TECHNICAL MANUAL

DIRECT SUPPORT MAINTENANCE MANUAL

(INCLUDING REPAIR PARTS AND

SPECIAL TOOLS LIST)

MINE DISPERSING

SUBSYSTEM,

AIRCRAFT: M56
(NSN 1345-00-313-1398)

This copy is a reprint which includes current pages from Changes 1 THROUGH 7.

H E A D Q U A R T E R S , D E P A R T M E N T O F T H E A R M Y
4 APRIL 1977

WARNINGS

The cover assembly tiedown eyes and stacking and cover lifting brackets will NOT be used to lift a loaded container.

When subsystem is lifted from container, inspect pallet for defects, bulges, etc., which may indicate one or more mine ejection charges have fired. Do not remove pallet. If batteries are installed in mines, carefully lower subsystem into container, immediately evacuate all personnel from working area, and immediately notify explosive ordnance disposal (EOD) personnel. Set up a new working area in a different location.

Mines containing batteries which are accidentally released from the subsystem will not be handled or moved under any circumstances. Personnel in the vicinity of exposed mines will evacuate the area immediately. Exposed mines will be reported to explosive ordnance disposal personnel immediately.

Munitions will be removed from the shipping and storage containers CNU-79/E and M602 and moved to a different area in accordance with TM 9-1300-206 when welding is to be done.

No electrical tests will be performed on the ejection charge assembly when it is out of the subsystem. Test only in subsystem with the safety pallet installed.

CHANGE }
NO. 7

TM 9-1345-201-30&P
C7

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, *1 September 1986*

Intermediate Direct Support Maintenance Manual
(Including Repair Parts and
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For
MINE DISPERSING SUBSYSTEM,
AIRCRAFT: M56
(NSN 1345-00-313-1398)

TM 9-1345-201-30&P, 4 April 1977, is changed as follows:

1. Remove old pages and insert new pages as indicated below. New or changed material is indicated by a vertical bar in the margin of the page. The TM title on this change sheet has been updated to agree with MRSA letter dated 25 July 1985. The revised title is applicable throughout this manual.

Remove pages	*Insert pages*
A	A
i and ii	i and ii
B-5 thru B-8	B-5 thru B-8
B-29 and B-30	B-29 and B-30

2. File this change sheet in front of the publication for. reference purposes.

By Order of the Secretary of the Army:

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General, United States Army
Chief of Staff

Official:

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(Including Repair Parts and
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For
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Remove pages	*Insert pages*
A	A
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1-9 and 1-10	1-9 and 1-10

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None	A
1-5 and 1-6	1-5 and 1-6

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Direct Support Maintenance Manual
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For
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1. Remove old pages and insert new pages as indicated below. New or changed material is indicated by a vertical bar in the margin of the page.

Remove pages	*Insert pages*
1-9 and 1-10	1-9 and 1-10

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Direct Support Maintenance Manual
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For
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AIRCRAFT: M56
(NSN 1345-00-313-1398)

TM 9-1345-201-30&P, 4 April 1977, is changed as follows:

1. Remove old pages and insert new pages as indicated below. New or changed material is indicated by a vertical bar in the margin of the page.

Remove pages	*Insert pages*
1-9 and 1-10	1-9 and 1-10

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Direct Support Maintenance Manual
(Including Repair Parts and Special Tools Lists)
For
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(NSN 1345-00-313-1398)

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1. Remove old pages and insert new pages as indicated below. New or changed material is indicated by a vertical bar in the margin of the page. A new or revised illustration is indicated by a vertical bar adjacent to the identification number.

Remove pages	*Insert pages*
i through iv	i through iv
1-1 and 1-2	1-1 and 1-2
None	1-6.1 and 1-6.2
5-17 and 5-18	5-17 and 5-18
None	5-18.1 and 5-18.2
E-1/E-2(blank)	E-1/E-2(blank)
G-1 and G-2	G-1 and G-2
None	G-2.1/G-2.2(blank)

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CHANGE }
No. 1 }

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Direct Support Maintenance Manual
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For
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Remove pages	*Inset pages*
G-1 and G-2	G-1 through G-3

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When applicable, insert latest change pages and dispose of superseded pages in accordance with applicable regulations.

LIST OF EFFECTIVE PAGES

Total number of pages in this publication is 136 consisting of the following:

Page No.	*Change No.
Cover	0
Inside Cover	0
A	7
i	7
ii thru iv	2
1-1	2
1-2 thru 1-5	0
1-6	5
1-6.1	2
1-6.2 blank	0
1-7 and 1-8	0
1-9	6
1-10	0
2-1 thru 2-6	0
3-1 thru 3-18	0
4-1 thru 4-5	0
4-6 blank	0
5-1 thru 5-17	0
5-18	2
5-18.1 and 5-18.2	2
5-19 thru 5-21	0
5-22 blank	0
6-1 thru 6-11	0
6-12 blank	0
A-1 and A-2	0
B-1 thru B-5	0
B-6 and B-7	7
B-8 thru B-29	0
B-30	7
B-31 and B-32	0
C-1 and C-2	0
D-1	0
D-2 blank	0
E-1	2
E-2 blank	0
F-1	0
F-2 blank	0
G-1 and G-2	2
G-3	1
G-4 blank	0
Index 1 thru Index 4	0
Authentication Page	0

*Zero indicates an original page.

TECHNICAL MANUAL } *TM 9-1345-201-30&P

No. 9-1345-201-30&P }

HEADQUARTERS
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Intermediate Direct Support Maintenance Manual
(Including Repair Parts and Special Tools List)
MINE DISPERSING SUBSYSTEM, AIRCRAFT: M56
(NSN 1345-00-313-1398)

REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, U.S Army Armament, Munitions and Chemical Command, ATTN: AMSMC-MAY-T (D), Dover, New Jersey 07801-5001. A reply will be furnished to you.

***This manual supersedes TM 9-1345-201-30&P, 30 December 1975.**

LIST OF ILLUSTRATIONS

Figure No. *Title* *Page*

CHAPTER 1
INTRODUCTION

Section I. General

1-1. Scope

a. These instructions are for use by direct support (DS) maintenance personnel. They apply to pre-flight, post-flight, and intermediate services, and maintaining and handling Mine Dispersing Subsystem, Aircraft: M56. This publication contains information on the care, handling, inspection, testing, and maintenance of the materiel. It also contains a repair parts list and a special tools list.

b. The maintenance instructions in this publication are intended for maintenance specialists who have been thoroughly trained in maintenance practices.

c. The lowest maintenance level assigned responsibility to prepare this subsystem for use is the direct support ordnance company (ammunition companies and ammunition sections of designated TOE 29 series supply and service companies). The lowest maintenance level capable of repairing this subsystem and its support equipment is also the DS level (designated TOE 29 series repair companies). When DS repair companies are not available, or when there is more work than can be accomplished by DS personnel in the allotted time, GS or depot personnel will perform the functions specified.

1-2. Forms, Records, and Reports

a. General. Department of the Army maintenance forms and reporting procedures are prescribed in TM 38-750, SB742-1, and AR 700-22. DA Form 3022-R (Army Depot Surveillance Record) (LRA) will be utilized to record inspection results. Accidents involving injury to personnel or damage to materiel will be reported on DA Form 285 (Accident Report) in accordance with AR 385-40. All shipments received in damaged or otherwise unsatisfactory condition because of deficiencies in preservation, packaging, marking, storage, or handling shall be reported on DD Form 6 (Report of Packaging and Handling Deficiencies) in accordance with AR 700-58. Reports of improper shipment or damage caused by transportation discrepancies shall be reported on SF 361 (Discrepancy in Shipment Report (DISREP) in accordance with AR 55-38.

b. Malfunctions Involving Ammunition or Explosives. A malfunction is defined as the failure of an explosive ammunition item to function as expected when fired or launched, or when explosive components function during a non-functional test. Malfunctions do not include accidents and incidents resulting from negligence, malpractice, vehicle accidents, fires, etc. However, malfunctions do include abnormal or premature functions of explosive ammunition items as a result of normal handling, maintenance, storage, transportation, and tactical deployment. Explosive ammunition malfunctions shall be reported in accordance with AR 75-1.

Section II. DESCRIPTION AND DATA

1-3. General

The aircraft mine dispersing subsystem M56 (fig. 1-1) consists of a bomb (mine) dispenser SUU-13D/A and a payload of antitank/antivehicular mines in canisters (fig. 1-2). Power for the mines is supplied by mercury batteries (which are shipped separately). The rectangular-shaped, electrically-fired subsystem is externally installed on UH-1H aircraft (fig. 1-3). A pallet is attached to the underside of the subsystem for handling and safety purposes. Initially, the subsystem is issued completely loaded with mines and is packed one per reusable shipping and storage container CNU-79/E (fig. 1-4). Loaded replacement mine canisters (40 to a container) are shipped and stored in mine canister shipping and storage container M602 (figs. 1-5 and 1-5.1). Both containers are sealed and desiccated.

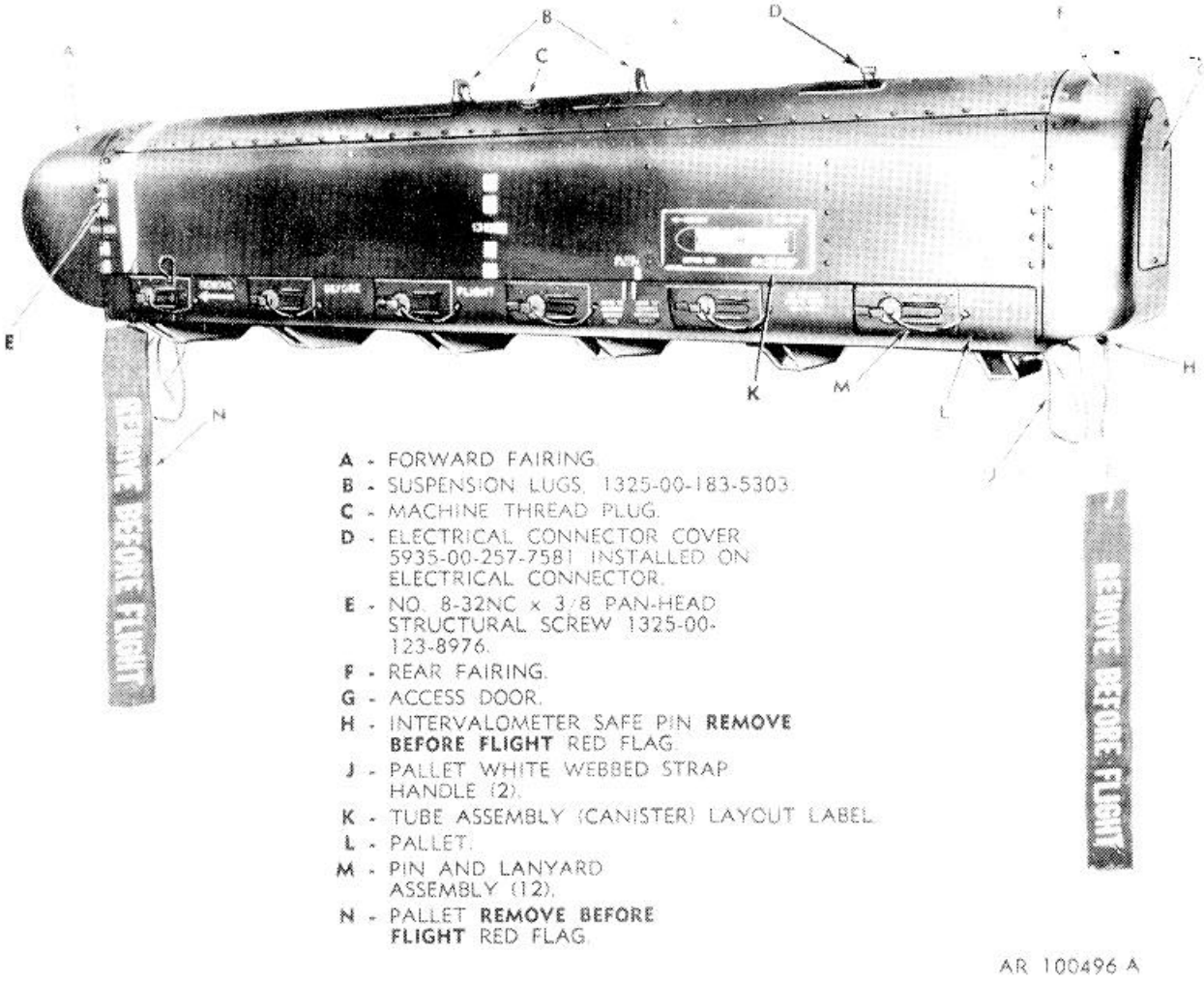


Figure 1-1. Mine dispersing subsystem, aircraft: M56.

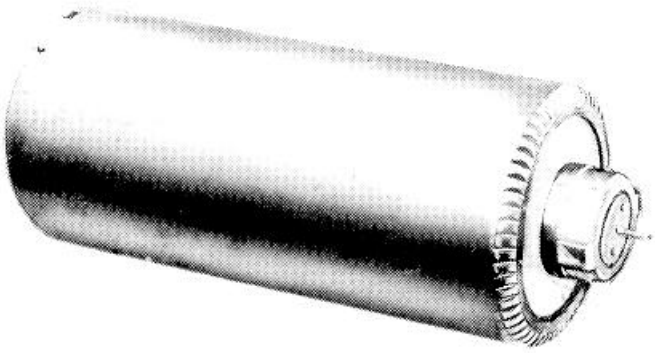


Figure 1-2. Canister assembly.

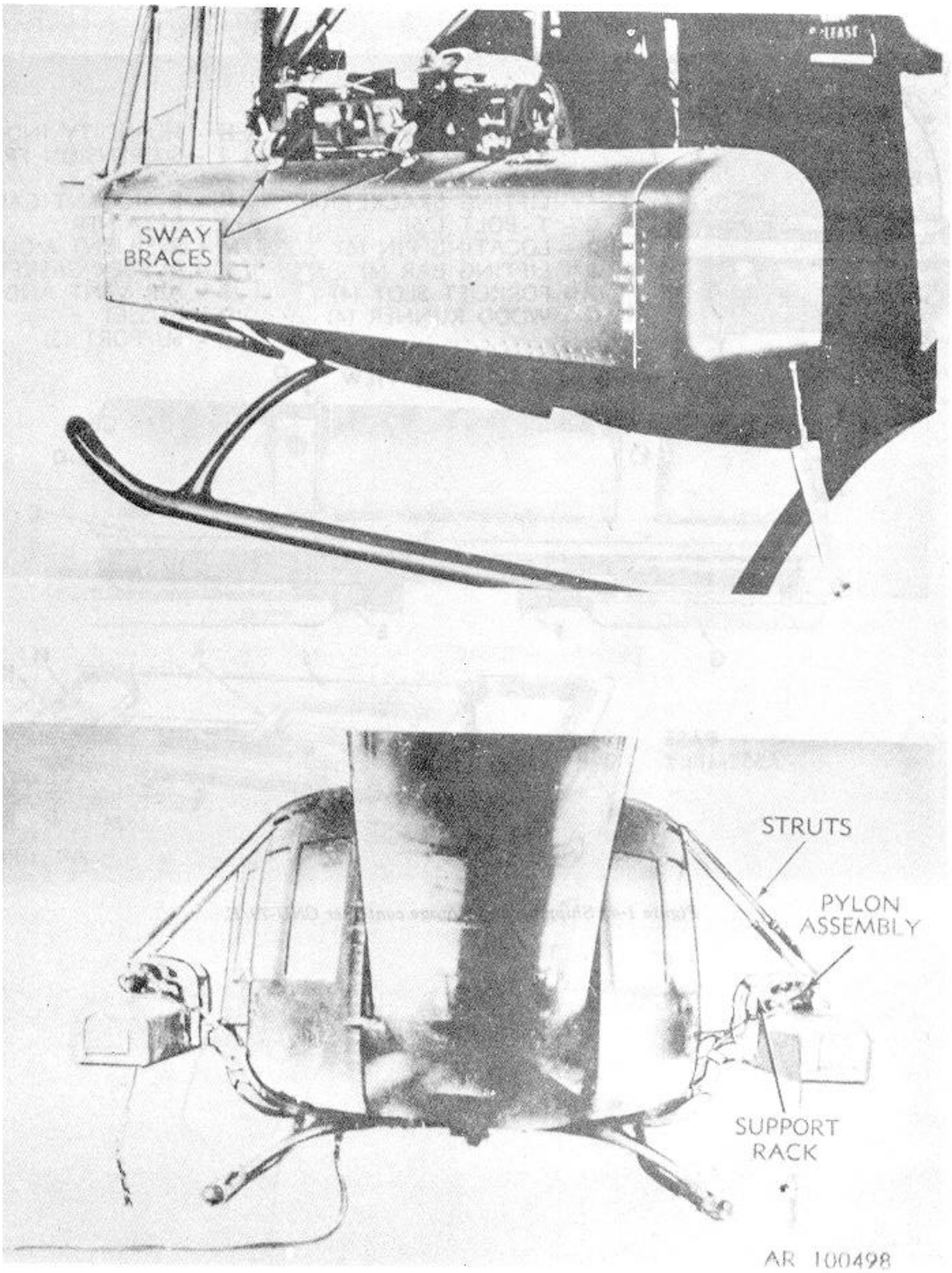


Figure 1-3. Mine dispersing subsystem, aircraft: M56 mounted on UH-1H helicopter (the struts, plyon assembly, pylon support, and support assembly comprise the multi-armament kit).

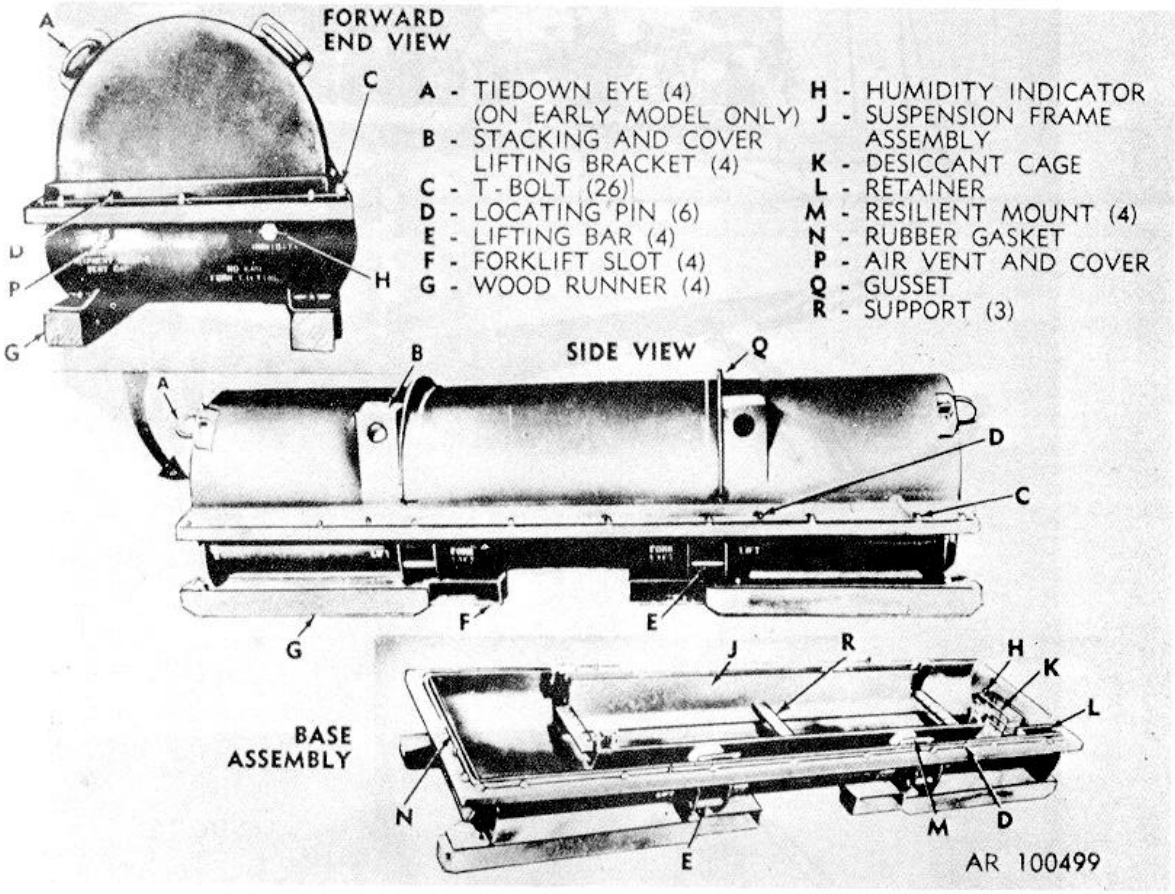
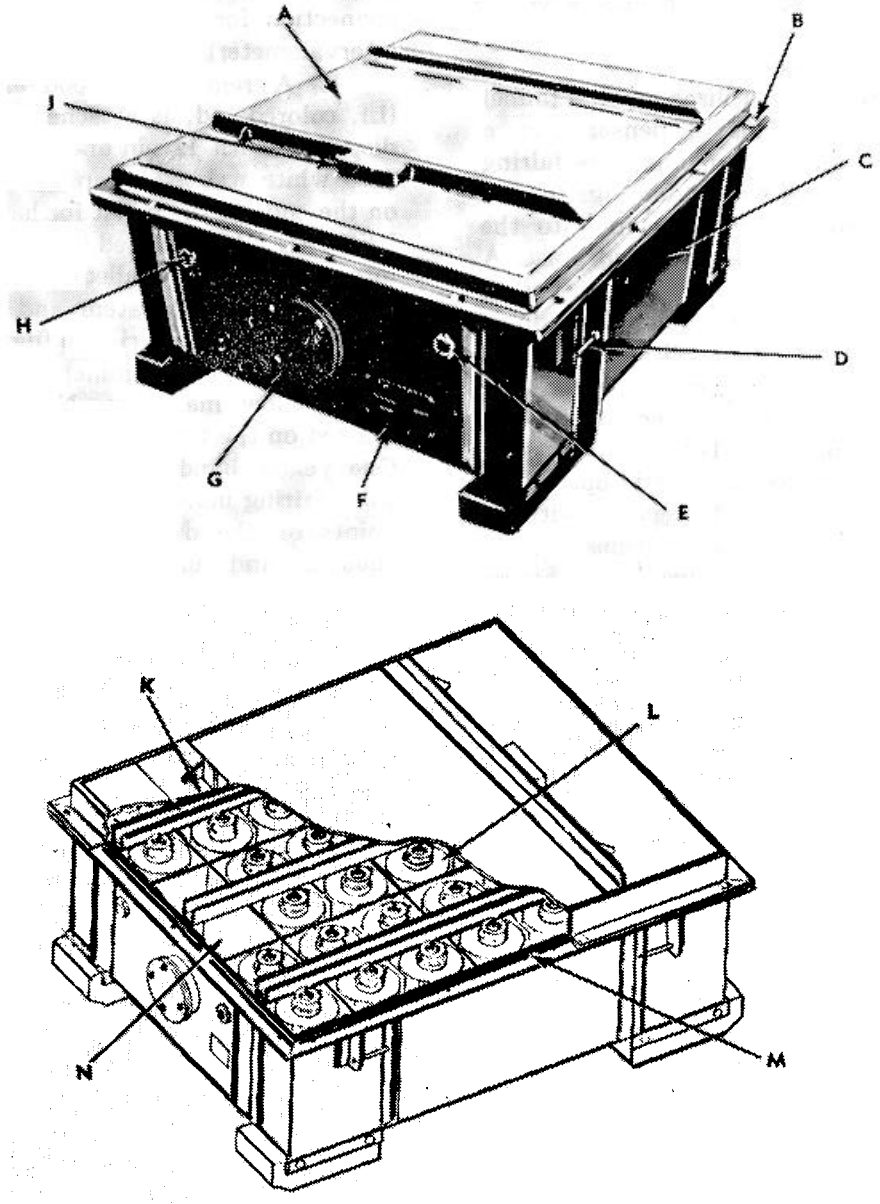


Figure 1-4. Shipping and storage container CNU-79/E



A - COVER
B - T-BOLT (14)
C - BASE ASSEMBLY
D - LIFTING BAR
E - EQUALIZING PRESSURE VALVE
F - IDENTIFICATION PLATE
G - DESICCANT DOOR
H - HUMIDITY INDICATOR
J - COVER HANDLE
K - 3-U-CHANNELS
L - 40 CANISTERS
M - GASKET
N - DESICCANT COMPARTMENT

AR 100500-B

Figure 1-5. Mine canister shipping and storage container M602 (as used in Reload Kit).

1-4. Mine Dispersing Subsystem, Aircraft: M56

NOTE

The capital letters in parentheses below refer to figure 1-1, except when otherwise noted.

a. Bomb (Mine) Dispenser.

(1) The subsystem M56 utilizes a bomb (mine) dispenser, SUU-13D/A. This dispenser has a rounded top surface, an aerodynamic nose fairing and a flat rear fairing. Two suspension lugs (B) are assembled to the dispenser for attaching to the aircraft or for handling with a sling and hoist. A threaded center insert, which may be present to provide the dispenser with a capability for single point suspension, is protected with a machine thread plug (C) at all times. The dispenser contains 40 vertical aluminum canister assemblies, each containing two mines (fig. 1-2).

(2) The rear fairing access door is opened by releasing the quick-release fasteners with a screwdriver. (On some models of dispensers there may be a hole on the bottom edge of the access door where a fastener has been removed.)

(3) In order to prevent possible damage to the aircraft when the subsystem is jettisoned, a ballast weight is attached to the support beam in the vicinity of canisters 39 and 40 at the rear of the dispenser.

(4) Each canister assembly (fig. 1-2) consists of an aluminum canister, obturator, mine ejection charge M198, and two mines. The mines are retained in the canister by four shear pins, two per mine.

(5) The mine dispenser is designed to provide release of mines from the 40 canisters with application of current through the intervalometer, which is the sequencing component of the dispenser, to the ejection charge M198. Release of mines from all 40 canisters is accomplished within a variable time span which is controlled by the helicopter pilot. A quick-release safe pin with an attached REMOVE BEFORE FLIGHT red flag (F, fig. 3-3) is installed in the intervalometer through an access hole in the bottom of the aft fairing to prevent accidental activation of the intervalometer before flight.

NOTE

On some dispensers there are two safe pin access holes adjacent to each other in the bottom of the aft fairing. The hole closer to the aft end of the fairing is the one to use.

The remainder of the electrical circuit consists of an electrical connector, a RADHAZ filter assembly, an aircraft cable assembly, and an intervalometer adapter. The intervalometer adapter (H, fig. 3-5) is connected on the top of the dispenser intervalomneter. The adapter bypasses the interval control, which is an integral part of the intervalometer, so the helicopter pilot can control the dispensing intervals from the DISPENSER control panel (fig. 1-6). (The wiring harness cable connector (G, fig. 3-5) provides for electrical connection for the dispenser control panel to the intervalometer).

(6) A removable wood and aluminum pallet (L), colored red, is attached to the bottom of the dispenser with 12 pin and lanyard assemblies (M). Two white webbed strap handles (J) are attached on the ends of the pallet for handling. A REMOVE BEFORE FLIGHT red flag (N) is attached to the forward end. The pallet protects the mines while handling the subsystem and prevents accidental expulsion of mines prior to flight.

(7) The bomb (mine) dispenser is olive drab with yellow markings. NO STEP markings are located on the top of the front and rear fairings. One yellow band located directly behind the forward fairing indicates high-explosive loading. Hard points on the dispenser are marked with yellow squares, and have the word CHOCK in yellow letters.

(8) A tube (canister) location and firing order label (decal) (K) appears on the side of the dispenser.

b. Functioning of Dispersing Subsystem M56.

(1) The firing pattern (fig. 1-7) is designed to assure the proper balance of the mine load during firing. Rewiring the dispenser to produce firing patterns other than those for which the dispenser is designed is prohibited.

(2) The electrical release system consists of an electrical connection to the aircraft electrical system, an aircraft cable assembly, and a dispenser control panel.

(3) The subsystem is fired by depressing the FIRE button of the control panel. The firing sequence will continue until the quantity of mines selected has been ejected from the subsystem. At any time after the FIRE button is depressed, the firing may be stopped by re-setting the switch to the STBY or SAFE positions. Firing will not commence when the SAFE-STBY-ARM switch is returned to ARM until the FIRE button is depressed. When the switch has been returned to ARM from SAFE, depressing the FIRE button will initiate a new sequence. When the switch has been returned to ARM from STBY, depressing the FIRE button will cause the subsystem to finish the sequence that: had been interrupted.

(4) The electrical impulse, from the dispenser control panel and through the intervalometer, initiates the ejection charge in each canister assembly (fig. 1-2). Gases from the ejection charge

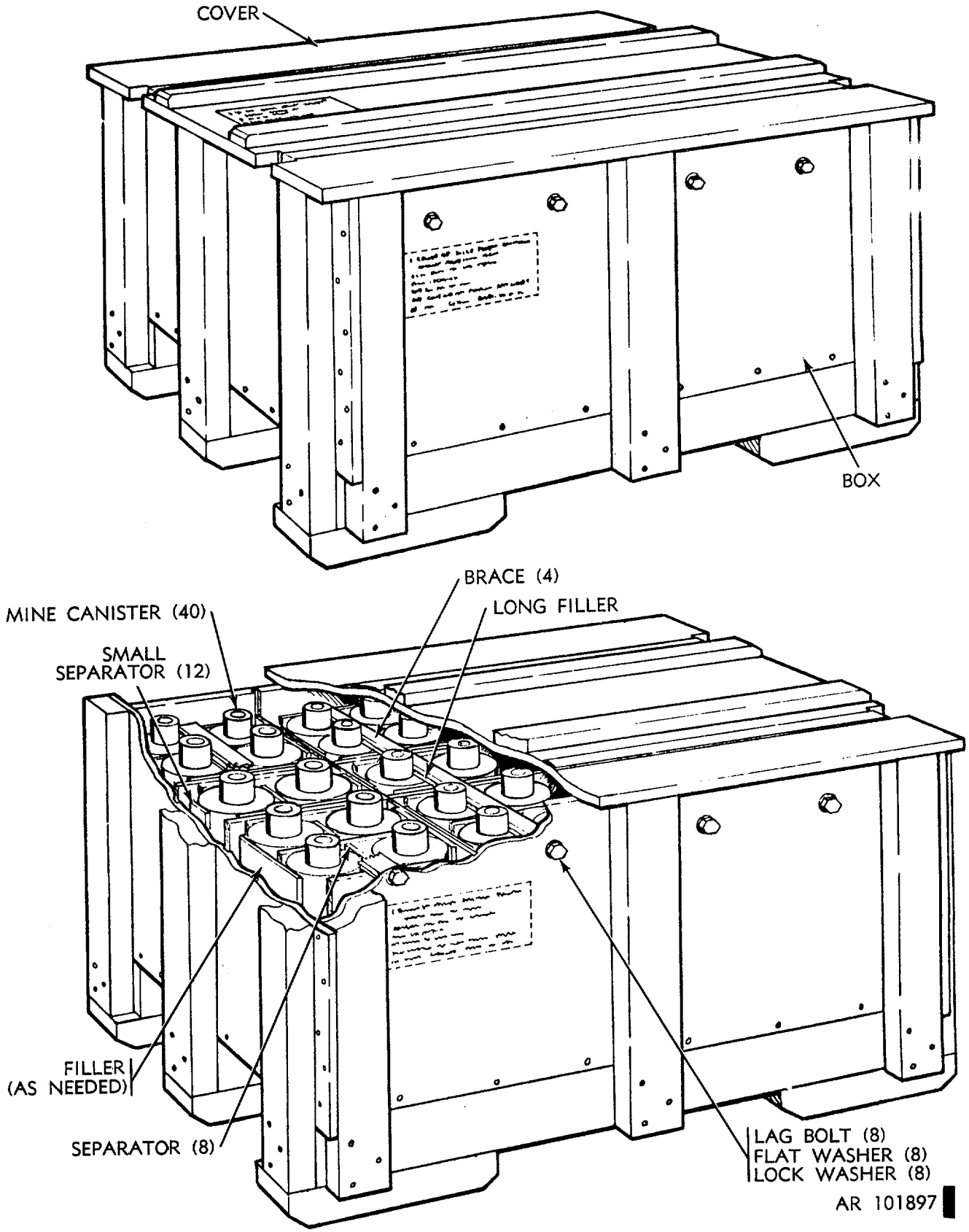


Figure 1-5.1. Reload kit for mine dispersing subsystem, aircraft, practice: M132 (M602 container may also be used for reload kit).

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Figure 1-6. Mine dispersing subsystem M56 dispenser (DISP) control panel.

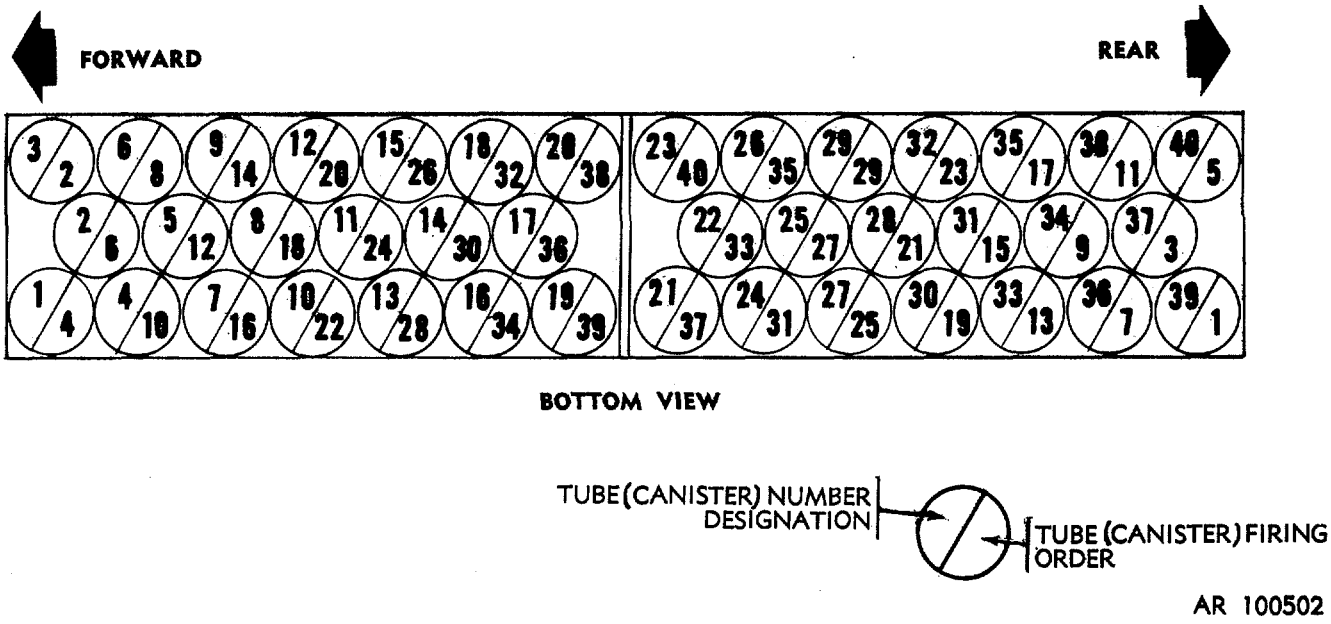


Figure 1-7. Canister identification and firing pattern.

apply an expelling force to the obturator which forces the mines from the canister and the subsystem.

1-5. Shipping and Storage Containers

a. General. The dispersing subsystem M56 is stored and transported in the reusable, steel, shipping and storage container CNU-79/E. Forty replacement canisters are stored and shipped in the reusable, steel, shipping and storage container M602. Both containers are stored and transported in the horizontal position.

b. Container CNU-79/E.

NOTE

The capital letters in parentheses below refer to figure 1-4.

(1) The subsystem is supported in the container CNU-79/E by .a resilient-mounted (M) suspension frame assembly (J) that is attached to the container base assembly. Two flexible strap assemblies (fig. 3-2), one at each end, secure the subsystem M56 to the suspension frame assembly. The cover assembly is secured to the base assembly by 26 quick-acting T-bolts (C). Locating pins (D) are provided to properly aline the cover assembly with the base assembly. All openings are provided with gaskets to make the container airtight. A rubber gasket (N) on the base assembly flange makes an airtight seal between the cover and base assemblies. Desiccant is used to absorb excessive moisture within the container.

(2) A desiccant cage (K), retainer (L), air vent and cover (P), and humidity indicator plug (H) are located at the forward end of the container base assembly. The desiccant cage contains five 16 unit bags of desiccant.

WARNING

The cover assembly tiedown eyes (A) and stacking and cover lifting brackets (B) will *NOT* be used to lift a loaded container.

(3) The cover assembly of early model containers has four eyes (A) (two at each end) for tiedown. These eyes are not provided on late-model containers.

(4) Four cover lifting brackets (B) are provided on the cover assembly for two purposes:

(a) Removing the cover assembly from the base assembly.

(b) To improve stability when containers are stacked.

(5) The base assembly has four lifting bars (E) mounted on exterior gussets for lifting the loaded container with a sling and two forklift slots (F) to lift the container with a forklift.

(6) The shipping and storage container is olive drab and has yellow markings.

NOTE

Capital letters in parentheses below refer to figure 1-5.

c. Container M602 Las used in Reload Kit).

(1) This reusable steel container is rectangular and is provided with a gasket (m) between the base assembly (c) and the cover (A) to make it airtight. The cover assembly is secured to the base assembly by 14 quick-acting T-bolts (B). Two cover handles (J) are provided for manual lifting of cover from base assembly.

(2) A desiccant door (G), pressure equalizing valve (E) and humidity indicator (H) are located at the forward end of the container base assembly.

(3) A desiccant compartment (N) contains five 16 unit bags of desiccant to absorb excessive moisture within the container when closed. Three canister hold-down U-channels (K) are utilized to retain mine canisters in position during handling and shipping.

(4) The base assembly has four lifting bars (D) on the base assembly for stacking and lifting the loaded container with a multiple sling.

(5) The shipping and storage container is olive drab and has yellow markings.

1-6. Tabulated Data

NOTE

Dimensions and weights are approximate.

Mine dispersing subsystem M56:
- Length ..... 90.38 in.
- Width ..... 14.75 in.
- Height ..... 14.44 in.
- Weight, empty, w/o pallet ..... 117.0 lb.
- Weight (loaded as flown) ..... 640 lb
- Weight of pallet ..... 40 lb
- Number of canisters 40
- Distance between suspension lugs ..... 14 in.
- Center of gravity (from front end (loaded)) ..... 51.6 in.
- Weight of explosive contents (per dispenser):
- Weight (H6 explosive) ..... 240 lb
- Weight (RDX explosive) ..... 696 gm
- Weight (M5 propellant) ..... 12.8 gm

Mine canister:
- Height ..... 11.9 in.
- Diameter ..... 4.80 in.
- Weight:
  - Empty ..... 1.8 lb
  - Loaded ..... 13.0 lb

Number of mines per canister 2

Number of mine ejection charges per canister 1

Explosive weight per canister:
- Comp H6 ..... 6.0 lb
- RDX ..... 17.4 gm
- M5 propellant ..... 0.32 gm

Mine ejection charge M198:
- Weight (loaded) ..... 34 gm
- Explosive weight (M5 propellant) ..... 0.32 gm

Antitank mine:
- Length ..... 10.38 in.
- Diameter (half-cylinder) ..... 4.63 in.
- Weight ..... 5.6 lb
- Explosive weight (Comp H6) ..... 3.0 lb

Shipping and storage container
- CNU-79/E (late model):
- Length ..... 104 in.
- (early model ..... 115.6 in.)
- Width ..... 31.5 in.
- Height ..... 31.5 in.
- Weight:
  - Without dispenser ..... 681 lb
  - With dispenser ..... 1,368 lb
- Cube ..... 59.7 cu ft
- Quantity-distance class 1.1
- Storage compatibility Group ..... D
- Quantity distance for field storage ..... E
- DOT shipping class ..... A
- DOT markings ..... Explosive bombs
- US Coast Guard Classification ..... X-A

Shipping and Storage container
- M602 (Reload Kit):
- Length ..... 37.5 in.
- Width ..... 32.35 in.
- Height ..... 18 in.
- Weight:
  - Empty ..... 214 lb
  - Loaded ..... 755 lb
  - Cube ..... 12.8 cu ft

Quantity-distance class 7

Storage compatibility group ..... G

Quantity distance for field storage ..... E

DOT shipping class ..... A

DOT markings ..... Explosive bombs

US Coast Guard Classification ..... X-A

Temperature limitations:
- Minimum ..... - 25 °F
- Maximum ..... + 145 °F

1-7. Test Sets

a. Bomb (mine) dispenser electrical circuit test set A/E 24T-80 (1, fig. B-17) is a portable test equipment item designed to check the operation of the intervalometer, intervalometer adapter, and the electrical circuit continuity from the electrical receptacle to the intervalometer. External power is supplied to the subsystem by connection with electrical cable assembly switch 4925-00-874-8672. The test set simulates the ejection charge circuits in the subsystem and cycles the intervalometer through its 40 firing positions. When the test equipment is connected and the circuit is energized, the indicators of the test set will change from red to white as the circuits are closed. The numbers next to the indicators signify which subsystem canister assembly would be energized (which canister assembly would fire) when the pilot depresses the firing button.

b. Bomb (mine) dispenser electrical circuit test set A/E 24T-79 (1, fig. B-18) is a portable, self-powered, test equipment item which simulates the intervalometer and feeds a very small amount of current through each ejection charge assembly M198 circuit to test for electrical circuit continuity and resistance from the intervalometer through the ejection charge assemblies. The test set is also utilized to determine the serviceability of the RADHAZ filter assembly.

NOTE

The electrical current source is within the tester. NO EXTERNAL POWER SHOULD

BE APPLIED TO THE SUBSYSTEM DURING THIS TEST.

c. Mine battery test set (fig. B-19) is utilized to check mine battery voltage before installing batteries into the mine.

Section III. SAFETY, CARE, AND HANDLING

1-8. General

a. The procedures in this section prescribe minimum safety standards and requirements that must be observed during all operations involving the subsystem M56. In addition to these instructions, the general instructions on storage, care, handling, preservation, and quantity-distance requirements for ammunition, outlined in TM 9-1300-206, will apply. The absence of a safety requirement in this technical manual or in the above references does not imply that safeguards are not needed. Prompt action will be taken to control any hazard. If an ejected mine is encountered, all operations in the immediate vicinity will be shut down, personnel evacuated to a safe location, and explosive ordnance disposal or other authorized personnel notified to render assistance in elimination of the possible hazard. Operations will not be resumed until this condition has been eliminated.

b. The safety requirements and precautions will be complied with by personnel during all operations involving explosive items. All personnel engaged, directly or indirectly, in operations in which an explosive item and/or other hazardous material are involved shall be thoroughly trained in explosive safety. Thinking safety and working safely must become a firmly established habit when working with, or in the vicinity of, explosive items.

c. Disassembly of the subsystem M56 beyond the extent prescribed in this publication is strictly forbidden.

1-9. Safety Precautions

WARNING

Mines containing batteries which are accidentally released from the subsystem will not be handled or moved under any circumstances. Personnel in the vicinity of exposed mines will evacuate the area immediately. Exposed mines will be reported to explosive ordnance disposal personnel immediately.

a. Handling.

(1) Exercise care, especially during handling, unpacking, and packing, to avoid denting or otherwise damaging the subsystem. The subsystem should be moved only with approved handling equipment. Containers will not be tumbled, rolled, dragged, dropped, or otherwise roughly handled.

(2) Do not strike or drop the subsystem M56.

(3) Do not expose the subsystem M56 to moisture, dampness, or direct rays of the sun for longer periods of time than is absolutely necessary.

b. Tools and Equipment. Prevention of accidents during use of tools and equipment is dependent upon proper instructions and training of personnel, adequate maintenance and inspection of equipment, and observation of safety precautions. Lack of proper maintenance and inspection of material handling equipment may result in defects which can present a hazardous condition when such equipment is in use. The following general precautions establish the minimum safety requirements which must be observed in the use of tools and handling equipment.

(1) Defective tools and equipment will not be used. Only those special tools cited in this manual will be used.

(2) No item of material handling equipment will be used for other than its intended purpose.

(3) Do not leave a subsystem M56 unattended when suspended from a lifting device.

(4) When a subsystem M56 is lifted by means of a lifting device, do not raise it higher, or keep it suspended longer, than necessary.

(5) All tools and equipment will be properly stored when not in use.

c. Safe Housekeeping. The area around the assembly site or storage location will be kept clear of tools, trash, flammable material, or other material that could interfere with the safety and efficiency of the operation.

d. Electrical Test and Repair Operations. During electrical testing and repair of the subsystem, use a grounding cable attached to a suspension lug. Tighten suspension lugs securely by hand into dispenser to assure proper grounding.

CHAPTER 2

TOOLS, EQUIPMENT, AND MAINTENANCE PROCEDURES

Section I. GENERAL

2-1. General

a. Tools, equipment, and repair parts for the subsystem M56, are supplied for handling, maintaining, and repairing the subsystem and the shipping and storage containers. Tools and equipment should not be used for purposes other than those prescribed and, when not in use, should be stored properly. Do not employ unauthorized tools and equipment.

b. The common tools, special tools, and material handling equipment which comprise the maintenance kit (5180-00-143-4107) are listed in tables 2-1 and 2-2.

2-2. Repair Parts

Authorized repair parts for maintenance are listed in appendix B.

Section II. COMMON TOOLS AND EQUIPMENT

2-3. General

a. Common Tools and equipment having general application for maintenance of the ammunition are authorized for issue by tables of allowances (TA) and tables of organization and equipment (TOE) and are listed in table 2-1. Common tools and equipment are part of the maintenance kit.

b. Table 2-1 constitutes authority for organizations responsible for maintenance and support of the mine dispersing subsystem M56 to requisition the following tools, if not available in the unit.

Table 2-1. Common Tools List

National stock no.	Description	Unit of issue
5120-00-144-5207	ADAPTER, SOCKET WRENCH: (to convert ½-inch square drive to 3A-inch square drive).	ea
5120-00-240-8702	ADAPTER, SOCKET WRENCH: (½ to 3/8).	ea
5120-00-517-7808	EXTENSION, SOCKET WRENCH: solid, ¼ in: drive	ea
5120-00-222-4284	EXTRACTOR, COTTER PIN: 6 in.-lg	ea
5120-00-221-7966	HANDLE SOCKET WRENCH: sliding tee, ¼. in. drive	ea
5120-00-230-6385	HANDLE, SOCKET WRENCH: ½ in. aq-drive.	ea
5120-00-198-5391	KEY, SOCKET HEAD SCREW: ½ in. hex.	ea
5120-00-198-5413	KEY, SOCKET HEAD SCREW: hex, L-type hdl, 5/32 in. w, 4-7/32 in. lg arm.	ea
5120-00-247-5177	PLIERS: lg rd nose w/cutter, 6 in. size.	ea
5110-00-239-8253	PLIERS, DIAGONAL CUTTING: 6 in. size.	ea
5120-00-223-7396	PLIERS, SLIP JOINT: stght nose, comb, w/cutter, 6 in. size.	ea
5120-00-223-1014	PUNCH, DIRVE PIN: 1/8 in. x 3 in. pin, 8 in. overall.	ea
5120-00-240-8716	SCREWDRIVER, CROSS TIP: plastic hdl, Phillips No. 1 tip, 3 in. lg blade.	ea
5120-00-234-8913	SCREWDRIVER, CROSS TIP: plastic hdl, Phillips No. 2 tip, 4-in. lg blade.	ea
5120-00-227-7356	SCREWDRIVER, FLAT TIP: plastic hdl, 3/16 in. wide tip, 6 in. lg-blade.	ea
5120-00-541-6655	SCREWDRIVER, OFFSET: one flat tip parallel to longitudinal axis of body and one flat tip at 90° angle. Tips ½ in. w, 6 in. lg overall.	ea
5120-00-761-1732	SOCKET, SOCKET WRENCH: ¼. In. drive	ea
5120-00-189-7930	SOCKET, SOCKET WRENCH: 1-3/8 in., 12 pt. opening, 3/4 in. drive size.	ea
5140-00-388-3416	TOOL BOX: 26 in. x 13 in. x 15 in.	ea
5120-00-224-3138	WRENCH BOX: double offset, double head, 5/8 in. and 3/4 in. openings.	ea
5120-00-240-5609	WRENCH, OPEN END: dble-hd type, 15° angle, 3/4 in. and 7/8 in. opngs.	ea
5120-00-277-1260	WRENCH, OPEN-END: singlehead type; style 1, size 9/16 in.	ea
5120-00-277-2326	WRENCH, OPEN-END: dble-hd type, 15° angle, 1-5/8 in. and 1-7/16 openings.	ea
5120-00-081-2305	WRENCH SET, SOCKET: ¼. in. sq-drive, 3/16 in. to 7/16 in. 8 pt opogs, w/hdl and/or attachments.	set

Table 2-1. Common Tools List-Continued

National stock no.	Description	Unit of issue
5120-00-081-2307	WRENCH SET, SOCKET: ½ in. sq-drive, 7/16 in. to 1 in. 12 pt opngs, w/hdl and/or attachments w/case.	set
5120-00-595-9069	WRENCH, TORQUE: ½-in. sq-drive, 5-75 foot-pounds torque capacity.	ea

Section III. SPECIAL TOOLS AND EQUIPMENT

2-4. General

Special tools and equipment authorized for issue to maintenance personnel are listed in appendix B and table 2-2. This table provided for information only.

2-5. Use of Maintenance Stand

The maintenance stand is designed to support the subsystem in an upright position and, when necessary for maintenance, to aid in turning the sub-system upside down and supporting it in the up-side-down position.

Table 2-2. Special Tools and Equipment

Item	References			Use
	National Stock No.	Figure	Paragraph	
CANISTER REMOVAL TOOL: (RELOAD KIT)	1345-00-370-3589	2,B-16	3-14*d*	For removing canisters from the container M602.
CANISTER REMOVAL TOOL ASSEMBLY (9287839)	1345-00-434-8865	3,B-16	5-20*c*(3) (*b*)1.	For removing or installing canister assembly.
CRANE, FLOOR PORTABLE:	3950-00-377-6574	3-3 3 4	3-2*b*(4) 3-2*b*(6)	For removing shipping and storage container GNU-79/E cover and for lifting and rotating the dispenser on maintenance stand.
DEPRESSOR, LOCKING SPRING	1325-00-123-9001	A,5-6	5-20*c*(3) (*b*)1.	Depressing the locking spring when removing the canister assembly.
FIXTURE, CANISTER HOLDING (part of maintenance stand).	1345-00-434-8869	B-21	5-20*c*(3) (*b*)3.	For holding canister while replacing mine ejection charges M198.
GENERATOR SET, GASOLINE ENGINE: 1.6 kw, 120v, a.c.	6115-00-889-1446	-	-	Power supply for mine battery storage refrigerator.
GENERATOR SET, GASOLINE ENGINE: 1.5 kw, 28v tests.	6115-00-017-8236	-	-	Power supply for subsystem electrical
MULTIMETER MODEL: AN-URM 105C	6625:00-999-6282	3-10	3-6*c*	For battery well test.
PLUG CALIBRATION (TEST) (9280148)	4925-00-370-3566	-	-	For calibration test using test set A/E 24T-79.
REFRIGERATOR, MECHANICAL:	4110-00-194-1570	-	3-10	For storage of mine batteries.
SLING, MULTIPLE-LEG: four leg (H-4191) (8845195)	4925-00-873-4462	1,B15	3-2*a*(1)	For removing or replacing top assembly of container or lifting entire container.
SLING, MULTIPLE TWO-LEG BRIDLE (8889417)	1398-00-763-0104	2,B-15	3-2*b*(3)	For removing subsystem from, or replacing subsystem in, container.
STAND, MAINTENANCE	4925-00-334-6938	B-20	3-2*b*(6) and 3-6	For supporting subsystem during maintenance operations.
TEST SET, BATTERY	6626-00-134-1338	B-19	3-6*c*(1)	For testing voltage of mine battery.
TEST SET, ELECTRICAL CIR-CUIT, BOMB DISPENSER: A/E 24T-79 (9209981)	4925-00-915-5736	1,B-18	5-18*b*	(1) For testing continuity of sub system ejection charge assemblies. (2) For testing RADHAZ filter.
TEST SET, ELECTRICAL CIR-CUIT, BOMB DISPENSER: A/E 24T-80 (928146)	4926-00-339-1069	1,B-17	3-4*a*	For testing dispenser intervalometer.
TOOL, CANISTER REMOVAL AND REPLACEMENT (DIS-PENSER)	1346-00-370-3674	1,B.16	5-20*c*(2)	Removing and replace mine canister from (in} subsystem.

Table 2-2. Special Tools and Equipment-Continued

Item	References			Use
	National Stock No.	Figure	Paragraph	
WRENCH, PLUG ASSEMBLY (9279987)	1345-00-370-3560	4,B-16	5-20*c*(3) (*c)1*.	For removing ejection charge assembly from, or installing in, canister assembly.
DISPENSER CONNECTOR ADJUSTMENT TOOL	1325-01-032-6053	7,B-16	5-20c(4)	To tighten disperser connectors.

WARNING

The pallet will remain in position when the subsystem is in the upright position, and during the turning operations.

Section IV. GENERAL MAINTENANCE PROCEDURES

2-6. General Repair Methods

a. Disassembly and Assembly Procedures.

(1) No adjustment or replacement of parts should be accomplished on a subsystem while it is mounted on the aircraft. If the subsystem is defective, it should be replaced with a serviceable subsystem to allow the flight mission to be completed. The defective subsystem can then be repaired and held in ready storage for use.

(2) In disassembling a subsystem, remove the major subassemblies and assemblies whenever possible. Subassemblies may then be disassembled as necessary, into individual parts.

(3) Good judgment should be exercised to keep disassembly and assembly operations to a minimum.

b. Replacement of Parts.

(1) When repairing a dispenser, replace damaged screws, bolts, washers, and nuts with new ones.

(2) Damaged or defective parts should be replaced as authorized in appendix B.

(3) Dispensers requiring repair or replacement of parts beyond the scope of Appendix B will be reported on DA For 2415 (Ammunition Condition Report) in accordance with TM 38-750.

c. Use of Tools.

(1) Care must be exercised to use tools that are suitable for the task to be performed in order to avoid mutilation of parts and/or damage of tools.

(2) Keep tools clean and work with clean parts. The rules of good housekeeping must be observed.

d. Repair of Damaged Threads. Damaged threads should be repaired by use of a thread restorer, or by use of a tap of proper dimensions.

e. Repair of Damaged Machined and Polished Surfaces. Smooth rough spots, scores, burs, galling, and gouges from damaged machined and polished surfaces so that the part will efficiently perform its normal function. The finish of the repaired parts is to approximate that of the original finish.

f. Removal of Corrosion. Remove corrosion from all parts of the materiel. To remove corrosion the use of crocus cloth, or wipe-on type phosphoric acid metal conditioner is recommended.

2-7. Cleaning

Refer to TM 9-237 for general cleaning procedures.

NOTE

The contact pin of the mine ejection charge M198 can be cleaned by use of crocus cloth, followed by wiping with a rag.

2-8. Responsibility

DS personnel are responsible for maintenance and repair of assigned equipment. The section leader is charged with supervisory responsibility for equipment pertaining to his command. Unit and organization commanders are required to assure that equipment issued or assigned to their commands is properly maintained in a serviceable condition, and properly cared for and used.

2-9. Recording Repairs

Repairs will be accomplished in accordance with procedures and instructions prescribed in the appropriate sections of this manual. The TAMMS system provides for recording repairs required and accomplished on the dispenser. These will include, but not be limited to, adjusting, cleaning, replacing, and straightening. Report deficiencies in accordance with TM 38-750 (The Army Maintenance Management System (TAMMS)).

2-10. General Procedures for all Services and Inspections

a. Personnel must be thoroughly trained in the following definitions and general procedures so that they will apply them automatically at all times in the performance of their duties.

(1) Inspection for "good condition" is usually an external visual inspection to determine whether the subsystem M56 is damaged beyond safe or serviceable limits. Good condition is explained further as meaning: Not bent or twisted, not chafed or burred, not broken or cracked, not bare or frayed, not dented or collapsed, not torn or cut, or not deteriorated.

(2) Inspection of a subsystem M56 to see that it is "correctly assembled" is usually a visual inspection to see if all parts are present and in their correct position.

(3) Inspection of a unit to determine if it is "secure" is usually an external visual examination or a check by hand, wrench, etc., for looseness. Such inspection must include any lockwashers, lock nuts, locking wires or cotter pins, as well as any connecting wiring harnesses.

(4) By "excessively worn" is meant worn beyond serviceable limits or to a point likely to result in failure if the unit is not replaced. Excessive wear of parts is usually evidenced by too much play between parts.

(5) Where the instruction "tighten" appears in the procedure, it means tighten with an appropriate tool, even if the item appears to be secure.

(6) Such expressions as "adjust is necessary" or "replace if necessary" are not used in the specific procedures. *It is understood that whenever inspection reveals the need of adjustment, repairs, or replacement, the necessary action will be taken.*

b. In addition to the definitions and general procedures outlined in a above, maintenance service include the following specific procedures:

(1) *Clean.* Clean the unit to remove dirt and other foreign material.

(2) *Tighten.* All tightening operations should be performed with sufficient force to tighten the unit according to good mechanical practice. Tightening will always be understood to include the correct installation of lockwasher, lock nuts, locking wire, or cotter pins, to secure the tightened nut.

Section V. TROUBLESHOOTING

2-11. General

Troubleshooting is a systematic method of detecting defects, isolating the cause, and determining remedies to restore unserviceable material to a serviceable condition. The procedures covered herein and the sequence in which they follow will reduce the time required to locate the defect and perform the repair.

2-12. Scope

a. This section provides troubleshooting procedures which apply to this materiel. These instructions are provided for use by technical personnel concerned with maintenance responsibilities for the subsystem M56. In order to properly perform these troubleshooting tests and operations, a thorough understanding of the principles of operation and function of the munition is necessary.

b. Troubleshooting for the subsystem M56 consists primarily of testing the various electrical circuits and observations of components.

c. This publication does not cover all possible defects and deficiencies. Therefore, if trouble is encountered that is not covered herein, report the deficiency in accordance with paragraph 1-2a. Refer to table 2-3 for most of the defects which might be encountered, their probable cause, and the prescribed corrective action to be taken.

Table 2-3. Troubleshooting

(1) Malfunction	(2) Probable cause	(3) Corrective action
1. Humidity indicator presence of 40 percent or more relative humidity within container.	*a.* Broken glass or faulty gasket in plug humidity indicator.	*a.* Replace plug humidity indicator (para 5-26c (8) and 5-29c (4)) and desiccant in container.
	b. Visible cracks or holes in container body.	*b.* Weld cracks and holes (para 5-23d.
	c. Rubber gasket between base and cover assemblies torn, damaged, or missing.	*c.* Replace gasket (3, fig. B-6 and 3, fig. B-11). Do not seal to flange.

Table 2-3. Troubleshooting- Continued

(1) Malfunction	(2) Probable cause	(3) Corrective action
2. When conducting electrical circuit continuity and intervalometer test (Test set A/E 24-80).		For lamp and fuze replacement, refer to TM 9-4925-228-23.
a. POWER ON lamp does not glow.	*a.* (1) No Power.	a. *(1) Assure test set POWER switch* is in the ON position. *(a)* Assure that generator is operative and connections are secure. *(b)* Electrical cable assembly switch is in ON position. *(c)* Check power cable connector connections and tighten where loose. *(d)* Check test cable connections and tighten where loose.
	(2) Burned-out fuse. (a) Lamp in fuse holder glows. (b) Lamp in fuse holder does Not glow.	(2) *(a)* Replace fuse. *(b)* Replace fuse and fuse holder.
	(3) Unserviceable test lamp.	(3) *(a)* Press-to-test POWER ON lamp. *(b)* Press-to-test other lamps. If they glow, replace POWER ON lamp.
	(4) Unserviceable generator. (5) Unserviceable lamp holder. (6) Unserviceable test cables. (7) Unserviceable intervalometer adapter. (8) Unserviceable subsystem.	(4) Replace generator. (5) Replace test set. (6) Replace test set. (7) Replace intervalometer adapter. (8) Replace subsystem. (Test unserviceable subsystem for defective intervalometer RADHAZ filter after preparations for mission are completed.)
b. Lamp(s) on test set do not glow. (When Press-to-test sequence is performed, POWER ON lamp is glowing).	*b.* (1) Loose lamp holder(s). (2) Unserviceable lamp(s). (3) Unserviceable test set.	*b.* (1) Tighten loose lamp holder(s). (2) Replace unserviceable lamp(s). (3) Replace test set.
c. SAFE lamp did not glow after MANUAL ADVANCE button was pressed seven times.	*c.* (1) Defective switch. (2) Defective test set wiring. (3) Defective intervalometer.	*c.* (1) Replace test set. (2) Replace test set. (3) Replace intervalometer.
d. Fuse burns out repeatedly.	*d.* (1) Unserviceable test set. (2) Unserviceable adapter. (3) Unserviceable wiring.	*d.* (1) Replace test set. (2) Replace adapter. (3) Replace unserviceable wiring.
e. Additional lamps glow with POWER ON light and SAFE light when quick-release safe pin is in position.	*e.* (1) Unserviceable test set. (2) Unserviceable intervalometer assembly.	*e.* (1) Verify test set functioning and replace unserviceable test set. (2) Replace unserviceable intercalometer assembly with serviceable assembly (para 5-17b).
f. Firing order indicator(s) do not turn from red to white.	*f.* (1) Defective test set. (2) Defective intervalometer.	*f.* (1) Replace test set. (2) Replace intervalometer.
g. Firing order indicator(s) cannot be reset.	*g.* Defective test set.	*g.* Replace test set.

Table 2-3. Troubleshooting-Continued

(1) Malfunction	(2) Probable cause	(3) Corrective action
3. When conducting ejection charge assembly circuit test (Test set A/E 24T-79).		**NOTE For verification of test set, refer to appendix F.**
a. Dial pointer does not move.	*a.* (1) Test set not turned on. (2) Weak or missing test set batteries. (3) Unserviceable test set.	*a.* (1) Turn test set on. (2) Replace unserviceable test set batteries with serviceable batteries. (3) Verify test set functioning and replace unserviceable test set with serviceable test set.
b. Dial pointer moves beyond readable scale.	*b.* (1) Unserviceable test set. (2) Unserviceable ejection charge assembly. (3) Loose dispenser connector. (4) Unserviceable wiring in the dispenser.	*b.* (1) Verify test set functioning and replace unserviceable test set. (2) Remove canister assembly and replace unserviceable ejection charge assembly (para 5-20c)(3)). (3) Tighten connector (para 5-20c(4)). (4) Report subsystem for disposition in accordance with para 1-2a.
c. Dial pointer shows more than 3.25 ohms resistance or less than 0.5 ohms resistance.	*c.* (1) Unserviceable test set. (2) Loose canister assembly. (3) Unserviceable ejection charge assembly. (4) If cause cannot be determined.	*c.* (1) Verify test set functioning and replace test set with service-able test set. (2) Tighten canister assembly (para 5-20c). (3) Remove canister assembly and replace unserviceable ejection charge assembly (para 5-20c(3)). (4) Report subsystem for disposi-tion instructions in accordance with paragraph 1-2a.
4. Quick-release safe pin cannot be replaced in, intervalometer.	*a.* Bent quick-release safe pin. *b.* Unserviceable intervalometer assembly.	*a.* Replace unserviceable quick-release safe pin with serviceable quick-release safe pin and sleeve (para 5-15). *b.* Replace unserviceable intervalometer assembly with serviceable assembly (para 5-17b).
5. When testing RADHAZ filter, a full-scale deflection on low setting is not obtained.	Defective RADHAZ filter (para 5-18b (8)).	Replace RADHAZ filter (para 5-18c and d).

CHAPTER 3

HANDLING AND TEST REQUIREMENTS

Section I. GENERAL

3-1. Scope

The chapter describes the handling methods required to prepare the subsystem M56 for use, reloading, uploading to and downloading from the aircraft. It also defines the procedures and requirements for unpacking, packing, inspecting and testing the subsystem.

Section II. PREPARATION FOR USE

3-2. Unpacking Subsystem

WARNING

The tiedown eyes (C, fig. 3-1) on the early model cover assembly will NOT be used to lift a loaded container.

CAUTION

Do not attempt to forklift the container from the ends, as this will damage the container.

NOTE

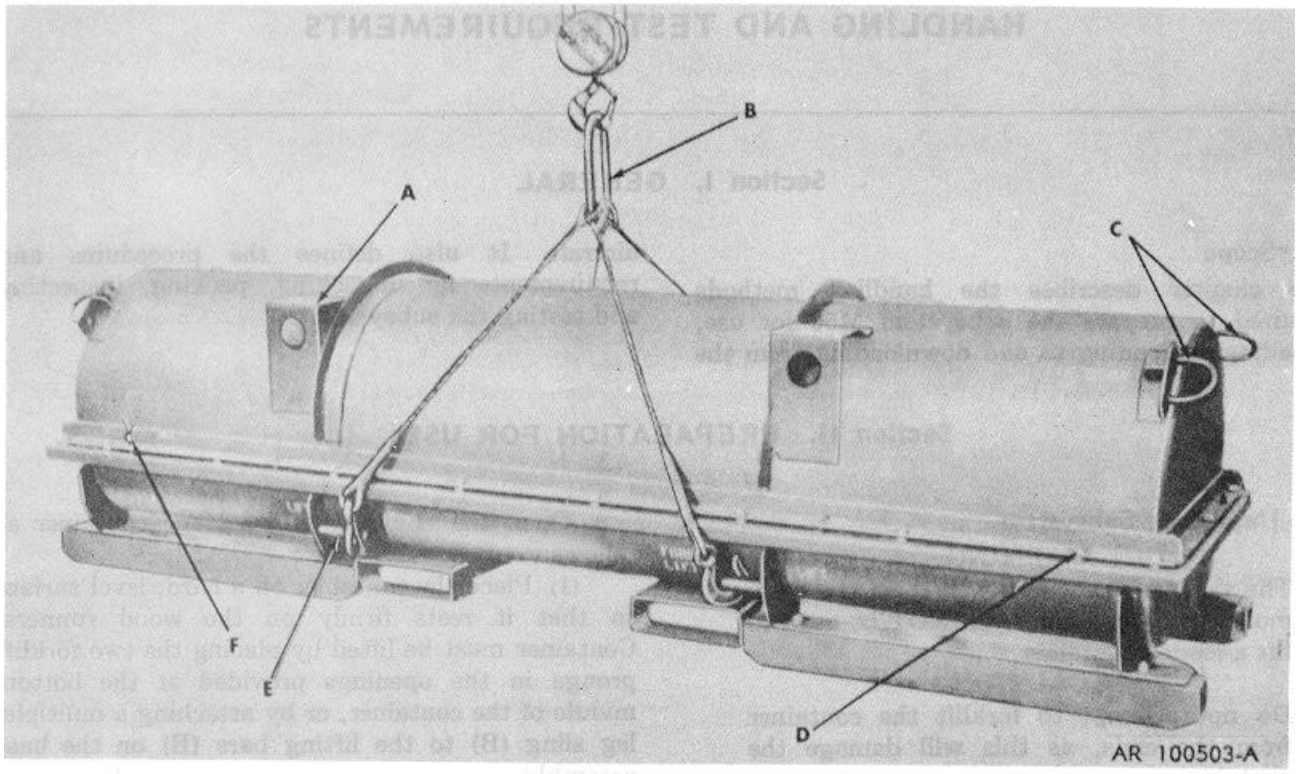
The capital letters in parentheses below refer to figure 3-1, except where otherwise noted.

a. Open the shipping and storage container as follows:

(1) Place the container on a hard, level surface so that it rests firmly on the wood runners. Container must be lifted by placing the two forklift prongs in the openings provided at the bottom middle of the container, or by attaching a multiple leg sling (B) to the lifting bars (E) on the base assembly.

(2) Remove the antipilferage seals (F) from each side of container.

(3) Using a 9/16-inch open end wrench, rotate each bolt one-quarter turn in either direction.



A- Cover lifting bracket
B-Multiple leg sling
C-Tiedown eye
D-T-bolt
E--Lifting bar
F--Antipilferage seal

Figure 3-1. Lifting loaded container.

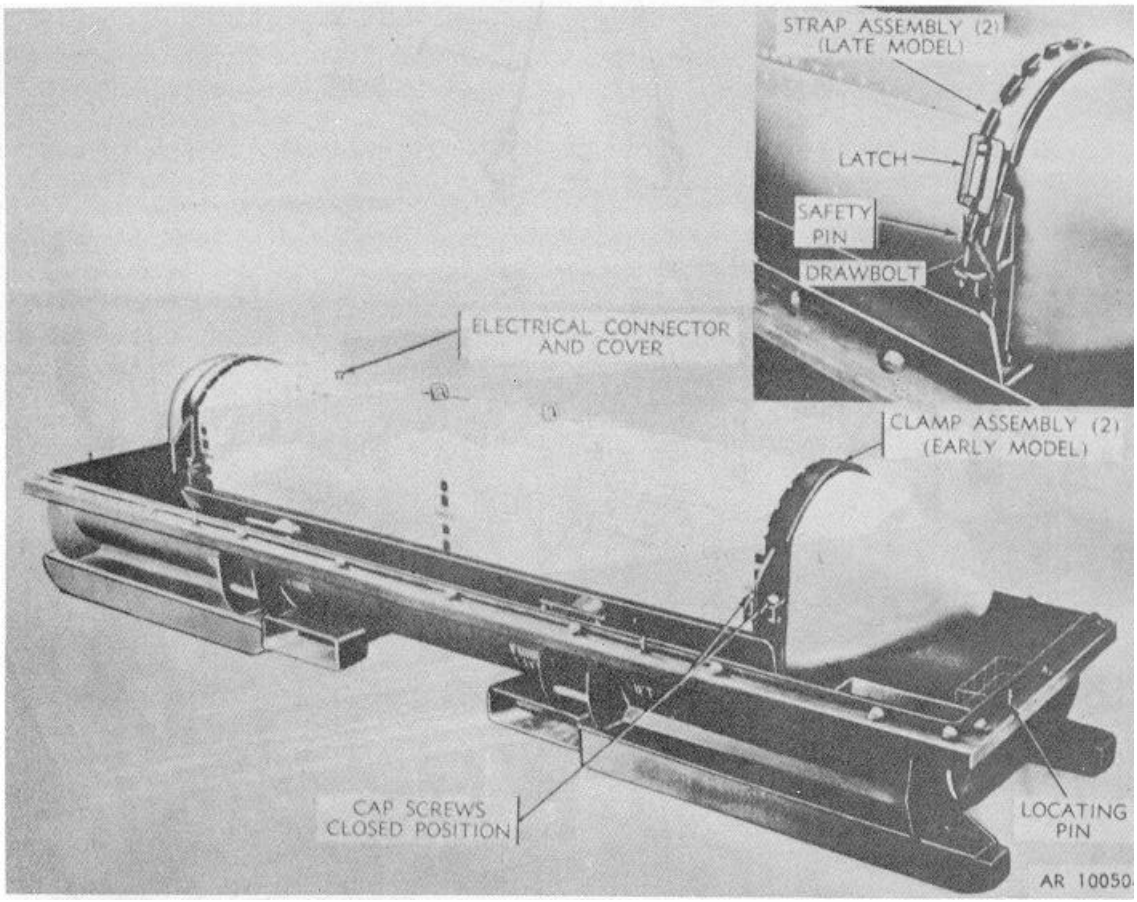


Figure 3-2. Subsystem on suspension frame assembly.

(4) Using a multiple leg sling (B) attached to the four cover lifting brackets (A) on the cover assembly, remove container cover assembly by lifting upward.

b. Remove the subsystem from the container as follows:

(1) Release subsystem from suspension frame as instructed in (a) or (b) below.

(a) Early model clamp assembly (fig. 3-2). Disengage the four cap screws on each clamp assembly using a 3/4-inch socket wrench. Swing the cap screws down; do not remove cap screws from the suspension frame assembly. Remove clamp assemblies.

(b) Late model strap assembly (fig. 3-2). Disengage the safety pin and chain. Swing each latch down. Swing strap over and away from subsystem.

CAUTION

-Assure that suspension lugs are assembled handtight in the subsystem. If necessary, lugs may be backed off a half turn to accommodate the sling in (3) below.

(2) Visually inspect the subsystem for defects, as follows:

(*a*) Defective or missing suspension lugs.

(*b*) Deformed, cracked, or corroded electrical connector.

(*c*) Dents in aft end fairing which could prevent opening of access door or may have damaged the intervalometer.

(*d*) Dents in center body (fig. 3-3) which may have damaged canister assemblies.

(*e*) Punctures, tears, or cracks in center body.

NOTE

If any of the above defects are found, reject subsystem until repairs or replacement of defective components can be performed.

NOTE

In the event that there are punctures, tears, or cracks in the center body, unload the subsystem and repack the mine canisters in a shipping and storage container M602.

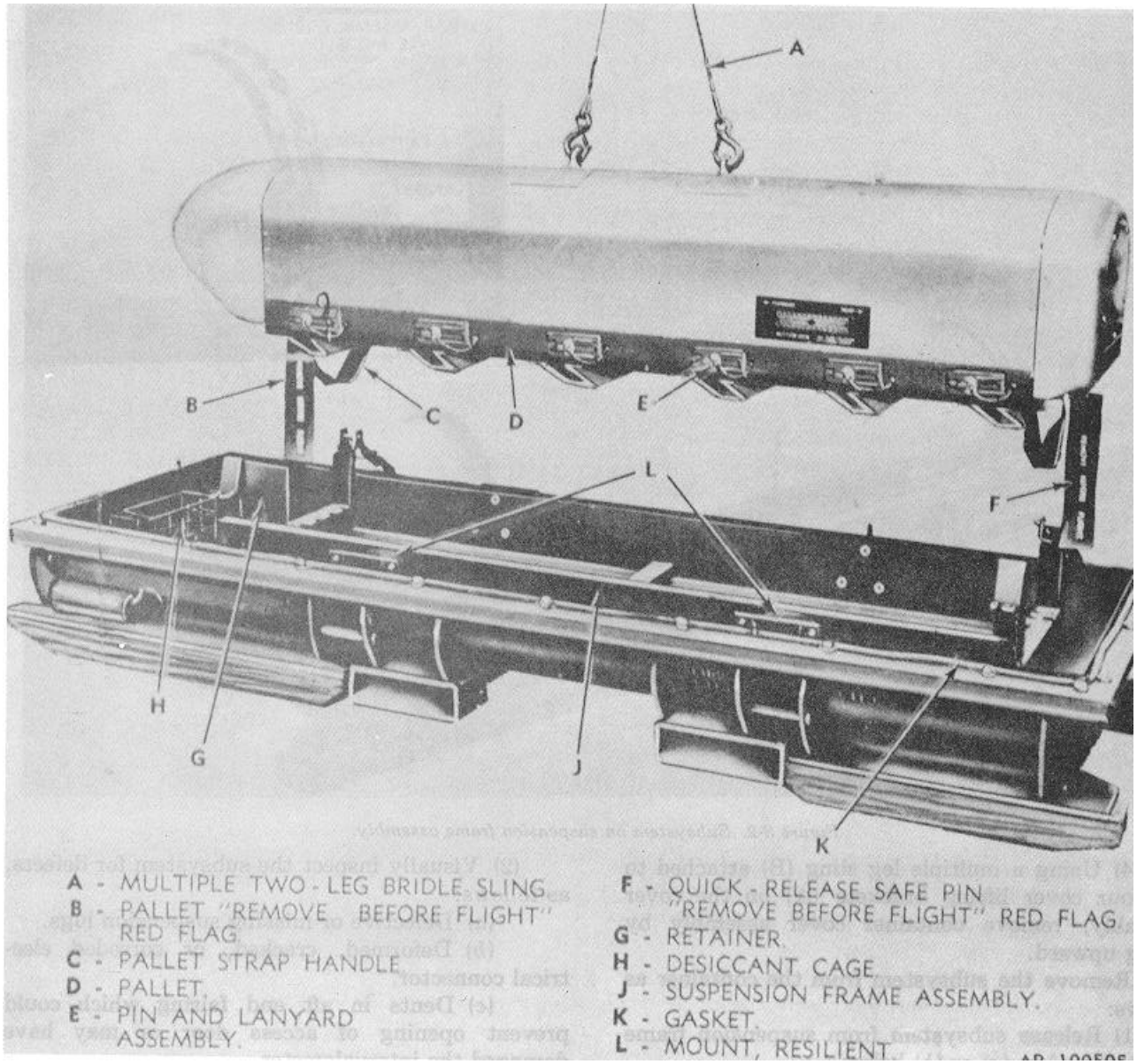


Figure 3-3. Subsystem lifted from suspension frame.

(3) Attach a multiple two-leg bridle sling (A, fig. 3-3) to subsystem lugs.

(4) Lift the subsystem from the container until the bottom of the pallet can be inspected (fig. 3-3).

(5) Visually inspect the bottom of the pallet for any bulges or deformities.

WARNING

When subsystem is lifted from container, inspect pallet for defects, bulges, etc., which may indicate one or more mine ejection charges have fired. Do not remove pallet. If batteries are installed in mines, carefully lower subsystem into container, immediately evacuate all personnel from working area and immediately notify explosive ordnance disposal (EOD) personnel. Set up a new working area in a different location.

CAUTION

If batteries are not installed in mines, carefully lower subsystem into container. Repack container in accordance with paragraphs 3-13d, e, f, i, j, and k, remove container from working area, and notify explosive ordnance disposal (EOD) personnel for removal.

(6) Place the subsystem in an upright position across the level support blocks of the stand as illustrated in figure 3-4. It is also permissable to invert the subsystem at this time in accordance with paragraph 3-6a.

NOTE

An alternate procedure to the operation outlined in paragraph (6) above is to position the dispenser across 4 x 4 blocks/dunnage or locally fabricated cradle to perform electrical checks.

3-3. Subsystem

a. Prior to electrical continuity test, inspect the subsystem as instructed below. If any defect is found, the subsystem will not be utilized until the defect is corrected.

b. Visually inspect the subsystem for the following defects: (1) Missing or damaged quick-release safe pin and red flag. Assure that the safe pin is fully inserted (para 3-4c (13)).

NOTE

Replace missing or damaged quick-release safe pin and red flag.

(2) Access into the rear fairing is by releasing the quick-release fasteners with a screwdriver, and opening the access door. Inspect for missing ballast 'weight which should be positioned forward of aft support frame (fig. 3-5).

(3) Missing or damaged intervalometer adapter (H, fig. 3-5).

NOTE

Replace missing ballast weight with one from a dispenser which is no longer considered suitable for flight. If no ballast weights are available, unload subsystem, repack canisters in shipping and storage container M602, and repack dispenser SUU-13D/A in shipping and storage container CNU-79/E. Report on DA Form 2415 (Ammunition Condition Report) for disposition instructions.

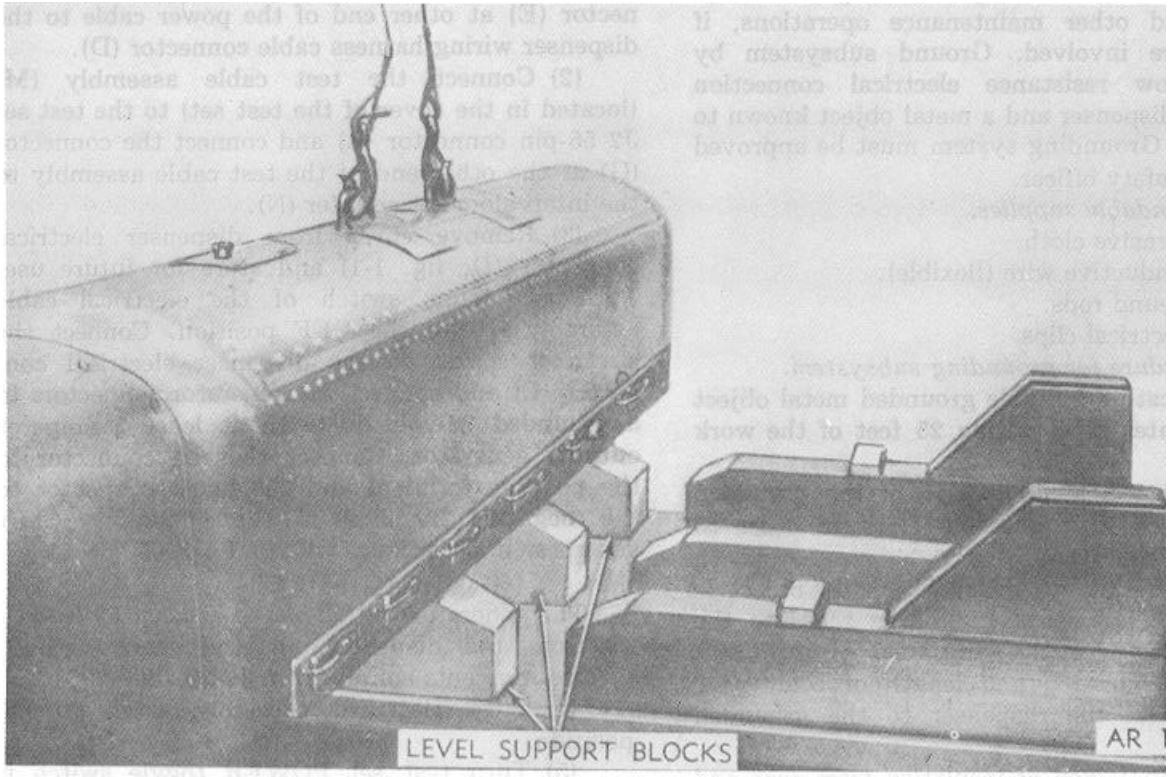


Figure 3-4. Subsystem in upright position on maintenance stand.

Section III. FUNCTION TESTING

3-4. Electrical Circuit Continuity and Intervalometer Test

a. General. This test checks the operation of the intervalometer, intervalometer adapter, and the electrical circuit continuity from the electrical receptacle to the intervalometer using the bomb (mine) dispenser electrical circuit test set A/E 24T80 (4925-00-339-1059) (J, fig. 3-6) and the electrical cable assembly-switch (B, fig. 3-6). The test set simulates the ejection charge circuits in the subsystem and cycles the intervalometer through its 40 firing positions. When the test equipment is connected and the circuit is energized, the indicators of the test set will change from red to white as the circuits are closed.

b. Preparing Subsystem for Test.

CAUTION

Do not work on a subsystem unless it is grounded.

(1) *General.* The subsystem should be grounded during loading/unloading, testing, repairing, and other maintenance operations, if explosives are involved. Ground subsystem by making a low resistance electrical connection between the dispenser and a metal object known to be grounded. Grounding system must be approved by the local safety officer.

(2) *Expendable supplies.*

(a) Abrasive cloth.

(b) Conductive wire (flexible).

(c) Ground rods.

(d) Electrical clips.

(3) *Procedure for grounding subsystem.*

(*a*) Locate a suitable grounded metal object (e.g., cold water pipe) within 25 feet of the work area.

(*b*) Clean a small section of the grounded objects' surface with abrasive cloth in order to obtain a good contact.

(*c*) If a suitable grounded metal object is not available, hammer a grounding rod into the earth within 25 feet of the work area.

(*d*) Cut the required length of conductive wire to connect the dispenser to the grounded object/rod.

(*e*) Strip 1 inch of insulation from each end of wire.

(*f*) Attach an electrical clip to each end of wire.

(*g*) Assure that pallet is installed securely on subsystem.

(*h*) Clamp one end of grounding wire to a handtight dispenser suspension lug, and the other to the grounding object/rod.

(4) Subsystem preparation.

(*a*) Open the rear fairing by releasing the quick-release fasteners with a screwdriver and opening the access door.

(*b*) Disconnect the wiring harness cable (G, fig. 3-5) from the intervalometer adapter (H, fig. 35) by turning the cable connector counter-clockwise and remove cable from adapter.

c. Conducting Electrical Circuit Continuity and Intervalometer Test.

NOTE

The test set A/E 24T-80 should be used in face-up position. (Fig. 3-6 shows test set in upright position to better illustrate connections.)

NOTE

The capital letters in parentheses below refer to figure 3-6.

(1) Remove test set power cable assembly (F) from test set cover and insert plug into J1 POWER jack (K) on test set. Connect the connector (E) at other end of the power cable to the dispenser wiring harness cable connector (D).

(2) Connect the test cable assembly (M) (located in the cover of the test set) to the test set J2 55-pin connector (L) and connect the connector (G) at the other end of the test cable assembly to the intervalometer adapter (N).

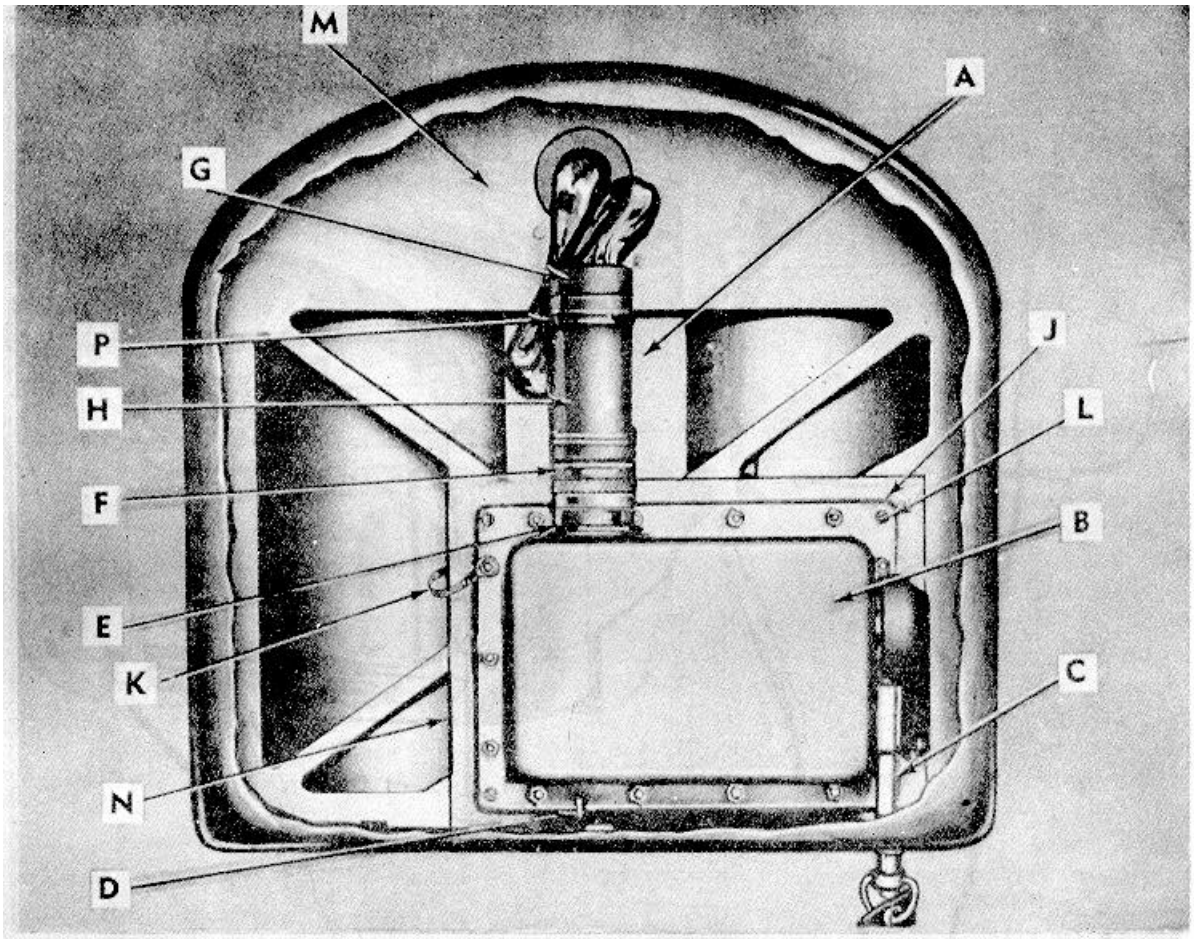
(3) Remove cover from dispenser electrical connector (D, fig. 1-1) and store for future use. Turn the inline switch of the electrical cable assembly (B) to the OFF position. Connect the electrical socket to the dispenser electrical connector (C) and connect the generator connectors to a grounded 28-volt dc (with at least 2 amperes output) generator. Connect the red connector to the positive terminal and the black connector to the negative terminal of the generator. Start generator in accordance with TM 5-2805-256-14.

NOTE

The generator will be placed at least 50 feet from the dispenser, in accordance with requirements contained in TM 9-1300-206.

(4) Turn electrical assembly-switch to ON position.

(5) Turn test set POWER toggle switch to ON position. Test set POWER ON lamp will glow at this time. If fuse Fl (7, fig. B-17) glows, fuse is blown. Replace fuse Fl with spare fuse housed in test set. If test set POWER ON lamp fails to glow, press-to-test. If lamp does not glow, turn test set and electrical cable assembly off and reverse position of alligator connectors. Proceed



A - BALLAST WEIGHT
B - INTERVALMOTER ASSEMBLY
C - QUICK - RELEASE SAFE PIN 5340-00-124-5282
D - TIME SELECTOR SWITCH
E - INTERVALOMETER CONNECTOR.
F - ADAPTER CONNECTOR (J2)
G - WIRING HARNESS CABLE CONNECTOR.
H - INTERVALOMETER ADAPTER.
J - RIGID MOUNT (-716549-)
K - GROUND WIRE.
L - NO. 8-32 UNC-2A x 1-1/4 CROSS-RECESS PAN - HEAD
STEEL MACHINE SCREW - MS35206-250
3/16-32 UNJC-3B HEX HEAD LOCKNUT - MS21042-08
M - AFT SUPPORT FRAME
N - BACKING PLATE (OLDER
MODELS ONLY)
P - ADAPTER CONNECTOR (J1)

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Figure 3-5. Aft end of subsystem-cutaway view.

with (4) above. (If, after reversing connectors, lamp does not glow, replace lamp.)

(6) Press-to-test SAFE lamp.

(7) Turn test set SAFE CHECK toggle switch to ON position. If the SAFE lamp glows, the intervalometer is in safe position. If SAFE lamp does not glow, follow procedures in NOTE immediately below.

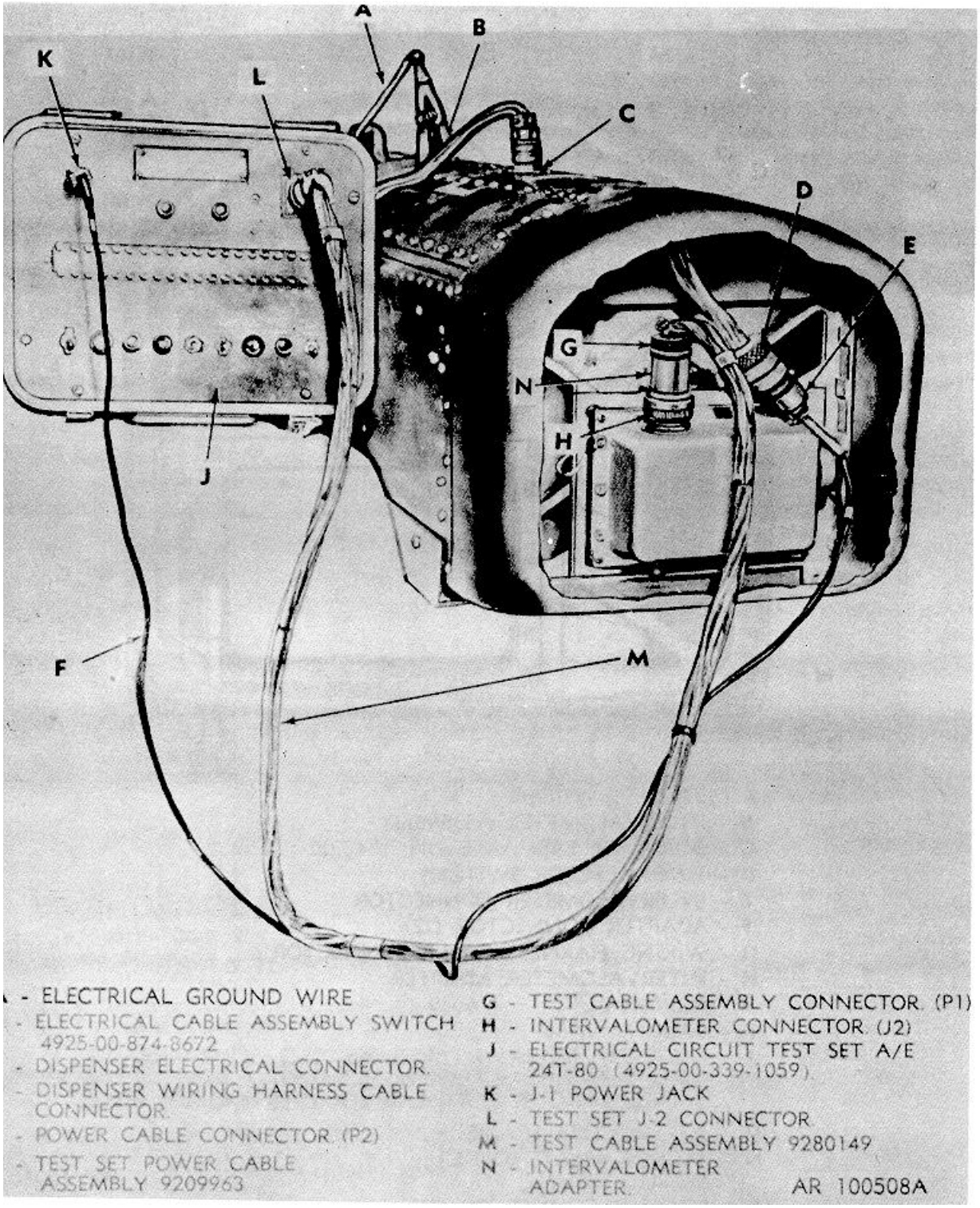


Figure 3-6. Test set A/E24T-80 installation for intervalometer test-cutaway view of subsystem.

NOTE

The intervalometer has two positions which can accept the quick-release safe pin. If SAFE light does not glow; press SAFE lamp down to assure bulb is not burned out. If SAFE lamp is serviceable and glows only when pressed down, press MANUAL ADVANCE button as many times as necessary to advance intervalometer to safe position and to light

SAFE lamp to a steady glow. Press test set RESET button to return indicators to red.

NOTE

If test set does not function, replace the intervalometer adapter. If test set does not function properly after the intervalometer adapter has been replaced, replace intervalometer.

(8) Remove quick-release safe pin (fig. 5-2) from intervalometer by depressing pin button and removing pin.

(9) Press test set RESET button. All indicators should be red.

(10) Press and hold FIRE button. Indicators numbered 1 through 40 will change from red to white in proper firing sequence and remain white. Lamp 40 will glow and remain glowing at the end of the firing sequence.

NOTE

Disregard lamp marked 35 through 39, as this has no function in the test.

(11) Press MANUAL ADVANCE button as many times as necessary until SAFE lamp glows. The intervalometer is now in the SAFE (home) position.

(12) Press test set RESET button to return indicators to red.

WARNING

If the orientation drum does not return to the proper position to receive the quick release safe pin in (13) below, do not attempt to turn the orientation drum by hand as it will damage the intervalometer. If the pin cannot be reinstalled, electrically recycle the intervalometer using the test set A/E 24T-80. If pin still cannot be installed, replace the intervalometer.

(13) Reinstall the quick-release safe pin in the .intervalometer orientation drum by depressing pin button while installing pin. If there are two safe pin access holes in the bottom of the aft fairing, insert the safe pin through the hole which is closer to the aft end of the fairing. Pull firmly on the quick-release safe pin without depressing the pin button (fig. 5-2) to assure that the safe pin is fully inserted and locked in place. If the safe pin comes out, reinstall into the intervalometer orientation drum, inserting the safe pin as far as it will go.

NOTE

If the safe pin still comes out, replace safe pin with a new one with a red flag attached. If new safe pin comes out, replace intervalometer assembly in accordance with paragraph 5-17b.

(14) Depress the FIRE button briefly (less than 2 seconds). All indicators should be red. The SAFE lamp and the POWER ON lamp on the test set should glow.

(15) Turn SAFE CHECK toggle switch to OFF position.

(16) Turn POWER toggle switch to OFF position.

(17) Turn switch of electrical cable assembly switch (B) to OFF position.

WARNING

Before proceeding to any other tests or inspections, disconnect the subsystem from the power source as instructed in paragraphs (18) through (23) below.

(18) Turn power source off and disconnect the alligator connectors of the electrical cable assembly-switch from the power source. Disconnect electrical cable assembly-switch from dispenser electrical connector.

NOTE

If electrical circuit testing is to be performed on more than one subsystem, follow procedures outlined in paragraphs (19) and (20), below, without disconnecting the cables from the test set.

(19) Disconnect test set power cable assembly connector (E) from the dispenser wiring harness connector (D) and disconnect the other end of the cable from the test set J1 POWER jack (K).

(20) Disconnect the test cable assembly connector (G) from the intervalometer adapter connector (H) and disconnect the other end of the test cable assembly from the test set.

(21) Install the dispenser electrical connector cover.

(22) After electrical continuity test, perform the ejection charge assembly circuit test as instructed in paragraph 3-5. Do not connect the wiring harness cable connector to the intervalometer adapter connector or remove the grounding cable from the suspension lug until the completion of the ejection charge assembly circuit test.

(23) On completion of testing, stow cables in cover of test set. Secure test set and store.

3-5. Ejection Charge Assembly Circuit Test

a. General. This test will be conducted using the bomb (mine) dispenser electrical circuit test set A/E 24T-79 (4925-00-915-5735) (1, fig. B-18). During this test, the test set simulates the intervalometer and feeds a very small amount of current through each ejection charge assembly circuit to test for electrical circuit continuity and resistance from the intervalometer through the ejection charge assemblies. The electrical current source is within the tester.

WARNING

No external power should be applied to the subsystem during this test.

b. Preparing Subsystem and Test Set for Test.

(1) As this test follows immediately after the intervalometer test (para 3-4), no further preparation of the subsystem is necessary.

(2) Verify accuracy and functioning of test set as instructed in appendix F.

c. Conducting Ejection Charge Assembly Circuit Test (fig. 3-7).

(1) If test set accuracy and functioning has been verified, assure that test set adjustment is in accordance with instructions on test set front panel.

(2) Connect the test set cable assembly P4 connector (stored in cover) to the test set and the other end to the dispenser wiring harness cable connector.

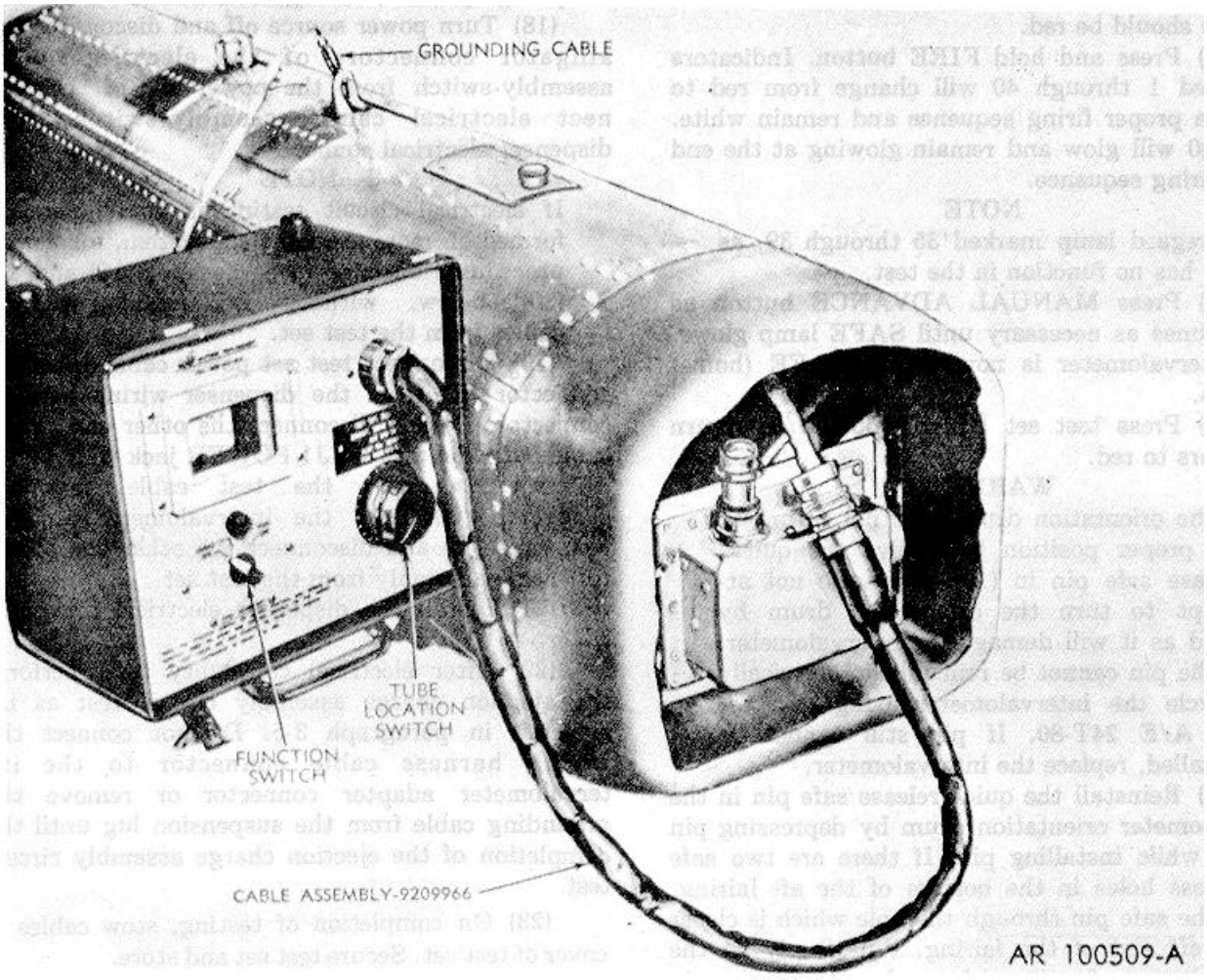


Figure 3-7. Test set A/E 24T-79 installation for ejection charge assembly circuit test-subsystem cutaway view.

(3) Turn function switch to LOW position.

CAUTION

If dial pointer goes off scale in (4) below, turn function switch off immediately to prevent damage to test set.

(4) Turn tube (canister) location knob on. the test set to position 1 and determine resistance of that circuit by reading the ohmmeter indicator on the face of the test set.

(5) The acceptable resistance reading is between 0.5 and 3.25 ohms. If the. resistance reading is not within the acceptable range, the tube assembly number should be noted for possible replacement of ejection charge assembly as instructed in paragraph 5-20.

(6) Turn tube location knob to position 2 and determine resistance. Continue until all 40 positions have been tested.

NOTE

Above reference is to the mine canister

location and not the firing position of the mine canister (fig. 1-7).

(7) Turn function switch to OFF position.

(8) If no other subsystems are to be tested, disconnect the test set cable assembly from the dispenser wiring harness cable connector and disconnect the other end from the test set. Store cable in test set cover.

(9) Reconnect the dispenser wiring harness cable connector to the intervalometer adapter and turn shell clockwise.

(10) Close the rear fairing and secure the quick-release fasteners with a screwdriver.

(11) Remove the grounding cable from the suspension lug.

3-6. Checkout and Installation of Mine Batteries

NOTE

Mine batteries installed into subsystems, and stored in the combat ready configuration, will be replaced annually. All other mine batteries will be maintained in refrigerated storage (320F ± 50).

a. Turning Subsystem Upside Down.

(1) In order to turn the subsystem to the upside-down position, the following personnel and equipment are required:

(a) A hoist operator.

(b) Two multiple two-leg slings (1398-00763-0104). The second sling is required to provide the necessary length when the sling is brought underneath the subsystem.)

(c) Two men, positioned one at each end of the subsystem, to steady the subsystem while it is in motion.

CAUTION

Close coordination is required between the two men guiding the subsystem and the hoist operator.

(2) Using one two-leg sling attached to the suspension lugs, hoist the subsystem and center it on the highest level of tilting blocks (A, fig. 3-8).

CAUTION

Tension must be maintained on the sling to prevent the subsystem from slipping.

CAUTION

Assure that electrical connector will clear support blocks of stand (fig. 3;4) when subsystem is being turned over.

(3) Using two men and a hoist, the hoist operator allows the subsystem to slide down the tilting blocks until it contacts the stop blocks (B, fig. 3-8).

(4) Continue turning until the subsystem is on its side.

(5) Remove the sling hooks from the suspension lugs. Slide the hooks of the second sling underneath the subsystem between the maintenance stand supports and attach hooks to the subsystem lugs. Attach the sling ring of the second sling to the first sling.

(6) Remove slack in cables with hoist.

(7) Continue turning the subsystem until the subsystem is upside down with the sling legs positioned in the channel (C, fig. 3-8).

(8) Remove sling ring from hoist.

b. Removing Pallet From Subsystem.

NOTE

Assure that the subsystem is grounded.

CAUTION

Two men are required (one man at each end) for removing the pallet from the subsystem.

NOTE

The numerals in the parentheses below refer to figure B-5. (Refer to figure 3-9 for additional view of pallet hardware.) (1) Remove two pinlocks from retaining blocks on the forward end of pallet (left and right sides).

(2) Remove the two retaining blocks.

NOTE

It may be necessary to force pallet rearward using a screwdriver blade between pallet and dispenser. This will release pressure on the retaining block.

(3) Grasp pallet (webbed) handle on the forward end of pallet and, with a HARD JERK toward the forward end, release the 12 (lock) pin assemblies.

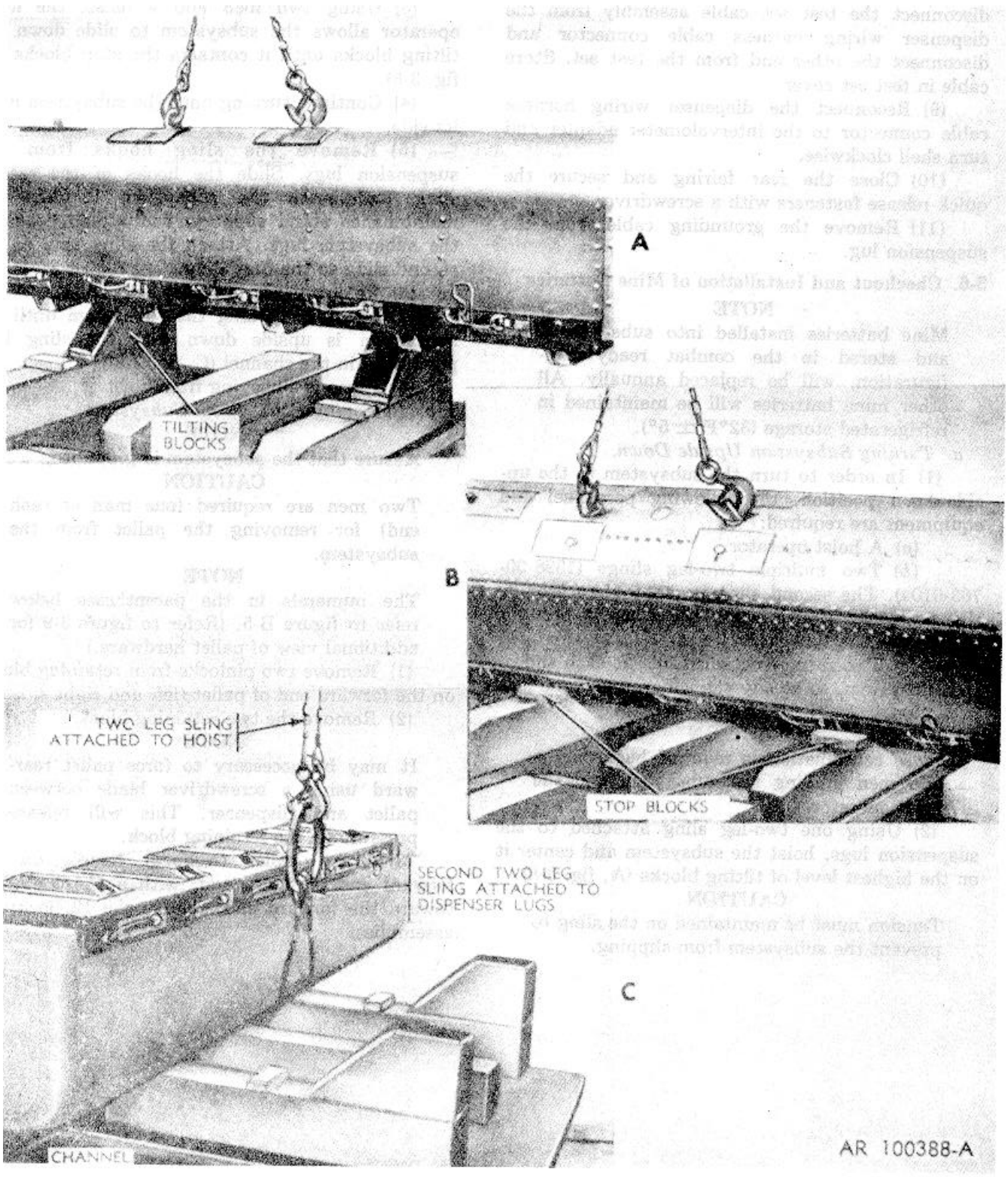


Figure 3-8. Turning subsystem on maintenance stand.

NOTE

Check for release of all 12 (lock) pins. If any remain in place, pull lanyard attached to (lock) pins and release.

(4) Remove pallet by lifting upward and away from subsystem.

c. Battery Well Test, Battery Test, and Battery Installation Procedure.

(1) Using a flat tip screwdriver, turn mine battery cap counterclockwise and remove the cap from mine fuze housing. Set preformed packing aside for use in installation of battery.

NOTE

The polarity of the multimeter probes may be disregarded for the battery well test.

(2) Utilize a multimeter (6625-00-999-6282) set on highest resistance scale.

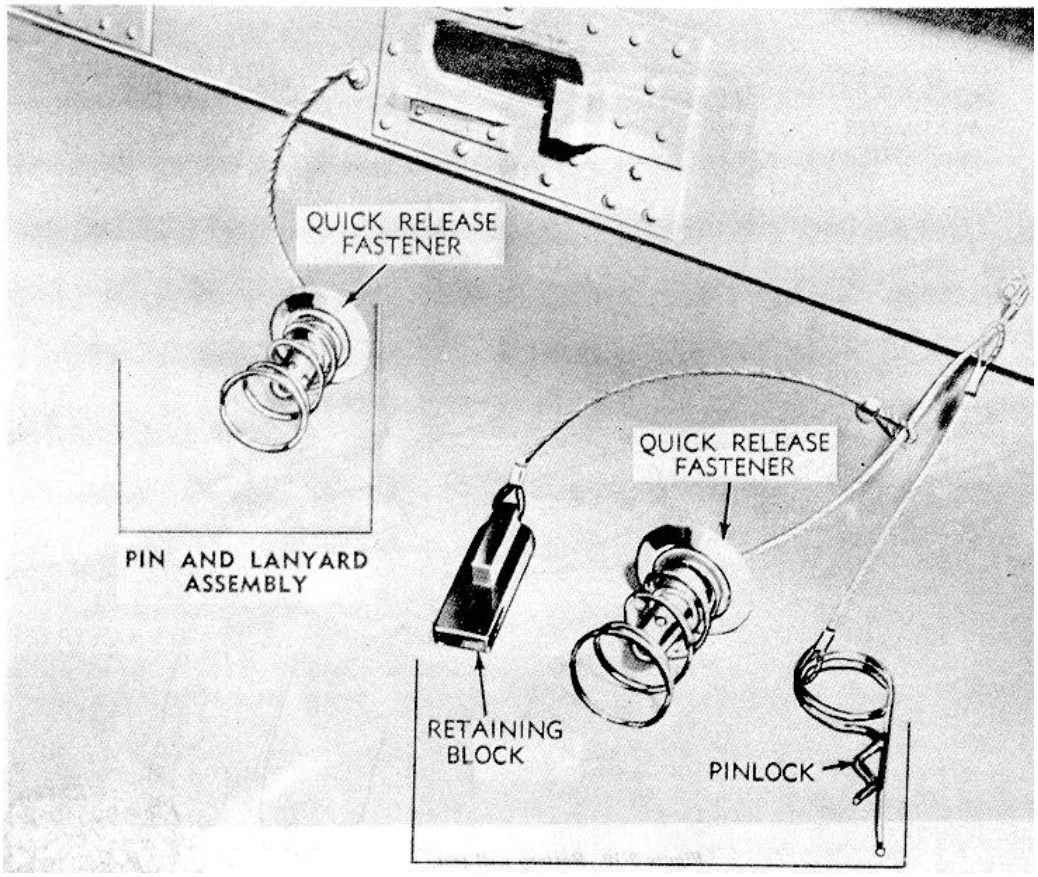
(3) Using one of the two meter probes, touch fuze cover (fig. 3-10) (on unpainted surface). Using the other meter probe, touch battery conical spring inside battery well. The multimeter should indicate infinity (no reading). If a reading is 'obtained, power micro switch in mine is in a closed position. Do not install battery.

CAUTION

If multimeter needle deflects, it indicates that electrical arming will occur if a battery is installed. DO NOT INSTALL BATTERY.

(4) If multimeter reading was obtained, remove mine canister from dispenser and replace it as instructed in paragraphs 5-20c (3) (b) through (d). Test new mines as instructed in paragraphs (1), (2), and (3) above.

(5) Utilizing mine battery test set (fig. B-19), test battery voltage by inserting battery (negative terminal into the keyed end) and observing meter pointer to assure that pointer is in GO zone (acceptable voltage). If meter pointer is in NO GO zone (low voltage), discard the battery and replace it with an acceptable one.



PIN AND LANYARD ASSEMBLY W/RETAINING BLOCK AND PIN

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Figure 3-9. Pallet hardware.

NOTE
The battery must remain in the test set for a minimum of 5 seconds during the test.

(6) Install tested acceptable battery terminal to mine battery cap clip.

(7) Assure that the performed packing (0ring) is properly lubricated and is in place in fuze housing. If preformed packing is not lubricated, apply silicone grease, specification MIL-G-4343.

(8) Insert mine battery and cap assembly into fuze housing. Tighten by turning mine battery cap clockwise with flat tip screwdriver.

NOTE
One battery is required for each mine, therefore, installation of 80 batteries is required for each fully loaded subsystem.

d. Reinstallation of Pallet on Subsystem.

NOTE
The numerals in the parentheses below refer to figure B-5.

(1) Place pallet on subsystem and aline yellow mark on pallet with yellow mark on dispenser.

(2) Replace (lock) pin and lanyard assemblies (7 and 8) by beginning on the forward end of pallet. Grasp pin and lanyard assembly with left hand and place spring against slot of pallet while alining with retaining hole of dispenser.

(3) With right hand, grasp drive pin punch (5120-00-223-1014) and insert pin in any one of the three holes in (lock) pin. Push inward to release balls on the end of (lock) pin. Insert into hole of dispenser and push inward until (lock) pin locks in place.

NOTE
If shoulder of (lock) pin assembly interferes with pallet, lift pallet upward slightly and push (lock) pin in until it locks in place.

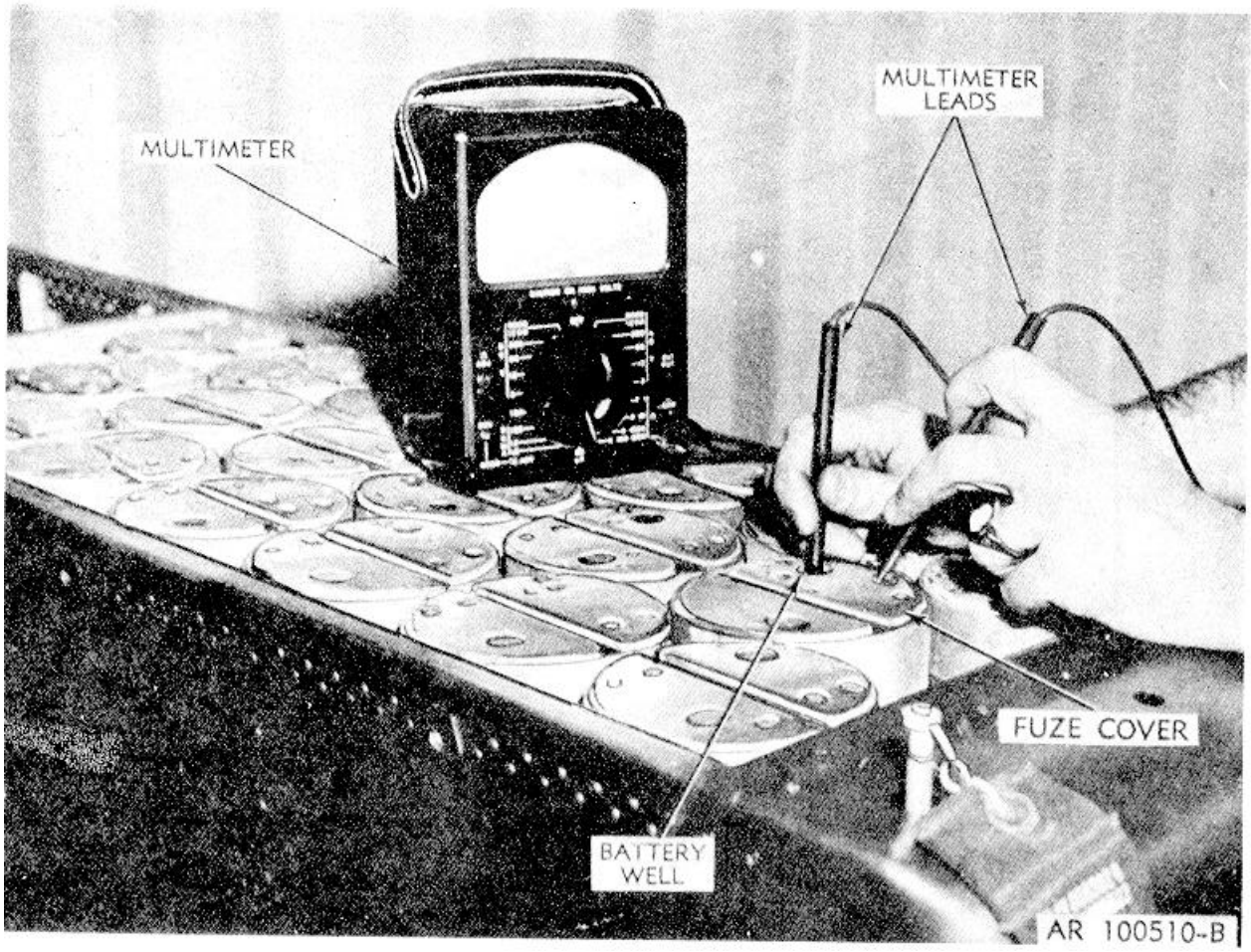


Figure 3-10. Battery well test.

(4) Follow above procedure for reinstalling remaining 11 (lock) pins.

(5) From forward end, grasp pallet skid and force skid aft.

NOTE

Assure yellow mark on dispenser is alined with yellow mark on pallet (aline to install retaining blocks).

(6) At the forward end of the pallet, install two blocks (12) with flat edge into slot under (lock) pin and lanyard assembly (left and right sides).

NOTE

If retaining and lanyard assembly block does not fall in place, assure that none of the (lock) pin springs have slipped into pallet slots, then use a screwdriver blade between pallet and dispenser to move pallet rearward. This will allow block to drop into its slot.

(7) Install two (lock) pins from bottom end into pin holes on pallet and lock in place.

(8) Attach the two slings to the hoist and dispenser lugs (C, .fig. 3-8). Remove grounding clip.

(9) Turn subsystem to the upright position (fig. 3-4).

NOTE

If maintenance stand is immediately required to prepare other subsystems, remove subsystem from maintenance stand and place on 4x4 (or larger) blocks.

(10) Remove subsystem from maintenance stand with a portable crane. Move subsystem to ready area for subsequent pick up.

3-7. Uploading Dispersing Subsystem To Helicopter

CAUTION

A minimum of two men will be employed

to guide subsystem when mounting on helicopter pylon assembly (bomb rack).

NOTE

Lateral stability must be provided while handling the subsystem.

a. Release safety pin, if installed, from pylon assembly. Assure that hooks are open on pylon assembly. Retract sway braces on pylon assembly. Assure that electrical wiring is clear of the subsystem.

b. Seat suspension lugs on dispenser, then back off until holes are parallel to long axis of subsystem. Raise subsystem until suspension lugs engage pylon assembly hooks.

c. Insert a 3/8-inch adapter wrench with a 6inch extension into the locking bar on right side of pylon assembly, turn and close hook assembly.

NOTE

Lower forks and assure that subsystem is firmly attached to the pylon assembly.

d. Install safety pin with red flag attached.

e. Tighten sway braces finger-tight. Using screwdriver, turn one half turn and then tighten lock nuts.

CAUTION

Do not overtighten sway braces or pylons will not jettison subsystem.

f. Connect dispenser control aircraft cable assembly to subsystem by firmly pressing plug into electrical connector on top of dispenser.

NOTE

This is not a threaded connector.

g. Remove safety pallet.

NOTE

Assure that safety pallets, intervalometer safety pins, and pylon safety pins are removed.

Section IV. MISSION CANCELLATION OR TERMINATION PROCEDURES

3-8. General

If a dispersing subsystem is loaded on an aircraft in preparation for a mission, and the mission has been canceled or terminated early, it will be downloaded (reloaded if necessary) and returned to the original shipping and storage container CNU79/E. The dispersing subsystem should be repacked in the same way it was packed when issued. Downloading and repacking procedures are described in paragraphs 3-9 through 3-13.

3-9. Downloading Dispersing Subsystem From Aircraft

NOTE

A minimum of two men are required to

perform downloading operations.

a. Assure that the safety pallet and the intervalometer safety pin (with red flag) are installed. If subsystem is partially loaded, reinstall the pallet only (safety pin cannot be reinstalled on a fired subsystem).

b. Disconnect aircraft cable assembly from dispenser.

CAUTION

Replace dispenser electrical connector cover (D, fig. 1-1). Assure that plug cover remains on receptacle during all handling of the dispenser to prevent damage to the receptacle.

c. Position forklift under the subsystem. Raise forks until they make contact with the subsystem.

d. Open lug assemblies. This releases subsystem from pylon fork lift.

e. Lower subsystem from aircraft and transport to maintenance stand.

3-10. Removal of Mine Batteries

a. Place subsystem on maintenance stand and turn to the upside-down position in accordance with instructions in paragraph 3-6a.

b. Remove pallet in accordance with instructions in paragraph 3-6b.

c. Using a flat tip screwdriver, turn battery cap assembly (3, fig. B-4) counterclockwise and remove cap assembly from mine body.

d. Disconnect mine battery from mine battery cap clip.

e. Reinstall mine battery cap (less battery) into mine, assuring battery preformed packing is in place in fuze housing.

NOTE

If mission has been. terminated early and some mines have been dispensed, reload subsystem in accordance with paragraph 3-14.

CAUTION

All canisters within the dispenser must be from the same lot number. It may be necessary to combine the contents of two or more partially loaded dispensers to accomplish one lot per dispenser.

3-11. Reinstalling Pallet on Subsystem

Reinstall the pallet on the subsystem in accordance with instructions in paragraph 3-6d.

3-12. Turning Subsystem Upright

a. Attach the two slings to the hoist and dispenser lugs (C, fig. 3-8).

b. Turn subsystem to the upright position (fig. 3-4).

3-13. Repacking Dispersing Subsystem in Shipping and Storage Container CNU-79/E

a. Open the shipping and storage container as instructed in paragraph 3-2, except for removal of metallic seals.

b. Remove early-model clamp assemblies or release late-model strap assemblies (fig. 3-2).

NOTE

Assure that quick-release safe pin with attached red flag (F, fig. 3-3), safety pallet with attached red flag (B, fig. 3-3), and electrical connector cover have been installed (1, fig. B-3).

c. Lift subsystem with multiple two-leg bridle sling attached to dispenser lugs (A, fig. 3-3).

d. Position subsystem over the container bottom assembly so that the forward fairing is above the forward portion of the suspension frame (J, fig. 33).

CAUTION

When lowering the subsystem in e below, guide the intervalometer quick-release safe pin at rear of dispenser into cutout portion of the rear (aft) support to prevent damage to the intervalometer. Assure that red flags are free of the forward and rear supports to prevent damage to the flags.

e. Lower the subsystem onto the suspension assembly.

f. Install the forward and rear clamp assemblies or strap assemblies around subsystem as instructed in (1) or (2) below.

(1) Early-model clamp assemblies (fig. 3-2).

Place forward and rear clamp assemblies around the subsystem with the slots facing toward the center and secure by swinging up and tightening the four cap screws on each clamp assembly to a torque of 9 -+ 1 foot-pounds.

(2) Late-model strap assemblies (fig. 3-2).

Secure forward and rear strap assemblies by placing each strap over subsystem and closing each latch. Insert safety pin on chain through hole in latch to hold latch in place.

g. Place five 16-unit bags of new or reactivated desiccant (6850-00-264-6572) in desiccant cage.

h. Inspect rubber gasket (N, fig. 1-4) to assure that it is in a serviceable condition to prevent air leakage when container is closed.

i. Position the 26 T-bolts in the open position.

j. Using a four-leg sling attached to cover-lifting brackets (B, fig. 1-4), place the cover assembly over the base assembly. Position the holes on the cover assembly over the locating pins on the base assembly (D, fig. 1-4) for proper alinement of the cover assembly.

k. Loosen nut on each T-bolt so that T-bolt can be turned to the closed position. Turn T-bolts to the closed position and tighten nuts to a torque of 33-4 foot-pounds with torque wrench and a 3/4inch socket.

NOTE Calibrate torque wrench in accordance with TB 43-180.After completion of torquing operation, recheck each bolt for correct torque to assure that bolts did not loosen during first torquing operation.

1. Insert antipilferage seal (1, fig. B-6) through each of the two diagonally opposite holes in the container flange. Secure seals with sealing tool.

m. Assure vent cover is present and properly adjusted (P, fig. 1-4).

n. Return container to storage area.

NOTE

Air test of container is not required.

o. Perform storage monitoring on the third day after closing the, container in accordance with paragraph 4-3.

Section V. SUBSYSTEM RELOAD INSTRUCTIONS

CAUTION

Mine canister removal or installation procedures require a minimum of two men.

3-14. General

CAUTION

Exercise caution in removing and handling empty canisters. The sharp edges of the canisters can cause cuts.

a. Removing Empty Mine Canisters.

(1) Place subsystem on maintenance stand and turn upside down in accordance with paragraph 3-6a. Attach a grounding cable to a suspension lug.

(2) If required, remove pallet as instructed in paragraph 3-6b.

(3) Remove empty canisters from subsystem as instructed in paragraph 5-20c (3) (b).

b. Inspection of Dispenser.

(1) Inspect the three cast aluminum support frames located in area of "chock" markings for cracks, distortion, and corrosion.

(2) Inspect for bent, broken or missing locking springs (fig. 5-8).

(3) Inspect the overall dispenser in accordance with instructions in paragraph 4-3c(3).

(4) If, after evaluating the above inspection, the dispenser is considered irreparable, salvage dispenser and report disposition in accordance with paragraph 5-2.

c. Opening of Reload Kit.

(1) Open container as instructed in paragraph 5-24b(2).

(2) Inspect contents of container for any visible damage to mine canisters.

d. Ballast Weight. (A, fig. 3-5). Check the torque of the connecting bolts on the ballast weight as instructed below.

NOTE

Torque will be checked each time the subsystem is reloaded.

(1) Using a 1/2-inch hex-head torque wrench, check the torque of the connecting bolts on the : ballast weight. The correct torque is between 12 and 15 foot pounds.

e. Installation of Mine Canisters.

NOTE

To remove the mine canisters from the reload kit, it may be necessary to use the canister removal tool (2, fig. B-16).

(1) Reload dispenser with 40 mine canisters as instructed in (a), (b), and (c) below.

NOTE

Face of ejection charge must be slightly below flush.

(a) Install canister assembly into dispenser as instructed in (b); below. Do not depress locking spring when installing canister assembly.

(b) Using the canister removal tool assembly to hold the canister assembly and a second person steadying the canister with a handgrip, insert canister assembly all the way into the opening in the canister support beam. Assure that lugs on canister assembly (fig. 5-7) aline with slots in support beam (fig. 5-8). Remove tool.

(c) Aline the canister mines separation line as described in paragraph 5-20c(2).

NOTE

If the mines separation line (fig. 5-8) is not parallel with longitudinal axis of the subsystem (subsystem line of flight), the canister may be alined by turning in either the clockwise or counterclockwise direction to achieve the desired position. If the mine canister assembly cannot be alined as instructed above, the sub-system will be rejected. Refer to paragraph 5-2 for disposition instructions.

(2) Install pallet onto the subsystem as instructed in paragraphs 3-6d(1) through (7).

(3) Perform electrical circuit continuity and intervalometer test as instructed in paragraph 3-4.

(4) Perform ejection charge assembly circuit test on the canister assembly as instructed in paragraph 3-5.

f. Remarking of Dispenser and Shipping Container. When a new lot number of mines is installed, the dispenser and shipping container must be remarked to reflect the ammunition lot loaded therein.

(1) Place masking tape over the old lot on the dispenser and stencil/mark tape with new lot number.

(2) Obliterate old lot number on the shipping container and restencil with new lot number.

NOTE

A second piece of masking tape, bearing lot number, may be attached loosely to the

dispenser for use in temporarily marking the container in which that dispenser is packed. During a sustained operation, a temporary marking may be sufficient.

(3) Repack subsystem in container CNU-79/E as instructed in paragraph 3-13.

CHAPTER 4

INSPECTION REQUIREMENTS

Section I. GENERAL

4-1. Scope

a. This chapter covers the purpose of technical inspections by direct support maintenance personnel. It defines receiving and shipping inspection, storage monitoring, pre-issue inspections, storage inspections, and shop inspections. Applicable portions of SB-742-1 (Ammunition Surveillance Procedures) shall be used in conjunction with the requirements contained in this chapter.

b. Maintenance requirements and modification operations shall normally be derived from one of the following:

(1) Surveillance reports from ammunition activities to which ammunition inspectors, either military or civilian, are assigned.

(2) Reports of function tests.

(3) Reports of unserviceability from the using services or units within command organizations.

(4) Reports of malfunctions or accidents from the using services, submitted in accordance with AR 75-1 which may indicate the desirability of the engineering change.

c. All items stored within the command organization shall be inspected and tested in accordance with the requirements of this chapter to determine serviceability and requirement for maintenance.

d. All items received at DS level as a result of paragraph b (3) and (4) above shall be tested on a lot sampling basis. Items received from the supply system, e.g., from CONUS depots, need only be inspected for proper identification and damage in transit.

4-2. Purpose of Inspection

Inspections are made for the purpose of recognizing conditions which would cause future failure or unsafe condItions.

4-3. Categories of Inspection

a. Receiving and Shipping Inspections.

(1) Receiving inspections. Subsystems M56 received directly from a manufacturer, storage installation, depot activity, or the user, will be inspected. Inspection of items received directly from the manufacturer, storage installation, or depot activity will be limited -to a visual inspection of each container for damage incurred in transit, condition of seals, correct markings on container, and a reading of the humidity indicator.

(2) Pre-issue inspections. Subsystems M56 to be shipped will require a 100 percent inspection of the humidity indicators.

b. Storage Monitoring.

(1) General.

(a) Storage monitoring is a periodic inspection of subsystems M56 in stockpile or operational storage to determine whether a change in relative humidity inside the shipping and storage container has occurred which could detrimentally affect the munition. Each container CNU-79/E and container M602 will be monitored to detect the presence of excessive moisture within the container by visually examining the humidity indicator which is attached to the front end of the shipping and storage container.

(b) Each loaded container CNU-79/E and container M602 will be monitored at least once each month for the first 3 months, then, if the moisture trend is not upward, the monitoring interval may be extended to once every 3 months. Humidity indicator readings secured from storage monitoring will be noted on DA Form 2409 or other applicable documents. Stacks of containers will be examined to assure the stacks are stable, dunnage is solid and free from dry rot or other fungi, and container seals are intact.

(c) Whenever the container is opened for inspection or maintenance of the munitions and then reclosed, read the humidity indicator on the third day after closing the container to assure that the desiccant has absorbed any excessive moisture within the container. Thereafter, read the humidity indicator at least once each month for the first 3 months, then, if the moisture trend is not upward, extend the monitoring interval to once every 3 months.

(2) Procedures. Read the humidity indicator (fig. 4-1) on the front end of the containers to asscertain if relative humidity is satisfactory. When all circles (dots) are blue, relative humidity is satisfactory. When circles have changed to

lavender, pink, or white, the following procedures will be followed: (a) When relative humidity is less than 40 percent (circles 20 and 30 are pink or lavender and circles 40 and 50 are blue); no action is required.

(b) When relative humidity is over 40 percent (circles 20, 30, and 40 are pink or lavender), perform a storage inspection as outlined in paragraph 4-3c as soon as possible (not to exceed 30 days).

(c) When all four circles show no pink or lavender and have turned white, the indicator card probably has been wetted and will not return to the blue condition regardless of new desiccant and low actual relative humidity. In such cases, perform a storage inspection as outlined in paragraph 4-3c and replace the humidity indicator card as instructed in paragraph 5-26c 8. This is to be accomplished as soon as possible and, in all cases, within 30 days.

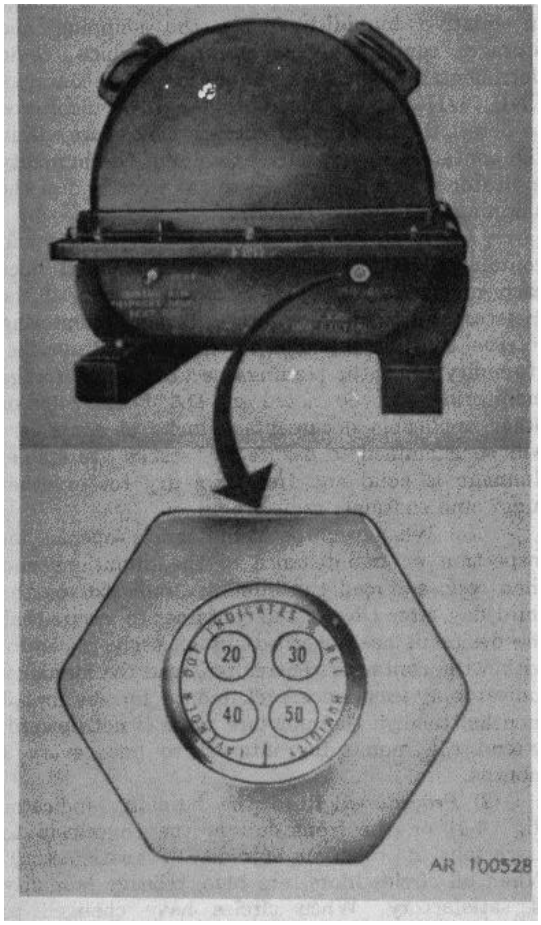


Figure 4-1. Humidity indicator.

c. Storage Inspection.

(1) General.

(a) Storage inspection will be performed:

1. When a subsystem or reload kit is received with broken container seals.

2. When a subsystem or reload kit is returned from flight line.

3. When there is evidence of obvious physical defects, i.e., container is damaged to the extent that there may be damage to the subsystems M56.

4. When the humidity indicator reveals that the relative humidity within the container is over 40 percent.

(b) Refer to paragraphs 4-4, 4-5, and 4-6 for storage definitions, classifications, and evaluation of defects.

(2) Unpacking subsystem. Unpack and lift the subsystem out of the container and place it on a maintenance stand in accordance with instructions in paragraph 3-2.

(3) Inspecting dispenser (fig. 1-1).

(a) Dispenser skin (including forward and rear fairings). Inspect the subsystem skin for the following defects:

1. Punctures, tears, or cracks.
2. Incorrect or illegible markings.
3. Loose or missing small parts (screws, etc.).
4. Dents that damage or dislodge tube assemblies.
5. Inadequate paint coverage.

(b) Suspension lugs. Inspect the suspension lugs for the following defects:

1. Damaged threads.
2. Improper fit on subsystem.
3. Corrosion.
4. Burs or deformities.

(c) Electrical connector. Inspect the electrical connector for the following defects.

1. Missing or damaged cover.
2. Cracked, chipped, or deformed connector.
3. Bent or missing pins.
4. Corrosion.

(d) Pallet. Inspect the pallet for the following defects:

1. Chipped or cracked paint.
2. Defective bolts, nuts, washers, or pin and a lanyard assemblies.
3. Missing or unserviceable web strap handles.
4. Illegible markings.
5. Missing red flag.

(e) Quick-release safe pin. Inspect for bent, rusted, or missing quick-release safe pin with attached red flag, and assure that the safe pin is fully inserted (para 3-4c (13)).

(f) Ballast weight. Open rear fairing as instructed in paragraph 3-3b(2) and inspect for missing ballast weight (A, fig. 3-5) (positioned forward of the bulkhead).

(g) Interior subsystem including canister assemblies. When a visual inspection determines that the subsystem is damaged to the extent that dents and punctures may have damaged the canister assemblies, the subsystem will be turned upside down, the pallet removed, and the interior inspected as instructed below.

1. Turn the subsystem upside down on the maintenance stand as instructed in paragraph 3-6a.

2. Remove the pallet from the subsystem as instructed in paragraph 3-6b.

3. Inspect the canister assemblies for looseness of canister assemblies (this condition can be detected by hand-check), dents, corrosion, missing locking spring, and missing canister assemblies.)

4. Inspect the three bulkheads for cracks, distortion, and corrosion.

5. Reinstall the pallet on the subsystem in accordance with instructions stated in paragraph 3-6d.

(h) Turning subsystem upright.

1. Attach the two slings to the hoist and dispenser lugs as illustrated in C, figure 3-8.

2. Turn subsystem to the upright position as illustrated in figure 3-4.

(4) Inspecting shipping and storage containers CNU-79/E and M602 (figs. 1-4 and 1-5). Inspect the shipping and storage containers for the following defects:

*(a) Missing or broken cover assembly stacking and lifting brackets.

(b) Missing or broken base assembly lifting bars.

(c) Broken gussets.

*(d) Damaged forklift slots.

(e) Damaged or missing T-bolt and tee head bolt latch assemblies.

(f) Missing or damaged wood runners.

(g) Missing or damaged humidity indicator plug.

(h) Bent bottom support channels.

(i) Surface dented to the extent that contents may be damaged.

(j) Misalinement of cover and base assemblies (after assuring that cover is not reversed).

(k) Rusted or corroded metal.

(l) Incorrect or illegible markings.

(m) Deteriorated, torn, cut or mis-shaped rubber parts.

(n) Unserviceable hardware such as bolts, nuts, screws, washers, etc.

(o) Damaged desiccant cage.

*(p) Damaged suspension frame.

*(q) Bent or missing clamp assemblies or missing strap assemblies, as applicable.

(5) Repacking subsystem. Repack subsystem in accordance with instructions contained in paragraph 3-13.

d. Shop Inspection. The following categories of shop inspection are performed on materiel during repair operations. Shop inspection is detailed in chapter 5 (DS maintenance instructions).

(1) Initial inspection. Initial inspections are performed on the materiel to be repaired. This inspection is performed to determine the extent of repair required and to provide a basis for requisitioning parts, assemblies, or supplies necessary to accomplish the repair. While this inspection is being performed, special attention should be given the following phases:

(a) Visual inspection. This phase of the inspection is made to check the overall condition of the dispenser to be repaired. Special attention should be given to the shipping and storage containers coming into shops to assure that all markings are present and that the container is not damaged or broken due to rough handling.

(b) Safety. inspection. All dispensers which are to be repaired will be inspected to assure that all explosives have been removed before repair operations are to commence. A dispenser to be repaired, should be considered a hazard to personnel and equipment until this inspection has been performed.

(2) In-process inspection. This is an inspection performed in the process of repairing the dispenser. This inspection assures that all parts conform to the prescribed standards, that the workmanship is in accordance with approved method and procedures and that deficiencies not disclosed by the initial inspection are found and corrected.

(3) Final inspection. This is an acceptance inspection performed by a qualified inspector after repair has been completed to assure that the materiel is acceptable in accordance with established standards.

*Applicable to container CNU-79/ E only.

Section II. EVALUATION OF DEFECTS

4-4. Definitions of Defects

The following definitions of defects will be used to determine the physical condition of subsystems M56 and their components:

a. Dispenser and Canisters.

(1) Critical defect. A defect that could result in a hazardous or unsafe condition for persons using or maintaining the dispenser and canisters.

(2) Major defect. A defect that requires repair or replacement of components or, if irreparable, reporting of dispenser for disposition instructions because the defect will significantly reduce reliability or actually prevent intended functioning of the dispenser and canisters.

(3) Minor defect. A defect that does not significantly reduce reliability or actually prevent intended functioning of the dispenser and canisters, and where. repair or replacement of components is not essential but only desirable.

b. Shipping and Storage Container.

(1) Major defect. A defect that requires repair or replacement of components because the defect prevents the container from performing its intended function as protection of contents or suitability for identification, storage, or handling.

(2) Minor defect. A defect that does not prevent the container from performing its intended function as protection of contents or suitability for identification, storage, or handling, and where repair or replacement of components is not essential but only desirable.

Section III. CLASSIFICATION OF DEFECTS

4-5. Classification of Defects

a. Subsystem.

(1) Critical defects.

(a) Bulges or distortions in the bottom of the attached pallet..

(b) Punctures, tears, or cracks in the subsystem that expose canister assemblies.

(c) Dispenser dented to the extent that the mines within the canister assemblies cannot be released.

(2) Major defects.

(a) Large dents in end fairings.

(b) Dents in dispenser which contact canister assemblies.

(c) Damaged or broken wiring in dispenser.

(d) Defective intervalometer assembly.

(e) Defective or missing suspension lugs.

(f) Defective RADHAZ filter.

(g) Defective electrical connector.

(h) Defective or missing ejection charge assemblies.

(i) Missing intervalometer adapter.

(j) Incorrect or illegible markings.

(k) Broken or cracked bulkhead in dispenser.

(l) Bent or missing quick-release safe pin and red flag.

(m) Ballast weight missing or loose.

(n) Canisters which cannot be properly alined (para 5-20c(1)).

(3) Minor defects.

(a) Loose or missing small parts (screws, etc.) (b) Small dents in subsystem skin that do not affect canister assemblies within 4-4 (c) Small dents in front and rear fairings.

(d) Inadequate paint coverage.

b. Shipping and Storage Containers CNU-79/E and M602.

(1) Major defects.

*(a) Missing or broken cover assembly stacking and lifting brackets.

(b) Missing or broken base assembly lifting bars.

(c) Damaged or missing T-bolt assemblies.

(d) Surface dented to the extent that contents may be damaged.

(e) Broken gussets.

* (f) Damaged forklift slots.

(g) Container cover and base assemblies do not properly aline (after assuring that cover assembly is not reversed).

(h) Incorrect or illegible markings.

(i) Missing or damaged wood runners.

(j) Bent bottom support channels.

(k) Missing or damaged rubber gasket that seals cover and base assemblies.

(l) Missing or damaged humidity indicator plug.

(m) Rusted or corroded metal.

(n) Bent or missing clamp assemblies, missing strap assemblies, or hold-down U-channels, as applicable.

*(o) Damaged suspension frame.

(p) Damaged desiccant cage.

(q) Missing or damaged rubber gasket that seals desiccant door to base assembly (M602 container only).

'Applicable to container CNU-79/ E only.

(r) Missing or damaged gasket under U-channels (M602 container only).

(2) Minor defects.

(a) Inadequate paint.

(b) Minor dents.

4-6. Evaluation of Inspection Results

a. A subsystem M56 having a critical defect will be considered unserviceable and reported for disposition in accordance with paragraph 5-2.

b. A subsystem or its shipping and storage container having a major defect will be considered unserviceable until the condition is corrected.

c. A subsystem or its shipping and storage container having a minor defect will be considered serviceable and the condition will be corrected when practicable.

d. Upon completion of the prescribed inspections, the data will be evaluated to assess the condition and operability of the subsystem M56 to determine whether it is:

(1) Satisfactory.

(2) In need of minor repair.

(3) In need of major repair.

(4) Irreparable.

e. If inspection indicates that the dispersing subsystem or its shipping and storage containers requires repair, perform necessary repairs as authorized in chapter 5.

4-7. Annotation of Inspection Results

DA Forms 2415 and 3022-R and other applicable documents, as required, will be annotated to show date and results of inspection and any corrective actions taken or required.

Section IV. DISPOSITION OF LOTS

4-8. General

a. Each lot of materiel shall be inspected and screened 100 percent if one critical defect defined in paragraph 4-5a (1) 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. Disposition instructions shall be furnished by the US Army Armament Command.

b. A lot of materiel is acceptable for issue and use if the acceptable criteria as indicated in section III are met.

c. Report all lots of material rejected under the applicable serviceability table for disposition instructions to: Commander, US Army Armament Materiel Readiness Command, ATTN: AMSARMAD-A, Rock Island, IL 61201. Include a statement describing the capability and workload situation of your organization as to whether you are capable of reworking the items or demilitarizing them.

CHAPTER 5

DIRECT SUPPORT MAINTENANCE INSTRUCTIONS

Section I. GENERAL MAINTENANCE

5-1. General

a. This chapter contains instructions for the guidance of direct support maintenance personnel in testing and repairing the subsystem M56 and repairing the shipping and storage containers CNU-79/E and M602. These instructions are not to be construed as authorization to disassemble the item to the prescribed limits needlessly; they are a guide to performing only the necessary disassembly to complete a specific task.

b. The scope of maintenance is generally governed by replacement of parts. If a part is damaged beyond repair, the next higher assembly or the component to which the part belongs will be used.

c. All tools and equipment required for tests and repairs are as authorized in this manual.

d. Consumable materials used in maintenance are listed in appendix D.

5-2. Disposition Instructions

a. Unserviceable-Irreparable Items. Unserviceable-irreparable explosive and inert items will be reported for disposition DA Form 2415 (Ammunition Condition Report) in accordance with T 38-750.

b. Serviceable Items. Items which are returned to a serviceable condition as a result of the maintenance prescribed in this publication may either be returned to storage for subsequent issue or returned to the using organization from which received.

5-3. Disassembly and Assembly

a. Disassembly beyond the limits prescribed in this publication is strictly prohibited.

b. Disassembly procedures will be kept to a minimum and will be made only to the extent necessary to repair or replace an item. Handle these components carefully during replace to prevent any further damage to the components. Closely examine components to determine the need for replacement.

c. As parts and assemblies are removed, they will be placed on a clean, flat surface to. prevent damage. Parts which are removed from an assembly should be kept together and segregated from those of other assemblies.

d. Assembly of a unit will normally be conducted in reverse order to that of disassembly.

e. When installing screws, always engage the first two or three threads by hand, if possible, to avoid cross-threading.

5-4. Replacement of Parts

a. All screws and bolts having stripped, crossed, stretched, burred, or damaged threads; cracked, broken, or worn shanks; or damaged or mutilated heads will be replaced with new or serviceable items (app. B). Damaged bolts or screws will not be reused.

b. All washers having scored surfaces or mutilated or damaged edges will be replaced with new or serviceable items.

c. All nuts having crossed or stripped threads or damaged or mutilated external surfaces will be replaced with new or serviceable items.

5-5. Cleaning

Dirt and other foreign matter should be removed from the surface of inert items with cleaning cloths or brushes.

5-6. Threads and Mating Surfaces

All threads and matting surfaces must be clean, dry, and free of corrosion.

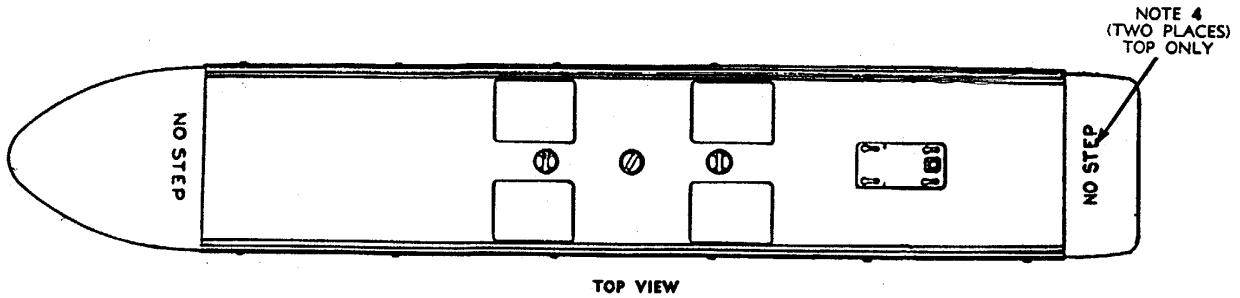
5-7. Painting and Marking

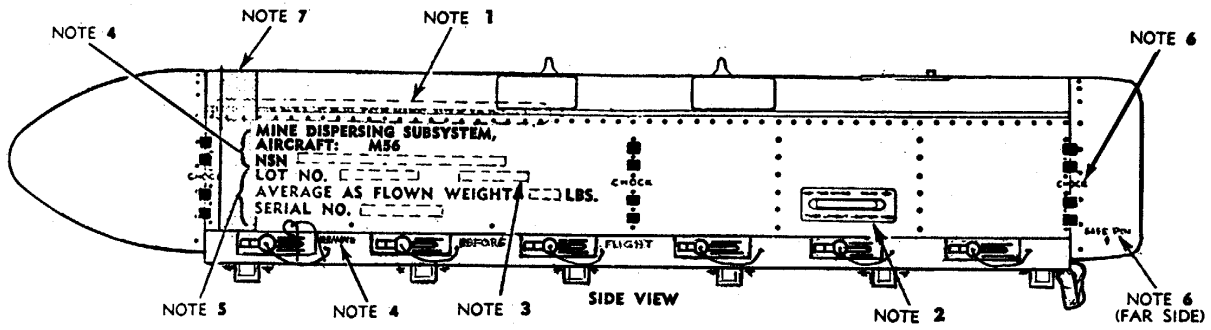
a. General. The area to be painted should be sanded with fine sandpaper or emery cloth, and the edge of the surrounding paint feathered to produce a smooth finish.

b. Dispenser (fig. 5-1). The dispenser is to be painted with one or two coats of olive-drab lacquer, color number X34087 (8010-00-297-2116). Markings and yellow stripe may be touched up with yellow stencil ink, color number 33538 *(751000-161-0816).*

c. Pallet (fig. 5-1). The pallet is to be painted with red lacquer, color number 31136 (8010-5977847), with markings to be applied with yellow stencil ink, color number 33538 (7510-00-161-0816).

d. Shipping and Storage Containers. Refer to paragraph 5-23g (fig. 5-11) for painting and marking instructions for the container CNU-79/E and to figure 5-12 for container M602 (Reload Kit).





NOTES

1 - STAMPED NOMENCLATURE, LOT NO. PART NO. AND DATE OF MANUFACTURE.
2 - TUBE (CANISTER) LOCATION AND FIRING ORDER DECAL.
3 - DATE (MONTH AND YEAR) LOADED.
4 - 1-INCH HIGH (BOTH SIDES EXCEPT WHERE NOTED).
5 - 3/4-INCH HIGH (BOTH SIDES EXCEPT WHERE NOTED).
6 - 1/2-INCH HIGH (BOTH SIDES EXCEPT WHERE NOTED).
7 - 1-1/2-INCH WIDE (BOTH SIDES EXCEPT WHERE NOTED).

COLORS

DISPENSER — OLIVE DRAB, COLOR NO. X34087, STOCK NO. 8010-297-2116. MARKINGS AND YELLOW STRIPE - YELLOW STENCIL INK, COLOR NO. 33538 STOCK NO. 7510-00-161-0816

PALLET — RED LACQUER, COLOR NO. 31136, STOCK NO. 8010-597-7847, MARKINGS IN YELLOW STENCIL INK, COLOR NO. 33538, STOCK NO. 7510-00-161-0816

AR 100511-A

Figure 5-1. Dispenser - painting and marking.

5-8. Welding

NOTE

No attempt will be made to weld any part of a dispenser.

a. Welding will be restricted only to the repair of empty containers.

b. Welding will be done only by fully qualified personnel.

c. For welding instructions and welding materials, refer to TM 9-237.

Section II. REPAIR OF DISPENSER

5-9. General

This section contains instructions for the cleaning, repairing, and in-process inspections of the subsystem M56.

5-10. Unpacking

Unpack and lift the subsystem out of the container and place it on a maintenance stand in accordance with instructions contained in paragraph 3-2.

5-11. Initial Inspection

a. Inspect the subsystem in accordance with instructions in paragraph 4-3c.

b. If, after evaluating this initial inspection, the subsystem is considered irreparable, report the subsystem for disposition in accordance with paragraph 5-2.

5-12. Suspension Lugs (1, fig. B-1)

a. Disassembly. The suspension lugs are assembled to the dispenser for shipment and are to remain in this position except for inspection or repair. Remove the suspension lugs by unscrewing them from the dispenser.

b. In-Process Inspection. Inspect each suspension lug for presence and completeness of threads, proper fit on the dispenser, corrosion, burs, and deformities.

c. Repair. Suspension lugs found with light to medium corrosion, oxidation, or rust will be cleaned with a wire brush and coated with a light film of oil (P-7 or P-10, MIL-P-116). Remove burs by filing. Replace deformed, heavily rusted, or heavily corroded suspension lugs with serviceable lugs.

d. Installation. Install suspension lugs by screwing into the mating holes in the dispenser.

5-13. Electrical Connector and Cover (2, fig. B-l)

The electrical connector is a component of the RADHAZ filter assembly. When the electrical connector must be replaced, refer to paragraph 518 for replacement of the RADHAZ filter assembly.

a. In-Process Inspection.

(1) Remove the electrical connector cover and inspect the cover for cracks, damaged threads, or deformation.

(2) Inspect the electrical connector for deformation, bent or missing pins, and corrosion.

b. Repair.

(1) Replace unserviceable electrical connector cover with serviceable electrical connector cover.

(2) If electrical connector is lightly corroded, wipe off corrosion with a clean cloth.

(3) If electrical connector is deformed, cracked, or chipped to the extent that an electrical connection cannot be made, pins are bent or missing, or connector is heavily corroded, replace the RADHAZ filter assembly with a serviceable RADHAZ filter assembly (para 5-18).

(4) Reinstall electrical connector cover.

5-14. Dispenser Skin (Including Forward and Rear Fairings)

a. In-Process Inspection.

(1) Inspect the dispenser for punctures, tears, cracks, illegible markings, and inadequate paint coverage.

(2) Inspect the center body skin for dents that damage or dislodge canister assemblies.

(3) Inspect the forward and rear fairings for large dents.

b. Repair.

(1) Overall skin. When the dispenser skin is punctured, torn, or cracked, or when dents in the center body skin damage or dislodge canister assemblies, report the subsystem for disposition instructions in accordance with paragraph 1-2a.

(2) Forward fairing. Repair large dents in the forward fairing as follows:

(a) Remove the screws attaching the fairing to the center body. Inspect screws and replace unserviceable screws with serviceable screws.

(b) Straighten fairing with metal working dolly and hammer.

(c) Reinstall the screws with sealing compound grade C, MIL-S-22473.

(3) Rear fairing. Repair large dents in the rear fairing as follows:

(a) Release the quick-release fasteners with a screwdriver and swing the access door open.

(b) Straighten the fairing with a metal working dolly and a hammer.

(c) Close the access door and secure the quick-release fasteners with a screwdriver.

(4) Painting and marking. *If necessary, retouch* marking and painting in accordance with figure 5-1 and paragraph 5-7.

5-15. Quick-Release Safe Pin (fig. 5-2)

a. Removal. Remove the quick-release safe pin from the intervalometer by depressing pin button and withdrawing pin.

b. In-Process Inspection. Inspect the quick-release safe pin to assure it is not bent or distorted, and that red flag is not missing.

c. Repair. Replace unserviceable quick-release safe pin with a serviceable pin.

d. Installation. Reinstall quick-release safe pin in intervalometer by depressing pin button and inserting pin through access hole in bottom of rear fairing and into intervalometer. If there are two access holes, insert pin through hole which is closer to aft end of fairing. Assure that the safe pin is fullv inserted (para 3-4c(13)).

5-16. Electrical Tests

If, in the performance of electrical tests, there is indication of any defects refer to troubleshooting procedures in chapter 2, section V, table 2-3, for corrective action.

5-17. Intervalometer Assembly

a. Removal.

(1) Attach a grounding cable to a suspension lug. Assure that suspension lugs are assembled handtight in the subsystem.

(2) Remove quick-release safe pin (3, fig. B-l) by depressing pin button and withdrawing pin. Remove red flag from quick-release safe pin for installation in replacement intervalometer assembly safe pin.

(3) Remove aft fairing by removing 15 No. 832NC x 3/8 pan head structural screws and 11 No. 8-32NC x 1/2 flat head structural screws (fig. B-1).

(4) Disconnect intervalometer adapter connector (9, fig. B-2) with wiring harness by turning adapter counterclockwise and pulling adapter straight up and away from the intervalometer assembly (7, fig. B-2).

(5) Remove the ground wire (6, fig. B-2) and the attaching screws, locknuts, and mounts at the four corners of the intervalometer assembly. Remove intervalometer assembly (7, fig. B-2).

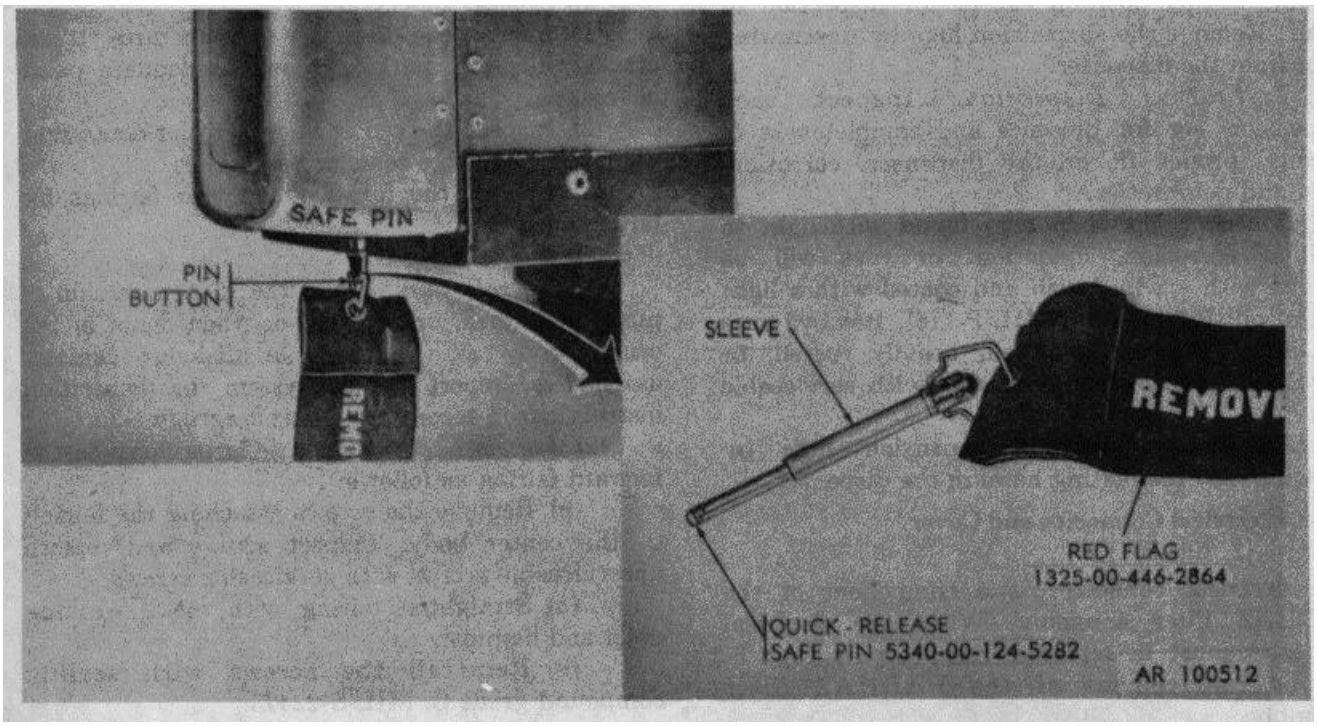


Figure 5-2. Quick release safe pin.

b. Repair. Replace unserviceable intervalometer assembly with a serviceable item and replace unserviceable attaching hardware with serviceable hardware. Before installing replacement intervalometer on dispenser, test the intervalometer assembly with bomb dispenser electrical circuit test set A/E 24T-80 (Fig. B-17), as instructed below:

(1) Remove test set power cable assembly (9209961) (9, fig. B-17) from test set and insert plug into J1 POWER jack on test set. Connect the banana plugs on other end of cable to a grounded 28to 32-volt d.c. power source within a minimum of 2 amperes. Connect the red banana plug to the positive terminal and the black banana plug to the negative terminal.

(2) Connect the test set cable assembly (8, fig. B-17) to the test set and connect the other end to the intervalometer adapter connector.

(3) Turn power source on.

(4) Continue the test by following the instructions in paragraph 3-4c(5) through (16).

(5) Turn power source off. Disconnect the banana plugs of the test set power cable assembly from the battery or power source. Disconnect the other end of the cable from the test set.

(6) Disconnect the test set cable assembly connector from the intervalometer adapter connector and disconnect the other end from the test set.

c. Installation.

(1) Remove quick-release safe pin (if installed) from new intervalometer by depressing pin button.

Install red flag removed from old intervalometer safe pin on new safe-pin ring.

(2) Mount the intervalometer with the four No. 8-32UNC-2A x 11/4 cross-recess pan-head machine screws, four 3/8 diameter x 5/16 long aluminum rigid mounts and 3/16-32UNJC-3B hex head locknuts. Assure that ground wire (6, fig. B2) is connected. The selector-switch dial should be positioned opposite the selector switch access hole in rear fairing. Do not connect intervalometer to dispenser wiring harness until after the test in (3) below.

(3) After installing intervalometer in subsystem, retest the intervalometer as instructed in Daragraph 3-4.

(4) Reconnect the dispenser wiring harness to intervalometer adapter.

(5) Reinstall aft fairing using 15 No. 8-32NC x 3/8 pan-head structural screws and 11 No. 8-32NC x 1/2 flat head structural screws.

(6) Reinstall quick-release safe pin in intervalometer by instering pin through access hole in rear fairing into intervalometer. Depress pin button while installing pin, and assure that the safe pin is fully inserted (para 3-4c(13)). if there are two access holes, insert pin through hole which is closer to aft end of fairing.

(7) Remove grounding cable from suspension lug.

5-18. RADHAZ Filter Assembly (Including Electricl Connector) (4, fig. B-3) ‘

NOTE

The electrical connector is a component of the RADHAZ filter assembly. If the electrical connector is unserviceable, the RADHAZ filter assembly will be replaced as instructed in a, c, and d, below.

a. Removal. Remove the electrical connector cover. Loosen the four screws attaching the electrical connector mounting plate to the subsystem. Slide plate forward, carefully lift plate up, and turn over.

b. Testing RADHAZ Filter (fig. 5-3). Conduct a test to determine the serviceability of the RADHAZ filter using the bomb dispenser electrical test set A/E 24T-79 (fig. B-18) as instructed in (1) through (10) below.

(1) Attach a grounding cable to a suspension lug. Assure that suspension lugs are assembled handtight in the subsystem.

(2) Open the rear fairing by releasing the quick-release fasteners with a screwdriver and opening the access door.

(3) Disconnect the wiring harness cable from the intervalometer adapter connector by turning connector shell counterclockwise and lifting connector out.

(4) Connect the cable assembly (9209966) P4 connector to the test set and connect the other end to the test set accessory cable 9209982.

(5) Adjust test set in accordance with instruction on test set front panel.

(6) Touch accessory cable leads together and turn function switch on test set to LOW position.

There should be a slight deflection of the dial pointer.

(7) Turn function switch to OFF position.

(8) Loosen screws and remove RADHAZ filter assembly from dispenser. Apply positive lead (red) of the accessory cable to the RADHAZ filter assembly terminal FL1 and the negative lead (black) to terminal E9.

(9) Turn function switch on test set to LOW position only long enough to read dial pointer and then turn function switch to OFF position immediately. A reading other than a full scale deflection to the right will indicate that the

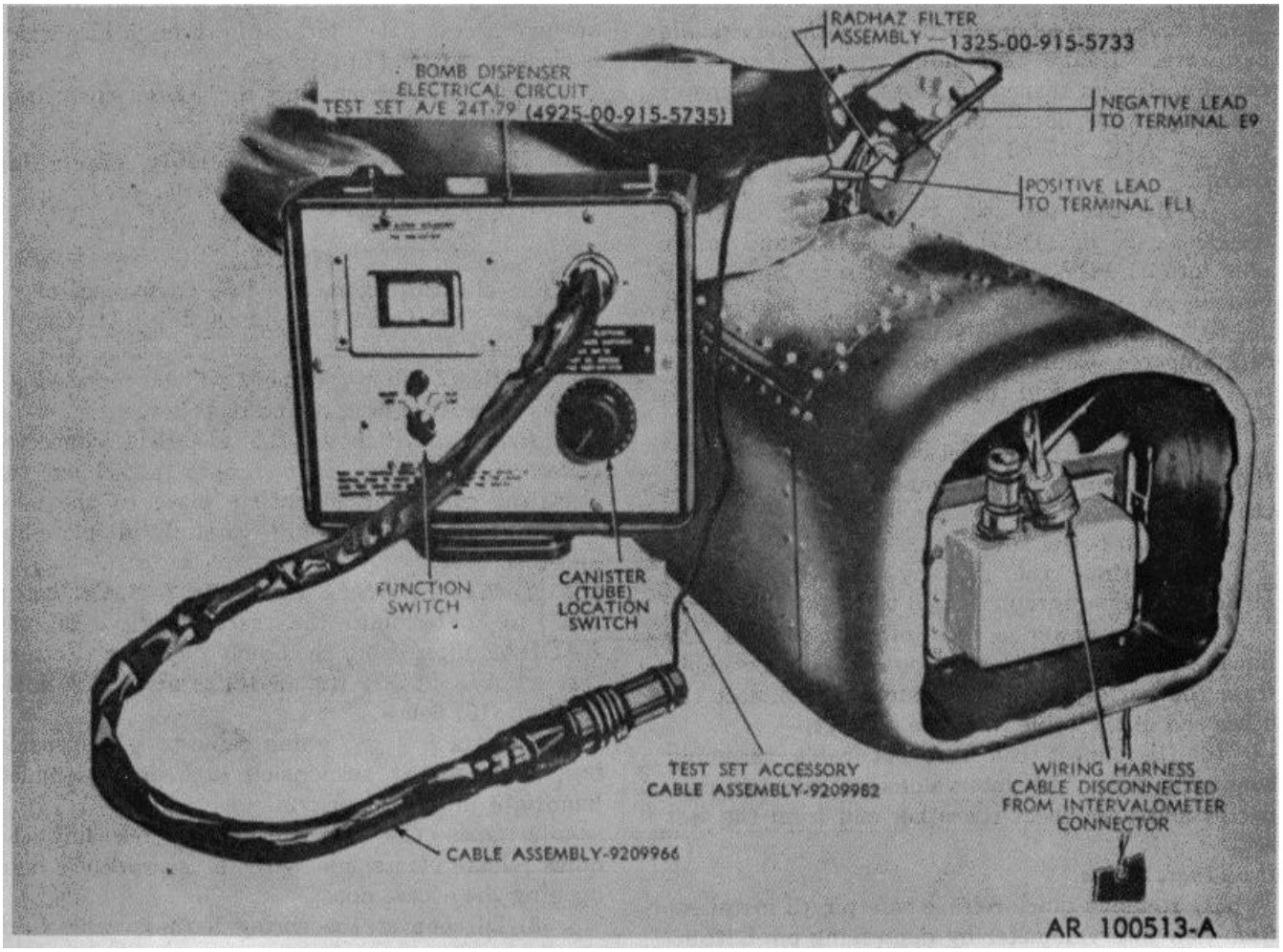


Figure 5-3. Test equipment for RADHAZ filter assembly test - cutaway view

RADHAZ filter is unserviceable. Care should be exercised so that a full scale reading is not held for a prolonged period of time.

(10) Disconnect the test set accessory cable from the test set cable assembly and disconnect the cable assembly from the test set.

(11) If the RADHAZ filter assembly is satisfactory, reconnect the wiring harness cable connector to the intervalometer adapter connector and turn shell clockwise and close access door. If the RADHAZ filter assembly is unserviceable, replace it with a serviceable item in accordance with instructions in c and d below.

(12) Secure RADHAZ filter assembly to the electrical connector mounting plate with the four No. 4-40 UNC-2Ax5/16 cross-recessed pan-head machine screws.

(13p Install the electrical connector mounting plate,, with the electrical, connector toward the aft end, to the dispenser by fitting the slotted holes over the four No. 10-32NF-2Ax5/8 cross-recessed pan-head machine screws in the dispenser, moving 5-6 plate aft and tightening the screws.

c. Disassembly (fig. 5-4).

(1) Assure that wiring harness cable is disconnected from the intervalometer adapter.

(2) Place a protective shield over the opening in the subsystem to keep out foreign material.

(3) Place plate, with 'RADHAZ filter positioned on top, on protective shield.

(4) The following numbered leads go to the terminals of the RADHAZ filter assembly: K41, K45, and K46 to FL1; K43 to E6; K42 to E7; K50 to E8; and K49 and K53 to E9 (ground).

Unsolder these leads from the RADHAZ filter assembly.

(5) Remove the four screws (3, fig. B-3) attaching the RADHAZ filter to the electrical connector mounting plate.

d. Assembly.

(1) Before installing new RADHAZ filter assembly, test it with the bomb dispenser electrical test set A/E 24T-79, as instructed in b (4) through (10) above.

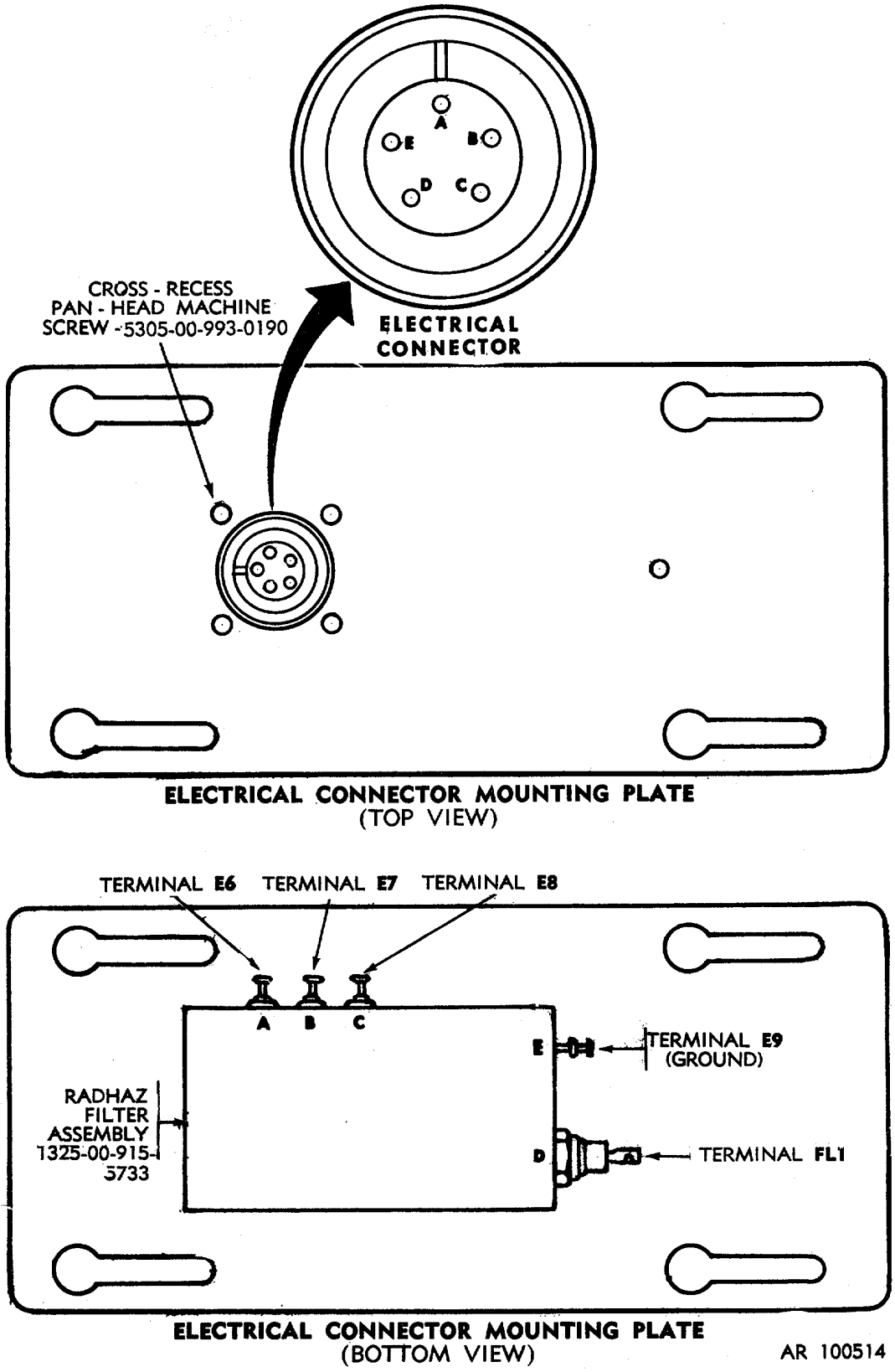


Figure 5-4 RADHAZ filter assembly and electrical connector plate.

(2) Secure the RADHAZ filter to the electrical connector mounting plate with the four No. 4-40 UNC-2A x 5/16 cross-recessed pan-head machine screws previously removed.

CAUTION

During soldering operations ((3) below), if too much heat is applied to terminal FL1, the RADHAZ filter assembly will become unserviceable. Avoid too much heat by using a soldering iron with a rating of 25 to 40 watts. Attach a heat sink to terminal FL1 to draw off heat from the terminal. If not heat sink is available', secure approximately 3 feet of bare wire to an alligator clip, and attach the clip to terminal FL1.

(3) Solder the leads to their respective terminals in accordance with c (4) above.

(4) Install the electrical connector mounitng plate to the subsystem by fitting the slotted holes over the four No. 10-32NF-2A x 5/8 cross-recessed pan-head machine screws in the subsystem, moving plate aft, and fastening the screws b (13) above.

(5) Perform an electrical circuit continuity and intervalometer test as instructed in paragraph 3-4.

(6) After disconnecting the test set from the dispenser wiring harness cable connector, reconnect the wiring harness cable connector ton the intervalometer adapter connector and turn shell clockwise.

(7) Close the rear fairing access door and secure the quick-release fasteners with a screwdriver.

5-19. Safety Pallet (fig. 5-5)

WARNING

When subsystem is lifted from container, inspect pallet for defects, bulges, etc., which may indicate one or more mine ejection charges have fired. Do not remove pallet. Carefully lower subsystem into container, repack container in accordance with paragraph 3-13d, e, f, i, j, and k, remove container from working area and notify explosive ordnance disposal (EOD) personnel immediately for removal.

a. Removal.

(1) Assure quick-release safe pin is installed properly on subsystem (para 3-4c(13)).

(2) Turn the subsystem upside down on the maintenance stand as instructed in paragraph 3-6a.

(3) Attach a grounding cable to a suspension lug.

(4) To remove the pallet from the subsystem, follow instructions given in paragraph 3-6b.

b. In-Process Inspection. Inspect the pallet for the following defects:

(1) Torn or frayed pallet handles.

(2) Chipped or cracked paint.

(3) Illegible markings.

(4) Missing skids.

(5) Missing REMOVE BEFORE FLIGHT flag.

(6) Missing pin and lanyard assemblies (12).

(7) Missing retaining blocks (2) and lock pins (2).

c. Disassembly.

NOTE

The capital letters in the parentheses below refer to figure 5-5.

(1) Remove the aft web strap handle (D) from the pallet by removing the two hex head cap screws (B).

(2) Remove the forward web strap handle and the REMOVE BEFORE FLIGHT flag (C) by removing the two hex head cap screws (A and B).

d. Repair.

(1) Replace the following unserviceable parts with serviceable parts:

(a) Pallet web strap handles.

(b) REMOVE BEFORE FLIGHT red flag.

(2) If necessary, retouch marking and painting in accordance with figure 5-1 and paragraph 5-7.

e. Assembly.

NOTE

The capital letters in parentheses below refer to figure 5-5.

(1) Install the aft web strap handle on the pallet with two 1/4-UNF-2A x 5/8 hex head cap screws (b).

(2) Install the forward web strap handle with red REMOVE BEFORE FLIGHT flag on the left side (top view, fig. 5-5) onto the pallet using the 1/4-UNF-2A x 3/4 inch long hex head cap screw (A) (the longest cap screw).

(3) Attach the right end of the web strap handle to the pallet with the 1/4-UNF-2A x 5/8 hex head cap screw (b).

f. Installation. Install the pallet on the subsystem as instructed in paragraph 3-6d. Remove grounding cable from suspension lug and turn subsystem upright as instructed in paragraphs 36d (8) and (9).

5-20. Canister Assembly with Mines

a. General. During the ejection charge assembly circuit test using the test set (A/E 24T-79 (para 35)), when a canister assembly shows more than 3.25 ohms resistance or 'less than 0.5 ohms resistance, it indicates that the canister assembly is loose, the ejection charge assembly in the

canister is unserviceable or that the dispenser connector (electrical connection for the ejection charge) is loose.

b. Preparing Subsystem.

(1) Turn the subsystem upside down as instructed in paragraph 3-6a. Attach a grounding cable to a suspension lug.

(2) Remove pallet as instructed in paragraph 36b.

c. Repair.

(1) *General.* If the canister assembly mines separation line (fig. 5-8) is not parallel with the longitudinal axis of the subsystem (subsystem line of flight), the canister alignment may be corrected by turning in the clockwise or counterclockwise direction to orient the mines separation line as required adjustment of one notch (fig. 5-7) in either direction from exact alignment is permissible.

NOTE

It may be necessary to tighten the canister one notch past exact alignment to provide sufficient contact for acceptable testing of the ejection charge resistance.

(2) *Alignment of the canister assembly mines separation line.* Align the canister using the canister removal and replacement tool. Place the tool on the end of the applicable canister assembly and align the tool lugs with the canister slots (A, fig. 5-6 and fig. 5-7). Using a 1/2 inch square drive wrench, align the canister as required. Reinstall pallet to the subsystem and perform an ejection charge assembly circuit test on the applicable canister assembly as instructed in d below. If the dial pointer on the test set still shows more than 3.25 ohms or less than 0.5 ohms resistance, replace the. ejection charge assembly as instructed in (3) below.

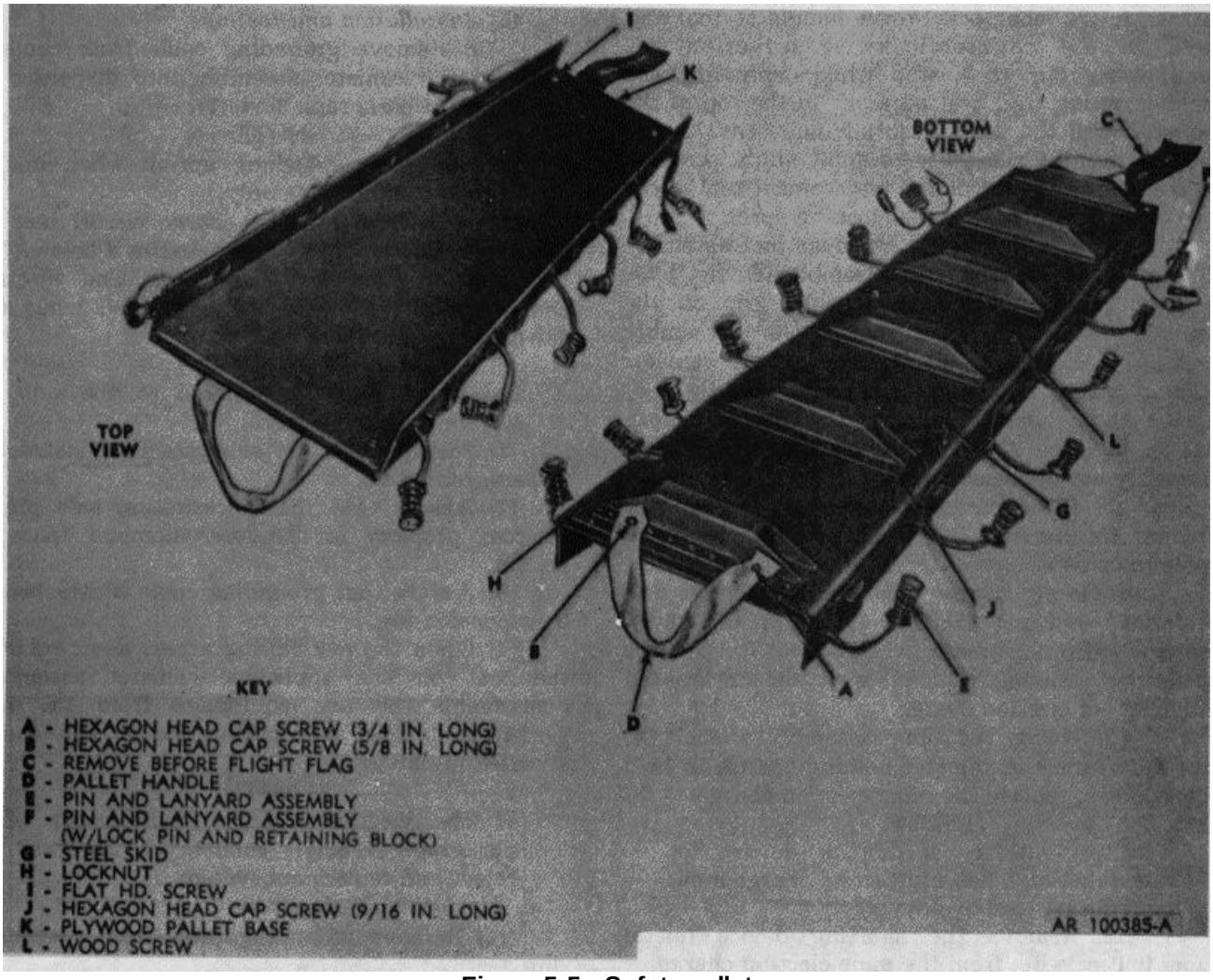


Figure 5-5. Safety pallet

(3) *Replacing ejection charge assembly M198.*

(a) Disconnect all test cabling and position dispenser upside down as instructed in paragraph 3-6a. Attach a grounding cable to a suspension lug. Remove pallet as instructed in paragraph 36b.

WARNING

No electrical tests will be performed on the ejection charge assembly when it is out of the subsystem. Test only in SUBSYSTEM with safety pallet installed.

(b) Remove canister assembly from the subsystem as instructed in 1 thru 3 below.

CAUTION

When depressing locking ring 1 below, depress it only far enough to release canister. Excessive pressure will permanently deform the spring and render it useless.

1. Place the canister removal and replacement tool on top of applicable canister assembly, engaging tool lugs with canister slots. Attach a 1/2-inch socket-drive handle to tool and turn in the counterclockwise direction approximately 900 to a stop while depressing the locking spring (fig. 5-8) adjacent to the top of the canister with the locking spring depressor (A, fig. 5-6). It may be necessary to apply slight pressure to the canister removal and replacement tool in the clockwise direction to release locking spring.

2. Lower canister removal tool assembly (3, fig. B-16) over canister assembly (B, fig. 5-6). Squeeze handles to obtain a tight grip on the canister assembly. Turn the canister assembly slightly clockwise to lift it free of the canister support beam. Lift canister assembly (B, fig. 5-6) until a second person can grip the tube with both hands. Release tool and manually lift canister assembly out of the subsystem.

3. Place canister assembly in canister holding fixture (fig. B-21) and attach grounding cable to canister.

(c) Obtain a new mine ejection charge and preformed packing (5330-00-579-7916) (fig. 5-7).

Apply silicone grease (MIL-G-4343) to the preformed packing and place it on unthreaded diameter of ejection charge.

1. Using the plug assembly wrench (4, fig. B-16) and the canister holding fixture to hold the canister, replace the mine ejection charge.

NOTE

Retain a quantity of shorting devices for reinstallation when a defective charge must be replaced (1 above).

2. Remove the shorting device (metal tape, foil, or wire) from the mine ejection charge.

3. Using a 1/2-inch square drive torque wrench, torque the new ejection charge to 20+2 foot-pounds.

NOTE

Face of ejection charge must be slightly below flush at the above torque requirement.

(4) *Dispenser Connector Adjustment.*

(a) Lower the dispenser connector adjustment tool (fig. B-16) through the opening in the tube support beam (at the tube location station to be adjusted) and position it to grip the lower hex nut of the dispenser connector assembly, (fig. 5-9).

NOTE

The box wrench end of the tool is used on all but four tube locations. The open end is used on tube locations 16-18-24-26.

(b) Utilize the 9/16" socket, the 1/4 in. x 14 in. socket extension, and the 1/4 in. x 4-1/2 in. socket wrench handle, (fig. 5-10) to tighten the upper hex nut of the dispenser connector assembly.

(5) Installation and testing.

(a) Remove grounding cable from canister and reinstall canister assembly into dispenser as instructed in paragraph 3-14e(1).

NOTE

Do not depress locking spring when installing canister assembly.

(b) Perform ejection charge circuit test on the canister assembly as instructed in d below.

d. Testing Canister Assembly. The ejection charge circuit test may be performed while the subsystem is upside down.

WARNING

The pallet must be secured to the subsystem during the test.

(1) Install pallet on subsystem as instructed in paragraph 3-6d.

(2) Assure that the quick-release safe pin is inserted properly in the intervalometer (para 34c(13)).

(3) Assure that grounding cable is attached to a suspension lug.

(4) Open the rear fairing access door, perform the test on the applicable canister assembly, disassemble the test equipment from the subsystem and close rear fairing access door as instructed in paragraph 3-5.

NOTE

If the ejection charge requirements of paragraph 3-5c(5) cannot be obtained, reject and replace subsystem.

e. Uprighting Subsystem.

(1) Remove grounding cable from suspension lug.

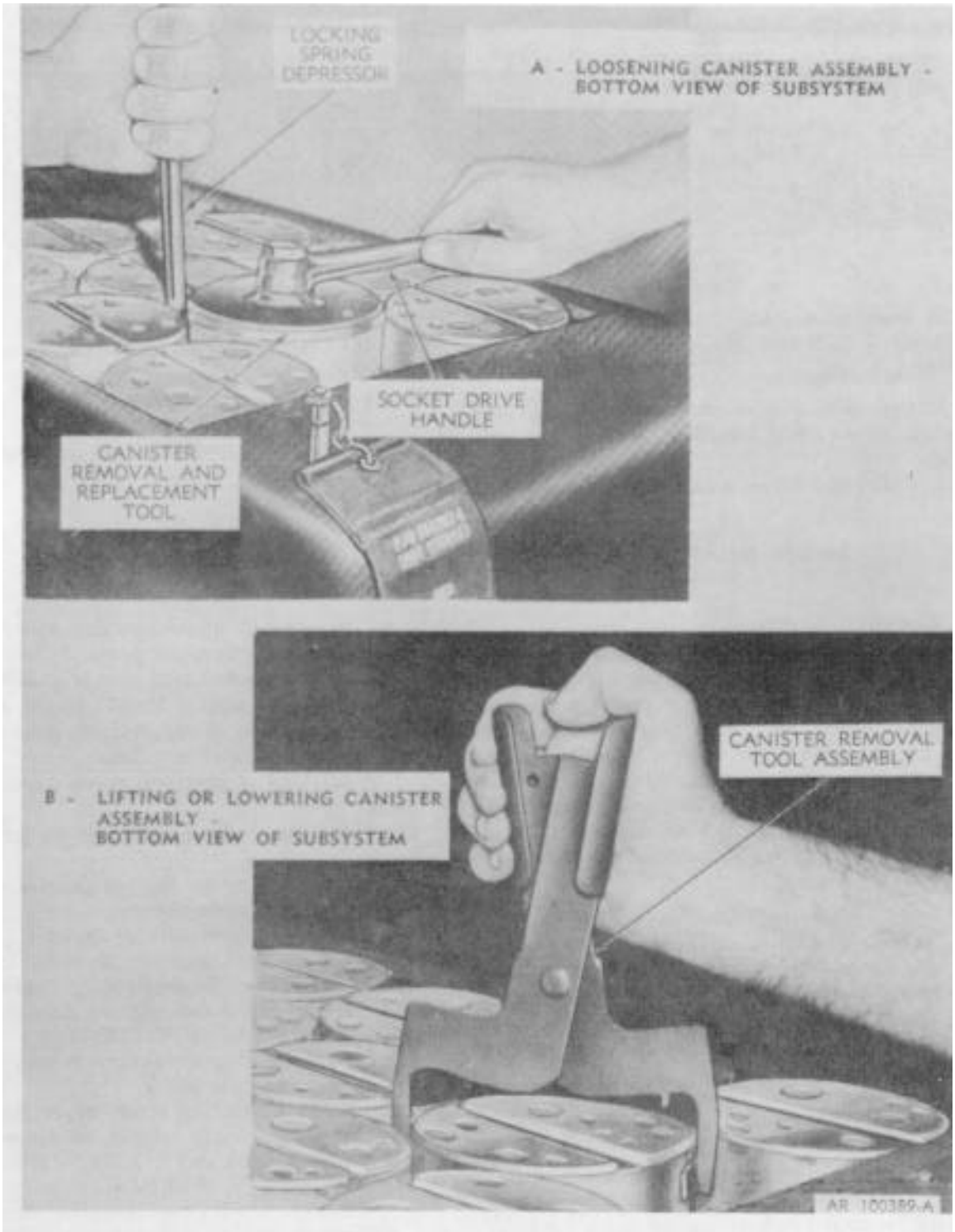


Figure 5-6. Canister tube assembly-removal and disassembly procedures.

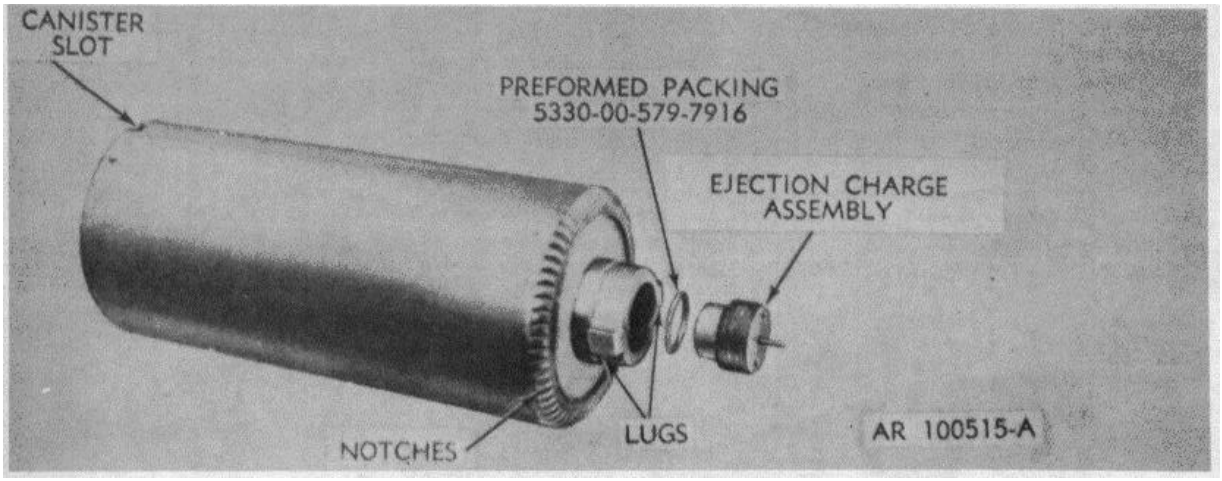


Figure 5-7. Partially exploded view of mine canister tube assembly.

(2) Turn subsystem upright as instructed in paragraphs 3-6d(8) and (9).

5-21. Final Inspection

a. Inspect the subsystem to assure that the following items are installed and/or properly secured.

(1) Pallet and its red flag.

(2) Rear fairing access door.

(3) Intervalometer quick-release safe pin and its red flag.

(4) Two suspension lugs.

(5) Electrical connector cover.

b. Assure that painting and marking have been properly applied.

Section III. REPAIR OF SHIPPING AND STORAGE CONTAINERS

5-22. General

This section contains instructions and procedures for disassembling, cleaning, inspecting, repairing, and reassembling the shipping and storage containers CNU-79/E and M602. For descriptive and repair purposes, each container will be divided into two assemblies, the cover assembly and the base assembly. Certain cleaning, inspecting, and repair procedures are common to both containers. These common procedures are described in paragraph 523 below.

5-23. General Maintenance

a. Inspecting Common Hardware and Other Threaded Parts. Visually inspect all common hardware items such as bolts, nuts, screws, washers, keys, pins, and other threaded parts. When any of the following conditions exist, items are unserviceable:

(1) Bent or distorted part.

(2) Stripped, crossed, pulled, or distorted threads.

(3) Misshaped or burred bolt or screw heads.

(4) Misshaped or broken slots and recesses.

(5) Misshaped or burred nuts.

b. Inspecting Miscellaneous Parts. Visually inspect all miscellaneous parts. When any of the following conditions exist, part is unserviceable:

(1) *Metal parts*. Metal parts are nicked, scratched, galled, scored, burred, gouged, cracked, or distorted to the extent that:

(a) Use of part will cause damage to other parts.

(b) Part will not fit mating part satisfactorily.

(2) *Rubber parts.* Rubber parts are torn, cut, misshaped,. or deteriorated.

c. Restoring Unserviceable Threads.

(1) Damaged internal threads in housing, frames, etc., may be repaired by chasing, drilling and tapping over-size, or by installing helical thread inserts listed in SC 5340-IL.

(2) Damaged external threads may be repaired by chasing, if practicable.

d. Welding. Welding is authorized for parts that may be satisfactorily welded in accordance with standards set forth in TM 9-237.

WARNING

Munitions will be removed from the shipping and storage containers CNU-79/E

and M602 and moved to a different area in accordance with TM 9-1300-206 when welding is to be done.

CAUTION

Welding is not to be attempted unless the operator is thoroughly familiar with the physical characteristics of the metal to be welded.

e. Miscellaneous Repairs.

(1) Distorted metal parts may be straightened, cracked metal parts may be welded, and metal parts with nicks, scratches, galls, scores, burs, and gouges may be smoothed or repaired.

(2) Unserviceable rubber parts should be replaced.

f. Minor Rust. Rust is permitted on the container and its nonfunctioning parts provided that the protection afforded the dispenser is not adversely affected. Rust is not acceptable on functioning parts such as latches, quick-release pins, and threads if it affects the functioning of these parts.

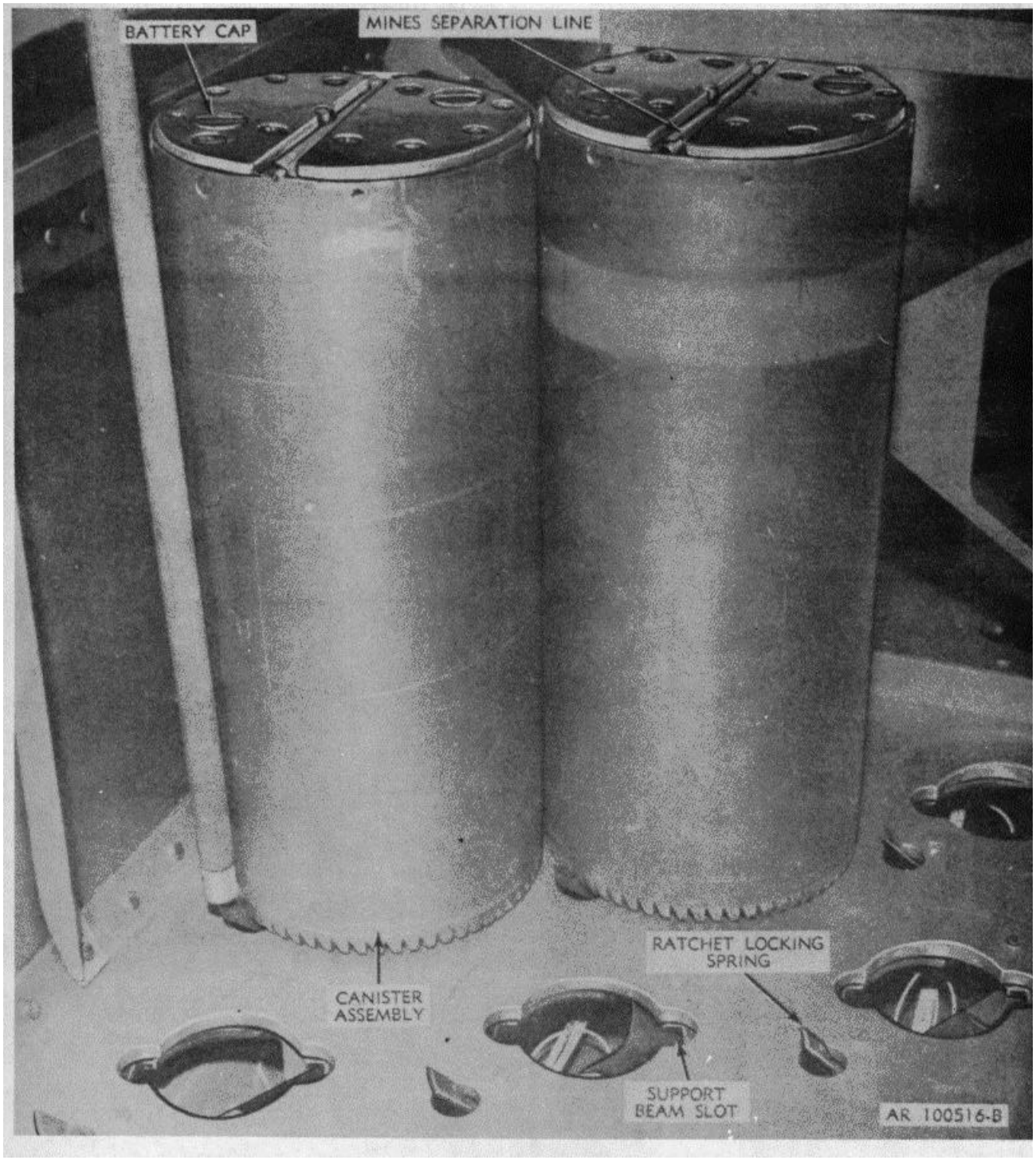


Figure 5-8. Locking spring and support beam slots.

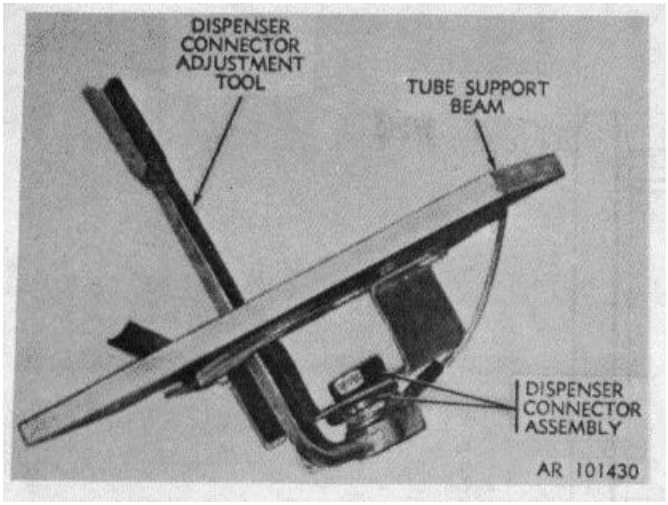


Figure 5-9 Dispenser connector adjustment tool in position

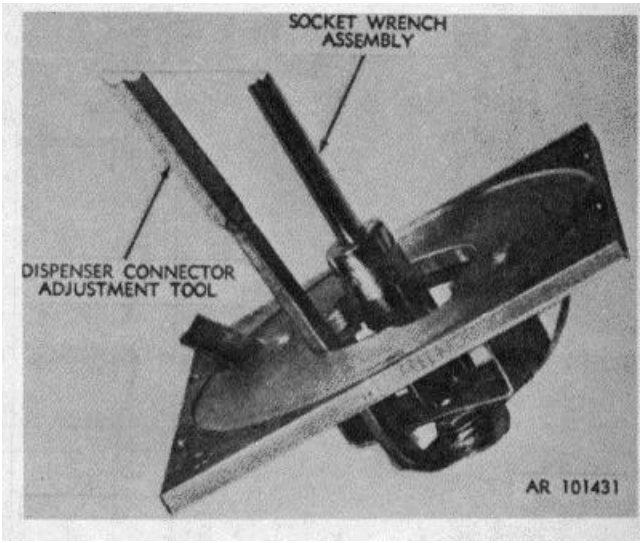


Figure 5-10. Tool positioning for tightening connector.

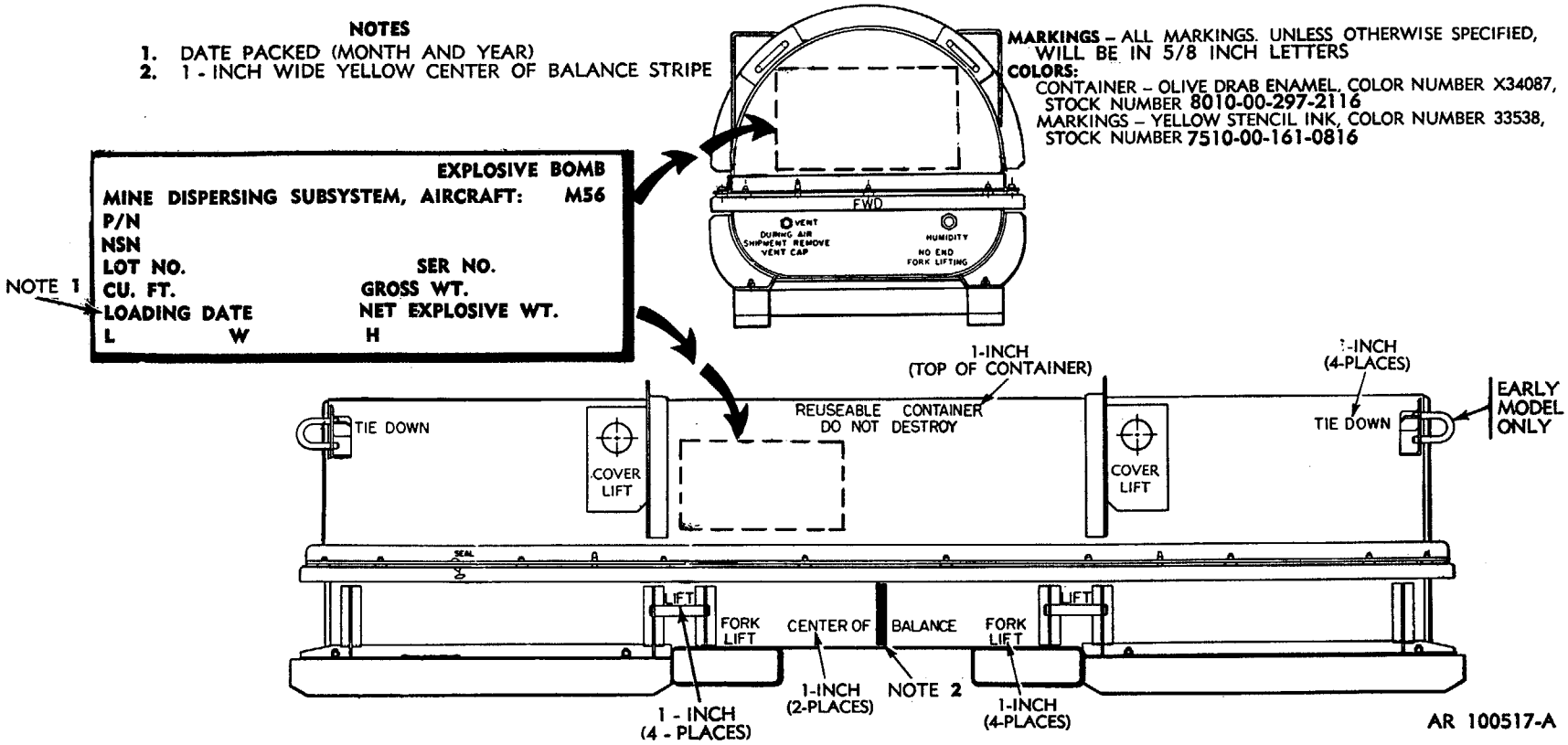
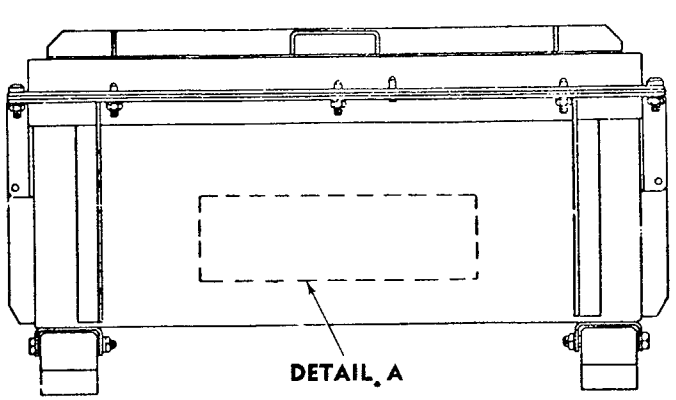
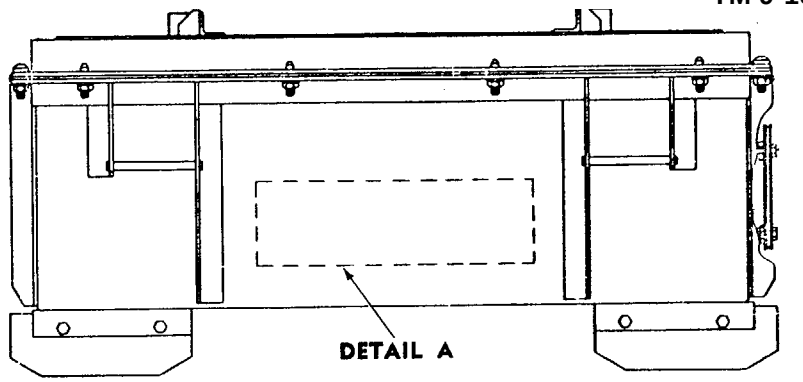


Figure 5-11. Shipping and storage container CNU-79/E-pointing and marking.





MARKING DIAGRAM

MARKING INSTRUCTIONS

1 - MARKING SHALL BE IN LETTERS AND FIGURES 3/8 INCH HIGH LOCATED APPROXIMATELY AS SHOWN WITH WHITE STENCIL INK, NO. 37875
2 - INSERT APPLICABLE NATIONAL STOCK NUMBER
3 - INSERT APPLICABLE LOT NUMBER.
4 - INSERT DOT MARKING "EXPLOSIVE BOMB"
5 - INSERT APPROXIMATE WEIGHT TO THE NEAREST POUND.
6 - INSERT DATE PACKED (MONTH AND YEAR).
7 - INSERT APPLICABLE PART NUMBER

DETAIL A

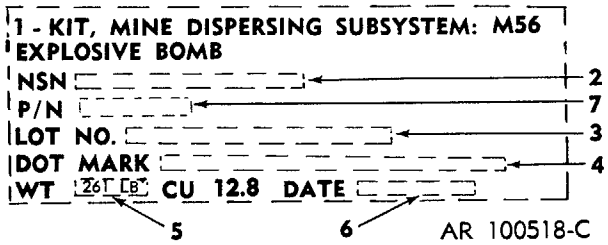


Figure 5-12. Shipping and storage container M602-marking diagram.

g. Painting and Marking (figs. 5-9 and 5-10). The shipping and storage containers are to be painted with olive-drab enamel, color number X34087 (8010-00-297-2116). Markings are to be applied with yellow stencil ink, color number 33538 (7510-00-161-0816) and/or white stencil ink, color number 37875 (7510-00-161-0815).

5-24. Initial Inspection

a. Container CNU-791E.

(1) Inspect the container in accordance with paragraph 4-3c(4).

(2) Open the container and remove the subsystem in accordance with instructions in paragraph 3-2.

(3) Remove desiccant from container cage and store in sealed moisture-proof receptacle.

b. Container M602.

(1) Inspect the container in accordance with paragraph 4-3c(4).

NOTE

The capital letters in parentheses below refer to figure 1-5.

CAUTION

Opening the container requires two men.

(2) Open the shipping and storage container as follows:

(a) Place the container on a hard, level surface. Container may be fork lifted or the multiple-leg sling (4925-00-873-4452) may be attached to lifting bars *(d)*.

(b) Remove antipilferage seals from container.

(c) Using a 7/16-inch open end or adjustable wrench and a 9/16-inch socket wrench, unloosen each of the 14 T-bolts *(b)* and plain nuts.

(d) Remove cover assembly *(a)* by lifting straight up (to prevent damage to contact pin of mine ejection charge (M198) with cover handles (J).

(e) Using a 9/16-inch open end or adjustable wrench, turn two channel studs one-quarter turn counterclockwise and remove channel (K). Repeat step for remaining two channels.

(f) Remove packing materials (fiberboard and chipboard) from container compartments.

5-25. Cover Assembly for Containers CNU-79/E and M602

a. Inspect the overall body of the cover assembly in accordance with paragraph 4-5.

b. Repair. Repair the cover assemblies by welding and straightening (para 5-8).

5-26. Base Assembly for Container CNU79/E (figs. 5-11, 5-12 and 5-12.1)

a. Disassembly.

(1) Remove latching T-bolt (8, fig. B-6) by removing the plain nut, lock washer, and spacer (6, 7, and 9, fig. B-6).

(2) Remove the loose rubber gasket (3, fig. B-6) from container flange.

(3) Remove plug humidity indicator (10, fig. B-6) by unscrewing from outside end of base assembly.

(4) On containers which have early model clamp assemblies (fig. 3-2), remove barrel nut and hexagon head cap screw (1 and 2, fig. B-8) from suspension frame by unscrewing cap screw.

(5) On containers which have late model strap assemblies (fig. 3-2), disassembly strap assembly from suspension frame by removing cap screw, nut, and lock washer (1-3, fig. B-7).

(6) Remove suspension frame from resilient mounts by removing the three fastening screws (1, fig. B-9) at each mount.

(7) Remove resilient mount from the base assembly by removing the four cap screws, nuts, and flat washers (3-5, fig. B-9) from resilient mount.

(8) Remove wood runner under the base assembly by removing the two nuts, lock washers, flat washers, and cap screws (1-4, fig. B-10).

b. In-Process Inspection

(1) Inspect the overall body of the base assembly for bent portions, cracks, breaks, dents, and broken welds.

(2) Inspect the common hardware and other threaded parts in accordance with paragraph 5-23a.

(3) Inspect rubber gasket and resilient mounts in accordance with paragraph 5-23b(2).

(4) Inspect suspension frame for bent portions, cracks, breaks and broken welds.

(5) Inspect the wood runners for splits, breaks, and gouges.

(6) Disassemble the humidity indicator plug (10, fig. B-6) with a 1/2-inch sockethead screw key and inspect in accordance with paragraph 5-23a.

c. Repair.

(1) Repair the body of the base assembly by welding and straightening (paras 5-23d and e).

(2) Replace unserviceable rubber gasket that seals cover and base assemblies with a serviceable gasket.

(3) On containers which have early model clamp assemblies, replace unserviceable clamp cap screw and barrel nut with serviceable items.

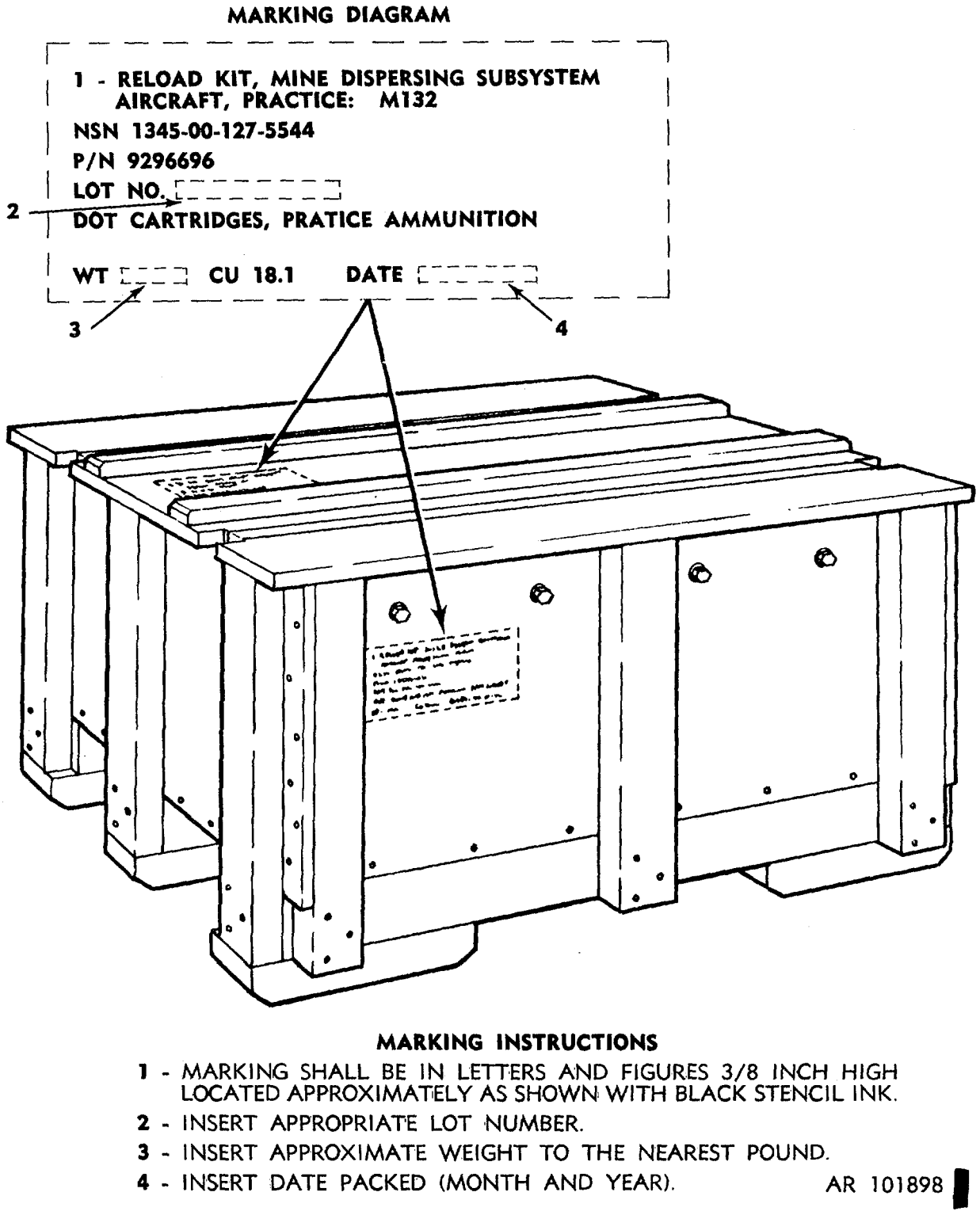


Figure 5-12.1. Shipping and storage container for reload kit, mine dispersing subsystem air craft, practice: M132-marking diagram.

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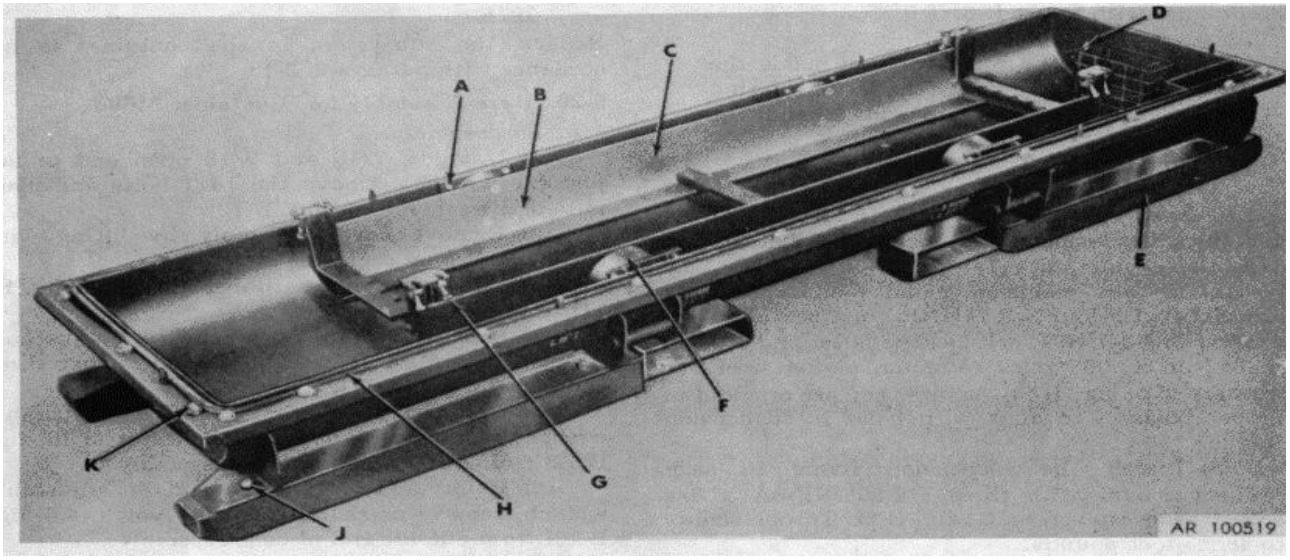


A- (3/8-24UNF x 1 hexagon head cap screw 5305-00-269-3236.
3/8-UNF self-locking nut 5310-00-982-4908.
0.406 i.d., 0.812 o.d., 0.065 thick steel flat washer 5310-00-080-6004.

B- 1/2-20UNF x 3/4 socket-head flat cap screw 5305-00-060-1165.

C- Suspension frame.

D- Plug humidity indicator 6685-00-079-3359.

E- Wood runner.

F- Resilient mount 5340-00-908-5955, 1/2-20UNF x 2-3/4 hexagon head cap screw 5305-00-,719-5241

G- Barrel self-locking nut 5310-00-208-4998

H- Rubber gasket 5330-01-012-2753
1/2-inch steel lock washer 5310-00-584-5272, 1/2-13 UNC-2B hexagon plain nut 5310-00-768-0318.

j- 1/2-13 UNC-2A x 4 hexagon-head cap screw 5305-00-071-2079.
9/16 i.d. x 1-3/8 o.d. x 0.109 thick steel flat washer 5310-00-809-3079.
1/2-13 UNC-2A x 2 bolt 8140-00-908-5954. (T-bolt).
1-1/8 o.d. x 0.56 i.d. x 0.31-thick steel spacer 1325-00-944-1701.

K- 1/2-inch steel lock washer 5310-00-584-5272.
1/2-13UNC-2B hexagon plain nut 5310-00-768-0318.

Figure 5-13. Early model (long) shipping and storage container-base assembly (equipped with early model rigid clamp assemblies).

(4) On containers which have late model strap assemblies, replace unserviceable clamp cap screw, nut, and lock washer with serviceable items.

Replace unserviceable latch assembly drawbolt, barrel nut, and clevis pin with serviceable items.

(5) Replace unserviceable resilient mounts with serviceable mounts.

(6) Repair suspension frame by straightening and welding.

(7) Repair wood runners with 4 x 4 lumber.

(8) Replace unserviceable humidity indicator plug with a serviceable item, or if card has turned white, replace with a serviceable humidity in

dicator card. Assemble humidity indicator plug in accordance with figure B-6.

NOTE

The card may be replaced from inside the container by removing the retainer ring and washer. Replace card and reinstall the washer and retaining ring.

d. Installation.

(1) Install wood runner with two 1/2-13 UNC x 4 hexagon head cap screws, 9/16 id x 1 3/8 od x 1/8 thick flat washers, 1/2 inch lock washers, and 1/2-13UNC plain nuts (1-4, fig. B-10).

(2) Install resilient mount on the base assembly with four 3/8-24UNF-2A x hex-head cap screws, 3/8-24UNJF self-locking nuts, and .406 id x .812 od x .065 thick cadmium plated steel flat washers (3-5, fig. B-9). Assure they are oriented in proper position to align with holes in suspension frame.

(3) Install the suspension frame to each resilient mount with three 1/2-20UNF-3A x 3/4 socket-head cap screws (1, fig. B-9). Torque screws to 48-5 foot pounds.

(4) On containers which have early model clamp assemblies, install clamp barrel nut in suspension frame with rounded portion facing forward. Install 'the 1/2-20UNF-2A x 2-3/4 hexhead cap screw in barrel nut (1-2, fig. B-8).

(5) On containers which have late model strap assemblies, assemble strap assembly to suspension frame using the 3/8-16UNC-2A x 2 3/4 hex-head cap screw, 3/8 helical lock washer, and 3/816UNC-2B hex-head nut (1-3, fig. B-7). Screw barrel nut onto drawbolt.

(6) Place rubber gasket (3, fig. B-6) on container flange. Do not seal to flange.

(7) Install humidity indicator (10, fig. B-6) by screwing into end of container. Torque to 33-3 foot-pounds.

(8) Install 1/2-13UNC-2A x 2 bolt (T-bolt) with 0.56 id x 1 1/8 od x 0.31 thick spacer, 1/2inch cadmium plated steel lock washer, and 1/213UNC-2B hexagon plain nut (6, 7, and 9, dig. B6) into flange assembly.

5-27. Final Inspection of Container CNU-79/E

a. Inspect the container to assure that the following items are installed and/or properly secured.

(1) Suspension frame.

(2) Latching T-bolts.

(3) Wood runners.

(4) Rubber gasket.

(5) Humidity indicator.

(6) Cap or air vent.

b. Assure that painting and marking have been properly applied.

accordance with figure B-13.

5-28. Repacking Subsystem in Container CNU-79/E

Repack the subsystem in the container in accordance with paragraph 3-13.

5-29. Base Assembly for Container M602

a. Disassembly.

(1) Using a 7/16 and 9/16 open end or adjustable wrench, remove the 14 T-bolts and plain nuts and washers (1-3, fig. B-12).

(2) Remove cover assembly by lifting with cover handles on each side.

(3) Remove the loose rubber gasket (3, fig. B11) from container flange.

(4) Using a 9/16 open end or adjustable wrench, loosen six channel studs and remove three channels (6, fig. B-11).

(5) Using a 1 7/16 open end or adjustable wrench, remove plug humidity indicator (8-10, fig. B-12) from outside end of base assembly.

(6) Using a 1 7/16 open end or adjustable wrench, remove pressure equalizing valve (4-6, fig. B-12) from outside end of base assembly.

(7) Using a 9/16 open end or adjustable wrench, remove four hexagon cap screws (1, fig. B14) from desiccant door assembly. Remove door and rubber gasket from base assembly (3 and 4, fig. B-14).

(8) Using a 3/4 open end or adjustable wrench, remove eight hexagon head cap screws from wood skid stand. Remove skids from base assembly (5-8, fig. B-14).

b. In-Process Inspection.

(1) Inspect the overall body of the base assembly for bent partitions, cracks, breaks, dents, and broken welds.

(2) Inspect the common hardware and other threaded parts in accordance with paragraph 5-23a.

(3) Inspect rubber gaskets in accordance with paragraph 5-23b(2).

(4) Inspect the wood runners for splits, breaks, and gouges.

(5) Disassemble the humidity indicator plug and inspect in accordance with paragraph 5-23a.

c. Repair.

(1) Repair the body of the base assembly by welding and straightening (paragraphs 5-23d and e).

(2) Replace unserviceable rubber gaskets, that seal cover and desiccant door of base assembly, with serviceable gaskets.

(3) Repair wood skids with 4 x 4 lumber.

(4) Replace unserviceable humidity indicator plug with a serviceable item, or if card has turned white, replace with a serviceable humidity indicator card. Assemble humidity indicator plug in

NOTE

The card may be replaced from inside the container by removing the retainer ring and washer. Replace card and reinstall the washer and retaining ring.

d. Installation.

(1) Install wood skids with two 1/2-13UNC x 4 1/2 hexagon head cap screws, 1/2 id x 7/8 x 0.130 inch thick lock spring washer, and 1/213UNC-2B plain hexagon nut (5-8, fig. B-14). Torque to 37±2 foot-pounds.

(2) Install rubber gasket P/N 9269045 and desiccant door with four 3/8-24UNF x 3/4 inch hexagon head cap screws (1-4, fig. B-14). Torque to 10±2 foot-pounds.

(3) Install pressure equalizing valve (9220106) (4, fig. B-12). Torque to 15±2 foot-pounds.

(4) Install humidity indicator (8860990) (5, fig. B-12). Torque to 15±2 foot-pounds.

(5) Install rubber gasket (9269046) on container flange (3, fig. B-11).

(6) Install three channels.

(7) Install container cover assembly.

(8) Install 14 3/8-16 UNC x 1.365 inch T-bolts, 3/8 id x 11/16 od x 0.099 thick lock spring washer, and 3/8-16 UNC-2B inch plain hexagon nut (1-3, fig. B-12). Torque to 16±2 foot-pounds.

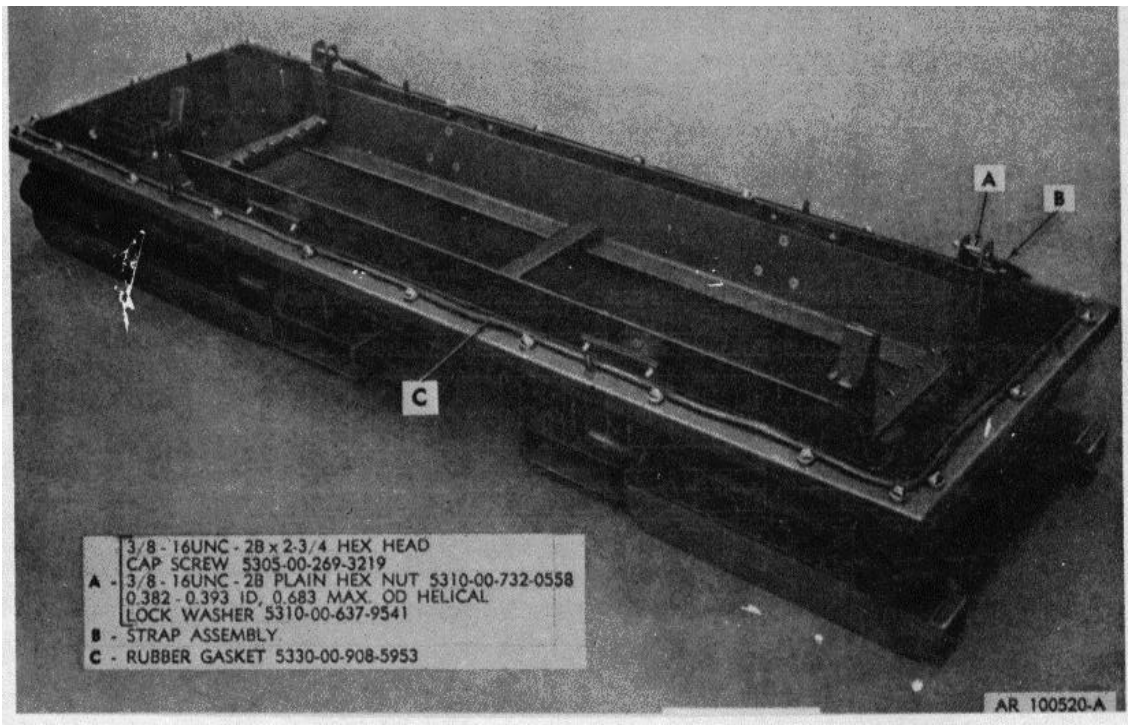


Figure 5-14. Late model (short) shipping and storage container base assembly (with late model flexible strap assemblies).

5-30. Final Inspection for Container M602

a. Inspect the container to assure that the following items are installed and/or properly secured.

(1) Wood skids.

(2) Desiccant door with gasket.

(3) Pressure equalizing valve.

(4) Humidity indicator.

(5) Channels.

(6) Rubber gasket (sealing cover and base assembly).

(7) Cover assembly.

b. Assure painting and marking have been properly applied.

CHAPTER 6
STORAGE AND STORAGE HANDLING PROCEDURES

6-1. Scope

This chapter contains procedures for storage, and storage handling.

6-2. Storage Classification

a. Quantity-Distance Class and Storage Compatibility Group. Refer to paragraph 1-6 for quantity-distance class and storage-compatibility group for the subsystem M56.

b. Minimum Distances. Refer to TM 9-1300-206 for minimum distances permitted.

6-3. Shelf Life

Shelf life is the length of time an item can remain in storage under prescribed packaging and storage conditions. The expiration date for shelf life is the last day of the month in the month and year specified. Refer to paragraph 1-6 for shelf life of the subsystem M56.

6-4. Storage Precautions

a. Subsystems M56, in common with other types of ammunition, are designed to be as safe in handling as is consistent with their function, and are packed to withstand all conditions ordinarily encountered in storage and transit. In order to assure that the ammunition will be in serviceable condition when required for use and to provide the highest possible protection to personnel and materiel, the precautions outlined in this paragraph and in chapter 1, section III, will be observed.

b. Containers will not be opened until the items are required for use or inspection. Items opened will be issued first in order that stocks of opened containers may be kept to a minimum.

c. Damaged containers will be repaired or replaced. Special care will be taken to assure that all markings on repaired containers or on new containers are complete and correct.

d. The subsystem M56 is equipped with a device for protection from hazards of electromagnetic radiation to ordnance (RADHAZ). The device consists of a special unit wired into the circuit in series and is attached to the bottom of the dispenser electrical connector mounting plate.

e. If transmitting antenna or radio, radar, or other electromagnetic generating devices are in the vicinity of items covered by this manual, the appropriate section of TM 9-1300-206 will be consulted. The applicable safety distances for electroexplosive devices will be followed.

6-5. Types of Storage

a. The subsystem M56 should be stored in magazines designed, designated, and isolated for the specific purpose of storing ammunition as specified in TM 9-1300-206. When specially constructed magazines are not available, the building used must afford good protection against moisture and dampness, and have a means of adequate ventilation.

b. In the event that the tactical situation dictates, other sites maybe utilized. Subsystems in containers and reload kits in containers M602, when placed in outside storage, must be placed on dunnage (a minimum of 4 inches thick when stored on hardstands or 6 inches thick when stored on unimproved surfaces). They must have adequate covering to provide protection from rain, snow, sleet, and the direct rays of the sun. The covering must allow free circulation of air around the containers. Suitable trenches should be dug to prevent water from running under the stacks during inclement weather.

c. Subsystems and reload kits must be stored in their shipping containers with adequate access and inspection aisles between stacks. Containers CNU-79/E and M602 should have the humidity indicator facing the aisle to permit reading of the humidity indicator (storage monitoring). Methods of stacking must provide good ventilation for all parts of the stack. The maximum. stacking allowed for the subsystem M56 in the container CNU-79/E is six high and seven high for the reload kit M602. Storage of early-model and late-model containers CNU-79/E in 60-foot nad 80-foot igloos, 80-foot Stradley magazines, and types I and II multicublical magazines is shown in figures 6-1 through 6-10. Precautions outlined in TM 9-1300-206 and FM 9-13 for the storage, care, handling, and preservation of ammunition, will be observed.

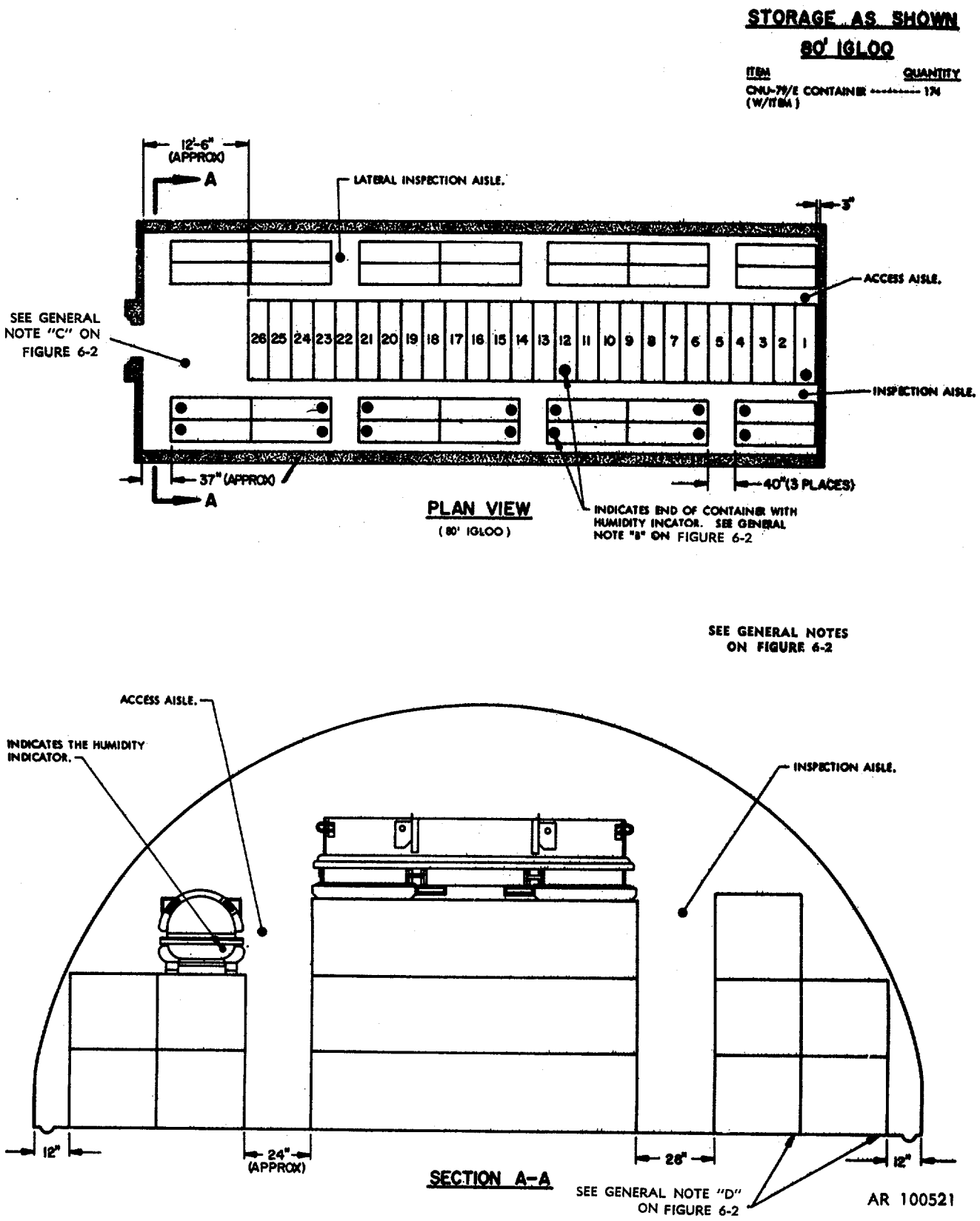
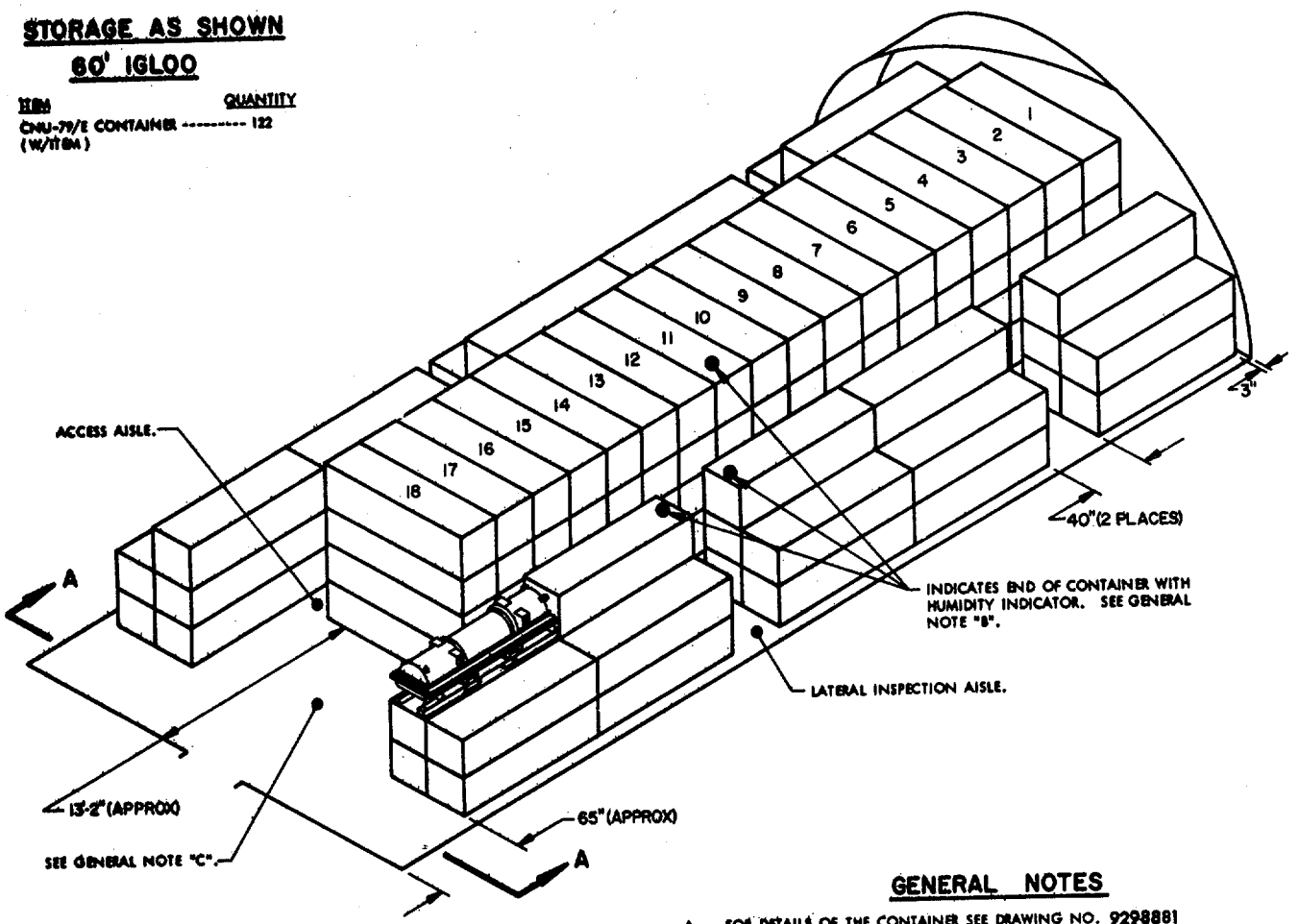


Figure 6-1. Recommended method for storage of early model shipping and storage containers CNU-79/E-80-foot igloo.



GENERAL NOTES

A. FOR DETAILS OF THE CONTAINER SEE DRAWING NO. 9298881

CONTAINER DIMENSIONS --- 116" LONG X 31-1/2" WIDE X 31" HIGH.
GROSS WEIGHT ---------- 1400 POUNDS (APPROX.)

B. AISLE DIMENSIONS SHOWN HEREIN MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS AND/OR AVAILABLE MATERIALS HANDLING EQUIPMENT (MHE); HOWEVER, A TWENTY-FOUR INCH (24") (MINIMUM) INSPECTION AISLE IS REQUIRED AT THE END OF THE CONTAINER WHERE THE HUMIDITY INDICATOR IS LOCATED.

C. IF THE AVAILABLE MHE PERMITS, ADDITIONAL CNU-79/E CONTAINERS WITH ITEMS MAY BE STORED WITHIN THE FRONTAL AREA OF THE IGLOO MAGAZINE.

D. AS REQUIRED TO CREATE VERTICAL STACKS, WOOD SHIMS (REF: 1/4" THICK BY SKID LENGTH) MAY BE USED UNDER THE TWO LOW SIDE SKIDS OF THE BOTTOM CONTAINER IN EACH OF THE ROWS AT THE SIDE OF A MAGAZINE.

E. LOTS WILL NOT BE MIXED, BUT ONLY TO THE EXTENT THAT ITEMS OF ONE LOT WILL NOT BE STACKED ON TOP OF ITEMS FROM ANOTHER LOT.

F. IF DESIRED, AN EIGHTEEN INCH (18") LATERAL AISLE MAY BE LOCATED NEAR THE MIDPOINT WITHIN THE ROW OF CROSSWISE POSITIONED CONTAINER STACKS, TO PROVIDE AN ACCESS AISLE BETWEEN OPPOSITE SIDES OF THE MAGAZINE.

G. STORED CONTAINERS MUST NOT CONTACT THE WALL OF A MAGAZINE. TO PROVIDE FOR THIS MANDATORY CLEARANCE REQUIREMENT, CONTAINERS MAY BE ELIMINATED FROM THE DEPICTED STACKING PATTERN AS NECESSARY, OR AISLE DIMENSIONS MAY BE ADJUSTED AS PER GENERAL NOTE "B" ABOVE.

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Figure 6-2. Recommended method for storage of early model shipping and storage containers CNU-79/E-60-foot igloo.

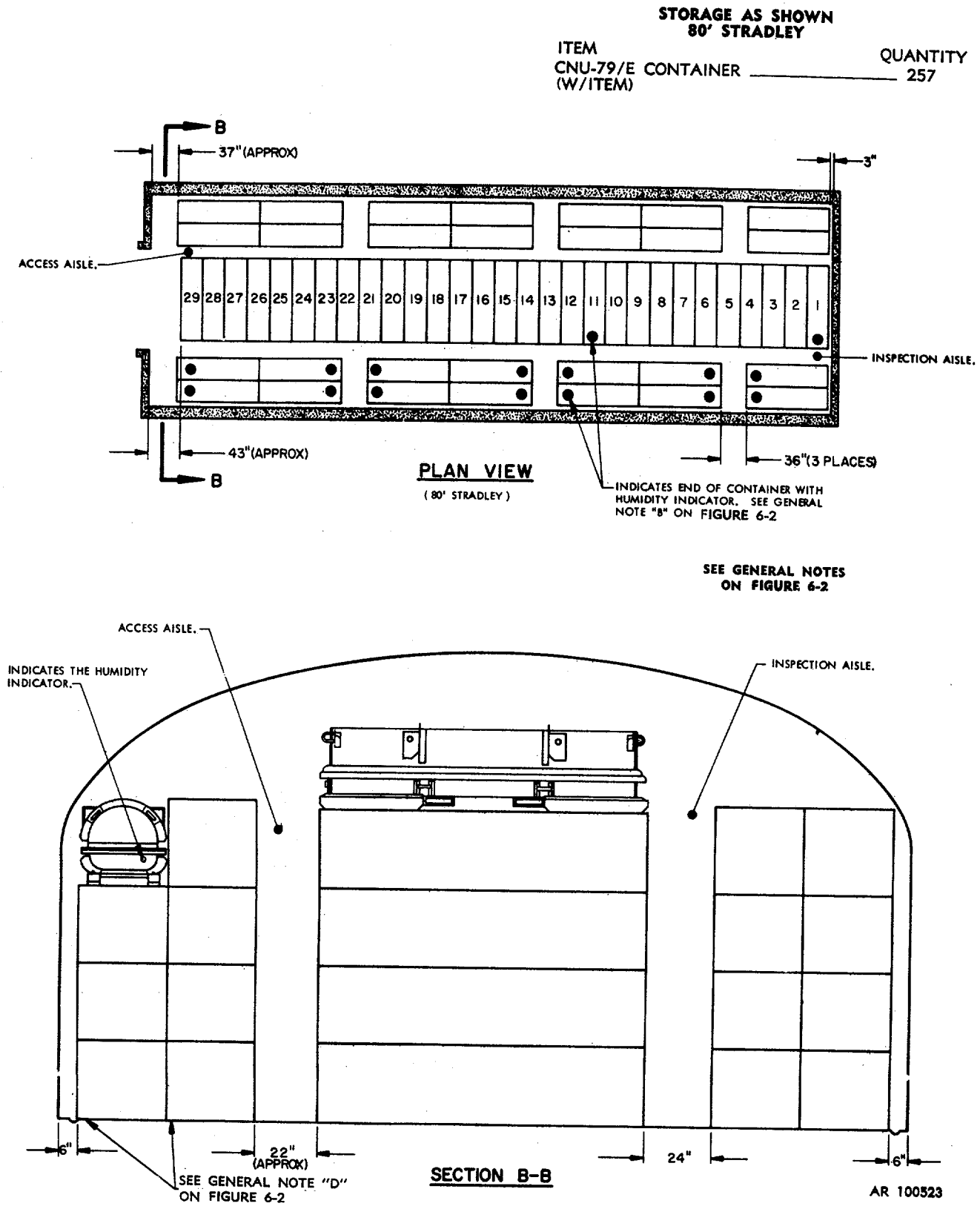


Figure 6-3. Recommended method for storage of early model shipping and storage containers CNU-79/E-80-foot Stradley magazine.

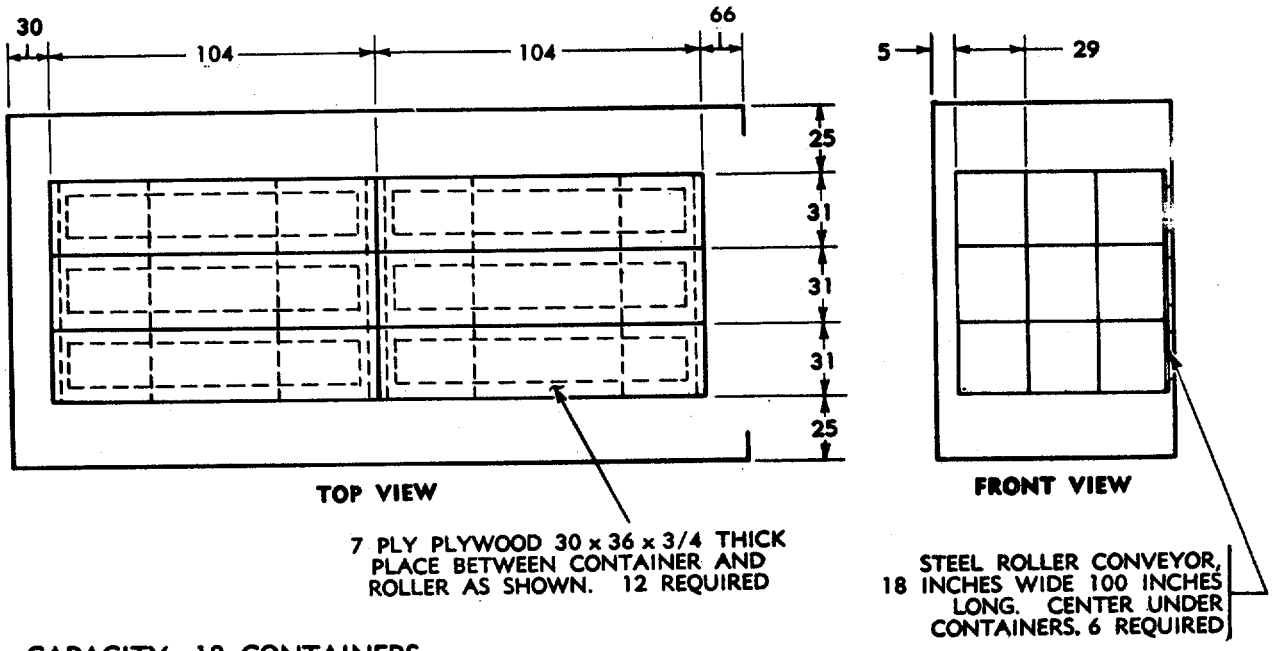


Figure 6-4. Recommended method for storage of early and late model shipping and storage containers CNU-79/E-mulitcubicle magazine.

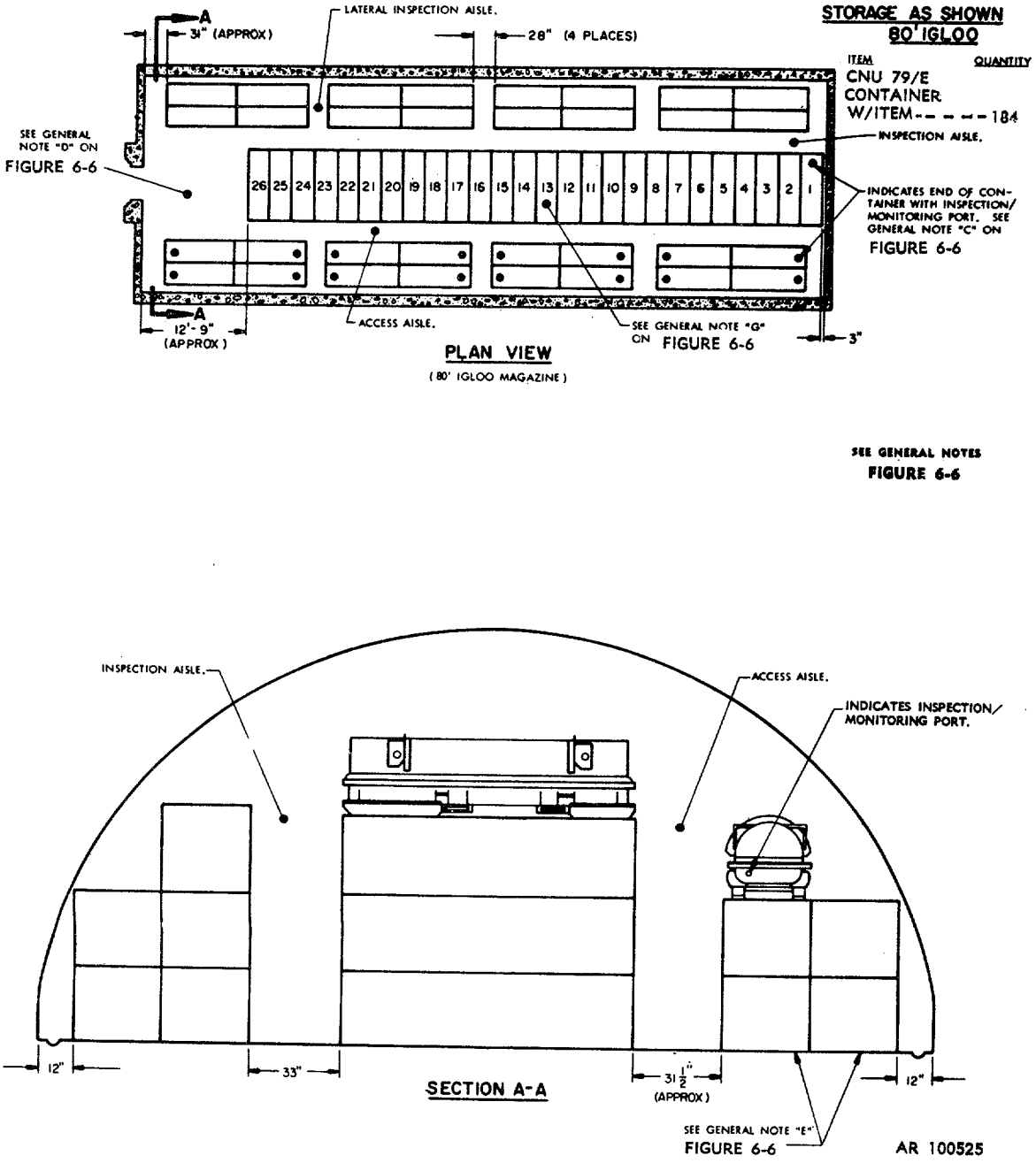


Figure 6-5. Recommended method for storage of late model shipping and storage containers CNU-79/E-80-foot igloo.

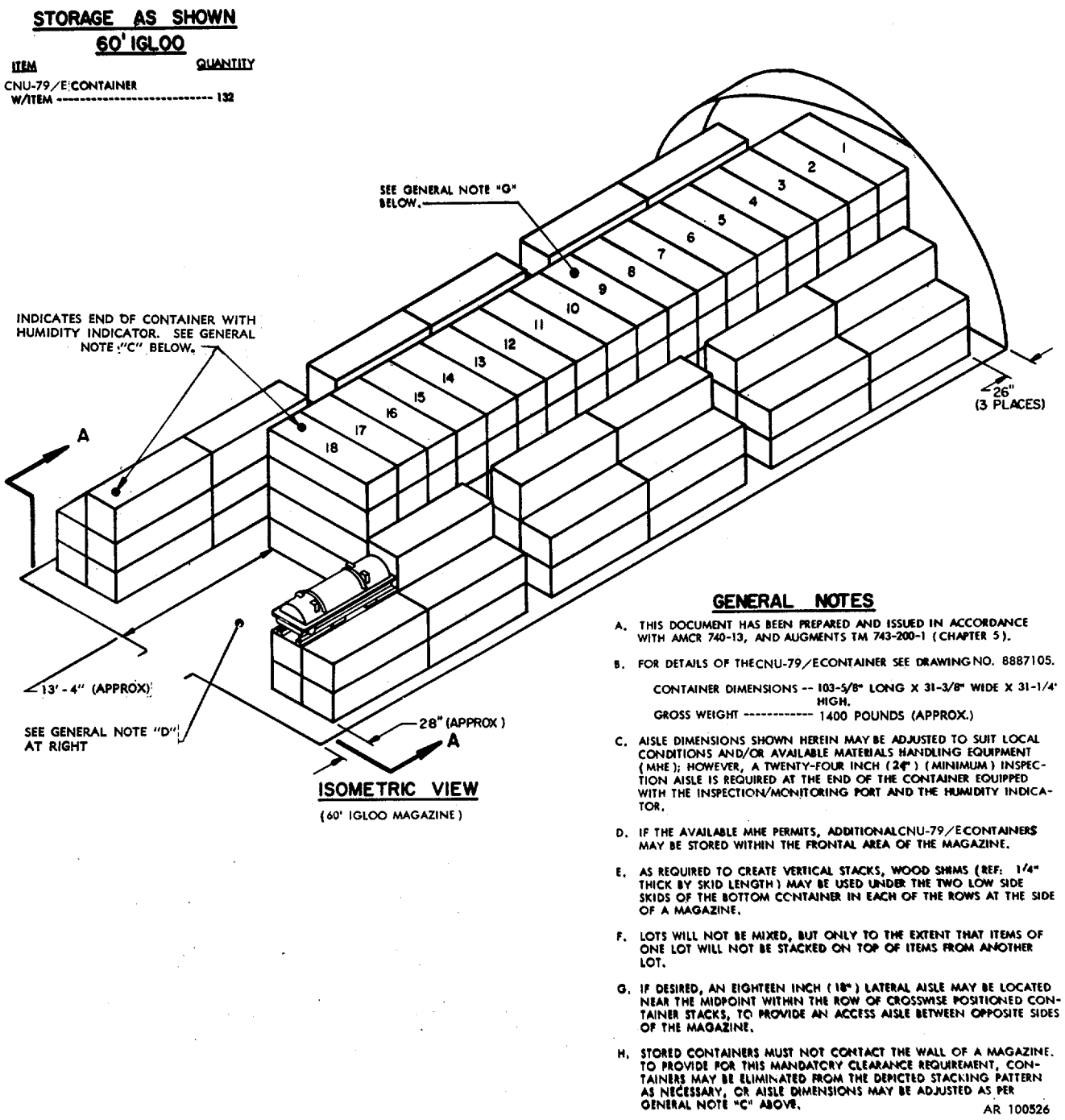


Figure 6-6. Recommended method for storage of late model shipping and storage containers CNU-79/E-60-foot igloo.

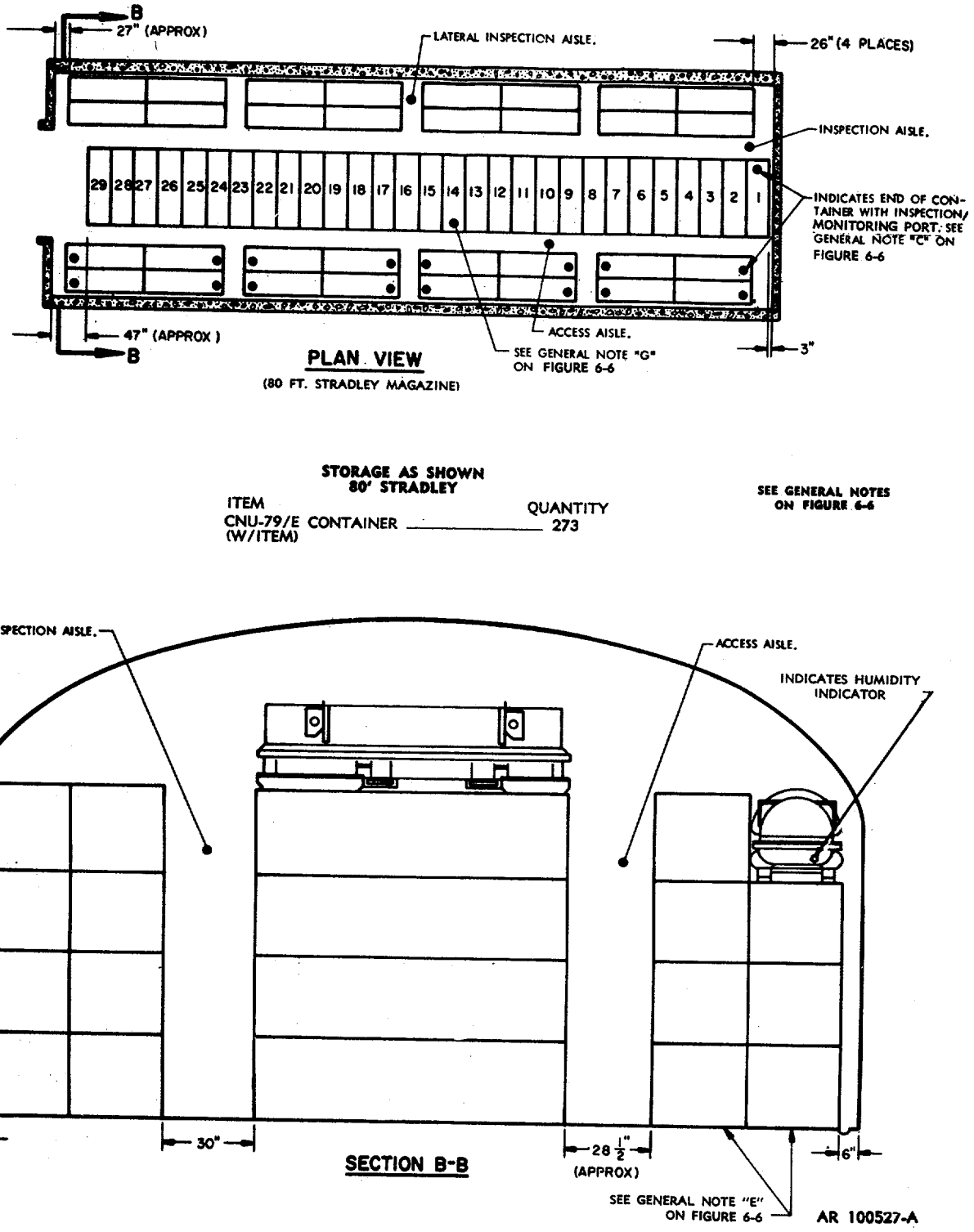


Figure 6-7. Recommended method for storage of late model shipping and storage containers CNU-79/E-80-foot Stradley magazine.

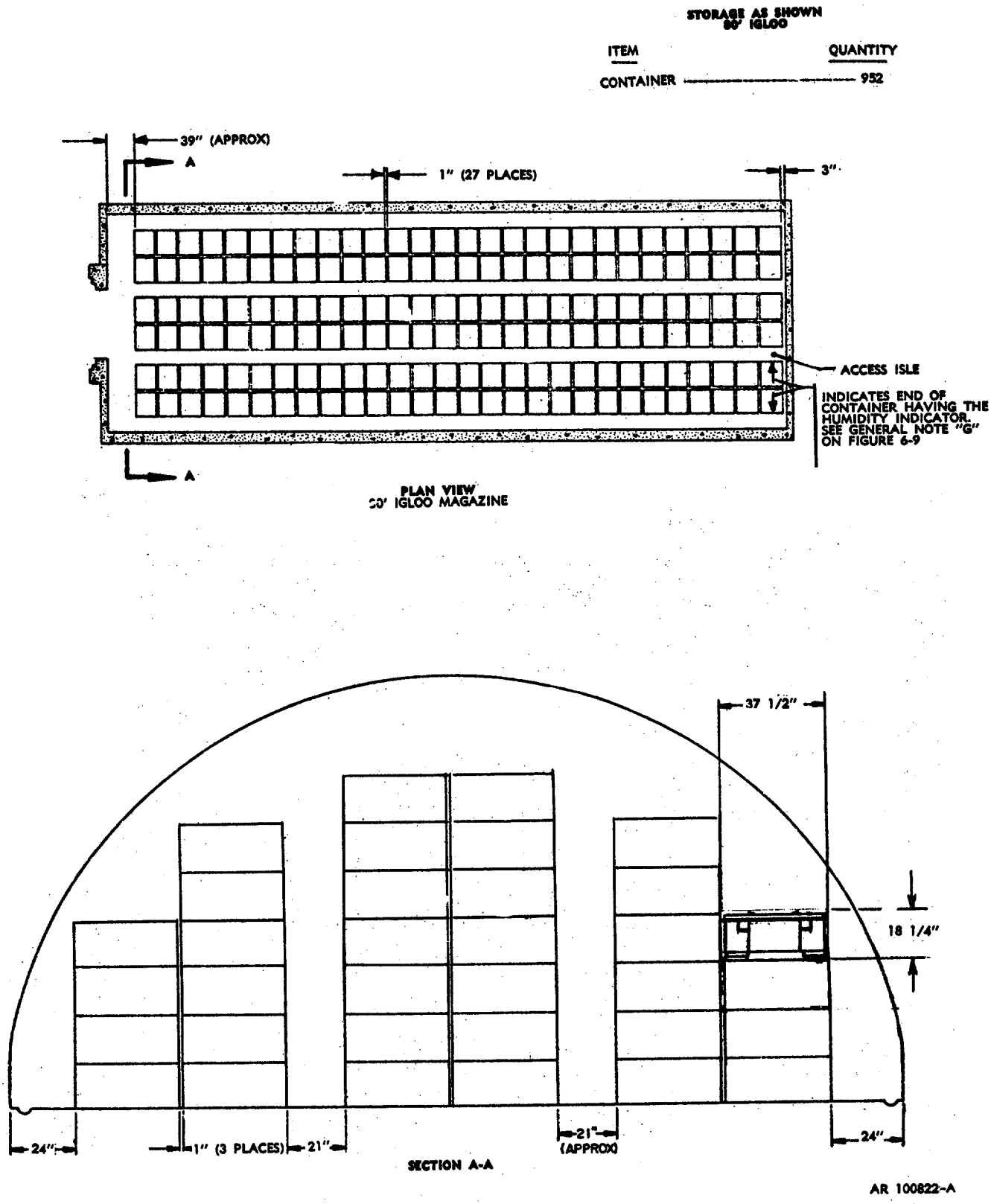
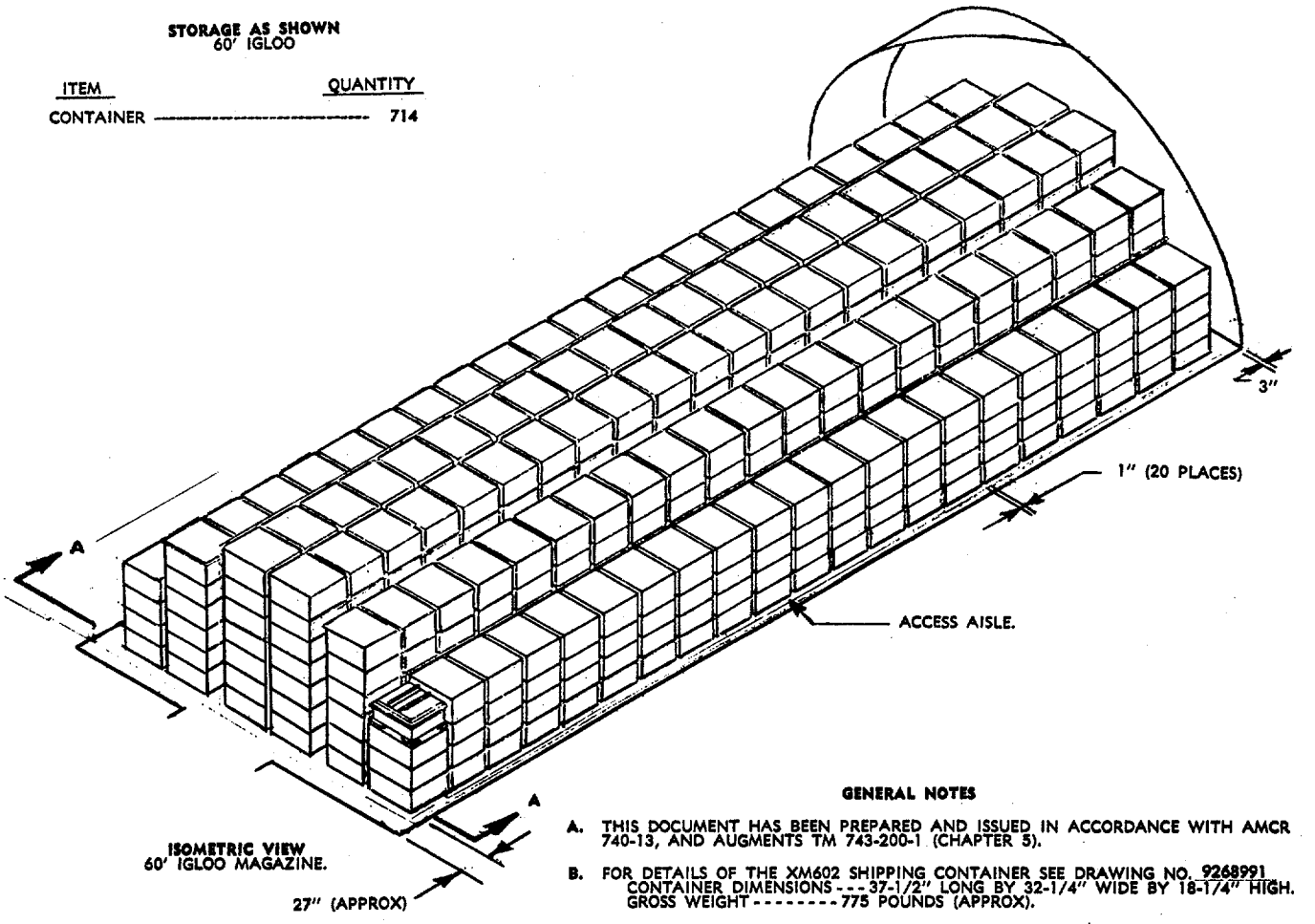


Figure 6-8. Recommended method of storage of shipping and storage containers M602 (reload kits)-80 foot igloo.



GENERAL NOTES

A. THIS DOCUMENT HAS BEEN PREPARED AND ISSUED IN ACCORDANCE WITH AMCR 740-13, AND AUGMENTS TM 743-200-1 (CHAPTER 5).

B. FOR DETAILS OF THE XM602 SHIPPING CONTAINER SEE DRAWING NO. 9268991 CONTAINER DIMENSIONS - - - 37-1/2" LONG BY 32-1/4" WIDE BY 18-1/4" HIGH. GROSS WEIGHT - - - - - - - - 775 POUNDS (APPROX).

C. THIS ITEM IS A QD CLASS 7, AND IS IN A COMPATIBILITY GROUP G.

D. THE CONTAINERS MUST BE STORED WITH THE HUMIDITY INDICATOR FACING THE ACCESS AISLE.

E. THE MAXIMUM STACKING HEIGHT ALLOWED IS SEVEN CONTAINERS HIGH.

F. STORED CONTAINERS MUST NOT CONTACT THE WALLS OF THE MAGAZINE.

G. AISLE DIMENSIONS SHOWN HEREIN MAY BE ADJUSTED TO SUIT LOCAL CONDITIONS AND/OR AVAILABLE MATERIAL HANDLING EQUIPMENT. HOWEVER, AN ADEQUATE INSPECTION AISLE MUST BE MAINTAINED FOR INSPECTION OF THE HUMIDITY INDICATOR.

H. THE IGLOO MAGAZINES SHOWN HAVE 8'-0" WIDE DOOR OPENINGS. FOR IGLOO MAGAZINES HAVING 4'-0" WIDE DOOR OPENINGS IT MAY BE NECESSARY TO OMIT SOME CONTAINERS FROM THE CENTER STACKS, IN THE DOOR AREA, TO FACILITATE STORAGE PROCEDURES.

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Figure 6-9. Recommended method for storage of shipping and storage containers M602 (reload kits)-60-foot-igloo.

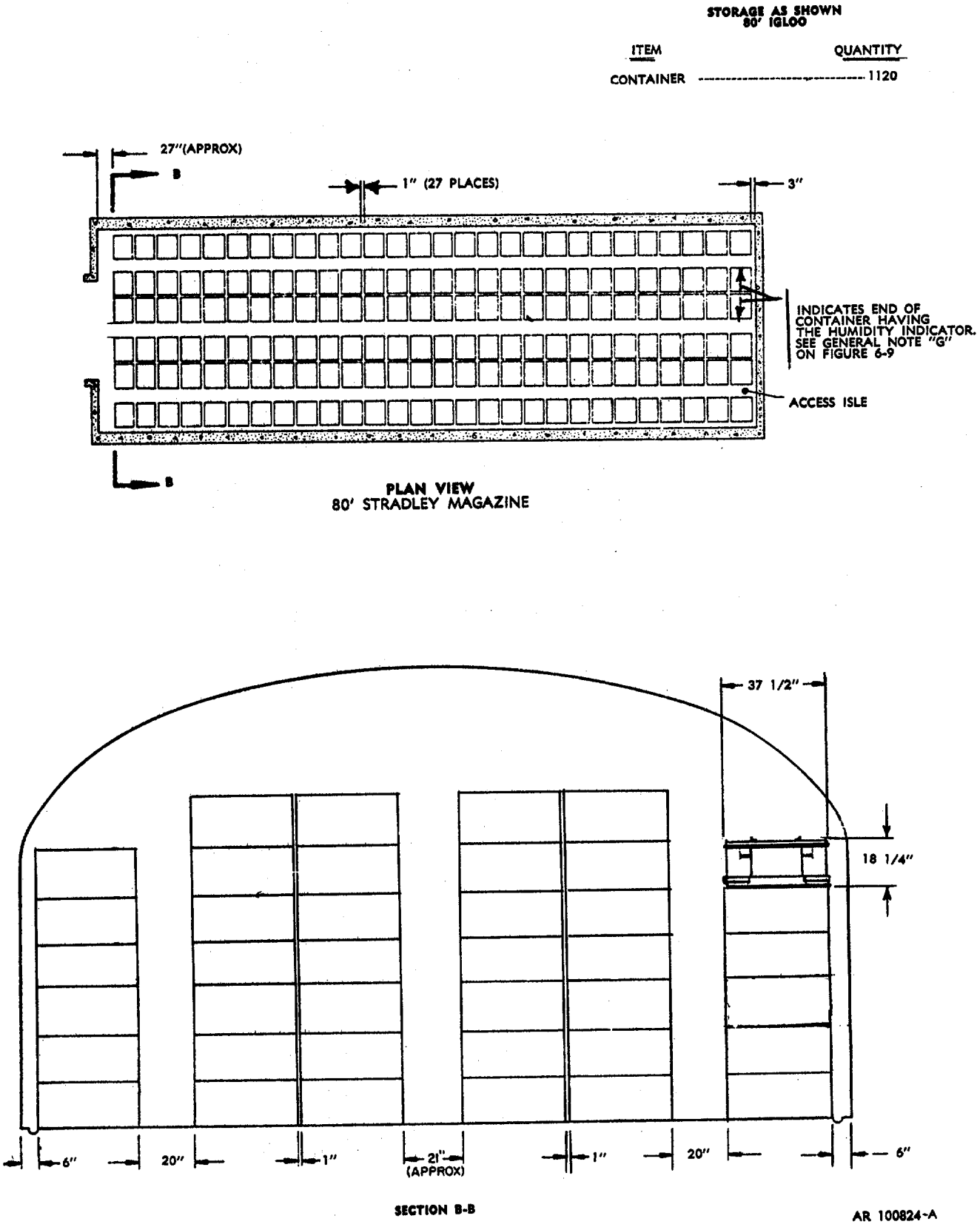


Figure 6-10. Recommended method for storage of shipping and storage containers M602 (reload kits)-80-foot-Stradley magazine.

APPENDIX A

REFERENCES

A-1. Indexes

Index of administrative publications (regulations, circulars, pamphlets, posters, Joint Chiefs of Staff publications, DOD and miscellaneous publications)	DA Pam 310-1
Index of blank forms	DA Pam 310-2
Index of technical manuals, technical bulletins, supply manuals (Types 7, 8 and 9), supply bulletins, and lubrication orders	DA Pam 310-4
Index of supply catalogs and supply manuals (excluding types 7, 8 and 9)	DA Pam 310-7

A-2. Forms

Accident report	DA Form 285
Recommended changes to publications and blank forms	DA Form 2028
Equipment maintenance log (consolidated)	DA Form 2409
Ammunition condition report	DA Form 2415
Army depot surveillance record (LRA)	DA Form 3022-R
Packaging improvement report	DD Form 6
Motor vehicle inspection	DD Form 626
Discrepancy in shipment report (Short title "DISREP")	SF 361

A-3. Regulations

Reporting of transportation discrepancies in shipments (RCS MTMC-54(r1))	AR 55-38
Transportation by water of explosives and hazardous cargo	AR 55-228
Military traffic management regulations	AR 55-355
Malfunctions involving ammunition and explosives (RCS AMC-132(MIN))	AR 75-1
Responsibilities and procedures for explosive ordnance disposal	AR 75-15
Dictionary of United States Army Terms (Short title "AD")	AR'310-25
Authorized abbreviations and brevity codes	AR 310-50
Department of the Army supplement to DOD 5200.1-R (DODISPR)	AR 380-5
Accident reporting and recores	AR 385-40
Packaging of materiel	AR 700-15
Worldwide ammunition reporting system (WARS)	AR 700-22
Classification, reclassification, maintenance, issuance and reporting of maintenance training aircraft	AR 700-42
Packaging improvement report	AR 700-58

A-4. Field Manuals

Explosives and demolitions	FM 5-25
Ammunition service in the Theater of Operations	FM 9-6
Ammunition Handbook	FM 9-13

A-5. Technical Bulletins

Munitions suspended or restricted	TB 9-1300-385-1
Munitions permanently suspended or restricted	TB 9-1300-385-2
Calibration procedure for Mine battery test set (N'SN 6625-00-134-1338)	TB 9-1345-208-35
Calibration requirements for the maintenance of Army materiel	TB 43-180

A-6. Technical Manuals

Operator, organizational, intermediate (field) (direct support and general support) and depot maintenance manual: Engine, gasoline 112 hp, Military Standard models (model 1A08-1, NSN 2805-00-5181) (model 1A08-2, NSN 2805-00-714-8552) (model 1A08-3, NSN 2805-00-068-7510) [TO 38G2-102-2; NAVFAC P-8611E, TM 81283-141	TM 5-2805-256-14

Welding: theory and application	TM 9-237
Use and care of handtools and measuring tools	TM 9-243
Ammunition and explosives standards	TM 9-1300-206
Operator's and organizational maintenance manual: Mine dispersing sub-system, aircraft: M56	TM 9-1345-201-12
Organizational and direct support maintenance manual (including repair parts and special tools lists) for Dispenser control panel (with aircraft wiring harness (NSN 1345-00-143-6536)	TM 9-1345-207-23
Operator's and organizational maintenance manual (including repair parts and special tools list): Demolition materials	TM 9-1375-213-12
Direct support maintenance manual (including repair parts list) for Test set, electrical circuit, bomb dispenser A/E 24T-79	TM 9-4925-227-30
Organizational and direct support maintenance manual (including repair parts list) for Test set, electrical circuit, bomb dispenser A/E 24T-80	TM 9-4925-228-23
Organizational and direct support maintenance manual (including repair parts and special tools lists) for Test set, dispenser control panel	TM 9.4925-229-23
Preservation, packaging, and packing of military supplies and equipment, Preservation and Packaging (Vol I)	TM 38-230-1
Preservation, packaging, and packing of military supplies and equipment, Packing (Vol II)	TM 38-230-2
Packaging and materials handling, preparation of hazardous materials for military air shipment	TM 38-250
The Army maintenance management system (TAMMS)	TM 38-750

A-7. Supply Publications

Federal supply code for manufacturers - United States and Canada, code to name (cataloging handbook, H4-2)	SB 708-42
Ammunition surveillance procedures	SB 742-1
Management data list-FCS Group 13-Ammunition and explosives	SC 1305/30-ML
Identification List-FSC Group 49-Maintenance and repair shop equipment	SC 4925 IL
Federal supply catalog identification list - Miscellaneous hardware	SC 5340 IL
Identification list-FSC Group 81 Containers, packaging, and packing supplies -D Class 8140-Ammunition boxes, packages, and special containers	SC 8140 IL

APPENDIX B

DIRECT SUPPORT REPAIR PARTS LIST AND SPECIAL TOOLS LIST

Section I. INTRODUCTION

B-1. Scope

This appendix lists repair parts, special tools, and special purpose test equipment required for performance of direct support maintenance of the aircraft mine dispersing subsystem M56.

B-2. General

The Repair Parts and Special Tools list is divided into the following sections:

a. Section II. Repair Parts List. A list of repair parts authorized for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending numerical sequence, with the parts in each group listed in figure and item number sequence. Bulk materials are listed in National Stock Number (NSN) sequence.

b. Section III. Special Tools and Equipment List. A list of special tools, test, and support equipment authorized for the performance of maintenance at the direct support level.

c. Section IV. Practice and Training Items. A list of items authorized which simulate those in the subsystem M56.

d. Section V. National Stock Number and Part Number Index. A list, in ascending numerical sequence, of all National Stock Numbers appearing in the listings, followed by a list, in alphanumeric sequence, of all part numbers appearing in the listings.

B-3. Explanation of Columns

The following provides an explanation of columns found in the tabular listings:

a. Illustration. This column is divided as follows:

(1) *Figure number*. Indicates the figure number of the illustration in which the item is shown.

(2) *Item number*. The number used to identify each item called out in the illustration.

b. Source, Maintenance, and Recoverability Codes (SMR).

(1) *Source code.* Source codes are assigned to support items to indicate the manner of acquiring support items for maintenance, repair, or overhaul of end items. Source codes are entered in the first and second positions of the Uniform SMR Code format as follows:

Code	*Definition*
PA....	Item procured and stocked for anticipated or known usage.
PD ...	Support item, excluding support equipment, procured for initial issue or outfitting and stocked only for subsequent or additional initial issues or outfittings. Not subject to automatic replenishment.
PE....	Support equipment procured and stocked for initial issue or outfitting to specified maintenance repair activities.
XA....	Item is not procured or stocked because the requirements for the item will result in the replacement of the next higher assembly.

NOTE

Cannibalization or salvage may be used as a source of supply for any items source coded above except aircraft support items as restricted by AR 700-42.

(2) *Maintenance code*. Maintenance codes are assigned to indicate the levels of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the Uniform SMR Code format as follows:

(a) The maintenance code entered in the third position will indicate the lowest maintenance level authorized to remove, replace, and use the support item. The maintenance code entered in the third position will indicate one of the following levels of maintenance:

Code	*Application/Explanation*
O.....	Support item is removed, replaced, used at the organizational level.
F	Support item is removed, replaced, used at the direct support level.

(b) The maintenance code entered in the fourth position indicates whether the item is to be repaired and identifies the lowest maintenance level with the capability to perform complete repair (i.e., all authorized maintenance functions). This position will contain one of the following maintenance codes:

Code	*Application/ Explanation*
F	The lowest maintenance level capable of complete repair of the support item is the direct support level.
Z	Nonreparable. No repair is authorized.

(3) *Recoverability code.* Recoverability codes are assigned to support items to indicate the disposition action on unserviceable items. The recoverability code is entered in the fifth position of the Uniform SMR Code format as follows:

Recoverability codes *Definition*

Z Nonreparable item. When unserviceable, condemn and dispose at the level indicated in position 3.

F Reparable item. When uneconomically reparable, condemn and dispose at the direct support level.

c. National Stock Number. Indicates the National stock number assigned to the item and will be used for requisitioning. purposes.

d. Part Number. Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications standards, and inspection requirements, to identify an item or range of items.

NOTE

When a stock numbered item is requisitioned, the repair part received may have a different part number than the part being replaced.

e. Federal Supply Code for Manufacturer (FSCM). The FSCM is a 5-digit numeric code listed in SB 708-42 which is used to identify the manufacturer, distributor, or Government agency, etc.

f. Description. Indicates the Federal item name and, if required, a minimum description to identify the item. Items that are included in kits are listed below the name of the kit with the quantity of each item in the kit indicated in the quantity incorporated in unit column.

g. Unit of Measure (U/M). Indicates the standard of the basic quantity of the listed item as used in performing the actual maintenance function. This measure is expressed by a two-character alphabetical abbreviation (e.g., ea, in., pr, etc.). When the unit of measure differs from the unit of issue, the lowest unit of issue that will satisfy the required units of measure will be requisitioned.

h. Quantity Incorporated in Unit. Indicates the quantity of the item used in the group/subgroup described in the Repair Parts List and the Special Tools and Equipment List. A "V" appearing in this column in lieu of a quantity indicates that no specific quantity is applicable, (e.g., shims, spacers, etc.).

B-4. Abbreviations

ay	assembly
cap	capacity
cd	cadmium
ck	countersunk
cres	corrosion resistant steel
dia	diameter
ea	each
fin	finish
h	high, height
hd	head
id	inside diameter
in	inch
int	internal
kw	Kilowatt
lb	pound
lg	long
mac	machined
max	maximum
NC	National Coarse Thread
o/a	overall
od	outside diameter
pan hd	panhead
pltd	plated
ru	rubber
S	steel
thd	thread
thk	thick
UNC	United National Coarse Thread
UNF	United National Fine Thread
u/w	used with
v	volt
w	wide
w/	with

Section II. REPAIR PARTS LIST

(1) ILLUSTRATION (a) FIG NO.	(1) ILLUSTRATION (b) ITEM NO.	(2) SMR CODE	(3) FEDERAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION / USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
1-1			1345-00-313-1398	9287573	19203	GROUP 01-MINE DISPERSING SUBSYSTEM, AIRCRAFT: M56		
		PAFFF	1095-00-360-5051	9287746	19203	0101-DISPENSER: (EMPTY) (packed in CNU-79/E container)		
B-1	1	PAFZZ	1325-00-183-5303	MS3314	96906	LUG, SUSPENSION: (1,000 lb class)-airborne equipment.	ea	2
B-1	2	PAFZZ	5935-00-257-7581	MS25043-14C	96906	COVER, ELECTRICAL CONNECTOR: metallic resistant to corrosion, 7/8-20 thd (int), 1-1/8 dia, 15/32 lg.	ea	1
B-1	4	PAFZZ	1325-00-123-8976	716574-1	18894	SCREW, STRUCTURAL: cross-recess pan-hd, S, cd-chromate-fin., No. 8-32NC x 3/8 (to attach fairing to center body).	ea	30
B-1	5	PAFZZ	1325-00-123-8997	716263-1	18894	SCREW, STRUCTURAL: flat head, S, cd-chromate No. 8-32NC x 1/2 (to attach fairing to center body).	ea	22
B-2	3	PAFZZ	5340-00-124-5282	716285	18894	PIN, QUICK RELEASE ASSEMBLY: S cd-pltd 3.4 in. grip lg, four locking elements, 1/4 in. dia (safe pin for intervalometer) w/flag.	ea	1
B-2	4	PAFZZ	5305-00-984-6198	MS35206-250	96906	SCREW, MACHINE: cross-recess pan-hd, S, cd-pltd, No. 8-32 UNC-2A x 1-1/4 (to mount intervalometer assembly).	ea	4
B-2	5	PAFZZ	5310-00-807-1466	MS21042-08	96906	NUT, SELF-LOCKING, HEXAGON: 3/16-32UNJC-3B (to mount intervalometer assembly).	ea	4
B-2	7	PAFZZ	1325-00-906-7953	9203528	19203	INTERVALOMETER ASSEMBLY:	ea	1
B-2	8	PAFZZ	1325-00-123-8975	716549	18894	MOUNT, RIGID (ALUMINUM): (to mount intervalometer) 3/8 dia, 5/16 in. length.	ea	4
B-2	9	PAFZZ	1325-00-123-8982	9280150	19203	INTERVALOMETER ADAPTER:	ea	1
B-3	3	PAFZZ	5305-00-993-0190	MS35206-214	96906	SCREW, MACHINE: cross-recess pan-hd, S, cd-chromate-fin., No. 4-40UNC-2A x 5/16 (to attach RADHAZ filter assembly to electrical connector mounting plate).	ea	4
B-3	4	PAFZZ	1325-00-915-6733	9203558	19203	FILTER ASSEMBLY, RADHAZ:	ay	1
B-3	5	PAFZZ	5305-00-989-7435	MS35207-264	96906	SCREW, MACHINE: cross-recess pan-hd, S, cd-chromate-fin., No. 10-32UNF-2A x 5/8 (to attach electrical connector mounting plate to dispenser).	ea	4

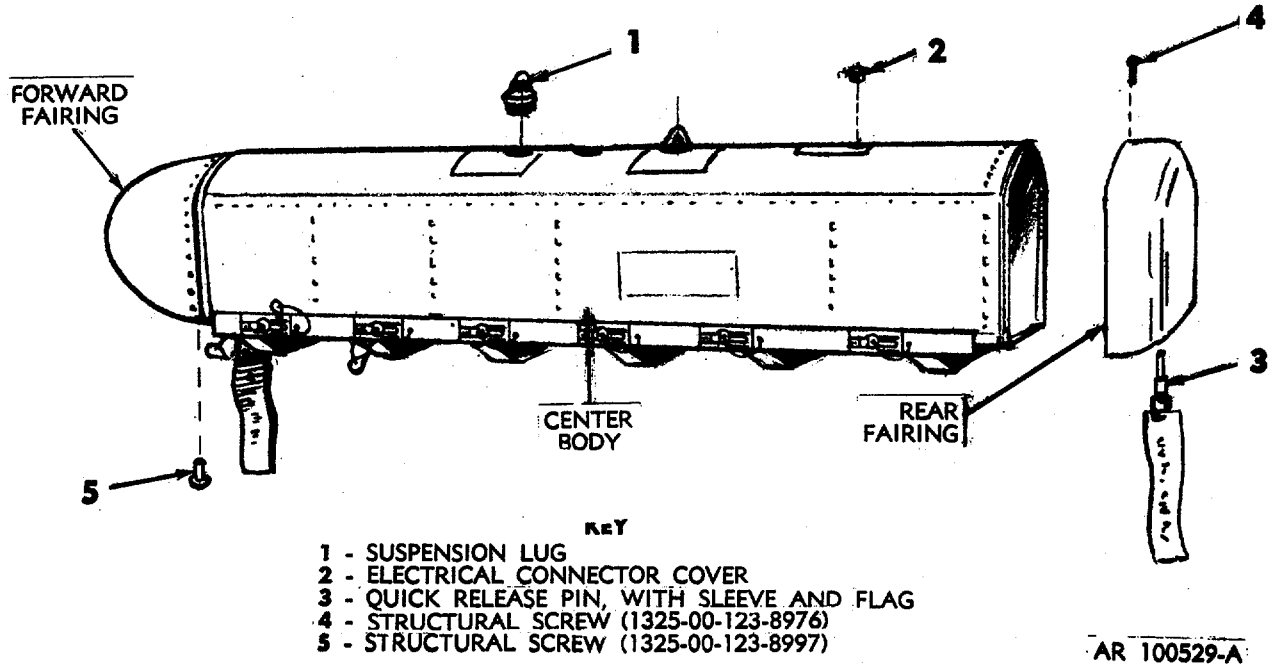


Figure B-1. Dispenser components.

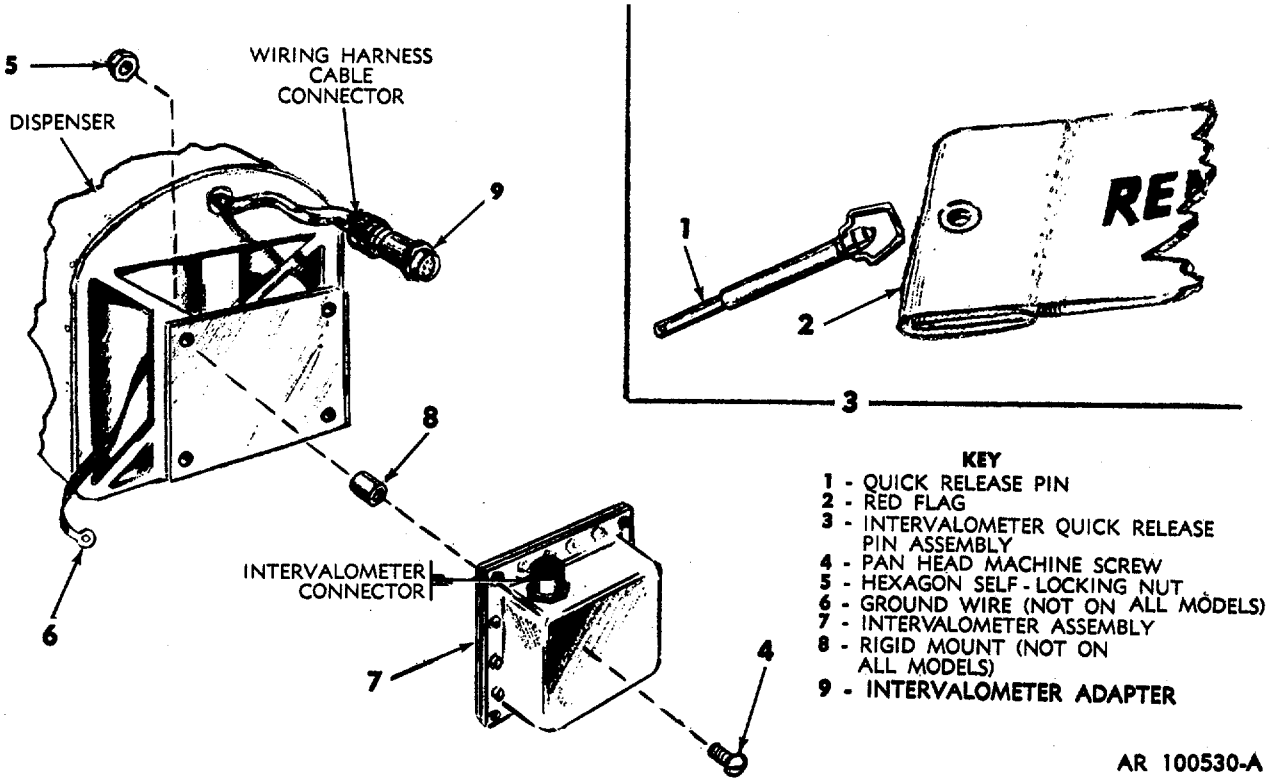


Figure B-2. Intervalometer assembly and related hardware.

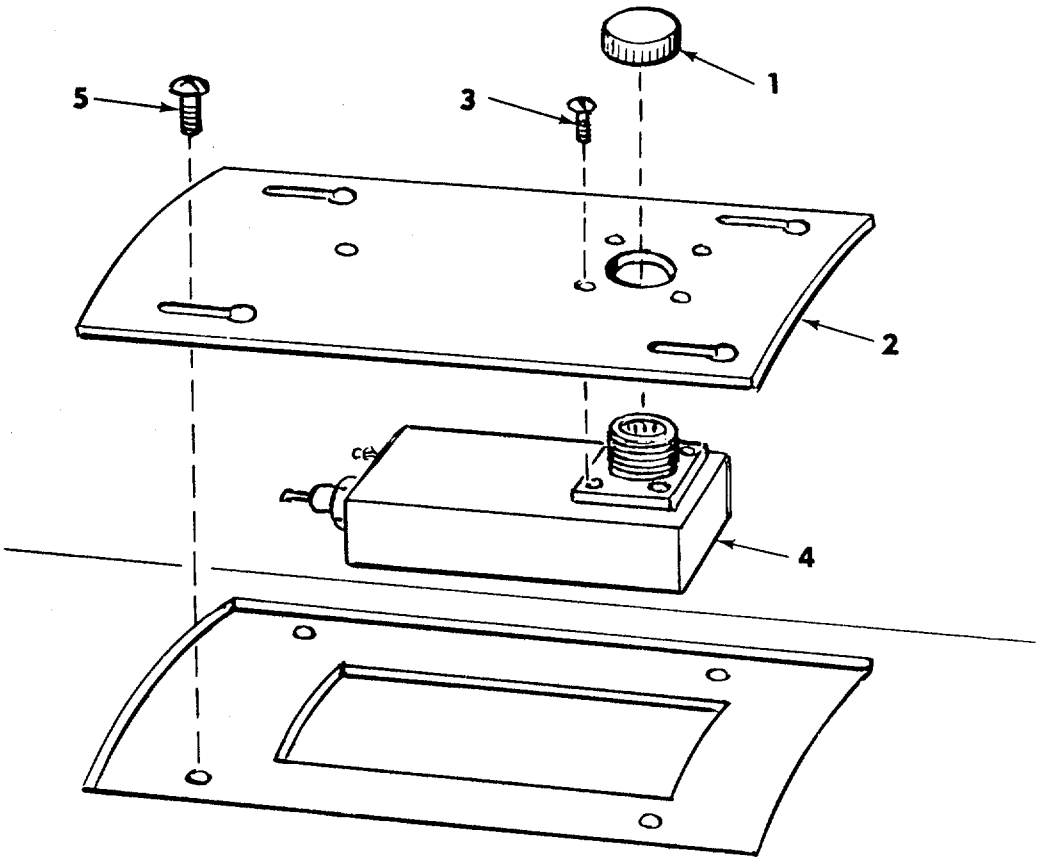


Figure B-3. RADHAZ filter assembly and related hardware.

(1) ILLUSTRATION (a) FIG NO.	(b) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
				9287631		0102-CANISTER MINE (LOADED)		
B-4	2	PAFZZ	5330-00-618-5361	MS28775-015	96906	PACKING, PREFORMED: 0.070 w, 0.551 id, 0.691 od (for mine battery closing plug seal).	ea	2
B-4	4	PAFZZ	6135-00-134-1337	9281115	19203	BATTERY, DRY: BA-1579(u)	ea	2
B-4	5	PAFZZ	5330-00-579-7916	MS28775-115	96906	PACKING, PREFORMED: 0.103w, 0.674 id, 0.880 od (for ejection charge to mine canister seal).	ea	1
B-4	6	PAFZZ	1345-00-143-7613	9287785	19203	CHARGE, MINE EJECTION: M198	ea	1
5-8		PAFZZ	1343-01-033-4536	9287590	19203	CAP, BATTERY, ASSEMBLY	ea	2
		XAFFF		9288629		0103-PALLET		
B-5	1	PAFZZ	5305-00-068-0513	MS90726-6	96906	SCREW, CAP, HEXAGON HEAD: S, grade 5 cd-pltd, 1/4UNF-2A x 3/4 (to attach web strap handle and red flag to pallet).	ea	1
B-5	2	PAFZZ	1325-00-123-8973	716279	18894	FLAG, RED:	ea	1
B-5	3	PAFZZ	1325-00-123-8969	716274	18894	HANDLE, PALLET (WHITE):	ea	2
B-5	4	PAFZZ	5305-00-068-0505	MS90726-5	96906	SCREW, CAP, HEXAGON HEAD: S, cd-pltd, 1/4UNF-2A x 5.8 (to attach web strap handles to pallet).	ea	3
B-5	5	PAFZZ	5320-00-117-6951	MS20426AD4-6	96906	RIVET, 100°CSK HEAD: 1/8 dia 3/8 lg (to attach pin and lanyard assembly to pallet).	ea	12
B-5	7	PAFZZ	1325-00-123-9241	9298873	19203	PIN LOCK AND LANYARD ASSEMBLY: (to attach pallet to dispenser).	ay	2
B-5	8	PAFZZ	1325-00-123-9246	9287745	19203	PIN AND LANYARD ASSEMBLY (to attach pallet to dispenser).	ay	12
B-5	9	PAFZZ	5305-00-719-5003	MS51959-84	96906	SCREW, MACHINE: flat-ck-hd, cres, 1/4-20UNC x 11/4 lg (to attach plywood to steel pallet).	ea	4
B-5	10	PAFZZ	5310-00-159-1577	MS51988-3	96906	NUT, SELF-LOCKING, EXTENDED WASHER, HEXAGON: cd-pltd w/chromate 1/4-20 UNC-2B, 0.438 mac, w, 0.300 h. (used with screw machine MS51959-84).	ea	4
B-5	11	PAFZZ	5305-00-142-4893	MS35495-108	96906	SCREW, WOOD: S, rdhd No. 12, 0.62 in. lg.	ea	2
B-5	12	PAFZZ	1325-01-013-1050	9298872	19203	BLOCK, RETAINING AND LANYARD ASSEMBLY:	ay	2
1-5			1345-00-143-6561	9272787	19203	0104-RELOAD KIT FOR MINE DISPERSING SUBSYSTEM, AIRCRAFT: M56 CANISTER, MINE (LOADED) (Refer to Group 0102) SHIPPING AND STORAGE CONTAINER, MINE CANISTER: M602 (Refer to Group 03)		
		XBFFF	8140-00-867-1130	8887105	19203	GROUP 02-SHIPPING AND STORAGE CONTAINERS, BOMB DISPENSER		
			8140-01-022-3256	9298881	19203	CNU-79/E (EMPTY)		
B-6	1	PAFZZ	5340-00-902-0426	MS51938-6	96906	SEAL, ANTIPILFERAGE: lead 0.500 dia	ea	2
B-6	3	PAFZZ	5330-00-908-5953	9204060, Rev. C	19203	GASKET: ru, 0.53 dia, 248 in. inside circum (to seal cover and base assemblies) (shortcont.).	ea	1
B-6	4	PAF'Q7	6850-00-264-6572	MIL-D-3464	81349	DESICCANT, ACTIVATED: 16-unit bag.	bg	5

(1) ILLUSTRATION (a) FIG NO.	(b) ITEM NO.	(2) SMR CODE	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
B-6 (B-10)	6 (1)	PAFZZ	5310-00-768-0318	MS51967-14	96906	NUT, PLAIN, HEXAGON: S, cd-pltd, 1/2-13UNC-2B, 3/4 w, 7/16 h (26 u/w bolt 8140-00-908-5954 and 8 u/w screw 5305-00-071-2079).	ea	34
B-6 (B-10)	7 (2)	PAFZZ	5310-00-584-5272	MS35338-48	96906	WASHER, LOCK SPRING: cd-pltd, 0.523 max id, 0.873 od, 0.125 thk, 26 u/w bolt 8140-00-908-5954 and 8 u/u screw 5305-00-071-2709).	ea	34
B-6	8	PAFZZ	8140-00-908-5954	9204062	19203	BOLT: S, bar, 1/2-13UNC x 2 (T-bolt) (to latch cover assembly to base assembly).	ea	26
B-6	9	PAFZZ	1325-00-944-1701	9204061	19203	SPACER: S, cd-pltd, 0.56 id, 1-1/8 od, 0.31 thk (u/w bolt 8140-00-908-5954);.	ea	26
B-6	10	PAFZZ	6685-00-079-3359	8860990-2	19203	INDICATOR, HUMIDITY, PLUG:	ea	1
B-6	3	PAFZZ	5330-01-012-2753	9298880		GASKET: ru, 0.53 dia, 272 in. inside circum (long cont.)	ea	1
B-6	13	PAFZZ	6685-00-052-1865	8881094	19203	INDICATOR, HUMIDITY, CARD	ea	1

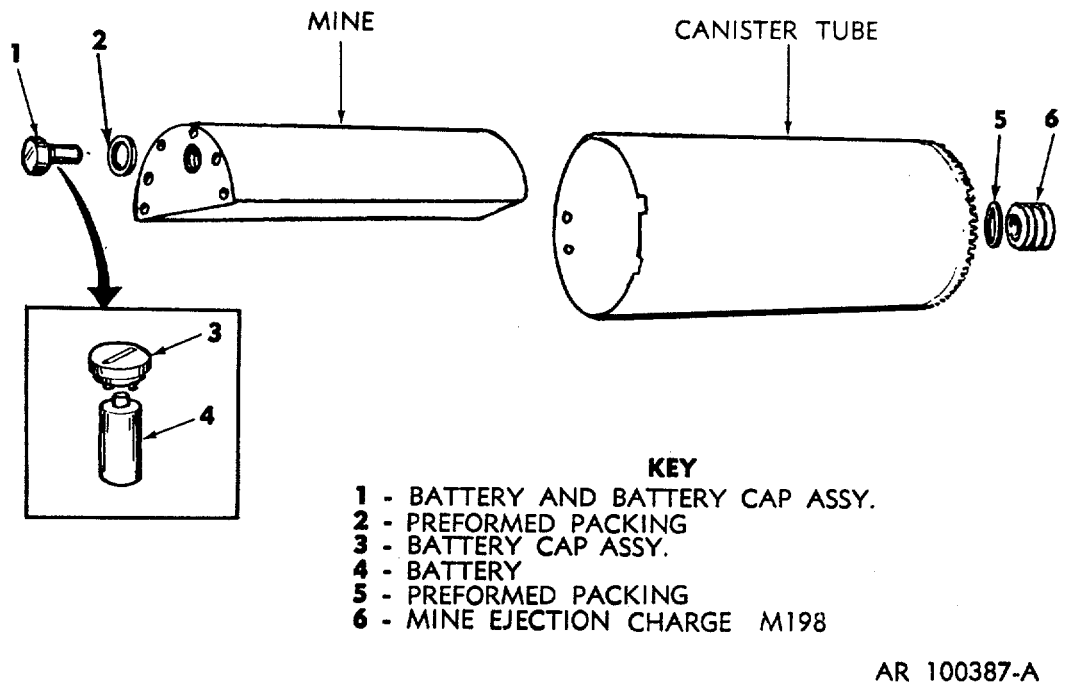


Figure B-4. Repair parts of mine canister.

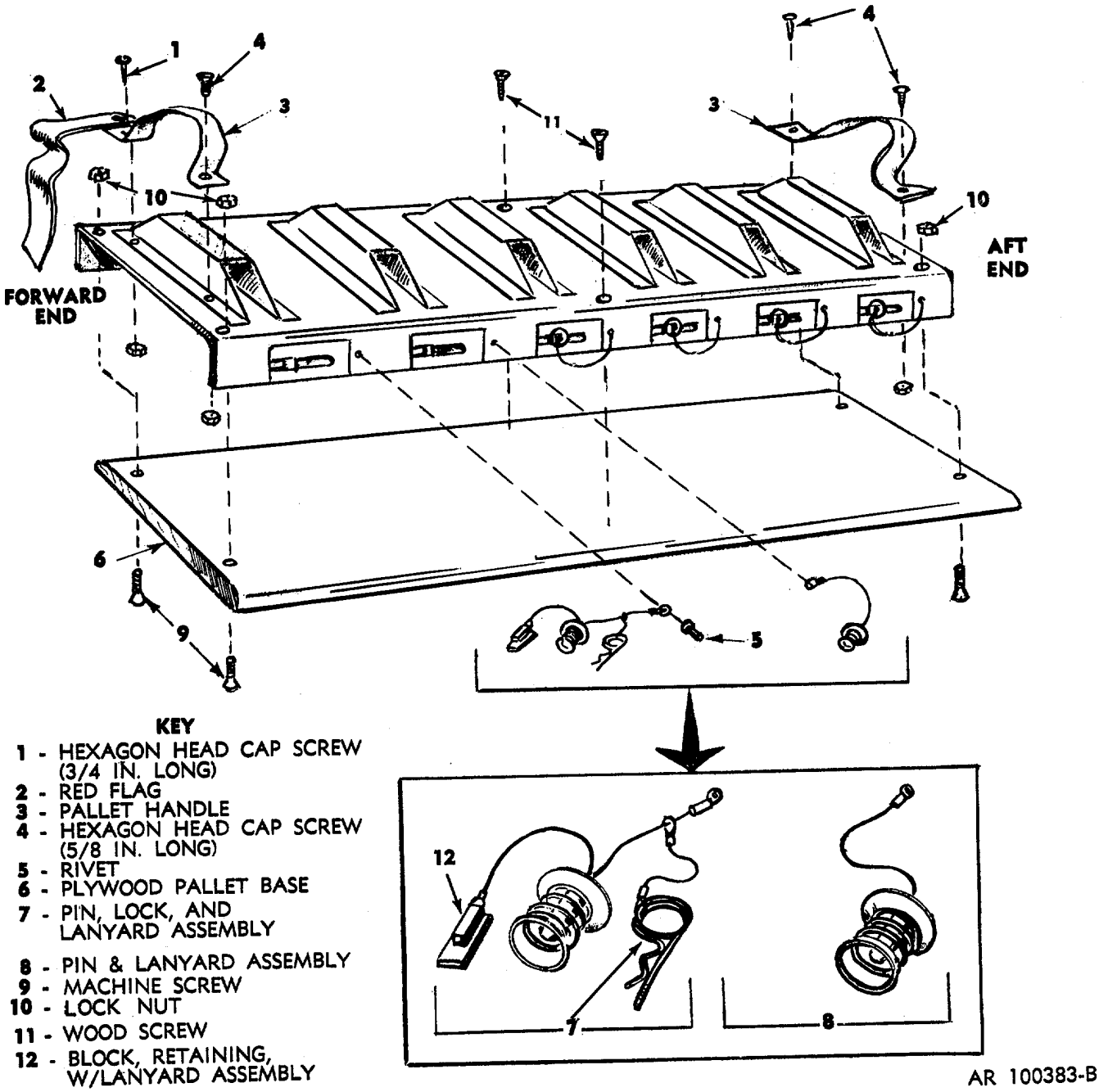


Figure B-5. Repair parts of pallet.

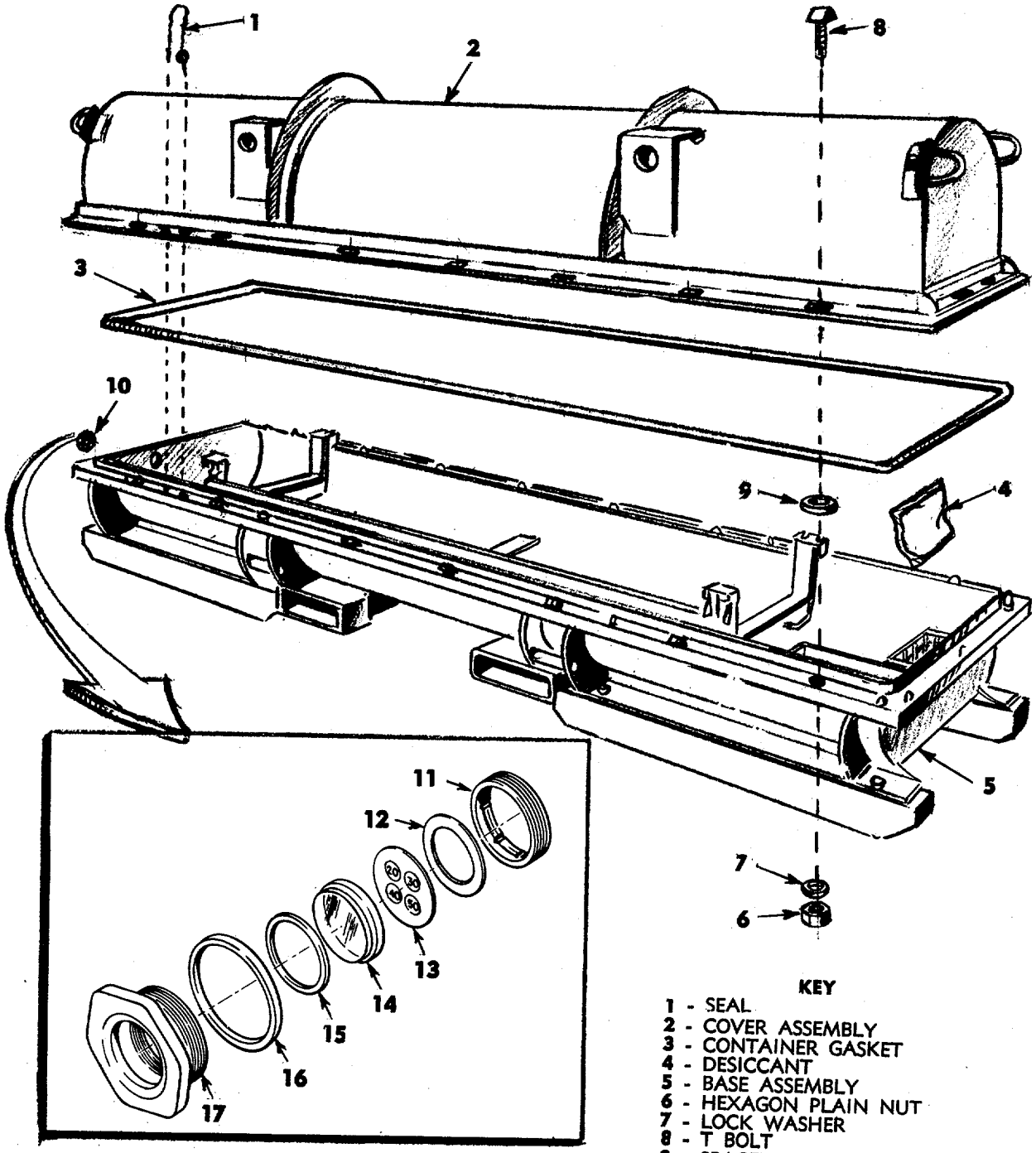


Figure B-6. Repair parts of shipping and storage container CNU-79/E.

(1) ILLUSTRATION (a) FIG NO.	(1) ILLUSTRATION (b) ITEM NO.	(2) SMR CODE	(3) FEDERAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION / USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 02-SHIPPING AND STORAGE CONTAINERS, BOMB DISPENSER: CNU-79/E (EMPTY)-Continued		
B-7	1	PAFZZ	5310-00-732-0558	MS51967-8	96906	NUT, PLAIN, HEXAGON: S, cd-pltd, 3/8-16UNC-2B, 9/16 w, 21/64 h (u/w screw 5305-00-269-3219).	ea	2
B-7	2	PAFZZ	5310-00-637-9541	MS35338-46	96906	WASHER, LOCK-SPRING, HELICAL: S, cd-pltd, 0.382 id, 0.683 max od (u/w screw 5305-00-269-3219).	ea	2
B-7	3	PAFZZ	5305-00-269-3219	MS90725-69	96906	SCREW, CAP, HEXAGON HEAD: S, cd-pltd, 3/8-16UNC-2A x 2-3/4 (to attach late-model strap assembly to suspension frame).	ea	2
B-8	1	PAFZZ	5310-00-208-4998	9205779	19203	NUT, SELF-LOCKING, BARREL: nylon insert, S, cd-pltd, ½-20UNF-3B, 0.703 o/a h, (u/w screw 5305-00-719-5003).	ea	8
B-8	2	PAFZZ	5305-00-719-5241	MS90727-118	96906	SCREW, CAP, HEXAGON HEAD: alloy-S, cd-pltd, ½-20UNF-2A x 2-3/4 (to bolt down early-model clamp assembly).	ea	8
B-8	3	PAFZZ	8140-00-012-2702	9204056	19203	CLAMP ASSEMBLY: early model.	ea	2
B-8	4	PAFZZ	8140-00-137-7740	9211554-1	19203	STRAP ASSEMBLY: w/o cushion.	ea	2
B-9	1	PAFZZ	5305-00-060-1165	MS24668-32	96906	SCREW, CAP, SOCKET HEAD: ck, alloy-S, cd-pltd, ½-20UNF-3A x 3/4 (to attach suspension frame to resilient mount).	ea	12
B-9	3	PAFZZ	5305-00-269-3236	MS90727-60	96906	SCREW, CAP, HEXAGON HEAD: alloy-S, cd-pltd, 3/8-24UNF-2A x 1 (to attach resilient mount to base assembly).	ea	16
B-9	4	PAFZZ	5310-00-080-6004	MS27183-14	96906	WASHER, FLAT: S, cd-pltd, 0.406 id, 0.812 od, 0.065 thk (u/w screw 5305-00-269-3236).	ea	16
B-9	5	PAFZZ	5310-00-982-4908	MS21405-6	96906	NUT, SELF-LOCKING, HEXAGON: S, cd-pltd, 0.3750-24UNJF-3B, 0.550 w, 0.394 thk (u/w screw 5305-00-269-3236).	ea	16
B-9	6	PAFZZ	5340-00-908-5955	9204063	19203	MOUNT, RESILIENT:	ea	4
B-10	4	PAFZZ	5310-00-809-3079	MS27183-19	96906	WASHER, FLAT: S, cd-pltd, 9/16 id, 1-3/8 od, 0.109 thk (u/w screw 5305-00-071-2079).	ea	8
B-10	3	PAFZZ	5305-00-071-2079	MS90728-123	96906	SCREW, CAP, HEXAGON HEAD: alloy-S, cd-pltd, %/-13UNC-2A x 4 (to attach wood runner to base assembly).	ea	8

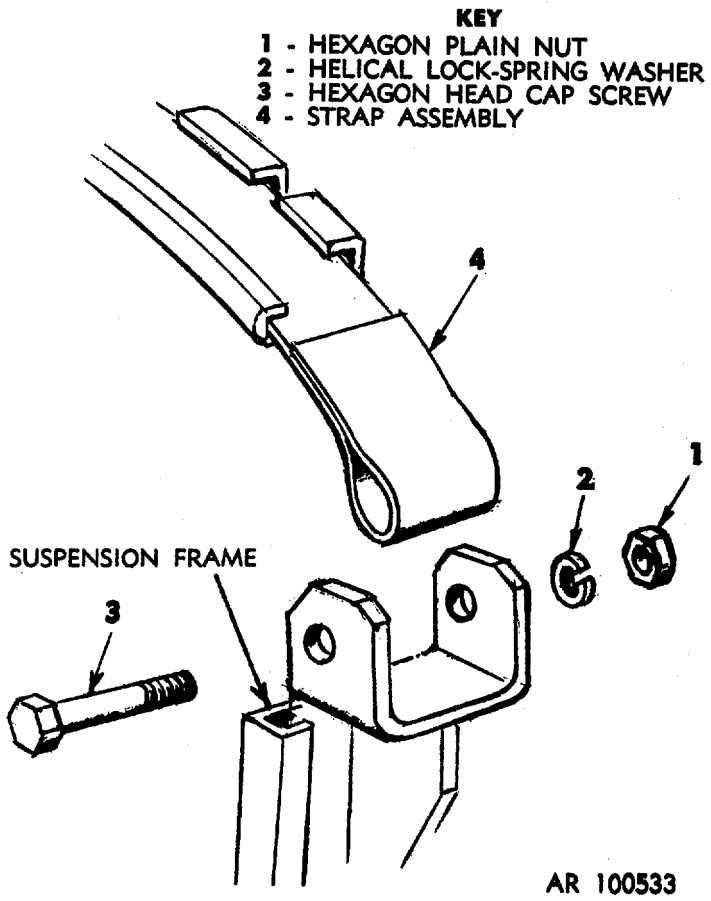


Figure B-7. Late-model strap assembly and related hardware (CNU-79/E).

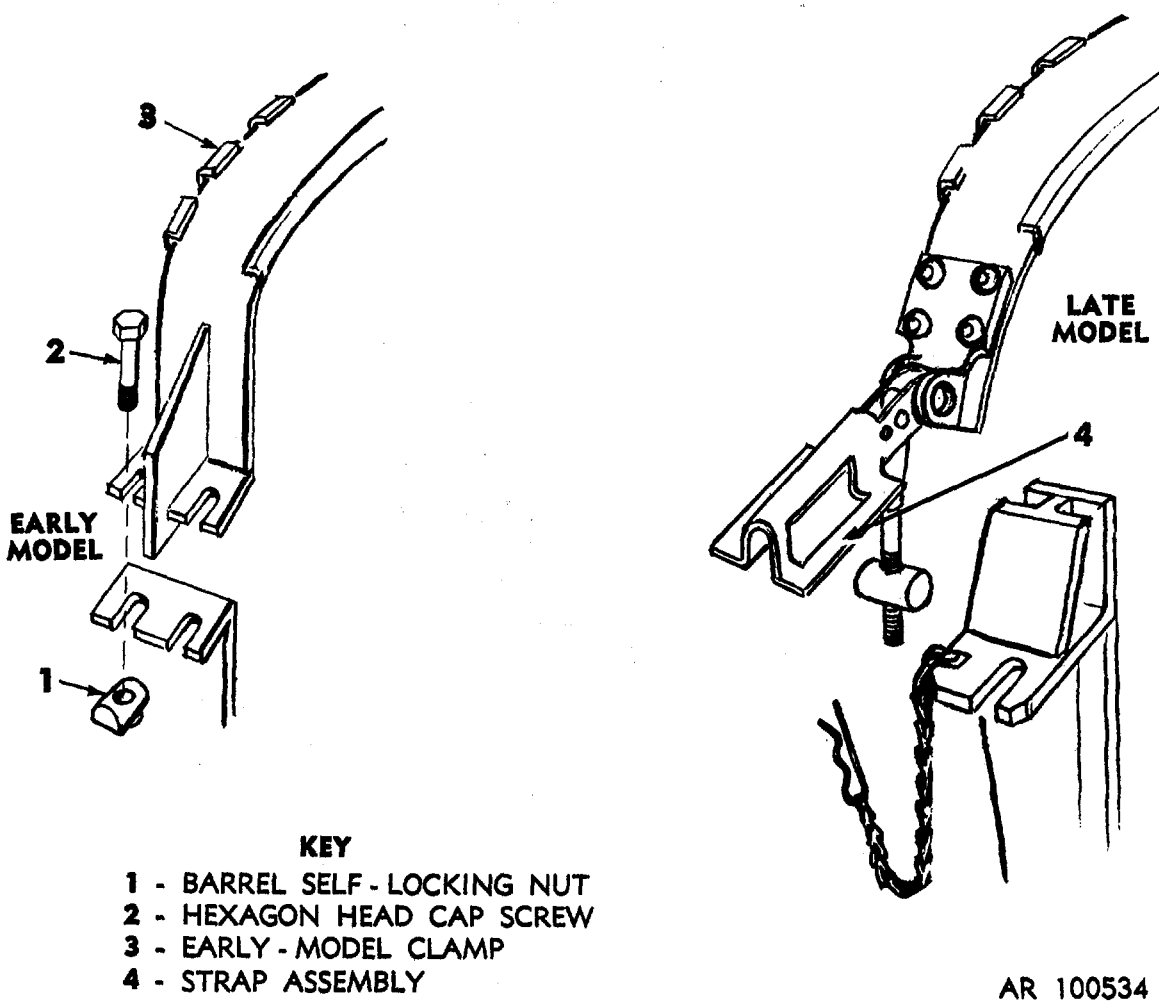


Figure B-8. Early-model clamp assembly and late-model strap assembly and related hardware (CNU-79/E).

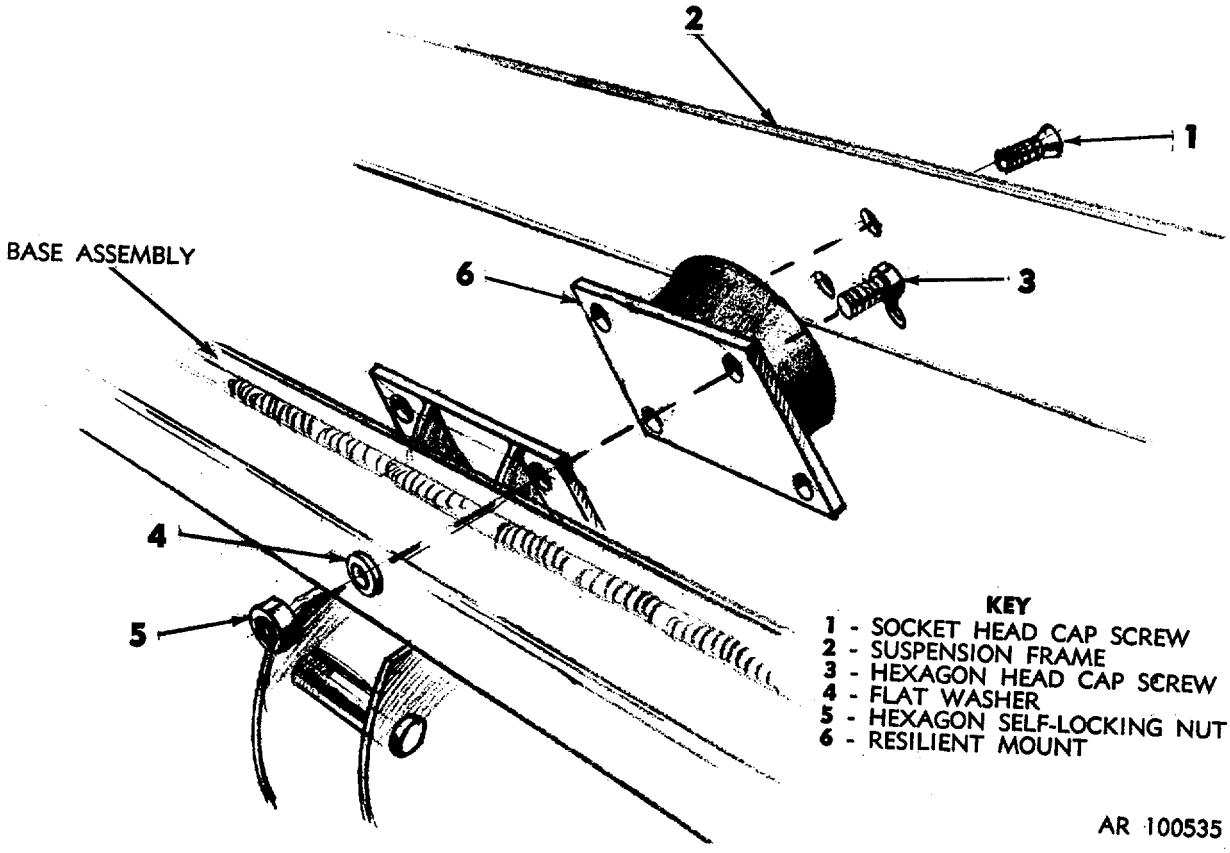


Figure B-9. Resilient mount and related hardware (CNU-79/E).

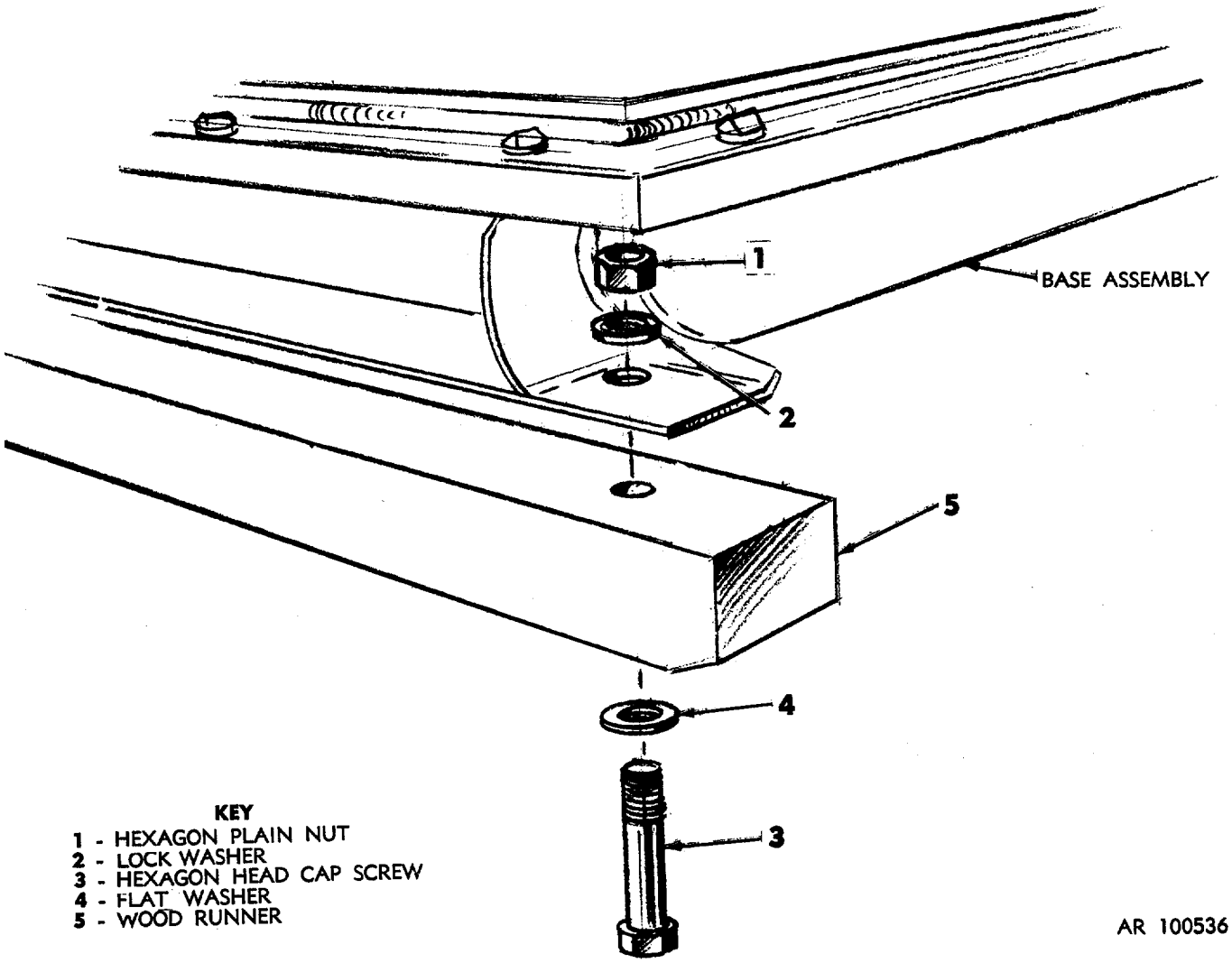


Figure B-10. Wood runner and related hardware (CNU-79/E).

(1) ILLUSTRATION (a) FIG NO.	(b) ITEM NO.	(2) SMR CODE	(3) FEDERAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
B-11		XBFFF	8140-00-111-2982	9268991		GROUP 03-SHIPPING AND STORAGE CONTAINER, MINE CANISTER: M602 (EMPTY) (PART OF RELOAD KIT)		
B-11	1	PAFZZ	5340-00-491-7632	MS51938-5	96906	SEAL, ANTIPILFERAGE: metallic wire	ea	2
B-11	3	PAFZZ	5330-00-123-9304	9269046	19203	GASKET: container (to seal cover and base assemblies).	ea	1
B-11	4	PAFZZ	6850-00-264-6571	MIL-D-3464	81349	DESICCANT, ACTIVATED: 8-unit bag.	bg	10
B-11	7	PAFZZ	5310-00-726-2212	9269051	19203	WASHER, RETAINER: (u/w stud 9269050)	ea	6
B-11	8	PAFZZ	5325-00-507-7976	9269050	19203	STUD ASSEMBLY, TURNLOCK FASTENER: (to secure channel to base assembly).	ea	6
B-12	1	PAFZZ	5310-00-732-0558	MS51967-8	96906	HEAD, PLAIN, HEXAGON HEAD: S, cd-pltd, 3/8-16UNC-2B, 9/16 w, 21/64 h u/w bolt 9204158).	ea	14
B-12	2	PAFZZ	5310-00-637-9541	MS35338-46	96906	WASHER, LOCK: spring cd-pltd, 3/8 id, 11/16 od, 0.099 thk (u/w bot 9204158).	ea	14
B-12	3	PAFZZ	5306-00-124-5281	9204158	19203	BOLT, TEE HEAD: S, cd-pltd, 3/8-16 UNC-2A x 1.365 (to attach cover assembly to base assembly).	ea	14
B-12	4	PAFZZ	4820-00-122.1121	9220106-1	19203	VALVE, PRESSURE, EQUALIZING:	ea	1
B-13		PAFZZ	6685-00-079-3359	8860990-2	19203	INDICATOR, HUMIDITY, PLUG:	ea	1
B-13	3	PAFZZ	6685-00-052-1865	8881094	19203	INDICATOR HUMIDITY CARD:	ea	1
B-14	1	PAFZZ	5305-00-269-2801	MS90726-58	96906	SCREW, CAP, HEXAGON HEAD: 3/8-24UNF x 3/4 (to attach desiccant door assembly (including door gasket to base assembly).	ea	4
B-14	4	PAFZZ	5330-00-123-8994	9269045	19203	GASKET, DOOR:	ea	1
B-14	5	PAFZZ	5310-00-768-0318	MS51967-14	96906	NUT, PLAIN, HEXAGON HEAD: S, cd-pltd M2-13UNC-2B, 3/4 w, 7/16 h (u/w screw MS90725-124).	ea	8
B-14	6	PAFZZ	5310-00-584-5272	MS35338-48	96906	WASHER, LOCK: S, cd-chromate-fin, 0.523 max id, 0.873 od, 0.125 thk (u/w screw MS90725-124).	ea	8
B-14	7	PAFZZ	5305-00-071-1777	MS90725-124	96906	SCREW, CAP, HEXAGON HEAD: ½-13 UNC x 4-1/4 (to attach skid to base assembly).	ea	8

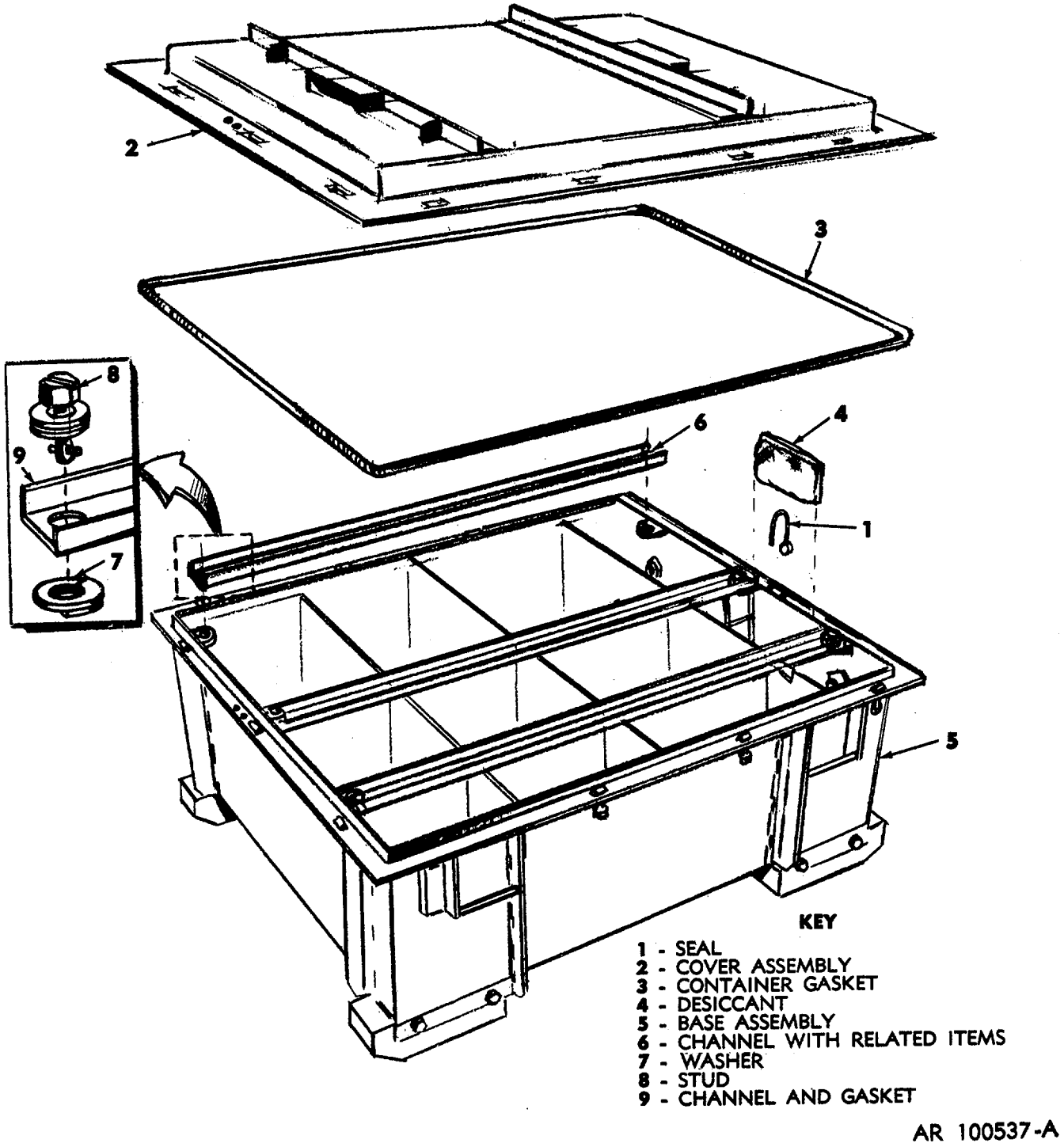
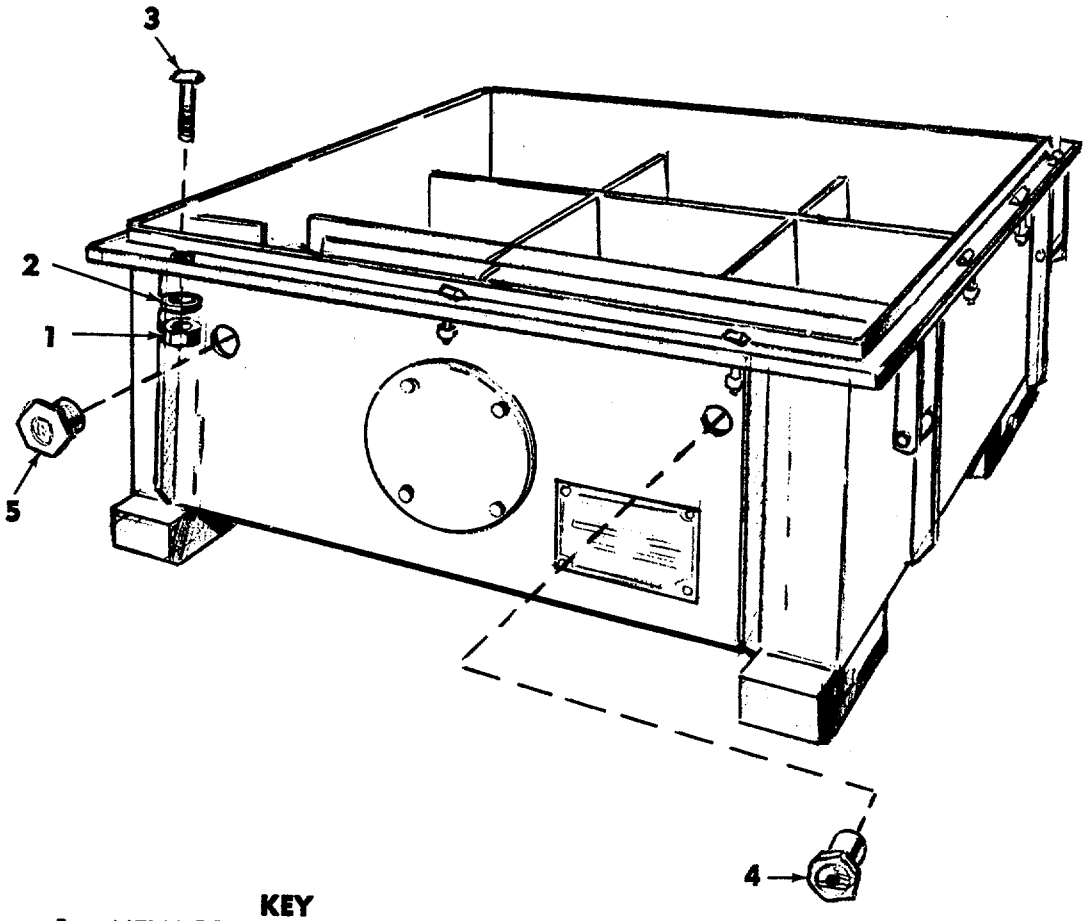


Figure B-11. Shipping and storage container M602-cover assembly, etc., removed.



KEY

1 - HEXAGON PLAIN NUT
2 - LOCK WASHER
3 - TEE BOLT
4 - EQUALIZING PRESSURE VALVE (MINUS NUT WASHER)
5 - PLUG HUMIDITY INDICATOR (MINUS HEXAGON PLAIN NUT AND LOCK WASHER)

AR 100538-A

Figure B-12. Shipping and storage container M602-tee head bolt, etc., removed.

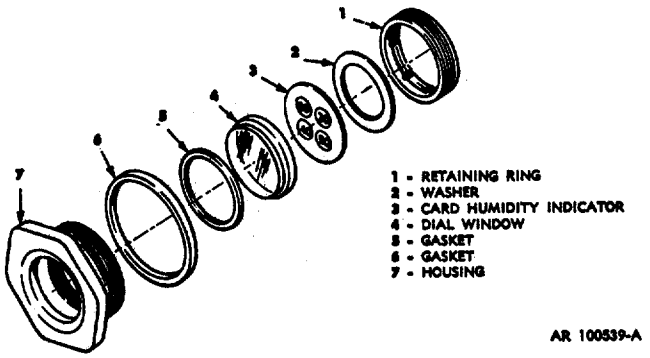


Figure B-13. Plug humidity indicator 8860990-2-exploded view (M602).

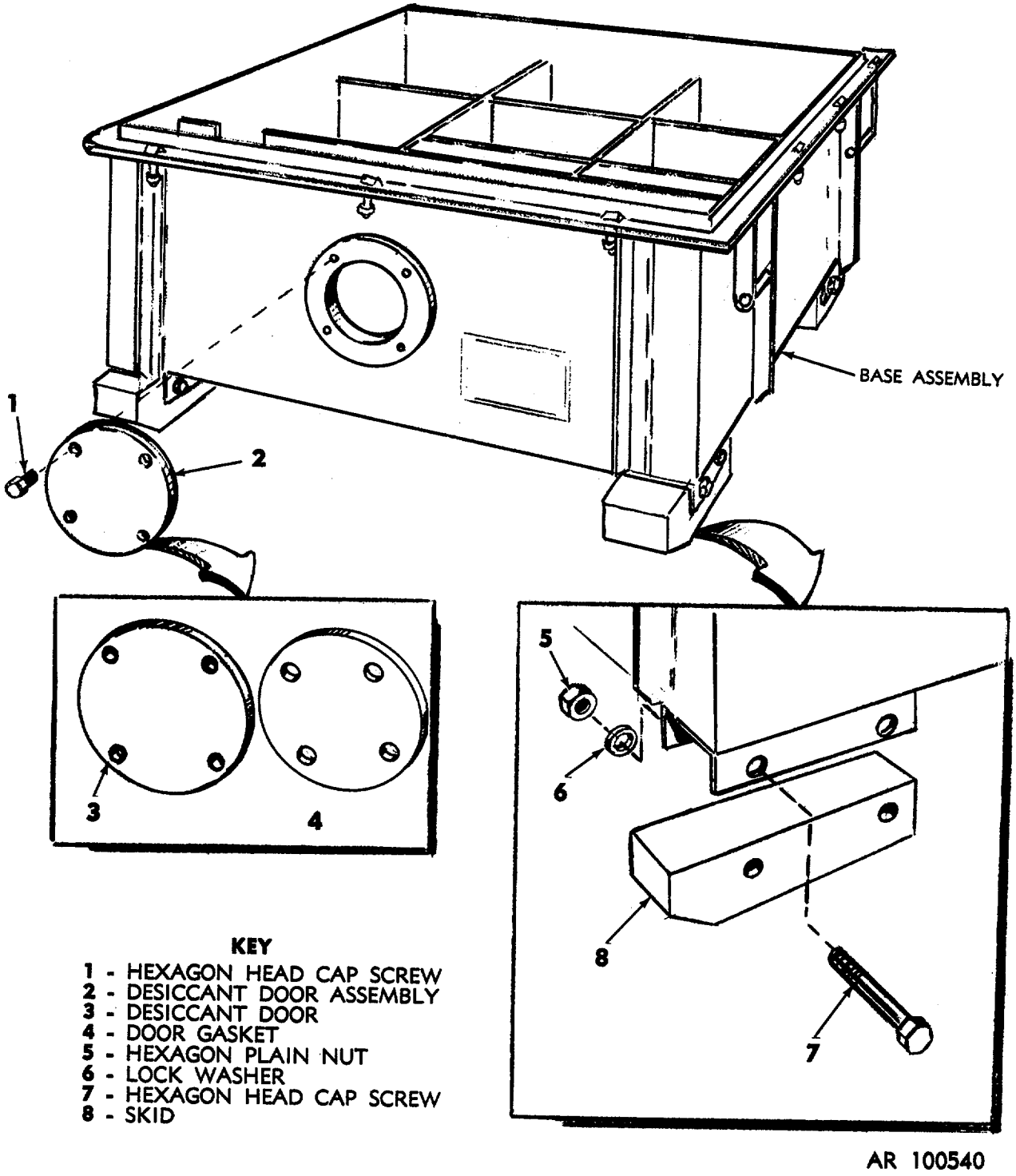
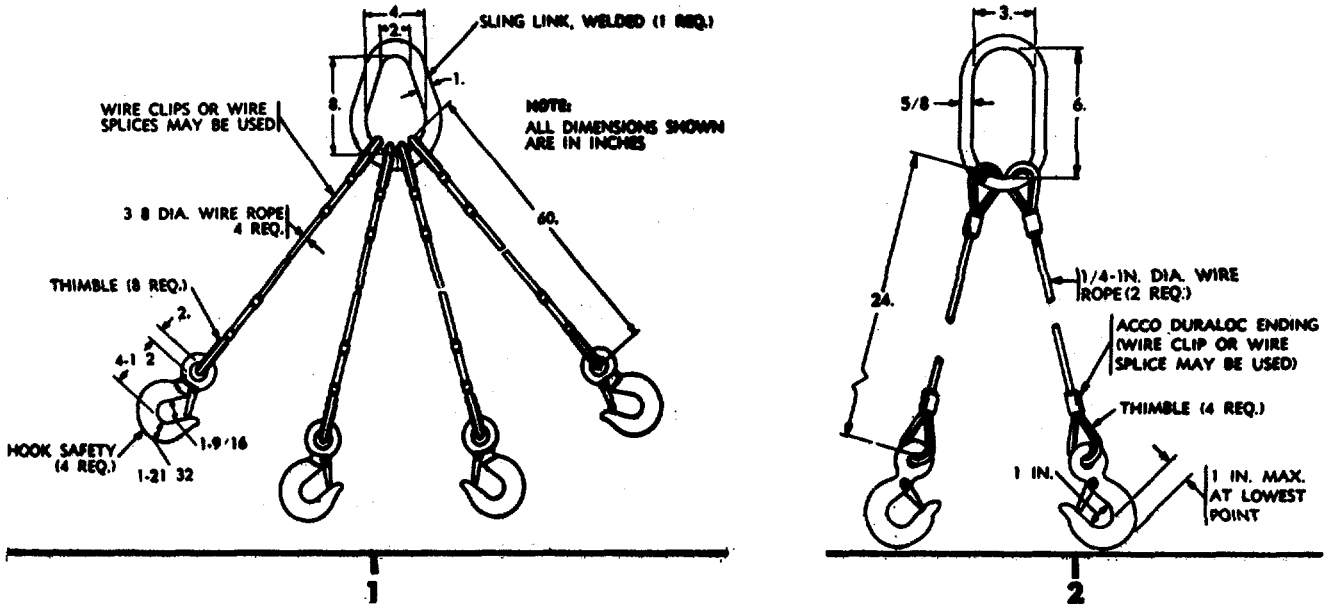


Figure B-14. Shipping and storage container M602-door gasket, etc., removed.

Section III. SPECIAL TOOLS AND EQUIPMENT LIST

(1) ILLUSTRATION (a) FIG NO.	(1) ILLUSTRATION (b) ITEM NO.	(2) SMR CODE	(3) FEDERAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION / USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
		PEFFF	5180-00-143-4107	9287581		GROUP 04-KIT, TOOL, MAINTENANCE		
B-15	1	PAFFF	4925-00-873-4452	8845195	19203	SLING, MULTIPLE LEG: four leg (H4191)	ea	1
B-15	2	PAFFF	1398-00-763-0104	8889417	19203	SLING, MULTIPLE TWO LEG BRIDLE:	ea	2
-	--	PAFEZ	4925-00-370-3566	9280148	19203	CALIBRATION PLUG:	ea	1
		PAFFF	6625-00-999-6282	Model AN/	55026	MULTIMETER (FOR BATTERY WELL TEST)	ea	1
-	--	PAFZZ	6135-00-120-1030	URM105C		BATTERY, CARBON-ZINC, 1.5v	ea	2
		PAFZZ	6135-00-160-7159			BATTERY, CARBON-ZINC, 22.5v	ea	1
B-16	1	PAFFZ	1345-00-370-3574			CANISTER REMOVAL AND REPLACEMENT TOOL (DISPENSER):	ea	1
B-16	2	PAFFZ	1345-00-370-3589	9279985	19203	CANISTER REMOVAL TOOL (RELOAD KIT):	ea	1
B-16	3	PAFFZ	1345-00-434-8865	9287771	19203	CANISTER REMOVAL TOOL ASSEMBLY:	ea	1
B-16	4	PAFFZ	1345-00-370-3560	9287839	19203	WRENCH, PLUG ASSEMBLY:	ea	1
B-16	5	PAFFZ	1325-00-123-9001	9279987	19203	DEPRESSOR, LOCKING SPRING	ea	1
B-16	6	PAFZZ	1345-00-610-1313	9294446	19203	TIP; DEPRESSOR:	ea	1
B-16	7	PAFZZ	1325-01-032-6053	9294446-3	19203	DISPENSER CONNECTOR ADJUSTMENT TOOL	ea	1
				9296852	19203			



KEY
1 - MULTIPLE LEG SLING
2 - MULTIPLE TWO-LEG BRIDLE SLING

AR 100541-A

Figure B-15. Material handling equipment-slings.

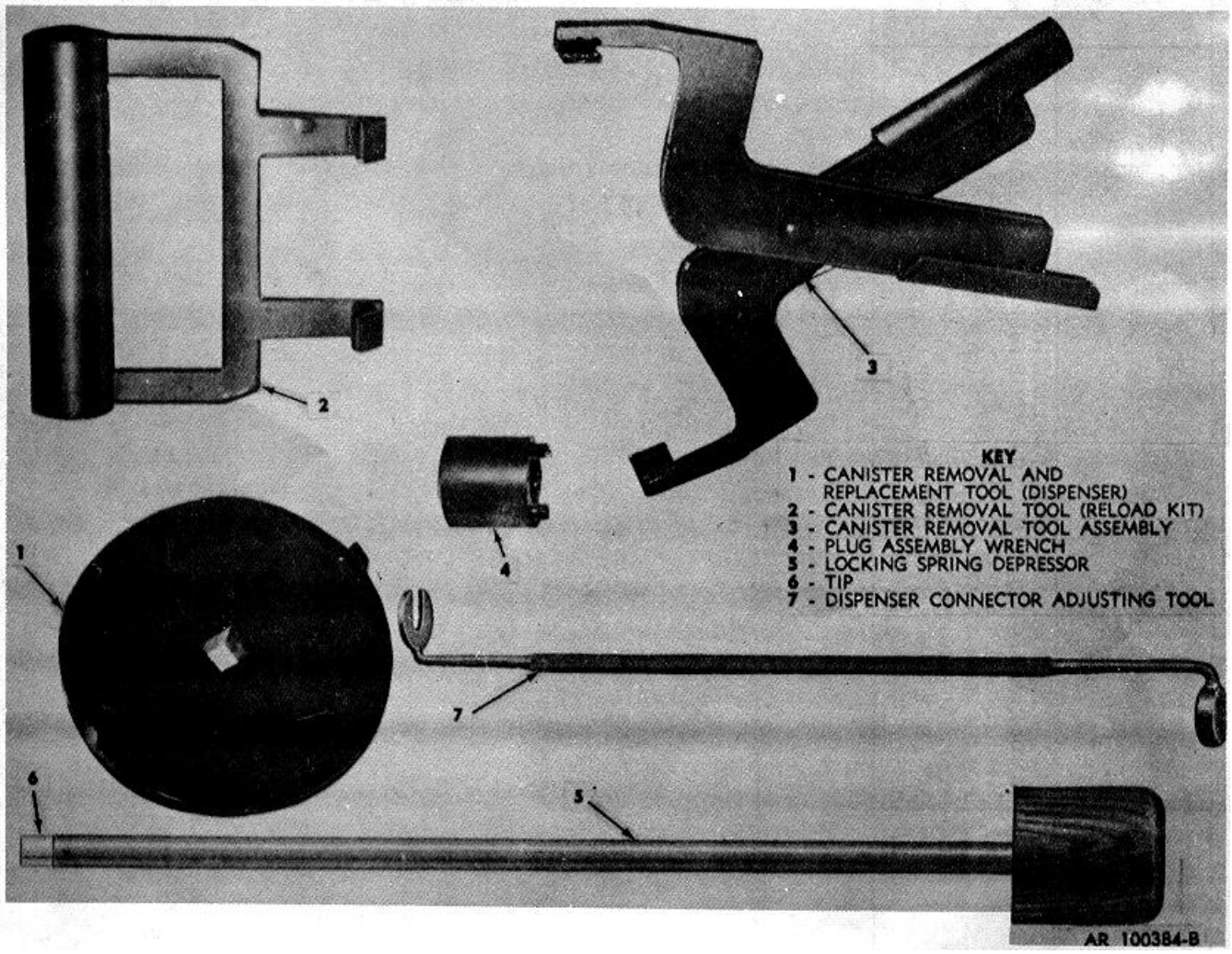


Figure B-16. Special tools.

(1) ILLUSTRATION (a) FIG NO.	(1) ILLUSTRATION (b) ITEM NO.	(2) SMR CODE	(3) FEDERAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION / USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 05-TEST EQUIPMENT		
B-17	1	PAFFF	4925-00-339-1059	9280146	19203	TEST SET, ELECTRICAL CIRCUIT, BOMB DISPENSER: A/E 24T-80.	ea	1
B-17	4	PAFZZ	6240-00-155-7836	MS25237-327	96906	LAMP, INCANDESCENT:	ea	4
B-17	6	PAFFF	5920-00-655-1154	MIL-F-19207	81849	FUSEHOLDER, EXTRACTOR POST: ¼ x 1-1¼/4, FHL-18G.	ea	2
B-17	7	PAFZZ	5920-00-228-7882	MIL-F-15160-02	81349	FUSE CARTRIGE: F02-B-125v-2A	ea	2
B-18	1	PAFFF	4925-00-915-5735	9209981	19203	TEST SET, ELECTRICAL CIRCUIT, BOMB DISPENSER: A/E 24T-79.	ea	1
B-19		PAFFF	6625-00-134-1338	9280151	19203	TEST SET, BATTERY	ea	1

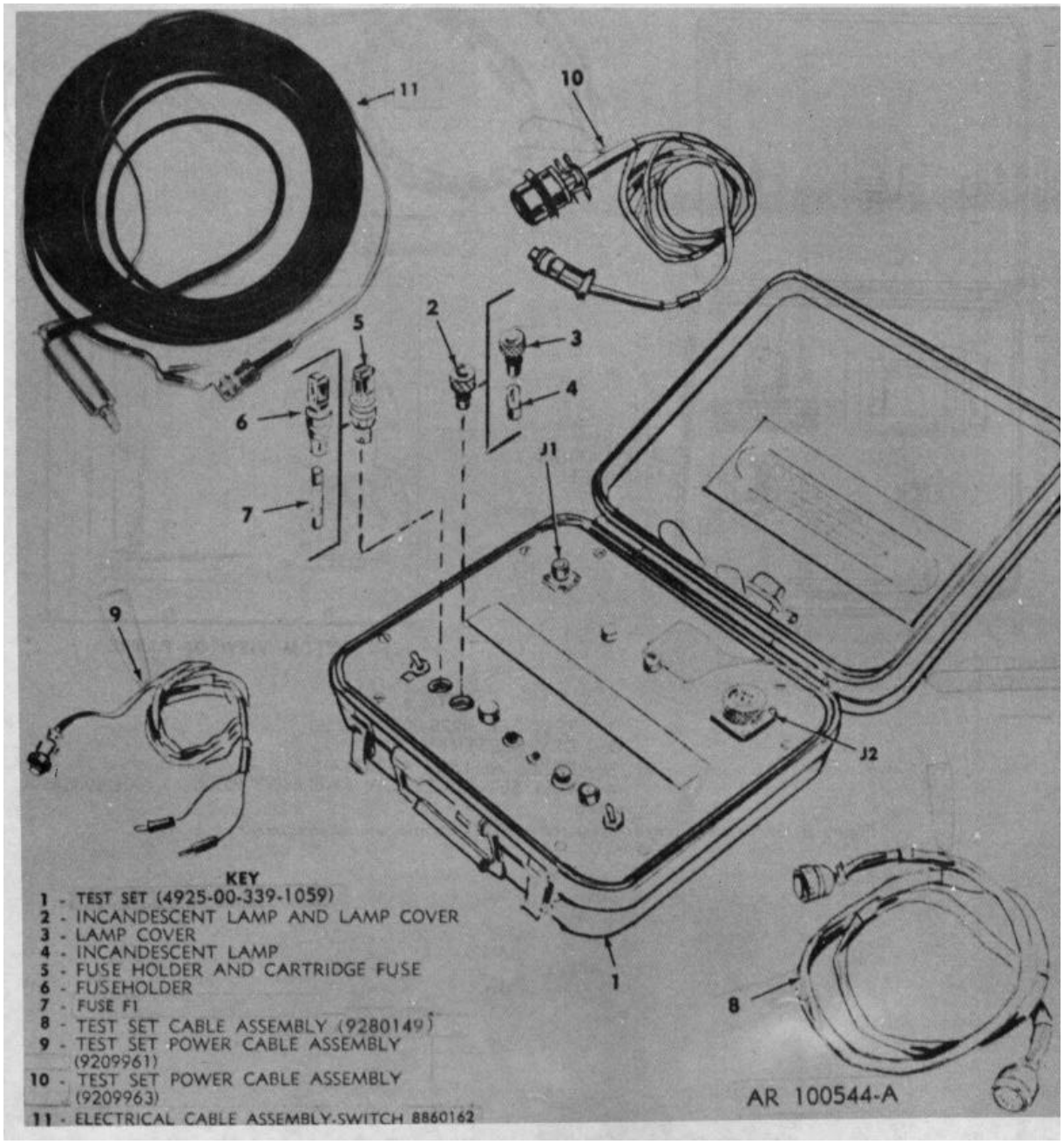


Figure B-17. Test equipment-test set A/E 24T-80 and related equipment.

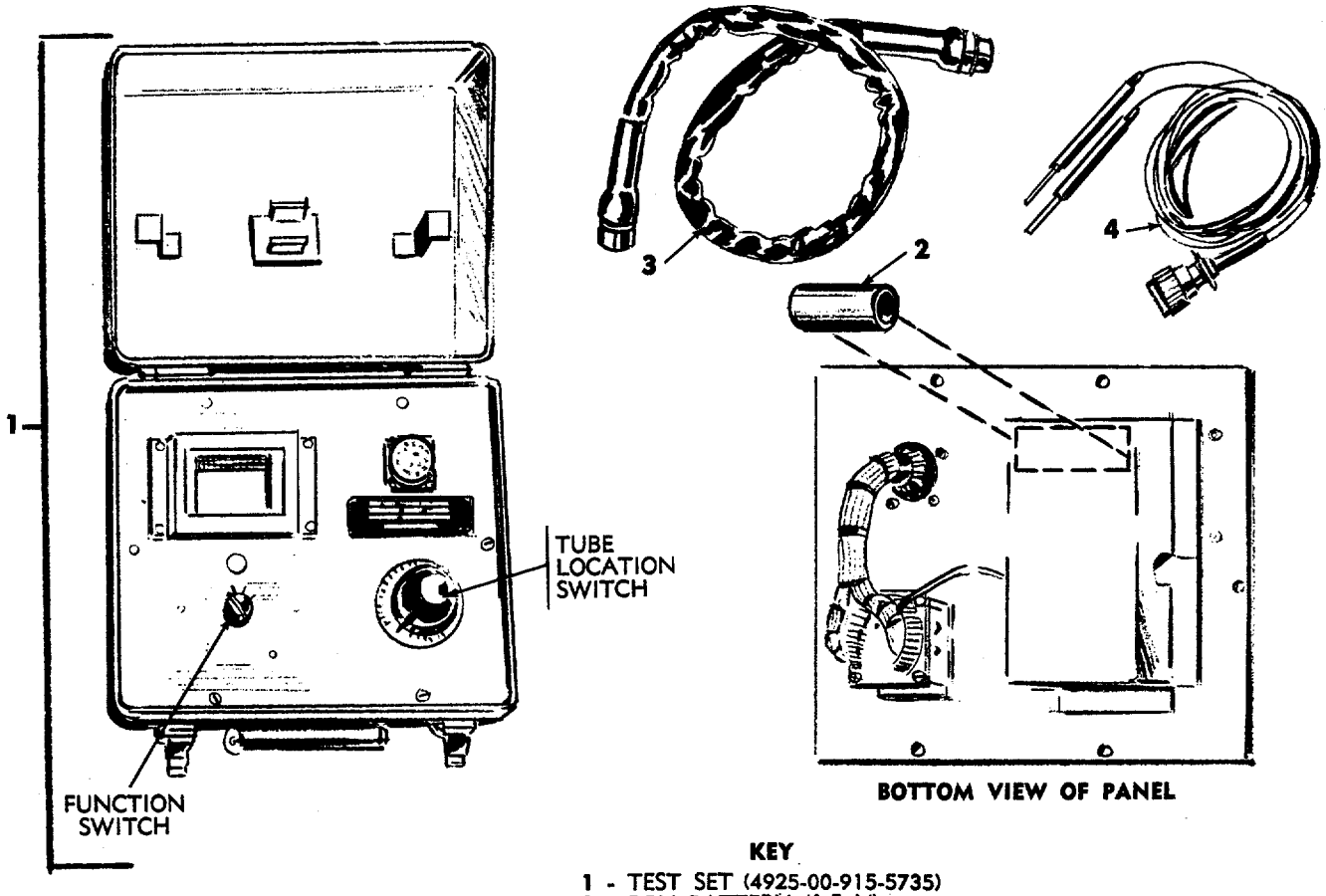


Figure B-18. Test equipment-test set A/E 24T-79 and related equipment.

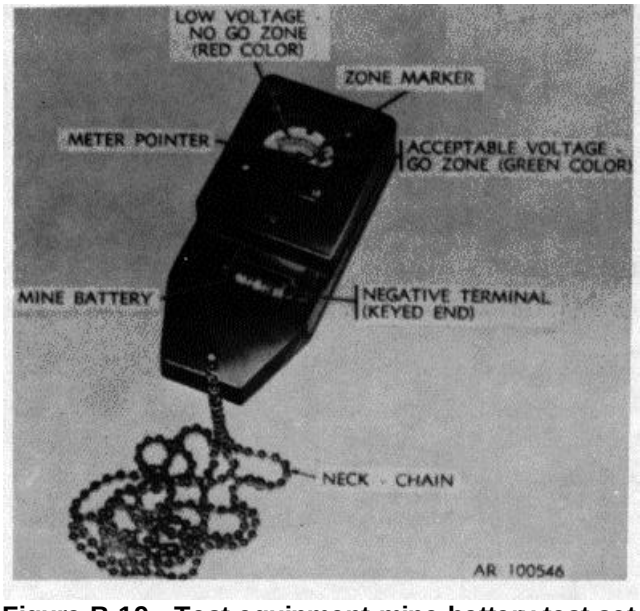
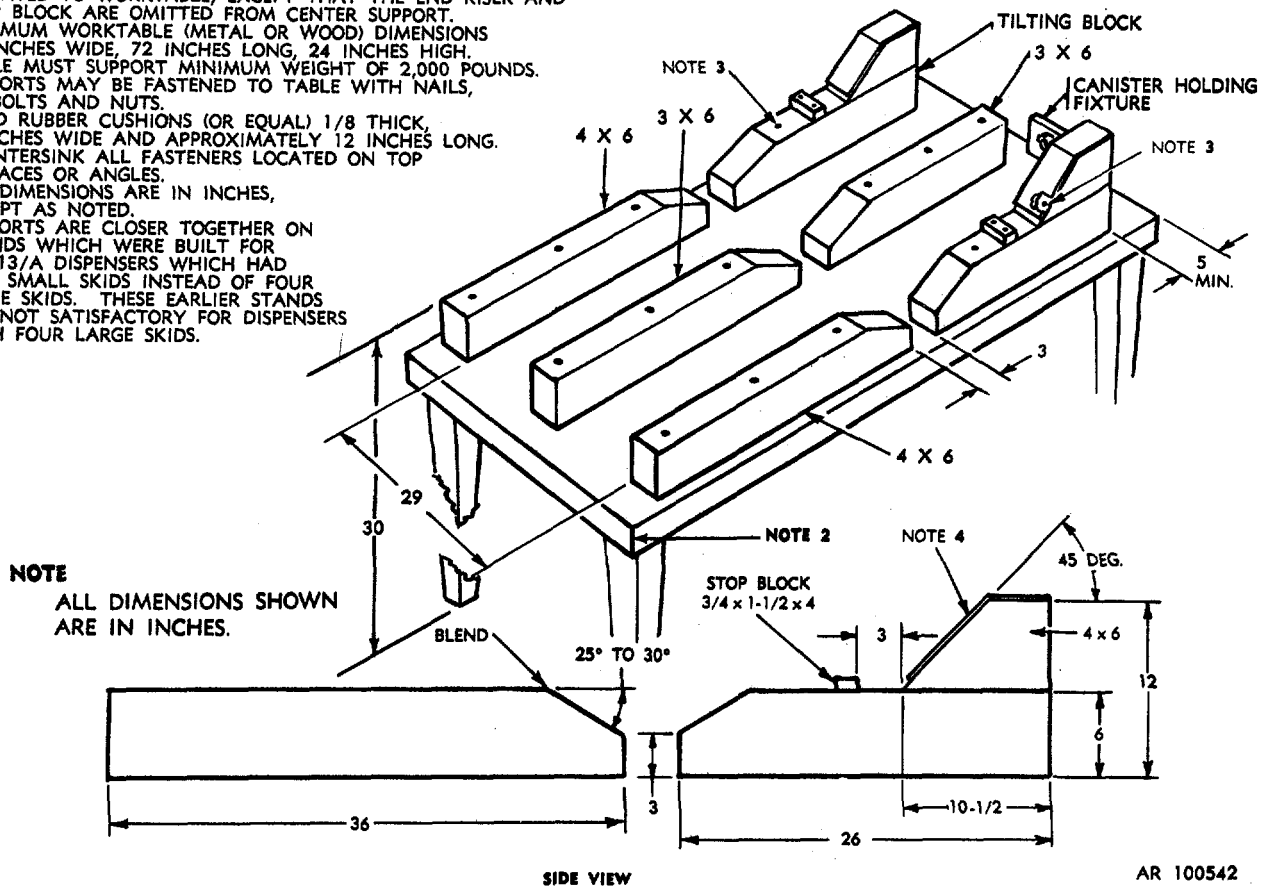


Figure B-19. Test equipment-mine battery test set.

(1) ILLUSTRATION (a) FIG NO.	(1) ILLUSTRATION (b) ITEM NO.	(2) SMR CODE	(3) FEDERAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION / USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 06-GENERAL EQUIPMENT		
B-20	_	PAFFF	4925-00-334-5938	9287630	19203	STAND, MAINTENANCE, DISPENSER w/holding fixture	ea	1
B-21	_	PAFFF	1345-00-434-8869	9280135	19203	FIXTURE, CANISTER HOLDING:	ea	1
_	_	PAFFF	6115-00-017-8236	CE017DC	73239	GENERATOR SET, GASOLINE ENGINE, 1.5 kw, 28v	ea	1
_	_	PAFFF	3950-00-377-6574	D13200E6970	81336	CRANE, FLOOR, PORTABLE:	ea	1
_	_	PAFFF	4110-00-194-1570	AAR-200	81348	REFRIGERATOR, MECHANICAL:	ea	1
_	_	PAFFF	6115-00-889-1446	CE016AC	73239	GENERATOR SET, GASOLINE ENGINE: 1.5 kw, 120v	ea	1

NOTES

1. THREE SETS OF SUPPORTS AS SHOWN IN SIDE VIEW ARE TO BE MOUNTED TO WORKTABLE, EXCEPT THAT THE END RISER AND STOP BLOCK ARE OMITTED FROM CENTER SUPPORT.
2. MINIMUM WORKTABLE (METAL OR WOOD) DIMENSIONS 39 INCHES WIDE, 72 INCHES LONG, 24 INCHES HIGH. TABLE MUST SUPPORT MINIMUM WEIGHT OF 2,000 POUNDS.
3. SUPPORTS MAY BE FASTENED TO TABLE WITH NAILS, OR BOLTS AND NUTS.
4. HARD RUBBER CUSHIONS (OR EQUAL) 1/8 THICK, 4 INCHES WIDE AND APPROXIMATELY 12 INCHES LONG.
5. COUNTERSINK ALL FASTENERS LOCATED ON TOP SURFACES OR ANGLES.
6. ALL DIMENSIONS ARE IN INCHES, EXCEPT AS NOTED.
7. SUPPORTS ARE CLOSER TOGETHER ON STANDS WHICH WERE BUILT FOR SUU-13/A DISPENSERS WHICH HAD TWO SMALL SKIDS INSTEAD OF FOUR LARGE SKIDS. THESE EARLIER STANDS ARE NOT SATISFACTORY FOR DISPENSERS WITH FOUR LARGE SKIDS.



NOTE
ALL DIMENSIONS SHOWN ARE IN INCHES.

Figure B-20. General equipment-maintenance stand.

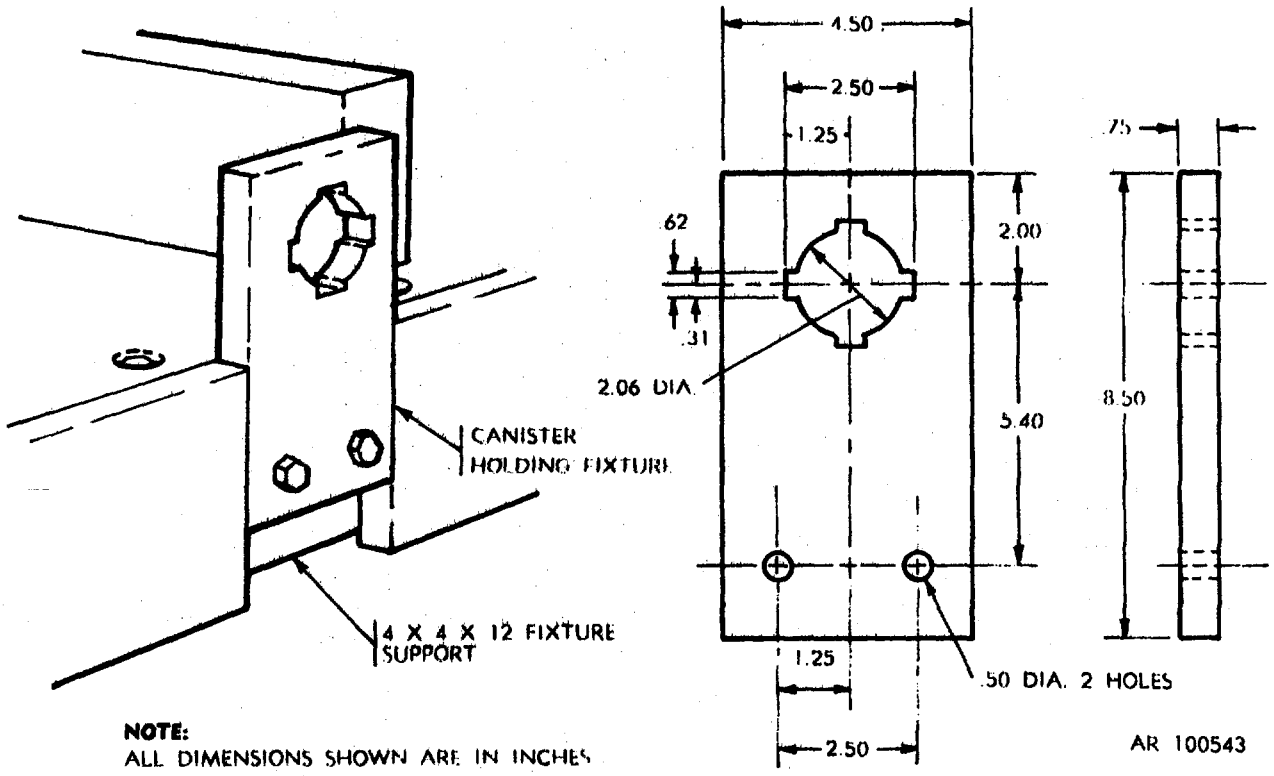


Figure B-21. Canister holding fixture.

Section IV. TRAINING ITEMS

(1) ILLUSTRATION (a) FIG NO.	(1) ILLUSTRATION (b) ITEM NO.	(2) SMR CODE	(3) FEDERAL STOCK NUMBER	(4) PART NUMBER	(5) FSCM	(6) DESCRIPTION / USABLE ON CODE	(7) U/M	(8) QTY INC IN UNIT
						GROUP 07-MINE DISPERSING SUBSYSTEM, AIRCRAFT,		
		PAFZZ	1345-00-127-5515	9296700		PRACTICE: M132 (PACKED IN CONTAINER CNU-79/E, REFER TO GROUP 02)		
		PAFFF	1095-00-360-5051	9287746	19203	DISPENSER: SUU-13D/A (EMPTY):	ea	1
		PAFZZ	1345-00-143-7614	9255991	19203	CANISTER, MINE, PRACTICE:	ea	3
		PAFZZ	1345-00-143-7613	9287785	19203	CHARGE, MINE, EJECTION: M198	ea	3
		PAFZZ	1345-00-127-5544	9296696		GROUP 08-RELOAD KIT FOR MINE, DISPERSING SUBSYSTEM, AIRCRAFT, PRACTICE: M132 (PACKED IN CONTAINER, M602, REFER TO GROUP 03)		
		PAFZZ	1345-00-143-7614	9255991		CANISTER, MINE, PRACTICE:	ea	40
		PAFZZ	1345-00-127-5516	9296697	19203	GROUP 09-MINE DISPERSING SUBSYSTEM, AIRCRAFT, TRAINING: M133 (PACK NO. 1 IN CONTAINER CNU-79/E, REFER TO GROUP 02)		
		PAFZZ	1095-00-360-5051	9287746	19203	DISPENSER, SUU-13D/A (EMPTY):	ea	1
		PAFZZ	1345-00-	9287551 143-8192	19203	CANISTER, ASSEMBLY, TRAINING: (PACKNO. 2 IN CONTAINER M602, REFER TO GROUP 03)	ea	40
		PAFZZ	1345-00-143-8436	9287552	19203	CANISTER, MINE, TRAINING:	ea	40
		PAFZZ	1095-01-012-3329	9296620	19203	BATTERY, CASE ASSEMBLY:	ea	80
		PAFZZ	1095-01-012-3328	9296624	19203	BASE ASSEMBLY:	ea	2
5-8		PAFZZ	1343-01-033-4536	9287590	19203	CAP, BATTERY, ASSEMBLY	ea	2
		PAFZZ	1095-01-012-3327	9281635	19203	COVER, FUZE:	ea	80
		PAFZZ	5305-00-900-2550	MS35494-36	96906	SCREW, WOOD: flat hd, slotted, S, cd pltd #6, 18 threads 1-in. lg.	ea	160
		PAFZZ	5305-00-254-0091	MS35494-60	96906	SCREW, WOOD: flat hd ck, slotted, S, cd pltd #8, 18 threads 1-in. lg.	ea	400
		PAFZZ	1345-00-143-8452	9287553	19203	CHARGE, MINE EJECTION, TRAINING: normal resistance.	ea	40
		PAFZZ	1345-00-143-8488	9287554	19203	CHARGE, MINE EJECTION, TRAINING: high resistance.	ea	6
		PAFZZ	1345-00-143-7450	9287555	19203	CHARGE, MINE EJECTION, TRAINING: low resistance.	ea	6
			1095-01-012-6736	9299238	19203	CLIP, SHORT	ea	2

Section V. NATIONAL STOCK NUMBER AND PART NUMBER INDEX

National Stock Number Cross Reference to Figure and Item Number

National Stock Number	Figure No.	Item No.	National Stock Number	Figure No.	Item No.
1095-00-360-5051	B-1		5120-00-595-9069		
1325-01-6053	B-16	7	5140-00-388-3416		
1325-00-123-8969	B-5	3	5180-00-143-4107		
1325-00-123-8973	B-5	2	5305-00-060-1165	B-9	1
1325-60-123-8975	B-2	8	5305-00-068-0506	B-5	4
1325-00-123-8976	B-1	4	5305-00-068-0506	B-5	1
1325-00-123-8982	B-2	9	5305-00-071-1777	B-14	7
1325-00-123-8997	B-1	5	5305-00-071-2079	B-10	3
1325-00-123-9001	B-16	5	5305-00-269-2801	B-14	1
1325-00-123-9241	B-5	7	5305-00-269-3219	B-7	3
1325-00-123-9246	B-5	8	5305-00-269-3236	B-9	3
1325-00-183-5303	B-1	1	5305-00-719-5003	B-5	9
1325-00-906-7953	B-2	7	5305-00-719-5241	B-8	2
1325-00-915-5733	B-3	4	5305-00-984-6198	B-2	4
1325-00-944-1701	B-6	9	5305-00-989-7435	B-3	5
1345-00-143-7613	B-4	6	5305-00-993-0190	B-3	3
1345-00-370-3560	B-16	4	5306-00-124-5281	B-12	3
1345-00-370-3574	B-16	1	5310-00-080-6004	B-9	4
1345-00-370-3589	B-16	2	5310-00-159-1577	B-5	10
1345-00-434-8865	B-16	3	5310-00-584-5272	B-14	6
1345-00-434-8869	B-17		5310-00-637-9541	B-12	2
1345-00-610-1313	B-16	6		B-7	
1398-00-763-0104	B-15	2	5310-00-726-2212	B-11	7
3950-00-377-6574			5310-00-732-0558	B-12	1
4110-00-194-1570			5310-00-768-0318	B-14	5
4820-00-122-1121	B-12	4	5310-00-807-1466	B-2	5
4925-00-334-5938	B-20		5310-00-809-3079	B-10	4
4925-00-339-1059	B-17	1	5310-00-982-4908	B-9	5
4925-00-370-3566			5320-00-117-6951	B-5	5
4925-00-873-4452	B-15	1	5325-00-507-7976	B-11	8
4925-00-915-5735	B-18	1	5330-01-012-2753	B-6	3
5110-00-239-8253			5330-00-123-8994	B-14	4
5120-00-081-2305			5330-00-123-9304	B-11	3
5120-00-081-2307			5340-00-124-5282	B-2	1
5120-00-144-5207			5340-00-491-7632	B-11	1
5120-00-189-7930			5340-00-902-0426	B-6	1
5120-00-198-5391			5340-00-908-5955	B-9	6
5120-00-198-5413			5935-00-257-7581	B-1	2
5310-00-208-4998	B-8	1	6115-00-889-1446		
5120-00-222-4284			6115-00-940-7867		
5120-00-223-1014			6130-00-134-1337	B-4	4
5120-00-223-7396			6240-00-155-7836	B-17	4
5120-00-224-3138			6625-00-134-1338	B-19	
5120-00-227-7356			6685-00-052-1865	B-6	13
5120-00-230-6385			6685-00-079-3359	B-6	10
5120-00-234-8913			6685-00-079-3359	B-13	
5120-00-240-5609			6850-00-264-6571	B-11	4
5120-00-240-8702			6850-00-264-6572	B-6	4
5120-00-240-8716			8140-00-111-2982	B-11	
5120-00-247-5177			8140-00-137-7740	B-8	4
5120-00-277-1260			8140-00-867-1130		
5120-00-277-2326			8140-00-908-5953	B-6	3
5120-00-541-6655			8140-00-908-5954	B-6	8

National Stock Number Cross Reference to Figure and Item Number-Continued

Part No.	FSCM	Fig. No.	Item No.	Part No.	FSCM	Fig. No.	Item No.
AAR200	81348			MS90725-69	96906	B-7	3
CEO16AC	73239			MS90726-5	96906	B-5	4
D13200E697C	81336			MS90726-58	96906	B-14	1
GGGE926	81348			MS90726-6	96906	B-5	1
GGGK00275	81348			MS90727-118	96906	B-8	2
GGGK00275	81348			MS90727-60	96906	B-9	3
GGGP00468	81348			MS90728-123	96906	B-10	3
GGGP00471	81348			13213E0110	97403		
GGGP471 Type II	81348			716263-1	18894	B-1	5
CLASS I STYLE A				716274	18894	B-5	3
GGGP831	81348			716279	18894	B-5	2
GGGS121	81348			716285	18894	B-2	3
GGGS121	81348			716549	18894	B-2	8
GGGS121	81348			716574-1	18894	B-1	4
GGGS121 TYPE 4	81348			8845195	19203	B-15	1
CLASS I				8860990-2	19203	B-6	10
GGGT558-5	81348			8860990-2	19203	B-13	
GGGW636	81348			8881094	19203	B-6	13
GGGW636	81348			8887105	19203	1-4	
GGGW636	81348			8889417	19203	B-15	2
GGGW636	81348			9203528	19203	B-2	7
GGGW641	81348			9203558	19203	B-3	4
GGGW641	81348			9204060 REV. C	19203	B-6	3
GGGW641	81348			9204061	19203	B-6	9
GGGW641	81348			9204062	19203	B-6	8
GGGW641	81348			9204063	19203	B-9	6
GGGW641	81348			9204158	19203	B-12	3
GGGW686	81348			9205779	19203	B-8	1
MIL-M-12135	81349			9209981	19203	B-18	1
MILD3464	81349	B-11	4	9211554-1	19203	B-8	4
MILD3464	81349	B-6	4	9220106-1	19203	B-12	4
MS20426AD4-6	96906	B-5	5	9269045	19203	B-14	4
MS21042-08	96906	B-2	5	9269046	19203	B-11	3
MS21045-6	96906	B-9	5	9269050	19203	B-11	8
MS24668-32	96906	B-9	1	9269051	19203	B-11	7
MS25043-14C	96906	B-1	2	9279987	19203	B-16	4
MS25237-327	96906	B-17	4	9280135	19203	B-17	
MS27183-14	96906	B-9	4	9280146	19203	B-17	1
MS27183-19	96906	B-10	14	9280148	19203		
MS3314	96906	B-1	1	9280150	19203	B-2	9
MS35206-214	96906	B-3	3	9280151	19203	B-19	
MS35206-250	96906	B-2	4	9281115	19203	B-4	4
MS35207-264	96906	B-3	5	9287581	19203		
MS35338-46	96906	B-12	2	9287581	19203		
MS35338-46	96906	B-7	2	9287590	19203	B-8	
MS35338-48	96906	B-14	6	9287631	19203		
MS35338-48	96906	B-6	7	9287745	19203	B-5	8
MS61938-5	96906	B-11	1	9287746	19203	B-1	
MS51938-6	96906	B-6	1	9287771	19203	B-16	2
M51959-84	96906	B-5	9	9287785	19203	B-4	6
MS51967-14	96906	B-14	5	9287839	19203	B-16	3
MS51967-14	96906	B-6	6	9288629	19203	B-5	
MS51967-8	96906	B-12	1	9294446	19203	B-16	5
MS51967-8	96906	B-7	1	9294446-3	19203	B-16	6
MS51988-3	96906	B-5	10	9296852	19203	B-16	7
MS90725-124	96906	B-14	7	9298880	19203	B-6	3

APPENDIX C

MAINTENANCE ALLOCATION CHART

Section I. INTRODUCTION

C-1. General

Section II of this appendix contains the maintenance allocation chart for the dispenser. The chart assigns maintenance functions to the lowest appropriate level of maintenance based on past experience with similar items, and the following considerations:

a. Skills available.

b. Time required.

c. Tools and test equipment required and/or available.

C-2. Maintenance Functions

Maintenance functions will be limited to and defined as follows:

a. Inspect. To determine serviceability of an item by comparing its physical, mechanical, and electrical characteristics with established standards.

b. Test. To verify serviceability and to detect electrical or mechanical failure by use of test equipment.

c. Service. To clean, to preserve, to charge, and to add fuel, lubricants, cooling agents, and air. If it is desired that elements, such as lubricating, be defined separately, they may be so listed.

(1) *Unpack*. To remove item 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 rectify to the extent necessary to bring into proper operating range.

e. Aline. To adjust specified variable elements of an item to bring to optimum performance.

f. Calibrate. To determine the corrections to be made in the readings of instruments or test equipment used in precise measurement. Consists of the comparison to 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 with the certified standard.

g. Install. To set up for use in the operational environment such as an emplacement, site, or vehicle.

h. Replace. To replace unserviceable items with serviceable assemblies, subassemblies, or parts.

i. Repair. To restore an item to serviceable condition. This includes, but is not limited to, inspection, cleaning, preserving, adjusting, replacing welding, riveting and strengthening.

j. Overhaul. To restore an item to a completely serviceable condition as prescribed by maintenance serviceability standards using the Inspect and Repair Only as Necessary technique.

k. Rebuild. To restore an item to a standard as nearly as possible to original or new condition in appearance, performance, and life expectancy. This is accomplished through complete, disassembly of the item, inspection of all parts or components, repair or replacement of worn or unserviceable elements (items) using original manufacturing tolerances and specifications, and subsequent reassembly of the item.

C-3. Explanation of Format

Purpose and use of the format are as follows:

a. Column 1, Group Number. Column 1 lists group numbers, the purpose of which is to identify components, assemblies, subassemblies and modules with the next higher assembly.

b. Column 2, Functional Group. Column 2 lists the noun names of components, assemblies, subassemblies, and modules on which maintenance is authorized.

c. Column 3, Maintenance Function. Lists the various categories of maintenance to be performed on the dispenser. The active repair time (manhours) required to perform the maintenance function is included directly below the symbol identifying the category of maintenance.

d. Use of Codes. Explanation of the use of the code in maintenance column (3) is as follows:

Code *Explanation*

F....Direct Support Maintenance

e. Column 4, Tools and Equipment. This column will be used to specify those tools required to perform the designated function.

f. Column 5, Remarks. Self-explanatory.

Section II. MAINTENANCE ALLOCATION CHART

FOR

MINE DISPERSING SUBSYSTEM, AIRCRAFT: M56

(1) GROUP NUMBER	(2) CAD/PAD Functional group	(3) Maintenance functions															(4) Tools and equipment	(5) Remarks
				SERVICE														
		INSPECT	TEST	UNPACK	REPACK	CLEAN	TOUCH UP	MARK	ADJUST	ALINE	CALIBRATE	INSTALL	REPLACE	REPAIR	OVERHAUL	REBUILD		
01	Mine Dispersing Subsystem, Aircraft: M56	F .083	F .16									F .16						
0101	Dispenser:													F 1.0.				
0102	Canister, Mine:	F .01										F .05						
	Charge, Mine Ejection: M 198												F .083					
	Battery, Mine		F .01									F .01						
0103	Pallet, Safety	F .1										F .1	F .05	F 1.0				
02	Container, Shipping and Storage: CNU-79 E	F 0.1		F .1	F .15	F .3	F .3	F .3						F 1.0				
03	Container, Shipping and Storage, Mine Canister: M602	F 0.1		F 0.1	F .1	F .3	F .3	F .3						F 1.0				
04	Test Equipment:																	
0401	Test Set, Electrical Circuit, Bomb Dispenser: A E 24T-79	F .1	F .15						F .025		F .5			F 1.0				See footnote at end of table.
0402	Test Set, Electrical Circuit, Bomb Dispenser: A E 24T-80	F .05												F 1.0				
0403	Test Set, Mine Battery:	F .05							F .05		F .25							
0404	Multimeter	F .05	F .10								F .5		F .02					
05	Wrench, Torque										F .15							

Footnote: Ammunition companies assigned responsibility for handling and maintaining subsystems M56 will be responsible for minor repairs to test sets e.g replacement of lamps and fuses).

APPENDIX D

LIST OF CONSUMABLE MATERIAL

(1) National stock number	(2) Nomenclature	(3) Military specification	(4) Unit of issue
5350-00-192-5047	ABRASIVE CLOTH: 9 x 11, 80 grit		
8040-00-543-7170	ADHESIVE: synthetic, rubber	MMM-A-189	pt
5999-00-260-0447	CLIP, ELECTRICAL: copper, type PCL	W-C-440	ea
6850-00-264-6572	DESICCANT, ACTIVATED:	MIL-D-3464	dr
8010-00-297-2116	ENAMEL: olive drab #34087	TT-E-516	gl
8010-00-597-7847	ENAMEL: red (bright)	TT-E-527	gl
9150-00-269-8255	GREASE, AIRCRAFT:	MIL-G-4343	lb
7510-00-161-0816	INK, MARKING STENCIL: yellow #33538	TT-I-1795	gl
7510-00-161-0815	INK, MARKING STENCIL: white #27875	TT-I-1795	gl
5975-00-296-5324	ROD, GROUND: steel, copper-clad, 5/8 in. diam, 8 ft long, with clamps, class 3, int type FCI,	W-R-00550	ea
6145-00-669-5551	WIRE, ELECTRICAL GROUND: 9/16 flat width 50 amp, braid		

APPENDIX E
STORAGE INSPECTION TEST OF ANTITANK MINE BATTERY

E-1. General

NOTE

Mine batteries that have been tested and installed into subsystems (combat ready configuration) do not require periodic testing. However, these batteries will be replaced annually.

Storage inspection test of antitank mine battery shall be performed using the mine battery test set (fig. B-19) in accordance with a sampling schedule as follows:

Months of storage (following date of manufacture)	*Sample size*	*Accept/Reject*
3	200	12
6	200	12
9	200	2/3
12	200	2/3
15	200	3/4
18	200	3/4
21	200	5/6
24	200	5/6
27	200	5/6
30	200	7/8
33	200	7/8
36	200	7/8

NOTE

The date of manufacture is slated on the battery label located directly above the lot number. The first 2 digits represent the months and the last 2 digits represent the year manufactured. As an example, "0675" is interpreted as June 1975.

E-2. Second Test

NOTE

Acceptable tested batteries shall be returned to stock.

If the first lot fails, a second sample of 200 shall be selected and tested. If the second sample passes, the lot shall be considered acceptable. If the second sample fails, the lot shall be screened 100 percent. The procuring activity shall be notified of the disposition of the lot and replacement batteries requisitioned.

E-3. Reporting of Test Results

Annotate all test results on DA Form 2415 (Ammunition Condition Report) and forward completed forms direct to Commander, US Army Armament Materiel Readiness (Command, ATTN: DRSAR-MAD-C, Dover NJ 07801.

APPENDIX F

VERIFICATION OF FUNCTIONING AND ACCURACY OF BOMB DISPENSER ELECTRICAL CIRCUIT TEST SET A/E 24T-79

F-1. Ohmmeter Calibration

a. The ohmmeter must be recalibrated every 100 to 180 days (as locally directed), when the last calibration date is unknown, or when the test set A/E 24T-79 has been handled roughly. The calibration plug should also be checked at the same time to assure that the resistor is not damaged.

b. To prevent erroneous readings, the meter adjustment must be performed in temperatures that approximate the ambient temperatures found during the use of the test set.

c. Perform meter adjustment according to the following procedures:

(1) Turn the ohmmeter function switch to ADJUST position.

(2) Aline meter pointer with the ADJUST line on the meter by turning the meter adjustment control knob.

(3) Turn control knob to OFF position.

NOTE

If meter cannot be adjusted, replace battery in accordance with instructions in TM 9-4925-227-30.

F-2. Continuity and Resistance Tests for Test Set Wiring

The test set and test cable assembly are tested together (fig. F-1). The ohmmeter must have been adjusted prior to this test.

a. Connect test cable assembly plug P4 to test set receptacle J4.

b. Connect calibration plug to receptacle J5 of the test cable assembly.

c. Turn test set FUNCTION switch to LOW position.

d. Determine the resistance in each of the 40 circuits by turning the tube location selector switch and observing the ohmmeter readings.

e. In all cases, the resistance should be from 2.0 to 2.2 ohms.

f. Turn FUNCTION switch to OFF position.

g. Remove calibration plug and return it to maintenance kit.

h. If test set is not to be used, remove test cable and store in cover.

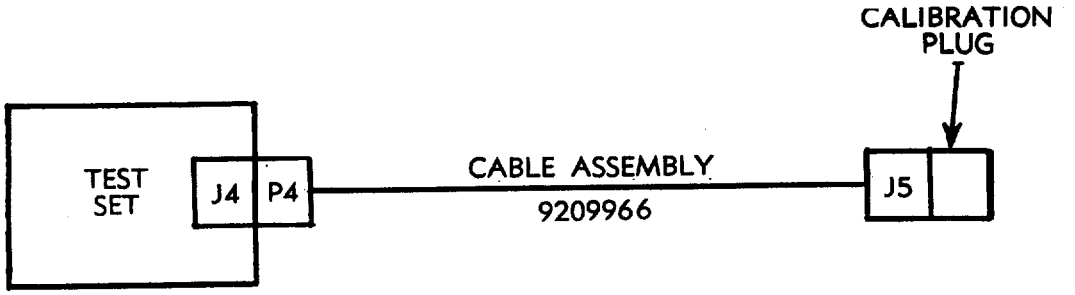


Figure F-1. Continuity and resistance testing of test set wiring.

APPENDIX G
MINE DISPERSING SUBSYSTEM, AIRCRAFT: M56 PRACTICE AND TRAINING ITEMS

G-1. Mine Dispersing Subsystem, Aircraft, Practice: M132

a. General. The subsystem M132 is used by aircraft crews for gaining experience in dispersing mines which simulate those in the aircraft mine dispersing subsystem.

b. Description.

(1) The subsystem M132, consists of a dispenser SUU-13D/A containing three practice mine canisters. The loaded dispenser is packed in the shipping and storage container CNU-79/E.

(2) Each practice canister contains two dummy mines and one mine ejection charge M198. The dummy mines are configured to match the flight characteristics of the service mines.

(3) The reload kit for the subsystem M132 consists of 40 practice mine canisters. The canisters are packed in either an unsealed wooden container (P/N 9328331) or the M602 shipping and storage container.

NOTE

When the M602 container is used, disregard the humidity indicator card (if installed).

(4) Dispenser loading for a practice mining mission consists of three practice mine canisters loaded into each dispenser in firing locations 1, 20, and 40 (fig. 1-7). The remaining 37 positions will be left empty. With the dispenser control panel mode selector switch set to PAIRS and the QUANTITY selector switch set to ALL, the dummy mines will be dispersed to land at the beginning, in the middle and at the end of the target area.

(5) Handling, loading, electrical tests, and repairs of the subsystem are the same as those specified for the service subsystem in the main body of this manual.

Exception: Ejection Charge M198 resistance test using the test set A/E 24T-79 will be performed only on settings 12, 23, and 39 (which directly relates to firing order 20, 40, and 1).

c. Tabulated Data.

NOTE

Dimensions and weights are approximate.

Mine dispersing subsystem M132:
- Length ..... 90.38 in.
- Width ..... 14.75 in.
- Height ..... 14.44 in.
- Weight, empty, w/o pallet ..... 117.0 lb
- Weight (loaded as flown) ..... 156 lb
- Weight of pallet ..... 40 lb
- Number of canisters 3
- Distance between suspension lugs ..... 14 in.
- Center of gravity (from front end (loaded) ..... 51.6 in.
- Weight of explosive content (per dispenser):
  - Weight (M5 propellant) ..... 0.96 gm

Mine canister:
- Height ..... 11.9 in.
- Diameter ..... 4.80 in.
- Weight:
  - Empty ..... 1.8 lb
  - Loaded ..... 13.0 lb

Number of practice mines per canister 2

Number of mine ejection charges per canister 1

Explosive weight per canister:
- M5 propellant ..... 0.32 gm

Mine ejection charge M198:
- Weight (loaded) ..... 34 gm
- Explosive weight (M5 propellant) ..... 0.32 gm

Practice antitank mine:
- Length ..... 10.38 in.
- Diameter (half-cylinder) ..... 4.63 in.
- Weight ..... 5.6 lb

Shipping and storage container CNU-79/E (late model):
- Length ..... 104 in. (early model ..... 115.6 in.)
- Width ..... 31.5 in.
- Height ..... 31.5 in.
- Weight: (add 100 lbs for early model)
  - Without dispenser ..... 681 lb
  - With dispenser ..... 888 lb
- Cube ..... 59.7 cu ft
- Quantity-distance class 1
- Storage compatibility group ..... B, E, N
- Quantity distance for field storage ..... B
- DOT shipping class C
- DOT markings ..... Cartridges, Practice Ammunition

Shipping and Storage container M602(Reload Kit):
- Length ..... 37.5 in.
- Width ..... 32.35 in.
- Height ..... 18 in.
- Weight:

Empty ..... 214 lb
Loaded..... 780 lb
Cube..... 12.8 cu ft
Container, wood:
Length..... 45 in.
Width..... 29.9 in.
Height..... 23.3 in.
Weight:
Empty ..... 145 lb
Loaded..... 670 lb
Cube..... 18.1 cu ft
Quantity-distance class 1
Storage compatibility group..... B, E, N
Quantity distance for field storage..... B
DOT shipping class..... C
DOD markings ..... Cartridges, Practice Ammunition
Shelf life:
Shelf life ..... 5 yrs
Temperature limitations:
Minimum ..... -65 °F
Maximum ..... +160 °F'

G-2. Mine Dispersing Subsystem Aircraft, Training: M133

a. General. The subsystem M133 is used for training ammunition handlers in preparation, testing, and handling the Mine Dispersing Subsystem, Aircraft: M56 and its reload kits, in replacing mine ejection charges M198 and mine canisters, and in using the maintenance kit and maintenance stand.

b. Description. The subsystem M133 consists of the components which are packed in two containers as follows:

(1) The shipping and storage container CNU79/E contains a dispenser SUU-13D/A which is loaded with 40 empty canisters.

(2) The shipping and storage container M602 contains 40 training mine canisters; each canister contains a training mine ejection charge with normal resistance. In addition, packed in the container M602 desiccant cage, are six training mine ejection charges with high resistance, six with low resistance, and two base assemblies.

(3) The dispenser SUU-13D/A, loaded with 40 empty canisters, is used to gain proficiency in reloading the dispenser. After the dispenser has been reloaded with the 40 training mine canisters (which are weighted to simulate service mines), the subsystem is used for the mine ejection charge resistance test and intervalometer circuit test. A wood plug is included in the exposed end of each mine which provides the means for the battery well test and battery insertion and removal.

(4) The methods, tools and equipment required are described in the main body of this manual.

(5) The variety of training mine ejection charges provided allows the instructor to vary the subsystem M133 configuration to suit his training needs.

(6) The battery well test is performed to assure that a micro-switch contained within the service mine fuze is in the open position. The dummy mines are closed with a wooden plug containing a battery case assembly (9296620) which is held in place by the fuze cover (9281635). The fuze cover is secured to the wooden plug by seven wood screws (two each, MS35492-32 and five each, MS35492-54). A battery well test of this configuration will have an open circuit (infinite resistance) result. A base assembly (9296624) is supplied, which, when installed in the battery case assembly, will result in a finite reading to simulate a closed (unsafe) micro-switch.

c. Installation of Base Assembly.

(1) Remove seven fuze cover screws and fuze cover.

(2) Withdraw battery case assembly from simulated fuze by inverting training canister assembly.

(3) Insert base assembly into battery case assembly, smaller diameter end first.

(4) With canister' assembly inverted, insert battery case assembly into simulated fuze.

(5) Turn canister assembly so simulated fuze is up and replace fuze cover and screws.

d. Tabulated Data.

NOTE
Dimensions and weights are approximate.

Mine dispersing subsystem M133:
Length..... 90.38 in.
Width..... 14.75 in.
Height..... 14.44 in.
Weight, w/pallet..... 229 lb
Weight of pallet ..... 40 lb.

Mine dispersing subsystem M133: - Continued
Number of canisters (empty)..... 40
Distance between suspension lugs14 in.
Mine canister:
Height..... 11. 9 in.
Diameter..... 4. 80 in
Weight:
Empty ..... 1.8 lb
Number of training mines per canister..... 2
Number of training mine ejection charges per canister..... 1
Shipping and storage container
CNU-79/E (late model):
Length..... 104 in.
(early model..... 115. 6 in)
Width..... 31. in.
Height..... 31. 5 in.
Weight: (add 100 lbs for early- model)
Without dispenser..... 681 lb
With dispenser..... 926 lb
Cube ..... 59.7 cu ft
Shipping and Storage container
M602:
Length..... 37. 5 in.
Width..... 32.35 in.
Height..... 18 in.
Weight:
Empty ..... 214 lb
Loaded..... 742 lb
Cube..... 12. 8 cu ft
Shelf life:
Shelf life ..... 5 yrs
Temperature limitations.:
Minimum ..... -65°F
Maximum ..... +160°F

G-3. Repair Parts

Repair parts for the Mine Dispersing Subsystem, Aircraft, Training: M133, which are listed in Appendix B, are packed and shipped in the following quantities:

Nomenclature	NSN	P/N	Quantity per package
CANISTER, MINE, TRAINING	1345-00-143-8192	9287551	6 ea
EJECTION CHARGE, TRAINING: Normal Resistance	1345-00-143-8452	9287553	6 ea
EJECTION CHARGE, TRAINING: High Resistance	1345-00-143-8488	9287554	6 ea
EJECTION CHARGE, TRAINING: Low Resistance	1345-00-143-7450	9287555	6 ea
BASE ASSEMBLY	1345-01-012-3328	9296624	2 ea
CLIP, SHORTING	1345-01-012-6736	9299238	40 ea
CANISTER, ASSEMBLY, TRAINING	1345-00-143-8436	9287552	4 ea
CAP, BATTERY, ASSEMBLY	1343-01-033-4536	9287590	6 ea

INDEX

Index 4

By Order of the Secretary of the Army:

BERNARD W. ROGERS
General, United States Army
Chief of Staff

Official:

PAUL T. SMITH
Major General, United States Army
The Adjutant General

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THE METRIC SYSTEM AND EQUIVALENTS

Linear Measure

1 centimeter = 10 millimeters = .39 inch
1 decimeter = 10 centimeters = 3.94 inches
1 meter = 10 decimeters = 39.37 inches
1 dekameter = 10 meters = 32.8 feet
1 hectometer = 10 dekameters = 328.08 feet
1 kilometer = 10 hectometers = 3.2808.8 feet

Weights

1 *centigram = 10 milligrams = .15 grain*
1 decigram = 10 centigrams = 1.54 grains
1 gram = 10 decigram = .035 ounce
1 dekagram = 10 grams = .35 ounce
1 hectogram = 10 dekagrams = 3.52 ounces
1 kilogram = 10 hectograms = 2.2 pounds
1 quintal = 100 kilograms = 220.46 pounds
1 metric ton = 10 quintals = 1.1 short tons

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
1 cu. decimeter = 1000 cu. centimeters = 61.02 cu in.
1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Square measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. in.
1 sq. decimeter = 100 sq. centimeters = 15.5 inches
1 sq. meter (centare) = 100 sq. decimeters = 10.76 feet
1 sq. dekameter (are) = 100 sq. meters = 1.076.4 sq. ft.
1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
1 sq. kilometer = 100 hectometers = .386 sq. miles

Liquid Measure

1 dekaliter = 10 liters = 2.64 gallons
1 hectoliter = 10 dekaliters = 26.42 gallons
1 kiloliter = 10 hectoliters = 264.18 gallons
1 liter = 10 deciliters = 33.81 fl. ounces
1 centiliter = 10 milliliters = .34 fl. ounce
1 deciliter = 10 centiliters = 3 38 fl. ounces
1 metric ton = 10 quintals = 1.1 short tons

Approximate Conversion Factors

To change	To	Multiply by
inches	centimeters	2.540
feet	meters	.305
yards	meters	.914
miles	kilometers	1.609
sq. inches	sq. centimeters	6.451
sq. feet	sq. meters	.093
sq. yards	sq. meters	.836
sq. miles	sq. kilometers	2.590
acres	sq. hectometers	.405
cubic feet	cubic meters	.028
cubic yards	cubic meters	.765
fluid ounces	milliliters	29.573
pints	liters	.472
quarts	liters	.946
gallons	liters	3.785
ounces	grams	28.349
pounds	kilograms	.454
short tons	metric tons	.907
pound inches	newton-meters	.11296

To change	To	Multiply by
ounce inches	newton-meters	.0070062
centimeters	inches	.394
meters	feet	3.280
meters	yards	1.094
kilometers	miles	.621
sq. centimeters	sq. inches	.155
sq. meters	sq. yards	10.764
sq. kilometers	sq. miles	1.196
sq. hectometers	acres	2.471
cubic meters	cubic feet	35.315
milliliters	fluid ounces	.034
liters	pints	2.113
liters	quarts	1.057
grams	ounces	.035
kilograms	pounds	2.205
metric tons	short tons	1.102
pound-feet	newton-meters	1.356

Temperature (Exact)

°F Fahrenheit temperature — 5/9 (after subtracting 32) — Celsius Temperature °C

PIN: 020402-000