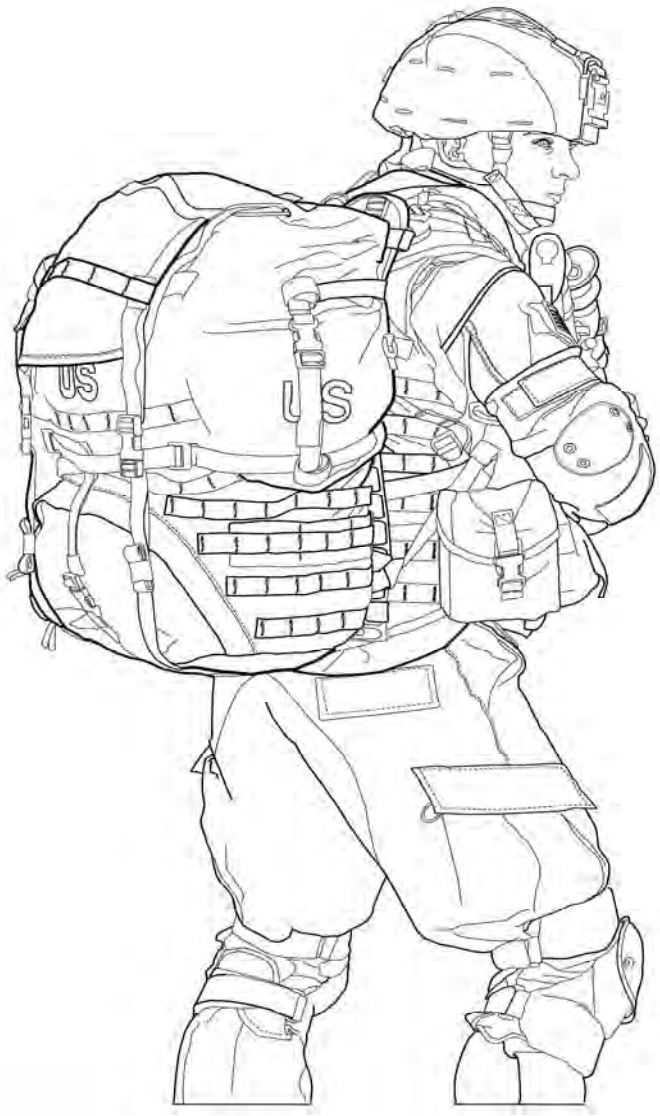
TM 10-8465-236-24&P

TECHNICAL MANUAL

FIELD AND SUSTAINMENT MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST FOR

MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II (NSN 8465-01-525-0578) (EIC:YCH)



HEADQUARTERS, DEPARTMENT OF THE ARMY

16 SEPTEMBER 2010

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.

FIRST AID DATA

For first aid treatment, refer to FM 4-25.11.

EXPLANATION OF SAFETY WARNING ICONS

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

WARNINGS DESCRIPTION

WARNING

Sewing machine needles can break with great force. Ensure that eye protection is worn. Serious injury can result from flying metal pieces coming in contact with eyes if proper safety precautions are not observed.

LIST OF EFFECTIVE PAGES/WORK PACKAGES

NOTE: Zero in the "Change No." column indicates an original page or work package.

Date of issue for the original manual is:

Original 16 September 2010

TOTAL NUMBER OF PAGES FOR FRONT AND REAR MATTER IS 28 AND TOTAL NUMBER OF WORK PACKAGES IS 42, CONSISTING OF THE FOLLOWING:

Page/WP No.	Change No.	Page/WP No.	Change No.
Front Cover	0	Chp 5 title page	0
Warning Summary (2 pgs)	0	WP 0033 (6 pgs)	0
i-xii	0	Chp 6 title page	0
Chp 1 title page	0	WP 0034 (6 pgs)	0
WP 0001 (4 pgs)	0	WP 0035 (2 pgs)	0
WP 0002 (16 pgs)	0	WP 0036 (4 pgs)	0
WP 0003 (2 pgs)	0	WP 0037 (2 pgs)	0
Chp 2 title page	0	WP 0038 (2 pgs)	0
WP 0004 (2 pgs)	0	Chp 7 title page	0
WP 0005 (4 pgs)	0	WP 0039 (2 pgs)	0
Chp 3 title page	0	WP 0040 (4 pgs)	0
WP 0006 (2 pgs)	0	WP 0041 (6 pgs)	0
WP 0007 (8 pgs)	0	WP 0042 (2 pgs)	0
WP 0008 (4 pgs)	0	Back cover	0
WP 0009 (4 pgs)	0		
WP 0010 (4 pgs)	0		
WP 0011 (4 pgs)	0		
WP 0012 (6 pgs)	0		
WP 0013 (4 pgs)	0		
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WP 0016 (6 pgs)	0		
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WP 0032 (14 pgs)	0		

HEADQUARTERS,
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 16 September 2010

TECHNICAL MANUAL

FIELD AND SUSTAINMENT MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST FOR

MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II (NSN 8465-01-525-0578) (EIC YCH)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms), located in the back of this manual directly to: Commander, U.S. Army TACOM Life Cycle Management Command, ATTN: AMSTA-LCL-MPP/TECH PUBS, 1 Rock Island Arsenal, Rock Island, IL 61299-7630. You may also send in your recommended changes via electronic mail or by fax. Our fax number is DSN 793-0726 and commercial number is 309-782-0726. Our e-mail address is TACOMLCMC.DAForm2028@us.army.mil. A reply will be furnished to you.

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

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HOW TO USE THIS MANUAL

HOW TO OBTAIN TECHNICAL MANUALS

When a new system is introduced to the Army inventory, it is the responsibility of the receiving units to notify and inform the Unit Publications Clerk that a Technical Manual is available for the new system. Throughout the life cycle of the new system, the Distribution Center DOL-W will also provide updates and changes to the Technical Manual.

To receive new Technical Manuals or change packages to fielded Technical Manuals, provide the Unit Publications Clerk the full Technical Manual number, title, date of publication, and number of copies required. The Unit Publications Clerk will then justify the request through the Unit Publications Officer. When the request is approved, DA Form 12-R is used to order the Technical Manual from the Army Publishing Directorate (APD).

Instructions for the Unit Publications Clerk

Obtain DA Form 12-R and request a publications account from the APD Web site at http://www.apd.army.mil. Once on the Website, click on the “Orders/Subscriptions/Reports” tab. From the dropdown menu, select “Establish an Account,” then select “Tutorial” and follow the instructions in the tutorial presentation.

Complete information for obtaining Army publications can be found in DA PAM 25-33.

ORGANIZATION OF THIS MANUAL

FRONT MATTER — Front matter consists of front cover, warning summary, title block, table of contents, and How to Use This Manual page.

CHAPTER 1 — GENERAL INFORMATION, EQUIPMENT DESCRIPTION, AND THEORY OF OPERATION. Chapter 1 contains general information, equipment description and data, as well as theory of operation.

CHAPTER 2 — PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS). Chapter 2 contains preventive maintenance checks and services information.

CHAPTER 3 — FIELD MAINTENANCE INSTRUCTIONS. Chapter 3 contains maintenance procedures authorized at the field level that include repair and replace.

CHAPTER 4 — SUSTAINMENT MAINTENANCE INSTRUCTIONS. Chapter 4 contains maintenance authorized at the sustainment level that includes service, inspect, repair, and replace.

CHAPTER 5 — AUXILIARY EQUIPMENT. Chapter 5 contains auxiliary equipment including the Patrol Pack and Sleep System Container.

CHAPTER 6 — PARTS INFORMATION. Chapter 6 contains the Repair Parts and Special Tools List (RPSTL), the National Stock Number Index, and the Parts Number Index.

CHAPTER 7 — SUPPORTING INFORMATION. Chapter 7 contains the Maintenance Allocation Chart (MAC) and the Expendable and Durable Items List.

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

Manual Organization and Page Numbering System

The Manual is divided into seven 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 form XXXX YY-ZZ where XXXX is the work package number (e.g. 0010 is work package 10) and YY is reserved to permit unlimited expansion of the TM to incorporate new configuration data without affecting the WP sequence numbers already assigned, and to permit adding one or more WPs between any two existing WPs during any revision cycle. 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 general descriptions of MOLLE II components, the Table of Contents indicates the information can be found in Chapter 1. Scanning down the listings for Chapter 1, “Equipment Description and Data” information can be found in WP 0002 00 (i.e. Work Package 2).

There is not a Glossary at the back of the Manual.

CHAPTER 1

GENERAL INFORMATION, EQUIPMENT DESCRIPTION, AND THEORY OF OPERATION FOR MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II

FIELD AND SUSTAINMENT MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
GENERAL INFORMATION

SCOPE

Type of Manual

This technical manual provides Field Maintenance instructions for Modular Lightweight Load-Carrying Equipment (MOLLE) II.

Equipment Name

The equipment name is Modular Lightweight Load-Carrying Equipment (MOLLE) II.

Purpose of Equipment

The MOLLE II is an integrated, modular load bearing system designed to have different configurations that allow soldiers to tailor their equipment to meet specific mission needs.

MAINTENANCE FORMS, RECORDS, AND REPORTS

(A) Department of the Army forms and procedures used for equipment maintenance will be those prescribed by (as applicable) DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual; DA PAM 738-751, or AR 700-138, Army Logistics Readiness and Sustainability.

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your MOLLE II 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.

If you have Internet access, the easiest and fastest way to report problems or suggestions is to go to https://aeps.ria.army.mil/aepspublic.cfm (scroll down and choose the “Submit Quality Deficiency Report” bar).The Internet form lets you choose to submit an Equipment Improvement Recommendation (EIR), a Product Quality Deficiency Report (PQDR), or a Warranty Claim Action (WCA).

You may also submit your information using an SF 368 (Product Quality Deficiency Report). You can send your SF 368 via e-mail, regular mail, or facsimile using the addresses/facsimile numbers specified in DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual. We will send you a reply.

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

Not applicable to the MOLLE II system.

PREPARATION FOR STORAGE AND SHIPMENT

The MOLLE II is shipped in sealed plastic. Do not store the MOLLE II in any medium that could trap moisture and cause degradation of the equipment.

NOMENCLATURE CROSS-REFERENCE LIST

Table 1. Nomenclature Cross-Reference List.

Common Name	Official Nomenclature
MOLLE	MOLLE II
Pack Frame	MOLLE Pack Frame
Rucksack	Large Field Pack (in legacy systems, called the main pack)

LIST OF ACRONYMS AND ABBREVIATIONS

Table 2. List of Acronyms and Abbreviations.

Acronym/Abbreviation	Meaning
AAL	Additional Authorized List (AAL)
ALICE	All Purpose Lightweight Individual Carrying Equipment
APD	Army Publishing Directorate (APD)
AR	Army Regulation
BII	Basic Issue Items
CBRN	Chemical, Biological, Radiological and Nuclear
CIF	Central Issue Facility
COEI	Components of End Items
CPC	Corrosion
DA	Department of the Army
EIR	Equipment Improvement Recommendations
ETLBV	Enhanced Tactical Load-Bearing Vest
FLC	Fighting Load Carrier
FM	Field Manual
LBV	Load Bearing Vest
MOLLE	Modular Lightweight Load-Carrying Equipment
MBITR	Multiband Inter-/Intra-Team Radio
MVP	MOLLE Vehicle Pane
NBC	Nuclear, Biological, and Chemical
NO	Number
PAM	Pamphlet
PMCS	Preventative Maintenance Checks and Services
PQDR	Product Quality Deficiency Report
PVS	Portable Visual Search (Night Vision Goggles)
SAW	Squad Automatic Weapon
SF	Standard Form
TAMMS	The Army Maintenance Management System
TDR	Transportation Discrepancy Report
TM	Technical Manual
UV	Ultra Violet
WCA	Warranty Claim Action
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.

END OF WORK PACKAGE

FIELD AND SUSTAINMENT MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
EQUIPMENT DESCRIPTION AND DATA

EQUIPMENT CHARACTERISTICS, CAPABILITIES AND FEATURES

MOLLE II is an integrated, modular load-carrying system designed to enhance the capability and lethality of the modern Soldier. MOLLE II is designed to have different configurations that allow soldiers to tailor their equipment to meet specific mission needs.

The MOLLE II system is configured from the following items: Large Field Pack with an external frame and webbing to accommodate added components, the Fighting Load Carrier (FLC) with webbing, Waist Pack, Assault Pack, compatible Pouches and Pockets, Hydration System, and additional items to assist in meeting mission requirements.

The MOLLE II is made from water-repellant fabrics and composites that are military specified.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

Rifleman Set

The rifleman set is the basic issue set of MOLLE II gear. It consists of the fighting load carrier (FLC), a base set of pouches, a hydration system, an assault pack, a waist pack, an entrenching tool carrier, an ammunition pouches bandoleer, and a flash bang grenade pouch.

Fighting Load Carrier. The fighting load carrier (FLC) is a modular vest that allows commanders to tailor the load to meet mission needs without unnecessary pouches and gear (Figure 1). It is one size fits all, and is may be worn over body armor. The MOLLE II pockets can be placed directly on Interceptor Body Armor for certain missions, however, when the pockets are placed directly on the armor, it limits the ability to take the fighting load off without exposing oneself to ballistic threats.

The FLC is designed to reduce heat build up on the back with a minimum area of coverage of the H-Harness design. The wide, 3½-inch shoulder straps of the FLC help distribute the load without the need for excessive padding that can hinder mobility and sighting a weapon.

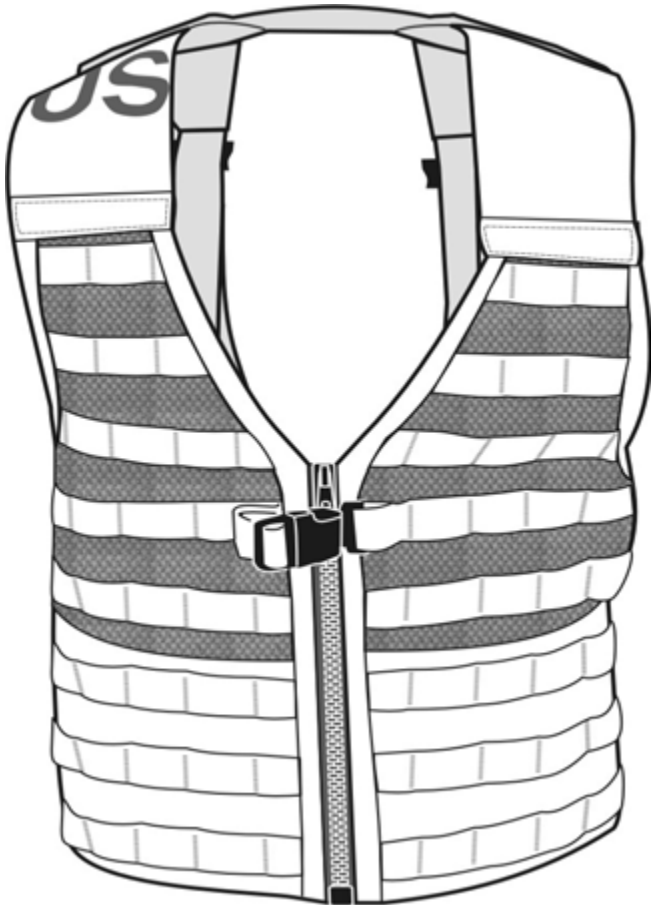
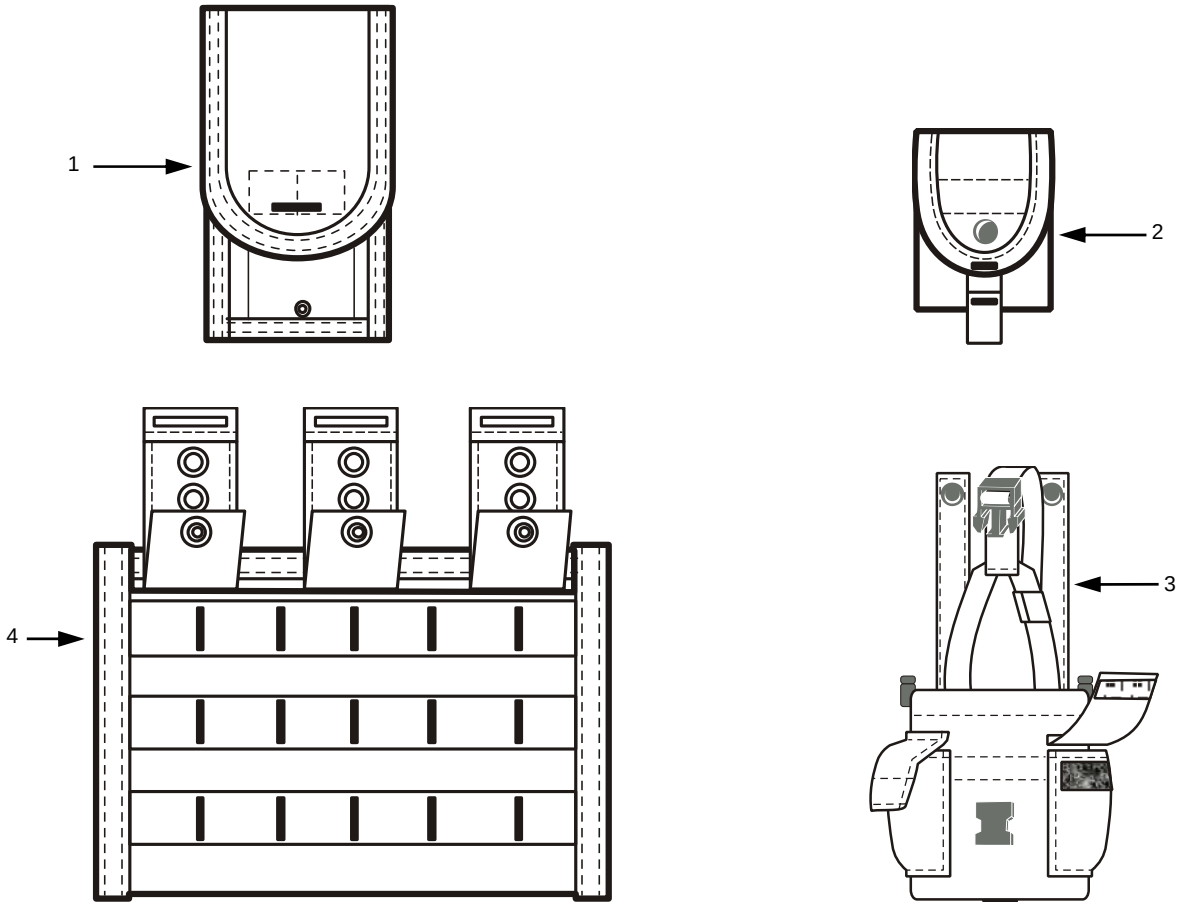


Figure 1. Fighting Load Carrier.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS — CONTINUED

Rifleman Set Pouches. The rifleman set comes standard with two general purpose/canteen pouches, two hand grenade pouches, three M4 two-magazine pouches, and two M4 three-magazine pouches. The M4 three-magazine pouches have additional webbing on the outside to allow for pouch stacking.

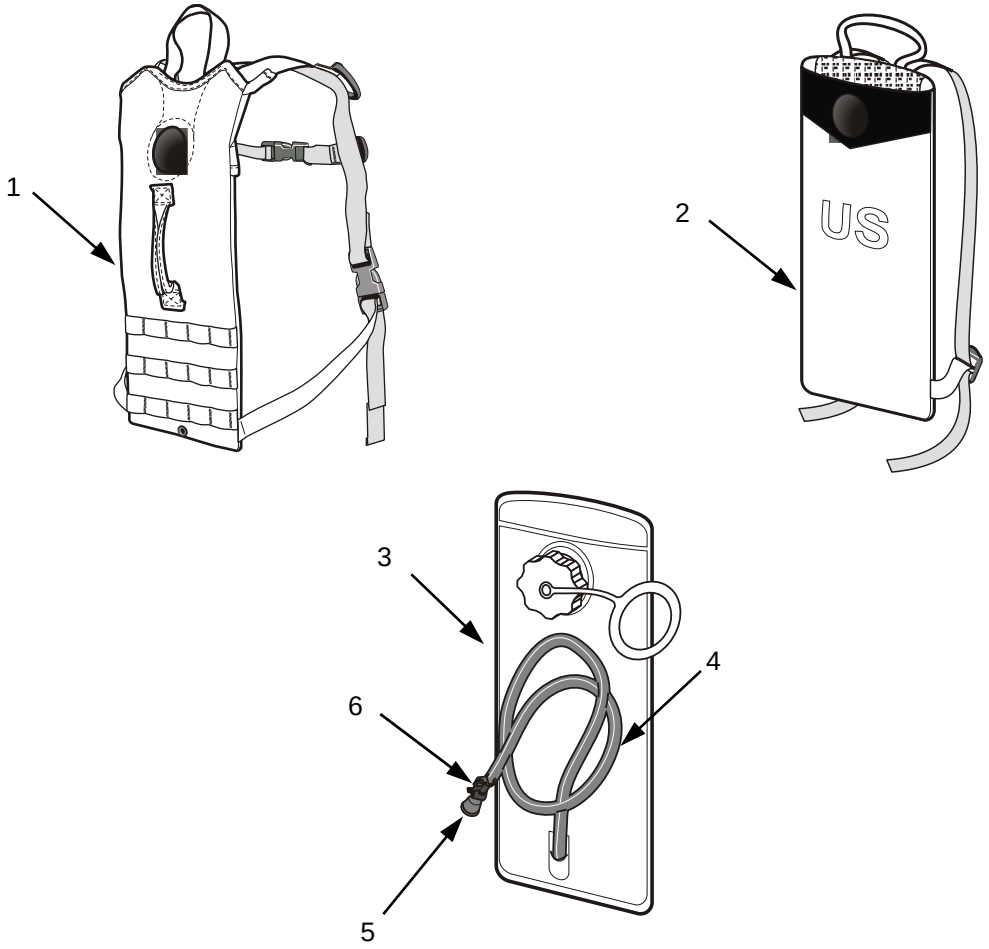


Legend
1. M4 Two-Magazine Pouch (3 ea.)
2. Hand Grenade Pouch (2 ea.)
3. Canteen/General Purpose Pouch (2ea.)
4. M4 Three-Magazine Pouch (2 ea.)

Figure 2. Rifleman Set Basic Pouches.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS — CONTINUED

Hydration System. Each rifleman set comes with one of two styles of hydration systems — one with MOLLE II webbing and one without. Both hydration systems consist of a carrier, a bladder, and a tube with shut-off valve and bite valve (in some systems, the tube detaches). Both hydration systems are easily cleaned and provide the soldier with 100 ounces of drinking water.



Legend
1. Hydration System Carrier (with MOLLE II)
2. Hydration System Carrier (without MOLLE II)
3. Hydration System Bladder
4. Hydration System Drink tube
5. Hydration System Bite Valve
6. Hydration System Shut-Off Valve

Figure 3. Hydration System.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS — CONTINUED

Assault Pack. The assault pack is designed to provide the soldier with a medium-sized container for shorter-duration patrols. The assault pack provides 1,525 cubic inches of space in the main compartment and 825 cubic inches of space in the large front packet. It carries 60 pounds and can be easily donned and doffed over the FLC. It is accessible through the top with a slide fastener and has a flap covering the opening that provides water resistance.

The pack has two, 30-inch lengths of Type VIII webbing for direct attachment to the parachutist snaphook for integration with personnel parachute harnesses, in addition to having a sewn-in, lowering-line attachment point. The assault pack may be worn on its own or may be attached to the pack frame on top of the large field pack.

Figure 4. Assault Pack.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS — CONTINUED

Waist Pack. The multi-purpose Waist Pack can be worn in one of three ways: It can be attached to the bottom of the Assault Pack by passing the stiffened webbing straps with the female side release buckles through the four webbing keepers on the bottom of the Assault Pack.

It can be attached directly to the FLC by utilizing the stiffened webbing tabs woven into the corresponding slots on the back of the FLC. It can be carried in the “stand alone” configuration by utilizing the attached two inch wide waist belt. This method allows the user to rotate the Waist Pack around in front to easily access the contents of the pack, without removing the FLC or Assault Pack.

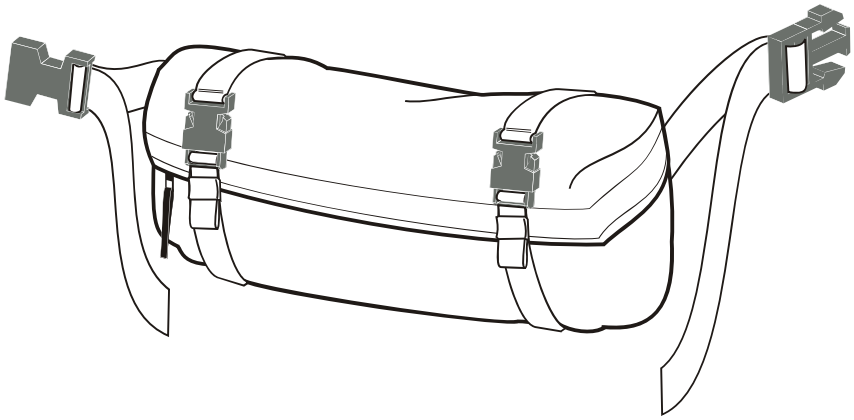


Figure 5. Waist Pack.

Entrenching Tool Carrier. The entrenching tool carrier is designed to fit on the assault pack or large field pack.

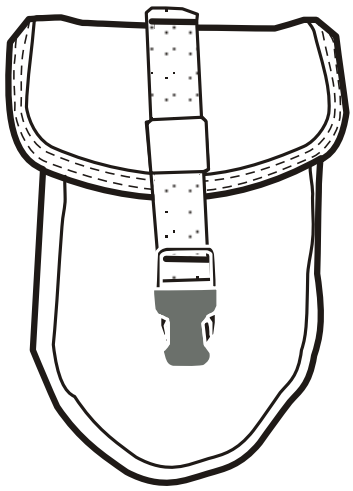


Figure 6. Entrenching Tool Carrier.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS — CONTINUED

Ammunition Pouches Bandoleer. This pouch carries six magazines.

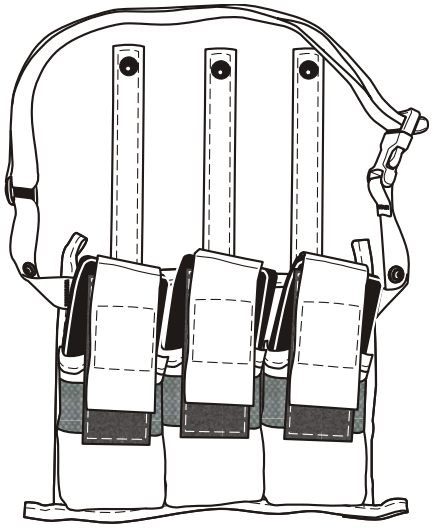


Figure 7. Ammunition Pouches Bandoleer.

Flash Bang Grenade Pouch. The rifleman set comes with one flash bang grenade pouch.

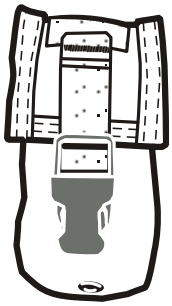


Figure 8. Flash Bang Grenade Pouch**.**

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS — CONTINUED

Large Field Pack Set

The large field pack set consists of a rucksack, two sustainment pouches, an enhanced frame, a molded waist belt and enhanced frame shoulder straps.

Rucksack. The large rucksack provides up to 4,000 cubic inches of space. In legacy systems, the rucksack was called the main pack.

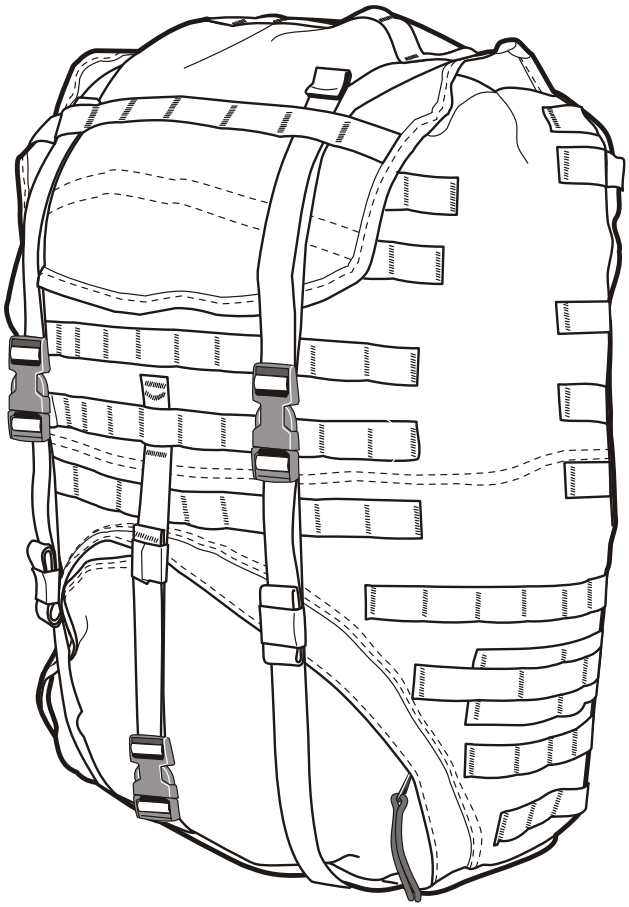


Figure 9. Rucksack.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS — CONTINUED

Sustainment Pouch. The two detachable sustainment pouches provide an additional 500 cubic inches each and attach to the side of the large field pack.

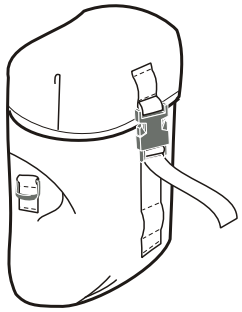


Figure 10. Sustainment Pouch.

MOLLE Pack Frame. The frame is contoured to comfortably fit closely to the body to prevent swaying of the load. The frame will allow proper head rotation while wearing a helmet and when the wearer is in the prone position. The frame is also compatible with body armor.

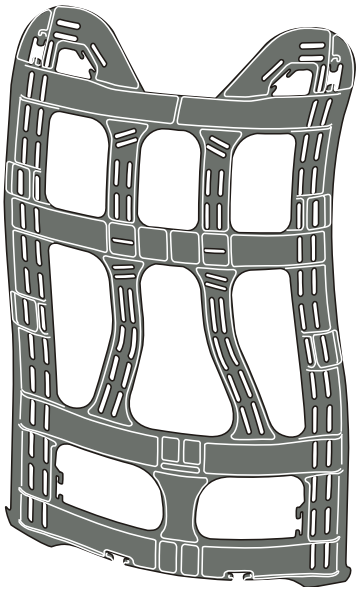


Figure 11. MOLLE Pack Frame.

Molded Waist Belt. The frame is fitted to the waist belt with four attachment straps to provide adjustment.

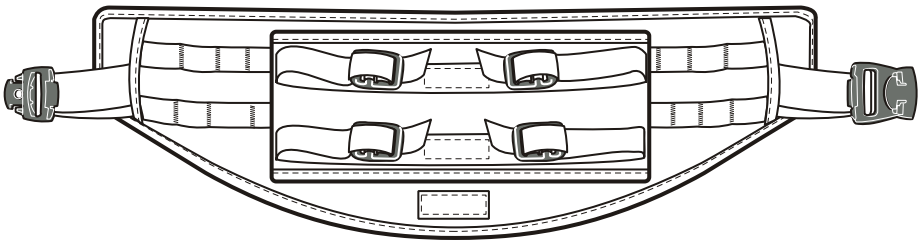


Figure 12. Molded Waist Belt.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS — CONTINUED

Enhanced Frame Shoulder Straps. The enhanced frame shoulder straps are extra-wide, padded shoulder straps that attach to the enhanced frame. The load lifter straps on the shoulder straps allow the soldier to transfer the weight of the large field pack between the hips and the shoulder and back again during long road marches to reduce fatigue.

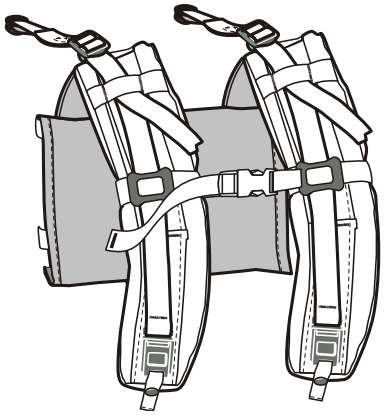


Figure 13. Enhanced Frame Shoulder Straps.

Buckle Set. The repair kit comes with each MOLLE II set and is used for quick, common field repairs that can be done by the individual soldier without any special skills or equipment.

Figure 14. Buckle Set.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS — CONTINUED

Pistol Set

The pistol set consists of a holster leg extender and four, 9 mm magazine pouches. This set is duty-specific and is issued in addition to the rifleman set.

Holster Leg Extender. The holster leg extender moves the position of the pistol holster from the hip to the thigh.

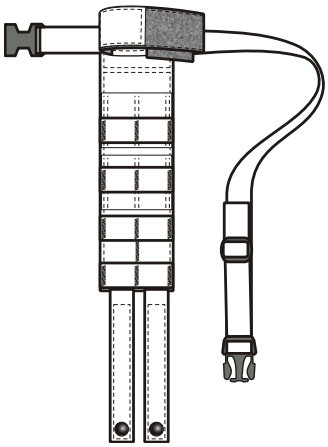


Figure 15. Holster Leg Extender.

9 MM Magazine Pouch. This pouch provides additional storage for 9 mm pistol magazines.

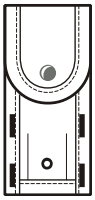


Figure 16. 9 MM Magazine Pouch.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS — CONTINUED

SAW Gunner Set

The SAW gunner set consists of two, 100-round utility pouches and two, 200-round SAW gunner pouches. This set is duty-specific and is issued in addition to the rifleman set.

100-Round Utility Pouch. This pouch has room for 100 rounds of 5.56 mm ammunition for the SAW.

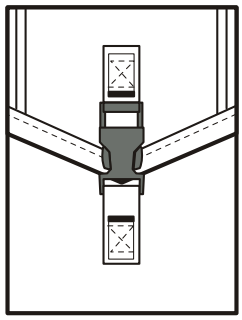


Figure 17. 100-Round Utility Pouch.

200-Round SAW Gunner Pouch. This pouch provides room for 200 rounds of 5.56 mm ammunition for the SAW.

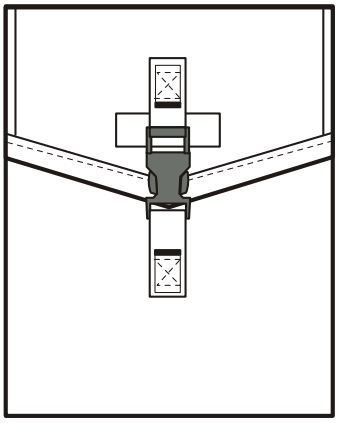
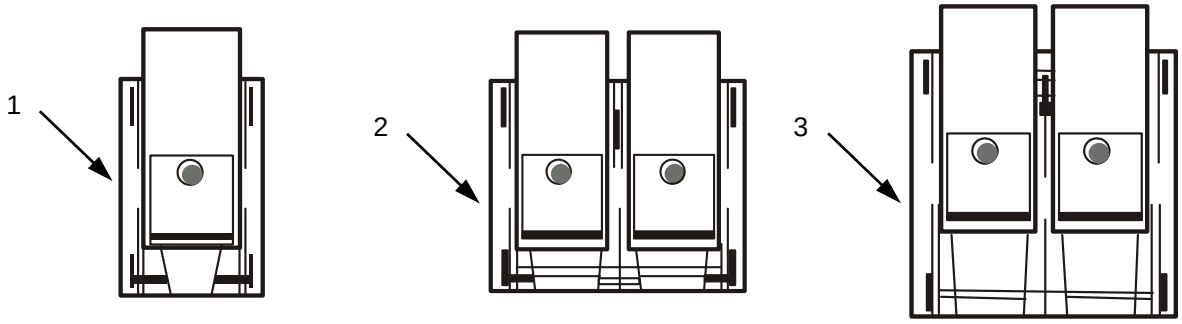


Figure 18. 200-Round SAW Gunner Pouch.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS — CONTINUED

Grenadier Set

The grenadier set consists of ten, 40 mm high explosive pouches (single), four, 40 mm high explosive pouches (double) and two, 40 mm pyrotechnic pouches (double). This set is duty-specific and is issued in addition to the rifleman set.



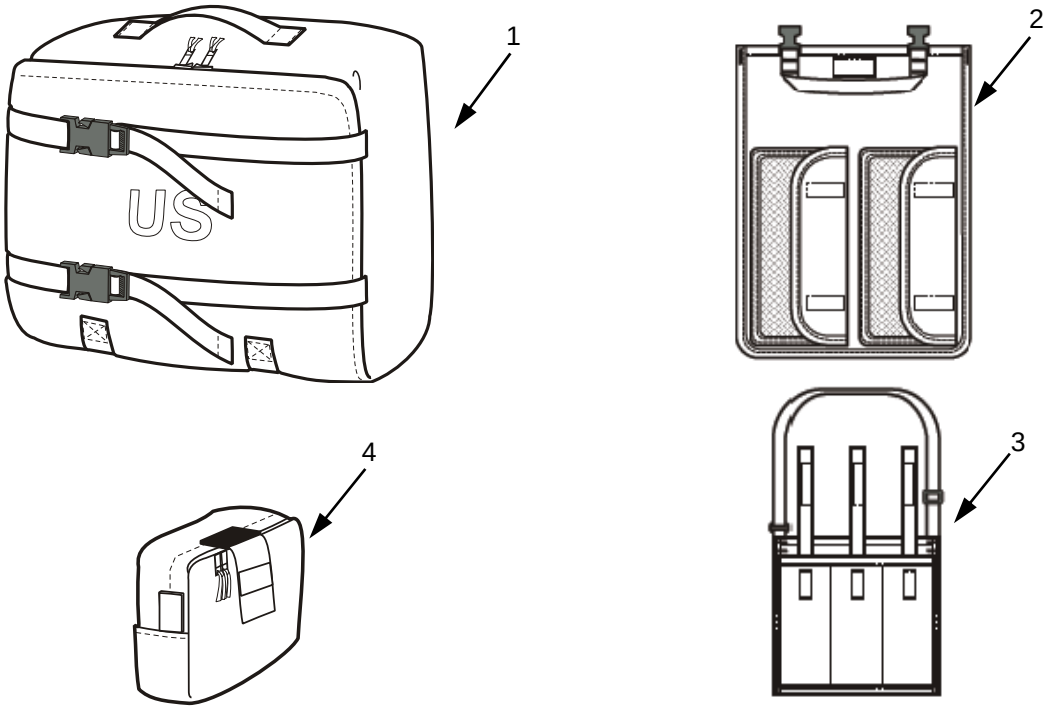
Legend
1. 40 MM High Explosive Pouch (Single)
2. 40 MM High Explosive Pouch (Double)
3. 40 MM Pyrotechnic Pouch (Double)

Figure 19. Grenadier Set Pouches.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS — CONTINUED

Medic Set

The medic set consists of a medic bag and eight external medic modular pouches. This set is duty-specific and is issued in addition to the rifleman set.



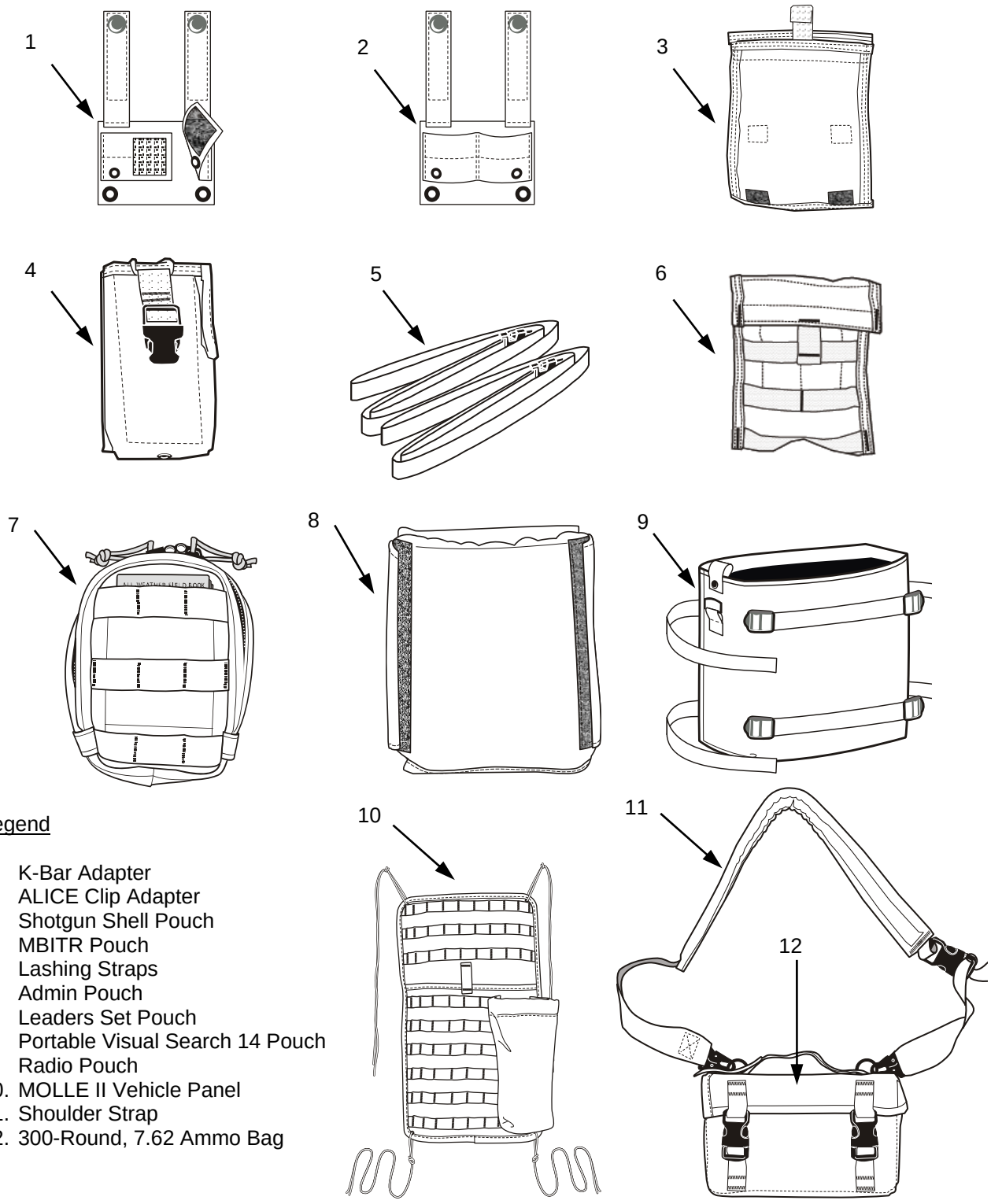
Legend
1. Medic Bag
2. Medical Bag Panel
3. Medical Bag IV Bandoleer
4. External Medic Modular Pocket

Figure 20. Medic Set.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS — CONTINUED

Additional MOLLE II Components

In addition to the pre-configured duty sets, the MOLLE II system has additional components that may be added to meet more specific mission needs.



Legend

1. K-Bar Adapter
2. ALICE Clip Adapter
3. Shotgun Shell Pouch
4. MBITR Pouch
5. Lashing Straps
6. Admin Pouch
7. Leaders Set Pouch
8. Portable Visual Search 14 Pouch
9. Radio Pouch
10. MOLLE II Vehicle Panel
11. Shoulder Strap
12. 300-Round, 7.62 Ammo Bag

Figure 21. Additional MOLLE II Components.

EQUIPMENT DATA

MOLLE II Rifleman Set

Load Weight (Pack and Vest System combined) .....120 lbs (54.4 kg) (approx)
Empty Weight (Large Field Pack, Frame, FLC, Rifleman Pouches).....8.25 lbs (3.74 kg) (approx.)

Fighting Load Carrier
Empty Weight (with pouches) ..... 1.6 lbs (725 g) (approx.)
Volume/Capacity .....4,000 cubic inches (65.5 liters)

Hydration System
Empty Weight..... 1.05.lbs (476 g) (approx.)
Volume/Capacity ..... 100 ounces (295 liters)

Assault Pack
Empty Weight (with pouches) .....3.875 lbs (1.757 kg) (approx.)
Volume/Capacity .....825 cubic inches (13.5 liters)

Waist Pack
Empty Weight (with pouches) ..... 13 oz (368 g) (approx.)
Load Capacity .....350 cubic inches (5.73 liters)

Large Field Pack Set

Rucksack
Empty Weight (with pouches) .....3.45 lbs (1.56 kg) (approx.)

Molded Waist Belt
Weight ..... 1.19 lbs (539 g) (approx.)

Grenadier Set

Weight .....2.625 lbs (1.19 kg) (approx.)

Medic Set

Weight (with pouches).....5 lbs (2.27 kg) (approx.)

MOLLE II Auxiliary Equipment
K-Bar Adapter ..... .2 oz (56.7 g) (approx.)
ALICE Clip Adapter ..... 2 oz (56.7 g) (approx.)
Lashing Straps ..... .4 oz (113.4) (approx.)
Radio Pouch..... .10 oz (283.5 g) (approx.)
Shotgun Shell Pouch..... .6 oz (170.1g) (approx.)
MBITR Pouch..... .5 oz (141.7g) (approx.)
Shoulder Strap ..... 1.375 lb (623.7 g) (approx.)
300-Round, 7.62 Ammo Bag ..... 1.9375 lb (878.8 g) (approx.)
Admin Pouch..... 3.3 oz (93.5 g) (approx.)

END OF WORK PACKAGE

FIELD AND SUSTAINMENT MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
THEORY OF OPERATION

GENERAL

MOLLE II is a modular load carrying system for soldiers to wear to enhance their capability, mobility, and lethality. The modularity permits tailoring for mission requirements and minimizes the combat load. The MOLLE II is designed as a replacement to the All-Purpose Lightweight Individual Carrying Equipment (ALICE) system.

END OF WORK PACKAGE

CHAPTER 2

PREVENTIVE MAINTENANCE CHECKS AND SERVICES FOR MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II

FIELD MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPIMENT (MOLLE) II
PREVENTIVE MAINTENANCE CHECKS AND SERVICES INTRODUCTION

GENERAL

The following information describes PMCS procedures on the field maintenance level. The PMCS table has been provided to ensure that the MOLLE II gear is in proper operating condition, and ready for use.

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

Frequency of Performing PMCS

PMCS will be performed upon receipt of new equipment, upon turn-in, after repair, and during issue.

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.

Lubrication Service Intervals

The MOLLE II gear does not require lubrication service.

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.

Corrosion specifically occurs with metals. It is an electrochemical process that causes the degradation of metals. It is commonly caused by exposure to moisture, acids, bases, or salts. An example is the rusting of iron. Corrosion damage in metals can be seen, depending on the metal, as tarnishing, pitting, fogging, surface residue, and/or cracking.

Plastics, composites, and rubbers can also degrade. Degradation is caused by thermal (heat), oxidation (oxygen), solvation (solvents), or photolytic (light, typically UV) processes. The most common exposures are excessive heat or light. Damage from these processes will appear as cracking, softening, swelling, and/or breaking.

SF Form 368, Product Quality Deficiency Report should be submitted to the address specified in DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual.

END OF WORK PACKAGE

FIELD MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

INITIAL SETUP:

Tools and Special Tools

Ruler, Tab, Metal, 16-inch (WP 0039, Item 3)

Personnel Required

Non-MOS specific (1)

Equipment Condition

Unpacked

References

WP 0021
WP 0023
WP 0024
WP 0025
WP 0026
WP 0027
WP 0030
WP 0031

GENERAL

This work package describes PMCS procedures on the field maintenance level. The PMCS table has been provided to ensure the MOLLE II equipment is in proper operating condition and ready for issue.

Table 1. PMCS for MOLLE II.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
1	Before Issue/ After Receipt	Fighting Load Carrier (FLC)	Webbing. Inspect for cuts, breaks, frays, burns, improper installation, and loose or broken stitching.	Presence of cuts, breaks, frays, burns, improper installation, and loose or broken stitching.
			Buckles. Inspect for proper operation and cracks or broken parts.	Presence of burns, cuts, breaks, and loose or broken stitching on lateral band or radial seam.
			Zipper. Inspect for proper operation, loose or broken stitching, missing teeth, and missing parts.	Presence of loose or broken stitching, broken case cords, frays, burns, tears, or broken lines.
			Fabric and Mesh. Inspect for rips, burns, holes, tears, dampness, debris, frays, broken or loose stitching, and marred or illegible marks.	Presence of holes, cuts, frays, tears, burns, and loose or broken stitching.
			Snaps. Inspect for proper operation, corrosion, debris and damage to surrounding fabric.	Presence of loose or broken stitching, burns, frays, and missing (or damaged) snap fasteners See WP 0021 for repair procedures.

PREVENTIVE MAINTENANCE CHECKS AND SERVICES — CONTINUED

Table 1. PMCS for MOLLE II — Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
2	Before Issue/ After Receipt	Ammunition, Grenade and Miscellaneous Pouches	Webbing. Inspect for cuts, breaks, frays, burns, improper installation, and loose or broken stitching.	Presence of cuts, breaks, frays, burns, improper installation, and loose or broken stitching.
			Buckles. Inspect for proper operation and cracks or broken parts.	Presence of burns, cuts, breaks, and loose or broken stitching on lateral band or radial seam.
			Fabric and Mesh. Inspect for rips, burns, holes, tears, dampness, debris, frays, broken or loose stitching, and marred or illegible marks.	Presence of holes, cuts, frays, tears, burns, and loose or broken stitching.
			Snaps. Inspect for proper operation, corrosion, debris and damage to surrounding fabric.	Presence of loose or broken stitching, burns, frays, and missing (or damaged) snap fasteners See WP 0031 for repair procedures.
3	Before Issue/ After Receipt	Assault Pack/ Large Field Pack Rucksack, Waist Pack	Webbing. Inspect for cuts, breaks, frays, burns, improper installation, and loose or broken stitching.	Presence of cuts, breaks, frays, burns, improper installation, and loose or broken stitching.
			Buckles and Adjustment Bars. Inspect for proper operation and cracks or broken parts.	Presence of burns, cuts, breaks, and loose or broken stitching on lateral band or radial seam.
			Zipper. Inspect for proper operation, loose or broken stitching, missing teeth and missing parts.	Presence of loose or broken stitching, broken case cords, frays, burns, tears, or broken lines.
			Fabric and Mesh. Inspect for rips, burns, holes, tears, dampness, debris, frays, broken or loose stitching, and marred or illegible marks.	Presence of holes, cuts, frays, tears, burns, and loose or broken stitching.
			Snaps. Inspect for proper operation, corrosion, debris, and damage to surrounding fabric.	Presence of loose or broken stitching, burns, frays, and missing (or damaged) snap fasteners
			Draw String and Closure. Inspect for cuts, abrasions, burns, improper routing, and exposed core material.	See WP 0023, WP 0024, and WP 0025 for repair procedures.

PREVENTIVE MAINTENANCE CHECKS AND SERVICES — CONTINUED

Table 1. PMCS for MOLLE II — Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
4	Before Issue/ After Receipt	Pack Harness/ Molded Waistbelt/ Frame	Webbing. Inspect for cuts, breaks, frays, burns, improper installation, and loose or broken stitching.	Presence of cuts, breaks, frays, burns, improper installation, and loose or broken stitching.
			Buckles and Adjustment Bars. Inspect for proper operation and cracks or broken parts.	Presence of burns, cuts, breaks, and loose or broken stitching on lateral band or radial seam.
			Fabric and Mesh. Inspect for rips, burns, holes, tears, dampness, debris, frays, broken or loose stitching, and marred or illegible marks.	Presence of holes, cuts, frays, tears, burns, and loose or broken stitching.
			Snaps. Inspect for proper operation, corrosion, debris, and damage to surrounding fabric.	Presence of loose or broken stitching, burns, frays, and missing (or damaged) snap fasteners
			Plastic Material. Inspect for cracked or broken material in the frame.	Cracked or broken material See WP 0026 for repair procedures.
5	Before Issue/ After Receipt	Hydration System Carrier Assembly	Webbing. Inspect for cuts, breaks, frays, burns, improper installation, and loose or broken stitching.	Presence of cuts, breaks, frays, burns, improper installation, and loose or broken stitching.
			Buckles and Adjustment Bars. Inspect for proper operation and cracks or broken parts.	Presence of burns, cuts, breaks, and loose or broken stitching on lateral band or radial seam.
			Fabric and Mesh. Inspect for rips, burns, holes, tears, dampness, debris, frays, broken or loose stitching, and marred or illegible marks.	Presence of holes, cuts, frays, tears, burns, and loose or broken stitching. See WP 0022 for repair procedures.
6	Before Issue	Hydration System Reservoir and Bite Valve	Hydration Reservoir. Inspect for cleanliness of exterior and interior of reservoir. Inspect for presence of mold or other contaminants inside the reservoir. The hydration reservoir may not be re-issued.	Dirty, mold, or other contaminants inside the reservoir.
			Bite Valve. Inspect for cleanliness of the bite valve. Inspect for deterioration of material and presence of mold or other contaminants. The bite valve may not be re-issued.	Dirty, deterioration of material, mold and other contaminants present.

PREVENTIVE MAINTENANCE CHECKS AND SERVICES — CONTINUED

Table 1. PMCS for MOLLE II — Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
				See WP 0023 for repair procedures.
7	Before Issue / After Receipt	Medical Bags	Webbing. Inspect for cuts, breaks, frays, burns, improper installation, and loose or broken stitching.	Presence of cuts, breaks, frays, burns, improper installation, and loose or broken stitching.
			Buckles. Inspect for proper operation and cracks or broken parts.	Presence of burns, cuts, breaks, and loose or broken stitching on lateral band or radial seam.
			Fabric and Mesh. Inspect for rips, burns, holes, tears, dampness, debris, frays, broken or loose stitching, and marred or illegible marks.	Presence of holes, cuts, frays, tears, burns, and loose or broken stitching.
			Snaps. Inspect for proper operation, corrosion, debris, and damage to surrounding fabric.	Presence of loose or broken stitching, burns, frays, and missing (or damaged) snap fasteners.
				See WP 0030 for repair procedures.
8	Before Issue / After Receipt	Leg Holster Extender	Webbing. Inspect for cuts, breaks, frays, burns, improper installation, and loose or broken stitching.	Presence of cuts, breaks, frays, burns, improper installation, and loose or broken stitching.
			Buckles. Inspect for proper operation and cracks or broken parts.	Presence of burns, cuts, breaks, and loose or broken stitching on lateral band or radial seam.
			Fabric and Mesh. Inspect for rips, burns, holes, tears, dampness, debris, frays, broken or loose stitching, and marred or illegible marks.	Presence of holes, cuts, frays, tears, burns, and loose or broken stitching.
			Snaps. Inspect for proper operation, corrosion, debris and damage to surrounding fabric.	Presence of loose or broken stitching, burns, frays, and missing (or damaged) snap fasteners
			Hook and Pile Tape. Inspect for proper operation.	Improper operation of hook and pile tape.
				See WP 0027 for repair procedures.

MANDATORY REPLACEMENT PARTS

There are no mandatory replacement parts required for these PMCS procedures.

END OF TASK

END OF WORK PACKAGE

CHAPTER 3

FIELD MAINTENANCE INSTRUCTIONS FOR MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II

FIELD MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE II)
SERVICE UPON RECEIPT

INITIAL SETUP:

Tools and Special Tools

None Required

Personnel Required

Maintainer (1)

Materials/Parts

None Required

References

DA PAM 750-8
SF 361
WP 0039

Equipment Condition

Unpacked

SERVICE UPON RECEIPT OF MATERIEL

Upon initial receipt of MOLLE II gear, proceed as follows:

1. For new equipment, check each component for damage and foreign material contaminations.
2. For used equipment, check each component for damage, foreign material contamination, and excessive wear and tear.
3. If defects or damages are discovered, process the equipment for maintenance at the maintenance level assigned by the Maintenance Allocation Chart (MAC), WP 0039.

END OF TASK

INSTALLATION INSTRUCTIONS

The MOLLE II gear does not require installation.

END OF WORK PACKAGE

FIELD MAINTENANCE
FIGHTING LOAD CARRIER SET
REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0032

Materials/Parts

Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)

Equipment Condition

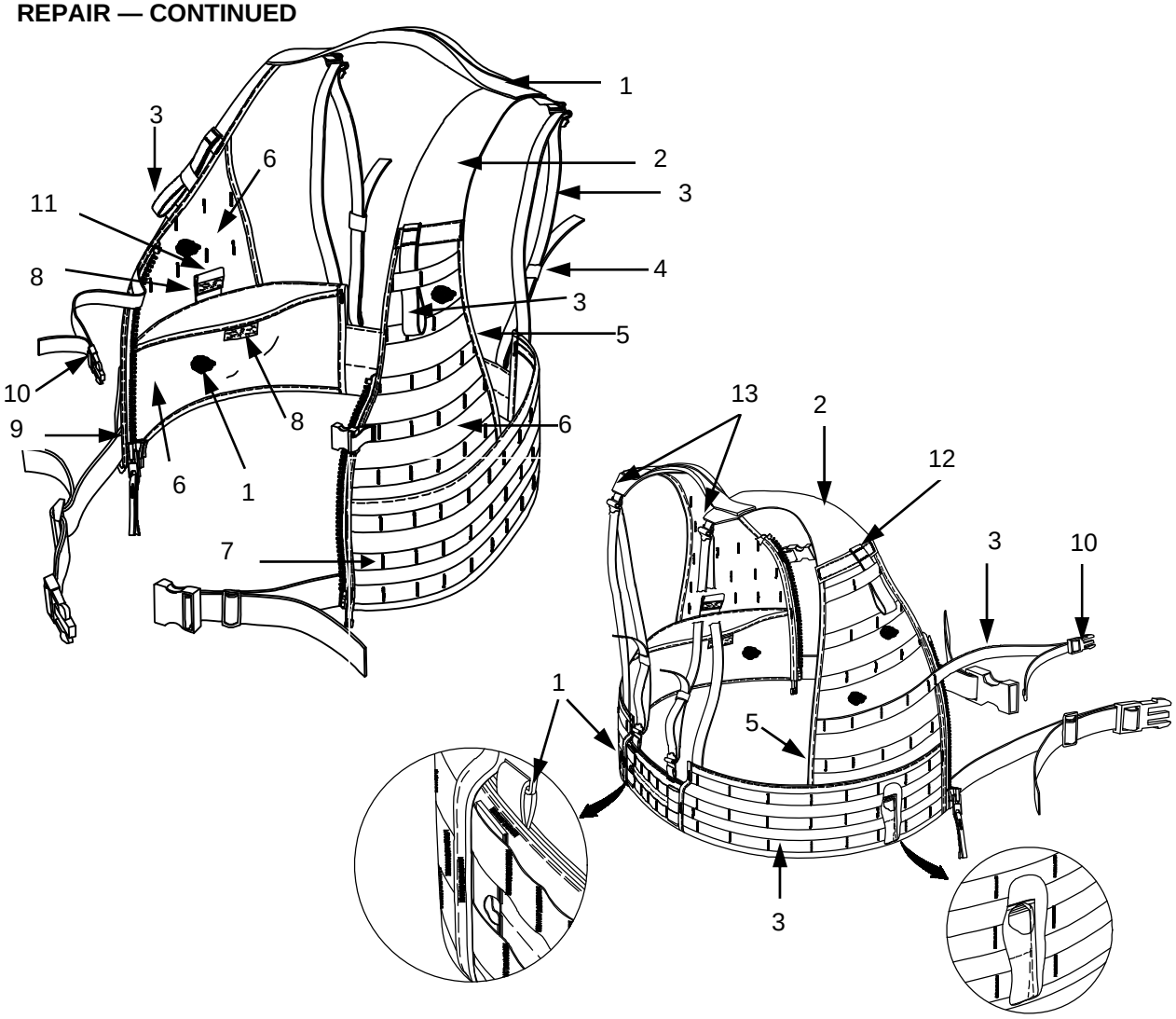
Lay out on flat surface or other suitable area.

REPAIR

Prior to repair operations, each component of the MOLLE II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished the user as a repair kit, all repairs to these components will be accomplished at the maintainer level or higher, using FM 10-16 as a general guide.

Use Figure 1 to Figure 5 to determine the location and construction of equipment in repair procedures.

REPAIR — CONTINUED

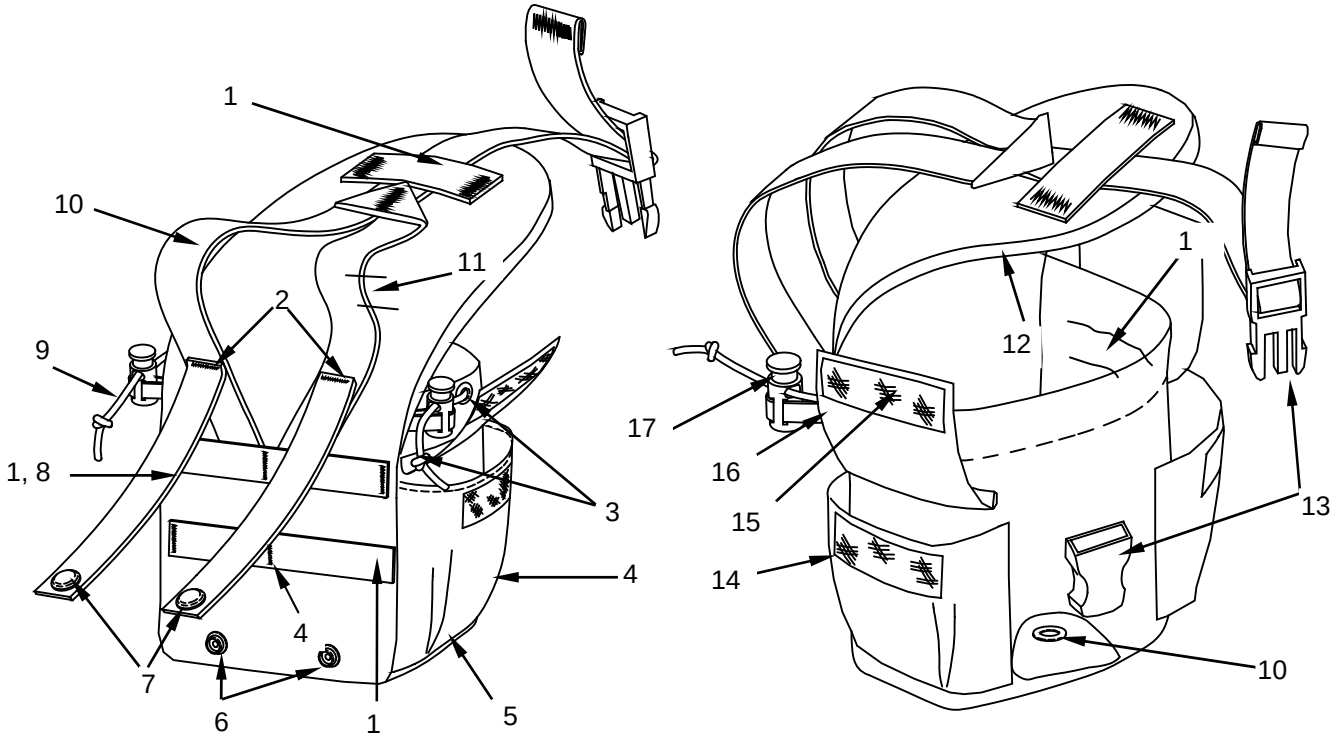


Legend

1. Textured Nylon Duck
2. 3 ½-inch Webbing
3. 1-inch Webbing
4. 1-inch Elastic Webbing
5. Binding Tape
6. Raschel Knit Cloth
7. Size E Thread
8. Hook and Pile Fastener
9. Slide Fastener
10. 1-inch Side Release Buckle
11. 2-Inch Webbing
12. Size F Thread
13. 1-inch Slide Buckle

Figure 1. Fighting Load Carrier Vest.

REPAIR — CONTINUED

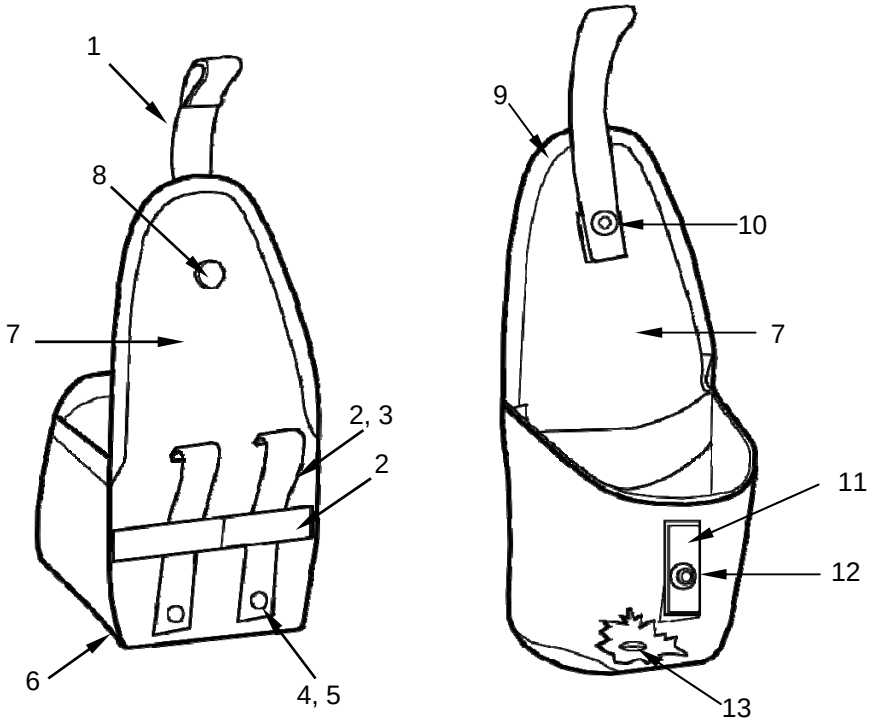


Legend

1. Webbing, Nylon, 1-inch
2. Thread, Size E
3. Eyelet
4. Textured Nylon Duck
5. Thread, Size F
6. Snap Fastener, Eyelet/Stud
7. Snap Fastener, Button/Socket
8. Polyethylene
9. Cord, Elastic, round
10. Eyelet, Drain
11. Webbing, Elastic, 1-inch
12. Binding Tape, 1-inch
13. Side Release Buckle, 1-inch
14. Fastener, Pile, 1-inch
15. Fastener, Hook, 1-inch
16. Webbing $^{11}/_{32}$ -inch
17. Barrel Lock

Figure 2. Fighting Load Carrier Pouch.

REPAIR — CONTINUED

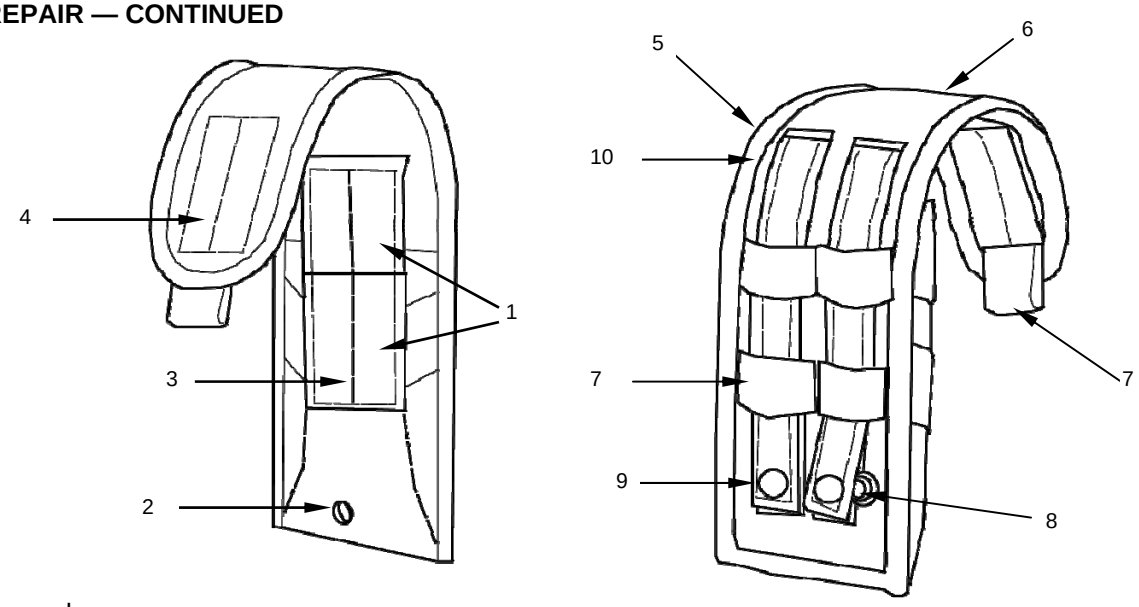


Legend

1. Webbing, Nylon, ¾ -inch
2. Webbing, Nylon, 1-inch
3. Polyethylene, 0.030-inch x 0.875-inch
4. Snap Fastener, Button/Socket
5. Snap Fastener, Eyelet/Stud
6. Thread, Size F
7. Textured Nylon Duck, Class III
8. Snap Fastener, Eyelet/Stud
9. Binding Tape, 1-inch
10. Snap Fastener, Button/Socket
11. Webbing, Nylon, 1-inch
12. Snap Fastener, Button/Socket
13. Eyelet (Drain)

Figure 3. Hand Grenade Pouch.

REPAIR — CONTINUED

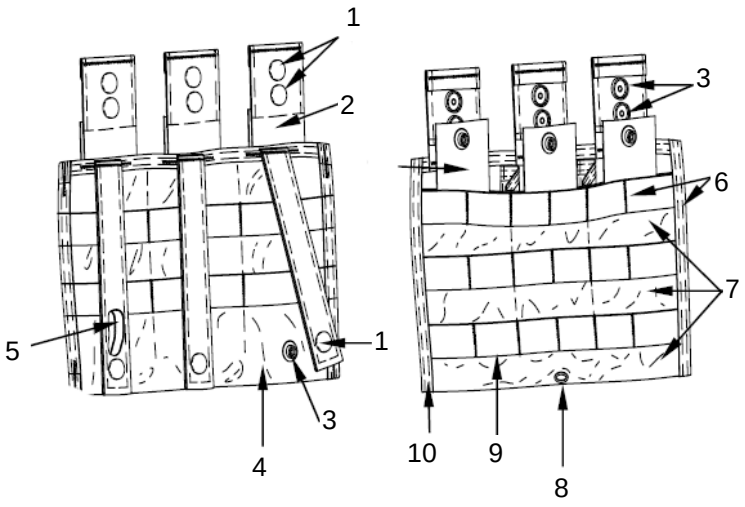


Legend

1. Hook and Pile Fastener, 2-inch
2. Eyelet (Drain)
3. Thread, Size F
4. Polyethylene, 0.030-inch x 2.000-inch,
5. Binding Tape, 1-inch
6. Textured Nylon Duck, Class III
7. Webbing, Nylon, 1-inch
8. Snap Fastener, Eyelet/Stud
9. Snap Fastener, Button/Socket
10. Thread, Size E

Figure 4. M4 Two Magazine Pouch.

REPAIR — CONTINUED



Legend

1. Snap Fastener, Button/Socket
2. Webbing, 2-inch
3. Snap Fastener, Stud/Eyelet
4. Textured Nylon Duck Fabric
5. Polyethylene, High Density, .030-inch
6. Thread, Size E
7. Hook and Pile Fastener
8. Grommet
9. Thread, Size F
10. Binding Tape, 1-inch

Figure 5. M4 Three Magazine Side by Side Pouch.

REPAIR — CONTINUED

Restitching

1. Use Figures 1 – 5 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Fighting Load Carrier Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Rifleman Set			
Fighting Load Carrier			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E
Waist Belt Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace Fighting Load Carrier Set with serviceable item from stock.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
HYDRATION SYSTEM CARRIER ASSEMBLY
REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 41, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16

Materials/Parts

Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)

Equipment Condition

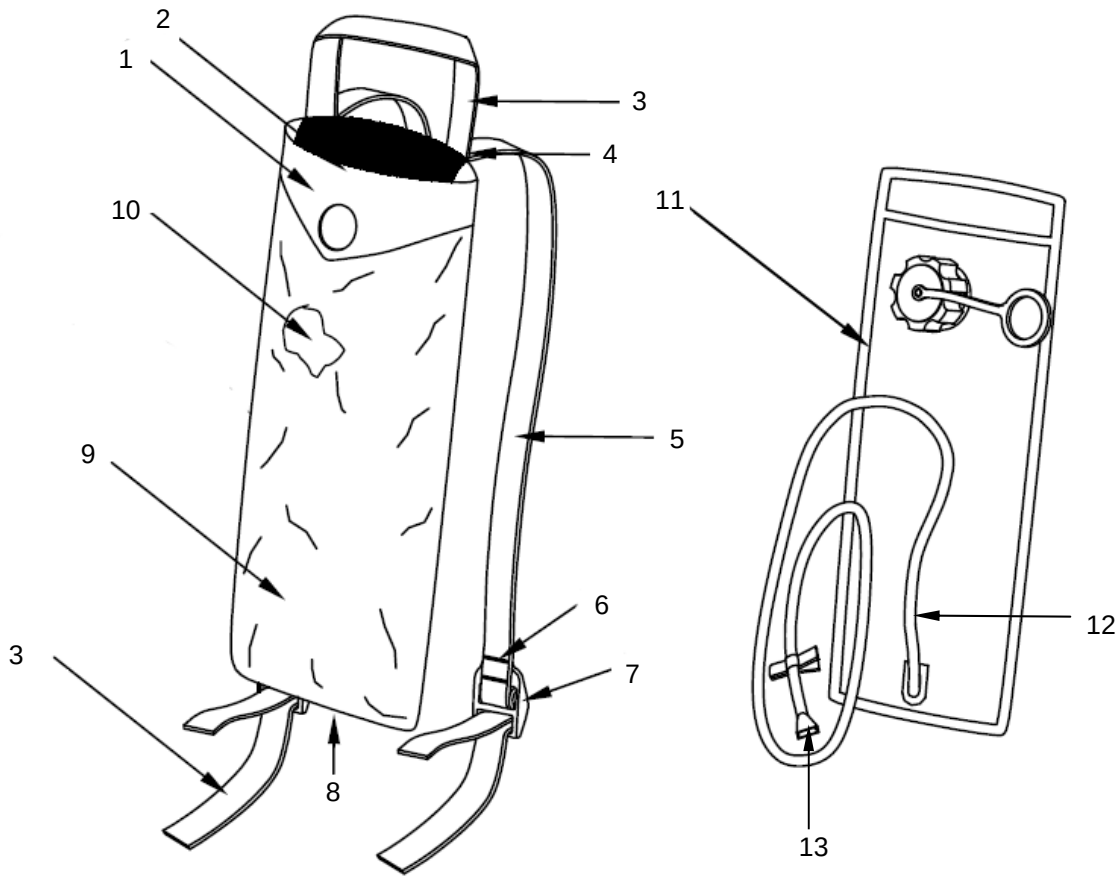
Unpacked

REPAIR

Prior to repair operations, each component of the MOLLE II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished to the user as a repair kit, all repairs to these components will be accomplished at the maintainer level or higher, using FM 10-16 as a general guide.

Use Figures 1 and 2 to determine location and construction of equipment in repair procedures.

REPAIR — CONTINUED

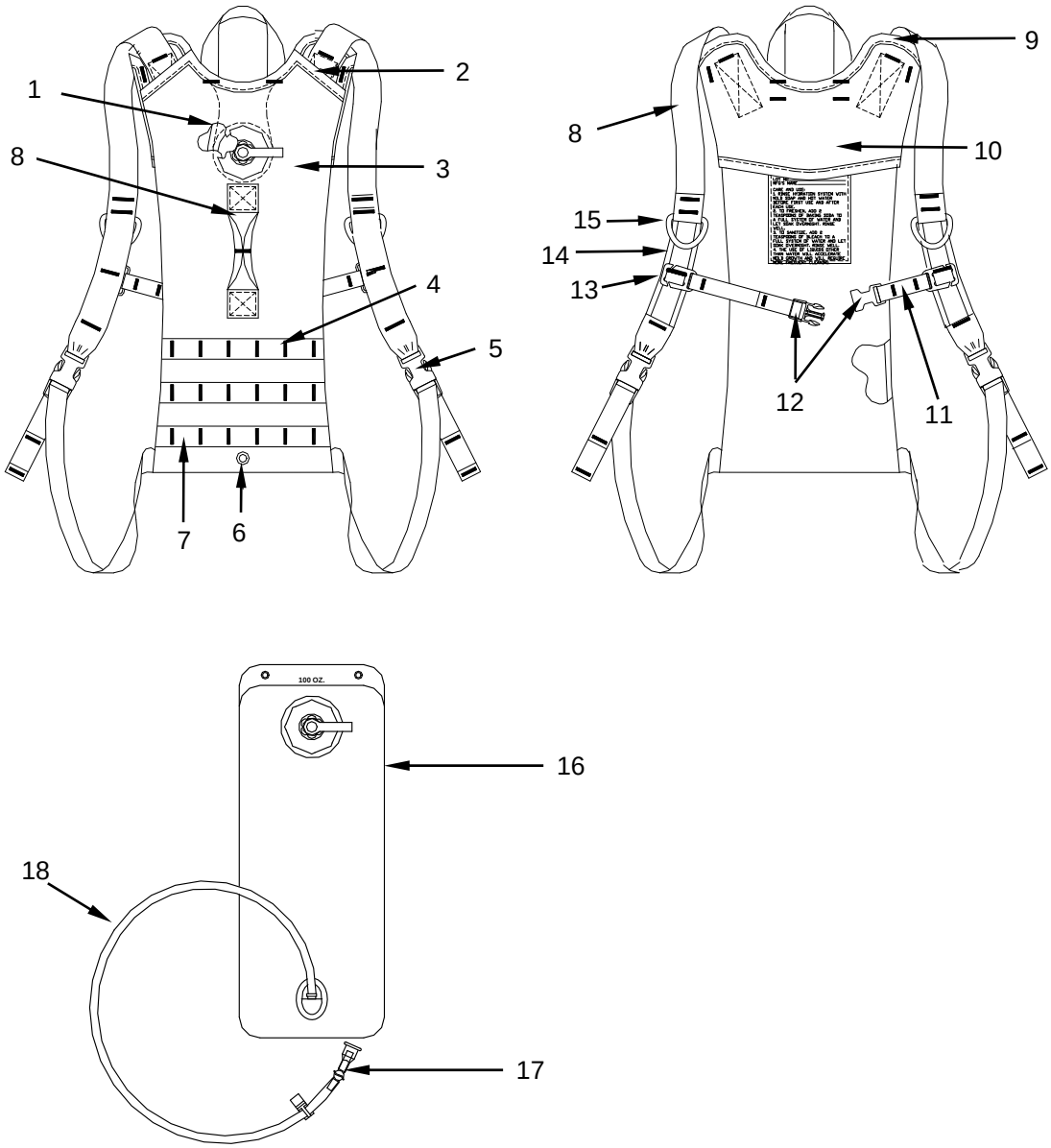


Legend

1. Nylon Duck Fabric (Black)
2. Fastener Tape, Hook and Pile, 2-inch wide
3. Webbing, 1-inch wide
4. Thread, Size F
5. Webbing, 1½-inch wide
6. Thread, Size E
7. Buckle, 1-inch
8. Grommet
9. Nylon Duck Fabric
10. Foam, ¼-inch
11. Bladder
12. Drink Tube
13. Bite Valve

Figure 1. Hydration System Carrier Assembly.

REPAIR — CONTINUED



Legend

1. Polyethylene, 0.030-inch
2. Binding Tape, 1-inch
3. Nylon/Foam Laminate
4. Thread, Nylon, Size E
5. Side Release Buckle, 1-inch
6. Eyelet and Washer
7. Webbing, Nylon, 1-inch
8. Webbing, Nylon, 1½-inch
9. Thread, Nylon, Size E
10. Textured Nylon Duck
11. Webbing, ¾-inch
12. Side Release Buckle, ¾-in
13. Adjuster Buckle, ¾- to 1-inch
14. Thread, Nylon, Size F
15. D-Ring, 1½-inch
16. Bladder
17. Bite Valve
18. Drink Tube

Figure 2. Hydration System Carrier Assembly (Alternate).

REPAIR — CONTINUED

Restitching

1. Use Figures 1 and 2 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all straight seams.
4. Trim running ends of thread.

Table 1. Hydration System Carrier Assembly Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Rifleman Set			
Hydration System Carrier			
General	Medium Duty	8 to 10	F
Edge Binding	Medium Duty	7 to 11	E
Bar Tacks	Bar Tack	42 to 48	E

END OF TASK

REPLACE

Hydration System Bladder

A used hydration system bladder cannot be repaired or re-issued. A new bladder is used to replace an existing one.

END OF TASK

Hydration System Tubing

Used hydration system tubing cannot be repaired or re-issued. New hydration system tubing is used to replace existing tubing.

END OF TASK

Hydration System Valve

A used hydration system valve cannot be repaired or re-issued. A new hydration system valve is used to replace an existing system valve.

END OF TASK

Hydration System Carrier Assembly

Replace the Hydration System Carrier Assembly with serviceable item from stock.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
ASSAULT PACK
REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0032

Materials/Parts

Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)

Equipment Condition

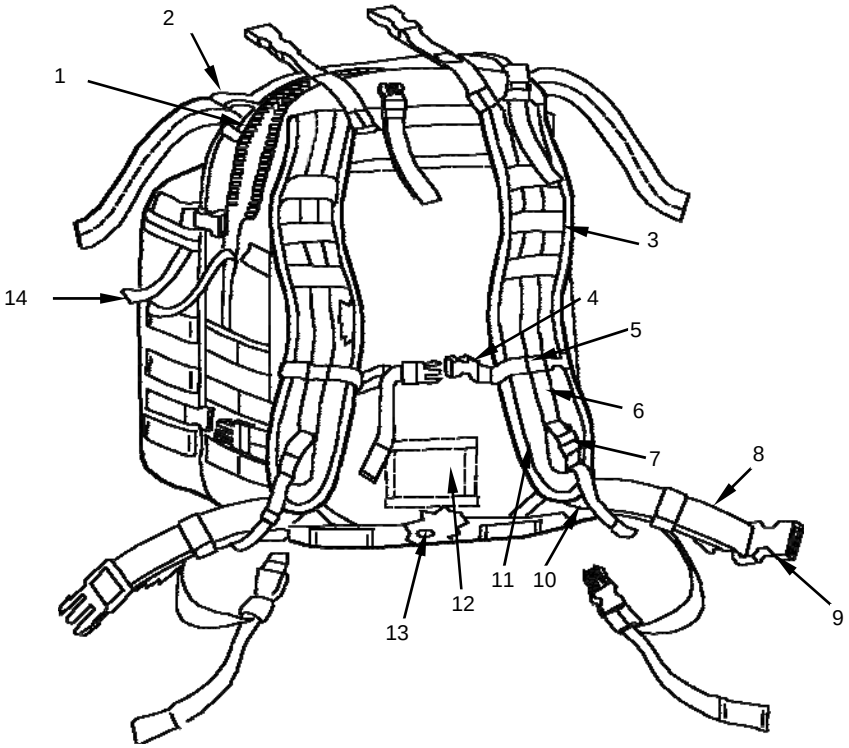
Lay out on flat surface or other suitable area.

REPAIR

Prior to repair operations, each component of the MOLLE II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished the user as a repair kit, all repairs to these components will be accomplished at the maintainer level or higher, using FM 10-16 as a general guide.

Use Figures 1 and 2 to determine location and construction of equipment in repair procedures.

REPAIR — CONTINUED

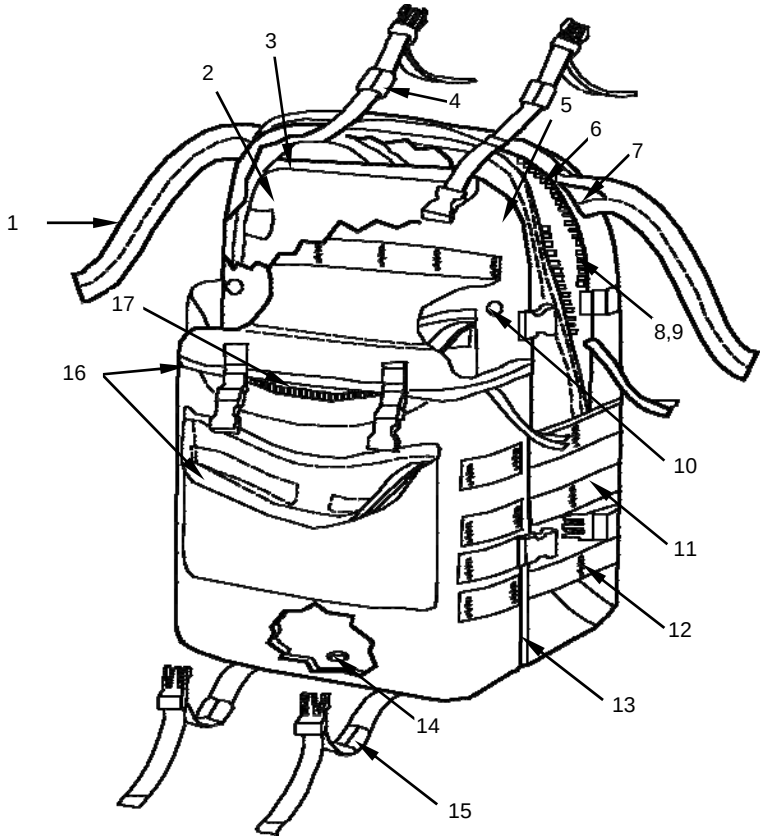


Legend

1. Slide Fastener
2. Thread, Size FF
3. Binding Tape, 1-inch
4. Side Release Buckle, 1-inch
5. Keeper, Sternum Strap
6. Webbing, 1-inch
7. Webbing, Nylon, $^{9}/_{16}$-inch
8. Webbing, 1½-inch
9. Side Release Buckle, 1½-inch
10. D-Ring, 1-inch
11. Textured Nylon Duck
12. Polyethylene, .020-inch
13. Eyelet (Drain)
14. Tubular Braid

Figure 1. Assault Pack (Front View).

REPAIR — CONTINUED



Legend

1. Webbing, Tan, $1^{23}/_{32}$-inch
2. Plastic Shield
3. Foam ¼-inch
4. Webbing, Elastic, 1-inch
5. Textured Nylon Duck
6. Slide Fastener
7. Hook and Pile Fastener 2-inch
8. Metal Loop
9. Webbing, 1-inch
10. Snap Fastener/Stud Eyelet
11. Webbing, 1-inch
12. Thread, Size E
13. Thread, Size F
14. Eyelet (Drain)
15. Webbing, Elastic, 1-inch
16. Binding Tape, 1-inch
17. Side Release Buckle, 1-inch

Figure 2. Assault Pack (Rear View).

REPAIR — CONTINUED

Re-stitching

1. Use Figure 1 to identify the component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Assault Pack Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Rifleman Set			
Assault Pack			
General	Medium Duty	8 to 10	F
Parachute attaching straps/handle	Medium Duty	1 to 11	FF
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace Assault Pack with serviceable item from stock.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
WAIST PACK
REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0032

Materials/Parts

Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)

Equipment Condition

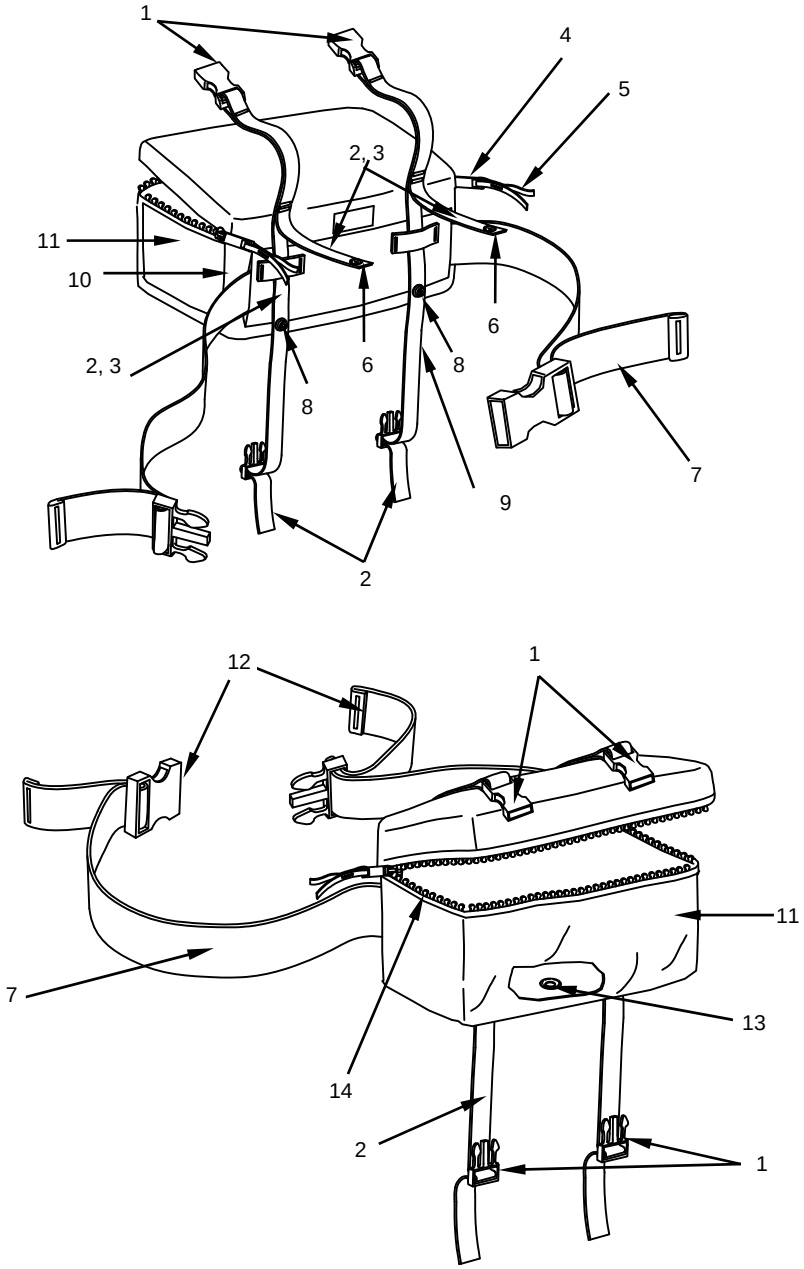
Lay out on flat surface or other suitable area.

REPAIR

Prior to repair operations, each component of the MOLLE II System shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished to the user as a repair kit, all repairs to these components will be accomplished at the maintainer level or higher, using FM 10-16 as a general guide.

Use Figure 1 to determine the location and construction of equipment in repair procedures.

REPAIR — CONTINUED



Legend

1. Side Release Buckles, 1-inch
2. Webbing, 1-inch
3. Polyethylene
4. Thread, Size E
5. Braid Tubular, $^{11}/_{32}$-inch
6. Snap Fasteners, Button/Socket
7. Webbing, 2-inch
8. Snap Fasteners, Eyelet/Stud
9. Webbing, Elastic, 1-inch
10. Thread, Size F
11. Textured Nylon Duck
12. Center Release Buckles, 2-inch
13. Grommet
14. Slide Fastener

Figure 1. Waist Pack.

REPAIR — CONTINUED

Restitching

1. Use Figure 1 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Waist Pack Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Rifleman Set			
Waist Pack			
Binding Tape	Medium Duty	7 to 11	E
Waist Belt Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace Waist Pack with serviceable item from stock.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
LARGE FIELD PACK RUCKSACK AND SUSTAINMENT POUCH
REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (0041, Table 2, Item 7)
Tape, Measuring (0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0032

Materials/Parts

Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)

Equipment Condition

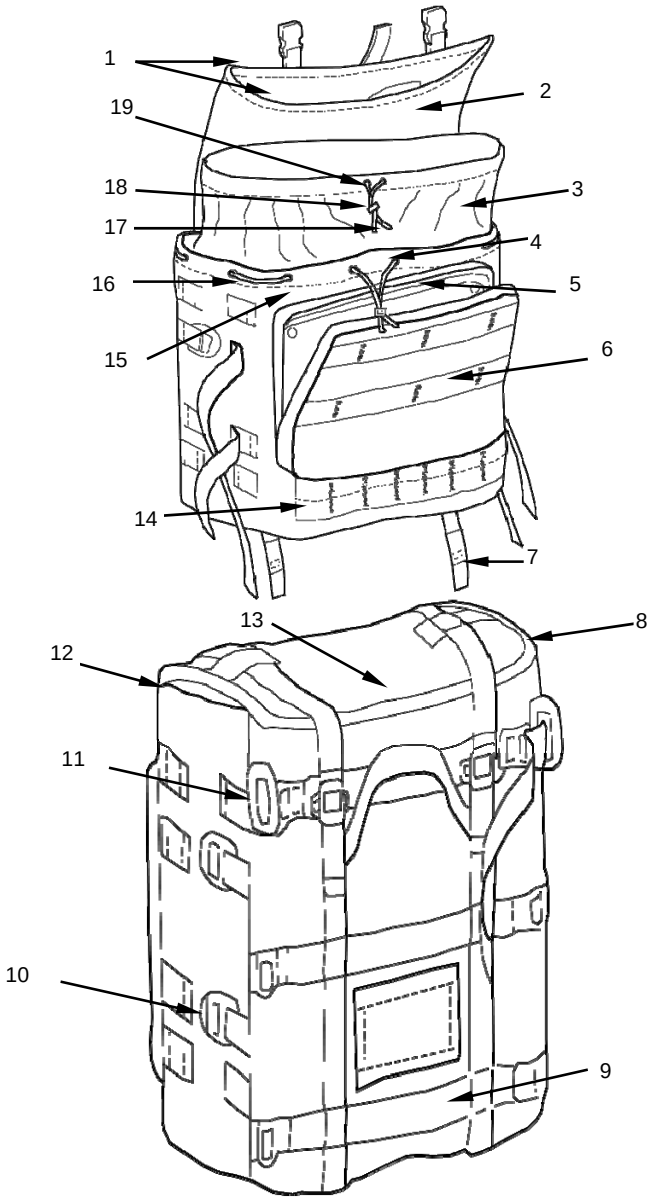
Lay out on flat surface or other suitable area.

REPAIR

Prior to repair operations, each component of the MOLLE II System shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished to the user as a repair kit, all repairs to these components will be accomplished at the maintainer level or higher, using FM 10-16 as a general guide.

Use Figures 1 – 2 to determine the location and construction of equipment in repair procedures.

REPAIR — CONTINUED

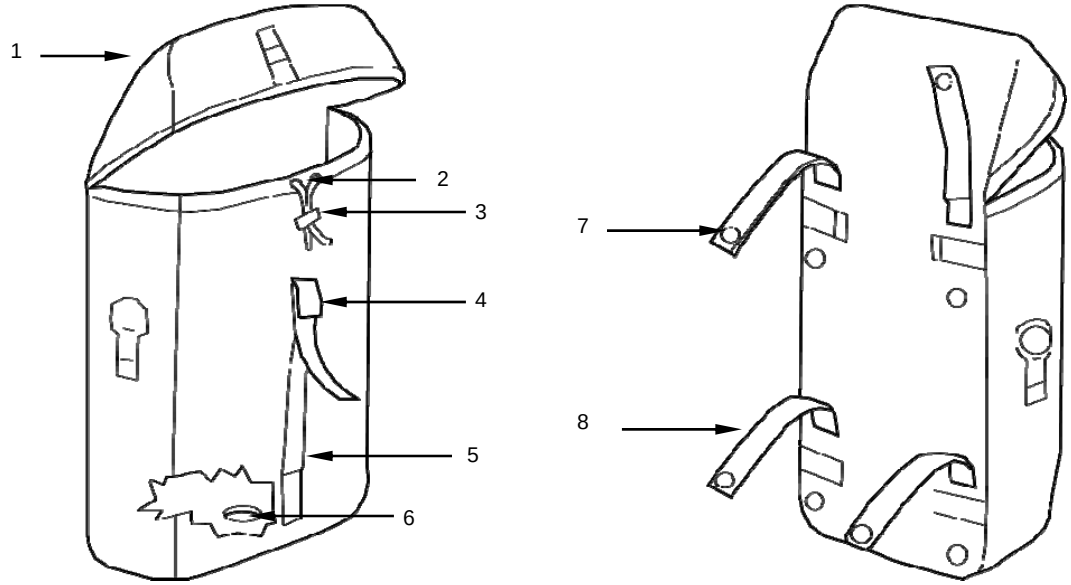


Legend

1. Hook and Pile Fastener
2. Film
3. Nylon Cloth
4. Eyelet/Washer
5. Slide Fastener
6. Polyethylene 0.020-inch
7. Side Release Buckle, 1-inch
8. Binding Tape, 1-inch
9. Webbing, 1-inch
10. Buckle, Single Bar
11. Buckle, Double-Bar, 1-inch
12. Thread, Size E
13. Textured Nylon Duck
14. Webbing, 2¼ -inch
15. Thread, Size F
16. Grommet/Washer
17. Cord Lock
18. Nylon Cord (Flat)
19. Eyelet/Washer

Figure 1. Large Field Pack Rucksack (Front and Rear).

REPAIR — CONTINUED



Legend

1. Binding Tape 1-inch
2. Eyelet/Washer
3. Cord Lock
4. Side Release Buckle, 1-inch
5. Webbing, 1-inch
6. Eyelet
7. Snap Fastener, Eyelet/Stud
8. Polyethylene 0.030-inch

Figure 2. Sustainment Pouch (Front and Rear).

REPAIR — CONTINUED

Restitching

1. Use Figures 1 and 2 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Large Field Pack Rucksack and Sustainment Pouch Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Rifleman Set			
Rucksack			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E
Waist Belt Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace Large Field Pack Rucksack and Sustainment Pouch with serviceable item from stock.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
MOLLE PACK FRAME, MOLDED WAIST BELT ENHANCED FRAME SHOULDER STRAPS, LOAD LIFTER ATTACHMENT STRAP, AND SHOULDER SUSPENSION MALE BUCKLE REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (W 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0032

Materials/Parts

Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)

Equipment Condition

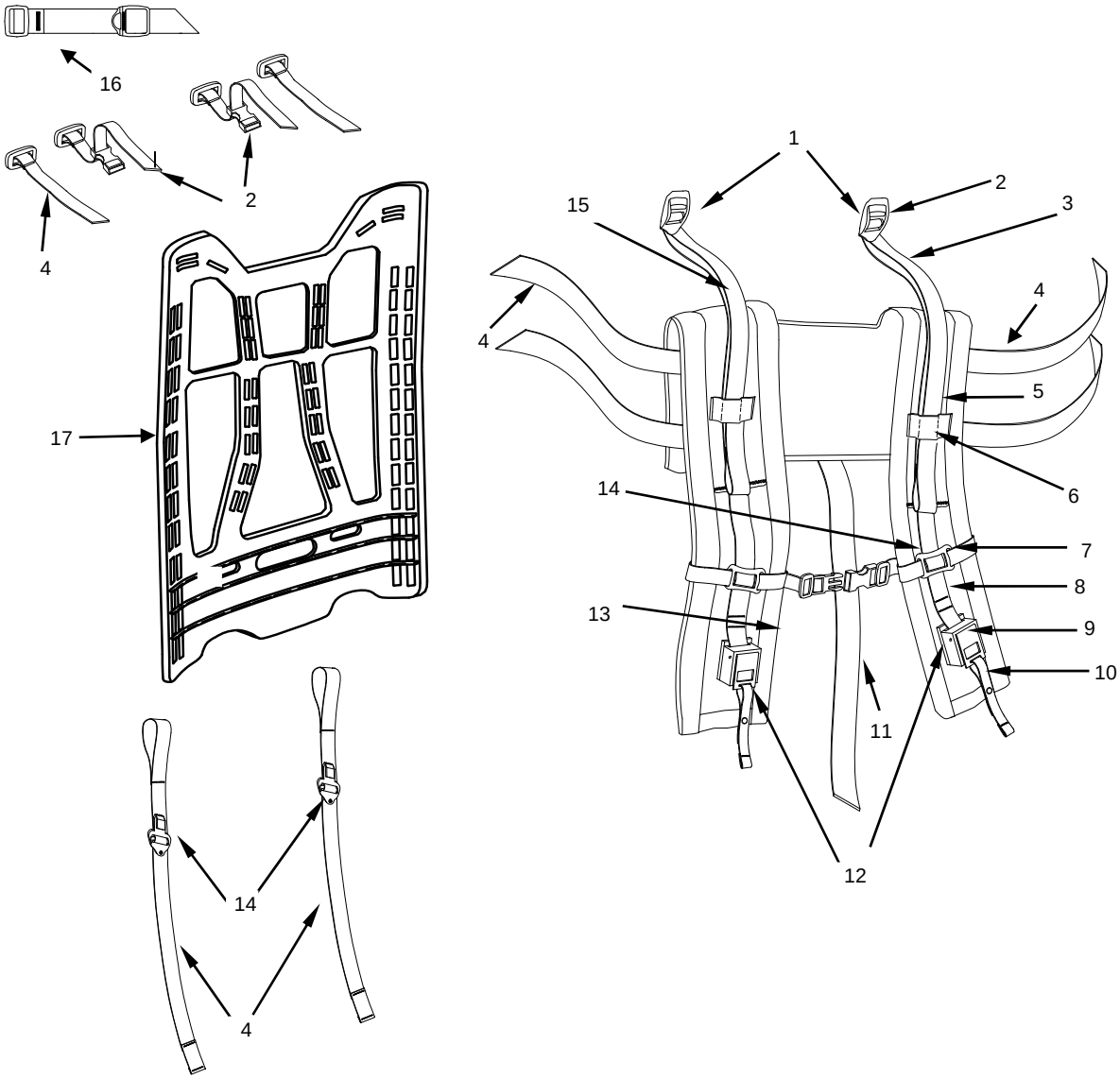
Lay out on flat surface or other suitable area.

REPAIR

Prior to repair operations, each component of the MOLLE II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished to the user as a repair kit, all repairs to these components will be accomplished at the maintainer level or higher, using FM 10-16 as a general guide.

Use Figures 1, 2, and 3 to determine the location and construction of equipment in repair procedures.

REPAIR — CONTINUED

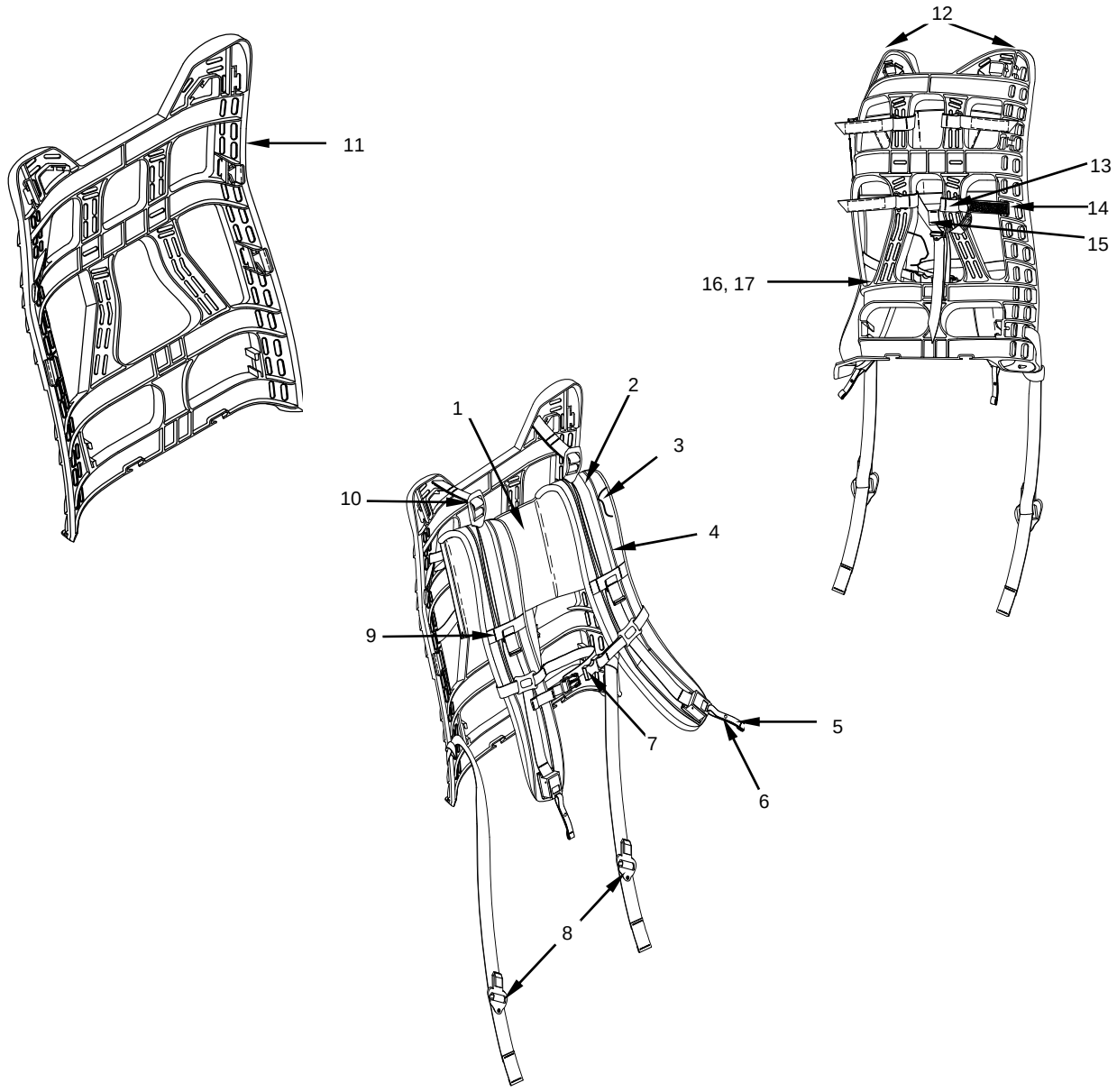


Legend

1. Double Bar Buckle 1½-inch
2. Double Bar Buckle, 1-inch
3. Textured Nylon Duck
4. Webbing, 1-inch
5. Thread, Size E
6. Binding Tape, 1-inch
7. Keeper, Sternum Strap
8. Foam ¼-inch
9. Snap Fastener Enhanced Frame
10. Webbing, $^{9}/_{16}$-inch, Type 1
11. Webbing, 1½-inch
12. Quick Release Buckle
13. Thread, Size F
14. Side Release Buckle, 1-inch
15. Webbing, 2-inch
16. Slide, 1-inch
17. Enhanced Frame

Figure 1. Pack Frame (Part 1 – PN1602).

REPAIR — CONTINUED

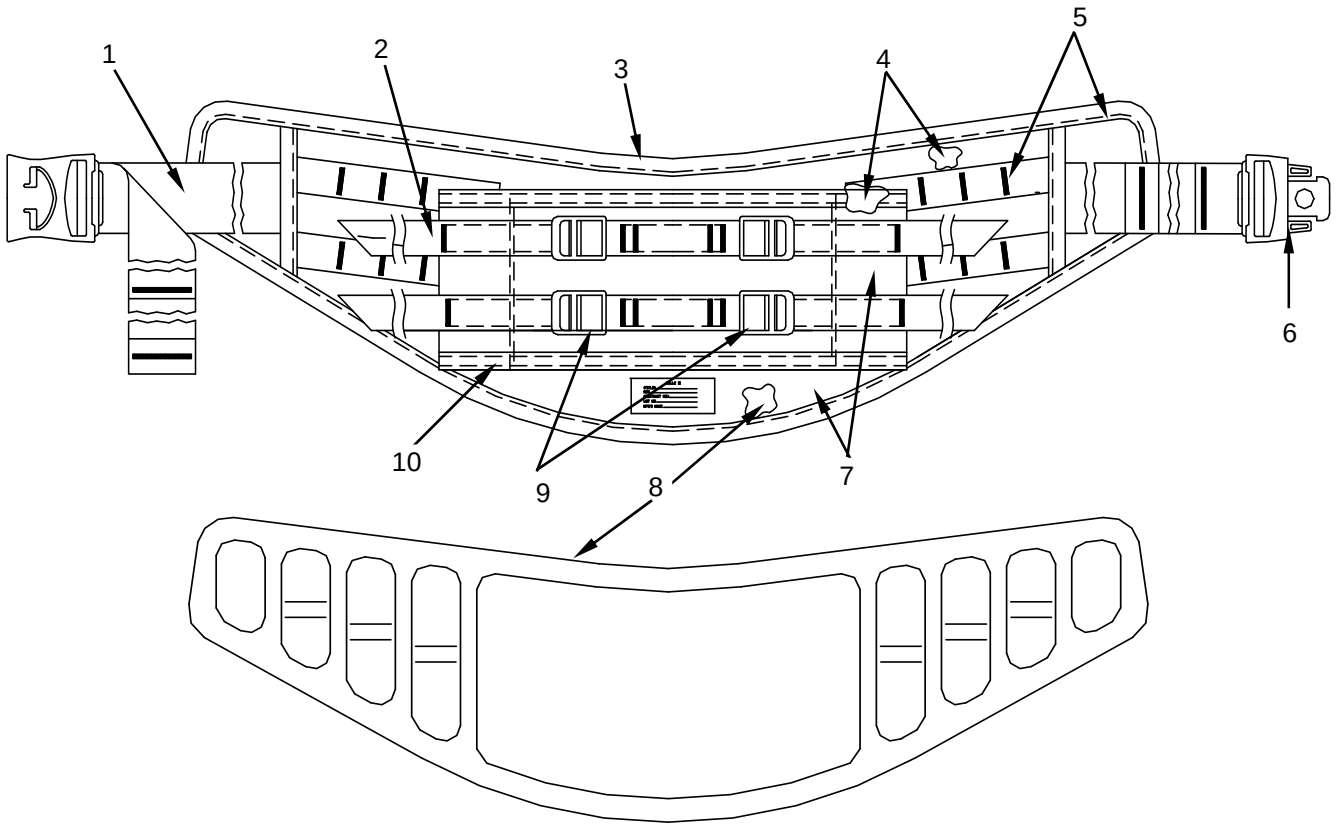


Legend

1. Textured Nylon Duck
2. Webbing, 2-inch
3. Foam, ¼-inch
4. Thread, Size F
5. Webbing, $^{9}/_{16}$-inch, Type 1
6. Snap Fastener, Button/Socket
7. Side Release Buckle, 1-inch
8. Buckles
9. Webbing, 1-inch
10. Double Bar Buckle, 1-inch
11. Frame
12. Metal Slides, 1-inch
13. Webbing, 1-inch
14. Brass Loop, 1-inch
14. Fastener Tape, Hook and Pile, 1-inch
15. Cinch Buckle, 1-inch
16. Binding Tape, 1-inch
17. Thread, Size E

Figure 2. Pack Frame (Part 2 – PN1603).

REPAIR — CONTINUED



Legend
1. Webbing, 2-inch
2. Webbing, 1-inch
3. Binding Tape, 1-inch
4. Plastic, Polyethylene
5. Thread, Size E
6. Center Release Buckle, 2-inch
7. Textured Nylon Duck
8. Molded Waist Belt
9. Tension Lock, 1-inch
10. Thread Size F

Figure 3. Molded Waist Belt.

REPAIR — CONTINUED

Restitching

1. Use Figure 1 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Molded Waist Belt, Enhanced Frame Shoulder Straps, and Load Lifter Attachment Strap Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Large Field Pack Set **Molded Waist Belt, Enhanced Frame Shoulder Straps, and Load Lifter Attachment Strap**			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E
Waist Belt Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace Pack Frame, Molded Waist Belt, Enhanced Frame Shoulder Straps, Load Lifter Attachment Strap, and Shoulder Suspension Male Buckle with serviceable items from stock.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
PISTOL SET
REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0032

Materials/Parts

Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)

Equipment Condition

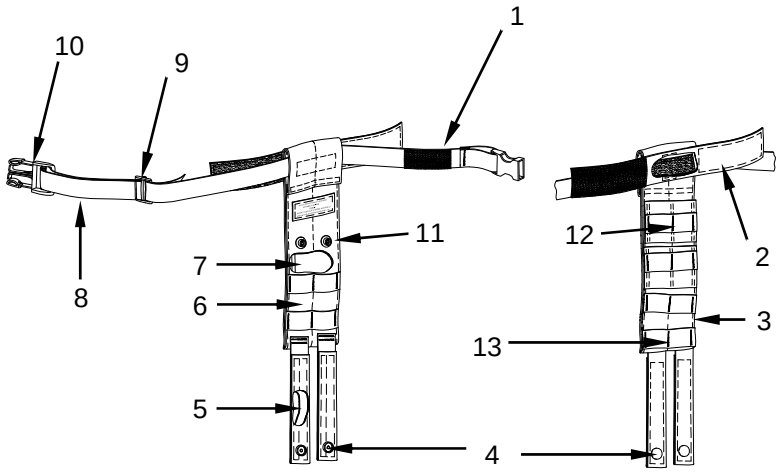
Lay out on flat surface or other suitable area.

REPAIR

Prior to repair operations, each component of the MOLLE II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished to the user as a repair kit, all repairs to these components will be accomplished at the maintainer level or higher, using FM 10-16 as a general guide.

Use Figures 1 and 2 to determine location and construction of equipment in repair procedures.

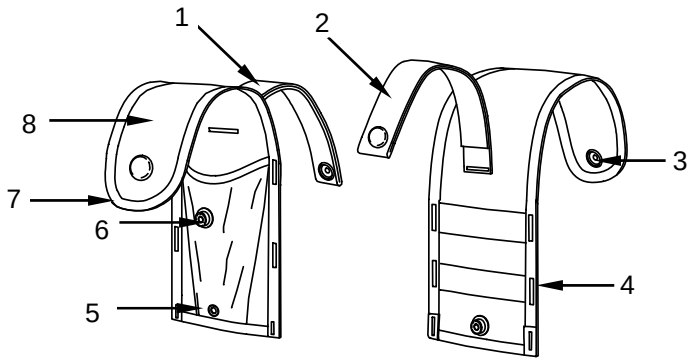
REPAIR — CONTINUED



Legend

1. Hook and Pile Fastener
2. Webbing, 1½-inch
3. Thread, Size F
4. Snap Fastener, Button/Socket
5. Polyethylene, High Density, .030-inch
6. Textured Nylon Duck Fabric
7. Polyethylene, High Density, .050-inch
8. Webbing, 1-inch
9. Slide Buckle, 1-inch
10. Side Release Buckle, 1-inch
11. Snap Fastener, Stud/Eyelet
12. Webbing, 2¼-inch
13. Thread Size E

Figure 1. Holster/Leg Extender.



Legend

1. Polyethylene, 0.030-inch x 0.875-inch
2. Webbing, Nylon, 1-inch
3. Snap Fastener, Button/Socket
4. Thread, Size E
5. Snap Fastener, Eyelet/Stud
6. Eyelet (Drain)
7. Binding Tape, 1-inch
8. Textured Nylon Duck, Class III

Figure 2. 9 MM Magazine Pouch.

END OF TASK

REPAIR — CONTINUED

Restitching

1. Use Figure 1 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Pistol Set Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Pistol Set			
Holster/Leg Extender and 9 MM Magazine Pouch			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace Pistol Set with serviceable items from stock.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
SAW GUNNER SET
REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0032

Materials/Parts

Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)

Equipment Condition

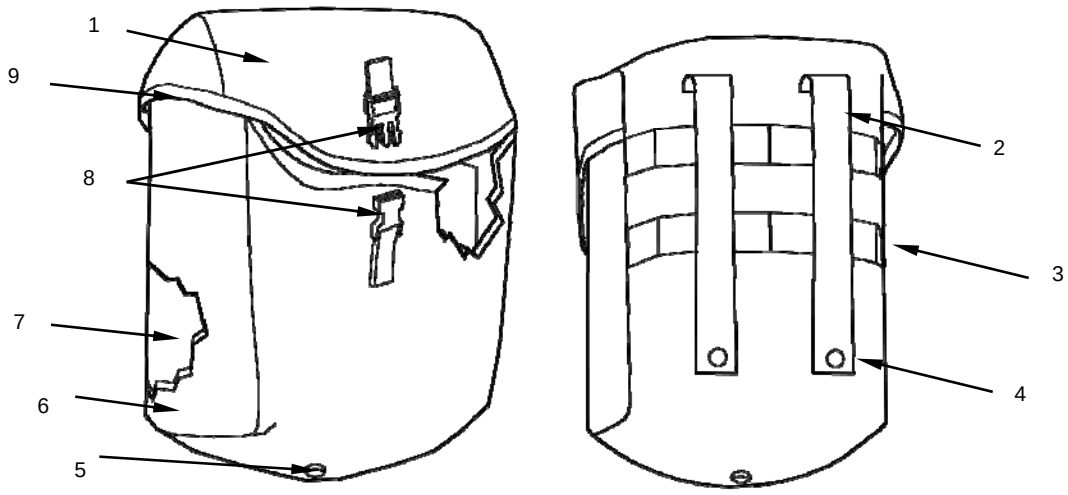
Lay out on flat surface or other suitable area.

REPAIR

Prior to repair operations, each component of the MOLLE II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished to the user as a repair kit, all repairs to these components will be accomplished at the maintainer level or higher, using FM 10-16 as a general guide.

Use Figures 1 and 2 to determine location and construction of equipment in repair procedures.

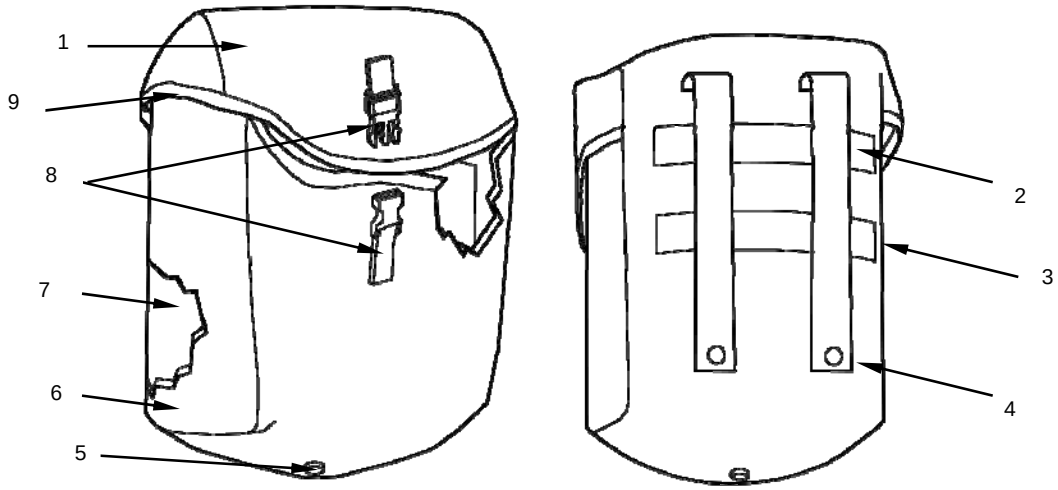
REPAIR — CONTINUED



Legend

1. Textured Nylon Duck, Class III
2. Webbing, Nylon, 1-inch
3. Polyethylene, 0.030-inch x 0.875-inch
4. Snap Fastener
5. Eyelet, Drain
6. Textured Nylon Duck, Class IV
7. Polyethylene, 0.030-inch x 2.00-inch
8. Buckle, Side Release, 1-inch
9. Binding Tape, 1-inch

Figure 1. 100-Round Utility Pouch.



Legend

1. Textured Nylon Duck, Class III
2. Webbing, Nylon, 1-inch
3. Polyethylene, 0.030-inch x 0.875-inch
4. Snap Fastener
5. Eyelet, Drain
6. Textured Nylon Duck, Class IV
7. Polyethylene, 0.030-inch x 2.00-inch
8. Buckle, Side Release, 1-inch
9. Binding Tape, 1-inch

Figure 2. 200-Round SAW Gunner Pouch.

REPAIR — CONTINUED

Restitching

1. Use Figures 1 and 2 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. SAW Gunner Set Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
SAW Gunner Set			
100-Round Utility Pouch and 200-Round SAW Gunner Pouch			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace SAW Gunner Set with serviceable item from stock.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
GRENADIER SET
REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0032

Materials/Parts

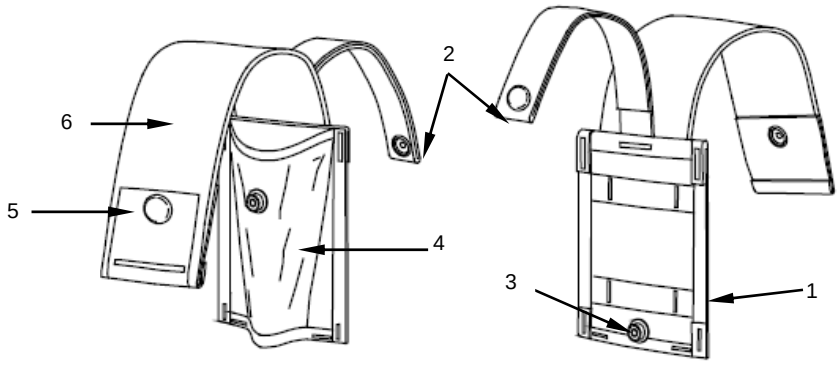
Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)

Equipment Condition

Lay out on flat surface or other suitable area.

REPAIR

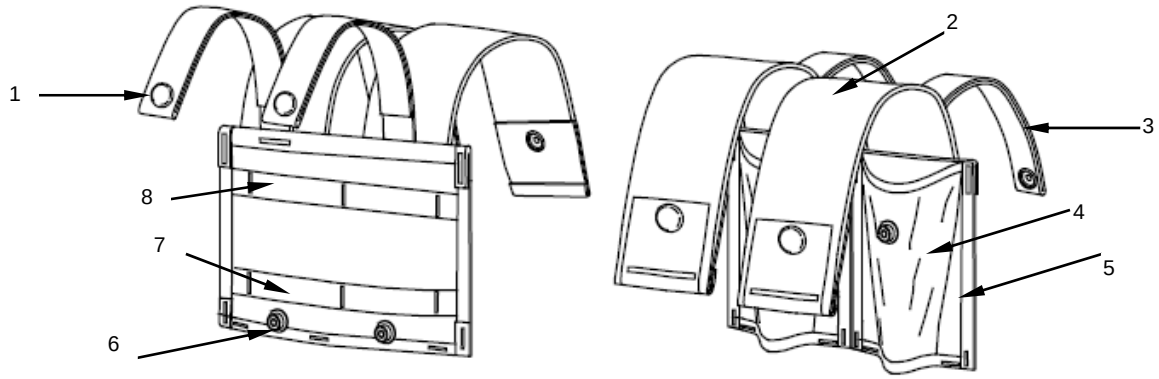
Prior to repair operations, each component of the MOLLE II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished the user as a repair kit, all repairs to these components will be accomplished at the maintenance level or higher, using FM 10-16 as a general guide. Use Figures 1, 2, and 3 to determine the location and construction of equipment in repair procedures.



Legend
1. Polyethylene, 0.030-inch
2. Webbing, Nylon, 1-inch
3. Snap Fastener, Eyelet/Stud
4. Textured Nylon Duck
5. Snap Fastener, Button/Socket
6. Webbing, Nylon, 2-inch

Figure 1. 40 MM High Explosive Pouch (Single).

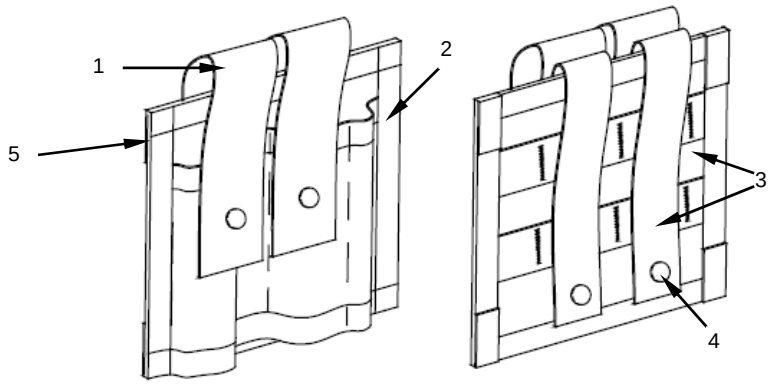
REPAIR — CONTINUED



Legend

1. Snap Fastener, Button/Socket
2. Webbing, Nylon, 2-inch
3. Polyethylene, 0.030-inch
4. Textured Nylon Duck
5. Binding Tape, 1-inch
6. Snap Fastener, Eyelet/Stud
7. Thread, Size F
8. Webbing, Nylon, 1-inch

Figure 2. 40 MM High Explosive Pouch (Double).



Legend

1. Webbing, Nylon, 2-inch
2. Binding Tape, 1-inch
3. Webbing, Nylon, 1-inch
4. Snap Fastener, Button/Socket
5. Thread, Size E

Figure 3. 40 MM Pyrotechnic Pouch (Double).

REPAIR — CONTINUED

Restitching

1. Use Figures 1 to 3 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Grenadier Set Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Grenadier Set			
All Pouches			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E
Waist Belt Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace Grenadier Set with serviceable items from stock.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
MEDIC SET
REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0032

Materials/Parts

Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)

Equipment Condition

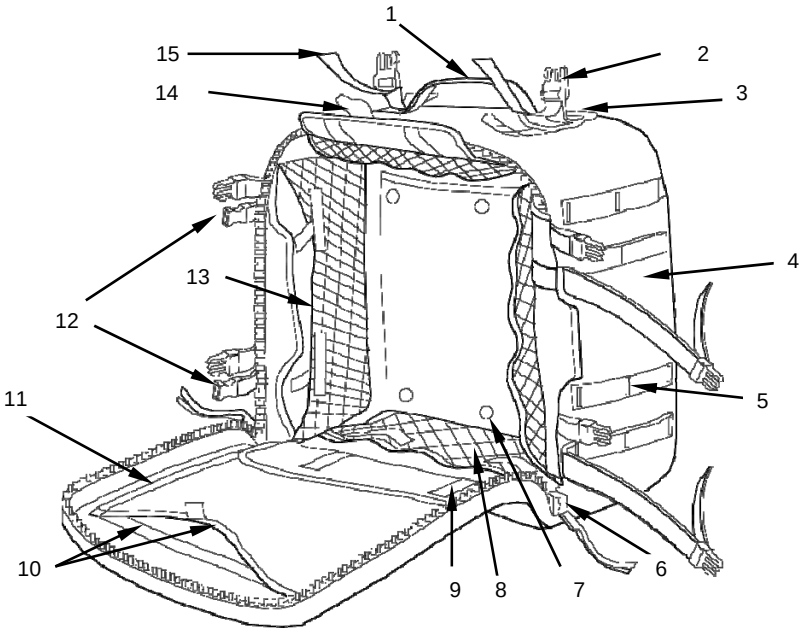
Lay out on flat surface or other suitable area.

REPAIR

Prior to repair operations, each component of the MOLLE II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished to the user as a repair kit, all repairs to these components will be accomplished at the maintainer level or higher, using FM 10-16 as a general guide.

Use Figures 1 – 5 to determine location and construction of equipment in repair procedures.

REPAIR — CONTINUED

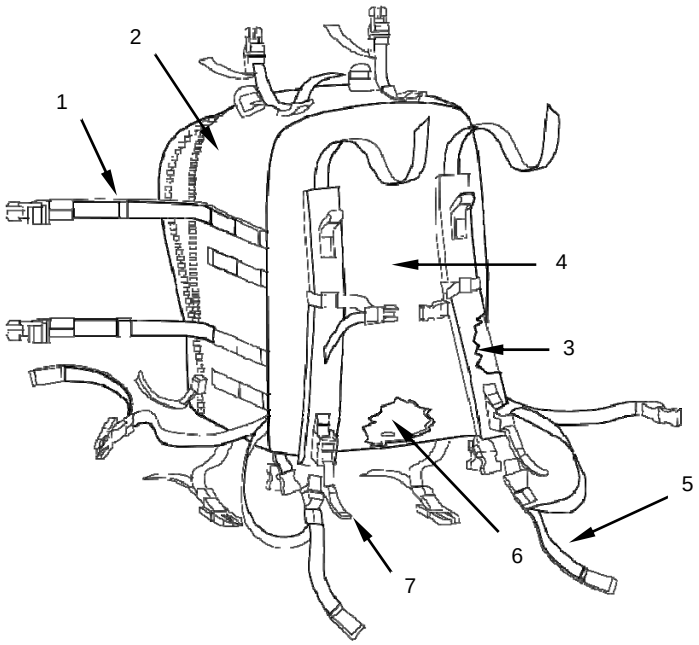


Legend

1. Webbing, 2-inch
2. Side Release Buckle, 2-inch
3. Metal Loop, 1-inch
4. Textured Nylon Duck
5. Thread, Size E
6. Slide Fastener
7. Snap Fastener
8. Elastic Webbing, ½-inch
9. Hook and Pile Fastener, 1-inch
10. Hook and Pile Fastener, $^{5}/_{8}$-inch
11. Thread, Size E
12. Side Release Buckle, 1-inch
13. Nylon Raschel Knit Cloth
14. Double Bar Buckles
15. Webbing, 1-inch

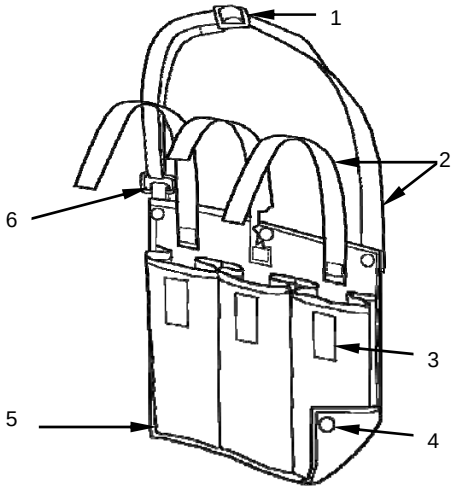
Figure 1. Medical Bag with Four Internal Pockets.

REPAIR — CONTINUED



Legend
1. Webbing, 1-inch
2. Textured Nylon Duck
3. Foam
4. Textured Nylon Duck
5. Quick Release Buckles
6. Webbing, Elastic, 1-inch
7. Webbing, $^{9}/_{16}$-inch

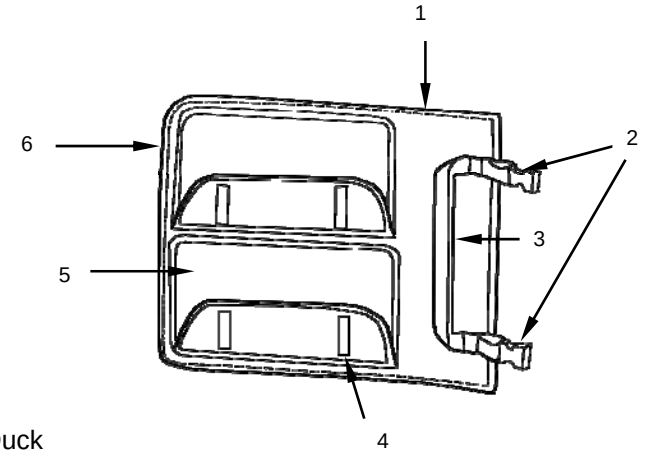
Figure 2. Medical Bag Exterior.



Legend
1. Double Bar Buckles
2. Webbing, 1-inch
3. Hook and Pile Fastener, 1-inch
4. Snap Fastener
5. Thread, Size E
6. Metal Hook, 1-inch

Figure 3. Medical IV Bandoleer Bag.

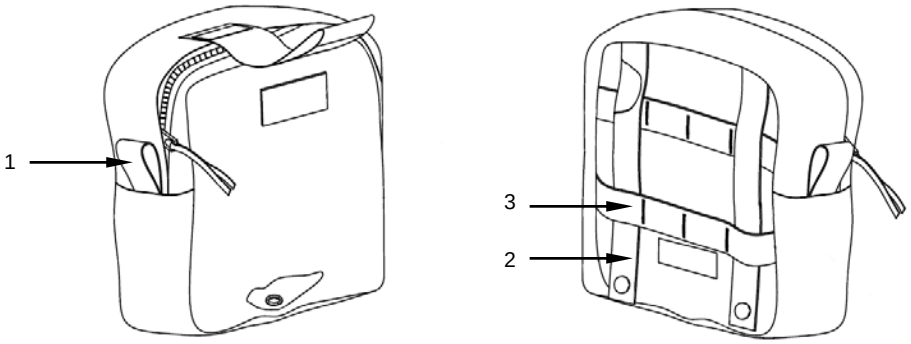
REPAIR — CONTINUED



Legend

1. Textured Nylon Duck
2. Side Release Buckle, 1-inch
3. Webbing, 1-inch
4. Hook and Pile Fastener, 1-inch
5. Nylon Raschel Knit Cloth
6. Binding Tape, 1-inch

Figure 4. Medical Bag Panel.



Legend

1. Loop
2. Attachment Strap
3. Rear Strap

Figure 5. External Medic Modular Pocket.

REPAIR — CONTINUED

Restitching

1. Use Figures 1 to 5 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Medic Set Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Medic Set			
Bag and Pouches			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E
Waist Belt Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace Medic Set with serviceable items from stock.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
RADIO POUCH, 300-ROUND BAG, SHOTGUN POUCH, MBITR POUCH, NBC BAG, K-BAR AND ALICE CLIP ADAPTERS, VEHICLE PANEL, LEADERS POUCH, PVS-14 NIGHT VISION GOGGLE POUCH, ADMIN POCKET, ENTRENCHING TOOL CARRIER, AMMUNITION POUCHES BANDOLEER, FLASH BANG GRENADE POUCH REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0032

Materials/Parts

Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)

Equipment Condition

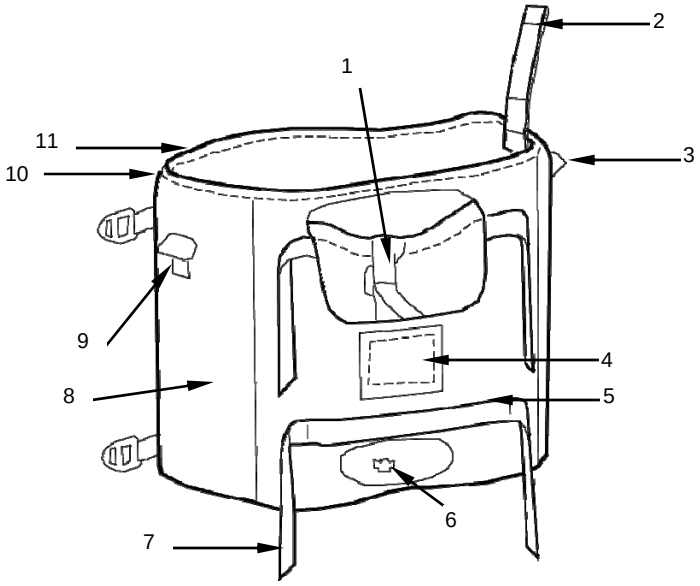
Lay out on flat surface or other suitable area.

REPAIR

Prior to repair operations, each component of the MOLLE II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished to the user as a repair kit, all repairs to these components will be accomplished at the maintainer level or higher, using FM 10-16 as a general guide.

Use Figures 1 through 14 to determine location and construction of equipment in repair procedures.

REPAIR — CONTINUED

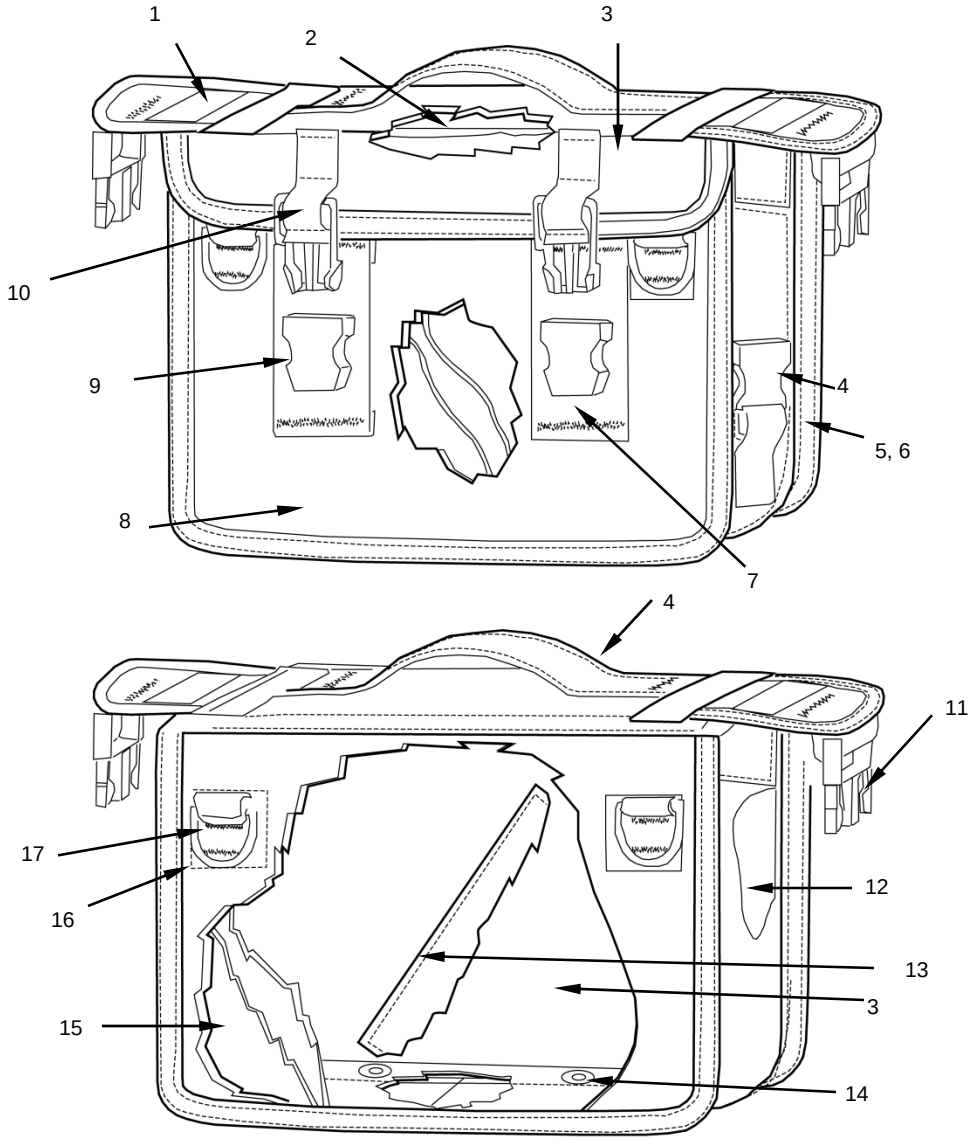


Legend

1. Buckle, 1-inch, Ladder-Type
2. Snap Fastener, Button/Socket
3. Snap Fastener, Eyelet/Stud
4. Polyethylene, 0.020-inch
5. Thread, Size F
6. Eyelet
7. Webbing, 1-inch
8. Textured Nylon Duck
8. D-Ring, 1-inch
9. Thread, Size E
10. Binding Tape, 1-inch
11. Thread

Figure 1. Radio Pouch.

REPAIR — CONTINUED

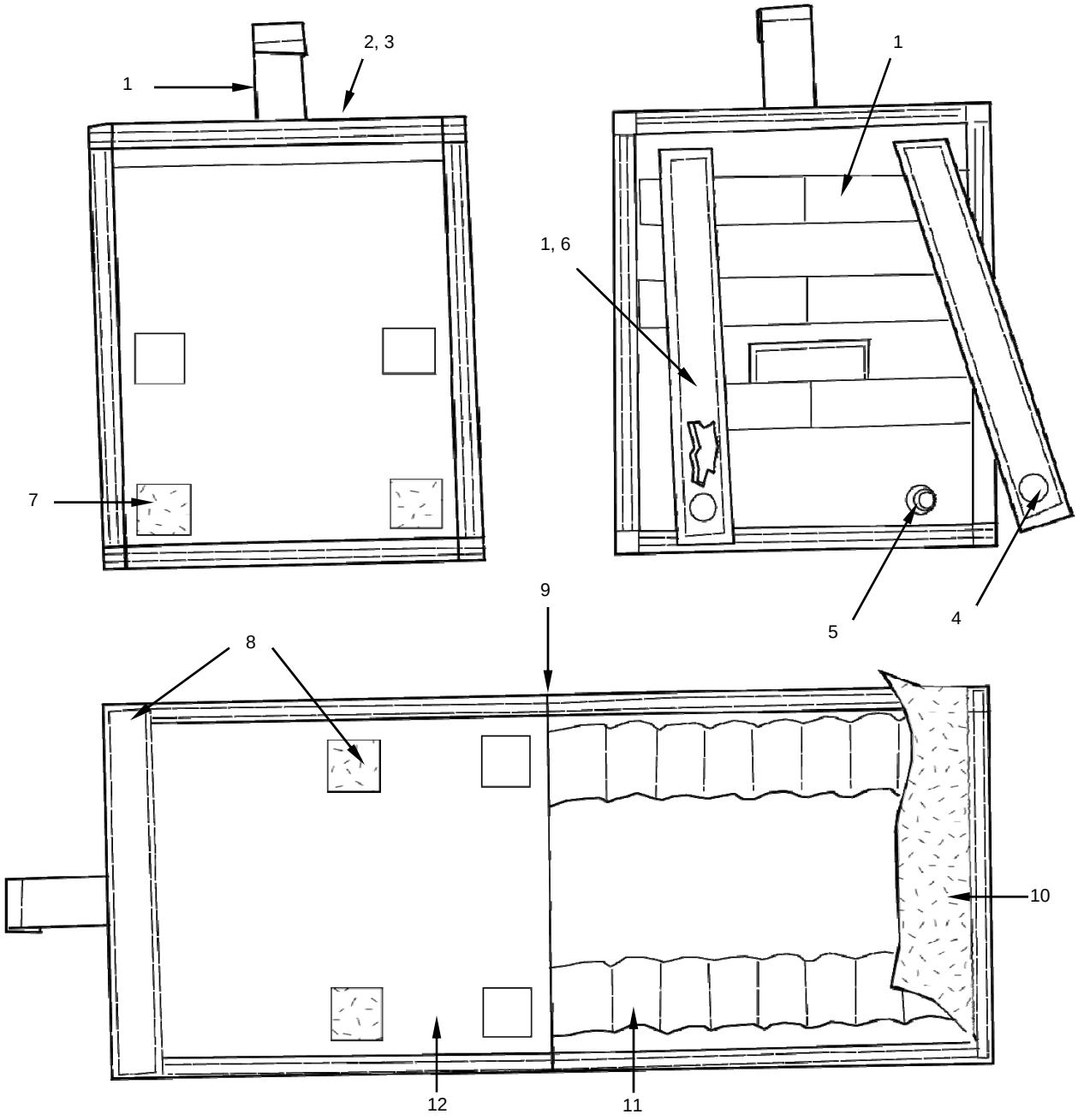


Legend

1. Hook and Pile Fastener
2. Polyethylene, High Density, .050-inch
3. Textured Nylon Duck Fabric
4. Side Release Buckle, 1-inch
5. Thread, Size E
6. Binding Tape, 1-inch
7. Webbing, 2-inch
8. Textured Nylon Duck Fabric
9. Fastener, 3-hole, 1-inch
10. Webbing, Nylon, 1-inch
11. Slide Buckle, 1-inch
12. Thread, Size F
13. Snap Fasteners, Button/Socket
14. Grommet
15. Polyethylene, High Density, .050-inch
16. Webbing, 1-inch
17. D-Ring, 1-inch

Figure 2. 300-Round, 7.62 Ammo Bag.

REPAIR — CONTINUED

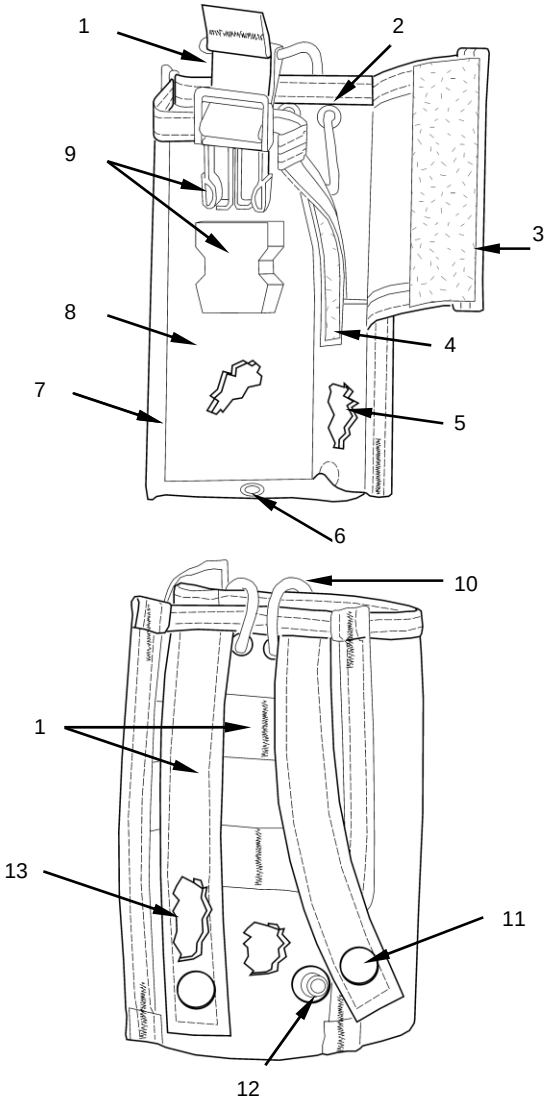


Legend

1. Webbing, Nylon, 1-inch
2. Binding Tape, 1-inch
3. Thread, Size E
4. Snap Fasteners, Button/Socket
5. Snap Fasteners, Stud/Eyelet
6. Polyethylene, 0.030-inch
7. Pile Fastener Tape, 1-inch
8. Hook Fastener Tape, 1-inch
9. Thread, Size F
10. Pile Fastener Tape, 2-inch
11. Webbing, Nylon, Elastic, 1½-inch
12. Textured Nylon Duck

Figure 3. Shotgun Shell Pouch.

REPAIR — CONTINUED

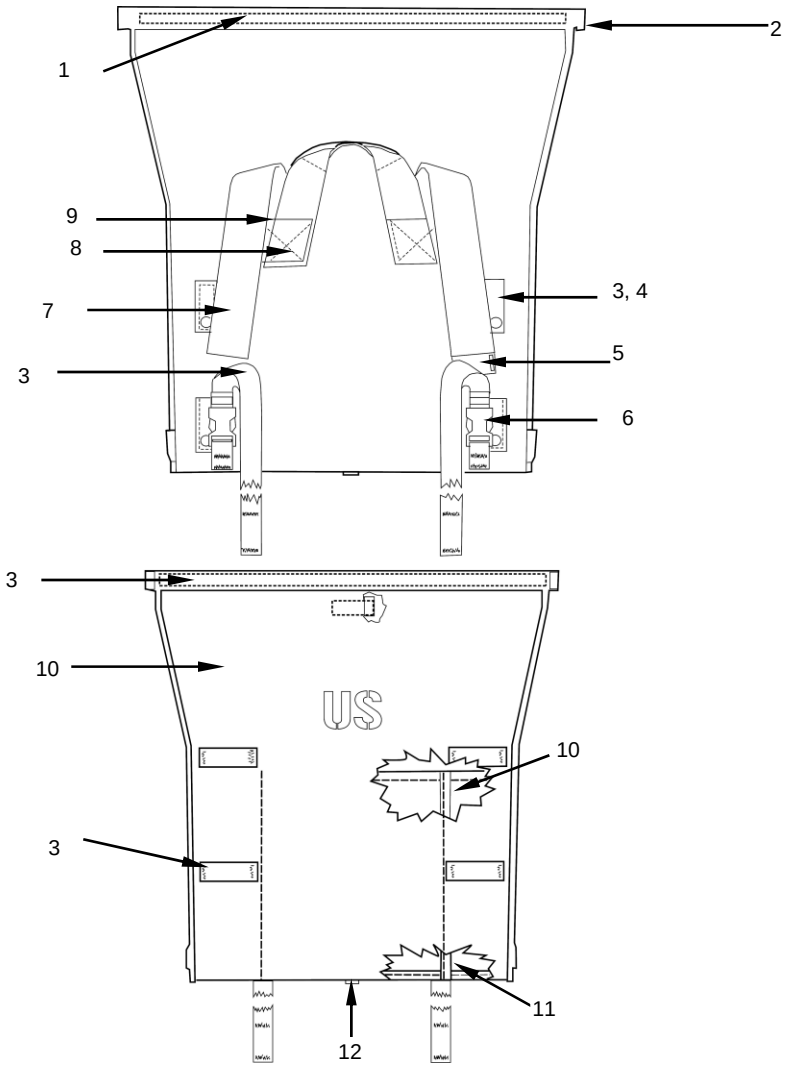


Legend

1. Webbing, Nylon, 1-inch
2. Eyelet/Washer
3. Fastener Tape, Hook, 1-inch wide
4. Fastener Tape, Pile, ½-inch wide
5. Foam, ¼-inch
6. Grommet
7. Thread Size F
8. Textured Nylon Duck
9. Fastener, 3-hole, 1-inch (Side Release)
10. Cord, Round
11. Snap Fasteners, Button/Socket
12. Snap Fasteners, Stud/Eyelet
13. Polyethylene, 0.030-inch

Figure 4. MBITR Pouch.

REPAIR — CONTINUED

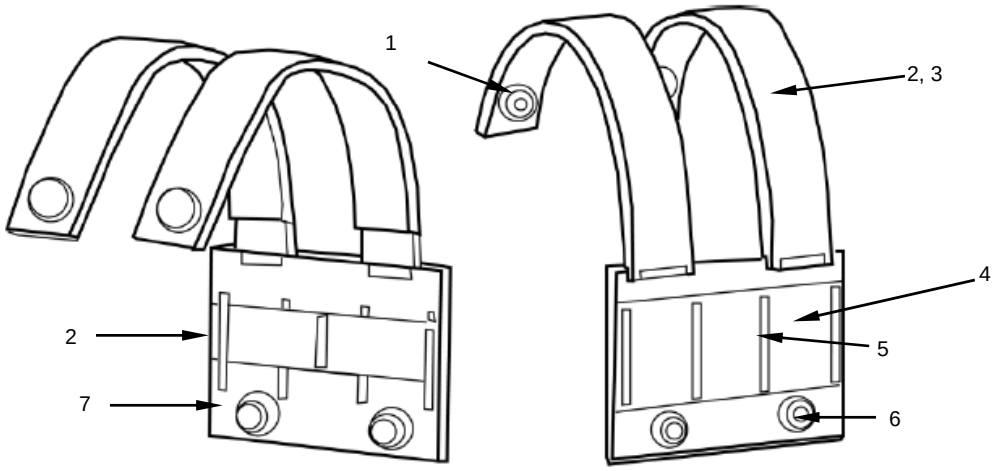


Legend

1. Strap, Leather, 1-inch
2. Fastener, 3-Hole, 1-inch
3. Webbing, Nylon, 1-inch
4. Polyethylene, 0.030-inch
5. Webbing, Nylon, Elastic , 1-inch
6. Side Release Buckle, 1-inch
7. Webbing, Nylon, 1-inch
8. Thread, Size E
9. Threading , Size F
10. Textured Nylon Duck
11. Binding Tape, 1-inch
12. Eyelet, Washer

Figure 5. NBC Bag.

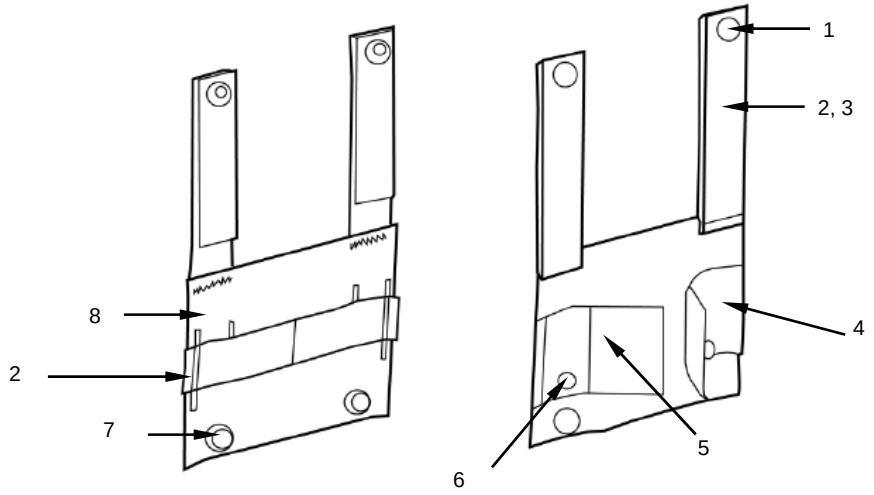
REPAIR — CONTINUED



Legend

1. Snap Fastener, Button/Socket
2. Webbing, 1-inch
3. Polyethylene, 0.030-inch
4. Textured Nylon Duck
5. Thread, Size E
6. Snap Fastener, Eyelet/Washer
7. Webbing, 3½-inch

Figure 6. ALICE Adapter Clip.

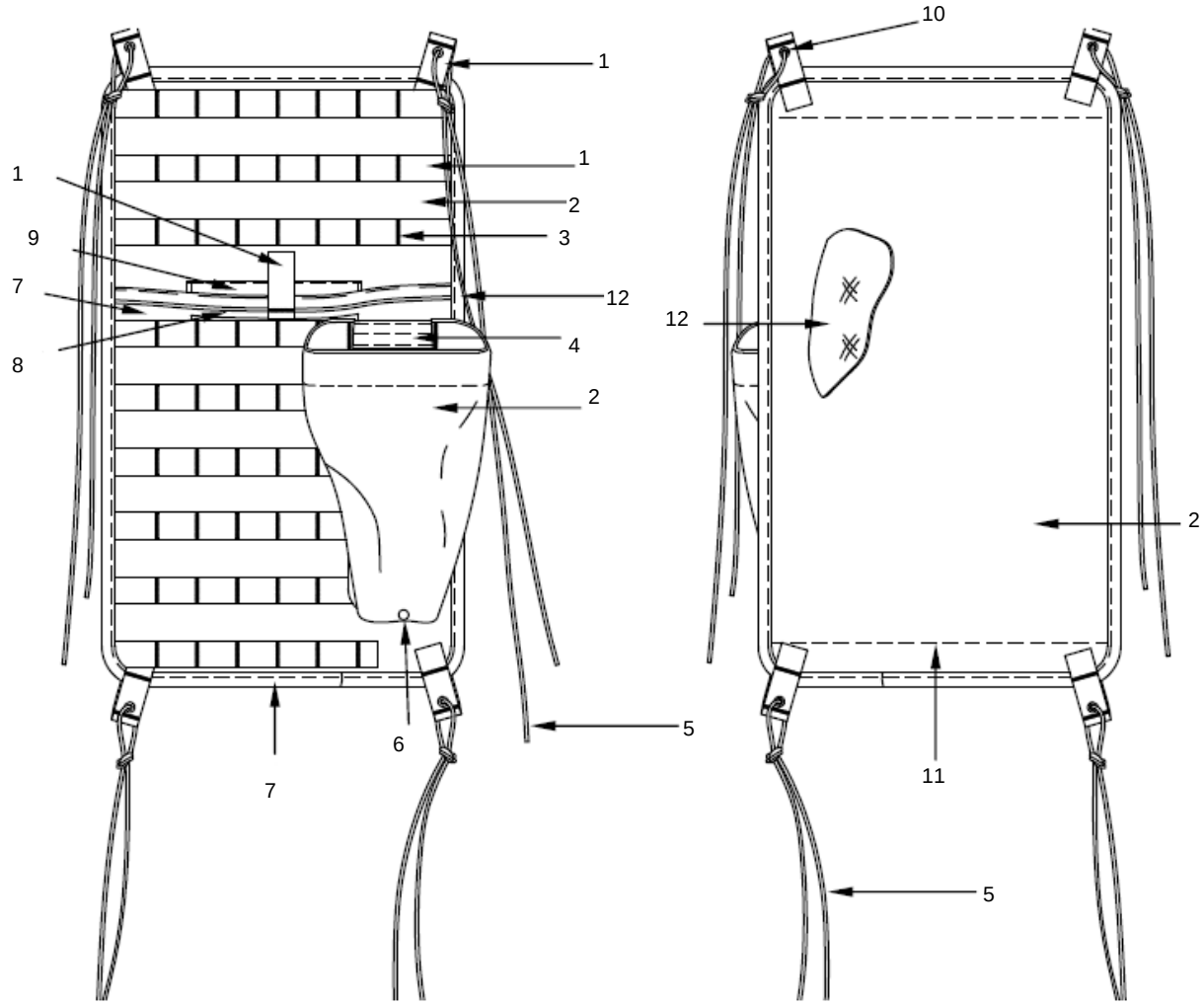


Legend

1. Snap Fastener, Button/Socket
2. Webbing, 1-inch
3. Polyethylene, 0.030-inch
4. Webbing, 2 ¼-inch
5. Hook and Pile Fastener
6. Snap Fastener, Eyelet/Washer
7. Snap Fastener, Eyelet/Stud
8. Webbing, 3½-inch

Figure 7. K-Bar Adapter.

REPAIR — CONTINUED

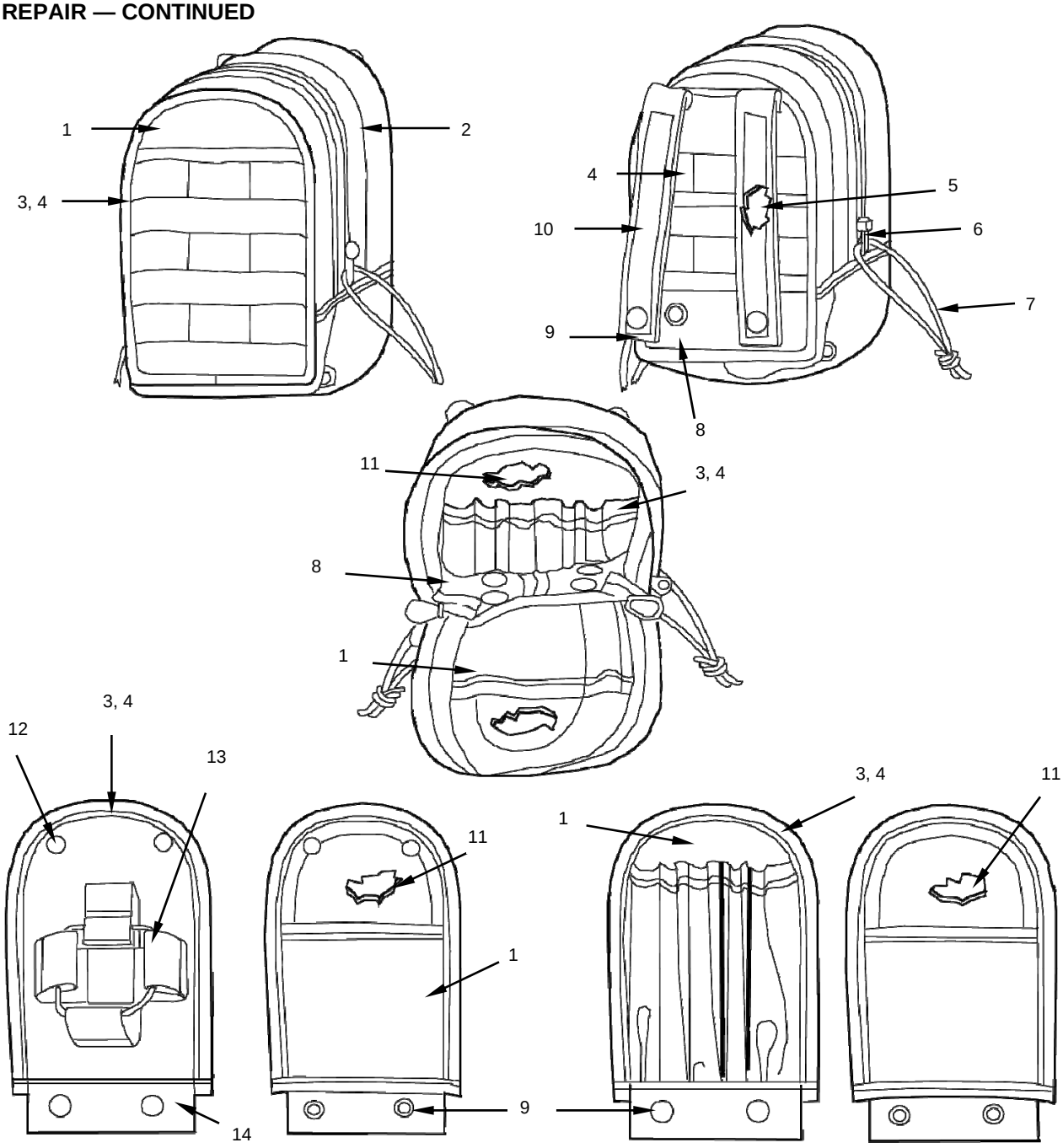


Legend

1. Webbing, 1-inch
2. Textured Nylon Duck
3. Thread, Size E
4. Coated Webbing
5. Cord, Round
6. Eyelet Fastener, Hook, 1-inch
7. Binding Tape, 1-inch
8. Fastener, Hook, 1-inch
9. Fastener, Pile, 1-inch
10. Grommet
11. Thread, Size F
12. Polyethylene, .050-inch

Figure 8. Vehicle Panel (MVP) Universal.

REPAIR — CONTINUED

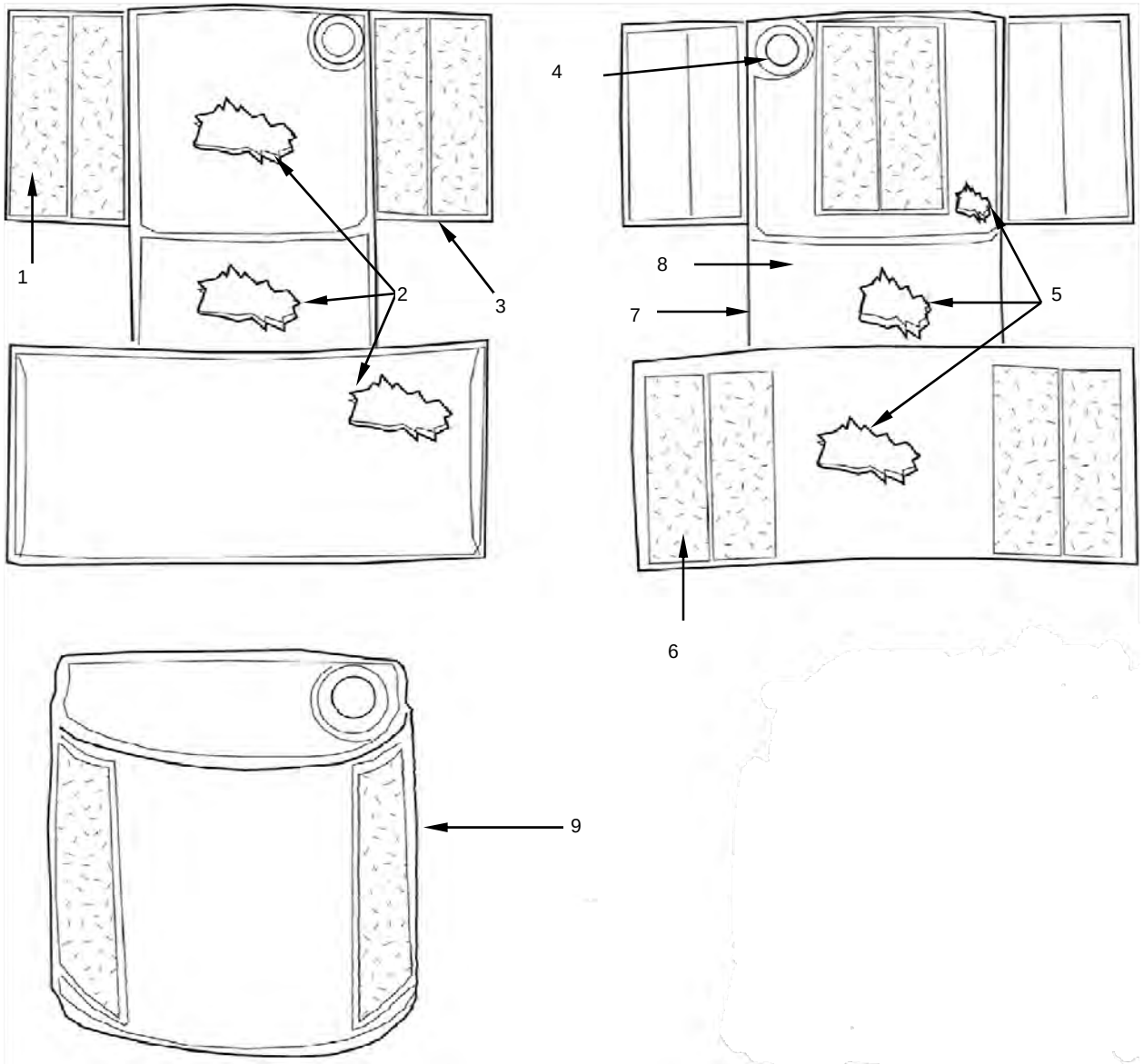


Legend

1. Textured Nylon Duck
2. Thread, Size F
3. Binding Tape, 1-inch
4. Thread, Size E
5. Polyethylene, 0.030-inch
6. Slide Fastener
7. Cord, Flat
8. Stud/Eyelet
9. Snap Fastener
10. Webbing, 1-inch
11. Polyethylene, .050-inch
12. Eyelet
13. Cord, Elastic
14. Webbing, 1½-inch

Figure 9. Leaders Set Universal.

REPAIR — CONTINUED

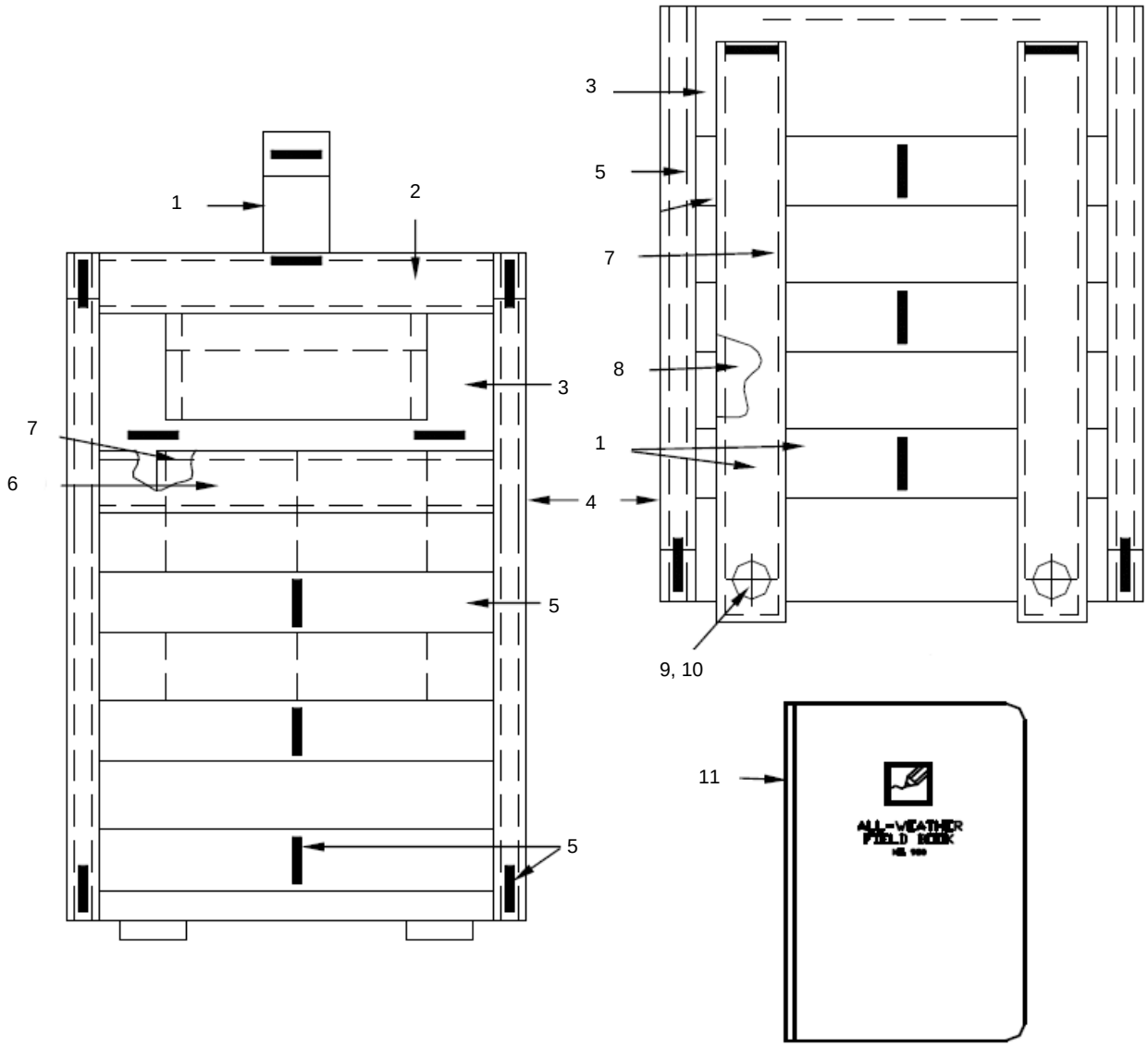


Legend

1. Fastener, Hook, 2-inch
2. Foam, $^{3}/_{16}$-inch
3. Thread, Size E
4. Eyelet
5. Polyethylene, 0.050-inch
6. Fastener, Pile, 2-inch
7. Thread, Size F
8. Textured Nylon Duck
9. Assembled Pouch

Figure 10. PVS-14 Pouch Universal.

REPAIR — CONTINUED

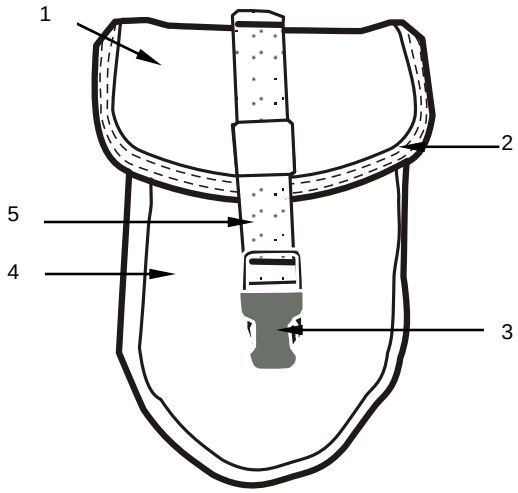


Legend

1. Webbing, 1-inch
2. Fastener Tape, Pile, 1-inch
3. Textured Nylon Duck
4. Tape, Binding, 1-inch
5. Thread, Size E
6. Fastener, Tape Hook, 1-inch
7. Thread, Size F
8. Polyethylene, 0.030-inch
9. Snap Fastener, Button/Socket
10. Snap Fastener, Stud/Eyelet
11. All Weather Field Book

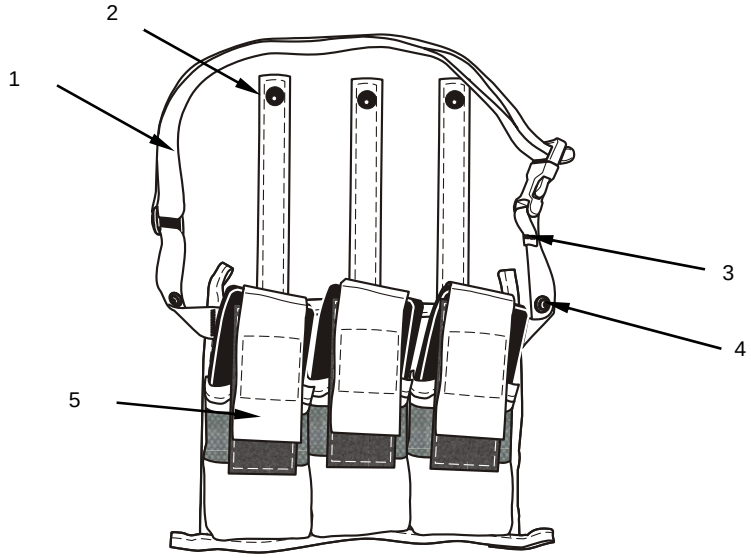
Figure 11. Admin Pocket.

REPAIR — CONTINUED



Legend
1. Webbing, Nylon, 3-inch
2. Tape, Binding, 1-inch
3. Fastener, 3-hole, 1-inch (side release)
4. Textured Nylon Duck
5. Webbing, Nylon, 1-inch

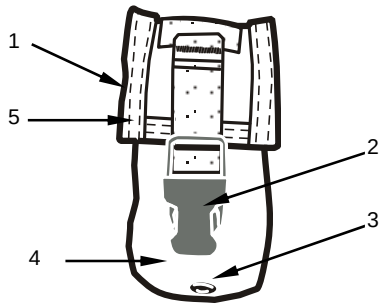
Figure 12. Entrenching Tool Carrier.



Legend
1. Webbing, 1-inch
2. Snap Fastener, Eyelet/Stud
3. Slide Buckle, 1-inch
4. Snap Fastener, Button/Socket
5. Webbing, 3-inch

Figure 13. Ammunition Pouches Bandoleer.

REPAIR — CONTINUED



Legend
1. Tape, Binding, 1-inch
2. Fastener, 3-hole, 1-inch (side release)
3. Eyelet, ABE-131
4. Textured Nylon Duck
5. Thread, Size E

Figure 14. Flash Bang Grenade Pouch.

Restitching

1. Use Figures 1 through 14 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Additional MOLLE II Components Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Additional MOLLE II Components			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E
Waist Belt Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace additional MOLLE components with serviceable items from stock.

END OF TASK

END OF WORK PACKAGE

CHAPTER 4

SUSTAINMENT MAINTENANCE INSTRUCTIONS FOR MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II

SUSTAINMENT MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
SERVICE UPON RECEIPT

INITIAL SETUP:

Tools and Special Tools

None Required

Materials/Parts

None Required

Equipment Condition

Unpacked

Personnel Required

Maintainer (1)

References

DA PAM 750-8
SF 361

SERVICE UPON RECEIPT OF MATERIEL

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 TASK

INSTALLATION INSTRUCTIONS

The MOLLE II gear does not require installation.

END OF WORK PACKAGE

SUSTAINMENT MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
SERVICE

INITIAL SETUP:

Tools and Special Tools

Brush, Scrub, Household (WP 0041, Table 2, Item 1)

Personnel Required

Non-MOS specific (1)

Materials/Parts

Detergent, Laundry, Powdered, MIL-D-12182, Type II (NSN 7330-00-252-6797)
Rag, Wiping (WP 0042, Item 34)

SERVICE

Field Cleaning of MOLLE II Components

1. Disassemble all components.
2. Remove loose dirt and mud from equipment with a stick or other dull instrument to prevent damage to equipment. A brush or cloth can also be used to remove dirt or debris.

END OF TASK

Garrison Cleaning of MOLLE II Components

CAUTION

Do not use chlorine bleach, yellow soap, cleaning fluids, or solvents that will discolor and deteriorate the item.

Do not launder or dry clean MOLLE II components in fixed commercial or home type laundry equipment as it will cause damage to equipment.

1. Wash the component by immersing it in a solution of Type II powdered laundry detergent or any mild commercial detergent or soap and warm water.
2. Scrub vigorously and repeatedly with a brush as necessary.
3. Flush the component thoroughly with clean, warm water until all the cleaning solution has been rinsed out.
4. Air dry washed and rinsed components away from direct sun light and heat or open flame.

CAUTION

Do not dry in a commercial dryer as it will cause damage to the equipment.

END OF TASK

SERVICE — CONTINUED

Central Issue Facility (CIF) Cleaning of MOLLE II Components

1. Prepare MOLLE II components for laundering by removing excessive dirt.

NOTE

Do not launder the waist belt plastic insert and plastic frame. Ensure all pockets and compartments of components are empty.

2. Separate all attached MOLLE II components from each other before cleaning.
3. Remove the main pack and shoulder straps from the plastic frame.
4. Remove the foam pad material from the patrol pack insert pocket.
5. Remove all hardware items from MOLLE II components, except those permanently attached.
6. Discard used hydration components.
7. Soak MOLLE II components in a warm water tank for at least 5 minutes.

CAUTION

Do not use chlorine bleach, yellow soap, cleaning fluids, or solvents that will discolor and deteriorate the item.

Do not launder or dry clean MOLLE II components in fixed commercial or home type laundry equipment.

8. After soaking, wash the items in a solution of Type II powdered laundry detergent, scrubbing vigorously and repeatedly with a brush as necessary.
9. Flush the washed MOLLE II components with clean warm water until all cleaning solution has been rinsed out.
10. Air dry washed and rinsed components away from direct sun light and heat or open flame.
11. Replace the foam pad into the patrol pack.
12. Replace hydration components with serviceable item from stock.
13. Insure all components are present and ready for issue.

END OF TASK

Hydration System Cleaning

NOTE

Be sure the cap is screwed all the way down to prevent leaking. If the cap leaks, make sure the cap lanyard is pushed down past the screw threads, otherwise, the lanyard could prevent the cap from completely closing.

1. Rinse hydration system with mild soap and hot water before first use and after each use.
2. To freshen, add 2 teaspoons of baking soda to a full system of water; soak overnight. Rinse well.
3. To sanitize, add 2 teaspoons of bleach to a full system of water and let soak overnight. Rinse thoroughly. The use of liquids other than water will accelerate mold growth and will require more frequent cleaning.

END OF TASK

END OF WORK PACKAGE

SUSTAINMENT MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
INSPECTION

INITIAL SETUP:

Tools and Special Tools	References
Not Applicable	TB 43-0002-27 WP 0021
Materials/Parts	WP 0022 WP 0023
Not Applicable	WP 0024 WP 0025
Personnel Required	WP 0027 WP 0028
Non-MOS specific (1)	WP 0029 WP 0030 WP 0031

INSPECT

All components of the MOLLE II system shall be inspected when turned in by the soldier to determine serviceability. Table 1 contains general guidelines for the classification of equipment.

Table 1. Item Classification Codes and Criteria.

CODE	EXPLANATION
A	New and unused property possessing original appearance and serviceability.
B	Serviceability as to be acceptable for issue or sale in lieu of Class A, like-new property. Items of organizational clothing and equipage will possess such appearance and degree of serviceability as to justify their issue to troops and afford a satisfactory military appearance. As a guide only and where practicable for application, these items should possess not less than 50 percent of the life of a like-new item.
F	Unserviceable items which are economically repairable. Economically repairable items are those which may be restored to Class B condition for not more than 65 percent or equipage of prices contained in current Army Master Data File.
H	Unserviceable items which are obviously scrap or salvage, for which any use would require a repair cost exceeding 65 percent for equipage of the current cost of the item.
X	Items which do not possess the appearance or degree of serviceability to justify the classification of B or which cannot be repaired economically for the purpose originally intended, but which can be used as an end item (without benefit of repair) for duties which are harmful to equipment.

INSPECT — CONTINUED

Organizational Clothing and Equipment General Inspection Criteria

Items of organizational clothing and equipment will require the following for classification in serviceable condition codes (A or B):

- Complete state of repair.
- Cleaned. Must be in a clean (laundered, dry cleaned, sterilized, or painted) condition.
- Hook and Pile Tape Fasteners. All hook and pile tape fasteners must be functional and of the correct color for the uniform. The tape shall not be frayed or worn.
- Fasteners. All present and of the same size originally affixed to item.
- Frayed edges. Frayed edges of an inconspicuous or minor nature will be permitted.
- Patches and darns. Patches and darns will be permitted, provided their color is similar to that of the original material.
- Pockets. Pockets must be clean and in a complete state of repair. Any repairs will be of a wear expectancy similar to that of the remainder of the garment. Replaced pockets must be of a size consistent with those originally in garment.
- Fading. Fading will be permitted.
- Identification marks. Marks of identification include those made at issue point and those made by individuals. These should be lined out. A mark is considered lined out when its cancellation is readily evident.
- Spots and stains will not be considered a determining factor in classifying this category of property if such spots and stains are of a minor nature.
- Hardware. Hardware will not be bent, broken, or missing.

Inspection and Classification Procedures for MOLLE II

Instructions contained in this paragraph will be used as a guide in making inspections of clothing and individual equipment in the hands of units or individuals for the purpose of determining serviceability and repair eligibility.

NOTE

Restitching of open seams is NOT to be counted as a tear with no limitation length.

Maximum repairs mean the number of repairs authorized on an item each time it is turned in for repair.

Additional repairs are authorized as long as expenditure limits do not exceed 65 percent replacement cost. Refer to TB 43-0002-27, Maintenance Expenditure Limits.

1. Set, SAW Gunner (S37688)
   a. Inspect for missing or damaged grommets and drawstrings. Check for rips, tears, burns, snags, oil, grease, or other contaminants.

      Code A. See Table 1.

      Code B. Complete and clean. No damage.

      Code F. Unserviceable (Reparable). Economically reparable items that require repair, reconditioning, or overhaul.

      Code H. Any damage. Any contamination that cannot be cleaned.

   b. Refer to WP 0028 for maintenance procedures.

INSPECT — CONTINUED

2. Set, Grenadier (G23298)
   a. Inspect for rips, tears, holes, dry rot, mildew, missing parts, or weakened material. Check to determine if the bag has a hard-painted area for stenciling owner's name.

      Code A. See Table 1.

      Code B. Complete and clean. No damage.

      Code F. Unserviceable (Reparable). Economically reparable items that require repair, reconditioning, or overhaul.

      Code H. Any damage. Any contamination that cannot be cleaned.

   b. Refer to WP 0029 for maintenance procedures.
3. Set, Pistol (P44064)
   a. Inspect for rips, tears, holes, and bums on outside or on the inside liner. Check for broken or missing zippers and snaps. Check hook and pile tape fasteners and handles for damage. Check inside pockets for rips and tears.

      Code A. See Table 1.

      Code B. Complete and clean. No damage.

      Code F. Unserviceable (Reparable). Economically reparable items that require repair, reconditioning, or overhaul.

      Code H. Any damage. Any contamination that cannot be cleaned.

   b. Refer to WP 0027 for maintenance procedures.
4. Set, Rifleman (R97425)
   a. Inspect for rips, tears, holes, and burns on outside or on the inside liner. Check for broken or missing zippers and snaps. Check hook and pile tape fasteners and handles for damage. Check inside pockets for rips and tears.

      Code A. See Table 1.

      Code B. Complete and clean. No damage.

      Code F. Unserviceable (Reparable). Economically reparable items that require repair, reconditioning, or overhaul.

      Code H. Any damage. Any contamination that cannot be cleaned.

   b. Refer to WP 0021, WP 0022, WP00 23, WP 0024, WP 0031 for maintenance procedures.
5. Set, Medic (M33390)
   a. Inspect for rips, tears, holes, and bums on outside or on the inside liner. Check for broken or missing zippers and snaps. Check hook and pile tape fasteners and handles for damage. Check inside pockets for rips and tears.

      Code A. See Table 1.

      Code B. Complete and clean. No damage.

      Code F. Unserviceable (Reparable). Economically reparable items that require repair, reconditioning, or overhaul.

      Code H. Any damage. Any contamination that cannot be cleaned.

   b. Refer to WP 0030 for maintenance procedures.

INSPECT — CONTINUED

6. Set, Large Field Pack (F59856)
   a. Inspect for rips, tears, holes, and burns on outside or on the inside liner. Check for broken or missing zippers and snaps. Check hook and pile tape fasteners and handles for damage. Check inside pockets for rips and tears.

      Code A. See Table 1.

      Code B. Complete and clean. No damage.

      Code F. Unserviceable (Reparable). Economically reparable items that require repair, reconditioning, or overhaul.

      Code H. Any damage. Any contamination that cannot be cleaned.

   b. Refer to WP 0025 for maintenance procedures.
7. Bag, 300-Round, 7.62 mm (B13701)
   a. Inspect for rips, tears, holes, and bums on outside or on the inside liner. Check for broken or missing zippers and snaps. Check hook and pile tape fasteners and handles for damage. Check inside pockets for rips and tears.

      Code A. See Table 1.

      Code B. Complete and clean. No damage.

      Code F. Unserviceable (Reparable). Economically reparable items that require repair, reconditioning, or overhaul.

      Code H. Any damage. Any contamination that cannot be cleaned.

   b. Refer to WP 0031 for maintenance procedures.

END OF TASK

END OF WORK PACKAGE

SUSTAINMENT MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
FIGHTING LOAD CARRIER SET
SERVICE, INSPECT, REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0019
WP 0020
WP 0032

Materials/Parts

Fastener Tape, Hook, A-A-55126, Type II, Class 1, 1 inch (WP 0036, Item 40)
Fastener Tape, Hook, A-A-55126, Type II, Class 1, 2 inch (WP 0036, Item 42)
Fastener Tape, Loop, A-A-55126, Type II, Class 1, 1 inch (WP 0036, Item 45)
Fastener Tape, Loop, A-A-55126, Type II, Class 1, 2 inch (WP 0036, Item 47)
Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Tape, Textile (Binding Tape), 1 inch (WP 0036, Item 66)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)
Webbing, as specified (WP 0036, Items 67-80)

Equipment Condition

Lay out on flat surface or other suitable area.

SERVICE

Clean the Fighting Load Carrier IAW WP 0019, Cleaning and Drying.

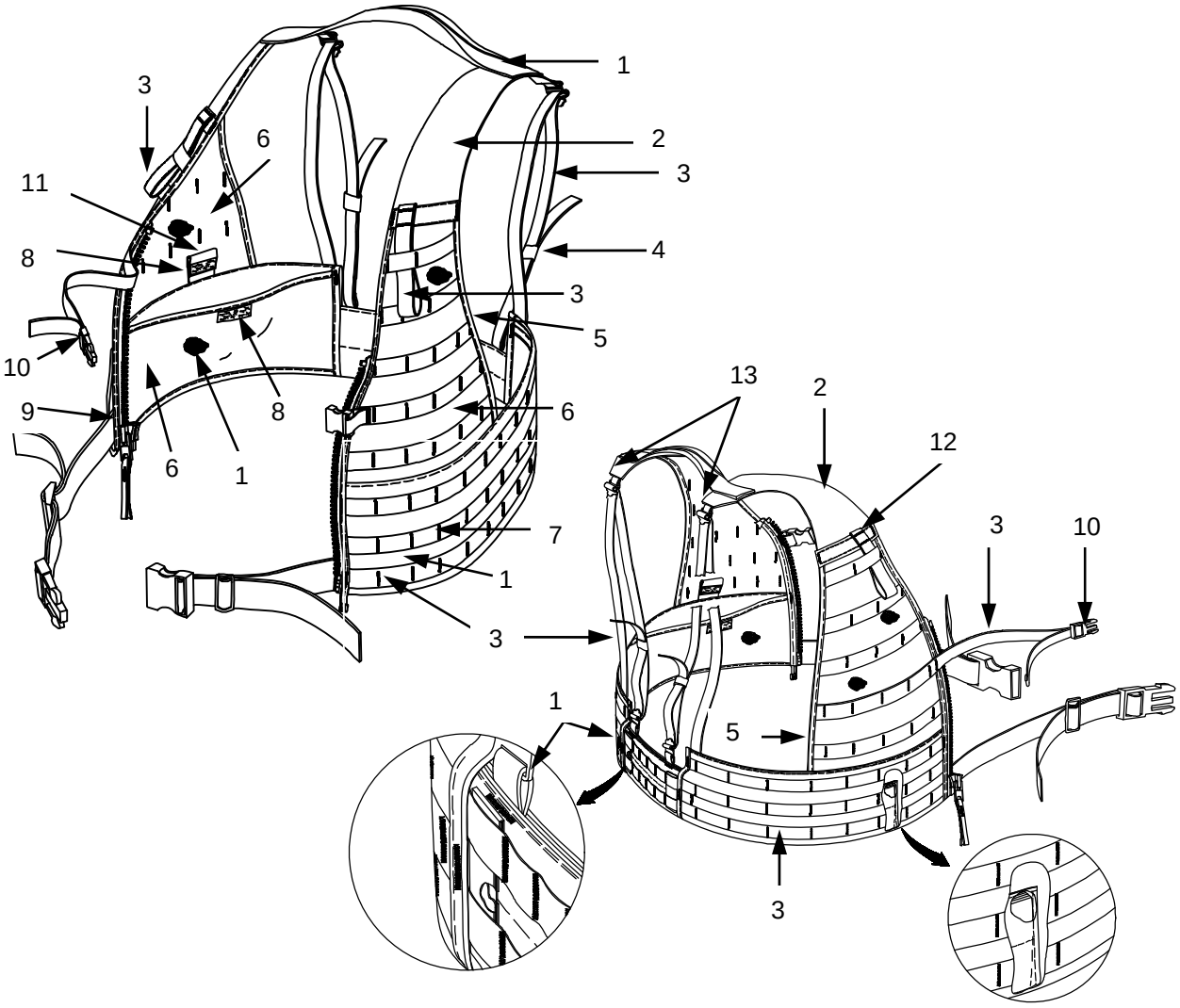
INSPECT

Conduct a preliminary examination IAW WP 0020 after components have been laundered as described in WP 0019. Discard decayed items. Test seams by grasping the item with both hands and pulling at right angles to the seams. Mark areas to be repaired. Cross out nonspecific and personal markings.

REPAIR

Prior to repair operations, each component of the MOLLE II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished the user as a repair kit, all repairs to these components will be accomplished at the CIF or approved facility, using FM 10-16 as a general guide.

Use Figures 1 through 5 to determine the location and construction of equipment in repair procedures.



Legend

1. Textured Nylon Duck
2. 3 ½-inch Webbing
3. 1-inch Webbing
4. 1-inch Elastic Webbing
5. Binding Tape
6. Raschel Knit Cloth
7. Size E Thread
8. Hook and Pile Fastener
9. Slide Fastener
10. 1-inch Side Release Buckle
11. 2-Inch Webbing
12. Size F Thread
13. 1-inch Slide Buckle

Figure 1. Fighting Load Carrier Vest.

REPAIR — CONTINUED

Restitching

1. Use Figure 1 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Fighting Load Carrier Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Rifleman Set			
Fighting Load Carrier			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E
Waist Belt Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Hook and Pile Tape

1. Mark the location of the faulty hook and pile tape on the FLC pocket closures.
2. Remove faulty hook and pile tape from FLC pocket closures. Do not damage the fabric.
3. Measure and cut a 2-inch (± 1/16 inch) piece of 1-inch wide hook and pile tape.
4. Using a medium duty sewing machine, size E thread of the appropriate color, sew new hook and pile tape to FLC pocket closure using the marks made in step 1. Overstitch by ½ inch.
5. Trim running ends of thread.

END OF TASK

Slide Fasteners

1. Remove inner waist belt from FLC.
2. Cut the fastener tape on the faulty slide fastener as close as possible to the outer row of stitching holding the slide fastener.
3. Trim any raveled yarns from the remaining fastener tape.
4. Measure the length of the damaged area.
5. Obtain a new 11/16-inch slide fastener in the same length as the damaged area.
6. Lay the FLC on a work surface with the MOLLE II webbing facing down.
7. Mark the location of the two bar tacks holding the interior pocket to the FLC. Repeat for opposite side.

REPAIR — CONTINUED

8. Using a stitch removal tool, remove the bar tack and approximately 1 inch of stitching from the interior pocket to the vest. Repeat for opposite side.
9. Using a medium duty sewing machine, size F thread, 7 to 11 stitches per inch, sew the new slide fastener to the FLC.
10. Using a medium duty sewing machine, size F thread, 7 to 11 stitches per inch, sew the interior pocket of the FLC back onto the vest. Overstitch at both ends by ½ inch.
11. Using a bar tack sewing machine, size E thread, 42 to 48 stitches per inch, place a ½ x 1-inch bar tack at the locations marked in step 6. There are four bar tacks, two on each side.
12. Trim all threads.

END OF TASK

Binding Tape

1. Place marks 1 inch on each side of the damaged area.
2. Measure the distance between marks.
3. Cut a length of new binding tape of the same type as original (1 inch) to the length indicated in step 2 plus 1 inch.
4. Sear raw ends of binding tape.
5. Place binding tape between marks in the same manner as the original.
6. Turn binding edges under ½ inch.
7. Using a medium duty sewing machine, size E thread, FG504, stitch $^{1}/_{8}$ inch from edge of tape. Overstitch both ends by ½ inch.

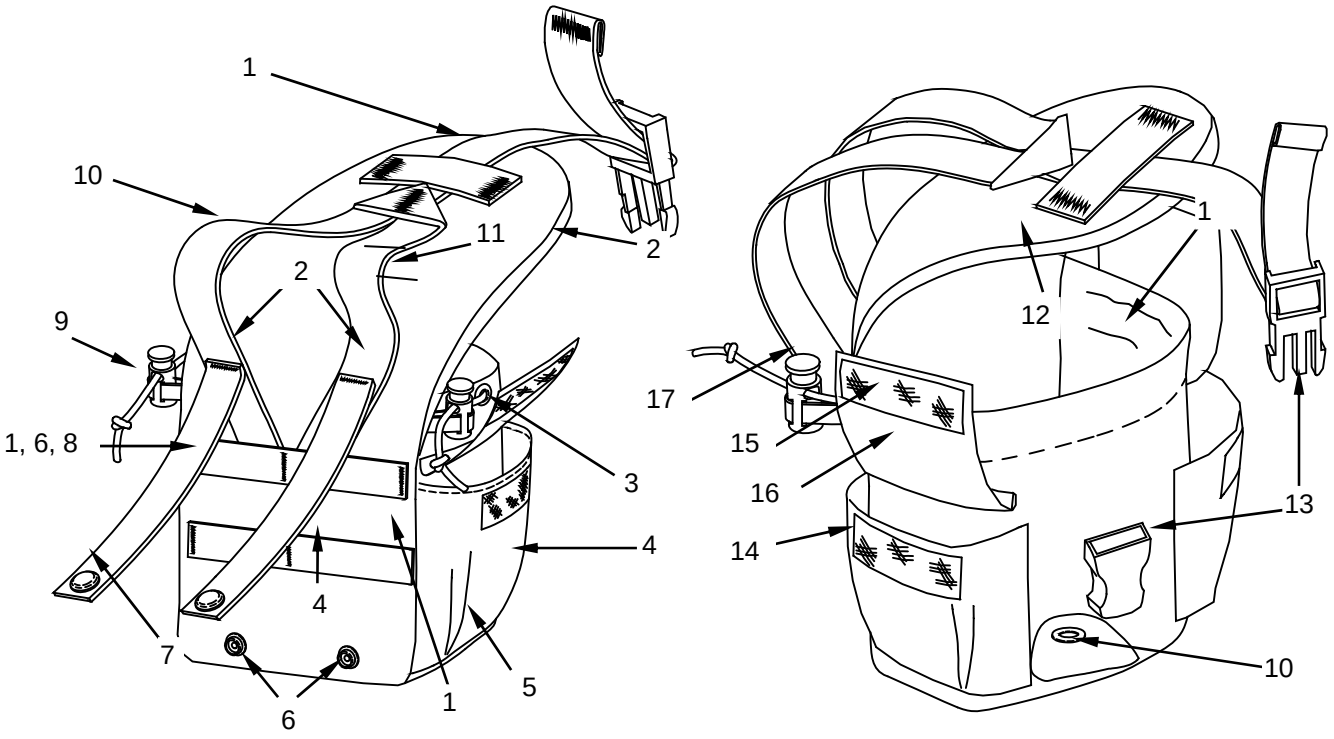
END OF TASK

Replace Harness Back Straps

1. If necessary, remove the plastic locking D-ring on the FLC.
2. Mark the location of the harness back strap on the front panel.
3. Using a stitch removal tool, remove the bar tacks and stitching securing the harness back strap to the panel.
4. Cut and sear a 45-inch length of 1-inch nylon webbing.
5. Place approximately ½ inch of the1-inch webbing between the layers of the panel. Using a bar tack sewing machine, size E thread, 42 to 48 stitches per inch, replace the bar tacks you removed.

END OF TASK

REPAIR — CONTINUED

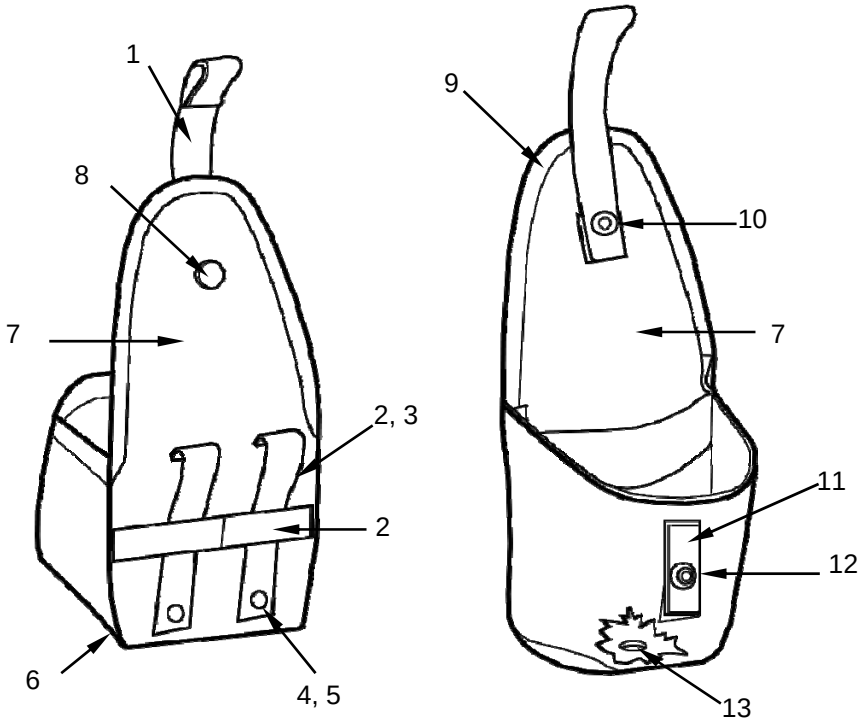


Legend

1. Webbing, Nylon, 1-inch
2. Thread, Size E
3. Eyelet
4. Textured Nylon Duck
5. Thread, Size F
6. Snap Fastener, Eyelet/Stud
7. Snap Fastener, Button/Socket
8. Polyethylene
9. Cord, Elastic, Round
10. Eyelet, Drain
11. Webbing, Elastic, 1-inch
12. Binding Tape, 1-inch
13. Side Release Buckle, 1-inch
14. Fastener, Pile, 1-inch
15. Fastener, Hook, 1-inch
16. Webbing $^{11}/_{32}$ -inch
17. Barrel Lock

Figure 2. Fighting Load Carrier Pouch.

REPAIR — CONTINUED

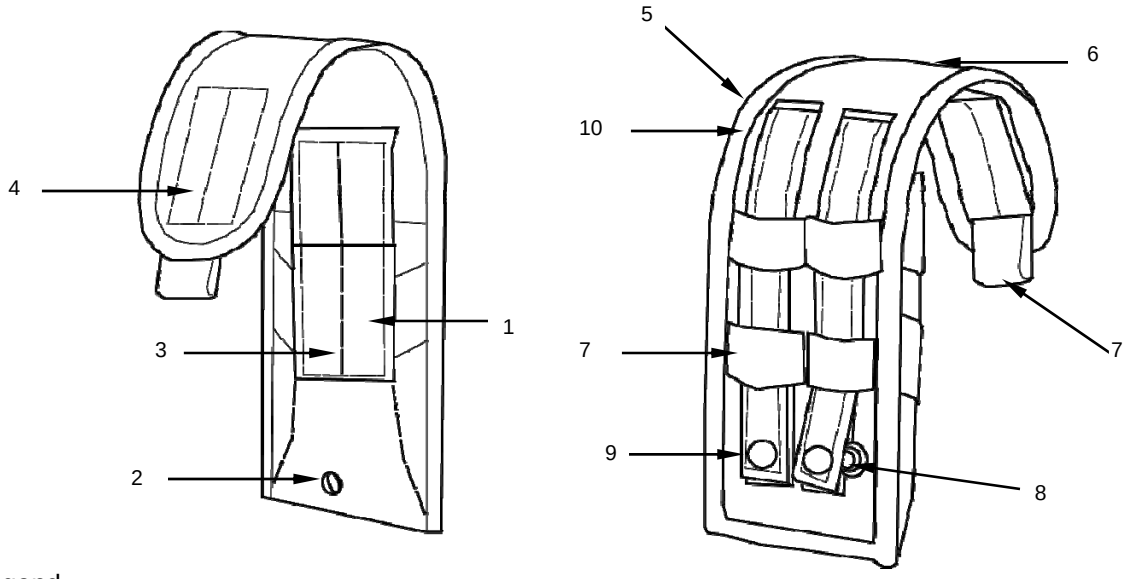


Legend

1. Webbing, Nylon, ¾ -inch
2. Webbing, Nylon, 1-inch
3. Polyethylene, 0.030-inch x 0.875-inch
4. Snap Fastener, Button/Socket
5. Snap Fastener, Eyelet/Stud
6. Thread, Size F
7. Textured Nylon Duck, Class III
8. Snap Fastener, Eyelet/Stud
9. Binding Tape, 1-inch
10. Snap Fastener, Button/Socket
11. Webbing, Nylon, 1-inch
12. Snap Fastener, Button/Socket
13. Eyelet (Drain)

Figure 3. Hand Grenade Pouch.

REPAIR — CONTINUED

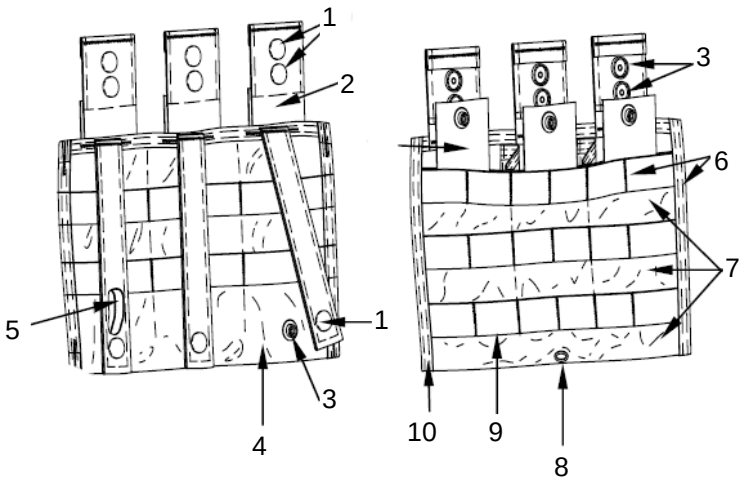


Legend

1. Hook and Pile Fastener, 2-inch
2. Eyelet (Drain)
3. Thread, Size F
4. Polyethylene, 0.030-inch x 2.000-inch,
5. Binding Tape, 1-inch
6. Textured Nylon Duck, Class III
7. Webbing, Nylon, 1-inch
8. Snap Fastener, Eyelet/Stud
9. Snap Fastener, Button/Socket
10. Thread, Size E

Figure 4. M4 Two Magazine Pouch.

REPAIR — CONTINUED



Legend

1. Snap Fastener, Button/Socket
2. Webbing, 2-inch
3. Snap Fastener, Stud/Eyelet
4. Textured Nylon Duck Fabric
5. Polyethylene, High Density, .030-inch
6. Thread, Size E
7. Hook and Pile Fastener
8. Grommet
9. Thread, Size F
10. Binding Tape, 1-inch

Figure 5. M4 Three Magazine Side by Side Pouch.

REPAIR — CONTINUED

Restitching

1. Use Figures 1 through 5 to identify component to be repaired.
2. Use Table 2 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 2. Stitching Requirements for Fighting Load Carrier Pouches.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Fighting Load Carrier			
Pouches			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E
Waist Belt Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Canteen Pouch Drawcord Repair

1. Cut a 14-inch length (± ¼ inch) of 1/8-inch cord.
2. Sear raw ends of cord.
3. Place an overhand knot in one end of cord.
4. Route cord through appropriate channels or guides in equipment, ensuring the cord goes through the barrel lock.
5. Place an overhand knot in remaining end of cord.

END OF TASK

Hook and Pile Tape

1. Remove faulty hook and pile tape from pocket closures. Do not damage the fabric.
2. Measure and cut a new length of the appropriate width hook and pile tape IAW Table 3.
3. Using a medium duty sewing machine, size F thread of the appropriate color, sew new hook and pile tape to pocket closure 1/8 inch from the edge, overstitching by ½ inch.
4. Trim running ends of thread.

REPAIR — CONTINUED

Table 3. Hook and Pile Requirements for Fighting Load Carrier Pouches.

COMPONENT	APPLICATION	TYPE	WIDTH	LENGTH	TOLERANCE
Canteen/General Purpose Pouch	Side Pocket Closure	Hook and Pile	1”	3”	+ or - $^1/_8$ Inch
M4 Two Magazine Pocket	Pocket Closures	Hook	2”	3”	+ or - $^1/_8$ Inch
M4 Three Magazine Pocket	Pocket Closures	Pile	2”	5“	+ or - $^1/_8$ Inch

END OF TASK

Binding Tape

1. Place marks 1 inch on each side of the damaged area.
2. Measure the distance between marks.
3. Cut a length of new binding tape of the same type as original (1-inch wide) to the length indicated in step 2.
4. Sear raw ends of binding tape.
5. Place binding tape between marks in the same manner as the original.
6. Turn binding edges under ½ inch.
7. Using a medium duty sewing machine, size E thread of appropriate color, stitch $^1/_8$ inch from edge of tape.

END OF TASK

Attachment Webbing Repair

1. Remove old attachment webbing by cutting away bar tacks and lifting edge binding or seam. Do not damage underlying fabric.
2. Cut a new piece of webbing the same length as the old webbing.
3. Sear both ends of new webbing.
4. Measure the distance between bar tacks on the old webbing and transfer those measurements to the new webbing.
5. Place new webbing component where old webbing was removed.
6. Using a bar tack sewing machine, place a 42- to 48- inch bar tack on each of the marked locations.
7. Place ends of webbing into the seam tape or seam in the same manner as the original construction.
8. Using a medium duty sewing machine, size F thread, 7 to 11 stitches per inch, sew the webbing back into the seam tape or seam, overstitching by a minimum of ½ inch.
9. Trim thread ends.

END OF TASK

REPAIR — CONTINUED

Snap Fastener Replacement

Replace snap fasteners using replacement procedures in WP 0032.

END OF TASK

Eyelet Replacement

Replace eyelets using replacement procedures in WP 0032.

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace the Fighting Load Carrier set with serviceable items from stock.

END OF TASK

END OF WORK PACKAGE

SUSTAINMENT MAINTENANCE
HYDRATION SYSTEM CARRIER ASSEMBLY
SERVICE, INSPECT, REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0019
WP 0020

Materials/Parts

Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Tape, Textile (Binding Tape), 1 inch (WP 0036, Item 66)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)
Webbing, as specified (WP 0036, Items 67-80)

Equipment Condition

Unpacked

SERVICE

Clean the Hydration System IAW WP 0019, Cleaning and Drying.

INSPECT

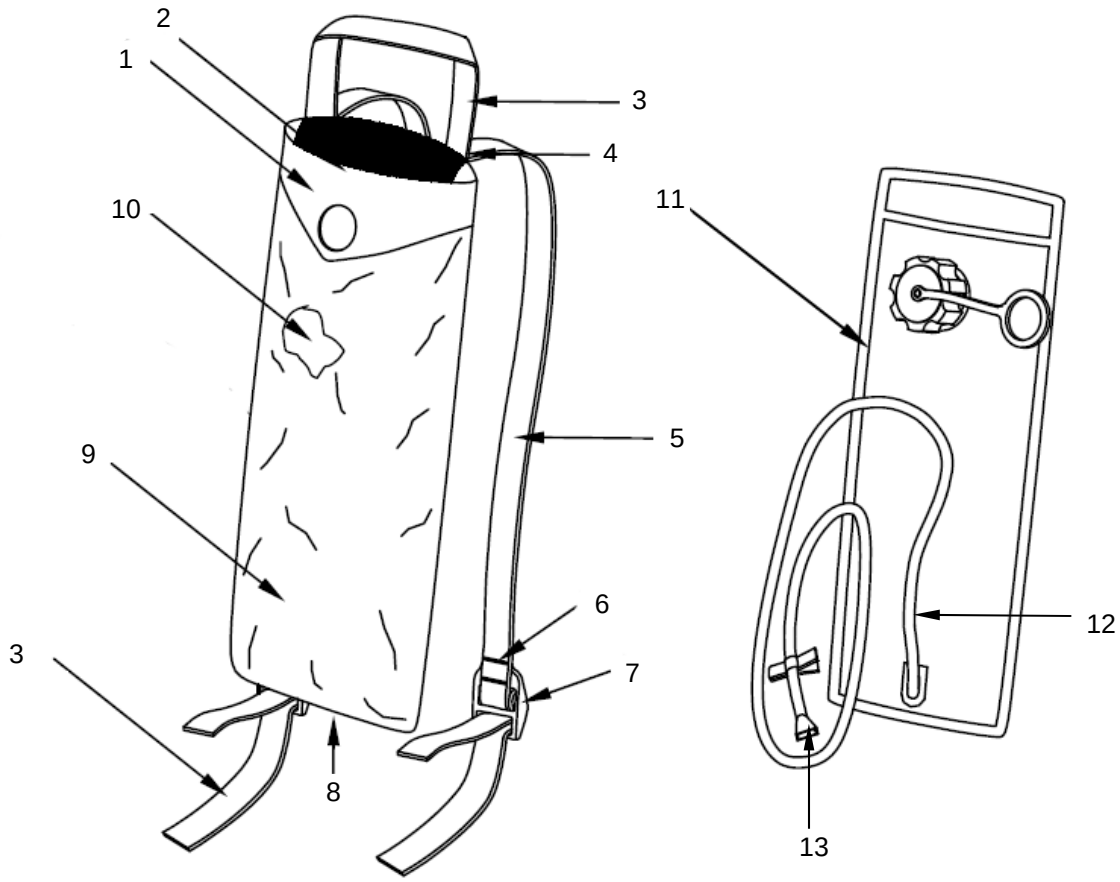
Conduct a preliminary examination IAW WP 0020 after components have been laundered as described in WP 0019. Discard decayed items. Test seams by grasping the item with both hands and pulling at right angles to the seams. Mark areas to be repaired. Cross out nonspecific and personal markings.

REPAIR

Prior to repair operations, each component of the MOLLE II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished to the user as a repair kit, all repairs to these components will be accomplished at the CIF or appropriate facility, using FM 10-16 as a general guide.

Use Figures 1 and 2 to determine location and construction of equipment in repair procedures.

REPAIR — CONTINUED

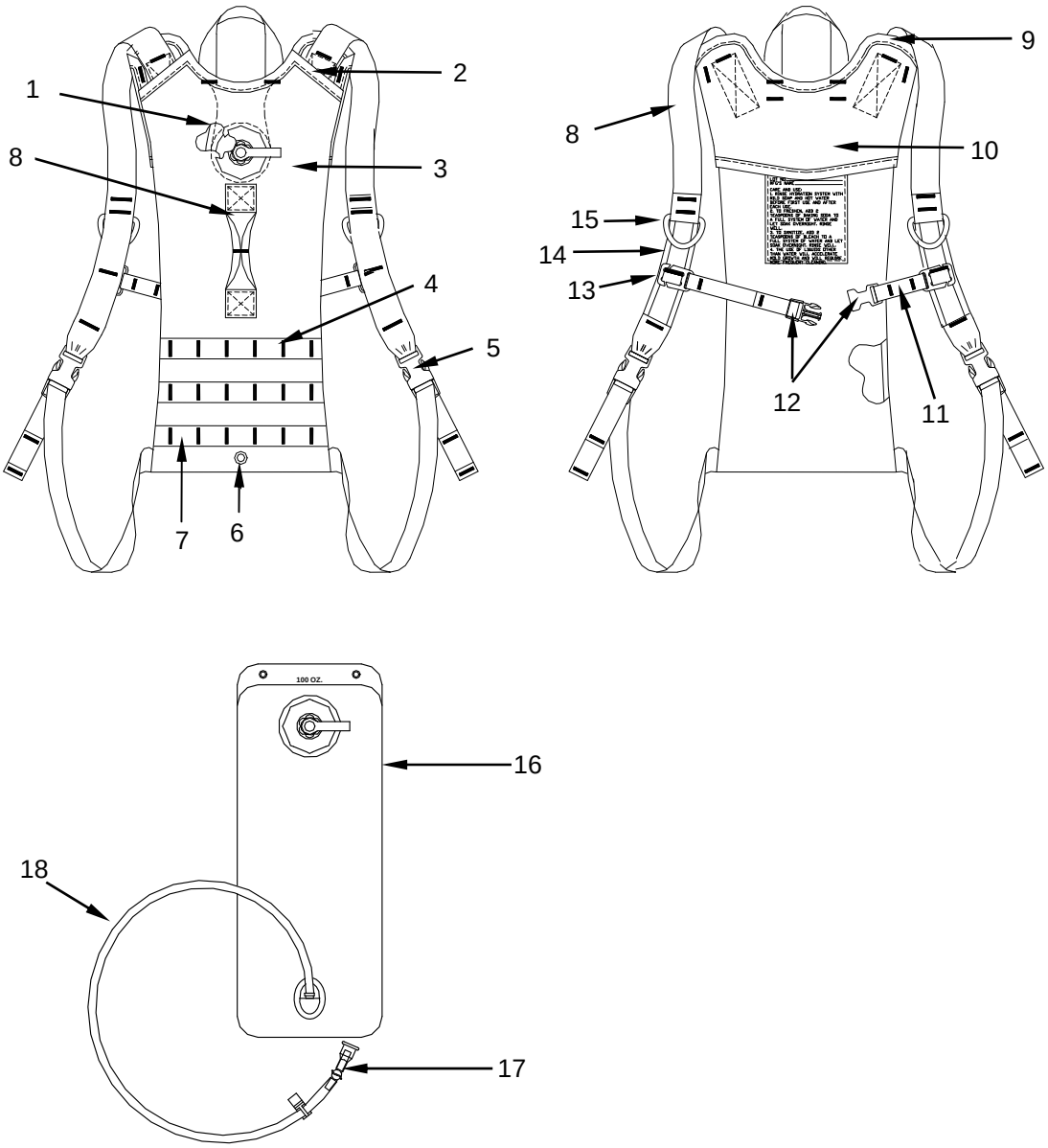


Legend

1. Nylon Duck Fabric (Black)
2. Fastener Tape, Hook and Pile, 2-inch wide
3. Webbing, 1-inch wide
4. Thread, Size F
5. Webbing, 1½-inch wide
6. Thread, Size E
7. Buckle, 1-inch
8. Grommet
9. Nylon Duck Fabric
10. Foam, ¼-inch
11. Bladder
12. Drink Tube
13. Bite Valve

Figure 1. Hydration System Carrier Assembly.

REPAIR — CONTINUED



Legend

1. Polyethylene, 0.030-inch
2. Binding Tape, 1-inch
3. Nylon/Foam Laminate
4. Thread, Nylon, Size E
5. Side Release Buckle, 1-inch
6. Eyelet and Washer
7. Webbing, Nylon, 1-inch
8. Webbing, Nylon, 1½-inch
9. Thread, Nylon, Size E
10. Textured Nylon Duck
11. Webbing, ¾-inch
12. Side Release Buckle, ¾-inch
13. Adjuster Buckle, 1-in to ¾-inch
14. Thread, Nylon, Size F
15. D-Ring, 1½-inch
16. Bladder
17. Bite Valve
18. Drink Tube

Figure 2. Hydration System Carrier (Alternate).

REPAIR — CONTINUED

Restitching

1. Use Figures 1 or 2 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all straight seams.
4. Trim running ends of thread.

Table 1. Hydration System Carrier Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Rifleman Set			
Hydration System Carrier			
General	Medium Duty	8 to 10	F
Edge Binding	Medium Duty	7 to 11	E
Bar Tacks	Bar Tack	42 to 48	E

END OF TASK

Binding Tape

1. Place marks 1 inch on each side of the damaged area.
2. Measure the distance between marks.
3. Cut a length of new binding tape of the same type as original (1-inch wide) to the length indicated in step 2.
4. Sear raw ends of binding tape.
5. Place binding tape between marks in the same manner as the original.
6. Turn binding edges under ½ inch.
7. Using a medium duty sewing machine, size E thread of appropriate color, stitch $^{1}/_{8}$ inch from edge of tape.

END OF TASK

REPAIR — CONTINUED

Attachment Webbing Repair

1. Remove old attachment webbing by cutting away bar tacks and lifting edge binding or seam. Do not damage underlying fabric.
2. Cut a new piece of webbing the same length as the old webbing.
3. Sear both ends of new webbing.
4. Measure the distance between bar tacks on the old webbing and transfer those measurements to the new webbing.
5. Place new webbing component where old webbing was removed.
6. Using a bar tack sewing machine, place a 42- to 48-inch bar tack on each of the marked locations.
7. Place ends of webbing into the seam tape or seam in the same manner as the original construction.
8. Using a medium duty sewing machine, size F thread, 7 to 11 stitches per inch, sew the webbing back into the seam tape or seam, overstitching by a minimum of ½ inch.
9. Trim thread ends.

END OF TASK

REPLACE

Hydration System Bladder

A used hydration system bladder cannot be repaired or re-issued. A new bladder is used to replace an existing one.

Hydration System Tubing

Used hydration system tubing cannot be repaired or re-issued. New hydration system tubing is used to replace existing tubing.

Hydration System Valve

A used hydration system valve cannot be repaired or re-issued. A new hydration system valve is used to replace an existing system valve.

Hydration System Carrier Assembly

Replace the Hydration System Carrier Assembly with serviceable item from stock.

END OF WORK PACKAGE

SUSTAINMENT MAINTENANCE
ASSAULT PACK
SERVICE, INSPECT, REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Materials/Parts

Fastener Tape, Hook, A-A-55126, Type II, Class 1, 1 inch (WP 0036, Item 40)
Fastener Tape, Hook, A-A-55126, Type II, Class 1, 2 inch (WP 0036, Item 42)
Fastener Tape, Loop, A-A-55126, Type II, Class 1, 1 inch (WP 0036, Item 45)
Fastener Tape, Loop, A-A-55126, Type II, Class 1, 2 inch (WP 0036, Item 47)
Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Tape, Textile (Binding Tape), 1 inch (WP 0036, Item 66)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)
Webbing, as specified (WP 0036, Items 67-80)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0019
WP 0020

Equipment Condition

Lay out on flat surface or other suitable area.

SERVICE

Clean the assault pack IAW WP 0019, Cleaning and Drying.

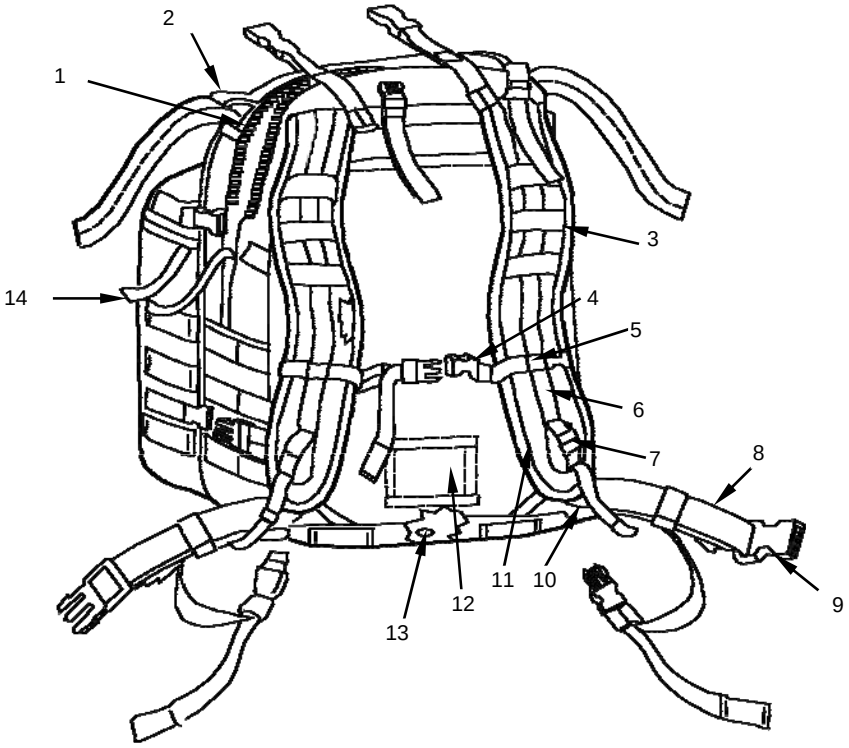
INSPECT

Conduct a preliminary examination IAW WP 0020 after components have been laundered as described in WP 0019. Discard rotten items. Test seems by grasping the item with both hands and pulling at right angles to the seams. Mark areas to be repaired. Cross out nonspecific and personal markings.

REPAIR

Prior to repair operations, each component of the MOLLE II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished to the user as a repair kit, all repairs to these components will be accomplished at the CIF or appropriate facility, using FM 10-16 as a general guide.

Use Figure 1 and 2 to determine location and construction of equipment in repair procedures.

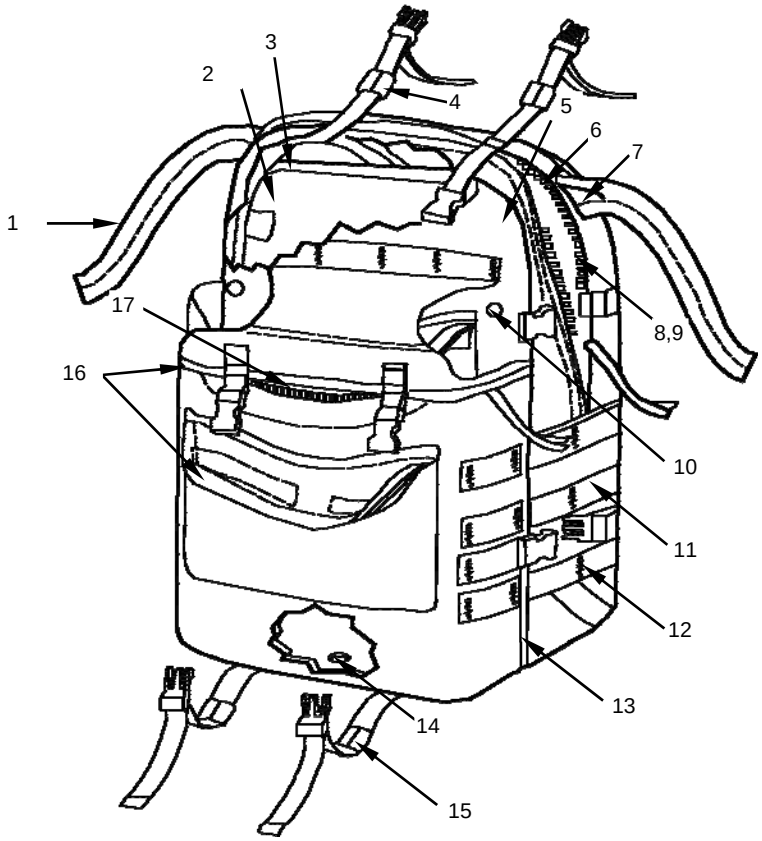


Legend

1. Slide Fastener
2. Thread, Size FF
3. Binding Tape, 1-inch
4. Side Release Buckle, 1-inch
5. Keeper, Sternum Strap
6. Webbing, 1-inch
7. Webbing, Nylon, $^{9}/_{16}$-inch
8. Webbing, 1½-inch
9. Side Release Buckle, 1½-inch
10. D-Ring, 1-inch
11. Textured Nylon Duck
12. Polyethylene, .020-inch
13. Eyelet (Drain)
14. Tubular Braid

Figure 1. Assault Pack (Front View).

REPAIR — CONTINUED



Legend

1. Webbing, Tan $1^{23}/_{32}$-inch
2. Plastic Shield
3. Foam ¼-inch
4. Webbing, Elastic, 1-inch
5. Textured Nylon Duck
6. Slide Fastener
7. Hook and Pile Fastener 2-inch
8. Metal Loop
9. Webbing, 1-inch
10. Snap Fastener/Stud Eyelet
11. Webbing, 1-inch
12. Thread, Size E
13. Thread, Size F
14. Eyelet (Drain)
15. Webbing, Elastic, 1-inch
16. Binding Tape, 1-inch
17. Side Release Buckle, 1-inch

Figure 2. Assault Pack (Rear View).

REPAIR — CONTINUED

Restitching

1. Use Figure 1 and 2 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Assault Pack Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Rifleman Set			
Assault Pack			
General	Medium Duty	8 to 10	F
Parachute attaching straps/handle	Medium Duty	1 to 11	FF
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E

END OF TASK

Hook and Pile Tape

1. Remove faulty hook and pile tape from assault pack. Do not damage the fabric.
2. Measure and cut a new piece of hook and pile fastener tape to the appropriate length and width listed in Table 2.

WARNING

If sewing the parachute interface slot, be careful to sew slowly as the needle has to go through plastic stiffeners. The needle could break and cause eye damage.

3. Using a medium duty sewing machine, size F thread of the appropriate color, sew new hook and pile tape to the assault pack closure flap, overstitching by ½ inch.
4. Trim running ends of thread.

Table 2. Hook and Pile Tape Measurements.

COMPONENT	APPLICATION	TYPE	WIDTH	LENGTH	TOLERANCE
Assault Pack	Parachute Interface Slots	Hook and Pile	2”	3½”	+ or − $^{1}/_{16}$ inch
Assault Pack	Closure Flap	Hook and Pile	1”	AR	+ or − $^{1}/_{16}$ inch

END OF TASK

REPAIR — CONTINUED

Slide Fasteners and Slide Fastener Thong Replacement

1. Cut the fastener tape on the faulty slide fastener as close as possible to the outer row of stitching holding the slide fastener.
2. Trim any raveled yarns from the remaining fastener tape.
3. Measure the length of the damaged area.
4. Obtain a new slide fastener (Table 3).
5. Using a medium duty sewing machine, size F thread, 7-11 stitches per inch, sew the new slide fastener to the assault pack.
6. Trim threads.
7. Replace slide fastener thongs with a new 6-inch length of 11/32-inch nylon webbing.

Table 3. Slide Fastener Lengths.

COMPONENT	APPLICATION	FASTENER WIDTH	LENGTH	TOLERANCE
Assault Pack	Main Pocket Closure	0.435”	AR	+ or – $^{1}/_{8}$ Inch
Assault Pack	Front Pocket Closure	0.435”	AR	+ or – $^{1}/_{8}$ Inch

END OF TASK

Binding Tape

1. Place marks 1 inch on each side of the damaged area.
2. Measure the distance between marks.
3. Cut a length of new binding tape of the same type as original (1-inch wide) to the length indicated in step 2.
4. Sear raw ends of binding tape.
5. Place binding tape between marks in the same manner as the original.
6. Turn binding edges under ½ inch.
7. Using a medium duty sewing machine, size E thread of appropriate color, stitch $^{1}/_{8}$ inch from edge of tape.

END OF TASK

REPAIR — CONTINUED

Attachment Webbing Repair

1. Remove old attachment webbing by cutting away bar tacks and lifting edge binding or seam. Do not damage underlying fabric.
2. Cut a new piece of webbing the same length as the old webbing.
3. Sear both ends of new webbing.
4. Measure the distance between bar tacks on the old webbing and transfer those measurements to the new webbing.
5. Place new webbing component where old webbing was removed.
6. Using a bar tack sewing machine, place a 42- to 48-inch bar tack on each of the marked locations.
7. Place ends of webbing into the seam tape or seam in the same manner as the original construction.
8. Using a medium duty sewing machine, size F thread, 7 to 11 stitches per inch, sew the webbing back into the seam tape or seam, overstitching by a minimum of ½ inch.
9. Trim thread ends.

END OF TASK

REPLACE

Replace Assault Pack with serviceable item from stock.

END OF TASK

END OF WORK PACKAGE

SUSTAINMENT MAINTENANCE
WAIST PACK
SERVICE, INSPECT, REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0019
WP 0020
WP 0032

Materials/Parts

Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Tape, Textile (Binding Tape), 1 inch (WP 0036, Item 66)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)
Slide Fastener, VFGOL-16 (WP 0036, Item 62)
Webbing, as specified (WP 0036, Items 67-80)

Equipment Condition

Lay out on flat surface or other suitable area.

SERVICE

Clean the waist pack IAW WP 0019, Cleaning and Drying.

INSPECT

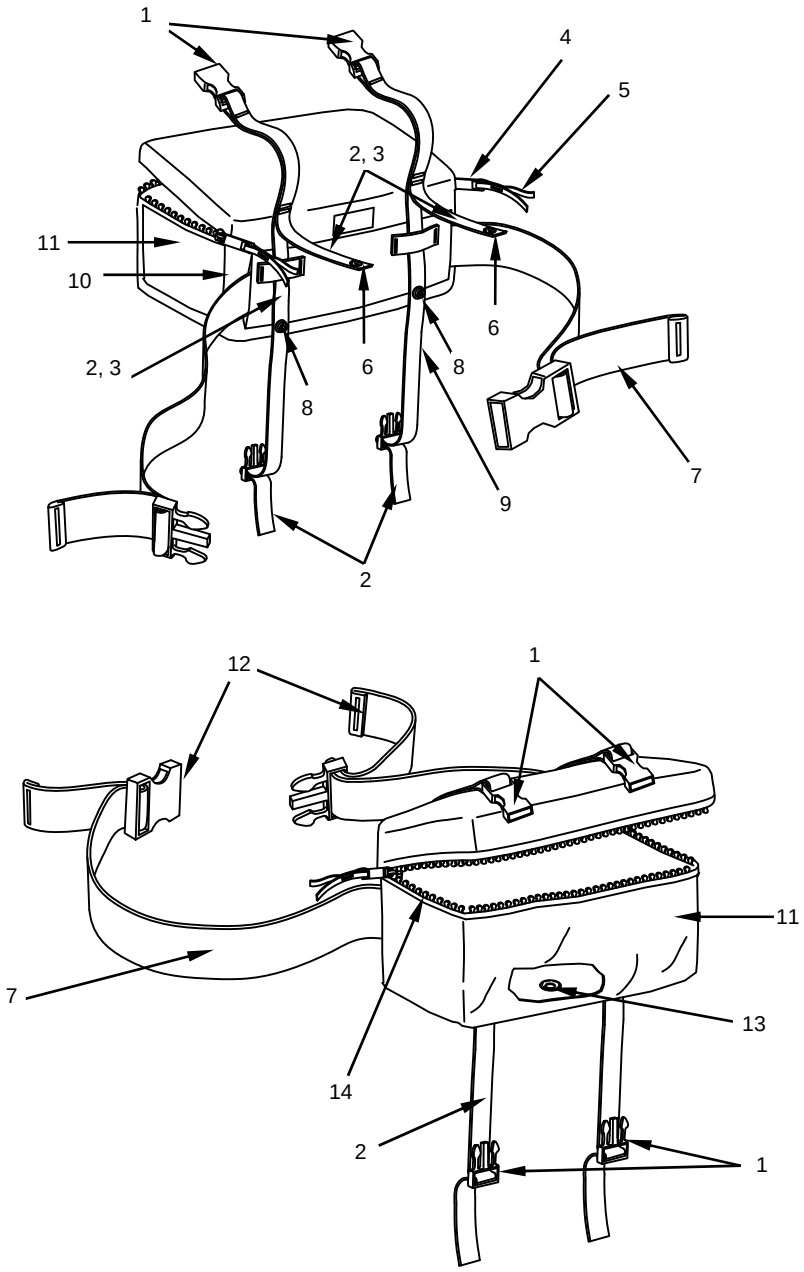
Conduct a preliminary examination IAW WP 0020 after components have been laundered as described in WP 0019. Discard decayed items. Test seams by grasping the item with both hands and pulling at right angles to the seams. Mark areas to be repaired. Cross out nonspecific and personal markings.

REPAIR

Prior to repair operations, each component of the MOLLE II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished to the user as a repair kit, all repairs to these components will be accomplished at the CIF or approved facility, using FM 10-16 as a general guide.

REPAIR — CONTINUED

Use Figure 1 to determine location and construction of equipment in repair procedures.



Legend

1. Side Release Buckles, 1-inch
2. Webbing, 1-inch
3. Polyethylene
4. Thread, Size E
5. Braid Tubular, $^{11}/_{32}$-inch
6. Snap Fasteners, Button/Socket
7. Webbing, 2-inch
8. Snap Fasteners, Eyelet/Stud
9. Webbing, Elastic, 1-inch
10. Thread, Size F
11. Textured Nylon Duck
12. Center Release Buckles, 2-inch
13. Grommet
14. Slide Fastener

Figure 1. Waist Pack.

END OF TASK

REPAIR — CONTINUED

Restitching

1. Use Figure 1 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Waist Pack Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Rifleman Set			
Waist Pack			
Binding Tape	Medium Duty	7 to 11	E
Waist Belt Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Slide Fasteners

1. Cut the fastener tape on the faulty slide fastener as close as possible to the outer row of stitching holding the slide fastener.
2. Trim any raveled yarns from the remaining fastener tape.
3. Measure the length of the damaged area.
4. Obtain a new 11/16-inch slide fastener, the same length as the damaged area.
5. Using a medium duty sewing machine, size F thread, 7-11 stitches per inch, sew the new slide fastener to the waist pack.
6. Trim threads.

Table 2. Main Pocket Closure Stitching Requirements.

COMPONENT	APPLICATION	FASTENER WIDTH	LENGTH	TOLERANCE
Waist Pack	Main Pocket Closure	0.270”	AR	+ or – $^{1}/_{8}$ inch

END OF TASK

Snap Fastener Replacement

Replace snap fasteners using replacement procedures in WP 0032.

END OF TASK

REPAIR — CONTINUED

Eyelet Replacement

Replace eyelets using replacement procedures in WP 0032.

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace Waist Pack with serviceable item from stock.

END OF TASK

END OF WORK PACKAGE

SUSTAINMENT MAINTENANCE
LARGE FIELD PACK RUCKSACK AND SUSTAINMENT POUCH
SERVICE, INSPECT, REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Equipment Condition

Lay out on flat surface or other suitable area.

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0019
WP 0020
WP 0032

Materials/Parts

Cord, Round, Type II, Mil-C-5040 (WP 0036, Item 30)
Cord, Flat, Type II A, Mil-C-5040 (WP 0036, Item 28)
Fastener Tape, Hook, A-A-55126, Type II, Class 1, 1 inch (WP 0036, Item 40)
Fastener Tape, Hook, A-A-55126, Type II, Class 1, 2 inch (WP 0036, Item 42)
Fastener Tape, Loop, A-A-55126, Type II, Class 1, 1 inch (WP 0036, Item 45)
Fastener Tape, Loop, A-A-55126, Type II, Class 1, 2 inch (WP 0036, Item 47)
Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Tape, Textile (Binding Tape), 1 inch (WP 0036, Item 66)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)
Slide Fastener, VFGOL-16 (WP 0036, Item 62)
Webbing, as specified (WP 0036, Items 67-80)

SERVICE

Clean the rucksack IAW WP 0019, Cleaning and Drying.

INSPECT

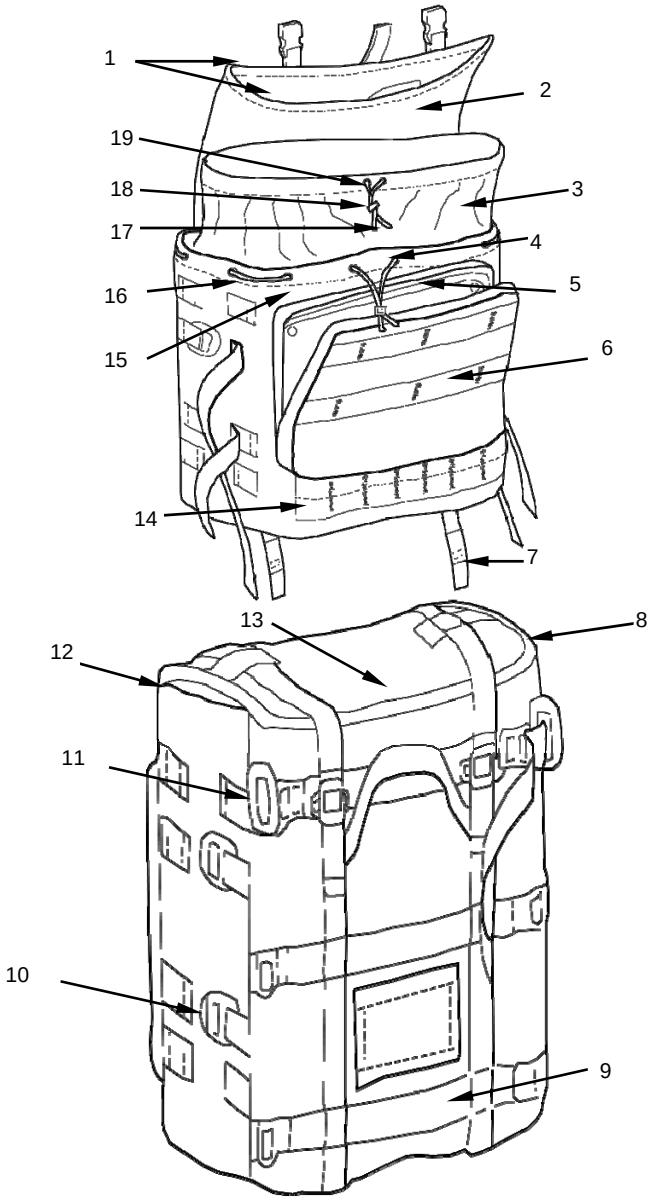
Conduct a preliminary examination IAW WP 0020 after components have been laundered as described in WP 0019. Discard decayed items. Test seams by grasping the item with both hands and pulling at right angles to the seams. Mark areas to be repaired. Cross out nonspecific and personal markings.

REPAIR

Prior to repair operations, each component of the MOLLE II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished to the user as a repair kit, all repairs to these components will be accomplished at the CIF or approved facility, using FM 10-16 as a general guide.

Use Figures 1 and 2 to determine location and construction of equipment in repair procedures.

REPAIR — CONTINUED

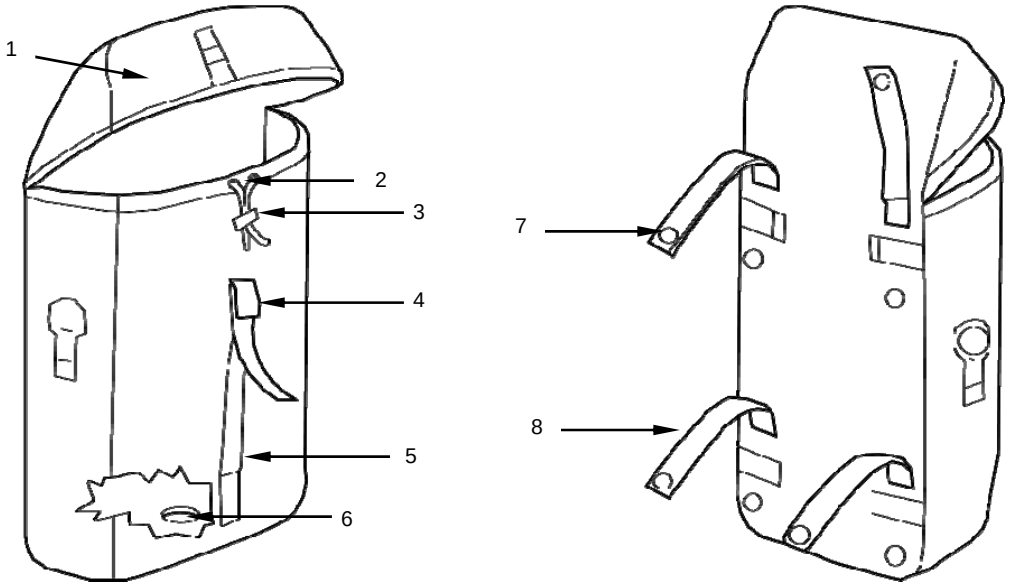


Legend

1. Hook and Pile Fastener
2. Film
3. Nylon Cloth
4. Eyelet/Washer
5. Slide Fastener
6. Polyethylene0.020-inch
7. Side Release Buckle, 1-inch
8. Binding Tape 1-inch
9. Webbing, 1-inch
10. Buckle, Single Bar
11. Buckle, Double-Bar, 1-inch
12. Thread, Size E
13. Textured Nylon Duck
14. Webbing, 2¼ -inch
15. Thread, Size F
16. Grommet/Washer
17. Cord Lock
18. Nylon Cord (Flat)
19. Eyelet/Washer

Figure 1. Large Field Pack Rucksack (Front and Rear).

REPAIR — CONTINUED



Legend
1. Binding Tape 1-inch
2. Eyelet/Washer
3. Cord Lock
4. Side Release Buckle, 1-inch
5. Webbing, 1-inch
6. Eyelet
7. Snap Fastener, Button/Socket
8. Polyethylene, 0.030-inch
9. Snap Fastener, Stud/Eyelet

Figure 2. Sustainment Pouch (Front and Rear).

Restitching

1. Use Figures 1 and 2 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

REPAIR — CONTINUED

Table 1. Large Field Rucksack and Sustainment Pouch Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Rifleman Set			
Rucksack and Sustainment Pouch			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E
Waist Belt Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Hook and Pile Tape

1. Remove faulty hook and pile tape from rucksack. Do not damage the fabric.
2. Measure and cut a new piece of hook and pile tape of the size and length indicated in Table 2.
3. Using a medium duty sewing machine, size F thread of the appropriate color, sew new hook and pile tape to rucksack IAW WP 0032, overstitching by ½ inch.
4. Trim running ends of thread.

Table 2. Hook and Pile Tape Measurements.

COMPONENT	APPLICATION	TYPE	WIDTH	LENGTH	TOLERANCE
Main Pack (Legacy)	Map Case Closure	Hook and Pile	1”	$14\frac{5}{8}$“	+ or − $\frac{1}{8}$ inch
Rucksack (New)	Inside Dividers	Hook and Pile	2”	2”	+ or − $\frac{1}{16}$ inch
Rucksack (New)	Inside Side Flaps	Hook and Pile	1”	1½”	+ or − $\frac{1}{16}$ inch
Rucksack (New)	Flap Pouch Closure	Hook and Pile	1”	AR	+ or − $\frac{1}{16}$ inch

END OF TASK

REPAIR — CONTINUED

Slide Fasteners

1. Cut the fastener tape on the faulty slide fastener as close as possible to the outer row of stitching holding the slide fastener.
2. Trim any raveled yarns from the remaining fastener tape.
3. Measure the length of the damaged area.
4. Obtain a new slide fastener, the length of the damaged area.
5. Using a medium duty sewing machine, size F thread, 7-11 stitches per inch, sew the new slide fastener to the rucksack.
6. Trim threads.

Table 3. Slide Closure Measurements.

COMPONENT	APPLICATION	FASTENER WIDTH	LENGTH	TOLERANCE
Main Pack (Legacy)	Front Pocket Closure	0.435”	AR	+ or − $^{1}/_{8}$ inch
Rucksack (New)	Bottom Closure	0.435”	AR	+ or − $^{1}/_{8}$ inch

END OF TASK

Binding Tape

1. Place marks 1 inch on each side of the damaged area.
2. Measure the distance between marks.
3. Cut a length of new binding tape of the same type as original to the length indicated in step 2.
4. Sear raw ends of binding tape.
5. Place binding tape between marks in the same manner as the original.
6. Turn binding edges under ½ inch.
7. Using a medium duty sewing machine and size E thread of appropriate color, stitch $^{1}/_{8}$ inch from edge of tape.

Table 4. Binding Tape Measurements.

COMPONENT	APPLICATION	WIDTH	LENGTH
Main Pack (Legacy)	Map Case Polyethylene Edging	1”	AR
Main Pack (Legacy)	Drawcord Tunnel	1”	58”
Main Pack (Legacy)	Spindrift Collar Tunnel Eyelet Reinforcement	1”	3”
Main Pack (Legacy)	Nylon Cloth Collar Assembly	1”	AR
Main Pack (Legacy)	Back Panel and Upper Pocket Edge Lining	1”	AR
Main Pack (Legacy)	Radio Pocket Rim Edging	1”	33”
Main Pack (Legacy)	Radio Pocket Polyethylene Edging	1”	AR
Main Pack (Legacy)	Bandoleer Pouch Edging	1”	AR
Main Pack (Legacy)	Sustainment Pouch Edging	1”	AR
Rucksack (New)	Fabric Edging	1”	AR

END OF TASK

REPAIR — CONTINUED

Drawcord Repair

1. Cut a new length of cord of the type and length indicated in Table 5.
2. Sear raw ends of cord.
3. Place an overhand knot in one end of cord.
4. Route cord through appropriate channels or guides in equipment, ensuring the cord goes through the barrel lock.
5. Place an overhand knot in remaining end of cord.

Table 5. Drawcord Lengths.

COMPONENT	APPLICATION	CORD TYPE	LENGTH	TOLERANCE
Main Pack (Legacy)	Main Closure (Outer)	MIL-C-5040, Type II	72”	+ or − ¼ inch
Main Pack (Legacy)	Main Closure (Spindrift)	MIL-C-5040, Type IIA	70”	+ or − ¼ inch
Pouch, Sustainment	Main Closure	MIL-C-5040, Type IIA	20”	+ or − ¼ inch
Rucksack (New)	Main Closure	MIL-C-5040, Type II	80”	+ or − ¼ inch

END OF TASK

Attachment Webbing Repair

1. Remove old attachment webbing by cutting away bar tacks and lifting edge binding or seam. Do not damage underlying fabric.
2. Cut a new piece of webbing the same length as the old webbing.
3. Sear both ends of new webbing.
4. Measure the distance between bar tacks on the old webbing and transfer those measurements to the new webbing.
5. Place new webbing component where old webbing was removed.
6. Using a bar tack sewing machine, place a 42- to 48-inch bar tack on each of the marked locations.
7. Place ends of webbing into the seam tape or seam in the same manner as the original construction.
8. Using a medium duty sewing machine, size F thread, 7 to 11 stitches per inch, sew the webbing back into the seam tape or seam, overstitching by a minimum of ½ inch.
9. Trim thread ends.

END OF TASK

Snap Fastener Replacement

Replace snap fasteners using replacement procedures in WP 0032.

END OF TASK

Eyelet Replacement

Replace eyelets using replacement procedures in WP 0032.

END OF TASK

REPAIR — CONTINUED

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace Large Field Pack Rucksack or Sustainment Pouch with serviceable item from stock.

END OF TASK

END OF WORK PACKAGE

SUSTAINMENT MAINTENANCE
MOLLE PACK FRAME, MOLDED WAIST BELT, ENHANCED FRAME SHOULDER STRAPS, LOAD LIFTER ATTACHMENT STRAP, AND SHOULDER SUSPENSION MALE BUCKLE
SERVICE, INSPECT, REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Equipment Condition

Lay out on flat surface or other suitable area.

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0019
WP 0020
WP 0032

Materials/Parts

Fastener Tape, Hook, A-A-55126, Type II, Class 1, 1 inch (WP 0036, Item 40)
Fastener Tape, Loop, A-A-55126, Type II, Class 1, 1 inch (WP 0036, Item 45)
Pencil, China Marker, Yellow, A-A-87 (WP0042, Item 2)
Tape, Textile (Binding Tape), 1 inch (WP 0036, Item 66)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)
Webbing, as specified (WP 0036, Items 67-80)

SERVICE

Clean the equipment IAW WP 0019, Cleaning and Drying.

INSPECT

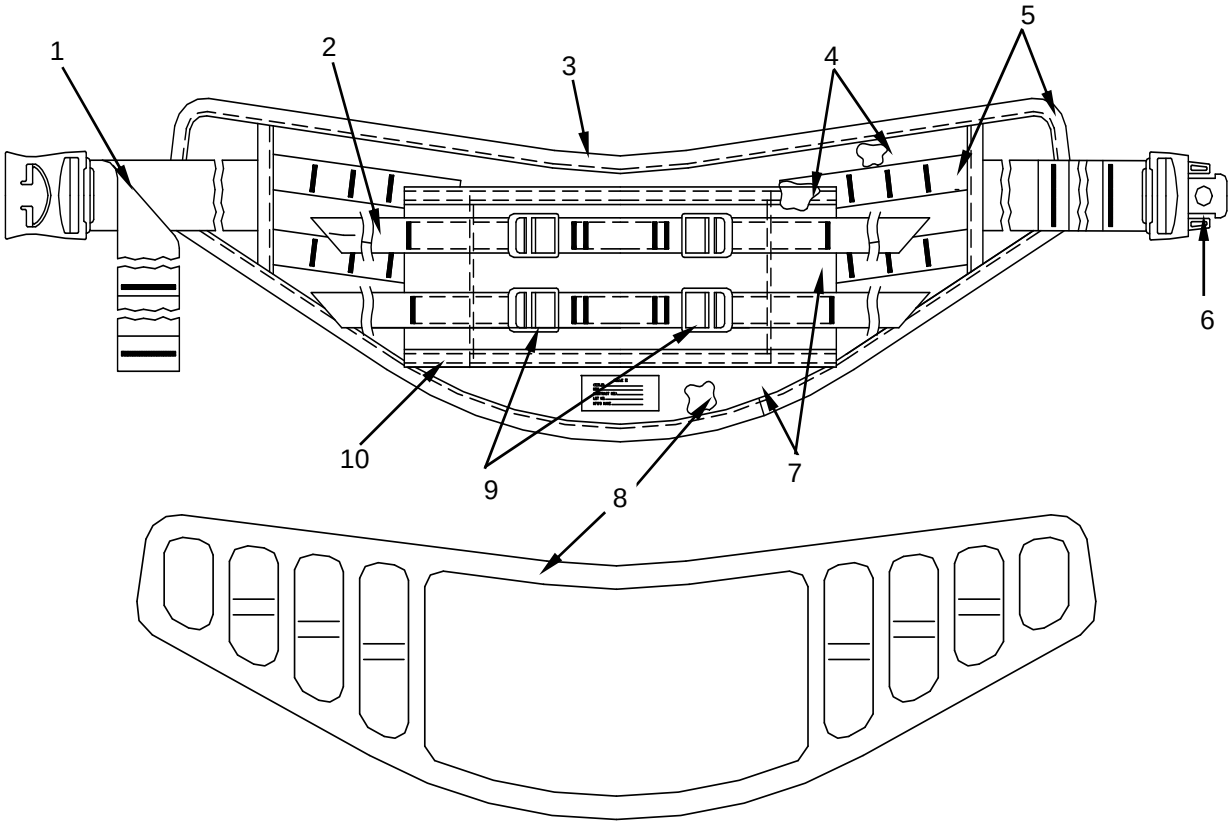
Conduct a preliminary examination IAW WP 0020 after components have been laundered as described in WP 0019. Discard decayed items. Test seams by grasping the item with both hands and pulling at right angles to the seams. Mark areas to be repaired. Cross out nonspecific and personal markings.

REPAIR

Prior to repair operations, each component of the Modular Lightweight Load-Carrying Equipment (MOLLE) II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished to the user as a repair kit, all repairs to these components will be accomplished at the CIF or approved facility, using FM 10-16 as a general guide.

Use Figures 1, 2, and 3 to determine location and construction of equipment in repair procedures.

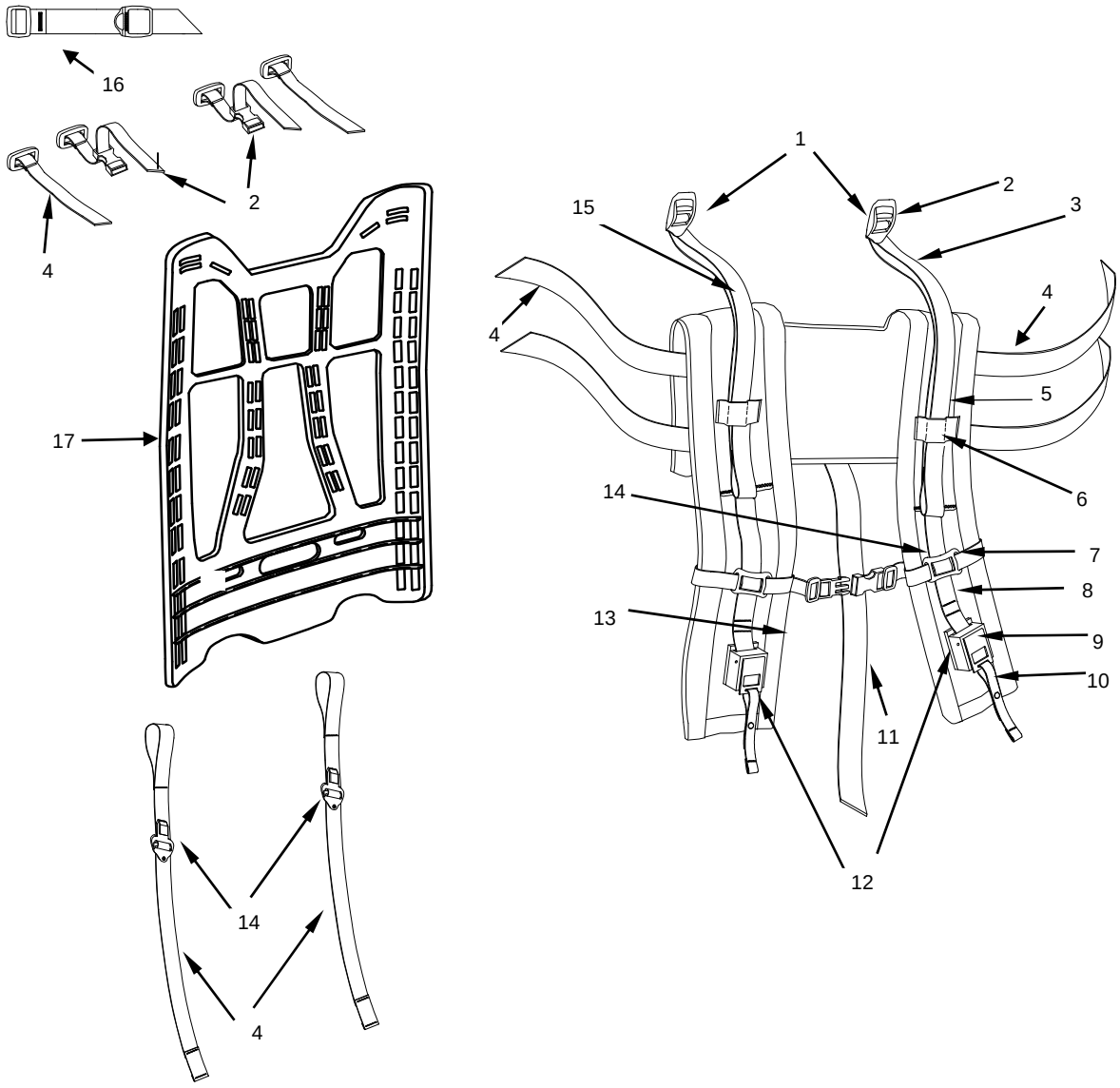
REPAIR — CONTINUED



Legend
1. Webbing, 2-inch
2. Webbing, 1-inch
3. Binding Tape, 1-inch
4. Plastic, Polyethylene
5. Thread, Size E
6. Center Release Buckle, 2-inch
7. Textured Nylon Duck
8. Molded Waist Belt
9. Tension Lock, 1-inch
10. Thread Size F

Figure 1. Molded Waist Belt.

REPAIR — CONTINUED

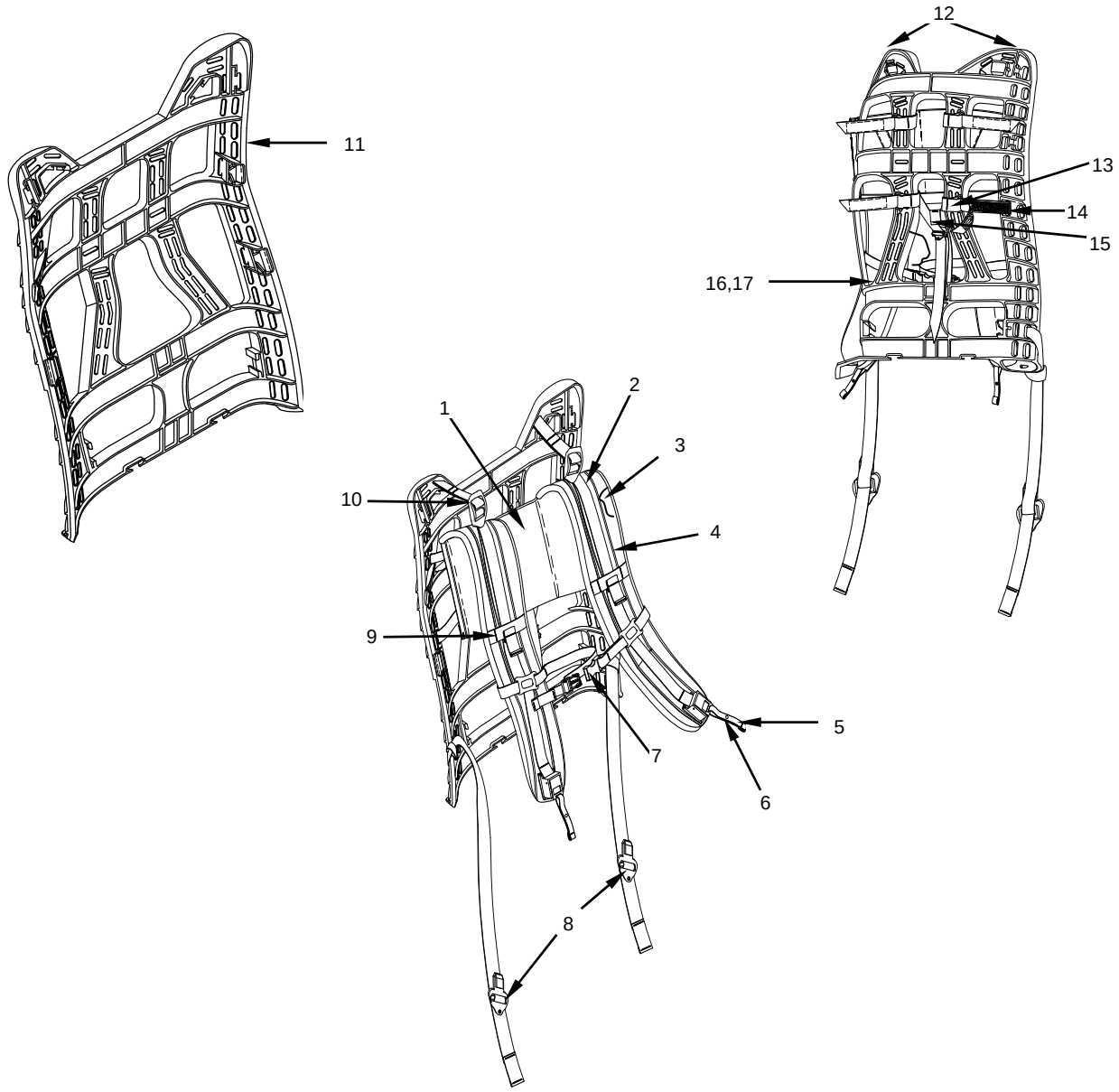


Legend

1. Double Bar Buckle, 1½-inch
2. Double Bar Buckle, 1-inch
3. Textured Nylon Duck
4. Webbing, 1-inch
5. Thread, Size E
6. Binding Tape, 1-inch
7. Keeper, Sternum Strap
8. Foam ¼-inch
9. Snap Fastener
10. Webbing, $^{9}/_{16}$-inch, Type 1
11. Webbing, 1½-inch
12. Quick Release Buckle
13. Thread, Size F
14. Side Release Buckle, 1-inch
15. Webbing, 2-inch
16. Slide, 1-inch
17. Enhanced Frame

Figure 2. Pack Frame (Part 1 – PN1602).

REPAIR — CONTINUED



Legend

1. Textured Nylon Duck
2. Webbing, 2-inch
3. Foam, ¼-inch
4. Thread, Size F
5. Webbing, $^{9}/_{16}$-inch, Type 1
6. Snap Fastener, Button/Socket
7. Side Release Buckle, 1-inch
8. Buckles
9. Webbing, 1-inch
10. Double Bar Buckle, 1-inch
11. Frame
12. Metal Slides, 1-inch Webbing, 1-inch
13. Brass Loop, 1-inch
14. Fastener Tape, Hook and Pile, 1-inch
15. Cinch Buckle, 1-inch
16. Binding Tape, 1-inch
17. Thread, Size E

Figure 3. Pack Frame (Part 2 – PN1603).

END OF TASK

REPAIR — CONTINUED

Restitching

1. Use Figures 1 to 3 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Molded Waist Belt, Enhanced Frame Shoulder Straps, and Load Lifter Attachment Strap Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Rifleman Set **Molded Waist Belt, Enhanced Frame Shoulder Straps, and Load Lifter Attachment Strap**			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE Webbing	Bar Tack	42 to 48	E
Waist Belt Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Hook and Pile Tape

1. Remove faulty hook and pile tape from equipment. Do not damage the fabric.
2. Measure and cut a new piece of hook and pile tape of the size and length indicated in Table 2.
3. Using a medium duty sewing machine, size F thread of the appropriate color, sew new hook and pile tape to equipment IAW WP 0032, overstitching by ½ inch.
4. Trim running ends of thread.

Table 2. Hook and Pile Tape Measurements

COMPONENT	APPLICATION	TYPE	WIDTH	LENGTH	TOLERANCE
Enhanced Frame	Rear Attachment Strap	Hook and Pile	1”	AR	+ or − $^{1}/_{16}$ inch

END OF TASK

REPAIR — CONTINUED

Binding Tape

1. Place marks 1 inch on each side of the damaged area.
2. Measure the distance between marks.
3. Cut a length of new binding tape of the same type as original to the length indicated in step 2.
4. Sear raw ends of binding tape.
5. Place binding tape between marks in the same manner as the original.
6. Turn binding edges under ½ inch.
7. Using a medium duty sewing machine and size E thread of appropriate color, stitch $^{1}/_{8}$ inch from edge of tape.

Table 3. Binding Tape Measurements.

COMPONENT	APPLICATION	WIDTH	LENGTH
Molded Waist Belt	Cover Edging	1”	AR
Molded Waist Belt	Tunnel Edging	1”	AR

END OF TASK

Snap Fastener Replacement

Replace snap fasteners using replacement procedures in WP 0032.

END OF TASK

Eyelet Replacement

Replace eyelets using replacement procedures in WP 0032.

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace Pack Frame, Molded Waist Belt, Enhanced Frame Shoulder Straps, Load Lifter Attachment Strap, and Shoulder Suspension Male Buckle with serviceable items from stock.

END OF TASK

END OF WORK PACKAGE

SUSTAINMENT MAINTENANCE
PISTOL SET
SERVICE, INSPECT, REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0019
WP 0020
WP 0032

Equipment Condition

Lay out on flat surface or other suitable area.

Materials/Parts

Fastener Tape, Hook, A-A-55126, Type II, Class 1, 1 inch (WP 0036, Item 40)
Fastener Tape, Hook, A-A-55126, Type II, Class 1, 1 ½ inch (WP 0036, Item 41)
Fastener Tape, Loop, A-A-55126, Type II, Class 1, 1 inch (WP 0036, Item 45)
Fastener Tape, Loop, A-A-55126, Type II, Class 1, 1 ½ inch (WP 0036, Item 46)
Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Tape, Textile (Binding Tape), 1 inch (WP 0036, Item 66)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)
Webbing, as specified (WP 0036, Items 67-80)

SERVICE

Clean the Pistol Set IAW WP 0019, Cleaning and Drying.

INSPECT

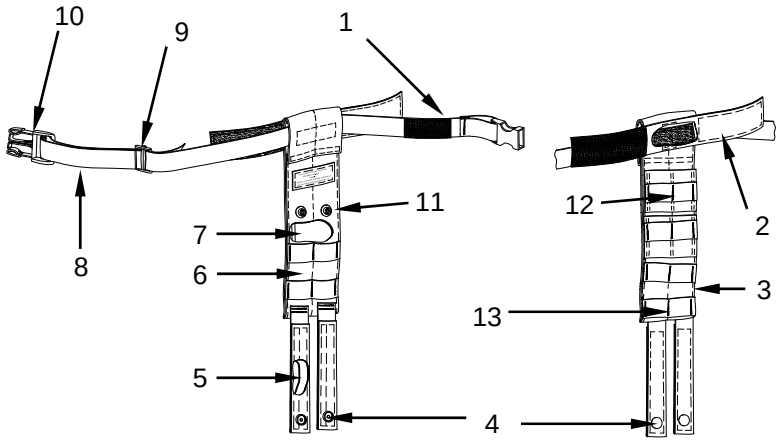
Conduct a preliminary examination IAW WP 0020 after components have been laundered as described in WP 0019. Discard decayed items. Test seams by grasping the item with both hands and pulling at right angles to the seams. Mark areas to be repaired. Cross out nonspecific and personal markings.

REPAIR

Prior to repair operations, each component of the MOLLE II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished the user as a repair kit, all repairs to these components will be accomplished at the CIF or approved facility, using FM 10-16 as a general guide.

Use Figures 1 and 2 to determine location and construction of equipment in repair procedures.

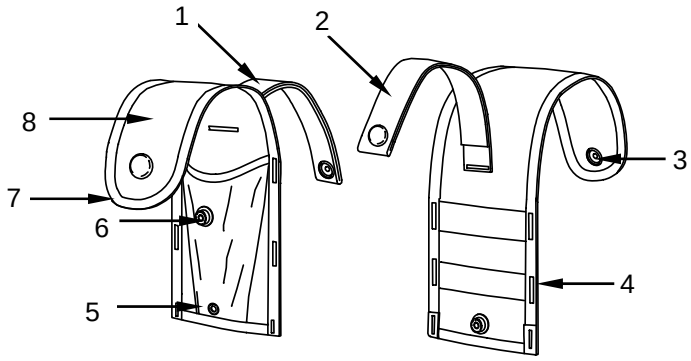
REPAIR — CONTINUED



Legend

1. Hook and Pile Fastener
2. Webbing, 1½-inch Thread
3. Thread, Size F
4. Snap Fastener, Button/Socket
5. Polyethylene, High Density, .030-inch
6. Textured Nylon Duck Fabric
7. Polyethylene, High Density, .050-inch
8. Webbing, 1-inch
9. Slide Buckle, 1-inch
10. Side Release Buckle, 1-inch
11. Snap Fastener, Stud/Eyelet
12. Webbing, 2¼-inch
13. Thread Size E

Figure 1. Holster/Leg Extender.



Legend

1. Polyethylene, 0.030-inch x 0.875-inch
2. Webbing, Nylon, 1-inch
3. Snap Fastener, Button/Socket
4. Thread, Size E
5. Snap Fastener, Eyelet/Stud
6. Eyelet (Drain)
7. Binding Tape, 1-inch
8. Textured Nylon Duck, Class III

Figure 2. 9 MM Magazine Pouch.

END OF TASK

REPAIR — CONTINUED

Restitching

1. Use Figure 1 and 2 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Pistol Set Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Pistol Set			
Holster/Leg Extender and 9 MM Magazine Pouch			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Hook and Pile Tape

1. Remove faulty hook and pile tape from components. Do not damage the fabric.
2. Measure and cut a new piece of hook and pile tape of the size and length indicated in Table 2.
3. Using a medium duty sewing machine, size F thread of the appropriate color, sew new hook and pile tape to equipment IAW WP 0032, overstitching by ½ inch.
4. Trim running ends of thread.

Table 2. Hook and Pile Tape Measurements.

COMPONENT	APPLICATION	TYPE	WIDTH	LENGTH	TOLERANCE
Holster Extender	Fastener Strap and Retainer	Hook and Pile	1”	3”	+ or − $^{1}/_{16}$ inch
Holster Extender	Securing Strap	Hook and Pile	1½”	4”	+ or − $^{1}/_{16}$ inch

END OF TASK

REPAIR — CONTINUED

Binding Tape

1. Place marks 1 inch on each side of the damaged area.
2. Measure the distance between marks.
3. Cut a length of new binding tape of the same type as original to the length indicated in step 2.
4. Sear raw ends of binding tape.
5. Place binding tape between marks in the same manner as the original.
6. Turn binding edges under ½ inch.
7. Using a medium duty sewing machine and size E thread of appropriate color, stitch $^{1}/_{8}$ inch from the edge of tape.

Table 3. Binding Tape Measurements.

COMPONENT	APPLICATION	WIDTH	LENGTH
9 MM Magazine Pouch	Closure flap and pocket edging	1”	AR

END OF TASK

Snap Fastener Replacement

Replace snap fasteners using replacement procedures in WP 0032.

END OF TASK

Eyelet Replacement

Replace eyelets using replacement procedures in WP 0032.

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace Pistol Set with serviceable item from stock.

END OF TASK

END OF WORK PACKAGE

SUSTAINMENT MAINTENANCE
SAW GUNNER SET
SERVICE, INSPECT, REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0019
WP 0020
WP 0032

Materials/Parts

Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Tape, Textile (Binding Tape), 1 inch (WP 0036, Item 66)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)
Webbing, as specified (WP 0036, Items 67-80)

Equipment Condition

Lay out on flat surface or other suitable area.

SERVICE

Clean the equipment IAW WP 0019, Cleaning and Drying.

INSPECT

Conduct a preliminary examination IAW WP 0020 after components have been laundered as described in WP 0019. Discard decayed items. Test seems by grasping the item with both hands and pulling at right angles to the seams. Mark areas to be repaired. Cross out nonspecific and personal markings.

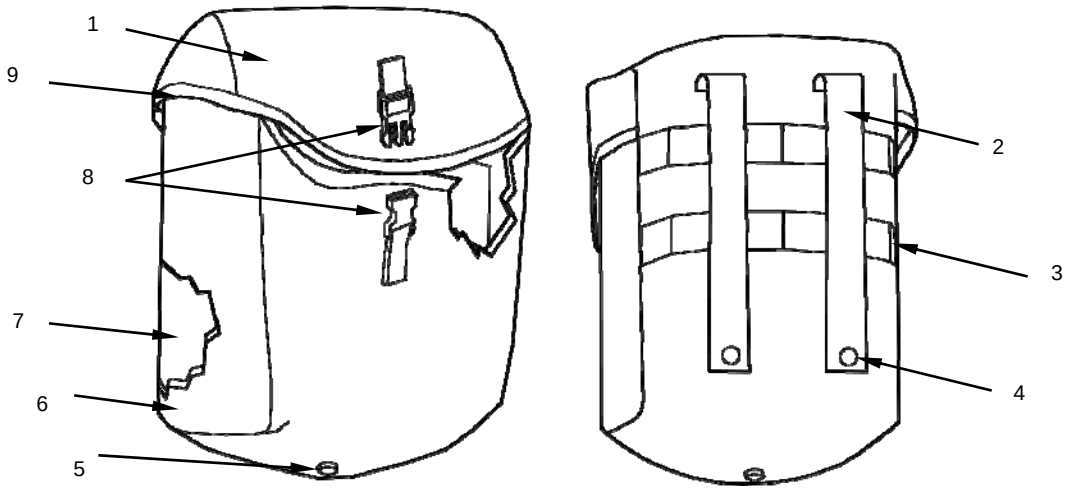
REPAIR

Prior to repair operations, each component of the Modular Lightweight Load-Carrying Equipment (MOLLE) II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished to the user as a repair kit, all repairs to these components will be accomplished at the CIF or approved facility, using FM 10-16 as a general guide.

Use Figures 1 and 2 to determine location and construction of equipment in repair procedures.

END OF TASK

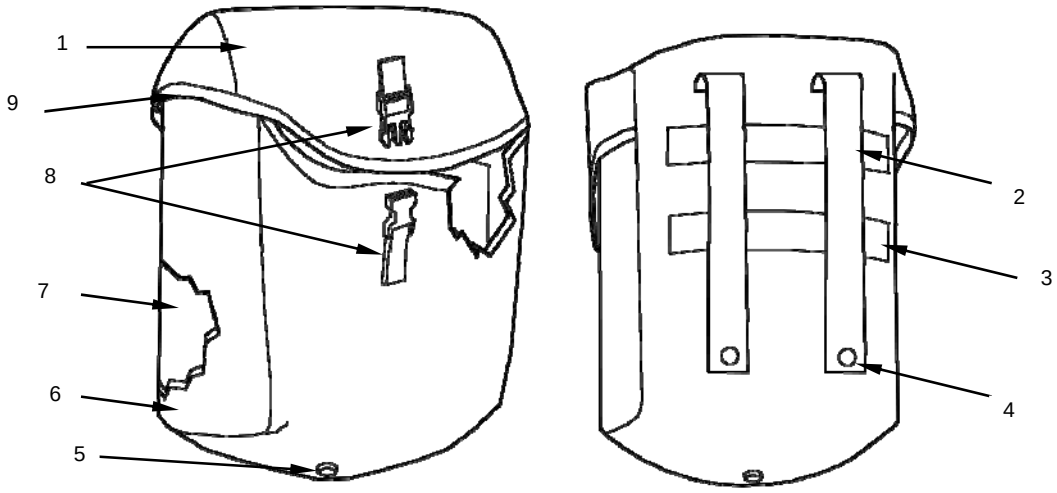
REPAIR — CONTINUED



Legend

1. Textured Nylon Duck, Class III
2. Webbing, Nylon, 1-inch
3. Polyethylene, 0.030-inch x 0.875-inch
4. Snap Fastener
5. Eyelet, Drain
6. Textured Nylon Duck, Class IV
7. Polyethylene, 0.030-inch x 2.00-inch
8. Buckle, Side Release, 1-inch
9. Binding Tape, 1-inch

Figure 1. 100-Round Utility Pouch.



Legend

1. Textured Nylon Duck, Class III
2. Webbing, Nylon, 1-inch
3. Polyethylene, 0.030-inch x 0.875-inch
4. Snap Fastener
5. Eyelet, Drain
6. Textured Nylon Duck, Class IV
7. Polyethylene, 0.030-inch x 2.00-inch
8. Buckle, Side Release, 1-inch
9. Binding Tape, 1-inch

Figure 2. 200-Round SAW Gunner Pouch.

REPAIR — CONTINUED

Restitching

1. Use Figure 1 and 2 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. SAW Gunner Set Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
SAW Gunner Set			
100- and 200-Round Pouches			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Binding Tape

1. Place marks 1 inch on each side of the damaged area.
2. Measure the distance between marks.
3. Cut a length of new binding tape of the same type as original to the length indicated in step 2.
4. Sear raw ends of binding tape.
5. Place binding tape between marks in the same manner as the original.
6. Turn binding edges under ½ inch.
7. Using a medium duty sewing machine and size E thread of appropriate color, stitch $^{1}/_{8}$ inch from the edge of tape.

Table 2. Binding Tape Measurements.

COMPONENT	APPLICATION	WIDTH	LENGTH
SAW Gunner Pouch	Closure Flap and Pocket Edging	1”	AR
Utility Belt (Old)	Belt end Edging	1”	AR

END OF TASK

REPAIR — CONTINUED

Snap Fastener Replacement

Replace snap fasteners using replacement procedures in WP 0032.

END OF TASK

Eyelet Replacement

Replace eyelets using replacement procedures in WP 0032.

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace SAW Gunner Set with serviceable items from stock.

END OF TASK

END OF WORK PACKAGE

SUSTAINMENT MAINTENANCE
GRENADIER SET
SERVICE, INSPECT, REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0019
WP 0020
WP 0032

Materials/Parts

Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Tape, Textile (Binding Tape), 1 inch (WP 0036, Item 66)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)
Webbing, as specified (WP 0036, Items 67-80)

Equipment Condition

Lay out on flat surface or other suitable area.

SERVICE

Clean the equipment IAW WP 0019, Cleaning and Drying.

INSPECT

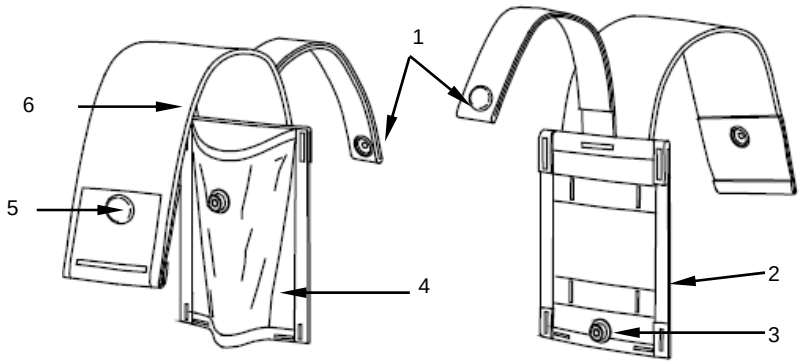
Conduct a preliminary examination IAW WP 0020 after components have been laundered as described in WP 0019. Discard decayed items. Test seems by grasping the item with both hands and pulling at right angles to the seams. Mark areas to be repaired. Cross out nonspecific and personal markings.

REPAIR

Prior to repair operations, each component of the Modular Lightweight Load-Carrying Equipment (MOLLE) II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished the user as a repair kit, all repairs to these components will be accomplished at the CIF or approved facility, using FM 10-16 as a general guide.

Use Figures 1, 2, and 3 to determine the location and construction of equipment in repair procedures.

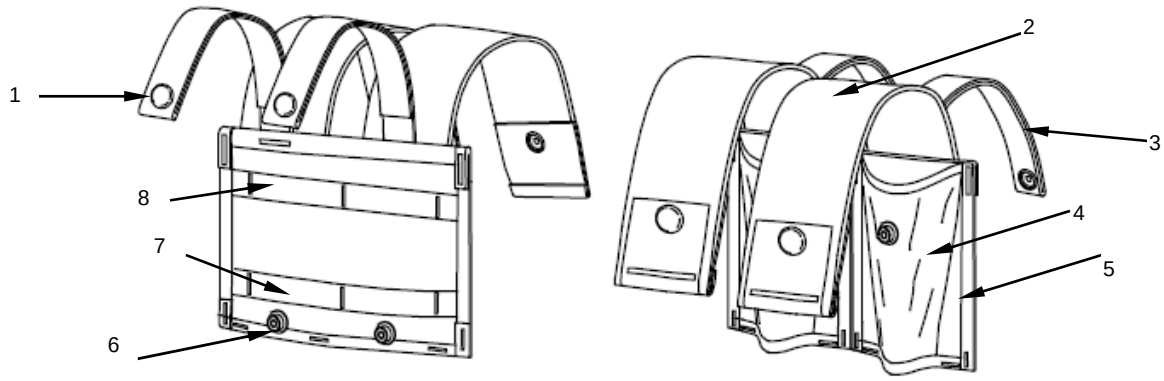
REPAIR — CONTINUED



Legend

1. Polyethylene, 0.030-inch
2. Webbing, Nylon, 1-inch
3. Snap Fastener, Eyelet/Stud
4. Textured Nylon Duck
5. Snap Fastener, Button/Socket
6. Webbing, Nylon, 2-inch

Figure 1. 40 MM High Explosive Pouch (Single).

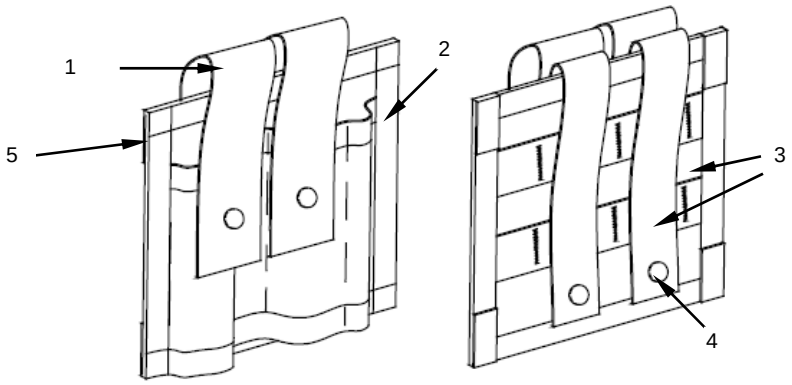


Legend

1. Snap Fastener, Button/Socket
2. Webbing, Nylon, 2-inch
3. Polyethylene, 0.030-inch
4. Textured Nylon Duck
5. Binding Tape, 1-inch
6. Snap Fastener, Eyelet/Stud
7. Thread, Size F
8. Webbing, Nylon, 1-inch

Figure 2. 40 MM High Explosive Pouch (Double).

REPAIR — CONTINUED



Legend
1. Webbing, Nylon, 2-inch
2. Binding Tape, 1-inch
3. Webbing, Nylon, 1-inch
4. Snap Fastener, Button/Socket
5. Thread, Size E

Figure 3. 40 MM Pyrotechnic Pouch (Double).

END OF TASK

Restitching

1. Use Figures 1, 2, and 3 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Grenadier Set Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Grenadier Set			
All Pouches			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E
Waist Belt Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

REPAIR — CONTINUED

Binding Tape

1. Place marks 1 inch on each side of the damaged area.
2. Measure the distance between marks.
3. Cut a length of new binding tape of the same type as original to the length indicated in step 2.
4. Sear raw ends of binding tape.
5. Place binding tape between marks in the same manner as the original.
6. Turn binding edges under ½ inch.
7. Using a medium duty sewing machine and size E thread of appropriate color, stitch $^{1}/_{8}$ inch from the edge of tape.

Table 2. Binding Tape Measurements.

COMPONENT	APPLICATION	WIDTH	LENGTH
40 MM High Explosive Pouch Double	Pouch edging	1”	AR
40 MM High Explosive Pouch Single	Pouch side lining (2)	1”	6 ½”
40 MM High Explosive Pouch Single	Pouch lower lining (2)	1”	3”
40 MM High Explosive Pouch Single	Pouch upper lining (2)	1”	3”
40 MM Pyrotechnic Pouch Double	Pouch edging	1”	AR

END OF TASK

Snap Fastener Replacement

Replace snap fasteners using replacement procedures in WP 0032.

END OF TASK

Eyelet Replacement

Replace eyelets using replacement procedures in WP 0032.

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace Grenadier Set with serviceable item from stock.

END OF TASK

END OF WORK PACKAGE

SUSTAINMENT MAINTENANCE
MEDIC SET
SERVICE, INSPECT, REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Equipment Condition

Lay out on flat surface or other suitable area.

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0019
WP 0020
WP 0032

Materials/Parts

Fastener Tape, Hook, A-A-55126, Type II, Class 1, 5/8 inch (WP 0036, Item 39)
Fastener Tape, Hook, A-A-55126, Type II, Class 1, 1 inch (WP 0036, Item 40)
Fastener Tape, Loop, A-A-55126, Type II, Class 1, 5/8 inch (WP 0036, Item 44)
Fastener Tape, Loop, A-A-55126, Type II, Class 1, 1 inch (WP 0036, Item 45)
Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Slide Fastener, VFGOL-106 (WP 0036, Item 62)
Tape, Textile (Binding Tape), 1 inch (WP 0036, Item 66)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)
Webbing, as specified (WP 0036, Items 67-80)

SERVICE

Clean the equipment IAW WP 0019, Cleaning and Drying.

INSPECT

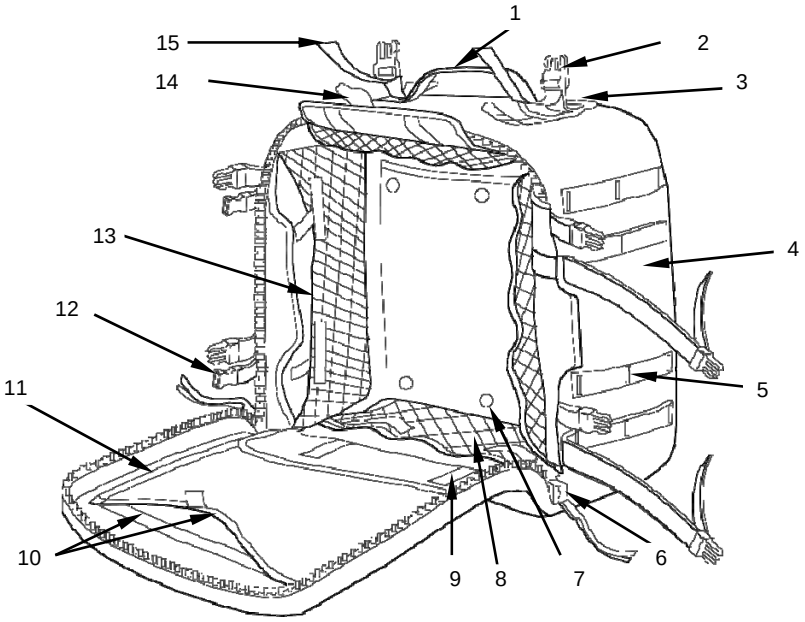
Conduct a preliminary examination IAW WP 0020 after components have been laundered as described in WP 0019. Discard decayed items. Test seams by grasping the item with both hands and pulling at right angles to the seams. Mark areas to be repaired. Cross out nonspecific and personal markings.

REPAIR

Prior to repair operations, each component of the Modular Lightweight Load-Carrying Equipment (MOLLE) II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished the user as a repair kit, all repairs to these components will be accomplished at the CIF or approved facility, using FM 10-16 as a general guide.

Use Figures 1 – 5 to determine the location and construction of equipment in repair procedures.

REPAIR — CONTINUED

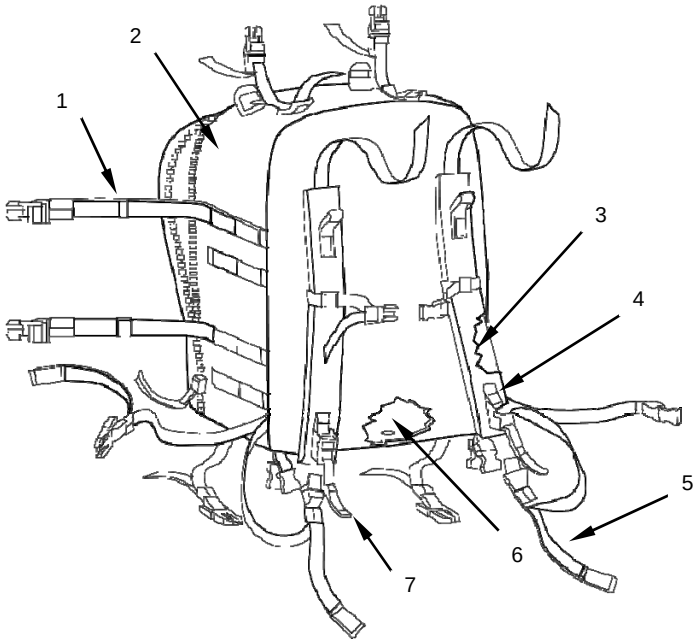


Legend

1. Webbing, 2-inch
2. Side Release Buckle, 2-inch
3. Metal Loop, 1-inch
4. Textured Nylon Duck
5. Thread, Size E
6. Slide Fastener
7. Snap Fastener
8. Elastic Webbing, ½-inch
9. Hook and Pile Fastener, 1-inch
10. Hook and Pile Fastener, $^{5}/_{8}$-inch
11. Thread, Size E
12. Side Release Buckle, 1-inch
13. Nylon Raschel Knit Cloth
14. Double Bar Buckles
15. Webbing, 1-inch

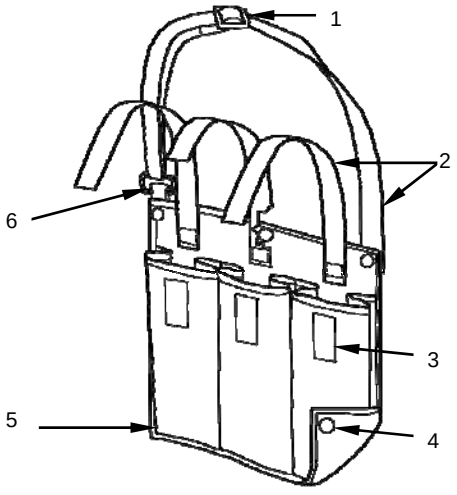
Figure 1. Medical Bag with Four Internal Pockets.

REPAIR — CONTINUED



Legend
1. Webbing, 1-inch
2. Textured Nylon Duck
3. Foam, ¼-inch
4. Textured Nylon Duck
5. Quick Release Buckles
6. Webbing, Elastic, 1-inch
7. Webbing, $^{9}/_{16}$-inch

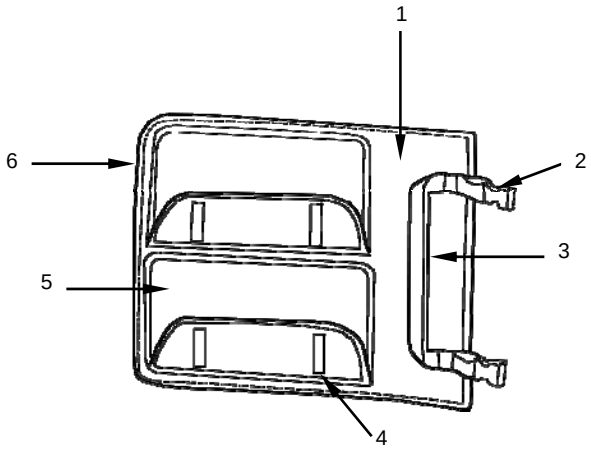
Figure 2. Medical Bag Exterior.



Legend
1. Double Bar Buckles
2. Webbing, 1-inch
3. Hook and Pile Fastener, 1-inch
4. Snap Fastener
5. Thread, Size E
6. Metal Look, 1-inch

Figure 3. Medical IV Bandoleer Bag.

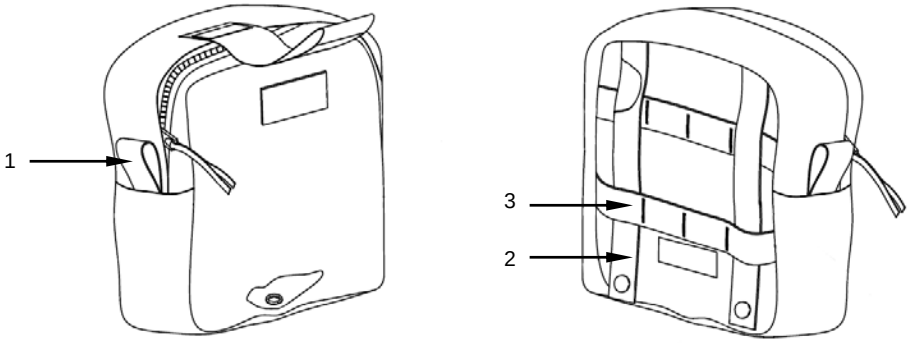
REPAIR — CONTINUED



Legend

1. Textured Nylon Duck
2. Side Release Buckle, 1-inch
3. Webbing, 1-inch
4. Hook and Pile Fastener, 1-inch
5. Nylon Raschel Knit Cloth
6. Binding Tape, 1-inch

Figure 4. Medical Bag Panel.



Legend

1. Loop
2. Attachment Strap
3. Rear Strap

Figure 5. External Medic Modular Pocket.

REPAIR — CONTINUED

Restitching

1. Use Figures 1 – 5 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Medic Set Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Medic Set			
Bag and Pouches			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E
Waist Belt Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Hook and Pile Tape

1. Remove faulty hook and pile tape from equipment. Do not damage the fabric.
2. Measure and cut a new piece of hook and pile tape of the size and length indicated in Table 2.
3. Using a medium duty sewing machine, size F thread of the appropriate color, sew new hook and pile tape IAW WP 0032, overstitching by ½ inch.
4. Trim running ends of thread.

Table 2. Hook and Pile Tape Lengths.

COMPONENT	APPLICATION	TYPE	WIDTH	LENGTH	TOLERANCE
Medical Pouch	Attachment	Pile	1"	2"	+ or − $^{1}/_{16}$ inch
Medical Pouch	Flap Closure	Hook and Pile	1"	2"	+ or − $^{1}/_{16}$ inch
Medic Bag	Map Case Closure	Hook and Pile	5/8”	12"	+ or – $^{1}/_{8}$ inch
Medic Bag	Flap Assembly Closure	Pile	1"	3"	+ or − $^{1}/_{16}$ inch
Medic Bag	Flap Mesh Pocket	Hook	1"	4"	+ or − $^{1}/_{16}$ inch
Medic Bag	Inner Pocket Closure	Hook	1"	2"	+ or − $^{1}/_{16}$ inch
Medic Bag	Inner Pocket Straps	Pile	1"	$3^{1}/_{2}$"	+ or - $^{1}/_{16}$ inch
Medic Bag	Main Compartment Pocket Flap	Pile	1"	3"	+ or − $^{1}/_{16}$ inch
Medic Bag	Main Compartment Mesh Pocket	Hook	1"	4"	+ or − $^{1}/_{16}$ inch

END OF TASK

REPAIR — CONTINUED

Slide Fasteners

1. Cut the fastener tape on the faulty slide fastener as close as possible to the outer row of stitching holding the slide fastener.
2. Trim any raveled yarns from the remaining fastener tape.
3. Measure the length of the damaged area.
4. Obtain a new slide fastener, the length of the damaged area.
5. Using a medium duty sewing machine, size F thread, 7-11 stitches per inch, sew the new slide fastener to the equipment.
6. Trim threads.

Table 3. Slide Closure Measurements.

COMPONENT	APPLICATION	FASTENER WIDTH	LENGTH	TOLERANCE
Medical Pouch	Main Pocket Closure	¾”	14”	+ or − $^{1}/_{8}$ inch
Medic Bag Assembly	Main Pocket Closure	¾”	43”	+ or − $^{1}/_{8}$ inch

END OF TASK

Binding Tape

1. Place marks 1 inch on each side of the damaged area.
2. Measure the distance between marks.
3. Cut a length of new binding tape of the same type as original to the length indicated in step 2.
4. Sear raw ends of binding tape.
5. Place binding tape between marks in the same manner as the original.
6. Turn binding edges under ½ inch.
7. Using a medium duty sewing machine and size E thread of appropriate color, stitch $^{1}/_{8}$ inch from the edge of tape.

Table 4. Map Case Edging Measurement.

COMPONENT	APPLICATION	WIDTH	LENGTH
Medical Bag	Map Case Edging	1”	AR

END OF TASK

REPAIR — CONTINUED

Attachment Webbing Repair

1. Remove old attachment webbing by cutting away bar tacks and lifting edge binding or seam. Do not damage underlying fabric.
2. Cut a new piece of webbing the same length as the old webbing.
3. Sear both ends of new webbing.
4. Measure the distance between bar tacks on the old webbing and transfer those measurements to the new webbing.
5. Place new webbing component where old webbing was removed.
6. Using a bar tack sewing machine, place a 42- to 48-inch bar tack on each of the marked locations.
7. Place ends of webbing into the seam tape or seam in the same manner as the original construction.
8. Using a medium duty sewing machine, size F thread, 7 to 11 stitches per inch, sew the webbing back into the seam tape or seam, overstitching by a minimum of ½ inch.
9. Trim thread ends.

END OF TASK

Snap Fastener Replacement

Replace snap fasteners using replacement procedures in WP 0032.

END OF TASK

Eyelet Replacement

Replace eyelets using replacement procedures in WP 0032.

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace Medic Set with serviceable items from stock.

END OF TASK

END OF WORK PACKAGE

SUSTAINMENT MAINTENANCE
RADIO POUCH, 300-ROUND BAG, SHOTGUN POUCH, MBITR POUCH, NBC BAG, K-BAR AND ALICE CLIP ADAPTERS, VEHICLE PANEL, LEADERS POUCH, PVS-14 NIGHT VISION GOGGLE POUCH, ADMIN POCKET, AMMUNITION POUCHES BANDOLEER, FLASH BANG GRENADE POUCH
SERVICE, INSPECT, REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Item 4)
Sewing Machine, Medium Duty (WP 0041, Item 5)
Shears, Tailors, 12-inch (WP 0041, Item 6)
Stitch Removal Tool (WP0041, Item 7)
Tape, Measuring (WP 0041, Item 8)

Equipment Condition

Lay out on flat surface or other suitable area.

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0019
WP 0020
WP 0032

Materials/Parts

Cord, Round, Type II, Mil-C-5040 (WP 0036, Item 30)
Fastener Tape, Hook, A-A-55126, Type II, Class 1,1 inch (WP 0036, Item 40)
Fastener Tape, Hook, A-A-55126, Type II, Class 1, 2 inch (WP 0036, Item 42)
Fastener Tape, Loop, A-A-55126, Type II, Class 1, 1 inch (WP 0036, Item 45)
Fastener Tape, Loop, A-A-55126, Type II, Class 1, 2 inch (WP 0036, Item 47)
Pencil, China Marker, Yellow, A-A-87 (WP 0042, Item 2)
Slide Fastener, VFGOL-106 (WP 0036, Item 62)
Tape, Textile (Binding Tape), 1 inch (WP 0036, Item 65)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 3)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)
Webbing, as specified (WP 0036, Items 67-80)

SERVICE

Clean the equipment IAW WP 0019, Cleaning and Drying.

INSPECT

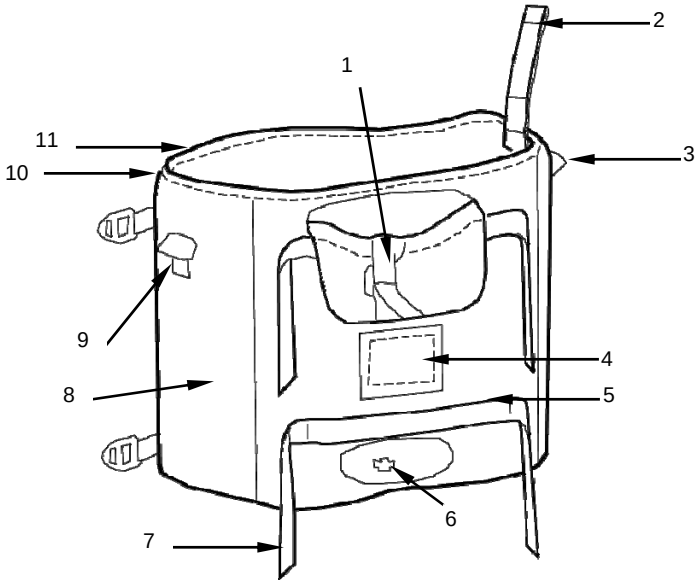
Conduct a preliminary examination IAW WP 0020 after components have been laundered as described in WP 0019. Discard decayed items. Test seams by grasping the item with both hands and pulling at right angles to the seams. Mark areas to be repaired. Cross out nonspecific and personal markings.

REPAIR

Prior to repair operations, each component of the Modular Lightweight Load-Carrying Equipment (MOLLE) II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished to the user as a repair kit, all repairs to these components will be accomplished at the CIF or approved facility, using FM 10-16 as a general guide.

Use Figures 1 – 14 to determine the location and construction of equipment in repair procedures.

REPAIR — CONTINUED

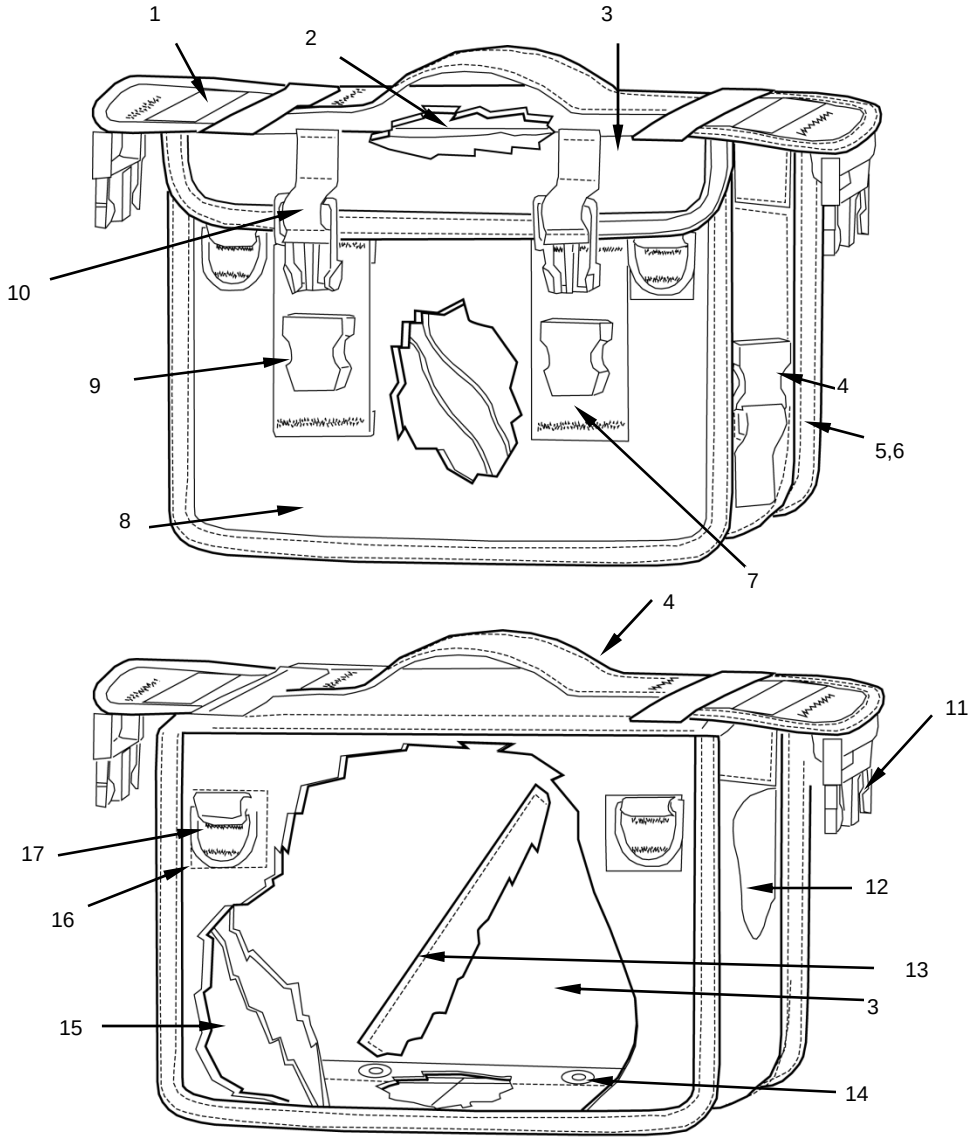


Legend

1. Buckle, 1-inch, Ladder-type
2. Snap Fastener, Button/Socket
3. Snap Fastener, Eyelet/Stud
4. Polyethylene, 0.020-inch
5. Thread, Size F
6. Eyelet
7. Webbing, 1-inch
8. Textured Nylon Duck
8. D-Ring, 1-inch
9. Thread, Size E
10. Binding Tape 1-inch

Figure 1. Radio Pouch.

REPAIR - CONTINUED

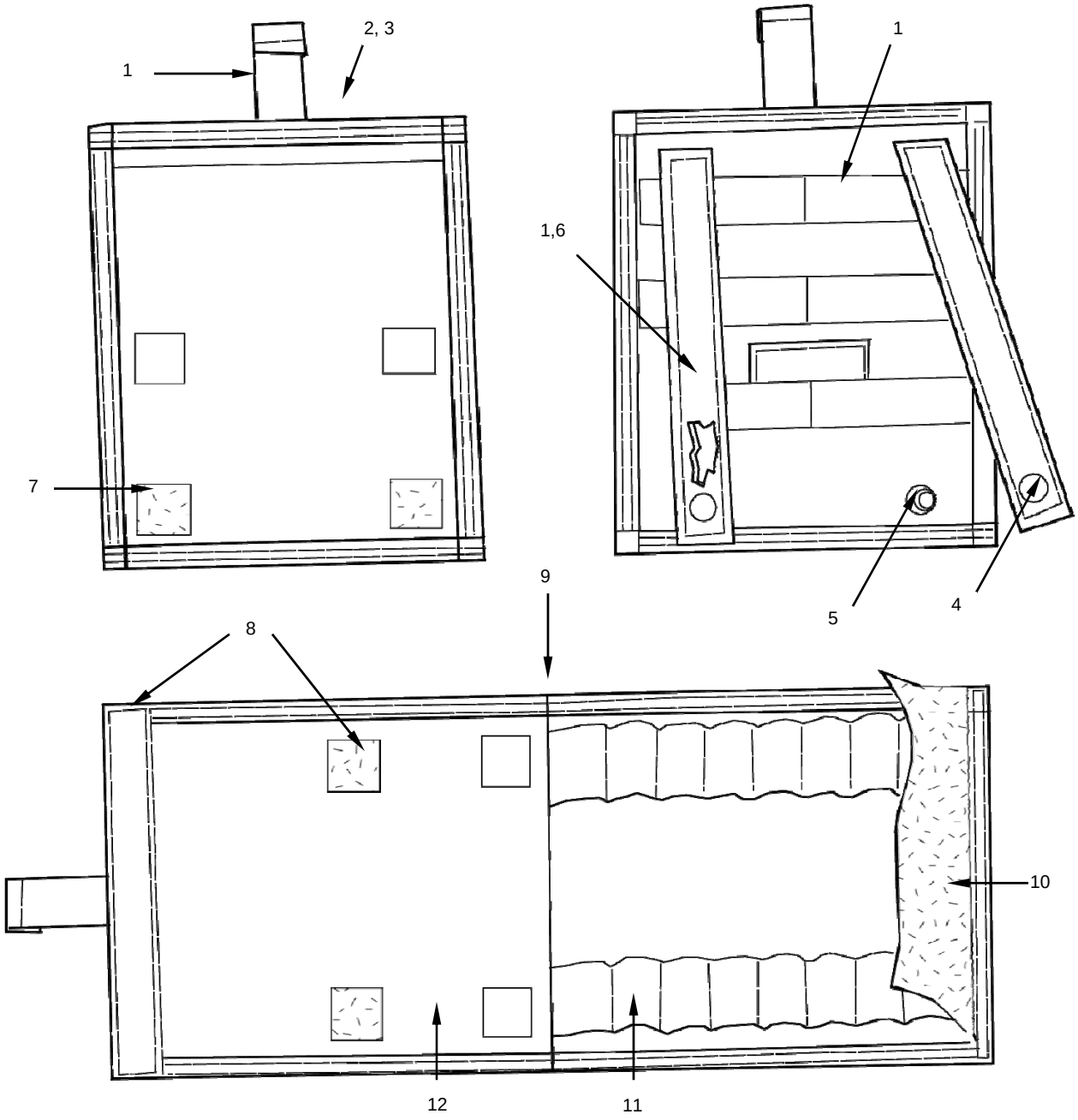


Legend

1. Hook and Pile Fastener
2. Polyethylene, High Density, .050-inch
3. Textured Nylon Duck Fabric
4. Side Release Buckle, 1-inch
5. Thread Size E
6. Binding Tape, 1-inch
7. Webbing, 2-inch
8. Textured Nylon Duck Fabric
9. Fastener, 3-hole, 1-inch
10. Webbing, Nylon, 1-inch
11. Slide Buckle, 1-inch
12. Thread, Size F
13. Snap Fasteners, Button/Socket
14. Grommet
15. Polyethylene, High Density, .050-inch
16. Webbing, 1-inch
17. D-Ring 1-inch

Figure 2. 300-Round, 7.62 Ammo Bag.

REPAIR — CONTINUED

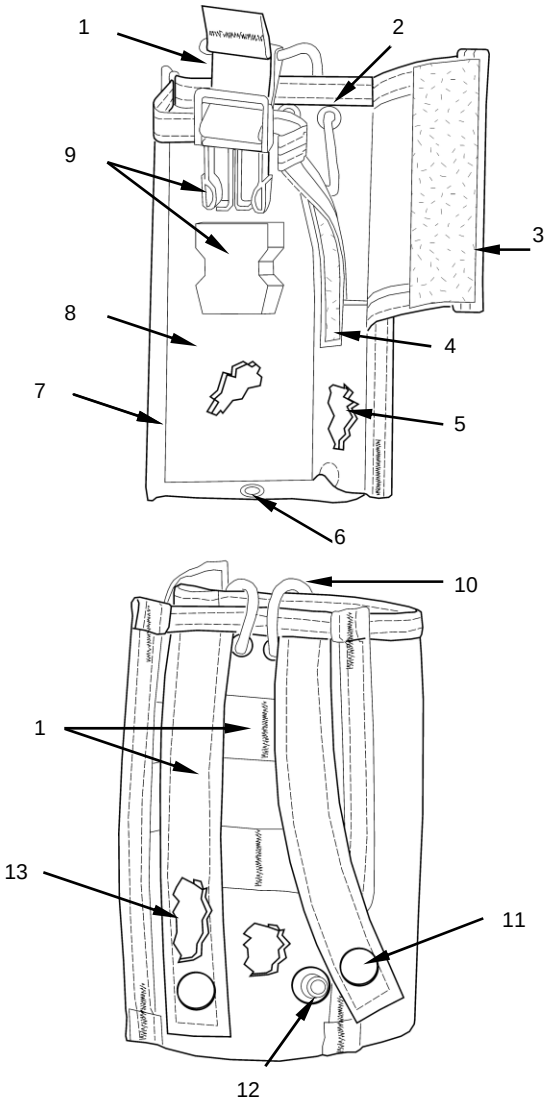


Legend

1. Webbing, Nylon, 1-inch
2. Binding Tape, 1-inch
3. Thread, Size E
4. Snap Fasteners, Button/Socket
5. Snap Fasteners, Stud/Eyelet
6. Polyethylene, 0.030-inch
7. Pile Fastener Tape, 1-inch
8. Hook Fastener Tape, 1-inch
9. Thread, Size F
10. Pile Fastener Tape, 2-inch
11. Webbing, Nylon, Elastic, 1½-inch
12. Textured Nylon Duck

Figure 3. Shotgun Shell Pouch.

REPAIR — CONTINUED

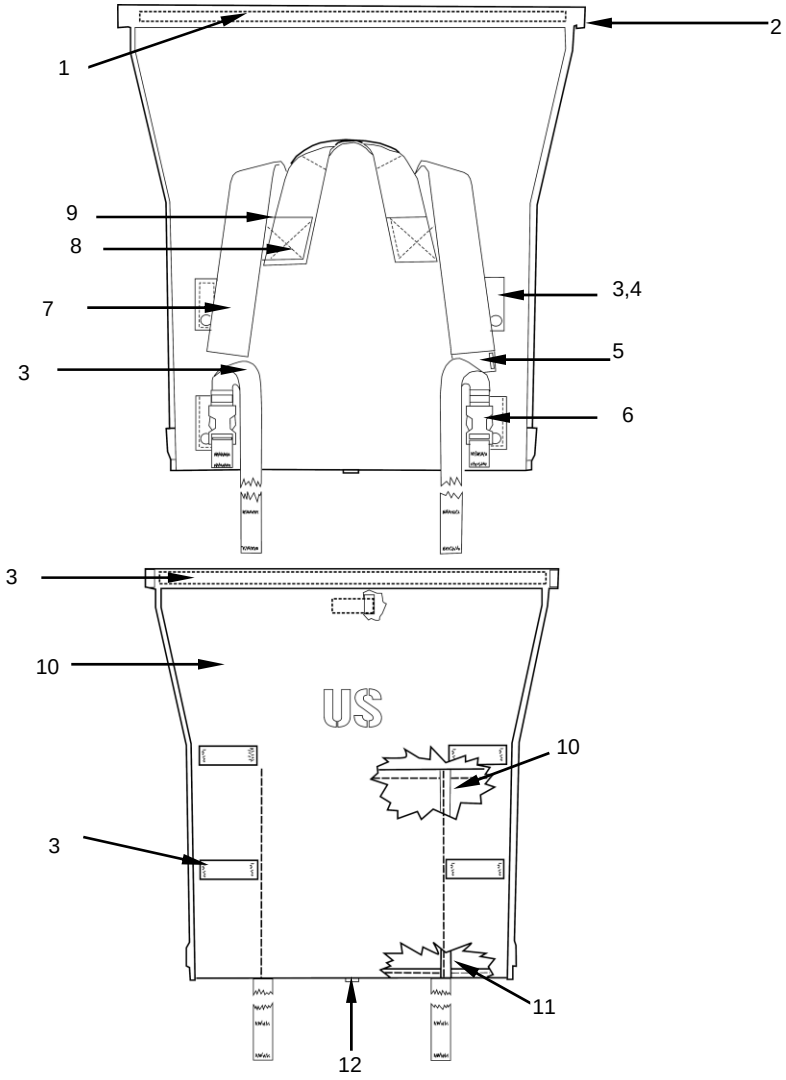


Legend

1. Webbing, Nylon, 1-inch
2. Eyelet/Washer
3. Fastener Tape, Hook, 1-inch wide
4. Fastener Tape, Pile, ½-inch wide
5. Foam, ¼-inch
6. Grommet
7. Thread, Size F
8. Textured Nylon Duck
9. Fastener, 3-hole, 1-inch (Side Release)
10. Cord, Round
11. Snap Fasteners, Button/Socket
12. Snap Fasteners, Stud/Eyelet
13. Polyethylene, 0.030-inch

Figure 4. MBITR Pouch.

REPAIR — CONTINUED

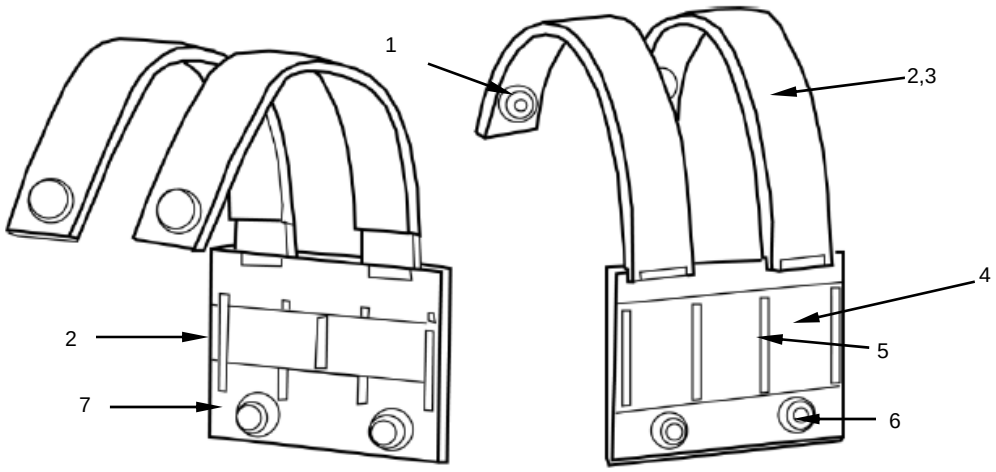


Legend

1. Strap, Leather, 1-inch
2. Fastener, 3-Hole, 1-inch
3. Webbing, Nylon, 1-inch
4. Polyethylene, 0.030-inch
5. Webbing, Nylon, Elastic , 1-inch
6. Side Release Buckle, 1-inch
7. Webbing, Nylon, 1-inch
8. Thread, Size E
9. Threading , Size F
10. Textured Nylon Duck
11. Binding Tape, 1-inch
12. Eyelet, Washer

Figure 5. NBC Bag.

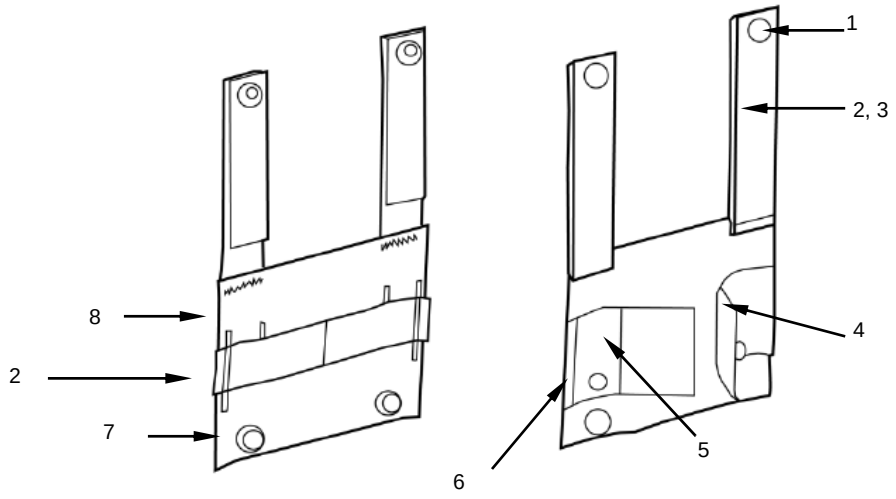
REPAIR — CONTINUED



Legend

1. Snap Fastener, Button/Socket
2. Webbing, 1-inch
3. Polyethylene, 0.030-inch
4. Textured Nylon Duck
5. Thread, Size E
6. Snap Fastener, Stud/Eyelet
7. Webbing, 3½-inch

Figure 6. ALICE Adapter Clip.

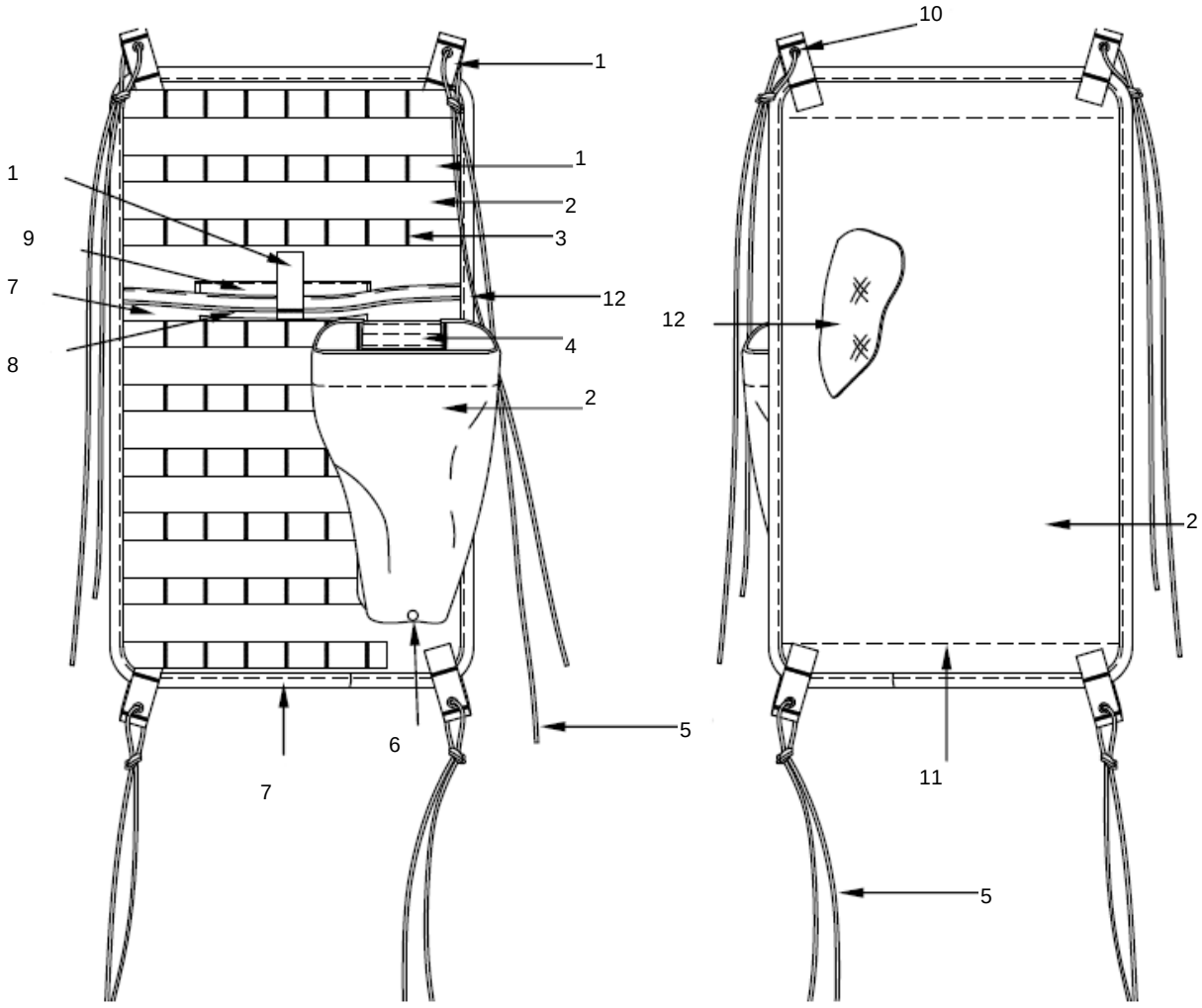


Legend

1. Snap Fastener, Button/Socket
2. Webbing, 1-inch
3. Polyethylene, 0.030-inch
4. Webbing, 2 ¼-inch
5. Hook and Pile Fastener
6. Snap Fastener, Eyelet/Washer
7. Snap Fastener, Eyelet/Stud
8. Webbing, 3½-inch

Figure 7. K-Bar Adapter.

REPAIR — CONTINUED

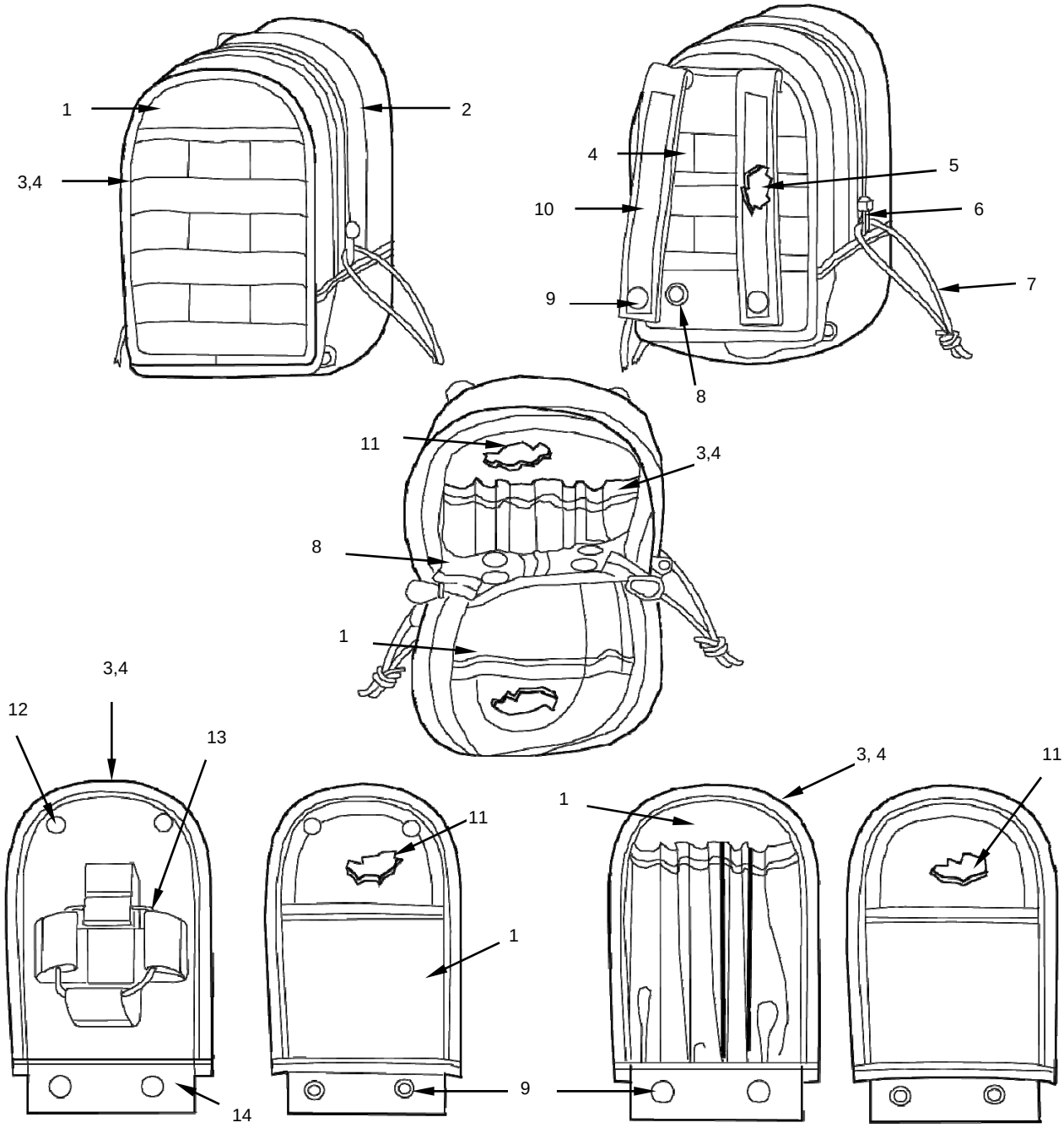


Legend

1. Webbing, 1-inch
2. Textured Nylon Duck
3. Thread, Size E
4. Coated Webbing
5. Cord, Nylon, Round
6. Eyelet Fastener, Hook, 1-inch
7. Binding Tape, 1-inch
8. Fastener, Hook, 1-inch
9. Fastener, Pile, 1-inch
10. Grommet
11. Thread, Size F
12. Polyethylene, .050-inch

Figure 8. Vehicle Panel (MVP) Universal.

REPAIR — CONTINUED

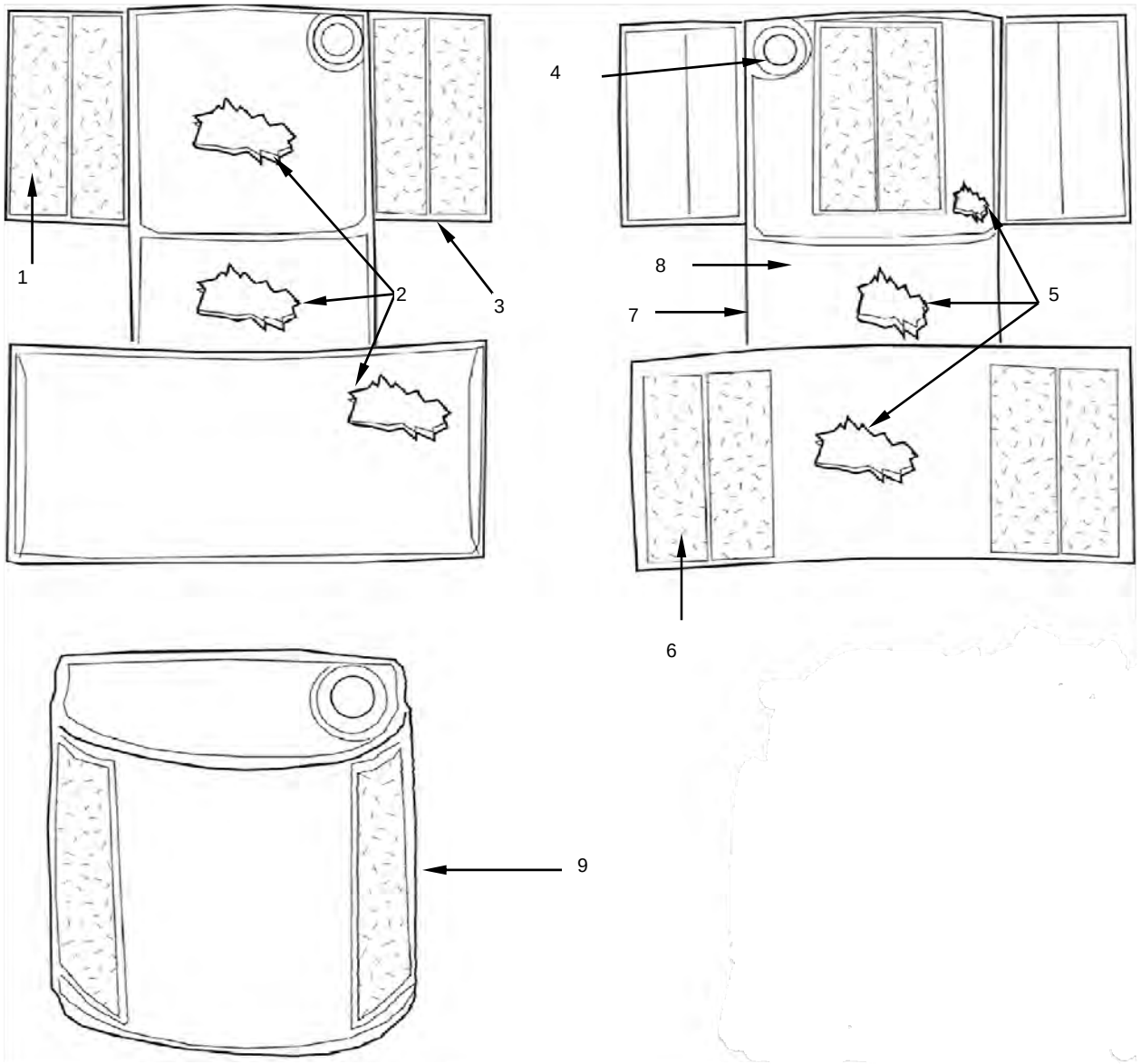


Legend

1. Textured Nylon Duck
2. Thread, Size F
3. Binding Tape, 1-inch
4. Thread, Size E
5. Polyethylene, 0.030-inch
6. Slide Fastener
7. Cord, Flat
8. Snap Fastener, Stud/Eyelet
9. Snap Fastener, Button/Socket
10. Webbing, 1-inch
11. Polyethylene, .050-inch
12. Eyelet
13. Cord, Elastic
14. Webbing, 1½-inch

Figure 9. Leaders Set Universal.

REPAIR — CONTINUED

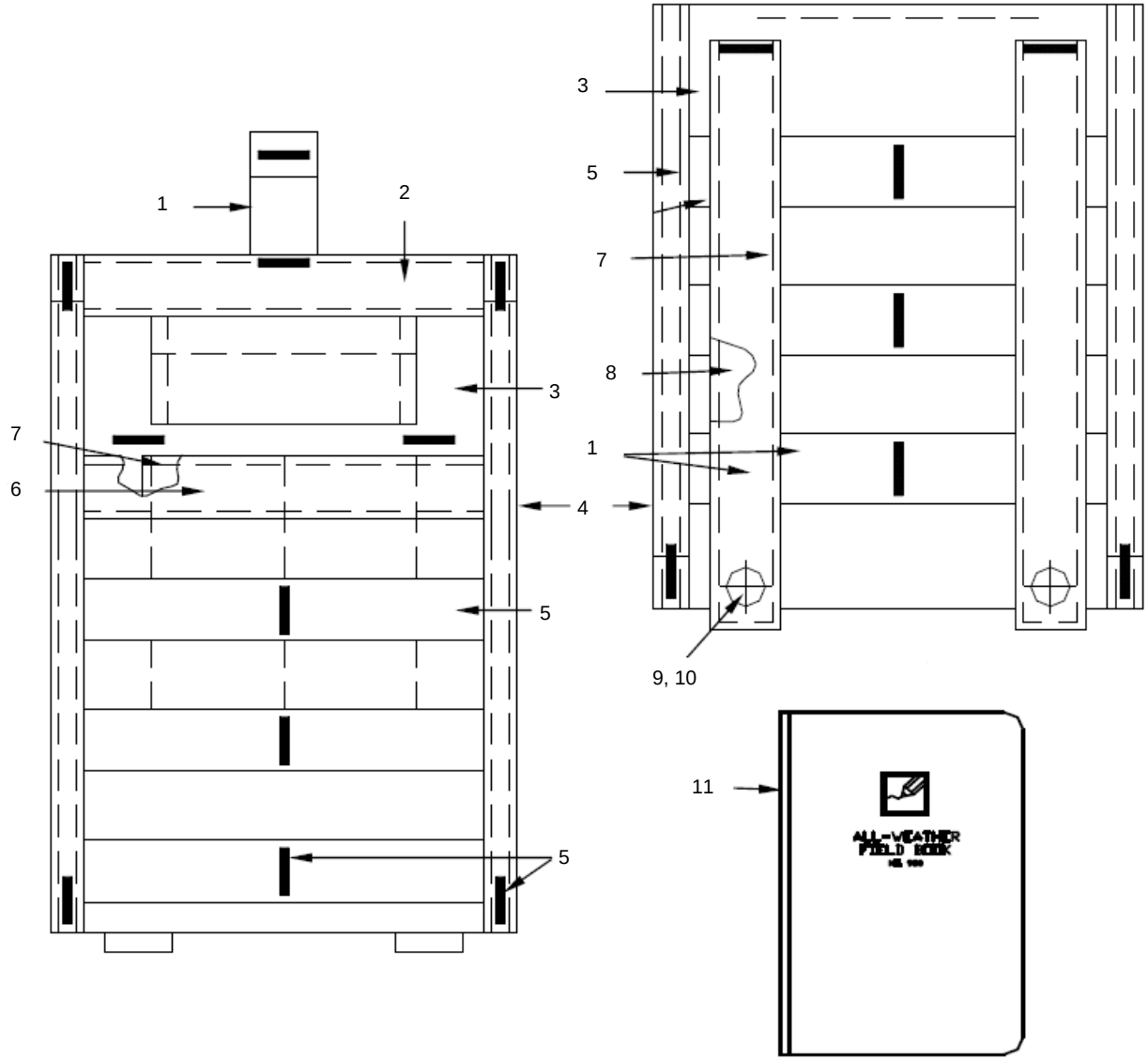


Legend

1. Fastener, Hook, 2-inch
2. Foam, $^{3}/_{16}$-inch
3. Thread, Size E
4. Eyelet
5. Polyethylene, 0.050-inch
6. Fastener, Pile, 2-inch
7. Thread, Size F
8. Textured Nylon Duck
9. Assembled Pouch

Figure 10. PVS-14 Pouch Universal.

REPAIR — CONTINUED

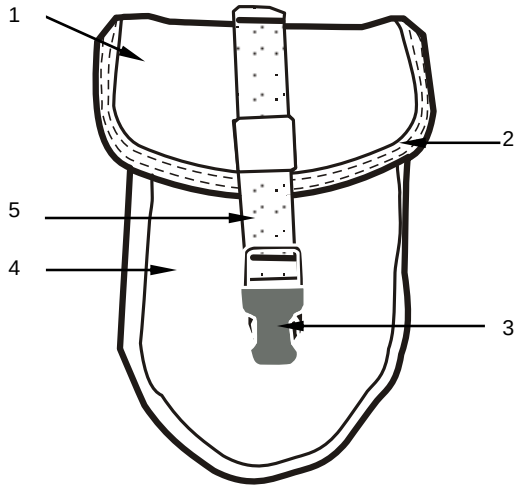


Legend

1. Webbing, 1-inch
2. Fastener Tape, Pile, 1-inch
3. Textured Nylon Duck
4. Tape, Binding, 1-inch
5. Thread, Size E
6. Fastener, Tape Hook, 1-inch
7. Thread, Size F
8. Polyethylene, 0.030-inch
9. Snap Fastener, Button/Socket
10. Snap Fastener, Stud/Eyelet
11. All Weather Field Book

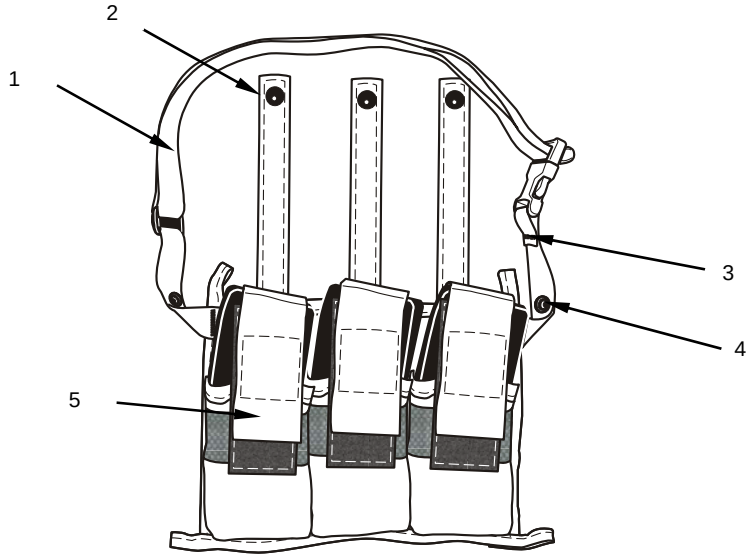
Figure 11. Admin Pocket.

REPAIR — CONTINUED



Legend
1. Webbing, Nylon, 3-inch
2. Tape, Binding, 1-inch
3. Fastener, 3-hole, 1-inch (side release)
4. Textured Nylon Duck
5. Webbing, Nylon, 1-inch

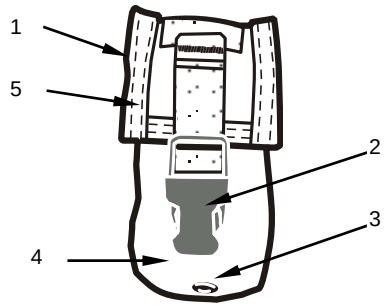
Figure 12. Entrenching Tool Carrier.



Legend
1. Webbing, 1-inch
2. Snap Fastener, Eyelet/Stud
3. Slide Buckle, 1-inch
4. Snap Fastener, Button/Socket
5. Webbing, 3-inch

Figure 13. Ammunition Pouches Bandoleer.

REPAIR — CONTINUED



Legend
1. Tape, Binding, 1-inch
2. Fastener, 3-hole, 1-inch (side release)
3. Eyelet, ABE-131
4. Textured Nylon Duck
5. Thread, Size E

Figure 14. Flash Bang Grenade Pouch.

Restitching

1. Use Figure 1 – 14 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Additional MOLLE II Components Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Additional MOLLE Components			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE Webbing	Bar Tack	42 to 48	E
Waist Belt Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

REPAIR — CONTINUED

Hook and Pile Tape

1. Remove faulty hook and pile tape from closures. Do not damage the fabric.
2. Measure and cut a new piece of hook and pile tape of the size and length indicated in Table 2.
3. Using a medium duty sewing machine, size F thread of the appropriate color, sew new hook and pile tape IAW WP 0032, overstitching by ½ inch.
4. Trim running ends of thread.

Table 2. Hook and Pile Tape Measurements.

COMPONENT	APPLICATION	TYPE	WIDTH	LENGTH	TOLERANCE
Shotgun Pouch	Panel Closure	Hook	1”	AR	+ or − $^{1}/_{16}$ inch
Shotgun Pouch	Panel Closure	Pile	2”	AR	+ or − $^{1}/_{16}$ inch
Shotgun Pouch	Panel Closure	Hook and Pile	1”	1”	+ or − $^{1}/_{16}$ inch
Admin Pouch	Pouch Closure	Hook and Pile	1”	AR	+ or − $^{1}/_{16}$ inch
K-Bar Adapter	Retainer Closure	Hook and Pile	2”	1¾”	+ or − $^{1}/_{16}$ inch
300-Round Ammo Bag	Closure Flap	Hook and Pile	1”	$3^{3}/_{8}$”	+ or − $^{1}/_{16}$ inch

END OF TASK

Slide Fasteners

1. Cut the fastener tape on the faulty slide fastener as close as possible to the outer row of stitching holding the slide fastener.
2. Trim any raveled yarns from the remaining fastener tape.
3. Measure the length of the damaged area.
4. Obtain a new slide fastener, the length of the damaged area.
5. Using a medium duty sewing machine, size F thread, 7-11 stitches per inch, sew the new slide fastener to the equipment.
6. Trim threads.

Table 3. Slide Closure Measurements.

COMPONENT	APPLICATION	FASTENER WIDTH	LENGTH	TOLERANCE
Leader’s Pouch	Main Pocket Closure	0.435”	AR	+ or − $^{1}/_{8}$ inch

END OF TASK

REPAIR — CONTINUED

Binding Tape

1. Place marks 1 inch on each side of the damaged area.
2. Measure the distance between marks.
3. Cut a length of new binding tape of the same type as original to the length indicated in step 2.
4. Sear raw ends of binding tape.
5. Place binding tape between marks in the same manner as the original.
6. Turn binding edges under ½ inch.
7. Using a medium duty sewing machine, size E thread of the appropriate color, stitch $^{1}/_{8}$ inch from the edge of tape.

Table 4. Binding Tape Measurements.

COMPONENT	APPLICATION	WIDTH	LENGTH
MBITR	Rim and seam edging	1”	AR
300-Round Ammo Bag	Side panels and closure flap edgings	1”	AR
Shotgun Pouch	Closure flap edging	1”	AR
Leader’s Pocket Set	Pocket and panel edgings	1”	AR
Entrenching Tool Carrier	Pouch edging		AR
Bandoleer	Pouch Edging	1"	AR
Bandoleer	Pouch Sling Brass Ring Loop	4”	
Bandoleer	Pouch Sling	48”	
Bandoleer	Pocket Closure	10”	
Flash Bang Pouch	Closure Flap Ending	1”	AR

END OF TASK

Drawcord Repair

1. Cut a new length of cord of the type and length indicated in Table 5.
2. Sear raw ends of cord.
3. Place an overhand knot in one end of cord.
4. Route cord through appropriate channels or guides in equipment, ensuring the cord goes through the barrel lock.
5. Place an overhand knot in remaining end of cord.

Table 5. Drawcord Lengths.

COMPONENT	APPLICATION	CORD TYPE	LENGTH	TOLERANCE
MBITR	Retainer	MIL-C-5040, Type II	AR	+ or − ¼ inch

END OF TASK

REPAIR — CONTINUED

Snap Fastener Replacement

Replace snap fasteners using replacement procedures in WP 0032.

END OF TASK

Eyelet Replacement

Replace eyelets using replacement procedures in WP 0032.

END OF TASK

Buckle Replacement

Replace buckles using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace component with serviceable item from stock.

END OF TASK

END OF WORK PACKAGE

SUSTAINMENT MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
GENERAL REPAIR PROCEDURES

INITIAL SETUP:

Tools

Specified in paragraph applicable to the item being repaired.

Personnel Required

Non-MOS specific (1)

Materials/Parts

Specified in paragraph applicable to the item being repaired.

References

ASTM D 6193-97

Equipment Condition

Lay out on flat surface or other suitable area.

REPAIR

Prior to repair operations, each component of the MOLLE II System shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished to the user as a repair kit, all repairs to these components will be accomplished at the maintainer level or higher.

Preparation for Repair

1. Conduct a preliminary examination after components have been laundered as described in WP 0019, Service.
2. Discard decayed items.
3. Test seams by grasping the item with both hands and pulling at right angles to the seams.
4. Mark areas to be repaired.
5. Obliterate nonspecific and personal markings.

END OF TASK

Recommended Sewing Machines and Stitching and Restitching Requirements

All stitches and seams shall conform to ASTM D 6193-97. Seam allowances shall be maintained with seams sewn so no raw edges, run offs, pleats, puckers, or open seams occur. When two or more methods of stitching are given for the same operation, any one may be used.

Straight stitching and restitching on MOLLE II components 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 re-stitching should extend at least ¼ inch into undamaged stitching at each end, when possible.

Recommended sewing machine codes are provided in Table 1.The stitch type, location, thread size and stitches per inch for the various MOLLE II components are listed in Table 2.

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.
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.
BT	Sewing Machine, Industrial: Bar tack; 42 stitch (Local purchase, Recommended Juki; LK 1900A-HS)

Table 2. Stitching and Restitching Specifications.

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	THREAD SIZE
Fighting Load Carrier			
Binding Tape	MD	7 to 11	E
1-Inch MOLLE II Webbing	BT	42 to 48	E
Waist Belt Webbing	BT	42 to 48	E
All Other Components	MD	7 to 11	F
Canteen/General Purpose Pouch			
Binding Tape	MD	7 to 11	E
1-Inch MOLLE II Webbing	BT	42 to 48	E
Waist Belt Webbing	BT	42 to 48	E
All Other Components	MD	7 to 11	F
Grenade Pouches (Hand and Flash Bang)			
Binding Tape	MD	7 to 11	E
1-Inch MOLLE II Webbing	BT	42 to 48	E
Waist Belt Webbing	BT	42 to 48	E
All Other Components	MD	7 to 11	F
M4 Magazine Pouches (Two and Three)			
Binding Tape	MD	7 to 11	E
1-Inch MOLLE II Webbing	BT	42 to 48	E
Waist Belt Webbing	BT	42 to 48	E
All Other Components	MD	7 to 11	F

Table 2. Stitching and Restitching Specifications — Continued.

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	THREAD SIZE
Hydration System			
General	MD	8 to 10	F
Edge Binding	MD	7 to 11	E
Bar Tacks	BT	42 to 48	E
Assault Pack			
General	MD	8 to 10	F
Parachute attaching straps/handle	MD	1 to 11	FF
Binding Tape	MD	7 to 11	E
1-Inch MOLLE II Webbing	BT	42 to 48	E
Waist Pack			
Binding Tape	MD	7 to 11	E
Waist Belt Webbing	BT	42 to 48	E
All Other Components	MD	7 to 11	F
Entrenching Tool Carrier			
Binding Tape	MD	7 to 11	E
1-Inch MOLLE II Webbing	BT	42 to 48	E
Waist Belt Webbing	BT	42 to 48	E
All Other Components	MD	7 to 11	F
Large Rucksack and Sustainment Pouch			
Binding Tape	MD	7 to 11	E
1-Inch MOLLE II Webbing	BT	42 to 48	E
Waist Belt Webbing	BT	42 to 48	E
All Other Components	MD	7 to 11	F
SAW Gunner Set			
Binding Tape	MD	7 to 11	E
1-Inch MOLLE II Webbing	BT	42 to 48	E
All Other Components	MD	7 to 11	F

Table 2. Stitching and Restitching Specifications — Continued.

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	THREAD SIZE
Grenadier Set			
Binding Tape	MD	7 to 11	E
1-Inch MOLLE II Webbing	BT	42 to 48	E
Waist Belt Webbing	BT	42 to 48	E
All Other Components	MD	7 to 11	F
Medic Set			
Binding Tape	MD	7 to 11	E
1-Inch MOLLE II Webbing	BT	42 to 48	E
Waist Belt Webbing	BT	42 to 48	E
All Other Components	MD	7 to 11	F
Additional MOLLE II Components			
Binding Tape	MD	7 to 11	E
1-Inch MOLLE II Webbing	BT	42 to 48	E
Waist Belt Webbing	BT	42 to 48	E
All Other Components	MD	7 to 11	F
Sleep System Carrier (Legacy)			
Box -X	MD	7 to 11	E
All Other Components	MD	7 to 11	F
Patrol Pack (Legacy)			
Binding Tape	MD	7 to 11	E
1-Inch MOLLE II Webbing	BT	42 to 48	E
Waist Belt Webbing	BT	42 to 48	E
All Other Components	MD	7 to 11	F

REPAIR — CONTINUED

Repair Straight Stitching

NOTE

Unless otherwise specified, all stitching on MOLLE II equipment is Type 301 lockstitch.

Ends of a continuous line of stitching shall overlap not less than ½ -inch (1.25 cm).

Thread tensions shall be maintained so that there will be no loose stitching resulting in loose bobbin or top thread or excessively tight stitching resulting in puckering of materials sewn. The lock shall be embedded in the materials sewn.

When thread breaks, skipped stitches, run-offs, or bobbin runouts occur during sewing, stitching shall be repaired by restarting the stitching a minimum of ½ -inch (1.25 cm) back of end of the interrupted stitching.

1. Remove the loose or broken stitching from affected area, ensuring no fabric damage.
2. Start sewing a minimum of ½ inch (1.25 cm) in back of the defective area.
3. Continue sewing over the original stitch pattern, overstitching or backstitching by not less than ½ inch (1.25 cm), except where ends are turned under or caught in other seams or stitching.
4. Except for pre-stitching, thread breaks of two or more consecutive skipped or run-off stitches noted during inspection of the item shall be repaired by over stitching.

END OF TASK

Repair Bar Tacks

NOTE

Unless otherwise specified, all bar tacks shall be 7/8 inch ± 1/16 inch long and 1/8 inch ± 1/32 inch wide, and shall contain 42 – 49 stitches per inch. Stitching on MOLLE II equipment is Type 301-lockstitch.

Thread tensions shall be maintained so that there will be no loose stitching resulting in loose bobbin or top thread or excessively tight stitching resulting in puckering of materials sewn. The lock shall be embedded in the materials sewn.

1. Remove the loose or broken stitching from affected area, ensuring no fabric damage.
2. Mark location of old bar tack.
3. Place a bar tack as indicated by marks.

END OF TASK

REPAIR — CONTINUED

Drawcord Repair

Replace missing or defective drawcords in lengths to match original construction IAW applicable work package.

1. Cut correct length of new draw cord IAW referring work package.
2. Sear raw ends of drawcord.
3. Place knot in one end of drawcord.
4. Route drawcord through appropriate channels or guides in equipment.
5. Place knot in remaining end of drawcord.
6. Replace drawcord locks with types specified in referring work package.

Table 3. Drawcord Lengths.

COMPONENT	APPLICATION	CORD TYPE	LENGTH	TOLERANCE
Main Pack (Legacy)	Main Closure (Outer)	MIL-C-5040, Type II	72 inch	± ¼ inch
Main Pack (Legacy)	Main Closure (Spindrift)	MIL-C-5040, Type IIA	70 inch	± ¼ inch
Patrol Pack	Main Closure	MIL-C-5040, Type IIA	AR	± ¼ inch
Pouch, Canteen	Main Closure	Tan 499, $^{1}/_{8}$ inch diameter	14 inch	± ¼ inch
Carrier, Sleep System	Main Closure	MIL-C-5040, Type IIA	61 inch	± ¼ inch
Pouch, Sustainment	Main Closure	MIL-C-5040, Type IIA	20 inch	± ¼ inch
Rucksack	Main Closure	MIL-C-5040, Type II	80 inch	± ¼ inch
MBITR	Retainer	MIL-C-5040, Type II	AR	± ¼ inch

END OF TASK

Retaining Hardware

Replace damaged, missing or malfunctioning side release buckles, brass loops, double bar buckles, keepers, and slides as necessary.

1. Remove stitching holding damaged hardware, or trim any raveled yarns from torn stitching.
2. Cut appropriate webbing specified in referring work package, to the length indicated.
3. Thread new hardware through webbing.
4. Sew webbing as in original construction using Type 301 stitching and size F thread, and bar tack as appropriate using size E Thread.

END OF TASK

Slide Fasteners

Replace damaged missing, or malfunctioning slide fasteners with serviceable ones . Remove damaged fasteners by carefully cutting off the fastener tape as close as possible to the outer row of stitching holding the slide fastener. Trim any raveled yarns from the remaining fastener tape. Attach a new fastener of appropriate length (see Table 4) using Type 301 stitching and size F thread.

REPAIR — CONTINUED

Table 4. Slide Fastener Lengths.

COMPONENT	APPLICATION	FASTENER WIDTH	LENGTH	TOLERANCE
Medical Pouch	Main Pocket Closure	¾”	14”	+ or – 1/8 Inch
Patrol Pack	Main Pocket Closure	0.435”	AR	+ or – 1/8 Inch
Main Pack (Legacy)	Front Pocket Closure	0.435”	AR	+ or – 1/8 Inch
Main Pack (Legacy)	Bottom Closure	0.435”	AR	+ or – 1/8 Inch
Medic Bag Assembly	Main Pocket Closure	¾”	43”	+ or – 1/8 Inch
Fighting Load Carrier	Belt Closure	11/16”	AR	+ or – 1/8 Inch
Waist Pack	Main Pocket Closure	0.270”	AR	+ or – 1/8 Inch
Assault Pack	Main Pocket Closure	0.435”	AR	+ or – 1/8 Inch
Assault Pack	Front Pocket Closure	0.435”	AR	+ or – 1/8 Inch
Leader’s Pouch	Main Pocket Closure	0.435”	AR	+ or – 1/8 Inch
Sling Bag	Main and Side Closure	0.435”	AR	+ or – 1/8 Inch

END OF TASK

Snap Fasteners

Replace missing, loose, or damaged snap fasteners. Repair damaged area surrounding snap fastener sockets and studs prior to attaching new fasteners. A hole will be pre-punched through the material before inserting the sockets or studs. The pre-punched hole will be smaller than the outside diameter of the fastener barrel, so that the barrel must be forced through the hole. The fastener will be securely clinched without cutting the adjacent material and no more than three splits shall occur in the button or eyelet barrels.

Eyelets

Replace missing, loose, badly split and off center eyelet holes. Remove damaged eyelets and washers by carefully cutting them with diagonal wire cutters, avoiding damage to the webbing. Holes shall be pre-punched or drilled to receive the eyelets and shall be smaller than the outside diameter of the eyelet barrel. Eyelets will be clinched without splitting and shall not damage the adjacent material.

Webbing

When webbing straps are frayed or worn, replace them with material specified in Section III in the appropriate lengths indicated. Sew them as in original construction using Type 301 stitching and size F thread.

REPAIR — CONTINUED

Binding Tape

1. Place marks 1 inch on each side of the damaged area.
2. Measure the distance between marks.
3. Cut a length of new binding tape of the same type as original to the length indicated in step 2.
4. Sear raw ends of binding tape.
5. Place binding tape between marks in the same manner as the original.
6. Turn binding edges under ½ inch.
7. Using a medium duty sewing machine, size E thread of appropriate color, stitch $^{1}/_{8}$ inch from the edge of tape.

END OF TASK

Table 5. Binding Tape Stitching Measurements.

COMPONENT	APPLICATION	WIDTH	LENGTH
Molded Waist Belt	Cover Edging	1”	AR
Molded Waist Belt	Tunnel Edging	1”	AR
Vest, FLC	Load Panel Edging	1”	AR
Vest, FLC	Load Panel Tunnel Edging	1”	AR
Vest, FLC	Pocket Edging	1”	AR
Main Pack (Legacy)	Map Case Polyethylene Edging	1”	AR
Main Pack (Legacy)	Drawcord Tunnel	1”	58”
Main Pack (Legacy)	Spindrift Collar Tunnel Eyelet Reinforcement	1”	3”
Main Pack (Legacy)	Nylon Cloth Collar Assembly	1”	AR
Main Pack (Legacy)	Back Panel And Upper Pocket Edge Lining	1”	AR
Main Pack (Legacy)	Radio Pocket Rim Edging	1”	33”
Main Pack (Legacy)	Radio Pocket Polyethylene Edging	1”	AR
Main Pack (Legacy)	Bandoleer Pouch Edging	1”	AR
Main Pack (Legacy)	Sustainment Pouch Edging	1”	AR
Sleep System Carrier	Polyethylene Edging	1”	AR
MBITR	Rim and Seam Edging	1”	AR
Sleep System Carrier	Spindrift Collar Tunnel Eyelet Reinforcement	1”	3”
Sleep System Carrier	Cover Edging	1”	53”
Pack, Frame	Upper Suspender Pad Edging (2)	1”	16”
Patrol Pack	Front Pocket Closure Flap Edging	1”	35”
Patrol Pack	Foam Pad Pocket Edging	1”	AR
Patrol Pack	Polyethylene Edging	1”	AR
Magazine Pouch Single	Pocket and Closure Flap Edging	1”	AR
Magazine Pouch Double	Pocket and Closure Flap Edging	1”	AR

REPAIR — CONTINUED

Table 5. Binding Tape Stitching Measurements —Continued.

COMPONENT	APPLICATION	WIDTH	LENGTH
40 mm High Explosive Pouch Double	Pouch Edging	1”	AR
40 mm High Explosive Pouch Single	Pouch Side Lining (2)	1"	6 1/2
40 mm High Explosive Pouch Single	Pouch Lower Lining (2)	1"	3"
40 mm High Explosive Pouch Single	Pouch Upper Lining (2)	1"	3"
40 mm Pyrotechnic Pouch Double	Pouch Edging	1”	AR
Hand Grenade Pouch	Closure Flap and Pocket Edging	1”	AR
Pouch Utility	Closure Flap and Pocket Edging	1”	AR
9 mm Magazine Pouch	Closure Flap and Pocket Edging	1”	AR
SAW Gunner Pouch	Closure Flap and Pocket Edging	1”	AR
Utility Belt	Belt End Edging	1”	AR
Pouch, Canteen	Closure Flap Edging	1”	AR
Medical Bag	Map Case Edging	1”	AR
Assault Pack	Polyethylene Edging	1”	AR
Assault Pack	Drain Covers	1”	2 ½”
Assault Pack	Front and Back Pattern Edging	1”	AR
Assault Pack	Bottom, Upper, Inner and Outer Pattern	1”	AR
Assault Pack	Back Pocket Pattern	1”	AR
Assault Pack	Inner Pocket Pattern	1”	AR
Assault Pack	Shoulder Strap Assembly, Pattern Edging	1”	AR
Assault Pack	Pocket Flaps Edging	1”	AR

END OF TASK

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. Note the following:

- Basting and temporary tacking should be made using thread that is of a contrasting color to the material being worked.
- Basting and temporary tacking will be performed using a single strand of size A, nylon thread, or Ticket No. 24/4 cotton thread.
- When basting, do not tie knots at any point in the thread length. Also, the sewing should be made with two stitches per inch.
- Upon completion of a repair, remove the basting or temporary tacking.

REPAIR — CONTINUED

Darning

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:

Machine Darning

1. Using an authorized marking aid of contrasting color, mark a square around the damaged area and ensure the marking is at least ¼ inch back from each edge of the damaged area (Figure 1).

2. Darn the damaged area by sewing the material in a back and forth manner, using size A or E nylon thread.

3. Turn the material and stitch back and forth across the stitching made in step 2, until the hole or tear is completely darned.

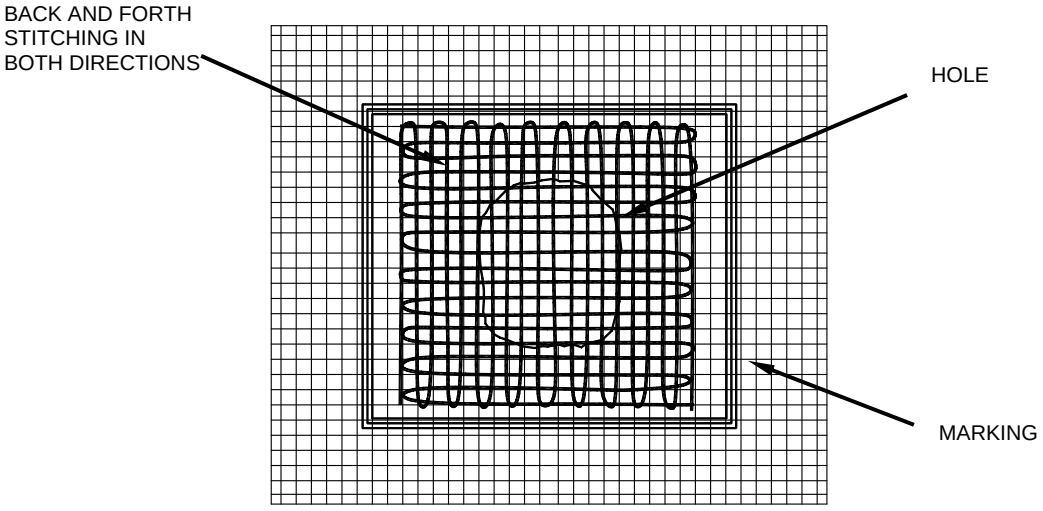


Figure 1. Machine Darning.

END OF TASK

REPAIR — CONTINUED

Hand Darning

When repair of a hole or tear is made by hand darning (Figure 2), the darn should match the original weave of the damaged material as closely as possible. Hand darning will be performed as follows:

1. Using an authorized marking aid of contrasting color, mark a square around the damaged area and ensure the marking is at least ¼ inch back from each edge of the damaged area.

2. 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.

3. Turn the material and weave the needle and thread back and forth across the stitching made in step 2 until the hole is completely darned.

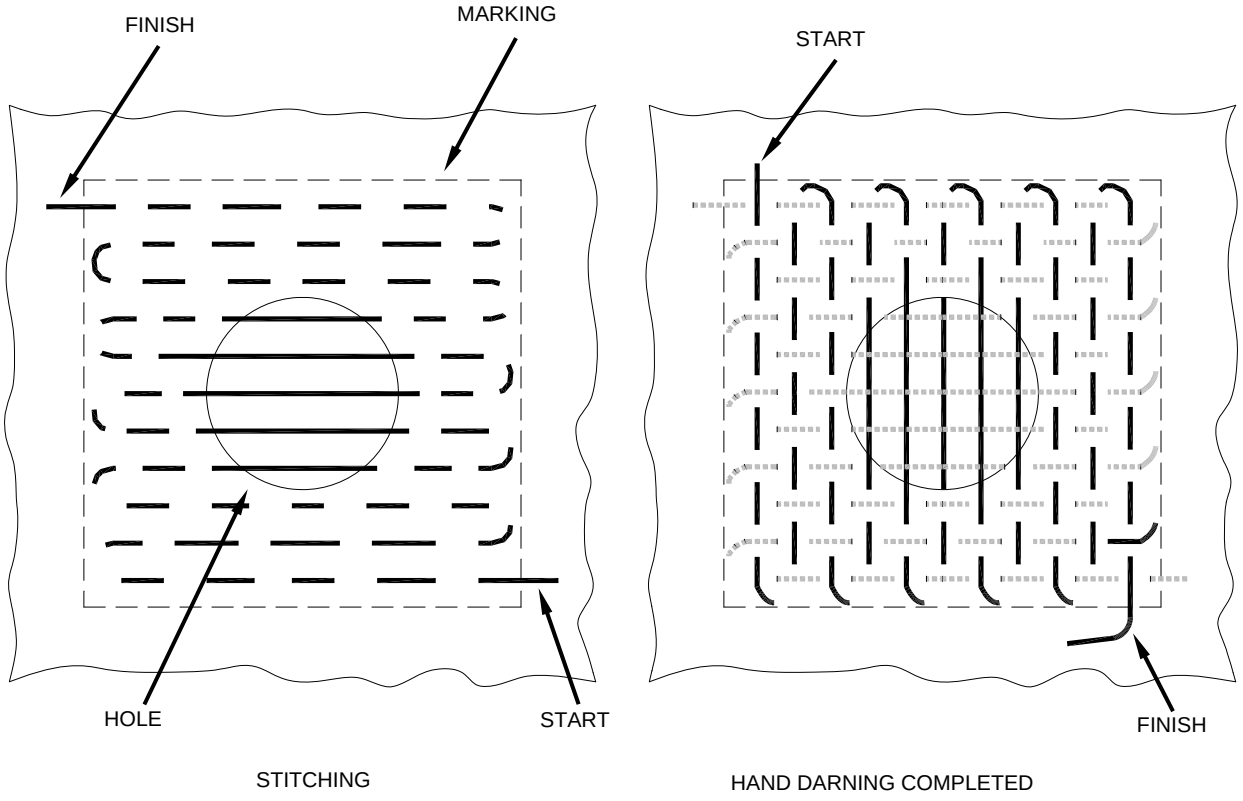


Figure 2. Hand Darning.

END OF TASK

REPAIR — CONTINUED

Box X Stitching Pattern

NOTE

Use the maintenance instructions related to the repair or replacement being conducted for required thread and stitching requirements.

Number 1 in the drawing is the top of the Box X stitch pattern.

Use the following diagram (Figure 3) to complete the Box X stitch pattern. Start the Box X at the 1 position and follow the numbers in sequence finishing with a ½-inch locking stitch.

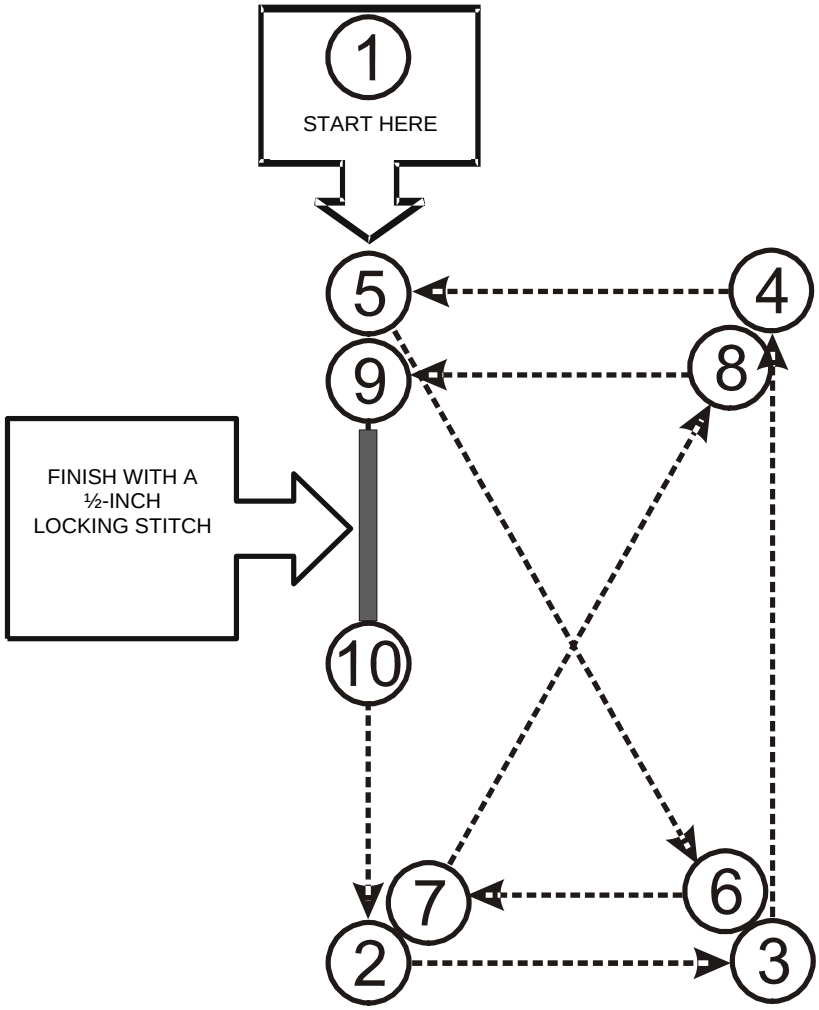


Figure 3. Box X Stitching Pattern with Locking Stitch.

END OF TASK

REPAIR — CONTINUED

Tying an Overhand Knot

1. Hold rope out parallel to the ground and cross it over to form a loop.
2. Wrap the right-hand end through the loop. Pull to tighten (Figure 4).

Figure 4. Overhand Knot.

END OF TASK

Tying a Square Knot

1. Make an "X" with the rope ends, with the right end on top, and tie an overhand knot, twisting the right end around the left end (Figure 5).

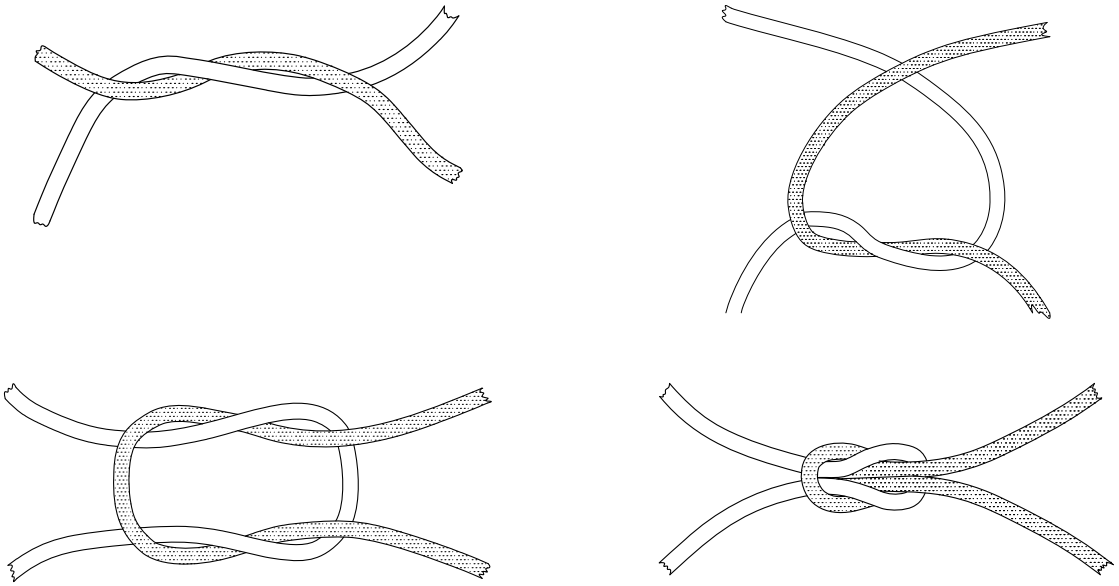


Figure 5. Square Knot.

2. With the "new" right and left, put the left over the right, and tie another overhand knot.

NOTE

The knot should look very neat — like a square — essentially looking like a loop stuck in another loop.

3. Pull tightly.

END OF TASK

REPAIR — CONTINUED

Searing

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 MOLLE II system, will normally be heat-seared to prevent the material from fraying or unraveling.

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 (heated blade cutter)
until the nylon has melted sufficiently. Avoid forming a sharp edge or lumped effect on the melted end.

END OF TASK

END OF WORK PACKAGE

CHAPTER 5

LEGACY EQUIPMENT
FOR
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II

SUSTAINMENT MAINTENANCE
PATROL PACK AND SLEEP SYSTEM CARRIER
SERVICE, INSPECT, REPAIR, REPLACE

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0041, Table 2, Item 2)
Ruler, Tab, Metal, 16-inch (WP 0041, Table 2, Item 3)
Sewing Machine, Industrial Bar Tack (WP 0041, Table 2, Item 4)
Sewing Machine, Medium Duty (WP 0041, Table 2, Item 5)
Shears, Tailors, 12-inch (WP 0041, Table 2, Item 6)
Stitch Removal Tool (WP 0041, Table 2, Item 7)
Tape, Measuring (WP 0041, Table 2, Item 8)

Equipment Condition

Lay out on flat surface or other suitable area.

Personnel Required

Non-MOS specific (1)

References

FM 10-16
WP 0019
WP 0020
WP 0032

Materials/Parts

Fastener Tape, Hook, A-A-55126, Type II, Class 1,1 inch (WP 0036, Item 40)
Fastener Tape, Hook, A-A-55126, Type II, Class 1,2 inch (WP 0036, Item 42)
Fastener Tape, Loop, A-A-55126, Type II, Class 1,1 inch (WP 0036, Item 45)
Fastener Tape, Loop, A-A-55126, Type II, Class 1,2 inch (WP 0036, Item 47)
Pencil, China Marker, Yellow, A-A-87 (WP 0042,Item 2)
Slide Fastener, VFGOL (WP 0036, Item 62)
Tape, Textile (Binding Tape), 1 inch (WP 0036, Item 66)
Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504 (WP 0042, Item 4)
Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504 (WP 0042, Item 5)
Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504 (WP 0042, Item 6)
Webbing, as specified (WP 0036, Items 67-80)

SERVICE

Clean the equipment IAW WP 0019, Cleaning and Drying.

INSPECT

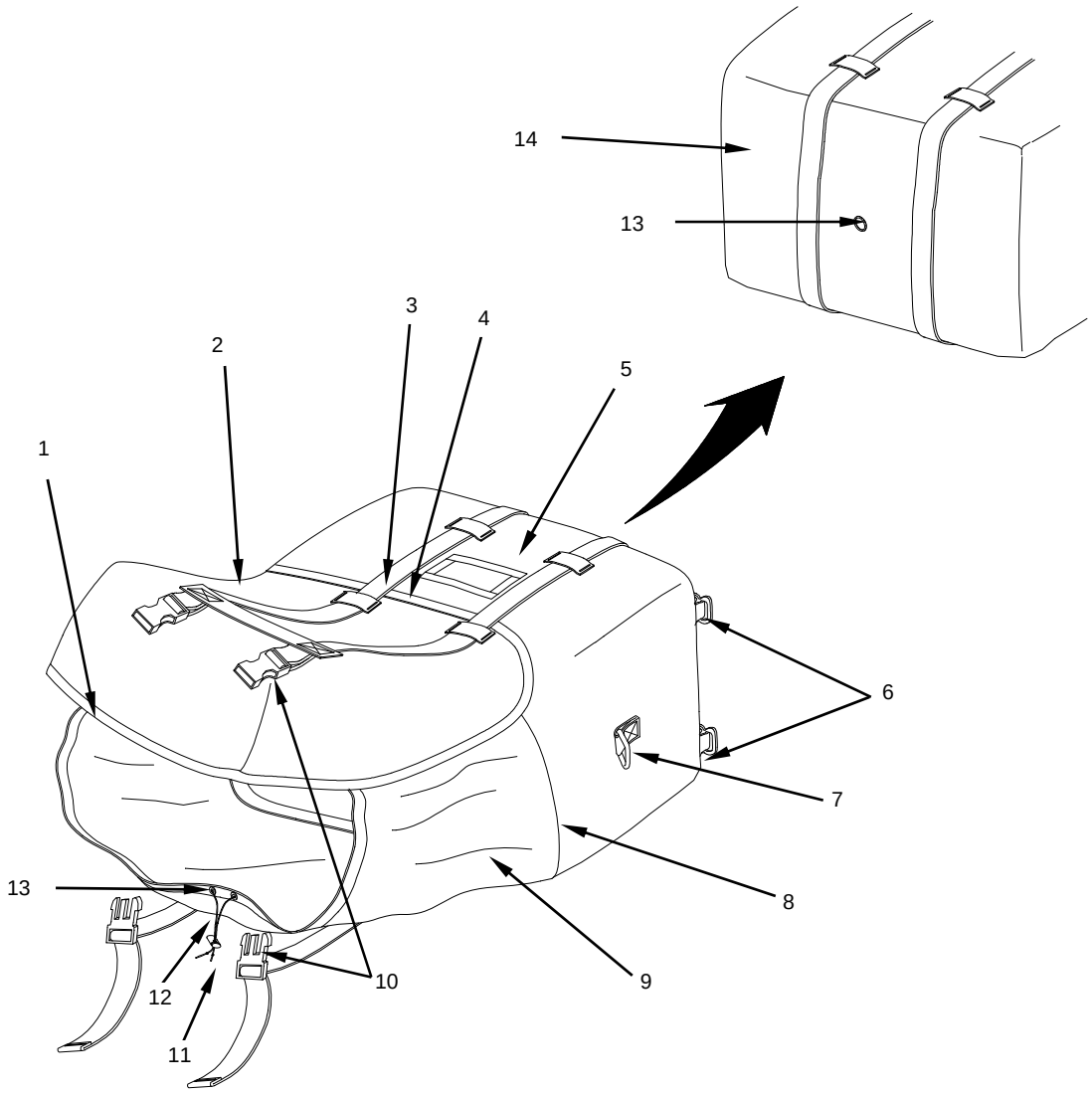
Conduct a preliminary examination IAW WP 0020 after components have been laundered as described in WP 0019. Discard decayed items. Test seems by grasping the item with both hands and pulling at right angles to the seams. Mark areas to be repaired. Cross out nonspecific and personal markings.

REPAIR

Prior to repair operations, each component of the Modular Lightweight Load-Carrying Equipment (MOLLE) II system shall be inspected by qualified personnel to determine the extent of the repair necessary. With the exception of the replacement of hardware items furnished the user as a repair kit, all repairs to these components will be accomplished at the CIF or approved facility, using FM 10-16 as a general guide.

Use Figures 1 and 2 to determine the location and construction of equipment in repair procedures.

REPAIR — CONTINUED

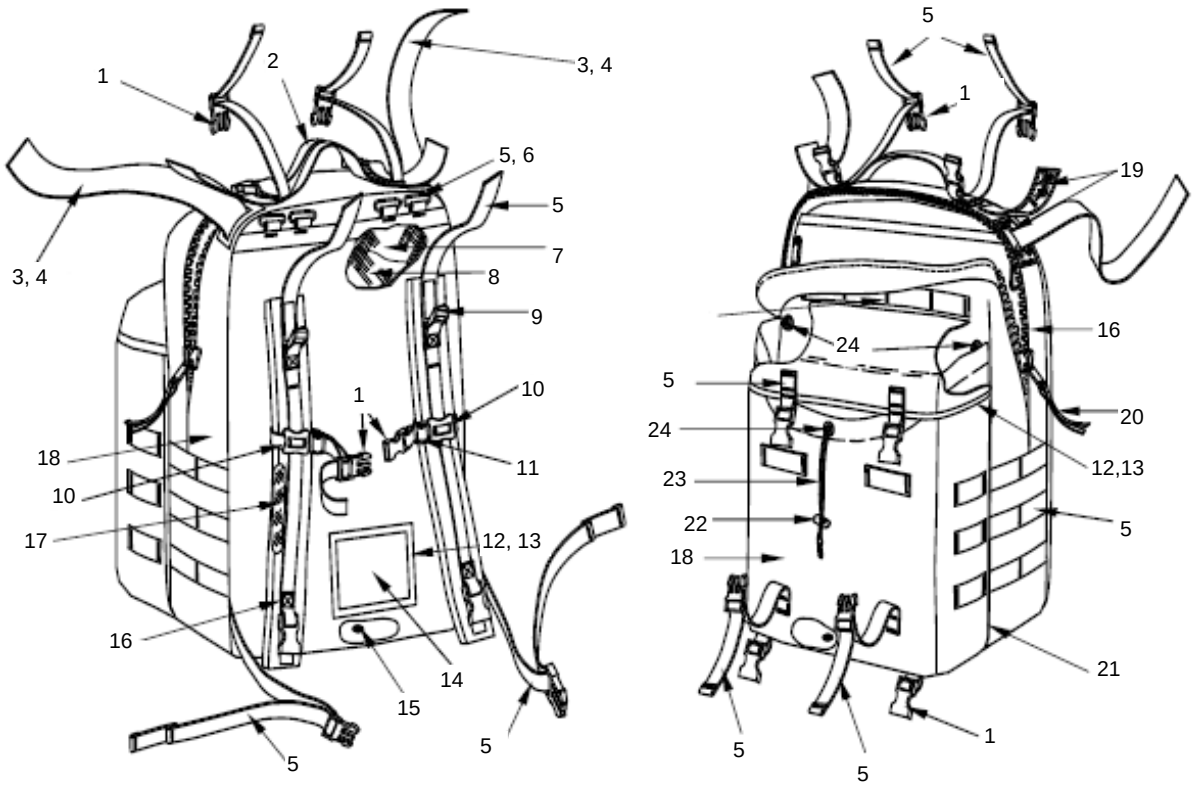


Legend

1. Binding Tape, 1-inch
2. Webbing, 1 ½-inch
3. Polyethylene
4. D-Rind, 1-inch
5. Nylon Cloth
6. Cord Lock
7. Eyelet
8. Thread, Size E
9. Webbing, 1-inch
10. Slide Buckle
11. Thread, Size F
12. Side Release Buckle, 1-inch
13. Draw Cord
14. Textured Nylon Duck

Figure 1. Sleep System Carrier.

REPAIR — CONTINUED



Legend

1. Side Release Buckle, 1-inch
2. Webbing, 2-inch
3. Webbing, $1^{23}/_{32}$-inch
4. Thread, Size FF
5. Webbing, 1-inch
6. Metal Loop, 1-inch
7. Foam, ¼-inch
8. Plastic Shield
9. Buckle, double-bar, 1-inch
10. Buckle, Sternum, 1-inch
11. Buckle, 1-inch
12. Binding Tape, 1-inch
13. Thread, Size E
14. Polyethylene, 0.020-inch
15. Grommet/Washer
16. Slide Fastener
17. Foam, ½-inch
18. Textured Nylon Duck
19. Hook and Pile Fastener
20. Braid $^{23}/_{32}$-inch
21. Thread, Size F
22. Cord Lock
23. Nylon Cord
24. Eyelet, Washer

Figure 2. Patrol Pack (Front and Rear View).

REPAIR — CONTINUED

Sleep System Carrier Repair

Restitching

1. Use Figure 1 to identify component to be repaired.
2. Use Table 1 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch all 301-lockstitch seams.
4. Trim running ends of thread.

Table 1. Sleep System Carrier Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE	STITCHES PER INCH	THREAD SIZE
Fighting Load Carrier			
Sleep System Carrier			
Box-X	Medium Duty	7 to 11	E
All Other Components	Medium Duty	7 to 11	F

END OF TASK

Binding Tape

1. Place marks 1 inch on each side of the damaged area.
2. Measure the distance between marks.
3. Cut a length of new binding tape of the same type as original to the length indicated in step 2.
4. Sear raw ends of binding tape.
5. Place binding tape between marks in the same manner as the original.
6. Turn binding edges under ½ inch.
7. Using a medium duty sewing machine, size E thread of appropriate color, stitch $^{1}/_{8}$ inch from the edge of tape.

Table 2. Sleep System Binding Tape Measurements.

COMPONENT	APPLICATION	WIDTH	LENGTH
Sleep System Carrier	Polyethylene Edging	1”	AR
Sleep System Carrier	Spindrift Collar Tunnel Eyelet Reinforcement	1”	3”
Sleep System Carrier	Cover Edging	1”	53”

END OF TASK

REPAIR — CONTINUED

Patrol Pack Repair

Restitching

1. Use Figure 2 to identify component to be repaired.
2. Use Table 3 to determine specific sewing machine, thread size, and stitching requirements.
3. Overstitch or backstitch by ½ inch for all 301-lockstitch seams.
4. Trim running ends of thread.

Table 3. Patrol Pack Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	THREAD SIZE
Fighting Load Carrier			
Patrol Pack			
Binding Tape	Medium Duty	7 to 11	E
1-Inch MOLLE II Webbing	Bar Tack	42 to 48	E
Waist Belt Webbing	Bar Tack	42 to 48	E
All Other Components	Medium Duty	7 to 11	F

Drawcord Repair

1. Cut a 14-inch length (± ¼ inch) of 1/8-inch, tan 499 cord.
2. Sear raw ends of cord.
3. Place an overhand knot in one end of cord.
4. Route cord through appropriate channels or guides in equipment, ensuring the cord goes through the barrel lock.
5. Place an overhand knot in remaining end of cord.

END OF TASK

Hook and Pile Tape

1. Remove faulty hook and pile tape from pocket closures. Do not damage the fabric.
2. Measure and cut a new length of the appropriate width hook and pile tape IAW Table 4.
3. Using a medium duty sewing machine, size F thread of the appropriate color, sew new hook and pile tape to pocket closure 1/8 inch from the edge, overstitching by ½ inch.
4. Trim running ends of thread.

REPAIR — CONTINUED

Table 4. Patrol Pack Hook and Pile Tape Requirements.

COMPONENT	APPLICATION	TYPE	WIDTH	LENGTH	TOLERANCE
Canteen/General Purpose Pouch	Side Pocket Closure	Hook and Pile	1”	3”	+ or − $^{1}/_{8}$ inch
M4 Two-Magazine Pocket	Pocket Closures	Hook	2”	3”	+ or − $^{1}/_{8}$ inch
M4 Two-Magazine Pocket	Pocket Closures	Pile	2”	5“	+ or − $^{1}/_{8}$ inch

END OF TASK

Binding Tape

1. Place marks 1 inch on each side of the damaged area.
2. Measure the distance between marks.
3. Cut a length of new binding tape of the same type as original to the length indicated in step 2.
4. Sear raw ends of binding tape.
5. Place binding tape between marks in the same manner as the original.
6. Turn binding edges under ½ inch.
7. Using a medium duty sewing machine, size E thread of appropriate color, stitch $^{1}/_{8}$ inch from the edge of tape.

Table 5. Patrol Pack Binding Tape Requirements.

COMPONENT	APPLICATION	WIDTH	LENGTH
Hand Grenade Pouch	Closure Flap and Pocket Edging	1”	AR
Pouch Utility	Closure Flap and Pocket Edging	1”	AR
Pouch, Canteen	Closure Flap Edging	1”	AR
M4 Two-Magazine	Flap and Pocket Edging	1”	AR

END OF TASK

Snap Fastener Replacement

Replace snap fasteners using replacement procedures in WP 0032.

END OF TASK

Eyelet Replacement

Replace eyelets using replacement procedures in WP 0032.

END OF TASK

REPLACE

Replace Patrol Pack and Sleep System Carrier with serviceable items from stock.

END OF TASK

END OF WORK PACKAGE

CHAPTER 6

PARTS INFORMATION
FOR
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II

FIELD AND SUSTAINMENT MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
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 field maintenance and sustainment maintenance for the Modular Lightweight Load-Carrying Equipment (MOLLE) II. 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 at the end of the individual work packages. 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 two cross-reference 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

SMR CODE (Column (2)). The SMR code containing supply/requisitioning information, maintenance level authorization criteria, and disposition instruction, as shown in the following breakout:

Table 1. SMR Code.

Source Code	Maintenance Code		Recoverability Code
XX	XX		X
1st two positions:	3rd position:	4th position:	5th position:
How to get an item.	Who can install, replace, or use the item.	Who can do complete repair* on the item.	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.

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES — CONTINUED

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:

Source Code	Application/Explanation
PA PB PC PD PE PF PG PH PR PZ	**NOTE** Items coded PC are subject to deterioration. 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 third position of the SMR code.
KD KF KB	Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance level indicated in the third position of the SMR code. The complete kit must be requisitioned and applied.
MF-Made at field Made at below depot/sustainment level ML-Made at SRA MD-Made at depot MG-Navy only	Items with these codes are not to be requisitioned/ requested individually. They must be made from bulk material which is identified by the part number in the DESCRIPTION AND MH-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 third 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.
AF-Assembled by field AH-Assembled by below depot/sustainment level AL-Assembled by SRA AD-Assembled by depot AG-Navy only	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 third 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 at top of next page.)
XB	If an item is not available from salvage, order it using the CAGEC and part number.
XC	Installation drawings, diagrams, instruction sheets, field service drawings; identified by manufacturer's part number.
XD	Item is not stocked. Order an XD-coded item through Local purchase or normal supply channels using the CAGEC and part number given, if no NSN is available.

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES — CONTINUED

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:

Maintenance Code	Application/Explanation
F -	Field maintenance can remove, replace, and use the item.
H -	Below Depot Sustainment maintenance can remove, replace, and use the item.
L -	Specialized repair activity can remove, replace, and use the item.
G -	Afloat and ashore intermediate maintenance can remove, replace, and use the item. (Navy only)
K -	Contractor facility can remove, replace, and use the item.
Z -	Item is not authorized to be removed, replaced, or used at any maintenance level.
D -	Depot can remove, replace, and use the item.

*NOTE - Army may use C in the third position. However, for joint service publications, Army will use O.

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.

Maintenance Code	Application/Explanation
F -	Field is the lowest level that can do complete repair of the item.
H -	Below Depot Sustainment is the lowest level that can do complete repair of the item.
L -	Specialized repair activity (enter specialized repair activity designator) 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.
G -	Both afloat and ashore intermediate levels are capable of complete repair of item. (Navy only)
K -	Complete repair is done at contractor facility
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.

EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES — CONTINUED

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:

Recoverability Code	Application/Explanation
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.
F -	Reparable item. When uneconomically reparable, condemn and dispose of the item at the field level.
H -	Reparable item. When uneconomically reparable, condemn and dispose of the item at the below depot sustainment 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.
G -	Field level reparable item. Condemn and dispose at either afloat or ashore intermediate levels. (Navy only)
K -	Reparable item. Condemnation and disposal to be performed at contractor facility.

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 part number 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. Part numbers 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. NSNs in this index are listed in National Item Identification Number (NIIN) sequence.

STOCK NUMBER Column. This column lists the NSN in NIIN sequence. The NIIN consists of the last nine digits of the NSN. 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.

For example, if the NSN is 5385-01-574-1476, the NIIN is 01-574-1476.

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. Part numbers 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 part number 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. UOCs will be identified in the RPSTL , which will be published in Change 1 of this manual.

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 the applicable maintenance work package.

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 / Part Number (P/N) Index work packages and the bulk material list in the repair parts list work package.

Illustrations List. The illustrations in this RPSTL contain field authorized items. The tabular list in the repair parts list work package contains only those parts coded "F" in the third position of the SMR code, therefore, there may be a break in the item number sequence.

HOW TO LOCATE REPAIR PARTS

1. When NSNs or Part Numbers 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 Part Number Is Known.

First. If you have the part number and not the NSN, look in the PART NUMBER column of the part number 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.

END OF WORK PACKAGE

FIELD AND SUSTAINMENT MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)

The Repair Parts and Special Tools List for the Modular Lightweight Load-Carrying Equipment (MOLLE) II system will be published in Change 1.

FIELD AND SUSTAINMENT MAINTENANCE

MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II

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 MATERIAL	
					FIG. BULK	
1	PAFZZ	8465-01-465-2096	3T951	R00475	Bladder, MOLLE	EA
2			9L141	MIL-B-371	Braid Tubular (Type VII, Class 2)	YD
3			9L141	MIL-B-371	Braid Webbing (1 1/32 inch)	YD
4			3Z8V4	154-2100	Buckle, Tension Locke	EA
5			3Z8V4	102-5050-5674	Buckle, Center Release (2 inch)	EA
6			3Z8V4	01004-20	Buckle, Double Bar (1 inch)	EA
7			3Z8V4	104-0150-5674	Buckle, Ladderlock (1 1/2 inch)	EA
8			3Z8V4	104-3100-5674	Buckle, Ladderlock (1 inch)	EA
9			2M569	1584	Buckle, Quick Release	EA
10			3Z8V4	101-3150-5614	Buckle, Side Release (1 1/2 inch)	EA
11			3Z8V4	101-5150-5674	Buckle, Side Release (1 inch)	EA
12			3Z8V4	SRGT 101-4100-5674	Buckle, Side Release (1 inch)	EA
13			3Z8V4	101-0075-5674	Buckle, Side Release (3/4 inch)	EA
14			3Z8V4	101-6100-5674	Buckle, Side Release (Canteen/General)	EA
15			3Z8V4	101-1150-5614	Buckle, Side Release (FLC, 1 1/2 inch)	EA
16			22969	5425	Buckle, Single Bar	EA
17			3Z8V4	0890-22	Buckle, Slide (1 inch)	EA
18			3Z8V4	101-4100-5674	Buckle, Slide (Kit, 1 inch)	EA

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
19			3Z8V4	SS25T-5674	Buckle, Sternum Strap (1 inch)	EA
20			3Z8V4	646-2025-5674	Buckle, Sternum Strap Adjuster (1 inch)	EA
21			1BP15	MIL-C-43734	Cloth, Duck (Nylon 12 oz)	YD
22			82125	MIL-C-7219	Cloth, Duck (Nylon 7.25 oz)	YD
23			1BP15	mil-C-43734	Cloth, Duck Textured (Nylon 12 oz)	YD
24			0HY43	Mil-C-8061	Cloth, Knit (Nylon)	YD
25			9L141	2831	Cord, Elastic (1/8 inch)	YD
26			83168	22111	Cord, Elastic, Coiled Lace	YD
27			9L141	Mil-C-5040	Cord, Flat (Type IIA)	YD
28			9L141	Mil-C-5040G	Cord, Flat (Type IIA)	EA
29			3Z8V4	350-2000-5674	Cord, Lock, Single	EA
30			9L141	Mil-C-5040	Cord, Round (Type II)	EA
31			3Z8V4	110-0100-5674	D-Ring, Acetal (1 1/2 inch)	EA
32			3Z8V4	110-0100-5674	D-Ring, Acetal (1 inch)	EA
33			02768	01047-20	D-Ring, Metal (1 inch)	EA
34			57771	MIL-E-20652/1B	Eyelet (ABE-131)	EA
35			57771	MIL-E-20652/1B	Eyelet (Aluminum, Black)	EA
36			57771	MIL-E-20652/1B	Eyelet (BBE-114) and Washer (BBW-101)	EA
37			57771	MIL-F-10884	Eyelet, Stud (ABE 131)	
38			07MZ0	5000, 5707, 5709	Fastener (1 inch, 3 hole)	EA
39			8T804	A-A-55126	Fastener Tape, Hook (Type II, Class 1, 5/8 inch)	YD

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
40			8T804	A-A-55126	Fastener Tape, Hook (Type II, Class 1, 1 inch)	YD
41			8T804	A-A-55126	Fastener Tape, Hook (Type II, Class 1, 1 ½ inch)	YD
42			8T804	A-A-55126	Fastener Tape, Hook (Type II, Class 1, 2 inch)	YD
43			8T804	A-A-55126	Fastener Tape, Hook (Type II, Class 1, 4 inch)	YD
44			8T804	A-A-55126	Fastener Tape, Loop (Type II, Class 1, 5/8 inch)	YD
45			8T804	A-A-55126	Fastener Tape, Loop (Type II, Class 1, 1 inch)	YD
46			8T804	A-A-55126	Fastener Tape, Loop (Type II, Class 1, 1 ½ inch)	YD
47			8T804	A-A-55126	Fastener Tape, Loop (Type II, Class 1, 2 inch)	YD
48			8T804	A-A-55126	Fastener Tape, Loop (Type II, Class 1, 4 inch)	YD
49			45368	ST-1522CL-85	Film, Clear (Map Case)	SH
50			06XU5	MIL-R-6130	Foam, Pad (Black, 1/2 inch)	EA
51			06XU5	MIL-R-6130	Foam, Pad (Black, 1/4 inch)	EA
52			06XU5	MIL-R-6130	Foam, Pad (Black, 1/8 inch)	EA
53			2M569	1602	Frame	EA
54			2M569	1603	Frame, Pack	EA
55			57771	MIL-G-16491	Grommet (Type III, Class 3)	EA
56			57771	MIL-G-16491	Grommet and Washer (Type III, Class 3)	EA
57			02768	01004-20	Metal Loop (1 inch)	EA
58			55900	A	Molded Waistbelt	
59			02RS6	MIL-C-43128	Plain Weave (Nylon Fabric)	YD
60			1GBA3	L-P-378	Polyethylene (.20 thick)	SH

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
61			1GBA3	L-P-378	Polyethylene (.30 thick)	SH
62			8M431	VFGOL-106	Slide Fastener	EA
63			57771	MIL-F-10884	Snap Fastener (Stud/eyelet)	EA
64			57771	MIL-F-10884	Snap Fastener, (Button/Socket)	EA
65			57771	MIL-F-10884F	Snap Fastener, (Button/Socket)	EA
66			85810	MIL-T-5038	Tape, Textile (Binding tape 1 inch)	YD
67			1S3D4	MIL-W-5664D	Webbing, Elastic (Nylon 1 inch)	YD
68			1S3D4	MIL-W-5664	Webbing, Elastic (Nylon, 1 1/2 inch)	YD
69			1S3D4	MIL-W-5664	Webbing, Elastic (Nylon, Type II)	YD
70			85810	MIL-W-4088	Webbing, Textile (Nylon 1 23/32 inch)	YD
71			85810	MIL-W-43668	Webbing, Textile (Nylon 1 inch)	YD
72			85810	A-A-55301	Webbing, Textile (Nylon 1 inch, Class III)	YD
73			85810	MIL-W-4088	Webbing, Textile (Nylon 2 1/4 inch)	YD
74			85810	MIL-W-17337	Webbing, Textile (Nylon 2 inch)	YD
75			85810	MIL-W-4088	Webbing, Textile (Nylon 3 inch, Class IIIA)	YD
76			85810	MIL-W-4088	Webbing, Textile (Nylon 3/4 inch)	YD
77			85810	MIL-W-4088	Webbing, Textile (Nylon 9/16 inch, Type 1)	YD
78			85810	MIL-W-4088	Webbing, Textile (Nylon, Type VIIIC)	YD
79			85810	MIL-W-17337	Webbing, Textile ((Nylon 1 1/2 inch)	YD
80			85810	MIL-W-17337	Webbing, Textile (Nylon 3 1/2 inch)	YD

END OF FIGURE

FIELD AND SUSTAINMENT MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIG.	ITEM

NOTE

The National Stock Number Index will be updated in Change 1.

FIELD AND SUSTAINMENT MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
PART NUMBER INDEX

PART NUMBER	FIG.	ITEM
A-A-55126	99	39
	99	40
	99	41
	99	42
	99	43
	99	44
	99	45
	99	46
	99	47
	99	48
	99	72
L-P-378	99	60
	99	61
MIL-B-371	99	2
	99	3
MIL-C-43128	99	59
MIL-C-43734	99	21
	99	23
MIL-C-5040	99	27
	99	30
MIL-C-5040G	99	28
MIL-C-7219	99	22
MIL-C-8061	99	24
MIL-E-20652/1B	99	34
	99	35
	99	36
MIL-F-10884	99	37
	99	63
	99	64
MIL-F-10884F	99	65
MIL-G-16491	99	55
	99	56

PART NUMBER	FIG.	ITEM
MIL-R-6130	99	50
	99	51
	99	52
MIL-T-5038	99	66
MIL-W-17337	99	74
	99	79
	99	80
MIL-W-4088	99	70
	99	73
	99	75
	99	76
	99	77
	99	78
MIL-W-43668	99	71
MIL-W-5664	99	68
	99	69
MIL-W-5664D	99	67
R00475	99	1
SRGT 101-4100-5674	99	12
SS25T-5674	99	19
ST-1522CL-85	99	49
1584	99	9
1602	99	53
1603	99	54
2831	99	25
5425	99	16
22111	99	26
01004-20	99	57
	99	6
01047-20	99	33
0890-22	99	17
101-0075-5674	99	13

PART NUMBER	FIG.	ITEM
101-1150-5614	99	15
	99	10
101-4100-5674	99	18
101-5150-5674	99	11
101-6100-5674	99	14
102-5050-5674	99	5
104-0150-5674	99	7
104-3100-5674	99	8
110-0100-5674	99	31
	99	32
154-2100	99	4
350-2000-5674	99	29
5000, 5707, 5709	99	38
646-2025-5674	99	20
0890-22	99	17
101-0075-5674	99	13

CHAPTER 7

SUPPORTING INFORMATION
FOR
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II

FIELD AND SUSTAINMENT MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
REFERENCES

SCOPE

This Work Package lists all field manuals, forms, technical manuals, and miscellaneous publications referenced in manual.

ARMY REGULATIONS

AR 700-138	Army Logistics Readiness and Sustainability

DA PAMPHLETS

DA PAM 25-33	User's Guide for Army Publications and Forms
DA PAM 750-8	The Army Maintenance Management System (TAMMS) User's Manual
DA PAM 738-751	Army Logistics Readiness and Sustainability

FIELD MANUALS

FM 4-25.11	First Aid for Soldiers
FM 10-16	General Fabric Repair

FORMS

DA Form 12-R	Army Publishing Directorate Order Form
DA Form 2028	Recommended Changes to Publications and Blank Forms
DA form 2404	Equipment Inspection and Maintenance Worksheet
SF361	Transportation Discrepancy Report
SF 368	Product Quality Deficiency Report (PQDR)

TECHNICAL BULLETINS

TB 43-0002-27	Maintenance Expenditure Limits for FSC Groups 72, 83, and 84; (Classes 7210, 8340, and 8400) (24X microfiche)

TECHNICAL MANUALS

TM 10-8465-236-10	Operator's Manual for Modular Lightweight Load-Carrying Equipment (MOLLE) II

COMMON TABLES OF ALLOWANCES

CTA 50-970	Expendable/ Durable Items (Except Medical, Class V Repair Parts, and Heraldic Items)
CTA 50-909	Field Garrison Furnishings and Equipment
CTA 8-100	Army Medical Department Expendable/Durable Items

END OF WORK PACKAGE

FIELD AND SUSTAINMENT MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
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 System concept.

This 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 subcolumns, Crew (C) and Maintainer (F).
Sustainment – includes two subcolumns, Below Depot (H) and Depot (D)

The maintenance to be performed at field and sustainment levels is described as follows:

1. Crew maintenance. The responsibility of a using organization to perform maintenance on its assigned equipment. It normally consists of inspecting, servicing, lubricating, adjusting, and replacing parts, minor assemblies, and subassemblies. The replace function for this level of maintenance is indicated by the letter "C" in the third position of the SMR code. A "C" appearing in the fourth position of the SMR code indicates complete repair is possible at the crew maintenance level.

2. Maintainer maintenance. Maintenance accomplished on a component, accessory, assembly, subassembly, plug-in unit, or other portion either on the system or after it is removed. The replace function for this level of maintenance is indicated by the letter "F" appearing in the third position of the SMR code. An "F" appearing in the fourth position of the SMR code indicates complete repair is possible at the field maintenance level. Items are returned to the user after maintenance is performed at this level.

3. Below depot sustainment. Maintenance accomplished on a component, accessory, assembly, subassembly, plug-in unit, or other portion either on the system or after it is removed. The replace function for this level of maintenance is indicated by the letter "H" appearing in the third position of the SMR code. An "H" appearing in the fourth position of the SMR code indicates complete repair is possible at the below depot sustainment maintenance level. Items are returned to the supply system after maintenance is performed at this level.

4. Depot sustainment . Maintenance accomplished on a component, accessory, assembly, subassembly, plug-in unit, or other portion either on the system or after it is removed. The replace function for this level of maintenance is indicated by the letter "D" or "K" appearing in the third position of the SMR code. Depot sustainment maintenance can be performed by either depot personnel or contractor personnel. A "D" or "K" appearing in the fourth position of the SMR code indicates complete repair is possible at the depot sustainment maintenance level. Items are returned to the supply systems after maintenance is performed at this level.

   The tools and test equipment requirements table (immediately following the MAC) lists the tools and test equipment (both special tools and common tool sets) required for each maintenance function as referenced from the MAC.

   The remarks table (immediately following the tools and test equipment requirements) contains supplemental instructions and explanatory notes for a particular maintenance function.

INTRODUCTION — CONTINUED

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 gaugings 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 from 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 (ammunition only). 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 material 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 man hours in whole hours or decimals) in the appropriate subcolumn. This work time figure represents the active time required to perform that maintenance function at the indicated level of maintenance. If the number or complexity of the tasks within the listed maintenance function varies at different maintenance levels, appropriate work time figures are to be shown for each level. The work time figure represents the average time required to restore an item (assembly, subassembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time (including any necessary disassembly/assembly time), troubleshooting/fault location time, and quality assurance time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the MAC. The symbol designations for the various maintenance levels are as follows:

Field:
C Crew maintenance
F Maintainer maintenance

Sustainment:
L Specialized Repair Activity (SRA)
H Below depot 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 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.

FIELD AND SUSTAINMENT MAINTENANCE
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
MAINTENANCE ALLOCATION CHART (MAC)

Table 1. MAC for Modular Lightweight Load-Carrying Equipment (MOLLE) II.

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL				(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT			
			CREW	MAINTAINER	BELOW DEPOT	DEPOT		
			C	F	H	D		
00	MOLLE II							
01	RIFLEMAN SET							
0101	SET, FIGHTING LOAD CARRIER	Service Inspect Repair Replace			0.2 0.2		1	A
010101	FIGHTING LOAD CARRIER (BUCKLE OR SLIDE FASTENER)	Repair Replace		0.1 0.1	0.2 0.1		2, 3, 4, 5, 6, 7, 8	B, C
010102	POUCH, CANTEEN, GENERAL PURPOSE	Repair Replace		0.1 0.1	0.1 0.1		2, 3, 4, 5, 6, 7, 8	B, C
010103	POUCH, HAND GRENADE	Repair Replace		0.1 0.1	0.1 0.1		2, 3, 4, 5, 6, 7, 8	B, C
010104	POUCH, M4 TWO MAGAZINE	Repair Replace		0.1 0.1	0.1 0.1		2, 3, 4, 5, 6, 7, 8	B, C
010105	POUCH, M4 THREE MAGAZINE SIDE BY SIDE	Repair Replace		0.1 0.1	0.1 0.1		2, 3, 4, 5, 6, 7, 8	B, C
0102	HYDRATION SYSTEM	Service Inspect Replace			0.1 0.1		1	A
010201	CARRIER, HYDRATION SYSTEM	Repair Replace		0.1 0.1	0.1 0.1		2, 3, 4, 5, 6, 7, 8	B, C
010202	BLADDER, HYDRATION SYSTEM	Replace		0.1	0.1			
010203	DRINK TUBE, HYDRATION SYSTEM	Replace		0.1	0.1			

Table 1. MAC for Modular Lightweight Load-Carrying Equipment (MOLLE) II — Continued.

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL				(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT			
			CREW	MAINTAINER	BELOW DEPOT	DEPOT		
			C	F	H	D		
010204	BITE VALVE, HYDRATION SYSTEM	Replace		0.1	0.1			
0103	ASSAULT PACK	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.2		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
0104	WAIST PACK	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.2		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
0105	CARRIER, ENTRENCHING TOOL	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
0106	BANDOLEER, AMMUNITION POUCHES 6 MAGAZINE	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
0107	FLASH BANG GRENADE POUCH	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
0108	FIELD PACK, LARGE SET	Service			0.1		1	A
		Inspect			0.1			
		Repair						B, C
		Replace						
010801	RUCKSACK, LARGE	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
010802	SUSTAINMENT POUCH	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
010803	FRAME, PACK, MOLLE	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B
		Replace		0.1	0.1			C
010804	MOLDED WAIST BELT	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			

Table 1. MAC for Modular Lightweight Load-Carrying Equipment (MOLLE) II — Continued.

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL				(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT			
			CREW	MAINTAINER	BELOW DEPOT	DEPOT		
			C	F	H	D		
010805	ENHANCED FRAME SHOULDER STRAPS	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
010806	LOAD LIFTER ATTACHMENT STRAP	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B
		Replace		0.1	0.1			C
010807	BUCKLE, MALE SHOULDER SUSPENSION	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
02	PISTOL MAN SET							
0201	HOLSTER LEG EXTENDER	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
0202	9 MM MAGAZINE POUCH	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
03	SAW GUNNER SET							
0301	100-ROUND UTILITY POUCH	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
0302	200-ROUND SAW GUNNER POUCH	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
04	GRENADIER SET							
0401	40 MM HIGH EXPLOSIVE POUCH (Single)	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
0402	40 MM HIGH EXPLOSIVE POUCH (Double)	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
0403	40 MM PYROTECHNIC POUCH (Double)	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			

Table 1. MAC for Modular Lightweight Load-Carrying Equipment (MOLLE) II — Continued.

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL				(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT			
			CREW	MAINTAINER	BELOW DEPOT	DEPOT		
			C	F	H	D		
05	MEDIC SET							
0501	MEDICAL BAG WITH FOUR INTERNAL POCKETS	Service Inspect Repair Replace		 0.1 0.1	0.1 0.1 0.1 0.1		1 2, 3, 4, 5, 6, 7, 8	A B, C
0502	EXTERNAL MEDIC MODULAR POCKET	Service Inspect Repair Replace		 0.1 0.1	0.1 0.1 0.1 0.1		1 2, 3, 4, 5, 6, 7, 8	A B, C
0503	MEDICAL BAG IV BANDOLEER	Service Inspect Repair Replace		 0.1 0.1	0.1 0.1 0.1 0.1		1 2, 3, 4, 5, 6, 7, 8	A B, C C
0504	PANEL MEDICAL BAG	Service Inspect Repair Replace		 0.1 0.1	0.1 0.1 0.1 0.1		1 2, 3, 4, 5, 6, 7, 8	A B, C C
06	ADDITIONAL MOLLE II COMPONENTS							
0601	RADIO POUCH	Service Inspect Repair Replace		 0.1 0.1	0.1 0.1 0.1 0.1		1 2, 3, 4, 5, 6, 7, 8	A B, C
0602	SHOTGUN SHELL POUCH (16X12ga)	Service Inspect Repair Replace		 0.1 0.1	0.1 0.1 0.1 0.1		1 2, 3, 4, 5, 6, 7, 8	A B, C
0603	MBITR POUCH	Service Inspect Repair Replace		 0.1 0.1	0.1 0.1 0.1 0.1		1 2, 3, 4, 5, 6, 7, 8	A B, C
0604	300-ROUND, 7.62 AMMO BAG	Service Inspect Repair Replace		 0.1 0.1	0.1 0.1 0.1 0.1		1 2, 3, 4, 5, 6, 7, 8	A B, C
0605	SHOULDER STRAP (Sling Assembly), UNIVERSAL, INDIVIDUAL LOAD	Service Inspect Repair Replace		 0.1 0.1	0.1 0.1 0.1 0.1		1 2, 3, 4, 5, 6, 7, 8	A B, C

Table 1. MAC for Modular Lightweight Load-Carrying Equipment (MOLLE) II — Continued.

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL				(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT			
			CREW	MAINTAINER	BELOW DEPOT	DEPOT		
			C	F	H	D		
0606	PANEL, VEHICLE MOLLE (MVP)	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
0607	POUCH, PVS-14 MOLLE	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
0608	POUCH, LEADERS SET MOLLE	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
060801	LEADERS POCKET GUIDE (GPS) UNIVERSAL	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
060802	LEADERS POCKET INSERT (Writing Instrument) UNIVERSAL	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
0609	K-BAR ADAPTER	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
0610	ALICE CLIP ADAPTER	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
0611	LASHING STRAPS	Service			0.1		1	A
		Inspect			0.1			
		Repair		0.1	0.1		2, 3, 4, 5, 6, 7, 8	B, C
		Replace		0.1	0.1			
07	MOLLE LEGACY EQUIPMENT							
0701	SLEEP SYSTEM CARRIER	Service			0.1		1	A
		Inspect			0.1			
		Repair			0.1		2, 3, 4, 5, 6, 7, 8	C
		Replace			0.1			
0703	PATROL PACK	Service			0.1		1	A
		Inspect			0.1			
		Repair			0.1		2, 3, 4, 5, 6, 7, 8	C
		Replace			0.1			

Table 2. Tools and Test Equipment for Modular Lightweight Load-Carrying Equipment (MOLLE) II.

(1) Tool or Test Equipment	(2) Maintenance Level	(3) Nomenclature	(4) National Stock Number	(5) Tool Number
1	H	Brush, Scrub, Household	Local Purchase	
2	F	Knife, Hot, Cutting Tool, Handheld	Local Purchase	2RMC5
3	F	Ruler, Tab, Metal, 16-inch	7510-00-173-4897	16INCHMETAL
4	F	Sewing Machine, Industrial Bar Tack	Local purchase	
5	F	Sewing Machine, Medium Duty	3530-01-177-8591	255RB-3
6	F	Shears, Tailors, 12-Inch	5110-00-223-6370	GGG-5-278
7	F	Stitch Removal Tool	Local Purchase	
8	F	Tape, Measuring	5210-00-182-4797	W7312

Table 3. Remarks for Modular Lightweight Load-Carrying Equipment (MOLLE) II.

(1) REMARK CODES	(2) REMARKS
A	Service is cleaning of equipment.
B	At maintainer level, repair by restitching or replacement.
C	At below depot level, repair by darning, replacement, restitching, retacking, searing, and splicing edge binding tape.

END OF WORK PACKAGE

SUPPORTING INFORMATION
MODULAR LIGHTWEIGHT LOAD-CARRYING EQUIPMENT (MOLLE) II
EXPENDABLE AND DURABLE ITEMS LIST

INTRODUCTION

Scope

This work package lists expendable and durable items that you will need to operate and maintain the Modular Lightweight Load-Carrying Equipment (MOLLE) II. 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), CTA 50-909, Field Garrison Furnishings and Equipment or CTA 8-100, Army Medical Department Expendable/Durable Items.

Explanation of Columns in Expendable/Durable Items List

Column (1) Item No. 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 (WP 0098, Item 5)).

Column (2) Level. This column identifies the lowest level of maintenance that requires the listed item. (F = Maintainer, H = Below Depot).

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, Part Number/(CAGEC). This column provides the other information you need to identify the item. The last line below the description is the part number and the Commercial and Government Entity Code (CAGEC) (in parentheses).

Column (5) U/I. Unit of Issue (U/I) codes shows the physical measurement or count of an item, such as gallon, dozen, gross, etc.

Table 1. Expendable and Durable Items List.

(1) Item Number	(2) Level	(3) National Stock Number (NSN)	(4) Item Name, Description, Part Number/(CAGEC)	(5) U/I
1	F, H	7330-00-252-6797	Detergent, Laundry, Powdered, MIL-D-12182, Type II	
2	F, H		Pencil, China Marker, Yellow, A-A-87	
3	F, H		Rag, Wiping	
4	F, H		Thread, Nylon, V-T-295, Size E, TY I, II, or III CL A, FG504	
5	F, H		Thread, Nylon, V-T-295, Size F, TY I, II, or III CL A, FG504	
6	F, H		Thread, Nylon, V-T-295, Size FF, TY I, II, or III CL A, FG504	

END OF WORK PACKAGE

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: TACOMLCMC.DAForm2028@us.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-LCL-MPP/TECHPUBS 1 Rock Island Arsenal ROCK ISLAND, IL 61299-7360	FROM: *(Activity and location) (Include ZIP Code)* *PFC JANE DOE* *Co A 3RD Engineer Br.* *Ft Leonard Wood, MO 63108*	

PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS

PUBLICATION/FORM NUMBER	DATE	TITLE
TM 10-1670-296-20&P	30 October 2002	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	*In Table 1, Sewing Machine Code Symbols, the second sewing machine code symbol should be MDZZ not MD22* *Change the manual to show Sewing Machine, Industrial: Zig-Zag; 308 stitch; medium-duty; NSN 3530-01-181-1421 as a MDZZ code symbol.*

**Reference to line numbers within the paragraph or subparagraph.*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE
Jane Doe, PFC	(508) 233-4141 DSN 256-4141	Jane Doe *Jane Doe*

DA FORM 2028, FEB 74 REPLACES DA FORM 2028, 1 DEC 68, WHICH WILL BE USED. USAPPC V3.00

TO: (*Forward direct to addressee listed in publication)*	FROM: (*Activity and location) (Include ZIP Code)*	DATE
US ARMY TACOM LIFE CYCLE MANAGEMENT COMMAND ATTN: AMSTA-LCL-MPP/TECHPUBS 1 Rock Island Arsenal ROCK ISLAND, IL 61299-7360	*PFC JANE DOE* *Co A 3RD Engineer Br.* *Ft Leonard Wood, MO 63108*	21 October 2003

PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

PUBLICATION NUMBER	DATE	TITLE
TM 10-1670-296-20&P	30 October 2002	Unit Manual for Ancillary Equipment for Low Velocity Air Drop Systems

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-					4			*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 Snap Hook. Please correct one or the other.*

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.)*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE

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

TO: *(Forward to proponent of publication or form) (Include ZIP Code)*
US ARMY TACOM LIFE CYCLE MANAGEMENT COMMAND
ATTN: AMSTA-LCL-MPP/TECHPUBS
1 Rock Island Arsenal
ROCK ISLAND, IL 61299-7360

FROM: *(Activity and location) (Include ZIP Code)*

PART I – ALL PUBLICATIONS (EXCEPT RPSTL AND SC/SM) AND BLANK FORMS

PUBLICATION/FORM NUMBER	DATE	TITLE
TM 10-8465-236-24&P	16 September 2010	Field and Sustainment Maintenance Manual Including Repair Parts and Special Tools Lists for Modular Lightweight Load-Carrying Equipment (MOLLE) II

ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON *(Provide exact wording of recommended changes, if possible).*

**Reference to line numbers within the paragraph or subparagraph.*

TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE

TO: *(Forward to proponent of publication or form) (Include ZIP Code)*	**FROM:** (*Activity and location) (Include ZIP Code)*	**DATE**
US ARMY TACOM LIFE CYCLE MANAGEMENT COMMAND ATTN: AMSTA-LCL-MPP/TECHPUBS 1 Rock Island Arsenal ROCK ISLAND, IL 61299-7360		

PART II – REPAIR PARTS AND SPECIAL TOOL LISTS AND SUPPLY CATALOGS/SUPPLY MANUALS

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TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS

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Use Part II *(reverse)* for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).

DATE

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ROCK ISLAND, IL 61299-7360

FROM: *(Activity and location) (Include ZIP Code)*

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TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE

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
1025303

DISTRIBUTION:

To be distributed in accordance with initial distribution number (IDN) 314259 requirements for TM 10-8465-236-24&P.

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 = 3 2.8 feet
1 hectometer = 10 dekameters = 328.08 feet
1 kilometer = 10 hectometers = 3,280.8 feet

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

Weights

1 centigram = 10 milligrams = .15 grain
1 decigrarn = 10 centigrams = 1.54 grains
1 gram = 10 decigrams = .035 ounce
1 dekagrarn = 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

Square Measure

1 sq. centimeter = 100 sq. millimeters = .15 5 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

To change	*To*	*Multiply by*	*To change*	*To*	*Multiply by*
inches	centimeters	2.540	ounce-inches	newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	Iiters	.473	milliliters	fluid ounces	.034
quarts	Iiters	.946	liters	pints	2.113
gallons	Iiters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	metric tons	short tons	1.102
pound-inches	newton-meters	.11296			

Temperature (Exact)

_F	Fahrenheit temperature	5/9 (after subtracting 32)	Celsius temperature	_C

PIN: 086592-000