

INCH-POUND

MIL-DTL-9850D  
July 18 2025  
SUPERSEDING  
MIL-H-9850C  
10 June 1977

## DETAIL SPECIFICATION

HINGE, BUTT, CONTINUOUS, PIANO

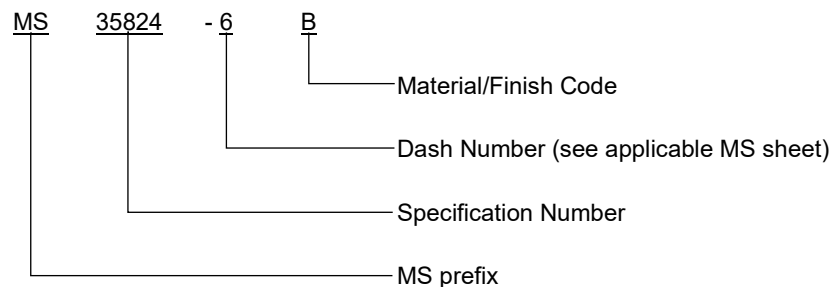
Inactive for new design after 1 October 1997

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

### 1. SCOPE

1.1 Scope. This specification covers one type of continuous butt, hinge, piano as specified in the supplement.

1.2 Part or Identifying Number (PIN). The PIN consists of the letters "MS", the specification number, a number for hinge size, and letters for material/finish designator. See other MS sheets for PIN variations.



### 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 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: DLA Land and Maritime, Attn: VAI, P.O. Box 3990, Columbus, OH 43218-3990, or emailed to [FluidFlow@dla.mil](mailto:FluidFlow@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>.



DEPARTMENT OF DEFENSE SPECIFICATIONS

(See supplement 1 for list of specification sheets)

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

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

(Copies of these documents are available from <https://www.asq.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 Materials. The materials for the hinges described herein shall be in accordance with the applicable MS sheet, drawing, or specification.

3.3 Design and construction. The hinges shall be of the design, construction, and physical dimensions specified herein and on the applicable MS sheet, drawing, or specification.

3.3.1 Pins. Pins of assembled hinges shall securely fasten together the leaves of the hinge.

3.3.2 Leaves. Separate leaves, as applicable, shall be in accordance with the pertinent dimensional requirements of the applicable MS sheet, drawing, or specification. The leaves of the assembled hinge shall match to permit freedom of movement without excessive looseness.

3.4 Workmanship. Workmanship shall conform to the best commercial practice to produce high quality hinges. Hinges shall be free from burrs, blisters, peeling, chips, looseness, lubricants, and all other defects which might affect their serviceability.

4. VERIFICATION

4.1 Conformance inspection.

4.1.1 Inspection of product for delivery. Inspection of product for delivery shall consist of visual and mechanical examination.

4.1.1.1 Inspection lot. An inspection lot shall consist of all hinges made of the same material, metal thickness, and pin diameter produced under the same manufacturing conditions and offered for inspection at one time. Hinges of different lengths may be combined to form one lot for sampling purposes.

4.1.1.2 Sampling plan. Sampling for examination shall be in accordance with ASQ Z1.4, Inspection Level I.

4.1.1.3 Examination.

4.1.1.3.1 Samples. Samples selected in accordance with 4.1.1.2 shall be examined for the defects specified in Table I.

Table I. Classification of defects

| Categories | Defects                                                                                                                  | Inspection Method |
|------------|--------------------------------------------------------------------------------------------------------------------------|-------------------|
| Major:     |                                                                                                                          |                   |
| 101        | Hinge is incomplete; component parts missing (3.3)                                                                       | Visual            |
| 102        | Type of finish not as specified or blistered, peeled, chipped, or of no film or thin film affecting serviceability (3.4) | Visual            |
| 103        | Hinge not fabricated of specified material (3.2)                                                                         | SIE 1/            |
| 104        | Hinge does not comply with specified dimensions (3.3)                                                                    | SIE               |
| 105        | Assembly; anchor and straightness of hinge pin (3.4)                                                                     | Visual            |

1/ Standard inspection equipment

## 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 materiel 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. The continuous butt piano hinge covered by this specification is intended for use on cases, chests, and any other adaptable surface.

6.2 Acquisition requirements. Procurement documents should specify the following:

- a. Title, number, and date of this specification.
- b. Part number (see 1.2).
- c. Packaging requirements (see 5.1).

6.3 Subject term (key word) listing.

Hardware  
Zinc plating  
Cadmium plating

6.3 Changes from previous issue. The margins of this specification are marked with vertical lines to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the previous issue.

CONCLUDING MATERIAL

Custodians:  
Army – CR

Preparing Activity:  
DLA – CC  
(Project 5340-2025-018)

Review Activities:  
Army – AR, CR4, EA, MI  
Navy – AS, MC

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>.