

INCH-POUND

MIL-DTL-24653A(SH)

28 July 2020

SUPERSEDING

MIL-H-24653(SH)

30 May 1985

DETAIL SPECIFICATION

HASP, HIGH SECURITY, SHROUDED, FOR SHIPBOARD DOORS AND HATCHES USING HIGH SECURITY PADLOCK, GENERAL SPECIFICATION FOR

This specification is approved for use by the Naval Sea Systems Command and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers high security, shrouded hasps for shipboard doors and hatches using high security padlocks.

1.2 Classification. The hasps are of the following styles with specific component callouts for each style in accordance with the specification sheet specified (see [table I](#) and 6.2):

- a. Style 1 – Hasp, high security shipboard, arrangement for left-hand or right-hand hinged doors swinging out to open.
- b. Style 2 – Hasp, high security shipboard, arrangement for left-hand or right-hand hinged armored doors swinging out to open.
- c. Style 3 – Hasp, high security shipboard, arrangement for watertight hatches.
- d. Style 4 – Hasp, high security shipboard, arrangement for watertight scuttles.
- e. Style 5 – Hasp, high security shipboard, arrangement for left-hand or right-hand hinged quick acting watertight doors swinging in to open.
- f. Style 6 – Hasp, high security shipboard, arrangement for left-hand or right-hand hinged doors swinging in to open.

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in section 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 of documents cited in sections 3 and 4 of this specification, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks 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.

Comments, suggestions, or questions on this document should be addressed to Commander, Naval Sea Systems Command, ATTN: SEA 05S, 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 <https://assist.dla.mil>.

AMSC N/A

FSC 5340

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DEPARTMENT OF DEFENSE SPECIFICATIONS

(See ASSIST database for list of specification sheets.)

(Copies of these documents are available online at <https://quicksearch.dla.mil>.)

2.2.2 Other Government documents, drawings, and publications. The following other Government documents, drawings, and publications 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.

NAVAL SEA SYSTEMS COMMAND (NAVSEA) DRAWINGS

803-8436640 - High Security Hasp, Shipboard, Pictorial and Parts List

(Copies of this document are available from the applicable repositories listed in S0005-AE-PRO-010/EDM, which can be obtained online via Technical Data Management Information System (TDMIS) at <https://mercury.tdmis.navy.mil/>. Copies of this document may also be obtained from the Naval Ships Engineering Drawing Repository (NSED) online at <https://199.208.213.105/webjedmics/index.jsp>. To request an NSED account for drawing access, send an email to NNSY_JEDMICS_NSED_HELP_DESK@navy.mil.)

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 FOR QUALITY

ANSI/ASQ Z1.4 - Sampling Procedures and Tables for Inspection by Attributes

(Copies of this document are available online at www.asq.org.)

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

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

(Copies of this document are available online at www.asme.org.)

ASTM INTERNATIONAL

- ASTM A36/A36M - Standard Specification for Carbon Structural Steel
- ASTM A240/A240M - Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications
- ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar
- ASTM A743/A743M - Standard Specification for Castings, Iron-Chromium, Iron-Chromium-Nickel, Corrosion Resistant, for General Application
- ASTM E10 - Standard Test Method for Brinell Hardness of Metallic Materials
- ASTM E18 - Standard Test Methods for Rockwell Hardness of Metallic Materials
- ASTM E1417/E1417M - Standard Practice for Liquid Penetrant Testing

(Copies of these documents are available online at www.astm.org.)

SAE INTERNATIONAL

- SAE AIR4127 - Steel: Chemical Composition and Hardenability
- SAE AMS2175 - Casting, Classification and Inspection of
- SAE AS3071 - Acceptance Criteria - Magnetic Particle, Fluorescent Penetrant, and Contrast Dye Penetrant Inspection

(Copies of these documents are available online at www.sae.org.)

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 (except for related specification sheets), 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 Specification sheets. The individual item requirements shall be as specified herein and in accordance with the applicable specification sheet. In the event of any conflict between the requirements of this specification and the specification sheet, the latter shall govern.

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

3.3 Hasp components. For the purpose of this specification, a complete high security hasp shall consist of an assembly of the components listed in [table I](#) and detailed on 803-8436640.

TABLE I. Hasp system components by style.

System components														
Style number	Installation procedure	Reversible cover	Hasp liner	Tang	Shackle pin for 951 lock (see 6.1)	Locking pins	Holster plate	Z bracket	Hinge assy	Tang bracket	Foam installation jig	Mounting plate	Shim plate set	Spacer
1	MIL-DTL-24653/1	X	X	X	2	2	X				X		X	
2	MIL-DTL-24653/2	X	X	X	2	2					X		X	X
3	MIL-DTL-24653/3	X	X	X	2	2	X			X	X			
4	MIL-DTL-24653/4	X	X	X	2	2	X				X		X	
5	MIL-DTL-24653/5	X	X	X	2	2		X	X		X	X	X	
6	MIL-DTL-24653/6	X	X	X	2	2	X		X		X		X	
NOTE: X indicates one each of that part required.														

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3.4 Materials.

3.4.1 Castings. The castings shall be in accordance with ASTM A743/A743M, grade 304L. Castings shall meet the acceptance criteria of SAE AS3071 when tested in accordance with ASTM E1417/E1417M (see 4.6.2).

3.4.2 Foam installation jig. The installation jig shall be composed of polyethylene foam with a density of not less than 1.7 pounds per cubic foot or more than 2.0 pounds per cubic foot. The jig may be manufactured using a hot wire cut process.

3.4.3 Bolster and shim plate. Material for bolster and shim plate shall be in accordance with ASTM A36/A36M steel.

3.4.4 Locking pin. Locking pins shall be composed of carbon steel conforming to any of the steel numbers 1070 through 1095 in accordance with SAE AIR4127.

3.4.5 Mounting plate. Material for the mounting plate shall be type 300 series stainless steel in accordance with ASTM A240/A240M and ASTM A666.

3.4.6 Recycled, recovered, environmentally preferable, or biobased materials. Recycled, recovered, environmentally preferable, or biobased materials should be used to the maximum extent possible, provided that the material meets or exceeds the operational and maintenance requirements, and promotes economically advantageous life cycle costs.

3.5 Mechanical properties.

3.5.1 Hardness.

3.5.1.1 Casting hardness. When tested in accordance with ASTM E10, hardness of the cast parts shall be not less than Brinell 150.

3.5.1.2 Locking pin hardness. When tested in accordance with ASTM E18, hardness shall be not less than Rockwell C46 and shall not exceed Rockwell C53.

3.6 Identical items. Complete hasps of the same style furnished under any specific contract shall be in accordance with this specification and shall be physically identical, within the tolerances specified (see 3.1). This requirement includes all parts, assemblies, and components.

3.7 Design and construction. The hasps shall conform to the design, details, dimensions, and materials requirements specified herein and on 803-8436640, and applicable specification sheets (see 3.1).

3.7.1 Fabrication. Fabrication of the hasp shall be as specified on 803-8436640.

3.8 Identification marking. Each hasp reversible cover shall be permanently and legibly marked in accordance with the requirements of 803-8436640 and other requirements as specified (see 6.2).

3.9 Finish. The hasp surfaces shall have a uniform finish for which roughness does not exceed 125 root mean square when measured in accordance with ASME B46.1.

3.10 Instructions. Installation instructions shall be included with each hasp based on the style of hasp (see [table 1](#)).

3.11 Workmanship. Castings shall be free from patching, sharp edges, cracks, voids, shrinkage, and any other defect that reduces the casting's ability to perform the intended function. Dimensions shall be within the tolerances specified herein and on the applicable specification sheets (see 3.1).

4. VERIFICATION

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

- a. First article inspection (see 4.2).
- b. Conformance inspection (see 4.3).

4.2 First article inspection. First article inspection shall be performed on a complete hasp style when a first article sample is required (see 3.2, 6.2, and 6.3). First article inspection shall include the examination of 4.5 and the tests of 4.6. The first article shall be representative of the design, construction, and manufacturing technique applicable to the remaining hasps of the style to be furnished under the contract.

4.3 Conformance inspection. Conformance inspection shall include the examination of 4.5 and the tests of 4.6. Examination shall be conducted on 100 percent of the hasps to be furnished under the contract. Tests shall be conducted on a sample (see 4.4).

4.4 Sampling. Units of the same style, manufactured in one production run, and offered to the Government at one time, shall be considered a lot. The sample unit shall be one complete hasp style. A random sample of hasps shall be selected from each lot offered to the Government in accordance with ASQ Z1.4 at inspection level II and the Acceptance Quality Limit (AQL) specified (see 6.2).

4.5 Examination. The first article, when furnished, and each hasp shall be examined for compliance with SAE AMS2175 and the requirements specified in section 3: components (3.3); materials (3.4); identical items (3.6); design and construction (3.7); identification marking (3.8); finish (3.9); instructions (3.10); and workmanship (3.11). Any redesign or modification of the 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.

4.6 Tests. The first article, when required, and each sample hasp selected in accordance with 4.4 shall be tested to determine compliance with the specification. Tests shall be conducted as specified (see 4.6.1, 4.6.2, and 6.3).

4.6.1 Hardness. In order to determine compliance with 3.5.1, castings shall be tested in accordance with ASTM E10 and shall not be less than Brinell 150. Pins shall be tested in accordance with ASTM E18 and shall not be less than Rockwell C46 and not greater than Rockwell C53.

4.6.2 Liquid penetrant. Castings shall be examined by means of fluorescent liquid penetrant inspection in accordance with ASTM E1417/E1417M using acceptance criteria of SAE AS3071.

5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When packaging of material is to be performed by DoD or in-house contractor personnel, these personnel need to contact the responsible packaging activity to ascertain packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activities within the Military Service or Defense Agency, or within the military service's system commands. 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. This specification covers high security hasps of six basic styles for use with high security padlocks (Sargent and Greenleaf Model 951 or equal [hereafter refer to as 951 lock]) and the Navy-produced dual control padlock. Hasps will be installed on naval vessels subjected to harsh, high-stress environments and battle conditions. Current stock of hasps may be used until depleted; future requisitions for hasps should refer to the current version of this specification.

6.2 Acquisition requirements. Acquisition documents should specify the following:

- a. Title, number, and date of this specification.
- b. Title, number, and date of specification sheets (see 1.2).
- c. When first article inspection is required (see 3.2 and 4.2).
- d. If other identification marking is required (see 3.8).

- e. AQL of 1.0 (see 4.4).
- f. Packaging requirements (see 5.1).

6.3 First article inspection. Invitations for bids should provide that the Government reserves the right to waive the requirement for samples for first article inspection as 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 approval is presently appropriate for the pending contract.

6.4 Sub-contracted material and parts. The preparation for delivery requirements of referenced documents listed in section 2 do not apply when material and parts are acquired by the contractor for incorporation into the equipment and lose their separate identity when the equipment is shipped.

6.5 Subject term (key word) listing.

Hinge

Shackle

Tang

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.

CONCLUDING MATERIAL

Custodian:
Navy – SH

Preparing activity:
Navy – SH
(Project 5340-2020-014)

Review activity:
DLA – IS

NOTE: The activities listed above were interested in this document as of the date of this 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>.