INCH-POUND
MIL-C-48360 (AR)
AMENDMENT 5
30 September 1998
SUPERSEDING
AMENDMENT 4
12 March 1993

MILITARY SPECIFICATION

CHARGE, PROPELLING, M200 FOR 105MM HOWITZER, M119 LOADING, ASSEMBLING AND PACKING

This Amendment forms a part of Military Specification MIL-C-48360 (AR), dated 3 July, 1980, and is approved for use by the US Army Research Development and Engineering Center, and is available for use by all Departments and Agencies of the Department of Defense.

PAGE 1

Title: Delete "M204" and substitute "M119", and whenever it appears in this specification.

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- 3.4.3: Delete "47,000 PSI" and substitute "46,500 PSI".
- 3.4.4: Delete in its entirety and substitute new paragraph 3.4.4:
 - "3.4.4 <u>Muzzle velocity and velocity standard deviation</u>. The muzzle velocity of 70 degrees F temperature shall not be less than 2052 feet per second nor greater than 2102 feet per second and the standard deviation of the lot shall not be greater than 8 feet per second."

Add new paragraph:

"3.7 <u>Initial production test</u>. This specification contains provisions for the submission of an initial production sample. This is a one time qualification test for a new contractor to load, assemble and pack M200 propelling charges. Test samples shall be withdrawn from the first lot produced by the contractor. Charges will be tested in accordance with all the requirements of this specification and Table II (see 6.10). Until the initial production sample has been found to be acceptable, the contractor is in no way authorized by the Government to initiate production of a second lot unless otherwise directed by the contracting officer."

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PAGE 4

4.2: Add the following:

"c. Initial Production Inspection (see 6.10)."

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Table I: Delete "Foil, Lead" and "(Dwg 9282047)"; and substitute "Cloth, Lead Laminate (Dwg 12913756)".

4.4.1: Add the following:

"An entire lot of propellant shall be utilized in the formation of one lot of propelling charges unless otherwise directed by the Contracting Officer."

4.4.2.b: Delete "Major and Defects" and substitute "Major and Minor Defects."

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4.4.2.1: Delete Major Defects 102 and 103 in their entirety.

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4.4.2.2:

Title: Delete "Foil, Lead" and substitute "Cloth, Lead, Laminate".

Major Defect 101: Delete "Length" and substitute "Established Length".

Major Defect 102: Delete "Width" and substitute "Established Width".

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4.4.2.3:

Major Defect 103: Delete "Length from edge of lead foil to edge of liner" and substitute "Body seam improperly assembled".

Delete "Gage/Scale" and substitute "visual".

Major Defect 104: Delete in its entirety.

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4.4.2.4: Add Critical 1 and Majors 105 and 106 as follows:

| Category | Examination or Test | Req. Para. | Para Ref. |
|----------------------|--|------------|---------------|
| <u>Critical</u> 1 | Proving Ground Pressure exceeds PIMP at 145 degrees F | 3.4.1 | 4.5.3 |
| Major | Manufacture de la completa del completa del completa de la completa del completa del la completa del completa de la completa de la completa del completa del la completa del | 2.4.4 | 4.5.2 |
| 105 | Muzzle velocity and muzzle velocity standard deviation | 3.4.4 | 4.5.3 |
| 106 | Excessive thread used in tacking operation | 100 % | Visual/Manual |

Minor Defect 201: Under No. of Sample Units, add "(a)".

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Notes: add "(a) Some delamination and tearing of the lead foil is expected during loading and is not a cause for rejection."

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4.4.3.3.2: Delete paragraph in its entirety and substitute:

"4.4.3.3.2 <u>Muzzle velocity and muzzle velocity standard deviation</u>. Determination of acceptance will be in accordance with MIL-STD-414, Section B, Table B3, AQL of 0.65%. All muzzle velocity and muzzle velocity standard deviation samples will be ballistic tested at 70 degrees F. Fifteen (15) charges will be fired for muzzle velocity and muzzle velocity standard deviation. If the sample is determined unacceptable the lot will be rejected. In addition, if the velocity standard deviation of the sample multiplied by the factor 0.76 exceeds the applicable lot requirement, the lot shall be rejected. Fifteen (15) calibration charges will be fired alternately with the test samples and the muzzle velocity and pressure of all the test charges will be corrected to standard conditions."

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- 4.5.3.2: Delete "The rounds shall be fired in a M205 cannon which has a tube wear of no greater than 0.015 in. (0.381 MM) when measured 25.25 in. (641.3 MM) from the rear of the tube." and substitute "The rounds shall be fired in a L20A1 tube which has a tube wear of no less than 50 % life remaining."
- 5.2 line 1: Delete "Twenty four (24)" and substitute "Twenty eight (28)".

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6.7:

Delete "47,000 psi" and substitute "46,500 psi".

Delete "2170 to 2220 fps" and substitute "2052 to 2102 fps".

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Add new paragraph:

"6.10 <u>Initial production test</u>. The initial production test is a one time qualification test for a new contractor to load assemble and pack acceptable M200 propelling charges. Once a contractor has demonstrated the ability to load, assemble and pack the propelling charges, the initial production test may be waived by the contracting officer. The following test program shall be used for the initial production test.

"Table II Initial Production Test

| | Temp | No. Control | No. Test | |
|--------------------------|---------|-------------|----------|--------------|
| Test Phase | (Deg F) | Rounds | Rounds | TECOM TOP |
| Propellant checkout | 70 | | 10 | TOP-4-2-504 |
| | 145 | | 10 | TOP-4-2-504 |
| | -60 | | 10 | TOP-4-2-504 |
| Sequential Environmental | 145 | 15 | 60 | TOP-4-2-504 |
| _ | -60 | 15 | 60 | TOP-4-2-504" |

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