METRIC A-A-52462A July 21, 2009 SUPERSEDING A-A-52462 April 28, 1993

COMMERCIAL ITEM DESCRIPTION

CONTAINERS, SHIPPING AND STORAGE: METAL, REUSABLE; FOR ENGINES, TRANSMISSIONS, DIFFERENTIALS, TRANSFERS, AND SIMILAR ASSEMBLIES (METRIC)

The General Services Administration has authorized the use of this commercial item description (CID) as a replacement for MIL-C-14200C which is cancelled.

1. SCOPE. This CID covers two types of leakproof, pressurized, metal, reusable containers/ boxes (hereinafter referred to as containers). They are used as humidity controlled containers for shipment and storage of automotive engines, transmissions, differentials, transfers, and similar assemblies. The two types of containers are classified as follows (see 5.2):

Type I - Pressurized container. Type II - Controlled breather container.

2. SALIENT CHARACTERISTICS

2.1 <u>Materials</u>. Unless otherwise specified in the applicable engineering drawing (AED), the materials shall be in accordance with the manufacturer's specifications. The use of recovered material made in compliance with regulatory requirements is acceptable providing that all requirements of this CID are met (see 5.4).

2.2 <u>Design and construction</u>. The design and construction of containers shall be in accordance with the AED (see 5.2).

Comments, suggestions, or questions on this document should be addressed to U.S. Army Tank-automotive and Armaments Command, ATTN: RDTA-EN/STND/TRANS, MS# 268, 6501 E. 11 Mile Road, Warren, MI 48397-5000 or emailed to <u>DAMI_STANDARDIZATION@conus.army.mil</u>. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at http://assist.daps.dla.mil.

2.3 Welding. Unless otherwise specified (see note b), welding shall conform to TACOM Drawing 12479550, "Arc Welding Procedures for Constructional Steels". All fluxes, acids, and flux solvents shall be removed prior to preparation for painting. Peening of weld in any pressurized area shall not be permitted. Defective areas of weldments shall be removed and then rewelded. Reworked containers shall conform to all requirements of this CID.

2.4 <u>Performance</u>. The containers shall be capable of meeting all performance requirements when used under simulated shipping and storage conditions as specified herein. When specified (see 5.2), the contracting officer may substitute the manufacturer's test procedures for any of the performance tests specified herein.

2.4.1 <u>Air leakage</u>. The containers shall be equipped with a method to read and monitor their internal pressure. Each container shall show no evidence of air leakage when pressurized to the following air pressures:

Type I - 69 kilopascals (kPa) Type II - 34.5 kPa

2.4.2 <u>Rough handling</u>. Containers when loaded shall be capable of protecting its contents from damage due to shipping and rough handling operations. This shall be evident after the "loaded" container has been subjected to the following drop, impact test, and the leakage test repeated. (Note: Unless otherwise specified (see 5.2) a dummy load of the same size weight and weight distribution of the component line load for which the container is designed shall be used.)

2.4.2.1 <u>Edgewise drop test</u>. The packed container shall be supported at one end of its base on a wood sill or block, 15 centimeters (cm) in height, and placed at right angles to the skids. The opposite end of the container shall be raised and allowed to drop freely from heights of 30, 60, and 90 cm successively onto a concrete or metal surface. The test shall be applied to each end of the container. If the size of the container and the location of the center of gravity are such that drop tests cannot be made from all of the prescribed heights, the greatest attainable height shall be the height for succeeding drops until a total of three drops have been accomplished.

2.4.2.2 <u>Cornerwise drop test</u>. The packed container shall be supported at one corner of its base on a block, 15 cm in height. A block, 30 cm in height, shall be placed under the other corner of the same end of the container. The lowest point of the opposite end of the container shall then be raised and allowed to fall freely from heights of 30, 60, and 90 cm successively onto a concrete or metal surface. If the size of the container and the center of gravity are such that drop tests cannot be performed from all the prescribed heights, the greatest attainable height shall be the height for succeeding drops until a total of three drops have been performed. This test shall be applied on two diagonal corners at the bottom of the container.

2.4.2.3 <u>Tip over test</u>. The packed container, erect on its base on a hard level floor, shall be slowly tipped to the side until it falls freely and solely by its own weight to the floor. After righting the container, the test shall be repeated on the opposite side. Cylindrical containers shall be tipped at right angles to the longitudinal axis of the installed item and allowed to fall freely to the floor.

2.4.2.4 <u>Impact test</u>. An impact test shall be applied to each end of the packed container. The container shall be suspended, as a pendulum, at the end of four or more cables (two cables shall be used for cylindrical containers with two lifting eyes). The cables shall be of sufficient length to prevent any interference or binding. A flat, vertical, stationary masonry or metal barrier, with a thickness of not more than 5 cm of wood between the barrier and container, shall be provided for the container to strike against. The suspended container shall be raised vertically to a height which will allow the lowest point of the container (while swinging through the arc of the pendulum) to clear the floor. While the suspended container is resting lightly against the barrier and prior to pulling back for the impact, the center of balance shall be marked (if not stenciled on the container shell. The suspended container shall be pulled back with a straight even pull until a height of 46 cm plus the aforementioned floor clearance is reached. This measurement shall be taken from the measuring reference point on the container to the floor. At this point, the container shall be released in a manner to allow a smooth even travel to the barrier.

2.4.2.5 <u>Flatwise drop test</u>. The packed container shall be raised so that its base is parallel to the floor and allowed to fall freely once from a height of 15 cm and once from a height of 30 cm to a concrete or metal surface.

2.4.2.6 <u>Examination and functional test</u>. Containers tested as specified in Rough handling shall be opened and the contents examined for visible signs of movement and damage. When specified (see 5.2), a functional test shall be conducted on the contents if the contents are a "live load".

2.4.2.7 <u>Finish treatment</u>. Unless otherwise specified (see 5.2), cleaning, pretreating, priming, painting, and exterior paint topcoat color of the containers shall conform to an appropriate CARC paint system selected from Drawing No. 12369000.

2.4.2.8 <u>Identification and marking</u>. Unless otherwise specified in the AED, identification and markings shall be permanent and legible and shall include, as a minimum, the AED container part number and national stock number (NSN), the manufacturer's CAGE code and part number, contract number, lifting points, and centers of gravity (see 5.2).

3. PRODUCT CONFORMANCE

3.1 <u>Responsibility for inspection</u>. The contractor is responsible for the performance of all inspections (examinations and tests).

3.2 <u>First article inspection</u>. When specified (see note 5.2), a first article sample shall be inspected to verify conformance to the salient characteristics in this CID. Approval of the first article sample by the Government shall not relieve the contractor of the obligation to supply items that are fully representative of those inspected as a first article sample.

3.3 <u>Contractor certification</u>. The contractor shall certify and maintain substantiating evidence that the product offered meets the salient characteristics of this CID and that the product conforms to the producer's own drawings, specifications, workmanship standards, and quality assurance practices. Items with known defects shall not be submitted for Government acceptance. The Government reserves the right to require proof of such conformance prior to the first delivery and thereafter as may be otherwise provided for under the provisions of the contract.

4. PACKAGING

Preservation, packaging, packing, labeling, and marking for the desired level shall be as specified in the contract (see 5.2i).

5. NOTES

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

5.1 Source of Documents (see 5.2).

5.1.1 <u>Army drawing</u>. Copies of Army Drawing 12369000 "Chemical Agent Resistant Coatings (CARC) Paint Systems Index" and 12479550 "Arc Welding Procedures for Constructional Steels" are available from the U.S. Army Tank-Automotive and Armaments Command, ATTN: AMSRD-TAR-EN/STND/TRANS, Warren, MI 48397-5000.

5.2 Ordering data. Acquisition documents must specify the following:

- a. Title, number, and date of this CID.
- b. Type of container and title, number, and date of AED and part number.
- c. Welding, if other than as specified (see 2.3).

- d. Whether manufacturer's test procedures and which ones are to be substituted for one or more of the performance tests (see 2.4).
- e. Whether a live load (component) is to be used instead of the dummy load for the rough handling tests and who will provide the live load (see 2.4.2).
- f. Preparation and painting if other than as specified and exterior color of paint topcoat (see 2.4.2.7).
- g. Whether additional markings are required (see 2.4.2.8).
- h. If first article is required and arrangements for first article inspection (see 3.2).
- i. Packaging requirements (see 4).

5.3 <u>Cross reference</u>. Containers conforming to this CID are interchangeable/substitutable with containers conforming to MIL-C-14200C, dated 10 November 1988.

5.4 <u>Recovered material</u>. The offeror/contractor is encouraged to use recovered materials in accordance with Public Law 94-580 to the maximum extent practicable.

Preparing Activity: Army - AT (Project 8145-2009-001)

Review Activities: Army – SM, GL, CR4 Navy - MC Air Force - 84 DLA - IS

Custodians:

Army - AT Navy - YD Air Force - 99

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