

X XXXXXXXX EMERGENCY XXXXXXXX X

MWO effective date is 1 August 2008 and completion date is 31 July 2009

MWO 10-1670-327-23-1

MODIFICATION WORK ORDER

**MODIFICATION INSTRUCTION FOR
MC-6 PERSONNEL PARACHUTE SYSTEM
NSN 1670-01-527-7537**

**UPGRADE TO THE T-11 HARNESS ASSEMBLY,
RESERVE PACK TRAY,
MC-6 MAIN PACK TRAY, MAIN RISERS,
AND RESERVE RISERS**

**HEADQUARTERS, DEPARTMENT OF THE ARMY, WASHINGTON, D.C.
1 August 2008**

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this MWO. If you find any technical errors that could cause personal injury or damage to materiel, please let us know. Contact Mike Murphy and report the needed corrections by telephoning DSN 256-4581 or Commercial (508) 233-4581. Additionally, complete a DA Form 2028, Recommended Changes to Publications and Blank Forms, and mail to: TACOM Life Cycle Management Command, ATTN: AMSTA-LC-LMPP / TECH PUBS, 1 Rock Island Arsenal, Rock Island, IL 61299-7630. You may also submit your recommended changes via electronic mail or by fax. Our fax number is (DSN 793-0726, and commercial number 309-782-0726). Our e-mail address is TACOMLCMC.DAForm2028@us.army.mil. A reply will be furnished to you.

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1. **Purpose.** The MC-6 Parachute System is the replacement for the currently fielded MC1-1D Main parachute, Center Pull Reserve Parachute Assemblies. Conduct local maintenance upgrades to the MC-6 Parachute System. Upgrades to the MC-6 parachutes system are required based on identified safety concerns with the current configuration. The upgrades will only affect the T-11 Harness Assembly, MC-6 Main Riser Assembly, MC-6 Main Pack Tray, Reserve Pack Tray, and Reserve risers.
2. **Priority.** This modification is classified as EMERGENCY as a result of an Emergency Safety of Use/Flight Message (TACOM NO. SOUM-07-016, dated 10 May 2007). The equipment is dead-lined/grounded. The restriction remains in effect until this modification is applied.
 - a. Equipment is currently being fielded. All authorized MC-6 parachute systems with a minimum of 1 year or more of service remaining will be modified and completed no later than the scheduled completion date.
 - b. The MWO will be applied to serviceable MC-6 Parachute Systems prior to issue and/or subsequent to the scheduled completion date.
3. **End Item(s) or system(s) to be modified.** This applies to all MC-6 Parachute Systems.

Table 1. End Item to be Modified.

Nomenclature	National Stock Number	Part Number	Type and Model	CAGEC	Serial Number	LIN
MC-6 Parachute System	1670-01-527-7537	11-1-7400	MC-6	81337	ALL	A46878

4. **Module(s), (components, assemblies, subassemblies, boards, and cards) to be modified.** The following items whether installed or in PPL/ASL or depot stock shall be modified.

Table 2. Assemblies to be Modified.

Nomenclature	National Stock Number	Type and Model	Part Number	CAGEC
Harness Assy, T-11	1670-01-535-2233	T-11 Harness Assy	11-1-7053-1	81337
Reserve Pack Tray Assembly, T-11R	1670-01-535-2254	T-11 Reserve Pack Tray	11-1-7055-1	81337
Main Pack Tray, Personnel Parachute, Troop	1670-01-535-2228	MC-6 Main Pack Tray	11-1-7090-1	81337
Riser Assembly, Main Canopy, MC-6	1670-01-535-2231	MC-6 Main Risers	11-1-7271-1	81337
Riser Set, T-11R	1670-01-535-2255	T-11 Reserve Risers	11-1-7057-1	81337

5. **Part(s) to be modified.** Not applicable.
6. **Application.**
 - a. **Time Compliance Schedule.** MWO effective date is 01 August 2008 and completion date is 31 July 2009.
 - b. **Level of Maintenance.** Unit.

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- c. **Workforce and Man-hour Requirement(s).** A total of 6 man-hours are required for a single modification of the harness assembly and installation of this MWO. Based on depot workload requirement and quantities received (from the user), estimated down time per end Item cannot be determined.

Table 3. Requirement(s).

WORK FORCE / SKILLS	MAN-HOURS	MAN-HOURS W/O DISASSEMBLY
MOS 92P Parachute Rigger	6	N/A

- d. **MWO To Be Applied Prior To, or Concurrently With, This MWO:** Not Applicable.

7. Technical Publication Affected/Changed.

Table 4. Technical Publications Affected/Changed.

Publication Number	Date	Publication Title
Army TM 10-1670-327-23&P	31 January 2006	Unit and Direct Support (DS) Maintenance Manual Including Repair Parts and Special Tools List for MC-6 Personnel Parachute System
Air Force T.O. 14D1-2-472-2	31 January 2006	Unit and Direct Support (DS) Maintenance Manual Including Repair Parts and Special Tools List for MC-6 Personnel Parachute System
Navy NAVSEA SS400-A1-MMO-010	31 January 2006	Unit and Direct Support (DS) Maintenance Manual Including Repair Parts and Special Tools List for MC-6 Personnel Parachute System

8. MWO kit(s)/part(s) and their disposition.

- a. **Kit(s)/Part(s) Needed To Apply the MWO.**

Table 5. MWO Kit.

Nomenclature	National Stock Number	CAGEC	Part Number
MC-6 Personnel Parachute Modification Kit	N/A	81337	11-1-7745-1

b. Contents of MWO kit.

Table 6. MWO Kit Contents.

Nomenclature	National Stock Number	Type and Model	CAGEC	Quantity Required	Figure Number
Left Upper Harness Assembly P/N: 11-1-7723-1	1670-01-535-2236	T-11 Harness Assembly	81337	1 ea.	1
Right Upper Harness Assembly P/N: 11-1-7723-2	1670-01-535-2239	T-11 Harness Assembly	81337	1 ea.	2
Riser Set, Main P/N: 11-1-7716-1	1670-01-535-2231	MC-6 Main	81337	1 ea.	3
Diagonal Back Strap Retainer P/N: 11-1-7124-2	N/A	MC-6 Main Pack Tray	81337	2 ea.	4
Diagonal Back Strap Keeper	N/A	MC-6 Main Pack Tray	81337	1 ea.	5
Riser Set, T11R (w/ Spreader Bar) P/N: 11-1-7729-1	1670-01-535-2255	T-11 Reserve	81337	1 ea.	6
Tuck Tab Assembly P/N: 11-1-7164-1	1670-01-541-8961	T-11 Harness Assembly	81337	2 ea.	7
Pack Tray Assembly, T11R P/N: 11-1-7726-1	1670-01-535-2254	Reserve Pack Tray Assembly	81337	1 ea.	8
Link, Parachute P/N: 11-1-7228-3	1670-01-330-3691	# 6 Stainless Steel w/locking compound on threads	81337	4 ea.	9

c. **Bulk and expendable materials.** These items will be provided to the units. The threads and tape are not yet in the supply system.

Table 7. Bulk and Expendable Materials List.

Nomenclature	National Stock Number	CAGEC	PART NUMBER	QUANTITY
Thread, Nylon, Type I or II, Class A, Size E, Color FG504	N/A	81348	V-T-295	As Required
Thread, Nylon, Type I or II, Class A, Size 3, Color FG504	N/A	81348	V-T-295	As Required
Cord, Fibrous, Nylon, Type III, RED	4020-00-262-2147	023X0	MIL-C-5040H	As Required
Thread, Cotton, Ticket 8/4, ORANGE	8310-01-279-6073	58536	A-A-52094	As Required
Tape, Nylon, Type IV, Class 1A, 1 Inch Wide, Color FG504	N/A	N/A	PIA-T-5078	As Required

NOTE

Complete de-militarization of components is accomplished by removing all hardware from components. All hardware, material, and obsolete items will be disposed locally.

- d. **Parts Disposition.** All obsolete components of the MC-6 Parachute System will be deemed unserviceable (removed from service) and de-militarized IAW with these MWO instructions. These items include the Left and Right Upper Main Lift Web Assemblies, MC-6 Main Riser Sets, and all material removed from the MC-6 Main, and T-11 Reserve Pack Tray Assemblies. Upon completion of de-militarized items, provide a memorandum listing those items and send to Mike Murphy, PM-CIE -Personnel Airdrop Team Project Lead, via electronic mail at Joseph.M.Murphy@us.army.mil.
- e. **Mandatory Replacement Parts.** Left and Right Upper Main Lift Web Assemblies, MC-6 Main Riser Assembly, T-11 Reserve Riser Assembly with Spreader Bar, and Connector Links.

9. Special tools; tool kits; jigs; test, measurement and diagnostic equipment (TMDE); and fixtures required.

Table 8. Special Tools Required for Modification.

Nomenclature	National Stock Number	Type and Model	CAGEC	Part Number	Quantity
Sewing Machine, Industrial	3530-01-177-8590	Light Duty	90338	7360R	1 ea.
Sewing Machine, Industrial	3530-01-177-8591	Medium Duty	90338	255RB-3	1 ea.
Sewing Machine, Industrial	Local Purchase	Bar tack , Light Duty (Optional)			1 ea.
Sewing Machine, Industrial	3530-01-177-8588	Heavy Duty	90338	733R-5	1 ea.
Screwdriver	5120-00-596-8653	Flat Tip, ¼ Inch	05047	0107.15	1 ea.
Wrench	5120-00-264-3795	Adjustable, 6 Inch	05047	0107.8	1 ea.
Wrench, Torque	5120-00-776-1841	Torque, 0-300 Inch Pounds	05047	B107.14	1 ea.
Crowfoot Attachment, Socket Wrench	5120-01-335-1150	3/8 Inch Drive, 7/16 Inch Open End, FC014A	55719	FC014A	1 ea.
Stitch Removal Tool	Local Purchase				1 ea.
Shears, Tailors	5110-00-223-6370	12 Inch	80244		1 ea.
Pencil, Marking	7510-00-240-1525 or 7510-00-240-4612	White or Yellow	58536	A-A-87	1 ea.
Hot Glue Gun (Optional)	Local Purchase				1 ea.
Knife, Hot, Metal	Local Purchase				1 ea.
Ruler, Metal	7510-00-173-4897	16 In Long	93267	16inchmetal	1 ea.
Needle, Upholsterers	8315-00-237-4959	Curved, Size 5	58536	A-A-55066	1 ea.
Template, Diagonal Back Strap Keeper and Retainer			81337	11-1-7744-1	1 ea.
Separator, Connector Link	1670-00-072-4941		81337	Mil-S-43243	1 ea.

10. Modification Procedures. This MWO will modify the Main Canopy Riser Assembly, Reserve Canopy Riser Assembly, T-11 Harness Assembly, Main Pack Tray, and Reserve Pack Tray of the MC-6 Personnel Parachute System. Upon initial receipt of the MWO kit, ensure all components are present in the kit IAW the packing list and conduct an inspection as detailed below. Refer to Appendix A of this MWO for detailed MWO kit installation procedures.

Conduct an overall visual inspection of all components of the MWO kit before performing modifications procedures and after the modifications procedures have been completed. All Items will be inspected using the following criteria:

- a. Fabric Components.
 - Presence of loose, broken, or missing stitching
 - Frays, cuts, tears or holes in the material
 - Missing components
- b. Metal Components.
 - Presence of corrosion, rough spots, bends, foreign material, cracks.
 - Ensure grommets are not missing, damaged, sharp edges, and/or set properly.

11. Calibration Required. Not applicable.

12. Weight and Balance Data. Not applicable.

13. Quality Assurance Requirements. The following items will need to be inspected after the Modification Work Order (MWO) has been completed: Harness Assembly, Main Pack Tray Assembly, Reserve Pack Tray Assembly, And Main and Reserve Riser Assemblies. Once the inspection has been completed, compliance with the MWO will be recorded in the Army Parachute Log Record for both the main and reserve parachute systems.

Quality Assurance Inspections will be completed per inspection requirements listed in Table 9.

After Inspection Criteria. All Items will be inspected for completeness, broken or loose stitching, missing components, and proper assembly using the check list below:

Table 9. After Inspection Criteria.

Interval	Item to be checked or serviced	Procedure	Equipment not ready/available if:
After	MC-6 Assembly	<p>Verify that assembly is complete and no components are missing. Check for proper assembly, foreign material, mildew or stains, and Army Parachute Log Record.</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>Suspension Line. Inspect for loose or broken stitching, frays, burns, tears, or broken lines. Proper line continuity.</p>	<p>Assembly is not complete and components are missing. Improper assembly. Presence of foreign material, mildew or stains. Log record book is missing.</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 loose or broken stitching, frays, burns, tears, or broken lines, suspension line continuity out of sequence.</p>
After	Harness Assembly	<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>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>

Table 9. After Inspection Criteria (continued).

Interval	Item to be checked or serviced	Procedure	Equipment not ready/available if:
After	Harness Assembly (Continued)	<p>Shoulder and Ejector Snap Pads. Inspect for loose or broken stitching and hand tacking, cuts, and tears.</p> <p>Saddle Assembly. Inspect for loose or broken stitching, burns, frays, tears, and markings that are marred or illegible.</p> <p>Diagonal and Horizontal Back- straps: Inspect for loose or broken stitching, burns, frays, tears, and marred (or illegible) markings, improper routing.</p> <p>Tuck Tab Assembly: Inspect for proper installation. Check for loose or broken stitching on the tuck tab retainer, snap fasteners are serviceable.</p> <p>Upper Main Lift Web Assemblies: Inspect for proper routing through main lift web adjuster and back strap adjuster, right and left upper main lift web assemblies installed correctly.</p> <p>CRA Proper Functioning: Inspect for improper operation, rust, corrosion, burrs, & cracks.</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, routing improper.</p> <p>Installed incorrectly, snap fasteners damaged or missing, stitching missing or broken on the tuck tab retainer.</p> <p>Improperly routed through lower saddle assembly. Right or left upper main lift web assemblies installed incorrectly (opposite side).</p> <p>Cracks, rust, corrosion, or broken components, improper operation.</p>
After	Main Pack Tray Assembly	<p>Pack Tray. Inspect for markings that are illegible. Inspect webbings, bindings, and cloth for loose or broken stitching and tacking, holes, tears, burns, and frays.</p> <p>Inspect for loose or broken stitching, burns, frays, tears, and missing (or damaged) snap fasteners.</p> <p>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>Presence of illegible markings, loose or broken stitching and tacking, holes, tears, burns, and frays.</p> <p>Stitching, burns, frays, tears, and missing (or damaged) snap fasteners.</p> <p>Presence of loose, cracked or broken stiffener.</p> <p>Presence of loose or broken stitches, burns, frays and tears.</p>

Table 9. After Inspection Criteria (continued).

Interval	Item to be checked or serviced	Procedure	Equipment not ready/available if:
After	Main Pack Tray Assembly (Continued)	<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>Grommets. Inspect for loose, cracked or broken stiffener. Ensure grommets are seated and check for burrs, rough spots, corrosion, cracks, rust, and bends, and do not spin.</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 check 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> <p>Presence of loose, cracked or broken stiffener. Presence of burrs, rough spots, corrosion, cracks, rust, and bends on the grommets and grommets spin.</p>
After	Main Riser Assembly	<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 and cracks.</p> <p>Log Record Pocket. Inspect for loose or broken stitching.</p> <p>Identification Tape. Inspect for loose or missing blue confluence wrap. Guide Channel. Inspect for burns, cuts, breaks, and loose or broken stitching.</p>	<p>Presence of loose or broken stitching, 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 wrapped loose or missing.</p> <p>Presence of burns, cuts, breaks, and loose or broken stitching.</p>

Table 9. After Inspection Criteria (continued).

Interval	Item to be checked or serviced	Procedure	Equipment not ready/available if:
After	Main Riser Assembly (Continued)	Control Line Guide Ring. Inspect for burrs, rough spots, corrosion, cracks and bends. Guide Ring Retaining Strap. Inspect for loose or broken stitching, frays, tears, and cuts.	Presence of burrs, rough spots, corrosion, cracks and bends. Presence of loose or broken stitching, frays, tears, and cuts.
After	Reserve Pack Tray Assembly	Pack Tray. Inspect for illegible markings. Inspect webbings, bindings, and duck cloth for loose or broken stitching and tacking, holes, tears, burns, and frays. Stiffener and Grommets. Inspect for loose, cracked or broken stiffener. Ensure grommets are seated and check for burrs, rough spots, corrosion, cracks, and bends, and do not spin. Inspect for loose, cracked or broken stiffener. Log Record Pocket. Inspect for loose or broken stitching. Retainer Band Keepers. Inspect for loose or broken stitches, burns, frays, and tears. Ripcord Assembly. Inspect for loose or broken stitches, burns, frays, and tears. Edge Binding. Inspect for loose or broken stitches, burns, frays, and tears. Stow Bars. Inspect for loose or broken stitches, burns, frays, and tears. Waistband Loop. Inspect for loose or broken stitches, burns, frays, and tears.	Presence of illegible markings, loose or broken stitching and tacking, holes, tears, burns, and frays. Presence of loose, cracked or broken stiffener. Presence of loose or broken stitching. Presence of loose or broken stitches, burns, frays, and tears. Presence of loose or broken stitches, burns, frays, and tears. Presence of loose or broken stitches, burns, frays, and tears. Presence of loose or broken stitches, burns, frays, and tears.

Table 9. After Inspection Criteria (continued).

Interval	Item to be checked or serviced	Procedure	Equipment not ready/available if:
After	Reserve Riser Assembly	<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>Spreader Bar. Inspect for loose or broken stitching, holes, tears, burns or frays</p> <p>Connector Snap. 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> <p>Presence for loose or broken stitching, holes, tears, burns or frays.</p> <p>Presence of loose or broken stitching, holes, tears, burns or frays.</p>

14. Recording and Reporting of the Modification Records and Report Forms.

- a. **Records and reports.** Once units have completed this MWO on all their assets, immediately notify Mr. Mike Murphy at DSN 256-4581 or Commercial at (508) 233-4581, with the total number completed.
- b. TACOM-SBC MWO Office will assume responsibility for recording the MWO application data to the Modification Management Information System (MMIS). Mr. Murphy will forward the application data to the MWO Office as is received from the field units.

15. Materiel Change (MC) Number. The MWO is authorized by MC Number 1-08-04-0001.

16. Modification Identification.

To ensure that the harness and the main pack tray have been modified, proper installation of the main risers, and reserve riser with spreader bar have been attached to the reserve pack tray, check the following:

- a. **Harness Assembly.** Both right and left upper main lift assemblies (Figure 1, Item 1) contain the female fitting canopy release assembly (Figure 1, Item 2). The chest strap (Figure 1, Item 3) on the left upper main lift web assembly will be made from Type VII nylon webbing. The right upper main lift web assembly will contain a friction adaptor (Figure 1, Item 4) attached to Type VII nylon webbing. No diagonal back strap guide is present on the diagonal back strap assembly.



Figure 1. Harness Assembly.

- b. **Main Pack Tray.** Left and right adjustment straps have been removed from the upper portion of the pack tray assembly (Figure 2, Item 1). Diagonal back strap retainer (Figure 2, Item 2) and keeper (Figure 2, Item 3) have been installed onto the upper portion of the pack tray.

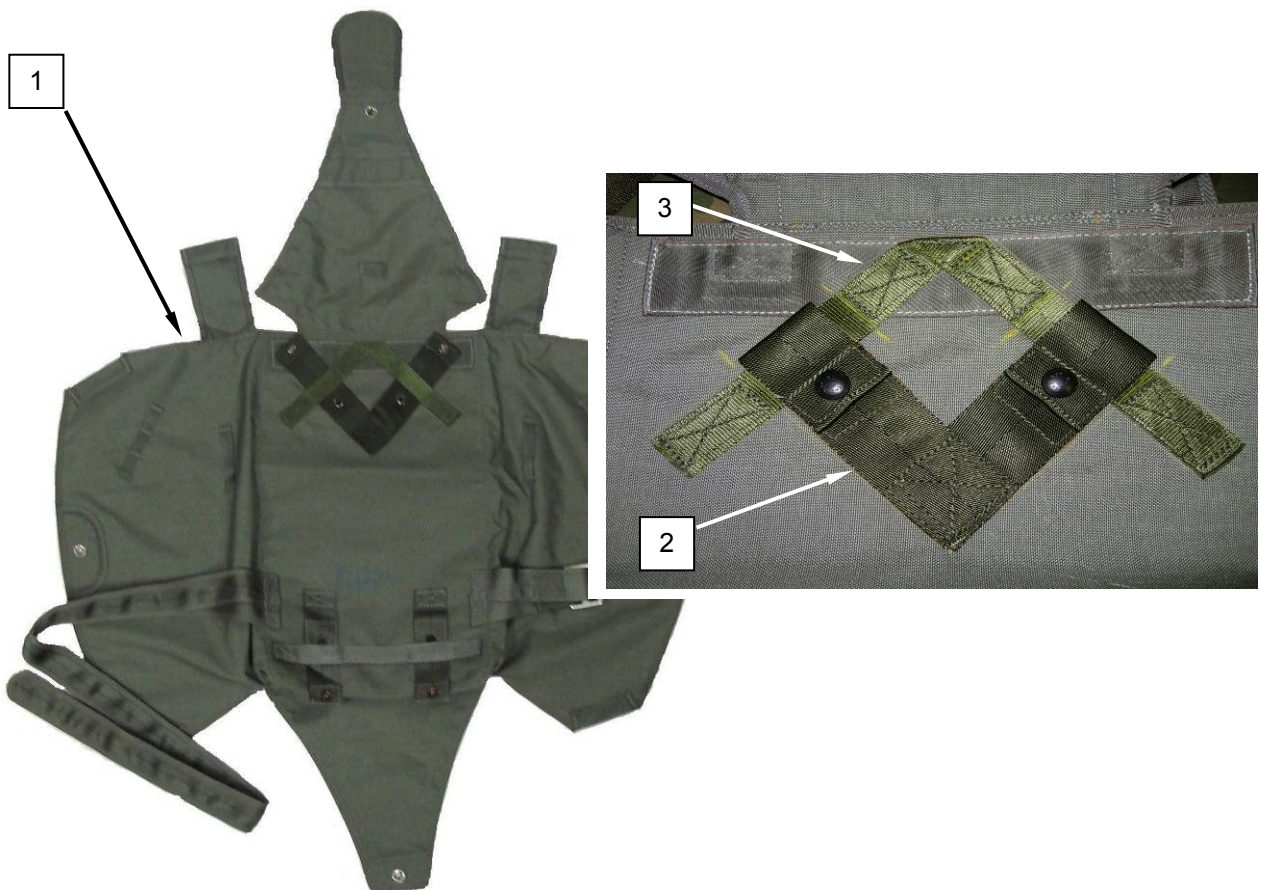


Figure 2. Main Pack Tray Assembly.

- c. **Riser Assemblies.** Riser assemblies with large ring have been replaced with riser assembly containing the male fitting of the canopy release assembly (Figure 3, Item 1) and blue confluence wrap (Figure 3, Item 2).

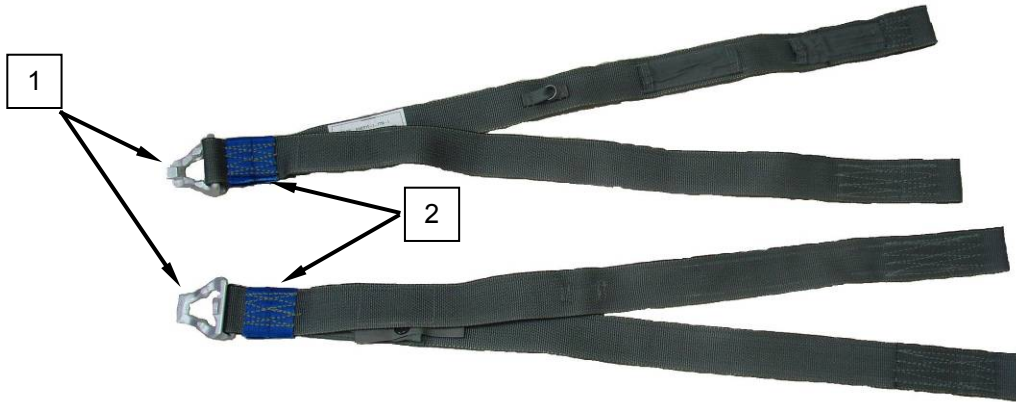


Figure 3. Riser Assembly.

- d. **T-11 Reserve Riser Assembly.** Riser assemblies without a spreader bar have been replaced with a new riser assembly (Figure 4, Item 1) which contains a spreader bar (Figure 4, Item 2) installed between the two snap hooks (Figure 4, Item 3).

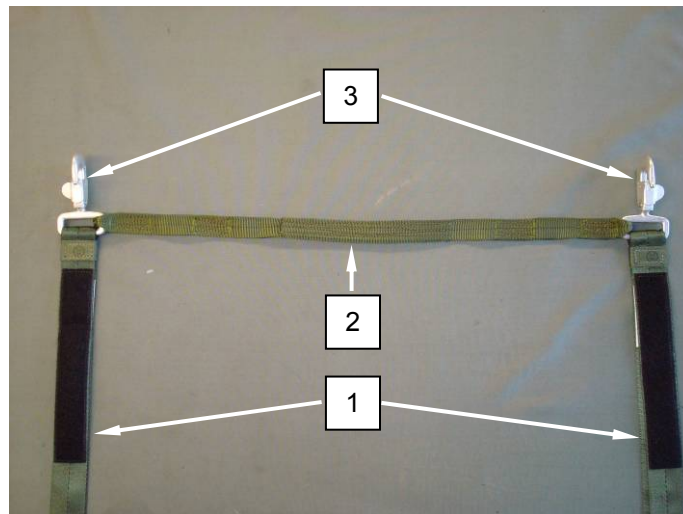


Figure 4. Reserve Riser Assembly.

- e. **New Connector Link Assemblies.** Connector links with locking compound on the threads, torque to 50 inch-pounds.
- f. **T-11 Reserve Pack Tray.** Pack tray contains four size 00 grommets (Figure 5, Item 1) located between the carrying handle (Figure 5, Item 2) and upper edge binding tape. Carrying handle has been moved down ½ inch to accommodate the installation of the grommets. Waistband retainers (Figure 5, Item 3) constructed of Type VIII nylon webbing have been repositioned so they are centered, 5 inches apart and 1½-inch below the carrying handle.

T-11 Reserve Riser Assembly (Figure 5, Item 4) is attached to the reserve pack tray, and reserve riser assembly has been properly attached to the reserve pack tray in the following two ways:

- (1) Snaps hooks (Figure 5, Item 5) have been secured to the reserve pack tray using one turn single lacing and tying tape.
- (2) Spreader bar (Figure 5, Item 6) has been secured to the reserve pack tray with Type III nylon cord (RED) (Figure 5, Item 7). The excess folds of the spreader bar are secured using ticket 8/14 (Orange) (Figure 5, Item 8).

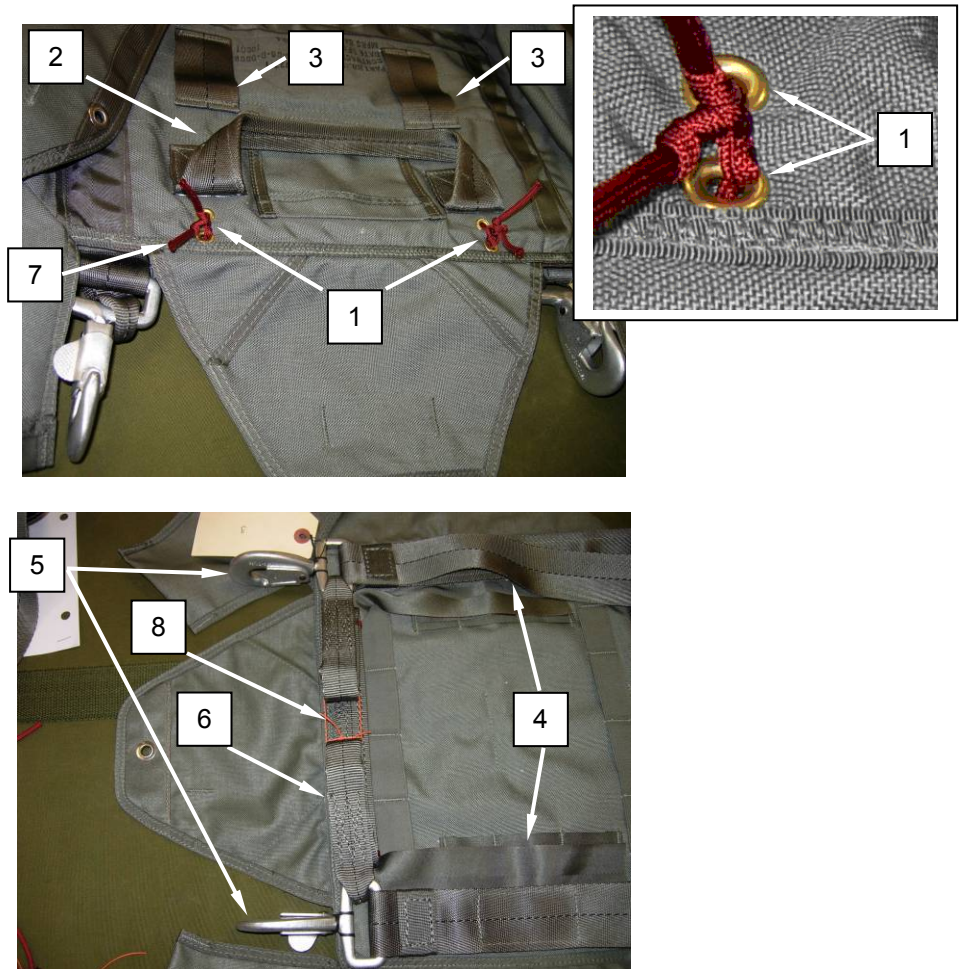


Figure 5. Reserve Pack Tray.

INTRODUCTION

This section contains direction/ maintenance procedures to modify the MC-6 Personnel Parachute System. Modifications will be applied to the Main and Reserve Canopies Riser Assemblies, T-11 Harness Assembly, both Main and Reserve, and Pack Trays.

NOTE

Prior to performing any modification procedures, inspect all components of the MWO kit.

INSPECTION

Upon initial receipt of the MWO kit, ensure all components are present in the kit IAW the packing list. Conduct an overall visual inspection of all components of the MWO kit before performing modifications procedures and after the modifications procedures have been completed. All Items will be inspected using the following criteria:

Fabric Components:

- Presence of loose, broken, or missing stitching
- Frays, cuts, tears or holes in the material
- Missing components

Metal Components:

- Presence of corrosion, rough spots, bends, foreign material, cracks
- Ensure grommets are not missing, damaged, sharp edges, and/or set properly

END OF TASK

REMOVE MAIN RISER ASSEMBLIES FROM MAIN CANOPY ASSEMBLY

Place the main parachute in proper layout and install new riser sets using the following steps:

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

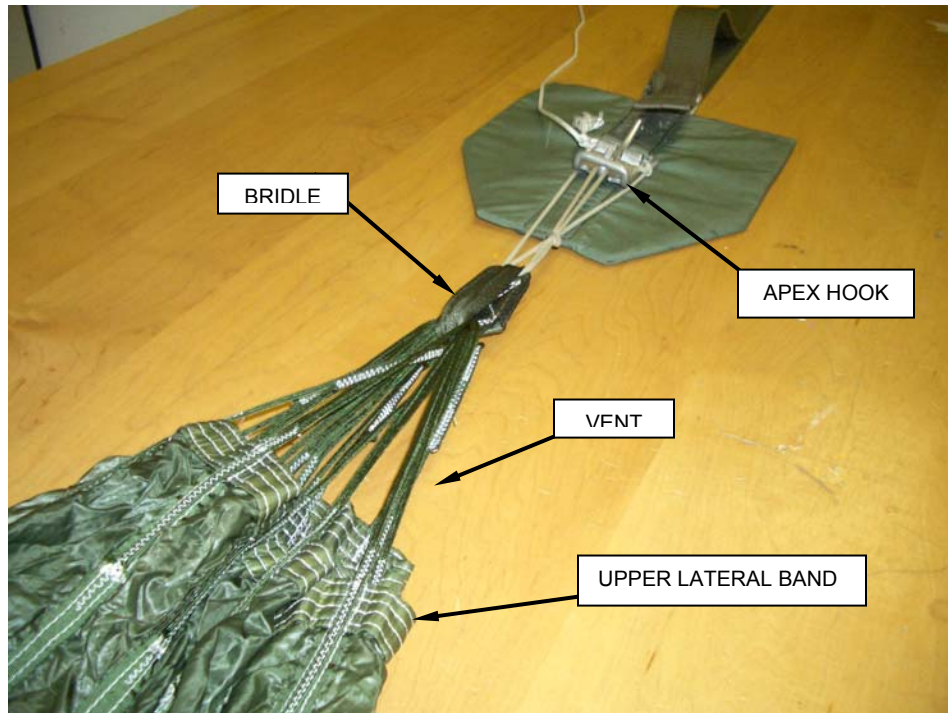


Figure 1. Attaching Canopy to Packing Table Apex Hook.

3. Attach the connector links to the tension plate and apply enough tension to keep the canopy on the table.
4. Remove Army Parachute Log Record, DA Form 3912, from riser assembly and maintain possession with the main canopy to re-attach to new riser assembly.
5. Remove Main Riser Assembly by rotating small ring 180° and large ring 180°, and remove riser ring and riser. Repeat step for opposite side.
6. Using a suitable size flat-tip (slotted head) screwdriver, remove the two locking screws from the L-Bar connector link assembly. Disassemble the L-Bar connector link using a connector link separator, if necessary.

NOTE

Ensure the canopy suspension lines do not slide off their respective L-Bar during this process.

7. Slide the suspension lines onto an appropriate tool to ensure lines remain in proper sequence.

END OF TASK

ATTACH MAIN RISERS TO THE MAIN CANOPY

1. Obtain new set of main risers from the MWO kit.

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APPENDIX A

NOTE

Main risers must be installed together as a set, starting on the left side and then to the right side. Both left and right riser assemblies MUST be installed prior to routing lower control lines.

2. Lay out 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 and that the rear riser is on top.
3. Slide the other L-Bar through the top loop on the new riser; fit the L-Bars together, and ensure they are engaged by tapping each end with a leather mallet.
4. Replace the two locking screws at each end of the connector assembly.

NOTE

Use of an aid may be required to route control line through the control line channel.

5. Trace each control line from the point of attachment at the canopy to the free end of the control line.
6. 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.
7. Check for 282-inch mark on the control line. If not present, measure from where the lower control line (Figure 2, 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 2, item 2) with a yellow mark. Follow procedure for both lower control lines.



Figure 2. Marking Control Line at 282 Inches.

8. Push the toggle up past the 282-inch mark and tie first an 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.
9. Make a second overhand knot ensuring that it is tight against the first knot. The remaining free end of each control line from the second overhand knot is to measure 3 inches.
10. Make a third overhand knot with the free end.

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CAUTION

Do not cut control lines if the main canopy has less than five jumps on it.
Control lines will be re-adjusted after the canopy has five jumps on it.

11. Trim the control line free end at a point ½-inch below the third overhand knot.
12. Repeat steps 5 through 11 for opposite toggle. Left set of connector links shall be placed on the left post of the tension plate, and the right set of connector links shall be placed on the right post of the tension plate. When complete, ensure controls lines are positioned to the inside.

END OF TASK

PERFORM LINE 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.

END OF TASK

Installing Attaching Tie

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.

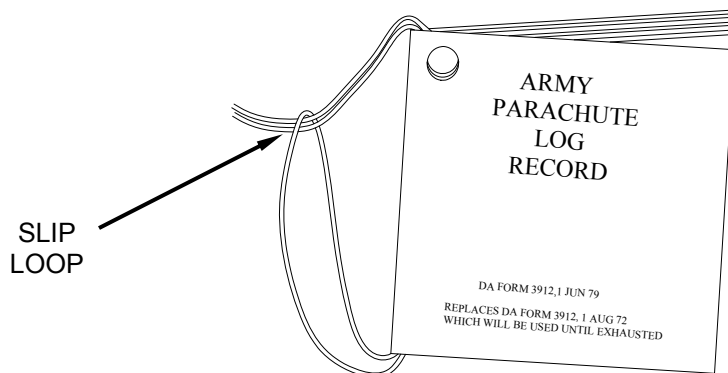


Figure 3. Forming Slip Loop on Log Record Outside.

3. Pass the lacing length running ends through the corner attaching hole, from the front to rear of the log record.

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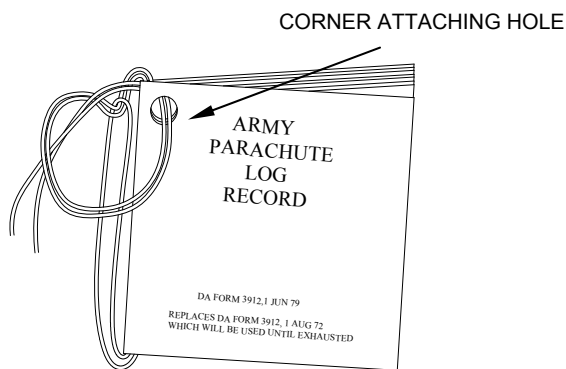


Figure 4. Passing Lacing Loose Ends through Corner Attaching Hole.

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

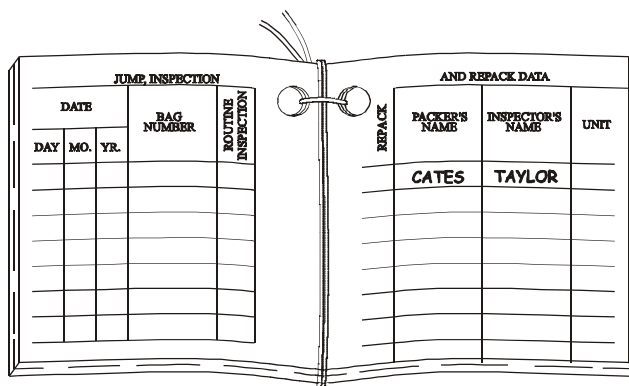


Figure 5. Routing Lacing Loose End Through Log Record Centerfold.

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.

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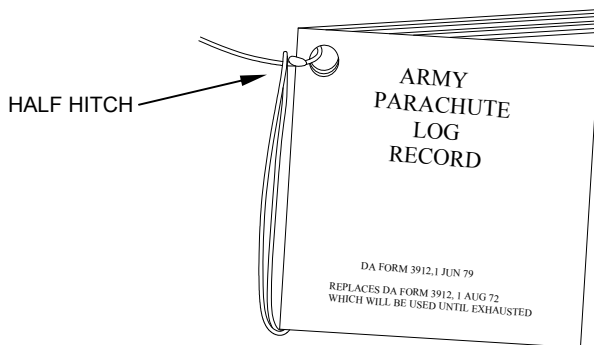


Figure 6. Log Record Attachment Tie Completed.

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

END OF TASK

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:

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

MODIFICATION WORK ORDER		COMPLIANCE RECORD					
MWO NUMBER	MWO TITLE	MODIFIED BY (NAME)	INSP. BY	UNIT	DATE		
					DAY	MONTH	YEAR
10-1670-327-23-1	Upgrade to T-11 Harness Assy	Dee	Ingersoll	SBCCOM	30	09	08

Figure 7. Modification Work Order (MWO) Compliance Record Page.

2. MWO Title. Enter a short, abbreviated title extracted from the MWO prescribing the work.
3. 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.
4. Inspected by. The individual who accomplished the inspection, required after modification, will sign this entry with last name only.

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5. 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.
6. Date. Enter the day, month, and year the modification work was completed.

END OF TASK

REMOVE HARNESS FROM MAIN PACK TRAY

1. Lay out the MC-6 main pack tray (Figure 8, Item 1) and harness assembly (Figure 8, Item 2) on the pack table, with the harness assembly facing up, and the main pack tray assembly against the packing tables.



Figure 8. Main Pack Tray Layout.

2. Remove the harness assembly from the main pack tray assembly by unsnapping the upper sizing channel keepers (Figure 9, Item 1) and remove the tuck tabs (Figure 9, Item 2) from the diagonal back strap sizing channels (Figure 9, Item 3) on both the left and right.



Figure 9. Removing Harness from Main Pack Tray.

3. Remove the horizontal back strap (Figure 10, Item 1) from the main pack tray assembly (Figure 10, Item 2) by unsnapping the horizontal back strap retainer snap fasteners (Figure 10, Item 3). Remove the horizontal back strap retainers (Figure 10, Item 4) from behind the horizontal back keeper (Figure 10, Item 5). Remove harness assembly.

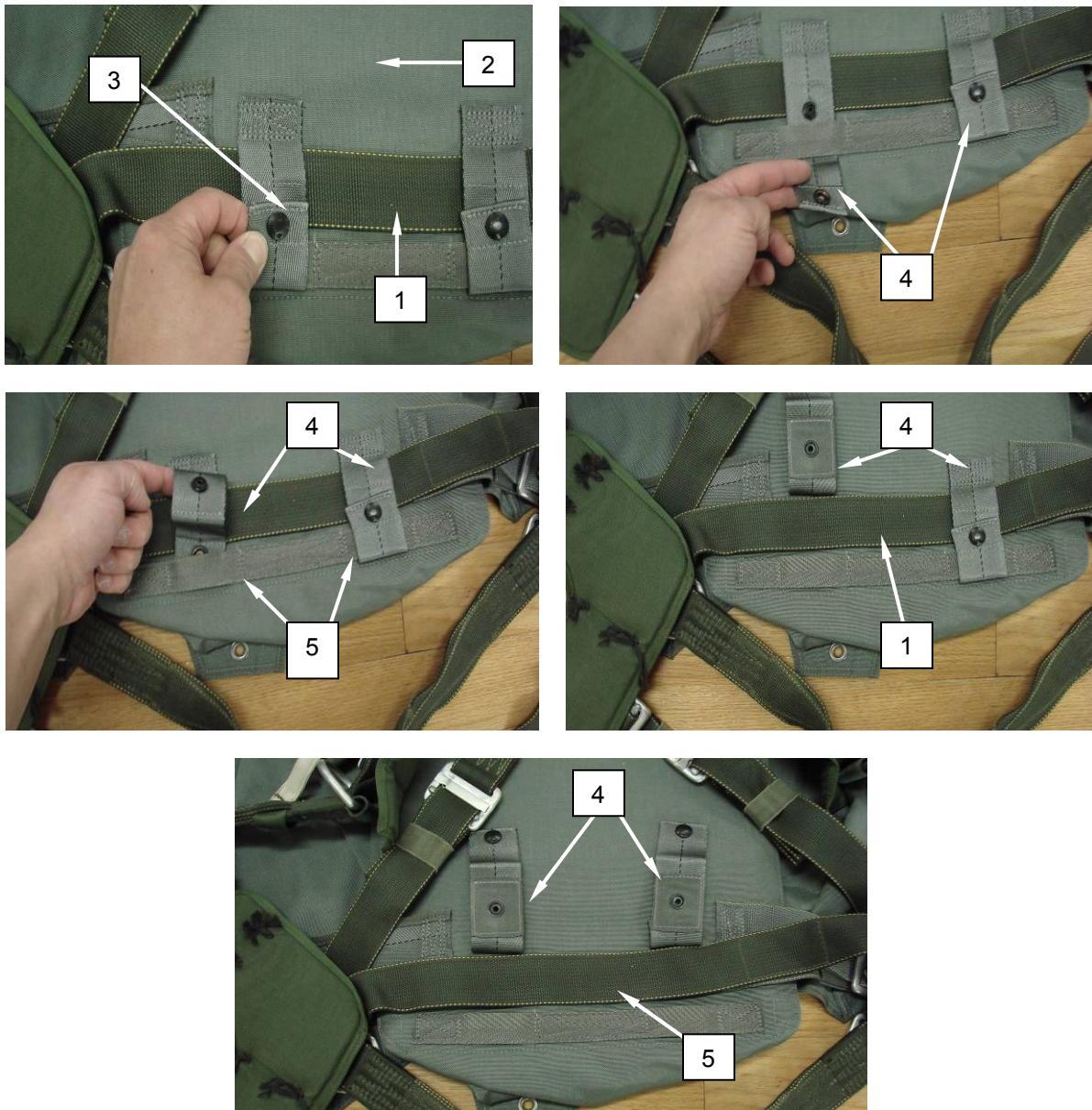


Figure 10. Removing Horizontal Back Strap from Main Pack Tray.

END OF TASK

REPLACE RIGHT AND LEFT UPPER MAIN LIFT WEB ASSEMBLIES

NOTE

Ensure that the harness assembly is in proper layout with the leg ejector snaps and the canopy release assemblies facing down.

1. Lay out the harness assembly (Figure 11, Item 1) ensuring that the L-shaped ejector snap pads and shoulder pads are facing up (Figure 11, Item 2).

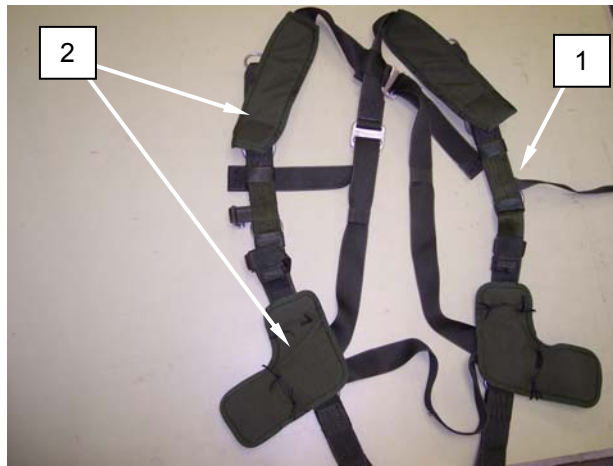


Figure 11. Proper Layout of Harness Assembly.

2. Carefully remove stitching of the rolled back ends of the diagonal back straps (Figure 12, Item 1). Remove the diagonal back strap (Figure 12, Item 2) from the back strap adjuster (Figure 12, Item 3).



Figure 12. Replace Harness Right and Left Upper Main Lift Web Assemblies.

3. Unsnap tuck tab snap fasteners (Figure 13, Item 1) on the tuck tab assemblies (Figure 13, Item 2) on the right and left upper main lift web (Figure 13, Item 3).
4. Using shears (Figure 13, Item 4), carefully cut both the right and left upper main lift web straps between the tuck tab snap fasteners (Figure 13, Item 1) and the main lift web adjusters (Figure 13, Item 5). Remove both main lift webs from the main lift web adjuster (Figure 13, Item 6).

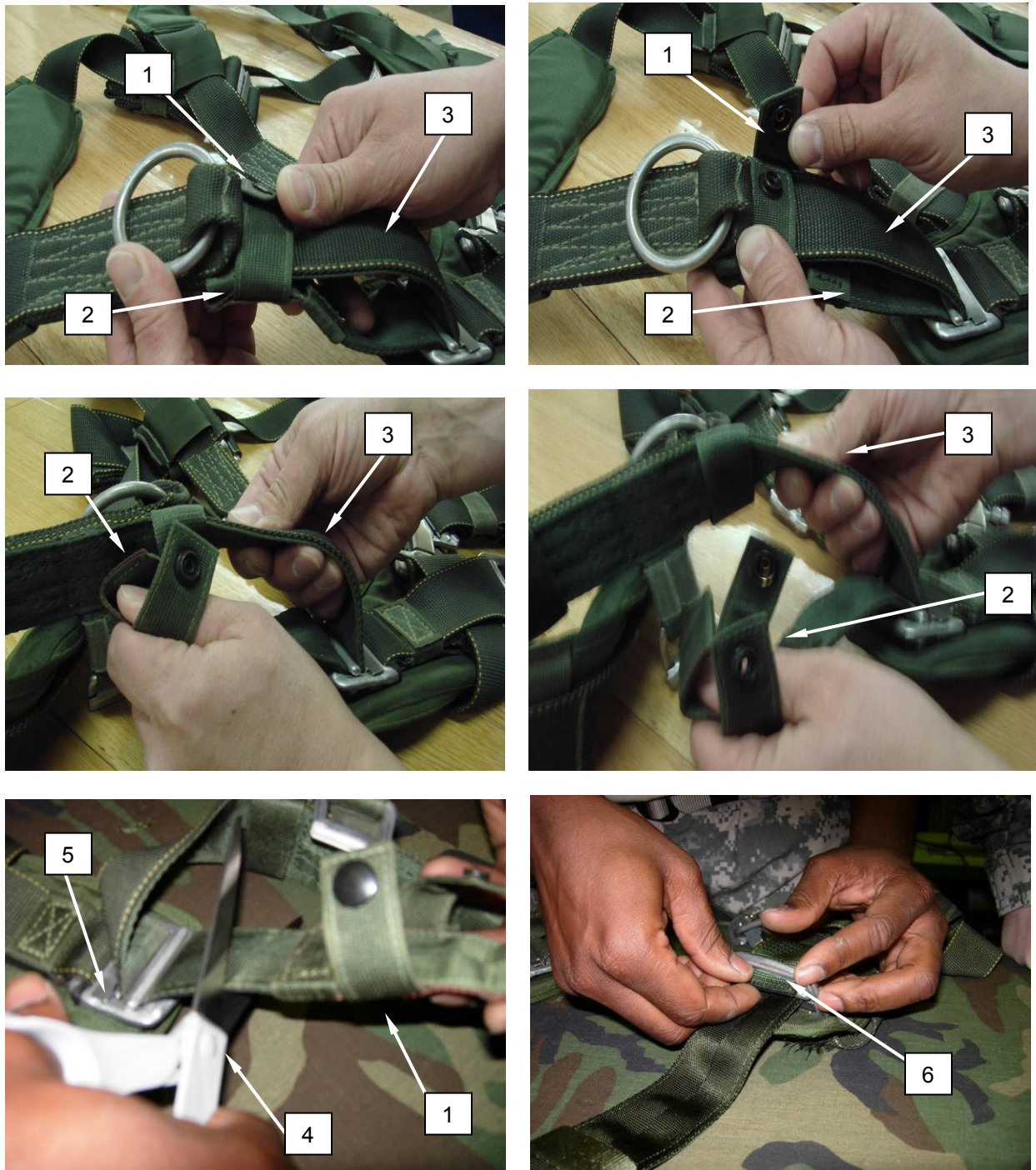


Figure 13. Replacing Harness Right and Left Upper Main Lift Web Assemblies.

5. Replace both the right and left upper main lift web assemblies with a new upper main lift web assembly (Figure 14, Item 1).



Figure 14. Right and Left Upper Main Lift Web Assemblies.

6. Lay out the lower saddle assembly (Figure 15) so that the L-shaped comfort pads are facing up and the ejector snaps are facing down and that the right diagonal back straps (Figure 15, Item 1) cross over the left diagonal back strap (Figure 15, Item 2) forming an "X" (Figure 15, Item 3).

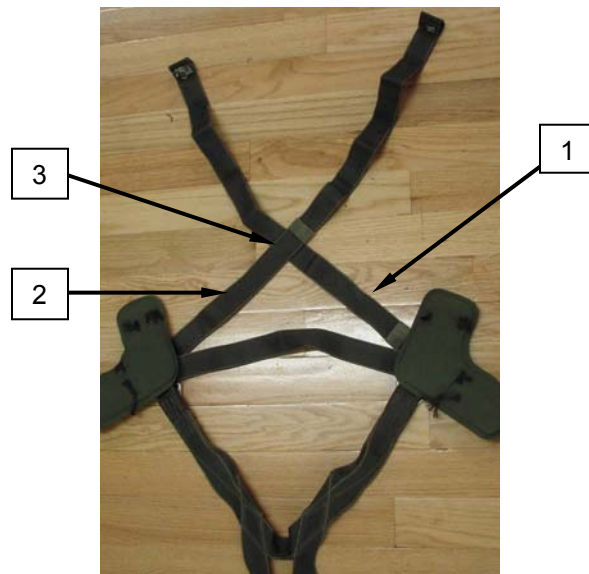


Figure 15. Lower Saddle Assembly.

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7. Lay out a new right upper main lift web assembly (Figure 16, Item 5) and left upper main lift web assembly (Figure 16, Item 2), and position so that the canopy release assemblies (CRA) are facing down and equipment D-rings (Figure 16, Item 3) are located toward the lower saddle assembly (Figure 16, Item 4) and the shoulder comfort pads (Figure 16, Item 1) are facing up. Position both upper main lift web assemblies to the outside of the lower saddle assembly (Figure 16, Item 4).

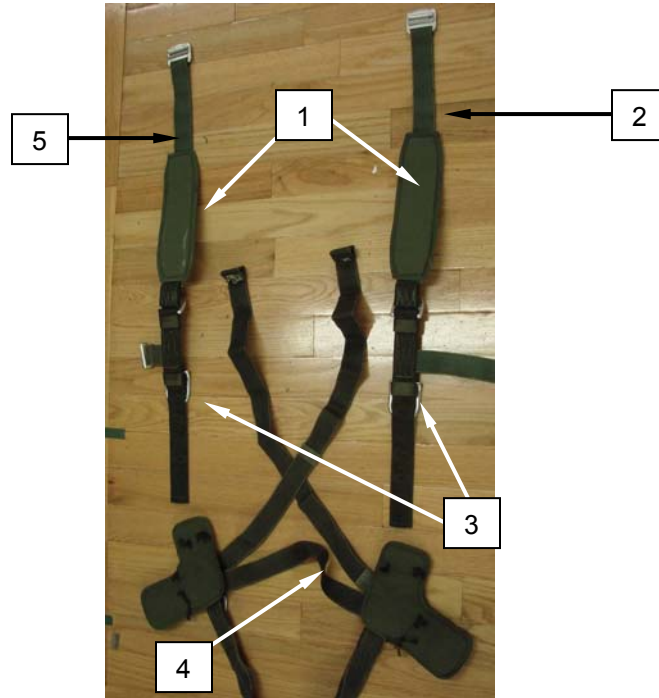


Figure 16. Lower Saddle Assembly and Right and Left Upper Main Lift Web Assemblies.

8. Install the right and left upper main lift web assemblies onto the lower saddle assembly (Figure 17).

NOTE

Ensure to pull approximately 5 inches of excess webbing through the main lift web adjuster. Ensure no twists are put into right and left upper main lift web straps during installation process.

9. Thread both the right and left upper main lift web straps (Figure 17, Item 1) through the main lift web adjusters (Figure 17, Item 2) located on the lower saddle assembly (Figure 17, Item 3), from bottom to top then back up through the main lift web adjuster. When task is complete, verify proper installation of the right and left upper main lift web assemblies (Figure 18, Item 1) onto the lower saddle assembly (Figure 18, Item 2).

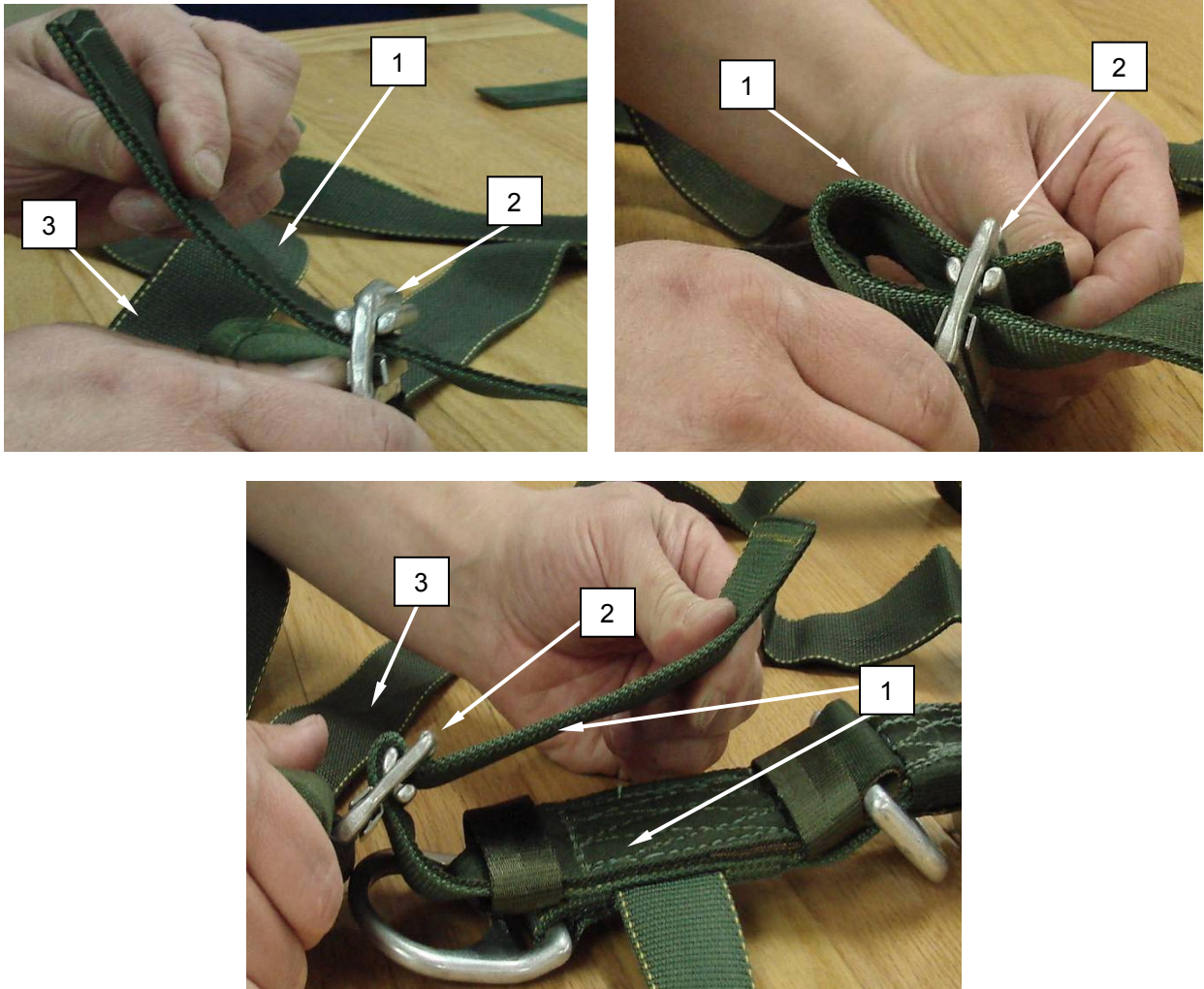


Figure 17. Routing of the Right and Left Upper Main Lift Web Straps.

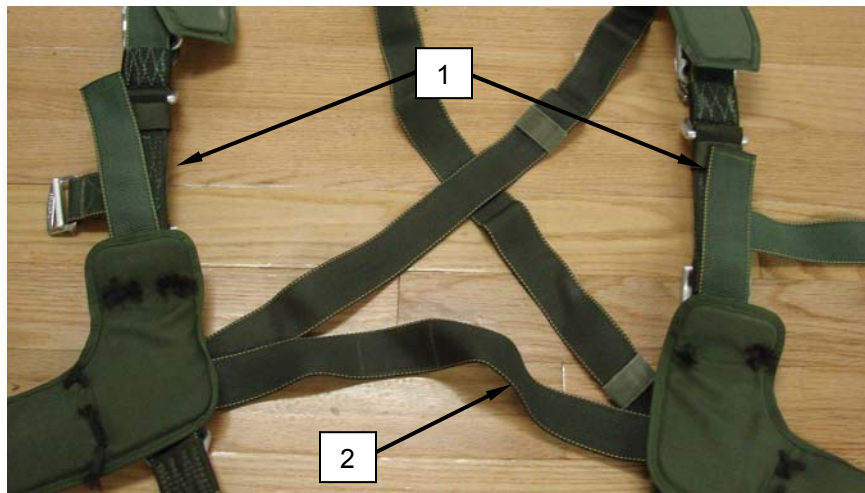


Figure 18. Main Lift Web Assemblies Installed on Lower Saddle Assembly.

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10. Route the diagonal back straps (Figure 19, Item 1) through the back strap adjuster (Figure 19, Item 2). thread the diagonal back straps (Figure 19, Item 1) from top to bottom then back up through the back strap adjuster (Figure 19, Item 2).

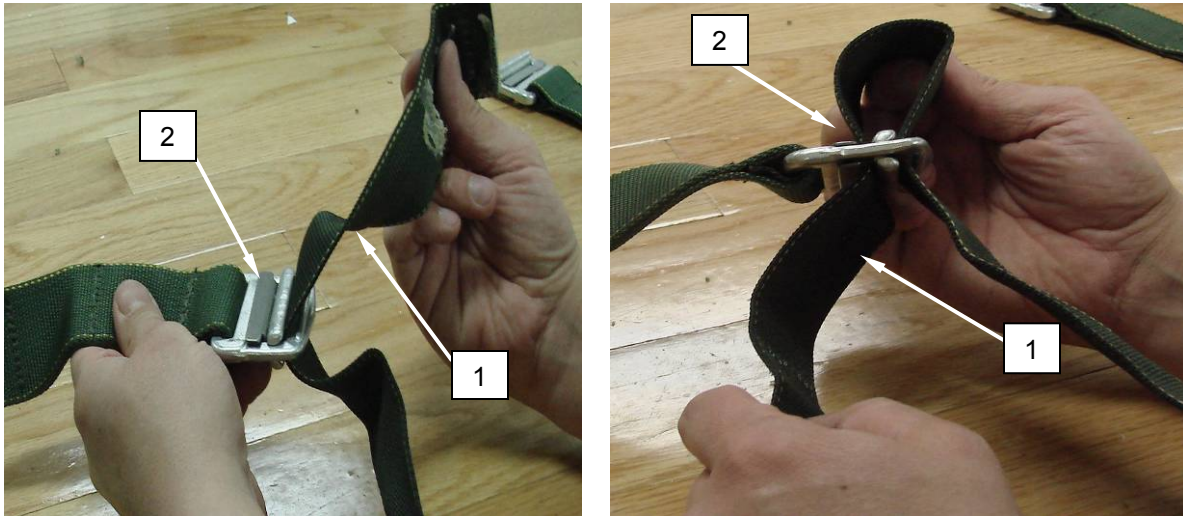


Figure 19. Route Diagonal Back Straps through Back Strap Adjuster.

11. Position the right diagonal back strap over the left diagonal back strap forming an “X” (Figure 20) and ensure harness assembly has no twists.



Figure 20. Proper Routing of the Upper Main Lift Web Assemblies.

12. Obtain two new tuck tab assemblies (Figure 21) from the MWO kit.

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Figure 21. Tuck Tab Assembly.

13. Mark the tuck tab assembly 1 inch from the bottom edge (Figure 22, Item 1) and opposite end from the tuck tab stiffener, (Figure 22, Item 2) using a ruler and contrasting marking device. This will help in proper placement of the tuck tab assembly on the upper main lift web assemblies.

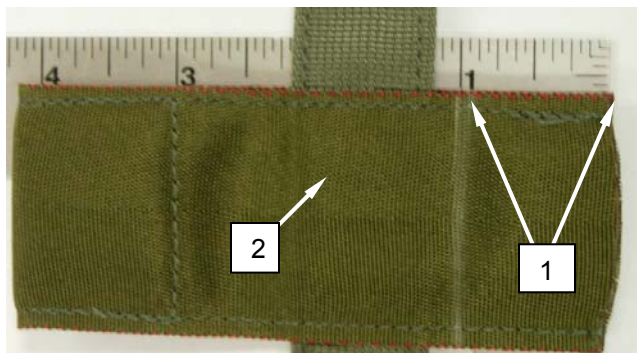


Figure 22. Mark Tuck Tab Assembly.

14. Using a glue gun place a small amount of glue on the upper main lift web assembly (Figure 23).



Figure 23. Apply Glue to the Upper Main Lift Web.

NOTE

The snap fasteners will be secured by wrapping the tabs around the upper main lift web assembly. Ensure that the snap fasteners are installed correctly to allow for proper securing of the tuck tab assembly.

15. Position the tuck tab and snap fastener (Figure 24, Item 1) so that the stiffener end of the tuck tab assembly (Figure 24, Item 2) is facing towards the shoulder comfort pad (Figure 24, Item 3). Align the 1-inch mark (Figure 14, Item 4) on the tuck tab assembly with the top edge of the upper main lift web strap (Figure 24, Item 5). Repeat for opposite side.

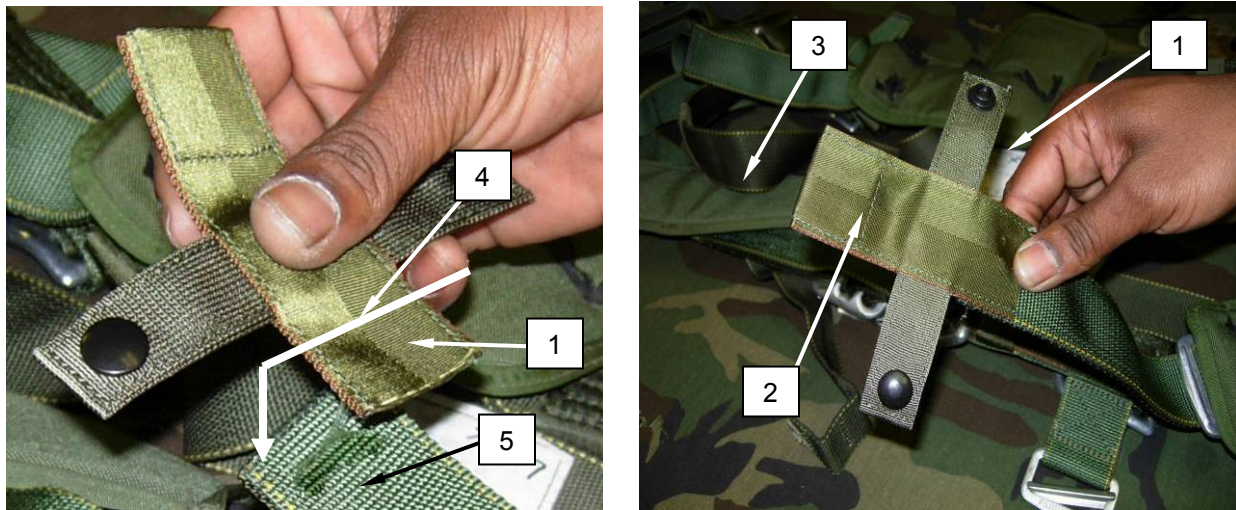


Figure 24. Proper positioning of the Tuck Tab Assembly.

16. Cut two pieces of Tape, Type IV, CL 2, 1-inch wide at 6 inches. These two lengths of tape will be used for the tuck tab retainer on the right and left upper main lift web assemblies.
17. Using a glue gun, place a small amount of glue on the tuck tab assembly, and place the tuck tab retainer (Figure 25, Item 1) flush with the left edge of the upper main lift web (Figure 25, Item 5).
18. Place a small amount of glue on the back side on the upper main lift web strap.
19. Working from left to right, continue to wrap the tuck tab retainer (Figure 25, Item 4) free end around the upper main lift web (Figure 25, Item 5) and tuck tab assembly (Figure 25, Item 6). Ensure to press firmly to allow the glue to hold the tuck tab retainer in place.
20. Place a small amount of glue on the tuck tab retainer (Figure 25, Item 4) top and continue to wrap the tuck tab retainer free end (Figure 25, Item 7) back over itself. Secure into place (Figure 25, Item 8).

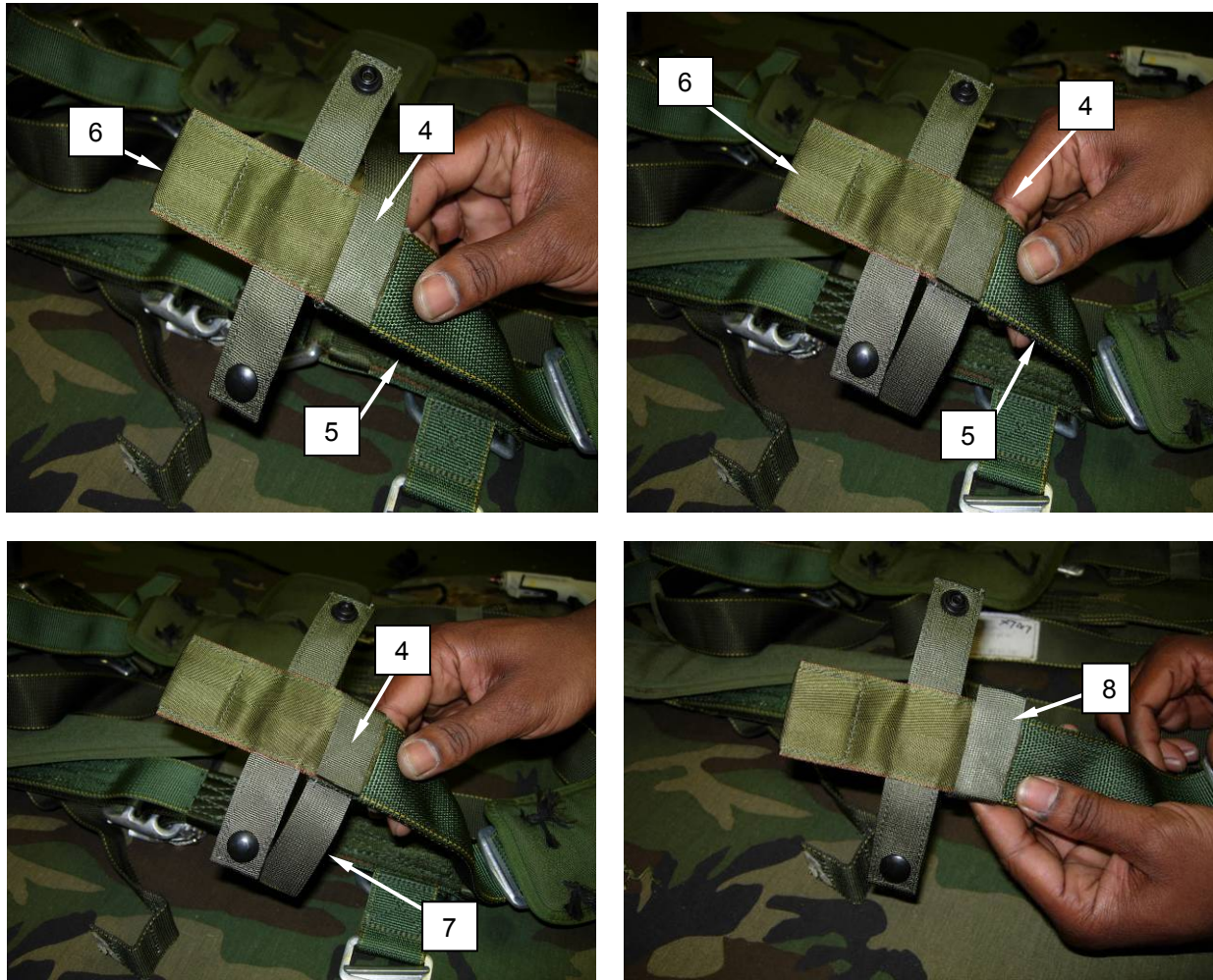


Figure 25. Attach Tuck Tab Assembly to the Upper Main Lift Web Assemblies.

21. Using a heavy duty sewing machine, size 5 nylon thread, 4 to 6 stitches per inch, sew the tuck tab assembly to the main lift web adjustment strap with a box stitch pattern (Figure 26). Repeat for opposite side.



Figure 26. Tuck Tab Retainer Sewn.

22. Cut and sear any excess webbing from the tuck tab retainer even with the main lift web strap. be careful not to cut or sear into the tuck tab retainer, tuck tab assembly, and the main lift web strap.
23. Place both main lift web assemblies (Figure 27, Item 1) on the small sizing setting. Insert the tuck tab stiffener (Figure 27, Item 1) into the small size retainer (Figure 27, Item 2).

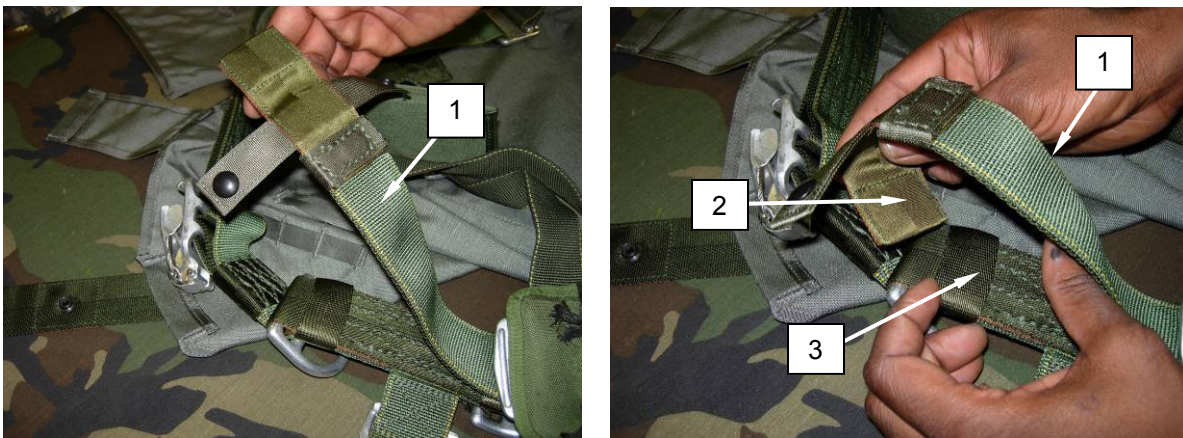


Figure 27. Upper Main Lift Web Assemblies Placed on Small Sizing Setting.

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24. Properly seat the tuck tab stiffener (Figure 28, Item 1) into the small sizing retainer (Figure 28, Item 2) and secure by wrapping the tuck tab retainer around the main lift web assembly (Figure 28, Item 3) and secure the snap fastener (Figure 28, Item 4).

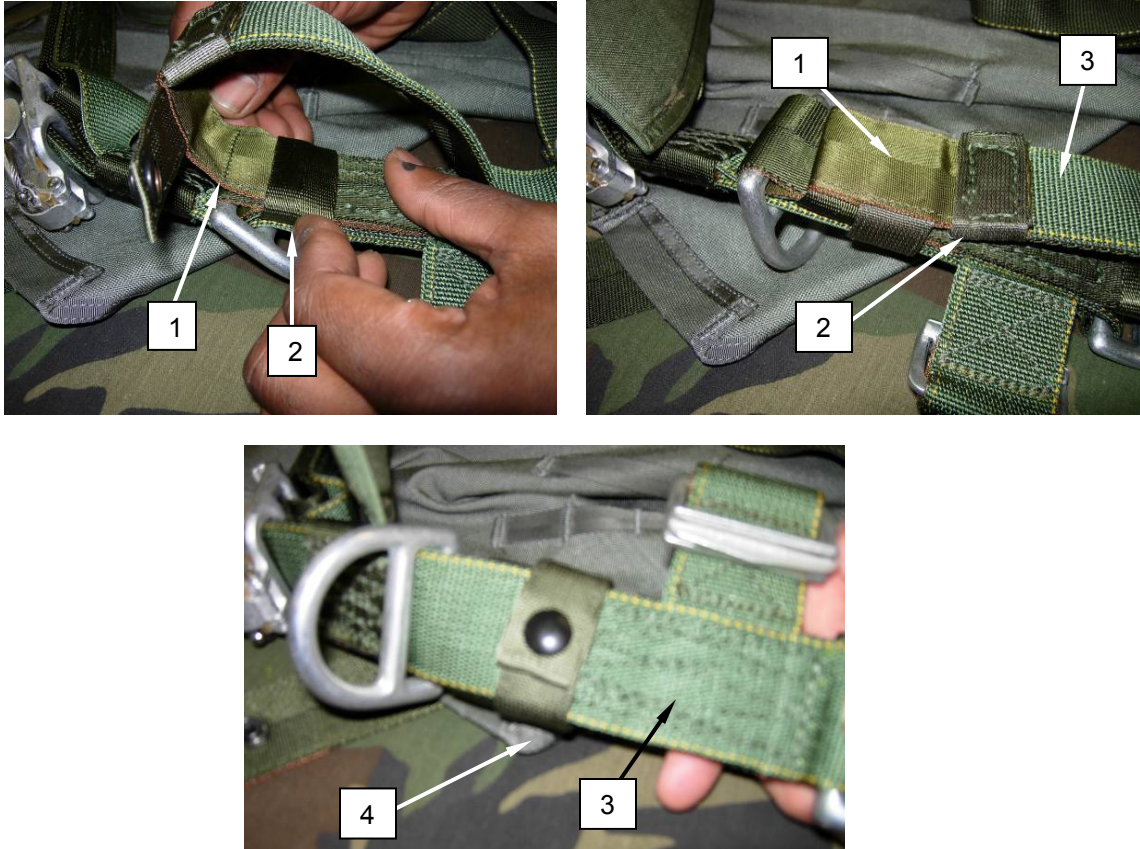


Figure 28. Upper Main Lift Web Assemblies Placed on Small Sizing Setting.

25. Roll the free end of the diagonal back strap and sew three rows of straight stitch using a heavy duty machine, size 3 nylon thread and 5 to 8 stitches per inch (Figure 29).



Figure 29. Roll and Sew Free End Diagonal Back Strap.

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26. Inspect the harness to ensure there are no twists of the right and left upper main lift web assemblies, diagonal back straps, horizontal back strap, and lower saddle assembly. Ensure to check for any missing stitching on the entire harness assembly. If required, re-stitch.

END OF TASK

MODIFY THE MAIN PACK TRAY

1. Lay out the MC-6 pack tray on the maintenance table with the smooth side down.

NOTE

It is authorized to cut the adjustment straps flush with the pack tray as close as possible. Searing is not authorized due to leaving sharp edges.

2. Carefully remove stitching from the reinforcement webbing (Figure 30, Item 1) that secures the left and right adjustment straps (Figure 30, Item 2) using a stitch removal tool (Figure 30, Item 3).

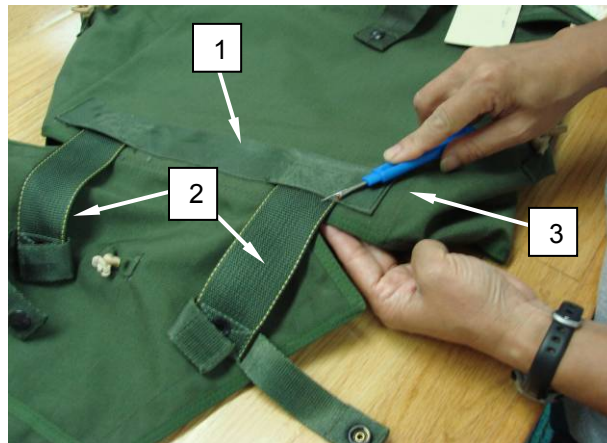


Figure 30. Remove Stitching from Reinforcement Panel.

3. Remove both adjustment straps (Figure 31, Item 1).

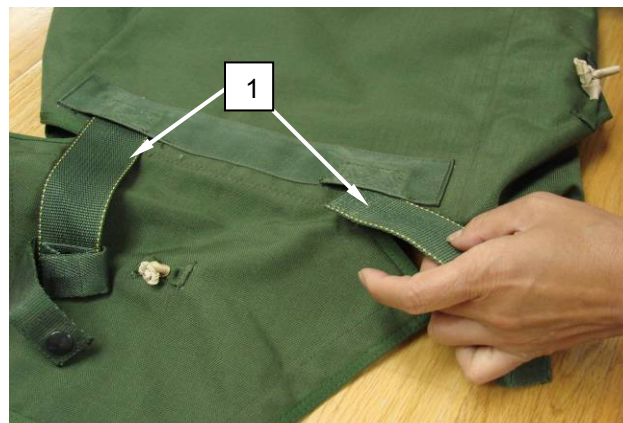


Figure 31. Removing of Adjustment Straps.

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4. Remove all loose stitching from the reinforcement webbing.
5. Re-stitch the reinforcement webbing with a light duty sewing machine, using size E thread 7 to 11 stitches per inch. Run a straight stitch $\frac{1}{4}$ -inch around the entire edge of the reinforcement panel, ensuring 1-inch locking stitch is used at the ending point (Figure 32).



Figure 32. Re-Stitch Reinforcement Panel.

6. Measure pack tray from the top outer edge of binding tape $6\frac{1}{2}$ -inches down and place a mark (Figure 33, Item 1). Repeat for opposite side (Figure 33, Item 2).

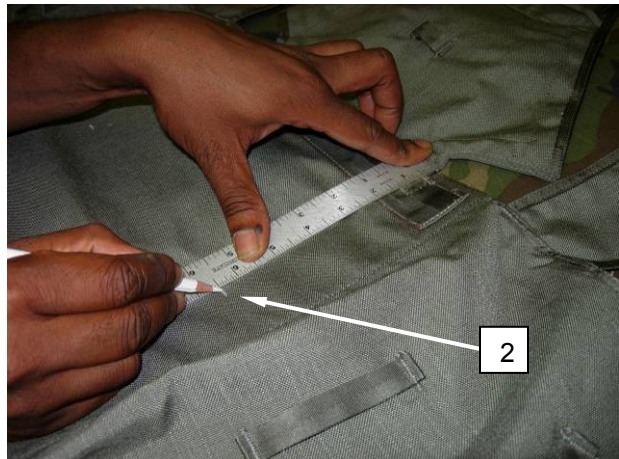
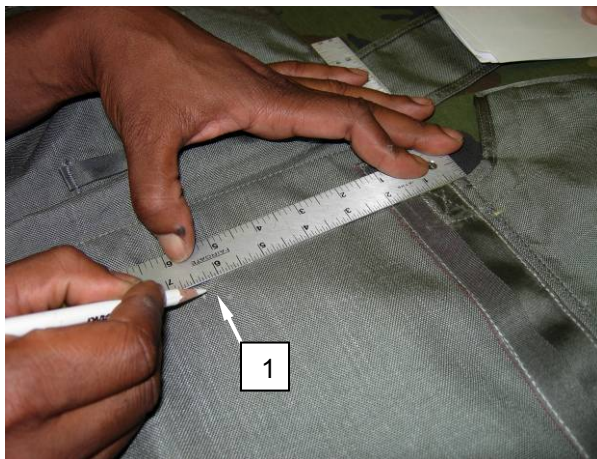


Figure 33. Marking of the Main Pack Tray Assembly.

7. Using a ruler, align both side marks and trace a line across the pack tray making an alignment line from both $6\frac{1}{2}$ -inch side marks, then measure 6 inches to the center from the $6\frac{1}{2}$ -inch side marks and mark the center of the main pack tray (Figure 34).

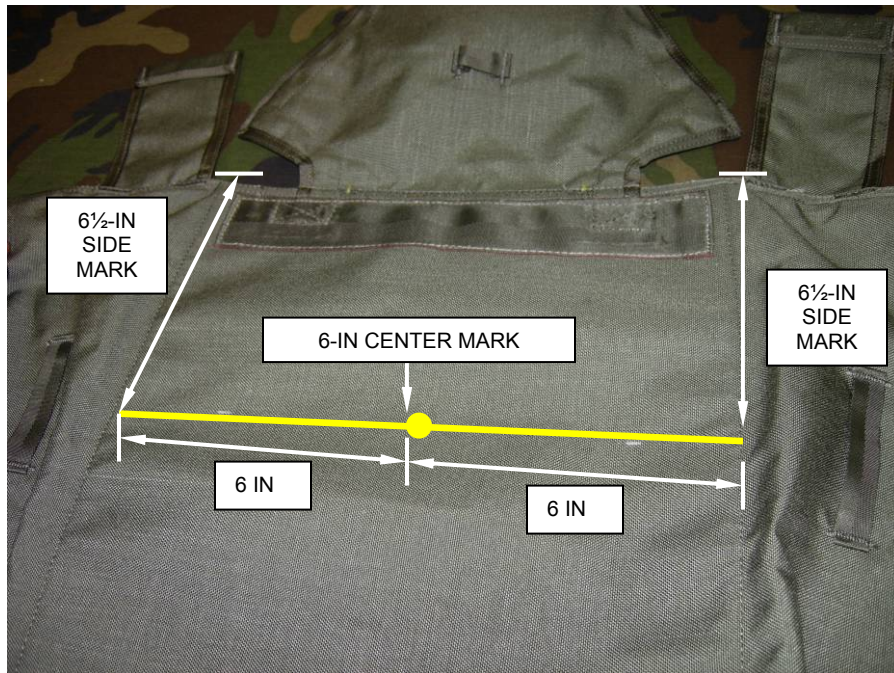


Figure 34. Marking of the Main Pack Tray Assembly.

- Place the first hole (Figure 35, Item 1) on the bottom edge of the template (Figure 35, Item 2) on top of the 6-inch center mark on the main pack tray. Align top edge of the template (Figure 35, Item 4) with the reinforcement panel (Figure 35, Item 5).

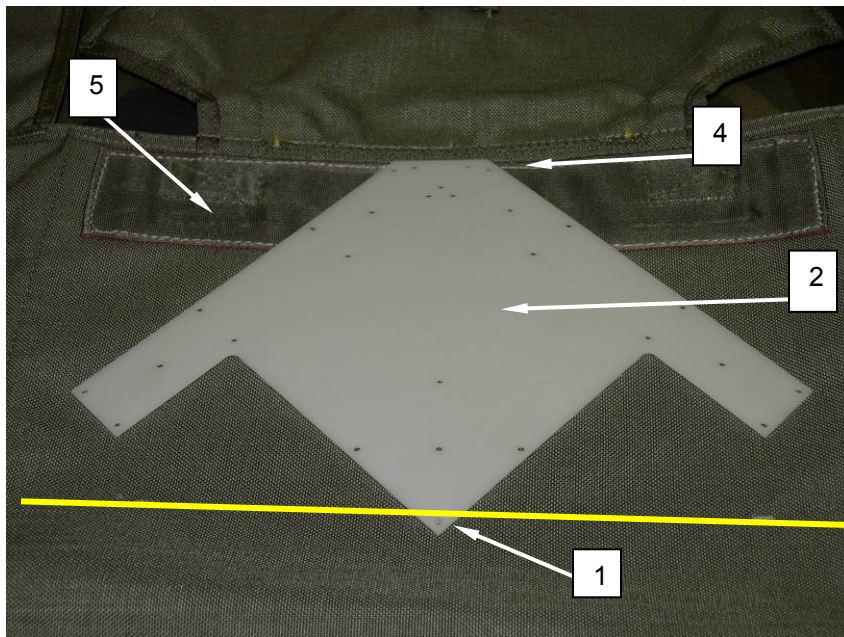


Figure 35. Proper Placement of Template.

NOTE

It is optional to use a weight to hold the template in place while tracing and marking the material.

9. Place a weight on the template to hold (optional). Trace the outer edges of the template. Mark all the holes on the template using a contrasting color. Once completed, remove the template (Figure 36).



Figure 36. Trace the Outer Edge of the Template and Mark Holes.

10. Obtain a new pre-manufactured diagonal back strap keeper (Figure 37) supplied in the MWO kit.

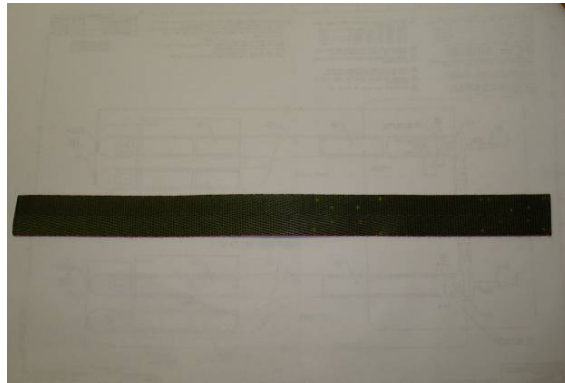


Figure 37. Diagonal Back Strap Keeper.

NOTE

The diagonal back strap keeper is cut to a total of 13½ inches to ensure there is enough length during the sewing process.

Ensure that the diagonal back strap keeper is positioned on the pack tray with the top folded portion aligned with the top of the reinforcement panel.

11. Using the template, mark the diagonal back strap keepers by placing the template on top of the diagonal back strap keepers and mark the alignment holes with a contrasting color (Figure 38).

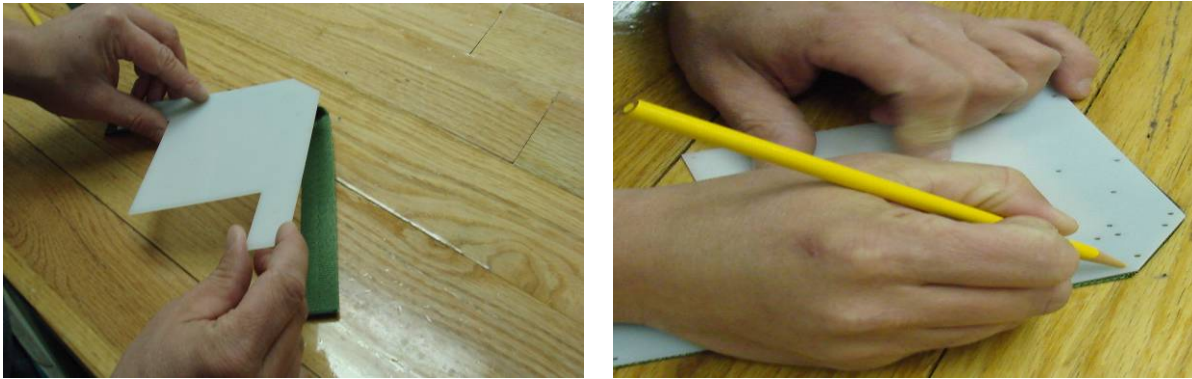


Figure 38. Marking the Diagonal Back Strap Keeper.

12. Place diagonal back keeper (Figure 39, Item 1) onto the pack tray by aligning with the marks made from the template. Fold the diagonal back strap keeper back onto itself at a 45-degree mark and align with the traced lines made from the template (Figure 39, Item 2).

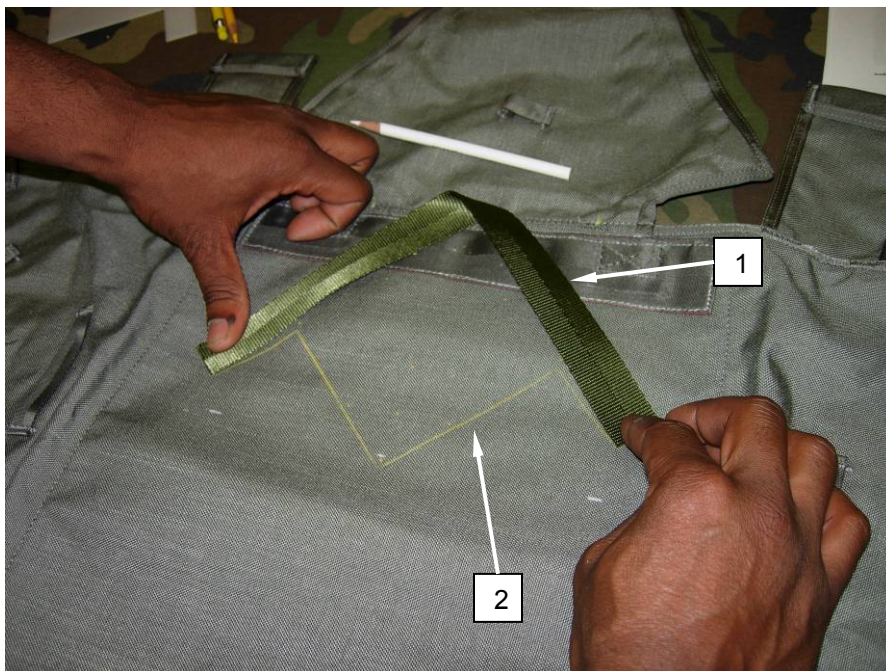


Figure 39. Proper Placement of the Diagonal Back Strap Keeper.

NOTE

Use of a glue gun is authorized to ensure the diagonal back strap is in place during the sewing process.

13. Apply a small amount of glue on the reinforcement panel (Figure 40, Item 1) and location where the four box X stitch patterns (Figure 40, Item 2) will secure the diagonal back strap keeper onto the pack tray (Figure 40).

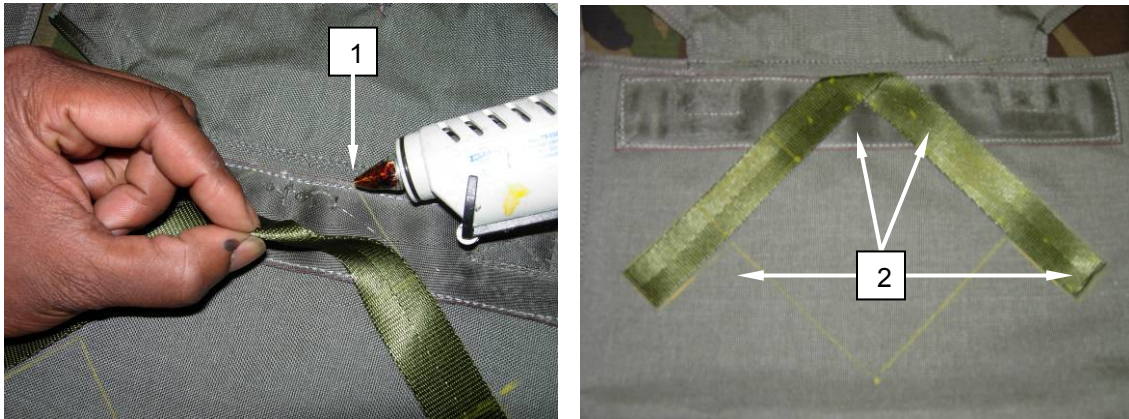


Figure 40. Diagonal Back Strap Keeper Proper Positioning.

14. Once the diagonal back strap keeper (Figure 41, Item 1) is in place, use the marks on the diagonal back strap keeper and the pack tray (Figure 41, Item 2) to identify the location of the four box X stitching patterns. Stitching patterns are $1\frac{5}{8}$ inch (Figure 41, Item 3) and 2 inches (Figure 41, Item 4).

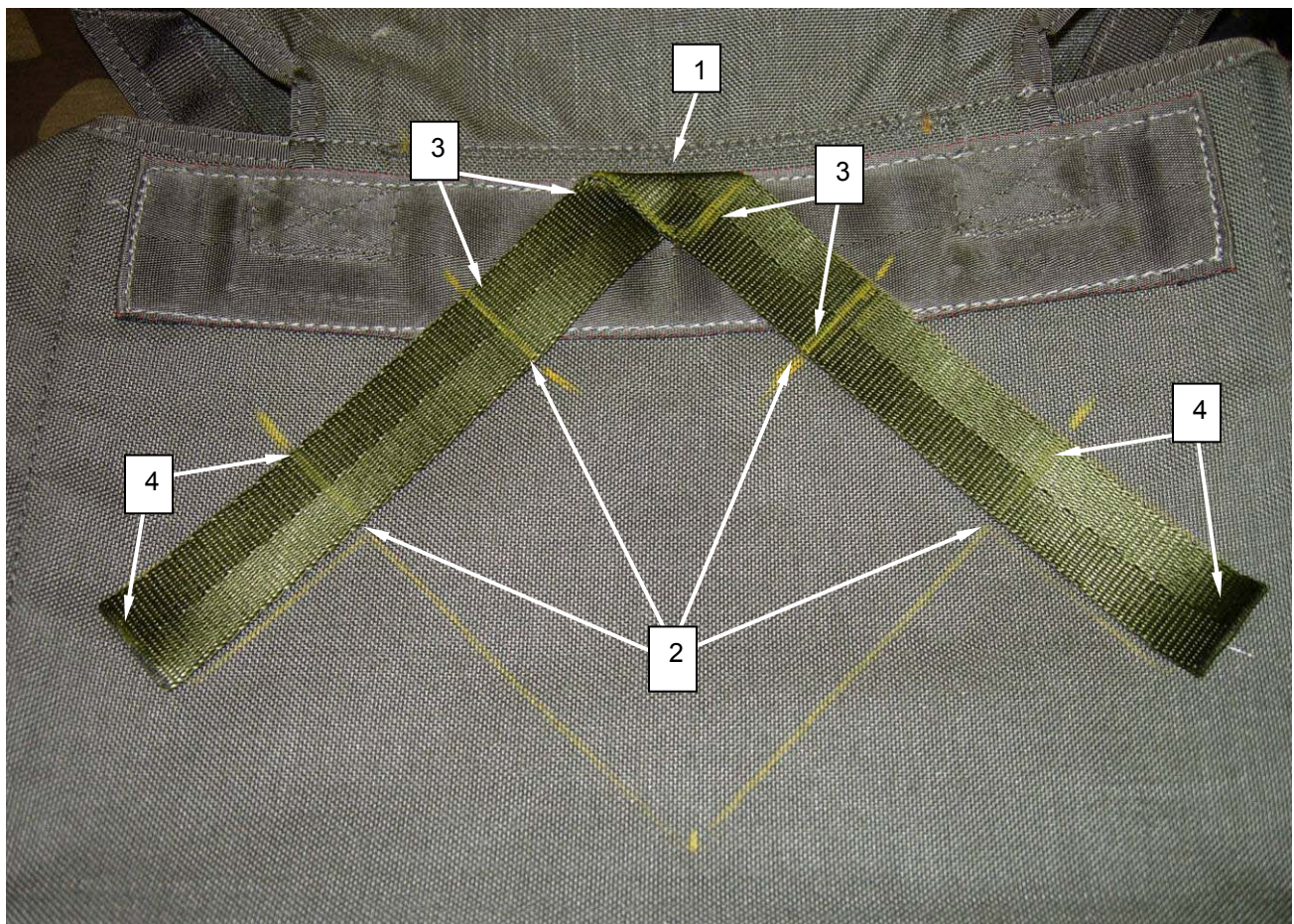


Figure 41. Mark the Diagonal Back Strap Keeper.

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15. Box X stitch pattern with locking stitch will be used to secure the diagonal back strap keeper and diagonal back strap retainers to the main pack tray (Figure 42).
16. Using the following diagram (Figure 42), complete the Box X stitch pattern by starting in position one and follow the numbers in sequence, making a ½-inch locking stitch.

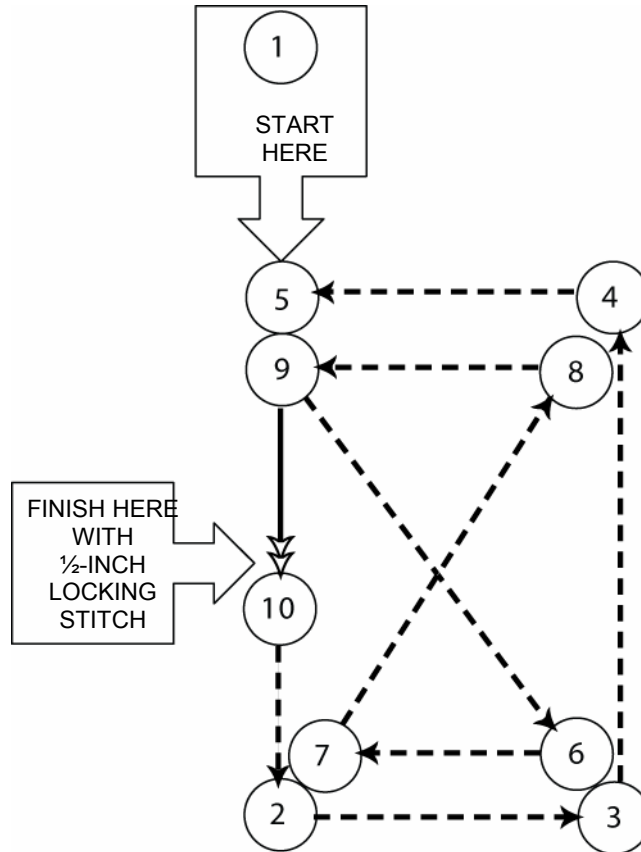


Figure 42. Box Stitching Pattern with Locking Stitch.

17. Sew the diagonal back strap keeper to the pack tray using a medium duty sewing machine with size 3 nylon thread, 5 to 8 stitches per inch.
18. Start sewing from the top of the folded portion going from left to right (Figure 43, Item 1).



Figure 43. Sewing the Diagonal Back Strap Keeper to the Pack Tray.

19. Sew two box X stitch patterns $1\frac{5}{8}$ -inch in length with locking stitch on the upper portion of the diagonal back strap keeper (Figure 44, Item 1).

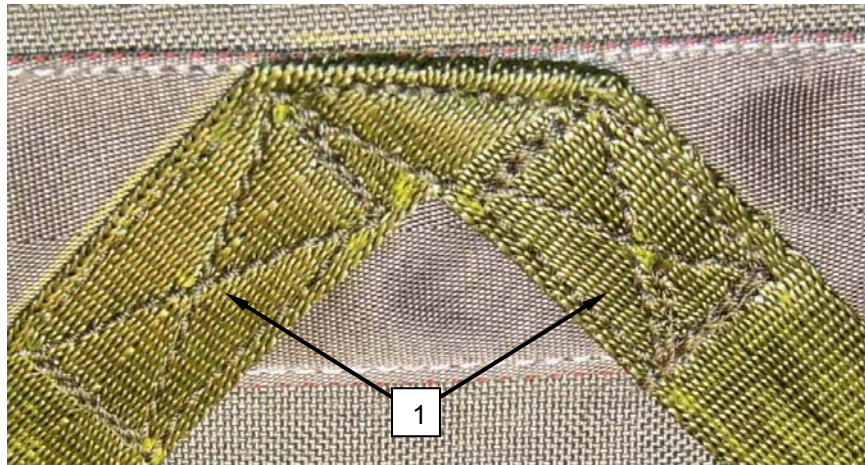


Figure 44. Box X Stitch Sewn on the Upper Diagonal Back Strap Keeper.

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20. Sew two Box X stitch patterns 2 inches in length with locking stitch on the lower portion of the diagonal back strap keeper (Figure 45, Item 1).

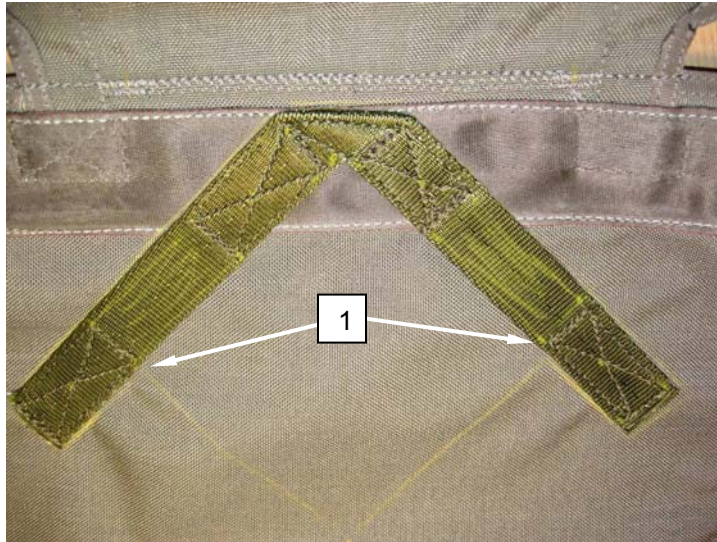


Figure 45. 2-inch Box X Stitching on the Diagonal Back Strap Keeper.

21. Take two new diagonal back strap retainers (Figure 46) supplied in the MWO kits.



Figure 46. Diagonal Back Strap Retainers.

22. Using a glue gun, apply a small amount of glue to hold the diagonal back strap retainers. Mark the diagonal back strap retainer using the template (Figure 47).

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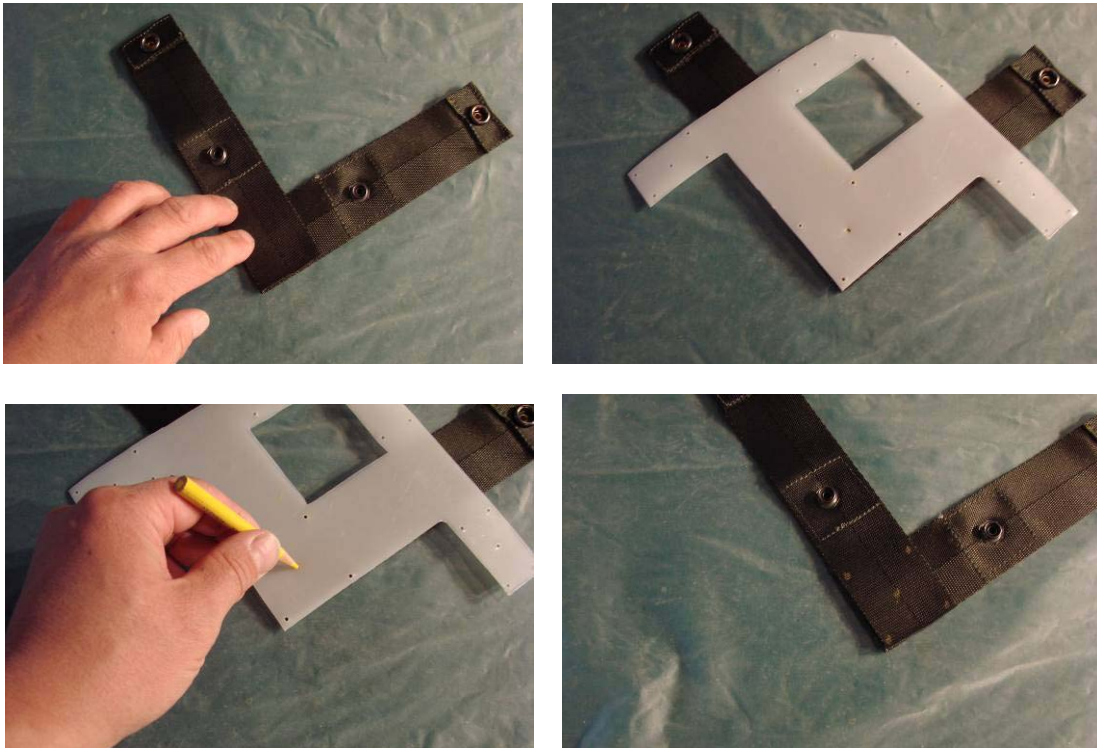


Figure 47. Mark the Diagonal Back Strap Retainers.

23. Place the diagonal back strap retainer onto the pack tray, aligning with the traced lines made from the template. Route the diagonal back strap retainers through the diagonal back strap keepers and snap closed (Figure 48).
24. Lift the diagonal back strap retainers and place a small amount of glue on the pack tray. Press the diagonal back strap retainer firmly to secure in place (Figure 48).



Figure 48. Install the Diagonal Back Strap Retainer.

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25. Sew the diagonal back strap retainers onto the main pack tray using size 3 nylon thread, 5 to 8 stitches per inch with a Box X stitching pattern (Figure 49).

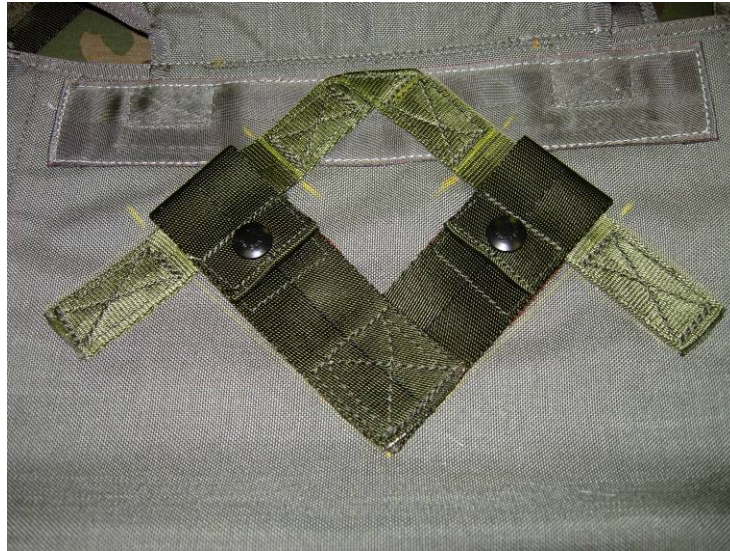


Figure 49. Sew the Diagonal Back Strap Retainer.

END OF TASK

RE-ATTACH THE HARNESS AND MAIN PACK TRAY ASSEMBLIES TO THE MAIN CANOPY

1. Lay pack tray (Figure 50, Item 1) on pack table with the harness attaching points (Figure 50, Item 2) facing up.



Figure 50. Layout Main Pack Tray Assembly.

2. Place the harness assembly (Figure 51, Item 3) on the pack tray (Figure 51, Item 1) with the ejector (Figure 51, Item 4) and shoulder pads (Figure 51, Item 5) facing up. Ensure the diagonal back straps intersect (Figure 51, Item 6) in the center of the pack tray, and ensure there are no twists in the upper main lift web (Figure 51, Item 7) and lower saddle assembly (Figure 51, Item 8).

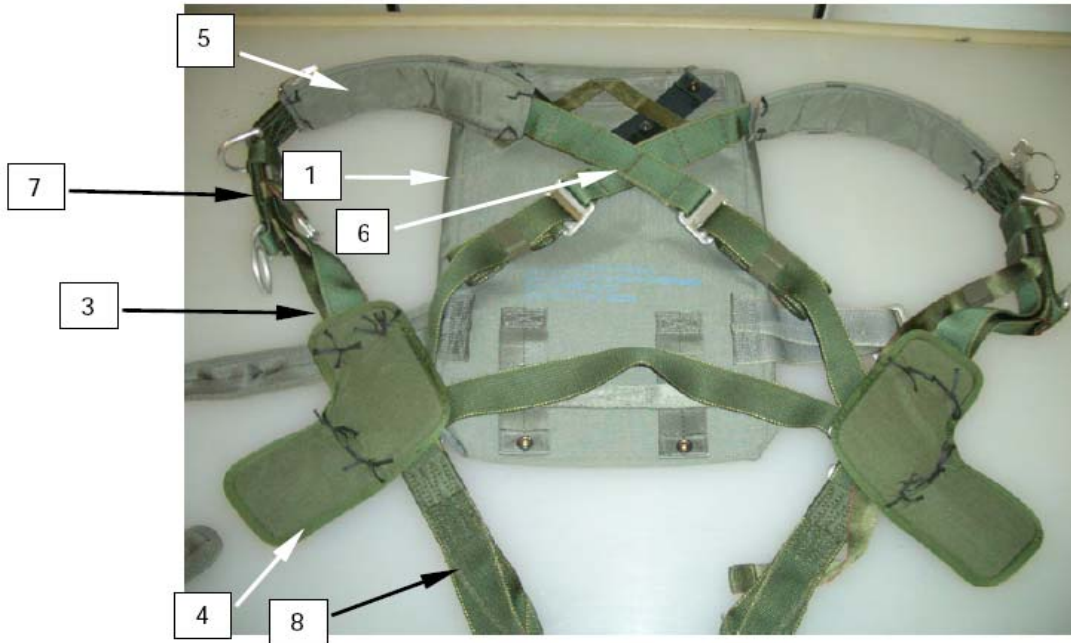


Figure 51. Harness Assembly Positioned on the Main Pack Tray.

3. Secure the horizontal back strap (Figure 52, Item 1) by routing both pack tray horizontal back strap retainers (Figure 52, Item 2) over the horizontal back strap (Figure 52, Item 1) and under the horizontal back strap keepers and secure the snap fasteners (Figure 52, Item 3).

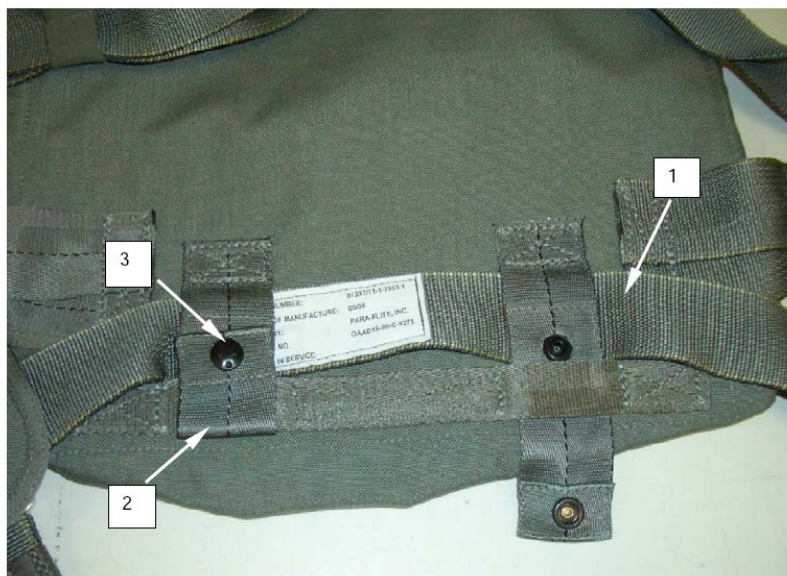


Figure 52. Secure the Horizontal Back Strap onto the Main Pack Tray.

4. Attach diagonal back straps (Figure 53, Item 1) by routing the diagonal back strap retainer (Figure 53, Item 2) through the selected sizing channel (Figure 53, Item 3).

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5. Route the diagonal back strap retainer (Figure 53, Item 2) through the diagonal back strap keeper (Figure 53, Item 4).
6. Close snap fastener (Figure 53, Item 5) to secure.
7. Repeat for the opposite side (Figure 53, Item 6). Ensure that the same sizing channel is used for both.
8. Enter the date in service on the horizontal back strap in data panel.

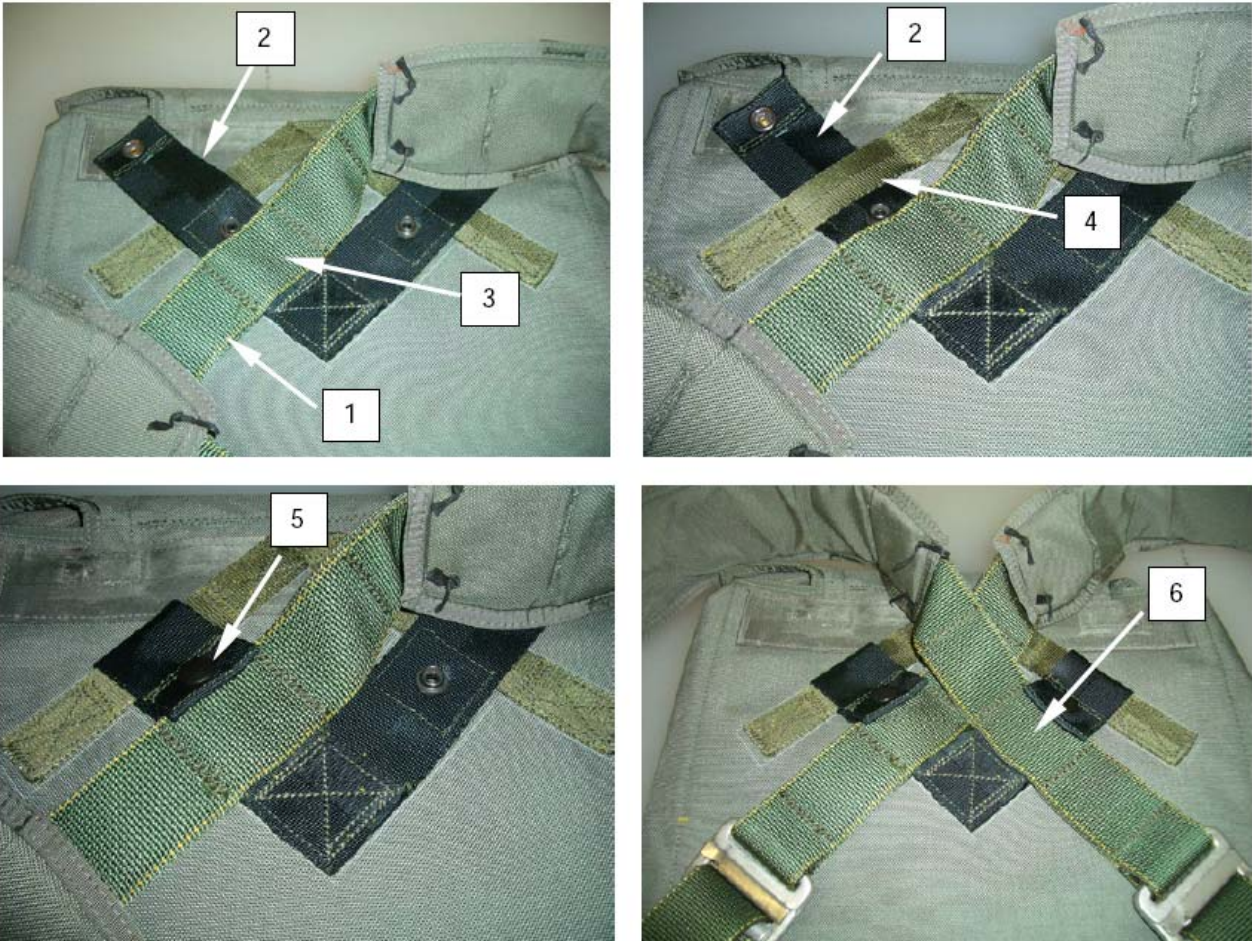


Figure 53. Attach Diagonal Back Straps onto Main Pack Tray.

END OF TASK

ATTACH RISERS TO THE HARNESS ASSEMBLY

1. Place the assembled harness and pack tray on the packing table between the lower end of the packing table and the male fitting (Figure 54, Item 1) of the CRA of the riser assemblies (Figure 54, Item 2) so that the smooth side of the pack tray is facing up, the harness is against the table, the harness is oriented with the canopy release assemblies on bottom, and the top closing flap is facing toward the upper end of the packing table.



Figure 54. Attach the Harness Assembly to the Main Riser Assemblies.

2. Ensure the riser assemblies and harness assembly are free of tangles and twists.
3. Seat the male fitting (Figure 55, Item 1) of the CRA into the female fitting (Figure 55, Item 2), by fitting the heel of the male fitting into the groove of the female fitting (Figure 55, Item 3).
4. Fit the toe of the male fitting (Figure 55, Item 4) into the slot of the female fitting (Figure 55, Item 2).

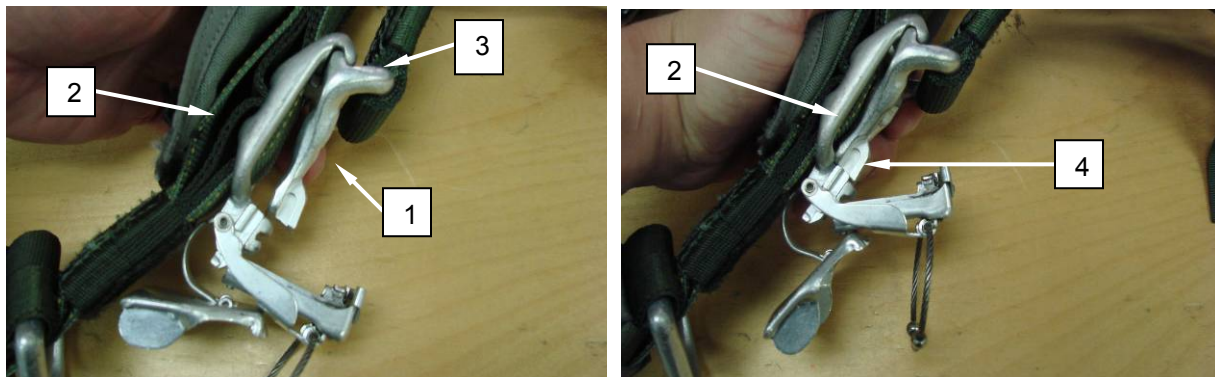


Figure 55. Secure Riser Assemblies to Harness Assembly.

5. Operate the latch and check for smooth operation. Close the latch (Figure 56, Item 1) and ensure the latch is securely locked (Figure 56, Item 2).
6. Position the cable loop (Figure 56, Item 3).
7. Fit the heel of the safety clip (Figure 56, Item 4) into the slot of the latch (Figure 56, Item 5).
8. Close the safety clip (Figure 56, Item 6).
9. Repeat for the opposite side.

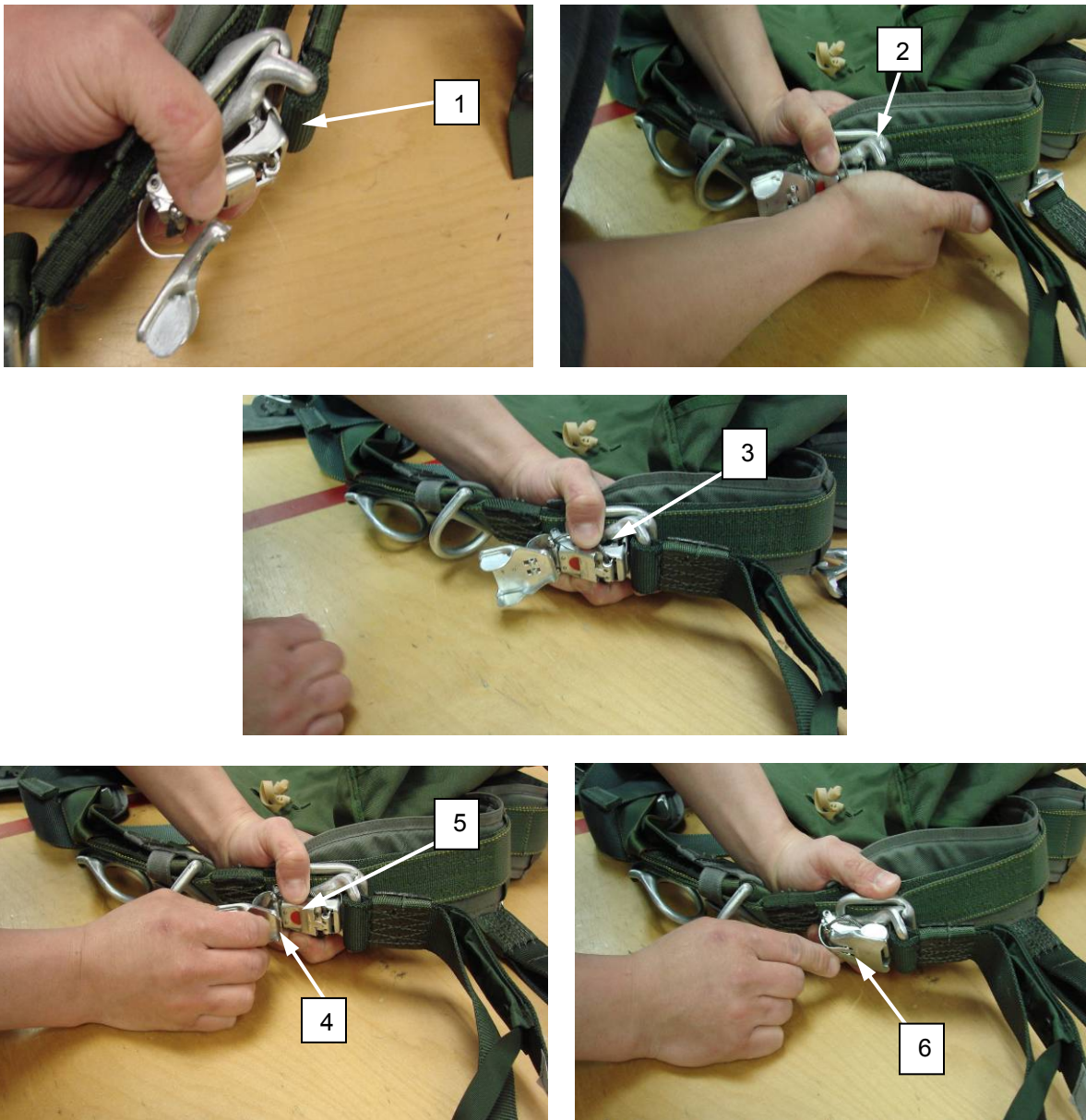


Figure 56. Secure Riser Assemblies to Harness Assembly.

END OF TASK

REMOVE RISER ASSEMBLIES AND REPLACE #6 CONNECTOR LINKS ON T-11 RESERVE SUSPENSION LINE ASSEMBLY.

1. Cut and remove tacking (Figure 57, Item 1) from risers (Figure 57, Item 2).

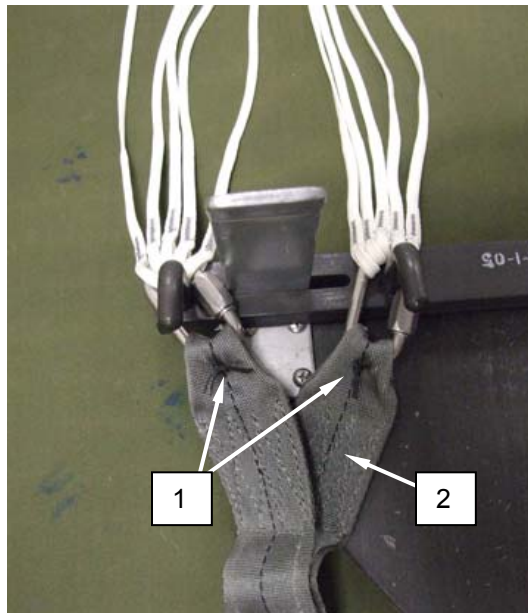


Figure 57. Remove Tacking.

NOTE

Use an appropriate tool to assist with line continuity.

2. Using an adjustable wrench, loosen barrel nuts (Figure 58, Item 1) on connector links (Figure 58, Item 2) and remove risers.
3. Remove suspension lines (Figure 58, Item 3), starting with left riser groups then right riser groups attached to connector links (Figure 58, Item 2) and discard unserviceable links.
4. Position replacement links with nylon patch so that barrels face inboard and tighten downward to lower end of table. Attach suspension lines to their corresponding connector links without crossing. Ensure the suspension lines are closest to the barrel end of the connector link.

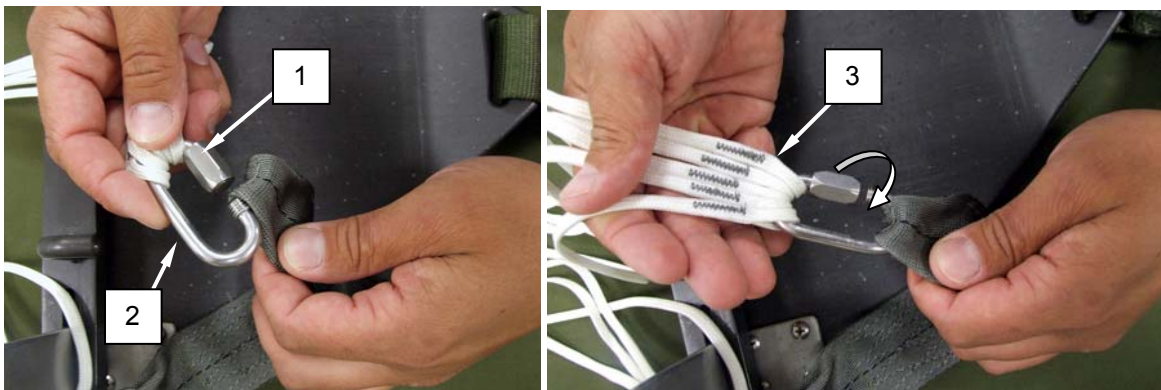


Figure 58. Replace Connector Links.

5. Secure a new T-11 reserve riser assembly with spreader bar from the MWO kit.

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6. Lay out the reserve riser assembly (Figure 59) directly behind the connector link groups. Ensure there are no twists.
7. Evenly mate the hook pile tape between the reserve risers' plies.
8. Ensure the gates of the snap hooks are facing downwards and the butterfly portions of the snap hooks are facing outwards, with the spreader bar laying flat with no twists (Figure 59).



Figure 59. T-11 Reserve Riser Layout.

9. Install risers onto applicable connector links.

Top left	5	4	3	2	1		20	19	18	17	16	Top right
	○	○	○	○	○		○	○	○	○	○	
Bottom left	6	7	8	9	10		11	12	13	14	15	Bottom right
	○	○	○	○	○		○	○	○	○	○	

1. Perform line continuity check:
 - a. 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.
 - b. 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.
 - c. 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.
 - d. 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.
2. Finger-tighten the connector links clockwise. Using a torque wrench with the crowfoot adapter and socket wrench, tighten barrel nuts (Figure 60, Item 3) on connector link (Figure 60, Item 2) to 50 inch-pounds.

CAUTION

Do not use vise grip or other type of pliers to hold connector link body when tightening. Damage to connector link may occur.

NOTE

Ensure torque wrench is calibrated with TMDE prior to use.

12. Using a torque wrench with crowfoot adapter, tighten barrel nut (Figure 60, Item 2) on connector link (Figure 60, Item 3) to 50 inch-pounds.
13. Remove connector links and risers from the tension plate adapter.
14. Rotate the riser sideways on the long portion of the connector link, positioning the riser to the long portion of the connector link opposite the barrel nut.
15. Hand tack (Figure 60, Item 4) each riser at connector link (Figure 60, Item 2) with one turn, double lacing and tying tape.
16. Tack each riser (Figure 60, Item 1) with a 12-inch length of lacing and tying tape, one turn double (Figure 60, Item 4). Pass the tacking needle (Figure 60, Item 5) tight against the body of the connector link (Figure 60, Item 3) with square knot toward top when tied.

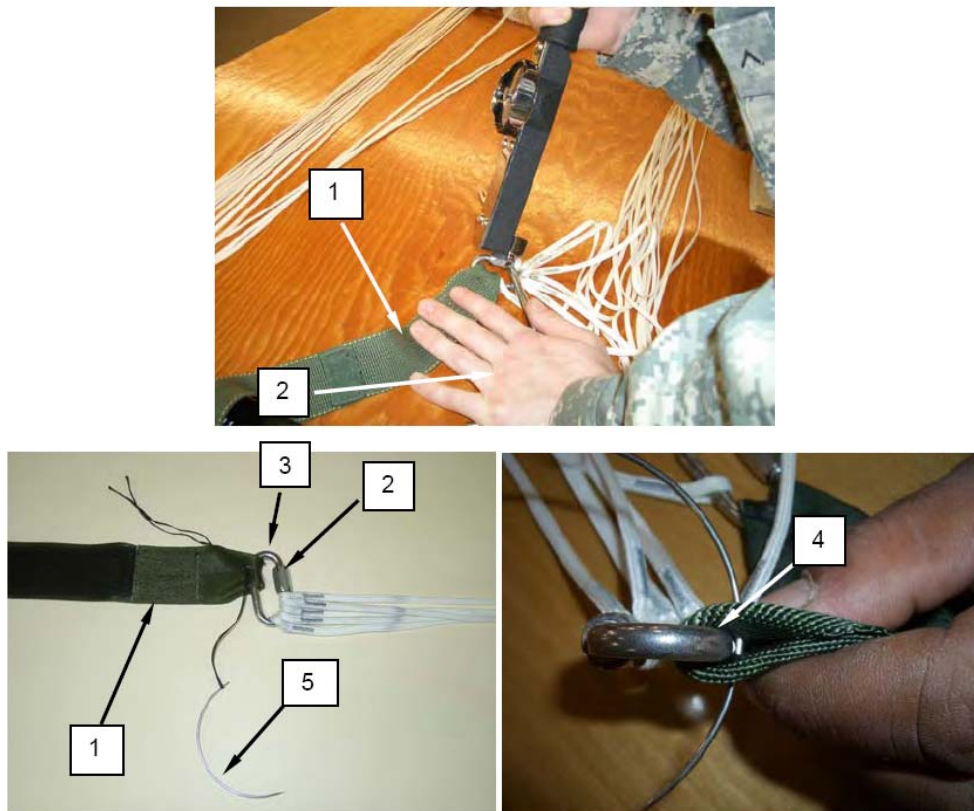


Figure 60. Securing Connector Link to Risers.

END OF TASK

SECURE SPREADER BAR TO PACK TRAY

1. Cut two 10-inch pieces of Type III nylon cord (Red) gutted for the spreader bar securing tie.
2. Route each cord (Figure 61, Item 1) through the top grommet (Figure 61, Item 2) on each side of the pack tray.



Figure 61. Route Type III Nylon Cord (RED) Through Top Grommets of Pack Tray.

3. Center the spreader bar (Figure 62, Item 1) between the upper and lower grommets, parallel to the top of the pack tray.



Figure 62. Centering the Spreader Bar Between Upper and Lower Grommets.

4. Route each Type III nylon cord (RED) (Figure 63, Item 1) over the spreader bar (Figure 63, Item 2) and through the lower grommet (Figure 63, Item 3) on each side.

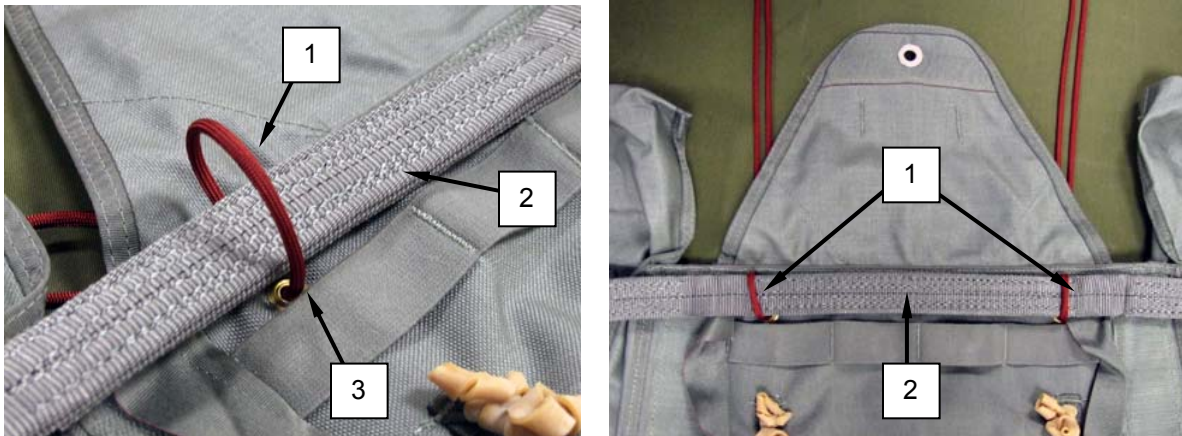


Figure 63. Routing Type III Nylon Cord (Red) Through Lower Grommet and Over Spreader Bar.

5. Secure the spreader bar on the back side of the pack tray by tying Type III nylon cord (Red) (Figure 64, Item 1) using a surgeons knot with locking knot (Figure 64, Item 2) with a locking knot (Figure 64, Item 3) in the running ends. Trim the running ends to 1 inch.

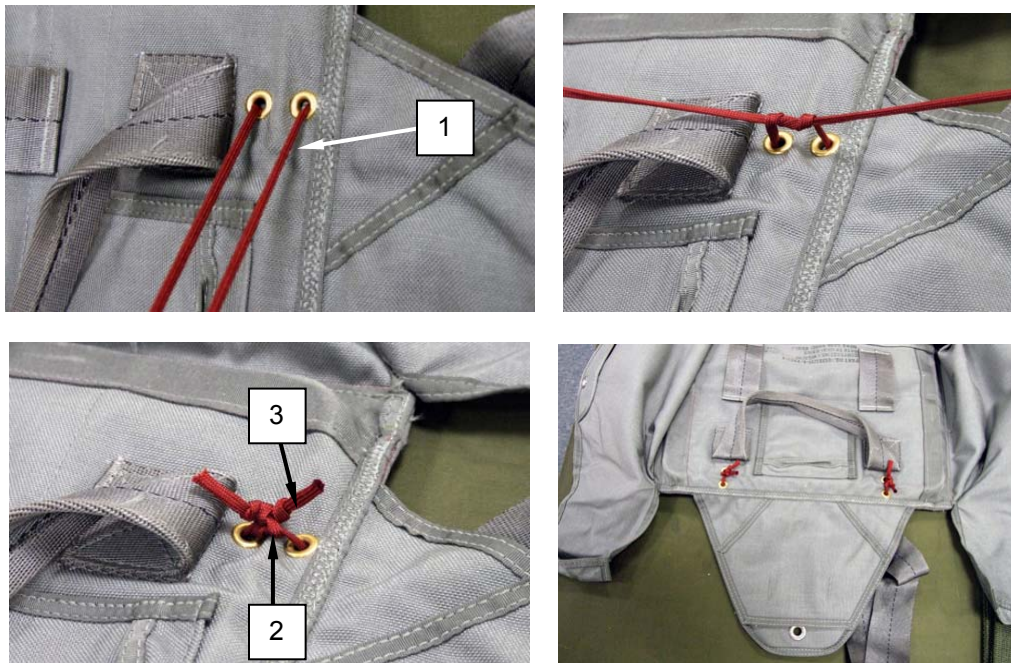


Figure 64. Securing the Spreader Bar onto the Back Side of Pack Tray.

6. Place the pile tape on the riser to the hook tape on the pack tray. Ensure that the top bar (Figure 65, Item 1) of each snap hook aligns with the top of the binding tape (Figure 65, Item 2). S-fold the excess of the spreader bar (Figure 65, Item 3) back onto itself.

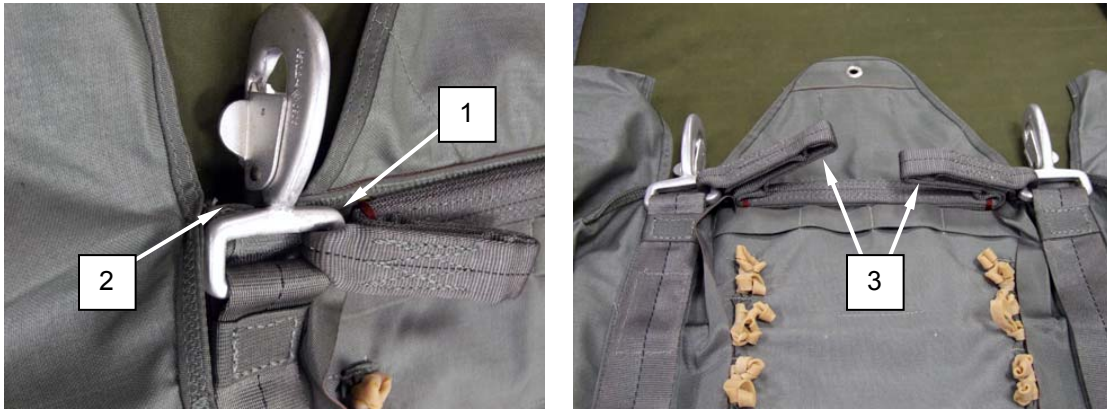


Figure 65. Aligning Top Bar of Snap Hook with Binding Tape and S-Folding Excess Spreader Bar.

7. Use a tacking needle with one single turn of lacing tape to attach the connector snap to the pack tray. Push the tacking needle just below the binding tape, through the back of the pack tray, to the front in the middle of the connector snap (Figure 66).
8. Route the lacing tape around the throat of the connector snap.
9. Run the tacking needle through the front of the pack tray to the back of the pack tray.
10. Both running ends should now be on the back side of the pack tray.
11. Route the running ends over the pack tray around the throat of the connector snap, and tie a surgeon's knot with locking knot. Trim the running ends to 1 inch.
12. Repeat for the second connector snap.

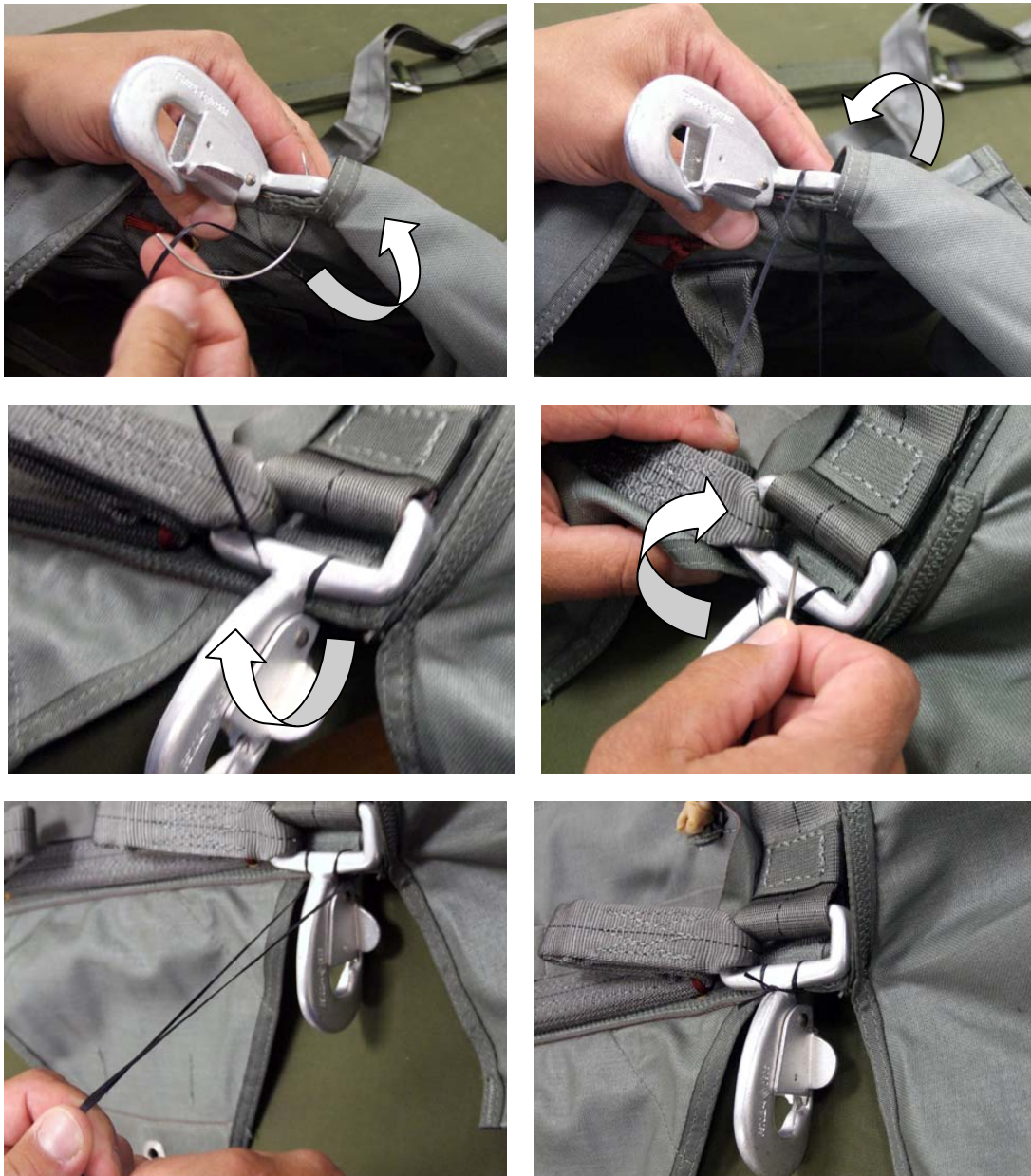


Figure 66. Securing Connector Snaps To Pack Tray.

13. Using an 8-inch piece of thread, cotton, ticket 8/4, orange, route from the right side to the left side in a counter-clockwise direction between the plies of the excess fold-over from the spreader bar and back through the right side (Figure 67).
14. Tie a surgeon's knot with locking knot. Ensure tie is secured tightly.

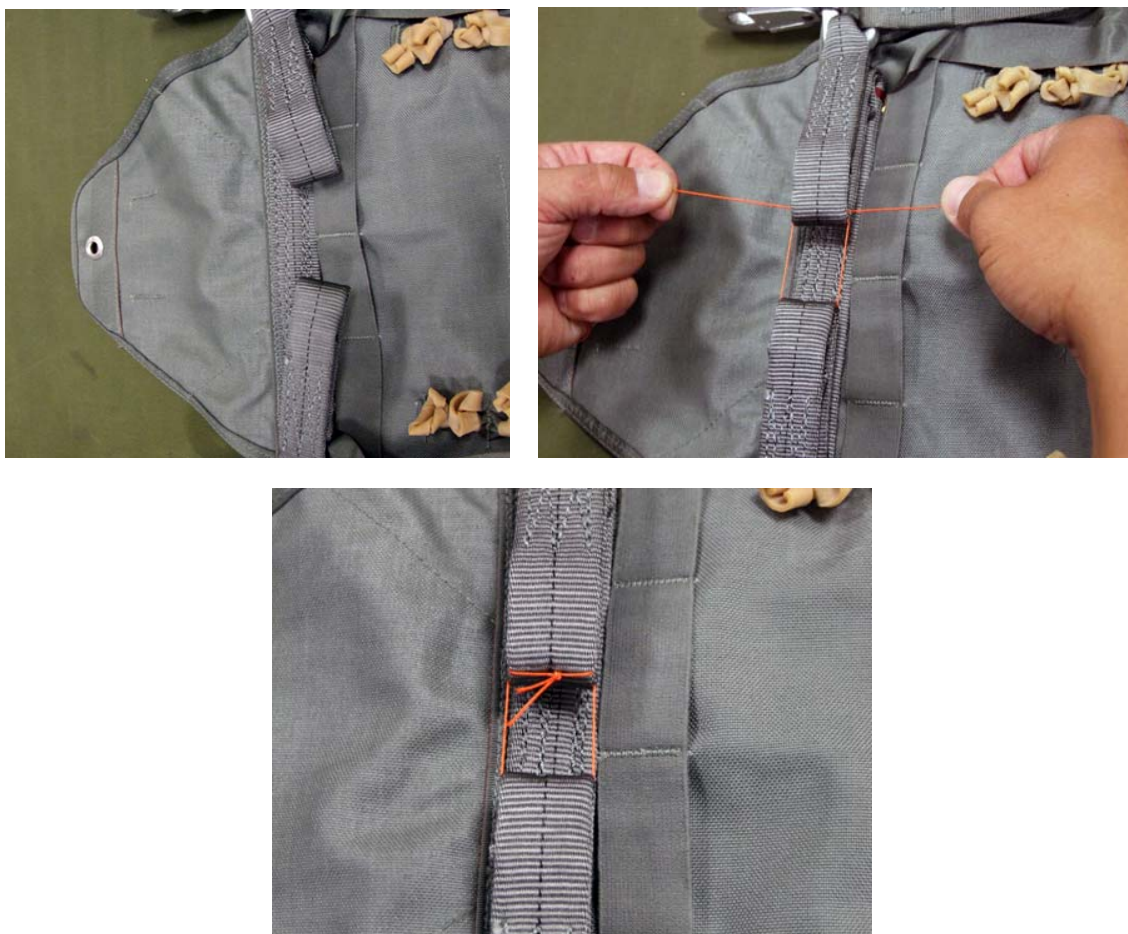


Figure 67. Securing the Excess Spreader Bar Fold-over.


END OF TASK

END OF MODIFICATION PROCEDURES

By Order of the Secretary of the Army:

GEORGE W. CASEY, JR.
General, United States Army
Chief of Staff

Official:


JOYCE E. MORROW
Administrative Assistant to the
Secretary of the Army
0820502

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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 TACOM LIFE CYCLE MANAGEMENT COMMAND ATTN: AMSTA-LC-SECT 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	<p><i>In Table 1, Sewing Machine Code Symbols, the second sewing machine code symbol should be MDZZ not MD22</i></p> <p><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></p>	
<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 TACOM LIFE CYCLE MANAGEMENT COMMAND ATTN: AMSTA-LC-SECT 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
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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 D-Ring. 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>

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.)*

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PUBLICATION/FORM NUMBER MWO 10-1670-327-23-1						DATE 1 August 2008	TITLE MC-6 Upgrade to T-11 Reserve Components
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

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PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS									
PUBLICATION NUMBER MWO 10-1670-327-23-1				DATE 1 August 2008			TITLE MC-6 Upgrade to T-11 Reserve Components		
PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION	
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PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS							
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