

MIL-B-83769/7A(AS)
 5 November 1982
 SUPERSEDING
 MIL-B-83769/7(AS)
 23 June 1978

MILITARY SPECIFICATION SHEET

BATTERY, STORAGE, THREADED-POST-CONNECTED, LEAD-ACID

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

The complete requirements for acquiring the battery described herein shall consist of this document and the latest issue of the specification MIL-B-83769.

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|--|------------------|
| Military part number | -M83769/7-1 |
| Nominal voltage | -12 volts |
| Maximum weight | -80 pounds (wet) |
| Capacity at 1-hour rate | -54 AH |
| Discharge rate for cell terminal post, intercell connectors, terminal connectors | -600 amps |
| Dimensions and configurations | -see Figure 1 |

M83769/7 shall conform to MIL-B-83769 except as modified by the following:

3. REQUIREMENTS

3.4 Design and construction. The battery shall consist of six (6) cells enclosed in an integrally molded container. Cells shall contain the necessary plates, terminal posts, and separators, and shall be secured so that minimal motion of the plates, relative to the container, can occur. Any motion which does occur as a result of the testing to this specification shall not degrade performance.

3.4.3 Container and cover. Delete "and cover" in two places.

3.4.4 Sealing. Delete.

3.4.5 Battery terminals. The battery terminals shall consist of threaded studs as shown on the applicable specification sheet.

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3.4.5.1 Threaded studs. The studs shall be fastened to the top of the container as shown on the applicable specification sheet. The studs shall be threaded with .3125-18-UNC-2A threads in accordance with MIL-S-7742.

3.4.5.1.1 Receptacle adapter. Delete.

3.4.5.2 Disconnect receptacle. Delete.

3.4.9 Container cover gasket. Delete.

Figure 1. Battery Terminal with Threaded-Stud Type Terminal Assembly. Delete.

Figure 2. Typical Receptacle Adapter. Delete.

* Figure 3. Typical Receptacle. Delete.

3.4.10 Venting. Delete.

3.4.13 Venting plugs. Change "twelve each" to "six each" and "battery cover" to "battery handle."

3.4.14 Interior and exterior finish. Delete.

* 3.4.15 Sealing compound. The batteries shall be constructed so that the intercell connectors shall be completely covered with an acid resistant coating which firmly adheres to rubber, lead, copper, and lining materials. The compound, after application to the battery, shall have a smooth surface free of blisters, air bubbles, and other indications of poor processing. The sealing compound shall meet the requirements of 3.5.8 when subjected to the test of 4.6.8.

3.5.3.2 Bulge resistance. Change "1/4 inch" to "1/16 inch."

* 3.5.3.4 Impact resistance. When tested as specified in 4.6.3.4, the average minimum impact resistance value for the containers and cell covers shall be 20 inch-pounds with no single value below 16 inch-pounds.

3.5.7 Strength of receptacle. Delete.

* 3.5.8.3 Vent tubes. Change "vent tubes" to "handles."

TABLE IV. Qualification inspection of batteries. Delete "Strength of Receptacle" test.

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TABLE VI. Group B inspection. Delete "Strength of Receptacle" test.

4.6.3.4.2 Cell covers. Three flat plate cell cover material specimens shall be molded and tested according to ASTM Standard D639-72 except that the specimen shall be 4 X 4 X 0.150 inches. The impact resistance values shall meet the specified requirements of 3.5.3.4.

4.6.7 Strength of receptacle. Delete.

* 4.6.8d Physical integrity at temperature extremes and vibration. Change "vent tubes" to "handles."

4.6.12b Altitude. Delete "with cover in place."

* 4.6.13d Mechanical shock. Change "vent tubes" to "handles."

* 4.6.14 Temperature shock. Change 4.6.14b to read:

"Subject the battery to the temperature shock requirement of Procedure 1, Method 503, MIL-STD-810 except that the high temperature shall be 49°C and the exposure time for each temperature shall be 4(-0, +.5) hours."

* 4.6.14c Change "vent tubes" to "handles."

4.6.17 Cell terminal posts, intercell connectors, terminal connectors. Delete "with their lids in position" from first sentence.

Changes from previous issue. This specification is marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) 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 notations and relationship to the last previous issue.

International standardization. Certain provisions of this specification are the subject of International Standardization Agreements (ASCC AIR STD 12/15 and STANAG 3514AE). When revision or cancellation of this standard is proposed which will affect or violate the international agreement concerned, the preparing activity will take appropriate reconciliation action through international standardization channels, including department standardization offices, if required.

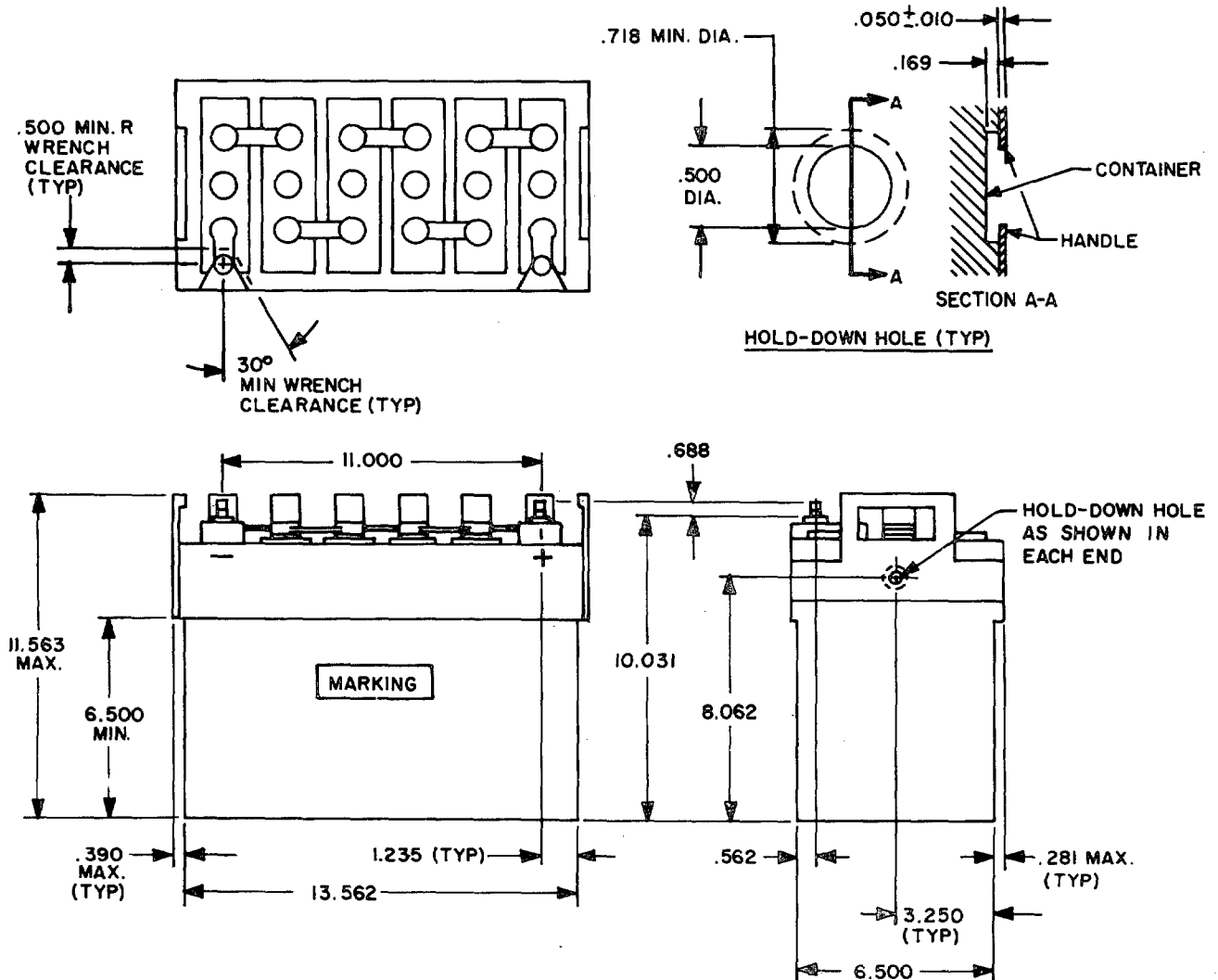
Preparing activity:

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NOTICE: Review/user information is current as of the date of this document. For future coordination of changes to this document, draft circulation should be based on the information in the current DoDISS.

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NOTES:

1. ALL DIMENSIONS ARE IN INCHES. ALL TOLERANCES ARE $\pm .063$ UNLESS OTHERWISE SPECIFIED.
2. EACH BATTERY SHALL INCLUDE TWO HANDLES AS SHOWN, SUITABLE FOR CARRYING THE BATTERY BY HAND.

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Figure 1. Battery assembly.