

TECHNICAL MANUAL
UNIT MAINTENANCE MANUAL
INCLUDING REPAIR PARTS
AND SPECIAL TOOLS LIST
FOR
CONTAINER DELIVERY SYSTEM

A-7A CARGO SLING
NSN 1670-00-251-1153
A-21 AERIAL DELIVERY CARGO BAG
NSN 1670-00-242-9173
A-22 AERIAL DELIVERY CARGO BAG
NSN 1670-00-587-3421
A-23 AERIAL DELIVERY CARGO BAG
NSN 1670-01-065-3748
CAPSULE, CARGO, CTU-2/A
NSN 1670-01-059-5788
STRAP CONNECTOR, 60-INCHES LONG
NSN 5340-00-738-5878
STRAP CONNECTOR, 120-INCHES LONG
NSN 5340-00-738-5879

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*This manual together with TM 10-1670-296-20&P, 15 September 1995, TM 10-1670-297-20&P, 15 September 1995, and TM 10-1670-299-20&P, 15 September 1995, supersedes TM 10-1670-240-20, 14 April 1970, including all changes.

Distribution Statement A. Approved for public release, distribution is unlimited.

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

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TECHNICAL MANUAL
NO. 10-1670-298-20&P

HEADQUARTERS,
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 15 September 1995

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REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual If you find any mistakes or if you know of a way to Improve the procedures, please let us know Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual directly to' Commander, US Army Aviation and Troop Command, ATTN: AMSAT-I-MP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. A reply will be furnished directly to you.

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HOW TO USE THIS MANUAL

Be sure to read all WARNINGS before using your equipment.

This manual Incorporates a quick reference tab feature that allows you to quickly locate the most often referenced subjects and topics appearing in this manual The reference tab feature consists of the following components:

Cover Page Index

Index boxes are located in the right-hand edge of the cover page Each Index contains a subject title, page number, and black index tab.

Table of Contents

The Table of Contents lists all the major subjects contained in this manual. Subjects that are surrounded by a black box correspond to those that appear on the cover page Index.

Page Numbers and Index Tabs

Each page of this manual is identified with a page number Pages that contain the subjects identified on the cover page index also contain a black tab on the right edge of the page that aligns with the cover Index tab.

To use the quick reference tab features, select the title of the subject you are trying to find from the cover page index. You can either turn to the indicated page or bend back the pages and thumb to the page tab that aligns with the cover index tab.

If the cover page is lost or badly worn, page numbers and index tabs can be located by referring to the Table of Contents.

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INTRODUCTION

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SECTION I. GENERAL INFORMATION

1.1 SCOPE.

a. Type of Manual. Unit Maintenance Manual Including Repair Parts and Special Tools List

b. Model Number and Equipment Name.

A-7A Cargo Sling
 A-21 Aerial Delivery Cargo Bag
 A-22 Aerial Delivery Cargo Bag
 A-23 Aerial Delivery Cargo Bag
 Capsule, Cargo, CTU-2/A
 Strap Connector, 60-Inches (152 400 cm) Long
 Strap Connector, 120-Inches (304 800 cm) Long

c. Purpose of Equipment. The Container Delivery System is a group of airdrop terms of equipment which is designed to use for various cargo delivery configurations needed to meet changing requirements to the overall mission of the organization.

1.2 MAINTENANCE FORMS, RECORDS, AND REPORTS.

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750; The Army Maintenance Management System (TAMMS), or AR 700-138, Army Logistics Readiness and Sustainability.

1.3 DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE.

Destruction of Army equipment to prevent enemy use shall be in accordance with TM 750-244-3.

1.4 PREPARATION FOR STORAGE AND SHIPMENT.

Refer to Unit Maintenance Instructions, Section V, for storage and shipment preparation.

1.5 QUALITY ASSURANCE (QA) PROCEDURES.

Any critical procedure in this technical manual which requires quality assurance inspections are identified by "(QA)" written after the applicable step. All "QA" inspections shall be conducted by qualified technical riggers

1.6 REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR).

If your airdrop equipment needs improvement, let us know Send us an EIR You, the user, are the only one who can tell us what you don't like about your equipment Let us know why you don't like the design or performance. Put it on an SF-368 (Product Quality Deficiency Report) Mail it to us at Commander, U.S. Army Aviation and Troop Command, ATTN: AMSAT-I-MDO, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798.

1.7 CORROSION PREVENTION AND CONTROL (CPC).

- a. Corrosion Prevention and Control (CPC) of Army materiel is a continuing concern It is important that any corrosion problems with these items be reported so that the problem can be corrected and improvements made to prevent the problem in future items
- b. While corrosion is typically associated with rusting of metal products, it can also include deterioration of other materials, such as rubber, plastic, or treated canvas. Unusual cracking, softening, swelling or breaking of the materials may be a corrosion problem.
- c. If a corrosion problem is Identified, it can be reported using Standard Form 368, Product Quality Deficiency Report. Using key words such as "corrosion", "rust", "deterioration", or "cracking" will ensure that the information is identified as a CPC problem.
- d. The form should be submitted to the address specified In DA Pan 738-750.

SECTION II. EQUIPMENT DESCRIPTION AND DATA

1.8 EQUIPMENT CHARACTERISTICS, CAPABILITIES' AND FEATURES.

a. Characteristics.

- (1) All equipment is lightweight and heavy duty.
- (2) Equipment can be combined in multiple configurations to meet changing mission requirements.

b. Capabilities and Features.

- (1) Allows for safely airdropping equipment without landing aircraft.
- (2) System configurations allow airdropping of a single container or multiple containers.

1.9 LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.

The Container Delivery System is not issued as a set and all components must be requisitioned separately. The system consists of the components described and illustrated in the following paragraphs.

a. A-7A Cargo Sling.

- (1) The A-7A cargo sling (Figure 1-1) consists of four Type X cotton or Type VII nylon webbing straps (2) with a fixed quick-fit parachute harness adapter (3) attached to each strap and four dee rings (1).
- (2) The A-7A cargo sling strap is also used as a static line anchor strap in Army aircraft. When used in this configuration, the strap must be constructed of cotton Type X webbing to prevent slipping of the webbing through the adapter, as prescribed in TM 57-220.

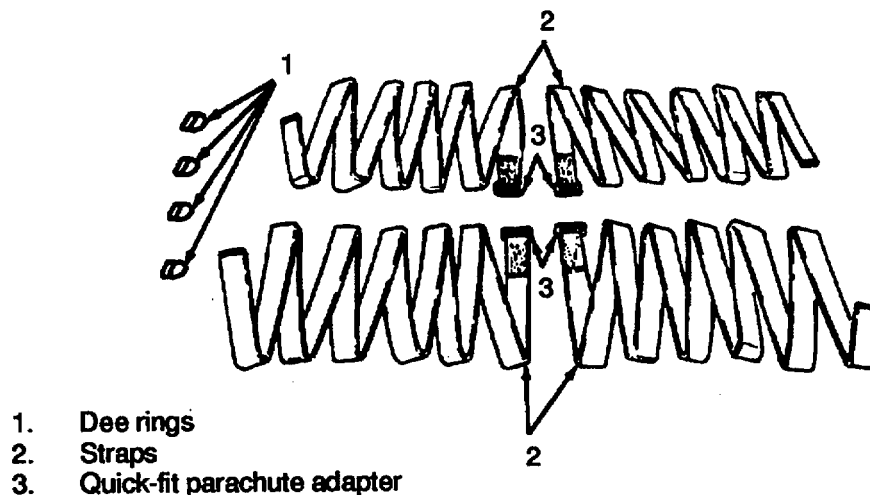
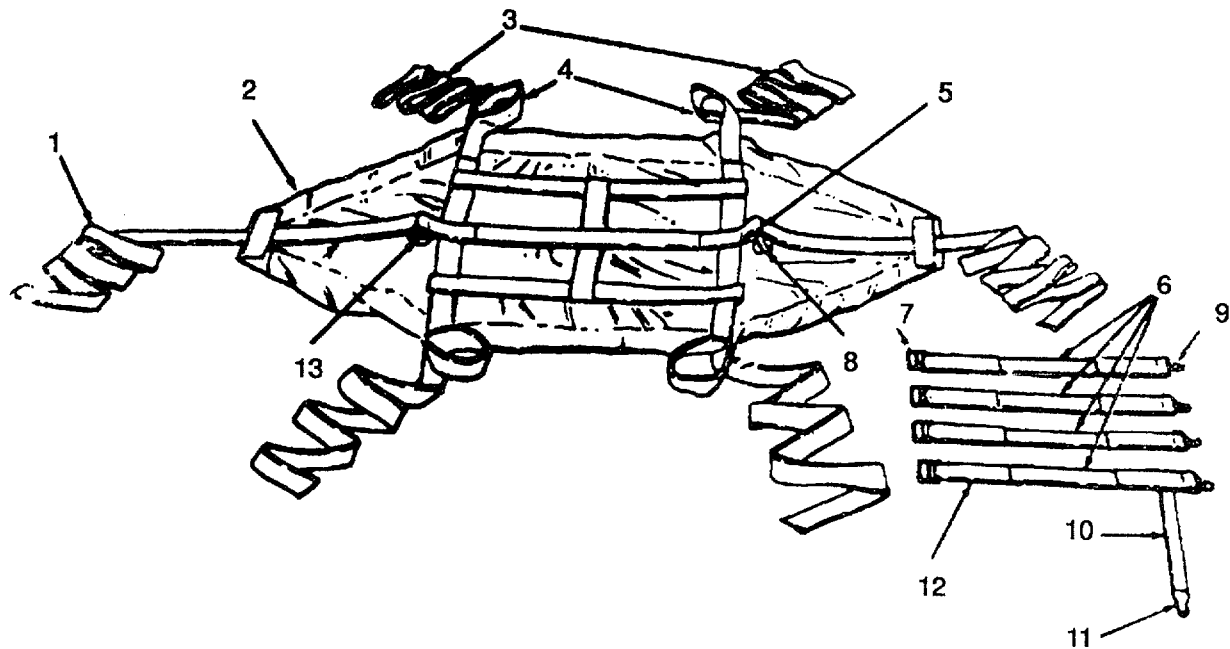


Figure 1-1. A-7A Cargo Sling

- b. A-21 Aerial Delivery Cargo Bag. The A-21 cargo bag (Figure 1-2), used to airdrop supplies and equipment, is an adjustable bag type container, consisting of a sling, two straps with ring, a quick release, and a cover.



- | | | |
|---------------------|--|---------------------------------|
| 1. Main strap | 6. V-ring hole | 10. Safety clip retaining strap |
| 2. Scuff pad | 7. Quick-fit parachute harness adapter | 11. Safety clip |
| 3. Side straps | 8. Quick-release straps | 12. Fixed quick release strap |
| 4. Side strap loops | 9. Quick-release lug | 13. V-ring |
| 5. V-ring loop | | |

Figure 1-2. A-21 Cargo Bag

- (1) Sling. The sling consists of a network of webbing straps and loops with an octagonal-shaped scuff pad (2) attached, three quick release straps (8) and a fixed quick release strap (12). One 188-inch (477.520 cm) main strap (1) is stitched lengthwise on the scuff pad, and two 144-inch (365.760 cm) side straps (3) are stitched cross-wise. Four side strap loops (4) or handles, are stitched to the side straps to facilitate handling of the load cargo bag. Two V-rings (13) are attached by V-ring loops (5) to the main strap and extend through holes (6) to the underside of the scuff pad. The three quick-release straps are fitted at one end with a quick-fit adapter (7) for attachment to the side straps of the sling assembly and at the other end with a quick release lug (9) for attachment to the quick release. The fixed quick release strap, which remains attached to the quick release is also fitted with a permanently attached safety clip (11) and strap (10) to prevent accidental opening of the release. The sling assembly is used to enclose and support the load.
- (2) Strap With Ring. Each of the two straps with ring (Figure 1-3) consists of a ring (1) and a long strap (3) attached. The short strap is fitted with a dee ring (4) to provide a means for attaching the parachute. The long strap is fitted with a quick fit adapter (5) for attachment to the main strap of the sling assembly.