

MIL-C-2440E (AR)
AMENDMENT 5
27 February 1989
SUPERSEDING
AMENDMENT 4
15 May 1984

MILITARY SPECIFICATION

CONTAINERS, METAL, FOR PROPELLING CHARGE

This Amendment forms a part of Military Specification MIL-C-2440E (AR), dated 29 October 1979, and is approved for use within the U.S. Army Armament Munitions and Chemical Command, and is available for use by all Departments and Agencies of the Department of Defense.

PAGE 2

Standards, Military: Delete "MIL-STD-1188 - Commercial Packaging of Supplies and Equipment".

PAGE 3

Other Publications, American Society for Testing Materials:

Add:

"ASTM-D412 - Tension Testing of Vulcanized Rubber, Standard Method of

ASTM-D3951-82 - Commercial Packing, Standard Practice for".

PAGE 5

4.3.2, line 1: After "see MIL-A-48078" and Table I specified herein."

Add the included Table I to the specification.

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Add the included Classification of Defects and Tests (4.4.2.5, 4.4.2.6, 4.4.2.7, 4.4.2.8 and 4.4.2.9) to the specification.

TABLE I. First article inspection.MIL-C-2440E (AR)
AMENDMENT 5**CLASSIFICATION OF DEFECTS & TESTS**

PARAGRAPH	TITLE	Containers, Metal, for Propelling Charges and Components			SHEET 1 OF 4		DRAWING NUMBER See Below
						NEXT HIGHER ASSEMBLY	
CATEGORY	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	AQL OR 100%	REQUIREMENT PARAGRAPH	PARAGRAPH REFERENCE / INSPECTION METHOD		
	Body (see dwg. 8880538) a. Examination for defects 1. Thickness 2. Length 3. Location of bead for rim b. Tensile strength	5	-	3.1 3.1 3.1 3.3.1	Gage Gage Gage 4.5.1		
	Bottom (see dwg. 8880539 or 8880540, as applicable) Examination for defects 1. Thickness	5	-	3.1	Gage		
	Plug (see dwg. 8880552) Examination for defects	5	-	3.1	4.4.2.2		
	Rim (see dwg. 8880541) Examination for defects	5	-	3.1	4.4.2.4		
	Ring (see dwg. 8880542) Examination for defects 1. Thickness	5	-	3.1	Gage		
NOTE:							

TABLE I. First article inspection.

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CLASSIFICATION OF DEFECTS & TESTS

PARAGRAPH	TITLE	NO. OF SAMPLE UNITS	AQL OR 100%	SHEET 2 of 4	DRAWING NUMBER
4.3.2.1	Containers, Metal, for Propelling Charges and Components				See Below NEXT HIGHEN ASSEMBLY
CATEGORY	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	AQL OR 100%	REQUIREMENT PARAGRAPH	PARAGRAPH REFERENCE /INSPECTION METHOD
	Screw Assembly (see dwg. 8880544, 8880545) or 8880547 as applicable) a. Examination for defects 1. Pitch diameter of thread 2. Major diameter of thread 3. Total length b. Crimp of handle to sleeve	5	-	3.1 3.1 3.1 3.1	Gage Gage Gage 4.5.5
	Stud (see dwg. 8880549) Examination for defects 1. Total length 2. Pitch diameter of thread 3. Minor diameter of thread 4. Small outside diameter	5	-	3.1 3.1 3.1 3.1	Gage Gage Gage Gage
	Cover (see dwg. 8880550) Examination for defects 1. Overall height (1 9/16") 2. Width of gasket groove 3. Height of lip	5	-	3.1 3.1 3.1	Gage Gage Gage
	Nut (see dwg. 8880553, 9232378, 9282857, or 9311209 as applicable) Examination for defects 1. Minor diameter of thread 2. Pitch diameter of thread	5	-	3.1 3.1	Gage Gage
NOTE:					

TABLE I. First article inspection.MIL-C-2440E (AR)
AMENDMENT 5**CLASSIFICATION OF DEFECTS & TESTS**

PARAGRAPH	TITLE	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	AQL OR 100%	SHEET OF	3 4	DRAWING NUMBER	PARAGRAPH REFERENCE / INSPECTION METHOD
4.3.2.1	Containers, Metal, for Propelling Charges and Components						See Below	
							NEXT HIGHEN ASSEMBLY	
CATEGORY								
		Spider (see dwg. 8880555) Examination for defects 1. Diameter of hole 2. Location from center of hole to edge of wing (Dimension A) 3. Thickness	5	-		3.1 3.1 3.1	Gage Gage Gage	
		Base (see dwg. 8880556 or 8880557, as applicable) Examination for defects 1. Height 2. Thickness 3. Diameter of hole	5	-		3.1 3.1 3.1	Gage Gage Gage	
		Gasket (see dwg. 8880558) a. Examination for defects 1. Angularity, maximum 2. Inside diameter 3. Height (11/16") 4. Large width (3/8") 5. Height from base to edge of large width (3/16") b. Tensile strength (see note)	5	-		3.1 3.1 3.1 3.1 3.1 3.1	Gage Gage Gage Gage Gage Gage	
			3 of 5	5		3.1	4.5.9/dwg. 8880558	
NOTE: The gasket tensile stress test shall be performed after the other inspections have been performed on the applicable samples.								

TABLE I. First article inspection.MIL-C-2440E (AR)
AMENDMENT 5**CLASSIFICATION OF DEFECTS & TESTS**

PARAGRAPH	TITLE				SHEET		DRAWING NUMBER	
4.3.2.1	Containers, Metal, for Propelling Charges and Components				4	4	See Below	
							NEXT HIGHEN ASSEMBLY	
CATEGORY	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	AQL OR 100%	REQUIREMENT PARAGRAPH	PARAGRAPH REFERENCE /INSPECTION METHOD			
	<u>Body Assembly, unpainted (see dwg. 8880537)</u> a. Examination for defects b. Weld of rim to body	5	-	3.1 3.1	4.4.2.1 4.5.6			
	<u>Spider and Nut Assembly (see dwg. 8880554)</u> a. Crimp of nut to spider	2	-	3.1	4.5.8			
	<u>Cover Assembly (see dwg. 8880543)</u> a. Weld of stud cover	5	-	3.1	4.5.4			
	<u>Assembly (see dwg. 9332423)</u> a. Examination for defects b. Assembly of cover and body c. Air pressure test	5	-	3.1 3.4 3.6	4.4.2.3 4.5.2 4.5.3			
NOTE:								

QUALITY CONFORMANCE INSPECTIONMIL-C-2440E (AR)
AMENDMENT 5**CLASSIFICATION OF DEFECTS & TESTS**

PARAGRAPH	TITLE	SHEET 1 of 1		DRAWING NUMBER	
CATEGORY	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	AQL OR 100%	REQUIREMENT PARAGRAPH	PARAGRAPH REFERENCE / INSPECTION METHOD
4.4.2.5	Body				8880538 NEXT HIGHEN ASSEMBLY 8880537
Critical	None defined				
Major	Thickness		0.40%	3.1	Gage
101	Length		0.40%	3.1	Gage
102	Location of bead for rim		0.40%	3.1	Gage
103					
Minor	Evidence of poor workmanship		0.65%	3.8	Visual
201					
NOTE:					

QUALITY CONFORMANCE INSPECTIONMIL-C-2440E (AR)
AMENDMENT 5**CLASSIFICATION OF DEFECTS & TESTS**

PARAGRAPH	TITLE	SHEET 1 of 1		NO. OF SAMPLE UNITS	EXAMINATION OR TEST	AQL OR 100%	REQUIREMENT PARAGRAPH	DRAWING NUMBER
CATEGORY								
4.4.2.6	Cover							8880550
								NEXT HIGHEN ASSEMBLY 8881028
Critical	None defined							
Major	Overall height (1 9/16")					0.40%	3.1	Gage
101	Width of gasket groove					0.40%	3.1	Gage
102	Height of lip					0.40%	3.1	Gage
103								
Minor	Evidence of poor workmanship					0.65%	3.8	Visual
201								
NOTE:								

QUALITY CONFORMANCE INSPECTION

**MIL-C-2440E (AR)
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CLASSIFICATION OF DEFECTS & TESTS

PARAGRAPH	TITLE	1 1 SHEET OF		DRAWING NUMBER	
CATEGORY	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	AQL OR 100%	REQUIREMENT PARAGRAPH	PARAGRAPH REFERENCE / INSPECTION METHOD
4.4.2.7	Screw assembly				8880544 as 8880545a8ie NEXT HIGHEN ASSEMBLY 8880543
<u>Critical</u>	None defined				
Major					
101	Pitch diameter of thread		0.40%	3.1	Gage
102	Major diameter of thread		0.40%	3.1	Gage
103	Total length		0.40%	3.1	Gage
Minor					
201	Evidence of poor workmanship		0.65%	3.8	Visual
NOTE:					

AMSMC Form 1570, 1 Feb 85

Replaces DRSYC-QA (D) Form 160, 1 Aug 83, which may not be used.

QUALITY CONFORMANCE INSPECTIONMIL-C-2440E (AR)
AMENDMENT 5**CLASSIFICATION OF DEFECTS & TESTS**

PARAGRAPH	TITLE	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	SHEET		DRAWING NUMBER
CATEGORY				AQL OR 100%	REQUIREMENT PARAGRAPH	NEXT HIGH ASSEMBLY
						PARAGRAPH REFERENCE / INSPECTION METHOD
4.4.2.8	Stud				1 of 1	8880549
						8880543
Critical	None defined					
Major	Total length			0.40%	3.1	Gage
101	Pitch diameter of thread			0.40%	3.1	Gage
103	Minor diameter of thread			0.40%	3.1	Gage
104	Small outside diameter			0.40%	3.1	Gage
Minor	Evidence of poor workmanship			0.65%	3.8	Visual
201						
NOTE:						

QUALITY CONFORMANCE INSPECTIONMIL-C-2440E (AR)
AMENDMENT 5**CLASSIFICATION OF DEFECTS & TESTS**

PARAGRAPH	TITLE	SHEET		DRAWING NUMBER	
		1	1	8880558	
		OF		NEXT HIGHEN ASSEMBLY	
				8880543	
CATEGORY	EXAMINATION OR TEST	NO. OF SAMPLE UNITS	AQL OR 100%	REQUIREMENT PARAGRAPH	PARAGRAPH REFERENCE / INSPECTION METHOD
4.4.2.9	Gasket				
<u>Critical</u>	None defined				
Major	Angularity, max.		0.40%	3.1	Gage
101	Inside diameter		0.40%	3.1	Gage
102	Height (11/16")		0.40%	3.1	Gage
103	Large width (3/8")		0.40%	3.1	Gage
104	Height from base to edge of large width		0.40%	3.1	Gage
105			0.40%	3.1	Gage
Minor	Evidence of poor workmanship		0.65%	3.8	Visual
201					
NOTE:					

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4.4.3.7 Weld of nut to spider. (see dwg. 8880554) : Delete in its entirety.

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4.4.3.9 Add new paragraph as follows:

"4.4.3.9 Tensile stress of gasket (see dwg. 880558), Major Defect. Five (5) gaskets shall be randomly selected from each lot for this test. If any gasket fails to meet the requirement, the lot shall be rejected."

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4.5.7 Weld of nut to spider. Delete in its entirety.

4.5.9 Add new paragraph as follows:

"4.5.9 Tensile strength of gasket. The tensile stress shall be determined in accordance with ASTM-D412."

5. Delete in its entirety and substitute the following:

"5. PACKAGING

5.1 Unit packing. None required.

5.2 Packing. Packing shall be commercial. Propelling charge containers shall be prepared in accordance with ASTM D3951-82 (Standard Practice for Commercial Packing).

5.3 Marking. Shipping marking shall comply with ASTM D3951-82 and the following additional instructions. No shipping marking shall be placed directly on the containers. Commercial shipping tags attached with wire shall be used unless otherwise specified. The following information shall be shown: item name and model number, part number and revision, contract number, lot number and date, name and address of manufacturer. If containers are bundled, boxed or palletized, the gross weight and quantity shall be included. The above information may be placed on pallets or boxes by labeling or stenciling."

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Add new paragraph as follows:

"6.5 Superseded container designs. Containers and their components, whose designs have been superseded, are not acceptable for renovation (see Appendix) without prior approval of the procuring activity."

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- * 30.4 Change title to "Air pressure of body and cover".

PAGE 16

- * 40.1.2 Inspection No. 3, Air Pressure: Change "(see 30.4)" to "(see Note 1 below and 30.4)".
- * 40.1.4 Cover after painting:

Inspection No. 3, Change to "Cover gasket missing or improper".

"4. Plugwasher missing or improper Visual

5. Air pressure (see Note 1 below and 30.4)
Test, 100 percent".

- * Bottom of page Add note as follows:

"1. The air pressure test may be conducted 100 percent on the assembled container (cover and body), after painting, in lieu of the individual body or cover."

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The margins of this amendment are marked with an asterisk or vertical line to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment 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 last previous amendment.

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