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SUPERSEDING  
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## PERFORMANCE SPECIFICATION MANUALS, TECHNICAL: CONVENTIONAL AND CHEMICAL AMMUNITION

This specification is approved for use by the Department of the Army, and is available for use by all Departments and Agencies of the Department of Defense.

### 1. SCOPE

1.1 Scope. This specification contains the requirements for the preparation of technical manuals for conventional and chemical ammunition including improved conventional munitions and air delivered munitions.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be used in improving this document should be addressed to: Executive Director, USAMC Logistics Support Activity, Acquisition Logistics Center, ATTN: AMXLS-AP, Redstone Arsenal, AL 35898-7466 by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

AMSC A7274

AREA TMSS

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

1.2 Classification. The types of technical manuals to be prepared in accordance with this specification are:

- Type 10 - Operator's Manual
- Type 20 - Unit Maintenance Manual
- Type 30 - Direct Support Maintenance Manual
- Type 40 - General Support Maintenance Manual
- Type 12 - Operator's and Unit Maintenance Manual
- Type 13 - Operator's, Unit, and Direct Support Maintenance Manual
- Type 14 - Operator's, Unit, Direct Support and General Support Maintenance Manual
- Type 23 - Unit and Direct Support Maintenance Manual
- Type 24 - Unit, Direct Support, and General Support Maintenance Manual
- Type 34 - Direct Support and General Support Maintenance Manual

## 2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in section 3 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 documents cited in section 3 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 specification to the extent specified herein. Unless otherwise specified, the issue of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

## STANDARDS

### DEPARTMENT OF DEFENSE

MIL-STD-12	—	Abbreviations for Use on Drawings, Specifications, Standards, and in Technical Documents
MIL-STD-38784	—	Standard Practices For Manuals, Technical: General Style and Format Requirements.
MIL-STD-40051	—	Technical Manual Preparation

(Unless otherwise indicated, copies of the above standard are available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.3 Order of precedence. In the event of a conflict between the text of this document and the references cited herein 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 General.

3.1.1 Style and format. Unless otherwise specified herein, the general style and format of the technical manuals(TM) for operation and maintenance of conventional and chemical ammunition shall be prepared in accordance with MIL-STD-38784.

3.1.2 National stock numbers (NSN) and part numbers (PNs). NSNs shall not be used in the narrative portion of the TM. Unless essential for identification, manufacturer's PNs shall not be used in procedures and the narrative portion of the TM.

3.1.3 Level of coverage. The information provided in the TMs for operation and maintenance of conventional and chemical ammunition shall be directed to the least experienced personnel expected to use them. The reading grade level shall be the level specified by the contracting activity and evaluated in accordance with MIL-STD-38784 (see 6.2).

3.1.3.1 Language. The text shall be concise, accurate, and in the simplest English that will convey the intended message.

3.1.3.2 Abbreviations and acronyms. Abbreviations used throughout the manual shall be in accordance with MIL-STD-12. Use of acronyms shall be consistent throughout the TMs but shall be held to a minimum. The first use of abbreviations and acronyms shall be spelled out completely with the abbreviation or acronym in parenthesis immediately after the word(s).

3.1.3.3 Equipment names and nomenclature. Only approved names and approved nomenclature shall be used. Terms, names, and nomenclature shall be used consistently throughout the TMs.

3.1.4 Illustrations. Unless otherwise specified by the contracting activity (see 6.2), only line drawings shall be used. Illustrations shall be integrated with the text and shall be used when text alone cannot adequately communicate the message. Illustrations shall be black and shades of black (one color).

3.1.5 Page and paragraph numbering. Pages and paragraphs shall be numbered in accordance with MIL-STD-38784.

3.1.6 Repair parts and special tools list. The inclusion of a repair parts and special tools list in the manual shall be indicated by adding "Including Repair Parts and Special Tools List" to the title and "&P" to the number. These lists shall be prepared in accordance with the technical content requirements of MIL-STD-40051, except the lists shall not be prepared in work package format. The style and format shall conform to MIL-STD-38784. RPSTLs shall be included as an appendix to the pertinent manual.

3.1.7 TM divisions. TMs shall be divided into volumes, chapters, sections, and paragraphs, as appropriate. There shall be at least two of each division, if used. If there is a volume 1, there shall be a volume 2. If there is a chapter 1, there shall be a chapter 2.

3.1.7.1 Volumes. When the thickness of a TM exceeds two inches (1500 pages or 750 sheets), it shall be divided into volumes. Each volume shall be clearly identified on the volume cover and each volume shall have its own table of contents. Volume 1 shall contain a complete table of contents covering the entire set.

3.1.8 Referencing. Reference to other documents and information within the TM shall be held to a minimum. Reference shall not be made to other documents unless they are normally available to the user. If reference to other documents is necessary, reference shall include the document name and publication number only. Reference made within the TM shall include the necessary location data only. For example, if the entire chapter is applicable, only the chapter number shall be referenced; if the data needed is found in one or more paragraph(s), reference to the paragraph number(s) shall be made.

3.1.9 Manual size. Technical manuals shall be prepared in the size selected from table I as specified by the contracting activity (see 6.2). The maximum printing area shall include all printed matter including publication numbers and page numbers.

TABLE I. Manual sizes (in inches).

Style	Trim Size	Format	Maximum Printing Area
Pocket	4 x 5-1/2	Vertical	3-3/8 x 5-1/4
	5-1/2 x 4	Horizontal	5-1/4 x 3-3/8
Logbook	6-1/2 x 9-1/2	Vertical	5-5/16 x 8-3/4
	9-1/2 x 6-1/2	Horizontal	8-3/4 x 5-5/16
Standard	8-1/2 x 11	Vertical	7 x 10
	11 x 8-1/2	Horizontal	10 x 7
Double standard	17 x 11	Horizontal Only	15-1/2 x 9

3.1.9.1 Pocket TM. Pocket TM numbers shall appear on the front and back cover only. Page numbers shall appear on lower, outer edge of each page.

3.1.9.2 Horizontal TM. Unless otherwise specified by the contracting activity (see 6.2), TMs prepared in horizontal format shall be printed head to foot with holes punched at the bottom of even numbered pages and at the top of odd numbered pages. Except for pocket TMs, the TM numbers shall appear on the upper right corner of all pages, and page numbers shall appear on the lower right corner of all pages. The upper pages shall have even numbers, and the lower pages shall have odd numbers.

3.1.9.3 Type size. Except for pocket size TMs, type size shall be no smaller than 8 point. For pocket size TMs, type size shall be no smaller than 6 point.

3.1.9.4 Foldout/foldup pages. Foldout or foldup pages shall not be used.

3.1.10 Security classification markings. Security classification markings, if required, shall be applied in accordance with MIL-STD-38784.

3.1.11 Content. Content shall be as specified by the outlines contained herein. When chapters, sections, or paragraphs outlined herein are not applicable to the item being covered, they shall be omitted and subsequent chapters, sections, and paragraphs renumbered.

3.1.12 Warnings, cautions, and notes. Warnings, cautions, and notes shall be in accordance with MIL-STD-38784.

3.1.13 Reporting errors and recommending improvements.

a. Except for classified manuals, oversize manuals, pocket size manuals, and manuals with fewer than 8 pages, the following statement shall precede the Table of Contents title:

"REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms) located in the back of this manual direct to: (insert name and address of proponent). You may also send in your recommended changes via electronic mail or by fax. Our fax number is (insert DSN and commercial number of proponent). Our e-mail address is (insert address of proponent). A reply will be furnished to you."

b. One filled-out sample of DA Form 2028, plus three blank DA Forms 2028, shall be included at the back of all unclassified manuals except for oversize manuals, pocket size manuals, and those with fewer than eight pages. The filled-out sample shall include guidelines for completing the form. The three blanks shall be tear-out forms, preprinted to show the applicable manual number, manual date, and manual title on the front and the proponent's return address on the reverse.

3.1.13.1 Reporting errors and recommending improvements for pocket size manuals, oversize manuals, and manuals with fewer than eight pages. The following shall precede the table of contents title:

"REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms), direct to (insert name and address of proponent). You may also send in your recommended changes via electronic mail or by fax. Our fax number is (insert DSN and commercial number of proponent). Our e-mail address is (insert address of proponent). A reply will be furnished to you."

3.1.13.2 Reporting errors and recommending improvements in classified manuals. For classified manuals only, the following shall precede the table of contents title:

"REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve this manual, write and tell us about it. Address your correspondence to (insert name and address of proponent). When dealing with classified information, make sure that your correspondence is properly marked and is handled in accordance with current security regulations."

3.2 Type 10 - Operator's Manual. Type 10 manuals shall be prepared in accordance with the technical content requirements of MIL-STD-40051, except data shall not be prepared in work package format. Style and format shall be in accordance with MIL-STD-38784.

3.3 Type 20 - Unit Maintenance Manual. This manual shall contain instructions for performing maintenance allocated by the MAC to unit maintenance. The arrangement of the manual shall be as follows:

Front Matter  
Chapter 1 Introduction  
Chapter 2 Maintenance Instructions  
Chapter 3 Shipment/Movement and Storage  
Appendix () References  
Appendix () Maintenance Allocation Chart (MAC)  
Appendix () Repair Parts and Special Tools List (RPSTL)  
Appendix () Expendable and Durable Items List  
Glossary  
Index

3.3.1 Front matter. Front matter shall be prepared in accordance with MIL-STD-38784.

3.3.2 Chapter 1, introduction. This chapter shall consist of the following sections:

3.3.2.1 Section 1, general. This section shall consist of the following paragraphs:

a. Scope. This paragraph shall contain the following statement: "These instructions are for use by unit maintenance personnel. They apply to (name of ammunition)."

b. Forms, records, and reports. This paragraph shall contain the following statement: "Department of the Army maintenance forms and reporting procedures are prescribed in DA Pam 738-750 (Functional Users Manual for the Total Army Maintenance Management System (TAMMS)). Accidents involving injury to personnel or damage to materiel will be reported on DA Form 285 (Accident Report) in accordance with AR 385-40 (Procedures for the Destruction of Aircraft and Associated Equipment to Prevent Enemy Use). Explosive ammunition malfunctions will be reported in accordance with AR 75-1 (Malfunctions Involving Ammunition and Explosives)." When applicable, reference shall also be made to SB 742-1 and AR 700-22.

c. Destruction of army materiel to prevent enemy use. This paragraph shall reference the appropriate technical manual(s) covering the destruction of the ammunition to prevent enemy use.

3.3.2.2 Section II, description and data. This section shall consist of the following paragraphs:

a. Description. This paragraph shall provide a brief, general description indicating the purpose, use, capabilities, and features of the ammunition and illustrations as required. Significant differences in models shall be clearly noted. Packing and packaging shall be described including number of rounds per pack. This paragraph shall contain only that data which is applicable to unit maintenance but is not included in the operator's manual.

b. Tabulated data. This paragraph shall include a table containing nomenclature, model number, dimensions, weight, Department of Defense Identification Code (DODIC), and any other tabular information considered necessary to the task. This paragraph shall contain only that data which is pertinent to unit maintenance but is not contained in the operator's manual.

3.3.2.3 Section III, safety, care, and handling. This section shall include a paragraph on general precautions needed to comply with safety regulations. (See AR 385-62, -63, and -64). References to ARs for range safety and danger zones during training and combat shall be included. Clear explanations and official definitions of such safety-related terms as misfire, hangfire, cook-off, etc., which describe characteristics associated with the specific item(s) covered by the manual under preparation shall also be included. A reference to TM 9-1300-206 shall be made for general ammunition care, handling, and safety.

3.3.3 Chapter 2, maintenance instructions. This chapter shall consist of the following sections:

3.3.3.1 Section I, inspection upon receipt of material. This section shall contain procedures for performing visual inspection of ammunition received from the ammunition supply facility. This inspection shall include verification that ammunition received was that requisitioned. The inspection shall also include a condition check of the shipment (including that of pallets, containers, and boxes) and legibility of markings. The quantity of each lot shall be noted for recording purposes.

3.3.3.2 Section II, special tools and equipment. This section shall include a statement to the effect that special tools and equipment required at unit level are listed in the RPSTL appendix. A brief, illustrated description of the use of specially designed tools and equipment issued to the organizations for the purpose of maintaining or using the ammunition shall be given. A reference symbol shall be placed beside each item on the illustration(s) and keyed to items in the paragraph.

3.3.3.3 Section III, maintenance instructions. This section shall contain maintenance procedures for unit maintenance as required by the MAC. It shall contain all procedures required for care and handling of the ammunition and prevention of deterioration due to rough handling or exposure to adverse weather conditions, hazards, or degradation caused by rough handling. It shall provide visual inspection criteria to determine item serviceability (see figure 1). It shall also contain procedures for disposition of defective ammunition. These procedures shall include use of cleaning materials and paint authorized for use in the specific maintenance operations. Inspection, repair, marking, and repacking procedures, including repacking and marking of repacked ammunition shall be described and illustrated as required.

3.3.4 Chapter 3, shipment/movement and storage. This chapter shall consist of the following sections:

3.3.4.1 Section I, shipment/movement. This section shall contain instructions for proper handling, blocking, and bracing of basic load ammunition being transported in trucks and other tactical vehicles.

3.3.4.2 Section II, storage. This section shall contain information on basic load storage, quantity distance class, storage compatibility groupings, storage temperatures, stacking limits, and other pertinent storage requirements.

3.3.5 Appendixes. Appendixes shall be identified alphabetically throughout the document in the order of their reference in the text (e.g., Appendix A, Appendix B, etc.).

3.3.6 Appendix ( ), references. This appendix shall contain a listing of the publications referenced in the manual and any additional references furnished by the contracting activity (see 6.2).

3.3.7 Appendix ( ), maintenance allocation chart (MAC). Information contained in this appendix shall be that furnished by the contracting activity (see 6.2).

3.3.7.1 MAC Format. The general style and format for the ammunition MAC shall be as shown in figure 2.

3.3.7.2 Maintenance function headers. The following maintenance function headers are authorized for use in the preparation of an ammunition MAC:

a. Inspect. To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination (e.g., by sight, sound, or feel).

b. Test. To verify serviceability by measuring the mechanical, pneumatic, hydraulic, or electrical characteristics of an item and comparing those characteristics with prescribed standards.

c. Service. Operations required periodically to keep an item in proper operating condition; e.g., to clean (includes decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases. The following are examples of service functions:

(1) Unpack. To remove from packing box for service or when required for the performance of other maintenance operations.

(2) Repack. To return item to packing box after service and other maintenance operations.

(3) Clean. To rid the item of contamination.

(4) Touch up. To spot paint scratched or blistered surfaces.

(5) Mark. To restore obliterated identification.

d. Adjust. To maintain or regulate, within prescribed limits, by bringing into proper position, or by setting the operating characteristics to specified parameters.

e. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments or test, measuring, and diagnostic equipment used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.

f. Align. To adjust specified variable elements of an item to bring about optimum or desired performance.

g. Remove/Install. To remove and install the same item when required to perform service or other maintenance functions. Install may be the act of emplacing, seating, or fixing into position a spare, repair part, or module (component or assembly) in a manner to allow the proper functioning of an equipment or system.

h. Paint. To prepare and spray color coats of paint so that the ammunition can be identified and protected. The color indicating primary use is applied, preferably, to the entire exterior surface as the background color of the item. Other markings are to be repainted as original so as to retain proper ammunition identification.

i. Repair. The application of maintenance services<sup>1</sup> including fault location/troubleshooting<sup>2</sup>, removal/installation, and disassembly/assembly<sup>3</sup> procedures, and maintenance actions<sup>4</sup> to identify troubles and restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

<sup>1</sup> Services - Inspect, test, service, adjust, align, calibrate, and/or replace.

<sup>2</sup> Fault location/troubleshooting - The process of investigating and detecting the cause of equipment malfunctioning; the act of isolating a fault within a system or unit under test (UUT).

<sup>3</sup> Disassembly/assembly - The step-by-step breakdown (taking apart) of a spare/functional group coded item to the level of its least component, that is assigned an SMR code for the level of maintenance under consideration (i.e., identified as maintenance significant).

<sup>4</sup> Actions - Welding, grinding, riveting, straightening, facing, machining, and/or resurfacing.

j. Replace. To remove an unserviceable item and install a serviceable counterpart in its place. "Replace" is authorized by the MAC and assigned maintenance level is shown as the 3d position code of the SMR code.

k. Overhaul. That maintenance effort (service/action) prescribed to restore an item to a completely serviceable/operational condition as required by maintenance standards in appropriate technical publications (i.e., DMWR). Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.

l. Rebuild. Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of materiel maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (e.g., hours/miles) considered in classifying Army equipment/components.

3.3.8 Appendix (), repair parts and special tools list (RPSTL). When specified by contracting activity (see 6.2) a RPSTL is to be combined with the narrative manual and shall be prepared in accordance with the technical content requirements of MIL-STD-40051, except data shall not be prepared in work package format. General style and format shall conform to MIL-STD-38784.

3.3.9 Appendix (), expendable and durable items list. This appendix shall have two sections, Section I, Introduction, and Section II, Expendable and Durable Items List (tabular listing). The introduction shall be prepared and shall include the applicable information as shown in figure 3. This appendix shall not include illustrations. The list shall be formatted and shall include the applicable information under the headings shown on figure 4.

3.3.10 Glossary. When specified by the contracting activity (see 6.2), a glossary shall be prepared in accordance with MIL-STD-38784.

3.3.11 Index. The index is to be prepared in accordance with MIL-STD-38784.

3.4 Type 30 - Direct Support Maintenance Manual. This manual shall include instructions for performing the maintenance operations allocated by the MAC to direct support maintenance. The arrangement shall be as follows:

Front Matter  
Chapter 1 Introduction  
Chapter 2 Tools and Equipment

Chapter 3 Inspection and Test Requirements	
Chapter 4 DS Maintenance	
Appendix ()	References
Appendix ()	Repair Parts and Special Tools List (RPSTL)
Appendix ()	Expendable and Durable Items List
Appendix ()	Marking Information
Glossary	
Index	

3.4.1 Front matter. Front matter shall be prepared in accordance with MIL-STD-38784.

3.4.2 Chapter 1, introduction. This chapter shall consist of the following sections:

3.4.2.1 Section 1, general. This section shall consist of the following paragraphs:

a. Scope. This paragraph shall contain the following statement: "These instructions are for use by direct support maintenance personnel. They apply to (name of ammunition)."

b. Forms and records. (See 3.3.2.1b)

3.4.2.2 Section II, reference manuals. This section shall make reference to the lower level manual(s) which cover features, capabilities, functions, and purpose of the ammunition. Supplementary description and data information necessary to accomplish DS maintenance shall be included.

3.4.2.3 Section III, safety, care, and handling. This section shall make reference to TM 9-1300-206 and the lower level manual(s) for general safety requirements.

3.4.3 Chapter 2, tools and equipment. This chapter shall consist of the following sections:

3.4.3.1 Section I, special tools and equipment. This section shall describe and illustrate the use of any special tools and equipment authorized for DS maintenance. It shall also make reference to the RPSTL appendix and to those items already authorized for lower maintenance levels.

3.4.3.2 Section II, fabricated tools and equipment. This section shall cover in detail the description of and fabrication instructions for the manufacture or fabrication of tools and equipment required for maintenance, but not provided for in the supply system. This shall include information on materials (list of parts) needed and detail illustrations. This data shall be prepared in tabular form when two or more items are to be fabricated.

3.4.4 Chapter 3, inspection and test requirements. This chapter shall consist of the following sections:

3.4.4.1 Section I, general. This section shall contain a statement to the effect that inspection criteria are provided to ensure that maintenance performed will restore the items to an acceptable quality level. It shall also reference regulations and technical publications relating to policy responsibility and procedures applicable to ammunition stockpile reliability, ammunition surveillance, and quality evaluation programs. The types of inspections contained in this section shall, at a minimum, include a pre-maintenance inspection to be conducted during unpacking, in-process inspection, and final acceptance inspection.

3.4.4.2 Section II, classification of materiel defects. This section shall describe the inspection methods or techniques used to detect defective components/end items being processed. It shall also include "Classification of Materiel Defect" tables for ammunition components and packaging material. The tabulated data shall include a listing of components, categories of defects (minor, major, critical) attributable to each component, a listing of defects by category, a reference to the paragraph of the manual containing corrective action, the inspection method used to determine if corrective action was accomplished, and the Acceptable Quality Level (AQL) established for each defect.

3.4.4.3 Section III, visual inspection. This section shall contain visual inspection criteria for the packaging of the items. See figure 1 for example of inspection criteria.

3.4.4.4 Section IV, function testing. This section shall contain detailed procedures for function testing to be performed by experienced personnel. Diagrams and instructions for fabrication of test fixtures shall be included when required.

3.4.4.5 Section V, evaluation of defects. This section shall contain a paragraph covering evaluation of item defects and a paragraph covering evaluation of packing defects. Both paragraphs shall contain guidelines to be used in establishing a uniform system of examination for deterioration or damage. Definitions of minor, major, and critical defects shall be included. References to the -12 or -20 TM shall be made when appropriate.

3.4.4.6 Section VI, classification of defects. This section shall contain a classification of defects (i.e. minor, major or critical), for both functioning and nonfunctioning categories. The criteria shall be those specified in SB 742-1.

3.4.4.7 Section VII, disposition of lots. This section shall contain the following paragraphs verbatim:

"a. Each lot of materiel shall be inspected and screened 100 percent if one critical nonfunctioning defect is observed. If a critical functioning defect occurs, save remaining pieces and components: suspend the lot from local issue and use. Submit malfunction reports as prescribed in AR 75-1 (Malfunctions Involving Ammunition and Explosives). Disposition instructions will be furnished by the US Army Materiel Command.

b. A lot of materiel is acceptable for issue if the acceptable criteria as indicated in (insert applicable table number) are met.

c. Report all lots of materiel rejected under applicable serviceability table for disposition instructions to: Commander, US Army Armament, and Chemical Logistics Activity, ATTN: AMSMC- DSM, Rock Island, IL 61299-6000. Include a statement describing the capability and workload situation of your organization as to whether you are capable of reworking/demilitarizing the item."

3.4.5 Chapter 4, direct support maintenance. This chapter shall contain the procedures, including in-process inspection, to be performed by DS units for those maintenance operations allocated to it by the MAC. It shall prescribe the responsibilities for performing such operations as care and preservation of items and stocking authorized replacement components, packing material, and expendable and durable supplies (figures 3 and 4) and re-covering items such as cardboard inner boxes and wooden boxes needed for maintenance of stock. Reference shall be made to the RPSTL appendix for replacement parts and any special tools required, to the expendable and durable items list appendix, and to the marking information appendix for appropriate marking information.

3.4.6 Appendixes. (See 3.3.5)

3.4.7 Appendix (), references. (See 3.3.6)

3.4.8 Appendix (), repair parts and special tools list (RPSTL). (See 3.3.8)

3.4.9 Appendix (), expendable and durable items list. (See 3.3.9)

3.4.10 Appendix (), marking information. This appendix shall be prepared in accordance with figure 5 or by specific illustration(s), figure 6.

3.4.11 Glossary. (See 3.3.10)

3.4.12 Index. (See 3.3.11)

3.5 Type 40 - General Support Maintenance Manual. This manual shall include instructions for performing the maintenance operations allocated by the MAC to general support maintenance. The arrangement of the manual shall be as follows:

Front Matter  
Chapter 1 Introduction  
Chapter 2 Tools and Equipment  
Chapter 3 Inspection and Test Requirements  
Chapter 4 GS Maintenance  
Appendix ()           References  
Appendix ()           Repair Parts and Special Tools List (RPSTL)  
Appendix ()           Expendable and Durable Items List  
Appendix ()           Marking Information  
Glossary  
Index

3.5.1 Front matter. Front matter shall be prepared in accordance with MIL-STD-38784.

3.5.2 Chapter 1, introduction. (See 3.4.2 and adjust to GS Maintenance.)

3.5.3 Chapter 2, tools and equipment. (See 3.4.3 and adjust to GS Maintenance.)

3.5.4 Chapter 3, inspection and test requirements. (See 3.4.4 and adjust to GS maintenance.)

3.5.5 Chapter 4, general support maintenance. (See 3.4.5 and adjust to GS maintenance.)

3.5.6 Appendixes. (See 3.3.5)

3.5.7 Appendix (), references. (See 3.3.6)

3.5.8 Appendix (), RPSTL. (See 3.3.8)

3.5.9 Appendix (), expendable and durable items list. (See 3.3.9)

3.5.10 Appendix (), marking information. (See 3.4.10)

3.5.11 Glossary. (See 3.3.10)

3.5.12 Index. (See 3.3.11)

3.6 Type 12 - Operator and Unit Maintenance Manual. This manual shall include instructions for performing the operations and maintenance allowed to the operator/crew and to unit maintenance by the MAC. The arrangement of the manual shall be as follows:

Front Matter	
Chapter 1 Introduction	
Chapter 2 Operating Instructions	
Chapter 3 Operator Maintenance Instructions	
Chapter 4 Unit Maintenance Instructions	
Chapter 5 Shipment and Storage	
Chapter 6 Administrative Storage (when applicable)	
Appendix ()	References
Appendix ()	Maintenance Allocation Chart (MAC)
Appendix ()	Repair Parts and Special Tools List
Appendix ()	Expendable and Durable Items List
Glossary	
Index	

3.6.1 Front matter. Front matter shall be prepared in accordance with MIL-STD-38784.

3.6.2 Chapter 1, introduction. This chapter shall consist of the following sections:

3.6.2.1 Section 1, general. This section shall consist of the following paragraphs:

a. Scope. This paragraph shall contain the following statement: "These instructions are for use by operator/crew and unit maintenance personnel. They apply to (name of ammunition)."

b. Forms and records. (See 3.3.2.1b)

c. Destruction of army materiel to prevent enemy use. (See 3.3.2.1c)

3.6.2.2 Section II, description and data. (See 3.3.2.2 and adjust to cover operator and unit levels.)

3.6.2.3 Section III, safety, care, and handling. (See 3.3.2.3)

3.6.3 Chapter 2, operating instructions. Chapter 2 shall be prepared in accordance with the technical content requirements of MIL-STD-40051, except data shall not be prepared in work package format. General style and format shall conform to MIL-STD-38784.

3.6.4 Chapter 3, operator maintenance instructions. Chapter 3 shall be done in accordance with the technical content requirements of MIL-STD-40051, except data shall not be prepared in work package format. General style and format shall conform to MIL-STD-38784.

3.6.5 Chapter 4, unit maintenance instructions. (See 3.3.3)

3.6.6 Chapter 5, shipment/movement and storage. (See 3.3.4)



3.6.7 Appendixes. (See 3.3.5)

3.6.8 Appendix (), references. (See 3.3.6)

3.6.9 Appendix (), maintenance allocation chart (MAC). (See 3.3.7)

3.6.10 Appendix (), repair parts and special tools list (RPSTL). (See 3.3.8)

3.6.11 Appendix (), expendable and durable items list. (See 3.3.9)

3.6.12 Glossary. (See 3.3.10)

3.6.13 Index. (See 3.3.11)

3.7 Type 13 - Operator, Unit, and Direct Support Maintenance Manual. This manual shall include instructions for performing the operations and maintenance allowed to the operator/crew, unit, and direct support maintenance by the MAC. The arrangement of the manual shall be as follows:

Front Matter	
Chapter 1 Introduction	
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3.7.1 Front matter. Front matter shall be prepared in accordance with MIL-STD-38784.

3.7.2 Chapter 1, introduction. This chapter shall consist of the following sections:

3.7.2.1 Section 1, general. This section shall consist of the following paragraphs:

a. Scope. This paragraph shall contain the following statement: "These instructions are for use by operator/crew, unit, and direct support maintenance personnel. They apply to (name of ammunition)."

b. Forms and records. (See 3.3.2.1b)

c. Destruction of army materiel to prevent enemy use. This paragraph shall reference the appropriate technical manual(s) covering the destruction of the ammunition to prevent enemy use.

3.7.2.2 Section II, description and data. (See 3.3.2.2 and adjust to cover operator, unit, and DS levels.)

- 3.7.2.3 Section III, safety, care, and handling. (See 3.3.2.3)
- 3.7.3 Chapter 2, operating instructions. (See 3.6.3)
- 3.7.4 Chapter 3, operator maintenance instructions. (See 3.6.4)
- 3.7. Chapter 4, unit maintenance instructions. (See 3.3.3)
- 3.7.6 Chapter 5, DS tools and equipment. (See 3.4.3)
- 3.7.7 Chapter 6, DS inspection requirements. (See 3.4.4)
- 3.7.8 Chapter 7, DS maintenance. (See 3.4.5)
- 3.7.9 Chapter 8, shipment/movement and storage. (See 3.3.4)
- 3.7.10 Appendixes. (See 3.3.5)
- 3.7.11 Appendix (), references. (See 3.3.6)
- 3.7.12 Appendix (), maintenance allocation chart. (See 3.3.7)
- 3.7.13 Appendix (), repair parts and special tools list (RPSTL). (See 3.3.8)
- 3.7.14 Appendix (), expendable and durable items list. (See 3.3.9)
- 3.7.15 Appendix (), marking information. (See 3.4.10)
- 3.7.16 Glossary. (See 3.3.10)
- 3.7.17 Index. (See 3.3.11)

3.8 Type 14 - Operator, Unit, Direct Support, and General Support Maintenance Manual. This manual shall include instructions for performing the operations and maintenance allowed to the operator/crew, unit, direct support, and general support maintenance by the MAC. The arrangement of the manual shall be as follows:

Front Matter	
Chapter 1 Introduction	
Chapter 2 Operating Instructions	
Chapter 3 Operator Maintenance Instructions	
Chapter 4 Unit Maintenance Instructions	
Chapter 5 Tools and Equipment	
Chapter 6 Inspection Requirements	
Chapter 7 DS Maintenance Instructions	
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3.8.1 Front matter. Front matter shall be prepared in accordance with MIL-STD-38784.

3.8.2 Chapter 1, introduction. This chapter shall consist of the following sections:

3.8.2.1 Section 1, general. This section shall consist of the following paragraphs:

a. Scope. This paragraph shall contain the following statement: "These instructions are for use by operator/crew, unit, direct support, and general support maintenance personnel. They apply to (name of ammunition)."

b. Forms and records. (See 3.3.2.1b)

c. Destruction of army materiel to prevent enemy use. This paragraph shall reference the appropriate technical manual(s) covering the destruction of the ammunition to prevent enemy use.

3.8.2.2 Section II, description and data. (See 3.3.2.2 and adjust to cover operator, unit, DS, and GS levels.)

3.8.2.3 Section III, safety, care, and handling. (See 3.3.2.3)

3.8.3 Chapter 2, operating instructions. (See 3.6.3)

3.8.4 Chapter 3, operator maintenance instructions. (See 3.6.4)

3.8.5 Chapter 4, unit maintenance instructions. (See 3.3.3)

3.8.6 Chapter 5, DS and GS tools and equipment. (See 3.4.3)

3.8.7 Chapter 6, DS and GS inspection requirements. (See 3.4.4)

3.8.8 Chapter 7, DS maintenance. (See 3.4.5)

3.8.9 Chapter 8, GS maintenance. (See 3.4.5 and adjust to GS maintenance.)

3.8.10 Chapter 9, shipment/movement and storage. (See 3.3.4)

3.8.11 Appendixes. (See 3.3.5)

3.8.12 Appendix (), references. (See 3.3.6)

3.8.13 Appendix (), maintenance allocation chart. (See 3.3.7)

3.8.14 Appendix (), repair parts and special tools list (RPSTL). (See 3.3.8)

3.8.15 Appendix (), expendable and durable items list. (See 3.3.9)

3.8.16 Appendix (), marking information. (See 3.4.10)

3.8.17 Glossary. (See 3.3.10)

3.8.18 Index. (See 3.3.11)

3.9 Type 23 - Unit, and Direct Support Maintenance Manual. This manual shall include instructions for performing the operations and maintenance allowed to the unit and direct support maintenance by the MAC. The arrangement of the manual shall be as follows:

Front Matter	
Chapter 1 Introduction	
Chapter 2 Unit Maintenance Instructions	
Chapter 3 DS Tools and Equipment	
Chapter 4 DS Inspection Requirements	
Chapter 5 DS Maintenance Instructions	
Chapter 6 Shipment/Movement and Storage	
Appendix ()	References
Appendix ()	Maintenance Allocation Chart (MAC)
Appendix ()	Repair Parts and Special Tools List
Appendix ()	Expendable and Durable Items List
Appendix ()	Marking Information
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3.9.1 Front matter. Front matter shall be done in accordance with MIL-STD-38784.

3.9.2 Chapter 1, introduction. This chapter shall consist of the following sections:

3.9.2.1 Section 1, general. This section shall consist of the following paragraphs:

a. Scope. This paragraph shall contain the following statement: "These instructions are for use by unit and direct support maintenance personnel. They apply to (name of ammunition)."

b. Forms and records. (See 3.3.2.1b)

c. Destruction of army materiel to prevent enemy use. This paragraph shall reference the appropriate technical manual(s) covering the destruction of the ammunition to prevent enemy use.

3.9.2.2 Section II, description and data. (See 3.3.2.2 and adjust to cover unit and DS levels.)

3.9.2.3 Section III, safety, care, and handling. (See 3.3.2.3)

3.9.3 Chapter 2, unit maintenance instructions. (See 3.3.3)

3.9.4 Chapter 3, DS tools and equipment. (See 3.4.3)

3.9.5 Chapter 4, DS inspection requirements. (See 3.4.4)

3.9.6 Chapter 5, DS maintenance. (See 3.4.5)

3.9.7 Chapter 6, shipment/movement and storage. (See 3.3.4)



3.9.8 Appendixes. (See 3.3.5)

3.9.9 Appendix (), references. (See 3.3.6)

3.9.10 Appendix (), maintenance allocation chart. (See 3.3.7)

3.9.11 Appendix (), repair parts and special tools list (RPSTL). (See 3.3.8)

3.9.12 Appendix (), expendable and durable items list. (See 3.3.9)

3.9.13 Appendix (), marking information. (See 3.4.10)

3.9.14 Glossary. (See 3.3.10)

3.9.15 Index. (See 3.3.11)

3.10 Type 24 - Unit, Direct Support, and General Support Maintenance Manual. This manual shall include instructions for performing the operations and maintenance allowed to the unit, direct support, and general support maintenance by the MAC. The arrangement of the manual shall be as follows:

Front Matter  
Chapter 1 Introduction  
Chapter 2 Unit Maintenance Instructions  
Chapter 3 DS and GS Tools and Equipment  
Chapter 4 DS and GS Inspection Requirements  
Chapter 5 DS Maintenance Instructions  
Chapter 6 GS Maintenance Instructions  
Chapter 7 Shipment/Movement and Storage  
Appendix ()           References  
Appendix ()           Maintenance Allocation Chart (MAC)  
Appendix ()           Repair Parts and Special Tools List  
Appendix ()           Expendable and Durable Items List  
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3.10.1 Front matter. Front matter shall be done in accordance with MIL-STD-38784.

3.10.2 Chapter 1, introduction. This chapter shall consist of the following sections:

3.10.2.1 Section 1, general. This section shall consist of the following paragraphs:

a. Scope. This paragraph shall contain the following statement: "These instructions are for use by unit, direct support, and general support maintenance personnel. They apply to (name of ammunition)."

b. Forms and records. (See 3.3.2.1b)

c. Destruction of army materiel to prevent enemy use. This paragraph shall reference the appropriate technical manual(s) covering the destruction of the ammunition to prevent enemy use.

3.10.2.2 Section II, description and data. (See 3.3.2.2 and adjust to cover unit, DS and GS levels.)

3.10.2.3 Section III, safety, care, and handling. (See 3.3.2.3)

3.10.3 Chapter 2, unit maintenance instructions. (See 3.3.3)

3.10.4 Chapter 3, DS and GS tools and equipment. (See 3.4.3)

3.10.5 Chapter 4, DS and GS inspection requirements. (See 3.4.4)

3.10.6 Chapter 5, DS maintenance. (See 3.4.5)

3.10.7 Chapter 6, GS maintenance. (See 3.4.5 and adjust to GS maintenance.)

3.10.8 Chapter 7, shipment/movement and storage. (See 3.3.4)

3.10.9 Appendixes. (See 3.3.5)

3.10.10 Appendix (), references. (See 3.3.6)

3.10.11 Appendix (), maintenance allocation chart. (See 3.3.7)

3.10.12 Appendix (), repair parts and special tools list (RPSTL). (See 3.3.8)

3.10.13 Appendix (), expendable and durable items list. (See 3.3.9)

3.10.14 Appendix (), marking information. (See 3.4.10)

3.10.15 Glossary. (See 3.3.10)

3.10.16 Index. (See 3.3.11)

3.11 Type 34 - Direct Support and General Support Maintenance Manual. This manual shall include instructions for performing the operations and maintenance allowed to the direct support and general support maintenance by the MAC. The arrangement of the manual shall be as follows:

Front Matter

Chapter 1 Introduction

Chapter 2 Tools and Equipment

Chapter 3 Inspection Requirements

Chapter 4 DS Maintenance Instructions

Chapter 5 GS Maintenance Instructions

Appendix ()           References

Appendix ()           Repair Parts and Special Tools List

Appendix ()           Expendable and Durable Items List

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- 3.11.1 Front matter. Front matter shall be prepared in accordance with MIL-STD-38784.
- 3.11.2 Chapter 1, introduction. (See 3.4.2 and adjust to DS and GS Maintenance.)
- 3.11.3 Chapter 2, tools and equipment. (See 3.4.3 and adjust to DS and GS Maintenance.)
- 3.11.4 Chapter 3, inspection requirements. (See 3.4.4 and adjust to DS and GS Maintenance.)
- 3.11.5 Chapter 4, DS maintenance. (See 3.4.5)
- 3.11.6 Chapter 5, GS maintenance. (See 3.5.5)
- 3.11.7 Appendixes. (See 3.3.5)
- 3.11.8 Appendix (), references. (See 3.3.6)
- 3.11.9 Appendix (), repair parts and special tools list (RPSTL). (See 3.3.8)
- 3.11.10 Appendix (), expendable and durable items list. (See 3.3.9)
- 3.11.11 Appendix (), marking information. (See 3.4.10)
- 3.11.12 Glossary. (See 3.3.10)
- 3.11.13 Index. (See 3.3.11)

#### 4. VERIFICATION

- 4.1 Verification. The verification requirements shall be as specified in the contract or order (see 6.2).

#### 5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When actual packaging of material is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activity within the Military Department or Defense Agency, or within the Military Department's System Command. 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. This specification is intended to be used for acquisition of the technical manuals specified herein. The requirements of this specification are normally invoked by contract. When the Government prepares the subject manuals, the Government preparing activity assumes the role of the contractor and is responsible for meeting the requirements specified herein.

6.2 Acquisition requirements. Acquisition documents should specify the following:

- a. Title, number, and date of this specification.
- b. Issue of DoDISS to be cited in the solicitation and, if required, the specific issue of individual documents (see 2.2.1 and 2.2.2).
- c. Title and publication number of the manual to be prepared.
- d. Description of target audience and reading grade level for TM (see 3.1.3).
- e. Line drawings, unless otherwise specified (see 3.1.4).
- f. Size of manual (see 3.1.9).
- g. Format of horizontal technical manual (if applicable), unless otherwise specified (see 3.1.9.2).
- h. Identification of additional reference information to be furnished by the Government (see 3.3.6).
- i. Required information for Maintenance Allocation Chart (see 3.3.7).
- j. Requirements for Repair Parts and Special Tools List (see 3.3.8).
- k. Glossary for technical manual (see 3.3.10).
- l. Verification requirements (see 4.1).
- m. Packaging requirements (see 5.1).
- n. Specification tailoring by selection of optional requirements on the content/format selection summary (see appendix A).

6.3 Technical manuals. The requirement for technical manuals should be considered when this specification is applied on a contract. If technical manuals are required, specifications and standards that have been cleared and listed in DoD 5010.12-L, Acquisition Management Systems and Data Requirements Control List (AMSDL) must be listed on a separate Contract Data Requirements List (DD Form 1423), which is included as an exhibit to the contract. The technical manuals must be acquired under separate contract line item in the contract.

6.4 Definitions. The definition of terms below apply as they are used in this specification.

6.4.1 Contracting activity. The Department of Defense (DoD) component activity, or organization of a using military service, or that organization delegated by the using service that is responsible for the selection and determination of requirements for TMs.

6.4.2 Warning. A statement or other notification about an operation or maintenance procedure, practice, or condition that, if not strictly observed, could result in injury or death of personnel doing the operation or maintenance.

6.5 Subject term (key word) listing.

Ammunition stockpile reliability  
Ammunition supply activity  
Ammunition surveillance  
Explosive ammunition malfunction

6.6 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

**Table 3-2, Inspection Criteria for Packaging**

Component	Acceptable	Repairable	Irreparable
Wooden boxes and crates			
Hardware	Operative and tight.  Nails, screws, and fasteners present and in good condition.	Inoperative or loose.  Nails, screws, and fasteners which can be replaced or properly sealed.	None  None
Ends	Free from damage.	Broken or missing cleats and handles.	Damage which requires disassembly of box.
Wood	Splits less than 3 inches long, no closer than 1 inch to edge of board or adjoining split. The second board must be secured by at least one nail on each side of the split when it extends to the end of the board.	Splits over 3 inches but no closer than 1 inch to edge of board or adjoining split, or 1/8-inch wide, which can be repaired by use of corrugated fasteners.	Splits closer than 1 inch to edge of board or adjoining split or over 1/8-inch wide.  ~~~~~
Fiber containers			
Metal ends	Minor, rust, cracks, indentations, or splits which would not impair water proofing or serviceability of container.	None	Perforations, excessive rust, or ends which are crushed or not securely crimped to body.
Body and cap	No tears, cuts, or gouges.  No mold, mildew, or rot.  Free from wrinkles caused by looseness between layers.	Cuts, tears, or gouges not closer than 1 inch to closure, less than 1/2 square inch in area, and unpenetrated layers which can be spot painted.  None  None	Cuts, tears, or gouges closer than 1 inch to closure, more than 1/2 square inch in area, or through all impregnated layers.  Molded, mildewed, or rotted.  Wrinkled or peeling.

FIGURE 1. Sample inspection criteria.

**Section II. MAINTENANCE ALLOCATION CHART**

**FOR**

**AMMUNITION, CHARGE AND PROJECTILE**

(1) Group Number	(2) Component/ Assembly	(3) Maintenance Function	(4) Maintenance Level					(5) Tools and Equipment Ref Code	(6) Remarks Code
			Unit		Direct Support	General Support	Depot		
			C	O	F	H	D		
0010	CHARGE (OVERALL)	INSPECT	0.1					2	A
		TEST					0.5		
		UNPACK	0.2						
		REPACK		0.3	3.0				
		CLEAN	0.4						
		TOUCH-UP		0.6					
		MARK			0.7				
		CALIBRATE				0.4			
		INSTALL	0.8						
		PAIN REPAIR					0.9 1.0		
0020	PROJECTILE	INSPECT	0.1					9	F
		TEST			0.1				
		UNPACK	0.1						
		REPACK		0.2					
		CLEAN		0.3					
		TOUCH-UP		0.2					
		MARK			0.2				
		PAIN REPAIR		0.4					
		OVERHAUL			1.0				
							1.6		

FIGURE 2. Example of an ammunition MAC.

**SECTION III - TOOLS AND TEST EQUIPMENT**

**FOR**

**AMMUNITION, CHARGE AND PROJECTILE**

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE LEVEL	NOMENCLATURE	NATIONAL STOCK NUMBER	TOOL NUMBER
1	O	CLEANER, ELECTRICAL CONTACT	5850-00-973-3122	9100
2	O	SCREWDRIVER, CROSS TIP, PHILLIPS NO. 1	6120-00-240-8716	
3	O	PLIERS, LONG NOSE	5120-00-247-5177	108285
4	O	WRENCH, SOCKET, SPINNER TYPE 3/8"	5120-00-596-1263	
5	O	WRENCH, SOCKET, SPINNER TYPE 1/4"	5120-00-241-3188	3408
6	O	SCREWDRIVER, FLAT TIP, 3/16 INCH WIDE	5120-00-293-3183	7577858
7	O	WRENCH, OPEN END, FIXED, 9/16 INCH AND 1/2 INCH OPENING	5120-00-187-7124	17258
8	F, H	MULTI METER, DIGITAL, WRE-300/M	6625-00-933-2406	300M
9	F, H	BRUSH, SMALL, STIFF BRISTLED NON-METALLIC	Not available in system. Purchase Market.	Fed Supply on Open
10	F, H	CONFORMAL COATING	8030-00-738-1725	

**SECTION IV - REMARKS**

**FOR**

**AMMUNITION, CHARGE AND PROJECTILE**

REMARKS CODE	REMARKS
A	EXTERNAL
B	PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)
C	REMOVAL OF A PACKED UNIT
D	BENCH TOP USE ONLY; 0.1 HRS
E	SELF-TEST
F	REPAIR BY PWA AND AUTHORIZED COMPONENT REPLACEMENT ONLY
G	COMPLETE UNIT AND SUBASSEMBLY REPAIR

FIGURE 2. Example of an ammunition MAC - Continued.

## APPENDIX C

### EXPENDABLE AND DURABLE ITEMS LIST

#### SECTION 1. INTRODUCTION

##### C-1. SCOPE

This approach lists expendable and durable items you will need to maintain the M1 tank hull. This listing is for information purposes only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, expendable items (except Medical, Class V, Repair Parts, and Heraldic Items).

##### C-2. EXPLANATION OF COLUMNS

a. Column (1) - Item number. This number is assigned to the entry in the listing for reference when required.

b. Column (2) - Level. This column identifies the lowest level of maintenance that requires the listed item.

C - Operator/Crew  
O - Unit Maintenance  
F - Direct Support Maintenance  
H - General Support Maintenance

c. Column (3) - National Stock Number. This is the national stock number assigned to the item; use it to request or requisition the item.

d. Column (4) - Description. Indicates the federal item name and, if required, a description to identify the item. The last line for each item indicates the Commercial and Government Entity Code (CAGEC) parentheses followed by the part number.

e. Column (5) - Unit of Measure (U/M)/Unit of Issue (U/I). This measure is expressed by a two-character alphabetical abbreviation (e.g., EA, IN, PR). If the unit of measure differs from the unit of issue as shown in the Army Master Data File (AMDF), requisition the lowest unit of issue that will satisfy your requirements.

FIGURE 3. Sample expendable and durable items list introduction.

## SECTION II. EXPENDABLE AND DURABLE ITEMS LIST

(1) Item Number	(2) Level	(3) National Stock Number	(4) Description	(5) (U/M/ U/I)
1	O	8040-01-154-0038	Adhesive Kit, no mix adhesive and activator: (05972) 00206	KT
2	O	8040-00-880-7332	Adhesive, liquid rubber, Type II, 12-ounce can: (81348) MIL-A-46106	OZ
3	O	8040-00-273-8708	Adhesive, sealant: (81349) MIL-A-3316	GL
4	O	8040-00-118-2695	Adhesive, sealant, Type I, 3-ounce tube: (80244) MIL-A-46146	OZ
5	O	8040-00-877-9872	Adhesive, sealant, Type I, 3-ounce tube: 81348) MIL-A-46106	OZ
6	O	8040-01-009-1562	Adhesive, sealant, Type II, 3-ounce tube: (80244) MIL-A-46106	OZ
7	O	8040-00-900-6296	Adhesive, Type I: (80244) MMM-A-134	KT
8	O	8040-00-142-9193	Adhesive, Type I, Class 1, 1-ounce bottle: (81349) MIL-A-46050	OZ
9	O	8040-00-664-2912	Adhesive, Type I, Class 3, 1-pint can: (80244) MMM-A-132	PT
10	O	8040-00-664-4318	Adhesive, Type II, 1-pint can: (81348) MMM-A-1617	PT
11	O	8040-00-322-4034	Adhesive, Type II, Class 3: (80244) MMM-A-132	PT
12	O		Adhesive, Type A: (59997) Swift 17135	EA
13	O	8040-01-123-0082	Adhesive Type B: (19200) 11669677	GL
14	O	8030-00-597-5367	Antiseize Compound, 1050 F temperature rating, 2.5-pound can: (81349) MIL-A-907	LB
15	O	8105-00-837-7754	Bag, plastic, package of 1000: (81348) PPP-B-26	EA
16	O	9530-00-236-8449	Bar, metal, aluminum alloy, 2-inch x 2-inch x 10-foot long: (81348) QQ-A-225/6	PT

FIGURE 4. Sample expendable and durable items list table.

**Model Number and Color Coding of Projectiles for 8-inch Howitzer, M110A2**

Type and Model No. of Projectile	New Manufacture			Old Manufacture		
	Color of Projectile	No/Color of Bands	Marking	Color of Projectile	No/Color of Bands	Marking
** Agent (GB) w/burster, M246	Gray	3/Green 1/Yellow	Green	Gray	1/Green	Green
** Agent (VX) w/burster, M426	Gray	3/Green 1/Yellow	Green	Gray	2/Green	Green
HE, (ICM) M404	Olive Drab	*Diamonds	Yellow	Olive Drab	None	Yellow



- \* Row of yellow diamonds between nose and bourrelet of projectile.
- \*\* Renovated or newly manufactured projectile (post 1976) will be marked with one green band and if burster, one yellow band.

FIGURE 5. Example of marking information presented in a table.

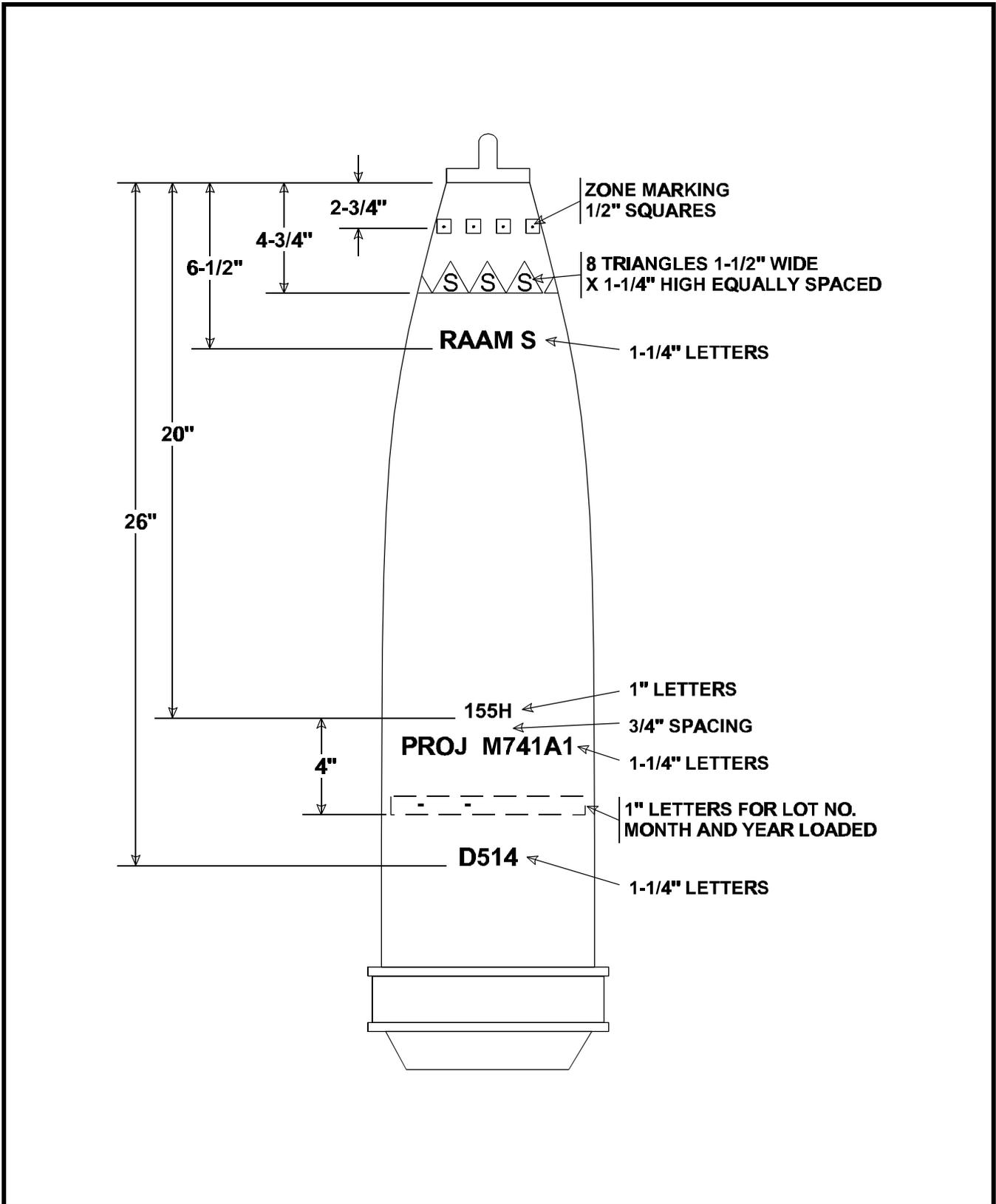


FIGURE 6. Example of marking information presented in an illustration.

**APPENDIX**

**CONTENT/FORMAT SELECTION SUMMARY FOR  
TECHNICAL MANUALS FOR CONVENTIONAL AND CHEMICAL AMMUNITION**

A.1 GENERAL.

A.1.1 Scope. This appendix facilitates the tailoring of requirements for technical manuals for conventional and chemical ammunition contained in the body of this specification. This appendix is a mandatory part of this specification. The information contained herein is intended for compliance when the Content/Format Selection Summary is completed by the Government.

A.1.2 Application. This appendix is intended to be copied/reproduced, completed, used for contract solicitation, and incorporated into the contract.

A.1.3 Tailoring. The contracting activity should evaluate the individual requirements of this specification to determine the extent to which they are most suitable for the acquisition and modify the requirements to ensure that each achieves the optimal balance between operational needs and cost. Exclusions of sections, paragraphs, or sentences shall be indicated on the Content/Format Selection Summary. When necessary, remarks should be expanded and included on a separate sheet of paper attached to the Summary List. In all cases, tailoring shall be compatible with this specification.

A.1.4 Explanation of columns - content/format selection summary. Column (1), Item no., self explanatory. Column (2) is the type of requirement and column (3) identifies the applicable paragraph in the specification. Column (4) Options Selected, subcolumn (a) "yes", should be marked with an "X" for each item/requirement applicable to the solicitation/acquisition as written. Column (4), subcolumn (b), "no" should be marked with an "X" for each item that is not applicable as written, but is applicable as specified in subcolumn (c). Subcolumn (c), Explanation/Remarks is provided for clarity.

A.2 APPLICABLE DOCUMENTS.

This section is not applicable to this appendix.

**APPENDIX**

**CONTENT/FORMAT SELECTION SUMMARY SHEET**

**EQUIPMENT NAME/NOMENCLATURE** \_\_\_\_\_

**CONTRACT NO.** \_\_\_\_\_

**NOTE: Applicable requirements are indicated by an “x” in column 4a or explained in column 4b.**

(1) Item No.	(2) Requirements	(3) Applicable Paragraph No.	(4)		
			(a)	(b)	(c)
			Options Selected		Explanation/Remarks
(yes)	(no)				
1	Line Drawings	3.1.4			
2	RPSTL combined with narrative manual	3.3.8			
3	Glossary	3.3.10			

NOTE: The above selected requirements tailoring options identified by an “X” in the Options Selected column 4, subcolumn 4(a) or 4(b), or the explanation provided in the Remarks subcolumn 4(c) are a mandatory part of this contract.

COMPLETED BY: \_\_\_\_\_  
(authorized signature)

PUBLICATIONS ACTIVITY: \_\_\_\_\_ DATE: \_\_\_\_\_

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