

MIL-H-29181A
21 December 1987
 SUPERSEDING
 MIL-H-29181(YD)
 18 August 1978
 MIL-H-29181(YD)/1
 18 August 1978
 MIL-H-29181(YD)/2
 18 August 1978

MILITARY SPECIFICATION

HASP, HIGH SECURITY, SHROUDED, FOR HIGH AND MEDIUM SECURITY PADLOCK

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

1. SCOPE AND CLASSIFICATION

1.1 Scope. This specification covers hasps for high and medium security padlocks (see 6.1).

1.2 Classification. The hasps covered by this specification shall be of the following styles as specified (see 6.2 and 6.5).

Style 1 - Hasp, high security, hinged or sliding, horizontal door right hand.

Style 2 - Hasp, high security, hinged or sliding, horizontal door left hand.

1.2.1 Specification part numbers (SPN). The SPN for the hasps covered by this specification are established as follows:

<u>STYLE</u>	<u>SPN</u>
Style 1	M29181-01
Style 2	M29181-02

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to : Commanding Officer (Code 156), Naval Construction Battalion Center, Port Hueneme, CA 93043, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.
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AMSC N/A

FSC 5340

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2. APPLICABLE DOCUMENTS

2.1 Government documents.

2.1.1 Specifications, standards, and drawings. The following specifications, standards, and drawings form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of these documents shall be those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation.

SPECIFICATIONS

FEDERAL

PPP-B-566 - Boxes, Folding, Paperboard.
PPP-B-601 - Boxes, Wood, Cleated-Plywood.
PPP-B-636 - Boxes, Shipping, Fiberboard.
PPP-B-676 - Boxes, Setup.

MILITARY

MIL-P-116 - Preservation, Methods of.

STANDARDS

MILITARY

MIL-STD-105 - Sampling Procedures and Tables for Inspection by Attributes.
MIL-STD-129 - Marking for Shipment and Storage.

DRAWINGS

NAVAL SEA SYSTEMS COMMAND (NAVSEA)
(Code Ident 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 specifications, standards, and drawings required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting activity.)

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2.2 Other publications. The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of the documents which are DOD adopted shall be those listed in the issue of the DODISS specified in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS shall be the issue of the non-Government documents which is current on the date of the solicitation.

AEROSPACE MATERIALS SPECIFICATION (AMS/SAE)

AMS 5370 - Steel Castings, Investment, Corrosion and Heat Resistant
19cr - 9.5Ni Solution Heat Treated.

(Applications for copies should be addressed to Society of Automotive Engineers, Inc., 400 Commonwealth Drive, Warrendale, PA 15096.)

AMERICAN NATIONAL STANDARDS INSTITUTE, INC. (ANSI)

B46.1 - Surface Texture.

(Applications for copies should be addressed to the American National Standards Institute, Inc., 1430 Broadway, New York, NY 10018.)

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

D3951 - Standard Practice for Commercial Packaging.

E18 - Test Methods for Rockwell Hardness and Rockwell Superficial Hardness of Metallic Materials.

E23 - Methods for Notched Bar Impact Testing of Metallic Materials.

(Application for copies should be addressed to the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.)

(Non-Government standards and other publications are normally available from the organizations which prepare or which distribute the documents. These documents also may be available in or through libraries or the information services.)

2.3 Order of precedence. In the event of a conflict between the text of this specification and the references cited herein (except for associated detail specifications, specification sheets or MS standards), the text of this specification shall take precedence. Nothing in this specification, however, shall supersede applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 First article. When specified in the contract or purchase order (see 6.2), a sample shall be subjected to first article inspection (see 4.2.1 and 6.4).

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3.2 Design and 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 System of measurement. The dimensions used in this specification are not intended to preclude the use of the metric system of measurement in the fabrication and production of the material, individual parts, and the finished product, provided form, fit, and function requirements are satisfied.

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. None of the above shall be interpreted to mean that the use of used or rebuilt products are allowed under this specification unless otherwise specified.

3.3.1 Casting materials. The casting material shall be as specified on Drawing 5532334 or Drawing 5532335 as applicable. Certified metals from reputable alloy manufacturers shall be used for castings, and in no case shall the weight of the production lot be greater than the weight of the purchased certified metals (see 4.5.1).

3.3.1.1 Heat treatment. Castings shall be heat treated as specified in AMS 5370 and shall exhibit mechanical properties specified in 3.4.

3.4 Mechanical properties.

3.4.1 Hardness. Hardness shall be not less than 36 on Rockwell C Scale and shall be not greater than 40 on the Rockwell C Scale (see 4.5.2).

3.4.2 Impact. Energy absorbed shall be not less than 50 foot-pounds at -100 degrees (°) Fahrenheit (F) (see 4.5.3).

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 insure interchangeability of component parts, assemblies, accessories, and spare parts.

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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 high 0.25 inch letters. Each hasp and each part comprising a hasp assembly shall be permanently and legibly marked with the following:

The letters U.S.
Manufacturer's name or trademark.
Year of manufacture.
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 Roughness average (Ra) when measured in accordance with ANSI 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 ability to perform its intended function.

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for inspection. Unless otherwise specified in the contract or purchase order, the contractor is responsible for the performance of all inspection requirements as specified herein. Except as otherwise specified in the contract or purchase order, the contractor may use his own or any other facilities suitable for the performance of the inspection requirements specified herein, unless disapproved by 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 supplies and services conform to prescribed requirements.

4.1.1 Responsibility for compliance. All items shall meet the requirements of sections 3 and 5. The inspection set forth in this specification shall become a part of the contractor's overall inspection system or quality program. The absence of any inspection requirements in the specification shall not relieve the contractor of the responsibility of assuring that all products or supplies submitted to the Government for acceptance comply with all requirements of the contract. Sampling in quality conformance does not authorize submission of known defective material, either indicated or actual, nor does it commit the Government to acceptance of defective material.

4.1.2 Component and material inspection. Components and material shall be inspected in accordance with all the requirements specified herein and in applicable referenced documents.

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

- a. First article inspection (see 4.2.1).
- b. Quality conformance inspection (see 4.2.2).

4.2.1 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 4.4 and the tests of 4.5. 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.

4.2.2 Quality conformance inspection. The quality conformance inspection shall include the examination of 4.4, the tests of 4.5, and the packaging inspection of 4.6. This inspection shall be performed on the samples selected in accordance with 4.3, except for the test of 4.5.1. All hasps manufactured in one production run shall receive the tests of 4.5.1.

4.3 Sampling. Sampling and inspection procedures shall be in accordance with MIL-STD-105. The unit of product shall be one hasp. All the 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 for all defects. Rejected lots shall be separate from new lots, and shall be clearly identified as reinspected lots.

4.3.1 Sampling for tests. Tests for the hasp shall be based on inspection level S-2 and an Acceptable Quality Level of 2.5 percent defective.

4.4 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 specification. Any redesign or modification of the contractors 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 requirements or presence of one or more defects preventing or lessening maximum efficiency shall constitute cause for rejection.

4.5 Tests.

4.5.1 Weight of material. All hasps manufactured in one production run shall be weighed. Total weight of hasps shall be not greater than the weight of purchased certified metal as specified in 3.3.1.

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4.5.2 Hardness. The hasp shall be tested in accordance with ASTM E18. No superficial hardness test shall be substituted. Failure of the hasp to meet the hardness requirement of 3.4.1 shall constitute failure of this test.

4.5.3 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 except that a modified Type A test specimen shall be used. The length shall be standard (2.165 inches); the distance between the notched face and opposite face shall be standard (0.394 inch); only the remaining dimensions of the Type A test specimen height shall differ and shall be 0.250 ± 0.001 inch. Failure of the hasp to meet the impact requirement of 3.4.2 shall constitute failure of this test.

4.6 Inspection of packaging. Except when industrial packaging is specified, the sampling and inspection of the preservation and interior package marking shall be in accordance with groups A and B quality conformance inspection requirements of MIL-P-116. The sampling and inspection of the packing and marking for shipment and storage shall be in accordance with the quality assurance provisions of the applicable container specification shown in section 5 and the marking requirements of MIL-STD-129. The inspection of industrial packaging shall be as specified in the contract (see 6.2).

5. PACKAGING

5.1 Preservation and packaging. The level of preservation and packaging shall be level A or C as specified (see 6.2).

5.1.1 Level A. Each complete hasp shall be preserved and packaged in a close-fitting box, conforming to PPP-B-566, variety 2; PPP-B-676, variety 2; or PPP-B-636, class weather resistant. The contents shall be cushioned to prevent movement inside the container. Each box shall be closed in accordance with the appendix to the applicable box specification.

5.1.2 Level C. The hasps shall be packaged in accordance with ASTM D3951.

5.2 Packing. Packing shall be level A, B, or C as specified (see 6.2).

5.2.1 Level A. Hasps of one style only shall be packed in close fitting boxes conforming to PPP-B-601, overseas type. When specified (see 6.2), boxes conforming to PPP-B-636, type SF, class weather resistant, grade V2s may be used. The contents within the container shall be blocked and braced to prevent movement.

5.2.2 Level B. Hasps of one style only shall be packed as specified for level A, except the boxes shall conform to PPP-B-601, domestic type; or PPP-B-636, type SF, class weather resistant, grade V2s or grade V3s. When specified (see 6.2), fiberboard boxes conforming to PPP-B-636, shall be domestic type.

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5.2.3 Level C. Hasps of one style only shall be packed in accordance with ASTM D3951.

5.3 Marking. In addition to any special marking required in the contract (see 6.2), interior packages and shipping containers shall be marked in accordance with MIL-STD-129.

6. NOTES

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 Ordering data. Acquisition documents should specify the following:

- a. Title, number, and date of this specification.
- b. Style (see 1.2).
- c. Size of identification markings, if other than as specified (see 3.6).
- d. When first article sample and inspection is required (see 3.1 and 4.2.1).
- e. Level of preservation and level of packing (see 5.1 and 5.2).
- f. Inspection method for industrial packaging (see 4.6).
- g. When boxes conforming to PPP-B-636, type SF, class weather resistant, grade V2s are required for Level A packing (see 5.2.1).
- h. When boxes conforming to PPP-B-636 are to be domestic type for Level B packing (see 5.2.2).
- i. Additional special marking on interior packages and shipping containers, if required (see 5.3).

6.3 Data requirements. When this specification is used in an acquisition which incorporates a DD Form 1423, Contract Data Requirements List (CDRL), and invokes the provisions of DOD Federal Acquisition Regulations (FAR) Supplement 27.410-6, the data requirements will be developed as specified by an approved Data Item Description (DD Form 1664) and delivered in accordance with the approved CDRL (DD Form 1423) incorporated into the contract. When the provisions of DOD FAR 27.410-6 are not invoked, the data shall be in accordance with the contract requirements.

6.4 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 contractors current inventory as specified in 4.2.1. 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. Invitations for bids should provide that the Government reserves the right to waive the requirement for samples for first article inspection to those bidders offering a product which has been previously acquired or tested by the Government, and that bidders offering such products, who wish to rely on such production or test, must furnish evidence with the bid that prior Government

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approval is presently appropriate for the pending contract. The contracting officer should contact the Assistant to the DOD Program Manager for Physical Security, Naval Civil Engineering Laboratory (Code L56), Port Hueneme, CA 93043-5003, regarding testing and disposition of the test samples.

6.5 Cross-reference of classification. The following is a cross-reference of classification in the styles between this revision and the previous revision.

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Style 1
Style 2

6.6 Subject term (key word) listing.

Hasp, high security
NAPEC hasp
Shrouded

6.7 Changes from previous issue. Asterisks are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Civil Agencies Coordinating Activity:
GSA - 7FXE

Custodians:
Army - ME
Navy - YD
Air Force - 99

Preparing activity:
Navy - YD

Project 5340 -1770

Review Activities:
Army - AR
Navy - SH, OS, AS
Air Force - 82
DLA - IS

User Activity:
Navy - MC

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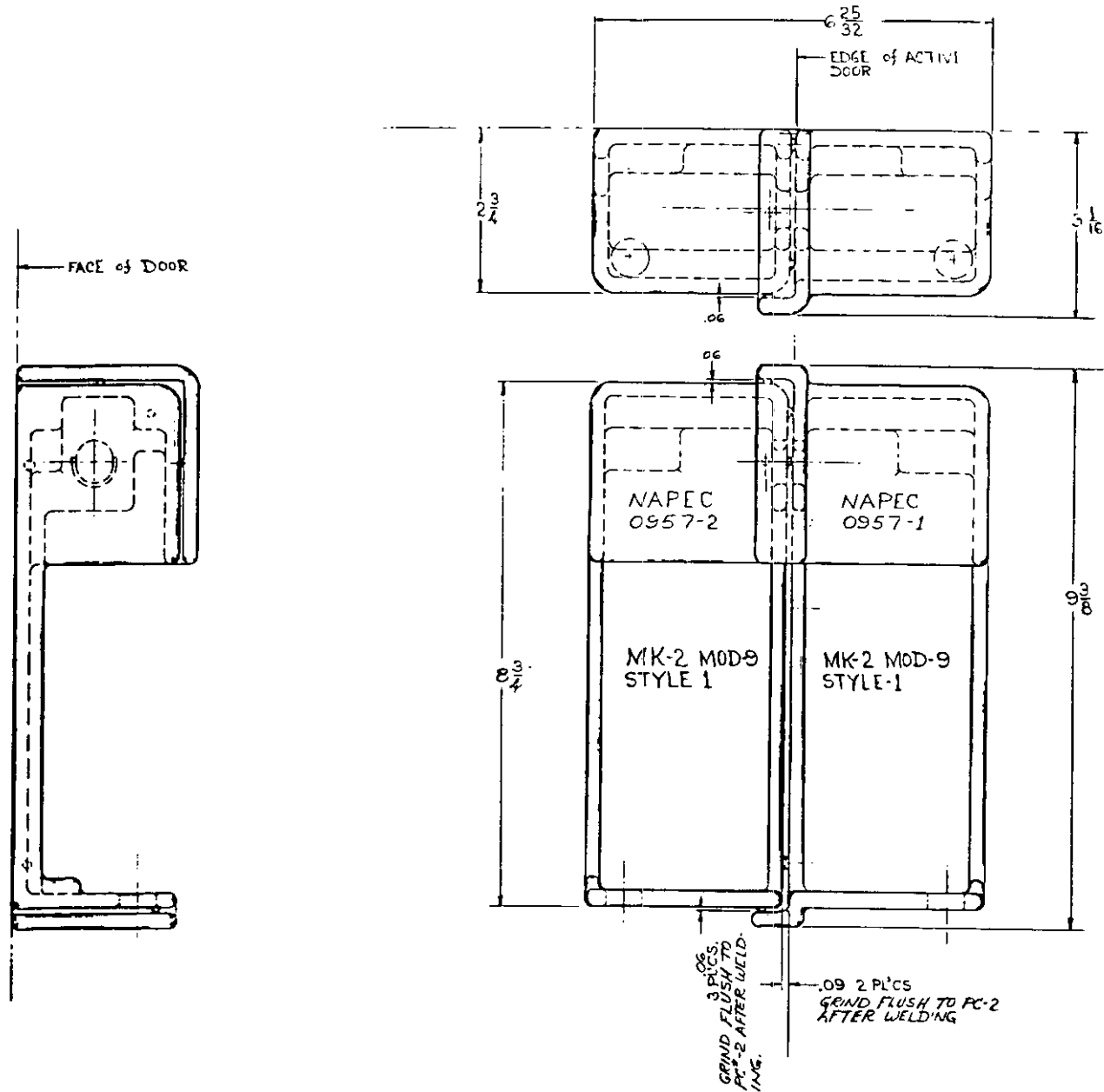
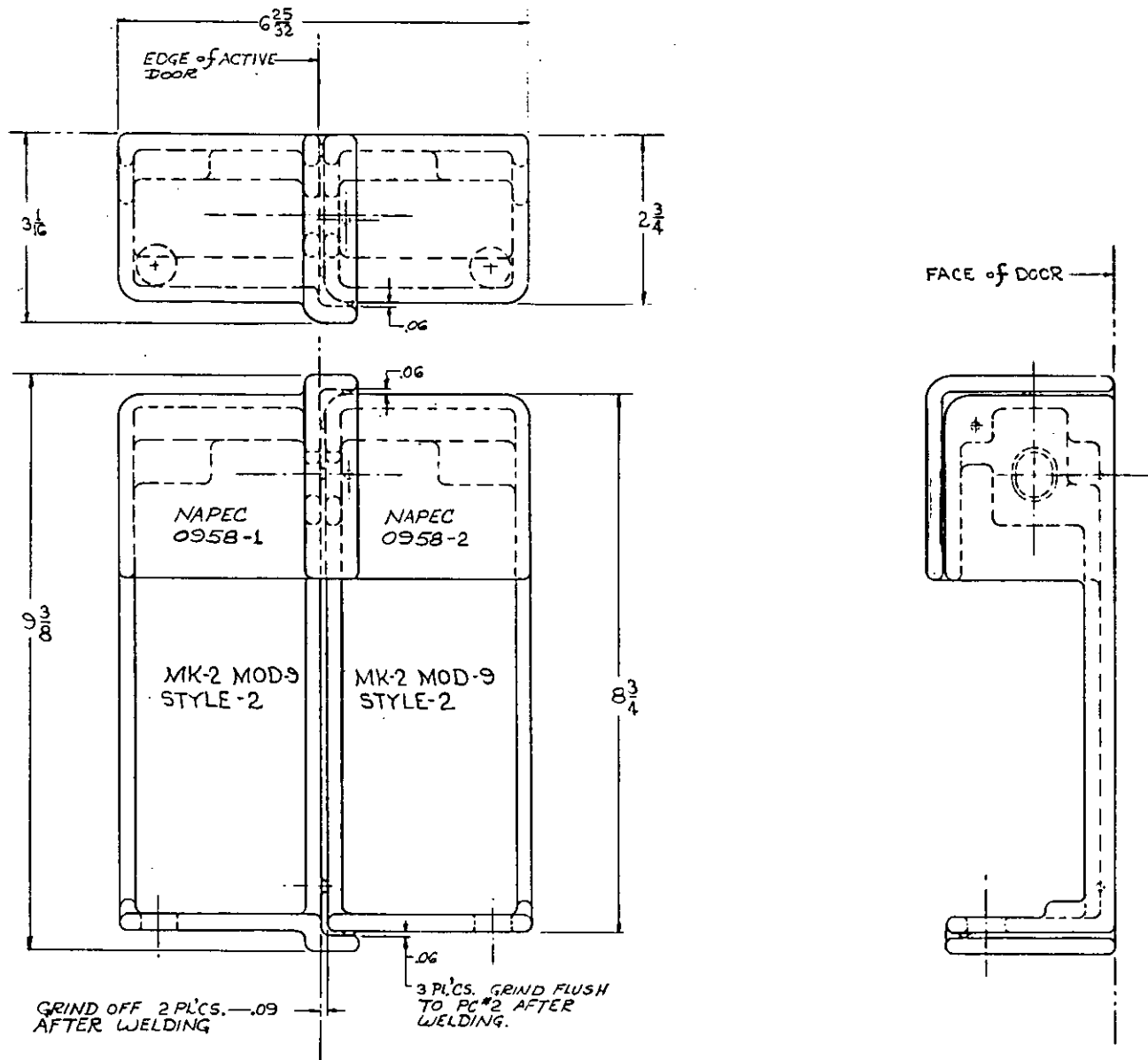


Figure 1. Style I, MK 2 MOD 9 from Drawing 5532334, Sheet 1 of 3

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Figure 2. Style 2, MK 2 MOD 9 from Drawing 5532335, Sheet 1 of 3

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

(See Instructions - Reverse Side)

1. DOCUMENT NUMBER MIL-H-29181A	2. DOCUMENT TITLE HASP, HIGH SECURITY, SHROUDED, FOR HIGH AND MEDIUM SECURITY PADLOCK
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3a. NAME OF SUBMITTING ORGANIZATION

4. TYPE OF ORGANIZATION (Mark one)

☐ VENDOR☐ USER☐ MANUFACTURER☐ OTHER (Specify): _____

b. ADDRESS (Street, City, State, ZIP Code)

5. PROBLEM AREAS

a. Paragraph Number and Wording:

b. Recommended Wording:

c. Reason/Rationale for Recommendation:

6. REMARKS

7a. NAME OF SUBMITTER (Last, First, MI) - Optional

b. WORK TELEPHONE NUMBER (Include Area Code) - Optional

c. MAILING ADDRESS (Street, City, State, ZIP Code) - Optional

8. DATE OF SUBMISSION (YYMMDD)