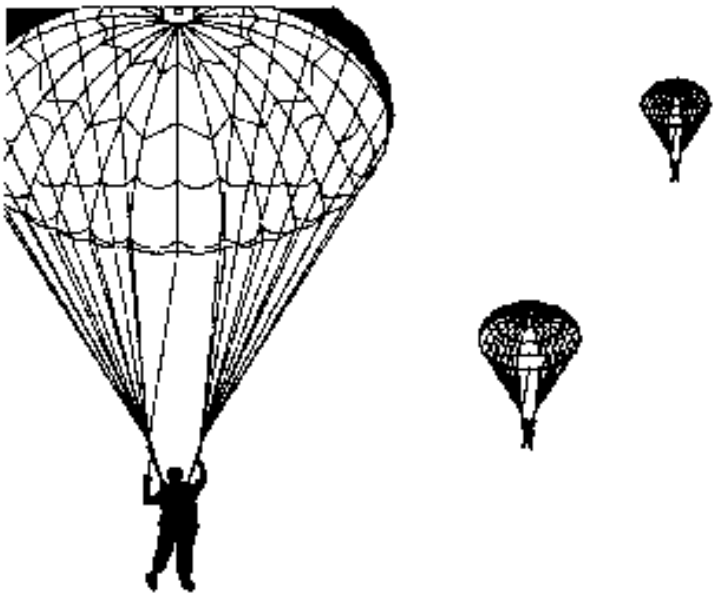
ARMY ***TM 10-1670-299-20&P**
AIRFORCE **TO 14D1-2-470-2**
NAVY **NAVAIR 13-1-41**

UNIT MAINTENANCE MANUAL
INCLUDING
REPAIR PARTS AND SPECIAL TOOLS LIST
FOR
ANCILLARY EQUIPMENT
FOR:
PERSONNEL TROOP PARACHUTE SYSTEM

Case, Parachutists, Individual Weapon, M-1950, NSN: 8465-00-261-4995
Case, Parachutists, Weapon & Individual Equipment, NSN: 8465-00-753-6549
Extension, Static Line, NSN: 1670-00-368-4225
Accessory, Set Scuba, NSN: 1670-00-064-5735
Line, Lowering, NSN: 1670-01-067 6838
Jump, Pack, DRAGON Missile, NSN: 1670-01-035-7727
Harness, Single Point Release, NSN: 1670-01-227-7992
Pack, Assembly, AT4, NSN: 1670-01-259-5932
Jump, Pack, Stinger Missile, NSN: 1670-01-352-9264
Release Assembly, NSN: 1670-01-415-0035
Container, Aerial Delivery, Weapons & Equipment, NSN: 1670-01-414-2757
Container, Aerial Delivery, General Purpose Individual Equipment, NSN: 1670-01-413-7836



'This manual together with TM 10-1670-296-20&P, 15 September 1995; TM 10-1670-297-20&P, 15 September 1995; and TM 10-1670-298-20&P, 15 September 1995, supersedes TM 10-1670-240-20, 14 April 1970, including all changes.

HEADQUARTERS, DEPARTMENT OF THE ARMY
15 SEPTEMBER 1995

SUMMARY OF WARNINGS

WARNING

The retainer/stow pocket must have the hook and pile closures on both ends of the pocket. Failure to insure that the retainer ends are securely closed could result in premature lowering line release.

WARNING

Failure to correctly position the release knob could result in a safety hazard. If the knob is in the UP position, it could interfere with the parachutist's reserve parachute.

TECHNICAL MANUAL

NO. 10-1670-299-20&P

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

UNIT MAINTENANCE MANUAL
INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST FOR
ANCILLARY EQUIPMENT FOR: PERSONNEL TROOP PARACHTE SYSTEM
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Release Assembly, NSN: 1670-01-415-0035
Container, Aerial Delivery, Weapons & Equipment, NSN: 1670-01-414-2757
Container, Aerial Delivery, General Purpose Individual Equipment, NSN: 1670-01-413-7836

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 these 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. You may also submit your recommended changes by E-mail directly to <daf2028@st-louis-emh7.army.mil>. A reply will be furnished directly to you.

For Air Force users, submit AFTO Form 22 (Technical Order System Publication Improvement Report and Reply) and forward to the address prescribed for Army users. An information copy of the prepared AFTO Form 22 shall be furnished to Commander, San Antonio Air Logistics Center, ATTN: SA-ALC/TIRTR, Kelly Air Force Base, TX 78241-5000.

For Navy users, mail your comments to Commander, Space and Naval Warfare Systems Command, ATTN: SPAWAR 8122, Washington, DC 20363-5100.

In either case, a reply will be furnished to you.

*This manual together with TM 10-1670-296-20&P, 15 September 1995; TM 10-1670-297-20&P, 15 September 1995; and TM 10-1670-298-20&P, 15 September 1995, supersedes TM 10-1670-240-20, 14 April 1970, including all changes.

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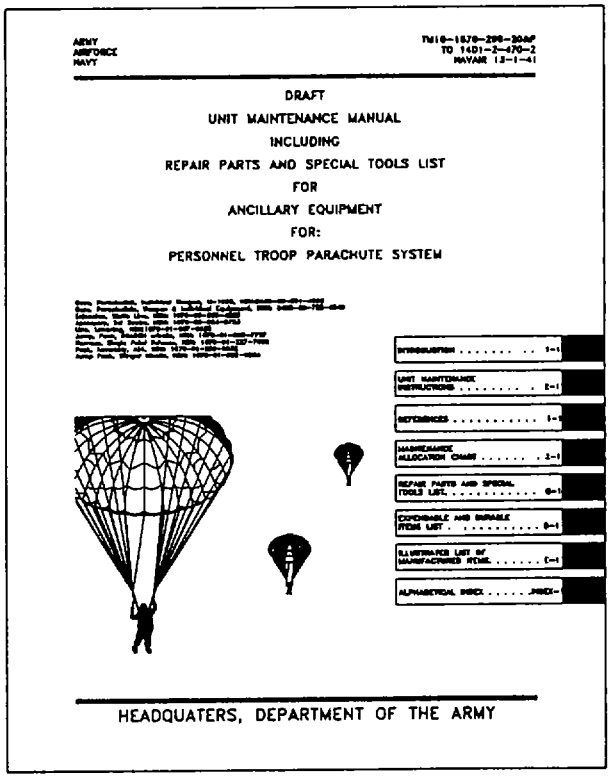
HOW TO USE THIS MANUAL

This manual, (TM 10-1670-299-23&P), contains general information, operating instructions, PMCS instructions, troubleshooting steps, and maintenance instructions for the Personnel Troop Parachute System. Use the front cover index and thumb bleeds at the edge of the pages to quickly find the sections of the manual shown on the cover.


ARMY
AIRFORCE
NAVY

DRAFT
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FOR:
PERSONNEL TROOP PARACHUTE SYSTEM

HEADQUATERS, DEPARTMENT OF THE ARMY

The manual has been divided into chapters, sections and paragraphs that are numbered in sequence. Pages, paragraphs, and illustrations are numbered by chapter. For example, chapter 2, page 3, is marked page 2-3; chapter 3, paragraph 5 is marked 3-5; figure 2-3 is the third illustration in chapter 2. To quickly find specific information, use the table of contents. For example, the front cover index states that Chapter 1 begins on page 1-1. The table of contents on page i tells you the exact page where the paragraph you want is located.

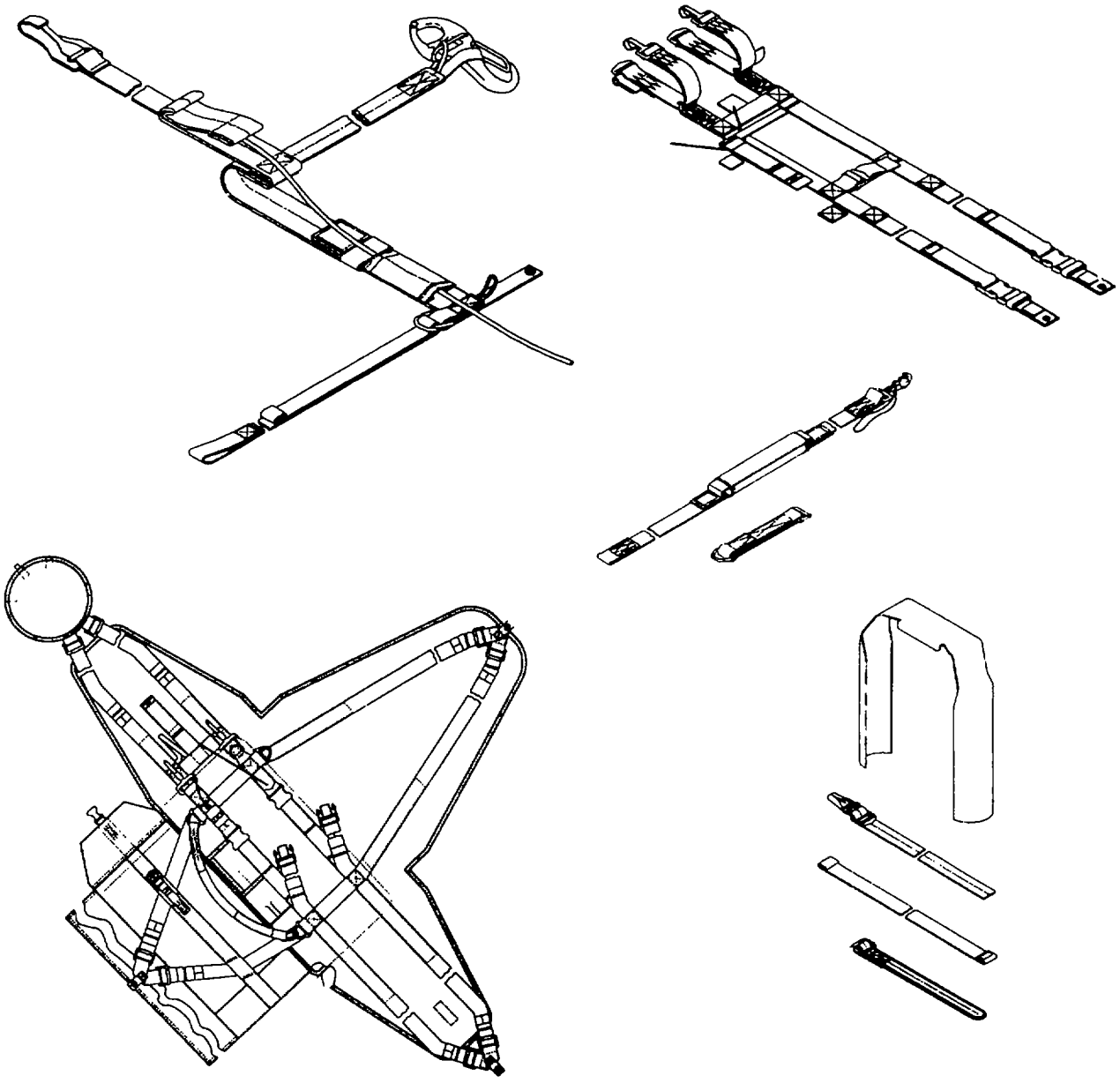

FIGURE 1-1. Personnel Troop Parachute System Ancillary Equipment (Sheet 1 of 3)

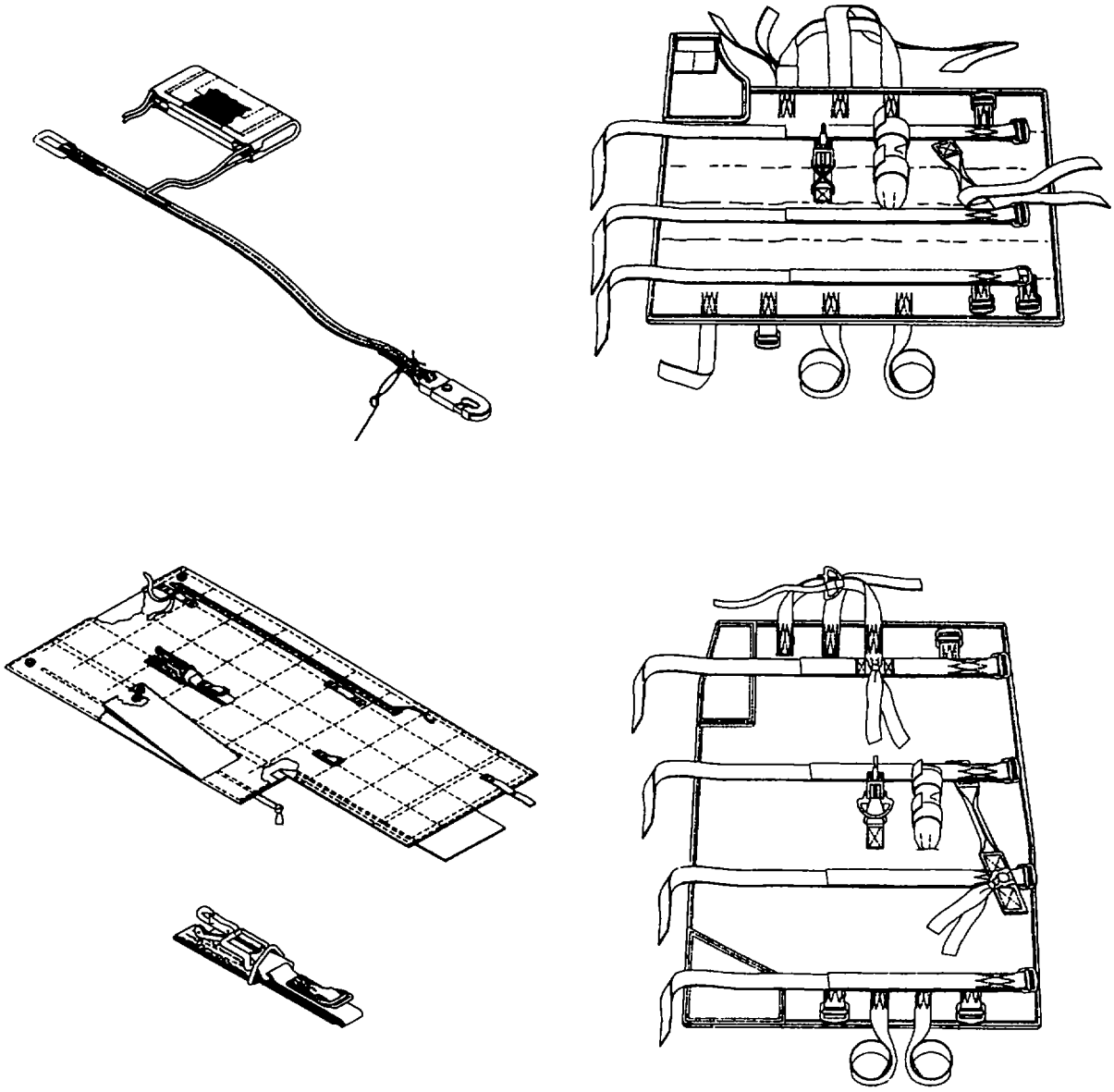

FIGURE 1-1. Personnel Troop Parachute System Ancillary Equipment (Sheet 2 of 3)

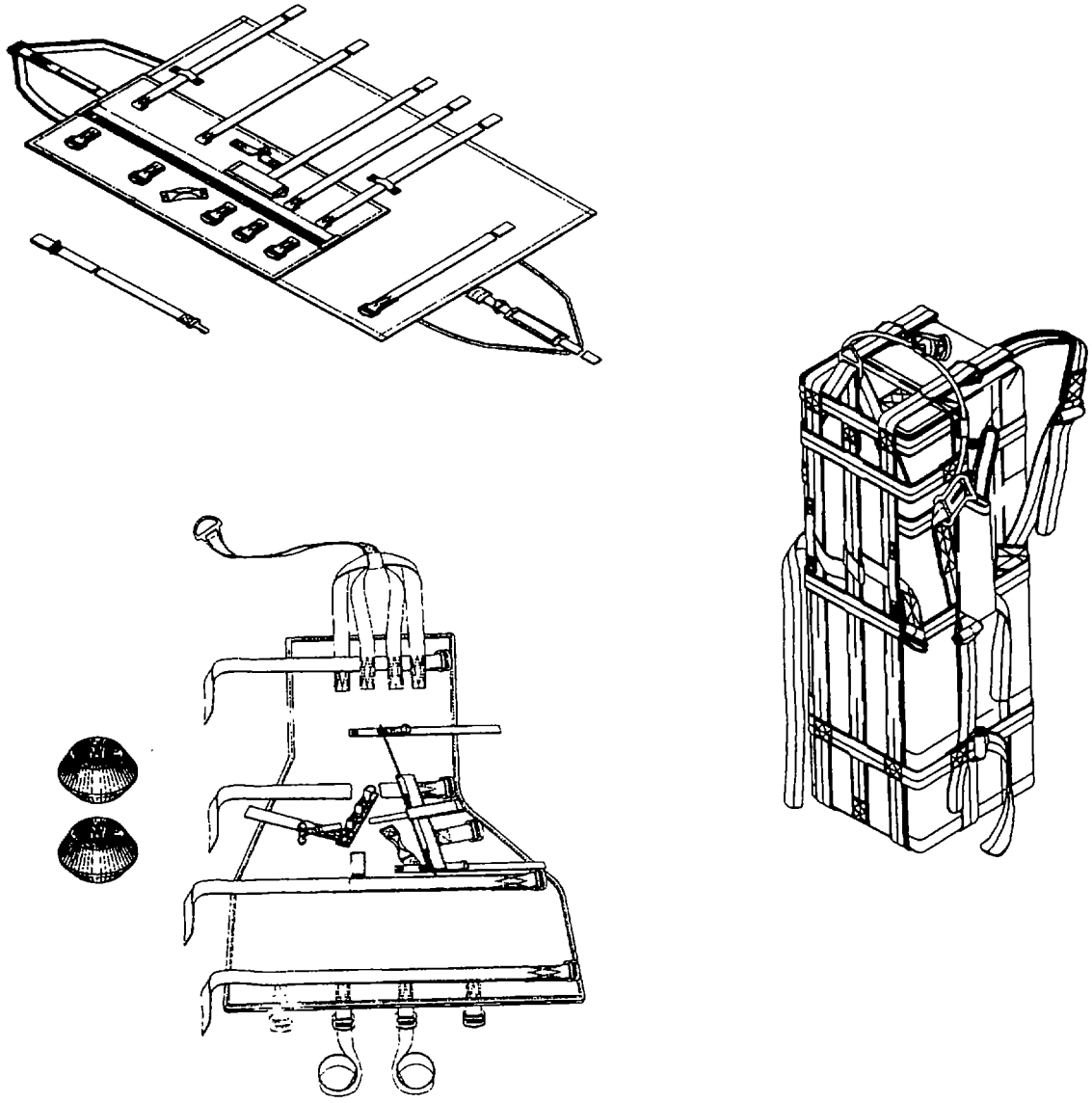

FIGURE 1-1. Personnel Troop Parachute System Ancillary Equipment (Sheet 3 of 3)

CHAPTER 1

INTRODUCTION

SUBJECT

Section I. GENERAL INFORMATION

1-1. SCOPE. This manual describes unit maintenance procedures for the Personnel Troop Parachute System. This equipment is used by airborne qualified personnel only.

1-2. MAINTENANCE FORMS AND PROCEDURES. Department of the Army forms and procedures used for the Personnel Troop Parachute System Ancillary Equipment maintenance will be those prescribed by DA PAM 738-750.

1-3. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE. Destruction of Army materiel to prevent enemy use shall be in accordance with TM 750-244-3.

1-4. PREPARATION FOR STORAGE OR SHIPMENT. Special instructions for administrative storage, as well as long term storage and shipment instructions are provided in Section III of Chapter 2.

1-5. NOMENCLATURE CROSS-REFERENCE LIST.

a. Cross Reference List.

Common Name	Official Nomenclature
Extension	Extension, Static Line
Backstrap	Backstrap, Harness
Dragon Pack	Jump Pack, Dragon Missile
Case	Case, Parachutist's Individual Weapon M1950
Line	Line, Lowering
Harness	Harness, Single Point Release
AT4JP	Pack, Assembly, AT4
Stinger Pack	Jump Pack, Stinger Missile
SCUBA Set	Accessory Set, SCUBA

b. List of Abbreviations/Acronyms.

CPC	Corrosion Prevention and Control
EIR	Equipment Improvement Recommendation
ESC	Equipment Serviceability Criteria
MWO	Modification Work Order
MTOE	Modified Table of Organizational Equipment
NBC	Nuclear, Biological, Chemical
TMDE	Test, Measurement, and Diagnostic Equipment
U/M	Unit of Measure
UOC	Usable On Code

c. Glossary of Terms.

Bx	Box
CPC	Corrosion Prevention Control
EA	Each
EIR	Equipment Improvement Recommendation
Illus	Illustration
MWO	Modification Work Order
NBC	Nuclear, Biological, Chemical
Qty rg	Quantity Required
U/M	Unit of Measure
UOC	Usable On Code
SCUBA	Self Contained Underwater Breathing Apparatus

1-6. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR). If your Personnel Troop Parachute System ancillary 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, US Army Aviation and Troop Support Command, ATTN: AMSAT-I-MDO, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. We will send you a reply.

1-7. CORROSION PREVENTION AND CONTROL.

a. Corrosion Prevention and Control (CPC) of Army materiel is a continuing concern. It is important that corrosion problems with the ancillary items are reported so that problems can be corrected and improvements can be applied to future items.

b. While corrosion is typically associated with rusting of metals, it can also include deterioration of other materials, such as rubber and plastic. Unusual cracking, softening, swelling or breaking of these materials may be a corrosion problem.

c. If a corrosion problem is identified, it can be reported using Standard Form 368, Quality Deficiency Report. Use of key words such as "corrosion", "rust", "deterioration", or "cracking" will assure that the information is identified as a CPC problem.

d. This form should be submitted to the address specified in DA Pam 738-750.

Section II. EQUIPMENT DESCRIPTION

1-8. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES. The ancillary equipment components of the Personnel Troop Parachute System are designed to facilitate the adaption of various types of personal equipment and weapons to the individual parachute. Their use is dictated by the nature and equipment requirements of each particular mission. There are no unique maintenance related requirements or characteristics. Ancillary equipment components are constructed of various types of fabric materials and require only the kind of maintenance normally associated with personal equipment items.

1-9. DESCRIPTION OF MAJOR COMPONENTS.

a. The Personnel Troop Parachute System ancillary equipment contained in this publication consists of:

(1) Extension, Static Line. The static line extension is constructed of Type VIII nylon. It comes with a permanently attached cover that is placed over the snap hook connection when the extension is used with the 15 foot static line. The extension is 5 feet long. The cover is constructed of two strands of nylon cord, separated by a strip of pressed felt material, enclosed in a cotton duck fabric sleeve. The extension has a snap hook on one end and an attaching ring on the other.

(2) Accessory Set, SCUBA.

(a) Support Strap. Two support straps are used with the SCUBA Set. They are constructed of Type III Nylon Webbing with a quick fit adapter at one end and approximately 66 inches long.

(b) Backstrap, Harness. The backstrap harness is approximately 96 inches long and constructed of Type XIII Nylon Webbing.

(c) Strap, Waistband Extension. The waistband extension strap is constructed of Type VIII Nylon Webbing that is enclosed in Type III Nylon Duck Cloth. The strap is 24.5 inches long, with one end is rounded, and an adjuster attached to the other end. Type III Nylon Tape is sewn to one side of the strap.

(d) Shield. The shield is a U-shaped metal plate installed over the SCUBA tank regulators to prevent the static line from becoming entangled in the regulator valves.

(3) Line, Lowering. The lowering line is constructed of nylon webbing with a snap hook at one end. An extension extractor fabricated of cotton duck material is located at the center. The adapter web has attaching hardware on both ends.

(4) Jump Pack, Dragon Missile. The dragon pack is fabricated from nylon or cotton duck, webbing and various types of tapes. The pack incorporates adjustable straps with quick fit and release hardware listed in Appendix C. A 15 foot lowering line and stowage pocket is attached to the exterior of the pack.

(5) Harness, Single Point Release.

(a) Strap, Leg Release. This strap is constructed of 1 inch wide nylon elastic webbing, approximately 4 inches long with a side release buckle (female) at one end and a Type III Spur Grommet on the other.

(b) Handle, Release. The single point release handle assembly consists of a tubular webbing lanyard to which the angular wire release cable is attached.

(c) Strap, Harness, Attaching. This strap is made of 1 1/2 inch Type III nylon webbing with a snap hook on one end, and a triangular link on the other.

(6) Pack, Assembly, AT4. This jump pack is fabricated from nylon duck, nylon webbing, wool felt, and cotton tape. The pack incorporates adjustable straps and quick release/fit hardware listed in Appendix C. A 15 foot lowering line and stowage pocket is located on the exterior of the pack.

(7) Case, Parachutist's Individual Weapon, M-1950. The parachutist's individual weapons case Is made of Type I cotton duck lined with 1/4-inch thick felt. The bottom of the case is reinforced on the inside with leather. The case is closed at the side by means of a slide fastener thong and a snap fastener. The weapons case is equipped with a quick-release snap link and several metal loops that are all attached to the case by webbing chapes. The snap link is provided for accommodation of the quick-release snap-hook that secures the weapons case to the parachutist's harness. The weapons case also has a webbing adjusting strap; two tiedown tapes, each of which is attached to a webbing tie-down loop; a 20-foot lowering line; and a lowering line pocket. Hardware items are listed in Appendix C.

(8) Case, Parachutist's Weapon and Individual Equipment. This equipment consists of a pack and a harness. The hexagonal-shaped pack is constructed of Type I cotton duck. The body is lined with 1/4-inch felt, and a network of Type VIII cotton-nylon webbing suspender and securing straps. The straps are reinforced and are equipped with quick-fit reversible adapters of 750-pound breaking strength. The pack is folded at the top and each side is held to the top by a rivet. The harness consists of a Type I cotton duck body and flap, a network of securing and suspension straps made of Type VIII nylon webbing, appropriate items of hardware, and a push pull actuator assembly. The release assembly comprises the push-pull actuator assembly with release knob, a keeper pin with a Type IV nylon webbing strap, a left and right-hand fastener and a Type X nylon webbing quick-release strap equipped with a snaphook at one end and a quick-release, quick-fit connecting link at the other end.

(9) Jump Pack, Stinger Missile. The stinger pack consists of a nylon shell and felt liner. The pack incorporates adjustable straps of Type II, VII, and X woven nylon webbing with

quick fit and release hardware, a carrying handle, and a single-pull quick release subsystem. Hook and pile fasteners of varying dimensions are also used. The standard 15 foot lowering line is used with this pack. Hardware items are listed in Appendix C.

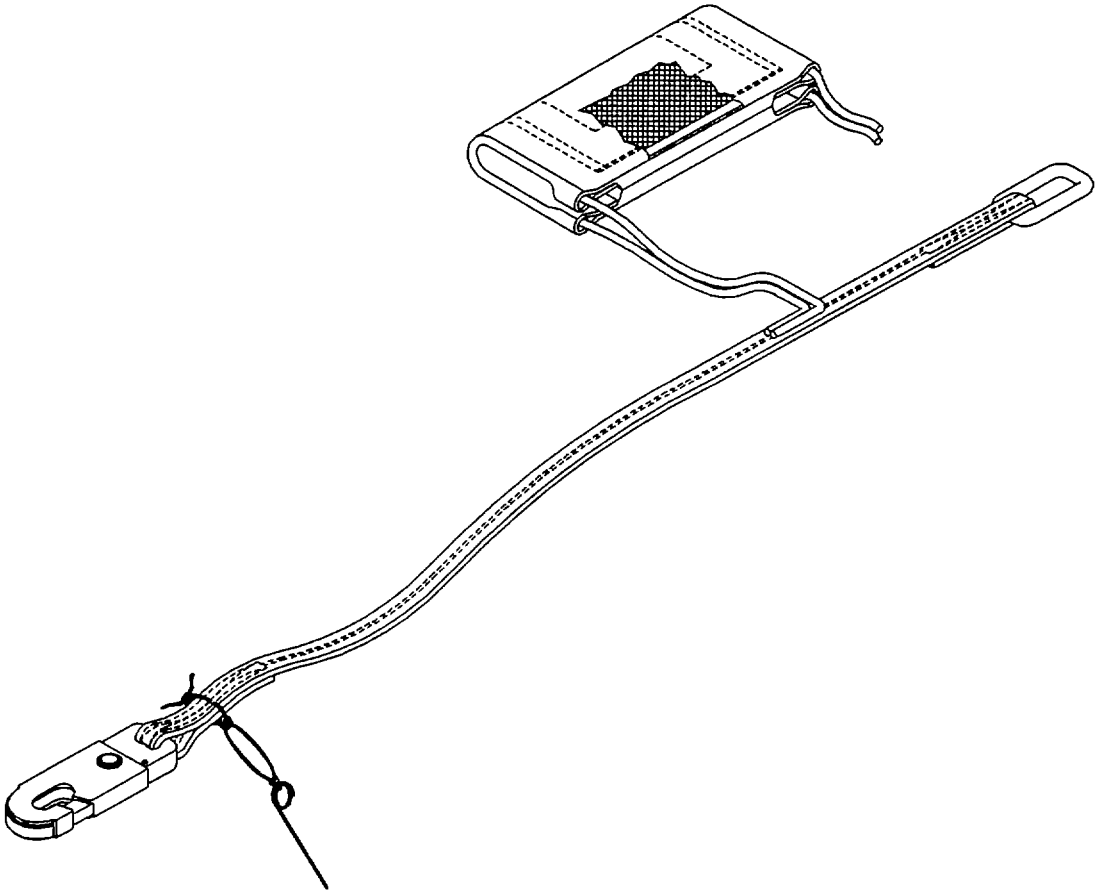

Figure 1-1
Personnel Troop Parachute System Ancillary Equipment
Extension, Static Line
(Sheet 1 of 12)

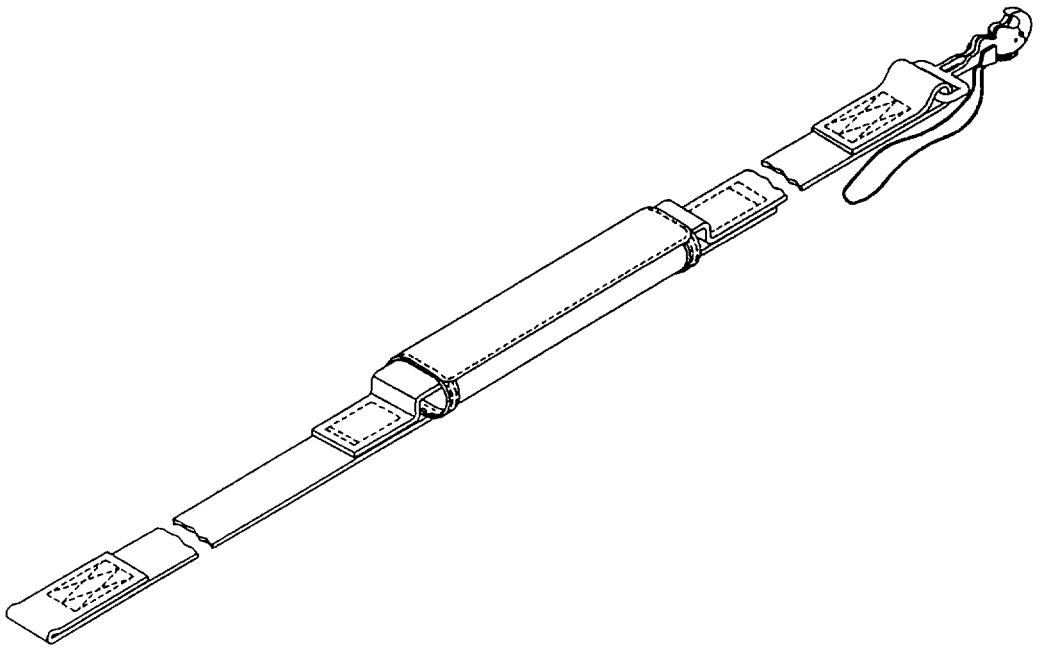

Figure 1-1
Personnel Troop Parachute System Ancillary Equipment
Lowering Line
(Sheet 2 of 12)

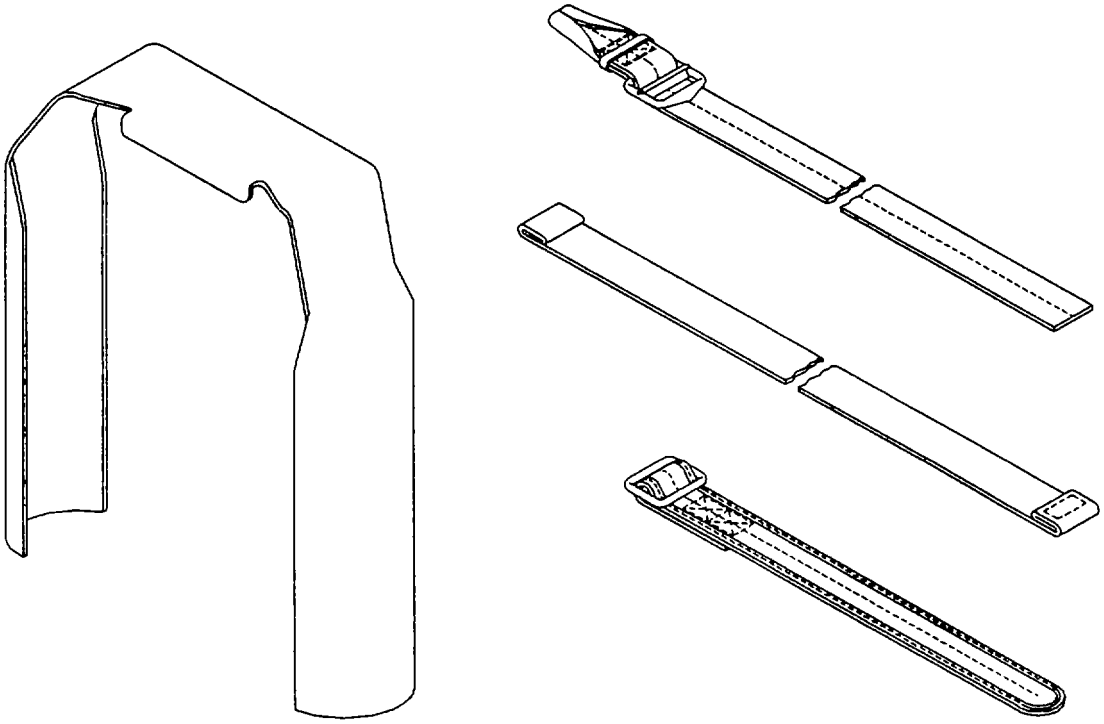

Figure 1-1
Personnel Troop Parachute System Ancillary Equipment
Accessory Set, SCUBA
(Sheet 3 of 12)

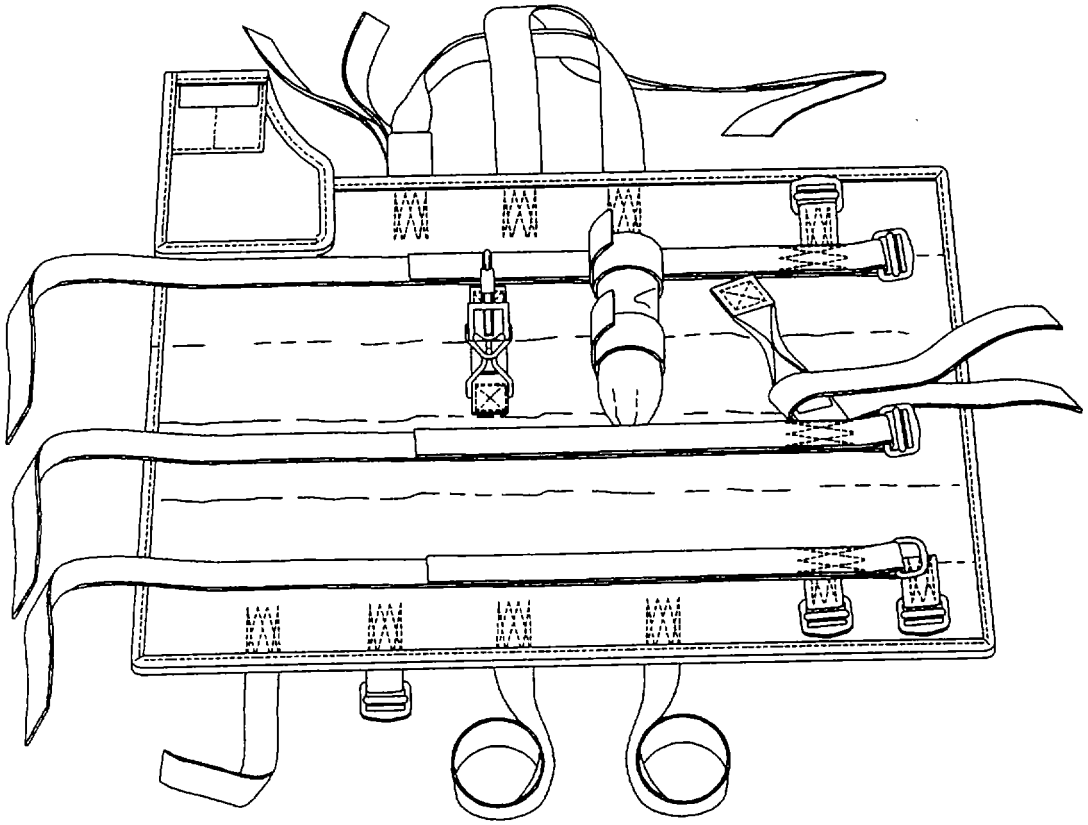

Figure 1-1
Personnel Troop Parachute System Ancillary Equipment
Jump Pack, Dragon Missile
(Sheet 4 of 12)

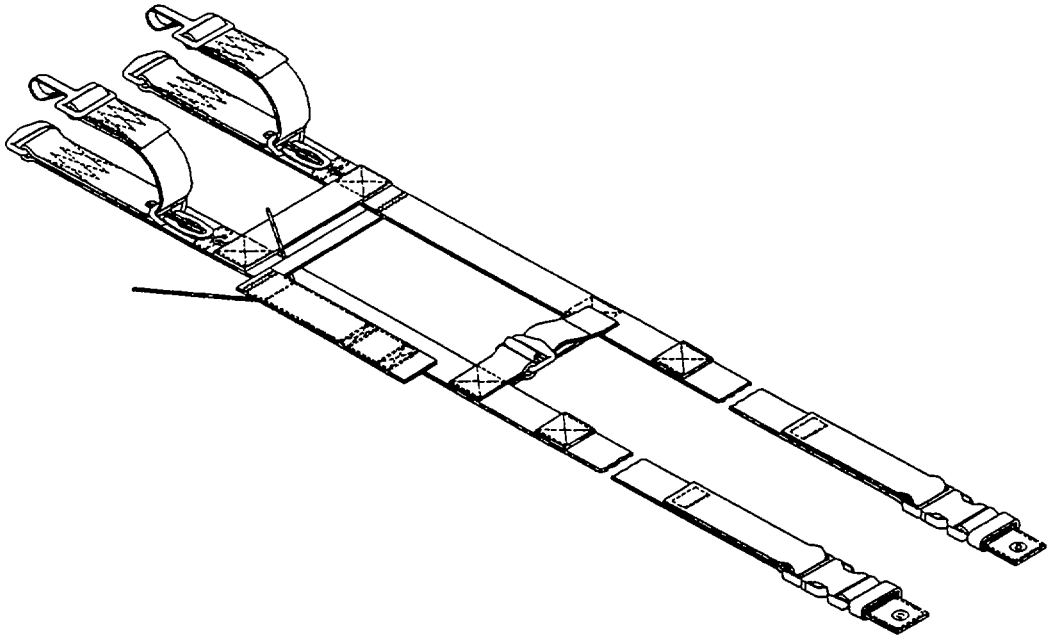

Figure 1-1
Personnel Troop Parachute System Ancillary Equipment
Harness, Single Point Release
(Sheet 5 of 12)

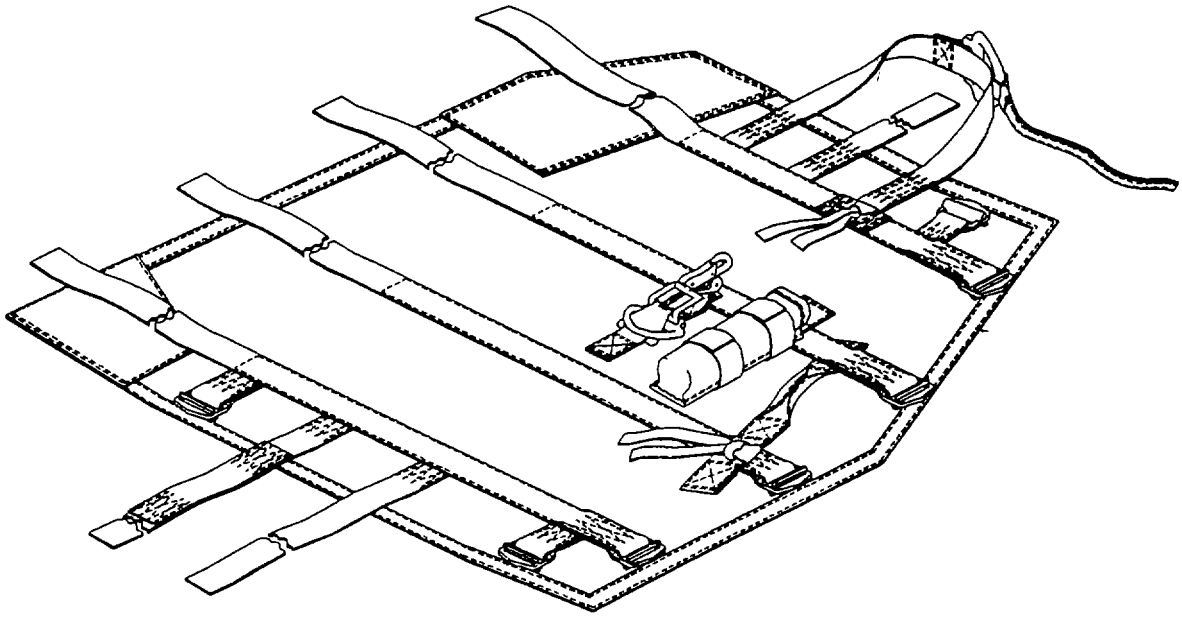

Figure 1-1
Personnel Troop Parachute System Ancillary Equipment
Pack, Assembly AT4
(Sheet 6 of 12)

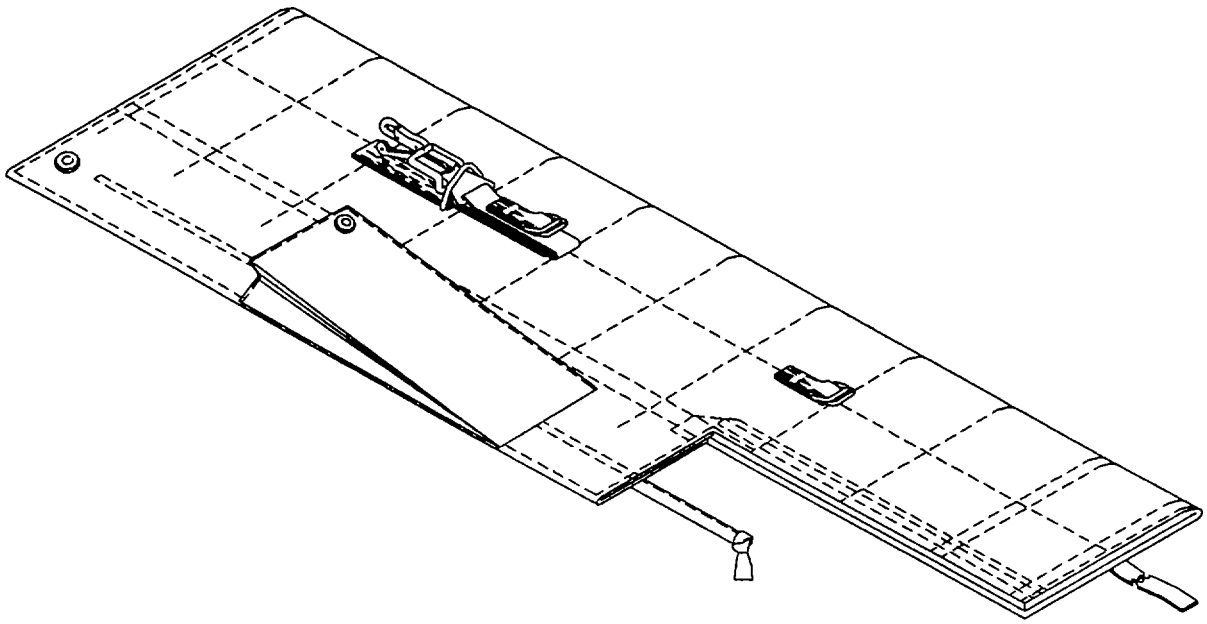

Figure 1-1
Personnel Troop Parachute System Ancillary Equipment
Case, Parachutist's Individual Weapon, M1950
(Sheet 7 of 12)

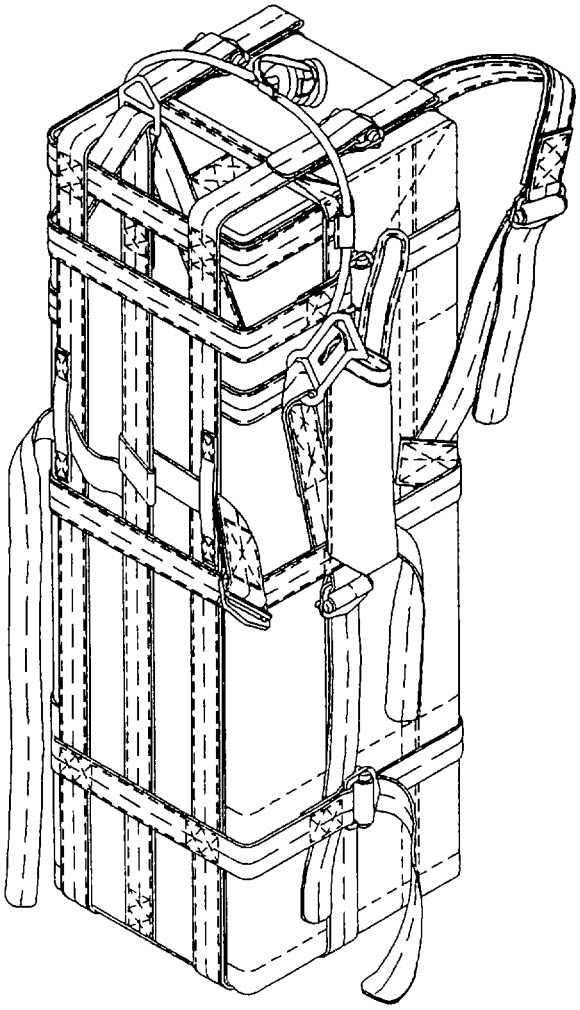

Figure 1-1
Personnel Troop Parachute System Ancillary Equipment Case, Parachutist's Weapons and Individual Equipment
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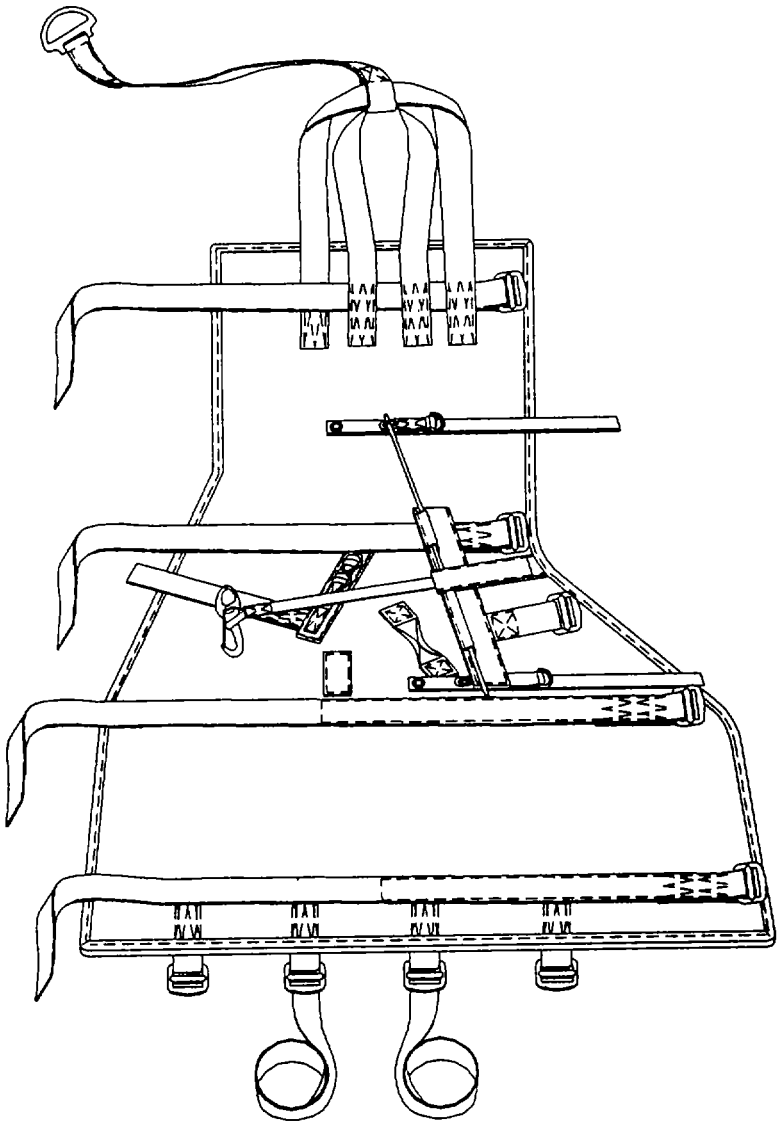

Figure 1-1
Personnel Troop Parachute System Ancillary Equipment
Jump Pack, Stinger Missile
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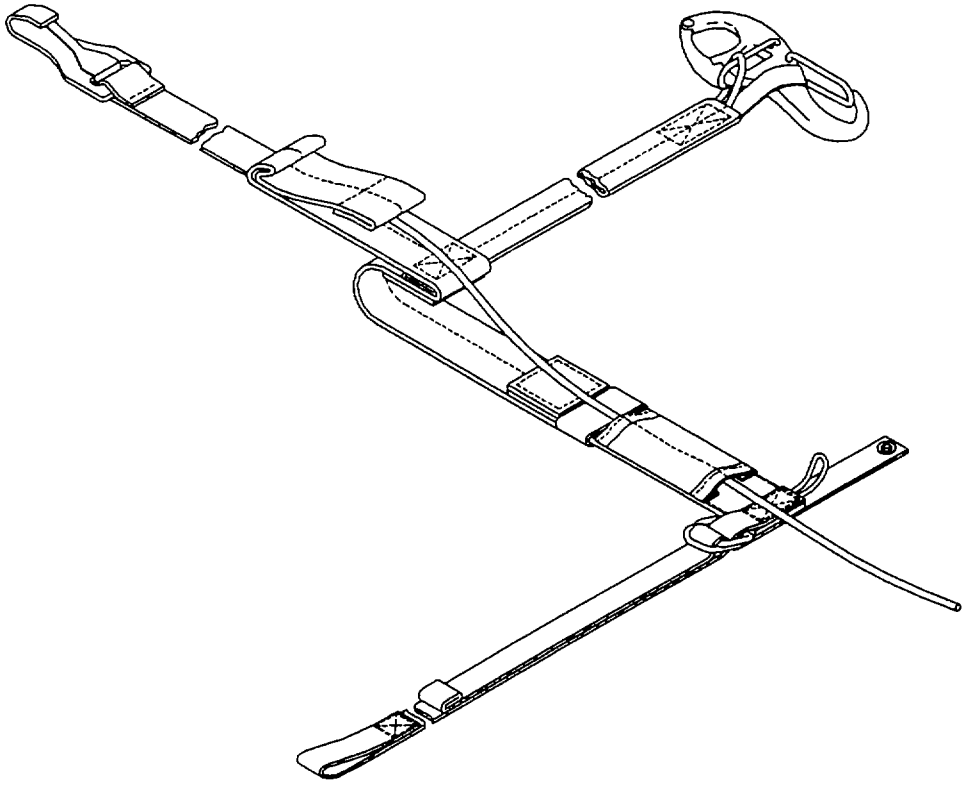

Figure 1-1
Personnel Troop Parachute System Ancillary Equipment
Parachutist's Individual Equipment Rapid Release Assembly
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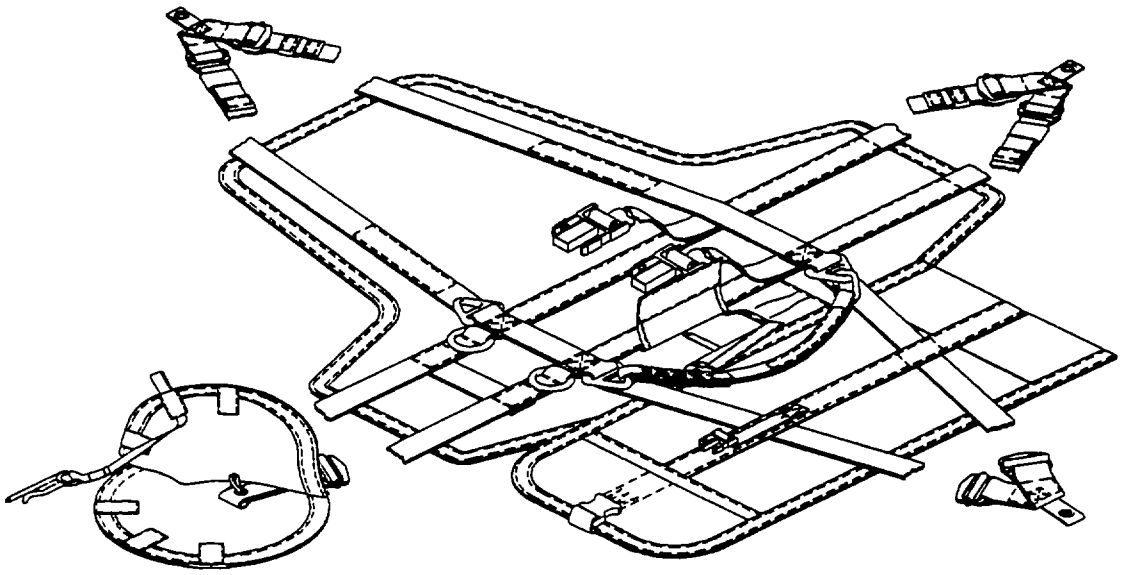


Figure 1-1
Personnel Troop Parachute System Ancillary Equipment
Container, Aerial Delivery, General Purpose, Individual Equipment
(Sheet 11 of 12)

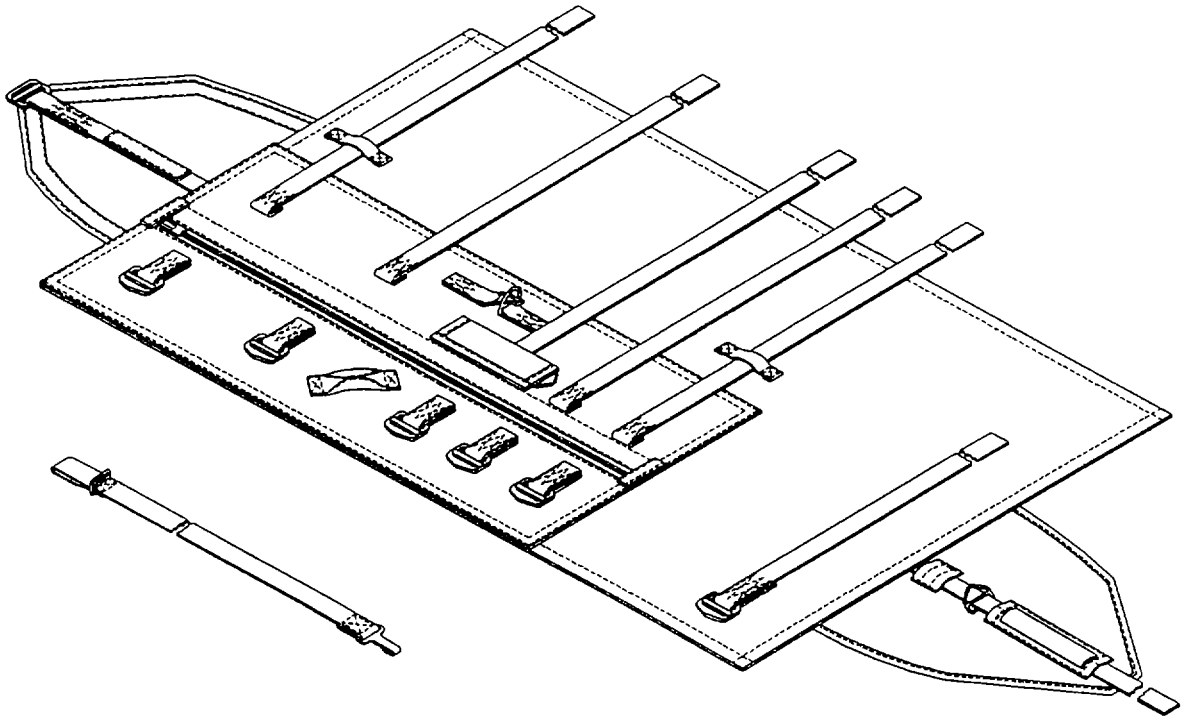


Figure 1-1
Personnel Troop Parachute System Ancillary Equipment
Container, Aerial Delivery, Weapons and Equipment, Adjustable
(Sheet 12 of 12)

1-10. EQUIPMENT DATA.

Item	Material	(Finished) Dimension
Extension Static Line	Type VIII Nylon Webbing	60 " L
Support Strap	Type III Nylon Webbing	66 " L
Backstrap Harness	Type XIII Nylon Webbing	69 " L
Strap Waist-band Extension	Type VIII Nylon Webbing	24.5 " L
Shield	Aluminum	
Line, Lowering	Nylon Rope Cotton Duck	15
Jump Pack, Dragon Missile	Cotton or Nylon Duck	39 " L 30 " W
Harness Single Point Release	Type VIII Nylon Webbing	
Strap, Leg Release	Cotton Webbing	4 " L
Handle, Release	Nylon Webbing	
Strap, Harness Attaching	Type III Nylon Webbing	
Pack, Assembly AT4	Nylon or Cotton Duck	40 " L 30 " W
Case, Parachutist, s Individual Weapon M1950	Cotton Duck	33.5 " L to 50.5 " L 10 " W
Case, Parachutist, s Weapon / Individual Equipment	Cotton Duck	36"L,12"W,12"D adjustable to 18"L,12"W,6"D
Jump Pack Stinger Missile	Nylon Duck	67" L 38" W

1-11. EQUIPMENT CONFIGURATION. The Personnel Troop Parachute System Ancillary Equipment is used with individual parachutes. This equipment is not provided or issued as a set; each component must be requisitioned separately. The equipment configuration is dictated by the mission.

Section III PRINCIPLES OF OPERATION

1-12. DESCRIPTION. This paragraph will explain how the various components are used in conjunction with others to achieve the intended purpose. The interface and function of each component will be explained.

(a) Extension, Static Line. The 5 foot long static line extension is used only with certain types of aircraft (C-46, C47, CH46, CH53). When used, it is attached to the normal 15 foot static line by placing the attaching ring of the extension into the snap hook of the basic static line. The safety pin is then inserted and bent. The extension cover is then placed over the snap hook and taped in place.

(b) Accessory Set, SCUBA. This set includes a waistband extension, a backstrap harness, support straps, and a shield. The waistband extension is attached to the waistband adapter and allows for the extra bulk of the SCUBA gear. The longer (69 inch) backstrap harness replaces the standard 59 inch horizontal backstrap in this configuration. A support strap is attached to each of the canopy releases of the harness assembly. The shield is installed over the SCUBA tank to prevent the static line from becoming entangled in the regulator valves.

(c) Lowering Line. The standard lowering line is used to lower a 15 foot long assembly with a quick ejector snap fastener for attachment to the parachute harness. The line can be used with any of the packs described in this manual.

(d) Jump Pack, Dragon Missile. The Dragon Pack is designed to form a padded, wrap-around type packing around the missile for attachment to the parachutist's harness. It also protects the parachutist's M-16 rifle. The pack is attached to the left reserve parachute "D" Ring of the harness with a quick release type snap. A leg tiedown strap assists in retaining the pack to the parachutist during exit and main parachute deployment. The lowering line permits lowering the pack below the parachutist prior to landing to mitigate potential damage to personnel and weapons.

(e) Harness, Single Point Release. This harness is a general purpose item used by the individual parachutist to jump the ALICE medium or large combat pack with or without frame. It is of an "H" type design with a network of equipment retainer straps, cross straps, leg straps, leg strap release assembly, attaching harness strap, and single point release handle.

(f) Pack, Assembly, AT4. The AT4 pack is designed to form a padded, wrap-around type packing around the AT4 missile for attachment to the parachutist's harness. It also protects the parachutist's M-16 rifle. The pack is attached to the left "D" Ring of the harness with a quick release type snap. Tiedown straps are provided for attachment to the harness main lift web and left leg for retaining the pack to the parachutist during exit and main parachute deployment. The lowering line permits lowering the pack below the parachutist prior to landing to mitigate potential damage to personnel and weapons.

(g) Case, Parachutist, s Individual Weapons, M-1950. The parachutist's individual weapons case is used by the parachutist to carry individual and crew served weapons. A quick release snap fastener secures the case to the parachutist's harness and two tapes which are tied to the case and to the parachutist keep the case from swaying when the parachute deploys.

(h) Case, Parachutist’s Weapon and Individual Equipment. This is a general purpose item used by the parachutist to carry designated combat equipment. Adjustable carrying straps permit the container to be carried in the same manner as a field pack. When rigged for jumping, the pack is encased in the harness.

(i) Jump Pack, Stinger Missile. The pack is designed to carry one Stinger missile round and is attached to the left side of the parachutist's harness. Prior to landing the pack is vertically suspended beneath the parachutist with a standard lowering line. A foam cap protects the weapon during impact.

(j) Parachutist's Individual Equipment Rapid Release. This release assembly is primarily intended for use with the AIRPAC containers described in (k) and (l) below, but is also compatible with all existing containers. It provides a universal release of equipment containers carried by the parachutist.

(k) Container, Aerial Delivery, General Purpose, Individual Equipment. Together with the container described in (1) below, this item is part of a system designed to carry a variety of the soldier's weapons and equipment. This container is front mounted, and will accommodate a rucksack, ammunition, and other, smaller items. It is adjustable to conform to the items carried.

(l) Container, Aerial Delivery, Weapons and Equipment, Adjustable. This side mounted general purpose container is designed to accommodate larger and longer equipment items carried by the parachutist, such as individual weapons, anti-tank weapons, antennas, skies or other bulky items. Up to 40 lbs may be carried in this container.

CHAPTER 2

UNIT MAINTENANCE

PAGE

Section I. REPAIR PARTS; TOOLS; SPECIAL TOOLS; TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT (TMDE); AND SUPPORT 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 TOOL, TMDE, AND SUPPORT EQUIPMENT. The tool and test equipment requirements required for the maintenance of the Personnel Troop Parachute Ancillary Equipment are listed in Appendix B, Section III., Tool and Test Equipment List.

2-3. REPAIR PARTS. Repair parts for the Personnel Troop Parachute Ancillary Equipment are listed and illustrated in Appendix C, Repair Parts and Special Tools List.

Section II. LUBRICATION INSTRUCTIONS

2-4. GENERAL. Apply a limited amount of "zipper ease" lubricant to the slide fastener on any ancillary equipment component when it becomes difficult to operate.

Section III. SERVICE UPON RECEIPT

2-5. UNPACKING. When items are received, inspect packaging before unpacking and note any obvious damage. If package is ripped, torn or exhibits evidence of water or heat damage, do not accept item. Prepare a Standard Form 368, Quality Deficiency Report as described in paragraph 1-10.

2-6. SHIPPING MATERIAL. When unpacking equipment, avoid ripping and tearing packaging materials more than necessary. Save crates, boxes and barrier material so that it can be re-used.

2-7. CHECKING UNPACKED EQUIPMENT. Check unpacked equipment for physical damage and evidence of water stains. Check that unpacked equipment is complete and all parts are present. Prepare a Standard Form 368, Quality Deficiency Report as described in paragraph 1-10 if damage or shortages are noted. The unpacked items will be inspected by a qualified rigger (MOS-43E) . The inspection performed will be a technical/rigger type as outlined in paragraph 2-14.

Section IV. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

2-8. GENERAL. Always keep in mind the WARNINGS and CAUTIONS when you perform your checks and services. PMCS is performed upon receipt and quarterly thereafter. Record all defects found during performance of PMCS and, if applicable, the steps taken to correct them, on DA Form 2404, Equipment Inspection and Maintenance Worksheet. Instructions for reporting/correcting noted deficiencies are provided in DA PAM 738-750.

2-9. UNIT PMCS PROCEDURES. Table 2-1 lists the specific PMCS that must be performed by unit maintenance personnel on a quarterly schedule. If your equipment fails to operate, troubleshoot as described in Section V.

a. Purpose. PMCS is accomplished to insure that the equipment is ready for use at all times and all deficiencies are corrected promptly. These checks and services are designed to help you find and correct defects before the equipment is damaged or fails to operate.

b. The "ITEM" column of Table 2-1 indicates sequence of inspection. Use this column to obtain the numbers for the "TM Item No." column of DA Form 2404.

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

d. The "ITEM TO CHECK/SERVICE" column identifies and illustrates the item.

e. The "PROCEDURE" column of Table 2-1 tells you the procedure by which the inspection is to be performed and the expected results are described.

Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
1	Before	Extension Static Line	Check entire length of extension for loose or broken stitches, missing or damaged snap hook or safety pin/lanyard. Look for frays, cuts or tears in webbing and sleeve	Cuts, tears or frayed areas. Snap hook or pin lanyard damaged or missing.

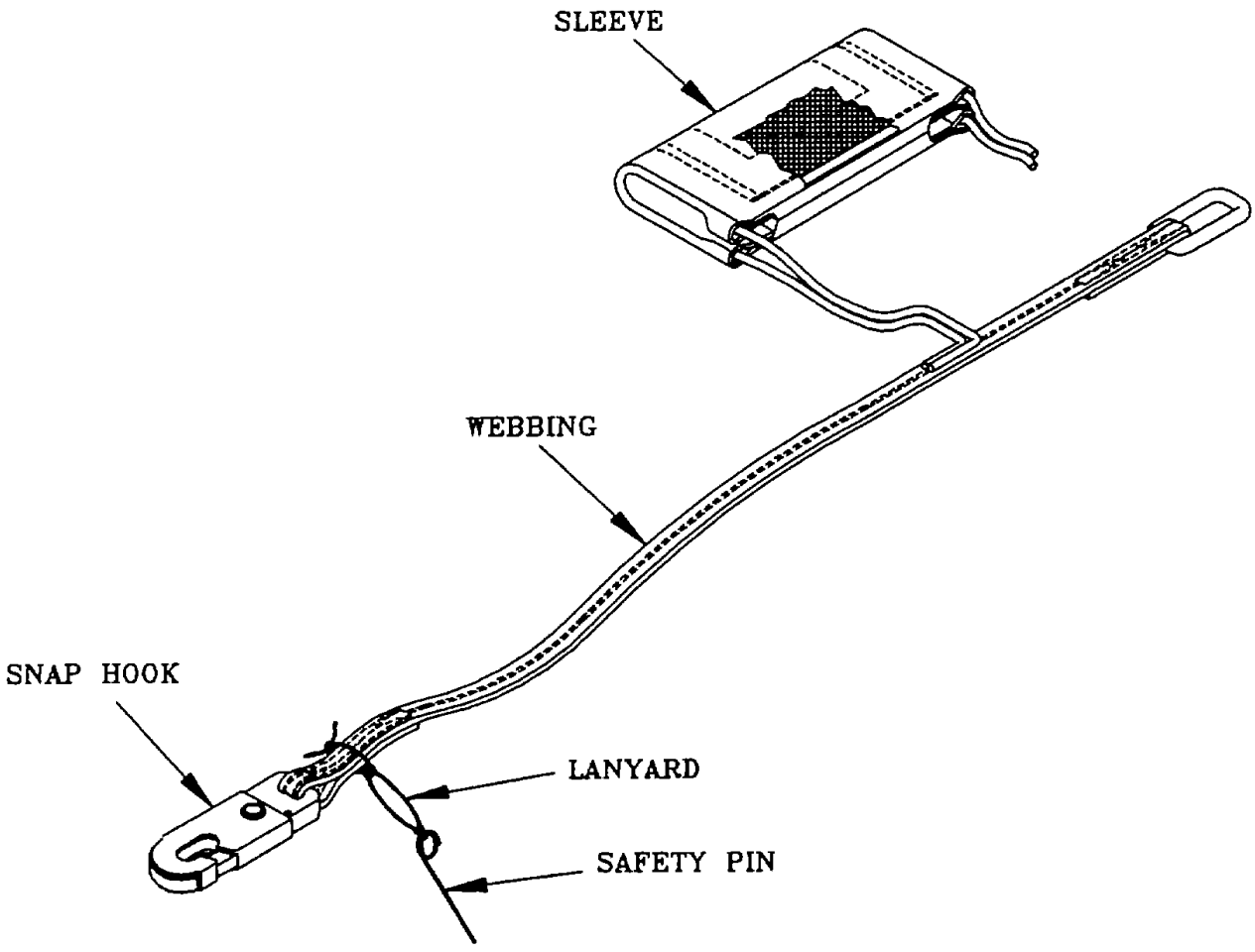
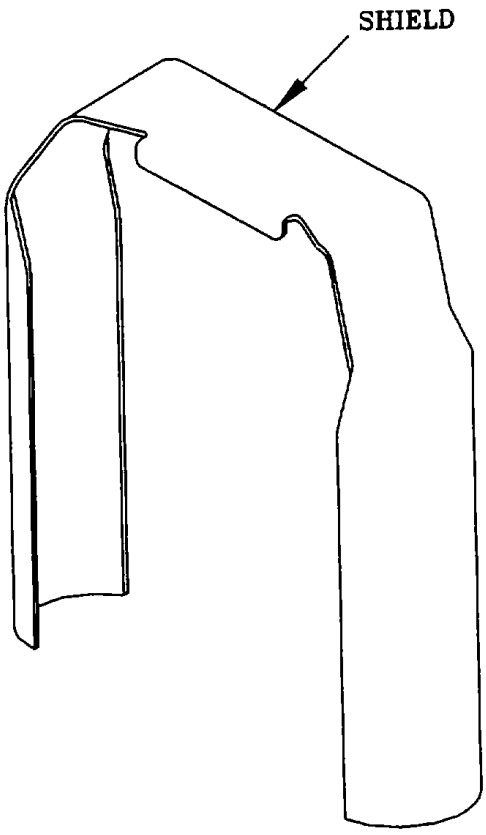


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
2	Before	Accessory Set, SCUBA	Check waistband, support and harness backstraps for frays, cuts or tears and missing hardware. Check for open or loose stitches. Check shield for deformation, burrs or sharp edges.	Cuts, frays or tears in any strap. missing hardware on straps. Shield damaged.



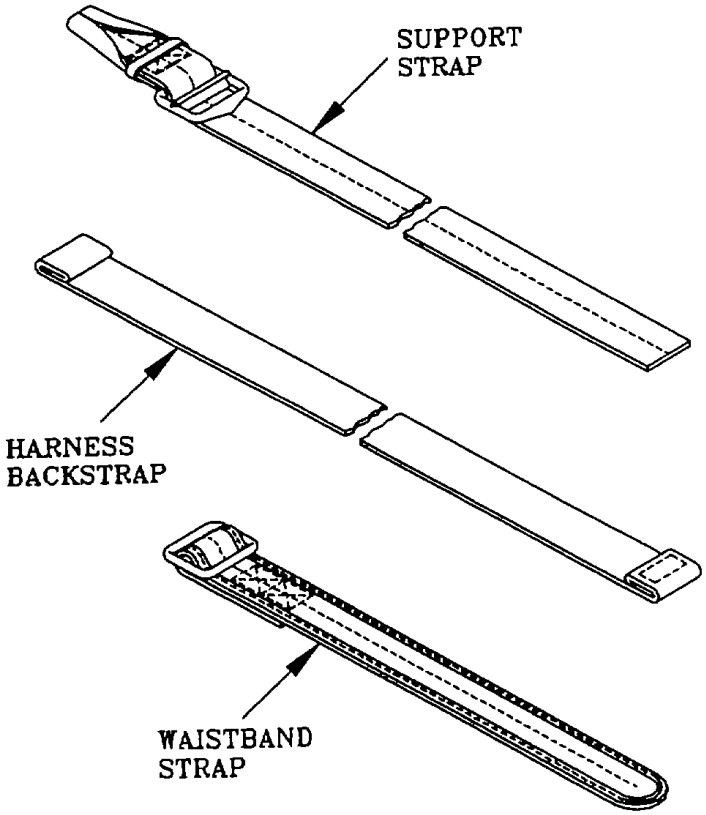


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
3	Before	Line Lowering	Check for loose or open stitches, worn, frayed, or other webbing damage. Missing or damaged snap hook or other hardware. Damaged nylon rope.	Cuts, tears or frays in webbing or nylon rope. Missing or damaged hardware.

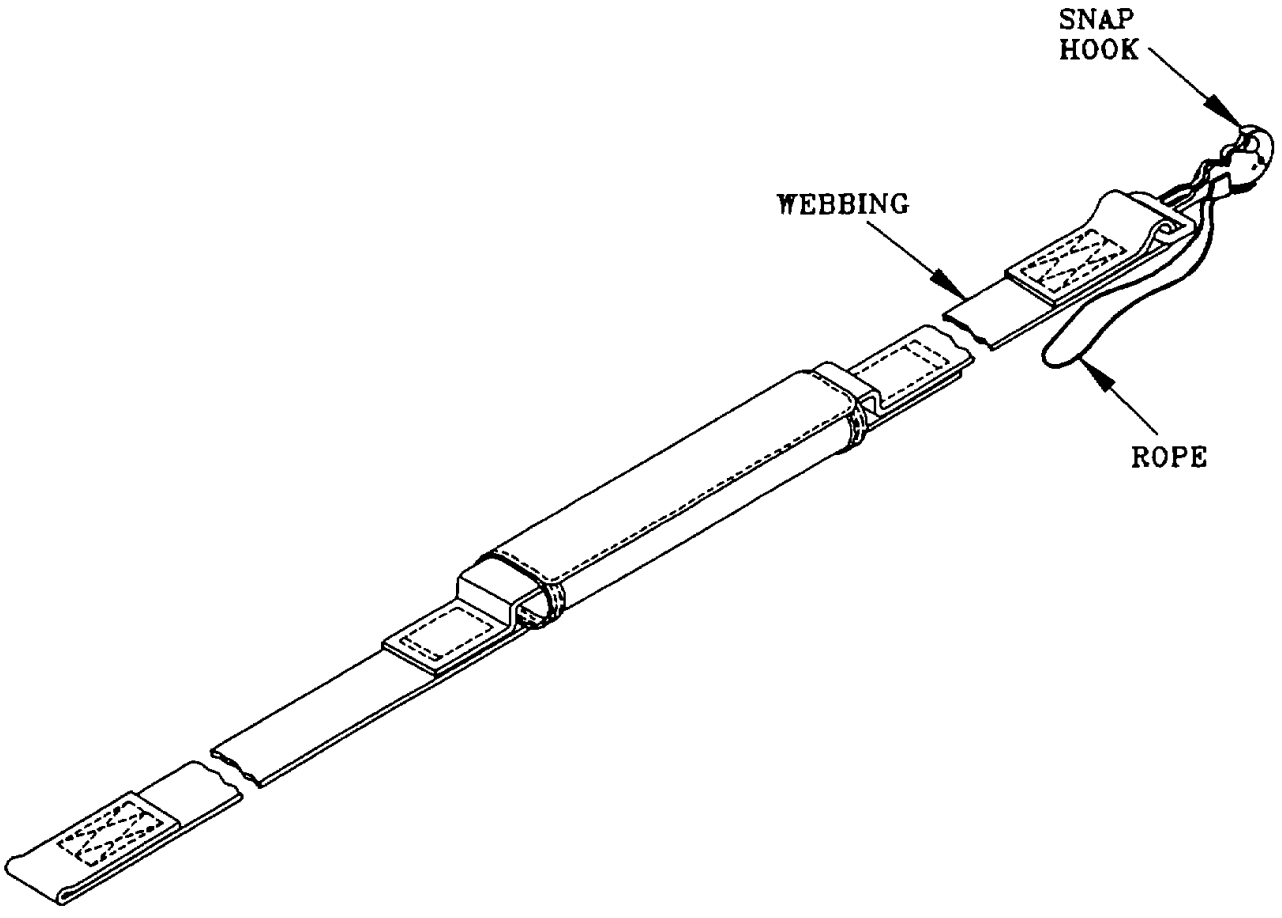


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
4	Before	Jump Pack Dragon Missile	Missing parts, loose or broken stitches, frayed, worn or cuts, tears, and holes in webbing. Bent or otherwise damaged hardware.	Cuts, tears frayed area in webbing. Missing or damaged hardware.

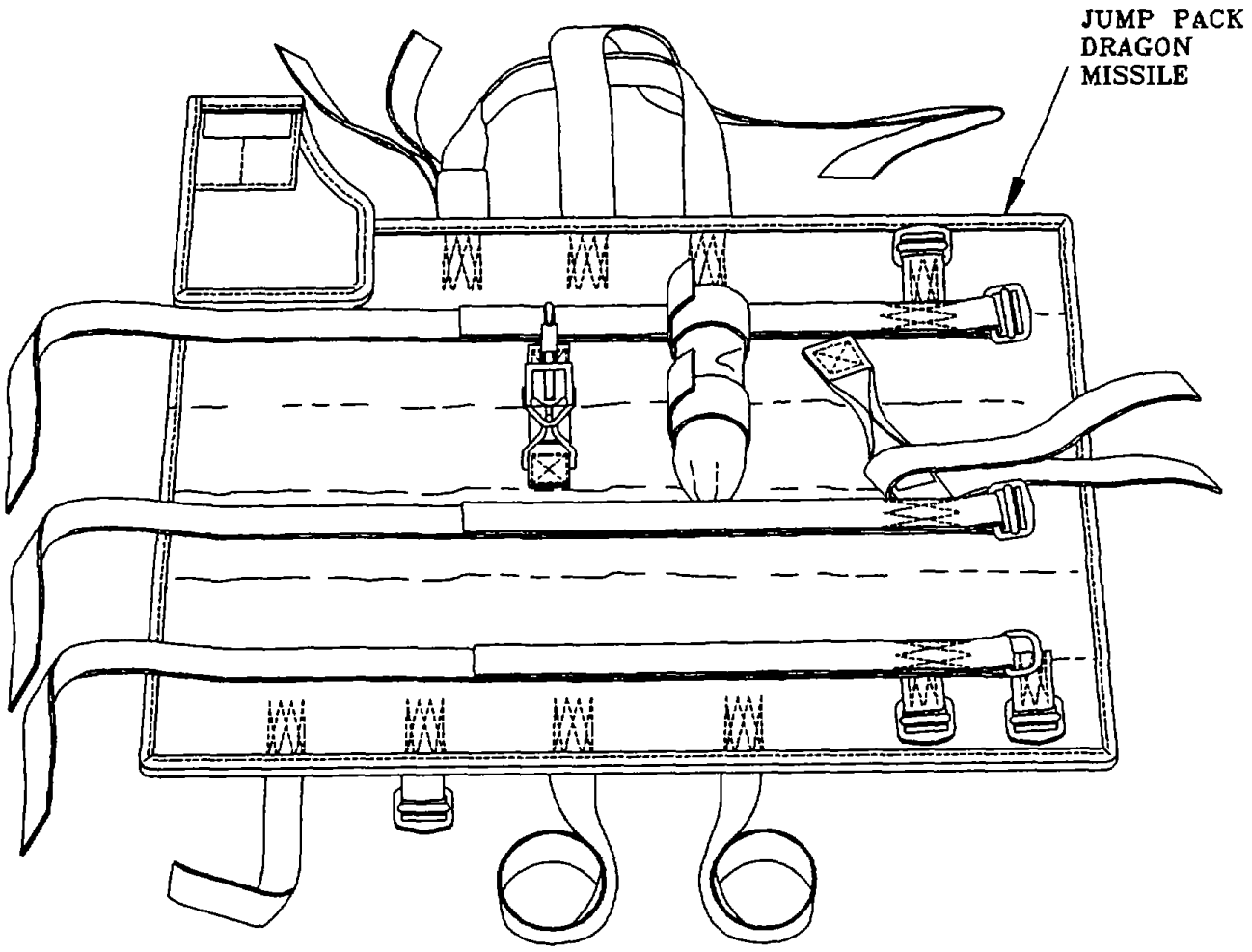


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
5	Before	Harness, Single Point Release	Loose or broken stitches and frayed, worn or cut webbing. Bent or damaged hardware.	Cuts, tears and frayed areas in webbing. Missing or damaged hardware.

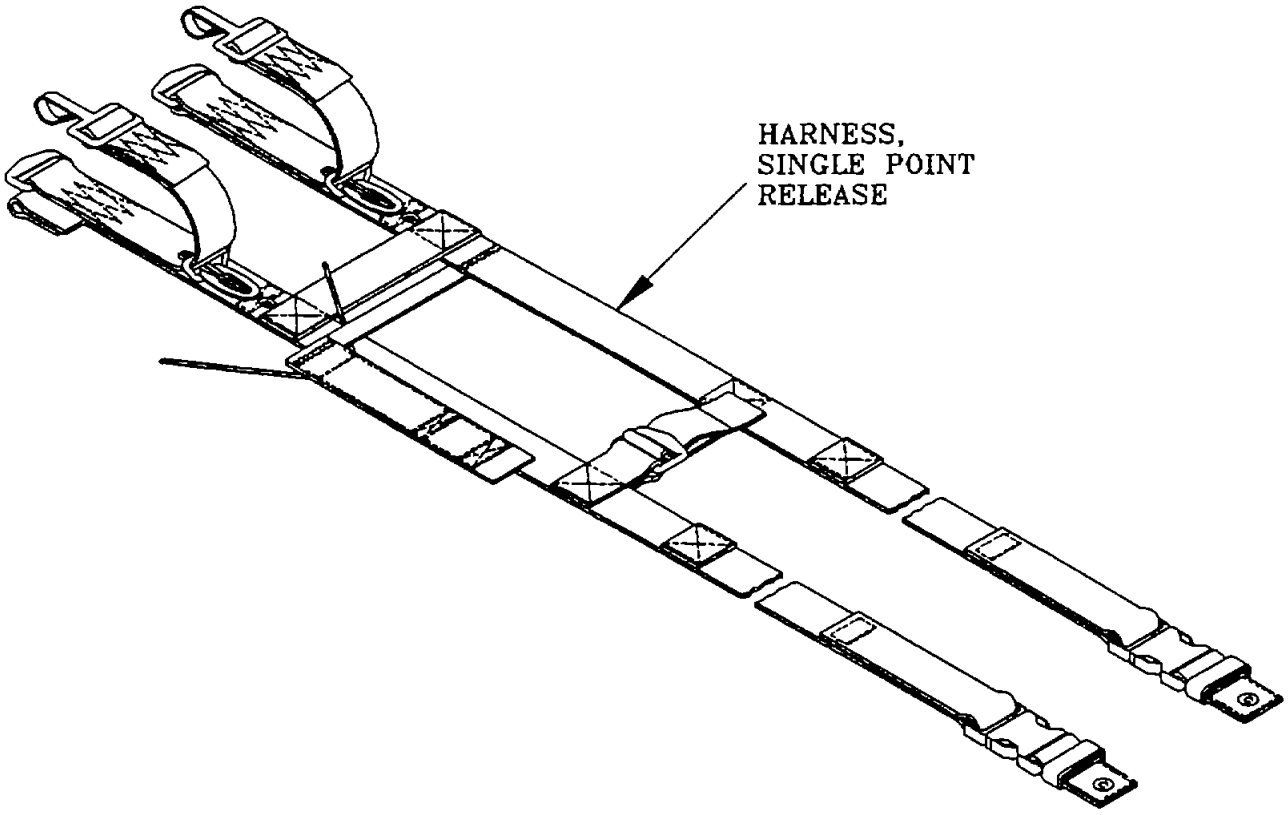


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
6	Before	Pack, Assembly, AT4	Loose or broken stitches or frayed, worn and cut areas in webbing. Bent, missing or damaged hardware.	Open seams, cuts, tears or frays in webbing. Missing or damaged hardware.

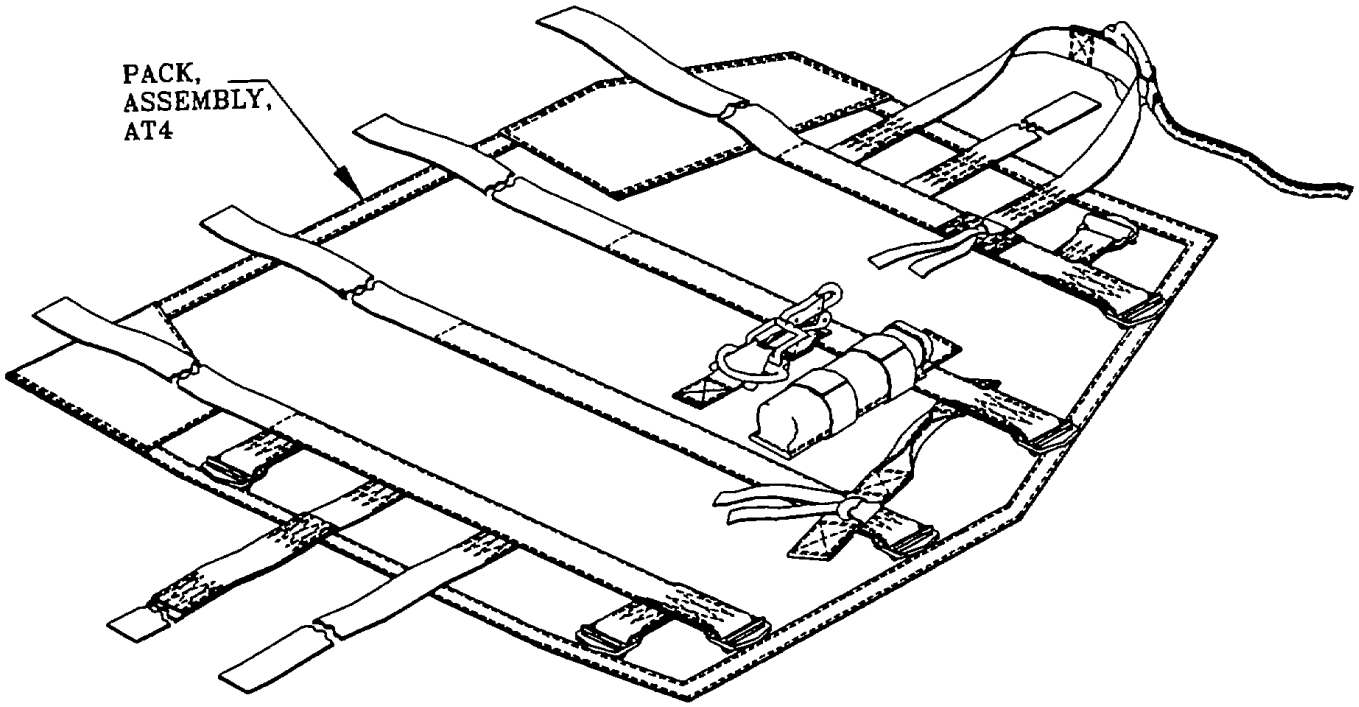


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
7	Before	Case Para-chutist's Individual Weapon	Loose or broken stitches or frayed, worn, and cut areas in fabric. Bent, missing or damaged hardware.	Open seams, cuts, tears or frays in fabric. Missing or damaged hardware.

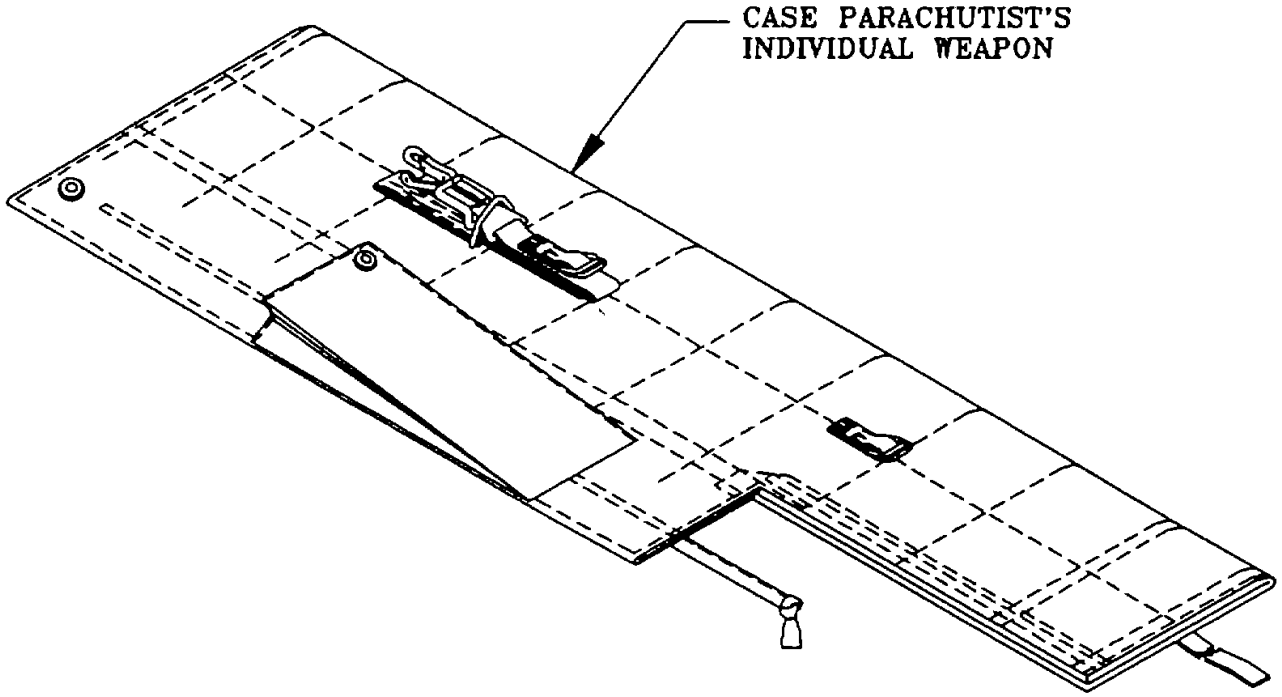


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
8	Before	Case Parachutist's Weapon and Individual Equipment	Loose or broken stitches or frayed, worn, and cut areas in fabric. Bent, missing or damaged hardware.	Open seams, cuts, tears or frays in fabric. Missing or damaged hardware.

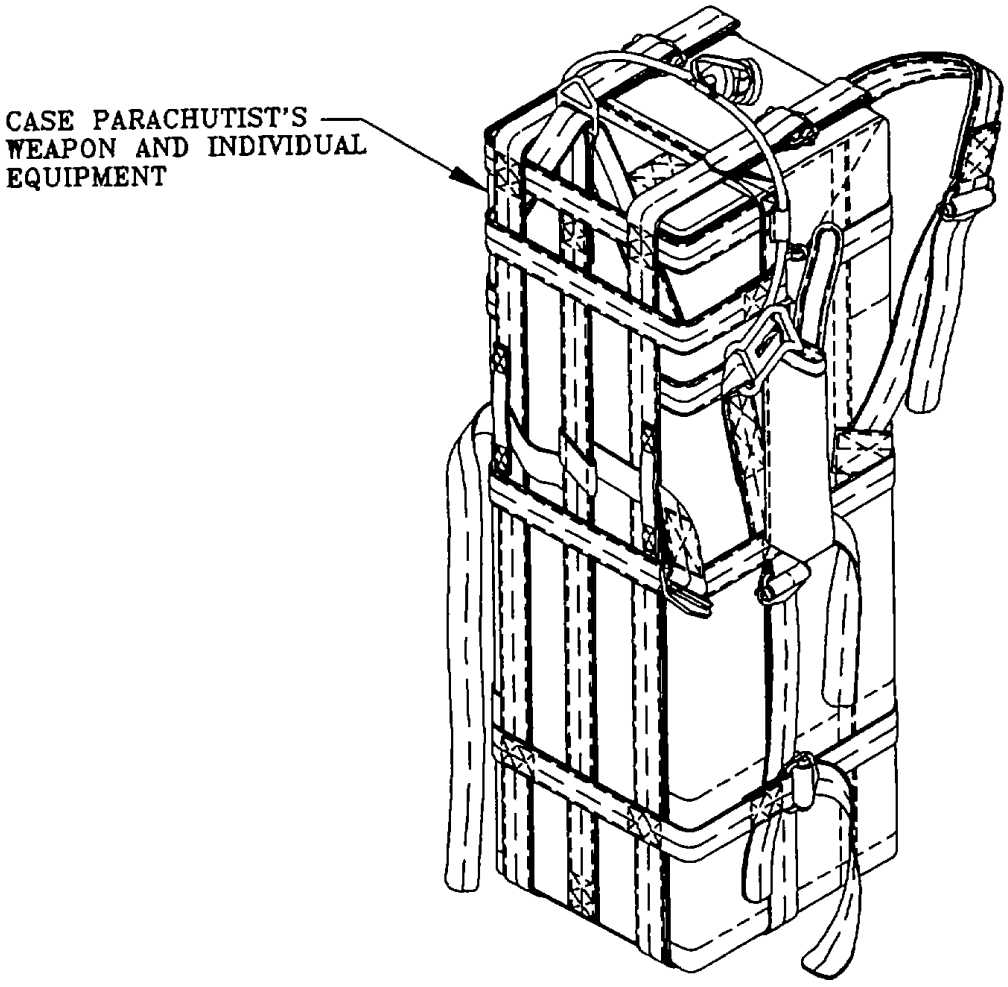


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
9	Before	Jump Pack Stinger Missile	Loose or broken stitches or frayed, worn, and cut areas in fabric. Bent, missing or damaged hardware.	Open seams, cuts, tears or frays in fabric. Missing or damaged hardware.

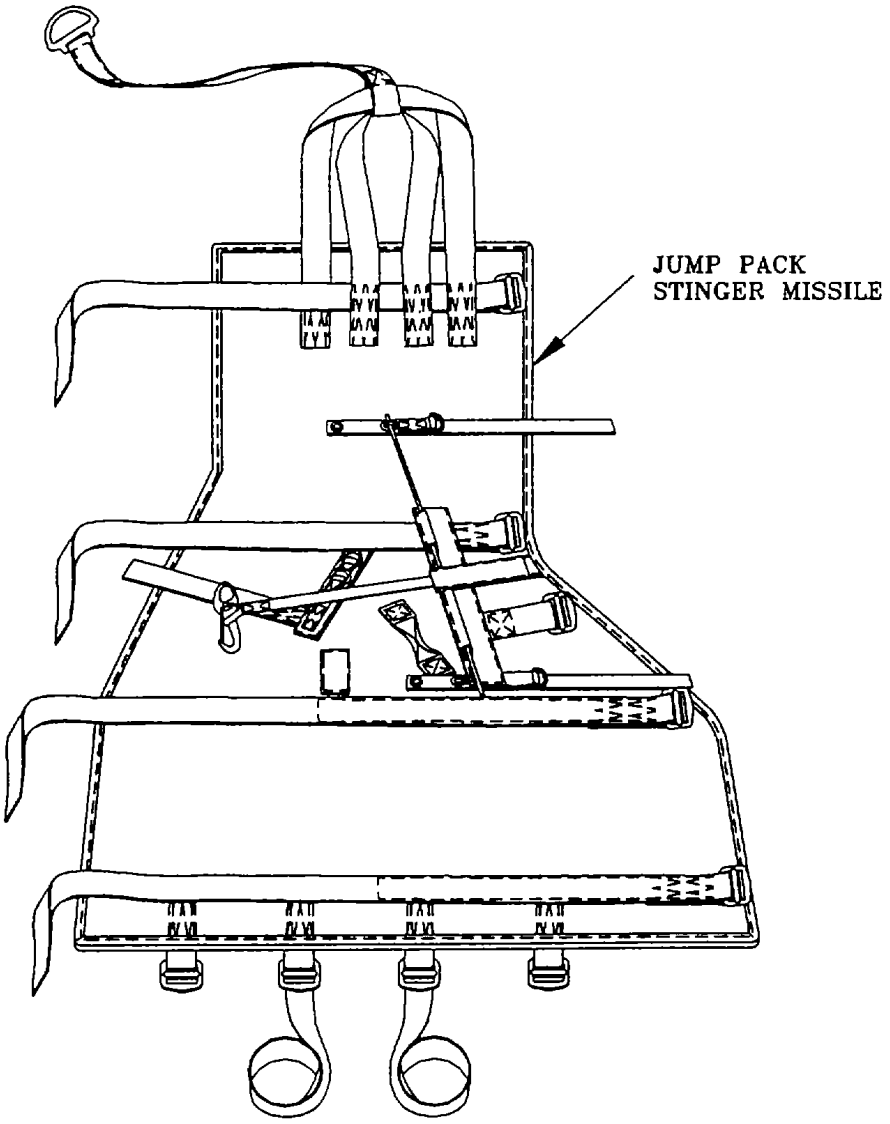


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) QUARTERLY-Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
10	Before	Release Assembly, Parachu-tist's Individual Equipment	Loose or broken stitches or frayed, worn, and cut areas in fabric. Bent, missing or damaged hardware.	Open seams, cuts, tears or frays in fabric. Missing or damaged hardware.

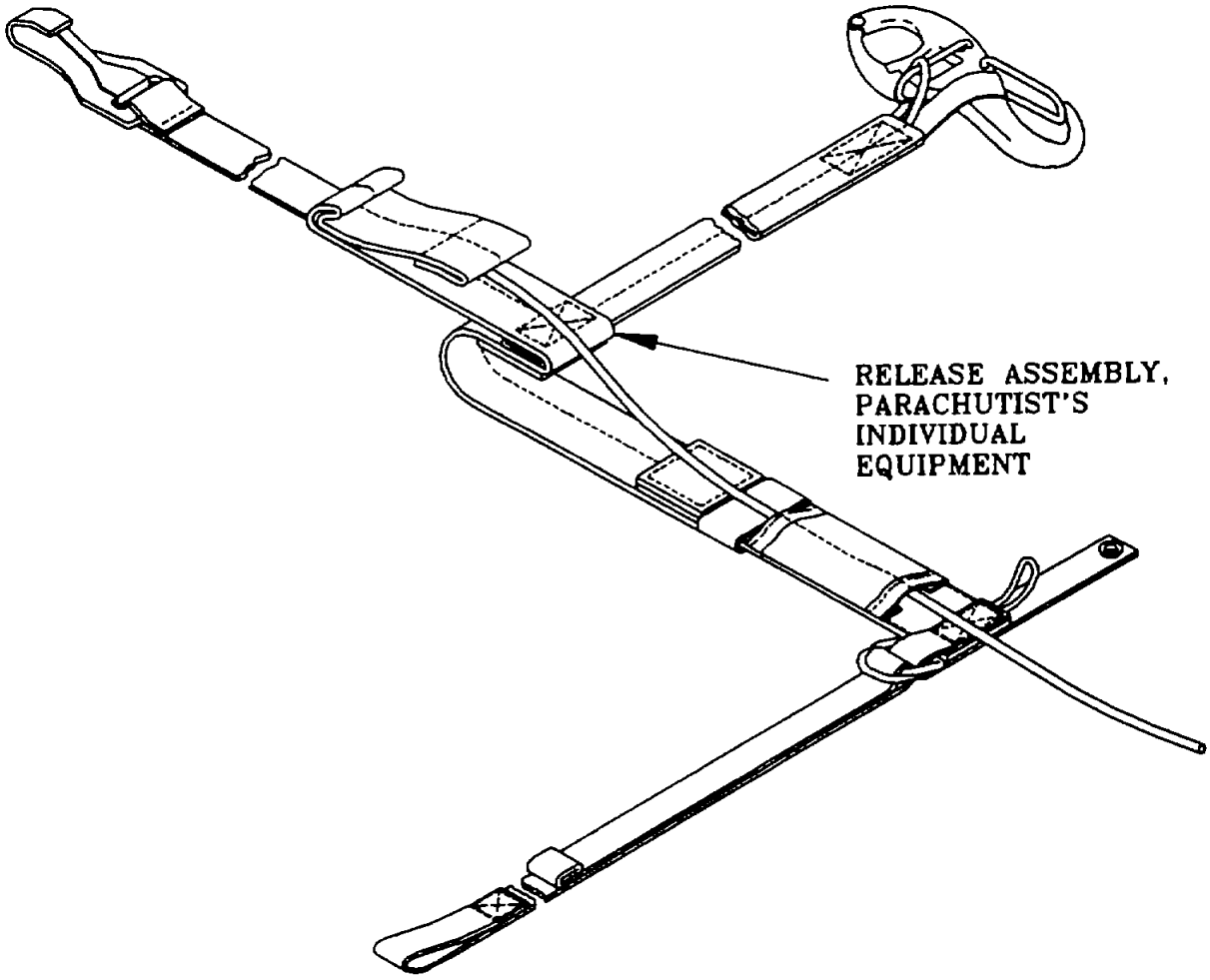


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) QUARTERLY-Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
11	Before	Container, Aerial Delivery, Weapons & Equipment, Adjustable	Loose or broken stitches or frayed, worn, and cut areas in fabric. Bent, missing or damaged hardware.	Open seams, cuts, tears or frays in fabric. Missing or damaged hardware.

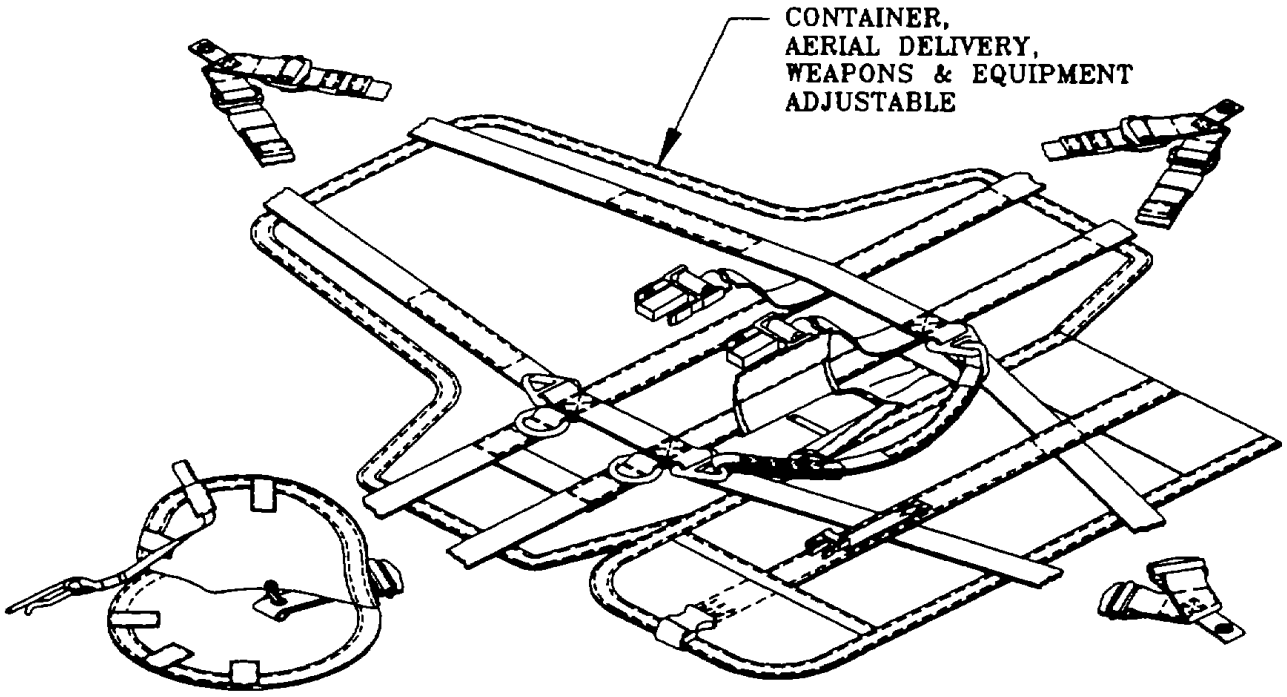


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) QUARTERLY-Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
12	Before	Container, Aerial Delivery, General Purpose, Individual Equipment	Loose or broken stitches or frayed, worn, and cut areas in fabric. Bent, missing or damaged hardware.	Open seams, cuts, tears or frays in fabric. Missing or damaged hardware.

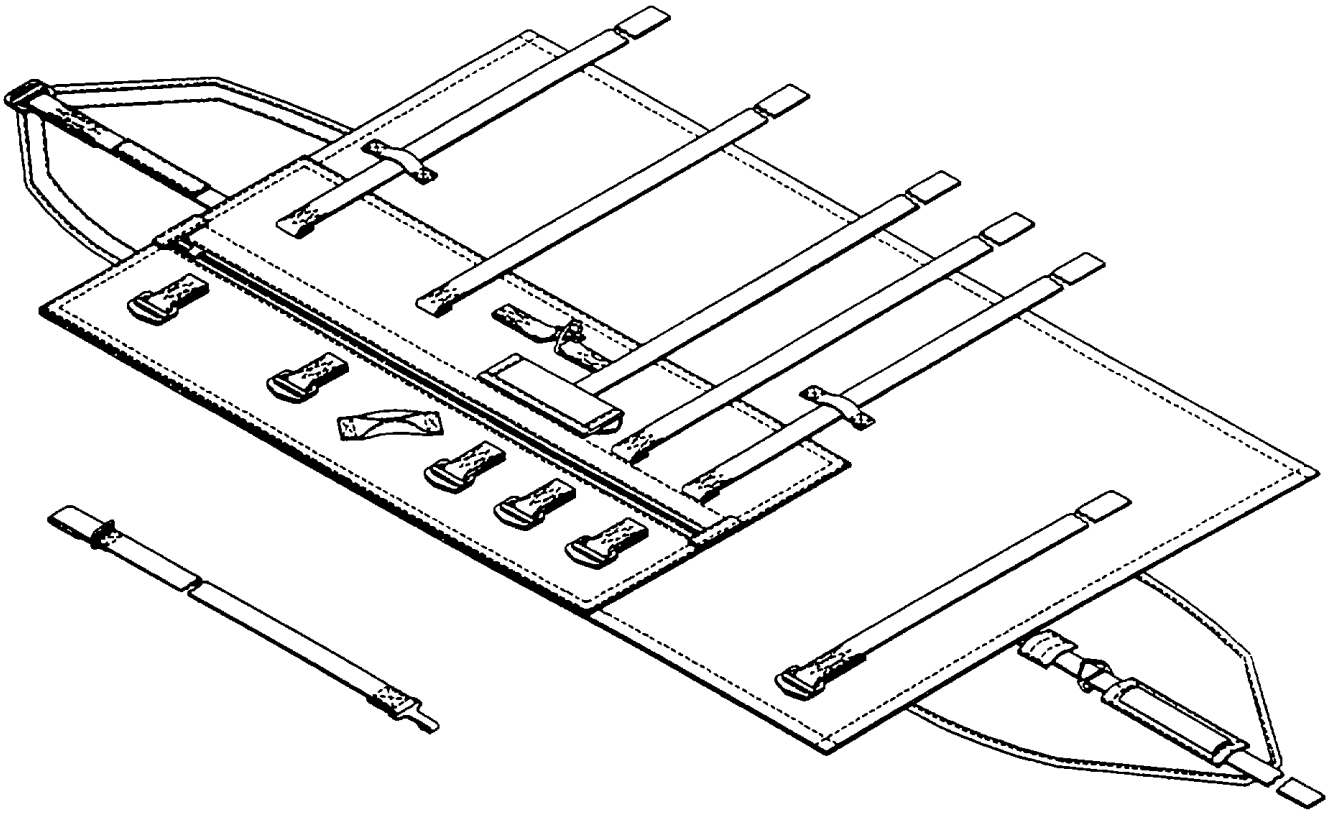


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
13	After	Extension Static Line	Check entire length of extension for loose or broken stitches, missing areas. or damaged snap hook or safety pin/lanyard. Look for frays, cuts or tears in webbing and sleeve	Cuts, tears or frayed Snap hook or pin lanyard damaged or missing.

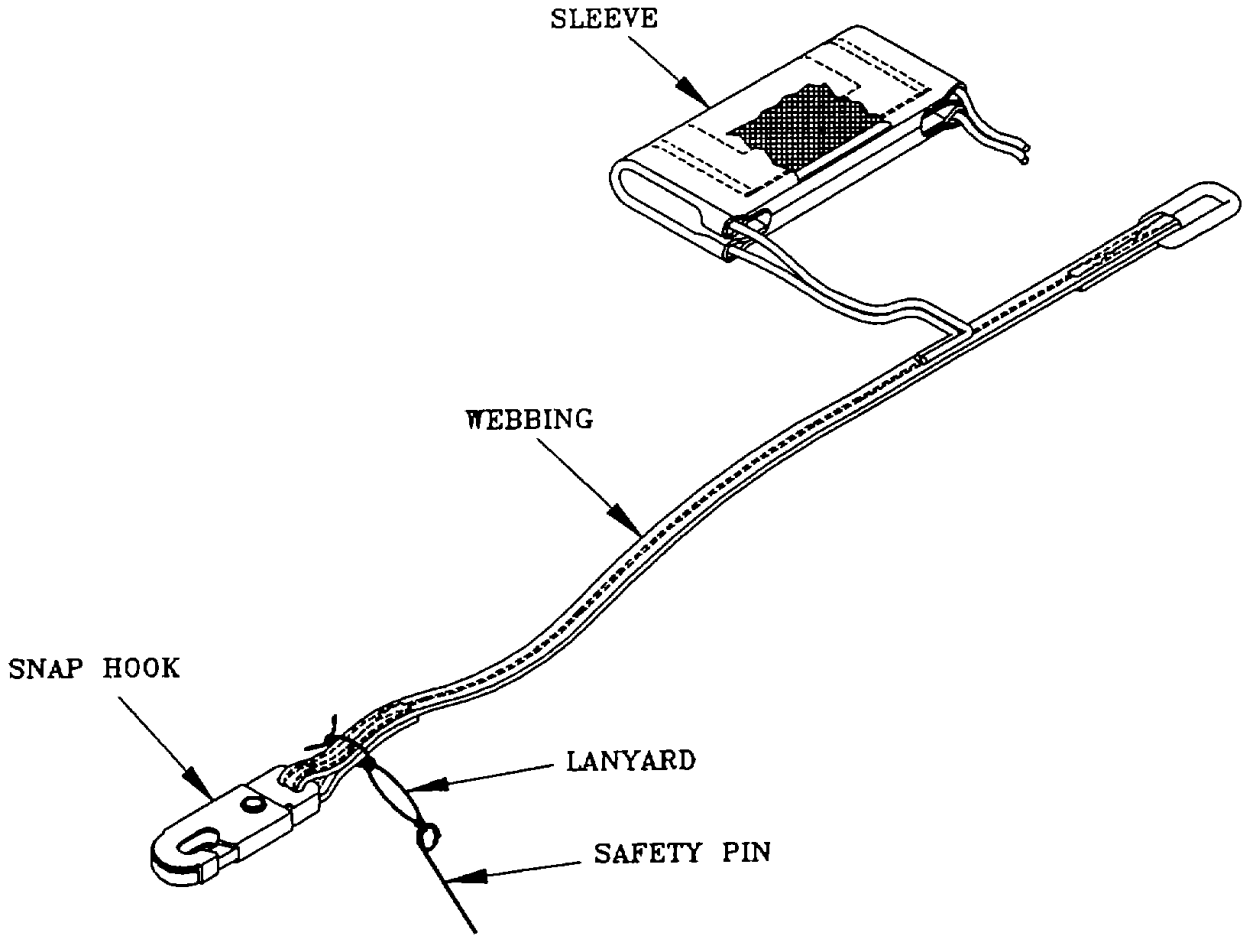
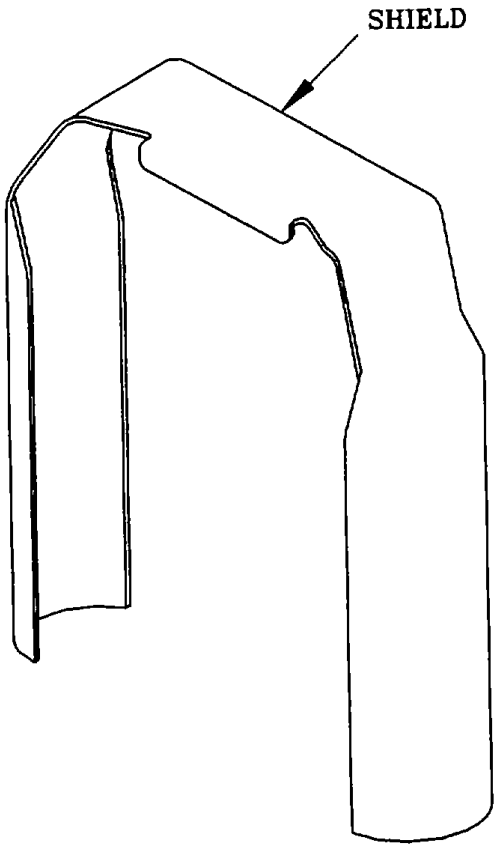


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
14	After	Accessory Set, SCUBA	Check waistband, support and harness backstraps for frays, cuts or tears and missing hardware. Check for open or loose stitches. Check shield for deformation, burrs or sharp edges.	Cuts, frays or tears in any strap. missing hardware on straps. Shield damaged.



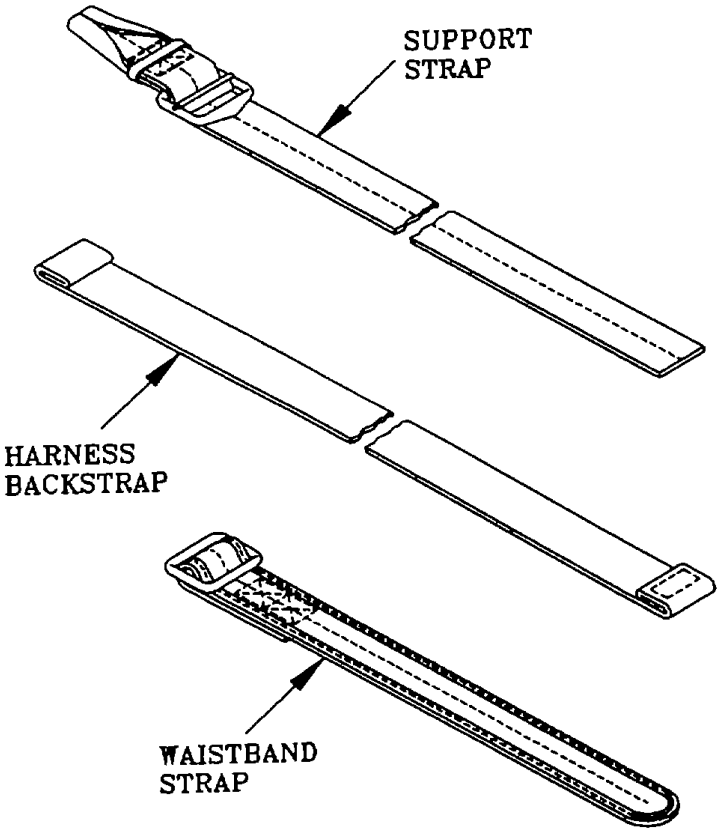


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
15	After	Line Lowering	Check for loose or open stitches, worn, frayed, or other webbing damage. Missing or damaged snap hook or other hardware. Damaged nylon rope.	Cuts, tears or frays in webbing or nylon rope. Missing or damaged hardware.

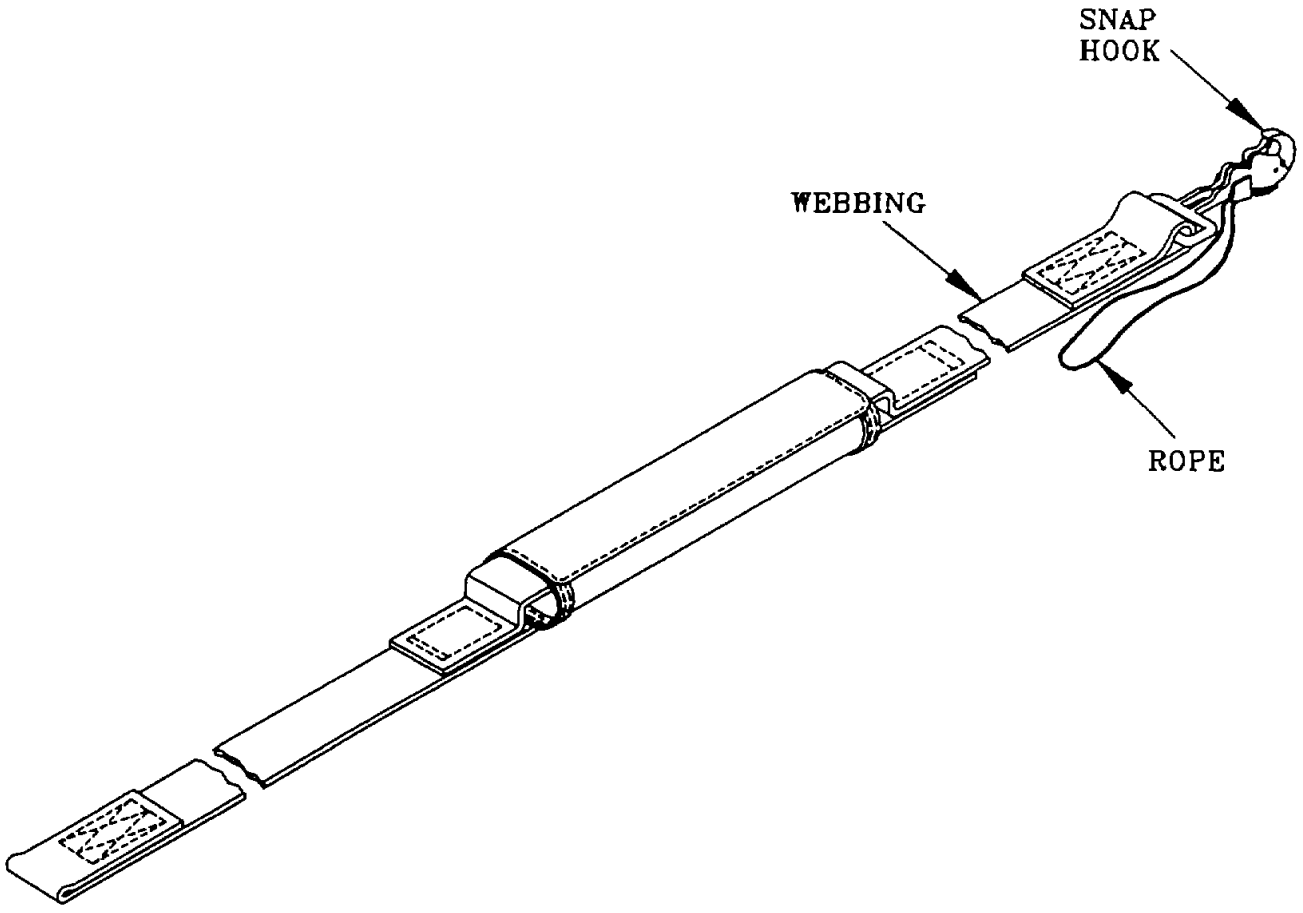


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
16	After	Jump Pack Dragon Missile	Missing parts, loose or broken stitches, frayed, worn or cuts, tears, and holes in webbing. Bent or otherwise damaged hardware.	Cuts, tears frayed area in webbing. Missing or damaged hardware.

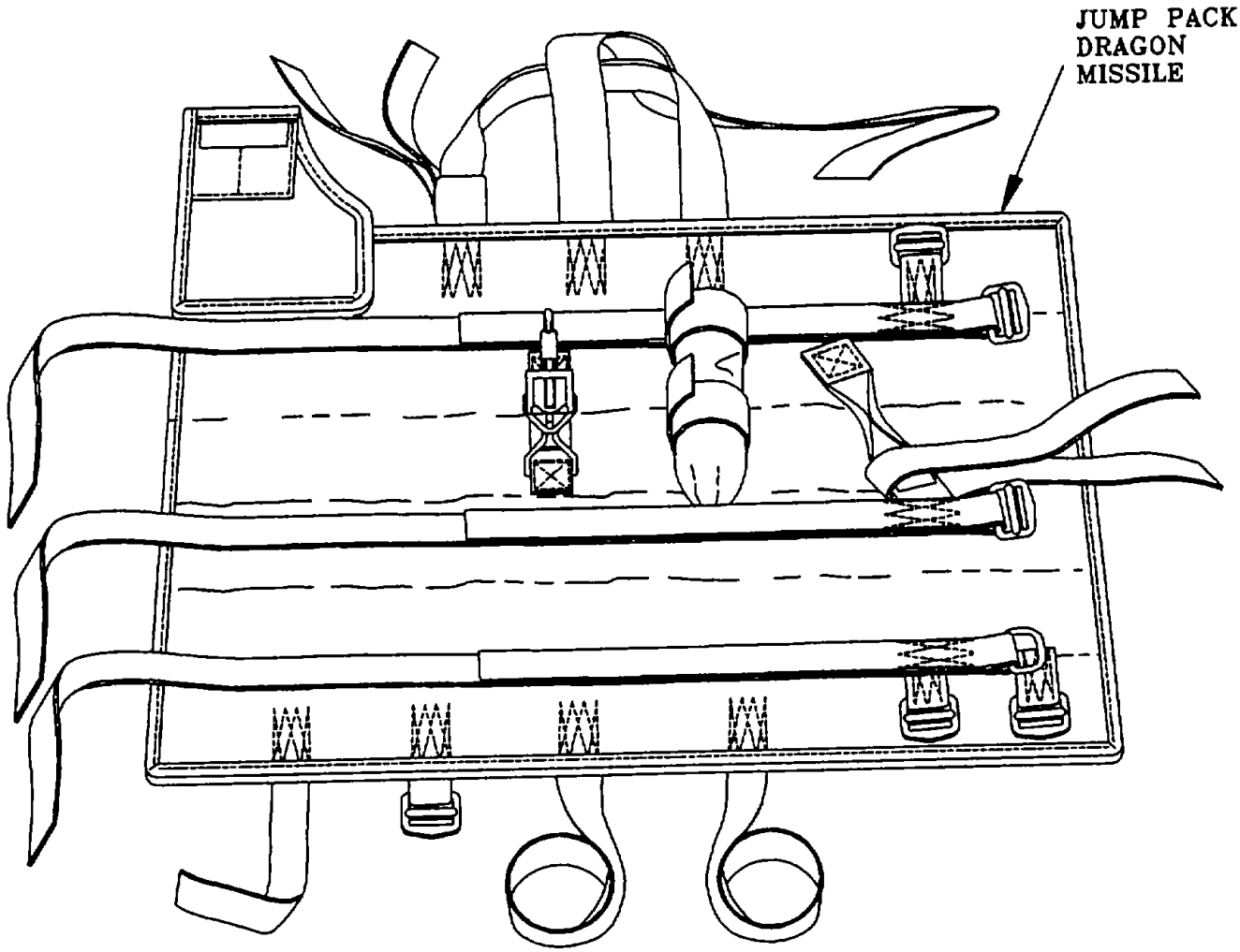


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
17	After	Harness, Single Point Release	Loose or broken stitches and frayed, worn or cut webbing. Bent or damaged hardware.	Cuts, tears and frayed areas in webbing. Missing or damaged hardware.

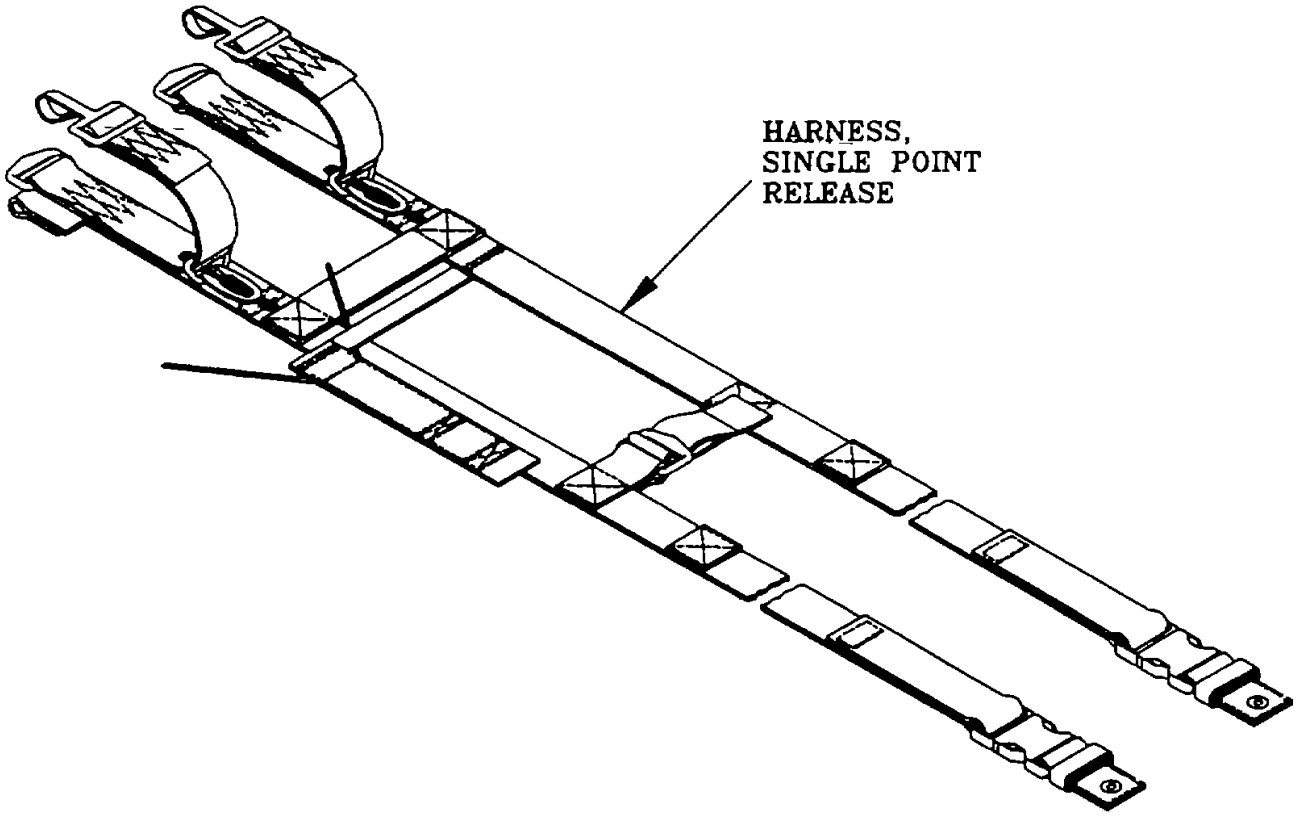


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
18	After	Pack, Assembly, AT4	Loose or broken stitches or frayed, worn and cut areas in webbing. Bent, missing or damaged hardware.	Open seams, cuts, tears or frays in webbing. Missing or damaged hardware.

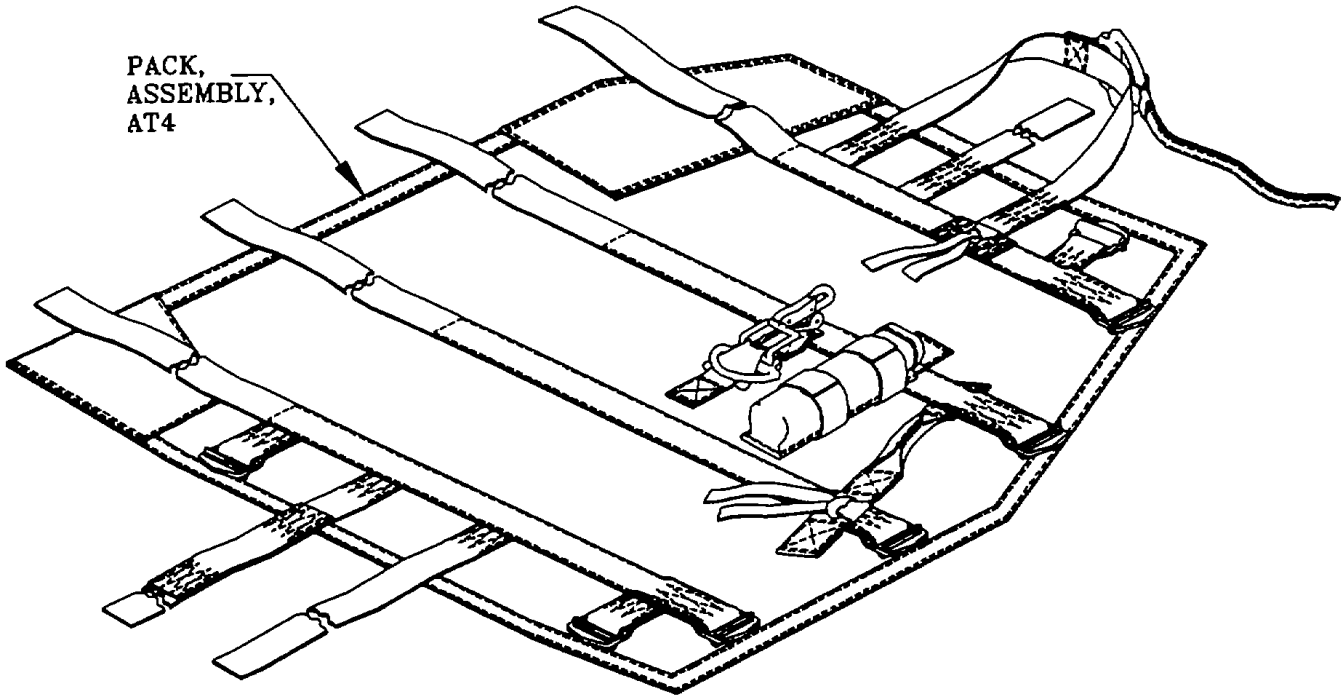


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
19	After	Case Para-chutist's Individual Weapon	Loose or broken stitches or frayed, worn, and cut areas in fabric. Bent, missing or damaged hardware.	Open seams, cuts, tears or frays in fabric. Missing or damaged hardware.

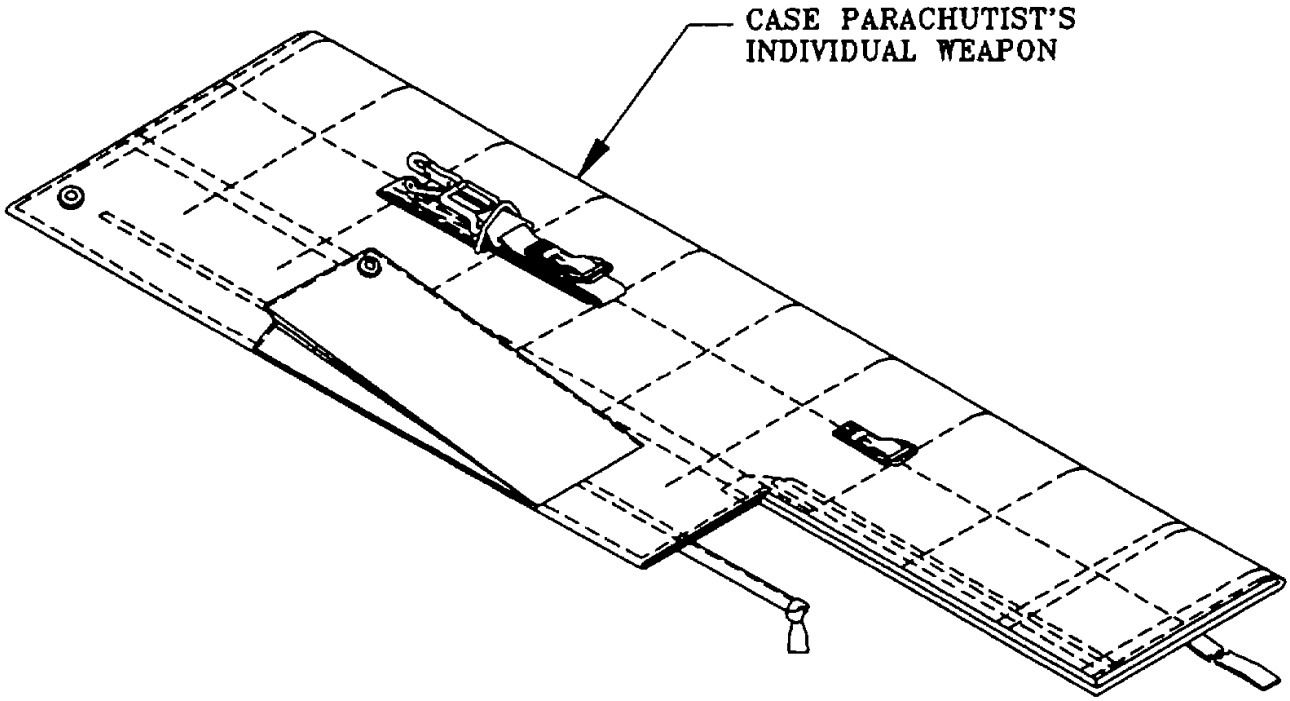


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
20	After	Case Parachutist's Weapon Individual Equipment	Loose or broken stitches or frayed, worn, and cut and areas in fabric. Bent, missing or damaged hardware.	Open seams, cuts, tears or frays in fabric. Missing or damaged hardware.

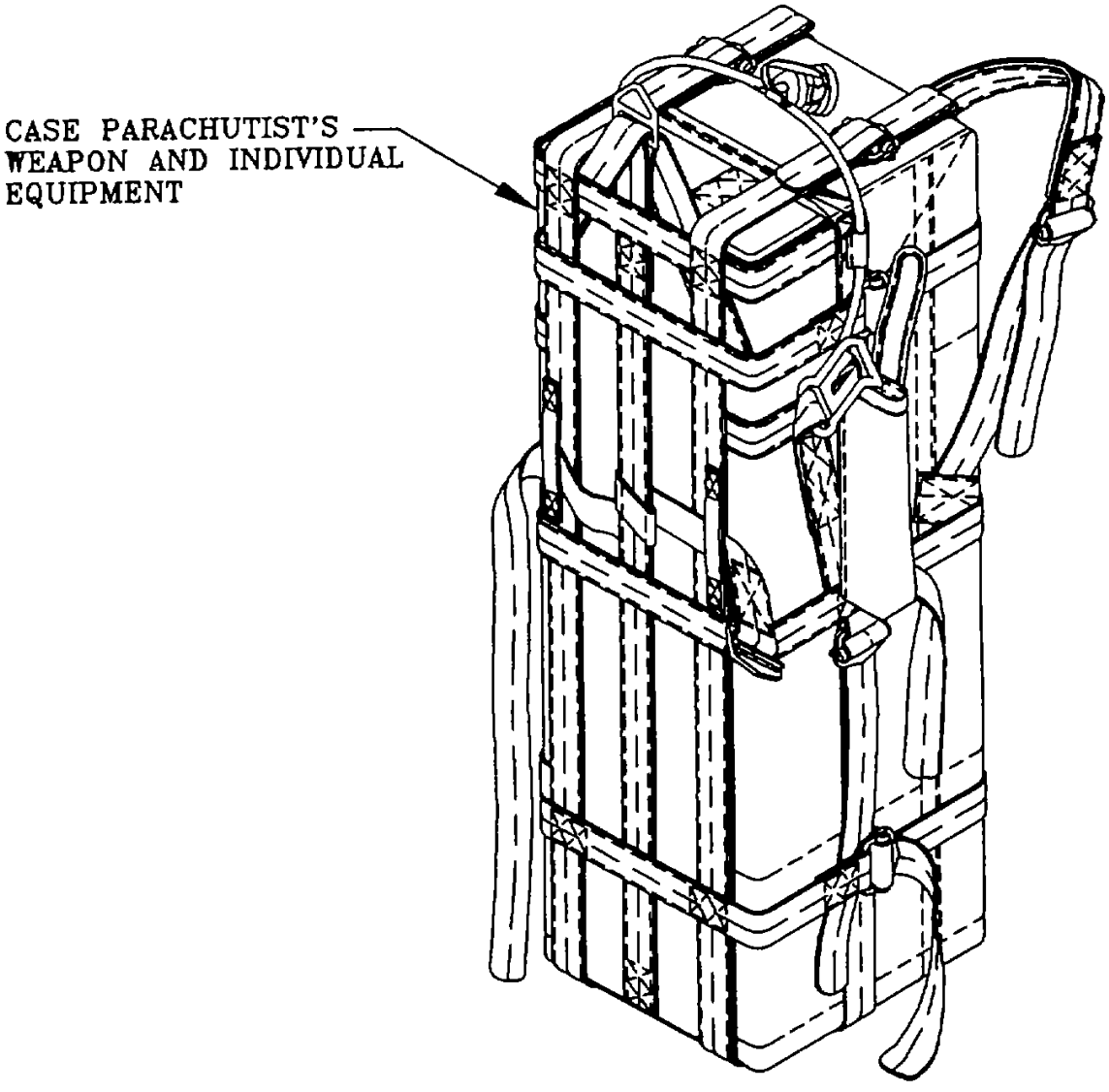


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
21	After	Jump Pack Stinger Missile	Loose or broken stitches or frayed, worn, and cut areas in fabric. Bent, missing or damaged hardware.	Open seams, cuts, tears or frays in fabric. Missing or damaged hardware.

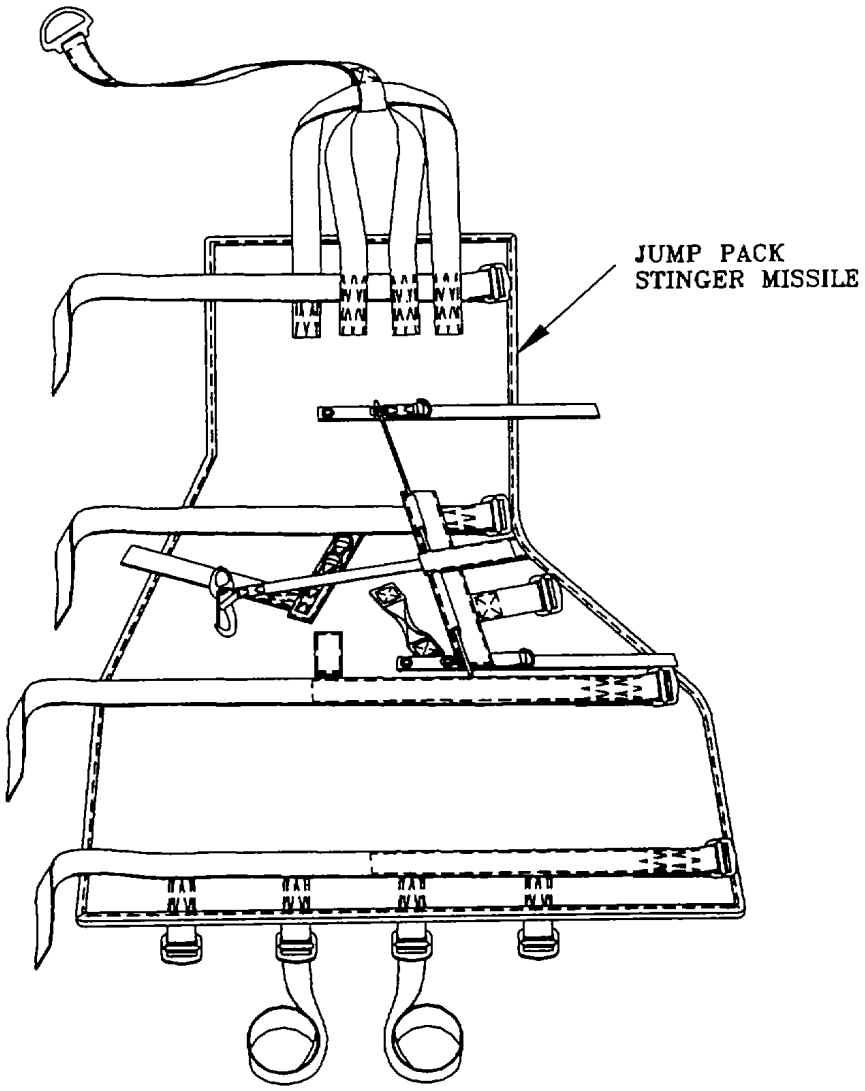


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) QUARTERLY-Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
22	After	Release Assembly, Parachu-tist's Individual Equipment	Loose or broken stitches or frayed, worn, and cut areas in fabric. Bent, missing or damaged hardware.	Open seams, cuts, tears or frays in fabric. Missing or damaged hardware.

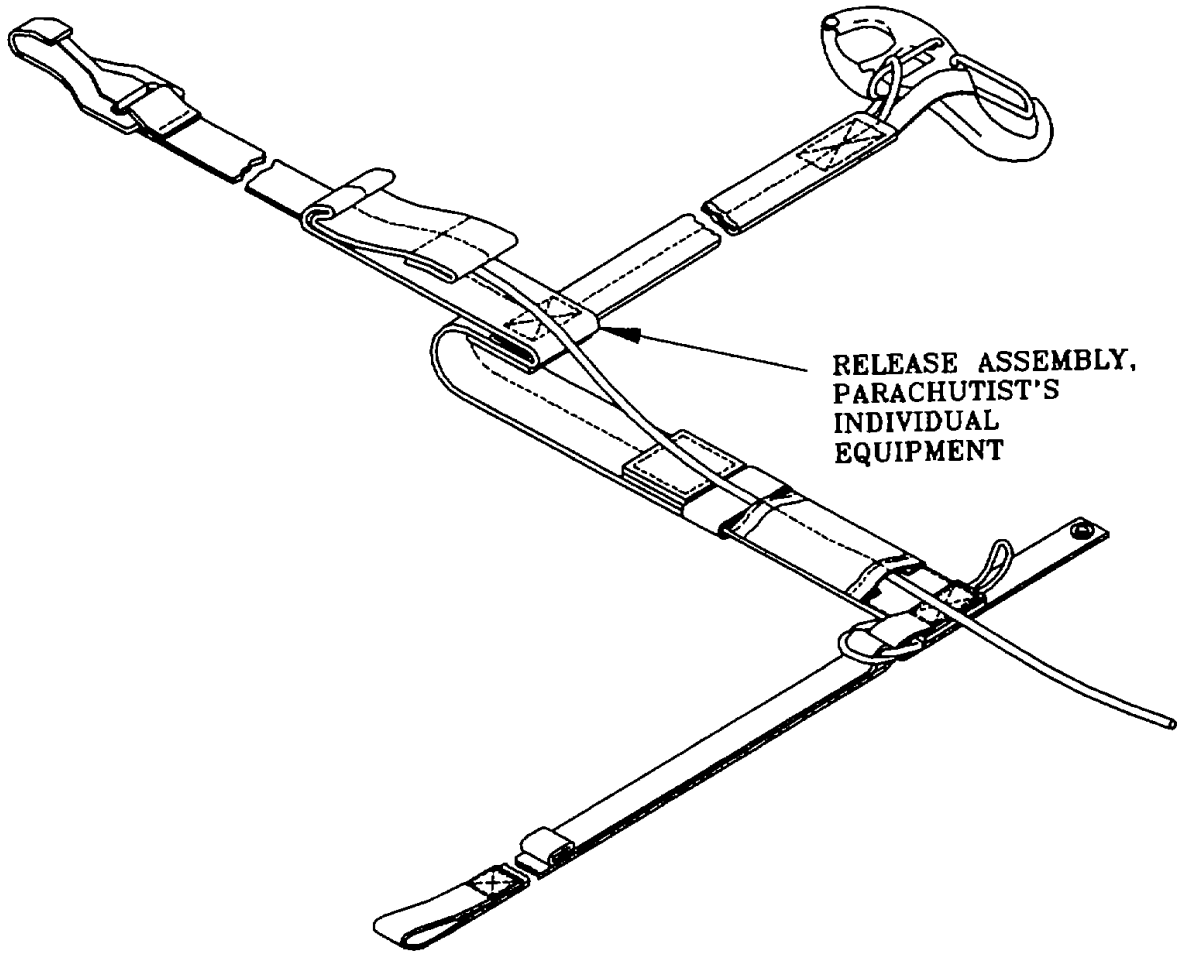


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) QUARTERLY-Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
23	After	Container, Aerial Delivery, Weapons & Equipment, Adjustable	Loose or broken stitches or frayed, worn, and cut areas in fabric. Bent, missing or damaged hardware.	Open seams, cuts, tears or frays in fabric. Missing or damaged hardware.

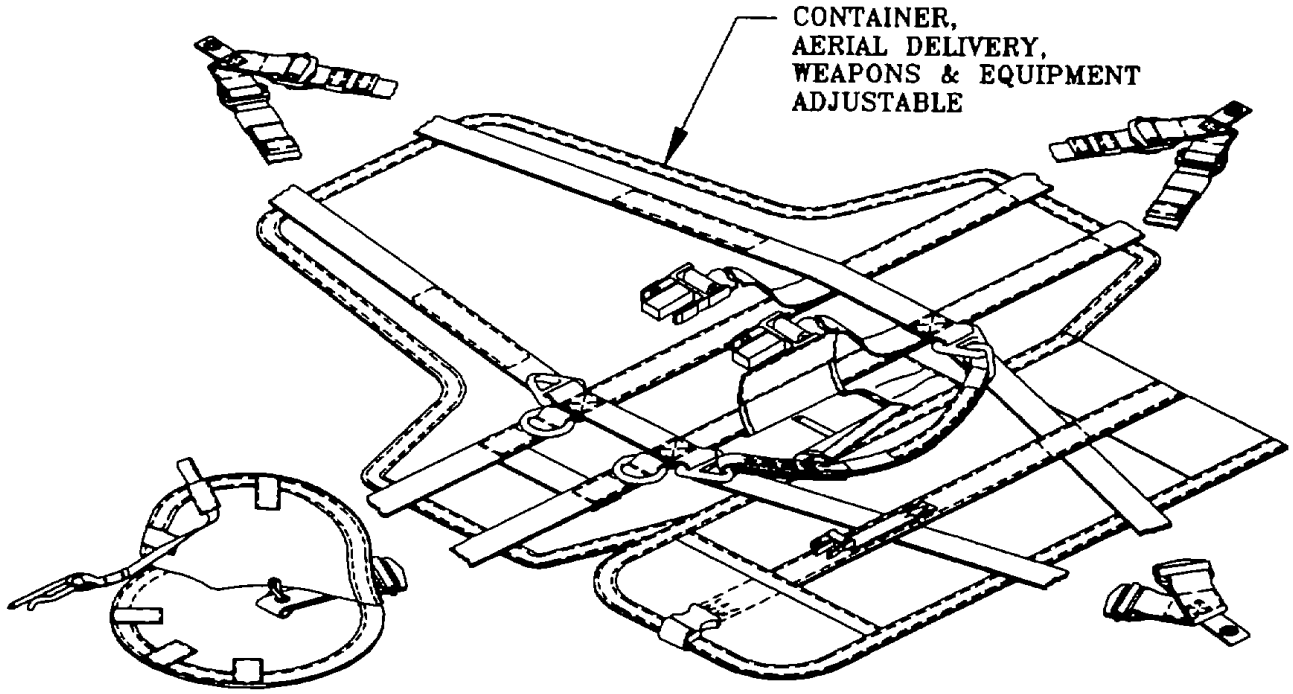
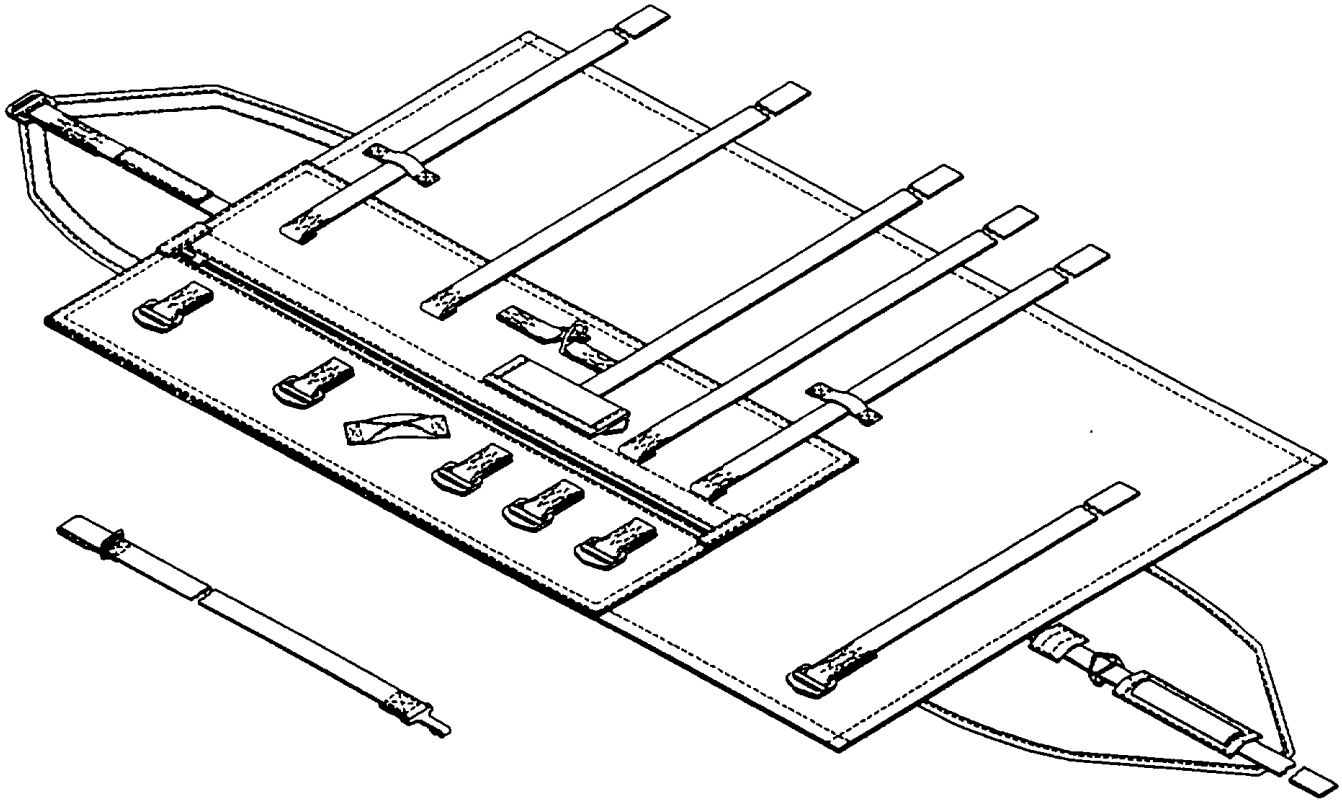


Table 2-1. UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) QUARTERLY-Continued

Item	Interval	Item to Check/ Service	Procedure	Not Fully Mission Capable If:
24	After	Container, Aerial Delivery, General Purpose, Individual Equipment	Loose or broken stitches or frayed, worn, and cut areas in fabric. Bent, missing or damaged hardware.	Open seams, cuts, tears or frays in fabric. Missing or damaged hardware.



Section V. UNIT TROUBLESHOOTING PROCEDURES

2-10. GENERAL. This Section contains procedures to isolate ancillary equipment defects that can be corrected by Unit Maintenance. Perform the checks and corrected actions in the order listed. The symptom index list the common malfunctions which may be found during item inspection/operation. Use this index for quick access to the troubleshooting procedures listed in Table 2-2. This manual cannot list all possible malfunctions that may occur, nor all the test, inspections, or corrective actions. If a malfunction is not listed or is not corrected by procedure(s) listed in corrective actions, notify your supervisor.

2-11. TROUBLESHOOTING.

MALFUNCTION INDEX

Table 2-2. Unit Troubleshooting Procedure

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION
1. EXTENSION SNAP HOOK DOES NOT FUNCTION OR SAFETY PIN CANNOT BE INSERTED.
Step 1. Check snap hook for damage/deformation. Replace snap hook if damaged/deformed.
Step 2. Check safety pin for damage/deformation. Replace safety pin if damaged/deformed.
2. SCUBA SET STRAPS OR SHIELD CANNOT BE INSTALLED PROPERLY.
Step 1. Check waistband strap, harness backstrap, and support strap hardware far proper function. Replace hardware if malfunctioning.
Step 2. Check shield for bends or other deformation. Replace entire shield if damaged/deformed.
3. LOWERING LINE OR ATTACHING WEB DOES NOT ATTACH PROPERLY
Step 1. Check snap hook for damage/deformation. Replace snap hook if damaged/deformed.
4. DRAGON PACK HARDWARE DOES NOT FUNCTION PROPERLY.
Step 1. Check all hardware items for damaged/deformation. Replace hardware if damaged/deformed.
5. HARNESS RELEASE LANYARD DOES NOT FUNCTION PROPERLY.
Step 1. Check release handle for proper attachment of wire rope. Repair release handle if necessary
Step 2. Check all hardware items for damaged/deformation. Replace hardware if damaged/deformed.

Table 2-3. Unit Troubleshooting Procedure

MALFUNCTION TEST OR INSPECTION CORRECTIVE ACTION
6. INDIVIDUAL WEAPONS CASE SLIDE FASTENER INOPERABLE
Step 1. Check fastener for damage. Replace fastener if damage.
Step 2. Check fastener for malfunction. Apply "Zipper Ease" lubrication to fastener.
7. PACK ASSEMBLY, AT4
Step 1. Check all hardware items for damaged/deformation. Replace hardware if damaged/deformed.
8. HARDWARE ON INDIVIDUAL WEAPONS CASE INOPERABLE
Step 1. Check inoperable hardware items for damage. Replace damage hardware items.
9. HARDWARE ON STINGER MISSILE PACK INOPERABLE
Step 1. Check inoperable hardware items for damage. Replace damage hardware items.
10. HARDWARE ON PARACHUTIST'S INDIVIDUAL EQUIPMENT RELEASE ASSEMBLY
Step 1. Check inoperable hardware items for damage. Replace damage hardware items.
11. HARDWARE ON WEAPONS & EQUIPMENT AERIAL DELIVERY CONTAINER
Step 1. Check inoperable hardware items for damage. Replace damage hardware items.
12. HARDWARE ON GENERAL PURPOSE INDIVIDUAL EQUIPMENT AERIAL DELIVERY CONTAINER
Step 1. Check inoperable hardware items for damage. Replace damage hardware items.

Section VI. UNIT MAINTENANCE PROCEDURES

2-12. GENERAL. This Section contains Unit Maintenance procedures for the Personnel Troop Parachute System Ancillary Equipment as authorized by the Maintenance Allocation Chart (MAC), Appendix B, of the manual. Procedures include instructions for inspecting, servicing, and repairing or replacing assemblies and subassemblies. All maintenance procedures in this Section can be performed by one person unless otherwise indicated in the Initial Setup. Read all Warnings, Cautions, and Notes carefully before performing the maintenance procedures.

MAINTENANCE PROCEDURE PARAGRAPH

2-13. GENERAL MAINTENANCE PROCEDURES. Maintenance and repair procedures being applied to the Personnel Troop Parachute System Ancillary Equipment will be limited to those authorized in the Maintenance Allocation Chart (MAC), Appendix B. The following general maintenance procedures apply:

a. Darning and Patching. There is no limit to the number of darns that may be applied as long as the overall strength of the fabric is not significantly reduced. Darning and patching shall be accomplished as outlined in the appropriate procedures. Holes or tears that exceed 1-inch in length or 1-inch in diameter will not be machined or hand darned. However, any cut or tear may be repaired without zigzag stitching, provided no adjacent material is missing or damaged. Holes and tears larger than 1-inch in length or 1-inch in diameter will be patched.

b. Stitching. Stitching and restitching of Personnel Troop Parachute Ancillary Equipment will be accomplished with thread that matches the color of the original stitching if possible. All straight stitching will be backed by back stitching at least 1/2-inch. Restitching will be locked by overstitching each end of the stitch formation by 1/2-inch. Zigzag stitching does not require locking; however, zigzag restitching will extend at least 1/2-inch into undamaged stitching at each end, when possible. Keep proper thread tension to prevent loose top or bobbin thread, and excessively tight stitching resulting in puckering of the materials sewn. The stitching lock shall be imbedded in the center of the material. Restitching will be made directly over the original stitching, following the original stitch pattern as closely as possible. See Table 2-3, Stitching Specifications.

c. Cleaning and deburring metal items. Remove burrs, rough spots, rust, or corrosion from metal items by either filing with a metal file, or buffing with a crocus cloth.

d. Searing and waxing. When specified in the separate repair procedures, nylon based fabrics will be heat seared or immersed in melted wax to prevent fraying or unraveling. Proceed as follows:

CAUTION

Cotton based fabrics or cord will not be heat sealed. These fabrics burn rather than melt. Serious material damage will result.

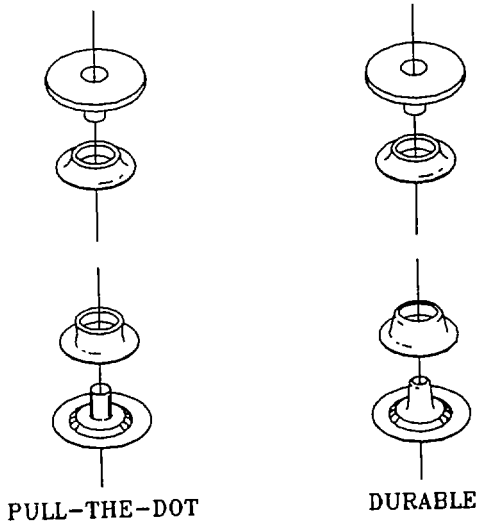
(1) Searing. The ends of nylon tape, webbing, and cord lengths will be prepared by heat searing. This is accomplished by pressing the raw end of the fabric against a hot metal surface until the nylon material has melted and formed a seal. Avoid creating sharp ends or material lumping at the end.

(2) Waxing. The fraying or unraveling of cotton or nylon tape, webbing, and cord length can be prevented by dipping approximately 1/2-inch of the raw fabric end into a thoroughly melted mixture of half bees wax and half paraffin. The wax temperature must be high enough to insure that the wax completely penetrates the material rather than just coating the exterior.

e. Re-stenciling, and re-painting. Original stenciled data or markings that become faded, illegible, or obliterated as a result of applying repairs will be re-stenciled in the same manner, at or as near as possible to the original location. A ballpoint pen or felt tip marker that contains parachute marking ink and is labeled "FOR PARACHUTE MARKING" may be used when stenciling is not possible. Painted markings on airdrop equipment that are chipped or worn will be repainted with the same color enamel paint. Metal and wood items may be repainted with olive drab paint as required.

f. Repairs to Felt Lining. If felt lining is not damaged, darn or stitch as specified through lining. If felt lining is damaged, plug the felt material as described in the repair procedure for the applicable end item.

g. Replacing Snap Easter Assemblies. A snap fastener assembly is a fourpiece metal fitting used to secure flaps and tabs on parachute packs and harnesses. Two of the metal parts, the socket and clinch plate, or the button (cap) and socket, are installed on opposite sides of a flap or tab. The remaining two metal parts, the stud and the washer or stud and post, as applicable, are installed in a corresponding position on the main panel or body. The flap or tab is closed by snapping the mating parts together. The two types of snap fastener assemblies used on airdrop equipment are the pull-the-dot, and the durable as shown below. Repair or replace a defective snap fastener assembly using the following procedures, as appropriate



(1) Repair. The only repair that may be performed on a snap fastener assembly is reseating of the fastener which will be accomplished using the applicable procedures and tools prescribed in paragraph (b) below.

(2) Replacement. A snap fastener assembly which is defective or cannot be reseated will be replaced with a serviceable item from, stock. However, if only one part of a fastener is defective, such as the socket or stud, just that particular portion of the fastener assembly will necessitate replacement. Remove and replace a damaged snap fastener a follows:

(a) Original snap fastener removal.

1 Cut the crimped edge of the applicable snap fastener assembly part at three or four points with diagonal nippers.

2 Using a suitable type tool, pry back the fastener crimped edges and remove the applicable defective fastener parts.

(b) Repair and preparation of the original snap fastener area.

1 If the fabric area around the original snap fastener has been damaged, repair the area by darning, using the procedures in a. above and the stitching specifics prescribed in b. and Table 2-3. However, if darning does not provide and adequate repair, construct a suitable sized reinforcement to the inside of the damaged area using the patching procedures in a. above and the stitching specifies cited in b. above and Table 2-3.

2 After repair of the fabric in the original snap fastener area has been completed, further preparation of the repaired area may be required according to the following criteria.

3 When the replacement action involves a socket and clinch plate of a lift-the-dot snap fastener assembly, cut an appropriate sized hole in the repaired material to accommodate the size of the replacement fastener clinch plate and socket. Cutting the material will be accomplished using a rawhide mallet or other non-steel impact device, lead cutter block, and a lift-the-dot fastener cutter.

4 Normally, the replacement of a lift-the-dot fastener assembly stud and washer, a pull-the-dot snap fastener assembly, or a durable snap fastener assembly does not require cutting of a fabric area prior to component installation. However, if a situation occurs which necessitates fabric cutting to accommodate any of the cited assemblies, the cutting process will be accomplished using a mallet and a lead cutter block as described in step A, above and an appropriate sized double or single bow cutter.

(c) Snap fastener installation.

1 General. Installation of a snap fastener may be performed by three different methods. The most common method is the hand-held method that requires the use of a leather mallet or other no-steel impact device, a holder to hold the appropriate sized chuck, and an anvil which is used to contain a compatible sized die. A second method of installing a snap fastener assembly is by use of the hand-operated press, the chuck or die are individually secured in position by a threaded screw that is tightened by using a suitable sized key (Allen-type hexagon wrench) or a flat-tip (common-head) screwdriver, as applicable. The third method of snap fastener installation is by use of the foot-operated press which, except for the means of operation, functions similar to the hand-operated press.

2 Installing a durable or pull-the-dot snap fastener assembly by the hand-held method.

3 Select the appropriate size die and chuck required for installing the fastener cap and socket or stud and post, as applicable.

4 Place the selected chuck in the open end of the holder and secure the chuck in place using the locking screw located on one side of the holder. Further place the appropriate die into the anvil.

NOTE

In most instances a chuck will be installed in the hand held holder and a die will be placed in the anvil. However, there may be some occasions the require the location of the chuck and die to be reversed. This situation may also apply to the hand or foot-operated press.

5 Fit the socket or stud, as applicable, on the chuck lower end. Place the cap or post, as applicable, on the die with the barrel facing up.

6 Position the material over the barrel of the cap or post, as applicable. Insure that the fastener socket or stud, as applicable, will be located on the proper side of the material for subsequent fastener engagement.

7 Place the socket or stud, as applicable, on the barrel of the cap or post, as applicable. With an applied strike from a mallet, clinch the two snap fastener components to the material.

8 Remove the clinched snap fastener components from the chuck and die set and check the seating of the joined components. If the applicable components are not properly seated, repeated the procedure in step (a) through (f), above.

9 Check the engagement of the installed snap fastener components with the opposite mating components with the opposite mating components to insure the open and closed snapping process is accomplished without hindrance. If the snap engaging process cannot be accomplished without difficulty, replace the opposite mating snap fastener components using the procedures in steps 1 through 3, above.

NOTE

A durable snap fastener assembly will open and close from any direction. A pull-the-dot snap fastener assembly will open and close from only one direction. A pull-the-dot snap fastener assembly will open and close from only one direction.

10 As required, remove the chuck and die from the applicable snap fastener tools by reversing the procedures in step Z, above.

(d) Hand- or foot-operated press method. Installation of durable or pull-the-dot snap fastener assemblies by hand- or foot-operated press can be accomplished by using the procedures in paragraph 1, above, except the chunk and die will be secured within the applicable press assembly using the available locking screws.

(e) Installing a lift-the-dot snap fastener assembly.

1. Hand-held method.

(a) Using the specifics in Table 2-4, ascertain the size chuck and die required the fastener socket and clinch plate or stud and washer. As applicable.

(b) Place the selected chuck in the open end of the holder and secure the chuck in place using the locking screw located on one side of the holder. Further, place the appropriate die into the anvil.

(c) Fit the socket (with prongs facing down) or stud (with barrel facing down) on the lower end of the chuck. Place the clinch plate or washer, as applicable, on the die.

(d) Position the material over the clinch plate or washer, as applicable.

(e) Aline the socket prongs with the pre-cut holes in the material or the barrel of the stud at the center of the material-covered washer, as applicable. With an applied strike from a mallet, clinch the two snap fastener components to the material.

(f) Remove the clinched snap fastener components from the chuck and die set and check the seating of the joined components. If the applicable components are not properly seated, repeat the procedure in (e) above.

(g) Check the engagement of the installed snap fastener components to insure the open and closed snapping process cannot be accomplished without difficulty, replace the opposite mating snap fastener components using the procedures in steps (a) through (f), above.

NOTE
A lift-the-dot snap fastener assembly will open and close from only one direction.

(h) As required, remove the chuck and die from the applicable snap fastener tools by reversing the procedures in (b) above.

2. Hand- or foot-operated press method. Installation of a lift-the-dot snap fastener assembly by hand- or foot-operated press may be accomplished using the procedures in paragraph 1 above, except the chuck and die will be secured within the applicable locking screws.

h. Replacement of Grommets. A grommet is a two piece metal eyelet used to reinforce and protect textile material at a point where a hole has been made to permit the threading of a line, chord, webbing or the insertion of a retainer device. The three types of grommets used on air-drop equipment are the flat (A, Fig.3-41), plain (B), and spur (c), each of which is installed with an applicable type washer. Repair or replace a defective grommet using the following procedures, as appropriate.

(1) Repair. Remove burrs, rough spots, rust, or corrosion from an installed grommet by filing with a metal file or by buffing with a crocus cloth.

(2) Reseat a loose grommet by using the applicable procedures described under grommet replacement.

(3) Replacement. A grommet which is damaged or cannot be reseated will be replaced with a serviceable grommet and washer of the same size and type from stock and the following procedures, as applicable:

(4) Original grommet removal. Using a suitable type tool, lift the edge of the original washer at one point.

(5) Grip the lifted washer edge with diagonal nippers and roll the washer edge back to lift the washer from the original grommet. Remove the original grommet from the material.

(6) If the fabric area around the original grommet has been damaged, repair the area by darning, using the procedures in a. above and the stitching specified in Table 2-3. However, if darning does not provide and adequate repair, construct a suitable sized reinforcement of the same type material as that used in the original grommet location. Secure the reinforcement to the inside of the damaged area using the patching procedures in a. above and the stitching specified in Table 2-3.

(7) Using a single or double bow cutter that is compatible with the size of the replacement grommet, a lead cutter block, and a rawhide mallet or other non-steel impact device, cut a hole in the repaired fabric area to accommodate the barrel of the replacement grommet. Insure the hole is cut with a slightly smaller diameter than the diameter of the barrel of the replacement grommet.

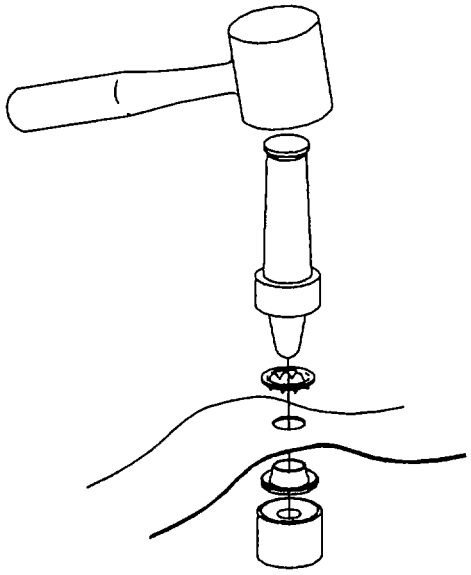
(8) Install a plain or spur grommet by the hand-held method which requires the use of a suitable sized punch and die, and a rawhide mallet or other non-steel impact device. A flat grommet should also be installed using the hand-held method, but may be installed using a hand- or foot-operated press and a suitable size chuck and die.

CAUTION

Tools used to install a grommet will be compatible with the size and type of grommet.

(9) Insert the barrel of the replacement grommet through the accommodating hole in the material and insure the grommet flange is located on the same side of the material as the original grommet.

(10) Position the grommet on a suitable sized die with the barrel facing up and place the applicable washer over the grommet barrel.



NOTE

When installing a flat grommet by the hand-held method, insure the grommet barrel and washer are aligned to preclude off-center setting of the grommet.

(11) Using a suitable sized punch and a rawhide mallet or other non-steel impact device, spread the grommet barrel by hammering as shown until the barrel collar is rolled down smooth on the washer. If the grommet barrel splits during the hammering process, remove and replace the installed grommet with a serviceable item from stock, subsequently repeating the procedures in (9) and (10) above.

(12) Check the seating of the grommet and if the grommet can be turned by hand, repeat the procedure in 3 above until the grommet is firmly seated.

(13) To install a flat grommet by hand-operated press install a suitable sized chuck and die on a hand- or foot-operated press. Secure the chuck and die in place using the available locking screws and a suitable sized key (Allen type hexagon wrench)

(14) Insert the barrel of the replacement grommet through the accommodating hole in the material as shown. Insure the flange of the replacement grommet is on the same side of the material as the original grommet.

(15) Position the grommet on the installed die with the barrel facing up and place the replacement washer over the grommet barrel.

(16) Depress the press handle or foot pedal and spread the grommet barrel until the collar of the barrel is rolled down smoothly on the washer.

(17) Check the grommet for a firm seating. If the grommet can be turned by hand, repeat the procedure in (16) above until a firm seating of the grommet is achieved

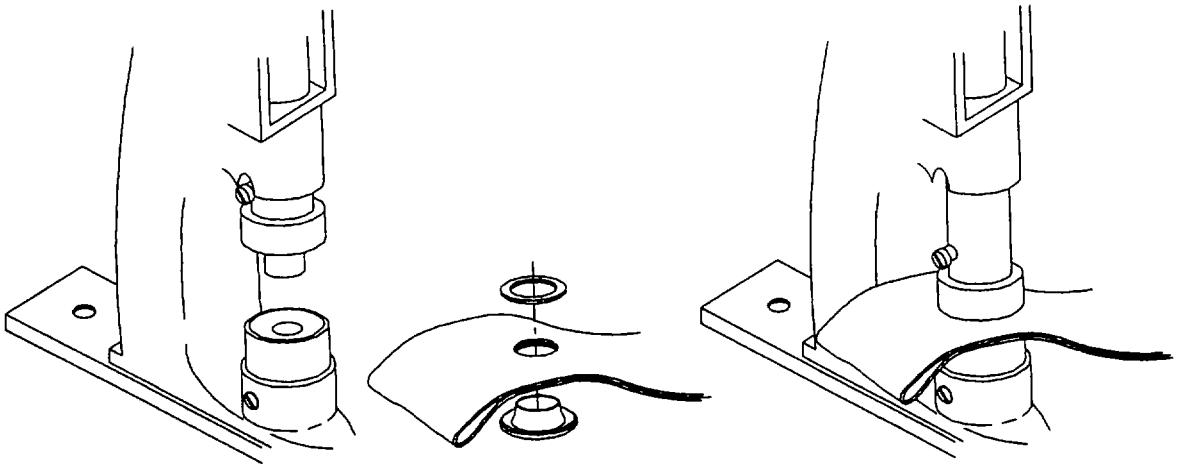


Table 2-3. STITCHING SPECIFICATION

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	THREAD SIZE
Extension, Static Line Assembly	VHD	5 to 8	6
SCUBA Set, Accessory			
96-Inch Harness Backstrap	VD	5 to 8	6
Support Strap	HD	5 to 8	3
Waistband Extension Strap	LD	7 to 11	E
Lowering Line, General	LD	7 to 11	E
Snap hook	HD	6 to 9	3
Attaching Web	LD	7 to 11	E
Jump Pack DRAGON	HD	4 to 6	3
Darning	DN	Darn	E
Tack Felt Plug	HD	4 to 6	3
Lowering Line	LD	7 to 9	E
Harness, Single Point Release			
Harness Stitching	HD	6 to 8	3
Attaching Harness Strap	HD	6 to 8	3
Darning	DN or ZZ	Darn	E
Loops "A", "B", "C"	ZZ	7 to 11	E
Lanyard	HD	6 to 8	3
Retainer Loop			
Attachment to Release Assembly	MD	7 to 9	FF
Elastic Keeper			
Keeper Assembly	MD	7 to 9	FF
Attachment to Release Assy.	MD	7 to 9	FF
Attachment of Hook & Pile Tapes	MD	7 to 9	FF
Jump Pack AT4:			
Pack Body Patching	HD	5 to 8	FF/3
Darning	DN or ZZ	Darn	E/F
Plugging Felt	HD	5 to 8	FF/3
Binding Tape	HD	5 to 8	FF/3
Rifle Butt or Muzzle Pockets	HD	5 to 8	FF/3
Lowering Line Pocket			
Pocket Assembly	MD	5 to 8	FF
Hook and Pile Assembly	MD	5 to 8	FF
Attachment to Pack	HD	5 to 8	3

Table 2-3. STITCHING SPECIFICATION - Continued

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	THREAD SIZE
Carrying Handle Strap			
Handle Assembly	MD	5 to 8	FF
Attachment to Pack	HD	5 to 8	3
Link/D-Ring Chape	HD	5 to 8	3
Securing Straps	HD	5 to 8	3
Cross Straps	HD	5 to 8	3
Web Chapes	HD	5 to 8	3
Lowering Line			
Darning	DN or ZZ	7 to 11	E
Binding Tape	LD	7 to 11	E
Hook and Pile Assembly	LD	7 to 11	E
Retainer Assembly	LD	7 to 11	E
Loop/Quick Fit Assembly	HD	5 to 8	3
Case, Parachutist's Individual Weapon M1950			
General Stitching	VHD	5 to 8	5
Lowering Line Pocket	HD	5 to 8	3
Felt Padding	HD	5 to 8	3
Sides and Ends of Case	VHD	5 to 8	5
Leather Reinforcement	VHD	5 to 8	5
Strip Panel	VHD	5 to 8	3
Corner Reinforcement	HD	5 to 8	3
Tiedown Loops	HD	5 to 8	3
Buckle Loop	HD	5 to 8	3
Shock Absorber Loop	HD	5 to 8	3
Flap Thong	MD	7 to 9	FF
Slide Fastener Thong	MD	7 to 9	FF
Slide Fastener Tape	MD	7 to 9	FF
Loop Chape	VHD	5 to 8	5
Adjusting Strap	VHD	5 to 8	5
Triangular Loop Chape	HD	5 to 8	5
Single Loop Chape	HD	5 to 8	5
Parachutist's Weapons and Individual Equipment Pack			
General Patching	MD	7 to 9	FF
Center Webbing	MD	7 to 9	FF
Darning	DN/ZZ	Darning	E

Table 2-3. STITCHING SPECIFICATION - Continued

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	THREAD SIZE
Parachutist's Weapons and Individual Equipment Harness			
General Restitching	MD	7 to 11	E
Lowering Line Pocket	HD	5 to 8	3
General Darning	DN/ZZ	Darning	E
Darning long narrow cuts	ZZ	Darning	E
Lowering Line Pocket Flap	MD	7 to 9	FF
Lowering Line Pocket Tie	MD	7 to 9	FF
Splicing Webbing	HD	5 to 8	3
Replace Webbing	HD	5 to 8	3
Keeper Pin Strap	LD	7 to 11	E
Jump Pack, Stinger Missile			
Pack, Body, Patching	HD	7 to 9	FF
Darning	DN or ZZ	8 to 11	E
Plugging Felt	HD	7 to 9	FF
Binding Tape	HD	7 to 9	FF
Carrying Handle Strap			
Handle Assembly	MD	7 to 9	FF
Attachment to Pack	HD	6 to 8	3
O-Ring Chape	HD	5 to 7	5
Securing Straps			
Side	HD	6 to 8	3
Aft and Forward	HD	5 to 7	5
Hook and Pile Fastener			
To Pack	HD	7 to 9	FF
To Webbing	MD	7 to 9	FF
Lowering Line			
Darning	DN or ZZ	8 to 11	E
Binding Tape	LD	8 to 11	E
Hook and Pile Fastener	LD	8 to 11	E
Retainer Assembly	LD	8 to 11	E
Loop Quick Fit Assembly	HD	6 to 8	3
Tiedown Assemblies			
Chape to Pack	HD	6 to 8	3
Tiedown Straps	MD	8 to 11	E
Extension Sling	MD	6 to 8	3
Cable Guide Assembly			
Guide to webbing	MD	7 to 9	FF
Assembly to Pack	HD	6 to 8	3

Table 2-3. STITCHING SPECIFICATION - Continued

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	THREAD SIZE
Quick Release Assembly			
550 Cord to Lanyard	HD	7 to 9	FF
Lanyard to Handle	HD	7 to 9	FF
Webbing Handle	Hand Tack		

2-14. TECHNICAL/RIGGER INSPECTION. A technical/rigger-type inspection is a complete and thorough inspection of an individual airdrop item, including associated parts and components. The following paragraphs outline criteria applicable to accomplishing a technical/rigger-type inspection. It will be performed by a qualified parachute rigger in accordance 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 other time as deemed necessary by the airdrop equipment maintenance officer.

b. Inspection Function Requirement. Normally, a technical /rigger-type inspection will be performed 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 a defect or damage by 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. The repair activity inspection of personnel parachutes will be made on a shadow table. Any defect discovered during an organizational level repair activity inspection which exceeds the capability of that activity will

require the affected item to be evacuated to a direct support maintenance facility for determination of economic repair and its application, if applicable.

c. Technical/Rigger-type Inspection Procedures.

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

(a) Log record/parachute inspection data pocket and form. As applicable inspect the assembly log record/ parachute inspection data pocket to insure the Army Parachute Log Record (DA form 10-42 or 3912) is inclosed and properly attached Further, remove the log record from the pocket and evaluate the recorded entries.

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

(c) Operational adequacy. Check the item components and parts to insure proper assembly which includes attachment and alignment, and that the assembled product function 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.

(d) Markings 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.

(e) 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 by 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 swaging or welding; loss of spring tension.

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

(c) Cloth. Inspect for breaks, burns, 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, burns, cuts, frays, holes, snags, tears, incorrect weaving, and sharp edges formed from searing; loose, missing, or broken stitching, tacking, shipping, and searing; weak spots, wear, and deterioration.

(e) Pressure-sensitive (adhesive) tape. Inspect for burns, holes, cuts, tears, weak spots; looseness and deterioration.

(f) Rubber and elastic. Inspect for burns, cuts, holes, tears, weak spots; loss of elasticity and deterioration.

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

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

2-15. EXTENSION, STATIC LINE.

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

INITIAL SETUP

Tools:

Knife, Item 1, Section III, Appendix B
Shears, Item 2, Section III, Appendix B

Materials/Parts:

Cord, Nylon, OD nylon core, Type III, Item 9, Appendix D
Thread, nylon, size 6, Item 39, Appendix D
Wire, Steel, Item 60, Appendix D

General Safety Requirements:

Read, understand, and follow all warnings, cautions, and notes.

Equipment Condition:

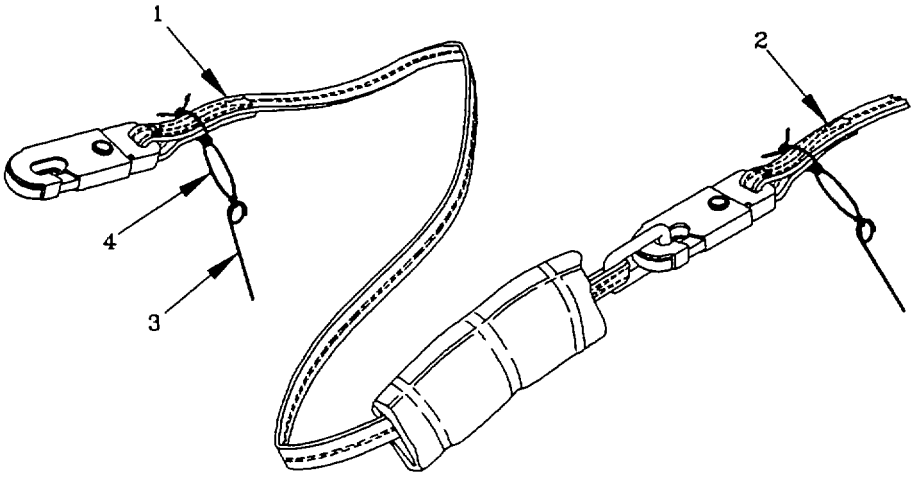
Static line extension removed from static line. Position on work table in extended position. Extension must be clean and dry.

INSPECT

Perform a before and after repair rigger/technical inspection of the static line extension as outlined in paragraph 2-14.

REPLACE

Remove the 5 foot long static line extension (1) from the 15 foot static line (2). Replace damaged safety pin (3) or lanyard (4) as described in the repair procedures. If the extension is unserviceable because of frays, cuts, worn areas or other defects in the fabric that can not be repaired by restitching, replace the extension with a serviceable item from stock.

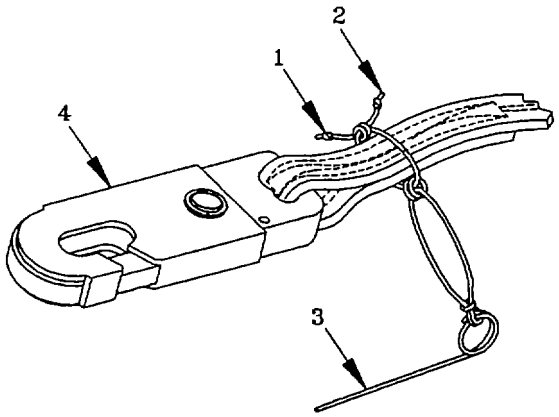


REPAIR

Repair the static line extension safety pin and lanyard as follows:

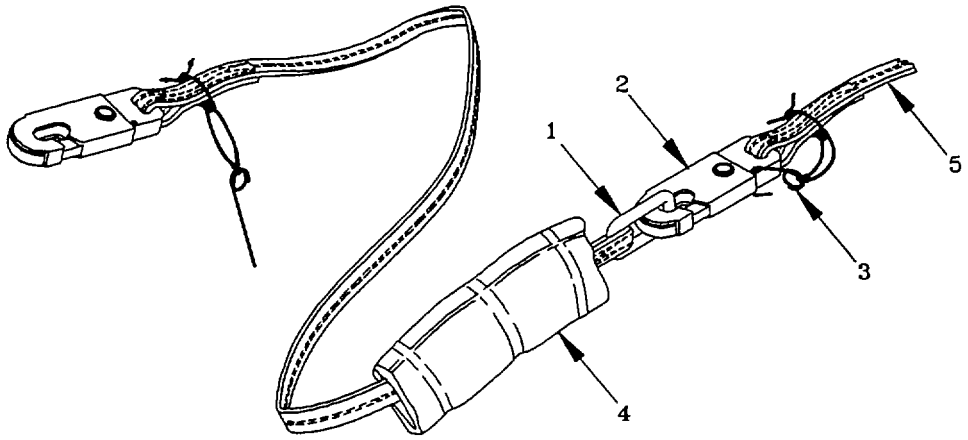
a. Cut a 5 inch length of steel wire and construct a new safety pin (3) as shown in Appendix E.

b. To prepare a new lanyard cut a 20 inch length of nylon cord. Remove the core cord, tie an overhand knot at each end (1), and sear both ends (2) as described in paragraph 2-13. Secure cord to safety pin (3) and static line snap hook (4) as shown.



INSTALL

Install the 5 foot extension onto the static line by attaching the ring (1) of the extension to the snap hook (2) of the 15 foot static line. Install and bend safety pin (3). Slide the permanently attached cover (4) on the extension over the snap hook of the 15 foot static line (5).



2-16. ACCESSORY SET, SCUBA.

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

INITIAL SETUP

Tools:

Screwdriver, flat tip, Item 5, Section III Appendix B
Knife, Item 1, Section III, Appendix B
Shears, Item 2, Section III, Appendix B

Materials/Parts:

Cord, nylon, Type III, Item 9, Appendix D
Tape, Pressure Sensitive, 2 inch, Item 23, Appendix D
Thread, nylon, size 3, Item 35, Appendix D
Thread, nylon, size E, Item 36, Appendix D
Thread, nylon, size 6, Item 39, Appendix D

General Safety Requirements:

Read, understand, and follow all warnings, cautions, and notes.

Equipment Condition:

SCUBA Accessory Set equipment components removed from other parachute equipment. Components must be clean, dry and separated.

INSPECT

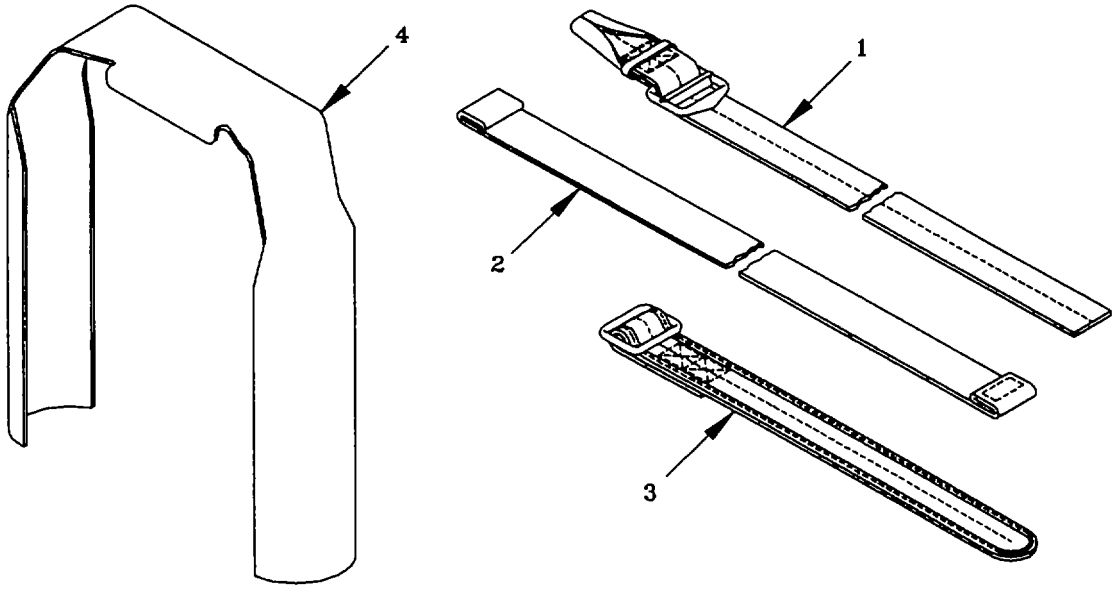
Perform a before and after repair rigger/technical inspection of the static line extension as outlined in paragraph 2-14.

SERVICE

Wrap the center portion of the shield, if serviceable, prior to each use with 2 inch waterproof adhesive tape.

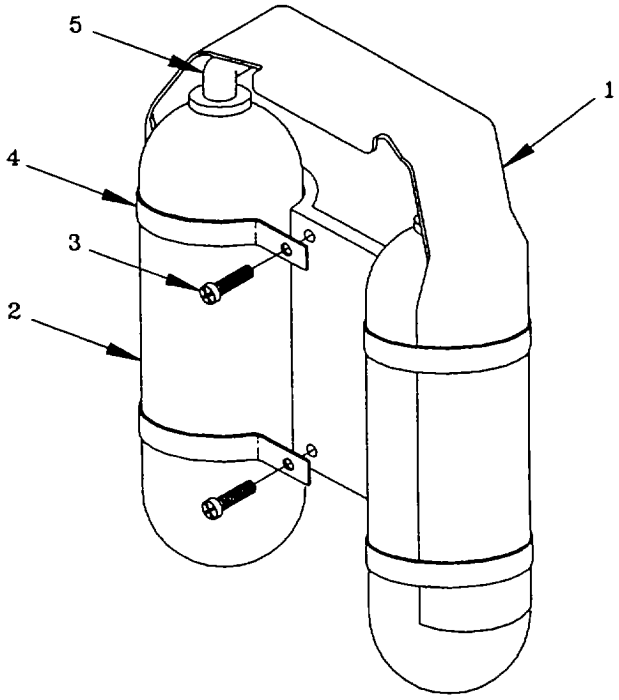
REPLACE

Replace damaged support straps (1), Backstrap Harness (2), or Waistband Extension Strap (3) with new items manufactured as described in Appendix E, or repair items by restitching where required. Replace a damaged shield (4) with a serviceable item from stock.



INSTALL

To install the shield (1) over the airtanks (2), loosen the two retaining screws (3) between the airtanks. Insert the ends of the shield between the outside of the airtanks and the metal straps (4). Push shield down over regulator valves (5), and tighten retainer screws (3).



2-17. LINE, LOWERING.

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

INITIAL SETUP

Tools:

Knife, Item 1, Section III, Appendix B
Shears, Item 2, Section III, Appendix B

Materials/Parts:

Marker, Felt Tip, Item 18, Appendix D
Tape, fastener hook, Item 25, Appendix D
Tape, fastener pile, Item 27 Appendix D
Thread, nylon, size 5, Item 38, Appendix D

General Safety Requirements:

Read, understand, and follow all warnings, cautions, and notes.

Equipment Condition:

Lowering line and attaching webbing detached from other equipment and placed on worktable. Lowering line must be clean and dry.

INSPECT

Perform a before and after repair rigger/technical inspection of the lowering line as outlined in paragraph 2-14.

REPAIR

CAUTION

Splicing of the lowering line and attaching web is not authorized. Serious equipment damage may occur due to failure of a spliced lowering line or attaching web.

a. Repair a lowering line and attaching web by restitching as required using size E thread, 7 to 11 stitches per inch and an HD sewing machine.

b. Replace the hook and pile fastener on the lowering line pocket as follows:

(1) Remove damaged piece of hook (1) and/or pile (2) fastener.

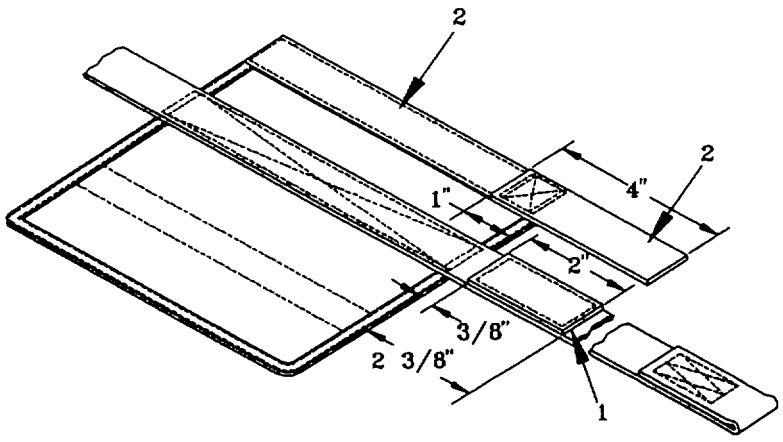
(2) Cut a new 2 inch length of hook tape (1).

(3) Place a mark, 3/8 inch, and 2-3/8 inches from the retainer binding on the folded loop side of the 1 inch wide lowering line.

(4) With hook side facing up, position the 2 inch hook tape between the 3/8 and the 2-3/8 inch markings, and stitch with a single box stitch, using size E thread, 7 to 11 stitches per inch and an HD sewing machine.

(5) Place a mark 1 inch from the binding edge on the pile flap retainer at the folded loop end of the lowering line.

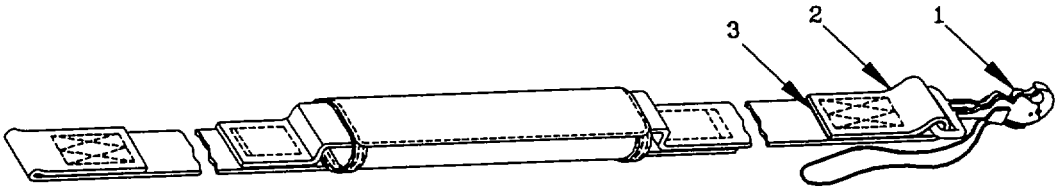
(6) With pile side facing up, position edge of 4 inch pile tape on 1 inch marking with opposite end extending over binding edge. Stitch to pile flap retainer with a single box X stitch using size E thread, 7 to 11 stitches per inch and an HD sewing machine.



REPLACE

Replace the quick-ejector snap (1) by carefully cutting and removing stitching which secures the item to the lowering line (2). Place buffer (3) and lowering line (2) on serviceable quick-ejector snap (1) as in original and stitch with 3 inch, 3 point WW stitch using size 3 thread, 6 to 9 stitches per inch, and an HD sewing machine.

Replace any defective lowering line that can not be repaired.



2-18. JUMP PACK, DRAGON MISSILE.

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

INITIAL SETUP

Tools:

Knife, Item 1, Section III, Appendix B
Shears, Item 2, Section III, Appendix B

Materials/Parts:

Felt, 1/4 inch, Item 12, Appendix D
Marker, felt tip, Item 18, Appendix D
Tape, fastener hook, Item 25, Appendix D
Tape, fastener pile, Item 27, Appendix D
Thread, nylon, size 3, Item 35, Appendix D
Thread, nylon, size E, Item 36, Appendix D

General Safety Requirements:

Read, understand, and follow all warnings, cautions, and notes.

Equipment Condition:

The Dragon Missile Pack should be clean and dry. Place the pack to be repaired on worktable.

INSPECT

Perform a before and after repair rigger/technical inspection of the lowering line as outlined in paragraph 2-14.

REPAIR

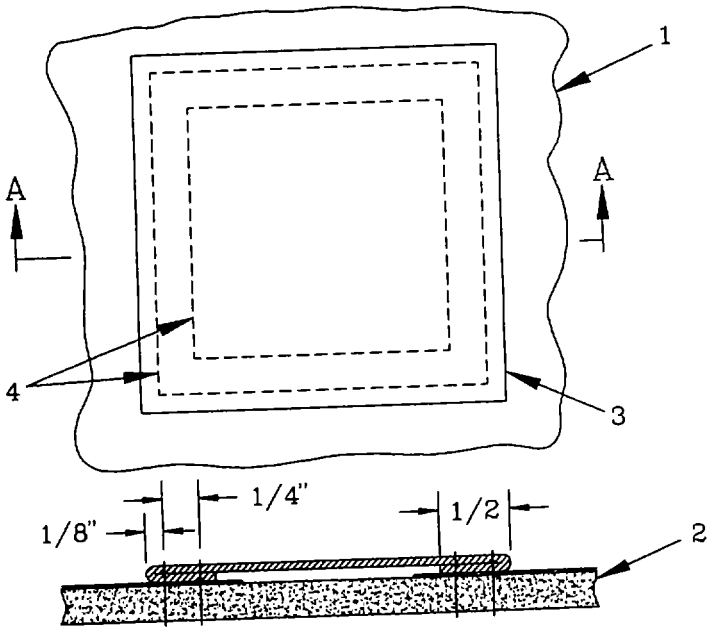
The cotton or nylon duck fabric of the pack may be restitched, darned, patched and plugged.

a. Restitching. Restitch the pack fabric (1) directly over old stitching using size 3 thread, 4 to 6 stitches per inch, and an HD sewing machine. Lock stitching at least 1/2 inch.

b. Darning. Darn a hole or tear in the pack fabric that does not exceed 1 inch in length or diameter using size E thread and a darning machine. There is no limit to darns that may be applied, provided they do not weaken or reduce the original strength of the fabric more than 10%. If damage is in the lined portion of the container body and only the cotton duck is damaged, darn through duck and felt. If felt is also damaged, remove damaged area before darning duck fabric. Then plug felt as in c.(3) below.

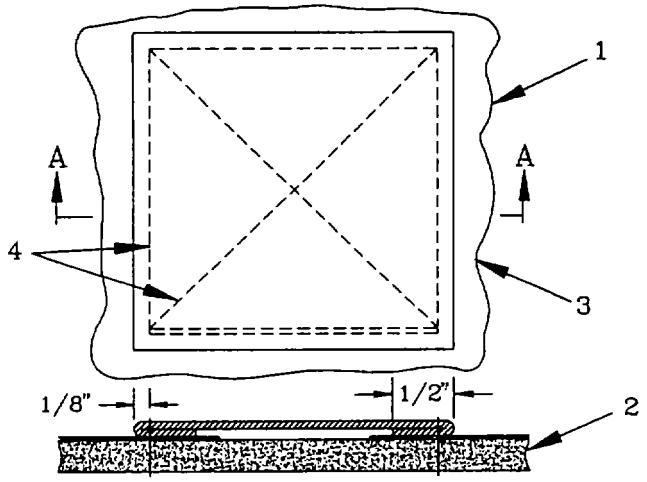
c. Patching. There is no limit to the number of times the container body may be patched. Patch a hole or tear that exceeds 1 inch in length or diameter following procedures in (1) or (2) below. Use nylon or cotton duck cloth according to original construction for patching outside, and 1/4 inch thick felt for plugging inside lining. Use an HD sewing machine, size 3 thread, and 4 to 6 stitches per inch.

(1) To patch a lined portion of the pack (1) when the felt (2) is not damaged, cut nylon or cotton duck patch (3) 2 inches beyond circumference of damaged portion. Turn under edges of patch 1/2 inch and center patch over damaged area. Sew patch to container body with a double row of stitching (4) as shown.

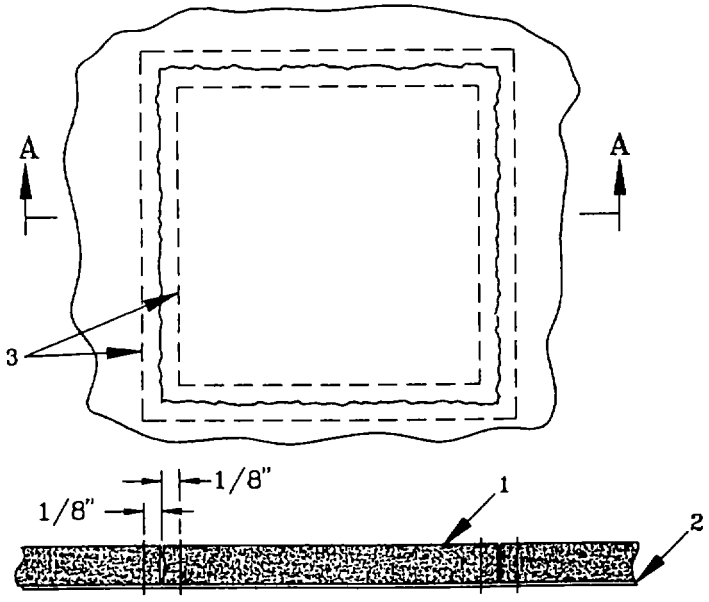


SECTION A–A

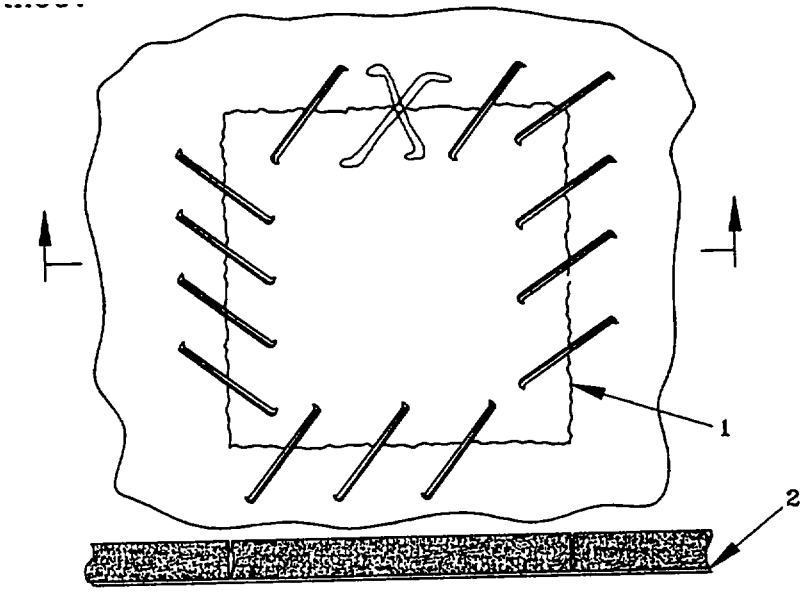
(2) To patch a lined portion of the pack (1) when the felt (2) is damaged, remove the damaged felt as described in (3) below. Cut a piece of felt (2) the same size as the piece removed, and position felt plug and cotton duck patch (3) (with edges turned under 1/2 inch) over damaged area. Sew a single box X stitch (4) formation as shown.



(3) To plug the main or end panels of felt (1) lining, mark a rectangle around the damaged area. Remove the damaged felt while being careful not to damage the cotton duck material (2). Cut a piece of felt (1) the size of the piece removed. Position felt plug into area cleared and sew as shown. Use size 3 thread, 4 to 6 stitches (3) per inch and an HD sewing machine.



(4) If damage is in an area that cannot be sewed by machine, tack felt plug (1) securely to cotton duck (2) as shown using doubled and waxed size 3 nylon thread. Secure thread ends with suitable knot.



CAUTION

If the webbing is inadvertently damaged when stitching is being removed, the webbing must be replaced in accordance with original construction.

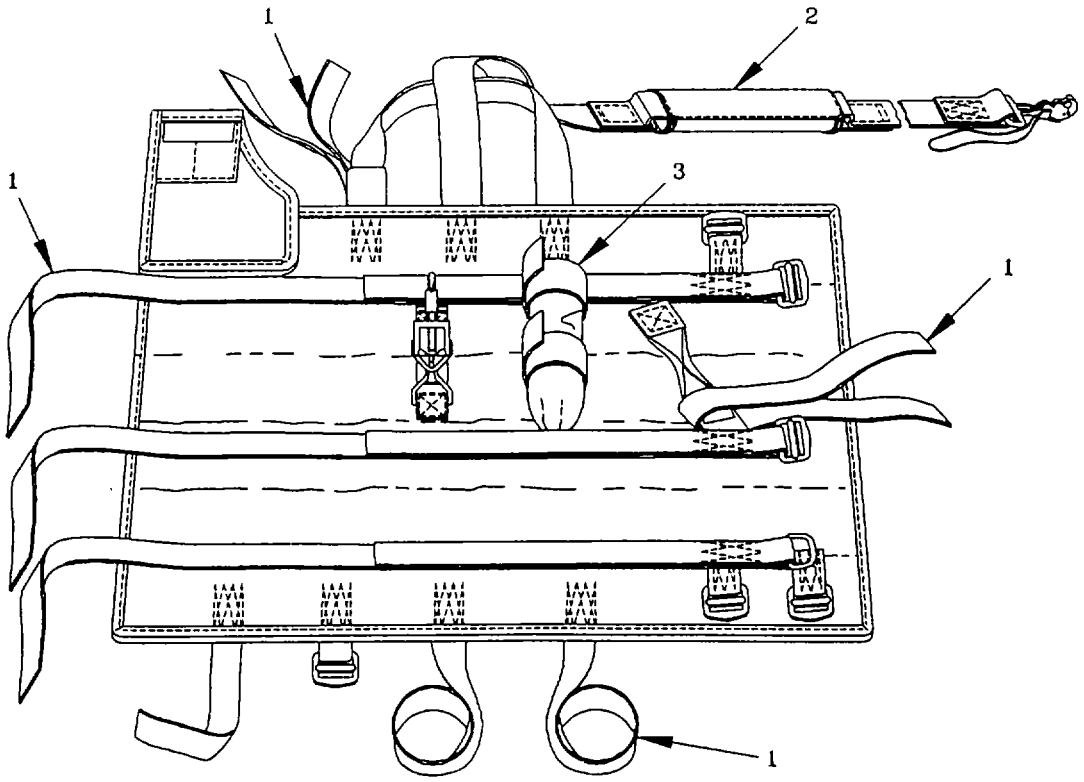
b. Repair webbing items (1) by restitching. Use size 3 thread, 4 to 6 stitches per inch, and an HD sewing machine. Lock stitching at least 1/2 inch.

CAUTION

Splicing of the lowering line is not authorized. Serious equipment damage may occur due to failure of a spliced lowering line.

c. Repair lowering line (2) by restitching. Use size E thread, 7 to 9 stitches per inch, and an HD sewing machine. Lock stitching at least 1/2 inch.

d. Repair lowering line pocket (3) by restitching. Use size 3 thread, 4 to 6 stitches per inch, and an HD sewing machine. Lock stitching at least 1/2 inch.



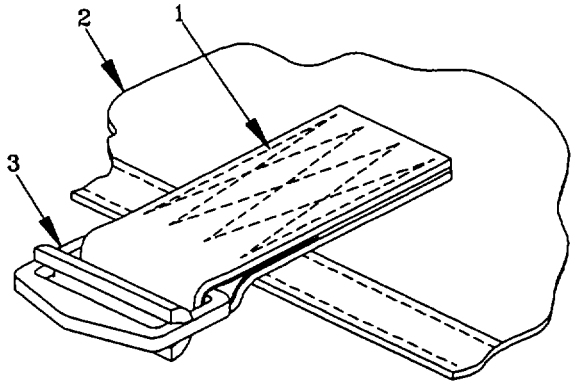
REPLACE

a. Replace webbing components in accordance with original construction as follows:

(1) Carefully remove stitching that hold the item (1) to be replaced to the pack (2). Remove damaged webbing and hardware (3) if applicable.

(2) Cut new webbing material in appropriate length and type required, and install hardware if applicable. (Chapes, Side and rifle butt securing straps require Type VIII webbing; forward and aft cross straps require Type X, and the leg and upper tiedown require Type II webbing).

(3) Turn under edges as in item removed. Place webbing on pack and sew using size 3 thread, 4 to 6 stitches per inch, and an HD sewing machine. Lock stitching at least 1/2 inch.

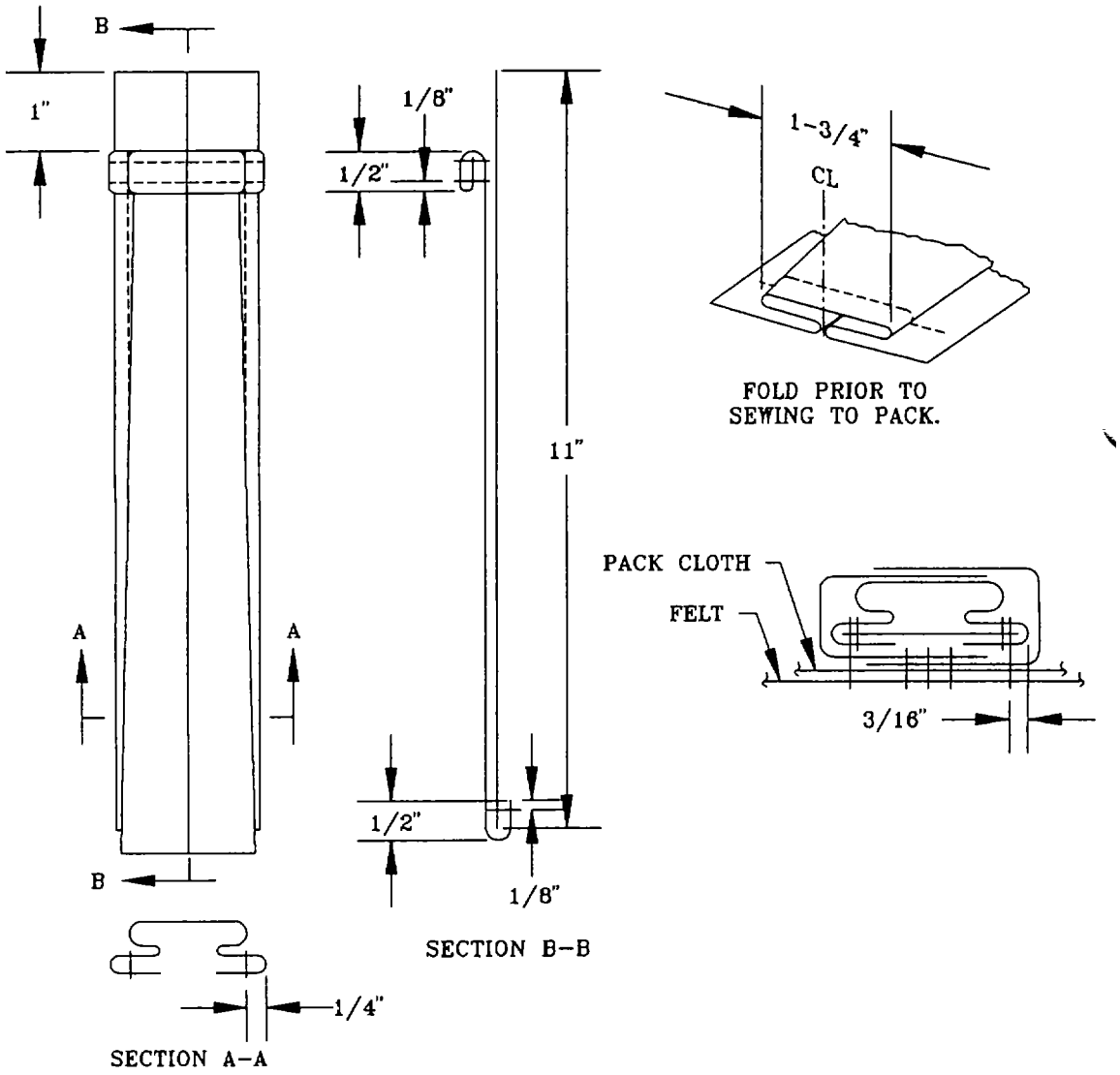


CAUTION

Splicing of the lowering line is not authorized. Serious equipment damage may occur due to failure of a spliced lowering line.

b. If it cannot be repaired by restitching, replace the lowering line entirely.

c. Replace a lowering line pocket, if it cannot be repaired by restitching. Fabricate new pocket as described in Appendix E, and sew to pack as shown using size 3 thread, 4 to 6 stitches per inch, and an HD sewing machine. Lock stitching at least 1/2 inch.



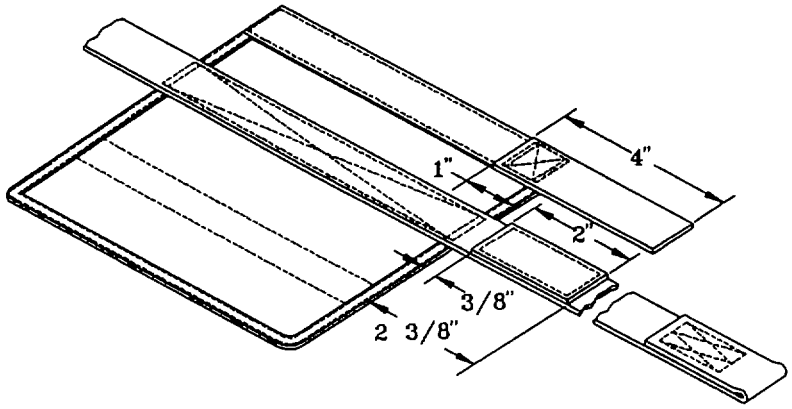
d. To replace the hook and pile fastener, proceed as follows:

(1) Remove damaged piece of hook or pile tape.

(2) Cut a 2 inch length of hook tape.

(3) Cut a 4 inch length of pile tape.

(4) Place a mark 3/8 inch and 2 3/8 inches from the retainer binding on the folded loop side of the 1 inch wide lowering line (1).



(5) With hook side facing up, position the 2 inch hook tape between the 3/8 and 2 3/8 inch markings. Stitch with a single box stitch using size E thread, 7 to 9 stitches per inch and an HD sewing machine.

(6) Place a mark 1 inch from the binding edge on the pile flap retainer at the folded loop end of the lowering line (2).

(7) With the pile side facing up, position edge of 4 inch pile tape on 1 inch marking with opposite end extending over binding edge. Stitch with a single box stitch using size E thread, 7 to 9 stitches per inch and an HD sewing machine.

2-19. HARNESS, SINGLE POINT RELEASE.

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

INITIAL SETUP

Tools:

Knife, Item 1, Section III, Appendix B
Shears, Item 2, Section III, Appendix B
Compressing Tool, Item 3, Section III Appendix B
Cutter, Cable, Item 4, Section III Appendix B

Materials/Parts:

Cord, nylon, Item 9, Appendix D
Grommet, Spur type. Type III, Item 14, Appendix D
Nylon Cord, Type III, Item 9, Appendix D
Tape, fastener, hook, Item 25, Appendix D
Tape, fastener, pile, Item 27, Appendix D
Thread, nylon, size 3, Item 35, Appendix D
Thread, nylon, size E, Item 36, Appendix D
Thread, nylon, size FF, Item 37, Appendix D
Webbing, tubular, nylon. Item 50, Appendix D
Webbing, nylon, Item 45, Appendix D
Webbing, nylon, Type IV, Item 46, Appendix D
Wire, steel, Item 60, Appendix D

General Safety Requirements:

Read, understand, and follow warnings, cautions and notes.

Equipment Condition:

The harness assembly should be clean and dry. Place assembly on worktable.

INSPECT

Perform a before and after repair rigger/technical inspection of the lowering line as outlined in paragraph 2-14.

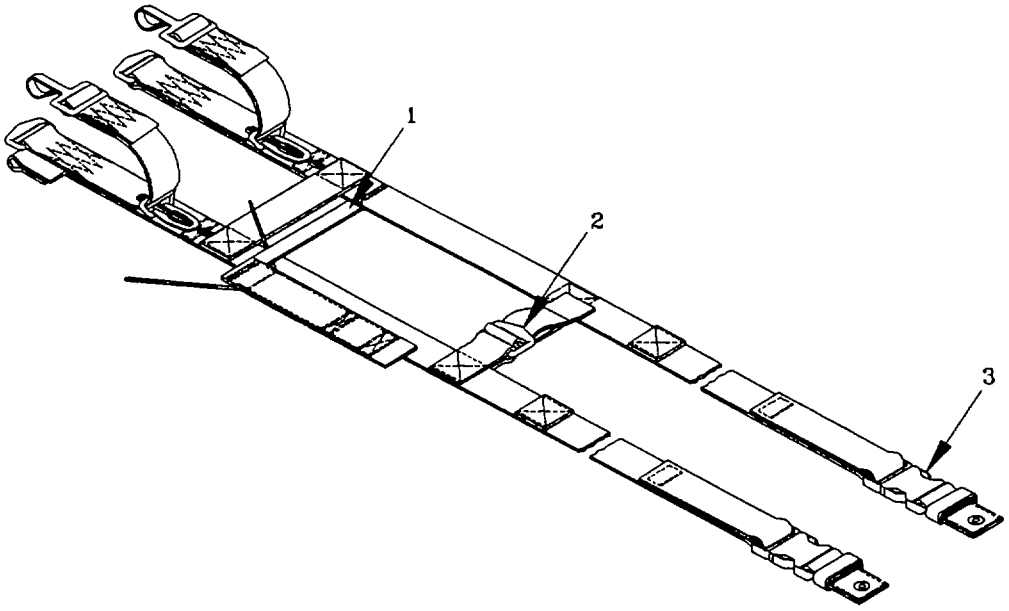
REPAIR

a. Repair harness webbing by restitching or darning. Splicing of webbing is restricted to the release handle lanyard (1) and straps not required to be adjusted through quick fit adapters (2)) or side release buckles (3).

a. Restitching. Restitch the harness webbing directly over old stitching using size 3 thread, 6 to 8 stitches per inch, and an HD sewing machine. Lock stitching at least 1/2 inch.

b. Darning. Darn a tear in the harness webbing that does not exceed 1 inch in length or diameter using size E thread and a darning machine (DN or ZZ). There is no limit to darns that may be applied; provided they do not weaken or reduce the original strength of the webbing more than 10%.

c. Splicing. Cut a piece of 5/8 inch tubular or 1-3/4 inch wide nylon webbing as appropriate, long enough to extend a minimum of 1 inch beyond each side of damaged area and sear ends as described in paragraph 2-13. Center splicing material lengthwise over damaged area and stitch with a three point WW for the 5/8 inch tubular and 4 point WW pattern for the 1-3/4 inch webbing the length of the splice.



REPLACE

a. Replace a damaged cord loop "A", "B" or "C" as follows:

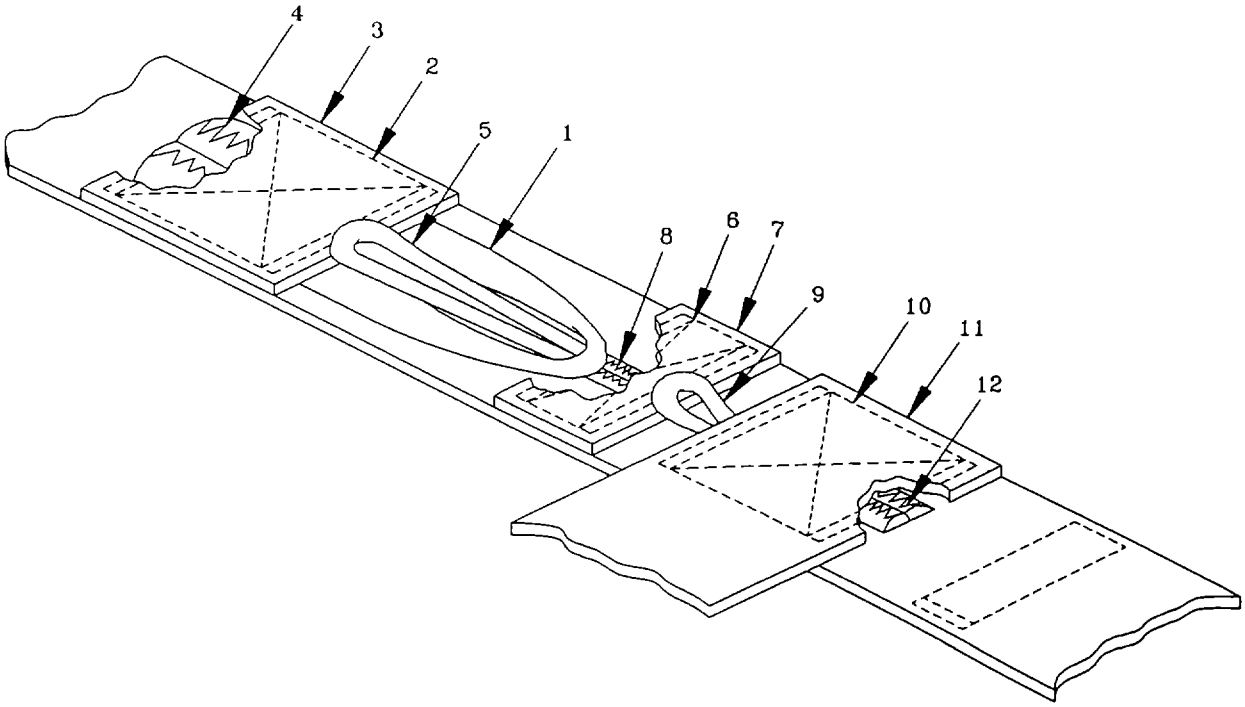
(1) Replacement of cord loop "A" (1).

(a) Carefully cut and remove stitching (2) which secures the fixed web keeper (3) to the harness. Cut replacement Type VIII nylon web keeper (3) the length of the removed keeper (3) and sear ends.

(b) Carefully cut and remove stitching (4) that secures the loop (1) to the harness in two places (4) and discard. Cut a 8-1/4 inch length of 5/8 inch width, natural color tubular nylon and sear ends.

(c) Position tubular nylon loop (1) as in original location and stitch with double-throw zigzag or straight zigzag stitching, two places (4) forming loop. Use size E thread, 7 to 11 stitches per inch, and a type ZZ sewing machine.

(d) Position web keeper (3) 2-3/8 inches from outside edge of loop (1) as in original and stitch with double box X stitch pattern. Use size FF thread, 7 to 11 stitches per inch, and a type MD sewing machine. The two plies of web keeper (3) shall be located on the loop side of the harness.



(2) Replacement of cord loop "B" (5).

(a) Carefully cut and remove stitching (6) that secures the 1-inch wide fixed web keeper (7) to the harness. Cut replacement Type IV nylon web keeper (7) the length of the removed keeper and sear ends as described in paragraph 2-13.

(b) Carefully cut and remove stitching (8) that secures the loop (5) to the harness in two places (6) and discard. Cut a 6-1/2 inch length of Type III, OD-7 nylon cord and sear ends as described in paragraph 2-13.

(c) Position nylon cord (5) as in original location and stitch with double-throw zigzag or straight zigzag stitching (8), two places (6) forming loop. Use size E thread, 7 to 11 stitches per inch, and a type ZZ sewing machine.

(d) Position web keeper (7) 2-1/4 inches from outside edge of loop (5) as in original construction. The two plies of web keeper must be located on the loop side of the harness. Stitch with double box X stitch pattern (6). Use size FF thread, 7 to 9 stitches per inch, and a type MD sewing machine.

(3) Replacement of cord loop "C" (9).

(a) Carefully cut and remove stitching (10) that secures the cross strap (11) to the harness.

(b) Carefully cut and remove stitching (12) that secures the loop (9) to the harness in two places (12) and discard. Cut a 5-1/4 inch length of Type III, red nylon cord and sear ends.

(c) Position nylon cord (9) as in original location and stitch with double-throw zigzag or single-throw zigzag stitching (12), two places forming loop (9). Use size E thread, 7 to 11 stitches per inch, and a type ZZ sewing machine.

(d) Position cross strap (11) 7/8 inch from outside edge of loop with harness strap sandwiched between superimposed cross straps as in original construction and stitch with double box X stitch pattern. Use size 3 thread, 6 to 8 stitches per inch, and a type HD sewing machine.

b. Replace damaged cross straps as follows:

(1) Carefully cut and remove without damaging the "C" release loops, the double box X stitching which secures the cross straps (1) to the harness (2) on both sides.

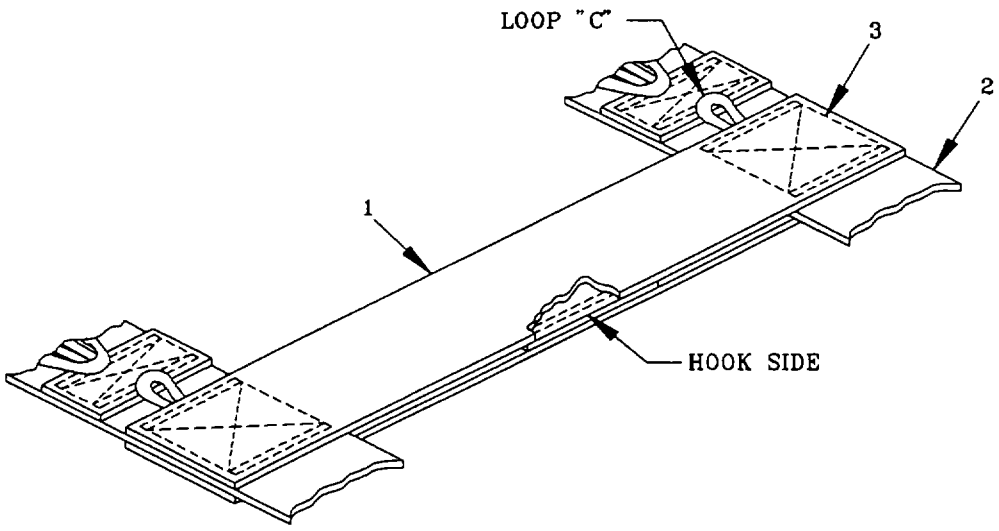
(2) Cut two 8-3/4 inch lengths of Type VIII nylon webbing and sear ends.

(3) Cut a 1-3/4 wide X 2-inch long hook tape fastener.

(4) On one cross strap, make a mark 4-3/8 inches for the center line location. From the center line, make a 1-inch mark at each side.

(5) Position replacement 2-inch long hook tape (facing up) between marks and stitch with two rows of box stitching (3). Use size FF thread, 7 to 9 stitches per inch, and a type MD sewing machine.

(6) Place cross straps (1) together with hook tape on inside bottom layer, and with harness strap (2) sandwiched between superimposed cross straps as in original construction and stitch with double box X stitch pattern in two places. Use size 3 thread, 6 to 8 stitches per inch, and a type HD sewing machine.



c. Replace a damaged adjustable cross strap, chape adapter or quick-fit adapter as follows:

(1) Replacement of adjustable cross strap (1).

(a) Carefully cut and remove stitching (2) that secures the strap (1) to harness (3). Remove adapter (4) from strap and discard.

(b) Cut a 21-inch length of Type VIII nylon webbing and sear ends.

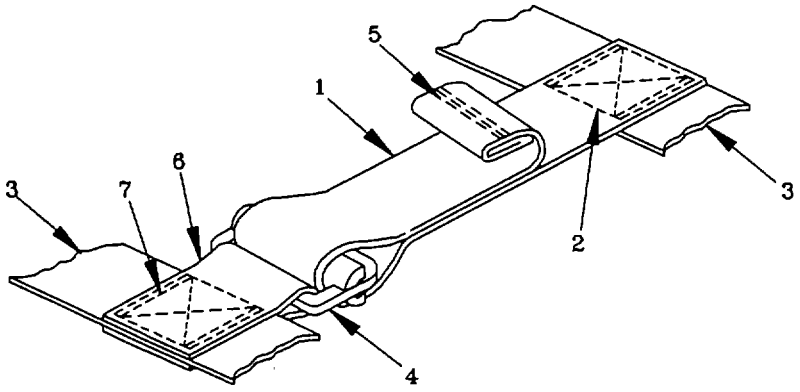
(c) Position nylon webbing on bottom side of harness (3) as in original location and stitch with double box X stitch pattern (2). Use size 3 thread, 6 to 8 stitches per inch, and a type HD sewing machine.

(d) Thread other end of webbing through quick-fit adapter (4) and fold end eight times (nine plies thick) 1-1/2 inches wide and stitch with three rows of stitching (5) located in the center. Use size 3 thread, 6 to 8 stitches per inch, and a type HD sewing machine.

(2) Replacement of chape adapter (6) or damaged quick-fit adapter (4).

(a) Carefully cut and remove stitching (7) which secures the chape adapter (6) to the harness (3) and discard chape adapter.

(b) Cut a 5-inch length of Type VIII nylon webbing, sear ends and fold in center.



(c) Unthread folded end of adjustable strap (1) from quick-fit adapter (2).

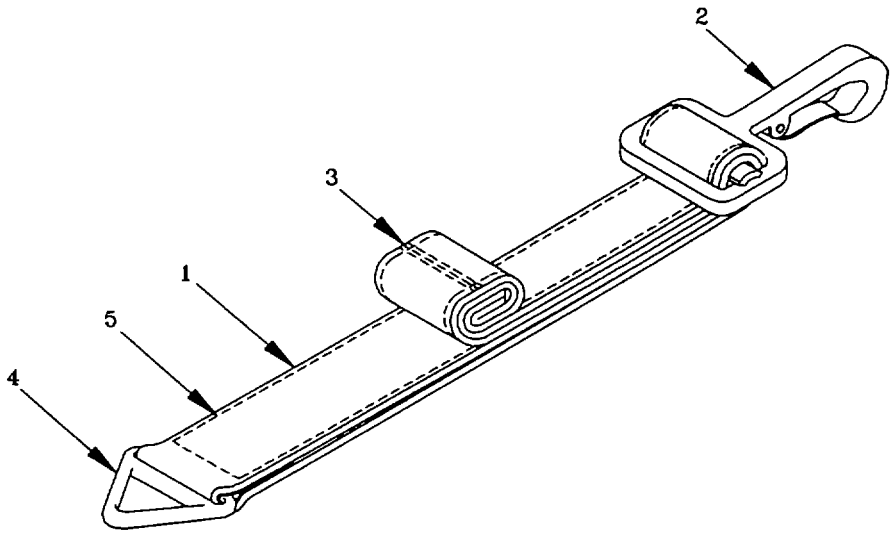
(d) Place serviceable quick-fit adapter (4) on new chape adapter (6) with harness strap (3) sandwiched between superimposed web chape adapter (6) as in original construction and stitch with double box X stitch pattern (7). Use size 3 thread, 6 to 8 stitches per inch, and a type HD sewing machine.

d. Replace a damaged Attaching Harness Strap (1) with a serviceable item from stock.

(1) Replacement of damaged hardware:

(a) If only the snap hook (2) is damaged, carefully cut and remove the stitching at the folded end of the strap (3). Remove damaged snap hook and replace with serviceable item. Fold end of strap according to original construction and stitch using size 3 thread, 6 to 8 stitches per inch, and a type HD sewing machine.

(b) If only the triangular link (4) is damaged, carefully cut and remove the stitching at the folded end of the strap (3), sides and link end (5) of the strap. Remove triangular link and replace with a serviceable item. Stitch link end (5) and sides. Fold end of strap as in the original construction and stitch using size 3 thread, 6 to 8 stitches per inch, and a type HD sewing machine.

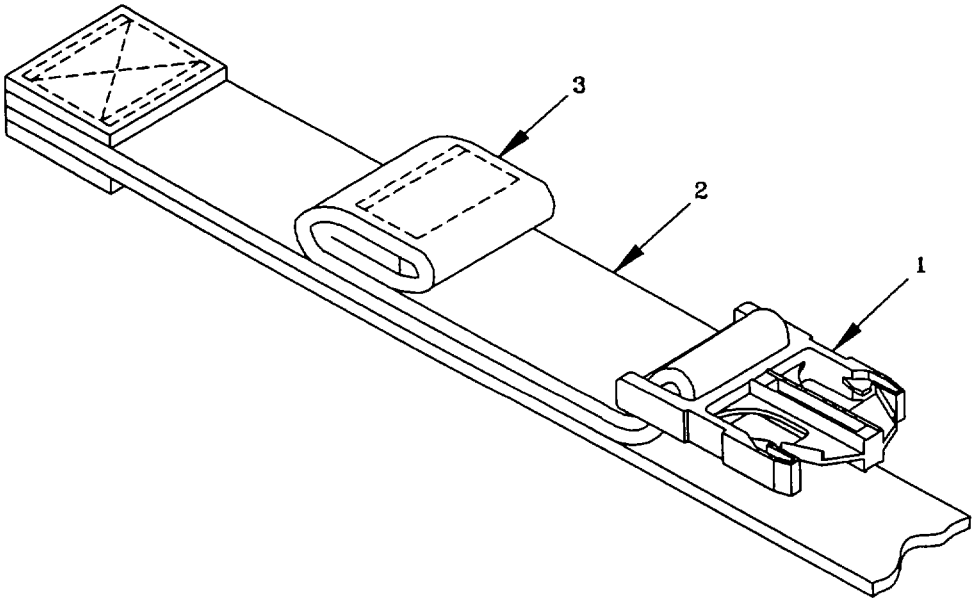


e. Replace a damaged adjustable leg strap by fabricating a new one as described in Appendix E.

(1) Replacement of damaged quick release buckle:

(a) If only the male half quick release buckle (1) is damaged, carefully cut and remove the stitching at the folded end of the strap (2). Remove male half of buckle, replace with a serviceable item of like construction and design.

(b) Thread through replacement buckle as in original construction and fold end (3) four times (five plies thick) 1-inch wide and stitch with double box stitch pattern using size 3 thread, 6 to 8 stitches per inch, and a type HD sewing machine.



f. Replace a damaged Leg Strap Release Assembly with a new one.

(1) Replacement of damaged elastic keeper (1).

(a) Carefully cut and remove stitching (2) that secures the keeper to the strap.

(b) Cut a 4-3/4 inch length of 1-inch wide elastic webbing and wax dip ends to a depth of 3/8 inch.

(c) Fold in half with ends aligned and stitch with two rows of stitching 1/2 inch from edge (3). Use size FF thread, 7 to 9 stiches per inch, and a type MD sewing machine.

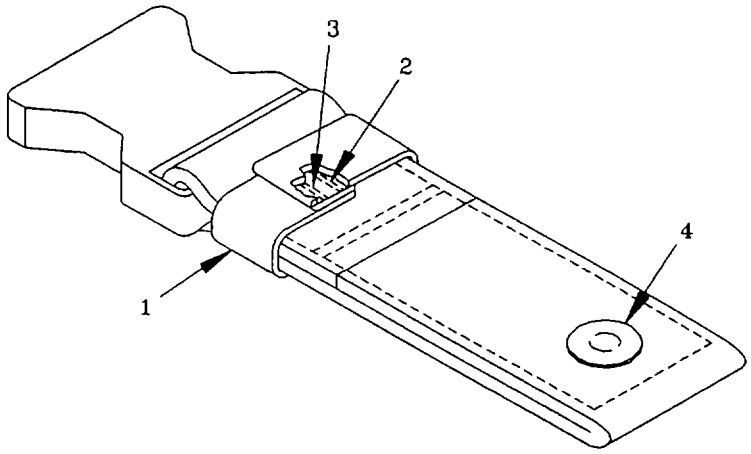
(d) With keeper (1) turned to inside, position in original location and stitch to strap with two rows of stitching 1/4 inch from edge. Use size FF thread, 7 to 9 stiches per inch, and a type MD sewing machine. Turn keeper to outside by passing end of leg strap release assembly through keeper loop.

(2) Replace or reset a loose or damaged grommet (4) in accordance with procedures described in paragraph 2-13.

(a) Resetting. Reset a loose Size 0, Type III Spur Grommet and washer by using appropriate dies.

(b) Replace. Remove damaged grommet and washer by cutting it with a pair of diagonal wire cutters. Do not damage the webbing.

(c) Set. Without damage to the webbing, install a replacement grommet of appropriate size, and set using the proper size dies. The grommet half shall be located on the web loop side of the leg strap release assembly.



g. Release Handle Assembly. Replace a damaged cable lanyard or pile fastener tape on the release handle assembly as follows:

(1) Replacement of release handle lanyard (1).

(a) Cut the tubular lanyard web adjacent to harness (2) and handle straps (3) and discard.

(b) Cut a 9-3/4 inch length of 5/8 inch width, natural color tubular webbing and sear ends.

(c) Position replacement on top of webbing (side opposite the pile tape) to outside edge of webbing and secure to handle assembly using double box stitch pattern (4). Use size 3 thread, 6 to 8 stitches per inch, and a type HD sewing machine.

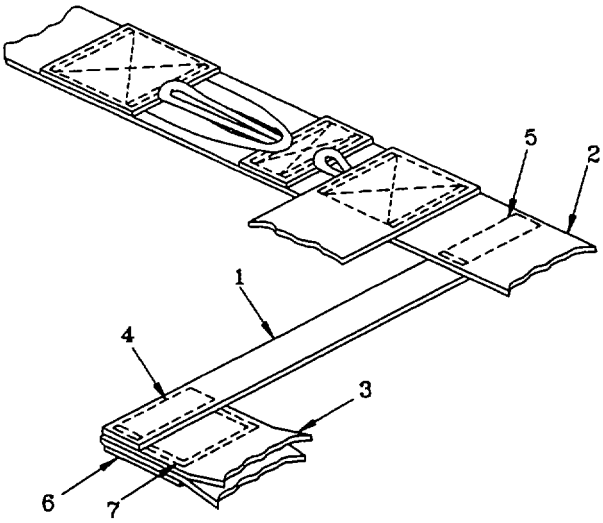
(d) Superimpose other end of replacement on top of cut lanyard, to outside edge of webbing and secure to harness assembly with double box stitch pattern (5). Use size 3 thread, 6 to 8 stitches per inch, and a type HD sewing machine.

(2) Replacement of pile fastener tape (6).

(a) Carefully cut and remove stitching (7) hat secures the pile to the release handle and discard.

(b) Cut a 1-3/4 inch length of 1-1/2 inch width pile tape.

(c) Position as in original location and stitch with two rows of stitching 1/8-inch from the edges. Use size FF thread, 7 to 9 stitches per inch, and a type MD sewing machine.



(3) Replace or reset a loose or damaged wire cable on the release handle assembly as follows:

(a) Re-press a loose cable sleeve (1) with compressing tool.

(b) Replacement of damaged wire cable.

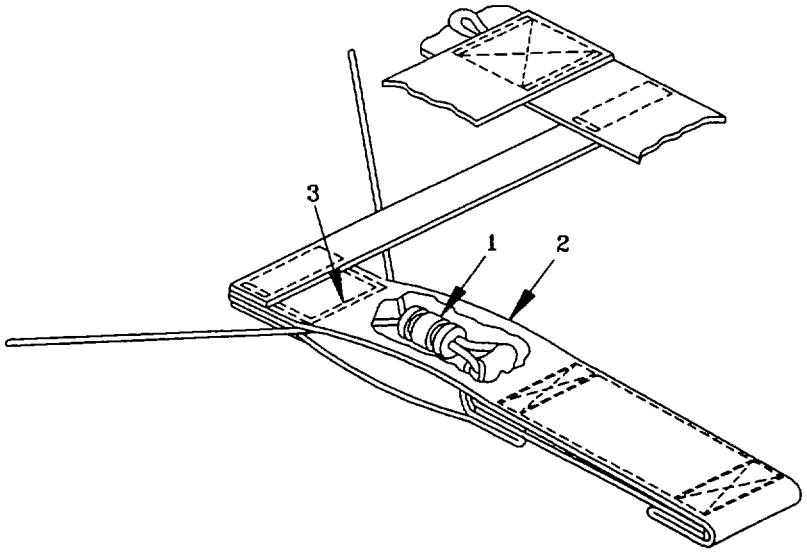
1 Remove a damaged wire cable by cutting cable at web loop attachment (2) location with cable cutter.

2 Cut a 17-inch length of replacement cable and sear ends of the nylon cable cover coating, sealing the ends of the wire material.

CAUTION

Be careful not to cut the wire cable material by compressing the sleeve excessively tight when assembling sleeve to the cable.

3 Thread one end of cable through the ¾ inch long wire cable sleeve (1), web loop of handle assembly (2), and opposite side of sleeve until ends are even, forming a 1-inch loop from cable edge to sleeve edge. Compress the sleeve, 3/16 inch from each end of the sleeve (two places) firmly to retain cable. The cable legs shall be positioned between the web plies and to the outside edges of pile tape stitching (3).

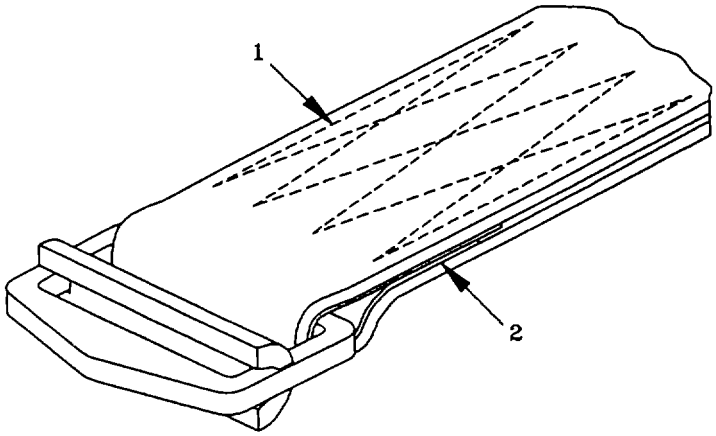


i. Replace damaged retainer strap quick-fit adapters as follows:

(1) Carefully cut and remove the 4-point WW stitch pattern (1) which secures the adapter to the harness and discard buffer (2).

(2) Cut a 3-1/2 inch length of Type VIII nylon webbing, sear ends and fold so ends are offset 1/4-inch.

(3) Position buffer (2) and harness web strap on serviceable adapter as in original and stitch with 3-inch long 4-point WW stitch pattern. Use size 3 thread, 6 to 8 stitches per inch, and a type HD sewing machine.



2-20. PACK ASSEMBLY, AT4.

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

INITIAL SETUP

Tools:

Knife, Item 1, Section III, Appendix B
Shears, Item 2, Section III, Appendix B

Materials/Parts:

Beeswax, technical, Item 1, Appendix E
Brush, Stencil, Item 3, Appendix E
Cloth, nylon, 12.5 oz, Item 7, Appendix D
Felt, 1/4 inch, Item 12, Appendix D
Ink, Marking, Item 15, Appendix E
Stencilboard, oiled, Item 21, Appendix E
Tape, fastener, pile, Item 27 ,Appendix D
Tape, cotton, 1 inch, Item 32,Appendix D
Thread, nylon, size 3, Item 35, Appendix D
Thread, nylon, size E, Item 36, Appendix D
Thread, nylon, size FF, Item 37, Appendix D
Wax, paraffin, technical, Item 42, Appendix D
Webbing, nylon type VII, Item 49, Appendix D
Webbing, nylon, type VIII, Item 45, Appendix D

General Safety Requirements:

Read, understand, and follow warnings, cautions and notes.

Equipment Condition:

AT4 Pack should be clean and dry. Position pack on work table.

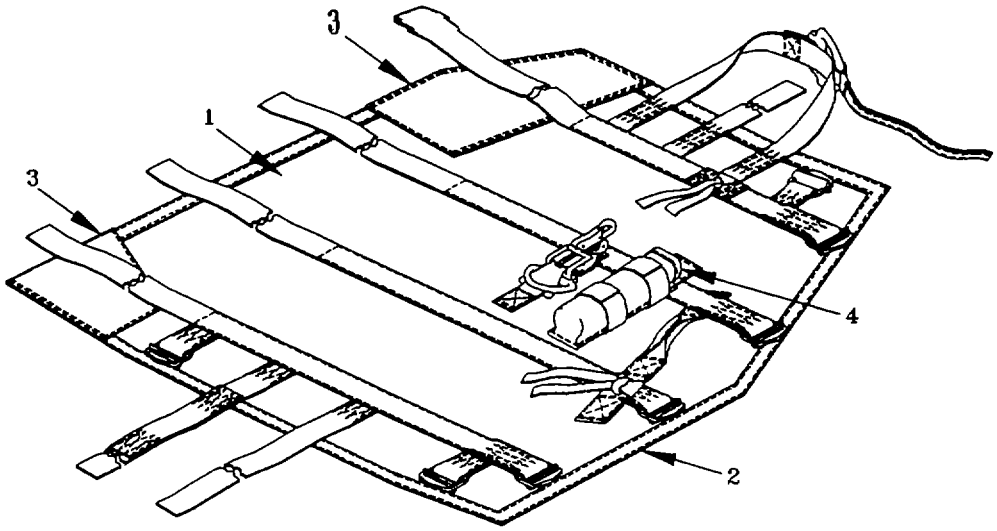
INSPECT

Perform a before and after repair rigger/technical inspection of the AT4 Pack as outlined in Paragraph 2-14.

REPAIR

The nylon fabric (1) of the pack body may be restitched, darned and patched. The felt lining may be restitched and plugged.

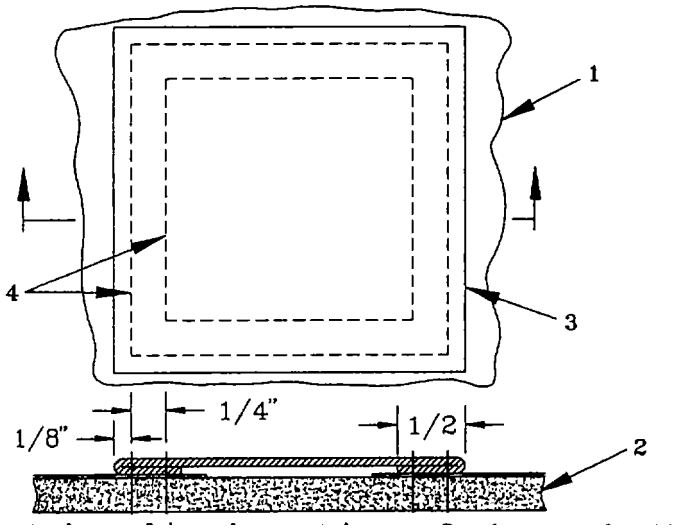
a. Restitching. Restitch loose or broken stitching on body of pack (2), muzzle butt (3), and lowering line pocket (4) directly over old stitching using size 3 thread, 5 to 8 stitches per inch, and an HD sewing machine. Lock stitching at least ½ inch.



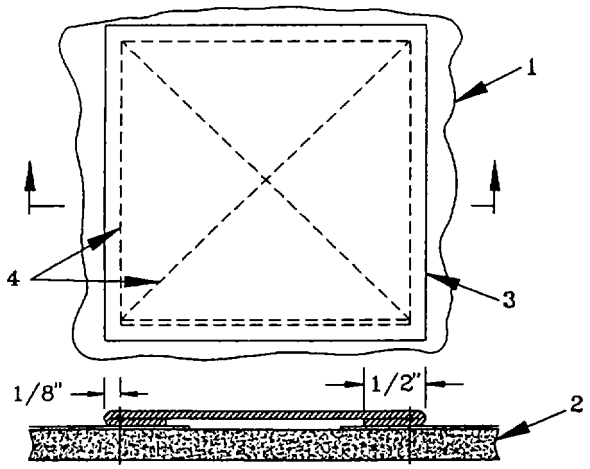
b. Darning. Darn a hole or tear in the pack fabric, rifle butt or muzzle pockets that does not exceed 1 inch in length or diameter using size E thread and a darning machine. There is no limit to darns that may be applied, provided they do not weaken or reduce the original strength of the fabric more than 10%. If damage is in the lined portion of the container body and only the cotton duck is damaged, darn through duck and felt. If felt is also damaged, remove damaged area before darning duck fabric. Then plug felt as in c.(3) below.

c. Patching. There is no limit to the number of times the container body may be patched. Patch a hole or tear that exceeds 1 inch in length or diameter following procedures in (1) or (2) below. Use nylon or cotton duck cloth according to original construction for patching outside, and 1/4 inch thick felt for plugging inside lining. Use an HD sewing machine, size 3 thread, and 5 to 8 stitches per inch.

(1) To patch a lined portion of the pack (1) when the felt (2) is not damaged, cut nylon or cotton duck patch (3) 2 inches beyond circumference of damaged portion. Turn under edges of patch 1/2 inch and center patch over damaged area. Sew patch to pack (1) with a double row of stitching (4) as shown.

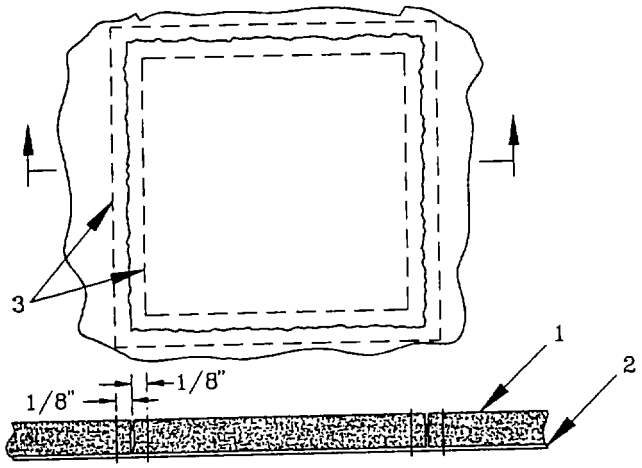


(2) To patch a lined portion of the pack (1) when the felt (2) is damaged, remove the damaged felt as described in (3) below. Cut a piece of felt (2) the same size as the piece removed, and position felt plug and cotton duck patch (3) (with edges turned under 1/2 inch) over damaged area. Sew a single box X stitch (4) formation as shown.



(3) To plug the felt (1) lining, mark a rectangle around the damaged area. Remove the damaged felt while being careful not to damage the cotton duck material (2). If damage is

in area of the rifle butt or muzzle pockets, carefully remove stitching which holds pocket to pack. Cut a piece of felt the size of the piece removed. Position felt plug into area cleared and sew as shown. Use size 3 thread, 5 to 8 stitches (3) per inch and an HD sewing machine.



d. Repair of binding tape. Overlap the binding tape extending the new tape at least 1-inch beyond the damaged tape. Stitch tape with two rows of stitching 1/8 and 1/4 inches from edge of tape as in original construction using size 3 thread, 5 to 8 stitches per inch and an HD sewing machine.

e. Repairing Webbing.

CAUTION

If the webbing is inadvertently damaged when stitching is being removed, the webbing must be replaced in accordance with original construction.

(1) General. The webbing on the pack may be restitched.

(2) Restitching. Restitch loose, broken or defective stitching according to original construction using size 3 thread, 5 to 8 stitches per inch and an HD sewing machine. Lock stitching at least 1/2 inch.

c. Repair lowering line pocket (3) by restitching. Use size FF thread, 5 to 8 stitches per inch, and an MD sewing machine. Lock stitching at least 1/2 inch.

CAUTION

Splicing of the lowering line is not authorized. Serious equipment damage may occur due to failure of a spliced lowering line.

d. Repair lowering line (2) by restitching. Use size 3 thread, 5 to 8 stitches per inch and an HD sewing machine. Lock stitching at least 1/2 inch. To replace quick ejector snap, carefully cut and remove stitching that holds hardware to lowering line. Place new ejector snap between buffer and lowering line and stitch using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.

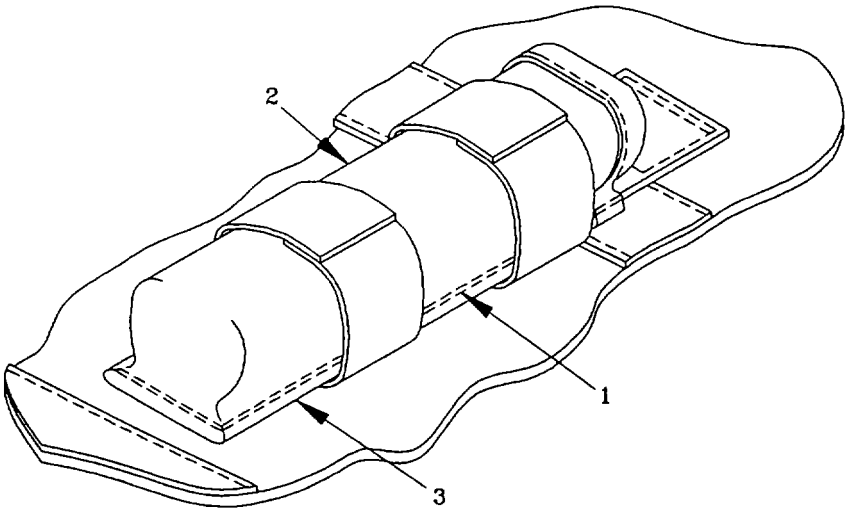
REPLACE

a. Lowering Line Pocket. Replace a damaged lowering line pocket, and hook and pile retainer as follows:

(1) Cut stitching (1) and remove damaged pocket (2) from pack.

(2) Fabricate a new lowering line pocket as described in Appendix E.

(3) Position replacement pocket assembly as in original and stitch to pack 1/8 inch from pocket edge (3) using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.



b. Replacing Webbing. All webbing items may be replaced. Replacement will be accomplished in accordance with the original construction and as prescribed herein.

(1) Line/D-Ring Chape. Replace damaged chape as follows:

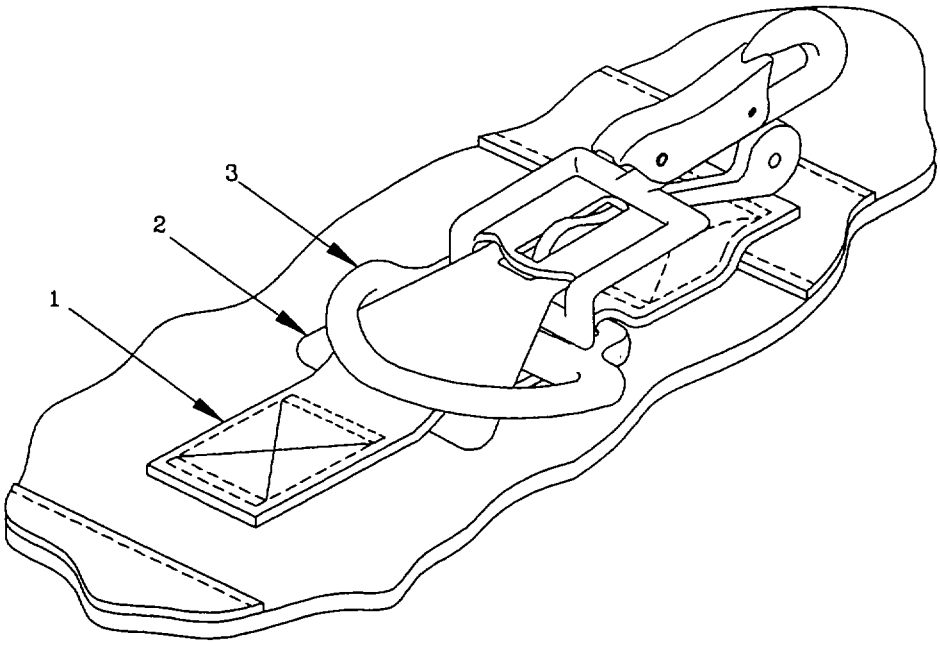
(a) Carefully cut and remove the three stitch patterns which secure the chape (1) to the pack and discard.

(b) Make new chape as specified in Appendix E.

(c) Position replacement chape as in original and secure to pack body with 2-inch double box X stitch pattern in center of chape using size 3 thread 5 to 8 stitches per inch and a type HD sewing machine.

(d) Position serviceable link (2) in location and direction as in original and secure to pack with 2-inch double box X stitch pattern using size 3 thread 5 to 8 stitches per inch and a type HD sewing machine.

(e) Position serviceable D-ring (3) in location as in original and secure to pack with 2-inch double box X stitch pattern using size 3 thread 5 to 8 stitches per inch and a type HD sewing machine.

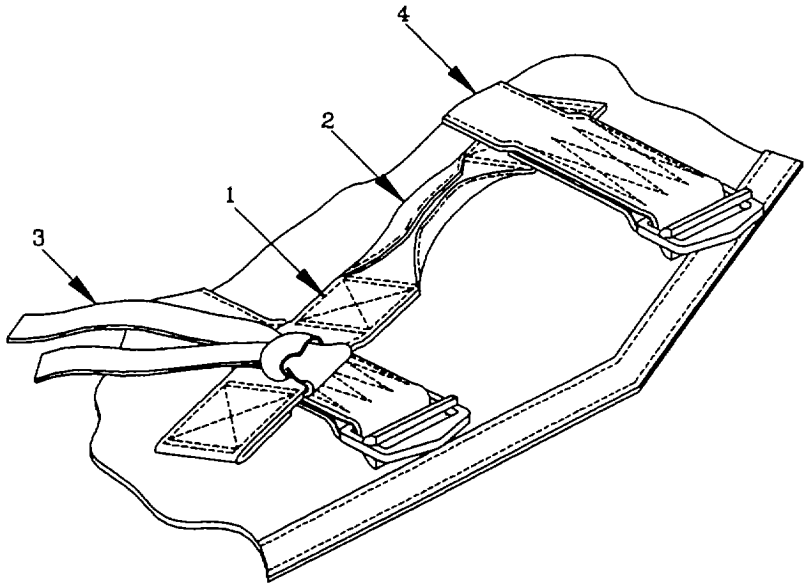


(2) Carrying Handle Strap. Replace damaged carrying handle strap as follows:

(a) Remove damaged handle by cutting and removing stitching (1) of the two 2 inch box X patterns which secure the handle (2) to the pack at the leg tiedown tape end (3). Cut the webbing along the side securing strap (4) at the other end and discard.

(b) Make new handle as specified in Appendix E.

(c) Turn under ends 1 1/4 inch and position replacement strap on top of side securing strap over cut end of old carrying handle, and over other end as in original construction using size 3 thread 5 to 8 stitches per inch and a type HD sewing machine.

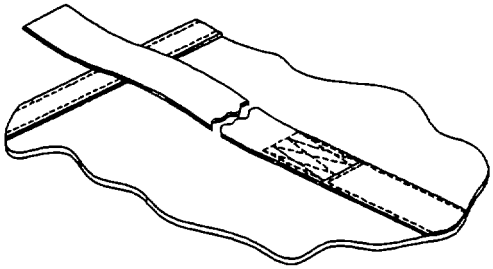


(3) Side securing strap running ends. Replace damaged running end of side securing strap as follows:

(a) Remove damaged end by cutting strap along stitching that secures it to the pack.

(b) Cut a length of Type VIII nylon webbing equal to length removed plus 3 1/2 inches and sear ends.

(c) Turn under one end 1/2 inch, and position replacement strap 3 inches beyond the cut webbing end on the pack. Stitch with 3-inch four point WW pattern using size 3 thread 5 to 8 stitches per inch and a type HD sewing machine.

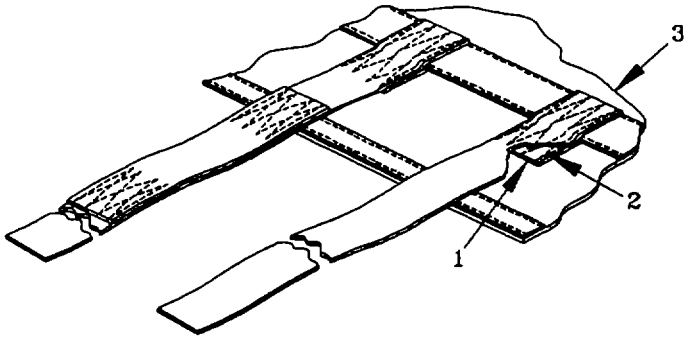


(4) Aft end securing straps. Replace damaged aft securing straps as follows:

(a) Remove damaged end by cutting strap (1) along stitching (2) that secures strap to pack (3).

(b) Cut a length of Type VII nylon webbing to length removed plus 3 inches and sear ends of webbing.

(c) Position replacement strap 3 inches beyond the cut webbing end on the pack (3). Stitch with 3-inch four point WW using size 3 thread 5 to 8 stitches per inch and a type HD sewing machine.



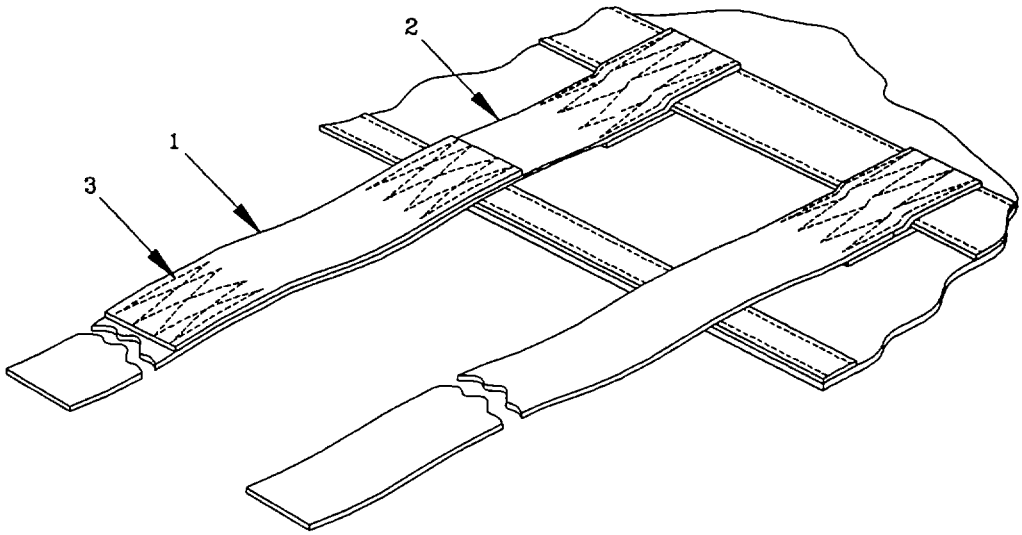
(5) Replacement of damaged keeper strap:

(a) Carefully cut and remove stitching which secures the keeper (1) to the aft end securing strap (2) and discard.

(b) Cut a 13-inch length of Type VII nylon webbing and sear ends.

(c) Make a mark 3 inches from each end for the 3 inch stitch patterns (3).

(d) Position replacement keeper as in original and secure to strap with 3-inch four point WW patterns using size 3 thread 5 to 8 stitches per inch and a type HD sewing machine.



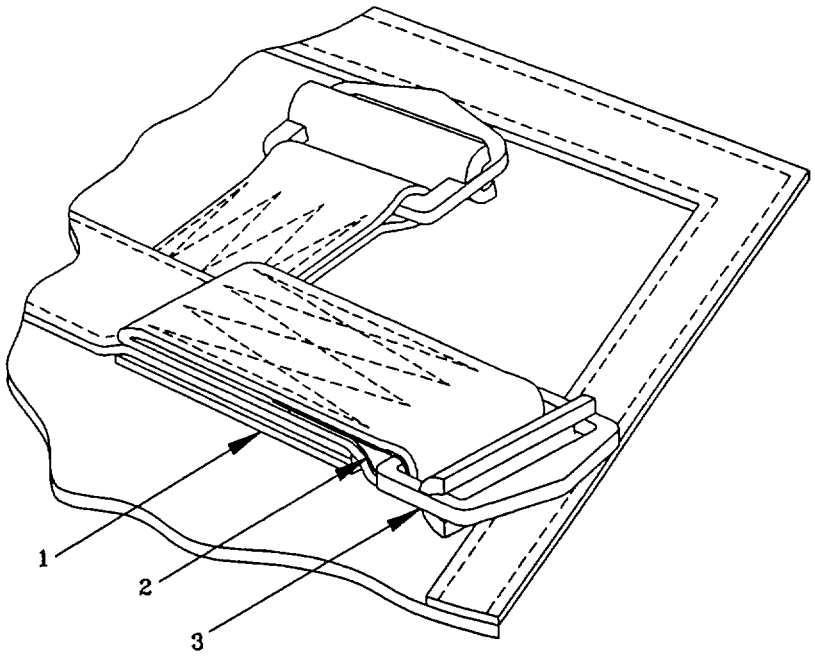
(6) Quick-Fit Adapter Chape, Side and Aft Securing Adapters. Replace damaged webbing or adapter as follows:

(a) Remove adapter by cutting webbing as close to stitching as possible (1) and discard.

(b) Cut a 3 3/4 inch buffer of Type VIII nylon webbing and fold so ends are offset 1/2 inch (2).

(c) Cut a 7 1/2 inch adapter chape of Type VIII nylon webbing and sear ends. Fold webbing 1/2 and 3 3/4 inches from one end.

(d) Place buffer and chape on serviceable adapter (3) and position replacement on top of original. Sew with a 3-inch 4-point WW stitch formation using size 3 thread 5 to 8 stitches per inch and a type HD sewing machine.



(7) Forward end cross strap. Replace damaged cross strap as follows:

(a) Carefully cut and remove stitching (1) of the two 4-point patterns which secures the strap (2) to the pack body and discard.

(b) Make new forward end cross strap in accordance with Appendix E.

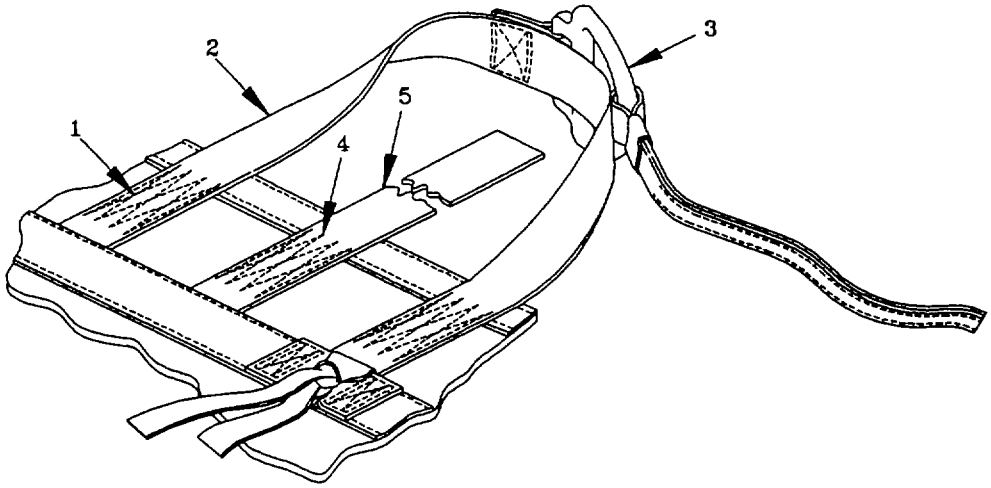
(c) Position replacement cross strap with "D" ring (3) as in original and secure to pack using two 3 1/2 inch 4-point WW stitch pattern (1) using size 3 thread 5 to 8 stitches per inch and a type HD sewing machine.

(8) Forward end securing strap. Replace damaged forward securing strap as follows:

(a) Carefully cut and remove stitching (4) which secures the strap (5) to the pack body and discard.

(b) Cut a 20-inch length of Type VII nylon webbing and sear ends and make a mark 3 1/2 inches at one end (4) for the stitch pattern.

(d) Position replacement securing strap as in original and secure to pack using 3 1/2 inch 4-point WW stitch pattern as shown, using size 3 thread 5 to 8 stitches per inch and a type HD sewing machine.



(9) Leg Tiedown Tape. Replace a damaged or missing tiedown tape as follows:

(a) Remove the tiedown by untying the slip loop (girth hitch) knot and discard.

(b) Cut a 82-inch length of 1-inch wide, Type II, cotton tape and wax dip cut ends a minimum of 1/2 inch.

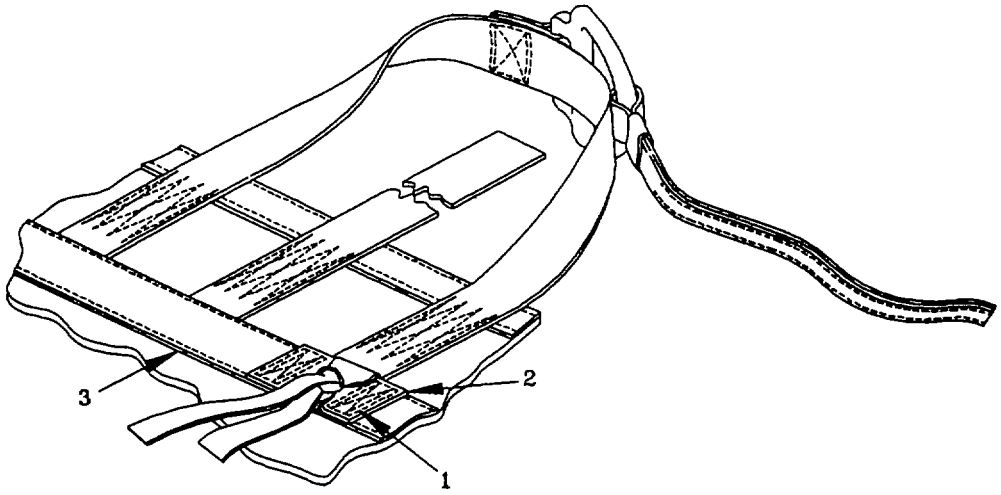
(c) Fold tape so one end is twice as long as the other. Pass loop through leg tiedown loop, forming a slip loop (girth hitch) knot around webbing.

(11) Upper tiedown chape. Replace damaged web chape as follows:

(a) Carefully cut and remove stitching (1) which secures the chape (2) to the side securing strap (3), pack body and discard.

(b) Cut a 5 1/4-inch length of Type VIII nylon webbing, sear ends, and fold the ends 7/8 inch (3).

(d) Position replacement chape as in original and secure to side securing strap (2) and pack body with 5/8 inch double box X stitch pattern using size 3 thread 5 to 8 stitches per inch and a type HD sewing machine.



b. Replacing Hardware.

(1) The quick-ejector snap on the lowering line may be replaced when damaged, by carefully cutting the stitching that secures hardware to lowering line. Place buffer and lowering line on serviceable quick-ejector snap and stitch with 3 inch, 3-point WW stitch formation using size 3 thread 5 to 8 stitches per inch and a type HD sewing machine.

(2) Replace other damaged hardware by carefully cutting and removing the two end stitch patterns that secures the hardware to the pack. Replace with serviceable link or D-ring by positioning as in original and sewing with a 2-inch double box X stitch pattern using size 3 thread 5 to 8 stitches per inch and a type HD sewing machine.

c. Alteration of Line Assembly, Lowering, for Tandem Load.

(1) Carefully cut the stitching which secures the 2- inch long pile tape located approximately 11 3/4 inch from quick-ejector snap end and remove cut stitching.

(2) Cut a 2-inch length of pile tape. (If previously removed pile tape is undamaged, it may be used in lieu of replacement tape.)

(3) Place marks 46 and 48 inches from the folded web edge quick-ejector snap end on the side of the removed 2-inch pile tape of the 1 inch wide lowering line.

(4) With pile side facing up, position 2-inch pile tape between the marking and stitch with a single box stitch using size E thread, 7 to 11 stitches per inch and a type MD sewing machine.

(5) Markings.

(a) Stencil with 1/2 inch high characters, on the outside of retainer fabric using stencil brush and parachute marking blue ink the following "DMJP/AT4JP MOD."

(b) Stencil 1/8 inch wide line across the web width on each side of lowering line, 187 inches from fold web edge quick-ejector snap end.

2-21. CASE, PARACHUTIST'S INDIVIDUAL WEAPON M-1950.

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

INITIAL SETUP

Tools:

Knife, Item 1, Section III, Appendix B
Shears, Item 2, Section III, Appendix B

Materials/Parts:

Beeswax, technical, Item 1, Appendix D
Cloth, duck, cotton, Type I, Item 5 , Appendix D
Felt, 1/4 inch, Item 11, Appendix D
Ink, marking, parachute, strata-blue, Item 15, Appendix D
Leather, cattlehide, Item 16, Appendix D
Lubricant, Stick form, Item 17, Appendix D
Thread, size 3, Item 35, Appendix D
Thread, nylon, size 5, Item 38, Appendix D
Thread, nylon, size FF, Item 37, Appendix D
Wax, Paraffin, Item 42, Appendix D
Webbing, cotton, Type III, Item 59, Appendix D
Webbing, cotton, Type VIII, Item 55, Appendix D

General Safety Requirements:

Read, understand and follow warnings and cautions and notes.

Equipment Condition:

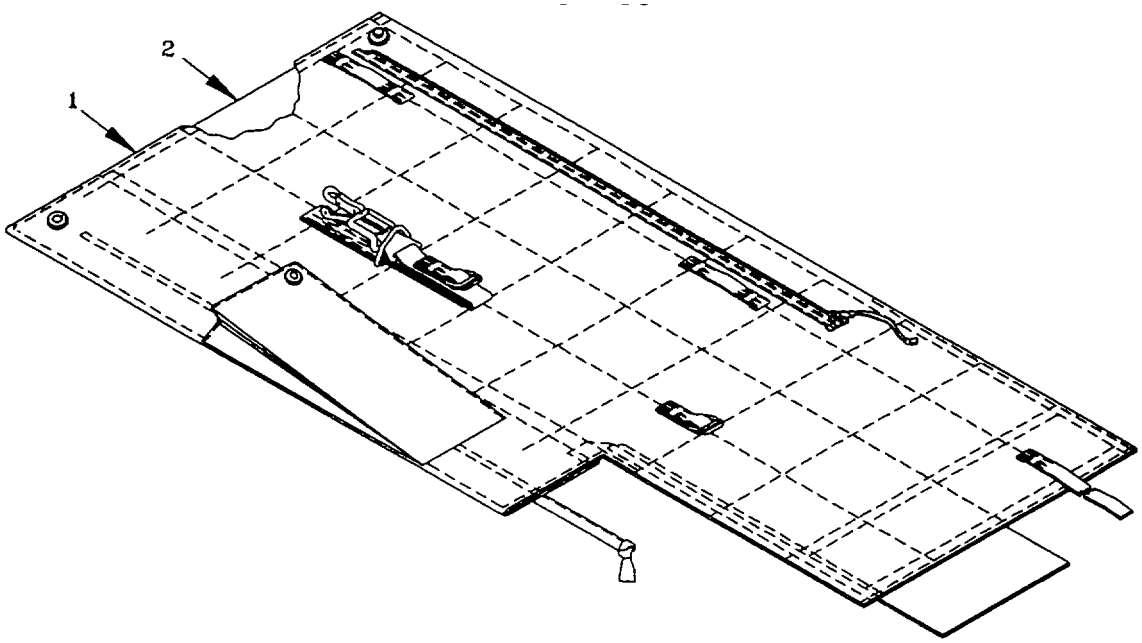
Parachutist's weapons and Individual Equipment Pack and Harness Assembly should be clean and dry. Place assembly on work table.

INSPECT

Perform a before and after repair rigger/technical inspection of the lowering line as outlined in paragraph 2-14.

REPAIR

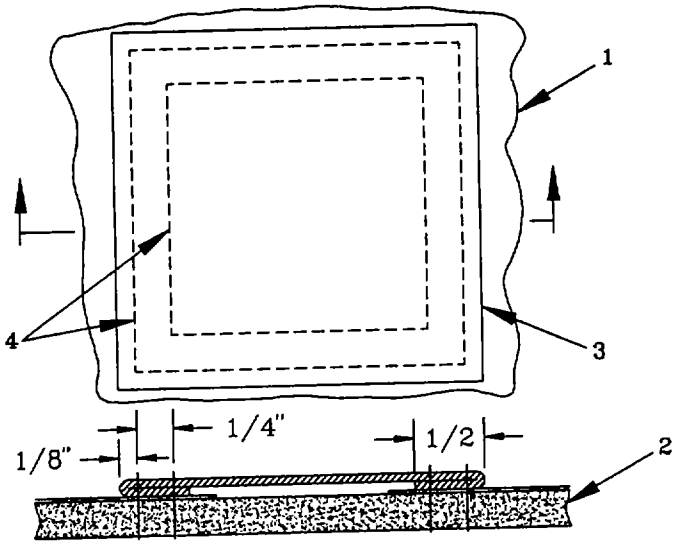
The cotton duck (1) and felt (2) fabric of the case may be restitched, darned, patched and plugged.



a. Restitching. Restitch the case fabric (1) directly over old stitching using size 5 thread, 5 to 8 stitches per inch, and an VHD sewing machine. Lock stitching at least 1/2 inch.

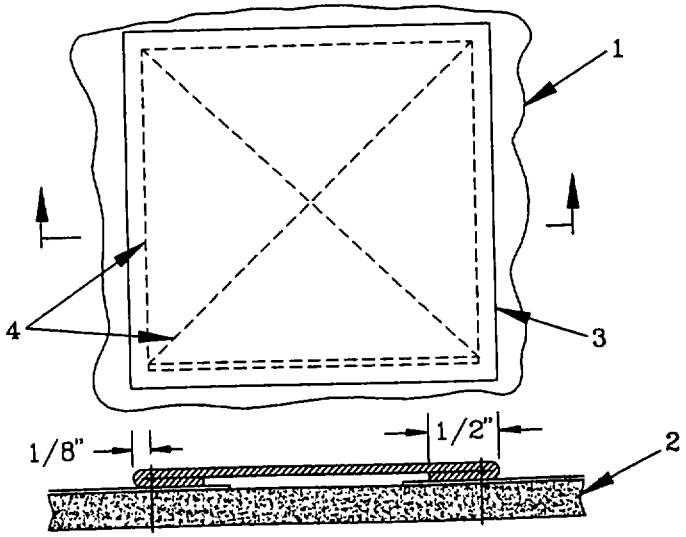
b. Darning. Darn a hole or tear in the case fabric that does not exceed 1 inch in length or diameter using size E thread and a ZZ darning machine. There is no limit to darns that may be applied, provided they do not weaken or reduce the original strength of the fabric more than 10%. If damage is in the lined portion of the case and only the cotton duck is damaged, darn through duck and felt. If felt is also damaged, remove damaged area before darning duck fabric. Then plug felt as in c.(3) below.

c. Patching. There is no limit to the number of times the case may be patched. Patch a hole or tear that exceeds 1 inch in length or diameter following procedures in (1) or (2) below. Use nylon or cotton duck cloth according to original construction for patching outside, and 1/4 inch thick felt for plugging inside lining. Use an MD sewing machine, size FF thread, and 7 to 9 stitches per inch.

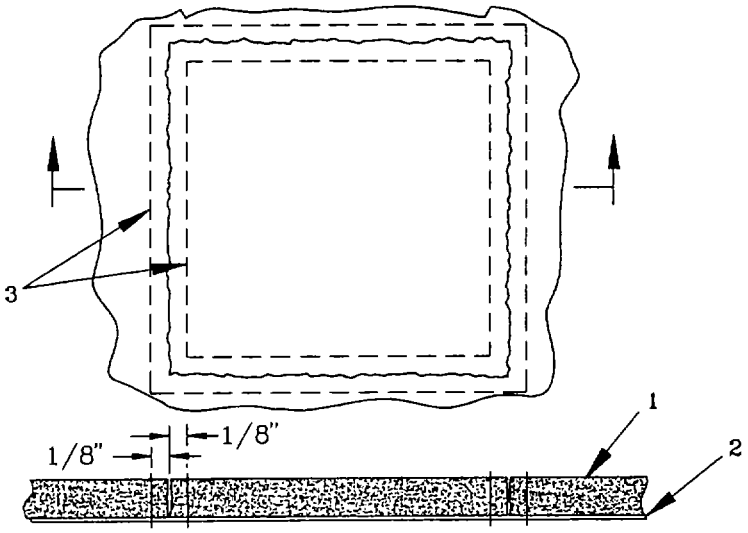


(1) To patch a lined portion of the case (1) when the felt (2) is not damaged, cut nylon or cotton duck patch (3) 2 inches beyond circumference of damaged portion. Turn under edges of patch 1/2 inch and center patch (3) over damaged area. Sew patch to case with a double row of stitching (4) as shown.

(2) To patch a lined portion of the case (1) when the felt (2) is damaged, remove the damaged felt as described in (3) below. Cut a piece of felt the same size as the piece removed, and position felt plug and cotton duck patch (3) (with edges turned under 1/2 inch) over damaged area. Sew a single box X stitch (4) formation as shown.



(3) To plug the felt (1) lining, mark a rectangle around the damaged area. Remove the damaged felt while being careful not to damage the cotton duck material (2). Cut a piece of felt (1) the size of the piece removed. Position felt plug into area cleared and sew as shown. Use size 3 thread, 4 to 6 stitches (3) per inch and an HD sewing machine.



b. Repairing Tape, Webbing and Leather. Restitching is the only repair authorized for the tape, webbing, and leather items on the weapons case. Restitch loose or broken stitching on the corner reinforcement, tiedown loops, quick-adjustable buckle loop and shock absorber loop using size 3 thread, 5 to 8 stitches per inch and type HD sewing machine. Restitch flap thong, and slide fastener thong, using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine. Restitch the leather reinforcement using size 5 thread, 5 to 8 stitches per inch and a type VHD sewing machine. Backstitch at least 1/2 inch.

c. Repairing and Lubricating Slide Fastener. Restitch loose or broken stitching on slide fastener tape using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine. Apply a small amount of "zipper ease" lubricant to slide fastener when it becomes difficult to operate.

REPLACE

a. Replace the lowering line pocket (1) as follows:

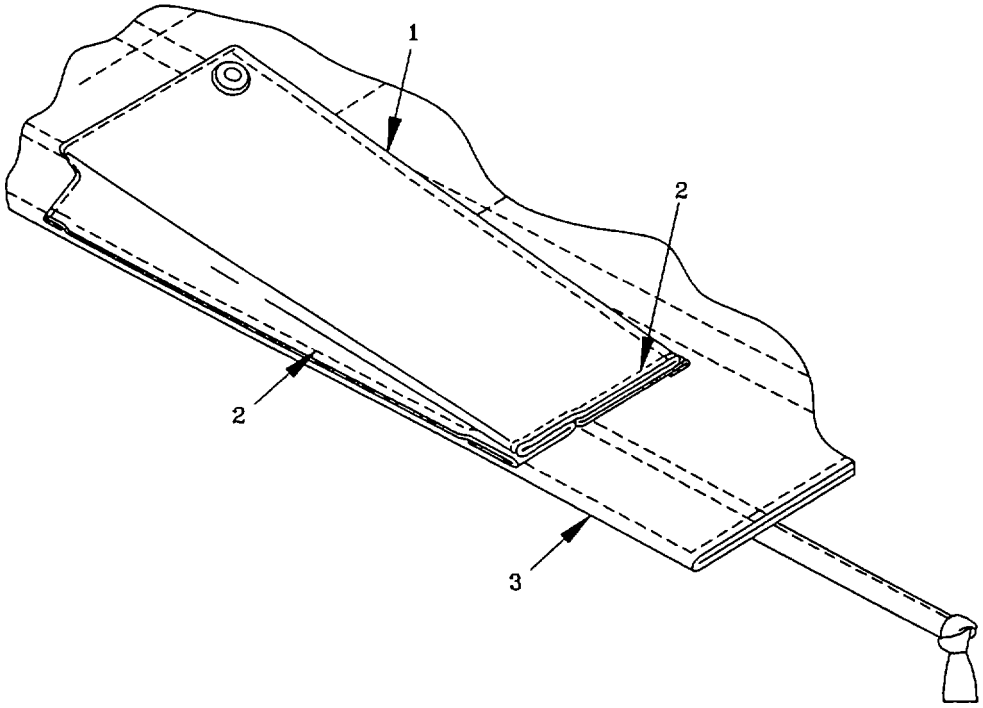
(1) Cut stitching (2) and remove damaged pocket.

(2) Fabricate a new pocket as specified in Appendix E.

CAUTION

Avoid sewing through slide fastener when attaching new lowering line pocket. Damage to the slide fastener will result.

(3) Position new pocket on weapons case (3), turn edges under 1/2 inch, and sew pocket to case using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.

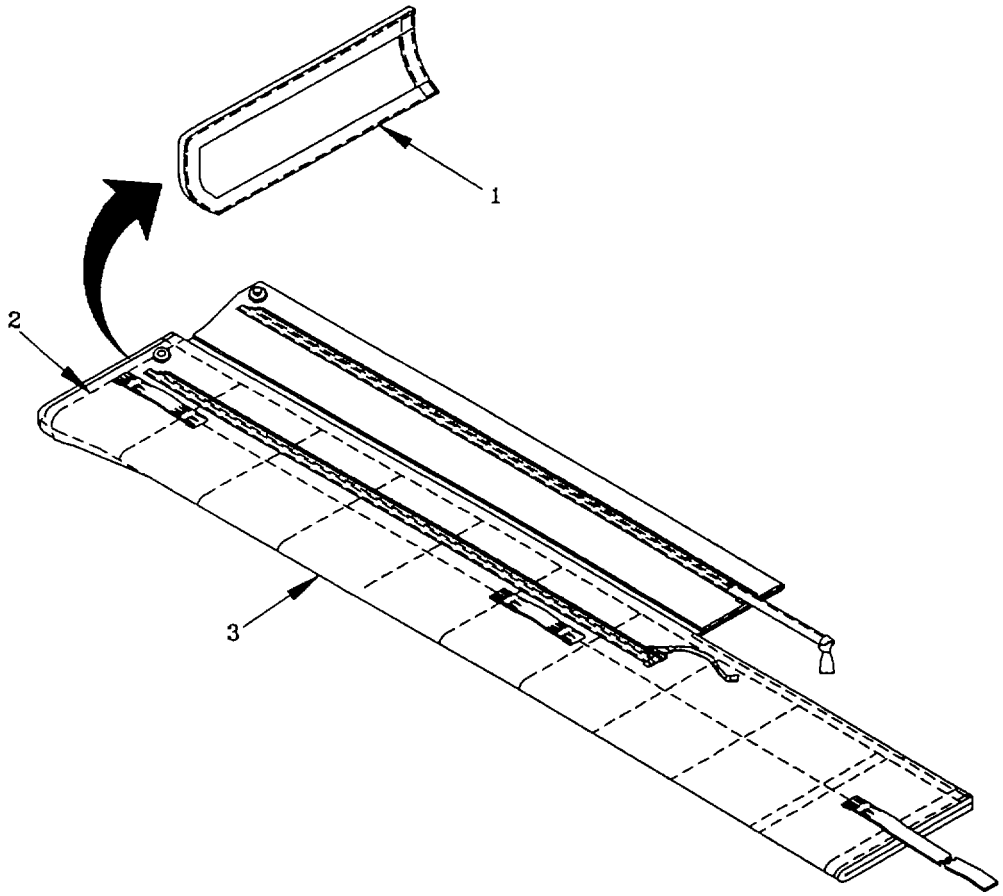


b. Replace the strip panel (1) as follows:

(1) Cut stitching (2) and remove damaged strip panel (1) from weapons case (3).

(2) Fabricate a new strip panel as specified in Appendix E.

(3) Position new strip panel on case, and sew using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.



c. Replace the slide fastener thong, flap thong, tiedown tapes, and corner reinforcement as follows:

(1) Slide fastener thong. Replace a damaged or missing slide fastener thong (1) with a 20-inch length of 3/4-inch Type I cotton tape. Fold tape lengthwise, aligning edges and sew 1/8 inch from the edge, using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine. Tie ends of tape together with an overhand knot, and install tape on slide fastener.

(2) Flap thong. Replace a damaged or missing flap thong (2) with a 6-inch length of 3/4-inch Type I cotton tape. Fold tape lengthwise, aligning edges, and sew 1/8 inch from the edge using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine. Stitch thong to case using same method.

(3) Tiedown tape. Replace a damaged or missing tiedown tape (3) with a length of 1-inch Type I cotton tape. Use a 60-inch length on the bottom tiedown loop and a 54-inch length on the top tiedown loop. Sear ends of tape as described in paragraph 2-13. Pass one end of tape under tiedown loop, pull tape halfway halfway through, and tie tape to loop with a square knot.

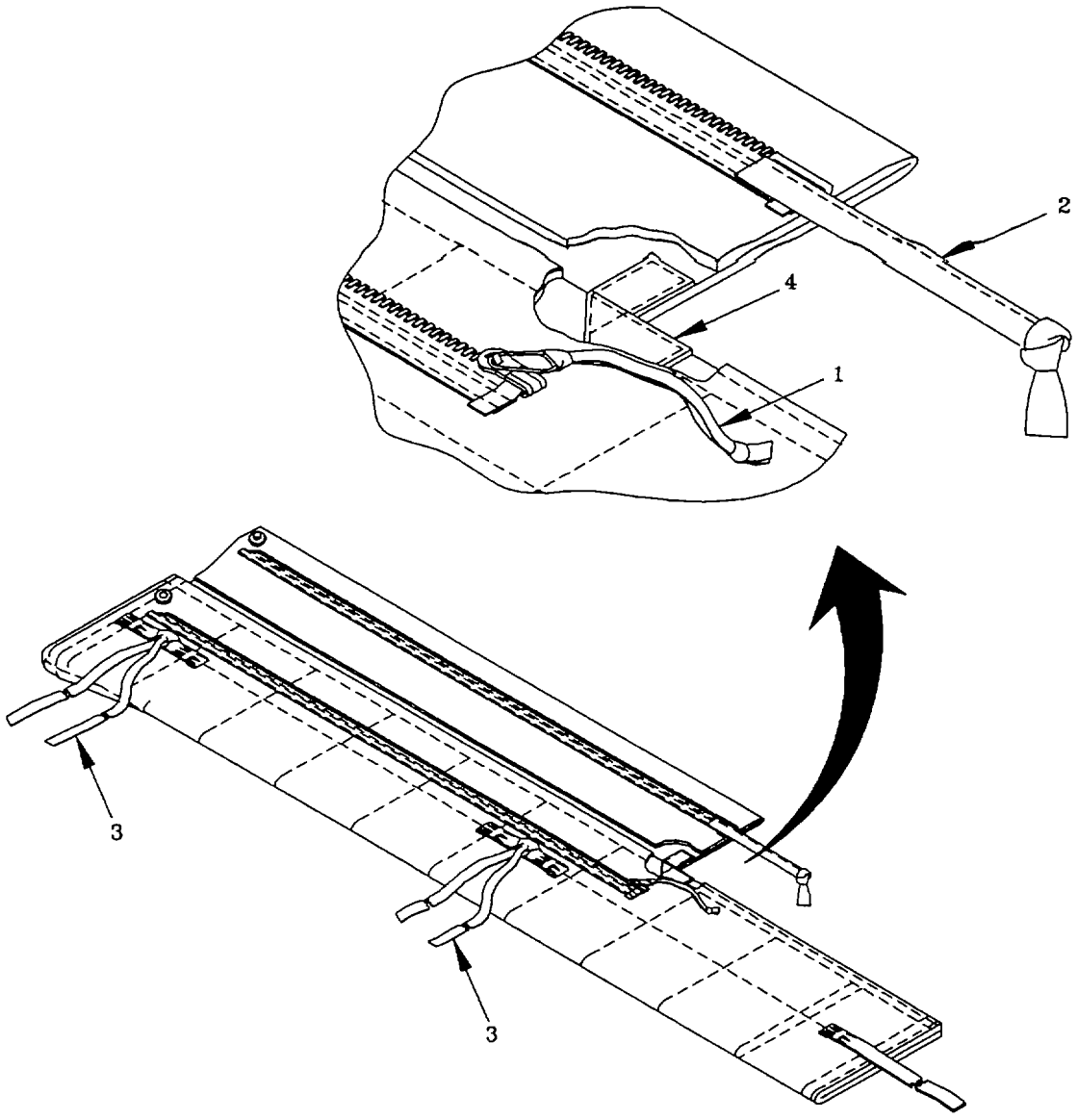
(4) Corner reinforcement. Replace a damaged corner reinforcement (4) with a 5-1/2 inch length of 1-1/2 inch Type1 cotton tape as follows:

(a) Cut sufficient stitching to expose damaged corner reinforcement.

(b) Mark and fold tape as shown.

(c) Position replacement over damaged reinforcement. Sewing 1/8 of an inch from the edge, stitch replacement to case as shown using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.

(d) Restitch loosened stitching. Backstitch at least 1/2 inch.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d. Replace the leather reinforcements follows:

(1) Cut an 8-inch square of 6/64-inch thick leather (1)

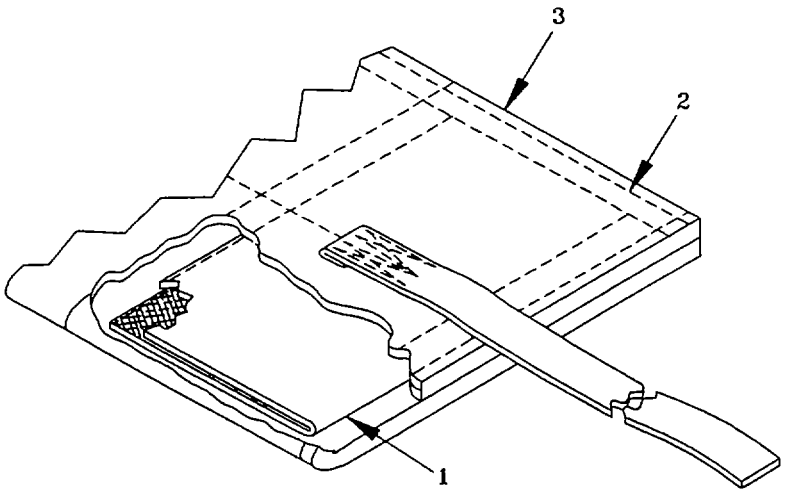
(2) Cut stitching along side and bottom of weapons case, and remove damaged reinforcement from case.

(3) Position new leather square (1) on one side of case with rough side of leather as shown.

(4) Sew along one side of reinforcement, 1/8 inch from edge (2) using size 5 thread, 5 to 8 stitches per inch and a type VHD sewing machine.

(5) Fold case, aligning sides as in original construction. Fold leather reinforcement and sew to other side of case, 4-3/4 inches from bottom of case (3) using size 5 thread, 5 to 8 stitches per inch and a type VHD sewing machine.

(6) Restitch side and bottom of case according to original construction. Backstitch at least 1/2 inch.



e. Replacing Webbing.

(1) The webbing items listed in 2 through 5 below may be replaced. To replace damaged webbing, cut stitching along side and end of weapons case and along one side of the leather reinforcement. After installing new webbing, Restitch leather reinforcement, side and end of case using size 5 thread, 5 to 8 stitches per inch and a type VHD sewing machine.

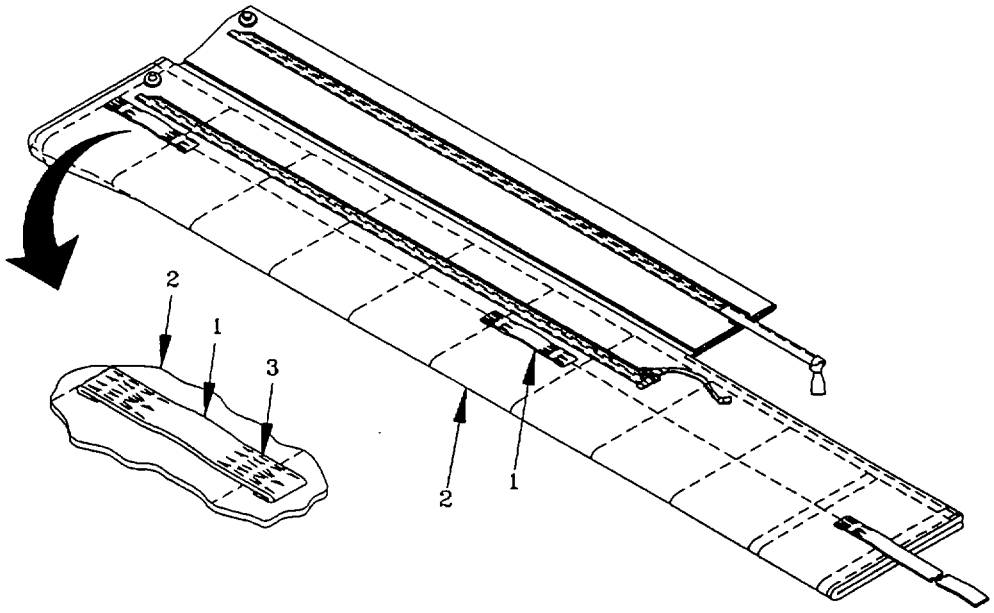
(2) Tiedown loop.

(a) Replace a damaged tiedown loop (1) with a 6-inch length of 1-inch Type III cotton webbing.

(b) Cut stitching, and remove damaged loop.

(c) Turn under ends of replacement webbing ½ inch and position replacement on weapons case (2).

(d) Sew each end of replacement to weapons case with a 3-point WW stitch formation (3) using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.



(3) Loop chap.

(a) Replace a damaged upper (1) or lower (2) loop chap with a 7-inch length of 1-inch Type III cotton webbing.

(b) Cut stitching (3) and remove damaged chap and loops. When removing upper loop chap be careful not to cut stitching that secures triangular loop chap (4) to case.

(c) Install loops on replacement webbing, and sew webbing to case with a 3-point WW stitch formation using size 5 thread, 5 to 8 stitches per inch and a type VHD sewing machine.

(5) Triangular loop chaps. Replace a double-loop (5) or single-loop chap (6) as follows:

(a) double-loop chap.

1 Cut stitching, and remove upper loop chap (1) and double-loop chap (5) from weapons case. Remove quick-release snap link (7) from double-loop chap (5) and remove chap webbing from triangular loop.

2 Cut a 27-1/2 inch length of Type VIII cotton-nylon webbing, and pass webbing through quick-release snap link (7) and triangular loop as shown.

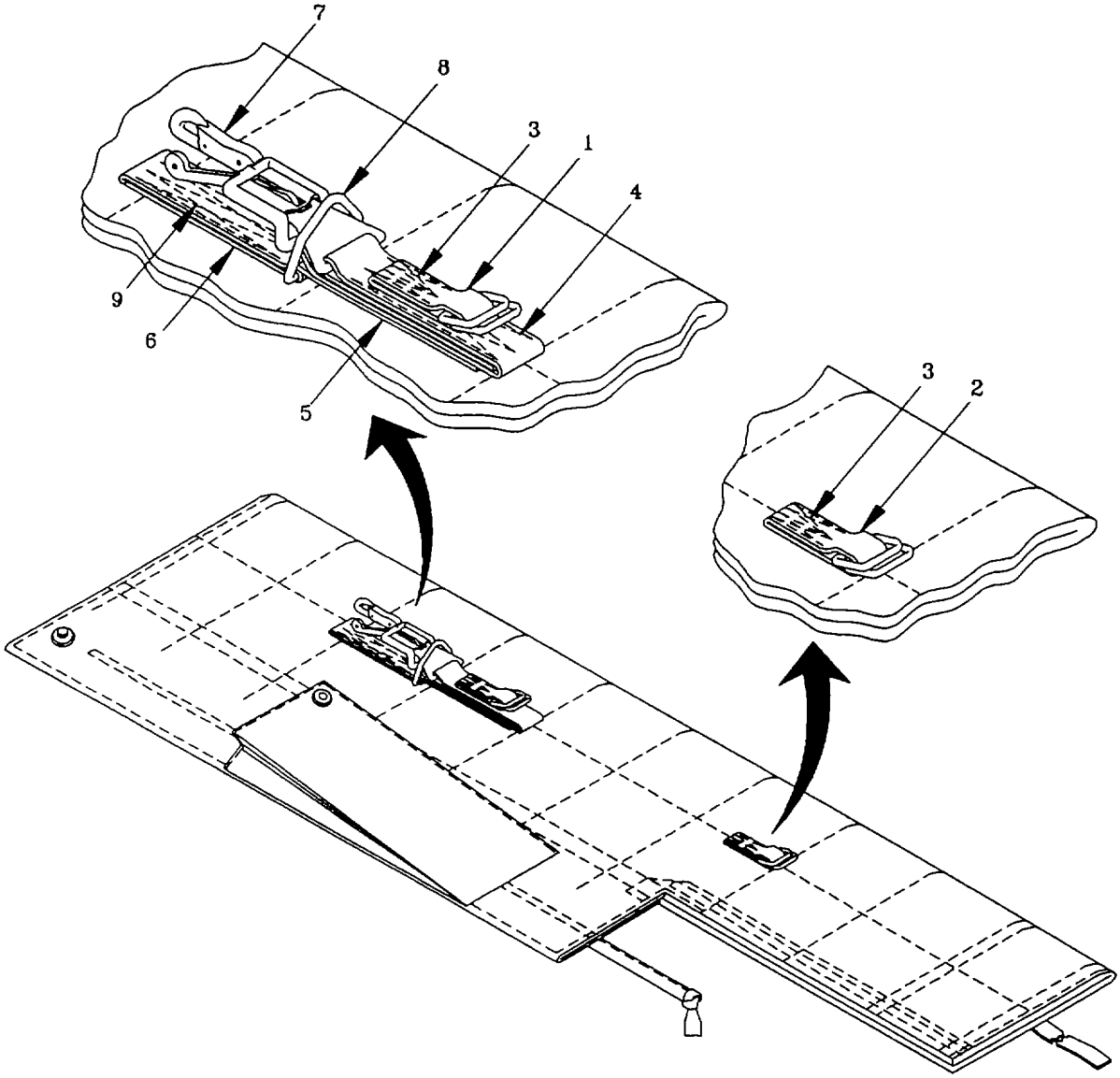
3 Position replacement loop on case, and sew a 3-point WW stitch formation using size 5 thread, 5 to 8 stitches per inch and a type HD sewing machine.

4 Stitch upper loop chap (1) in place as in (3) (c), above.

(b) Single-loop chap.

1 Cut stitching, and remove damaged single loop chap (6) from weapons case. Remove chap webbing from triangular loop (8).

2 Cut an 8-inch length of Type VIII cotton nylon webbing. Thread webbing through triangular loop, position webbing on case, and sew a 3-point WW stitch formation (9) using size 5 thread, 5 to 8 stitches per inch and a type HD sewing machine.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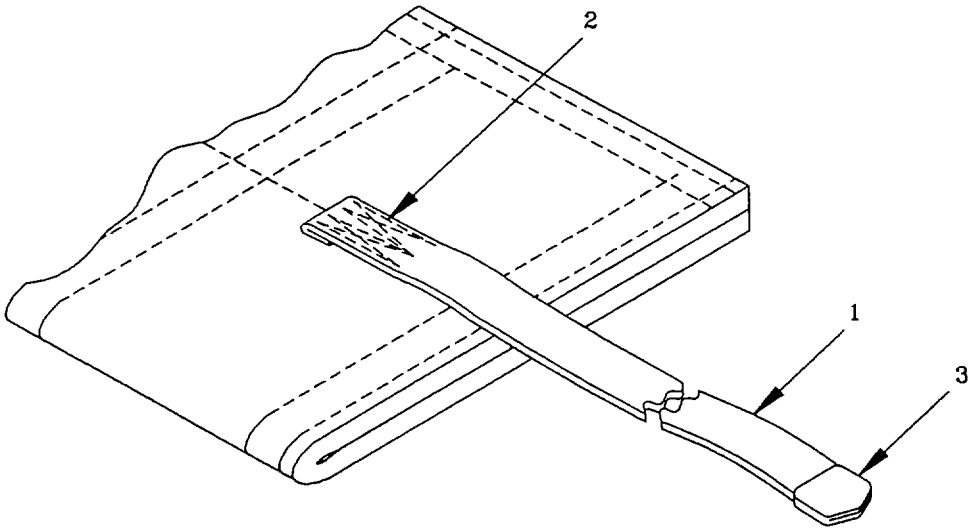
(4) Adjusting strap.

(a) Replace a damaged adjusting strap (1) with a 25-1/2 inch length of 1-inch Type III cotton webbing as follows:

(b) Cut stitching, and remove damaged strap.

(c) Install an end clip (2) at one end of replacement webbing. If end clip is not available dip end of webbing in wax to a depth of 2 inches. Fold other end of webbing under, 1/2 inch

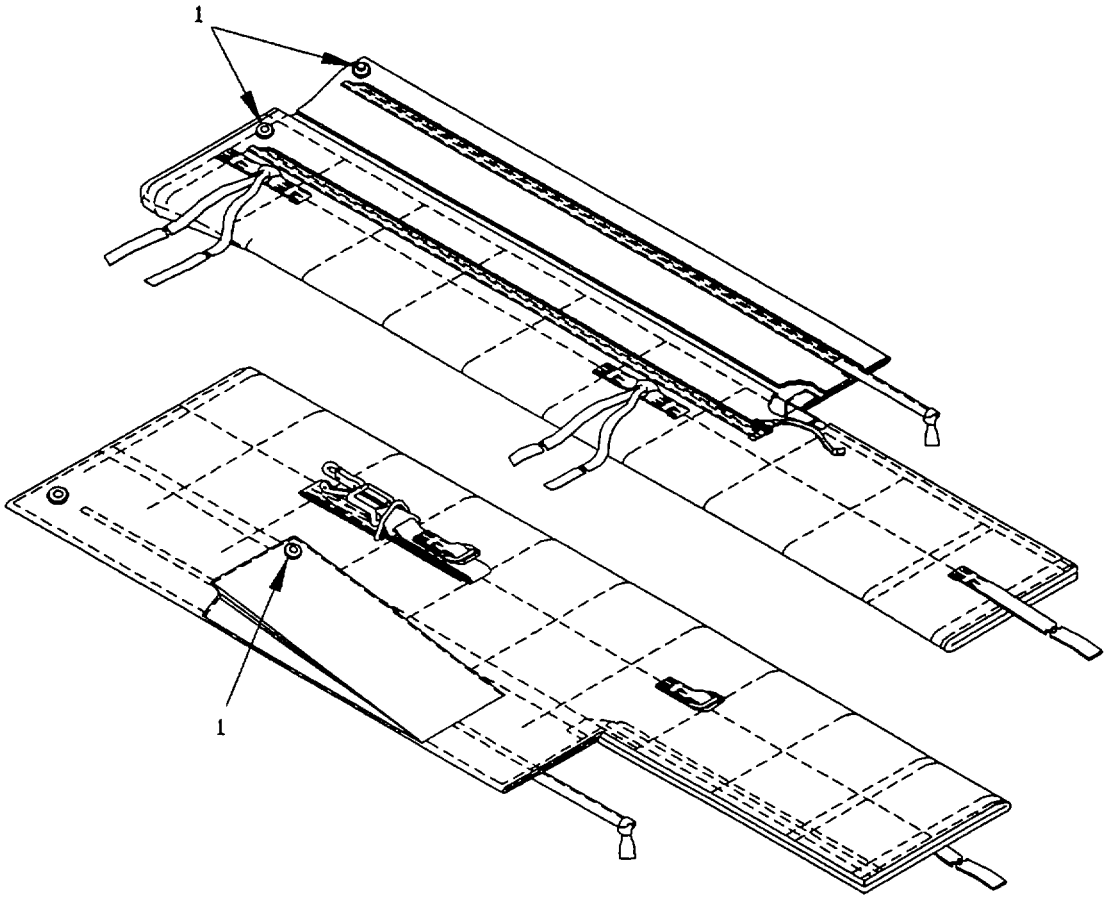
(d) Position webbing on weapons case as in original construction, and sew a 2-inch 3-point WW stitch formation (3). Overstitch end of webbing 1/8 of an inch. Use size 5 thread, 5 to 8 stitches per inch and a type VHD sewing machine.



(f) Replacing Hardware.

(1) Snap fastener (1). Replace a damaged snap fastener with a serviceable like item from stock. Install fastener in accordance with procedures described in paragraph 2-13.

(2) Other hardware item. Replace other damaged items of hardware on the weapons case with serviceable like items from stock. Do not attempt to straighten bent hardware or otherwise repair cracked or broken hardware. When it is necessary to cut any stitching to remove damaged hardware from webbing, replace hardware and webbing following procedures in the appropriate section of d., above. Do not restitch the webbing.



2-22. PARACHUTIST'S WEAPONS AND INDIVIDUAL EQUIPMENT PACK AND HARNESS ASSEMBLY.

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

INITIAL SETUP

Tools:

Knife, Item 1, Section III, Appendix B
Shears, Item 2, Section III, Appendix B

Materials/Parts:

Cloth, duck, cotton, Item 5, Appendix D
Tape, cotton. Type I, Item 32, Appendix D
Thread, nylon, size 3, Item 35, Appendix D
Thread, nylon, size E, Item 36, Appendix D
Thread, nylon, size FF, Item 37, Appendix D
Felt, 1/4 inch, Item 12, Appendix D
Webbing, nylon, Type VIII, Item 45, Appendix D
Webbing, nylon, Type IV, Item 46, Appendix D

General Safety Requirements:

Read, understand and follow warnings, cautions and notes.

Equipment Condition:

Pack and Harness Assembly should be clean and dry. Place pack and harness assembly on worktable.

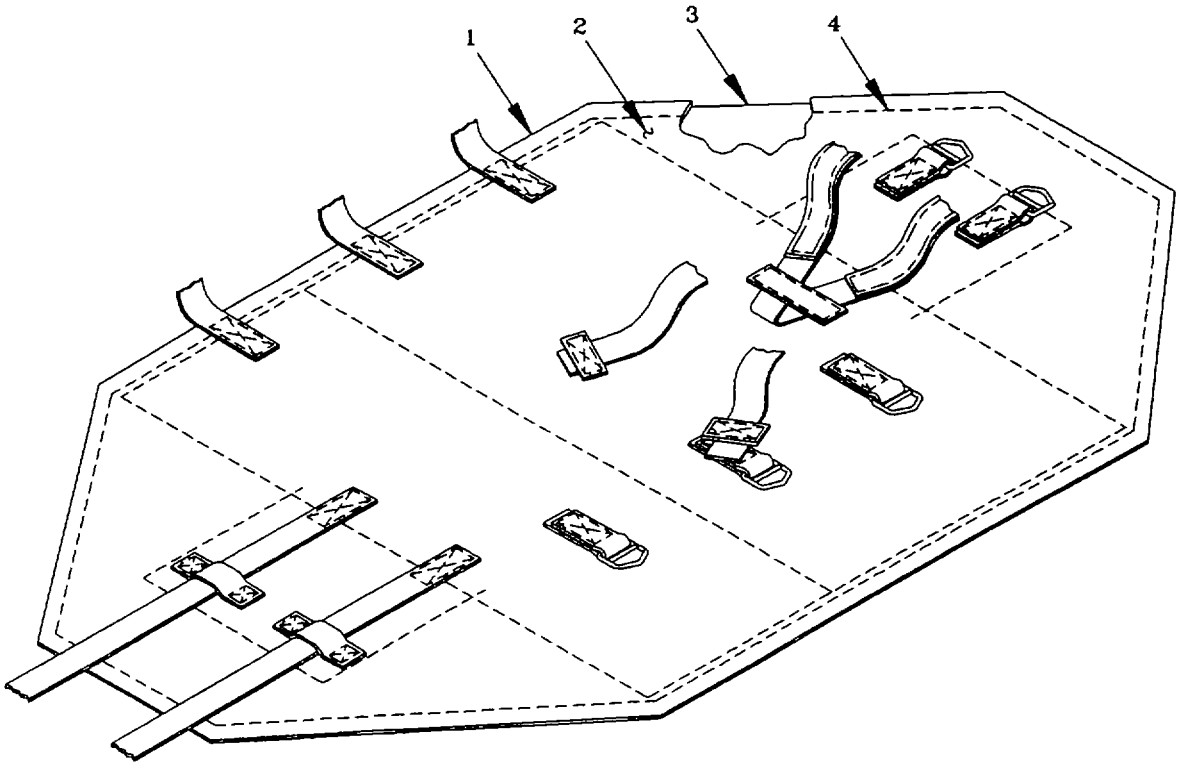
INSPECT

Perform a before and after repair rigger/technical inspection of the lowering line as outlined in paragraph 2-14.

REPAIR

The pack (1) cotton duck (2) and felt (3) fabrics may be restitched, darned, and patched. The felt lining may be restitched and plugged. When making any of these repairs, remove stitching (4) from side and end of pack as necessary to gain

access to the damaged area. After repairs have been made, replace any stitching (4) that has been removed, as in original construction or as specified in each procedure. Repair duck (2) and felt (3) fabrics by Restitching, darning and patching as described below.

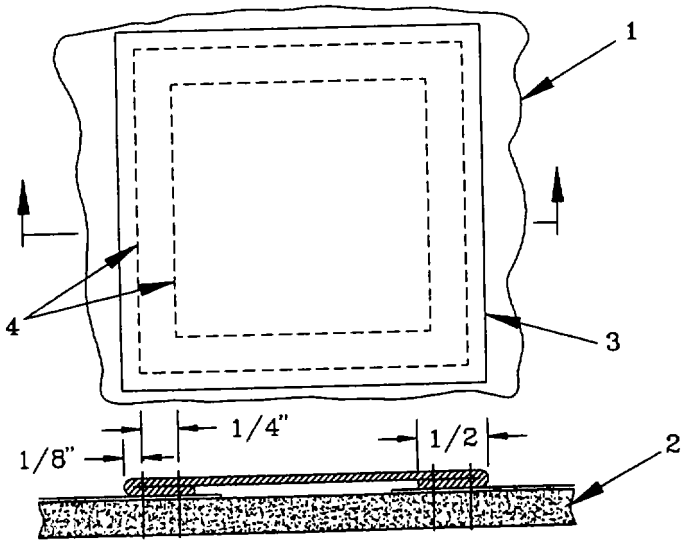


a. Restitching. Restitch the pack fabric (1) directly over old stitching using size E thread, 7 to 11 stitches per inch, and an MD sewing machine. Lock stitching at least 1/2 inch.

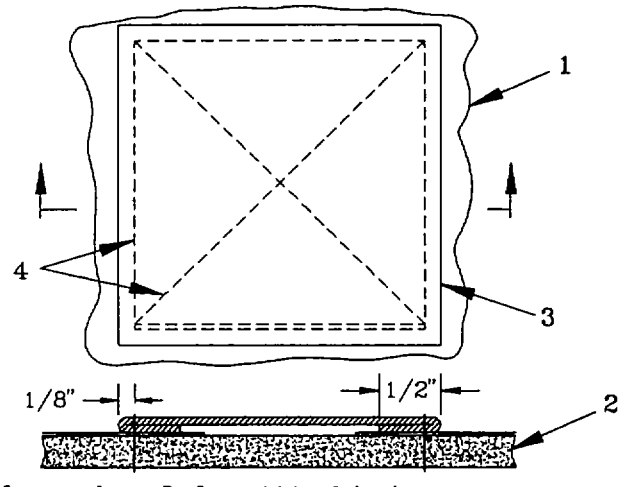
b. Darning. Darn a hole or tear in the pack fabric that does not exceed 1 inch in length or diameter using size E thread and a darning machine. There is no limit to darns that may be applied, provided they do not weaken or reduce the original strength of the fabric more than 10%. If damage is in the lined portion of the pack body and only the cotton duck is damaged, darn through duck and felt. If felt is also damaged, remove damaged area before darning duck fabric. Then plug felt as in c.(3) below.

c. Patching. There is no limit to the number of times the pack body may be patched. Patch a hole or tear that exceeds 1 inch in length or diameter following procedures in (1) or (2) below. Use cotton duck cloth according to original construction for patching outside, and 1/4 inch thick felt for plugging inside lining. Use an MD sewing machine, size FF thread, and 7 to 9 stitches per inch.

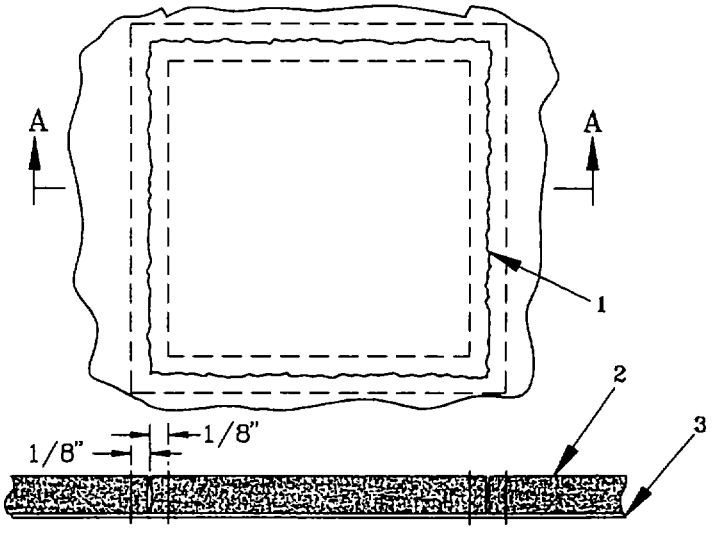
(1) To patch a lined portion of the pack (1) when the felt (2) is not damaged, cut nylon or cotton duck patch (3) 2 inches beyond circumference.of damaged portion. Turn under edges of patch 1/2 inch and center patch over damaged area. Sew patch to container body with a double row of stitching (4) as shown.



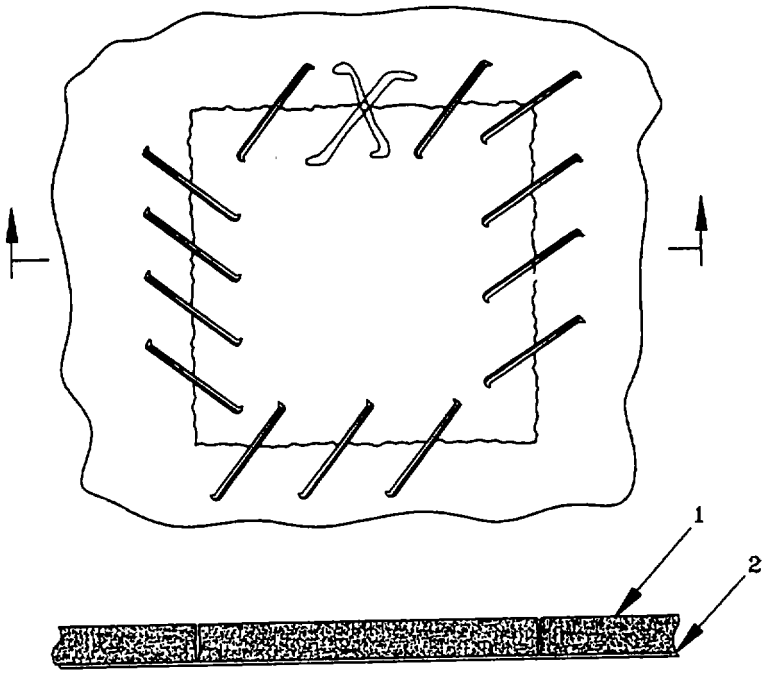
(2) To patch a lined portion of the pack (1) when the felt (2) is damaged, remove the damaged felt as described in (3) below. Cut a piece of felt the same size as the piece removed, and position felt plug and cotton duck patch (3) (with edges turned under 1/2 inch) over damaged area. Sew a single box X stitch (4) formation as shown.



(3) To plug the felt (1) lining of the pack (2), mark a rectangle around the damaged area. Remove the damaged felt while being careful not to damage the cotton duck material (3). Cut a piece of felt the size of the piece removed. Position felt plug into area cleared and sew as shown.



(4) If damage is in an area that cannot be sewed by machine, tack felt (1) plug securely to cotton duck (2) as shown using doubled and waxed size 3 nylon thread. Secure thread ends with suitable knot.



CAUTION

If the webbing is inadvertently damaged when stitching is being removed, the webbing must be replaced in accordance with original construction.

b. Repairing Pack Webbing.

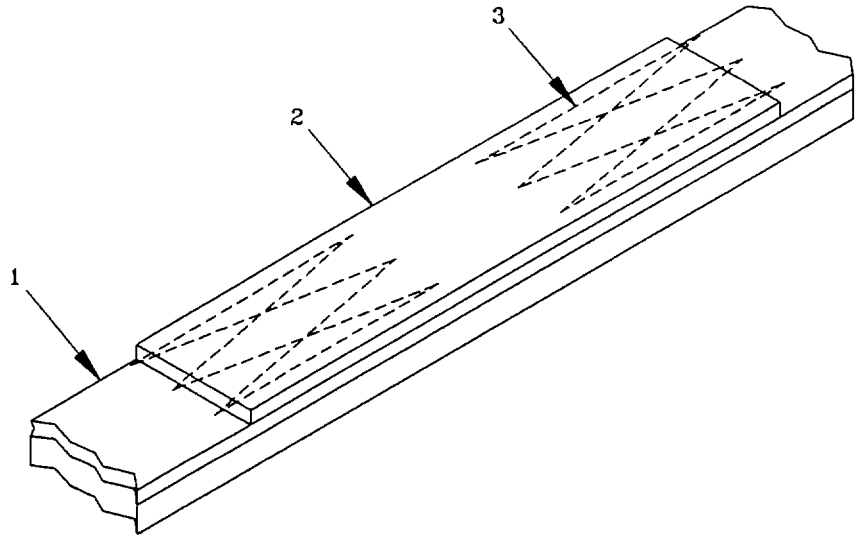
(1) General. The webbing on the pack may be restitched, and the upper suspender strap (1) may be spliced.

(2) Restitching. Restitch loose or broken stitching using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.

(3) Splicing upper suspender strap. Splice a frayed, torn, or cut upper suspender strap (1) as follows:

(a) Cut a piece of Type VIII nylon webbing (2) long enough to extend 4 inches beyond each side of damaged area, and sear ends as described in paragraph 2-13.

(b) Center webbing lengthwise over damaged area, and sew a 3-point WW stitch (3) formation at each end of webbing at each end of splice. Use size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine. Overstitch reinforcement 1/8 inch.



c. Repairing Harness Cotton Duck Fabric.

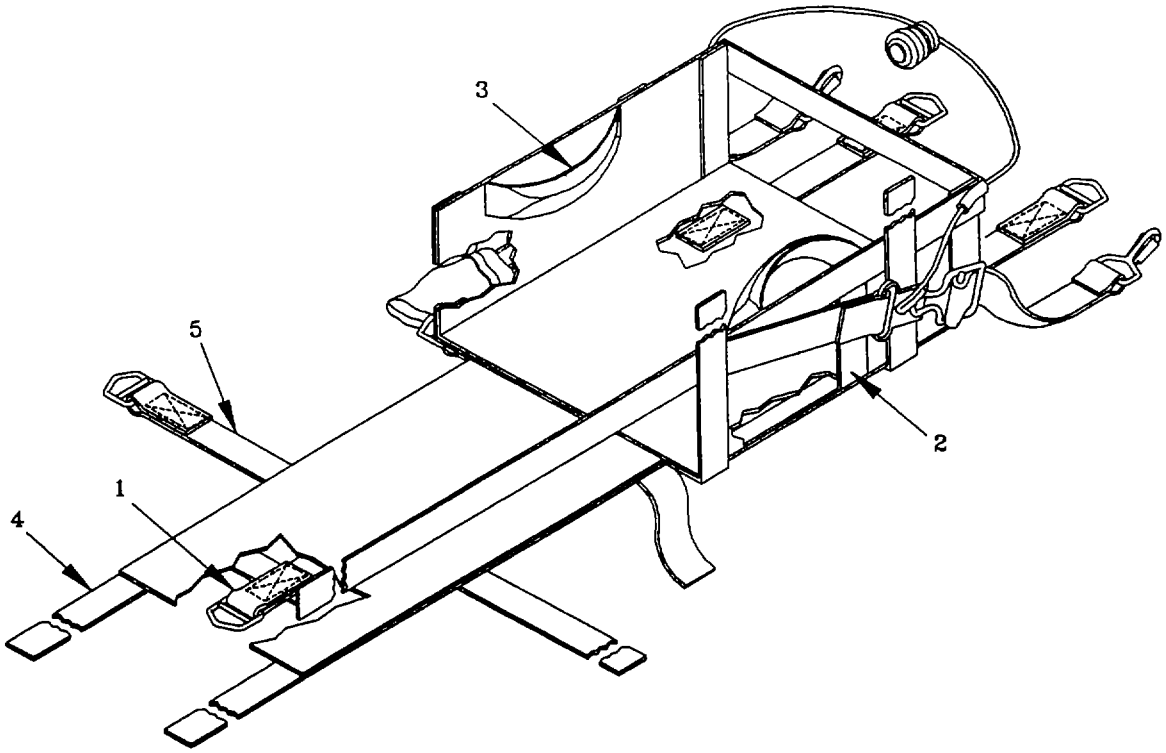
(1) General. The cotton duck fabric of the harness may be restitched or darned. These are the only repairs authorized. Restitch using size E thread, 7 to 11 stitches per inch and a type MD sewing machine. Backstitch at least 1/2 inch. Darn holes that do not extend 1 inch in length or diameter using size E thread and a type DN machine.

d. Repairing Harness Webbing

(1) General. The webbing on the harness may be restitched, and the suspension straps (1), body reinforcement strap (2), handle strap (3), end securing straps (4), and side securing straps (5) may be spliced as follows:

(a) Cut a piece of Type VIII nylon webbing long enough to extend 4 inches beyond each side of damaged area, and sear ends.

(b) Center webbing lengthwise over damaged area, and sew a 3-point WW stitch formation at each end of webbing at each end of splice. Use size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine. Overstitch reinforcement 1/8 inch.



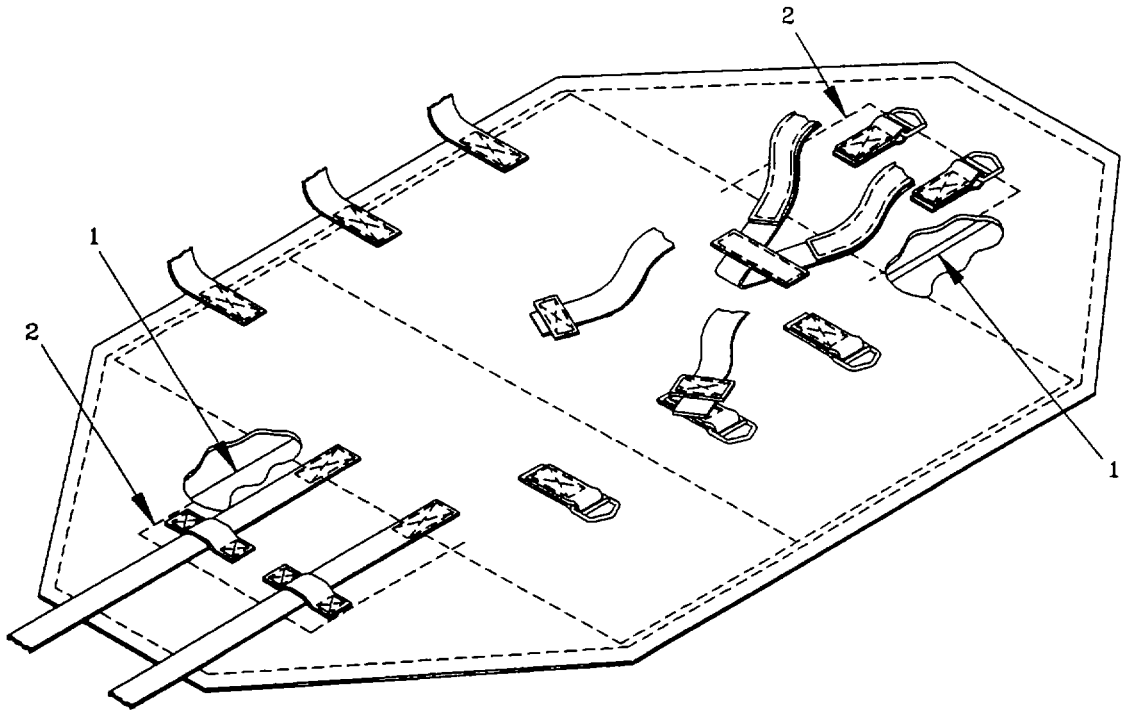
REPLACE

(c) Replacing Pack Felt End Panel (1).

1 Cut stitching (2) and remove damaged end panel (1).

2 Cut a 12-inch by 13-inch piece of 1/4-inch thick felt, and position it on inside of container as in original construction. Stitch new panel (1) to container, 1/4 of an inch from edge of panel using size FF thread, 7 to 11 stitches per inch and a type MD sewing machine.

3 Turn pack right side out, and restitch loosened webbing according to original construction, using same machine, thread, and stitch range as above.



a. Replacing Pack Webbing.

(1) General. All of the webbing items listed in (2) through (9) below may be replaced. Fabricate each of the items from the prescribed length of Type VIII nylon webbing. Sear ends of nylon webbing smooth and even. Stitch using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.

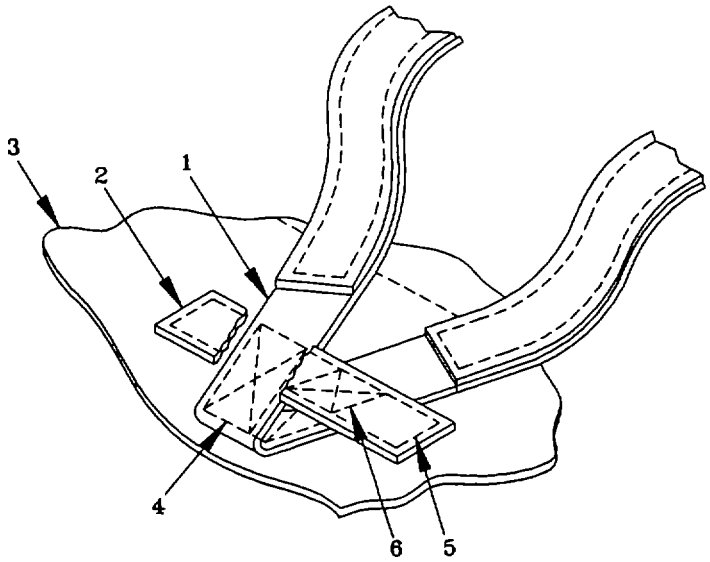
(2) Upper suspender strap (1). Replace a damaged upper suspender strap (1) with a new strap fabricated as described in Appendix E as follows:

(a) Cut stitching, and remove suspender strap (1) and suspender strap reinforcement (2) from pack (3).

(b) Fold new strap (1) at fold line as shown and sew strap to pack (3) with two modified single-X box-stitch (4) formations using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.

(c) Position suspender strap reinforcement (2) over suspender strap (1), and sew reinforcement (2) to strap (1) and pack (3) with a box-stitch formation (5) and two hourglass stitch (6) formations. Sew as in (b) above.

(3) Upper suspender strap reinforcement. Replace a damaged upper suspender strap reinforcement with a 9-1/2-inch length of webbing. Cut stitching, and remove damaged reinforcement. Turn under ends of replacement webbing 3/4 inch, and sew webbing to suspender strap and container as in (2) (c) above and as shown. Sew as in (d) above.



(4) Lower suspender strap. Replace a damaged lower suspender strap (1) as follows:

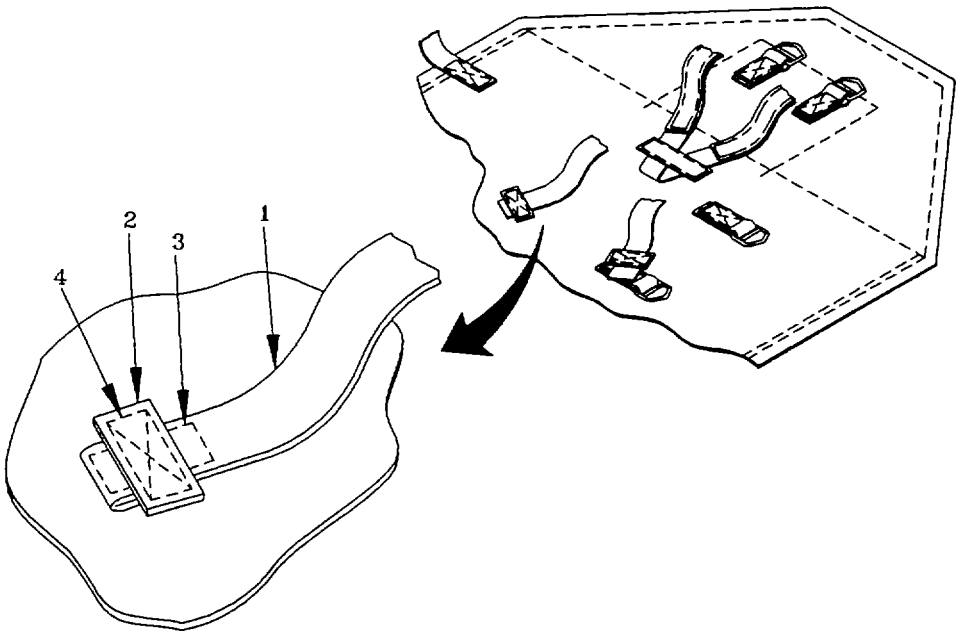
(a) Cut stitching that secures suspender strap (1) and strap reinforcement (2) to pack.

(b) Fabricate new lower suspender strap (1) from a 26 inch length of webbing. Sear ends of webbing.

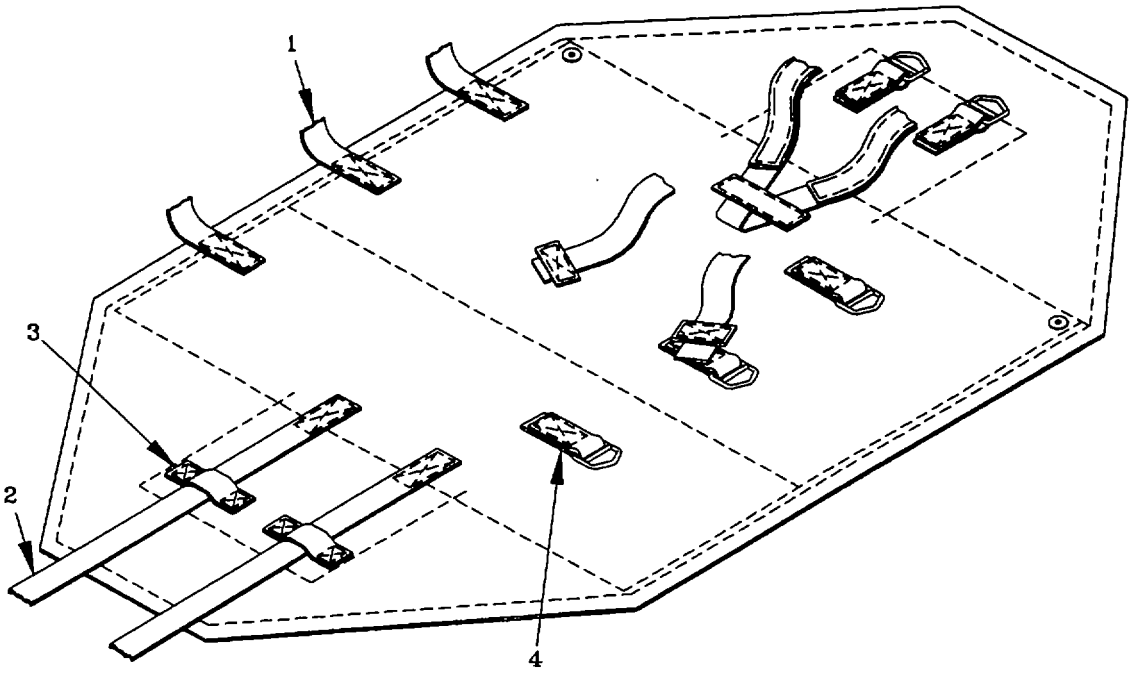
(c) Turn end under 1-1/2-inch, position on pack as in original construction, and sew a 3-inch single-box-stitch (3) formation using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.

(d) Reposition reinforcement (2) over suspender strap (1) as in original construction. Sew a single-X box-stitch formation, 1/8 of an inch from edges of webbing. Sew as in (c).

(5) Lower suspender strap reinforcement (2). Replace a damaged lower suspender strap reinforcement with a 4-inch length of webbing. Cut stitching, and remove damaged reinforcement. Turn under edges of replacement webbing 1/2-inch, and sew webbing to suspender strap and container as in (4) (d) above.



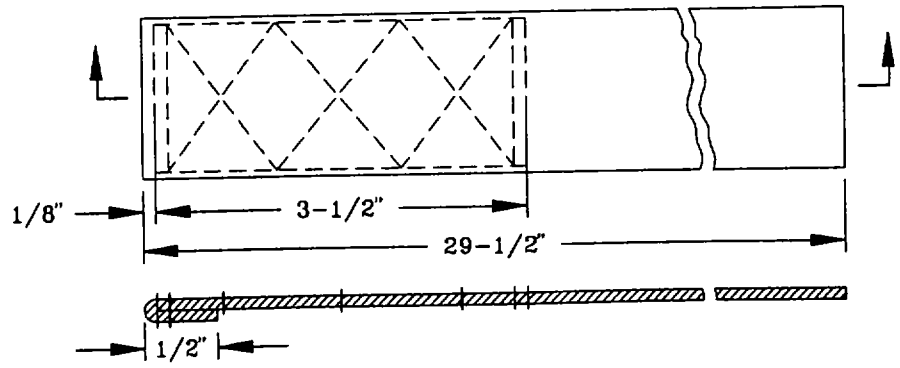
(6) Side securing straps. Replace a damaged side securing strap (1) with a 30-inch length of webbing as follows:



(a) Cut stitching, and remove damaged strap.

(b) Cut Type VIII nylon replacement webbing to dimensions shown and sear ends. Sew according to details shown. Use size 3 thread, 5 to 8 stiches per inch and a type HD sewing machine.

(c) Fold end under 1/2 inch, position webbing on container as in original construction and sew according to details shown. Sew as above.

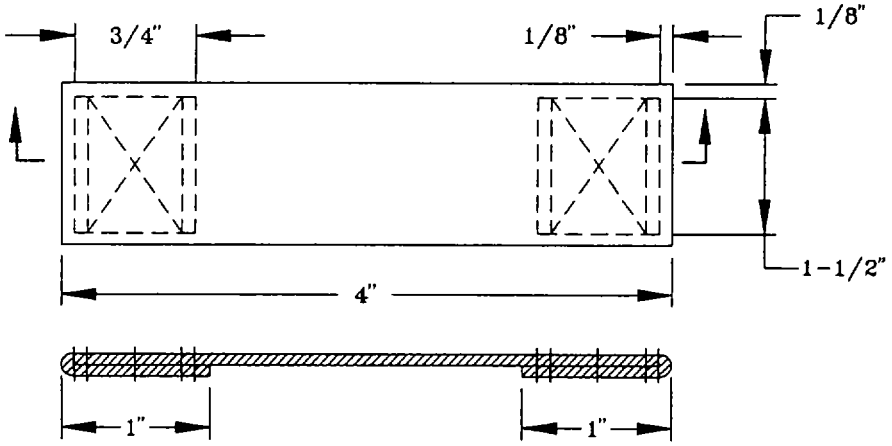


(7) End securing straps. Replace a damaged end securing strap (2) with a 60-inch length of webbing. Use procedures in (6) above.

(8) Strap guide. Replace a damaged strap guide (3) with a 6-inch length of webbing as follows:

(a) Cut stitching, and remove damaged strap guide.

(b) Turn under ends of replacement webbing 1 inch, position webbing on pack as in original construction, and sew according to details shown. Use size 3 thread, 5 to 8 stiches per inch and a type HD sewing machine.

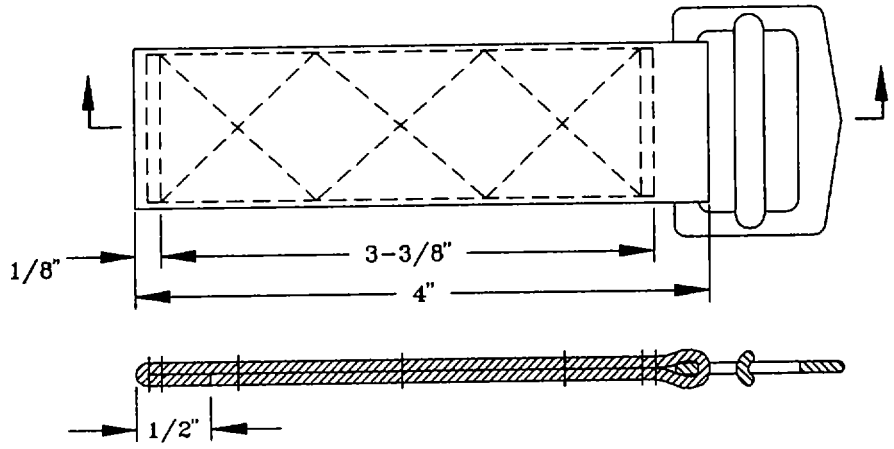


(9) Adapter chap. Replace a damaged adapter chap (4) with a 8-inch length of Type VIII nylon webbing as follows:

(a) Cut stitching that secures chap (4) to pack and remove adapter (5).

(b) Position adapter on replacement webbing as shown.

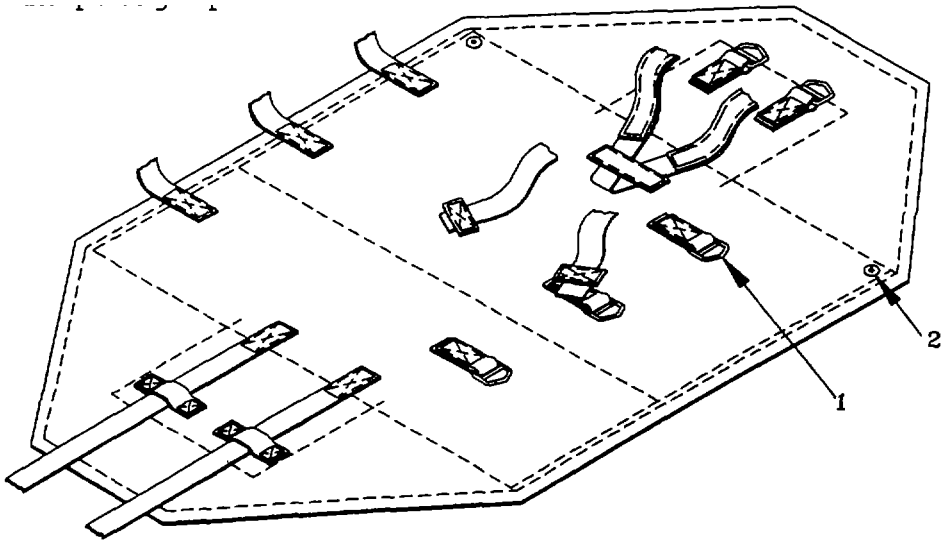
(c) Position webbing on pack in original construction, and sew according to details shown. Use size 3 thread, 5 to 8 stiches per inch and a type HD sewing machine.



c. Replacing Pack Hardware.

(1) Adapters. Replace a damaged adapter (1) with a serviceable like item from stock. Do not attempt to straighten a bent adapter by removing adapter chap. Install serviceable adapter, and fabricate new adapter chap as prescribed in (9) above.

(2) Rivets. Replace a loose or damaged rivet (2) with a serviceable rivet and washer from stock. Remove damaged rivet by cutting or filing end of rivet so that it may be withdrawn through fabric. Exercise care in removing rivet so as not to damage fabric. Install new rivet following procedures described in paragraph 2-13.



d. Replacing Harness Lowering Line Pocket (1), Pocket Flap (2) and Pocket Tie (3).

(1) Pocket. Replace a damaged lowering line pocket (1) as follows:

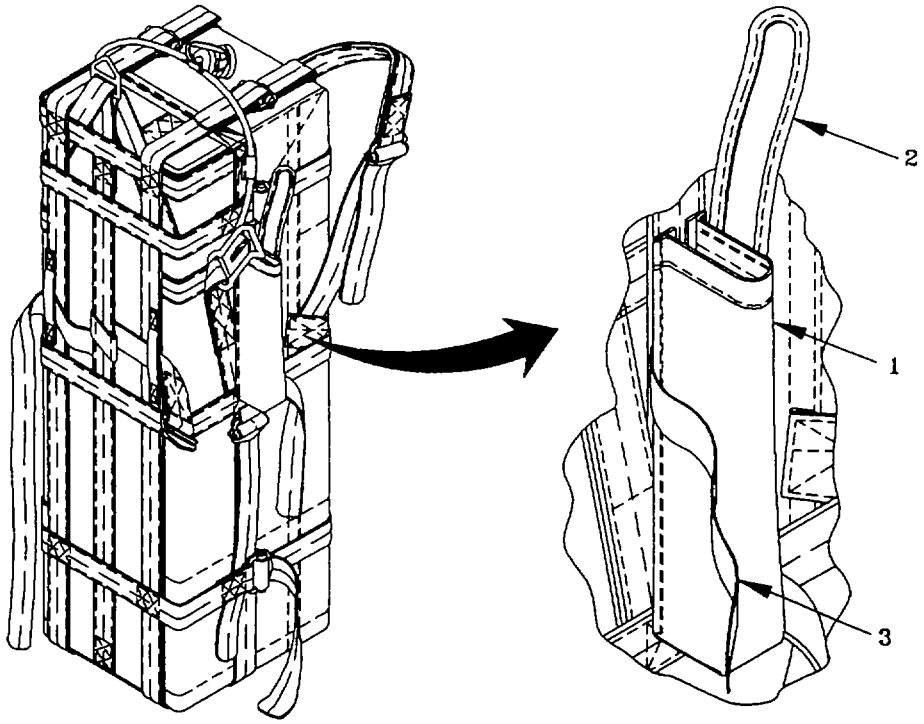
(a) Cut stitching and remove damaged pocket from harness. If pocket flap (2) is not damaged remove flap from pocket.

(b) Fabricate pocket as described in Appendix E.

(c) Turn under raw edges of pocket 1/2 inch, and position pocket on harness as in original construction. Sew around pocket 1/8 inch from edge using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.

(2) Pocket flap. Fabricate new pocket flap (2) as specified in Appendix E, if necessary.

(3) Pocket ties. Replace a damaged pocket tie (3) with a 14-inch length of 3/4-inch Type 1 cotton tape. Sear ends of tape and turn under one end of tape 1/4 inch. Position this end of tape on edge of lowering line pocket, 2-inches from the top. Sew pocket tie to pocket using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.



d. Replacing Webbing on Harness.

(1) General. All of the webbing items listed in (2) through (19) below may be replaced. Unless otherwise specified, fabricate each of the items from the prescribed length of Type VIII nylon webbing and sew using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine. Sear exposed webbing ends.

(2) Upper suspension strap (1) and reinforcement (2). Replace a damaged upper suspension strap reinforcement (2) with 21-3/4-inch length of webbing as follows:

(a) Remove reinforcement (2) by cutting webbing along edge (3) of harness, leaving stitched ends attached.

(b) Thread replacement webbing through triangular loop (4) and position ends of webbing on harness over old webbing.

(c) Sew each end of replacement webbing to harness according to details shown and as stated in d. (1).

(3) Suspension straps (3). Replace a damaged suspension strap as follows:

(a) Upper suspension strap (1). Replace a damaged upper suspension strap with a 15-inch length of webbing as follows:

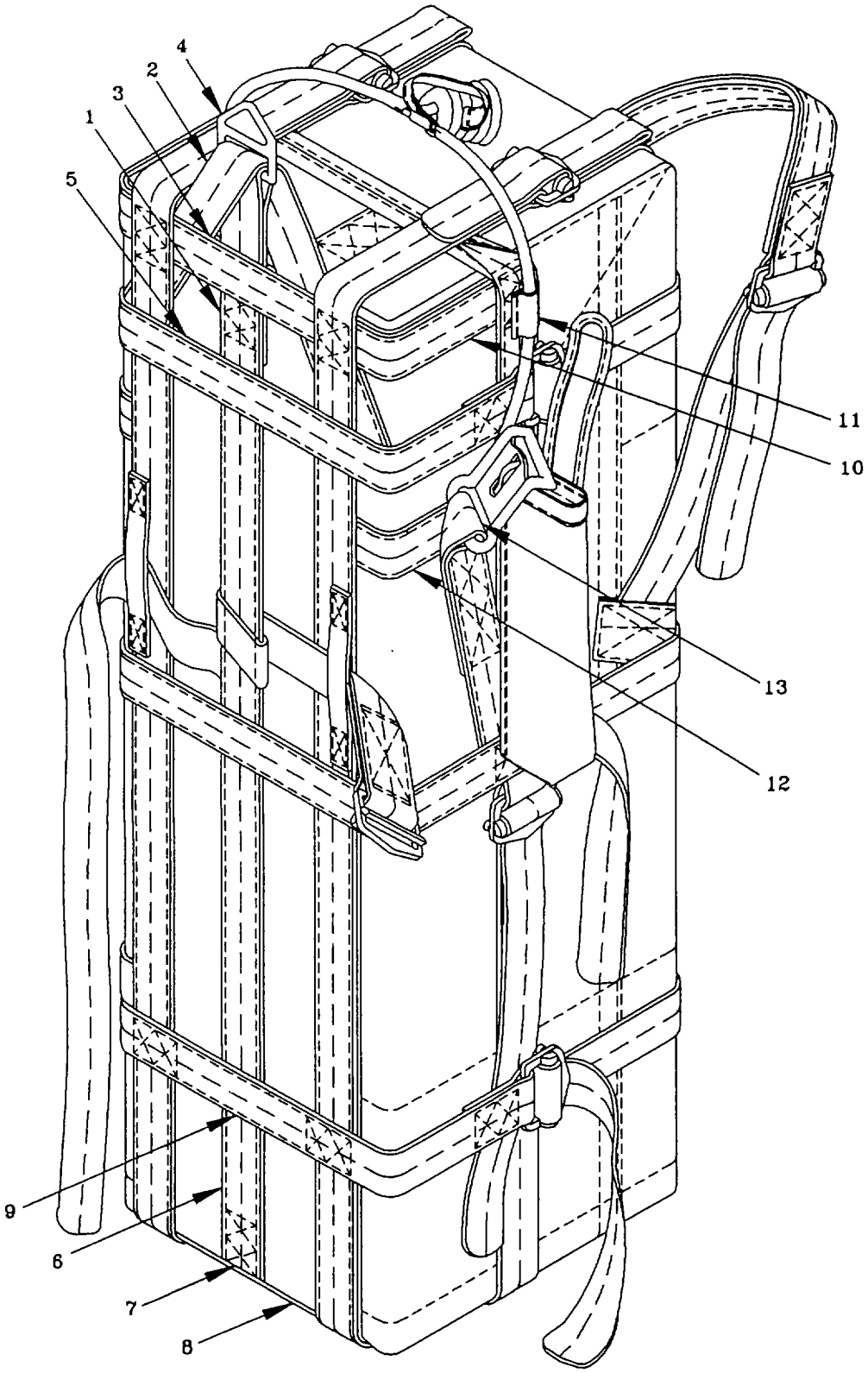
1. Remove damaged strap by cutting both thicknesses of webbing along edge (4) of harness, leaving stitched ends attached.

2. Pass one end of webbing through triangular loop (4) , under reinforcement (2) as shown and fold end under 7-1/4-inches.

3. Position replacement strap on harness over old webbing with long end extending to leading edge (5) of second perpendicular web. Stitch replacement to harness as in d. (1).

(b) Lower suspension strap (6). Replace a damaged lower suspension strap as follows:

1. Remove damaged strap by cutting both thicknesses of webbing along edge (7) of lower suspension strap reinforcement (8), leaving stitched ends attached. Remove triangular loop.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2. Cut a 14-1/2-inch length of webbing for a replacement strap and a 3 1/2-inch length of webbing for a buffer.

3. Pass one end of replacement strap through triangular loop, and fold under end of strap 5-inches. Position buffer between triangular loop and strap.

4. Position replacement strap on harness over old webbing, with long end extending to leading edge (9) of second perpendicular web. Stitch replacement strap to harness. Use size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.

(4) Body reinforcement (10). Replace a damaged body reinforcement with a 25-1/2-inch length of webbing as follows:

(a) Cut stitching, and remove quick-release retaining loops (11).

(b) Position replacement webbing over old webbing, and sew around replacement with a box-stitch formation, 1/8 of an inch from the edge. Use size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.

(c) Replace quick-release retaining loops (11) according to original construction.

(5) Lower suspension strap reinforcement (8). Replace a damaged lower suspension strap reinforcement with a 10-inch length of webbing. Position replacement over old reinforcement, and sew around replacement with a box-stitch formation, 1/8 inch from edge. Use size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.

(6) Fastener chap reinforcement (12). Replace a damaged fastener chap reinforcement with a 7-inch length of webbing as follows:

(a) Cut stitching that secures fastener chap (13) to reinforcement.

(b) Position replacement over old reinforcement, and sew around replacement with a box-stitch formation, 1/8 inch from edge. Restitch fastener chap according to original construction. Use size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.

(7) Handle strap. The handle, adapter, and running end portions of the handle strap may be replaced.

(a) Handle portion (1). Replace damaged handle portion of handle strap as follows:

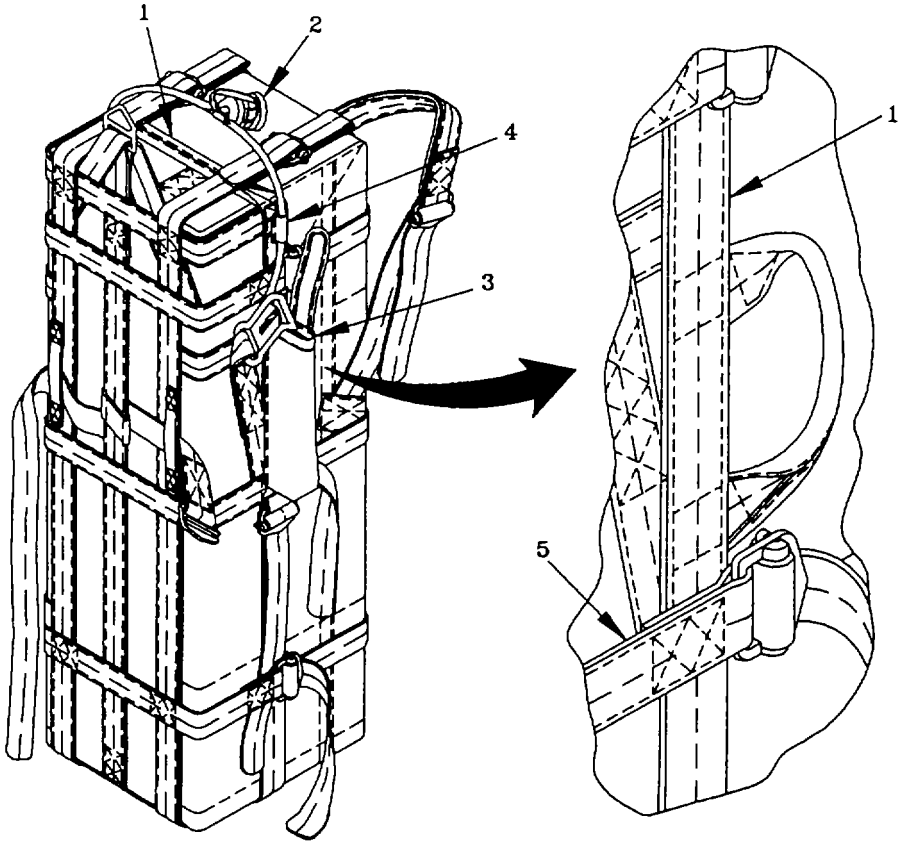
1. Remove cable and conduit assembly (2), lowering line (3), and quick-release retaining loops (4).

2. Remove handle (1) by cutting webbing along edge of harness (5).

3. Fabricate new handle according to details in Appendix E.

4. Position replacement handle on harness, and sew using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.

5. Replace quick-release retaining loops (4) according to original construction. Replace cable and conduit (2) assembly.



(b) Adapter portion (1). Replace damaged adapter portion of handle strap (2) with a 14-1/2-inch length of webbing as follows:

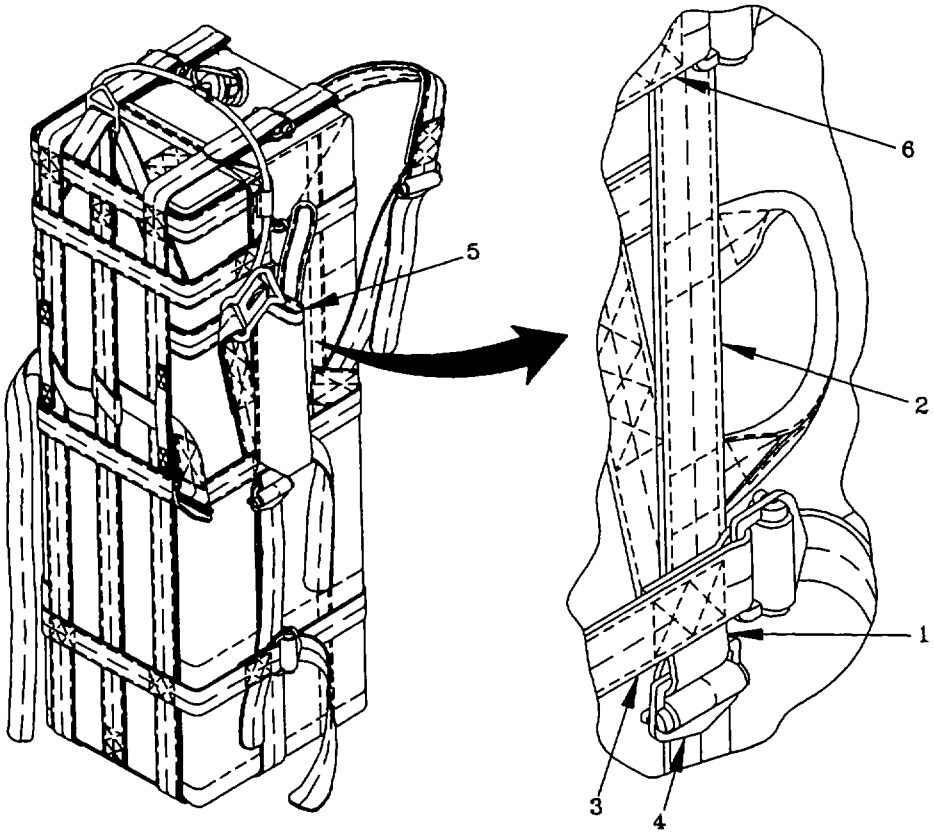
1. Cut strap along edge (3) of harness, and remove adapter (4).

2. Cut stitching, and remove lowering line pocket (5).

3. Pass one end of replacement webbing through adapter and fold end under 2-1/2 inches.

4. Position webbing on harness, with long end extending to leading edge (6) of second perpendicular web. Stitch webbing to harness using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.

5. Replace lowering line pocket as described in d. above.

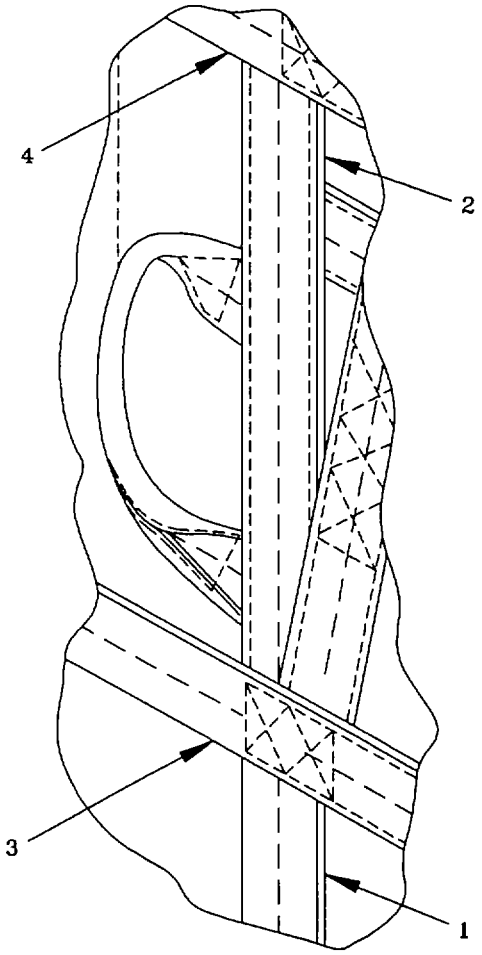


(c) Running end portion (1). Replace damaged running end portion of handle strap (2) with a 76-inch length of webbing as follows:

1. Remove damaged end by cutting strap along edge (3) of harness.

2. Round one end of replacement webbing, and dip end in wax to a depth of 2 inches.

3. Position webbing on harness, with straight end extending to leading edge (4) of second perpendicular web. Sew webbing to harness using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.

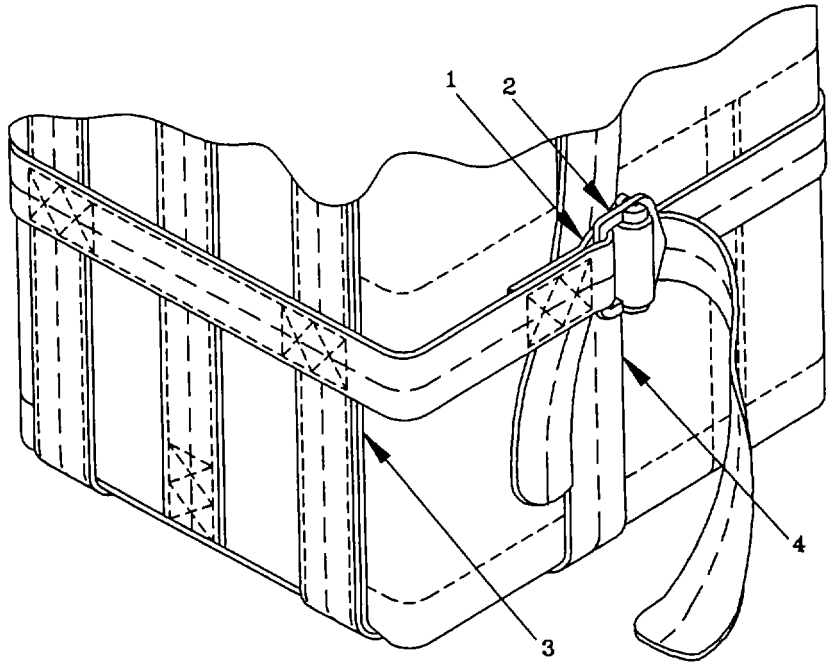


(8) Securing strap adapter ends (1). Replace damaged adapter end of securing strap as in (a) or (b) below.

(a) Cut a piece of webbing 2-1/2 inches longer than distance from adapter (2) to leading edge (3) of second perpendicular web.

(b) Remove damaged end by cutting strap along edge (4) of harness, and remove adapter (2).

(c) Pass one end of replacement webbing through adapter (2), and fold end under 2-1/2 inches. Position replacement on harness, and sew using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.



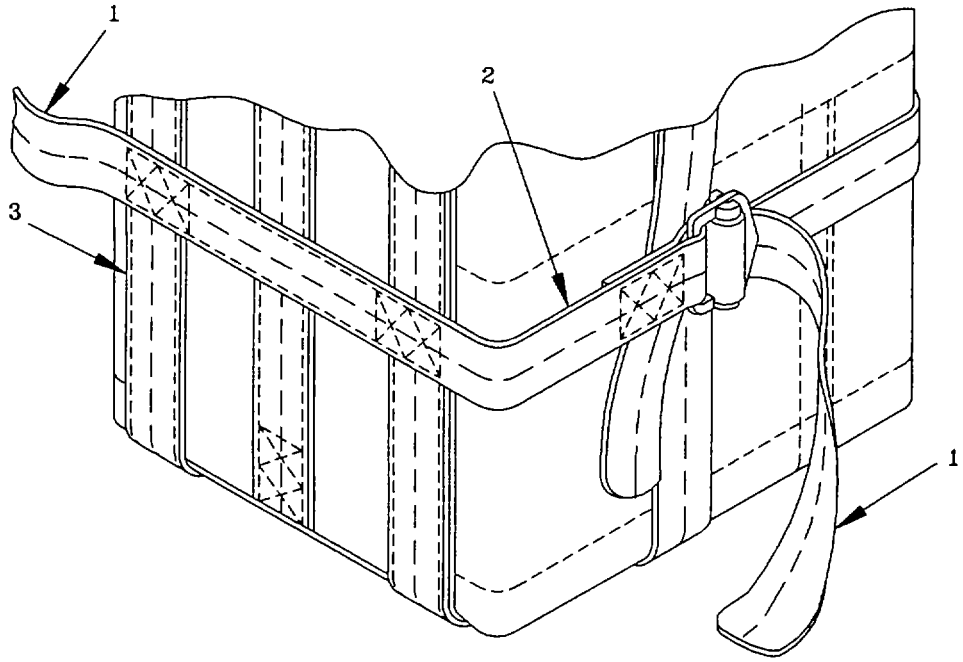
(9) Securing strap running ends (1). Replace damaged running end of side securing strap (2) or end securing strap as follows:

(a) Remove damaged end by cutting strap along edge of harness.

(b) Cut a length of webbing equal to length of end removed plus distance from edge of harness to leading edge (3) of second perpendicular web.

(c) Sear exposed ends of nylon webbing smooth and even.

(d) Position webbing on harness, with straight end extending to leading edge of second perpendicular web. Sew webbing to harness using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.



(10) Leg strap. Replace a damaged leg strap (1) with a 41-1/2-inch length of webbing as follows:

(a) Cut stitching (2), and remove leg strap from harness. Remove adapter (3) and buffer (4). If buffer is damaged, replace it with a 3-1/2-inch length of webbing.

(b) Sear exposed ends of nylon webbing smooth and even. Pass straight end of replacement webbing through adapter, and fold under end of webbing, 3-3/4 inches. Position buffer between adapter and strap, and sew using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.

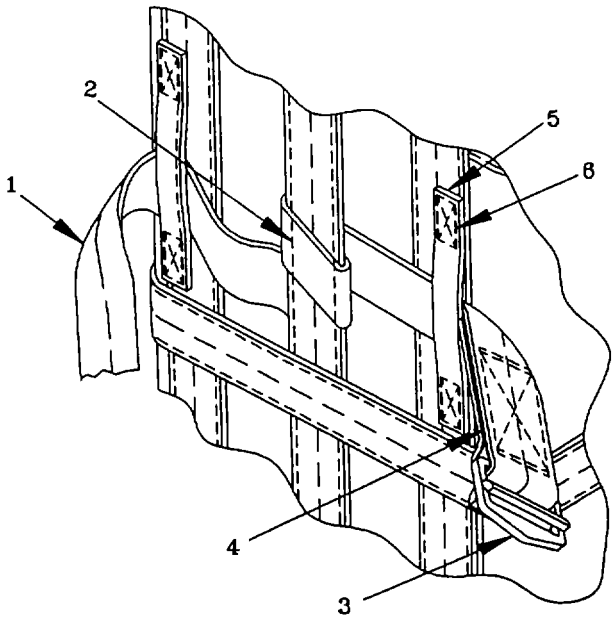
(c) Pass replacement webbing under suspension strap from right to left, leaving 7-3/4 inches of webbing between adapter end of replacement and suspension strap. Pass replacement webbing back over and under suspension.

(11) Leg strap guide (5). Replace a damaged leg strap guide with a 6-inch length of webbing as follows:

(a) Align edges of webbing, and sew them together 1/8 of an inch from edge. Use size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.

(b) Cut stitching (6), and remove damaged guide from harness.

(c) Position replacement guide (5) on harness with sewn edge to the inside as in original construction and sew as in (a) above.



(12) Handle. Replace a damaged handle (1) with a 15-1/2-inch length of webbing as follows:

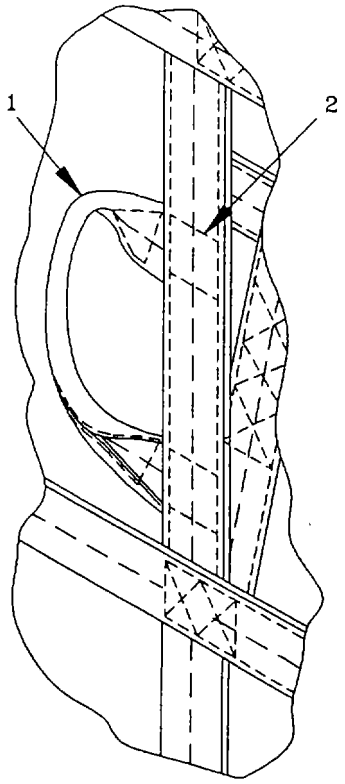
(a) Remove handle (1) by cutting stitching (2) that secures handle to harness. Cut sufficient stitching so that replacement handle may be inserted between webbing and cotton duck and sewed to the duck without difficulty, if handle on lowering line pocket side of harness is damaged, remove pocket.

(b) Fabricate handle (1) according to details in Appendix E.

(c) Position handle (1) on harness as in original construction, and sew using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.

(d) Restitch loosened stitching (2) according to original construction. If lowering line pocket has been removed, replace it according to original construction.

(13) Quick-release retaining loop. Replace a quick-release retaining loop with a 3-inch length of webbing. Cut stitching, and remove damaged loop. Sew replacement loop to handle strap using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.



(14) Keeper pin strap. Replace a damaged keeper pin strap (1) with a 13-inch length of 1-inch Type IV nylon webbing as follows:

(a) Remove damaged keeper pin strap (1) from cable and conduit assembly (2), and remove keeper pin (3) from keeper pin strap (1).

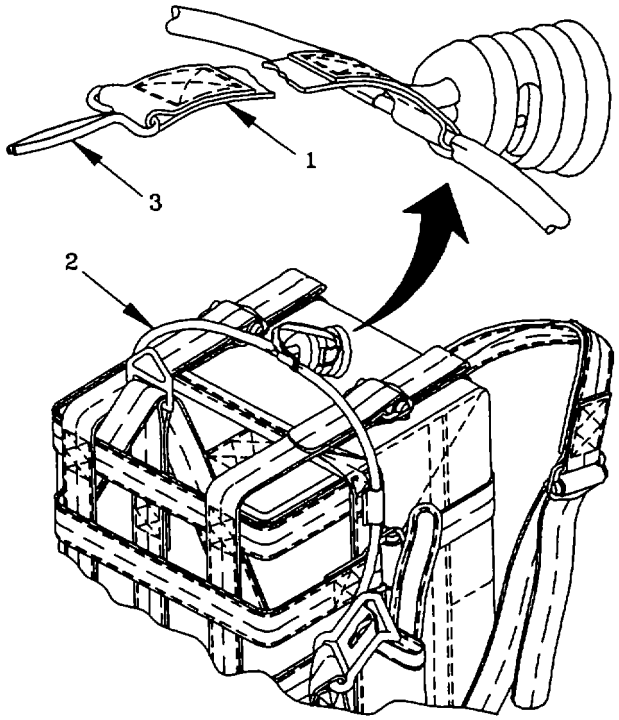
(b) Sear ends of replacement webbing.

(c) Pass one end of webbing through keeper pin, fold end under 2 inches and sew using Size E thread, 7 to 11 stitches per inch and a type LD sewing chine.

(d) Pass other end of webbing through cable and conduit assembly, fold end under 2 inches, and sew according to details shown. Use same machine, thread and stitch range as in (c) above.

(f) Replacing Harness Hardware.

(1) Keeper pin (3). Replace a bent, sprung, burred or nicked keeper pin with a serviceable like item from stock. Open damaged pin, and remove it from keeper pin strap. Thread strap loop into place between forks of new pin.



(2) Cable and conduit assembly.

(a) Removal. Unscrew push-pull actuator assembly (1) from release fasteners (2) as shown, and withdraw assembly through quick-release retaining loop (3).

(b) Installation.

1. Position a 20 x 10 inch preformer, using a rigid wooden or paperboard box, in the top part of the harness and secure with two "F" web straps as shown.

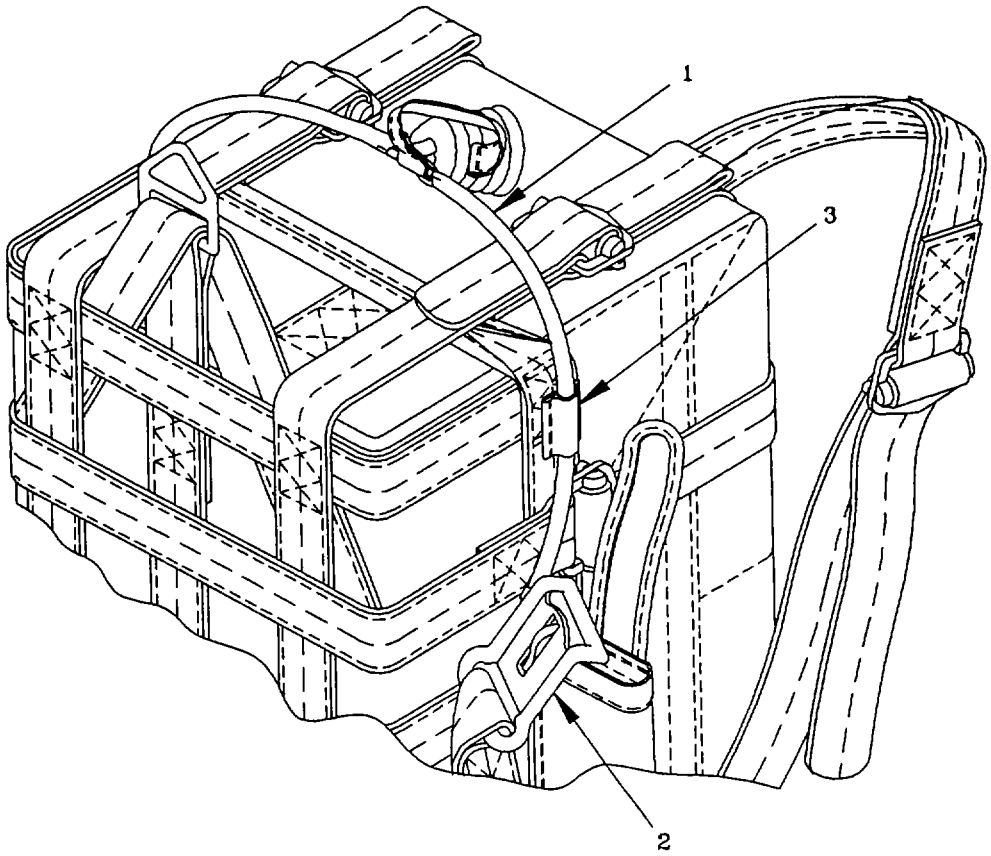
WARNING

Failure to correctly position release knob could result in a safety hazard. If the knob is in the up position it could interfere with the parachutists's reserve parachute.

2. With the words "Pull to Release" on the actuator knob facing up, insert the push-pull actuator assembly through the retaining loops in both sides of the harness and attach to release fasteners with nuts. Remove preformer.

NOTE

When tightening the nuts, assure that the release fasteners are not twisted away from the harness. When the nuts are fully tightened the actuator knob should be in position shown.



(3) Other items of hardware. Replace other damaged items of hardware on the harness with serviceable like items from stock. Do not attempt to straighten bent hardware or otherwise repair cracked or broken hardware. When it is necessary to cut any stitching to remove damaged hardware form webbing, replace hardware and webbing following procedures in the appropriate section of subparagraph d. above. Do not restitch the webbing.

2-23. JUMP PACK, STINGER MISSILE.

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

INITIAL SETUP

Tools:

Knife, Item 1, Section III, Appendix B
Shears, Item 2, Section III, Appendix B
Compressing Tool, Item 3, Section III, Appendix B

Materials/Parts:

Cloth, duck, nylon, Item 7, Appendix D
Cord, fibrous, nylon, red, Item 10, Appendix D
Tape, fastener, hook, 1" wide, Item 25, Appendix D
Tape, fastener, pile, 1 1/2" wide, Item 27, Appendix D
Felt, 1/4 inch, Item 12, Appendix D
Tape, textile, Type IV, Item 31, Appendix D
Thread, nylon, size 3, Item 35, Appendix D
Thread, nylon, size 5, Item 38, Appendix D
Thread, nylon, size E, Item 36, Appendix D
Thread, nylon, size FF, Item 37, Appendix D
Webbing, nylon, Type III, Item 57, Appendix D
Webbing, nylon, Type X, Item 47, Appendix D
Webbing, nylon, Type II, Item 56, Appendix D
Webbing, nylon, yellow, Type VIII, Item 58, Appendix D
Webbing, nylon, Type VIII, Item 45, Appendix D
Sleeve, swaging, Item 22, Appendix D
Wire, rope, Item 61, Appendix D

General Safety Requirements:

Read, understand and follow all warnings, cautions and notes.

Equipment Condition:

The Stinger Missile Pack should be clean and dry. Place the pack on a work table.

INSPECT

Perform a before and after repair rigger/technical inspection of the Stinger Missile Pack as outlined in paragraph 2-14.

REPAIR

The nylon duck material of the pack body may be restitched, darned, and patched. The polyester felt material may be restitched and plugged as described below.

a. Restitching. Restitch the pack fabric (1) directly over old stitching using stitching specifications outlined in the appropriate repair procedures. Lock stitching at least 1/2 inch.

b. Darning. Darn a hole or tear in the pack fabric that does not exceed 1 inch in length or diameter using size E or F thread and a darning machine. There is no limit to darns that may be applied, provided they do not weaken or reduce the original strength of the fabric more than 10%. If damage is in the lined portion of the pack body and only the cotton duck is damaged, darn through duck and felt. If felt is also damaged, remove damaged area before darning duck fabric. Then plug felt as in c.(3) below.

c. Patching. There is no limit to the number of times the pack body may be patched. Patch a hole or tear that exceeds 1 inch in length or diameter following procedures in (1) or (2) below. Use cotton duck cloth according to original construction for patching outside, and 1/4 inch thick felt for plugging inside lining. Use an HD sewing machine, size FF thread, and 7 to 9 stitches per inch.

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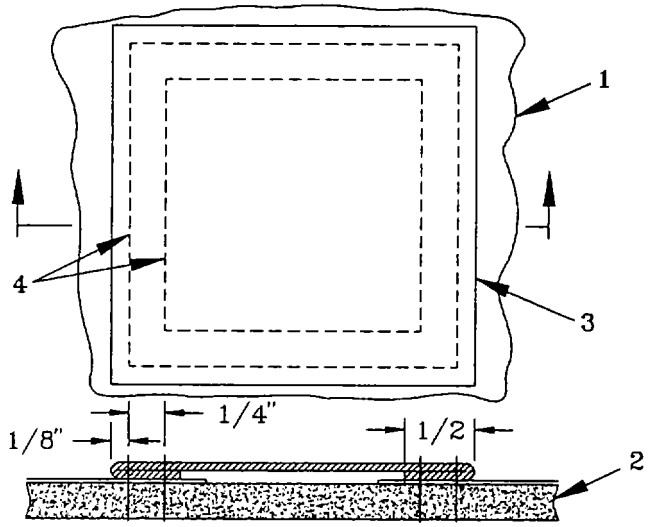
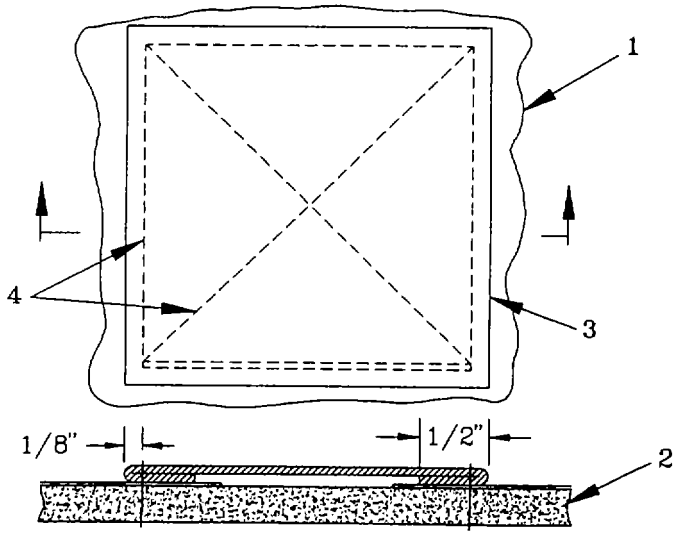
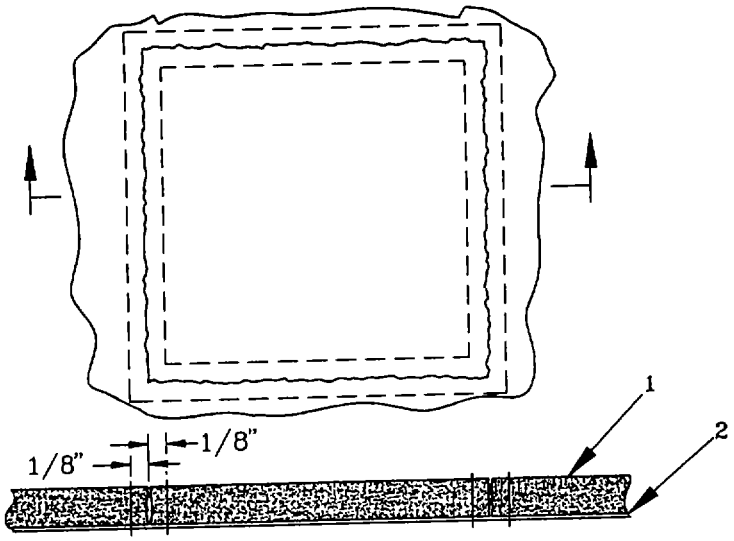
(1) To patch a lined portion of the pack (1) when the felt (2) is not damaged, cut nylon duck patch (3) 2 inches beyond circumference of damaged portion. Turn under edges of patch 1/2 inch and center patch over damaged area. Sew patch to pack (1) with a double row of stitching (4) as shown.



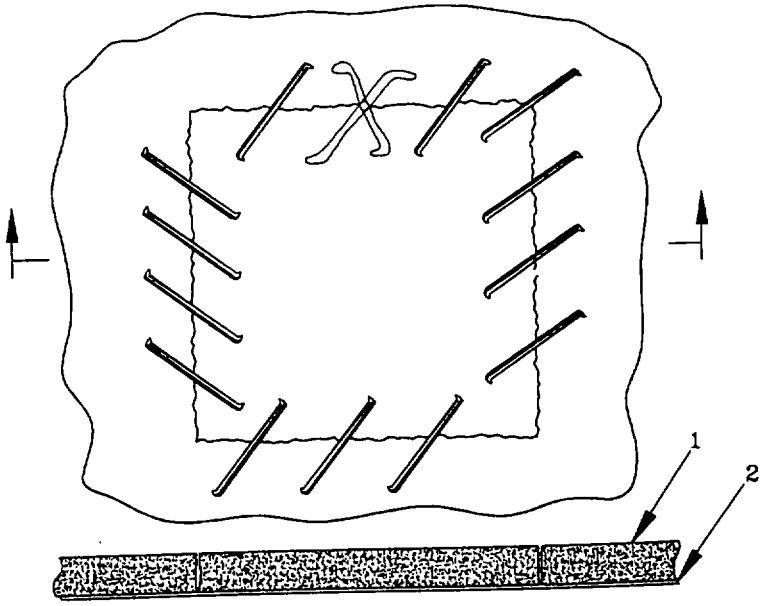
(2) To patch a lined portion of the pack (1) when the felt (2) is damaged, remove the damaged felt as described in (3) below. Cut a piece of felt the same size as the piece removed, and position felt plug and cotton duck patch (3) (with edges turned under 1/2 inch) over damaged area. Sew a single box X stitch (4) formation as shown.



(3) To plug the felt (1) lining of the pack, mark a rectangle around the damaged area. Remove the damaged felt while being careful not to damage the cotton duck material (2). Cut a piece of felt the size of the piece removed. Position felt plug into area cleared and sew as shown.



(4) If damage is in an area that cannot be sewed by machine, tack felt (1) plug securely to cotton duck (2) as shown using doubled and waxed size 3 nylon thread. Secure thread ends with suitable knot.



b. Repair of Binding Tape. Overlap the binding tape, extending the new tape at least 1 inch beyond the damaged tape. Stitch tape with two rows of stitching 1/8 and 1/4 inches from edge of tape as in original construction using size FF thread, 7 to 9 stitches per inch and a type HD sewing machine.

c. Repairing Webbing. The webbing on the pack may be restitched. Restitch loose, broken, or defective stitching according to original construction details and as outlined in the appropriate repair procedures.

REPLACE

a. Replacing Webbing. All webbing items may be replaced. Replacement will be accomplished in accordance with the original construction and as prescribed herein. Sear all cut ends of webbing before assembling webbing on pack.

NOTE

Splicing of the lowering line and attaching web is not authorized. Darning of the attaching web is not authorized.

(1) Lowering line. Replace lowering line as described in paragraph 2-17.

(2) Ring Strap Assembly, O-Ring, and O-Ring Chape.

NOTE

Some packs may be equipped with O-Rings in lieu of D-Rings. Replace D-Rings if damaged, with O Rings.

(a) O-Ring and O-Ring Chape.

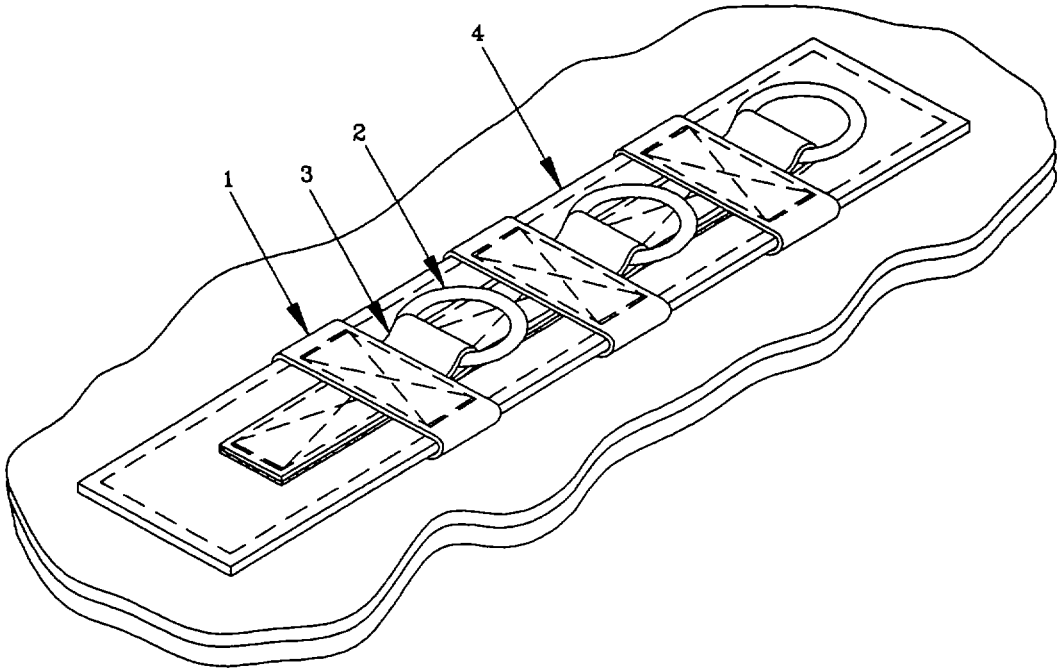
1 Cut stitching from Type III nylon retaining strap, (1) and remove strap. Replace with a 6 inch length of Type III nylon webbing if damaged. Sew box x stitching using size 5 thread, 5 to 7 stitches per inch and a type HD sewing machine.

2 Cut stitching from Type III nylon webbing which secures the O-Ring (2) to the chape (3). Replace damaged webbing with a 5 1/2 inch length of Type III nylon webbing. Sew as in 1 above. Replace D-Ring with a serviceable O-Ring of the same type.

(b) Ring Strap Assembly.

1 Cut stitching from Type III nylon webbing following steps 1 and 2 above. Set aside webbing and O-Rings.

2 Cut stitching from ring strap assembly (4) and remove. Replace ring strap assembly with a 10 inch length of Type X woven nylon webbing. Sew as in original construction using size 3 thread, 6 to 8 stitches per inch and a type HD sewing machine.

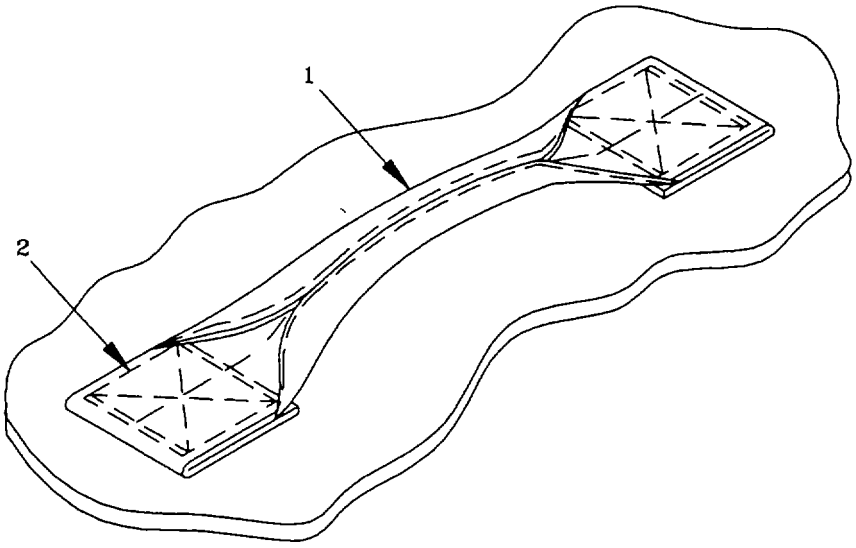


(3) Carrying Handle Strap. Replace damaged carrying handle strap as follows:

(a) Remove the damaged handle (1) by cutting and removing stitching of the two 2 inch box X patterns (2) that secure handle to the pack, and discard the damaged handle (1).

(b) Fabricate new handle of Type VIII woven nylon webbing according to details in Appendix E.

(c) Turn under ends 1-1/4 inch and position replacement strap in the original position of the handle. Sew using size 3 thread, 6 to 8 stitches per inch and a type HD sewing machine.

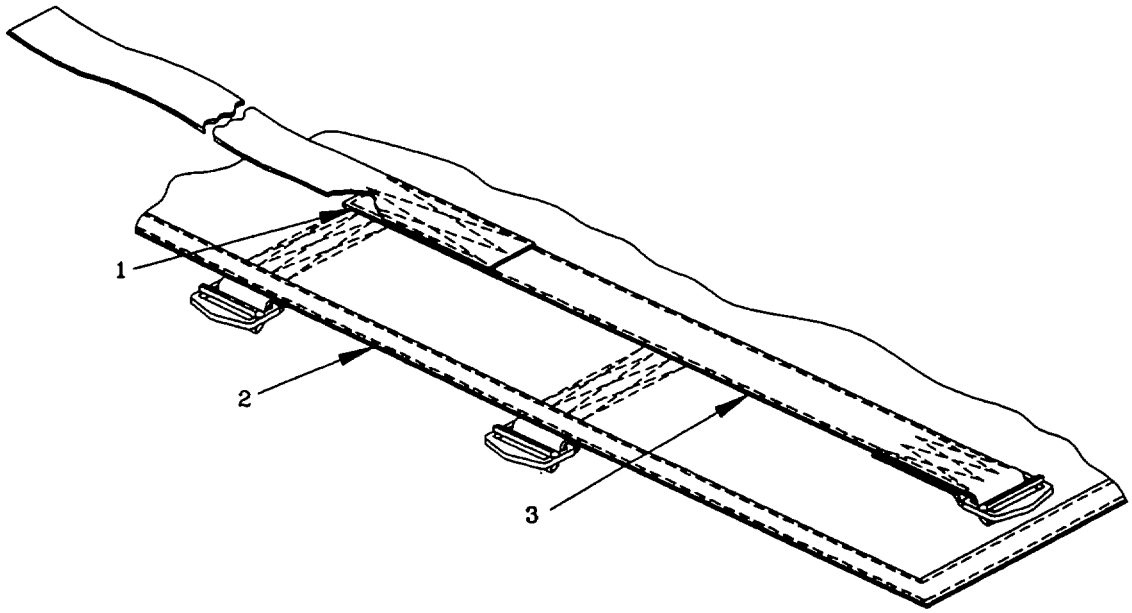


(4) Side Securing Straps (running ends). Replace damaged running end of side securing strap as follows:

(a) Cut strap (1) along stitching that secures strap to pack (2).

(b) Cut a length of Type VIII nylon webbing equal to the length removed plus 3 1/2 inches. Sear ends.

(c) Turn under one end 1/2 inch, and position replacement strap 3 inches beyond the cut webbing (3) end on the pack. Stitch with 3 point WW pattern as shown using size 3 thread, 6 to 8 stitches per inch and a type HD sewing machine.



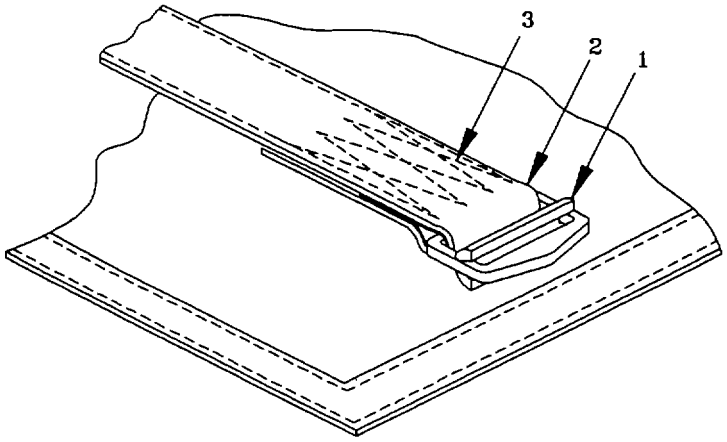
(5) Side Securing Strap Quick Fit Adapters. Replace damaged hardware as follows:

(a) Remove adapter (1) by cutting the webbing chape (2) as close to the 3 point WW stitch pattern (3) as possible. Discard adapter.

(b) Cut a 3 3/4 inch buffer of Type VIII nylon webbing and fold so ends are offset 1/2 inch.

(c) Cut a 7 1/2 inch adapter chape of Type VIII nylon webbing. Fold Webbing 1/2 and 3 3/4 inches from one end.

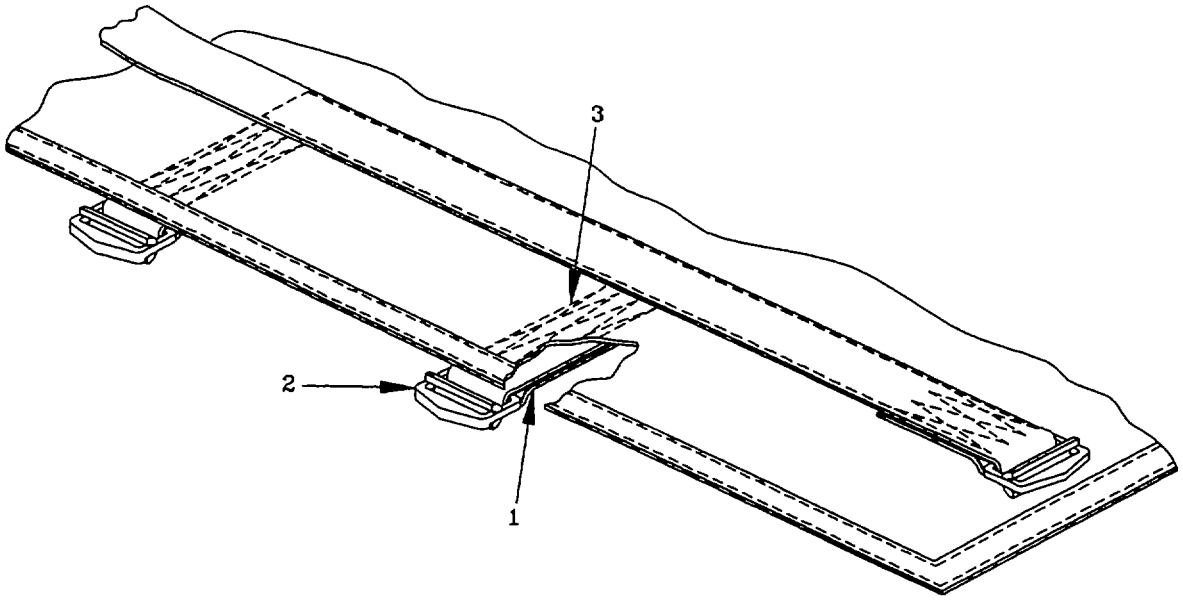
(d) Place buffer and chape on serviceable adapter, position replacement on top of original, and sew with a 3 inch 3 point WW stitch formation using size 3 thread, 6 to 8 stitches per inch and a type HD sewing machine.



(6) Forward End Securing Straps and Heavy Duty Adapters. Replace damaged forward end securing straps (1) and heavy duty adapters (2) as follows:

(a) Remove damaged strap (1) by cutting along stitching (3) that secures strap to pack. Replace strap with a length of Type X nylon webbing equal to the length removed. Replace damaged adapter (2) with serviceable adapter of the same type.

(b) Fold the webbing around the heavy duty quick fit adapter (2) and position strap (1) on the pack in its original position, as shown. Stitch with 3 inch three point WW pattern as shown (3) using size 5 thread, 5 to 7 stitches per inch and a type HD sewing machine.



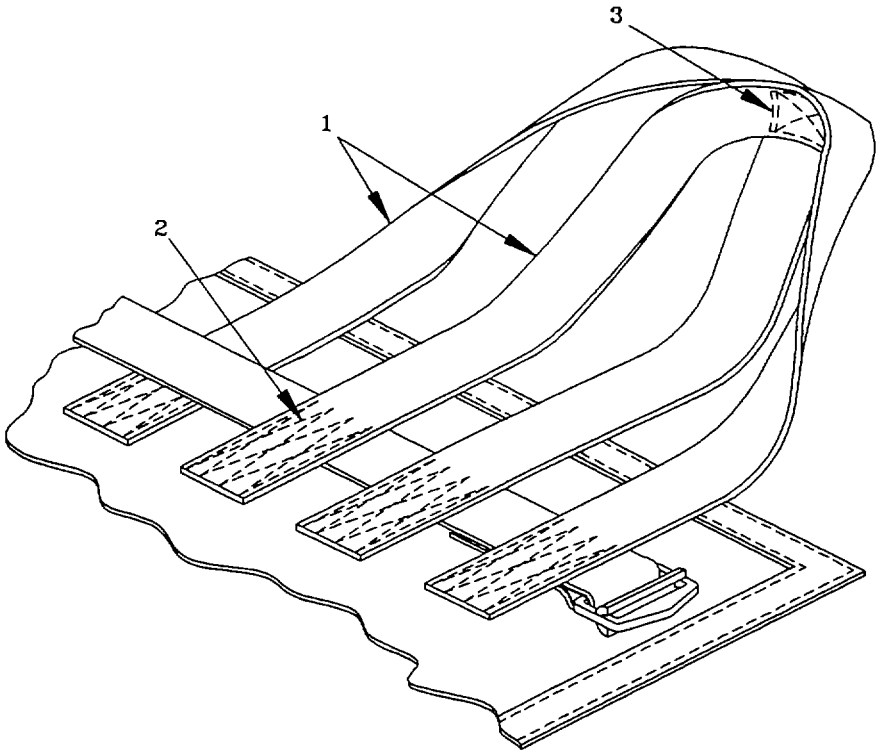
(7) Aft End Securing Straps.

(a) Remove damaged aft end securing straps (1) by cutting along stitching (2) that secures straps to pack.

(b) Cut two lengths of type X nylon webbing equal to the lengths removed.

(c) Stitch the two lengths of webbing together, as in original, with a 2-inch double box X stitch (3) formation. Use size 5 thread, 5 to 7 stitches per inch and a type HD sewing machine.

(d) Position the four free running ends of the replacement straps, as shown and stitch to the pack body with 3 inch three point WW stitch formation. Stich as in (c) above.



(8) Chest Tiedown Assembly. Replace a damaged tiedown strap, D-Rings, grommet, Type III nylon loop, or chape as follows:

(a) Chest tiedown strap. Replace a damaged or missing tiedown strap (1) as follows:

1 Remove the damaged strap (1) from the D-Rings (2) and chape.

2 Cut a 36 inch length of Type III nylon webbing, sear one end, and stitch a 4-inch loop (3) in the other end using two bartacks. Use size E thread, 6 to 11 stitches per inch and a type MD sewing machine.

3 Route the replacement webbing through the D-Rings (2).

(b) D-Rings, and Type III nylon loop. Replace damaged D-Ring (2), and/or Type III nylon loop (4) as follows:

1 Remove tiedown strap (1) from pack and set aside. Cut stitching on the chape (5) and remove and discard damaged D-Ring, and/or Type III nylon loop. Replace damaged Type III nylon loop (4) with a 5 inch piece of Type III nylon cord, red 21105. Replace a damaged D-Ring (2) with serviceable D-Ring of the same type.

2 Sew to pack as shown and with box x stitch. Use size E thread, 6 to 11 stitches per inch and a type MD sewing machine.

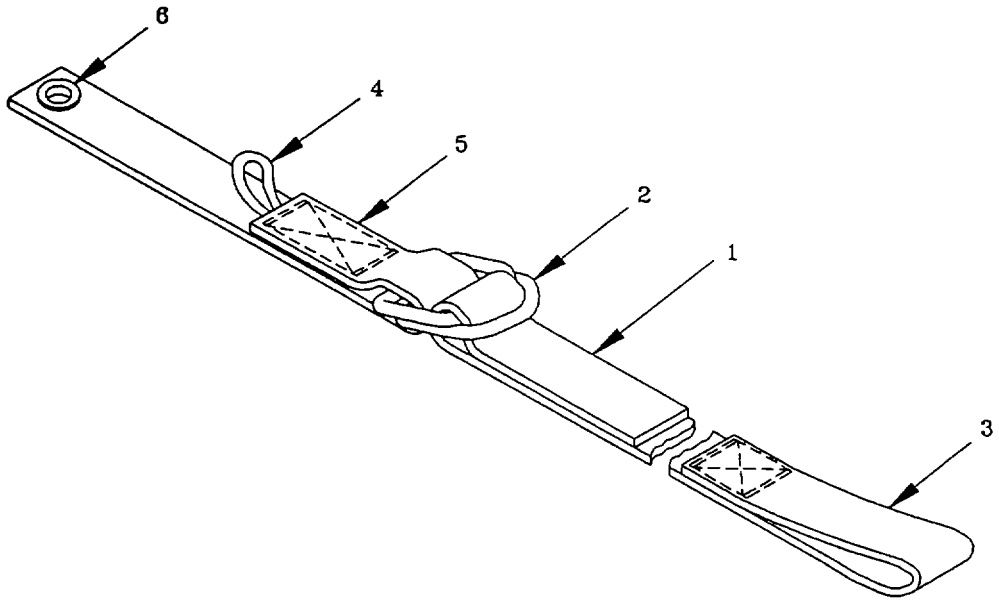
(c) Chape (5) and grommet (6). Replace damaged chape and grommet as follows:

1 Remove tiedown strap (1) from pack and set aside. Cut stitching on the chape (5) and remove chape from D-Rings (2) and Type III nylon loop. Set components aside.

2 Cut an 8-1/8 inch length of Type III nylon webbing, fold over two D-Rings and Type III nylon loop. Remove damaged grommet and install a new one as described in paragraph 2-13.

3 Hand tack and position the replacement chape as shown.

4 Route tiedown strap around D-Rings.

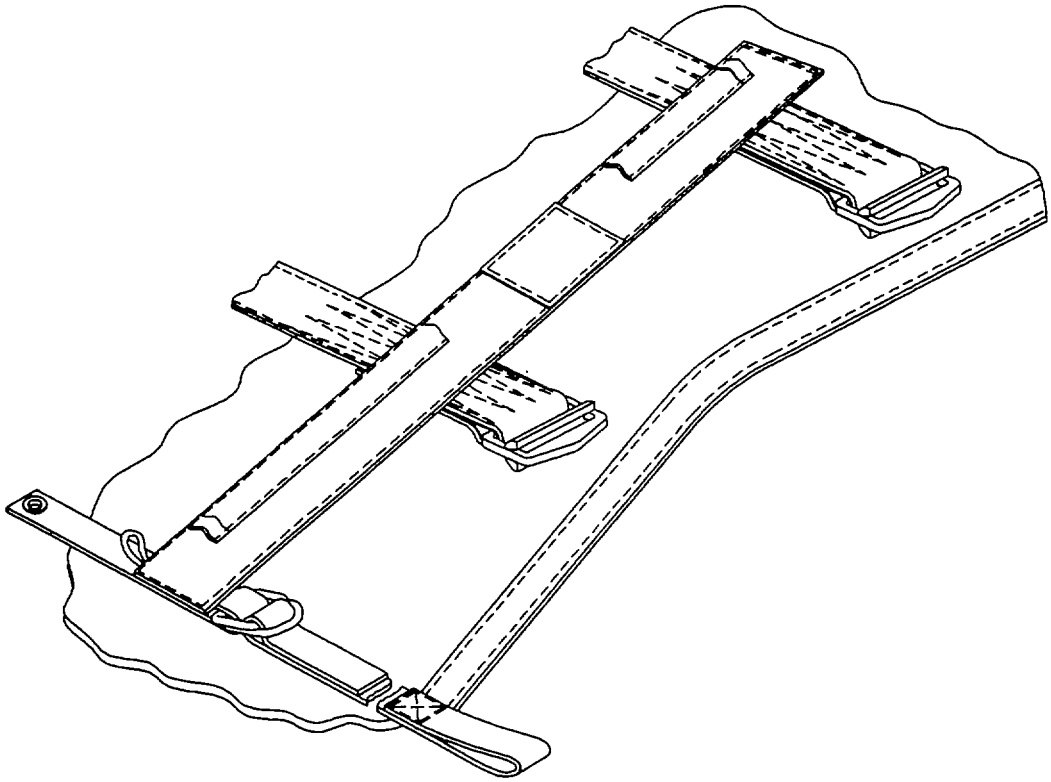

6
4
5
2
1
3

(9) Leg Tiedown Assembly. Replace a damaged tiedown strap, D-Rings, grommet, Type III nylon loop, or chape as follows:

(a) Leg tiedown strap. Replace the leg tiedown strap following paragraph (8) (a) above, except cut a 60 inch length of bulked 1 inch nylon webbing in lieu of the 36 inch length.

(b) D-Rings, and Type III nylon loop. Replace a damaged D-Ring, and/or Type III nylon loop following paragraph (8) (b) ensuring that the new chape is routed under the cable guide assembly strap as shown.

(c) Grommet and Chape. Replace damaged grommet and/or chape following paragraph (8) (c) ensuring that the new chape is routed under the cable guide assembly strap as shown.



(10) Cable Guide Assembly. Replace a damaged cable guide as follows:

(a) Cut stitching (1) that secures the cable guide (2) to the pack (3).

(b) Cut an appropriate piece of Type II nylon webbing equal in size to the piece being replaced.

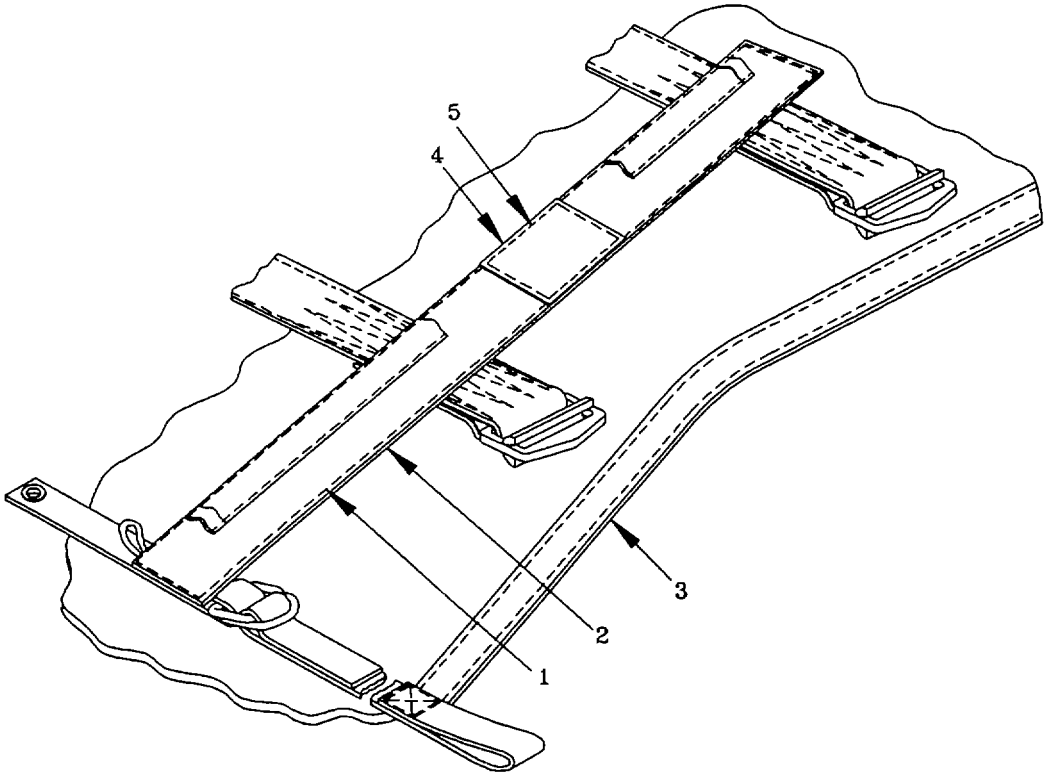
(c) Stitch as in original using size FF thread, 7 to 9 stiches per inch and a type MD sewing machine.

(11) Pile Fastener. Replace any damaged or missing pile fastener (4) on the pack (3) as follows:

(a) Cut stitching (5) that secures the pile fastener to the pack.

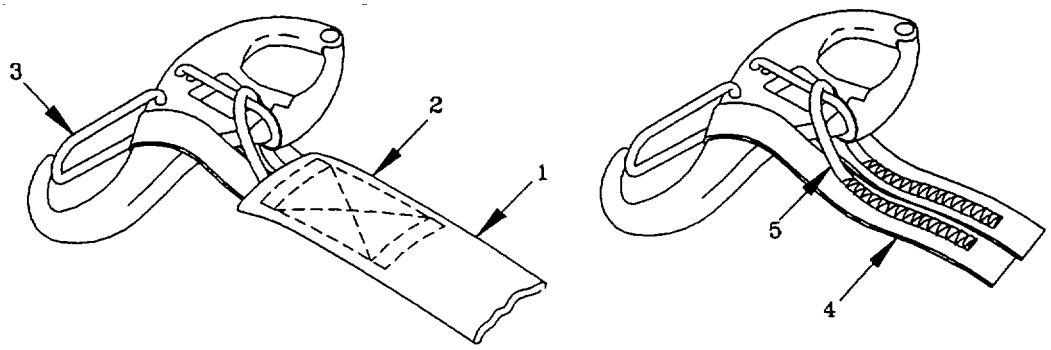
(b) Cut an appropriate piece of pile tape, as required, equal in size to the piece being replaced.

(c) Stitch to pack as in original using size FF thread, 7 to 9 stiches per inch and a type MD sewing machine.



(12) Quick-Release Assembly and Snap Shackle. Replace damaged snap shackle, 1 inch webbing, single pull handle, coated wire and swaging as follows:

(a) Shackle and loop assembly. Replace any damaged part of the shackle and loop assembly (1) as follows:



1 Cut stitching from webbing (2) and remove snap shackle (3), 1/2 inch tape (4) and Type III nylon loop (5). Discard and replace damaged components. Replace 1/2 inch tape with 7 inch length of Type IV 1/2 inch nylon tape. Replace nylon loop with 7 inch length of Type III nylon cord. Sew as shown using size 3 thread, 6 to 8 stitches per inch and a type HD sewing machine.

2 Sew assembly to webbing with box x stitch as shown, using size 3 thread, 6 to 8 stitches per inch and a type HD sewing machine.

(b) 1 inch Webbing. Replace damaged webbing (1) by shackle and loop assembly as in (a) 1 above. Set assembly aside.

2 Cut stitching from pile fastener (6) and 1 inch webbing (1) on the release handle (7) and remove and discard webbing. Replace with 12 1/2 inch length of nylon webbing.

3 Assemble webbing (1), snap shackle (3), 1/2 inch tape (4), and Type III nylon loop (5) on release handle (7) as shown and using size 3 thread, 6 to 8 stitches per inch and a type HD sewing machine.

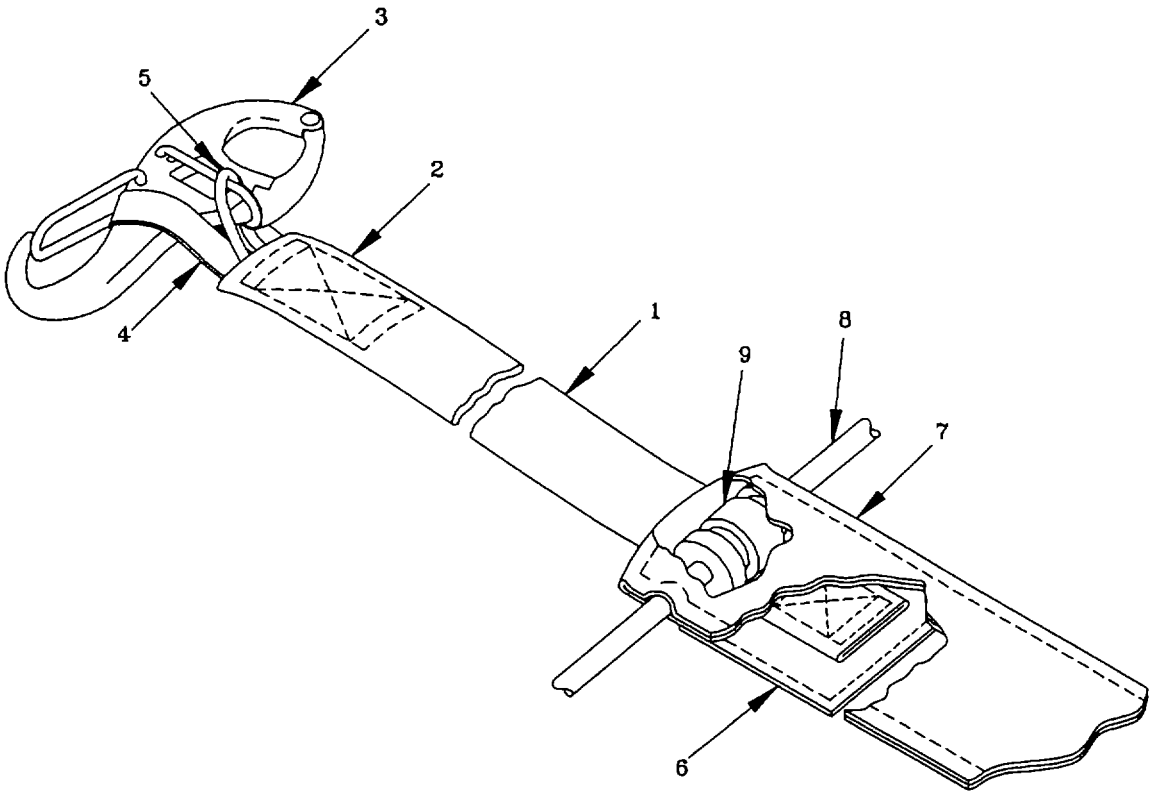
(c) Release Handle, coated wire and swaging.

1 Cut stitching on pile fastener (6) and webbing (1) on the release handle (7) and remove release handle. Set aside pile fastener and webbing.

2 Cut stitching on release handle (7) enough to remove coated wire (8) as shown. Discard damaged components.

3 Replace damaged release handle (7) with an 18 1/2 inch length of Type VIII woven nylon webbing, yellow 12197. Replace damaged wire (8) and swaging (9) with a 25 3/4 inch length of Type IIB, 5/32 inch O.D. coated wire rope and 5/32 inch swaging sleeve. Swage swaging sleeve as shown.

4 Assemble components as in original construction. Sew using size 3 thread, 6 to 8 stitches per inch and a type HD sewing machine



(14) Extension Sling. Replace damaged extension sling, D-Ring, and 4 inch length of Type X nylon webbing as follows:

(a) D-Ring and 4 inch nylon webbing. Replace damaged D-Ring (1) and 4 inch nylon webbing (2) as follows:

1 Cut stitching from hook fastener (3) on D- Ring end of extension sling (4), remove and set aside fastener. Cut stitching (5) that supports D-Ring (1) and 4 inch nylon webbing (2) and remove D-Ring and webbing. Replace D-Ring (1) with a serviceable item. Replace 4 inch webbing with a 4 inch length of Type X woven nylon webbing.

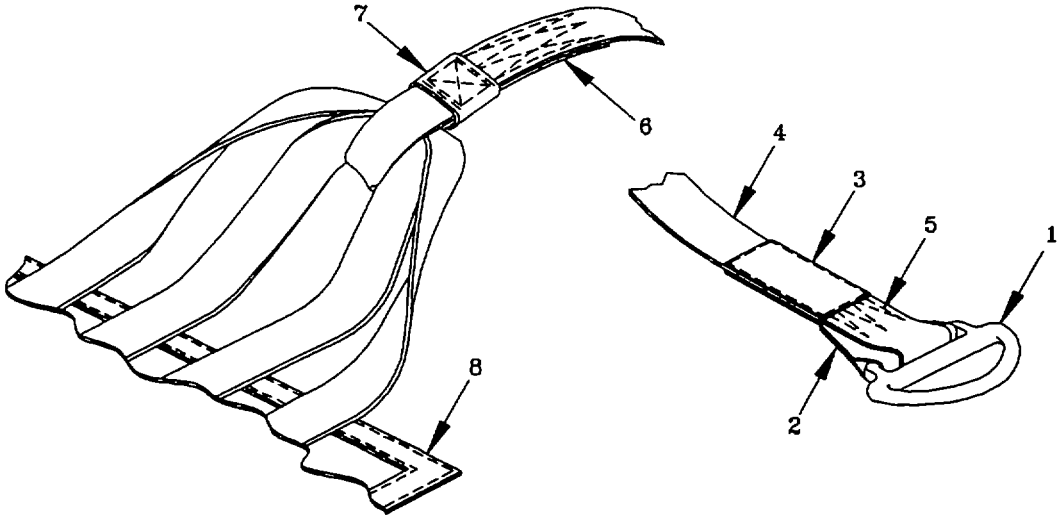
2 Sew D-Ring and hook fastener to extension sling as shown using size 3 thread, 5 to 8 stitches per inch and a type HD sewing machine.

(b) Extension sling (6) and retaining strap (7). Replace damaged extension sling and retaining strap as follows:

1 Cut extension sling (6) from pack body (8).

2 Follow step (a) above for replacing D-Ring and 4 inch webbing except discard damaged extension sling (6) and replace with 78 inch length of 1 inch woven nylon webbing. Replace 3 1/2 inch webbing retainer (7) with a 3 1/2 inch length of Type II woven nylon webbing.

3 Sew sling as shown and as in (a) 2 above.



2-24. RELEASE ASSEMBLY

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

INITIAL SETUP

Tools:

Knife, Item 1, Section III, Appendix B
Shears, Item 2, Section III, Appendix B

Materials/Parts:

Tape, nylon, Item 34, Appendix D
Thread, nylon, size E, Item 36, Appendix D
Thread, nylon, size FF, Item 37, Appendix D
Cord, fibrous nylon, Item 9, Appendix D

General Safety Requirements:

Read, understand and follow all warnings, cautions and notes.

Equipment Condition:

The Release Assembly should be clean and dry. Place the assembly on a work table.

INSPECT

Perform a before and after repair rigger/technical inspection of the Release Assembly as outlined in paragraph 2-14.

REPAIR

The webbing on the release assembly may be restitched or darned. Splicing is not authorized. Restitch loose, broken, or defective stitching according to original construction details using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine. Darn using size E thread and a type DN machine.

REPLACE

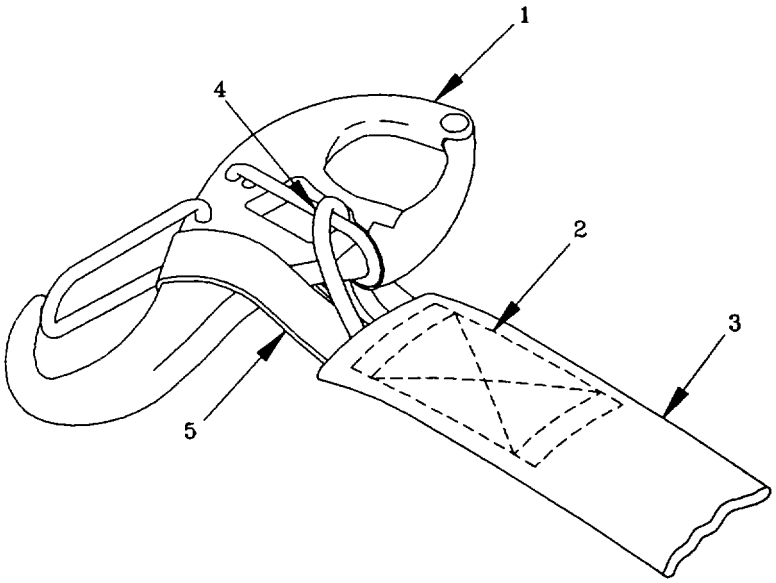
Replacement of the webbing components on the release assembly is not authorized. If assembly webbing becomes unserviceable and can not be repaired, remove and retain any serviceable hardware, and discard webbing. Replace any hardware item on an otherwise serviceable release assembly as follows:

a. Shackle. Replace a damaged snap shackle (1) by cutting the stitching (2) that secures the item to the 1 inch tubular nylon webbing (3).

(1) Cut nylon cord (4) and tape retainers (5) from damaged shackle.

(2) Cut a 6 inch length of nylon tape retainer (5) and a 5 inch length of nylon cord retainer (4).

(3) Install retainers on new shackle (1) as shown. Sandwich retainer ends between 1 inch tubular nylon webbing (3) and stitch with a box X stitch (2) using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.

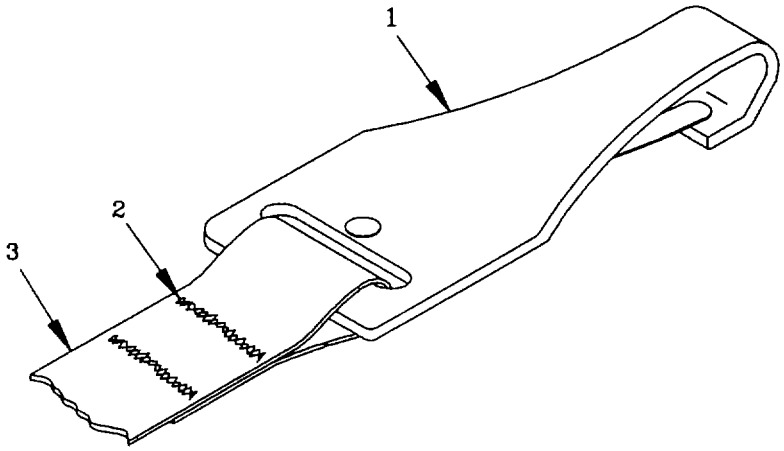


b. Snap Hook. Replace a damaged snap hook (1) by cutting the stitching (2) that secures the item to the 1 inch nylon tape (3).

(1) Remove the damaged snap hook (1) and discard.

(2) Thread 1 inch nylon tape (3), through serviceable snap hook (1) and fold back 1 3/8 inch.

(3) Secure new snap hook (1) with a double bartack (2) as shown using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.

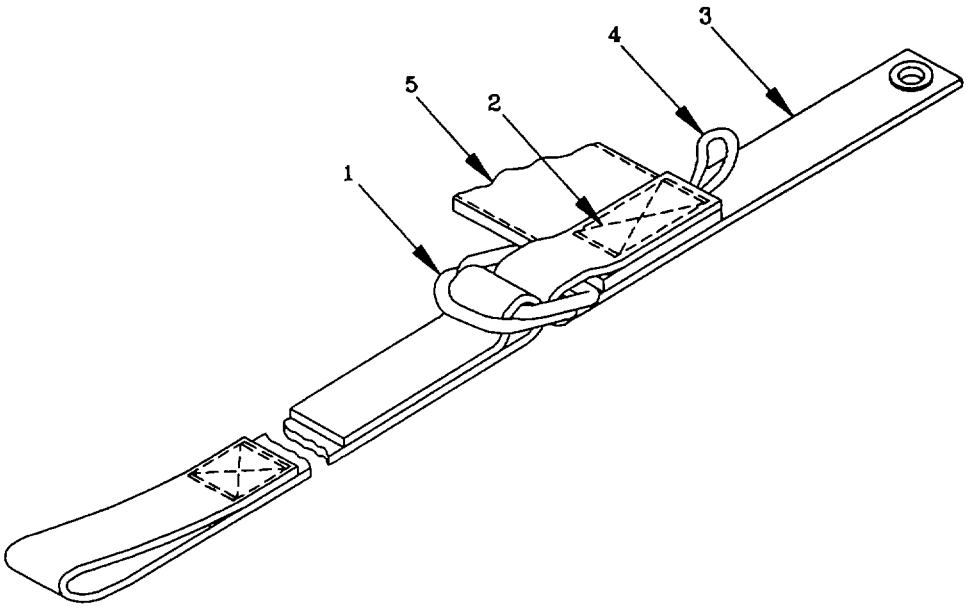


c. D-Ring. Replace a damaged D-Ring (1) by cutting the stitching (2) that secures the item to the 1 inch tubular nylon webbing (3).

(1) Remove the damaged D-Ring(s) (1) and discard.

(2) Thread 1 inch tubular nylon webbing (3) through new D-Ring(s) (1) and fold tubular nylon webbing (3) around red nylon cord (4) and release assembly strap (5).

(3) Position tubular webbing (3) on release assembly strap (4) as in original construction and secure with a box X stitch (2) using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.



2-25. Container, Front Mounted

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

INITIAL SETUP

Tools:

Knife, Item 1, Section III, Appendix B
Shears, Item 2, Section III, Appendix B

Materials/Parts:

Cloth, duck, nylon, Item 7, Appendix D
Cord, fibrous nylon, Item 9, Appendix D
Felt, 1/4" thick, Item 12, Appendix D
Tape, textile, nylon, Item 30, Appendix D
Thread, nylon, size E, Item 36, Appendix D
Thread, nylon, size FF, Item 37, Appendix D
Thread, nylon, size 3, Item 35, Appendix D

General Safety Requirements:

Read, understand and follow all warnings, cautions and notes.

Equipment Condition:

The container should be clean and dry. Place container on work table.

INSPECT

Perform a before and after repair rigger/technical inspection of the Release Assembly as outlined in paragraph 2-14.

REPAIR

The nylon duck material of the container and attached flap assemblies may be restitched, darned, and patched. The felt lining may be restitched and plugged. When making any of these repairs, remove stitching as necessary to gain access to the damaged area. After repairs have been made, replace any stitching

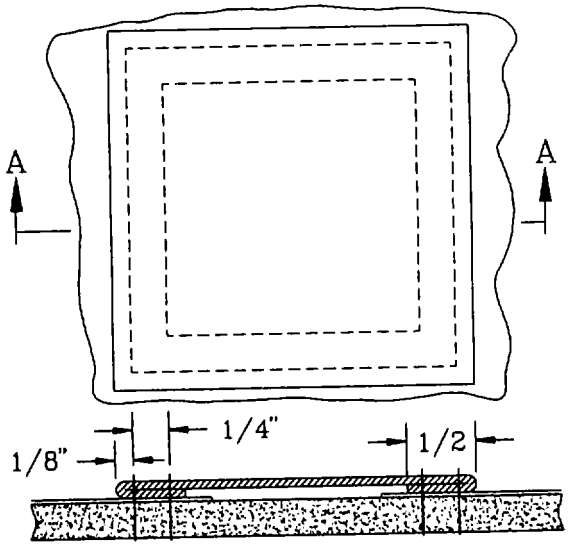
that has been removed, as in original construction or as specified in each procedure. Repair duck and felt fabrics by restitching, darning and patching as described below.

a. Restitching. Restitch the container fabric directly over old stitching using size FF thread, 7 to 11 stitches per inch, and an MD sewing machine. Lock stitching at least 1/2 inch.

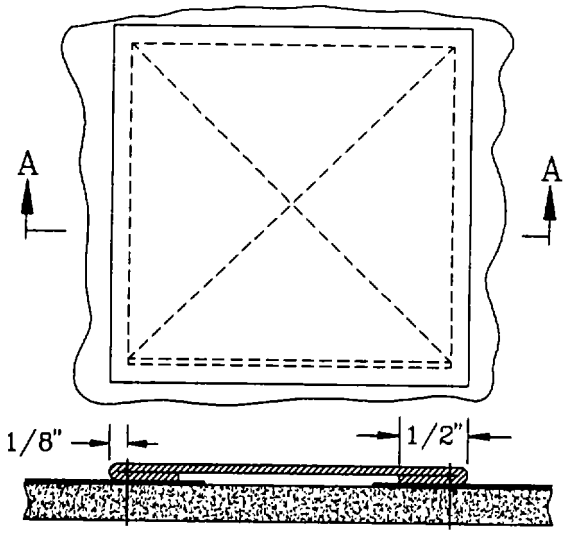
b. Darning. Darn a hole or tear in the container fabric that does not exceed 1 inch in length or diameter using size E thread and a darning machine. There is no limit to darns that may be applied, provided they do not weaken or reduce the original strength of the fabric more than 10%. If damage is in the lined portion of the container body and only the cotton duck is damaged, darn through duck and felt. If felt is also damaged, remove damaged area before darning duck fabric. Then plug felt as in c.(3) below.

c. Patching. There is no limit to the number of times the container body may be patched. Patch a hole or tear that exceeds 1 inch in length or diameter following procedures in (1) or (2) below. Use nylon duck cloth according to original construction for patching outside, and 1/4 inch thick felt for plugging inside lining. Use an MD sewing machine, size FF thread, and 7 to 9 stitches per inch.

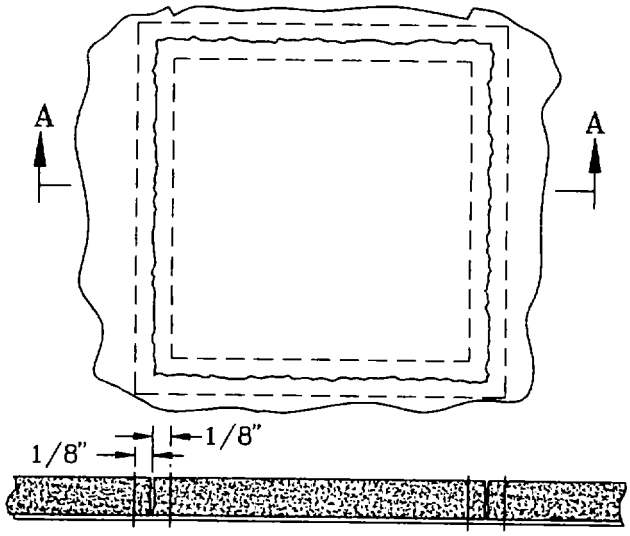
(1) To patch a lined portion of the container when the felt is not damaged, cut nylon duck patch 2 inches beyond circumference of damaged portion. Turn under edges of patch ½ inch and center patch over damaged area. Sew patch to container body with a double row of stitching as shown.



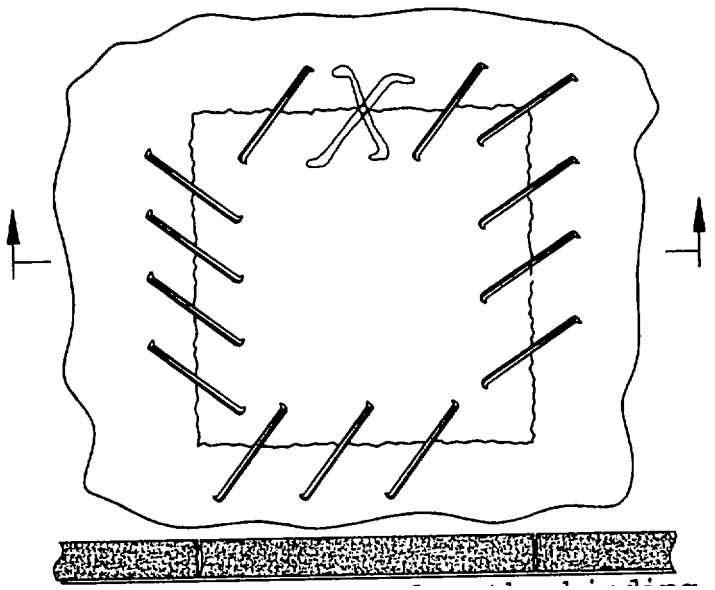
(2) To patch a lined portion of the container when the felt is damaged, remove the damaged felt as described in (3) below. Cut a piece of felt the same size as the piece removed, and position felt plug and cotton duck patch (with edges turned under 1/2 inch) over damaged area. Sew a single box X stitch formation as shown.



(3) To plug the felt lining of the container, mark a rectangle around the damaged area. Remove the damaged felt while being careful not to damage the nylon duck material. Cut a piece of felt the size of the piece removed. Position felt plug into area cleared and sew as shown.



(4)If damage is in an area that cannot be sewed by machine, tack felt plug securely to nylon duck as shown using doubled and waxed size 3 nylon thread. Secure thread ends with suitable knot.



d. Repair of Binding Tape. Overlap the binding tape, extending the new tape at least 1 inch beyond the damaged tape. Stitch tape with two rows of stitching 1/8 and 1/4 inches from edge of tape as in original construction using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.

e. Repairing Webbing. The webbing on the pack may be restitched or darned. Restitch loose, broken, or defective stitching according to original construction details using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine. Darn using size E thread and a darning machine.

REPLACE

a. Replacing Webbing. All webbing in (1) through (12) below may be replaced. Replacement will be accomplished in accordance with the original construction and as prescribed herein. Sear all cut ends of webbing before assembling webbing on pack.

NOTE
Splicing and darning of the attaching strap assembly is not authorized.

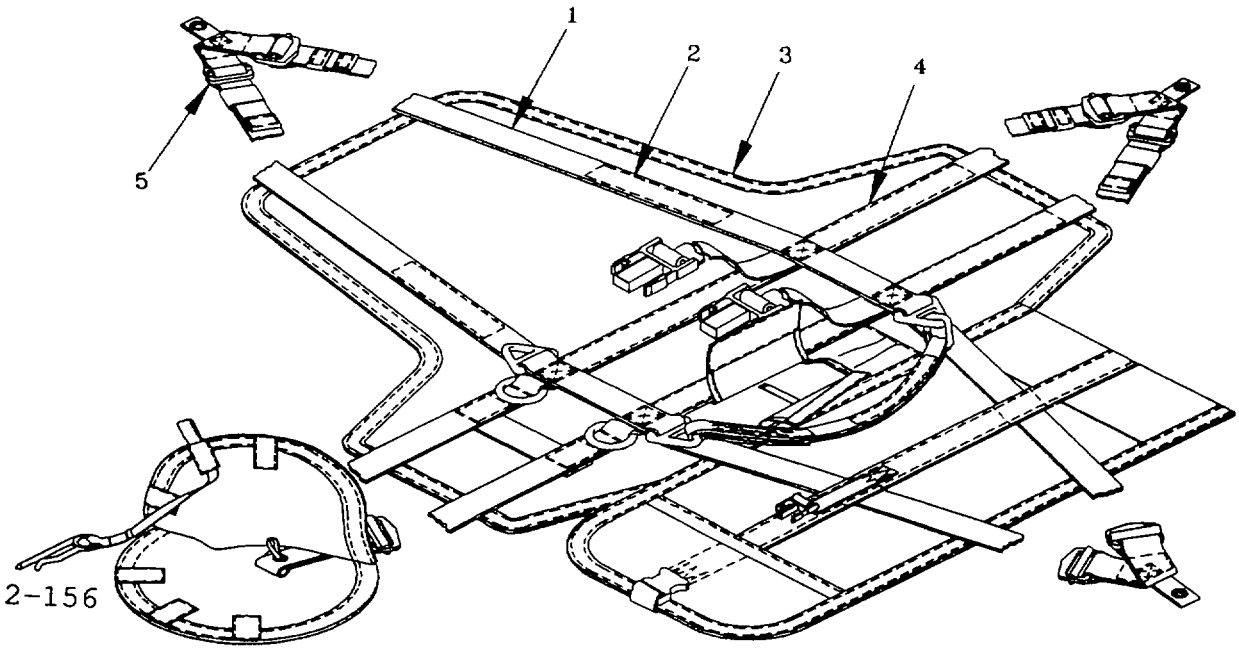
(1) Horizontal Restraint Assembly. To replace this assembly (1) proceed as follows:

a Cut the stitching (2) that secures the damaged assembly to the container body (3) and vertical restraint assembly (4).

b Cut off any serviceable hardware items and closing assemblies (5) and set aside.

c Fabricate new assembly (1) as described in Appendix E, using salvaged, serviceable hardware items (5) and closing assemblies removed as applicable.

d Place new horizontal restraint assembly (1) onto container (3) as shown and sew as in original construction using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.



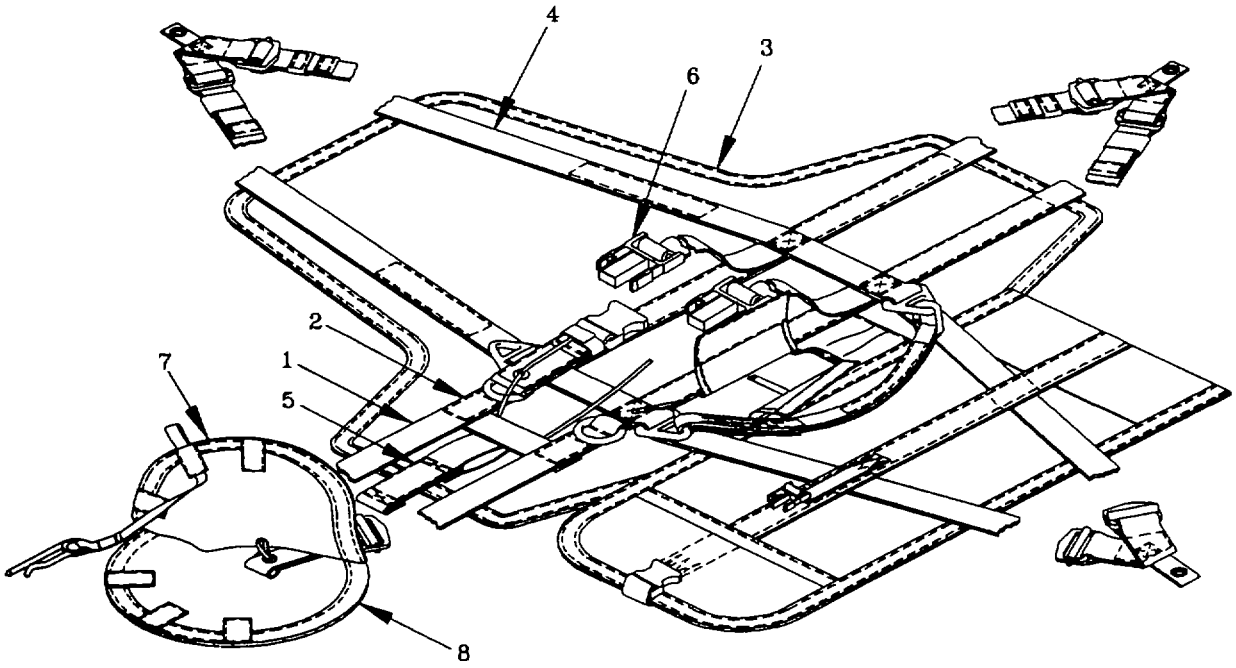
(2) Vertical Restraint Assembly. To replace this assembly (1) proceed as follows:

a Cut the stitching (2) that secures the damaged assembly to the container body (3) horizontal restraint assembly (4) and the release assembly (5).

b Remove serviceable hardware items (6) the flap assemblies (7) and the closing assembly (8).

c Fabricate new vertical restraint assembly (1) as described in Appendix E, using salvaged, serviceable hardware items (6) and closing assembly (8) removed, as applicable.

d Place new vertical restraint assembly (1) onto container (3) as shown and sew as in original construction using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.



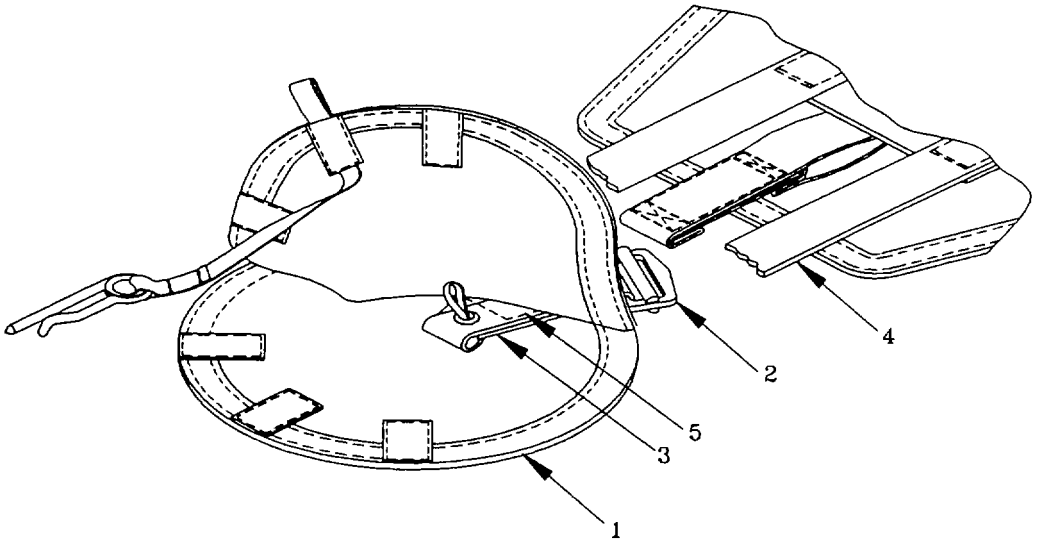
(3) Closing Flap Assembly. To replace this assembly (1) proceed as follows:

a Remove the reversible quick fit adapters (2) on the restraining loop assembly (3) from the vertical restraint assembly (4). Remove the flap assembly (1) from the restraining loop assembly (3) but cutting the stitching (5) holding these assemblies together.

b If the restraining loop assembly (3) is also being replaced, remove serviceable quick fit adapters (2) and set aside.

c Fabricate new closing flap assembly (1) and restraining loop assembly (3), if required, as described in Appendix E.

d Attach quick fit adapters (2) on restraining loop assembly (3) with new closing flap assembly (1) onto vertical restraint assembly (4).



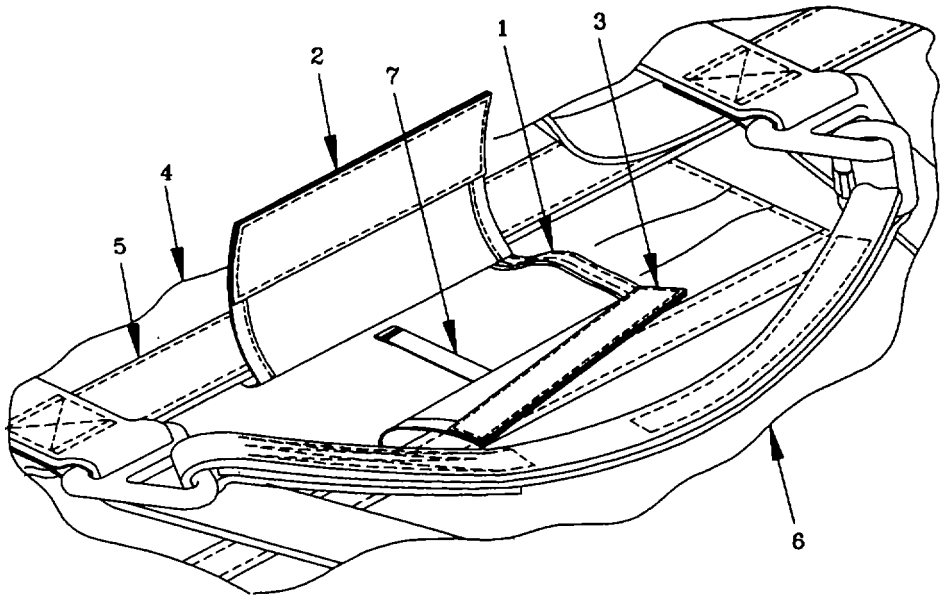
(4) Pocket Assembly, Lowering Line, Closure Flap Assembly, and Inner Flap Assembly. To replace these assemblies proceed as follows:

a Cut the stitching that secures the damaged pocket (1), closure (2) and inner flap assembly (3) to the container body (4), vertical restraint assembly (5) and the side container assembly (6).

b Remove nylon tape loop (7) from container body if damaged.

c Fabricate new pocket (1), closure flap (2), and inner flap (3) as described in Appendix E.

d Place new pocket (1), closure flap (2), and inner flap (3) onto container body (4) as shown and sew using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.



(5) Container Assembly, Side. To replace this assembly proceed as follows:

a Remove the horizontal restraint assembly straps (1) from the side container (2).

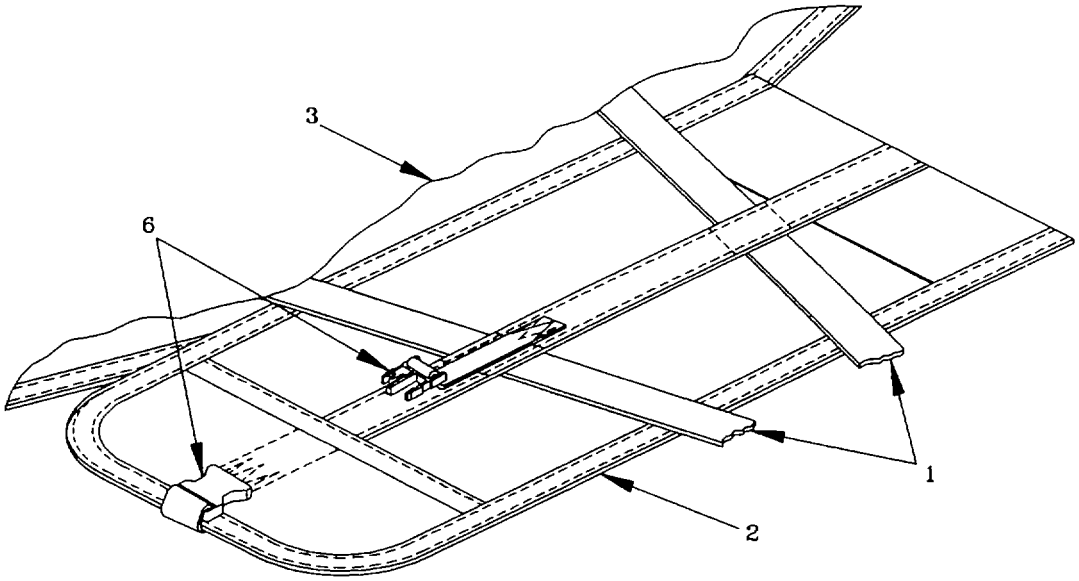
b Cut the stitching that secures the damaged container (2), to the container body (3).

c Remove serviceable hardware items (6) and set aside.

c Fabricate new container (2) as described in Appendix E.

d Place new container (2), onto container body (3) as shown and sew using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.

e Reinstall the horizontal restraint assembly straps (1) onto the side container (2).

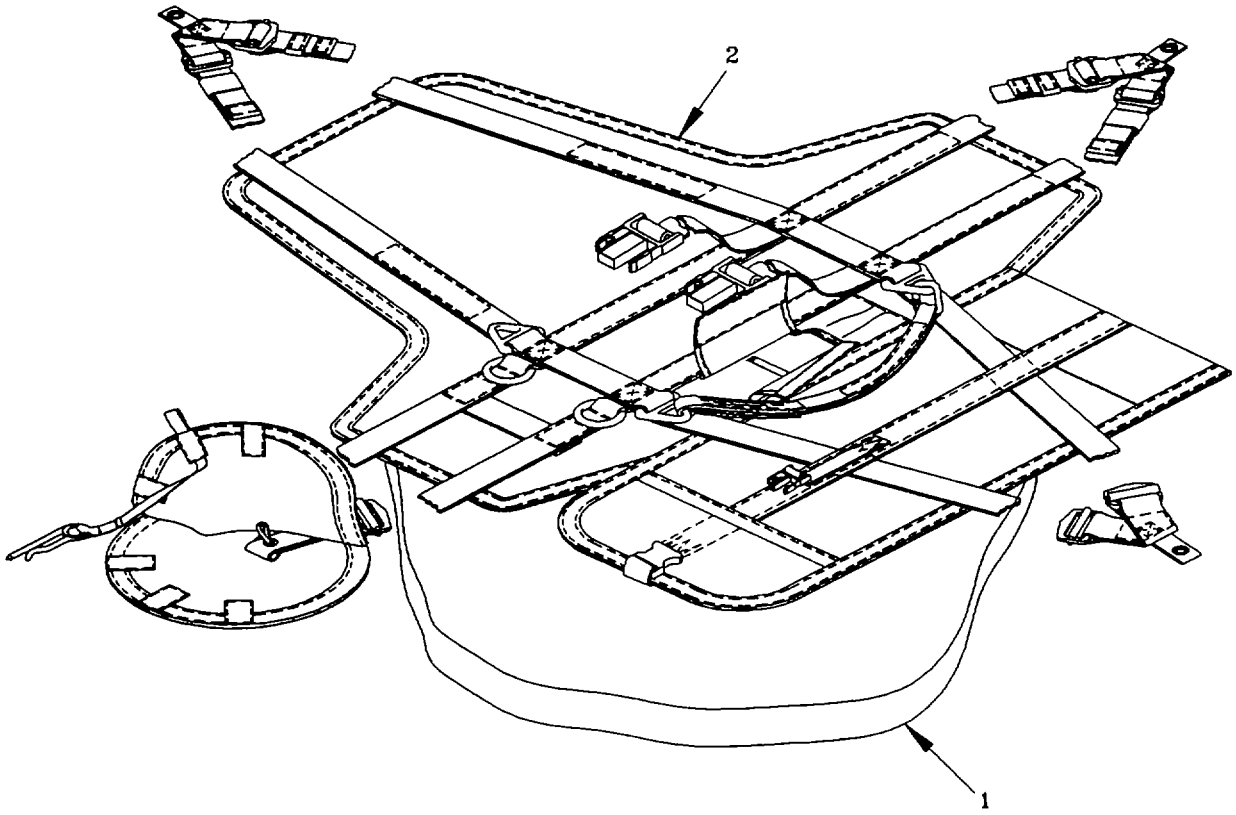


(6) Kit, Bag Assembly, Internal. To replace this assembly proceed as follows:

a Cut the stitching that secures the damaged bag (1), to the container body (2).

b Fabricate new bag assembly (1) as described in Appendix E.

c Sew new bag assembly (1) to container (2) using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.



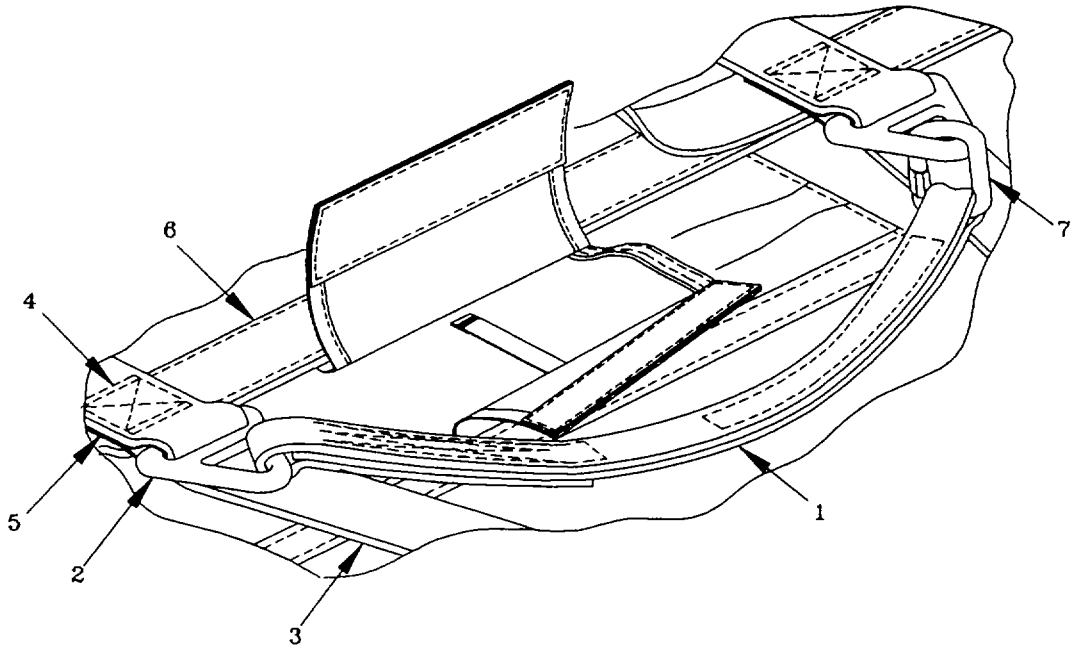
(7) Bridle Assembly. To replace this assembly proceed as follows:

a Cut the damaged bridle assembly (1), from the triangle link (2) holding it to the horizontal restraint assembly (3). If link (2) is to be replaced, cut the stitching (4) holding the link chape (5) to the horizontal (3) and vertical restraint assemblies (6).

b Remove rapid connector link (7) from bridle assembly (1).

c Fabricate new bridle assembly (1) as described in Appendix E.

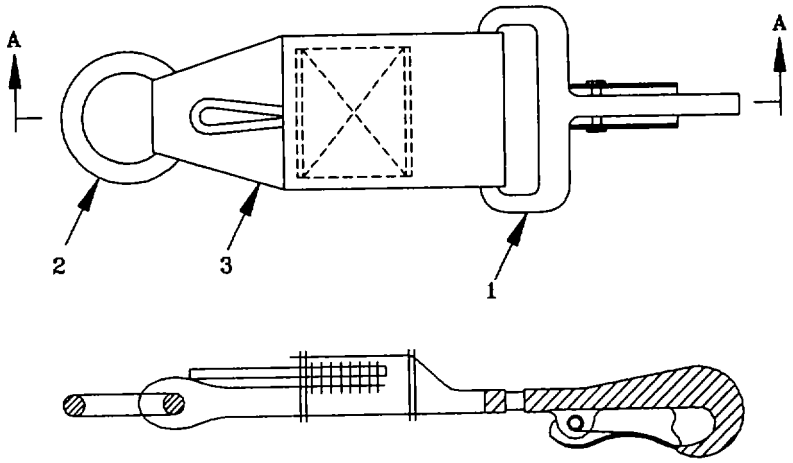
c Attach new bridle assembly (1) by threading triangular link (2) to chape and restitching chape with a box x stitch to the vertical restraint assembly using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine. Connect the rapid connector link (7) to the other trianguler link.



(8) Attaching Strap Assembly. To replace this assembly proceed as follows:

a Remove serviceable snap hook (1) and ring (2) by cutting the webbing (3), and set aside.

b Fabricate new attaching strap assembly (1) as described in Appendix E, using serviceable hardware items salvaged as applicable.



SECTION A-A

(9) Leg strap Assembly. To replace this assembly proceed as follows:

a Remove serviceable plastic side release (1) by cutting the webbing (2), and set aside.

b Cut webbing and remove damaged part, or if the entire strap is to be replaced, cut stitching (3) that holds the strap to the container (4).

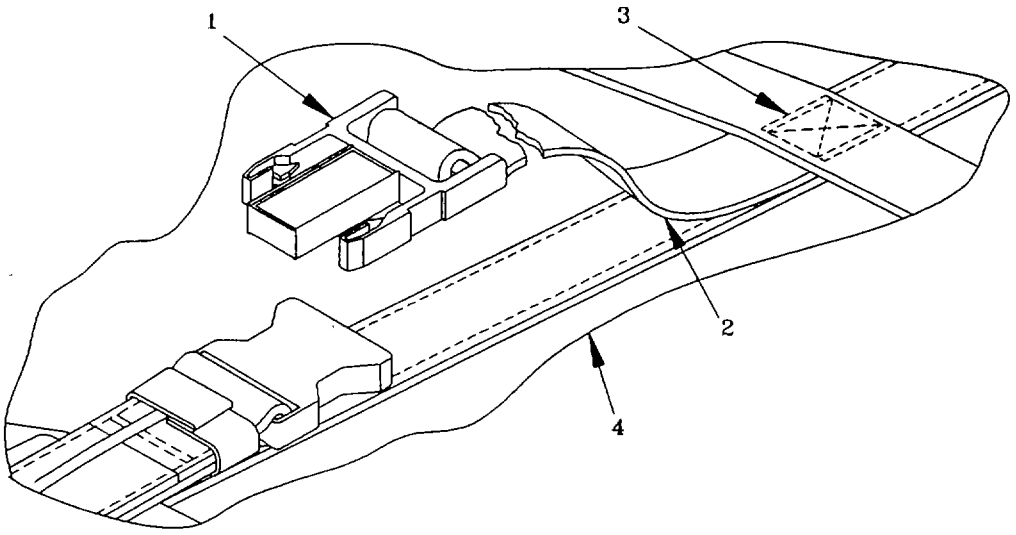
NOTE

Splice a leg strap only if at least 4 inches of free running, serviceable end from the attachment point on the container is available to facilitate overlap.

c Cut an appropriate length of Type VII nylon webbing (2) to splice or replace the leg strap entirely.

d Place plastic side release (1) onto strap as on original construction using new, or serviceable hardware items salvaged as applicable.

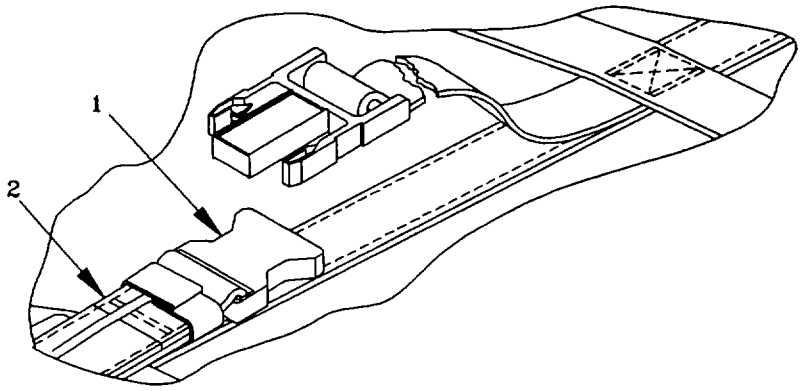
e Turn running end under 1 inch twice (5) and secure with box stitch using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.



(10) Leg Strap Release Assembly. To replace this assembly proceed as follows:

a Remove serviceable side release (1) by cutting the webbing (2), and set aside.

b Fabricate new leg strap release assembly as described in Appendix E, using serviceable hardware items salvaged as applicable.

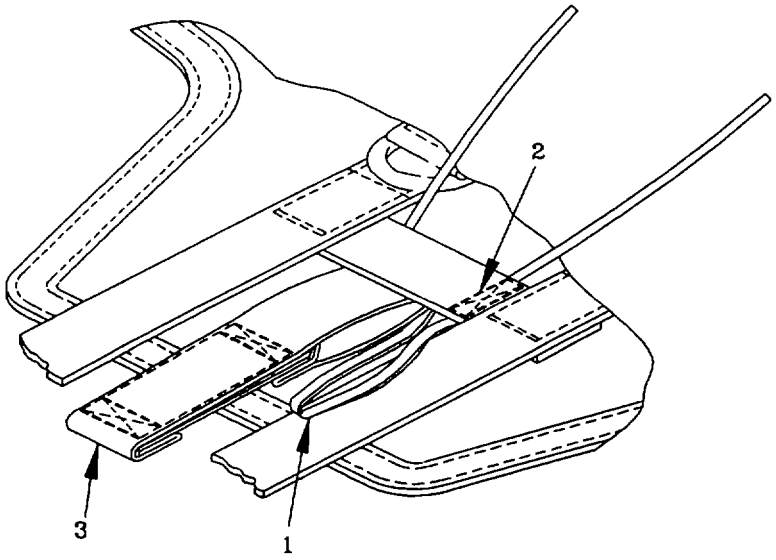


(11) Release Assembly Handle. To replace this assembly proceed as follows:

a Remove stitching that secures lanyard (1) to the container (2). Discard a damaged handle assembly (3).

b Fabricate a new release assembly handle as described in Appendix E.

c Sew lanyard (1) to container as in original construction using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.



2-26. Container, Side Mounted

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

INITIAL SETUP

Tools:

Knife, Item 1, Section III, Appendix B
Shears, Item 2, Section III, Appendix B

Materials/Parts:

Thread, nylon, size 3, Item 35, Appendix D
Thread, nylon, size 5, Item 38, Appendix D
Thread, nylon, size FF, Item 37, Appendix D
Webbing, nylon, Type VIII, Item 45, Appendix D
Webbing, nylon, Type VII, Item 49, Appendix D

General Safety Requirements:

Read, understand and follow all warnings, cautions and notes.

Equipment Condition:

The container should be clean and dry. Place the container on a work table.

INSPECT

Perform a before and after repair rigger/technical inspection of the Release Assembly as outlined in paragraph 2-14.

REPAIR

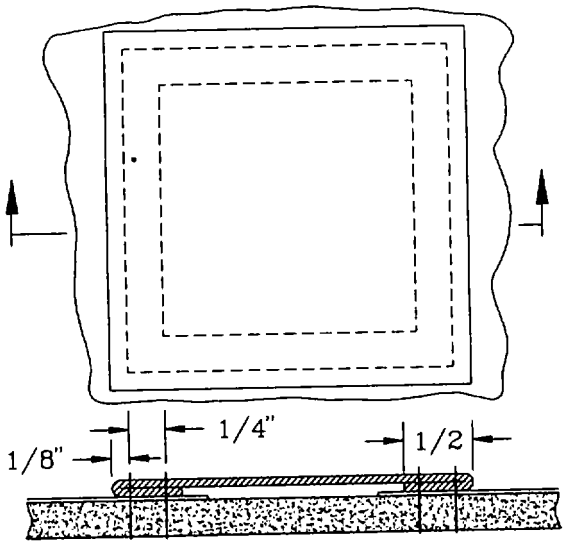
The nylon duck material of the container body may be restitched, darned, and patched. The polyester felt material may be restitched and plugged as described below.

a. Restitching. Restitch the container fabric directly over old stitching using stitching specifications outlined in the appropriate repair procedures. Lock stitching at least 1/2 inch.

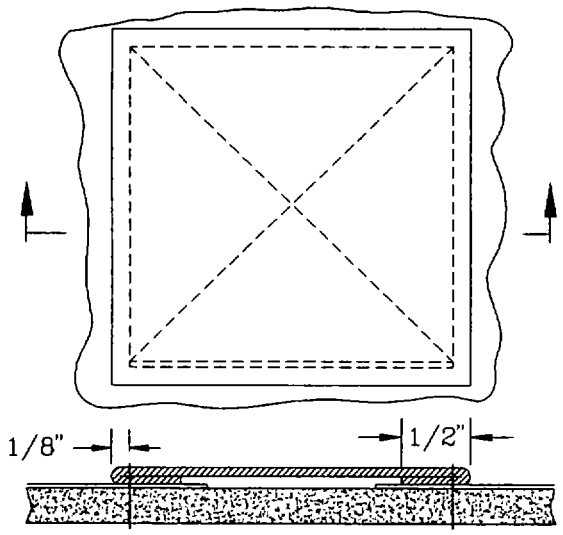
b. Darning. Darn a hole or tear in the container fabric that does not exceed 1 inch in length or diameter using size E thread and a darning machine. There is no limit to darns that may be applied, provided they do not weaken or reduce the original strength of the fabric more than 10%. If damage is in the lined portion of the container body and only the nylon duck is damaged, darn through duck and felt. If felt is also damaged, remove damaged area before darning duck fabric. Then plug felt as in c.(3) below.

c. Patching. There is no limit to the number of times the container body may be patched. Patch a hole or tear that exceeds 1 inch in length or diameter following procedures in (1) or (2) below. Use nylon duck cloth according to original construction for patching outside, and 1/4 inch thick felt for plugging inside lining. Use an HD sewing machine, size 3 thread, and 6 to 8 stitches per inch.

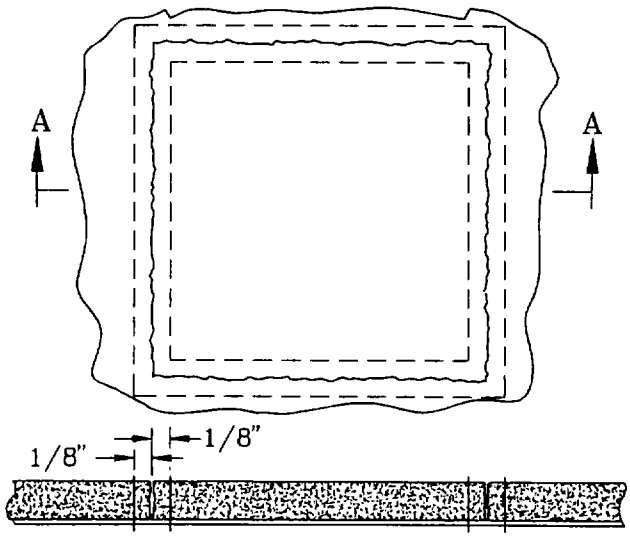
(1) To patch a lined portion of the container when the felt is not damaged, cut nylon duck patch 2 inches beyond circumference of damaged portion. Turn under edges of patch ½ inch and center patch over damaged area. Sew patch to container body with a double row of stitching as shown.



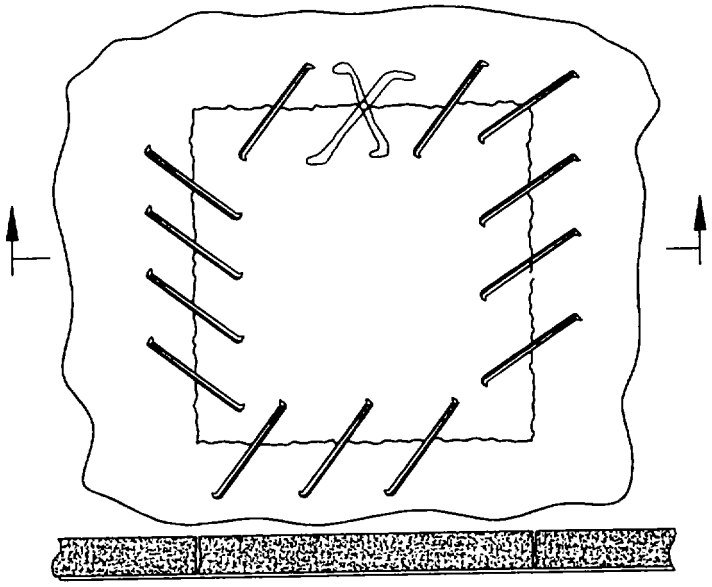
(2) To patch a lined portion of the container when the felt is damaged, remove the damaged felt as described in (3) below. Cut a piece of felt the same size as the piece removed, and position felt plug and cotton duck patch (with edges turned under 1/2 inch) over damaged area. Sew a single box X stitch formation as shown.



(3) To plug the felt lining of the container, mark a rectangle around the damaged area. Remove the damaged felt while being careful not to damage the cotton duck material. Cut a piece of felt the size of the piece removed. Position felt plug into area cleared and sew as shown.



(4) If damage is in an area that cannot be sewed by machine, tack felt plug securely to cotton duck as shown using doubled and waxed size 3 nylon thread. Secure thread ends with suitable knot.



b. Repair of Binding Tape. Overlap the binding tape, extending the new tape at least 1 inch beyond the damaged tape. Stitch tape with two rows of stitching 1/8 and 1/4 inches from edge of tape as in original construction using size FF thread, 7 to 9 stitches per inch and a type HD sewing machine.

c. Repairing Webbing. The webbing on the pack may be restitched or darned (do not darn the attaching web). Restitch loose, broken, or defective stitching according to original construction details and as outlined in the appropriate repair procedures. Darn as in original construction.

REPLACE

a. Replacing Webbing. Webbing components in (1) through (7) below may be replaced. Replacement will be accomplished in accordance with the original construction and as prescribed herein. Sear all cut ends of webbing before assembling webbing on pack.

NOTE
Splicing and darning of the attaching strap assembly is not authorized.

(1) Quick Release Link and V-Ring Chape Assembly. To replace this assembly proceed as follows:

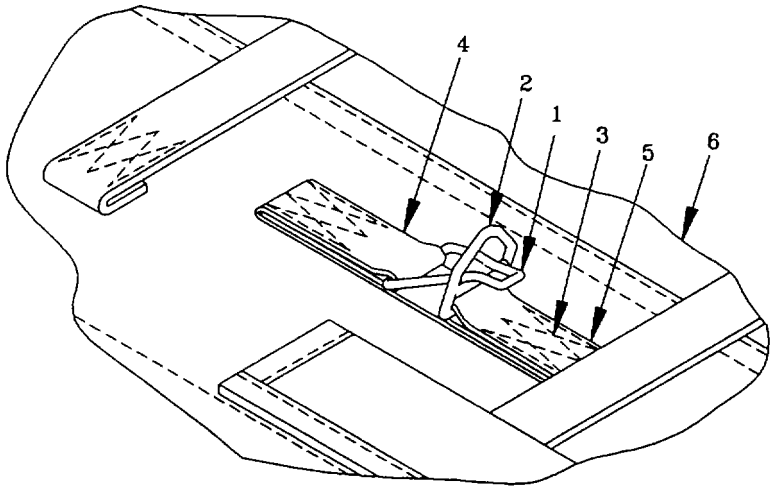
a Cut webbing to remove serviceable quick release link (1) and V-Ring (2).

b Cut stitching (3) that holds chapes (4) and (5) to container.

c Cut 25 1/2 inch length of Type VIII nylon webbing and sear both ends.

d Thread quick release link (1) onto one end of nylon webbing. Fold back end to form 4 1/2 inch chape (4). Place on container (6) as in original construction and sew as shown using size 5 thread, 5 to 7 stitches per inch and a type HD sewing machine.

e Thread V-Ring (2) onto other end of webbing. Fold end back to form 3 1/2 inch chape (5). Sew as V-Ring chape.

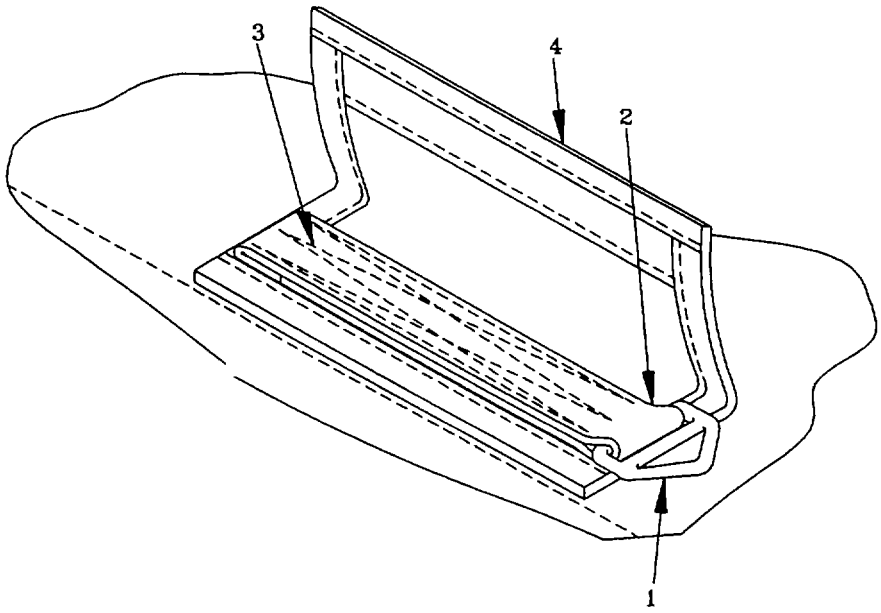


(2) Flap Assembly V-Ring Harness. To replace the V-Ring (1) and webbing (2) proceed as follows:

a Cut stitching (3) holding type VII webbing (2) to flap assembly (4). Remove V-Ring (1) from damaged webbing (2) and retain if serviceable.

b Cut a 19 inch length of type VII nylon webbing (1) and sear both ends. Threat serviceable V-Ring (1) onto webbing (2). Fold as shown and place on flap assembly (4) as in original construction.

c Sew as shown using size 5 thread, 5 to 7 stitches per inch and a type HD sewing machine

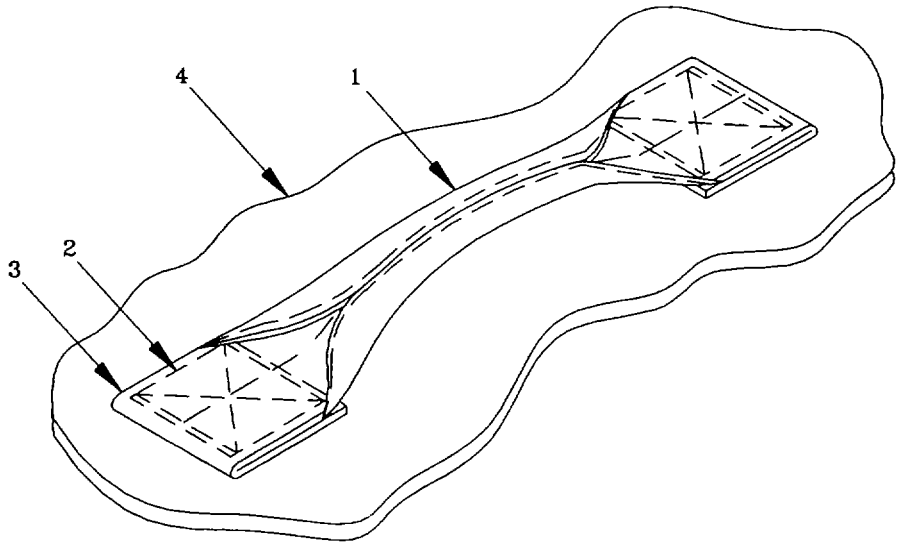


(2) Carrying Handle Strap. To replace this strap (1) proceed as follows:

a Cut stitching (2) that holds webbing (3) to container (4).

b Cut 8 inch length of Type VIII nylon webbing (3) and sear ends. Fold center 5 inches as shown (5) to form handle and place on container (4) as in original construction.

c Sew handle strap to container with box x stitch using size 3 thread, 6 to 8 stitches per inch and a type MD sewing machine.

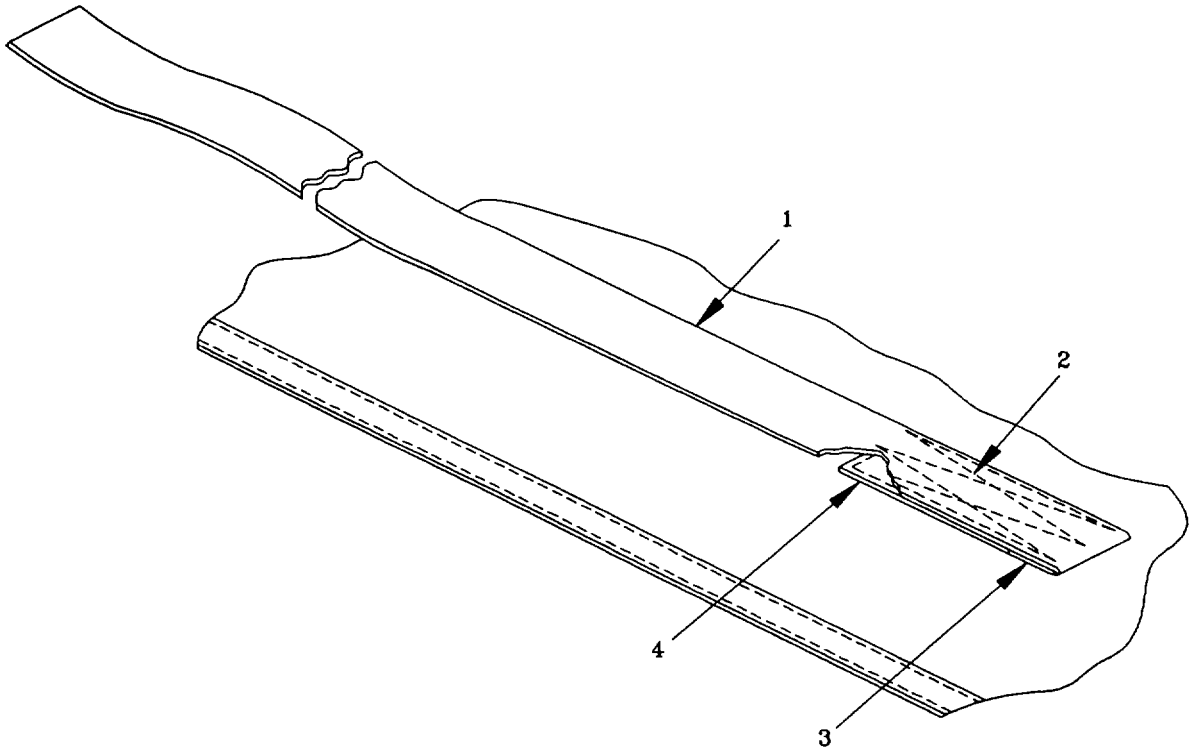


(3) Side Securing Straps (Running Ends). To replace these straps (1) proceed as follows:

a Cut strap (1) along stitching that secures strap to container (2).

b Cut a length of Type VIII nylon webbing equal to the length removed plus 3 1/2 inches.

c Turn under one end 1/2 inch (3), and position replacement strap 3 inches beyond the cut webbing end (4) on the container (2). Stitch with 3 point WW pattern as shown using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.

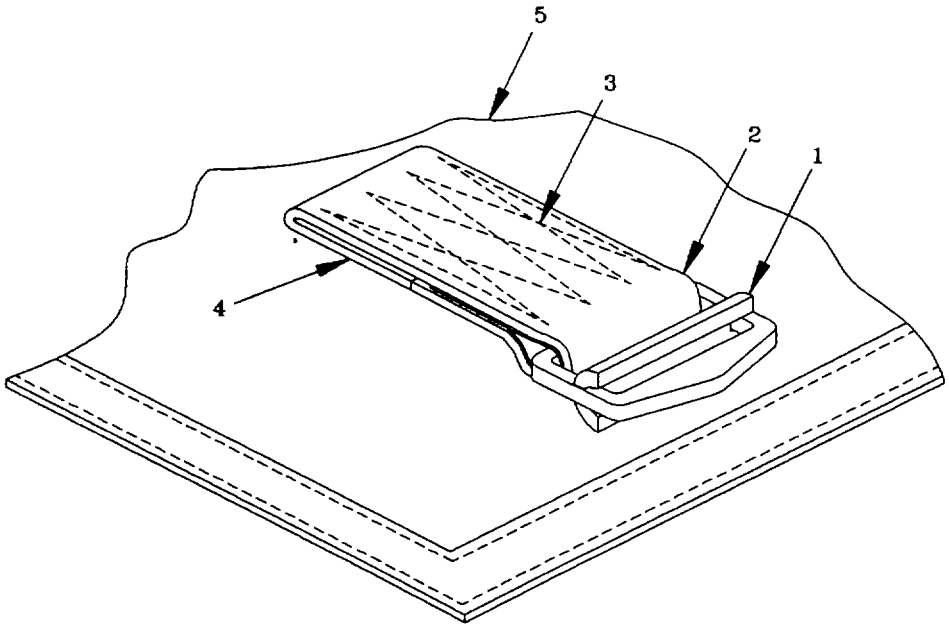


(4) Side Securing Strap Quick Fit Adapters. To replace these straps proceed as follows:

a Remove serviceable quick fit adapters (1) from webbing (2) by cutting as close to the 3 point WW stitch pattern (3) as possible, and set aside.

(b) Cut 8 inch length of Type VIII nylon webbing, and fold so ends meet 1 inch under (4).

c Place on container (5) as in original construction and stitch with 3 point WW pattern using size FF thread, 7 to 9 stitches per inch and a type MD sewing machine.



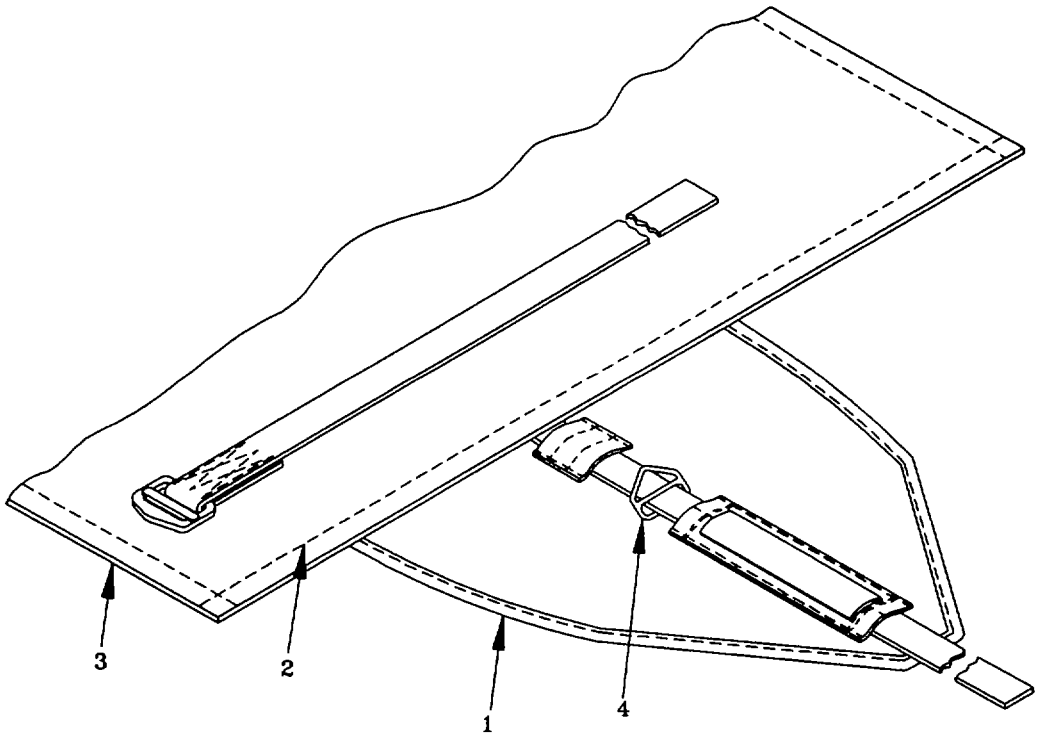
(5) Upper Cap Assembly. To replace this assembly (1) proceed as follows:

a Cut stitching (2) that secures cap assembly to container (3)

b Remove serviceable hardware (4) by cutting the webbing and set aside.

c Fabricate a new cap assembly as described in Appendix E.

d Place new cap assembly onto container as in original construction using size 3 thread, 6 to 8 stitches per inch and a type HD sewing machine.



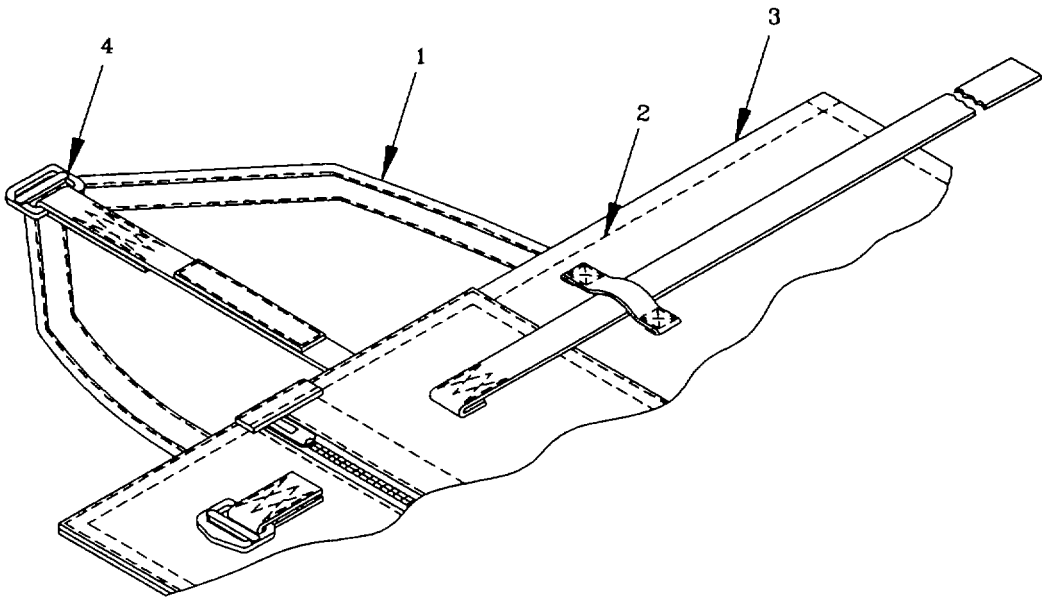
(6) Lower Cap Assembly. To replace this assembly (1) proceed as follows:

a Cut stitching (2) that secures cap assembly to container (3)

b Remove serviceable hardware (3) by cutting the webbing and set aside.

c Fabricate a new cap assembly as described in Appendix E.

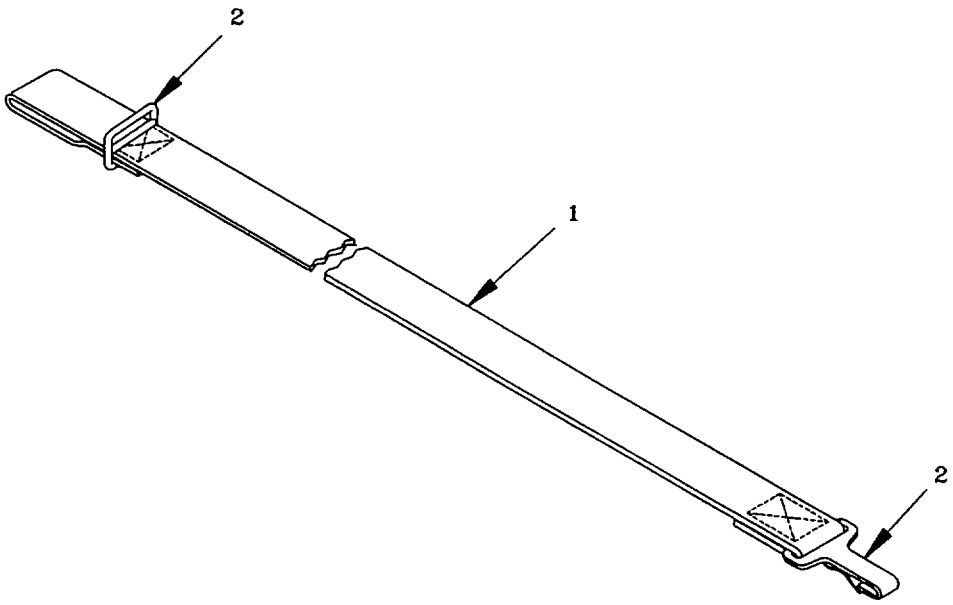
d Place new cap assembly onto container as in original construction using size 3 thread, 6 to 8 stitches per inch and a type HD sewing machine.



(7) Bridle Assembly. To replace this assembly (1) proceed as follows:

a Remove serviceable hardware (2) by cutting the webbing and setting the items aside.

b Fabricate a new bridle assembly as described in Appendix E, using serviceable hardware salvaged, if appropriate.



Section VII. PREPARATION FOR STORAGE OR SHIPMENT

2-27. SPECIAL INSTRUCTIONS FOR ADMINISTRATIVE STORAGE. Placement of ancillary equipment in administrative storage should be for brief periods of time when a maintenance resource shortage 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 will be kept.

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

Storage site selection. Personnel Troop Parachute Ancillary Equipment should be stored in a controlled temperature, dry, and well ventilated environment.

a. Inspection. In addition to the unit PMCS procedures, inspect the ancillary equipment for rips, tears, dirt and missing components.

b. Cleaning and drying. 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:

WARNING

Use of compressed air can create airborne particles that may enter the eyes or penetrate the skin. When used for cleaning or drying, compressed air shall not exceed 30 psig. Adequate chip guards and eye protection shall be used. Do not direct compressed air against skin.

(1) 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 when available to remove foreign material from inaccessible areas.

(2) 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.

(3) 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

Tetrachloroethylene is hazardous. Repeated or prolonged contact with liquid or inhalation of vapor can cause skin and eye irritation, dermatitis, narcotic effects, and damage to internal organs. Use this solvent in well ventilated areas only. Avoid breathing vapor and avoid contact with skin, eyes and clothes. Do not use near open flame or excessive heat.

a Cotton item. Spot-clean a cotton item by rubbing soiled area with a clean cloth dampened with tetrachloroethylene (Item 18, Appendix D). 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, except a personnel parachute harness soiled by airsickness, 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 dishwashing detergent (liquid or powdered) dissolved in one gallon of warm water. A soiled area cleaned with the 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.

c Metal items. Burrs, rough spots, rust or corrosion on metal items that cannot be eliminated by brushing or spot cleaning, using procedures in a and b 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

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.

(4) 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, 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.

(5) Airing. Under certain conditions, 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 frame that would not inflict damage.

2-28. LONG TERM STORAGE AND SHIPMENT. When preparing ancillary equipment for long term storage or shipment, it must be packed to the standards of the original packing. This is generally not accomplished by the using unit unless all original packing was retained during original unpacking and is in serviceable condition.

a. Packaging. Package items for storage and shipment in accordance with AR 700-15.

b. Packing. Pack ancillary equipment for storage and shipment in accordance with TM 38-230-1.

APPENDIX A

REFERENCES

A-1. SCOPE**.** This appendix lists all forms, field manuals, technical manuals, military specifications, standards and miscellaneous publications referenced in this manual.

A-2. FORMS

Report of Item Discrepancy ..... SF 364
Product Quality Deficiency Report ..... SF 368
Recommended Changes to Publications and Blank Forms ..... DA Form 2028
Recommended Changes to Equipment Technical Publications ..... DA Form 2028-2
Uncorrected Fault Record ..... DA Form 2408-14
Equipment Inspection and Maintenance Worksheet ..... DA Form 2404
Army Parachute Log Record ..... DA Form 10-42

A-3. FIELD MANUALS

General Repair for Tents, Canvas and Webbing ..... FM 10-16
First Aid for Soldiers ..... FM 21-11

A-4. TECHNICAL MANUALS

Packaging of Material, Preservation ..... TM 38-230-1
Administrative Storage of Equipment ..... TM 740-90-1
Procedures for Destruction of Equipment to Prevent Enemy Use (Mobility Equipment Command) ..... TM 750-244-3

A-5. MISCELLANEOUS PUBLICATIONS

The Army Maintenance Management System (TAMMS) ..... DA Pam 738-750
Functional User's Manual for the Army Maintenance Management System Aviation (TAMMS-A) ..... DA Pam 738-751
Army Logistics Readiness and Sustainability ..... AR 700-138
Air Delivery, Parachute Recovery, and Aircraft Personnel Ejection Systems ..... AR 750-32

A-6. MILITARY SPECIFICATIONS AND STANDARDS

Color, Marking, and Camouflage Patterns Used on Military Equipment ..... TB 43-0147

A-7. DA PAMPHLETS

The Army Maintenance Management System (TAMMS) ..... DA PAM 738-750

APPENDIX B

MAINTENANCE ALLOCATION CHART (MAC)

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 consistent with the capacities and capabilities of the designated maintenance levels, which are shown on the MAC in column (4) as:

Unit - includes two subcolumns, C (operator/crew) and 0 (unit) maintenance.

Direct Support - includes an F subcolumn.

General Support - includes an H subcolumn.

Depot - includes a D subcolumn.

c. Section III lists the tools and test equipment (both special tools and common tool 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 are 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 (e.g. by sight, sound, or feel).

b. Test. To verify serviceability by measuring the mechanical, pneumatic, hydraulic, or electrical characteristics

B-2. Maintenance Functions. (CONT)

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 decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases.

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

e. Align. 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 equipment or a system.

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

B-2. Maintenance Functions. (CONT)

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), end item.

j. Overhaul. The maintenance effort (service/action) prescribed to restore an item to a completely serviceable/ operational condition as required by maintenance standards in appropriate technical publications (i.e., DMWR). Overhaul is 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 materiel maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (e.g. hours, miles) considered in classifying Army equipment/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.

[1]Services - Inspect, test, service, adjust, align, 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 an SMR code for the level of maintenance under consideration (i.e., identified as maintenance significant).

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

B-3. Explanation of Columns in the MAC, Section II. (CONT)

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

c. Column 3, Maintenance Functions. 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.)

d. Column 4, Maintenance Level. Column 4 specifies each level of maintenance authorized to perform each function listed in Column 3, by indicating work time required (expressed as man-hours in whole hours or decimals) in the appropriate subcolumn. This work-time figure represents the active time required to perform that maintenance function at the indicated level of maintenance. If the number or complexity of the tasks within the listed maintenance function varies at different maintenance levels, appropriate work-time figures are to be shown for each level. 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 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 levels are as follows:

C..... Operator or crew maintenance
O..... Unit maintenance
F..... Direct support maintenance
L..... Specialized Repair Activity (SRA)[5]
H..... General support maintenance
D..... Depot maintenance

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[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.

B-3. Explanation of Columns in the MAC, Section II. (CONT)

e. Column 5, Tools and Test Equipment. Column 5 specifies, by number, those common tool sets (not individual tools), common TMDE, and special tools, special TMDE, and special support equipment required to perform the designated function. Numbers are keyed to tools and test equipment in Section III.

f. Column 6, Remarks. When applicable, this column contains a letter code, in alphabetical order, which is 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 corresponds with a code used in the MAC, Section II, Column 5.

b. Column 2, Maintenance Level. The lowest level of maintenance authorized to use the tool or test equipment.

c. Column 3, Nomenclature. Name or identification of the tools or test equipment.

d. Column 4, National Stock Number. The National Stock Number of the tool or test equipment.

e. Column 5, Manufacturer's Part Number. The manufacturer's part number, model number, or type 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.

SECTION II. MAINTENANCE ALLOCATION CHART FOR PERSONNEL TROOP PARACHUTE SYSTEM ANCILLARY EQUIPMENT

(1)	(2)	(3)	(4) MAINTENANCE LEVEL					(5)	(6)
			UNIT		DS	GS	DEPOT		
GROUP NUMBER	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	C	O	F	H	D	TOOLS AND EQUIPMENT	REMARKS
00	Personnel Troop Parachute System								
01	Extension, Static Line	Inspect Install Replace Repair		0.2 0.2 0.2 0.2				1,2	A
02	Accessory Set, Scuba	Inspect Install Repair Replace		0.4 0.5 0.2 0.1				1,2,5	A,B
0201	Support Strap	Inspect Repair Replace		0.1 0.2 0.1				1,2	B
0202	Backstrap, Harness	Inspect Repair Replace		0.1 0.2 0.5				1,2	B
0203	Strap, Waistband Extension	Inspect Repair Replace		0.1 0.2 0.2				1,2	B
0204	Shield	Inspect Repair Replace		0.1 0.2 0.1				5	A
03	Line, Lowering	Inspect Repair Replace		0.1 0.5 0.1				1,2	B
04	Jump Pack, Dragon Missile	Inspect Repair Replace		0.2 0.5 0 5				1,2	A

SECTION II. MAINTENANCE ALLOCATION CHART FOR PERSONNEL TROOP PARACHUTE SYSTEM ANCILLARY EQUIPMENT (CONTINUED)

(1)	(2)	(3)	(4) MAINTENANCE LEVEL					(5)	(6)
			UNIT		DS	GS	DEPOT		
GROUP NUMBER	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	C	O	F	H	D	TOOLS AND EQUIPMENT	REMARKS
05	Harness, Single Point Release	Inspect Repair Replace		0.3 0.2 0.1				1,2,3,4	A
0501	Strap, Leg Release	Inspect Repair Replace		0.1 0.2 0.1				1,2	A
0502	Handle, Release	Inspect Repair Replace		0.1 0.2 0.1				1,2	A
0503	Strap, Harness Attaching	Inspect Repair Replace		0.1 0.2 0.1				1,2	A
06	Pack, Assembly, AT4	Inspect Repair Replace		0.2 0.5 0.2				1,2	A
07	Case, Parachutist's Individual Weapon M-1950	Inspect Repair Replace		0.2 0.5 0.2				1,2	A
08	Parachutist's Weapon and Individual Equipment Pack and Harness Assembly	Inspect Repair Replace		0.2 0.5 0.2				1,2	A
0801	Pack	Inspect Repair Replace		0.2 0.5 0.2				1,2	A
0802	Harness	Inspect Repair Replace		0.2 0.5 0.2				1,2	A

SECTION II. MAINTENANCE ALLOCATION CHART FOR PERSONNEL TROOP PARACHUTE SYSTEM ANCILLARY EQUIPMENT (CONTINUED)

(1)	(2)	(3)	(4) MAINTENANCE LEVEL					(5)	(6)
			UNIT		DS	GS	DEPOT		
GROUP NUMBER	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	C	O	F	H	D	TOOLS AND EQUIPMENT	REMARKS
09	Jump Pack, Stinger Missile	Inspect Repair Replace		0.2 0.5 0.2				1,2,3	A,B
10	Release Parachute Individual Equipment	Inspect Repair Replace		0.2 0.5 0.2				1,2,3	A,B
11	Container, Aerial Delivery, General Purpose, Individual Equipment	Inspect Repair Replace		0.2 0.5 0.2				1,2,3	A,B
1101	Container	Inspect Repair Replace		0.2 0.5 0.2				1,2,3	A,B
1102	Harness and Body Assembly	Inspect Repair Replace		0.2 0.5 0.2				1,2,3	A,B
1103	Restraint Assembly, Horizontal	Inspect Repair Replace		0.2 0.5 0.2				1,2,3	A,B
12	Container, Aerial Delivery Weapon and Equipment, Adjustable	Inspect Repair Replace		0.2 0.5 0.2				1,2,3	A,B
1201	Outer Padded Assembly	Inspect Repair Replace		0.2 0.5 0.2				1,2,3	A,B
1202	Outer Cap Assembly	Inspect Repair Replace		0.2 0.5 0.2				1,2,3	A,B

SECTION II. MAINTENANCE ALLOCATION CHART FOR PERSONNEL TROOP PARACHUTE SYSTEM ANCILLARY EQUIPMENT (CONTINUED)

(1)	(2)	(3)	(4) MAINTENANCE LEVEL					(5)	(6)
			UNIT		DS	GS	DEPOT		
GROUP NUMBER	COMPONENT/ ASSEMBLY	MAINTENANCE FUNCTION	C	O	F	H	D	TOOLS AND EQUIPMENT	REMARKS
1203	Lower Cap Assembly	Inspect Repair Replace		0.2 0.5 0.2				1,2,3	A,B
1204	Upper Bridle Assembly	Inspect Repair Replace		0.2 0.5 0.2				1,2,3	A,B
1205	Lowering Line	Inspect Repair Replace		0.2 0.5 0.2				1,2,3	A,B

SECTION III. TOOLS AND TEST EQUIPMENT REQUIREMENTS FOR PERSONNEL TROOP PARACHUTE SYSTEM ANCILLARY EQUIPMENT

TOOL OR TEST EQUIPMENT REF CODE	MAINTENANCE CATEGORY	NOMENCLATURE	NATIONAUNATO STOCK NUMBER	TOOL NUMBER
1	0	Knife	5110-00-162-2205	
2	0	Shears	5110-00-223-6370	
3	0	Compressing Tool	5120-00-323-2296	
4	0	Cutter, Cable	5110-00-516-4217	
5	0	Screwdriver	5120-00-278-1283	

SECTION IV. REMARKS FOR PERSONNEL TROOP PARACHUTE SYSTEM ANCILLARY EQUIPMENT

REFERENCE CODE	REMARKS
A	Technical/Rigger Inspection Required
B	Restitching only

APPENDIX C

UNIT MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS LIST

Section I. INTRODUCTION

C-1. SCOPE.

This Repair Parts and Special Tools List (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 maintenance of the Personnel Troop Parachute Ancillary Equipment. It authorizes the requisition, 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 Section I, Introduction, this RPSTL 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. The list also includes parts that must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in as ending alpha-numeric sequence, with the parts in each group listed in ascending figure and item number sequence. Repair parts kits or sets are listed in ascending figure and item number sequence. Bulk materials are listed by item name in FIG BULK at the end of the section. Repair parts kits or sets are listed separately in their own functional group within section II. Repair parts for repairable special tools are also listed in the section.

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 (UOC) column) for the performance of maintenance.

c. Section IV - Cross-Reference Indexes National Stock Number and Part Number Index. A list, in National Item Identification Number (NIIN) sequence, of all national stock numbered items appearing in the listings, followed by a list in

C-2. GENERAL. (CONT)

alpha-numeric sequence of all part numbers appearing in the listing. NSNs and part numbers are cross-referenced to each illustration figure and item number appearance. The figure and item number index lists figure and item number in alphanumeric sequence and cross-references NSN, FSCM 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 SMR code is a 5-position code containing supply/requisitioning information, maintenance category authorization criteria, and disposition instructions, as shown in the following breakout:

Source Code		Maintenance Code	Recoverability Code
XX		XX	X
1st two positions	3rd position	4th position	5th position
Determines how you get an item.	Determines who can install/ replace or use the item.	Determines who can do complete repair on the item.	Determines who decides disposition action on an unserviceable item.

NOTE

Complete repair is the 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 follow:

CODE	EXPLANATION
PA PB	Stocked items; use the applicable NSN to request/ requisition items with these source codes. They

C-3. EXPLANATION OF COLUMNS. (Sections II and III). (CONT)

PC**	are authorized to the category indicated by the
PD	code entered in the third position of SMR code
PE	NOTE: Items coded PC are subject to deterioration
PF**	Items with these codes are not to be requested/
PG	requisitioned individually. They are part of a
KD	kit that is authorized to the maintenance
KF	category indicated in the third position of the
KB	SMR code. The complete kit must be requisitioned and applied.

CODE	EXPLANATION
MO-(Made at org/ Level) MF-(Made at DS/ AVUM Level) MH-(Made at GS Level) ML-(Made at Specialized Repair Act (SRA) MD-(Made at Depot) level of maintenance.	Items with these codes are not to be AVUM requisitioned individually. They must be made from bulk material that 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 third position code of the SMR code, but the source code indicates it is made at a higher level, order the item from the higher
AO-(Assembled by org/AVUM Level) AF-(Assembled by Level) AH-(Assembled by Category) AL-(Assembled by SRA) AD-(Assembled by Depot)	Items with these codes are not to be requisitioned individually. The parts that make up the assembled item must be DS/AVIM requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the third position code of the SMR code authorizes you to replace the item, but the source code indicates the item is assembled at a higher level, order the item from the higher level of maintenance.

XA Do not requisition an "XA" - coded item. Order its next higher assembly. (Also, refer to the NOTE.)

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 by manufacturer's part number.

C-3. EXPLANATION OF COLUMNS. (Sections II and III). (CONT)

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 700-42.

(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 the support item. The maintenance code entered in the third position will indicate authorization to one of the following levels of maintenance:

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

C-3. EXPLANATION OF COLUMNS. (Sections II and III). (CONT)

(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 to the item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes.) This position will contain one of the following maintenance codes:

Code	Application/Explanation
O	Unit or aviation unit is the lowest level that can do complete repair of the item.
F	Direct support or aviation intermediate 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 (designate the 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	Nonrepairable. 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 of unserviceable items. The recoverability code is entered in the fifth position of the SMR Code as follows:

C-3. EXPLANATION OF COLUMNS. (Sections II and III). (CONT)

Recoverability Code	Application/Explanation
Z	Nonrepairable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in third position of the SMR Code.
O	Repairable item. When uneconomically repairable, condemn and dispose of the item at unit or aviation unit level.
F	Repairable item. When uneconomically repairable, condemn and dispose of the item at the direct support or aviation intermediate level.
H	Repairable item. When uneconomically repairable, condemn and dispose of the item at the general support level.
D	Repairable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item not authorized below depot level.
L	Repairable 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 Government Entity Code (CAGEC) is a 5-digit numeric code which is used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.

d. *PART NUMBER (Column (4)).* Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity) that controls the design and

C-3. EXPLANATION OF COLUMNS. (Sections II and III). (CONT)

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 part ordered.

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) The physical security classification of the item is indicated by the parenthetical entry (insert applicable physical security classification abbreviation, Phy Sec C1 (C) -Confidential, Phy Sec C1 (S) - Secret, Phy Sec C1 (T) Top Secret.

(3) Items that are included in kits and sets are listed below the name of the kit or set.

(4) Spare/repair parts that make up an assembled item are listed immediately following the assembled item line entry.

(5) Part numbers for bulk materials are referenced in this column in the line item entry for the item to be manufactured/fabricated.

(6) When the item is not used with all serial numbers of the same modes, the effective serial numbers are shown on the last line(s) of the description (before UOC).

(7) The UOC, when applicable (see paragraph 5, Special Information).

(8) In the Special Tools List section, the BOI appears as the last line(s) in the entry for each special tool, special TMDE, and other special support equipment. When density of equipment supported exceeds density spread indicated in the basis of issue, the total authorization is increased proportionately.

C-3. EXPLANATION OF COLUMNS. (Sections II and III). (CONT)

(9) 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. *OTY (Column (6)).* The 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 in lieu of a quantity indicates that the quantity is variable and the quantity may vary from application to application.

C-4. EXPLANATION OF COLUMNS (SECTION IV).

a. *NATIONAL STOCK NUMBER (NSN) INDEX.*

(1) STOCK NUMBER Column. The NSN column lists the NSN by National Item Identification Number (NIIN) sequence. The NIIN consists of the last nine digits of the NSN (i.e., NSN 5305-01-740-1467) When using this column to locate an item, ignore the first 4 digits of the NSN. However, the complete NSN should be used when ordering items by stock number.

(2) FIGURE 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 alpha-numeric 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 Contractor and Government Entity Code (CAGEC) column contains a 5-digit numeric code used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.

(2) PART NUMBER Column. Indicates the primary number used by the manufacturer (individual, firm, corporation, or Government activity) that controls the design and characteristics

C-4. EXPLANATION OF COLUMNS (SECTION IV). (CONT)

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) FIGURE Column. This column lists the number of the figure where the item is identified/located in sections II and III.

(5) 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.

c. *FIGURE AND ITEM NUMBER INDEX.*

(1) FIGURE Column. This column lists the number of the figure where the item is identified/located in sections II and 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 Contractor and Government Entity Code (CAGEC) column contains a 5-digit numeric code used to identify the manufacturer, distributor, or Government agency, etc., that supplies the item.

(5) PART NUMBER Column. Indicates the primary number used by the manufacturer (individual, firm, corporation, or Government activity) that 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. *USABLE ON CODE*. The Usable On Code appears in the lower left corner of the Description column heading. Usable On Codes

C-5. SPECIAL INFORMATION. (CONT)

are shown as "UOC..." in the Description Column (justified left) on the first line applicable item description/nomenclature. Uncoded items are applicable to all models.

b. *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 item to be manufactured/fabricated. Detailed fabrication instructions for item source codes to be manufactured or fabricated are found in FM 10-16.

c. *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 Number or Part Number is Not Known:*

(1) First. Using the table of contents, determine the assembly group 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 National Stock Number or the Part Number Index, find the pertinent National Stock Number or Part Number. The NSN index is in National Item Identification Number (NIIN) sequence. The part numbers in the Part Number index are listed in ascending alpha-numeric sequence. 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're looking for, then locate the item number in the repair parts list for the figure.

SECTION II. REPAIR PARTS LIST

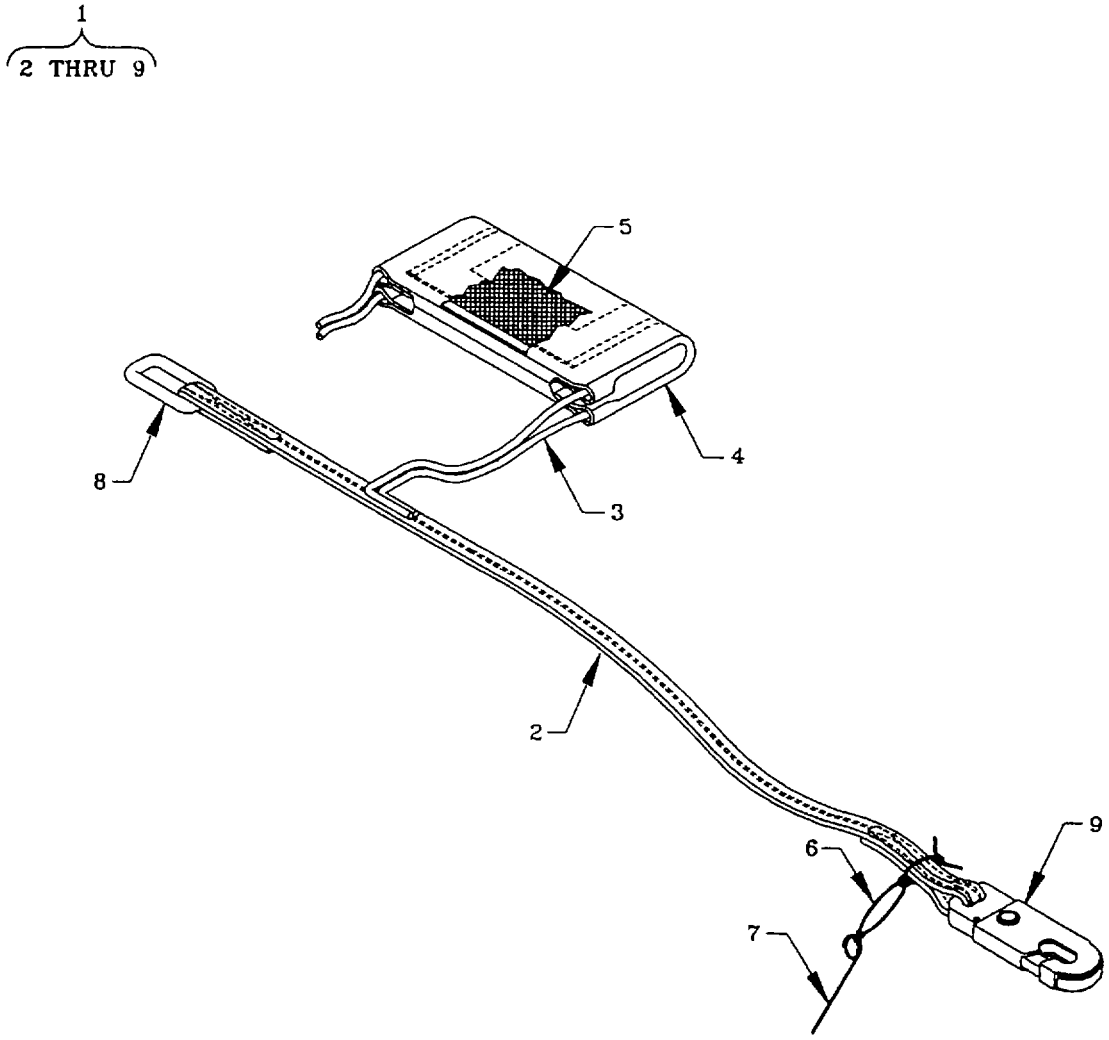


FIGURE C-1. EXTENSION, STATIC LINE

SECTION II. REPAIR PARTS LIST - CONTINUED

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 01. EXTENSION, STATIC LINE	
				FIG. C-1. EXTENSION, STATIC LINE	
1.	PBOOO	98750	53D6887	Extension, Static Line	1
2.	XAOZZ	98750	53D6887-1	.Static Line	1
3.	XAOZZ	98750	53D6887-2	.Cord, Retaining	1
4.	XAOZZ	98750	53D6887-2	.Cover	1
5.	XAOZZ	98750	53D6887-4	.Pad	1
6.	XAOZZ	98750	53D6887-5	.Lanyard	1
7.	MOOZZ	98750	55B6261	.Wire, Safety	1
8.	MOOZZ	98750	55B6261	.Wire, Safety	1
9.	PAOZZ	96906	MS70120	.Snap Hook	1
				END OF FIGURE	

SECTION II. REPAIR PARTS LIST - CONTINUED

1
2 THRU 6

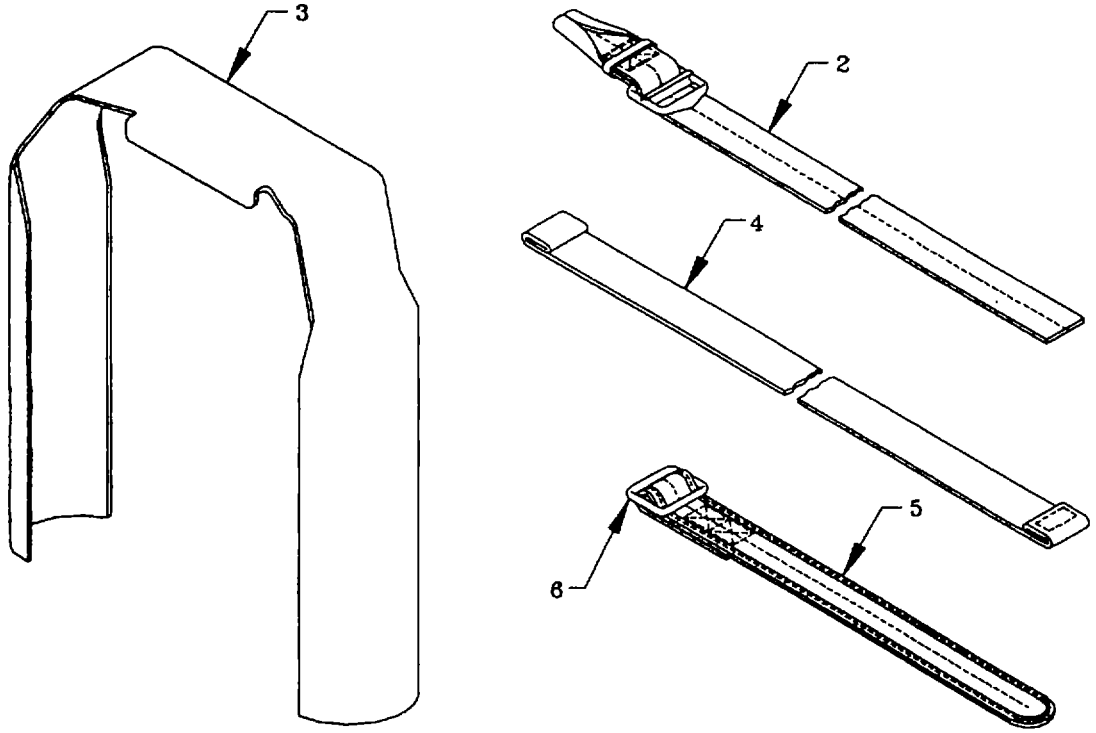


FIGURE C-2. ACCESSORY SET, SCUBA

SECTION II. REPAIR PARTS LIST - CONTINUED

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 02. ACCESSORY SET, SCUBA	
				FIG. C-2. ACCESSORY SET, SCUBA	
1.	PAOOO	81337	11-1-308	Accessory Set, Scuba	1
2.	MOOZZ	81337	11-1-308-1	.Strap, Support	1
3.	XAOZZ	81337	11-1-308-2	.Shield	1
4.	MOOZZ	81337	11-1-308-3	.Backstrap, Harness	1
5.	MOOZZ	81337	11-1-308-4	.Strap, Waistband Extension	1
6.	XBOZZ	96906	MS22014-3	..Buckle	1

END OF FIGURE

SECTION II. REPAIR PARTS LIST - CONTINUED

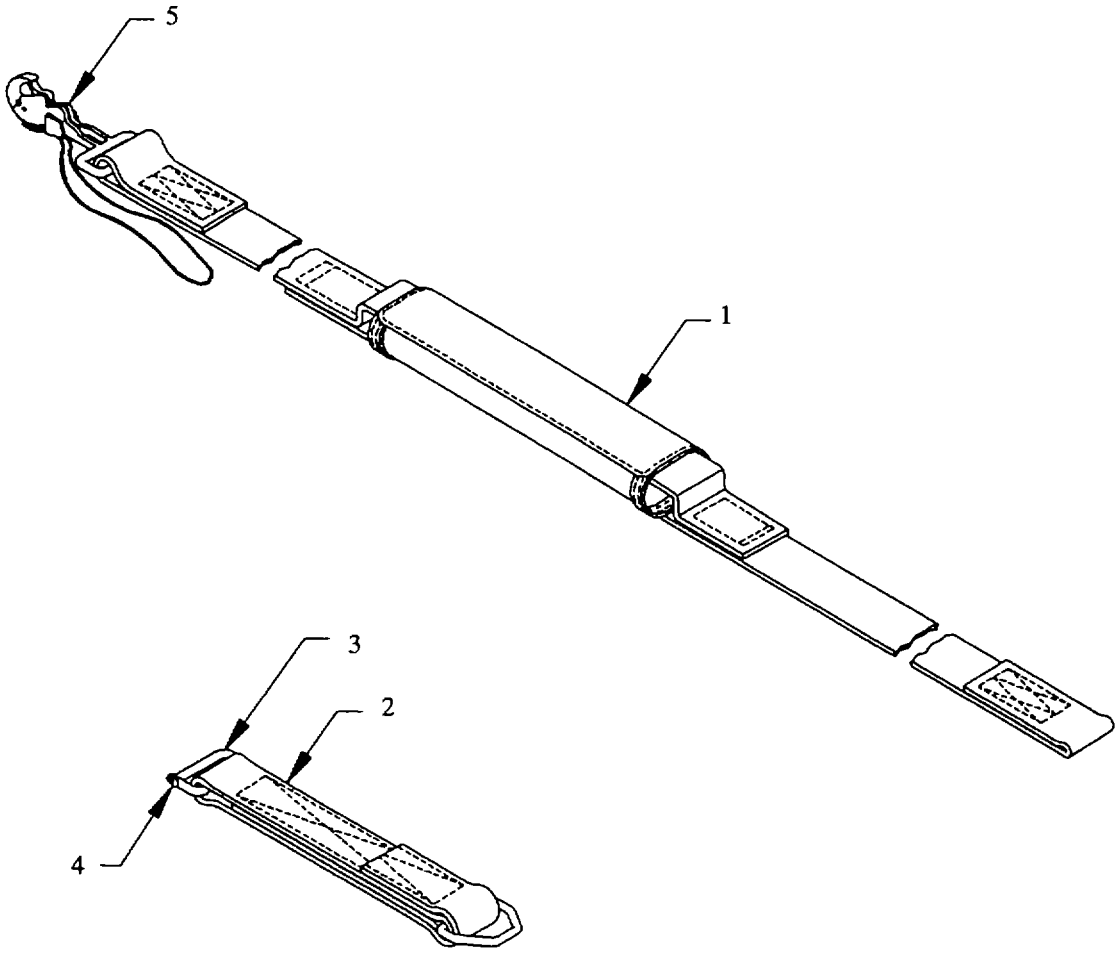


FIGURE C-3. LINE, LOWERING

SECTION II. REPAIR PARTS LIST - CONTINUED

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 03 LOWERING LINE	
				FIG. C-3. LINE, LOWERING	
1.	PAOOO	81337	11-1-2530-1	Line, Lowering	1
2.	PAOZZ	81337	11-1-2721	.Adapter, Web, Lowering Line	1
3.	PAOZZ	96906	MS22002-1	..Link, Parachute Connector	1
4.	PAOZZ	96906	MS22002-7	...Set Screw	2
5.	PAOZZ	96906	MS22017	.Snap, Parachute Harness	1
				END OF FIGURE	

SECTION II. REPAIR PARTS LIST - CONTINUED

1
2 THRU 6

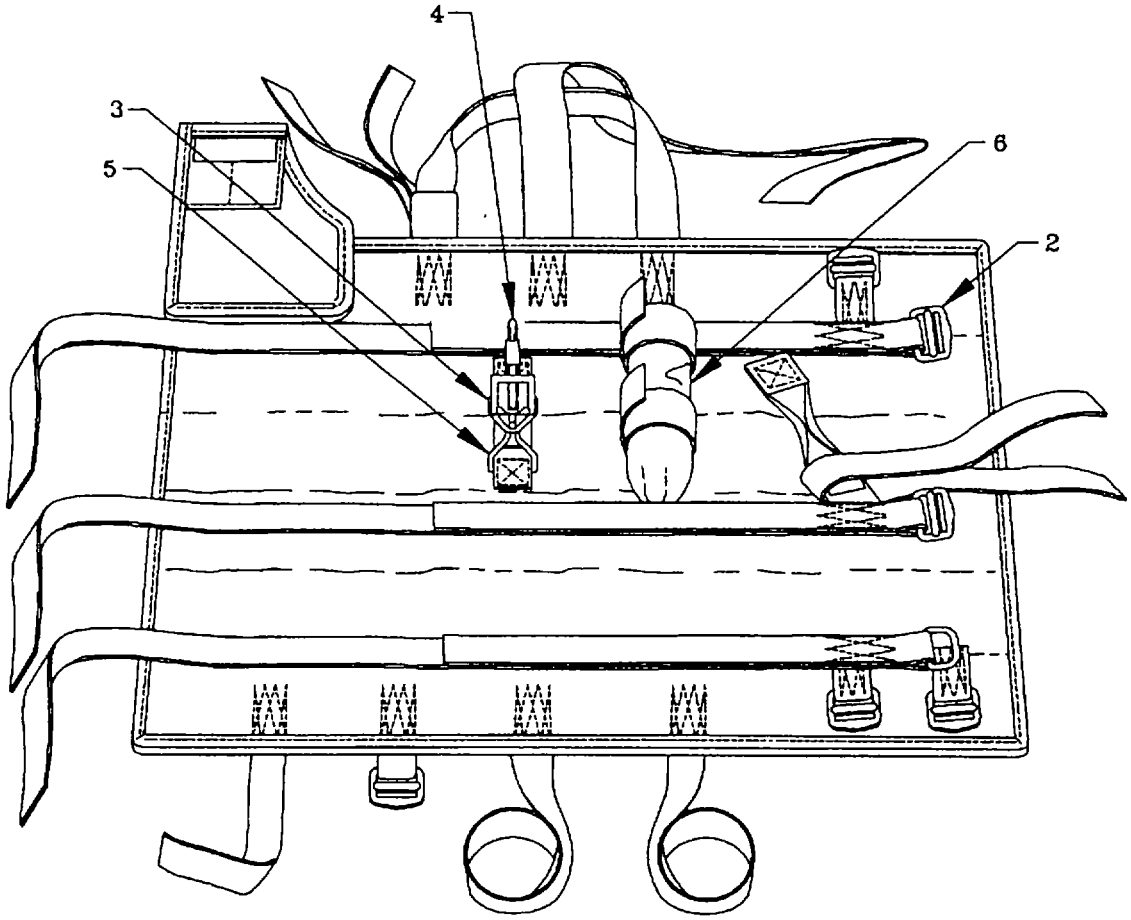


FIGURE C-4. JUMP PACK, DRAGON MISSILE

SECTION II. REPAIR PARTS LIST - CONTINUED

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 04. DRAGON MISSILE JUMP PACK	
				FIG. C-4. JUMP PACK, DRAGON MISSILE	
1.	PAOOO	81337	11-1-2714	Jump Pack Dragon Missile	1
2.	PAOZZ	96906	MS70101-1	.Adapter, Special	7
3.	PAOZZ	96906	MS70098	.Link, Quick Release	1
4.	PAOZZ	96906	MS70099	.Snap Hook	1
5.	PAOZZ	96906	MS22045-1	.Ring, Parachute Harness	1
6.	MOOZZ	81337	11-1-2716	.Pocket Assembly, Lowering Line	1

END OF FIGURE

SECTION II. REPAIR PARTS LIST - CONTINUED

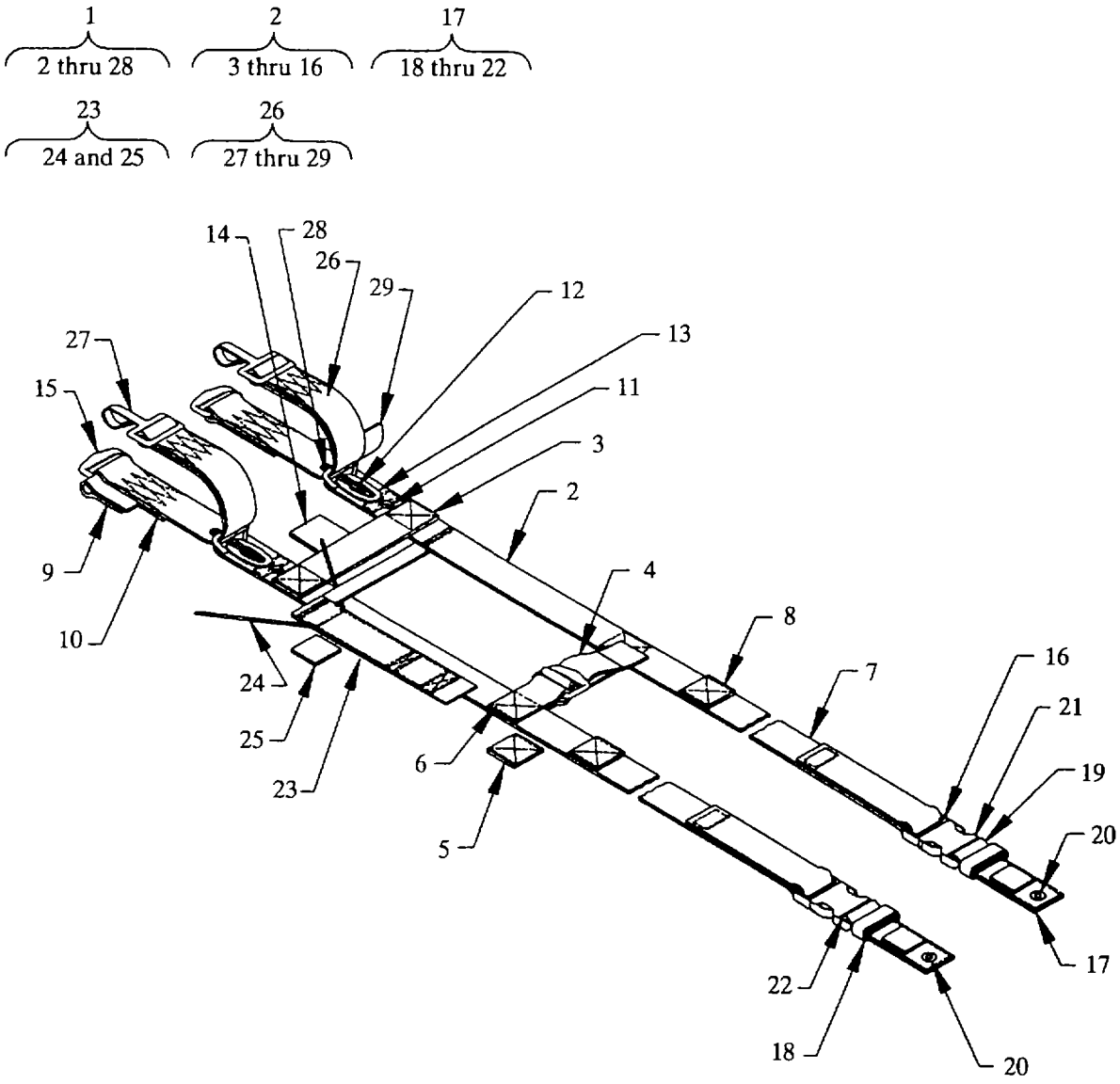


FIGURE C-5. HARNESS, SINGLE POLE RELEASE

SECTION II. REPAIR PARTS LIST - CONTINUED

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
				GROUP 05 SINGLE POINT RELEASE HARNESS	
				FIG. C-5. HARNESS, SINGLE POINT RELEASE	
1.	PAOOO	81337	11-1-3008	Harness, Parachutist, Single Point Release	1
2.	XAOOO	81337	11-1-3009	. Harness Assembly	1
3.	MOOZZ	81337	11-1-3009-2	.. Strap, Cross	1
4.	MOOZZ	81337	11-1-3009-3	.. Strap, Cross, Adjustable	1
5.	XAOZZ	81337	11-1-3009-1	... Strap, Retainer	1
6.	MOOZZ	81337	11-1-3009-4	... Adapter Chape	2
7.	MOOZZ	81337	11-1-3009-5	.. Strap, Leg	2
8.	MOOZZ	81337	11-1-3009-6	.. Keeper	2
9.	MOOZZ	81337	11-1-3009-7	.. Buffer	2
10.	MOOZZ	81337	11-1-3012-1	.. Web	2
11.	MOOZZ	81337	11-1-3009-9	.. Loop C	2
12.	MOOZZ	81337	11-1-3009-10	.. Loop B	2
13.	MOOZZ	81337	11-1-3009-11	.. Loop A	2
14.	MOOZZ	81337	11-1-3009-12	.. Fastener, Tape, Hook	1
15.	PAOZZ	96906	MS70101-1	.. Adapter, Special	2
16.	PAOZZ	02768	SR-2	.. Buckle, Male	2
17.	PAOZZ	81337	11-1-3010	. Strap, Leg, Release	2
18.	XAOZZ	81337	11-1-3010-2	.. Keeper, Elastic	2
19.	XAOZZ	81337	11-1-3010-3	.. Loop, Web	2
20.	XAOZZ	81337	5-4-1602-12-4	.. Grommet, Metallic	2
21.	XDOZZ	02768	SR-2	.. Buckle, HSPR, 2-Inch	2
22.	XAOZZ	81337	11-1-3010-7	.. Buffer	2
23.	PAOZO	81337	11-1-3011	. Lever, Manual Control	1
24.	XAOZZ	81337	11-1-3011-2	.. Wire Rope Jacket	1
25.	MOOZZ	81337	11-1-3011-5	.. Fastener, Tape, Pile	1
26.	PAOZZ	81337	11-1-3012	. Strap, Harness Attaching	2

SECTION II. REPAIR PARTS LIST - CONTINUED

(1) ITEM NO	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES (UOC)	(6) QTY
27.	XDOZZ	96906	MS22043-1	..Snap Hook	1
28.	PAOZZ	96906	MS22020-1	..Link, Parachute Harness	2
29.	MOOZZ	81337	11-1-3012-4	..Buffer	1

END OF FIGURE

SECTION II. REPAIR PARTS LIST - CONTINUED

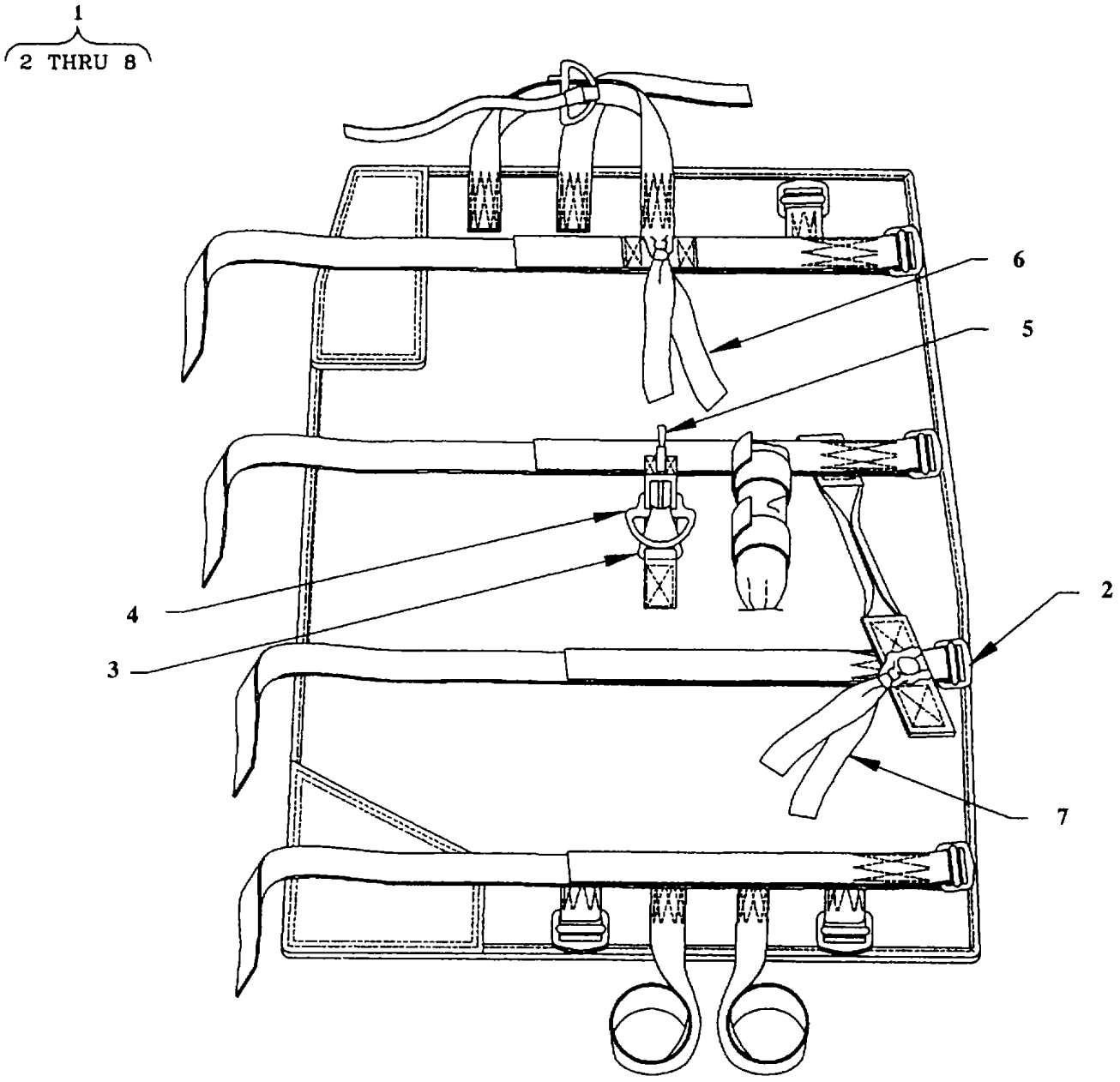


FIGURE C-6. PACK, ASSEMBLY, AT4

SECTION II. REPAIR PARTS LIST - CONTINUED

(1) ITEM NO.	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
				GROUP 06 AT4 ASSEMBLY PACK	
				FIG. C-6. PACK, ASSEMBLY, AT4	
1.	PAOZZ	81337	11-1-3398	Pack, Assembly, AT4	1
2.	PAOZZ	96906	MS70101-1	.Adapter, Special	7
3.	PAOZZ	96906	MS70098	.Link, Quick Release	1
4.	PAOZZ	81337	11-1-485	.Ring, D	2
5.	PAOZZ	96906	MS70099	.Snap Hook	1
6.	MOOZZ	81337	11-1-3398-20	.Tiedown Upper	1
7.	MOOZZ	81337	11-1-3398-21	.Tiedown Leg	1
				END OF FIGURE	

SECTION II. REPAIR PARTS LIST - CONTINUED

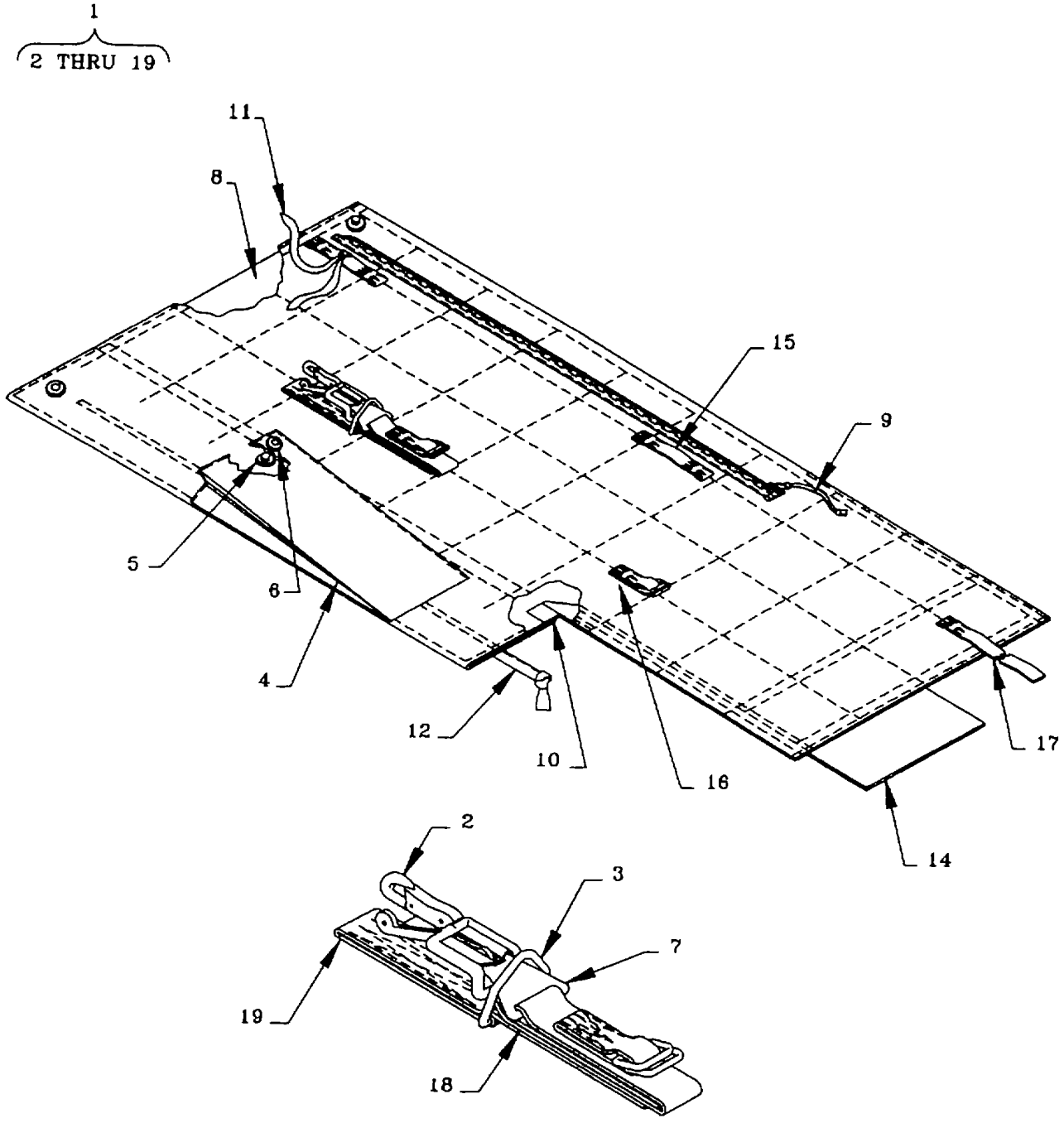


FIGURE C-7. CASE, PARACHUTIST'S INDIVIDUAL WEAPON, M-1950

SECTION II. REPAIR PARTS LIST - CONTINUED

(1) ITEM NO.	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
				GROUP 07 CASE, PARACHUTIST INDIVIDUAL WEAPON, M-1950	
				FIG. C-7. CASE, PARACHUTIST INDIVIDUAL WEAPON, M-1950	
1.	PAOZZ	81349	MIL-C-10922	Case, Parachutist Individual Weapon, M-1950	
2.	PAOZZ	96906	MS70098	.Link, Quick Release	1
3.	PAOZZ	96906	MS22045-1	.Ring, Parachute Harness	1
4.	MOOZZ	81337	2-2-116-1	.Pocket, Lowering Line	1
5.	PAOZZ	96906	MS27977-64B	..Stud, Snap Fastener	1
6.	PAOZZ	96906	MS27977-1B	..Socket, Snap Fastener	1
7.	PAOZZ	96906	MS27977-3B	..Clinch Plate, Snap Fastener	1
8.	MOOZZ	81337	2-2-116-2	.Panel, Strip	1
9.	MOOZZ	81337	2-2-116-4	.Thong, Slide Fastener	1
10.	MOOZZ	81337	2-2-116-5	.Reinforcement Corner	1
11.	MOOZZ	81337	2-2-116-6	.Tape, Tiedown	1
12.	MOOZZ	81337	2-2-116-9	.Thong, Flap	1
13.	MOOZZ	81337	2-2-116-8	.Strap, Tiedown	1
14.	MOOZZ	81337	2-2-116-10	.Reinforcement, Leather	1
15.	MOOZZ	81337	2-2-116-11	.Loop, Tiedown	2
16.	MOOZZ	81337	2-2-116-12	.Loop, Chape	1
17.	MOOZZ	81337	2-2-116-14	.Strap, Adjustable	1
18.	MOOZZ	81337	2-2-116-20	.Loop, Chape, Triangular	1
19.	MOOZZ	81337	2-2-116-18	.Loop, Chape, Single	1

END OF FIGURE

SECTION II. REPAIR PARTS LIST - CONTINUED

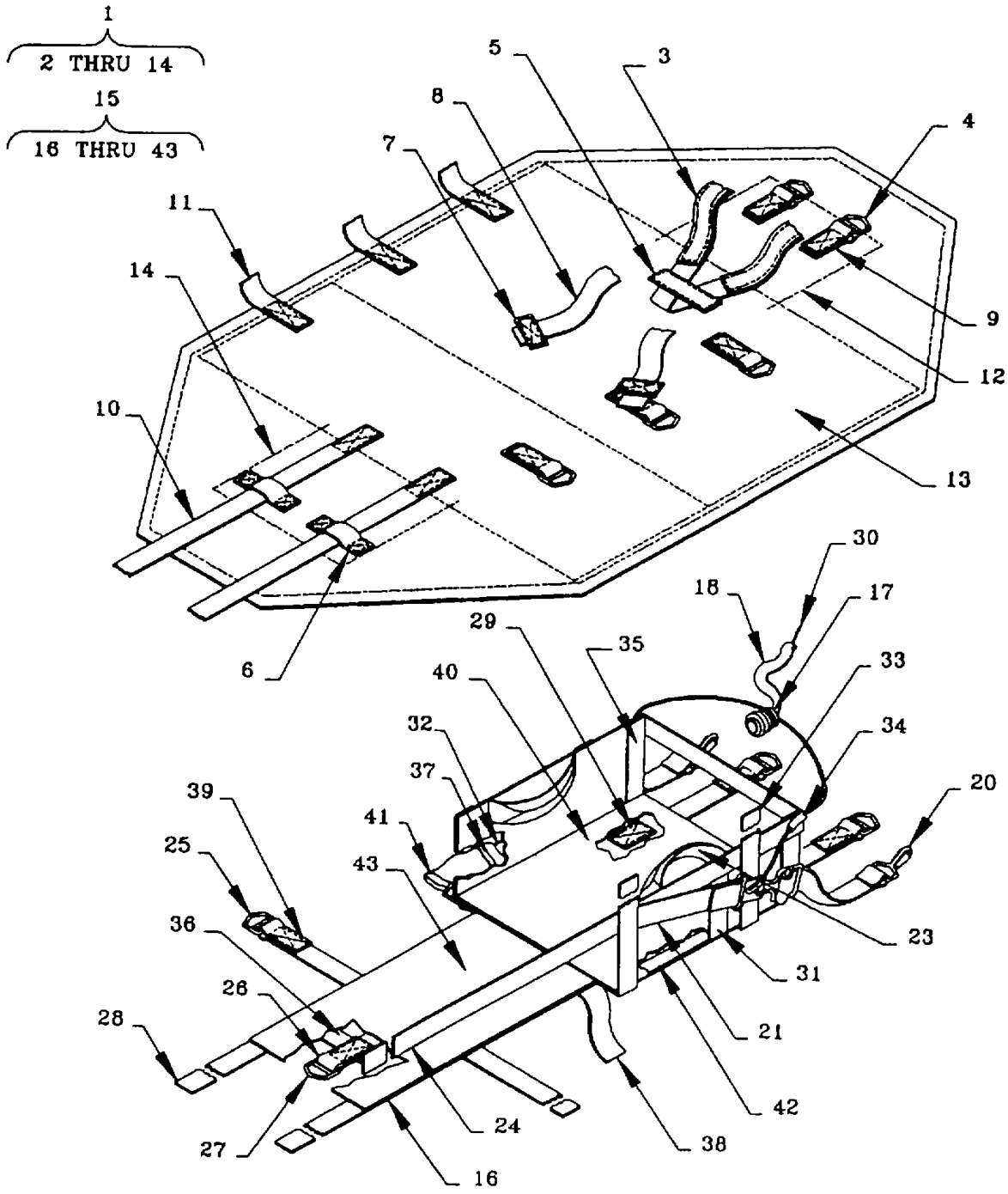


FIGURE C-8. PARACHUTIST'S WEAPONS AND INDIVIDUAL EQUIPMENT PACK AND HARNESS ASSEMBLY

SECTION II. REPAIR PARTS LIST - CONTINUED

(1) ITEM NO.	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
				GROUP 08 PARACHUTISTS WEAPONS AND INDIVIDUAL EQUIPMENT PACK AND HARNESS ASSEMBLY	
				FIG. C-8. PARACHUTIST'S WEAPONS AND INDIVIDUAL ... EQUIPMENT PACK AND HARNESS ASSEMBLY	
1	PAOOO	81337	5-4-692	Pack and Harness Assembly	1
2	XAOOO	81337	5-4-693	.Link, Quick Release	1
3	MOOZZ	81337	5-4-693-2-1	..Suspender A Assembly	1
4	PAOZZ	96906	MS70101-1	..Adapter, Special	1
5	MOOZZ	81337	5-4-693-2-4	..Tape, Reinforcement	1
6	MOOZZ	81337	5-4-693-2-5	..Strap Guide	2
7	MOOZZ	96906	5-4-693-2-6	..Reinforcement Band	2
8	MOOZZ	81337	5-4-693-2-7	..Suspender Lower	2
9	MOOZZ	81337	5-4-693-2-13	.Adapter and Chape	1
10	MOOZZ	81337	5-4-693-2-14	..Web Strap	2
11	MOOZZ	81337	5-4-693-2-15	..Web Strap	3
12	XDOZZ	81337	5-4-693-2-9	..Pad	2
13	XDOZZ	81337	5-4-693-2-16	..Pad	1
14	XAOZZ	81337	5-4-693-2-17	..Pad	1
15	XDOZO	81349	MIL-P43304	.Harness, Parachutist's	1
16	XAOZZ	81337	5-4-697-3-1	..Harness Body	1
17	XCOZZ	81349	MIL-R-45906	..Release Assembly	1
18	MOOZZ	81337	5-4-697-3-3	..Release Strap	2
19	XBOZZ	81337	5-4-697-3-5	..Keeper	2
20	XDOZZ	81337	11-1-2501	..Snap Hook	1
21	MOOZZ	81337	5-4-697-3-13	..Strap A, Side	1
22	MOOZZ	81337	5-4-697-3-14	..Buffer	1
23	MOOZZ	81337	5-4-697-3-15	..Handle	2

SECTION II. REPAIR PARTS LIST - CONTINUED

(1) ITEM NO.	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
24.	MOOZZ	81337	5-4-697-3-22	..Handle Strap	1
25.	PAOZZ	96906	MS701 01-1	..Adapter, Special	
26.	MOOZZ	81337	5-4-697-3-24	..Strap	1
27.	XAOZZ	81337	MS220454	..V-Ring	2
28.	MOOZZ	81337	5-4-697-3-26	..Lower Suspension Strap	2
29.	MOOZZ	81337	5-4-697-3-27	..Strap F Reinforcement	1
30.	XBOZZ	81337	5-4-697-3-28	..Strap Keeper Pin	1
31.	MOOZZ	81337	5-4-697-3-30	..Body Reinforcement	1
32.	MOOZZ	81337	5-4-697-3-31	..Pocket Flap	6
33.	MOOZZ	81337	5-4-697-3-34	..Strap	2
34.	MOOZZ	81337	5-4-697-3-35	..Retaining Loop	2
35.	MOOZZ	81337	5-4-697-3-36	..Reinforcement 4	1
36.	MOOZZ	81337	5-4-697-3-37	..Reinforcement K	1
37.	MOOZZ	81337	5-4-697-3-38	..Tie Tape	1
38.	MOOZZ	81337	5-4-697-3-39	..Leg Strap	2
39.	MOOZZ	81337	5-4-697-3-40	..Strap L Adapter	2
40.	MOOZZ	81337	5-4-697-3-41	..Body M Reinforcement	1
41.	MOOZZ	81337	5-4-697-3-42	..Pocket	1
42.	MOOZZ	81337	5-4-697-3-43	..Leg Strap Guide	2
43.	MOOZZ	81337	5-4-697-3-44	..Body Piece	2

END OF FIGURE

SECTION II. REPAIR PARTS LIST - CONTINUED

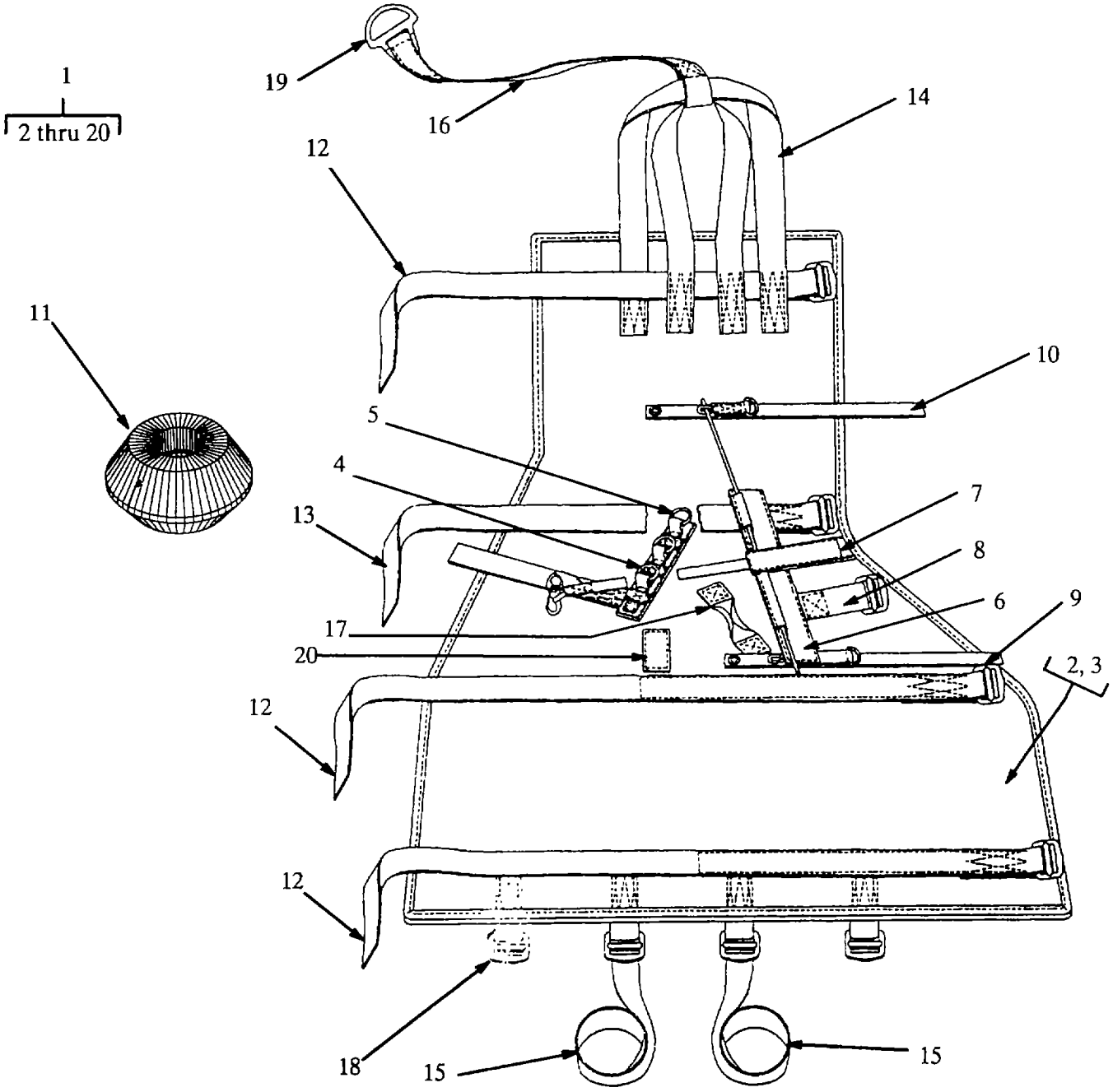


FIGURE C-9. JUMP PACK, STINGER MISSILE

SECTION II. REPAIR PARTS LIST - CONTINUED

(1) ITEM NO.	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
				GROUP 09 JUMP PACK, STINGER MISSILE	
				FIG C-9. JUMP PACK, STINGER MISSILE	
1.	PAOOO	81337	11-1-3890	Pack and Harness Assembly	1
2.	XAOOO	81337	11-1-3891-1	.Shell, Nylon	1
3.	XAOOO	81337	11-1-3891-2	..Liner, Felt	1
4.	XAOOO	81337	11-1-3893-1	.Strap, Ring	1
5.	XDOZZ	96906	MS51925	..Ring, D, Medium	3
6.	MOOZZ	81337	11-1-3894-1	.Strap, Cable Guide	1
7.	PAOZZ	81337	11-1-3895-1	.Quick-Release	1
8.	MOOZZ	81337	11-1-3890-6	.Strap, Quick Release	1
9.	MOOZZ	81337	11-1-3898-1	.Tie-Down, Leg	1
10.	MOOZZ	81337	11-1-3898-2	.Tie-Down, Chest	1
11.	PAOZZ	81337	11-1-3896-1	.End Cap, Foam	2
12.	MOOZZ	81337	11-1-3890-10	.Strap/Suspender, Quick-Release	3
13.	MOOZZ	81337	11-1-3890-11	.Strap, Closing	1
14.	MOOZZ	81337	11-1-3890-12	.Strap, Riser	2
15.	MOOZZ	81337	11-1-3890-13	.Strap, Securing	2
16.	MOOZZ	81337	11-1-3890-14	.Strap, Lowering	1
17.	MOOZZ	81337	11-1-3890-15	.Strap, Carrying	1
18.	MOOZZ	81337	11-1-3890-16	.Strap, Attaching, Quick Release	2
19.	PAOZZ	81337	11-1-485	.Ring, D	1
20.	MOOZZ	81337	11-1-3890-21	.Fastener, Pile	1
				END OF FIGURE	

SECTION II. REPAIR PARTS LIST - CONTINUED

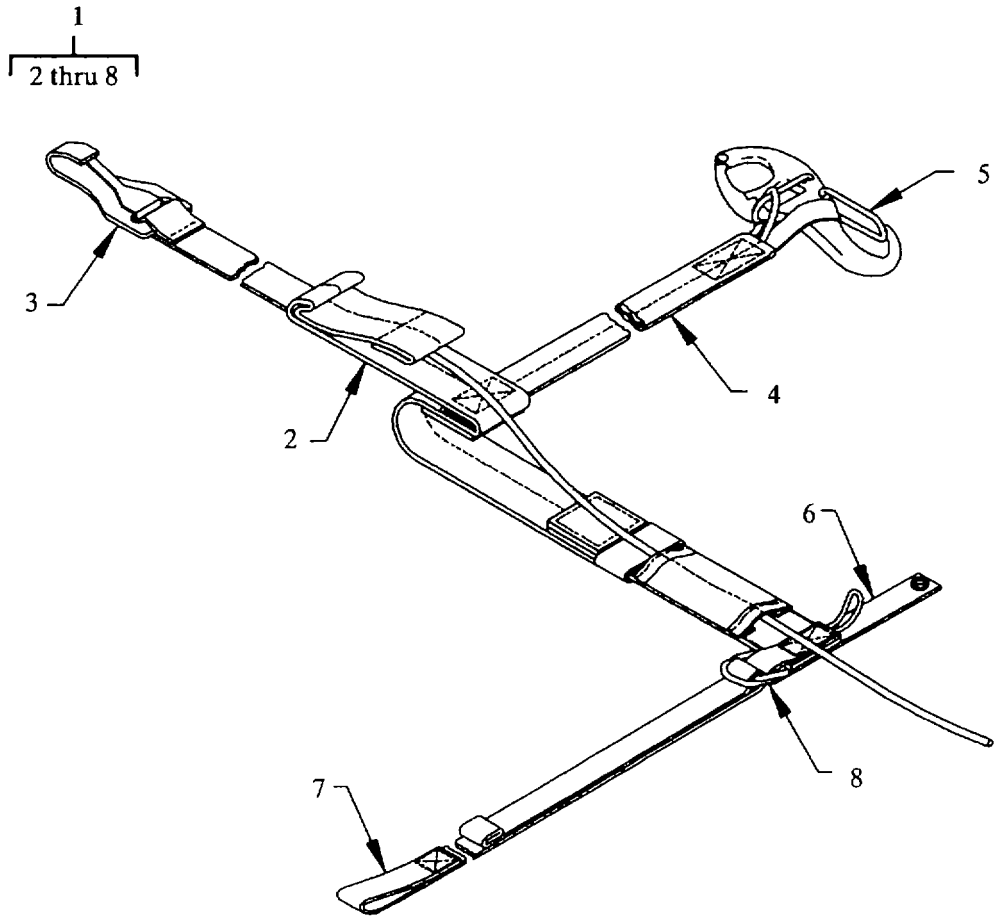


FIGURE C-10. RELEASE, PARACHUTIST'S, INDIVIDUAL EQUIPMENT

SECTION II. REPAIR PARTS LIST - CONTINUED

(1) ITEM NO.	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
				GROUP 10 RELEASE, PARACHUTISTS, INDIVIDUAL EQUIPMENT	
				FIG. C-10. RELEASE, PARACHUTIST'S, INDIVIDUAL EQUIPMENT	
1.	PAOOO	81337	11-1-6861	Release Assembly	1
2.	PAOOO	81337	11-1-6863	.Cable Release Assembly	1
3.	XBOZZ	81337	M43770/1 0-CCBC1	..Snap Hook, Cast Body	1
4.	PAOOO	81337	11-1-6864	.Quick Release Assembly	1
5.	XBOZZ	81337	11-1-3901	..Shackle, Snap, w/Snap Hook	1
6.	PAOOO	81337	11-1-6862	.Release Assembly, Upper Attachment	1
7.	PAOZZ	81337	11-1-6865	..Strap, Upper Attachment	1
8.	XBOZZ	81337	MIL-R-3390	..Ring, D, Class II, Style I	12
				END OF FIGURE	

SECTION II. REPAIR PARTS LIST - CONTINUED

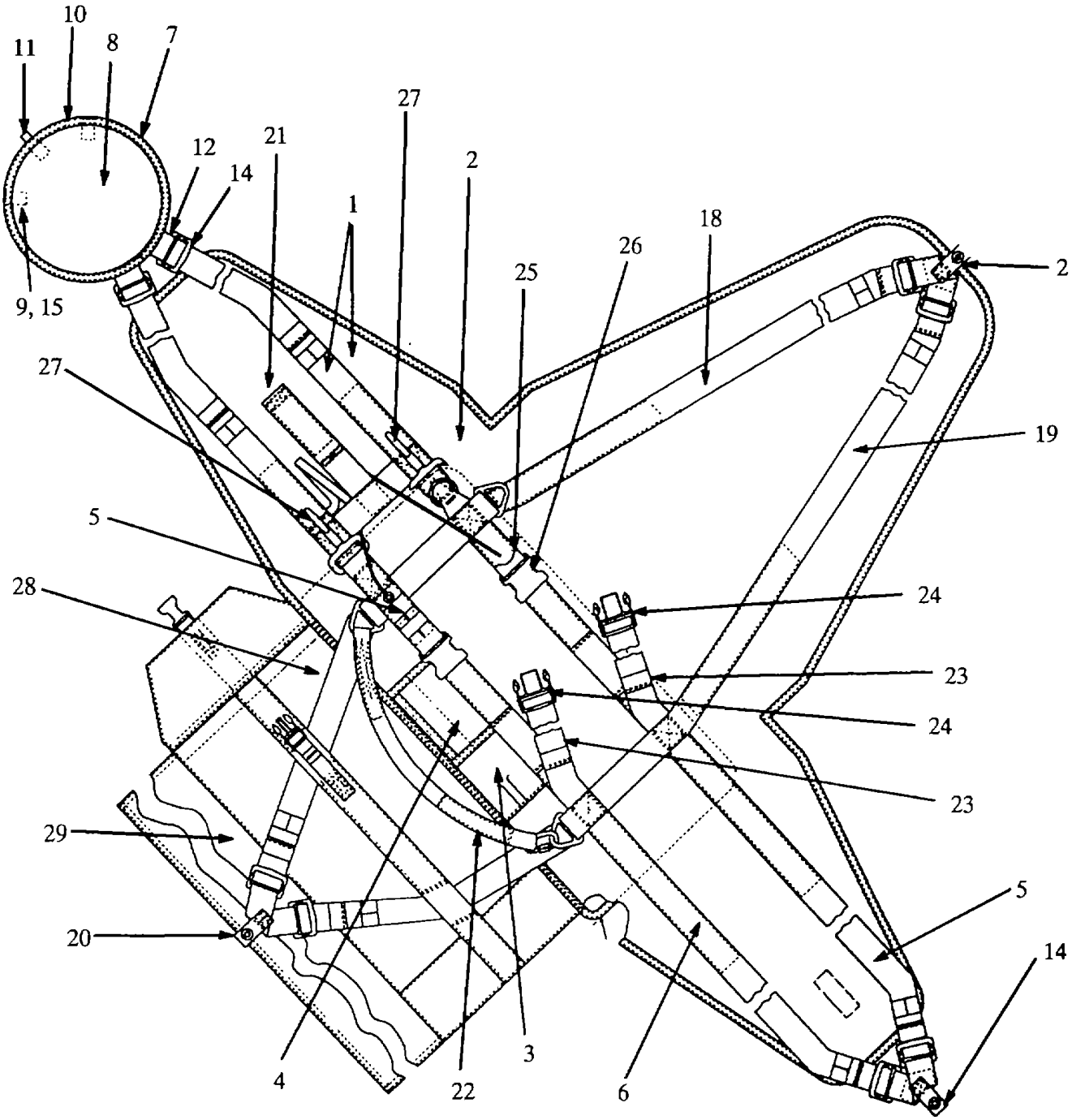


FIGURE C-11. CONTAINER, AERIAL DELIVERY, GENERAL PURPOSE, INDIVIDUAL EQUIPMENT

SECTION II. REPAIR PARTS LIST - CONTINUED

(1) ITEM NO.	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
				GROUP 11 CONTAINER, AERIAL DELIVERY, GENERAL PURPOSE, INDIVIDUAL EQUIPMENT	
				FIG. C-11. CONTAINER, AERIAL DELIVERY, GENERAL PURPOSE, INDIVIDUAL EQUIPMENT	
1.	XAOOO	81337	11-1-6833	Harness and Body Assembly	1
2.	XAOZZ	81337	11-1-6839-1	.Body Assembly, Container	1
3.	XAOZZ	81337	11-1-6847-1	.Pocket, Lowering Line	1
4.	XAOZZ	81337	11-1-6845-1	.Closure Flap, Lowering Line	1
5.	XAOOO	81337	11-1-6837	.Restraint Assembly, Vertical	1
6.	XAOZZ	81337	11-1-6848-2	..Strap, Reinforcement, 86-Inch	2
7.	XAOOO	81337	11-1-6850	..Closing Flap Assembly	1
8.	XAOOO	81337	11-1-6855FD1	...Flap	1
9.	MOOZZ	81337	11-1-6855FD2	...Fastener, Hook	3
10.	XAOZZ	81337	11-1-6855FD3	...Reinforcement, Edge	1
11.	MOOZZ	81337	11-1-6854-1	...Loop Assembly, Restraint	1
12.	XAOZZ	81337	11-1-6854FD1	...Strap, Nylon	1
13.	XAOZZ	81337	11-1-6854FD2	...Loop, Cord, TY I, 8-Inch	1
14.	XAOZZ	81337	11-1-6854FD3	...Adapter, Quick Fit	2
15.	XAOZZ	81337	11-1-6857FD2	...Fastener, Pile	3
16.	XAOZZ	81337	11-1-6857FD4	...Strap, Locking Pin	1
17.	PAOZZ	81337	11-1-6856	...Pin, Locking	1
18.	XAOZZ	81337	11-1-6838	..Restraint Assembly, Horizontal	1
19.	XAOZZ	81337	11-1-6848-1	...Strap	2
20.	XAOZZ	81337	11-1-6849FD1	..Tab, Closing	3
21.	PAOOO	81337	11-1-6844	..Release, Handle	1
22.	PAOZZ	81337	11-1-6841	..Bridle	1
23.	XAOOO	81337	11-1-6842	..Strap, Leg	2
24.	PAOZZ	81337	5-4-7605M	..Side Release, Male	2
25.	XAOOO	81337	11-1-6842	..Release, Strap, Leg	2

SECTION II. REPAIR PARTS LIST - CONTINUED

(1) ITEM NO.	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
26.	PAOZZ	81337	5-4-7605F	...Side Release, Female	2
27.	PAOZZ	81337	11-1-6840	..Strap, Attaching	2
28.	XAOZZ	81337	11-1-6834	..Container, Side	1
29.	XAOOO	81337	11-1-6835	Kit Bag, Internal	1

END OF FIGURE

SECTION II. REPAIR PARTS LIST - CONTINUED

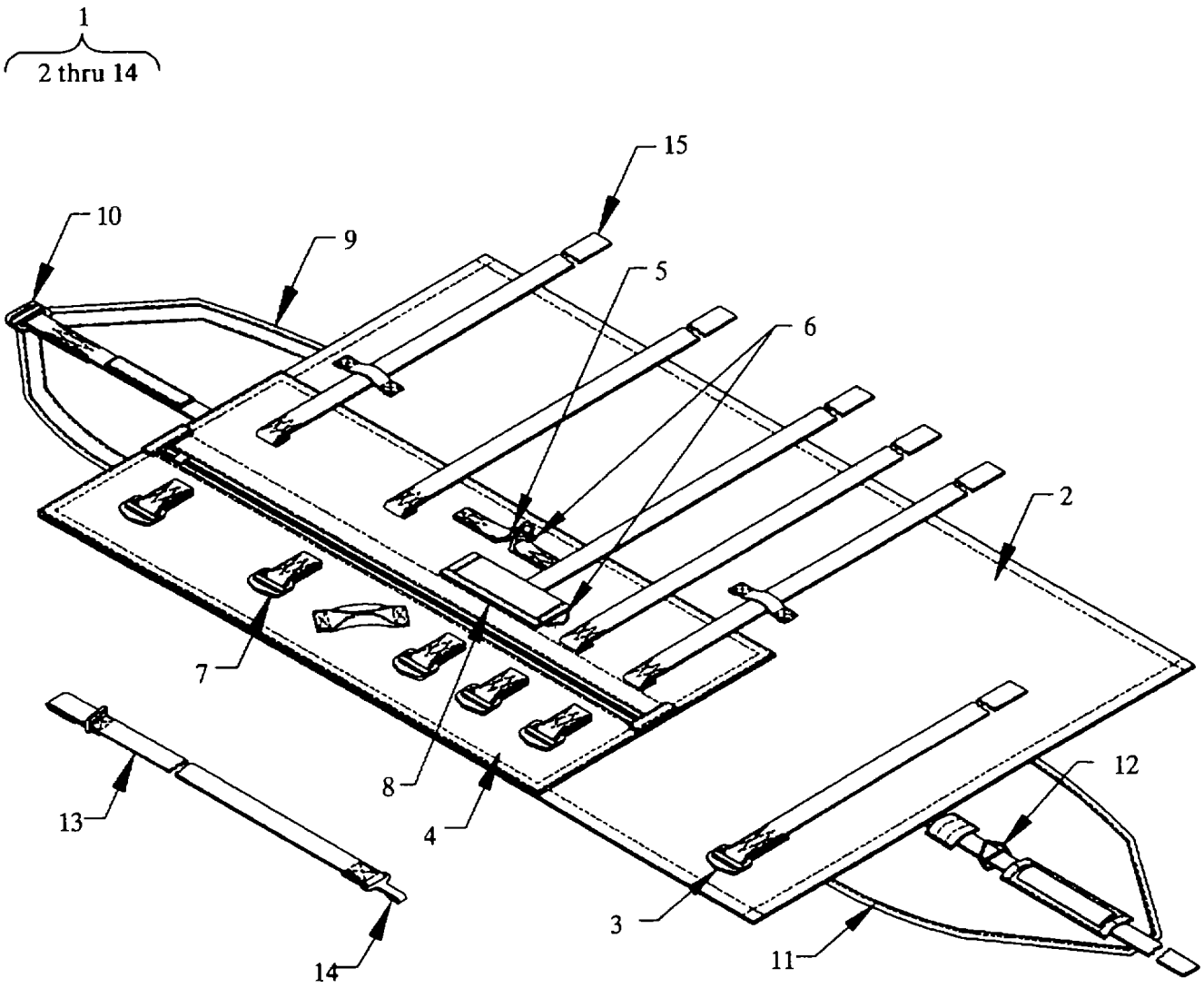


FIGURE C-12. CONTAINER, AERIAL DELIVERY, WEAPONS AND EQUIPMENT, ADJUSTABLE

(C-39 blank)/C-40

SECTION II. REPAIR PARTS LIST - CONTINUED

(1) ITEM NO.	(2) SMR CODE	(3) CAGEC	(4) PART NUMBER	(5) DESCRIPTION AND USABLE ON CODES(UOC)	(6) QTY
				GROUP 12 CONTAINER, AERIAL DELIVERY, WEAPONS AND EQUIPMENT, ADJUSTABLE	
				FIG. C-12. CONTAINER, AERIAL DELIVERY, WEAPONS AND EQUIPMENT, ADJUSTABLE	
1.	PAOOO	81337	11-1-6866	Container, Aerial Delivery, Weapons and Equipment, Adjustable	1
2.	XAOZZ	81337	11-1-6867	.Cover Assembly, Outer	1
3.	PAOZZ	81337	MS70101-1	..Adapter, Reversible, Quick Fit	1
4.	XAOZZ	81337	11-1-6868	.Padded Assembly, Outer	1
5.	PAOZZ	81337	MS80098-1	..Link, Snap, Quick Release, 1-3/4 Inches	1
6.	PAOZZ	81337	MS22045-1	..Ring, Parachute Harness V"	2
7.	PAOZZ	81337	MS70101-1	..Adapter, Reversible, Quick Fit	5
8.	XAOZZ	81337	11-1-6880	..Rap Assembly, Lowering Line	1
9.	MOOZZ	81337	11-1-6870	.Cap Assembly, Lower	1
10.	PAOZZ	81337	MS22040-1	..Adapter, Parachute Harness	1
11.	MOOZZ	81337	11-1-6871	.Cap Assembly, Upper	1
12.	PAOZZ	81337	MS22045-1	..Ring, Parachute Harness "V"	2
13.	MOOZZ	81337	11-1-6839	.Bridle Assembly, Lowering Line	1
14.	PAOZZ	81337	11-1-2501	..Snap Hook, Parachute Harness	1
15.	MOOZZ	81337	U/O #4	..Strap, Securing	5

END OF FIGURE

SECTION III. SPECIAL TOOLS

(Not Applicable)

SECTION IV. CROSS REFERENCE INDEX

CROSS-REFERENCE INDEXES
FIGURE AND ITEM NUMBER INDEX

Fig	Item	SMR	FSCM	Part Number	National Stock Number	Nomenclature
1	1	PBOOZ	98750	53D6887	1670-00-368-4225	Static Line, Extension
1	2	XAOZZ	98750	53D6887-1		Static Line
1	3	XAOZZ	98750	53D6887-2		Cord, Retainer
1	4	XAOZZ	98750	53D6887-3		Cover
1	5	XAOZZ	98750	53D6887-4		Pad
1	6	MOOZZ	98750	53D6887-5		Lanyard, Nylon
1	7	MOOZZ	98750	55B6261		Pin-Snap, Locking
1	8	XDOZZ	C9690	6MS70108-1		Link, Parachute Conn
1	9	XAOZZ	96906	MS70120	5340-00-491-1065	Snap, Hook
2	1	PAOOO	81337	11-1-308	1670-00-064-5735	Accessory Set, Parachute
2	2	MOOZZ	81337	11-1-308-1		Strap, Support
2	3	XAOZZ	81337	11-1-308-2	5340-00-360-0235	Shield
2	4	MOOZZ	81337	11-1-308-3		Backstrap, Harness
2	5	MOOZZ	81337	11-1-308-4		Strap. Waistband, Extension
2	6	XBOZZ	96906	MS22014-3		Buckle
3	1	PAOOO	81337	11-1-2530-1	1670-01-067-6838	Line, Lowering
3	2	PAOZZ	81337	11-1-2721	1670-00-065-8196	Adapter, Web, Lowering Line
3	3	PAOZZ	96906	MS22002-1	1670-00-217-2421	Link, Parachute Connection
3	4	PAOZZ	96906	MS22002-7		Set Screw
3	5	PAOZZ	96906	MS22017		Snap, Parachute Harness

SECTION IV. CROSS REFERENCE INDEX - CONTINUED

CROSS-REFERENCE INDEXES
FIGURE AND ITEM NUMBER INDEX - Continued

Fig	Item	SMR	FSCM	Part Number	National Stock Number	Nomenclature
4	1	PAOOO	81337	11-1-2714	1670-01-035-7727	Jump Pack, Dragon Missile
4	2	PAOZZ	96906	MS70101-1	5340-01-050-7680	Adapter, Special
4	3	PAOZZ	96906	MS70098	1670-01-079-9653	Link, Quick Release
4	4	PAOZZ	96906	MS70099	5340-01-036-0473	Snap Hook
4	5	PAOZZ	96906	MS22045-1	5365-00-360-0471	Ring, Parachute Harness
4	6	MOOZZ	81337	11-1-2716		Pocket, Assembly, Lowering Line
5	1	PAOOO	81337	11-1-3008	1670-01-227-7992	Harness, Parachutist, Single Point Release
5	2	XAOO	81337	11-1-3009		Harness Assembly
5	3	MOOZZ	81337	11-1-3009-2		Strap, Cross
5	4	MOOZZ	81337	11-1-3009-3		Strap, Cross, Adjustable
5	5	XAOZZ	81337	11-1-3009-1		Strap, Retainer
5	6	MOOZZ	81337	11-1-3009-4		Chape, Adapter
5	7	MOOZZ	81337	11-1-3009-5		Strap, Leg
5	8	MOOZZ	81337	11-1-3009-6		Keeper
5	9	MOOZZ	81337	11-1-3009-7		Buffer
5	10	MOOZZ	81337	11-1-3012-1		Web
5	11	MOOZZ	81337	11-1-3009-9		Loop C
5	12	MOOZZ	81337	11-1-3009-10		Loop B
5	13	MOOZZ	81337	11-1-3009-11		Loop A
5	14	MOOZZ	81337	11-1-3009-12		Fastener, Tape, Hook

SECTION IV. CROSS REFERENCE INDEX - CONTINUED

CROSS-REFERENCE INDEXES
FIGURE AND ITEM NUMBER INDEX - Continued

Fig	Item	SMR	FSCM	Part Number	National Stock Number	Nomenclature
5	15	PAOZZ	96906	MS70101-1	5340-01-050-7680	Adapter, Special
5	16	XAOZZ	02768	SR-2		Buckle, Male
5	17	PAOZZ	81337	11-1-3010	1670-01-283-6412	Strap, Leg, Release
5	18	XAOZZ	81337	11-1-3010-2		Keeper, Elastic
5	19	XAOZZ	81337	11-1-3010-3		Loop, Web
5	20	XAOZZ	81337	5-4-1602-12-4	5325-01-028-0945	Grommet, Metallic
5	21	XDOZZ	02768	SR-2		Buckle, HSPR, 2-inch
5	22	XAOZZ	81337	11-1-3010-7		Buffer
5	24	PAOZZ	81337	11-1-3011-2	5340-01-353-0637	Wire Rope Jacket
5	25	MOOZZ	81337	11-1-3011-5		Fastener, Tape, Pile
5	26	PAOZZ	81337	11-1-3012	5340-01-364-6335	Strap, Harness, Attaching
5	27	XDOZZ	96906	MS22043-1		Snap Hook
5	28	PAOZZ	96906	MS22020-1	1670-00-862-5749	Link, Parachute Harness
5	29	MOOZZ	81337	11-1-3012-4		Buffer
6	1	PAOOO	81337	11-1-3398	1670-01-259-5932	Parachute Assembly
6	2	PAOZZ	96906	MS70101-1	5340-01-050-7680	Adapter, Special
6	3	PAOZZ	96906	MS70098	1670-01-079-9653	Link, Quick Release
6	4	PAOZZ	81337	11-1-485	5365-01-278-0418	Ring, D
6	5	PAOZZ	96906	MS70099	5340-01-036-0473	Snap Hook
6	6	MOOZZ	81337	11-1-3398-20		Tiedown, Upper
6	7	MOOZZ	81337	11-1-3398-21		Tiedown, Leg
7	1	PAOZZ	81349	MIL-C-10922	8465-00-261-4995	Case, Parachutist's

SECTION IV. CROSS REFERENCE INDEX - CONTINUED

CROSS-REFERENCE INDEXES
FIGURE AND ITEM NUMBER INDEX - Continued

Fig	Item	SMR	FSCM	Part Number	National Stock Number	Nomenclature
7	2	PAOZZ	96906	MS70098	1670-01-079-9653	Link, Quick Release
7	3	PAOZZ	96906	MS22045-1	5365-00-360-0471	Ring, Parachute Harness
7	4	MOOZZ	81337	2-2-116-1		Pocket, Lowering Line
7	5	PAOZZ	96906	MS27977-64B	5325-01-356-2566	Stud, Snap Fastener
7	6	PAOZZ	96906	MS27977-1B	5325-00-281-4356	Socket, Snap Fastener
7	7	PAOZZ	96906	MS27977-3B	5325-00-276-4283	Clinch, Plate, Snap Fastener
7	8	MOOZZ	81337	2-2-116-2		Strip Panel
7	9	MOOZZ	81337	2-2-116-4		Thong, Slide Fastener
7	10	MOOZZ	81337	2-2-116-5		Reinforcement, Corner
7	11	MOOZZ	81337	2-2-116-6		Tape, Tiedown
7	12	MOOZZ	81337	2-2-116-9		Thong, Flap
7	13	MOOZZ	81337	2-2-116-8		Strap, Tiedown
7	14	MOOZZ	81337	2-2-116-10		Reinforcement, Leather
7	15	MOOZZ	81337	2-2-116-11		Loop, Tiedown
7	16	MOOZZ	81337	2-2-116-12		Loop, Chape
7	17	MOOZZ	81337	2-2-116-14		Strap, Adjusting
7	18	MOOZZ	81337	2-2-116-20		Loop, Chape, Triangular
7	19	MOOZZ	81337	2-2-116-18		Loop, Chape, Single

SECTION IV. CROSS REFERENCE INDEX - CONTINUED

CROSS-REFERENCE INDEXES
FIGURE AND ITEM NUMBER INDEX - Continued

Fig	Item	SMR	FSCM	Part Number	National Stock Number	Nomenclature
8	1	PAOOO	81337	5-4-692	8465-00-753-6549	Pack and Harness Assembly
8	2	XAOOO	81337	5-4-693		Link, Quick-Release
8	3	MOOZZ	81337	5-4-693-2-1		Suspender A Assembly
8	4	PAOZZ	96906	MS70101-1	5340-01-050-7680	Adapter, Special
8	5	MOOZZ	81337	5-4-693-2-4		Tape, Reinforcement
8	6	MOOZZ	81337	5-4-693-2-5		Strap Guide
8	7	MOOZZ	81337	5-4-693-2-6		Reinforcement Band
8	8	MOOZZ	81337	5-4-693-2-7		Suspender, Lower
8	9	MOOZZ	81337	5-4-693-2-13		Adapter and Chape
8	10	MOOZZ	81337	5-4-693-2-14		Web Strap E
8	11	MOOZZ	81337	5-4-693-2-15		Web Strap F
8	12	XDOZZ	81337	5-4-693-2-9		Pad D
8	13	XDOZZ	81337	5-4-693-2-16		Pad G
8	14	XAOZZ	81337	5-4-693-2-17		Pad H
8	15	XDOZZ	81349	MIL-P-43304		Harness, Parachutist
8	16	XAOZZ	81337	5-4-697-3-1		Harness Body
8	17	XCOZZ	81349	MIL-R-45906		Release Assembly
8	18	MOOZZ	81337	5-4-697-3-3		Release Strap Assembly
8	19	XBOZZ	81337	5-4-697-3-5		Keeper
8	20	XDOZZ	81337	11-1-2501		Snap Hook
8	21	MOOZZ	81337	5-4-697-3-13		Strap A, Side
8	22	MOOZZ	81337	5-4-697-3-14		Buffer

SECTION IV. CROSS REFERENCE INDEX - CONTINUED

CROSS-REFERENCE INDEXES
FIGURE AND ITEM NUMBER INDEX - Continued

Fig	Item	SMR	FSCM	Part Number	National Stock Number	Nomenclature
8	23	MOOZZ	81337	5-4-697-3-15		Handle
8	24	MOOZZ	81337	5-4-697-3-22		Handle, Strap
8	25	PAOZZ	96906	MS70101-1	5340-01-050-7680	Adapter, Special
8	26	MOOZZ	81337	5-4-697-3-24		Strap D
8	27	XAOZZ	81337	MS220454		V-Ring
8	28	MOOZZ	81337	5-4-697-3-26		Lower Suspension Strap
8	29	MOOZZ	81337	5-4-697-3-27		Strap F, Reinforcement
8	30	XBOZZ	81337	5-4-697-3-28		Strap, Keeper Pin
8	31	MOOZZ	81337	5-4-697-3-30		Body Reinforcement
8	32	MOOZZ	81337	5-4-697-3-31		Pocket Flap
8	33	MOOZZ	81337	5-4-697-3-34		Strap
8	34	MOOZZ	81337	5-4-697-3-35		Retaining Loop
8	35	MOOZZ	81337	5-4-697-3-36		Reinforcement 4
8	36	MOOZZ	81337	5-4-697-3-37		Reinforcement K
8	37	MOOZZ	81337	5-4-697-3-38		Tie Tape
8	38	MOOZZ	81337	5-4-697-3-39		Leg Strap
8	39	MOOZZ	81337	5-4-697-3-40		Strap L Adapter
8	40	MOOZZ	81337	5-4-697-3-41		Body M Reinforcement
8	41	MOOZZ	81337	5-4-697-3-42		Pocket
8	42	MOOZZ	81337	5-4-697-3-43		Leg Strap Guide
8	43	MOOZZ	81337	5-4-697-3-44		Body Piece
9	1	PAOOO	81337	11-1-3890	1670-01-352-9264	Jump Pack, Missile

SECTION IV. CROSS REFERENCE INDEX - CONTINUED

CROSS-REFERENCE INDEXES
FIGURE AND ITEM NUMBER INDEX - Continued

Fig	Item	SMR	FSCM	Part Number	National Stock Number	Nomenclature
9	2	XAOOO	81337	11-1-3891-1		Shell, Nylon
9	3	XAOOO	81337	11-1-3891-2		Liner, Felt
9	4	MOOZZ	81337	11-1-3893-1		Strap, Ring Assembly
9	5	XDOZZ	96906	MS51925		Ring, D, Medium
9	6	MOOZZ	81337	11-1-3894-1		Strap, Cable Guide
9	7	PAOZZ	81337	11-1-3895-1		Quick-Release
9	8	MOOZZ	81337	11-1-3890-6		Strap, Quick-Release
9	9	MOOZZ	81337	11-1-3898-1		Tie-down, Leg
9	10	MOOZZ	81337	11-1-3898-2		Tiedown Chest
9	11	PAOZZ	81337	11-1-3896-1		End Cap, Foam
9	12	MOOZZ	81337	11-1-3890-10		Strap/Suspension, Quick-Release
9	13	MOOZZ	81337	11-1-3890-11		Strap, Closing
9	14	MOOZZ	81337	11-1-3890-12		Strap, Riser
9	15	MOOZZ	81337	11-1-3890-13		Strap, Securing
9.	16	MOOZZ	81337	11-1-3890-14		Extension, Sling Assembly
9	17	MOOZZ	81337	11-1-3890-15		Strap, Handle, Carry
9	18	MOOZZ	81337	11-1-3890-16		Strap, Attaching, Quick Release
9	19	PAOZZ	81337	11-1-485	5365-01-278-0418	Ring, D
9	20	MOOZZ	81337	11-1-3890-21		Fastener, Pile
10	1	PAOOO	81337	11-1-6861		Release Assembly
10	2	PAOOO	81337	11-1-6863		Cable Release Assembly

SECTION IV. CROSS REFERENCE INDEX - CONTINUED

CROSS-REFERENCE INDEXES
FIGURE AND ITEM NUMBER INDEX - Continued

Fig	Item	SMR	FSCM	Part Number	National Stock Number	Nomenclature
10	3	XBOZZ	81337	M43770/10-CCBC1		Snap Hook, Cast Body
10	4	PAOOO	81337	11-1-6864		Quick Release Assembly
10	5	XBOZZ	81337	11-1-3901		Shackle, Snap, w/ Snap Hook
10	6	PAOOO	81337	11-1-6862		Release Assembly, Upper Attachment
10	7	PAOZZ	81337	11-1-6865		Strap, Upper Attachment
10	8	XBOZZ	81337	MIL-R-3390		Ring, D, Class II, Style I
11		XCOOO	81337	11-1-6832		Container, Aerial Delivery
11	1	XAOOO	81337	11-1-6833		Harness and Body Assembly
11	2	XAOOO	81337	11-1-6836-1		Body Assembly, Container
11	3	XAOZZ	81337	11-1-6847-1		Pocket, Lowering Line
11	4	XAOZZ	81337	11-1-6845-1		Closure Flap, Lowering Line
11	5	XAOOO	81337	11-1-6837		Restraint Assembly, Vertical
11	6	XAOZZ	81337	11-1-6848-2		Strap, Reinforcement, 86-inch
11	7	XAOOO	81337	11-1-6850		Closing Flap Assembly
11	8	XAOOO	81337	11-1-6855FIND1		Flap, Duck, Nylon

SECTION IV. CROSS REFERENCE INDEX - CONTINUED

CROSS-REFERENCE INDEXES
FIGURE AND ITEM NUMBER INDEX - Continued

Fig	Item	SMR	FSCM	Part Number	National Stock Number	Nomenclature
11	9	MOOZZ	81337	11-1-6855FIND2		Fastener, Hook
11	10	XAOZZ	81337	11-1-6855FIND3		Reinforcement, Edge
11	11	MOOZZ	81337	11-1-6854-1		Loop Assembly, Restraining
11	12	XAOZZ	81337	11-1-6854FIND1		Strap, Nylon, Type VII
11	13	XAOZZ	81337	11-1-6854FIND2		Loop, Cord, Type I, 8-inches
11	14	XAOZZ	81337	11-1-6854FIND3		Adapter, Quick-Fit
11	15	XAOZZ	81337	11-1-6857FIND2		Fastener, Pile
11	16	XAOZZ	81337	11-1-6857FIND4		Strap, Locking Pin
11	17	PAOZZ	81337	11-1-6856		Pin, Locking
11	18	XAOZZ	81337	11-1-6838		Restraint Assembly, Horizontal
11	19	XAOZZ	81337	11-1-6848-1		Strap
11	20	XAOZZ	81337	11-1-6849FIND1		Tab, Closing
11	21	PAOOO	81337	11-1-6844		Release, Handle
11	22	PAOZZ	81337	11-1-6841		Bridle
11	23	XAOOO	81337	11-1-6842		Strap, Leg
11	24	PAOZZ	81337	5-4-7605M		Side Release, Male
11	25	XAOOO	81337	11-1-6842		Strap, Leg, Release
11	26	PAOZZ	81337	5-4-7605F		Side Release, Female
11	27	PAOZZ	81337	11-1-6840		Strap, Attaching
11	28	XAOZZ	81337	11-1-6834		Container, Side
11	29	XAOOO	81337	11-1-6835		Kit, Bag, Internal

SECTION IV. CROSS REFERENCE INDEX - CONTINUED

CROSS-REFERENCE INDEXES
FIGURE AND ITEM NUMBER INDEX - Continued

Fig	Item	SMR	FSCM	Part Number	National Stock Number	Nomenclature
12	1	PAOOO	81337	11-1-6866		Container, Aerial Delivery, Adjustable
12	2	XAOZZ	81337	11-1-6867		Cover Assembly, Outer
12	3	PAOZZ	96906	MS70101-1		Adapter, Reversible, Quick-Fit
12	4	XAOZZ	81337	11-1-6868		Padded Assembly, Outer
12	5	PAOZZ	81337	MS80098-1		Link, Snap, Quick-Release, 1 3/4-inch
12	6	PAOZZ	81337	MS22045-1		Ring, Parachute Harness "V"
12	7	PAOZZ	96906	MS70101-1		Adapter, Reversible, Quick-Fit
12	8	XAOZZ	81337	11-1-6880		Flap Assembly, Lowering Line
12	9	MOOZZ	81337	11-1-6870		Cap Assembly, Lower
12	10	PAOZZ	81337	MS22040-1	1670-00-884-3668	Adapter, Parachute Harness
12	11	MOOZZ	81337	11-1-6871		Cap Assembly, Upper
12	12	PAOZZ	81337	MS22045-1		Ring, Parachute Harness "V"
12	13	MOOZZ	81337	11-1-6839		Bridle Assembly, Lowering Line
12	14	PAOZZ	81337	11-1-2501		Snap Hook, Parachute Harness
12	15	MOOZZ	81337	U/O #4		Strap, Securing

APPENDIX D

EXPENDABLE AND DURABLE ITEMS LIST

Section I. INTRODUCTION

D-1. SCOPE. This appendix lists expendable and durable items that you will need to operate and maintain the ancillary equipment. 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.

D-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 D".)

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

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 identify 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 REQUIREMENTS LIST

(1) ITEM NUMBER	(2) MAINT LEVEL	(3) NATIONAL STOCK	(4) ITEM NAME,DESCRIPTION CAGEC, PART NUMBER NUMBER	(5) U/M
1	0	9160-00-253-1171	Beeswax, technical, ILB (81348) C-B-191	LB
2	0	7920-00-282-2490	Brush, scrub,(81348) H-B-1490	EA
3	0	7520-00-248-9285	Brush, stencil (81348) H-B-00621	EA
4	0	5350-00-221-0872	Cloth, abrasive, ferric oxide and quart (81348) MIL-C-4279	EA
5	0	8305-00-107-5854	Cloth, duck, cotton, color 07, MRWRT, 36"W, type I, No 6, CCC-C-419	YD
6	0	8305-00-170-9284	Cloth, duck, cotton, OD 14.35 oz	YD
7	0	8305-00-170-0079	Cloth, duck, nylon, OD 12.5 oz	YD
8	0		Cloth, duck, nylon, OD C1 4, 8 oz, MIL-C-4373A	YD
9	0	4020-00-246-0688	Cord, nylon, OD, nylon core, type III, MIL-C-5040	YD
10	0	4020-00-262-2147	Cord, fibrous, nylon, type III, red Nr 70180, MIL-C-5040	YD
11	0	7930-00-281-4730	Dishwashing compound, hand, flake, (81348) P-D-410	LB

Section II. EXPENDABLE/DURABLE SUPPLIES AND REQUIREMENTS LIST - CONTINUED

(1) ITEM NUMBER	(2) MAINT LEVEL	(3) NATIONAL STOCK	(4) ITEM NAME,DESCRIPTION CAGEC, PART NUMBER NUMBER	(5) U/M
12	0	8305-00-227-1247	Felt, 1/4" thick, grey, class 12R2, 92" long, 72" wide, C-F-206	SF
13	0	8305-00-633-9844	Felt, 1" thick, 72" wide type I, C-F-206	SF
14	0	5325-00-231-6589	Grommet, spur, Type III	EA
15	0	7510-00-286-5362	Ink, marking, parachute, strata-blue, (81348)	PT
16	0	8330-00-299-8552	Leather, cattlehide, natural, (81348) KKL201	SF
17	0	9150-00-999-7548	Lubricant, stick form	BX
18	0	7520-00-230-2734	Marker, felt tip, black (81348) GG-M-0014	EA
19	0	7520-00-491-2917	Pen, ballpoint (81348) GG-B-0060	EA
20	0	7920-00-205-3570	Rag, wiping, (81348) DDD-R-30	BL
21	0	9310-00-160-7858	Stencilboard, oiled, Type II, (81348) UU-S-265	SH
22	0	4030-00-431-5538	Sleeve, swaging, wire cable, 5/32" W	EA
23	0	7510-00-266-5016	Tape, pressure sensitive 2" W, Type IV (81348)	RL
24	0	7510-00-952-7212	Tape, pressure sensitive 1 1/4" W, Type IV (81348)	RL
25	0	8315-00-151-6480	Tape, fastener, hook, OD 1" wide	RL

Section II. EXPENDABLE/DURABLE SUPPLIES AND REQUIREMENTS LIST - CONTINUED

(1) ITEM NUMBER	(2) MAINT LEVEL	(3) NATIONAL STOCK	(4) ITEM NAME,DESCRIPTION CAGEC, PART NUMBER NUMBER	(5) U/M
26	0	8315-00-450-9837	Tape, fastener, hook, OD 2" wide	RL
27	0	8315-00-151-6484	Tape, fastener, pile, OD 1" wide	RL
28	0	8315-00-151-6482	Tape, fastener, pile, OD 2" wide	RL
29	0	8315-00-151-6483	Tape, fastener, pile, OD 1 1/2" wide	RL
30	0	8315-00-255-7673	Tape, nylon, Type III OD, 1/2" W	YD
31	0	8305-00-261-8579	Tape, textile, webbing type IV, OD	YD
32	0	8315-00-253-6290	Tape, textile, cotton 1" wide, OD-7, Type I	YD
33	0	8315-00-253-6292	Tape, textile, cotton 1 1/2" wide OD-7, Type I	YD
34	0	8315-00-260-2561	Tape, textile, cotton type II, 1" wide	YD
35	0	8310-00-267-3027	Thread, nylon, size 3 OD, (81348) V-T-295	RL
36	0	8310-00-262-2772	Thread, nylon, size E OD, (81348) V-T-295	RL
37	0	8310-00-227-1244	Thread, nylon, size FF OD, (81348) V-T-295	RL
38	0	8310-00-262-2777	Thread, nylon, size 5 OD, (81348) V-T-295	RL

Section II. EXPENDABLE/DURABLE SUPPLIES AND REQUIREMENTS LIST - CONTINUED

(1) ITEM NUMBER	(2) MAINT LEVEL	(3) NATIONAL STOCK	(4) ITEM NAME,DESCRIPTION CAGEC, PART NUMBER NUMBER	(5) U/M
39	0	8310-00-262-2780	Thread, nylon, size 6 OD, (81348) V-T-295	RL
40	0	8310-00-917-3945	Thread, cotton, ticket 8/7, natural (81348) V-T-295	RL
41	0	6810-00-270-9982	Tetrachloroethylene, technical (81348) 0-T-236	GL
42	0	8310-00-285-2044	Wax, paraffin, Type I, technical, grade A, (81348) W-W-95	LB
43	0	8305-00-260-2564	Webbing, cotton, Type VII, OD, (81348) MIL-W-5665	YD
44	0	8305-01-206-9219	Webbing, nylon, OD, Type XXVI, (81348) MIL-W-4088	YD
45	0	8305-00-261-8585	Webbing, nylon, OD, Type VIII	YD
46	0	8305-00-261-8579	Webbing, nylon, OD, Type IV	YD
47	0	8305-00-261-8584	Webbing, nylon, OD, Type X	YD
48	0	8305-00-261-8856	Webbing, nylon, OD, Type I, 9/16" wide	YD
49	0	8305-00-782-6734	Webbing, nylon, Type VII 1 9/16" wide	YD
50	0	8305-00-753-3258	Webbing, tubular, nylon OD, 5/8" wide	YD

Section II. EXPENDABLE/DURABLE SUPPLIES AND REQUIREMENTS LIST - CONTINUED

(1) ITEM NUMBER	(2) MAINT LEVEL	(3) NATIONAL STOCK	(4) ITEM NAME,DESCRIPTION CAGEC, PART NUMBER NUMBER	(5) U/M
51	0	8305-00-753-3258	Webbing, tubular, nylon natural, 5/8 wide	YD
52	0	8305-00-261-8582	Webbing, tubular, nylon OD, 9/16" wide	YD
53	0	8305-00-082-5751	Webbing, tubular, nylon natural, 3/4" wide	YD
54	0	8305-00-268-2455	Webbing, tubular, nylon OD, 1" wide	YD
55	0	8305-00-260-2564	Webbing, cotton/nylon Type VIII, OD	YD
56	0	8305-00-263-3592	Webbing, nylon, 1" W, Type II	YD
57	0	8315-00-263-3604	Webbing, text., textured or multifilament nylon OD-7, type III	YD
58	0	8305-00-559-6871	Webbing, textile, woven nylon, type VIII, Class I yellow, MIL-W-4088	YD
59	0	8305-00-263-2462	Webbing, cotton, 1" W, type III	YD
60	0	9509-00892-4616	Wire, steel, composition 430, QQ-W-423-80-10, form 1, condition A, (81348)	RL
61	0	4010-00-618-4717	Wire, rope, type IIB, coated, 5/32" W	EA

APPENDIX E

ILLUSTRATED LIST OF MANUFACTURED ITEMS

Section I.

E-1. INTRODUCTION.

a. This appendix contains instructions for making items authorized to be manufactured or fabricated at unit maintenance level.

b. A nomenclature index of end items to which the manufactured part belongs is provided for cross-referencing the nomenclature of the item to be manufactured to the figure which covers fabrication.

c. All bulk materials needed for manufacture of an item are listed by part number or specification number in a tabular list on the illustration.

E-2. MANUFACTURED ITEMS NOMENCLATURE INDEX.

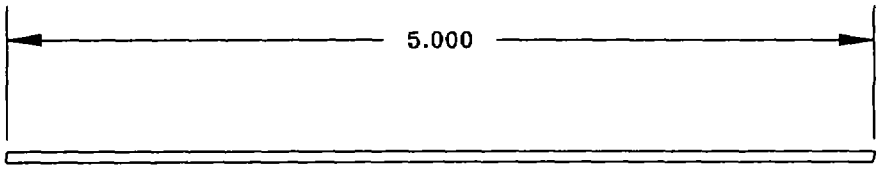
EQUIPMENT	PART NUMBER	NOMENCLATURE	FIG NO
Extension Static Line	55B6261	Pin, Locking	E-1
Accessory Set, SCUBA	11-1-308-1	Strap, Support	E-2
	11-1-308-3	Harness, Backstrap	E-3
	11-1-308-4	Strap, Waistband Extension	E-4
Jump Pack Dragon Missile	11-1-2716	Pocket Assembly, Lowering	E-5
Harness Single Point Release	11-1-3009-3	Leg Strap, Adjustable	E-6
Pack, Assembly, AT4	11-1-3401	Pocket Assembly, Lowering	E-7
	11-1-3403	Forward End Cross Strap	E-8
Case, Parachutist's M-1950	2-2-116-1	Pocket Assembly, Lowering	E-9
	2-2-116-2	Strip Panel	E-10

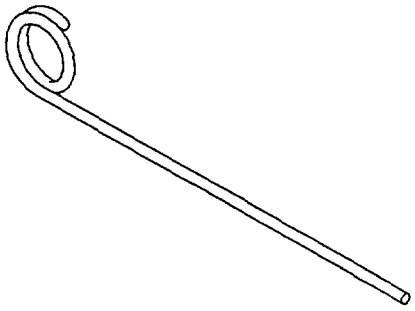
E-2. MANUFACTURED ITEMS NOMENCLATURE INDEX - Continued.

EQUIPMENT	PART NUMBER	NOMENCLATURE	FIG NO
Parachutist's Weapons and Individual Equipment Pack and Harness Assembly		Upper Suspender Strap	E-11
	5-4-697-3-42	Pocket Assembly, Lowering	E-12
	5-4-697-3-15	Handle	E-13
Jump Pack Stinger Missile	11-1-3890	Handle	E-14

Section II.

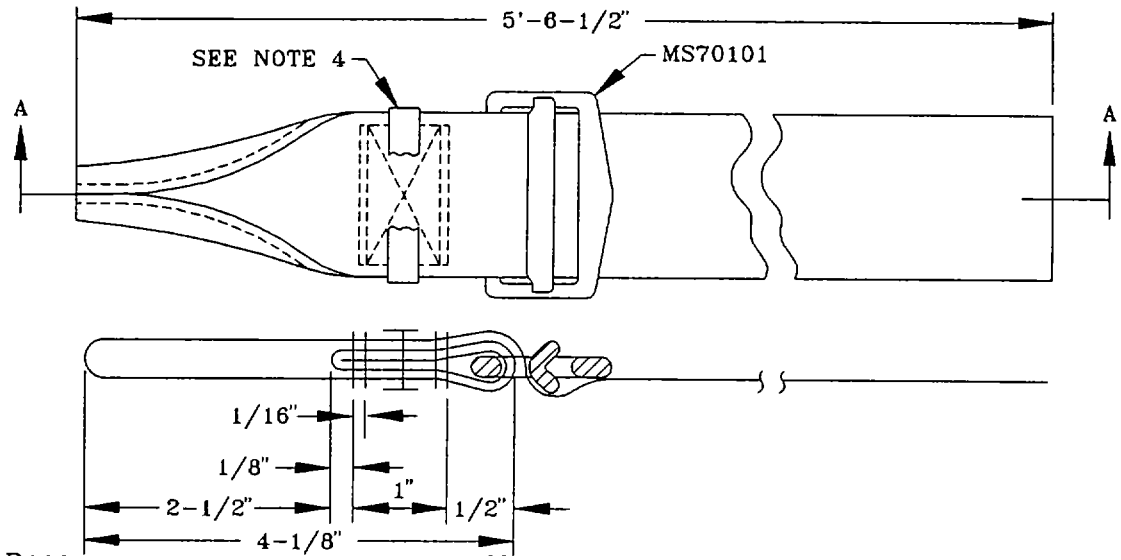
E-3. MANUFACTURED ITEMS ILLUSTRATIONS. Illustrations No 1 through 27 provide make-from instructions and specify the appropriate materials to be used.





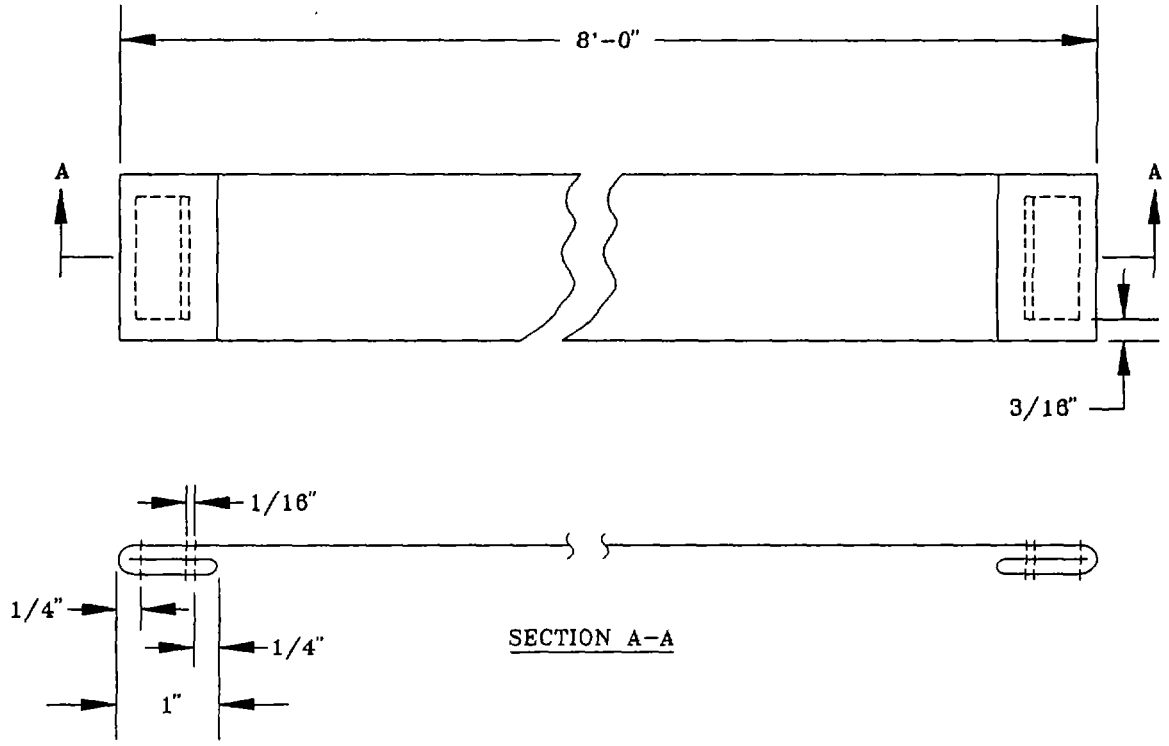
	PROCEDURE	MATERIALS	NOTE
1.	CUT WIRE TO LENGTH INDICATED.	WIRE, STEEL, QQ-W-423-8-10	DIMENSIONS SHOWN ARE IN INCHES.
2.	BEND WIRE AS SHOWN.		TOLERANCE IS 1/8 INCH.

Figure E-1. (Extension Static Line) Pin, Locking



PROCEDURE	MATERIALS	NOTE
1. CUT 6'4" LENGTH OF NYLON WEBBING, WEBBING.	NYLON, TYPE VIII CLASS R, OD-7,MIL-W-27265	DIMENSIONS SHOWN ARE IN INCHES.
2. SEAR ONE END AS DESCRIBED IN PARAGRAPH 2-13.	RUBBER BAND, TYPE I OR II	TOLERANCE IS 1/8 INCH.
3. INSTALL QUICK FIT ADAPTER.	THREAD, NYLON, SIZE 3 TYPE I OR II, V-T-295	
4. FOLD AND SEW WEBBING AS SHOWN USING SIZE 3 THREAD 5 TO 8 STITCHES PER INCH AND A TYPE HD SEWING MACHINE.		
5. CUT OTHER END OF WEBBING TO LENGTH INDICATED AND SEAR END AS DESCRIBED IN PARAGRAPH 2-13.		

Figure E-2. (Accessory Set, SCUBA) Strap, Support



	PROCEDURE	MATERIALS	NOTE
1.	CUT 8'4" LENGTH OF WEBBING MATERIAL.	WEBBING, NYLON, TYPE VIII CLASS R, OD-7,MIL-W-27265	DIMENSIONS SHOWN IN INCHES.
2.	SEAR ENDS AS DESCRIBED IN PARAGRAPH 2-13.	THREAD, SIZE 6, OD V-T-295	TOLERANCE IS 1/8 INCH.
3.	FOLD AS SHOWN AND SEW USING SIZE 6 THREAD, 5 TO 8 STITCHES PER INCH AND A TYPE HD SEWING MACHINE.		

Figure E-3. (Accessory Set SCUBA) Harness, Backstrap

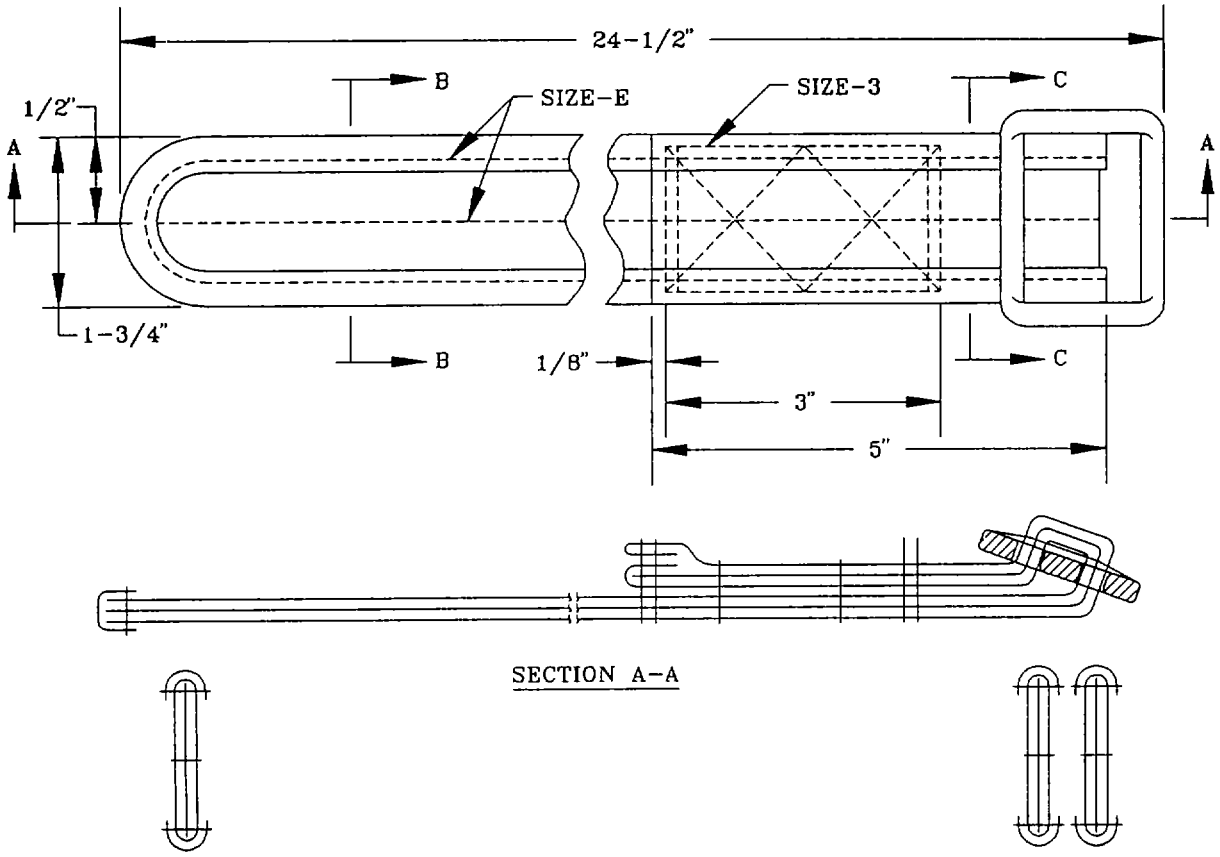
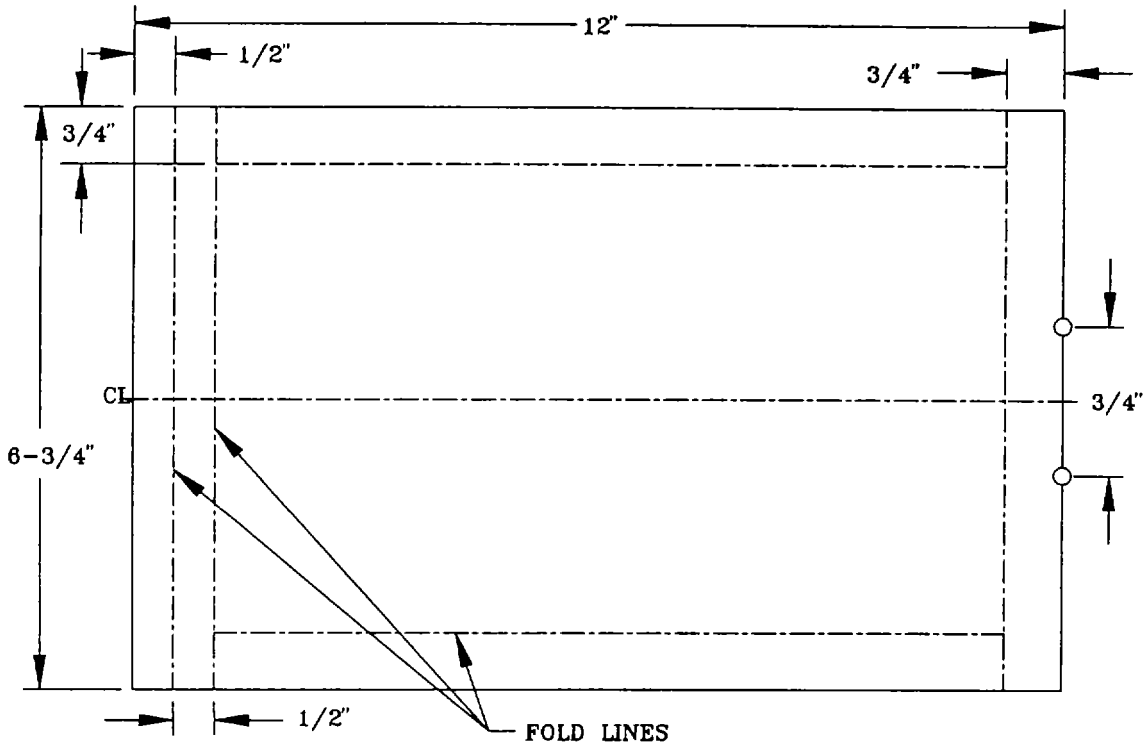


Figure E-4. (Accessory Set SCUBA) Strap, Waistband Extension

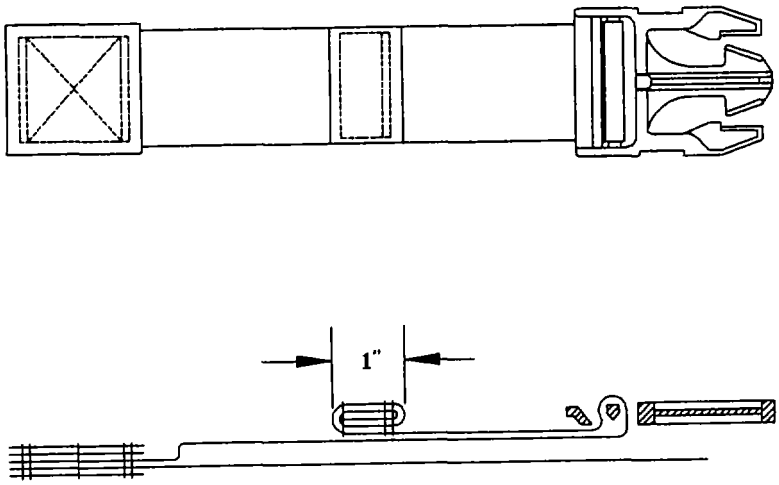
Strap, Waistband Extension

	PROCEDURE	MATERIALS	NOTE
1.	CUT A 29 1/2" LENGTH OF WEBBING AND SEAR ENDS AS	WEBBING, NYLON, OD MIL-W-27265	DIMENSION SHOWN ARE IN INCHES.
2.	CUT TWO 30" LENGTHS OF 1 3/4" WIDE NYLON CLOTH.	CLOTH, NYLON DUCK, TYPE III MIL-C-7219	TOLERANCE IS 1/8 INCH.
3.	SANDWICH WEBBING BETWEEN NYLON CLOTH STRIPS AND SEW ALONG CENTER AS SHOWN USING SIZE E THREAD, 7 9 STITCHES PER INCH AND A TYPE HD SEWING MACHINE.	THREAD, NYLON, SIZE 3 V-T-295 TO TAPE, BINDING, NYLON TYPE III, 3/4" WIDE MIL-T-5038	
4.	CUT ROUNDED END ON OTHER END OF ASSEMBLY AS SHOWN.	THREAD, NYLON, SIZE E V-T-295	
5.	TURN BINDING UNDER 1/2" AND SEW TO ASSEMBLY USING METHOD IN 3 ABOVE.		
6.	INSTALL ADAPTER ON STRAP.		
7.	FOLD STRAP AS SHOWN AND APPLY BOX X STITCH USING SIZE 3 THREAD, 4 TO 6 STITCHES PER INCH AND A TYPE HD SEWING MACHINE.		



PROCEDURE	MATERIALS	NOTE
1. CUT CLOTH TO DIMENSIONS SHOWN.	CLOTH, DUCK, COTTON, TYPE X	DIMENSIONS SHOWN ARE IN INCHES.
2. FOLD CLOTH ALONG FOLD LINES INTO POCKET SHOWN.	THREAD, NYLON, SIZE E	TOLERANCE IS 1/8 INCH.
3. SEW LENGTHWISE FOLDS AS SHOWN.		
4. PLACE POCKET ONTO PACK AND SEW AS SHOWN IN VIEW D. USE 7 TO 9 STITCHES PER INCH AND A TYPE HD SEWING MACHINE.		

Figure E-5. (Jump Pack, Dragon Missile) Pocket Assembly, Lowering



	PROCEDURE	MATERIALS	NOTE
1.	CUT 62" LENGTH OF WEBBING AND SEAR ENDS.	WEBBING, NYLON, TYPE VIII.	DIMENSIONS SHOWN ARE IN INCHES.
2.	THREAD ON END OF WEBBING THROUGH SIDE RELEASE BUCKLE AND FOLD END FOUR TIMES. SEW WITH SIZE 3 THREAD, 6 TO 8 STITCHES PER INCH AND TYPE HD MACHINE.	THREAD, NYLON, SIZE 3	TOLERANCE IS 1/8

Figure E-6. (Harness, Single Point Release) Leg Strap, Adjustable

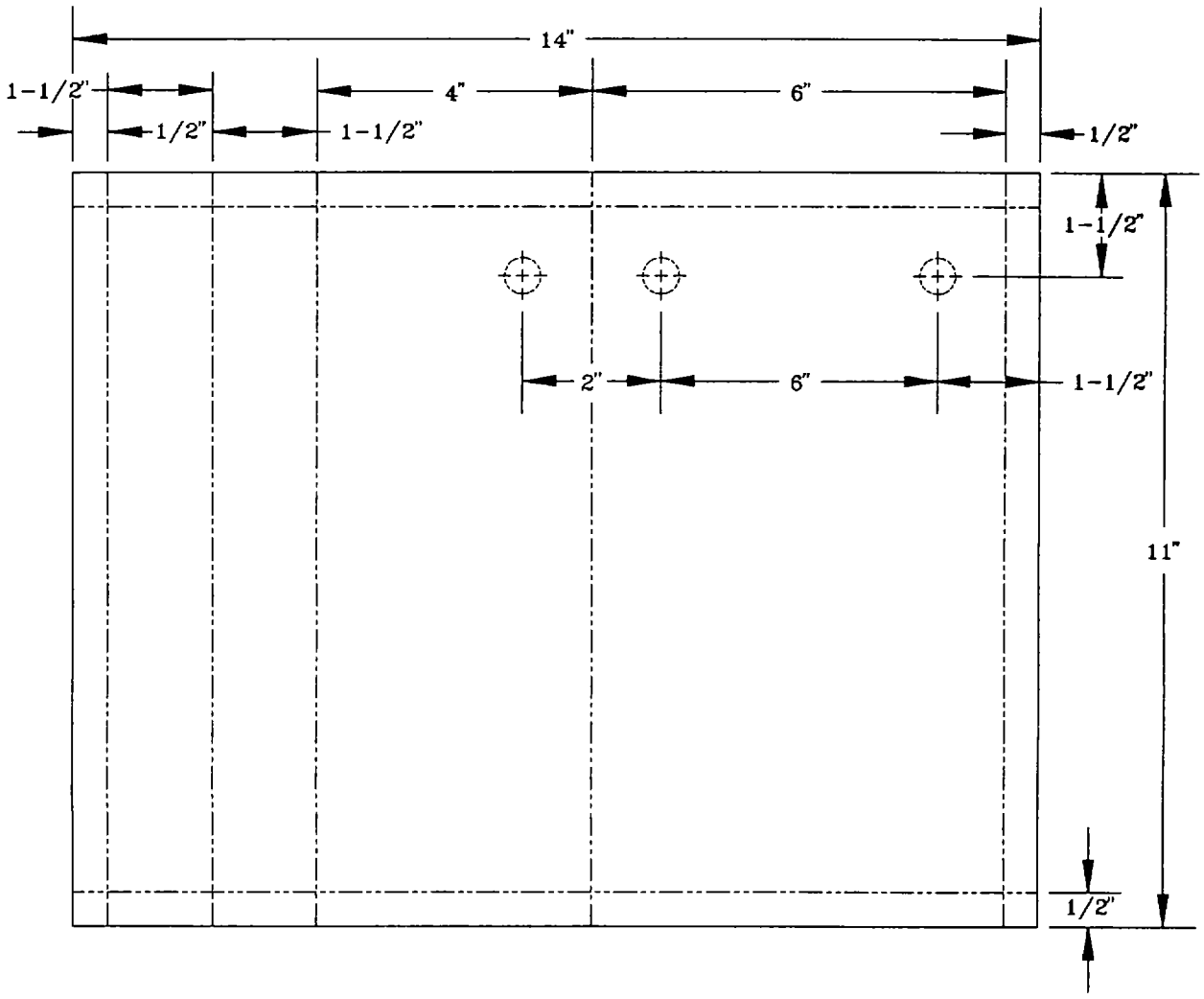
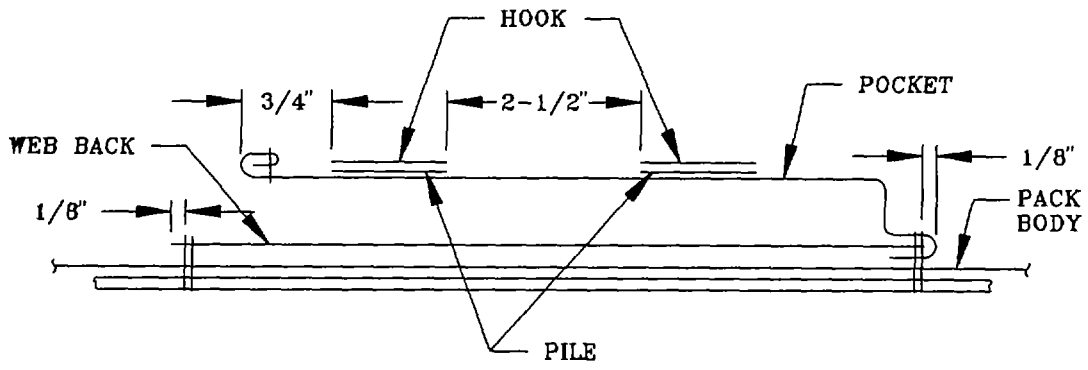


Figure E-7. (AT4 Pack) Pocket Assembly Lowering (Sheet 1 of 2)

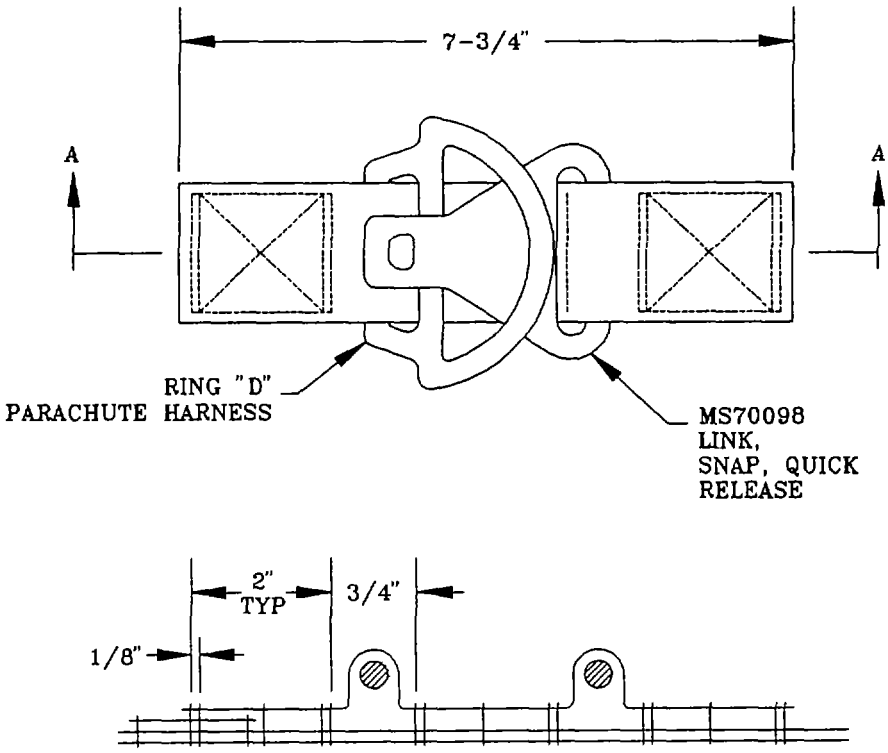


	PROCEDURE	MATERIALS	NOTE
1.	CUT CLOTH TO DIMENSIONS SHOWN IN VIEW A.	CLOTH, DUCK, NYLON, TYPE X	DIMENSION SHOWN ARE IN INCHES.

Figure E-7. (AT4 Pack) Pocket Assembly Lowering (Sheet 2 of 2)

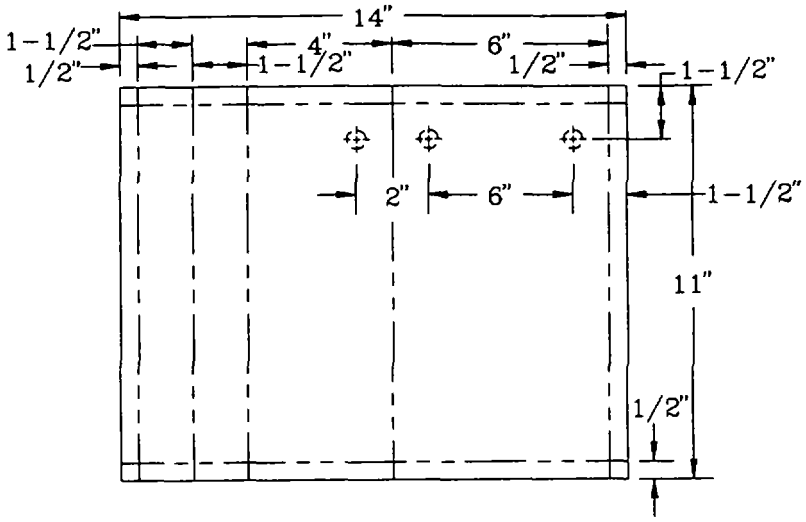
(AT4 Pack) Pocket Assembly Lowering - Continued

	PROCEDURE	MATERIALS	NOTE
2.	DOUBLE FOLD TOP EDGE OF POCKET 1/2". STITCH WITH SIZE FF THREAD, 5 TO 8 STITCHES PER INCH AND TYPE MD SEWING MACHINE.	THREAD, NYLON, SIZE FF INCH. THREAD, NYLON, SIZE 3 TAPE, FASTENER, PILE 2" WIDE	TOLERANCE IS 1/8
3.	ALIGN CORNERS (1) AND (2) AND SEW SIDES 1/2" FROM EDGE. SEW CORNERS (3) AND (4) IN SAME MANNER. OVER-EDGE THE RAW SIDE EDGES.	TAPE, FASTENER, HOOK 2" WIDE	
4.	REPLACE HOOK AND PILE TAPE AS SHOWN IN VIEW B. SEW AS IN 2. ABOVE.		
5.	CUT AN 11" LENGTH OF NYLON WEBBING AND SEAR ENDS.		
6.	TURN UNDER RAW EDGE OF POCKET 1/2" AND POSITION ON WEBBING BACK 1" FROM EDGE LOCATING TOP AND BOTTOM HOOK AND PILE RE-TAINERS 1 AND 4 " FROM THE TOP OF POCKET. STICH POCKET SIDES AND BOTTOM TO RE-INFORCEMENT WEBBING 3/16" FROM EDGE. SEW AS IN 2. ABOVE .		
7.	PLACE POCKET ON PACK AND STITCH TO PACK 1/8" FROM POCKET EDGE WITH SIZE 3 THREAD, 5 TO 8 STITCHES PER INCH AND TYPE HD SEWING MACHINE.		



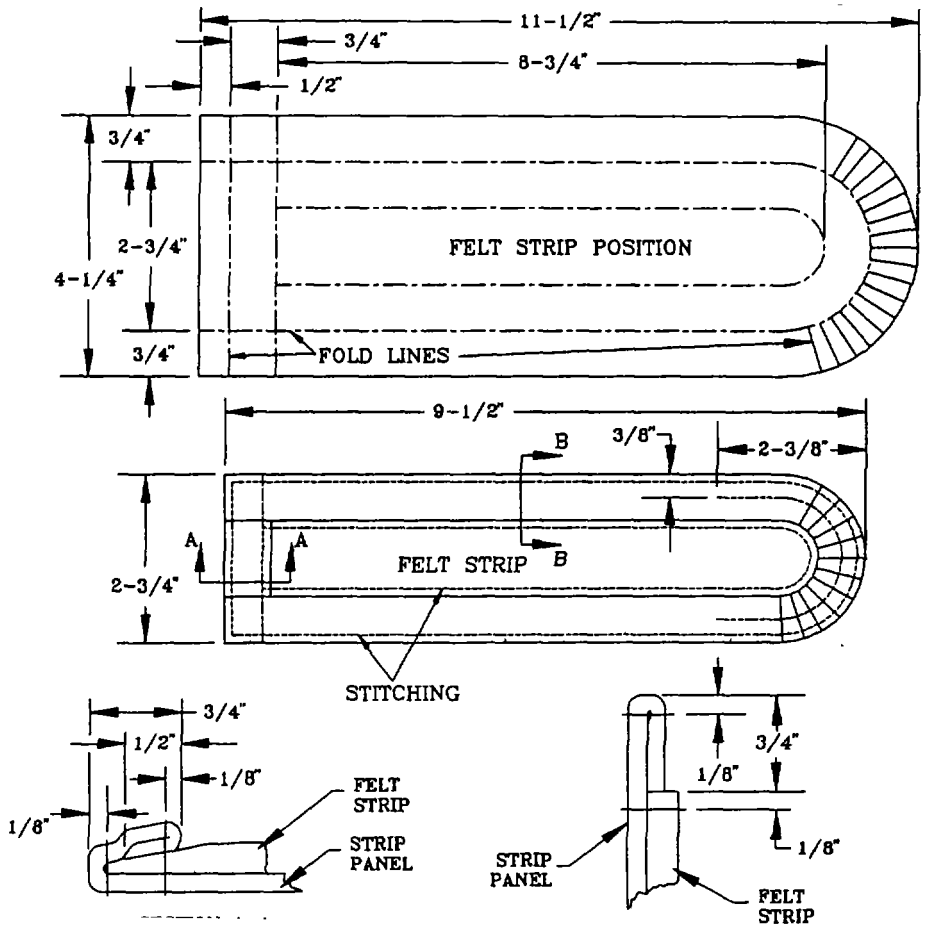
PROCEDURE	MATERIALS	NOTE
1. CUT WEBBING TO LENGTH SHOWN AND SEAR ENDS.	WEBBING, NYLON, TYPE TYPE VIII	DIMENSION SHOWN ARE IN INCHES.
2. MARK WEBBING 2 1/8" FROM EACH END.	THREAD, NYLON, SIZE 3 INCH	TOLERANCE IS 1/8
3. POSITION CHAPE ON PACK AND SEW USING SIZE 3 THREAD, 5 TO 8 STITCHES PER INCH AND TYPE HD SEWING MACHINE.		

Figure E-8. (AT4 Pack) Forward End Cross Strap



PROCEDURE	MATERIALS	NOTE
1. CUT A 14" BY 11" LENGTH OF CLOTH. OF THE 14" SIDES RUNS ALONG THE SELVAGED EDGE OF THE MATERIAL.	CLOTH, DUCK, COTTON, ENSURE THAT ONE TYPE I, 36" WIDE THREAD, NYLON, SIZE FF	DIMENSION SHOWN ARE IN INCHES. TOLERANCE IS 1/8 INCH.
2. MARK FOLD LINES, AND POSITIONS OF SNAP FASTENERS ON MATERIAL AS SHOWN.		
3. TURN UNDER SELVAGED EDGE 1/2" AND SEW ALONG MATERIAL 1/4" FROM EDGE. USE SIZE FF THREAD, 7 TO 9 STICHES PER INCH AND TYPE MD SEWING MACHINE.		
4. FOLD CLOTH ALONG FOLD LINES, PLACING SELVAGE ON INSIDE. SEW MATERIAL ALONG FOLD LINE 1/8" FROM FOLD. INSTALL SNAP FASTENERS AS DESCRIBED IN TM 10-1670-201 -23.		

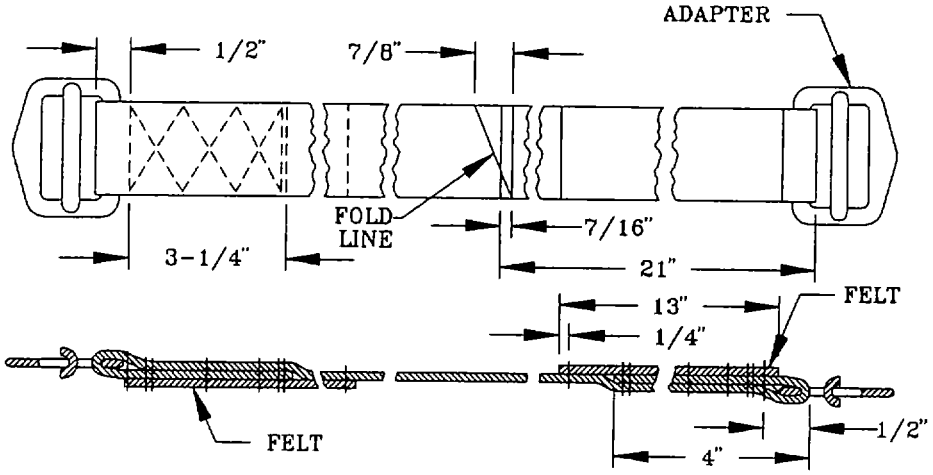
Figure E-9. (Individual Weapons Case, M-1950) Pocket Assembly, Lowering



SECTION A-A SECTION B-B

PROCEDURE	MATERIALS	NOTE
1. CUT A 4 1/4" BY 11 1/2"CLOTH, LENGTH OF CLOTH, AND A 1 1/4 BY 8 3/4" PIECE OF 1/4" FELT. ROUND ONE END OF DUCK AND FELT AS SHOWN.	DUCK, COTTON, TYPE I, 36" WIDE	DIMENSION SHOWN ARE IN INCHES.
	THREAD,NYLON, SIZE 3	TOLERANCE IS 1/8 INCH.
	FELT, 1/4" THICK	
2. POSITION FELT ON DUCK AND SEW AS SHOWN USING SIZE FF THREAD 7 TO 9 STITCHES PER INCH AND TYPE VHD SEWING MACHINE.	THREAD, NYLON,	SIZE FF

Figure E-10. (Individual Weapons Case) M-1950, Strip Panel



PROCEDURE	MATERIALS	NOTE
1. CUT A 50" LENGTH OF WEBBING AND SEAR ENDS.	WEBBING, NYLON, TYPE VIII	DIMENSION SHOWN ARE IN INCHES.
2. INSTALL ADAPTERS AT BOTH ENDS OF WEBBING IN OPPOSITE DIRECTION AND FOLDS ENDS OVER 4".	FELT, 1/4" CLASS 12R2 GREY. THREAD, NYLON, SIZE FF	TOLERANCE IS 1/8 INCH.
3. SEW TRIPLE X BOX STITCH AT EACH END OF WEBBING, USING SIZE FF THREAD, 7 TO 9 STITCHES PER INCH, AND A TYPE MD MACHINE.		
4. CUT TWO 1 3/4" X 13" LENGTHS OF 1/4' FELT AND POSITION AT EACH END OF STRAP OVER 4" FOLD, AND SEW TO STRAP 1/4" FROM THE EDGE, AS IN 3. ABOVE.		

Figure E-11. (Equipment Pack and Harness Assembly) Upper Suspension Strap

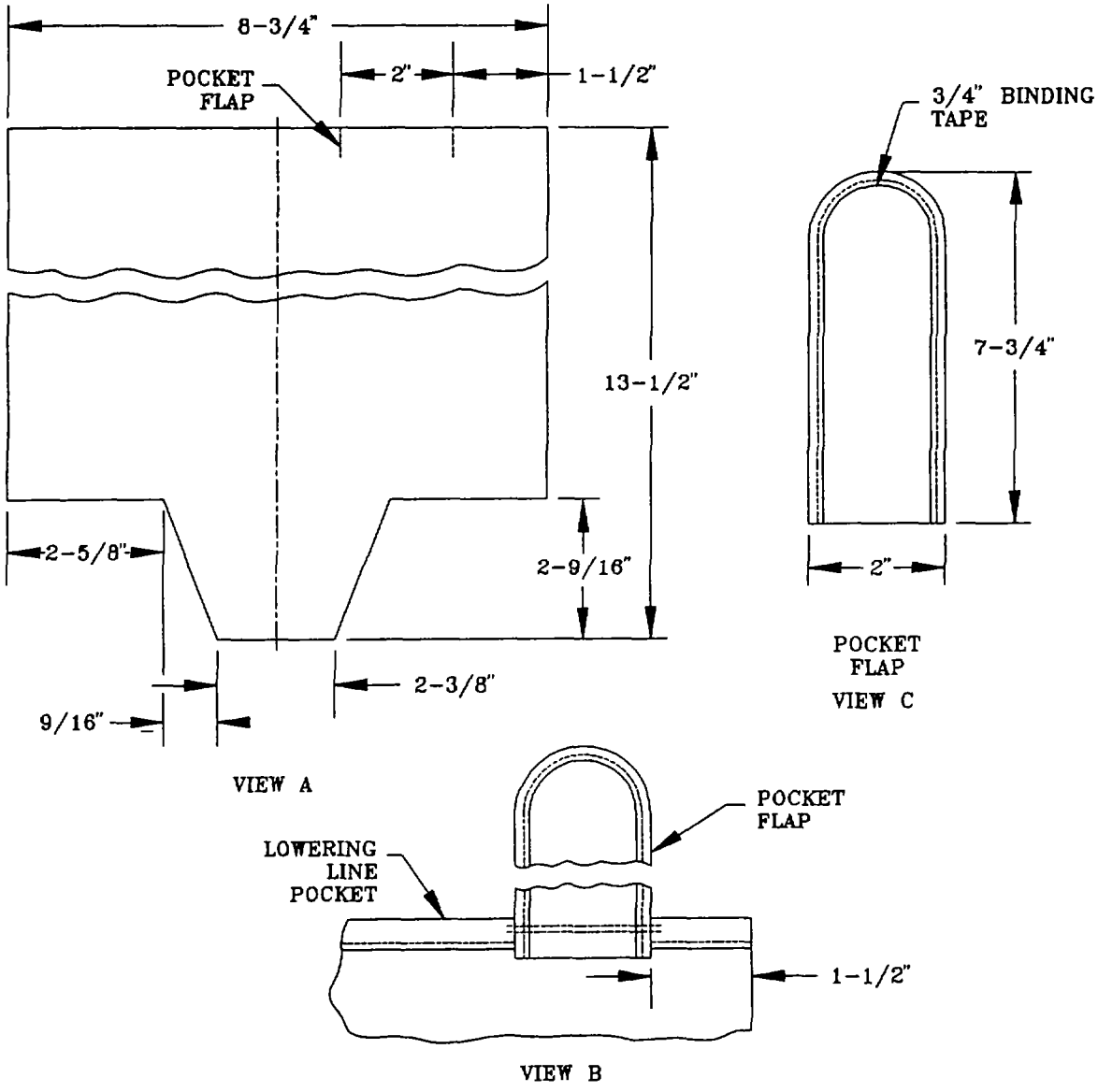
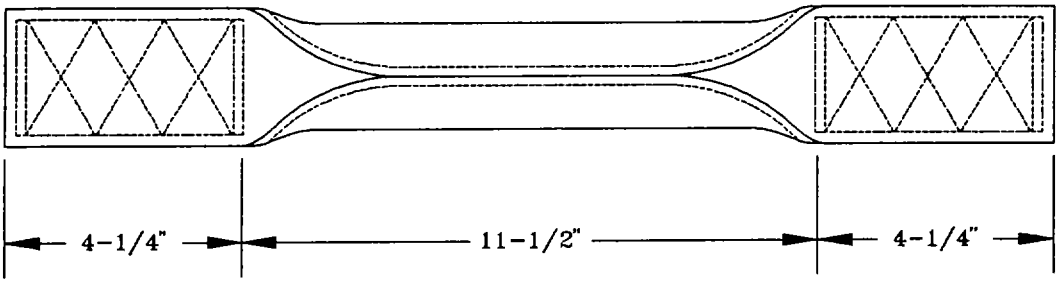


Figure E-12. (Equipment Pack and Harness Assembly) Pocket Assembly, Lowering

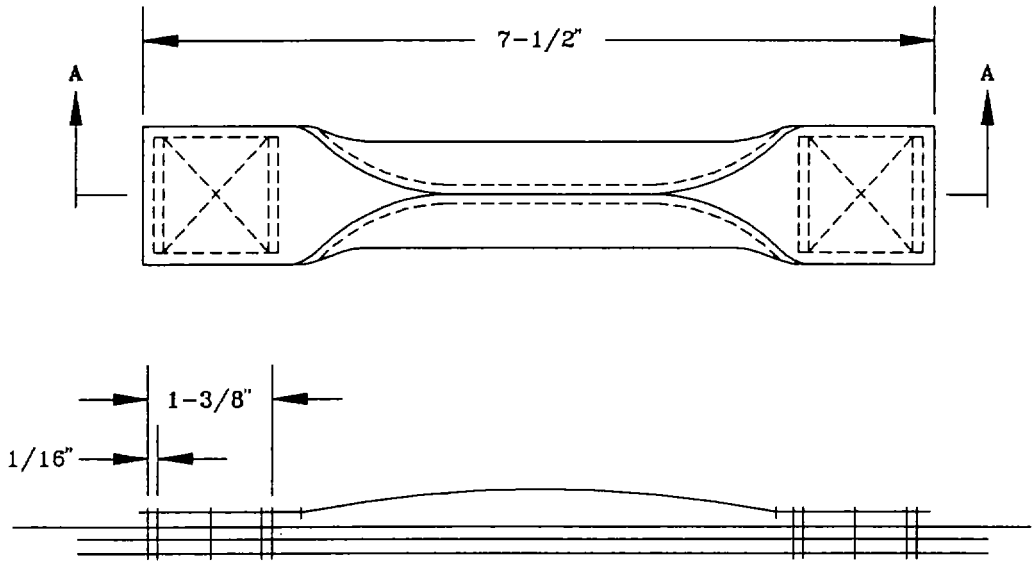
(Equipment Pack and Harness Assembly) Pocket Assembly, Lowering

PROCEDURE	MATERIALS	NOTE
1. CUT A PIECE OF CLOTH TO THE DIMENSIONS SHOWN IN VIEW A.	CLOTH, DUCK, COTTON, TYPE I	DIMENSION SHOWN ARE IN INCHES.
2. ALIGN CORNER (1) WITH CORNER (2) AND SEW THE ALIGNED SIDES TOGETHER 1/2 INCH FROM EDGE. SIZE 3 THREAD, 5 TO 8 STITCHES PER INCH AND A TYPE HD SEWING MACHINE.	THREAD, NYLON, SIZE 3	TOLERANCE IS 1/8
	TAPE, TEXTILE, COTTON USE TYPE I, 1" WIDE	
3. SEW CORNER (3) TO CORNER		
4. TURN POCKET RIGHT SIDE OUT, AND POSITION FLAP SO THAT RIGHT EDGE OF FLAP IS 1 1/2" FROM RIGHT POCKET EDGE, AND BOTTOM FLAP 3/4" BELOW SELVAGED EDGE.		
5. TURN BACK SELVAGED EDGE OF POCKET 3/4" AND SEW AS SHOWN IN VIEW B AS IN 2. ABOVE. THEN FOLD FLAP BACK AND SEW TWO ROWS OF STITCHING ACROSS IT USING SIZE FF THREAD, 7 TO 9 STITCHES PER INCH AND A TYPE MD SEWING MACHINE.		
6. FABRICATE POCKET FLAP FROM CLOTH AND COTTON TAPE AS SHOWN IN VIEW C. SEW AS IN 5. ABOVE.		



	PROCEDURE	MATERIALS	NOTE
1.	FABRICATE HANDLE AS SHOWN AND SEW USING SIZE FF THREAD, 7 TO 9 STITCHES PER INCH AND A TYPE MD SEWING MACHINE.	WEBBING, NYLON TYPE VIII THREAD, NYLON, SIZE FF	DIMENSION SHOWN ARE IN INCHES. TOLERANCE IS 1/8 INCH.

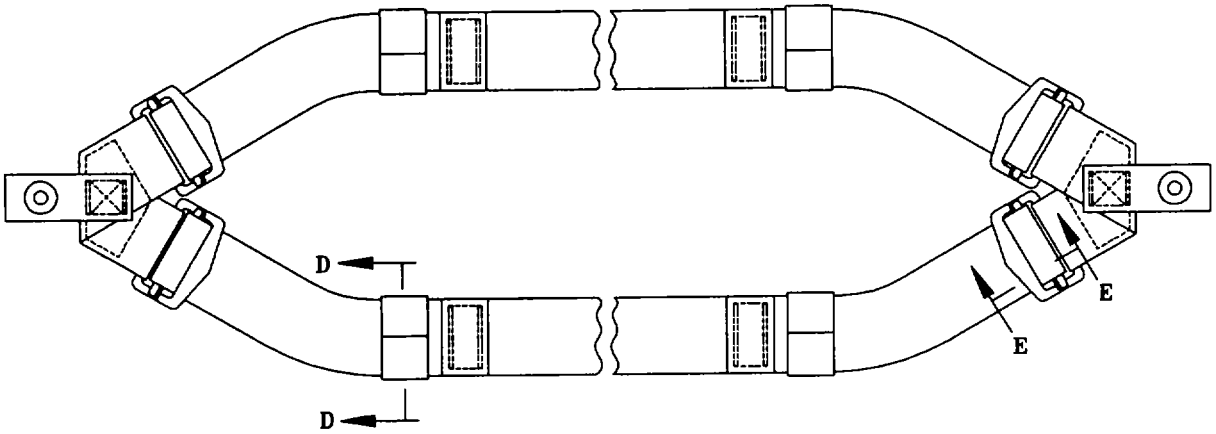
Figure E-13. (Equipment Pack and Harness Assembly) Handle

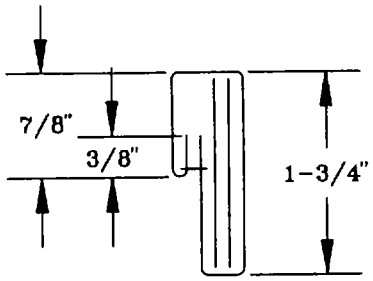


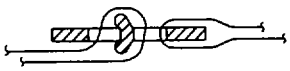
SECTION A-A

	PROCEDURE	MATERIALS	NOTE
1.	FABRICATE HANDLE AS SHOWN AND SEW USING SIZE 3 THREAD, 6 TO 8 STITCHES PER INCH AND A TYPE HD SEWING MACHINE.	WEBBING, NYLON TYPE VIII THREAD, NYLON, SIZE 3	DIMENSION SHOWN ARE IN INCHES. TOLERANCE IS 1/8 INCH.

Figure E-14. (Stinger Missile Pack) Handle





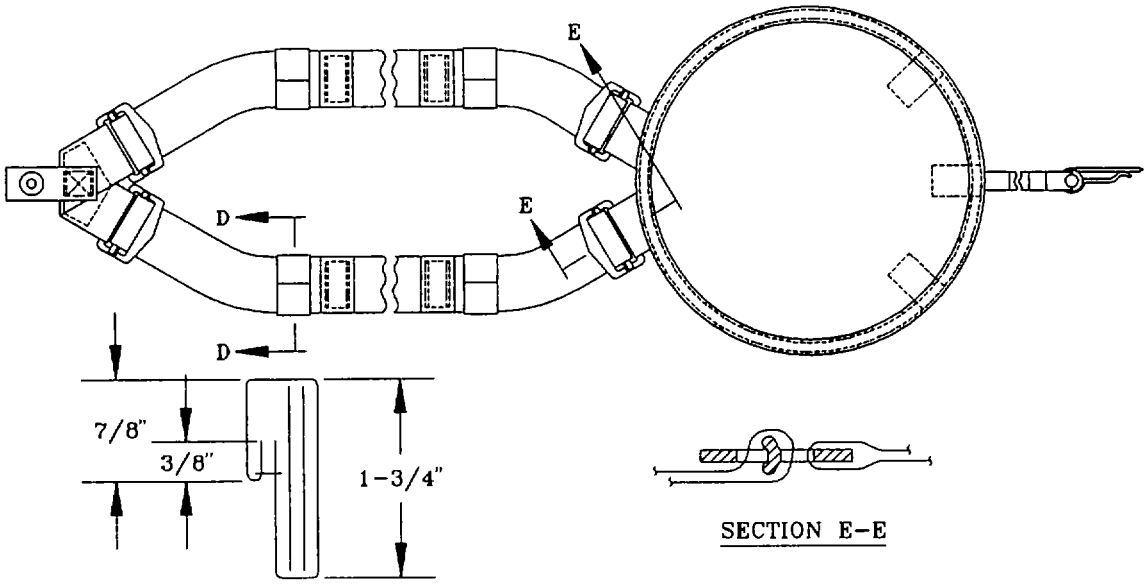


SECTION D-D

SECTION E-E

PROCEDURE	MATERIALS	NOTE
1. FABRICATE HORIZONTAL RESTRAINT ASSEMBLY AS SHOWN.	WEBBING, NYLON TYPE VIII	DIMENSION SHOWN ARE IN INCHES.
	THREAD, NYLON, SIZE 3.	TOLERANCE IS 1/8 INCH.

Figure E-15. (Container Front Mounted) Horizontal Restraint Assembly



SECTION D-D

PROCEDURE	MATERIALS	NOTE
1. FABRICATE VERTICAL RESTRAINT ASSEMBLY AS SHOWN	WEBBING, NYLON TYPE III.	DIMENSION SHOWN ARE IN INCHES.
	THREAD, NYLON, SIZE 3.	TOLERANCE IS 1/8 INCH.
	WEBBING, NYLON, TYPE VIII.	
	WEBBING, NYLON, TYPE III.	
	WEBBING, NYLON, TYPE I.	
	CORD, POLYESTER, CORDLESS.	
	TAPE, FASTENER, PILE	

Figure E-16. (Container Front Mounted) Vertical Restraint Assembly (Sheet 1 of 3)

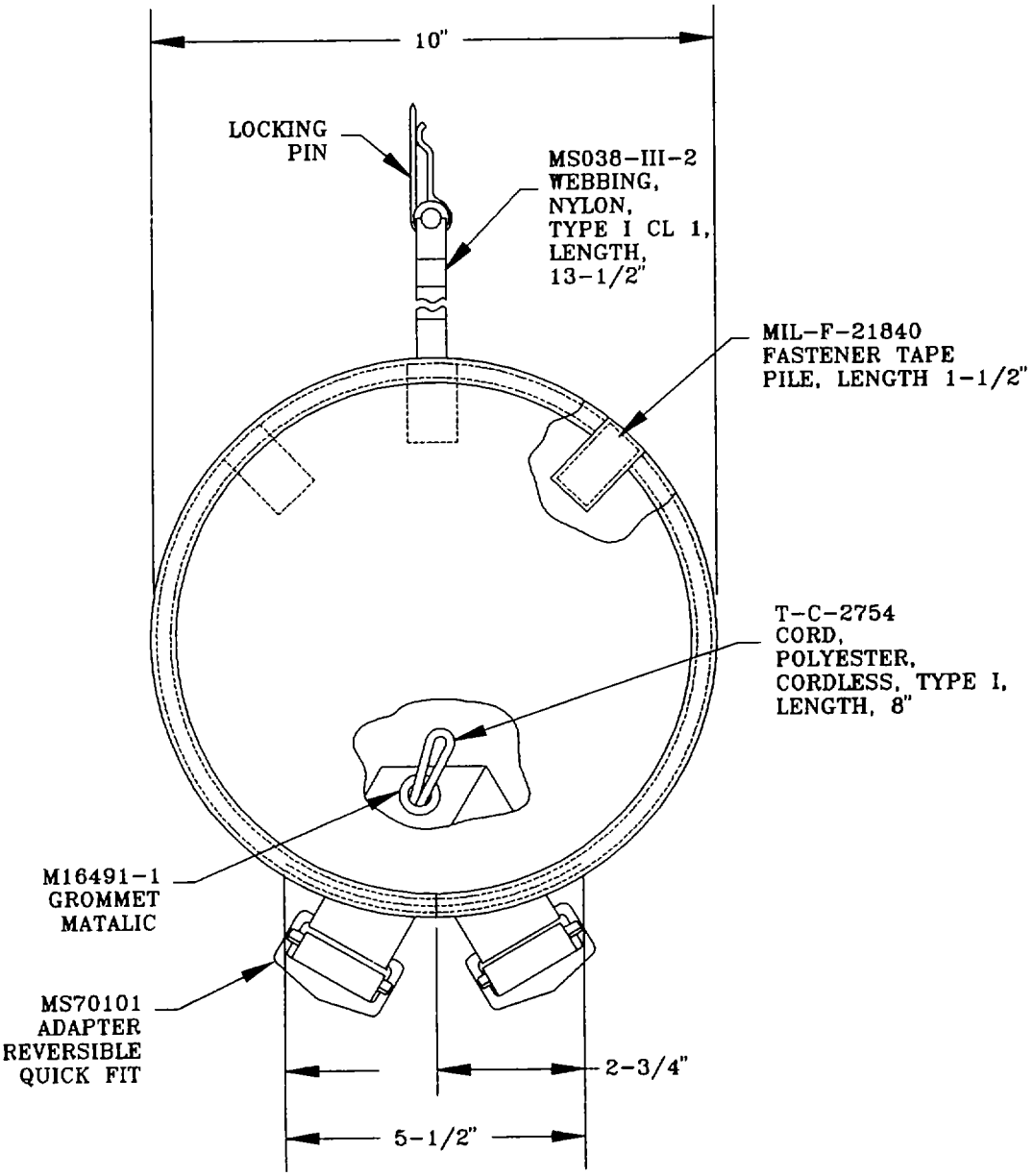


Figure E-16. (Container Front Mounted) Vertical Restraint Assembly (Sheet 2 of 3)

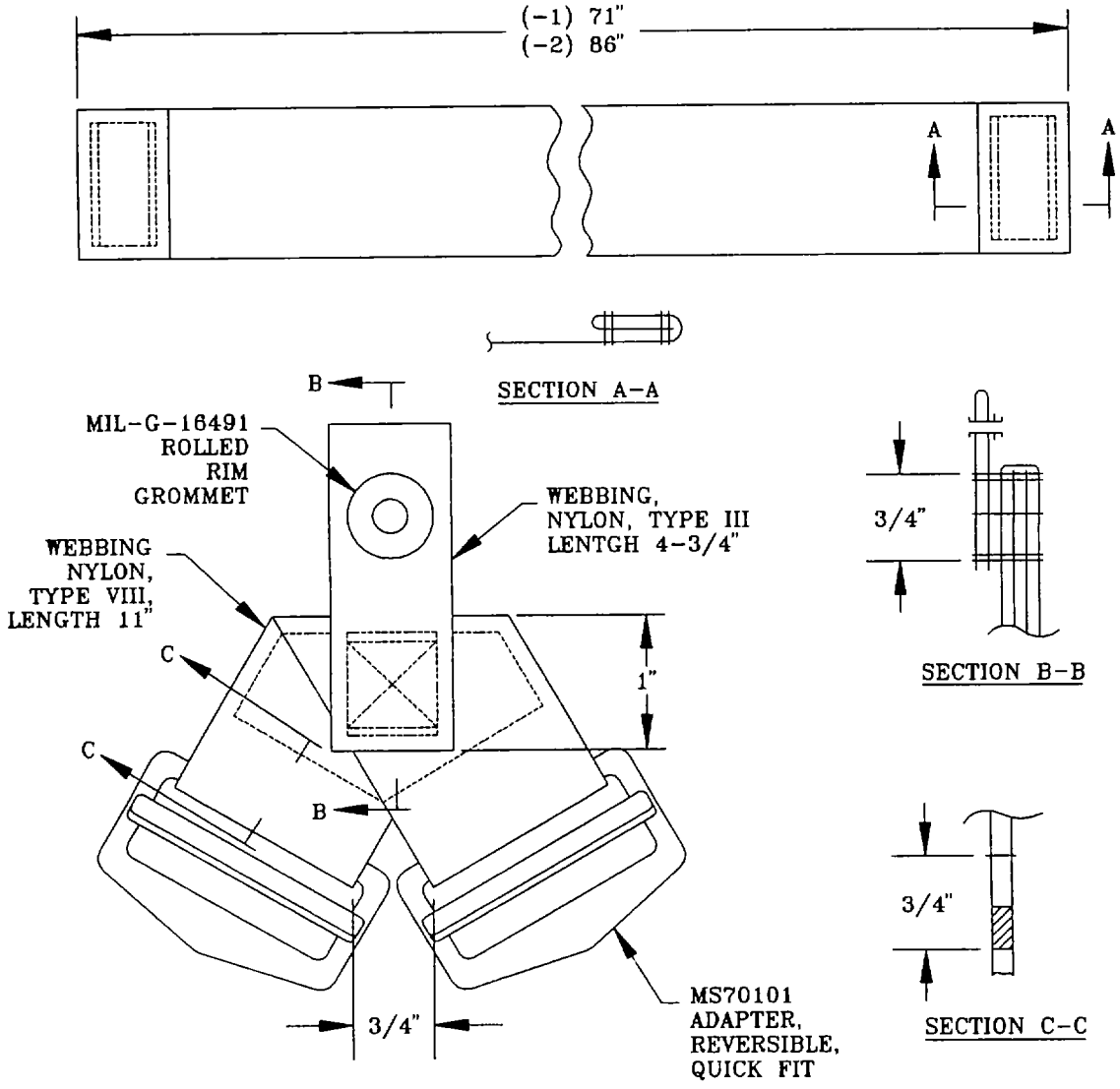
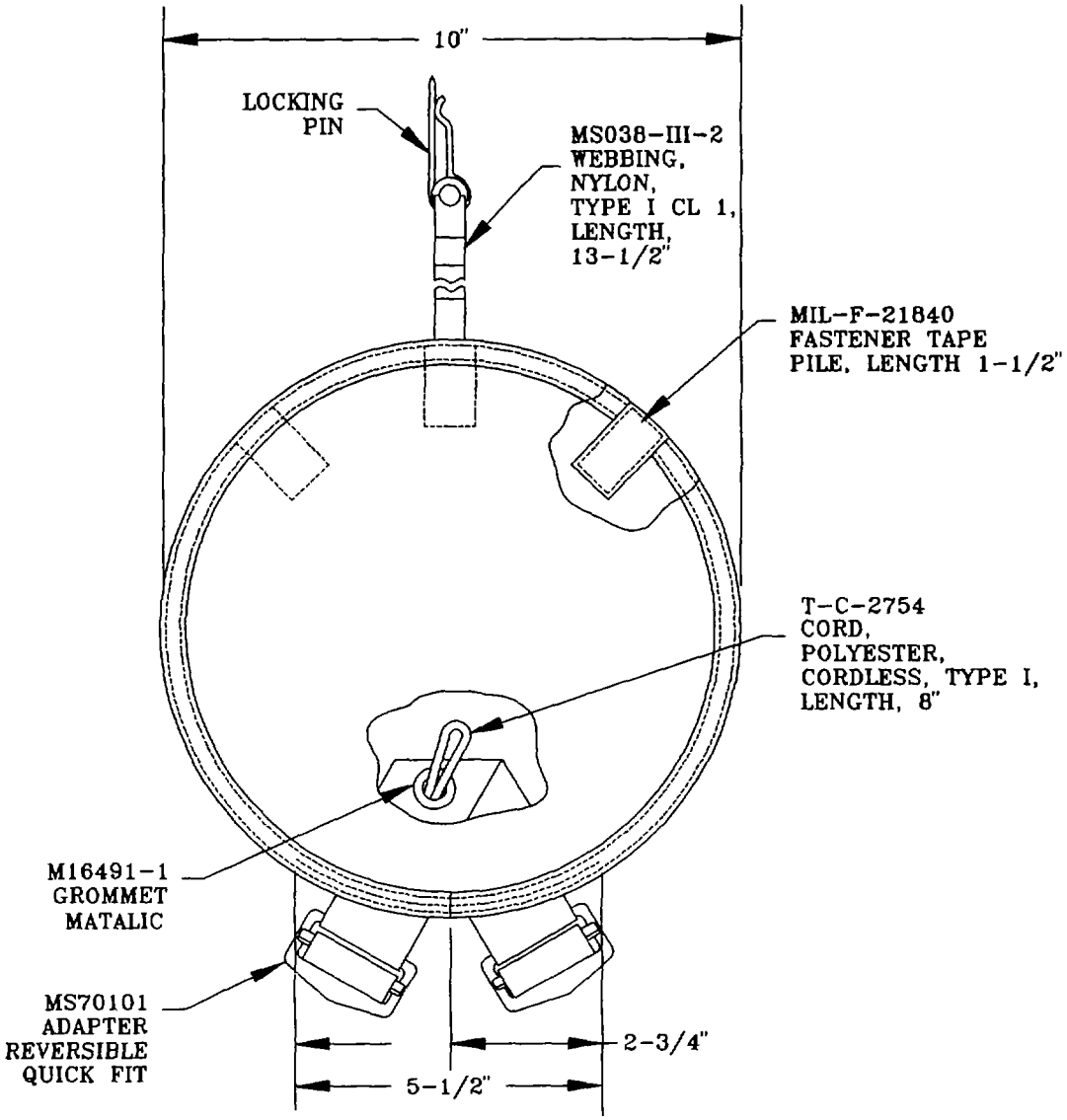
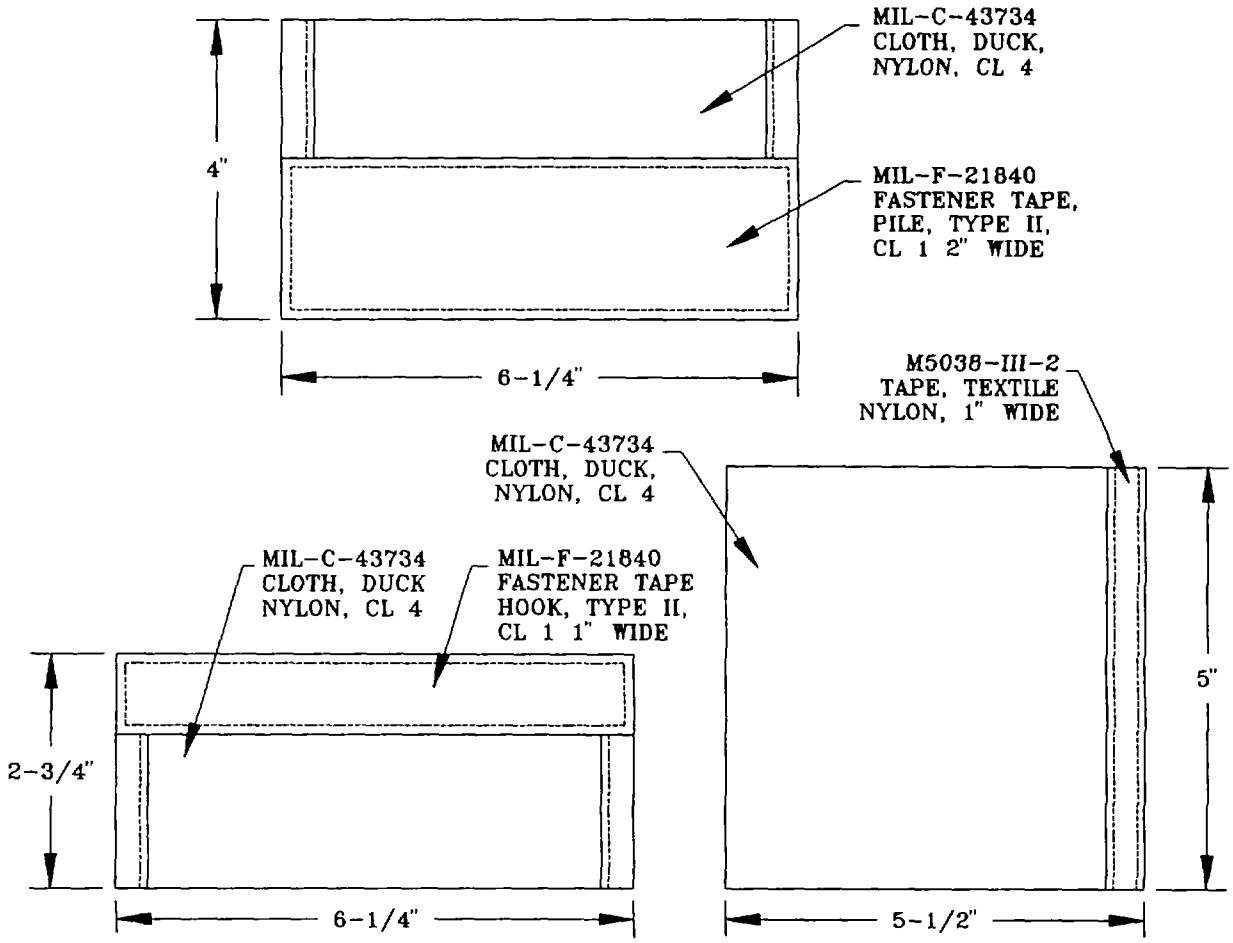


Figure E-16. (Container Front Mounted) Vertical Restraint Assembly (Sheet 3 of 3)



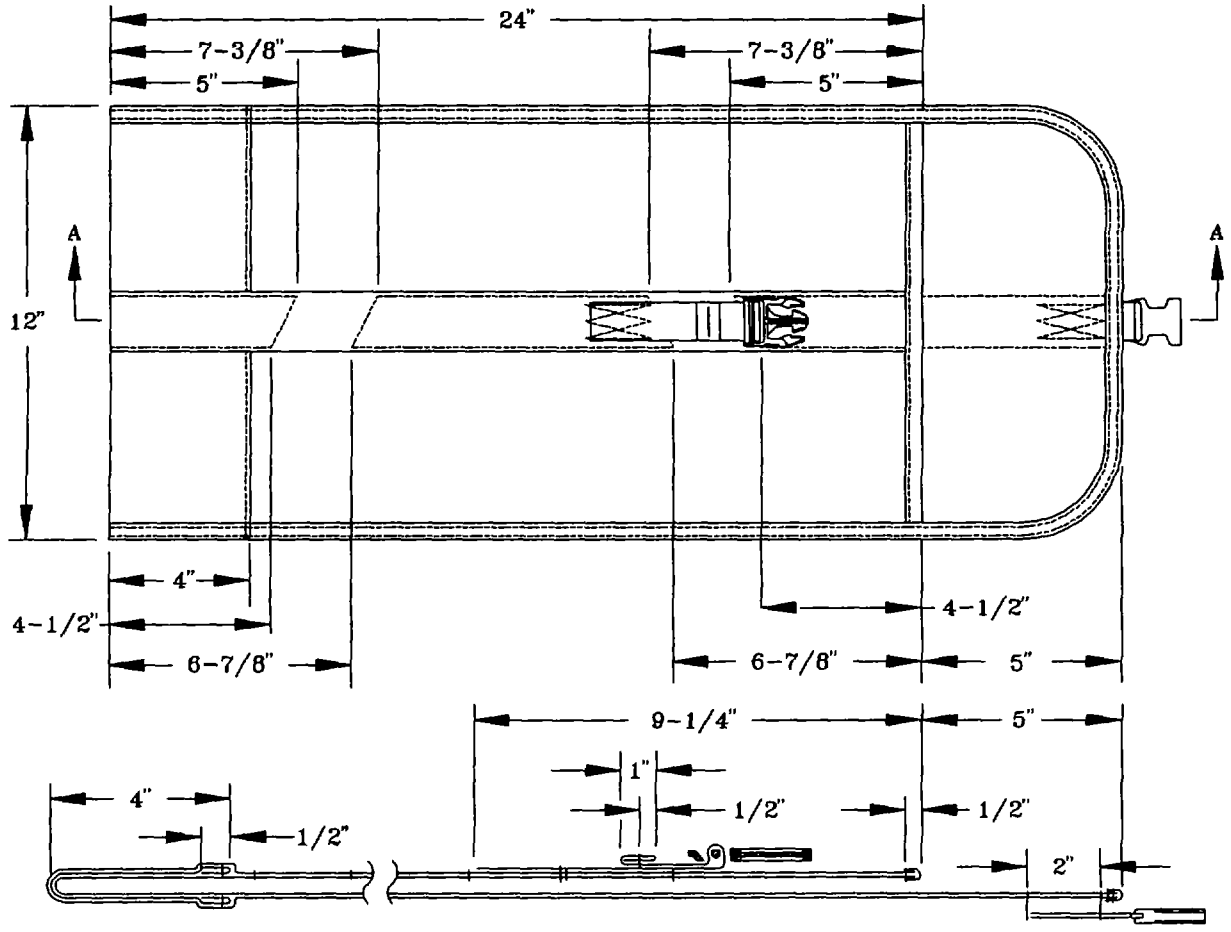
PROCEDURE	MATERIALS	NOTE
1. FABRICATE CLOSING FLAP ASSEMBLY AS SHOWN.	WEBBING, NYLON TYPE I.	DIMENSION SHOWN ARE IN INCHES.
	CORD, POLYESTER, CORDLESS, TYPE I.	TOLERANCE IS 1/8 INCH.
	TAPE, FASTENER, PILE	

Figure E-17. (Container Front Mounted) Closing Flap Assembly



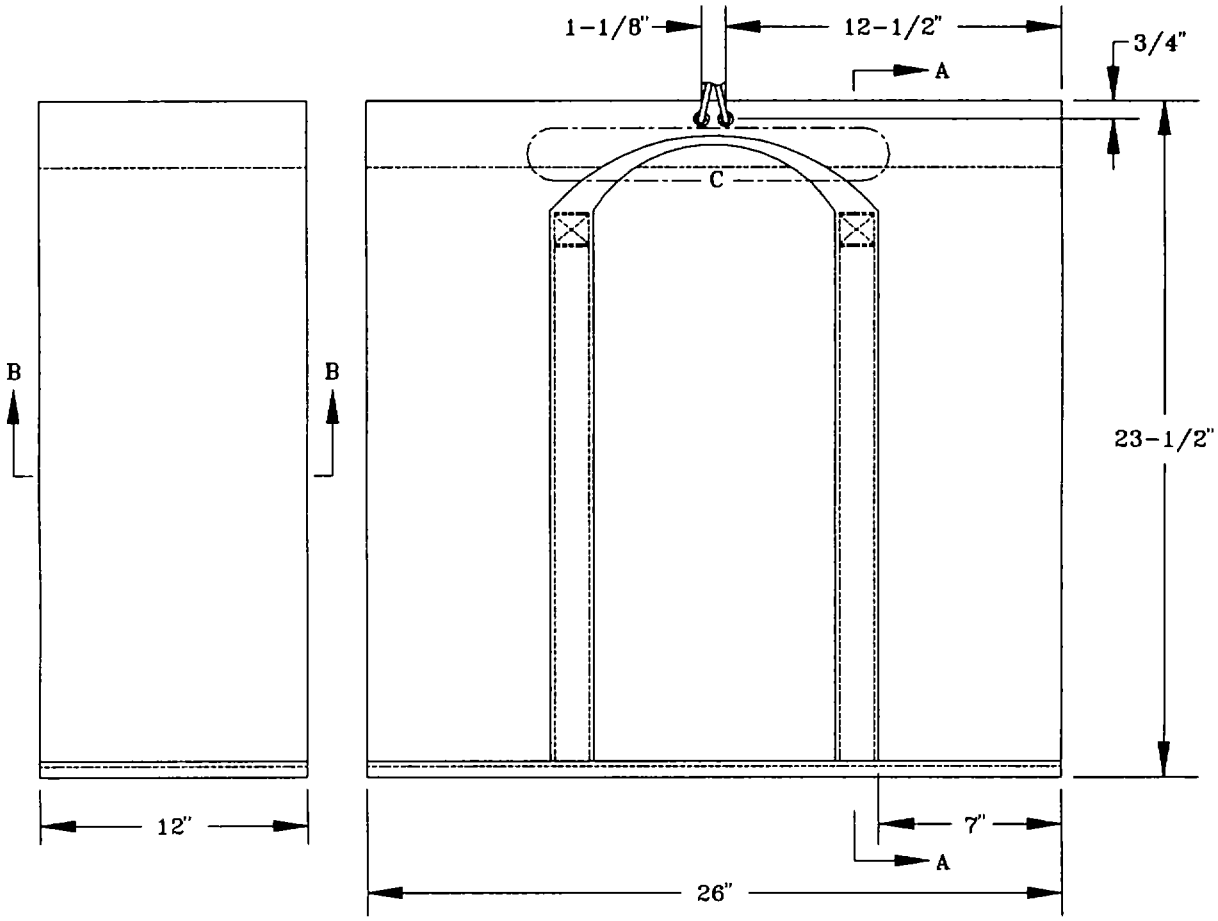
PROCEDURE	MATERIALS	NOTE
1. FABRICATE LOWERING LINE POCKET FLAPS AND LOOP AS SHOWN.	CLOTH, DUCK, NYLON CLASS 4. TAPE, FASTENER, PILE TYPE II, 2" WIDE. TAPE, TEXTILE, NYLON 1" WIDE. TAPE, FASTENER, HOOK TYPE II, 1" WIDE.	DIMENSION SHOWN ARE IN INCHES. TOLERANCE IS 1/4 INCH.

Figure E-18. (Container Front Mounted) Lowering Line Pocket, Flaps ang Loop



PROCEDURE	MATERIALS	NOTE
1. FABRICATE SIDE CONTAINER ASSEMBLY AS SHOWN. SHOWN.	CLOTH, DUCK, NYLON CLASS 4. TAPE, REINFORCING NYLON, 1" WIDE. WEBBING, NYLON TYPE VIII THREAD, NYLON, SIZE	DIMENSION SHOWN ARE IN INCHES. TOLERANCE IS 1/4 INCH.

Figure E-19. (Container Front Mounted) Side Container Assembly



PROCEDURE	MATERIALS	NOTE
1. FABRICATE BAG ASSEMBLY AS SHOWN. SHOWN.	CLOTH, DUCK, NYLON CLASS 4.	DIMENSION SHOWN ARE IN INCHES.
	TAPE, REINFORCING NYLON, 1" WIDE.	TOLERANCE IS 1/4 INCH.
	WEBBING, NYLON, TYPE VIII.	
	THREAD, NYLON, SIZE	

Figure E-20. (Container Front Mounted) Kit, Bag Assembly (Sheet 1 of 2)

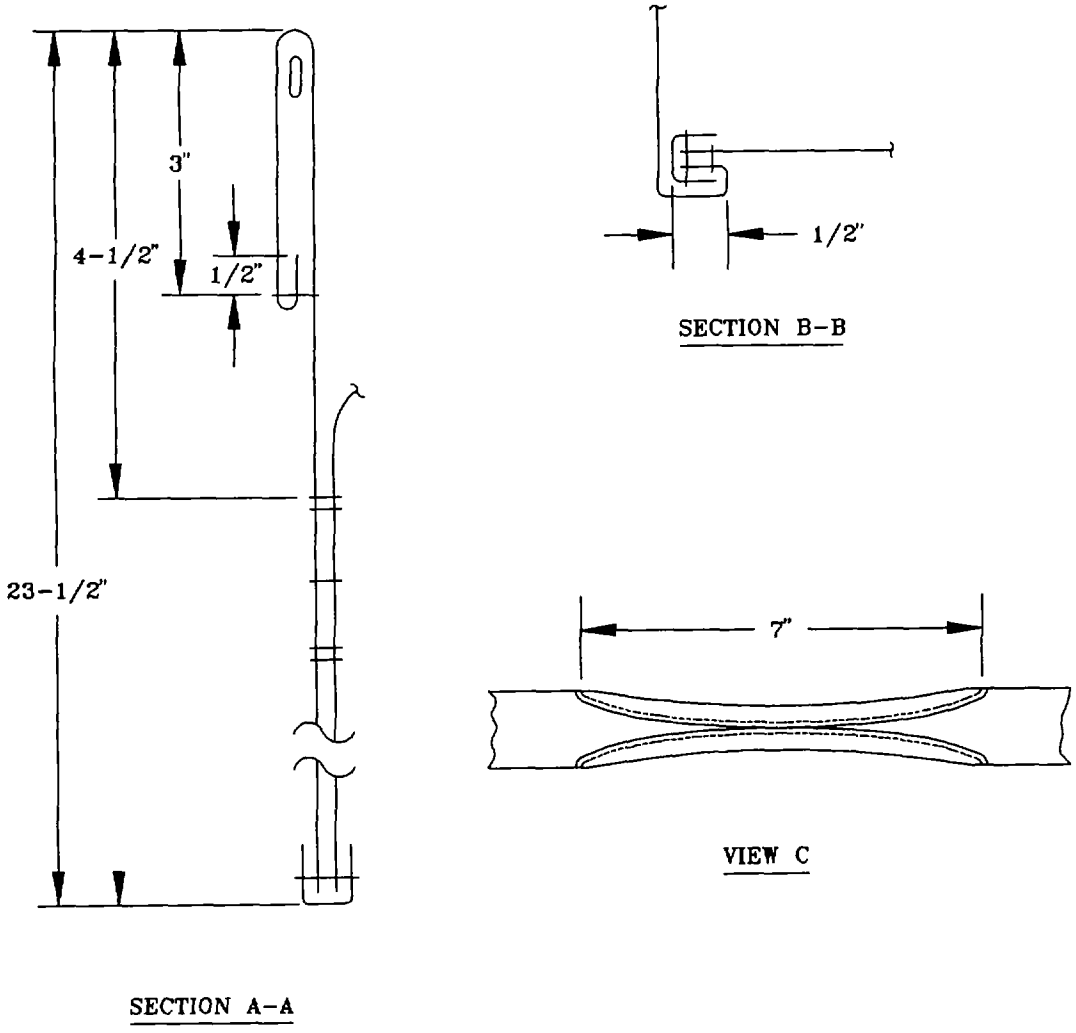
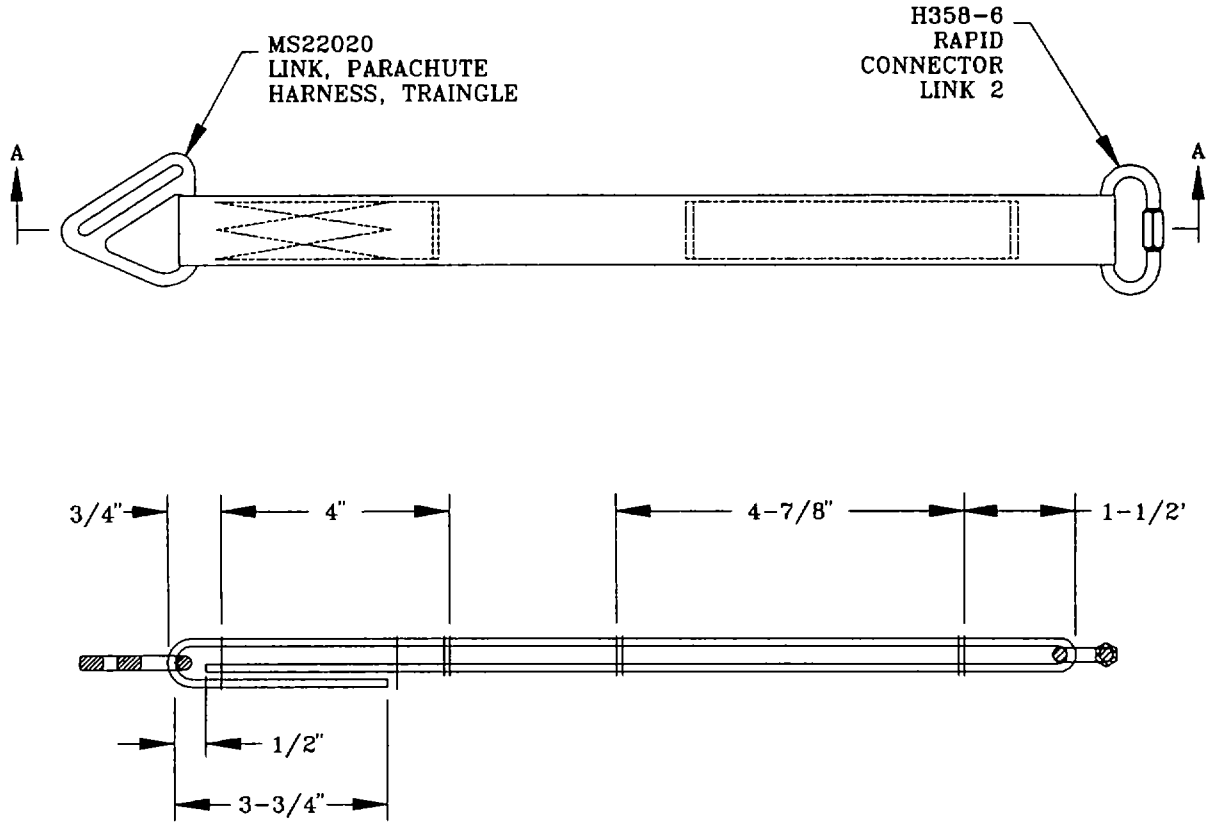


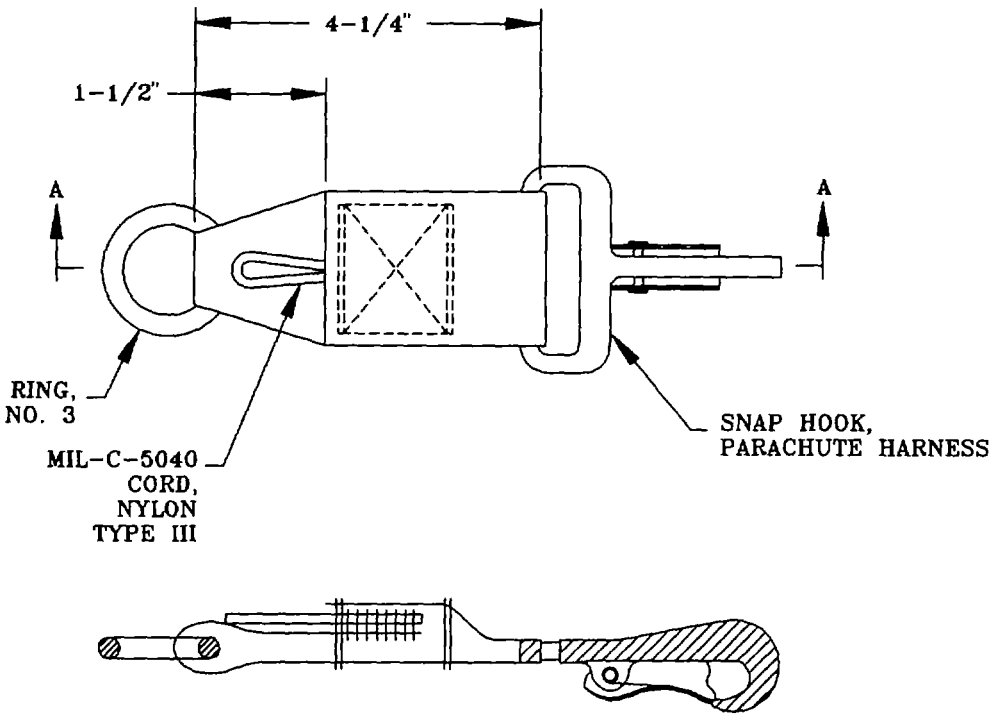
Figure E-20. (Container Front Mounted) Kit, Bag Assembly (Sheet 2 of 2)



SECTION A-A

PROCEDURE	MATERIALS	NOTE
1. FABRICATE BRIDLE ASSEMBLY AS SHOWN.	WEBBING, NYLON, TUBULAR 1" WIDE.	DIMENSION SHOWN ARE IN INCHES.
	THREAD, NYLON, SIZE	TOLERANCE IS 1/4 INCH.

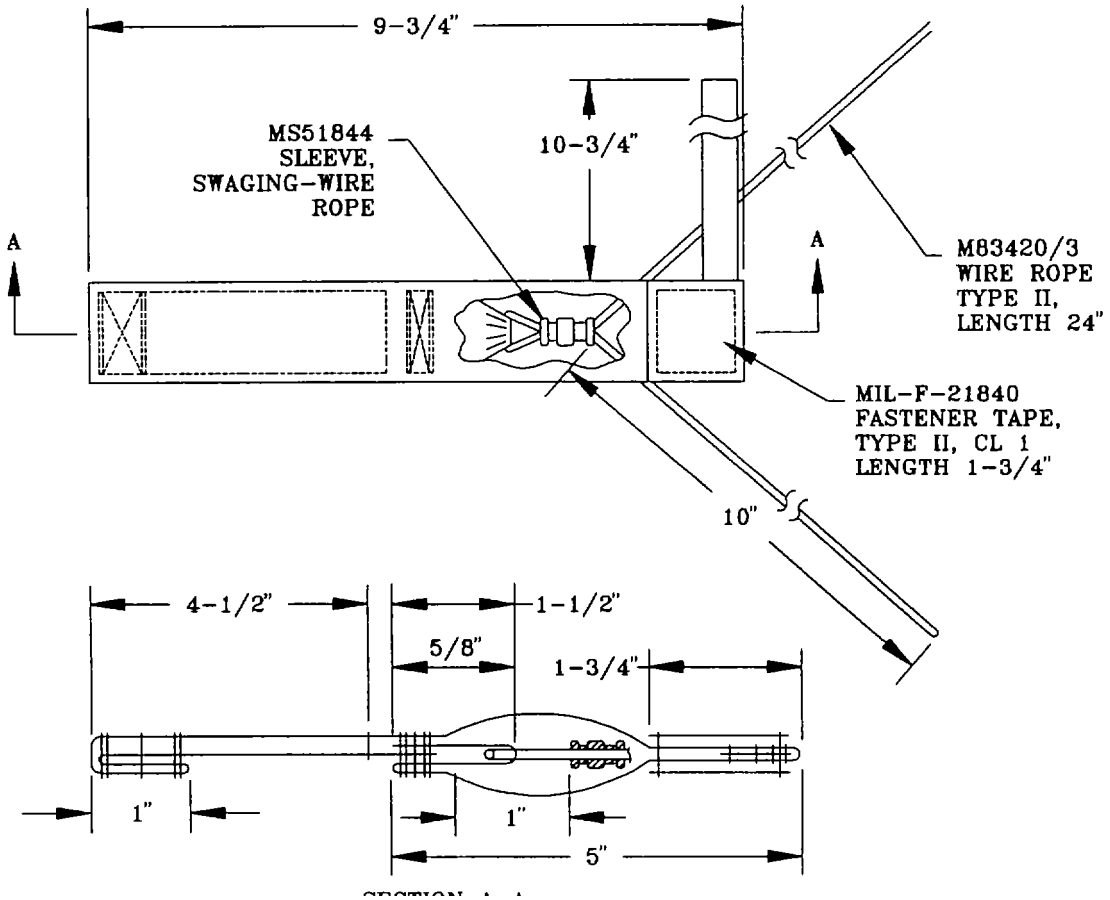
Figure E-21. (Container Front Mounted) Bridle Assembly



SECTION A-A

PROCEDURE	MATERIALS	NOTE
1. FABRICATE ATTACHING STRAP AS SHOWN.	WEBBING, NYLON, TYPE VII.	DIMENSION SHOWN ARE IN INCHES.
	THREAD, NYLON, SIZE	TOLERANCE IS 1/4 INCH.

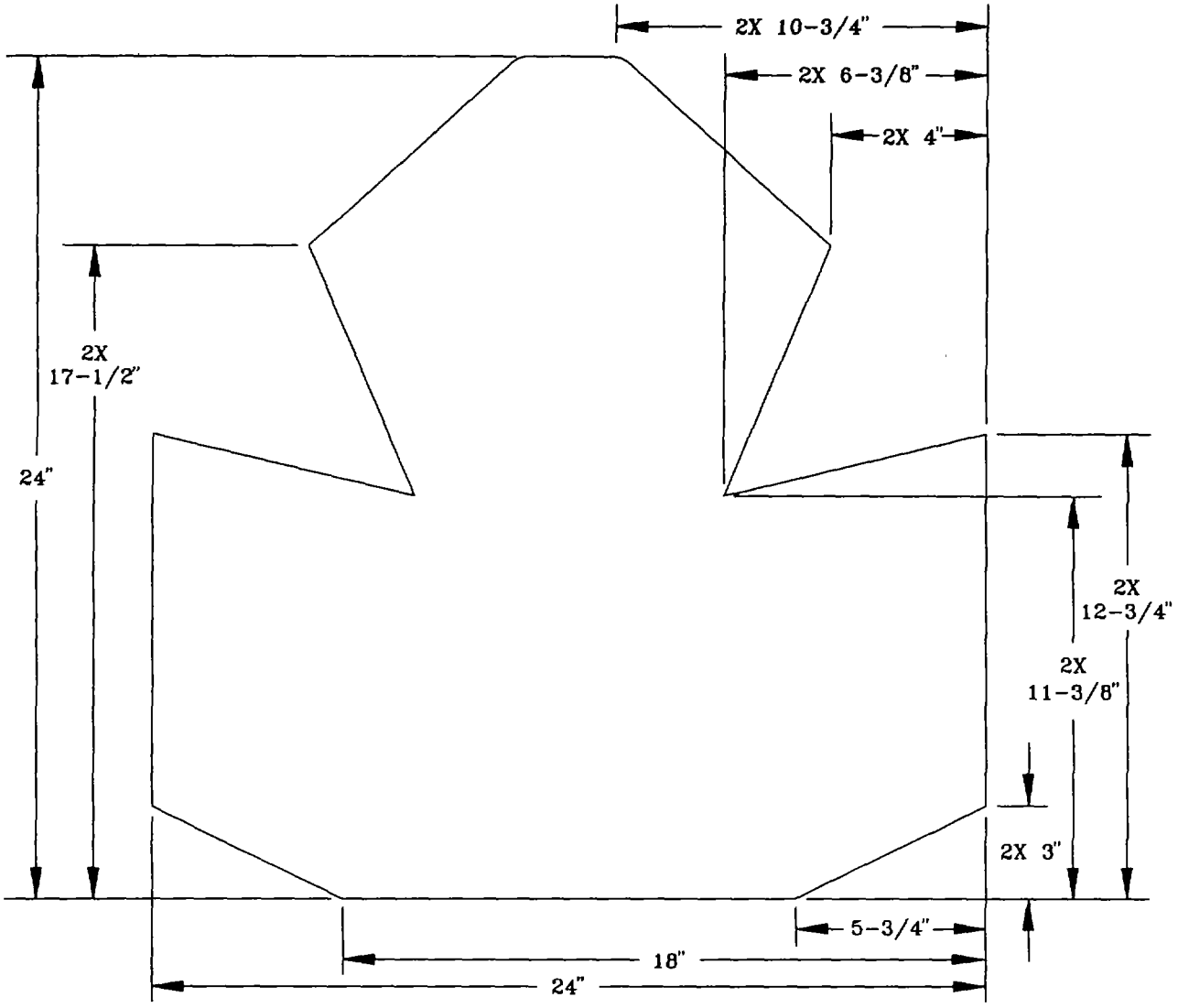
Figure E-22 (Container Front Mounted) Attaching Strap



SECTION A-A

PROCEDURE	MATERIALS	NOTE
1. FABRICATE RELEASE HANDLE ASSEMBLY AS SHOWN.	WEBBING, NYLON, TYPE VIII.	DIMENSION SHOWN ARE IN INCHES.
	WEBBING, NYLON, TUBULAR, 1/2" WIDE	TOLERANCE IS 1/4 INCH.
	TAPE, FASTENER, PILE TYPE II.	
	WIRE ROPE, TYPE II.	
	THREAD, NYLON, SIZE	

Figure E-24. (Container Front Mounted) Release Handle Assembly



PROCEDURE	MATERIALS	NOTE
1. FABRICATE UPPER CAP ASSEMBLY AS SHOWN.	CLOTH, DUCK, TEXTURED TYPE VIII.	DIMENSION SHOWN ARE IN INCHES. TOLERANCE IS 1/4 INCH.

Figure E-25. (Container Side Mounted) Upper Cap Assembly (Sheet 1 of 2)

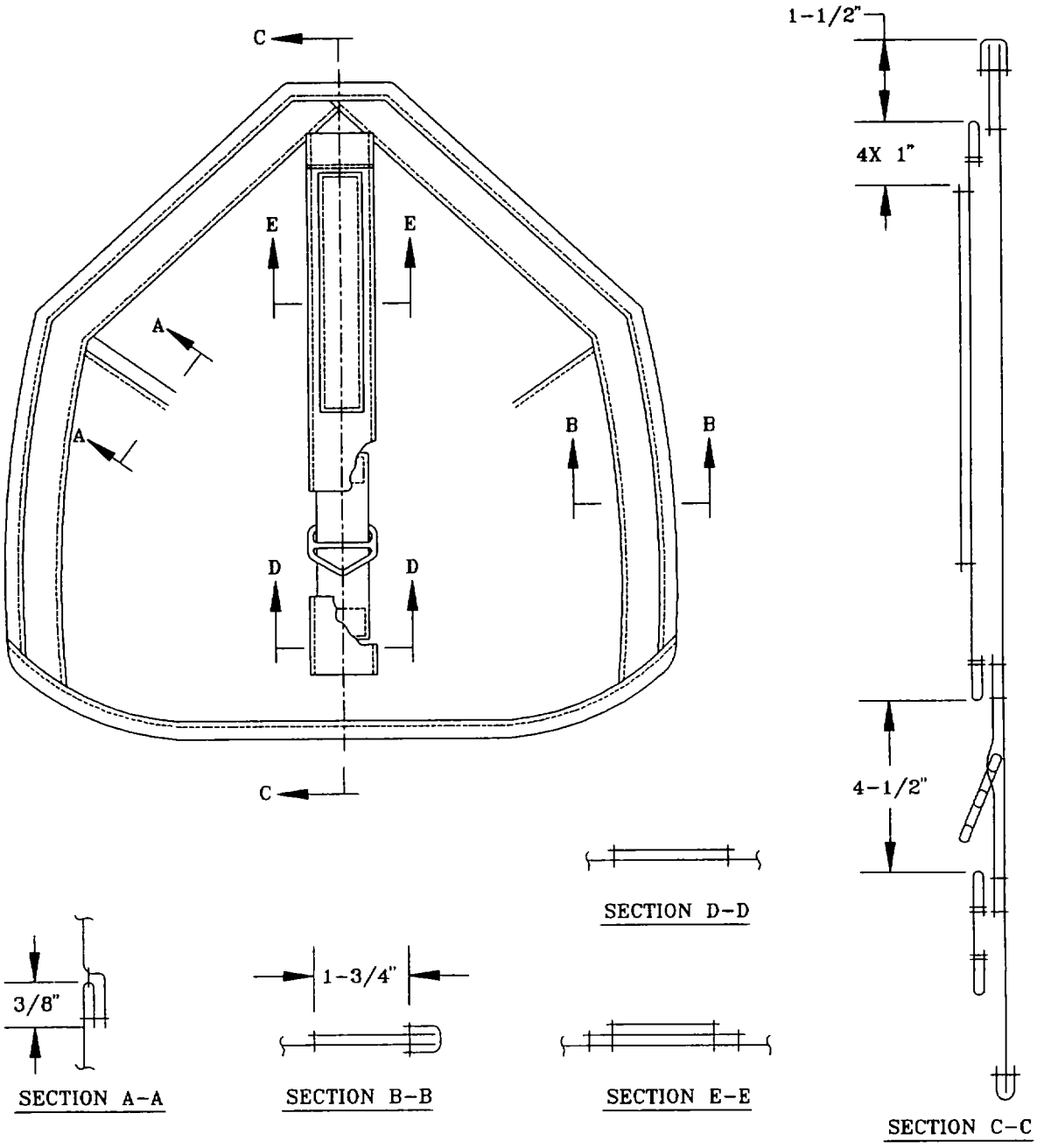
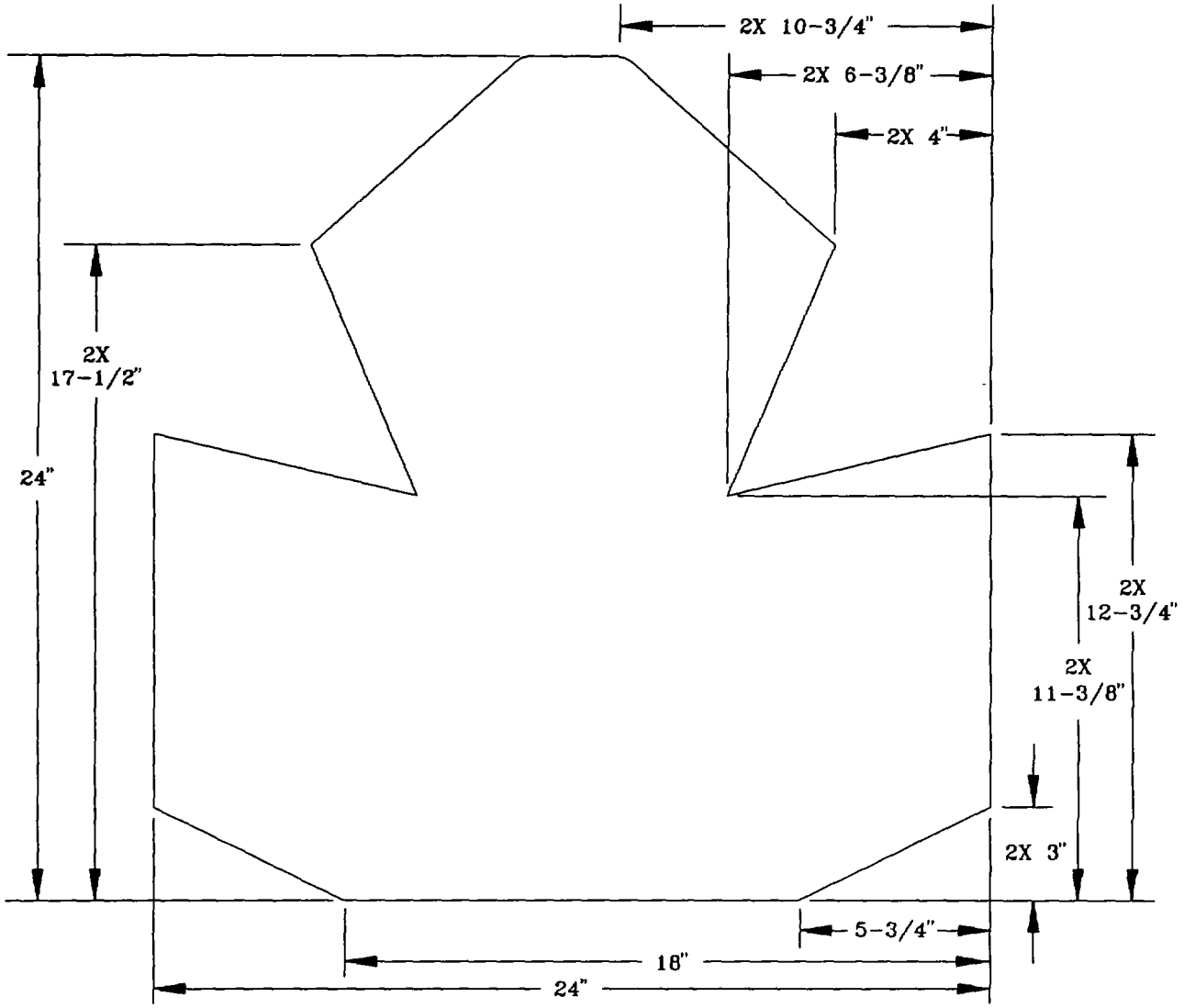


Figure E-25. (Container Side Mounted) Upper Cap Assembly (Sheet 2 of 2)



PROCEDURE	MATERIALS	NOTE
1. FABRICATE LOWER CAP ASSEMBLY AS SHOWN.	CLOTH, DUCK, TEXTURED VIII.	DIMENSION SHOWN ARE IN INCHES. TOLERANCE IS 1/4 INCH.

Figure E-26. (Container Side Mounted) Lower Cap Assembly (Sheet 1 of 2)

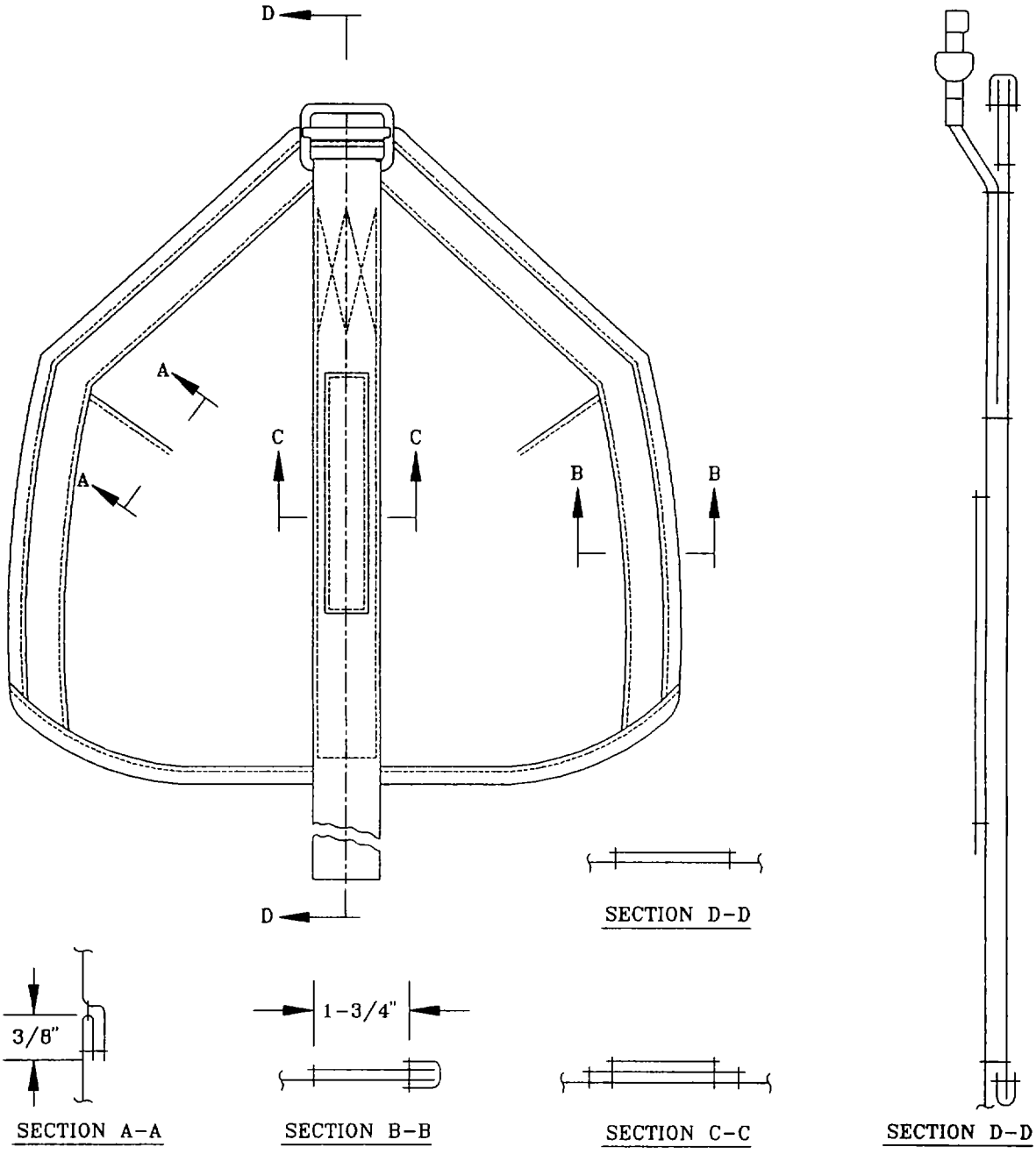
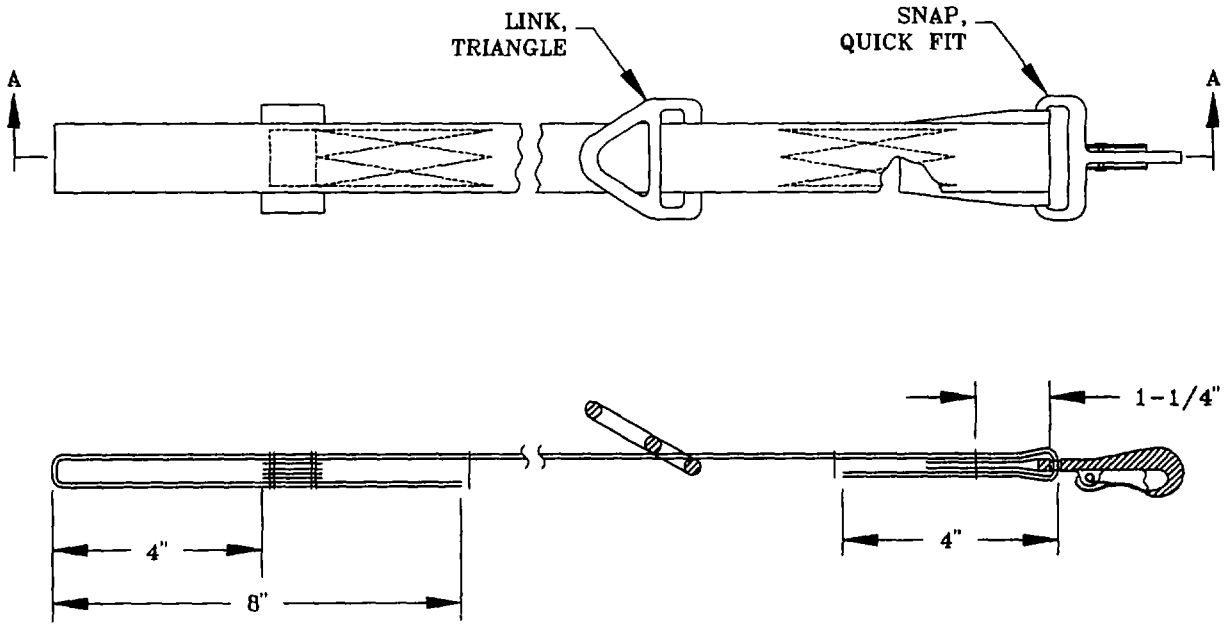


Figure E-26. (Container Side Mounted) Lower Cap Assembly (Sheet 2 of 2)



SECTION A-A

PROCEDURE	MATERIALS	NOTE
1. FABRICATE LOWERING LINE BRIDLE ASSEMBLY AS SHOWN.	CLOTH, DUCK, TEXTURED VIII.	DIMENSION SHOWN ARE IN INCHES.
	THREAD, NYLON, SIZE INCH.	TOLERANCE IS 1/4

Figure E-27. (Container Side Mounted) Lower Line Bridle Assembly

ALPHABETIC INDEX

A

C

D

E

F

G

I

ALPHABETIC INDEX (CONT'D)

L

M

N

P

R

ALPHABETIC INDEX (CONT'D)

TM 10-1670-29920&P
TO 14D1-2-470-2
NAVAIR 13-1-41

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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
acres
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

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			

Temperature (Exact)

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

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