

ARMY TM 10-1670-327-23&P
AIR FORCE T.O. 14D1-2-472-2
NAVY NAVSEA SS400-A1-MMO-010

TECHNICAL MANUAL
UNIT AND DIRECT SUPPORT (DS) MAINTENANCE MANUAL
INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS
FOR
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537

DISTRIBUTION STATEMENT A – Approved for public release; distribution is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

31 JANUARY 2006

WARNING SUMMARY

This warning summary contains general safety warnings and hazardous materials warnings that must be understood and applied during operation and maintenance of this equipment. Failure to observe these precautions could result in serious injury or death to personnel. Also included are explanations of safety and hazardous materials icons used within the technical manual.

EXPLANATION OF SAFETY WARNING ICONS



FIRE - flame shows that a material may ignite and cause burns.



PARACHUTIST FALLING - Parachutist falling shows that severe injury or death could result by not adhering to warning.



FLYING PARTICLES - arrows bouncing off face shows that particles flying through the air will harm face.

GENERAL SAFETY WARNINGS DESCRIPTION

WARNING



DEATH could result to personnel if inspections are not performed as specified in this manual. Perform all inspections as specified.

WARNING



For First Aid treatment, refer to FM 4-25.11.

WARNING



Exercise extreme care when using petroleum products to destroy equipment by fire, as these materials are highly flammable. Improper handling may cause injury to personnel.

WARNING



Failure to detect areas of damage may result in malfunction of the parachute and injury or loss of life to personnel.

WARNING



The limitations prescribed for parachute canopy patching will be stringently adhered to under all circumstances and without any deviations. Failure to do so may result in death or serious injury to personnel.

WARNING



Deployment bag will be given a complete inspection, including static line and that portion of the static line that is covered by the static line sleeve. Failure to do so could result in serious injury or death to the parachutist.

WARNING



Dress each main canopy gore section and the anti-inversion net to insure no foreign material is present. If foreign material is present, repeat fine dress procedures. Failure to do so could cause serious injury or death to personnel.

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Dates of issue for the original manual is:

Original 31 January 06

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HEADQUARTERS,
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 31 JANUARY 2006

TECHNICAL MANUAL
UNIT AND DIRECT SUPPORT (DS) MAINTENANCE MANUAL
INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST
FOR
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

ARMY

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, 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, U.S. Army Tank-automotive & Armament Command, ATTN: AMSTA-LC-CECT, Kansas St., Natick, MA 01760. You may also submit your recommended changes via electronic mail or by fax. Our fax number is: DSN 256-5205, COMM: 508-233-5205. Our email address is amssbriml@natick.army.mil. A reply will be furnished to you.

AIR FORCE

Reports by U.S. Air Force units should be submitted on AFTO Form 22 (Technical Order Publication Improvement Report and Reply) and forwarded to the address prescribed above for the Army. An information copy of the prepared AFTO Form 22 shall be furnished to WP-ALC/TILTA, 420 2nd Street, Suite 100, Robins AFB, GA 31098-1640.

NAVY

Submit NAVSEA Form 416011 (REV 2-99) to Commander, NSDSA Code 5E30, NAVSURFCENDIV, 4363 Missile Way, Port Hueneme, CA 93043-4307. A reply will be sent to you.

CURRENT AS OF 31 January 2006

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

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HOW TO USE THIS MANUAL

In this manual, primary chapters appear in upper case/capital letters; work packages are presented in numeric sequence, e.g., 0001 00; paragraphs within a work package are not numbered and are presented in a titles format. For a first level paragraph, title all upper case/capital letters, e.g., FRONT MATTER subordinate paragraph title will have the first letter of the first word of each principle word all upper case/capital letters, e.g., Manual Organization and Page Numbering System. The location of additional material that must be referenced is clearly marked. Illustrations supporting maintenance procedures/text are located underneath, or as close as possible to, their referenced paragraph.

FRONT MATTER. Front matter consists of front cover, warning summary, title block, table of contents, and how to use this manual page.

CHAPTER 1 - INTRODUCTION. Chapter 1 contains general information, equipment description and data, as well as theory of operation.

CHAPTER 2 - UNIT MAINTENANCE INSTRUCTIONS. Chapter 2 contains Unit maintenance procedures that include service upon receipt, assembling the main and reserve canopies, preventive maintenance checks and services information, and maintenance procedures authorized at the unit level.

CHAPTER 3 - DIRECT SUPPORT MAINTENANCE INSTRUCTIONS. Chapter 3 provides maintenance procedures authorized at the direct support level.

CHAPTER 4 - SUPPORTING INFORMATION. Chapter 4 contains references, maintenance allocation chart, repair parts and special tools list (RSPSTL), national stock number index, part number index, expendable and durable items list, and illustrated list of manufactured items.

REAR MATTER. Rear matter consists of alphabetical index, DA Form 2028, authentication page, and back cover.

Manual Organization and Page Numbering System. The manual is divided into five major chapters that detail the topics mentioned above. Within each chapter are work packages covering a wide range of topics. Each work package is numbered sequentially starting at page 1. The work package has its own page-numbering scheme and is independent of the page numbering used by other work packages. Each page of a work package has a page number of the for XXXX YY-ZZ where XXXX is the work package number (e.g. 0010 is work package 10), YY is the revision number for that work package, and ZZ represents the number of the page within that work package. A page number such as 0010 00-1/(2 Blank) means that page 1 contains information but page 2 of that work package has been intentionally left blank.

Finding Information. The table of contents permits the reader to find information in the manual quickly. The reader should start here first when looking for a specific topic. The table of contents lists the topics contained within each chapter and the work package sequence number where it can be found.

Example: If the reader were looking for instructions on Assembling the Reserve Canopy, which is a unit maintenance topic, the table of contents indicates that unit maintenance information can be found in chapter 2. Scanning down the listings for chapter 2, information on Assembling the Reserve Canopy can be found in WP 0006 00 (i.e. Work Package 6).

An Alphabetical Index can be found at the back of the manual; specific topics are listed with the corresponding work package number.

CHAPTER 1

**GENERAL INFORMATION, EQUIPMENT DESCRIPTION,
AND THEORY OF OPERATION
FOR
MC-6 PERSONNEL PARACHUTE SYSTEM**

**UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
GENERAL INFORMATION**

SCOPE

Type of Manual. This technical manual provides Unit and Direct Support (DS) maintenance instructions for the MC-6 Personnel Parachute System, NSN 1670-01-527-7537. This manual also provides a Repair Parts and Special Tools List (RPSTL), located in WP 0098 00 through WP 0108 00.

Part Number and Equipment Name. Part Number 11-1-7400, MC-6 Personnel Parachute System.

Purpose of Equipment. The MC-6 Personnel Parachute System provides capability to safely deliver an airborne soldier and individual equipment from an aircraft in flight for a vertical assault on an enemy.

MAINTENANCE FORMS, RECORDS, AND REPORTS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual. Additional maintenance forms, records, and reports that are to be used by organizational and direct support maintenance personnel are listed in and prescribed by TM 10-1670-201-23 and TB 43-0002-43.

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your MC-6 Personnel Parachute System needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance. Put it on an SF 368 Product Quality Deficiency Report (PQDR). Mail it to: Commander U.S. Army Tank-automotive and Armament Command (TACOM); ATTN: AMSSB-RIM-E (N), Kansas St., Natick, MA, 01760-5052. A reply will be furnished to you.

PQDR Electronic Address to read:

To electronically submit a PQDR, go to the EZ PQDR website <https://199.208.242.174/spqdr/home.do>. This site can be used to submit the PQDR, answer questions on how correctly fill out the form, and track the status once submitted.

CORROSION PREVENTION AND CONTROL (CPC)

Corrosion Prevention and Control (CPC) of Army materiel is a continuing concern. It is important that any corrosion problems with this item be reported so that the problem can be corrected and improvements can be made to prevent the problem in future items.

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.

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

The form should be submitted to the address specified in DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual.

DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

GENERAL INFORMATION

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

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

Implementation plan. All units that possess air delivery equipment should have a plan for the implementation of destruction procedures.

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

SPECIFIC METHODS

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

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

WARNING



Exercise extreme care when using petroleum products to destroy equipment by fire, as these materials are highly flammable. Improper handling may cause injury to personnel.

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

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

PREPARATION FOR STORAGE AND SHIPMENT

For storage and shipment, refer to TM 10-1670-201-23/T.O. 13C-1-411/NAVAIR 13-1-17; for storage, refer to WP 0093 00 and for shipment, refer to WP 0094 00 of this manual.

WARRANTY INFORMATION

The MC-6 Personnel Parachute System does not contain warranty provisions.

NOMENCLATURE CROSS-REFERENCE LIST

Common Name	Official Nomenclature
Crocus Cloth	Abrasive Cloth
D-bag	Deployment Bag
Finger Trap Tool	Line Insertion Tool
Guide Ring	Reefing Ring
MC-6	MC-6 Personnel Parachute System
T-11R	T-11 Reserve Parachute
Universal Static Line with Curved Pin	Universal Static Line Modified

LIST OF ACRONYMS AND ABBREVIATIONS

AGL	Above Ground Level
AIN	Anti-inversion Netting
BER	Beyond Economic Repair
BOI	Basis of Issue
CAGEC	Commercial and Government Entity Code
cm.	Centimeter
CPC	Corrosion Prevention and Control
CRA	Canopy Release Assembly
DA	Department of the Army
DS	Direct Support
Dtd.	Dated
EA	Each
EIR	Equipment Improvement Recommendation
EDS	Electrostatic Discharge Sensitive
F	Fahrenheit
FSAL	Frangible Assist Lines
FSCM	Federal Supply Code for Manufacturer
FSC	Federal Supply Classification
ft.	Feet
GPM	Ground Precautionary Message
IAW	In Accordance With
in.	Inches
IP	In-process Inspector
KIAS	Knots Indicated Air Speed
Ltrs	Liters
LG	Long
Lbs	Pounds
MAC	Maintenance Allocation Chart
MAM	Maintenance Advisory Message
MOLLE	Modular Lightweight Load-Carrying Equipment
MOS	Military Occupational Specialty
MTOE	Modified Table of Organization and Equipment
MTG	Mounting
MWO	Modification Work Order
NF	National Fine (Thread)
NIIN	National Item Identification Number
NLT	No Later Than
NMP	National Maintenance Point
No.	Number

LIST OF ACRONYMS AND ABBREVIATIONS - continued

NSN	National Stock Number
OD	Olive Drab
oz.	Ounces
PIS	Placed In Service
PMCS	Preventive Maintenance Checks and Services
PQDR	Product Quality Deficiency Report
psi	Pounds per square inch
PVC	Polyvinyl Chloride
RPSTL	Repair Parts and Special Tools List
SF	Standard Form
SMR	Source, Maintenance and Recoverability
SOUM	Safety Of Use Message
TAMMS	The Army Maintenance Management System
TB	Technical Bulletin
TDA	Table of Distribution and Allowances
TDR	Transportation Discrepancy Report
TMDE	Test Measurement and Diagnostic Equipment
UOC	Usable on Code
USL	Universal Static Line
WP	Work Package

QUALITY OF MATERIAL

Material used for replacement, repair, or modification must meet the requirements of this manual. If quality of material requirements are not stated in this manual, the material must meet the requirements of the drawings, standards, specifications, or approved engineering change proposals applicable to the subject equipment.

SAFETY, CARE AND HANDLING

The following subparagraphs summarize the safety, care and handling requirements for the parachute assembly.

Safety. Use care in handling packed parachutes as exposed metal parts could result in injury.

Care and Handling. Every effort shall be made to protect the parachute from weather elements, dust, dirt, oil, grease, and acid. An unpacked parachute shall be placed in an aviator kit bag. When available, an environmentally controlled building should be used to store parachutes. Parachutes shall be stored in a dry, well-ventilated location and protected from pilferage, dampness, fire, dirt, insects, rodents, and direct sunlight.

COMMON TOOLS AND EQUIPMENT

For authorized common tools and equipment, refer to the Modified Table of Organization and Equipment (MTOE) applicable to your unit.

SPECIAL TOOLS, TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT (TMDE), AND SUPPORT EQUIPMENT

Special tools, TMDE and support equipment are not required.

REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)

Repair parts are listed and illustrated in WP 0098 00 through WP 0108 00 of this manual.

**UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
EQUIPMENT DESCRIPTION AND DATA**

EQUIPMENT CHARACTERISTICS, CAPABILITIES AND FEATURES

The MC-6 is a highly portable system, which includes the main canopy assembly, the reserve canopy assembly deployment bag, pack tray, harness assembly, risers, and universal static line and is capable of supporting 400-pounds. The complete system weight is 42 pounds. The MC-6 is limited to operation in winds of 13-knots at surface.

The MC-6 is compatible with all current military aircraft used for airborne missions and compatible with ancillary items such as the Inceptor body armor, MOLLE rucksack and Land Warrior system.

EQUIPMENT DATA MC-6 PERSONNEL PARACHUTE SYSTEM

Weight (packed for airdrop)..... 42 lbs. (approx.)

EQUIPMENT DATA MC-6 MAIN PARACHUTE

Shape Polyconical

Maximum All Up Weight (Total Rigged Weight) Paratrooper and Equipment.....400 lbs

MC-6 Main with Harness and Pack Tray Dimensions (packed for use).....Length – 20-inches
Width – 14-inches
Height – 14-inches

MC-6 Main with Harness and Pack Tray Cube (packed for use) 2.27

MC-6 Main with Harness and Pack Tray Weight (packed for use).....29 – pounds (approx.)

Maximum Deployment Speed 150 KIAS

Maximum Deceleration for 382 lbs. at 150 KIAS..... 8.2 g

Maximum Rate of Descent for 382 lbs at Mean Sea Level 16 feet per second

Maximum Opening Time for 382 lbs at 150 KIAS4 seconds

Oscillation Angle..... 8 degrees

Repack Cycle 120 days

Diameter (nominal)..... 32-feet

Number of Gores 28

Number of Sections Per Gore 4

Gore Material..... 1.1 ounce Nylon Cloth, parachute, low porosity

Extended Gores 4

Extended Gores 7 horizontal, 2 vertical sections

Number of Control Lines 2

Control Line Material Type III, nylon cord (red)

EQUIPMENT DATA MC-6 MAIN PARACHUTE -continued

Number of Control Line Cascades	4
Control Line Cascades Material	Type IIA nylon cord
Control Line Toggle Material	5/8-in. diameter, hardwood dowel
Control Line Guide Ring	Reefing ring (PS27762-1)
Guide Ring Retaining Strap Material	9/16-in. wide, Type I, nylon tape
Number of Radial Seams	28
Radial Tape Material	9/16-in., Type I nylon webbing
Number of Vent Lines	14
Vent Line Material	Type III, Nylon Cord
Number of Suspension Lines	28
Suspension Line Material	Type III, Nylon Cord
Number of Connector Links	4 L-bar
Anti-Inversion Net	3 3/4-in. mesh

EQUIPMENT DATA FOR T-11R RESERVE PARACHUTE

Shape	Aeroconical
Diameter (nominal)	29 feet
Diameter of Skirt	20.2 feet
T-11R Reserve with Pack Tray Dimensions (packed for use)	Length – 12 inches Width – 15 inches Height – 8 inches
T-11R Reserve with Pack Tray Cube (packed for use)	1
T-11R Reserve with Pack Tray Weight (packed for use)	14.8 pounds
Maximum Deployment Speed	150 KIAS
Maximum Deceleration for 382 lbs. at 150 KIAS	11 g
Maximum Rate of Descent for 382 lbs at Mean Sea Level	26 feet per second
Maximum Opening Time for 382 lbs at 150 KIAS	0.7
Oscillation Angle	9 degrees
Repack Cycle	365 days
Fabric Area	180 sq feet
Apex Vent Area	3.5 sq feet
Suspension Line Length	20.3 feet
Number of Suspension Lines	20
Number of Gores	20
Number of Sections Per Gore	4 or 5
Gore Material	cloth, parachute, low porosity, Type I
Number of Radial Tapes	20

EQUIPMENT DATA T-11R RESERVE - continued

Geometric Porosity	7%
Radial Tape Material	9/16 inches, type I nylon webbing
Suspension Line Material	Cord, Nylon, 650 lb, Class F
Radial Tape Material	9/16 inches, type I nylon webbing
Number of Connector Links.....	4 Links #6 Stainless Steel
Number of scoops	4
Number of skirt assist lines	20
Number of skirt assist line ties.....	20

EXTRACTOR ASSEMBLY

Diameter	6 feet
Material.....	1.5 ounce Nylon Ripstop
Number of Suspension Lines	12
Number of Centering Lines	1
Number of Bridle Lines.....	4

PACK TRAY ASSEMBLIES (2)

MAIN PACK TRAY

Container Material	Cloth, Duck, Textured Nylon (MIL-C-43734), 7.25 ounce
Closing Loop Material.....	Cord, Spectra® 1000 lb TS

RESERVE PACK TRAY

Container Material	Cloth, Duck, Textured Nylon (MIL-C-43734), 7.25 ounce
Closing Loop Material.....	Cord, Spectra® 1000 lb TS
Closing Loop Length	12 inches, +/- 1/2 inch

HARNESS ASSEMBLY

Strap Material	Type XIII, nylon webbing
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DEPLOYMENT BAG

Bag Material	8.2-oz. Cotton sateen cloth
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RISER ASSEMBLIES (2)

MAIN RISER ASSEMBLY

Material.....	Type VII, nylon webbing
Length	30 inches

RESERVE RISER ASSEMBLY

Material.....	Type VIII, Class 1A
Length	48 inches

UNIVERSAL STATIC LINE WITH CURVED PIN

Material.....	Tube edge
Lengths.....	5 foot and 15 foot

UNIVERSAL STATIC LINE SNAP HOOK (1)

Material..... Chromium molydenum
 Length6 inches

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS FOR THE MC-6 PERSONNEL PARACHUTE SYSTEM

Main Canopy. The MC-6 Main Canopy (**figure 1, item 1**) has a 32 foot (nominal diameter), is polyconical-shaped, and block constructed of 1.1-ounce zero porosity nylon parachute cloth. Depending on the jumper's total weight and drop altitude, its rate of decent is between 14.5 to 18.5 feet per second. The canopy has a forward speed of 10 knots, and can complete a 360° in 5 seconds. The canopy is described as follows:

1. The canopy consists of 28 gores (**figure 1, item 2**) as follows:
 - a. Four sections per gore with the exception of the four extended gores, which consist of seven horizontal and two vertical sections.
 - b. Four extended gores are located on gores 4-5, 6-7, 21-22, and 23-24 (**figure 1, item 3**). When the jumper pulls either the left or right control line toggle it closes the extended gores, which re-directs the airflow through the opposite extended gores which provides an increased turning capability. A break slot (**figure 1, item 4**), reduces forward speed. In full brakes, the canopy can go backwards. The extended gores also facilitate the canopy's ability to perform flat turns by venting air in the opposite direction.
 - c. Six opening vents located on the front canopy gores 9, 11, 13, 15, 17, and 19 (**figure 1, item 5**) prevent the front of the canopy from collapsing, improving the forward drive and stability of the canopy.
 - d. Three drive vents located on rear of the canopy (**figure 1, item 6**) with mesh netting sewn into gores 2, 26, and 28, allow for positive airflow through the canopy, which provides the canopy with its forward drive.
 - e. Radial seam (**figure 1, item 7**) runs from the lower skirt to the upper apex and is made using a 1/2-inch wide Type III, nylon tape.
 - f. The skirt hem is the folded-over lower edge of the canopy, encompassing the skirt band (**figure 1, item 8**) (sometimes called the lower lateral band).
2. There are 28 Suspension lines (**figure 1, item 9**) which are 21-feet in length made with Type III nylon cord and are connected from the suspension line attaching loops on the anti-inversion netting (**figure 1, item 10**) to the connector links (**figure 1, item 11**).
 - a. Two lower control lines run from the risers to the attachment point on the middle control lines. The middle control lines attach to the upper control lines, lower control lines, and skirt. Upper control lines attach to the extended gores and middle control lines, providing the canopy with increased response from jumpers actions.
 - b. Fourteen apex vent lines run continuous from one end of the vent band to the opposite side of the vent band and are constructed of Type III nylon cord.

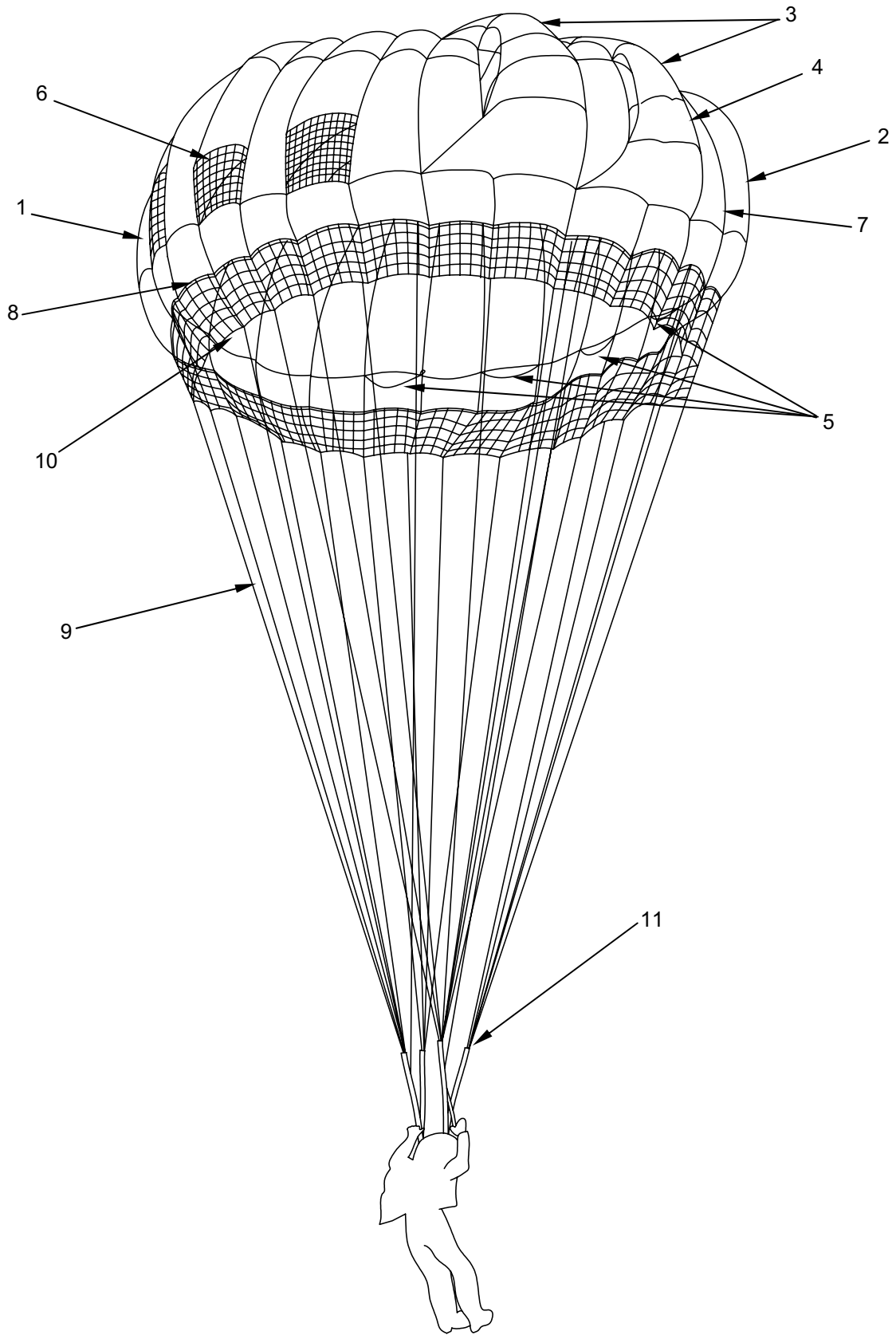


Figure 1. MC-6 Main Parachute Components.

Pack Tray Assembly. The pack tray assembly (20 x 14 x 14 inches) (Figure 2) is constructed of duck textured nylon fabric, and consists of the following:

- Pack closing flaps (four) (**figure 2, item 1**): right and left side flaps, and upper and lower end flaps with reinforced pack closing grommets (four) sewn into pack closing flaps.
- Static line stow bars (inner and outer) (**figure 2, item 2 and item 3**).
- Static line slack retainer loop with retainer (**figure 2, item 4**).
- Waistband adjuster panel (**figure 2, item 5**).
- Metal adjuster (**figure 2, item 6**).
- Waistband (43 inches long) (**figure 2, item 7**).
- Pack closing loop (**figure 2, item 8**) (Spectra[®] loop with nylon retaining tab used to align grommets in pack closing flaps and is held in place by curved pack closing pin).
- Two 5-1/2-inch lengths of Type VII Nylon webbing (**figure 2, item 9**) sewn into upper edge of pack tray (each with tuck tab and easy open snap) for use with sizing channels on T-11R harness.
- Horizontal back-strap retainer (two) with pull-dot snap assemblies (**figure 2, item 10**).
- Horizontal back-strap keeper (**figure 2, item 11**).

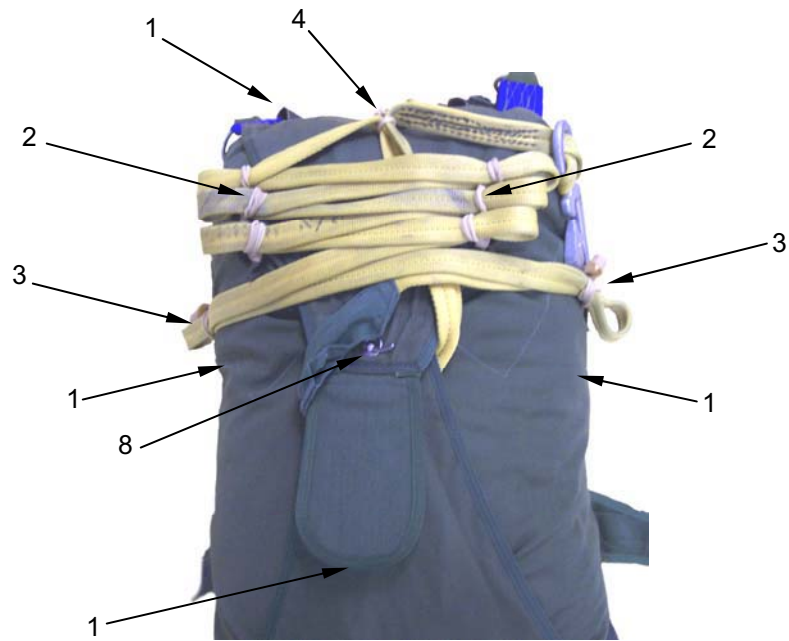
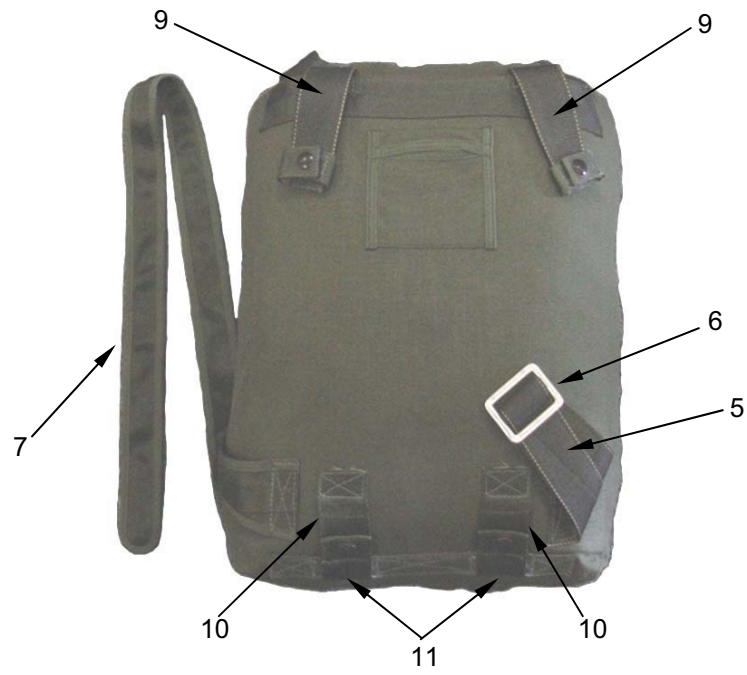


Figure 2. Pack Tray Assembly.

Harness Assembly. The harness assembly (**figure 3**) is only used with the MC-6 main canopy.

1. **Components:** The harness assembly (**figure 3**) is made of Type VII nylon webbing and consists of two upper lift web sections (left and right) and a saddle. The harness design allows for multi-directional adjustment. The components attached to it are as follows:
 - a. Canopy release assembly (**figure 3, item 1**) with hinged, spring-loaded cover plates at the harness shoulders. Each release unit has a removable operating lug, which is girth hitched to a Spectra[®] loop and secured above the release unit by a nylon retaining tab and steel grommet. The No. 2 (medium) and No. 3 (small) release assembly rings are secured above the operating lug grommet on the harness.
 - b. Comfort pads (**figure 3, item 2**) permanently attached to the left and right upper lift web assemblies beneath the pack tray sizing channels (**figure 3, item 3**).
 - c. Five pack tray sizing channels (Type VII webbing) (**figure 3, item 3**) sewn into the harness above the reserve attaching D-rings (**figure 3, item 4**).
 - d. Two main lift web sizing loops (**figure 3, item 5**) are sewn into the harness directly below the reserve attaching D-rings (**figure 3, item 4**). The adjustment assemblies consist of Type VII (reinforced with Type VIII) webbing and a 1-3/4 inch locking adapter rated at 2500 pounds.
 - e. Main lift web (**figure 3, item 6**) is constructed of Type VII nylon webbing with a rated capacity of 5,500 pounds.
 - f. Chest straps (**figure 3, item 7**), made of Type XVII nylon webbing and has a 1-inch quick-fit friction adapter rated at 2500 pounds. An elastic webbing retainer is used for stowing excess webbing.
 - g. D-rings (**figure 3, item 4**) used for attaching the T-11R are located directly below the canopy release units (**figure 3, item 1**), and have a rated capacity of 4200 pounds.
 - h. Equipment rings (**figure 3, item 8**) used for attaching the combat equipment, with a rated capacity of 2500 pounds.
 - i. Triangular accessory attaching rings (**figure 3, item 9**) sewn into the main lift web of the harness (about 8 inches below the equipment rings) for attaching equipment and lowering lines; rated at 500-pounds.
 - j. Leg straps (**figure 3, item 10**) have quick ejector snaps with activating lever, ball detent, and opening gate with a rated capacity of 2,500 pounds.
 - An "L" shaped ejector snap pad is attached behind the ejector snap (the pad also attaches behind the main lift web locking adapter).
 - The quick-fit V-ring has a rated capacity of 2,500 pounds.
 - A webbing retainer is used for stowing excess webbing.
 - k. Saddle (Type VII nylon) (**figure 3, item 11**) with two attached leg straps.
 - l. Nylon diagonal back strap guide (**figure 3, item 12**).
 - m. Back strap adjusters (**figure 3, item 13**) with attached free-running ends of the horizontal back strap (rolled and sewn).

2. **Adjustment Points.** The harness assembly has seven points of adjustment: the chest strap (figure 3, item 7), two main lift web sizing adapters (figure 3, item 3), two leg straps (figure 3, item 10), and two diagonal back straps (figure 3, item 12).

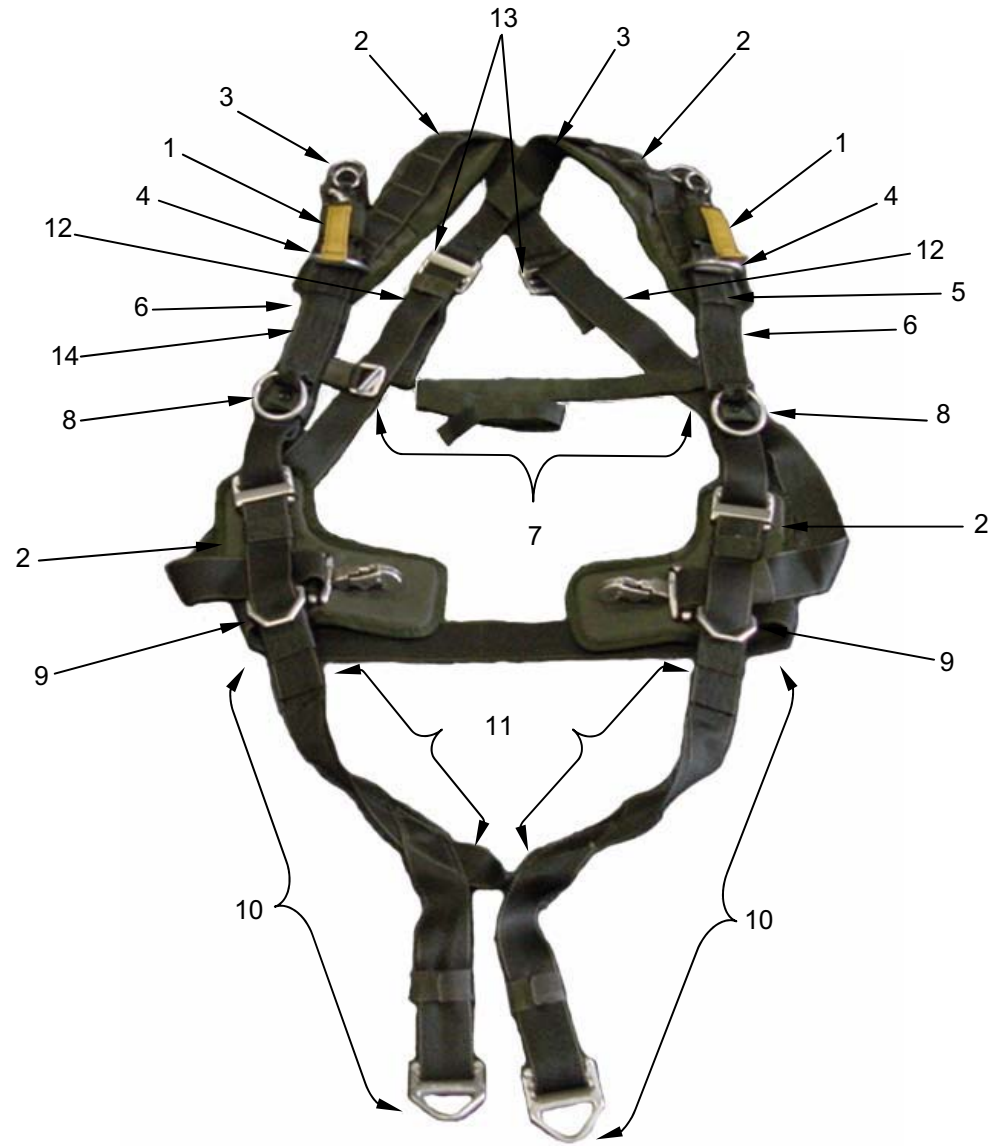


Figure 3. Harness Assembly and Nomenclature.

Riser Assembly. The riser assembly (**figure 4**) on the MC-6 consists of the following:

Two riser assemblies (**figure 4**), with a finished length of 30 inches (Type VII nylon) and a tensile strength of 5,500 pounds. A No. 1 (Large) riser release ring (**figure 4, item 1**) is permanently attached to the center of the webbing. When attached to the canopy, the riser assemblies provide four individual risers.

1. Control line guide ring (**figure 4, item 2**).
2. Control line channel (**figure 4, item 3**).
3. Blue confluence wrap (**figure 4, item 4**).

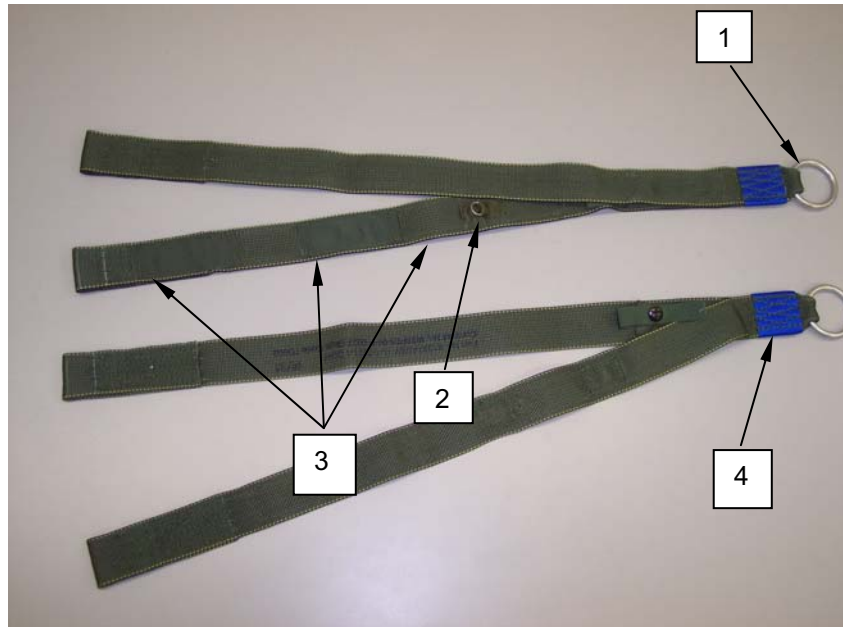


Figure 4. MC-6 Riser Assembly and Nomenclature.

Deployment Bag. The MC-6 main parachute is packed in the T-10D deployment bag. The deployment bag is constructed of 8.2-ounce cotton sateen cloth.



Figure 5. Deployment Bag.

Universal Static Line With Curved Pin. The MC-6 main static line (**figure 6, item 1**) is 14-feet 10-inches \pm 1-inch and contains a protected curve pin (**figure 6, item 2**).

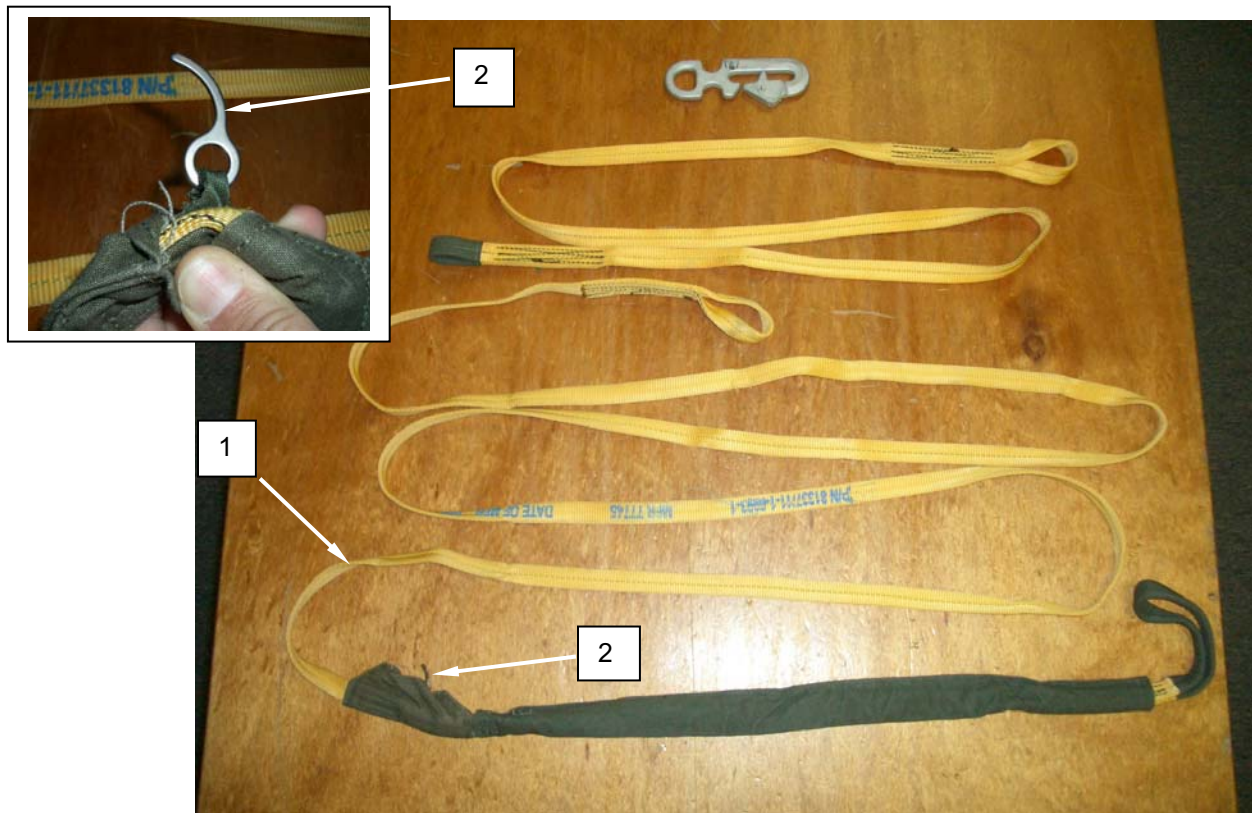


Figure 6. Universal Static Line with Curved Pin.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS FOR THE T-11R

Reserve Canopy. The T-11R (**figure 7, item 1**) is a derivative of the proven aero conical design, this being an extended skirt multiconic canopy. The T-11R has been adapted for use with the MC-6. Designed to open rapidly with a minimum post inflation collapse, the T-11R features minimum altitude loss. The designed shape resists malfunctions, such as a line over and, in its event, tends to release the line. The risk of air stealing by a malfunctioned main parachute is reduced as the T-11R, with its short system length, flies with its hem even with the hem of the main parachute. Tests have proven this to be highly successful with the reserve controlling the descent even with a fully inflated main parachute.

The T-11R also features a novel and advanced deployment and inflation acceleration system. These have been designed to give the maximum permitted opening load at the maximum permitted speed, thus minimizing altitude loss to a safe total speed.

The T-11R is constructed to be as lightweight as possible. This not only reduces the inconvenience to the paratrooper but also enhances his/her payload to weight ratio. The lightweight construction is also necessary to allow the reserve to align with the airflow at lower speeds. In the case of a low speed malfunction, such as some main canopy damage, the reserve will rise and inflate faster.

Scoops, Apex Ties. The scoops (**figure 7, item 2**) are formed by four downward pockets constructed around the apex of the parachute. The gores of the reserve between the pockets are fitted with small loops, which are drawn together with a weak break tie during packing. The scoops thus formed, when they are inflated, are also too large to get inside the line cone of the malfunctioned main parachute.

The apex vent of the reserve parachute is also closed during packing using a break tie. This minimizes the through flow of air during opening and promotes the fastest possible opening at slow speeds. During high-speed openings the ties yield and allow the vent (**figure 7, item 3**) to perform normally, thus reducing excessively hard openings under high-speed deployment conditions.

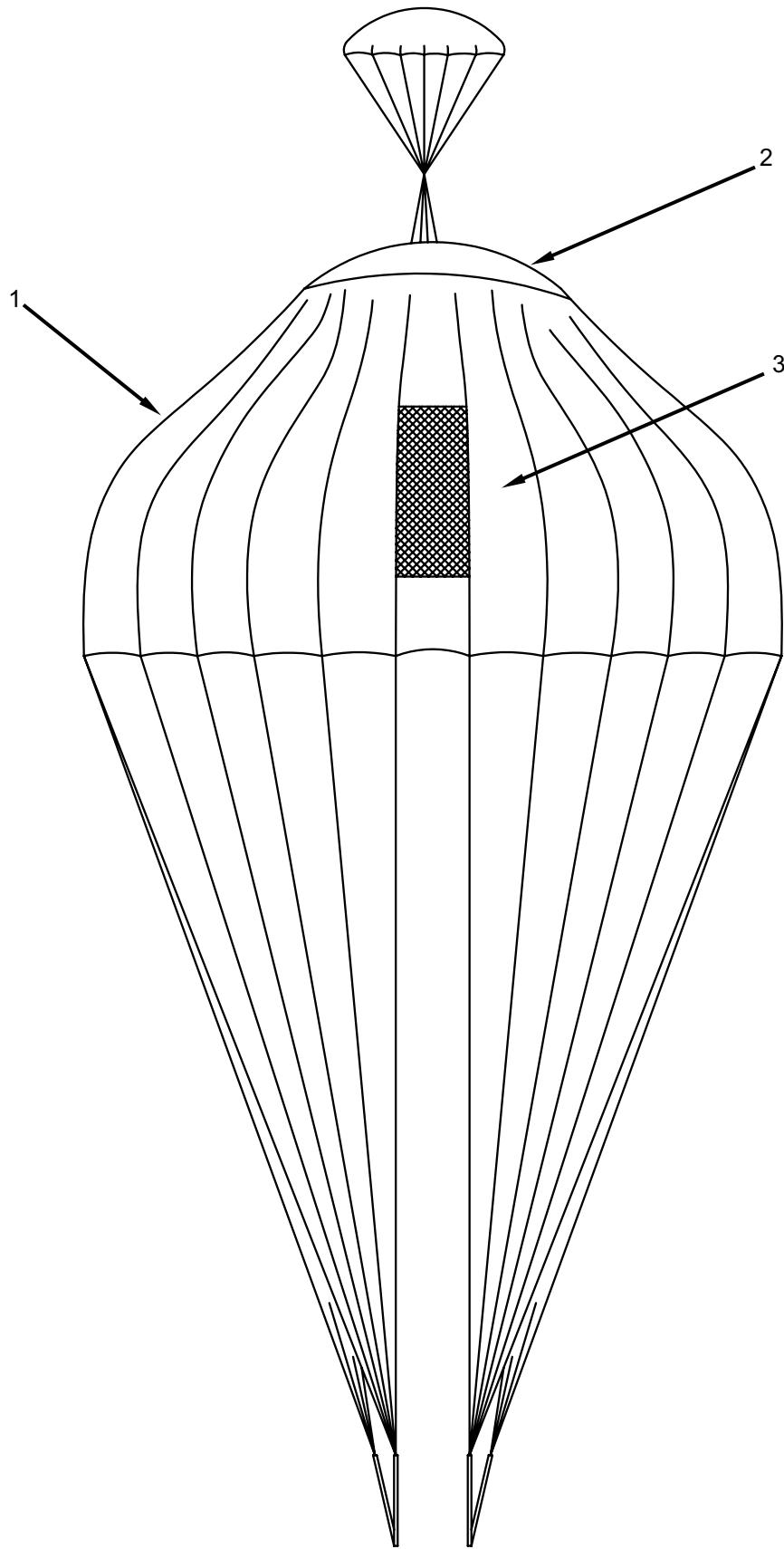


Figure 7. T-11R Parachute.

Frangible Skirt Hesitator Ties. In order to continue to promote fast opening of the reserve parachute during low speed malfunction, Frangible Skirt Assist Lines (FSAL) (**figure 8**) are attached inside the canopy, with type I, 1/4-inch cotton webbing between the main seam and a point on the rigging line. When the lines are together, as in before the canopy begins to inflate, the load path is along the main seam, the skirt assist line, and the suspension lines, since this is the shortest path. Since tension in the parachute during early part of the deployment is transmitted down the skirt-accelerator line, the skirt is free to move outwards in the airflow, which promotes faster inflation by forming a funnel.

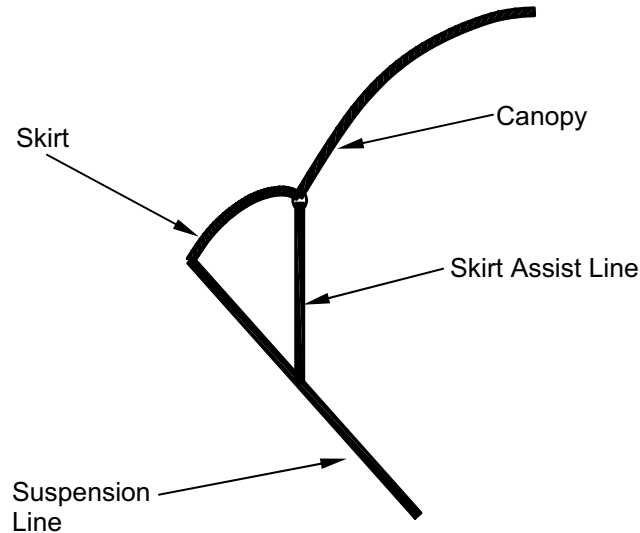


Figure 8. Frangible Skirt Assist Lines At Low Speed.

At high speed, the load is such that the FSAL will break, reapplying the tension to the hem and prevent the funneling effect (**figure 9**). The canopy then inflates in a conventional manner.

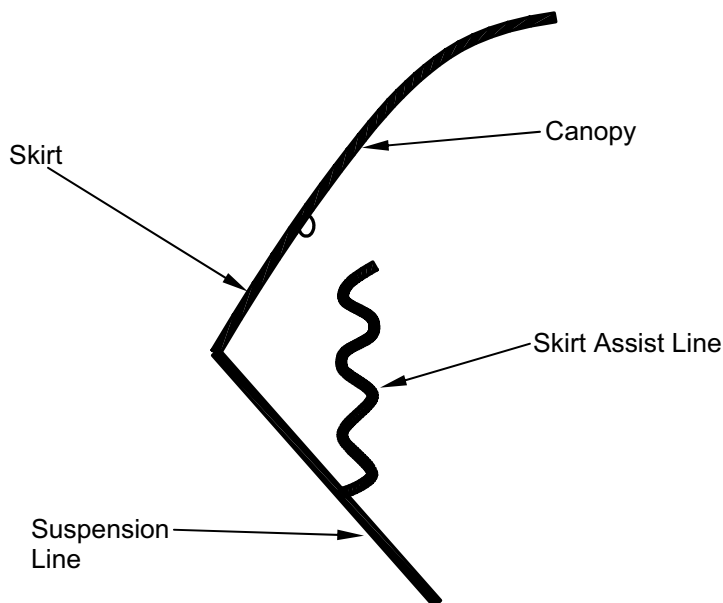


Figure 9. Frangible Skirt Assist Lines At High Speed.

Ejector Spring. A "boxed" and vented ejector spring (**figure 10, item 1**) is packed 1/3 of the distance from the apex to the skirt within the canopy folds. This ensures that upon pack opening, the primary extractor parachute and the apex of the canopy, with the scoops, are ejected positively and laterally into the airflow. The extractor parachute and the scoops inflate immediately to extract the S folded canopy from the container to present the canopy into the airflow.



Figure 10. Ejector Spring.

Ripcord Handle. The T-11R ripcord handle (**figure 11, item 1**) is designed as a multi directional pull and centrally mounted soft handle.



Figure 11. Ripcord Handle (Handle Side).

The handle design incorporates a soft toggle type handle. This minimizes the snagging hazard, permitting suspension lines to run freely over the handle without removing it from its stowage. The tuck tab design regulates the pull force required to remove the handle from the stowage.

Two curved pins (**figure 12, item 1**) are attached to a length of 600 lb Dacron[®] line and stitched to the handle. The curve of the two pins is configured in opposite directions so that the pull load remains consistent regardless of the pull direction. In addition, the use of a curved pin minimizes the risk of the pin being pushed out of the closure loop. Additionally, the tuck tab configuration has the advantage of preventing the reserve canopy from deploying if the curved pins are inadvertently removed from the closing loops.



Figure 12. Ripcord Handle (Underside).

Extractor. The reserve extractor (**figure 13, item 1**) is a 6 ft diameter flat canopy manufactured from 1.5 oz ripstop fabric. It has 12 suspension lines and a center line. The extractor is attached to the apex of the reserve with Spectra[®] 1000.



Figure 13. Extractor.

Reserve Pack Tray. The reserve pack tray (**figure 14, item 1**) is designed to reduce the profile and give the jumper added vision as he looks down and prepares for landing. The pack is manufactured from Textured Nylon Duck Cloth (MIL-C-43734) fabric and is stiffened with a wire frame. Inside the pack tray, elastic loops accommodate the reserve risers when packed.



Figure 14. Reserve Pack Tray.

Reserve Risers. The reserve risers (**figure 15, item 1**) are 48 inches long manufactured from Type VIII nylon webbing. The risers have a 15-inch length of hook and pile fastener tape positioned between the front and rear to prevent riser offset during high speed deployments. The risers are left and right handed because of the left/right reserve snap hooks positioned on the lower end of each riser.



Figure 15. Reserve Risers.

Extractor Cap. The reserve extractor cap (**figure 16, item 1**) is 6 inches in diameter and manufactured from Textured Nylon Duck Cloth (MIL-C-43734) fabric. During the parachute packing process it is placed on top of the folded canopy, providing protection from the pack tray flaps.



Figure 16. Extractor Cap.

Closing Loop, Reserve. The reserve closing loop (**figure 17, item 1**) is manufactured from Spectra[®] cord. It is a prefabricated loop that is fitted to the base of the reserve ejector spring. The length of the loop is regulated to control the pull force on the reserve ripcord pins.

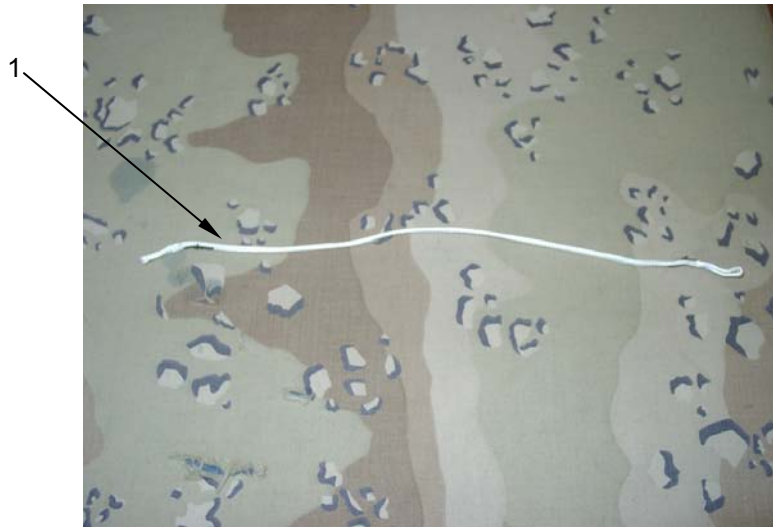


Figure 17. Reserve Closing Loop.

END OF WORK PACKAGE

UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
THEORY OF OPERATION

General. The MC-6 Personnel Parachute System is a two part parachute system comprised of both the MC-6 main parachute and the T-11R parachute.

The MC-6 was developed to satisfy the high priority airdrop requirement to reduce parachutist injuries in parachuting operations.

In a typical combat mission, troops drop from as low as 500 feet Above Ground Level (AGL), and at aircraft speeds between 130-150 Knots Indicated Airspeed (KIAS). In this operational profile, rate of descent is highly critical. The MC-6 main parachute has a rate of decent of between 14.5 and 18.5 ft/sec depending on the jumper's total weight and drop altitude. This yields a 40% reduction in impact energy and is expected to reduce landing injuries significantly. Injuries upon landing reduce the combat effectiveness of the assaulting element and require otherwise combat effective soldiers to assist those injured.

The MC-6 also incorporates an advanced reserve parachute and harness. The T-11R parachute provides a rate of decent of 26 feet per second. The T-11R harness reserve attachment points align the parachute opening forces along the long axis of the jumper's body. The harness incorporates the use of comfort pads, an integral equipment release, and adjustability for use by a 5th percentile female and 95th percentile male parachutist.

MC-6 Main Parachute. During use, it is located on the back of the parachutist. Opening of the main canopy is controlled by its shape. The parachute has a forward speed of 10 knots and can complete a complete 360 degree turn in 5 seconds.

T-11 Reserve Parachute. T-11R parachute is a chest mounted ripcord center pull reserve parachute. In an emergency situation, the T-11R may be deployed with either hand under the following conditions:

1. Fully deployed main parachute.
2. Partially deployed main parachute (partial malfunction)

Main Parachute Harness. The main parachute harness is adjustable to fit the parachutist. Changing the settings on the two adjusters located at the shoulder of the harness accommodates individual chest sizes. The two main lift web adjustments are to accommodate individual torso length.

Main Parachute Deployment Sequence. Activation begins with the static line connected to the aircraft and the jumper exiting. The static line tightens as the jumper falls away from the aircraft, pulling the main container closing pin from the container closing loop. The static line is connected to the deployment bag and as the jumper continues to fall away from the aircraft, the deployment bag is held by the static line. Two 80-pound cotton break cords, one on each riser group holding the risers and lines in place, break. After the suspension lines pay out of the line stow loops, the suspension lines pull out of the deployment bag closure loops, opening the bag mouth. The parachute skirt with its anti-inversion netting (AIN) is the first to emerge from the deployment bag. The remainder of the canopy continues to pay out from the deployment bag as the jumper falls away. As the last bit of canopy (the apex) deploys from the bag, a final double 80-pound cotton tie breaks, freeing the parachute from the deployment bag. As the parachute system reaches full elongation downstream, the canopy begins to inflate. During the initial stages of inflation, control line movement is limited by the eight control line limiters. Once completely inflated, the control line limiters are slack, the extended gores are fully inflated, and the control lines are free and clear.

Reserve Parachute Deployment Sequence. Upon activation by means of the ripcord handle, the closing pins are extracted. From this point on the parachutist has nothing to do in order to ensure or enhance the performance of the reserve system. Following pin extraction, the ejector spring parts the flaps of the container launching an extractor cap from the solid flat base and places the top portion of the parachute with its associated extraction and assist system away from the parachutist and into clean air flow. Both the primary extractor parachute and the scoops inflate almost immediately and carry first the 'S' folded canopy and then the lines from the tray up and alongside the malfunctioned main parachute (if present).

The T-11R parachute responds differently to different situations as follows:

1. **At low speed.** The combination of ejector spring and double deployment system apply a positive force to the apex of the reserve canopy to expedite and control the deployment thus reducing the risk of entanglement. Tests have shown that the primary extractor parachute is too big when inflated, and lacks momentum (as there is no pilot chute spring mass), to get into the main parachute line cone. The scoops operate in a similar manner. Once aligned the open skirt is presented to the airflow. By virtue of the skirt assist lines the normal orifice for inflation is greatly enhanced allowing the funneling of air into the parachute.
2. **At high speed.** The high drag of the lightweight extractor parachute is not required after canopy elongation. In this event the securing ties break and release the extractor parachute to go free. Moreover at line stretch, the frangible skirt assist lines break preventing the hem from flaring prematurely, and allowing the canopy to inflate in a conventional manner.

END OF WORK PACKAGE

CHAPTER 2

**UNIT MAINTENANCE INSTRUCTIONS
FOR
MC-6 PERSONNEL PARACHUTE SYSTEM**

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
INTRODUCTION

OVERVIEW

This chapter contains information necessary to maintain the MC-6, on the unit and direct support maintenance levels, in accordance with the Maintenance Allocation Chart (MAC) for the equipment. It includes the following:

1. Procedures for processing a new or used parachute assembly upon receipt.
2. Assembly of components prior to packing.
3. Preventive maintenance procedures to ensure continued serviceability of all components.
4. As required inspections and maintenance procedures performed prior to packing such as shakeout and airing, cleaning and drying, and salt-water contamination tests.
5. Detailed packing procedures.
6. Repair methods and repair (or replacement) procedures for all components of the parachute assembly.

Common Tools and Equipment. For authorized common tools and equipment, refer to the Modified Table of Organization and Equipment or Table of Distribution and Allowances (MTOE/TDA) applicable to your unit.

Special Tools, TMDE, and Support Equipment. Tools and equipment that must be fabricated are listed in WP 0113 00 of this manual.

Repair Parts. Repair parts are listed and illustrated in WP 0098 00 through WP 0108 00 of this manual.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
SERVICE UPON RECEIPT

INITIAL SETUP:**Tools**

Needle, Tacking (Item 32, WP 0097 00)
 Cradle, Deployment Bag Packing (Item 13, WP 0097 00)
 Ballast, Bag, 14-lb (Item 6, WP 0097 00)
 Ballast, Bag, 27-lb (Item 5, WP 0097 00)
 Carabiner, Small (Item 9, WP 0097 00)
 Tape Measure (Item 64, WP 0097 00)
 Test Tube, Spring Compression (Item 67, WP 0097 00)
 Tester, Spring, 0 to 80 lbs. (scale) (Item 66, WP 0097 00)

Personnel Required

Two 92R (10) Parachute Riggers (during positioning of control lines only).

Materials/Parts

Tape Lacing And Tying, Nylon, A-A-52080-B-3 (Item 42, WP 0109 00)
 Cord, Nylon, Type III, (Item 18, WP 0109 00)

Equipment Condition

All equipment shall be serviceable and ready for use.
 Cuff, Fabric (fabricated IAW WP 0113 00)

INITIAL RECEIPT

The following describes the procedures for processing parachutes upon initial receipt.

General Procedures for Air Delivery Equipment. When air delivery equipment is initially procured from a supply source and issued to a using unit, the item(s) will be unpacked from the shipping container(s) and inspected by a qualified parachute rigger (MOS 92R). The inspection performed will be a technical rigger-type inspection and will be conducted as outlined in the Preventive Maintenance Checks and Services (PMCS) procedures. Upon completion of the inspection, the item(s) will be tagged as prescribed in DA PAM 738-751. Serviceable equipment may then be entered either into storage or into use in airdrop operations, as applicable. An unserviceable item will be held and reported, in accordance with DA PAM 750-8.

Inspection Personnel. Personnel other than parachute rigger personnel may assist in the unpacking process of initially received parachutes, as directed by the local air delivery equipment maintenance officer. However, the maintenance officer will ensure the entire unpacking effort is conducted under the direct supervision of a qualified rigger (MOS 92R).

Configuration Condition. Acceptance of new equipment from the manufacturer is based upon inspections made of sample lots that have been randomly selected in accordance with military standards. It is incumbent upon the using activity personnel to bear this in mind whenever equipment is first placed in service. Changes will sometimes evolve from the original equipment design and sometimes contractors are authorized deviations in material and construction techniques. Air delivery equipment that has been in the field cannot be expected to meet exacting manufacturing specifications; however, the equipment should closely reflect desired design characteristics. Since repairs, modifications, and/or changes can alter or detract from the configuration originally desired, such equipment shall be airworthy, safe, of the desired configuration, and adequate for intended use.

Marking Parachutes. Prior to being placed into service, personnel parachutes that have had no previous use will be marked to reflect the date of entry into service. The marking will be made on the canopy information data block by stenciling the lettering in 1/2-inch characters, using the marking and restenciling repair procedures detailed in WP 0019 00. Other applicable parachute components will be marked adjacent to existing data. The stenciled data will appear as "Placed In Service (PIS)" followed by the date, which will indicate the month and calendar year, such as "Jan. 05". Ensure the added marking does not infringe upon, or obliterate, any original data on the information data block.

Marking Risers. Prior to being placed into service, the risers will be placed in service and identified as a MC-6 by ensuring that each riser has been manufactured with a blue confluence wrap sewn onto each riser assembly.

Perform 100% line continuity on main parachute.

1. Conduct a line continuity check in accordance with the steps 5 – 8 below paying close attention to the suspension lines (**figure 1**).
2. Top left suspension line group. Line 1 (inside top) followed in sequence by 2,3,4,5,6,7 (out side top) runs from the canopy to top left connector link.
3. Bottom left suspension line group. Line 14, (inside bottom) followed in sequence 13,12,11,10,9,8 (outside bottom) runs from the canopy to bottom left connector link.
4. Top right suspension line group. Line 28, (inside top) followed in sequence 27,26,25,24,23,22 (outside top) runs from the canopy to the top right connector link.
5. Bottom right suspension line group. Line 15, (inside bottom) followed in sequence 16,17,18,19,20,21 (outside bottom) runs from the canopy to the bottom right connector link.



Figure 1. Line Continuity Check.

6. Re-Attach the appropriate connector link, top left connector link to the top left riser, etc. Place the left set of connector links on the left post of the tension plate and the right group of connector links on the right post of the tension plate (**figure 2, item 1**).
7. Layout the main risers (**figure 2, item 2**) directly behind the connector link groups (**figure 2, item 3**) ensuring there are no twists. Rear riser needs to be on top.

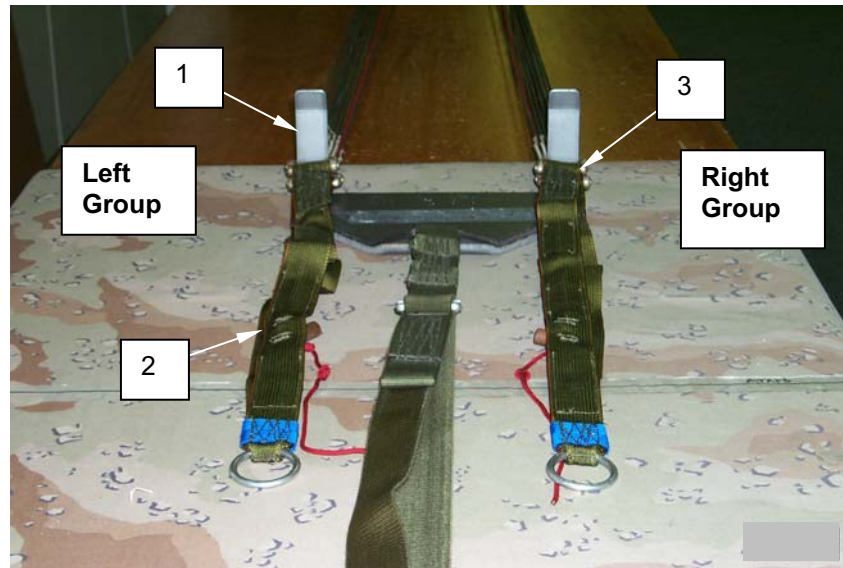


Figure 2. Reattaching Connector Links.

Position Control Lines on Main Parachute. For new MC-6 parachutes being placed in-service and in-serviced parachutes, position control lines as follows:

1. Ensure that all ten upper control lines (five left side, five right side) and four guide rings (two left side, two right side) are routed correctly and are free and clear.
2. Ensure that all four middle control lines (two left side, two right side) are free and clear, and that the four control line limiters (two left side, two right side) are routed and attached correctly.
3. Ensure the two lower control lines (one left, one right) (**figure 3, item 1**) are free and clear in the canopy.

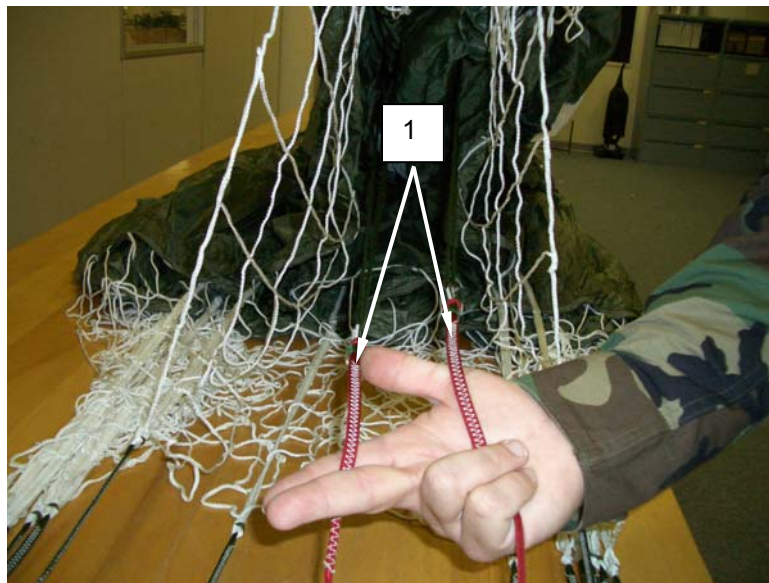


Figure 3. Ensuring Lower Control Lines are Free and Clear.

4. Trace the lower control lines (left and right) (**figure 4, item 1**) down to the risers end (**figure 4, item 2**) ensure that the lower control lines are free and clear from suspension lines and are routed to the outside of the tension bar (**figure 4, item 3**).

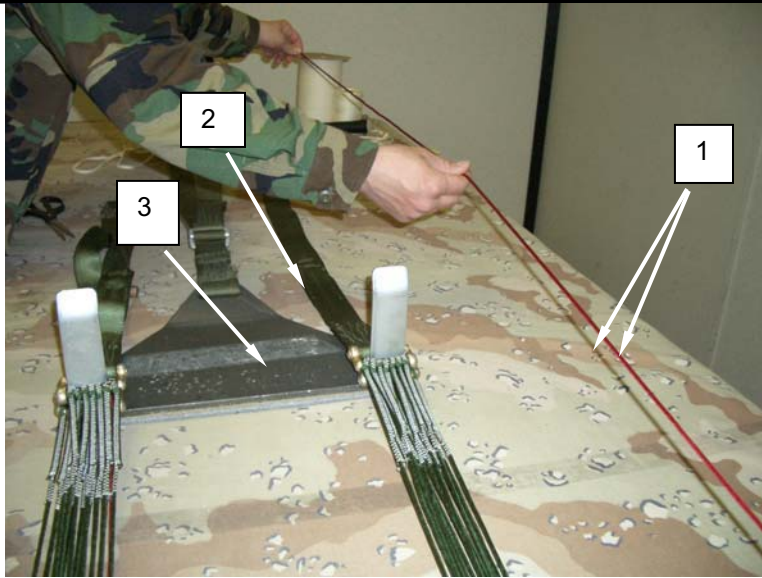


Figure 4. Tracing Lower Control Lines Down To Risers.

NOTE

Requires two rigger personnel to conduct measurement.

5. Measure the lower control lines (left and right) with 5 lbs of pressure.
6. Using a calibrated scale, insert the scale hook-end (**figure 5, item 1**) into the girth hitch (**figure 5, item 2**) where the lower control line (**figure 5, item 3**) is attached to the middle control line cascade.

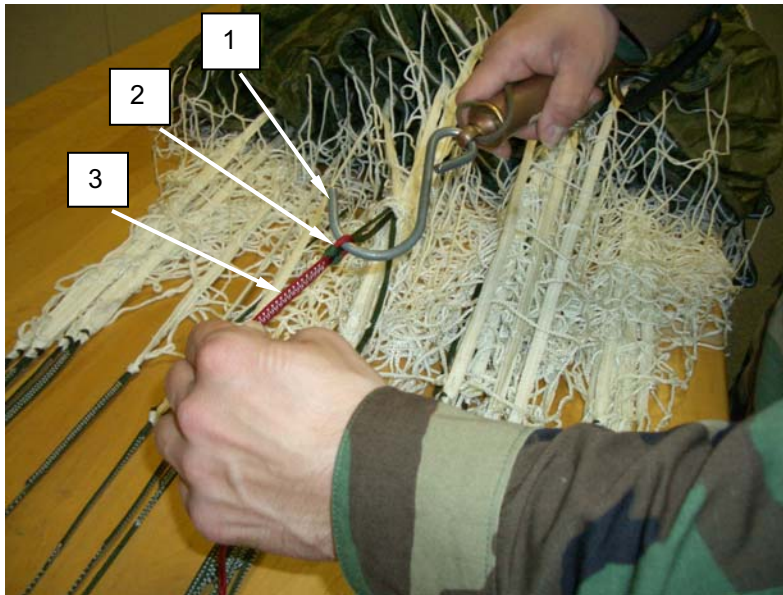


Figure 5. Inserting Scale Hook-end into Girth Hitch.

7. Measure from where the lower control line (**figure 6, item 1**) is girth hitched to the middle control line cascade down to the riser end and mark the control line at 282 inches (**figure 6, item 2**) with a yellow mark. Follow procedure for both lower control lines.

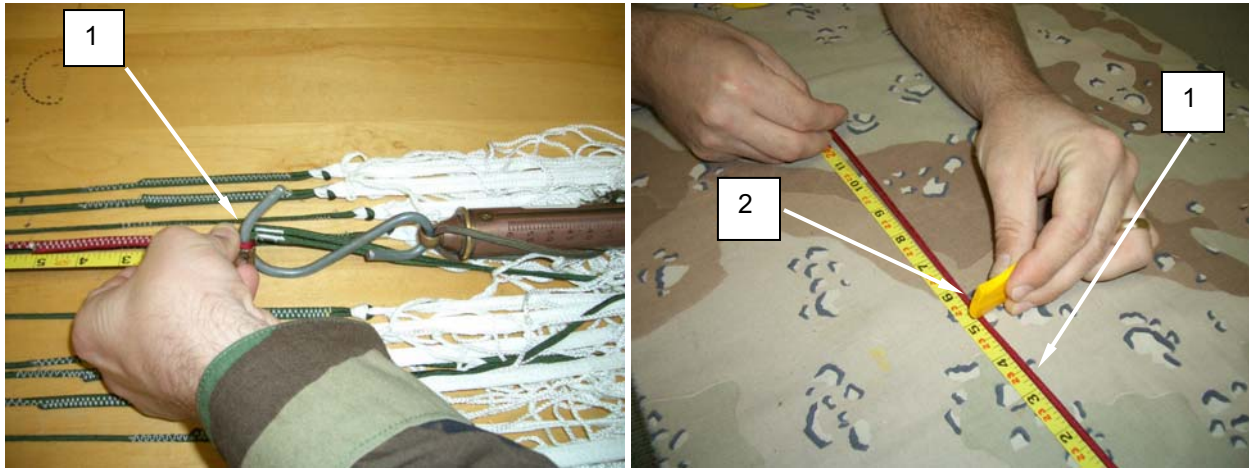


Figure 6. Marking Control Line at 282 Inches.

8. Once the measurements are completed, route both lower control lines (left and right) to the center of both left and right suspension line groups, ensure the lower control lines are free and clear and to the inside of the suspension line groups.
9. Pass each lower control line (**figure 7, item 1**) through the two control line channels (located on the inside of each rear riser) (**figure 7, item 2**), then through the guide ring (**figure 7, item 3**) and finally through the wooden toggle (**figure 7, item 4**).

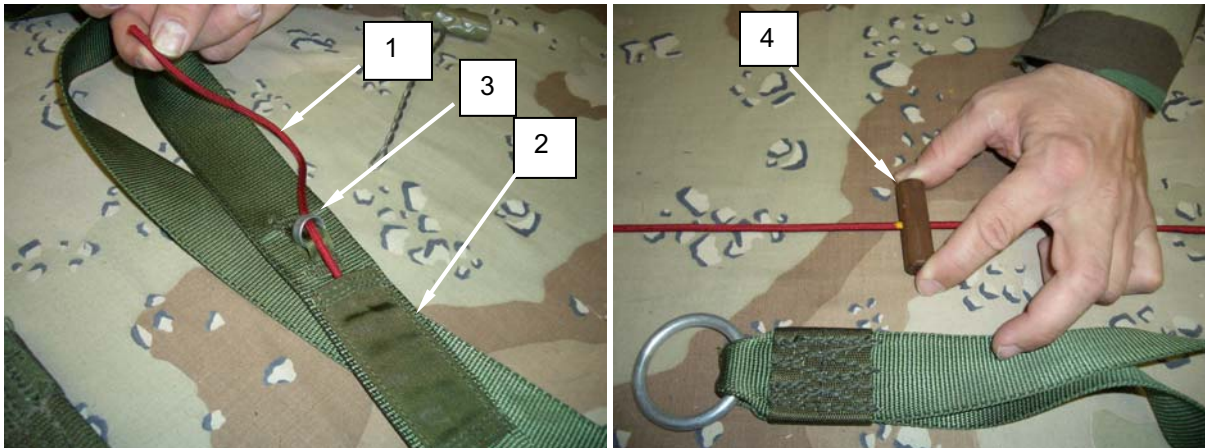


Figure 7. Routing Control Line Through Channel, Guide Ring, and Toggle.

10. Push the toggle (**figure 8, item 1**) up past the 282-inch mark (**figure 8, item 2**) and tie two overhand knots (**figure 8, item 3**) on top of each other, below the toggle, such that the yellow mark (282-inch mark) is located in the center of the first knot.

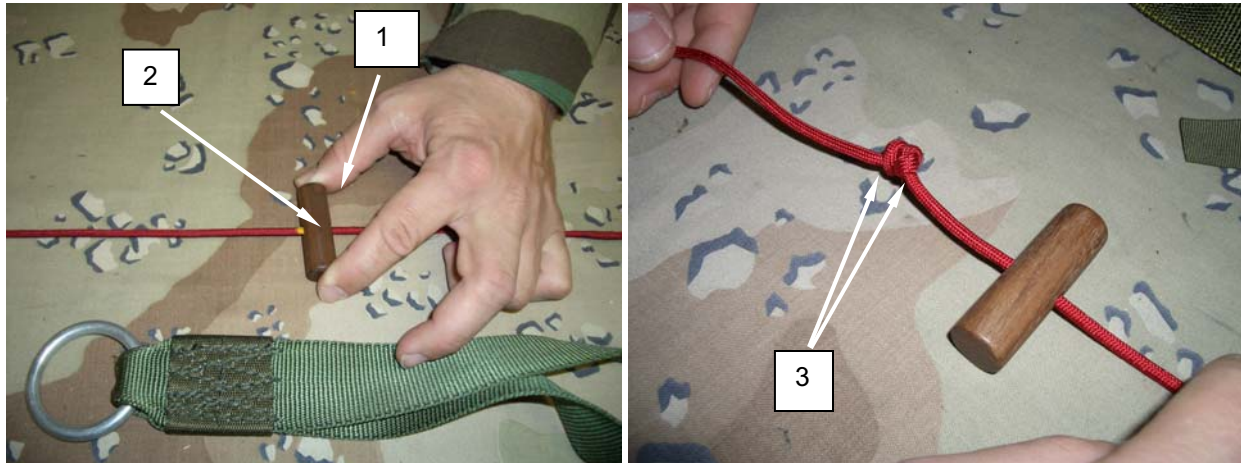


Figure 8. Tying First Two Overhand Knots.

11. Leave a gap of about 2.5 inches (3 fingers width) and tie another overhand knot (**figure 9, item 1**).



Figure 9. Tying Final Overhand Knot.

Parachute Log Record. The Army Parachute Log Record, DA Form 3912, AFTO 391 is a history-type maintenance document that accompanies the parachute canopy and pack tray assemblies through the period of service of the individual assembly. The log record provides a means of recording maintenance actions performed on a parachute canopy assembly. Normally, a log record is initiated and attached to a riser assembly upon receipt by a using unit. If the item is subjected to alteration or modification by a maintenance activity during the interim period from date of manufacture to receipt by a using unit, the log record will be prepared by the activity performing the maintenance function. Once initiated, a log record will be attached to, and contained in, an affixed parachute log record/ inspection data pocket, until such time as the parachute canopy assembly is destroyed or rendered unfit for further use or repair.

Additionally, should an item that requires a log record, be transferred from one unit to another, the log record for the parachute assembly will accompany the item in the transfer action. A prepared log record will not be removed or separated from a parachute, and especially a packed parachute, except as directed by the local air delivery equipment maintenance activity officer.

A log record that is illegible, lost, damaged, soiled, or precludes further entries due to lack of space, will be replaced upon the next repack or inspection, as applicable, with a serviceable item from stock.

Installing Attaching Tie. Install attaching tie as follows:

1. Cut a 30-inch length of tape, lacing and tying (super tack), and double the lacing length.
2. Pass the looped end, of the doubled lacing length, around the centerfold of the log record and form a slip loop on the outside, at the log record top.

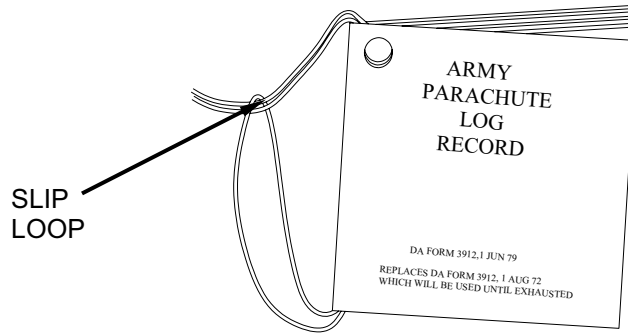


Figure 10. Forming Slip Loop on Log Record Outside.

3. Pass the lacing length running ends through the corner attaching hold, from the front cover of the log record.

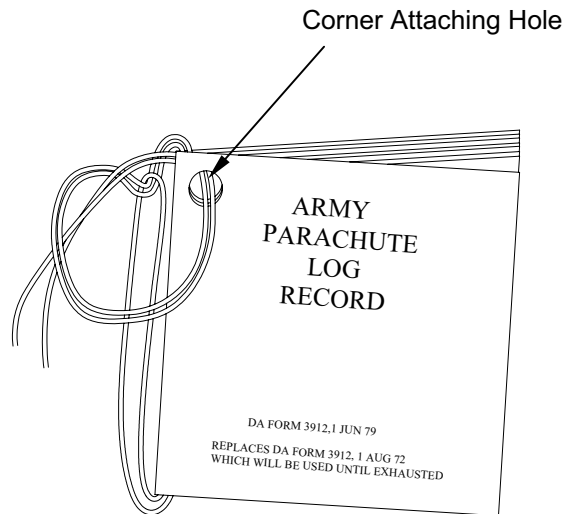


Figure 11. Passing Lacing Loose Ends Through Corner Attaching Hole.

4. Ensure the running ends are routed over that part of the lacing length located along the log record centerfold.

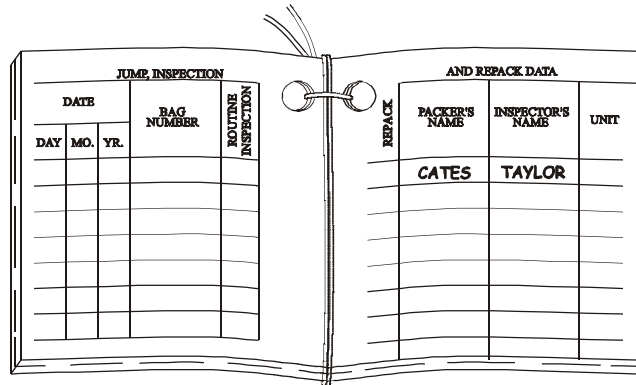


Figure 12. Routing Lacing Loose End Through Log Record Centerfold.

5. Complete the attachment tie by making a half hitch on top of the slip loop made in step 2, above.
6. Thread one running end of the log record attachment tie in a tacking needle and pass the tacking needle, with attached end, through the edge binding of the applicable parachute log record/ inspection data pocket.
7. Remove the lacing end from the tacking needle; make a finished 10-inch long log record attaching loop by securing the two lacing ends together with an overhand knot.

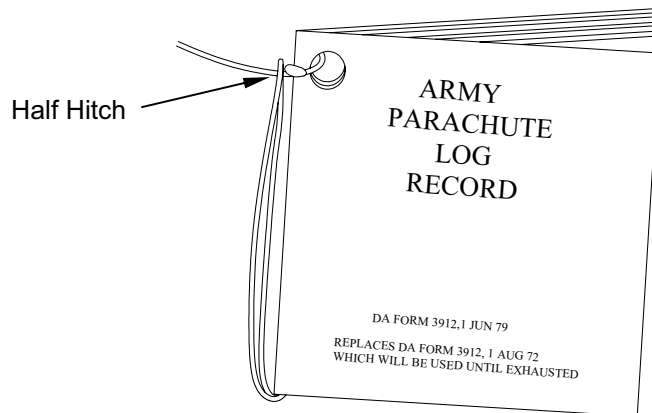


Figure 13. Log Record Attachment Tie Completed.

8. Insert the log record into the pocket and secure the record within the pocket using the pocket flap and applicable type flap fastener.

Accomplishing a Log Record. Upon completion of the first technical/ rigger-type inspection, the individual performing the inspection will initially prepare a log record for an individual parachute, or applicable type parachute harness, and accomplish subsequent record entries using the following procedures:

NOTE

Log record book entries will be made with a suitable type blue or black marking device that cannot be erased (no felt tip markers).

1. Inside Front Cover. Using the information provided on the parachute canopy data block, make the following entries on the inside front cover of the log record. Entries may be continued on the inside of the back cover, if necessary.

SERIAL NO.	○
TYPE	
PART NO.	
DATE OF MFG. (Month & Year)	
MANUFACTURER	
CANOPY CONTRACT NO.	
MO/YR CANOPY PLACED IN SERVICE	
STATION & UNIT	
(Continued on inside back cover)	

Figure 14. Inside Front Cover.

NOTE

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

- a. Serial Number. Enter the parachute canopy assembly serial number.
- b. Type. Enter the parachute type.
- c. Part number. Enter the part number of the parachute canopy.
- d. Date of Manufacture. Enter the month and year the parachute canopy was manufactured.
- e. Manufacturer. Enter the name of the parachute canopy manufacturer.
- f. Canopy Contract Number. Enter the entire contract number specified for the parachute canopy.
- g. Station and Unit. Enter the name of the station and unit to which the parachute canopy is currently assigned. When a parachute is transferred permanently to another station, and/ or unit, the original entry will be lined out and the name of the receiving station, and/ or unit, will be entered.

- 2. Inside Back Cover. Entries may be continued on the inside back cover, if necessary.

Figure 15. Inside Back Cover.

- 3. Modification Work Order (MWO) Compliance Record Page. When a modification is performed on a parachute canopy, the following entries will be made on the Modification Work Order Compliance Record pages of the log record, as follows:

- a. MWO Number. Enter the publication number and date of the MWO that describes the MWO.

Legend

- 1. Modification Work Order Compliance Completed.
- 2. Modification Completed By Unknown Due To Lost Original Log Record.

Figure 16. Modification Work Order (MWO) Compliance Record Page.

- b. MWO Title. Enter a short, abbreviated title extracted from the MWO prescribing the work.
- c. Modified by. Enter the last name of the individual who has performed the modification. If the original log record for the parachute has been lost, and it has been ascertained through inspection that a particular modification has been accomplished, the entry for this column will be C/W, complied with, which signifies the applicable MWO has been complied with.
- d. Inspected by. The individual who accomplished the inspection, required after modification, will sign this entry with last name only.
- e. Unit. Enter the unit designation responsible for performing the MWO or, in the event of a lost log record, the unit to which the inspector is assigned.
- f. Date. Enter the day, month, and year the modification work was completed.

4. Unit and Direct Support Repair and Inspection Data. When a parachute canopy assembly is initially received from a supply source, and a technical/rigger-type inspection is performed, the inspection accomplishment will be documented on the Unit and Intermediate Repair and Inspection Data page of the individual parachute log record. Additional entries will also be made on this page each time the canopy assembly is repaired, or is administered an inspection, in compliance with a Safety-of-Use-Message (SOUM), Ground Precautionary Message (GPM) or a Maintenance Advisory Message (MAM). The page completion criteria are as follows:
 - a. Type of repair. Enter the type of repair, completion of initial inspection, repair accomplishment, SOUM, GPM or MAM inspection compliance.
 - b. Inspection by. The individual, who accomplished the inspection required, will sign this entry with last name.
 - c. Unit. Enter the unit designation responsible for performing the type of repair.
 - d. Date. Enter the day, month, and year the repair was performed.

UNIT & INTERMEDIATE	REPAIR & INSPECTION DATA				
TYPE OF REPAIR	INSP BY	UNIT	DATE		
			DAY	MONTH	YEAR
1 → Initial Inspection	<i>Phillips</i>	SBCCOM	12	2	01
2 → ISEC and 4 lines replaced	<i>Kididis</i>	SBCCOM	3	3	01
3 → TB10-1670-213-2015	<i>Land</i>	SBCCOM	10	4	01

- Legend**
1. Completion Of Initial Inspection
 2. Repair Accomplishment
 3. SOUM, GPM, or MAM Inspection Compliance

Figure 17. Unit and Direct Support Repair and Inspection Data.

5. Note page. A page is provided at the back of a parachute log record to accommodate recording additional data pertinent to the serviceability of a parachute canopy assembly. This shall also include the month and year the item was placed in service.


	NOTES
Riser Mfg Date: Jan '86 Placed in Service: Mar '86 Immersed in Saltwater: 26/10/86 Rinsed: 27/10/86	

Figure 18. Note Page.

NOTE

A parachute log record that is completely filled out, lost, illegible, or in an otherwise unserviceable condition, will be replaced with a serviceable log record.

6. Replacing a filled out or unserviceable log record.
 - a. Using a suitable blue or black marking device, enter NEW BOOK on the outside front cover of the replacement log record.
 - b. Transcribe the information from the inside front cover of the original log record to the inside front cover of the replacement log record. If the original data is illegible or missing, use the canopy information data block to collect the required data.
 - c. In the replacement log record; transcribe the initial and last entry made on the Jump, Inspection, and Repack Data page of the original log record.
 - d. Transcribe all data from the remaining pages of the original log record; to the appropriate pages of the replacement log record.
 - e. After all original data has been transcribed destroy the original log record.
7. Replacing a lost log record.

NOTE

Any time a log record is discovered missing from a parachute, a replacement log record will be initiated during repack or inspection, as applicable.

- a. Accomplish the log record inside front cover as prescribed above.
- b. If it can be ascertained by inspection that a previous MWO, SOUM, GPM or MAM has been complied with, applicable entries will be made on the appropriate page of the replacement log record.

- c. Attach the replacement log record to the log record/inspection data pocket using the procedures above.
8. Reserve ripcord grip pull test.

NOTE

The following ripcord grip pull test is performed upon initial receipt of a new MC-6 System, a T-11R assembly, or a new T-11R ripcord handle. The T-11R will be completely packed IAW WP 0016 00. The T-11R will be subjected to both a 14-pound minimum and 27-pound maximum ripcord pull test.

- a. Use of a locally fabricated handle cuff is required. Fabricate a fabric cuff IAW WP 0113 00.

NOTE

To conduct the T-11R ripcord pull tests, the packed T-11R shall be face down on the top of the packing cradle to allow the parachute to be deployed in a downward direction. There must be sufficient clearance beneath the horizontally suspended T-11R to suspend a weight from the ripcord handle and allow it to withdraw the ripcord pins from the soft loops activating the parachute.

A suggested method to ensure sufficient clearance beneath the horizontally suspended T-11R to conduct this test is to place two pack tables end to end with approximately 18-inches between them. Place the packing cradle on top of the pack table centered over the gap.

The pull force exerted upon the handle must be uniformly distributed along the length of the handle. The handle cuff may be fabricated by using lightweight cotton duck material cut to 4 inches by 6 inches in size with two 1/2-inch holes spaced evenly so they will be below the handle when the material is folded in half around the handle.

TEST PREPARATION

1. Insert temporary closing pins into the two pack closing loops so that the reserve does not deploy when the handle is pulled.
2. Aggressively exercise the reserve handle by pulling it 5 times in each direction diagonally towards the corners of the reserve pack tray. Reinsert the handle tuck tabs (top, bottom, two sides) after each pulling exercise.

NOTE

Do not reseal the curved pins during pull exercise.

3. Reinsert the reserve handle tuck tabs (top, bottom, two sides) after each pulling exercise. This will serve to break-in the handle.
4. Reseat the curved pins of the reserve handle. Remove the temporary closing pins holding the reserve closing loops.

WARNING



Do not stand directly underneath the T-11R in the event of accidental activation. Being hit by the ejector spring may cause severe injury. Stand off to one side of the T-11R when conducting both the 14-pound and 27-pound pull test.

CONDUCT TEST

Conduct a 14-pound Minimum Ripcord Pull Test as Follows:

1. Place the handle cuff over the T-11R ripcord handle so that the grommets are below the handle and centered.
2. While standing at the pack frame with the T-11R positioned for the pull test, carefully attach a 14-pound weight to the ripcord handle cuff and very slowly remove your hand from under the weight to allow the weight to be slowly transferred to the ripcord grip. Do not release the weight suddenly or let it drop since this will invalidate the test. The weight must not completely withdraw the ripcord pins from the soft loops and the ripcord handle completely from the pack tray.
3. If the 14-pound weight causes complete withdrawal of the ripcord pins and the ripcord handle, conduct a retest. The retest must be performed 5 times. Conduct a retest by repacking the T-11R IAW WP 0016 00 and repeat step 1 and 2 above.
4. Upon completion of the retest (5 iterations), if the 14-pound weight does not withdraw the ripcord pins and ripcord handle from the T-11R each of the 5 times, it passes the 14-pound ripcord pull test.
5. If during any one of the 5-retest iterations the 14-pound weight causes complete withdrawal of the ripcord pins and the ripcord handle, then remove the T-11R assembly, replacement pack tray or ripcord handle (which ever is applicable), from service and follow instructions in step 6 below.

6. If the pack tray and ripcord handle are new (part of a T-11R assembly), or a new replacement pack tray or handle, submit an Standard Form (SF) 368, Product Quality Deficiency Report (PQDR) for the new items.

Conduct a 27-pound maximum ripcord pull test as follows:

1. Place the handle cuff over the T-11R ripcord handle so that the grommets are below the handle and centered.
2. While standing at the pack frame with the T-11R positioned for the pull test, carefully attach a 27-pound weight to the ripcord grip and very slowly remove your hands from under the weight to allow the weight to be very slowly transferred to the ripcord grip. Do not release the weight suddenly or let it drop since this will invalidate the test.
3. If the 27-pound weight does not withdraw the ripcord pins and handle, remove the weight and re-inspect the ripcord pins and ripcord handle to ensure there are no bent pins. Ensure proper alignment of the handle tuck tabs. Bent pins or misaligned tuck tabs can significantly increase the ripcord withdrawal force. If ripcord pins and handle are serviceable, reseal the pins and tuck tabs and conduct a retest.
4. The retest must be performed 5 times. Conduct retest by repacking the T-11R IAW WP 0016 00 and repeat step 1.
5. Upon completion of the retest (5 iterations), if 27-pound weight does withdraw the ripcord pins and ripcord handle each of the 5 times, it passes the test.
6. If during any one of the 5-retest iterations the 27-pound weight does not withdraw the ripcord pins and ripcord handle, then remove the T-11R assembly, replacement pack tray or ripcord handle (which ever is applicable), from service and follow instructions in step 7 below.
7. If the pack tray and ripcord handle are new (part of a T-11R assembly), or a new replacement pack tray or handle, submit a PQDR for the new item.
8. If the T-11R passes both the 14 and 27-pound ripcord pull test, repack the T-11R IAW WP 0016 00.
9. Annotate completion of this test (test conducted, name of tester, date completed) on the notes page of the parachute log record book (DA Form 3912).

EJECTOR SPRING ASSEMBLY TEST FOR THE T-11R**NOTE**

The test tube (PVC pipe) and the 32-lb weight constitute the spring compression test set. The spring compression test set is locally manufactured IAW WP 0113 00.

Perform a compression test during initial receipt, during each re-pack and each time the ejector spring is replaced. It may be necessary to allow the spring to remain in a relaxed state for up to 24 hours before testing (especially those that have been compressed/packed for 365 days).

TEST

Perform the spring compression test as follows:

CAUTION

Dropping the weight onto the spring will result in unnecessary replacement of the spring and cause irreparable damage to the material covering the spring.

1. Place the tube on a flat hard surface in the vertical position with the 6-inch slot closest to the floor.
2. Place the spring inside the tube.
3. Lower the 32-pound weight onto the spring.
4. Check to ensure that the spring is visible between the 6-inch slot in the tube.

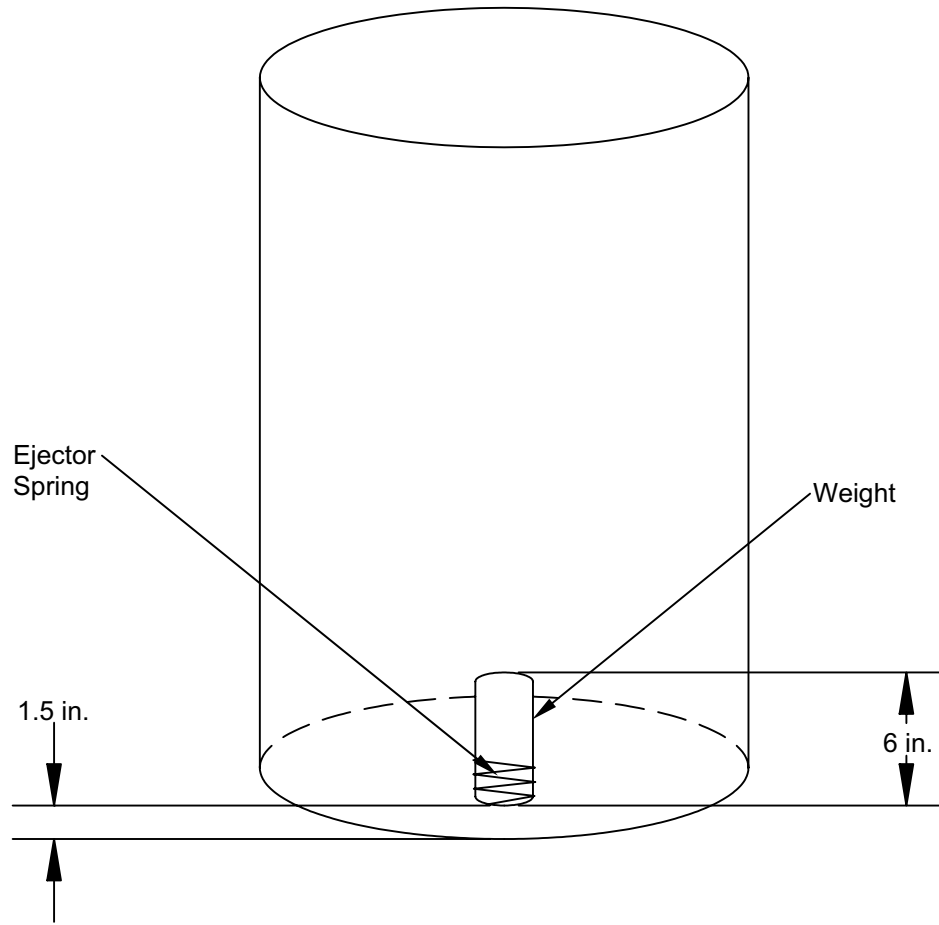


Figure 19. Spring Compression Test Tube.

5. If the top of the spring falls above or below the slot, discard and replace the ejector spring with a serviceable one from stock.

RECEIPT OF USED PARACHUTE

Upon initial receipt of used parachute, proceed as follows:

1. Follow procedures given in the General Procedures for Air Delivery Equipment paragraph, above, and check each component for excessive wear and tear.
2. If defects or damages are discovered, process the parachute for maintenance at the maintenance level assigned by the Maintenance Allocation Chart (MAC), WP 0097 00.

AFTER-USE RECEIPT

When a parachute is received at the maintenance activity, following its use by the parachutist during air delivery, it must be given a shakeout and aired (WP 0010 00), and if necessary, cleaned (WP 0011 00) before it can be returned to service. If a parachute is issued but is not used, it does not need to be given a shakeout; however, it must be given a routine inspection by a qualified parachute rigger (MOS 92R).

CHECKING UNPACKED EQUIPMENT AFTER SHIPMENT

1. Inspect equipment for damage incurred during shipment. If the equipment has been damaged, report the damage on a SF 361, Transportation Discrepancy Report (TDR).
2. Check the equipment against the packing slip to see if the shipment is complete. Report all discrepancies in accordance with the instructions in DA PAM 750-8.
3. Check to see whether the equipment has been modified.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
ASSEMBLING THE MAIN CANOPY
ASSEMBLY

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
 Needle, Tacking (Item 32, WP 0097 00)
 Wrench, Adjustable, 8-in (Item 71, WP 0097 00)
 Sewing Machine, Double Needle (Item 54, WP
 0097 00)
 Shears (Item 61, WP 0097 00)
 Screwdriver, Flat (Item 49, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Band, rubber retainer, 1-1/16-in (Item 1, WP 0109
 00)
 Band, rubber retainer, 2-inch (Item 3, WP 0109
 00)
 Tape, Lacing and Tying, Nylon, (Item 42, WP
 0109 00)
 Webbing, Cotton, 80 lb. (Item 53, WP 0109 00)

Equipment Condition

All equipment shall be serviceable and ready for
 use.

NOTE

If any component is found to be defective when it is received from the supply activity, the component should be set aside and a PQDR should be submitted prior to initiating any repairs on that component.

ASSEMBLY

NOTE

Procedures begin on following page.

Assembling the MC-6 Personnel Parachute System. When the parachute is received from the supply activity, and before it is packed for use, the components must be assembled. If, in assembling components, any component is found to be defective, the parachute must be processed for repair. Place the components on a packing table and obtain proper layout of the canopy assembly; then assemble components as follows:

1. **MC-6 Harness.** Attach the harness to the pack tray as follows:
 - a. Lay pack tray (**figure 1, item 1**) on pack table with the harness (**figure 1, item 2**) attaching points facing up (**figure 1, item 3**).
 - b. Place the harness (**figure 1, item 2**) on the pack tray (**figure 1, item 1**) with the hip (**figure 1, item 4**) and shoulder pads (**figure 1, item 5**) facing up.

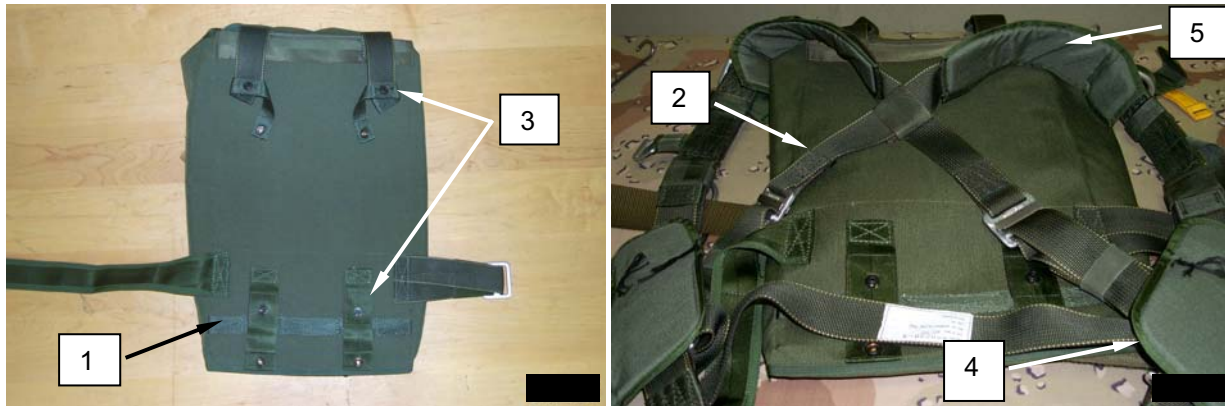


Figure 1. Pack tray and Harness.

- c. Adjust harness so that it is set properly.
2. Secure the horizontal back strap (**figure 2, item 1**) by routing both pack tray horizontal back strap retainers (**figure 2, item 2**) over the back strap (**figure 2, item 4**), route the horizontal back strap keepers and secure the snap fasteners (**figure 2, item 5**).

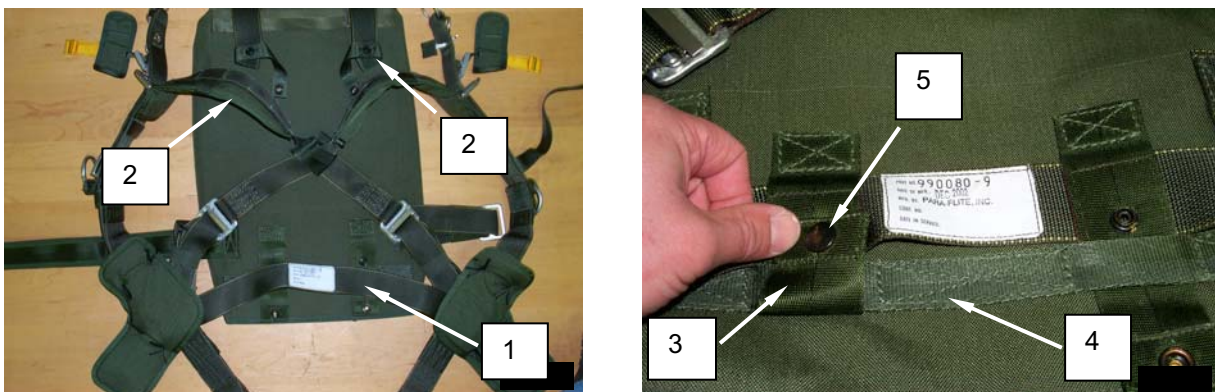


Figure 2. Securing Horizontal Back Strap and Attaching Diagonal Back Straps.

3. Attach diagonal back straps (**figure 2, item 3**) by rotating the long tuck tab (**figure 3, item 1**) (snap fastener cap attached) through the selected sizing channel (**figure 3, item 2**).
 4. Route the small tuck tab (**figure 3, item 3**) into the sizing channel between the long tuck tab (**figure 3, item 3**) and the sizing channel (**figure 3, item 1**).

5. Close snap fastener (**figure 3, item 4**) and secure (**figure 3, item 5**).



Figure 3. Route Small Tuck Tab, Close Snap Fastener, and Snap Fastener Secured.

6. Repeat for the opposite side.

ASSEMBLE LOCKING KEY AND SOFT LOOP

1. Locate the canopy release assembly (**figure 4, item 1**) at the shoulder of the harness assemblies (**figure 4, item 2**). Open the canopy release assembly cover plate (**figure 4, item 3**) by pulling downwards.
2. Locate and remove the operating lug (**figure 4, item 4**) by depressing the two operating lug release levers (**figure 4, item 5**).
3. Pass the soft loop (**figure 4, item 6**) through the grommet (**figure 4, item 7**) in the harness main lift web insuring the webbing tab of the loop is positioned on the underside of the three ring riser release (**figure 4, item 8**).

NOTE

Use lacing tape to assist routing the soft loop if needed.

4. Pass the loop (**figure 4, item 6**) through the slot in the operating lug (**figure 4, item 4**) and secure using a girth-hitch knot (**figure 4, item 9**).
5. Repeat for opposite side.

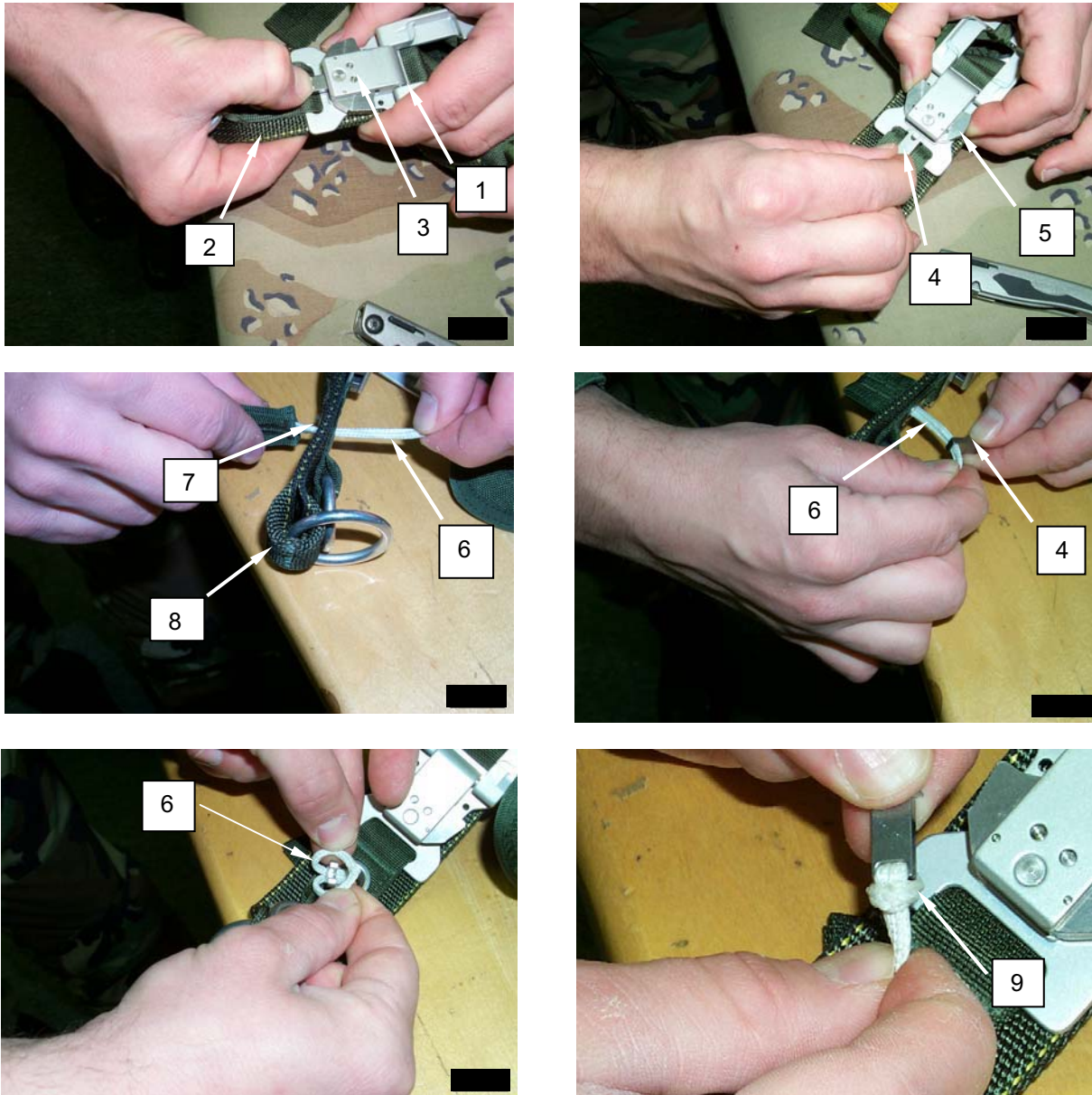


Figure 4. Locating Canopy Release Assembly, Removing Operating Lug, and Passing Soft Loop Through the Grommet.

Attach the Canopy Release Covers

NOTE

There is a right release cover and left release cover.

1. Open the canopy release cover plate (**figure 5, item 1**) on the canopy release assembly (CRA) (**figure 5, item 2**).

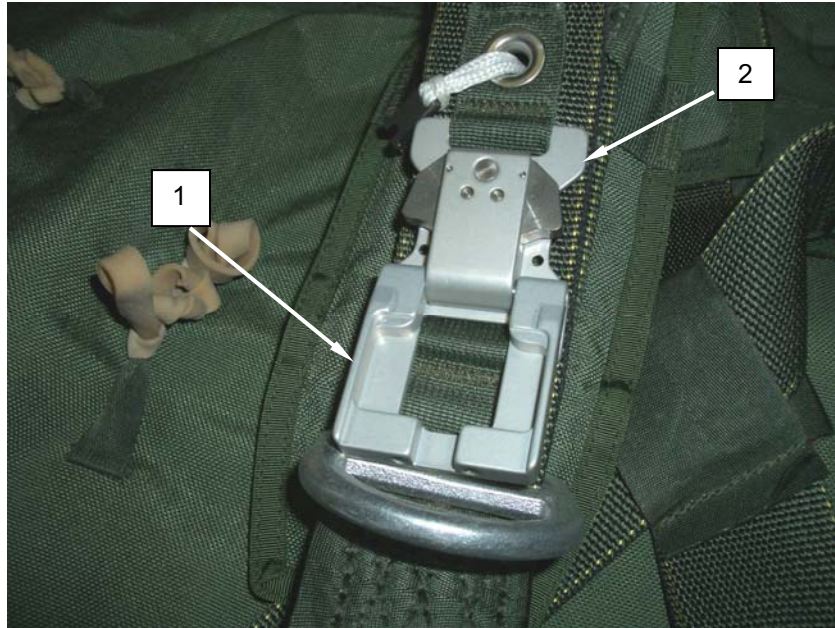


Figure 5. Opening the Canopy Release Cover Plate

2. Orientate the right release cover and left release cover by ensuring that the yellow lanyard (**figure 6, item 1**) is facing forward and the release cover attaching loop (**figure 6, item 2**) is facing upward.
3. Distinguishing the right release cover from the left release cover, insert the long tuck tab (**figure 6, item 3**) so that it faces the inside and the short tuck tab (**figure 6, item 4**) so that it faces the outside.

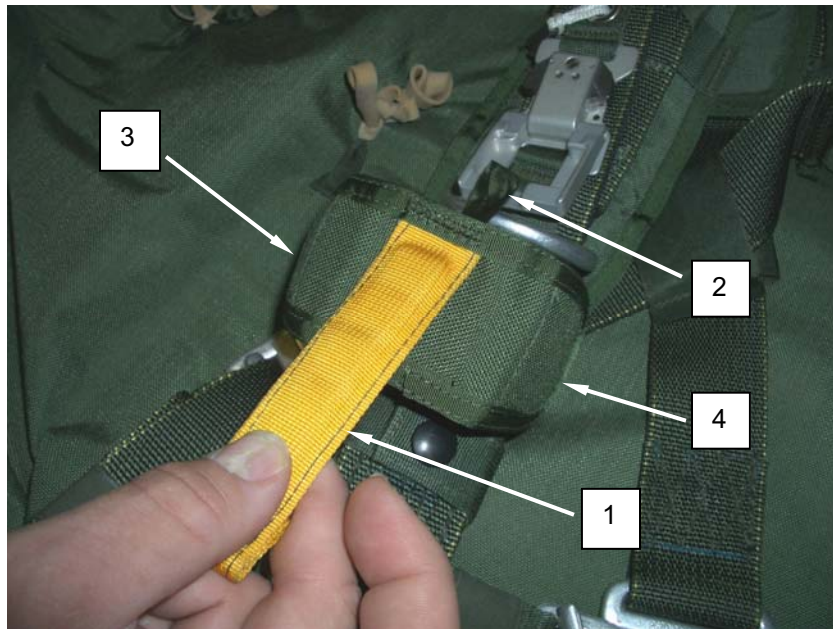


Figure 6. Orienting the Yellow Lanyard.

4. Open the release cover plate (**figure 7, item 1**) so that it is fully open and route the release cover attaching loop (**figure 7, item 2**) through the top of the release cover plate (**figure 7, item 1**).
5. Ensure there are no twists in the release cover attaching loop (**figure 7, item 2**).



Figure 7. Routing the Release Cover Attaching Loop.

6. Grasp the yellow lanyard (**figure 8, item 1**) on the release cover (**figure 8, item 2**) and route through the release cover loop (**figure 8, item 3**) and pull tight forming the girth hitch (**figure 8, item 4**) on the canopy release cover plate (**figure 8, item 2**).

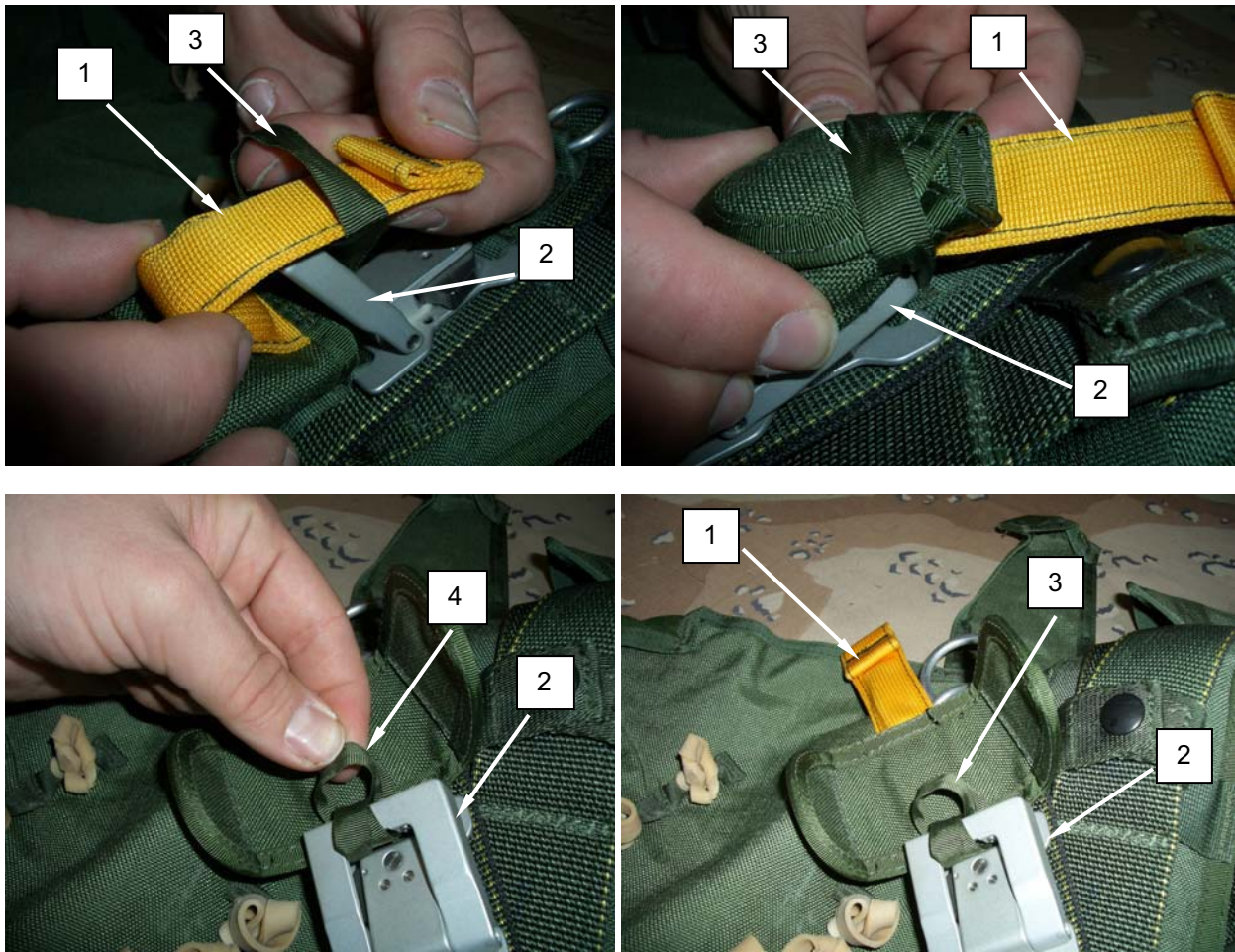


Figure 8. Forming a Girth Hitch with the Yellow Lanyard.

7. Repeat for opposite side.

Attach Risers To Harness Assembly

1. Ensure risers and harness are free of tangles and twists and lay out harness with smooth side up. Make certain risers are identified with a blue confluence wrap on each riser (**figure 9, item 1**).
2. Route large ring of upper main lift web (**figure 9, item 2**) through large riser ring (**figure 9, item 3**).
3. Rotate the large ring of the upper main lift web (**figure 9, item 4**) up 180° and insert small ring (**figure 9, item 5**) through large ring of upper main lift web (**figure 9, item 4**).

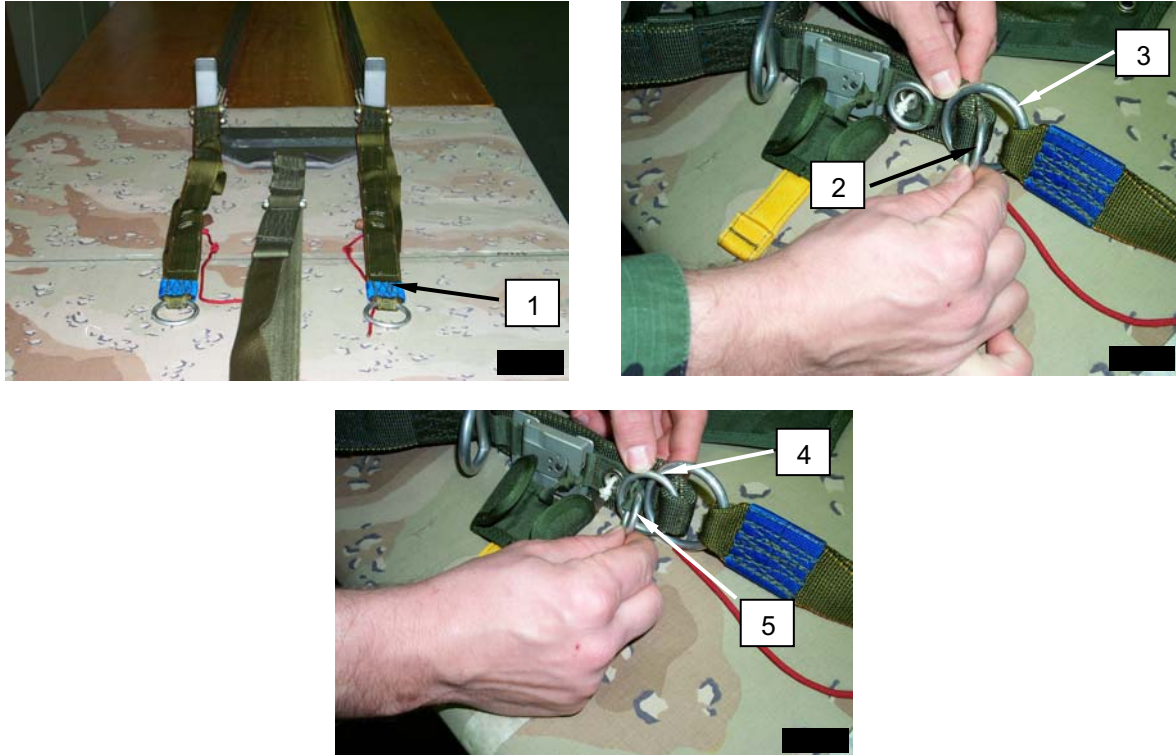


Figure 9. Laying Out Risers and Harness, Risers and Harness, and Assembling Risers and Harness.

4. Pass the locking loop lug (**figure 10, item 1**) and soft loop (**figure 10, item 2**) through the small ring (**figure 10, item 3**) and insert the lug (**figure 10, item 4**) into the jaws of the canopy release assembly (**figure 10, item 5**) by depressing the two operating lug release levers (**figure 10, item 6**).
5. Insure that the lug is fully seated into canopy release assembly (**figure 10, item 5**).
6. Close canopy release cover (**figure 10, item 7**), locking the loop in place (**figure 10, item 8**).
7. The top of the lug should not be visible after closing the cover (**figure 10, item 9**) if properly seated.

CAUTION

A lug, which is not fully seated, will not allow the cover to close. Do not force the cover closed.

WARNING

A Canopy Release Assembly (CRA) that is not properly assembled may result in death to the parachutist.

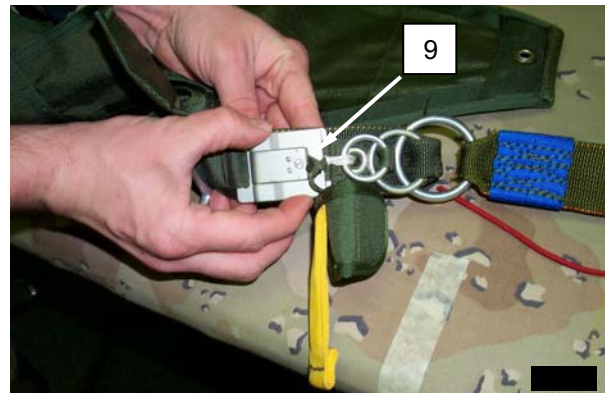
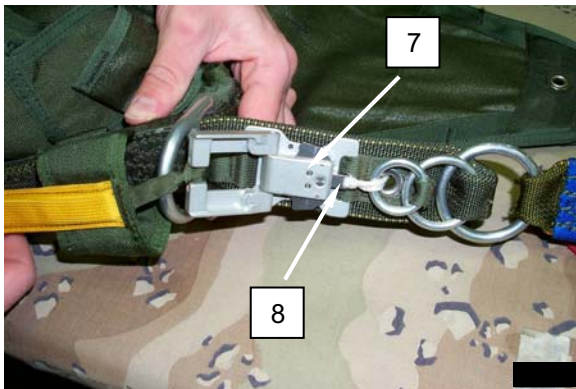
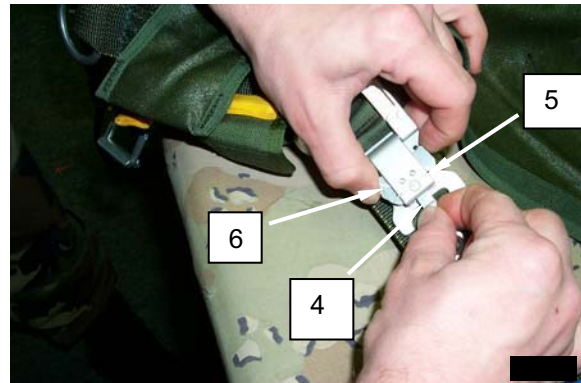
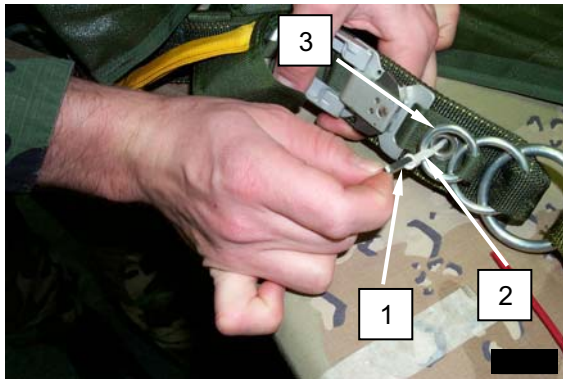


Figure 10. Passing Lug Through Small Loop, Inserting Lug into Jaws, Locking Loop in Place, and Lug Properly Seated.

8. Then grasp the short tuck tab (**figure 11, item 1**) and insert behind the CRA (**figure 11, item 2**), then grasp the long tuck tab (**figure 11, item 3**) and insert behind the CRA and over the short tuck tab (**figure 11, item 1**).



Figure 11. Inserting the Short and Long Tuck Tabs Behind the CRA.

9. Repeat steps 2 through 8 for opposite side.

Attach Retaining Bands to Pack Tray Assembly

Attach 2 large retainer bands (**figure 12, item 1**) on each static line stow bar (**figure 12, item 2**) of the pack tray (**figure 12, item 3**) and attach two 1-1/16-in retaining bands to the static line slack retainer (**figure 12, item 4**).

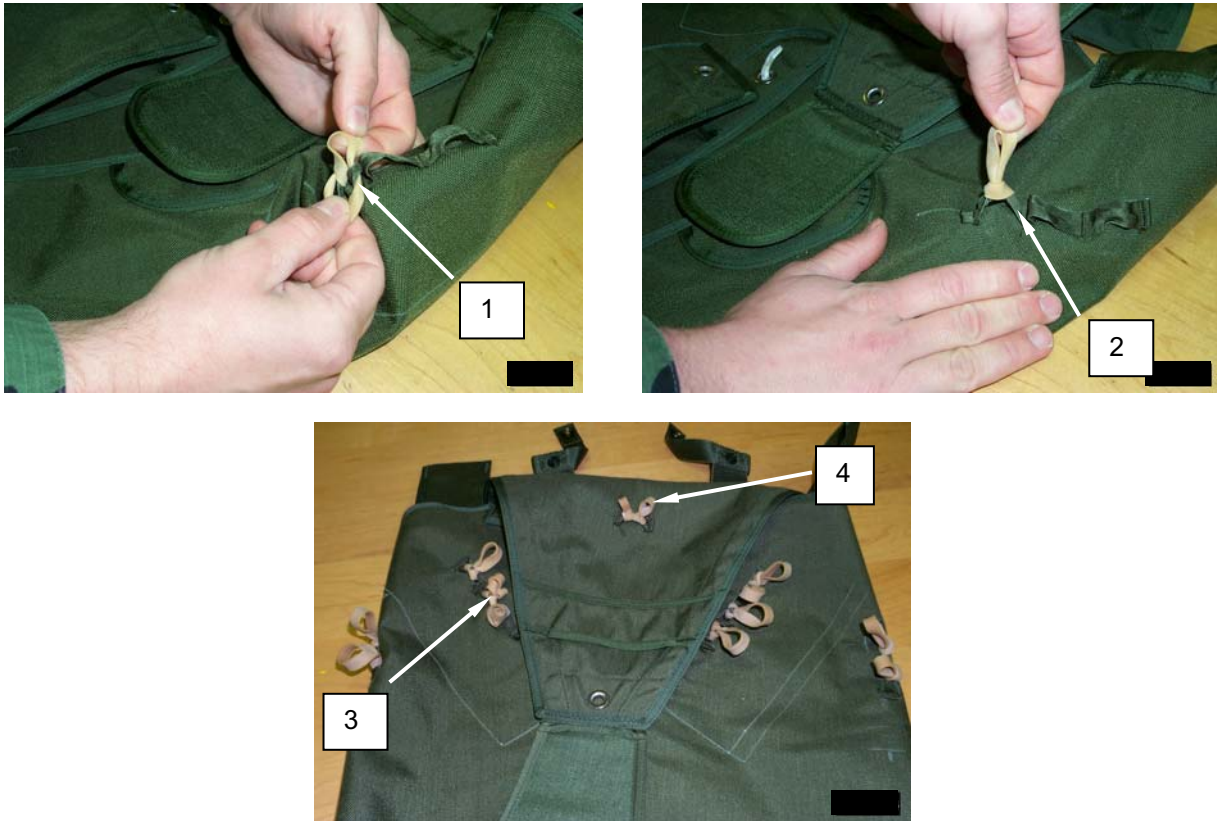


Figure 12. Attaching Retainer Bands, Retainer Bands On Static Line Stow Bars, and Retainer Bands Attached To Static Line Stow Bars.

NOTE

Number of retaining bands used is determined by the 15-foot or 20-foot universal static line (USL).

ATTACH MAIN CLOSING LOOP TO MAIN PACK TRAY

1. Route the main closing loop (**figure 13, item 1**) under the main closing loop protective cover (**figure 13, item 2**) and through the grommet (**figure 13, item 3**).
2. Rotate the closing loop (**figure 13, item 4**) 90° insuring the loop opening is facing to the inside of the pack tray (**figure 13, item 5**).

CAUTION

Do not attempt to tack through stiffener. Failure to heed caution will result in damage to the stiffener.

3. Using a 12-inch length of one turn double tape lacing and tying (**figure 13, item 6**), tack both sides of the closing loop protective cover (**figure 13, item 7**). Secure with a surgeons knot locking knot trimming the ends to within 1-inch.

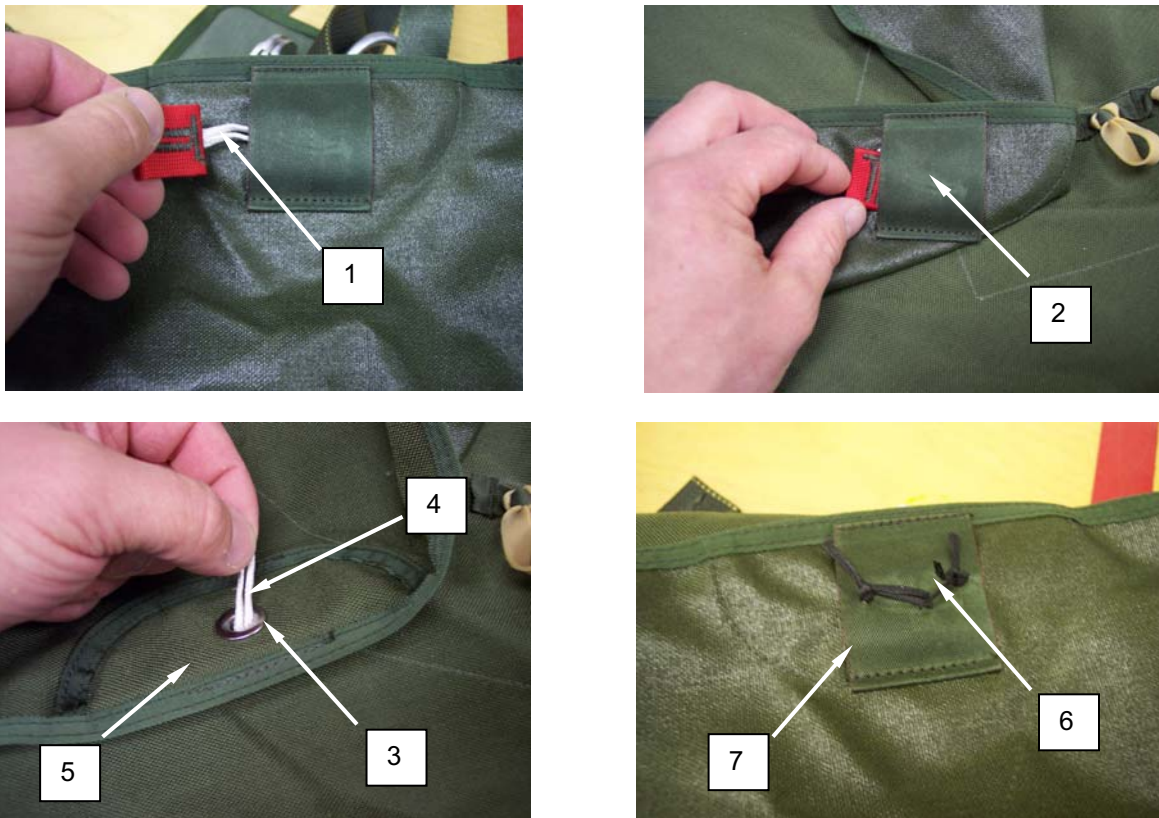


Figure 13. Routing the Main Closing Loop, Closing Loop Under The Protective Cover, Main Closing Loop Through Grommet, and Tacking Both Sides.

Attach 15-Foot Modified Universal Static Line (USL) and Universal Static Line (USL) Extension to the Deployment Bag

NOTE

Once the 15-foot modified Universal Static Line (USL) and the USL Extension has been used in a parachute deployment from an aircraft, the webbing, while it is under tension, will stretch, therefore never returning to its original manufactured dimension. That original manufactured dimension is what determines the serviceability at the in-service inspection.

NOTE

When laying out the 15-foot Modified USL or the USL extension to form the girth hitch, ensure the green ID marking thread of the webbing is on the top.

1. Attaching the 15-foot Modified USL to the deployment bag.
 - a. Position the deployment bag (**figure 14, item 1**) with the stow loops (**figure 14, item 2**) facing up. Pass the 6-inch buffer loop (**figure 14, item 3**) of the static line (**figure 14, item 4**) left to right, halfway through the deployment bag reinforcement webbing (**figure 14, item 5**) ensuring that you go through both plies.

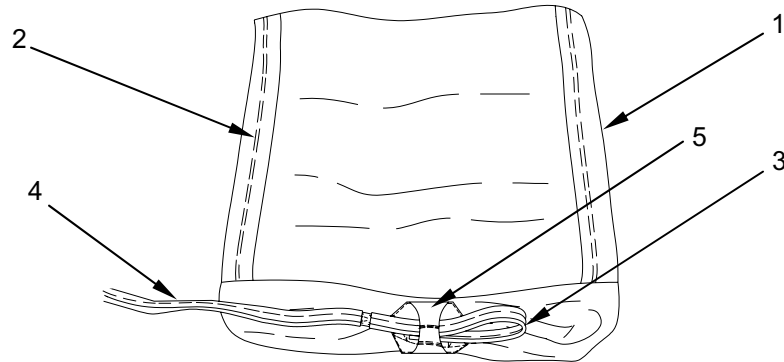


Figure 14. Passing the 6-inch Buffer Loop Through D-bag Reinforcement Webbing.

- b. Pass the 3½-inch loop end (**figure 15, item 1**) of the static line (**figure 15, item 2**) through the 6-inch buffer loop (**figure 15, item 3**), counterclockwise until a taut girth hitch is formed.

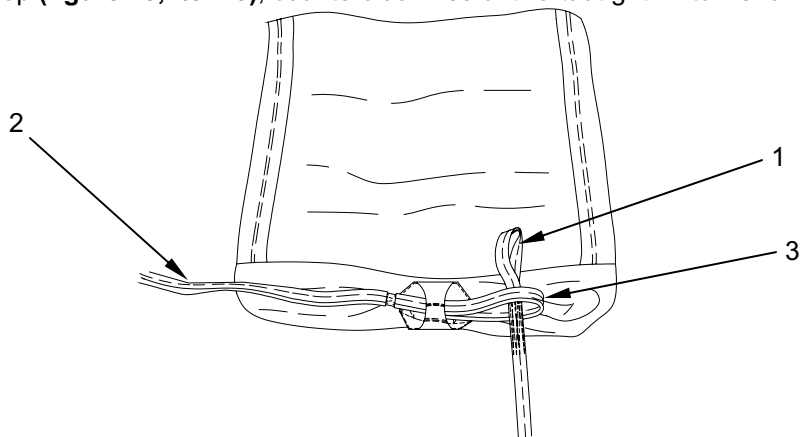


Figure 15. Passing Loop End of USL Through Buffer Loop.

- c. Secure the static line (**figure 16, item 1**) to the deployment bag (**figure 16, item 2**).

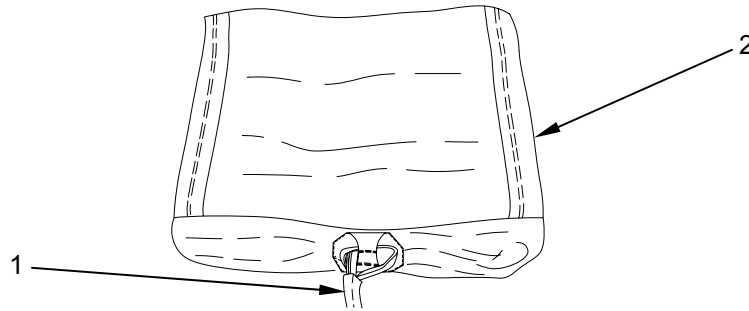


Figure 16. Securing Static Line to D-bag.

- 2. Attach the snap hook to the Modified USL, or the USL extension as follows:
 - a. Position the snap hook (**figure 17, item 1**) so the opening gate (**figure 17, item 2**) is facing left. Lay the static line (**figure 17, item 3**) flat on the packing table. Ensure that the green ID marking thread (**figure 17, item 4**) is on top and on the outside of the loop.

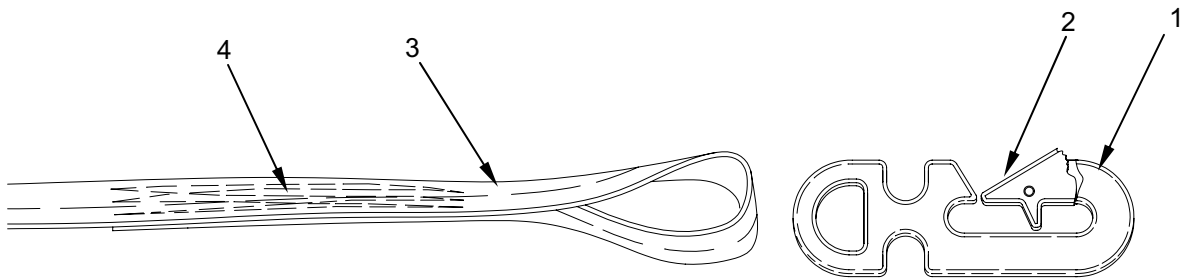


Figure 17. Positioning Static Line and Snap Hook.

- b. Pass the 3½-inch loop end (**figure 18, item 1**) of the static line (**figure 18, item 2**) through the opening (**figure 18, item 3**) in the base of the snap hook (**figure 18, item 4**), from bottom to top.

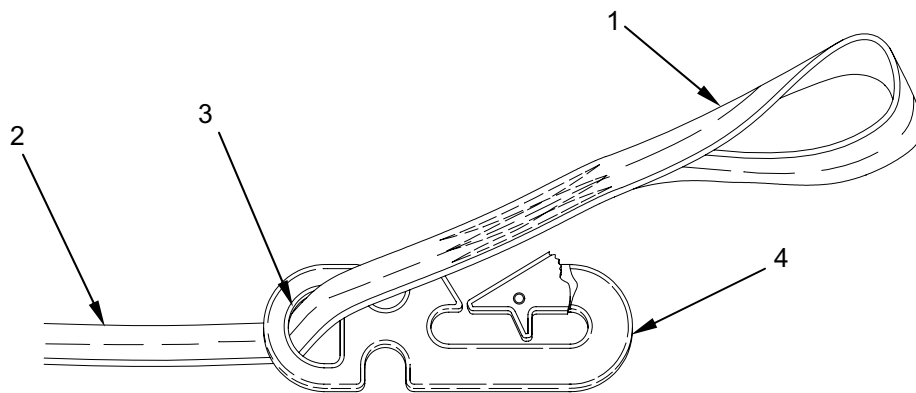


Figure 18. Passing Loop End of Static Line Through Base of Snap Hook.

- c. Pass the top of the snap hook (**figure 19, item 1**) through the 3-1/2 inch loop end of the static line (**figure 19, item 2**).

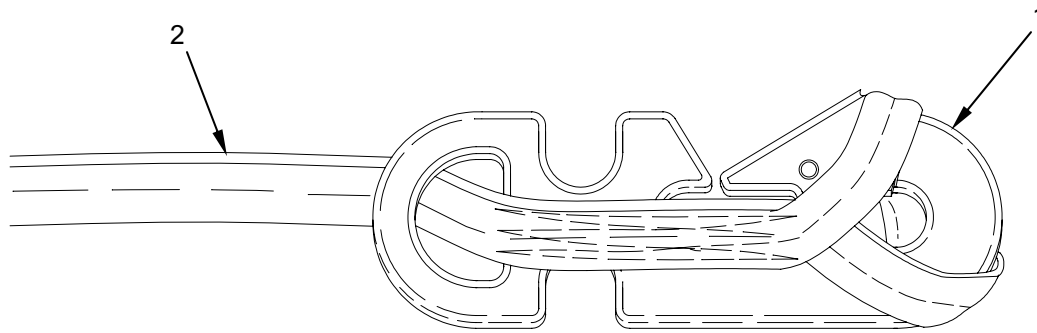


Figure 19. Passing Top of Snap Hook Through Loop End of Static Line.

- d. Continue passing the snap hook (**figure 20, item 1**) through the 3-1/2 inch loop end (**figure 20, item 2**); pull the excess static line back through the opening (**figure 20, item 3**) in the base of the snap hook (**figure 20, item 1**) until the loop is past the snap hook opening.
- e. Slide the loop down to the bottom of the snap hook (**figure 20, item 1**) until the static line (**figure 20, item 4**) is fully seated in the indent (**figure 20, item 5**) on the side of the snap hook (**figure 20, item 1**); form a taut girth hitch.

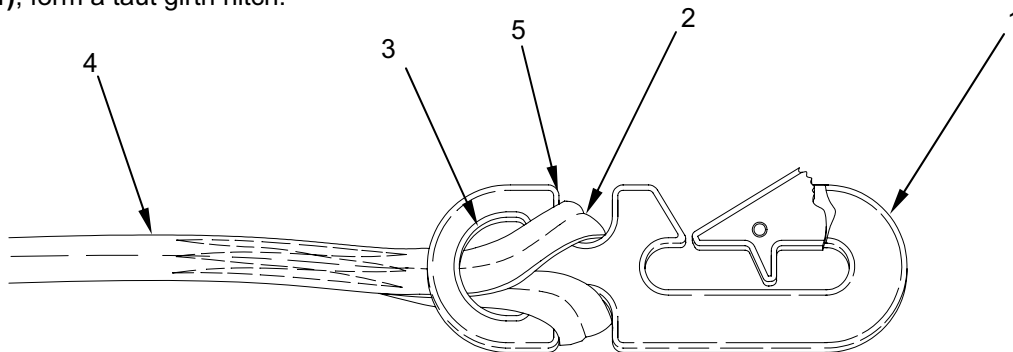


Figure 20. Sliding Loop Down to Bottom of Snap Hook.

- f. Ensure there is no twists in the static line snap hook loop.

NOTE

Before forming the girth hitch, the green ID marking thread on the USL and USL extension must be on top.

3. Attaching the USL extension to the 15-foot Modified USL.
 - a. Attach the snap hook to the USL extension as stated in step 2 above.

- b. Pass the 3½-inch loop (figure 21, item 1) on the static line (figure 21, item 2), through the 2-inch buffer loop (figure 21, item 3), on the USL extension (figure 21, item 4).

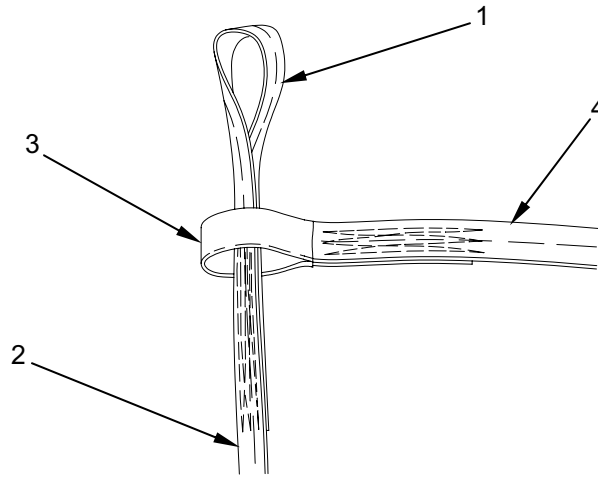


Figure 21. Passing Loop of Static Line Through Buffer Loop on USL Extension.

- c. Pass the snap hook (figure 22, item 1) of the USL extension (figure 22, item 2) through the 3½-inch loop (figure 22, item 3), on the static line (figure 22, item 4).

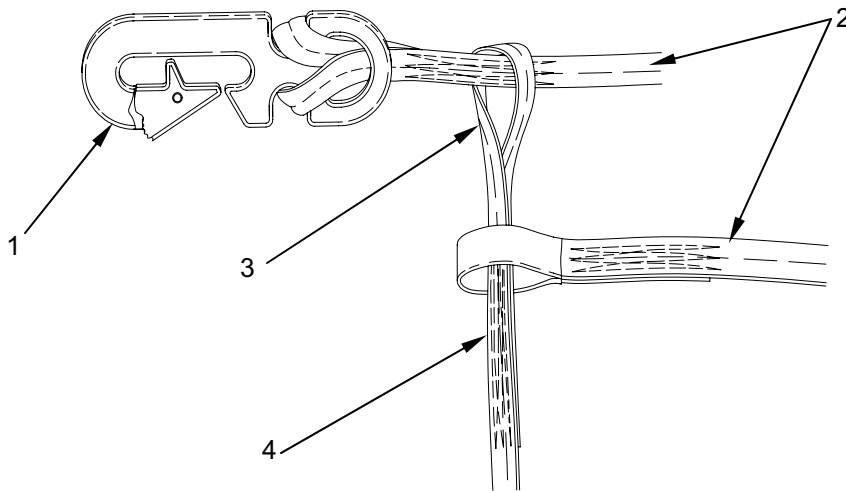


Figure 22. Passing Snap Hook of USL Extension Through Loop on Static Line.

- d. Continue passing the snap hook through the 3½-inch loop until a taut girth hitch (**figure 23, item 1**) is made securing the USL extension (**figure 23, item 2**) to the static line (**figure 23, item 3**) (there will be a half-twist in the 3-1/2-inch loop when forming the girth hitch).

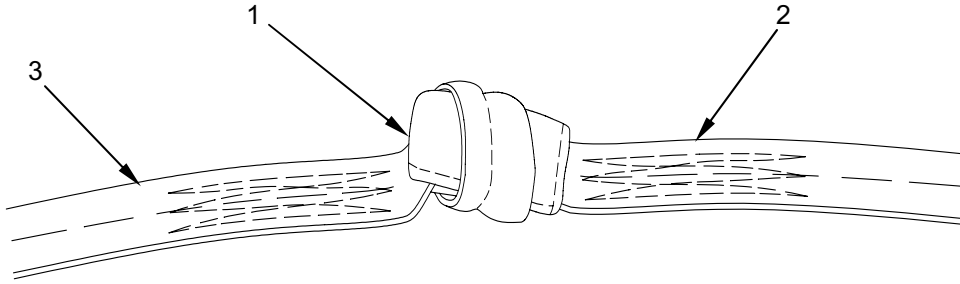


Figure 23. Making Girth Hitch Securing USL Extension to Static Line.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
ASSEMBLING THE RESERVE CANOPY
ASSEMBLY

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Needle, Tacking (Item 32, WP 0097 00)
Rod, Compression, Ejector Spring (Item 46, WP 0097 00)
Wrench, Adjustable, 8-inch (Item 71, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Cord, Spectra®, #1000 (Item 19, WP 0109 00)
Tape, Lacing And Tying, Nylon, (Item 42, WP 0109 00)
Webbing, Cotton, 80 lb (Item 53, WP 0109 00)

Equipment Condition

All equipment shall be serviceable and ready for use.

ASSEMBLY**Assemble Reserve Pack Tray**

Place two large retainer bands (**figure 1, item 1**) per retainer stow bar (**figure 1, item 2**).



Figure 1. Assembling the Reserve Pack Tray.

Assemble the Ejector Spring

1. Route the reserve closing loop (**figure 2, item 1**) through the reserve closing loop channel (**figure 2, item 2**) located at the bottom of the ejector spring (**figure 2, item 3**).
2. To aid in installation, pass the reserve-closing loop (**figure 2, item 1**) through the eye of the ejector spring compression rod (**figure 2, item 4**), pass the compression rod through the channel.

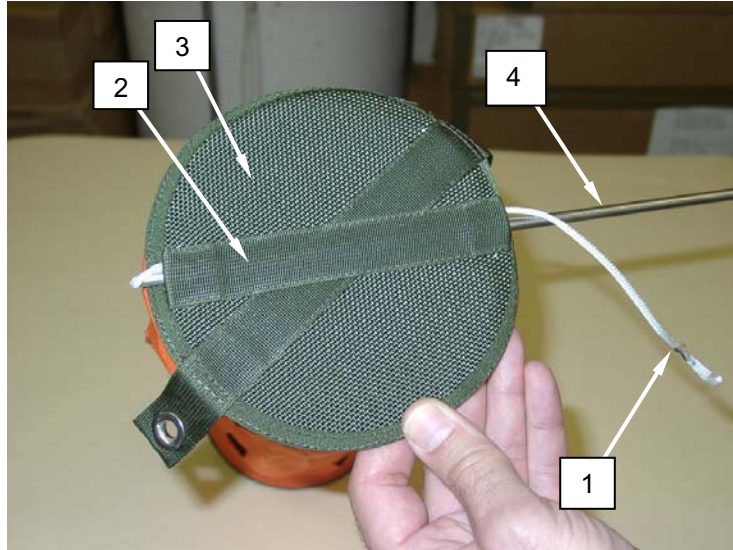


Figure 2. Assembling the Ejector Spring.

Attaching Extractor

1. Arrange the canopy on the pack table with gore 1 on top.
2. Disconnect the packing loop from the apex hook.

NOTE

Insure the extractor vent bridle lines are straight and free of twists.

3. Layout the extractor immediately above the apex insuring the extractor vent bridle lines are free of turns, tangles and twists.
4. Locate the four apex extractor attaching loops (**figure 3, item 1**) attached to the apex of main seam numbers 4, 9, 14 and 19. The four attachment loops are identified by the OD color on each of the four extractor attaching loops.
5. Route one end of a 12-inch length of one turn single Spectra[®] cord (**figure 3, item 2**) through one end of the apex extractor attaching loop (**figure 3, item 1**), through the looped end of the extractor vent bridle line (**figure 3, item 3**), and back through the apex extractor attaching loop (**figure 3, item 1**).–

6. Tightly secure the ends of the cord (**figure 3, item 2**) over the apex extractor-attaching loop (**figure 3, item 1**) using a surgeon's knot and a locking knot with a knot in the running end.
7. Trim excess to approximately 1 inch long.
8. Attach the remaining extractor vent bridle lines (**figure 3, item 3**) in the same manner.

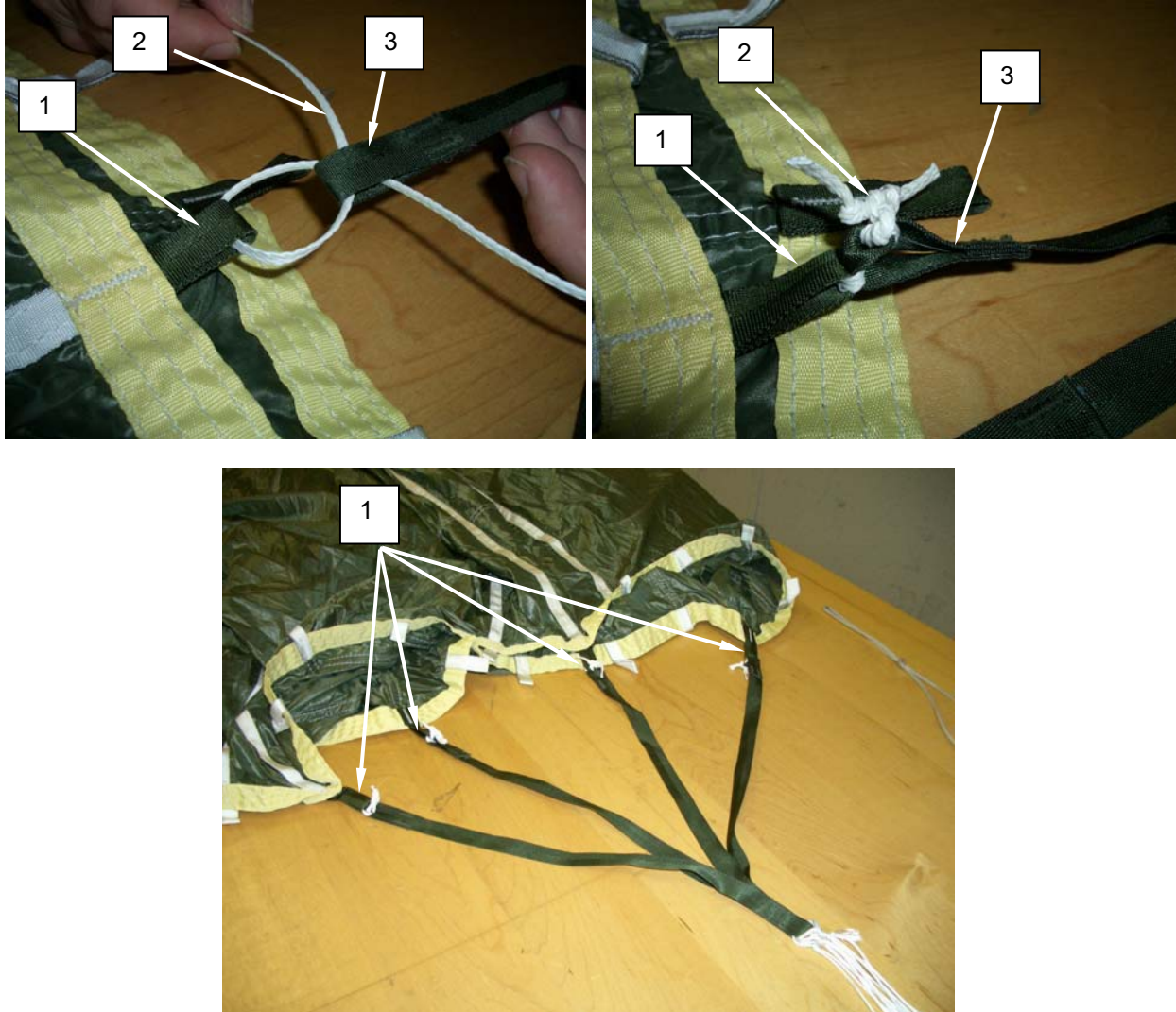


Figure 3. Attaching Extractor Vent Bridle Lines.

Attach the Reserve Risers to the Reserve Canopy

1. Place the reserve canopy and all components on the packing table.
2. Layout reserve canopy on a pack table with the suspension line-organizing card at the bottom of the pack table.
3. Extend the canopy to the opposite end of the pack table and temporarily secure the apex to the top of the pack table by passing a packing loop (**figure 4, item 1**) through all of the vent loops (**figure 4, item 2**). Attach the packing loop (**figure 4, item 1**) to the apex hook (**figure 4, item 3**).

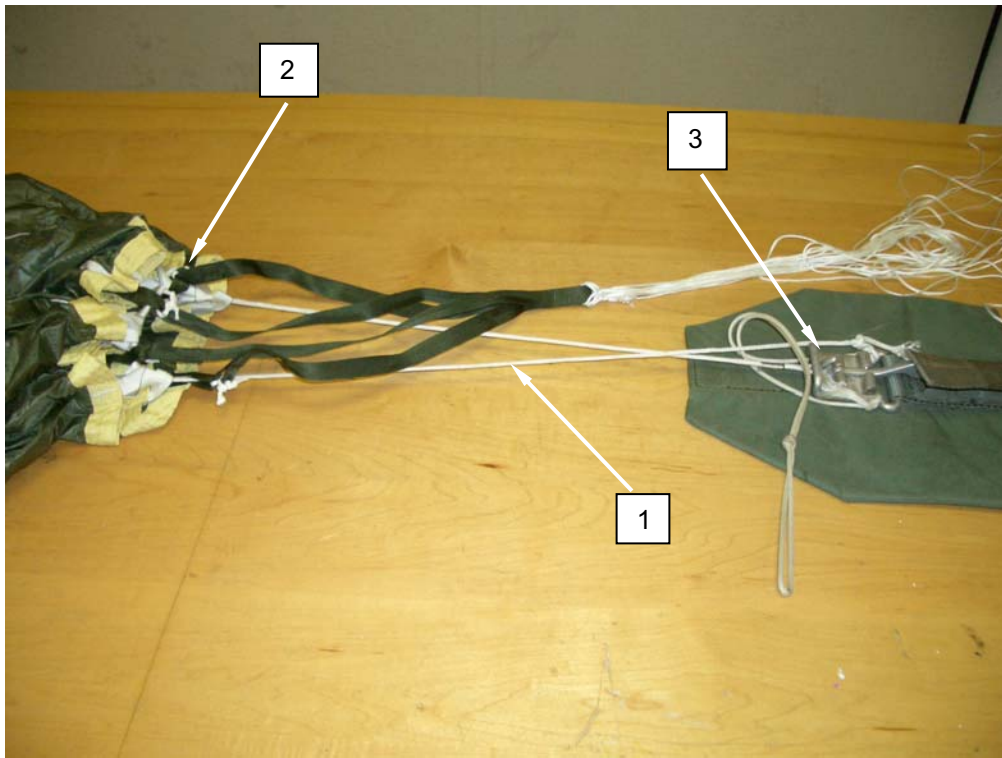


Figure 4. Attaching Reserve Risers To Reserve Canopy.

4. At the lower lateral band, split the canopy between the left and right line groups.
5. Layout the reserve risers (**figure 5, item 1**) directly behind the connector link groups ensuring there are no twists.
6. Evenly mate the hook pile tape between the reserve risers plies.
7. Ensure the gates of the snap hooks are facing downwards and the butterfly portions of the snap hooks are facing outwards.



Figure 5. Laying Out Risers.

- Using an 8-inch adjustable wrench, completely open the barrel nut on the connector links (**figure 6, item 1**), remove connector links (**figure 6, item 1**) from line organizing card and loosely connect connector links to proper riser (**figure 6, item 2**).

NOTE

Connector link barrel nuts must be oriented so they face inboard and tighten downward.

NOTE

Suspension lines 1 thru 20 are divided into two groups, no. 1 thru 10 in the left group and no. 11 thru 20 in the right group.

- Place the left set of connector links (**figure 6, item 1**) on the left post (**figure 6, item 2**) of the tension plate and the right set of connector links (**figure 6, item 3**) on the right post (**figure 6, item 4**) of the tension plate.

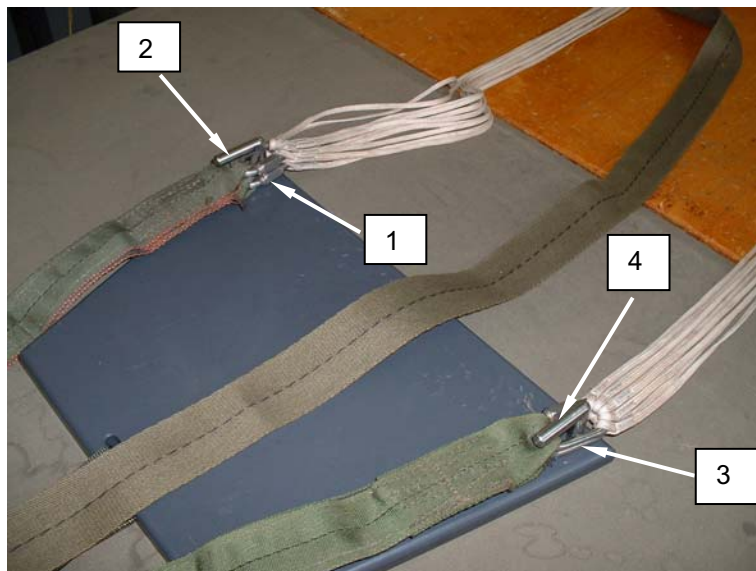


Figure 6. Riser Connector Links.

10. Conduct a continuity check in accordance with figure 7 below.
11. Top left suspension line group. Line 1 (inside top) followed in sequence by 2, 3, 4, 5 (outside top) runs from the canopy, to the top left connector link.
12. Bottom left suspension line group. Line 6 (outside bottom) followed in sequence by 7, 8, 9, 10 (inside bottom) runs from the canopy, to the bottom left connector link.
13. Bottom right suspension line group. Line 11 (inside bottom) followed in sequence by 12, 13, 14, 15 (outside bottom) runs from the canopy, to the bottom right connector link.
14. Top right suspension line group. Line 16 (outside top) followed in sequence by 17, 18, 19, 20 (inside top) runs from the canopy, to the top right connector link.

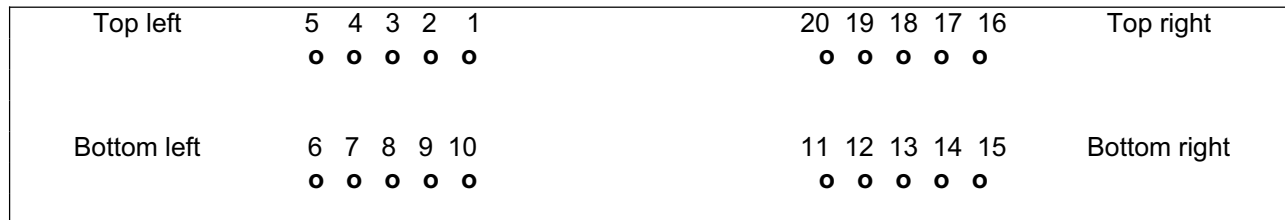


Figure 7. Suspension Line Groups.

15. Using an 8-inch adjustable wrench, tighten barrel nut (**figure 8, item 1**) on connector links (**figure 8, item 2**) until firmly seated against flange finger tight plus 1/4-turn.
16. Rotate each connector link (**figure 8, item 2**) sideways on the long portion of the connector link (**figure 8, item 2**).

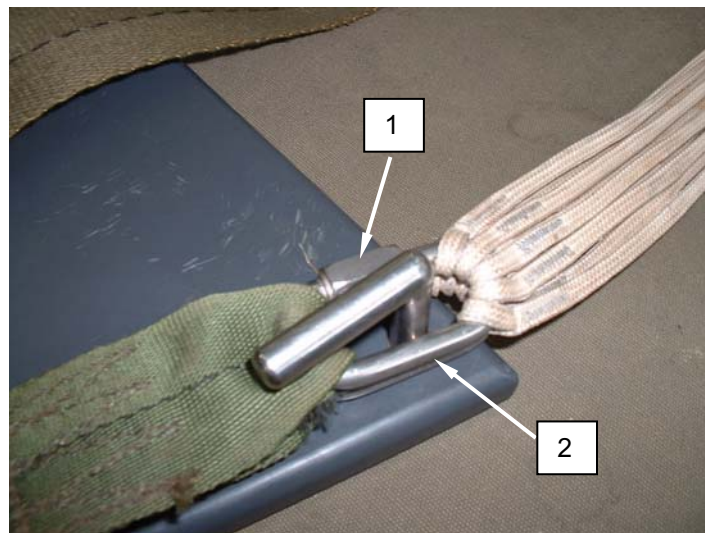


Figure 8. Rotating Connector Links.

17. Tack each riser (**figure 9, item 1**) with a 12-inch length of tape lacing and tying, one turn double (**figure 9, item 2**), passing the tacking needle (**figure 9, item 3**) tight against the body of the connector link (with knot toward top when tied) (**figure 9, item 4**).

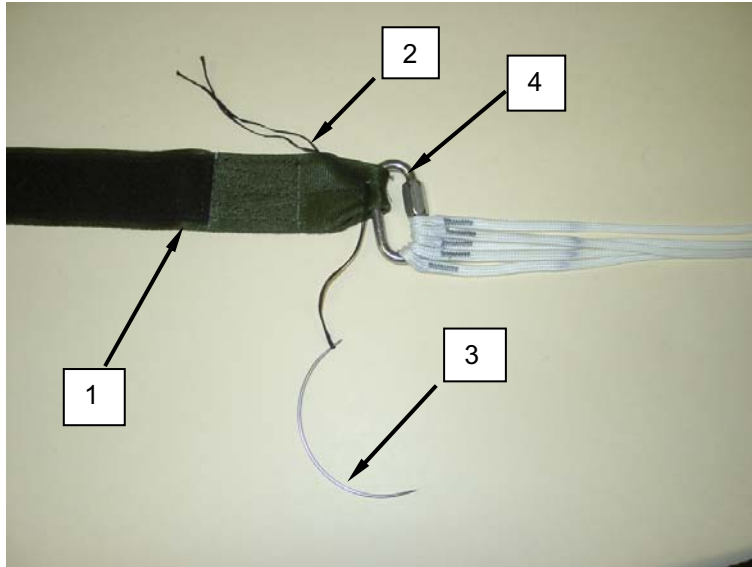


Figure 9. Attaching Reserve Risers to Reserve Canopy.

18. Secure with a surgeons knot locking knot trimming the running ends to within 1-inch.
19. Rotate the riser positioning the riser to the lower portion of the connector link (**figure 10, item 1**).

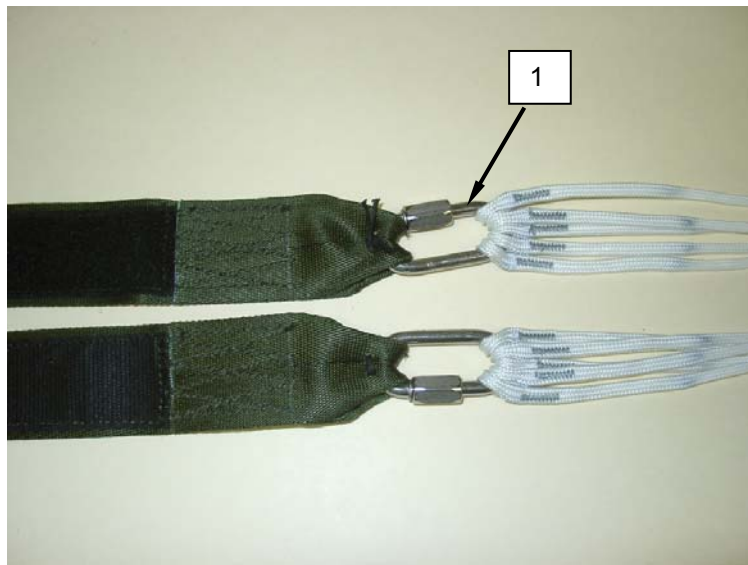


Figure 10. Rotating Risers to Lower Portion of Connector Link.

Attach Skirt Hesitator Lines**WARNING**

If the reserve canopy has been deployed in a known high-speed malfunction, the reserve canopy will be removed from service. Continued use may cause the canopy to fail resulting in serious injury or death to the parachutist.

CAUTION

If the reserve canopy has been deployed for any reason, ascertain the reason for deployment. In any event, the skirt assist line attachment points shall be inspected to determine if the type I, 1/4-inch cotton webbing broke. If any skirt assist lines are broken, and it has been determined the reserve canopy was NOT involved in a known high speed deployment, remove and replace the skirt assist ties with 1/4-inch Type I cotton webbing IAW WP 0063 00.

NOTE

Ensure that all skirt hesitator ties are secured properly.

NOTE

Each suspension line is cascaded near the skirt of the canopy. The continuous lines attach to the skirt and the cascaded lines are attached to loops on the corresponding seam 19.5-inches on the inside of the canopy. The cascaded portions are called "Skirt Assist Lines" and aid in inflation of the canopy.

During high-speed deployments the skirt assist lines break free of the canopy to dampen the opening shock. During low speed deployments they remain attached and assist in the deployment. During normal repack, the skirt assist attachments should be inspected but it is not necessary to replace them unless the canopy has been deployed.

1. Starting with line 1, follow the inside radial seam until you run into the skirt assist line attaching loop (**figure 11, item 1**).
2. Route one end of a 12-inch length of Type I, 1/4-inch, cotton webbing, one turn single, through one end of the skirt assist line attaching loop, through the looped end of the skirt assist line (**figure 11, item 2**), and back through skirt assist line attaching loop.
3. Secure the ends of the Type I, 1/4-inch cotton webbing (**figure 11, item 3**), over the skirt assist line attaching loop (**figure 11, item 1**), with a surgeon's knot and locking knot.
4. Trim the excess to within 1/2-inch.
5. Repeat steps 1 through 4 with the additional 19 suspension lines.

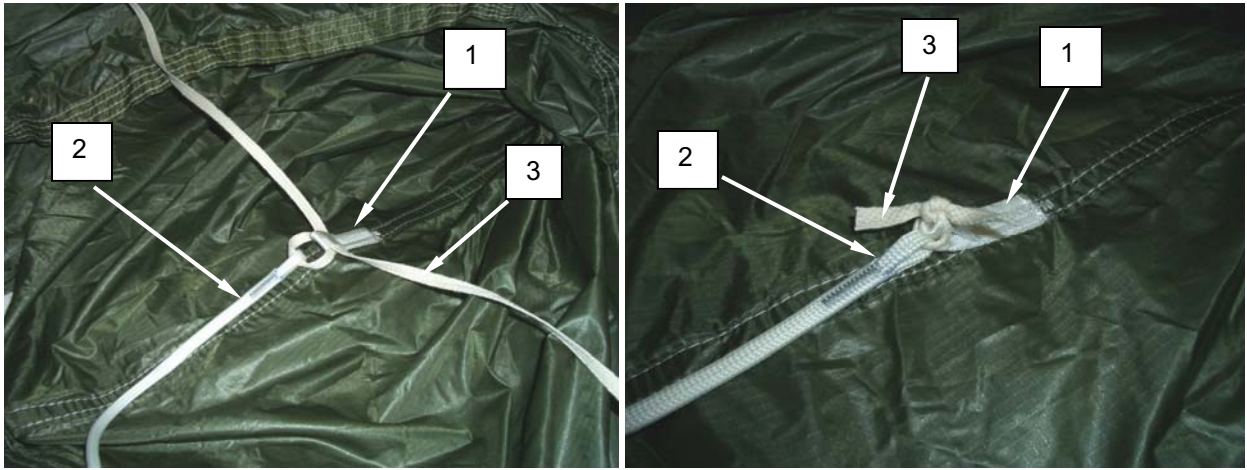


Figure 11. Attaching Skirt Hesitator Lines.

END OF WORK PACKAGE

**UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537**

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS), INTRODUCTION

INITIAL SETUP:

Tools

None required

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

None required

Equipment Condition

All equipment shall be serviceable and ready for use.

GENERAL

The following describe PMCS procedures on the unit and direct support levels. The PMCS table has been provided to ensure the MC-6 is in proper operating condition, and ready for use.

SCOPE

The following work packages (WP 0009 00 through WP 0094 00) contain maintenance procedures that are the responsibility of the specified technician, as authorized by the Maintenance Allocation Chart (MAC), and the Source, Maintenance, and Recoverability (SMR) coded items that are identified in the Repair Parts and Special Tools List (RPSTL).

MAINTENANCE FUNCTIONS/PROCEDURES

Each of the mentioned work packages above identifies a maintenance function specified in the MAC. All maintenance procedures required to complete a maintenance function are identified under THIS TASK COVERS: in the order in which the work is most logically accomplished.

PARACHUTE REPACK INTERVAL

The MC-6 will be repacked at a scheduled interval to insure airworthiness. When necessitated by climate/storage/use condition, the local airdrop equipment maintenance officer may require more frequent repack intervals. In this regard, a major concern would be rapid fluctuations of temperature (fluctuations around 32 degrees Fahrenheit) sustained high or low temperature, or high humidity and heavily polluted atmosphere. The MC-6 main parachute will be repacked at a 120-day interval and the T-11R parachute will be repacked at a 365-day interval.

DROP TESTING CRITERIA

Drop testing of the MC-6 consist of physically airdropping an item from an aircraft in flight. The drop-test is used as a means of proving the serviceability of an item or checking parachute rigger proficiency, and will only be performed under the supervision of qualified parachute rigger personnel who satisfy the supervisory requirements outlined in AR 750-32. Drop testing will usually be conducted by an activity responsible for the inspection and maintenance of airdrop equipment, which includes either parachute packing or airdrop load rigging. The criteria required to accomplish a drop test is as follows:

1. To drop-test a troop-type personnel parachute, a qualified parachute rigger will jump the parachute and the applicable type parachute will be released under conditions that are consistent with the requirements for a personnel jump or equipment drop.
2. During the drop-test of any type parachute, the deployment of the parachute will be thoroughly monitored and observed to detect any indication of malfunction or defect. A subsequent record of the applicable parachute log record will be entered into the applicable log record using procedures outlined in WP 0042 00.
3. Any type of airdrop equipment that indicates evidence of malfunction/defect during, or after, a drop-test will be disposed of as prescribed in WP 0012 00.

4. A personnel parachute that is considered to have contributed to the injury of an individual parachutist (critical or fatal) will be disposed of in accordance with WP 0012 00, Equipment Disposition.
5. Airdrop equipment that does not reflect evidence of malfunction or defect upon completion of a drop-test will be administered a technical/rigger-type inspection as outlined in WP 0012 00. If serviceable, the item(s) may then remain in use.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

INITIAL SETUP:**Tools**

None required

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

None required

Equipment Condition

All equipment shall be serviceable and ready for use.

GENERAL

The following describe PMCS procedures on the unit and direct support levels. The PMCS table has been provided to ensure the MC-6 is in proper operating condition, and ready for its primary mission.

Frequency of Performing PMCS. PMCS will be performed before equipment is packed for use, during modification and repair after use, or at any time deemed necessary by the air delivery equipment maintenance officer.

PMCS Columnar Entries Table 1.

Item Number. The item number column shall be used as a source of the item number required for the TM Number column on DA Form 2404 (Equipment Inspection and Maintenance Worksheet), when recording the results of the PMCS.

Interval. This column identifies the required PMCS interval.

Item to be inspected. Contains the common name of the item to be inspected.

Procedures. Provides a brief description of the procedures by which the checks are to be performed.

Recording Defects. All defects discovered during the inspection will be recorded using the applicable specifics in DA PAM 750-8, DA PAM 738-751 and TB 43-0002-43.

Over Age Items. During any inspection, or at any time that an item is found to be over age (i.e., shelf/service-life has expired as specified in TB 43-0002-43), the item will be removed from service, condemned, and tagged, in accordance with DA PAM 738-751.

Conservation of Resources. To conserve time and labor, and to avoid evacuation to a direct support maintenance activity, unit/detachment commanders may designate, in writing, rigger personnel to accomplish classification inspection of over age air delivery equipment and the classification of Beyond Economical Repair (BER) parachutes.

Inspection Function Requirement. Normally, air delivery equipment maintenance personnel at a packing, rigging, or repair activity will perform a technical/rigger-type inspection. The inspection of initial receipt items will be performed as a separate function from packing or rigging activity; the item to be inspected will be placed in proper layout on a packing table or suitable sized floor area.

Should defect or damage be discovered at any point during the inspection, the inspection will be terminated and the applicable item will be processed and forwarded to 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 the light table.

Any defect discovered during a unit level repair activity inspection, that exceeds the capability of that activity, will require the affected item to be evacuated to a direct support maintenance function.

Lubrication Service Intervals. The MC-6 Personnel Parachute System assemblies do not require lubrication service.

NOTE

Parachutes that are deemed unserviceable, by packing or rigging activity, will be rigger-rolled (see the ACCORDION FOLDING/RIGGER ROLLING paragraph detailed in WP 0094 00) prior to being sent to a repair activity.

Table 1. Preventive Maintenance Checks and Services for MC-6.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
00	Before After	MC-6 Assembly	Verify that assembly is complete, and no components are missing. Check for proper assembly, foreign material, mildew or stains, and log record book.	Assembly is not complete, and components are missing. Improper assembly. Presence of foreign material, mildew or stains. Log record book is missing.
01	Before After	Canopy, Main	<p>Canopy Assembly Fabric. Inspect for rips, burns, holes, tears, dampness, debris, frays, broken or loose stitching, and marred and illegible marks.</p> <p>Vent Loop. Inspect for cuts, breaks, frays, burns, improper installation, and loose or broken stitching.</p> <p>Vent Line. Inspect for burns, cuts, breaks, and loose or broken stitching on lateral band or radial seam.</p> <p>Vent Band. Inspect the upper lateral band for holes, cuts, frays, tears, burns, and loose or broken stitching.</p> <p>Cross Seam. Inspect the cross seam for holes, cuts, frays, tears, burns, and loose or broken stitching.</p> <p>Lateral Tape. Inspect the lateral tape for holes, cuts, frays, tears, burns, and loose or broken stitching.</p>	<p>Presence of rips, burns, holes, tears, dampness, debris, frays, broken or loose stitching, and marred and illegible marks.</p> <p>Presence of cuts, breaks, frays, burns, improper installation, and loose or broken stitching.</p> <p>Presence of burns, cuts, breaks, and loose or broken stitching on lateral band or radial seam.</p> <p>Presence of holes, cuts, frays, tears, burns, and loose or broken stitching.</p> <p>Presence of holes, cuts, frays, tears, burns, and loose or broken stitching.</p> <p>Presence of holes, cuts, frays, tears, burns, and loose or broken stitching.</p>

Table 1. Preventive Maintenance Checks and Services for MC-6 – continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
	Before After	Main Canopy- Continued	<p>Gore Panels. Inspect the gore panels for dampness, dirt, foreign material, holes, cuts, snags, tears, frays, burns, loose or broken stitching, and marred or illegible markings.</p> <p>Information Data Block. Inspect for legibility of data.</p> <p>Radial Seams. Inspect for loose and broken stitching, holes and tears.</p> <p>Radial Tapes. Inspect for loose and broken stitching, holes and tears.</p> <p>Suspension Line Loops. Inspect for loose or broken stitching, frays, tears, burns, and cuts.</p> <p>Skirt Band. Inspect for loose or broken stitching, rips, snags, or burns.</p> <p>Ant-inversion Net. Inspect for cuts, broken cords, and loose or broken stitching.</p> <p>Lines. Inspect for loose or broken stitching, broken lines, broken core cords, frays, burns, and tears.</p> <p>Connector Links. Inspect for rust, burrs, rough spots, corrosion, cracks, foreign material, loose or missing screws, stripped threads, and ends not locked.</p> <p>Extended Gore Assembly. Inspect for dampness, dirt, foreign material, holes, cuts, snags, tears, frays, burns, loose or broken stitching, and marred.</p> <p>Extended Gore Limit Lines. Inspect for loose or broken stitching, broken lines, frays, burns, and tears.</p> <p>Mesh Panel Assembly. Inspect for dampness, dirt, foreign material, holes, cuts, snags, tears, frays, burns, loose or broken stitching, and marred.</p> <p>Brake Slot Control Line. Inspect for loose or broken stitching, frays, burns, tears, or broken lines.</p> <p>Upper Control Line Set. Inspect for loose or broken stitching, frays, burns, tears, or broken lines.</p>	<p>Presence of dampness, dirt, foreign material, holes, cuts, snags, tears, frays, burns, loose or broken stitching, and marred or illegible markings.</p> <p>Data illegible.</p> <p>Presence of loose and broken stitching, holes and tears.</p> <p>Presence of loose and broken stitching, holes and tears.</p> <p>Presence of loose or broken stitching, frays, tears, burns, and cuts.</p> <p>Presence of for loose or broken stitching, rips, snags, or burns.</p> <p>Presence of cuts, broken cords, and loose or broken stitching.</p> <p>Presence of loose or broken stitching, broken lines, broken core cords, frays, burns, and tears.</p> <p>Presence of rust, burrs, rough spots, corrosion, cracks, foreign material, loose or missing screws, stripped threads, and ends not locked.</p> <p>Presence of dampness, dirt, foreign material, holes, cuts, snags, tears, frays, burns, loose or broken stitching, and marred.</p> <p>Presence of loose or broken stitching, broken lines, frays, burns, and tears.</p> <p>Presence of dampness, dirt, foreign material, holes, cuts, snags, tears, frays, burns, loose or broken stitching, and marred.</p> <p>Presence of loose or broken stitching, frays, burns, tears, or broken lines.</p> <p>Presence of loose or broken stitching, frays, burns, tears, or broken lines.</p>

Table 1. Preventive Maintenance Checks and Services for MC-6 – continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
	Before After	Main Canopy- Continued	<p>Middle Control Line Set. Inspect for loose or broken stitching, frays, burns, tears, or broken lines.</p> <p>Control Line Limiter Loops. Inspect for loose or broken stitching, frays, tears, burns, and cuts.</p> <p>Control Line Limiter. Inspect for loose or broken stitching, frays, tears, burns, and cuts.</p> <p>Lower Control Line. Inspect for loose or broken stitching, broken case cords, frays, burns, tears, or broken lines.</p> <p>Toggle. Inspect for rough spots and cracks.</p> <p>Control Line Guide Ring. Inspect for burrs, rough spots, corrosion, cracks and bends.</p> <p>Guide Ring Retaining Strap. Inspect for loose or broken stitching, frays, tears, and cuts.</p> <p>Vent Loop Centering Line. Inspect for loose or broken stitching, broken case cords, frays, burns, tears, or broken lines.</p> <p>Reinforcement Tape. Inspect for loose or broken stitching, rips, snags, or burns.</p> <p>Attachment Loop. Inspect for loose or broken stitching, frays, tears, burns, and cuts.</p> <p>Suspension Line. Inspect for loose or broken stitching, frays, burns, tears, or broken lines.</p>	<p>Presence of loose or broken stitching, frays, burns, tears, or broken lines.</p> <p>Presence of loose or broken stitching, frays, tears, burns, and cuts.</p> <p>Presence of loose or broken stitching, frays, tears, burns, and cuts.</p> <p>Presence of loose or broken stitching, broken case cords, frays, burns, tears, or broken lines.</p> <p>Presence of rough spots and cracks.</p> <p>Presence of burrs, rough spots, corrosion, cracks and bends.</p> <p>Presence of loose or broken stitching, frays, tears, and cuts.</p> <p>Presence of loose or broken stitching, broken case cords, frays, burns, tears, or broken lines.</p> <p>Presence of for loose or broken stitching, rips, snags, or burns.</p> <p>Presence of loose or broken stitching, frays, tears, burns, and cuts.</p> <p>Presence of loose or broken stitching, frays, burns, tears, or broken lines.</p>
02	Before After	Canopy, Reserve	<p>Canopy Assembly Fabric. Inspect for rips, burns, holes, tears, dampness, debris, frays, broken or loose stitching, and marred and illegible marks.</p> <p>Suspension Line Attaching Loop. Inspect for cuts, breaks, frays, burns, improper installation, and loose or broken stitching.</p> <p>Reserve Closing Loop. Inspect for burns, cuts, breaks, and loose or broken stitching.</p>	<p>Presence of rips, burns, holes, tears, dampness, debris, frays, broken or loose stitching, and marred and illegible marks.</p> <p>Presence of cuts, breaks, frays, burns, improper installation, and loose or broken stitching.</p> <p>Presence of burns, cuts, breaks, and loose or broken stitching</p>

Table 1. Preventive Maintenance Checks and Services for MC-6 – continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
03	Before After	Reserve Canopy-Continued	<p>Extractor/(Pilot Chute). Inspect the extractor for holes, cuts, frays, tears, burns, and loose or broken stitching.</p> <p>Skirt Hesitator Ties. Inspect for burns, cuts, breaks, and loose or broken stitching.</p> <p>Connector Link. Inspect for burrs, rough spots, corrosion, cracks and bends.</p> <p>Gore Sections. Inspect the gore sections for dampness, dirt, foreign material, holes, cuts, snags, tears, frays, burns, loose or broken stitching, and marred or illegible markings.</p> <p>Information Data Block. Inspect for legibility of data.</p> <p>Main Seams. Inspect for loose and broken stitching, holes and tears.</p> <p>Apex Vent Bridle Loops. Inspect for loose or broken stitching, holes, tears, frays, burns and cuts.</p> <p>Canopy Scoop. Inspect for loose or broken stitching, frays, tears, burns, and cuts.</p> <p>Suspension Lines. Inspect for loose or broken stitching, broken lines, broken core cords, frays, burns, and tears.</p> <p>Ejector Spring. Inspect for loose or broken stitching, frays, tears, burns, and cuts. Inspect for rust, burrs, rough spots, corrosion, cracks, distorted or broken springs</p>	<p>Presence of holes, cuts, frays, tears, burns, and loose or broken stitching.</p> <p>Presence of burns, cuts, breaks, and loose or broken stitching</p> <p>Presence of burrs, rough spots, corrosion, cracks and bends.</p> <p>Presence of dampness, dirt, foreign material, holes, cuts, snags, tears, frays, burns, loose or broken stitching, and marred or illegible markings.</p> <p>Data illegible.</p> <p>Presence of loose and broken stitching, holes and tears.</p> <p>Presence of loose or broken stitching, holes, tears, frays, burns and cuts.</p> <p>Presence of loose or broken stitching, frays, tears, burns, and cuts.</p> <p>Presence of loose or broken stitching, broken lines, broken core cords, frays, burns, and tears.</p> <p>Presence of loose or broken stitching, frays, tears, burns, and cuts. Presence of rust, burrs, rough spots, corrosion, cracks, distorted or broken springs.</p>
		Risers, Main	<p>Risers. Inspect for loose or broken stitching and tacking, burns, frays, tears, deterioration, and marred (or illegible) markings.</p> <p>Canopy Release Male Fittings. Inspect for corrosion, rough spots, bends, cracks.</p> <p>Log Record Pocket. Inspect for loose or broken stitching.</p> <p>Identification Tape. Inspect for loose or missing blue confluence wrap.</p>	<p>Presence of loose or broken stitching and tacking, burns, frays, tears, deterioration, and marred (or illegible) markings.</p> <p>Presence of corrosion, rough spots, bends, cracks.</p> <p>Presence of loose or broken stitching.</p> <p>Blue confluence wrap loose or missing.</p>

Table 1. Preventive Maintenance Checks and Services for MC-6 – continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
03		Risers, Main-Continued	Guide Channel. Inspect for burns, cuts, breaks, and loose or broken stitching.	Presence of burns, cuts, breaks, and loose or broken stitching.
04	Before After	Harness	<p>All Webbing, Bindings, and Cloth. Inspect for loose or broken stitching, burns, frays, tears, and markings that are marred or illegible.</p> <p>All Hardware & Functional Fittings. Inspect for improper operation, rust, corrosion, burrs, & cracks</p> <p>Retainer Webbing. Inspect for loose or broken stitching, loss of elasticity, cuts and frays.</p> <p>Canopy Release and Ejector Snap Pads. Inspect for loose or broken stitching and hand tacking, cuts, and tears.</p> <p>Horizontal Back-strap: 96-inch and 120-inch. Inspect for loose or broken stitching, burns, frays, tears, and marred (or illegible) markings.</p> <p>Diagonal Guide. Inspect for loose or broken stitching, burns, frays, tears, and markings that are marred or illegible.</p> <p>Hip Pad. Inspect for loose or broken stitching, burns, frays, tears, and markings that are marred or illegible.</p> <p>Saddle Assembly. Inspect for loose or broken stitching, burns, frays, tears, and markings that are marred or illegible.</p> <p>Locking Lug. Inspect for improper operation, rust, corrosion, burrs, & cracks</p> <p>3-Ring Release Fabric Loop. Inspect for loose or broken stitching, burns, frays, tears, and markings that are marred or illegible.</p> <p>Shoulder Pad. Inspect for loose or broken stitching, burns, frays, tears, and markings that are marred or illegible.</p>	<p>Presence of loose or broken stitching, burns, frays, tears, and marred or illegible markings.</p> <p>Presence of improper operation, rust, corrosion, burrs, & cracks</p> <p>Presence of loose or broken stitching, loss of elasticity, cuts and frays.</p> <p>Presence of loose or broken stitching and hand tacking, cuts, and tears.</p> <p>Presence of loose or broken stitching, burns, frays, tears, and marred (or illegible) markings.</p> <p>Presence of loose or broken stitching, burns, frays, tears, and marred or illegible markings.</p> <p>Presence of loose or broken stitching, burns, frays, tears, and marred or illegible markings.</p> <p>Presence of improper operation, rust, corrosion, burrs, & cracks</p> <p>Presence of loose or broken stitching, burns, frays, tears, and marred or illegible markings.</p> <p>Presence of loose or broken stitching, burns, frays, tears, and marred or illegible markings.</p>
05	Before After	Pack Tray, Main	Pack Tray. Inspect for markings that are illegible. Inspect webbing, bindings, and cloth for loose or broken stitching and tacking, holes, tears, burns, and frays.	Presence of illegible markings, loose or broken stitching and tacking, holes, tears, burns, and frays.

Table 1. Preventive Maintenance Checks and Services for MC-6 – continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
05	Before After	Pack Tray, Main – Continued	<p>Back-strap Retainers & Keepers. Inspect for loose or broken stitching, burns, frays, tears, and missing (or damaged) snap fasteners. Grommet Stiffener. Inspect for loose, cracked or broken stiffener.</p> <p>Pack Closing Loop. Inspect for loose or broken stitches, burns, frays and tears.</p> <p>Retainer Band Keepers. Inspect for loose or broken stitches, burns, frays and tears.</p> <p>Static Line Slack Retainer. Inspect for loose or broken stitches, burns, frays, and tears.</p> <p>Waistband & Waistband Extension. Inspect for loose or broken stitches, burns, frays and tears; and check metal adjuster for rust, burrs or corrosion.</p> <p>Snap Fastener. Inspect for loose or broken stitching, burns, frays, tears, and missing (or damaged) snap fasteners.</p> <p>Top/Bottom Stiffener. Inspect for loose, cracked or broken stiffener.</p> <p>Side Stiffener. Inspect for loose, cracked or broken stiffener.</p>	<p>Presence of loose or broken stitching, burns, frays, tears, and missing (or damaged) snap fasteners. Presence of loose, cracked or broken stiffener.</p> <p>Presence of loose or broken stitches, burns, frays and tears.</p> <p>Presence of loose or broken stitches, burns, frays and tears.</p> <p>Presence of loose or broken stitches, burns, frays, or tears.</p> <p>Presence of loose or broken stitches, burns, frays and tears; and checks metal adjuster for rust, burrs or corrosion.</p> <p>Presence of loose or broken stitching, burns, frays, tears, and missing (or damaged) snap fasteners.</p> <p>Presence of loose, cracked or broken stiffener.</p> <p>Presence of loose, cracked or broken stiffener.</p>
06	Before After	Deployment Bag	<p>Deployment Bag. Inspect all webbing and tapes for loose or broken stitching.</p> <p>Main Panel. Inspect for holes and tears, loose or broken stitching.</p> <p>Stow Loops and Reinforcement Panel. Inspect for loose or broken stitching, holes, tears, burns or frays.</p> <p>Edge Reinforcement Webbing. Inspect for loose or broken stitching, holes, tears, burns or frays.</p> <p>Side Flaps. Inspect for loose or broken stitching, holes, tears, burns or frays.</p> <p>Locking Stow Panel. Inspect for loose or broken stitching, holes, tears, burns or frays.</p> <p>Locking Stow Loop Hoods. Inspect for loose or broken stitching, holes, tears, burns or frays.</p>	<p>Presence of loose or broken stitching on webbing and tapes.</p> <p>Presence of holes, tears and loose or broken stitching.</p> <p>Presence of loose or broken stitching, holes, tears, burns or frays.</p> <p>Presence of loose or broken stitching, holes, tears, burns or frays.</p> <p>Presence of loose or broken stitching, holes, tears, burns or frays.</p> <p>Presence of loose or broken stitching, holes, tears, burns or frays.</p> <p>Presence of loose or broken stitching, holes, tears, burns or frays.</p>

Table 1. Preventive Maintenance Checks and Services for MC-6 – continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
06	Before After	Deployment Bag – Continued	<p>Closing & Locking Stow Loops. Inspect for loose or broken stitching, holes, tears, burns or frays.</p> <p>Suspension Line Protection Cover. Inspect for loose or broken stitching, holes, tears, burns or frays and illegibility of markings.</p> <p>Cover Tiedown Loops. Inspect for loose or broken stitching, holes, tears, burns or frays.</p> <p>Connector Link Tie Loops. Inspect for loose or broken stitching, holes, tears, burns or frays.</p>	<p>Presence of loose or broken stitching, holes, tears, burns or frays.</p> <p>Presence of loose or broken stitching, holes, tears, burns or frays and illegibility of markings.</p> <p>Presence of loose or broken stitching, holes, tears, burns or frays.</p> <p>Presence of loose or broken stitching, holes, tears, burns or frays.</p>
07	Before After	Pack Tray, Reserve	<p>Pack Tray. Inspect for illegible markings. Inspect webbings, bindings, and duck cloth for loose or broken stitching and tacking, holes, tears, burns, and frays.</p> <p>Grommet Stiffener. Inspect for loose, cracked or broken stiffener.</p> <p>Log Record Pocket. Inspect for loose or broken stitching</p> <p>Retainer Band Keepers. Inspect for loose or broken stitches, burns, frays and tears.</p> <p>Ripcord Assembly. Inspect for loose or broken stitches, burns, frays and tears.</p> <p>Edge Binding. Inspect for loose or broken stitches, burns, frays and tears.</p> <p>Stow Bars. Inspect for loose or broken stitches, burns, frays and tears.</p> <p>Waistband Loop. Inspect for loose or broken stitches, burns, frays and tears.</p>	<p>Presence of illegible markings, loose or broken stitching and tacking, holes, tears, burns, and frays.</p> <p>Presence of loose, cracked or broken stiffener.</p> <p>Presence of loose or broken stitching</p> <p>Presence of loose or broken stitches, burns, frays and tears.</p> <p>Presence of loose or broken stitches, burns, frays and tears.</p> <p>Presence of loose or broken stitches, burns, frays and tears.</p> <p>Presence of loose or broken stitches, burns, frays and tears.</p> <p>Presence of loose or broken stitches, burns, frays and tears.</p>
08	Before After	Riser, Reserve	<p>Webbing. Inspect for loose or broken stitching, holes, line extension tears, burns or frays.</p> <p>Fastener Tape, Hook and Pile. Inspect for loose or broken stitching, holes, tears, burns or frays.</p>	<p>Presence of loose or broken stitching, holes, line extension tears, burns or frays.</p> <p>Presence of loose or broken stitching, holes, tears, burns or frays.</p>
09	Before After	Universal Static Line	<p>Webbing. Inspect for loose or broken stitching, holes, line extension tears, burns or frays.</p>	<p>Presence of loose or broken stitching, holes, line extension tears, burns or frays.</p>

Table 1. Preventive Maintenance Checks and Services for MC-6 – continued.


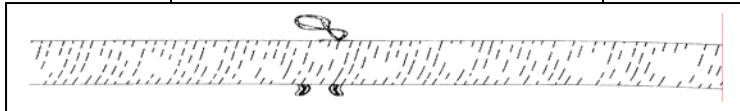
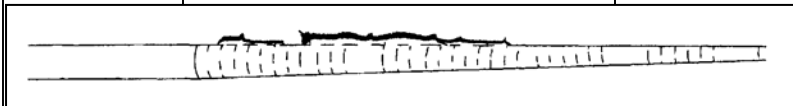
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
09	Before After	Universal Static Line- Continued	<p>Static line webbing with minor abrasions are serviceable. Minor Abrasions (figure 1) are visible on the surface of the USL webbing and will appear to look “fuzzy”.</p>	
				
			<p>Figure 1. Minor Abrasion.</p> <p>Static line webbing with major abrasions are unserviceable. Major abrasions (figure 2) are visible when inner core fibers are pulled through the surface of the webbing.</p>	<p>Presence of major abrasions.</p>
				
			<p>Figure 2. Major Abrasion.</p> <p>Sleeve and Buffer. Inspect for loose or broken stitching, holes, tears, burns or frays. Inspect entire portion of static line covered by sleeve.</p> <p>Curved Pins. Inspect for rust, burrs, corrosion, bent or twisted pins.</p> <p>Snap Hook. Inspect for proper operation, excessive wear, rust, burrs, corrosion, and cracks.</p>	<p>Presence of broken stitching, holes, tears, burns or frays.</p> <p>Presence of rust, burrs, corrosion, or bent or twisted pins.</p> <p>Presence of excessive wear, rust, burrs, corrosion, and cracks. Snap hook doesn't operate properly.</p>
10	Before After	Extension, Universal Static Line, (USL)	<p>Webbing. Inspect for loose or broken stitching, holes, line extension tears, burns or frays.</p> <p>Static line webbing with minor abrasions are serviceable. Minor Abrasions (figure 3) are visible on the surface of the USL webbing and will appear to look “fuzzy”.</p>	<p>Presence of loose or broken stitching, holes, line extension tears, burns or frays.</p>
				
			<p>Figure 3. Minor Abrasion.</p>	

Table 1. Preventive Maintenance Checks and Services for MC-6 – continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
10	Before After	Extension, Universal Static Line, (USL) – Continued	<p>Static line webbing with major abrasions are unserviceable. Major abrasions (figure 4) are visible when inner core fibers are pulled through the surface of the webbing.</p> <div data-bbox="459 457 1182 632" style="text-align: center;"> </div> <p style="text-align: center;">Figure 4. Major Abrasion.</p>	Presence of major abrasions.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
SHAKEOUT AND AIRING
SERVICE**

INITIAL SETUP:**Tools**

Brush, Scrub, Household (Item 7, WP 0097 00)

Personnel Required

Two, 92R (10) Parachute Riggers

Materials/Parts

None required

Equipment Condition

Parachute Suspended

SERVICE

Shakeout. A two-person team, either indoors within a shakeout room or outdoors at a shakeout tower, will accomplish the shakeout. Each parachute will be suspended by the canopy vent and all debris will be removed by shaking the canopy thoroughly or by brushing with a dry, soft-bristled brush, as detailed below:

1. With assistance from the No. 2 person, the No. 1 person will connect the snap (**figure 1, item 1**) on a pulley rope to the canopy bridle loop (**figure 1, item 2**).



Figure 1. Connecting Snap On Pulley Rope to Canopy Bridle Loop.

2. Through use of the pulley rope, the No. 2 person will raise the canopy to a suitable height; this will enable the No. 1 person to perform shakeout on each of the canopy gores. Until the gore shaking process is completed, the No. 2 person will maintain a steady pull on the pulley rope to hold the suspended canopy at the working height needed by the No. 1 person.
3. The No. 1 person will grasp any two-consecutive suspension lines (**figure 2, item 1**), one in each hand, and vigorously shake the first gore (**figure 2, item 2**).

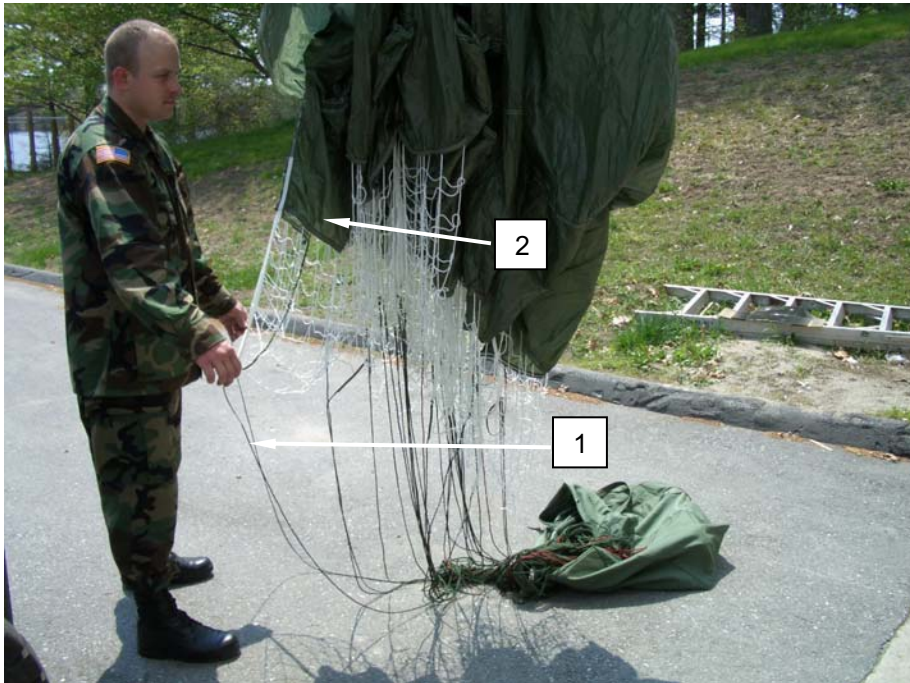


Figure 2. Grasping Two Consecutive Suspension Lines and Shaking First Gore.

4. When the gore is free of debris, the No. 1 person passes the line from the right hand to the left hand and grasps the next consecutive suspension line, in the right hand. The No. 1 person will shake out each consecutive gore until all suspension lines are held in the left hand, and all gores are free of debris.
5. Once the gore shaking process is completed, the No. 2 person will slowly raise the suspended canopy higher as the No. 1 person clears the suspension lines of debris and removes entanglements (**figure 3, item 1**), when possible.



Figure 3. Clearing Suspension Lines of Debris and Removing Entanglements.

6. After the suspension lines have been cleared, the No. 2 person may hold, or temporarily secure, the pulley rope while the No. 1 person proceeds to clear debris from other parachute components such as the risers, harness, and pack tray.
7. When all components are free of debris, the No. 2 person will slowly lower the canopy, while the No. 1 person S-folds the suspension lines (**figure 4, item 1**) into the pack tray, or aviator's kit bag (**figure 4, item 2**), as applicable.



Figure 4. S-Folding Suspension Lines into Aviator's Kit Bag.

8. After the suspension lines have been completely folded, the No. 1 person will accordion-fold the canopy length on top of the folded lines.
9. As the canopy folding is being completed, the No. 1 person disconnects the canopy vent from the pulley rope snap. Secure the folded canopy assembly for further handling.

Airing. Where dampness and mildew are prevalent, air delivery equipment will be aired at frequent intervals according to the severity of the prevailing conditions. Parachutes that have been previously packed or are unpacked, and have been subjected to conditions of dampness or mildew, will be aired for a period of at least 6-hours prior to being repacked. Air delivery 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 that would allow maximum exposure to air circulation. Outside facilities used for the shakeout of parachutes may be used for the airing of air delivery equipment, if weather conditions permit. If the shakeout facilities are inadequate for airing, the applicable item(s) may be suspended or elevate at several points, or draped over suitable type objects that will not cause damage.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
CLEANING AND DRYING
SERVICE**

INITIAL SETUP:**Tools**

Brush, scrub, household (Item 7, WP 0097 00)
File, flat (Item 20, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Cloth, Abrasive (Item 9, WP 0109 00)
Dishwashing Compound (Item 22, WP 0109 00)
Rag, Wiping (Item 38, WP 0109 00)

Equipment Condition

Laid out on packing table or other suitable surface.

SERVICE**Cleaning and Drying****CAUTION**

If, during the cleaning, there exists a possibility that the substance to be removed contains acid or some other equally destructive ingredient, the item will be evacuated to intermediate maintenance activity for determination as to the nature of the substance and item disposition. If the substance cannot be identified, or if normal repair procedures will not eliminate all traces of chemical or acid damage, the applicable item will be condemned.

NOTE

Cleaning of parachutes should be held to a minimum and should be performed only when necessary, to prevent malfunction or deterioration. When a parachute contains debris, or when it is soiled by dirt, oil, grease, rust, corrosion, or other foreign substances, to such an extent that cleaning is necessary, the cleaning should be performed manually and should be limited to the soiled area only, unless the parachute has been contaminated by water. The methods of cleaning must be determined by the nature of the substance to be removed. Do not use cleaning solvent to clean items soiled by airsickness. Use a solution of hand dishwashing compound to clean this type of soiling.

SERVICE - continued**Cleaning fabric items with a solution of hand dishwashing compound**

Use dishwashing compound to clean fabric items as follows:

1. Gently brush with a soft bristle brush.
2. Spot clean with a solution of dishwashing compound.
 - a. Dissolve one-half cup of dishwashing compound in one-gallon of warm water.
 - b. Rub the soiled area with a clean cloth dampened with a solution of dishwashing compound.
 - c. Rinse the cleaned area by repeating the rubbing process, with a clean portion of the cloth dampened with water.

Rinsing parachute assembly immersed in salt-water

If the parachute, or any of its components, has been immersed in salt water in excess of 24-hours it will be condemned. Additionally, if the parachute, or any of its components, has been immersed in salt water for a period less than 24-hours, but cannot be rinsed within 48-hours after recovery, it will also be condemned unless the following actions are performed. Upon removal from the salt water, the parachute is placed in a single heavy duty plastic trash bag, the top of the bag secured closed and kept in a wet state until a rinse can be performed following normal rinse procedures. The bag must be doubled when outside temperatures exceed 85 degrees F. The bags must be inspected after transport and storage to insure the bag did not get torn and the assembly was allowed to dry. Parachutes recovered using this method must be rinsed no later than than 7 days after the salt water immersion or be condemned. However, if the cited time limitations can be met, then immediately upon recover, suspend or elevate the parachute assembly in a shaded area and allow it to drain for at least 5-minutes. Do not attempt to wring the fabric or the suspension lines. Within 48-hours after recover, under the supervision of a qualified parachute rigger (92R), rinse the recovered parachute assembly as follows:

1. Place the parachute assembly in a large watertight container filled with a suitable amount of fresh, clean water to cover the assembly.

NOTE

If the salt-water-soaked parachute assembly is too large to be placed into a rinsing container, then the rinsing process will be affected by applying fresh, clean water to the assembly using a hose.

2. Agitate the container contents by hand for 5-minutes.
3. Remove the parachute assembly from the container and suspend or elevate it in a shaded area, allowing a 5-minute drainage period. Do not attempt to wring the fabric or the suspension lines.
4. Repeat the procedures in steps 1. through 3. above, twice, using fresh, clean water for each rinse.
5. After the third rinse, allow the parachute assembly to drain thoroughly. Upon completion of draining, dry the assembly in accordance with the DRYING FABRIC ITEMS procedures, below.

SERVICE - continued

6. When dried, perform a technical/rigger-type inspection of the parachute assembly. Corroded metal components, or corrosion-stained fabrics or suspension lines, will be either repaired or replaced as prescribed by the Maintenance Allocation Chart (MAC) in WP 0097 00.
7. Record any repair, immersion, and rinsing in the parachute log record as shown in WP 0005 00.

Rinsing parachute assembly immersed in fresh-water

Any parachute, or its components, that has been immersed in a fresh water lake, river, or stream will not require rinsing unless it has been ascertained that the water is dirty, oily, or otherwise contaminated. Procedures for handling a fresh water immersed parachute are as follows:

1. Contaminated fresh water. If the parachute, or its components, has been immersed in contaminated fresh-water, rinse and dry (see RINSING PARACHUTE ASSEMBLY IMMERSSED IN SALT WATER, above), and, if applicable, repair.
2. Uncontaminated fresh-water. If the parachute, or its components, has been immersed in uncontaminated fresh-water, it will be cleaned and dried as outlined in CLEANING FABRIC ITEMS WITH A SOLUTION OF HAND DISHWASHING COMPOUND, DRYING FABRIC ITEMS, and CLEANING METAL ITEMS, in the detailed paragraphs above and below. Minor discoloration of fabric items, resulting from immersion in uncontaminated fresh-water, may occur.

NOTE

Fabric items will not be dried in direct sunlight or by laying an item on the ground except in an emergency.

Drying fabric items

Dry fabric items as follows:

1. Suspend or elevate the item in a well-ventilated room or in a heated drying room away from direct sunlight.
2. Using electric circulating fans or suspending the assembly in a heated drying room may reduce drying time.
3. Do not use in a room where the temperature exceeds 160°F. nor dry the assembly for more than three consecutive hours at this temperature.

Cleaning Metal Items

Clean metal items as follows:

CAUTION

Use care not to damage the adjacent fabric materials.

1. Remove burrs, rough spots, rust, or corrosion from metal items by filing with a metal file, or by buffing and polishing with abrasive cloth.
2. Remove all oils and filings by brushing and cleansing with dishwashing compound. Allow to dry.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY
INSPECT

INITIAL SETUP:**Tools**

None required

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

None required

Equipment Condition

Packed IAW WP 0015 00

INSPECT**Routine Inspection**

A routine inspection is a visual check performed to ascertain the serviceability of all visible components of a parachute that is packed or rigged for use. The inspection will be made on all components that can be inspected without opening the parachute pack. Prior to issue, a parachute rigger will administer this inspection. Personnel parachutes issued for an air delivery operation and not deployed will receive a routine inspection prior to being placed into ready-for-issue storage.

Pack-In-Process Inspection

A pack-in-process inspection is performed at specified intervals during the packing of a parachute to ensure that only authorized procedures and methods are being used. A parachute rigger other than the packer or rigger preparing the applicable equipment for use will accomplish the inspection. The intervals, at which the inspection is performed, are as follows:

WARNING

Deployment bag will be given a complete inspection, including static line and that portion of the static line that is covered by the static line sleeve. Failure to do so could result in serious injury or death to the parachutist.

NOTE

For Army personnel, the In-Process-Inspector (IP) qualifications are IAW AR 750-32.

INSPECT - Continued**In-process Rigger Checks- MC-6 Main Parachute**

1. After Proper Layout

- Remove inversion from canopy
- Remove suspension line turns, tangles, and twists
- Assemble canopy release assemblies
- Control lines to the inside
- Place harness in proper layout
- Bridle loop to left (box stitch)
- Centering lines & line 28 cleared

2. After Gore Folding

- Dress upper lateral band
- Apply first tension
- Fold gores
- Apply second tension
- Rough dress canopy
- Subdivide canopy, dress bottom gore
- Dress lower lateral band and net
- Dress modifications and clear upper control lines
- Clear air channel position control lines

3. After Long Fold And Breakcord Tie

- Fold right group
- Fold left over right group
- Longfold proper width (rollback)
- Breakcord tie

4. Stowing Canopy & 1st Regular Stow

- Stow canopy and net in bag (Maintaining group separation)
- Move tension plate forward (Control lines even with suspension lines)
- First locking stow
- Second locking stow
- Flatten D-bag
- First regular stow

5. Stowing Lines & Connector Link Ties

- Slack in suspension line stows
- Stow loops even with edge
- Rolled stow loops
- Remove stow hooks
- Route connector link ties
- Tie connector links
- Correct log book entry (D-bag #)

6. After Pack Closing

- Center pack on harness
- Fold riser roll D-bag
- Position curved pin
- Pack closing (Left, Right, Bottom, Top)

INSPECT - Continued

7. Completion Of Pack

- Dress the pack
- Stow the static line
- Complete entries in log record book

Technical/Rigger-Type Inspection Procedures

Perform inspection as follows:

1. Overall inspection. An overall inspection will be made on the MC-6 as follows:
 - a. Log record/parachute inspection data pocket and form. As applicable, inspect the assembly log record parachute inspection data pocket to ensure the Army Parachute Log Record (DA Form 3912) is enclosed and properly attached. Further, remove the log record from the pocket and evaluate the recorded entries. Inspect and evaluate as follows:

The Army Parachute Log Record, DA Form 3912, and AFTO 391 are history-type maintenance documents that accompany the parachute canopy and pack tray assemblies through the period of service of the individual assembly. The log record provides a means of recording maintenance actions performed on a parachute canopy assembly. Normally, a log record is initiated and attached to either rear riser upon receipt by a using unit. However, if the item is subjected to alteration or modification by a maintenance activity during the interim period from date of manufacture to receipt by a using unit, the log record will be prepared by the activity performing the maintenance function. Once initiated, a log record will be attached to, and contained in, an affixed parachute log record/ inspection data pocket, until such time as the parachute canopy assembly is destroyed or rendered unfit for further use or repair. Additionally, should an item that requires a log record, be transferred from one unit to another, the log record for the parachute assembly will accompany the item in the transfer action. A prepared log record will not be removed or separated from a parachute, and especially a packed parachute, except as directed by the local air delivery equipment maintenance activity officer. A log record that is illegible, lost, damaged, soiled, or precludes further entries due to lack of space, will be replaced upon the next repack or inspection, as applicable, with a serviceable item from stock.

- b. Assembly completeness. Ensure the applicable assembly is complete and that no components (or parts) are missing.
- c. Operation adequacy. Check the item components and parts to ensure proper assembly, which includes attachment and alignment, and that the assembled product functions in the prescribed manner. Further, ensure that no stitch formation (or sewn seam) has been omitted.
- d. Markings and stenciling. Inspect each assembly and components for faded, illegible, obliterated, or missing informational data and identification numbers.
- 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.

INSPECT - Continued

2. Detailed inspection. In addition to the overall inspection performed in 1., above, a detailed inspection will be performed on the materials that 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 grommets, safety pins, connector snap, eye hook, pack fastener; improper swaging or welding; loss of spring tension; and missing or loose screws.
 - b. Cloth. Inspect for breaks, burns, cuts, frays, holes, rips, snags, tears; loose, missing, or broken stitching or tacking; and weak spots, wear, or deterioration.
 - c. 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, whipping, and weaving; weak spots, wear, and deterioration.

IN-STORAGE INSPECTION

An in-storage inspection is a physical check conducted on a random sample of air delivery equipment that is located in storage. The purpose of the inspection is to ensure that the equipment is ready for issue, that the item is properly identified and segregated from other types of equipment, that no damage or deterioration of equipment has been incurred, and that all modifications or similar action requirements have been completed. The inspection shall also concern the methods and procedures applied to the storage of air delivery items, the adequacy of storage facilities, efforts of pest and rodent control, and protection against unfavorable climatic conditions. Air delivery equipment that is in storage will be inspected at least semiannually and at more frequent intervals if prescribed by the local parachute maintenance officer. The frequency of inspection may vary according to the type of storage facilities and local climatic conditions. Only parachute rigger personnel designated by the local parachute maintenance officer will conduct in-storage inspections.

EQUIPMENT DISPOSITION

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

1. Item requiring repair or modification. An air delivery item that requires repair or modification will be tagged in accordance with DA PAM 738-751. Subsequent work on the item will be performed at the maintenance level specified for the maintenance function in the applicable supporting technical publication.
2. Parachutes with exhausted age or service life. Any parachute component or air delivery equipment whose age or service life has expired as specified in TB 43-0002-43 will be removed from service, condemned and tagged as prescribed by DA PAM 738-751.

INSPECT - Continued

3. Disposition of condemned air deliver equipment. Condemned equipment, other than fatality parachutes, will be removed from service and disposed of in accordance with current directives listed in this WP.
4. Rejected equipment. Equipment which, prior to use, is deemed unserviceable for use will be reported in an EIR in accordance with DA PAM 750-8, as authorized by AR 750-1. Each applicable item that is defective will be held and safeguarded pending receipt of disposition instructions from the National Maintenance Point (NMP). In all instances, EIR exhibit material will be handled as prescribed in DA PAM 750-8. If the quality or the serviceability of an item is questionable, clarification and assistance may be obtained by contacting Commander, U.S Army Soldier and Biological Chemical Command, ATTN: AMSSB-RIM-E(N), Kansas Street, Natick, MA 01760-5052.
5. Equipment of doubtful serviceability. Equipment that has had previous use and has not exceeded normal fair wear or aging criteria, but of which further serviceability is doubtful, will be tagged as prescribed in DA PAM 750-751. In addition, the equipment will be reported in an EIR, in accordance with DA PAM 750-8 and AR 750-1. The item(s) in question will be held as EIR exhibit material as outlined in D PAM 750-8 pending receipt of disposition instructions from the National Maintenance Point (NMP). A maintenance activity holding EIR exhibit material will not tamper with the applicable item(s) or make any attempt to ascertain cause factors. Unnecessary handling of EIR exhibit material may disturb or alter peculiar aspects of the affected item(s) that might affect the judgment of engineering personnel who have the responsibility for final evaluation of EIR actions.
6. Equipment immersed in salt-water. Any air delivery item constructed from cotton material that has been immersed in salt-water will be condemned. Cotton thread used for tacking and sewing on nylon parachute packs that have been immersed in salt-water will only be replaced when there is visible evidence or deterioration such as extreme discoloration or indications of broken thread. Any air delivery equipment constructed of nylon or rayon material that has been immersed in salt-water for a period less than 24-hours, but which cannot be rinsed within 48-hours after recovery will also be condemned unless the following actions are performed. Upon removal from the salt water, the parachute is placed in a single heavy duty plastic trash bag, the top of the bag secured closed and kept in a wet state until a rinse can be performed following normal rinse procedures. The bag must be doubled when outside temperatures exceed 85 degrees F. The bags must be inspected after transport and storage to insure the bag did not get torn and the assembly was allowed to dry. Parachutes recovered using this method must be rinsed NLT than 7 days after the salt water immersion or be condemned. However, if the cited time limitations can be met, then immediately upon recovery, suspend or elevate the recovered equipment in a shaded area and allow the item(s) to drain for at least 5-minutes. Do not attempt to wring the equipment fabric or the suspension lines. Within 48-hours after recovery, under the supervision of a qualified parachute rigger (92R), rinse the recovered equipment as indicated in WP 0011 00.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE CANOPY
INSPECT

INITIAL SETUP:**Tools**

None required

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

None required

Equipment Condition

Packed IAW WP 0016 00

INSPECT**Routine Inspection**

A routine inspection is a visual check performed to ascertain the serviceability of all visible components of a parachute that is packed or rigged for use. The inspection will be made on all components that can be inspected without opening the parachute pack. Prior to issue, a parachute rigger will administer this inspection. Personnel parachutes issued for an air delivery operation and not deployed will receive a routine inspection prior to being placed into ready-for-issue storage.

Pack-In-Process Inspection

A pack-in-process inspection is performed at specified intervals during the packing of a parachute to ensure that only authorized procedures and methods are being used. A parachute rigger other than the packer or rigger preparing the applicable equipment for use will accomplish the inspection. The intervals, at which the inspection is performed, are as follows:

WARNING



Deployment bag will be given a complete inspection, including static line and that portion of the static line that is covered by the static line sleeve. Failure to do so could result in serious injury or death to the parachutist.

NOTE

For Army personnel, the In-Process-Inspector (IP) qualifications are IAW AR 750-32.

INSPECT - Continued**In-process Rigger Checks – Reserve Parachute**

1. After Proper Layout
 - Packtray in proper layout (connector snaps even with w/ bottom edge of packtray)
 - Two riser stows
 - Barrel nut on connector links inside/tightened towards the packtray 1/4 turn
 - 4 line (1 - 20 top) (10 – 11 bottom)
 - All apex loops retained by tension device
 - Apex tie pre-positioned
 - Skirts assist ties present
 - Ejector spring compressed
 - Extractor secured to apex tie loops
2. After Gore Folding (Flat Fold)
 - Apply first tension
 - Fold gores
 - Apply second tension
 - Rough dress canopy
 - Skirt assist lines Left/Right groups in line separator, suspension lines routed to the outside Left/Right
 - Air channel is clear, 20 is on top
 - Scoops are dressed and tied correctly
3. After Long Fold
 - 45 degree skirt fold Left/Right
 - Fold right group over left group 3 inches over air channel
 - Scoops long folded to apex
4. After First Regular Stow
 - Risers completely stowed (top & bottom)
 - Note retainer bands between the 1 and 2 riser stows
 - Connector links in the middle of the pack tray
 - First stow to bottom right, 3-inch running end away
5. After Suspension Lines Are Stowed
 - 12 stows on the packtray, 6 on the Left/Right
 - 3 free stows utilizing 1-inch retainer bands, 1 on the Left/Right before last stow, milk the skirt assist lines away from the canopy placing retainer band just below bartacks
 - 12-inch of suspension lines remaining
 - Apex tie secured
6. After Extractor Parachute Position
 - Ensure all folds are correct
 - Ejector spring and extractor positioned
 - Extractor parachute positioned
7. After Temporary Closing
 - Position extractor cap
 - Side closing flaps correct (Left/Right)
 - Remove compression rod
8. After Curved Pins Are Inserted
 - Left/Right pack tray tabs tucked
 - Close top / bottom closing flaps

INSPECT – Continued

- Position ripcord handle correctly
- Curved pins properly routed (curve of the pin facing counter-clockwise)

9. Completion Of Pack

- Remove pull-up cords
- Insert left tuck tab
- Tuck top / bottom ripcord handle tuck tabs
- Conduct ripcord handle pull test
- Complete log record book entry

Technical/Rigger-Type Inspection Procedures

Perform inspection as follows:

1. Overall inspection. An overall inspection will be made on the MC-6 as follows:
 - a. Log record/parachute inspection data pocket and form. As applicable, inspect the assembly log record parachute inspection data pocket to ensure the Army Parachute Log Record (DA Form 3912) is enclosed and properly attached. Further, remove the log record from the pocket and evaluate the recorded entries. Inspect and evaluate as follows:

The Army Parachute Log Record, DA Form 3912, and AFTO 391 are history-type maintenance documents that accompany the parachute canopy and pack tray assemblies through the period of service of the individual assembly. The log record provides a means of recording maintenance actions performed on a parachute canopy assembly. Normally, a log record is initiated and attached to either rear riser upon receipt by a using unit. However, if the item is subjected to alteration or modification by a maintenance activity during the interim period from date of manufacture to receipt by a using unit, the log record will be prepared by the activity performing the maintenance function. Once initiated, a log record will be attached to, and contained in, an affixed parachute log record/ inspection data pocket, until such time as the parachute canopy assembly is destroyed or rendered unfit for further use or repair. Additionally, should an item that requires a log record, be transferred from one unit to another, the log record for the parachute assembly will accompany the item in the transfer action. A prepared log record will not be removed or separated from a parachute, and especially a packed parachute, except as directed by the local air delivery equipment maintenance activity officer. A log record that is illegible, lost, damaged, soiled, or precludes further entries due to lack of space, will be replaced upon the next repack or inspection, as applicable, with a serviceable item from stock.

- b. Assembly completeness. Ensure the applicable assembly is complete and that no components (or parts) are missing.
 - c. Operation adequacy. Check the item components and parts to ensure proper assembly, which includes attachment and alignment, and that the assembled product functions in the prescribed manner. Further, ensure that no stitch formation (or sewn seam) has been omitted.
 - d. Markings and stenciling. Inspect each assembly and components for faded, illegible, obliterated, or missing informational data and identification numbers.

INSPECT - Continued

- 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 that 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 grommets, safety pins, connector snap, eye hook, pack fastener; improper swaging or welding; loss of spring tension; and missing or loose screws.
 - b. Cloth. Inspect for breaks, burns, cuts, frays, holes, rips, snags, tears; loose, missing, or broken stitching or tacking; and weak spots, wear, or deterioration.
 - c. 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, whipping, and weaving; weak spots, wear, and deterioration.

IN-STORAGE INSPECTION

An in-storage inspection is a physical check conducted on a random sample of air delivery equipment that is located in storage. The purpose of the inspection is to ensure that the equipment is ready for issue, that the item is properly identified and segregated from other types of equipment, that no damage or deterioration of equipment has been incurred, and that all modifications or similar action requirements have been completed. The inspection shall also concern the methods and procedures applied to the storage of air delivery items, the adequacy of storage facilities, efforts of pest and rodent control, and protection against unfavorable climatic conditions. Air delivery equipment that is in storage will be inspected at least semiannually and at more frequent intervals if prescribed by the local parachute maintenance officer. The frequency of inspection may vary according to the type of storage facilities and local climatic conditions. Only parachute rigger personnel designated by the local parachute maintenance officer will conduct in-storage inspections.

EQUIPMENT DISPOSITION

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

1. Item requiring repair or modification. An air delivery item that requires repair or modification will be tagged in accordance with DA PAM 738-751. Subsequent work on the item will be performed at the maintenance level specified for the maintenance function in the applicable supporting technical publication.
2. Parachutes with exhausted age or service life. Any parachute component or air delivery equipment whose age or service life has expired as specified in TB 43-0002-43 will be removed from service, condemned and tagged as prescribed by DA PAM 738-751.
3. Disposition of condemned air deliver equipment. Condemned equipment, other than fatality parachutes, will be removed from service and disposed of in accordance with current directives listed in this WP.

INSPECT-Continued

4. Rejected equipment. Equipment which, prior to use, is deemed unserviceable for use will be reported in an EIR in accordance with DA PAM 750-8, as authorized by AR 750-1. Each applicable item that is defective will be held and safeguarded pending receipt of disposition instructions from the National Maintenance Point (NMP). In all instances, EIR exhibit material will be handled as prescribed in DA PAM 750-8. If the quality or the serviceability of an item is questionable, clarification and assistance may be obtained by contacting Commander, U.S Army Soldier and Biological Chemical Command, ATTN: AMSSB-RIM-E(N), Kansas Street, Natick, MA 01760-5052.
5. Equipment of doubtful serviceability. Equipment that has had previous use and has not exceeded normal fair wear or aging criteria, but of which further serviceability is doubtful, will be tagged as prescribed in DA PAM 750-751. In addition, the equipment will be reported in an EIR, in accordance with DA PAM 750-8 and AR 750-1. The item(s) in question will be held as EIR exhibit material as outlined in D PAM 750-8 pending receipt of disposition instructions from the NMP. A maintenance activity holding EIR exhibit material will not tamper with the applicable item(s) or make any attempt to ascertain cause factors. Unnecessary handling of EIR exhibit material may disturb or alter peculiar aspects of the affected item(s) that might affect the judgment of engineering personnel who have the responsibility for final evaluation of EIR actions.
6. Equipment immersed in salt-water. Any air delivery item constructed from cotton material that has been immersed in salt-water will be condemned. Cotton thread used for tacking and sewing on nylon parachute packs that have been immersed in salt-water will only be replaced when there is visible evidence or deterioration such as extreme discoloration or indications of broken thread. Any air delivery equipment constructed of nylon or rayon material that has been immersed in salt-water for a period less than 24-hours, but which cannot be rinsed within 48-hours after recovery will also be condemned unless the following actions are performed. Upon removal from the salt water, the parachute is placed in a single heavy duty plastic trash bag, the top of the bag secured closed and kept in a wet state until a rinse can be performed following normal rinse procedures. The bag must be doubled when outside temperatures exceed 85 degrees F. The bags must be inspected after transport and storage to insure the bag did not get torn and the assembly was allowed to dry. Parachutes recovered using this method must be rinsed NLT than 7 days after the salt water immersion or be condemned. However, if the cited time limitations can be met, then immediately upon recovery, suspend or elevate the recovered equipment in a shaded area and allow the item(s) to drain for at least 5-minutes. Do not attempt to wring the equipment fabric or the suspension lines. Within 48-hours after recovery, under the supervision of a qualified parachute rigger (92R), rinse the recovered equipment as indicated in WP 0011 00.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MC-6 SYSTEM
TEST

INITIAL SETUP:**Tools**

None required

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Test Paper and Color Chart, pH, (Item 46, WP 0109 00)

Equipment Condition

Laid out on packing table or other suitable area.

TEST**Salt/Fresh Water Contamination Test**

Look for a white crystalline residue. If evidence of salt-water/fresh-water contamination is found, refer to the procedures detailed below:

1. **Rinsing Parachute Assembly Immersed in Salt-Water.** If the parachute, or any of its components, has been immersed in salt water in excess of 24-hours it will be condemned. Additionally, if the parachute, or any of its components, has been immersed in salt water for a period less than 24-hours, but cannot be rinsed within 48-hours after recovery, it will also be condemned unless the following actions are performed. Upon removal from the salt water, the parachute is placed in a single heavy duty plastic trash bag, the top of the bag secured closed and kept in a wet state until a rinse can be performed following normal rinse procedures. The bag must be doubled when outside temperatures exceed 85 degrees F. The bags must be inspected after transport and storage to insure the bag did not get torn and the assembly was allowed to dry. Parachutes recovered using this method must be rinsed NLT than 7 days after the salt water immersion or be condemned. However, if the cited time limitations can be met, then immediately upon recover, suspend or elevate the parachute assembly in a shaded area and allow it to drain for at least 5-minutes. Do not attempt to wring the fabric or the suspension lines. Within 48-hours after recover, under the supervision of a qualified parachute rigger (92R), rinse the recovered parachute assembly as follows:
 - a. Place the parachute assembly in a large watertight container filled with a suitable amount of fresh, clean water to cover the assembly.

NOTE

If the salt-water-soaked parachute assembly is too large to be placed into a rinsing container, then the rinsing process will be affected by applying fresh, clean water to the assembly using a hose.

- b. Agitate the container contents by hand for 5-minutes.
- c. Remove the parachute assembly from the container and suspend or elevate it in a shaded area, allowing a 5-minute drainage period. Do not attempt to wring the fabric or the suspension lines.
- d. Repeat the procedures in steps 1 through 3 twice, using fresh, clean water for each rinse.

TEST - Continued

- e. After the third rinse, allow the parachute assembly to drain thoroughly. Upon completion of draining, dry the assembly in accordance with the Drying Fabric Items procedures detailed below.
 - f. When dried, perform a technical/rigger-type inspection of the parachute assembly. Corroded metal components, or corrosion-stained fabrics or suspension lines, will be either repaired or replaced as prescribed by the Maintenance Allocation Chart (MAC) in WP 0097 00.
 - g. Record any repair, immersion, and rinsing in the parachute log record as shown in WP 0005 00.
2. **Rinsing Parachute Assembly Immersed in Fresh-Water.** Any parachute, or its components, that has been immersed in a fresh water lake, river, or stream will not require rinsing unless it has been ascertained that the water is dirty, oily, or otherwise contaminated. Procedures for handling a fresh water immersed parachute are as follows:
- a. Contaminated fresh water. If the parachute, or its components, has been immersed in contaminated fresh water, rinse and dry (see RINSING PARACHUTE ASSEMBLY IMMERSSED IN SALT WATER, above), and, if applicable, repair.
 - b. Uncontaminated fresh water. If the parachute, or its components, has been immersed in uncontaminated fresh water, it will be cleaned and dried as outlined in Cleaning Fabric Items With a Solution of Hand Dishwashing Compound, Drying Fabric Items, and Cleaning Metal Items, in the detailed paragraphs above and below. Minor discoloration of fabric items, resulting from immersion in uncontaminated fresh water, may occur.

NOTE

Fabric items will not be dried in direct sunlight or by laying an item on the ground.

3. **Drying Fabric Items.** Dry fabric items as follows:
- a. Suspend or elevate the item in a well-ventilated room or in a heated drying room.
 - b. Using electric circulating fans may reduce drying time.
 - c. When heat is used, the heat temperature shall not exceed 160 degrees Fahrenheit (71 degrees Celsius). The preferred temperature is 140 degrees Fahrenheit (60 degrees Celsius).

Acidity Test**CAUTION**

Hands must be washed, or rubber gloves worn, prior to testing. Failure to do so will result in inaccuracy of test and may cause damage to equipment.

1. Wash hands or wear rubber gloves prior to testing.
2. Clean packing paddle prior to use.
3. If stain is wet enough to achieve a color change on the pH test paper, do not use water.
4. If water is needed, use tap, deionized, distilled, spring or mineral water to wet intended test area.
5. Take the pH of the water prior to use. Only use water sample if the pH of the water is 7.

TEST - Continued

6. Place one to five drops of water on the item in the intended test area. Do not saturate the pH paper, use the minimum amount of water needed to completely moisten the pH paper. A guideline may be 1 to 2 drops on fabric and 3 to 5 drops on webbing.

NOTE

If the water droplets do not penetrate the material, gently rub the moistened area with the flat side of a packing paddle.

7. Using the flat side of a packing paddle, press test paper against the moistened area. Remove the test paper when it becomes moist.
8. Note the color of the pH test paper and compare the color to the colors found on the pH color chart.
9. If test result is multi-colored, assume the "worst case result" and report the most severe pH level (e.g., if the pH paper is mostly a pH level of 7, with specks of pH level 3, assume the pH level for the entire test area is pH level 3).
10. Condemn if pH test results read levels 1, 2, 3, 4, or 5.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN PARACHUTE PACKING PROCEDURES

INITIAL SETUP:**Tools**

Pull-up Cords (Item 41, WP 0097 00)
 Packing Weights (Item 35, WP 0097 00)
 Apex Tensioning Device (Item 3, WP 0097 00)
 Line Separator (Item 29, WP 0097 00)
 Packing Paddle (Item 34, WP 0097 00)
 Riser Tension Plate (Item 45, WP 0097 00)
 Needle, Tacking (Item 32, WP 0097 00)
 Wrench, Adjustable, 8-inch (Item 71, WP 0097 00)
 Pin, Temporary Locking (Item 36, WP 0097 00)
 Stow Hooks (Item 63, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger
 92R (20) Parachute Rigger

Materials/Parts

Band, Rubber, 1-1/16-inch (Item 1, WP 0109 00)
 Band, Rubber Retainer, 2-inch (Item 3, WP 0109 00)
 Tape, Lacing and Tying, Nylon, (Item 42, WP 0109 00)
 Band, Rubber Retainer, 1-1/4-inch (Item 2, WP 0109 00)
 Webbing, Cotton, 80 lb. (Item 53, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

This work package contains the packing procedures for the MC-6 Main Personnel Parachute.

Read all warnings and cautions within this section and follow procedures outlined herein to ensure safe operation of the MC-6 Main Personnel Parachute and associated equipment.

Technical/rigger-type inspection. Before each parachute is packed for air delivery, it must be given a technical/rigger-type inspection by the packer, in accordance with WP 0012 00.

Re-Adjustment Of Lower Control Line With More Than 5 Jumps.

1. Once 5 jumps have been made on the MC-6 main canopy re-adjust the lower control lines due to stretching of the upper, middle, and lower control lines.
2. Undo the three over hand knots in each control line free end.
3. Position the toggle against the bottom of the guide ring and, while holding the toggle in position, pull control line free ends until the control lines tension equals that of the suspension lines.
4. Secure the toggle by making two overhand knots against the bottom of the toggle. After the toggle is secured with the two overhand knots, check to make sure the toggle does not exert any pressure against the guide ring.
5. At 2 inches below the last overhand knot make a third overhand knot in the lower control line free end.
6. Repeat the same adjustment for both control lines.

Pack-in-process inspection. A designated supervisory rigger, other than the packer, must perform a pack-in-process inspection at seven intervals during the packing procedure. The inspection is performed to ensure that the parachute is packed according to authorized packing procedures (refer to WP 0012 00).

ORIENTATION

Throughout this manual, all directions (right, left, upper, lower, top, bottom, clockwise, and counterclockwise) are given from the rigger's point of view, as the rigger stands at the tension plate end of the packing table, facing the apex-hook end of the table. All directions are indicated as the parachute is in proper layout.

1. Top. That portion of the equipment that is farthest from the packing table surface.
2. Bottom. That portion of the equipment that is nearest to the packing table surface.

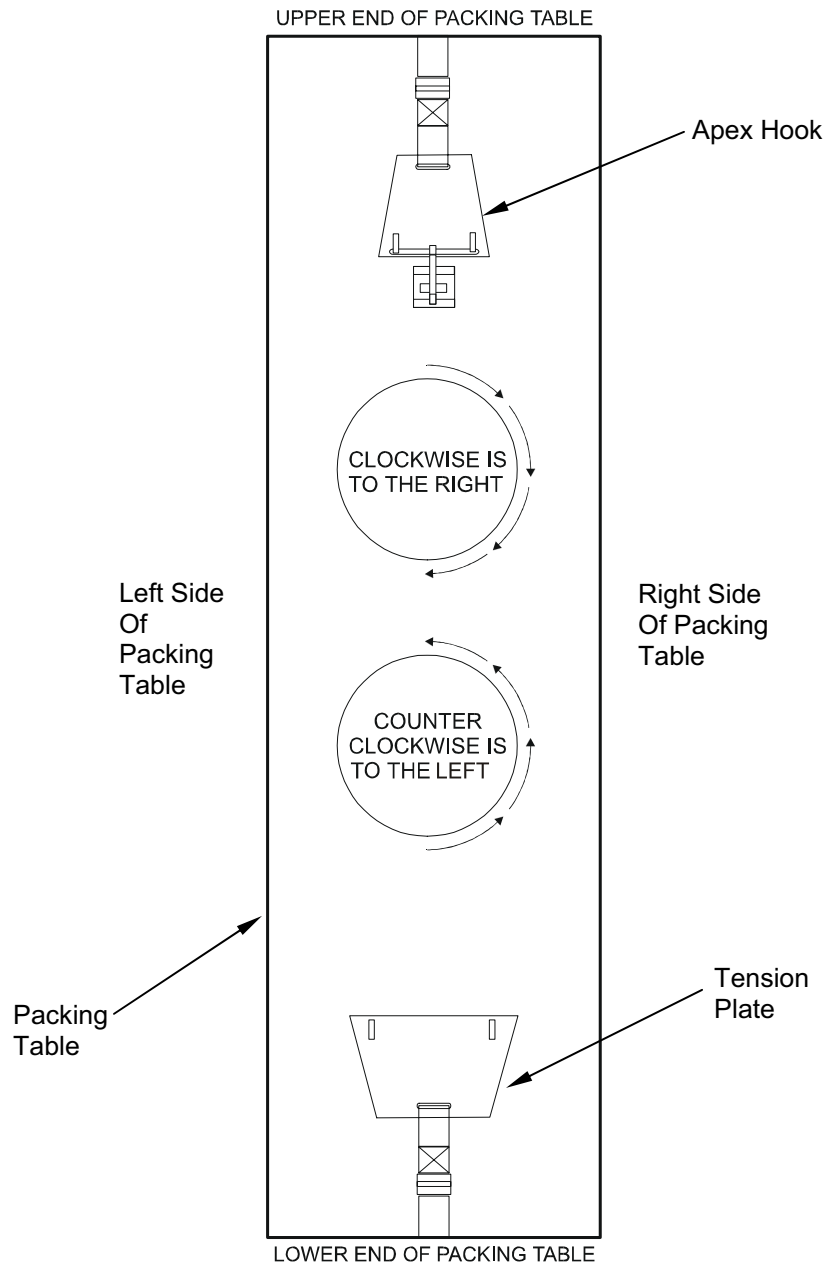


Figure 1. Rigger's Position.
0015 00-2

LAYOUT OF MAIN CANOPY

Preparing The Parachute For Proper Layout

Prepare the parachute as follows:

1. Place packing tools in convenient locations on the packing table.
2. Lay the canopy assembly lengthwise on the packing table (**figure 2**), and attach the vent loop to the packing table apex hook.

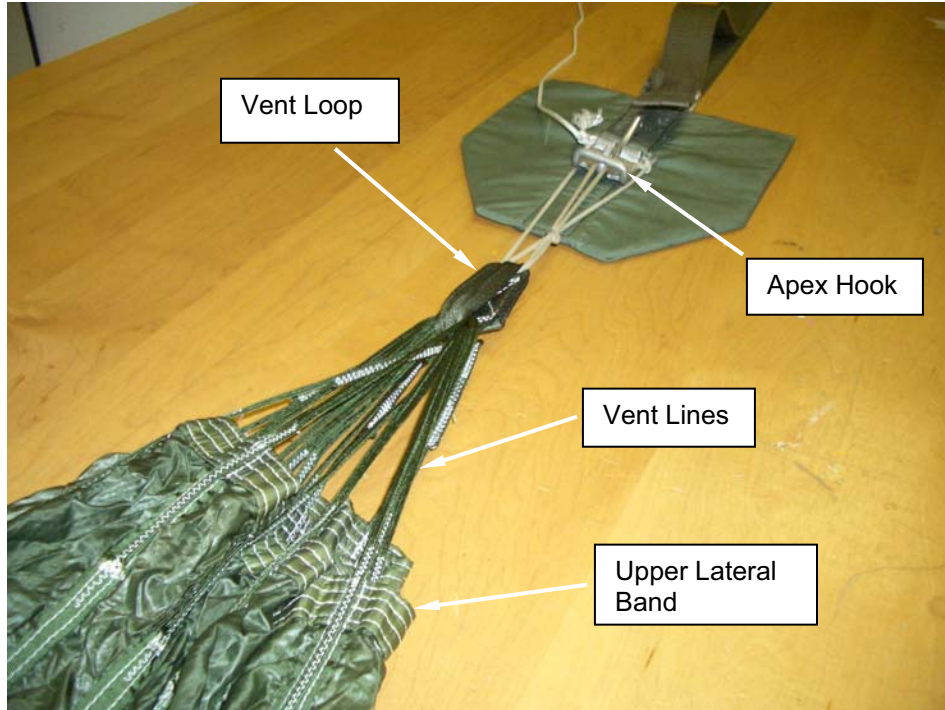


Figure 2. Attaching Canopy To Packing Table Apex Hook.

3. Attach the connector links to the tension plate and apply enough tension to keep the canopy on the table.

Removing Tangles/Twists From Apex Lines

Remove tangles or twists from the apex lines as follows:

1. Locate gore 28, at lower lateral band, and follow it to apex line 28, removing turns from the canopy (**figure 3**).
2. Continue tracing apex line 28 to the bridle loop; remove any tangles/twists by rotating bridle loop until lines are in proper location.

Removing Inversion

To remove an inversion, proceed as follows:

1. Skirt inversion. Check to see the apex lines are on the outside of the upper lateral band (**figure 3**).

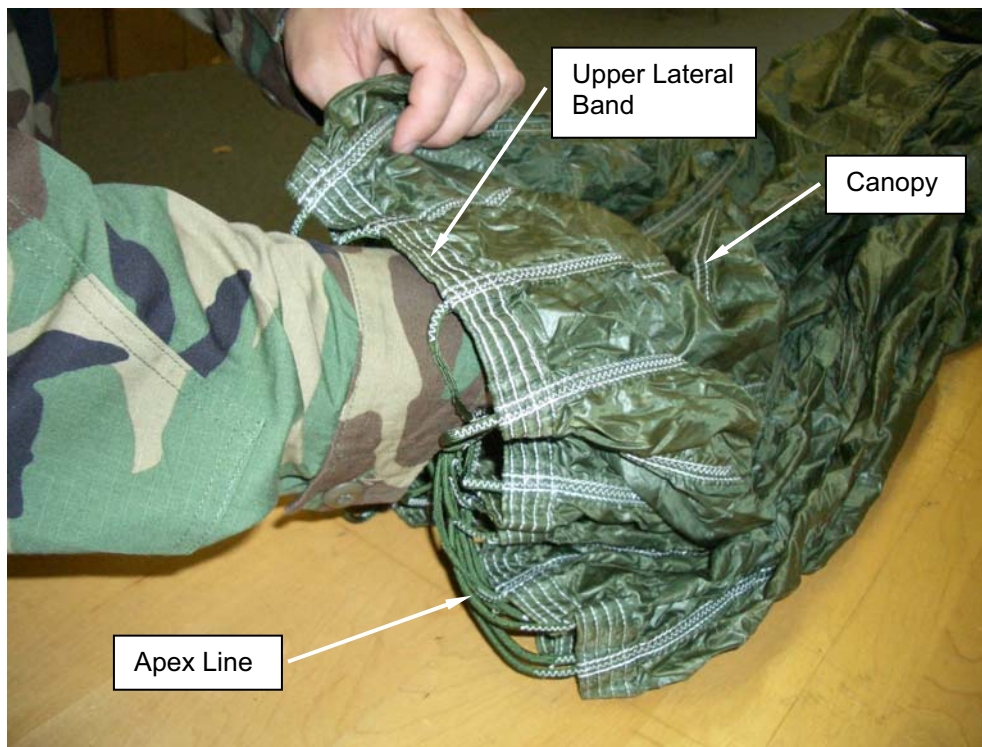


Figure 3. Removing Skirt Inversions.

2. If the apex lines are on the inside of the upper lateral band, and the control line assembly is to the outside of the lower lateral band and extended gores, the canopy is inverted through the skirt. Remove an inversion through the skirt as follows:

NOTE

Take care not to pass the apex out through one of the canopy vents/slots.

- a. Remove canopy from apex hook.
- b. Pass apex down through the canopy and out the skirt between two adjacent suspension lines (**figure 4**).



Figure 4. Removing An Inversion Through Skirt.

- c. Reattach the canopy to the apex hook.
3. Canopy vent/slot inversion. Two kinds of canopy vent / slot inversions may be encountered. Remove canopy vent / slot inversions as follows:
 - a. Apex through one of the canopy vents /slots: If the anti-inversion net appears on the inside of the lower lateral band and the apex lines appear on the inside of the upper lateral band, the apex is inverted through one of the canopy vents / slots. To remove this kind of canopy vent / slot inversion, locate the vent / slot through which the canopy has been inverted, and pass the apex lines down through the canopy and out the canopy vent /slot.
 - b. One or two risers through one of the canopy vents /slots: For this type of canopy vent /slot inversion, the apex lines appear on the outside of the upper lateral band. If half the anti-inversion net appears on the inside of the lower lateral band, and half appears on the outside, the right or left riser is inverted through one of the canopy vents / slots. If all the anti-inversion net appears on the outside of the lower lateral band, both risers are inverted through one of the canopy vents / slots.
 - c. One or both risers may be inverted in one of two directions, either down through one of the canopy vents/slots and out of the canopy skirt, or up the canopy skirt and out one of the canopy vents/slots. To remove this type of inversion, proceed as follows:
 - (1) Place the suspension lines and canopy gores into group separation.
 - (2) Determine whether the left or right riser, or both, is inverted and determine the direction of the inversion.
 - (3) Remove the connector links from the tension plate and reverse the direction of the riser(s) through the lower portion of the canopy below the canopy vent / slot.
 - (4) Reinstall the connector links on the tension plate.

Removing Turns/ Tangles/ Twists From Suspension Lines

To properly locate suspension lines, proceed as follows:

NOTE

Suspension lines 1 thru 28 are divided into two groups, 1 thru 14 are in the left group and 15 thru 28 are in the right group.

1. Locate the top center gore of the canopy and divide the suspension lines into the left and right groups.
2. Place a packing weight around the right group of lines and the right control line, and move the weight toward the risers; check for turns, tangles and twists.
3. Remove turns, tangles and twists as follows (**figure 5**):
 - a. Turns. A turn occurs when one group of suspension lines rotates around the other group.

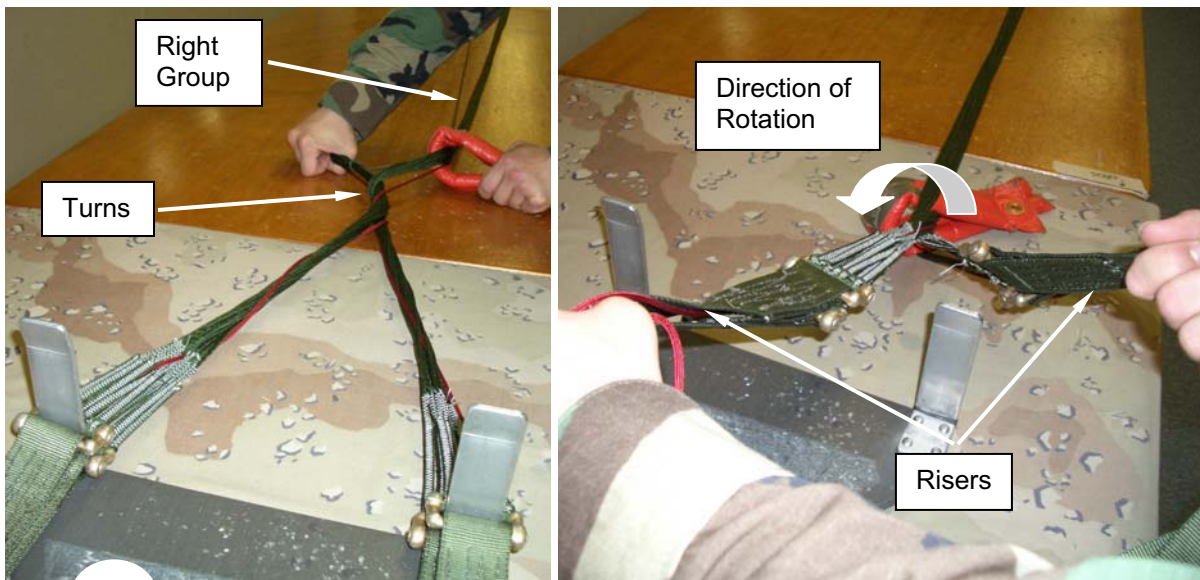


Figure 5. Removing Turns/ Tangles/ Twists From Suspension Lines.

- (1) Remove the connector links from the tension plate and remove a turn by rotating the risers, or pack, in the direction opposite to the direction of the turn.
- (2) Reposition the connector links on the tension plate.
- b. Tangles. To remove tangle(s), keep the two groups of lines separated and work the tangle(s) as close to the connector links as possible. Remove connector links from the tension plate.
 - (1) Select the top line(s) that form the tangle and, with the left hand, lift the line(s) away from the other lines (**figure 6**).

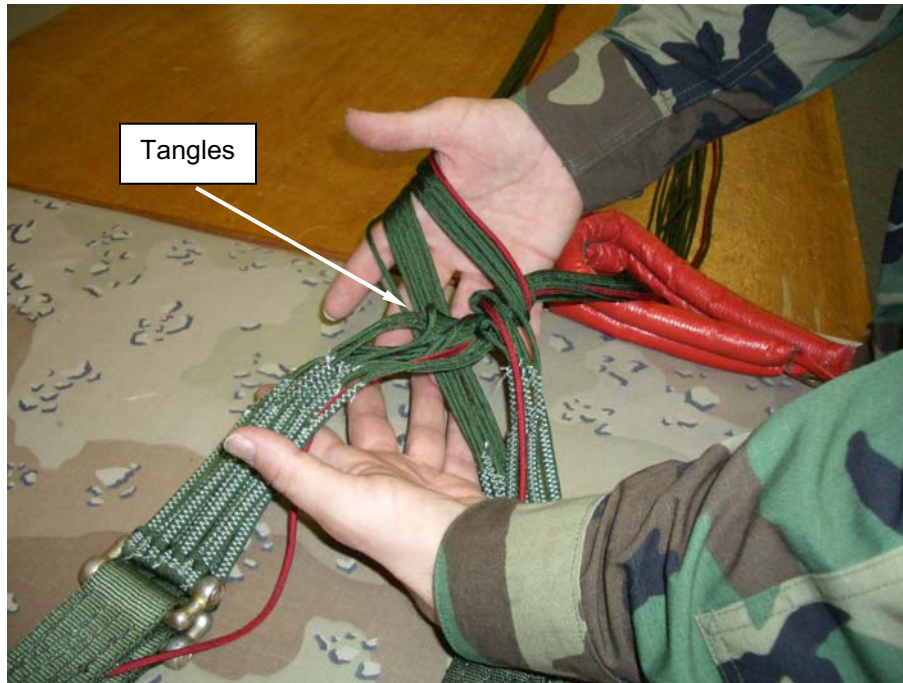


Figure 6. Lifting Lines from other Lines.

- (2) Reach through the opening, created by lifting the suspension lines, with the right hand (**figure 7**).

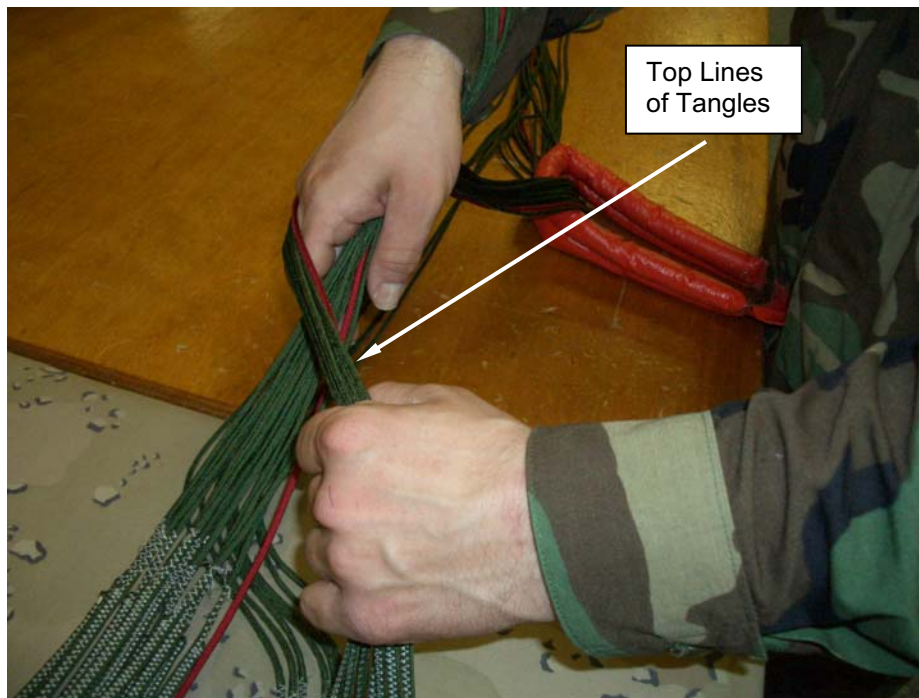


Figure 7. Reaching Through Opening with Right Hand.

- (3) Pull the risers through the opening. Do not permit risers to turn (figure 8).

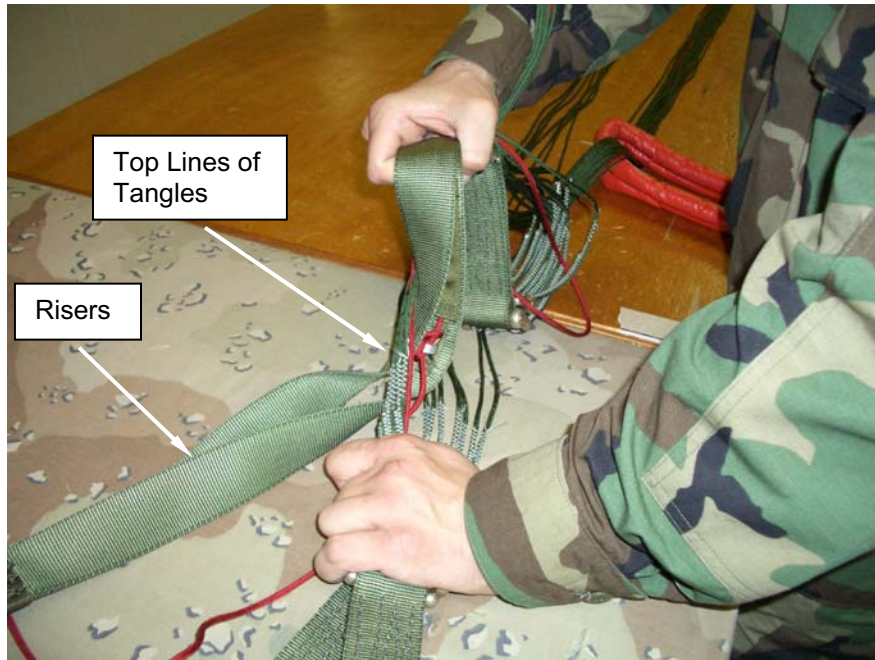


Figure 8. Pulling Risers Through Opening.

- (4) Replace connector links on tension plate.
- c. Twists. A twist occurs when the suspension lines within one group become improperly crossed (figure 9).

NOTE

Insert packing weight around lines 1 and 14 while working on lines 15 and 28.

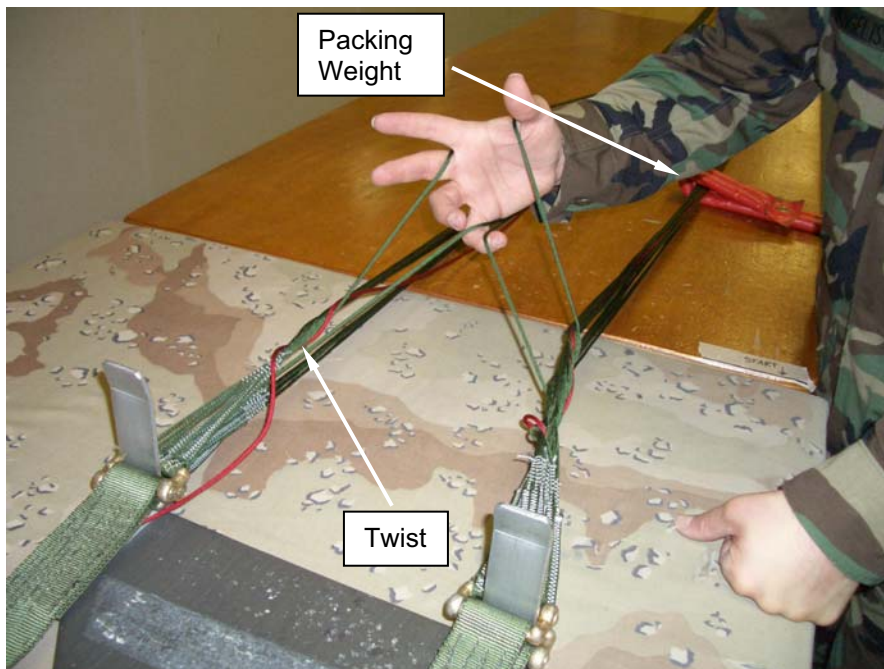


Figure 9. Twisted Suspension Lines.

To remove twists, grasp the top and bottom inside lines (lines 1 and 14 left group) or (28 and 15 right group) at the skirt of canopy and trace them to the connector links.

Remove twists from one group at a time by rotating risers until lines are in proper location on the connector links. Do not remove suspension lines from connector links. If in doubt, perform a line continuity check.

LOCATING SUSPENSION LINES

NOTE

Suspension lines are divided into two groups, 1 thru 14 are in the left group and 15 thru 28 are in the right group.

1. Group separation. With left group (**figure 10, item 1**) in left hand and right group (**figure 10, item 2**) in right hand, trace from the connector links to the anti-inversion net (**figure 10, item 3**).
2. Locate the top center gore (**figure 11, item 1**) of the canopy.
3. Check the suspension lines for proper layout. Left group (**figure 11, item 2**) should have line number 1 on the inside of the top connector link and line number 14 on the inside of the bottom connector link. The right group (**figure 11, item 3**) will have line number 28 on the inside of the top connector link and line number 15 on the inside of the bottom connector link. Ensure the control lines are routed to the inside of the risers and are not routed around any of the suspension lines.

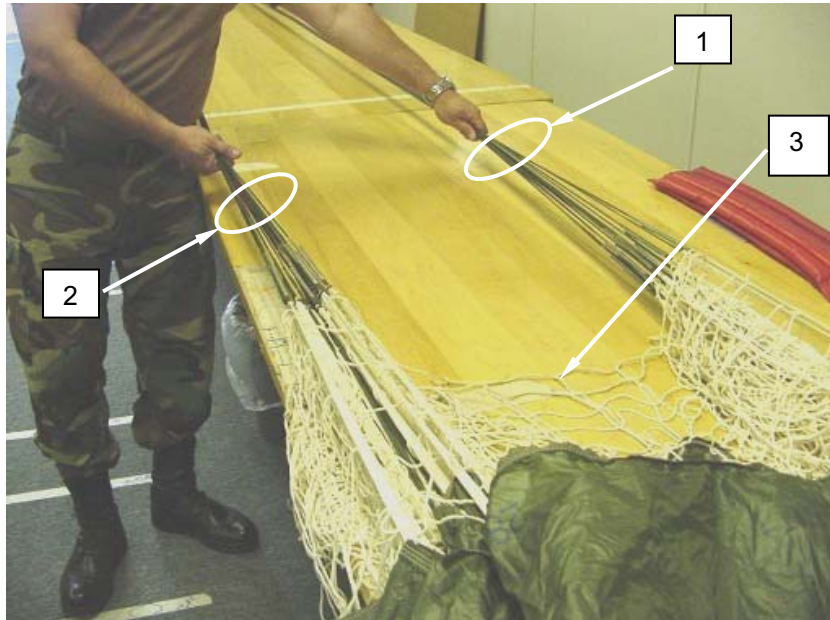


Figure 10. Ensuring the Control Lines are Routed to the Inside of the Risers.

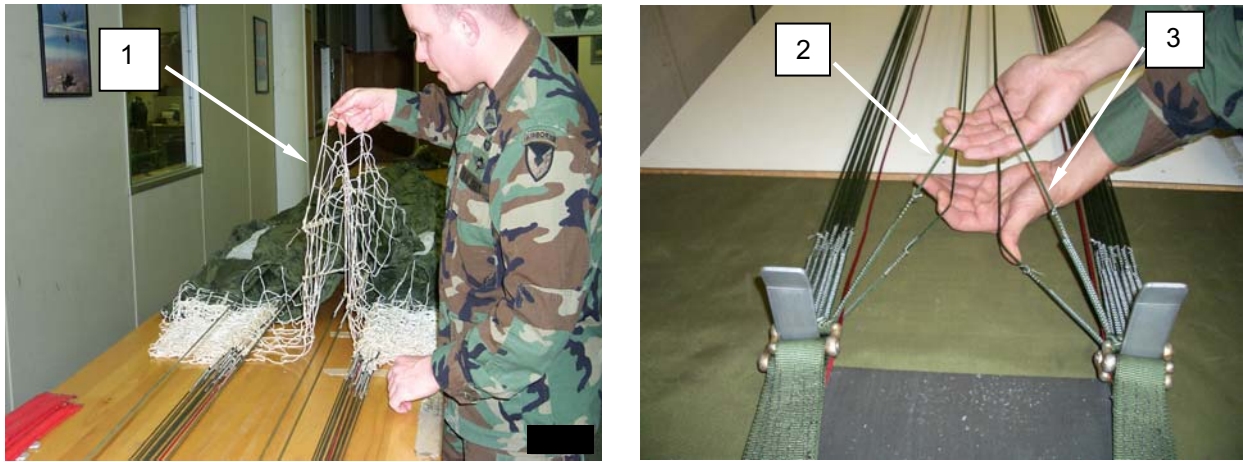


Figure 11. Dividing Suspension Lines into Left and Right Groups, and Checking for Proper Layout.

ATTACH THE PACK TRAY AND HARNESS TO THE MAIN RISERS**NOTE**

If pack tray and harness are separate from the main canopy, refer to WP 0006 00 for instructions on attaching the harness to the pack tray.

1. Layout the pack tray and harness (**figure 12, item 1**) so that the adjustment points are facing down.
2. Locate the canopy release assembly (**figure 12, item 2**) at the shoulder of the harness assemblies (**figure 12, item 3**). Open the canopy release assembly cover plate (**figure 12, item 4**) by pulling downwards on the cover plate (**figure 12, item 5**).
3. Locate and remove the operating lug by depressing the two operating lug release levers (**figure 12, item 6**).

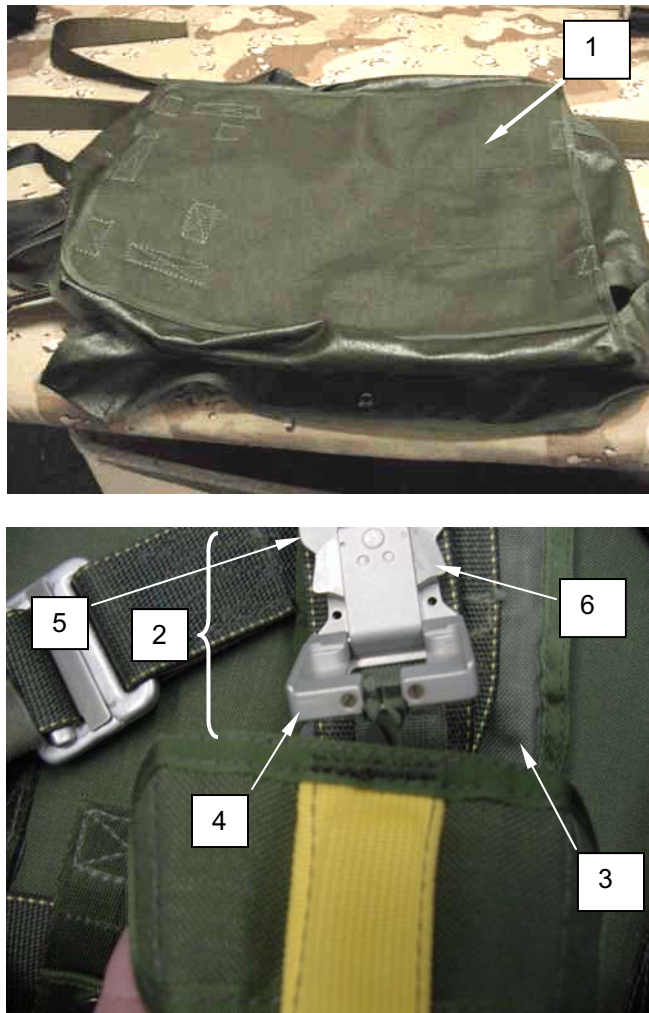


Figure 12. Laying Out Pack Tray and Harness; Opening Canopy Release Assembly Cover Plate.

4. Ensure risers and harness are free of tangles and twists and lay out harness with smooth side up. Make certain risers are identified with a blue confluence wrap on each riser (**figure 13, item 1**).
5. Route large ring of upper main lift web (**figure 13, item 2**) through large riser ring (**figure 13, item 3**).
6. Rotate the large ring of the upper main lift web (**figure 13, item 4**) up 180° and insert small ring (**figure 13, item 5**) through large ring of upper main lift web (**figure 13, item 4**).

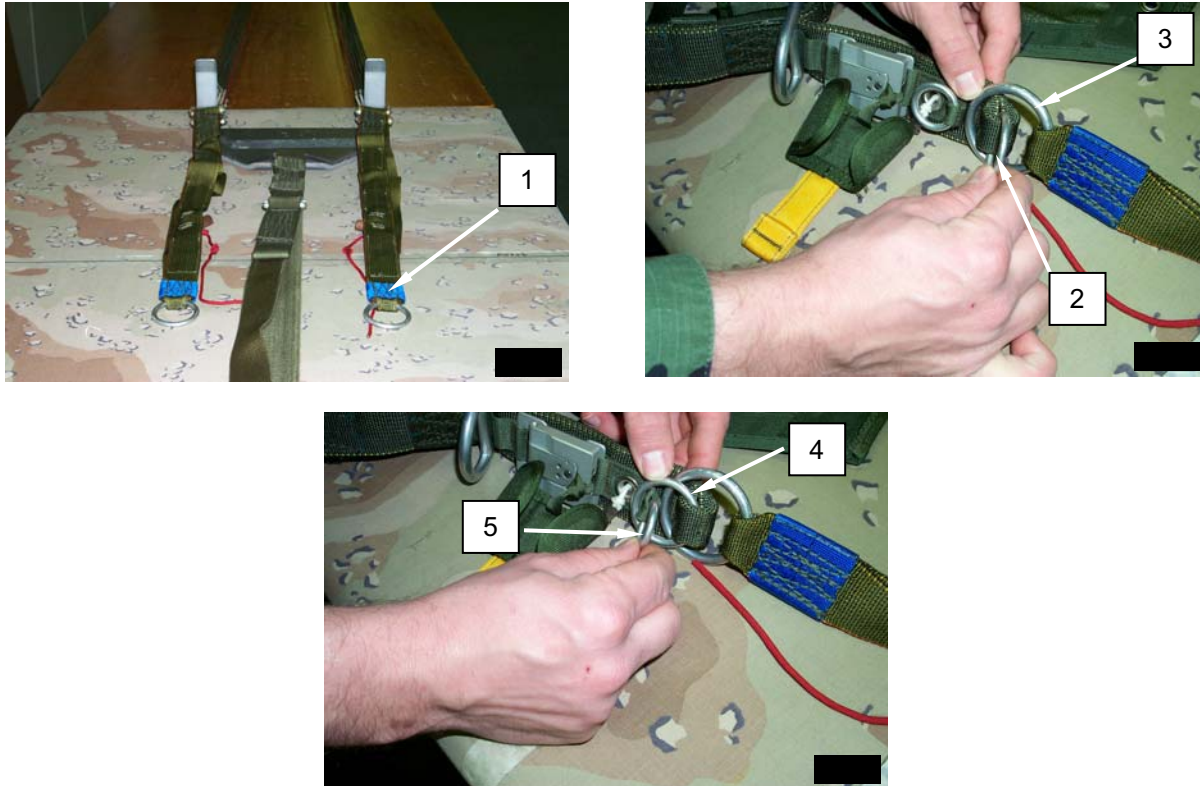


Figure 13. Laying Out Risers with Smooth Side Up, Routing Large Ring of Upper Main Lift Web through Large Riser Ring, Rotating Large Ring of Upper Main Lift Web.

7. Pass the locking loop lug and soft loop (**figure 14, item 1**) through the small ring (**figure 14, item 2**) and insert the lug (**figure 14, item 3**) into the jaws of the riser release (**figure 14, item 4**) by depressing the two operating lug release levers (**figure 14, item 5**).
8. Ensure that the lug is fully seated into canopy release assembly (**figure 14, item 6**).
9. Close canopy release cover (**figure 14, item 7**), locking the loop (**figure 14, item 8**) in place.

WARNING



A lug, which is not fully seated, will not allow the cover to close. Do not force the cover closed. A CRA that is not properly assembled may result in death to the parachutist.

10. The top of the lug should not be visible after closing the cover (**figure 14, item 9**) if properly seated.

11. Repeat steps 5 through 9 for opposite side.

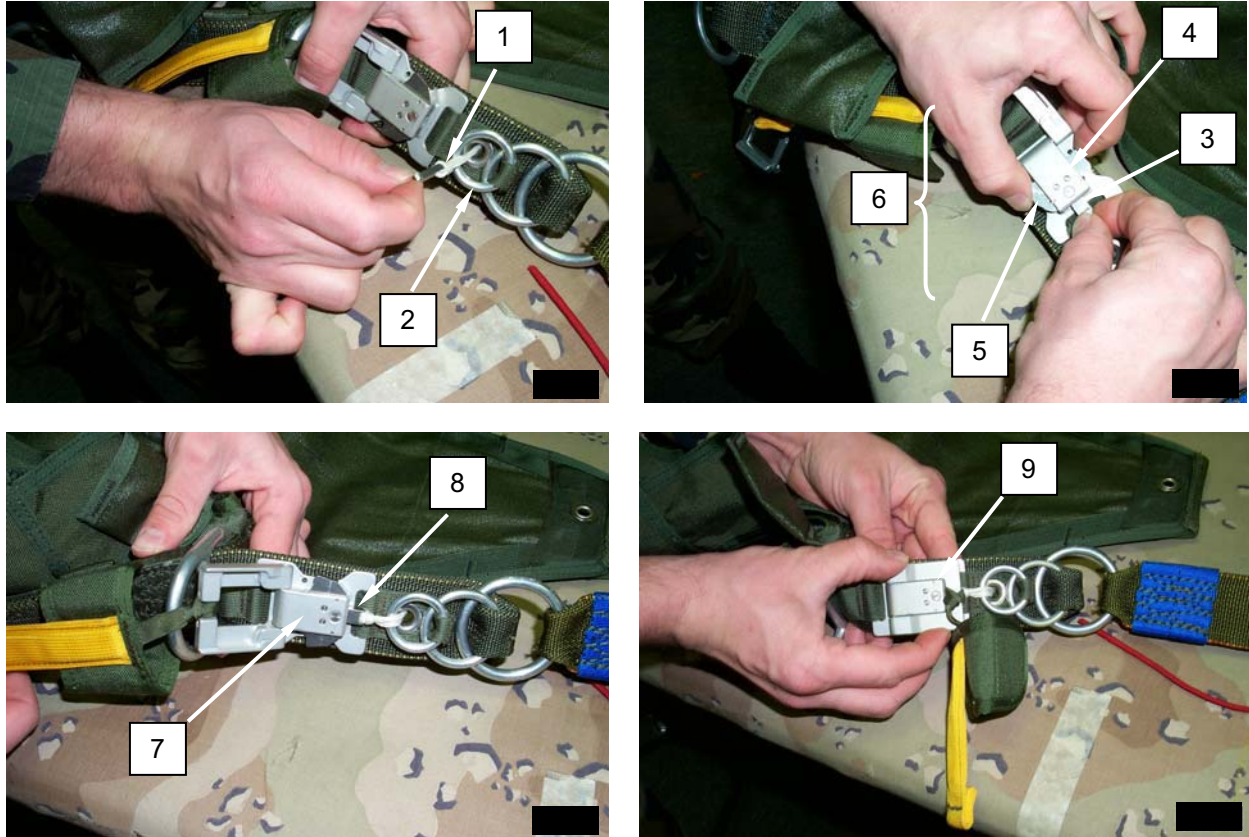


Figure 14. Inserting Lug into Jaws of Riser Release, Ensuring Lug is Fully Seated, Closing Canopy Release Cover, and Checking Position of Top of Lug.

CHECK CONTROL LINES AND ENSURE PROPER ROUTING

1. Trace the control lines (**figure 15, item 1**) from the toggle (**figure 15, item 2**) to the connector link (**figure 15, item 3**) on the inside of the risers (**figure 15, item 4**), ensuring that the control lines run from the toggle (**figure 15, item 2**) through the guide ring (**figure 15, item 5**) and routed through the control line channels (**figure 15, item 6**).

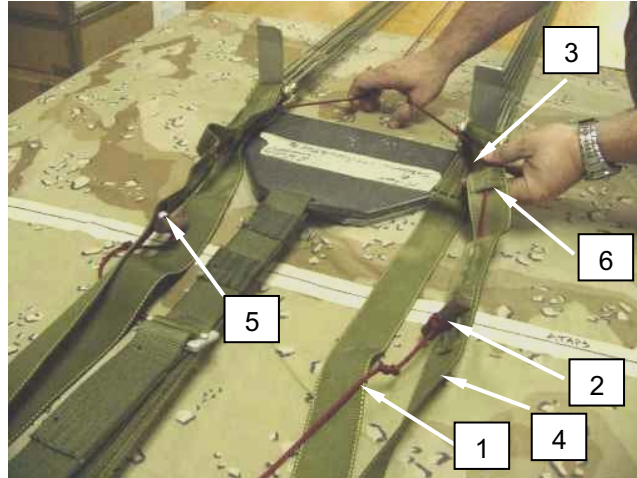


Figure 15. Tracing Control Lines.

2. With the control lines routed to the inside of the connector links trace both control lines (**figure 16, item 1**) up to the point where they are connected to the cascade lines (**figure 16, item 2**) inside the canopy. Ensure that the control lines and the upper control line assembly run free and clear from the attachment points (**figure 16, item 3**) on the canopy to the skirt.



Figure 16. Ensuring Control Lines and Cascades Run Free and Clear.

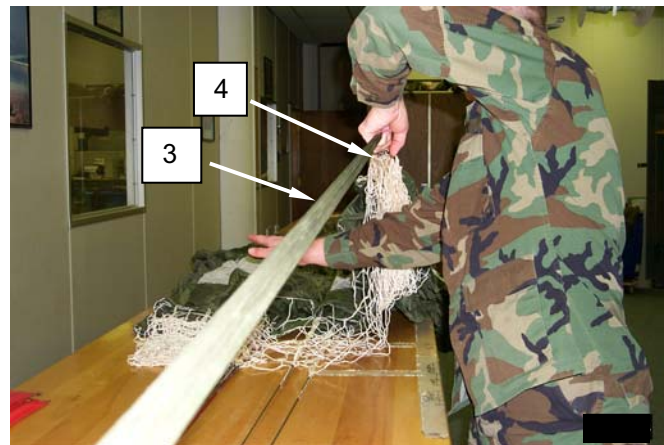
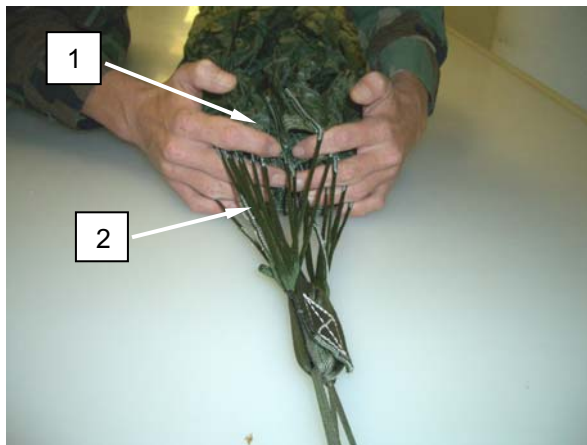
3. **Rigger check number 1.** Check suspension lines for proper layout (**figure 17, item 1**). Left group should have line number 1 (**figure 17, item 2**) on the inside of the top connector link (**figure 17, item 3**) and line number 14 (**figure 17, item 4**) on the inside of the bottom connector link. Right group should have line number 28 (**figure 17, item 5**) on inside top and line number 15 (**figure 17, item 6**) on the inside of the bottom connector link (**figure 17, item 7**).



Figure 17. Checking Suspension Lines for Proper Layout.

FOLDING THE GORES

1. Move to the apex end of the table. Grasp the upper lateral band (**figure 18, item 1**) on both sides with your fingers through the apex vent lines (**figure 18, item 2**). Apply pressure toward the tension end of the table until the upper lateral band is aligned.
2. Move to the tension end of the table and apply first tension on the parachute until the suspension lines are taut and rise off the table.
3. Move to the lower lateral band of the canopy with the right group of lines (**figure 18, item 3**) in the left hand. Lift right group suspension lines with the left hand at the anti inversion net (**figure 18, item 4**). Hold top center gores in position with the right hand, and flip right group of gores (**figure 18, item 5**) over the left group (**figure 18, item 6**).



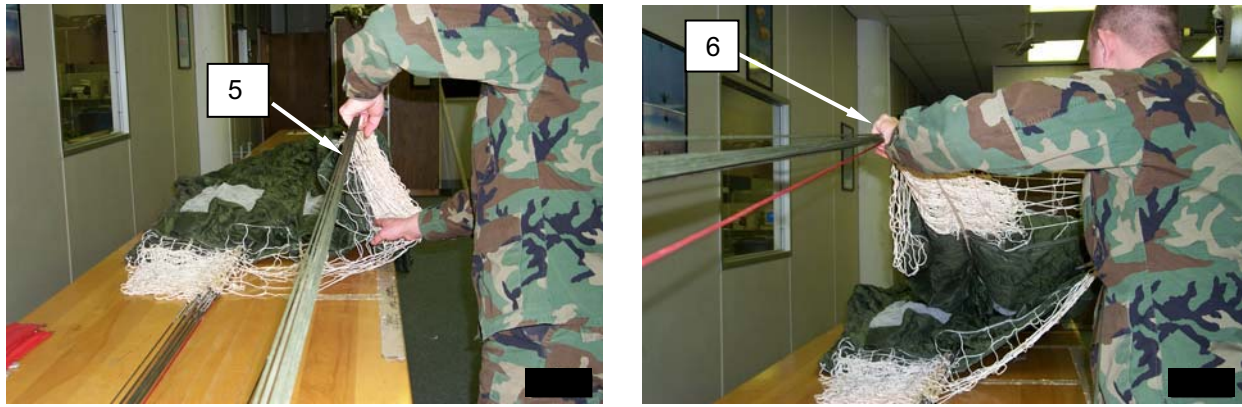


Figure 18. Aligning the Upper Lateral Band and Folding the Gores.

4. Start with line number 15 (**figure 19, item 1**) in the right hand. Pick up line number 16 (**figure 19, item 2**) with the left hand and lift straight up until slack is removed from lower lateral band (**figure 19, item 3**). With a smooth, continued movement bring the left hand over the head. When the gore (**figure 19, item 4**) inflates, place line 16 (**figure 19, item 5**) on top of line 15 (**figure 19, item 6**). Ensure that the gore material folds to the right.

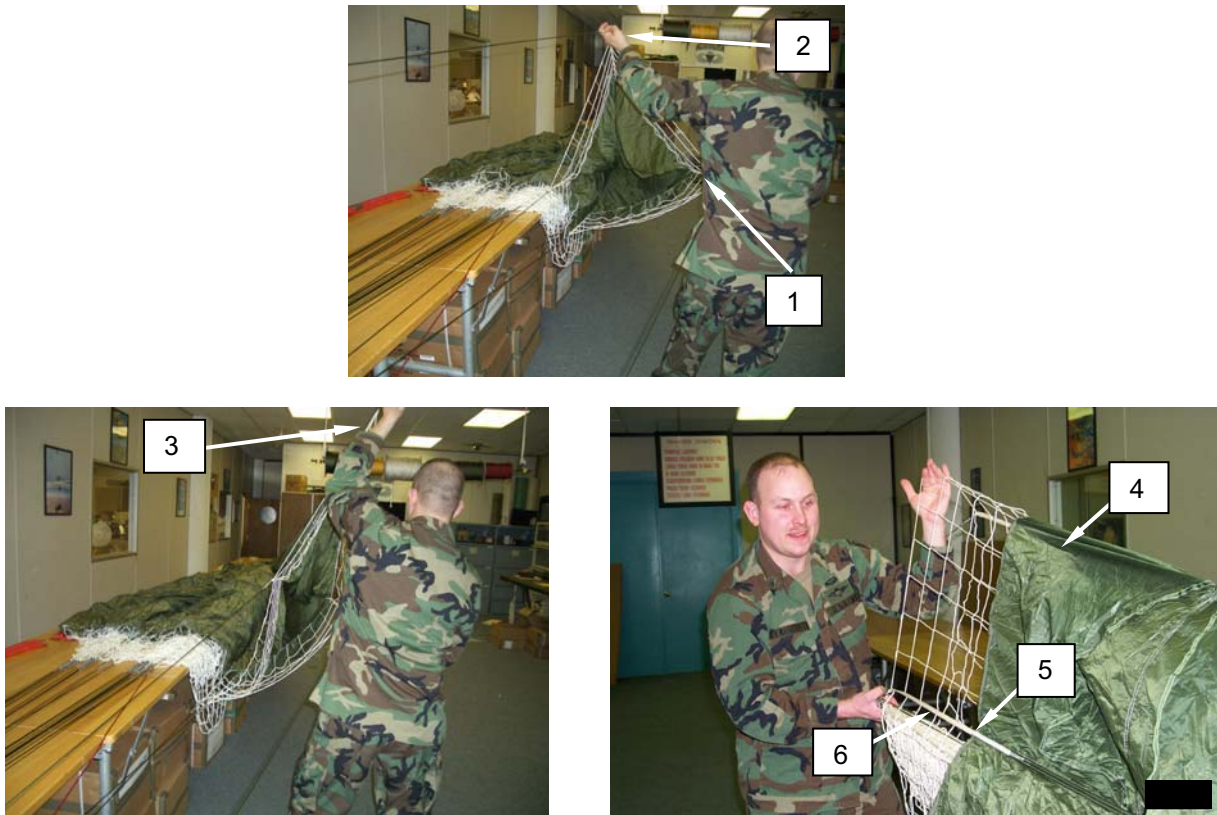


Figure 19. Folding the Gores (continued).

5. Continue folding gores to the right until you reach line number 22, the first extended gore (**figure 20, item 1**). Ensure that the entire extended gore is folded to the right. Ensure that the slack in the control line is folded to the right and folds naturally with the gore, pick up the control line (**figure 20, item 2**) and place it between lines number 22 and 23.



Figure 20. Folding the Gores (continued)

6. Continue folding the gores until you reach suspension line number 28. Hold the right group of lines with the left hand. With the right hand (fingers pointing down) scissor the right group of lines (**figure 21, item 1**) between the 1st and 2nd fingers.
7. Rotate this group of lines clockwise until the fingers are tilted slightly upward, so that line number 28 is on the bottom and line 15 (**figure 21, item 2**) is on the top.
8. Starting with line 1, fold the left group of gores until you reach line number 7. Pick up the control line and put it between suspension line number 7 and number 8 (**figure 21, item 3**). Continue folding the gores until line 13 is reached..
9. Pick up top anti-inversion net (**figure 21, item 4**) approximately 6- to 8-inches from suspension line number 14. Raise it as you insert your elbow inside the anti-inversion net, placing suspension line number 14 over your left shoulder. Drape the last gore on the left and the next to last gore on the right.

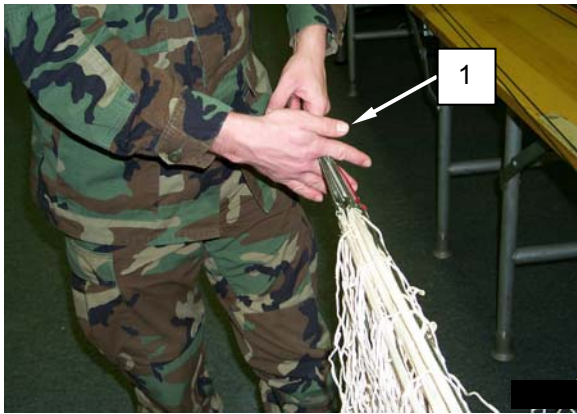
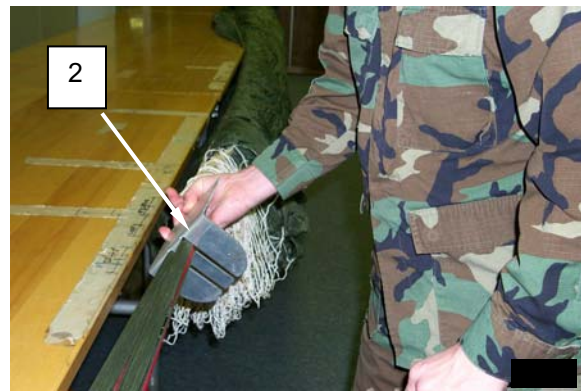
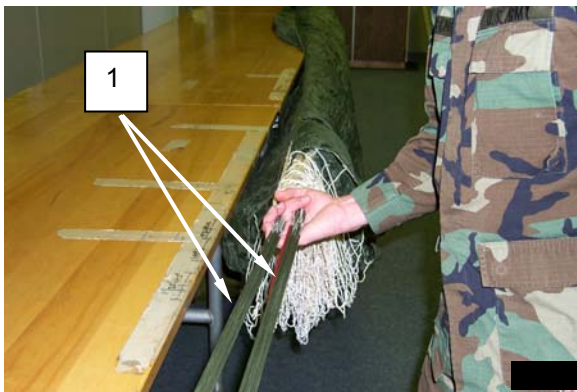


Figure 21. Folding the Gores (continued)

10. Insert the two groups of lines (**figure 22, item 1**) into the line separator (**figure 22, item 2**) with the left group of lines in the left slot and the right group of lines in the right slot.
11. Hold the base of the line separator against the base of the suspension line stitching (**figure 22, item 3**); pull canopy off the table so that all gores (**figure 22, item 4**) drape to the right of the table.
12. Turn the line separator counterclockwise (**figure 22, item 5**) so that its base is down and slide it back on the table (**figure 22, item 6**).



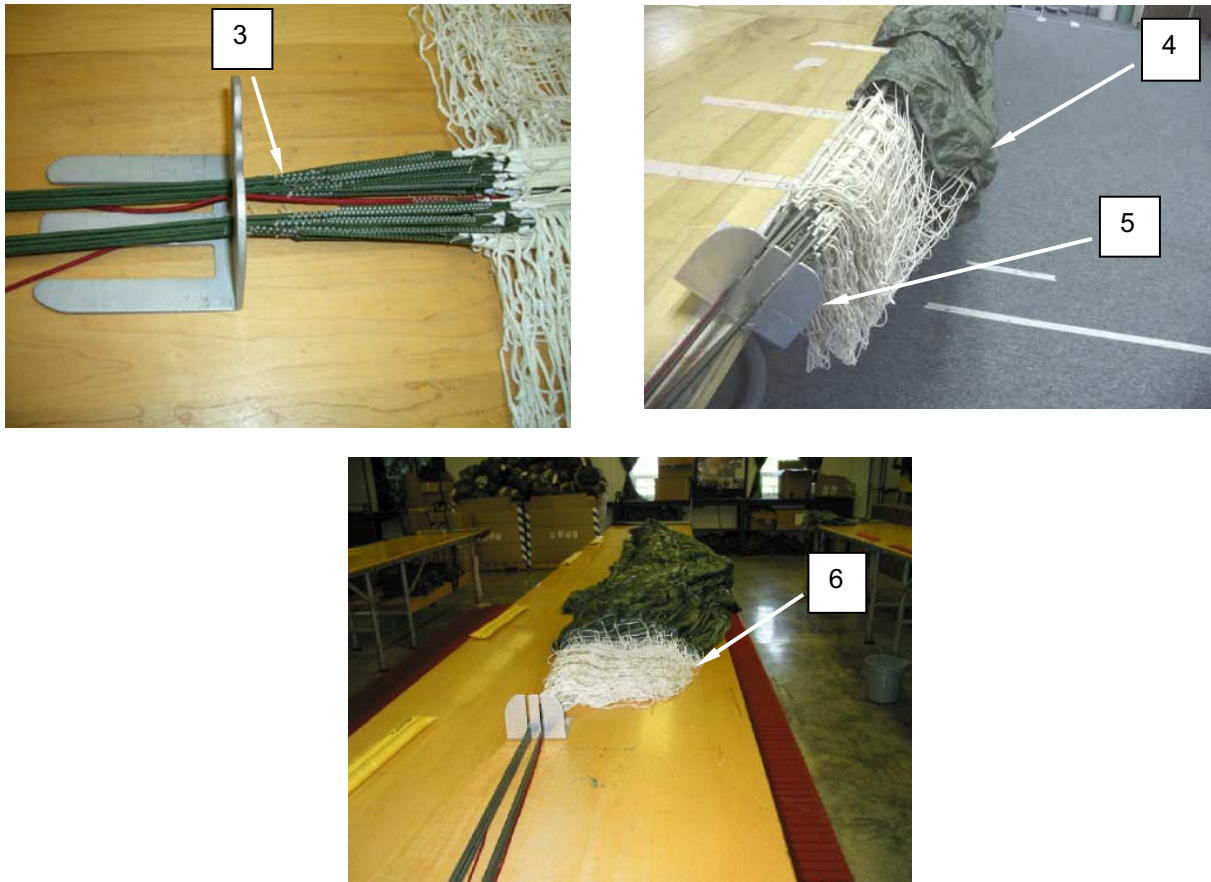


Figure 22. Folding the Gores (continued)

13. Place a packing weight (**figure 23, item 1**) on suspension lines (**figure 23, item 2**) next to the line separator (**figure 23, item 3**).

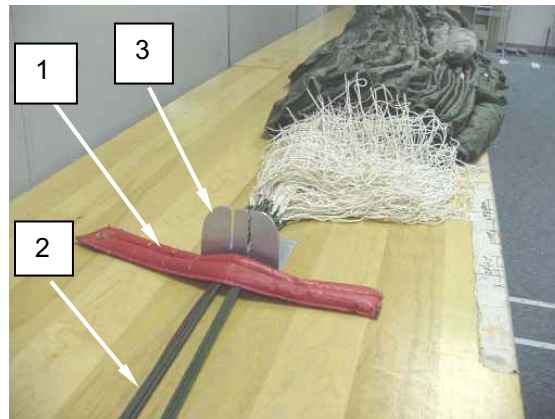


Figure 23. Placing Packing Weight on Suspension Lines.

14. Apply additional tension to suspension lines with the tensioning device (**figure 24, item 1**). After second tension is applied, rough dress top and bottom gore to ensure the last gore was subdivided properly.

15. Placing the middle finger (**figure 24, item 2**) between the two groups of suspension lines, grasp the top part of the anti-inversion net (**figure 24, item 3**) and separate the left side (**figure 24, item 4**) from the right side (**figure 24, item 5**).
16. Continue separation of the canopy until you reach the apex (**figure 24, item 6**) with line 28 on top.



Figure 24. Separating the Canopy.

17. Fine dress the bottom gores (**figure 25, item 1**) by pulling gently on the left and right sides of the canopy (**figure 25, item 2**), moving from the lower lateral band (**figure 25, item 2**) to the apex (**figure 25, item 3**).



Figure 25. Fine Dressing the Bottom Gores.

18. Fine dress the lower lateral band and anti-inversion net. Start with the left group of gores (**figure 26, item 1**), dress each gore section from the anti-inversion net to the second section. When the bottom extended gore is reached, dress the excess material (**figure 26, item 2**). Repeat for right side.
19. Move to the top of section 3. Fine dress the aft and forward extended gore on left side. Pull excess to the apex and position open edge to the air channel. Clear upper control lines and place in air channel. Ensure extended gore line limiter is clear and placed toward the apex. Fold outside edge of the remaining gores.
20. Fold excess material of extended gores even with remaining gores.
21. Repeat for right side.

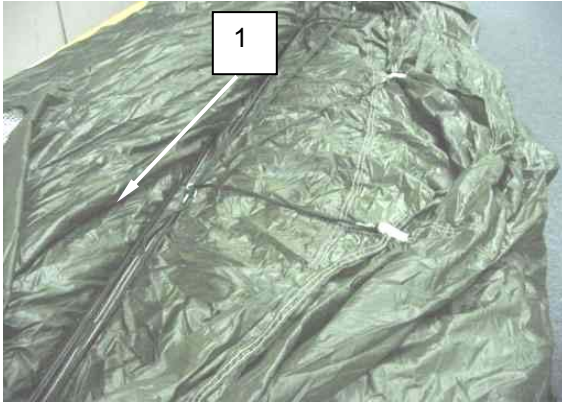


Figure 26. Dressing the Extended Gores.
0015 00-21

NOTE

Ensure the control line assembly attaching loops are not pulled through the metal "O" ring (**figure 27**) and the control line assembly is free and clear of canopy material.

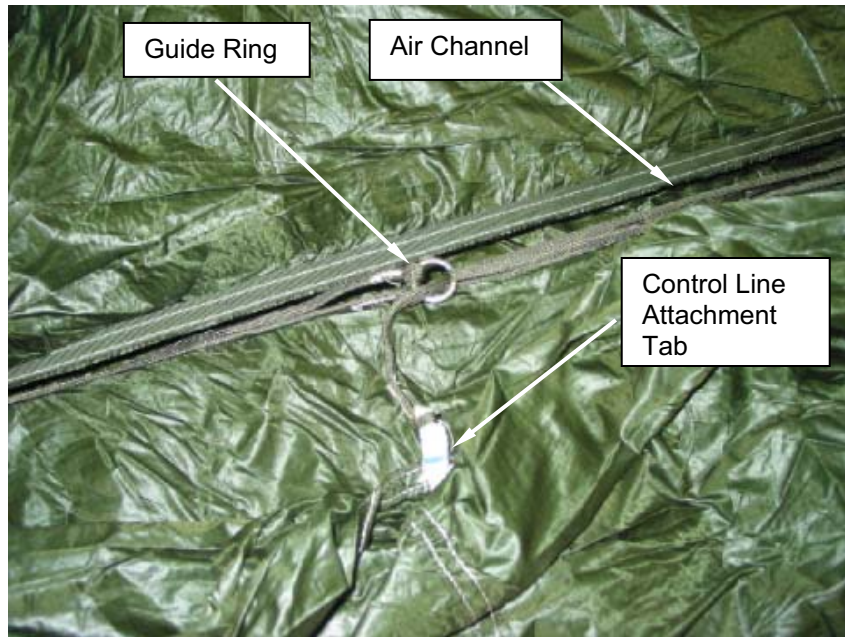


Figure 27. Dressing the Control Lines

22. The canopy is now in a flat-fold (**figure 28**).



Figure 28. Canopy in Flat-Fold.

23. **Rigger check number 2.**

- a. Check to see that the air channel (**figure 29, item 1**) is clear and free of canopy material and debris. Raise the top suspension line and check to see that the middle control lines and upper control lines are free and clear.

- b. Ensure the middle control lines and upper control lines are positioned in the air channel, check that the lower control lines and middle control lines are cleared from the anti-inversion net.

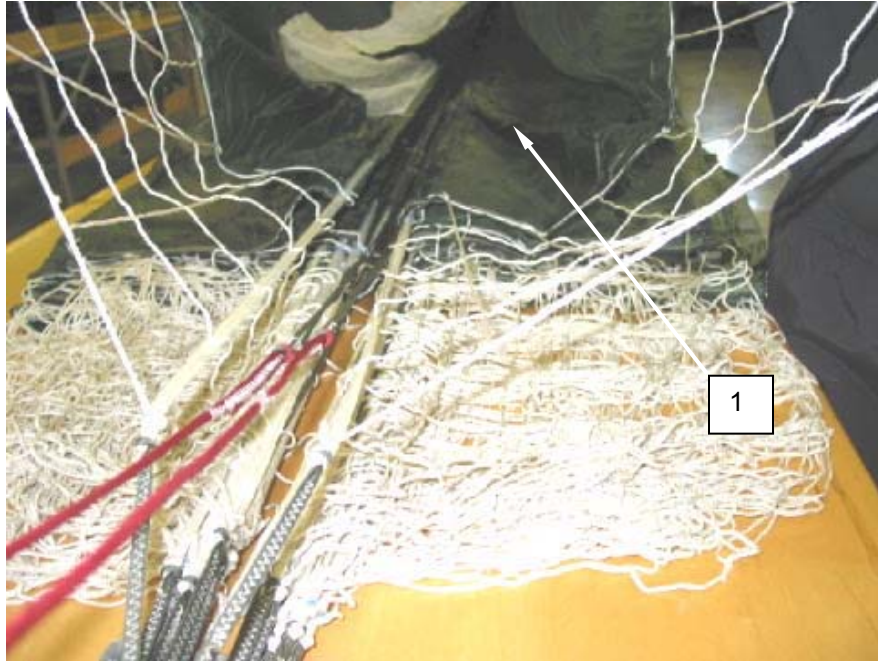


Figure 29. Checking the Air Channel.

STOW SLACK OF LOWER CONTROL LINES

Stow the control line slack as follows:

1. Grasp the control lines (**figure 30, item 1**) with the left and right hands at the point of attachment (**figure 30, item 2**) at the cascade lines.

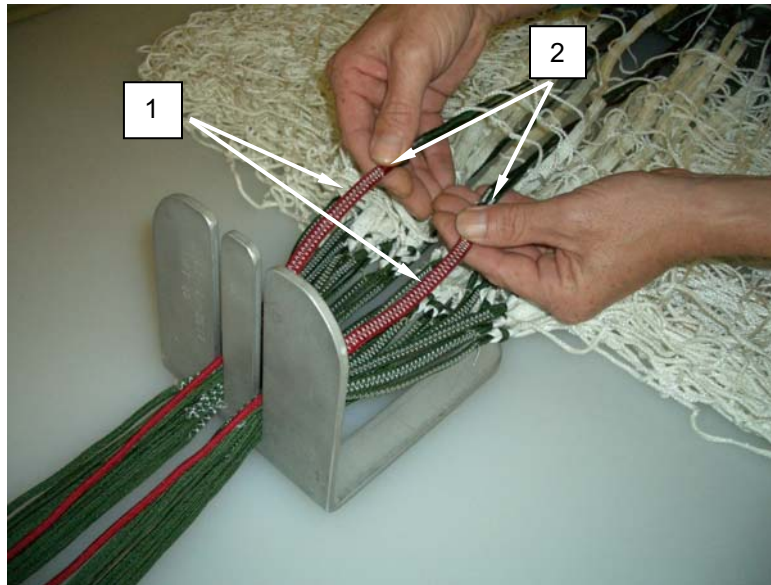


Figure 30. Grasping the Control Lines.

- Trace the control lines (**figure 31, item 1**) down to the risers (**figure 31, item 2**) ensuring that left and right control lines run inside of the suspension lines (**figure 31, item 3**) and are free and clear.

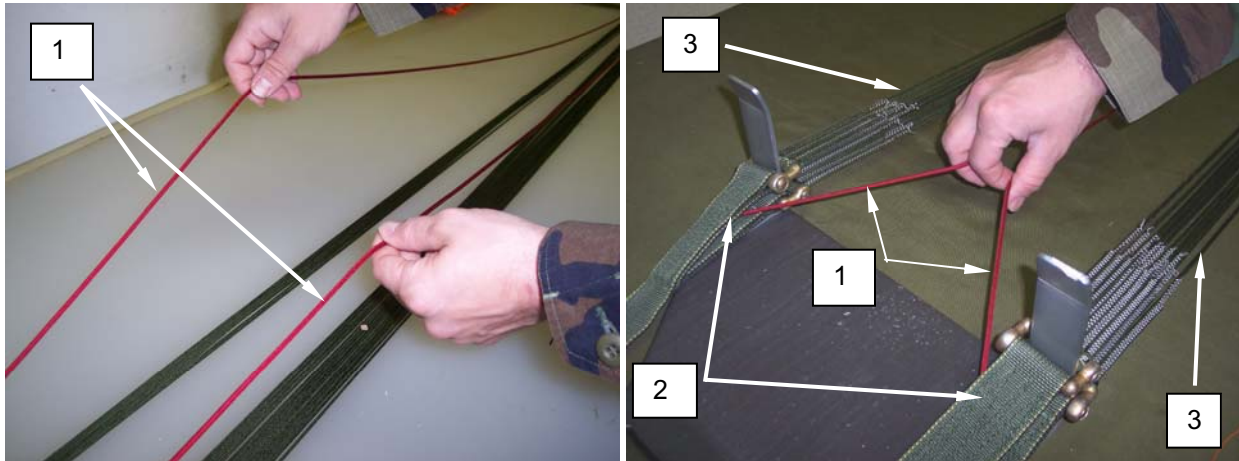


Figure 31. Tracing the Control Lines to the Risers.

- Take slack out of control lines, by grasping the toggles (**figure 32, item 1**) and pulling control lines towards the pack tray until all slack is pulled down to the riser end.

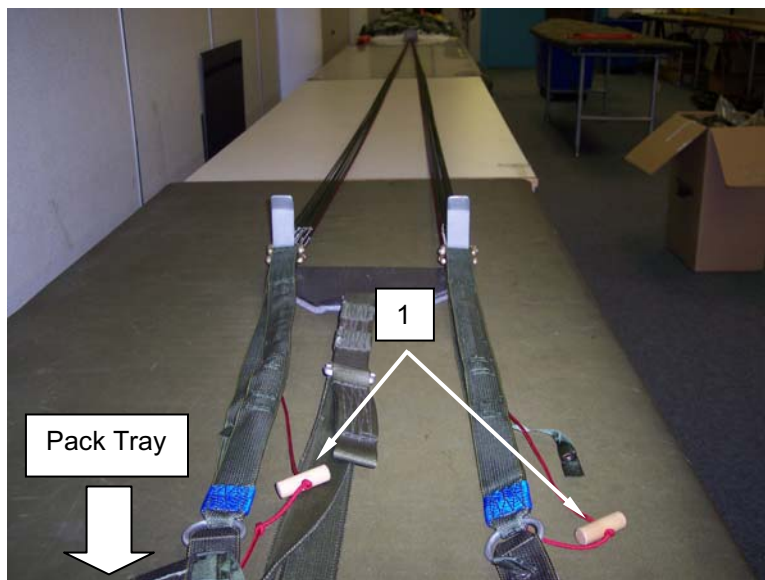


Figure 32. Taking Slack from Control Lines.

- Starting with the right riser group (**figure 33, item 1**) remove the connector link (**figure 33, item 2**) from the tension bar, rotate the rear riser outward; this will orient the control line channels and guide ring to the inside.

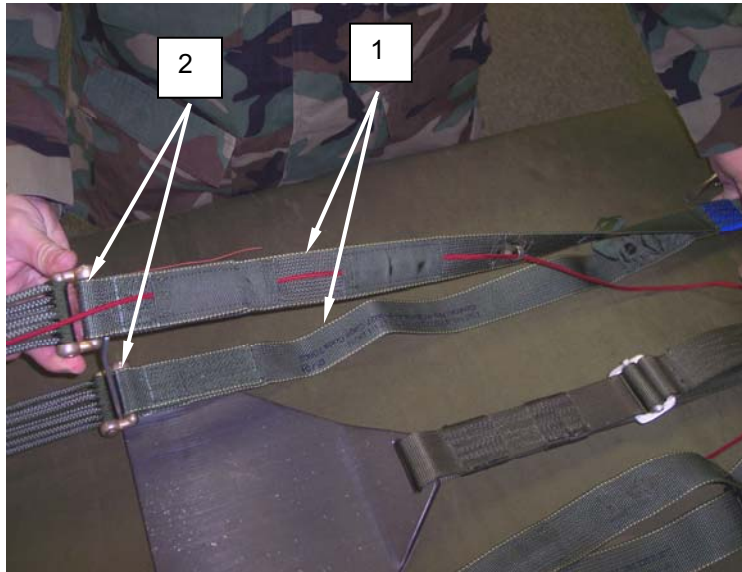


Figure 33. Rotate Riser and Reposition Connector Link on Tension Bar.

5. Attach a 1-1/16-inch retaining band (**figure 34, item 1**) onto the guide ring (**figure 34, item 2**) on the right riser assembly (**figure 34, item 3**).

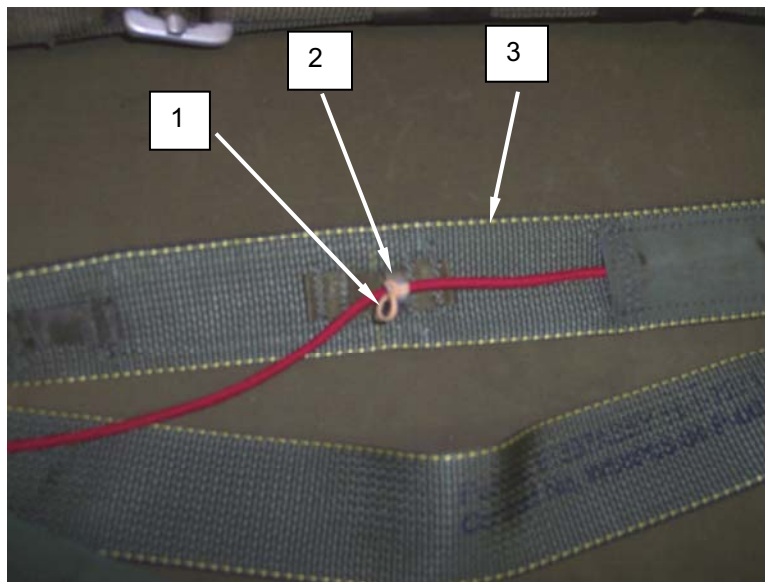


Figure 34. Attaching Retaining Band on Guide Ring of Right Riser Assembly.

6. Grasp the control line (**figure 35, item 1**) at the point between the guide ring (**figure 35, item 2**) and control line channel (**figure 35, item 3**), pull the control line so that the toggle (**figure 35, item 4**) is pulled tight up against the guide ring, then pull the remaining slack outwards.

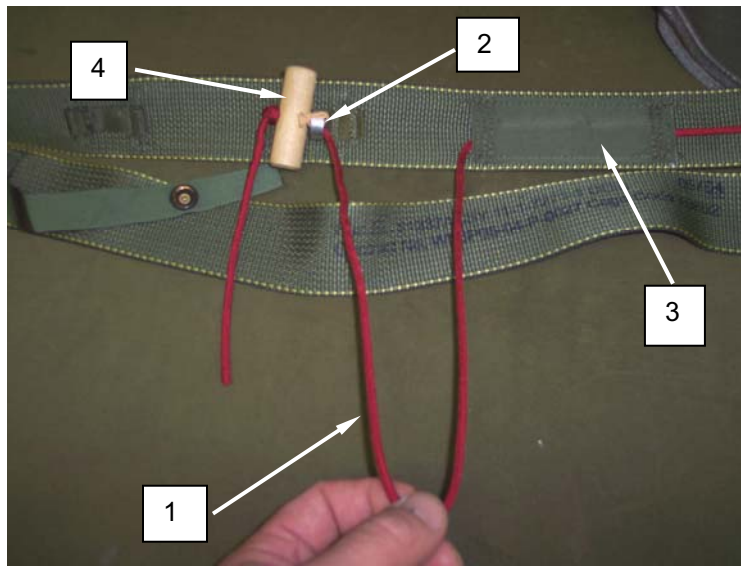


Figure 35. Pulling Remaining Slack of Control Line.

7. S-fold all the slack in the control line (**figure 36, item 1**) 2 to 3 inches then secure using the retaining band (**figure 36, item 2**) attached to the guide ring (**figure 36, item 3**), ensure enough wraps of the retaining band are used to firmly secure the s-fold. Repeat steps 4-7 for the left riser assembly and control line.

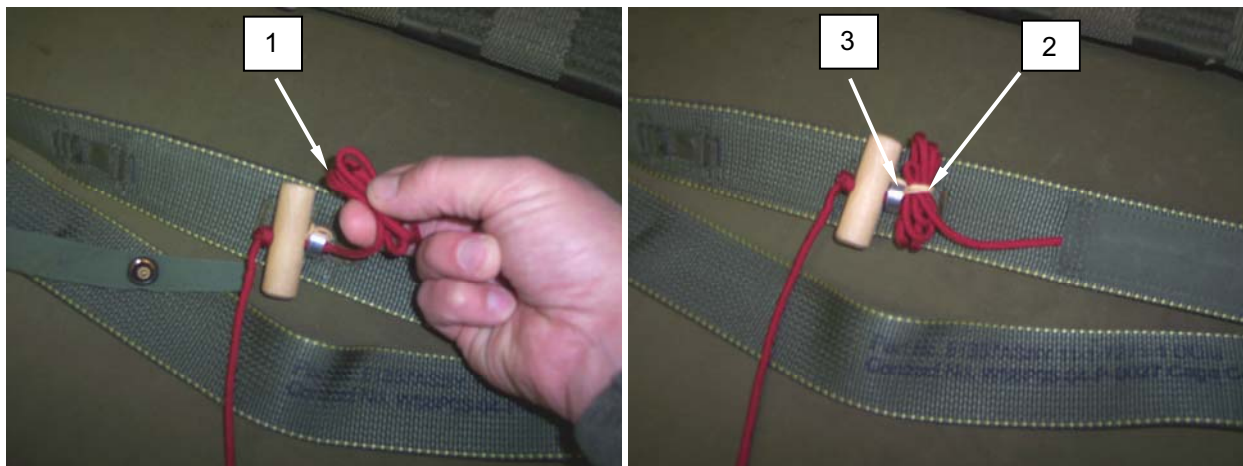


Figure 36. S-folding Slack in Control Lines And Securing with Retaining Band.

LONG-FOLDING THE CANOPY

1. The anti-inversion net and lower lateral band of the canopy will be folded 180 degrees, with the right group (**figure 37, item 1**) folded first.
2. Grasp the edges on the right side of the anti-inversion net (**figure 37, item 2**) with the left hand and the lower lateral band in the right hand. Fold edges slightly over the air channel (**figure 37, item 3**) (approximately 2 inches). Place the first packing weight (**figure 37, item 4**) on the lower lateral band.



Figure 37. Folding Edges over Suspension Lines/Radial Seam.

3. Continue folding right group in the same manner until you reach the halfway up the canopy. Place the second packing weight (**figure 38, item 1**). Continue folding until you reach approximately 48 inches from the apex. Then place a third packing weight (**figure 38, item 2**).

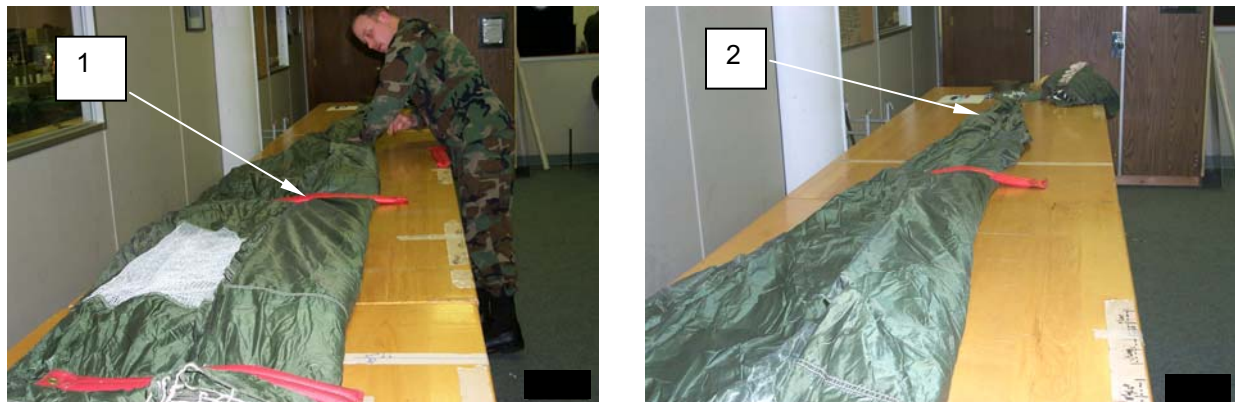


Figure 38. Folding Edges over Suspension Lines/Radial Seam.

4. Fold the left group of the anti-inversion net (**figure 39, item 1**) and lower lateral band over the right groups of gores (**figure 39, item 2**). Replace packing weight.
5. Fold left group of gores (**figure 39, item 3**) in a similar manner, adjusting packing weights to hold both groups of gores.

NOTE

After long folding, ensure there is no rollback. The parachute should be approximately 10 inches wide at the skirt (lower lateral band) and 6 inches wide where the fold breaks near the apex.

6. Long-folding is completed.

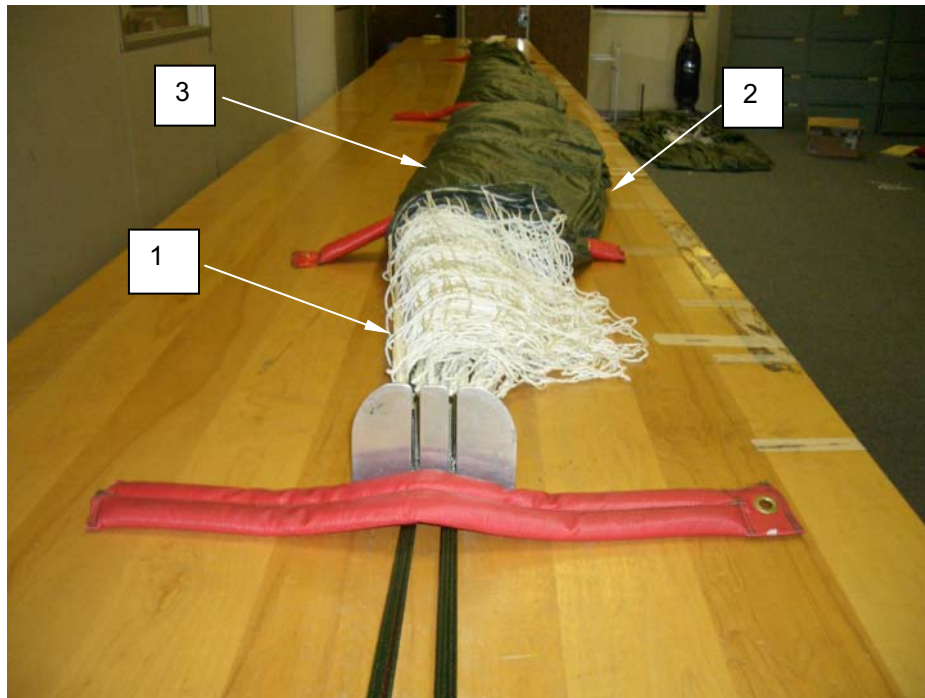


Figure 39. Final Long-folding Steps.

TYING THE STATIC LINE TO THE VENT LOOP OF THE CANOPY

Before stowing canopy into the deployment bag, the canopy must be attached at the vent loop to the deployment bag. Proceed as follows:

1. Roll back sides of the deployment bag (**figure 40, item 1**) until the static line buffere loop is exposed.
2. Secure the canopy vent loop to the static line buffer loop using a double 36-inch length of Type I, 1/4-inch cotton webbing (**figure 40, item 2**). Pass one end of the double webbing through the static line buffer loop (**figure 40, item 3**), through the vent loop of the canopy (**figure 40, item 4**), and back through the static line buffer loop.

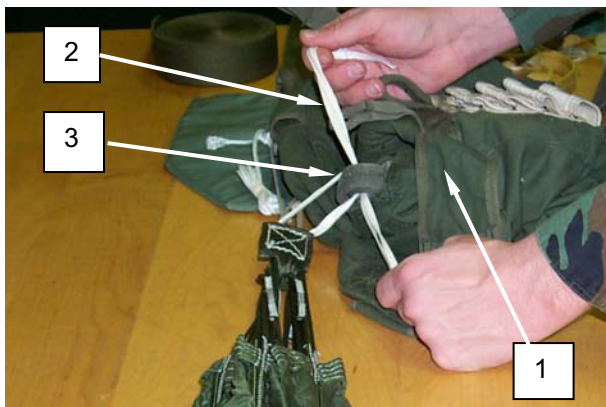


Figure 40. Securing Main Canopy Bridle Loop To Girth Hitch of Static Line.

3. Tie the ends of the webbing (**figure 41, item 1**) over the static line buffer loop (**figure 41, item 2**) using a surgeon's knot and a locking knot. Allow for a 3-inch loop between the bridle loop and static line buffer loop. Cut off excess webbing, leaving approximately 2 inches long.



Figure 41. Securing Main Canopy Bridle Loop To Static Line Buffer Loop.

4. Rigger check number 3.

STOWING THE CANOPY

1. Release tension and unhook the bridle loop from the apex hook. Hold the deployment bag (**figure 42, item 1**) open with the right hand and grasp the canopy (**figure 42, item 2**) near the apex. Place the apex of the canopy into the upper right corner of the deployment bag.
2. Grasp a section of the canopy approximately the width of the deployment bag with the left hand and place the second fold in the upper left corner.

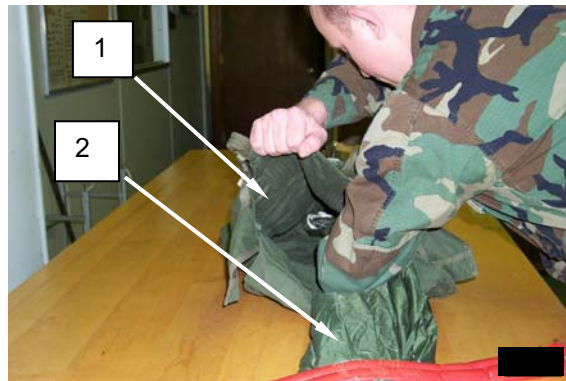


Figure 42. Stowing the Canopy.

3. Continue folding the canopy in alternating sides of the deployment bag until the lower lateral band and anti-inversion net (**figure 43, item 1**) are reached.

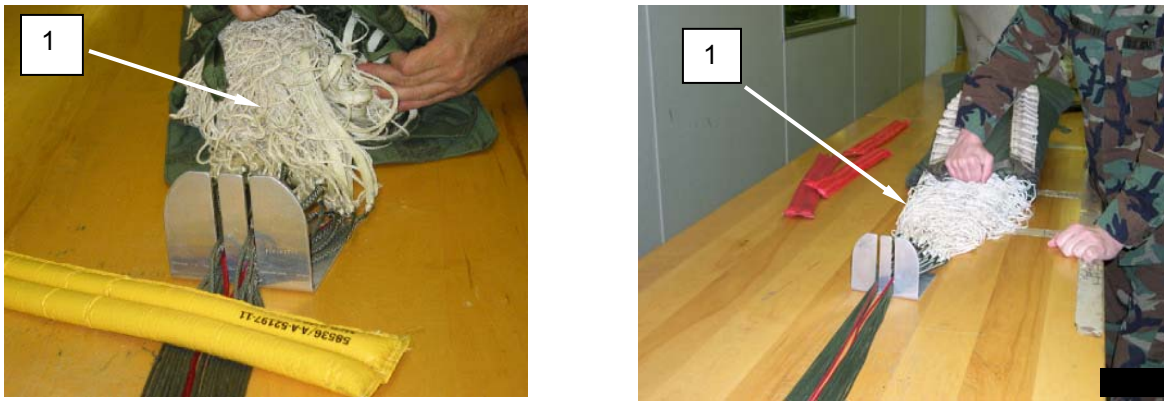


Figure 43. Stowing the Canopy (continued).

4. Grasp the lower lateral band and slide it into the center of the deployment bag.
5. With the index finger of the right hand (**figure 44, item 1**) placed between the left and right group of suspension lines (**figure 44, item 2**), grasp the anti-inversion net.
6. With the left hand, remove the packing weight and line separator. Then place the left hand on the mouth of the deployment bag (**figure 44, item 3**) and, with the right hand, slide the anti-inversion net into the center of the deployment bag.

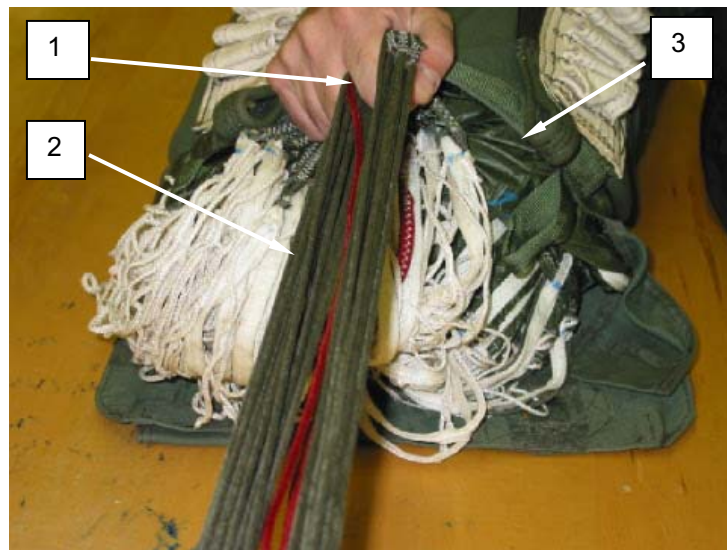


Figure 44. Stowing the Canopy (continued).

7. Turn the deployment bag upright, with the static line end down. When the entire canopy is stowed, the suspension lines and anti-inversion net will be centered on top of deployment bag.

CLOSING DEPLOYMENT BAG AND STOWING SUSPENSION LINES

1. Pull suspension lines (**figure 45, item 1**) over the top of the deployment bag (**figure 45, item 2**), fold the side flaps (**figure 45 item 3**) of the deployment bag over the stowed canopy anti-inversion net (**figure 45 item 4**).



Figure 45. Closing Deployment Bag and Stowing Suspension Lines.

2. Place the locking stow panel (**figure 46, item 1**) over the side flaps. Insert the locking loops and connector links tie loops through the slots in the stow panel (**figure 46, item 2**), Insert the stow hooks (**figure 46, item 3**) in the locking loops (**figure 46, item 4**) to hold the deployment bag closed. Insert a packing paddle (**figure 46, item 5**) through the connector link tie loops (**figure 46, item 6**).

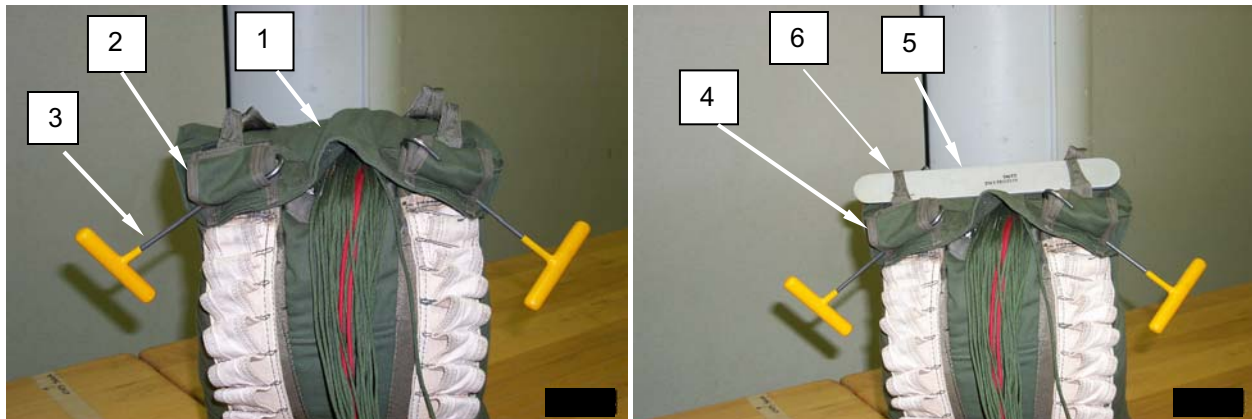


Figure 46. Closing Deployment Bag and Stowing Suspension Lines (continued)

3. Lay the deployment bag down. Grasp all suspension lines (**figure 47, item 1**) and form a loop, which reaches from the center of the deployment bag to 2 inches beyond the hood of locking stow loop.
4. Insert right stow hook (**figure 47, item 2**) through loop formed by suspension lines. Ensure that the stow hook is around all of the suspension lines.

5. Pull the suspension line loop through the right locking stow loop (**figure 47, item 3**). Ends of stow should extend 2 inches beyond locking stow loop.

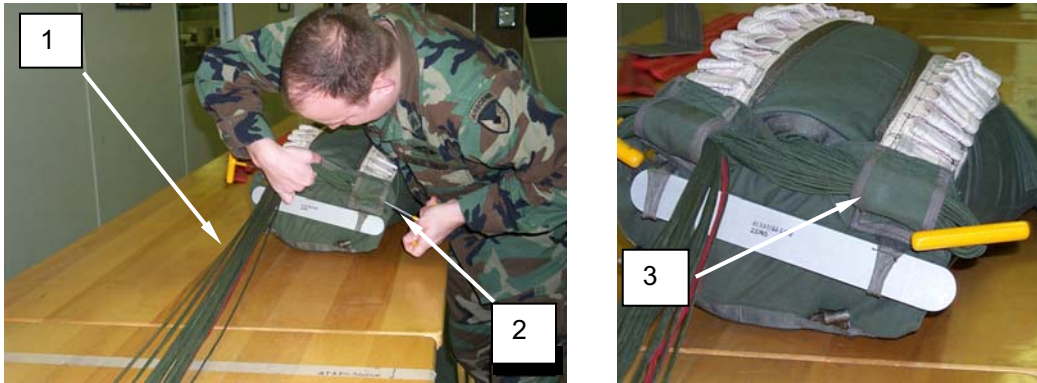


Figure 47. Closing Deployment Bag and Stowing Suspension Lines (continued).

6. Grasp a section of the suspension lines (**figure 48, item 1**) approximately the width of the deployment bag and form a second loop which extends 2 inches beyond the hood of left locking stow loop.
7. Insert left stow hook (**figure 48, item 2**) through the formed suspension line loop. Ensuring that the stow hook is around all of the suspension lines.
8. Pull the suspension line loop through the left locking stow loop (**figure 48, item 3**). Ends of the stow should extend 2 inches beyond locking stow loop.

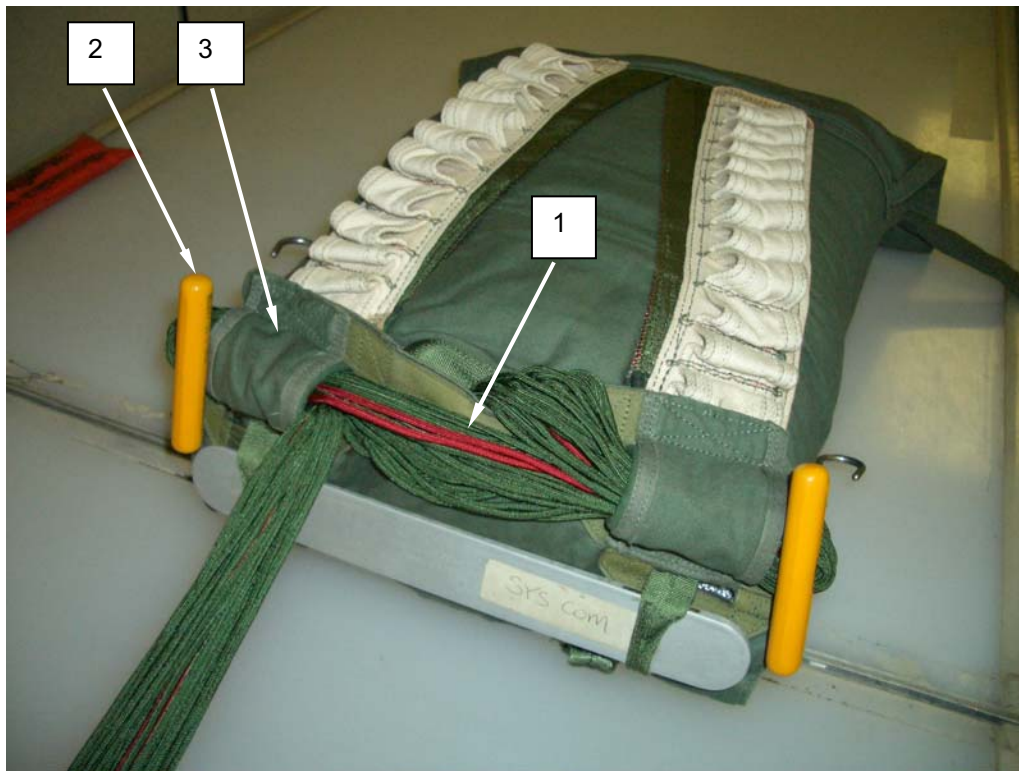


Figure 48. Closing Deployment Bag and Stowing Suspension Lines (continued).

9. Flatten the deployment bag using the forearm (**figure 49, item 4**).
10. Extend suspension lines (**figure 49, item 1**) to the upper right corner (**figure 49, item 2**) of the of the deployment bag. Form the first regular stow (**figure 49, item 3**).
11. Make the first regular stow in the upper right stow loop (**figure 49, item 5**).

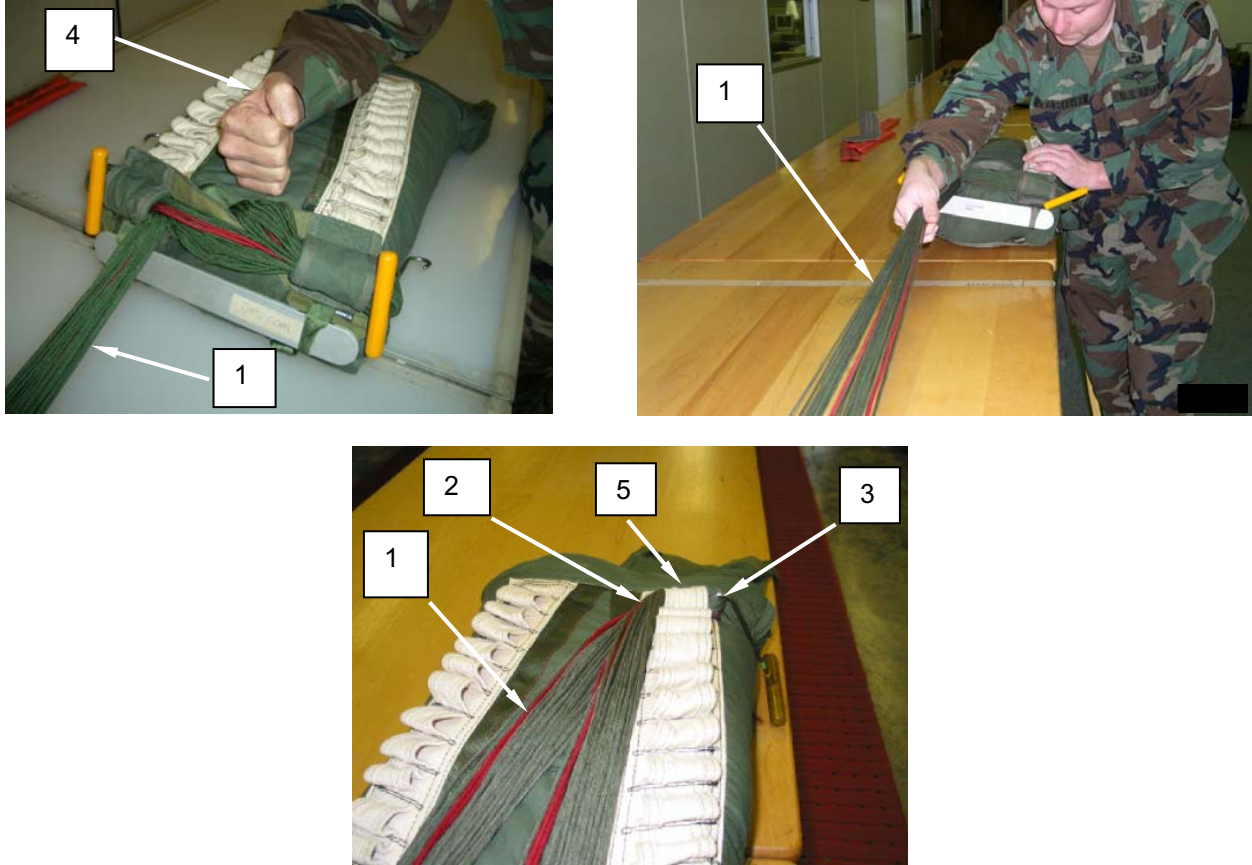


Figure 49. Making the First Regular Stow.

NOTE

Ensure stow hook is around all the suspension lines when making stows. Regular stows should extend through stow loops to the outer edge of the reinforcement panels, but not more than 1 inch beyond the outer edge of the stow loop.

12. Remove packing paddle.
13. **Rigger Check number 4.**
14. Rotate deployment bag one-quarter turn clockwise (**figure 50, item 1**).
15. Grasp a section of the suspension lines (**figure 50, item 2**) approximately the width of the deployment bag and, while sliding the bag on the table; form second regular stow in the upper left corner of the bag (**figure 50, item 3**).
16. Using a stow hook, make second regular stow in upper left corner (**figure 50, item 4**).

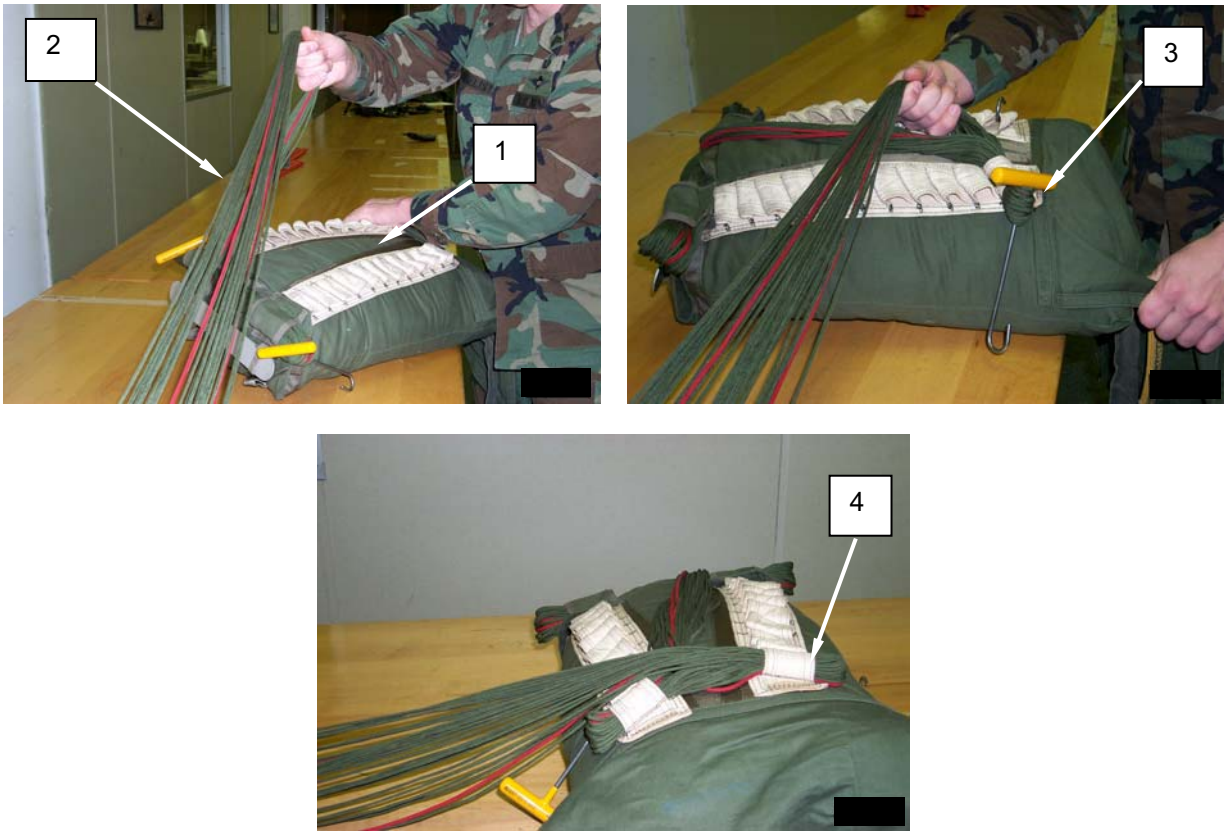


Figure 50. Making the Second Regular Stow.

17. Continue to alternate stows from right to left until approximately 8 to 10 inches of suspension lines are remaining (**figure 51, item 1**).

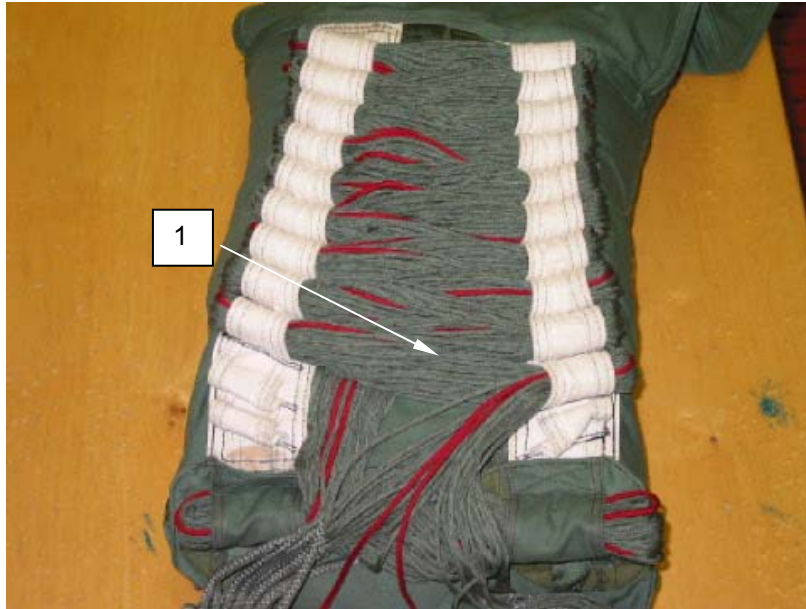


Figure 51. Continuing to Alternate Stows.

18. Remove connector links (**figure 52, item 1**) from the tension plate.

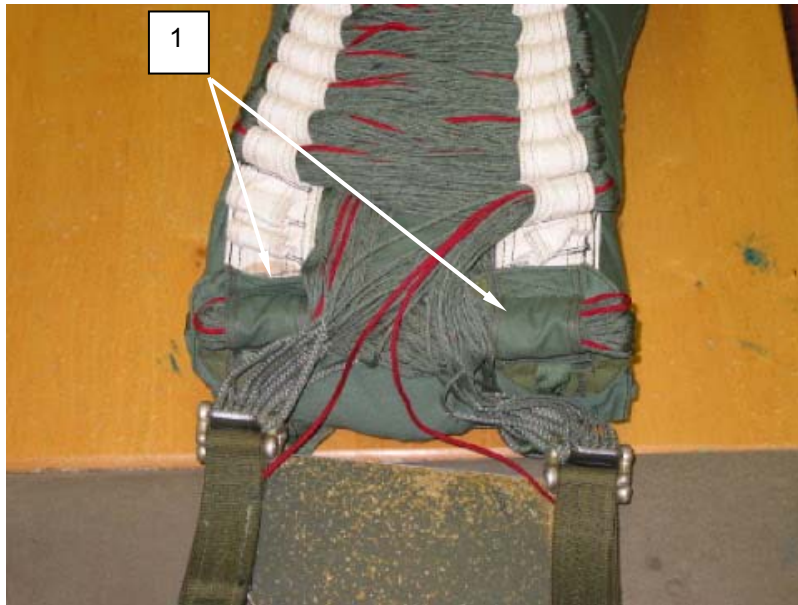


Figure 52. Removing Connector Links from Tension Plate.

19. Fold excess slack from the suspension lines from the remaining suspension lines over the stowed suspension lines.

NOTE

There should be a minimum of 8 stows in each panel. Ensure that all packing aids are removed.

Tying Connector Links and Suspension Line Protective Cover

1. Cover suspension lines with the suspension line protector cover.

NOTE

Make certain that riser groups are still in proper layout and control lines are routed to the inside of the connector links.

2. Using one-turn, single, 14-inch length of Type I, 1/4-inch cotton webbing (**figure 53, item 1**), pass an end through the right bottom connector link tie loop (**figure 53, item 2**), through right pair of connector links (**figure 53, item 3**), up through the top right connector link tie loop (**figure 53, item 4**), and through suspension line protector cover tie loop (**figure 53, item 5**).

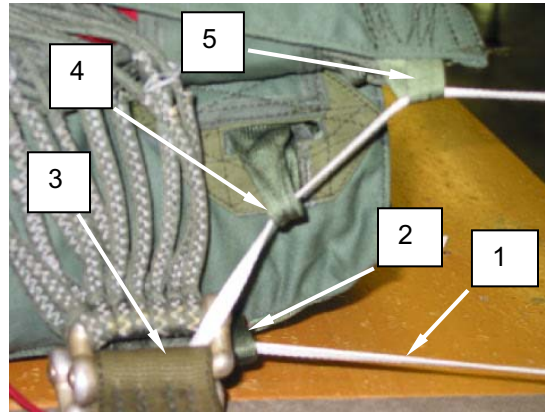


Figure 53. Tying Connector Links and Suspension Line Protective Cover.

3. Secure ends with a surgeon's knot and a locking knot (**figure 54, item 1**). Cut excess webbing, leaving end approximately 2 inches long (**figure 54, item 2**).
4. Secure the left tie loops and connector links using procedures in step 2 and 3 above.

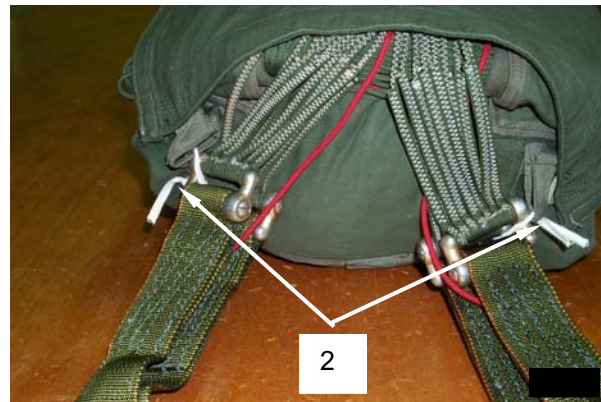


Figure 54. Tying Connector Links and Suspension Line Protective Cover (continued).

5. Enter deployment bag number into the log record book and sign as packer.
6. **Rigger Check number 5.**

Close the Pack Tray

1. With the right hand, hold the risers (**figure 55, item 1**) in place next to the canopy release assembly. With the left hand grasp the edge of the pack tray (**figure 55, item 2**). Slide the pack tray forward beyond halfway up the risers. Spread the pack tray flaps (**figure 55, item 3**).
2. Slide the risers onto the pack tray, V-fold the risers onto the pack tray (**figure 55, item 4**).
3. While holding the folded risers in place, grasp the static line at the end of the deployment bag, and rotate onto the pack tray (**figure 55, item 5**).

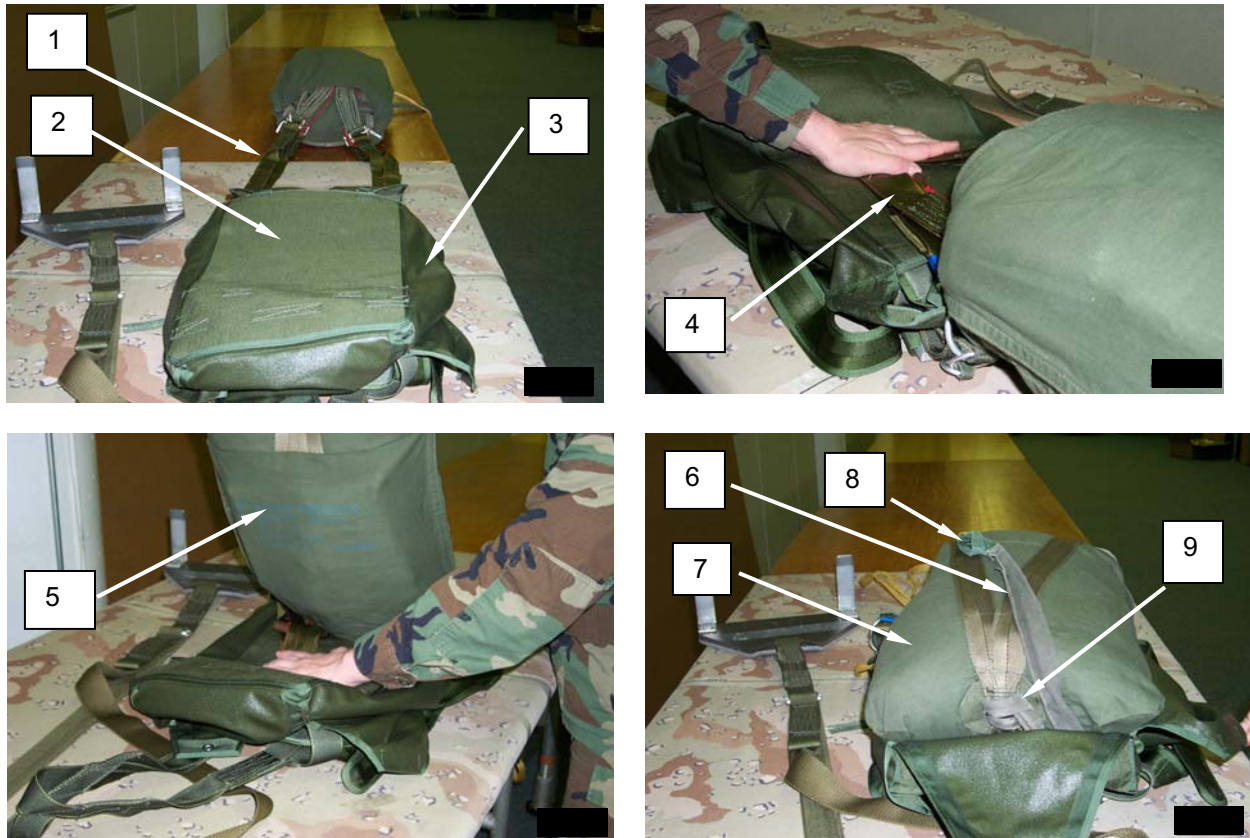


Figure 55. Closing the Pack Tray.

NOTE

Ensure that the closing loop is not routed over the static line.

4. Route a pull-up cord (**figure 56, item 1**) through the pack-tray closing loop (**figure 56, item 2**) located on the left side flap (**figure 56, item 3**).

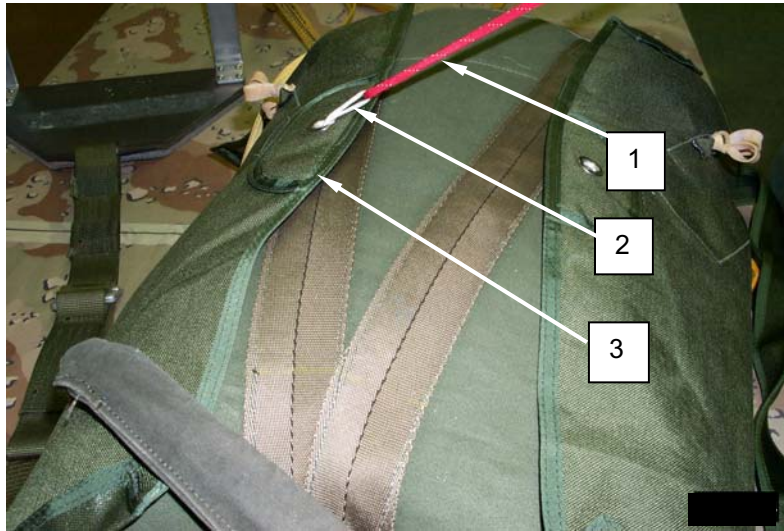


Figure 56. Closing the Pack Tray (continued)

5. Route the pull-up cord through the grommet on the right side flap. Close the right side flap (**figure 57, item 1**) over the left side flap (**figure 57, item 2**) and place temporary pin (**figure 57, item 3**). Dress the upper and lower portion of the side flaps (**figure 57, item 4**).

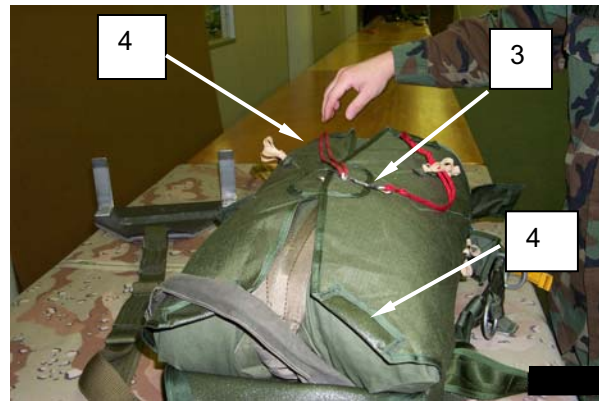
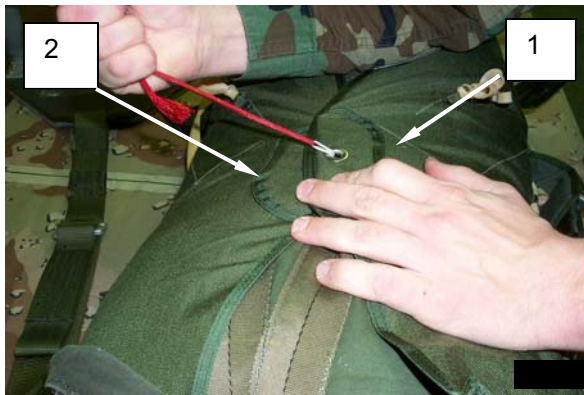


Figure 57. Closing the Pack Tray (continued)

6. Remove twists from the static line and fold the static line (**figure 58, item 1**) across the pack tray so that the curved pin (**figure 58, item 2**) is up and even with the closing loop. Fold remaining sleeve portion under the upper end (**figure 58, item 3**) of the deployment bag.

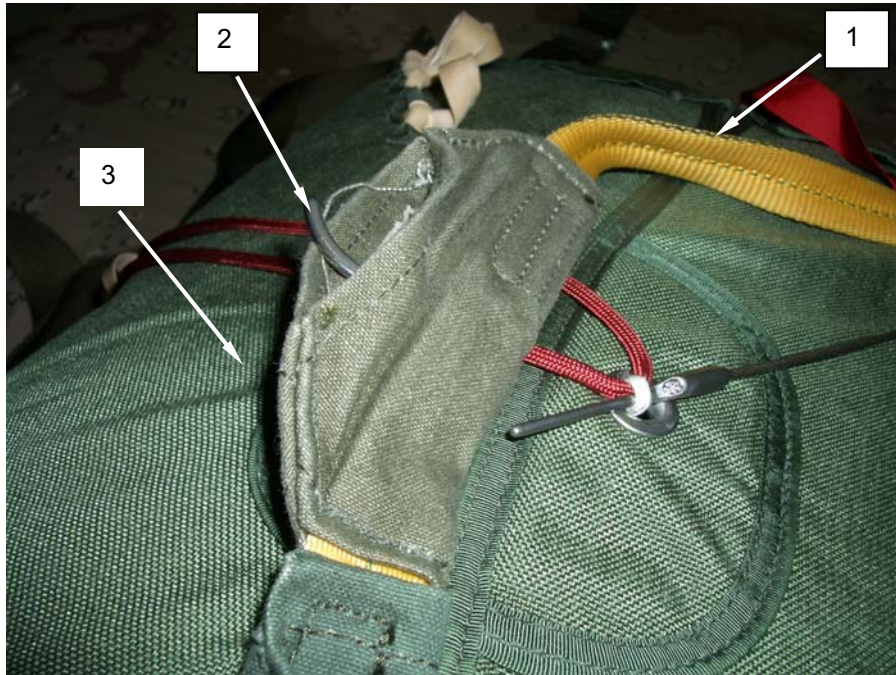


Figure 58. Closing the Pack Tray (continued).

7. Close bottom flap (**figure 59, item 1**), securing with temporary pin (**figure 59, item 2**). Static line should exit from lower left near the closing loop (**figure 59, item 3**).

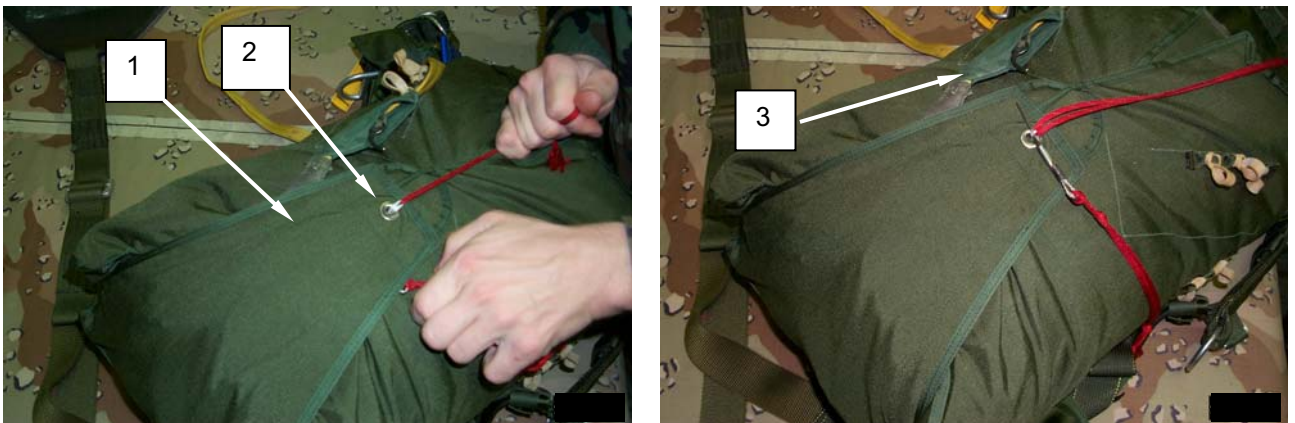


Figure 59. Closing the Pack Tray (continued).

8. Position the pack closing pin cover (**figure 60, item 1**) on the static line so that the opening is facing away from the closing loop.
9. Close top flap (**figure 60, item 2**) and secure with temporary pin (**figure 60, item 3**).

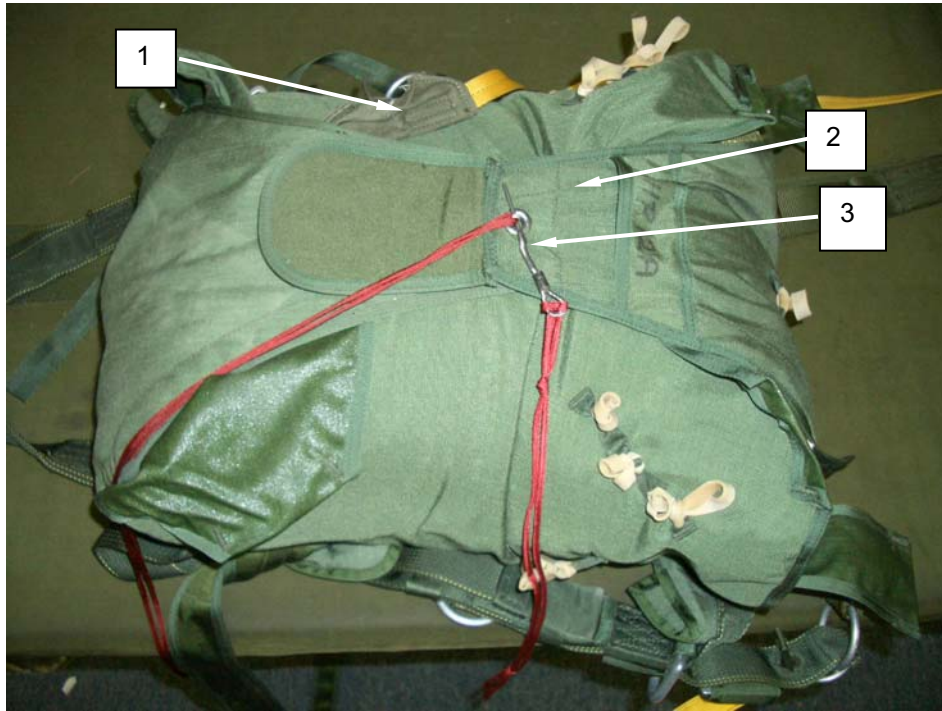


Figure 60. Closing the Pack Tray (continued).

10. Pull out the static line until the bottom of the cotton protective sleeve (**figure 61, item 1**) is aligned with the edge of the top flap (**figure 61, item 2**).
11. Pull up on the pull up cord (**figure 61, item 3**) and remove temporary pin. Turn static line 1/2-turn exposing the curved pin (**figure 61, item 4**) and insert curved pin left to the right through closing loop (**figure 61, item 5**). Curved pin will face counterclockwise.
- 12. Rigger Check number 6.**
13. Route the pullup cord under the curved pin and remove pullup cord.
14. Close the pin protector flap and secure it in the tuck flap (**figure 61, item 6**).
15. Dress the pack tray.

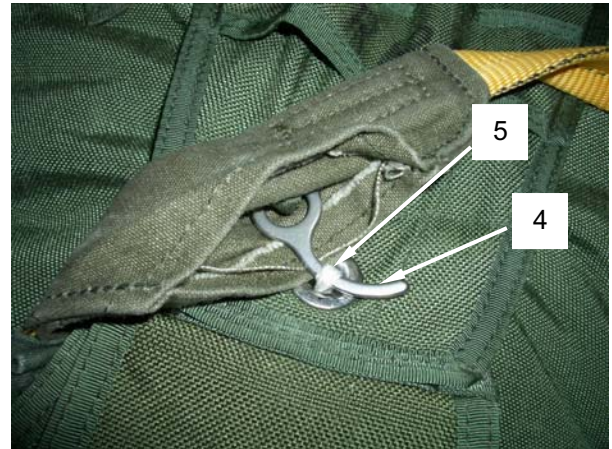
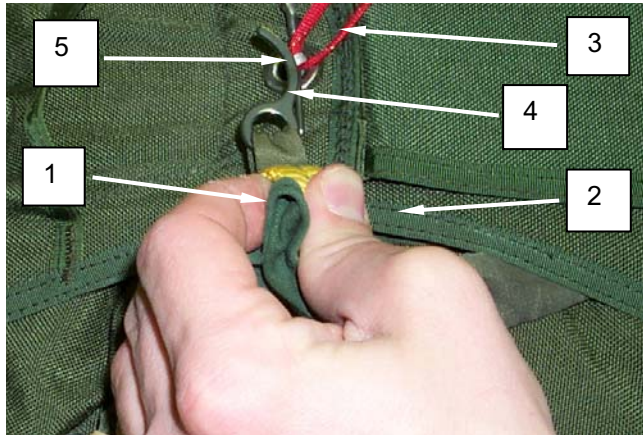


Figure 61. Closing the Pack Tray (continued).

STOWING THE 15-FOOT STATIC LINE (SEE NEXT SECTION FOR 20-FOOT STATIC LINE)

1. Make first static line stow to the lower right of the outer static line stow bar (**figure 62, item 1**).

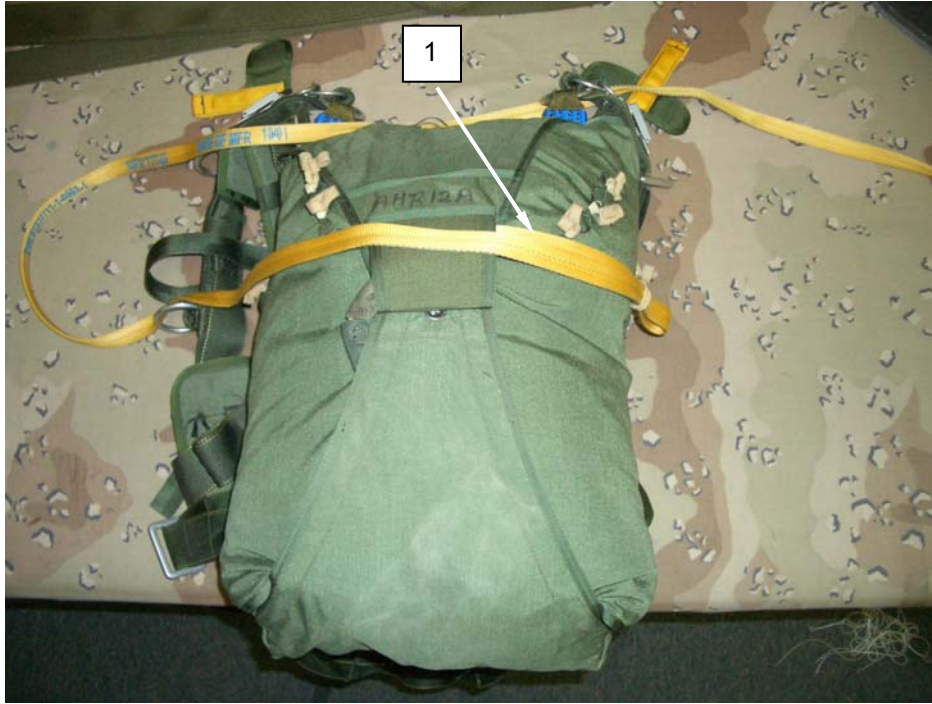


Figure 62. First Static Line Stow.

2. Retainer band is doubled (**figure 63, item 1**). Align end of stows (**figure 63, item 2**) with the edge of the pack tray with approximately 2-inch stows, two stows on outer stow bar.



Figure 63. Second Static Line Stow.
0015 00-42

3. Continue stowing the static line across the top of the pack tray container (**figure 64, item 1**).



Figure 64. Continuing the Static Line Stows.

4. Inspect container and verify proper stowing of static line by ensuring that there are two stows on both the left and right outer stow bars.
5. Complete log record book.
6. **Rigger Check number 7.**

STOWING THE 20-FOOT STATIC LINE (SEE PREVIOUS SECTION FOR 15-FOOT STATIC LINE)

1. Make first static line stow to the right lower outer static line stow bar.
2. Make second static line stow to the left lower outer static line stow bar.
3. Continue stowing the static line (**figure 65, item 1**) so that there are two static line stows on each outer stow bar; four static line stows on both the right and left inner static line stow bars.
4. Inspect container and verify proper stowing of static line by ensuring that there are two stows on both the left and right outer stow bars.
5. Complete Log Record Book.
6. **Rigger Check number 8.**



Figure 65. Stowing the 20-Foot Static Line.

FOLDING THE HARNESS

For easier handling of the main parachute after packing is completed, fold the harness as follows:

1. Turn the pack over and place the kit bag (**figure 66, item 1**) on top of the pack tray; attach the chest strap (**figure 66, item 2**) across the kit bag with a quick release.



Figure 66. Folding the Harness.

2. Pull both leg straps (**figure 67, item 1**) through the kit bag carrying handle (**figure 67, item 2**), under the diagonal straps (**figure 67, item 3**); criss-cross the leg straps (**figure 67, item 4**), and attach the leg straps to the quick-ejector snaps (**figure 67, item 5**).

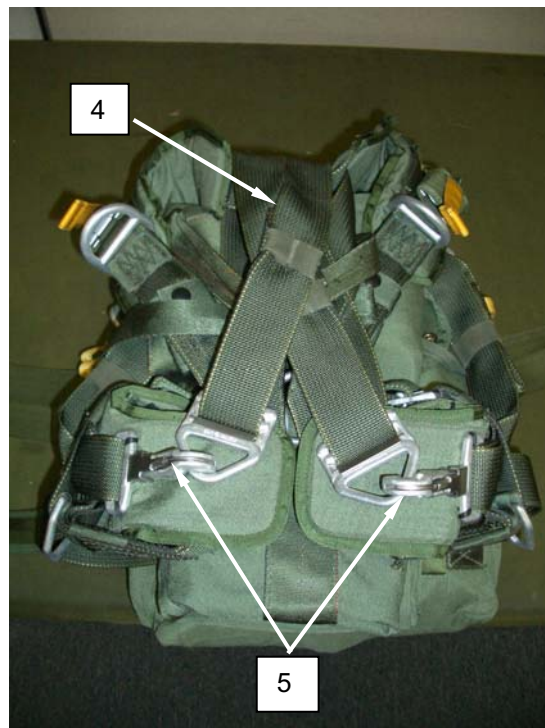


Figure 67. Folding the Harness (continued).

3. Grasp the saddle (**figure 68, item 1**) and pull straight up. Route the waistband through the saddle and completely around the harness located under the kit bag. (pull tightly).
4. Route the waistband back through the saddle, into the waistband adjuster (**figure 68, item 2**), and then back through the waistband adjuster, forming a quick-release.



Figure 68. Folding the Harness (continued).

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE PARACHUTE PACKING PROCEDURES

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
 Pin, Temporary Locking (Item 36, WP 0097 00)
 Pull-Up Cords (Item 41, WP 0097 00)
 Rod, Compression, Ejector Spring (Item 46, WP 0097 00)
 Line Separator (Item 29, WP 0097 00)
 Packing Paddle (Item 34, WP 0097 00)
 Packing Weight (Item 35, WP 0097 00)
 Riser Tension Plate (Item 45, WP 0097 00)
 Packing Loop (Item 33, WP 0097 00)
 Needle, Tacking (Item 32, WP 0097 00)
 Apex Tensioning Device (Item 3, WP 0097 00)
 T-Bar (Item 65, WP 0097 00)
 Cradle, Deployment Bag Packing (Item 13, WP 0097 00)
 Adapter, Tension Plate (Item 1, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger
 92R (20) Parachute Rigger

Equipment Condition

Laid out on packing table or other suitable area.

Materials/Parts

Tape, Lacing and Tying, Nylon, (Item 42, WP 0109 00)
 Thread, Cotton, Ticket 8/4, Orange (Item 47, WP 0109 00)
 Band, Rubber Retainer, 1-1/4-inch (Item 2, WP 0109 00)
 Band, Rubber Retainer, 2-inch (Item 3, WP 0109 00)
 Webbing, Cotton, 80 lb. (Item 53, WP 0109 00)

GENERAL

This work package contains the packing procedures for the T-11R Personnel Parachute.

Read all warnings and cautions within this section and follow procedures outlined herein to ensure safe operation of the T-11R Personnel Parachute and associated equipment.

WARNING

Check that all skirt hesitator ties are secured. Replace skirt hesitator ties every time parachute is packed.

PREPARING THE T-11R PERSONNEL PARACHUTE FOR PACKING**Inspection**

If defects or damage are discovered during inspection of a parachute, the parachute must be rigger-rolled and processed for maintenance in accordance with WP 0094 00.

1. Technical/Rigger-type inspection. Before each parachute is packed for air delivery, it must be given a technical/rigger-type inspection by the packer. Refer to WP 0012 00 for inspection procedures.
2. Pack-in-process inspection. A designated supervisory rigger, other than the packer, must perform a pack-in-process inspection. The inspection is performed to assure that the parachute is packed according to authorized packing procedures. Refer to WP 0012 00 for inspection procedures.

Orientation

Throughout this manual, all directions (right, left, upper, lower, top, bottom, clockwise, and counterclockwise) are given from the rigger's point of view, as the rigger stands at the tension plate end of the packing table, facing the apex-hook end of the table. All directions are indicated as the parachute is in proper layout.

1. Top. That portion of the equipment that is farthest from the packing table surface.
2. Bottom. That portion of the equipment that is nearest to the packing table surface.

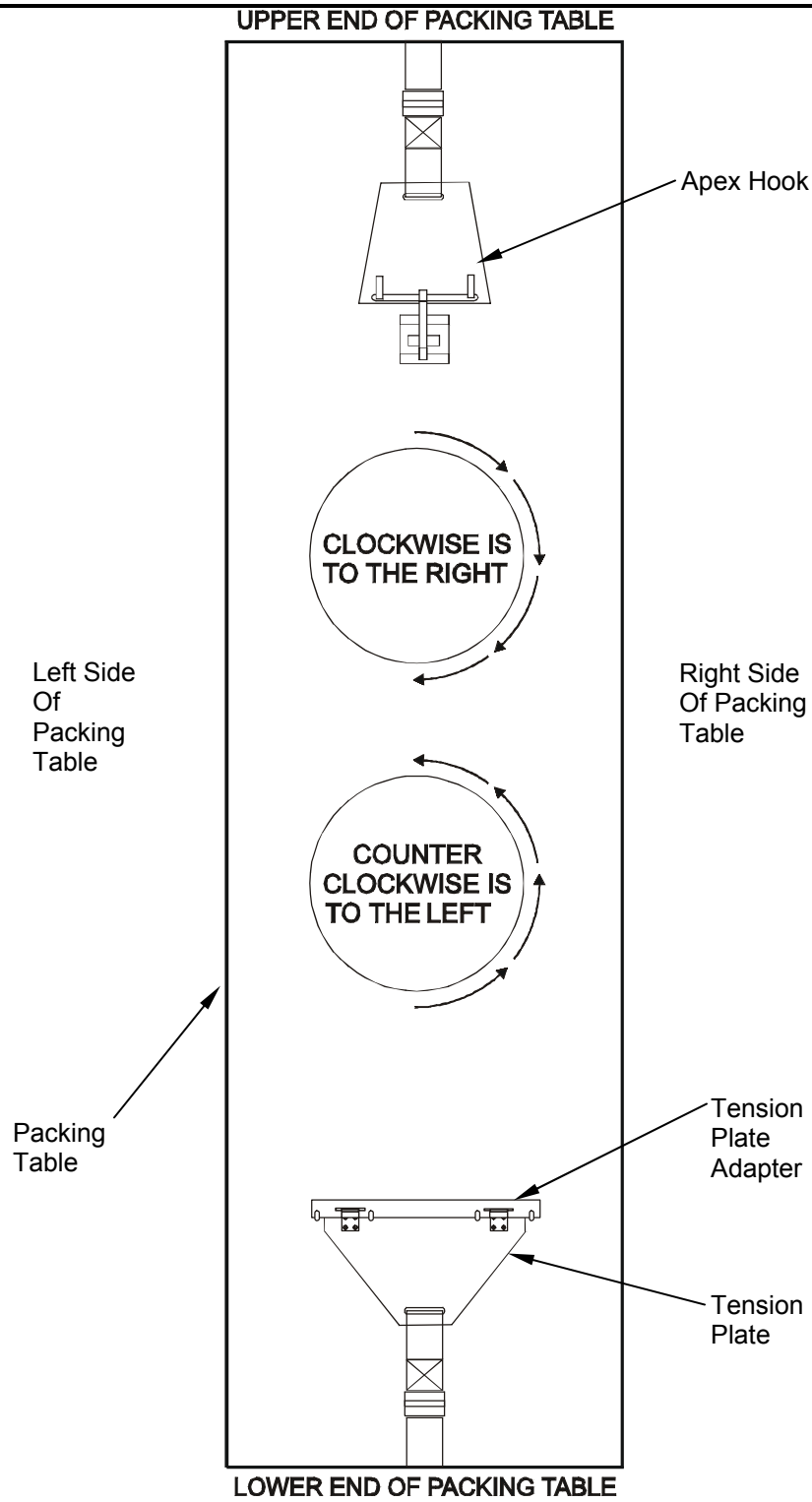


Figure 1. Rigger's Position.

WARNING

Failure to detect areas of damage may result in malfunction of the parachute and injury or loss of life to personnel.

Ripcord Test Requirements

The 14-pound and 27-pound record testing will be conducted at the following increments:

- Annual re-pack
- Every re-pack cycle
- Soft loop replacement

NOTE

The soft loop must be replaced at every re-pack regardless if this is an annually pack cycle or accidental deployment.

Prepare Ejector Spring

1. Compress the ejector spring as follows:
 - a. Compress the ejector spring (**figure 2, item 1**) using the ejector spring compression rod (**figure 2, item 2**) and route the rod through the bottom locator tabs (**figure 2, item 3**).
 - b. Place the closing loops (**figure 2, item 4**) from the bottom of the ejector spring through the top locator tabs (**figure 2, item 5**) inline with the bottom closing loops.
 - c. Place pull-up cords (**figure 2, item 6**) through each closing loop.
 - d. Insert temporary pin.

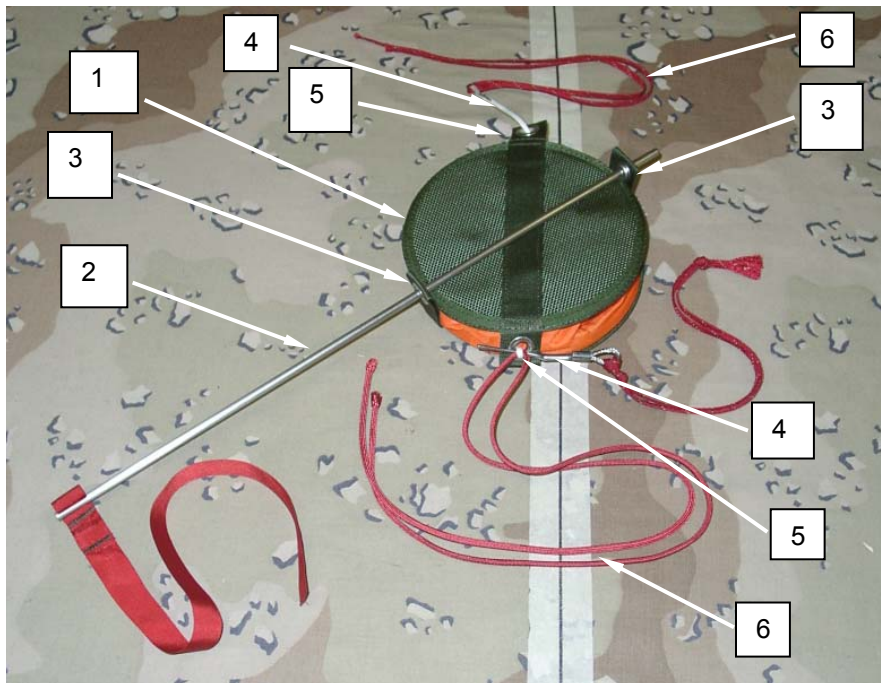


Figure 2. Prepare Ejector Spring.

Attach The Apex To Table

1. Locate one of the green apex extractor attaching loops (**figure 3, item 1**) (identified by a double bartack) and working in a counter-clockwise direction, pass the apex hookup lanyard (**figure 3, item 2**) through all of the apex loops (**figure 3, item 1**).



Figure 3. Passing Apex-packing Loop Through All Apex Loops.

2. Cut a 24-inch length of Ticket 8/4 Cotton Thread (**figure 4, item 1**) and route one end through the apex hookup lanyard (**figure 4, item 2**).
3. Attach both ends of the apex hookup lanyard to the apex hook (**figure 4, item 3**).

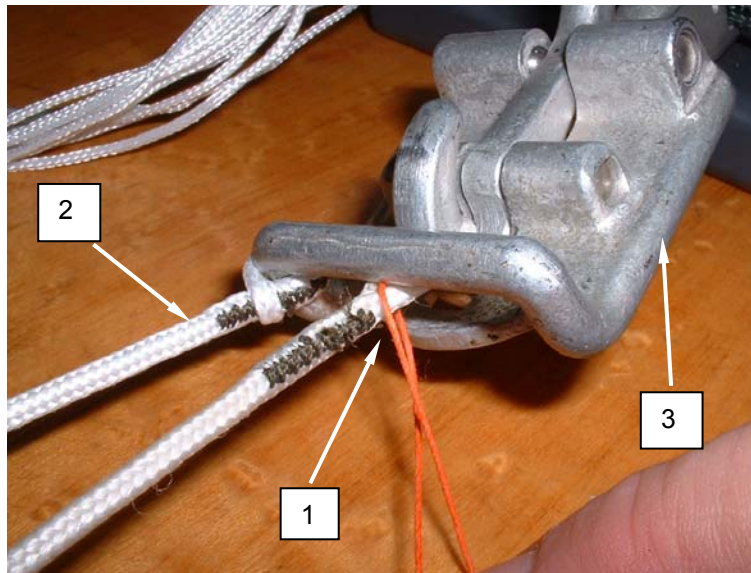


Figure 4. Attaching Ends of Packing Loop to Apex Hook.

Lay Out the Canopy

1. Place the reserve risers (**figure 5, item 1**) on the pack table with the reserve connector snaps (**figure 5, item 2**) at the lower end of the pack table and the connector links (**figure 5, item 3**) on the tension plate (**figure 5, item 4**).

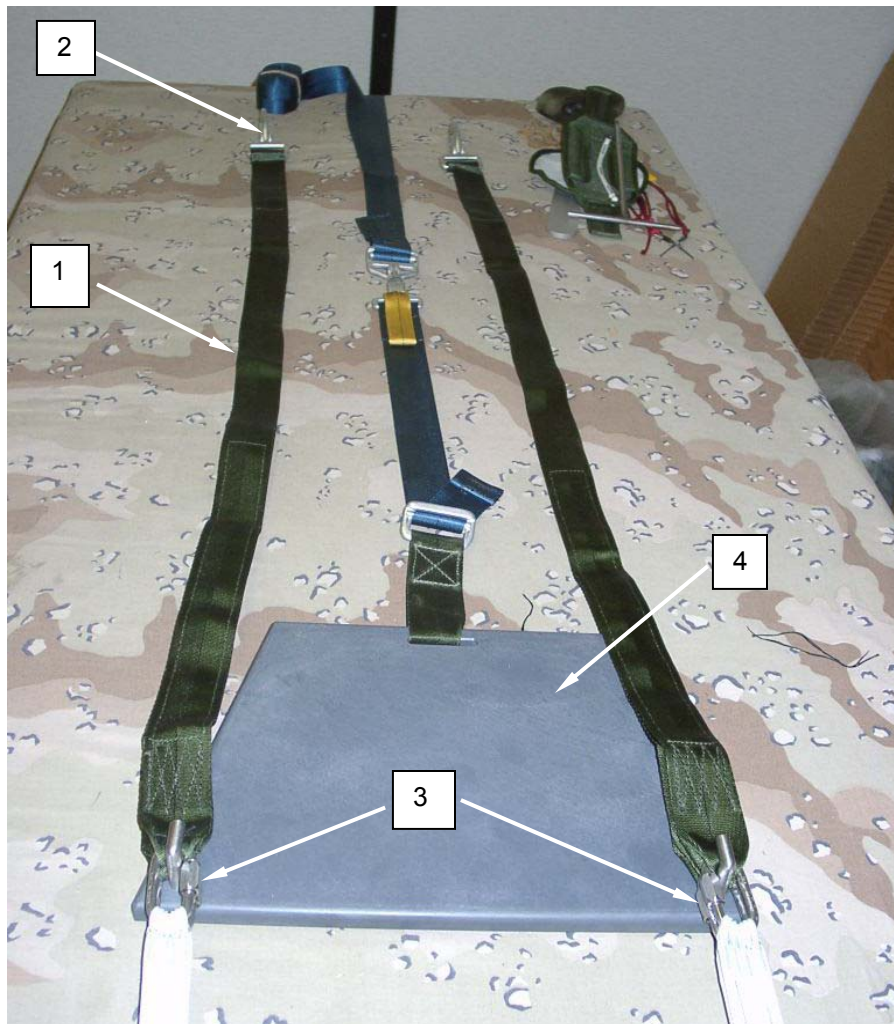


Figure 5. Laying Out the Canopy.

NOTE

The connector links should be tightened finger tight plus 1/4-turn. Do not over tighten.

2. Inspect the risers (**figure 6, item 1**) to insure they are tacked with 1 turn doubled tape lacing and tying to prevent the barrel nuts (**figure 6, item 2**) of the connector links (**figure 6, item 3**) from rotating into the risers (**figure 6, item 1**).

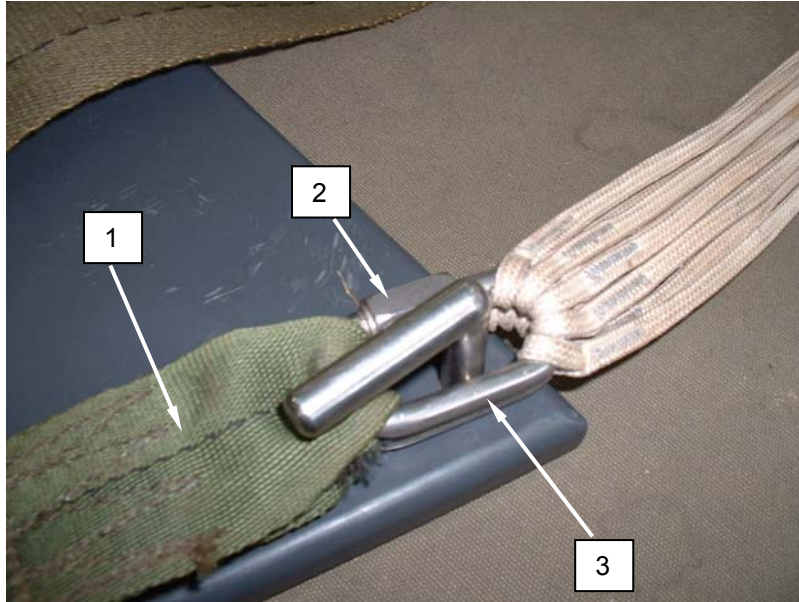


Figure 6. Inspecting the Risers.

3. Place the pack tray under the risers (**figure 7, item 1**) with the connector snaps (**figure 7, item 2**) located at the top flap. Ensure the gates of the connector snaps are facing downwards and the butterfly portions of the connector snaps are facing outwards.
4. Evenly mate the hook and pile tape (**figure 7, item 3**) between the reserve riser plies.
5. Mate the hook and pile tape on the underside of the riser (**figure 7, item 1**) with the hook and pile tape on the base of the pack tray (**figure 7, item 4**).
6. Partially S-fold the risers (2-stows) into the pack tray from lower to upper, outside to inside.

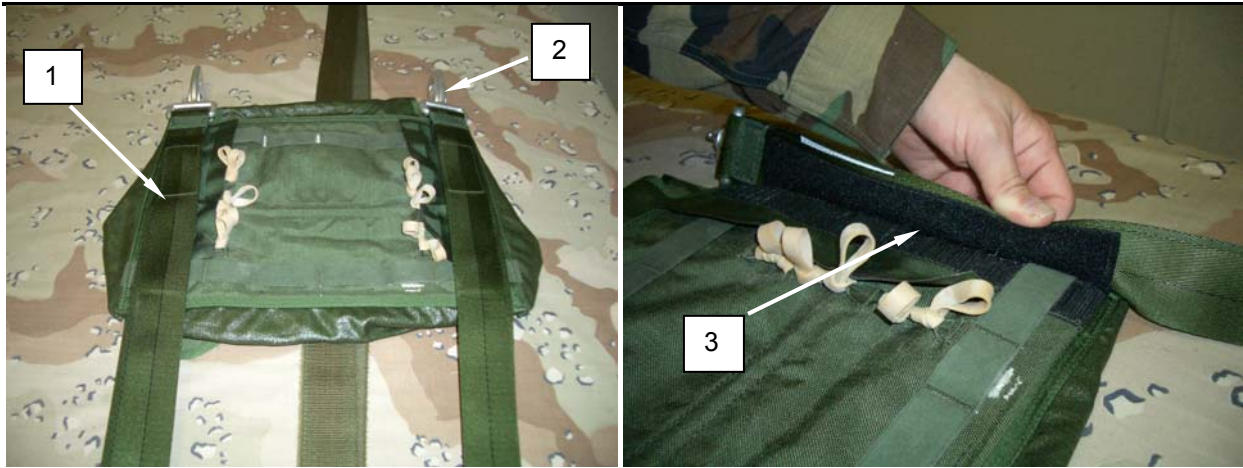


Figure 7. Partially S-folding the Risers into Pack Tray.

Four Line Check

1. Arrange the canopy (**figure 8, item 1**) on the pack table with gores 1-10 on the left and gores 11-20 on the right.
2. Locate the top center gore of the canopy (**figure 8, item 1**) and divide the suspension lines (**figure 8, item 2**) into the left and right groups. Ensure the suspension lines are free from twists and tangles.
3. The left suspension line group will have line 1 on the inside of the top left connector link and line 10 on the inside of the bottom left connector link.
4. The right suspension line group will have line 20 on the inside of the top right connector link and line 11 on the inside of the bottom right connector link.
5. **Rigger check number 1.**

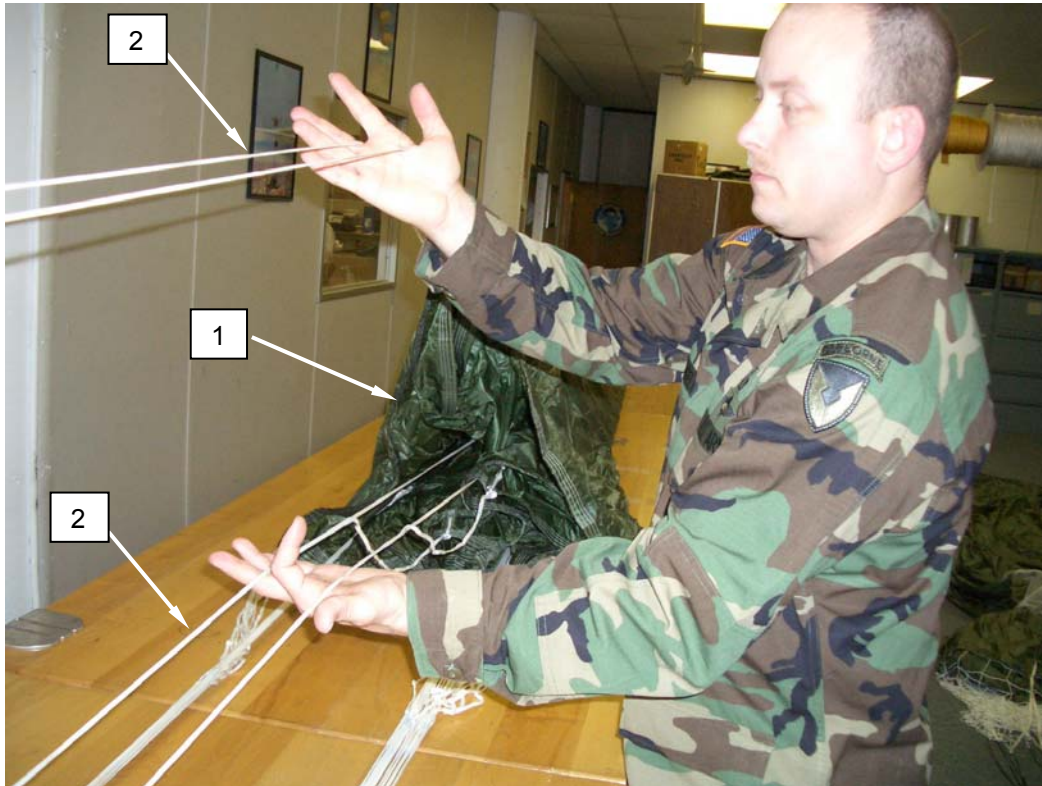


Figure 8. Ensuring Suspension Lines are Free from Twists and Tangles.

Fold The Gores

1. Apply tension as required being cautious not to break the skirt assist ties.
2. At the bottom of the canopy, with your right hand, grasp the lines (**figure 9, item 1**) below the skirt assist line attachment points (**figure 9, item 2**), with the right group lines in the left hand, lift the right group of suspension lines with the left hand. Hold the top center of the lower lateral band in position with the right hand and flip the right group of gores over the left group.
3. Start with line number 11 in the right hand. Pick up line number 12 with the left hand and lift straight up until slack is removed from the lower lateral band. With a smooth continuous movement, bring the left hand over the head. When the gore inflates, place line number 12 on top of line number 11. Make certain the gore material folds to the right side.
4. Continue folding gores until you reach line 20.

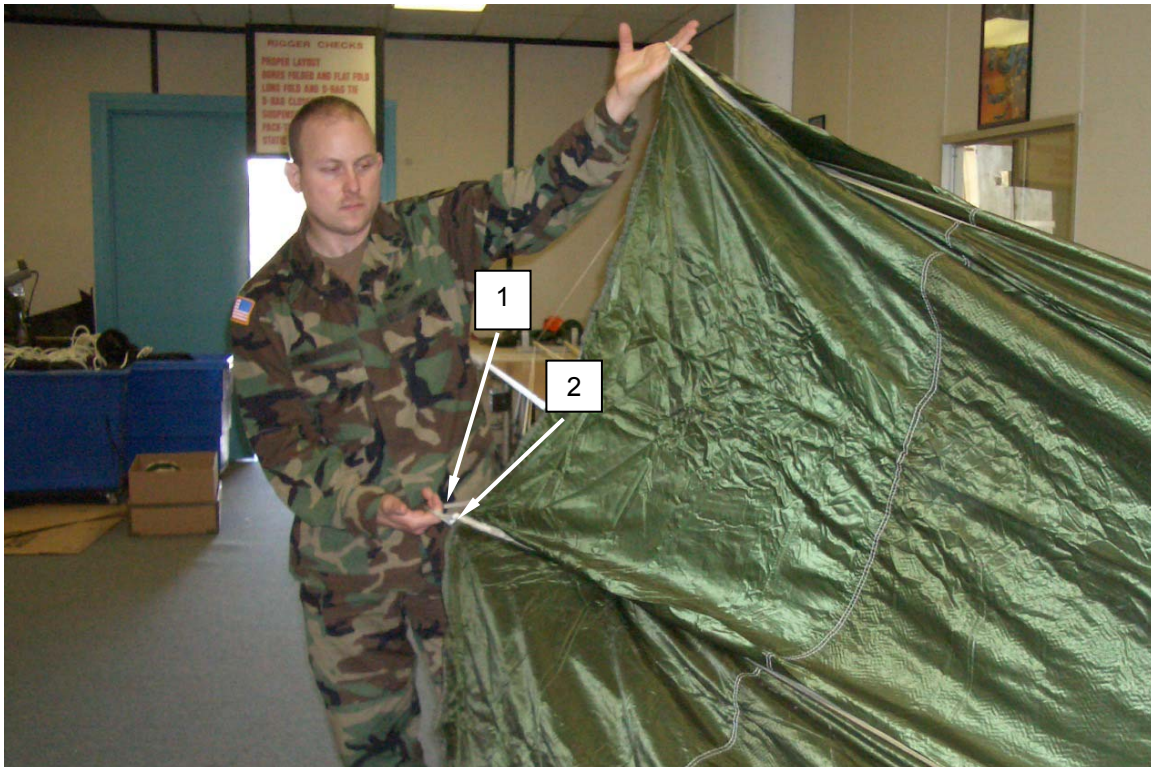


Figure 9. Folding Gores.

5. Hold the right group of lines with the left hand. With the right hand, fingers pointing down, scissor the right group of lines between the 1st and 2nd fingers.
6. Rotate this group of lines clockwise until the fingers are tilted slightly upward, so that line 20 is on the bottom and line 11 is on the top.
7. Starting with line 1, fold the left group of gores using the same movement as in step 3, above.
8. Continue folding the gores until you reach suspension line 10. Raise suspension line 11 and drape the last gore on left and the next to last gore on the right. Place suspension line 10 on top of the other lines in the left group.

9. Ensure that the skirt assist lines run freely up into the folded canopy. Separate the two groups of lines attached to the skirt of the canopy (1-10 and 20-11) ensuring that the lines are not routed around the skirt assist lines.
10. Dress the skirt assist lines (**figure 10, item 1**) with the suspension lines (**figure 10, item 2**) to the outside. The skirt assist lines and the suspension lines should be centered on the canopy and generally aligned with the radial seam and the center of the table as depicted in Figure 10. Although a line separator may be used it is not required.

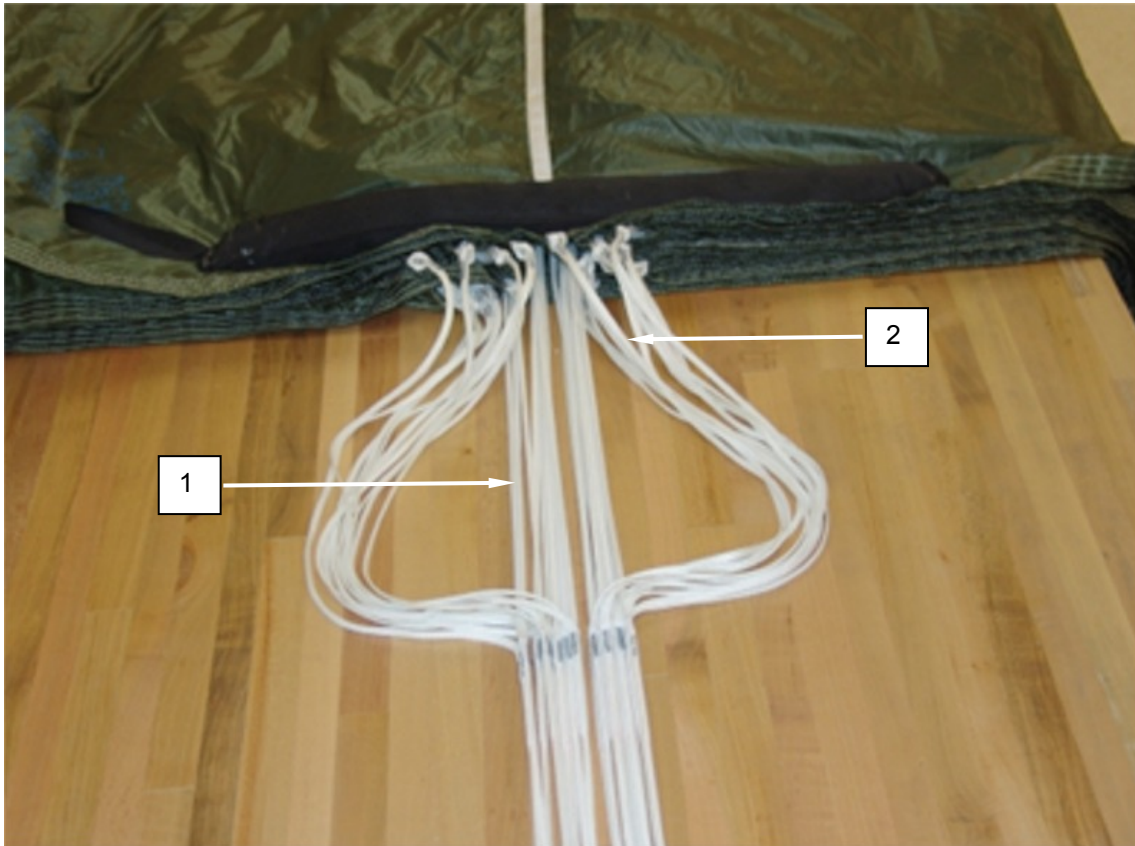


Figure 10. Placing Suspension Lines in Line Separator.

11. Apply second tension.
12. Rough dress gore number 10 from lower lateral band to within 24 inches of the apex, and flip left group of gores (top half) to left side of table tracing radial seam 20 to the apex.
13. Placing the middle finger between the two groups of suspension lines, grasp the top part of the canopy and separate the left side from the right side.
14. Continue separation of the canopy until you reach the apex with line 20 on top.
15. Fine dress the bottom gores by pulling gently on the left and right sides of the canopy, moving from the lower lateral band to the apex.
16. Dress the top gores by pulling gently while moving to the lower lateral band. The canopy is now in a flat fold.

17. Dress the Lower Lateral Band as follows:

NOTE

Count gore edges to be sure that 10 are in each group.

- a. Dress each gore section of the lower lateral band, working from bottom to top of the left group. Pay particular attention to dressing the canopy at the lateral band 4.5 feet below the apex vent. Repeat the procedure for the right side.
- b. Raise the top radial tape (number 20) and check for a clear channel.

18. Tying the Apex Scoops. Tie the apex scoops as follows:

- a. Locate the top scoop (**figure 11, item 1**) at the apex of the canopy. Following the reinforcing tape attached to the bottom of the scoop to the left until the loop at the main seam is located.
- b. Locate the next scoop (**figure 11, item 1**) to the left and follow the reinforcing tape to the right until the next loop (**figure 11, item 2**) is located.
- c. Bring the two loops together (both loops should face each other), arranging the folded gores between the two scoops to lie inside the two loops.



Figure 11. Tying the Apex Scoops.

- d. Pass a 12-inch length of Ticket 8/4 Cotton Thread (**figure 12, item 1**) down through the right loop (**figure 12, item 2**) and back up through the left loop (**figure 12, item 3**).
- e. Bring the two ends together and secure tightly with a surgeon's knot and a locking knot.

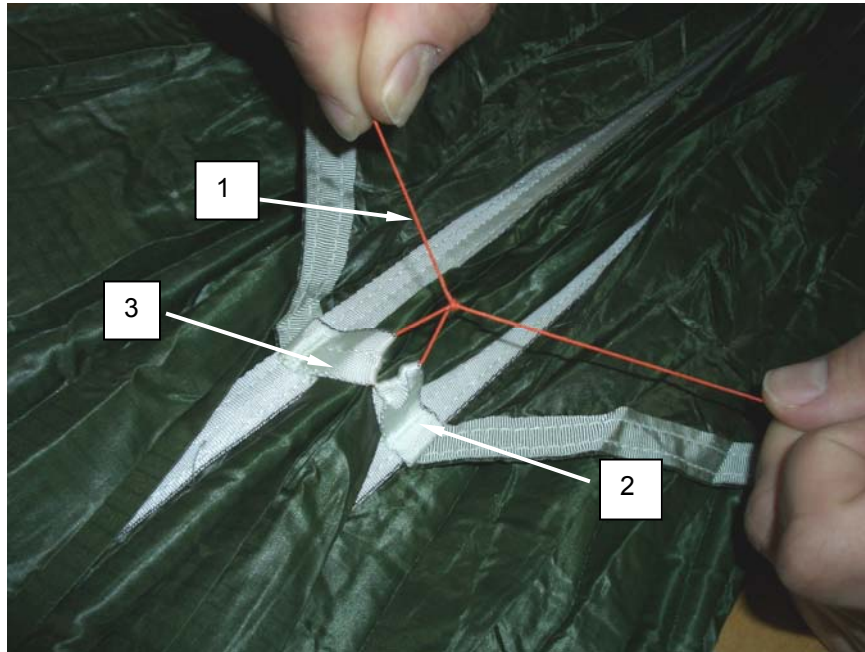


Figure 12. Securing Loop Ends.

- f. Continue with the remaining scoops (**figure 13, item 1**) until all four loops are secured.



Figure 13. Securing Remaining Loops.

19. Rigger check number 2.

Long Fold The Canopy

1. Fold the canopy (**figure 14, item 1**) at the lower lateral band 90° from the left and right sides to the center forming a 45 degree outside fold.



Figure 14. Folding Canopy at Lower Lateral Band.

2. Fold the left side of the canopy (**figure 15, item 1**) 180 degrees (approximately 3-inches over the air channel) to the right so that the suspension lines (**figure 15, item 2**) are centered on the fold. Place a packing weight (**figure 15, item 3**) on the lower lateral band.
3. Continue folding the left group in the same manner until you reach halfway up the canopy and place a second packing weight.
4. Continue folding until you reach approximately 48 inches from the apex of the canopy and place the third packing weight.
5. Fold the right side of the canopy in the same manner, beginning at the lower lateral band folding it to the left. The canopy should be folded evenly into thirds.

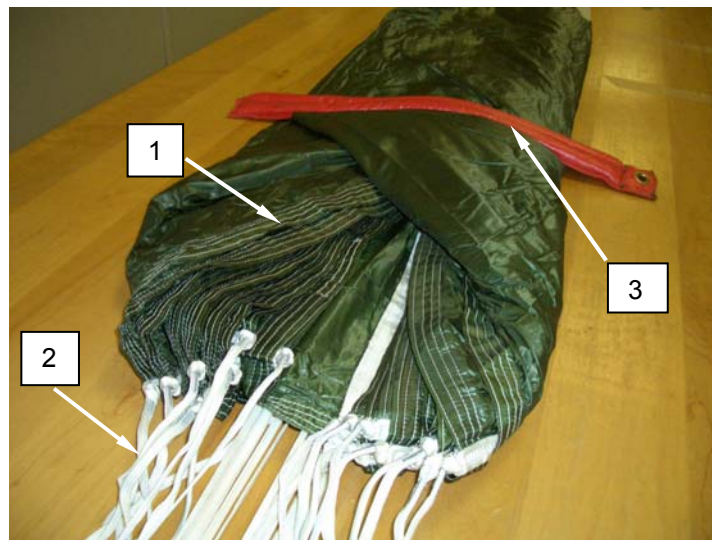


Figure 15. Folding Canopy Evenly into Thirds.

6. Folding the Apex Scoops. Fold the apex scoops as follows:
- The top and bottom scoops (**figure 16, item 1**) are split evenly between the left and right sides of the folded canopy. The left and right scoops (**figure 16, item 1**) are dressed to their respective sides.



Figure 16. Dressing Left and Right Scoops.

- Alternating between the left and right scoops (**figure 17, item 1**), fold the left and right sides of the top scoop to the center.



Figure 17. Folding Left and Right Sides of Top Scoop.

- c. S-Fold the left then the right side on top of the folded top scoop (**figure 18, item 1**) folds.



Figure 18. S-Folding Left and Right Side on top of the Folded Top Scoop.

- d. Fold the left then right of the bottom scoops (**figure 19, item 1**) over the previously folded scoops.
- e. Fold the apex scoops (**figure 19, item 1**) to the left to dress the apex folds with the canopy long fold. Place a packing weight (**figure 19, item 2**) on top.

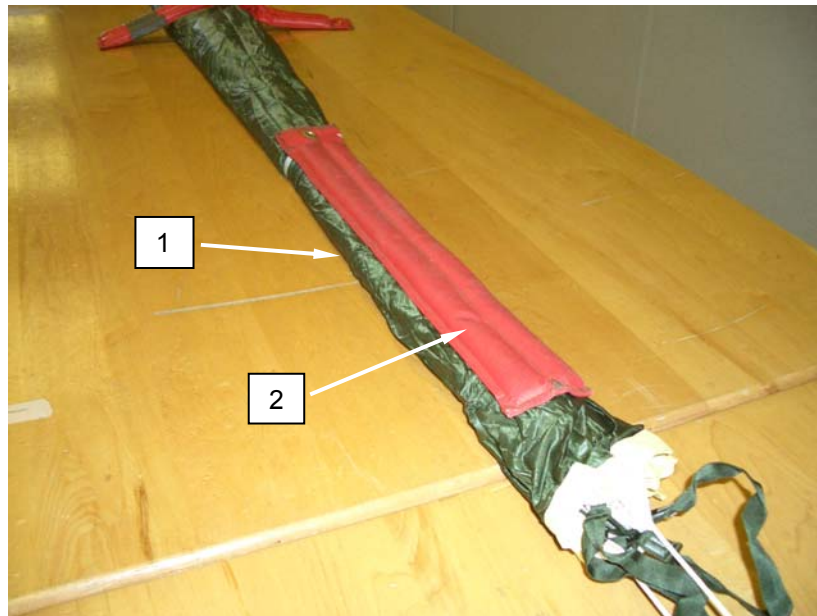


Figure 19. Folding Apex Scoops To Dress Apex Folds.

7. Rigger check number 3.

Stow The Suspension Lines

1. Remove the connector links from the tension device.
2. Make the remaining 2 riser stows by S-folding the risers (**figure 20, item 1**) into the pack tray (**figure 20, item 2**) from upper to lower, outside to inside ensuring the connector links (**figure 20, item 3**) are in the center of the pack tray.

NOTE

2-inch retainer bands (commonly known as large) will be used for stows attached to the pack tray. 1-1/4-inch (commonly known as small) retainer bands will be used for the 2-inch "free" stows. All retainer band stows are single turn only.

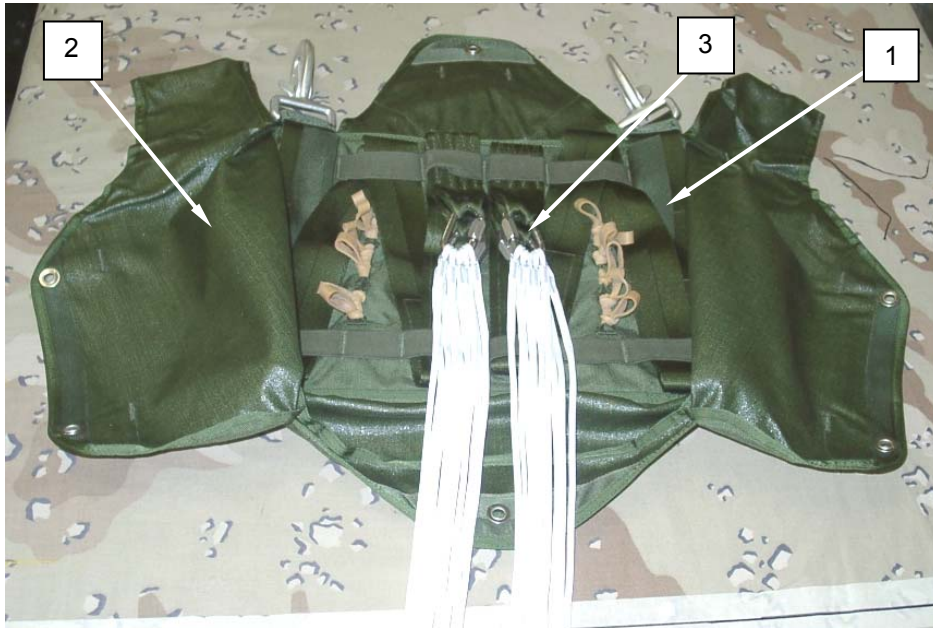


Figure 20. Making Two Remaining Riser Stows.

3. Rotate the container 90° clockwise.
4. Make the first stow (**figure 21, item 1**) to the upper right of the pack tray. Ensure the stow (**figure 21, item 1**) extends to the edge of the pack tray (**figure 21, item 2**).



Figure 21. Making First Regular Stow.

5. **Rigger check number 4.**
6. The 2nd stow (**figure 22, item 1**) is to the upper left of the pack tray.
7. Continue stowing until approximately 36 inches of suspension lines (**figure 22, item 2**) remain to the lower lateral band. There should be 6 stows per side attached to the stow bars of the container. Align all stows with the outer edge of the pack tray.

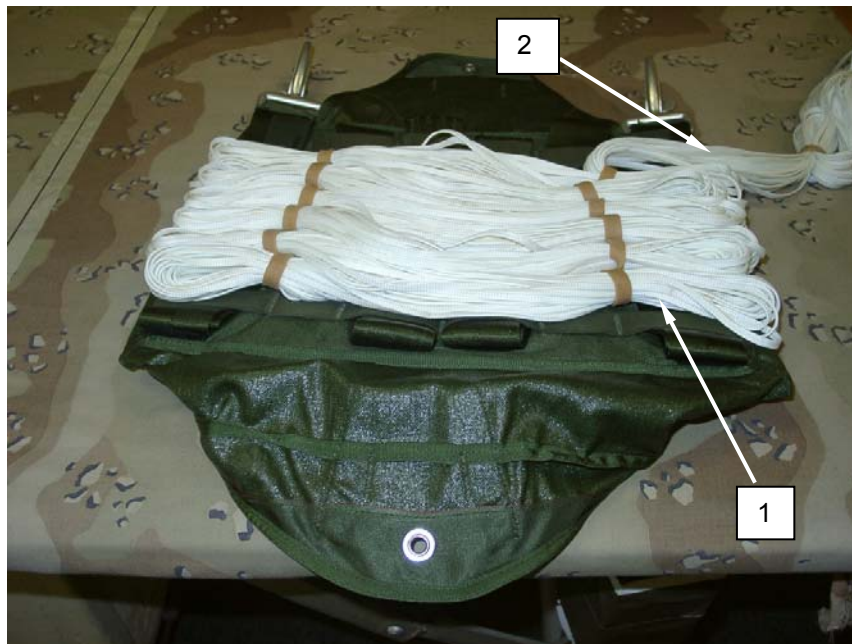


Figure 22. Continuing Regular Stows.

8. Form 3 additional "free" stows (not attached to the pack tray).
9. Form a bight approximately 12 inches from the last stowed line and place a small retainer band (**figure 23, item 1**) 1-2 inches from the end of the bight.
10. Form another bight approximately the same distance and place another small retainer band (**figure 23, item 2**) in the same manner.



Figure 23. Forming Bight and Placing Retainer Band.

11. Remove the line separator.
12. Remove the slack from the skirt assist lines as follows:
 - a. Grasp lines (**figure 24, item 1**) at lower lateral band and slide slack toward the bartack (**figure 24, item 2**) at the point where the lines cascade forming a bight.

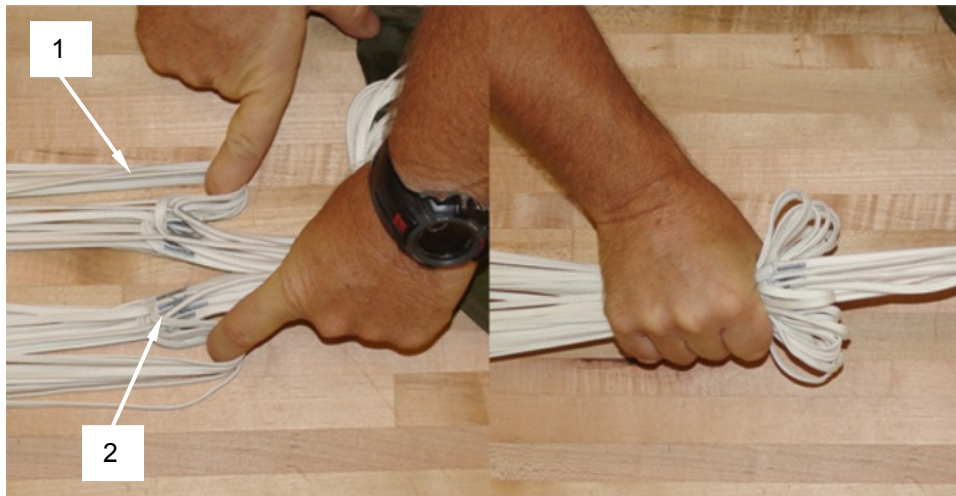


Figure 24. Grasping Lines and Removing Slack.

- b. Place a small retaining band approximately 1 inch from the end of the bight (**figure 25, item 1**). There should be no loops exposed.

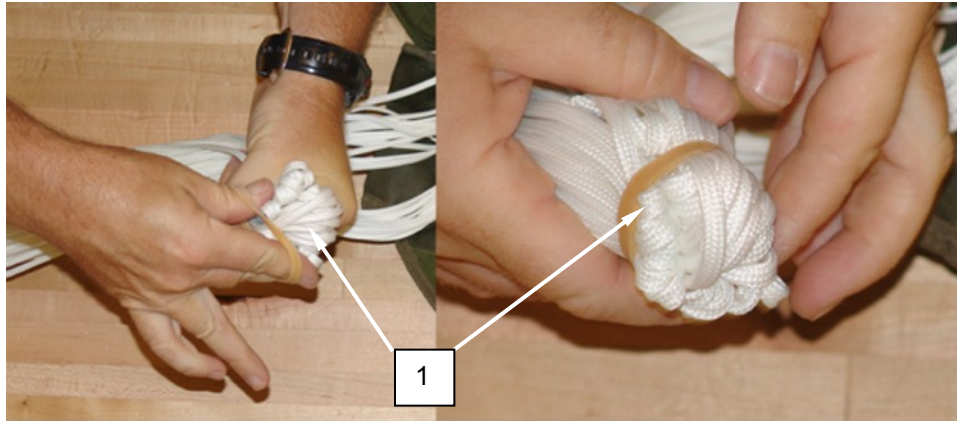


Figure 25. Making a Stow with Suspension Line Bight and Small Retainer Band.

- c. Place the last free stow (**figure 26, item 1**) of the skirt assist lines on top of the stowed lines in the center of the pack tray.

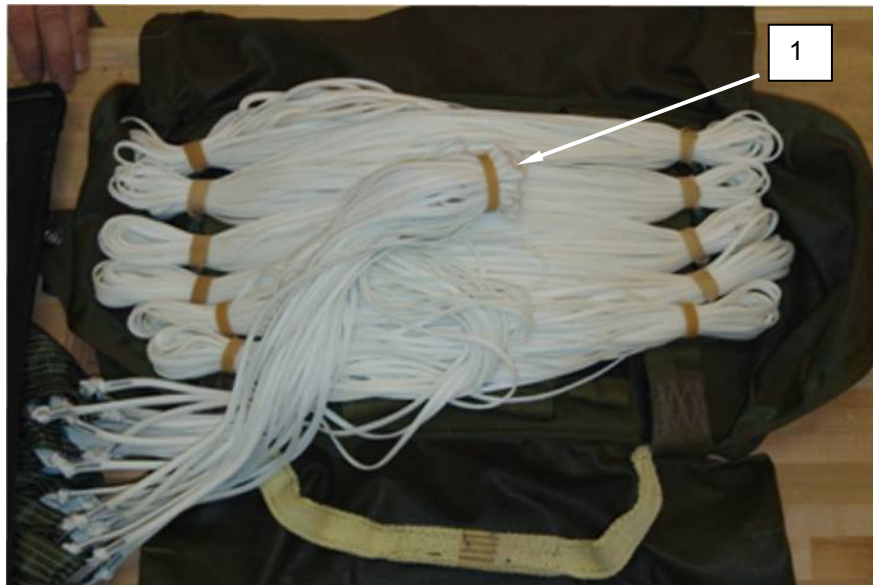


Figure 26. Placing Last Free Stow on top of Stowed Lines.

- d. Rigger check number 4.

13. Remove the apex hookup lanyard.

WARNING



Failure to make the apex tie may result in a malfunction causing serious injury or death.

a. Remove the packing loop (**figure 27, item 1**).

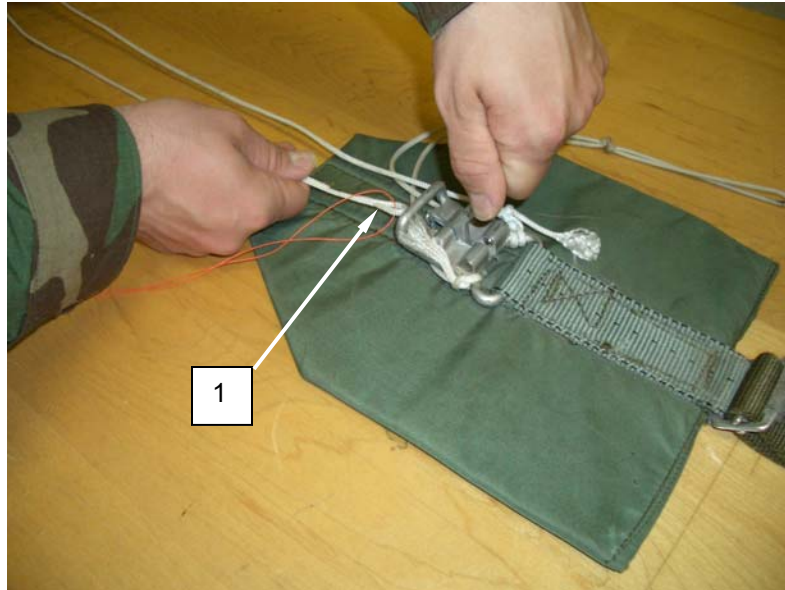


Figure 27. Removing the Packing Loop.

- b. Carefully pull the hookup lanyard (**figure 28, item 1**) through the apex loops (**figure 28, item 2**) so that the Ticket 8/4 Cotton Thread (**figure 28, item 3**) is laced through all of the apex loops.

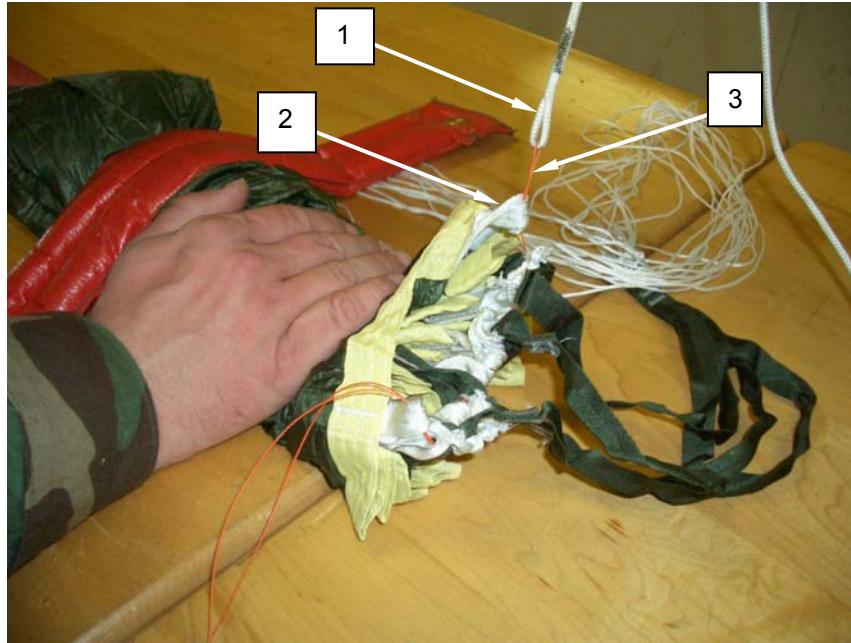


Figure 28. Pulling the Hookup Lanyard through the Apex Loops.

- c. Tightly tie the two ends of the Ticket 8/4 Cotton Thread (**figure 29, item 1**) with a surgeon's knot and a locking knot.

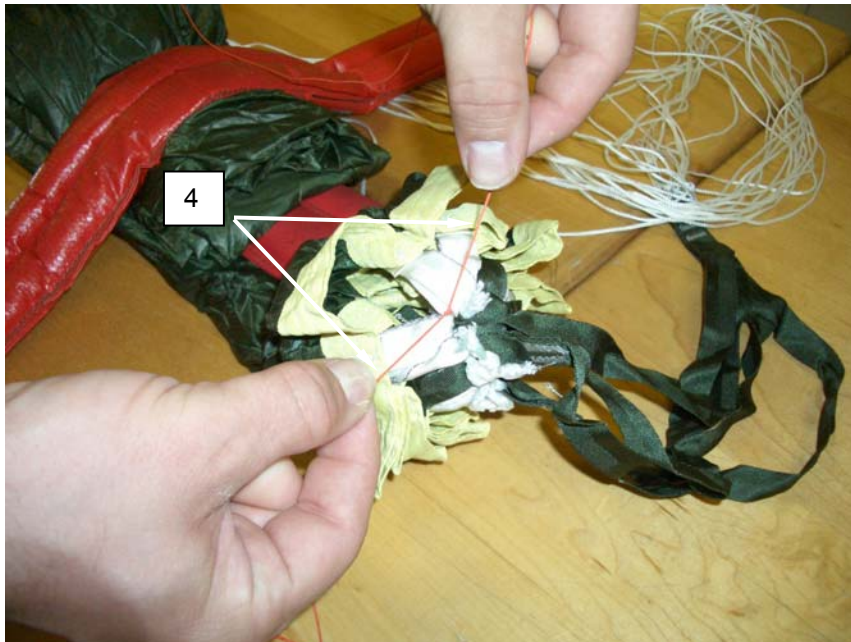


Figure 29. Tying Off Apex Loops.

- d. Trim the ends to within 1-inch.

14. Rigger check number 5.

Fold the Canopy into the Container**NOTE**

All folds should be even with the upper end of the pack tray. This forms a wedge shape to the top of the container, fitting the pack tray shape.

NOTE

First fold has a tendency to push up the canopy. Dress the canopy in the pack tray to counter this.

1. Place the canopy (**figure 30, item 1**) into the pack tray (**figure 30, item 2**) so that the lower lateral band is flush with the right side of the pack tray.



Figure 30. Placing Canopy into Pack Tray.

2. Make one S-fold (**figure 31, item 1**) the width of the reserve pack tray until the lateral seam (**figure 31, item 2**) adjacent to the bottom of the meshed vents is centered.

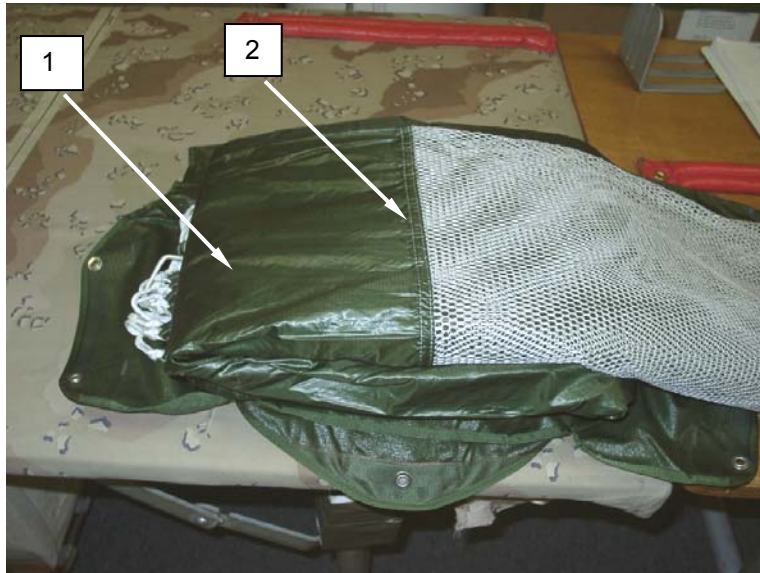


Figure 31. Making First S-fold.

3. Make a second S-fold (**figure 32, item 1**) the width of the reserve pack tray until the lateral seam (**figure 32, item 2**) adjacent to the top of the meshed vents is even with the left of the pack tray.

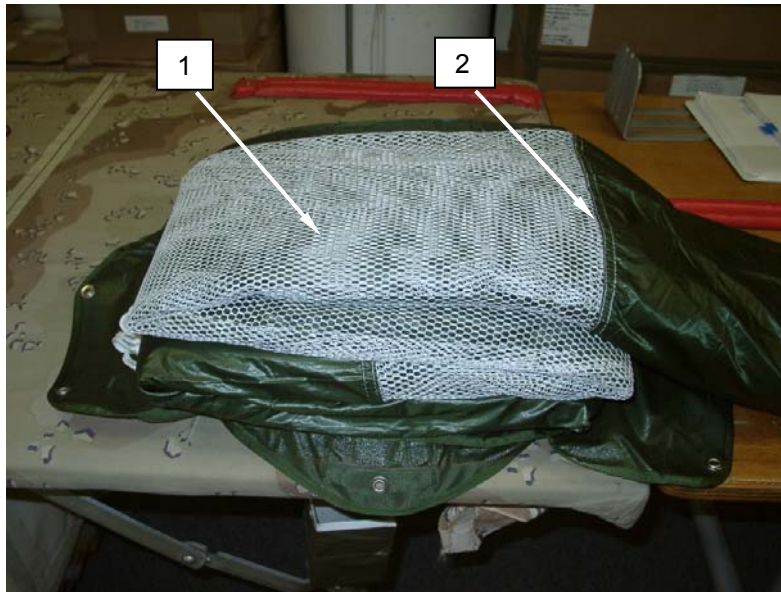


Figure 32. Making Second S-fold.

4. Make two small intermediate S-folds (**figure 33, item 1**) on the left side approximately 4 inches wide.



Figure 33. Making Two Intermediate S-folds.

5. Place the compressed ejector spring (**figure 34, item 1**) in the center of the folded canopy (**figure 34, item 2**) with the ejector spring rod (**figure 34, item 3**) exiting the container from the upper right.

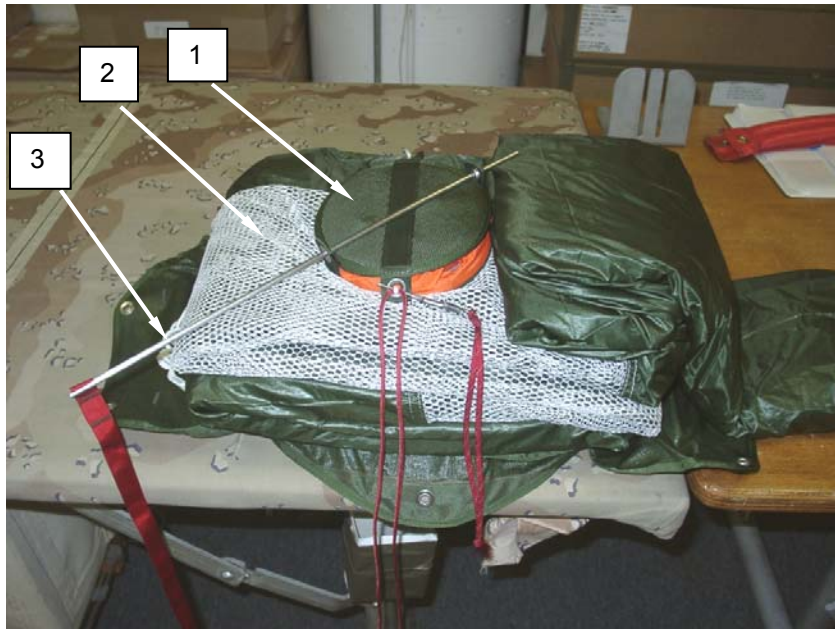


Figure 34. Placing Compressed Ejector Spring on Folded Canopy.

6. Ensure pull up cords (**figure 35, item 1**) are aligned with closing flap grommets (**figure 35, item 2**) positioned on each side of the pack tray.
7. Make 1 fold (**figure 35, item 3**) over the ejector spring. The right side of the fold should extend past the other folds approximately 6 inches.
8. Fold under 4 inches under the top fold to form a bridge over the top of the ejector spring.



Figure 35. Forming a Bridge Over Top of Ejector Spring.

9. The only remaining canopy (**figure 36, item 1**) to be folded should be the scoop and extractor.
10. S-fold the remaining canopy (**figure 36, item 1**) neatly and evenly ensuring the folds are directly over the ejector spring. The final fold should finish with the apex of the canopy laying to left as viewed by the Rigger. This ensures that the folds are the proper length to correctly complete the packing and closure of the T-11R.



Figure 36. S-folding Remaining Canopy.

11. Place a packing weight on top of the canopy (**figure 37, item 1**).

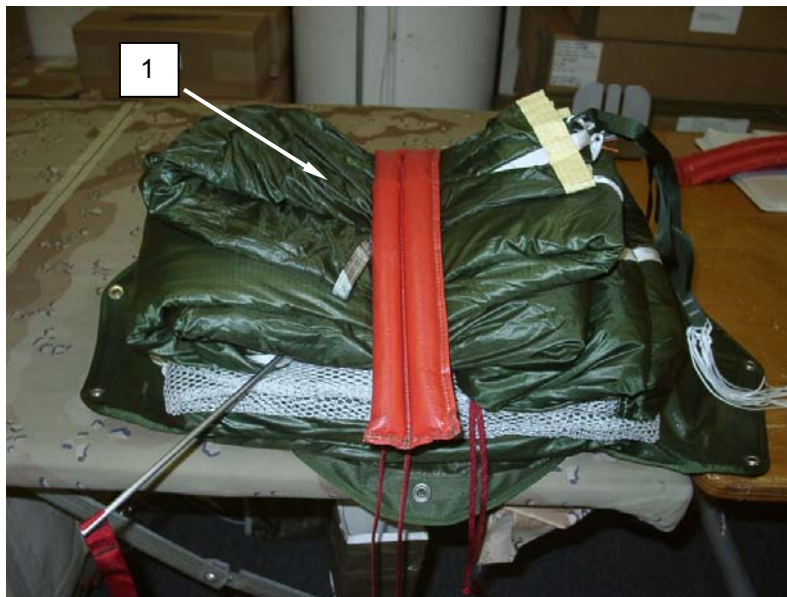


Figure 37. Placing Packing Weight On Top of Canopy.

Fold the Extractor

1. With the apex of the canopy attached to the table, carry out a line check by identifying the top or bottom line group (**figure 38, item 1**) and running it up to the canopy.

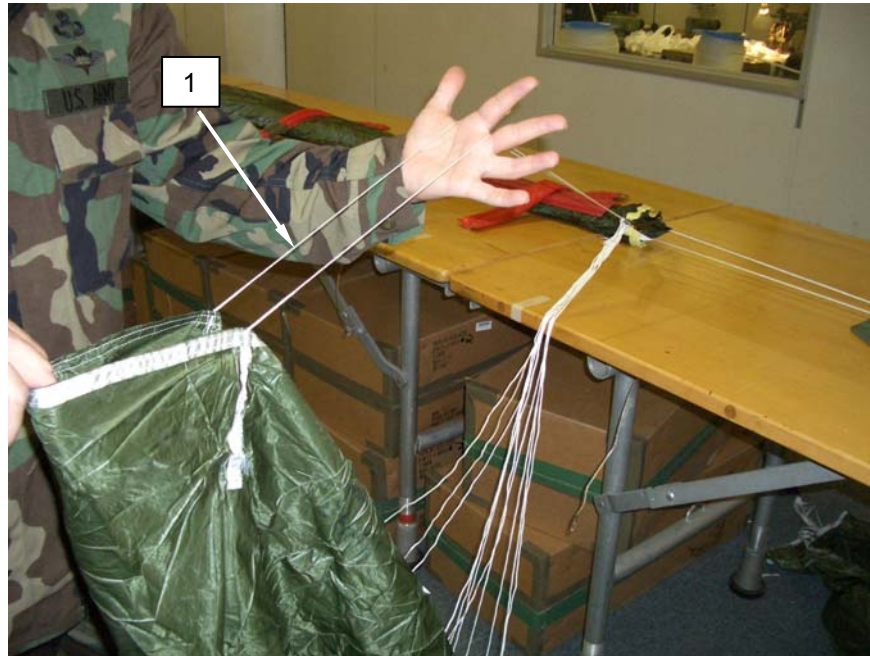


Figure 38. Carrying Out Line Check.

2. Apply hand tension to the lines and canopy.
3. Fold the extractor (**figure 39, item 1**) keeping the attachment lines (**figure 39, item 2**) centered with six even folds on each side.

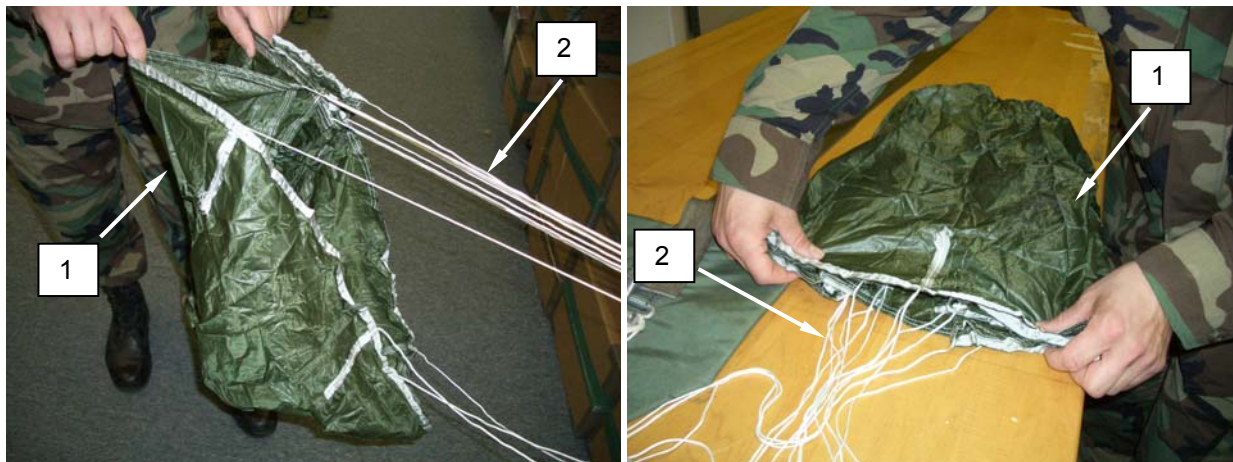


Figure 39. Folding the Extractor.

4. Place extractor (**figure 40, item 1**) onto packing table and fold each side into the center, folding the canopy in thirds.

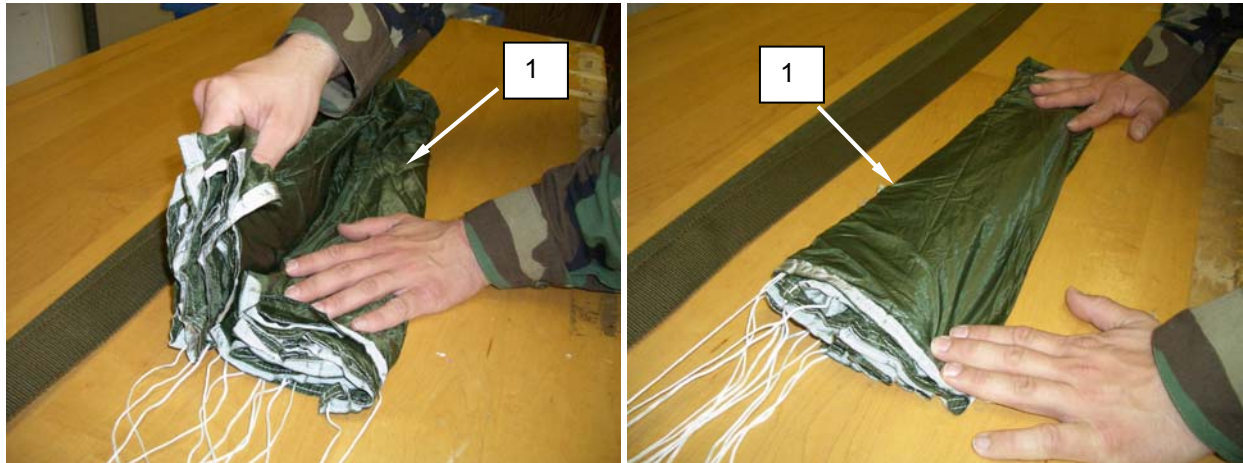


Figure 40. Folding the Extractor Canopy into Thirds.

5. S-fold the extractor (**figure 41, item 1**) in thirds.



Figure 41. S-folding Extractor.

6. Place the extractor (**figure 42, item 1**) on top of the apex area under the packing weight (**figure 42, item 2**).

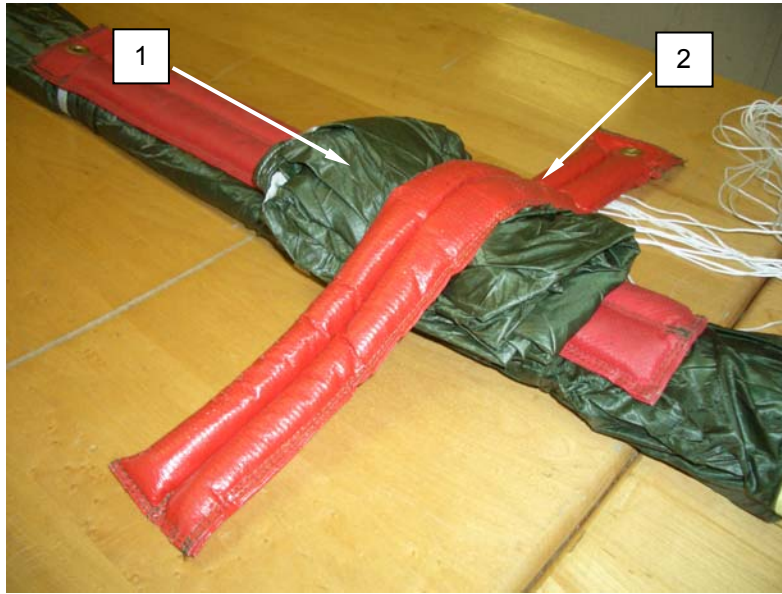


Figure 42. Placing Extractor on Top of Apex Area.

7. S-fold the extractor attachment lines (**figure 43, item 1**) and place the folded lines neatly on top of the apes.



Figure 43. S-folding Extractor Attachment Lines.

8. Ensure extractor (**figure 44, item 1**) is centered on top of folded canopy.



Figure 44. Centering Extractor on Top of Folded Canopy.

9. Rigger check number 6.

Close the Pack Tray**WARNING**

Utilizing the tensioning device when closing the container is mandatory. Failure to use the tensioning device can distort the folds in the canopy causing a malfunction, which may result in serious injury or death.

1. Place extractor cap (**figure 45, item 1**) over the extractor (**figure 45, item 2**).

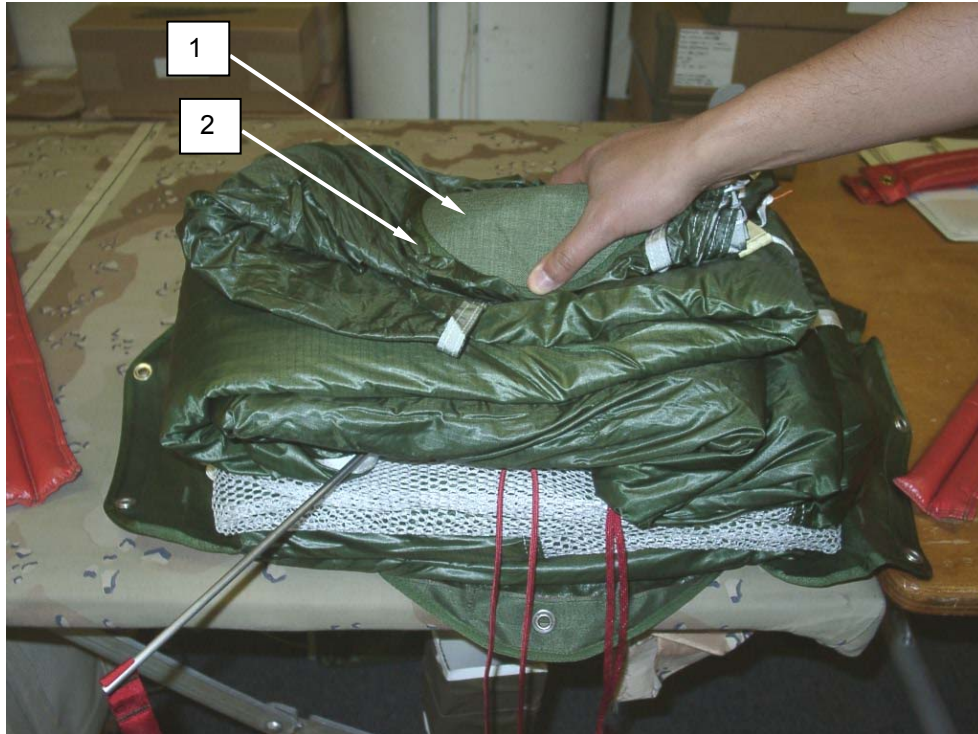


Figure 45. Placing the Extractor Cap over Extractor.

2. Place the upper pull up cord (**figure 46, item 1**) through the lower left grommet (**figure 46, item 2**) of the right side flap (rigger view) (**figure 46, item 3**) then through the lower right grommet on the right side flap.

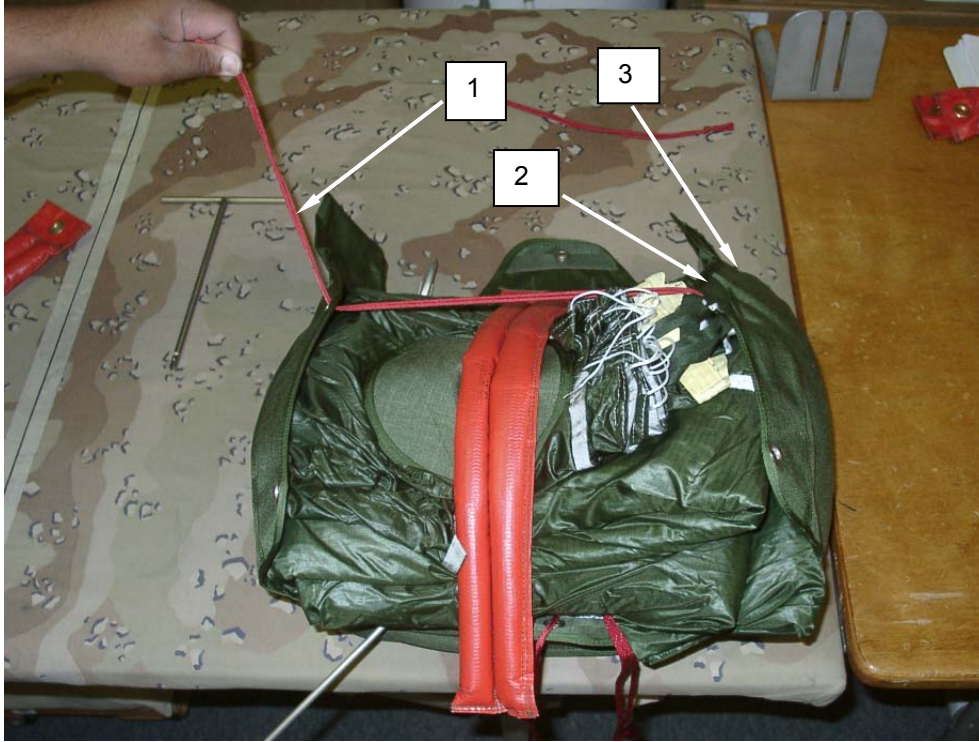


Figure 46. Placing Lower Pull Up Cord Through Lower Grommet.

3. Pull up on the pull up cord (**figure 47, item 1**) until the closing loop is exposed and insert temporary pin. The extractor cap (**figure 47, item 2**) should be centered over the extractor at this point.



Figure 47. Inserting Temporary Pin.

4. Place the upper pull up cord (**figure 48, item 1**) through the upper left grommet on the left flap (rigger view) (**figure 48, item 2**), then through the upper right grommet on the right flap (**figure 48, item 3**). Apply even tension utilizing the T-bar (**figure 48, item 4**) until the closing loop is exposed and insert temporary pin (**figure 48, item 5**).

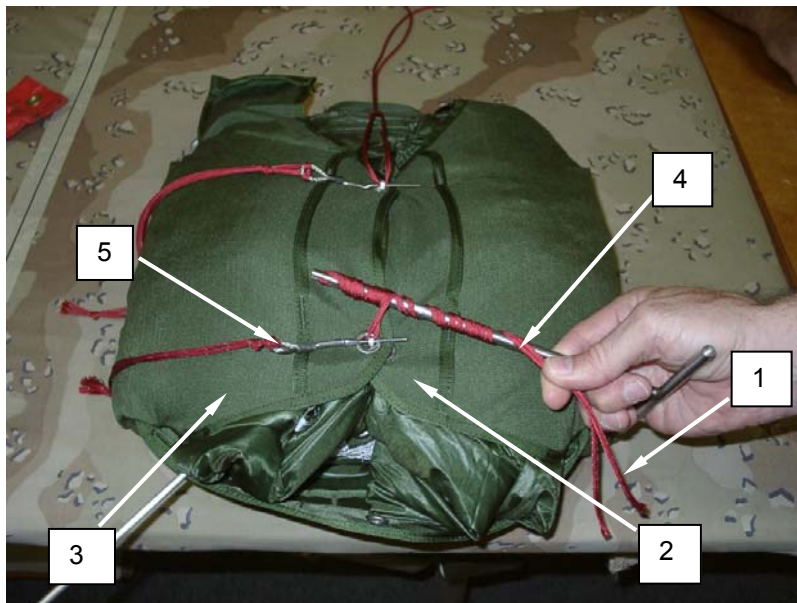


Figure 48. Exposing Closing Loops and Inserting Temporary Pin.

5. Rigger check number 7.

6. Remove the ejector spring rod.
7. Stand pack tray on end with connector snaps facing up.
8. Tuck the left and right sides into the pack tray (**figure 49, item 1**) between suspension lines and risers.



Figure 49. Tucking Left and Right Sides into Pack Tray.

9. Lay the pack tray (**figure 50, item 1**) down.
10. Place the lower pull up cord (**figure 50, item 2**) through the lower flap grommet (rigger view) (**figure 50, item 3**). Use the T-bar to close then insert temporary pin (**figure 50, item 4**).

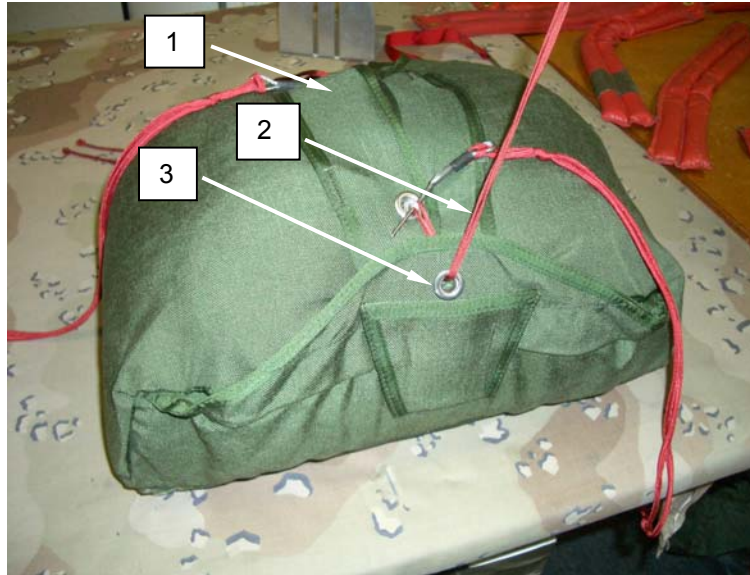


Figure 50. Using T-bar To Close Pack Tray and Inserting Temporary Pin.

11. Rotate the pack tray (**figure 51, item 1**) 180°.
12. Place the upper pull up cord (**figure 51, item 2**) through the upper flap grommet (rigger view) (**figure 51, item 3**). Utilizing the T-bar (**figure 51, item 4**), apply pressure until the closing loop is exposed and insert temporary pin (**figure 51, item 5**).

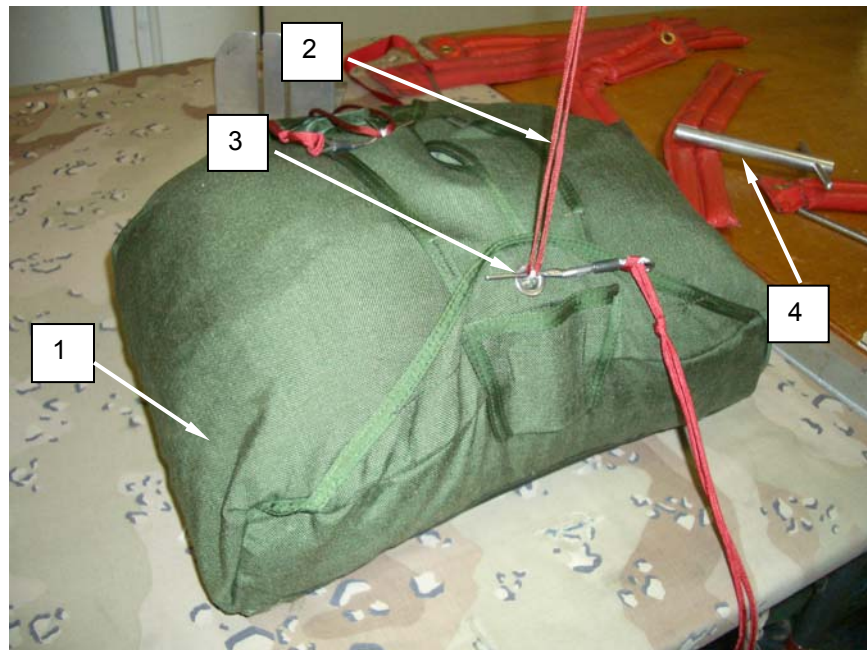


Figure 51. Inserting Second Temporary Pin.

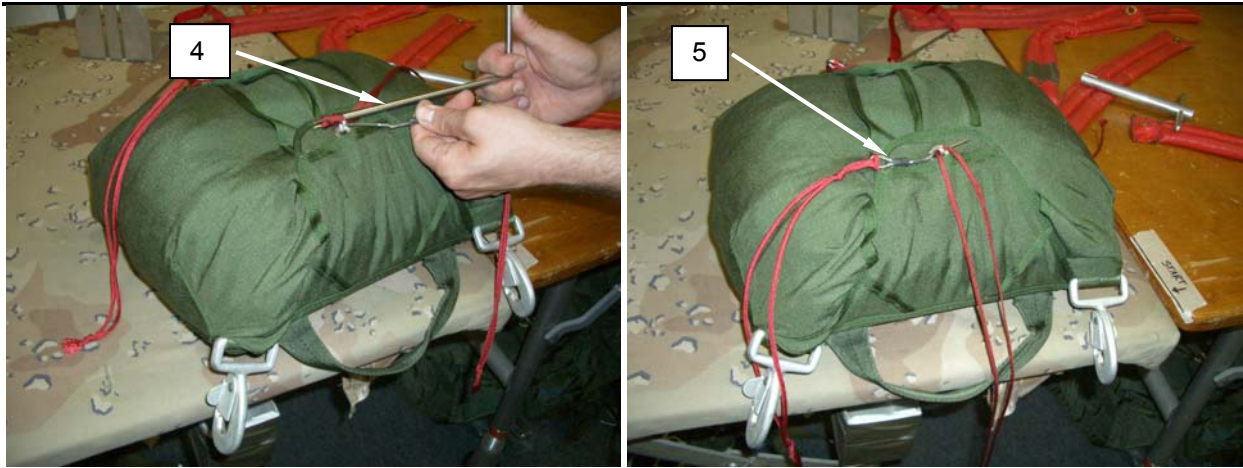


Figure 51. Inserting Second Temporary Pin (continued).

13. Dress the pack tray. Once dressed, rotate the pack tray 180° so that the carrying handle is facing away.
14. Position the ripcord handle (**figure 52, item 1**) with the arrow pointing to the carrying handle (**figure 52, item 2**).
15. Insert the right tuck tab (**figure 52, item 3**) into the right tuck tab pocket.



Figure 52. Inserting Right Tuck Tab Into Right Tuck Tab Pocket.

16. Pull up on the lower pull up cord (**figure 53, item 1**), remove temporary pin, and insert lower-curved pin (**figure 53, item 2**) counter-clockwise through closing loop.

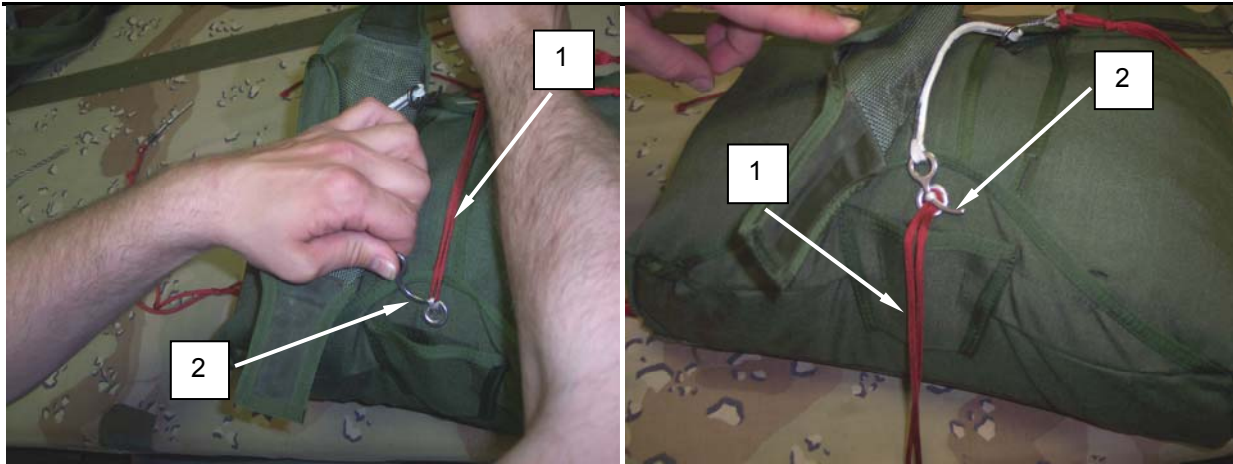


Figure 53. Inserting Lower-Curved Pin Through Closing Loop.

- 17. Rotate pack tray (**figure 54, item 1**) 180°.
- 18. Pull up on upper pull up cord (**figure 54, item 2**), remove temporary pin and insert upper curved pin (**figure 54, item 3**) counter-clockwise through closing loop.

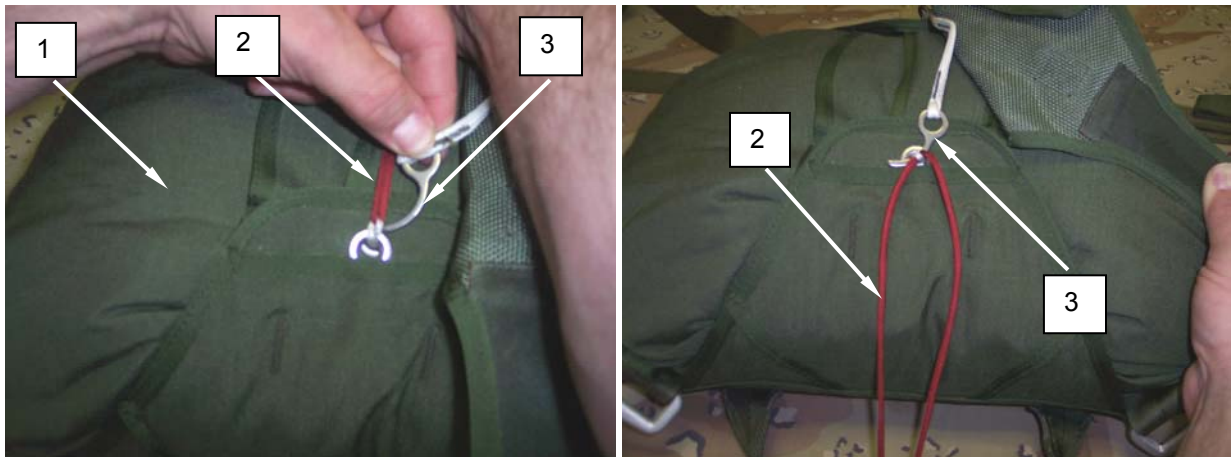


Figure 54. Inserting Top Curved Pin Through Closing Loop.

- 19. Rigger check number 8.

WARNING

All packing aids must be accounted for after completion of packing. Failure to account for all packing aids could result in a malfunction causing serious injury or death.

20. Rotate pack tray 180° and insert right tuck tab (**figure 55, item 1**) into right tuck tab pocket (**figure 55, item 2**).

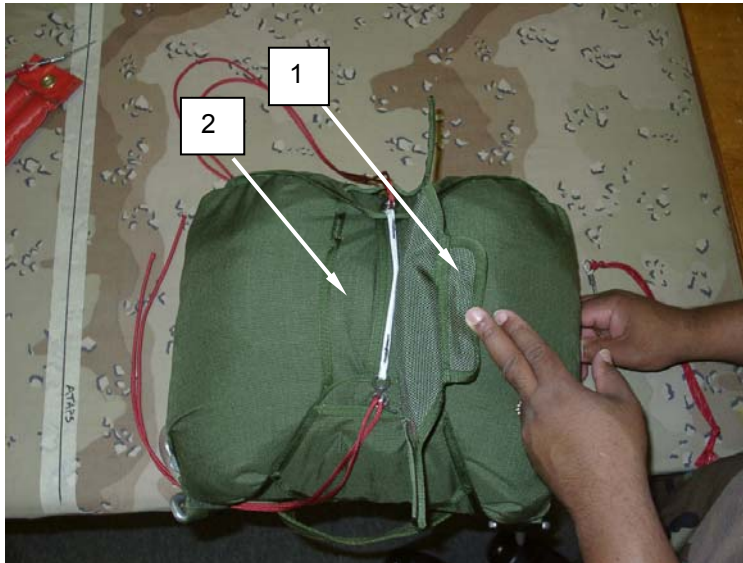


Figure 55. Inserting Left Tuck Tab Into Left Tuck Tab Pocket.

21. Remove pull up cords (**figure 56, item 1**) by routing cords under curved pins and slowly pulling them under the pin, thereby removing the pull-up cords.

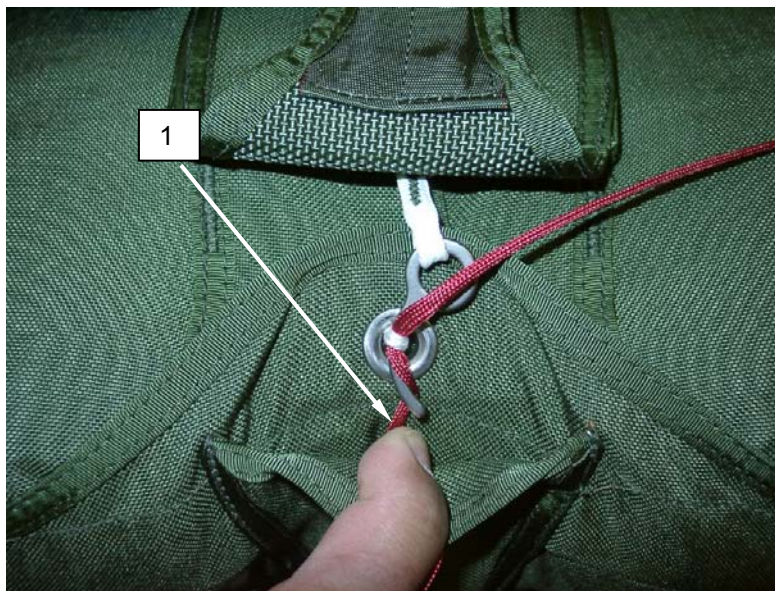


Figure 56. Removing the Pull-up Cords.

22. Dress the top and bottom tuck tabs in the top/bottom tuck tab flaps.

23. Dress the container with packing paddle and inspect.

CONDUCT TEST

Conduct a 14-pound Minimum Ripcord Pull Test as Follows:

1. Insert temporary closing pins into the two pack closing loops so that the reserve does not deploy when the handle is pulled.

NOTE

Using temporary closing pins does not have an adverse affect on the outcome/results of the 14- pound pull test, this mainly serves as a tool to ensure the ripcord handle does not pull out at the 14-pound test.

2. Place the handle cuff (refer to WP 0112 00) over the T-11 Reserve ripcord handle so that the grommets are below the handle and centered.
3. While standing at the pack frame with the T-11 Reserve positioned for the pull test, carefully attach a 14-pound weight to the ripcord handle cuff and very slowly remove your hand from under the weight to allow the weight to be slowly transferred to the ripcord grip. Do not release the weight suddenly or let it drop since this will invalidate the test. The weight must not completely withdraw the ripcord pins from the soft loops and the ripcord handle completely from the pack tray.
4. If the 14-pound weight causes complete withdrawal of the ripcord pins and the ripcord handle, conduct a retest. The retest must be performed 5 times. Conduct a retest by repacking the T-11 Reserve IAW WP 0014 00 and repeat step 1.
5. Upon completion of the retest (5 iterations), if the 14-pound weight does not withdraw the ripcord pins and ripcord handle from the T-11 Reserve each of the 5 times, it passes the 14-pound ripcord pull test.
6. If during any one of the 5-retest iterations the 14-pound weight causes complete withdrawal of the ripcord pins and the ripcord handle, then remove the T-11 Reserve assembly, replacement pack tray or ripcord handle (which ever is applicable), from service and follow instructions in step 6 below.
7. If the pack tray and ripcord handle are new (part of a T-11 Reserve assembly), or a new replacement pack tray or handle, submit an Standard Form (SF) 368, Product Quality Deficiency Report (PQDR) for the new items.

PARACHUTE LOG RECORD

Beginning with the initial packing of a parachute, and each time a parachute is repacked, the log record must be completed, as follows:

1. Remove the log record (DA Form 3912, AFTO 391) from the parachute inspection data pocket (log record pocket) located on the riser.

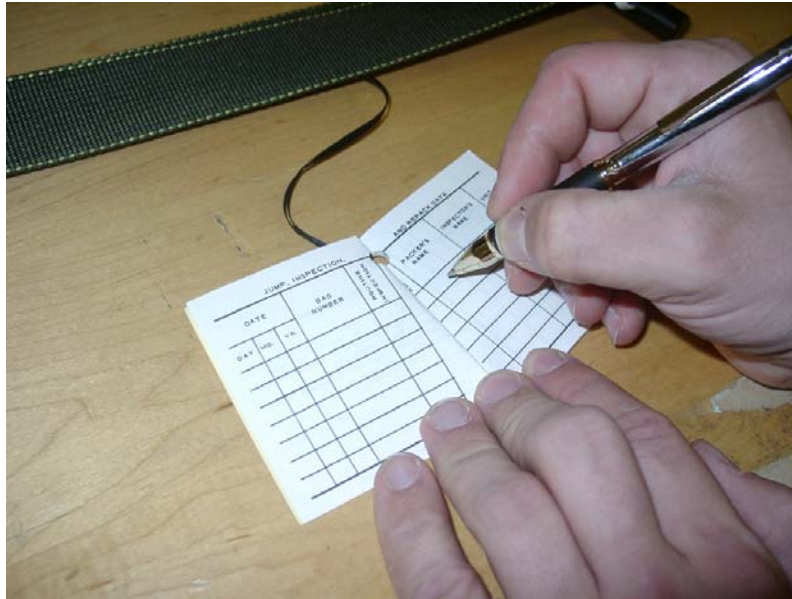


Figure 57. Completing Log Record.

2. Make entries on the JUMP, INSPECTION AND REPACK DATA page, as follows:
 - a. Date. Enter the day, month and year of each packing action.
 - b. Bag Number. Pass/Fail 14 lb. Ripcord test.
 - c. Routine inspection. No entry required.
 - d. Jumps or dropped. No entry required.
 - e. Repack. For initial packing, enter IN; thereafter, enter a checkmark in the column each time the parachute is packed.
 - f. Packer's name. The packer performing the packing will sign this entry.
 - g. Inspector's name. The inspector who has performed the pack-in-process inspection will sign this entry.
 - h. Unit. Enter the unit designation to which the packer and/or inspector is assigned.

Returned the log record to the log record pocket upon completion of the entries. Packing is now completed.

3. **Rigger check number 9.**

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
GENERAL PARACHUTE REPAIR

INITIAL SETUP:**Tools**

Specified in paragraph applicable to the item being repaired.

Personnel Required

92R (10) Parachute Rigger
 92R (20) Parachute Rigger

Materials/Parts

Specified in paragraph applicable to the item being repaired.

Equipment Condition

Parachute unpacked and clean.
 Canopy with defects recorded.

REPAIR**General Repair Procedures****CAUTION**

Stitch removal requirements will vary according to the type of item being repaired. Due to the unique type of stitch formations found on the MC-6, use of a stitch removal tool is mandated when removing Bartack, Box X, or Double Box X stitch formations.

NOTE

Sewing requirements will vary according to the type of item being repaired and the type of repair being made. The type of sewing machine, type of thread, the stitch range, and the stitch pattern (if applicable) required to accomplish a sewing procedure will be specified in the paragraph applicable to the item being repaired. All original stitching that is cut during the performance of a sewing procedure will be removed from the applicable item. Immediately after the accomplishment of a machine sewing procedure, trim thread ends to a point as close as possible to the material that has been sewn.

NOTE

Repair and replacement of parachute components is performed in accordance with the repair instruction in this section and in specific paragraphs applicable to the item being repaired. Fabrication is a means of replacing an air delivery item component that is damaged beyond repair and not an issue item. Though the act of fabrication is a replacement-type action, the function is actually a method of repairing an end item. Since most fabrication pertains to components that are peculiar to parachutes, the fabrication of components that are most general in nature will be detailed in the following paragraphs.

Basting and Temporary Tacking

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

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

REPAIR - continued

2. Basting and temporary tacking will be performed using a single strand of size A, nylon thread, or Ticket No. 24/4 cotton thread.
3. When basting, do not tie knots at any point in the thread length. Also, the sewing should be made with two stitches per inch.
4. Immediately upon completion of a repair, remove previously made basting or temporary tacking.

Stitching And Restitching

Perform stitching and restitching as follows, refer to Tables 1 and 2.

1. Parachute canopy assemblies. The stitching and restitching made on parachute canopies should be accomplished with thread that is contrasting in color to the fabric being restitched. If contrasting color thread is not available, thread of matching color may be used, providing all other specifications are met. Straight stitching and restitching on parachute canopy assemblies should be locked by at least 2-inches at each end of a stitch row, when possible. Zig-Zag stitching does not require locking; however, zig-zag restitching should extend at least 1/4-inch into undamaged stitching at each end, when possible. When restitching parachute canopy assemblies, stitch directly over the original stitching and follow the original stitch pattern as closely as possible.

Table 1. Recommended Sewing Machine Code Symbols.

CODE SYMBOL	SEWING MACHINE
LD	SEWING MACHINE, INDUSTRIAL: General Sewing; 301 Stitch; Light Duty; NSN 350-01-177-8590.
HD ZZ	SEWING MACHINE, INDUSTRIAL: Zig-Zag; 308 Stitch; Heavy Duty; NSN 3530-01-181-1421.
MD ZZ	SEWING MACHINE, INDUSTRIAL: Zig-Zag; 308 Stitch; Medium Duty; NSN 3530-01-181-1420.
HD	SEWING MACHINE, INDUSTRIAL: General Sewing; 301 Stitch; Heavy Duty; NSN 3530-01-177-8588.
MD	SEWING MACHINE, INDUSTRIAL: General Sewing; 301 Stitch; Medium Duty; NSN 3530-01-177-8591.
DN	SEWING MACHINE, INDUSTRIAL: Darning; Lock Stitch; NSN 3530-01-177-8589.
LHD	SEWING MACHINE, INDUSTRIAL: 301 Stitch; Light-Heavy Duty; NSN 3530-01-186-3079.
ND	SEWING MACHINE, INDUSTRIAL: 301 Stitch; Double-Needle; NSN 3530-00-892-4636.
BOX X	SEWING MACHINE, AUTOMATIC: Box-X; (Local purchase, Herbert Jaffe/JF PN HJ1615X1X56, Model Number 3334)
BT	SEWING MACHINE, INDUSTRIAL: Bartack; 42 stitch (Local purchase, Recommended PN HJ1466-1X42)
LD BT	SEWING MACHINE, INDUSTRIAL: Automatic Bartack; 28 stitch; 5/8" x 3/16"; Light Duty

REPAIR - continued

Table 2. Stitching and Restitching Specifications.

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	THREAD SIZE
Main Canopy	LD BT/ Box X/LD/ND	42/7 to 11	E
Main Canopy Vent Loop	LHD	5to 8	5
Main Canopy Vent Line	MD ZZ	7 to 11	E
Main Canopy Vent Loop Centerlines	MD ZZ	7 to 11	E
Main Canopy Vent Band	LD or MD	7 to 11	E
Main Canopy Cross Seam	LD/MD/ND	7 to 11	E
Main Canopy Radial Seam	LD or ND	7 to 11	E
Main Canopy Reinforcing Tape	LD or ND	7 to 11	E
Main Canopy Attaching Loops	LD BT	24 to 32	E
Main Canopy Gore Sections	LD/DN/MD ZZ/ LD BT	7 to 11 DARN 24 to 32	E
Main Canopy Forward Extended Gore Assembly	LD/ND/LD BT	7 to 11 24 to 32	E
Main Canopy Aft Extended Gore Assembly	LD/ND/LD BT	7 to 11 24 to 32	E
Main Canopy Mesh Panel Assembly	LD/ND/MD ZZ	7 to 11 24 to 32	E
Main Canopy Lower Control Line	LD BT	24 to 32	E
Main Canopy Left/Right Control Line Assembly	LD BT	24 to 32	E
Main Canopy Left/Right Control Line Assembly	LD BT	24 to 32	E
Main Control Line Limiter Loop	LD BT	24 to 32	E
Main Canopy Suspension Line Attaching Loop	LD ZZ/LD BT	7 to 11 24 to 32	E
Main Canopy Anti-Inversion Net	MD ZZ/HD ZZ	24 to 32	E
Main Canopy Skirt	LD	7 to 11	E
Main Risers	MD/HD ZZ	7 to 11	E
Main Riser Log Book Pocket	MD	7 to 11	E
Main Riser Guide Channels	MD	7 to 11	E
Main Pack Tray	LD/MD/HD ZZ	7 to 11	E
Main Pack Tray Closing Pin Cover	HD ZZ	7 to 11	E
Main Pack Tray Binding Tape	LD	7 to 11	E
Main Pack Tray Stiffeners	MD	7 to 11	E
Harness Assembly	LD/MD/HD/ HD ZZ/LD BT	6 to 9 7 to 11	5/E
Harness Assembly Diagonal Guide	LD	7 to 11	E
Harness Assembly Hip Pad	LD	7 to 11	E

Table 2. Stitching and Restitching Specifications.

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	THREAD SIZE
Harness Assembly Left Upper Main Lift Web	LD/MD/HD	4 to 6 6 to 9 7 to 11	E/5
Harness Assembly Right Upper Main Lift Web	LD/MD/HD	4 to 6 6 to 9 7 to 11	E/5
Harness Assembly Saddle	MD/HD	4 to 6 6 to 9	E/5
Harness Assembly Shoulder Pad	MD/HD/HD ZZ/ LD BT	28 6 to 9 7 to 11	E/5
Main Deployment Bag	LD or ND	7 to 11	E
Main Deployment Bag Suspension Line Stow Loops	LD BT	42	E
Main Deployment Bag Locking Stows	LHD	4 to 6	3
Main Deployment Bag Tie Down Loops	LD	7 to 11	E
Reserve Canopy	MD ZZ/LD/ND/ LD BT	28 7 to 11	E
Reserve Canopy Suspension Line	LD BT	42	E
Reserve Canopy Plain Gore Sections	LD/LD BT	28 7 to 11	E
Reserve Canopy Gore Section, 1, 2 and 3	LD	7 to 11	E
Reserve Canopy Gore Section, 4 and 5	LD	7 to 11	E
Reserve Canopy Gore Section #6 Mesh Panel	LD/ND/MD ZZ	7 to 11	E
Reserve Canopy Scoop	LD or ND	7 to 11	E
Reserve Canopy Extractor Attachment	LD or ND	7 to 11	E
Reserve Canopy Apex Vent Bridle Loop	LD BT	42	E
Reserve Canopy Suspension Line Attaching Loop	LD BT	42 7 to 10	E
Reserve Risers	MD	7 to 11	E
Reserve Pack Tray	LD/LD BT/DN	42 7 to 10	E
Reserve Pack Tray Edge Binding	LD	42 7 to 11	E
Reserve Pack Tray Riser Stow Loops	LD/LD BT	7 to 11	E
Reserve Pack Tray Waistband Loops	LD BT	42 7 to 11	E
Reserve Pack Tray Stiffeners	MD/LD BT	42 7 to 11	E

REPAIR - continued

2. Other parachute items. Stitching and restitching on other parachute items constructed from cloth, canvas, and webbing should be accomplished with thread that matches the color of the original stitching, when possible. All straight stitching should be locked by backstitching at least 1/2-inch. Restitching should be locked by over stitching each end of the stitch formation by 1/2-inch. Zig-zag stitching does not require locking; however, zig-zag restitching should extend at least 1/4-inch into undamaged stitching at each end, when possible. Restitching should be made directly over the original stitching; follow the original stitch pattern as closely as possible.

Darning

(Refer to Tables 1 and 2). Darning is a sewing procedure used to repair limited size holes, rips, and tears. A darning repair may be made either by hand or by sewing machine, depending upon the method preferred and the availability of equipment. However, a darning machine should be used to darn small holes and tears where fabric is missing. A darning repair will be performed using the following procedures, as appropriate:

1. Machine darning. Proceed as follows:
 - a. Using an authorized marking aid of contrasting color, mark a square around the damaged area and ensure the marking is at least 1/4-inch back from each edge of the damaged area.
 - b. Darn the damaged area by sewing the material in a back and forth manner, using size A or E nylon thread.
 - c. Turn the material and stitch back and forth across the stitching made in step b., until the hole or tear is completely darned.

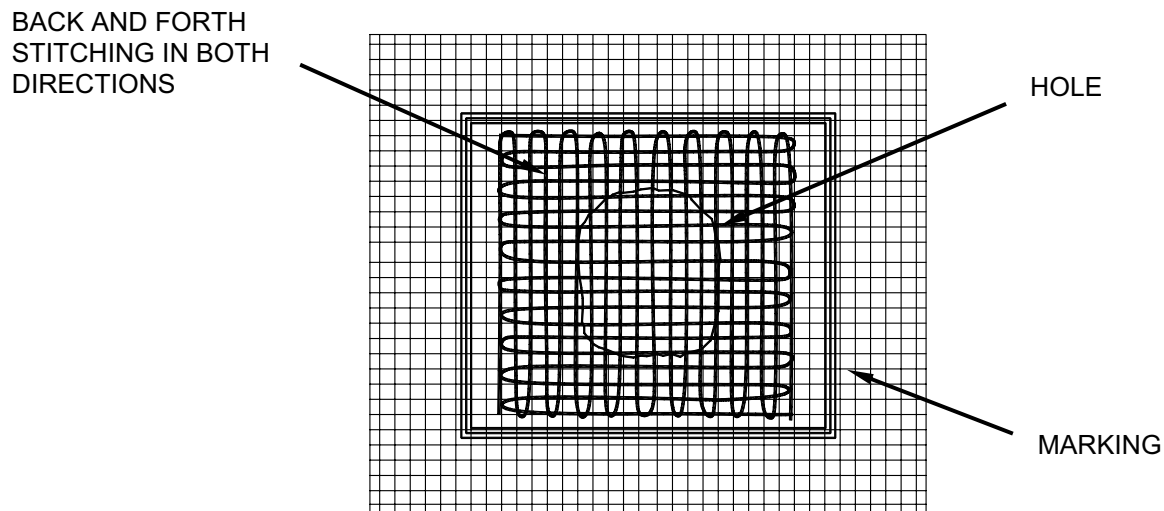


Figure 1. Machine Darning.

- d. If applicable, restencil informational data; gore number(s), or identification marks using the criteria in WP 0019 00.
2. Hand darning. When repair of a hole or tear is made by hand darning, the darn should match the original weave of the damaged material as closely as possible. Hand darning will be performed as follows:
 - a. Using an authorized marking aid of contrasting color, mark a square around the damaged area and ensure the marking is at least 1/4-inch back from each edge of the damaged area.

REPAIR - continued

- b. Using a darning needle and a length of size A or E nylon thread, begin darning at one corner of the marked area. Working parallel with the marking, pass the needle and thread back and forth through the material until the opposite diagonal corner of the marked area is reached.
- c. Turn the material and weave the needle and thread back and forth across the stitching made in step b. until the hole is completely darned.

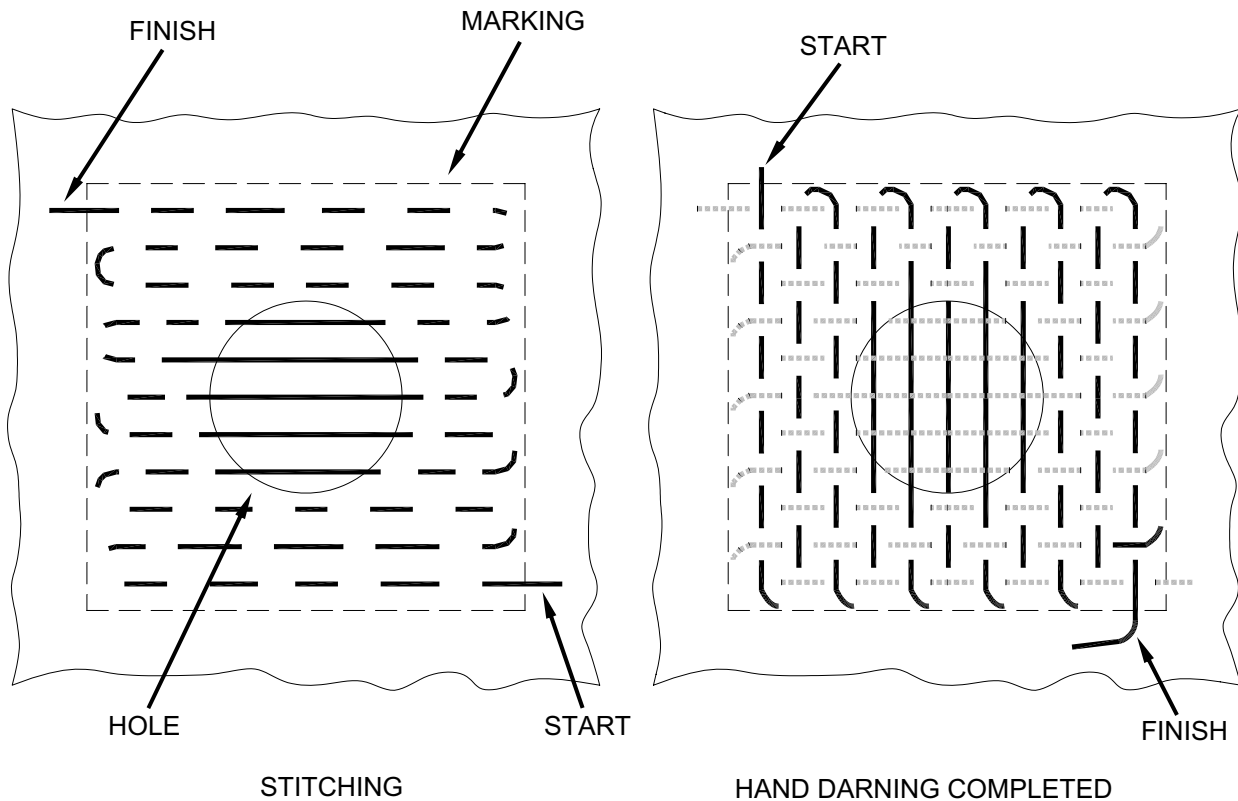


Figure 2. Hand Darning.

- d. If applicable, restencil informational data or identification marks as outlined in WP 0019 00.

ZIG-ZAG SEWING

(Refer to Tables 1 and 2). Components of the MC-6, except the parachute canopy, that have sustained cut or tear damage, may be repaired by zig-zag sewing, provided the applicable damaged area does not have any material missing and the cut or tear is straight or L-shaped. Should the damaged area be irregular shaped or have material missing, the repair will be achieved by either darning or patching, as required. A zig-zag sewing repair will be accomplished using a zig-zag sewing machine, with the following procedures:

1. Set the sewing machine to the maximum stitch width.
2. Beginning at a point 1/4-inch beyond one end of the cut or tear, stitch lengthwise along the damaged area to a point 1/4-inch beyond the opposite end of the cut or tear.

REPAIR - continued

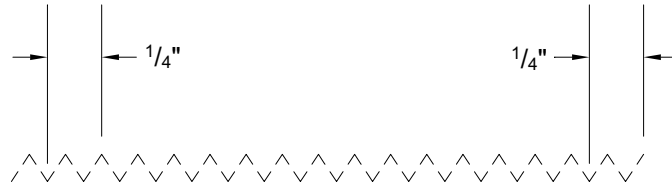


Figure 3. Straight Cut Or Tear Stitching.

3. The cited stitching procedure will also apply to an L-shaped cut or tear.

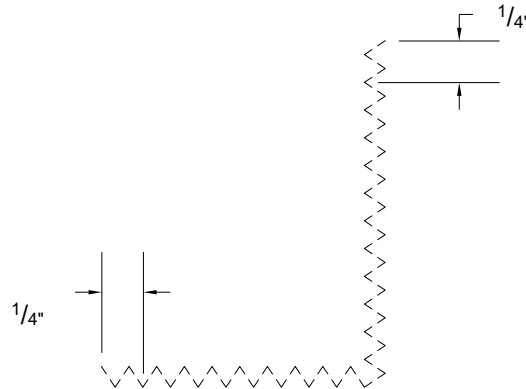


Figure 4. L-Shaped Cut Or Tear Stitching.

4. If applicable, restencil informational data or identification marks a prescribed in WP 0019 00.

PATCHING

Patching is a procedure used to repair holes that cannot be darned.

1. Parachute canopy patching limitations. The following is a list of patching limitations for the MC-6:

WARNING



The limitations prescribed for the parachute canopy patching will be stringently adhered to under all circumstances and without any deviations. Failure to do so may result in death or serious injury to personnel.

- a. A patch will not be applied to a damaged area that has been previously patched.
- b. Each canopy section, gore, has specified repair limitations. Determination should be made as to the most economical method to be used, i.e., the number of allowable patches versus a section replacement. A patch applied to a parachute canopy may extend from radial seam to radial seam.

REPAIR - continued

- c. Parachute mending cloth is authorized on the MC-6 main canopy ONLY in designated areas. Parachute mending cloth is not authorized on the T-11R canopy. Use no more than two mending cloth patches on a canopy section. Limit the size of the finished patch to 10-inches. Round the corners of the patches to 1-inch radius. Use size E nylon thread, and sew a row of 7 to 11 stitches per inch, 1/16-inch in from the outer edge of the patch. Table 3 prescribes sizes of parachute mending cloth.

Table 3. Mending Cloth Patching Specifications.

DAMAGED AREA SIZE	PATCH MINIMUM SIZE
1-inch to 1-1/2-inches	2-inches
1-1/2-inches to 2-inches	3-1/2-inches
2-inches to 3-inches	4-1/2-inches
3-inches to 5-inches	9-inches
5-inches to 7-inches	*10-inches

*Maximum size for a canopy patch is 10-inches.

- 2. Making a basic patch. A basic patch is used to repair damaged cloth when the affected area is no closer than 1-inch from a radial seam or lower lateral band. Should a damaged area be closer than 1-inch to the cited areas, a miscellaneous patch will be made as detailed in step 3. There are three methods that may be used to apply a basic patch; the procedures for performing each method are outlined in steps a. and b., as follows:

NOTE

A basic patch applied to the parachute canopy by sewing will be square or rectangular in shape. A parachute canopy basic patch, constructed from adhesive nylon parachute mending cloth, may be shaped rectangular or triangular, as required.

- a. The sewn patch. The primary method of applying a basic patch is by sewing. When using this method of patching on a parachute canopy, the patch will be applied to the inside of the canopy. The deployment bag may be patched on either the inside or the outside.

REPAIR - continued

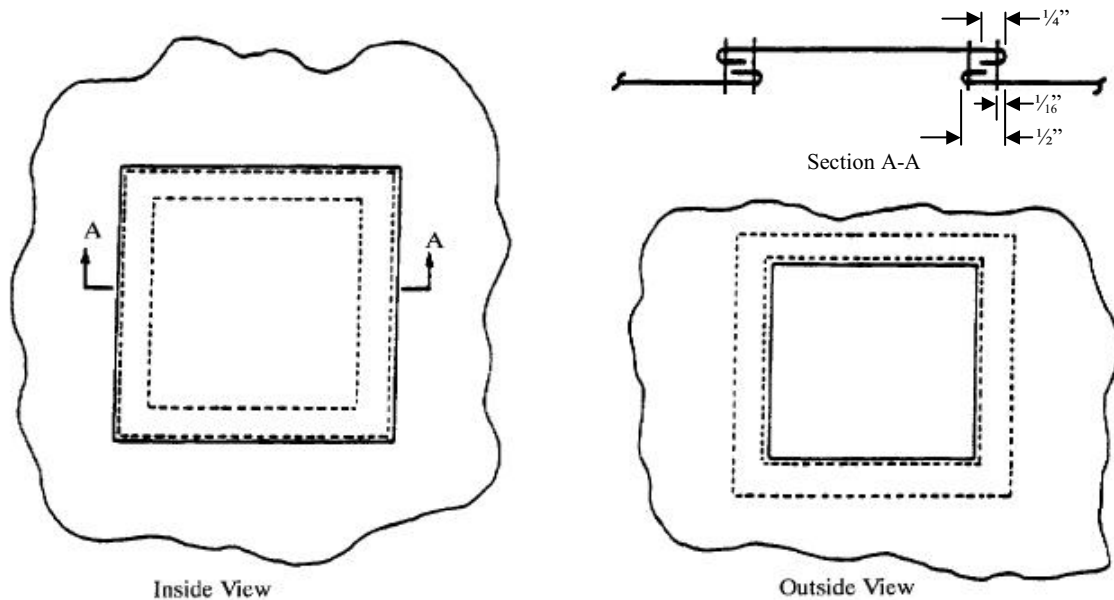


Figure 5. Sewn Patch.

Apply a sewn patch as follows:

NOTE

Use applicable details in the STITCHING AND RESTITCHING paragraph and the figure above.

- (1) Estimate the rectangular size of the damaged area.
- (2) Using the same type of material as in the original construction, mark and cut a patch that is at least 1-1/2 inches larger in all four directions, than the damage.
- (3) Working from the inside of the parachute, align the patch with the fabric weave and over the damaged area.
- (4) Choose one side of the patch and fold that edge under 1/2-inch.
- (5) Start sewing that side approximately 1-1/2 inches from the adjoining side and 1/8 inch in from the edge.
- (6) Continue sewing to just short of 1-1/2 inches from the next side. Fold the next side under 1/2-inch and sew to the corner. Repeat until all four sides have been sewn down. Be sure to overlap the stitching start by at least 1-inch.

REPAIR - continued

- (7) Working from the outside of the parachute using scissors, cut the damaged area out forming a rectangle that is approximately 1-inch from the initial patch stitch line. Be careful not to cut the patch.
 - (8) Cut the corners of the canopy cloth from the inside towards the patch corner stopping approximately 1/2-inch from the sides allowing for a 1/2-inch fold under of the canopy cloth to the patch stitch line.
 - (9) Choose one side and fold that edge under (approximately 1/2-inch) forming a straight seam from inside corner to inside corner. Note that the width of the patch seam should be consistent but can be as narrow as 3/8-inch and as wide as 1-inch.
 - (10) Sew the side from inside corner to inside corner 1/8-inch from the edge. Fold the next side under while maintaining the patch seam width. Repeat until all four sides have been sewn down. Be sure to overlap the stitching start by at least 1-inch.
- b. The parachute mending cloth patch. A second method of applying a basic patch is by use of 36-inch wide adhesive, nylon, parachute mending cloth. Patch limitations as outlined in step 1. shall be adhered to. Apply a parachute mending cloth patch as follows:

NOTE

Age life for the nylon parachute mending cloth, prior to application, is three years from the date of the adhesive coating, which is marked on each roll of mending cloth. Use no more than two mending cloth patches on a canopy section.

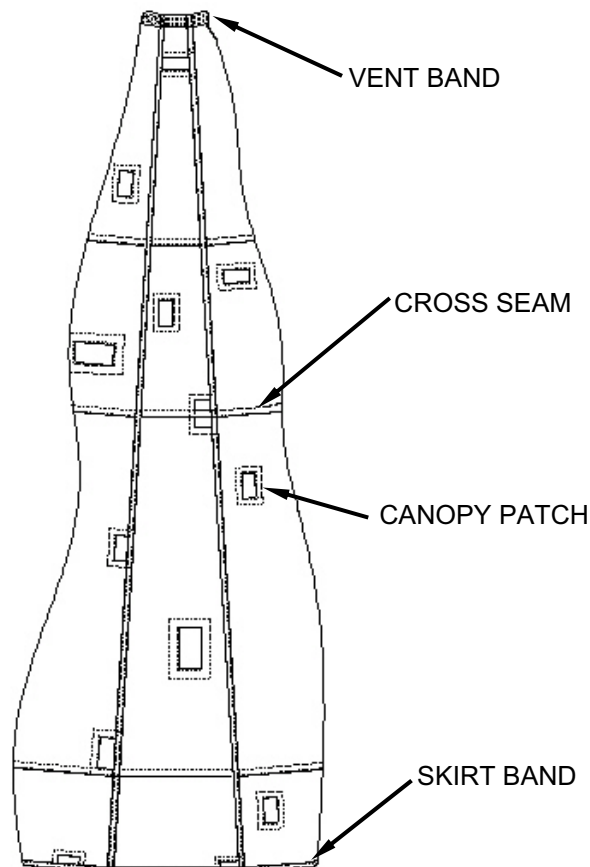


Figure 6. Parachute Mending Cloth Patch.

REPAIR - continued

- (1) Lay out the canopy with the damaged area exposed.
 - (2) To facilitate the application of the mending cloth patch, place a 1/2- by 20- by 20-inch smooth wooden board or similar smooth, hard-finished, rigid material (except paper board) under the damaged area.
 - (3) Trim the ragged, frayed, or severely burned areas of the canopy cloth to provide a smooth area for patch application.
 - (4) Using an authorized marking aid of contrasting color, mark a square, triangle, or rectangle, as applicable, around the damaged area.
 - (5) Measure and cut lengths of the mending cloth to achieve the shape and size of the intended patch. Cut the patch to provide an overlap of the damaged area using the specifications in table 3. Round off the corners of the patch. Patches will be prepared in duplicate to allow for application on the inside and outside of the canopy.
 - (6) Remove the paper backing from the adhesive side of the mending cloth by forming a crease; score the paper with a fingernail, and peel the paper from the adhesive coating. Ensure the mending cloth is not damaged when scoring the paper backing.
 - (7) Smooth the canopy material adjacent to the damaged area on the canopy outside; place the formed mending cloth patch over the damaged area.
 - (8) Using the edge of a packing paddle (or a roller), apply pressure to smooth the patch on.
 - (9) Apply the duplicate-shaped patch to the damaged area on the inside of the canopy, using the procedures in steps (6) and (7), above. Stitch 1/16-inch in from the outer edge of the patch using details from Tables 1 and 2.
3. Applying a miscellaneous canopy patch. A miscellaneous canopy patch, which may be irregularly shaped, is used to repair damaged canopy material when the location of the damaged area requires the patch to extend into a seam, joint, reinforcement or lateral band. Determine the type of patch required for the canopy, using the details in illustrations following the canopy patch procedures detailed below. Apply a miscellaneous patch to a gore section as follows:

NOTE

Use applicable details in STITCHING AND RESTITCHING.

- a. Identify the damaged area. If desired, outline the damaged area with a marking pen, tailors chalk, et cetera.
- b. Determine which seams, joints, reinforcements or lateral bands will be involved in the patch.
- c. Determine the patch size, shape.
- d. As required, cut the applicable stitching to remove or lay aside items that may interfere with the patching process. Open any seam, joint, reinforcement or lateral band seam involved in the patch, by removing the stitching.

REPAIR - continued

- e. Using the same type of material as in the original construction, mark and cut a patch that is the same shape as the damaged area and approximately 1-1/2 inches larger in all directions except in the direction of the open seam(s). Cut the open seam edge(s) of the patch to match the open seam edge of the canopy.
- f. Working from the inside of the parachute, align the patch with the fabric weave and over the damaged area.
- g. Start adjacent to an open seam edge of the canopy, folding that patch edge under 1/2-inch.
- h. Start sewing 1/8-inch in along the patch edge.
- i. Continue sewing to just short of 1-1/2 inches from the next side. Fold the next side under 1/2-inch and sew to the corner. Repeat until all four sides have been sewn down. Be sure to overlap the stitching start by at least 1-inch.
- j. Working from the outside of the parachute using scissors, cut the damaged area out forming a rectangle that is approximately 1-inch from the initial patch stitch line. Be careful not to cut the patch. The open seam edges of both the patch and the canopy should be flush with one another.
- k. Cut the corners of the canopy cloth from the inside towards the patch corner stopping approximately 1/2-inch from the sides allowing for a 1/2-inch fold under of the canopy cloth to the patch stitch line. There is no fold under on open seams.
- l. Start adjacent to an open seam and fold that edge under (approximately 1/2-inch) forming a straight seam from the open seam to an inside corner. Note that the width of the patch seam should be consistent but can be as narrow as 3/8-inch and as wide as 1-inch.
- m. Sew the first side from the open seam to the first inside corner, keeping the stitching 1/8-inch from the edge. Fold the next side under while maintaining the patch seam width. Repeat until all except the open seams have been sewn down. The open seam ends of the patch do not require backstitching.

NOTE

The cloth portion of the patch is finished. The damaged area has been removed leaving reassembly to complete the repair.

REPAIR - continued

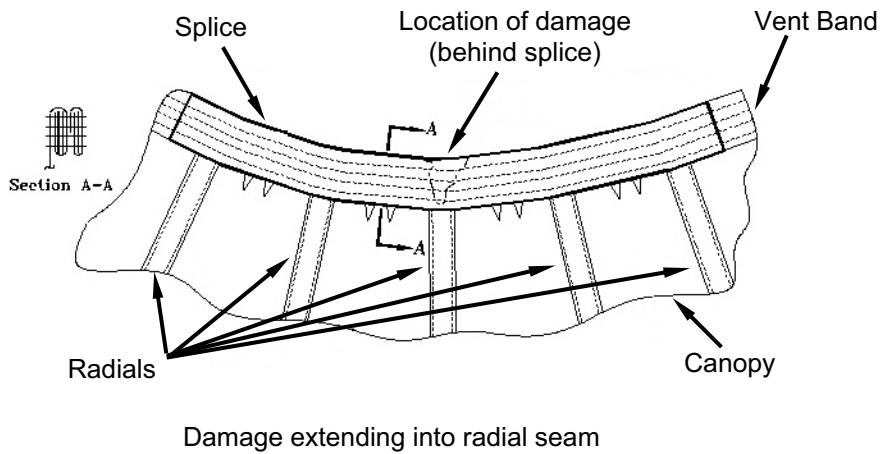
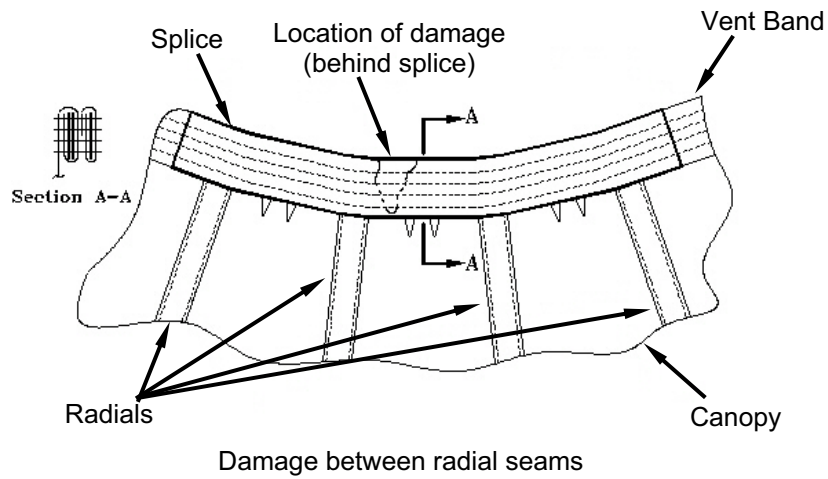


Figure 7. Canopy Repair.

- n. Re-assemble the panel seam.
- o. Close any seam, joint, reinforcement or lateral band seam involved in the patch, by replacing the stitching. Re-attach or replace any parts or stitching that was removed or laid aside prior to the patching process.
- p. If applicable, re-stencil informational data or gore numbers according to procedures in WP 0019 00.

REPAIR - continued

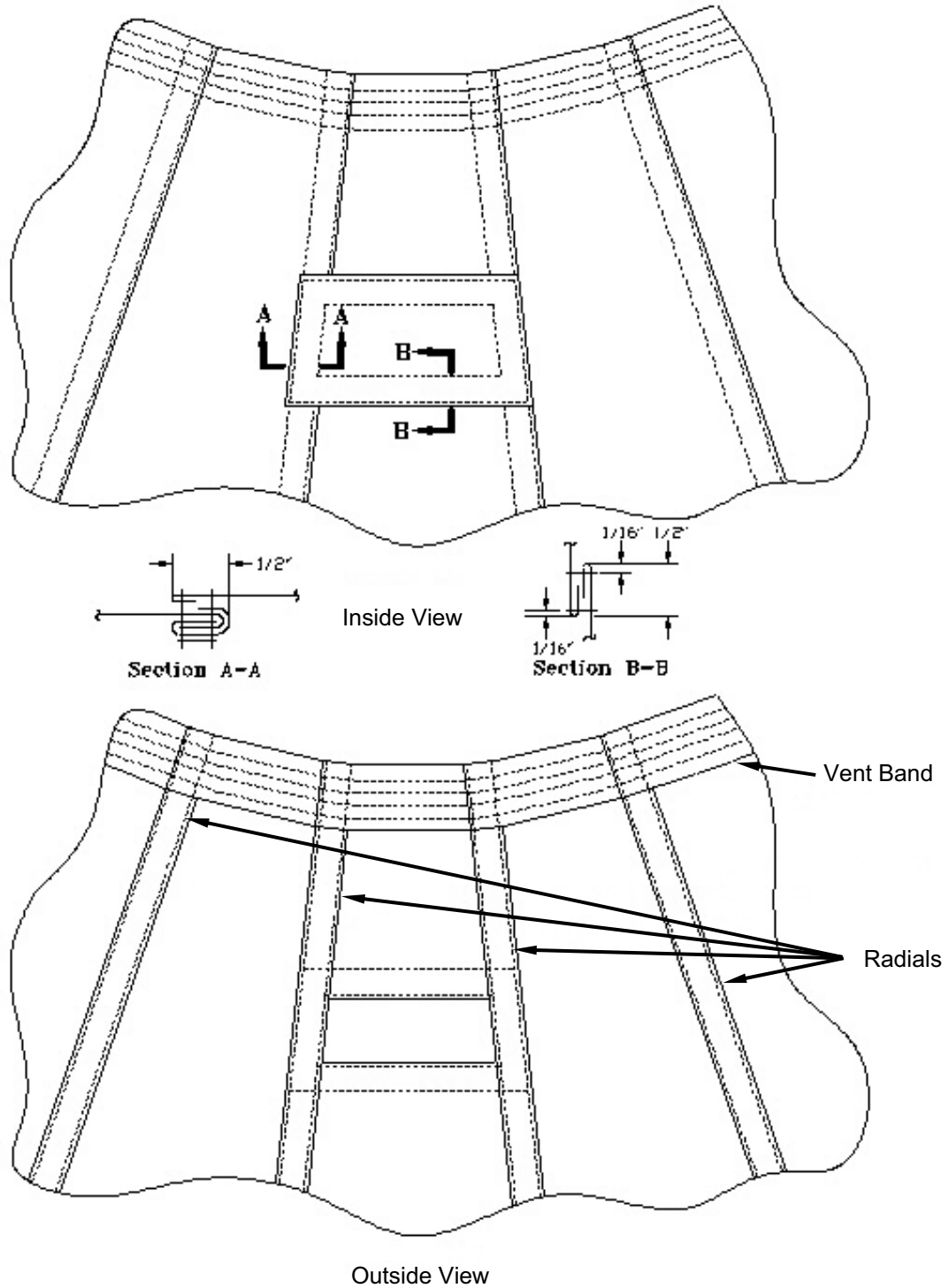


Figure 8. Irregular Shape Patch Including Two Radials.

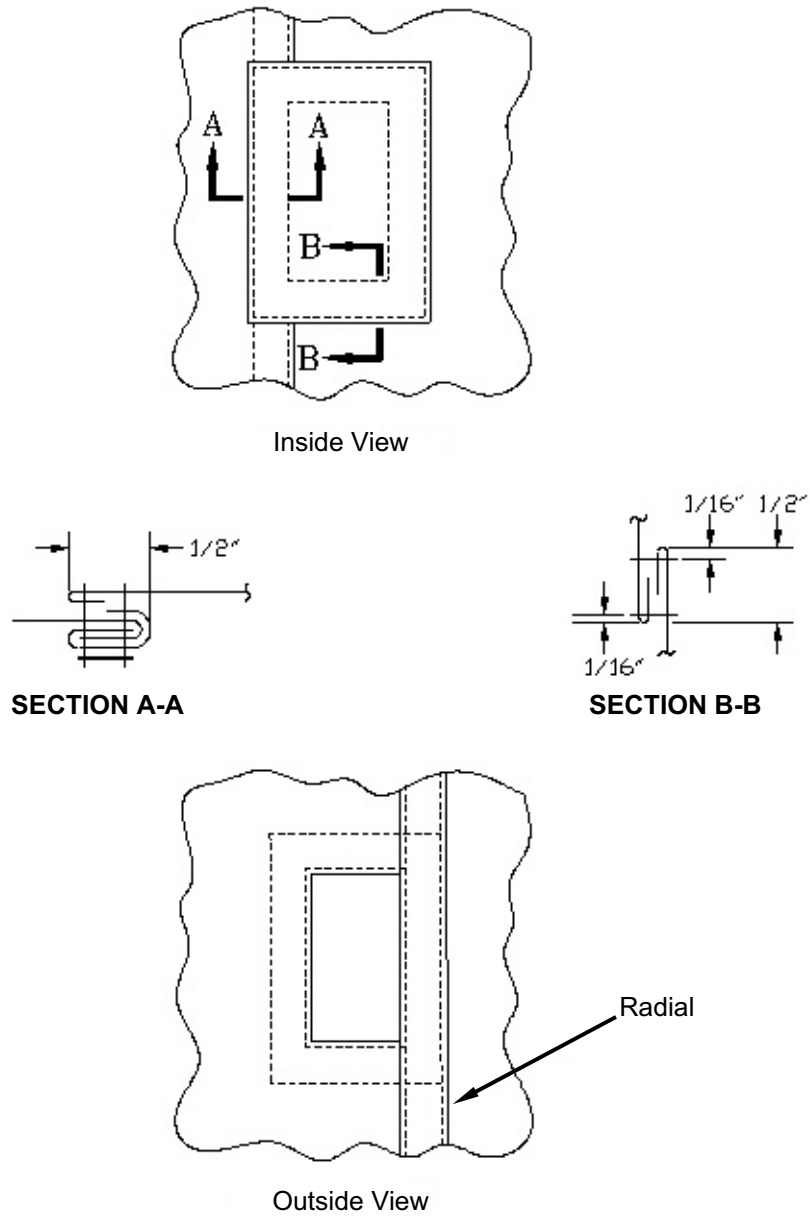


Figure 9. Rectangular Patch Including Radial Seam.

REPAIR - continued

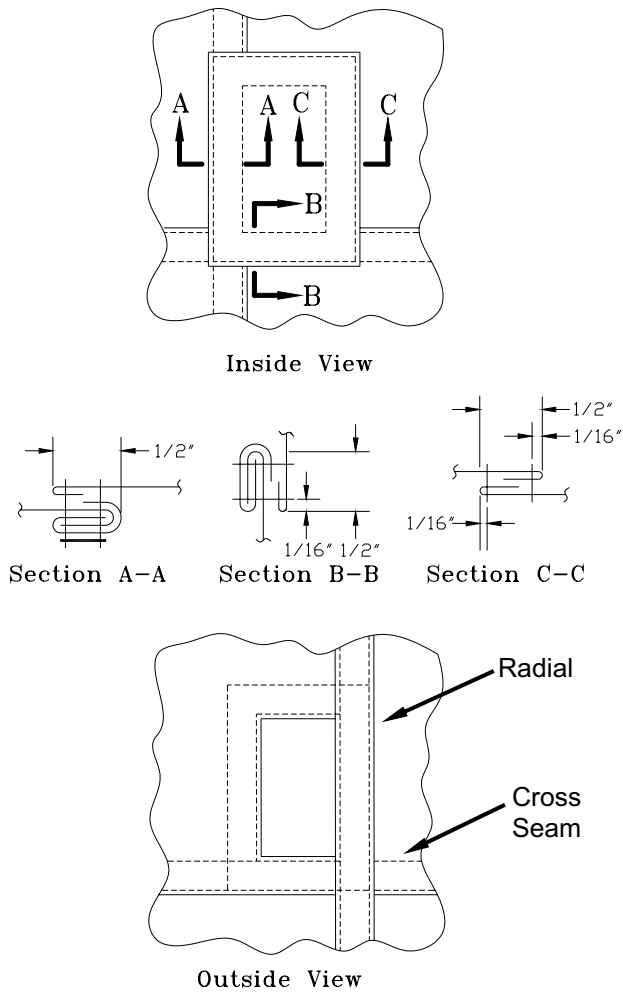


Figure 10. Rectangular Patch Including a Radial Seam and a Cross Seam.

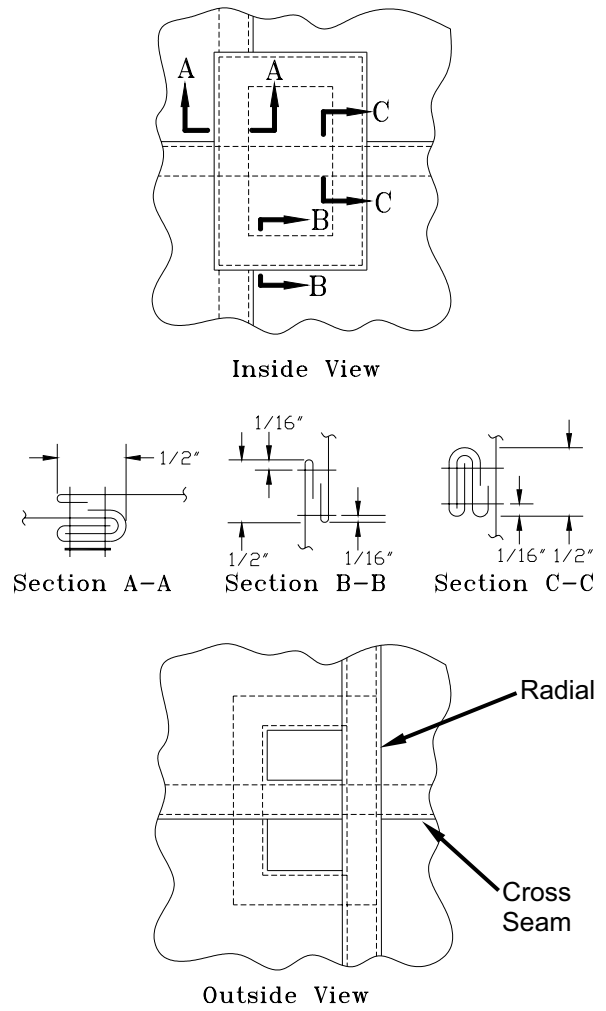


Figure 11. Rectangular Patch Crossing a Cross Seam and Including Radial Seam.

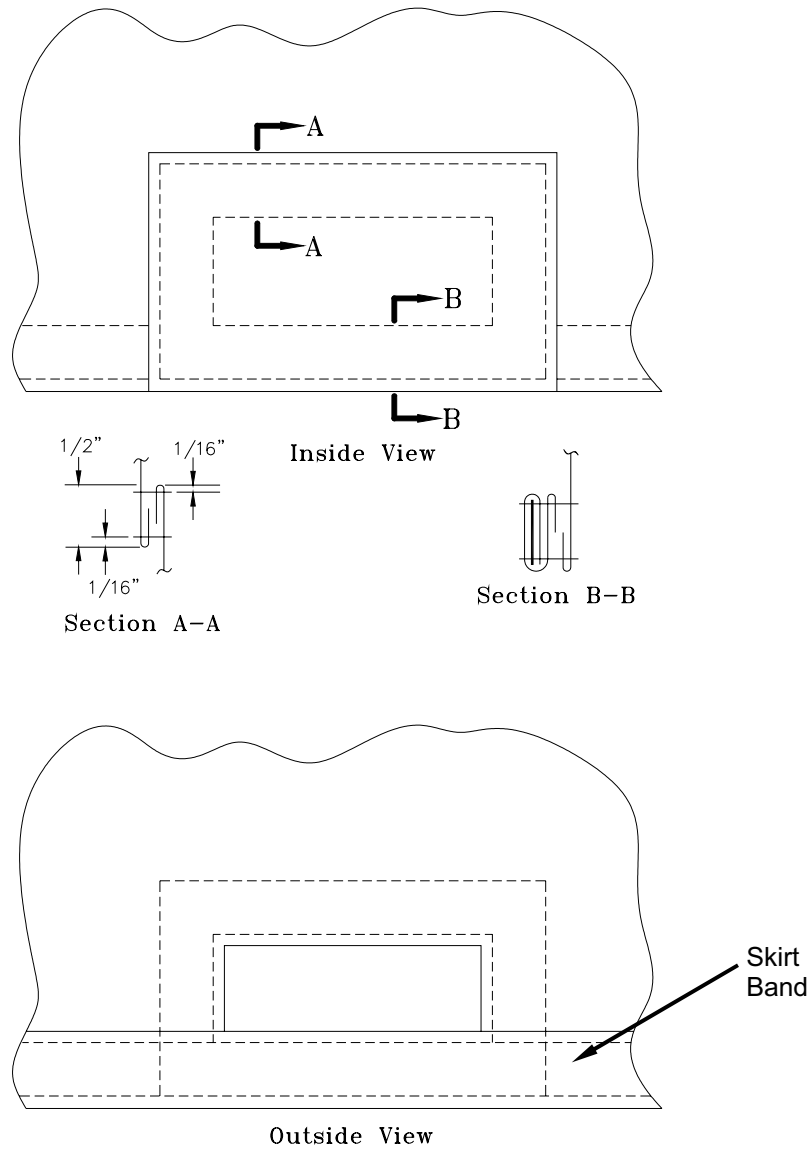


Figure 12. Rectangular Patch Including Skirt Band.

REPAIR - continued

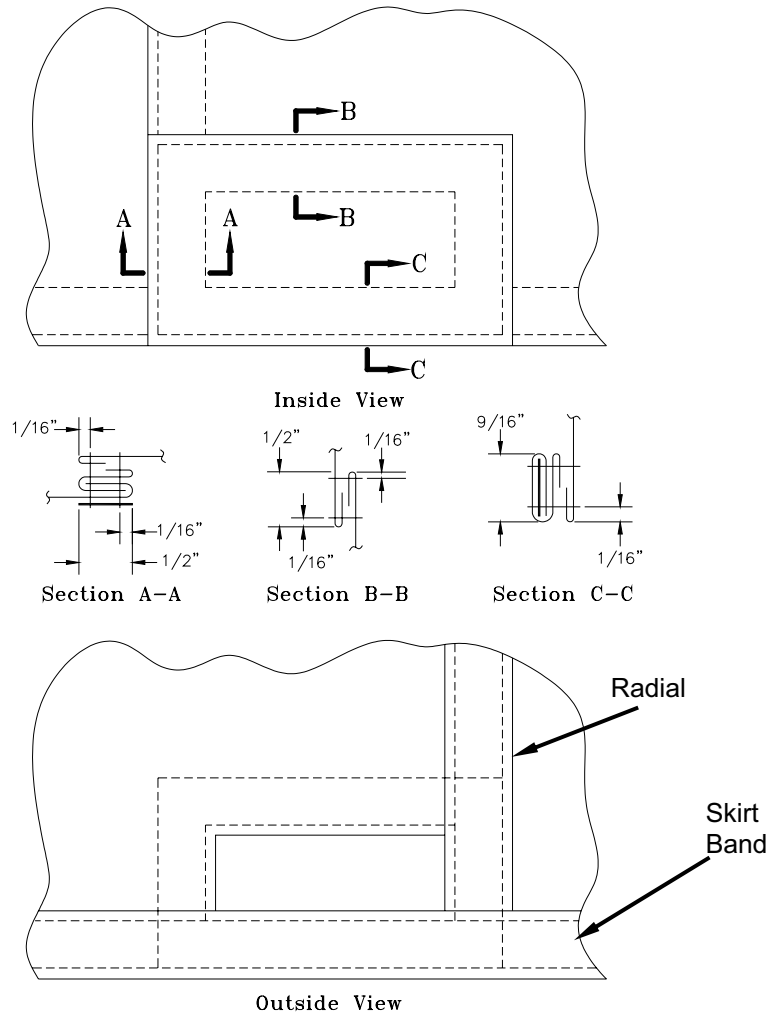


Figure 13. Rectangular Patch Including Radial Seam and Skirt Band.

TYING A GIRTH-HITCH KNOT

When threading a new line use the following procedures when forming the girth-hitch knot (**figure 14**):

1. Thread the new line through the loop, from bottom to top.
2. Route back over the top of the loop.
3. Cross back under the new line.
4. Then back through the loop from top to bottom.
5. Then route between the loop and new line which forms a loop then pull tight.

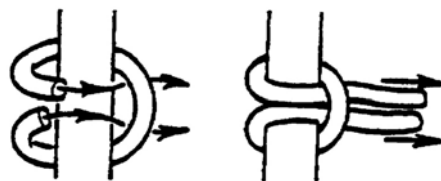


Figure 14. Girth Hitch.

MAIN CANOPY GORE, EXTENDED GORE AND SECTION REPLACEMENT**CAUTION**

Structural soundness of the main canopy can be seriously degraded, if more than the allotted gore or section panel replacements are completed on the main canopy through its lifecycle.

During the lifecycle of the main canopy (**figure 15**) the limitations for gore replacement, extended gore, mesh netting and the section panel replacements are as follows: replacement of 3 entire gores and not more than 3 section replacements on the A&D section panels, and 8 section replacements on the B&C section panels. A section panel can only be replaced once throughout the lifecycle of the main canopy. These are the maximum section panel replacements that can be performed throughout the lifecycle of the main canopy. Only authorized manufactured section panels will be used when performing gore, extended gore, mesh netting and section replacements on the main canopy.

Limitations. When the maximum replacement panels have been installed on the main canopy, for instance if the maximum section panels have been replaced on the A&D section panels previously and another A&D section panel needs to be replaced the main canopy will be deemed beyond economical repair (BER) no other repairs can be made to the canopy.

Gore Replacements (ABCD Section Panels). Only 3 entire gore sections can be replaced throughout the lifecycle of the main canopy. Gore replacements will be replaced as an entire gore assembly. The individual sections panels required for the entire replacement of the gore are to be sewn together prior to being sewn onto the main canopy. Detailed replacement procedures can be found in WP 0028 00.

NOTE

If a gore replacement is required and the canopy has been repaired previously with the maximum 3 sectional replacements on sections A&D the canopy will be deemed beyond economical repair (BER). This will also apply to sections B&C.

A&D Section Replacements. Only 3 sections on both the A&D panels can be replaced throughout the lifecycle of the main canopy. When the three section panels have been replaced on either A&D sections, if additional damage occurs to any of the A&D section panels and a replacement is required the canopy shall be placed out of service as BER.

B&C Section Replacements. Only 8 section panels can be replaced on the B&C section panels throughout the life cycle of the main canopy.

Extended Gore Replacements. Extended gores can be replaced on either side but are limited to only 2 extended gore replacements throughout the lifecycle of the parachute. Replacements will be in accordance with the procedures outlined in the specific WP 0029 00 and WP 0030 00.

Mesh Netting Replacements. Replacement of the mesh netting panels, all 3 Mesh netting panels can be replaced only one throughout the lifecycle of the main canopy. Replacements will be in accordance with the procedures outlined in the specific WP 0031 00.

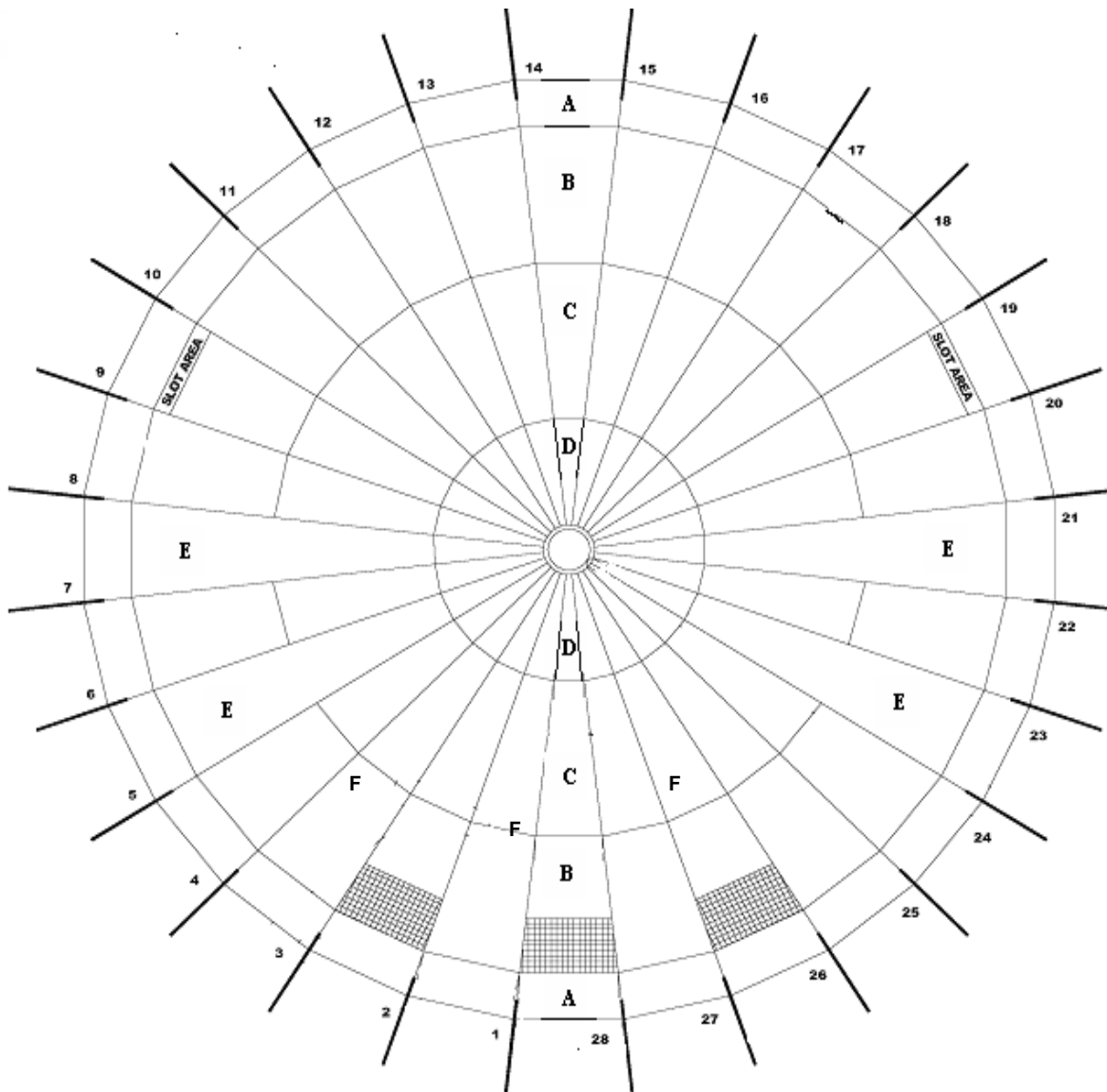


Figure 15. Gore, Extended Gore Section Replacement.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
SEARING AND WAXING
REPAIR

INITIAL SETUP:**Tools**

Electric Pot, Melting (Item 18, WP 0097 00)
Knife, Hot, Metal (Item 27, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Beeswax (Item 4, WP 0109 00)
Wax, Paraffin (Item 52, WP 0109 00)

Equipment Condition

Unpacked.

REPAIR**CAUTION**

Cotton tape, webbing, or cord will not be seared.

NOTE

Fabric materials such as cord, tape, and webbing, that are cut for use in the maintenance of the MC-6, will normally be heat-seared or dipped in a melted wax mixture, as applicable, to prevent the material from fraying or unraveling. However, in some instances, the preparation of the material may not be necessary and will be specified accordingly.

SEARING

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

WAXING

The fraying or unraveling of cotton or nylon tape, webbing, and cord length ends may be prevented by dipping 1/2-inch of the raw end of the material into a thoroughly melted mixture of half beeswax and half paraffin in an electric melting pot. The wax temperature should be substantial enough to ensure the wax completely penetrates the material, rather than just coating the exterior fabric.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MARKING AND RESTENCILLING
REPAIR

INITIAL SETUP:**Tools**

Brush, Stenciling (Item 8, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Ink, Marking (Item 31, WP 0109 00)
Marker, Felt Tip, Permanent (Item 33, WP 0109
00)
Pen, Ball Point (Item 34, WP 0109 00)
Stencil Board, Oiled (Item 40, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area

REPAIR**NOTE**

Stenciling should be used whenever possible. A ballpoint pen or permanent felt tip marker should be used only where stenciling is not possible, or when stenciling devices are not available. Any type ballpoint pen using black or blue ink may be used for marking on labels only.

Original stenciled data or marking that becomes faded, illegible, obliterated, or removed as a result of performing a repair procedure, will be remarked with a ballpoint pen, permanent felt tip marker, or restenciled. All marking or restencilling will be done on, or as near as possible to, the original location and should conform to the original lettering type and size.

MARKING

Using marking devices, such as a ballpoint pen or permanent felt tip marker, mark on, or as near as possible to, the original location and conform to the original lettering type and size.

RESTENCILING

Proceed as follows:

1. Cut oiled stencil board to match the original lettering type and size of data to be restenciled.
2. Place cut stencil board over, or as near as possible to, the original marking to be restenciled.
3. Place an additional sheet of stencil board beneath the area to be restenciled to prevent the marking ink from penetrating to other areas.
4. Hold the stencil board in place and, using the stenciling brush filled with parachute marking ink, restencil the original marking.

REPAIR - continued

REMARKING AND RESTENCILING

Remark/restencil the original stenciled data/markings that become faded, illegible, obliterated, or that have been removed as a result of performing a repair procedure. Ensure all marking/restencilling is on, or as near as possible to, the original location, and conforms to the original lettering type and size.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY VENT LOOP
REPAIR, REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Knife, Hot Metal (Item 27, WP 0097 00)
Sewing Machine, Light-Heavy Duty (Item 58, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Webbing, Nylon, Type VIII (Item 60, WP 0109 00)
Thread, Nylon, Size 5, Type I, Class A (Item 49, WP 0109 00)

Equipment Condition

Unpacked. Canopy laid flat.

NOTE

Any damage to vent loop, other than loose or broken stitches, will require complete replacement of the vent loop.

REPAIR

Repair a vent loop requiring restitching as follows:

1. Use a light-heavy duty sewing machine to restitch any loose or broken stitches.
2. Restitch over the original stitch pattern using nylon thread, size 5. Overstitch 1/2-inch to lock stitches.

REPLACE

Replace a missing or damaged vent loop (**figure 1, item 1**) as follows:

1. Cut a 12-inch length of webbing, nylon type VIII, olive drab (OD). Sear the ends of the webbing.
2. Pass one end of the webbing through all of the canopy vent lines (**figure 1, item 2**). Be sure to pass through the two vent loop centering lines (**figure 1, item 3**).
3. Fold both ends 1-inch back and to the center (**Figure 1, item 4**). The ends will overlap forming a 2-inch long fold (**figure 1, item 5**).
4. Begin at a point 1/4-inch from one overlapped webbing end. Use a heavy duty sewing machine to secure the overlapped ends.
5. With thread nylon, size 5 cord, 301 stitch a 1-1/2-inch wide, single box X stitch, and 5-8 stitches per inch (**figure 1, item 6**).

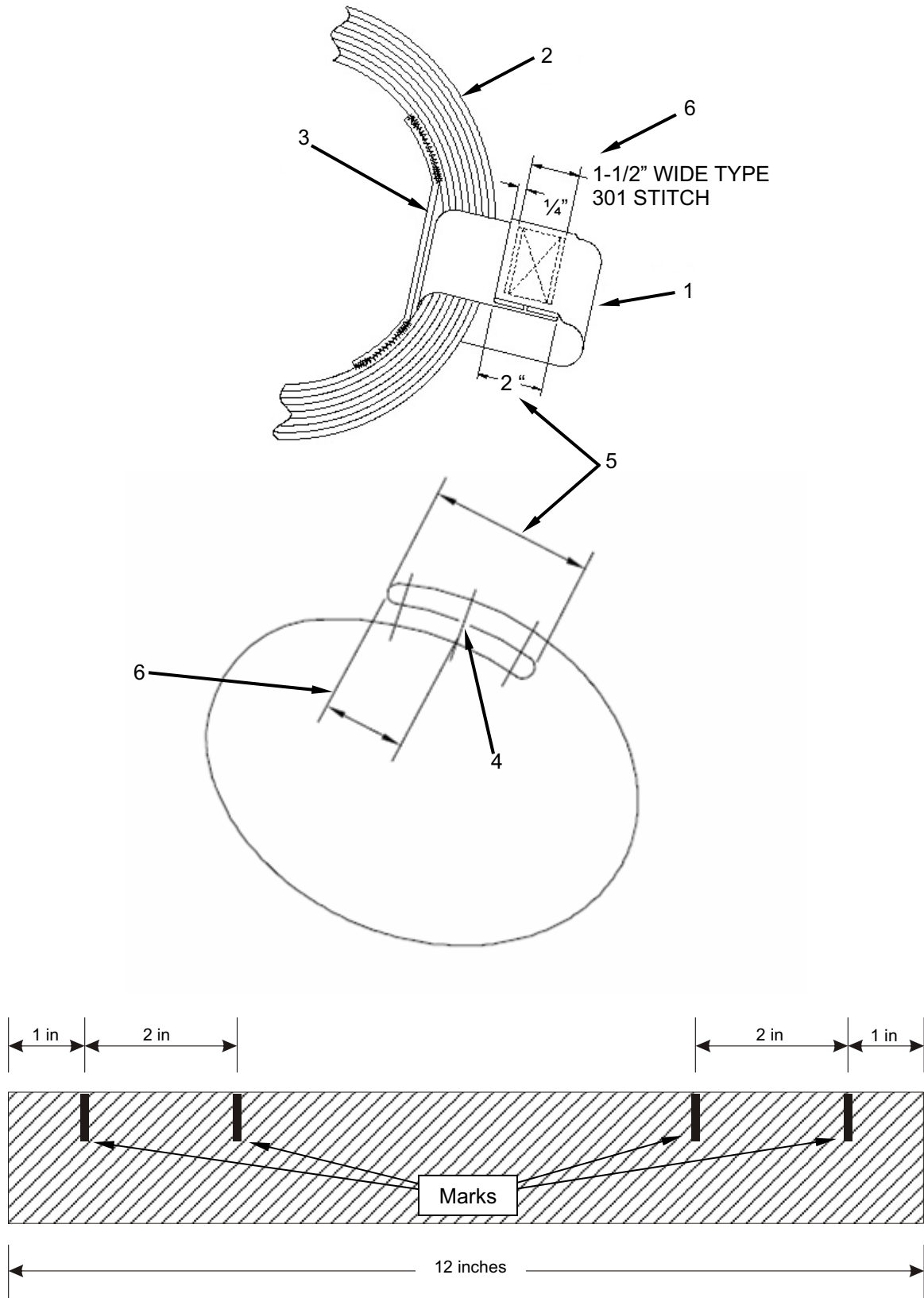


Figure 1. Main Canopy Vent Loop.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY VENT LINES
REPAIR, REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Knife, Hot Metal (Item 27, WP 0097 00)
Sewing Machine, Heavy Duty (Item 55, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Webbing, Nylon, Type VIII (Item 60, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)
Pencil, China Marker, White (Item 36, WP 0109 00)

Equipment Condition

Unpacked. Canopy laid flat.

REPAIR

Repair vent lines (**figure 1**) requiring re-stitching, as follows:

1. Use a zig-zag sewing machine to re-stitch any loose or broken stitches.
2. Re-stitch over the original stitch pattern using size E nylon thread. Overstitch 1/2-inch to lock stitches.



Figure 1. Main Canopy Vent Line Repair.

REPLACE

Replace missing or damaged vent lines as follows:

1. Place canopy in proper layout on the table and trace the damaged vent line across the apex, from upper lateral band.
2. Remove the damaged vent line by cutting stitching that holds the line to the canopy at both sides of the apex.
3. Remove all loose or broken stitching.
4. Cut a 25-inch length of type II, nylon cord (**figure 2**). Sear the ends of the cord.
5. Mark cord 1-inch in from each end.
6. Mark cord 5-inches in from each end.
7. Position one end of the new vent line in the exact location formerly occupied by the end of the old line by lining up the 5-inch mark with the top edge of the upper lateral band.

NOTE

Measure from the outside edge of the upper lateral band, the vent line should be extend 4 inches into the radial seam.

8. Ensure there are no twists in the line and that it has been properly routed.
9. Using a zig-zag sewing machine and size E nylon thread, stitch the new vent line into place. Begin by stitching on the line 1/2-inch above the vent band; sew across upper lateral band, scissor cut vent line at 1-inch mark and sew to 1/2-inch beyond the line, 7 to 11 stitches per inch and 1/8-inch wide.
10. Pass the remaining end of the line under the other vent lines, and through the vent loop, as required.
11. Ensure there are no twists in the line and that it has been properly routed.
12. Position and sew the remaining end of the line to the opposite side of the canopy, as detailed in steps 7 – 9 above.

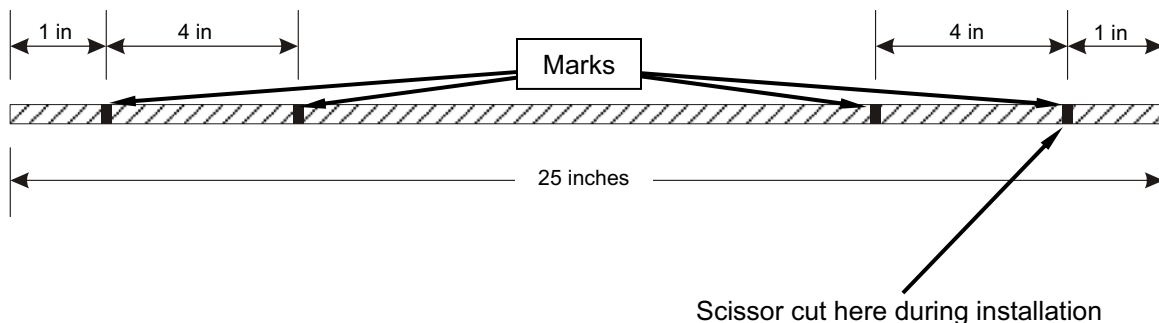


Figure 2. Main Canopy Vent Line Replacement.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY VENT LOOP CENTERING LINE
REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Knife, Hot Metal (Item 27, WP 0097 00)
Sewing Machine, Medium Duty, Zig-Zag (Item 57, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Cord, Nylon, Type II (Item 17, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Unpacked

REPLACE**NOTE**

The Vent Loop Centering Lines shall be installed so that the Vent Loop is contained by the centering loop opening. Vent lines shall not be routed through the opening in the centering loops, and the centering loops shall not be routed through each other.

Replace a missing or damaged vent loop centering line as follows:

1. Remove the damaged vent loop centering line by removing the stitching that holds the vent loop centering line to the vent line. Clean the vent line by removing all loose pieces of thread.
2. Cut the replacement vent loop centering line 9 inches long with marks every 3 inches, using Cord, Nylon, Type II. Hot cut (sear) the ends smooth.
3. Center the replacement vent loop centering line on the same vent line that the previous vent loop centering line was attached. Verify the routing. See note above.

NOTE

Backstitch both ends a minimum of 1-inch. Once both sides are sewn, there will be a 3-inch gap for the vent loop.

REPLACE - continued

4. Using a zig-zag sewing machine and nylon size E thread, sew the vent loop centering line to the vent line 1-1/2 inches from the center (starting on the 3-inch mark from the end) on both ends. Continue sewing to the hot cut end.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY VENT BAND
REPAIR**

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Knife, Hot Metal (Item 27, WP 0097 00)
Sewing Machine, Light-Duty (Item 56, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Tape, Kevlar, 1-inch (Item 41, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)
Cloth, Nylon Ripstop, Type I (Item 11, WP 0109 00)

Equipment Condition

Unpacked

REPAIR**NOTE**

The vent band may be spliced only once and will not be replaced.

1. Re-stitching of the Vent Band is authorized. Use a light-duty sewing machine and size E, nylon thread of contrasting color. Stitch over the original stitch pattern. Lock each row of stitches 2 inches at each end.
2. Damage Between Radial Seams:
 - a. Identify the damaged length of the vent band.
 - b. Pin two vent lines on each side of the damage to themselves and to the adjacent vent line. Then, carefully remove the stitching from the four vent lines.
 - c. Determine if any of the adjoining cloth is damaged and requires patching. If so, patch the adjoining cloth prior to repairing the vent band.
 - d. Cut a piece of 1-inch Kevlar[®] tape long enough to extend 1 inch beyond the outside edge of the second radial seam on each side of the damaged area.
 - e. Cut a piece of parachute cloth 1 inch longer than the cut piece of Kevlar[®] tape from the previous step and 2-1/2 inches wide.
 - f. Wrap the piece of parachute cloth around the piece of Kevlar[®] tape. The parachute cloth should extend 1/2-inch past both ends of the Kevlar[®] tape. The cloth may be held in place using cellophane tape or basting.
 - g. Center the splice assembly over the damaged area.
 - h. Turn both ends under 1/2-inch.
 - i. Sew into place stitching 3 inches past both ends of the splice.

REPAIR - continued

3. Damage Extending into Radial Seams:
 - a. Identify the damaged length of the vent band.
 - b. Pin two vent lines on each side of the damage to themselves and to the adjacent vent line. Then, carefully remove the stitching from the four vent lines.
 - c. Determine if any of the adjoining cloth is damaged and requires patching. If so, patch the adjoining cloth prior to repairing the vent band.
 - d. Cut a piece of 1-inch Kevlar[®] tape long enough to extend 1-inch beyond the outside edge of the second radial seam on each side of the damaged area.
 - e. Cut a piece of parachute cloth 1-inch longer than the cut piece of Kevlar[®] tape from the previous step and 2-1/2 inches wide.
 - f. Wrap the piece of parachute cloth around the piece of Kevlar[®] tape. The parachute cloth should extend 1/2-inch past both ends of the Kevlar[®] tape. The cloth may be held in place using cellophane tape or basting.
 - g. Center the splice assembly over the damaged area.
 - h. Turn both ends under 1/2-inch.
 - i. Sew into place stitching 3 inches past both ends of the splice.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY CROSS SEAM
REPAIR**

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Sewing Machine, Light Duty (Item 56, WP 0097 00)
Sewing Machine, Double Needle (Item 54, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Tape, Nylon, Type III, Class 1, 1/2- inch wide (Item 43, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Unpacked

REPAIR**NOTE**

Double needle sewing machine may be substituted for a single needle sewing machine.

NOTE

This repair is for damage to a cross seam that does not extend into any panel. For damage extending into the panel, see WP 0017 00, rectangular patch crossing a cross seam.

NOTE

This repair covers the cross seam damage with reinforcement tape.

NOTE

30% damage across width of the reinforcement tape requires repair.

Repair a damaged cross seam as follows:

1. Identify the damaged length of the cross seam.
2. Determine if any of the adjoining cloth is damaged and requires patching. If so, patch the adjoining cloth prior to repairing the cross seam.
3. Determine the repair reinforcement tape length by adding 7 inches to the damaged length.
4. Using 1/2-inch, Type III, Nylon Tape, measure, mark, and scissor cut the cross seam reinforcement tape.
5. Center the reinforcement tape over the damaged area.
6. Turn both ends under 1/2-inch.

REPAIR - continued

7. Using a single needle sewing machine and size E nylon thread, begin sewing at least 3 inches beyond the reinforcement tape and sew the entire reinforcement tape to the cross seam, sewing past the other end by at least 3 inches.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY RADIAL SEAM
REPAIR**

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Sewing Machine, Double Needle (Item 54, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Tape, Nylon, Type III, Class 1, 1/2- Inch Wide
(Item 43, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Unpacked

REPAIR

Patching repairs the radial seam and/or radial tape. You may only have one radial splice per radial radial seam/radial tape repair as follows:

1. Identify the damaged length of the radial tape.
2. Determine if any of the adjoining cloth is damaged and requires patching. If so, patch the adjoining cloth prior to repairing the radial tape. See section of WP 0017 00 entitled "Applying a Miscellaneous Canopy Patch" for parachute cloth patching details.
3. Determine the radial tape splice length by adding 7 inches to the damaged length.
4. Using the same type of material as in the original construction, measure mark and scissor cut the splice tape.
5. Center the splice tape over the damaged area.
6. Turn both ends under 1/2-inch.
7. Sew into place stitching 3 inches past both ends of the splice.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY REINFORCING TAPE
REPAIR**

INITIAL SETUP:**Tools**

Shears (Item 61, WP 0097 00)
Sewing Machine, Light Duty (Item 56, WP 0097 00)
Sewing Machine, Double Needle (Item 54, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Tape, Nylon, Type III, Class 1, 1/2- inch (Item 43, WP 0109 00)

Equipment Condition

Unpacked

NOTE

Double needle sewing machine may be used in place of single needle sewing machine.

NOTE

Splice a damaged reinforcing tape only if there is less than 50% damage to the width. For damage encompassing 50% or more, refer to WP 0086 00 for replacement procedures.

REPAIR

Splice a damaged reinforcing tape as follows:

1. Identify the damaged length of the reinforcing tape.
2. Determine if any of the adjoining cloth is damaged and requires patching. If so, patch the adjoining cloth prior to repairing the reinforcing tape.
3. Determine the reinforcing tape splice length by adding 7 inches to the damaged length.
4. Using the same type of material as in the original construction, measure, mark and scissor cut the splice tape.
5. Center the splice tape over the damaged area.
6. Turn both ends under 1/2-inch.
7. Sew into place stitching 3 inches past both ends of the splice.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY ATTACHMENT LOOP
REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Knife, Hot Metal (Item 27, WP 0097 00)
Sewing Machine, Bartack, 28 stitch (Item 51, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Webbing, Nylon, Bally #8962, 3/8-inch wide (Item 55, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Unpacked

REPLACE

Replace a damaged attachment loop as follows:

1. Cut a replacement attachment loop 4 inches long with marks 1-inch from each end. Hot cut (sear) the ends smooth.
2. Carefully cut the damaged attaching loop.
3. Slide the damaged attaching loop out of the larksheaded line while maintaining the larkshead.
4. Pin the line that is attached to the attachment loop so that it remains close and line continuity is maintained.
5. Remove the damaged attachment loop from the canopy by removing the two bartack stitch patterns that secure the loop to the canopy. Clean the area by all loose pieces of thread.
6. Thread the replacement attachment loop through the larkshead in the end of the line.
7. Fold the new attachment loop in half aligning the two marks.
8. Place the new attachment loop over the canopy so that the canopy is sandwiched between the new loop and the 1-inch mark aligns with the edge of the canopy forming a 1-inch loop that the line is attached to. See figure 1.
9. Ensure that twists have not introduced to the line.

REPLACE- continued

10. Sew the new loop into place using two bartacks, one horizontal and one vertical. The horizontal bartack should just runoff the end of the new loop.
11. Verify the attached line's continuity.

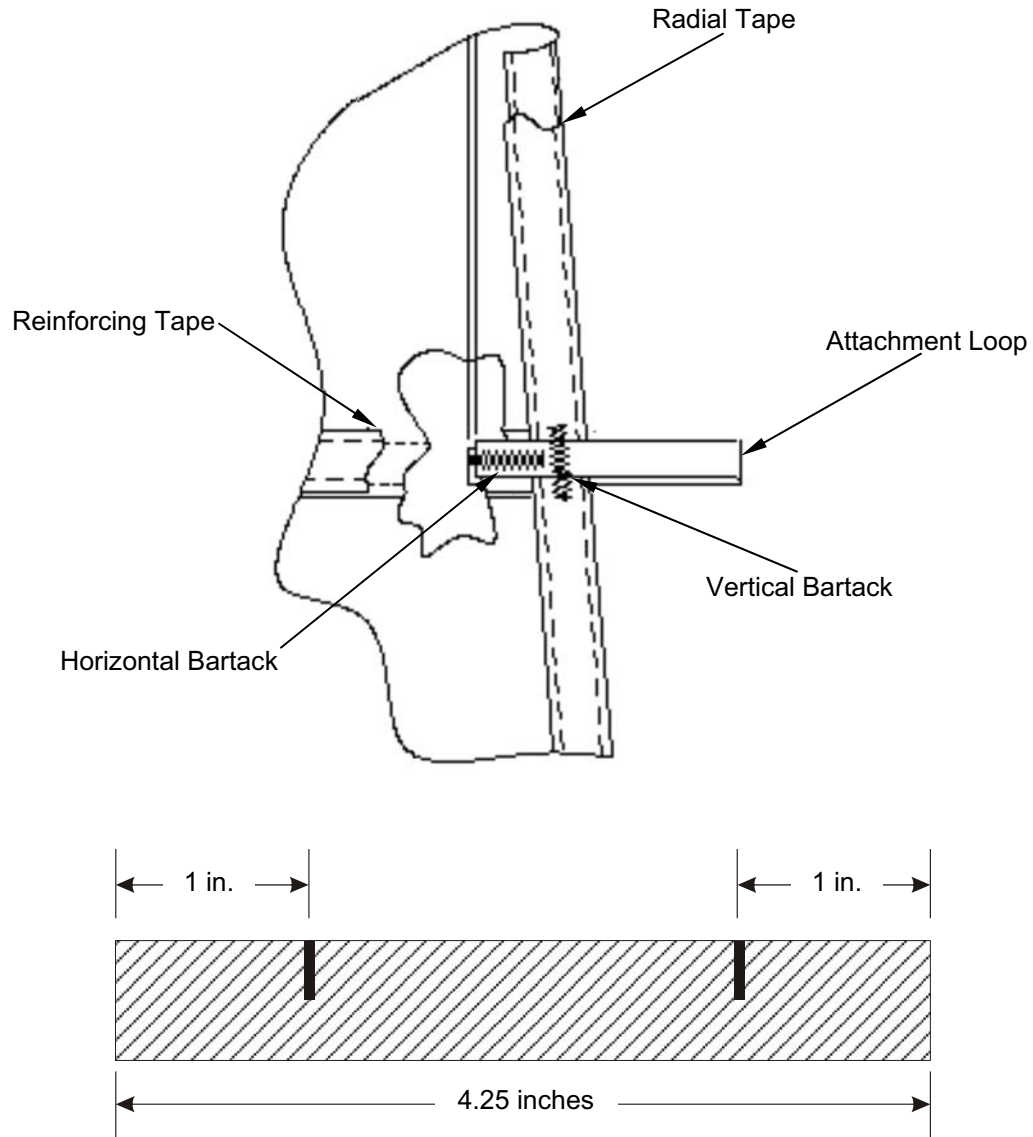


Figure 1. Placement of New Attachment Loop.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY GORE SECTIONS
REPAIR**

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Needle, Basting (Item 31, WP 0097 00)
Sewing Machine, Bartack, 28 Stitch (Item 51, WP 0097 00)
Sewing Machine, Light-Duty (Item 56, WP 0097 00)
Shears (Item 61, WP 0097 00)
Stitch Removal Tool (Item 62, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Brush, Stenciling (Item 6, WP 0109 00)
Cloth, Parachute Mending (Item 13, WP 0109 00)
Cloth, Parachute, Nylon Ripstop, Type 1 (Item 11, WP 0109 00)
Thread, Nylon, Size A (Item 50, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)
Stencil Board, Oiled (Item 40, WP 0109 00)

Equipment Condition

Unpacked

REPAIR

Repair gore sections by restitching, darning, patching, or re-stencilling, in accordance with the applicable work package as well as WP 0017 00 and WP 0019 00. Darn holes that do not exceed 1/2-inch in length or diameter. Darning is limited to two holes per gore section. Stitching and darning will be done as specified in Table 2., WP 0017 00. Refer to WP 0017 00 for repair procedures.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY FORWARD EXTENDED GORE ASSEMBLY
REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
 Sewing Machine, Light Duty (Item 56, WP 0097 00)
 Sewing Machine, Double Needle (Item 54, WP 0097 00)
 Sewing Machine, Bartack, 28 Stitch (Item 51, WP 0097 00)
 Line Insertion Tool (Finger Trap) (Item 28, WP 0097 00)
 Stitch Removal Tool (Item 62, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)
 Pencil, China Marker, Yellow (Item 35, WP 0109 00)
 Pencil, Marking, China, White (Item 36, WP 0109 00)
 Pin, Steel, T, Size 24 (Item 37, WP 0109 00)

Equipment Condition

Unpacked

NOTE

Double needle sewing machine can be used in place of single needle sewing machine.

REPLACE**NOTE**

Each extended gore is a complete assembly that is sewn over a finished opening. You will remove the damaged extended gore assembly and sew a new one on in the same location.

NOTE

There are two different extended gore assemblies, left and right. There is no difference between the forward and aft extended gore assemblies.

NOTE

The forward extended gores are located on gores 7 and 21 (left and right respectively).

NOTE

To ensure proper installation of the new extended gore ensure that the sewing machine that will be used to conduct the repair has been tested for proper stitching pattern, stitches per inch, tension, and correct type of thread.

Replace a damaged **Forward** extended gore as follows:

1. Carefully cut the attaching loops on the extended gore being removed, this will allow for removal of the upper control lines.
2. Slide the attaching loop out of the girth-hitch knot on the control line.
3. Pin the upper control lines to the exposed radial of the open gore (radial 7 or 22) at the trailing edge of the extended gore to maintain continuity.

REPLACE – continued

4. Before removing stitching of the extended gore, mark the bartack location on the break slot with chalk where the bartack intersects the main seam. This will establish the break slot.
5. Carefully remove stitching on the damaged extended gore assembly. Take note on how the extended gore is attached. Clean the area by removing all loose pieces of thread.

NOTE

There is some overlap of the reinforcement tapes on the forward and aft extended gores. You may need to remove some of the stitching of the aft extended gore. This stitching must be replaced when the new forward extended gore is sewn into place.

6. Take a new forward extended gore (**Figure 1**). Ensure that you have the correct assembly; left extended gore assembly for the jumpers left side; right extended gore assembly for the jumpers right side.

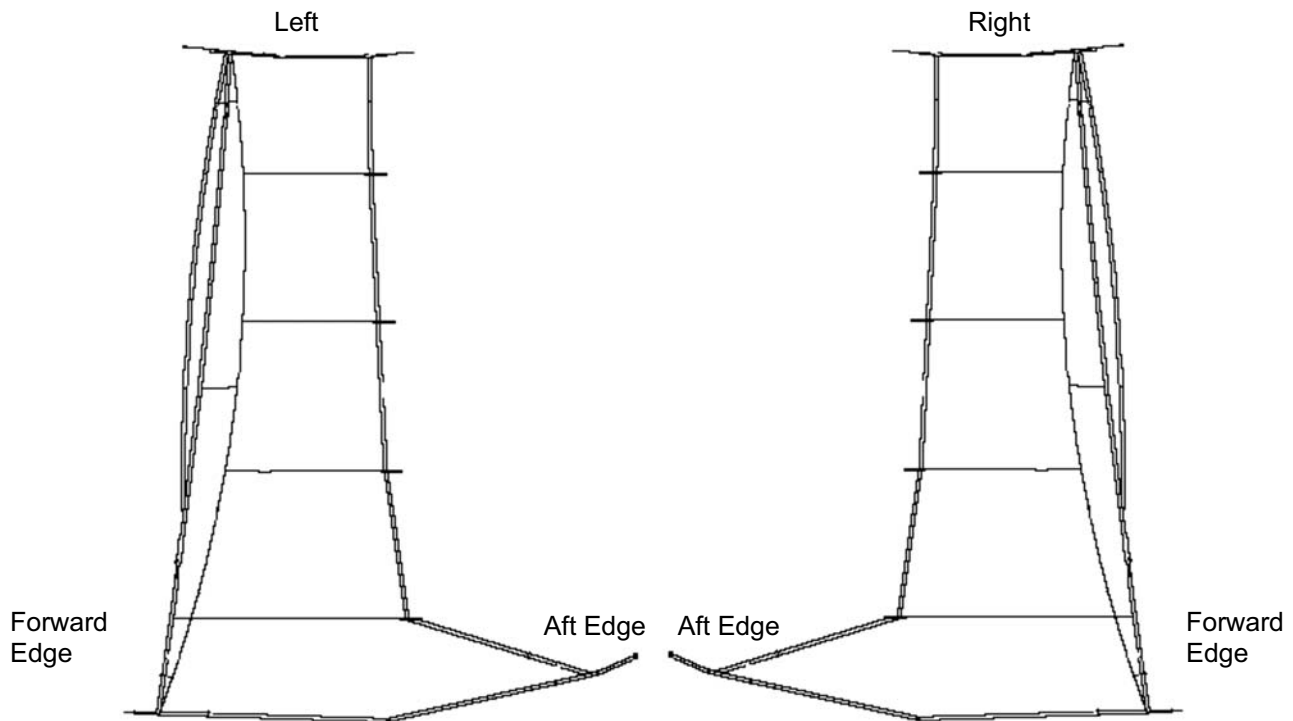


Figure 1. Identifying a Left and Right Extended Gore Assembly.

REPLACE - continued

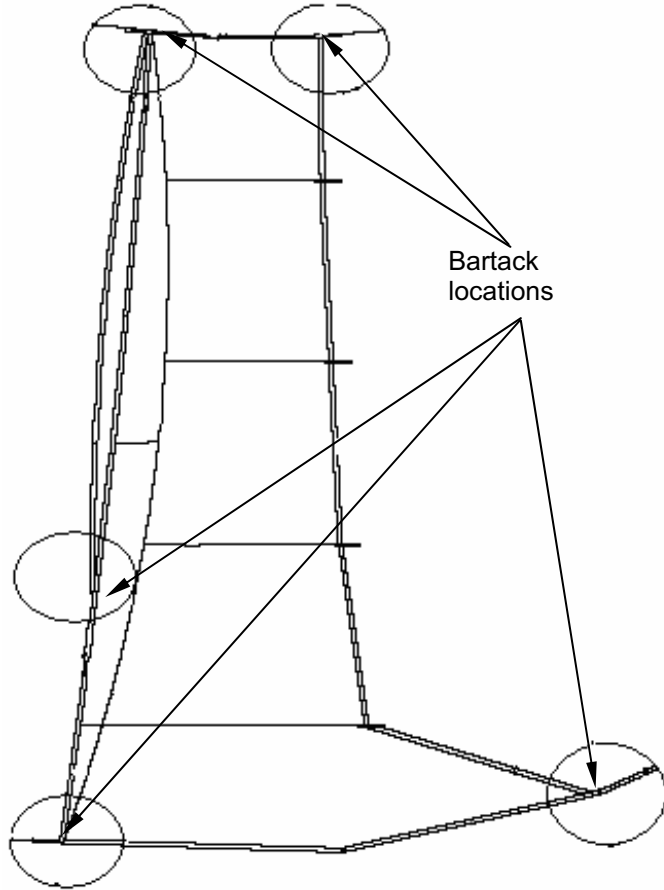


Figure 2. Brake slot opening of Extended Gore.

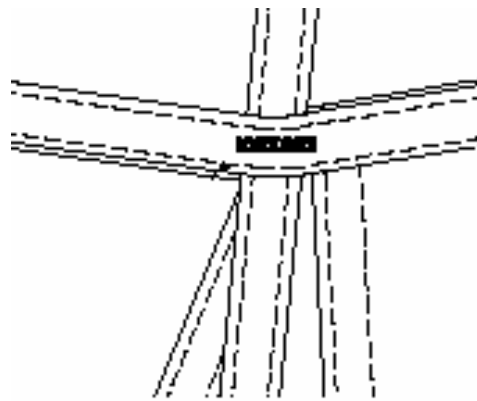
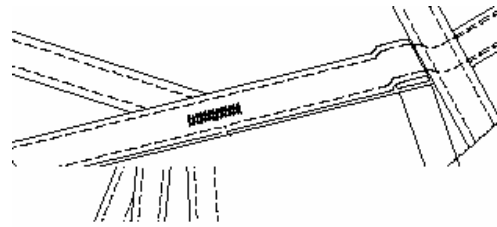


Figure 3. Bartack Intersections On Cross Seam and Main Seam.

7. In the same manner as the original extended gore was positioned, align the forward upper corner of the new extended gore with the forward upper inside corner of the open gore (**figure 4**) (on radial 8 or 21), laying the reinforcement tape on top of the canopy cross seam for at least 4 inches beyond the extended gore with the end folded under a minimum of 1/4-inch on both ends.



Figure 4. Aligning New Extended Gore with Open Gore.

REPLACE – continued

8. Using a single needle sewing machine and size E nylon thread, 7 to 11 stitches per inch, sew across top, moving from forward to aft.

NOTE

Ensure that there are no twists in the extended gore.

9. Using a single needle sewing machine, size E nylon thread and 7 to 11 stitches per inch, sew across bottom moving from forward to aft.
10. Pull light tension on the radial where the new extended gore is being attached. Ensure there is no difference in length at break slot bartack mark.
11. Start sewing at the break slot bartack mark and sew down the main seam of the new extended gore to the bottom of the extended gore.
12. Reattach upper control lines to the new extended gore. Form girth hitch in attachment loop. Remove any twists or turns in the control line and thread the attachment loop through the loose girth hitch in the end of the control line. Repeat this process for the remaining control line.
13. Fold the new attachment loop in half aligning the two marks. Place the new attachment loop over the canopy so that the canopy is sandwiched between the new loop and the 1-inch mark. Ensure mark aligns with the edge of the canopy forming a 1-inch loop. **(figure 2,3)**.
14. Sew the new loop into place using two bartacks, one horizontal and one vertical. The horizontal bartack should runoff the end of the new loop.
15. Verify the attached line's continuity.
16. Using a bartack sewing machine on the extended gore, place bartacks in the same manner as original, at the junctions of the trailing edge of the new extended gore and the reinforcements.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY AFT EXTENDED GORE ASSEMBLY
REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
 Sewing Machine, Double Needle (Item 54, WP 0097 00)
 Sewing Machine, Bartack, 28 Stitch (Item 51, WP 0097 00)
 Sewing Machine, Light Duty (Item 56, WP 0097 00)
 Line Insertion Tool (Item 28, WP 0097 00)
 Stitch Removal Tool (Item 62, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)
 Pencil, China Marker, Yellow (Item 35, WP 0109 00)
 Pencil, Marking, China, White (Item 36, WP 109 00)
 Pin, Steel, T, Size 24 (Item 37, WP 0109 00)

Equipment Condition

Unpacked

REPLACE**NOTE**

Double needle sewing machine can be used in place of single needle sewing machine.

NOTE

Each extended gore is a complete assembly that is sewn over a finished opening. You will remove the damaged extended gore assembly and sew a new one on in the same location.

NOTE

There are two different extended gore assemblies, left and right. There is no difference between the forward and aft extended gore assemblies.

NOTE

The forward extended gores are located on gores 5 and 23 (left and right respectively).

NOTE

To ensure proper installation of the new extended gore ensure that the sewing machine that will be used to conduct the repair has been tested for proper stitching pattern, stitches per inch, tension, and correct type of thread.

Replace a damaged **AFT** extended gore as follows:

1. Carefully cut the attaching loops on the extended gore, this will allow for removal of the upper control lines.
2. Slide the attaching loop out of the girth-hitch knot on the control line.
3. Pin the upper control lines to the exposed radial of the open gore (radial 5 or 23) at the trailing edge of the extended gore to maintain continuity.

REPLACE – continued

- Carefully remove stitching on the damaged extended gore assembly. Take note on how the extended gore is attached. Clean the area by removing all loose pieces of thread.

NOTE

There is some overlap of the reinforcement tapes on the forward and aft extended gores. You may need to remove some of the stitching of the aft extended gore. This stitching must be replaced when the new forward extended gore is sewn into place.

- Take a new aft extended gore (**figure 1**). Ensure that you have the correct assembly; left extended gore assembly for the jumpers left side; right extended gore assembly for the jumpers right side.

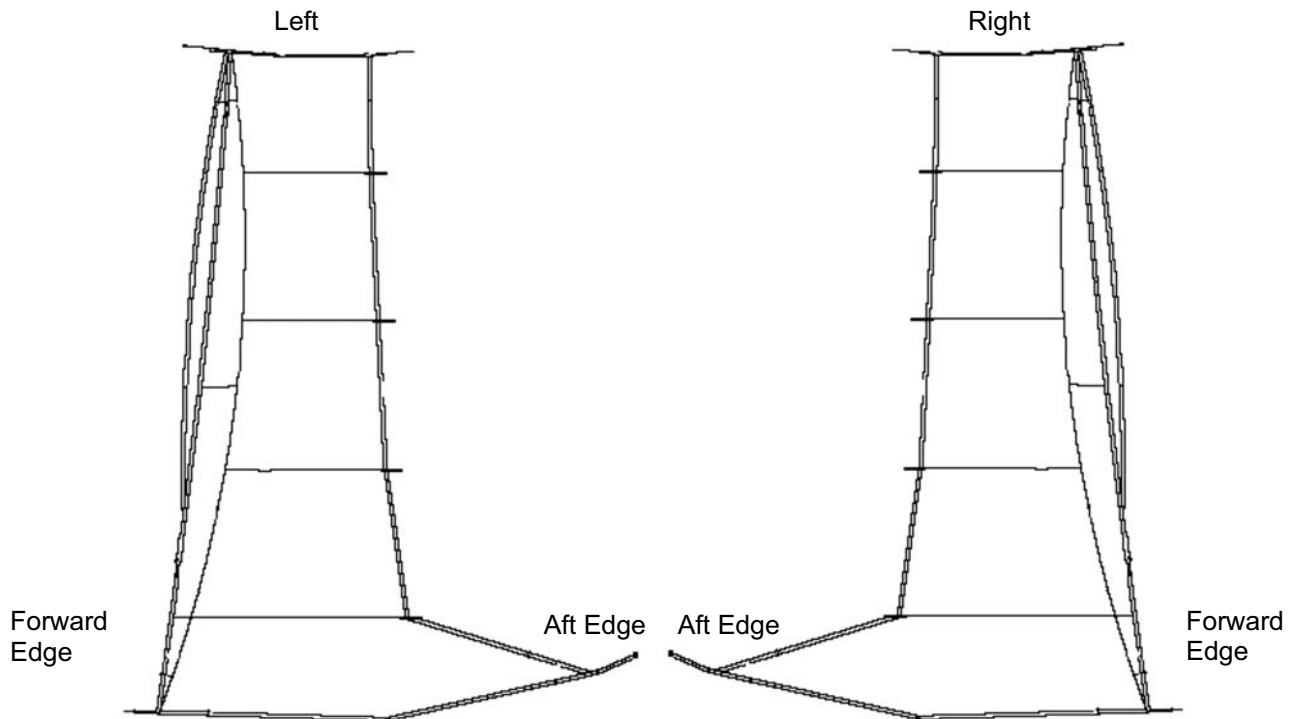


Figure 1. Identifying a Left and Right Extended Gore Assembly.

REPLACE – continued

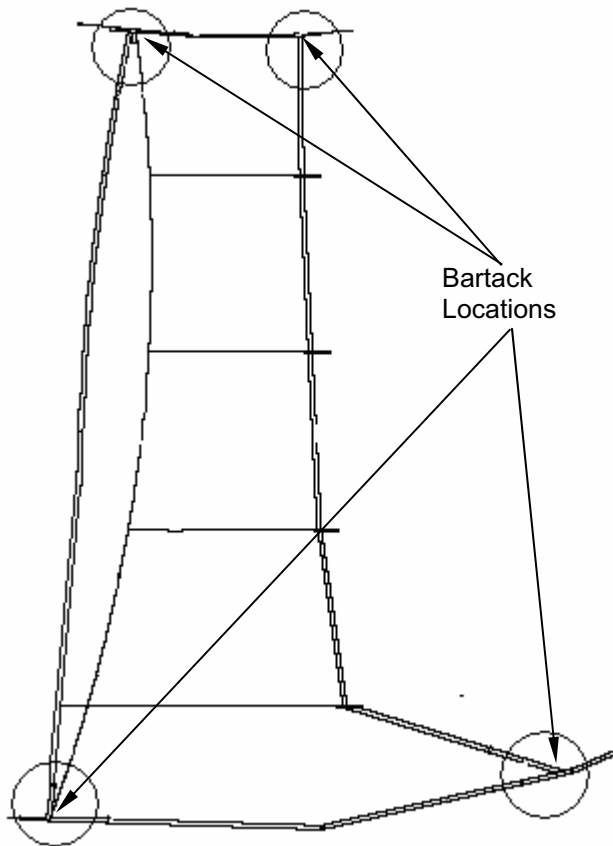


Figure 2. Marking All Four Corners and brake slot opening of Extended Gore.

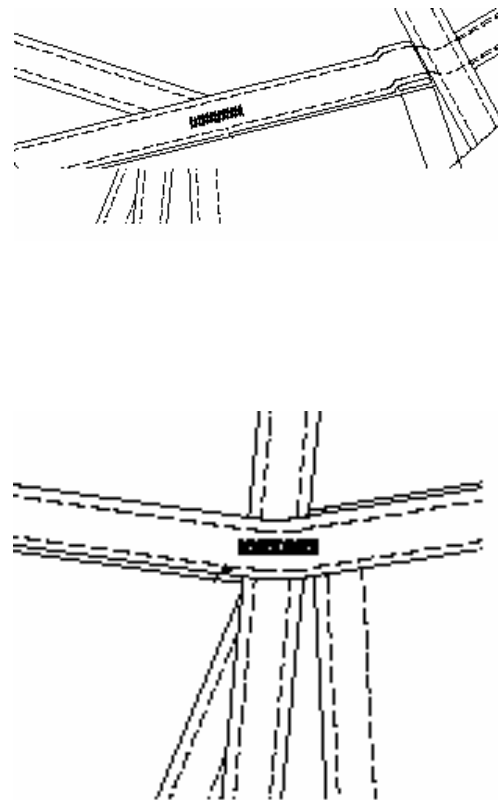


Figure 3. Bartack Intersections On Cross Seam and Main Seam.

6. In the same manner as the original aft extended gore was positioned, align the forward upper corner of the new extended gore with the forward upper inside corner of the open gore (on radial 6 or 23), laying the reinforcement tape on top of the canopy cross seam for at least 4 inches beyond the extended gore with the end folded under a minimum of 1/4-inch on both ends.
7. Using a single needle sewing machine and size E nylon thread, 7 to 11 stitches per inch, sew across top moving from forward to aft.

NOTE

Ensure that there are no twists in the extended gore.

8. Using a single needle sewing machine and size E nylon thread, 7 to 11 stitches per inch, sew across bottom moving from forward to aft.
9. Pull light tension on the radial where the new extended gore is being attached.
10. Pin the new extended gore to the radial every 6 to 10 inches to evenly distribute the slack.
11. Start sewing at the top of the extended gore to the bottom of the extended gore.

REPLACE – continued

12. Reattach upper control line assembly to the new extended gore. Form a girth hitch on attachment loop IAW WP 0017 00. Remove any twists or turns in the control line and thread the attachment loop through the loose girth hitch in the end of the control line. Repeat this process for the remaining control line assembly.
13. Fold the new attachment loop in half aligning the two marks. Place the new attachment loop over the canopy so that the canopy is sandwiched between the new loop and the 1-inch mark. Ensure that the mark aligns with the edge of the canopy forming a 1-inch loop (**figure 2,3**).
14. Sew the new loop into place using two bartacks, one horizontal and one vertical. The horizontal bartack should runoff the end of the new loop.
15. Verify the attached line's continuity.
16. Using a bartack sewing machine on the extended gore, place bartacks in the same manner as original (**figure 2,3**), at the junctions of the trailing edge of the new extended gore and the reinforcements.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY MESH PANEL ASSEMBLY
REPAIR, REPLACE**

INITIAL SETUP:

Tools

Knife (Item 26, WP 0097 00)
Sewing Machine, Double Needle (Item 54, WP 0097 00)
Sewing Machine, Medium Duty, Zig-Zag (Item 57, WP 0097 00)
Sewing Machine, Light Duty (Item 56, WP 0097 00)
Stitch Removal Tool (Item 62, WP 0097 00)
Shears (Item 61, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Unpacked

REPAIR

NOTE

Only straight tears can be repaired. Do not repair if parts of the mesh are missing.

NOTE

No single repair may be more than 6 inches in length. No more than 4 repairs per mesh panel. No more than 12 inches of repaired damage in total. Repairs may not cross one another.

Repair a damaged mesh panel as follows:

1. Invert canopy.

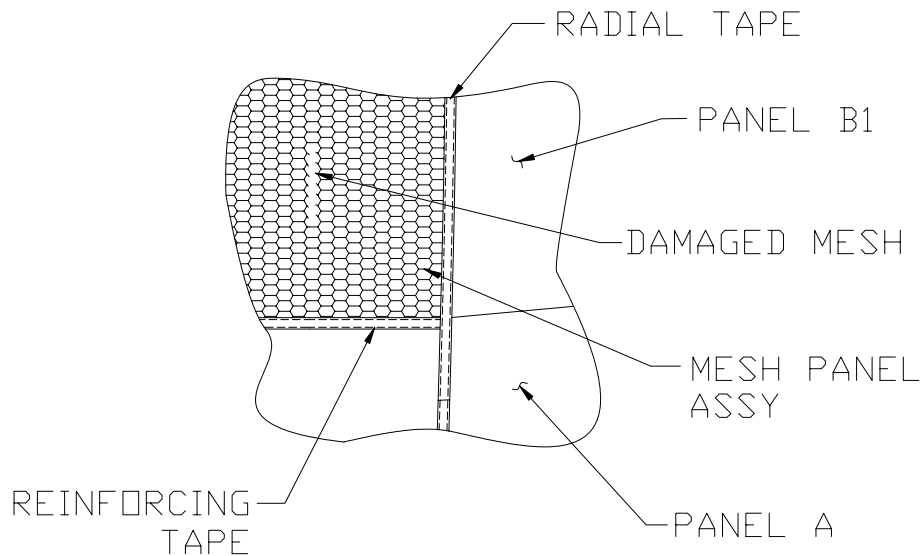


Figure 1. Repair Damaged Mesh Panel.

REPAIR - continued

2. Pinch the torn edges together.
3. Using a zig-zag sewing machine set to a 3/16-inch wide stitch and size E nylon thread, start sewing at least 1-inch before the tear and at least 1/8-inch in from the edge. Sew the length of the tear, binding the torn edges together. Continue sewing to at least 1-inch past the tear (**figure 2**).

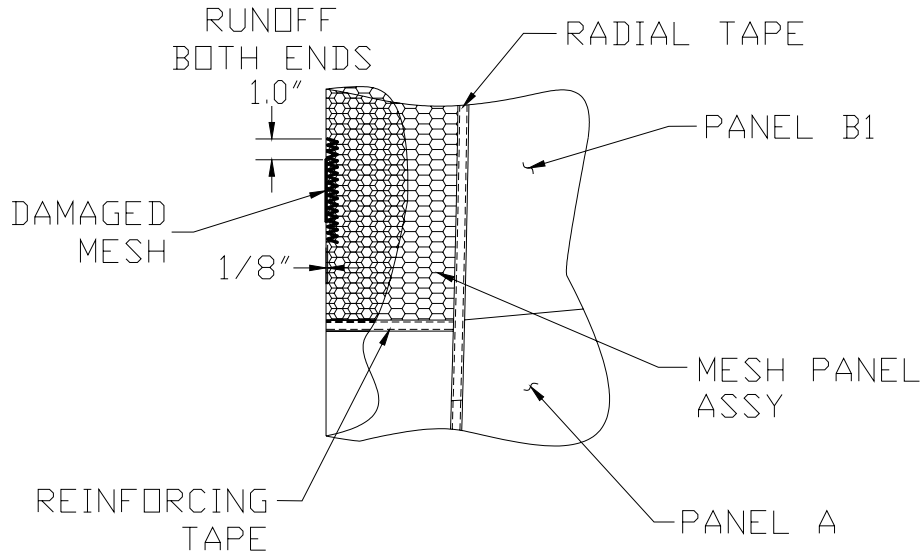


Figure 2. Sew Before Tear.

4. Verify that the repair is functional by using hand tension to pull the mesh perpendicular to the repair. If it pulls apart, attempt the repair again or replace the entire mesh panel.

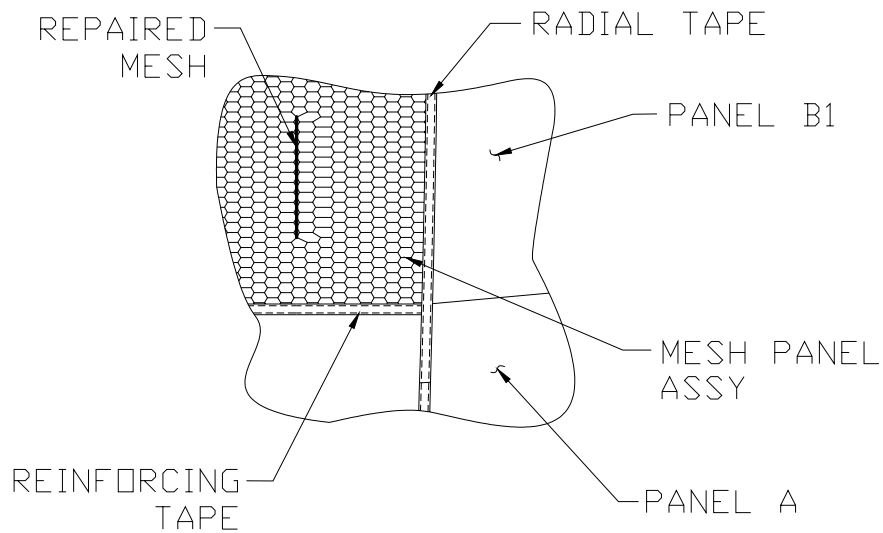


Figure 3. Verify Repair Is Functional.

REPLACE - continued

NOTE

Each mesh panel is a complete assembly that is sewn over a finished opening. Replacement entails removing the damaged mesh panel assembly and sewing a new one in the same location.

NOTE

A double needle sewing machine may be used in place of a single needle sewing machine.

Replace a damaged mesh panel as follows:

1. Carefully remove the damaged mesh panel assembly. Take note on how the mesh panel is attached. Clean the area by removing all loose pieces of thread.
2. Take a new mesh panel assembly and, in the same manner as the original mesh panel was positioned, align an upper corner of the new mesh panel with an upper inside corner of the opening, laying the reinforcement tape on top of the radial seam for at least 4 inches beyond the mesh panel with the end folded under a minimum of 1/4-inch on both ends. Pin into place
3. Using a single needle sewing machine and size E nylon thread, begin sewing at least 4 inches before the end of the mesh panel radial tape and sew the entire radial seam of the new mesh panel to the canopy, sewing past the other end by at least 4 inches. Repeat for the other radial.
4. Using a single needle sewing machine and size E nylon thread, sew the top of the new mesh panel to the opening. Backstitch both ends a minimum of 1/2-inch. Repeat for the bottom.

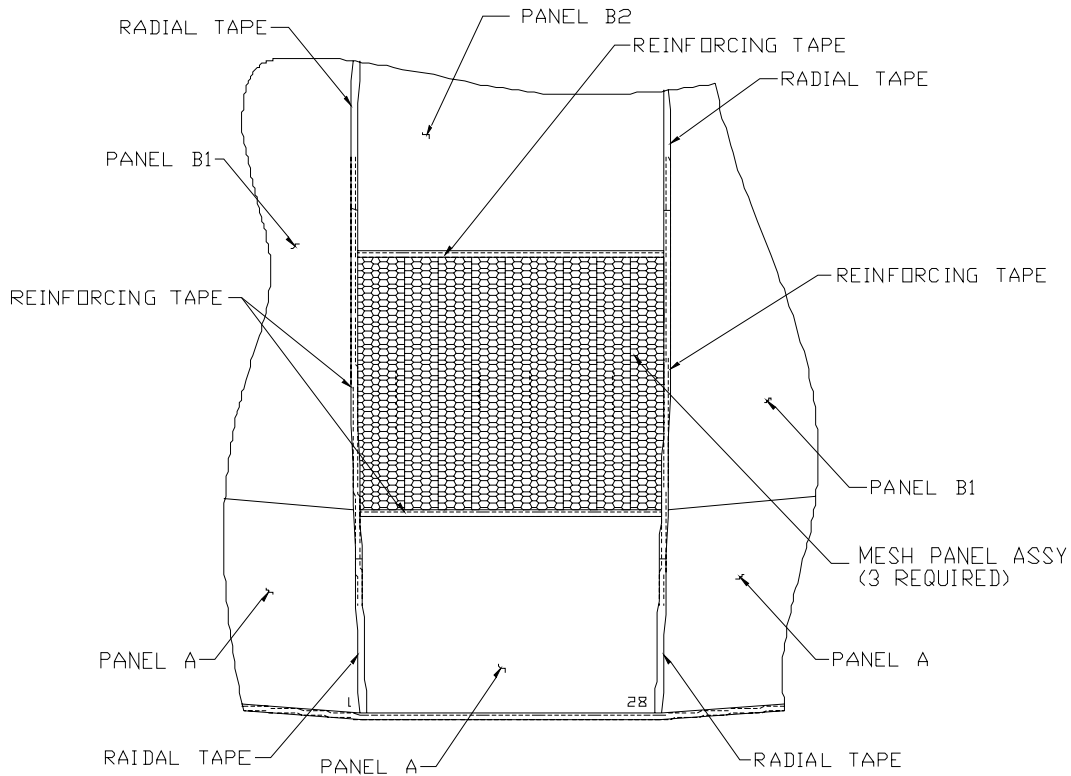


Figure 4. Replace Damaged Mesh Panel.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY LOWER CONTROL LINE
REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Sewing Machine, Bartack, 28 Stitch (Item 51, WP 0097 00)
Scale, Weighing (Item 47, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger, Two

Materials/Parts

Pencil, China Marker, Yellow (Item 35, WP 0109 00)
Ruler, Measure (Item 39, WP 0109 00)

Equipment Condition

Unpacked

REPLACE

WARNING



Always replace control lines as a set (left to right). Failure to do so may cause severe injury or death to personnel.

Replace a damaged lower control line as follows:

1. Straighten the middle and upper control lines ensuring that they are free and clear from all attachment points in the canopy to the junction with the lower (red) control line and down to the toggle. There should be no twists, entanglements or knots.
2. Locate the damaged lower control line and remove the toggle.
3. Take a new lower control line and girth hitch the preformed end to the junction of the two middle control lines and the damaged lower control line.
4. Run the new lower control line down the center of the suspension lines, ensuring that it remains free and clear.
5. Repeat for second line.

REPLACE - continued

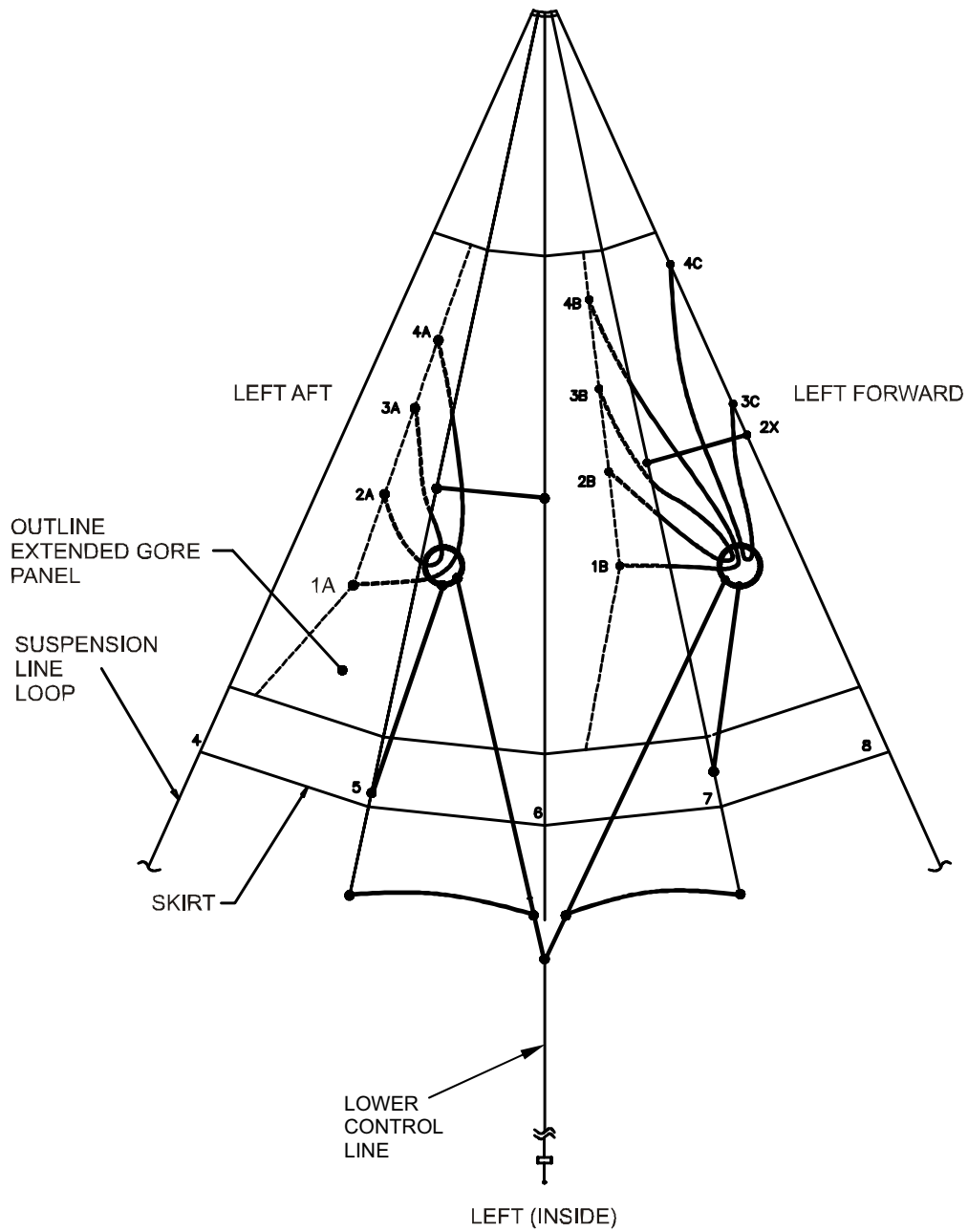


Figure 1. Control Line Assembly.

REPLACE - continued

Position Control Lines on Main Parachute. After replacing a lower control line, position control lines as follows:

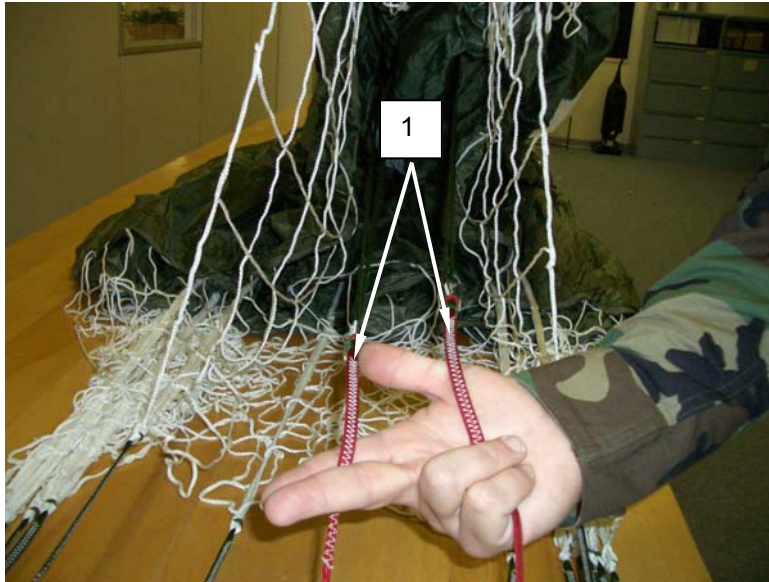


Figure 2. Ensuring Lower Control Lines are Free and Clear.

1. Trace the lower control lines (left and right) (**figure 3, item 1**) down to the risers end (**figure 3, item 2**) ensure that the lower control lines are free and clear from suspension lines and are routed to the outside of the tension bar (**figure 3, item 3**).

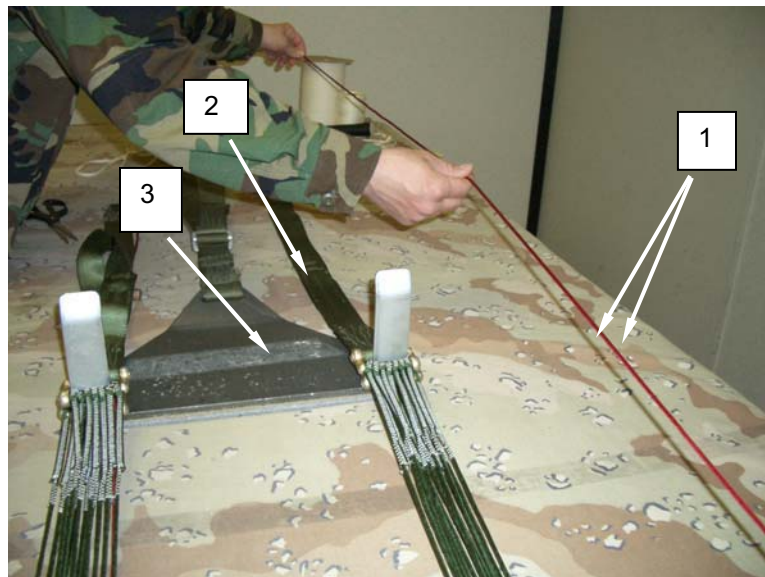


Figure 3. Tracing Lower Control Lines Down To Risers.

NOTE

Requires two rigger personnel to conduct measurement.

2. Measure the lower control lines (left and right) under 5 lbs of pressure.
3. Using a calibrated scale, insert the scale hook-end (**figure 4, item 1**) into the girth hitch (**figure 4, item 2**) where the lower control line (**figure 4, item 3**) is attached to the middle control line cascade.

REPLACE - continued

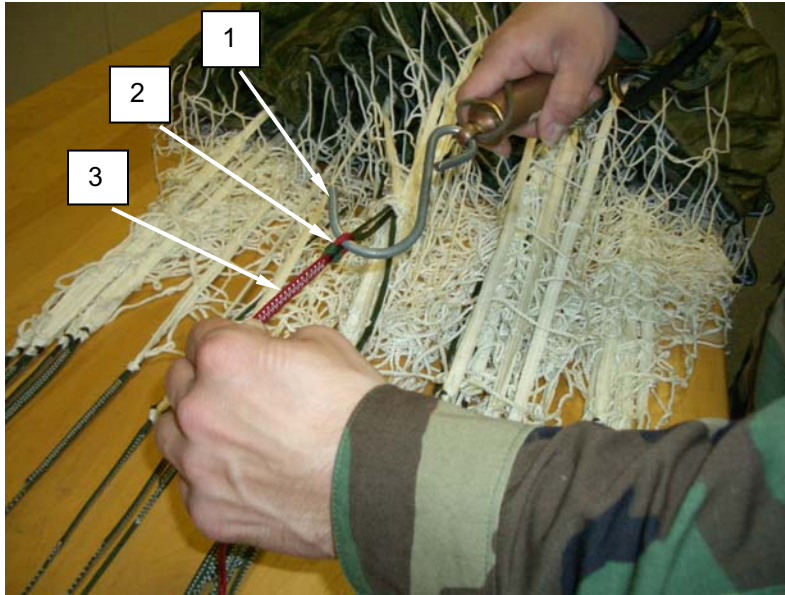


Figure 4. Inserting Scale Hook-end into Girth Hitch.

NOTE

Ensure that ruler and line are lying flat on the packing table and outside of the tension device.

4. Measure from where the lower control line (**figure 5, item 1**) is girth hitched to the middle control line cascade down to the riser end and mark the control line at 282 inch (**figure 5, item 2**) with a yellow mark. Follow procedure for both lower control lines.

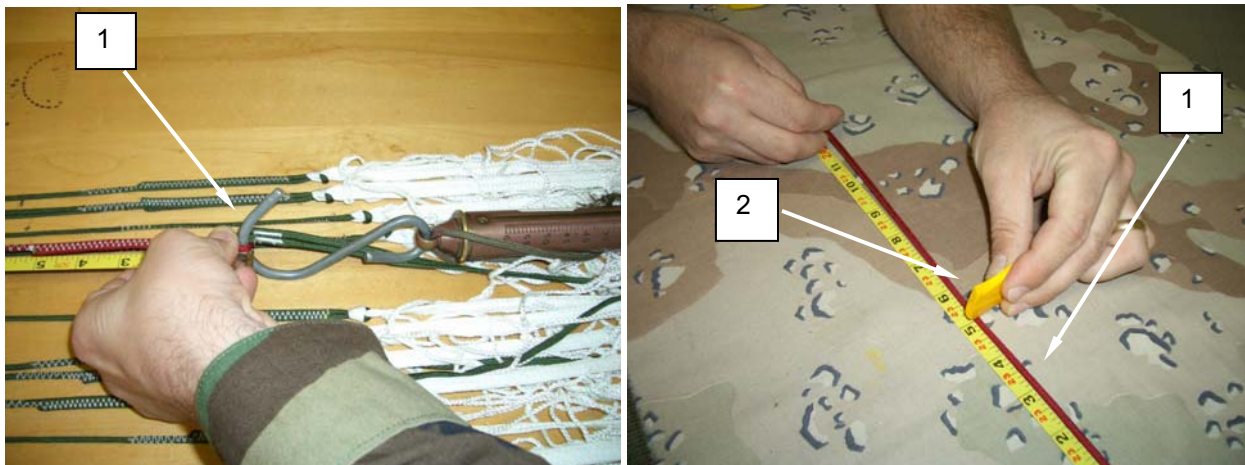


Figure 5. Marking Control Line at 282 Inches.

5. Once the measurements are completed, route both lower control lines (left and right) to the center of both left and right suspension line groups, ensure the lower control lines are free and clear and to the inside of the suspension line groups.
6. Pass each lower control line (**figure 6, item 1**) through the two control line channels (located on the inside of each rear riser) (**figure 6, item 2**), then through the guide ring (**figure 6, item 3**) and finally through the wooden toggle (**figure 6, item 4**).

REPLACE - continued

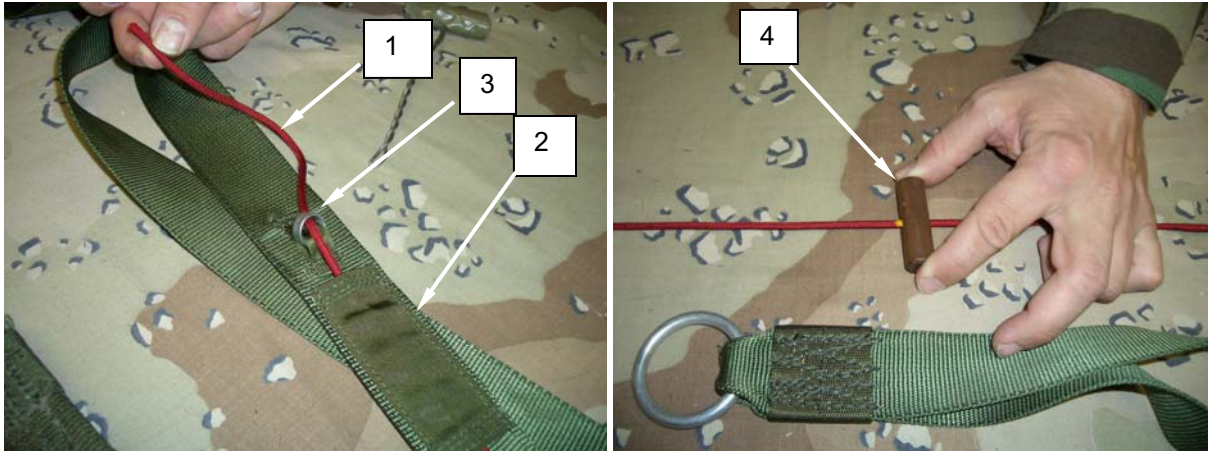


Figure 6. Routing Control Line Through Channel, Guide Ring, and Toggle.

7. Push the toggle (**figure 7, item 1**) up past the 282 inch mark (**figure 7, item 2**) and tie two overhand knots (**figure 7, item 3**) on top of each other, below the toggle, such that the yellow mark (282 inch mark) is located in the center of the first knot.

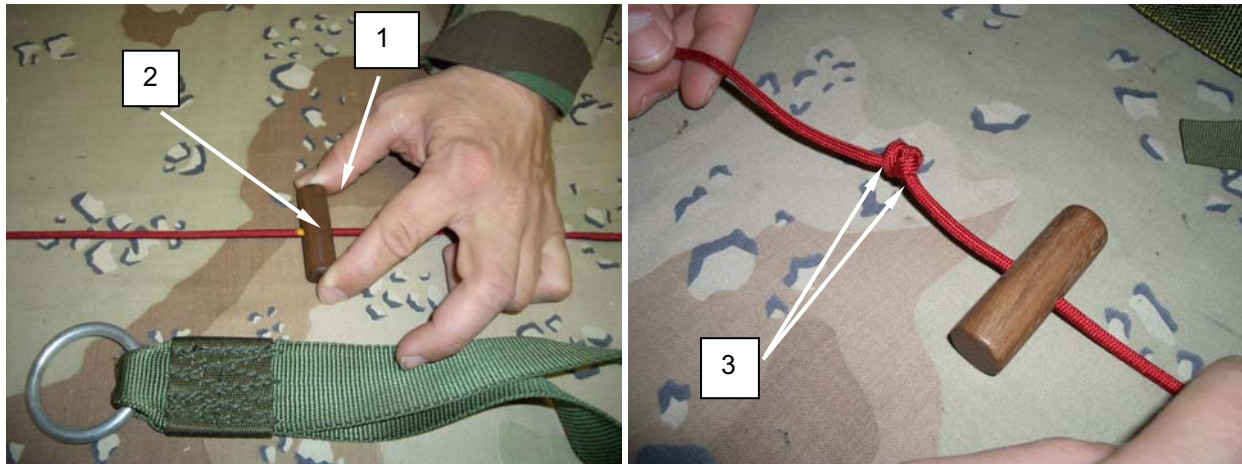


Figure 7. Tying First Two Overhand Knots.

8. Leave a gap of about 2.5 inches (3 fingers width) and tie another overhand knot (**figure 8, item 1**).

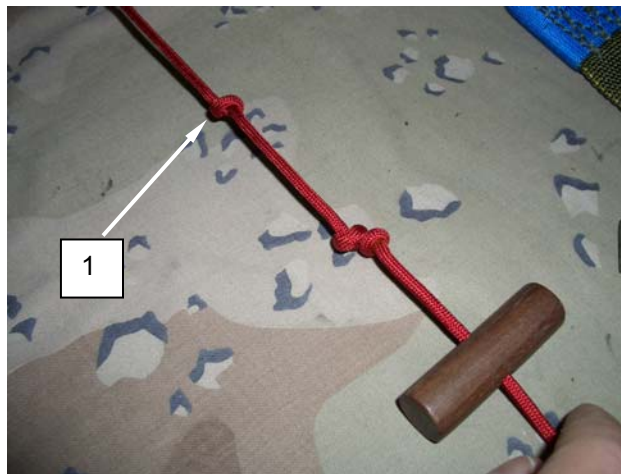


Figure 8. Tying Final Overhand Knot.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY MIDDLE AND UPPER LEFT/RIGHT AFT CONTROL LINE ASSEMBLY
REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
 Sewing Machine, Bartack, 28 Stitch (Item 51, WP 0097 00)
 Line Insertion Tool (Finger Trap Tool) (Item 28, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Pin, Steel, T, Size 24 (Item 37, WP 0109 00)
 Thread, Nylon, Size E (Item 51, WP 0109)

Equipment Condition

Unpacked

REPLACE**WARNING**

Upper and middle control line assembly will be replaced as an entire assembly if any one of the upper and middle control lines in the control line assembly is damaged. Failure to follow these replacement procedures may have adverse effects on the performance of the main canopy and may result in a malfunction of the parachute and severe injury or death to personnel.

NOTE

Procedures in this work package will be used to replace the left or right aft control line assembly. The left and right aft control line assemblies are mirror images of each other. Both sides are installed in the same manner described in this work package.

Replace a damaged control line assembly as follows:

1. Place canopy in proper layout
2. Invert canopy between lines 1 and 28.
3. Straighten the control line assembly, ensuring that it is free and clear from all attaching points in the canopy to the junction with the lower (red) control line down to the control toggle. Ensure that there are no twists, entanglements or knots.
4. Align the new control line assembly on top of the damaged control line assembly and pin the new control line assembly next to the attaching points as this will assist in re-attaching the new control line assembly. Reference the control line assembly diagrams in this work package to ensure the control line assembly has been correctly routed and attached to the canopy.
5. Replace the left or right aft Control Line assembly in this order:
 - a. Middle Control Line Assembly
 - b. Upper Long Control Line
 - c. Upper Short Control Line
 - d. Extended Gore Limiter Line
 - e. Lower Control Line

REPLACE – continued

6. Use the following routing chart (**Table 1**) and layout charts left/right aft assemblies (**figure 1, 2**) to assist with the proper installation of the new left and right aft control line assemblies.
7. Follow the procedures/steps outlined in the appropriate section of this work package for the control line being replaced.

Table 1. Control Line Routing Chart.

Line Nomenclature	Line Number	Connect From	Connect To	Routing
Lower Control Line	40	Middle Control Line	Riser Assembly	
Middle control Line	42	Guide Ring	Lower Control Line, Connect Control Line Limiter to Suspension Attaching Loop Line # 5	Girth Hitch to Guide Ring, and free and clear to Lower Control Line
Control Line Limiter	46	Guide Ring	Suspension Attaching Loop Line # 5	Girth Hitch to Guide Ring then to Control Line Limiter Loop
Upper Control Line Long	43	1A Attaching Loop	4A Attaching Loop	From Bottom to Top Through Ring
Upper Control Line Short	44	2A Attaching Loop	3A Attaching Loop	From Bottom to Top Through Ring
Extended Gore Limit Line	48	Attaching Loop on Gore # 5	Attaching Loop on Gore # 6	Route Under Upper Control Line (Long)
Toggle	55		Lower Control Line	

REPLACE – continued

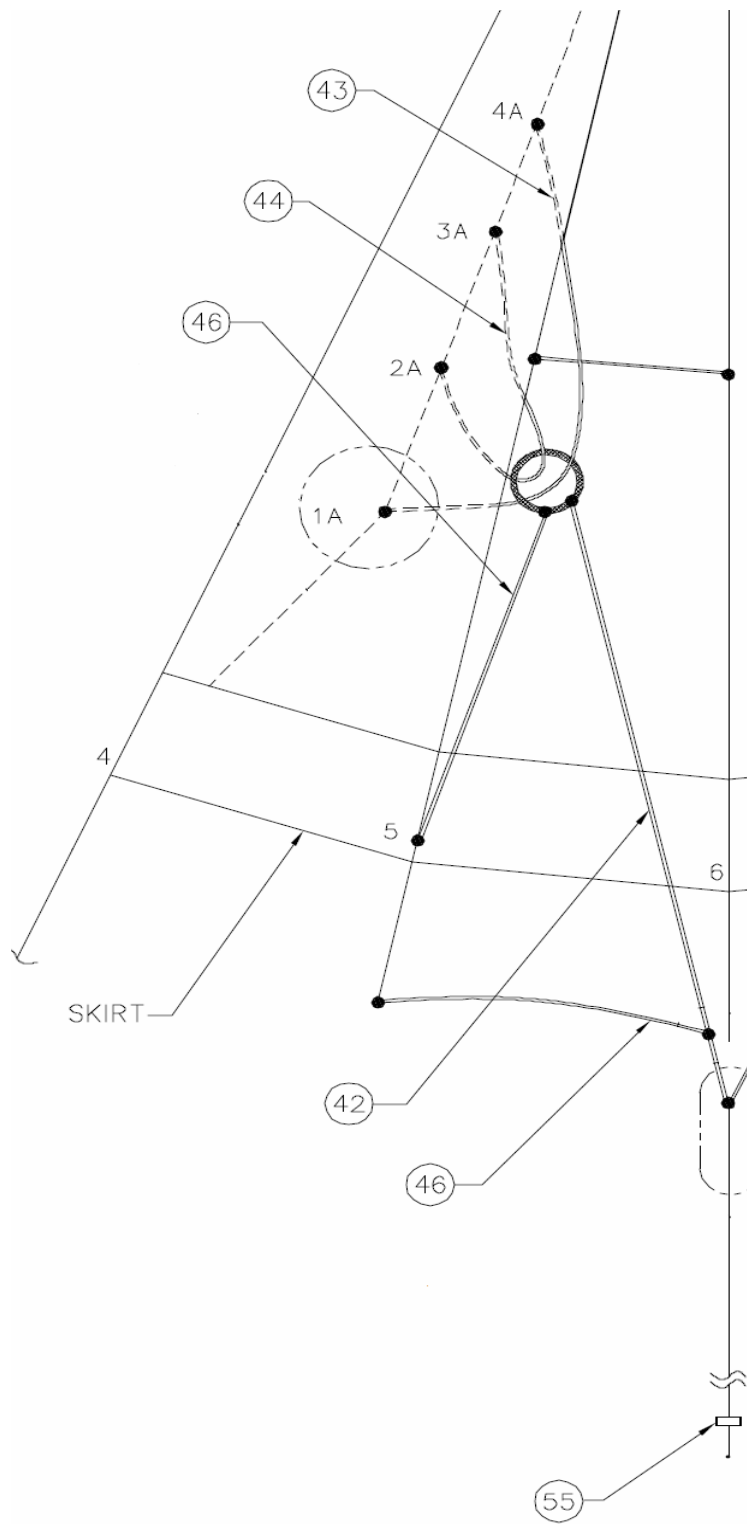


Figure 1. Left Aft Control Line System.

REPLACE – continued

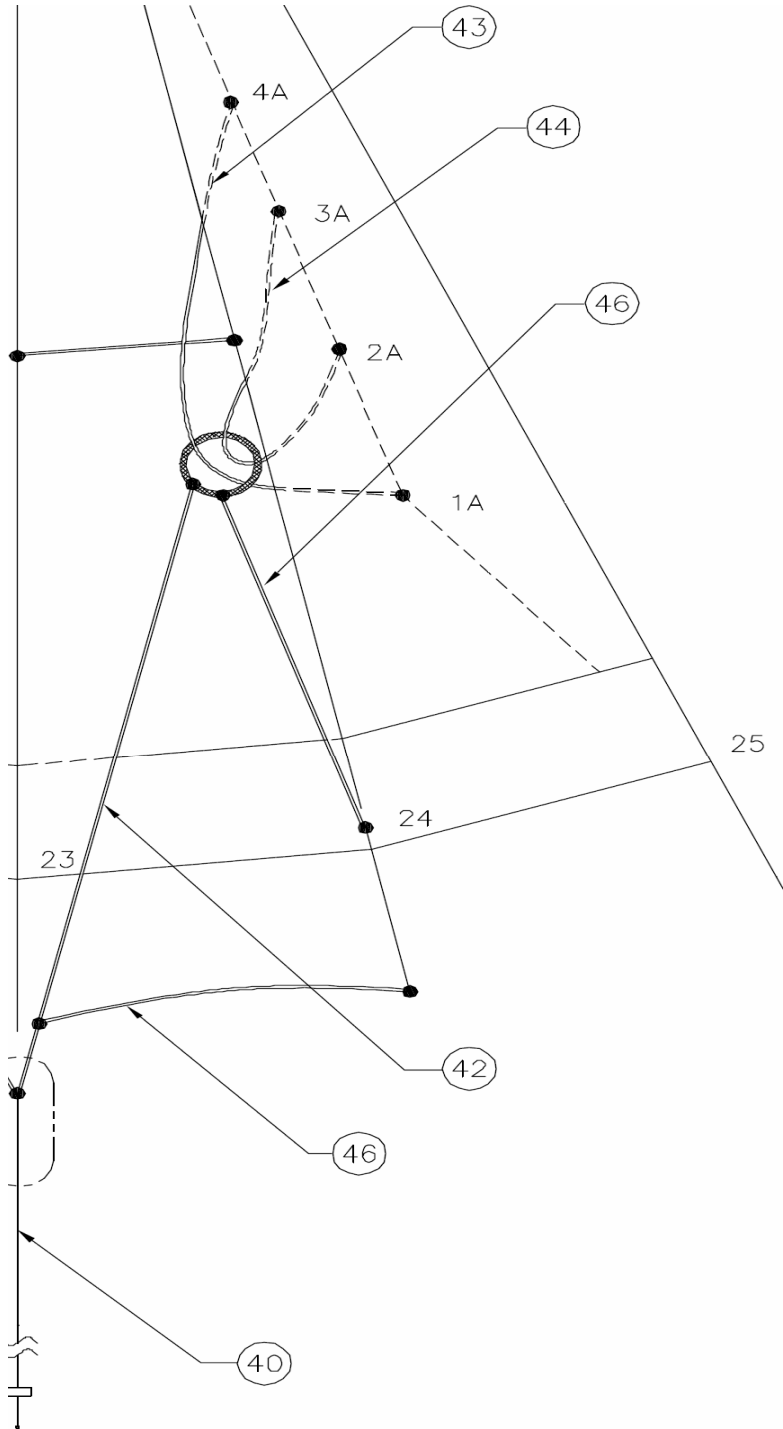


Figure 2. Right Aft Control Line Assembly.

REPLACE – continued**Attach Middle Control Line Assembly (figure 1, item 42)**

1. Girth hitch the new middle control line to the guide ring.
2. Pin the middle control line limiter (**figure 1, item 42**) to the suspension line attaching loop.
3. Girth hitch the control line limiter to the guide ring.
4. Pin free running end to control line limiter loop.
5. Thread the middle control line with control line limiter through the looped end of the suspension line and form a girth hitch.
6. Align the loop marks and insert the free end (approx 3-1/2 inches) of the control line limiter back into itself using a finger trap tool.
7. Thread the control line limiter through the looped end of the control line limiter loop and form a girth hitch IAW WP 0017 00.
8. Align the loop marks and insert the free end (approximately 3-1/2 inches) of the control line limiter back into itself using a finger trap tool.
9. Using a bartack sewing machine, place a bartack 1/8-inch from the insertion.

WARNING

Forward and aft guide rings must be aligned. If they do not align within 1-inch, then the forward control lines must be replaced. Failure to do so will cause damage to the parachute, affect control ability, and injury or death to personnel.

10. Inspect to ensure the middle control line with control line limiter has been routed correctly.
11. Align guide rings. If guide rings are not perfectly aligned, measure the distance between guide rings. Distance between guide rings should not exceed 1-inch.

Upper Long Control Line (figure 2, item 43)

1. Remove the upper long control line (**figure 2, item 43**) from the attaching loops on 1A and 4A.
2. Attach a new upper long control line (**figure 2, item 43**) to the aft assembly by girth hitching the looped end on the upper long control line (**figure 2, item 43**) to the attaching loop (1A).
3. Thread the freerunning end of the upper long control line (**figure 2, item 43**) through the guide ring from bottom to top, through the 4A attaching loop and form a girth hitch IAW WP 0017 00.
4. Align the loop marks on the upper long control line and insert the free end (approx 3-1/2 inches) of the upper long control line back onto itself using a finger trap tool.
5. Using a bartack sewing machine, place a bartack 1/8-inch from the insertion.
6. Inspect to ensure that the upper long control line has been routed correctly.

REPLACE – continued**Upper Short Control Line (figure 2, item 44)**

1. Remove the upper short control line (**figure 2, item 44**) from the attaching loops on 2A and 3A.
2. Attach a new upper short control line to the aft assembly by girth hitching the looped end on the upper short control line (**figure 2, item 44**) to the attaching loop (2A).
3. Thread the other end of the upper short control line (**figure 2, item 44**) through the guide ring from bottom to top, and through the 3A attaching loop and form a girth hitch IAW WP 0017 00.
4. Align the loop marks on the upper long control line and insert the free end (approx 3-1/2 inches) of the upper long control line back onto itself using a finger trap tool.
5. Using a bartack sewing machine, place a bartack 1/8-inch from the insertion.
6. Inspect to ensure that the upper long control line has been routed correctly.

Extended Gore Limiter Line (figure 2, item 48)

1. Remove the extended gore limiter line (**figure 2, item 48**) from the left aft attaching loops gores 5 and 6.
2. Girth hitch the new extended gore limiter line (**figure 2, item 48**) to attaching loop on gore number 5 for the left aft and gore number 24 for the right aft.
3. Route the extended gore limiter line (**figure 2, item 48**) under the Upper Control Line (Long) (**figure 2, item 43**).
4. Thread the freerunning end of the extended gore limiter line (**figure 2, item 48**) through the attaching loop on gore 6 for the left aft, gore 23 for the right aft and form a girth hitch IAW WP 0017 00.
5. Align the loop marks on the extended gore limiter line and insert the free end (approx 3-1/2 inches) of the extended gore limiter line back onto itself using a finger trap tool.
6. Using a bartack sewing machine, place a bartack 1/8-inch from the insertion.
7. Inspect to ensure that the extended gore limiter line has been routed correctly.

Remove Lower Control Line (figure 1, item 40)

1. Un-tie the over hand knots in the lower control line.
2. Remove the lower line control toggle and unthread the lower control line from the riser.
3. Loosen the lower control line where it attaches to the middle control line and remove lower control line by threading through itself.

REPLACE – continued**Attach Lower Control Line (figure 2, item 40)****NOTE**

Once the entire control line assembly has been replaced, the lower control line will need to be re-measured under 5 lbs and re-marked at 282 inches IAW WP 0005 00.

1. Attach lower control line to the middle control line using a girth hitch.
2. Trace the lower control line down to the riser ensuring it is free and clear of the suspension lines and route through the control line channel and guide ring.
3. Remove old middle control line.
4. Place parachute in proper layout.
5. Thread the lower control line through the toggle and place an overhand knot in the lower control line.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY MIDDLE AND UPPER LEFT/RIGHT FORWARD CONTROL LINE ASSEMBLY
REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Sewing Machine, Bartack, 28 Stitch (Item 51, WP 0097 00)
Line Insertion Tool (Finger Trap Tool) (Item 28, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Pin, Steel, T, Size 24 (Item 37, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Unpacked

REPLACE**WARNING**

Upper and middle control line assembly will be replaced as an entire assembly if any one of the upper and middle control lines in the control line assembly is damaged. Failure to follow these replacement procedures may have adverse effects to the performance of the main canopy and may result in a malfunction of the parachute and severe injury or death to personnel.

NOTE

Procedures in this work package will be used to replace the left or right forward control line assembly. The left and right forward control line assemblies are mirror images of each other. Both sides are installed in the same manner described in this work package.

Replace a damaged control line assembly as follows:

1. Place the canopy in proper layout.
2. Invert canopy between lines 1 and 28.
3. Straighten the control line assembly ensuring that it is free and clear from all attaching points in the canopy to the junction with the lower (red) control line and down to the control toggle. Ensure that there are no twists, entanglements or knots.
4. Align the new control line assembly on top of the damaged control line assembly and pin the new control line assembly next to the attaching points as this will assist in re-attaching the new control line assembly. Reference the control line assembly diagrams in this work package (**figure 1**) to ensure the control line assembly has been correctly routed and attached to the canopy.

5. Replace the left or right forward control line assembly in this order:
 - a. Middle Control Line Assembly
 - b. Upper Long Control Line
 - c. Upper Short Control Line
 - d. Extended Gore Limiter Line
 - e. Brake slot Control Line
 - f. Lower Control Line

6. Use the following routing chart (**Table 1**) and layout illustrations left/right forward assemblies (figure 1,2) to assist with the proper installation of the new left/right forward control line assemblies.

7. Follow the procedures/steps for the control line being replaced as detailed in the appropriate section of this work package.

Table 1. Control Line Routing Chart.

Line Nomenclature	Line Number	Connect From	Connect To	Routing
Lower Control Line	40	Middle Control Line	Riser Assembly	
Middle control Line	42	Guide Ring	Lower Control Line, Connect Control Line Limiter to Suspension Attaching Loop Line # 5	Girth Hitch to Guide Ring, and free and clear to Lower Control Line
Control Line Limiter	46	Guide Ring	Suspension Attaching Loop Line # 5	Girth Hitch to Guide Ring then to Control Line Limiter Loop
Upper Control Line Long	43	1A Attaching Loop	4A Attaching Loop	From Bottom to Top Through Ring
Upper Control Line Short	44	2A Attaching Loop	3A Attaching Loop	From Bottom to Top Through Ring
Extended Gore Limit Line	48	Attaching Loop on Gore # 5	Attaching Loop on Gore # 6	Route Under Upper Control Line (Long)
Toggle	55		Lower Control Line	

REPLACE – continued

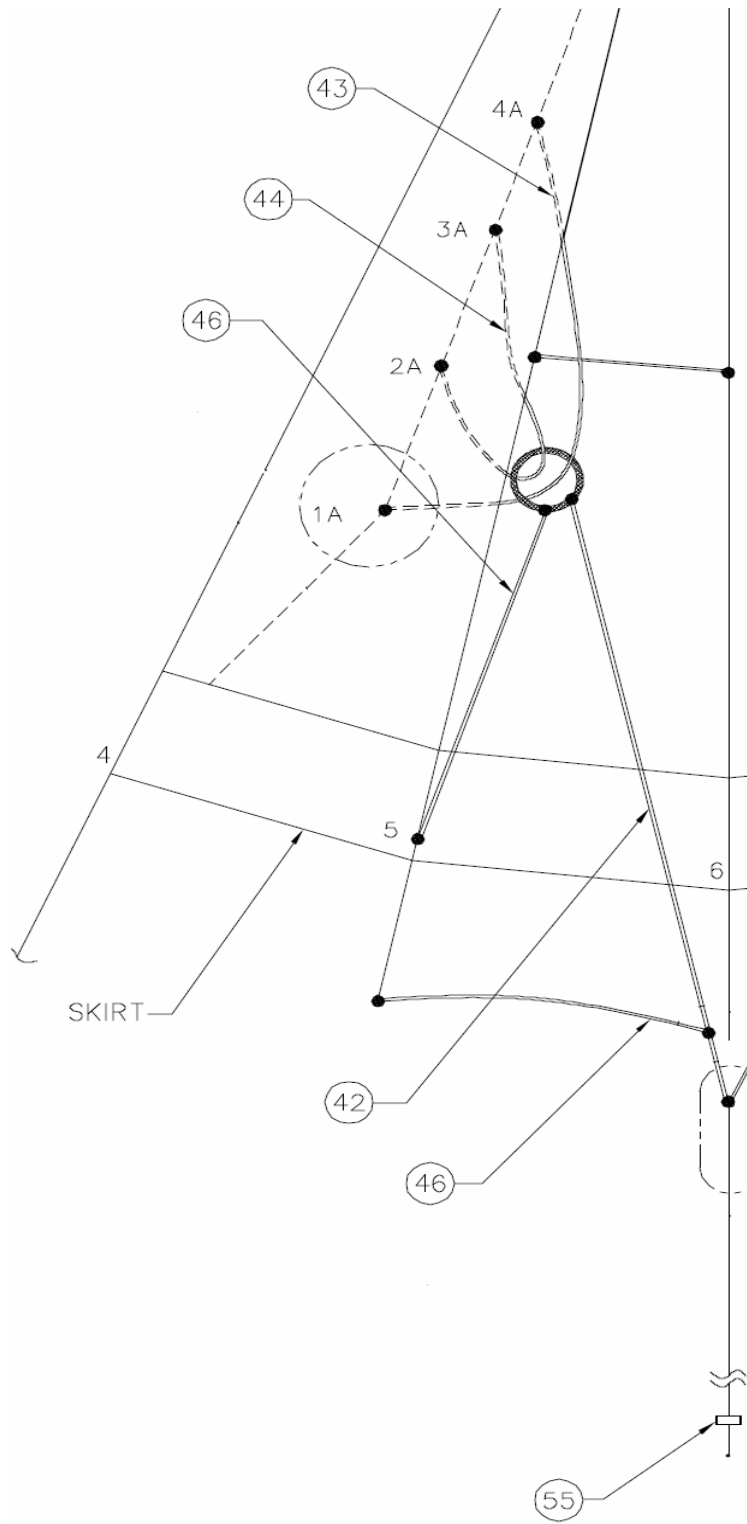


Figure 1. Left Forward Control Line System.

REPLACE – continued

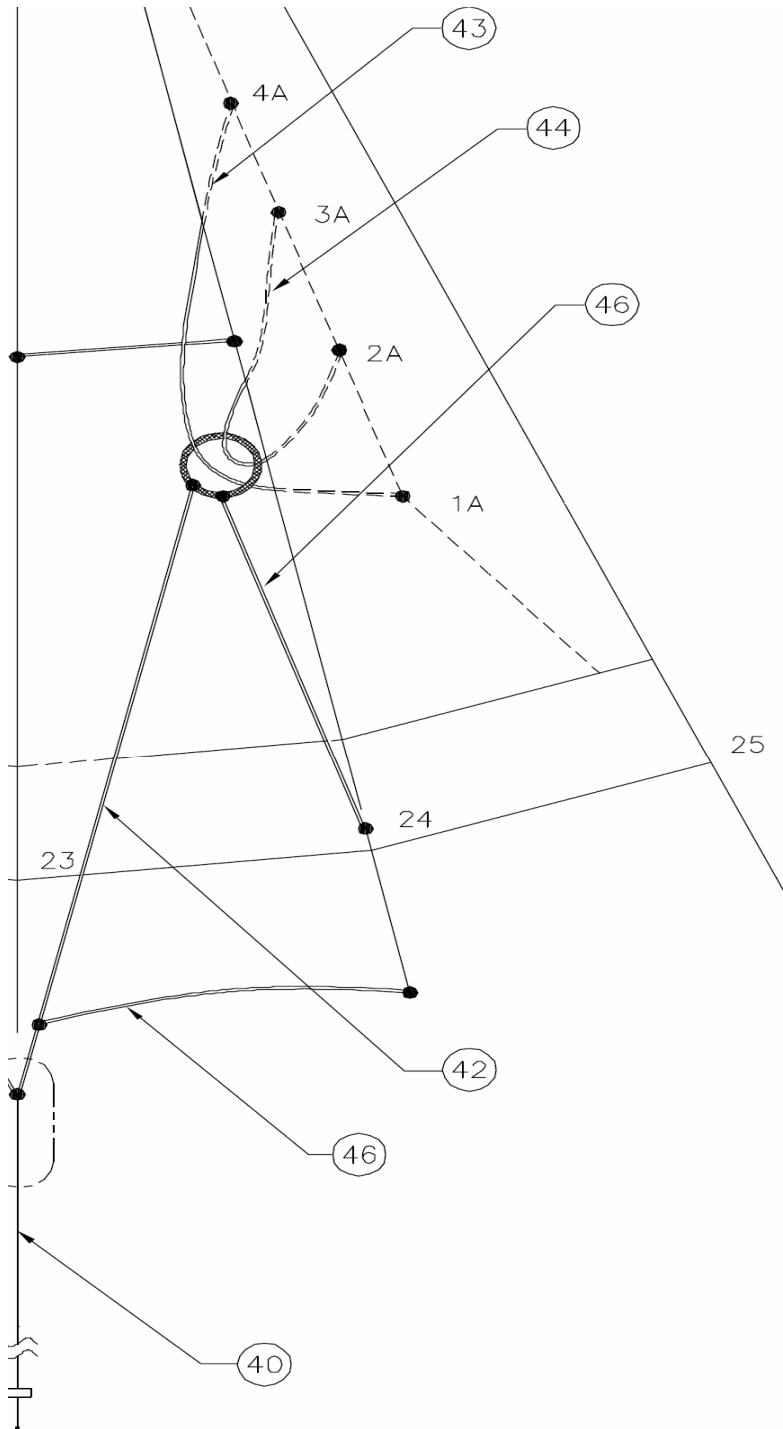


Figure 2. Right Forward Control Line Assembly.

REPLACE – continued**Attach Middle Control Line Assembly (figure 1, item 42)**

1. Girth hitch the new middle control line to the guide ring.
2. Pin the middle control line limiter (**figure 1, item 42**) to the suspension line attaching loop.
3. Girth hitch the control line limiter to the guide ring.
4. Pin free running end to control line limiter loop.
5. Thread the middle control line with control line limiter through the looped end of the suspension line and form a girth hitch.
6. Align the loop marks and insert the free end (approx 3-1/2 inches) of the control line limiter back into itself using a finger trap tool.
7. Thread the control line limiter through the looped end of the control line limiter loop and form a girth hitch IAW WP 0017 00.
8. Align the loop marks and insert the free end (approximately 3-1/2 inches) of the control line limiter back into itself using a finger trap tool.
9. Using a bartack sewing machine, place a bartack 1/8-inch from the insertion.

WARNING

Forward and forward guide rings must be aligned. If they do not align within 1-inch, then the forward control lines must be replaced. Failure to do so will cause damage to the parachute, affect control ability, and injury or death to personnel.

10. Inspect to ensure the middle control line with control line limiter has been routed correctly.
11. Align guide rings. If guide rings are not perfectly aligned, measure the distance between guide rings. Distance between guide rings should not exceed 1-inch.

Upper Long Control Line (figure 2, item 43)

1. Remove the upper long control line (**figure 2, item 43**) from the attaching loops on 1B and 4B.
2. Attach a new upper long control line (**figure 2, item 43**) to the forward assembly by girth hitching the looped end on the upper long control line (**figure 2, item 43**) to the attaching loop (1B).
3. Thread the freerunning end of the upper long control line (**figure 2, item 43**) through the guide ring from bottom to top, through the 4B attaching loop and form a girth hitch IAW WP 0017 00.
4. Align the loop marks on the upper long control line and insert the free end (approx 3-1/2 inches) of the upper long control line back onto itself using a finger trap tool.
5. Using a bartack sewing machine, place a bartack 1/8-inch from the insertion.
6. Inspect to ensure that the upper long control line has been routed correctly.

REPLACE – continued**Upper Short Control Line (figure 2, item 44)**

1. Remove the upper short control line (**figure 2, item 44**) from the attaching loops on 2B and 3B.
2. Attach a new upper short control line to the forward assembly by girth hitching the looped end on the upper short control line (**figure 2, item 44**) to the attaching loop (2B).
3. Thread the other end of the upper short control line (**figure 2, item 44**) through the guide ring from bottom to top, and through the 3B attaching loop and form a girth hitch IAW WP 0017 00.
4. Align the loop marks on the upper long control line and insert the free end (approx 3-1/2 inches) of the upper long control line back onto itself using a finger trap tool.
5. Using a bartack sewing machine, place a bartack 1/8-inch from the insertion.
6. Inspect to ensure that the upper long control line has been routed correctly.

Extended Gore Limiter Line (figure 2, item 48)

1. Remove the extended gore limiter line (**figure 2, item 48**) from the left forward attaching loops gores 5 and 6.
2. Girth hitch the new extended gore limiter line (**figure 2, item 48**) to attaching loop on gore number 5 for the left forward and gore number 24 for the right forward.
3. Route the extended gore limiter line (**figure 2, item 48**) under the Upper Control Line (Long) (**figure 2, item 43**).
4. Thread the freerunning end of the extended gore limiter line (**figure 2, item 48**) through the attaching loop on gore 6 for the left forward, gore 23 for the right forward and form a girth hitch IAW WP 0017 00.
5. Align the loop marks on the extended gore limiter line and insert the free end (approx 3-1/2 inches) of the extended gore limiter line back onto itself using a finger trap tool.
6. Using a bartack sewing machine, place a bartack 1/8-inch from the insertion.
7. Inspect to ensure that the extended gore limiter line has been routed correctly.

Brake Slot Control Line

1. Remove the brake slot control line from the attaching loops.
2. Attach the new brake slot control line to the attaching loop 2C and form a girth hitch.
3. Thread the freerunning end of the brake slot control line through the guide ring from bottom to top and through the 3C attaching loop and form a girth hitch IAW WP 0017 00.
4. Align the loop marks on the brake slot control line and insert the free end (approx 3-1/2 inches) of the brake slot control line back onto itself using a finger trap tool.
5. Using a bartack sewing machine, place a bartack 1/8-inch from the insertion.
6. Inspect to ensure that the brake slot control line has been routed correctly.

REPLACE – continued**Remove Lower Control Line (figure 1, item 40)**

1. Un-tie the over hand knots in the lower control line.
2. Remove the lower line control toggle and unthread the lower control line from the riser.
3. Loosen the lower control line where it attaches to the middle control line and remove lower control line by threading through itself.

Attach Lower Control Line (figure 2, item 40)**NOTE**

Once the entire control line assembly has been replaced, the lower control line will need to be re-measured under 5 lbs and re-marked at 282 inches IAW WP 0005 00.

1. Attach lower control line to the middle control line using a girth hitch.
2. Trace the lower control line down to the riser ensuring it is free and clear of the suspension lines and route through the control line channel and guide ring.
3. Remove old middle control line.
4. Place parachute in proper layout.

Thread the lower control line through the toggle and place an overhand knot in the lower control line.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY CONTROL LINE LIMITER LOOP
REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Sewing Machine, Bartack, 28 Stitch (Item 51, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Unpacked

REPLACE**NOTE**

There are four control line limiter loops. They are located inside the canopy just up from the skirt, along radials 5, 7, 22 & 24.

Replace a damaged control line limiter loop as follows:

1. Turn the canopy inside-out.
2. Straighten the control line system ensuring that it is free and clear from all attachment points in the canopy to the junction with the lower (red) control line. Ensure that there are no twists, entanglements or knots.
3. Locate the damaged control line limiter loop.
4. Pin the control line limiter to the radial about 6 inches above the control line limit loop.
5. Remove the stitching from the control line limiter loop.
6. Unthread the damaged loop from the control limiter line.
7. Take a new control line limiter loop. Girth hitch the new loop to the control line limiter.
8. Remove any twists from the control line limiter and loop. Place the new loop in the same location as the one removed.
9. Using a bartack sewing machine, place a bartack as close as possible to the base of the new control line limiter loop (**figure 1**).

REPLACE - continued

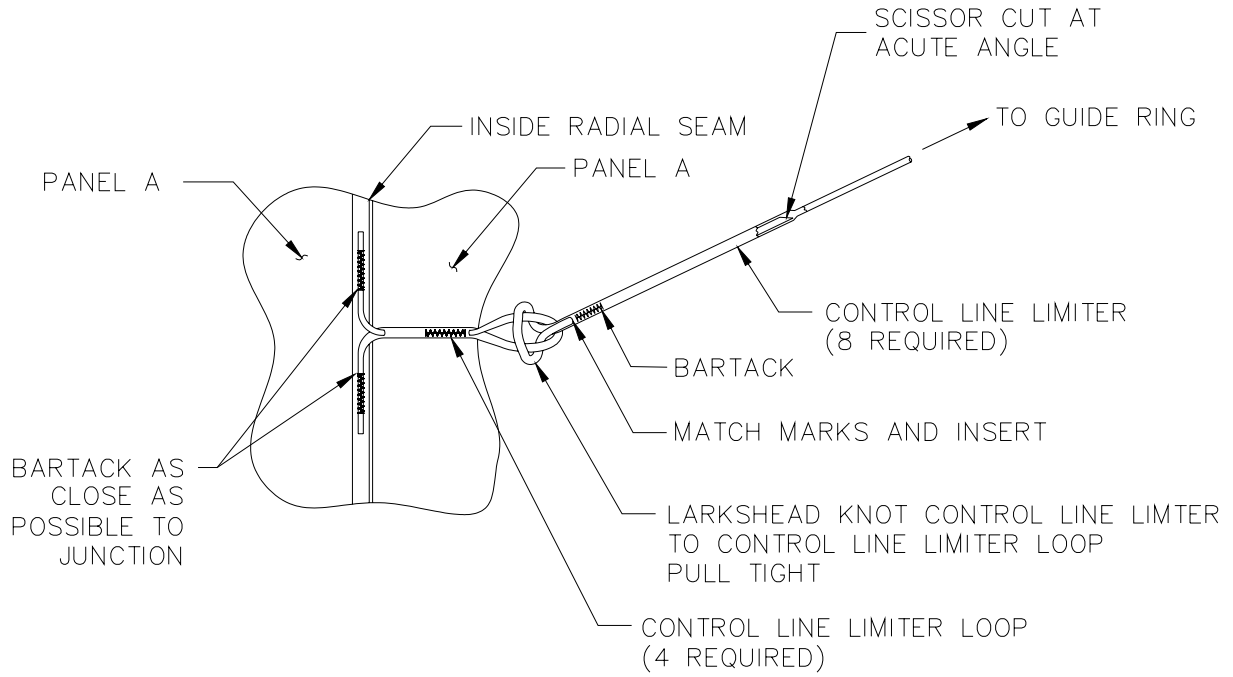


Figure 1. Replace a Damaged Control Line Limiter Loop.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY SUSPENSION LINE
REPLACE**

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Cord, Nylon, Type II (Item 17, WP 0109 00)

Equipment Condition

Unpacked

NOTE

When replacing a suspension line, the link connector must be disassembled.

REPLACE

1. Place the canopy in proper layout on the repair table or repair surface, and apply partial tension to the suspension lines.
2. Trace the damaged suspension line, from canopy skirt to connector link.
3. Remove the tension and lay the canopy out so that the damaged suspension line and one adjacent line run free and clear to the connector link.
4. Remove the damaged suspension line.
5. Remove the screws from the connector links and separate the connector link using a connector link separator.
6. Remove the damaged suspension line.

NOTE

Ensure line continuity is maintained. Use an appropriate tool to slide the suspension lines onto, making certain not to disturb the girth-hitch knot.

7. Take a new suspension line and girth-hitch knot IAW WP 0017 00 to the suspension line loop.
8. Use the adjacent line as a guide and run the replacement line to the connector link.
9. Form a girth-hitch knot and slide the new suspension line onto the connector link.
10. Apply tension and check suspension line fit and continuity.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY CONTROL TOGGLE
REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Pencil, Marking, China, White (Item 36, WP 0109 00)

Dowel, Wood (Item 23, WP 0109 00)

Equipment Condition

Unpacked

REPLACE**NOTE**

The control toggle is locally manufactured. Refer to WP 0113 00 entitled Illustrated List of Manufactured Items for detailed instructions on fabrication.

Replace a damaged control toggle as follows:

1. Straighten the control system ensuring that it is free and clear.
2. Locate the damaged control toggle (**figure 1, item 4**), untie the lower control line (**figure 1, item 1**) and remove the damaged control toggle.
3. Pass the lower control line (**figure 1, item 1**) through the control line channel (located on the inside of the rear riser) (**figure 1, item 2**), then through the guide ring (**figure 1, item 3**) and finally through the wooden toggle (**figure 1, item 4**).

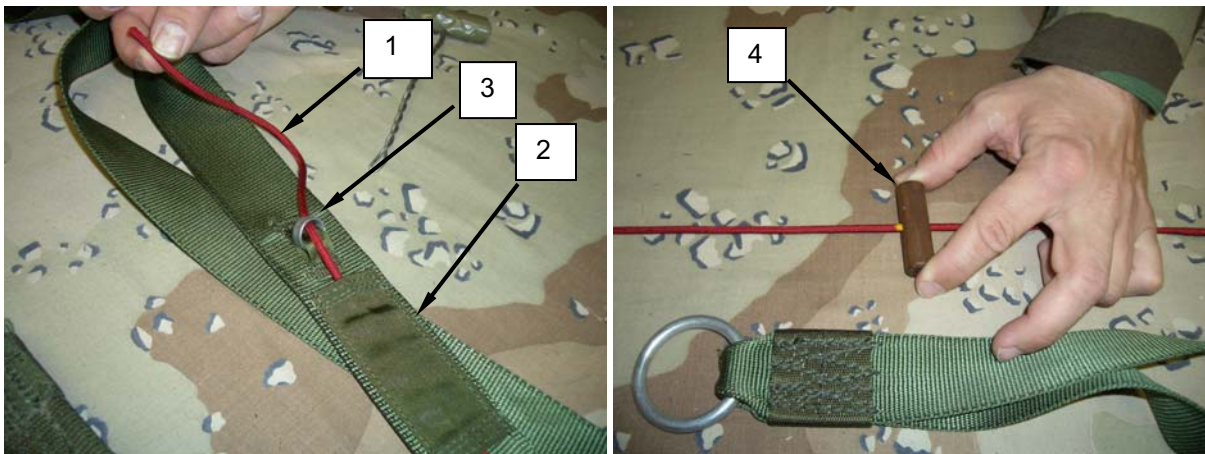


Figure 1. Routing Control Line Through Channel, Guide Ring, and Toggle.

NOTE

If the 282 inch mark is not visible on the lower control line, refer to the section of WP 0005 00 entitled Position Control Lines on Main Parachute for instructions on applying proper tension and marking the lower control line.

4. Push the toggle (**figure 2, item 1**) up past the 282 inch mark (**figure 2, item 2**) and tie two overhand knots (**figure 2, item 3**) on top of each other, below the toggle, such that the yellow mark (282 inch mark) is located in the center of the first knot.

REPLACE - continued

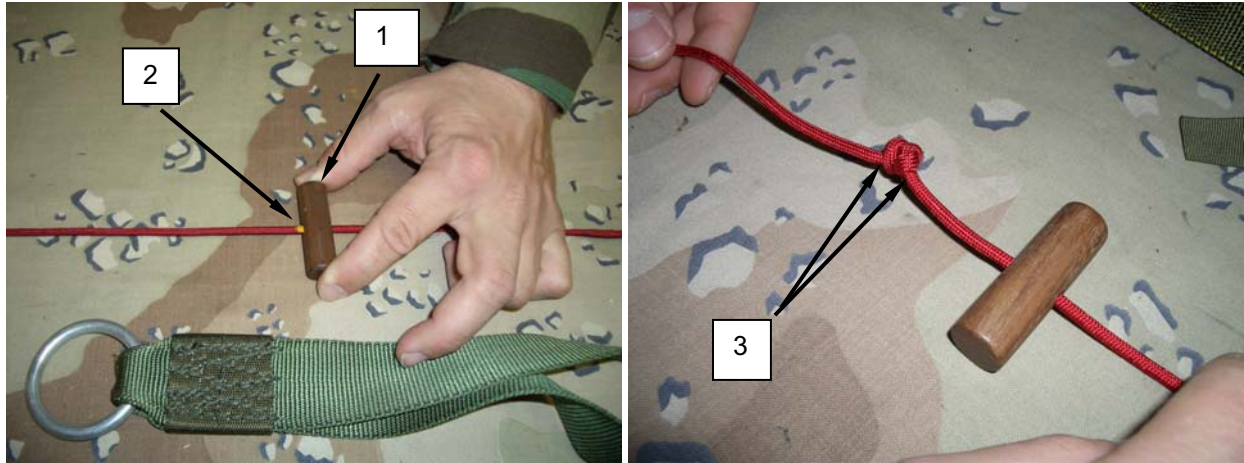


Figure 2. Tying First Two Overhand Knots.

5. Leave a gap of about 2.5 inches (3 fingers width) and tie another overhand knot (**figure 3, item 1**).



Figure 3. Tying Final Overhand Knot.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY ANTI-INVERSION NET
REPAIR, REPLACE**

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Sewing Machine, Medium Duty, Zig-Zag (Item 57, WP 0097 00)
Sewing Machine, Heavy Duty, Zig-Zag (Item 60, WP 0097 00)
Presser Foot, Modified (Item 40, WP 0097 00)
Shears (Item 61, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Cloth Netting, Nylon, 3-3/4-in. sq. Mesh, 18-in. Width (Item 8, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Unpacked. Laid flat on repair table.

REPAIR**NOTE**

The following procedures describe basic netting repairs normally required. This should not be understood to mean that these repairs are the only authorized repairs. Any time supervisory parachute maintenance personnel determine that other repairs are necessary to maintain the basic integrity of the net assembly, they may be made using the following basic criteria.

Procedures in WP 0118 00 may be used to modify the zig-zag sewing machine presser foot which will assist in the repair and replacement of the anti-inversion net.

Due to the net not bearing any weight, the objectives in making repairs to the net are as follows: to prevent damage to the parachute's suspension lines and lower lateral bands; to avoid excessive accumulation of net material during repairs; and to maintain the net in a serviceable condition at minimum cost. To achieve these objectives, the following guidelines are to be followed in making inspections and repairs:

1. A limit of two horizontal and two vertical net cords may be broken in any one net section without repair. Trim the broken cord to within 1/4-inch from where the cord crosses the horizontal or vertical cord, as shown in **figure 1**. Only one unrepaired break per net is permitted.

REPAIR - continued

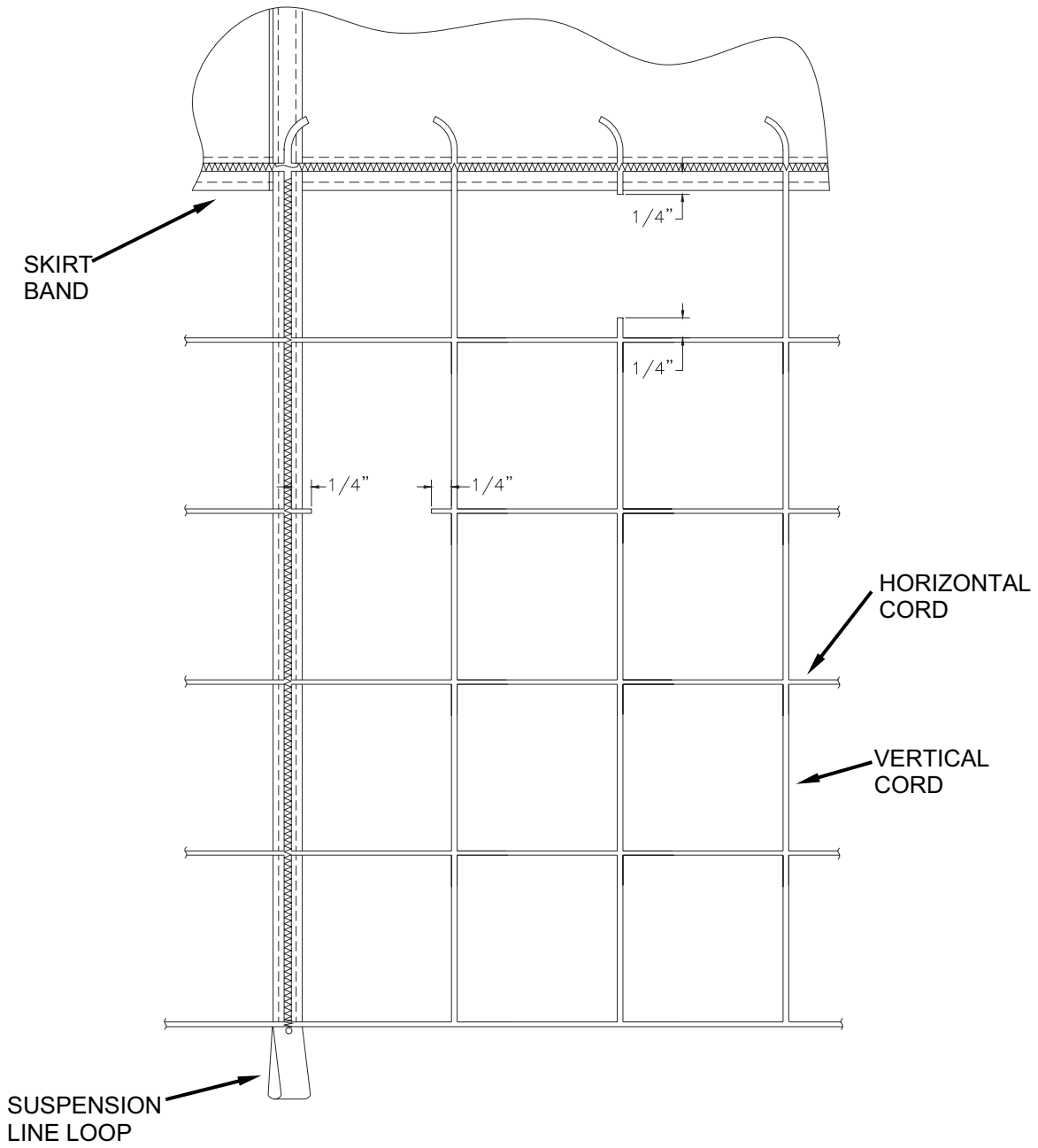
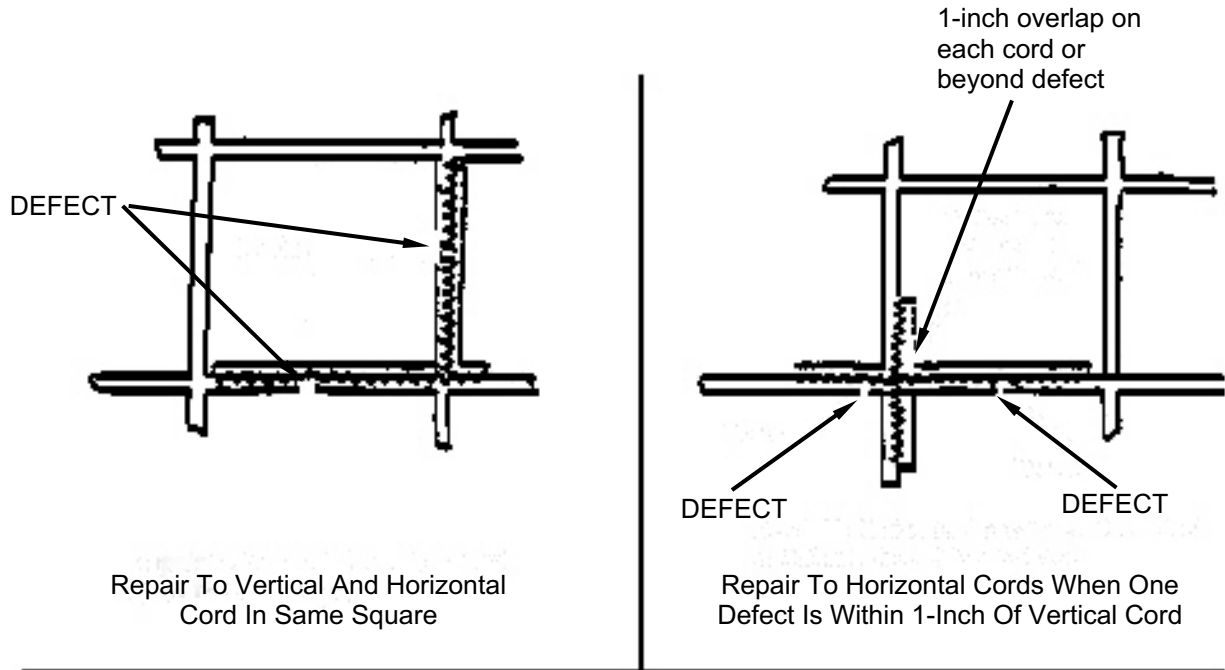


Figure 1. Repair Horizontal and Vertical Net Cords.

REPAIR - continued

- 2. Broken net cords exceeding the number specified in step 1., above, and damaged net cords shall be repaired using a medium duty zig-zag sewing machine, 7 to 11 stitches per inch, 1/8-inch wide throw as illustrated below.



Repair to Vertical Cords Attached to Top Cord

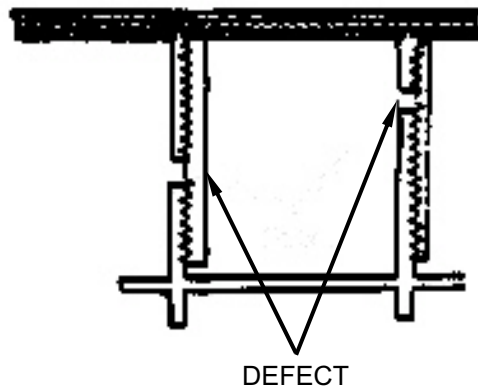


Figure 2. Repair of Broken Net Cord.

REPAIR - continued

3. Damaged areas in the bottom cord must be repaired in accordance with A or B, using a medium duty zigzag sewing machine, 7 to 11 stitches per inch, 1/8-inch wide.

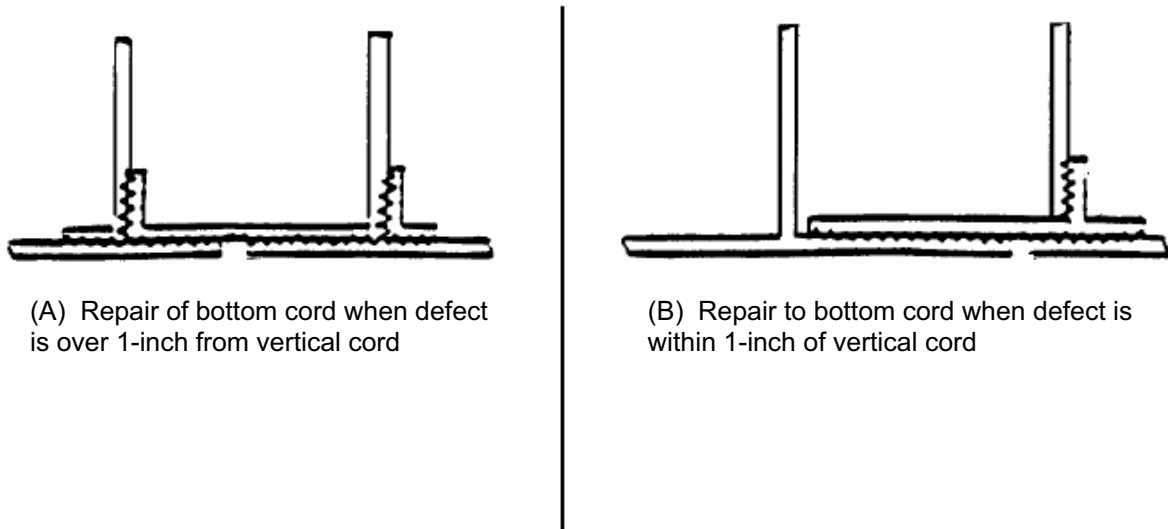


Figure 3. Damaged Areas in the Bottom Cord.

4. If damage is in a square next to a suspension line, exceeds limits, or would require zig-zag stitching to the suspension line, the netting should be cut and removed.

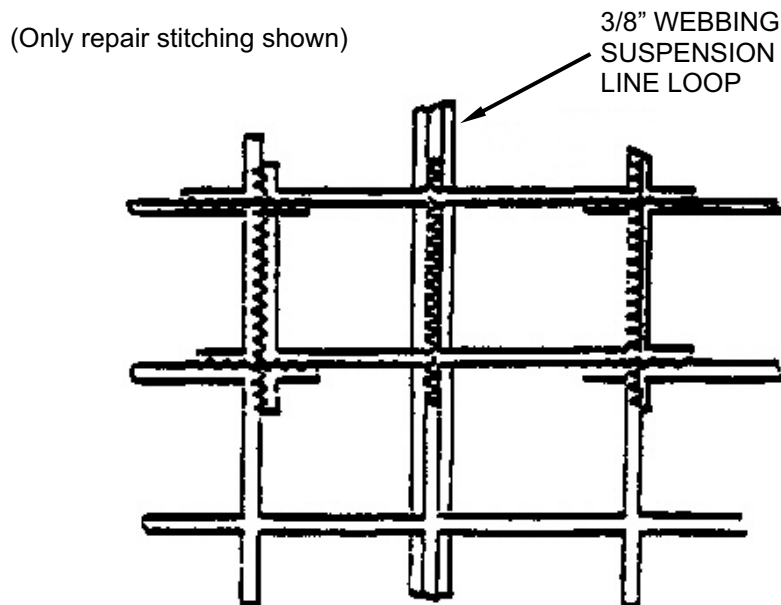


Figure 4. Repair to Net when Defect is less than 1-Inch from Suspension Line.

REPAIR - continued

5. Carefully cut the zig-zag stitching loose from the suspension line. If the line is cut, the suspension line must be replaced. Butt the ends of the vertical cord of the new netting to the end of the cut vertical cord on the suspension line. Using a medium duty zig-zag sewing machine, 7 to 11 stitches per inch, 1/8-inch wide throw, start zig-zag stitch 1/2-inch from new netting material. Stitch on the suspension line and 1/2-inch beyond the end.

REPLACE

If the net section requires replacement, remove the damaged area as follows:

1. Cut the vertical cords close to the top cord sewn to the skirt band.
2. Cut the horizontal cords, except for the top cord; leave one square length plus 1-inch on the outside of the suspension line loop, where possible.
3. Spread the new piece of netting over the removed section, with the top horizontal cord placed below the old cord sewn to the skirt band.

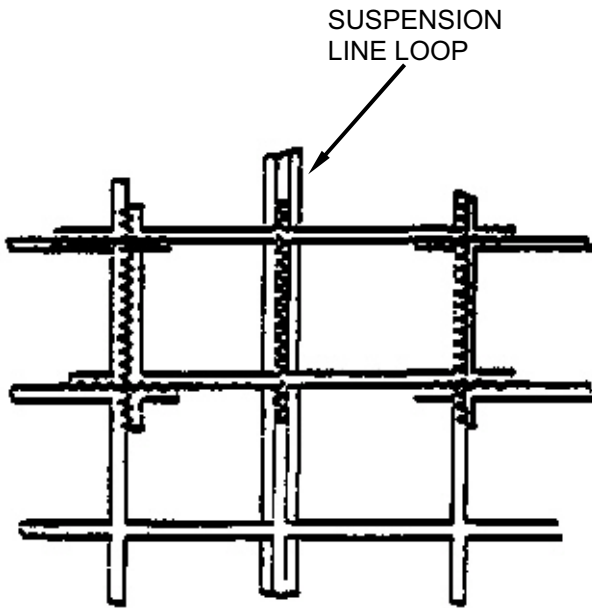
NOTE

If there is insufficient horizontal cord on the inside of the suspension line loop of the section being replaced to attach the replacement net, the horizontal net cords may be placed across the suspension line loop and sewn to cords on the other side. Sew the horizontal for a minimum of 2 inches, sewing directly over the suspension line loop if required.

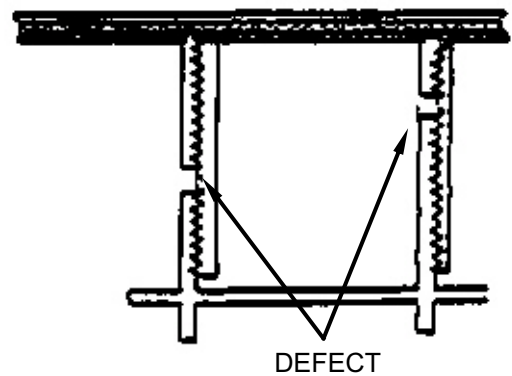
REPLACE - continued

4. Cut out a new section so the ends may be sewn together, using the method shown in figure 5, part C and D, as a guide. Use a medium duty zig-zag sewing machine, 7 to 11 stitches per inch, 1/8-inch wide throw to sew the ends together. Use a heavy duty, zig-zag sewing machine, 7 to 11 stitches per inch, 1/8-inch wide throw to sew the net to the suspension line loop.

(Only repair stitching shown)



(C) Repair to net when defect is less than 1-inch from suspension line



(D) Repair to vertical cords attached to top cord

Figure 5. Cut Out New Section so Ends may be Sewn Together.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY SKIRT BAND
REPAIR**

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Knife, Hot Metal (Item 27, WP 0097 00)
Electric Pot, Melting, (Item 18, WP 0097 00)
Sewing Machine, Light Duty (Item 56, WP 0097 00)
Shears (Item 61, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Beeswax (Item 4, WP 0109 00)
Webbing, Nylon, Type I, 9/16-inch Wide (Item 58, WP 0109 00)
Thread, Nylon, Size E, Natural (Item 51, WP 0109 00)

Equipment Condition

Unpacked. Laid out flat on repair table.

REPAIR

1. Repair damaged between radial seams (**figure 1, item 1**) as follows:
 - a. Cut the stitching (**figure 1, item 2**) of the line loop on each side of the damaged area (**figure 1, item 3**).
 - b. Invert the canopy (**figure 1, item 4**) and smooth the canopy around the damaged area.
 - c. Cut a piece of natural 9/16-inch nylon webbing, long enough to extend 6 inches on each side of the damaged area.
 - d. Position the tape over the damaged area of the skirt band (**figure 1, item 5**).
 - e. Using a light-duty sewing machine, and size E nylon thread, stitch in place with two continuous rows of stitching, 7 to 11 stitches per inch. Overstitch the ends of the tape by 2 inches.
 - f. Reposition the line loop, sew in place according to the original construction.

REPAIR - continued

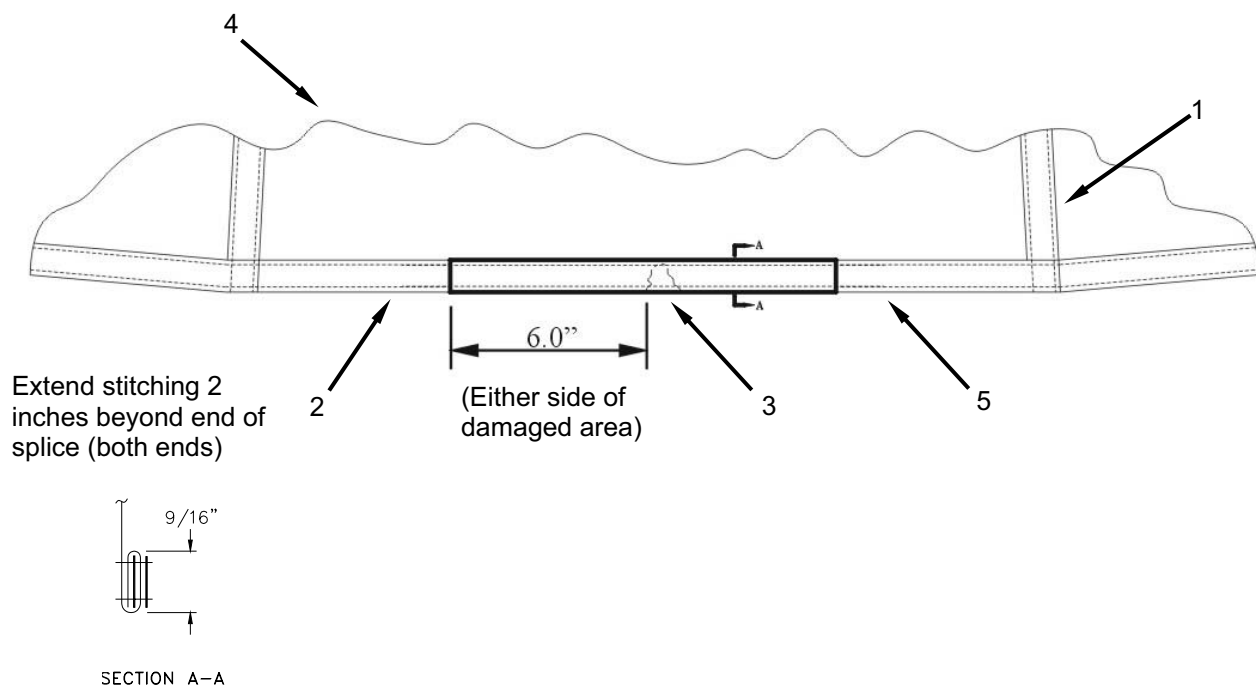


Figure 1. Skirt Band Damage Between Radial Seams.

2. Repair damaged extending into radial seams (**figure 2, item 1**) as follows:
 - a. Cut the stitching of the line loop at the damaged radial seam (**figure 2, item 1**) on each side of the damaged area. Move these items to one side.
 - b. Invert the canopy (**figure 2, item 2**) and smooth the canopy around the damaged area.
 - c. Cut a piece of 9/16-inch nylon webbing, long enough to extend 6 inches beyond the outside edge of the radial seam on each side of the damaged area (**figure 2, item 3**). Sear or dip the ends of the webbing.
 - d. Position the webbing on the damaged area. Using a light-duty sewing machine, and size E nylon thread, sew the webbing in place with two continuous rows of stitching, 7 to 11 stitches per inch. Overstitch the ends of the webbing by 2 inches.
 - e. Reposition the line loops; sew in place according to the original construction.
3. Stitching and Restitching. Stich and restitch with size E nylon thread that matches the color of the original stitching, when possible. Lock all straight stitching by backstitching at least 1/2-inch. Restitch directly over the original stitching. Follow the original stitch pattern as closely as possible.

REPAIR - continued

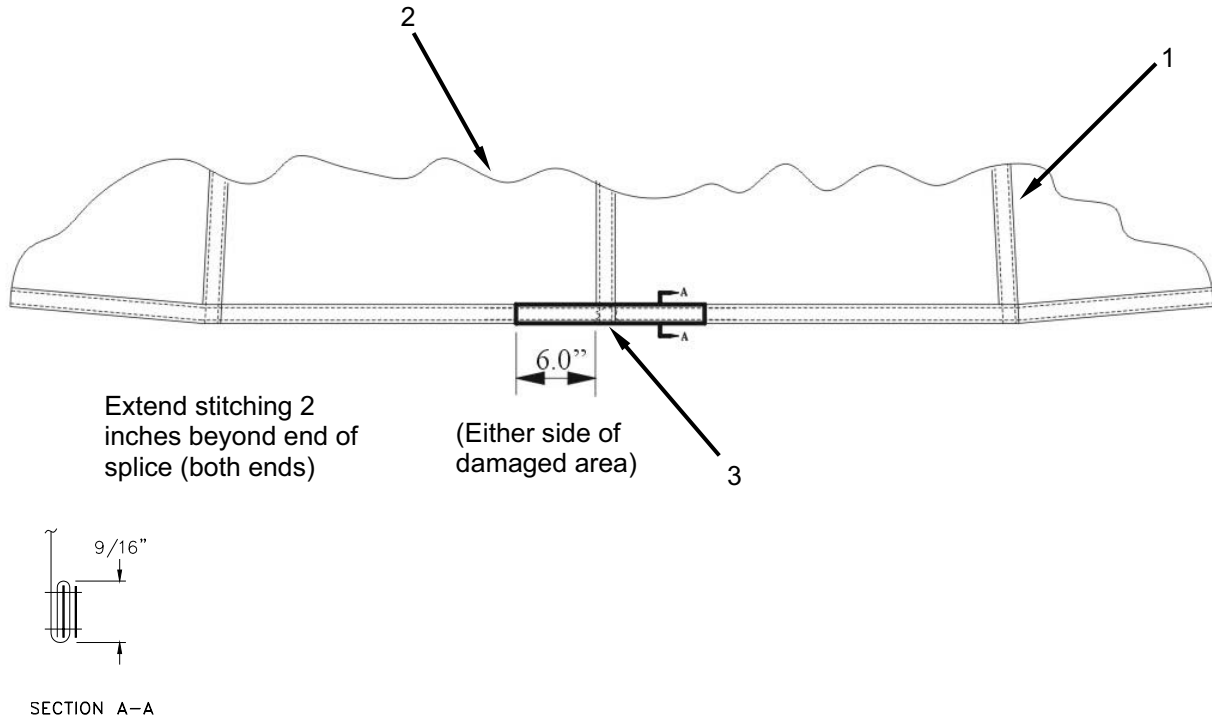


Figure 2. Skirt Band Damage Extending into Radial Seams.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY CONNECTOR LINK
REPAIR, REPLACE

INITIAL SETUP:**Tools**

File, Flat (Item 20, WP 0097 00)
Mallet, Large Leather (Item 30, WP 0097 00)
Screwdriver, Flat-tip (Item 49, WP 0097 00)
Separator, Connector Link (Item 50, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Cloth, Abrasive (Item 9, WP 0109 00)

Equipment Condition

Control links laid out on table.

REPAIR**NOTE**

L-bar connector link assemblies are used on MC-6 personnel parachutes. Quick-fit link assemblies are not to be used on the MC-6 parachute.

Repair an L-bar connector link (**figure 1, item 1**) assembly as follows:

1. Cleaning. Remove burrs, rough spots, rust, or corrosion from a parachute connector link assembly (**figure 1, item 1**) by either filing with a metal file or by buffing with a crocus cloth.
2. Replacing a locking screw. Replace a damaged or missing locking screw (**figure 1, item 2**) on a parachute connector link (**figure 1, item 1**) with a serviceable item from stock.

REPLACE

A parachute connector link assembly, regardless of type, that is damaged beyond repair will be replaced with a serviceable L-bar parachute connector link assembly from stock. Use the following procedures:

1. Using a suitable sized, flat-tip (slotted-head) screwdriver, remove the two locking screws (**figure 1, item 2**) from the ends of a replacement L-bar parachute connector link assembly (**figure 1, item 1**) and disassemble the link.
2. Using a suitable sized, flat-tip (slotted-head) screwdriver, remove the two locking screws (**figure 1, item 2**) from the damaged, original parachute connector link assembly (**figure 1, item 1**). Disassemble the link assembly, using a link separator, if necessary. If the connector link contains suspension lines, ensure the lines are not allowed to slide off the damaged link during the disassembly process.
3. As applicable, position an L-bar, of the replacement link assembly, adjacent to the disassembled original link assembly; slide the suspension lines from the damaged link onto the replacement link L-bar.
4. If required, pass the remaining L-bar of the replacement link through the attaching loop of the adjoining component.
5. Fit the replacement link L-bars together and ensure the L-bar leg is engaged by tapping the end of each L-bar with a rawhide mallet.

REPLACE - continued

6. As applicable, trace the suspension lines from the connector link assembly to the canopy skirt to ensure the lines are properly installed and in the correct sequence.

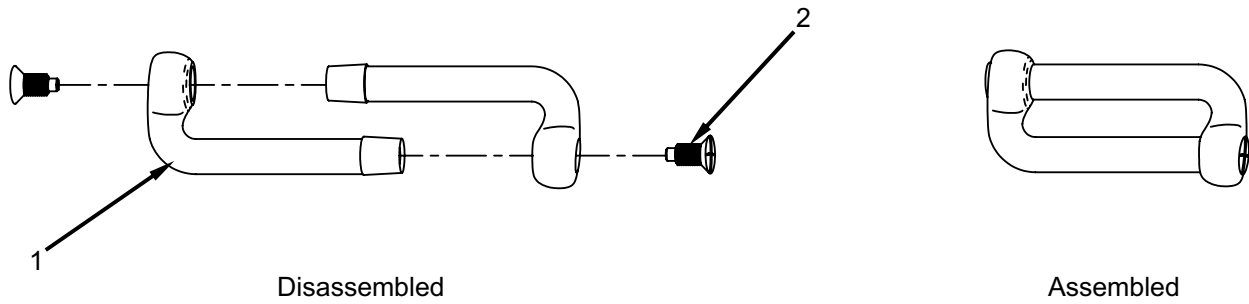


Figure 1. Connector Links.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN RISERS
REPAIR, REPLACE**

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Needle, Tacking (Item 32, WP 0097 00)
Riser Tension Plate (Item 45, WP 0097 00)
Screwdriver, Flat-tip, 1/4-in (Item 49, WP 0097 00)
Sewing Machine, Medium Duty (Item 59, WP 0097 00)
Wrench, Adjustable, 6-in (Item 70, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)
Webbing, Nylon, Type I, 9/16-inch Wide, OD (Item 59, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR

Restitching. Restitch main risers using a light duty sewing machine and size E nylon thread that contrasts the color of the original stitching and material when possible. Restitch directly over the original stitch pattern as closely as possible with 7 to 11 stitches per inch. Lock each row of stitching two inches at each end.

Repair a damaged riser assembly as follows:

1. Repairing a guide ring and a guide ring retaining strap. Repair is limited to replace. Replace a damaged or missing guide ring and guide ring retainer strap as follows:
2. If applicable, remove the original guide ring retaining strap, from the riser by cutting the stitching securing the strap to the riser.
3. Ensure the riser webbing is not damaged during the cutting process.
4. If required, replace the guide ring (reefing ring) with a serviceable item from stock.
5. Cut a 4-1/2-inch length of 9/16-inch wide, type 1, nylon webbing; sear the ends.
6. Fold the webbing and install a serviceable guide ring on the folded webbing according to the details illustration below.
7. Secure the formed retraining strap with the guide ring, to the riser. Use medium duty sewing machine and size E nylon thread, and refer to the illustrations below and Tables 1 and 2 in WP 0017 00, as a reference.

REPAIR - continued

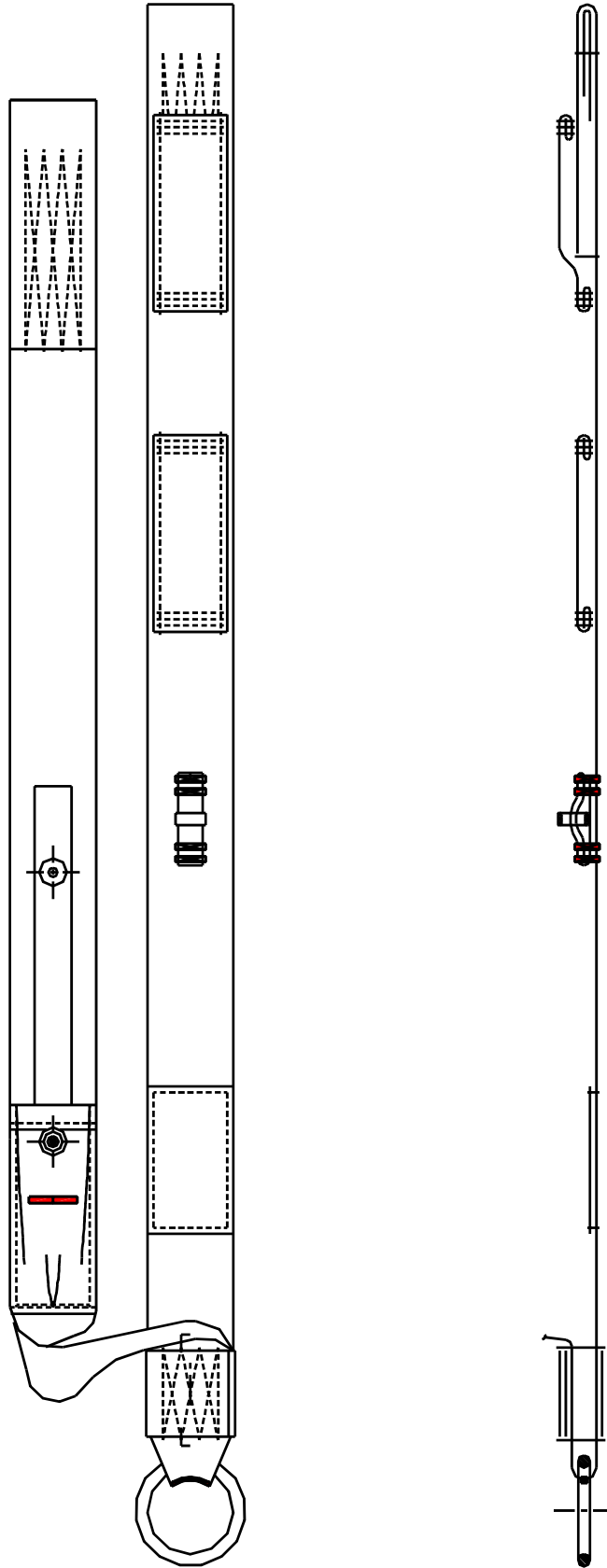


Figure 1. Main Risers.

REPLACE**Replace Riser Assemblies****Place Canopy in Proper Layout**

1. Place the pack tray and harness on the pack table with the harness facing up.
2. Place the left set of connector links on the left post of the tension plate and the right group of connector links on the right post of the tension plate.
3. Extend the canopy to the opposite end of the table.
4. Attach the vent loop at the top of the canopy to the apex attaching point at the end of the pack table.
5. Grasp and separate lines 1 and 28 and lines 14 and 15 at the skirt.
6. Run a 4-line check ensuring there are no twists IAW WP 0015 00.

Remove Main Risers from Pack Tray and Harness

1. Open canopy release cover.
2. Depress the two operator release levers and remove locking lug.
3. Pass the locking lug and soft loop through the small ring.
4. Rotate small ring 180° and large ring 180°, and remove riser ring and riser.
5. Repeat steps for opposite side.

Remove Control Lines from Risers

1. Untie the two over hand knots and the knot in the running end securing the toggle to the control lines.
2. Remove toggles.
3. Pull control line from the riser.

Remove Main Risers from Main Canopy

1. Remove the screws from the connector link.
2. Remove connector links with suspension lines from each riser.

Attach the Main Risers to the Main Canopy

1. Layout a new set of main risers directly behind the connector link groups ensuring the guide ring is on the inside top and there are no twists.
2. Using an adjustable wrench, completely open the barrel nut on the connector links and loosely connect the appropriate riser to the appropriate connector link (top left connector link to the top left riser, etc). Do not tighten at this time.

REPLACE - continued**NOTE**

Use of an aid may be required to route control line through control line channel.

3. Trace each control line from the point of attachment at the canopy to the free-end of the control line.
4. Pass the control line free-end from the top, through the two control line channels and then the channel guide ring (located on the inside of each rear riser), and further past the control line free-end, through a toggle.
5. Push the toggle up past the 282-inch mark and tie first overhand knot on the yellow mark, below the toggle, such that the yellow mark (282-inch mark) is located in the center of the first knot.

NOTE

If the yellow 282-inch mark is not present, re-measure the lower control line assemblies IAW WP 0005 00.

6. Make a second overhand knot, knot should be tight against the first knot.
7. The remaining free end of each control line from the second overhand knot is to measure three inches.
8. Then make the third overhand knot in the free end.
9. Trim the control line free end at a point 1/2-inch below the third overhand knot.
10. Repeat steps 3-9 for opposite toggle.
11. With the left set of connector links on the left post of the tension plate and the right group of connector links on the right post of the tension plate, ensure control lines are positioned to the inside.

Conduct a continuity check

1. Top right suspension line group. Line 1 (inside top) followed in sequence by 2, 3, 4, 5, 6, 7 (outside top) runs from the canopy to the top right connector link.
2. Bottom right suspension line group. Line 8 (outside bottom) followed in sequence by 9, 10, 11, 12, 13, 14 (inside bottom) runs from the canopy to the bottom right connector link.
3. Bottom left suspension line group. Line 15 (inside bottom) followed in sequence by 16, 17, 18, 19, 20, 21 (outside bottom) runs from the canopy to the bottom left connector link.
4. Top left suspension line group. Line 22 (outside top) followed in sequence by 23, 24, 25, 26, 27, 28 (inside top) runs from the canopy to the top left connector link.

Attach the Pack Tray and Harness to the Main Risers

1. Ensure risers and harness is free of twists.
2. Route large ring of upper left main lift web through large riser ring rotate up 180° and insert small ring through large ring of upper left main lift web.
3. Pass the locking lug and locking loop through the small ring and insert the lug into the jaws of the riser release by depressing the two operating locks
4. Ensure that the lug is fully seated into canopy release assembly.

REPLACE - continued

5. Close cover, locking the lug in place.
6. The top of the lug should not be visible after closing the cover if properly seated.
7. Insert inside (long) tuck tab between the CRA and the riser.
8. Insert outside (short) tuck tab between the CRA and the long tuck tab.
9. Dress CRA cover insuring CRA attaching loop is tucked between CRA and cover.
10. Repeat steps 1 and 10 for opposite side.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
LOG RECORD BOOK POCKET
REPAIR, REPLACE**

INITIAL SETUP:**Tools**

Sewing Machine, Medium Duty (Item 59, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)
Fastener, Snap, Style 2 Button, 4 Line (size 1, finish black) (Item 26, WP 0109 00)
Fastener Snap, Style 2, Socket, Black (Item 28, WP 0109 00)
Fastener Snap, Style 2, Stud, Black (Item 29, WP 0109 00)
Fastener Snap, Style 2, Eyelet, Black (Item 27, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR

Restitching. Restitch log record book pocket using a medium duty sewing machine and size E nylon thread that contrasts the color of the original stitching and material when possible. Restitch directly over the original stitch pattern as closely as possible with 7 to 11 stitches per inch. Lock each row of stitching 2 inches at each end.

REPLACE**Replace Data Log Record Book Pocket**

1. Mark location of data log record book pocket. Carefully remove the data log record book pocket from the riser.
2. Reposition the new date log record book pocket in its original position. Using a medium duty sewing machine and size E nylon thread, 7 to 11 stitches per inch, sew in place as per original stitching.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN RISER GUIDE CHANNELS
REPAIR, REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
 Needle, Tacking (Item 32, WP 0097 00)
 Riser Tension Plate (Item 45, WP 0097 00)
 Screwdriver, Flat-tip, 1/4-inch (Item 49, WP 0097 00)
 Sewing Machine, Medium Duty (Item 59, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)
 Tape, Nylon, Type III, Class 1, 1/2-inch wide (Item 43, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR**Repairing a damaged control line guide channel.**

Restitching. Restitch main risers using a light duty sewing machine and size E nylon thread that contrasts the color of the original stitching and material when possible. Restitch directly over the original stitch pattern as closely as possible with 7 to 11 stitches per inch.

REPLACE

Replace a control line guide channel. Replace a damaged or missing control line guide channel by fabricating as follows:

1. If applicable, remove the original control line guide channel from the riser by cutting the stitching and securing the channel to the riser.
2. Cut a 5-inch length of 1-1/2-inch wide, Type III, nylon tape and sear the ends.
3. Make a 1/2-inch long fold-back on each end of the tape.
4. Secure each fold-back by making three rows of stitching across the tape width at a point 1/8-inch back from the seared edged of the fold-back; lock the stitching ends back 1/2-inch.
5. Stitching will be made using a medium-duty sewing machine and size E, nylon thread; use details in WP 0017 00, Table 2.
6. Position the stitched tape lengthwise on the riser in the original channel location IAW **figure 1**.
7. Form the control line channel by securing the tape to the riser with a single row of stitching made 1/8-inch along each edge of tape.
8. Overstitch each end of the tape by 1/4-inch.
9. Refer to **figure 1** to assist in the replacement of the control line guide channel.
10. The stitching will be made using the specifics in WP 0017 00.

REPLACE – continued

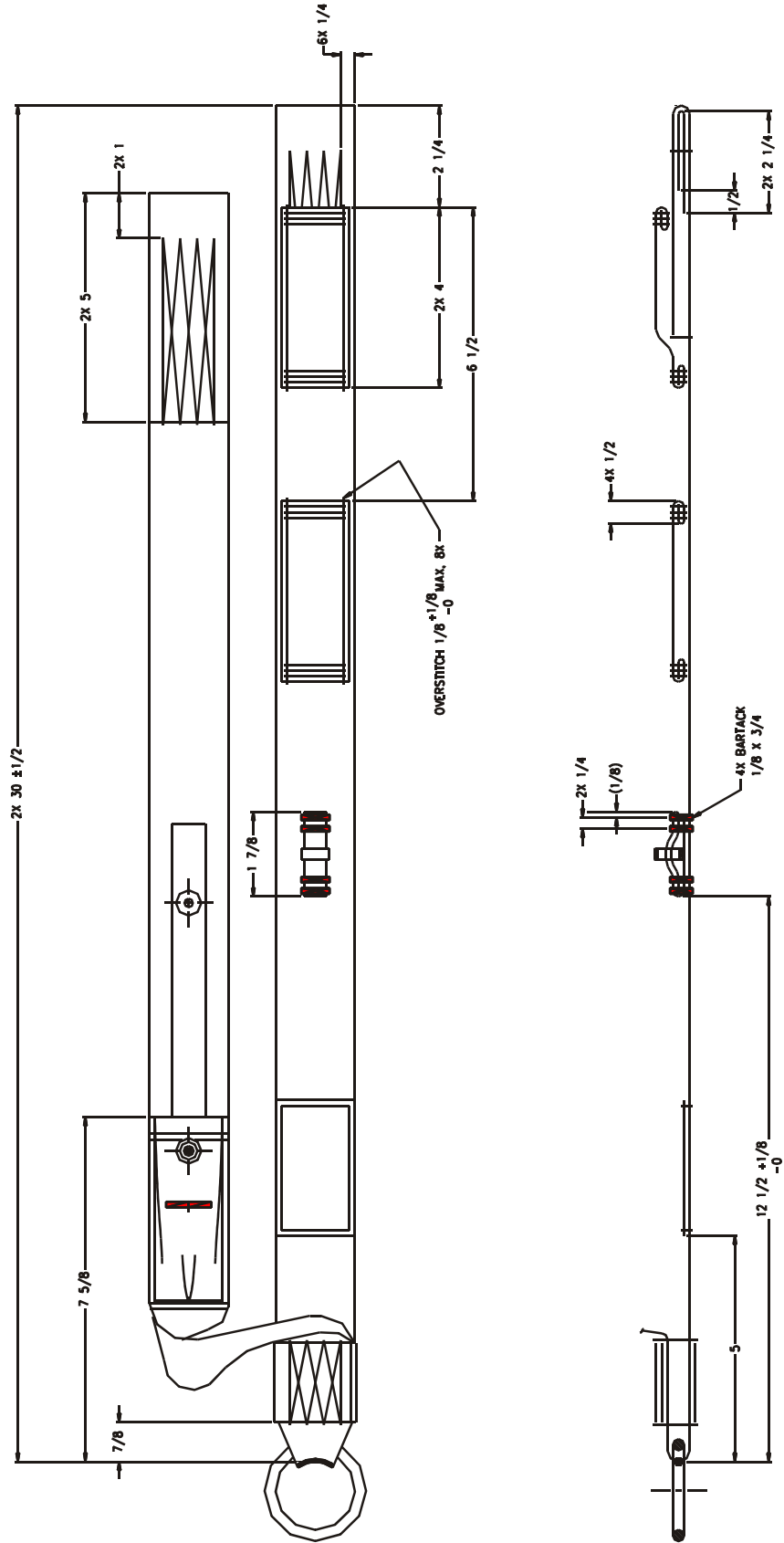


Figure 1. Main Riser Control Line Guide Channel.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN PACK TRAY
REPAIR, REPLACE**

INITIAL SETUP:**Tools**

Sewing Machine, Light Duty (Item 56, WP 0097 00)
Sewing Machine, Medium Duty, Zig Zag (Item 57, WP 0097 00)
Sewing Machine, Heavy Duty (Item 55, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Layout on packing table or other suitable area.

REPAIR

Restitching. Restitch main pack tray using a light duty sewing machine and size E nylon thread that contrasts the color of the original stitching and material when possible. Restitch directly over the original stitch pattern as closely as possible with 7 to 11 stitches per inch. Lock each row of stitching 2 inches at each end.

If bartack stitching requires repair, bartacks will be completely removed and a new bartack will be replaced with the same stitch length and width.

Darn Main Pack Tray**NOTE**

For darning holes, repair of holes are limited to 3/4-inch in diameter.

Refer to WP 0017 00 for General Parachute Repairs procedures.

Repair Main Pack Tray

Refer to WP 0017 00 "General Parachute Repair" for patching. Refer to applicable work packages for additional items needing repair.

REPLACE

Refer to WP 0041 00 to remove main risers from pack tray and harness.

Refer to WP 0006 00 Attach Main Closing Loop to Main Pack Tray, to replace main packing loop.

Remove Harness from Main Pack Tray

1. Lay pack tray (**figure 1, item 1**) on pack table.
2. Remove two large retainer bands (**figure 1, item 2**) on each static line stow bar.



Figure 1. Lay Pack Tray On Pack Table.

3. Open snap fastener (**figure 2, item 1**).



Figure 2. Open Snap Fastener.

REPLACE - continued

4. Remove the small tuck tab (**figure 3, item 1**) from the sizing channel between the long tuck tab (**figure 3, item 2**) and the sizing channel.
5. Remove diagonal back straps (**figure 3, item 3**) by rotating the long tuck tab (**figure 3, item 2**) (pull-dot cap attached) through the selected sizing channel.
6. Repeat for opposite side.



Figure 3. Remove Diagonal Back Straps.

7. Remove the horizontal back strap (**figure 4, item 1**) by unfastening the snap fasteners and pulling both pack tray horizontal back straps (**figure 4, item 1**) through the horizontal back strap keepers.
8. Remove harness from pack tray.



Figure 4. Remove The Horizontal Back Strap.

REPLACE - continued

Attach Harness to Main Pack Tray

1. Lay pack tray (**figure 5, item 1**) on pack table with harness (**figure 5, item 2**) attaching points facing up.



Figure 5. Attach Harness To Pack Tray.

2. Place the harness (**figure 6, item 1**) on the pack tray (**figure 6, item 2**) with the data tag (**figure 6, item 3**) located on the horizontal back strap facing up.

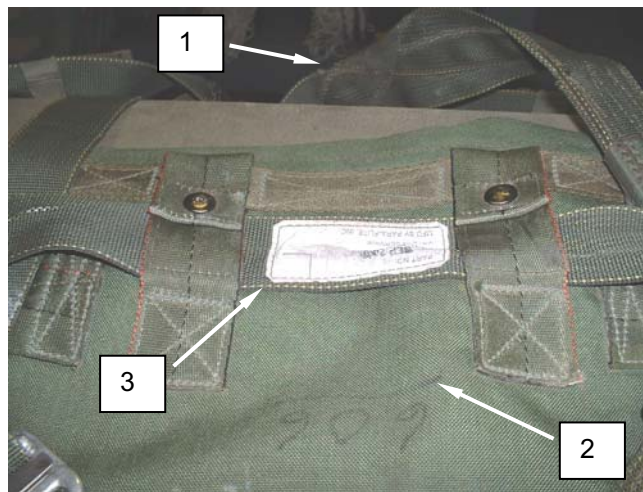


Figure 6. Attach Harness To Pack Tray With Data Tag Facing Up.

REPLACE - continued

- Secure the horizontal back strap (**figure 7, item 1**) by routing both pack tray horizontal back strap retainers (**figure 7, item 2**) over the back strap (**figure 7, item 1**), through the horizontal back strap keepers and secure the snap fasteners.

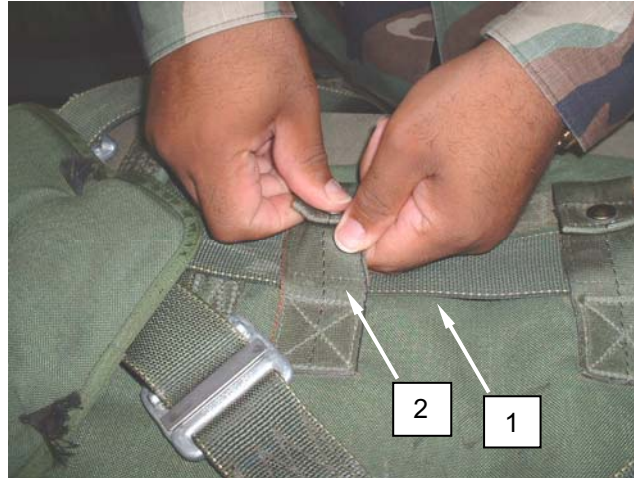


Figure 7. Secure The Horizontal Back Strap.

- Attach diagonal back straps (**figure 8, item 1**) by rotating the long tuck tab (**figure 8, item 2**) (pull-dot cap attached) through the selected sizing channel.
- Route the small tuck tab (**figure 8, item 3**) into the sizing channel between the long tuck tab (**figure 8, item 2**) and the sizing channel.
- Close snap fastener (**figure 9, item 1**) and secure.
- Repeat for the opposite side.

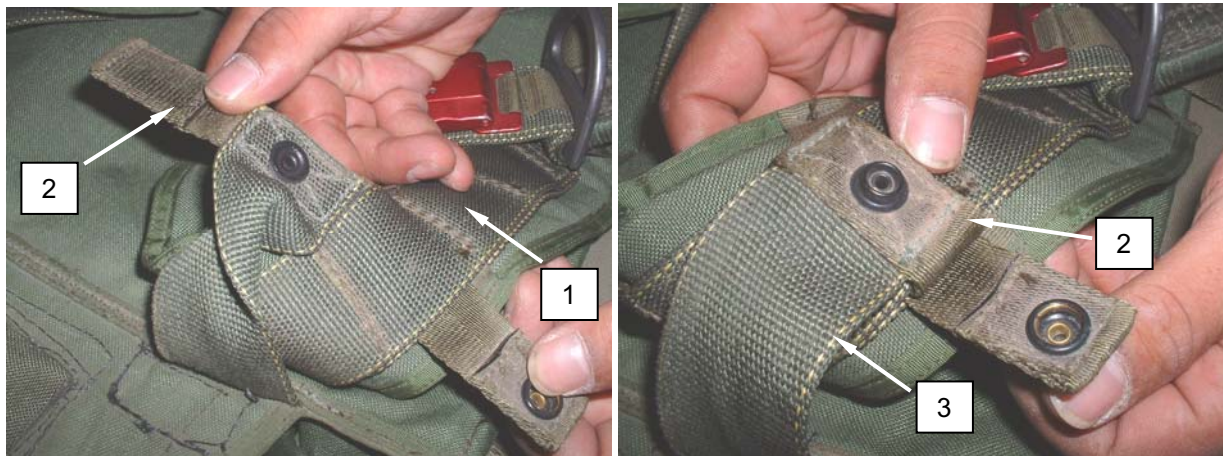


Figure 8. Attach Diagonal Back Straps.

REPLACE - continued



Figure 9. Close Snap Fastener And Secure.

8. Attach two large retainer bands (**figure 10, item 1**) on each static line stow bar of the pack tray (**figure 10, item 2**).



Figure 10. Attach Large Retainer Bands.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN PACK TRAY CLOSING LOOP
REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Needle, Tacking (Item 32, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Tape, Lacing And Tying, Nylon, (Item 42, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPLACE**Replace Main Closing Loop On Main Pack Tray**

1. Remove the damaged closing loop, cut the lacing tape securing the closing loop protective cover.
2. Remove the pack closing loop from the pack tray.
3. Replace damaged pack closing loop with a new pack closing loop, no exceptions.
4. Rotate the closing loop (**figure 1, item 1**) 90° insuring the loop opening is facing to the inside of the pack tray (**figure 1, item 2**).
5. Using a 12-inch length of one turn double tape lacing and tying (**figure 1, item 3**), tack both sides of the closing loop protective cover (**figure 1, item 4**). Secure with a surgeons knot locking knot trimming the ends to within 1-inch.

REPLACE – continued

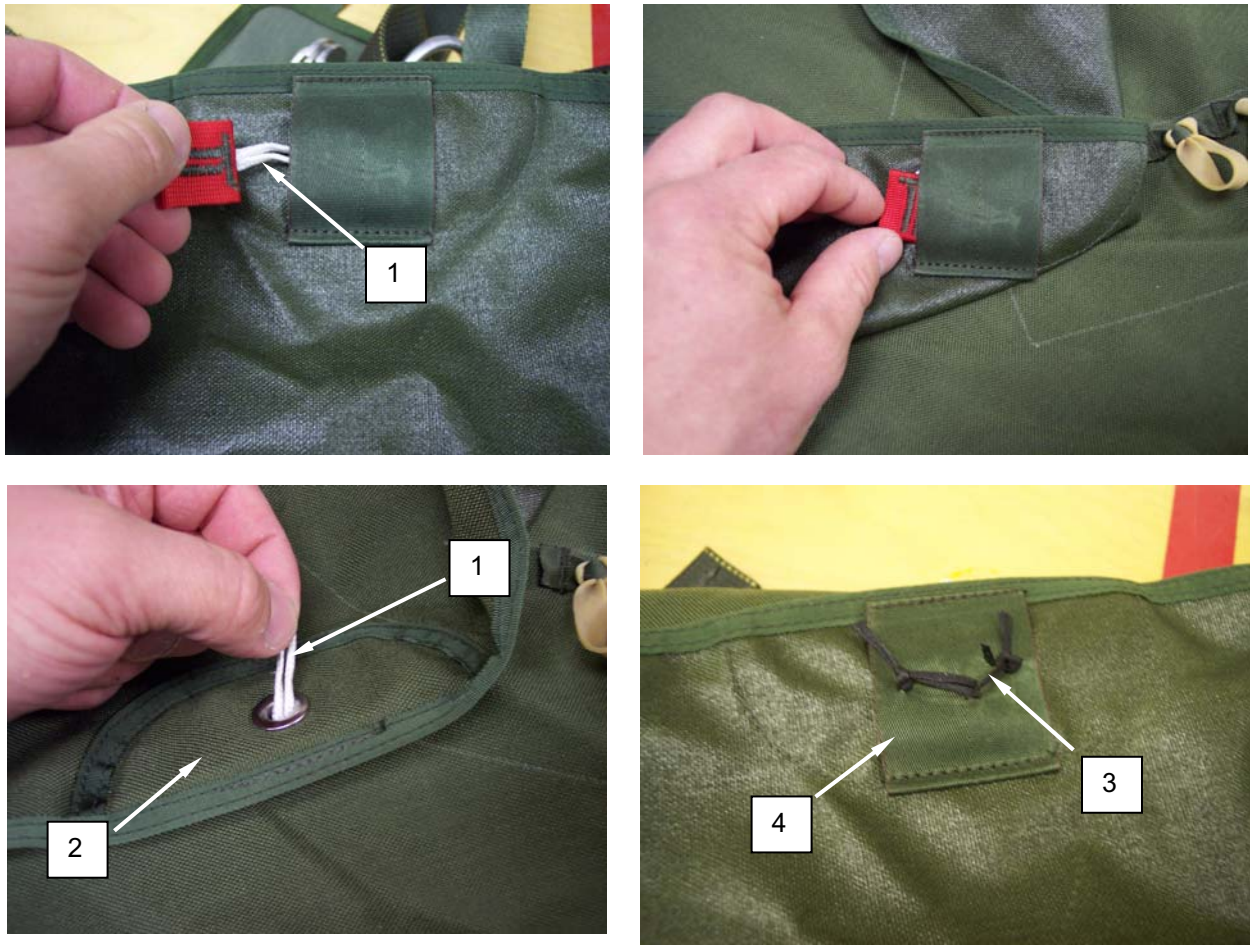


Figure 1. Routing the Main Closing Loop, Closing Loop Under The Protective Cover, Main Closing Loop Through Grommet, and Tacking Both Sides.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN PACK TRAY CLOSING PIN COVER
REPLACE

INITIAL SETUP:**Tools**

Sewing Machine, Medium Duty (Item 59, WP 0097 00)
Stitch Removal Tool (Item 62, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPLACE

1. Using a stitch removal tool, carefully remove the damaged pin protector flap.
2. Remove any loose stitching.
3. Center the new pin protector flap (**figure 1, item 1**) overlapping the binding tape at the end of the top flap.



Figure 1. Replace Damaged Pin Protector Flap.

4. Using a medium duty sewing machine and size E nylon thread, 7 to 10 stitches per inch and 3/8 of an inch wide, sew the pin protector flap to the binding tape.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN PACK TRAY STIFFENER GROMMETS
REPAIR, REPLACE**

INITIAL SETUP:**Tools**

Sewing Machine, Medium Duty (Item 59, WP 0097 00)
Die Set, Spur Grommet, No. 0, Stainless Steel (Item 16, WP 0097 00)
Pliers, Diagonal Cutting (Item 37, WP 0097 00)
Mallet, Large Leather (Item 30, WP 0097 00)
Shears (Item 61, WP 0097 00)
Stitch Removal Tool (Item 62, WP 0097 00)
Punch, Cutting (Item 42, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Grommet, Rolled Rim/Spur Washer, 305
Stainless Steel, No. 0 (Item 30, WP 0109 00)
Webbing, Nylon, Type II (Item 56, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)
Cloth, Abrasive (Item 9, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR**Repair Grommets**

1. Remove burrs, rough spots, rust, or corrosion from an installed grommet by buffing with crocus cloth.
2. Reseat a loose grommet using procedures described below.

REPLACE**Replace Grommet and Stiffener****NOTE**

If grommet needs to be replaced the stiffener must also be replaced.

1. Remove original grommet as follows:
 - a. Using the diagonal pliers, lift edge of original washer at one point.

NOTE

Reinforcement is allowed only on the main pack tray.

- b. Grip lifted washer edge with diagonal pliers and roll washer edge back to lift washer from original grommet. Remove original grommet from material.

REPLACE - continued

- c. If fabric area around the original grommet has been damaged, repair area by applying a reinforcement patch to the outside of flap. Use a 1-inch square of seared type II nylon webbing.
2. Remove stitching from the exposed side of the Type XII nylon webbing to remove the stiffener.
3. Insert a new stiffener. Using a medium duty sewing machine and size E nylon thread, 7 to 1 stitches per inch, close the open side of the type XII nylon webbing locking the stitching along the binding tape.
4. Insert barrel of replacement grommet through accommodating hole in the material and ensure grommet flange is located on the same side of the material as original grommet.
5. Position grommet on the die with the barrel facing up and place washer over grommet barrel. Ensure grommet barrel and washer are aligned to prevent off-center setting of grommet.
6. Using a punch and rawhide mallet or other non-steel impact device, spread grommet barrel by hammering until barrel collar is rolled down smooth on washer.
7. If grommet barrel splits during hammering, remove and replace installed grommet with a serviceable item from stock. Repeat the procedure in steps 4 and 5, above.

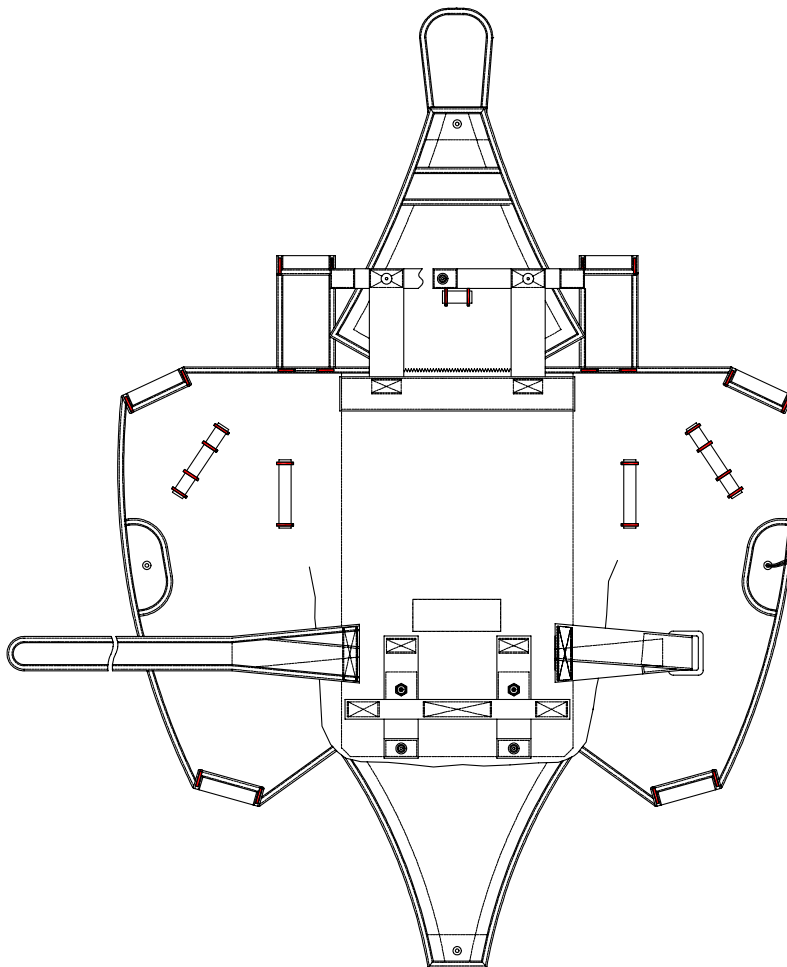


Figure 1. Main Pack Tray.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN PACK TRAY SNAP FASTENER
REPAIR, REPLACE**

INITIAL SETUP:**Tools**

Anvil, Chuck Fastener (Item 2, WP 0097 00)
Chuck, Socket (Item 10, WP 0097 00)
Die, Eyelet (Item 15, WP 0097 00)
Die Tool, Fastener (Item 14, WP 0097 00)
Key, Socket Head Set (Item 24, WP 0097 00)
Knife, Hot, Metal (Item 27, WP 0097 00)
Mallet, Large Leather (Item 30, WP 0097 00)
Pliers, Diagonal Cutting (Item 37, WP 0097 00)
Shears (Item 61, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Fastener, Snap, Button (Item 26, WP 0109 00)
Fastener, Snap, Eyelet (Item 27, WP 0109 00)
Fastener, Snap, Socket (Item 28, WP 0109 00)
Fastener, Snap, Stud (Item 29, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)
Webbing, Nylon, Type II (Item 56, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR

Snap fastener repair is limited to reseating, which will be accomplished using the applicable procedures and tools prescribed in the replace procedures detailed below.

REPLACE

A snap fastener that 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 requires replacement. Replace a damaged snap fastener as follows:

1. Original snap fastener removal.
 - a. Cut crimped edge of applicable snap fastener assembly part at three or four points with diagonal cutters.
 - b. Using a suitable type tool, pry back fastener crimped edges and remove applicable defective fastener parts.
2. Reinforcement of original snap fastener area. If fabric area around original snap fastener is damaged, repair area by applying a reinforcement patch to the outside of the material. Use a 1-inch square of seared type II nylon webbing.

REPLACE - continued

3. Hand-held method. Proceed as follows:

- a. Place selected chuck (**figure 1, item 1**) in open end of holder (**figure 1, item 2**) and secure chuck in place using locking screw (**figure 1, item 3**) located on one side of holder (**figure 1, item 2**). Then place the die (**figure 1, item 4**) into anvil (**figure 1, item 5**).

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 that require the location of the chuck and die to be reversed. This situation may also apply to the hand or foot operated press.

- b. Fit socket or stud (**figure 1, item 6**), as applicable, on chuck (**figure 1, item 1**) lower end. Place cap or post, as applicable, on die (**figure 1, item 4**) with barrel facing up.
- c. Position material over barrel of cap or post. Ensure that fastener socket or stud (**figure 1, item 7**) is located on proper side of material for subsequent fastener engagement.
- d. Place socket or stud on barrel of cap or post. With a mallet, strike holder, clinching the two snap fastener components to material.
- e. Remove clinched snap fastener components from chuck (**figure 1, item 1**) and die set (**figure 1, item 4**) and check seating of joined components. If applicable components are not properly seated, repeat procedures in step d., above.
- f. Check engagement of installed snap fastener components with opposite mating components to ensure open and closed snapping process without hindrance. If snap engaging process cannot be accomplished without difficulty, replace opposite mating snap fastener components using procedures in steps a. through e., above. As required, remove chuck and die from applicable snap fastener tools by reversing procedures in step 1 above.

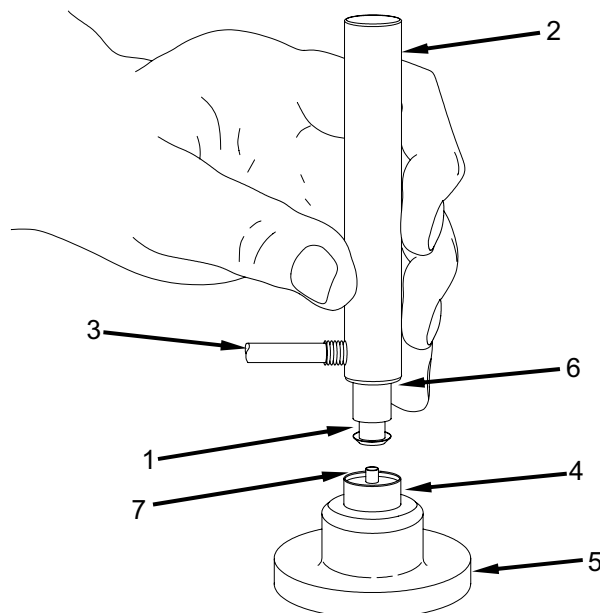


Figure 1. Hand-held Method.

REPLACE - continued

4. Hand or foot operated press method. Installation of a snap fastener assembly by hand or foot operated press (**figure 2, item 1**) may be accomplished using the procedures in step 3., above, except one uses the hand or foot to press the two pieces together, and the chuck (**figure 2, item 2**) and die (**figure 2, item 3**) will be secured within the applicable press assembly using the available locking screws (**figure 2, item 4**).

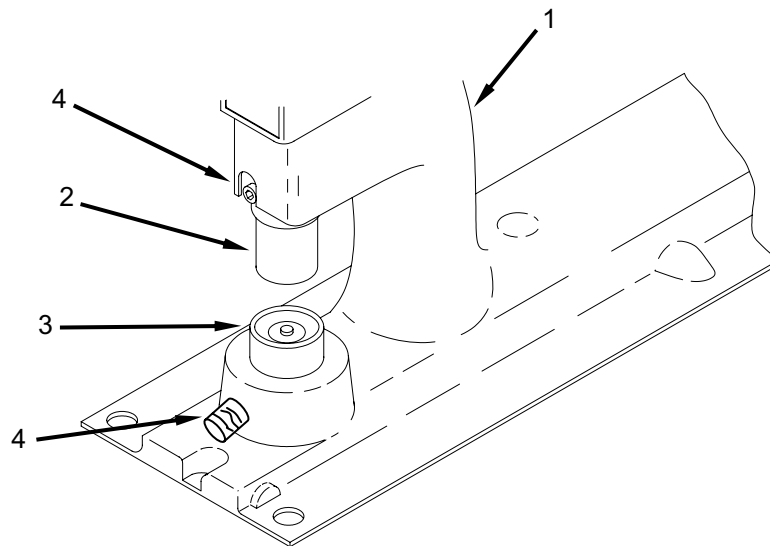


Figure 2. Hand or Foot Operated Press Method.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
HARNESS ASSEMBLY
REPLACE

INITIAL SETUP:**Tools**

None required.

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

None required.

Equipment Condition

Lay out on packing table or other suitable area.

NOTE

If harness is not attached to the pack tray, start with step 4, layout pack tray with attaching points facing up.

REPLACE

1. Layout the pack tray (**figure 1, item 1**) and harness (**figure 1, item 2**) assembly on the pack table with the harness assembly facing up.
2. Remove the harness (**figure 1, item 2**) from the pack tray (**figure 1, item 1**) by unsnapping the upper sizing channel keepers (**figure 1, item 3**) and remove the tuck tabs (**figure 1, item 4**) from the diagonal back strap sizing channels (**figure 2, item 5**) on both the left and right.



Figure 1. Pack tray and Harness.

REPLACE – continued

3. Remove the horizontal back strap (**figure 2, item 1**) from the pack tray (**figure 2, item 2**) by unsnapping the horizontal back strap retainer snap fasteners (**figure 2, item 3**). Remove the horizontal back strap retainers (**figure 2, item 3**) from behind the horizontal back keeper (**figure 2, item 4**). Remove harness assembly.

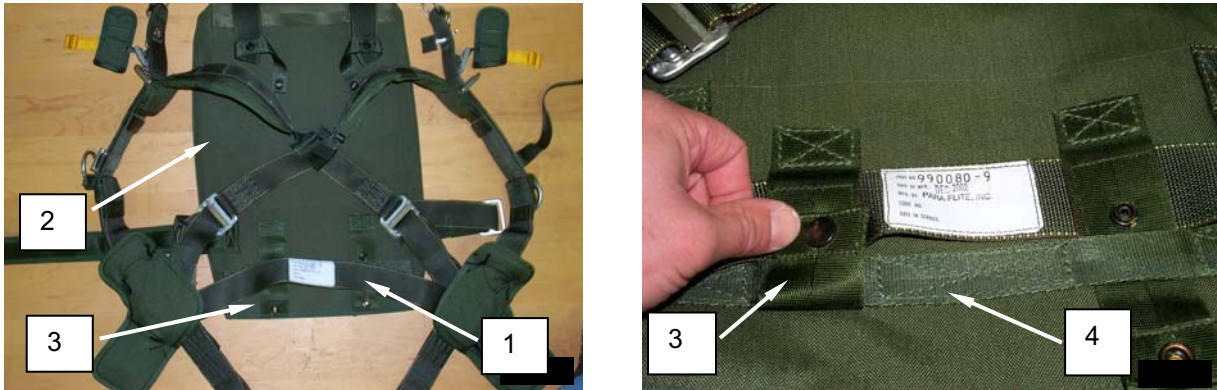


Figure 2. Removing Horizontal Back Strap and Diagonal Back Straps.

4. Place the harness (**figure 3, item 1**) assembly on the pack tray (**figure 3, item 2**) with the hip (**figure 3, item 3**) and shoulder pads (**figure 3, item 4**) facing up. Ensure the diagonal back strap guide (**figure 3, item 5**) is to the center of the pack tray (**figure 3, item 1**), and there are no twists in the upper main lift web (**figure 3, item 6**), and lower saddle assembly (**figure 3, item 7**).



Figure 3. Pack tray and Harness.

REPLACE – continued

5. Adjust harness so that it is set properly.
6. Secure the horizontal back strap (**figure 4, item 1**) by routing both horizontal back strap retainers (**figure 4, item 2**) over the horizontal back strap (**figure 4, item 1**) and through the horizontal back strap keepers (**figure 4, item 3**) and back over the back strap keeper (**figure 4, item 3**) securing the snap fasteners (**figure 4, item 4**).
7. Secure the diagonal back straps (**figure 4, item 1**) to the pack tray (**figure 4, item 2**) by routing the tuck tabs on the diagonal back strap keepers (**figure 4, item 3**) through the sizing channels (**figure 4, item 4**) on the diagonal back strap (**figure 4, item 5**).

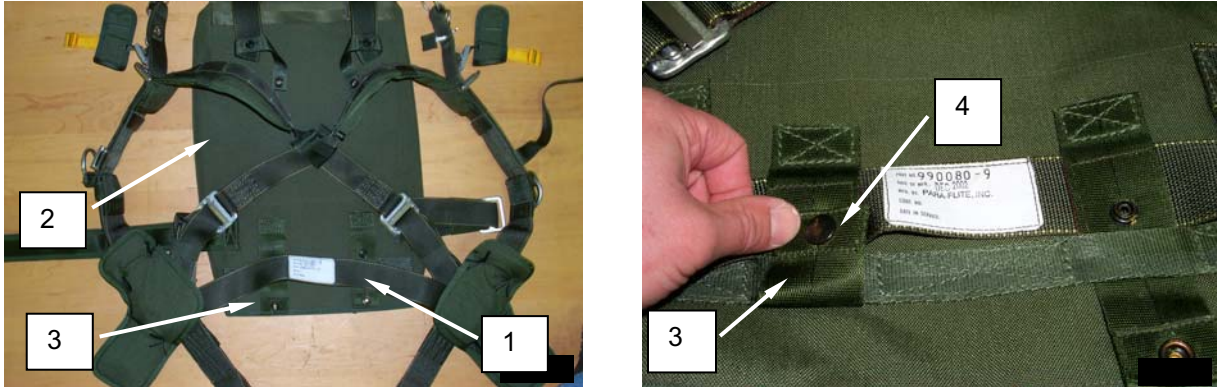


Figure 4. Securing Horizontal Back Strap and Attaching Diagonal Back Straps.

8. Route the long tuck tab (**figure 5, item 1**) (snap fastener attached) through the sizing channel (**figure 5, item 2**), then route the short tuck tab (**figure 5, item 3**) into the sizing channel (**figure 5, item 2**) between the long tuck tab (**figure 5, item 1**) sizing channel (**figure 5, item 2**).
9. Close snap fastener (**figure 5, item 4**) and secure (**figure 5, item 5**).
10. Repeat procedure for opposite side.

REPLACE – continued

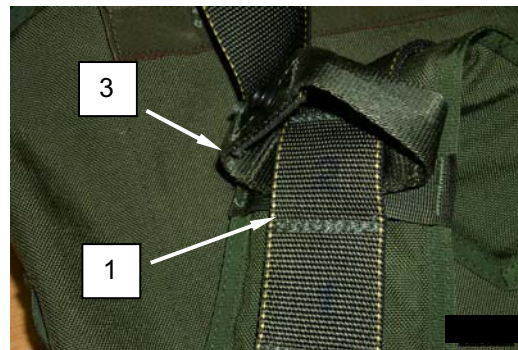


Figure 5. Route Small Tuck Tab, Close Snap Fastener, and Snap Fastener Secured.

END OF WORD PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
HARNESS DIAGONAL GUIDE
REPLACE

INITIAL SETUP:**Tools**

Sewing Machine, Light Duty (Item 56, WP 0097 00)
Shears (Item 61, WP 0097 00)
Knife, Hot, Metal (Item 27, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Webbing, Nylon, Type XII (Item 57, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPLACE**Replace Harness Diagonal Guide**

1. Remove damaged diagonal guide by cutting with shears.
2. Cut two pieces of type XII nylon webbing 5-1/4-inch long using the hot knife. Lay one piece over the other as shown in **figure 1**. The short sides are overlapped by 1/2-inch.

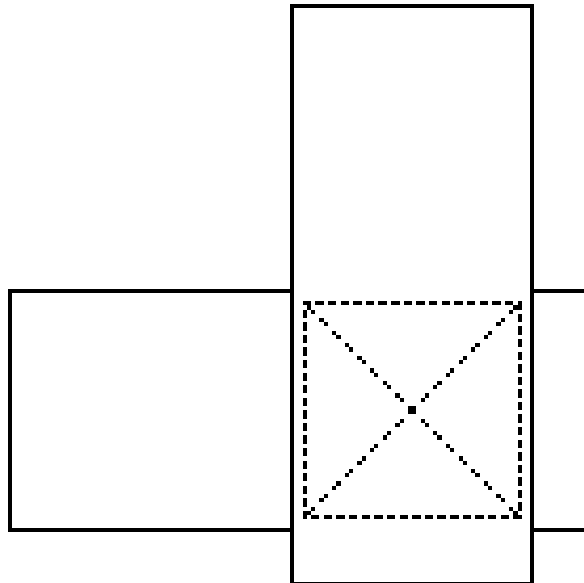


Figure 1. Replacing Harness Diagonal Guide.

REPLACE - continued

3. Using a light duty sewing machine and size E nylon thread, 7 to 11 stitches per inch, sew the two pieces together using a box X stitch pattern.
4. Lay the harness down so that the diagonal straps cross between the shoulder pads and the adjustment buckle. Place the new diagonal guide between the two diagonal straps with the long sides towards the shoulder pads.

NOTE

Stitch bottom guide piece first.

5. Fold each diagonal guide piece in half sandwiching one diagonal strap. Fold the top piece under and sew. Fold other over and sew. Using a light duty sewing machine and size E nylon thread, 7 to 11 stitches per inch, close the open ends of the diagonal guide with three rows of stitching. Ensure the diagonal straps run freely through the diagonal guide.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
HARNESS HIP PAD
REPAIR, REPLACE

INITIAL SETUP:**Tools**

Sewing Machine, Light Duty (Item 56, WP 0097 00)
 Shears (Item 61, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Webbing, Nylon, Type XII (Item 57, WP 0109 00)
 Thread, Nylon, Size E (Item 51, WP 0109 00)
 Tape, Lacing And Tying, Nylon, (Item 42, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR

Re-stitching. Re-stitch leg hip pad using a light duty sewing machine and size E nylon thread that contrasts the color of the original stitching and material when possible. Re-stitch directly over the original stitch pattern as closely as possible with 7 to 11 stitches per inch. Lock each row stitching two inches from the end.

REPLACE

1. Cut the lacing tape (**figure 1, item 1**) that secures the damaged hip pad (**figure 1, item 2**) to the harness assembly (**figure 1, item 3**).
2. Remove hip pad (**figure 1, item 2**) from harness assembly (**figure 1, item 3**).
3. Ensure the ejector snap (**figure 1, item 4**) is facing down. Place new hip pad (**figure 1, item 2**) so that the L-shaped is facing outward.
4. Tack the hip pad (**figure 1, item 2**) to the harness (**figure 1, item 3**) using a one turn double of lacing tape type 1, finish B Black (super tack)(figure 1, item 5)
5. Route the lacing tape down through the hip pad and through the adjustment buckle to the outside of the main lift web strap and back up through the hip pad. Repeat this procedure for the second tie. Tie the ends off using a square knot.
6. Route the lacing tape down through the hip pad and through the ejector snap buckle to the outside of the strap and back up through the hip pad. Repeat this procedure for the second tie. Tie the ends off using a square knot.
7. The hip pad (**figure 1, item 6**) must be tacked in four locations, two ties each on the adjustment buckle and ejector snap.

REPLACE - continued

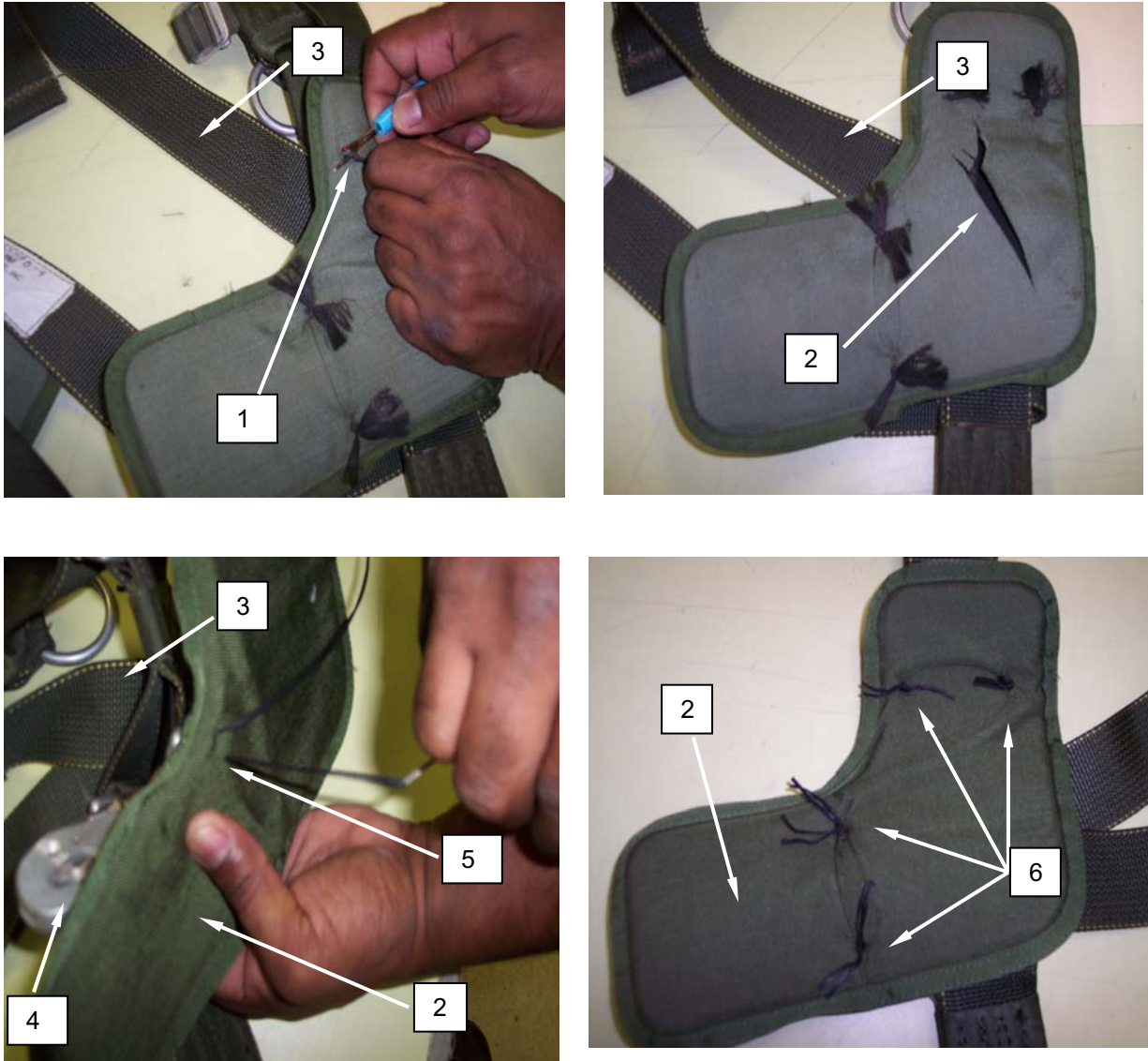


Figure 1. Replacing the Hip Pad.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
HARNESS LEFT UPPER MAIN LIFT WEB
REPAIR, REPLACE

INITIAL SETUP:**Tools**

Sewing Machine, Light Duty (Item 56, WP 0097 00)
 Sewing Machine, Heavy Duty (Item 58, WP 0097 00)
 Sewing Machine, Medium Duty (Item 59, WP 0097 00)
 Shears (Item 61, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Webbing, Nylon, Type XII (Item 57, WP 0109 00)
 Thread, Nylon, Size E (Item 51, WP 0109 00)
 Thread, Nylon, Size 5, Type 1, Class A (Item 49, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area

REPAIR

Restitching. Restitch LEFT upper main lift web using a medium duty sewing machine and size E nylon thread that contrasts the color of the original stitching and material when possible. Restitch directly over the original stitch pattern as closely as possible with 6 to 9 inches per inch. Lock each row of stitching 2 inches at each end.

REPLACE

1. Layout the harness assembly (**figure 1, item 1**) ensuring that the hip pads and shoulder pads are facing up (**figure 1, item 2**), in this layout configuration the leg ejector snaps will be facing down, canopy release assemblies are facing down.



Figure 1. Replacing Harness Left Upper Main Lift Web.

2. Carefully remove stitching of the rolled back ends of the diagonal back strap (**figure 2, item 1**). Remove the diagonal back strap (**figure 2, item 2**) from the diagonal back strap adjustment buckle (**figure 2, item 3**)

REPLACE – continued

- Carefully remove the three rolls of stitching on the bottom diagonal guide (**figure 2, item 4**) where the LEFT upper main lift web (**figure 2, item 5**) is routed through the diagonal guide (**figure 2, item 4**), this will allow for removal of the diagonal back strap (**figure 2, item 6**)

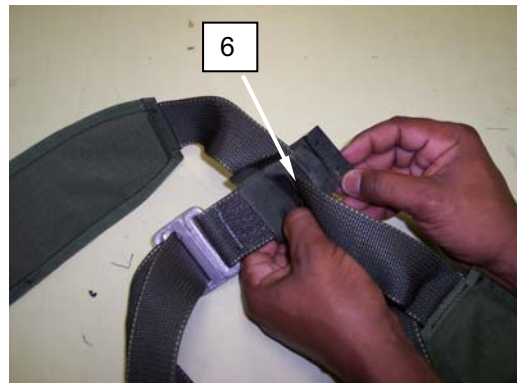
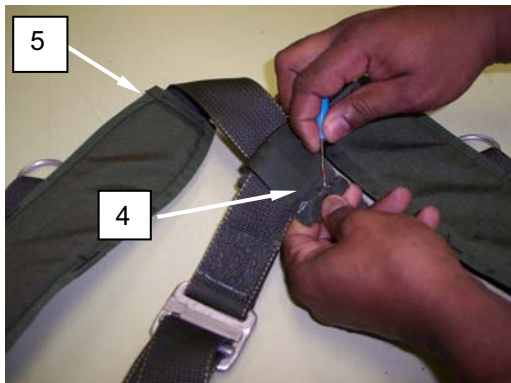
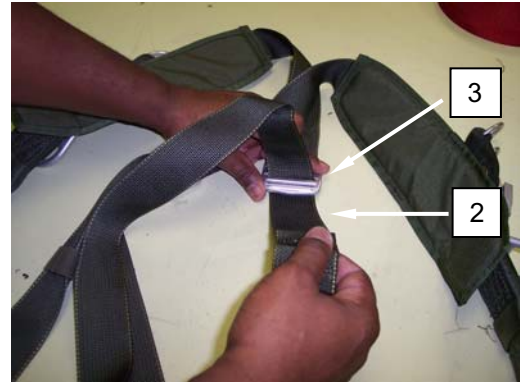
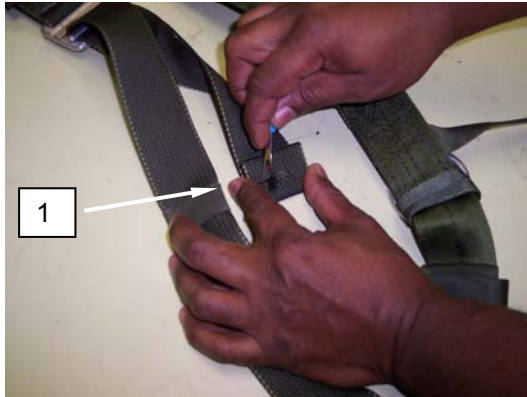


Figure 2. Replacing Harness Left Upper Main Lift Web (continued).

REPLACE – continued

4. Carefully remove the stitching (box stitch pattern) that attaches the tuck tab and snap fastener (**figure 3, item 1**) to the LEFT upper main lift web (**figure 3, item 2**) Remove the main lift web from the lower harness adjustment buckle (**figure 3, item 3**). Replace with a new LEFT upper main lift web assembly.

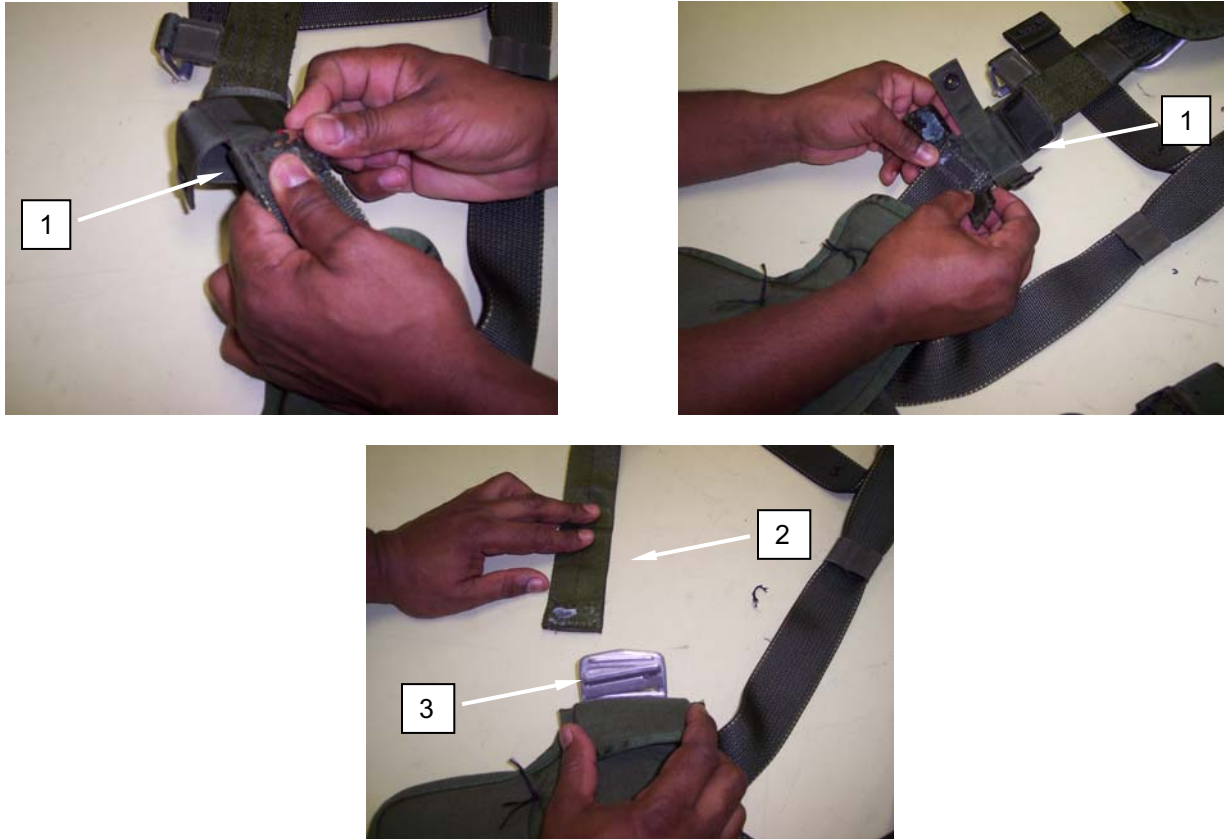


Figure 3. Replacing Harness Left Upper Main Lift Web (continued).

5. Attaching the LEFT upper main lift web to the harness assembly
6. First ensure that the LEFT upper main lift web (**figure 4, item 1**) is correctly positioned so that the canopy release assembly is facing down and the equipment d-ring is located toward the lower saddle assembly.
7. Route the LEFT upper main lift (**figure 4, item 1**) then route the main lift web strap through the lower adjustment buckle (**figure 4, item 2**) thread the strap through the lower adjustment buckle (**figure 4, item 3**) from bottom to top then back up through the lower adjustment buckle.
8. Ensure you pull enough excess webbing through the lower adjustment buckle (**figure 4, item 4**) to allow for sewing the tuck tab and snap fastener onto the LEFT main lift web strap.

REPLACE – continued

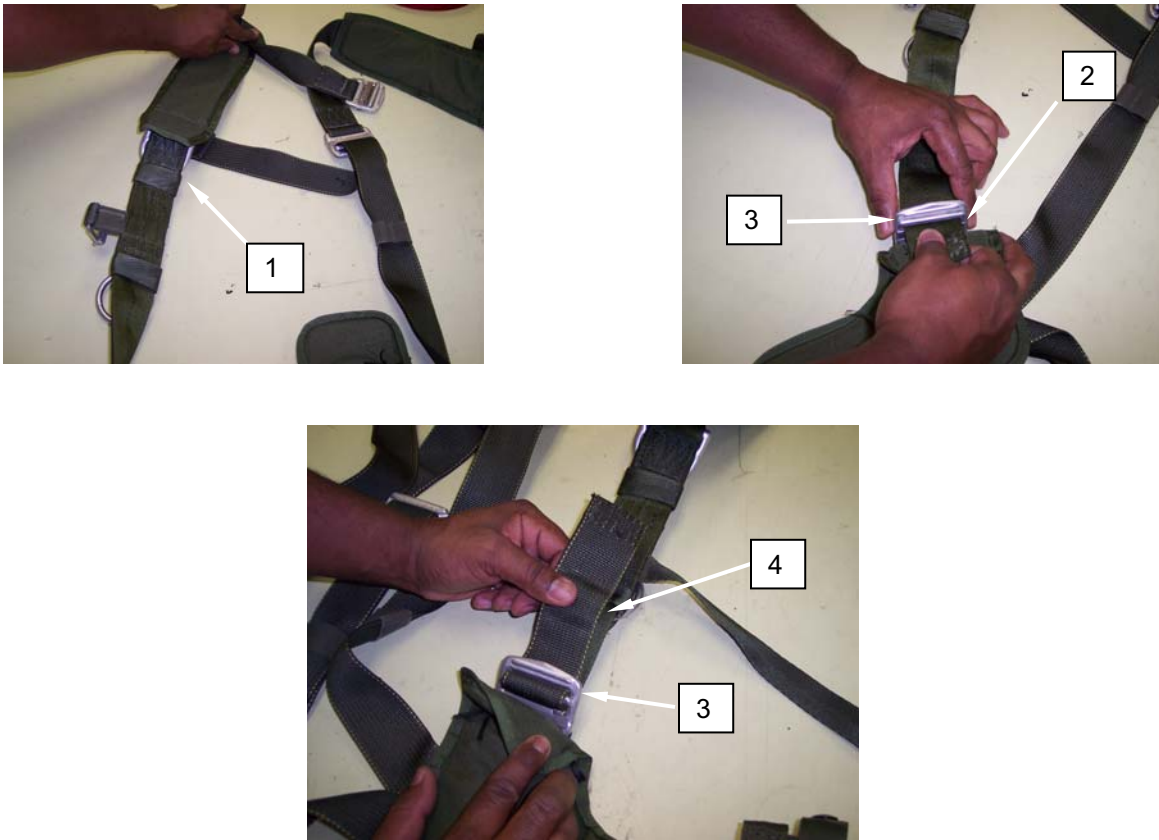


Figure 4. Replacing Harness Left Upper Main Lift Web (continued).

9. Attach the tuck tab and snap fastener (**figure 5, item 1**) to the LEFT upper main lift web strap (**figure 5, item 2**), position the tuck tab and snap fastener so they are facing forward, route the tuck tab wrap around the LEFT upper main lift web, using a heavy duty sewing machine, size 5 nylon thread , 4 to 5 stitches per inch, sew the tuck tab to the main lift web adjustment strap with a box stitch pattern (**figure 5, item 3**).

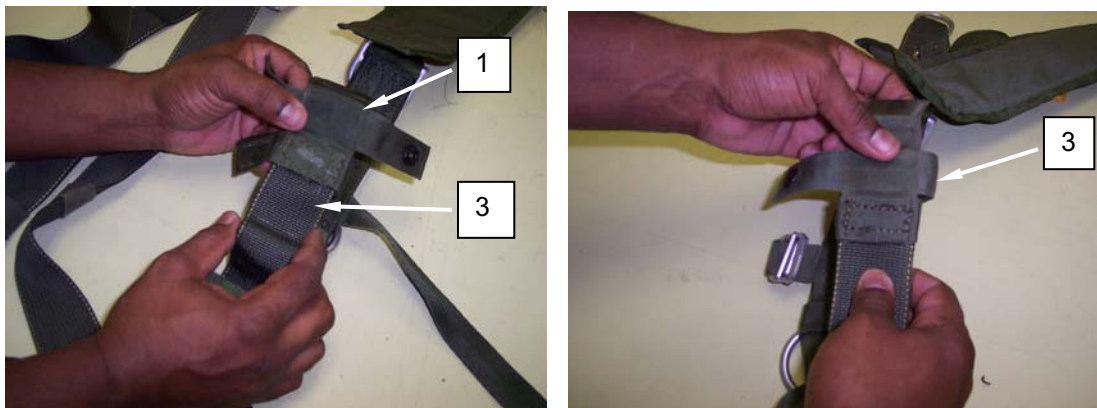


Figure 5. Replacing Harness Left Upper Main Lift Web (continued).

REPLACE – continued

10. Proceed by routing the LEFT diagonal back strap (**figure 6, item 1**) and diagonal back strap adjustment buckle (**figure 6, item 2**) under the right diagonal back strap (**figure 6, item 3**).
11. Route the diagonal back strap (**figure 6, item 1**) through the diagonal back strap adjustment buckle (**figure 6, item 2**) thread the diagonal back strap (**figure 6, item 4**) from top to bottom then back up through the diagonal back strap adjustment buckle. forming an “X” (**figure 6, item 5**).

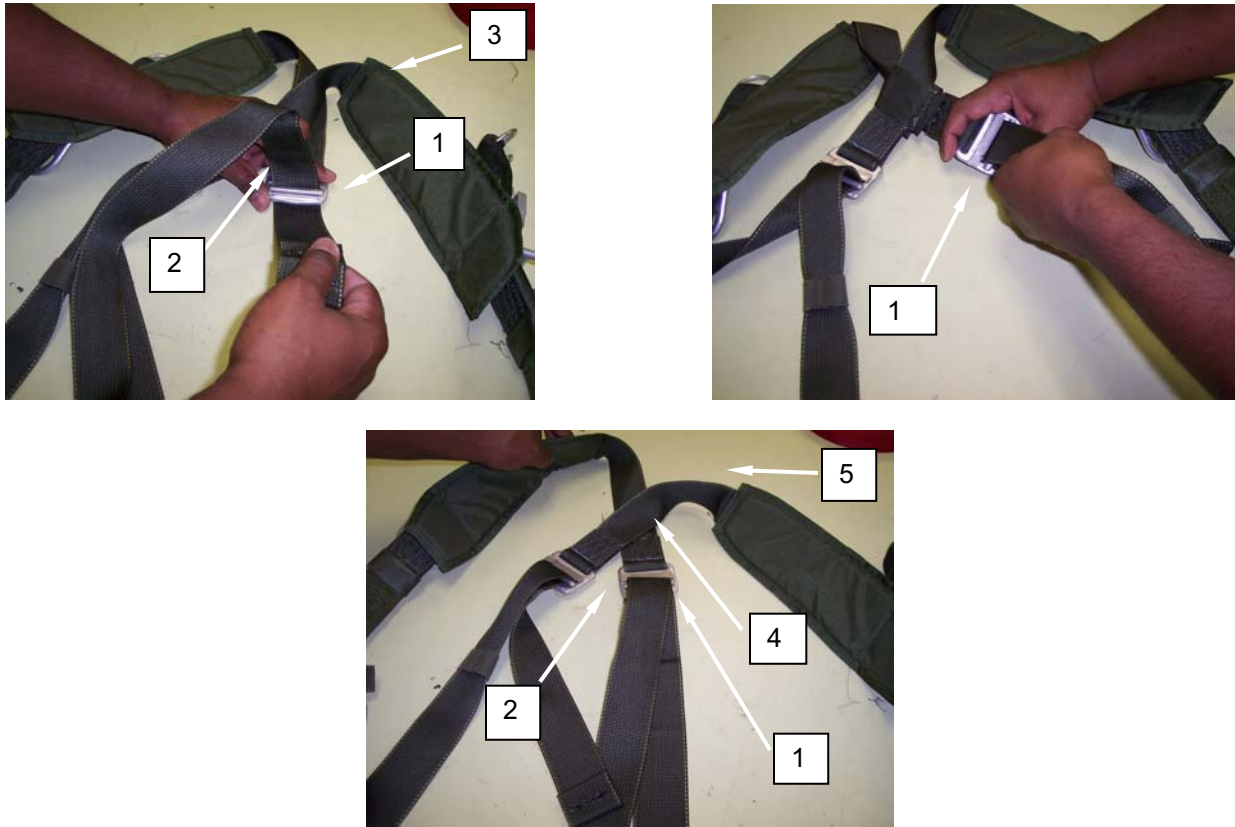


Figure 6. Replacing Harness Left Upper Main Lift Web (continued).

12. Ensure there are no twists in the LEFT upper main lift web then route the diagonal guide back over the diagonal back strap (**figure 7, item 1**) Using a light duty sewing machine and size E nylon thread, 7 to 11 stitches per inch, close the open end of the diagonal guide with three rows of stitching (**figure 7, item 2**).



Figure 7. Replacing Harness Left Upper Main Lift Web (continued).

REPLACE – continued

13. Roll the free end of the diagonal back strap and sew three rows of straight stitch using a heavy duty machine, size 5 nylon thread and 4 to 6 stitches per inch (**figure 8**).



Figure 8. Replacing Harness Left Upper Main Lift Web (continued).

14. Inspect the harness to ensure there are no twists, misrouting of the LEFT upper LEFT upper main lift web, or any missing stitching.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
HARNESS RIGHT UPPER MAIN LIFT WEB
REPAIR, REPLACE

INITIAL SETUP:**Tools**

Sewing Machine, Light Duty (Item 56, WP 0097 00)
 Shears (Item 61, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Webbing, Nylon, Type XII (Item 57, WP 0109 00)
 Thread, Nylon, Size E, Color OD (Item 51, WP 0109 00)
 Thread, Nylon, Size 5, Type 1, Class A (Item 49, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area

REPAIR

Restitching. Restitch RIGHT upper main lift web using a medium duty sewing machine and size E nylon thread that contrasts the color of the original stitching and material when possible. Restitch directly over the original stitch pattern as closely as possible with 6 to 9 inches per inch. Lock each row of stitching 2 inches at each end.

REPLACE

- Carefully remove stitching of the rolled back ends of the diagonal back strap (**figure 1, item 1**). Remove the diagonal back strap from the diagonal back strap adjustment buckle (**figure 1, item 2**)



Figure 1. Replacing Harness Right Upper Main Lift Web.

- Carefully remove the top row of stitching on the bottom diagonal guide (**figure 2, item 1**) where the RIGHT upper main lift web (**figure 2, item 3**) is routed through (**figure 2, item 1**) the diagonal guide (**figure 2, item 1**), this will allow for removal of the diagonal back strap (**figure 2, item 2**)

REPLACE - continued

3. Carefully remove the stitching (box stitch pattern) that attaches the tuck tab and snap fastener (**figure 2, item 1**) to the RIGHT upper main lift web (**figure 2, item 2**) Remove the main lift web from the lower harness adjustment buckle (**figure 2, item 3**). Replace with a new RIGHT upper main lift web assembly.

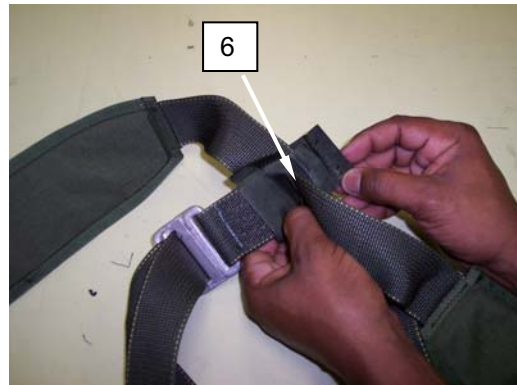
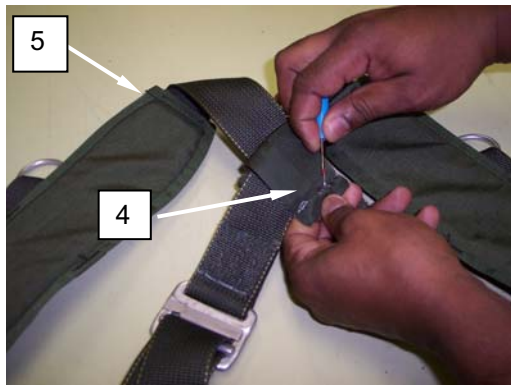
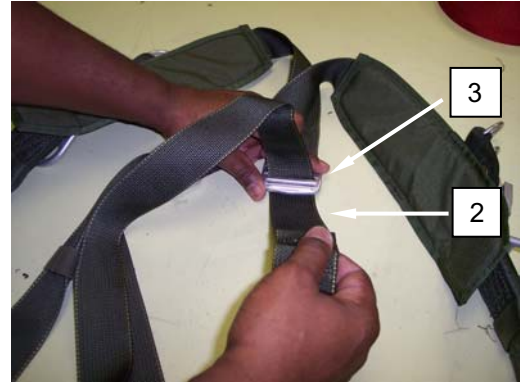
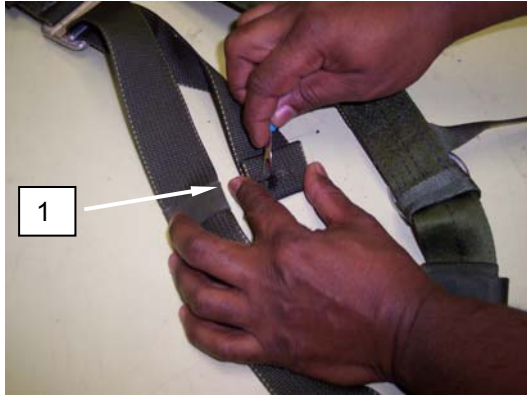


Figure 2. Replacing Harness Right Upper Main Lift Web (continued).

REPLACE - continued

4. Layout the harness assembly (**figure 3, item 1**) ensuring that the data tag on the horizontal back strap (**figure 3, item 2**) is facing up, in this layout configuration the hip pads and leg ejector snaps will be facing up, the shoulder pad on the RIGHT upper main lift web will be positioned so that the canopy release assembly is facing up.

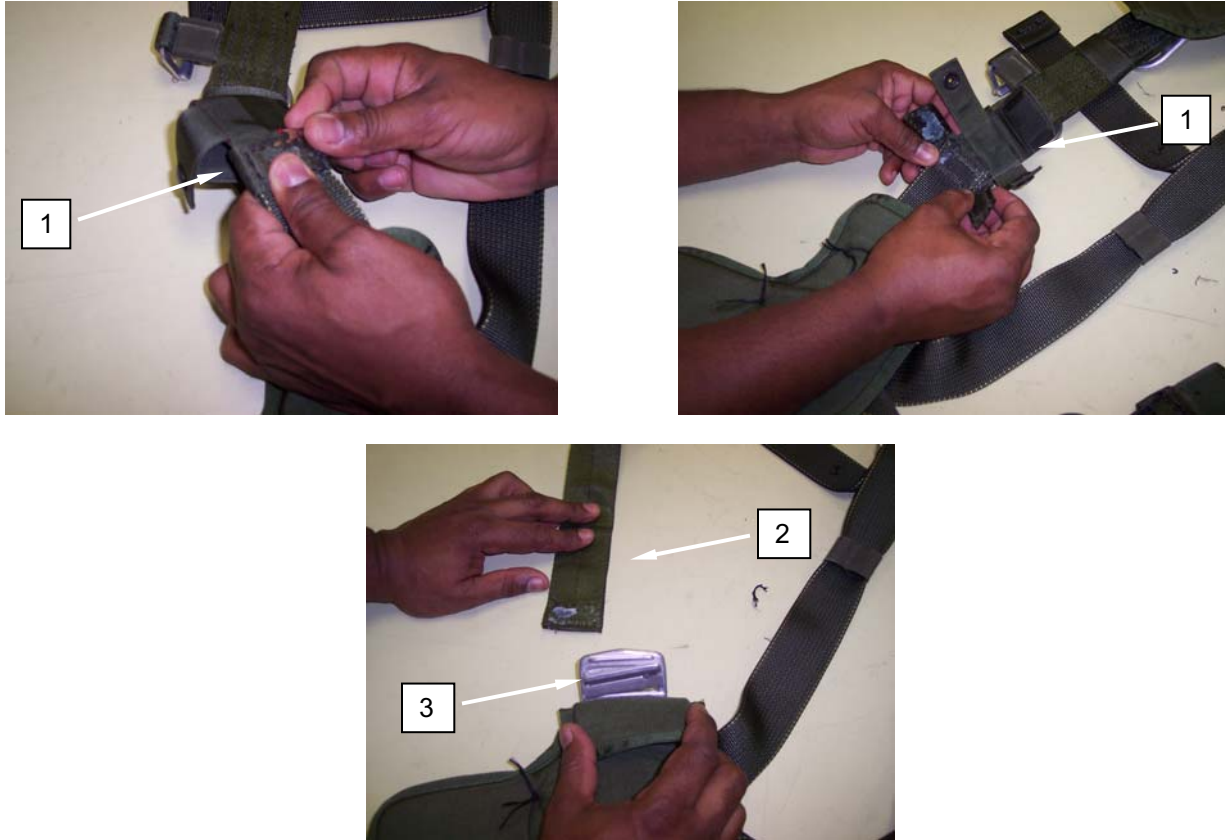


Figure 3. Replacing Harness Right Upper Main Lift Web (continued).

5. Attaching the RIGHT upper main lift web (**figure 4, item 1**) to the harness assembly
6. First ensure that the RIGHT upper main lift web (**figure 4, item 1**) is correctly positioned so that the canopy release assembly (**figure 4, item 2**) is facing up and the equipment d-ring (**figure 4, item 3**) is located toward the lower saddle assembly (**figure 4, item 3**).
7. Route the RIGHT upper main lift web strap (**figure 4, item 1**) through the lower adjustment buckle (**figure 4, item 2**) thread the strap through the lower adjustment buckle (**figure 4, item 2**) from top to bottom then back up through the lower adjustment buckle.
8. Ensure you pull enough excess webbing through the lower adjustment buckle (**figure 4, item 2**) to allow for sewing the tuck tab and snap fastener onto the RIGHT main lift web strap.

REPLACE - continued

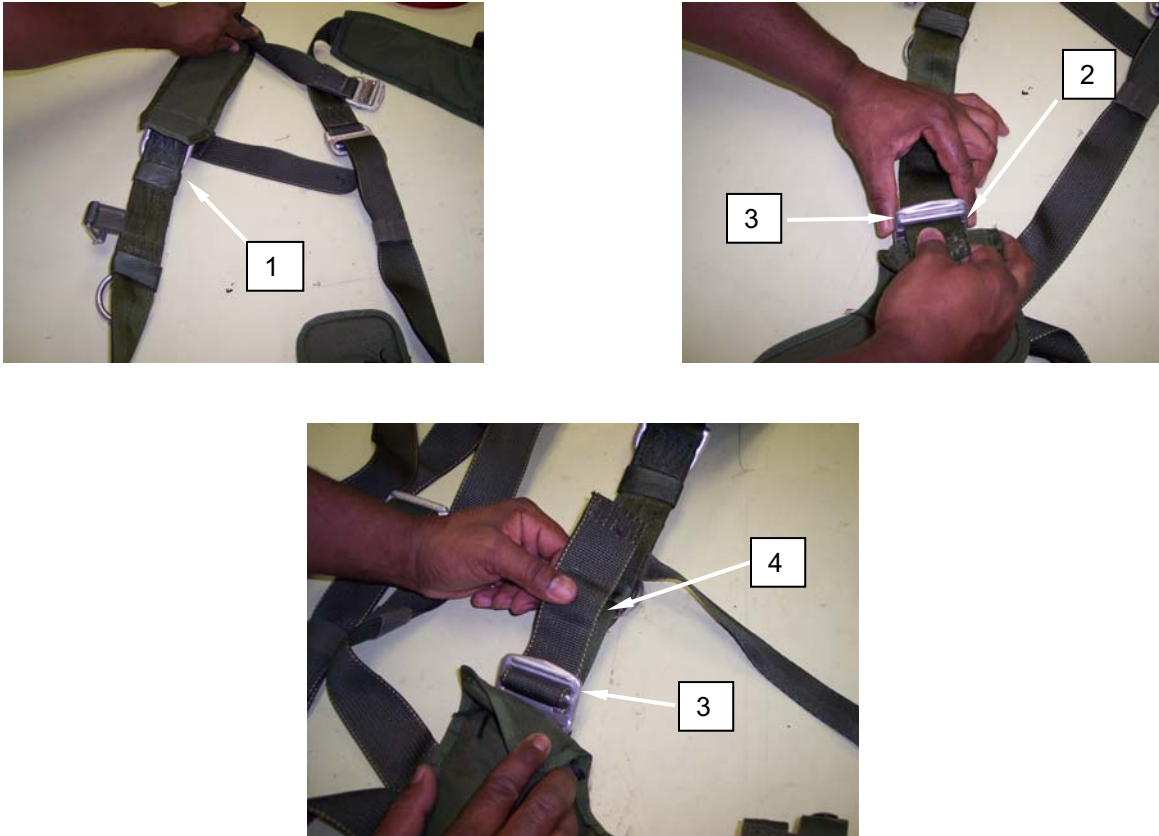


Figure 4. Replacing Harness Right Upper Main Lift Web (continued).

9. Attach the tuck tab and snap fastener (**figure 5, item 1**) to the RIGHT upper main lift web strap (**figure 5, item 2**), position the tuck tab and snap fastener so they are facing forward, route the tuck tab wrap around the RIGHT upper main lift web, using a heavy duty sewing machine, size 5 nylon thread , 4 to 5 stitches per inch, sew the tuck tab to the main lift web adjustment strap with a box stitch pattern (**figure 5, item 3**).

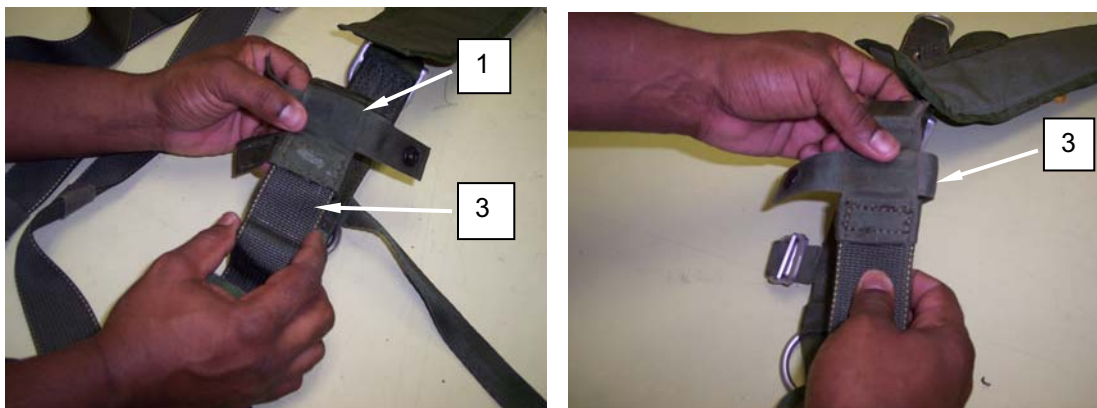


Figure 5. Replacing Harness Right Upper Main Lift Web (continued).

REPLACE - continued

10. Proceed by routing the RIGHT diagonal back strap (**figure 6, item 1**) and diagonal back strap adjustment buckle (**figure 6, item 2**) under the RIGHT diagonal back strap (**figure 6, item 3**) forming an X.
11. Route the diagonal back strap (**figure 6, item 1**) through the diagonal back strap adjustment buckle (**figure 6, item 2**) thread the diagonal back strap (**figure 6, item 1**) from top to bottom then back up through the diagonal back strap adjustment buckle (**figure 6, item 2**).

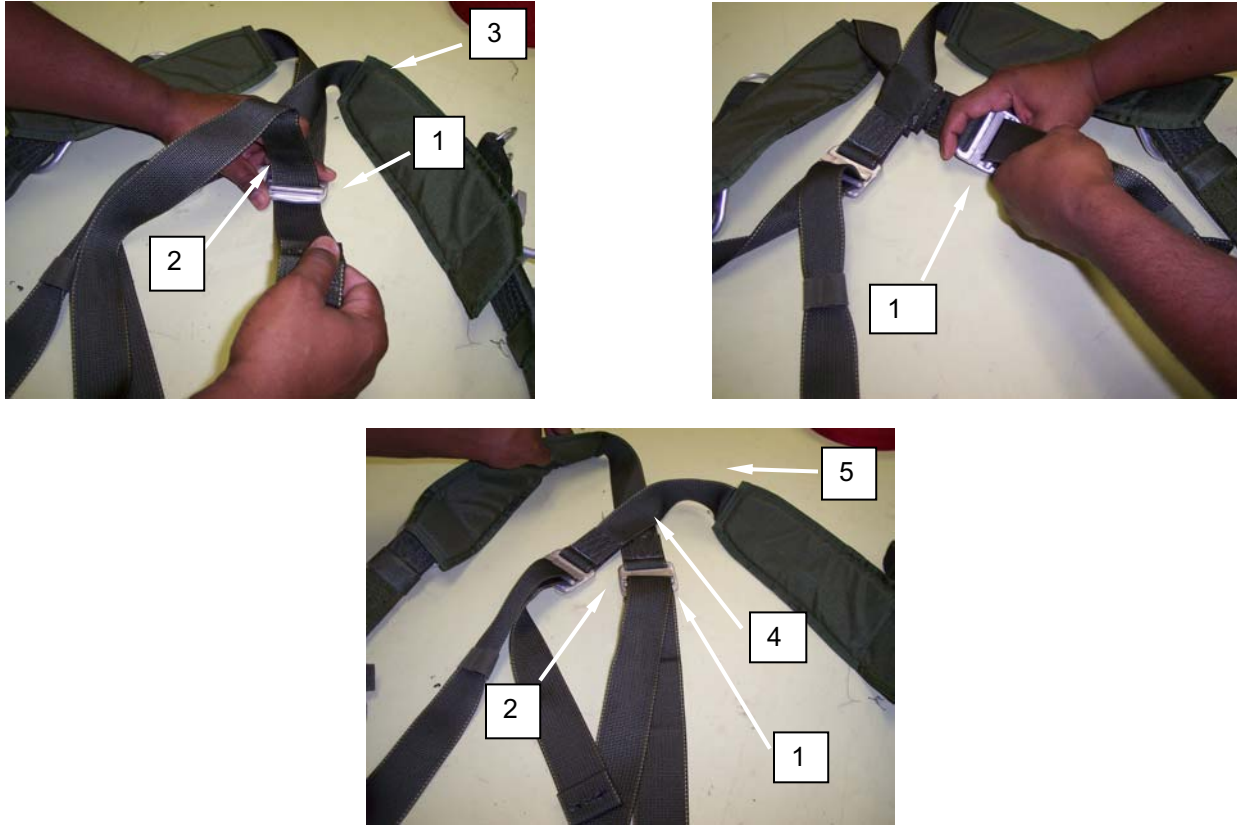


Figure 6. Replacing Harness Right Upper Main Lift Web (continued).

12. Ensure there are no twists in the RIGHT upper main lift web then route the diagonal guide back over the diagonal back strap (**figure 7, item 1**), Using a light duty sewing machine and size E nylon thread, 7 to 11 stitches per inch, close the open end of the diagonal guide with three rows of stitching (**figure 7, item 2**).



Figure 7. Replacing Harness Right Upper Main Lift Web (continued).

REPLACE - continued

13. Roll the free end of the diagonal back strap and sew three rows of straight stitch using a heavy duty machine, size 5 nylon thread and 4 to 6 stitches per inch (**figure 8**).



Figure 8. Replacing Harness Right Upper Main Lift Web (continued).

14. Inspect the harness to ensure there are no twists, misrouting of the RIGHT upper RIGHT upper main lift web, or any missing stitching.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
HARNESS SADDLE ASSEMBLY
REPAIR, REPLACE

INITIAL SETUP:**Tools**

Sewing Machine, Heavy Duty (Item 58, WP 0097 00)
Sewing Machine, Medium Duty (Item 59, WP 0097 00)
Shears (Item 61, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Webbing, Nylon, Type XII (Item 57, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)
Thread, Nylon, Size 5, Type 1, Class A (Item 49, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR

Restitching. Restitch right upper main lift web using a medium duty sewing machine and size E nylon thread that contrasts the color of the original stitching and material when possible. Restitch directly over the original stitch pattern as closely as possible with 6 to 9 inches per inch. Lock each row of stitching two inches at each end.

REPLACE

1. Carefully remove stitching of the rolled back ends of the diagonal back straps (**figure 1, item 1**). Remove the diagonal back straps from the diagonal back strap adjustment buckle (**figure 1, item 2**).



Figure 1. Replacing the Saddle Assembly.

REPLACE - continued

- Carefully remove the stitching (box stitch pattern) on the wrap that secures the tuck tab assemblies and snap fasteners (**figure 2, item 1**) to the right and left upper main lift web assemblies (**figure 2, item 2**), remove both right and left upper main lift web assemblies from the saddle assembly adjustment buckle (**figure 2, item 3**).

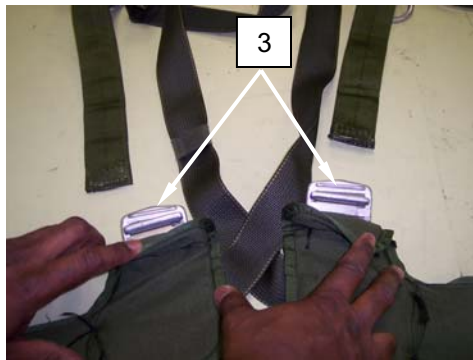
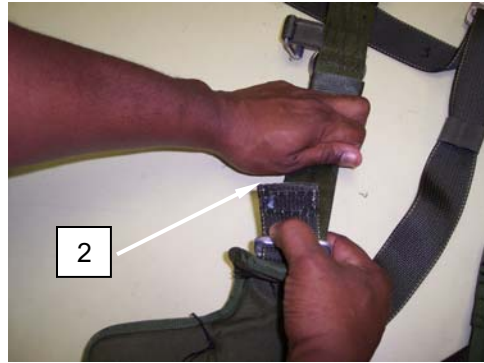


Figure 2. Replacing the Saddle Assembly (continued).

- Attach new saddle assembly by laying out the upper harness assembly (**figure 3, item 1**) ensuring that the diagonal backstraps (**figure 3, item 2**) are crossed and routed through the diagonal backstrap guide (**figure 3, item 3**). In this layout configuration the shoulder pads on the left and right upper main lift webs (**figure 3, item 4**), will be positioned so that the canopy release assemblies are facing down.

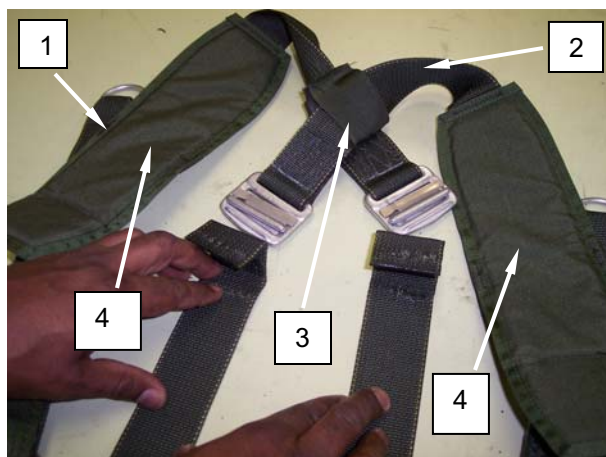


Figure 3. Replacing the Saddle Assembly (continued).

REPLACE - continued

4. Layout the saddle assembly (**figure 4, item 1**) so that the horizontal backstrap data tag (**figure 4, item 2**), and the ejector snaps are facing down.

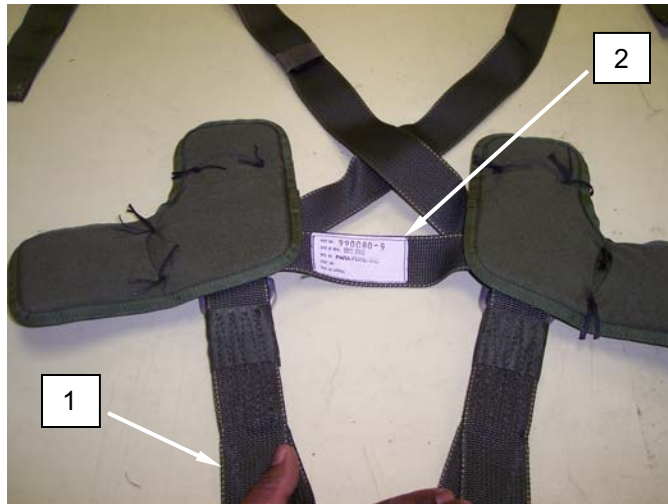


Figure 4. Replacing the Saddle Assembly (continued).

5. To attach the new saddle assembly to the upper harness assembly (**figure 5, item 1**), route the upper main lift web straps (**figure 5, item 2**) through the adjustment buckles (**figure 5, item 3**) route the main lift web straps (**figure 5, item 2**) from top to bottom and then back up through the adjustment buckle (**figure 5, item 3**).
6. Ensure that enough excess webbing is pulled through the saddle assembly adjustment buckle to allow for sewing the tuck tab and snap fastener onto the left and right upper main lift web straps.

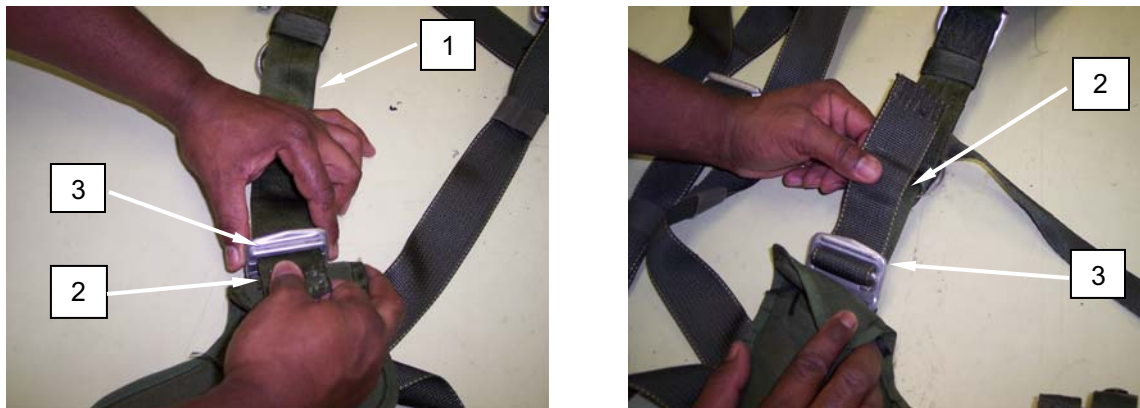


Figure 5. Replacing the Saddle Assembly (continued).

REPLACE - continued

7. Attach the diagonal backstraps (**figure 6, item 1**) to the upper main lift web (**figure 6, item 2**), route the diagonal backstraps (**figure 6, item 1**) through the diagonal backstrap adjustment buckles (**figure 6, item 3**) from top to bottom and back up through the diagonal backstrap adjustment buckle (**figure 6, item 3**).

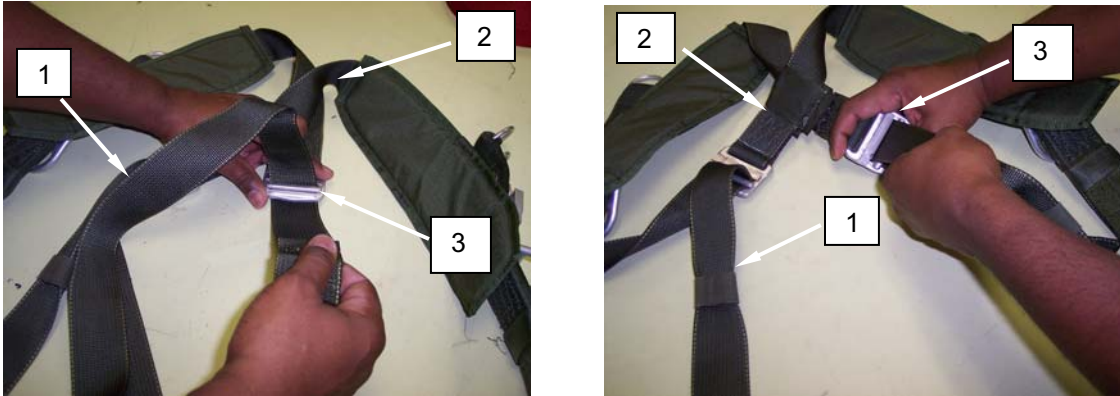


Figure 6. Replacing the Saddle Assembly (continued).

8. Once the diagonal backstrap has been routed, do an overall inspection of the harness assembly to ensure the diagonal backstrap and upper main lift web straps have been properly routed, should have no twist.
9. Attach the tuck tab and snap fastener (**figure 7, item 1**) to the left and right upper main lift web strap (**figure 7, item 2**), position the tuck tab and snap fastener (**figure 7, item 1**) so they are facing toward the top of the harness assembly. Route the tuck tab wrap (**figure 7, item 3**), around the right upper main lift web.
10. Sew the new tuck tab and snap fastener assembly (**figure 7, item 1**) onto the left and right upper main lift web straps (**figure 7, item 2**). using a heavy duty sewing machine, size 5 nylon thread, 4 to 5 stitches per inch. Sew the tuck tab to the main lift web adjustment strap with a box stitch pattern. Use this procedure for attaching the tuck tab and snap fastener to the left upper main lift web.

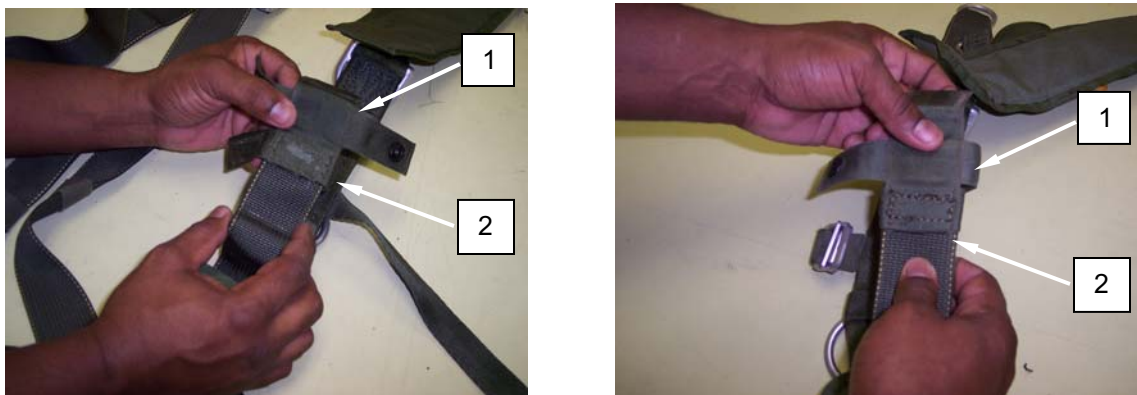


Figure 7. Replacing the Saddle Assembly (continued).

REPLACE - continued

11. Roll the free end of the diagonal back strap and sew three rows of straight stitch using a heavy duty machine, size 5 nylon thread and 4 to 6 stitches per inch (**figure 8**).



Figure 8. Replacing the Saddle Assembly (continued).

12. Inspect the harness to ensure there are no twists, misrouting of the saddle assembly, left and right upper right upper main lift web, or any missing stitching.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
HARNESS FABRIC LOOP 3-RING RELEASE
REPLACE

INITIAL SETUP:**Tools**

None required

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

None required

Equipment Condition

Lay out on packing table or other suitable area.

REPLACE**NOTE**

If needed, use lacing tape to assist routing the locking key.

Remove Fabric Loop 3 Ring Release

1. Open canopy release assembly cover plate by pulling downward on the pull-to-release-lanyard (**figure 1, item1**) on the cover flap.



Figure 1. Open Canopy Release Assembly Cover Plate.

REPLACE - continued

2. Locate and remove the locking key (**figure 2, item 1**) by depressing the two protruding lug release levers (**figure 2, item 2**).

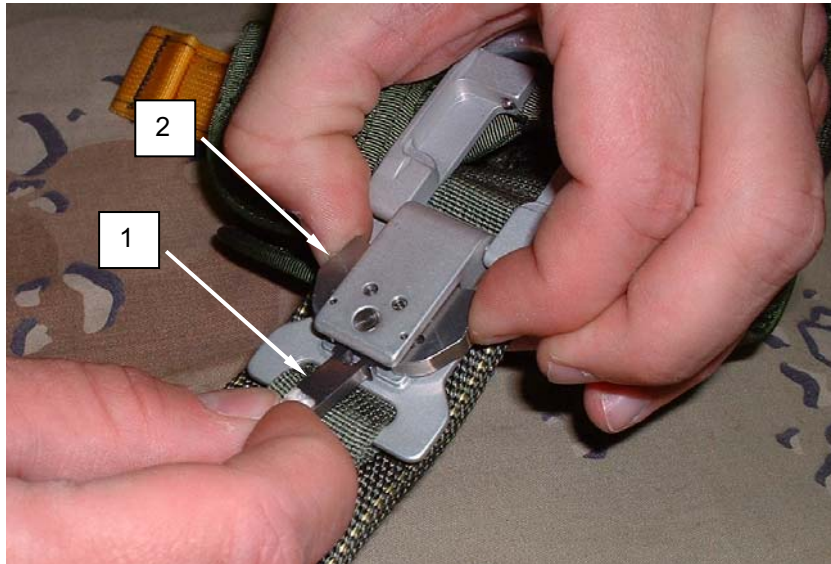


Figure 2. Remove The Locking Key.

3. Remove girth-hitch knot from slot on locking key (**figure 3, item 1**) and remove soft loop (**figure 3, item 2**) from locking key (**figure 3, item 1**).

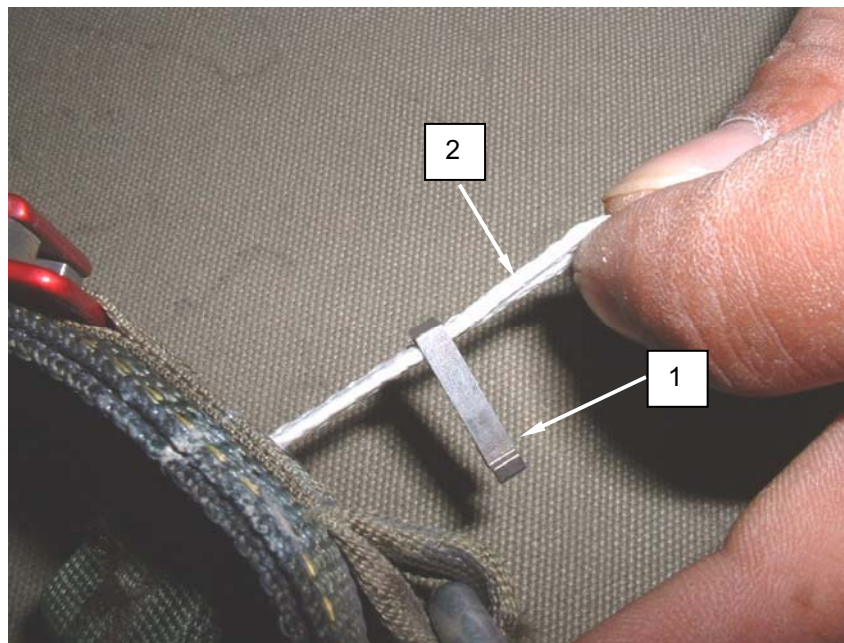


Figure 3. Remove Soft Loop From Locking Key.

4. Pass the soft loop (**figure 4, item 4**) through the grommet (**figure 4, item 5**) in the harness main lift web (**figure 4, item 6**).
5. Remove soft loop.

REPLACE - continued**Install Harness Fabric Loop 3-Ring Release**

1. Pass the soft loop (**figure 4, item 1**) through the grommet (**figure 4, item 2**) in the harness main lift web (**figure 4, item 3**) insuring the webbing tab (**figure 4, item 4**) of the loop is positioned on the underside of the three-ring release.

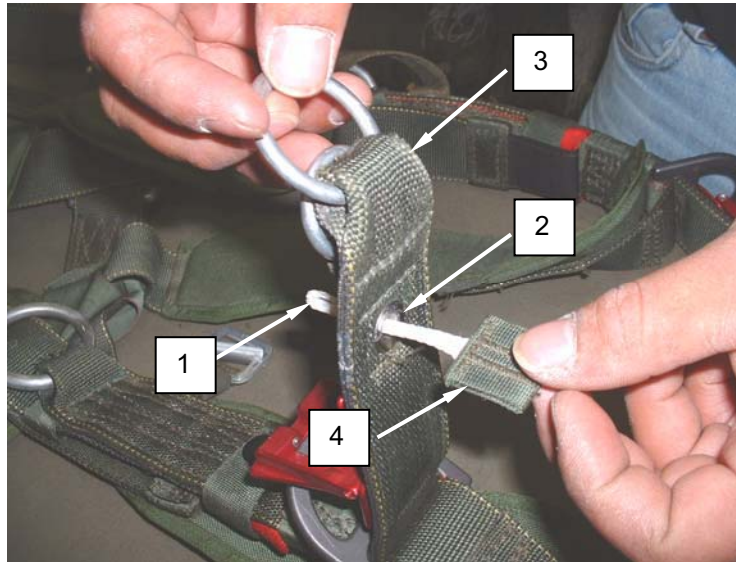


Figure 4. Pass Soft Loop Through The Grommet.

2. Pass the loop (**figure 5, item 1**) through the slot in the locking key (**figure 5, item 2**) and secure using a girth-hitch knot.

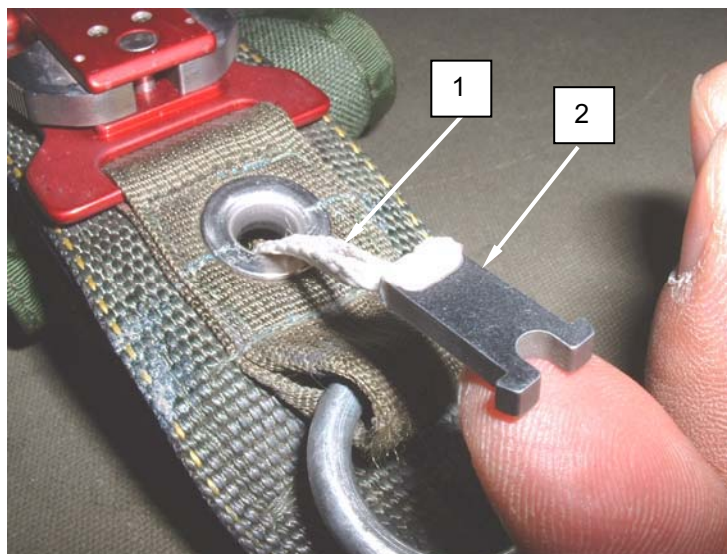


Figure 5. Pass Loop Through Slot In Locking Key And Secure.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
HARNES LOCKING LUG
REPLACE

INITIAL SETUP:**Tools**

None required

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

None required

Equipment Condition

Lay out on packing table or other suitable area.

REPLACE**NOTE**

If needed, use lacing tape to assist routing the soft loop.

Remove Locking Lug

1. Open canopy release assembly cover plate by pulling downward on the pull-to-release-lanyard (**figure 1, item 1**) on the cover flap.



Figure 1. Open Canopy Release Assembly Cover Plate.

REPLACE - continued

2. Locate and remove the locking lug (**figure 2, item 1**) by depressing the two protruding lug release levers (**figure 2, item 2**).

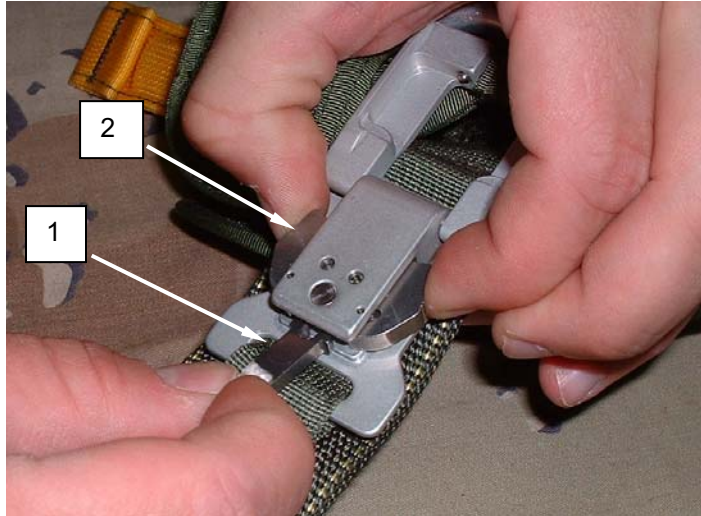


Figure 2. Locate And Remove The Locking lug.

3. Remove girth-hitch knot from slot on locking lug (**figure 3, item 1**) and remove soft loop (**figure 3, item 2**) from locking lug (**figure 3, item 1**).
4. Remove locking lug.

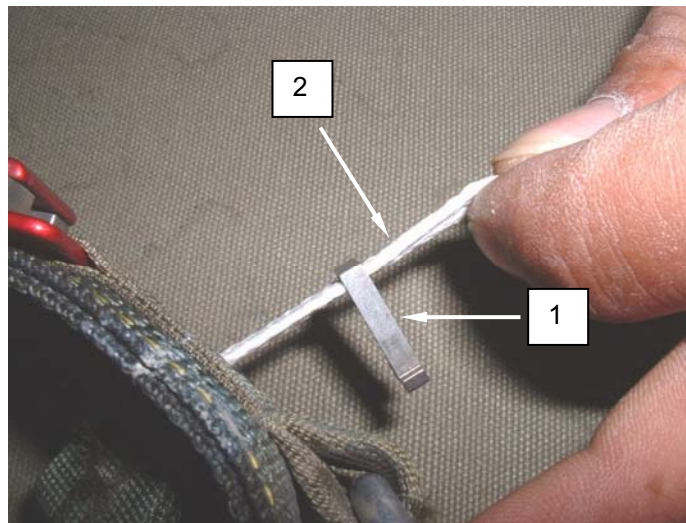


Figure 3. Remove Locking lug.

REPLACE - continued**Install locking lug**

1. Pass the loop (**figure 3, item 1**) through the slot in the locking lug (**figure 3, item 2**).
2. Secure using a girth-hitch knot.

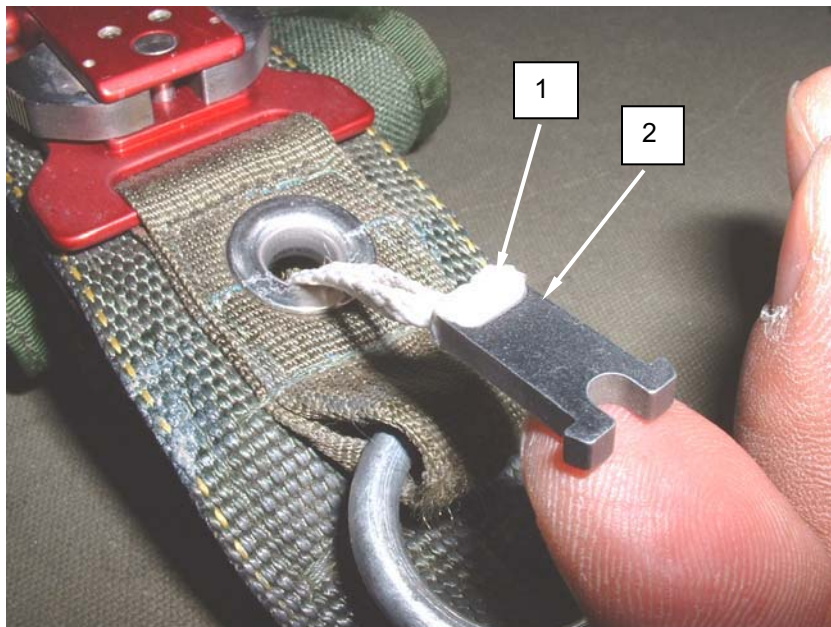


Figure 3. Install Locking lug.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
HARNESS RELEASE SAFETY COVER
REPLACE

INITIAL SETUP:**Tools**

None required

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

None required

Equipment Condition

Lay out on packing table or other suitable area.

REPLACE

1. Open the release cover plate (**figure 1, item 1**), remove the release cover (**figure 1, item 2**) by removing the girth hitch from the release cover plate (**figure 1, item 1**).
2. Push the attaching loop towards the release cover plate (**figure 1, item 1**) creating slack in the green attaching loop (**figure 1, item 3**).
3. Grasp the yellow lanyard (**figure 1, item 4**) and bring it back through the attaching loop (**figure 1, item 3**) and then bring the tuck tabs on the release cover (**figure 1, item 2**) through the attaching loop (**figure 1, item 3**) this will allow for removal of the release cover (**figure 1, item 2**).
4. Open the canopy release cover plate (**figure 1, item 1**) on the canopy release assembly (CRA) (**figure 1, item 2**).
5. There is a right release cover and left release cover.
6. Orientate the right release cover (**figure 1, item 5**) and left release cover by ensuring that the yellow lanyard (**figure 1, item 4**) is facing outward and the release cover attaching loop (**figure 1, item 3**) is facing upward.
7. Distinguish the right release cover (**figure 1, item 5**) from the left release cover, the long tuck tab (**figure 1, item 6**) will be to the inside and the short tuck tab (**figure 1, item 7**) will be to the outside.
8. Open the release cover plate (**figure 1, item 1**) so that it is fully open.
9. Routing the release cover attaching loop (**figure 1, item 3**) through the top of the release cover plate (**figure 1, item 1**).
10. Ensure there are no twist in the release cover attaching loop (**figure 1, item 3**).
11. Grasp the yellow lanyard (**figure 1, item 4**) on the release cover (**figure 1, item 2**) and route through the release cover loop (**figure 1, item 3**) and pull tight forming the girth hitch on the canopy release cover plate (**figure 1, item 1**).
12. Once the release cover (**figure 1, item 2**) is girth hitched in place close the release cover plate (**figure 1, item 1**) ensuring it securely fastens to the CRA.
13. Then grasp the short tuck tab (**figure 1, item 7**) and insert behind the CRA, then grasp the long tuck tab (**figure 1, item 6**) and insert behind the CRA and over the short tuck tab (**figure 1, item 7**).

REPLACE – continued

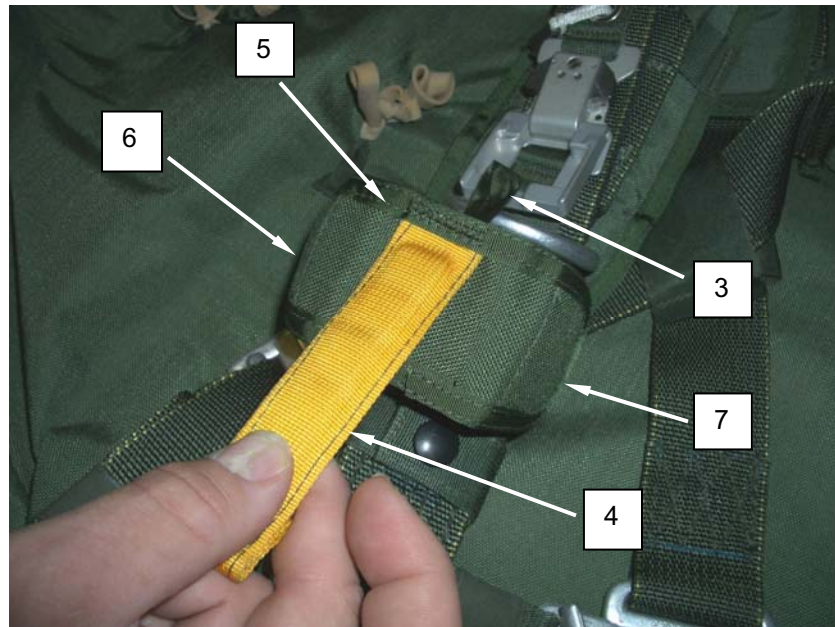
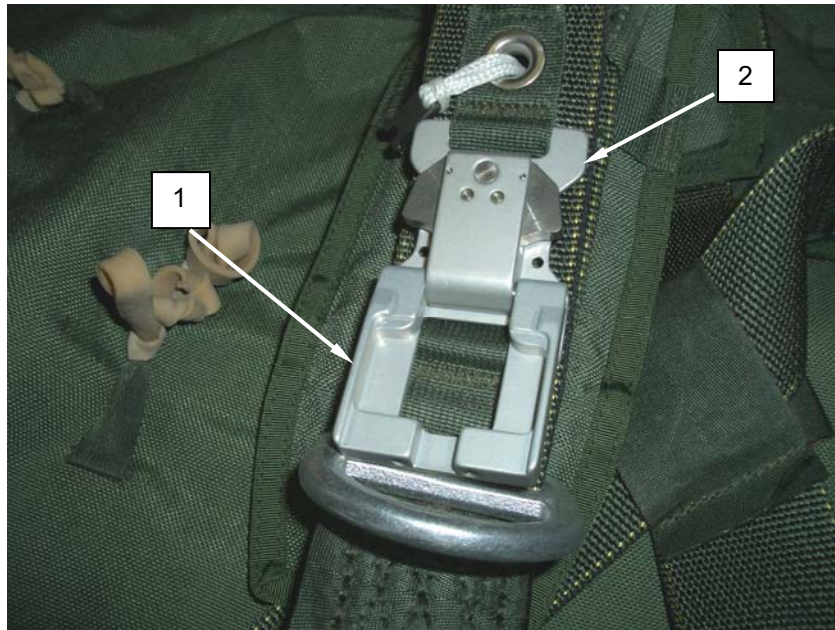


Figure 1. Harness Canopy Release Safety Cover.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
HARNESS SHOULDER PAD ASSEMBLY
REPAIR, REPLACE

INITIAL SETUP:**Tools**

Sewing Machine, Heavy Duty, Zig-Zag (Item 60, WP 0097 00)
Sewing Machine, Bartack, 28 Stitch (Item 51, WP 0097 00)
Stitch Removal Tool (Item 62, WP 0097 00)
Knife (Item 26, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR

Re-stitching. Re-stitch leg hip pad using a heavy duty sewing machine and size E nylon thread that contrasts the color of the original stitching and material when possible. Re-stitch directly over the original stitch pattern as closely as possible with 6 to 9 stitches per inch. Lock each row by stitching 2 inches from the end.

REPLACE

1. Remove the stitching that holds the shoulder pad (**figure 1, item 1**) to the main lift web assembly.
2. Cut one end of the tape that is routed through sizing channel number 2 setting that secures the center of shoulder pad (**figure 1, item 1**) to the main lift web.
3. Take a new shoulder pad (**figure 1, item 1**) and position under the main lift web of the harness, ensure the hardware is facing up.
4. Route the sewn tape located in the center of the shoulder strap through sizing channel number 2 setting.
5. Sew tape to the shoulder strap (**figure 1, item 1**) using a bartack sewing machine, place a bartack so that the stitch does not exceed the edges of the tape.
6. Align the top of the shoulder pad (**figure 1, item 1**) with the top of the sizing channel and sew the binding of the shoulder pad to the main lift web using a heavy duty zig-zag sewing machine.
7. When sewing the bottom to the main lift web be sure to sew 1/2-inch below the bottom edge of the sizing channel strap. Sew using a heavy duty zig-zag sewing machine.

REPLACE - continued

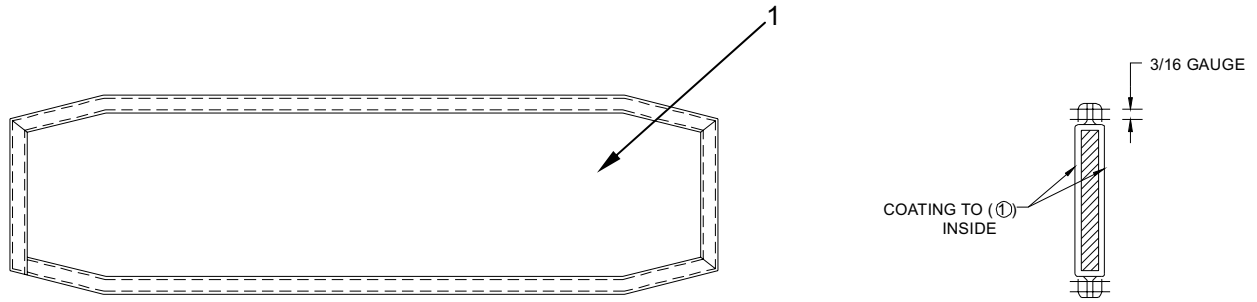


Figure 1. Harness Shoulder Pad.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE CANOPY
REPAIR**

INITIAL SETUP:**Tools**

Stitch Removal Tool (Item 62, WP 0097 00)
Sewing Machine, Light Duty (Item 56, WP 0097 00)
Shears (Item 61, WP 0097 00)
Wrench, Adjustable, 8-inch (Item 71, WP 0097 00)
Needle, Tacking (Item 32, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Cloth, Nylon Ripstop, Type I (Item 11, WP 0109 00)
Cloth Netting, Nylon, 3-3/4 inch square, mesh, 18-inch (Item 8, WP 0109 00)
Tape, Lacing and Tying, Nylon, (Item 41, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Unpacked

REPAIR

Restitching. Restitch reserve canopy using a light-duty sewing machine and size E thread that contrasts the color of the original stitching and material when possible. Restitch directly over the original stitch pattern as closely as possible with 7 to 11 stitches per inch. Lock each row of stitching two inches at each end.

Restitch Reserve Canopy Fabric**CAUTION**

Stitch removal requirements will vary according to the type of item being repaired. Due to the unique type of stitch formations found on the T-11R, use of a stitch removal tool is mandated when removing Bartack, Box X, or Double Box X stitch formations.

NOTE

Parachute mending cloth IS NOT AUTHORIZED on the reserve parachute.

If bartack stitching requires repair, bartacks will be completely removed and a new bartack will be replaced with the same stitch length and width.

REPAIR - continued**Patch Reserve Canopy Fabric**

Refer to individual component/assembly repairs, replacement procedures, MAC, and WP 0017 00 with the exception of the following rules:

1. 4-sided patches only with rounded or square corners.
2. Sections 1 through 3 (1.1oz material), maximum of 3 patches per section providing the area does not exceed 50% of the section, any damage in excess of 50% will require a section replacement.
3. A repair to section 1 that requires patching against the lower lateral band will require that the patch extend over the whole width of the lower lateral band and all rows of stitching in the lower lateral band must be re-stitched across patch material.
4. Sections 4 & 5 (1.5 oz material), maximum of 1 patch per section providing the patch it is not within 1-inch of a main seam. Damage closer than 1-inch to the main seam will require a section replacement.
5. No patch larger than 8-inch by 8-inch is authorized, any damage that requires a patch larger than 8-inch by 8-inch will require a section replacement.
6. A section replacement will require removal of the stitching in the main seams and forming a French Fold between the new material and existing material from the neighboring sections.
7. Canopy Scoop, maximum of 1 patch per scoop providing the area does not exceed 50% of the scoop, any damage in excess of 50% will require a section replacement.

Patch the Reserve Canopy Mesh Area**NOTE**

The first hole that is less than 1-inch in diameter or length does not require repair. More than one hole or damage in excess of 1-inch will require patching. A maximum of three patches is authorized in the mesh section. Damage in excess of 50% of the section will require a section replacement.

1. Invert the canopy on repair table and locate damaged section. Smooth the fabric around damaged area.
2. Measure damaged area. Cut a 4-sided patch that will extend at least 1-inch completely around damaged area.
3. Center patch over damaged area and sew 1/4-inch from the raw edges around the patch using a light duty sewing machine, size E nylon thread and 7 to 11 stitches per inch.
4. Turn canopy right side out.
5. Trim damaged area 1/4-inch to the inside of the stitching.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE CANOPY SUSPENSION LINE
REPAIR, REPLACE**

INITIAL SETUP:**Tools**

Shears (Item 61, WP 0097 00)
Stitch Removal Tool (Item 62, WP 0097 00)
Sewing Machine, Bartack, 28 Stitch (Item 51, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Cord, Nylon, 650 lb., Color Natural, Class F (Item 16, WP 0109 00)

Equipment Condition

Unpacked

REPAIR**Restitch Suspension Lines****CAUTION**

Stitch removal requirements will vary according to the type of item being repaired. Due to the unique type of stitch formations found on the T-11R, use of a stitch removal tool is mandated when removing Bartack, Box X, or Double Box X stitch formations.

If bartack stitching requires repair, bartacks will be completely removed and a new bartack will be replaced with the same stitch length and width.

REPLACE**Replace Reserve Canopy Suspension Line**

1. Place canopy in proper layout.
2. Cut damaged line off the connector link. Cut the skirt hesitator tie located inside the canopy. Remove suspension line (**figure 1, item 1**) from the canopy line-attaching loop (**figure 1, item 2**).
3. Align the new suspension line (**figure 1, item 1**) so that the cascade is closest to the canopy.
4. Attach a new suspension line (**figure 1, item 1**) to the canopy by passing one end through the attaching loop (**figure 1, item 2**). Pass the other end through the opposite end of the suspension line loop.
5. Pull tight forming a girth hitch. Make sure that the cascade is facing towards the inside of the canopy.



Figure 1. Attaching New Suspension Line To Attaching Loop.

6. Trace the new suspension line (**figure 2, item 1**) down beside the adjacent line that is being replaced. Ensure that all twists, knots, or entanglements are removed.
7. Attach the line (**figure 2, item 1**) to the connector link (**figure 2, item 2**) next to the adjacent line.

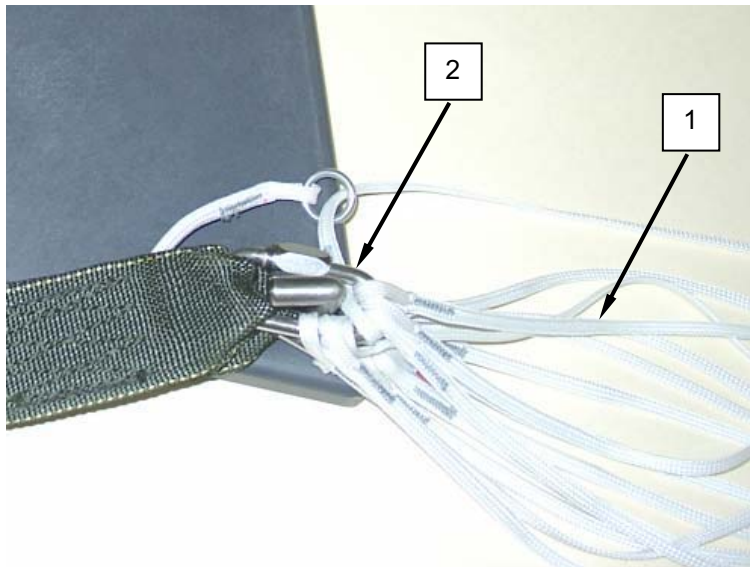


Figure 2. Attaching New Suspension Line To Connector Link.

8. Reinstall the skirt hesitator tie IAW WP 0065 00.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE EXTRACTOR ASSEMBLY
INSPECT, REPLACE

INITIAL SETUP:**Tools**

Shears (Item 61, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/PartsCord, Spectra[®], #1000 (Item 19, WP 0109 00)**Equipment Condition**

Unpacked

INSPECT

Extractor Bridal Assembly must be free of cuts, burns and frays.

REPLACE**Remove Reserve Extractor**

1. Arrange the canopy on the pack table with gore 1 on top.
2. Layout the extractor immediately above the apex ensuring the extractor vent bridle lines are free of turns, tangles and twists.
3. Remove the 12-inch length of one turn single Spectra[®] cord (**figure 1, item 1**) from one end of the apex extractor attaching loop (**figure 1, item 2**) through the looped end of the extractor vent bridle line (**figure 1, item 3**), and back through apex extractor attaching loop (**figure 1, item 2**).–
4. Remove the remaining extractor vent bridle lines (**figure 1, item 3**) in the same manner.
5. Remove the reserve extractor.

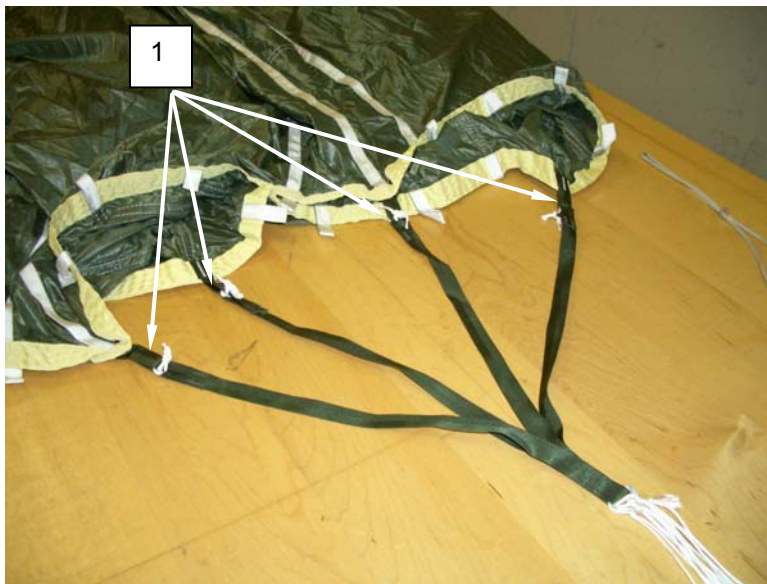


Figure 1. Remove Cord From Apex Extractor Attaching Loop.

REPLACE - continued

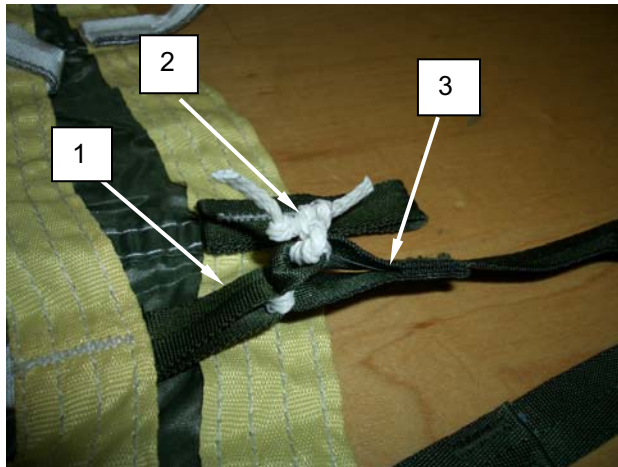


Figure 1. Remove Cord From Apex Extractor Attaching Loop (continued).

Attach Reserve Extractor

1. Arrange the canopy on the pack table with gore 1 on top.

NOTE

Ensure the extractor vent bridle lines are straight and free of twists.

2. Layout the extractor immediately above the apex insuring the extractor vent bridle lines are free of turns, tangles and twists.
3. Locate the four apex extractor attaching loops (**figure 2, item 1**) attached to the apex of main seam numbers 4, 9, 14 and 19 (the four attachment loops are OD in color for easy identification).
4. Route one end of a 12-inch length of one turn single Spectra[®] cord (**figure 2, item 2**) through one end of the apex extractor attaching loop (**figure 2, item 1**), through the looped end of the extractor vent bridle line (**figure 2, item 3**), and back through apex extractor attaching loop (**figure 2, item 1**).–
5. Tightly secure the ends of the cord (**figure 2, item 2**) over the apex extractor-attaching loop (**figure 2, item 1**) using a surgeon's knot and a locking knot with a knot in the running end.
6. Trim excess to approximately 1-inch long.
7. Attach the remaining extractor vent bridle lines (**figure 2, item 1**) in the same manner.

REPLACE - continued

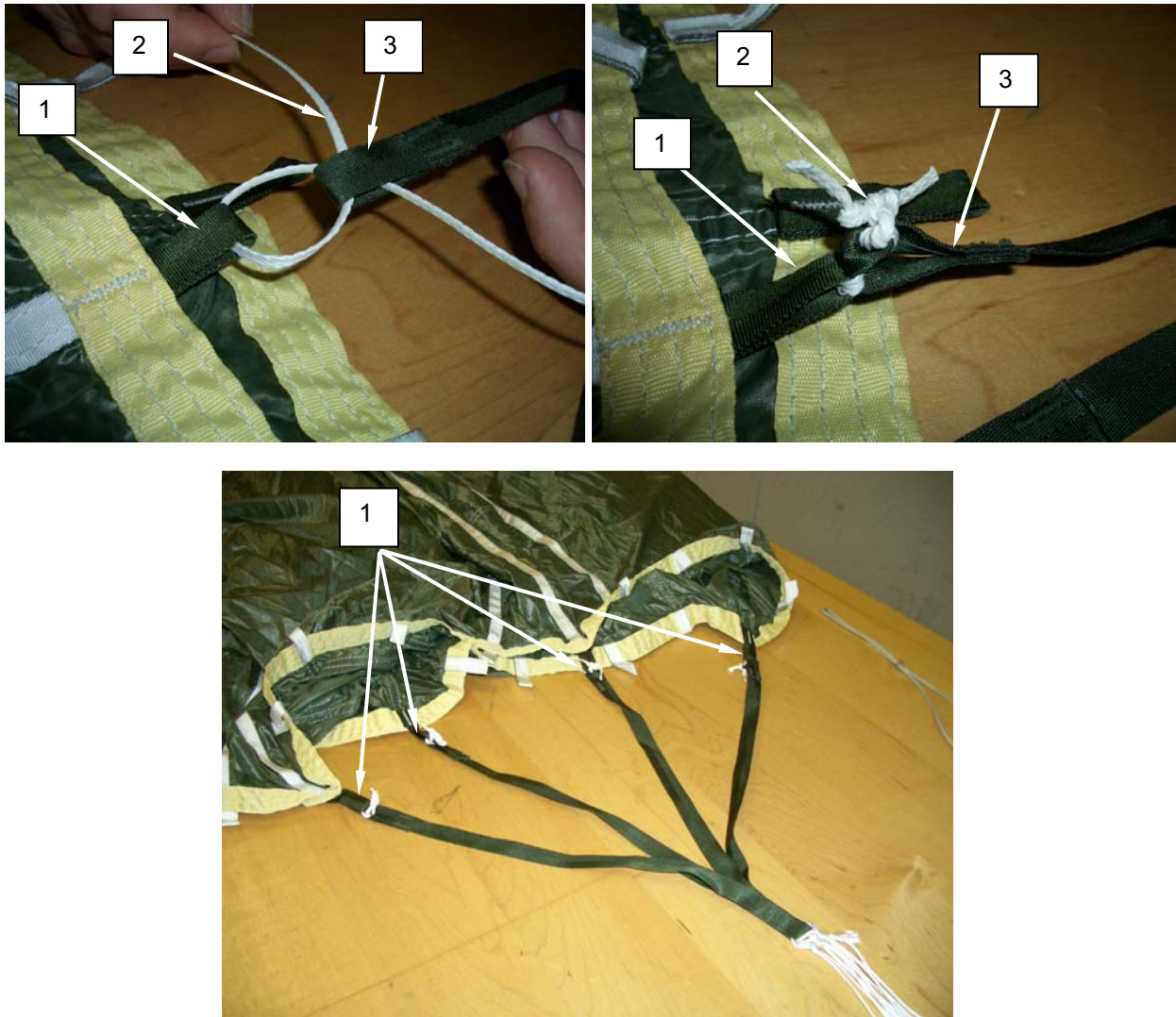


Figure 2. Attach Reserve Extractor Chute.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE EJECTOR SPRING ASSEMBLY
REPAIR, TEST, REPLACE

INITIAL SETUP:**Tools**

Rod, Compression, Ejector Spring (Item 46, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

None required

Equipment Condition

Unpacked

REPAIR

Holes may be hot trimmed up to a 1/4-inch to avoid fraying. No repairs to the end caps or spring are authorized.

TEST**NOTE**

The test tube (PVC pipe) and the 32-lb weight constitute the spring compression test set. The spring compression test set is locally manufactured IAW WP 0113 00.

Perform a compression test during initial receipt, during each re-pack and each time ejector spring is replaced. It may be necessary to allow the spring to remain in a relaxed state for up to 24 hours before testing (especially those that have been compressed/packed for 365 days).

Perform the spring compression test as follows:

CAUTION

Dropping the weight onto the spring will result in unnecessary replacement of the spring and cause irreparable damage to the material covering the spring.

1. Place the tube on a flat hard surface in the vertical position with the 6-inch slot closest to the floor.
2. Place the spring inside the tube.
3. Lower the 32-pound weight onto the spring.
4. Check to ensure that the spring is visible between the 6-inch slot in the tube.

TEST - continued

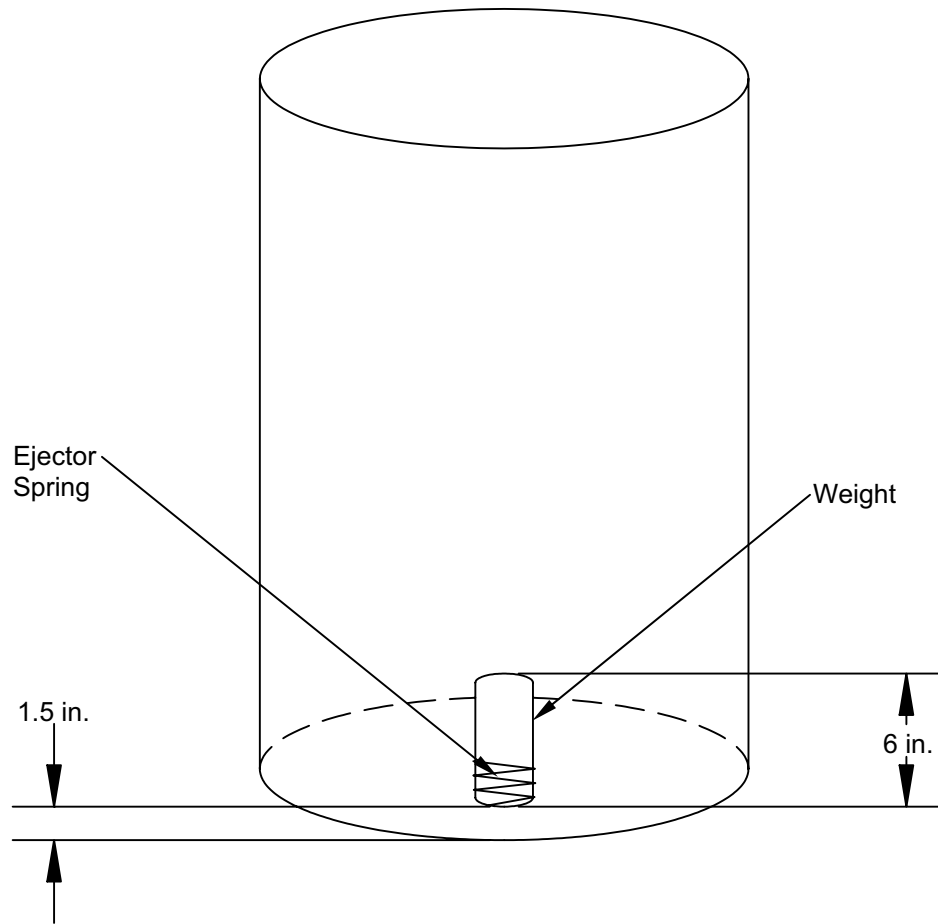


Figure 1. Spring Compression Test Tube.

5. If the top of the spring falls above or below the slot, discard and replace the ejector spring with a serviceable one from stock.

REPLACE

Replace an unserviceable ejector spring with a serviceable one from stock.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE CANOPY GORE SECTIONS
REPAIR**

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Needle, Basting (Item 31, WP 0097 00)
Sewing Machine, Light-Duty (Item 56, WP 0097 00)
Shears (Item 61, WP 0097 00)
Stitch Removal Tool (Item 62, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Brush, Stenciling (Item 6, WP 0109 00)
Cloth, Nylon Ripstop, Type I (Item 11, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)
Stencil Board, Oiled (Item 40, WP 0109 00)

Equipment Condition

Unpacked

REPAIR**WARNING**

The reserve canopy must not be darned or repaired through the use of parachute mending cloth. Failure to adhere to this requirement could result in failure of the parachute and serious injury or death to the parachutist.

Restitching. Restitch canopy gore sections using a light duty sewing machine and size E nylon thread that contrasts the color of the original stitching and material when possible. Restitch directly over the original stitch pattern as closely as possible with 7 to 11 stitches per inch. Lock each row of stitching 2 inches at each end.

NOTE

Parachute mending cloth IS NOT AUTHORIZED on the reserve parachute.

1. Repair gore sections 1, 2 and 3 IAW patching procedures detailed in WP 0017 00, and stencilling procedures detailed in WP 0019 00 and the following guidelines:
 - a. 4-sided patches only with square corners.
 - b. No patch larger than 8-inch by 8-inch is authorized. Any damage that requires a patch larger than 8-inch by 8-inch will require the entire reserve canopy to be replaced.
 - c. Sections 1 through 3 (1.1oz material), maximum of 3 patches per section providing the area does not exceed 50% of the section, any damage in excess of 50% will require a section replacement.
 - d. A repair to section 1 that requires patching against the lower lateral band will require that the patch extend over the whole width of the lower lateral band and all rows of stitching in the lower lateral band must be re-stitched across patch material.

REPAIR – continued

2. Repair gore sections 4 and 5 IAW patching procedures detailed in WP 0017 00 and the following guidelines:
 - a. 4-sided patches only with square corners.
 - b. No patch larger than 8-inch by 8-inch is authorized. Any damage that requires a patch larger than 8-inch by 8-inch will require a section replacement.
 - c. Sections 4 & 5 (1.5 oz material), maximum of 1 patch per section providing the patch it is not within 1-inch of a main seam. Damage closer than 1-inch of the main seam will require the entire reserve assembly to be replaced.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE CANOPY GORE SECTION #6 MESH PANEL ASSEMBLY
REPAIR, REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0103 00)
 Sewing Machine, Double Needle (Item 54, WP 0097 00)
 Sewing Machine, Light Duty (Item 56, WP 0097 00)
 Sewing Machine, Medium Duty, Zig-Zag (Item 57, WP 0097 00)
 Stitch Removal Tool (Item 62, WP 0097 00)
 Shears (Item 61, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E, (Item 51, WP 0109 00)
 Tape, Nylon, Type III, Class 1, 3/4-inch wide (Item 44, WP 0109 00)
 Cloth, Mesh Netting, Nylon, 1/4-inch Hexagonal (Item 10, WP 0109 00)

Equipment Condition

Unpacked

REPAIR**NOTE**

Only straight tears can be repaired. Do not repair if parts of the mesh are missing.

NOTE

No single repair may be more than 6 inches in length. No more than 4 repairs per mesh panel. No more than 12 inches of repaired damage in total. Repairs may not cross one another.

Repair a damaged mesh panel as follows:

1. Invert the canopy.

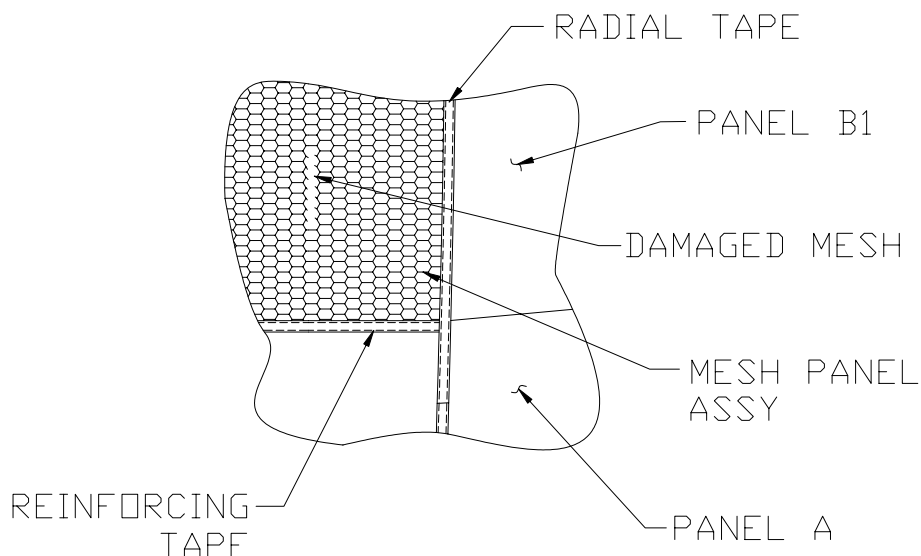


Figure 1. Repair Damaged Mesh Panel.

REPAIR - continued

2. Pinch the torn edges together.
3. Using a zig-zag sewing machine set to 3/16-inch wide stitch and size E nylon thread, start sewing at least 1-inch before the tear and at least 1/8-inch in from the edge. Sew the length of the tear, binding the torn edges together. Continue sewing to at least 1-inch past the tear (**figure 2**).

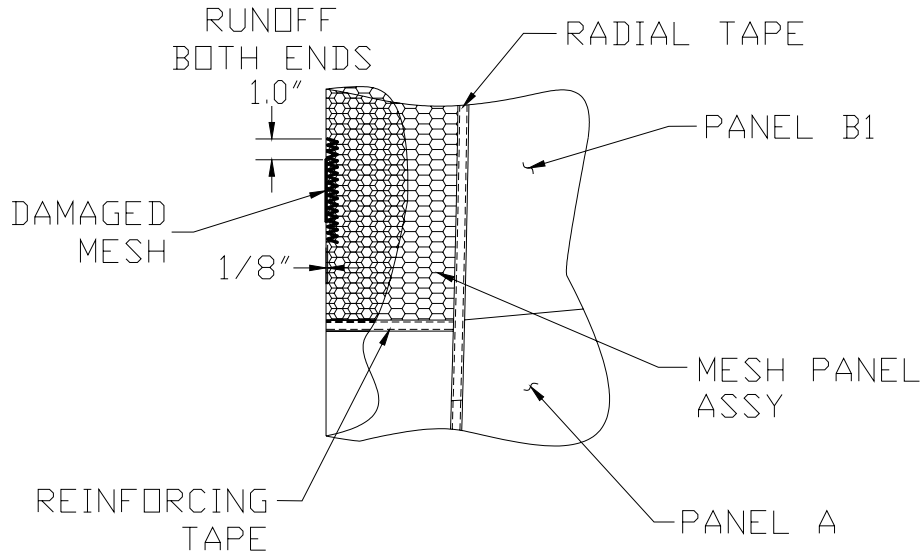


Figure 2. Sew Before Tear.

4. Verify that the repair is functional by using hand tension to pull the mesh perpendicular to the repair. If it pulls apart, attempt the repair again or replace the entire mesh panel.

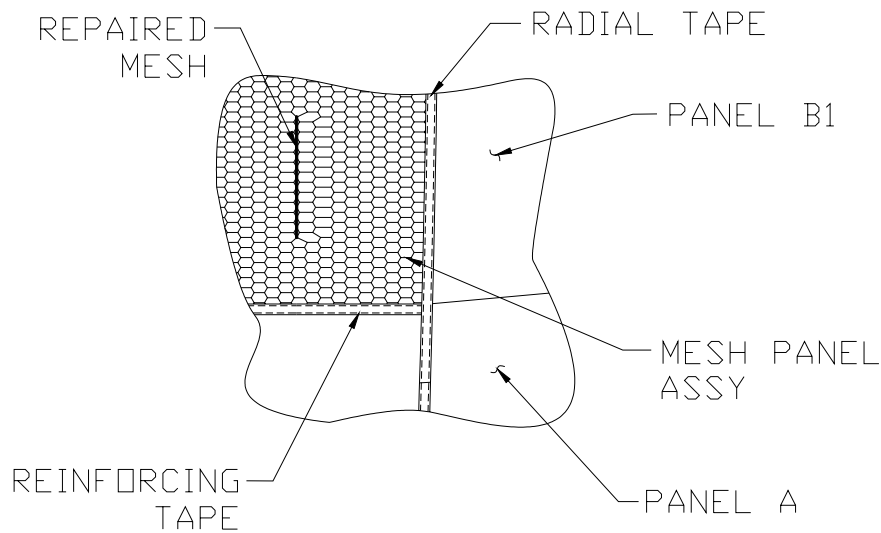


Figure 3. Verify Repair Is Functional.

REPLACE

NOTE

Each mesh panel is a complete assembly that is sewn over a finished opening. Replacement entails removing the damaged mesh panel assembly and sewing a new one in the same location.

NOTE

A double needle sewing machine may be used in place of a single needle sewing machine.

Replace a damaged mesh panel as follows:

1. Carefully remove the damaged mesh panel assembly. Take note on how the mesh panel is attached. Clean the area by removing all loose pieces of thread.
2. Take a new mesh panel assembly and in the same manner as the original mesh panel was positioned, align an upper corner of the new mesh panel with an upper inside corner of the opening.
3. Laying the reinforcement tape on top of the new netting and radial seam for at least 4 inches beyond the mesh panel with the end folded under a minimum of 1/4-inch on both ends.
4. Repeat for the opposite side
5. Using a single needle sewing machine and nylon size E thread, begin sewing at least 4 inches before the end of the mesh panel radial tape and sew the entire radial seam of the new mesh panel to the canopy, sewing past the other end by at least 4 inches. Repeat for the other radial.
6. Using a single needle sewing machine and nylon size E thread, sew the top of the new mesh panel to the opening. Backstitch both ends a minimum of 1/2-inch. Repeat for the bottom.

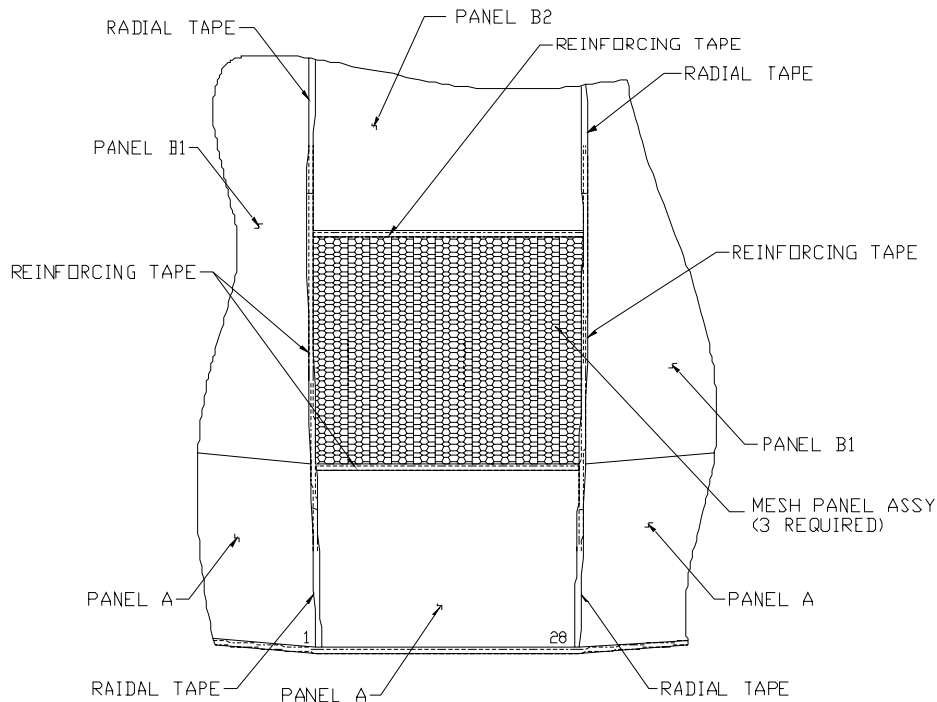


Figure 4. Replace Damaged Mesh Panel.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE CANOPY SKIRT HESITATOR TIES
REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Webbing, Cotton, 80 lb. (Item 53, WP 0109 00)

Equipment Condition

Unpacked

REPLACE**Replace Skirt Hesitator Ties****WARNING**

If the reserve canopy has been involved in a known high-speed malfunction and deployed, it must be removed from service immediately. Failure to do so could cause a catastrophic failure on any subsequent re-use. If the reserve canopy has been deployed for any reason, the reason for the deployment **MUST** be ascertained to determine the continued serviceability of the reserve parachute.

NOTE

If the canopy has been deployed, the skirt hesitator line attachments must be removed and replaced with new 80 lb. cotton webbing.

NOTE

Each suspension line is cascaded near the skirt of the canopy. The continuous lines attach to the skirt and the cascaded lines are attached to loops on the corresponding seam 19.5-inches on the inside of the canopy. The cascaded portions are called "Skirt Hesitator Lines" and aid in inflation of the canopy. During high-speed deployments the skirt hesitator lines break free of the canopy to dampen the opening shock. During low speed deployments they remain attached and assist in the deployment. During normal repack, the skirt hesitator attachments should be inspected but it is not necessary to replace them unless the canopy has been deployed.

1. Remove cotton webbing (**figure 1, item 1**) from skirt hesitator line attaching loops (**figure 1, item 2**).

REPLACE - continued

2. Route one end of a 12-inch length of Type I, 1/4-inch, cotton webbing, one turn single, through one end of the skirt hesitator line attaching loop, through the looped end of the skirt hesitator line, and back through skirt hesitator line attaching loop.

Install Skirt Hesitator Ties

1. Starting with line 1, follow the inside radial seam until you run into the skirt hesitator line attaching loop (**figure 1, item 2**).
2. Route one end of a 12-inch length of one turn single, Type I, 1/4-inch, cotton webbing through one end of the skirt hesitator line attaching loop, through the looped end of the skirt hesitator line, and back through skirt hesitator line attaching loop.
3. Secure the ends of the cotton webbing (**figure 1, item 1**), over the skirt hesitator line attaching loop (**figure 1, item 2**), with a surgeon's knot and locking knot.
4. Trim the excess to within 1/2-inch.
5. Repeat steps 1 through 3 with the additional 19 suspension lines.



Figure 1. Install Skirt Hesitator Ties.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE CANOPY SCOOP
REPAIR**

INITIAL SETUP:**Tools**

Stitch Removal Tool (Item 62, WP 0097 00)
Sewing Machine, Light-Duty (Item 56, WP 0097
00)
Shears (Item 61, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Cloth, Nylon, Ripstop, Type I (Item 11, WP 0109
00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Unpacked

REPAIR

Restitching. Restitch reserve canopy scoops using a light duty sewing machine and size E nylon thread as closely as possible with 7 to 11 stitches per inch. Lock each row of stitching 2 inches at each end.

NOTE

Parachute mending cloth IS NOT AUTHORIZED on the reserve parachute.

Repair canopy scoop IAW WP 0017 00, WP 0018 00 and the following guidelines:

1. 4-sided patches only with rounded or square corners.
2. Canopy Scoop, maximum of one patch per scoop providing the area does not exceed 50% of the scoop. Any damage in excess of 50% will require reserve assembly to be replaced.-

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE CANOPY APEX VENT BRIDLE LOOP
REPAIR, REPLACE**

INITIAL SETUP:**Tools**

Sewing Machine, Bartack, 28 Stitch (Item 51, WP 0097 00)
Knife, Hot, Metal (Item 27, WP 0097 00)
Shears (Item 61, WP 0097 00)
Tape Measure (Item 64, WP 0097 00)
Stitch Removal Tool (Item 62, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Webbing, Nylon, Type I, 9/16-inch wide (Item 58, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Unpacked

REPAIR**Restitch Apex Vent Bridle Loops****CAUTION**

Stitch removal requirements will vary according to the type of item being repaired. Due to the unique type of stitch formations found on the T-11R, use of a stitch removal tool is mandated when removing Bartack, Box X, or Double Box X stitch formations.

If bartack stitching requires repair, bartacks will be completely removed and a new bartack will be replaced with the same stitch length and width.

REPLACE**WARNING**

Replacement of load bearing vent bridle loops (green) is prohibited. Only non-load bearing (white) vent bridle loops are authorized for replacement. Failure to heed this warning may result in serious injury or death to personnel.

Replace Apex Vent Bridle Loop

1. Carefully remove damaged apex vent bridle loop.
2. Cut a 5-inch length of 1-inch wide Type I webbing and mark at 2 inches and 4 inches.
3. Fold the new loop at the 2-inch mark and again at the 4-inch mark as shown below.



Figure 1. Folding a New Loop.

4. Bartack the new loop to canopy in the same place as original loop.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE CANOPY SUSPENSION LINE ATTACHING LOOP
REPAIR**

INITIAL SETUP:**Tools**

Sewing Machine, Medium Duty, Zig Zag (Item 57, WP 0097 00)
Sewing Machine, Bartack, 28 Stitch (Item 51, WP 0097 00)
Shears (Item 61, WP 0097 00)
Tape Measure (Item 64, WP 0097 00)
Stitch Removal Tool (Item 62, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Webbing, Nylon, Type I, 9/16-inch Wide, Neutral (Item 58, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Unpacked

REPAIR**Restitch Suspension Line Attaching Loop****CAUTION**

Stitch removal requirements will vary according to the type of item being repaired. Due to the unique type of stitch formations found on the T-11R, use of a stitch removal tool is mandated when removing Bartack, Box X, or Double Box X stitch formations.

If bartack stitching requires repair, bartacks will be completely removed and a new bartack will be replaced with the same stitch length and width.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE CANOPY CONNECTOR LINKS
REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Needle, Tacking (Item 32, WP 0097 00)
Wrench, Adjustable, 8-inch (Item 71, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Tape, Lacing and Tying, Nylon, (Item 42, WP 0109 00)

Equipment Condition

Unpacked

REPLACE**Replace Connector Links**

1. Cut and remove tacking (**figure 1, item 1**) from risers (**figure 1, item 2**) .

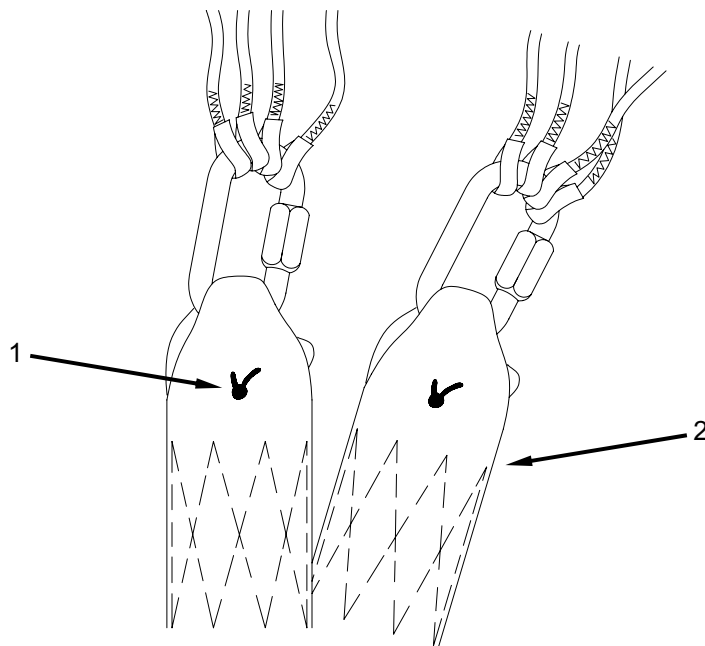


Figure 1. Remove Tacking.

REPLACE - continued

2. Using an 8-inch adjustable wrench, loosen barrel nuts (**figure 2, item 1**) on connector links (**figure 2, item 2**) and remove risers.
3. Remove suspension lines (**figure 2, item 3**) from connector links (**figure 2, item 2**) and discard unserviceable links.
4. Position replacement links so that barrels face inboard and tighten downward. Attach suspension lines to their corresponding connector links without crossing.

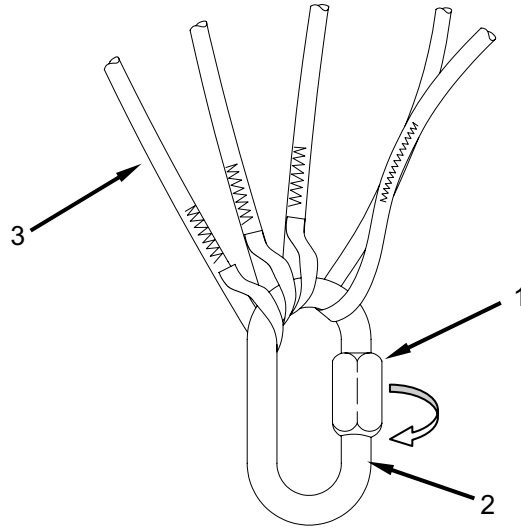


Figure 2. Replacing Connector Links.

5. Install risers (**figure 3, item 1**) onto applicable connector links (**figure 3, item 2**).
6. Using an 8-inch adjustable wrench, tighten barrel nuts (**figure 3, item 3**) on connector links (**figure 3, item 2**) hand tight plus 1/4-turn.
7. Hand tack (**figure 3, item 4**) each riser at connector link (**figure 3, item 2**) with one turn double, tape, lacing and tying utilizing the procedures in WP 0007 00.

REPLACE - continued

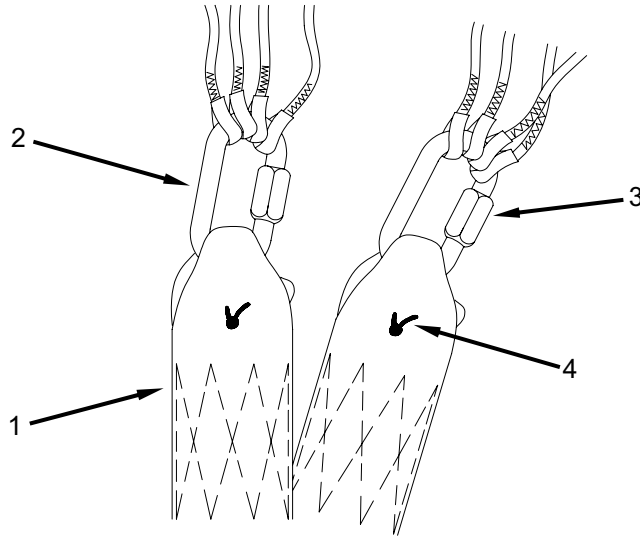


Figure 3. Install Risers.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE CANOPY PROTECTION CAP
INSPECT, REPLACE**

INITIAL SETUP:**Tools**

None required

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

None required

Equipment Condition

Unpacked

INSPECT

Inspect the reserve protection cap for damage; there should be no holes or tears in the protection cap. Ensure the binding tape on the outer edge of the protection cap is not torn and no stitching missing.

REPLACE

If a damaged protection cap is found to have damage it must be replaced with a new one, no exceptions.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE CANOPY RIPCORD PULL
TEST**

INITIAL SETUP:**Tools**

None required

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Cuff (fabricated IAW WP 0113 00, Illustrated List of Manufactured Items)

Equipment Condition

Lay out on packing table or other suitable area

TEST**Reserve Ripcord Grip Pull Test****NOTE**

The following ripcord grip pull test is performed upon initial receipt of an MC-6 System, a new T-11R Assembly or a new T-11R ripcord handle. The T-11R will be completely packed IAW WP 0016 00. The T-11R will be subjected to both a 14-pound minimum and 27-pound maximum ripcord pull test.

1. Use of a locally fabricated handle cuff is required. Fabricate a fabric cuff IAW with WP 0113 00, Illustrated List of Manufactured Items.

NOTE

To conduct the T-11R ripcord pull tests, the packed T-11R shall be face down on the top of the packing cradle to allow the parachute to be deployed in a downward direction. There must be sufficient clearance beneath the horizontally suspended T-11R to suspend a weight from the ripcord handle and allow it to withdraw the ripcord pins from the soft loops activating the parachute.

A suggested method to ensure sufficient clearance beneath the horizontally suspended T-11R to conduct this test is to place two pack tables end to end with approximately 18-inches between them. Place the packing cradle on top of the pack table centered over the gap.

The pull force exerted upon the handle must be uniformly distributed along the length of the handle. The handle cuff may be fabricated by using lightweight cotton duck material cut to 4 inches by 6 inches in size with two 1/2-inch holes spaced evenly so they will be below the handle when the material is folded in half around the handle.

Test Preparation

1. Insert temporary closing pins into the two pack closing loops so that the reserve does not deploy when the handle is pulled.
2. Aggressively exercise the reserve handle by pulling it 5 times in each direction diagonally towards the corners of the reserve pack tray. Reinsert the handle tuck tabs (top, bottom, two sides) after each pulling exercise.

TEST - continued**WARNING**

Do not reseat the curved pins during pull exercise. Doing so may result in serious injury or death to the parachutist.

3. Reseat the curved pins of the reserve handle. Remove the temporary closing pins holding the reserve closing loops.
4. Reinsert the reserve handle tuck tabs (top, bottom, two sides) after each pulling exercise. This will serve to break-in the handle.

WARNING

Do not stand directly underneath the T-11R, in the event of accidental activation. Being hit by the ejector spring may cause severe injury. Stand off to one side of the T-11R when conducting both the 14-pound and 27-pound pull test.

Conduct a 14-pound Minimum Ripcord Pull Test as Follows:

1. Place the handle cuff over the T-11R ripcord handle so that the grommets are below the handle and centered.
2. While standing at the pack frame with the T-11R positioned for the pull test, carefully attach a 14-pound weight to the ripcord handle cuff and very slowly remove your hand from under the weight to allow the weight to be slowly transferred to the ripcord grip. Do not release the weight suddenly or let it drop since this will invalidate the test. The weight must not completely withdraw the ripcord pins from the soft loops and the ripcord handle completely from the pack tray.
3. If the 14-pound weight causes complete withdrawal of the ripcord pins and the ripcord handle, conduct a retest. The retest must be performed 5 times. Conduct a retest by repacking the T-11R IAW WP 0016 00 and repeat step 1.
4. Upon completion of the retest (5 iterations), if the 14-pound weight does not withdraw the ripcord pins and ripcord handle from the T-11R each of the 5 times, it passes the 14-pound ripcord pull test.
5. If during any one of the 5-retest iterations the 14-pound weight causes complete withdrawal of the ripcord pins and the ripcord handle, then remove the T-11R assembly, replacement pack tray or ripcord handle (which ever is applicable), from service and follow instructions in step 6 below.
6. If the pack tray and ripcord handle are new (part of a T-11R assembly), or a new replacement pack tray or handle, submit an Standard Form (SF) 368, Product Quality Deficiency Report (PQDR) for the new items.

Conduct a 27-pound maximum ripcord pull test as follows:

1. Place the handle cuff over the T-11R ripcord handle so that the grommets are below the handle and centered.
2. While standing at the pack frame with the T-11R positioned for the pull test, carefully attach a 27-pound weight to the ripcord grip and very slowly remove your hands from under the weight to allow the weight to be *very slowly* transferred to the ripcord grip. Do not release the weight suddenly or let it drop since this will invalidate the test.

TEST - continued

3. If the 27-pound weight does not withdraw the ripcord pins and handle, remove the weight and reinspect the ripcord pins and ripcord handle to ensure there are no bent pins. Ensure proper alignment of the handle tuck tabs. Bent pins or misaligned tuck tabs can significantly increase the ripcord withdrawal force. If ripcord pins and handle are serviceable, reseal the pins and tuck tabs and conduct a retest.
4. The retest must be performed 5 times. Conduct retest by repacking the T-11R IAW WP 0016 00 and repeat step 1.
5. Upon completion of the retest (5 iterations), if the 27-pound weight does withdraw the ripcord pins and ripcord handle each of the 5 times, it passes the test.
6. If during any one of the 5 retest iterations the 27-pound weight does not withdraw the ripcord pins and ripcord handle, then remove the T-11R assembly, replacement pack tray, or ripcord handle (whichever is applicable), from service and follow instructions in step 7 below.
7. If the pack tray and ripcord handle are new (part of a T-11R assembly), or a new replacement pack tray or handle, submit a PQDR for the new item.
8. If the T-11R passes both the 14- and 27-pound ripcord pull test, repack the T-11R IAW WP 0016 00.
9. Annotate completion of this test (test conducted, name of tester, date completed) on the notes page of the parachute log record book (DA Form 3912).

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE RISERS
REPAIR, REPLACE**

INITIAL SETUP:**Tools**

Sewing Machine, Light Duty (Item 56, WP 0097 00)
Wrench, Adjustable, 8-inch (Item 71, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR

Restitching. Restitch reserve risers using a light duty sewing machine and size E nylon thread that contrasts the color of the original stitching and material when possible. Restitch directly over the original stitch pattern as closely as possible with 7 to 11 stitches per inch. Lock each row of stitching 2 inches at each end.

Repair Reserve Risers

Refer to WP 0073 00, Replacement of Reserve Riser Hook and Pile Fastener Tape.

REPLACE**Remove Reserve Risers from the Reserve Canopy****NOTE**

Risers must be replaced in pairs.

1. Place the reserve canopy and all components on the packing table.
2. Remove tacking (**figure 1, item 1**) from each riser (**figure 1, item 2**).
3. Using an 8-inch adjustable wrench, completely open barrel nuts (**figure 1, item 3**) on each connector link (**figure 1, item 4**) being careful not to lose control of the suspension lines.
4. Rotate each connector link (**figure 1, item 4**) sideways on the short portion.
5. Remove reserve risers (**figure 1, item 2**).

REPLACE - continued

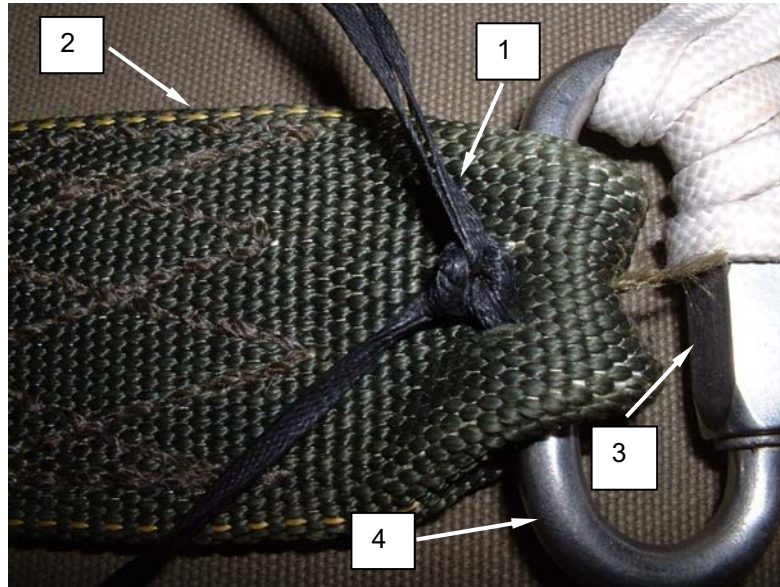


Figure 1. Remove Tacking.

Remove Reserve Pack Tray from Reserve Canopy Risers

1. Remove risers from the riser stow bars.
2. Pull risers from the pack tray releasing risers from the hook pile tape fastener.

Attach the Reserve Risers to the Reserve Canopy

1. Place the reserve canopy and all components on the packing table.
2. Layout reserve canopy on a pack table with the suspension line-organizing card at the bottom of the pack table.
3. Extend the canopy to the opposite end of the pack table and temporarily secure the apex to the top of the pack table by passing a packing loop (**figure 2, item 1**) through all of the vent loops (**figure 2, item 2**). Attach the packing loop (**figure 2, item 1**) to the apex hook (**figure 2, item 3**).

REPLACE - continued

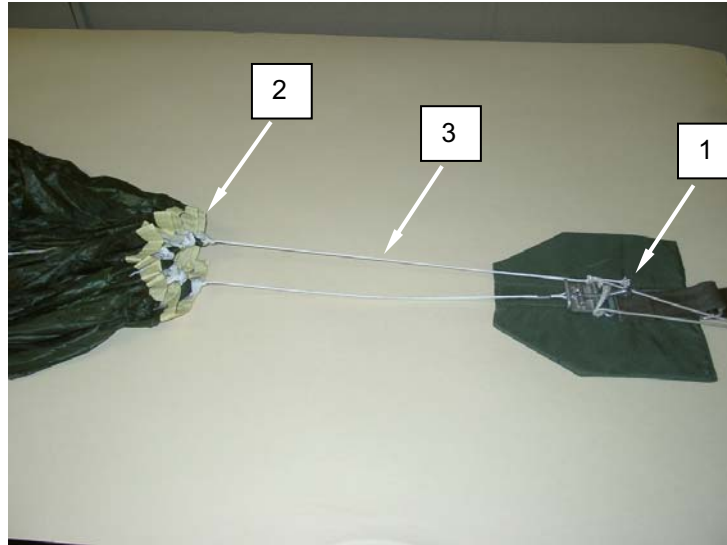


Figure 2. Secure Apex To Top Of Packing Loop.

4. At the lower lateral band, split the canopy between the left and right line groups.
5. Layout the reserve risers (**figure 3, item 1**) directly behind the connector link groups ensuring there are no twists.
6. Evenly mate the hook pile tape between the reserve risers plies.
7. Ensure the gates of the snap hooks are facing downwards and the butterfly portions of the snap hooks are facing outwards.



Figure 3. Lay Out Risers Behind Connector Groups.

8. Using an 8-inch adjustable wrench, completely open the barrel nut on the connector links (**figure 4, item 1**), remove connector links (**figure 4, item 1**) from line organizing card and loosely connect connector links to proper riser (**figure 4, item 2**).

REPLACE - continued**NOTE**

Connector link barrel nuts must be oriented so they face inboard and tighten downward.

NOTE

Suspension lines 1 thru 20 are divided into two groups, no. 1 thru 10 in the left group and no. 11 thru 20 in the right group.

9. Attach the appropriate riser (**figure 4, item 2**) to the appropriate connector link (**figure 4, item 1**) (top left connector link to the top left riser, etc).
10. Place the left set of connector links (**figure 4, item 1**) on the left post of the tension plate (**figure 4, item 3**), and the right group of connector links on the right post of the tension plate (**figure 4, item 3**).

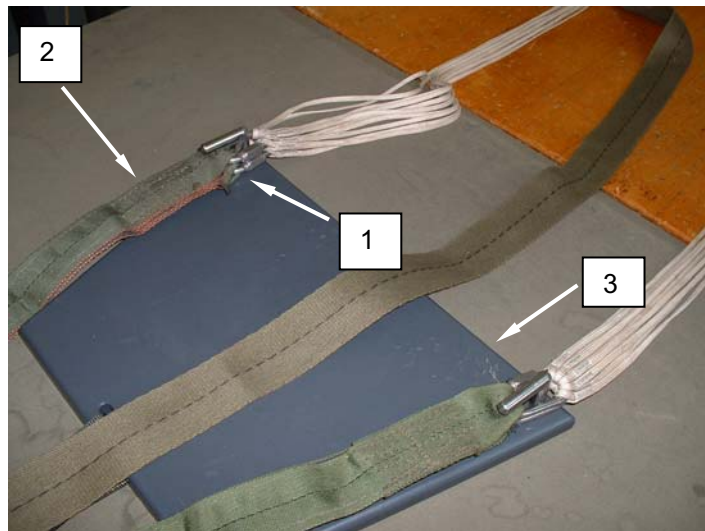


Figure 4. Attach Appropriate Riser to Appropriate Connector Link.

11. Conduct a continuity check as illustrated in Figure 5.
12. Top left suspension line group. Line 1 (inside top) followed in sequence by 2, 3, 4, 5 (outside top) runs from the canopy, to the top left connector link.
13. Bottom left suspension line group. Line 6 (outside bottom) followed in sequence by 7, 8, 9, 10 (inside bottom) runs from the canopy, to the bottom left connector link.
14. Bottom right suspension line group. Line 11 (inside bottom) followed in sequence by 12, 13, 14, 15 (outside bottom) runs from the canopy, to the bottom right connector link.

REPLACE - continued

15. Top left suspension line group. Line 16 (outside top) followed in sequence by 17, 18, 19, 20 (inside top) runs from the canopy, to the top right connector link.

Upper left	5 4 3 2 1	20 19 18 17 16	Upper right
	○ ○ ○ ○ ○	○ ○ ○ ○ ○	
Lower left	6 7 8 9 10	11 12 13 14 15	Lower right
	○ ○ ○ ○ ○	○ ○ ○ ○ ○	

Figure 5. Continuity Check.

16. Using an 8-inch adjustable wrench, tighten barrel nut (**figure 6, item 1**) on connector links (**figure 6, item 2**) until firmly seated against flange finger tight plus 1/4-turn.
17. Rotate each connector link (**figure 6, item 2**) sideways on the long portion of the connector link (**figure 6, item 2**).

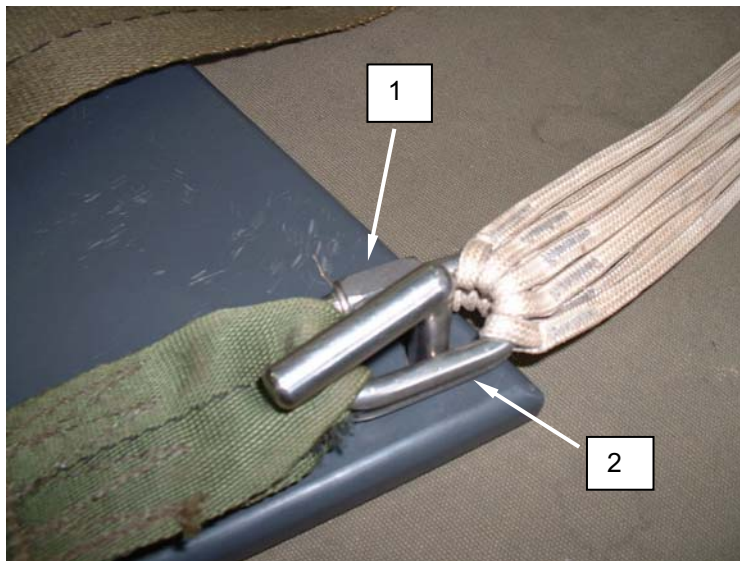


Figure 6. Tighten Barrel Nut On Connector Links.

18. Tack each riser (**figure 7, item 1**) with a 12-inch length of tape lacing (**figure 7, item 2**) and tying, one turn double, passing the tacking needle (**figure 7, item 3**) tight against the body of the connector link.

REPLACE - continued

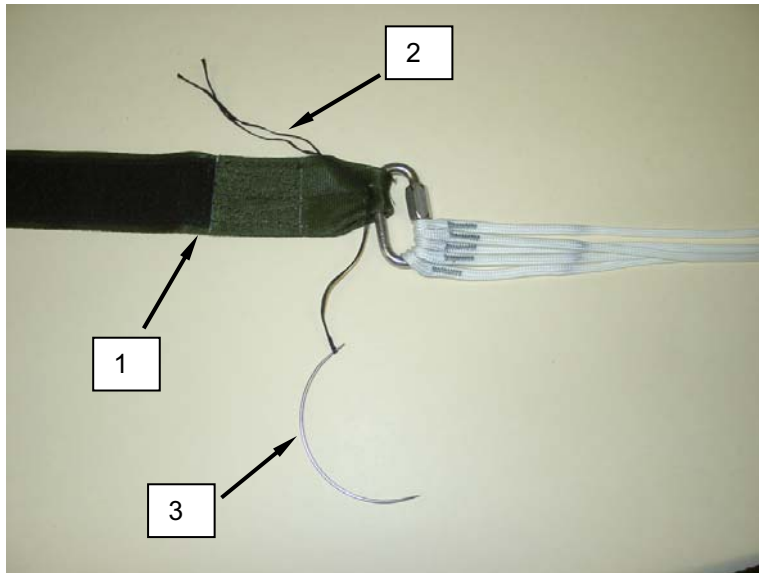


Figure 7. Tack Risers.

19. Secure with a surgeons knot and a locking knot trimming the running ends to within 1 inch. Place knot on top.
20. Rotate the riser positioning the riser to the lower portion of the connector link (**figure 8, item 1**).

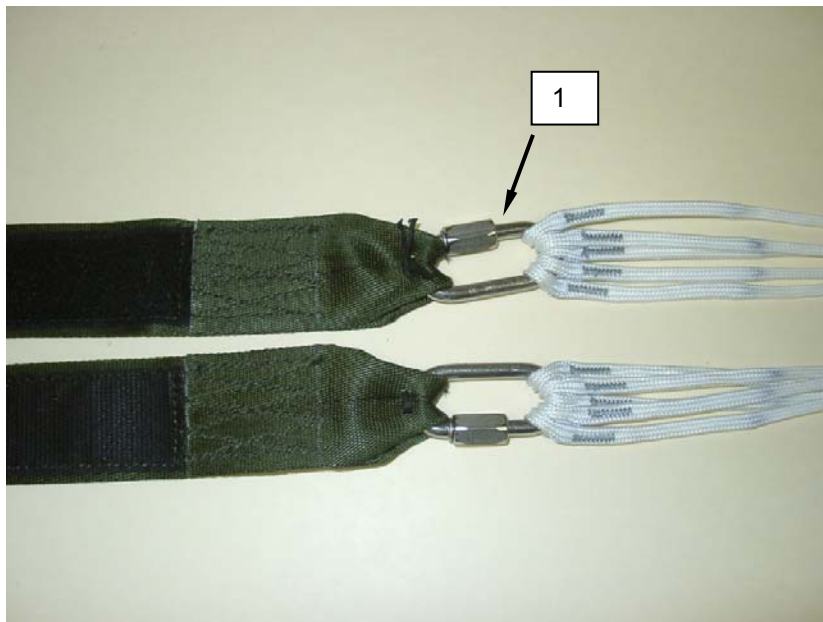


Figure 8. Riser to the Lower Portion of the Connector Link.

REPLACE - continued**Attach the reserve pack tray to the reserve canopy risers**

1. Place the reserve pack (**figure 9, item 1**) tray under the risers with the connector snaps located at the top flap.
2. Mate the hook pile tape on the underside of the riser with the hook pile tape (**figure 9, item 2**) on the base of the pack tray.
3. Place two large retainer bands (**figure 9, item 3**) per retainer band stow bar.

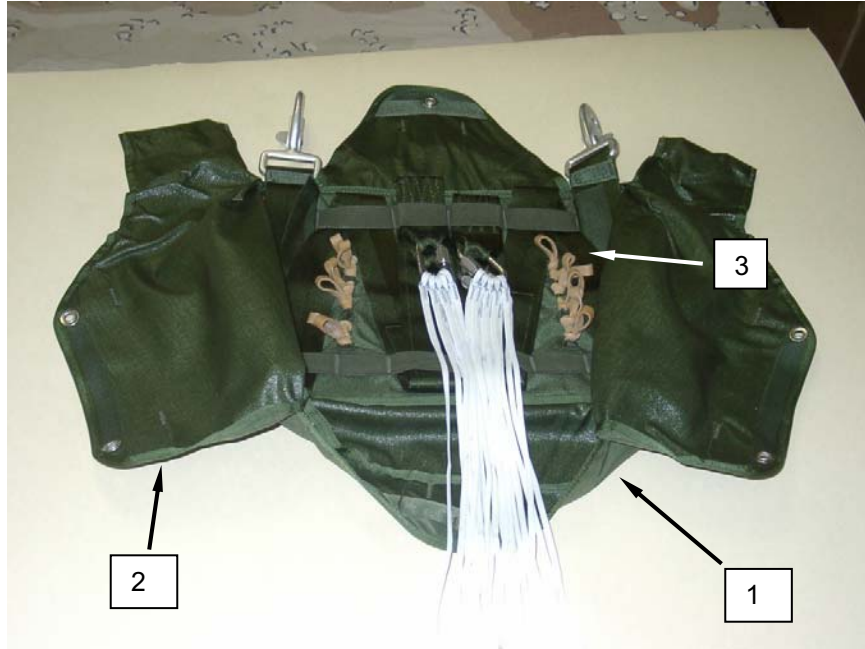


Figure 9. Attach the Reserve Pack Tray to the Reserve Canopy Risers.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE HOOK AND PILE FASTENER TAPE
REPAIR, REPLACE

INITIAL SETUP:**Tools**

Sewing Machine, Light Duty (Item 56, WP 0097 00)
 Knife, Hot, Metal (Item 27, WP 0097 00)
 Shears (Item 61, WP 0097 00)
 Tape Measure (Item 64, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Fastener Tape, Hook, 1-1/2-inch wide, Type II, Class 1 (Item 24, WP 0109 00)
 Fastener Tape, Pile, 1-1/2-inch wide, Type II, Class 1 (Item 25, WP 0109 00)
 Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR

Restitching. Restitch hook and pile fastener using a light duty sewing machine and size E nylon thread that contrasts the color of the original stitching and material when possible. Restitch directly over the original stitch pattern as closely as possible with 7 to 11 stitches per inch. Lock each row of stitching 1/2-inch if possible at each end.

REPLACE**Replace Hook and Pile****NOTE**

Damaged hook and pile tapes must be replaced in complete lengths.

1. Carefully remove damaged hook and pile. Remove or lay aside items that may interfere with the replacement process.
2. Measure the damaged material. Cut new material with the same type and width material.
3. Sew in place with a light-duty sewing machine, size E nylon thread and 7 to 11 stitches per inch using original stitch pattern.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE PACK TRAY ASSEMBLY
REPAIR, REPLACE**

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Sewing Machine, Bartack, 28 Stitch (Item 51, WP 0097 00)
Sewing Machine, Darning (Item 52, WP 0097 00)
Sewing Machine, Light Duty (Item 56, WP 0097 00)
Wrench, Adjustable, 8-inch (Item 71, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR**Restitch the Reserve Pack Tray**

Restitch reserve pack tray using the appropriate sewing machine and thread that contrasts the color of the original stitching and material when possible. Restitch directly over the original stitch pattern as closely as possible with the appropriate stitches per inch. Lock each row of straight stitching 2 inches at each end.

If bartack stitching requires repair, bartacks will be completely removed and a new bartack will be replaced with the same stitch length and width.

Darning the Reserve Pack Tray**NOTE**

Holes are limited to 3/4-inch in diameter.

NOTE

A maximum of two darns per flap/panel is authorized and are not to be closer than 4 inches of each other.

Darn a hole or tear that does not exceed 3/4-inch in length or diameter. Accomplish machine darning IAW WP 0017 00 and the specifics in Table 2.

REPAIR - continued**Repair the Reserve Pack Tray**

1. Small holes that are too large for darns can be patched using basic patching procedures as stated in WP 0017 00.
2. All patches are to be applied to the outside of the container.

REPLACE**Remove Reserve Pack Tray from Reserve Canopy Risers**

Pull risers (**figure 1, item 1**) from pack tray (**figure 1, item 2**).



Figure 1. Remove Reserve Pack Tray from Reserve Canopy Risers.

REPLACE - continued**Attach the reserve pack tray to the reserve canopy risers**

1. Place the reserve pack (**figure 2, item 1**) tray under the risers with the connector snaps located at the top flap.
2. Mate the hook and pile tape on the underside of the riser with the hook and pile tape (**figure 2, item 2**) on the base of the pack tray.

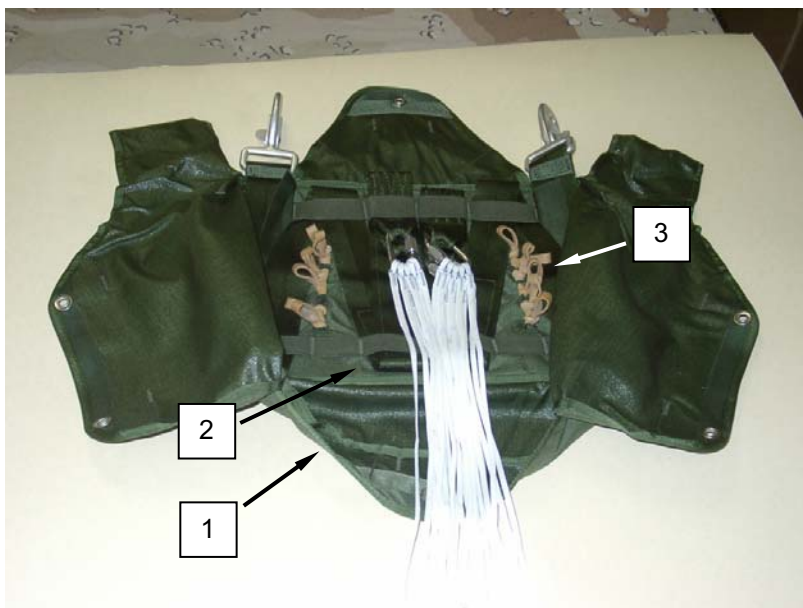


Figure 2. Attach The Reserve Pack Tray To The Reserve Canopy Risers.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE PACK TRAY EDGE BINDING
REPAIR**

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Sewing Machine, Light Duty (Item 56, WP 0097 00)
Shears (Item 61, WP 0097 00)
Tape Measure (Item 64, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Tape, Nylon, Type III, Class 1, 3/4-inch wide
(Item 44, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR

Restitching. Restitch edge binding using a light duty sewing machine and size E nylon thread that contrasts the color of the original stitching and material when possible. Restitch directly over the original stitch pattern as closely as possible with 7 to 11 stitches per inch. Lock each row of stitching by backstitching at least 1/2-inch.

Splicing. Splice an edge binding (an unlimited number of times) as follows:

1. Cut a length of 3/4-inch wide nylon tape 2-inches longer than damaged area.
2. Make a 1/2-inch fold under on each end of tape length.
3. Center and fold tape lengthwise over edge of the damaged area. Secure splice by stitching (a boxstitch formation, 1/16-inch in from each edge, along full length of splice material.) Replace with 2 rows of stitching overlapping the original stitching 1 inch past the splice creating a locking stitch on both ends.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE PACK TRAY GROMMETS SIZE NO. 0
REPAIR, REPLACE

INITIAL SETUP:**Tools**

Die Set, Spur Grommet, No. 0, Stainless Steel
(Item 16, WP 0097 00)
Knife, Hot, Metal (Item 27, WP 0097 00)
Mallet, Large Leather (Item 30, WP 0097 00)
Pliers, Diagonal Cutting (Item 37, WP 0097 00)
Sewing Machine, Medium Duty (Item 59, WP
0097 00)
Shears (Item 61, WP 0097 00)
File, Flat (Item 20, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)
Webbing, Nylon, Type II (Item 56, WP 0109 00)
Cloth, Abrasive (Item 9, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR

Repair reserve pack tray grommets size No. 0 (**figure 1, item 1**) as follows:

1. Remove burrs, rough spots, rust, or corrosion from an installed grommet by filing with a file or by buffing with crocus cloth.
2. Reseat a loose grommet

NOTE

Reinforcement is allowed only on the left and right closing flaps of the reserve parachute container.

3. If fabric area around original grommet has been damaged, repair area by applying a reinforcement patch to outside of flap. Use a 1-inch square of seared MIL-W-4088 nylon webbing.

REPLACE

Replace reserve pack tray grommets size No. 0 (**figure 1, item 1**) as follows:

1. Remove original grommet as follows:
 - a. Using suitable type tool, lift edge of original washer at one point.

REPLACE - continued

- b. Grip lifted washer edge with diagonal cutters and roll washer edge back to lift washer from original grommet. Remove original grommet from material.
2. Install new grommet as follows:
 - a. Insert barrel of replacement grommet through accommodating hole in material and ensure grommet flange is located on same side of material as original grommet.
 - b. Position grommet on die with barrel facing up and place washer over grommet barrel. Ensure grommet barrel and washer are aligned to prevent off-center setting of grommet.
 - c. Using a punch and rawhide mallet or other non-steel Impact device, spread grommet barrel by hammering until barrel collar is rolled down smooth on washer. If grommet barrel splits during hammering, remove and replace installed grommet with a serviceable item from stock. Repeat the procedure in steps (1) and (2), above.

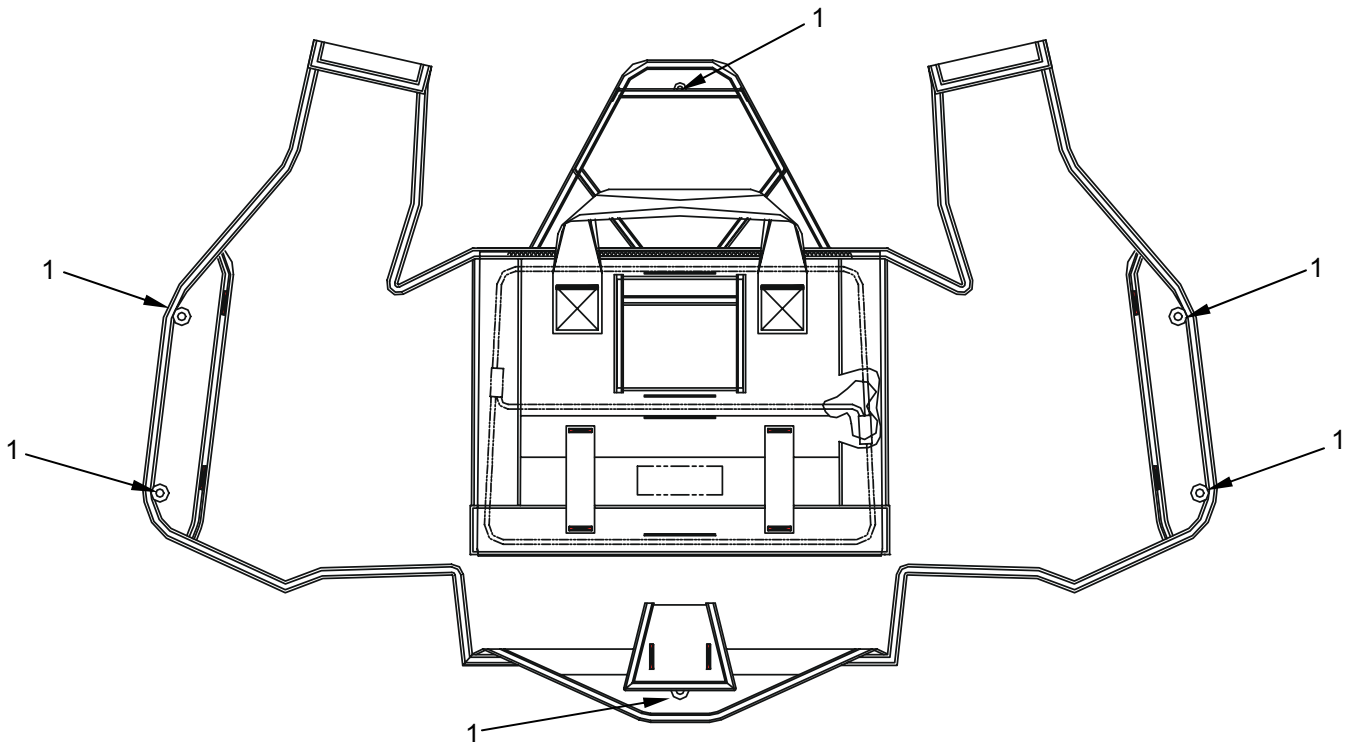


Figure 1. Reserve Pack Tray Grommet Size No. 0.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE PACK TRAY ELASTIC RISER STOW BARS
REPAIR, REPLACE

INITIAL SETUP:**Tools**

Sewing Machine, Bartack, 28 Stitch (Item 51, WP 0097 00)
 Sewing Machine, Medium Duty (Item 59, WP 0097 00)
 Stitch Removal Tool (Item 62, WP 0097 00)
 Shears (Item 61, WP 0097 00)
 Tape Measure (Item 64, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Pencil, Marking, China, White (Item 36, WP 0109 00)
 Band, Rubber, Retainer, 1-1/4-inch (Item 2, WP 0109 00)
 Band, Rubber, Retainer, 2-inch (Item 3, WP 0109 00)
 Thread, Nylon, Size E (Item 51, WP 0109 00)
 Webbing, Elastic, 1-inch (Item 54, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR**NOTE**

For a center stitich repair, ensure that the log record book is not sewn over pin pocket (back). If any of the bartacks are damaged, or if the inner stow bars are damaged, sew to outside of log record book pocket.

1. Remove broken stitching/threads.
2. Sew elastic riser bar using a bartack sewing machine in original stitch location.

REPLACE**Replace Upper Elastic Riser Stow Bar**

1. Mark location of data log record book pocket. Carefully remove the data log record book pocket from the pack tray.
2. Rotate the pack tray (**figure 1, item 1**) and mark location of the bartacks (**figure 1, item 2**) for the elastic riser stow loops (**figure 1, item 3**). Using a stitch removal tool, remove the damaged elastic riser stow bar.
3. Cut an 11-1/2-inch length of elastic webbing and mark the center.
4. Align center mark of elastic with the center mark of the elastic riser stow bar. Using a bartack sewing machine and size E nylon thread, secure the elastic to the pack tray at center mark.

REPLACE - continued



Figure 1. Remove Damaged Elastic Riser Stow Bar.

CAUTION

Do not sew through the elastic.

5. Rotate the pack tray and reposition the date log record book pocket to its original position. Using a medium duty sewing machine and size E nylon thread, 7 to 11 stitches per inch, sew in place as per original stitching.

NOTE

Once the elastic riser stow bar has been replaced, the bartacks will show through the pack tray.

6. Rotate the pack tray and place a bartack at each marked location of the elastic riser stow bar. Fold the end under 1/2-inch before bartacking.

REPLACE - continued**Replace Lower Elastic Riser Stow Bar**

1. Using a stitch removal tool, carefully remove the stitching securing the inner panel to the pack tray (**figure 2, item 1**) enough to where you can access the lower elastic riser stow bar (**figure 2, item 2**). (Approximately 4 inches up each side and across the entire bottom).
2. Remove the three sets of stitches securing the internal frame to the pack tray.
3. Mark location of the bartacks (**figure 2, item 3**) for the elastic riser stow bar. Remove the damaged elastic riser stow bar.
4. Cut a 15-1/2-inch length of elastic webbing. Fold one edge under 1/2-inch and bartack to the outside mark on the inner panel with size E nylon thread. The running end should lie across the pack tray. Bartack the elastic riser stow bar at marks folding the opposite end under 1/2-inch. (Once the elastic riser stow bar has been replaced the bartacks will show through the pack tray).
5. Resew the inner panel to the pack tray using a medium duty sewing machine and size E nylon thread, 7 to 11 stitches per inch.
6. Resew the three sets of stitching securing the internal frame in place with three rows of straight stitch using size E nylon thread, 7 to 11 stitches per inch.



Figure 2. Replace Lower Elastic Riser Stow Bar.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE PACK TRAY WAISTBAND LOOPS
REPAIR, REPLACE

INITIAL SETUP:**Tools**

Knife, Hot, Metal (Item 27, WP 0097 00)
Sewing Machine, Bartack, 28 Stitch (Item 51, WP 0097 00)
Stitch Removal Tool (Item 62, WP 0097 00)
Shears (Item 61, WP 0097 00)
Tape Measure (Item 64, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Webbing, Nylon, Type XVII (Item 61, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR**NOTE**

During repair, ensure that the elastic riser stow bar is not sewn over.

1. Remove broken stitching threads.
2. Sew waistband loop using a bartack sewing machine in the original stitch position.

REPLACE**Replace Waistband Loops**

1. Remove damaged waistband loop (**figure 1, item 1**).
2. Using a hot knife cut a 3-1/2-inch length of Type XVII nylon webbing.
3. Place the new waistband loop over the area where the damaged waistband loop was removed and bartack in place using size E nylon thread. Insure no stitches are placed into the elastic riser stow bar loop.
4. Stitch over the suspension line stow loop bartack. Bartacks will show through the pack tray once replaced.

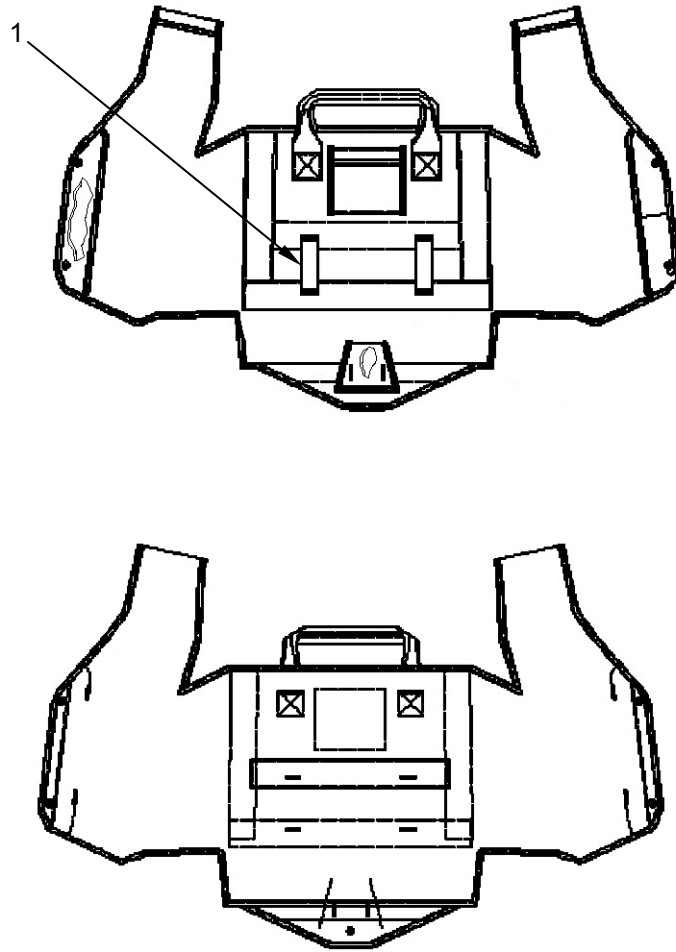


Figure 1. Reserve Pack Tray Waistband Loops.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE PACK TRAY FASTENER TAPE HOOK
INSPECT, REPAIR, REPLACE

INITIAL SETUP:**Tools**

Sewing Machine, Medium Duty (Item 59, WP 0097 00)
Knife, Hot, Metal (Item 27, WP 0097 00)
Stitch Removal Tool (Item 62, WP 0097 00)
Shears (Item 61, WP 0097 00)
Tape Measure (Item 64, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Fastener Tape, Hook 1-1/2-inch wide, Type II, Class 1 (Item 24, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

INSPECT

Inspect fastener hook tape to ensure that there is no missing stitching, holes or worn hook tape.

REPAIR

Repair broken stitching by using size E nylon thread over the original stitching.

NOTE

During repair, ensure that the elastic riser stow bar is not sewn over.

REPLACE**Replace Hook tape**

1. Remove damaged hook tape by removing stitching from the reserve pack tray. Ensure when removing the stitching not to cut the reserve pack tray, if any holes or any other tear are in the pack tray it must be replaced with a new one.
2. Cut a 11-1/4-inch length from a new roll of hook tape.
3. Put into place as in the original construction and sew into place using size E nylon thread. Ensure no stitches are placed into the elastic riser stow bar loop.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE PACK TRAY STIFFENER
REPLACE**

INITIAL SETUP:**Tools**

Sewing Machine, Medium Duty (Item 59, WP 0097 00)
Shears (Item 61, WP 0097 00)
Stitch Removal Tool (Item 62, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Webbing, Nylon, Type XII (Item 57, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPLACE**Replace Stiffener****NOTE**

Reinforcement is not allowed on the reserve pack tray.

1. Remove stitching from the exposed side of the type XII nylon webbing to remove the stiffener.
2. Insert a new stiffener. Using a medium duty sewing machine and size E nylon thread, 7 to 11 stitches per inch, close the open side of the type XII nylon webbing locking the stitching along the binding tape.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
RESERVE PACK TRAY RIPCORD ASSEMBLY
REPLACE, TEST**

INITIAL SETUP:**Tools**

None required.

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment ConditionLay out on packing table or other suitable area.
Cuff (fabricated IAW WP 0113 00, Illustrated List of Manufactured Items)

REPLACE**Replace Ripcord Grip Handle**

1. Remove ripcord handle grip.
2. Replace with a new ripcord handle grip from stock.

TEST**Reserve Ripcord Grip Pull Test****NOTE**

The following ripcord grip pull test is performed upon initial receipt of a new MC-6 System, a new T-11R Assembly or a new T-11R ripcord handle. The T-11R will be completely packed IAW WP 0016 00. The T-11R will be subjected to both a 14-pound minimum and 27-pound maximum ripcord pull test.

Use of a locally fabricated handle cuff is required. Fabricate a fabric cuff IAW WP 0113 00 entitled "Illustrated List of Manufactured Items".

NOTE

To conduct the T-11R ripcord pull tests, the packed T-11R shall be face down on the top of the packing cradle to allow the parachute to be deployed in a downward direction. There must be sufficient clearance beneath the horizontally suspended T-11R to suspend a weight from the ripcord handle and allow it to withdraw the ripcord pins from the soft loops activating the parachute.

A suggested method to ensure sufficient clearance beneath the horizontally suspended T-11R to conduct this test is to place two pack tables end to end with approximately 18-inches between them. Place the packing cradle on top of the pack table centered over the gap.

The pull force exerted upon the handle must be uniformly distributed along the length of the handle. The handle cuff may be fabricated by using lightweight cotton duck material cut to 4 inches by 6 inches in size with two 1/2-inch holes spaced evenly so they will be below the handle when the material is folded in half around the handle.

Test Preparation

1. Insert temporary closing pins into the two pack closing loops so that the reserve does not deploy when the handle is pulled.
2. Aggressively exercise the reserve handle by pulling it five times in each direction diagonally towards the corners of the reserve pack tray. Reinsert the handle tuck tabs (top, bottom, two sides) after each pulling exercise.

WARNING

Do not reseat the curved pins during pull exercise. Doing so may cause severe injury or death to the parachutist.

3. Reseat the curved pins of the reserve handle. Remove the temporary closing pins holding the reserve closing loops.
4. Reinsert the reserve handle tuck tabs (top, bottom, two sides) after each pulling exercise. This will serve to break-in the handle.

WARNING

Do not stand directly underneath the T-11R, in the event of accidental activation. Being hit by the ejector spring may cause severe injury. Stand off to one side of the T-11R when conducting both the 14-pound and 27-pound pull test.

Conduct Test

Conduct a 14-pound Minimum Ripcord Pull Test as Follows:

1. Place the handle cuff over the T-11R ripcord handle so that the grommets are below the handle and centered.
2. While standing at the pack frame with the T-11R positioned for the pull test, carefully attach a 14-pound weight to the ripcord handle cuff and very slowly remove your hand from under the weight to allow the weight to be slowly transferred to the ripcord grip. Do not release the weight suddenly or let it drop since this will invalidate the test. The weight must not completely withdraw the ripcord pins from the soft loops and the ripcord handle completely from the pack tray.
3. If the 14-pound weight causes complete withdrawal of the ripcord pins and the ripcord handle, conduct a retest. The retest must be performed five times. Conduct a retest by repacking the T-11R IAW WP 0016 00 and repeat step 1.
4. Upon completion of the retest (five iterations), if the 14-pound weight does not withdraw the ripcord pins and ripcord handle from the T-11R each of the five times, it passes the 14-pound ripcord pull test.
5. If, during any one of the five retest iterations, the 14-pound weight causes complete withdrawal of the ripcord pins and the ripcord handle, then remove the T-11R assembly, replacement pack tray or ripcord handle (which ever is applicable), from service and follow instructions in step 6 below.
6. If the pack tray and ripcord handle are new (i.e. part of a T-11R assembly), or a new replacement pack tray or handle, submit an Standard Form (SF) 368, Product Quality Deficiency Report (PQDR) for the new items.

Conduct a 27-pound maximum ripcord pull test as follows:

1. Place the handle cuff over the T-11R ripcord handle so that the grommets are below the handle and centered.
2. While standing at the pack frame with the T-11R positioned for the pull test, carefully attach a 27-pound weight to the ripcord grip and very slowly remove your hands from under the weight to allow the weight to be *very slowly* transferred to the ripcord grip. Do not release the weight suddenly or let it drop since this will invalidate the test.
3. If the 27-pound weight does not withdraw the ripcord pins and handle, remove the weight and re-inspect the ripcord pins and ripcord handle to ensure there are no bent pins. Ensure proper alignment of the handle tuck tabs. Bent pins or misaligned tuck tabs can significantly increase the ripcord withdrawal force. If ripcord pins and handle are serviceable, reseal the pins and tuck tabs and conduct a retest.
4. The retest must be performed five times. Conduct retest by repacking the T-11R IAW WP 0016 00 and repeat step 1.
5. Upon completion of the retest (five iterations), if the 27-pound weight does withdraw the ripcord pins and ripcord handle each of the five times, it passes the test.
6. If during any one of the five retest iterations the 27-pound weight does not withdrawal the ripcord pins and ripcord handle, then remove the T-11R assembly, replacement pack tray or ripcord handle (which ever is applicable), from service and follow instructions in step 7 below.
7. If the pack tray and ripcord handle are new (part of a T-11R assembly), or a new replacement pack tray or handle, submit a PQDR for the new item.

TEST - continued

8. If the T-11R passes both the 14- and 27-pound ripcord pull test, repack the T-11R IAW WP 0016 00.
9. Annotate completion of this test (i.e. test conducted, name of tester, date completed) on the notes page of the parachute log record book (DA Form 3912).

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN DEPLOYMENT BAG
INSPECT, REPAIR**

INITIAL SETUP:**Tools**

As required

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

INSPECT

Refer to WP 0009 00 "PMCS", and WP 0012 00 "INSPECTION", for inspection procedures.

REPAIR**Restitch Main Deployment Bag**

Stitching. Stitch and restitch with size E nylon thread that matches the color of the original stitching, when possible. Lock all straight stitching by backstitching at least 1/2-inch. Restitch directly over the original stitching; follow the original stitch pattern as closely as possible.

Restencilling. If necessary, restencil the bag number on the suspension line protector cover in accordance with WP 0019 00.

Darn Main Deployment Bag

Darning will be accomplished IAW WP 0017 00.

Repair Deployment Bag

Refer to individual repair procedures.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN DEPLOYMENT BAG SIDE FLAPS
REPLACE**

INITIAL SETUP:**Tools**

Sewing Machine, Darning (Item 52, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPLACE

Darning Small Holes Or Tears. Darn small holes or tears in the side flaps if the holes or tears do not exceed 3/4-inch in length or diameter. Use size E nylon thread, and 7 to 11 stitches per inch.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN DEPLOYMENT BAG SUSPENSION LINE STOW LOOPS
REPAIR, REPLACE

INITIAL SETUP:**Tools**

Sewing Machine, Bartack, 28 Stitch (Item 51, WP 0097 00)
 Sewing Machine, Medium Duty (Item 59, WP 0097 00)
 Stitch Removal Tool (Item 62, WP 0097 00)
 Shears (Item 61, WP 0097 00)
 Tape Measure (Item 64, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Webbing, Nylon, Type I, 9/16-inch wide, Neutral (Item 58, WP 0109 00)
 Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR

Suspension line stow loop. Repair stow loops as follows:

1. Permissible damage. Two stow loops per panel may be torn, if the tear does not exceed 1/2 the width of the loop, and the torn loops are not adjoining.
2. Restitching. Proceed as follows:
 - a. Stow loops that are torn more than halfway through may be stitched down (making them unusable), provided a minimum of ten stow loops per stow panel remain. Use a medium-duty sewing machine with size E, nylon thread to stitch 7 to 11 stitches per inch.
 - b. If 50% of stitching is loose or broken on one rolled stow, restitch the stow loop to the stow loop panel. If stitching in more than one adjacent rolled stow is broken more than 3/4 of an inch in either stow, then restitch all stow loops on that side. Use a medium-duty sewing machine, size E, nylon thread, and 7 to 11 stitches per inch.

REPLACE

1. Mark the location of the bartacks for the suspension line stow loops (**figure 1, item 1**). Using a stitch removal tool, remove damaged suspension line stow bar.
2. Cut a 6-1/2-inch length of type I nylon webbing.
3. Using size E nylon thread, bartack the new suspension line stow bar to the pack tray at the marks folding each end under 1/2-inch. Ensure the side of the waistband loop does not catch in the bartacks.

REPLACE - continued



Figure 1. Replace Suspension Line Stow Loops.

4. Suspension line stow loop. Repair stow loops as follows:
 - a. Permissible damage. Two stow loops per panel may be torn, if the tear does not exceed 1/2 the width of the loop, and the torn loops are not adjoining. Bags with tie closure may have closing loops torn up to 1/2 the width.
 - b. Restitching. Proceed as follows:
 - (1) Stow loops that are torn more than halfway through may be stitched down (making them unusable), provided a minimum of ten stow loops per stow panel remain. Use a medium duty sewing machine with size E, nylon thread to stitch 7 to 11 stitches per inch.
 - (2) If 50% of stitching is loose or broken on one rolled stow, restitch the stow loop to the stow loop panel. If stitching in more than one adjacent rolled stow is broken more than 3/4 of an inch in either stow, then restitch all stow loops on that side. Use a medium duty sewing machine, size E, nylon thread, and 7 to 11 stitches per inch.

END OF WORK PACKAGE

**UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN DEPLOYMENT BAG LOCKING STOW LOOP
REPAIR**

INITIAL SETUP:**Tools**

As required

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

As required

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR

Restitch locking stow loop IAW WP 0017 00.

NOTE

No other repairs are authorized for the locking stow loop.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN DEPLOYMENT BAG TIE DOWN LOOP
REPLACE

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
Electric Pot, Melting (Item 18, WP 0097 00)
Sewing Machine, Light-Duty (Item 56, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Beeswax (Item 4, WP 0109 00)
Cord, Nylon, Type II (Item 17, WP 0109 00)
Wax, Paraffin (Item 52, WP 0109 00)
Webbing, Nylon, Type I, 9/16-inch wide, Neutral (Item 58, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Lay out on packing table or other suitable area.

REPLACE

Suspension line protector cover tie-down loop (**figure 1, item 1**). Repair the tie-down loops that are burned, frayed or torn over one-half of the loop, as follows:

1. Cut stitching, and remove damaged loop (**figure 1, item 1**).
2. Cut a 6-inch length of 9/16-inch, Type I, nylon webbing; wax ends of webbing.
3. Position the Type I webbing in the same place the damaged material was removed. Align the two ends of the Type I webbing, with the top of the webbing reinforcement.

REPLACE - continued

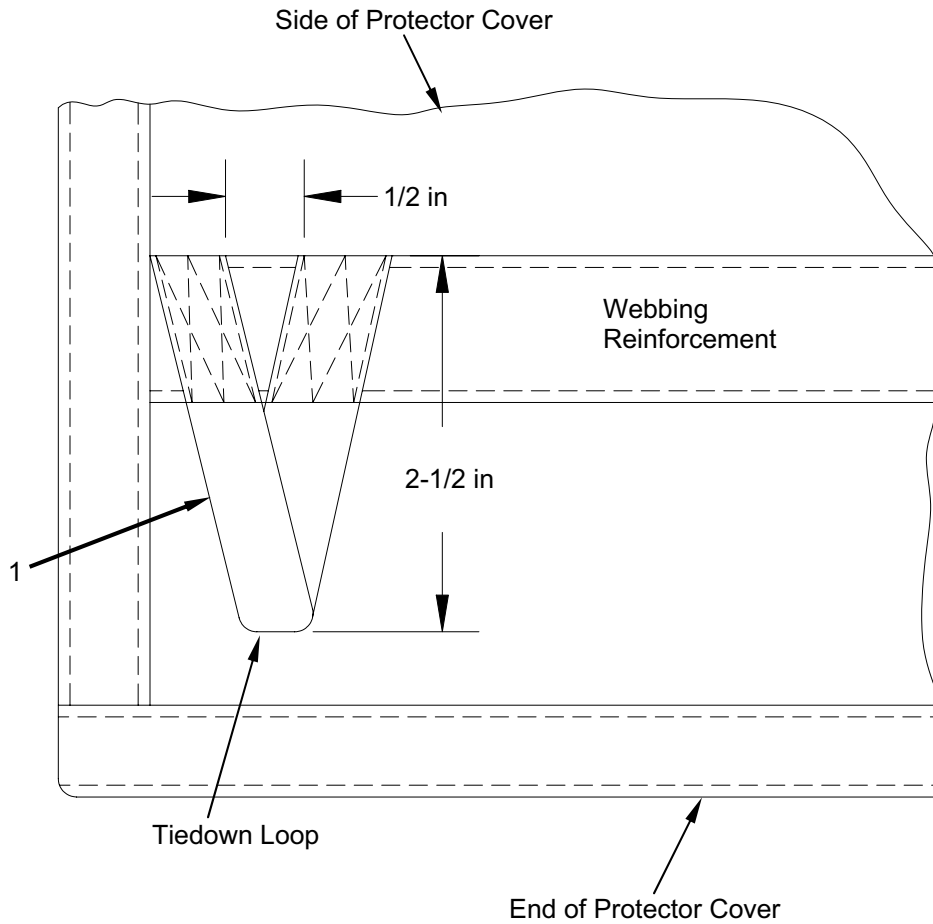


Figure 1. Replace Suspension Line Protector Cover Tie-Down Loop.

4. Sew the loop in place on the underside of the protector cover with a 3-point WW stitch formation on each end of the webbing; be sure to stay on the webbing reinforcement. Use a light-duty sewing machine, size E, nylon thread, 7 to 11 stitches per inch.

END OF WORK PACKAGE

UNIT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
UNIVERSAL STATIC LINE MODIFIED (USL)
REPAIR, REPLACE

INITIAL SETUP:**Tools**

None required

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

None required

Equipment Condition

Lay out on packing table or other suitable area.

REPAIR

There is no repair authorized on the static line or the Universal Static Line (USL) snap hook.

REPLACE**Remove Static Line**

Remove the unserviceable portion of the static line (**figure 1, item 1**) from the deployment bag (**figure 1, item 2**) or USL snap hook and replace it with a serviceable item from stock.

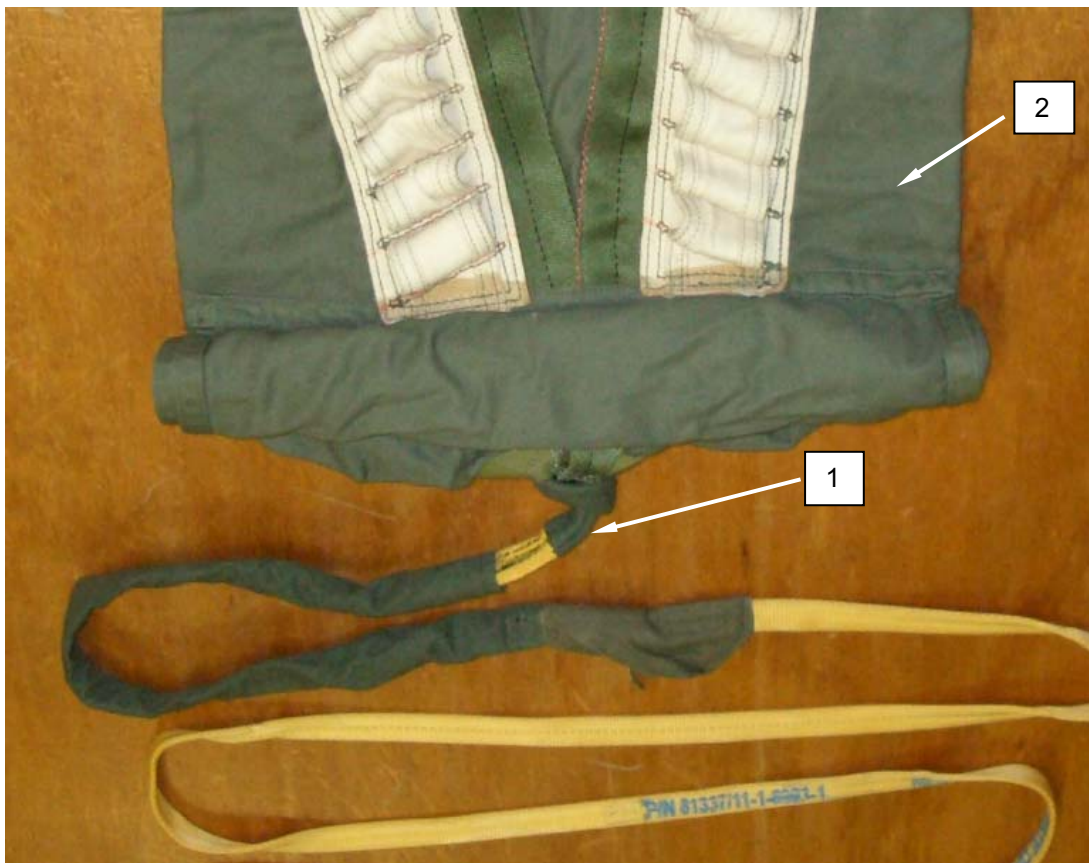


Figure 1. Remove The Unserviceable Portion Of The Static Line.

REPLACE - continued

Replace Static Line

NOTE

When laying out the static line to form the girth hitch, ensure the green ID marking thread of the webbing is on the top.

1. Attaching the static line to the deployment bag.
 - a. Position the deployment bag (**figure 2, item 1**) with the stow loops facing up and pass the 6-inch buffer loop (**figure 2, item 2**) of the static line clockwise, halfway through the break cord attaching strap loop (**figure 2, item 3**).

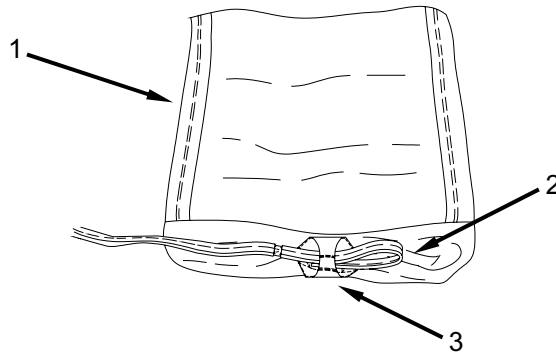


Figure 2. Position The Deployment Bag With The Stow Loops Facing Up.

- b. Pass the 3-1/2-inch loop end of the static line (**figure 3, item 1**) through the 6-inch buffer loop (**figure 3, item 2**), counterclockwise until a taut girth hitch is formed.

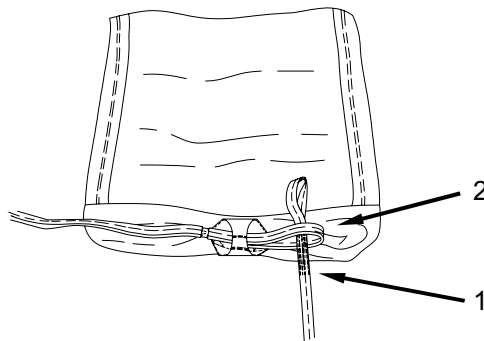


Figure 3. Static Line Through The 6-Inch Buffer Loop.

REPLACE - continued

- c. Secure the static line (**figure 4, item 1**) to the deployment bag (**figure 4, item 2**).

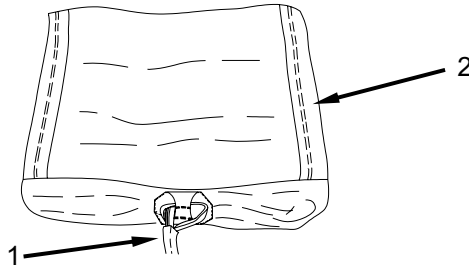


Figure 4. Secure Static Line To Deployment Bag.

2. Attaching the snap hook to the static line and the USL 5-foot extension.
- a. Position the snap hook (**figure 5, item 1**) so the opening is facing outward. Lay the static line (**figure 5, item 2**) flat on the packing table; ensure the green ID marking thread is on top and on the outside of the loop.

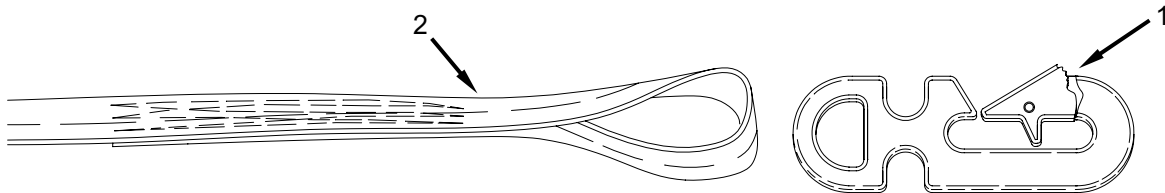


Figure 5. Position The Snap Hook.

- b. Pass the 3-1/2-inch loop end of the static line (**figure 6, item 1**) through the opening in the base of the snap hook (**figure 6, item 2**), from bottom to top.

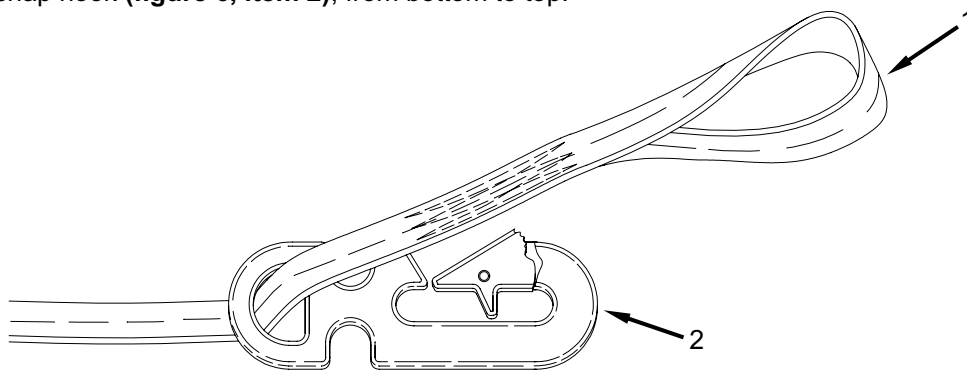


Figure 6. Pass The 3-1/2-inch Loop End of Static Line Through Opening of Snap Hook.

REPLACE - continued

- c. Pass the top of the snap hook (**figure 7, item 1**) through the static line loop (**figure 7, item 2**).

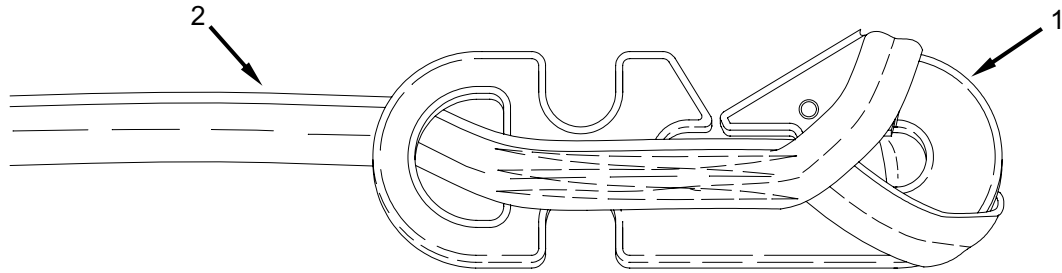


Figure 7. Pass Top Of Snap Hook Through Static Line Loop.

- d. Continue passing the snap hook (**figure 8, item 1**) through the static line loop (**figure 8, item 2**); pull the excess static line back through the opening in the base of the snap hook until the loop is past the snap hook opening.
- e. Slide the loop down to the bottom of the snap hook until the static line is fully seated in the indent on the side of the snap hook; form a taut girth hitch.

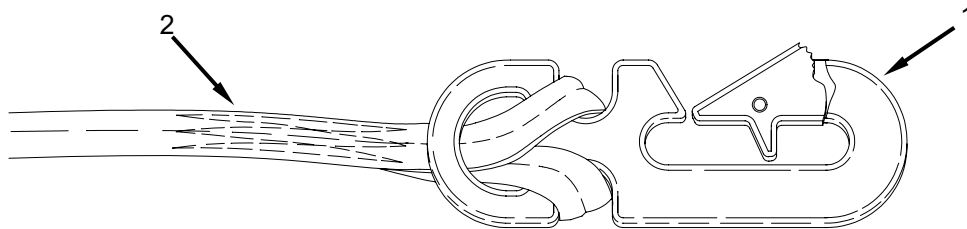


Figure 8. Form a Taut Girth Hitch.

- f. Ensure there is no twists in the static line snap hook loop.

NOTE

Before forming the girth hitch, the green ID marking thread on the static line and the USL 5-foot extension must be on top.

3. Attaching the USL 5-foot extension to the static line.
- a. Attach the USL snap hook to the USL 5-foot extension as stated in step 2 above.

REPLACE - continued

- b. Pass the 3-1/2-inch loop (**figure 9, item 1**) on the static line, through the 2-inch buffer loop (**figure 9, item 2**) on the USL 5-foot extension.

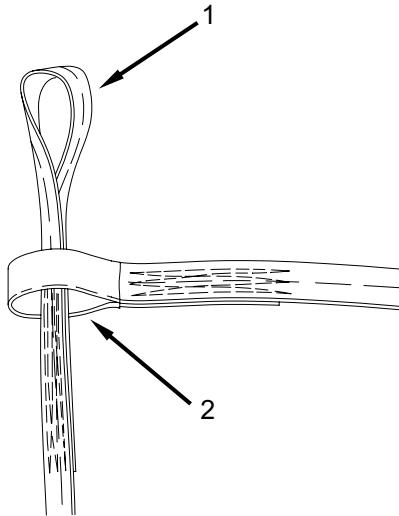


Figure 9. Pass The 3½-Inch Loop On The Static Line, Through The 2-Inch Buffer Loop.

- c. Pass the snap hook (**figure 10, item 1**) of the USL 5-foot extension through the 3-1/2-inch loop (**figure 10, item 2**) on the static line.

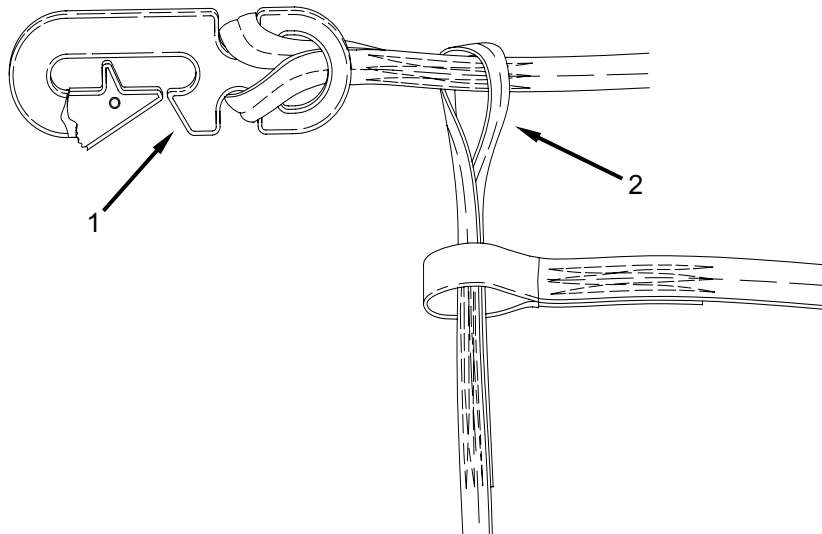


Figure 10. Pass Snap Hook Of USL 5-Foot Extension Through Loop On Static Line.

REPLACE - continued

- d. Continue passing the snap hook through the 3-1/2-inch loop until a taut girth hitch is made securing the 5-foot extension to the static line (**figure 10, item 1**). (There will be a half-twist in the 3-1/2-inch loop when forming the girth hitch.)

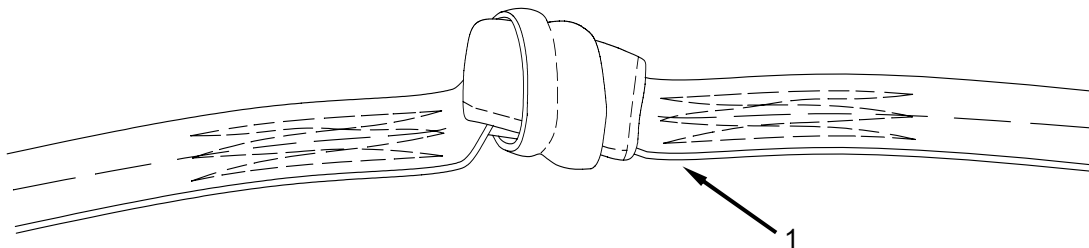


Figure 11. Girth Hitch Securing The 5-Foot Extension To Static Line.

END OF WORK PACKAGE

CHAPTER 3

DIRECT SUPPORT MAINTENANCE INSTRUCTIONS
FOR
MC-6 PERSONNEL PARACHUTE SYSTEM

**DIRECT SUPPORT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
GENERAL REPAIR PROCEDURES**

INITIAL SETUP:**Tools**

Specified in paragraph applicable to the item being repaired.

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Specified in paragraph applicable to the item being repaired.

Equipment Condition

Unpacked

Canopy with defects recorded.

Clean

REPAIR**CAUTION**

Stitch removal requirements will vary according to the type of item being repaired. Due to the unique type of stitch formations found on the MC-6, use of a stitch removal tool is mandated when removing Bartack, Box X, or Double Box X stitch formations.

NOTE

Sewing requirements will vary according to the type of item being repaired and the type of repair being made. The type of sewing machine, type of thread, the stitch range, and the stitch pattern (if applicable) required to accomplish a sewing procedure will be specified in the paragraph applicable to the item being repaired. All original stitching that is cut during the performance of a sewing procedure will be removed from the applicable item. Immediately after the accomplishment of a machine sewing procedure, trim thread ends to a point as close as possible to the material that has been sewn.

NOTE

Repair and replacement of parachute components is performed in accordance with the repair instruction in this section and in specific paragraphs applicable to the item being repaired. Fabrication is a means of replacing an air delivery item component damaged beyond repair and is not an item that is issued. Though the act of fabrication is a replacement-type action, the function is actually a method of repairing an end item. Since most fabrication pertains to components that are peculiar to parachutes, the fabrication of components that are most general in nature will be detailed in the following paragraphs.

BASTING AND TEMPORARY TACKING

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

1. Basting and temporary tacking should be made using thread that is of a contrasting color to the material being worked.
2. Basting and temporary tacking will be performed using a single strand of size A, nylon thread, or ticket No. 24/4 cotton thread.
3. When basting, do not tie knots at any point in the thread length. Also, the sewing should be made with two stitches per inch.
4. Immediately upon completion of a repair, remove previously made basting or temporary tacking.

STITCHING AND RESTITCHING

Perform stitching and restitching as follows, refer to Tables 1 and 2.

Parachute canopy assemblies. The stitching and restitching made on parachute canopies should be accomplished with thread that is contrasting in color to the fabric being restitched. If contrasting color thread is not available, thread of matching color may be used, providing all other specifications are met. Straight stitching and restitching on parachute canopy assemblies should be locked by at least 2-inches at each end of a stitch row, when possible. Zig-Zag stitching does not require locking; however, zig-zag restitching should extend at least 1/4-inch into undamaged stitching at each end, when possible. When restitching parachute canopy assemblies, stitch directly over the original stitching and follow the original stitch pattern as closely as possible.

Table 1. Sewing Machine Code Symbols.

CODE SYMBOL	SEWING MACHINE
LD	SEWING MACHINE, INDUSTRIAL: General Sewing; 301 Stitch; Light Duty; NSN 350-01-177-8590.
HD ZZ	SEWING MACHINE, INDUSTRIAL: Zig-Zag; 308 Stitch; Heavy Duty; NSN 3530-01-181-1421.
MD ZZ	SEWING MACHINE, INDUSTRIAL: Zig-Zag; 308 Stitch; Medium Duty; NSN 3530-01-181-1420.
HD	SEWING MACHINE, INDUSTRIAL: General Sewing; 301 Stitch; Heavy Duty; NSN 3530-01-177-8588.
MD	SEWING MACHINE, INDUSTRIAL: General Sewing; 301 Stitch; Medium Duty; NSN 3530-01-177-8591.
DN	SEWING MACHINE, INDUSTRIAL: Darning; Lock Stitch; NSN 3530-01-177-8589.

Table 1. Sewing Machine Code Symbols – continued.

CODE SYMBOL	SEWING MACHINE
LHD	SEWING MACHINE, INDUSTRIAL: 301 Stitch; Light-Heavy Duty; NSN 3530-01-186-3079.
ND	SEWING MACHINE, INDUSTRIAL: 301 Stitch; Double-Needle; NSN 3530-00-892-4636.
BOX-X	SEWING MACHINE, AUTOMATIC: Box-X; (Local purchase, Herbert Jaffe/JF PN HJ1615X1X56, Model Number 3334)
BT	SEWING MACHINE, INDUSTRIAL: Bartack, 42 stitch (Local purchase, Recommended PN HJ1466-1X42)
LD BT	SEWING MACHINE, INDUSTRIAL: Automatic Bartack; 28 stitch; 5/8" x 3/16"; Light Duty

Table 2. Stitching and Restitching Specifications.

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	THREAD SIZE
Main Canopy	LD BT/Box X/LD	28 7 to 11	E
Main Canopy Gore Sections	LD/DN/LD/ZZ	7 to 11 DARN 24 to 32	E
Main Canopy Forward Extended Gore Assembly	LD/ND/LD BT	7 to 11 24 to 32	E
Main Canopy Aft Extended Gore Assembly	LD/ND/LD BT	7 to 11 24 to 32	E
Main Canopy Mesh Panel Assembly	LD/ND/LD BT	7 to 11 24 to 32	E
Main Canopy Reinforcement Tape	LD/ND/LD BT	7 to 11 24 to 32	E
Main Canopy Suspension Line Attaching Loop	LD/ND/LD BT	7 to 11 24 to 32	E
Reserve Canopy	LD/ND	7 to 11	E
Gore Section, Plain	LD/ND	7 to 11	E
Gore Section, 1, 2 and 3	LD/ND	7 to 11	E
Gore Section, 4 and 5	LD/ND	7 to 11	E
Canopy Scoop	LD/ND	7 to 11	E

END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY VENT LINE
REPAIR, REPLACE**

INITIAL SETUP:

Tools

Sewing Machine, Medium Duty, Zig-Zag (Item 57, WP 0097 00)
 Knife (Item 26, WP 0097 00)
 Knife, Hot, Metal (Item 27, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Thread, Nylon, Size E (Item 51, WP 0109 00)
 Cord, Nylon, Type II (Item 17, WP 0109 00)

Equipment Condition

Unpacked

REPLACE

Replace missing or damaged vent lines as follows:

1. Trace the damaged vent line across the vent.
2. Remove the damaged vent line(s) by removing the stitching that holds each end of the vent lines to the canopy.
3. Take a new vent line and position one end aligning the mark with the top of the vent band (**figure 1**).

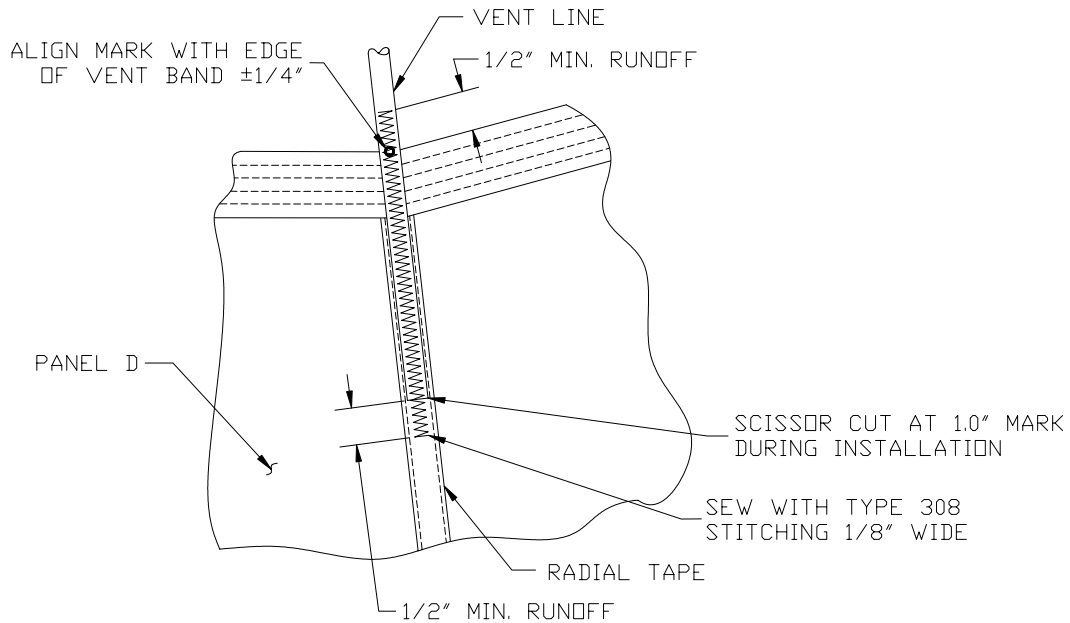


Figure 1. Replacing a Vent Line.

REPLACE - continued

4. Using a zig-zag sewing machine and size E nylon thread, begin sewing on the vent line at least 1/2-inch above the vent mark. Continue sewing to within 2 inches from the hot cut end. Scissor cut the vent line at the mark 1-inch from the hot cut end. Continue sewing over the now scissor cut end by at least 1/2-inch (**figure 1**).
5. Thread the free end of the vent line by tracing it with one of the adjacent lines to the opposite side without twists.
6. Align the mark with the top of the vent band.
7. Using a zig-zag sewing machine and size E nylon thread, begin sewing on the vent line at least 1/2-inch above the vent mark. Continue sewing to within 2 inches from the hot cut end. Scissor cut the vent line at the mark 1-inch from the hot cut end. Continue sewing over the now scissor cut end by at least 1/2-inch.

END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY REINFORCING TAPE
REPLACE**

INITIAL SETUP:**Tools**

Scissors (Item 48, WP 0097 00)
Sewing Machine, Double Needle (Item 54, WP 0097 00)
Sewing Machine, Light Duty (Item 56, WP 0097 00)
Sewing Machine, Bartack, 28 Stitch (Item 51, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Tape, Nylon, Type III, Class 1, 1/2-inch wide (Item 43, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Unpacked

NOTE

Replace a damaged reinforcement tape when more than 50% of the tape is damaged. When less than 50% of the tape is damaged REPAIR IAW WP 0026 00.

REPLACE

Replace a missing or damaged reinforcement tape as follows:

1. Identify the damaged reinforcement tape.
2. Determine if any of the adjoining cloth is damaged and requires patching. If so, patch or replace the adjoining panel prior to replacing the reinforcement tape.
3. Carefully remove the damaged reinforcement tape. Where the reinforcement tape is sewn into the radial, cut the tape flush with the radial.
4. Remove loose or broken stitching.
5. Scissor cut a length of 1/2-inch nylon type III tape that extends 1/2-inch beyond both radial tapes.
6. Fold the new reinforcement tape ends under 1/2-inch. Pin in place with the ends extending over the radial tape.
7. Using a double needle sewing machine with size E nylon thread, sew the new reinforcement tape in place. Backstitch both ends at least 1/2-inch.
8. Using a bartack sewing machine and size E nylon thread, place bartacks at the junction of the reinforcement tape and the radial.

END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY GORE PANEL SECTIONS
REPLACE**

INITIAL SETUP:**Tools**

Sewing Machine, Double Needle (Item 54, WP 0097 00)
Sewing Machine, Light Duty (Item 56, WP 0097 00)
Stitch Removal Tool (Item 62, WP 0097 00)
Shears (Item 61, WP 0097 00)
Pliers, Needle Nose (Item 38, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Cloth, Nylon Ripstop, Type I (Item 11, WP 0109 00)
Thread, Nylon, Size E (Item 51, WP 0109 00)
Pin, Steel, T, Size 24 (Item 37, WP 0109 00)

Equipment Condition

Unpacked

REPLACE**Replace Main Canopy Gore Sections****NOTE**

Stitch removal requirements will vary according to the type of item being replaced. Use of a stitch removal tool is mandated when removing any stitch formation.

NOTE

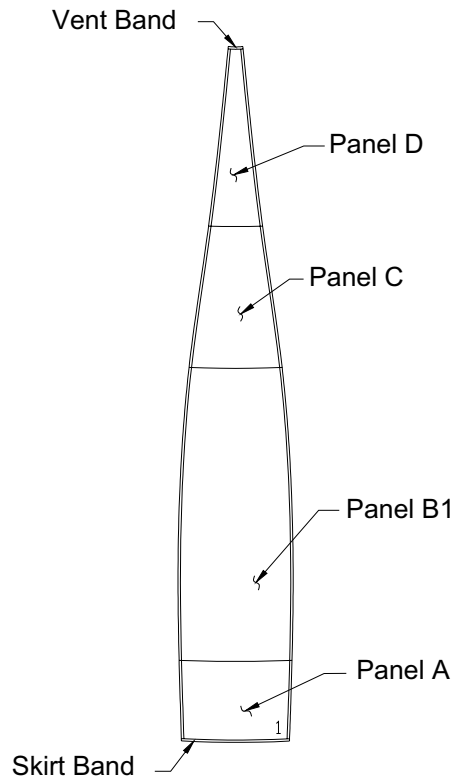
A double needle sewing machine may be substituted for a single needle sewing machine.

1. Place canopy in proper layout. Invert the canopy on a repair table with the damaged portion exposed.
2. Smooth out the damaged section and secure the surrounding canopy material to the repair table by placing push-pins through the seams, lateral bands, or the edge reinforcements as far above and below the damaged section as necessary. Ensure that all adjacent seams, lateral bands, and edge reinforcements are straight and the damaged section is not distorted.
3. Remove the damaged section by cutting the section material at a point 1/2-inch in from the inside edge of each adjacent seam, lateral band, or edge reinforcement. Cut the remaining fabric diagonally at each corner allowing the raw edges to be folded back 1/2-inch.
4. Fold each raw edge back 1/2-inch and baste (refer to basting procedures in WP 0088 00).
5. Start with any corner of the prefabricated replacement panel and align double stitching of panel to canopy and pin in place.
6. Move clockwise to next corner and apply tension to top and bottom of the material.
7. Align double stitching of panel to canopy and pin in place.
8. Repeat steps 5 and 6 for remaining corners.
9. Pin the replacement panel to the canopy halfway between all corners. Use additional push pins as needed to secure the replacement panel to the canopy.

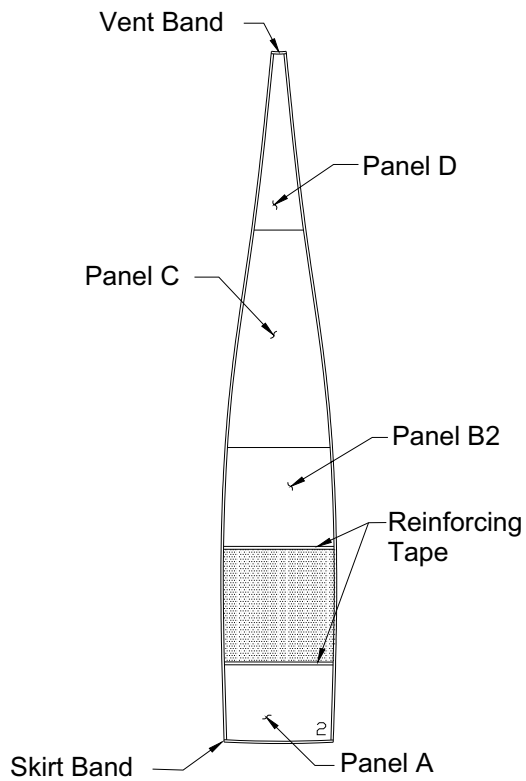
REPLACE - continued

10. Stitch completely around the prepared area using a light duty sewing machine and size E nylon thread, 7 to 11 stitches per inch.
11. Scissor cut corner tabs within 1/4-inch of outer edge of panel.
12. Reposition the item(s) removed or laid aside in step 1 above in the original location(s) and reattach each item to the canopy by restitching according to original construction. Stencil informational data or other markings on the replacement section IAW WP 0019 00.

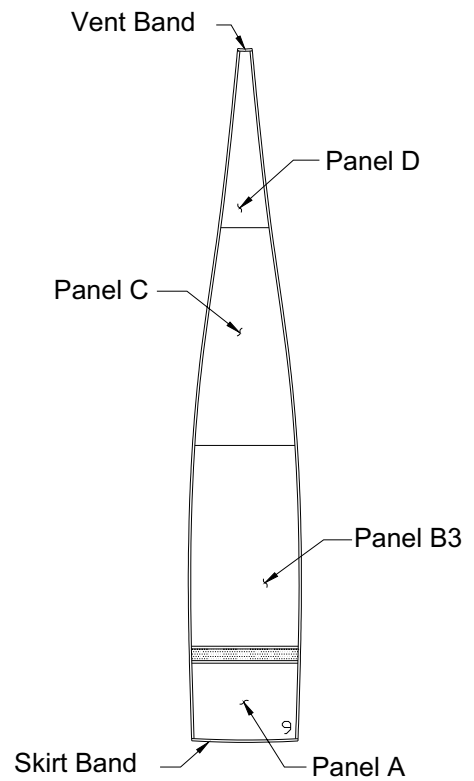
REPLACE - continued



Basic Gore



Drive Vent Gore



Slotted Gore

Figure 1. Gore Panel Sections.

END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAIN CANOPY SUSPENSION LINE ATTACHING LOOP
REPAIR, REPLACE**

INITIAL SETUP:**Tools**

Knife (Item 26, WP 0097 00)
 Knife, Hot, Metal (Item 27, WP 0097 00)
 Sewing Machine, Double Needle (Item 54, WP 0097 00)
 Sewing Machine, Medium Duty, Zig-Zag (Item 57, WP 0097 00)
 Sewing Machine, Light Duty (Item 56, WP 0097 00)
 Stitch Removal Tool (Item 62, WP 0097 00)

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

Webbing, Nylon, Bally #8962 3/8-inch wide (Item 55, WP 0109 00)
 Pencil, China Marker, Yellow, (Item 35, WP 0109 00)
 Thread, Nylon, Size E (Item 51, WP 0109 00)

Equipment Condition

Unpacked

NOTE

A double needle sewing machine may be substituted for a single needle sewing machine.

REPAIR**Repair Main Canopy Suspension Line Attaching Loop**

1. Remove damaged suspension line attaching loop (**figure 1, item 1**) by cutting loop with a pair of shears even with the anti-inversion net (**figure 1, item 2**). If previously repaired, carefully remove stitching and remove damaged suspension line attaching loop.

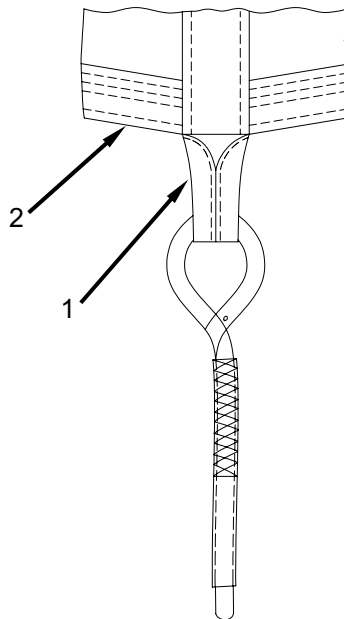


Figure 1. Suspension Line Attaching Loop.

REPAIR - continued

2. Scissor cut a 13-inch length of 3/8-inch wide nylon webbing and mark webbing IAW **figure 2**.

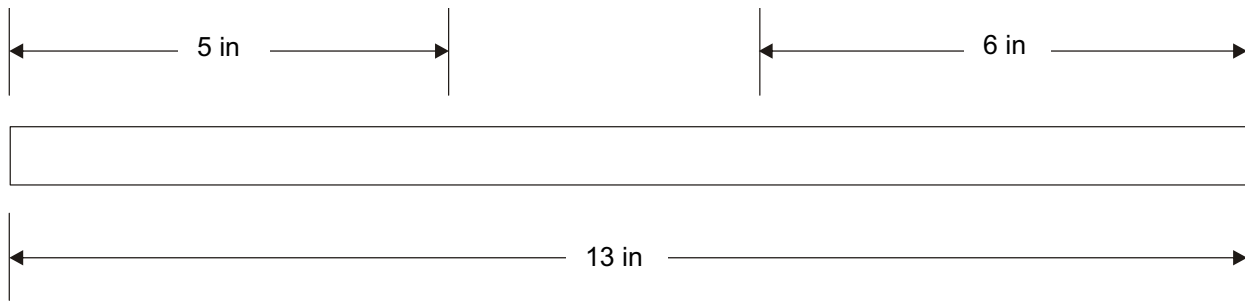


Figure 2. Suspension Line Attaching Loop Marking Diagram.

3. Route one end of the webbing through the girth hitch on the suspension line.
4. Align marks and fold webbing over the existing webbing.
5. Fold ends under 1/4-inch and pin in place ensuring the long section of the webbing is positioned on the inside of the canopy.
6. Using a single needle sewing machine, size E nylon thread, 7 to 11 stitches per inch, sew in place. Backstitch 1-inch on attaching loop end. Extend stitch 1-inch beyond the free end of the webbing.

REPLACE

Replace a damaged suspension line loop as follows:

1. Place canopy in proper layout.
2. Carefully remove the Anti-Inversion Netting (AIN) sewn along the damaged suspension line loop. Clean the area by removing all loose pieces of thread.
3. Pin the suspension line that is attached to the loop to the adjacent suspension line so that it is out of the way and continuity is maintained.
4. Carefully remove both the zig-zag and two rows of straight stitching that are holding the damaged loop to the canopy and the loop closed. This stitching must be removed up to the girth hitched suspension line. Clean the area by removing all loose pieces of thread.
5. Slide the damaged loop out of the girth hitched line while maintaining the girth hitch in the line.
6. Hot cut a 53-inch length of 3/8-inch nylon webbing.
7. Measure and mark webbing IAW **figure 3**.

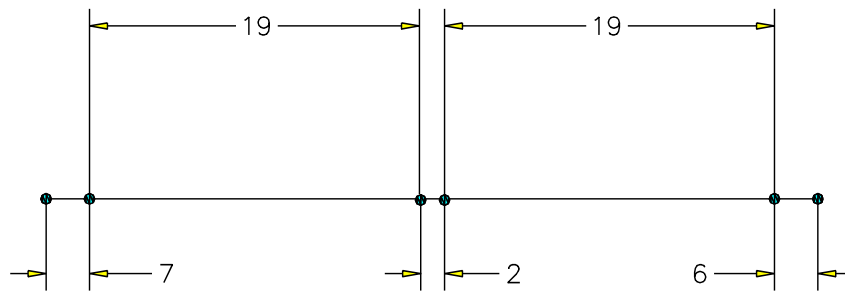


Figure 3. Suspension Line Loop Dimensional Information.

8. Take the replacement attachment loop and thread it through the girth hitch in the end of the suspension line.
9. Fold the new attachment loop approximately in half aligning the two marks for the bottom of the AIN and the skirt. From the skirt mark, the inside portion of the line loop is 1 inch longer than the outside (**figure 4**).
10. Place the new attachment loop so that the canopy skirt and radial are sandwiched between the new loop and pin in place (**figure 4**). Ensure that twists have not been introduced in the suspension line.
11. Using a light duty, single needle sewing machine and nylon size E thread, from the outside, begin sewing 1-inch from the end of the loop sewing toward the skirt of the canopy. Sew up to the skirt mark.
12. Position the canopy skirt and radial. Ensure that both ends of the suspension line loop are aligned with the radial.
13. Continue sewing over the skirt band and over the radial to a minimum of 1/2-inch past the inside end of the suspension line loop (**figure 4**).

REPLACE - continued

14. Using a zig-zag sewing machine and nylon size E thread, begin sewing 1/2-inch below the skirt band sewing up the radial. Continue sewing over the skirt band, over the radial to a minimum of 1/2-inch past the inside end of the suspension line loop (**figure 4**).
15. Using a zig-zag sewing machine and nylon size E thread, re-attach the AIN using the zig-zag sewing machine and nylon size E thread, in the same manner as the adjacent suspension line loop.

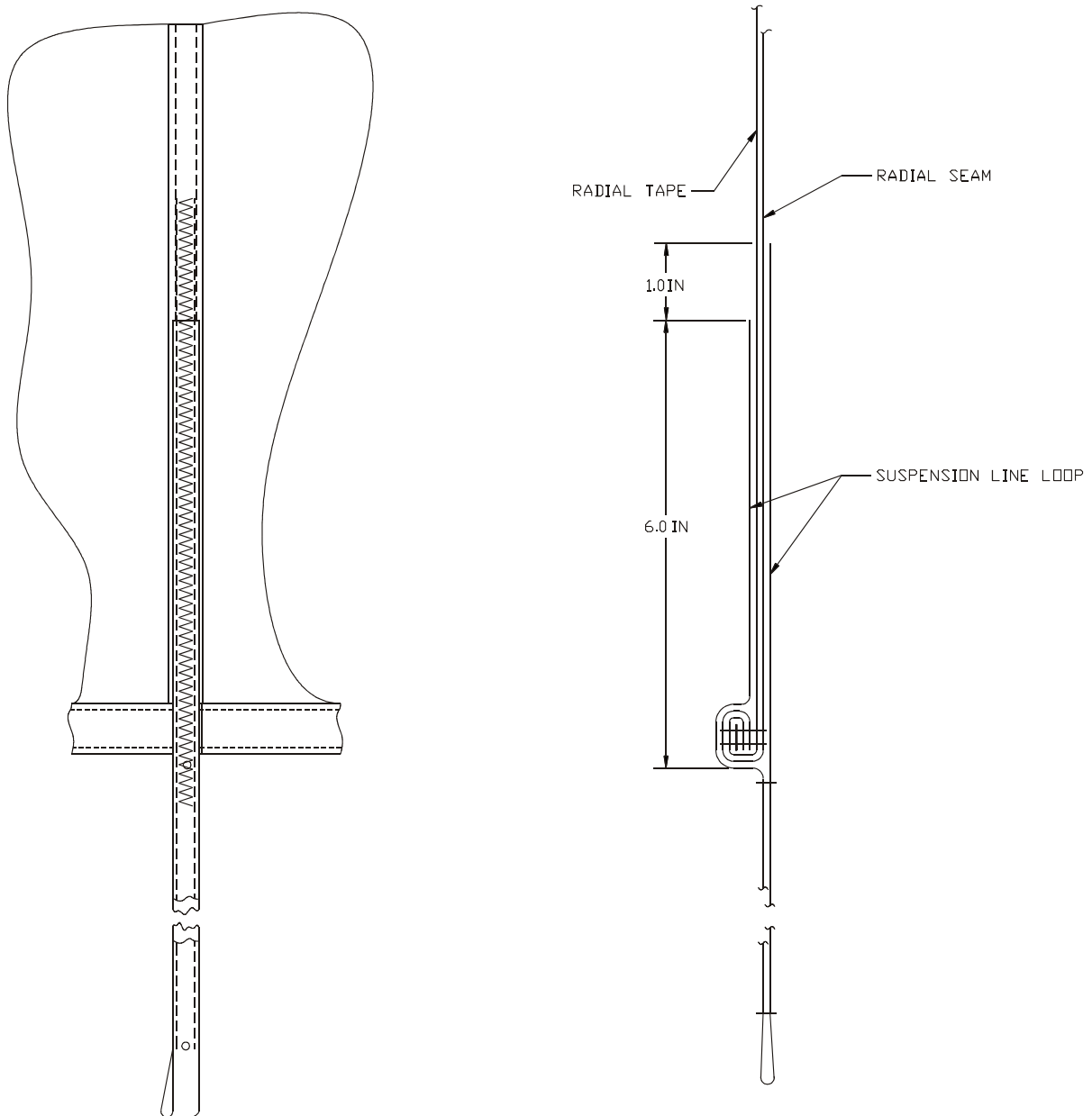


Figure 4. Suspension Line Loop Sewing Detail.

END OF WORK PACKAGE

**DIRECT SUPPORT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
PREPARATION FOR STORAGE**

INITIAL SETUP:**Tools**

None required

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

None required

Equipment Condition

Unpacked

STORAGE CRITERIA

Administrative storage of the MC-6 will be accomplished in accordance with AR 750-1, and the instructions furnished below.

GENERAL STORAGE REQUIREMENTS

To ensure that serviceability standards of the stored parachute assembly are maintained, every effort will be exerted to adhere to the following general storage requirements:

1. MC-6 main and reserve parachutes do not require co-location when storing.
2. Pyramid stacking of main parachutes will be no greater than seven high and reserve parachutes will be no greater than eleven high.
3. When available, a climate controlled building should be used to store parachutes.
4. Parachutes will be stored in a dry, well-ventilated location and protected from pilferage, dampness, fire, dirt, insects, rodents, and direct sunlight.
5. Parachutes will not be stored in a manner which would prevent ventilation or interfere with light fixtures, heating vents, fire fighting devices, cooling units, exits, or fire doors.
6. Parachutes will not be stored in a damaged, dirty, or damp condition.
7. All stored parachute items will be marked, segregated, and located for accessibility and easy identification.
8. Parachutes will not be stored in direct contact with any building floor or wall. Storage will be accomplished using bins, shelves, pallets, racks, or dunnage to provide airspace between the storage area floor and the equipment. If the pre-constructed shelving or similar storage accommodations are not available, locally fabricate storage provisions using suitable lumber or wooden boxes.
9. All available material handling equipment should be used as much as possible in the handling of parachutes.
10. Periodic rotation of stock, conversion of available space, proper housekeeping policies, and strict adherence to all safety regulations will be practiced at all times.

STORAGE SPECIFICS FOR PARACHUTES

In addition to the storage requirements stipulated in the general storage requirements paragraph on the previous page, the following is a list of specifics that must be enforced when storing parachutes:

1. Except for those assemblies required for contingency operation, parachutes will not be stored in a packed configuration.
2. Stored parachute assemblies will be secured from access by unauthorized personnel.
3. A parachute that is in storage, and is administered a cyclic repack and inspection, will not be exposed to incandescent light or indirect sunlight for a period of more than 36 hours. In addition, exposure to direct sunlight will be avoided entirely.

IN-STORAGE INSPECTION

1. General Information. An in-storage inspection is a physical check conducted on a random sample of parachutes that are located in storage.
2. Intervals. The MC-6 in-storage will be inspected at least once every 180 calendar days and at more frequent intervals if prescribed by the local parachute maintenance officer.
3. Inspection. Inspect to ensure that the parachute is ready for issue.
4. Check the parachute for proper identification.
5. Check that no damage or deterioration has been incurred.
6. Ensure that all modifications or similar requirements have been completed.
7. Check the adequacy of the storage facilities, efforts taken to control pests and rodents, and protection against unfavorable climatic conditions.

END OF WORK PACKAGE

DIRECT SUPPORT
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
PREPARATION FOR SHIPMENT

INITIAL SETUP:**Tools**

None required

Personnel Required

92R (10) Parachute Rigger

Materials/Parts

None required

Equipment Condition

Unpacked

SHIPMENT

Initial Shipment. The initial packaging and shipping of parachutes are the responsibility of item manufacturers, who are required to comply with federal and military packing specifications, as stipulated in contractual agreements. Parachutes are normally shipped to depot activities, by domestic freight or parcel post, and packed to comply with overseas shipping requirements. Except for those parachute that are unpackaged and subjected to random inspections or testing by depot activity, parachutes received by a using unit will be contained in the original packaging materials.

Shipping Between Maintenance Activities. The shipping of parachutes between activities will be accomplished on a signature verification basis using whatever means of transportation is available. Used parachutes and other fabric items will be tagged in accordance with DA PAM 738-751, and rolled, folded, or placed loosely in a parachute pack, deployment bag, or other suitable container, as required. Unused parachutes will be transported in original shipping containers. During shipment, every effort will be made to protect parachute from weather elements, dust, dirt, oil, grease, and acids. Vehicles used to transport parachutes will be inspected to ensure the items are protected from the previously cited material damaging conditions.

Other Shipping Instructions. Parachutes destined for domestic or overseas shipment will be packaged and marked in accordance with AR 700-15, TM 38-230-1, and TM 38-230-2. Shipment of parachutes will be accomplished in accordance with TM 10-1670-201-23/T.O. 13C-1-411/NAVAIR 13-1-17.

ACCORDION FOLDING/RIGGER ROLLING

Accordion Folding. Personnel parachute canopy assemblies that are not packed for use should be accordion folded prior to entry into storage. To accordion fold a parachute canopy assembly perform the following:

1. Place the parachute canopy in proper layout under partial tension and dress the outside edges of both gore groups.
2. Fold the left group of gores over the right group. Release the tension.

ACCORDION FOLDING/RIGGER ROLLING - continued

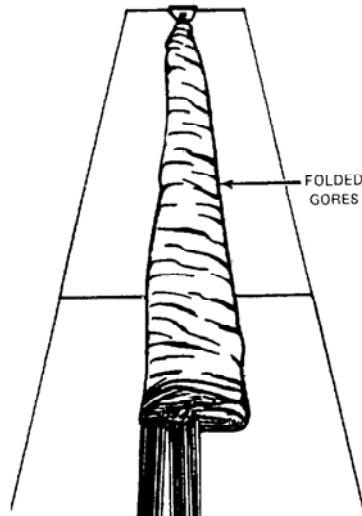


Figure 1. Folding Of Gore Groups Completed.

3. Daisy chain the suspension lines and S-fold the chained lines on top of the applicable parachute pack.

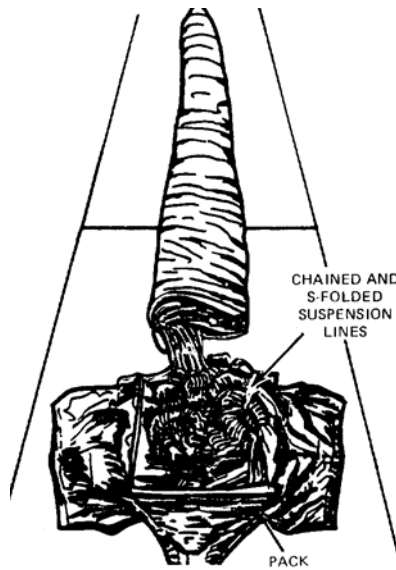


Figure 2. Suspension Lines Stowed On Pack.

ACCORDION FOLDING/RIGGER ROLLING - continued

4. Place the lower end of the canopy on top of the S-folded suspension lines and locate the lower edge of the canopy skirt at the lower end of the pack.
5. Accordion fold the remaining canopy length neatly on top of the canopy lower end. Turn the canopy vent under the last fold.

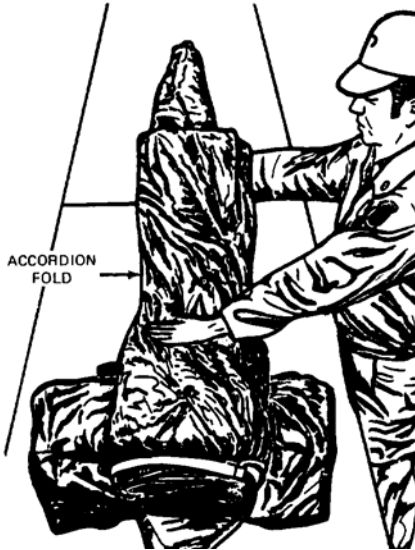


Figure 3. Accordion Folding The Canopy.

6. Temporarily secure the folded canopy to the pack tray with available webbing or pack components.



Figure 4. Folded Canopy Secured.

ACCORDION FOLDING/RIGGER ROLLING - continued

7. Upon completion of the accordion folding process, place the folded parachute assembly in a suitable type container for storage.

Rigger Rolling. Personnel parachute assemblies will be rigger rolled prior to being sent to, or returned from, a parachute repair activity, for ease of handling and to prevent suspension line entanglement. Rigger roll a parachute as follows:

1. Place the parachute in proper layout and apply partial tension.
2. Grasp the right and left suspension line groups. Using a fast circular motion, flip each of the two gore groups up and to the center radial seam. Tighten each gore group roll by hand; bring both rolled gore groups together at the center radial seam.

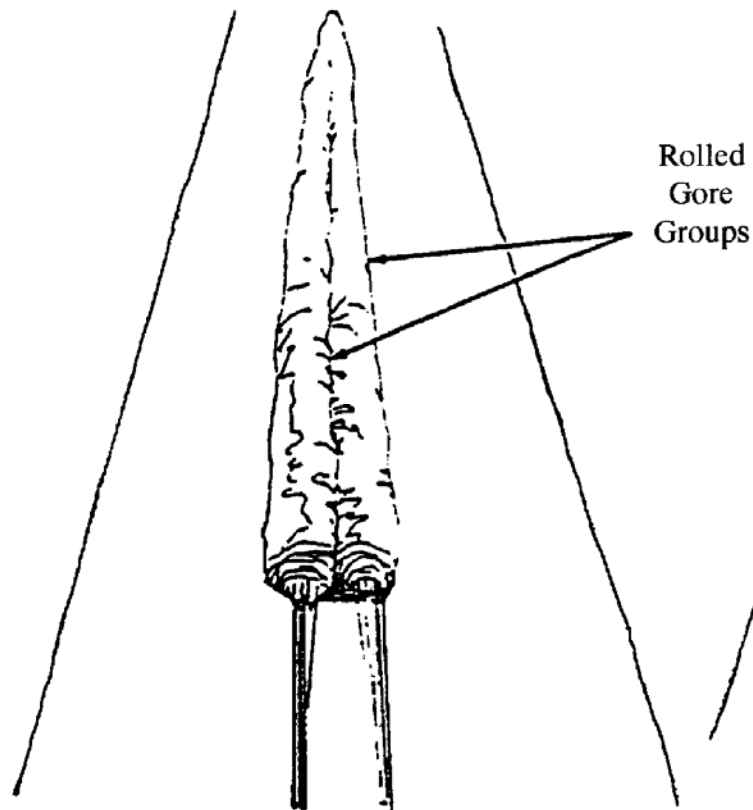


Figure 5. Rigger Rolling.

3. Release tension and disconnect the canopy vent from the vent-attaching device.
4. Fold the canopy vent down between the rolled gore groups to a point within 18-inches of the canopy skirt lower edge.

ACCORDION FOLDING/RIGGER ROLLING - continued

5. Beginning at the folded upper end of the canopy, roll the canopy tightly toward the canopy skirt. Ensure the width of the rolled canopy does not exceed the width of the applicable parachute pack tray.

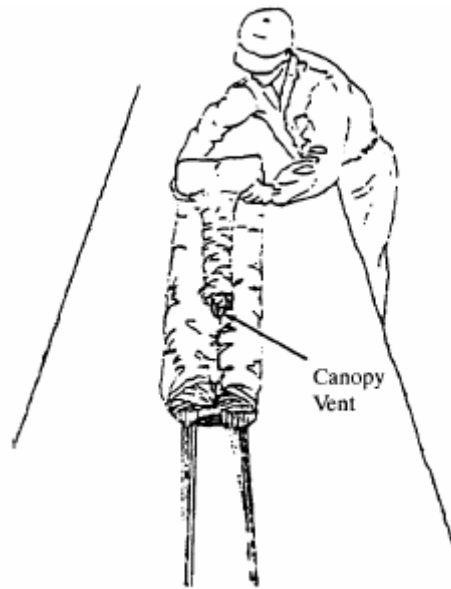


Figure 6. Roll The Canopy Tightly Toward The Canopy Skirt.

6. Continue rolling the canopy toward the lower end of the suspension lines and risers. If applicable, locate the lines and riser webbing around the center of the roll.

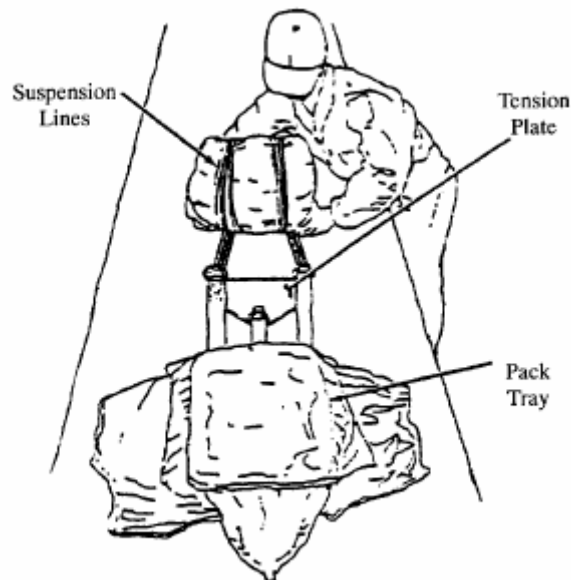


Figure 7. Continue Rolling Canopy Toward Lower End Of Suspension Lines And Risers.

ACCORDION FOLDING/RIGGER ROLLING - continued

7. As applicable, disconnect the suspension lines/risers from the attaching device and place the rolled canopy assembly on top of the pack tray.
8. Secure the rolled canopy assembly within the confines of the pack tray, using either the straps or webbing of the pack tray, or a length of suitable type cord.

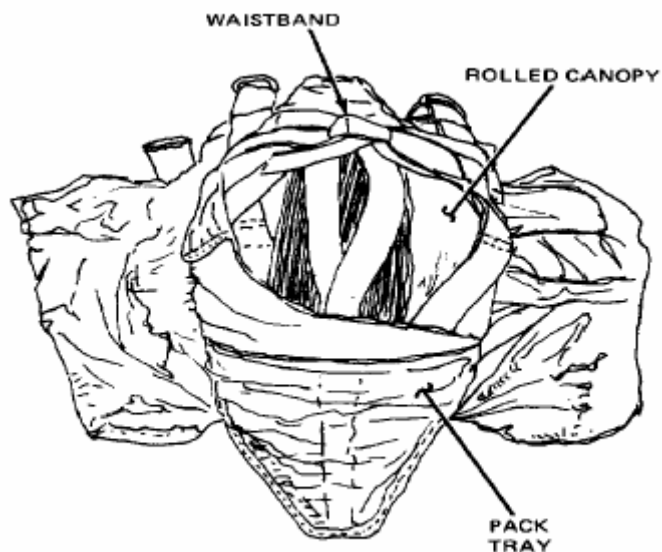


Figure 8. Secure Rolled Canopy Assembly Within Pack Tray.

END OF WORK PACKAGE

CHAPTER 4

SUPPORTING INFORMATION
FOR
MC-6 PERSONNEL PARACHUTE SYSTEM

SUPPORTING INFORMATION
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
REFERENCES

SCOPE

This Work Package lists all field manuals, technical manuals, forms, pamphlets, Army regulations, and military standards referenced throughout this manual.

Field Manuals

Airdrop of Supplies and Equipment: Information Rigging Airdrop Platform	FM 4.20.102 (FM 10-500-2)
First Aid for Soldiers	FM 4-25.11 (FM 21-11)

Technical Manuals

General Maintenance of Parachutes and Other Airdrop Equipment	TM 10-1670-201-23/ T.O. 13C-1-411 NAVAIR 13-1-17
Ancillary Equipment for Low Velocity Air Drop System (LVADS)	TM 10-1670-296-20&P T.O. 13C7-49-2
Preservation, Packaging, Packing of Military Supplies and Equipment (Vols. 1 and 2)	TM 38-230-1 and TM 38-230-2
Equipment Maintenance Forms and Procedures	TM 4700-15/1
Procedures for the Destruction of Air Delivery Equipment to Prevent Enemy Use	TM 43-0002-1/ T.O. 13C3-1-10/ NAVAIR 13-1-19

Forms

Parachute Log Record	DA Form 3912
Equipment Inspection & Maintenance Worksheet	DA Form 2404
Report of Discrepancy	SF 364
Transportation Discrepancy Report	SF 361
Product Quality Deficiency Report	SF 368

DA Pamphlets

Consolidated Index of Army Publications and Blank Forms	DA PAM 25-30
Functional Users Manual for The Army Maintenance Management System (TAMMS)	DA PAM 750-8
Functional Users Manual for The Army Maintenance Management System (Aviation) (TAMMS-A)	DA PAM 738-751
Army Maintenance Management System	DA PAM 750-751

Army Regulations

Dictionary of United States Army Terms	AR 310-25
Authorized Abbreviation and Brevity Codes and Acronyms	AR 310-50
Packaging of Material	AR 700-15
Army Material Maintenance Concepts and Policies	AR 750-1
Air Drop, Parachute Recovery and Aircraft Personal Escape Systems	AR 750-32
Reporting of Item and Packaging Discrepancies	AR 735-11-2
Reporting of Transportation Discrepancies in Shipments	AR 55-38

Technical Bulletins

Maintenance Expenditure Limits for FSC Group 16, FSC Class 1670	TB 43-0002-43
Use of Material Condition Tags and Labels on Army Aeronautical and Air Delivery Equipment	TB 750-126

Air Force Technical Orders

Cleaning of Parachute Assemblies
Parachute Logs and Records

T.O. 14D1-1-2
T.O. DO-25-241

Air Force Technical Order Forms

Parachute Log
Parachute Repack Inspection and Component Card

AFTO 391
AFTO 392

SUPPORTING INFORMATION
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
MAINTENANCE ALLOCATION CHART (MAC), INTRODUCTION

INTRODUCTION

The Army Maintenance System MAC

This introduction provides a general explanation of all maintenance and repair functions authorized at the two maintenance levels under the Two-Level Maintenance Systems concept.

The MAC (immediately following the introduction) 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 shall be consistent with the capacities and capabilities of the designated maintenance levels, which are shown on the MAC in column (4) as:

Field – includes two columns, Unit maintenance and Direct Support Maintenance. The Unit maintenance column is divided again into two more subcolumns, C for Operator or Crew and O for Unit maintenance.

Sustainment – includes two subcolumns, General Support (H) and Depot (D).

The tools and test equipment requirements (immediately following the MAC) list the tools and test equipment (both special tools and common tool sets) required for each maintenance function as referenced from the MAC.

The remarks (immediately following the tools and test equipment requirements) contain supplemental instructions and explanatory notes for a particular maintenance function.

Maintenance Functions

Maintenance functions are limited to and defined as follows:

1. **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). This includes scheduled inspection and gagings and evaluation of cannon tubes.
2. **Test.** To verify serviceability by measuring the mechanical, pneumatic, hydraulic, or electrical characteristics of an item and comparing those characteristics with prescribed standards on a scheduled basis, i.e., load testing of lift devices and hydrostatic testing of pressure hoses.
3. **Service.** Operations required periodically to keep an item in proper operating condition; e.g., to clean (includes decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases. This includes scheduled exercising and purging of recoil mechanisms. The following are examples of service functions:
 - a. **Unpack.** To remove for packing box for service or when required for the performance of maintenance operations.
 - b. **Repack.** To return item to packing box after service and other maintenance operations.
 - c. **Clean.** To rid the item of contamination.

- d. Touch up. To spot paint scratched or blistered surfaces.
 - e. Mark. To restore obliterated identification.
4. Adjust. To maintain or regulate, within prescribed limits, by bringing into proper position, or by setting the operating characteristics to specified parameters.
 5. Align. To adjust specified variable elements of an item to bring about optimum or desired performance.
 6. Calibrate. To determine and cause corrections to be made or to be adjusted on instruments of 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.
 7. Remove/Install. To remove and install the same item when required to perform service or other maintenance functions. Install may be the act of emplacing, seating, or fixing into position a spare, repair part, or module (component or assembly) in a manner to allow the proper functioning of an equipment or system.
 8. Paint. To prepare and spray color coats of paint so that the ammunition can be identified and protected. The color indicating primary use is applied, preferably, to the entire exterior surface as the background color of the item. Other markings are to be repainted as original so as to retain proper ammunition identification.
 9. 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 third position code of the Source, Maintenance and Recoverability (SMR) code.
 10. Repair. The application of maintenance services, including fault location/troubleshooting, removal/installation, disassembly/assembly procedures, and maintenance actions 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, or system.

NOTE

The following definitions are applicable to the "repair" maintenance function:

Services. Inspect, test, service, adjust, align, calibrate, and/or replace.

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).

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).

Actions. Welding, grinding, riveting, straightening, facing, machining, and/or resurfacing.

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

12. Rebuild. Consists of those services/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.

Explanation of Columns in the MAC

Column (1) Group Number. Column (1) lists Functional Group Code (FGC) numbers, the purpose of which is to identify maintenance significant components, assemblies, subassemblies, and modules with the Next Higher Assembly (NHA).

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

Column (3) Maintenance Function. Column (3) lists the functions to be performed on the item listed in column (2). (For a detailed explanation of these functions refer to "Maintenance Functions" outlined above.)

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 manhours 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 MAC. The symbol designations for the various maintenance levels are as follows:

Field:

- C Operator or Crew maintenance
- O Unit Maintenance
- F Direct Support maintenance

Sustainment:

- L Specialized Repair Activity
- H General Support maintenance
- D Depot maintenance

NOTE

The "L" maintenance level is not included in column (4) of the MAC. Functions to this level of maintenance are identified by a work time figure in the "H" column of column (4), and an associated reference code is used in the REMARKS column (6). This code is keyed to the remarks and the SRA complete repair application is explained there.

Column (5) Tools and Equipment Reference Code. Column (5) specifies, by code, those common tool sets (not individual tools), common Test, Measurement and Diagnostic Equipment (TMDE), and special tools, special TMDE and special support equipment required to perform the designated function. Codes are keyed to the entries in the tools and test equipment table.

Column (6) Remarks Code. When applicable, this column contains a letter code, in alphabetical order, which is keyed to the remarks table entries.

Explanation of Columns in the Tools and Test Equipment Requirements

Column (1) Tool or Test Equipment Reference Code. The tool or test equipment reference code correlates with a code used in column (5) of the MAC.

Column (2) Maintenance Level. The lowest level of maintenance authorized to use the tool or test equipment.

Column (3) Nomenclature. Name or identification of the tool or test equipment.

Column (4) National Stock Number (NSN). The NSN of the tool or test equipment.

Column (5) Tool Number. The manufacturer's part number.

Explanation of Columns in the Remarks

Column (1) Remarks Code. The code recorded in column (6) of the MAC.

Column (2) Remarks. This column lists information pertinent to the maintenance function being performed as indicated in the MAC.

**UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
1670-01-527-7537
MAINTENANCE ALLOCATION CHART (MAC)**

Table 1. MAINTENANCE ALLOCATION CHART for
MC-6 PERSONNEL PARACHUTE SYSTEM

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL				(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT			
			UNIT	DIRECT SUPPORT	GENERAL SUPPORT	DEPOT		
			C	O	F	H		
00	MC-6 PARACHUTE, PERSONNEL							
01	CANOPY, MAIN	Inspect Repair Replace		1.0 4.0 1.0			A,B,C,D,E A,B,C,D,E A,B,C,D,E	
0101	LOOP, VENT	Inspect Repair Replace		0.1 0.3 0.5		55 27,28,55	A A,E A,E	
0102	LINE, VENT	Inspect Repair Replace		0.1 0.3 0.7		55 27,28,55,59	A A,E A,E	
0103	LINE, VENT LOOP CENTERING	Inspect Replace		0.1 0.6		27,28,59	A A,E	
0104	BAND, VENT	Inspect Repair		0.1 0.5		27,28,56	A A,E	
0105	SEAM, CROSS	Inspect Repair		0.1 0.5		27,54	A A,E	
0106	SEAM, RADIAL	Inspect Repair		0.1 0.5		27,54	A A,E	
0107	TAPE, REINFORCING	Inspect Repair Replace		0.1 0.3 0.7		48,54,56,51	A A,E A,E	
0108	LOOP, ATTACHMENT	Inspect Replace		0.1 0.3		27,28,51	A A,E	
0109	SECTIONS (A, B, B1, B2, B3, C, D), GORE PANEL	Inspect Repair Replace		0.2 0.5 2.0		27,32,51, 56,60,61 54,56,61 ,60,39	A A,E A,E	
0110	ASSEMBLY (FORWARD AND AFT) , RIGHT AND LEFT EXTENDED GOSES	Inspect Replace		0.1 2.0		27,54,51, 29,61	A A,E	

Table 1. MAINTENANCE ALLOCATION CHART for MC-6 PERSONNEL PARACHUTE SYSTEM

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE	
			FIELD		SUSTAINMENT					
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT			
			C	O	F	H	D			
0111	ASSEMBLY, MESH PANEL	Inspect		0.1					A	
		Repair		0.5				57,61	A,E	
		Replace		1.0				54,61,27,61	A,E	
0112	LINE, LOWER CONTROL	Inspect		0.1					A	
		Replace		0.1				27	A,E	
0113	LINES, SUSPENSION	Inspect		0.1					A	
		Replace		0.3				27	A,E	
0114	TOGGLE, CONTROL	Inspect		0.1					A	
		Replace		0.1				27	A,E	
0115	ASSEMBLY, LEFT/RIGHT AFT CONTROL LINE	Inspect		0.1					A	
		Replace		0.9				27	A,E	
0116	ASSEMBLY, LEFT/RIGHT FORWARD CONTROL LINE	Inspect		0.1					A	
		Replace		0.5				27	A,E	
0117	NET, ANTI-INVERSION	Inspect		0.1					A	
		Repair		0.3				27,56,59, 41,60	A,E	
		Replace		0.8				27,56,41,60	A,E	
0118	BAND, SKIRT	Inspect		0.1					A	
		Repair		1.0				27,28,18, 56,60	A,E	
0119	LOOP, SUSPENSION LINE	Inspect		0.1					A	
		Repair			0.4				27,28,54,59	A,E
		Replace			1.0				27,28,54,59	A,E
0120	LINK, CONNECTOR	Inspect		0.1					A	
		Repair		0.3				20,49	A,E	
		Replace		0.3				31,49,50	A,E	
0121	LIMITER LOOP, CONTROL LINE	Inspect		0.1					A,E	
		Replace		0.5				27,51		
02	RISERS, MAIN	Inspect		0.1					A	
		Repair		0.2				27,56,58		
		Replace		0.2				46,49,27, 33,69		
0201	POCKET, LOG RECORD BOOK	Inspect		0.1					A	
		Repair		0.3				58		
		Replace		0.3				58		

Table 1. MAINTENANCE ALLOCATION CHART for MC-6 PERSONNEL PARACHUTE SYSTEM

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL				(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE	
			FIELD		SUSTAINMENT				
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT			DEPOT
			C	O	F	H			D
0202	CHANNELS, GUIDE	Inspect		0.1				A 56 27,33,46,49,58	
		Repair		0.3					
		Replace		0.3					
03	PACK TRAY, MAIN	Inspect		0.1				A,F 56	
		Repair		0.3					
		Replace		0.1					
0301	LOOP, CLOSING	Inspect		0.1				A 27,33	
		Replace		0.1					
0302	PIN COVER, PACK TRAY CLOSING	Inspect		0.1				A,D 59,61	
		Replace		0.3					
0303	GROMMETS, STIFFENER	Inspect		0.1				A 58,17,38,31,60,61,43	
		Replace		0.5					
0304	FASTENER, SNAP	Inspect		0.1				A 2,10,15,14,25,28,31,38,58,60	
		Replace		0.2					
0305	STIFFENERS, MAIN, SIDE	Inspect		0.1				A 58,60,61	
		Replace		0.2					
0306	STIFFENERS, TOP/BOTTOM	Inspect		0.1				A 58,60,61	
		Replace		0.2					
04	ASSEMBLY, HARNESS	Inspect		0.5				A,B,E,F 55,61,60	
		Service		1.0					
		Repair		0.3					
		Replace		0.5					
0401	GUIDE, DIAGONAL	Inspect		0.1				A,E 56,60	
		Replace		0.3					
0402	PAD, HIP	Inspect		0.1				A,E 55,49,58	
		Replace		0.2					
0403	MAIN LIFT WEB, LEFT UPPER	Inspect		0.1				A,E 56,58,60	
		Replace		0.5					
0404	MAIN LIFT WEB, RIGHT UPPER	Inspect		0.1				A,E 56,58,60	
		Replace		0.5					

Table 1. MAINTENANCE ALLOCATION CHART for MC-6 PERSONNEL PARACHUTE SYSTEM

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL				(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE	
			FIELD		SUSTAINMENT				
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT			DEPOT
			C	O	F	H			D
0405	ASSEMBLY, SADDLE	Inspect		0.1			56,58,60	A,E	
		Replace		0.5					
0406	3-RING RELEASE, FABRIC LOOP	Inspect		0.1				A	
		Replace		0.1					
0407	LUG, LOCKING	Inspect		0.1				A	
		Replace		0.1					
0408	COVERS, SAFETY RELEASE (CANOPY RELEASE ASSEMBLY)	Inspect		0.1				A,E	
		Replace		0.1					
0409	PAD, SHOULDER	Inspect		0.1				A	
		Repair		0.2					
		Replace		0.5					
05	CANOPY, RESERVE	Service		1.0			59 59,51,61,27	A,B,C,D,E, G	
		Inspect		1.0					
		Repair		1.5					
		Replace		1.0					
0501	LINES, SUSPENSION	Inspect		0.3			60,61,51	A	
		Replace		0.3					
0502	EXTRACTOR ASSEMBLY	Inspect		0.1			60	A	
		Replace		0.2					
0503	SPRING ASSEMBLY, EJECTOR	Inspect		0.1			47	A,H	
		Test		0.2					
		Repair		0.1					
		Replace		0.1					
0504	SECTIONS, GORE	Inspect		0.2			27,32,51, 56,60,61 56,61,60	A,E	
		Repair		0.5					
		Replace		1.0					
0505	MESH PANEL #6, GORE SECTION	Inspect		0.1			27,54,57,61 ,60 27,54,57,61 ,60	A	
		Repair		0.2					
		Replace		2.0					
0506	TIES, SKIRT HESITATOR	Inspect		0.1			27	A	
		Replace		0.3					
0507	LINKS, CONNECTING	Inspect		0.5				A	

Table 1. MAINTENANCE ALLOCATION CHART for MC-6 PERSONNEL PARACHUTE SYSTEM

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL				(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE	
			FIELD		SUSTAINMENT				
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT			DEPOT
			C	O	F	H			D
0508	CAP, PROTECTION	Replace		0.4			27,33,70	A	
		Inspect		0.1					
		Replace		0.1					
06	RISER, RESERVE	Inspect		0.1			56,70	A	
		Replace		0.2					
0601	FASTENER TAPE, HOOK AND PILE	Inspect		0.1			56,60 56,28,60,63	A,E	
		Repair		0.2					
		Replace		0.3					
07	ASSEMBLY, RESERVE PACK TRAY	Inspect		0.1			27,51,52, 56,70	A	
		Repair		0.2					
		Replace		0.3					
0701	BINDING, EDGE	Inspect		0.1			27,56,60,63	A,E	
		Repair		0.3					
0702	GROMMETS, SIZE #0	Inspect		0.1			16,28,31, 38,58,60,20	A,F	
		Repair		0.3					
0703	STOW BARS, ELASTIC	Inspect		0.1			51,58,61, 60,63	A,E	
		Repair		0.5					
0704	LOOPS, WAISTBAND	Inspect		0.1			51,61 28,51,61,60 ,63	A,E	
		Repair		0.3					
		Replace		0.3					
0705	FASTENER TAPE, HOOK AND PILE	Inspect		0.1			28,61,60,63	A,E	
		Replace		0.3					
0706	STIFFENERS, RESERVE PACK TRAY	Inspect		0.1			58,60,61	A,E	
		Replace		0.5					
0707	ASSEMBLY, RIPCORDER	Inspect		0.1				A,E	
		Replace		0.3					
		Test		0.3					
08	DEPLOYMENT BAG, MAIN	Inspect		0.1				A	
		Repair		0.5					
		Replace		0.1					
0801	STOW LOOPS,	Repair		0.2			51,58,61,63		

Table 1. MAINTENANCE ALLOCATION CHART for
MC-6 PERSONNEL PARACHUTE SYSTEM

(1) GROUP NUMBER	(2) COMPONENT/ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL					(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE	
			FIELD		SUSTAINMENT					
			UNIT		DIRECT SUPPORT	GENERAL SUPPORT	DEPOT			
			C	O	F	H	D			
0802	SUSPENSION LINE	Replace		1.0				51,58,61,63	A, E	
	STOW LOOP, LOCKING	Inspect		0.3				58,61		
		Repair		0.4				51,58,61, 60,63		
		Replace		0.4						
0803	LOOP, TIE DOWN	Inspect		0.3				27,18,56	A, E	
		Replace		0.3						
0804	FLAPS, SIDE	Inspect		0.1				52	A	
		Repair		0.3						
0805	STATIC LINE (MODIFIED), USL	Inspect		0.1					A, E	
		Replace		0.1						
0806	STATIC LINE, EXTENSION	Inspect		0.1					A, E	
		Replace		0.1						
0807	SNAP HOOK, USL	Inspect		0.1					A, E	
		Replace		0.1						

Table 2. TOOLS AND TEST EQUIPMENT for
MC-6 PERSONNEL PARACHUTE SYSTEM

(1) TOOL OR TEST EQUIPMENT REFERENCE CODE	(2) MAINTENANCE LEVEL	(3) NOMENCLATURE	(4) NATIONAL STOCK NUMBER	(5) TOOL NUMBER
1	O	Adapter, Tension Plate		11-1-7364
2	O	Anvil, Chuck Fastener	5120-00-357-6181	9902
3	O	Apex Tensioning Device		
4	O	Assembly, Packing Loop, Reserve		
5	O	Ballast, Bag, 27 lb.		
6	O	Ballast, Bag, 14 lb.		
7	O	Brush, Scrub, Household	7920-00-068-7903	H-B-515
8	O	Brush, Stenciling	7520-00-248-9285	H-B-621
9	O	Carabiner, Small		
10	O	Chuck, Socket	5120-00-144-2084	1410
11	O	Chuck, Stud	5120-00-144-2088	1412
12	O	Cord, Pull Up, Closing	Locally manufactured	N/A
13	O	Cradle, Deployment Bag Packing		
14	O	Die Tool, Fastener	5120-00-090-4412	1401
15	O	Die, Eyelet	5120-00-144-2097	1407
16	O	Die Set, Spur Grommet, No. 0, Stainless Steel	5120-00-221-1146	17-0
17	O	Die Set, Spur Grommet, Stainless Steel, No. 0	Local Purchase	
18	O	Electric Pot, Melting	5120-00-242-1276	W6441
19	O	Fabric Puller, Light Duty	Local Purchase	
20	O	File, Flat	5110-00-249-2848	GGG-F-325
21	O	Folder, Binding Tape		
22	O	Gun, Hot Glue		
23	O	Holder, Die Fastener	5120-00-357-6177	192
24	O	Key, Socket Head Set	5120-00-729-6392	GGG-K-275
25	O	Kit, Bag	8460-00-606-8366	MIL-K-41835
26	O	Knife	5110-00-162-2205	MIL-818C
27	O	Knife, Hot, Metal	3439-00-197-7656	4025
28	O	Line Insertion Tool (Finger Trap Tool)	Local Purchase	ADDCRIFTG
29	O	Line Separator	1670-00-092-8661	11-1-17-1
30	O	Mallet, Large Leather	5120-00-293-3397	GGG-H-33
31	O,F	Needle, Basting	8315-00-281-9484	FF-N-180
32	O	Needle, Tacking	8315-00-262-3733	FF-N-100
33	O	Packing Loop		
34	O	Packing Paddle	1670-00-764-6381	11-1-0152
35	O	Packing Weight	1670-00-375-9134	66C38599
36	O	Pin, Temporary Locking	Local Purchase (CYPRES)	
37	O	Pliers, Diagonal Cutting	5110-00-222-2708	GGG-P-468
38	O	Pliers, Needle Nose	5120-01-021-7473	B107.13M
39	O	Press, Hand	5120-00-880-0619	A741
40	O	Presser Foot, Modified	Locally Manufactured	
41	O	Pull-up Cords		
42	O	Punch, Cutting	5110-00-180-0924	GGG-P-833
43	O	Reserve Ejector Spring Retaining Rod	Locally Manufactured	

Table 2. TOOLS AND TEST EQUIPMENT for
MC-6 PERSONNEL PARACHUTE SYSTEM

(1) TOOL OR TEST EQUIPMENT REFERENCE CODE	(2) MAINTENANCE LEVEL	(3) NOMENCLATURE	(4) NATIONAL STOCK NUMBER	(5) TOOL NUMBER
44	O	Ripcord Inspection Kit	1670-00-910-3866	11-1-0595
45	O	Riser Tension Plate	1670-00-032-2705	11-1-99
46	O	Rod, Compression, Ejector Spring	Locally manufactured	
47	O,F	Scale, Weighing	6670-00-240-5821	IN10
48	O,F	Scissors	Local purchase	
49	O	Screwdriver, Flat-tip, 1/4 in	5120-00-596-8653	
50	O	Separator, Connector Link	1670-00-072-4941	
51	O	Sewing Machine, Bartack, 28 Stitch	Local purchase	
52	O,F	Sewing Machine, Darning	3530-01-177-8589	00-S-00256/16
53	O	Sewing Machine, Box X	Local Purchase	Recommended HJ1615X1X56 / 7A905
54	O	Sewing Machine, Double Needle	3530-00-892-4636	
55	O,F	Sewing Machine, Heavy Duty	3530-01-177-8588	00-S-00256/13
56	O,F	Sewing Machine, Light Duty	3530-01-177-8590	00-S-00256/13
57	O,F	Sewing Machine, Medium Duty, Zig-Zag	3530-01-181-1420	00-S-00256/14
58	O,F	Sewing Machine, Light-Heavy Duty	3530-01-186-3079	00-S-00256/13
59	O,F	Sewing Machine, Medium Duty	3530-01-177-8591	00-S-00256/13
60	O,F	Sewing Machine, Heavy Duty, Zig-Zag	3530-01-181-1421	00-S-00256/14
61	O	Shears	5110-00-223-6370	GGG-5-278
62	O	Stitch Removal Tool	Local Purchase	
63	O	Stow Hook	1670-00-903-4570	11-1-343
64	O	Tape Measure	5210-00-182-4797	W7312
65	O	T-Bar		11-1-7089-1
66	O	Tester, Spring, 0 to 80 lbs. (scale)	6635-00-705-5469	80D (11710)
67	O	Test Tube, Spring Compression	Locally Manufactured (See WP 0118 00)	
68	O	Wrench, 5/16-Inch, Open-End	5120-00-228-9503	
69	O	Wrench, 7/16-Inch, Open-End	5120-00-228-9505	A-A-1358
70	O	Wrench, Adjustable, 6-Inch	5120-00-264-3795	538SA12
71	O	Wrench, Adjustable, 8-Inch		

Table 3. REMARKS for MC-6 PERSONNEL PARACHUTE SYSTEM

(1) REMARKS CODE	(2) REMARKS
A	Inspect is a technical-rigger type inspection.
B	Service is cleaning of equipment.
C	Service is the packing of parachutes.
D	Repair by stitching, darning, or restencil canopy panel.
E	Repair by darning, retacking, restitching, patching, replacement, splicing edge binding tape, and repairing grommets. Replacement of parts authorized for unit maintenance.
F	Direct Support repair consists of main canopy vent line and reinforcing tape replacement as well as reserve canopy sections and scoop replacement.
G	Perform ripcord test.
H	Perform ejector spring compression test.

UNIT AND DIRECT SUPPORT MAINTENANCE**MC-6 PARACHUTE, PERSONNEL**

1670-01-527-7537

REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL), INTRODUCTION

INTRODUCTION**SCOPE**

This RPSTL lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of unit and direct support maintenance of the MC-6 Personnel Parachute System. It authorizes the requisitioning, issue, and disposition of spares, repair parts, and special tools as indicated by the source, maintenance, and recoverability (SMR) codes.

GENERAL

In addition to the Introduction work package, this RPSTL is divided into the following work packages.

1. Repair Parts List Work Packages. Work packages containing lists of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. These work packages also include parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Sending units, brackets, filters, and bolts are listed with the component they mount on. Bulk materials are listed by item name in FIG. BULK at the end of the work packages. Repair parts kits are listed separately in their own functional group and work package. Repair parts for reparable special tools are also listed in a separate work package. Items listed are shown on the associated illustrations.

2. Special Tools List Work Packages. Work packages containing lists of special tools, special TMDE, and special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in the DESCRIPTION AND USABLE ON CODE (UOC) column). Tools that are components of common tool sets and/or Class VII are not listed.

3. Cross-Reference Indexes Work Packages. There are 2 crossreference indexes work packages in this RPSTL: the National Stock Number (NSN) Index work package and the Part Number (P/N) Index work package. The National Stock Number Index work package refers you to the figure and item number. The Part Number Index work package refers you to the figure and item number.

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES

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

SMR CODE (Column (2)). The SMR code containing supply/requisitioning information, maintenance level authorization criteria, and disposition instruction, as shown in the following breakout:

<u>Source Code</u>	<u>Maintenance Code</u>	<u>Recoverability Code</u>
XX	XX	X
1st two positions: How to get an item.	3rd position: Who can install, replace, or use the item.	4th position: Who can do complete repair* on the item
		5th position: Who determines disposition action on unserviceable items.

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

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

<u>Source Code</u>	<u>Application/Explanation</u>
PA	Stock items; use the applicable NSN to requisition/request items with these source codes. They are authorized to the level indicated by the code entered in the 3rd position of the SMR code.
PB	
PC	
PD	
PE	
PF	
PG	NOTE
	Items coded PC are subject to deterioration.
KD	Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance level indicated in the 3rd position of the SMR code. The complete kit must be requisitioned and applied.
KF	
KB	

MO-Made at unit/AVUM level MF-Made at DS/AVIM level MH-Made at GS level ML-Made at SRA MD-Made at depot	Items with these codes are not to be requisitioned/requested individually. They must be made from bulk material which is identified by the P/N in the DESCRIPTION AND USABLE ON CODE (UOC) column and listed in the bulk material group work package of the RPSTL. If the item is authorized to you by the 3rd position code of the SMR code, but the source code indicates it is made at higher level, order the item from the higher level of maintenance.
AO-Assembled by unit/AVUM level AF-Assembled by DS/AVIM level AH-Assembled by GS level AL-Assembled by SRA AD-Assembled by depot	Items with these codes are not to be requested/requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the 3rd position 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 the next higher assembly.(Refer to NOTE below.)
XB	If an item is not available from salvage, order it using the CAGEC and P/N.
XC	Installation drawings, diagrams, instruction sheets, field service drawings; identified by manufacturer's P/N.
XD	Item is not stocked. Order an XD-coded item through normal supply channels using the CAGEC and P/N 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 items source coded "XA" or those aircraft support items restricted by requirements of AR 750-1.

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:

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

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

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

NOTE

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

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

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

<u>Recoverability Code</u>	<u>Application/Explanation</u>
Z -	Nonreparable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in the third position of the SMR code.
O -	Reparable item. When uneconomically repairable, condemn and dispose of the item at the unit level.
F -	Reparable item. When uneconomically repairable, condemn and dispose of the item at the direct support level.
H -	Reparable item. When uneconomically repairable, condemn and dispose of the item at the general support level.
D -	Reparable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item are not authorized below depot level.
L -	Reparable item. Condemnation and disposal not authorized below Specialized Repair Activity (SRA).
A -	Item requires special handling or condemnation procedures because of specific reasons (such as precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions.

NSN (Column (3)). The NSN for the item is listed in this column.

CAGEC (Column (4)). The Commercial and Government Entity Code (CAGEC) is a five-digit code which is used to identify the manufacturer, distributor, or Government agency/activity that supplies the item.

PART NUMBER (Column (5)). Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

NOTE

When you use an NSN to requisition an item, the item you receive may have a different P/N from the number listed.

DESCRIPTION AND USABLE ON CODE (UOC) (Column (6)). This column includes the following information:

1. The federal item name, and when required, a minimum description to identify the item.
2. P/Ns of bulk materials are referenced in this column in the line entry to be manufactured or fabricated.
3. Hardness Critical Item (HCI). A support item that provides the equipment with special protection from electromagnetic pulse (EMP) damage during a nuclear attack.

4. The statement END OF FIGURE appears just below the last item description in column (6) for a given figure in both the repair parts list and special tools list work packages.

QTY (Column (7)). The QTY (quantity per figure) column indicates the quantity of the item used in the breakout shown on the illustration/figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column instead of a quantity indicates that the quantity is variable and quantity may change from application to application.

EXPLANATION OF CROSS-REFERENCE INDEXES WORK PACKAGES FORMAT AND COLUMNS

1. National Stock Number (NSN) Index Work Package.

STOCK NUMBER Column. This column lists the NSN in National item identification number (NIIN) sequence. The NIIN consists of the last nine digits of the NSN.

$$\frac{\text{NSN}}{\text{NIIN}}$$
 (e.g., 5385-01-574-1476)

When using this column to locate an item, ignore the first four digits of the NSN. However, the complete NSN should be used when ordering items by stock number.

FIG. Column. This column lists the number of the figure where the item is identified/located. The figures are in numerical order in the repair parts list and special tools list work packages.

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.

2. Part Number (P/N) Index Work Package. P/Ns in this index are listed in ascending alphanumeric sequence (vertical arrangement of letter and number combinations 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).

PART NUMBER Column. Indicates the P/N assigned to the item.

FIG. Column. This column lists the number of the figure where the item is identified/located in the repair parts list and special tools list work packages.

ITEM Column. The item number is the number assigned to the item as it appears in the figure referenced in the adjacent figure number column."

SPECIAL INFORMATION

UOC. The UOC appears in the lower left corner of the Description Column heading. Usable on codes are shown as "UOC: ..." in the Description Column (justified left) on the first line under the applicable item/nomenclature. Uncoded items are applicable to all models. Identification of the UOCs used in the RPSTL are:

Code	Used On
FVA	MC-6

Fabrication Instructions. Bulk materials required to manufacture items are listed in the bulk material functional group of this RPSTL. Part numbers for bulk material are also referenced in the Description Column of the line item entry for the item to be manufactured/fabricated. Detailed fabrication instructions for items source coded to be manufactured or fabricated are found in WP 0113 00 of this technical manual.

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 NSN / P/N index work packages and the bulk material list in the repair parts list work package.

HOW TO LOCATE REPAIR PARTS

1. When NSNs or P/Ns Are Not Known.

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

Second. Find the figure covering the functional group or the subfunctional group to which the item belongs.

Third. Identify the item on the figure and note the number(s).

Fourth. Look in the repair parts list work packages for the figure and item numbers. The NSNs and part numbers are on the same line as the associated item numbers.

2. When NSN Is Known.

First. If you have the NSN, look in the STOCK NUMBER column of the NSN index work package. The NSN is arranged in NIIN sequence. Note the figure and item number next to the NSN.

Second. Turn to the figure and locate the item number. Verify that the item is the one you are looking for.

3. When P/N Is Known.

First. If you have the P/N and not the NSN, look in the PART NUMBER column of the P/N index work package. Identify the figure and item number.

Second. Look up the item on the figure in the applicable repair parts list work package.

UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PARACHUTE, PERSONNEL
NSN 1670-01-527-7537
MC-6 PERSONNEL PARACHUTE SYSTEM
REPAIR PARTS LIST

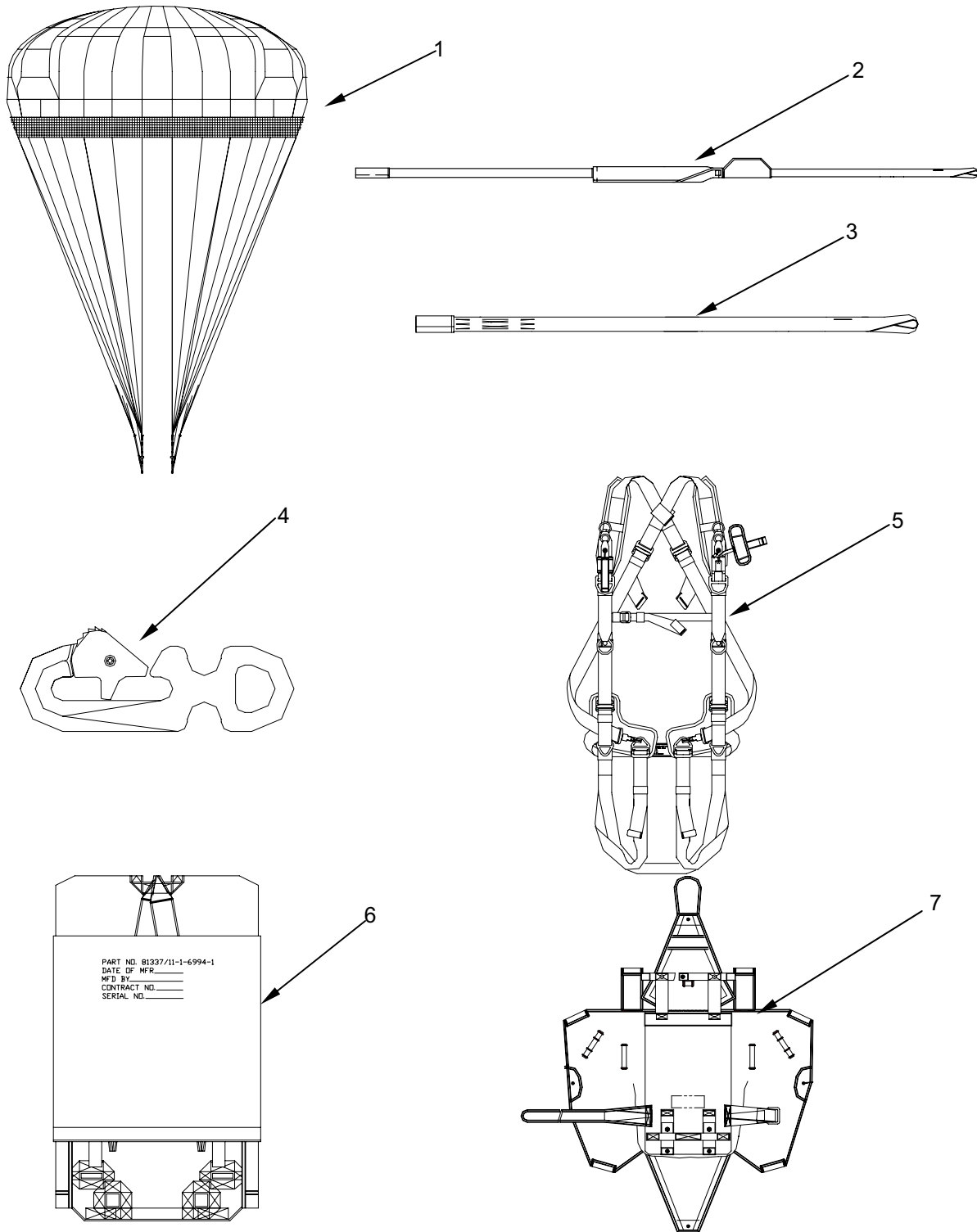


Figure 1. MC-6 Personnel Parachute System (Sheet 1 of 2).

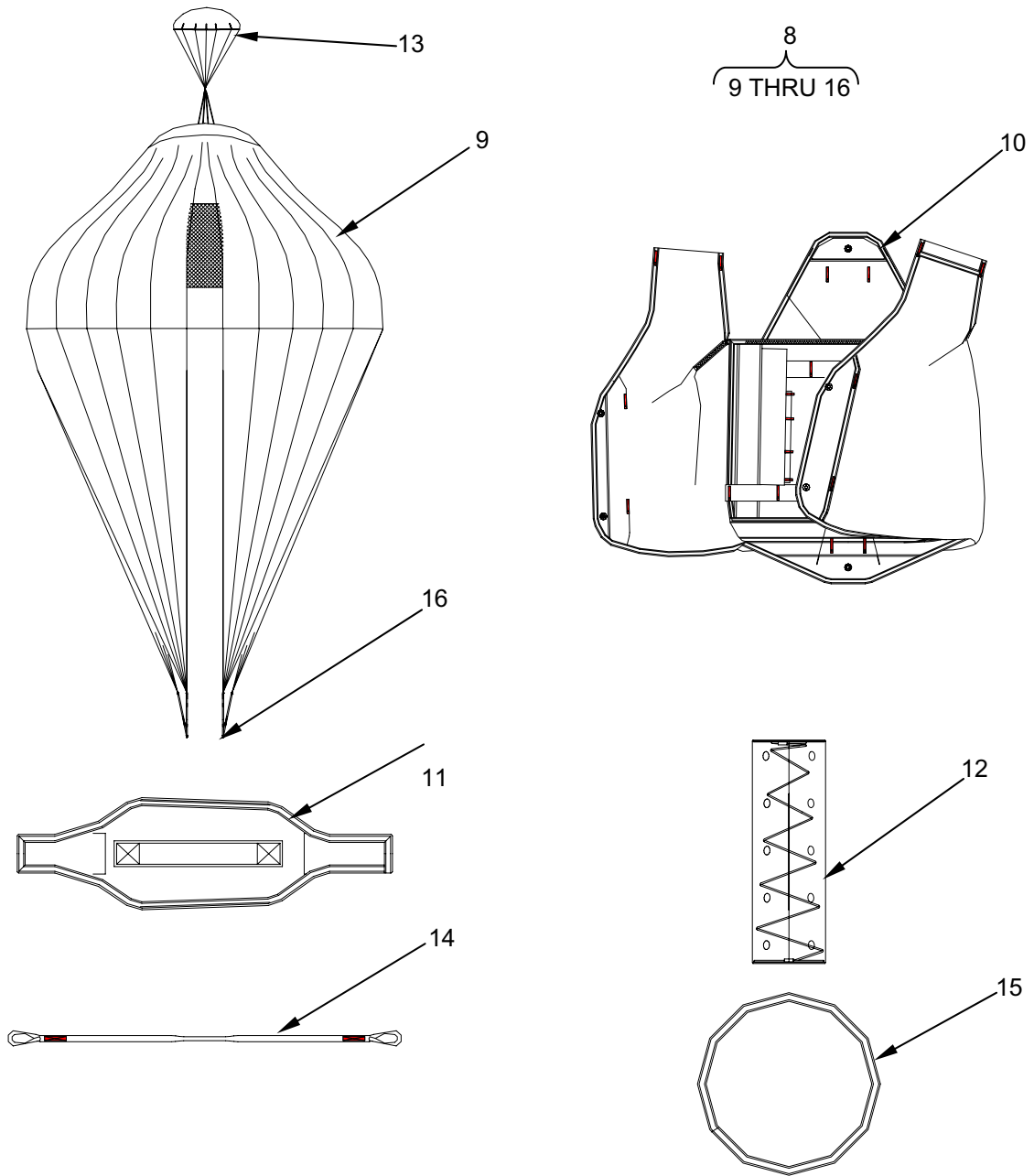


Figure 1. MC-6 Personnel Parachute System (Sheet 2 of 2).

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 00 MC-6 PERSONNEL PARACHUTE SYSTEM FIG. 1 MC-6 PERSONNEL PARACHUTE SYSTEM	
1	XAFFF		81337	11-1-7407-1	SF10-A, MAIN PARACHUTE ASSY.....	1
2	PAOZZ	1670-01-535-2252	81337	11-1-6993-1	STATIC LINE, MODIFIED, PERSONNEL .	1
3	PAOZZ	1670-01-476-3130	81337	11-1-6993-2	STATIC LINE, 5 FT. EXTENSION.....	1
4	PAOZZ	1670-01-476-3142	81337	11-1-6991-1	STATIC LINE SNAP	1
5	PAOZZ	1670-01-535-2233	81337	11-1-7053-1	HARNESS ASSY., T-11	1
6	PAOOO	1670-01-476-3131	81337	11-1-6994-1	DEPLOYMENT BAG PARACHUTE	1
7	PAOOO	1670-01-535-2228	81337	11-1-7090-1	MAIN PACK TRAY.....	1
8	PAOFF	1670-01-535-2248	81337	11-1-7408	RESERVE PARACHUTE ASSY.....	1
9	XAOFF		81337	11-1-7052-1	CANOPY ASSY., T-11R.....	1
10	PAOOO	1670-01-535-2254	81337	11-1-7055-1	RESERVE PACK TRAY ASSY.....	1
11	PAOZZ	1670-01-535-2250	81337	11-1-7058-1	RESERVE RIPCORD ASSY.	1
12	PAOZZ	1670-01-535-2246	81337	11-1-7065-1	EJECTOR SPRING ASSY.....	1
13	PAOZZ	1670-01-535-2251	81337	11-1-7064-1	EXTRACTOR ASSY, T-11R.....	1
14	PAOZZ	1670-01-535-2247	81337	11-1-7067-1	CLOSING LOOP ASSY., T-11R.....	1
15	PAOZZ	1670-01-535-4257	81337	11-1-7069-1	CAP ASSY., T-11R, PROTECTION	1
16	PAOZZ	1670-01-535-2255	81337	11-1-7057-1	RISER SET, T-11R.....	1
					END OF FIGURE	

UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PARACHUTE, PERSONNEL
NSN 1670-01-527-7537
MAIN CANOPY
REPAIR PARTS LIST

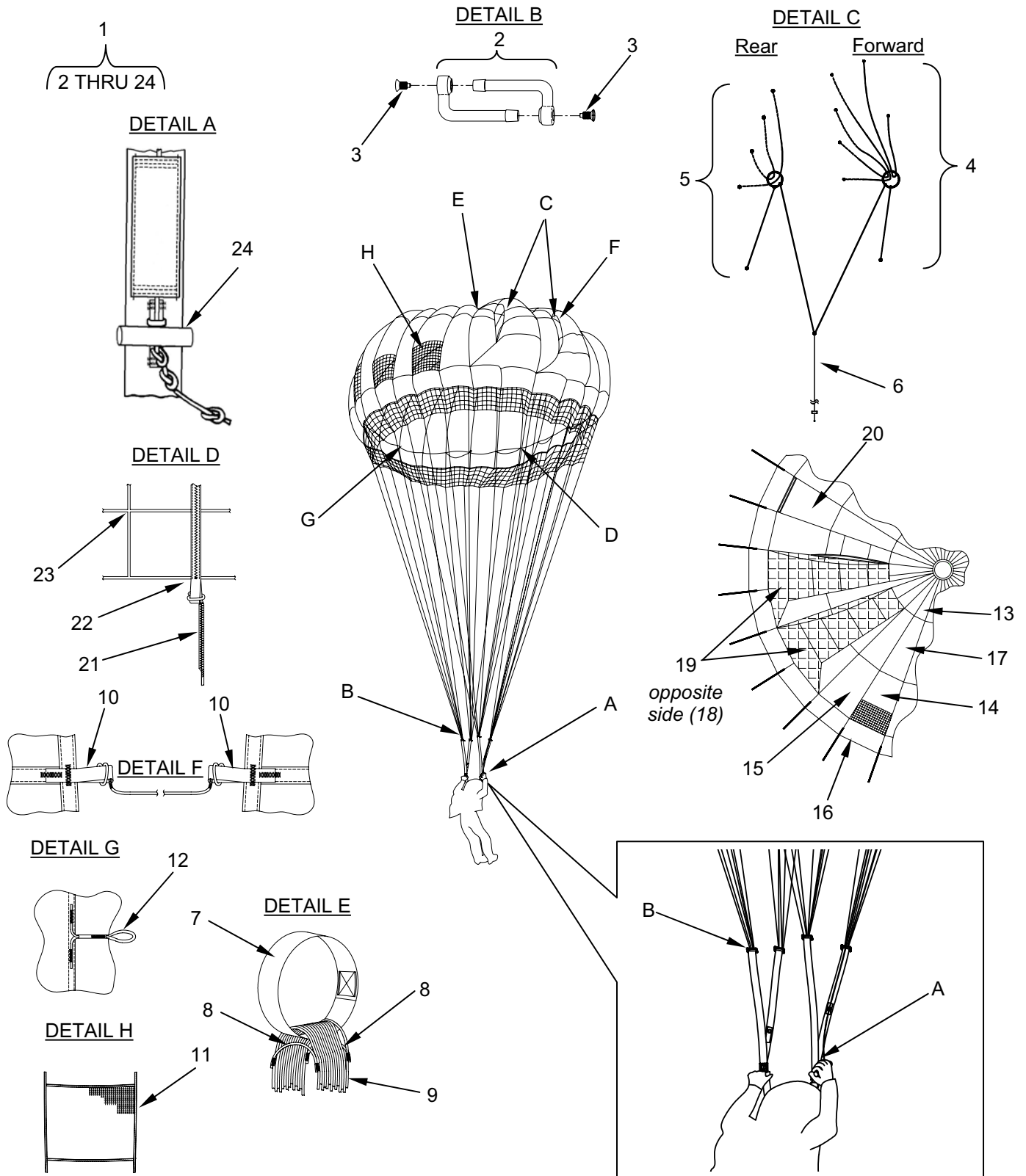


Figure 2. Main Canopy Components

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP 01 MAIN CANOPY FIG. 2 MAIN CANOPY COMPONENTS						
1	XAFFF		81337	11-1-7401-1	MAIN CANOPY	1
2	PAOZZ	1670-00-217-2421	1HHQ4	PS22002-1	● LINK, CONNECTOR	4
3	XAOZZ		96906	MS22002-7	●● SET SCREW.....	8
4	PAOZZ	1670-01-535-2235	81337	11-1-7413-1	● CONTROL LINE ASSEMBLY, FORWARD.....	2
5	PAOZZ	1670-01-535-2230	81337	11-1-7413-2	● CONTROL LINE ASSEMBLY, AFT.....	2
6	PAOZZ	1670-01-535-4262	81337	11-1-7405-2	● LOWER CONTROL LINE.....	2
7	MOOZZ		81337	11-1-7401-36	● VENT LOOP, CUT LENGTH 12 IN, MAKE FROM.....	1
8	MOOZZ		81337	11-1-7401-38	● LINE, VENT LOOP CENTERING, MAKE FROM CORD, NYLON, P/N.....	2
9	MFFFF		81337	11-1-7401-41	● VENT LINE, CUT LENGTH 25 IN, MAKE FROM CORD, NYLON, 400 LB, P/N	14
10	MOOOO		81337	11-1-7403-33	● ATTACHMENT LOOP, MAKE FROM WEBBING, NYLON, 3/8 IN WIDE, BALLY PATTERN #8962, NAT THREAD, NYLON, P/N V-T-295	28
11	PAOOO	1670-01-535-4264	81337	11-1-7401-15	● MESH PANEL ASSEMBLY	3
12	MOOOO		81337	11-1-7401-47	● CONTROL LINE LIMITER LOOP,MAKE FROM CORD,NYLON,225..	4
13	PAFFF	1670-01-535-4255	81337	11-1-7410-1	● GORE PANEL D	28
14	PAFFF	1670-01-535-4266	81337	11-1-7410-3	● GORE PANEL B2.....	3
15	PAFFF	1670-01-535-4267	81337	11-1-7410-5	● GORE PANEL B1.....	15
16	PAFFF	1670-01-535-4254	81337	11-1-7410-6	● GORE PANEL A.....	28
17	PAFFF	1670-01-535-4260	81337	11-1-7410-2	● GORE PANEL C	24
18	PAOOO	1670-01-535-4259	81337	11-1-7410-14	● RIGHT EXTENDED GORE	2
19	PAOOO	1670-01-535-4261	81337	11-1-7401-13	● LEFT EXTENDED GORE	2
20	PAFFF	1670-01-535-4263	81337	11-1-7410-4	● GORE PANEL B3 CLOTH, NYLON, LOW PERMEABILITY	6
21	PAOZZ	1670-01-535-4265	81337	11-1-7405-1	● SUSPENSION LINE.....	28
22	MFFFF		81337	11-1-7403-32	● SUSPENSION LINE LOOP,MAKE FROM WEBBIMG, NYLON, 3/8 IN WIDE .	28
23	MOOOO		81337	11-1-7401-28	● NET, ANTI-INVERSION, MAKE FROM CLOTH, NYLON RASCHAL,KNIT, 3-3/4 IN SQUARE MESH, 18IN, MIL-C-43805...	1
24	MOOOO		81337	68B219	● TOGGLE, CONTROL LINE, MAKE FROM DOWEL, WOOD, P/N A-A-1975, 3.0 FT LONG X 0.625 IN NOM.....	2
END OF FIGURE						

UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PARACHUTE, PERSONNEL
NSN 1670-01-527-7537
MAIN RISERS
REPAIR PARTS LIST

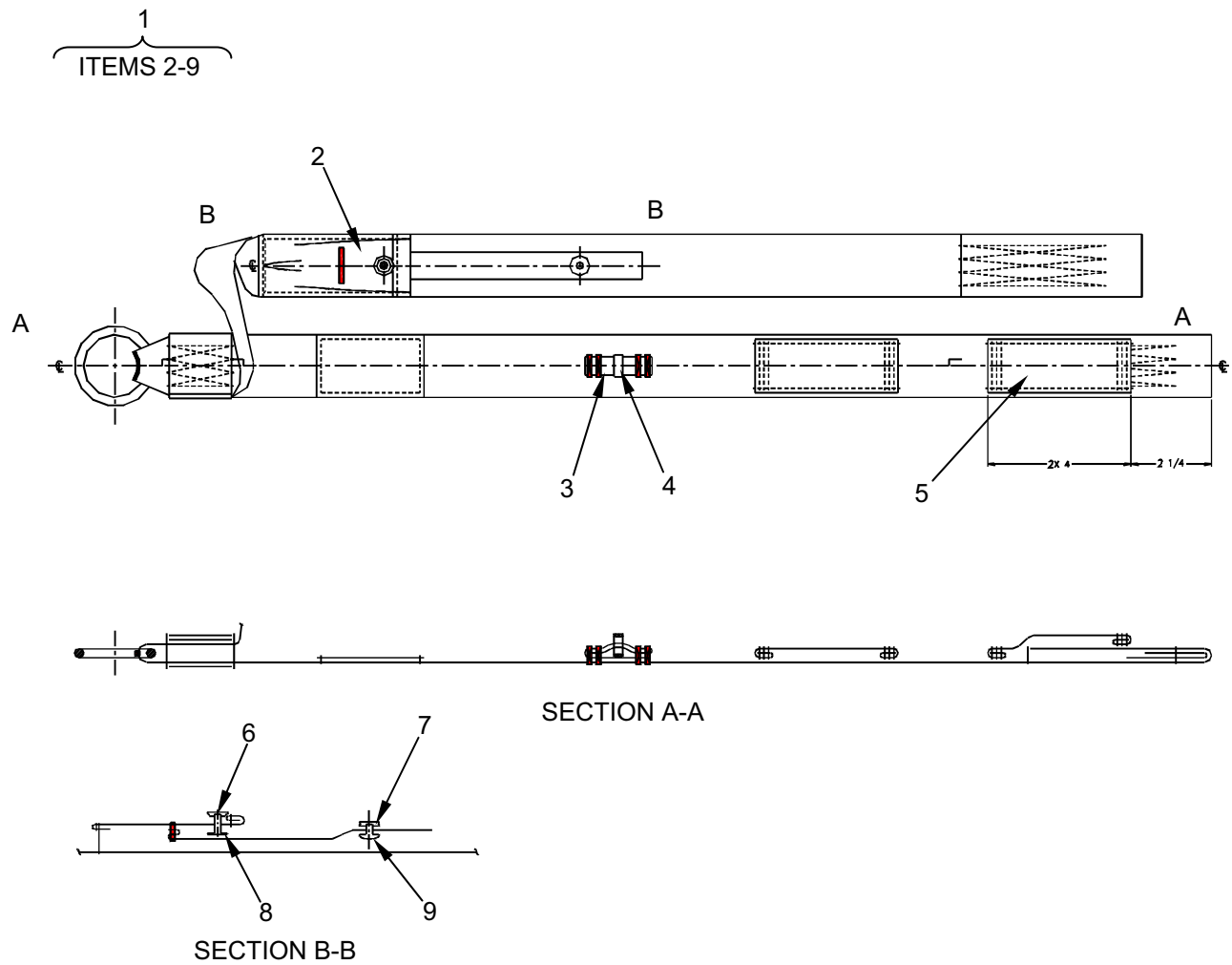


Figure 3. Main Risers
0101 00-(1 Blank)/2

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 02 MAIN RISERS FIG. 3 MAIN RISERS	
1	PAOOO	1670-01-535-2231	81337	11-1-7271-1	RISER ASSEMBLY, MAIN CANOPY, MC-6	1
2	PAOZZ	1670-01-535-2229	81337	11-1-7414-1	●POCKET, LOG RECORD BOOK, NYLON, TYPE III, CLASS 3, COLOR CAMO GRN 483	1
3	MOOOO		81337	11-1-7271-8	●STRAP, RING REEFING PARACHUTE, CUT LENGTH 5-5/8 IN, MAKE FROM	1
4	PAOZZ	1670-00-360-0469	96906	MS27762-1	●RING, REEFING, PARACHUTE .5 IN ID, STEEL OR TUBE STEEL, FINISH CADMIUM PLATE	1
5	MOOOO		81337	11-1-7271-7	●GUIDE CHANNEL CUT LENGTH 5 IN, MAKE FROM TAPE, TEXTILE	2
6	PAOZZ	5325-00-842-1879	96906	MS27980-7B	●STUD, SNAP FASTENER STYLE 2, (FINISH BLACK)	1
7	PAOZZ	5325-00-359-6844	96906	MS27980-1B	●CAP, SNAP FASTENER STYLE 2, 24 LINE (SIZE 1, FINISH BLACK)	1
8	PAOZZ	5325-01-023-3843	96906	MS27980-8B	●EYELET, METALLIC STYLE 2, (SIZE 1, FINISH BLACK)	1
9	PAOZZ	5325-00-285-6250	96906	MS27980-6B	●SOCKET, SNAP FASTENER, STYLE 2, (FINISH BLACK)	1
					END OF FIGURE	

UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PARACHUTE, PERSONNEL
NSN 1670-01-527-7537
MAIN PACK TRAY
REPAIR PARTS LIST

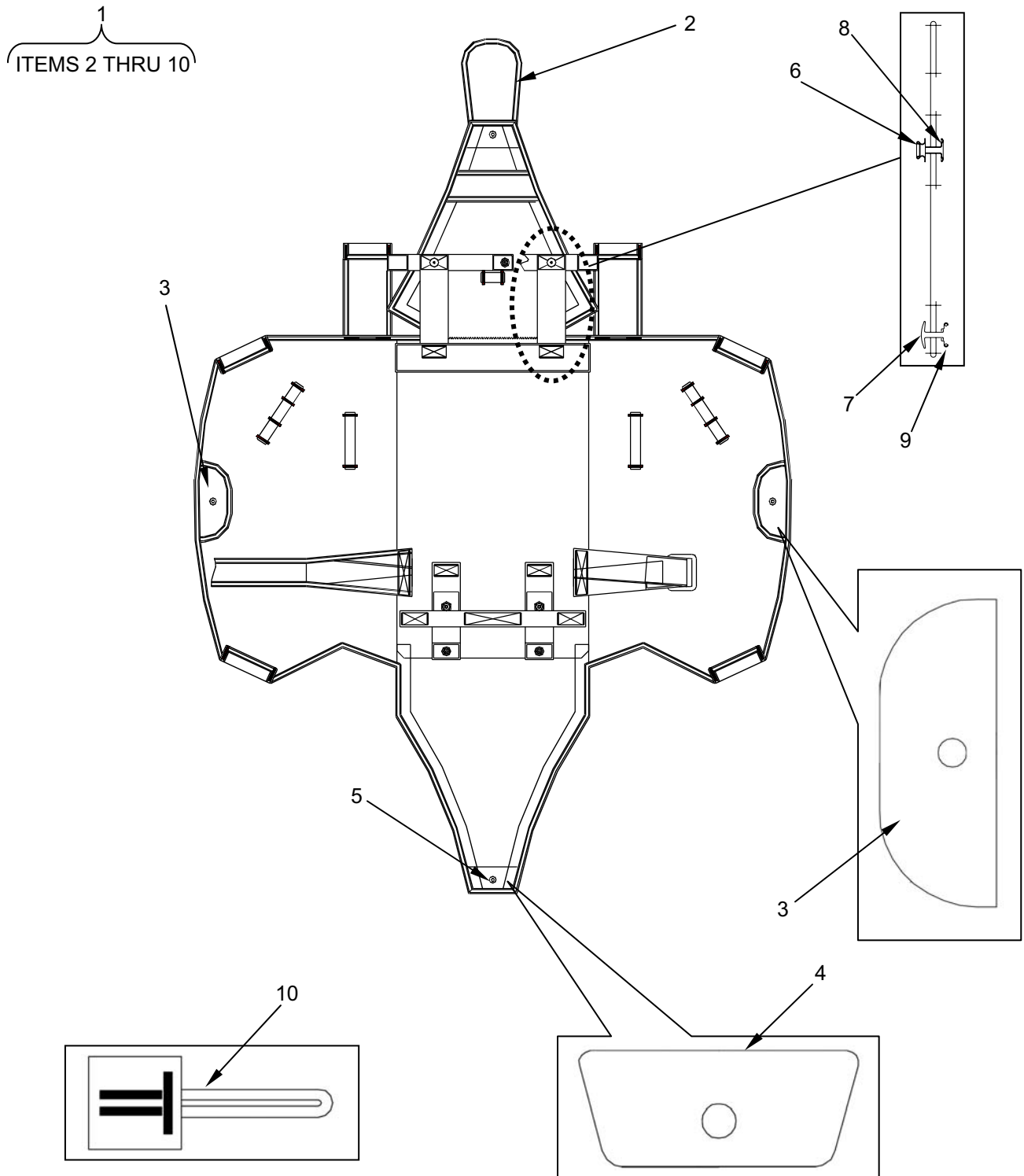


Figure 3. Main Pack Tray
0102 00-(1 Blank)/2

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 03 MAIN PACK TRAY FIG. 4 MAIN PACK TRAY	
1	PAOOO	1670-01-535-2228	81337	11-1-7090-1	MAIN PACK TRAY.....	1
2	PAOZZ	1670-01-535-2232	81337	11-1-7415-1	●PIN COVER, PACK TRAY CLOSING...	1
3	PAOZZ	1670-01-535-2237	81337	11-1-7236-1	●STIFFENER, MAIN, SIDE.....	2
4	PAOZZ	1670-01-535-4256	81337	11-1-7236-3	●STIFFENER, TOP/BOTTOM	2
5	PAOZZ	5325-01-506-9046	57771	ORRGSW305SS	●GROMMET, METALLIC ROLLED RIM/SPUR WASHER, 305 STAINLESS STEEL, NO. 0	4
6	PAOZZ	5325-00-842-1879	96906	MS27980-7B	●STUD, SNAP FASTENER STYLE 2, (FINISH BLACK)	4
7	PAOZZ	5325-00-359-6844	96906	MS27980-1B	●CAP, SNAP FASTENER STYLE 2, 24 LINE (SIZE 1, FINISH BLACK)	4
8	PAOZZ	5325-01-023-3843	96906	MS27980-8B	●EYELET,METALLIC STYLE 2, (SIZE 1, FINISH BLACK)	4
9	PAOZZ	5325-00-285-6250	96906	MS27980-6B	●SOCKET, SNAP FASTENER, STYLE 2, (FINISH BLACK)	4
10	PAOZZ	1670-01-535-2244	81337	11-1-7091-1	●LOOP, CLOSING ASSY	1
					END OF FIGURE	

UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PARACHUTE, PERSONNEL
NSN 1670-01-527-7537
HARNESS ASSEMBLY
REPAIR PARTS LIST

1
ITEMS 2-11

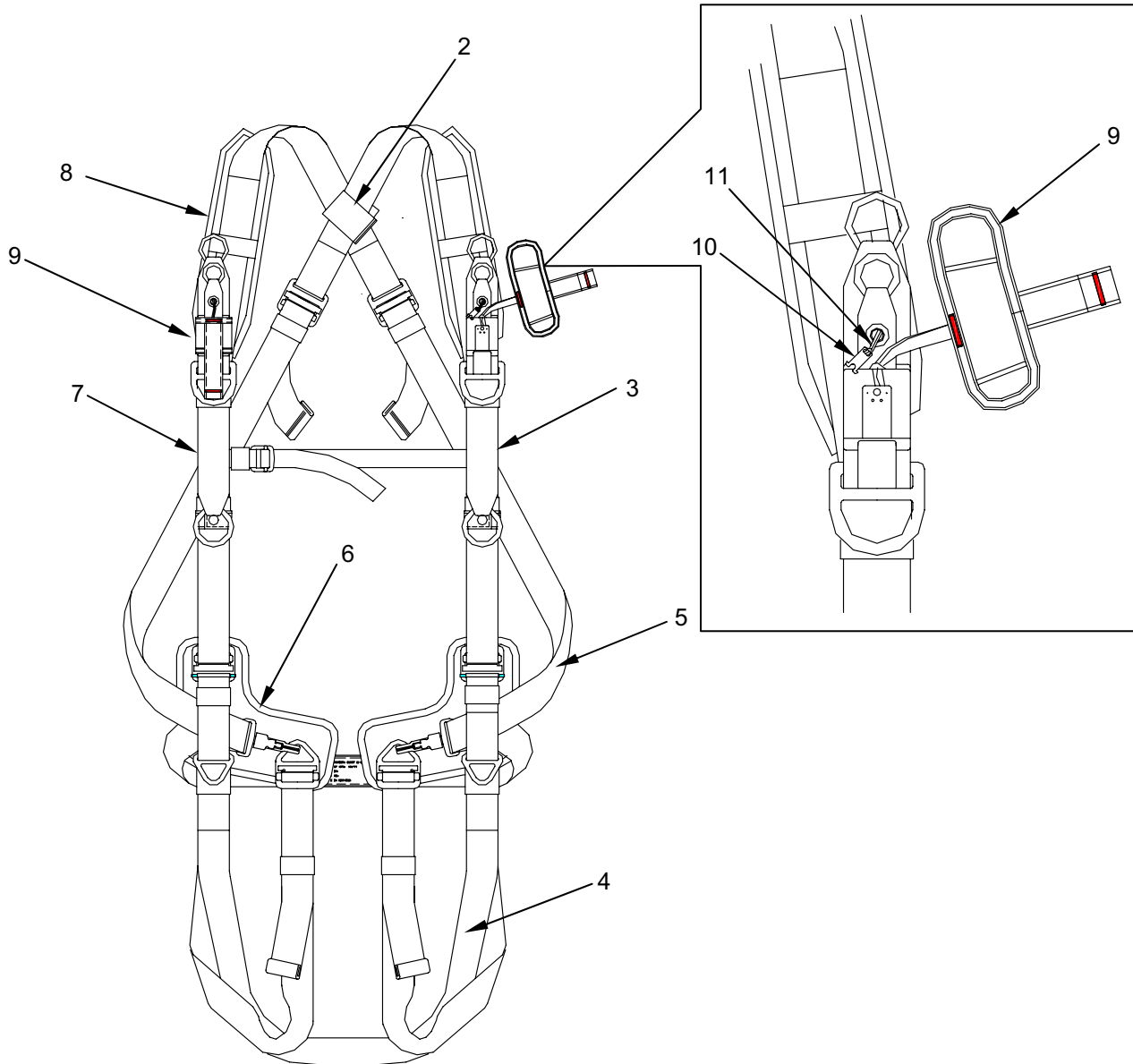


Figure 5. Harness Assembly
0103 00-(1 Blank)/2

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 04 HARNESS ASSEMBLY FIG. 5 HARNESS ASSEMBLY	
1	PAOZZ	1670-01-535-2233	81337	11-1-7053-1	HARNESS ASSY, T-11	1
2	PAOZZ	1670-01-535-2234	81337	11-1-7173-1	●DIAGONAL GUIDE ASSY, WEBBING, T12, CL1A, CG483, CLASS R.....	1
3	PAOZZ	1670-01-535-2236	81337	11-1-7159-1	●HARNESS, LEFT UPPER.....	1
4	PAOZZ	1670-01-535-2256	81337	11-1-7162-1	●SADDLE ASSY, T-11	1
5	PAOZZ	1670-01-535-2238	81337	11-1-7157-1	●DIAGONAL ASSY, T-11	1
6	PAOZZ	1670-01-535-2240	81337	11-1-7155-1	●HIP PAD ASSY, T-11	2
7	PAOZZ	1670-01-535-2239	81337	11-1-7159-2	●HARNESS, RIGHT UPPER.....	1
8	PAOZZ	1670-01-535-2242	81337	11-1-7154-1	●SHOULDER PAD ASSY, T-11	2
9	PAOZZ	1670-01-535-2241	81337	11-1-7070-1	●RISER RELEASE COVER SET, T-11.....	1
10	PAOZZ	1670-01-535-2245	81337	11-1-7214-1	●LUG, LOCKING, T-11.....	2
11	PAOZZ	1670-01-535-2243	81337	11-1-7068-1	●FABRIC LOOP, 3-RING RELEASE, T- 11	2
					END OF FIGURE	

UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PARACHUTE, PERSONNEL
NSN 1670-01-527-7537
RESERVE CANOPY
REPAIR PARTS LIST

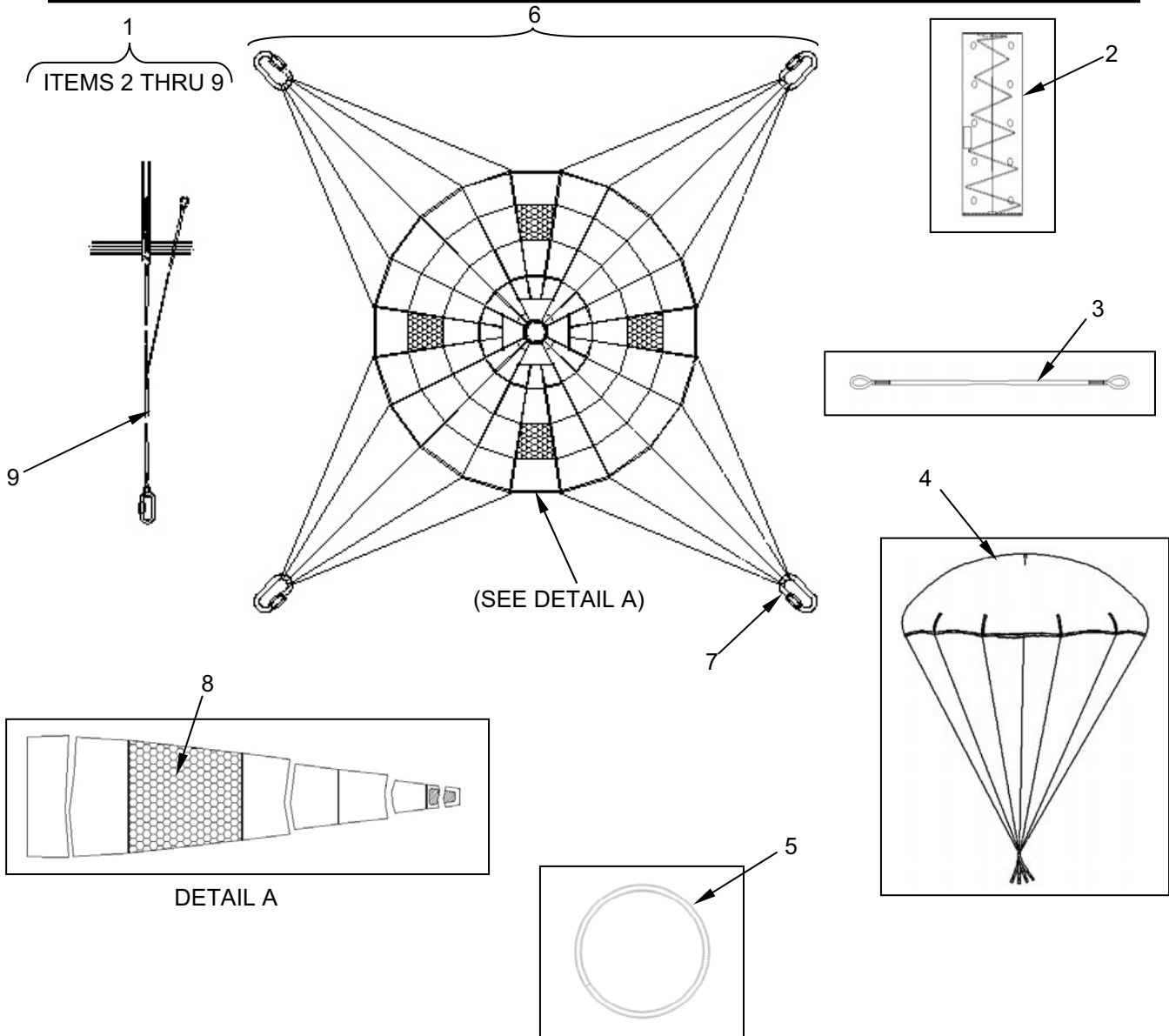


Figure 6. T-11R Parachute Assembly

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
1	PAOFF	1670-01-535-2248	81337	11-1-7408	GROUP 05 RESERVE CANOPY FIG. 6 T- 11R PARACHUTE ASSY RESERVE PARACHUTE ASSY, T-11R	1
2	PAOZZ	1670-01-535-2246	81337	11-1-7065-1	●EJECTOR SPRING ASSY, T-11R.....	1
3	PAOZZ	1670-01-535-2247	81337	11-1-7067-1	●CLOSING LOOP ASSEMBLY, T-11R	1
4	PAOZZ	1670-01-535-2251	81337	11-1-7064-1	●EXTRACTOR ASSY, T-11R	1
5	PAOZZ	1670-01-535-4257	81337	11-1-7069-1	●CAP ASSY T-11R, PROTECTION	1
6	XAOFF		81337	11-1-7052-1	●CANOPY ASSY, T-11R	1
7	PAOZZ	1670-01-330-3691	81337	11-1-7228-3	●●LINK, PARACHUTE CONNECTOR, SIZE 6	2
8	PAOOO		81337	11-1-7181-6	●●SECTION,GORE, NO.6, T-11R, MESH	4
9	PAOZZ		81337	11-1-7083-1	●●SUSPENSION LINE ASSY, T-11R.....	2
END OF FIGURE						

UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PARACHUTE, PERSONNEL
NSN 1670-01-527-7537
RESERVE RISER
REPAIR PARTS LIST

1
2 THRU 4

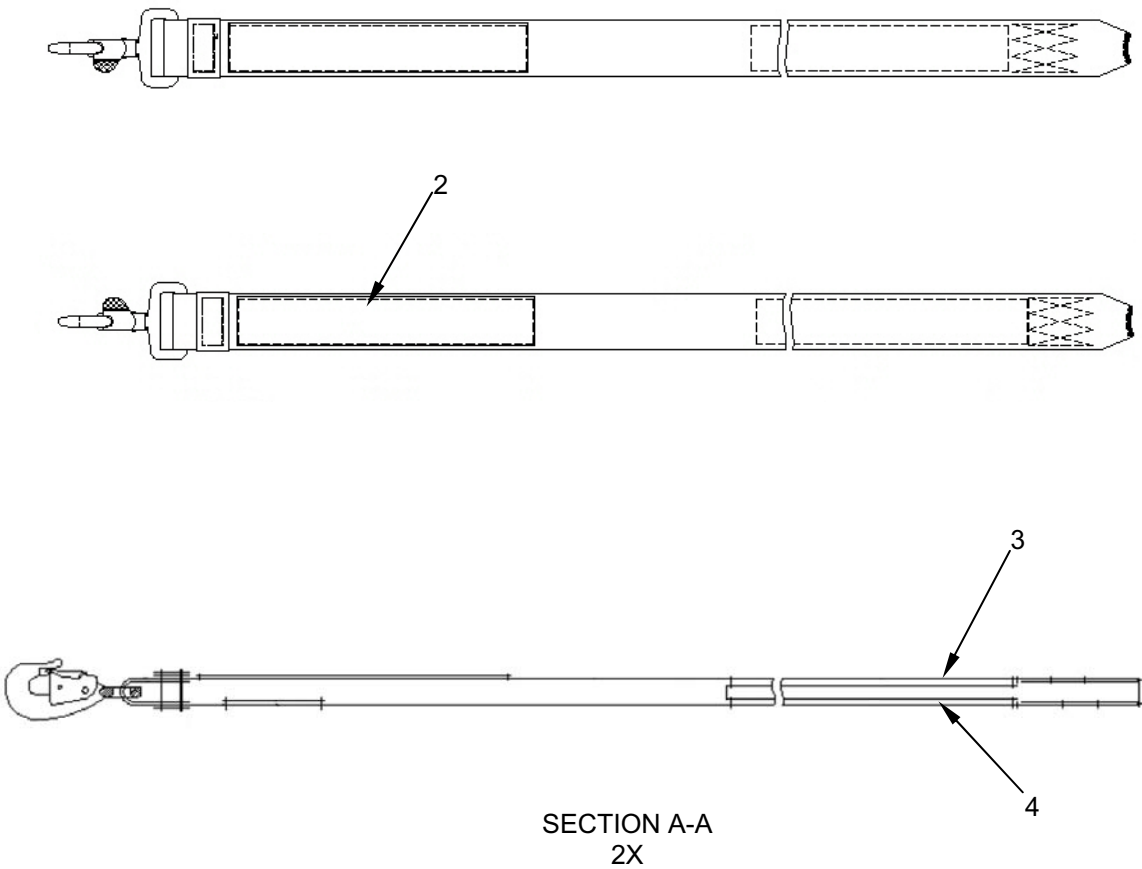


Figure 7. T-11R Riser Set
0105 00-(1 Blank)/2

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 06 RESERVE RISER FIG. 7 T-11R RISER SET	
1	PAOZZ	1670-01-535-2255	81337	11-1-7057-1	RISER SET, T-11R.....	1
2	MOOZZ		81337	11-1-7057-2	●FASTENER, LOOP 9-3/8 IN LONG, MAKE FROM TAPE, PILE, 1-1/2 IN WIDE, MIL-F-21840, T2, CL1, BLACK	1
3	MOOZZ		81337	11-1-7057-10	●FASTENER, LOOP 15 IN LONG, MAKE FROM TAPE, PILE 1-1/2 IN WIDE, MIL-F-21840, T2, CL1, BLACK	1
4	MOOZZ		81337	11-1-7057-9	●FASTENER, HOOK 15 IN LONG, MAKE FROM TAPE, HOOK, 1-1/2 IN WIDE, MIL-F-21840, T2, CL1, BLACK	1
					END OF FIGURE	

UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PARACHUTE, PERSONNEL
NSN 1670-01-527-7537
RESERVE PACK TRAY ASSEMBLY
REPAIR PARTS LIST

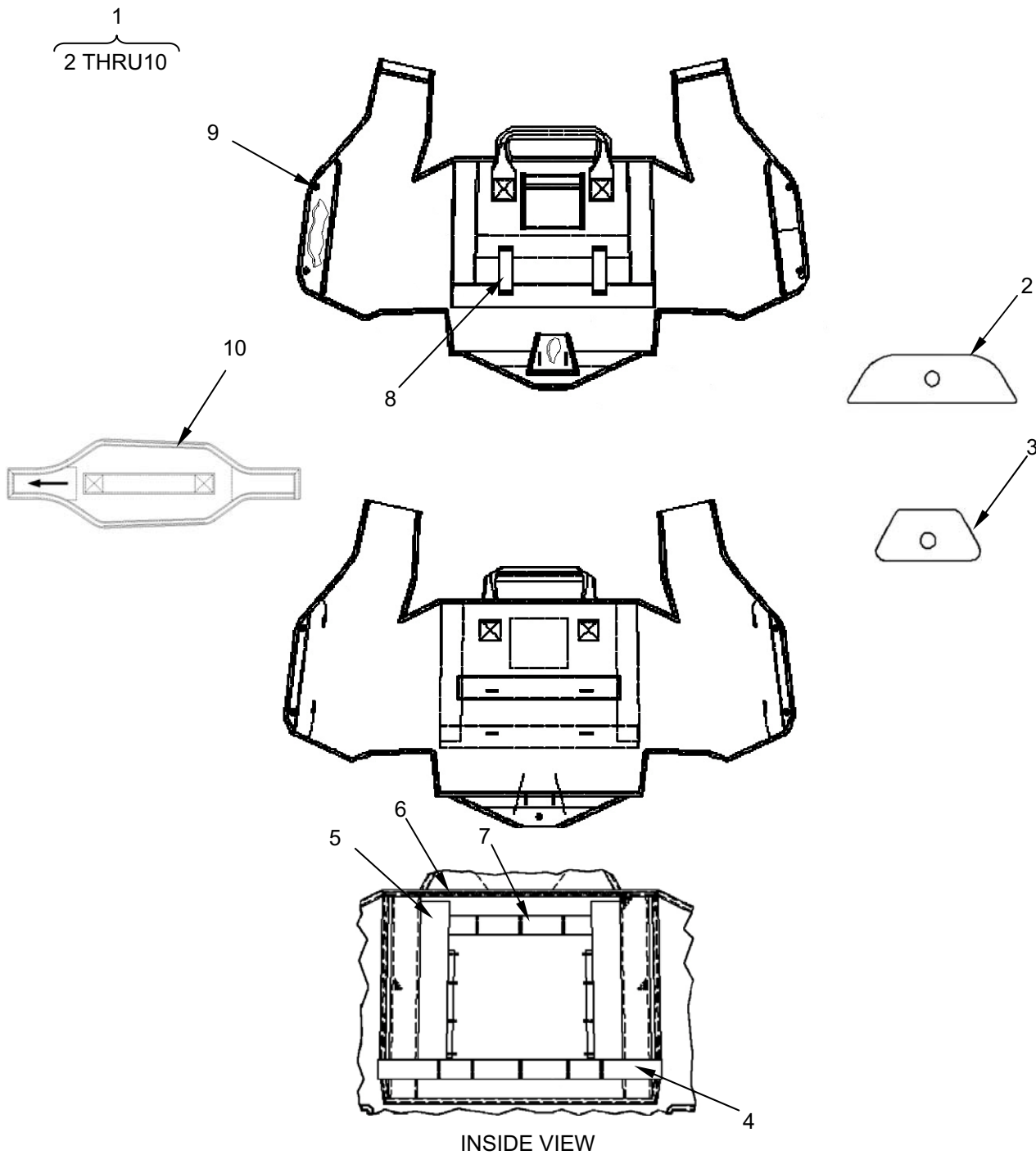


Figure 8. T-11R Pack Tray
0106 00-(1 Blank)/2

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 07 RESERVE PACK TRAY ASSEMBLY FIG. 8 T-11R PACK TRAY	
1	PAOOO	1670-01-535-2254	81337	11-1-7055-1	PACK TRAY ASSY, T-11R	1
2	PAOZZ	1670-01-535-2249	81337	11-1-7242-1	●STIFFENER, TOP FLAP, T-11R.....	1
3	PAOZZ	1670-01-535-2253	81337	11-1-7242-3	●STIFFENER, BOTTOM FLAP, T-11R....	1
4	MOOOO		81337	11-1-7169-2	●STOW BAR, ELASTIC, RISER, 16-1/2 IN LONG, MAKE FROM WEBBING, ELASTIC, 1 IN WIDE, CG483, T1, CL1 ...	1
5	MOOOO		81337	11-1-7169-5	●FASTENER, HOOK 11-1/4 IN LONG, MAKE FROM TAPE, HOOK, 1-1/2 IN WIDE, T2, CL1, BLACK	2
6	MOOOO		81337	11-1-7167-10	●EDGE BINDING, MAKE FROM TAPE, NYLON, MIL-T-5038, 3/4 IN WIDE, T3, CL1, CG483.....	1
7	MOOOO		81337	11-1-7169-3	●STOW BAR, ELASTIC RISER, 12-1/2 IN LONG, MAKE FROM WEBBING, ELASTIC, 1 IN WIDE, CG483, T1, CL1 ...	1
8	MOOOO		81337	11-1-7167-7	●LOOP, WAISTBAND 3-3/4 IN LONG, MAKE FROM WEBBING, T17, CL1A, CG483, COND R, PER PIA-W-27265.....	2
9	PAOZZ	5325-01-506-9046	57771	ORRGSW305SS	●GROMMET, METALLIC ROLLED RIM/SPUR WASHER, 305 STAINLESS STEEL, NO. 0	6
10	PAOZZ	1670-01-535-2250	81337	11-1-7058-1	●RESERVE RIPCORD ASSY, T-11R.....	1
					END OF FIGURE	

**UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PARACHUTE, PERSONNEL
NSN 1670-01-527-7537
MAIN DEPLOYMENT BAG
REPAIR PARTS LIST**

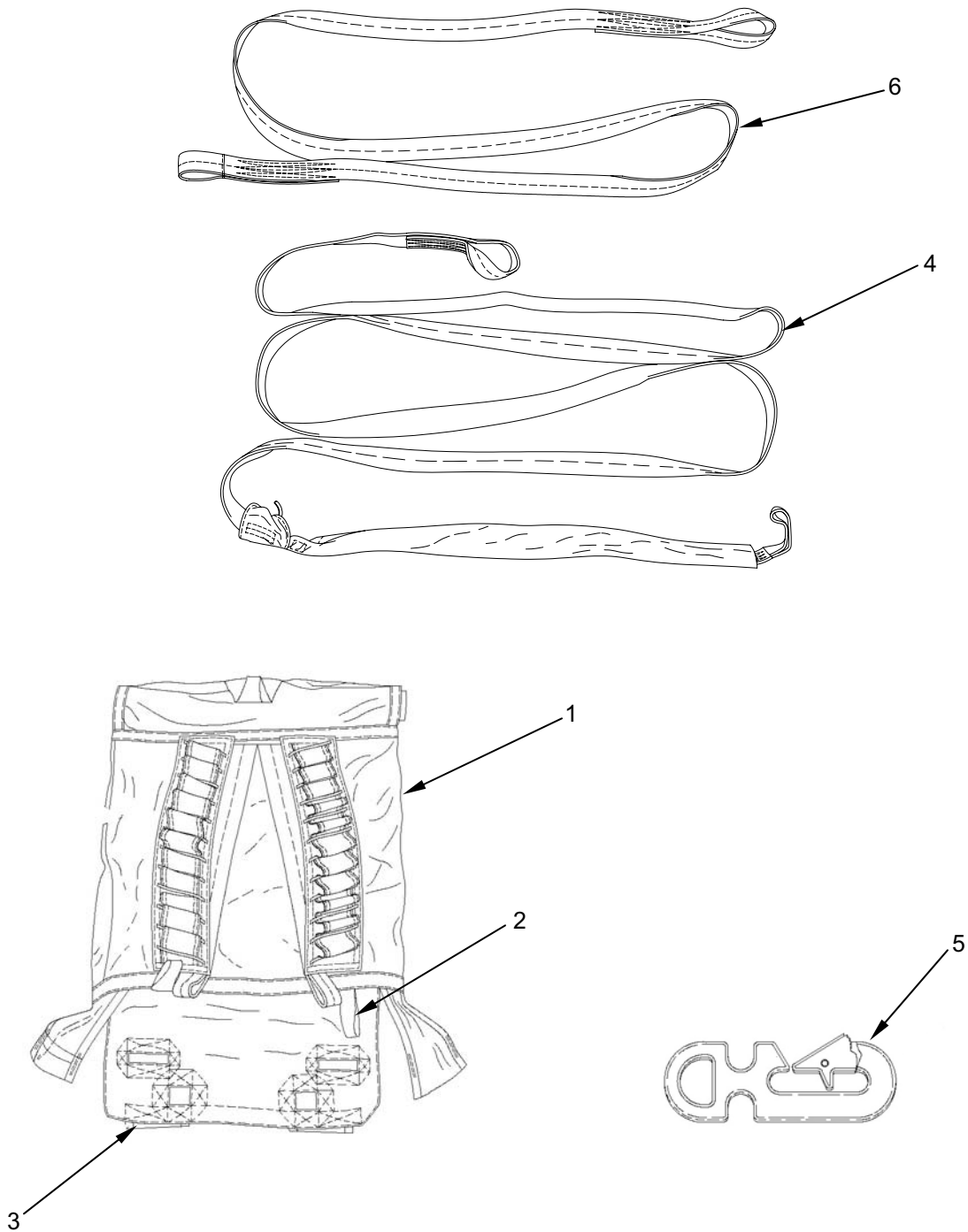


Figure 9. Main Deployment Bag

(1)	(2)	(3)	(4)	(5)	(6)	(7)
ITEM NO.	SMR CODE	NSN	CAGEC	PART NUMBER	DESCRIPTION AND USABLE ON CODE (UOC)	QTY
					GROUP 08 MAIN DEPLOYMENT BAG FIG. 9 MAIN DEPLOYMENT BAG	
1	PAOOO	1670-01-476-3131	81337	11-1-6994-1	DEPLOYMENT BAG, PARACHUTE	1
2	MOOZZ		81337	11-1-2594-18	●TIE-DOWN LOOP, MAKE FROM WEBBING, NYLON, P/N PIA-W-4088, TYPE 1, 9/16 IN WIDE, THREAD, NYLON, P/N V-T-295, TYPE 1, CL A, SIZE E, NATURAL	1
3	MOOZZ		81337	11-2-2594-5	●LOCKING STOW LOOP HOOD, MAKE FROM CLOTH, SATEEN, P/N MIL-C-10296, CLASS 1, OG THREAD, P/N V-T-295, TY I, CL A, SIZE E, NATURAL.....	1
4	PAOZZ	1670-01-535-2252	81337	11-1-6993-3	STATIC LINE, MODIFIED, PERSONNEL PARACHUTE	1
5	PAOZZ	1670-01-476-3142	81337	11-1-6991-1	STATIC LINE SNAP	1
6	PAOZZ	1670-01-476-3130	81337	11-1-6993-2	STATIC LINE EXTENSION, PERSONNEL PARACHUTE	1
					END OF FIGURE	

**UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PARACHUTE, PERSONNEL
NSN 1670-01-527-7537
BULK MATERIALS LIST**

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
GROUP 99 BULK MATERIALS LIST FIG. BULK						
1	PAOZZ	8315-00-006-9835	58536	A-A-55126-1	FASTENER TAPE, HOOK 1-1/2 IN WIDE, TYPE II, CLASS 1	1
2	PAOZZ	8315-00-006-9837	58536	A-A-55126	FASTENER TAPE, PILE 1-1/2 IN WIDE, TYPE II, CLASS 1	1
3	PAOZZ	8315-01-506-5894	81337	MIL-DTL-5038	TAPE, TEXTILE AND WEBBING, 3/8 IN, GRAY, 26270	1
4	PAOZZ	4020-00-753-6555	58536	A-A-52080-B-3	TAPE, LACING AND TYING, TYPE I, FINISH B, SIZE 3, BLACK.....	1
5	PAOZZ	8315-01-506-4404	81337	MIL-DTL-5038	TAPE, TEXTILE GRAY 1 IN WIDE, CLASS 2, COLOR 26270	1
6	PAOZZ	8315-00-176-8083	81349	MIL-T-5038	TAPE, TEXTILE TYPE III, CLASS I, 3/4 IN WIDE	1
7	PAOZZ	8310-00-261-9741	58536	A-A-52094	THREAD, COTTON, SIZE 24/4.....	1
8	PAOZZ	8310-00-262-3324	81348	V-T-295	THREAD, NYLON, SIZE A	1
9	PAOZZ	8310-00-262-2772	81348	V-T-295	THREAD, NYLON, SIZE E, GREEN, CG-483, CLASS A, TYPES I, II, III	1
10	PAOZZ	8310-00-262-2770	81348	V-T-295	THREAD, NYLON, SIZE E, NATURAL, CLASS A, TYPES I, II, OR III	1
11	PAOZZ	8310-00-227-1244	81348	V-T-295	THREAD, NYLON, SIZE FF, CG-483, CLASS A, TYPES I, II, OR III	1
12	PAOZZ	8305-00-270-1894	81349	MIL-W-5664	WEBBING, TEXTILE 1 IN	1
13	PAOZZ	8305-00-263-3598	81349	MILW4088	WEBBING, TEXTILE TYPE II, CG483, 1 INCH WIDE	1
14	PAOZZ		81337	11-1-7196-1	CLOTH, NETTING NYLON, 1/4 IN.....	1
15	PAOZZ		81337	11-1-7200-1	CORD, FIBROUS, 650LB, COLOR NATURAL, CLASS F	1
16	PAOZZ		81337	11-1-7202-1	CLOTH, PARACHUTE , NYLON, LOW PERMEABILITY, 1.5 OZ PER SQ YD	1
17	PAOZZ	8310-00-262-2777	81348	V-T-295-4	THREAD NYLON, SIZE 5, CLASS A, TYPE I	1
18	PAOZZ	5510-00-240-0070	58536	A-A-1975	DOWEL, WOOD	1
19	PAOZZ	8305-00-263-3598	81349	MILW4088	WEBBING, TEXTILE TYPE VIII, 1- 23/32 IN WIDE, CG483	1
20	PAOZZ	4020-00-262-2019	81349	MIL-C-5040	CORD, FIBROUS TYPE II, CG483	1
21	PAOZZ	8305-00-260-6909	81349	MILW4088	WEBBING, TEXTILE TYPE I, 9/16 IN WIDE	1
22	XDOZZ	8315-01-352-9305	81349	MIL-T-5038-1	TAPE, TEXTILE AND WEBBING, CL2, TYPE III, 1-1/2 IN WIDE	1
23	PAOZZ	8305-01-010-7033	58536	A-A-55183	CLOTH, NETTING, NYLON, 3-3/4 IN SQUARE MESH, 18 IN WIDE	1
24	PAOZZ	8305-00-267-3009	81349	MIL-W-4088	WEBBING, TEXTILE TYPE XVII, CG483, 1.00 IN WIDE	1
25	PAOZZ	8305-00-263-3639	81349	MILW4088	WEBBING, TEXTILE TYPE I, CL1A, NATURAL, 9/16 WIDE	1
26	PAOZZ	8305-00-943-0981	81349	MIL-C-10296	CLOTH, SATEEN	1

END OF FIGURE

**UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
EXPENDABLE AND DURABLE ITEMS LIST**

INTRODUCTION**Scope**

This work package lists expendable and durable items that you will need to operate and maintain the MC-6 Personnel Parachute System. This list is for information only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, Expendable/Durable Items (Except Medical Class V Repair Parts, and Heraldic Items), or CTA 8-100, Army Medical Department Expendable/Durable Items.

Explanation of Columns in Expendable/Durable Items List

Column (1) Item Number. This number is assigned to the entry in the list and is referenced in the narrative instructions to identify the item (e.g., "Use brake fluid (Item 5, WP 0098 00)").

Column (2) Level. This column includes the lowest level of maintenance that requires the listed item. (C=Operator/Crew; O=Unit; F=Direct Support)

Column (3) National Stock Number (NSN). This is the NSN assigned to the item which you can use to requisition it.

Column (4) Item Name, Description, Commercial and Government Entity Code (CAGEC), and Part Number (P/N). This column provides the other information you need to identify the item.

Column (5) Unit of Issue (U/I). Indicates the physical measurement or count of an item as issued per the National Stock Number shown in column (3).

EXPENDABLE AND DURABLE ITEMS LIST**Table 1. Expendable and Durable Items List.**

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) ITEM NAME, DESCRIPTION, (CAGEC), PART NUMBER	(5) U/I
1	O,F	7510-01-459-5471	Band, Rubber, 1-1/16-inch	LB
2	O,F		Band, Rubber Retainer, 1-1/4-inch	BX
3	O,F	1670-00-568-0323	Band, Rubber Retainer, 2-inch	BX
4	O,F	9160-00-253-1171	Beeswax	LB
5	O,F		Book, Log Record	BX
6	O,F	7520-00-248-9285	Brush, Stenciling	EA
7	O,F	7930-01-506-9885	Cleaner, Industrial, Multipurpose Cleaning Fluid, (1010) (Everblum, Gold TM)	GL
8	O,F	8305-01-010-7033	Cloth Netting, Nylon, 3-3/4 inch square, mesh, 18- inch	YD
9	O,F	5350-00-221-0872	Cloth, Abrasive	YD
10	O,F		Cloth, Mesh Netting, Nylon, 1/4-inch Hexagonal	YD
11	O,F	8305-01-315-7955	Cloth, Nylon Ripstop, MIL-C-44378, Type I	YD
12	O,F	8305-00-765-2863	Cloth, Nylon, MIL-C-7219, Type III, Class 3, Black	YD
13	O,F	1670-00-176-1802	Cloth, Parachute Mending	YD
14	O,F		Cloth, Parachute, Nylon, Low Permeability, 1.5 oz. Per Square Yard	YD
15	O,F	1670-01-359-9485	Cord, Dacron [®] , 600-Pound, T-C-2754, Type I	RL
16	O,F		Cord, Nylon, 650 Lb, Color Natural, Class F	RL

Table 1. Expendable and Durable Items List.

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) ITEM NAME, DESCRIPTION, (CAGEC), PART NUMBER	(5) U/I
17	O,F	4020-00-262-2019	Cord, Nylon, Type II	RL
18	O,F	4020-00-246-0688	Cord, Nylon, Type III, MIL-C-5040	YD
19	O,F		Cord, Spectra [®] , #1000	YD
20	O,F		Cord, Spectra [®] , #16	YD
21	O,F		Cuff, Fabric	EA
22	O,F	7930-00-281-4731	Dishwashing Compound	SA
23	O,F	5510-00-240-0070	Dowel, Wood, P/N A-A-1975, 3.0 ft Lg X 0.625 in Nominal	EA
24	O,F	8315-00-006-9835	Fastener Tape, Hook, 1-1/2-inch wide, A-A-55126, Type II, Class 1	RL
25	O,F	8315-00-006-9537	Fastener Tape, Pile, 1-1/2-inch wide, A-A-55126, Type II, Class 1	RL
26	O,F	5325-00-359-6844	Fastener, Snap, Button	BX
27	O,F	5325-01-023-3843	Fastener, Snap, Eyelet	BX
28	O,F	5825-00-285-6250	Fastener, Snap, Socket	BX
29	O,F	5325-00-842-1879	Fastener, Snap, Stud	BX
30	O,F	5325-01-506-9046	Grommet, Rolled Rim/Spur Washer, 305 Stainless Steel, No. 0	EA
31	O,F	7510-00-634-6583	Ink, Parachute Marking, Light Blue, A-A-59291	BT
32	O,F	9150-00-168-2000	Lubricant, Solid Film	QT
33	O,F	7520-00-973-1059	Marker, Felt Tip, Black, Permanent	BX
34	O,F	7520-01-060-5820	Pen, Ball Point	BX
35	O,F	7510-00-264-4612	Pencil, China Marker, Yellow, A-A-87	DZ
36	O,F	7510-00-240-1525	Pencil, Marking, China, White, A-A-87	DZ
37	O,F		Pin, Steel, T, Size 24	BX
38	O,F	7920-00-205-3570	Rag, Wiping	BE
39	O,F		Ruler, Measure	EA
40	O,F	9310-00-160-7858	Stencil Board, Oiled	SH
41	O,F		Tape, Kevlar, 1-inch	YD
42	O,F	4020-00-753-6555	Tape, Lacing and Tying, Nylon, A-A-52080-B-3	YD
43	O,F	8015-00-255-7673	Tape, Nylon, MIL-T-5038, Type III, Class 1, 1/2-inch wide	YD
44	O,F	8315-00-176-8083	Tape, Nylon, MIL-T-5038, Type III, Class 1, 3/4-inch wide	YD
45	O,F	7510-00-550-7175	Tape, Pressure-Sensitive, Yellow, 1/2-Inch Wide	YD
46	O,F	6640-01-516-9286	Test Paper and Color Chart, pH, 14-850-1	EA
47	O,F	8310-01-279-6073	Thread, Cotton, Ticket 8/4, Orange, A-A-52094	TU
48	O,F	8310-00-261-9741	Thread, Cotton, White, 24/4, Ticket 3	TU
49	O,F	8310-00-262-2777	Thread, Nylon, V-T-295, Size 5, Type 1, Class A	TU
50	O,F	8310-00-262-3324	Thread, Nylon, V-T-295, Size A	TU
51	O,F	8310-00-262-2772	Thread, Nylon, V-T-295, Size E	TU
52	O,F	9160-00-285-2044	Wax, Paraffin	LB
53	O,F	8305-00-268-2411	Webbing, Cotton, 80 lb.	YD
54	O,F	8305-00-270-1894	Webbing, Elastic, 1-inch	YD
55	O,F		Webbing, Nylon, Bally #8962, 3/8-inch wide	YD
56	O,F	8305-00-263-3592	Webbing, Nylon, MIL-W-4088, Type II	YD
57	O,F	8305-00-281-3012	Webbing, Nylon, MIL-W-4088, Type XII	YD
58	O,F	8305-00-263-3639	Webbing, Nylon, Type I, 9/16-inch wide, Neutral	YD
59	O,F	8305-00-260-6909	Webbing, Nylon, Type I, 9/16-inch wide, OD	YD
60	O,F	8305-00-263-3598	Webbing, Nylon, Type VIII	YD

Table 1. Expendable and Durable Items List.

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) ITEM NAME, DESCRIPTION, (CAGEC), PART NUMBER	(5) U/I
61	O,F	8305-00-267-3009	Webbing, Nylon, Type XVII	YD

**UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
TOOL IDENTIFICATION LIST**

TOOL IDENTIFICATION LIST**INTRODUCTION****Scope**

This work package lists all common tools and supplements and special tools/fixtures needed to maintain the MC-6 Personnel Parachute System.

Explanation of Columns in the Tool Identification List

Column (1) Item Number. This number is assigned to the entry in the list and is referenced in the initial setup to identify the item (e.g., Extractor (Item 32, WP 0090 00)).

Column (2) Item Name. This column lists the item by noun nomenclature and other descriptive features (e.g., Gage, belt tension).

Column (3) National Stock Number. This is the National Stock Number (NSN) assigned to the item; use it to requisition the item.

Column (4) Part Number/CAGEC. Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity) which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items. The manufacturer's Commercial and Government Entity Code (CAGEC) is also included.

Column (5) Reference. This column identifies the authorizing supply catalog or RPSTL for items listed in this work package.

TOOL IDENTIFICATION LIST**Table 1. Tool Identification List.**

(1) ITEM NO.	(2) ITEM NAME	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER/ CAGEC	(5) REFERENCE
1	Adapter, Tension Plate	1670-01-531-9101	11-1-7364-1	TM 10-1670-327-23&P
2	Anvil, Chuck Fastener	5120-00-357-6181	9902	TM 10-1670-327-23&P
3	Apex Tensioning Device			TM 10-1670-327-23&P
4	Assembly, Packing Loop, Reserve			TM 10-1670-327-23&P
5	Ballast, Bag, 14 lb.			TM 10-1670-327-23&P
6	Ballast, Bag, 27 lb.			TM 10-1670-327-23&P
7	Brush, Scrub, Household	7920-00-068-7903	H-B-515	TM 10-1670-327-23&P
8	Brush, Stenciling	7520-00-248-9285	H-B-621	TM 10-1670-327-23&P
9	Carabiner, Small			TM 10-1670-327-23&P
10	Chuck, Socket	5120-00-144-2084	1410	TM 10-1670-327-23&P
11	Chuck, Stud	5120-00-144-2088	1412	TM 10-1670-327-23&P
12	Cord, Pull Up, Closing	Locally manufactured	N/A	TM 10-1670-327-23&P
13	Cradle, Deployment Bag Packing			TM 10-1670-327-23&P
14	Die Set, Spur Grommet, No. 0, Stainless Steel	5120-00-221-1146	17-0	TM 10-1670-327-23&P

Table 1. Tool Identification List.

(1) ITEM NO.	(2) ITEM NAME	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER/ CAGEC	(5) REFERENCE
15	Die Set, Spur Grommet, Stainless Steel, No. 0	Local Purchase		TM 10-1670-327-23&P
16	Die Tool, Fastener	5120-00-090-4412	1401	TM 10-1670-327-23&P
17	Die, Eyelet	5120-00-144-2097	1407	TM 10-1670-327-23&P
18	Electric Pot, Melting	5120-00-242-1276	W6441	TM 10-1670-327-23&P
19	Fabric Puller, Light Duty	Local Purchase		TM 10-1670-327-23&P
20	File, Flat	5110-00-249-2848	GGG-F-325	TM 10-1670-327-23&P
21	Folder, Binding Tape			TM 10-1670-327-23&P
22	Gun, Hot Glue			TM 10-1670-327-23&P
23	Holder, Die Fastener	5120-00-357-6177	192	TM 10-1670-327-23&P
24	Key, Socket Head Set	5120-00-729-6392	GGG-K-275	TM 10-1670-327-23&P
25	Kit, Bag	8460-00-606-8366	MIL-K-41835	TM 10-1670-327-23&P
26	Knife	5110-00-162-2205	MIL-K-818C	TM 10-1670-327-23&P
27	Knife, Hot, Metal	3439-00-197-7656	4025	TM 10-1670-327-23&P
28	Line Insertion Tool (Finger Trap Tool)	Local Purchase	AADCRIFTG/3DLD5	TM 10-1670-327-23&P
29	Line Separator	1670-00-092-8661	11-1-3512	TM 10-1670-327-23&P
30	Mallet, Large Leather	5120-00-293-3397	GGG-H-33	TM 10-1670-327-23&P
31	Needle, Basting	8315-00-281-9484	FF-N-180	TM 10-1670-327-23&P
32	Needle, Tacking	8315-00-262-3733	FF-N-100	TM 10-1670-327-23&P
33	Packing Loop			TM 10-1670-327-23&P
34	Packing Paddle	1670-00-764-6381	11-1-152	TM 10-1670-327-23&P
35	Packing Weight	1670-00-375-9134	AA52197	TM 10-1670-327-23&P
36	Pin, Temporary Locking	Local Purchase (CYPRES)		TM 10-1670-327-23&P
37	Pliers, Diagonal Cutting	5110-00-222-2708	GGG-P-468	TM 10-1670-327-23&P
38	Pliers, Needle Nose	5120-01-021-7473	B107.13M	TM 10-1670-327-23&P
39	Press, Hand	5120-00-880-0619	A741	TM 10-1670-327-23&P
40	Presser Foot, Modified	Locally Manufactured	11-1-7088-1	TM 10-1670-327-23&P
41	Pull-up Cords			TM 10-1670-327-23&P
42	Punch, Cutting	5110-00-180-0924	GGG-P-833	TM 10-1670-327-23&P
43	Reserve Ejector Spring Retaining Rod	Locally Manufactured		TM 10-1670-327-23&P
44	Ripcord Inspection Kit	1670-00-910-3866	11-1-0595	TM 10-1670-327-23&P
45	Riser Tension Plate	1670-00-032-2705	11-1-99	TM 10-1670-327-23&P
46	Rod, Compression, Ejector Spring	Locally manufactured		TM 10-1670-327-23&P
47	Scale, Weighing	6670-00-240-5821	IN10	
48	Scissors	Local purchase		TM 10-1670-327-23&P
49	Screwdriver, Flat-tip, 1/4 in	5120-00-596-8653		TM 10-1670-327-23&P
50	Separator, Connector Link	1670-00-072-4941		TM 10-1670-327-23&P
51	Sewing Machine, Bartack, 28 Stitch	Local purchase		TM 10-1670-327-23&P
52	Sewing Machine, Box X	Local purchase	Recommended HJ1615X1X56 / 7A905	TM 10-1670-327-23&P
53	Sewing Machine, Darning	3530-01-177-8589	00-S-00256113	TM 10-1670-327-23&P
54	Sewing Machine, Double Needle	3530-00-892-4636		TM 10-1670-327-23&P
55	Sewing Machine, Heavy Duty	3530-01-177-8588	00-S-00256113	TM 10-1670-327-23&P

Table 1. Tool Identification List.

(1) ITEM NO.	(2) ITEM NAME	(3) NATIONAL STOCK NUMBER	(4) PART NUMBER/ CAGEC	(5) REFERENCE
56	Sewing Machine, Medium Duty	3530-01-177-8591	00-S-00256/13	TM 10-1670-327-23&P
57	Sewing Machine, Heavy Duty, Zig-Zag	3530-01-181-1421	00-S-00256/14	TM 10-1670-327-23&P
58	Sewing Machine, Industrial, Bartack, 42 Stitch	Local Purchase	Recommended: HJ1466-1X42/7A905	
59	Sewing Machine, Industrial, Light-Heavy Duty	3530-01-186-3079	00-S-00256/13	
60	Sewing Machine, Light Duty	3530-01-177-8590	00-S-00256/13	TM 10-1670-327-23&P
61	Sewing Machine, Medium Duty, Zig-Zag	3530-01-181-1420	00-S-00256/14	TM 10-1670-327-23&P
62	Shears	5110-00-223-6370	GGG-5-278	TM 10-1670-327-23&P
63	Stitch Removal Tool	Local Purchase		TM 10-1670-327-23&P
64	Stow Hook	1670-00-903-4570	11-1-343	TM 10-1670-327-23&P
65	Tape Measure	5210-00-182-4797	W7312	TM 10-1670-327-23&P
66	T-Bar		11-1-7089-1	TM 10-1670-327-23&P
67	Test Tube, Spring Compression	Locally Manufactured (See WP 0118 00)		TM 10-1670-327-23&P
68	Tester, Spring, 0 to 80 lbs. (scale)	6635-00-705-5469	80D (11710)	TM 10-1670-327-23&P
69	Wrench, 5/16-Inch, Open-End	5120-00-228-9503		TM 10-1670-327-23&P
70	Wrench, 7/16-Inch, Open-End	5120-00-228-9505	A-A-1358	TM 10-1670-327-23&P
71	Wrench, Adjustable, 6-Inch	5120-00-264-3795	5385A12	TM 10-1670-327-23&P
72	Wrench, Adjustable, 8-Inch	5120-00-240-5328	5385A13	TM 10-1670-327-23&P

**UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
NATIONAL STOCK NUMBER (NSN) INDEX**

STOCK NUMBER	FIG.	ITEM	STOCK NUMBER	FIG.	ITEM
8315-00-006-9835	Bulk	1	1670-01-535-2243	5	11
8315-00-006-9837	Bulk	2	1670-01-535-2244	4	10
8315-00-176-8083	Bulk	6	1670-01-535-2245	5	10
1670-00-217-2421	2	2	1670-01-535-2246	1	12
8310-00-227-1244	Bulk	11		6	2
5510-00-240-0070	Bulk	18	1670-01-535-2247	1	14
8305-00-260-6909	Bulk	21		6	3
8310-00-261-9741	Bulk	7	1670-01-535-2248	1	8
4020-00-262-2019	Bulk	20		6	1
8310-00-262-2770	Bulk	10	1670-01-535-2249	8	2
8310-00-262-2772	Bulk	9	1670-01-535-2250	1	11
8310-00-262-2777	Bulk	17		8	10
8310-00-262-3324	Bulk	8	1670-01-535-2251	1	13
8305-00-263-3598	Bulk	13		6	4
8305-00-263-3598	Bulk	19	1670-01-535-2252	1	2
8305-00-263-3639	Bulk	25		9	4
8305-00-267-3009	Bulk	24	1670-01-535-2253	8	3
8305-00-270-1894	Bulk	12	1670-01-535-2254	1	10
5325-00-285-6250	3	9		8	1
	4	9	1670-01-535-2255	1	16
5325-00-359-6844	3	7		7	1
	4	7	1670-01-535-2256	5	4
1670-00-360-0469	3	4	1670-01-535-4254	2	16
4020-00-753-6555	Bulk	4	1670-01-535-4255	2	13
5325-00-842-1879	3	6	1670-01-535-4256	4	4
	4	6	1670-01-535-4257	1	15
8305-00-943-0981	Bulk	26		6	5
8305-01-010-7033	Bulk	23	1670-01-535-4259	2	18
5325-01-023-3843	3	8	1670-01-535-4260	2	17
	4	8	1670-01-535-4261	2	19
1670-01-330-3691	6	7	1670-01-535-4262	2	6
8315-01-352-9305	Bulk	22	1670-01-535-4263	2	20
1670-01-476-3130	1	3	1670-01-535-4264	2	11
	9	6	1670-01-535-4265	2	21
1670-01-476-3131	1	6	1670-01-535-4266	2	14
	9	1	1670-01-535-4267	2	15
1670-01-476-3142	1	4			
	9	5			
8315-01-506-4404	Bulk	5			
8315-01-506-5894	Bulk	3			
5325-01-506-9046	4	5			
	8	9			
1670-01-535-2228	1	7			
	4	1			
1670-01-535-2229	3	2			
1670-01-535-2230	2	5			
1670-01-535-2231	3	1			
1670-01-535-2232	4	2			
1670-01-535-2233	1	5			
	5	1			
1670-01-535-2234	5	2			
1670-01-535-2235	2	4			
1670-01-535-2236	5	3			
1670-01-535-2237	4	3			
1670-01-535-2238	5	5			
1670-01-535-2239	5	7			
1670-01-535-2240	5	6			
1670-01-535-2241	5	9			
1670-01-535-2242	5	8			

**UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
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PART NUMBER (P/N) INDEX**

PART NUMBER	FIG.	ITEM	PART NUMBER	FIG.	ITEM
A-A-1975	Bulk	18	11-1-6993-3	9	4
A-A-52080-B-3	Bulk	4	11-1-6994-1	9	1
A-A-52094	Bulk	7		1	6
A-A-55126	Bulk	2	11-1-7052-1	6	6
A-A-55126-1	Bulk	1		1	9
A-A-55183	Bulk	23	11-1-7053-1	5	1
MIL-C-10296	Bulk	26		1	5
MIL-C-5040	Bulk	20	11-1-7055-1	8	1
MIL-DTL-5038	Bulk	3		1	10
	Bulk	5	11-1-7057-1	7	1
MIL-T-5038	Bulk	6		1	16
MIL-T-5038-1	Bulk	22	11-1-7057-10	7	3
MIL-W-4088	Bulk	13	11-1-7057-2	7	2
	Bulk	19	11-1-7057-9	7	4
	Bulk	21	11-1-7058-1	8	10
	Bulk	24		1	11
	Bulk	25	11-1-7064-1	6	4
MIL-W-5664	Bulk	12		1	13
MS22002-7	2	3	11-1-7065-1	6	2
MS27762-1	3	4		1	12
MS27980-1B	4	7	11-1-7067-1	6	3
	3	7		1	14
MS27980-6B	4	9	11-1-7068-1	5	11
	3	9	11-1-7069-1	6	5
MS27980-7B	4	6		1	15
	3	6	11-1-7070-1	5	9
MS27980-8B	4	8	11-1-7083-1	6	15
	3	8	11-1-7090-1	1	7
PS22002-1	2	2	11-1-7091-1	4	10
V-T-295	Bulk	8	11-1-7154-1	5	8
	Bulk	9	11-1-7155-1	5	6
	Bulk	10	11-1-7157-1	5	5
	Bulk	11	11-1-7159-1	5	3
V-T-295-4	Bulk	17	11-1-7159-2	5	7
ORRGSW305SS	8	9	11-1-7162-1	5	4
	4	5	11-1-7167-10	8	6
11-1-2594-18	9	2	11-1-7167-7	8	8
11-1-6991-1	9	5	11-1-7169-2	8	4
	1	4	11-1-7169-3	8	7
11-1-6993-1	1	2	11-1-7169-5	8	5
11-1-6993-2	9	6	11-1-7173-1	5	2
	1	3	11-1-7181-6	6	11

PART NUMBER	FIG.	ITEM	PART NUMBER	FIG.	ITEM
11-1-7196-1	Bulk	14	11-1-7403-33	2	10
11-1-7200-1	Bulk	15	11-1-7405-1	2	21
11-1-7202-1	Bulk	16	11-1-7405-2	2	6
11-1-7214-1	5	10	11-1-7407-1	1	1
11-1-7228-3	6	7	11-1-7408	6	1
11-1-7236-1	4	3		1	8
11-1-7236-3	4	4	11-1-7410-1	2	13
11-1-7242-1	8	2	11-1-7410-14	2	18
11-1-7242-3	8	3	11-1-7410-2	2	17
11-1-7271-1	3	1	11-1-7410-3	2	14
11-1-7271-7	3	5	11-1-7410-4	2	20
11-1-7271-8	3	3	11-1-7410-5	2	15
11-1-7401-1	2	1	11-1-7410-6	2	16
11-1-7401-13	2	19	11-1-7413-1	2	4
11-1-7401-15	2	11	11-1-7413-2	2	5
11-1-7401-28	2	23	11-1-7414-1	3	2
11-1-7401-36	2	7	11-1-7415-1	4	2
11-1-7401-38	2	8	11-2-2594-5	9	3
11-1-7401-41	2	9	11-7090-1	4	1
11-1-7401-47	2	12	68B219	2	24
11-1-7403-32	2	22			

**UNIT AND DIRECT SUPPORT MAINTENANCE
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
ILLUSTRATED LIST OF MANUFACTURED ITEMS**

ILLUSTRATED LIST OF MANUFACTURED ITEMS INTRODUCTION

Scope

This work package includes complete instructions for making items authorized to be manufactured or fabricated at the Unit and Direct Support maintenance levels.

How to Use the Index of Manufactured Items

A part number index in alphanumeric order is provided for cross-referencing the part number of the item to be manufactured to the page which covers fabrication criteria.

Explanation of the Illustrations of Manufactured Items

All instructions needed by maintenance personnel to manufacture the item are included on the illustrations. All bulk materials needed for manufacture of an item are listed by part number or specification number in a tabular list on the illustration.

ANTI-INVERSION NET PRESSER FOOT

Modify the sewing presser foot in accordance with the illustrations below. Use the modified presser foot in the repair of the anti-inversion net.

NOTE

Data in this figure may be used to modify the presser foot for repair of the anti-inversion net. A modified presser foot for splicing only net cords does not require the 1/16-inch groove illustrated in View "A".

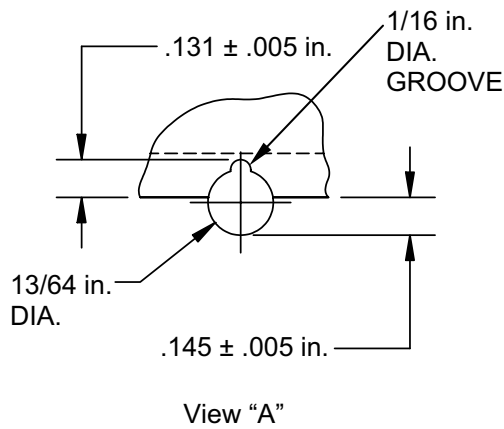
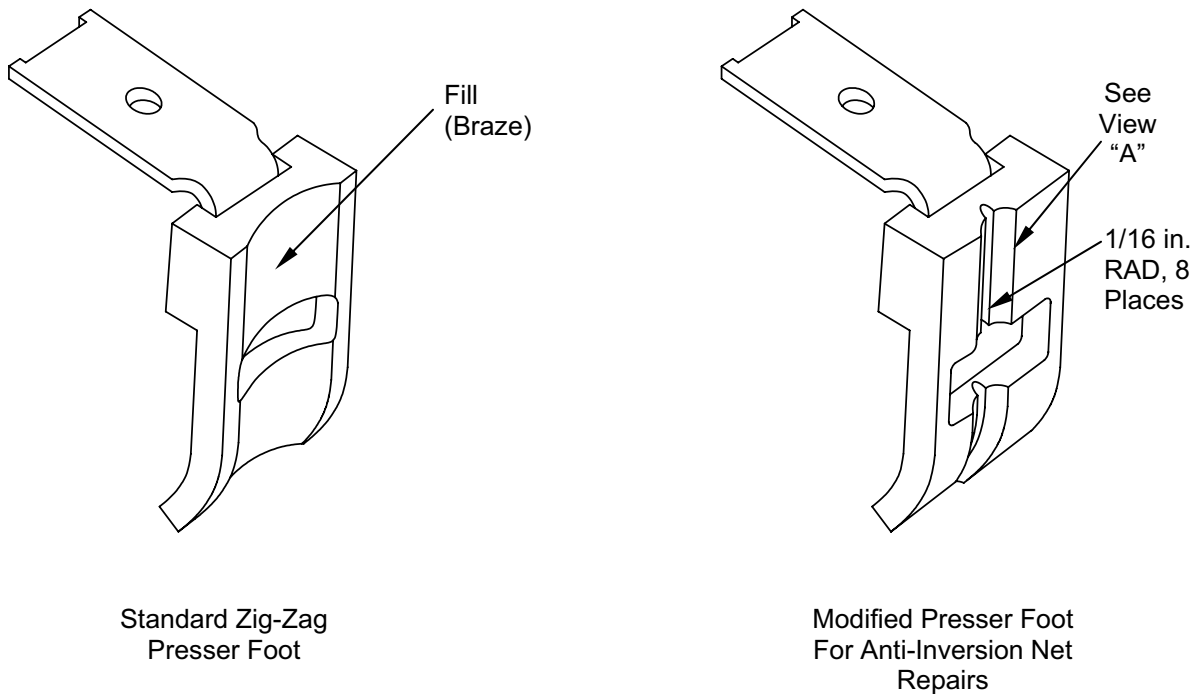


Figure 1. Anti-inversion Net Presser Foot.

SPRING COMPRESSION TEST TUBE**CAUTION**

Based on the manufacturer, the inside diameter of the PVC pipe may vary. Be sure to purchase the PVC pipe prior to the fabrication of the 32-pound weight. Slight dimensional modifications to the PVC pipe may be necessary to ensure the 32-pound weight fits inside the PVC pipe. Failure to procure the PVC pipe first may result in the improper fit of the 25-pound weight.

Tools

Drill, Electric, 5/8-in Chuck
Welding Machine

Materials/Parts

Pipe, PVC, 8-in
Sheet Metal, Aluminum, 1/8-IN Thick
Rod, Aluminum, 3/8-IN Diameter
Weighted Material
Test Set, Spring Compression
(Composition of assembled components listed above.)

Fabricate the test tube as follows:

1. Acquire a piece of pipe (PVC pipe) with an inside dimension of 8-inches (minimum). The outside dimensions should be around 8-1/2-inches.
2. Cut the pipe to a length of 36-inches and determine a top and bottom.
3. Install the inspection slot by placing a mark 1-1/2-inches up from the bottom. Make an additional mark 7-1/2-inches up from the bottom.
4. Cut a 1-inch wide slot from the 1-1/2-inch mark to the 7-1/2-inch mark. The top and bottom slots are rounded, but this is not required.

NOTE

The purpose of the slot is to view the spring when compressed under the 32-pound weight.

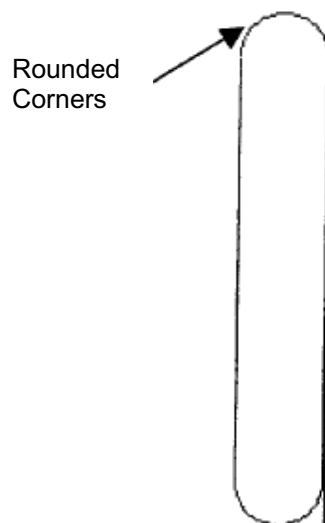


Figure 2. Viewing Slot.

SPRING COMPRESSION TEST TUBE 32-POUND WEIGHT

Fabricate the 32-lb weight as follows:

1. From 1/8-inch thick aluminum sheet metal, cut one piece 24-inches by 11-inches and two circular pieces 7-5/8 inches in diameter.
2. From a 3/8-inch diameter aluminum rod, cut one piece 7-5/8 inches in length.

NOTE

The rectangular piece will form the body of the 32-pound weight, the 3/8-inch diameter rod will form the carrying handle, and the two circular disks will form the top and bottom of the cylinder used to retain the weight material placed inside.

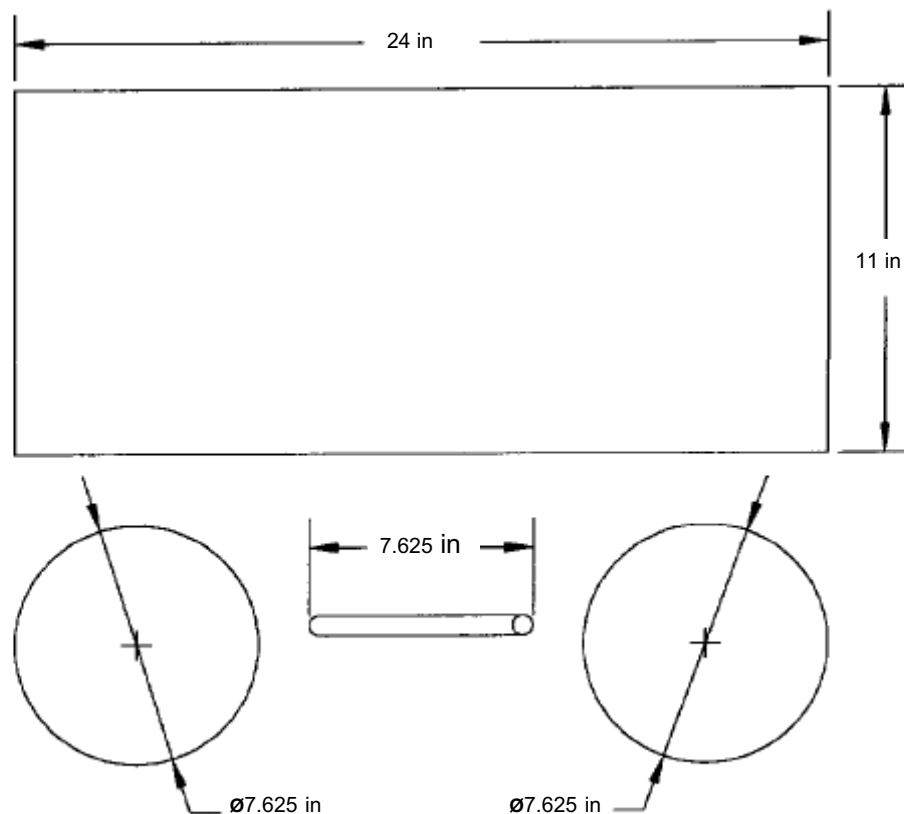


Figure 3. Fabricating 32-pound Weight.

3. Form the rectangular piece to conform to the circumference of the two circular disks.
4. Position the top disk 2-inches down from the top of the rectangular piece when the weld is made to join the pieces. This allows room for the installation of the 7 5/8-inch long, 3/8-inch diameter aluminum rod, which will be used as the carrying handle.

SPRING COMPRESSION TEST TUBE 32-POUND WEIGHT - continued

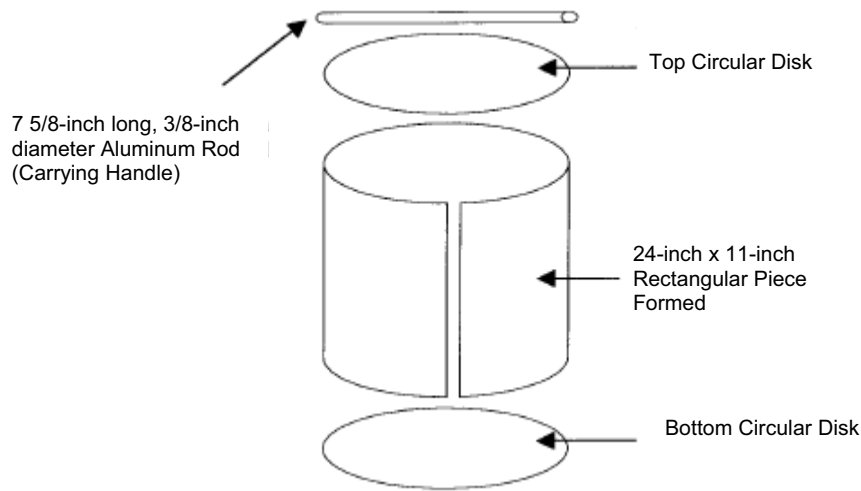


Figure 4. Fabricating 32-pound Weight (continued).

5. Position the bottom disk flush with the bottom of the rectangular piece when the weld is made.
6. Position the carrying handle even with the top of the rectangular piece and weld in place.

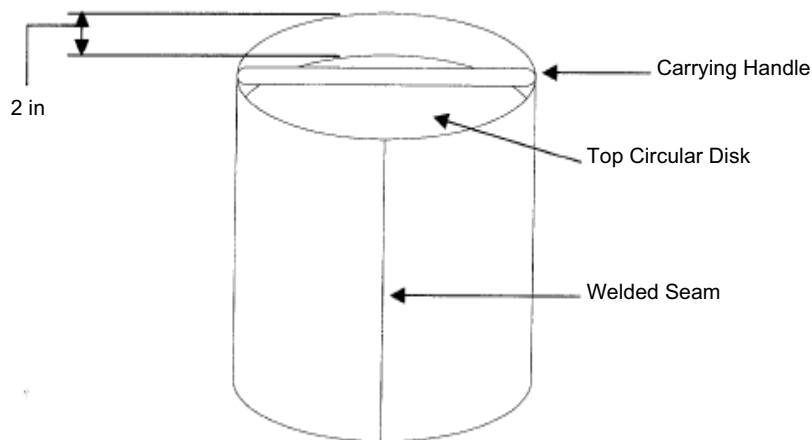
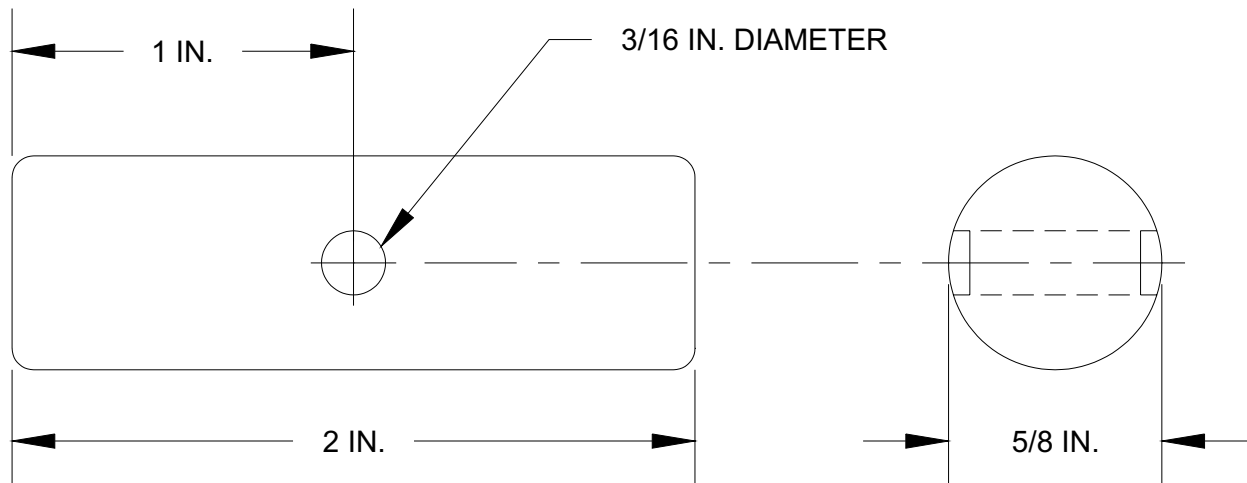


Figure 5. Fabricating 32-pound Weight (continued).

NOTE

The overall weight when complete will not exceed 32-pounds. Weight higher than 25-pounds will result in unnecessary replacement of ejector spring.

7. Drill a hole in the top disk. Do not make the diameter of the hole any larger than needed to fill the weight.
8. Suggested materials for weight include BBs, birdshot, or sand. Fill the cylinder to no less than 24-lbs, 12-oz and no more than 24-lbs, 15-oz.
9. Permanently close the hole ensuring no filter weight loss occurs. Welding the hole closed is recommended.

CONTROL TOGGLE

- ROUND/BEVEL ALL EDGES.
- FINISH WITH A COMMERCIAL TUNG OIL FINISH.

Figure 6. Control Toggle.

RESERVE RIPCORD PULL HANDLE CUFF

Fabricate a reserve ripcord pull handle cuff in accordance with the illustration below. Make from 8.2 oz cotton sateen cloth. Use a number 3 spur grommet.

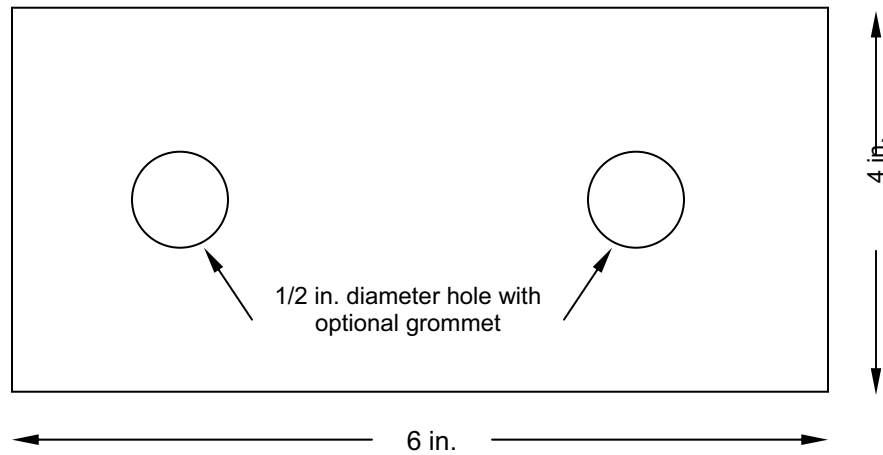


Figure 7. Reserve Ripcord Pull Handle Cuff.

END OF WORK PACKAGE

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MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537
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 Reserve Canopy, Repair 0059 00
 Ripcord Pull Test 0071 00
 Scoop, Repair 0066 00
 Skirt Hesitator Ties, Replace 0065 00
 Suspension Line, Repair, Replace 0060 00
 Suspension Line Attaching Loop, Repair 0068 00
 Reserve Pack Tray Assembly:
 Edge Binding, Repair 0075 00
 Elastic Riser Stow Bars, Repair, Replace 0077 00
 Fastener Tape Hook, Inspect, Repair, Replace 0079 00
 Grommets Size 0, Repair, Replace 0076 00
 Reserve Pack Tray Assembly, Repair, Replace 0074 00
 Ripcord Assembly, Replace, Test 0081 00
 Stiffener, Replace 0080 00
 Waistband Loops, Repair, Replace 0078 00
 Reserve Parachute Packing Procedures 0016 00
 Reserve Risers, Repair, Replace 0072 00

R- continued

Reserve Riser Hook and Pile Fastener Tape, Repair, Replace 0073 00

S

Searing and Waxing 0018 00

Service Upon Receipt 0005 00

Shakeout and Airing 0010 00

Shipment, Preparation for 0094 00

Storage, Preparation for 0093 00

T

Theory of Operation 0003 00

Tool Identification List 0110 00

U

Unit Maintenance Introduction 0004 00


Universal Static Line Modified (USL) 0087 00

TM 10-1670-327-23&P

By Order of the Secretaries of the Army, Air Force, and Navy:

PETER J. SCHOOMAKER
General, United States Army
Chief of Staff

Official:


SANDRA R. RILEY
Administrative Assistant to the
Secretary of the Army
0602409

MICHAEL E. RYAN
General, USAF
Chief of Staff

Official:

GEORGE T. BABBETT
General, USAF
Commander, Air Force Materiel Command

W.E. LANDAY, III
Rear Admiral, USN
Program Executive Officer
Littoral and Mine Warfare (PEO LMW)
Naval Sea Systems Command

DISTRIBUTION:

To be distributed in accordance with initial distribution IDN 256882, requirements for TM 10-1670-327-23&P.

These are the instructions for sending an electronic 2028

The following format must be used if submitting an electronic 2028. The subject line must be exactly the same and all fields must be included; however only the following fields are mandatory: 1, 3, 4, 5, 6, 7, 8, 9, 10, 13, 15, 16, 17, and 27.

From: "Whomever" <whomever@avma27.army.mil>
To: amssbriml@natick.army.mil

Subject: DA Form 2028

1. From: Joe Smith
2. Unit: home
3. Address: 4300 Park
4. City: Hometown
5. St: MO
6. Zip: 77777
7. Date Sent: 19-OCT-93
8. Pub no: 55-2840-229-23
9. Pub Title: TM
10. Publication Date: 04-JUL-85
11. Change Number: 7
12. Submitter Rank: MSG
13. Submitter FName: Joe
14. Submitter MName: T
15. Submitter LName: Smith
16. Submitter Phone: 123-123-1234
17. Problem: 1
18. Page: 2
19. Paragraph: 3
20. Line: 4
21. NSN: 5
22. Reference: 6
23. Figure: 7
24. Table: 8
25. Item: 9
26. Total: 123
27. Text:

This is the text for the problem below line 27.

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25-30; the proponent agency is ODISC4.						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE 21 October 2003
TO: (Forward to proponent of publication or form) (Include ZIP Code) US ARMY TANK AUTOMOTIVE AND ARMAMENT COMMAND ATTN: AMSTA-LC-CECT 15 KANSAS ST NATICK, MA 01760-5052						FROM: (Activity and location) (Include ZIP Code) PFC JANE DOE Co A 3 RD Engineer Br. Ft Leonard Wood, MO 63108	
PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS							
PUBLICATION/FORM NUMBER TM 10-1670-296-23&P						DATE 30 October 2002	TITLE Unit Manual for Ancillary Equipment for Low Velocity Air Drop Systems
ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON (Provide exact wording of recommended changes, if possible).	
	0036 00-2				1	<i>In Table 1, Sewing Machine Code Symbols, the second sewing machine code symbol should be MDZZ not MD22</i> <i>Change the manual to show Sewing Machine, Industrial: Zig-Zag; 308 stitch; medium-duty; NSN 3530-01-181-1421 as a MDZZ code symbol.</i>	
<i>*Reference to line numbers within the paragraph or subparagraph.</i>							
TYPED NAME, GRADE OR TITLE Jane Doe, PFC				TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION (508) 233-4141 DSN 256-4141		SIGNATURE Jane Doe <i>Jane Doe</i>	

TO: <i>(Forward direct to addressee listed in publication)</i> US ARMY TANK AUTOMOTIVE AND ARMAMENT COMMAND ATTN: AMSTA-LC-CECT 15 KANSAS ST NATICK, MA 01760-5052	FROM: <i>(Activity and location) (Include ZIP Code)</i> PFC JANE DOE Co A 3 RD Engineer Br. Ft Leonard Wood, MO 63108	DATE 21 October 2003
--	--	--------------------------------

PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER TM 10-1670-296-23&P	DATE 30 October 2002	TITLE Unit Manual for Ancillary Equipment for Low Velocity Air Drop Systems
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PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION
0066 00-1					4			<i>Callout 16 in figure 4 is pointed to a <u>D-Ring</u>. In the Repair Part List key for Figure 4, item 16 is called a <u>Snap Hook</u>. Please correct one or the other.</i>

SAMPLE

PART III – REMARKS <i>(Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)</i>

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TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
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TO: (Forward to proponent of publication or form) (Include ZIP Code) COMMANDER U.S. ARMYTANK-AUTOMOTIVE AND ARMAMENT COMMAND ATTN: AMSTA-LC-CECT 15 KANSAS STREET NATICK, MA 01760-5052						FROM: (Activity and location) (Include ZIP Code)	
PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS							
PUBLICATION/FORM NUMBER TM 10-1670-327-23&P						DATE 31 January 2006	TITLE: Unit and Direct Support Maintenance Manual (Including Repair Parts and Special Tools List (RPSTL)) for MC-6 Personnel Parachute System
ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON <i>(Provide exact wording of recommended changes, if possible).</i>	
<i>*Reference to line numbers within the paragraph or subparagraph.</i>							
TYPED NAME, GRADE OR TITLE					TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION		SIGNATURE

TO: <i>(Forward direct to addressee listed in publication)</i> COMMANDER U.S. ARMYTANK-AUTOMOTIVE AND ARMAMENT COMMAND ATTN: AMSTA-LC-CECT 15 KANSAS STREET NATICK, MA 01760-5052	FROM: <i>(Activity and location) (Include ZIP Code)</i>	DATE
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PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER TM 10-1670-327-23&P	DATE 31 January 2006	TITLE: Unit and Direct Support Maintenance Manual (Including Repair Parts and Special Tools List (RPSTL)) for MC-6 Personnel Parachute System
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<p align="center">RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS</p> <p align="center">For use of this form, see AR 25-30; the proponent agency is ODISC4.</p>						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE
TO: (Forward to proponent of publication or form) (Include ZIP Code) COMMANDER U.S. ARMYTANK-AUTOMOTIVE AND ARMAMENT COMMAND ATTN: AMSTA-LC-CECT 15 KANSAS STREET NATICK, MA 01760-5052						FROM: (Activity and location) (Include ZIP Code)	
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PART III – REMARKS *(Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

Empty space for remarks

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
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RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25-30; the proponent agency is ODISC4.						Use Part II (reverse) for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE
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TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
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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 decigrams = .035 ounce
 1 dekagram = 10 grams = .35 ounce
 1 hectogram = 10 dekagrams = 3.52 ounces
 1 kilogram = 10 hectograms = 2.2 pounds
 1 quintal = 100 kilograms = 220.46 pounds
 1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

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

Square Measure

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

Cubic Measure

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

Approximate Conversion Factors

<i>To change</i>	<i>To</i>	<i>Multiply by</i>	<i>To change</i>	<i>To</i>	<i>Multiply by</i>
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)

$\frac{5}{9}$ (after subtracting 32) Fahrenheit temperature

Celsius temperature

PIN: 082992-000