INCH POUND
MIL-DTL-29181D
5 March 2019
SUPERSEDING
MIL-DTL-29181C
10 March 1998

DETAIL SPECIFICATION

HASP, HIGH SECURITY, SHROUDED, FOR HIGH SECURITY PADLOCKS

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

1. SCOPE

1.1 Scope. This specification covers hasps for high security padlocks.

1.2 Classification. The hasps are the following styles as specified (see 6.2 and 6.5):

Style 1 - Hasp (M29181-01), high security, hinged or sliding, horizontal door right hand.

Style 2 - Hasp (M29181-02), high security, hinged or sliding, horizontal door left hand.

2. APPLICABLE DOCUMENTS

2.1 General. 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.

2.2 Government drawings. The following other Government drawings form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

Comments, suggestions, or questions on this document should be addressed to DLA Troop Support – Industrial Hardware Division (ATTN: Code FHTE), 700 Robbins Avenue, Philadelphia, PA 19111-5096 or email to trpsptspecspa@dla.mil. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at https://assist.dla.mil.

DRAWINGS

NAVAL SEA SYSTEMS COMMAND (NAVSEA)
(Code Identification 53711)

5532334	High Security Hasp, Hinged or Sliding Horizontal Door, Right Hand Style-1, MK-2 MOD 9.
5532335	High Security Hasp, Hinged or Sliding Horizontal Door, Left Hand Style-2, MK-2 MOD 9.

(Copies of drawings required by manufacturers in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the Contracting Officer.)

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 these documents are those cited in the solicitation or contract.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS

ASME B46.1	Surface Texture (Surface Roughness, Waviness, and Lay)

(Copies of this document are available from www.asme.org American Society of Mechanical Engineers, Three Park Avenue, M/S 10E, New York, NY 10016-5990.)

AMERICAN SOCIETY FOR QUALITY (ASQ)

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

(Copies of this document are available from www.asq.org American Society for Quality, 600 North Plankinton Avenue, Milwaukee, WI 53203.)

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A743/A743M	Castings, Iron-Chromium, Iron-Chromium-Nickel, Corrosion Resistant, for General Application.
ASTM E18	Materials, Metallic, Rockwell Hardness and Rockwell Superficial Hardness of.
ASTM E23	Bar, Notched, Impact Testing of Metallic Materials.

(Copies of these documents are available from www.astm.org or the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

2.4 Order of precedence. Unless otherwise noted herein or in the contract, in the event of a 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.

3. REQUIREMENTS

3.1 First article. When specified (see 6.2), a sample shall be subjected to first article inspection in accordance with 4.2.

3.2 Construction. The hasps shall conform to the design, details, dimension, and material requirements of drawing 5532334 for style 1 and drawing 5532335 for style 2 (see figures 1 and 2).

3.2.1 Mounting bolt holes. Unless otherwise specified (see 6.2), each half of style 1 and 2 hasps shall provide for bolting of each half to door or wall surface with 0.375-inch (9.5 mm) carriage bolts. 3 square holes for the square necked bolts shall be machined or cast in the back side of each half of the hasp section. Bolt holes shall be horizontally centered and vertically spaced. The top and bottom holes shall be centered 1.5 inches (37.5 mm) from the top and bottom outside surfaces. Vertical spacing shall be 2.9 inches (74 mm) on center bolts (see figures 1 and 2).

3.3 Materials. Materials used shall be free from defects which would adversely affect the performance or maintainability of individual components or of the overall assembly. Materials not specified herein shall be of the same quality used for the intended purpose in commercial practice. Unless otherwise specified herein, all equipment, material, and articles incorporated in the work covered by this specification are to be new and fabricated using materials produced from recovered materials to the maximum extent possible without jeopardizing the intended use. The term “recovered materials” means materials which have been collected or recovered from solid waste and reprocessed to become a source of raw materials, as opposed to virgin raw materials. Unless otherwise specified, none of the above shall be interpreted to mean that the use of used or rebuilt products is allowed under this specification.

3.3.1 Casting materials. Unless otherwise specified (see 6.2), the casting material shall be corrosion resisting steel, grade CF-3, CF-3M, CF-3MN, or CA-6NM per ASTM A743.

3.3.1.1 Heat treatment. Castings shall be heat treated as specified in ASTM A743 and shall exhibit mechanical properties specified in 3.4.

3.4 Mechanical properties.

3.4.1 Hardness. Hardness shall be as specified in test per ASTM E18.

3.4.2 Impact resistance. Energy absorbed shall be not less than 50 foot-pounds (67.791 Newton meter) at room temperature.

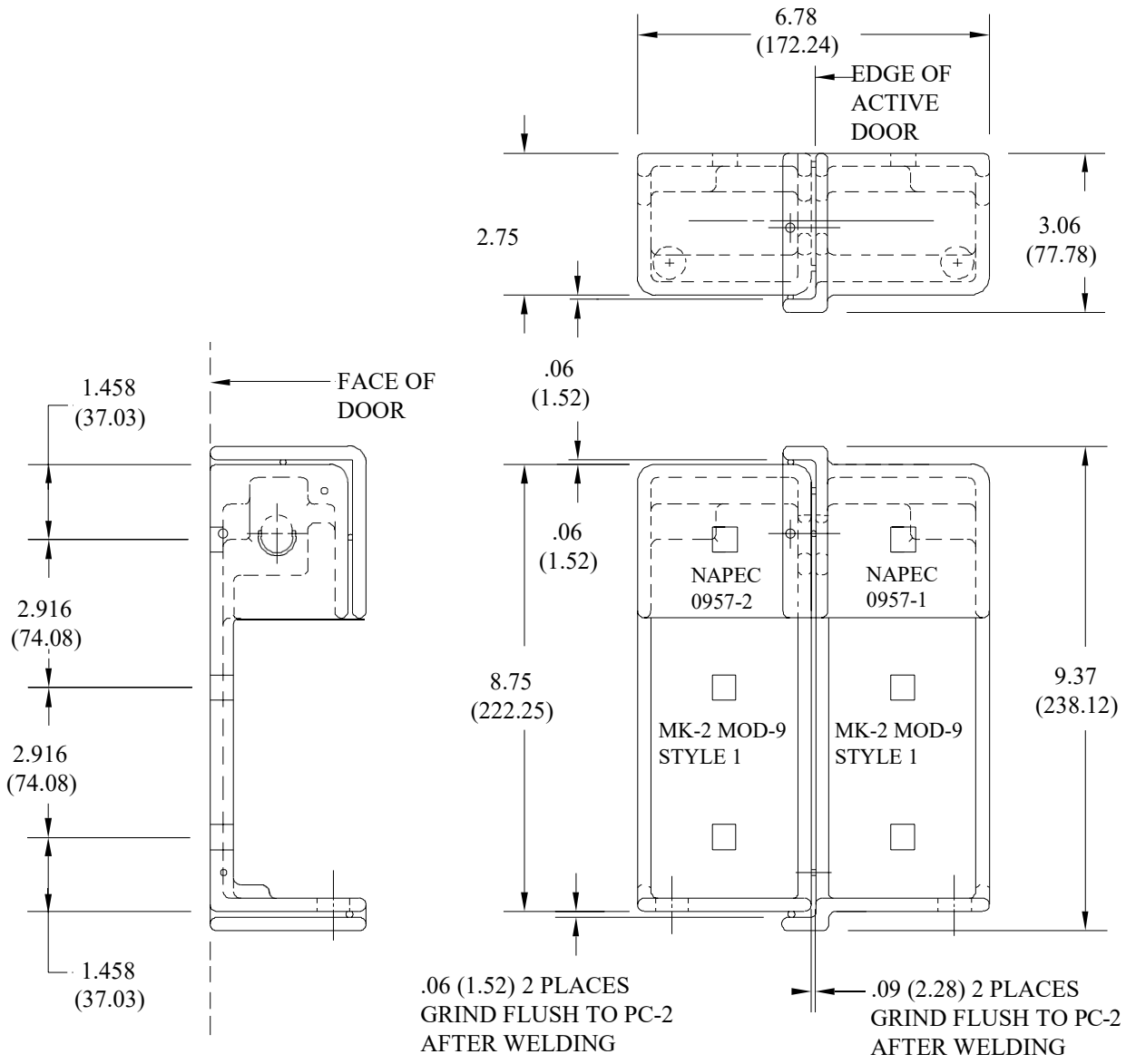


FIGURE 1. Style 1, MK 2 MOD 9.

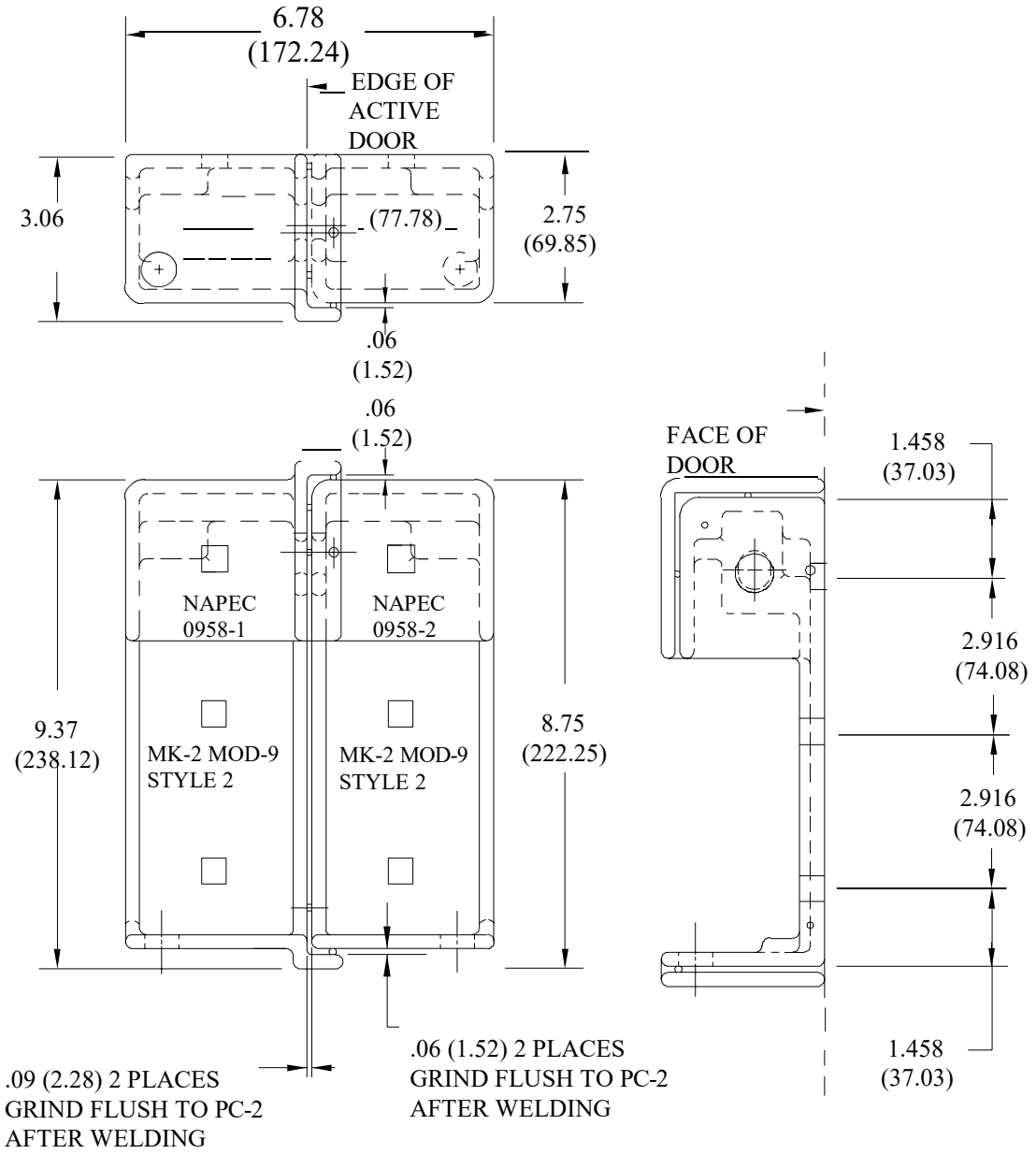


FIGURE 2. Style 2, MK 2 MOD 9.

3.5 Interchangeability. All units of the same classification furnished with similar options under a specific contract shall be identical to the extent necessary to ensure interchangeability of component parts, assemblies, accessories, and spare parts.

3.6 Identification markings. Identification markings shall be part of the die. Unless otherwise specified (see 6.2), the markings shall be 0.015-inch (0.38 mm) high with 0.25-inch (6.35 mm) letters. Each hasp and each part comprising a hasp assemble shall be permanently and legibly marked with the following:

The letters “U.S.,” “Manufacturer’s name or trademark,” “Year of manufacture,” and “Part number (drawing number).”

3.7 Finish. The hasp surfaces shall have a uniform finish. The surface roughness shall be not greater than 125-microinch (3 micrometer) Roughness average (Ra) when measured in accordance with ASME B46.1.

3.8 Workmanship.

3.8.1 Castings. All castings shall be sound and free from patching, misplaced coring, warping, or, any other defect which reduces the casting’s ability to perform its intended function.

4. VERIFICATION

4.1 Classification of inspections. The inspection requirements specified herein are classified as follows:

a. First article inspection (see 4.2).
b. Quality conformance inspection (see 4.3).

4.2. First article inspection. The first article inspection shall be performed on six hasps when a first article is required (see 3.1 and 6.2). This inspection shall include the examination of 4.5 and the tests of 4.6. The first article may be either a first production item or a standard production item from the supplier’s current inventory provided the item meets the requirements of the specification and is representative of the design, construction, and manufacturing technique applicable to the remaining items to be furnished under the contract.

4.3 Conformance inspection. The conformance inspection shall include the examination of 4.5 and the tests of 4.6. This inspection shall be performed on the samples selected in accordance with 4.4, except for the test of 4.6. All hasps manufactured in one production shall receive the tests of 4.6.1.

4.4 Sampling. Sampling and inspection procedures shall be in accordance with ASQ Z1.4. The unit of product shall be one hasp. All hasps offered for delivery at one time shall be considered a lot for the purpose of inspection. If an inspection lot is rejected, the contractor may rework it to

correct the defects, or screen out the defective units and resubmit for a complete reinspection. Resubmitted lots shall be reinspected using tightened inspection. If the rejected lot was screened, reinspection shall be limited to the defect causing rejection. If the lot was reprocessed, reinspection shall be performed on all defects. Rejected lots shall be separate from new lots and shall be clearly identified as reinspected lots.

4.4.1 Sampling for tests. Guidance for inspection level with zero percent defect is provided in 6.4.

4.5 Examination. Each hasp shall be examined for compliance with the requirements specified on drawing 5532334 or drawing 5532335 as applicable, and in section 3 of this document. Any redesign or modification of the contractor's standard product to comply with specified requirements, or any necessary redesign or modification following failure to meet specified requirements shall receive particular attention for adequacy and suitability. This element of inspection shall encompass all visual examinations and dimensional measurements. Noncompliance with any specified requirement shall constitute cause for rejection.

4.6 Tests.

4.6.1 Impact test. An impact test shall be performed to determine compliance with 3.4.2. The impact test shall conform to ASTM E23 for the Charpy test method. Type A test specimen shall be used. Failure of the hasp to meet the impact requirement of 3.4.2 shall constitute failure of this test.

5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of materiel is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department of Defense Agency, or within the Military Department's System Command. Packaging data retrieval is available from the managing Military Department's or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

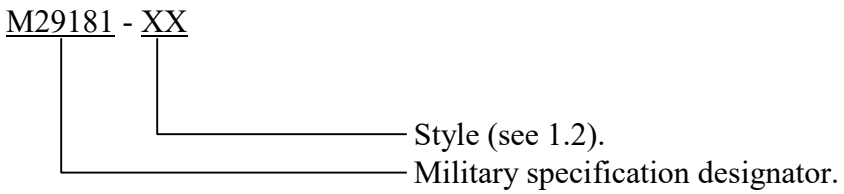
(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

6.1 Intended use. The two styles of hasps are intended for use with high security padlocks for critical security applications. The hasps were formerly known as the Naval Ammunitions Production Engineering Center (NAPEC) hasp.

6.2 Acquisition requirements. Acquisition documents must specify the following:

a. Title, number, and date of the specification.
b. Style (see 1.2).
c. When first article sample and inspection is required (see 3.1 and 4.2).
d. When bolt holes are not required (see 3.2.1).
e. Material required (see 3.3.1).
f. Size of identification markings, if other than as specified (see 3.6).
g. Packaging requirements (see 5.1).

6.2.1 Part identification number (PIN). A PIN has been established to facilitate procurement of a mixture of components by a self-constructed part ordering number (see 1.2).



6.3 First article. When a first article inspection is required, the item will be tested and should be a first article sample or it may be a standard production item from the contractor's current inventory as specified in 4.2. The first article should consist of six hasps. The contracting officer should include specific instructions in acquisition documents regarding arrangements for examination, test, and approval of the first article.

6.4 Sampling for tests. Recommended inspection level is S-2 (see 4.4.1).

6.5 Subject term (key word) listing.

NAPEC hasp

6.6 Changes from previous issue. 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:
Navy - YD
Air Force - 71
DLA - IS

Preparing Activity:
DLA - IS

(Project 5340-2019-001)

Review Activities:
Navy - AS, MC, NO

NOTE: The activities listed above were interested in this document as of the date of document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at https://assist.dla.mil.