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

1 5 S E P T E M B E R 1 9 9 5

WARNING

Personnel performing instructions involving operations, maintenance procedures, and practices which are included in this technical manual must observe the below instructions.

WARNING

EXPLOSIVE HAZARD

Do not attempt to disassemble the M5 cartridge-actuated release assembly, which has been sealed at the manufacturing source An explosion could occur! Serious personal injury or death could be caused by failure to observe this warning.

WARNING

FLAMMABLE AND TOXIC SUBSTANCES

Due to flammable properties and chemical damaging compounds, cleaning solvents other than tetrachloroethylene will not be used in the spot cleaning of airdrop equipment. Tetrachloroethylene will only be used In well ventilated areas Repeated or prolonged inhalation of the solvent vapors can be dangerous to your health. In addition, avoid prolonged or repeated contact of the solvent fluid with areas of the skin. Tetrachloroethylene must not be taken internally Death or serious injury could result.

WARNING

PROPER USE OF TOOLS

Use proper tools to tighten all bolts and nuts for airdrop components. To achieve the maximum desired holding strength, tighten the nut until at least two threads of the bolts are exposed through the nut For minimum holding strength, tighten the nut until top threads of the bolt are flush with top of the nut

WARNING

FIRST AID

First aid instructions are given In FM 21-11, first aid for soldier's

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.

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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 EQUIOMENT 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.

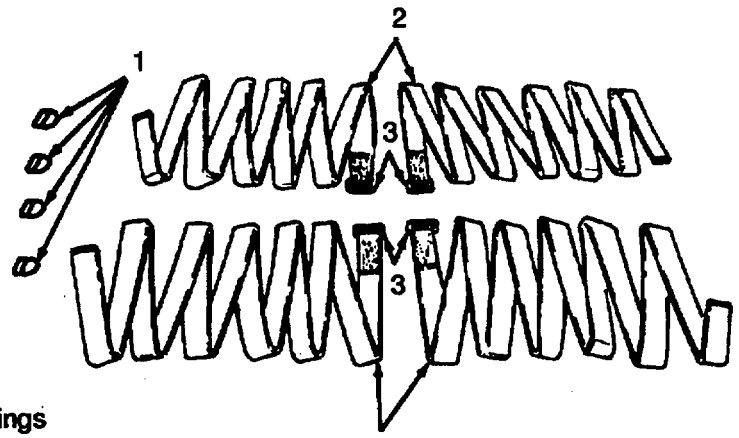
1.9 LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.

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).

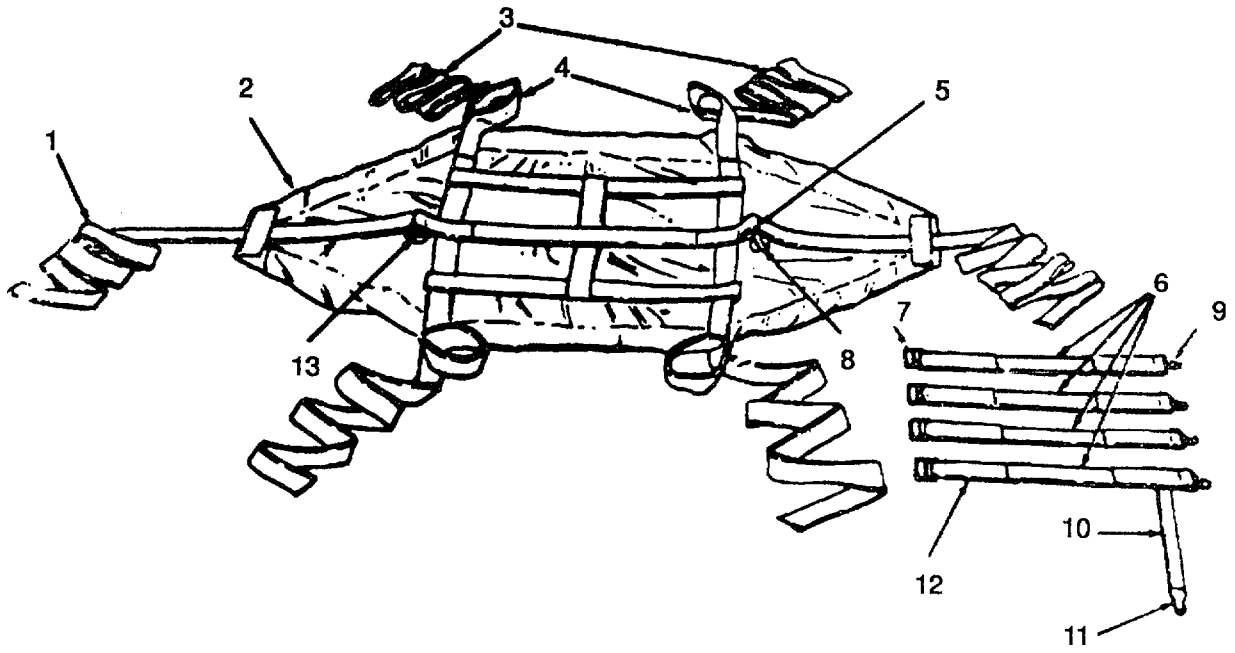
(2) The A-7A cargo sling strap is also used as a static line anchor strap in Army aircraft. When used in this configuration, the strap must be constructed of cotton Type X webbing to prevent slipping of the webbing through the adapter, as prescribed in TM 57-220.



1. Dee rings
2. Straps
3. Quick-fit parachute adapter

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.

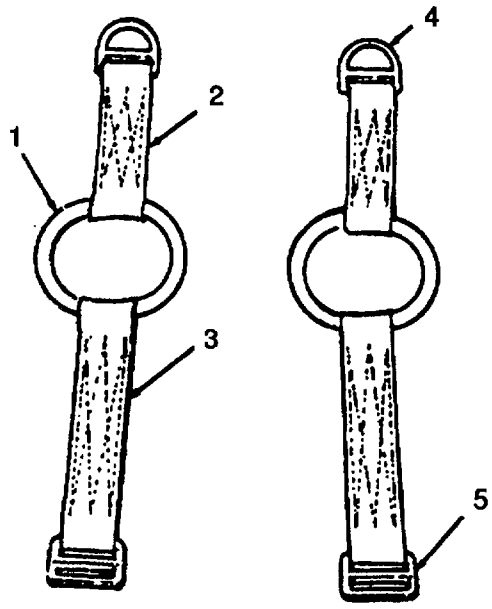


1. Main strap
2. Scuff pad
3. Side straps
4. Side strap loops
5. V-ring loop
6. V-ring hole
7. Quick-fit parachute harness adapter
8. Quick-release straps
9. Quick-release lug
10. Safety clip retaining strap
11. Safety clip
12. Fixed quick release strap
13. V-ring

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 handing 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 dip (11) and strap (10) to prevent accidental opening of the release. The sling assembly is used to enclose and support the load.

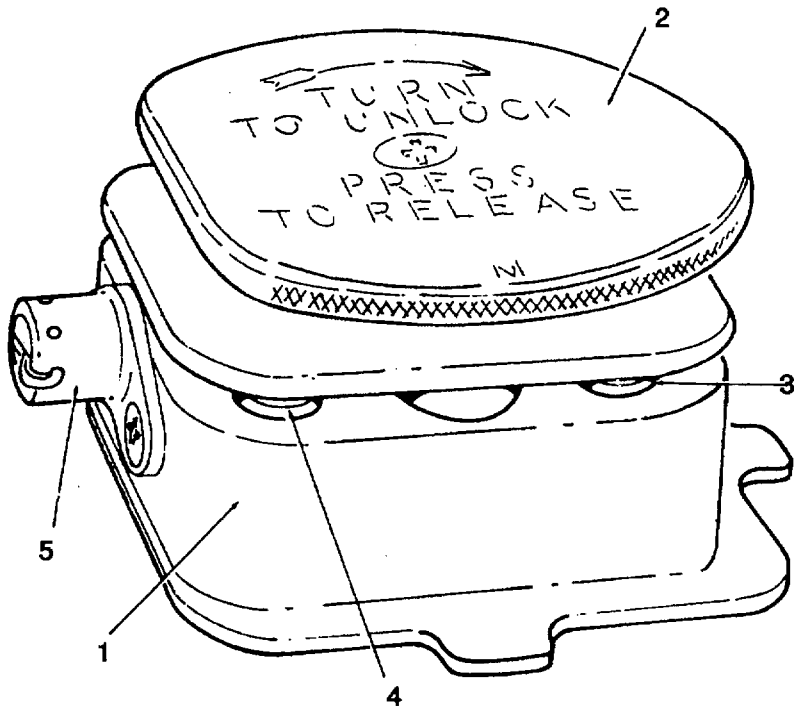
(2) Strap With Ring. Each of the two straps with ring (Figure 1-3) consists of a ring (1) and a long strap (3) attached. The short strap is fitted with a dee ring (4) to provide a means for attaching the parachute. The long strap is fitted with a quick fit adapter (5) for attachment to the main strap of the sling assembly.



1. Ring
2. Short strap
3. Long strap
4. Dee ring
5. Quick-fit parachute harness adapter

Figure 1-3. Strap With Ring

(3) Quick Release. The quick release (Figure 1-4) consists of a release body (1), an operating button (2), three locking plungers (3), a stationary plunger (4), and locking pin retainer (5). Rotation of the button clockwise and pressing down depresses the three locking plungers that disengage the three quick release straps. The fixed quick release strap is permanently attached to the stationary plunger which is located to the right of the locking pin retainer.



1. Release body
2. Operating button
3. Locking plunger
4. Stationary plunger
5. Locking pin retainer

Figure 1.4. Quick Release Assembly

(4) Cover. The rectangular shaped canvas cover (Figure 1 -5) consists of two or more jointed panels (1) with eight strap keepers (2) stitched to the underside of the cover. The strap keepers serve to hold the cover to the sling's main strap and side straps.

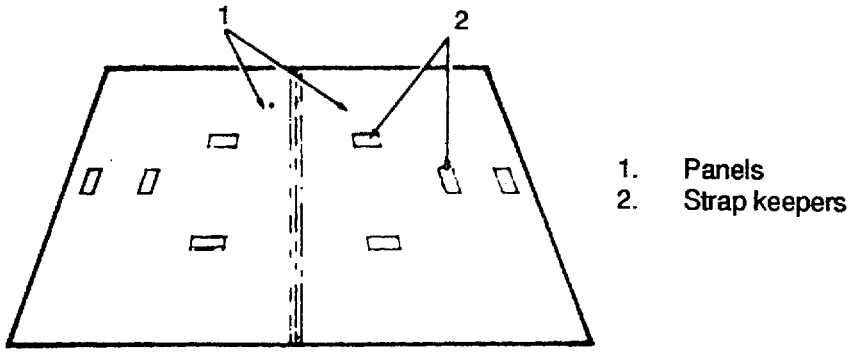


Figure 1-5. Cover (Bottom View)

c. A-22 Aerial Delivery Cargo Bag. The A-22 cargo bag is an adjustable container consisting of a sling, cover, four cover lacing cords, and four suspension webs. A plywood skid (not shown) may also be included as part of the container when directed by the applicable TM 10-500-Senes publication.

(1) Sling. The sling (Figure 1-6) consists of a network of webbing attached to a rectangular scuff pad (1). The lateral straps (2) are secured around the load by quick-fit adapters (3). Two tie-down straps (4 and 7) extend across the top of the load. The four dee rings (5) on the support webs (6) provide points of attachment for the suspension webs.

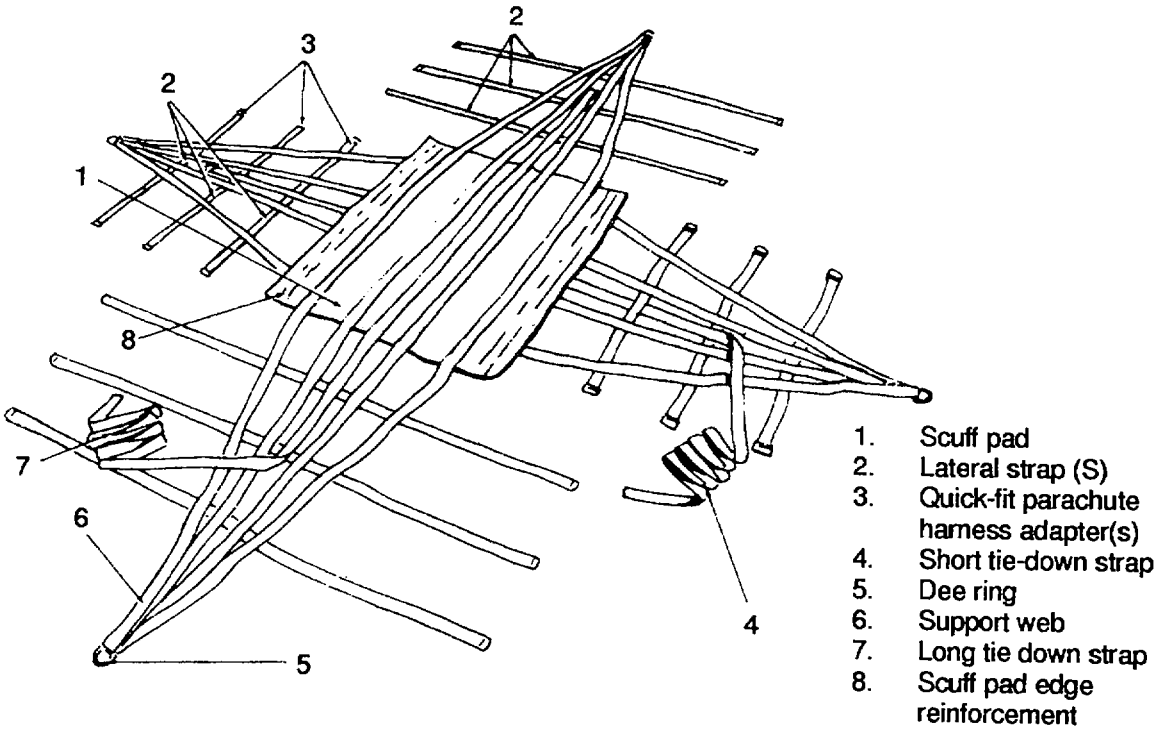
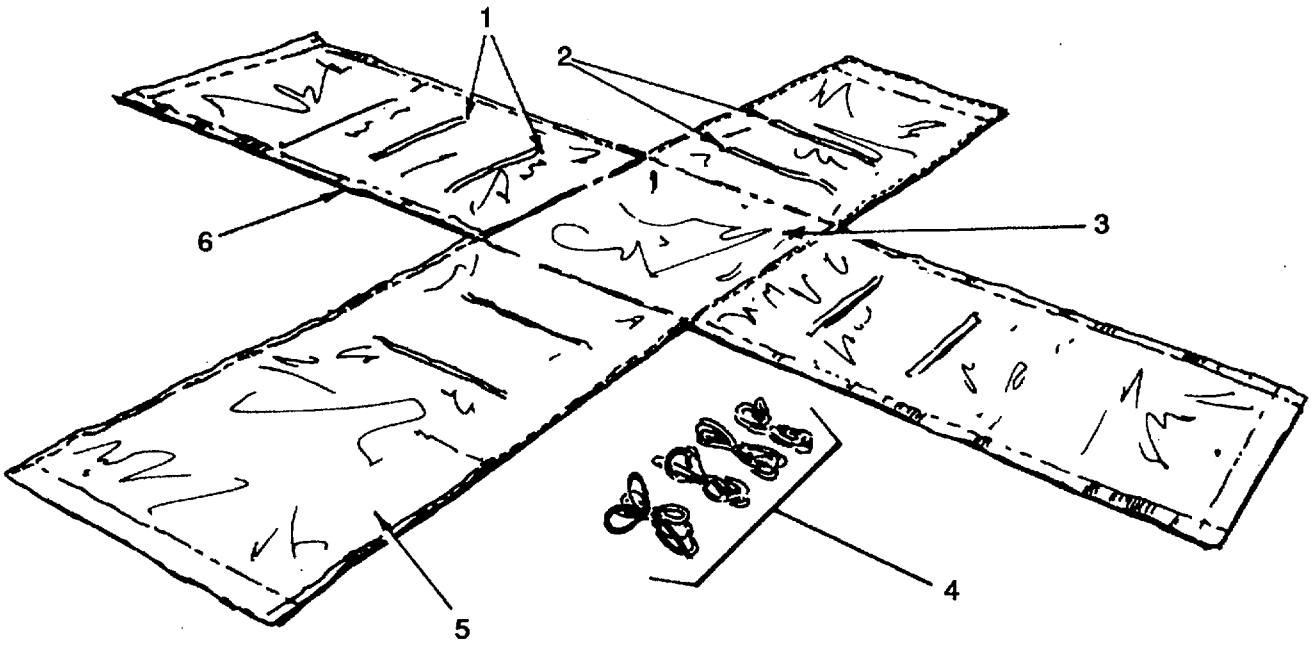


Figure 1-6. Sling Assembly

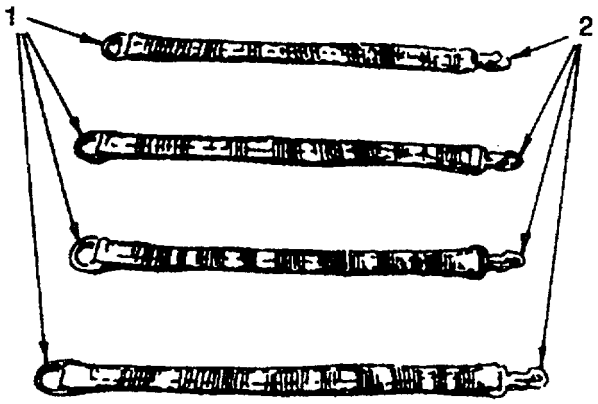
(2) Cover and Cover Lacing Cords. The cross-shaped cover (Figure 1-7) consists of two rectangular cotton duck panels sewn together around the overlapped area (3). Sixteen lacing loops (2) are stitched to the cover and four lacing cords (4) are passed through the cover lacing loops to secure the cover at the comer of the load.



1. Cover lacing loop strap(s)
2. Cover lacing loops
3. Cover bottom
4. Cover lacing cord(s)
5. End flap
6. Side flap

Figure 1-7. Cover and Cover Lacing Cords

(3) Suspension Webs. Four nylon webbing suspension webs (Figure 1-8) having a dee ring (1) at one end and a connector snap (2) at the other end are used to attach the load to the parachute.



1. Dee ring(s)
2. Connector snap(s)

Figure 1-8. Suspension Webs

d. A-23 Aerial Delivery Cargo Bag. (Figure 1-9) The A-23 cargo bag shown In Figure 1-9 consists of a sling (1), canvas cover (2), web (3), tie container, 11-feet (3 355 meters) long (4), and a skid (5).

1. Sling
2. Canvas Cover
3. Web
4. Tie Container
5. Skid

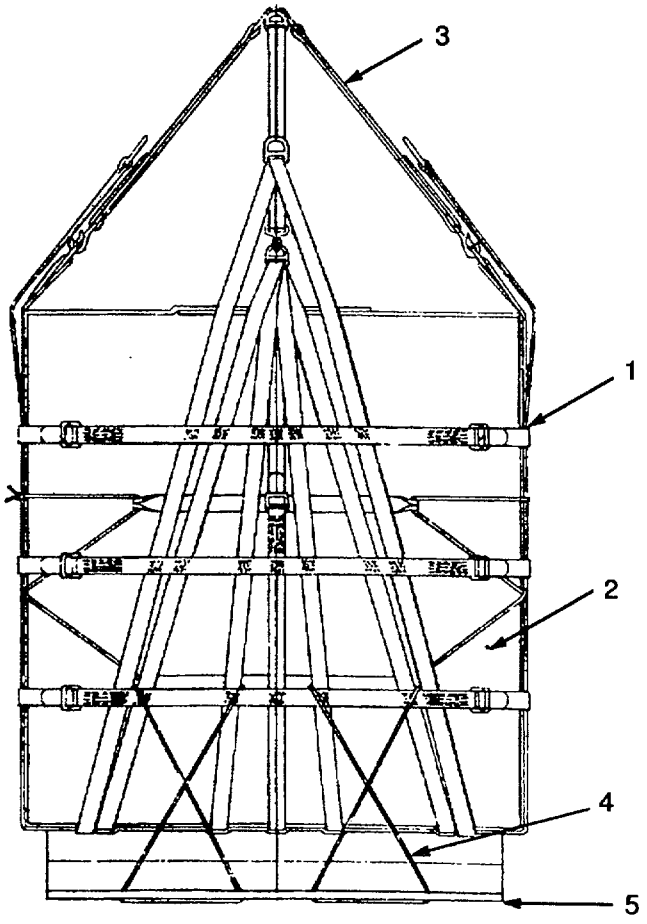
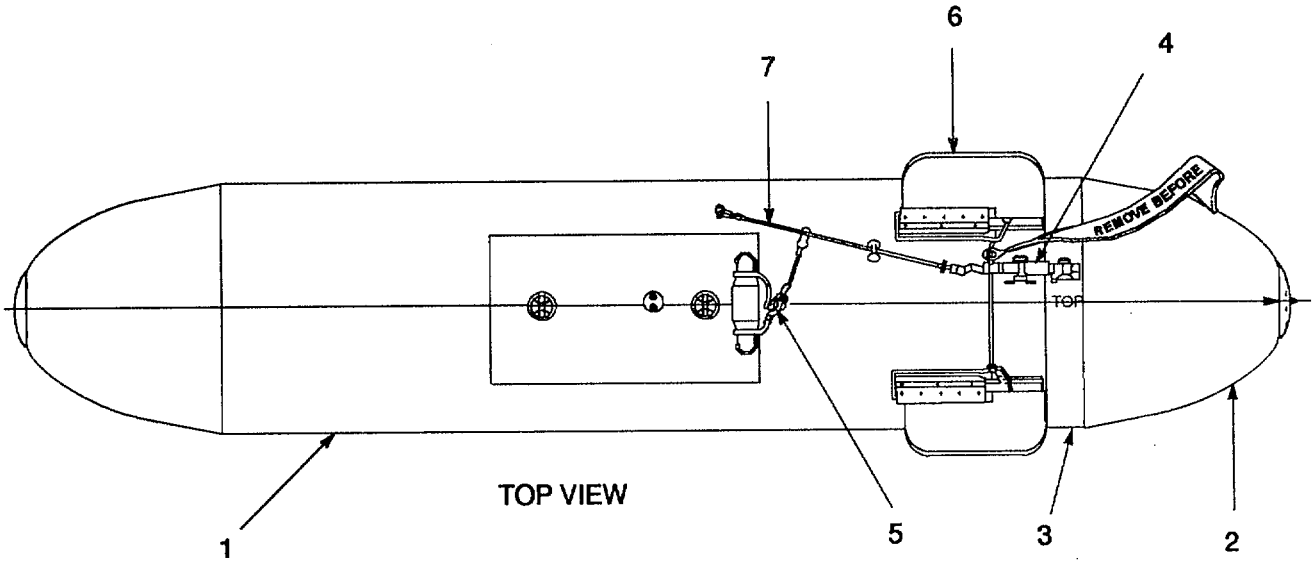


Figure 1-9. A-23 Cargo Bag

e. Capsule. Cargo, CTU-2/A. The CTU-2/A cargo capsule (Figure 1-10) encompasses the main body assembly (1), the tail cone assembly (2), parachute compartment assembly (3), M5 cartridge-actuated release assembly (4), harness cable assembly (5), fin assemblies (6), cable initiator assembly (7). Additional components not shown are the plywood bulkhead, web assemblies, parachute cable assembly, and pin assemblies.

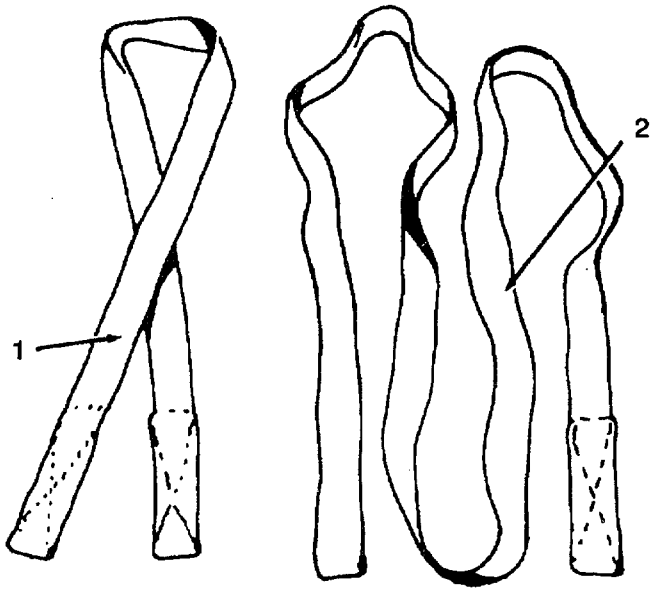


1. Main Body Assembly
2. Tail Cone Assembly
3. Parachute Compartment Assembly
4. M5 Cartridge-Actuated Release Assembly
5. Harness Cable Assembly
6. Fin Assemblies
7. Cable Initiator Assembly

Figure 1-10. CTU-2/A Cargo Capsule

The container itself consists of glass filament wound acrylic resin body and associated hardware which may be disposed of easily so it would be of no use or value to enemy forces. The cargo Is contained in the cylindrical space of the main body between the plywood bulkhead forward and the parachute cap aft. The container, which Is fin stabilized and structurally adequate to sustain explosive ejection from a bomb rack, is fitted with a parachute compartment and tail cone. The M5 cartridge-actuated release assembly is a sealed device designed to exert a 250-pound (11 3.500 kg) thrust over a 1 1/2-inch (3.810 cm) stroke following a 3/10-second delay after detonation The parachute assembly consists of a 34-foot (10.370 m) diameter conical ringslot main parachute, a 36-inch (10 980 m) diameter guide-surface pilot parachute, a deployment bag, and attachment bridle lines.

f. Strap Connector. 60- and 120-Inches (152 400 and 304 800 cm) Long. The 60- and 120-inch (152 400 and 304.800 cm) extraction connector straps (Figure 1-11) are made of 1 3/4-inch (4.445 cm) wide Type X untreated nylon webbing with a loop at each end for attachment of the Type IV quick-fit link assembly.



1. 60-Inch (152.400 cm) strap
2. 120-Inch (304.800 cm) strap

Figure 1-11. Connector Straps

1.10 EQUIPMENT DATA.

a. A-7A Cargo Sling

Material	Type X cotton or Type VII nylon
Length	188 inches (477.520 cm)
Width	1 3/4 inches (4.445 cm)

b. A-21 Aerial Delivery Cargo Bag.

Cover:	
Material	Cotton duck cloth, 12.29 ounces (348.409 g)
Length	97 inches (246.380 cm)
Width	115 inches (292.100 cm)
Sling Assembly:	
Material:'	
Scuff pad	Cotton duck cloth, 12.29 ounces (348.409 g)
Webbing	Type X cotton
Straps with ring:	
Material	Type X cotton or nylon webbing
Width	1 3/4 Inches (4.4445 cm)
Ring diameter	5 inches (12.700 cm)

c. A-22 Aerial Delivery Cargo Bag.

Cover:	
Material	Cotton duck cloth, 23.93 ounces (478.392 g) Type VIII cotton webbing
Length:	
End flap	232 inches (589 280 cm)
Side flap	211 inches (535.940 cm)
Width:	
End flap	43 Inches (109 220 cm)
Side flap	52 inches (132.080 cm)
Sling:	
Material:	
Scuff pad	Cotton duck cloth, 23.93 ounces (478.392 g)
Webbing	Type XV cotton or Type VII nylon

d. A-23 Aerial Delivery Cargo Bag.

Not furnished by government.

e. Capsule. Cargo. CTU-2/A.

Empty weights:	
Container (complete)	213 pounds (96.702 kg)
Main body assembly	113 pounds (51.302 kg)
Parachute compartment, release, and tail cone assemblies	35 pounds (15.890 kg)
Parachute assembly	65 pounds (29.510 kg)

f. Connector Straps. 60- and 120-inches (152.400 and 304.800 cm) Long.

Material	Type X nylon webbing
Length	60- and 120-inches (152.400 and 304 800 cm)
Width	1 3/4 inch (4.445 cm)
Tensile strength	8700 pounds (3949 800 kg)

1.11 EQUIPMENT CONFIGURATION.

Exact usage of the Container Delivery System Is dictated by mission requirements and the particular airdrop load being rigged. Refer to the applicable field manuals for guidance.

SECTION III. PRINCIPLES OF OPERATION

1.12 GENERAL.

The Container Delivery System consists of aerial delivery equipment designed to airdrop cargo Different configurations of this equipment may be used to meet changing operational commitments. These configuration functions can be met by referring to the appropriate field manuals which describe the various methods of equipment assembly. The function of each item contained in this system is described below.

a. A-7A Cargo Sling. The cargo sling is used to connect cargo to a parachute assembly using the fixed quick-fit parachute harness adapter attached to each strap and four dee rings It also functions as a static line anchor 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

b. A-21 Aerial Delivery Cargo Bag. The A-21 cargo bag is used to airdrop supplies and equipment It is an adjustable, bag-type container and consists of a sling, two straps with ring, a quick release, and a cover. The sling assembly is used to enclose and support the load. Each of the two straps with ring consists of a ring with a short and a long strap attached. The short strap is fitted with a dee ring to provide a means for attaching the parachute assembly. The long strap Is fitted with a quick-fit adapter for attachment to the main strap of the sling assembly The quick release provides a means of disconnecting the load from the parachute assembly

c. A-22 Aerial Delivery Cargo Bag. The A-22 cargo bag provides the same functions as the A-21 cargo bag described above; however, a plywood skid may also be included as part of the container when directed by the applicable TM 10-500-Series publication. The skid functions as a base for the container load and provides a smooth surface for use with roller conveyer loading systems

d. A-23 Aerial Delivery Cargo Bag. The A-23 cargo bag serves the same functions as the A-21 and A-22 cargo bags described above.

e. Capsule. Cargo. CTU-2/A. When commanded by the aircraft pilot, the container is released from the bomb rack and the connected cable assemblies effect detonation of the M5 cartridge-actuated release assembly. Three-tenths of a second after detonation, and at a safe distance from the aircraft, the release explosively ejects the tail cone, initiating deployment of the pilot parachute. The pilot parachute maintains tension on the man parachute suspension lines while stripping the deployment bag from the main canopy by progressively failing the cords which secure the suspension lines to the bag. Controlled failure of these cords, or hesitator ties, ensures an orderly deployment of the main parachute to the reefed diameter (approximately 36-inches (91.440 cm)). Two seconds after deployment to the reefed diameter, explosive cutters part a reefing line and initiate blossoming of the main canopy to full diameter. Subsequent container descent is controlled to a vertical impact velocity of 30-feet (3.355 m) per second at an angle of oscillation within a few degrees of vertical. After impact, the container may be rapidly opened to expose the cargo by removing the parachute compartment assembly (pulling out the four hinge pins at the base of each fin).

f. Connector Straps. 60- and 120-inches (152.400 and 304.800 cm) Long. One extraction connector strap with a Type IV quick-fit link assembly is installed on each modular or combat expendable airdrop platform load to provide a means of attaching the extraction parachute The 60-inch (152.400 cm) extraction connector strap is used with loads requiring a 1 5-foot (45.75 m) extraction parachute The 120-inch (304.800) extraction connector strap Is used with loads requiring an extraction parachute larger than 15-feet (45.75 m) in diameter.

CHAPTER 2

UNIT MAINTENANCE INSTRUCTIONS

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SECTION I. REPAIR PARTS; TOOLS; SPECIAL TOOLS; TEST, MEASUREMENT, AND DIAGNOSTIC EQUIPMENT (TMDE); AND SPECIAL EQUIPMENT

2.1 COMMON TOOLS AND EQUIPMENT.

For authorized common tools and equipment, refer to the Modified Table of Organization and Equipment (MTOE), CTA 50-970, or CTA 8-100, as applicable to your unit.

2.2 SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT.

No special tools, TMDE, or support equipment is required for the maintenance of this equipment.

2.3 REPAIR PARTS.

Repair parts are listed and illustrated in Appendix C of this manual.

SECTION II. SERVICE UPON RECEIPT

2.4 SERVICE UPON RECEIPT OF MATERIAL.

a. General. When airdrop equipment is initially received from a supply source and issued to a using unit, the Items will be unpacked from the shipping containers and inspected by a qualified parachute rigger. The Inspection performed will be a technical/rigger-type inspection which will be conducted as authorized in paragraph 2.9. Upon completion of the inspection, the items will be tagged as prescribed in DA Pam 738-751. Serviceable equipment may then be entered either into storage or into use in airdrop operations, as applicable An unserviceable item will be held and reported in accordance with DA Pam 738-750/MCO 4855.10.

NOTE

- **Personnel other than parachute rigger personnel may assist in the unpacking process of initially received airdrop equipment as directed by the local airdrop equipment maintenance officer However, the maintenance officer will insure that the entire unpacking effort is conducted under the direct supervision of a qualified parachute rigger.**

- **Acceptance of new airdrop equipment from manufacturers is based upon inspections made of sample lots which have been randomly selected in accordance with military standards It is incumbent upon using activity personnel to bear this information in mind whenever equipment is placed In service.**

- **Changes will sometimes evolve for the original design and occasionally contractors are authorized deviations of material and construction techniques. Airdrop equipment that has been In the field cannot be expected to meet exact manufacturing specifications; however, the equipment should closely reflect desired design characteristics.**

- **Since repairs, modifications, and/or changes can alter or detract from the original configuration, such equipment shall be air worthy, safe, and adequate for its intended use.**

b. Unpacking. Each component of the container delivery system is separately packaged in accordance with PPP-B-636. Use care when unpacking equipment to avoid damage Save all containers, shipping cartons, and crates for reuse when possible.

c. Checking Unpacked Equipment.

(1) Inspect the equipment for damage incurred during shipment If the equipment has been damaged, report damage on SF 364, Report of Discrepancy.

(2) Check the equipment against the packing slip to see if the shipment is complete. Report all discrepancies in accordance with the instructions of DA Pam 738-750 or DA Pam 738-751, as applicable.

(3) Note damage on DA Form 2404, Equipment Inspection and Maintenance Worksheet and initiate corrective maintenance procedures in accordance with Section IV of this chapter.

d. Processing Unpacked Equipment.

(1) The processing of unpacked airdrop equipment shall be accomplished only by a qualified parachute rigger.

(2) Check DA Pam 25-30 for Maintenance Work Orders (MWO) applicable to your equipment If any MWOs are listed, check DA Form 2408-5, Equipment Modification Record, to see If MWOs have been applied to the equipment. The MWO number will be shown near the equipment nomenclature label. If a current MWO is listed in DA Pam 25-30, but there is no evidence that it has been applied to the equipment you are processing, note the discrepancy on DA Form 2404, Equipment Inspection and Maintenance Worksheet.

SECTION III. PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

2.5 GENERAL. Preventive Maintenance Checks and Services (PMCS) means systematic caring, inspecting, and servicing of equipment to keep It in good condition and to prevent breakdowns As the equipment operator, your mission is to:

a. Be sure to perform your PMCS each time you use the equipment. Always do your PMCS in the same order, so it gets to be a habit Once you've had some practice, you'll quickly spot anything wrong.

b. Do your BEFORE (B) PMCS just before you use the equipment Pay attention to WARNINGs, CAUTIONs, and NOTEs.

c. Do your DURING (D) PMCS while you use the equipment During operation means to check the equipment and Its related components while it is being used Pay attention to WARNINGs, CAUTIONs, and NOTEs.

d. Do your AFTER (A) PMCS right after using the equipment Pay attention to WARNINGs, CAUTIONs, and NOTEs.

e. Do your WEEKLY (W) PMCS once a week.

f. Do your MONTHLY (M) PMCS once a month.

g. Use DA Form 2404 (Equipment Inspection and Maintenance Worksheet) to record any faults that you discover before, during, or after operation, unless you can fix them. You DO NOT need to record faults that you fix.

2.6 PMCS PROCEDURES.

a. Your Preventive Maintenance Checks and Services, Table 2-1, lists inspections and care required to keep your equipment In good operating condition. It is set up so you can make your BEFORE (B) OPERATION checks as you walk around the equipment.

b. The “ITEM NO.” column is used to record the results of checks/services on DA Form 2404.

c. The “INTERVAL” column of Table 2-1 tells you when to do a certain check or service.

d. The “PROCEDURE” column of Table 2-1 tells you how to do required checks and services. Carefully follow these instructions. If you do not have tools, or if the procedure tells you to, notify your supervisor.

NOTE

Terms “ready/available” and “mission capable” refer to same status: Equipment is on hand and ready to perform its combat missions (See DA Pam 738-750.)

e. The “NOT MISSION CAPABLE IF” column in Table 2-1 tells you when your equipment is nonmission capable and why the equipment cannot be used.

f. If the equipment does not perform as required, notify your supervisor.

g. If anything looks wrong and you can't fix It, write it on your DA Form 2404 IMMEDIATELY and report it to your supervisor.

h. When you do your PMCS, you will always need a rag or two. Following are checks that are common to the container delivery system.

(1) Keep It Clean. Dirt, grease, oil, and debris only get in the way and may cover up a serious problem. Clean as you work and as needed. Use dry cleaning solvent (SD-2) on all metal surfaces. Use soap and water when you clean rubber or plastic material. Upholstery can be cleaned with soap and water and a clean, damp cloth.

(2) Rust and Corrosion. Check equipment for rust and corrosion. If any bare metal or corrosion exists, clean, and apply a thin coat of oil. Report it to your supervisor.

(3) Bolts, Nuts, and Screws. Check them all for obvious looseness, missing, bent, or broken condition. You can't try them all with a tool, but look for chipped paint, bare metal, or rust around bolt heads. If you find a bolt, nut, or screw you think is loose, tighten it or report it to your supervisor.

(4) Welds. Look for loose or chipped paint, rust, or gaps where parts are welded together. If you find a bad weld, report it to your supervisor.

(5) Electric Wires and Connectors. Look for cracked, frayed, or broken insulation, bare wires, and loose or broken connectors. Tighten loose connectors. Report any damaged wires to your supervisor.

i. When you check for “operating condition” you look at the component to see if Its serviceable.

2.7 CLEANING AGENTS.

WARNING

- **DO NOT use diesel fuel, gasoline, or benzene (benzol) for cleaning**
- **DO NOT SMOKE when using cleaning solvent. NEVER USE IT NEAR AN OPEN FLAME. Be sure there is a fire extinguisher nearby and use cleaning solvent only in well ventilated places. Flash point of solvent is 138ºF (60ºC)**
- **USE CAUTION when using cleaning solvents Cleaning solvents evaporate quickly and can irritate exposed skin if solvents contact skin In cold weather, contact of exposed skin with cleaning solvents can cause frostbite.**
-

NOTE

- **Only use those authorized cleaning solvents or agents listed in Appendix E.**
- **Cleaning Rust or Corrosion. When cleaning rust or corrosion from metal parts, use tetrachloroethylene. Then apply a thin coat of aircraft and instrument grease to affected area.**

Table 2-1. Preventive Maintenance Checks and Services

Item No.	Interval	Location of Item to Check/Service	Procedure	Not Mission Capable If:
1	Before	A-7A Cargo Sling	Check for missing or defective parts; loose or broken stitches; frayed, worn or cut webbing; dirt, grease, foreign material, rust or corrosion.	INFORMATION FOR THIS COLUMN IS TO BE FURNISHED BY THE GOVT.
2	Before	A-21 Cargo Bag	Check for missing parts, loose or broken stitches, frayed, worn or cut webbing, holes, tears, foreign material, rust or corrosion. Inspect release for dirt, rust, corrosion, and other defects	
3	Before	A-22 Cargo Bag	Check for missing parts, loose or broken stitches, frayed, worn or cut webbing, holes, tears, foreign material, rust, corrosion, cracked or broken plywood if skid is used	
4	Before	A-23 Cargo Bag	Check for missing parts, loose or broken stitches, frayed, worn or cut webbing, holes, tears, foreign material, rust or corrosion. NOTE When a container is damaged beyond repair, all hardware must be removed for future use on other containers.	
5	Before	Capsule, Cargo, CTU-2/A		
		a. Hardware	Inspect hardware for damaged or loose nuts, bolts, or washers, and tighten or replace as required.	
		b. Brackets	Inspect brackets Those that are slightly bent may be straightened and reused, but cracked or severely distorted brackets should be replaced Pay particular attention to the dee ring assemblies.	
		c. Main and Parachute Compartment Body	Inspect for cracks In the supporting retainers, lugs, and shells Check for dents or distortion In the skin sufficiently large enough to alter aerodynamic effects, lessen structural integrity, or Interfere with components stored Inside Replace access plug In nose, if necessary.	

Table 2-1. Preventive Maintenance Checks and Services-Continued

Item No.	Interval	Location of Item to Check/Service	Procedure	Not Mission Capable If:
5	Before	Capsule, Cargo, CTU-2/A (Cont.)		
		d. Cables and Fittings	Inspect all cables for excessive fraying, kinks, or partial failures. Inspect cable fittings for cracks, distortions, or looseness. Replace even lightly damaged cable assemblies.	
		e. Tail Cone	Inspect for dents, cracks, and distortion. Diametrical clearance between the inside surface of the cone and the parachute compartment is not to exceed 1/8 inch (0.322 cm). Replace tail cone access plug if necessary	
		f. M5 Cartridge Actuated Release	**WARNING** EXPLOSIVE HAZARD DO NOT attempt to disassemble the M5 cartridge actuated release assembly, which has been sealed at the manufacturing source Serious injury or death could occur for failure to observe this warning. Conduct external visual inspection to ensure lack of obvious defects	
		g. Fins	Inspect for damaged rivets and cracks or distortion of plates and angles. Replace the entire assembly if badly warped.	
6	Before	Strap Connectors, 60- and 120-inches (152.400- and 304.800 cm) Long	Check for loose or broken stitches, cut, worn, or frayed webbings and foreign maternal.	
7	After	A-7A Cargo Sling	Check for missing or defective parts, loose or broken stitches; frayed, worn, or cut webbing; dirt, grease, foreign material, rust, or corrosion.	
8	After	A-21 Cargo Bag	Check for missing parts, loose or broken stitches, frayed, worn, or cut webbing, holes, tears, foreign material, rust, or corrosion. Inspect release for dirt, rust, corrosion, and other defects.	

Table 2-1. Preventive Maintenance Checks and Services-Continued

Item No.	Interval	Location of Item to Check/Service	Procedure	Not Mission Capable If:
9	After	A-22 Cargo Bag	Check for missing parts, loose or broken stitches, frayed, worn, or cut webbing, holes, tears, foreign material, rust, corrosion, cracked or broken plywood if skid is used.	
10	After	A-23 Cargo Bag	Check for missing parts, loose or broken stitches, frayed, worn, or cut webbing, holes, tears, foreign material, rust or corrosion.	
11	After	Capsule, Cargo, CTU-2/A	**NOTE** When a container Is damaged beyond repair, all hardware must be removed for future use on other containers.	
		a. Hardware	Inspect hardware for damaged or loose nuts, bolts, or washers, and tighten or replace as required.	
		b Brackets	Inspect brackets. Those that are slightly bent may be straightened and reused. But cracked or severely distorted brackets should be replaced Pay particular attention to the dee ring assemblies.	
		c Main and Parachute Compartment Body	Inspect for cracks in the supporting retainers, lugs, and shells. Check for dents or distortion In the skin sufficiently large enough to alter aerodynamic effects, lessen structural integrity, or interfere with components stored inside. Replace access plug in nose, if necessary.	
		d. Cables and Fittings	Inspect all cables for excessive fraying, kinks, or partial failures Inspect cable fittings for cracks, distortions, or looseness Replace even lightly damaged cable assemblies.	
		e Tail Cone	Inspect for dents, cracks, and distortion. Diametrical clearance between the inside surface of the cone and the parachute compartment is not to exceed 1/8 inch (0.322 cm). Replace tail cone access plug if necessary	

Table 2-1. Preventive Maintenance Checks and Services-*Continued*

Item No.	Interval	Location of Item to Check/Service	Procedure	Not Mission Capable If:
11	After	Capsule, Cargo, CTU-2/A (Cont.)		
		f. M5 Cartridge Actuated Release	WARNING EXPLOSIVE HAZARD DO NOT attempt to disassemble the M5 cartridge actuated release assembly, which has been sealed at the manufacturing source. Serious injury or death could occur for failure to observe this warning Conduct external visual inspection to ensure lack of obvious defects.	
		g. Fins	Inspect for damaged rivets and cracks or distortion of plates and angles Replace the entire assembly if badly warped.	
12	After	Strap Connectors, 60- and 120-Inches (152 400- and 304.800 cm) Long	Check for loose or broken stitches, cut, worn, or frayed webbing, and foreign material.	
13	Monthly	Quick Release Assembly	Service by soaking assembly In tetrachloroethylene.	

SECTION IV. MAINTENANCE PROCEDURES

2.8 GENERAL REPAIR INSTRUCTIONS.

a. Repair Limitations. Only those repairs prescribed in the Maintenance Allocation Chart (MAC) (Appendix B) are authorized. Repair cost limitations to preclude uneconomical repair of the airdrop items contained In this publication will conform to the requirements of TB 43-0002-43.

b. Searing and Waxing.

CAUTION

Cotton tape, webbing, or cord will not be seared. Permanent damage to the material will result

(1) Searing. The ends of nylon tape, webbing, and cord lengths may be prepared by heat searing which is performed by pressing the material's raw end against a hot metal surface until the nylon has melted sufficiently. Avoid forming a sharp edge or lumped effect on the melted end.

(2) Waxing. The fraying or unravelling of cotton or nylon tape, webbing, and cord length ends may be prevented by dipping 1/2-inch (1.270 cm) of the material's raw end into a thoroughly melted mixture of half beeswax (Item 1, Appendix E) and half paraffin (Item 17, Appendix E) The wax temperature should be substantial enough to Insure the wax completely penetrates the material rather than just coating the exterior fabric.

c. Marking, Restenciling, and Repainting.

NOTE

Stenciling should be used whenever possible A ball point pen (Item 10, Appendix E) or felt tip marker (Item 11 or 12, Appendix E) should be used only where stenciling is not possible or when stenciling devices are not available However, only felt tip markers that contain parachute marking ink and marked "FOR PARACHUTE MARKING" are authorized for use in marking parachute components Any type of ball point pen using black or blue ink may be used for marking on labels only.

(1) Marking. Informational data, gore numbers, and identification numbers, as applicable, are marked on individual airdrop items. Some airdrop equipment components possess painted red enamel warning marks to indicate to the user the critical nature of the applicable component Some metal and wooden airdrop items may be painted with olive drab paint (Item 10, Appendix E) as a corrosion preventive and protection against climatic elements.

(2) Restenciling. Original stenciled data or markings that become faded, illegible, obliterated, or are removed as a result of performing a repair procedure will be remarked with a ball point pen (Item 10, Appendix E), felt tipped marker (Item 11 or 12, Appendix E), or restenciled. All restenciling will be done on, or as nearly as possible to, the original location and should conform to the original lettering type and size.

(3) Repainting. A warning mark on an airdrop equipment component that is chipped or worn will be repainted with red enamel paint (Item 5, Appendix E) using a proper size paint brush (Item 2, Appendix E) for paint application. Likewise, a mark previously painted on an airdrop item to signify satisfactory completion of a specific test may be repainted with the original color enamel and a suitable applicator providing the item is still serviceable Metal and wood items may be repainted with olive drab paint (Item 9, Appendix E) using the previously cited painting methods, as required.

d. Basting and Temporary Tacking. Basting and temporary tacking are hand sewing methods used to temporarily hold layers of cloth fabric together while a repair is being performed The following is a list of procedures which apply to basting and temporary tacking actions.

(1) Basting and temporary tacking should be made using thread which is of a contrasting color to the material being worked.

(2) On most small airdrop items, basting will be made using a single strand of Size A nylon thread (Bulk, appendix C) or Ticket Number 24 cotton thread (Bulk, Appendix C).

(3) When basting, do not tie knots at any point in the thread length. Also, the sewing should be made with two stitches per inch.

(4) Temporary tacking will usually be made using a length of Size E nylon thread (Bulk, Appendix C) However, an alternate type thread may be specified within the applicable item equipment publication.

(5) Immediately upon completion of a repair, remove a previously made basting or temporary tacking.

e. Stitching and Restitching. Stitching and restitching on airdrop equipment constructed from cloth, canvas, and webbing should be accomplished with thread which matches the color of the original stitching, when possible. All straight stitching should be locked by back stitching each end of the stitch formation by ½-inch (1 270 cm.). Restitching should be locked by overstitching each end of the stitch formation by ½-inch (1.270 cm). Zigzag stitching does not require locking; however, zigzag restitching should extend at least ¼-inch (0.635 cm) into undamaged stitching at each end, when possible. Restitching should be made directly over the original stitching, following the original stitch pattern as closely as possible.

NOTE

Table 2-2 lists the various industrial sewing machine symbols common to most aerial delivery repair facilities and Table 2-3 Indicates stitching specifics normally encountered while performing maintenance on aerial delivery textile items of equipment.

Table 2-2. Sewing Machine Code Symbols

Code Symbol	Sewing Machine
LD	SEWING MACHINE, INDUSTRIAL: General sewing, 301 stitch; light duty; NSN 3530-01-177-8590.
MD ZZ	SEWING MACHINE, INDUSTRIAL: Zigzag, 308 stitch; medium duty; NSN 3520-01-181-1421.
LD ZZ	SEWING MACHINE, INDUSTRIAL: Zigzag, 308 stitch; light duty; NSN 3530-01-181-1420.
HD	SEWING MACHINE, INDUSTRIAL: General sewing; 301 stitch, heavy duty, NSN 3530-01-177-8588.
MD	SEWING MACHINE, INDUSTRIAL: General sewing, 301 stitch; medium duty, NSN 3530-01-177-8591.
DN	SEWING MACHINE, INDUSTRIAL: Darning; lockstitch, NSN 3530-01-177-8589.
LHD	SEWING MACHINE, INDUSTRIAL: 301 stitch; light heavy duty, NSN 3530-01-186-3079.
ND	SEWING MACHINE, INDUSTRIAL: 301 stitch, double-needle; NSN 3530-01-182-2873.

Table 2-3. Stitching Specifications

Component	Recommended Sewing Machine (Code Symbol)	Stitches Per Inch	Thread Size
A-21 Cargo Bag'			
Cover	MD	7 to 11	E
Strap Keeper	DN or ZZ	Darn	E
Sling			
Scuff Pad	MD	7 to 11	E
	DN or ZZ	Darn	E
V-Ring Hole Reinforcement	MD	7 to 11	E
Main Strap Keeper	HD	5 to 8	3
Sling Strap and Loop	HD	5 to 8	5
Quick-Release Strap	HD	5 to 8	5
Safety Clip Retaining Strap	MD	7 to 11	E
Strap with Ring	HD	5 to 8	5
A-22 Cargo Bag			
Cover	HD	5 to 8	3
Cover Lacing Loop Strap	HD	5 to 8	5
Sling Assembly			
Scuff Pad	HD	5 to 8	3
	DN or ZZ	Darn	E
Scuff Pad Edge Reinforcement	HD	5 to 8	3
Support Web	LHD or HD	5 to 8	5
Lateral Strap	LHD or HD	5 to 8	5
Tie-down Strap	LHD or HD	5 to 8	5
Suspension Web	VHD	5 to 8	6

f. Darning and Zigzag Sewing Repairs.

(1) Darning. Darning is a sewing procedure used to repair limited size holes, rips, and tears in assorted airdrop items constructed from textile material such as parachute canopy gore sections and the cloth and reinforcement webbing of deployment bags, packs, and cargo. A darning repair may be made either by hand or sewing machine, depending upon the method preferred and the availability of equipment. However, a darning machine should be used to darn small holes and tears where fabric in missing. Darning of previously patched material can be performed provided darning size limitations prescribed In the applicable item equipment publication are not exceeded. A darning repair will be performed using the following procedures, as appropriate:

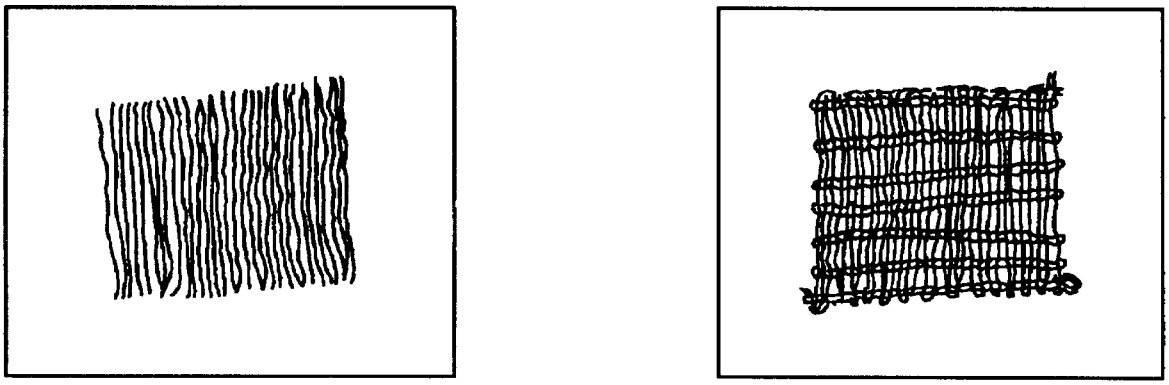
(a) Machine Darning.

1 Using an authorized marking aid of contrasting color, mark a square around the damaged area and insure that the marking is at least ¼-inch (0.635 cm) back from each edge of the damaged area. The marking will be made with the warp and filling of the material

2 Darn the damaged area by sewing the material in a back and forth manner, allowing the stitching to run with the warp or filling of the fabric (A, Figure 2-1).

3 Turn the material and stitch back and forth across the stitching made in 2 above until the hole or tear is completely darned (B, Figure 2-1).

4 If applicable, restencil informational data, gore number, or identification marks using the criteria in paragraph 2.8.c.



A. Stitching with fabric warp or filling.

B. Darning completed.

Figure 2-1. Darning Method Using a Darning Sewing Machine

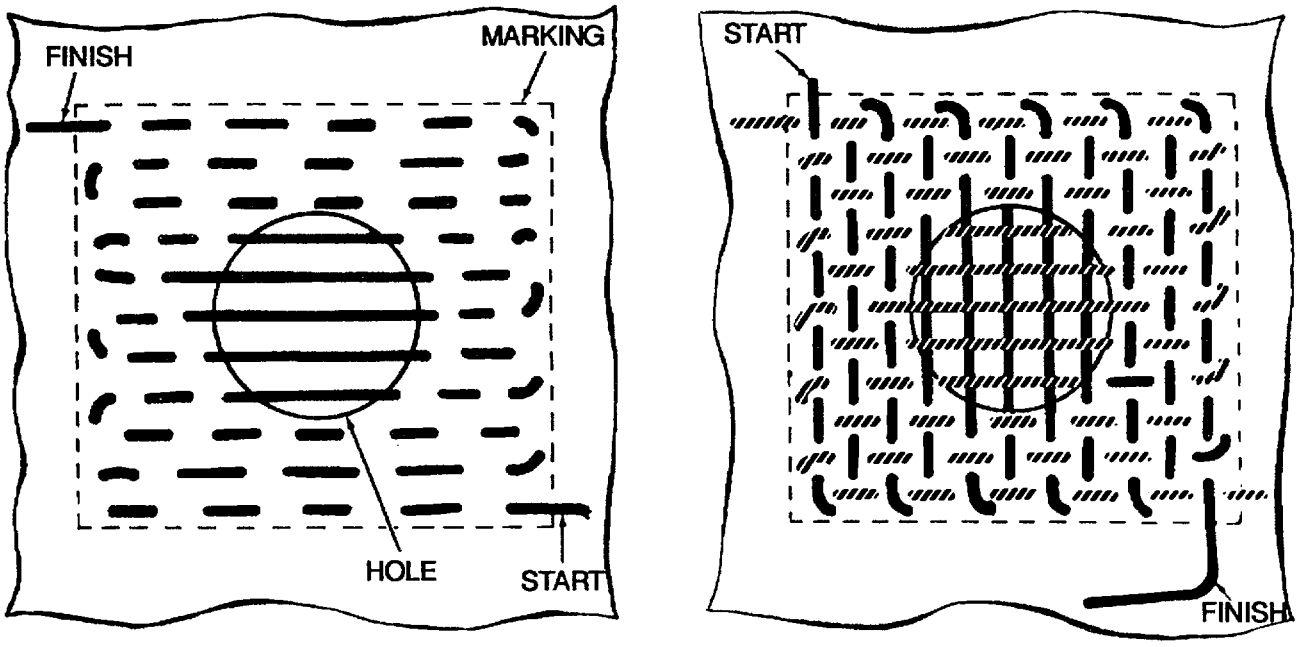
(b) Hand Darning. When repair of a hole or tear is made by hand darning, the dam should match the original weave of the damaged material as closely as possible. Hand darning will be performed as follows:

1 Using an authorized marking aid of contrasting color, mark a square around the damaged area and insure that the marking If at least 1/4-inch (0.635 cm) back from each edge of the damaged area. The marking will be made with the warp and the filling of the material.

2 Using a darning needle and a length of suitable type thread, begin darning at one comer of the marked area. Working In the direction of the fabric warp or filling, pass the needle and thread back and forth through the material until the opposite diagonal comer of the marked area is reached (A, Figure 2-2).

3 Turn the material and weave the needle and thread back and forth across the stitching made in 2 above until the hole Is completely darned (B, Figure 2-2).

4 If applicable, restencil informational data or identification marks as outlined in paragraph 2.8.c.



A. Stitch with warp or filling.

B. Hand darning completed.

Figure 2-2. Hand Darning Method

(c) Zigzag Sewing. Airdrop Items, except parachute canopies, made from textile materials that have sustained cut or tear damage may be repaired by zigzag sewing provided the applicable damaged area does not have any material missing and the cut or tear is straight or L-shaped. Should the damaged area be irregularly shaped or have material missing, the repair will be achieved by either darning or patching, as required. A zigzag sewing repair will be accomplished using a zigzag sewing machine, the specifics cited in Tables 2-2 and 2-3, and the following procedures.

1 Set the sewing machine to the maximum stitch width.

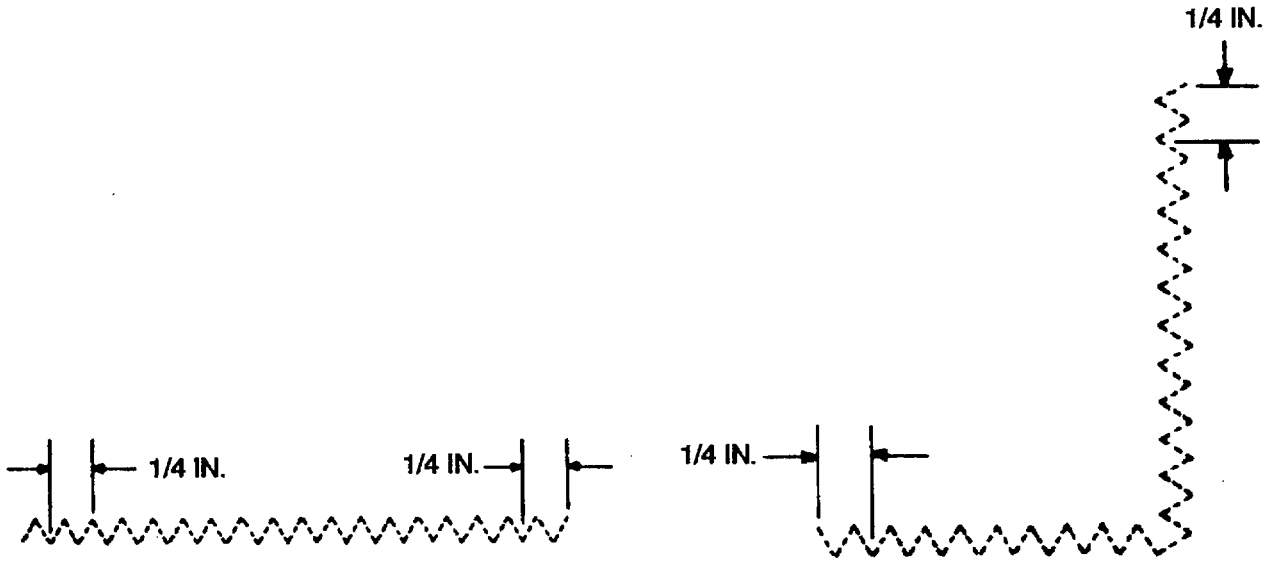
2 Beginning at a point ¼-inch (0.635 cm) beyond one end of the cut or tear, stitch lengthwise along the damaged area to a point 1/4-inch (0.635 cm) beyond the opposite end of the cut or tear (A, Figure 2-3). The cited stitching procedure will also apply to an L-shaped cut or tear (B, Figure 2-3).

3 If applicable, restencil informational data or Identification marks as prescribed In paragraph 2 8.c.

NOTE

- Holes or tears that exceed 1-inch (2 54 can) in length or 1-inch (2.54 cm) in diameter will not be machine darned or hand darned. However, any cut or tear may be repaired with zigzag stitching provided no material adjacent to the cut or tear is missing.

- Any hole or tear that exceeds 1-inch (2.54 cm) in length or 1-inch (2.54 cm) in diameter will be patched.



A. Straight cut or tear stitching.

B. L-shaped cut or tear stitching.

Figure 2-3. Repair Method Using a Zigzag Sewing Machine

g. Patching Procedures. Patching is a procedure used to repair holes which cannot be darned in airdrop equipment constructed from textile materials. This procedure applies to items such as parachute canopies, deployment bags, packs, cargo bags, and other assorted canvas and webbing items.

(1) Making a Basic Patch. A basic patch is used to repair damaged cloth when the affected area is no closer than 1-inch (2.54 cm) from the radial seam, edge reinforcement, or lower lateral band Should a damaged area be closer than 1 -inch (2.54 cm) to the cited areas, a miscellaneous patch will be made as detailed In paragraph 2 8.g. There are three methods which may be used to apply a basic patch and the procedures for performing each method are outlined as follows:

(a) The Sewn Patch. The primary method of applying a basic patch Is by sewing. The patch may be applied on either the inside or the outside of the item using the details of Figure 2-4 and as follows:

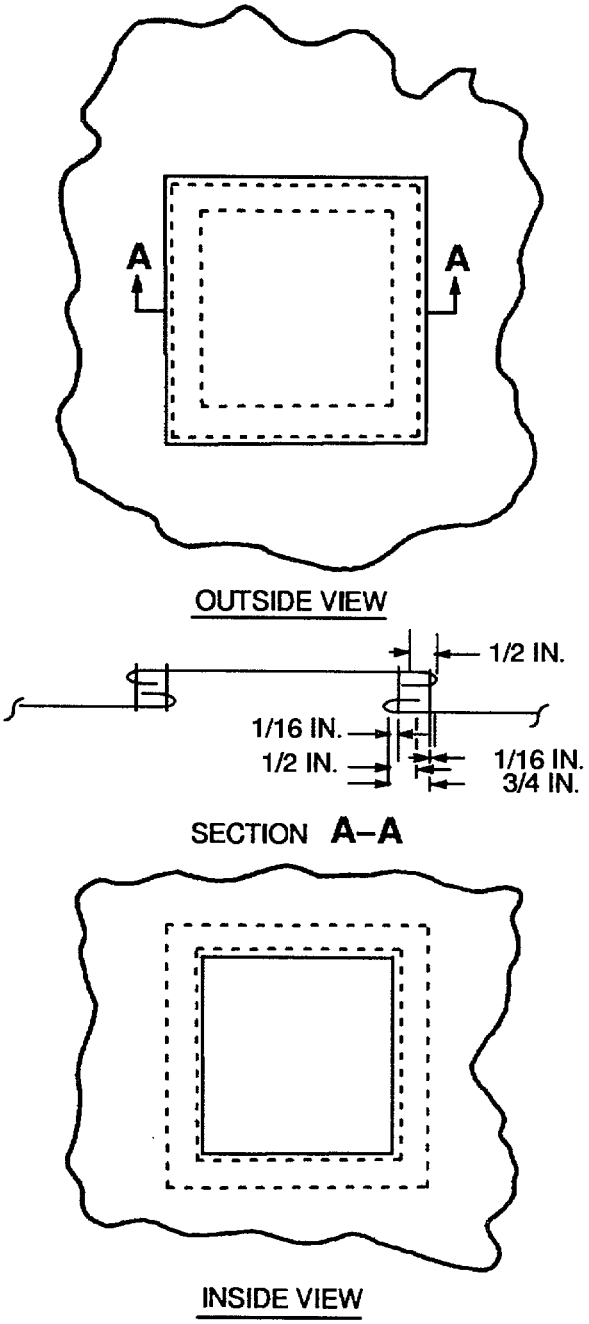


Figure 24. Basic Patch Application to Other Airdrop Equipment

1 Place the reparable item on a repair table, smooth the fabric around the damaged area, and secure the item to the table with pushpins. Do not pin the damaged area.

2 Using an authorized marking aid of contrasting color, mark a square or rectangle around the area to be patched.

3 Cut the damaged area fabric along the lines made in 2 above. Further cut the fabric diagonally at each corner to allow a ½-inch (1.270 can) fold back in the raw edges.

4 Make a ½-inch (1.270 cm) foldback on each raw edge Pin and baste each foldback to complete the prepared hole. Basting will be performed using the procedures in paragraph 2.8.d

5 Using the same type material as in the original construction, mark and cut a patch 2 ½-inches (6.350 cm) wider and longer than the inside measurements of the prepared hole.

6 Center the patch material over the prepared hole and pin the patch material in position.

7 Make a ½-inch (1.270 cm) foldunder on each edge of the patch material and baste the patch to the prepared area. Basting will be performed using the procedures in paragraph 2.8 d.

8 Remove the pushpins securing the item to the repair table and secure the patch by stitching, using the applicable details in Figure 2-4 and the stitching specifics outlined in Table 2-3. Make the first row of stitching completely around the patch. Turn the item over and make a second row of stitching around the prepared hole. Stitching will be performed In accordance with paragraph 2.8.e.

9 If applicable, restencil informational data or gore number according to procedures in paragraph 2.8 c

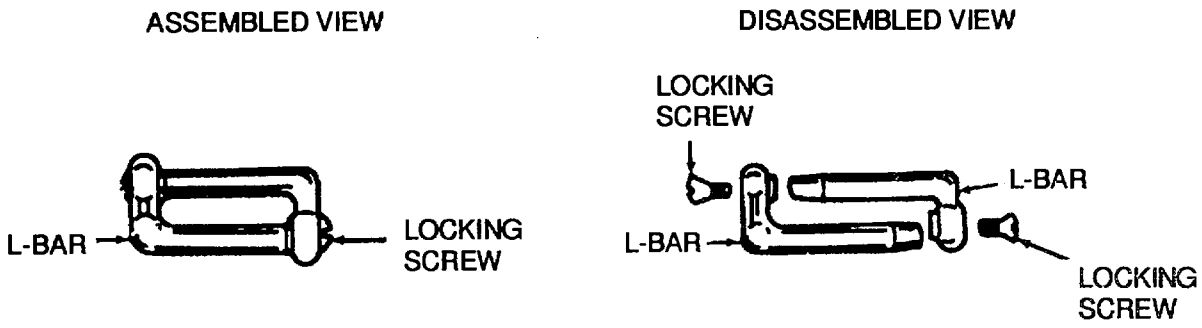
h Splicing Procedures. Splicing Is a procedure used to repair lengths of cord, tape, or webbing on airdrop items. For clarity, the term "splicing" as used in airdrop equipment publications refers to procedures such as drawing a cord length end into a cord length body, laying a cord length alongside another cord length, or the placing of a length of tape or webbing lengthwise over another length of tape or webbing. In most instances, a splicing procedure is completed by securing the cord, tape, or webbing, as applicable, with stitching.

i. Parachute Connector Link Assemblies. The three types of parachute connector link assemblies used on airdrop equipment are the L-bar, U-bar, and quick-fit (Figure 2-5). The L-bar connector link is the most common of the three link assemblies and has no restrictions on use. However, the U-bar and quick-fit connector link assemblies do have limited application for use of US Army airdrop equipment. The U-bar connector link assembly will only be used on cargo type airdrop items, which includes cargo parachutes. The quick-fit connector link assembly is limited for use on emergency-type personnel parachutes only. A damaged parachute connector link assembly will be repaired or replaced using the following procedures, as applicable

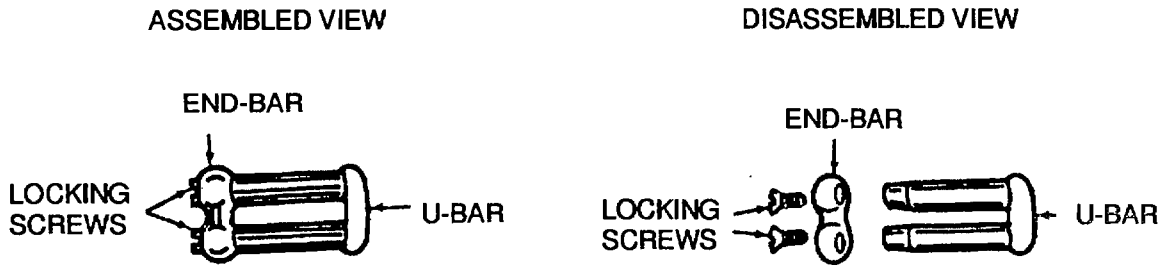
(1) Repair.

(a) Cleaning. Remove burrs, rough spots, rust, or corrosion from a parachute connector link assembly by either filing with a metal file (Item 6, Appendix E) or buffing with a crocus cloth (Item 3, Appendix E).

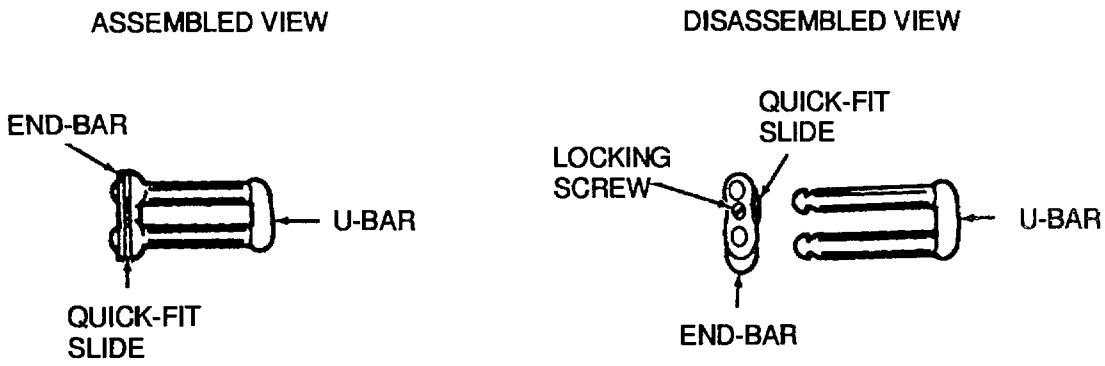
(b) Replacing a Locking Screw. Replace a damaged or missing locking screw on a parachute connector link with a serviceable item from stock.



A. The L-bar Parachute Connector Link Assembly.



B. The U-bar Parachute Connector Link Assembly.



C. The Quick-fit Parachute Connector Link Assembly.

Figure 2-5. Parachute Connector Link Assemblies

(2) Replacement. A parachute connector link assembly, regardless of the type, which is damaged beyond repair will be replaced with a serviceable L-bar parachute connector link assembly from stock and the following procedures:

(a) Using a suitable sized flat-tip (common head) screwdriver (Item 5, Appendix B), remove the two locking screws from the ends of a replacement L-bar parachute link assembly and disassemble the link.

(b) Using a suitable sized flat-tip (common head) screwdriver (Item 5, Appendix B), remove the two locking screws from the damaged original parachute connector link assembly. Disassemble the link assembly, using a link separator (Figure 2-6), if necessary. If the connector link contains suspension lines, insure the lines are not allowed to slide off the damaged link during the disassembly process.

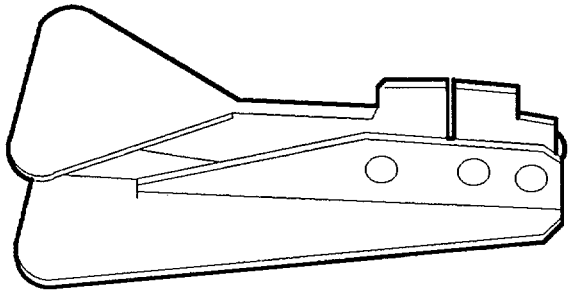


Figure 2-6. The Parachute Connector Link Separator

(c) As applicable, position an L-bar of the replacement link assembly adjacent to the disassembled original link assembly and slide the suspension lines from the damaged link onto the replacement link L-bar.

(d) If required, pass the remaining L-bar of the replacement link through the attaching loop of the adjoining component

(e) Fit the replacement link L-bars together and insure L-bar leg engagement by tapping the end of each L-bar with a phenolic mallet

(f) As applicable, trace the suspension lines from the connector link assembly to the canopy skirt to insure the lines are properly installed and in the correct sequence.

(g) Reinstall the two locking screws removed in (a) above and tighten each screw using a suitable sized flat-tip (common head) screwdriver (Item 5, Appendix B).

2.9 TECHNICAL/RIGGER-TYPE INSPECTION. A technical/rigger-type inspection is a complete and thorough inspection of an individual airdrop item, including associated parts and components. The following criteria cites the specifics applicable to accomplishing a technical/rigger-type inspection which will be performed by a qualified parachute rigger in compliance with AR 750-32.

a. Inspection Intervals.

(1) Upon initial receipt of procured equipment issued to a using unit by a supply source.

(2) Immediately before equipment is packed or rigged for use In airdrop operations.

(3) Before and after repairs or modifications are made.

(4) At any time as deemed necessary by the airdrop equipment maintenance officer

b Inspection Function Requirement. Normally, a technical/rigger-type inspection will be performed by airdrop equipment maintenance personnel at a packing, rigging, or repair activity. The Inspection of initial receipt Items will be performed as a separate function from packing or rigging operations When the inspection is conducted at a packing or rigging activity, the Item to be inspected will be placed In proper layout on a packing table or suitable sized floor area. Should defect or damage be discovered at any point during the Inspection, the inspection will be terminated and the applicable item will be processed and forwarded to a repair activity The repair activity In turn will conduct a technical/rigger-type Inspection that will be performed by only those parachute rigger personnel cited in AR 750-32 Any defect noted during a unit maintenance level repair activity inspection which exceeds the capability of that activity will require the affected item to be evacuated to a direct support maintenance function for further determination of economic repair and repair accomplishment, if applicable.

c. Technical/Rigger-Type Inspection Procedures

(1) Overall Inspection. An overall inspection will be made of parachutes and other airdrop equipment items to ascertain the following:

(a) Assembly Completeness. Insure that the applicable assembly is complete and that no components or parts are missing

(b) Operational Adequacy. Check the Item components and parts to insure proper assembly, which includes attachment and alignment, and that the assembled product functions in the prescribed manner. Further insure that no stitch formation or sewn seam has been omitted, with particular attention directed to static lines, harnesses, risers, slings, extraction lines, adapter webs, and parachute canopies.

(c) Marking and Paint. Inspect each assembly and associated components for faded, Illegible, obliterated, or missing informational data, identification numbers, and warning marks Also check for chipped, worn, or peeled paint, as applicable.

(d) Foreign Material and Stains. Inspect each assembly and related components for the presence of dirt or similar type foreign material. Also check for evidence of mildew, moisture, oil, grease, pitch, resin, or contamination of salt water.

(2) Detailed Inspection. In addition to the overall inspection performed in (1) above, a detailed inspection will be performed on the materials which constitute the assembly or component construction using the following criteria, as applicable.

(a) Metal. Inspect for rust, corrosion, dents, bends, breaks, burrs, rough spots, sharp edges, wear, deterioration; damaged, loose, or missing nuts, bolts, screws, safety pins, or rivets; improper swagging or welding; or loss of spring tension.

(b) Plastic and Wood. Inspect for breaks, bends, dents, holes, rough spots, sharp edges, and wear.

(c) Cloth. Inspect for breaks, bums, cuts, frays, holes, rips, snags, tears; loose, missing, or broken stitching or tacking; weak spots, wear, or deterioration.

(d) Fabric, Tape, Webbing, and Cordage. Inspect for breaks, bums, cuts, frays, holes, snags, tears, incorrect weaving, and sharp edges formed from searing; loose, missing, or broken stitching, tacking, whipping, and weaving; weak spots, wear, and deterioration.

(e) Pressure-Sensitive (Adhesive) Tape. Inspect for bums, holes, cuts, tears, weak spots, looseness, and deterioration.

(f) Rubber and Elastic. Inspect for bums, cuts, holes, tears, weak spots, loss of elasticity, and deterioration.

(g) Felt. Inspect for bums, cuts, holes, breaks, tears, and thin spots.

(h) Leather. Inspect for bums, cuts, holes, tears; loose, missing or broken stitching; thin spots, and deterioration.

2.10 DROP-TESTING PROCEDURES.

a. General. Drop-testing of airdrop equipment consists of physically airdropping an item from an aircraft in flight. The drop test Is used as a means of proving the serviceability of an item or checking parachute rigger proficiency and will only be performed under the supervision of qualified parachute rigger personnel who satisfy the supervisory requirements outlined in AR 750-32. Drop-testing usually will be conducted by an activity responsible for the inspection and maintenance of airdrop equipment, which includes airdrop load rigging The following criteria Is used to conduct a drop test.

(1) When drop-testing a cargo parachute, the weight of the load will be proportionate with the standard design load of the specific parachute being tested In addition, the applicable type parachute will be released under conditions which are consistent with the requirements for an equipment drop.

(2) During the drop test of any type parachute, the deployment of the parachute will be thoroughly monitored and observed to detect any indication of malfunction or defect. A subsequent record of the drop test will be entered into the applicable parachute log record as follows.

(a) Upon completion of the first technical/rigger-type inspection, the individual performing the inspection will initially prepare a log record for an individual parachute or applicable type parachute harness and accomplish subsequent record entries using the applicable procedures shown below.

1 Parachute Log Record. Using the information provided on the parachute canopy data block, make the following entries on the inside front cover of the log record (A, Figure 2-7). Entries may be continued on the inside of the back cover (B, Figure 2-7), if necessary.

a Enter the parachute canopy serial number.

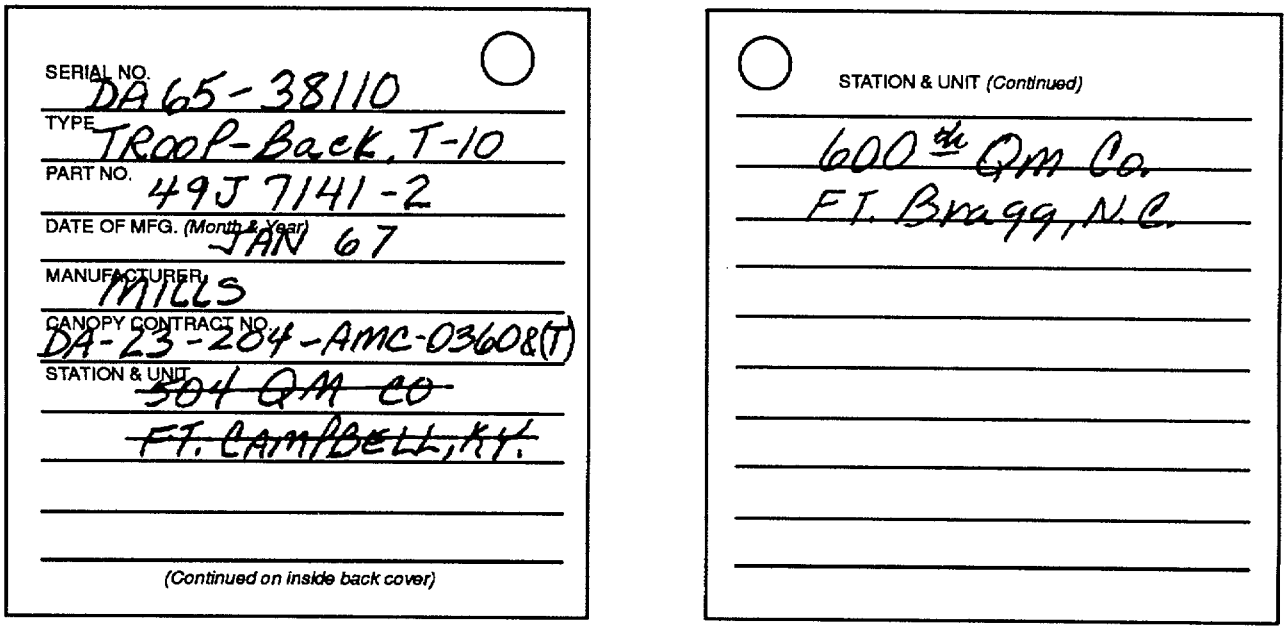
NOTE

A parachute canopy serial number is recorded as a method of establishing control for the maintenance EIR (Equipment Improvement Report) and QDR (Quality Deficiency Report) documentation, and to ensure the correct original record is reattached should the record become detached. A canopy serial number will not be used for property accountability, except in test projects or other special instances

b Enter the parachute type.

c Enter the part number of the parachute canopy.

d Enter the month and year the parachute canopy was manufactured.



A. Inside front cover.

B. Inside back cover.

Figure 2-7. Parachute Log Record Entries for the Inside Front and Back Covers, Typical

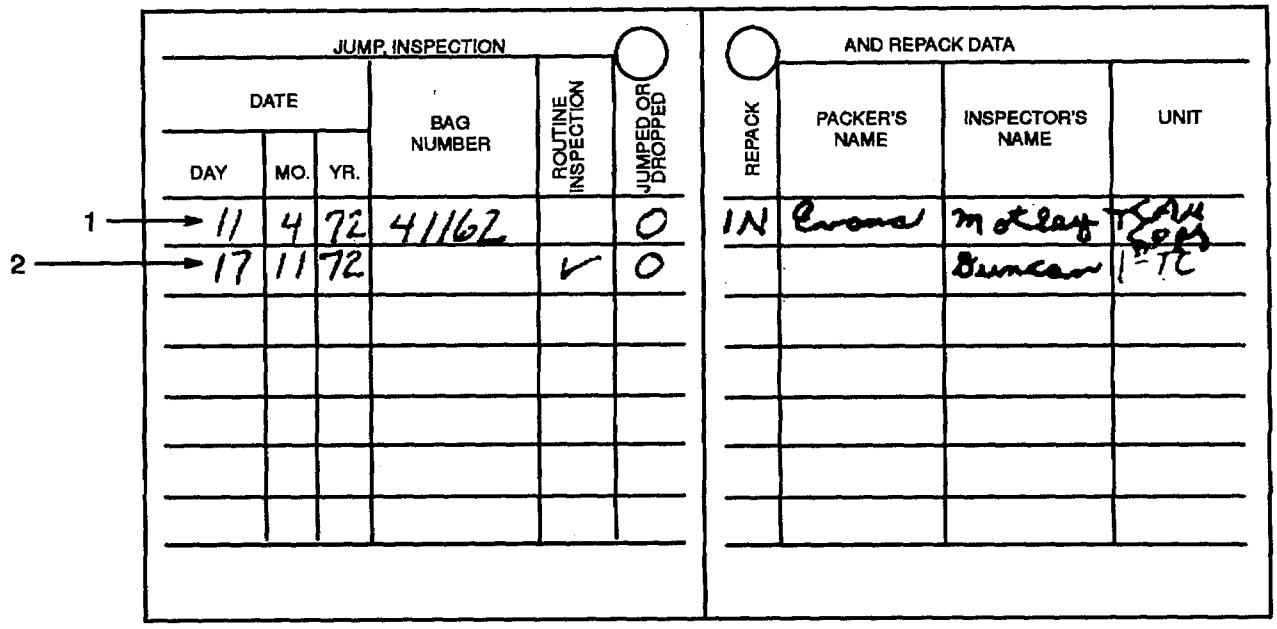
e Enter the name of the parachute canopy manufacturer.

f Enter the entire contract number specified for the parachute canopy.

g Enter the name of the station and unit to which the parachute canopy Is currently assigned When a parachute is permanently transferred to another station and/or unit, the original entry will be lined out and the name of the receiving station and/or unit will be entered

h At the top of the notes page located in back of the book enter- Placed in service: (enter month and year that the item was placed into service).

2 Jump. Inspection, and Repack Data Page Beginning with the initial packing of a parachute and each time a parachute is repacked or administered a routine inspection, make the appropriate entries on the "JUMP, INSPECTION, AND REPACK DATA" page of the log record (Figure 2-8) as shown below:



1. Entry for initial packing of a parachute.
2. Entry of emergency-type personnel parachute routine inspection.

Figure 2-8. Log Record Entries for the Jump, Inspection, and Repack Data Page, Typical

a Enter the date (day, month, and year) of each inspection and packing action applied to the parachute. These actions include the initial pack (1), after-use repack, 120-day Inspection and repack, and routine inspection (2), as applicable

b No entry is required for jumped or airdropped equipment

c For initial packing, enter "in", thereafter, enter a check mark in the column each time the parachute is replaced.

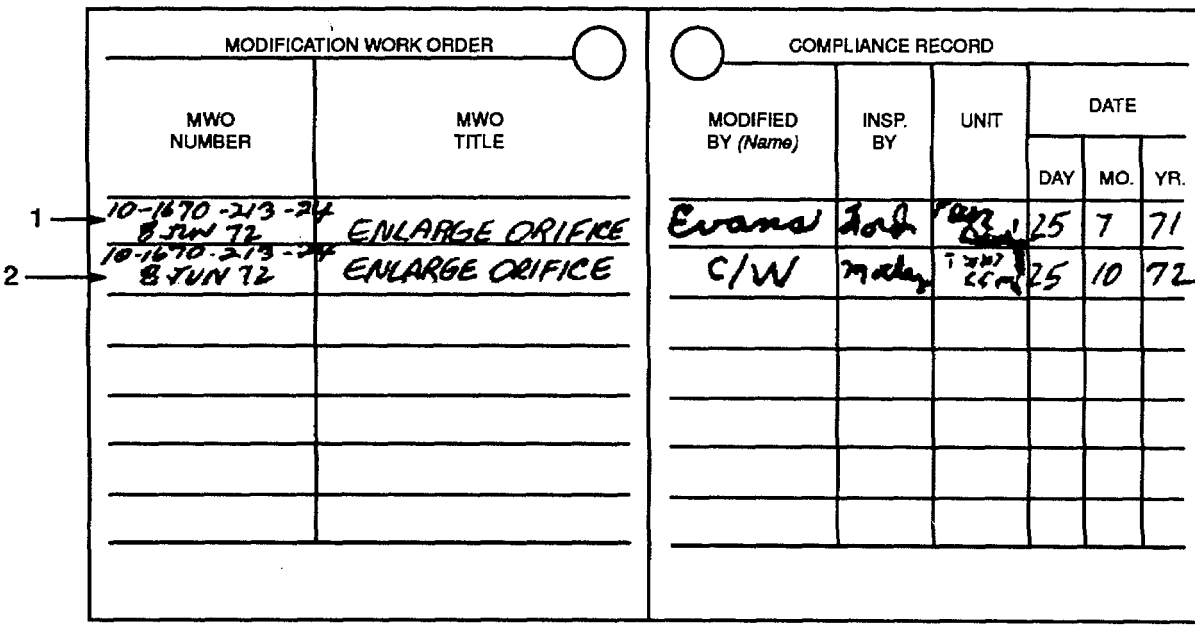
d Enter the packers name performing the initial pack, repack, or routine inspection, as applicable. The packer shall sign this entry.

e The inspector who has performed the pack-n-process inspection or routine inspection shall sign the entry

f Enter the publication number and date of the Modification Work Order (MWO) which prescribes the work (1) (Figure 2-9)

g Enter a short, abbreviated title extracted from the MWO prescribing the work.

h Enter the last name of the individual who has performed the modification. If the original log record for the parachute has been lost and it has been ascertained through inspection, that a particular modification has been accomplished, the entry for this column will be "C/N" (2) (Figure 2-9) which signifies the applicable MWO has been complied with.



1. Modification work order compliance completed.
2. Modification completed by unknown due to lost original log record.

Figure 2-9. Log Record Entries for the Modification Work Order Compliance Page, Typical

i The individual who accomplished the inspection required after the modification shall sign this entry with the last name only

j Enter the unit designation responsible for performing the MWO or in the event of a lost log record, the unit to which the inspector in assigned.

k Enter the date (day, month, and year) the modification work was completed.

l Enter the unit designation to which the packer and/or inspector is assigned.

3 Modification Work Order Compliance Record Page. When a modification is performed on a parachute canopy, the entries shown on Figure 2-9 will be made on the "MODIFICATION WORK ORDER COMPLIANCE RECORD" page of the log record.

4 Organizational. Field. and Depot Repair and Inspection Data Page When a parachute canopy assembly is initially received from a supply source and a technical/rigger-type inspection if performed, the inspection accomplishment will be documented on the "ORGANIZATIONAL, FIELD, DEPOT REPAIR AND INSPECTION DATA" page of the individual parachute log record (1, Figure 2-10). Additional entries will also be made on this page each time the canopy assembly Is repaired (2, Figure 2-10) or is administered an inspection in compliance with a one-time inspection Technical Bulletin (TB) (3, Figure 2-10). The page completion criteria is as follows.

a As applicable, enter the term "INITIAL INSPECTION", the type of repair, or the number of the TB which prescribes a one-time inspection.

b The individual who performed the initial inspection, inspection after repair, or one-time inspection, as applicable, shall sign this entry with the last name only.

c Enter the designation of the unit which performed an inspection on the repair.

d Enter the date (day, month, and year) the applicable type Inspection was completed.

5 A "NOTE" page is provided at the back of a parachute log record to accommodate recording of additional data pertinent to the serviceability of a parachute canopy assembly (Figure 2-11).

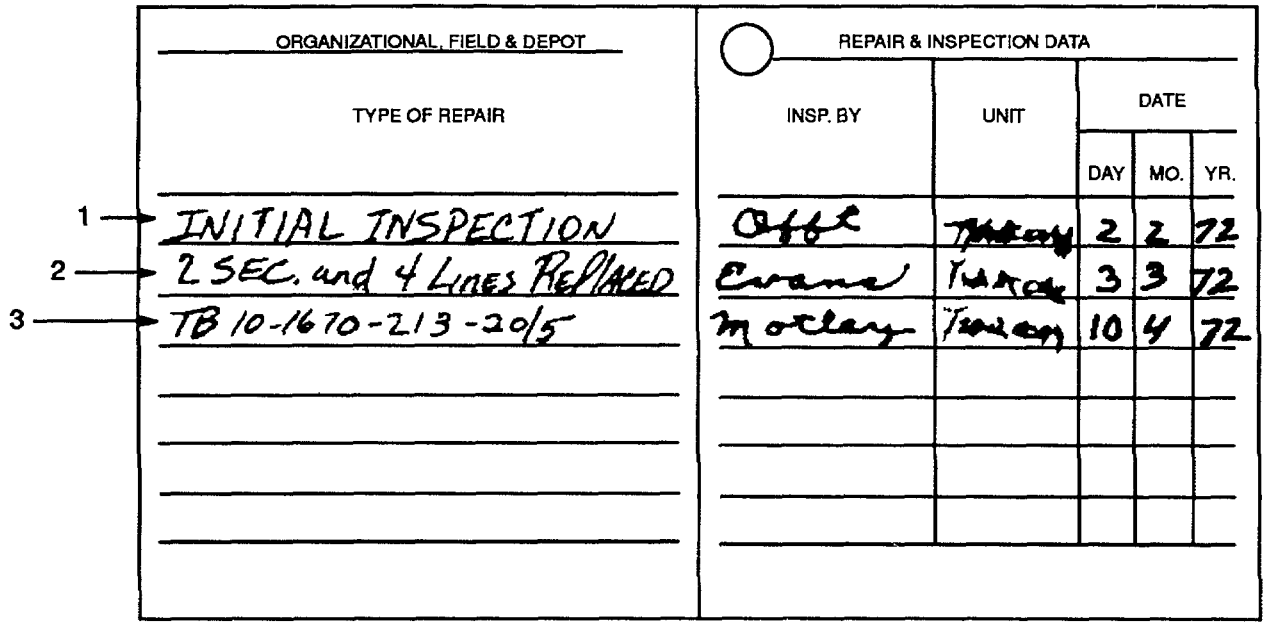
(3) Any type of airdrop equipment which Indicated any evidence of malfunction or defect during or after a drop-test will be disposed of as follows:

(a) Equipment of doubtful serviceability which has had previous use and has not exceeded normal fair wear or aging criteria, but of which further serviceability is doubtful, will be tagged as prescribed in DA Pam 738-751.

(b) The equipment will be reported on an Equipment Improvement Report (EIR) in accordance with DA Pam 738-750 and AR 750-1. The equipment in question will be held as an EIR exhibit as outlined in DA Pam 738-750 pending receipt of disposition instructions from the National Maintenance Point (NMP).

(c) A maintenance activity holding EIR exhibit material will not tamper with the applicable item or make any attempt to ascertain cause factors. Unnecessary handling of EIR exhibit material may disturb or alter peculiar aspects of the affected items which might alter the judgment of engineering personnel who have the responsibility for final evaluation of EIR actions.

(4) Airdrop equipment which does not reflect evidence of malfunction or defect upon completion of a drop-test will be administered a technical/rigger-type inspection as outlined in paragraph 2 9. If serviceable, the item may remain in use.



1. Completion of initial inspection.
2. Repair accomplishment.
3. Technical bulletin inspection compliance.

Figure 2-10. Log Record Entries for the Organizational, Field, Depot Repair and Inspection Data Page, Typical

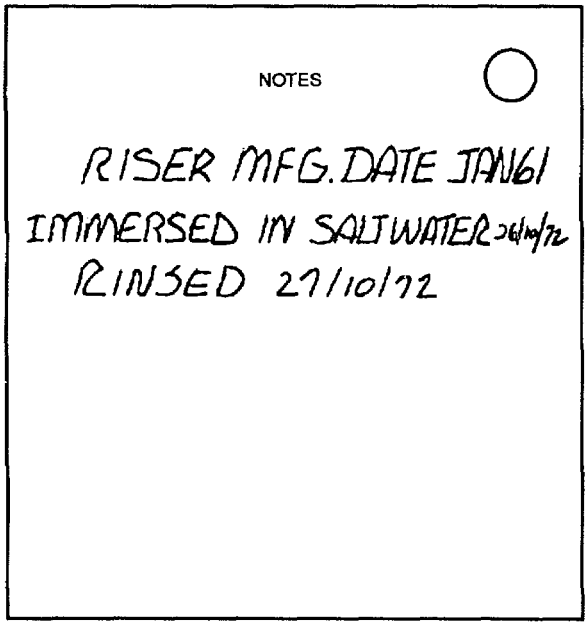


Figure 2-11. Data Entries for a Log Record Note Page, Typical

2.11 SHAKEOUT AND AIRING.

a. Shakeout of Other Airdrop Equipment. To shakeout airdrop equipment other than parachutes, perform the following:

(1) Lay the applicable assembly or related components on a clean level surface.

(2) Remove all debris from the airdrop item(s) by vigorous shaking or by brushing with a dry soft-bristle brush. A compressed air hose may be used to remove foreign material from inaccessible areas.

b. Airing. Under certain conditons, parachutes and other airdrop equipment will be aired to prevent discoloration, mildew, and deterioration. Where dampness and mildew are prevalent, airdrop equipment will be aired at frequent intervals according to the severity of the prevailing conditions Parachutes that have been previously packed or are unpacked, which have been subjected to conditions of dampness or mildew, will be aired for a period of at least 6 hours prior to being repacked. Airdrop items may be aired either indoors or outdoors in dry weather However, fabric items will not be aired in direct sunlight. Airing may be accomplished by suspending or elevating the applicable item(s) in a manner which would allow entire exposure to the circulation of air. Outside facilities used for the shakeout of parachutes may be used for the airing of airdrop equipment if weather conditions permit. If the shakeout facilities are inadequate for airing, the applicable item(s) may be suspended or elevated at several points or by draping over suitable type objects which would not inflict damage.

2.12 CLEANING AND DRYING.

Airdrop equipment will be inspected after each use for dampness, dirt or other foreign material Subsequent cleaning and drying of the equipment may be required to prevent a possible malfunction or deterioration of the item(s). Equipment that has been immersed in water will be processed as outlined in paragraph 2.13 The cleaning and drying of airdrop equipment will be accomplished as follows.

a. Cleaning. The practice of cleaning airdrop items should be held to a minimum and performed only when it is necessary to eliminate a malfunction potential or the possibility of material deterioration. The method of cleaning to be used must be compatible with the type of material to be cleaned and the nature of the substance to be removed. In addition, the cleaning process should be limited to the soiled area only. The cleaning of airdrop equipment will be performed using the following procedures, as applicable:

(1) Shaking and Brushing. Most airdrop equipment assemblies and associated components should be cleaned by shaking or gently brushing with a dry soft-bristle brush A dry stiff-bristle brush may be used on airdrop items constructed of canvas, metal, or wood.

(2) Spot-Cleaning. A soiled area on a fabric airdrop item which cannot be cleaned by shaking or brushing will be spot-cleaned as follows:

WARNING

Due to flammable properties and nylon-damaging substances, cleaning solvents other than tetrachloroethylene will not be used in the spot-cleaning of airdrop equipment. Tetrachloroethylene will only be used in areas where substantial ventilation is available Repeated or prolonged inhalation of the solvent vapors can be detrimental to human health In addition, avoid prolonged or repeated contact of the solvent fluid with areas of the skin. Tetrachloroethylene must not be taken internally

(a) Cotton item. Spot-clean a cotton item by rubbing the soiled area with a clean cloth dampened with tetrachloroethylene. Once the foreign substance has been removed, rinse the cleaned area by repeating the rubbing process with clean portion of the cloth which has been dampened with the cleaning solvent. Do not wring out the rinsed area If an undue amount of cleaning solvent is applied Allow the applicable item to dry thoroughly

(b) Nylon and Rayon Items. A soiled nylon or rayon item, may be spot-cleaned using the procedures In (a) above. However, the tetrachloroethylene may be substituted by a solution composed of one-half cup of hand dish washing detergent (liquid or powdered) dissolved in one gallon of warm water A soiled area cleaned with soap and water solution will be rinsed with fresh, clean water and allowed to dry thoroughly. Do not attempt to wring out the material which has been cleaned and rinsed

CAUTION

When cleaning a A-21 container soiled by airsickness, insure the quick release assembly Is not Immersed in water

(c) Plastic and Wood Items. Spot cleaning of a plastic or wood item will be accomplished by using procedures in (a) or (b) above, as required. Imperfections on plastic items may be removed by buffing with crocus cloth. Simular type defects on wood items can be disposed of through use of a suitable grade sandpaper. When applicable, insure that the adjacent fabric materials are not damaged when buffing or sanding

(d) Metal Items. Burrs, rough spots, rust or corrosion on metal Items that cannot be eliminated by brushing or spot cleaning, using procedures In (1) and (2) above, may be removed by filing with a metal file or by buffing and polishing with crocus cloth or steel wool, when applicable, insure that the adjacent fabric materials are not damaged when filing, buffing or polishing When the metal item has been properly smoothed, remove all oils and filings by brushing and dipping in tetrachloroethylene When the tetrachloroethylene has dried, spray the metal item with a dry film lubricant and allow to air dry for 24 hours and put hardware back Into service Shield adjacent fabric material when spraying dry film lubricant to prevent saturation Small amounts of lubricant will not damage fabric, but may cause discoloration and make fabric appear soiled

b. Drying. Airdrop equipment that Is wet or damp will be suspended or elevated in a well ventilated room or in a heated drying room Item drying time may be reduced through the use of electric circulating fans When heat is used, the heat temperature will not be In excess of 160° F with preferred temperature at 140° F until the item is dry Fabric or wooden items will not be dried in direct sunlight or by laying an item out on the ground, except In an emergency

2.13 EQUIPMENT DISPOSITION.

Airdrop equipment may be rendered unserviceable by either normal fair wear or by aging and will subsequently be repaired, modified, or condemned, as appropriate. Equipment that is uneconomically reparable (outdated) will be condemned. Disposition of airdrop equipment that is condemned, unserviceable, or for which the serviceability is questionable, will be accomplished using the following procedures, as applicable

a. Item Requiring Repair or Modification. An airdrop Item which requires repair or modification will be tagged In accordance with TB 750-126 Subsequent work on the item will be performed at the maintenance level specified for the maintenance function in the applicable supporting technical publication

b. Disposition of Condemned Air Delivery Equipment . Air delivery equipment that have been involved in a parachute jump fatality will be condemned and tagged as prescribed by TB 750-126. Equipment involved In a fatality will be retained until engineering studies and investigations have been completed When a fatality parachute Is no longer needed, it will be destroyed by burning or mutilation with appropriate destruction certification completed for documentation of supply records. Condemned equipment, other than fatality parachutes, will be removed from service and disposed of In accordance with current directives

c. Equipment of Doubtful Serviceability. Equipment which has had previous use and has not exceeded normal fair wear or aging criteria, but of which further serviceability Is doubtful, will be tagged as prescribed in TB 750-126. In addition, the equipment will be reported in an Equipment Improvement Recommendation (EIR) In accordance with TM 38-750 and AR 750-1. The item(s) in question will be held as EIR exhibit material as outlined in TM 38-750 pending receipt of disposition instructions from the National Maintenance Point (NMP) A maintenance activity holding EIR exhibit material will not tamper with the applicable item(s) or make any attempt to ascertain cause factors. Unnecessary handling of EIR exhibit material may disturb or alter peculiar aspects of the affected item(s) which might affect the judgment of engineering personnel who have the responsibility for final evaluation of EIR actions

d. Equipment Immersed In Salt Water. Any airdrop item constructed from cotton material that has been immersed in salt water will be condemned. Cotton thread used for tacking and sewing on nylon parachute packs which have been immersed in salt water will only be replaced when there s visible evidence of deterioration such as extreme discoloration or indications of broken thread. Any airdrop equipment constructed of nylon or rayon material that has been immersed in salt water in excess of 24 hours will be condemned. Additionally, any nylon or rayon airdrop item that has been immersed in salt water for a period less than 24 hours, but which cannot be rinsed within 48 hours after recovery will also be condemned However, if the cited time limitations can be met, then immediately upon recovery, suspend or elevate the recovered equipment in a shaded area and allow the item(s) to drain for at least 5 minutes Do not attempt to wring the equipment fabric or, if applicable, the suspension lines. Within 48 hours after recovery, under the supervision of a qualified parachute rigger (43E), rinse the recovered equipment as follows-

(1) Place the equipment in a large water-tight container filled with a suitable amount of fresh, clean water to cover the item(s).

NOTE

If salt water-soaked equipment is too large to be placed Into a rinsing container, then the rinsing process will be effected by applying fresh, clean water to the item using a hose.

(2) Agitate the container contents by hand for 5 minutes

(3) Remove the item(s) from the container and suspend or elevate the equipment in a shaded area, allowing a 5-minute drainage period Do not attempt to wring the equipment fabric or, if applicable, the suspension lines.

(4)Repeat the procedures in (1) through (3) above twice, using fresh, clean water for each rinse.

(5) After the third rinse, allow the equipment to drain thoroughly Upon completion of draining, dry the equipment in accordance with procedures in paragraph 2 12.

(6) When dried, perform a technical/rigger-type inspection of the Item(s) Corroded metal components, or corrosion-stained fabrics or suspension lines will be either repaired or replaced as prescribed by the applicable equipment Maintenance Allocation Chart (MAC).

e. Equipment Immersed in Fresh Water. Any airdrop equipment that has been immersed In a fresh water lake, river, or stream will not require rinsing unless It has been ascertained that the water is dirty, oily, or otherwise contaminated. Procedures for handling a fresh water immersed Item are as follows'

(1) Contaminated Fresh Water. If airdrop equipment has been immersed In contaminated fresh water, rinse, dry, and, if applicable, repair the Item(s) using the procedures In paragraph d. above.

(2) Uncontaminated Fresh Water. If airdrop equipment has been immersed in uncontaminated fresh water, the item(s) will be cleaned and dried as outlined in paragraph 2.12. Minor discoloration of fabric items resulting from immersion in uncontaminated fresh water may occur No attempt should be made to eliminate a minor discoloration as a slight discoloring is preferable to employing vigorous techniques that may damage the fabric. Small stains caused by petroleum products or blood will be removed using spot-cleaning procedures in paragraph 2.12.

MAINTENANCE OF CONTAINER DELIVERY SYSTEM COMPONENTS

2.14 A-7A CARGO SLING.

This task covers: a. Inspect b. Repair c. Replace

INITIAL SETUP

Tools

Industrial Sewing Machine (See Table 2-2)

References

Paragraph 2.8
Paragraph 2.9

Materials/Parts

Strap, sling, cargo (Appendix C)
Adapter, quick-fit (Appendix C)
Ring, parachute harness, dee (Appendix C)
Thread, Size 5 (Bulk, Appendix C)

INSPECT

Conduct a technical/rigger-type inspection in accordance with the Instructions contained in paragraph 2.9.

REPAIR

1. DEE RINGS. Clean the A-7A cargo sling dee rings by removing burrs, rust, or corrosion according to the procedures outlined in paragraph 2 8

2 RESTITCHING. Restitch broken or loose stitching on an A-7A cargo sling strap according to the original construction (Figure 2-12), using the specific data in Table 2-3.

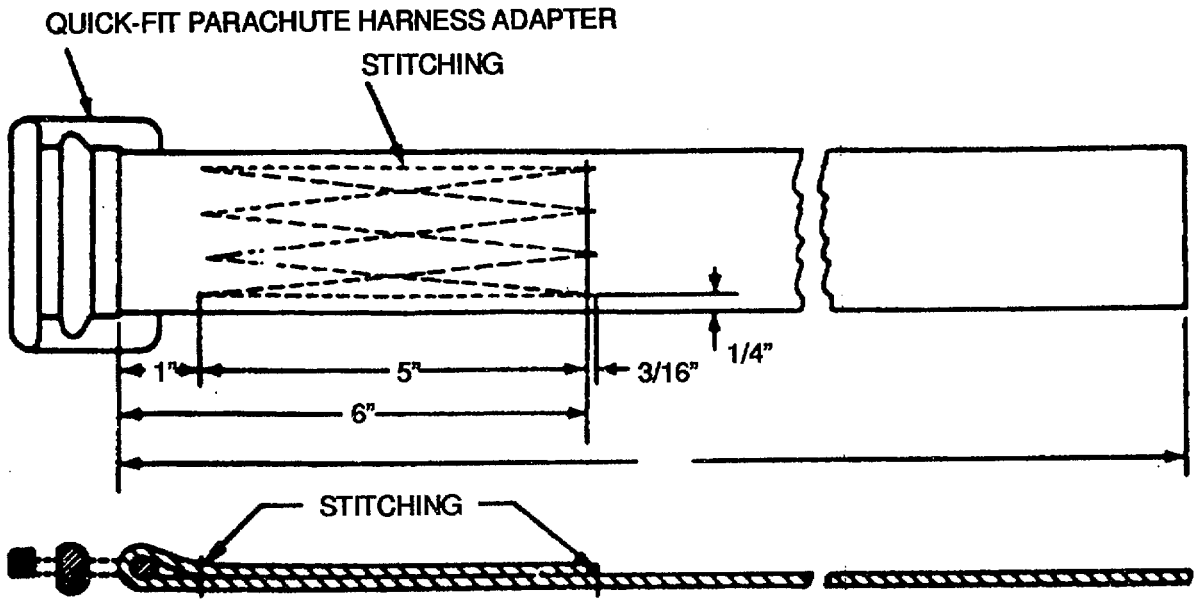


Figure 2-12. A-7A Cargo Sling Stitching Details

REPLACE

Replace an unserviceable A-7A cargo sling strap or dee ring with a serviceable item from stock.

MAINTENANCE OF THE A-21 AERIAL DELIVERY CARGO BAG

2.15 COVER

This task covers a. Inspect b. Repair c. Replace

INITIAL SETUP

Tools
Industrial Sewing Machine (See Table 2-2)

References
Paragraph 2.8
Paragraph 2 9

Materials/Parts

Cotton duck cloth, 12.29 oz (Bulk, Appendix C)
Cotton webbing, Type X (Bulk, Appendix C)

INSPECT

Conduct a technical/rigger-type Inspection In accordance with the instructions contained in paragraph 2.9.

REPAIR

1. RESTITCHING.

   a. Cover Panels. Restitch according to original construction and as specified in Table 2-3

   b. Strap Keeper. Remove loose or broken stitching Using an hourglass stitch formation, restitch as specified in Table 2-3.

2. DARNING. Dam holes and tears as outlined in paragraph 2.8 and as specified In Table 2-3.

3. PATCHING. Patch a hole or tear as outlined In paragraph 2 8, specified in Table 2-3, and as shown In Figure 2-13.

4. RESTENCIL. Restencil in accordance with paragraph 2.8

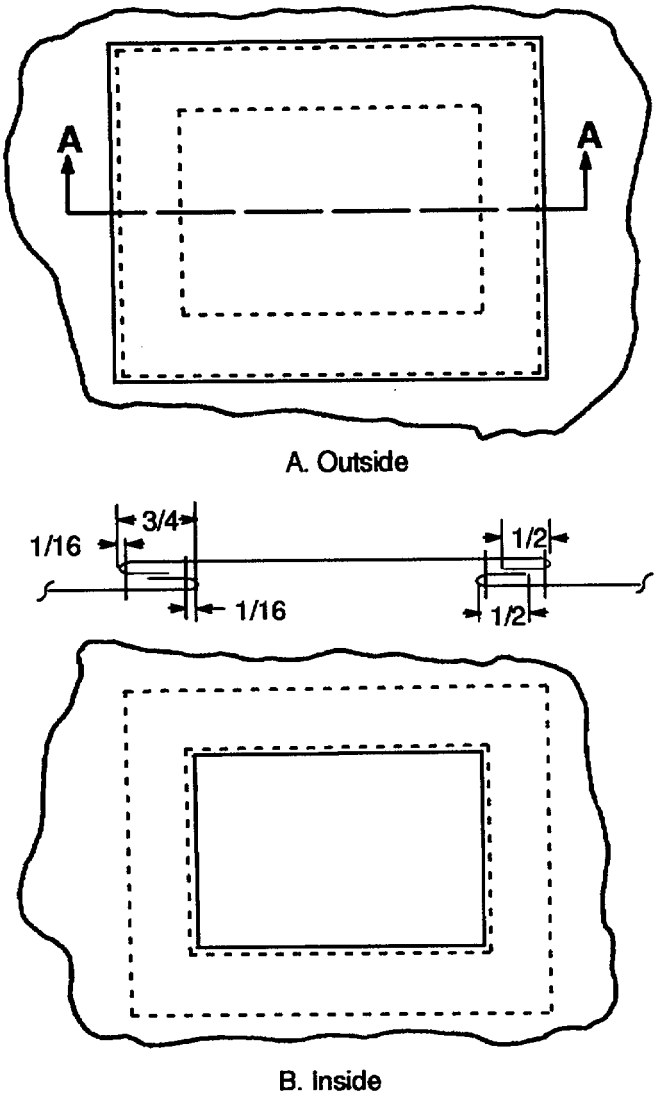


Figure 2-13. Patching Details for Cover

REPLACE

KEEPER

a. Cut the stitching that secures the keeper to the cover and remove the keeper.

b. Cut a 7 1/2-inch (19.050) length of 1 3/4-inch (4.445 cm) wide Type X cotton webbing from bulk material

(1) Wax the webbing ends.

(2) Position the fabricated strap keeper in the original location on the cover and sew the keeper to the cover with an hourglass stitch formation using the specifics In Table 2-3.

2.16 QUICK RFLEASE ASSEMBLY.

This task covers: a. Inspect b. Service c. Replace

INITIAL SETUP

Tools

File
Brush, wire, soft
Cutter, cable, hand, light-duty

References

Paragraph 2.7
Paragraph 2.9

Materials/Parts

Tetrachloroethylene (Item 16, Appendix E)
Grease, aircraft and instrument
(Item 7, Appendix E)
Quick release assembly (Appendix C)

INSPECT

Conduct a technical/rigger-type Inspection in accordance with the instructions contained in paragraph 2.9.

SERVICE

CLEANING

a Remove burrs, rough spots, rust, or corrosion from the quick release base plate (1), body (2), or operating button (3) by lightly filing with a metal file.

b Place the quick release assembly in a container filled with tetrachloroethylene and insure the solvent covers the entire assembly Allow to thoroughly soak as prescribed in paragraph 2.7.

c Rinse and brush the assembly with a soft wire brush until the parts are thoroughly cleaned

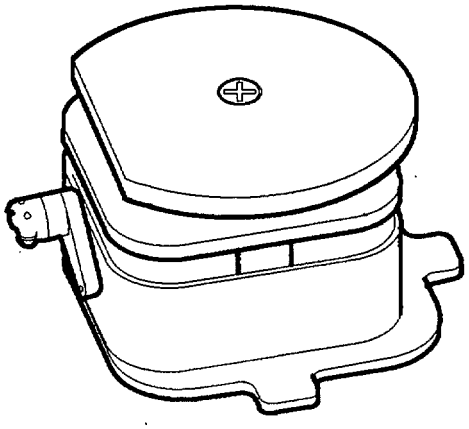


Figure 2-14. Quick Release Assembly

d. Remove assembly from the solvent and thoroughly rinse in clean water and allow to completely dry.

e. Lubricate using aircraft and instrument grease or equivalent. Apply a light grease coating to all surfaces of the assembly.

REPLACE

Replace an unserviceable quick release assembly with a serviceable item from stock.

2.17 SLING ASSEMBLY

This task covers a Inspect b Repair c. Replace

INITIAL SETUP

Tools

Industrial Sewing Machine (See Table 2-2)

Materials/Parts

Beeswax, Technical (Item 1, Appendix E)
Cloth, cotton duck, OD, 12 29 oz (Bulk, Appendix C)
Cotton webbing, Type II (Bulk, Appendix C)
Nylon webbing, OD Type VII (Bulk, Appendix C)

References

Paragraph 2.7
Paragraph 2 8
Paragraph 2 9

INSPECT

Conduct a technical/rigger-type inspection in accordance with the instructions contained in paragraph 2.9

REPAIR

1. SCUFF PAD The octagonal shaped scuff pad (Figure 2-15) has two reinforced holes which permit two V-rings to pass to the underside of the pad

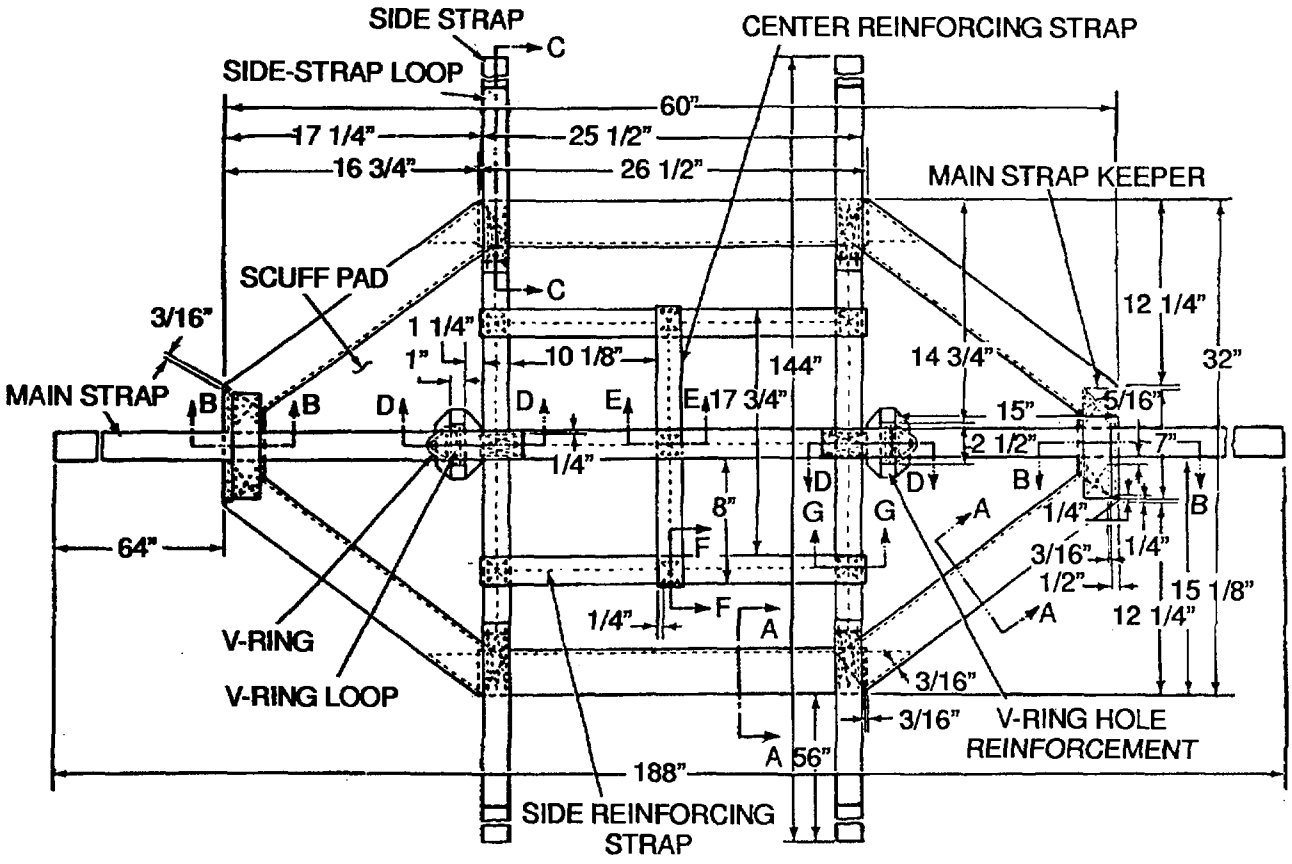
a Restitching. Restitch according to original construction using specific data In Table 2-3.

b Darning. Darn holes and tears In the scuff pad as outlined In paragraph 2 8 and as specified in Table 2-3.

c Patching. Patch a hole or tear with the same type of matenal used in original construction, using Figure 2-16, the specifics in Table 2-3, and as outlined in paragraph 2 8.

d Restencil. Restencil In accordance with paragraph 2 8

e Replacing V-Ring Hole Reinforcements. Cut the stitching that secures the defective reinforcement to the V-ring hole and remove the reinforcement Cut a 12-inch (30 480 cm) length of Type II cotton webbing and wax the webbed ends Position the cut length of webbing around the V-ring hole and install according to Figure Table 2-3, and paragraph 2 8



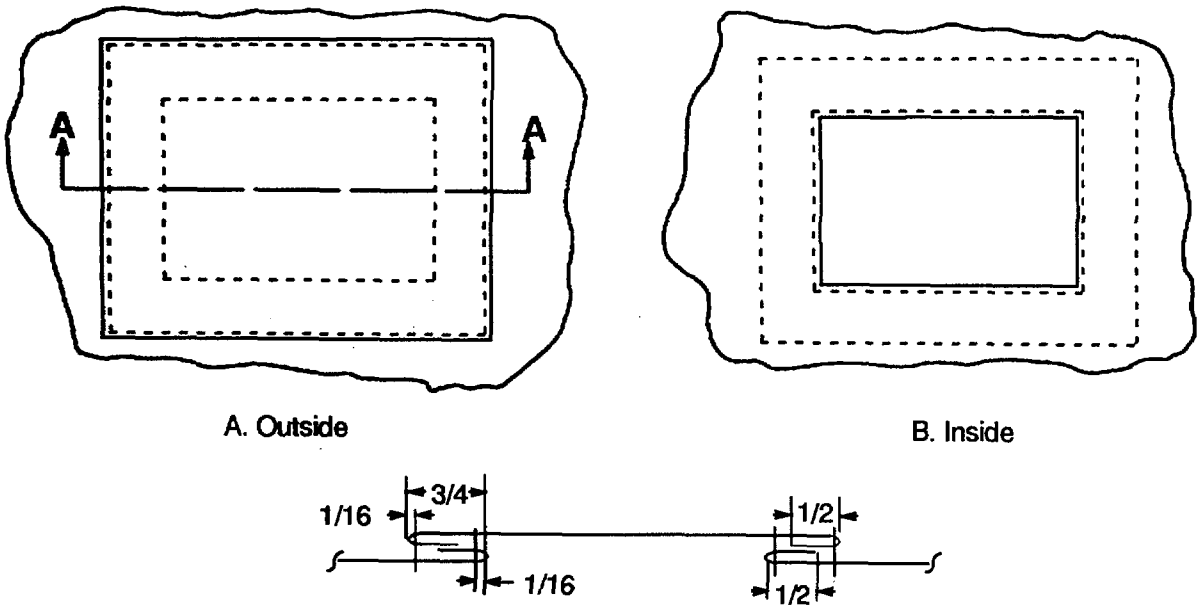


Figure 2-16. Patching Details for Scuff Pad

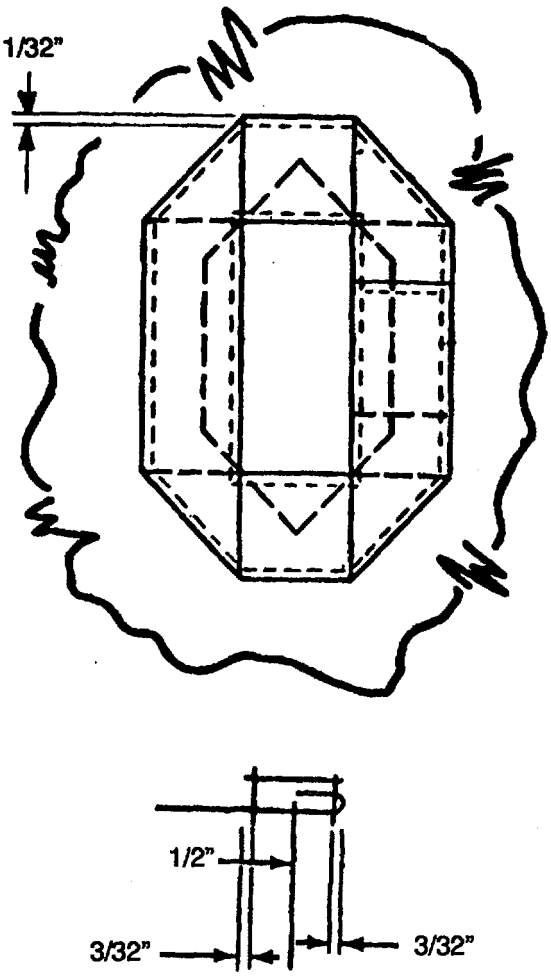


Figure 2-17. Scuff Pad V-Ring Hole Reinforcement Details

2. MAIN STRAP KEEPERS. The two main strap keepers (Figure 2-15) are attached near the ends of the scuff pad and are made of 1 3/4-inch (4.445 cm) wide Type VII, olive drab nylon webbing.

a. Restitching. Restitch according to original construction, the specifics in Table 2-3, and paragraph 2.8.

b. Replacement. Cut the stitching that secures the defective keeper to the scuff pad and remove it from the pad. Fabricate a new keeper by cutting a 7-inch (17.780 cm) length of Type VII nylon webbing and sear the ends. Place the length of webbing in the same position as the original keeper and stitch as outlined in paragraph 2.8 using the specifics in Table 2-3 and Figure 2-18.

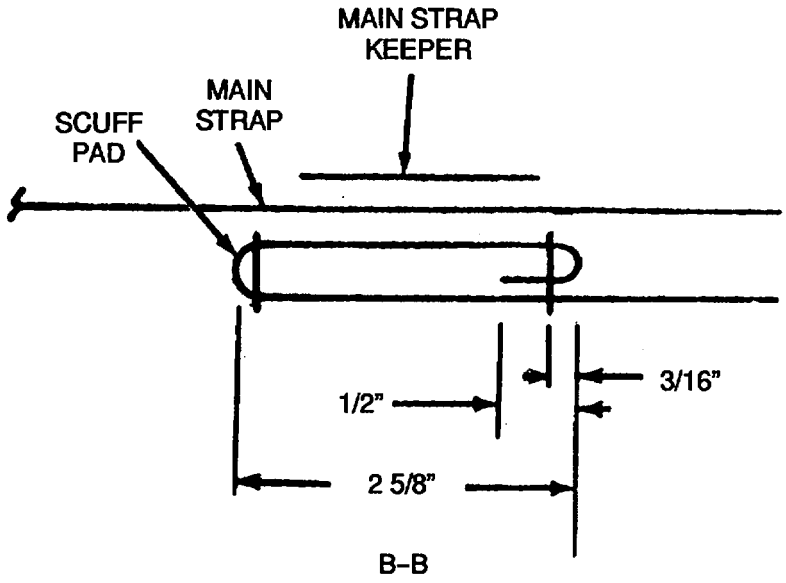


Figure 2-18. Main Strap Keeper Sewing Details

3. SLING STRAP AND LOOPS. The main strap, two side straps, three reinforcing straps, four side strap loops, and two V-ring loops with V-rings are permanently stitched to the scuff pad (Figure 2-15) All straps and loops are made of Type VII, olive drab nylon webbing.

a. Restitching. Restitch according to original construction, paragraph 2.8, and Table 2-3.

NOTE
Do not remove more than the fray of the strap end when trimming frayed webbing ends

b. Trim and Sear. Trim frayed webbing ends and sear.

c. Cleaning. Clean V-rings in accordance with paragraph 2.7.

d. Replacing Sling Straps and Loops. Cut the stitching that secures a defective strap or loop to the sling and remove the defective part Fabricate a replacement part by cutting and waxing the required length of Type VII nylon webbing as shown below-

Main Strap	188-inches (477.520 cm)
Side Strap	144-inches (365.760 cm)
Side Reinforcing Strap	29 1/2-inches (74.930 cm)
Center Reinforcing Strap	21 3/4-inches (55.245 cm)
Side Strap Loop	23 1/2-inches (59.690 cm)
V-Ring Loop	10 1/4-inches (26.035 cm)

Stitch the applicable strap or loop in position as shown in Figure 2-19, as outlined In paragraph 2 8, using the specifics in Table 2-3.

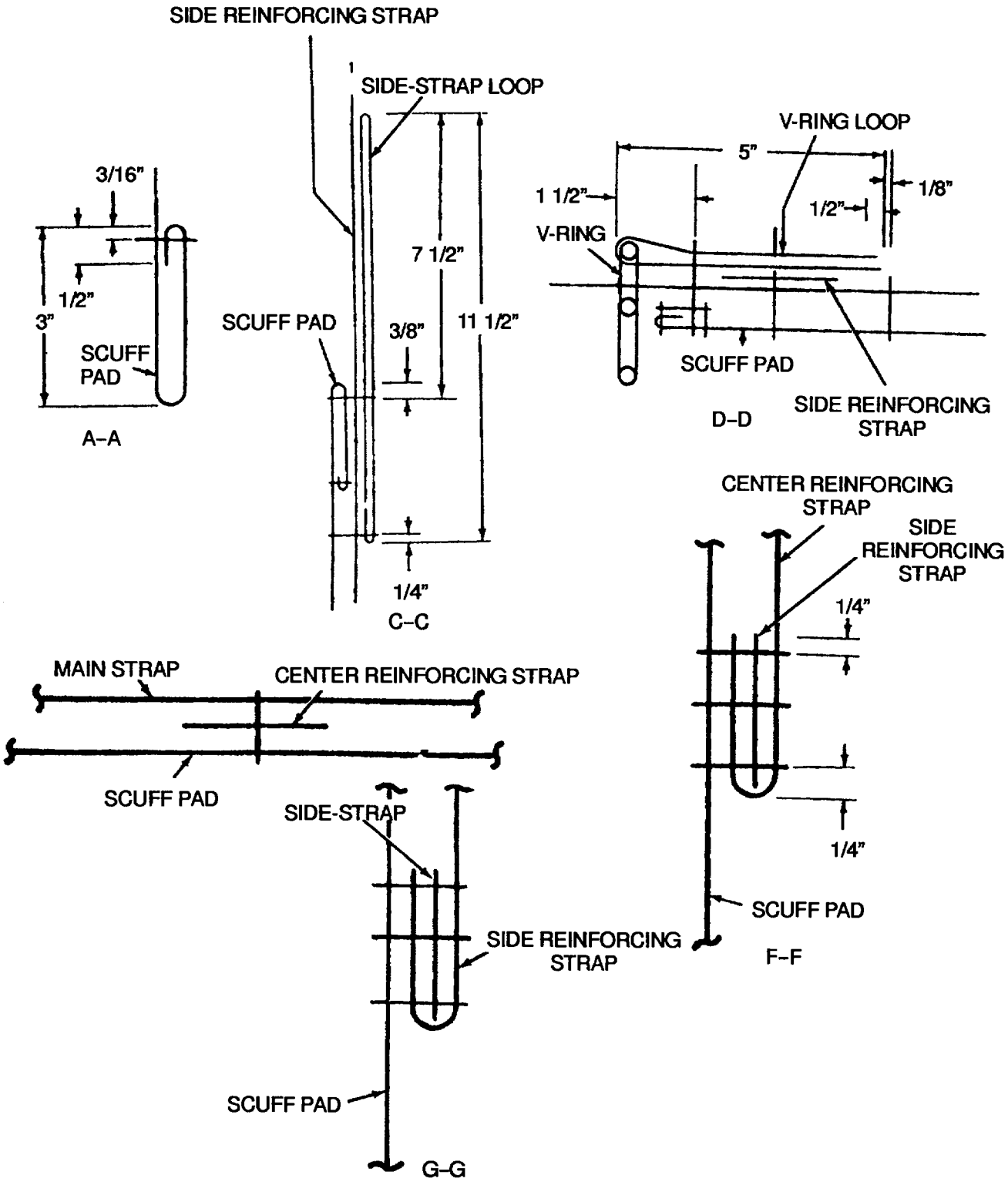


Figure 2-19. Sewing Details on A-21 Cargo Bag Sling Straps and Loops

2.18 QUICK RELEASE STRAPS.

This task covers: a. Inspect b. Repair c. Replace

INITIAL SETUP

Tools
Industrial Sewing Machine (See Table 2-2)

References
Paragraph 2 9

Materials/Parts

Quick release strap (Appendix C)
Type IV Nylon webbing (Bulk, Appendix C)

INSPECT

Conduct a technical/rigger-type inspection in accordance with the instructions contained In paragraph 2 9.

REPAIR

1. RESTITCHING. Restitch the quick release strap and safety clip retaining strap according to original construction and Table 2-3.

2. FABRICATION OF THE SAFETY CLIP RETAINING STRAP.

NOTE

Before discarding a defective safety dip retaining strap, insure the safety clip has been removed and retained for reuse.

An unserviceable safety dip retaining strap shall be removed from the fixed quick release strap and replaced with a fabricated item as follows:

a. Remove the defective retaining strap by cutting the retainer strap flush with the adjoining quick release strap.

b. Cut a 13-inch (32.020 cm) length of 1 -inch (2.54 cm) wide Type IV nylon webbing and sear ends

c Mark the length of webbing 2 3/4-inches (6 985 cm) from one end.

d. Fold the marked webbing end back to the mark and stitch a 1 -inch (2.54 cm), 3-point, WW stitch formation (Figure 2-20) using specifics In Table 2-3. Insure that a 3t8-inch (9.525 cm) loop remains on the sewn end of the web after stitching is complete.

e. Fold the opposite end of the retaining strap under and back 1/2-inch (1.270 cm) (Figure 2-20).

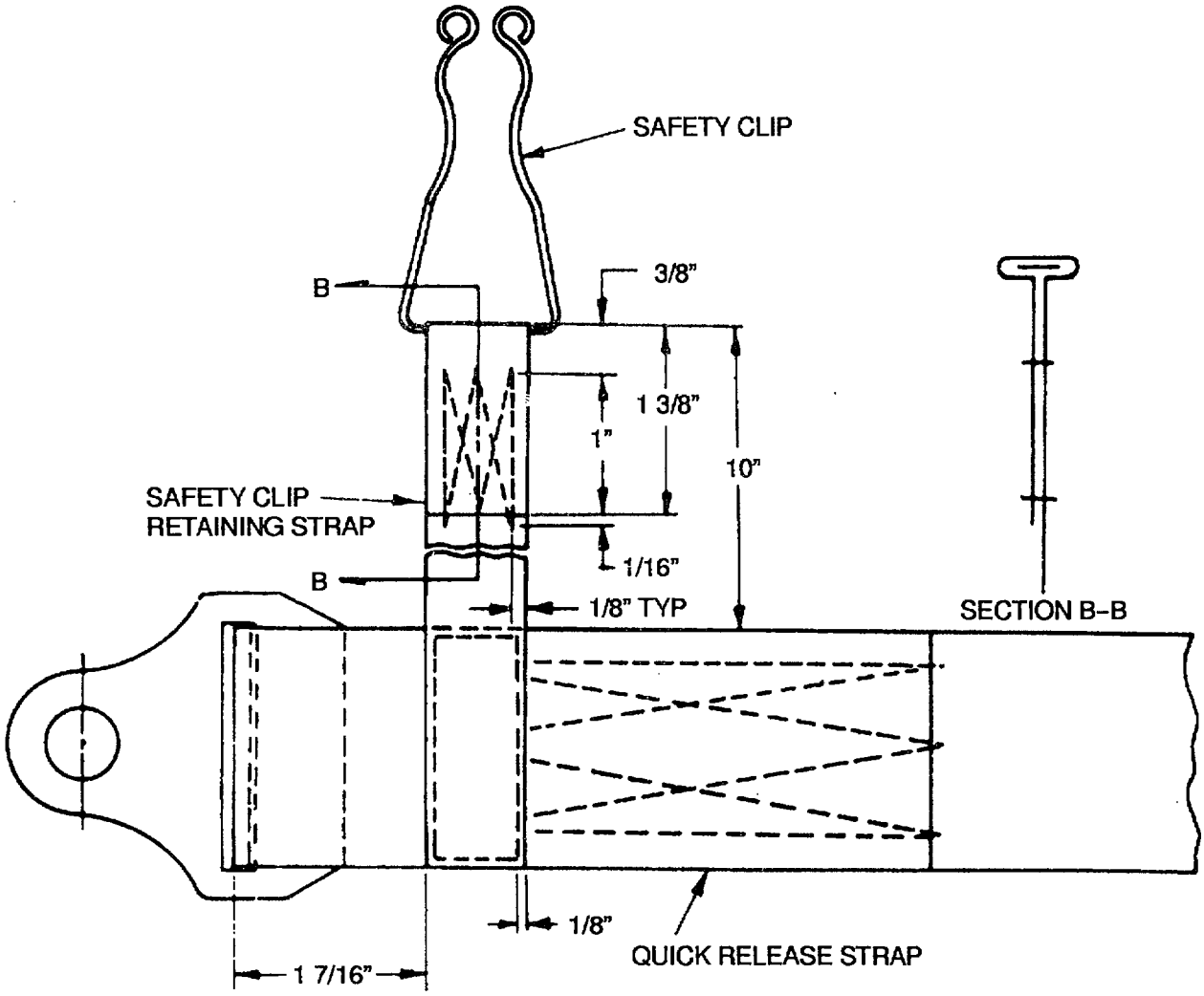


Figure 2-20. Fabrication and Installation Details of the Safety Clip Retaining Straps

f. Position the folded end on top of the quick release strap with the folded end edge located 1 7/1 6-inches (4.920 cm) from the end of the quick release strap webbing where the lug is attached.

NOTE

A replacement, fabricated safety clip retaining strap may be secured to any serviceable quick release strap.

g. Stitch the folded end of the safety dip retaining strap to the quick release strap with a box stitch formation using the specifics In Table 2-3.

h. Insert safety dip into the 3/8-inch (O 956 cm) loop of the safety clip retaining strap.

REPLACE

A defective quick release strap shall be replaced with a serviceable item from stock.

2.19 STRAP WITH RING.

This task covers: a. Inspect b. Repair c. Replace

INITIAL SETUP

Tools

Industrial Sewing Machine (See Table 2-2)

References

Paragraph 2 9

Materials/Parts

Strap with ring (Appendix C)

INSPECT

Conduct a technical/rigger-type inspection in accordance with the instructions contained in paragraph 2.9.

REPAIR

Restitch according to original construction using the specifics in Table 2-3.

REPLACE

Replace an unserviceable strap with ring with a serviceable item from stock.

MAINTENANCE OF THE A-22 AND A-23 AERIAL DELIVERY CARGO BAGS

NOTE

Except for a minor alteration to the Cargo Bag Sling, the A-23 Bag, Cargo, High Level is identical to the A-22 Bag, Cargo The alteration being the addition of four long Type X nylon webbing support webs with Heavy Duty Dee Rings. The additional support webs are used for the first stage attaching point for the High Altitude Aerial Resupply System (HAARS).

2.20 COVER.

This task covers: a. Inspect b. Repair c. Replace

INITIAL SETUP

Tools
Industrial Sewing Machine (See Table 2-2)

References
Paragraph 2 8
Paragraph 2 9

Materials/Parts

Beeswax, Technical (Item 1, Appendix E)
Cotton duck cloth, 23.93 oz (Bulk, Appendix C)
Type VIII Nylon Webbing (Bulk, Appendix C)
Cover (Appendix C)
Type I Cotton Cord (Bulk, Appendix C)

INSPECT

Conduct a technical/rigger-type inspection in accordance with the instructions contained in paragraph 2.9.

REPAIR

1. RESTITCHING. Restitch the cover and a cover lacing loop strap according to original construction using the specifics in Table 2-3

2. DARNING Dam a hole or tear in the cover as outlined in paragraph 2 8

3. PATCHING Patch a hole or tear in the cover as outlined in paragraph 2 8

4. RESTENCIL. Restencil in accordance with paragraph 2.8.

5. FABRICATION OF COVER LACING LOOP STRAP. Replace a defective cover lacing loop strap by fabricating as follows:

a. Remove. Cut the stitching that secures the defective strap to the cover and remove the strap.

b. Fabrication. Fabricate a 24- or 30-inch (60.960 or 76.200 cm) strap as required by cutting from bulk material a length of Type VII1 nylon webbing 11 -inches (27 940) longer than the finished length of the strap. Sear the webbing ends.

c. Stitching. Fold and stitch the webbing as shown in Figure 2-21.

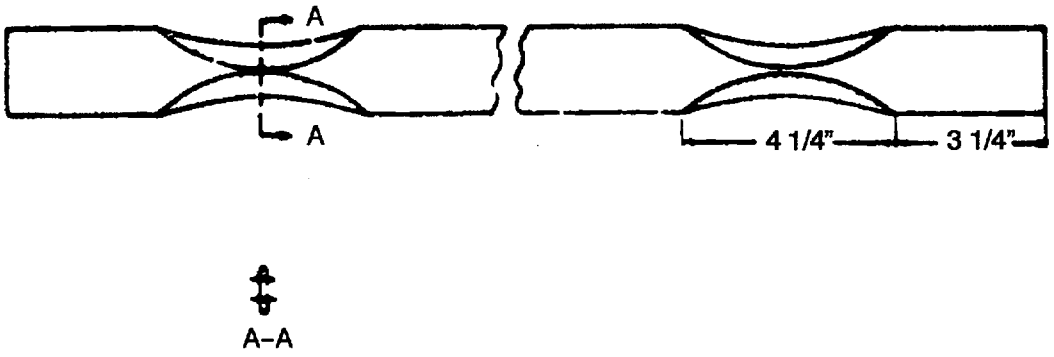


Figure 2-21. Fabrication Details of A-22 Cargo Bag Cover Lacing Loop Strap

d. Install install the stitched webbing in the original strap position and stitch as indicated In Figure 2-22 using specifics shown in Table 2-3.

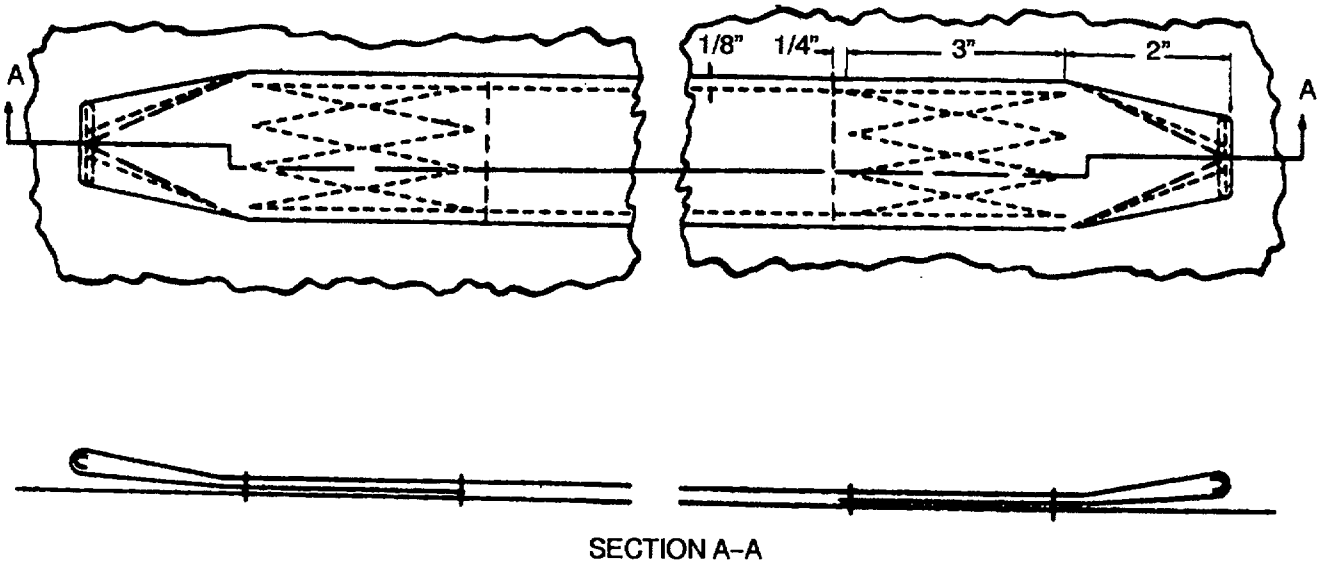


Figure 2-22. Installing Cover Lacing Loop Strap

6. COVER LACING CORD. The four cover lacing cords are made from 1/4-inch (O 635 cm) diameter Type I cotton cord and each cord is 11-feet (27 940 cm) long. Replace a defective cover lacing cord by cutting an 11-foot (27.940 cm) length of Type I cotton cord and wax the ends

REPLACE

Replace an unserviceable cover with a serviceable item from stock.

2.21 SLING ASSEMBLY.

This task covers: a. Inspect b. Repair c. Replace

INITIAL SETUP

Tools
Industrial Sewing Machine (See Table 2-2)

References
Paragraph 2.8
Paragraph 2 9

Materials/Parts

Type VII Nylon Webbing (Bulk, Appendix C)
Cloth, cotton duck, 29.93 oz (Bulk, Appendix C)

INSPECT

Conduct a technical/rigger-type Inspection In accordance with the instructions contained in paragraph 2 9.

REPAIR

1. SCUFF PAD The scuff pad is constructed from 29.93-oz cotton duck cloth and is 43-inches (109.22 can) wide and 52-inches (132 080 cm) long

a Restitching Restitch the scuff pad according to original construction using specifics in Table 2-3.

b. Darning Dam a hole or tear In the scuff pad as outlined in paragraph 2.8

c. Patching Patch a hole or tear in the scuff pad as outlined in paragraph 2 8.

d. Splicing. Splice the scuff pad edge reinforcement as follows:

(1) Cut a length of Type VII nylon webbing long enough to extend 1 -inch (2 54 cm) beyond each end of the damaged area and sear the webbing ends

(2) Center the length of webbing over the damaged area and sew In place with a box stitch formation as outlined in paragraph 2 8 using the specifics In Table 2-3

2. SUPPORT WEB. The four support webs consist of webbing which extends beyond the sides and the ends of the scuff pad. A dee ring Is located at the end of each support web to provide a point of attachment for the suspension webs

a. Restitching. Restitch a support web according to original construction and specifics in Table 2-3.

b. Splicing a Damaged Support Web. Refer to Figure 2-23 for splicing details on a damaged support web and proceed as follows:

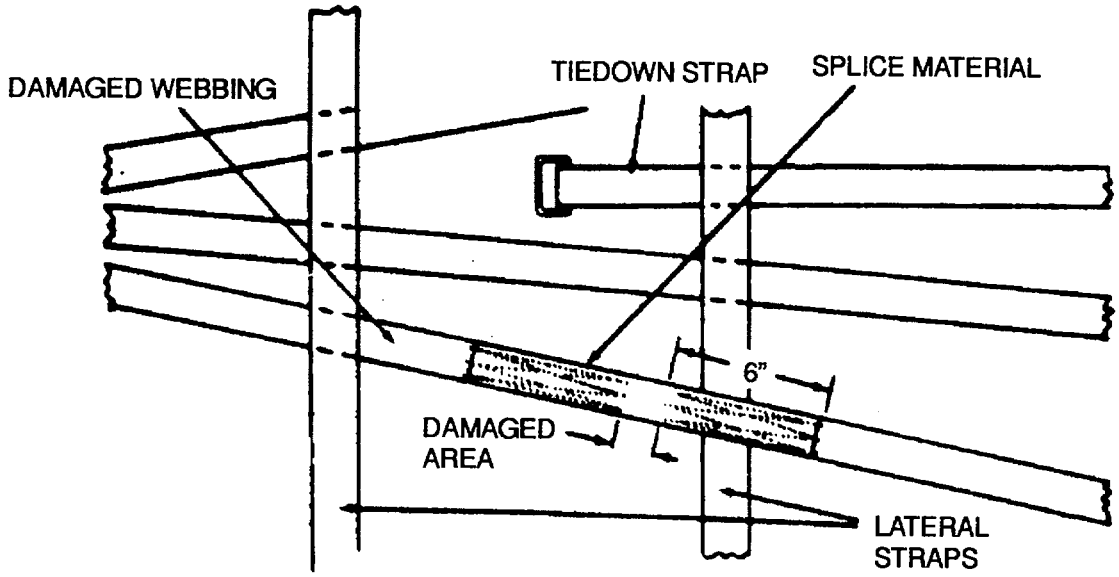


Figure 2-23. Splicing Details for a Damaged Support Web

NOTE

The webbing type used for splicing a support web shall be the same as that used in original construction.

(1) Cut a length of Type VII nylon webbing long enough to extend 6-inches (15 240 cm) beyond each end of the damaged area and sear the webbing ends.

(2) Center the splice matenal over the damaged area and stitch with a 6-inch (15.240 cm), 3-point, WW stitch formation at each end of the splice material. Overstitch the ends of the splice with one stitch Sew two rows of straight stitching 1/4-inch (O 635 cm) in from each edge of the splice between the stitch formations on the ends of the splice matenal Perform all stitching in accordance with paragraph 2.8 and the specifics shown in Table 2-3.

c. Splicing a Severed Support Web. Refer to Figure 2-24 for splicing details on a severed support web and proceed as follow:

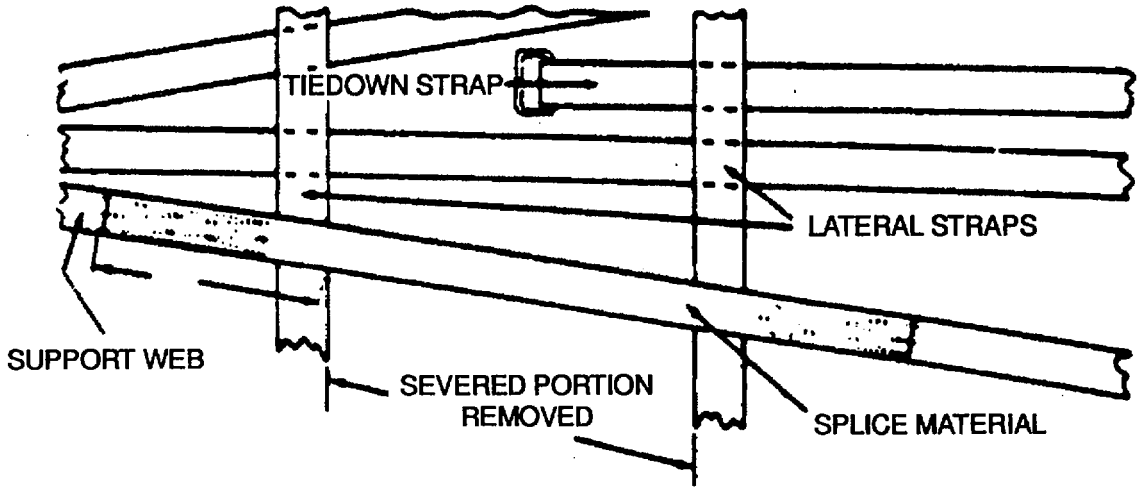


Figure 2-24. Splicing Details for a Severed Support Web

(1) Cut and remove the severed portion of webbing at the two nearest lateral straps.

(2) Cut a length of Type VII nylon webbing long enough to extend 6-inches (15.240 cm) beyond each lateral strap and sear the webbing ends.

(3) Center the splice matenal over the severed portion and stitch with a 6-inch (15 240 cm), 3-point, WW stitch formation at each end of the splice material

(4) Overstitch the ends of the splice with one stitch Sew two rows of straight stitching, 1/4-inch (0.635 cm) In from each edge of the splice between the stitch formations on the ends of the splice matenal. Perform stitching in accordance with paragraph 2.8 and the specifics shown in Table 2-3.

3. LATERAL STRAP. The twelve lateral straps are made from Type VII nylon webbing. Each of the six lateral straps with a quick-fit adapter on both ends measures 42-inches (106.680 cm) long. Each of the six lateral straps without hardware measures 78-inches (198.120 cm) long.

a. Restitching. Restitch a lateral strap according to original construction and the specifics in Table 2-3

b. Splicing a Damaged Lateral Strap. For repair of a damaged lateral strap located within the support strap framework, use the spicing instructions shown In paragraph 2.21. If the end of a lateral strap located outside the support strap framework is damaged, it shall be spliced as outlined below:

(1) Splicing a Damaged Lateral Strap End Without Adapter

(a) Cut and remove the damaged portion of webbing at the nearest support web where the lateral strap and support strap are joined Insure that the cut is made flush on the outside edge of the support strap

(b) Cut a length of Type VII nylon webbing 6-inches (15.240 cm) longer than the original total length of matenal removed

(c) Trim one end of the cut length of replacement webbing as shown in Figure 2-25 and sear the end.

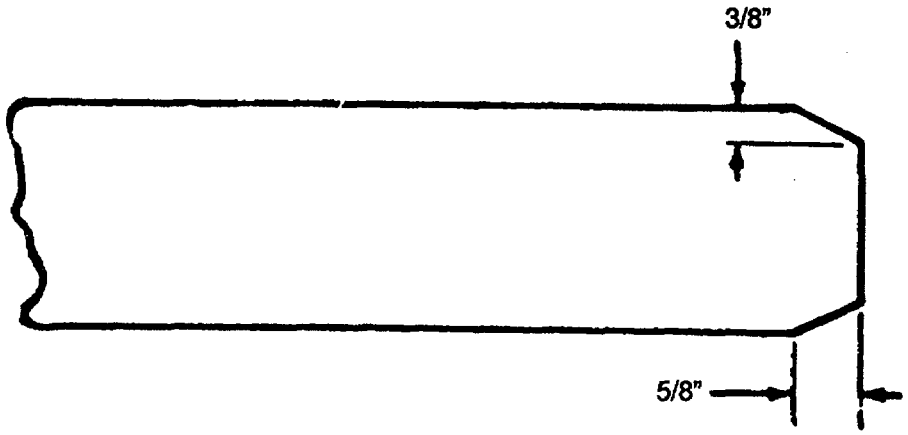


Figure 2-25. Trim Details for Lateral Strap End Without Adapter

(d) Position the replacement webbing in the original lateral strap end location, with 6-inches (15.240 cm) extending in beyond the support strap outside edge and sew a 6-inch (15.240 cm), 3-point, WW stitching formation Stitching shall be in accordance with paragraph 2 8 using the specifics in Table 2-3

(2) Splicing a Damaged Lateral Strap End with Adapter.

(a) Cut and remove the damaged portion of webbing at the nearest support strap where the lateral strap and support strap are joined. Insure that the cut Is made flush on the outside edge of the support strap.

(b) Cut and remove the quick-fit adapter from the damaged material

(c) Cut a length of Type VII nylon webbing 10 3/4-inches (27.315 cm) longer than the original total length of material removed and sear

(d) Thread one end of the replacement webbing through the quick-fit adapter and fold back as shown in Figure 2-26

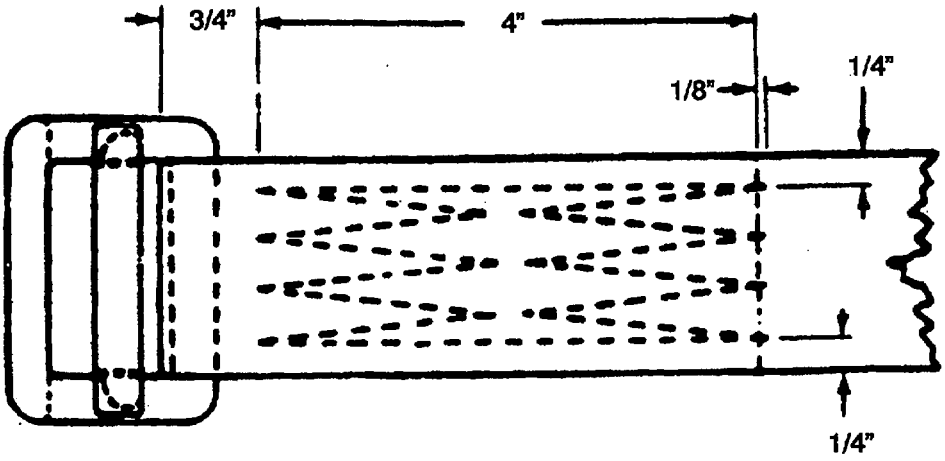


Figure 2-26. Quick-fit Adapter Installation Details

(e) Sew a 4-inch (10.160 cm), 4-point, WW stitch formation on the back end and over stitch the end one stitch. Stitching shall be performed as indicated in paragraph 2.8 using the specifics in Table 2-3.

(f) Position the opposite end of the replacement webbing in the original lateral strap end location with 6-inches (15.240 cm) extending in beyond the support strap outside edge and sew a 6-inch, (15.240 cm) 3-point, WW stitch formation in accordance with paragraph 2.8 using the specifics in Table 2-3

4. TIE-DOWN STRAP. The two tie-down straps consists of a 236-inch long (599.440 cm) strap and a 218-inch (554 220 cm) short strap. The straps are sewn throughout the length of the sling. A quick-fit adapter, attached to one end of each strap, is located 5 1/4-inches (13.335 cm) beyond the second lateral strap from the scuff pad. Refer to Figure 2-15. The tie-down straps are made from Type VII nylon webbing.

a. Restitching. Restitch a tie-down strap according to original construction and specifics in Table 2-3.

b. Splicing a Damaged Tie-down Strap. Refer to paragraph 2.21.3b for instructions applicable to splicing a damaged tie-down strap located within the support strap framework.

c. Splicing a Damaged Tie-down Strap End Without Adapter. Refer to paragraph 2.21.3b(1) for instructions applicable to splicing a damaged tie-down strap end without adapter

d. Splicing a Damaged Tie-down Strap End With Adapter.

(1) Cut and remove the damaged portion of webbing at the nearest lateral strap where the tie-down strap and lateral strap are joined Insure that the cut Is made flush on the outside edge of the lateral strap.

(2) Cut and remove the quick-fit adapter from the damaged material. Retain adapter for reuse.

(3) Cut a length of Type VII nylon webbing 16-inches (40.640 cm) long and sear ends.

(4) Thread one end of the replacement webbing through the quick-fit adapter and fold back as shown in Figure 2-26.

(5) Sew a 4-inch (10.160 cm), 4-point, WW stitch formation to the fold back end and over stitch the end one stitch Stitching shall be performed as Indicated in paragraph 2.8 using the specifics in Table 2-3.

(6) Position the opposite end of the be-down strap replacement webbing in the original location as shown in Figure 2-27 with 6-inches (15.240 cm) extending in beyond the lateral strap outside edge and sew a 6-inch (15.240 cm), 3-point, WW stitch formation In accordance with paragraph 2.8, using the specifics In Table 2-3.

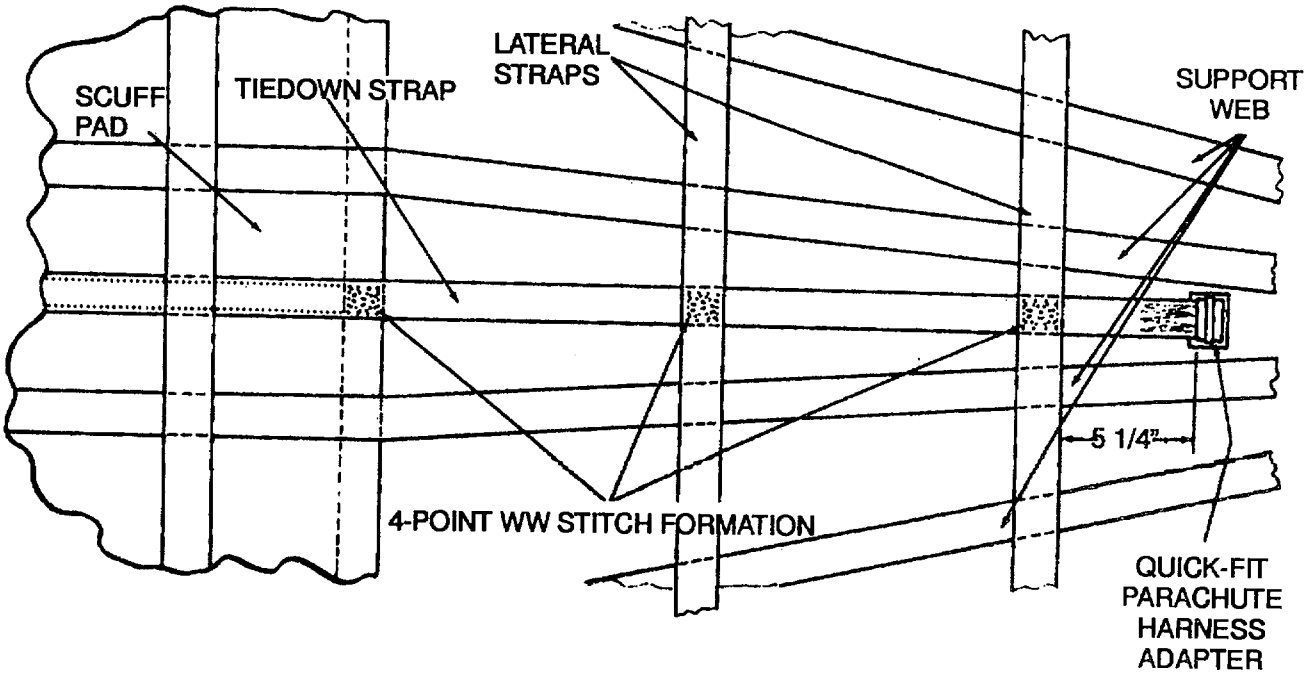


Figure 2-27. Tie-down Strap Installation Details

e. Splicing a Damaged Tie-down on the Scuff Pad.

(1) Cut and remove the damaged portion of be-down strap webbing from the scuff pad

(2) Cut a length of Type VII nylon webbing long enough to extend 6-inches beyond each end of the damaged area and sear the end as applicable.

(3) Center the splice material over the damaged area and stitch with a 6-inch (15 240 cm), 3-point, WW stitch formation at each end of the splice with one stitch Sew two rows of straight stitching, 1/4-inch (0. 635 cm) in from each edge of the splice between the ends of the splice matenal. All stitching shall be performed as indicated in paragraph 2.8 and Table 2-3.

2.22 SUSPENSION WEB.

This task covers: a. Inspect b Repair c Replace

INITIAL SETUP

Tools

Industrial Sewing Machine (See Table 2-2)

References

Paragraph 2 9

Materials/Parts

Type VII Nylon Webbing (Bulk Appendix C)
Suspension Web (Appendix C)

INSPECT

Conduct a technical/rigger-type inspection in accordance with the instructions contained in paragraph 2 9.

REPAIR

The four suspension webs (Figure 2-28) are made from Type VII nylon webbing. Each web is 27 1/2-inches (69.850 cm) long with a connector snap fixed to one end and a dee ring fixed to the opposite end.



Figure 2-28. Type A-22 Cargo Bag Suspension Webs

NOTE

Except for a minor alteration, the A-23 Cargo Bag is Identical to the A-22 Cargo Bag. The alteration being the addition of four long Type X nylon webbing support webs with heavy duty dee rings. The additional support webs are used for the first stage attaching point for the High Altitude Aerial Resupply System (HAARS).

Restitching . Restitch a suspension web according to original construction and the specifics shown in Table 2-3.

REPLACE

Replace an unserviceable suspension web with a serviceable Item from stock.

2.23 SKID BOARD

This task covers a. Inspect b. Replace

INITIAL SETUP

Tools

None

References

Paragraph 2.9

Materials/Parts

Skid Board 48" x 53 1/2" (Appendix C)
Skid Board 48" x 48" (Appendix C)

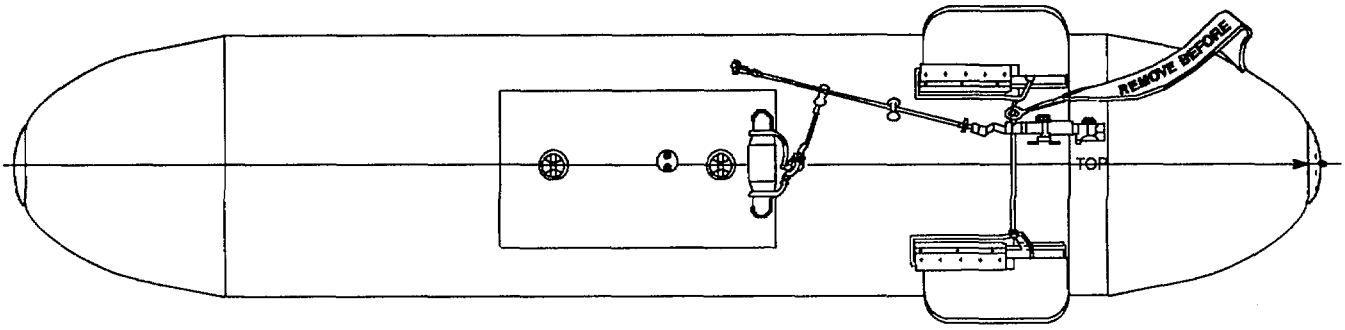
INSPECT

Conduct a technical/rigger-type inspection In accordance with the instructions contained in paragraph 2.9.

REPLACE

Replace an unserviceable skid board with a serviceable item from stock

MAINTENANCE OF THE CARGO CAPSULE, CTU-2/A



TOP VIEW

MAINTENANCE OF THE CABLE RELEASE SYSTEM (CTU-2/A)

NEED TOOL DESCRIPTIONS TO BE FURNISHED BY GOVERNMENT FOR THESE PROCEDURES AND FOR THE MAC.

2.24 CABLE ASSEMBLY, PARACHUTE RELEASE.

This task covers: a. Inspect b. Replace

INITIAL SETUP

Tools

Wrench, Adjustable (Item 6, Section III, Appendix B)
Wrench, Torque (Item 7, Section III, Appendix B)

References

Paragraph 2.9

Materials/Parts

Cable Assembly, Parachute Release (Appendix C)

INSPECT

Conduct a technical/rigger-type inspection in accordance with the instructions contained in paragraph 2.9.

REPLACE

NOTE

The parachute cable release assembly terminal shackles are merged with the spread clamp of the initiator cable and joined with the eye of the firing head of the M5 cartridge-actuated release assembly.

a. Remove nut, washer, and bolt connecting the parachute cable shackles and the initiator spread damp to the eye of the firing head on the M5 cartridge-actuated release assembly as shown in Figure 2-29.

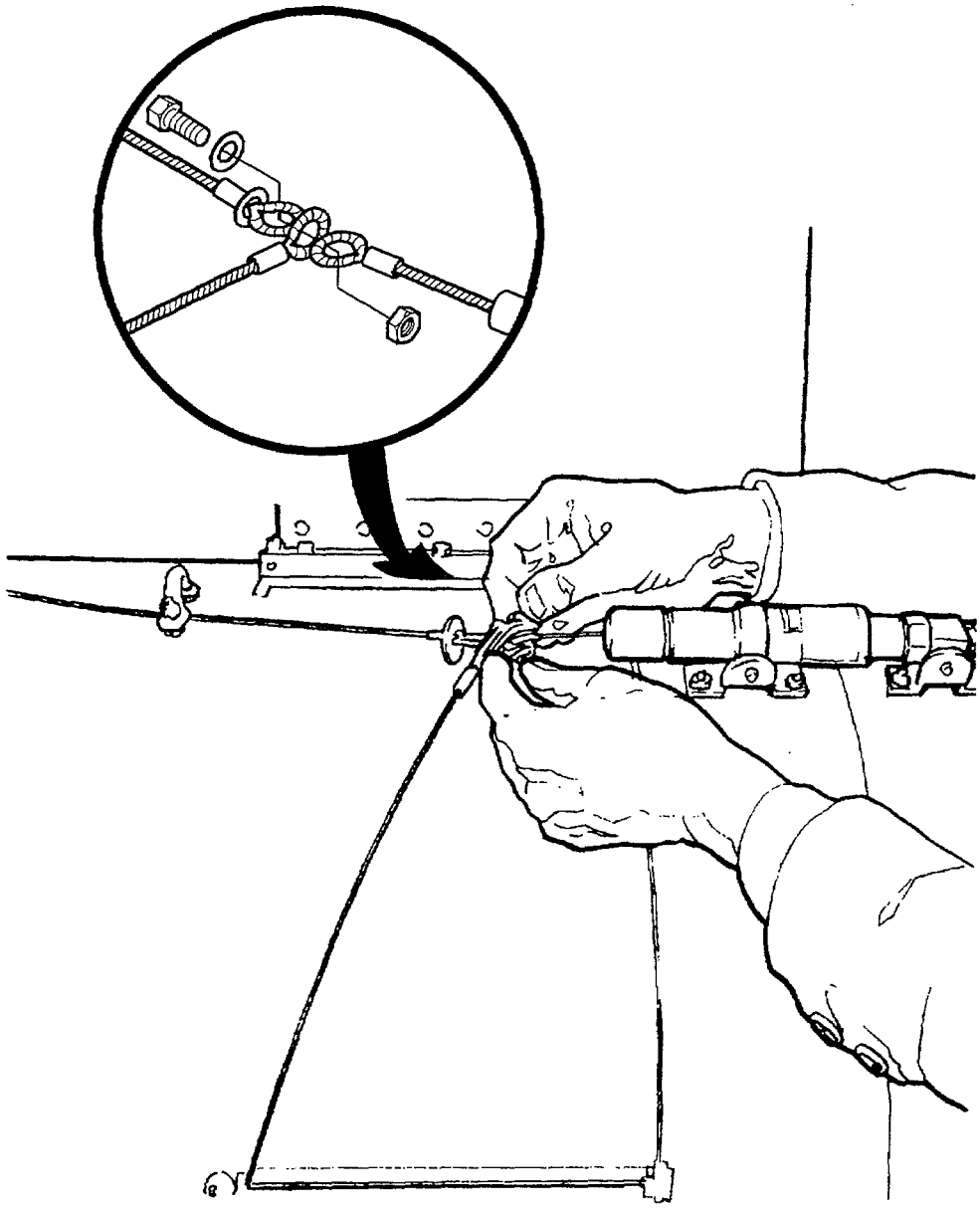


Figure 2-29. Parachute Cable Release Assembly

b. Remove opposite end of parachute cable and lock pin from the web cone assembly and pull through hole in parachute compartment.

c. Discard unserviceable cable and replace with a serviceable item from stock.

d. Merge terminating shackles of the parachute release cable with the spread damp of the initiator cable and secure to the eye of the firing head on the M5 cartridge-actuated release assembly with bolt, washer, and nut.

e. Thread opposite end of parachute cable lock pin through the hole in the parachute compartment and connect to the web cone assembly.

f. Check connections to be sure that the initiator cable assembly stop washer is located adjacent to the firing head of the M5 cartridge-actuated release assembly and that both the parachute release and the initiator cable assemblies have at least 1/4-inch (0.635 cm) slack.

2.25 CABLE HARNESS ASSEMBLY.

This task covers: a. Inspect b. Replace

INITIAL SETUP

Tools

References

Paragraph 2.9

Materials/Parts

Cable Harness Assembly (Appendix C)

INSPECT

Conduct a technical/rigger-type inspection in accordance with the instructions contained in paragraph 2.9.

REPLACE

NOTE

When the CTU-2/A delivery capsule is activated In flight, the cable harness assembly remains attached to the bomb rack.

a. Remove terminating shackle of harness assembly from initiator cable assembly (Figure 2-30).

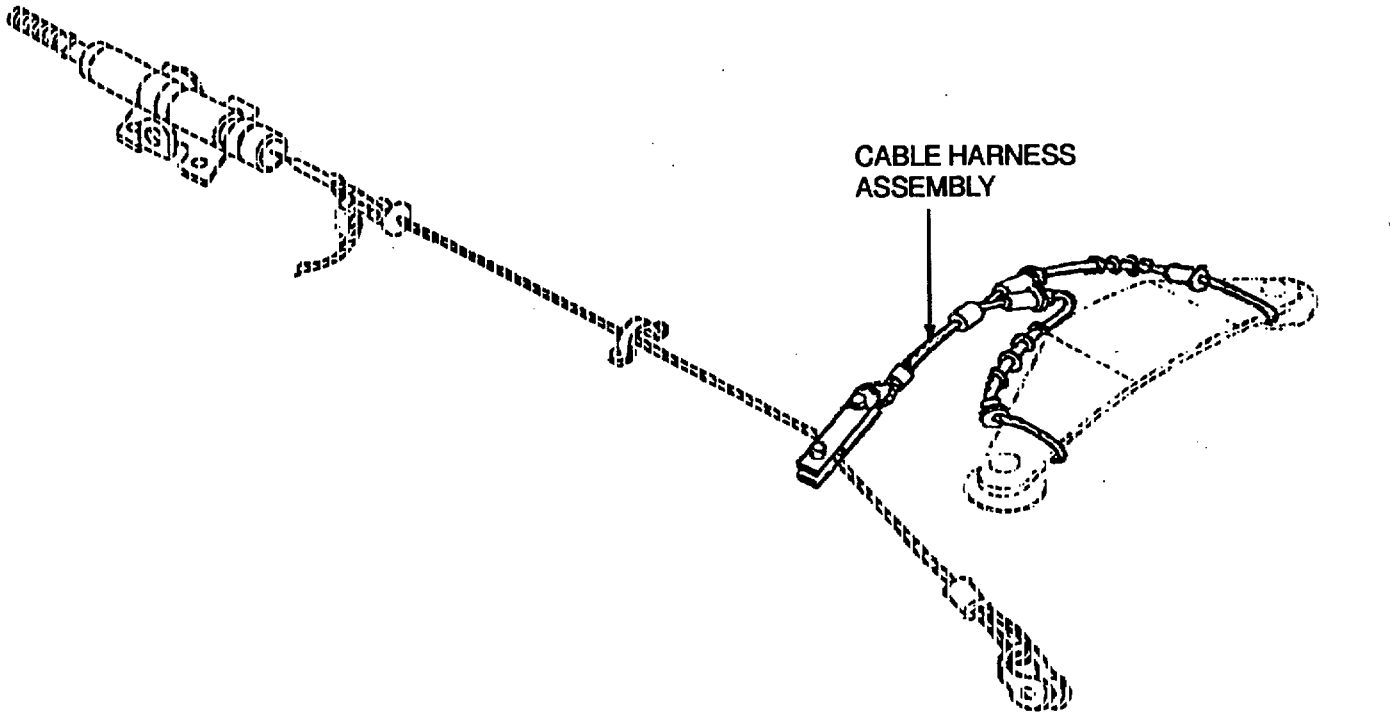


Figure 2-30. Cable Harness Assembly

b. Remove dual opposite ends of harness cable from bomb rack.

c. Discard unserviceable cable harness assembly and replace with a serviceable item from stock.

d. Connect dual ends of cable assembly to the bomb rack

e. Connect terminating shackle of harness cable to initiator cable assembly.

2.26 INITIATOR CABLE ASSEMBLY.

This task covers: a. Inspect b. Replace

INITIAL SETUP

Tools

References

Paragraph 2.9

Materials/Parts

Initiator Cable Assembly (Appendix C)

INSPECT

Conduct a technical/rigger-type inspection In accordance with the instructions contained in paragraph 2 9.

REPLACE

NOTE

Be sure that initiator cable stop washer is located next to the firing head of the M5 cartridge-actuated release assembly when replacement is completed.

a. Remove nut, washer, and bolt connecting the initiator spread clamp and the parachute cable shackles to the eye of the firing head on the M5 cartridge-actuated release assembly (Figure 2-31).

b. Remove bolt and disconnect opposite end of cable assembly from bracket on main body of the container.

c. Pull end (end without stop washer) of cable assembly through holding damp on main body of container.

d. Discard unserviceable cable assembly and replace with serviceable item from stock.

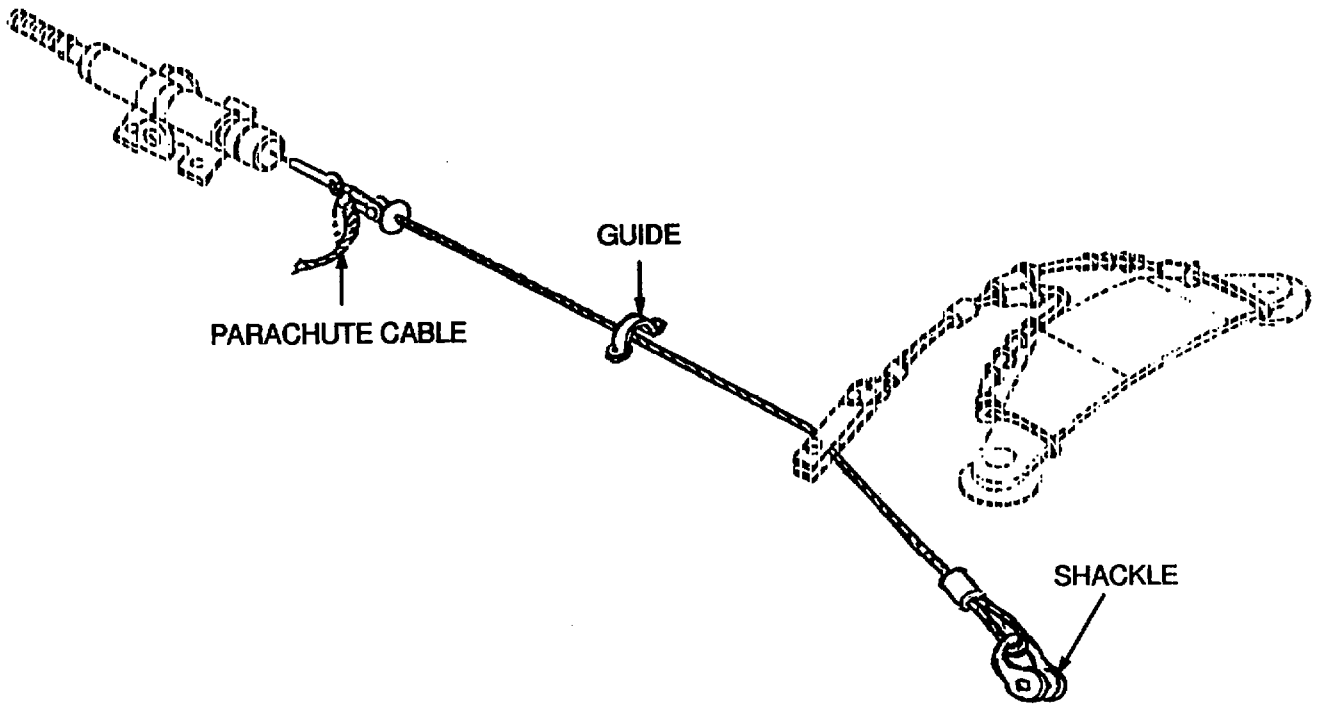


Figure 2-31. Initiator Cable Assembly

e. Slide cable end without stop washer through man body guide and secure to main body bracket with bolt.

f. Reconnect the initiator spread damp and the parachute cable shackles to the eye of the firing head on the M5 cartridge-actuated release assembly and secure with bolt, washer, and nut.

g. Allow ¼ inch (0.635 cm) slack for both the parachute release and initiator cable assemblies when replacement is complete.

2.27 M5 CARTRIDGE-ACTUATED RELEASE ASSEMBLY.

This task covers: a. Inspect b. Replace

INITIAL SETUP

Tools

References

Paragraph 2.9

Materials/Parts

M5 Cartridge-actuated release assembly (Appendix C)
Cotter Pin (Appendix C)

Equipment Condition

Cable release assemblies removed

INSPECT

WARNING

EXPLOSIVE HAZARD

- DO NOT attempt to disassemble the M5 cartridge-actuated release assembly, which has been sealed at the manufacturing source. Serious Injury or death could result.

- Because of special handling and stowage procedures required with cartridge-actuated devices, the release assembly IS NOT to be installed until immediately prior to mating the container with the aircraft. The safety pin is to be removed only during the preflight check.

Conduct a technical/rigger-type inspection in accordance with the instructions contained in paragraph 2 9.

REPLACE

a. Remove red warning flag from safety pin (Figure 2-32).

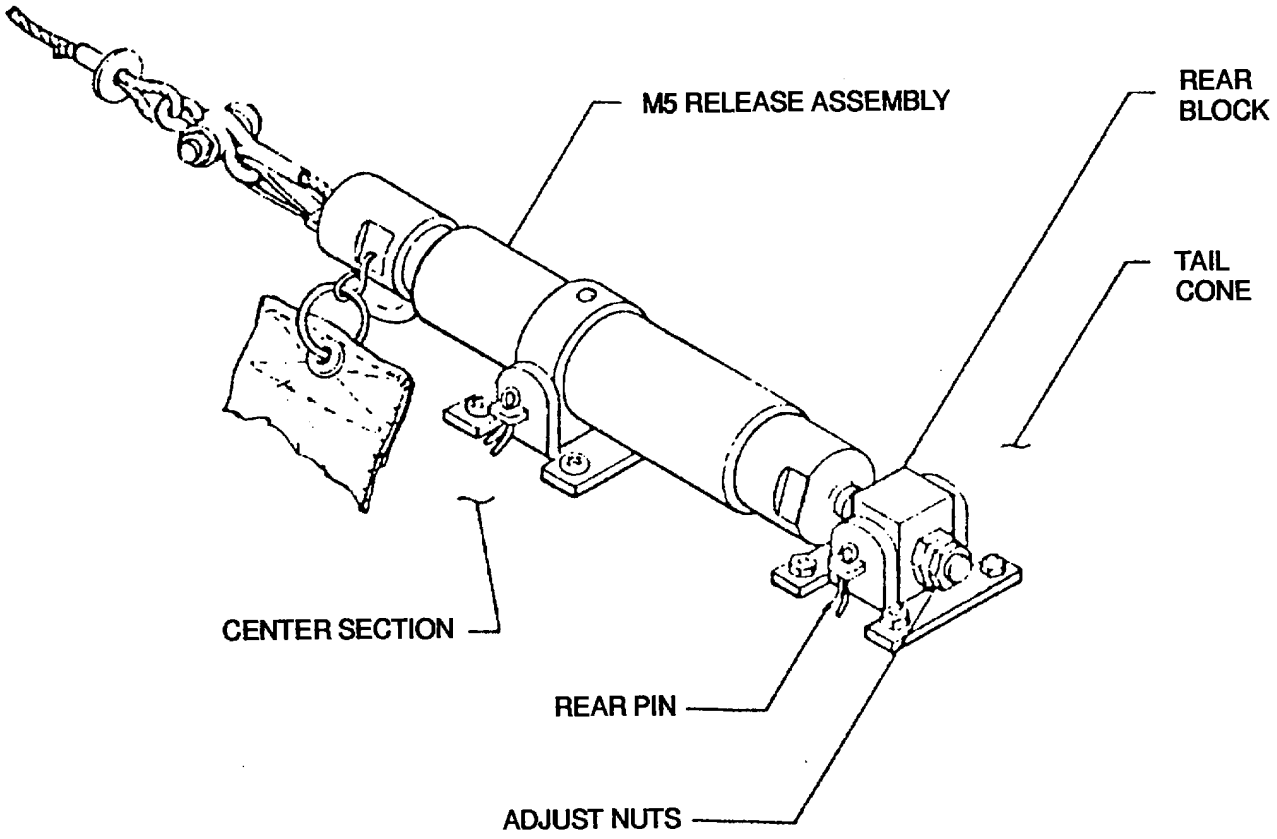


Figure 2-32. M5 Cartridge-Actuated Release Assembly

b. Loosen aft nut from rear block and then loosen forward nut from rear block

c. Remove and discard cotter pin from rear pin and then remove rear pin from rear block and rear bracket on tail cone.

d. Remove and discard cotter pin from front pin and then remove front pin from front block and front bracket on parachute compartment assembly.

e. Remove M5 cartridge-actuated release assembly from cargo capsule.

NOTE

The M5 cartridge-actuated release assembly must be replaced each time the cargo capsule is used.

f. Replace an unserviceable M5 assembly with a serviceable item from stock.

g. Point firing head of the M5 assembly toward nose of container and set assembly in place.

h. Pass front pin through front bracket and front block Into opposite side of front bracket.

i. Lock in front pin with a new cotter pin.

j. Place rear block in rear bracket and install rear pin through rear bracket and rear block through opposite side of the rear bracket.

k. Lock In rear pin with a new cotter pin



DO NOT remove safety pin from M5 assembly when installing warning flag

I. Place red warning flag on safety pin.

m. Holding tail cone firmly in place, rotate forward nut against rear block without creating a space at the joint between the tall cone and parachute compartment assembly.



DO NOT exceed this recommended torque value or the piston may separate from the cylinder, causing a malfunction of the system.

n. Tighten aft nut against rear block to 50-pound-inches (5.648 newton-meters) torque.

MAINTENANCE OF WEB ASSEMBLIES (CTU-2/A)

2.28 CONE WEB ASSEMBLY.

This task covers: a. Inspect b. Repair c. Replace

INITIAL SETUP

Tools

References

Paragraph 2.8
Paragraph 2.9

Materials/Parts

Cone Web Assembly (Appendix C)

Equipment Condition

Parachute compartment assembly removed.
M5 cartridge-actuated release assembly removed.
Tall cone assembly removed.

INSPECT

Conduct a technical/rigger-type inspection in accordance with the Instructions contained In paragraph 2.9.

REPAIR

a. Restitching. Restitch the cone web assembly according to original construction, instructions contained in paragraph 2.8, and the specifics shown In Table 2-3.

b. Splicing. Splicing shall be accomplished using the instructions in paragraph 2.8

REPLACE

a. Remove. (Figure 2-33)

(1) Place parachute compartment assembly on floor.

(2) Disconnect the parachute cable assembly lockpin from the cone on the web cone assembly.

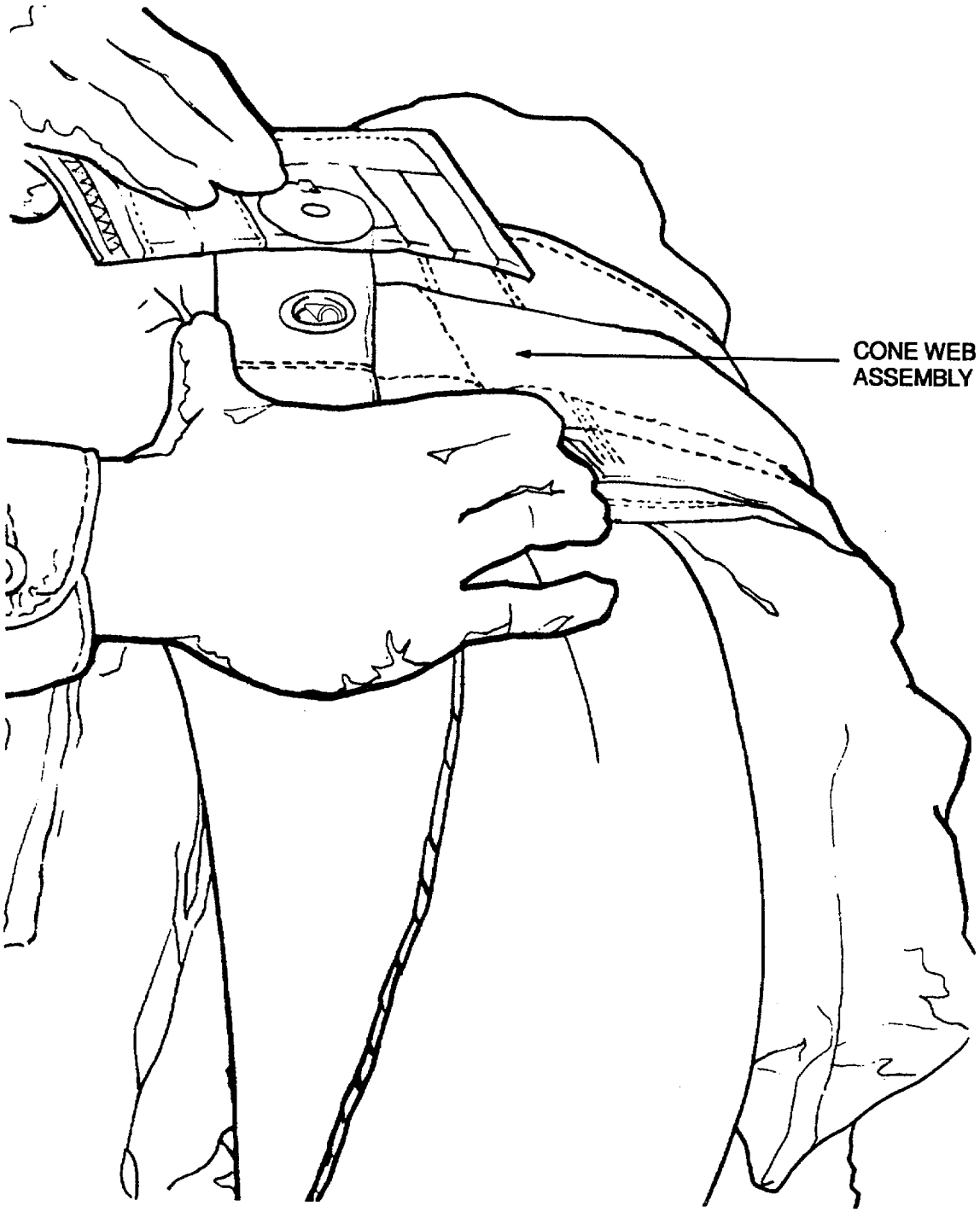


Figure 2-33. Cone Web Assembly

(3) Pull parachute cable through the hole In the parachute compartment.

(4) Remove grommet and washer web assemblies from the cone on the web cone assembly.

(5) Remove the pilot parachute/tail cone lanyard loop from the cone on the web cone assembly.

(6) Disengage the web cone assembly hooks from the two brackets located inside the parachute compartment.

b. Reinstall

(1) Route the parachute cable assembly lock pin through the hole in the parachute compartment until the lock pin exits at the aft end.

NOTE

The open sections of the web assembly hooks should point outboard.

(2) Secure the hooks on the web cone assembly to the two brackets which are generally in line with the suspension lugs on the container assembly.

(3) Position the web assembly tightly against the parachute assembly with the cone pointing to the rear.

(4) Form a ½-inch (1.270 cm) diameter loop (secured with a bowline knot) in the pilot parachute/tail cone lanyard at a point 6-inches (15.240 cm) from the pilot parachute apex.

(5) Slip loop of lanyard over cone of web assembly.

(6) Engage the grommets on both web assemblies over the cone. Be sure that the open sections on the hooks point outboard. Do not attach these web assemblies to the container at this time.

NOTE

Care must be exercised to ensure that the lock pin is engaged in the cone so that it will exit freely with a pull on the parachute cable.

(7) Slip the flat washer on the remaining web assembly over the cone and secure the five components with the parachute cable assembly lock pin.

(8) Route the pilot parachute/tail cone lanyard through the joint of the web assemblies so that it exits at approximately the center.

(9) Beat on the parachute assembly with the flat of the hand, while pulling on the washer web assembly until the hooks can be engaged in the brackets of the parachute compartment assembly.

(10) Engage the hooks on the remaining grommet web assemblies in the brackets provided on the left and right sides of the parachute compartment.

2.29 GROMMET WEB ASSEMBLY.

This task covers: a. Inspect b. Repair c. Replace

INITIAL SETUP

Tools

References

Paragraph 2.8
Paragraph 2.9

Materials/Parts

Grommet Web Assembly (Appendix C)

Equipment Condition

Parachute compartment assembly removed
M5 cartridge-actuated release assembly removed
Tail cone assembly removed.

INSPECT

Conduct a technical/rigger-type Inspection in accordance with the instructions contained in paragraph 2 9.

REPAIR

a. Restitching. Restitch the grommet web assembly according to original construction, instructions contained in paragraph 2 8, and the specifics shown in Table 2-3

b. Splicing. Splicing shall be accomplished using the instructions in paragraph 2.8.

REPLACE

NOTE

The grommet web assembly may be replaced using the instructions contained in paragraph 2 28 above.

Replace an unserviceable grommet web assembly with a serviceable item from stock.

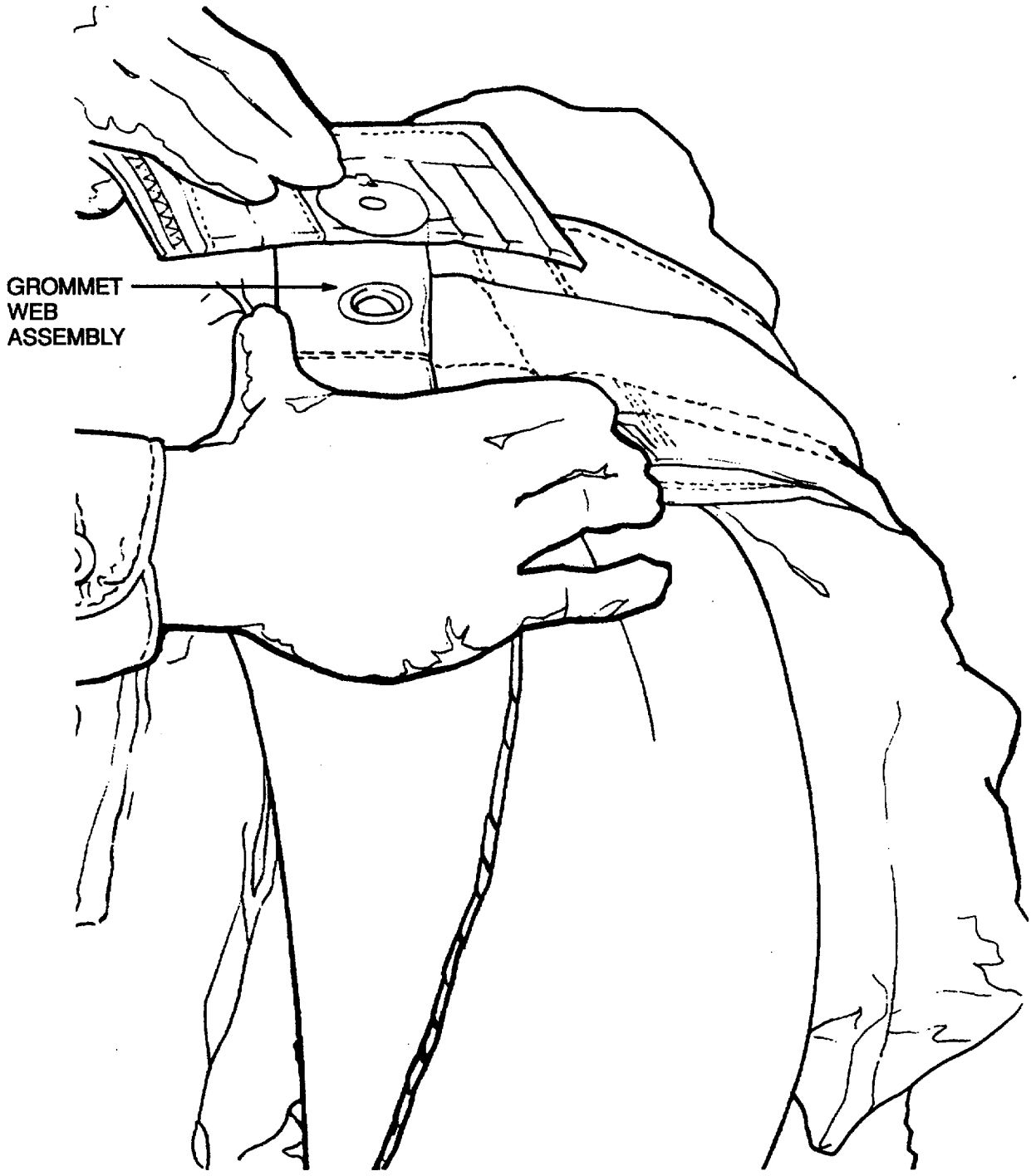


Figure 2-34. Grommet Web Assembly

2.30 WASHER WEB ASSEMBLY.

This task covers: a. Inspect b. Repair c. Replace

INITIAL SETUP

Tools

References

Paragraph 2.8
Paragraph 2.9

Materials/Parts

Washer Web Assembly (Appendix C)

Equipment Condition

Parachute compartment assembly removed.
M5 cartridge-actuated release assembly removed.
Tail cone assembly removed.

INSPECT

Conduct a technical/rigger-type inspection In accordance with the Instructions contained in paragraph 2 9.

REPAIR

a. Restitching. Restitch the washer web assembly according to original construction, instructions contained in paragraph 2.8, and the specifics shown in Table 2-3.

b. Splicing. Splicing shall be accomplished using the instructions in paragraph 2.8

REPLACE

NOTE

The washer web assembly may be replaced using the instructions contained in paragraph 2.28 above.

Replace an unserviceable washer web assembly with a serviceable items from stock.



Figure 2-35. Washer Web Assembly

2.31 PARACHUTE COMPARTMENT ASSEMBLY.

This task covers: a. Inspect b. Replace

INITIAL SETUP

Tools

References

Paragraph 2.9

Materials/Parts

Parachute compartment assembly (Appendix C)
Cotter pin (Appendix C)

Equipment Condition

Tail cone assembly removed.
Cable release system removed.
M5 cartridge-actuated release assembly removed.
Web assemblies removed.

INSPECT

Conduct a technical/rigger-type inspection in accordance with the instructions contained in paragraph 2.9

REPLACE

a. Remove and discard cotter pins from the four pin assemblies (Figure 2-36).

b. Unlock pin assemblies and remove defective parachute compartment assembly.

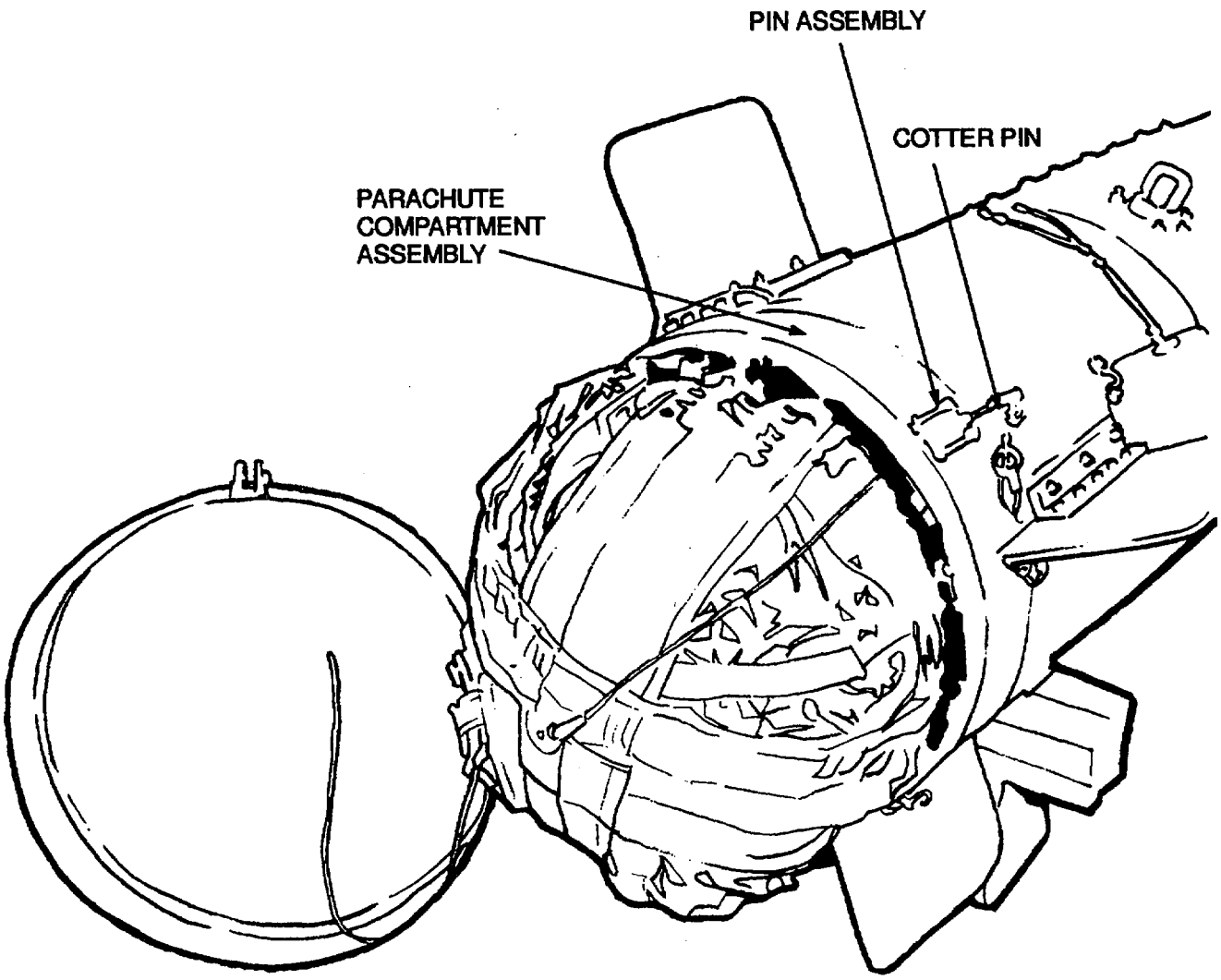


Figure 2-36. Parachute Compartment Assembly

c. Remove front M5 cartridge-actuated release bracket by removing nut, washer, and bolt.

d. Replace unserviceable parachute compartment assembly with a serviceable item from stock.

e. Install front bracket on assembly and secure with bolt, washer, and nut.

f. Fit parachute compartment to man body assembly and lock four pin assemblies.

g. Secure pin assemblies with four new cotter pins.

2.32 TAIL CONE ASSEMBLY.

This task covers: a. Inspect b. Replace

INITIAL SETUP

Tools

References

Paragraph 2.9

Materials/Parts

Tail cone assembly (Appendix C)
Cotter pin (Appendix C)

Equipment Condition

Equipment assembled.

INSPECT

Conduct a technical/rigger-type inspection In accordance with the instructions contained in paragraph 2 9.

REPLACE

a. Remove the aft nut from the rear block of the M5 cartridge-actuated release assembly (Figure 2-37).

b. Remove and discard the cotter pin.

c. Remove the rear pin from the rear block and bracket of the M5 assembly. Then remove the rear block.

d. Remove the tail cone assembly from the parachute compartment assembly, but keep it near the compartment until the pilot parachute lanyard is removed from the shackle located at the inner apex of the tail cone.

e. Replace an unserviceable tail cone assembly with a serviceable item from stock.

NOTE

Proper installation of the tail cone as described in the following steps is essential to reliable operation of the parachute system.

f. Hold the tail cone close to the aft end of the container and tie the pilot parachute lanyard, using a bowline knot finished with an overhand locking knot, to the shackle located at the inner apex of the tail cone. Allow approximately 48-inches (121.920 cm) between knots.

g. Two nuts are provided on the piston of the M5 release assembly. Rotate one nut forward and one nut aft to allow maximum longitudinal travel of the rear block.

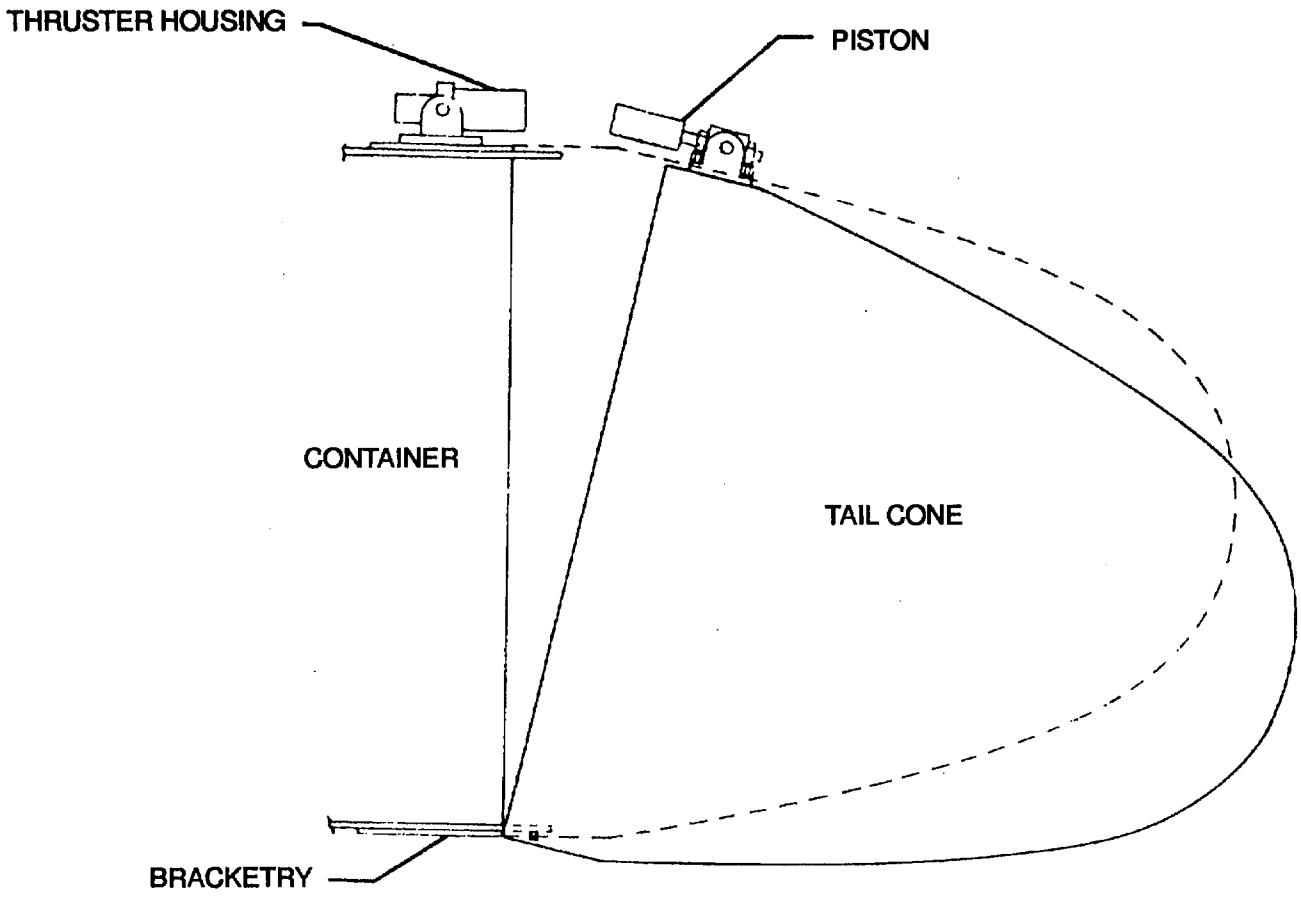


Figure 2-37. Tall Cone Assembly

h. Engage the tail cone with the screw on the back end of the parachute compartment and ascertain that the screw is fully seated in the tail cone.

i. Rotate the tail cone about the screw until the rear block can be dropped into the rear bracket, which is installed on the tail cone.

j. Align the rear block in the rear bracket and install the rear pin.

k. Secure rear pin with a new cotter pin.

CAUTION

DO NOT exceed this recommended torque value or the piston may separate from the cylinder, causing a malfunction of the system.

l. Holding the tail cone firmly in place, tighten the forward nut firmly against the rear block and torque the rear nut against the rear block to 50-pound-inches (5.648 newton-meters).

2.33 PACKING, PREFORMED.

This task covers: a. Inspect b. Replace

INITIAL SETUP

Tools

References

Paragraph 2.9

Materials/Parts

Packing, preformed (Appendix C)

Equipment Condition

Nose cone removed

INSPECT

Conduct a technical/rigger-type inspection In accordance with the instructions contained in paragraph 2.9.

REPLACE

Replace unserviceable preformed packing with serviceable items from stock.

2.34 GROUND SAFETY PIN.

This task covers: a. Inspect b. Replace

INITIAL SETUP

Tools

References

Paragraph 2.9

Materials/Parts

Pin, ground, safety (Appendix C)

INSPECT

Conduct a technical/rigger-type inspection in accordance with the instructions contained in paragraph 2.9.

REPLACE

Replace unserviceable ground safety pin with serviceable item from stock.

2.35 MAIN BODY ASSEMBLY.

This task covers: a. Inspect b. Repair c. Replace

INITIAL SETUP

Tools

Mallet, Rubber
(Appendix B, Section III, Item 2)

References

Paragraph 2.9

Materials/Parts

Fin assembly (Appendix C)
Main body assembly (Appendix C)

INSPECT

Conduct a technical/rigger-type inspection in accordance with the Instructions contained in paragraph 2.9. Special attention should be given to the fin assembly.

REPAIR

NOTE

Repair of the main body assembly consists of replacing a defective fin assembly (Figure 2-38).

a. Remove one of the pins securing the parachute pan to the main body.

b. Using rubber mallet, drive fin assembly from slot.

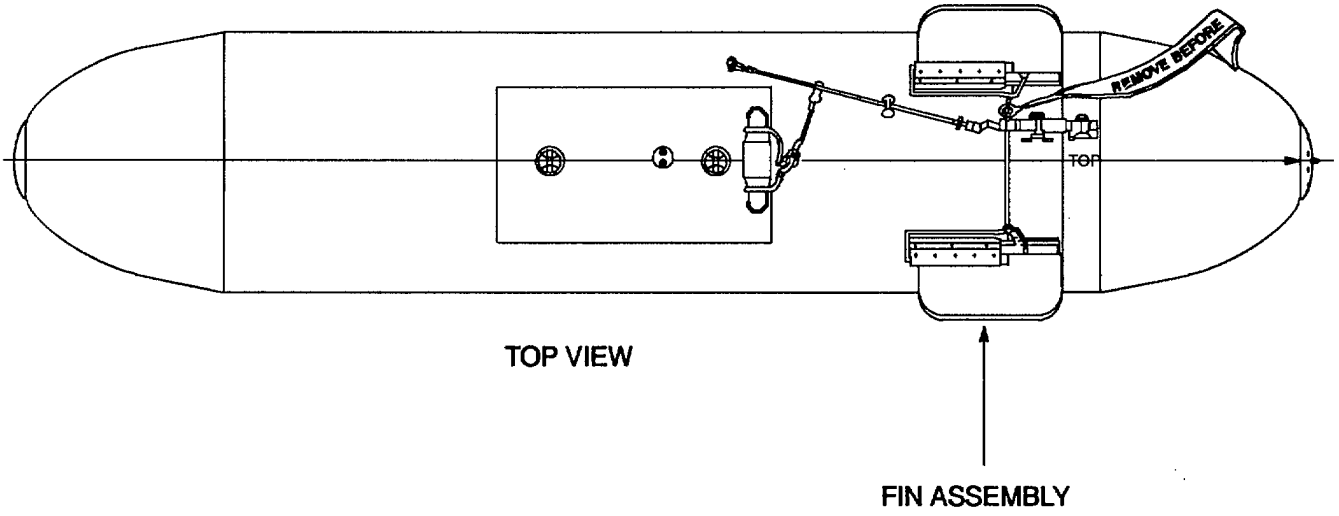


Figure 2-38. Main Body Assembly

c. Discard unserviceable fin assembly and replace with serviceable item from stock.

d. Drive new fin into slot with rubber mallet, being careful not to damage fin.

e. Reinstall pin securing the parachute pan to the main body.

f. Repeat steps a through e above until all four fins have been removed and replaced.

REPLACE

Replace an unserviceable main body assembly with a serviceable item from stock.

2.36 CONNECTOR PIN ASSEMBLY.

This task covers: a. Inspect b. Replace

INITIAL SETUP

Tools

References

Paragraph 2.9

Materials/Parts

Connector pin assembly (Appendix C)

Equipment Condition

INSPECT

Conduct a technical/rigger-type inspection in accordance with the instructions contained in paragraph 2.9.

REPLACE

Replace unserviceable connector pin assembly with serviceable item from stock (Figure 2-39).

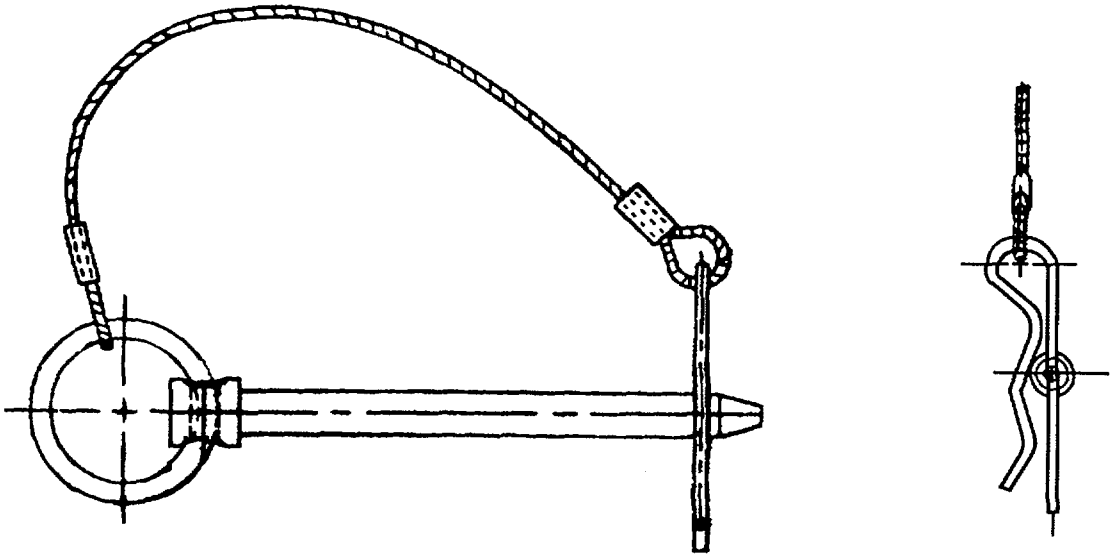


Figure 2-39. Connector Pin Assembly

MAINTENANCE OF CONNECTOR STRAPS

2.37 CONNECTOR STRAP, 60- AND 120-INCHES (152.400- AND 304.800 CM) LONG.

This task covers: a. Inspect b. Repair c. Replace

INITIAL SETUP

Tools

References

Paragraph 2.8
Paragraph 2.9

Materials/Parts

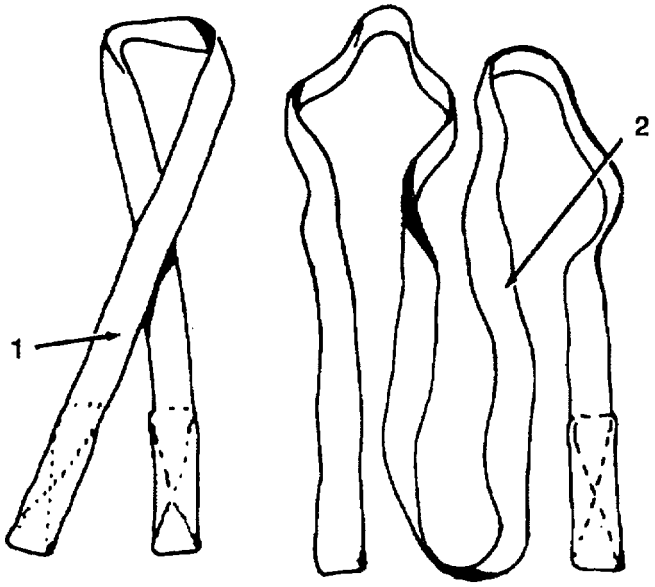
Connector strap 60-inches (152 400 cm) long
(Appendix C)
Connector strap 120-inches (304 800 cm) long
(Appendix C)

INSPECT

Conduct a technical/rigger-type inspection in accordance with the instructions contained in paragraph 2.9.

REPAIR

Restitch connector straps according to original construction, as shown in Figure 2-40, instructions contained in paragraph 2 8, and the specifics outlined in Table 2-3.



1. 60-Inch (152.400 cm) strap
2. 120-Inch (304.800 cm) strap

Figure 2-40. Connector Strap, 60- and 120-Inches (152.400- and 304.800 cm) Long

REPLACE

Replace an unserviceable connector strap with a serviceable item from stock.

SECTION V. PREPARATION FOR STORAGE AND SHIPMENT

2.38 GENERAL.

The initial packaging and shipping of airdrop equipment is the responsibility of component manufacturers who are required to comply with federal and military packaging specifications as stipulated in contractual agreements. Airdrop equipment in normally shipped to depot activities, packaged to comply with overseas shipping requirements. Except for those airdrop items which are unpackaged and subjected to random inspections or testing by a depot activity, airdrop equipment received by a using unit will be contained In original packaging materials.

2.39 GENERAL STORAGE REQUIREMENTS. To insure that serviceability standards for stored airdrop equipment are maintained, every effort will be exerted to adhere to the following storage requirements.

a. When available, a heated building should be used to store airdrop items.

b. Airdrop equipment will be stored in a dry, well-ventilated location and protected from pilferage, dampness, fire, dirt, insects, rodents, and direct sunlight

c. Airdrop equipment will not be stored in a manner which would prevent ventilation or interfere with light fixtures, heating vents, fire fighting equipment, cooling units, exits, or emergency exit doors.

d. Airdrop items shall not be stored if damaged, dirty, or damp.

e. All stored airdrop items will be marked, segregated, and located for accessibility, and easy Identification.

f. Airdrop equipment will not be stored in direct contact with any building floor or wall. Storage will be accomplished using bins, shelves, pallets, racks, or dunnage to provide airspace between the storage area floor and the equipment. If preconstructed shelving or similar storage accommodations are not available, locally fabricate storage container requirements using suitable lumber or wooden boxes.

g. All available Materials Handling Equipment (MHE) should be used as much as possible in the handling of airdrop items.

h. Periodic rotation of stock, conservation of available space, proper housekeeping policies, and strict adherence to all safety regulations will be practiced at all times.

2.40 SPECIAL INSTRUCTIONS FOR ADMINISTRATIVE STORAGE.

a. Placement of equipment in administrative storage should be for short periods of time when a shortage of maintenance effort exists. Items should be in mission readiness within 24-hours or within the time factors as determined by the directing authority During the storage period, appropriate maintenance records shall be kept.

b. Before placing the equipment in administrative storage, current preventive maintenance checks and services should be completed, shortcomings and deficiencies should be corrected, and all Modification Work Orders (MWO) should be applied.

c. Storage Site Selection Inside storage is preferred for items selected for administrative storage. If inside storage in not available, trucks, vans, conex containers, and other containers may be used.

2.41 SPECIAL INSTRUCTIONS FOR ADMINISTRATIVE STORAGE OF AIRDROP EQUIPMENT.

a. Storage Site Selection. Container delivery system components should be stored in a dry, well-ventilated environment with controlled temperature.

b. Inspection. In addition to performing the unit PMCS procedures, a technical/rigger-type inspection shall be conducted with discrepancies corrected prior to placement in storage.

c. Cleaning and Drying. Clean and dry the system components in accordance with the procedures described in TM 38-230-1.

d. Preservation. If the equipment is to be stored without regular PMCS or technical/rigger-type inspections being performed, consult TM 38-230-2 for preservation requirements.

2.42 SHIPMENT BETWEEN MAINTENANCE ACTIVITIES.

The shipment of airdrop equipment between maintenance activities will be accomplished on a signature certification basis using the best available means of transportation. Fabric items will be tagged in accordance with DA Pam 738-751, and rolled, folded, or placed loosely in a deployment bag, aviator's kit bag, or other suitable container, as required. Use of original containers is desired, if available. Used wood and metal airdrop items will be tagged as prescribed in DA Pam 738-751 and placed into a suitable type container, if possible. Unused airdrop equipment will be transported in their original shipping containers. During shipment, every effort will be made to protect airdrop items from weather elements, dust, dirt, oil, grease, and acids.

2.43 OTHER SHIPMENT REQUIREMENTS.

Airdrop equipment destined for domestic or overseas shipment will be packaged and marked In accordance with AR 700-15, TM 38-230-1, and TM 38-230-2. Shipment of airdrop items will be accomplished in accordance with AR 55-45.

APPENDIX A

REFERENCES

A.1 SCOPE.

This appendix lists all forms, field manuals, technical manuals, and miscellaneous publications referenced in this manual.

A.2 FORMS AND RECORDS.

Recommended Changes to Publications and Blank Forms..... DA Form 2028
Recommended Changes to Equipment Technical Publications ..... DA Form 2028-2
Equipment Inspection and Maintenance Worksheet ..... DA Form 2404
Equipment Modification Record..... DA Form 2408-5
Report of Deficiency..... SF 364
Product Quality Deficiency Report..... SF 368

A.3 FIELD MANUALS.

First Aid for Soldiers..... FM 21-11

A.4 TECHNICAL MANUALS AND BULLETINS.

Destruction of Army Materiel to Prevent Enemy Use..... TM 750-244-3
Technical Training of Parachutists..... TM 57-220
Airdrop of Supplies and Equipment General..... TM 10-500-Series
Preservation, Packaging, and Packing of Military Supplies and Equipment (Vol 1)..... TM 38-230-1
Preservation, Packaging, and Packing of Military Supplies and Equipment (Vol 2)..... TM 38-230-2

A.5 MISCELLANEOUS PUBUCATIONS.

Abbreviations for Use On Drawings, Specification Standards, and in Technical Documents..... MIL-STD-12
The Army Maintenance Management System (TAMMS) ..... DA Pam 738-750
DA Pam 25-30
The Army Maintenance Management System - Aircraft (TAMMS-A) ..... DA Pam 738-751
Expendable/Durable Items (Except Medical, Class V, Repair Parts, and Heraldic Items)..... CTA -50-970
CTA-8-100
PPP-B-636
Technical Manual, Parachute Assembly, PUC-8..... NAVAIR 13-5-7
Maintenance Expenditure Units for FSC Group 16 ..... TB 43-0002-43
Military Standard Transportation and Movement Procedures (MIL Stamp) ..... AR 55-45
Preservation, Packaging, Packing, and Marking of Items of Supply..... AR 700-15
Army Logistics Readiness and Sustainability..... AR 700-138
Army Materiel Maintenance of Supplies and Equipment..... AR 750-1
Airdrop, Parachute Recovery and Aircraft Personnel Escape Systems..... AR 750-32

APPENDIX B

MAINTENANCE ALLOCATION CHART

SECTION I. INTRODUCTION

B.1 THE ARMY MAINTENANCE SYSTEM MAC.

a. This introduction (section I) provides a general explanation of all maintenance and repair functions authorized at various maintenance levels under the standard Army Maintenance System concept.

b. The Maintenance Allocation Chart (MAC) in section II designates overall authority and responsibility for the performance of maintenance functions on the Identified end item or component. The application of the maintenance functions to the end item or component will be constant with the capacities and capabilities of the designated maintenance levels, which are shown in the MAC in column (4) as:

Unit - includes two subcolumns, C (operator/crew) and O (unit) maintenance.
Direct Support - includes an F subcolumn.
General Support - includes an H subcolumn
Depot - includes an D subcolumn.

c. Section III lists the tools and test equipment (both special tools and common tools sets) required for each maintenance function as referenced from section II.

d. Section IV contains supplemental instructions and explanatory notes for a particular maintenance function.

B.2 MAINTENANCE FUNCTIONS. MAINTENANCE FUNCTIONS WILL BE LIMITED TO AND DEFINED AS FOLLOWS:

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

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

c. Service. Operations required periodically to keep an item In proper operating condition, i e., to clean (includes decontamination, when required), to preserve, to paint, or to replenish fuel, lubricants, chemical fluids, or gases.

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

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

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

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

h. Replace. To remove an unserviceable item and install a serviceable counterpart In its place. Replace is authorized by the MAC and is shown as the 3rd position code of the SMR code.

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

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

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

B.3 EXPLANATION OF COLUMNS IN THE MAC, SECTION II.

a. Column 1 - Group Number. Column 1 lists functional group code numbers, the purpose of which is to identify maintenance significant components, assemblies, subassemblies, and modules with the next higher assembly.

b. Column 2 - Component/Assembly. Column 2 contains the names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

c. Column 3 - Maintenance Function. Column 3 lists the functions to be performed on the item listed in column 2. (For detailed explanation of these functions, see paragraph B 2)

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[1]Service - Inspect, test, service, adjust, aline, calibrate, and/or replace

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

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

[4]Actions - Welding, grinding, riveting, straightening, facing, machining, and/or resurfacing.

d. Column 4 - Maintenance Level. Column 4 specifies, by the listing of a work time figure in the appropriate subcolumn(s), the category of maintenance authorized to perform the function listed in Column 3. This figure represents the active time required to perform that maintenance function at the indicated category of maintenance. If the number or complexity of the tasks within the listed maintenance function varies at different maintenance categories, appropriate work time figures will be shown for each category. The work time figure represents the average time required to restore an item (assembly, subassembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time (including any necessary disassembly/assembly time), troubleshooting/fault location time, and quality assurance/quality control time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the maintenance allocation chart. The symbol designations for the various maintenance categories are as follows:

C	Operator or Crew
O	Unit Maintenance
F	Direct Support Maintenance
L	Specialized Repair Activity (SRA)[5]
H	General Support Maintenance
D	Depot Maintenance

e. Column 5 - Tools and Test Equipment. Column 5 specifies, by code, those common tool sets (not individual tools) and special tools, TMDE, and support equipment required to perform the designated function.

f. Column 6 - Remarks. This column shall, when applicable, contain a letter code, in alphabetic order, which shall be keyed to the remarks contained in section IV.

B.4 EXPLANATION OF COLUMNS IN TOOL AND TEST EQUIPMENT REQUIREMENTS, SECTION III.

a. Column 1 - Reference Code. The tool and test equipment reference code correlates with a code used in the MAC, section II, column 5.

b. Column 2 - Maintenance Category. The lowest category of maintenance authorized to use the tool or test equipment.

c. Column 3 - Nomenclature. Name or Identification of the tool or test equipment.

d. Column 4 - National Stock Number. The National stock number of the tool or test equipment.

e. Column 5 - Tool Number. The manufacturer's part number.

B.5 EXPLANATION OF COLUMNS IN REMARKS, SECTION IV.

a. Column 1 - Reference Code. The code recorded in column 6, section II.

b. Column 2 - Remarks. This column lists information pertinent to the maintenance function being performed as indicated in the MAC, section II.

[5]This maintenance level is not included in Section II, column 4 of the Maintenance Allocation Chart Functions to this level of maintenance are identified by a work-time figure in the "H" column of Section II, column 4, and an associated reference code is used in the Remarks column 6. This code is keyed to Section IV, Remarks, and the SRA complete repair application is explained there.

Section II. MAINTENANCE ALLOCATION CHART

Maintenance Allocation Chart

(1) GROUP NUMBER	(2) COMPONENT ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY					(5) TOOLS AND EQUIP	(6) REMARKS
			Unit		DS	GS	Depot		
			C	O	F	H	D		
00	CONTAINER DELIVERY SYSTEM								
01	A-7A CARGO SLING	INSPECT REPAIR REPLACE		0.1 0.1 0.1					A B D
02	A-21 AERIAL DELIVERY CARGO BAG	INSPECT		0.1					A
0201	COVER	INSPECT REPAIR REPLACE		0.1 0.2 0.1					A B D
0202	QUICK RELEASE ASSEMBLY	INSPECT SERVICE REPLACE		0.1 0.2 0.1					A C D
0203	SLING ASSEMBLY	INSPECT REPAIR REPLACE		0.1 0.2 0.1					A B D
0204	QUICK RELEASE STRAPS REPLACE	INSPECT REPAIR		0.1 0.2 0.1					A B D
0205	RING STRAP	INSPECT REPAIR REPLACE		0.1 0.2 0.1					A B D
03	A-22 AERIAL DELIVERY CARGO BAG	INSPECT		0.1					A
0301	COVER	INSPECT REPAIR REPLACE		0.1 0.2 0.1					A B D
0302	SLING ASSEMBLY	INSPECT REPAIR REPLACE		0.1 0.2 0.1					A B D

Maintenance Allocation Chart-Continued

(1) GROUP NUMBER	(2) COMPONENT ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY					(5) TOOLS AND EQUIP	(6) REMARKS
			Unit		DS	GS	Depot		
			C	O	F	H	D		
0303	SUSPENSION WEB	INSPECT REPAIR REPLACE		0.1 0.2 0.1					A B D
0304	SKID BOARD	INSPECT REPLACE		0.1 0.1					A D
0305	SKID BOARD	INSPECT REPLACE		0.1 0.1					A D
04		INSPECT							
0401	COVER	INSPECT REPAIR REPLACE		0.1 0.2 0.1					A B D
0402	SLING ASSEMBLY	INSPECT REPAIR REPLACE		0.1 0.2 0.1					A B D
0403	SUSPENSION WEB	INSPECT REPAIR REPLACE		0.1 0.2 0.1					A B D
05	CAPSULE, CARGO, CTU-2/A	INSPECT		0.2					A
0501	PARACHUTE COMPARTMENT ASSEMBLY	INSPECT REPLACE		0.1 0.1					A D
0502	TAIL CONE ASSEMBLY	INSPECT REPLACE		0.1 0.3					A D
0503	WEB ASSEMBLY, CONE	INSPECT REPAIR REPLACE		0.1 0.3 0.2					A B D
0504	WEB ASSEMBLY, GROMMET	INSPECT REPAIR REPLACE		0.1 0.3 0.2					A B D
0505	WEB ASSEMBLY, WASHER	INSPECT REPAIR REPLACE		0.1 0.3 0.2					A B D

Maintenance Allocation Chart-Continued

(1) GROUP NUMBER	(2) COMPONENT ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE CATEGORY					(5) TOOLS AND EQUIP	(6) REMARKS
			Unit		DS	GS	Depot		
			C	O	F	H	D		
0506	PACKING, PREFORMED	INSPECT REPLACE		0.1 0.2					A D
0507	PIN, GROUND SAFETY	INSPECT REPLACE		0.1 0.1					A D
0508	CABLE ASSEMBLY, PARACHUTE RELEASE	INSPECT REPLACE		0.1 0.1					A D
0509	MAIN BODY ASSEMBLY	INSPECT REPAIR REPLACE		0.1 0.2 0.2					A B D
0510	CABLE ASSEMBLY, INITIATOR	INSPECT REPLACE		0.1 0.2					A D
0511	CONNECTING PIN ASSEMBLY	INSPECT REPLACE		0.1 0.2					A D
0512	CABLE HARNESS ASSEMBLY	INSPECT REPLACE		0.1 0.1					A D
06	STRAP, CONNECTOR 60-INCHES LONG	INSPECT REPAIR REPLACE		0.1 0.1 0.1					A B D
07	STRAP, CONNECTOR 120-INCHES LONG	INSPECT REPAIR REPLACE		0.1 0.1 0.1					A B D

SECTION III TOOL AND TEST EQUIPMENT REQUIREMENTS

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAL/NATO STOCK NUMBER	TOOL NUMBER
1	O	SCREWDRIVER, CROSS-TIP	5120-00-060-2004	GGG-S-121
2	O	MALLET, RUBBER	5120-00-293-3399	GGG-H-33
3	O	KNIFE	5110-00-162-2205	MIL-K-818C
4	O	SHEARS	5110-00-223-6370	GGG-S-278
5	O	SCREWDRIVER, FLAT	5120-00-596-8653	GGG-S-121
6	O	WRENCH, ADJUSTABLE	5120-00-240-5328	GGG-W-631
7	O	WRENCH, TORQUE	5120-00-529-2552	A-A-1274
8				
9				
10				
11				
12				

SECTION IV. REMARKS

REFERENCE CODE	REMARKS
A	INSPECT IS A TECHNICAURIGGER TYPE INSPECTION.
B	REPAIR CONSISTS OF DARNING, RESTITCHING, PATCHING, SPLICING, AND REPLACEMENT OF PARTS AUTHORIZEED FOR UNIT MAINTENANCE.
C	SERVICE IS TO CLEAN EQUIPMENT.
D	REPLACE WITH SERVICEABLE ITEM FROM STOCK.
E	SERVICE CONSISTS OF DISASSEMBLY, CLEANING, LUBRICATION AND REASSEMBLY.

APPENDIX C

REPAIR PARTS AND SPECIAL TOOLS LIST

SECTION I. INTRODUCTION

C.1 SCOPE. This RPSTL lists and authorizes spares and repair parts, special tools; special test, measurement, and diagnostic equipment (TMDE), and other special support equipment required for performance of unit, direct support and general support maintenance of the Container Delivery System. It authorizes the requisitioning, issue, and disposition of spares, repair parts and special tools as indicated by the source, maintenance and recoverability (SMR) codes.

C.2 GENERAL. In addition to this section, Introduction, this Repair Parts and Special Tools List is divided into the following sections:

a. Section II. Repair Parts List. A list of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. This list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Bulk materials are listed in item name sequence. Items are shown in the associated illustration(s)/figure(s).

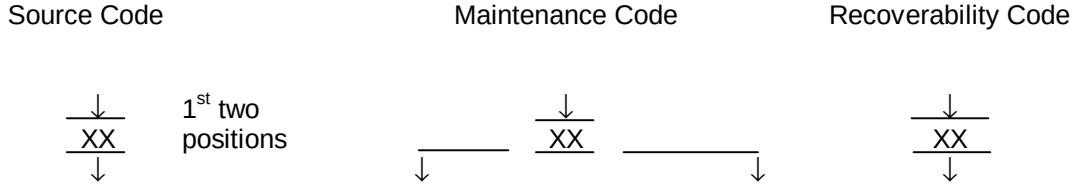
b. Section III. Special Tools List A list of special tools, special TMDE, and other special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in DESCRIPTION AND USABLE ON CODE column) for the performance of maintenance.

c. Section IV. Cross-Reference Index. A list, in National Item Identification Number (NIIN) sequence, of all National stock numbered items appearing in the listing, followed by a list in alphanumeric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are cross referenced to each illustration figure and item number appearance. The figure and item number index lists figure and item numbers in alphanumeric sequence and cross references NSN, CAGEC and part number

C.3 EXPLANATION OF COLUMNS (SECTIONS II AND III).

a. ITEM NO. (Column (1)). Indicates the number used to identify items called out In the illustration.

b. SMR Code (Column (2)). The Source, Maintenance, and Recoverability (SMR) code is a 5-position code containing supply/requisitioning information, maintenance category authorization criteria, and disposition instruction, as shown In the following breakout:



* Complete Repair: Maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the “Repair" function In a use/user environment in order to restore serviceability to a failed item.

(1) Source Code. The source code tells you how to get an item needed for maintenance, repair, or overhaul of an end item/equipment Explanations of source codes follows:

Source Code	Explanation
PA PB PC** PD PE PF PG	Stocked items, use the applicable NSN to request/requisition Items with these source codes. They are authorized to the category indicated by the code entered in the 3rd position of the SMR code **NOTE Items coded PC are subject to deterioration.
KD KF KB	Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance category indicated in the 3rd position of the SMR code. The complete lot must be requisitioned and applied.
MO- (Made at Unit/AVUM Level) MF- (Made at DSIAVUM Level) MH- (Made at GS Level) ML- (Made at Specialized Repair Activity (SRA)) MD- (Made at Depot)	Items with these codes are not to be requested/requisitioned individually. They must be made from bulk material which is identified by the part number in the DESCRIPTION and USABLE ON CODE (UOC) column and listed in the Bulk Material group of the repair parts list in this RPSTL.. If the item is authorized to you by the 3rd position code of the SMR code, but the source code indicates it is made at a higher level, order the item from the higher level of maintenance.
AO- (Assembled by Unit/AVUM Level) AF- (Assembled by DS/AVIM Level) AH- (Assembled by GS Category) AL- (Assembled by SRA) AD- (Assembled by Depot)	Items with these codes are not to be requested/ requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the 3rd position code of the SMR code authorizes you to replace the item, but the source code indicates the items are assembled at a higher level, order the item from the higher level of maintenance

XA- Do not requisition "XA"-coded item. Order its next higher assembly. (Refer to the NOTE below)
XB- If an "XB" item is not available from salvage, order it using the CAGEC and part number given.
XC- Installation drawing, diagram, instruction sheet, field service drawing, that is identified manufacturer's part number.
XD- Item is not stocked. Order an 'XD"-coded item through normal supply channels using the CAGEC and part number given, if no NSN is available.

NOTE

Cannibalization or controlled exchange, when authorized, may be used as a source of supply for items with the above source codes, except for those source coded “XA" or those aircraft support items restricted by requirements of AR 750-1.

(2) Maintenance Code. Maintenance codes tell you the level(s) of maintenance authorized to USE and REPAIR support items. The maintenance codes are entered in the third and fourth positions of the SMR code as follows:

(a) The maintenance code entered in the third position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to the following levels of maintenance.

Maintenance Code	Application/Explanation
C-	Crew or operator maintenance done within unit/AVUM maintenance.
O-	Unit level/AVUM maintenance can remove, replace, and use the item.
F-	Direct support/AVIM maintenance can remove, replace, and use the item.
H-	General support maintenance can remove, replace, and use the item.
L-	Specialized repair activity can remove, replace, and use the item.
D-	Depot can remove, replace, and use the item.

(b) The maintenance code entered in the fourth position tells whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (i.e., perform all authorized repair functions.)

NOTE

Some limited repair may be done on an item at a lower level of maintenance, If authorized by the Maintenance Allocation Chart and SMR codes.

Maintenance Code	Application/Explanation
O-	Unit/AVUM is the lowest level that can do complete repair of the item.
F-	Direct support/AVIM is the lowest level that can do complete repair of the item.
H-	General Support is the lowest level that can do complete repair of the Item
L-	Specialized repair activity is the lowest level that can do complete repair of the item
D-	Depot is the lowest level that can do complete repair of the item.
Z-	Nonreparable. No repair is authorized.
B-	No repair is authorized. No parts or special tools are authorized for the maintenance of a "B" coded item. However, the item may be reconditioned by adjusting, lubricating, etc., at the user level.

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

Recoverability Codes	Application/Explanation
Z-	Nonreparable Item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in 3d position of SMR Code.
O-	Reparable item. When not economically reparable, condemn and dispose of the item at unit or AVUM level.
F-	Reparable item. When uneconomically reparable, condemn and dispose of the item at the direct support or AVIM level.
H-	Reparable item. When uneconomically reparable, condemn and dispose of the item at the general support level.
D-	Reparable item. When beyond lower level repair capability, return to depot Condemnation and disposal of item not authorized below depot level.
L-	Reparable item. Condemnation and disposal not authorized below specialized repair activity (SRA).
A-	Item requires special handling or condemnation procedures because of specific reasons (e.g., precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions

c. CAGEC (Column (3)). The Commercial and Govemment Entity Code (CAGEC) is a 5-digit numeric code which is used to identify the manufacturer, distributor, or Govemment agency/activity that supplies the item.

d. PART NUMBER (Column (4)) 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 you use an NSN to requisition an item, the Item you receive may have a different part number from the number listed.

e. DESCRIPTION AND USABLE ON CODE (UOC) (Column (5)) This column includes the following information:

(1) The Federal item name and, when required, a minimum description to identify the item.

(2) Part numbers of bulk materials are referenced In this column In the line entry to be manufactured/fabricated.

(3) The statement "END OF FIGURE" appears just below the last item description In Column (5) for a given figure in both Section II and Section III.

f. QTY (Column (6)). The QTY (quantity per figure) column indicates the quantity of the item used in the breakout shown on the illustration/figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column instead of a quantity indicates that the quantity is variable and may vary from application to application.

C.4. EXPLANATION OF INDEX FORMAT AND COLUMNS (SECTION IV).

a. NATIONAL STOCK NUMBER (NSN) INDEX.

(1) STOCK NUMBER Column. This column lists the NSN in national item identification number (NIIN) sequence. The NIIN consists of the last nine digits of the NSN, i e.

NSN
5305-01-574-1467
NIIN

When using this column to locate an item, ignore the first four digits of the NSN. Use the complete NSN (13 digits) when requisitioning items by stock number.

(2) FIG. Column. This column lists the number of the figure where the item is identified/located. The figures are in numerical order in Section II and Section III.

(3) ITEM Column. The item number identifies the item associated with the figure listed in the adjacent FIG. column. This item is also identified by the NSN listed on the same line.

b. PART NUMBER INDEX. Part numbers in this index are listed by part number In ascending alphanumeric sequence (i e., vertical arrangement of letter and number combination which places the first letter or digit of each group in order A through Z, followed by the numbers 0 through 9, and each following letter or digit in like order).

(1) CAGEC Column. The Commercial and Govemment Entity Code (CAGEC) Is a 5-digit numeric code used
to identify the manufacturer, distributor, or Govemment agency/activity that supplies the item.

(2) PART NUMBER Column. Indicates the primary number used by the manufacturer (individual, firm, corporation, or Govemment 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

(3) STOCK NUMBER Column. This column lists the NSN for the associated part number and manufacturer identified in the PART NUMBER and CAGEC columns to the left.

(4) FIG. Column. This column lists the number of the figure where the item is identified/located In Section II and Section III.

(5) ITEM Column. The item number is that number assigned to the item as it appears in the figure referenced in adjacent figure number column.

c. FIGURE AND ITEM NUMBER INDEX

(1) FIG. Column. This column lists the number of the figure where the item Is identified/located In Section II and Section III.

(2) ITEM Column. The item number is that number assigned to the item as It appears In the figure referenced in the adjacent figure number column.

(3) STOCK NUMBER Column. This column lists the NSN for the Item.

(4) CAGEC Column. The Commercial and Govemment Entity Code (CAGEC) is a 5-digi numeric code used to identify the manufacturer, distributor, or Govemment agency/activity that supplies the item.

(5) PART NUMBER Column. Indicates the primary number used by the manufacturer (Individual, firm, corporation, or Govemment 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.

C.5 SPECIAL INFORMATION.

a. FABRICATION INSTRUCTIONS. Bulk materials required to manufacture items are listed in the Bulk Material Functional Group of this RPSTL. Part numbers for bulk materials are also referenced In the description column of the line entry for the item to be manufactured/fabricated.

b. INDEX NUMBERS. Items which have the word BULK in the figure column will have an index number shown in the item number column. This index number is a cross-reference between the National Stock Number/Part Number Index and the bulk material list In Section II

C.6 HOW TO LOCATE REPAIR PARTS.

a. When National Stock Numbers or Part Numbers are NOT Known.

(1) First. Using the table of contents, determine the assembly or subassembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and listings are divided into the same groups.

(2) Second. Find the figure covering the assembly group or subassembly group to which the item belongs

(3) Third. Identify the item on the figure and use the Figure and Item Number Index to find the NSN

b. When National Stock Number or Part Number is Known

(1) First. Using the of National Stock Number and Part Number Indexes find the pertinent National Stock Number or Part Number. The NSN index is in National Item Identification Number (NIIN) sequence (see paragraph C 4 a). The part numbers in the Part Number Index are listed In ascending alphanumeric sequence (see paragraph C 4 b). Both indexes cross-reference you to the illustration/figure and item number of the item you are looking for.

(2) Second. Turn to the figure and item number, verify that the item is the one you are looking for, then locate the item number In the repair parts list for the figure.

C.7 ABBREVIATIONS. Abbreviations used in this manual are listed In MIL-STD-12.

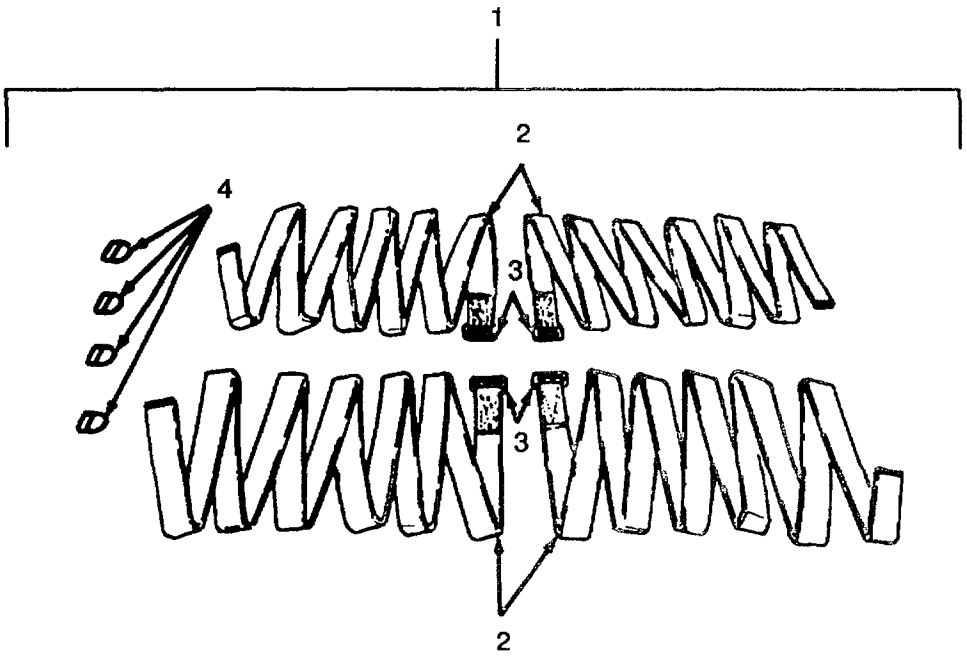


Figure C-1. A-7A Cargo Sling

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 01 A-7A CARGO SLING	
				FIG C-1 A-7A CARGO SLING	
1	PAOOO	81337	51C6716	SLING, CARGO, AERIAL DELIVERY, TYPE A-7A, 500 LB. CAPACITY	1
2	MOOZZ	81337	51C6717	.STRAP, SLING, CARGO	4
3	XDOZZ	96906	MS22040-2	..ADAPTER, QUICK FIT.....	1
4	PAOZZ	96906	MS22046-3	.RING, PARACHUTE HARNESS, DEE.....	4
				END OF FIGURE	

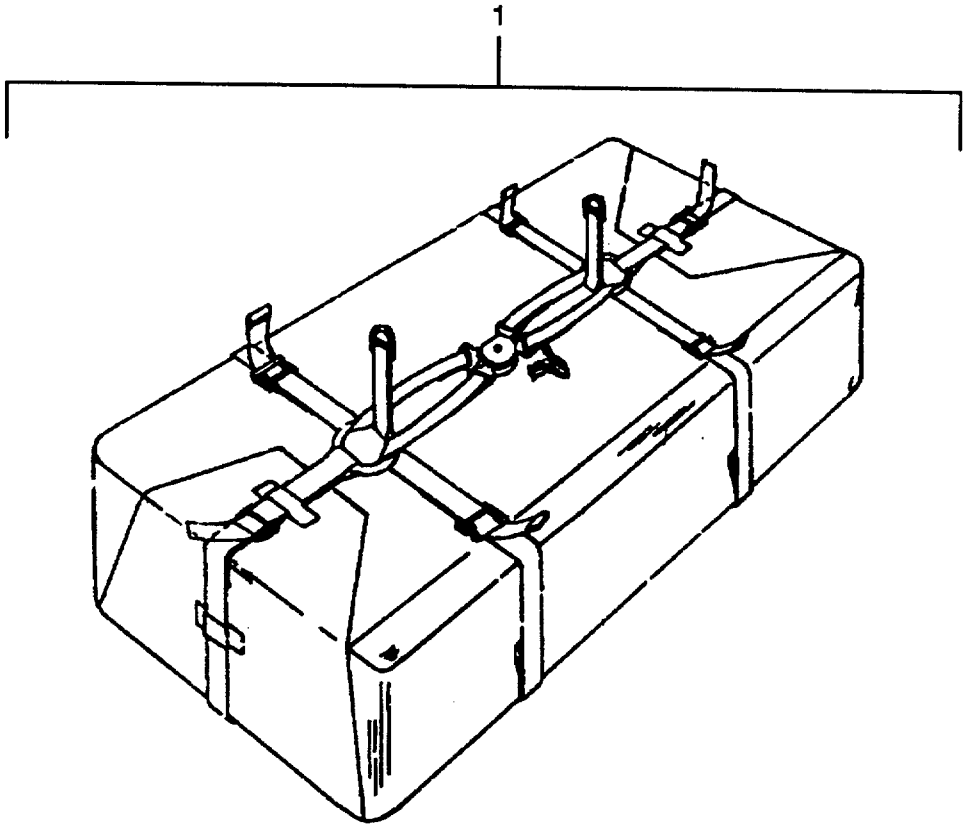


Figure C-2. A-21 Cargo Bag

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 02 A-21 AERIAL DELIVERY CARGO BAG	
				FIG. C-2 A-21 CARGO BAG	
1	PAOOO	81337	51C6739	BAG, CARGO, AERIAL DELIVERY TYPE, A-21, 500-LB., CAPACITY	1
				END OF FIGURE	

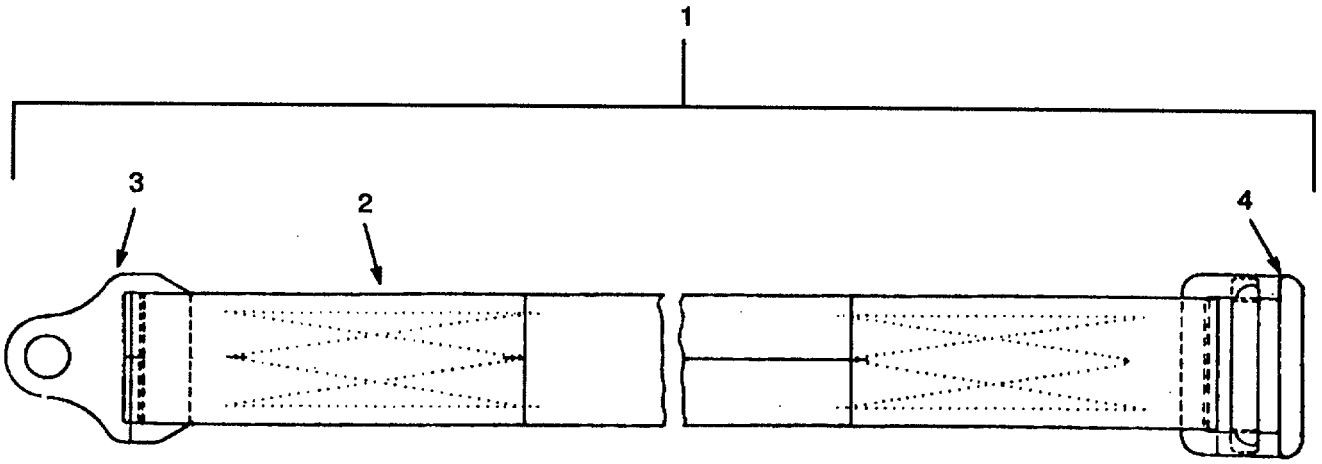


Figure C-3. Strap, Webbing, Quick Release

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 02 A-21 AERIAL DELIVERY CARGO BAG	
				FIG. C-3 STRAP, WEBBING, QUICK RELEASE	
1	XAOZZ	81337	51C6741	.STRAP, WEBBING, QUICK RELEASE.....	3
2	XAOZZ	81337	51C6741-1	.STRAP.....	1
3	XBOZZ	96906	44B9347	.LUG, PARACHUTE HARNESS	1
4	XCOZZ	96906	MS22040-2	..ADAPTER, QUICK-FIT	1
				END OF FIGURE	

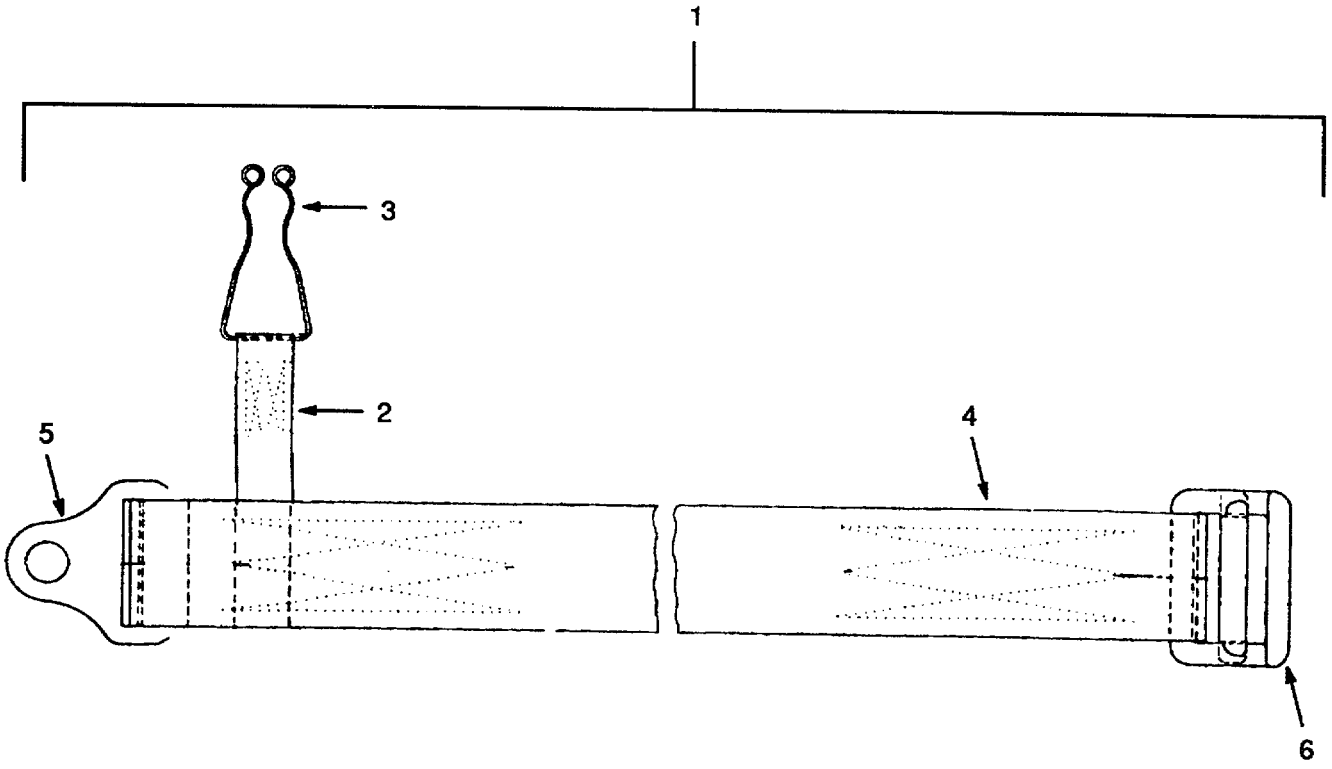


Figure C-4. Strap, Quick Release, Fixed

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 02 A-21 AERIAL DELIVERY CARGO BAG	
				FIG C-4 STRAP, QUICK RELEASE, FIXED	
1	XAOZZ	81337	51C6742	.STRAP, QUICK RELEASE, FIXED	1
2	XAOZZ	81337	51C6742-2	..STRAP, NARROW	1
3	XBOZZ	96906	MS27759	..CLIP, SAFETY	1
4	XAOZZ	81337	51C6742-1	..STRAP, FIXED	1
5	XDOZZ	96906	44B9347	..LUG, PARACHUTE HARNESS	1
6	XCOZZ	96906	MS22040-2	.ADAPTER, QUICK-FIT	1
				END OF FIGURE	

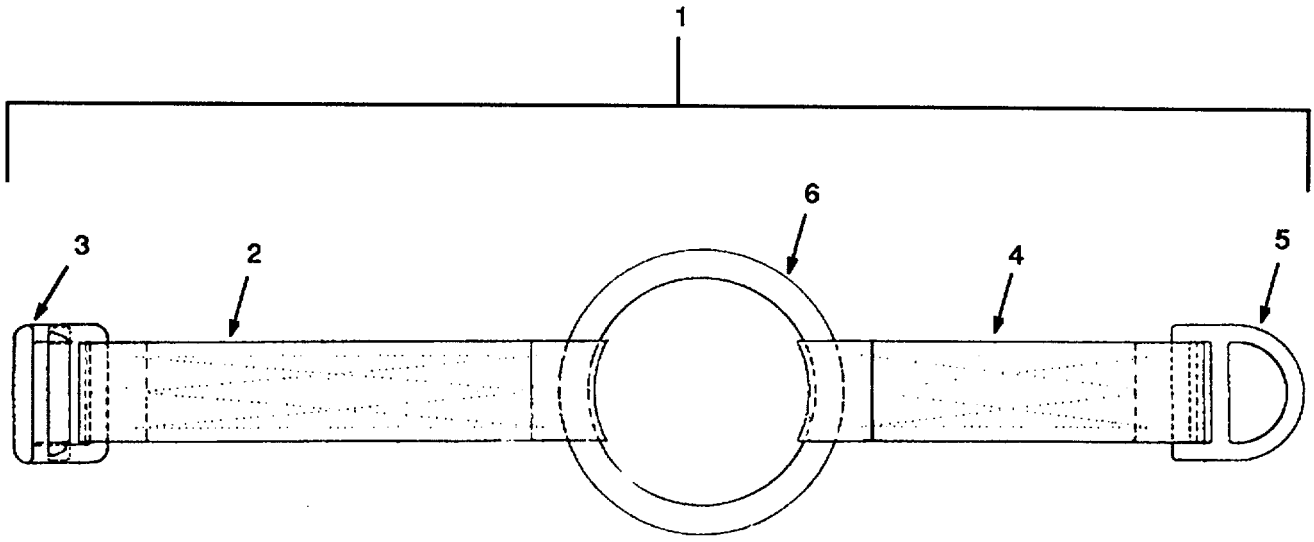


Figure C-5. Strap, Webbing Ring

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 02 A-21 AERIAL DELIVERY CARGO BAG	
				FIG C-5 STRAP, WEBBING, RING	
1	XAOZZ	81337	51 D6743	.STRAP, WEBBING, RING	2
2	XAOZZ	81337	51 D6743-1	..STRAP, LONG	1
3	XCOZZ	96906	MS22040-2	..ADAPTER, QUICK-FIT	1
4	XAOZZ	81337	51 D6743-2	..STRAP, SHORT	1
5	XBOZZ	91603	MS22046-2	.RING, PARACHUTE, DEE	1
6	XBOZZ	81348	RR-C-271, TY 6	.RING, 1/2 X 4	1
				END OF FIGURE	

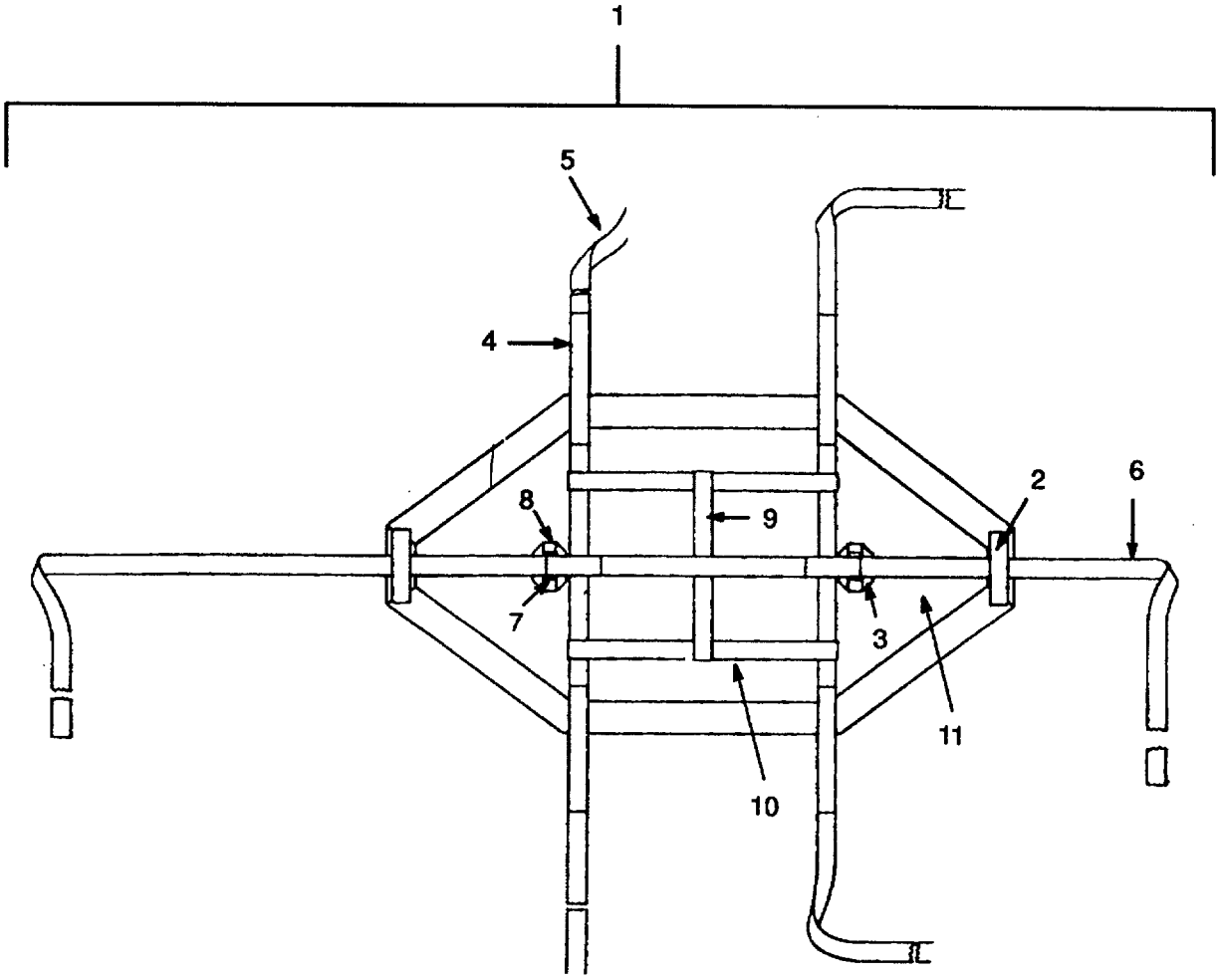


Figure C-6. Sling, Type A-21

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 02 A-21 AERIAL DELIVERY CARGO BAG	
				FIG. C-6 SLING, TYPE A-21	
1	XAOZZ	81337	51E6745	.SLING, TYPE A-21	1
2	XAOZZ	81337	51E6745-5	.KEEPER	2
3	XAOZZ	81337	51E6745-6	.STRAP, RING	2
4	XAOZZ	81337	51E6745-4	.LOOP	4
5	XAOZZ	81337	51E6745-3	..STRAP, SIDE	2
6	XAOZZ	81337	51E6745-2	..STRAP, MAIN	1
7	XDOZZ	96906	MS22045-2	.V-RING (LOCATED UNDER MAIN STRAP (6))	2
8	XAOZZ	81337	51E6745-9	..REINFORCEMENT	2
9	XAOZZ	81337	51E6745-7	..STRAP, RETAINING	2
10	XAOZZ	81337	51E6745-8	..STRAP, REINFORCING	2
11	XAOZZ	81337	51E6745-1	..COVER, SCUFF PAD	1
				END OF FIGURE	

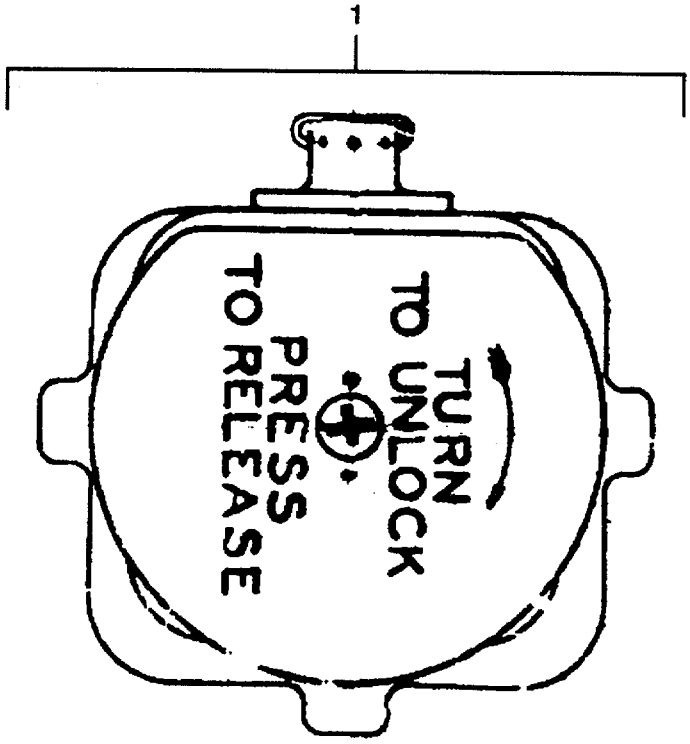


Figure C-7. Quick Release Assembly

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 02 A-21 AERIAL DELIVERY CARGO BAG	
				FIG. C-7 QUICK RELEASE ASSEMBLY	
1	PAOZZ	98750	45D18810	QUICK RELEASE ASSEMBLY	1
				END OF FIGURE	

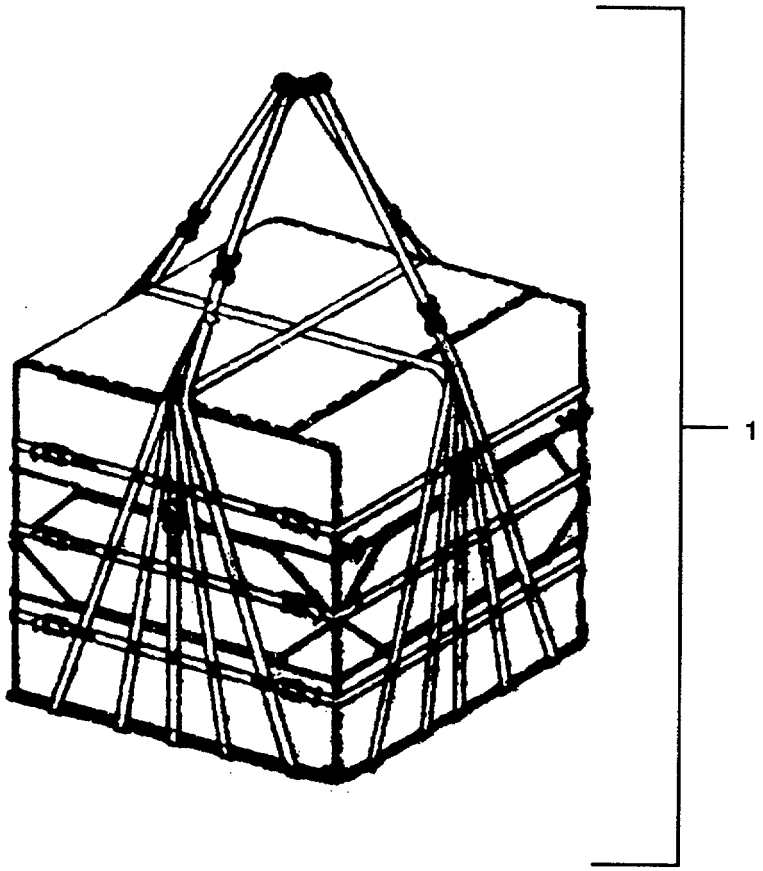


Figure C-8. A-22 Cargo Bag

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 03 A-22 AERIAL DELIVERY CARGO BAG	
				FIG. C-8 A-22 CARGO BAG	
1	PAOOO	81337	50B7702	BAG, CARGO, AERIAL DELIVERY, TYPE A-22, 2200-LB CAPACITY, W/O SKID	1
	PAOOO	98750	50B7702	BAG, CARGO, AERIAL DELIVERY, TYPE A-22, 2200-LB CAPACITY, WITH SKID	1
				END OF FIGURE	

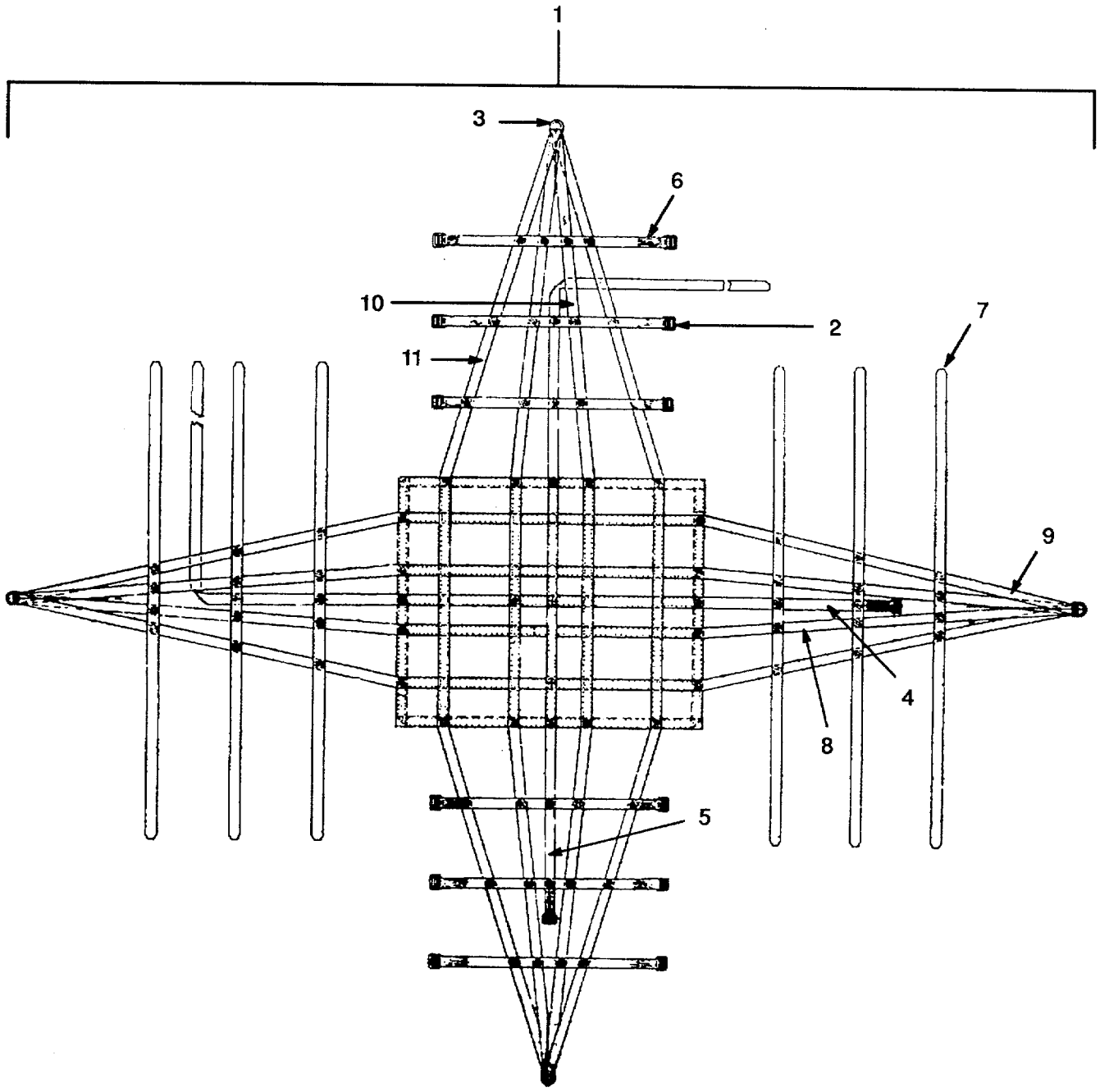


Figure C-9. Sling, Assembly

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 03 A-22 AERIAL DELIVERY CARGO BAG	
				FIG. C-9 SLING, ASSEMBLY	
1	XAOZZ	81337	50D7703	.SLING, ASSEMBLY	1
2	XAOZZ	96906	MS22040-2	.ADAPTER, QUICK-FIT	14
3	XBOZZ	96909	MS22046-2	..DEE RING	4
4	XAOZZ	81337	50D7703-3	..STRAP, TIE-DOWN, LONG	1
5	XAOZZ	81337	50D7703-6	.STRAP, TIE-DOWN, SHORT	1
6	XAOZZ	81337	50D7703-9	..STRAP, LATERAL, W/ADAPTERS	6
7	XAOZZ	81337	50D7703-10	..STRAP, LATERAL	6
8	XAOZZ	81337	50D7703-4	.WEB, SUPPORT	4
9	XAOZZ	81337	50D7703-5	..WEB, SUPPORT	4
10	XAOZZ	81337	50D7703-7	.WEB, SUPPORT	4
11	XAOZZ	81337	50D7703-8	..WEB, SUPPORT	4
				END OF FIGURE	

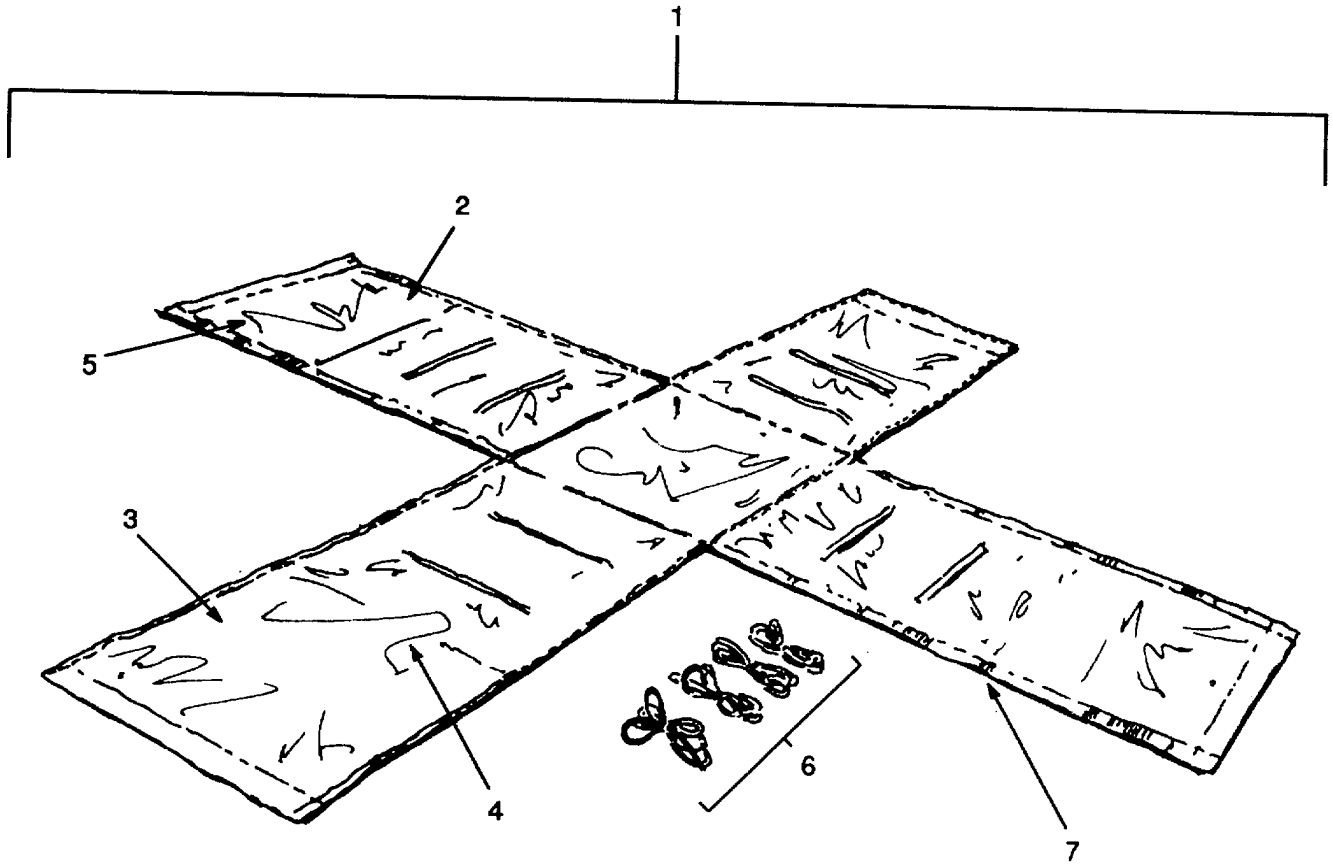


Figure C-10. Cover, Canvas

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 03 A-22 AERIAL DELIVERY CARGO BAG	
				FIG.. C-10 COVER, CANVAS	
1	XBOZZ	81337	50D7704	COVER,CANVAS.....	1
2	XAOZZ	81337	50D7704-1	PANEL, NARROW	1
3	XAOZZ	81337	50D7704-2	PANEL, WIDE.....	1
4	XAOZZ	81337	50D7704-3	LACING LOOP,TOP	4
5	XAOZZ	81337	50D7704-4	LACING LOOP, BOTTOM.....	4
6	PAOZZ	81348	T-R 571	ROPE, LACING, TYPE II,3/4-INCH CIRCUMFERENCE, 11 FEET LONG.....	4
7 .	XAOZZ	81337	50D7703-1	PAD,SCUFF(LOCATED ON UNDERSIDE OF COVER AND NOT ILLUSTRATED.....	1
				END OF FIGURE	

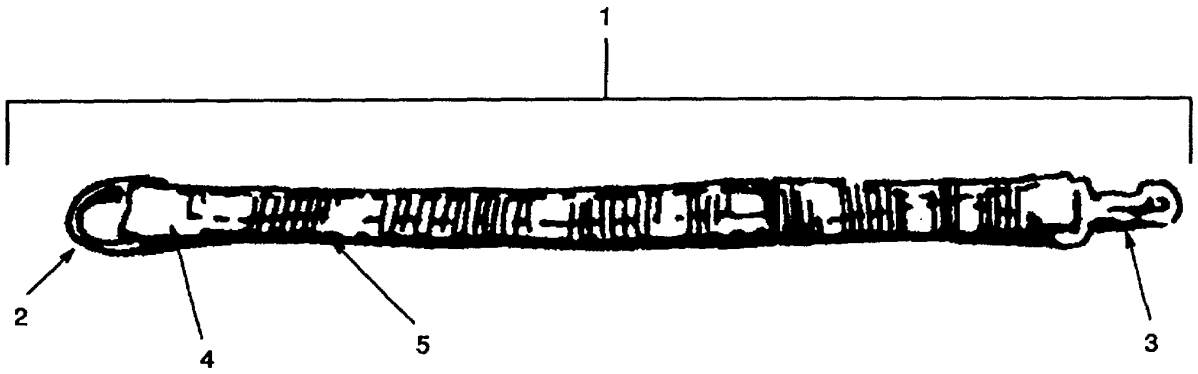


Figure C-11. Suspension Web

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 03 A-22 AERIAL DELIVERY CARGO BAG	
				FIG.. C-11 SUSPENSION WEB	
1	PAOZZ	81337	50T7707	. SUSPENSION WEB	4
2	XBOZZ	96906	MS22046-2	. DEERING.....	1
3	XBOZZ	96906	MS22042-2	SNAP HOOK.....	1
4	XAOZZ	81337	50T7707-4	LOOP NYLON.....	1
5	XAOZZ	81337	50T7707-5	. BUFFER, NYLON	2
				END OF FIGURE	

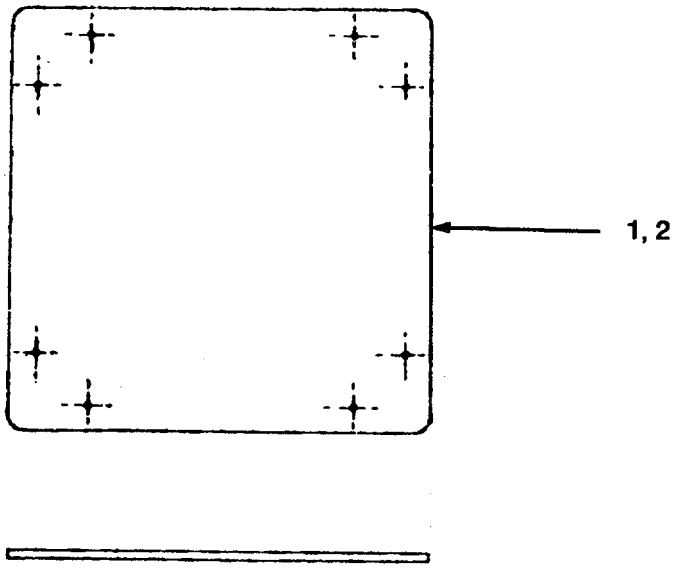


Figure C-12. Skid Boards

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 03 A-22 AERIAL DELIVERY CARGO BAG	
				FIG.. C-12 SKID BOARDS	
1	PROZZ	81337	11-1-1394	SKID BOARD, 48-INCH X 53 1/2-INCH.....	1
2	PAOZZ	81337	11-1-1394-2	SKID BOARD, 48-INCH X 48-INCH.....	1
				END OF FIGURE	

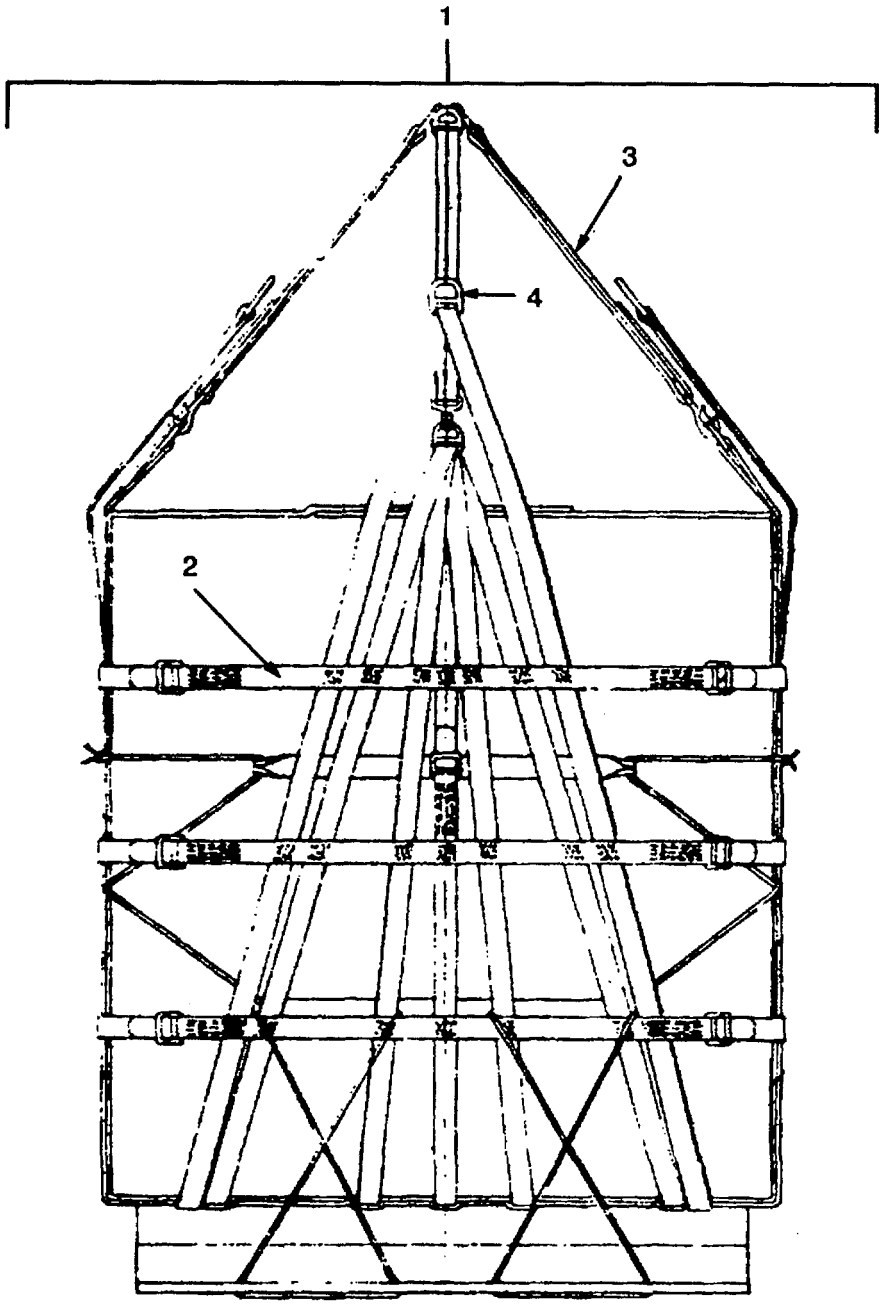


Figure C-13. A-23 Cargo Bag

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 04 A-23 AERIAL DELIVERY CARGO BAG	
				FIG. C-13 A-23 CARGO BAG	
				NOTE Except for a minor alteration to the Cargo Bag Sling, the A-23 Bag, Cargo, High Level is identical to the A-22 Cargo Bag. The alteration being the addition of four long Type X nylon webbing support webs with heavy duty dee rings. The additional support webs are used for the first stage attaching point for the High Altitude Aerial Resupply System (HAARS)	
1 ..	PAOZZ	81337	11-1-2616	BAG, CARGO, AERIAL DELIVERY, TYPE A-23	
2 ..	XAOZZ	81337	11-1-2617	SLING ASSEMBLY	1
3	PAOZZ	97151	50T7707	WEB, SUPPORT, LONG	4
4	PAOZZ	96906	MS22046-8	DEE RING, HEAVY DUTY	4
				END OF FIGURE	

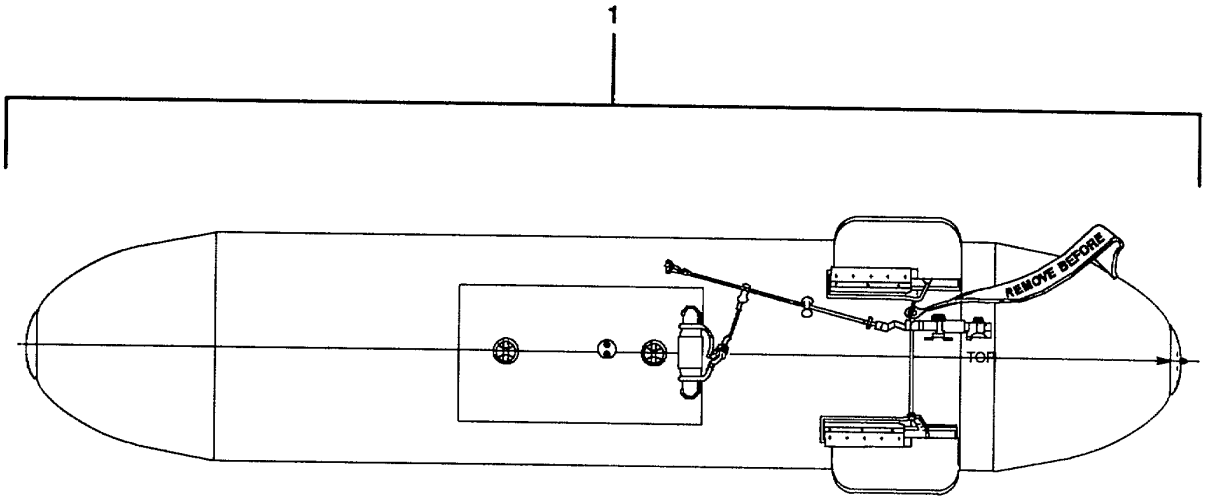


Figure C-14. Capsule, Cargo, CTU-2/A

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG.. C-14 CAPSULE, CARGO, CTU-2/A	
1	PAOZZ	81337	11-1-2819	CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	1
				END OF FIGURE	

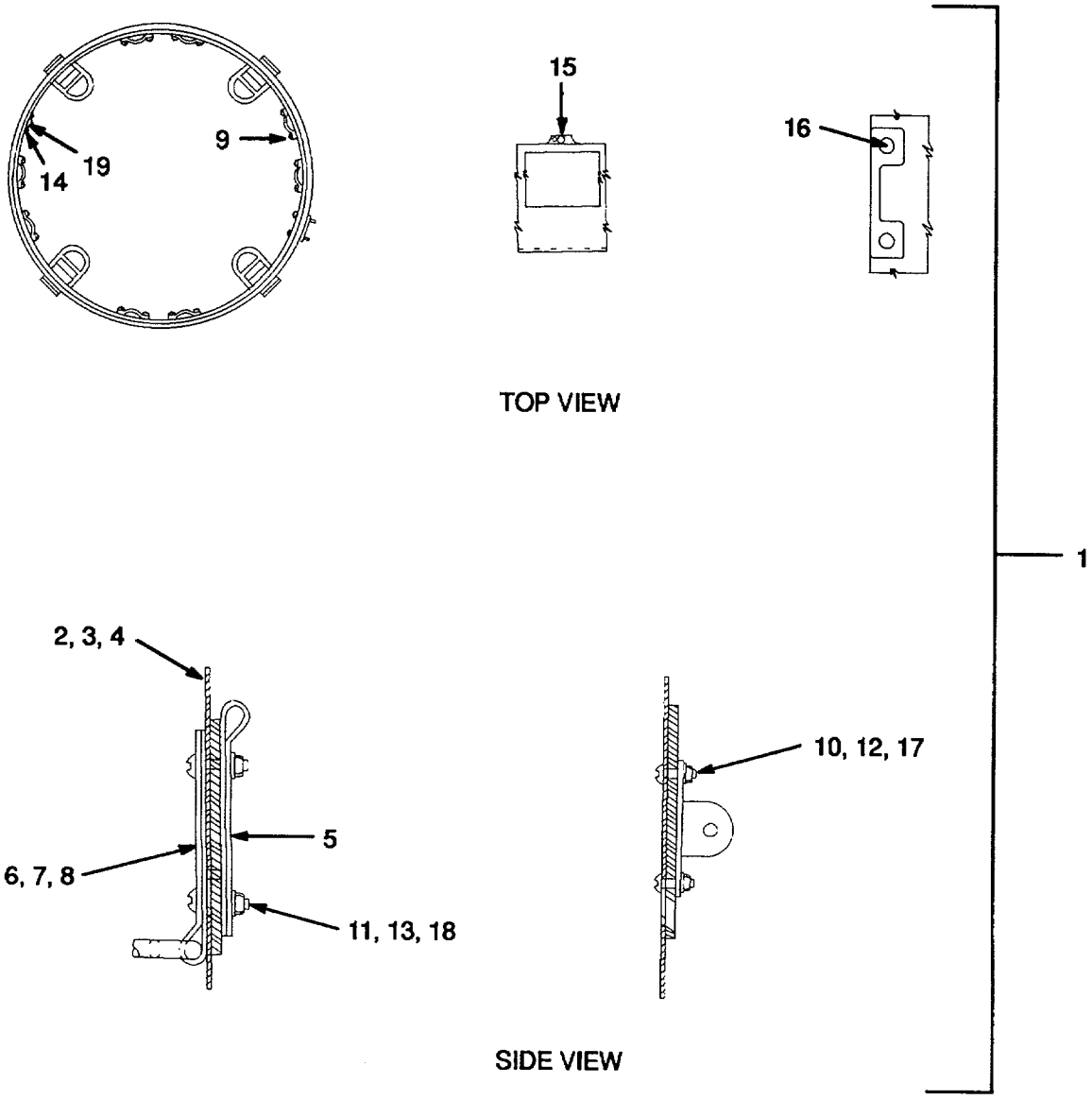


Figure C-15. Parachute Compartment Assembly

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG. C-15 PARACHUTE COMPARTMENT ASSEMBLY	
1	PAOZZ	81337	11-1-2839	. PARACHUTE COMPARTMENT ASSEMBLY....	1
2	XCOZZ	81337	11-1-2847	. CAP ASSEMBLY	
3	XCOZZ	81337	11-1-2847-1	... CAP	1
4	XCOZZ	81337	11-1-2847-2	... BAND.....	1
5	XBOZZ	81337	11-1-2848	.. STRAP, MALE	4
6	XBOZZ	81337	11-1-2849	.. STRAP ASSEMBLY,.....	4
7	XCOZZ	81337	11-1-2849-1	.. STRAP, STEEL, 080-INCH	4
8	XDOZZ	96906	MS22046-1	. RING, DEE.....	4
9	XCOZZ	81337	11-1-2850	.. CLIP, STEEL.....	8
10	XBOZZ	81352	AN525-10-14R	.. SCREW	4
11	PAOZZ	88044	AN525-416R18	.. SCREW, MACHINE	16
12	PAOZZ	88044	AN960-10L	.. WASHER, FLAT	10
13	PAOZZ	88044	AN960-416L	. WASHER, FLAT	16
14	XDOZZ	96906	MS16998-42	. SCREW, CAP, SOCKET HEAD	1
15	XCOZZ	96906	MS20426AD3-6	. RIVET, SOLID.....	2
16	XCOZZ	96906	MS20426AD5-6	. RIVET, SOLID.....	16
17	PAOZZ	96906	MS21044N3	.. NUT, SELF LOCKING.....	4
18	PAOZZ	96906	MS21044N4	.. NUT, SELF LOCKING.....	16
19	XCOZZ	96906	MS21078-4	.. NUT, SELF LOCKING.....	1
				END OF FIGURE	

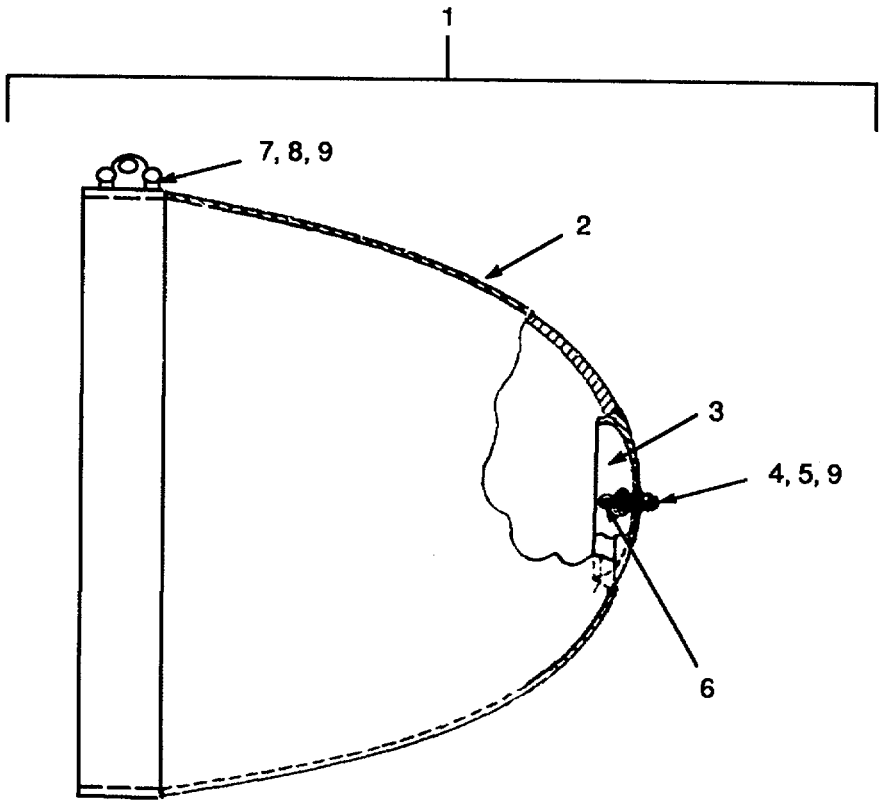


Figure C-16. Tail Cone Assembly

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG. C-16 TAIL CONE ASSEMBLY	
1	PAOZZ	81337	11-1-2840	TAIL CONE ASSEMBLY	1
2	XCOZZ	81337	11-1-2840-1	TAIL CONE	1
3	PAOZZ	81337	11-1-2834-2	BUTTON PLUG	1
4	PAOZZ	88044	AN3-5A	BOLT, MACHINE	1
5	PAOZZ	88044	AN42-2	BOLT, EYE	1
6	XBOZZ	96906	MS20115F3	SHACKLE	1
7	XBOZZ	81352	AN525-10	SCREW	4
8	PAOZZ	88044	AN960-10L	WASHER, FLAT	1
9	PAOZZ	96906	MS21044N3	NUT, SELF LOCKING	4
				END OF FIGURE	

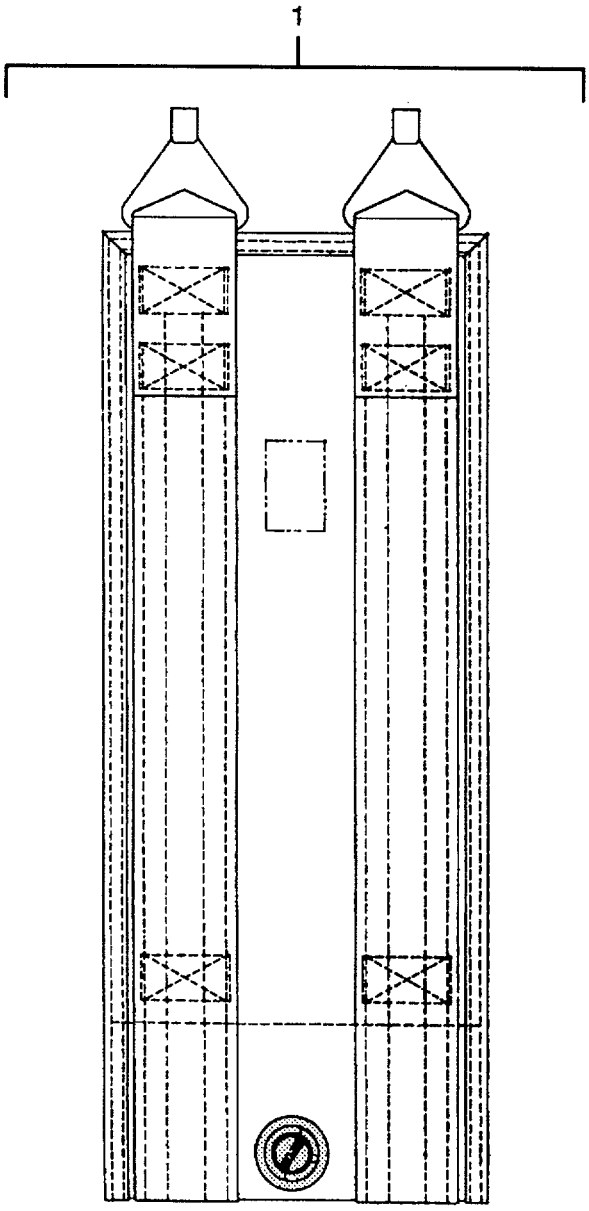


Figure C-17. Web Assembly, Cone

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG. C-17 WEB ASSEMBLY, CONE	
1	PAOZZ	81337	11-1-2841	WEB ASSEMBLY, CONE	1
				END OF FIGURE	

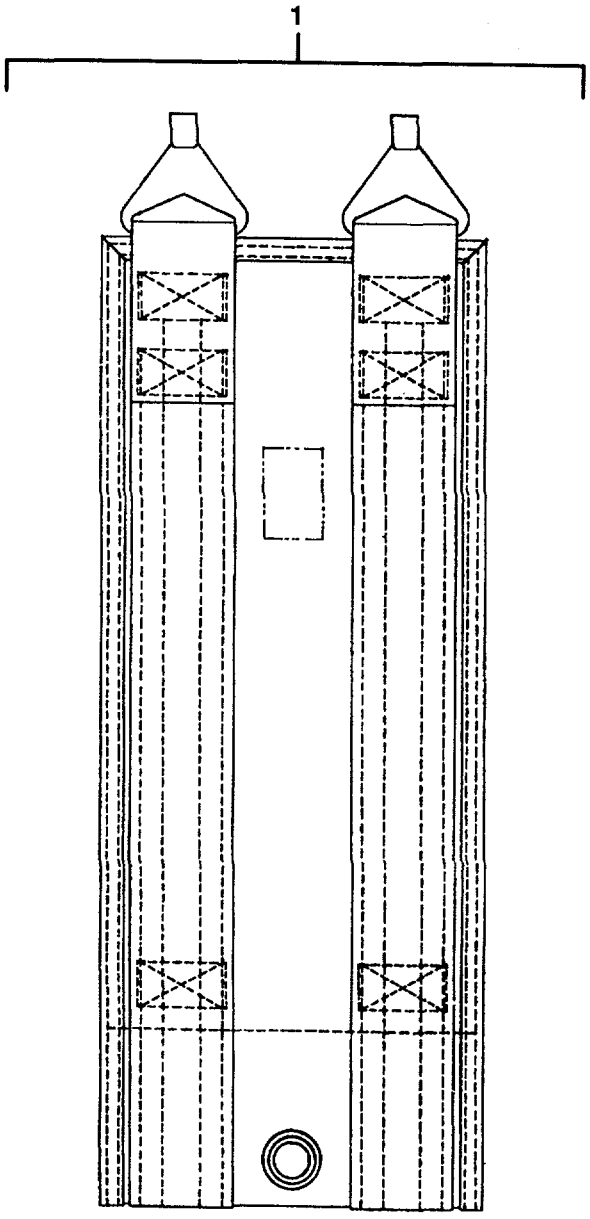


Figure C-18. Web Assembly, Grommet

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG. C-18 WEB ASSEMBLY, GROMMET	
1	PAOZZ	81337	11-1-2842	WEB ASSEMBLY, GROMMET	1
				END OF FIGURE	

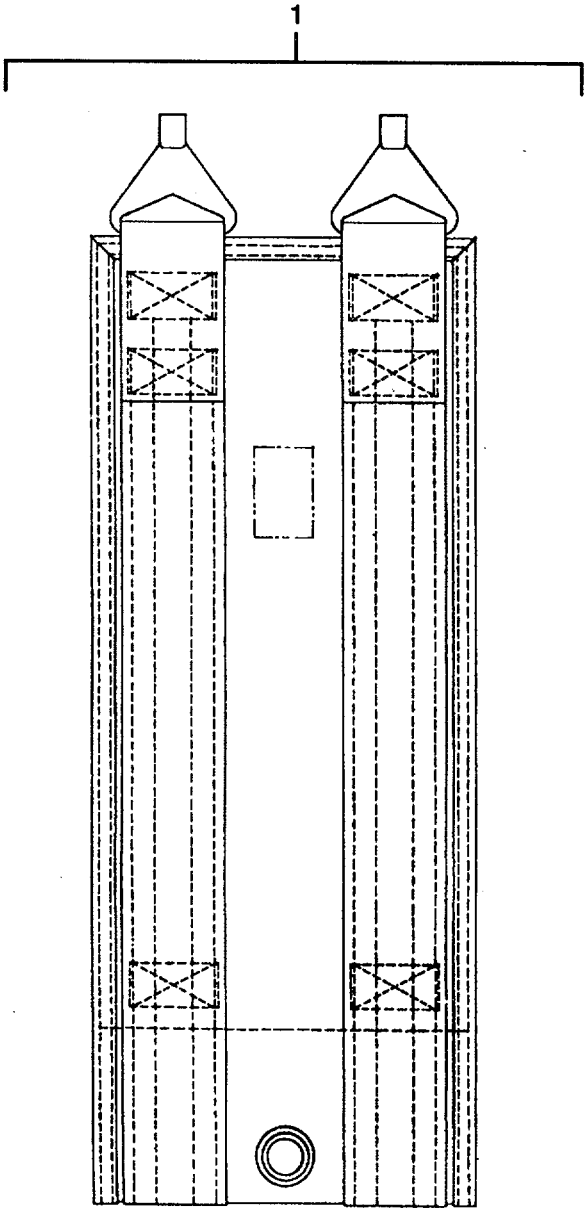


Figure C-19. Web Assembly, Washer

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG. C-19 WEB ASSEMBLY, WASHER	
1	PAOZZ	81337	11-1-2843	WEB ASSEMBLY, WASHER	2
				END OF FIGURE	

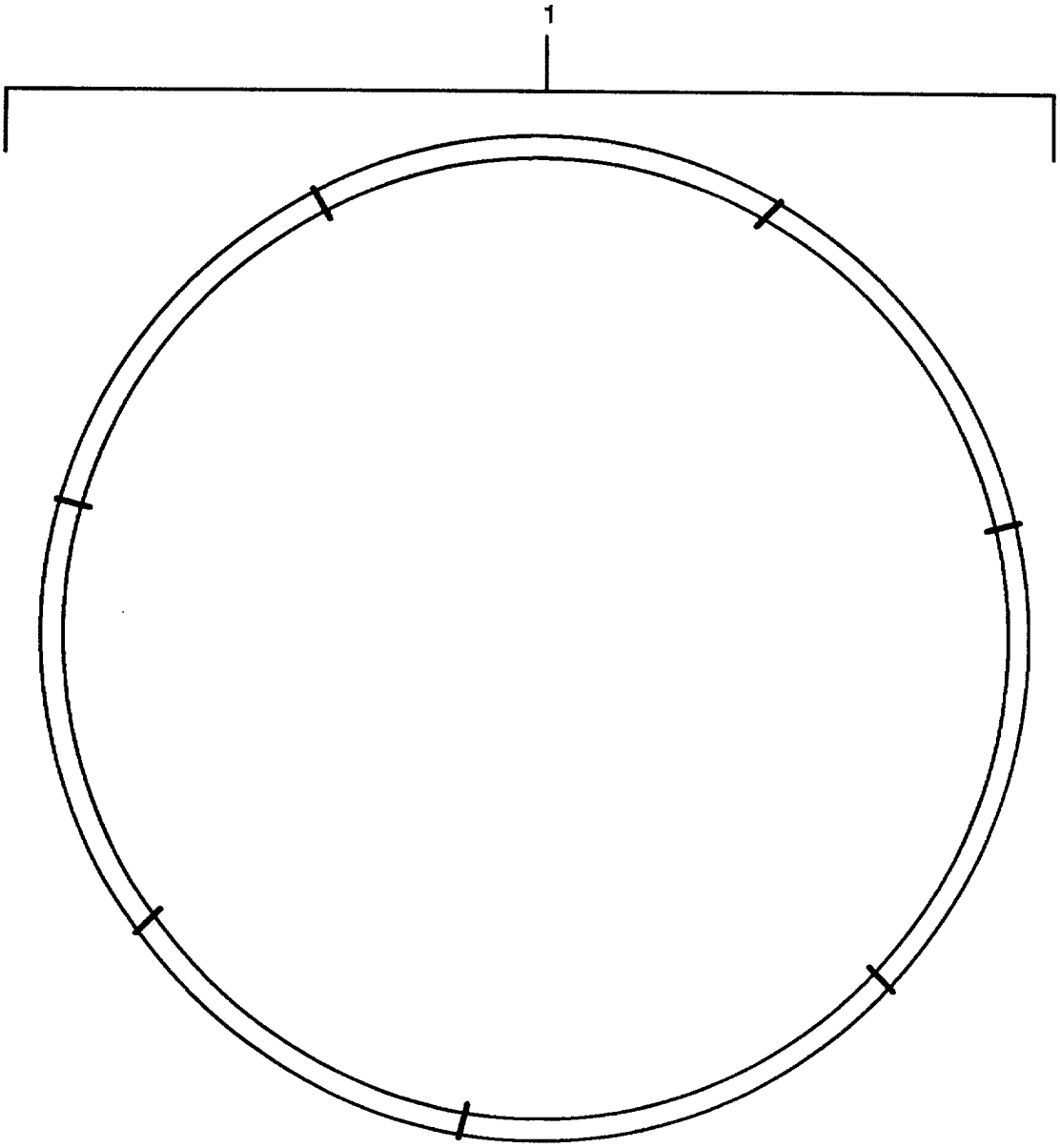


Figure C-20. Packing, Performed

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG. C-20 PACKING, PREFORMED	
1	PAOZZ	81 337	11-1-2844	PACKING, PREFORMED	1
				END OF FIGURE	

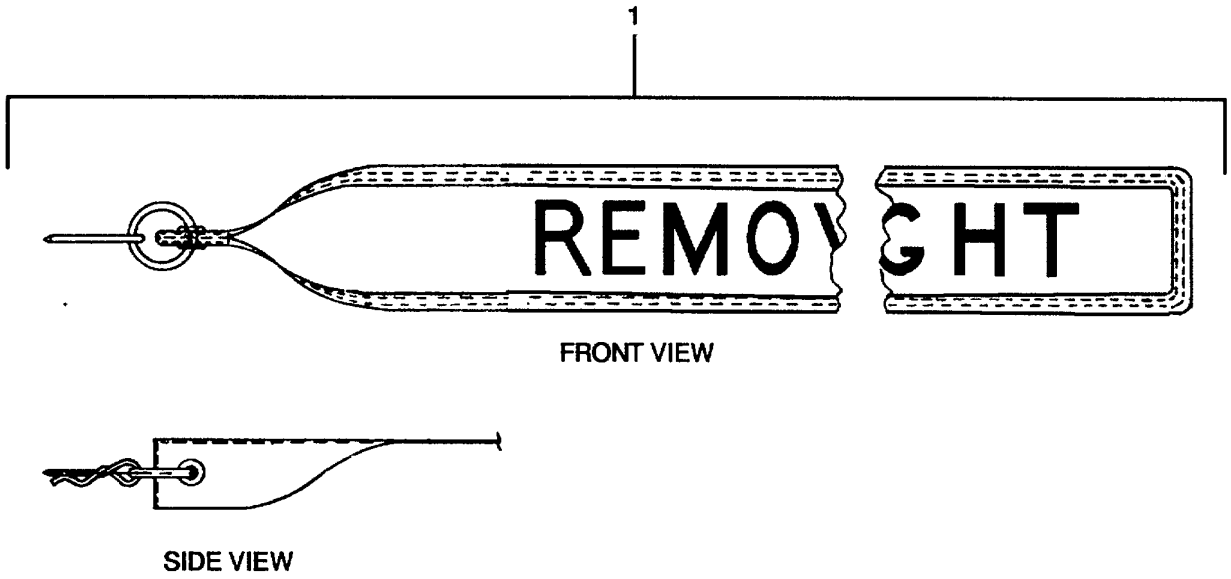


Figure C-21. Pin, Ground, Safety

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG. C-21 PIN, GROUND, SAFETY	
1	PAOZZ	81337	11-1-2845	PIN, GROUND, SAFETY	1
				END OF FIGURE	

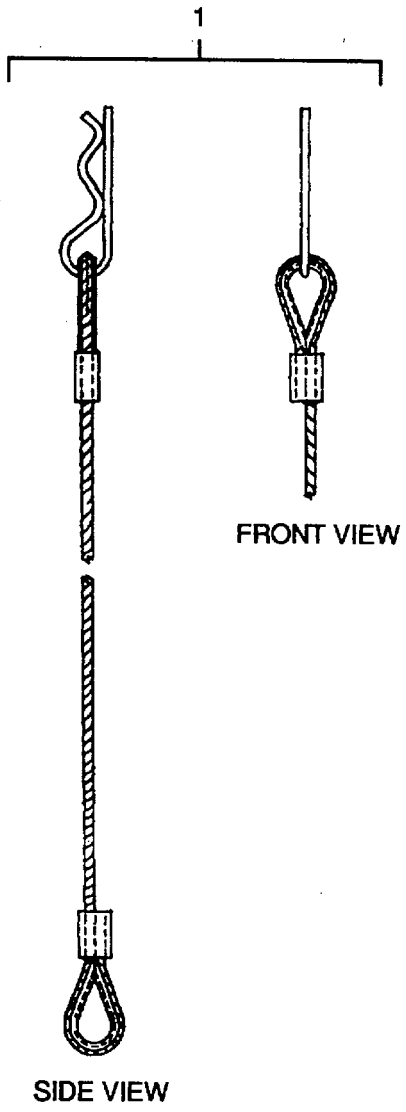


Figure C-22. Cable Assembly, Parachute Release

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG. C-22 CABLE ASSEMBLY, PARACHUTE RELEASE	
1	PAOZZ	81337	11-1-2846	CABLE ASSEMBLY, PARACHUTE RELEASE	1
				END OF FIGURE	

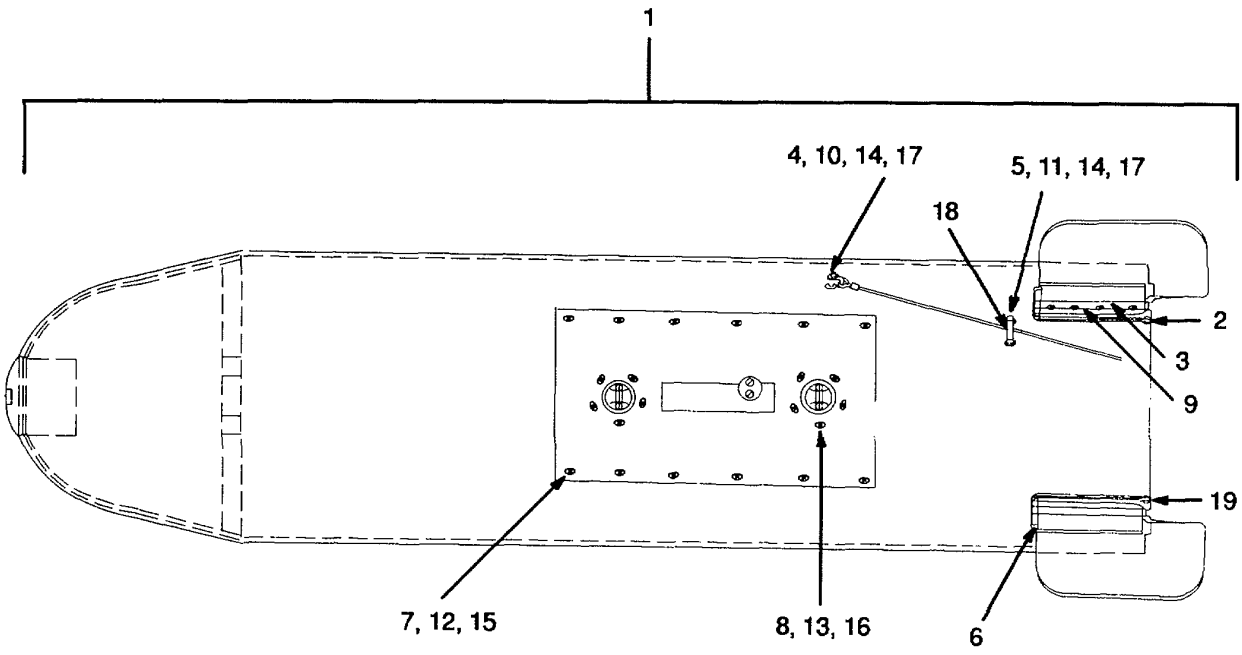


Figure C-23. Main Body Assembly

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG. C-23 MAIN BODY ASSEMBLY	
1	PAOZZ	81337	11-1-2820	MAIN BODY ASSEMBLY	1
2	XBOZZ	81 337	11-1-2829	STRAP, FEMALE	4
3	XBOZZ	81337	11-1-2830	BASE, FIN ASSEMBLY	4
4	XBOZZ	96906	MS20115F3	SHACKLE	1
5	XBOZZ	81337	11-1-2825	GUIDE	1
6	XDOZZ	96906	MS171602	PIN, SPRING	4
7	PAOZZ	96906	MS24693-S300	SCREW, MACHINE	14
8	PAOZZ	96906	MS24693-S322	SCREW, MACHINE	12
9	PAOZZ	96906	MS24693-S302	SCREW, MACHINE	24
10	PAOZZ	96906	MS24693-S277	SCREW, MACHINE	1
11	PAOZZ	96906	MS24693-S276	SCREW, MACHINE	2
12	PAOZZ	88044	AN960-416	WASHER, FLAT	14
13	PAOZZ	88044	AN960-516	WASHER, FLAT	12
14	PAOZZ	88044	AN960-10	WASHER, FLAT	1
15	PAOZZ	96906	MS21044N4	NUT, SELF LOCKING	14
16	PAOZZ	96906	MS21044N5	NUT, SELF LOCKING	12
17	PAOZZ	96906	MS21044N3	NUT, SELF LOCKING	1
18	XBOZZ	81337	11-1-2831	SPACER, INITIATOR.....	2
19	XCOZZ	81337	11-1-2820-21	GLASS FLOCK SHIM	V
				END OF FIGURE	

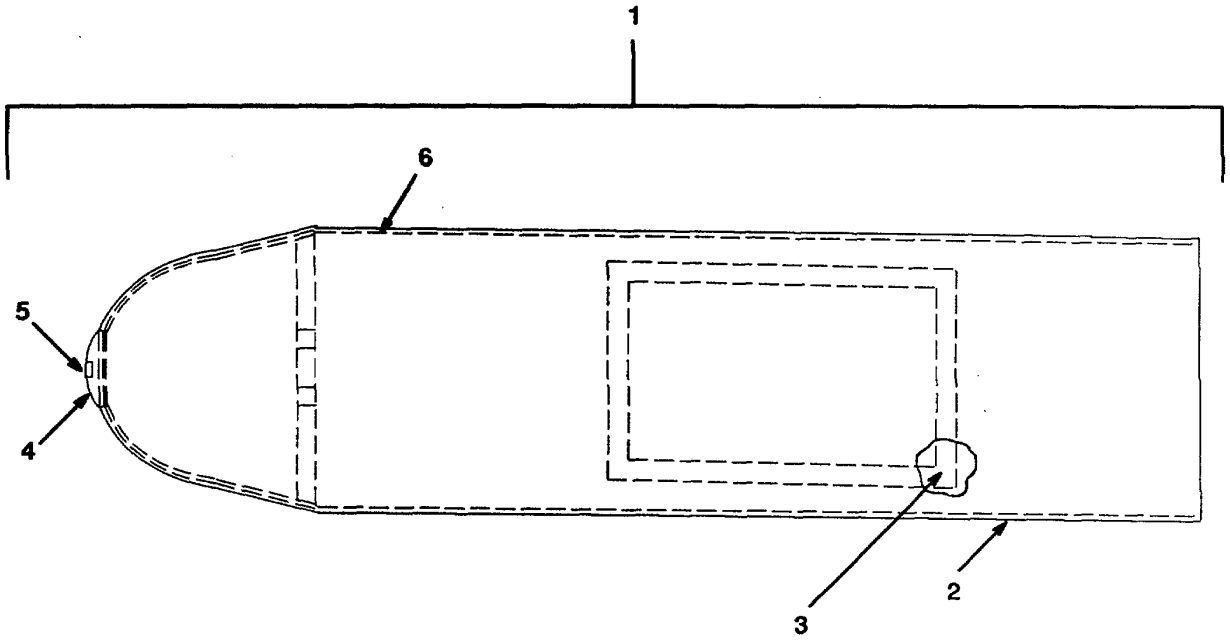


Figure C-24. Body Assembly

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG. C-24 BODY ASSEMBLY	
1	XAOOO	81337	11-1-2826	BODY ASSEMBLY	1
2	XCOZZ	81337	11-1-2826-1	BODY	1
3	XCOZZ	81337	11-1-2832	DOUBLER	1
4	PAOZZ	81337	11-1-2834-1	ACCESS PLUG	1
5	PAOZZ	83058	41G	BUTTON PLUG	1
6	XCOZZ	81337	11-1-2833-4	CEMENT	V
				END OF FIGURE	

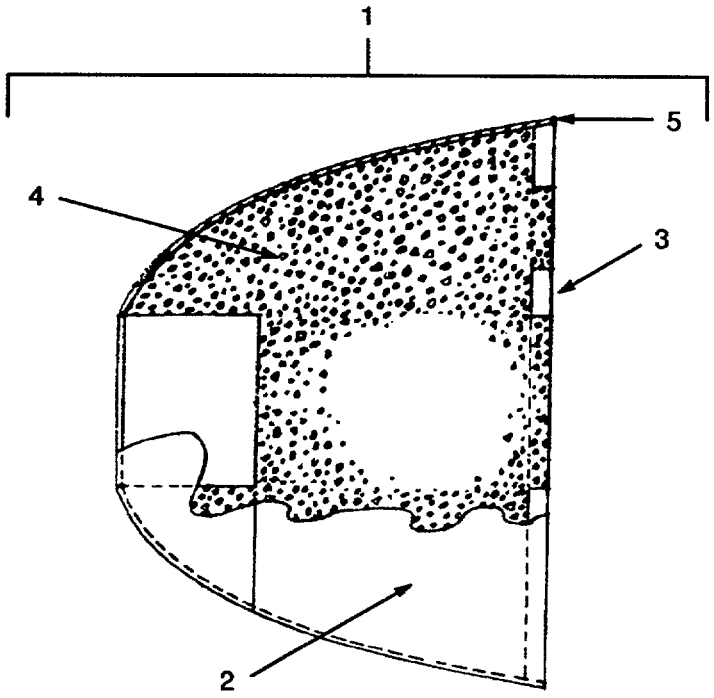


Figure C-25. Nose Cone Assembly

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG. C-25 NOSE CONE ASSEMBLY	
1	XCOZZ	81337	11-1-2833	NOSE CONE ASSEMBLY	1
2	XCOZZ	81337	11-1-2833-1	SHELL	1
3	XCOZZ	81337	11-1-2833-2	BULKHEAD	1
4	XCOZZ	81337	11-1-2833-3	FOAM	V
5	XCOZZ	81337	11-1-2833-4	CEMENT	V
				END OF FIGURE	

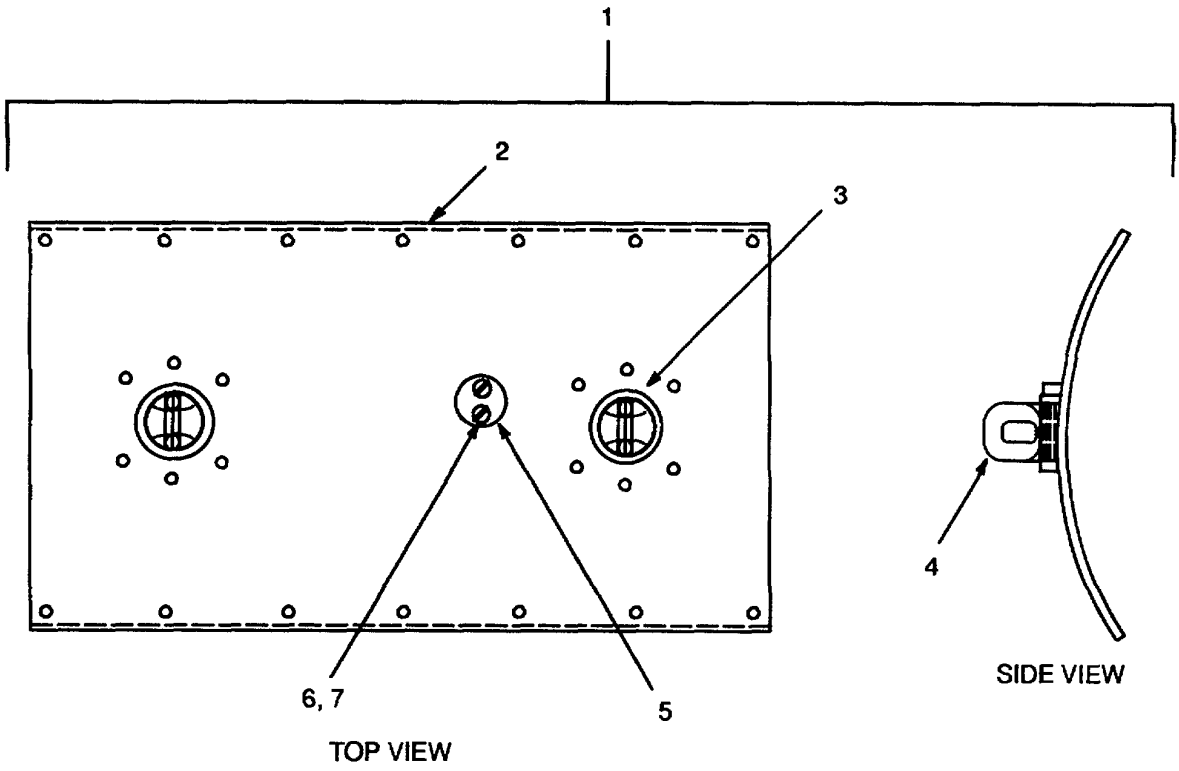


Figure C-26. Strong Back Assembly

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG. C-26 STRONG BACK ASSEMBLY	
1	XAOOO	81337	11-1-2827	STRONG BACK ASSEMBLY	1
2	XCOZZ	81337	11-1-2827-1	PLATE	1
3	XCOZZ	81337	11-1-2827-2	BOSS	2
4	XBOZZ	96906	MS3314	SUSPENSION LUG	2
5	PAOZZ	81337	11-1-2827-3	ADAPTER	1
6	PAOZZ	96906	MS51958-3	SCREW, MACHINE	2
7	PAOZZ	96906	MS35338-138	WASHER, LOCK	2
				END OF FIGURE	

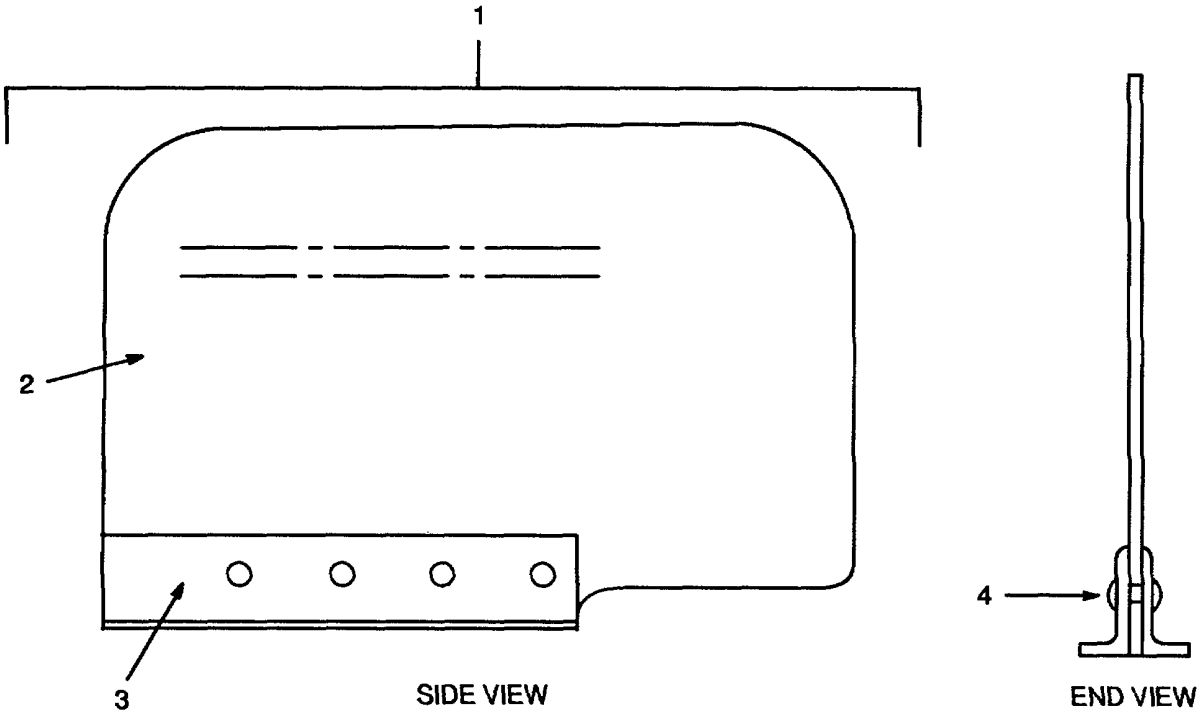


Figure C-27. Fin Assembly

SECTION II

(1) ITEM NO.	(2) SMR CODE	(3) CAGE	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG. C-27 FIN ASSEMBLY	
1	PAOZZ	81337	11-1-2828	FIN ASSEMBLY	4
2	XCOZZ	81337	11-1-2835	FIN	1
3	XCOZZ	81337	11-1-2836	ANGLE	2
4	XCOZZ	96906	MS20470AD6-12	RIVET, SOLID	5
				END OF FIGURE	

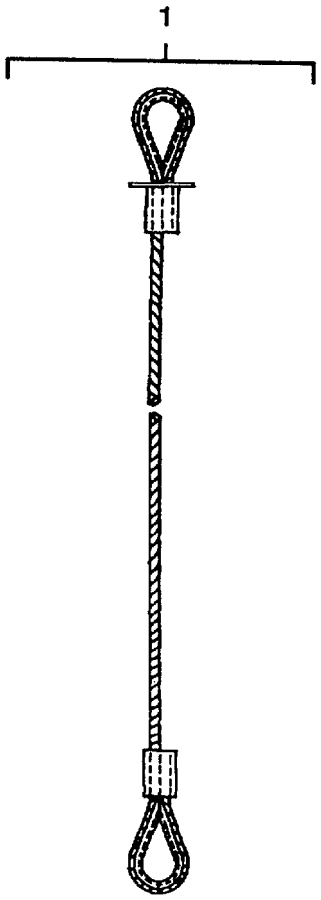


Figure C-28. Cable Assembly, Initiator

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG. C-28 CABLE ASSEMBLY, INITIATOR	
1	PAOZZ	81337	11-1-2822	CABLE ASSEMBLY, INITIATOR.....	1
				END OF FIGURE	

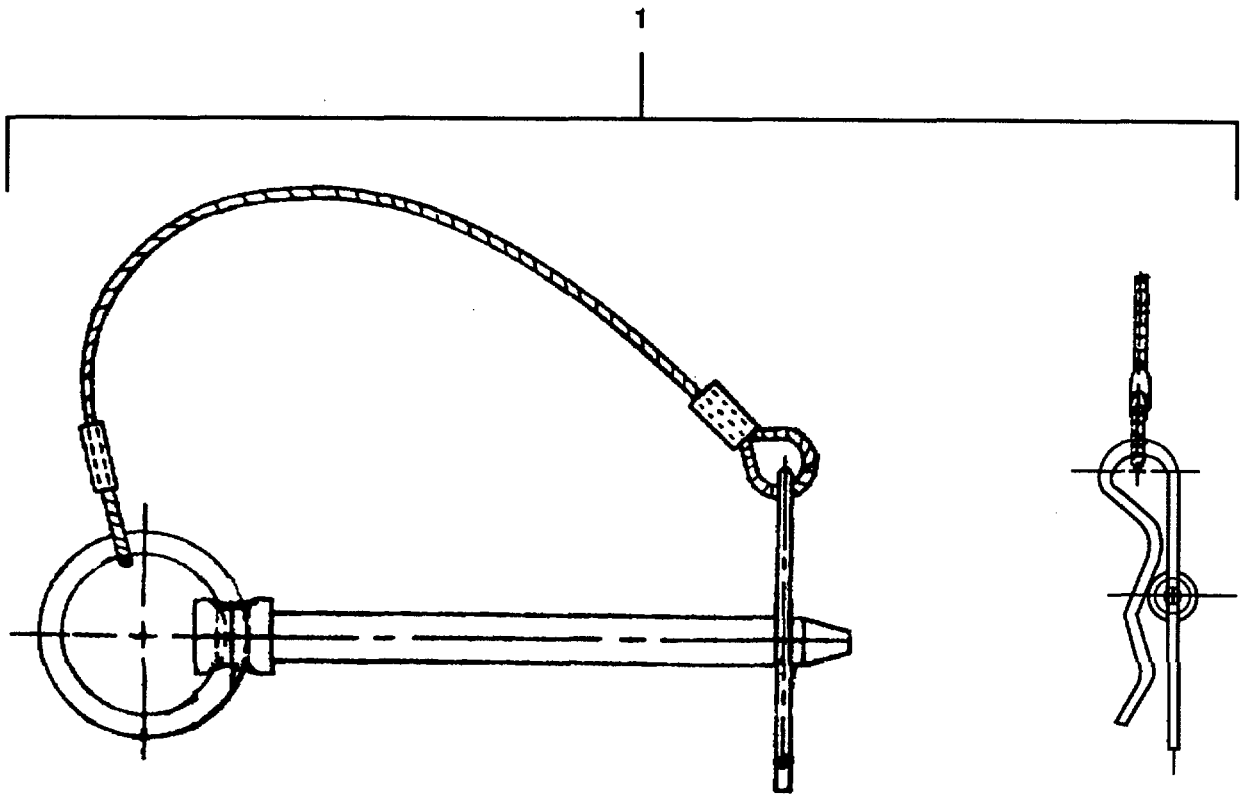


Figure C-29. Connecting Pin Assembly

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG. C-29 CONNECTING PIN ASSEMBLY	
1	PAOZZ	81337	11-1-2824	CONNECTING PIN ASSEMBLY	4
				END OF FIGURE	

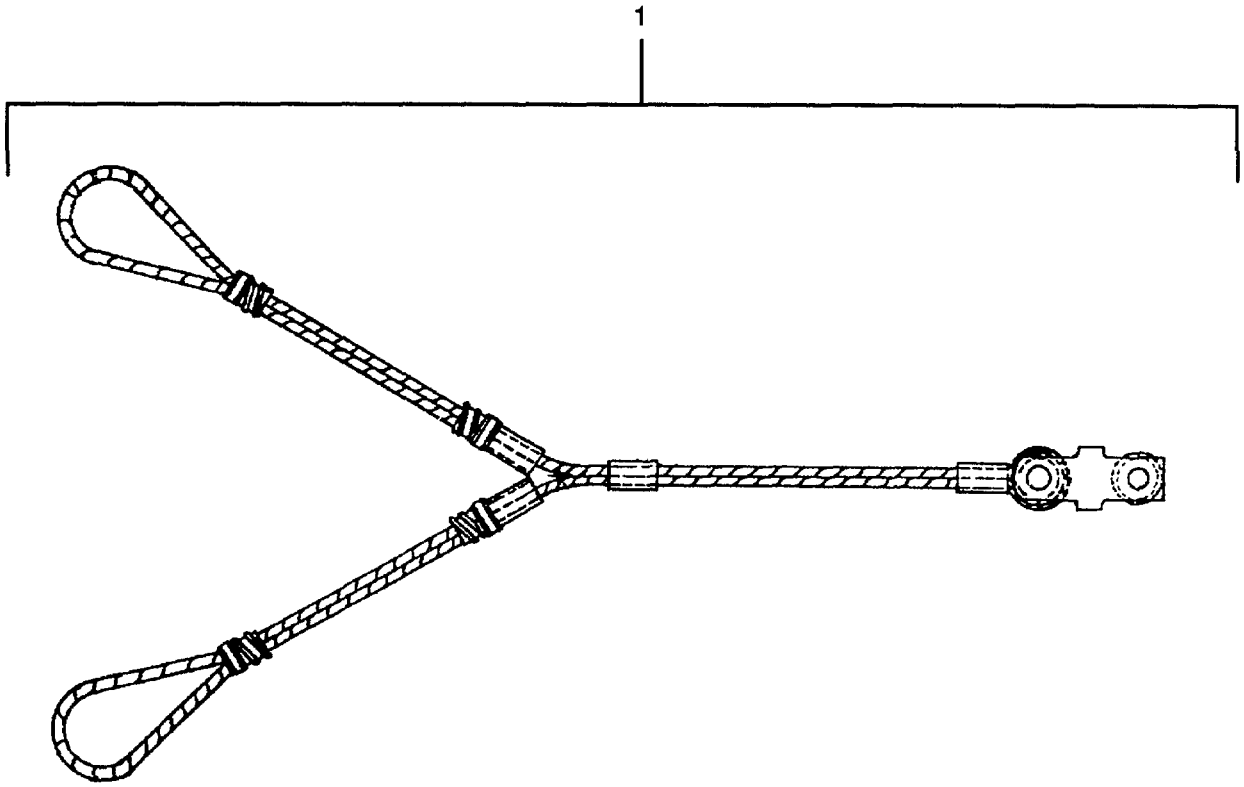


Figure C-30. Cable Harness Assembly

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NO.	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 05 CAPSULE, CARGO, AERIAL DELIVERY, CTU-2/A	
				FIG. C30 CABLE HARNESS ASSEMBLY	
1	PAOZZ	81337	11-1-2823	CABLE HARNESS ASSEMBLY	1
				END OF FIGURE	

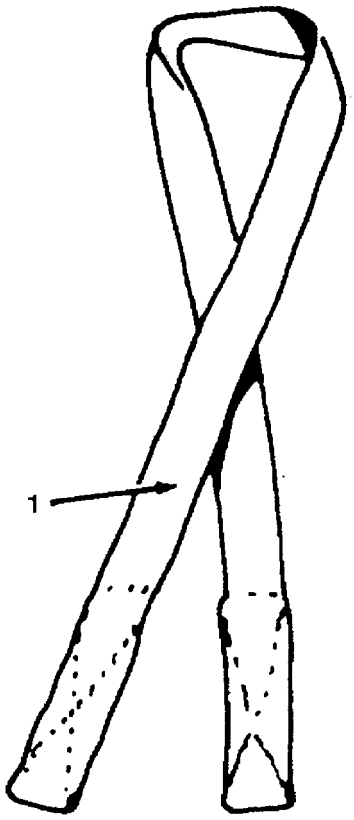


Figure C-31. Connector Strap, 60-inch

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NO	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 06 CONNECTOR STRAP 60-INCH	
				FIG. C-31 CONNECTOR STRAP, 60-INCH	
1	PAOZZ	81337	11-1-527-1	STRAP, CONNECTOR, 60-INCH.....	1
				END OF FIGURE	

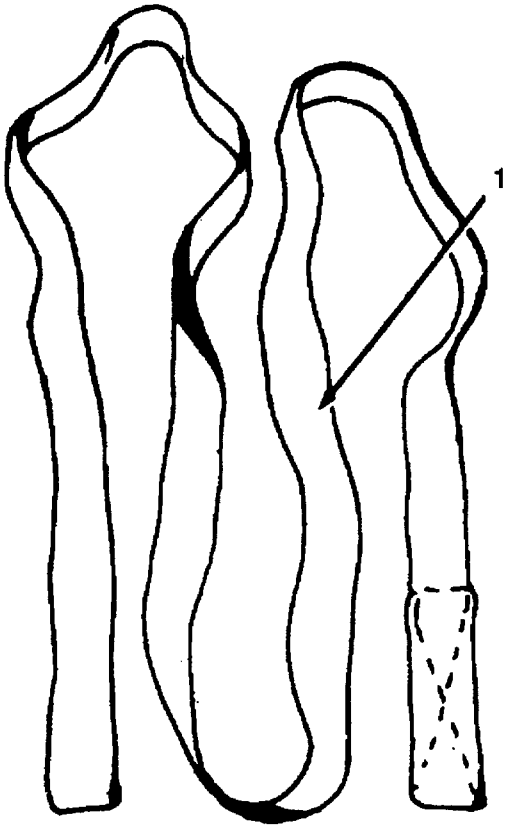


Figure C-32. Connector Strap, 120-inch

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NO	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 07 CONNECTOR STRAP 120-INCH	
				FIG. C-32 CONNECTOR STRAP, 120-INCH	
1	PAOZZ	81337	11-1-527-2	STRAP, CONNECTOR, 120-INCH.....	1
				END OF FIGURE	

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NO	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 08 BULK MATERIALS	
				FIG. BULK	
1	PAOZZ			CLOTH, DUCK, COTTON, TYPE I, 23.93-OUNCE, OLIVE DRAB, 36-INCH WIDE, FED CCC-C-419	V
2	PAOZZ			CLOTH, DUCK, COTTON, TYPE III, 12.29-OUNCE, OLIVE DRAB, 60-INCH WIDE, FED CCC-C-419	V
3	PAOZZ			CLOTH, DUCK, NYLON, CL-2, 12.50-OUNCE, COLOR OG 106, MIL-C-43375, 48-INCH WIDE	V
4	PAOZZ			THREAD, NYLON, SIZE E, OD, FED V-T-295, TYPE I,CLASS I	V
5	PAOZZ			THREAD, NYLON, SIZE 3, OD, FED V-T-295, TYPE I,CLASSI	V
6	PAOZZ			THREAD, NYLON, SIZE 5, OD, FED V-T-295, TYPE I, CLASS I	V
7	PAOZZ			THREAD, NYLON, SIZE 6, OD, FED V-T-295, TYPE I, CLASS I	V
8	PAOZZ			WEBBING, TEXTILE, COTTON/NYLON, TYPE X, 1 3/4-INCH WIDE, 5000 LB BS, MIL-W-5665, CLASS 2B	V
9	PAOZZ			WEBBING, TEXTILE, NYLON, TYPE VII, 1 23/32-INCH WIDE, OD, 5000 LB BS, MIL-W-4088, CLASS R	V
10	PAOZZ			WEBBING, TEXTILE, NYLON, TYPE X, 1 23/32-INCH WIDE, OD, 700 LB BS, MIL-W-4088	V
				END OF FIGURE	

SECTION III. SPECIAL TOOLS LIST

(Not Applicable)

SECTION IV. CROSS-REFERENCE INDEXES

CROSS-REFERENCE INDEXES

NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIG	ITEM	STOCK NUMBER	FIG	ITEM
5305-00-057-0505	C-26	6	5305-00-733-3045	C-23	9
5310-00-088-0553	C-23	16	5340-00-738-5878	C-31	1
5320-00-117-6856	C-27	4	5340-00-738-5879	C-32	1
5320-00-117-6883	C-15	16	5310-00-877-5796	C-15	18
1670-00-131-9695	C-7	1		C-23	15
5310-00-141-1795	C-23	12	5310-00-877-5797	C-15	17
5306-00-151-1003	C-16	5		C-16	9
5310-00-167-0818	C-23	14		C-23	17
5310-00-167-0820	C-23	13	1670-00-883-1654	C-12	1
5310-00-167-0834	C-15	12	5310-00-933-8120	C-26	7
	C-16	8	5305-00-957-7812	C-23	11
5310-00-167-0835	C-15	13	5305-00-957-7813	C-23	10
1670-00-242-9169	C-8	1	1670-01-059-5788	C-1 4	1
1670-00-242-9173	C-2	1	1730-01-059-5815	C-21	1
1670-00-251-1153	C-l	1	1670-01-066-9313	C-23	1
5305-00-267-9679	C-23	8	1670-01-067-6213	C-27	1
5306-00-274-2119	C-16	4	4010-01-067-7116	C-28	1
5305-00-282-0138	C-15	11	4010-01-067-7117	C-29	1
5340-00-360-0309	C-4	3	1670-01-127-0063	C-18	1
1670-00-360-0466	C-1	4	1670-01-127-0064	C-1 7	1
5340-00-360-0532	C-3	1	1670-01-167-1688	C-16	1
1670-00-360-0533	C-4	1	5340-01-168-0579	C-24	4
5340-00-360-0542	C-5	1	1670-01-168-0580	C-15	1
5340-00-360-0560	C-11	1	5330-01-168-0581	C-20	1
5320-00-584-0672	C-15	15	1670-01-168-0582	C-22	1
1670-00-587-3421	C-8	1	5310-01-254-1366	C-30	1
5310-00-728-5519	C-15	19	1670-01-342-5913	C-1 2	2
5305-00-733-3042	C-23	7	5340-01-365-0199	C-16	3

CROSS-REFERENCE INDEXES

PART NUMBER INDEX

CAGEC	PART NUMBER	STOCK NUMBER	FIG	ITEM
88044	AN3-5A	5306-00-274-2119	C-16	4
88044	AN42-2	5306-00-151-1003	C-16	5
81352	AN525-10		C-16	7
81352	AN525-10-14R		C-15	10
88044	AN525-416R18	5305-00-282-0138	C-15	11
88044	AN960-10	5310-00-167-0818	C-23	14
88044	AN960-10L	5310-00-167-0834	C-15	12
			C-16	8
88044	AN960-416	5310-00-141-1795	C-23	12
88044	AN960416L	5310-00-167-0835	C-1 5	13
88044	AN960-516	5310-00-167-0820	C-23	13
96906	MS16998-42		C-15	14
96906	MS171602		C-23	6
96906	MS20115F3		C-16	6
			C-23	4
96906	MS20426AD3-6	5320-00-584-0672	C-1 5	15
96906	MS20426AD5-6	5320-00-117-6883	C-15	16
96906	MS20470AD6-12	5320-00-117-6856	C-27	4
96906	MS21044N3	5310-00-877-5797	C-1 5	1 7
			C-16	9
			C-23	17
96906	MS21044N4	5310-00-877-5796	C-15	18
			C-23	15
96906	MS21044N5	5310-00-088-0553	C-23	16
96906	MS21078-4	5310-00-728-5519	C-15	19
96906	MS22040-2		C-1	3
			C-3	4
			C4	6
			C-5	3
96909	MS22040-2		C-9	2
96906	MS22042-2		C-11	3
96906	MS22045-2		C-6	7
96906	MS22046-1		C-1 5	8
91603	MS22046-2		C-5	5
96906	MS22046-2		C-11	2
96909	MS22046-2		C-9	3
96906	MS22046-3	1670-00-360-0466	C-1	4
96906	MS22046-8		C-13	4
96906	MS24693-S276	5305-00-957-7812	C-23	11
96906	MS24693-S277	5305-00-957-7813	C-23	10
96906	MS24693-S300	5305-00-733-3042	C-23	7
96906	MS24693-S302	5305-00-733-3045	C-23	9
96906	MS24693-S322	5305-00-267-9679	C-23	8
96906	MS27759	5340-00-360-0309	C-4	3
			C-13	3

CROSS-REFERENCE INDEXES

PART NUMBER INDEX (Continued)

CAGEC	PART NUMBER	STOCK NUMBER	FIG	ITEM	
96906	MS3314			C-26	4
96906	MS35338-138	5310-00-933-8120		C-26	7
96906	MS51958-8	5305-00-057-0505		C-26	6
81348	RR-C-271, TYPE 6			C-5	6
81348	T-R-571			C-10	6
81337	11-1-1394	1670-00-883-1654		C-12	1
81337	11-1-1394-2	1670-01-342-5913		C-12	2
81337	11-1-2616			C-13	1
81337	11-1-2617			C-13	2
81337	11-1-2819	1670-01-059-5788		C-14	1
81337	11-1-2820	1670-01-066-9313		C-23	1
81337	11-1-2820-21			C-23	19
81337	11-1-2822	4010-01-067-7116		C-28	1
81337	11-1-2823	5310-01-254-1366		C-30	1
81337	11-1-2824	4010-01-067-7117		C-29	1
81337	11-1-2825			C-235	
81337	11-1-2826			C-24	1
81337	11-1-2826-1			C-24	2
81337	11-1-2827			C-26	1
81337	11-1-2827-1			C-26	2
81337	11-1-2827-2			C-26	3
81337	11-1-2827-3			C-26	5
81337	11-1-2828	1670-01-067-6213		C-27	1
81337	11-1-2829			C-23	2
81337	11-1-2830			C-23	3
81337	11-1-2831			C-23	18
81337	11-1-2832			C-24	3
81337	11-1-2833			C-25	1
81337	11-1-2833-1			C-25	2
81 337	11-1-2833-2			C-25	3
81337	11-1-2833-3			C-25	4
81337	11-1-2833-4			C-24	6
				C-25	5
81337	11-1-2834-1	5340-01-168-0579		C-24	4
81337	11-1-2834-2	5340-01-365-0199		C-16	3
81337	11-1-2835			C-27	2
81337	11-1-2836			C-27	3
81337	11-1-2839	1670-01-168-0580		C-15	1
81337	11-1-2840	1670-01-167-1688		C-16	1
81337	11-1-2840-1			C-16	2
81337	11-1-2841	1670-01-127-0064		C-17	1
81337	11-1-2842	1670-01-127-0063		C-18	1
81337	11-1-2843			C-19	1
81337	11-1-2844	5330-01-168-0581		C-20	1

CROSS-REFERENCE INDEXES

PART NUMBER INDEX (Continued)

CAGEC	PART NUMBER	STOCK NUMBER	FIG.	ITEM
81337	11-1-2845	1730-01-059-5815	C-21	1
81 337	11-1-2846	1670-01-168-0582	C-22	1
81337	11-1-2847		C-15	2
81337	11-1-2847-1		C-15	3
81 337	11-1-2847-2		C-15	4
81337	11-1-2848		C-15	5
81337	11-1-2849		C-15	6
81337	11-1-2849-1		C-15	7
81337	11-1-2850		C-15	9
81337	11-1-527-1	5340-00-738-5878	C-31	1
81337	11-1-527-2	5340-00-738-5879	C-32	1
83058	41G		C-24	5
96906	44B9347		C-3	3
			C-4	5
98750	45D18810	1670-00-131-9695	C-7	1
81337	50B7702	1670-00-587-3421	C-8	1
98750	50B7702	1670-00-242-9169	C-8	1
81337	50D7703		C-9	1
81 337	50D7703-1		C-10	7
81337	50D7703-3		C-9	4
81337	50D7703-4		C-9	8
81337	50D7703-5		C-9	9
81337	50D7703-6		C-9	5
81337	50D7703-7		C-9	10
81337	50D7703-8		C-9	11
81 337	50D7703-9		C-9	6
81 337	50D7703-10		C-9	7
81337	50D7704		C-10	1
81337	50D7704-1		C-10	2
81337	50D7704-2		C-10	3
81337	50D7704-3		C-10	4
81337	50D7704-4		C-10	5
81337	50T770	5340-00-360-0560	C-11	1
81 337	50T7707-4		C-11	4
81337	50T7707-5		C-11	5
81 337	51C6716	1670-00-251-1153	C-1	1
81337	51C6717		C-1	2
81337	51C6739	1670-00-242-9173	C-2	1
81 337	51C6741	5340-00-360-0532	C-3	1
81337	51C6741-1		C-3	2
81337	51C6742	1670-00-360-0533	C-4	1
81337	51C6742-1		C-4	4
81337	51C6742-2		C-4	2

CROSS-REFERENCE INDEXES

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CAGEC	PART NUMBER	STOCK NUMBER	FIG.	ITEM
81337	51D6743	5340-00-360-0542	C-5	1
81 337	51D6743-1		C-5	2
81337	51D6743-2		C-5	4
81337	51E6745		C-6	1
81337	51E6745-1		C-6	11
81337	51E6745-2		C-6	6
81337	51E6745-3		C-6	5
81337	51E6745-4		C-6	4
81337	51E6745-5		C-6	2
81337	51E6745-6		C-6	3
81337	51E6745-7		C-6	9
81337	51E6745-8		C-6	10
81337	51E6745-9		C-6	8

CROSS-REFERENCE INDEXES

FIGURE AND ITEM NUMBER INDEX

FIG.	ITEM	STOCK NUMBER	CAGEC	PART NUMBER
C-1	1	1670-00-251-1153	81337	51C6716
C-1	2		81337	51C6717
C-1	3		96906	MS22040-2
C-1	4	1670-00-360-0466	96906	MS22046-3
C-2	1	1670-00-242-9173	81337	51C6739
C-3	1	5340-00-360-0532	81 337	51C6741
C-3	2		81337	51C6741-1
C-3	3		96906	44B9347
C-3	4		96906	MS22040-2
C-4	1	1670-00-360-0533	81337	51C6742
C-4	2		81337	51C6742-2
C-4	3	5340-00-360-0309	96906	MS27759
C-4	4		81337	51C6742-1
C-4	5		96906	44B9347
C-4	6		96906	MS22040-2
C-5	1	5340-00-360-0542	81 337	51D6743
C-5	2		81337	51D6743-1
C-5	3		96906	MS22040-2
C-5	4		81 337	51D6743-2
C-5	5		91603	MS22046-2
C5	6		81348	RR-C-271,TY 6
C-6	1		81337	51E6745
C-6	2		81 337	51E6745-5
C-6	3		81337	51E6745-6
C-6	4		81337	51E6745-4
C-6	5		81 337	51E6745-3
C-6	6		81337	51E6745-2
C-6	7		96906	MS22045-2
C-6	8		81 337	51E6745-9
C-6	9		81337	51E6745-7
C-6	10		81337	51E6745-8
C-6	11		81337	51E6745-1
C-7	1	1670-00-131 -9695	98750	45D18810
C-8	1		81 337	50B7702
C-8	1		98750	50B7702
C-9	1		81337	50D7703
C-9	2		96909	MS22040-2
C-9	3		96909	MS22046-2
C-9	4		81337	50D7703-3
C-9	5		81337	50D7703-6
C-9	6		81337	50D7703-9
C-9	7		81337	50D7703-10
C-9	8		81337	50D7703-4

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FIG	ITEM	STOCK NUMBER	CAGEC	PART NUMBER
C-9	9		81337	50D7703-5
C-9	10		81337	50D7703-7
C-9	11		81337	50D7703-8
C-10	1		81337	50D7704
C-10	2		81337	50D7704-1
C-10	3		81337	50D7704-2
C-10	4		81337	50D7704-3
C-10	5		81337	50D7704-4
C-10	6		81348	T-R-571
C-10	7		81337	50D7703-1
C-11		15340-00-360-0560	81337	50T7707
C-11	2		96906	MS22046-2
C-11	3		96906	MS22042-2
C-11	4		81337	50T7707-4
C-11	5		81337	50T7707-5
C-12	1	1670-00-883-1654	81337	11-1-1394
C-1 2	2	1670-01-342-5913	81337	11-1-1394-2
C-13	1		81337	11-1-2616
C-13	2		81337	11-1-2617
C-13	3			
C-13	4		96906	MS22046-8
C-1 4	1	1670-01-059-5788	81337	11-1-2819
C-15	1	1670-01-168-0580	81337	11-1-2839
C-15	2		81337	11-1-2847
C-15	3		81337	11-1-2847-1
C-15	4		81337	11-1-2847-2
C-15	5		81337	11-1-2848
C-15	6		81337	11-1-2849
C-15	7		81337	11-1-2849-1
C-15	8		96906	MS22046-1
C-15	9		81337	11-1-2850
C-15	10		81352	AN525-10-14R
C-15	11	5305-00-282-0138	88044	AN525-416R18
C-15	12	5310-00-167-0834	88044	AN960-100L
C-15	13	5310-00-167-0835	88044	AN960-416L
C-15	14		96906	MS16998-42
C-15	15	5320-00-584-0672	96906	MS20426AD3-6
C-15	16	5320-00-117-6883	96906	MS20426AD5-6
C-1 5	17	5310-00-877-5797	96906	MS21044N3
C-1 5	18	5310-00-877-5796	96906	MS21044N4
C-1 5	19	5310-00-728-5519	96906	MS21078-4
C-16	1	1670-01-167-1688	81337	11-1-2840
C-16	2		81337	11-1-2840-1
C-16	3	5340-01-365-0199	81337	11-1-2834-2
C-16	4	5306-00-274-2119	88044	AN3-5A

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C-16	5	5306-00-151-1003	88044	AN42-2
C-16	6		96906	MS20115F3
C-16	7		81352	AN525-10
C-16	8	5310-00-167-0834	88044	AN960-1 OL
C-16	9	5310-00-877-5797	96906	MS21044N3
C-1 7	1	1670-01-127-0064	81337	11-1-2841
C-18	1	1670-01-127-0063	81337	11-1-2842
C-19	1		81337	11-1-2843
C-20	1	5330-01-168-0581	81337	11-1-2844
C-21	1	1730-01-059-5815	81337	11-1-2845
C-22	1	1670-01-168-0582	81337	11-1-2846
C-23	1	1670-01-066-9313	81337	11-1-2820
C-23	2		81337	11-1-2829
C-23	3		81337	11-1-2830
C-23	4		96906	MS20115F3
C-23	5		81337	11-1-2825
C-23	6		96906	MS171602
C-23	7	5305-00-733-3042	96906	MS24693-S300
C-23	8	5305-00-267-9679	96906	MS24693-S322
C-23	9	5305-00-733-3045	96906	MS24693-S302
C-23	10	5305-00-957-7813	96906	MS24693-S277
C-23	11	5305-00-957-7812	96906	MS24693-S276
C-23	12	5310-00-141-1795	88044	AN960-416
C-23	13	5310-00-167-0820	88044	AN960-516
C-23	14	5310-00-167-0818	88044	AN960-10
C-23	15	5310-00-877-5796	96906	MS21044N4
C-23	16	5310-00-088-0553	96906	MS21044N5
C-23	17	5310-00-877-5797	96906	MS21044N3
C-23	18		81337	11-1-2831
C-23	19		81337	11-1-2820-21
C-24	1		81337	11-1-2826
C-24	2		81337	11-1-2826-1
C-24	3		81337	11-1-2832
C-24	4	5340-01-168-0579	81337	11-1-2834-1
C-24	5		83058	41-G
C-24	6		81337	11-1-2833-4
C-25	1		81337	11-1-2833
C-25	2		81337	11-1-2833-1
C-25	3		81337	11-1-2833-2
C-25	4		81337	11-1-2833-3
C-25	5		81337	11-1-2833-4
C-26	1		81337	11-1-2827
C-26	2		81337	11-1-2827-1
C-26	3		81337	11-1-2827-2
C-26	4		96906	MS3314
C-26	5		81337	11-1-2827-3

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FIGURE AND ITEM NUMBER INDEX (Continued)

FIG.	ITEM	STOCK NUMBER	CAGEC	PART NUMBER
C-26	6	5305-00-057-0505	96906	MS51958-8
C-26	7	5310-00-933-8120	96906	MS35338-138
C-27	1	1670-01-067-6213	81337	11-1-2828
C-27	2		81337	11-1-2835
C-27	3		81337	11-1-2836
C-27	4	5320-00-117-6856	96906	MS20470AD6-12
C-28	1	4010-01-067-7116	81 337	11-1-2822
C-29	1	4010-01-067-7117	81337	11-1-2824
C-30	1	5310-01-254-1366	81337	11-1-2823
C-31	1	5340-00-738-5878	81337	11-1-527-1
C-32	1	5340-00-738-5879	81337	11-1-527-2

APPENDIX D

COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LISTS

SECTION I. INTRODUCTION

D.1 SCOPE. This appendix lists components of the end item and basic issue items for the Container Delivery System to help you inventory the items for safe and efficient operation of the equipment.

D.2 GENERAL. The Components of End Item and Basic Issue items(BII) Lists are divided into the following sections:

a. Section II. Components of End Item. This listing is for information purposes only, and is not authority to requisition replacements. These items are part of the Container Delivery System, but they are to be removed and separately packaged for transportation or shipment. As part of the end item, these items must be with the end item whenever it is Issued or transferred between property accounts. Illustrations are furnished to help you find and identify the items.

b. Section III. Basic Issue Items. These essential items are required to place the Container Delivery System in operation, operate it, and to do emergency repairs. Although shipped separately packaged, BII must be with the Tent during operation and when it is transferred between property accounts. Listing items is your authority to request/requisition them for replacement based on authorization of the end item by the TOE/MTOE. Illustrations are furnished to help you find and identify the items.

D.3 EXPLANATION OF COLUMNS.

a. Column (1), Illustration Number, gives you the number of the item illustrated.

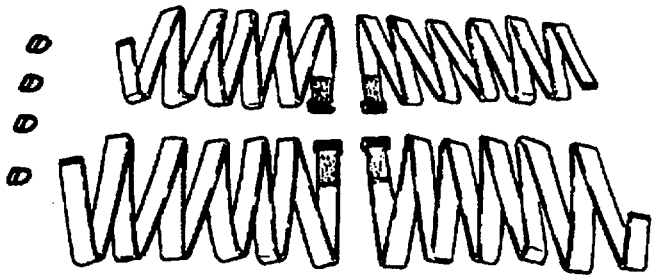
b. Column (2), National Stock Number, identifies the stock number of the item to be used for requisitioning purposes.

c. Column (3), Description and Useable On Code, identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The last line below the description is the CAGEC (commercial and Government entity code) (in parenthesis) and the part number.

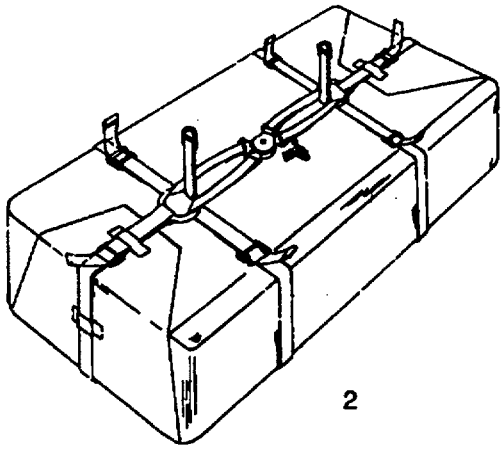
d. Column (4), U/I (unit of issue), indicates how the item is issued for the National Stock Number shown on column two.

e. Column (5), Qty Rqr, Indicates the quantity required.

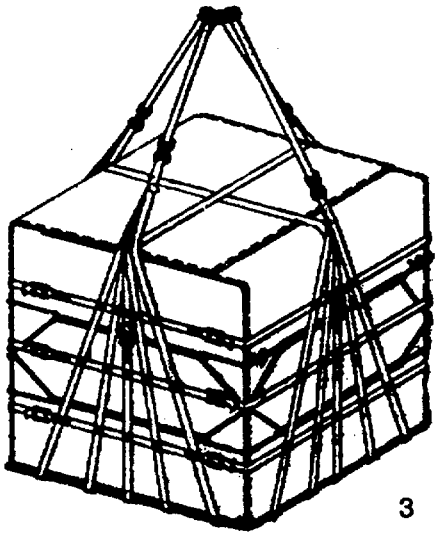
SECTION II. COMPONENTS OF END ITEM



1

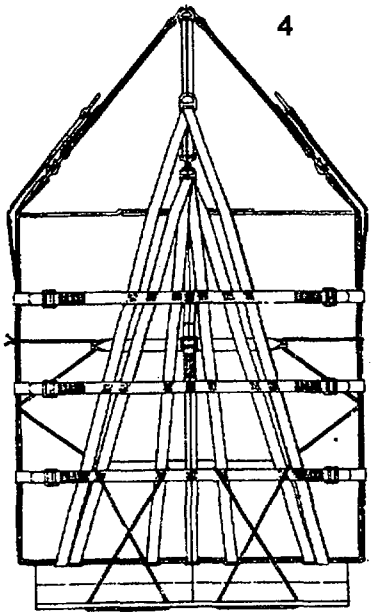


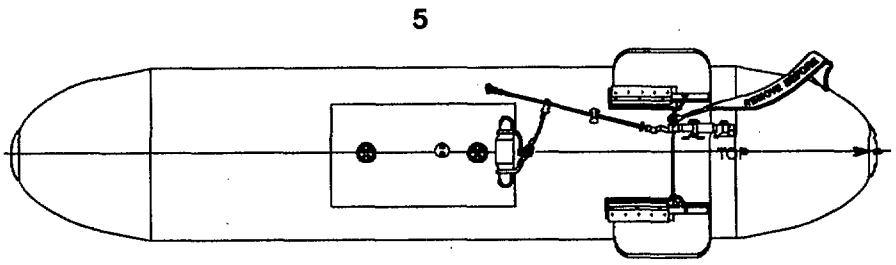
2

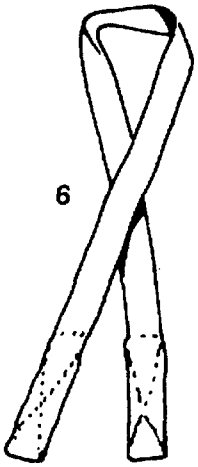


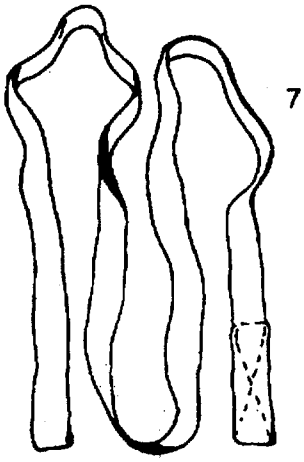
3

(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION CAGEC and Part Number	Usable On Code	(4) U/I	(5) Qty Rqr
1	1670-00-251-1153	A-7A CARGO SLING		EA	1
2	1670-00-242-9173	A-21 AERIAL DELIVERY CARGO BAG		EA	1
3	1670-00-587-3421	A-22 AERIAL DELIVERY CARGO BAG		EA	1





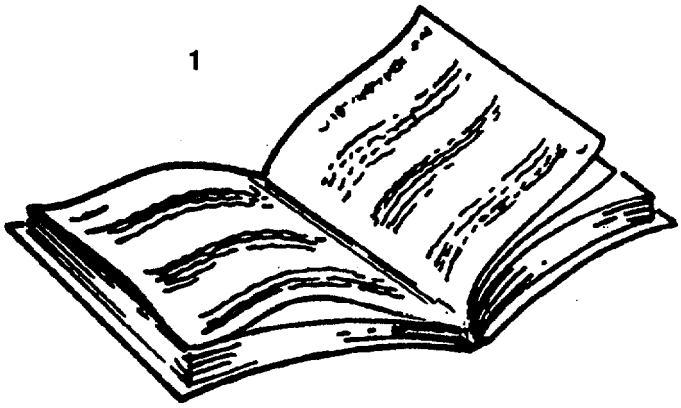




(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION CAGEC and Part Number	Usable On Code	(4) U/I	(5) Qty Rqr
4	1670-01-065-3748	A-23 AERIAL DELIVERY CARGO BAG		EA	1
5	1670-01-059-5788	CAPSULE, CARGO, CTU-2/A		EA	1
6	5340-00-738-5878	STRAP CONNECTOR, 60-INCHES LONG		EA	1
7	5340-00-738-5879	STRAP CONNECTOR, 120-INCHES LONG		EA	1

SECTION III. BASIC ISSUE ITEMS

1



(1) ILLUS NUMBER	(2) NATIONAL STOCK NUMBER	(3) DESCRIPTION CAGEC and Part Number	Usable On Code	(4) U/I	(5) Qty Rqr
1		TM 10-1670-298-20&P Unit Maintenance Manual Including Repair Parts and Special Tools List		EA	1

APPENDIX E
EXPENDABLE/DURABLE SUPPLIES LIST

SECTION I. INTRODUCTION

E.1 SCOPE.

This appendix lists expendable/durable supplies that you will need to operate and maintain the Container Delivery System. This listing Is for information only and Is not authority to requisition the listed items. These items are authorized to you by CTA 50-790, Expendable/Durable Items (except medical, class V repair parts, and heraldic items), or CTA 8-100, Army Medical Department Expendable/Durable Items.

E.2 EXPLANATION OF COLUMNS.

a. Column 1. Item number. This number is assigned to the entry in the listing and Is referenced in the narrative instructions to identify the item (e g. "Use cleaning compound, item 5, Appendix E")

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

C - Operator/crew
O - Unit maintenance
F - Direct support maintenance
H - General support maintenance

c. Column 3. National stock number. This is the national stock number assigned to the item which you can use to requisition it

d. Column 4. Item name. description. Commercial and Government Entity Code (CAGEC). and part number. This provides the other information you need to identity the item

e. Column 5. Unit of measure. This code shows the physical measurement or count of an item, such as gallon, dozen, gross, etc.

SECTION II. EXPENDABLE / DURABLE SUPPLIES AND MATERIAL LIST

(1) ITEM NO.	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) ITEM NAME, DESCRIPTION CAGEC, PART NUMBER	(5) U/M
1	O	9160-00-253-1171	BEESWAX, TECHNICAL	LB
2	O		BRUSH, PAINT	EA
3	O	5350-00-221-0872	CLOTH, ABRASIVE	BK
4	O	7930-00-281-4731	DISHWASHING COMPOUND, HAND	SA
5	O		ENAMEL, RED, ETC	QT
6	O	5110-00-241-9147	FILE, METAL	EA
7	O	9150-00-985-7245	GREASE, AIRCRAFT, 8-OUNCE	TU
8	O	7510-00-634-6583	INK, MARKING, PARACHUTE, STRATA-BLUE	BT
9	O		PAINT, OD	GL
10	O	7520-01-060-5820	PEN, BALL-POINT (81348) GG-B-0060	EA
11	O	7510-00-240-1525	PENCIL, MARKING AID, WHITE (81348) A-A-87	EA
12	O	7510-00-264-4612	PENCIL, MARKING AID, YELLOW (81348) A-A-87	EA
13	O	AA-S-781-M51	SEAL, STEEL STRAPPING	
14	O	8135-00-283-0667	STEEL STRAPPING	LB
15	O	9310-00-160-7858	STENCILBOARD, OILED, TYPE II, (81348) UU-S-625	SH
16	O	6810-00-270-9982	TETRACHLOROETHYLENE, TECHNICAL	DR
17	O	9160-00-285-2044	WAX, PARAFFIN, TECHNICAL	LB

APPENDIX F
MANDATORY REPLACEMENT PARTS

F.1 SCOPE.

This appendix lists all mandatory replacement parts referenced in the task setups in this manual.

(1) Item	(2) Part Number	(3) Nomenclature
		NOTE Replace the cartridge-actuated thruster after each use of the Capsule, Cargo, CTU-2/A.
1	5184910 (56711)	Thruster, cartridge activated, TCU-1B, M5 cartridge-actuated release assembly NSN 1377-01-075-6433
2	MS24665-132	Cotter Pin, M5 cartridge-actuated release assembly
3	MM19132-1	Fin assembly

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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 = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
1 decigram = 10 centigrams = 1.54 grains
1 gram = 10 decigram = .035 ounce
1 decagram = 10 grams = .35 ounce
1 hectogram = 10 decagrams = 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

Liquid Measure

1 centiliter = 10 milliters = .34 fl. ounce
1 deciliter = 10 centiliters = 3.38 fl. ounces
1 liter = 10 deciliters = 33.81 fl. ounces
1 dekaliter = 10 liters = 2.64 gallons
1 hectoliter = 10 dekaliters = 26.42 gallons
1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

To change	*To*	*Multiply by*	*To change*	*To*	*Multiply by*
inches	centimeters	2.540	ounce-inches	Newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29,573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	Newton-meters	1.356	metric tons	short tons	1.102
pound-inches	Newton-meters	.11296			

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°F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	°C

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