

TECHNICAL MANUAL
UNIT AND INTERMEDIATE DIRECT SUPPORT (DS)
MAINTENANCE MANUAL (INCLUDING REPAIR PARTS
AND SPECIAL TOOLS LIST)
FOR
PARACHUTE, CARGO TYPE: 22-FOOT
DIAMETER, CARGO EXTRACTION
PARACHUTE
NSN 1670-01-063-3716 AND
NSN 1670-00-687-5458

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HEADQUARTERS
DEPARTMENTS OF THE ARMY, AIR FORCE, AND NAVY
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DEPARTMENTS OF THE ARMY, AIR FORCE
AND THE NAVY
WASHINGTON, D.C., 30 August 1989

**Unit and Intermediate Direct Support (DS) Maintenance Manual
(Including Repair Parts and Special Tools List)
for
PARACHUTE, CARGO TYPE: 22-FOOT DIAMETER
CARGO EXTRACTION PARACHUTE ASSEMBLY
NSN 1670-01-063-3716 and
NSN 1670-00-687-5458**

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You can help improve this manual. If you find any mistakes, or if you know of a way to improve these procedures, please let us know. Mail 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 Soldier Biological and Chemical Command, ATTN: AMSSB-RIM-E (N), 15 Kansas Street, Natick, MA 01760. You may also send in your recommended changes via electronic mail directly to <AMSSB-RIM-E@natick.army.mil>. A reply will be furnished directly to you. Instructions for sending an electronic 2028 may be found at the back of this manual immediately preceding the hard copy 2028.

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CHAPTER 1

INTRODUCTION

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OVERVIEW

This chapter includes the general information common to all parachute manuals and specific information pertinent to the parachute described in this manual.

Section I. GENERAL

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1-1. Scope. The scope of this manual is described in the following subparagraphs.

a. Type of Manual. This manual provides unit and intermediate direct support (DS) maintenance instructions for parachute, NSN 1670-01-063-3716 and NSN 1670-00-687-5458. This is a 22-Foot Diameter Cargo Extraction Parachute (figure 1-1). This manual also provides a Repair Parts and Special Tools List located at Appendix C.

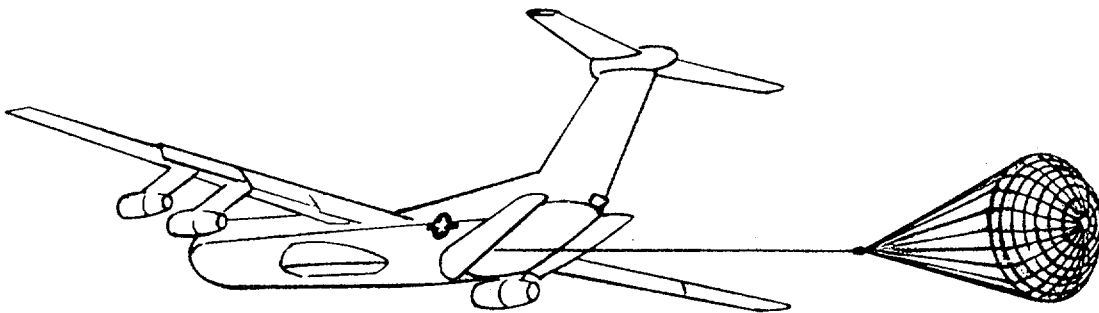
b. Equipment Name. 22-Foot Diameter, Cargo Extraction Parachute.

c. Purpose of Equipment. The parachute provides force to extract an air delivery load from aircraft.

1-2. Maintenance Forms and Records. 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 and DA PAM 738-751, The Army Maintenance Management System - Aviation.

1-3. Destruction of Army Materiel to Prevent Enemy Use. Destruction methods are described in the following subparagraphs.

1-1. Scope (cont).



4728-001

Figure 1-1. 22-Foot Diameter, Cargo Extraction Parachute, Deployed.

a. General.

(1) *Objective.* Methods of destruction used to inflict damage on air delivery platforms should make it impossible to restore equipment to a usable condition in a combat zone by either repair or cannibalization.

(2) *Authority.* Destruction of air delivery equipment that is in imminent danger of capture by an enemy is a command decision that must be made by a battalion or higher commander or the equivalent.

(3) *Implementation plan.* All units which possess air delivery equipment should have a plan for the implementation of destruction procedures.

(4) *Training.* All personnel who use or perform such functions as rigging, packing, maintenance, or storage of air delivery equipment should receive thorough training on air delivery equipment destruction procedures and methods. The destruction methods demonstrated during training should be simulated. Upon completion of training, all applicable personnel should be thoroughly familiar with air delivery equipment destruction methods and be capable of performing destruction without immediate reference to any publication.

(5) *Specific methods.* Specific methods of destroying Army materiel to prevent enemy use shall be by mechanical means, fire or by use of natural surroundings.

b. Destruction by Mechanical Means. Air delivery equipment metal assemblies, parts, and packing aids shall be destroyed using hammers, bolt cutters, files, hacksaws, drills, screwdrivers, crowbars, or other similar devices to smash, break, bend or cut.

WARNING

Exercise extreme care when using petroleum products to destroy equipment by fire, as severe burns or death could result.

c. Destruction By Fire. Items that can be destroyed by fire shall be burned. The destruction of equipment by use of fire is an effective method of destroying low-melting-point metal items (e.g., side rails, threaded portions of nuts and bolts, and platform panels.) However, mechanical destruction should be completed first, whenever possible, before initiating destruction by fire. When items to be destroyed are made of metal, textile materials (or some comparable low combustible material) should be packed under and around the items, then soaked with a flammable petroleum product and ignited. Proper concentration of equipment which is suitable for burning will provide a hotter and more destructive fire.

d. Destruction By Use of Natural Surroundings. Small vital parts of assemblies which are easily accessible may be disposed of as follows: Disposal or denial of equipment to an enemy may be accomplished through use of natural surroundings. Accessible vital parts of assemblies may be removed and scattered through dense foliage, buried in dirt or sand, or thrown into a lake, stream, or other body of water. Total submersion of equipment in a body of water will provide water damage as well as concealment. Salt water will inflict extensive damage to air delivery equipment.

1-4. Preparation for Storage or Shipment. For storage, refer to TM 10-1670-201-21 T.O. 13C-1-41/NAVAIR 13-1-17, and Chapter 2, Section VII of this manual.

1-5. Reporting of Equipment Improvement Recommendations (EIR). If your parachute system 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 Quality Deficiency Report (QDR). Mail it to us at: Commander, U.S. Army Troop Support Command, ATTN: AMSTR-QP, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. We will send you a reply.

Section II. EQUIPMENT DESCRIPTION AND DATA

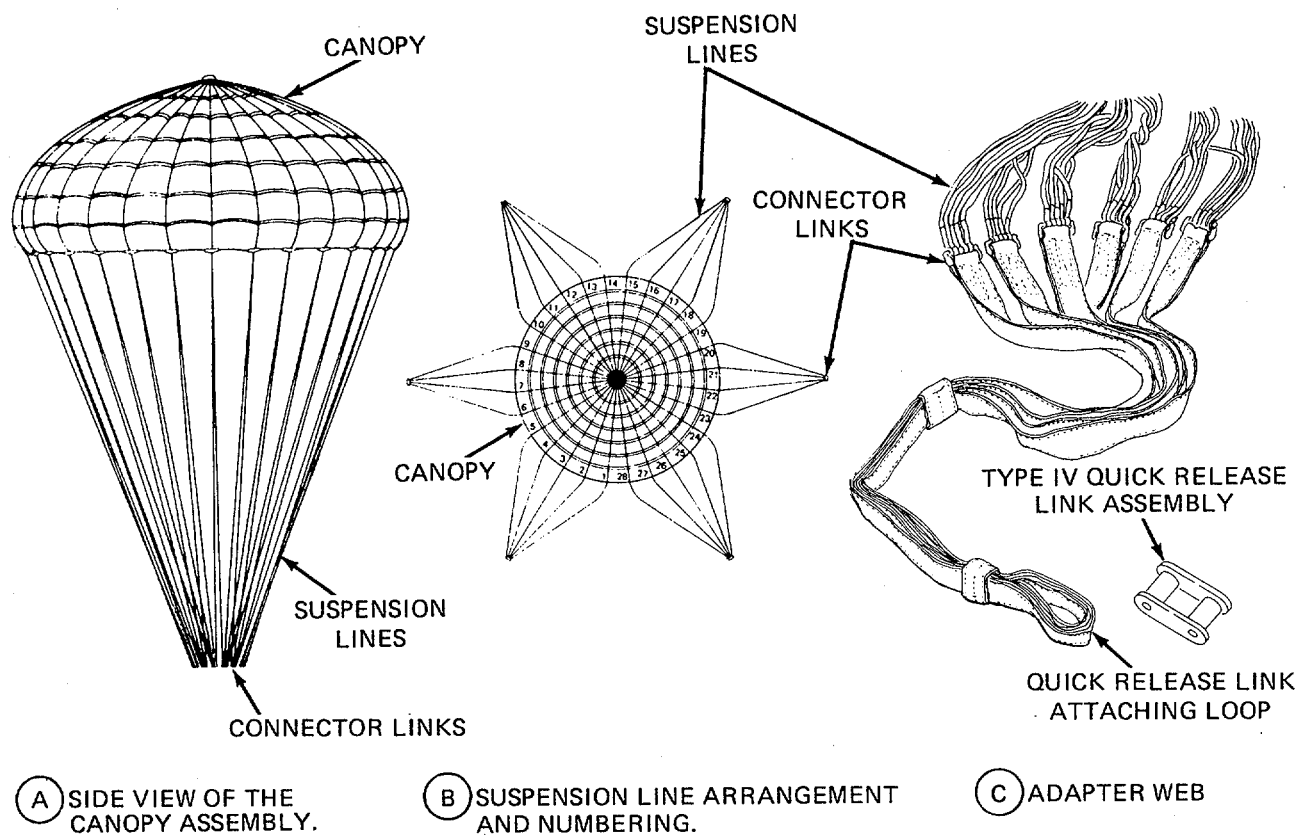
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1-6. Equipment Characteristics, Capabilities, and Features. A summary of the characteristics, capabilities and features of the equipment is contained in the following subparagraphs.

- a. Characteristics. Provides a capability to extract air delivery loads from an aircraft.
- b. Capabilities and Features.
 - (1) Alternate parachute for 26-foot high-velocity parachute.
 - (2) Used with the C-130 and C-141 aircraft.

1-7. Location and Description of Major Components. The following subparagraphs contain locations and descriptions of major components.

- a. Canopy. The canopy (figure 1-2) is a 22-foot-diameter flat circular ring slot canopy constructed with seven concentric rings of nylon fabric which are supported by 28 radial webs. There are 28 suspension lines which are attached on one end to the canopy. The opposite end of the suspension lines are connected to six detachable connector links which connect to the adapter web. The adapter web and extraction line are connected together by the type IV quick release link.



4728-002

Figure 1-2. Canopy Assembly and Adapter Web.