

INCH-POUND

A-A-59817

21 August 2008

COMMERCIAL ITEM DESCRIPTION

U-NUT, WIDE PANEL RANGE, $\frac{3}{8}$ -INCH DIAMETER, COARSE UNIFIED INCH SCREW THREADS

The General Services Administration has authorized the use of this commercial item description, for all federal agencies.

1. **SCOPE.** This Commercial Item Description (CID) covers the physical and performance characteristics of an extruded U-nut, $\frac{3}{8}$ -16UNC-2B inch thread size, wide panel range.

2. SALIENT CHARACTERISTICS.

2.1 **Material.** The extruded U-nut shall be constructed of carbon steel, AISI Grade 1050, 1055, 1060, 1064, or 1065 (UNS G10500 thru UNS G10650) spring steel processed to meet the requirements of this commercial item description.

2.2 **Hardness.** The hardness of the extruded U-nut shall be Rockwell C42-50 when tested in accordance with ASTM E18.

2.3 **Dimensions.** The dimensions of the extruded U-nut shall conform to the requirements in figure 1.

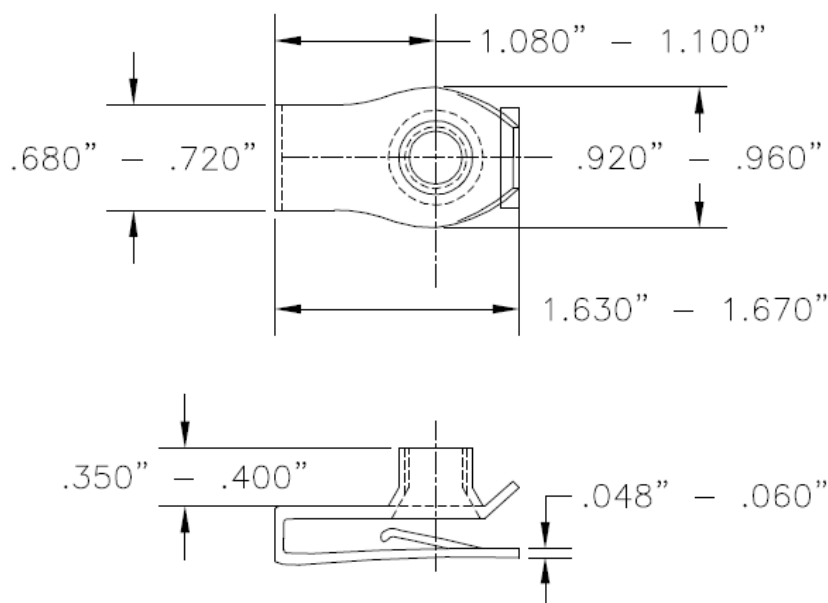


FIGURE 1. Dimensions of the extruded U-nut, $\frac{3}{8}$ -inch – 16 UNC-2B thread size, wide panel range.

Beneficial comments, recommendations, additions, deletions, clarifications, etc. and any data that may improve this document should be sent to: Commander, Naval Sea Systems Command, ATTN: SEA 05M2, 1333 Isaac Hull Avenue, SE, Stop 5160, Washington Navy Yard DC 20376-5160 or emailed to CommandStandards@navy.mil, with the subject line "Document Comment". Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at <http://assist.daps.dla.mil>.

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2.4 Test panels. The extruded U-nut shall fit onto 0.050-inch and 0.200-inch thick test panels and fit into holes drilled for $\frac{3}{8}$ -inch fasteners. When the extruded U-nut is assembled onto 0.050-inch and 0.200-inch thick test panels having $\frac{3}{16}$ -inch diameter holes located with their centers 1 inch from the edge, the retaining feature shall locate in the holes and a minimum pull force of 3 pounds shall be required to remove the nut from the test panel.

2.5 Threads. The threads shall conform to $\frac{3}{8}$ -inch – 16 UNC-2B thread form per ASME B1.1.

2.6 Proof load. The extruded U-nut shall be able to be easily removed after being exposed to a 9,300-pound force bolt. The extruded U-nut shall be assembled onto a test panel and a test bolt shall be installed with a minimum of three threads projecting through the extruded U-nut. The test bolt shall have a yield strength sufficient to develop a proof load of 9,300 pounds. A tensile load of 9,300 pounds shall be applied to the nut through the test bolt in the axial direction. The threaded sleeve shall resist this load without thread stripping, excessive plastic deformation, or rupture. The bolt shall be removable from the nut with fingers once the load is released. A hand wrench may be used for the first one-half turn.

2.7 Protective finish. The extruded U-nut shall be coated with a phosphate and oil finish in accordance with ASTM F1137, Grade 0D, or Ford ESS-M3P20-A (S2), or GM 4435-M, Code A.

2.8 Workmanship. Extruded U-nuts shall be free from cracks, splits, burrs, loose scale, and any defect that affects form, fit, or function.

2.9 Marking. The extruded U-nut shall be marked with the manufacturer's identification.

3. PRODUCT CONFORMANCE PROVISIONS.

3.1 Product conformance. The products provided shall meet the salient characteristics of this Commercial Item Description, conform to the producer's own drawings, specifications, standards, and quality assurance practices, and be the same product offered for sale in the commercial marketplace. The government reserves the right to require proof of such conformance.

4. PACKAGING. Preservation, packing, and marking shall be as specified in the contract or order.

5. NOTES.

5.1 Intended purpose. The extruded U-nut covered in this CID is intended for securing deck plates.

5.2 Source of documents.

5.2.1 ASME. ASME standards are available from ASME International, 22 Law Drive, PO Box 2900, Fairfield, NJ 07007-2900 or online at www.asme.org.

5.2.2 ASTM. ASTM standards are available from ASTM International, 100 Barr Harbor Dr., PO Box C700, West Conshohocken, PA 19428-2959 or online at www.astm.org.

5.2.3 Ford©. Ford© standards are available online at www.ihs.com.

5.2.4 General Motors© (GM). GM© standards are available at www.ihs.com.

5.3 Ordering data. The contract or order should specify the following:

- a. CID document number and revision.
- b. National Stock Number.
- c. Quantity required.
- d. Packaging requirements.

5.4 National stock numbers (NSNs). National Stock Number (NSN) 5310-01-500-2339 has been assigned to this product.

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5.5 Key words.

Clip nut

Clip-on nut

MILITARY INTERESTS

Custodians:

Army – AR

Navy – SH

Air Force – 99

Review Activities:

Army – MI

Navy – NP

Air Force – 03

DLA – IS

CIVIL AGENCY COORDINATING ACTIVITY:

GSA – FSS

Preparing Activity:

Navy – SH

(Project 5310-2007-003)

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