MIL-M-38796A (USAF)

1 August 1977

SUPERSEDING

MIL-M-38796 (USAF)

15 June 1969

### **MILITARY SPECIFICATION**

MANUALS, TECHNICAL: ORGANIZATIONAL, INTERMEDIATE MAINTENANCE, AND/OR DEPOT OVERHAUL INSTRUCTIONS WITH ILLUSTRATED PARTS BREAKDOWN (For Special Shipping and Storage Containers (Empty) for Non-nuclear Munitions)

This specification is approved for use by all departments and agencies of the Department of Defense.

#### 1. SCOPE

1.1 This specification covers the requirements for preparation of technical manuals for organizational, intermediate maintenance, and/or depot overhaul instructions with illustrated parts breakdown for special shipping and storage containers (empty) for non-nuclear munitions. The level of maintenance shall be determined by the processing activity.

# 2. APPLICABLE DOCUMENTS

2.1 The following documents of the issue in effect on the date of invitation for bids or request for proposal, form a part of this specification to the extent specified herein.

## **SPECIFICATIONS**

Military	
MIL-M-38807	Manuals, Technical: Illustrated Parts Breakdown; preparation of
MIL-M-38784	Manuals, Technical: General Style and Format Requirements
MIL-P-38790	Printing Production of Technical Manuals: General Requirements For
MIL-S-38130	Safety Engineering of Systems and Associated Subsystems and Equipment; General Requirements for
PUBLICATIONS	
H4-1	Cataloging Handbook
TO 00-5-1	AF Technical Order System

(Copies of documents required by contractors in connection with specific procurement functions should be obtained from the procuring activity or as directed by the contracting officer).

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: HQ AFLC/LOLMP, WPAFB OH 45433, by using the self-addressed Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

### 3. REQUIREMENTS

- 3.1 <u>Preparation</u>. The general manner of preparation of text, artwork, and negatives shall be in accordance with MIL-M-38784, and MIL-P-38790. Illustrations and diagrams shall supplement the text and contribute to its clarity.
- 3.2 <u>Contents</u>. Manuals shall include all procedures necessary to establish a complete, progressive maintenance program for the items to which the manual pertains. No requirement shall be omitted because the requirement would not be applicable until expiration of a long interval of service. Maintenance requirements shall be based on the manufacturer's recommendation and service experience as substantiated by an approved Air Force maintenance analysis. All available information shall be used to determine the maintenance criteria of the items. Procedures shall be stated tersely, but completely, in language understandable to maintenance personnel. Warning, cautions, and notes shall be inserted as necessary.
- 3.2.1 <u>Identification of items</u>. The official nomenclature and part numbers of items and special equipment shall be listed one time in the manual. Further identification shall be in short descriptive form, but definite enough to insure clear identification. The principal noun shall be consistent with those in Federal Stock Lists (FSL) and drawings. Use of part number shall be held to an absolute minimum and used only when no other means of positive identification will suffice.
- 3.3 <u>Arrangement of manual</u>. Manuals shall have the following arrangement in the order indicated. Where a section is not applicable, it shall be omitted and succeeding sections renumbered accordingly. In the event additional sections are required, they will be placed in the appropriate portion of the manual and numbered accordingly.

Front Matter

Title Page

**List of Effective Pages** 

**Table of Contents** 

List of Illustrations

List of Tables

Introduction

Section I - Description and Leading Particulars

Section II - Preparation for Maintenance

Section III - Organizational, Intermediate Maintenance and Depot Overhaul Instructions (as applicable)

Section IV - Preparation for use after Maintenance

Section V - Illustrated Parts Breakdown

Section VI - Safety and Accident Prevention

- 3.3.1 <u>Front matter</u>. The title page, list of effective pages, table of contents, list of illustrations, and list of tables shall be prepared in accordance with the requirements of MIL-M-38784.
- 3.3.2 <u>Introduction</u>. In addition to the requirments of MIL-M-38784, the introduction shall provide a brief explanation of the purpose and scope of the manual along with other relevant information that will contribute directly to the use of the manual. The words "shall", "will", "should", and "may", as used in the manual, shall be defined (refer to MIL-M-38784). The introduction shall conclude with the statement: "Suggested improvements to this manual shall be reported to OO-ALC/MMEDT, Pill AFB, Utah 84406."
- 3.3.3 <u>Section I, Description and Leading Particulars</u>. This section shall contain a narrative description and a table of loading particulars.
- 3.3.3.1 <u>Narrative description</u>. The purpose and general construction of the container shall be described. A brief physical and functional description of the container and its major sections shall be included. The container and each of its major sections shall be identified by official nomenclature and part number (tabular format recommended). Subsequent references may then be by short-form descriptive terms, provided that there will be no confusion as to which item is being described. An illustration of the container and its major sections, that will best portray physical characteristics, shall be provided.
- 3.3.3.2 <u>Table of leading particulars</u>. The following information on the container and its major sections shall be provided:
  - (1) Nomenclature
  - (2) Part number
  - (3) Dimensions (length, width, height) in inches
  - (4) Cube in cubic feet
  - (5) Weight empty, pounds
  - (6) Weight loaded, pounds
  - (7) Explosive class
  - (8) Compatibility gouping
- 3.3.4 Section II, Preparation for Maintenance.
- 3.3.4.1 <u>Special tools and equipment</u>. This portion of the section shall list and illustrate the special tools and equipment required for the handling, lifting, disassembly, inspection, repair, assembly, and testing of the container prior to, during, and after maintenance operations. Items shall be selected from the list of government approved tools and equipment if available; otherwise, the contractor's recommended tools and equipment shall be shown. However, these recommendations shall be changed promptly, if necessary, to conform to the official government list as soon as such information is available. Acceptable alternate tools and equipment will also be listed. Common and standard types of tools and equipment such as screw drivers, pliers, soldering irons, meters, shall not be listed.
- 3.3.4.1.1 <u>Special Tools List</u>. Special tools shall be listed in the following format. (See Fig. 1). Special tools shall be illustrated following this list unless they are adequately illustrated in other sections of the manual.

#### SPECIAL TOOLS LIST

MFR CODE

PART (TOOL) OR FIG AND NOMENNO. NAME/ADDRESS INDEX NO. CLATURE APPLICATION

- a. Part (Tool) No. Tools shall be listed in sequence by Part (Tool) No. The Part (Tool) No. shall agree with the drawing number.
- b. Manufacturer's (MFR) Code or Name/Address. The Mfr's Code (Cataloging Handbook H4-1), or name and address shall be shown.
- c. Figure and Index No. The applicable figure and index numbers that appear anywhere in the manual shall be shown.
  - d. Nomenclature. The nomenclature shall agree with the drawing title.
- e. Application. The purpose of each tool shall be stated. If the application is shown in the manual, reference to the applicable paragraphs will suffice.
- 3.3.4.1.2 <u>Equipment List</u>. The list of equipment shall be arranged in the following format. (See Fig 2). Equipment shall be illustrated in this section unless it is adequately illustrated in other sections of the manual.

### **EQUIPMENT LIST**

ALTERNATE

NATIONAL	TYPE	TYPE	FIG AND	NOMEN-	
STOCK NO.	DESIGNATION	DESIGNATION	INDEX NO.	CLATURE	APPLN

- a. National Stock No. Equipment shall have National Stock Numbers assigned.
- b. Type Designation. Equipments shall be listed in alpha-numeric sequence by type designation, or Aeronautical Equipment Identification Designators (AEID) using the AH/AEID type designation, if assigned, or the commercial or manufacturer's designation if an AH/AEID type was not assigned.
- c. Alternate Type Designation. If an alternate item of equipment can be used, its AH/AEID type designation, if assigned, or the commercial or manufacturer's designation, if an AH/AEID type was not assigned, shall be listed.
- d. Figure and Index No. The applicable figure and index numbers that appear anywhere in the manual shall be shown.
  - e. Nomenclature. The nomenclature shall agree with the drawing title.
- f. Application. The purpose of each item of equipment shall be stated. If the application is shown in the manual, reference to the applicable paragraph(s) will suffice.
- 3.3.4.2 <u>Special handling procedures</u>. Any requirements or limitations peculiar to the handling operations which are needed to preclude safety hazards to personnel or damage to equipment, shall be described.

- 3.3.4.3 <u>Inspection</u>. Inspection which should be conducted in order to determine the condition of the container, and extent of maintenance required, shall be described.
- 3.3.5 <u>Section III, Organizational, Intermediate Maintenance and/or Depot Overhaul Instructions</u>. This section shall cover the following subjected (as applicable).
- 3.3.5.1 <u>Disassembly</u>. Step-by-step procedures for breaking down the assembled container into component parts within the maintenance concept, shall be described.
- 3.3.5.2 <u>Cleaning and preparation for painting</u>. The materials and processes required for removing dirt, rust, corrosion, etc, and preparing surface for touch-up or complete repaint, if required, shall be described.
- 3.3.5.3 <u>Touch-up and repaint</u>. Materials and methods for touching-up prepared spots or repainting entire container, when required shall be described.
- 3.3.5.4 <u>Remove and replace</u>. Step-by-step instructions for removing and replacing all component parts which are not serviceable or have exceeded their shelf/service life shall be provided. A table of consumable items shall be included.
- 3.3.5.5 <u>Fabrication</u>. A statement shall be provided that for local fabrication of all component parts which are source coded M, reference shall be made to applicable engineering data.
- 3.3.5.6 <u>Testing</u>. Step-by-step procedures for any testing or checkout which should be conducted to verify container serviceability, shall be included.
- 3.3.5.7 <u>Assembly</u>. Instructions for buildup of containers, e.g., arrangement of cushioning, use of end plates, positioning of overlapping joints, torque requirements for bolts, etc. shall be supplied.
- 3.3.5.8 <u>Lubrication</u>. All parts which require lubrication shall be identified. The type of lubricant which should be used shall be specified, together with the frequency of application (tabular format recommended).
- 3.3.6 Section IV, Preparation for Use After Maintenance.
- 3.3.6.1 <u>Marking and stenciling</u>. Materials, methods, and locations for re-application of stenciling, marking, or decalcomania instructions which may become obliterated, shall be provided.
- 3.3.6.2 <u>Closing and sealing</u>. Instructions for closing the containers, torquing bolts, and any other final operations required to prepare the containers for shipment, or return to storage, shall be provided.
- 3.3.7 <u>Section V. Illustrated Parts Breakdown</u>. A Group Assembly Parts List shall be prepared in accordance with MII-M-38807.
- 3.3.8 <u>Section VI, Safety and Accident Prevention</u>. The manual shall provide all safety and accident prevention guidance necessary to safely utilize or handle the items, including special tools, AGE (Aerospace Ground Equipment), unusual dangers, and safe operating procedures. This information shall be in accordance with the provisions of MIL-S-38130.
- 3.4 <u>Review copies</u>. If copies of the manual in manuscript form are required, they shall be supplied and distributed as specified in the contract.
- 4. **QUALITY ASSURANCE PROVISIONS**

- 4.1 <u>Demonstrations</u>. Unless otherwise specified by the procuring activity, the contractor shall furnish personnel to demonstrate the performance of specific organizational, intermediate and depot maintenance procedures for representatives of the government at a time designated by the government.
- 4.2 <u>Final acceptance</u>. Validation, verification and final acceptance shall be in accordance with TO 00-5-1, MIL-M-38784, and MIL-P-38700.
- 5. PREPARATION FOR DELIVERY
- 5.1 Packaging, packing and marking for shipment shall be in accordance with MIL-M-38784 and MIL-P-38790
- 6. NOTES
- 6.1 <u>Intended use</u>. Manuals prepared in accordance with this specification are intended for use by qualified maintenance personnel to perform organizational, intermediate and/or depot maintenance on special containers for non-nuclear munitions.
- 6.2 **Definitions**.
- 6.2.1 <u>Non-nuclear munitions</u>. Non-nuclear munitions are: non-nuclear bombs; fuzes; warheads; missiles; pyrotechnics; chemical/biological materials; and items such as impulse cartridges, jettison charges, training items, ammunition, and other non-aircraft inventory items considered similar or relative to non-nuclear munitions.
- 6.2.2 <u>Special containers</u>. For the purpose of this specification, a special container is defined as a contracter that has been designed and fabricated to meet specific requirements, such as configuration, environmental control, impact protection, accessory and hardware storage, for a specific munitions item.

Custodian:

Air Force - 16

Preparing Activity: Air Force - 16

**Review Activities:** 

Air Force - 01, 10, 99

Project TMSS-F440

Table 3-1. SPECIAL TOOLS LIST

PART (TOOL) NO.	MFR CODE OR NAME/ADDRESS	FIG AND INDEX NO.	NOMENCLATURE	APPLICATION
Tools shall be listed in sequence by Part (Tool) No. The Part (Tool) No. shall agree with the drawing number.		The applicable fig and index numbers that appear any- where in the manual shall be shown.	The nomencia- ture shall agree with the drawing title.	Example: Inspection, Handling (if there are several applications, an application code could be used and identified at the bottom of the chart.)

Figure 1. Sample Special Tools List

Table 3-2. EQUIPMENT LIST

NATIONAL STOCK NO.	TYPE DESIGNATION	ALTERNATE TYPE DESIGNATION	FIG AND INDEX NO.	NOMENCLATURE	APPLN
	Equipment shall be listed in alphanumeric sequence by type designation or * AEID. Commercial or manufacturer's designation shall be used if AN/AEID type not assigned.  *Aeronautical Equipment Identification Designators.	If alternate equipment can be used, list AN/AEID if assigned, or if not, the commercial or manufacturer's designation.	If applicable figure & index numbers.	COMMON EQUIPMENT  (Common equipment, i.e., coveralls, asbestos or rubber gloves, shall not require a separate illustration.)  SPECIAL EQUIPMENT  Nomenclature shall agree with the drawing title.	

Figure 2. Sample Equipment List

INSTRUCTIONS: In a continuing effort to make our standardisation documents better, the DoD provides this form for use in submitting comments and suggestions for improvements. All users of military standardization documents are invited to provide suggestions. This form may be detached, folded along the lines indicated, taped along the loose edge (DO NOT STAPLE), and mailed. In block 5, he as specific as possible about particular problem areas such as wording which required interpretation, was too rigid, restrictive, loose, ambiguous, or was incompatible, and give proposed wordin, changes which would alleviate the problems. Enter in block 6 any remarks not related to a specific paragraph of the document. If block 7 is filled out, an acknowledgement will be mailed to you within 30 days to let you know that your comments were received and are being considered.

NOTE: This form may not be used to request copies of documents, nor to request waivers, deviations, or clarification of specification requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

(Pold along the line)

(Fold along this line)

DEPARTMENT OF THE AIR FORCE.

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300

BUSINESS REPLY MAIL FIRST CLASS FERMIT NO. 73236 WASHINGTON D. C.

POSTAGE WILL BE PAID BY THE DEPARTMENT OF THE AIR FORCE

AFLC/MMAPD Wright-Patterson AFB, OH 45433-5001

NO POSTAGE NECESSARY IF MAILED IN THE UNITED STATES

_	
_	
-	
=	
Z	
-	
-1	
_	
<b>'</b>	
~	
H	
-	
-	
Ξ.	
: 5	
Ξ	
<	
-	
·	
-	
•	
`	
-	
_	
$\sim$	
• 1	
•	
Έ	
his fur	
,-	
-	
-23	
A.S.	
~	
:	
•	
w	
.,	
. •	
-	
-	
Š	
ODE	
$\neg$	
_	
-	
=	
=	
=	
=	
=	

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL  (See Instructions - Reverse Side)			
1. DOCUMENT NUMBER	2. DOCUMENT TITLE	<del> </del>	
3. NAME OF SUBMITTING ORGANIZATION			4. TYPE OF ORGANIZATION (Mark one)  VENDOR  USER
b. ADDRESS (Street, City, State, 21	P Code)		MANUFACTURER  OTHER (Specify):
5. PROBLEM AREAS  a. Paragraph Number and Wording	l:		
b. Recommended Wording:			
c. Remon/Rationals for Recomm	enaetion:		
6. REMARKS			
74. NAME OF BUBMITTER (Last, F	bet, MI) - Optional		b. WORK TELEPHONE NUMBER (Include Area Code) — Optional
c. MAILING ADDRESS (Street, City	, Stale, ZIP Code) — Optional		E. DATE OF SUBMISSION (YYMMDD)