDS

2.1 **Specifications and standards.** The following specifications and standards, of the issues in effect on date of invitation for bids, form a part of this specification:

Federal Specification:

QQ-S-633—Steel, Carbon; Bars (General Purpose).

Federal Standards:

Fed. Std. No. 102—Preservation, Packaging, and Packing Levels.

Fed. Std. No. 123—Marking for Domestic Shipment (Civilian Agencies).

(Activities outside the Federal Government may obtain copies of Federal Specifications, Standards, and Handbooks as outlined under General Information in the Index of Federal Specifications and

Standards and at the prices indicated in the Index. The Index, which includes cumulative monthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U. S. Government Printing Office, Washington D. C., 20402.

(Single copies of this specification and other product specifications required by activities outside the Federal Government for bidding purposes are available without charge at the General Services Administration Regional Offices in Boston, New York, Washington, D. C., Atlanta, Chicago, Kansas City, Mo., Dallas, Denver, San Francisco, Los Angeles and Seattle, Wash.

(Federal Government activities may obtain copies of Federal Specifications, Standards, and Handbooks and the Index of Federal Specifications and Standards from established distribution points in their agencies.)

Military Specifications:

MIL-P-116—Preservation, Methods of.
MIL-S-7947—Steel, Sheet and Strip (1095).

MIL-H-15424—Hand Tools, Packaging of.

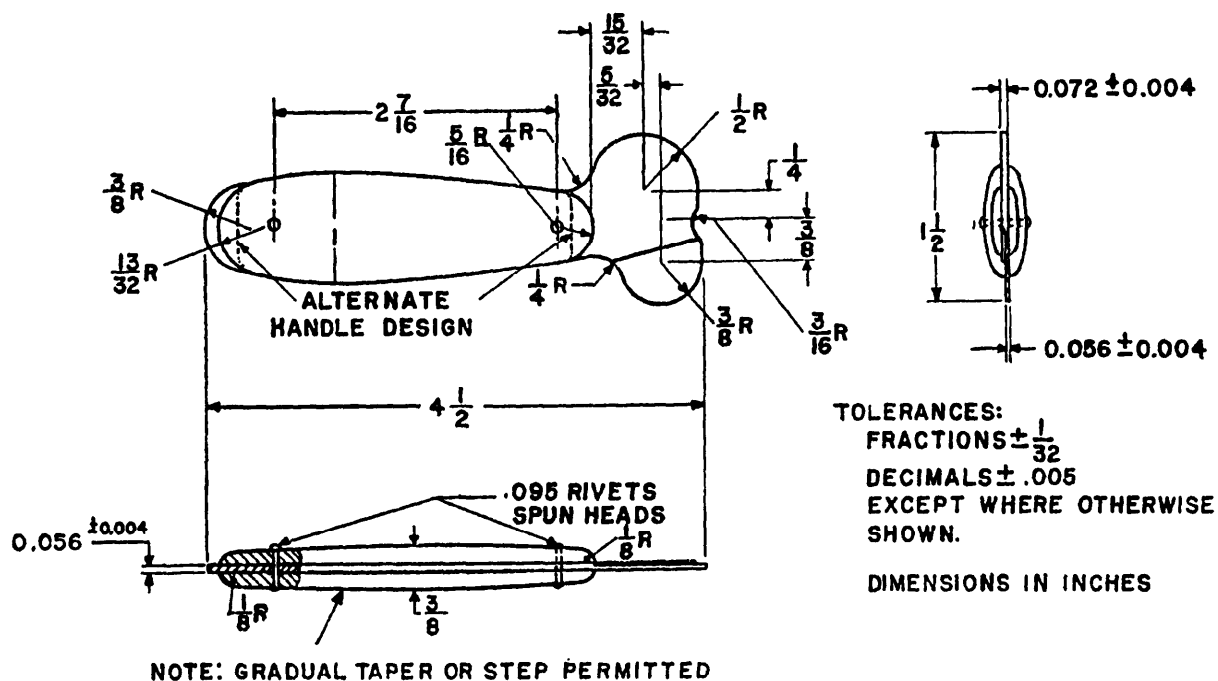
Military Standards:

MIL-STD-105—Sampling Procedures and Tables for Inspection by Attributes.

(Copies of Military Specifications and Standards required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer.)

3. REQUIREMENTS**3.1 Material.****FSC 5120**

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3.1.1 *Body.* The body shall be of steel conforming to composition FS 1095 of Fed. Spec. QQ-S-633 or MIL-S-7947. The material shall be heat-treated to a Rockwell hardness of not less than 42 nor more than 46 on the C scale (see 4.4.1).

3.1.2 *Handle.* The handle shall be of straight-grained hardwood or of plastic complying with the test requirements specified in 4.4.2. The two halves shall be securely attached to the body by two rivets 0.095 inch in diameter.

3.2 *Design.* The fastener key shall be of the design and dimensions shown on figure 1.

3.3 Finish.

3.3.1 *Body.* The body shall be provided with one of the following finishes: Cadmium plate, zinc plate, hot phosphating, or oxide coating.

3.3.2 *Handle.* The handle shall be finished smooth and, if made of hardwood, shall be suitably protected by the application of a coat of varnish or lacquer to prevent absorp-

tion of moisture. The varnish or lacquer shall be transparent so as not to conceal the grain of the wood.

3.4 *Identification marking.* The fastener key shall be permanently and legibly marked with the manufacturer's name or trademark so that the source of manufacture can be readily identified.

3.5 *Workmanship.* The workmanship shall be first class in every respect.

4. SAMPLING, INSPECTION, AND TEST PROCEDURES

4.1 *Responsibility for inspection.* Unless otherwise specified in the contract or order, the supplier is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified, the supplier may utilize his own facilities or any commercial laboratory acceptable to 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 that supplies and services conform to prescribed requirements.

4.2 Sampling for lot acceptance.

4.2.1 *Inspection lot.* All keys presented at one time shall be considered a lot for purposes of acceptance inspection, and tests.

4.2.2 Sampling for inspection.

4.2.2.1 *Sampling for visual and dimensional examination.* A random sample of keys shall be selected from each inspection lot of material offered for inspection of visual and dimensional characteristics in accordance with MIL-STD-105 at inspection level S-4. The acceptable quality level (AQL) shall be 1.5 percent defective.

4.2.3 *Sampling for lot acceptance tests.* A random sample of keys shall be selected from each lot in accordance with MIL-STD-105 at inspection level S-4 and shall be subjected to the tests specified in 4.4. The AQL shall be 4 percent defective.

4.3 *Visual and dimensional examination.* Each of the sample keys selected in accordance with 4.2.2.1 shall be visually and dimensionally examined to verify compliance with this specification. Examination shall be conducted as specified in table I. Any key in the sample containing one or more visual or dimensional defects shall be rejected, and if the number of defective keys in any sample exceeds the acceptance number for that sample, the lot represented by the sample shall be rejected.

4.3.1 Lot acceptance tests.

4.3.1.1 *Testing of sample keys for lot acceptance.* Each of the sample keys selected in accordance with 4.2.3 shall be tested in accordance with 4.4.1 and 4.4.2, as applicable, to verify compliance with this specification. Any sample key which does not meet the requirements for any of these characteristics shall be rejected, and if the number of nonconforming keys in any sample exceeds the acceptance number for that sample, the lot represented by the sample shall be rejected.

TABLE I.—Classification of defects in accordance with MIL-STD-105

Categories	Defects
<i>Critical</i>	None defined.
<i>Major:</i>	
101	Not of the design and size shown in figure 1.
102	Body not made of 1095 steel.
103	Handle not made of proper material.
104	Two halves of handle not securely attached.
105	Body not plated or coated as specified.
106	Handle not finished smooth.
107	Wood handle not coated with varnish or lacquer.
108	Varnish or lacquer not transparent on wood handles.
109	Workmanship not first class.
<i>Minor:</i>	
201	Marking, manufacturer's name or trademark missing, incorrect, illegible, or not permanent.
202	Preservation, packaging and packing not as required.

4.4 Test procedures.

4.4.1 *Hardness.* Fastener keys shall be tested for Rockwell hardness to determine conformance with 3.1.1.

4.4.2 *Flammability test for plastic handles.* The blade of the fastener key for test shall be clamped in a support with the plastic handle extended outward in a horizontal position. Under the handle there shall be clamped a piece of 10-mesh Bunsen-burner gauze about 5 inches square, in a horizontal position, 1/4 inch below the bottom of the handle, and with about 1/2 inch of the handle extending beyond the edge of the gauze. A Bunsen burner with an efficient flame 1/2 to 3/4 inch in height shall be adjusted so that the flame tip will just contact the specimen when placed under the free end of the handle. At the end of 30 seconds the flame shall be removed and the sample allowed to burn. The rate of travel of the flame shall be determined from the time required for the flame to travel the length of the handle after the removal of the Bunsen burner. In case the handle does not continue to burn after the first ignition,

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the burner shall be replaced under the free end for a period of 30 seconds immediately following the extinction of the flame. If the handle does not continue to burn until the flame has reached the blade end of the handle after the second ignition, the sample shall be considered self-extinguishing. When tested as specified, the plastic handles shall not burn at a rate exceeding 2 inches per minute.

4.5 Inspection of preparation for delivery. Sample items and packs shall be selected and inspected in accordance with MIL-H-15424 to verify conformance with the requirements of section 5 herein.

5. PREPARATION FOR DELIVERY

(Civil agencies should refer to Fed. Std. No. 102 for definitions and applications of the various levels of packaging protection for supplies and equipment.)

5.1 Preservation and packaging. Preservation and packaging shall be level A or C, as specified in the contract or order (see 6.1).

5.1.1 Level A. Level A cleaning, preservation, and packaging shall be in accordance with level A of MIL-H-15424.

5.1.2 Level C. Level C preservation and packaging shall afford adequate protection against corrosion, deterioration, and physical damage during shipment from the supply source to the first receiving activity for immediate use. This level may conform to the supplier's commercial practice when such meets the requirements.

5.2 Packing. Packing shall be level A, B, or C, as specified in the contract or order (see 6.1).

5.2.1 Levels A and B. Levels A and B packing shall be in accordance with levels A and B, respectively, of MIL-H-15424.

5.2.2 Level C. Level C packing shall insure carrier acceptance and safe delivery at destination. Shipping containers or method of shipment shall comply with rules or reg-

ulations as applicable to the mode of transportation.

5.3 Marking of shipments.

5.3.1 Civil agencies. In addition to marking required by the contract or order, shipments shall be marked in accordance with Fed. Std. No. 123.

5.3.2 Military. In addition to any special marking required by the contract or order, marking of shipments shall be in accordance with MIL-H-15424.

6. NOTES

6.1 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) Applicable level of packaging and level of packing (see 5.1 and 5.2).

6.2 Transportation description. Transportation description applicable to this item is:

Tools, not otherwise indexed by name.

Carload minimum weight 30,000 pounds.

Mechanics' hand tools, not otherwise indexed.

Truckload minimum weight 30,000 pounds.

Notice. When Government drawings, specifications, or other data are used for any purpose other than in connection with a definitely related Government procurement operation, the United States Government thereby incurs no responsibility nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data, is not to be regarded by implication or otherwise, as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use, or sell any patented invention that may in any way be related thereto.

MILITARY CUSTODIANS:

DOD coordination has been waived.

Preparing Activity:

GSA-FSS

Copies of this specification may be purchased for 5 cents each.