TM 10-8400-203-23&P

TECHNICAL MANUAL

FIELD MAINTENANCE MANUAL
INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST
FOR

GENERAL REPAIR PROCEDURES FOR INDIVIDUAL EQUIPMENT

*TM 10-8400-203-23&P dated 24 May 2010 supersedes TM 10-8400-203-23 dated 7 May 1990, including all changes.

HEADQUARTERS, DEPARTMENT OF THE ARMY

24 MAY 2010

WARNING SUMMARY

This warning summary contains general safety warnings and hazardous materials warnings that must be understood and applied during operation 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 this technical manual.

FIRST AID

Field level maintenance and repair of individual equipment requires the use of equipment and chemicals which may be hazardous if used improperly. Before undertaking any procedures presented in this manual, make sure you are familiar with the potential hazards and appropriate first aid measures. Refer to FM 4-25.11, First Aid.

EXPLANATION OF SAFETY WARNING ICONS

BIOLOGICAL - abstract symbol bug shows that a material may contain bacteria or viruses that present a danger to life or health.

CHEMICAL - drops of liquid on hand shows that the material will cause burns or irritation to human skin or tissue.

ELECTRICAL - electrical wire to hand with electricity symbol running through hand shows that shock hazard is present.

EXPLOSION - rapidly expanding symbol shows that the material may explode if subjected to high temperatures, sources of ignition or high pressure.

EYE PROTECTION - person with goggles shows that the material will injure the eyes.

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

HOT AREA - hand over object radiating heat shows that part is hot and can burn.

MOVING PARTS - hand with fingers caught between rollers shows that the moving parts of the equipment present a danger to life or limb.

EXPLANATION OF SAFETY WARNING ICONS – CONTINUED

POISON - skull and crossbones shows that a material is poisonous or is a danger to life.

SHARP OBJECT - pointed object in hand shows that a sharp object presents a danger to limb.

SLICK FLOOR - wavy line on floor with legs prone shows that slick floor presents a danger for falling.

VAPOR - human figure in a cloud shows that material vapors present a danger to life or health.

GENERAL SAFETY WARNINGS DESCRIPTION

WARNING

Solvents, cleaners, and adhesives are toxic, and may be flammable and explosive. Wear protective goggles and use only in a well-ventilated area. Avoid contact with skin, eyes, and clothes and don't breathe vapors. Do not use near open flame or excessive heat. If you become dizzy, get fresh air immediately and get medical aid. If contact with eyes or skin is made, immediately flush with clean water and get medical aid for eyes immediately.

LIST OF EFFECTIVE PAGES/WORK PACKAGES

NOTE: This manual supersedes TM 10-8400-203-23 dated 7 May 1990, including all changes. Zero in the "Change No." column indicates an original page or work package.

Date of issue for the original manual is:

Original 24 MAY 2010

TOTAL NUMBER OF PAGES FOR FRONT AND REAR MATTER IS 26 AND TOTAL NUMBER OF WORK PACKAGES IS 46, CONSISTING OF THE FOLLOWING:

Page / WP No.	Change No.	Page / WP No.	Change No.
Front Cover	0	WP 0037 (6 pgs)	0
Blank	0	WP 0038 (2 pgs)	0
Warning Summary (2 pgs)	0	WP 0039 (4 pgs)	0
i-viii (8 pgs)	0	WP 0040 (4 pgs)	0
Chp 1 title page (2 pgs)	0	WP 0041 (6 pgs)	0
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WP 0015 (6 pgs)	0		
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WP 0027 (8 pgs)	0		
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WP 0029 (6 pgs)	0		
WP 0030 (4 pgs)	0		
WP 0031 (4 pgs)	0		
WP 0032 (6 pgs)	0		
WP 0033 (10 pgs)	0		
WP 0034 (4 pgs)	0		
WP 0035 (4 pgs)	0		
WP 0036 (4 pgs)	0		

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 24 MAY 2010

TECHNICAL MANUAL

FIELD MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL) FOR

GENERAL REPAIR PROCEDURES FOR INDIVIDUAL EQUIPMENT

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this publication. If you find any errors, or if you would like to recommend any improvements to the procedures in this publication, please let us know. The preferred method is to submit your DA Form 2028 (Recommended Changes to Publications and Blank Forms) through the Internet, on the Army Electronic Product Support (AEPS) website. The Internet address is https://aeps.ria.army.mil. The DA Form 2028 is located under the Public Applications section in the AEPS Public Home Page. Fill out the form and click on SUBMIT. Using this form on the AEPS will enable us to respond quicker to your comments and better manage the DA Form 2028 program. You may also mail, e-mail, or fax your comments or DA Form 2028 directly to the U.S. Army TACOM Life Cycle Management Command. The postal mail address is U.S. Army TACOM Life Cycle Management Command, ATTN: AMSTA-LCL-MPP / TECH PUBS, 1 Rock Island Arsenal, Rock Island, IL 61299-7630. The e-mail address is tacomlcmc.daform2028@us.army.mil. The fax number is DSN 793-0726 or Commercial (309) 782-0726. A replay will be furnished to you.

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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 existing Technical Manuals (TM) for fielded equipment, provide the Unit Publications Clerk the full Technical Manual number, title, date of publication, and number of copies required. The Unit Publications Clerk will justify the request through the Unit Publications Officer. When the request is approved, the Unit Publications Clerk will use DA Form 12-R to order the series of Technical Manuals from the Army Publishing Directorate (APD).

Instructions for 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

This Manual contains General Information and Maintenance instructions for Individual Equipment.

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

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

CHAPTER 2 – PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS). Chapter 2 provides PMCS procedures for individual equipment.

CHAPTER 3 – FIELD MAINTENANCE INSTRUCTIONS. Chapter 3 provides maintenance procedures authorized at the field maintenance level that include repair and replacement of key components.

CHAPTER 4 – PARTS INFORMATION. Chapter 4 contains Repair Parts and Special Tools List (RPSTL), national stock number index and part number index.

CHAPTER 5 – SUPPORTING INFORMATION. Chapter 5 contains references, maintenance allocation chart and expendable and durable items list.

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

Manual Organization and Page Numbering System. The manual is divided into ten 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 where XXXX is the work package number (e.g. 0010 is work package 10) and YY represents the number of the page within that work package. A page number such as 0010-1/2 blank means that page 1 contains information but page 2 of that work package has been intentionally left blank.

ORGANIZATION OF THIS MANUAL – CONTINUED

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, figures, and tables contained within each chapter and the work package sequence number where it can be found.

Example: If the reader were looking for instructions on Operating Under Usual Conditions, the table of contents indicates that information on operation can be found in chapter 2. Scanning down the listings for chapter 2, information on how to repair the ACH can be found in WP 0022, Advanced Combat Helmet Inspect, Service, Repair.

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

CHAPTER 1

GENERAL INFORMATION, EQUIPMENT DESCRIPTION, AND THEORY OF OPERATION FOR GENERAL REPAIR PROCEDURES FOR INDIVIDUAL EQUIPMENT

INDIVIDUAL EQUIPMENT
GENERAL INFORMATION

SCOPE

Type of Manual

This technical manual provides field and sustainment maintenance instructions for repairing individual equipment issued to U.S. Army personnel. This manual also provides a Repair Parts and Special Tools List (RPSTL), located in WP 0023 through WP 0041.

Part Numbers and Equipment Names

See Equipment Data and Description work package and RPSTL work packages for all part numbers and equipment names.

MAINTENANCE FORMS, RECORDS, AND REPORTS

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

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your individual equipment items need 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 any items 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.

DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Destruction of Army materiel to prevent enemy use shall be in accordance with TM 750-244-1-2.

LIST OF ABBREVIATIONS AND ACRONYMS

Table 1. List Of Abbreviations And Acronyms.

ABBREVIATION / ACRONYM	MEANING
BII	Basic Issue Item
BOI	Basis of Issue
BTU	British Thermal Unit
°C	Degrees Celsius
CAGEC	Commercial and Government Entity Code
COEI	Component of End Item
CPC	Corrosion Prevention and Control
CTA	Common Table of Allowances
CWK	Cold Weather Kit
DA	Department of the Army
DD	Department of Defense
ea	Each
EIR	Equipment Improvement Recommendation
°F	Degrees Fahrenheit
Fig.	Figure
FM	Field Manual
ft	Foot
ft-lb	Foot/pound(s)
G	Gram
K	Thousand
kg	Kilogram(s)
KW	Kilowatt(s)
l	Liter(s)
lb	Pound(s)
m, M	Meter(s)
MAC	Maintenance Allocation Chart
MOS	Military Occupational Specialty
MTOE	Modified Table of Organization and Equipment
No.	Number
PMCS	Preventive Maintenance Checks and Services
Pr	Pair
Qty	Quantity
SOP	Standard Operating Procedure
SF	Standard Form
SMR	Source, Maintenance, and Recoverability
SRA	Specialized Repair Activity
TOC	Table of Contents
WP	Work Package
WT	Weight

QUALITY OF MATERIAL

Material used for replacement, repair, or modification must meet the requirements of this manual. If quality of material requirements is 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 MAINTENANCE

INDIVIDUAL EQUIPMENT

EQUIPMENT DESCRIPTION AND DATA

EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

This manual provides standards for the classification and repair and maintenance of individual equipment. Maintenance and repair for procedures for each type of garment is divided into individual work packages. DA Forms and records used for the equipment maintenance will be only those prescribed in DA PAM 738-750. Demolition to prevent enemy use will be in compliance with instructions outlined in TM 750-244-3.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

Intermediate Cold Sleeping Bag (Replaced by Modular Sleep System)

The Intermediate Cold Sleeping Bag is designed in a mummy-shaped configuration utilizing quilted construction; the outer fabric is a 6.5 ounce cloth oxford, 50 percent n-percent cotton, Olive Green 107, Quarpel water repellent treated; the inner fabric is a 3.9 ounce cloth balloon cotton, durable water repellent treated; both the inner and outer fabrics are quilted with a 6 oz/yd sq polyester batting as the insulating material. A full length free-running slide fastener is provided at the front of the bag with webbing loops attached to the slider for ease of operation. An adjustable drawstring face closure, to eliminate the flow of cold air into the bag and escape of warm air at the opening, is provided. Snap fasteners are provided on the flap of the bag for emergency use, if a failure of the slide fastener occurs. Each bag has two tie tapes attached at the foot of the bag, which are used for tying the rolled sleeping bag for carrying and storage purposes. The tie tapes for this bag have a finished length of 25 inches. The bag is intended for use by personnel in locations where temperature ranges from +50 degrees F to +10 degrees F.

Extreme Cold Sleeping Bag (Replaced by Self-Inflating Sleeping Mat)

The Extreme Cold Sleeping Bag is a single unit design, with cotton Balloon cloth inner panel with 9 oz. Polyester Batting filling; cotton/nylon oxford outer panel filled with 100 percent waterfowl down; dive green Army shade 107; water repellent treated and wind resistant; universal size; approximately 83 inches long, 35 inches wide with slide fastener snap fastener and drawstring closure; with hood: without carrying bag. The minimum dimension for the sleeping bag is 73 1/2 inches in length, and 21 3/4 inches in width, for 99th percentile Soldiers. The Type II, Sleeping Bag Extreme Cold is for use in locations where average monthly temperatures are below + 10 degrees.

Pneumatic Mattress (Replaced by Self-Inflating Sleeping Mat)

The Pneumatic Mattress is fabricated of plain weave, nylon cloth coated on both sides with natural and/or synthetic rubber. The inner area is coated black in color and the outer surface has a thinner cover of Olive Green 207 coating. A 5 oz/sq yd polyester batting is cemented into each of the channels. The mattress is inflated by mouth and is intended for use with the sleeping bags.

Foam Sleeping Mat (Replaced by Modular Sleep System)

The foam sleeping mat is made of closed-cell, cross linked polyethylene foam. The mat is equipped with tie tapes at one end to hold it in the rolled condition for carrying. The mat weighs about 1 1/4 pounds and is 24 inches wide by 75 inches long. The mat will not absorb water and remains flexible in extreme cold temperatures. Downsizing is authorized at the commander’s discretion subject to CIF manager/PBO approval. Authorized modifications should be performed using available cutting instruments such as scissors, pocket knife, or razor knife. Since the foam is of a closed cell composition, the cut edge need not be sealed. The minimum width authorized is 20 inches. Length will be determined by Soldier’s height. Tie straps are not to be removed. Soldiers are not authorized to cut sleeping mat to his/her size without written approval from CIF manager/PBO.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Waterproof Clothing Bag

The Waterproof Clothing Bag is fabricated of Olive Green, 106 Cloth, Nylon coated on one side with synthetic rubber. The color of the coating compound shaft is black. The coated side of the fabric is on the inside of the bag and the seams are fully vulcanized with no stitching. The waterproof clothing bag is provided for protecting the sleeping bag when it is stored, carried, transported, or not in use.

Combat Vehicle Crewman's Helmet (Models DH-132 and DH 132A)

Both models are comprised of three items:

1. Helmet Shell

   The model DH-132 helmet shell has two web straps, equipped with snap fasteners, riveted on each side of the front of the shell for attaching the helmet liner. A fastener is riveted on the rear of the shell for snap fastening the liner elastic strap, A 4 ½- by 2-inch size fastener tape is cemented to the inside top front of shell. It engages with fastener tape on the liner to hold the liner in the shell. The shell is edged with rubber at an equal Width on each side of the shell.

   The Model DH-132A's helmet shell is designed to provide ballistic protection to the wearer. It is made of multiple layers of high-strength aramid ballistic cloth bonded with a hard plastic resin. If helmet is cracked, has Lamination separation or any fabric fibers are visibly cut or raised on the shell body, helmet is not repairable.

2. Headset-Microphone Kit MK-1697-G.

3. Helmet Liner

   The helmet liner is made of nylon cloth netting and contains protective padding on the sides, front, and top. A headset-microphone kit is mounted in the liner. Two fastener tape mounted straps at the rear of the liner adjust the liner to the nape of the crewman's neck. There is also fastener tape on the top front of the helmet liner which engages the fastener tape inside the top front of the helmet shell. The front of the liner contains two fasteners for snap fastening to the two web straps on the helmet shell. Mounted on the rear of the liner is an elastic strap with a snap fastener which snaps to the fastener on the rear of the helmet shell. An adjustable chin strap of nylon webbing with a chin pad and leather pull is snap fastened to each lower front side for fitting the liner and helmet shell securely to the crewman's head.

Figure 1. CVC Helmet.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Duffel Bag

This item is fabricated from Olive Green 106 Nylon Duck and is provided with a handle and straps for either hand or over the shoulder carrying. The bag is provided with a pocket to accommodate shipping documents. Nylon webbing is used for fabrication of the straps.

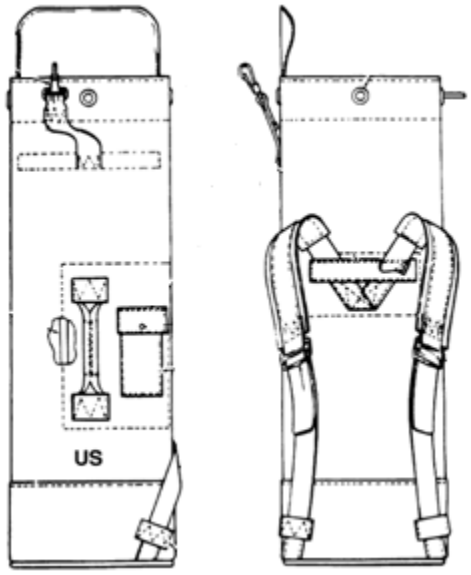

Figure 2. Duffel Bag.

Barracks Bag

This item is fabricated essentially of sateen cotton cloth. It is intended for use as a laundry bag for soiled clothing of Army personnel.

Figure 3. Barracks Bag.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Military Skis

The all-terrain military type skis are intended for use in tactical operations for mass movement of troops over level or hilly snow-covered terrains. The ski has an outer plastic composite material construction with a foam core, steel edges and an aluminum tail protector. The tip of the ski has a hole for towing the skis and the tail is notched to accept the strap on a ski climber. The skis are 78 inches.

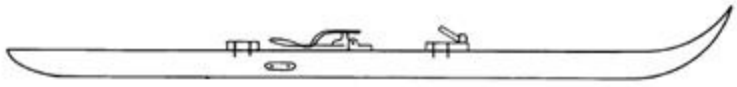

Figure 4. Military Skis.

Ski Binding

The ski bindings are commercial SiIvretta Alpine Touring Bindings. This binding is a cable binding consisting of a front throw, a toe piece, a heel plate and cable with guides. The cable is engaged in the guides for down hill skiing and release from the guides to allow the heel to lift for cross country skiing. The front throw is equipped with a release mechanism to release the cable in the event of a fall while in the down hill mode.

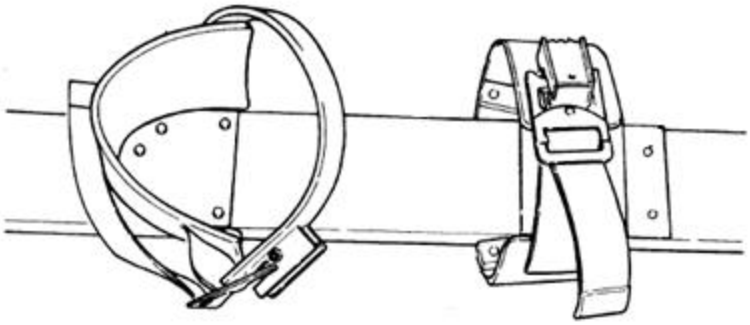

Figure 5. Ski Binding.

Ski Pole

The ski pole is composed of a steel shaft, rubber grips, leather wrist straps, and rubber snow ring assembly.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Figure 6. Ski Pole.

Magnesium Trail Snowshoes (Replaced by Assault Snowshoe)

The snowshoes are standard type snowshoe with ski type upturned front and sharply tapered rear. The frame is magnesium, laced with plastic covered steel cable.

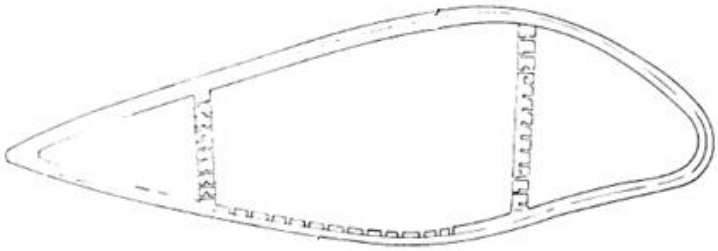

Figure 7. Magnesium Trail Snowshoes.

Snowshoe Binding (Replaced by Assault Snowshoe)

The snowshoe binding is intended for use with the magnesium trail snowshoe and will accommodate either the left or right boot.

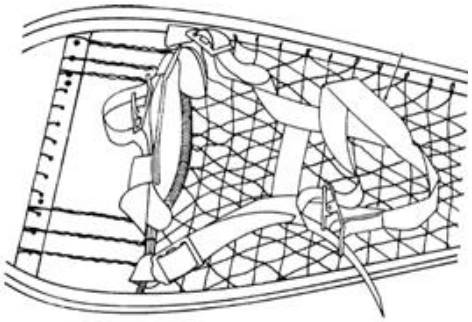

Figure 8. Snowshoe Binding.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Extreme Cold Weather Boots (Black)

The black rubber insulated boots have a seamless inner and outer carcass, direct molded sole and sealed insulation. An air valve on the outside of each boot is used to compensate for air pressure differentials.

Figure 9. Extreme Cold Weather Boots (Black).

Extreme Cold Weather Boots (White)

The white rubber insulated boots have a seamless inner and outer carcass, direct molded sole and sealed insulation greater than the black boots for protection against the hazards of a cold-dry environment.

Figure 10. Extreme Cold Weather Boots (White).

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Ice and Mountain Climbing Equipment

Ice Axe. The ice axe is 70 cm in length from top of head to point of spike. The head is made of either stainless steel with a riveted chrome-molybdenum steel pick or a one piece chrome-molybdenum steel head. The pick has ground teeth on its underside and a 15 degree angled droop. The adze (chopping portion of the head) is 5 ½ cm wide and ground to a sharp edge. The head has a hole directly above the shaft for attachment of the wrist loop. The shaft is made of hollow aluminum or fiberglass. The spike is chrome-molybdenum steel and comes to a sharp tapered point.

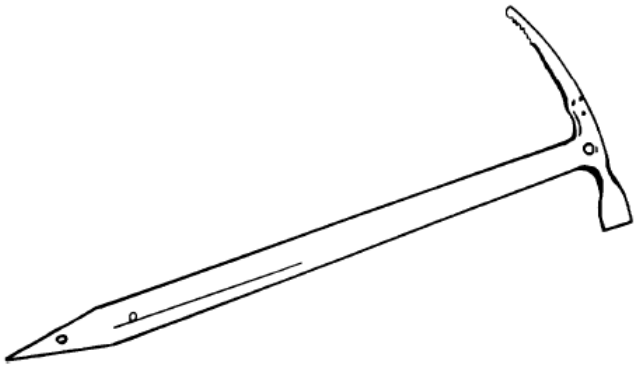

Figure 11. Ice Axe.

Hand Piton Hammer. The rock and ice hammer has a 12-inch fiberglass core handle with a polyethylene outer sheath to dampen vibrations. The head is made of stainless steel with three steel socket head cap screws to hold a removable serrated ice climbing pick. The ice climbing stainless steel pick has a hole for the attachment of a wrist loop. Each hammer has a replaceable nylon lanyard and an Allen Wrench with which to remove the serrated pick.

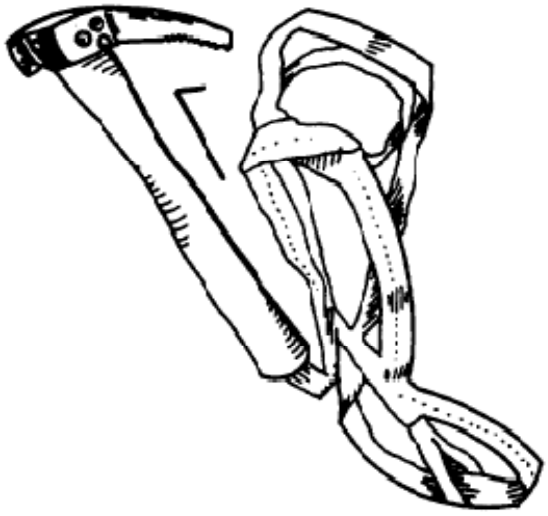

Figure 12. Hand Piton Hammer.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Pitons. The piton is fabricated of steel; consisting of the piton body, collar, and shackle, with or without ring. It is a metal spike which is driven into ice or cracks in rocks as an aid in mountain climbing. There are five distinct types of pitons – flat, angle, ice, offset knifeblade and mountain cliffhanger.

Flat Mountain Piton. The flat mountain piton is made of chrome-molybdenum steel with an eye hole. It comes in five sizes ranging from 3 ¼ to 6 inches in length.

Figure 13. Flat Mountain Piton.

Angle Piton. The angle piton is made of chrome-molybdenum steel with an eye hook. It comes in three sizes ranging from 4 ¼ to 5 5/8 inches in length.

Figure 14. Angle Piton.

Offset Mountain Knifeblade Piton. The offset mountain knifeblade piton is made of chrome-molybdenum steel. The overall length is 3-3/8 inch. The piton has a rounded offset 90 degrees to the blade. There are two combiner holes, one on the offset and another one adjacent to the offset on the main blade. The holes are 5/8 inches in diameter. The blade is tapered from a thickness of .025 inch at the end opposite the carabiner holes to a thickness of .120 inch. The blade width is .870 inch minimum of 1.28 inch maximum.

Figure 15. Offset Mountain Knifeblade Piton.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Cliffhanger Mountain Piton. The cliffhanger piton is made of chrome molybdenum steel. The thickness is.1 25 inch overall except the end of the hook is tapered. The hook end has a radius of .750 inch. The base of the cliffhanger is curved to create a biped base. The curved width of the base is 1.125 inches tapering uniformly to a width of .420 inch at the end of the hook. The base has two holes. A large hole of .370 inch diameter at the base and a smaller hole of .330 inch diameter located directly above the large hole.

Figure 16. Cliffhanger Mountain Piton.

Ice Piton. The ice pitons are made of chrome-molybdenum steel. The eye is permanently and firmly affixed to the top of the pitons. The tip is milled or hand ground teeth to create sharp points so it will grab the ice when screwing the pitons into ice. The pitons have right hand threads to penetrate when turned clockwise into the ice.

Figure 17. Ice Pitons.

Hinged Crampons. The hinged crampons come in pairs and are made of chrome-molybdenum steel. The crampon has 12 spikes and an adjustable center hinge to adjust the length of the crampon. The crampon is fully adjustable in width to be compatible with all standard military boots and commercial plastic mountaineering boots with the aid of a big foot center piece when necessary. The crampon has six attachment points for a ½-inch wide strap binding, and is furnished with all tools necessary to assemble and adjust the crampon.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Crampon Protectors. The crampon protectors are made of natural rubber latex. Each arm has three slotted caps evenly spaced in each arm (for a total of 12 slotted caps).

Figure 18. Hinged Crampons and Accessories.

Crampon Straps. The crampon straps are made of neoprene coated nylon with brass center bar buckles, copper or brass rivets and corrosion resisting steep or brass slide buckles. The straps are ½-inch wide and .080 inches thick and come with assembly and lacing instructions.

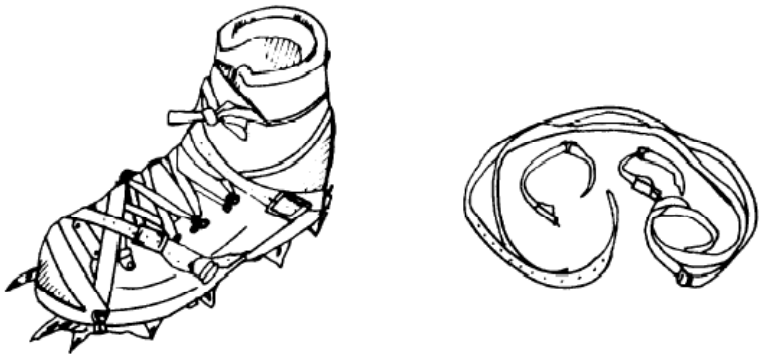

Figure 19. Crampon Straps.

Ice Creeper. Constructed of steel with spikes on the underside and is provided with web straps for attaching to shoes or boots. It is primarily used to prevent slipping when walking on ice or hard-packed snow.

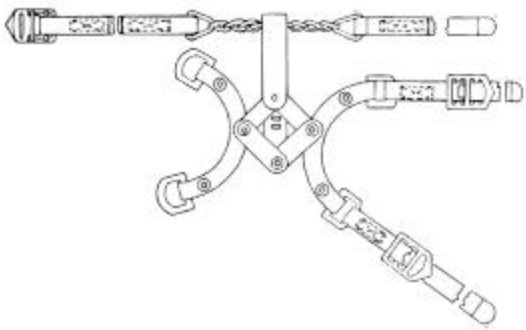

Figure 20. Ice Creepers.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Climbing Harness. The climbing harness is constructed of nylon webbing with metal buckles. The harness has two ice/axe hammer holster and a sling for attaching equipment.

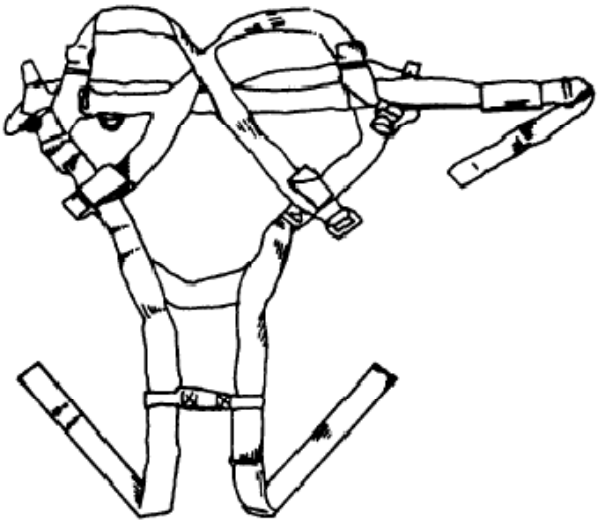

Figure 21. Climbing Harness.

Locking Mountain Piton Snap Link (Type II). The locking mountain piton snap link is D shaped and made of steel and zinc plated. The gate is threaded and fitted with a nut. The nut may be screwed into place over the opening between the gate and the snap link body to prevent inadvertent opening of the gate during use. The gate and the locking nut operate easily without jamming in either the open or closed position.

Figure 22. Locking Mountain Piton Snap Link.

Non-Locking Mountain Piton Snap Link. The non-locking snap link is made of aluminum. The gate is operated easily without jamming in either direction.

Figure 23. Non-Locking Mountain Piton Snap Link.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Kernmantle Rope. The kernmantle rope is nylon in construction consisting of a braided outer nylon sheath (mantle) and an inner nylon core (kern). All ends of kernmantle ropes are to be cut with a hot knife and taped to prevent fraying. The 11 mm type IV kernmantle rope is water repellent treated to resist water penetration into the rope. Type VI kernmantle rope consists of three strands and is nylon in construction. All ends of the rope should be cut with a hot knife and taped or heat sealed to prevent fraying. The rope is 150 feet of uninterrupted, unspliced length and 1-1/4 inch diameter.

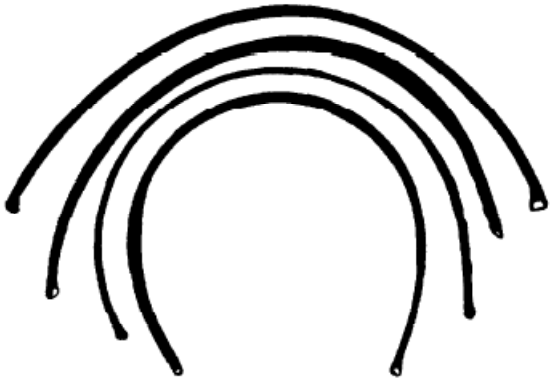

Figure 24. Kernmantle Ropes.

Hexagon Stoppers. The hexagon stoppers are made of aluminum. The holes are sufficiently wide to accept an 8 mm with which to sling the hexagon stopper.

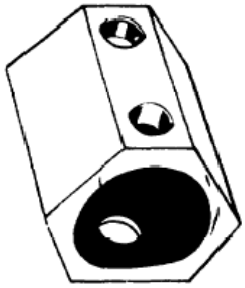

Figure 25. Hexagon Stopper.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Cam Ascenders. The cam action ascender frame is aluminum in construction. The cam, rivets and springs are made of stainless steel. There are plastic molded hand grips and an attachment hole for use with a snap link for hauling. The rope groove is large enough to accommodate an 11 mm kernmantle rope. A safety device is incorporated so the cam will only release the rope when a trigger is pressed and the cam is sprung back out of position.

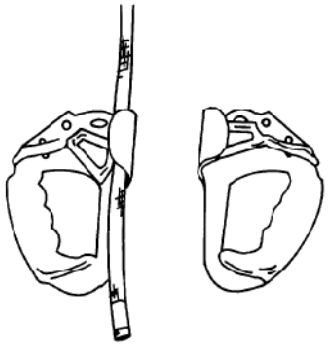

Figure 26. Cam Ascenders.

Wired Stoppers. The wedged portion of the wired stopper is made of aluminum and the wired portion is made of either galvanized steel or stainless steel construction.

- Type I is .335 inches in height and .170 inches in width. The wire size is .0625 inches in diameter. The wire loop protrudes 7.5 inches below the bottom of the stopper head.
- Type II is .400 inches in height and .195 inches in width. The wire size is .0625 inches in diameter. The wire loop protrudes 7.5 inches below the bottom of the stopper head.
- Type Ill is .475 inches in height and. 238 inches in width. The wire size is .093 inches in diameter. The wire loop protrudes 7.5 inches below the bottom of the stopper head.
- Type IV is .520 inches in height and .330 inches in width. The wire size is .093 inches in diameter. The wire loop protrudes 7.5 inches below the bottom of the stopper head.
- Type V is .650 inches in height and .460 inches in width. The wire size is .125 inches in diameter. The wire loop protrudes 7.5 inches below the bottom of the stopper head.
- Type VI is .750 inches in height and .530 inches in width. The wire size is .125 inches in diameter. The wire loop protrudes 7.5 inches below the bottom of the stopper head.
- Type Vll is .855 inches in height and .600 inches in width. The wire size is. 125 inches in diameter. The wire loop protrudes 7.5 inches below the bottom of the stopper head.
- Type Vlll is 1.250 inches in height and .900 inches in width. The wire size is.125 inches in diameter. The wire loop protrudes 7.5 inches below the bottom of the stopper head.

Figure 27. Wired Stoppers.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Figure 8 Descender. The figure 8 descender is made of aluminum with a soft anodized finish. The small end is large enough to accommodate two carabiners. The large end can accommodate two 11 mm ropes.

Figure 28. Figure 8 Descender.

Mountain Rescue Pulley. The mountain rescue pulley has split halves that enable the climber to put the rope in the pulley without having to thread the rope through the pulley. The pulley sides and wheel are made of aluminum. The center bolt is made of steel and has a 3/8-inch diameter shaft. The shaft nut has a self-locking nylon insert. The pulley wheel has roller bearings and is large enough to accommodate a ½-inch diameter rope. The snap link hole is large enough to accommodate two snap links.

Figure 29. Mountain Rescue Pulley.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Wired Snow Anchors. The fluted anchor portion of the snow anchors is made of aluminum. The wired portion k made of either galvanized steel or stainless steel.

- Size I is 8-1/2 inches long with 5-1/2 inches fluted anchor portion. The wire portion has a 1/8 inch diameter and the outstretched wire cable assembly is 2 feet, 3 inches long.
- Size II is 7-1/2 inches long with 10-1/2 inches fluted anchor portion. The wire portion has a.156 inch diameter and the outstretched wire cable assembly is 5 feet, 3 inches long.

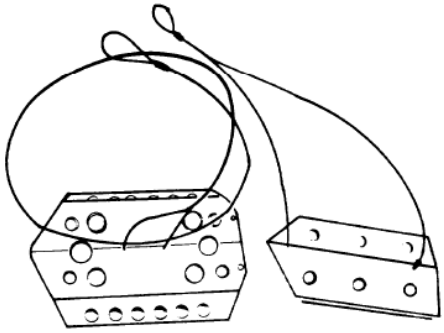

Figure 30. Wired Snow Anchors.

Tubular Nylon Webbing. The tubular nylon webbing is olive drab #7 in color. It comes in two widths – 9/16 inch and 1 inch.

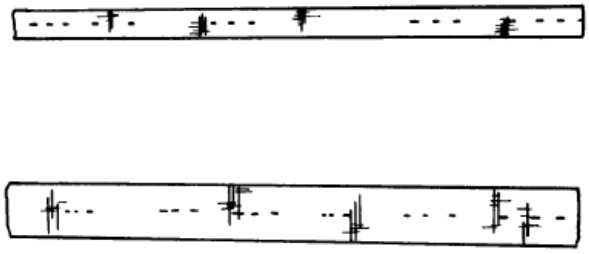

Figure 31. Tubular Nylon Webbing.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Ground Troop Fragmentation Protective Vest (Replaced by Interceptor Body Armor)

The vest covers the upper torso and consists of a ballistic filler of 14 oz/yd$_2$ (475 g/m2) water repellent treated Kevlar fabric. The inner and outer shell, shoulder pads and front closure flap of the vest is water repellent treated 8 oz/yd2 (271 g/m2) ballistic nylon cloth. The layer which makes up the inner shell of the vest is olive green and the layer which is the outer cover of the vest is camouflage printed. The Kevlar ballistic filler in the back is made in four sections. The three upper sections slide over each other and over the lower back section to allow for any changes in body dimensions associated with various movements. The front closure is hook and pile fastener tape. The side overlaps are made flexible through the use of sewn-in 1½ inch (3.81 cm) wide elastic webbing. The vest also has a ¾ collar, articulating shoulder pads, two front pockets, two grenade hangers, and rifle butt, patches at the front shoulder area. This body armor has been replaced by the Interceptor Body Armor System.

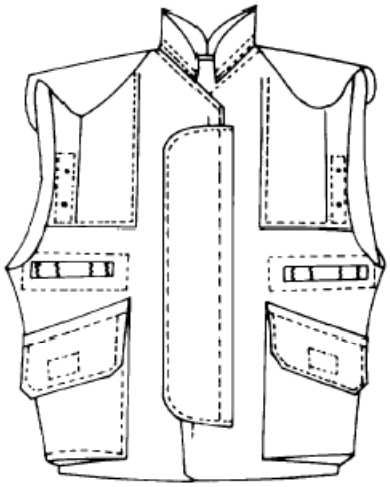

Figure 32. Body Armor Vest.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Load Carrying Equipment

Rucksack (Replaced by MOLLE II). The rucksack is fabricated essentially of cloth, cotton duck; it is supported by a tubular steel frame, and is equipped with shoulder straps for carrying purposes. The frame fits into a leather frame support on the body of the rucksack, and is attached by a snap fastener installed in the support. The bottom of the rucksack is secured to the frame with web straps. There are three outside pockets which close by means of leather straps and buckles. The top of the rucksack closes by a drawstring laced through 10 grommets inserted in the top hem, and is covered by a pouch flap which fastens down with two straps and buckles. There is an inside pocket in the pouch flap which closes with a 10-inch slide fastener. The body of the rucksack is also provided with three cotton duck tabs equipped with grommets for attaching various field equipment. The rucksack is normally used in cold areas, and a white cover is provided for camouflage purposes. The rucksack has been replaced with the MOLLE II system.

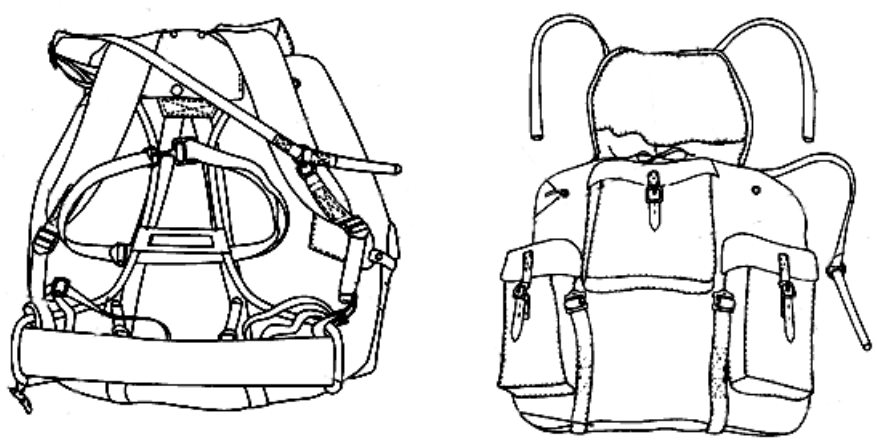

Figure 33. Rucksack.

Individual Equipment Belt (Replaced by MOLLE II). This belt is made from Army shade 7 olive drab nylon webbing with black chemical finish adjusting buckles, keepers, and a belt buckle. The medium size belt is for Soldiers with waists measuring less than 30 inches and size large is for those with waists measuring 30 inches or more. The belts are adjusted from each end by means of clamp-type buckles which slide on the belt when open. The individual equipment items are attached by interlocking slide keepers or are hooked through eyelets along the bottom of the belt. The eyelets along the top of the belt are for attaching the suspenders.

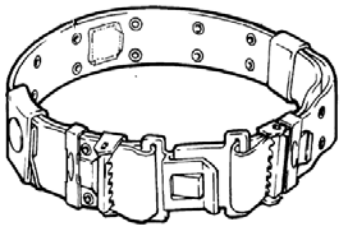

Figure 34. Individual Equipment Belt.

Individual Equipment Belt Suspenders (Replaced by MOLLE II). The suspenders are Y shaped with three adjusting straps, but four points of attachment to the belt and ammunition cases. The shoulder straps are padded with spacer cloth. Each shoulder strap has a web loop and a non-slip buckle on each of the straps in the front and one at the back through which the adjusting straps pass. There are rectangular wire loops located between the web loops and the buckles on the front of the straps. The 1-inch wide adjusting straps have side-retaining snap hooks at one end. The back adjusting strap has an

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

inverted V of which each end has a side-retaining snap hook. Each of the adjusting straps has a loop around it made of 1-inch elastic material.

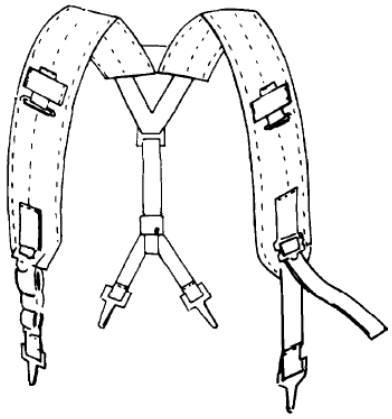

Figure 35. Individual Equipment Belt Suspenders.

Small Arms Ammunition Case (Replaced by MOLLE II). This small arms ammunition case is designed for the 30-Round magazine used with the M-16 rifle. It is fabricated of nylon duck and webbings with polyester sheet stiffeners in the front, rear and lid of the case. Each magazine is held in place by means of 3/4-inch (1.91 cm) wide webbing spacers which cross the top of the case. The lid is closed by means of a plastic latch. Grenade carrying pockets are on each side of the case which is secured by means of a nylon web strap and metal snap fastener. A tab with a metal eyelet is located at the top back of the case to which the suspenders are attached. The case is attached to the heft by keepers with interlocking slides.

Tactical Load Bearing Vest (Replaced by MOLLE II). The Tactical Load Bearing Vest is constructed of a seven ounce nylon fabric and weighs 1.8 Ibs. empty. The vest is compatible with the standard equipment belt. The equipment belt is secured to the vest with 10 belt loops that use both hook and pile fasteners and snaps. The vest has four permanently attached ammunition pockets that can carry six thirty round magazines. The pocket covers are secured by one snap and a strip of hook and pile. A pull tab is used to open the pocket. Located directly below the ammunition pockets are two fragmentation grenade pockets. The shoulders are protected by ½ inch foam padding. The vest closes in front with two chest straps using plastic quick release buckles. Two 2 ¼ inch webbing and two D-Rings sewn to the back of the vest can be used as equipment attachment points.

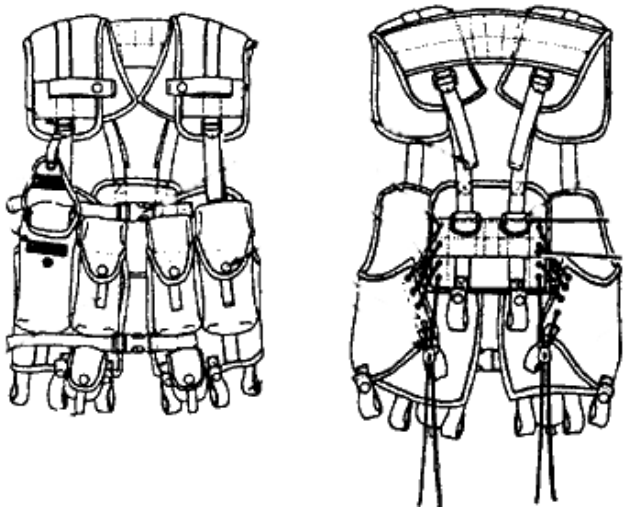

Figure 36. Tactical Load Bearing Vest.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Large Field Pack with Internal Frame (Replaced by MOLLE II)

The Large Field Pack with Internal Frame is constructed of an 8.0 ounce back coated nylon fabric which has excellent abrasion resistance and water repellency. The weight of the empty pack is 8 Ibs. The pack has two major sections; the sleeping bag compartment, and the main compartment. The main compartment has a false bottom that may be opened for full use of the pack when a sleeping bag is not carried. The outside of the pack has one long tunneled pocket and two smaller cargo pockets, all using compression straps for securing contents, Equipment attachment points in the form of 2 ¼ inch webbing and 1 inch webbing loops are located throughout the pack.

The internal frame is comprised of two aluminum staves running the full height of the pack. The staves are removable. The suspension system is adjustable allowing the user to position the pack where it is most comfortable. The pack has lower back padding as well as an extended lumbar support pad and the shoulder pads are made of bi-laminate foam. A softer, open cell foam is against the body for comfort followed by a stiffer closed cell foam for stability and good recovery after compression.

Two straps assemblies with quick release buckles allow for the attachment of the Combat Patrol Pack atop the field pack when both packs are used together. When used in combination with either the 40MM Grenade Vest or the Tactical Load Bearing Vest, the Field Pack shoulder pads are worn over those of the vest, where they are retained by two one inch of webbing.

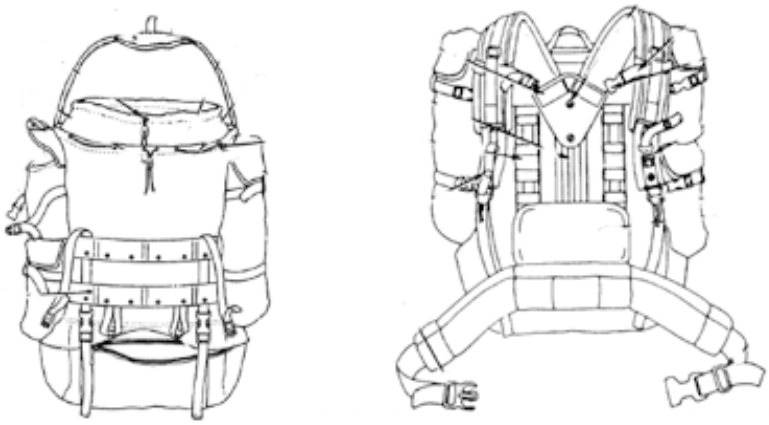

Figure 37. Large Field Pack with Internal Frame.

Combat Patrol Pack (Replaced by MOLLE II)

The Combat Patrol Pack was designed for short missions and offers 1200 cubic inches of cargo space in two compartments. The main compartment is padded to protect the back from heavy, sharp items. The main compartment incorporates two tiedown straps that can be used to stabilize equipment such as a field radio. The patrol pack has a separate shoulder harness. When used in combination with either the 40MM Grenade Vest or the Tactical Load Bearing Vest, the Combat Patrol Pack shoulder pads are worn over the vest shoulder pads, and retained for stability by two one inch pieces of webbing. The pack can also be used in conjunction with the Field Pack, Large with Internal Frame.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Figure 38. Combat Patrol Pack.

Grenade Carrier Vest (Replaced by MOLLE II)

The 40MM Grenade Vest is intended for use by the combat Soldier armed with the M203 or M79Grenade Launcher. It is constructed of a 7 ounce nylon fabric and weighs 2.1 Ibs. empty. The vest is compatible with the standard equipment belt which is secured to the vest with 10 belt loops. The loops use hook and pile fasteners and snaps. The vest has 18 permanently attached ammunition pockets that can carry 4 pyrotechnic and 14 high explosive rounds. The pocket covers are secured by one snap. A pull tab is used to open the pocket. The shoulders are protected by 1/2 inch foam padding. The vest doses in front with two chest straps using plastic quick release buckles. Two 2 1/4 inch webbing and two D-Rings sewn to the back of the vest can be used as equipment attachment points. This vest replaced the M-79 grenade vest. Both vests are replaced by the MOLLE II Grenadier Set.

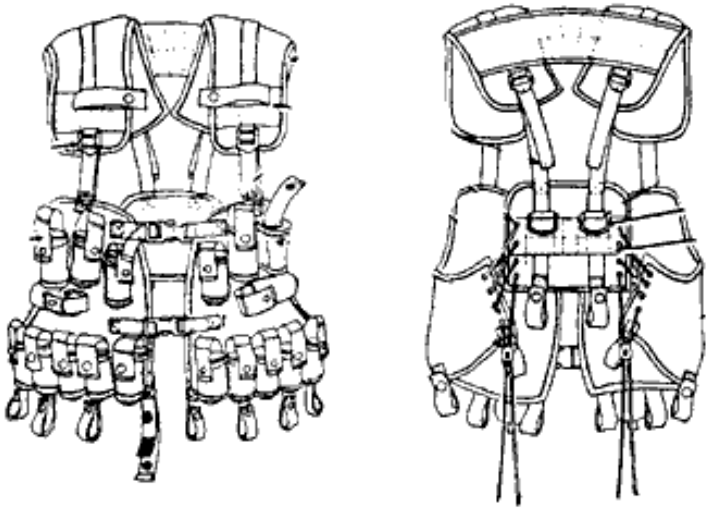

Figure 39. Grenade Carrier Vest.

Chemical Protective Glove Set

The components of the packaged set consist of an outer rubber glove to provide the chemical protection and an inner glove to assist in absorption of perspiration. The outer, five-finger gloves (right and left hands) are of an impermeable unsupported black butyl rubber.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

The glove set gives protection against vapors, aerosols, and small droplets of chemical agents. One pair each of the glove sets and an instruction sheet are packaged and sealed in a clear polyethylene film bag with excess air removed. The sets are issued as initial issue and as replacement items. The gloves are available in five sizes: X-Small, Small, Medium, Large, arid X-Large. Cotton inserts are provided with the gloves to be worn as a liner to aid in the absorption of perspiration. Proper fit should be checked upon issue. In addition to the above, the standard issue leather gloves or other work gloves can be worn over the CP glove set. It is important to wear the leather gloves when handling rough objects to protect the butyl rubber of the CP glove set from punctures and tears.

Figure 40. Chemical Protective Gloves.

Chemical Protective Helmet Cover

The chemical protective helmet cover is a one-piece configuration consisting of butyl coated nylon cloth gathered at the opening by elastic webbing enclosed in the hem. It is intended to provide the Personnel Armor System Ground Troops PASGT Helmet with protection from chemical and biological contamination. The helmet cover is designated for use in all climatic categories.

Figure 41. Chemical Protective Helmet Cover.

Combat Vehicle Crewman's Coveralls Hood (Balaclava)

The hood is a pull-over-the-head type with attached bib. The hood has a facial opening which allows for placement variation by means of a pull tab.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

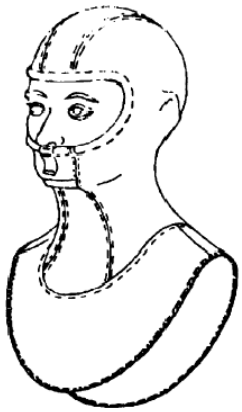

Figure 42. CVC Balaclava.

Body Armor, Combat Vehicle Crewmen's Fragmentation Protective Undergarment

This is an over-the-head type undergarment with two removable back and two removable front 8-ply ballistic protective inserts. The lower portion of the inserts is sufficiently wide to provide protection at the sides with the back panel overlapping the front panel. The inserts are made of 8.25-oz. 1000-denier, water repellent treated para-aramid cloth. The outer part of the carrier is of 4.3oz. plain weave, aromatic polyamide, non-melting cloth conforming to type II, class 3 of MIL-C-83429 olive green 106. The inner part of the carrier is of 6-02. cotton poplin cloth, O.G. The carrier has elastic webbing/hook and-pile fastener, tape straps at the sides for size and comfort adjustment.

Parachutists' Personnel Armor System Ground Troops (PASGT) Helmet

The Ground Troops'– Parachutists' Helmet or PASGT is a rigid one-piece ballistic protective item molded of laminated Kevlar fabric, It covers the front of the head, the temple region, the ears and the lower rear region of the head. The helmet has a small brim and rubber edging around the periphery. The helmet contains a cradle suspension system, a head band employing a buckle to adjust to size, and a pull tab with pile and hook closure to make the drawstring height adjustment. The chin strap is a two point suspension open chin cup having two adjustable buckles and a single pull-the-dot snap fastener closure on the left side.

Figure 43. PASGT Helmet.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Extreme Cold Weather Sleep System (Replaced by Modular Sleep System)

The Extreme Cold Weather Sleep System (ECWSS) consists of the ECWSS sleeping bag, hood, socks, stuff sack and bivy bag. It is designed to be layered and work with the Extreme Cold Weather Clothing System (ECWCS) for additional warmth. The ECWSS replaced the Intermediate and Extreme Cold Weather Sleeping Bags (Mountain and Arctic). All sleeping bags have been replaced by the Modular Sleep System.

ECWSS Sleeping Bag. The sleeping bag is constructed of a 1.65 ounce nylon fabric and utilizes a continuous filament polyester insulation. The sleeping bag has a double draft tube configuration to improve protection in the slide fastener area. It also has a full draft collar which protects both the front and the back of the neck. Locking drawcords are used to adjust tension on the sleeping bag and cover hood. The drawcords are positioned to allow adjustments to be made from within the bag. The sleeping bag is designed to be used with the insulating clothing layers of the Extended Cold Weather Clothing System (ECWCS) as supplemental insulation. Additional shoulder and leg room has been added to the sleeping bag so that a user wearing clothing will be more comfortable and less likely to compress the loft of the sleeping bag.

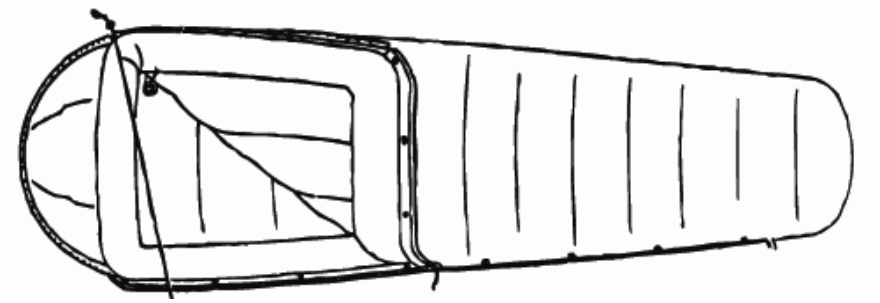

Figure 44. ECWSS Sleeping Bag.

ECWSS Hood and Socks. The Hood and Socks are provided as accessories for improved head and foot protection. They are constructed of a polyester fiber pile material and intended to be worn with other appropriate items of the Extended Cold Weather Clothing System (ECWCS).

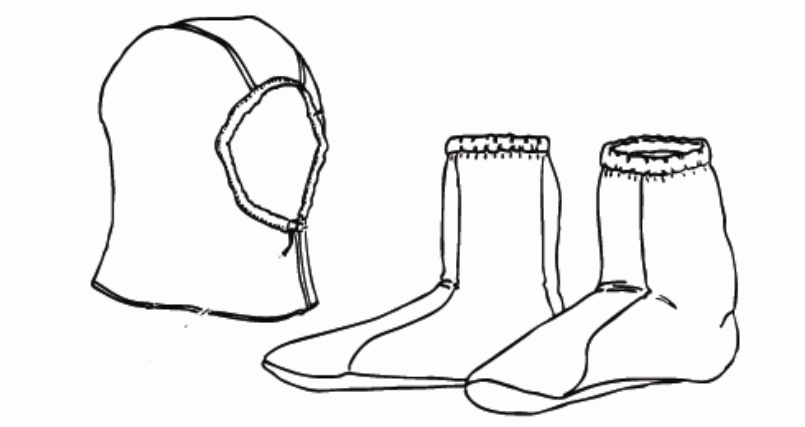

Figure 45. ECWSS Hood and Socks.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

ECWSS Stuff Bag. The bag is used to pack and carry the components of the ECWSS and ICWSS. It is a compression stuff sack constructed of a waterproof nylon fabric, with six compression straps running lengthwise around the sack allowing the bulk to be reduced to less than one cubic foot.

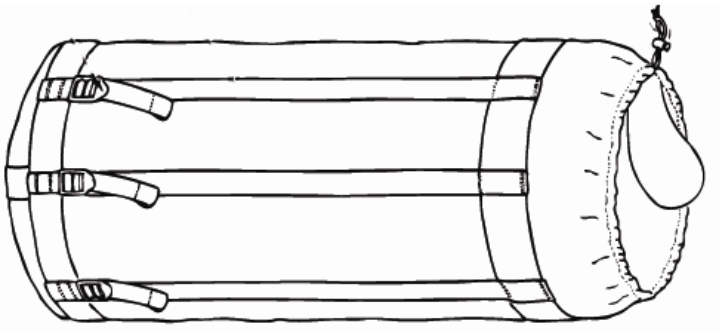

Figure 46. ECWSS Stuff Sack.

ECWSS Bivy Cover. The removable sleeping bag cover is constructed of a moisture vapor permeable waterproof fabric. The cover is attached to either the Extreme or Intermediate Cold Weather Sleeping Bag by two rows of snaps located above and below the slide fastener. The cover is designed to be removable from the bag to allow for better air drying of the bag and to permit its use as a protective enclosure separate from the sleeping bag. In addition, the cover serves as an excellent wind breaker.

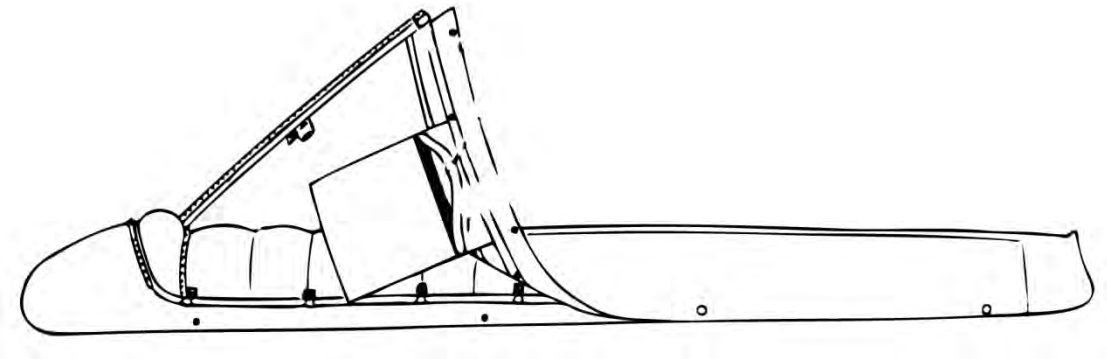

Figure 47. ECWSS Bivy Cover.

Body Armor Set, Individual Countermine (BASIC)

The BASIC is an armored clothing system designed to be worn by dismounted Soldiers during mine-clearing exercises. In addition to the Advanced Combat Helmet (ACH) and Interceptor Body Armor (IBA). BASIC includes ballistic protective trousers, overboots to protect against fragmentation, the Blast Protective Footwear System (BPFS), and fragmentation-resistant face shield.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Fragmentation Protective Trousers for BASIC. The protective trousers provide coverage from the upper waist to the top of the feet, with special emphasis on the groin and shin areas. Thirteen plies of 14 oz/sq yard, water-repellent treated Kevlar 29 is used for the ballistic insert. The inner and outer shell and shoulder pads are fabricated with water-repellent treated 8 oz/sq yard ballistic nylon cloth. The layer comprising the inner shell is camouflage green; the layer which comprises the outer shell is woodland camouflage printed. Three types of ballistic insert sections are used: abdominal, upper leg, and lower leg. The abdominal and upper leg sections are connected with webbing tabs that allow the insert sections to slide over each other for various changes in the body movements. In addition to the ballistic inserts are adjustable shoulder straps, permanently attached groin protector, an articulated knee joint, and hook and loop fastener straps.

Figure 48. Anti-Fragmentation Trousers for BASIC.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Blast Protective Footwear System (BPFS). The BPFS is standoff device that may supplement or replace the overboot and provides more than six times the protection for feet and lower legs. The BPFS does not significantly impair Soldier mobility during mine-sweeping and probing operations, nor does it interfere with the Soldier's operation of handheld mine detectors.

Figure 49. Blast Protective Footwear System.

Face Shied for BASIC. The face shield provides superior blast protection for the user. It works in conjunction with the Advanced Combat Helmet.

Figure 50. Face Shield for BASIC.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Advanced Combat Vehicle Crewman's' Helmet (ACVC)

Helmet Shell. The helmet shell is a rigid compression molded composite constructed of KM-2, molded with phenolic and polyvinyl butyral resins. Two 4 inch long x 2 inch wide pieces of hook tape fastener adhered to the inside crown area provide a means of attaching the impact liner to the shell. Left and Right Hand struts that support the face guard are mounted to each side of the face opening of the shell. Mounted to the rear of the shell by a single snap fastener is a headset tension assembly.

Figure 51. ACVC Helmet.

Camouflage Cover. The camouflage cover is made of cotton fabric with a one-inch tunnel around its edge, containing a rubber band. Reinforced cutouts at the rear allow the tension adjustment strap assembly to be threaded through the cover. A 3 ½ inch long and ¾ inch wide binding tape with a 1 inch long and ¾ inch wide pile fastener tape at its end, is sewn to the rear of the cover to secure the sun, wind, and dust goggles retainer strap. Similar pieces of binding tape but with both hook, and pile fastener tapes at opposite sides of its end, are sewn to the sides of the face opening.

Impact Liner Assembly. The spider is constructed of a rigid, one-piece, 3/8-inch thick, polyurethane foam. Two pieces of 3 ½ inch long and 1 ½ inch wide pile fastener strips adhered to the crown of the liner provide adhesion when pressed against the corresponding hook fastener tapes in the helmet shell. The inside of the liner is fitted with two, 1 ½ inch wide and 3 ½ inch long, pieces of pile fastener strips along the crown and the sides. In addition, 1-inch wide and 1½-inch long patches of pile fastener tape are attached to each of the fingers of the spider. The fitting pads consist of a crown, front, rear, and left and right side pads. They are cut from a smooth leather/vinyl material on the outside, and both a flexible and semi-flexible foam urethane material on the inside. The pads are fitted with 1-½ inch wide and 3 ½ inch long hook fastener strips that provide adhesion when pressed against the correspondingly sized hook fastener pads on the liner.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Retention System. The retention system consists of polyaramid/cotton fabric onto which the chinstrap is sewn and the headset housings are mounted. The basic pattern includes a nape strap with hook and pile fastener tapes at the seams that allow the headset ear-to-ear cord to be enclosed within the nape strap. The system is attached to the helmet shell on the right and left rear, and the faceguard adjustment struts on front using two screws. Each nylon tape attachment loop has 3 eyelets through which the system can be attached to achieve the optimum fit. The chinstrap includes two adjustment buckles and a snap fastener at one side.

Headset and Microphone Kit. The headset assembly consists of the left and right ear-cups, connected by the ear-to-ear cord. The microphone boom assembly, talk-through switch, foam ear cushion, and seal, are attached to the right ear-cup. The push-to-talk switch, upper cord with battery box, and foam ear cushion are attached to the left ear-cup. The upper cable assembly is connected to the left ear-cup and incorporates the battery box.

Faceguard and Attachment Struts. The faceguard is a single piece of a high impact plastic material. Positive latch mechanisms are attached to each side of the guard that hooks directly onto the attachment struts. The attachment struts are mounted to the helmet shell with four metal screws, washers, and posts.

Military Assault Snowshoe

Figure 52. Military Assault Snowshoes.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Snowshoe Tails.

Figure 53. Assault Snowshoe Tails.

Snowshoe Binding Assemblies (Left and Right).

Figure 54. Snowshoe Binding Assemblies (Left and Right).

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

Modular Sleep System

The modular sleep system consists of two “mummy-bag” type sleeping bags – the patrol bag and the intermediate cold weather bag – constructed of water-resistant, ripstop nylon, a waterproof bivy cover and a compression stuff sack into which the bags may be placed. Each sleeping bag may be used separately or may be joined together, with the patrol sleeping bag going inside the intermediate cold sleeping bag. The system will protect from -10 F to -50 F when used with the layers of the Extreme Cold Weather Clothing System.

Figure 55. Modular Sleep System.

Intermediate Cold Weather Sleeping Bag. The intermediate bag provides the user with adequate insulation to as low as 0 °F and weight approximately 4 pounds. The intermediate bag has a chest collar sewn along the inside, at the top of the chest area to prevent air drafting up and down through the hood. The intermediate bag has an adjustable hood for heat retention and is adjustable. The slide fastener has a draft flap to prevent heat loss and to prevent inadvertent snagging of the liner.

Patrol Sleeping Bag. The patrol bag is designed for use down to 32 °F and weights approximately 3 pounds. The patrol bag has an adjustable hood for heat retention and is adjustable. The slide fastener has a draft flap to prevent heat loss and to prevent inadvertent snagging of the liner.

Compression Stuff Sack. The stuff sack, when packed with the sleeping bags, is capable of being compressed to one cubic foot and will fit in the sleeping bag compartment of the MOLLE II large ruck.

Bivy Cover. The bivy cover may be used alone or with any combination of sleeping bags in the modular sleep system. The cover provides protection from water, wind and cold.

Advanced Combat Helmet

The Advanced Combat Helmet (ACH) is a rigid one-piece ballistic protective item molded of laminated aramid fabric. The ACH covers the front of the head, the temple region, the ears and the lower rear region of the head. The ACH is similar in coverage to the Helmet, Ground Troops – Parachutists but allows maximum sensory and situational awareness for the operator, including an unobstructed field of view and increased ambient hearing capabilities. There is rubber edging around the periphery. The helmet uses a pad suspension system which also provides impact protection. The chinstrap is a four-point suspension open chin cup design having four adjustable buckles and a single side-release buckle on the left side.

END OF WORK PACKAGE

FIELD MAINTENANCE

THEORY OF OPERATION

Soldiers are required to perform many different tasks related to their MOS, as well as each individual Soldier's responsibilities within the unit. Soldiers, therefore, require a wide variety of equipment in order to accomplish their tasks and missions. The most basic equipment issued to every Soldier is the uniform.

Uniforms are designed to provide the Soldier with comfortable, functional clothing necessary for any duty, any task, and any mission. To support the Soldier, uniforms must be kept in good repair or replaced as needed. On receipt of clothing, the individual items are inspected, assessed, and then classified for serviceability, which in turn determines the disposition of the item.

END OF WORK PACKAGE

CHAPTER 2

PREVENTIVE MAINTENANCE CHECKS AND SERVICES INFORMATON FOR GENERAL REPAIR PROCEDURES FOR INDIVIDUAL EQUIPMENT

FIELD MAINTENANCE

PREVENTIVE MAINTENANCE CHECKS AND SERVICES INTRODUCTION

GENERAL

The following information describes PMCS procedures on the unit level. The PMCS table has been provided to ensure that the OCIE equipment is in proper operating condition, and ready for use. This PMCS chart should be used in conjunction with the serviceability criteria in WP 0007.

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

Frequency of Performing PMCS

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

PMCS Columnar Entries Table 1

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

Interval. This column identifies the required PMCS interval.

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

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

Recording Defects

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

Over Age Items

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

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.

END OF WORK PACKAGE

FIELD MAINTENANCE
INDIVIDUAL EQUIPMENT
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

INITIAL SETUP:

Tools and Special Tools	Personnel Required
N/A	Non-MOS Specific
Equipment Condition	**References**
Unpacked.	N/A

GENERAL

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

PMCS PROCEDURES

Table 1. Preventive Maintenance Checks and Services for Individual Equipment.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED AND SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
1.	Before After	Barracks Bag	Inspect for missing or damaged grommets and drawstrings. Check for rips, tears, bums, snags, oil, grease, or other contaminants.	Missing or damaged grommets and drawstrings. Rips, tears, bums, snags, oil, grease, or other contaminants.
2.	Before After	Duffel Bag	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	Rips, tears, bums, snags, oil, grease, or other contaminants.
3.	Before After	Flyers Helmet Bag	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 loop fasteners and handles for damage. Check inside pockets for rips and tears.	Rips, tears, bums, snags, oil, grease, or other contaminants. Broken or missing zippers and snaps. Hook and loop fasteners do not work.
4.	Before After	Stuff Sack (ECWSS)	Inspect for rips, tears, holes, burns, grease, oil, stains, missing or broken double bar buckles and single cord locks and discoloration or fading.	Rips, tears, bums, snags, oil, grease, or other contaminants. Missing or broken double bar buckles and single cord locks. Severe discoloration or fading.

PMCS PROCEDURES – CONTINUED

Table 1. Preventive Maintenance Checks and Services for Individual Equipment – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED AND SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
5.	Before After	Waterproof Clothing Bag.	Inspect each item for holes, tears, separated seams, or missing tie cord. Check loops to assure they are present and serviceable. Check that item is not deteriorated. Check for oil, grease, or other soiled areas. Inspect for mildew, rot, or other deterioration.	Rips, tears, bums, snags, oil, grease, or other contaminants. Separated seams or missing tie cord. Loops missing. Mildew, rot or other deterioration.
6.	Before After	Canvas Helmet Band	Inspect for rips, tears, and frays.	Rips, tears, bums, snags, oil, grease, or other contaminants.
7.	Before After	Individual Equipment Belt	Inspect item for damaged or missing parts. Check for damage to metal parts. Check webbing for fraying or discoloration.	Damaged or missing parts. Damage to metal parts. Frayed or severely discolored webbing.
8.	Before After	Ski Binding	Inspect bindings for frays, cracks, chips, burns, loose fasteners, malfunctioning springs and pivot points. Inspect for mildew, rot or cracks.	Rips, tears, bums, snags, oil, grease, or other contaminants. Mildew, rot or cracks.
9.	Before After	Snowshoe Binding Assembly	Inspect bindings for frays, burns, tears, grease, oil or stains. Check metal components for cracks or corrosion. Check for damaged or broken fasteners and loose or broken stitching.	Rips, tears, bums, snags, oil, grease, or other contaminants. Cracks or corrosion to metal components. Damaged or broken fasteners.
10.	Before After	Black Rubber Combat Boot	Inspect each boot for holes, tears, separated seams, or missing tie cord. Check loops to make sure they are present and serviceable. Check for oil, grease or stains. Inspect for mildew, rot, or cracking.	Holes, tears, separated seams, missing tie cord, missing loops, oil, grease, stains, mildew, cracking or rot.
11.	Before After	White Rubber Combat Boot	Inspect each boot for holes, tears, separated seams, or missing tie cord. Check loops to make sure they are present and serviceable. Check for oil, grease or stains. Inspect for mildew, rot, cracking or stains.	Holes, tears, separated seams, missing tie cord, missing loops, oil, grease, stains, mildew, cracking or rot.
12.	Before After	Police Club Carrier	Inspect for loose, missing, or broken seam threads. Check snap fasteners for serviceability and proper mounting and that main body rivet assembly is not pulling through leather. Check entire body of carrier for tears, slices, cracks, or pieces of the leather missing.	Loose, missing or broken seam threads. Snap fasteners don't work or are missing. Main body rivet assembly is pulling through leather. Tears, slices, cracks or pieces of missing leather.

PMCS PROCEDURES – CONTINUED

Table 1. Preventive Maintenance Checks and Services for Individual Equipment – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED AND SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
13.	Before After	Entrenching Tool Carrier	Check for missing or damaged keepers and snaps. Check for rips or tears in the flap or case	Missing or damaged keepers or snaps. Rips or tears in flap or case.
14.	Before After	First Aid or Compass Carrier	Inspect item for missing or damaged snaps, rips, tears, fraying, oil, grease, burns, and other contamination	Missing or damaged snaps, rips, tears, fraying, oil, grease, burns, or other contamination.
15.	Before After	Leather MP Handcuff Case	Inspect for rips, tears, cracks, or holes in the leather. Check for damaged or missing flap fastener. Check for separated seams.	Rips, tears, cracks or holes in leather. Damaged or missing flap fastener. Separated items.
16.	Before After	Small Arms Ammunition Case	Inspect item for damaged or missing parts. Check for damaged or broken plastic flap fasteners and metal parts. Check for rips, tears, holes, burns, grease, oil or other contaminants. Check inside case for missing or damaged separation straps. Cracks or splits in the plastic stiffener in the wall of the case shall not be considered unserviceable unless the stiffener interferes with placing magazines in or taking them out of the case.	Damaged or missing parts. Damaged or broken plastic flap fasteners or metal parts. Rips, tears, holes, burns, grease, oil or other contaminants. Missing or separated straps. Cracks or splits in plastic stiffener that interfere with placing magazines in or taking magazines out of case.
17.	Before After	Bivy Cover (ECWSS)	Inspect for rips, tears, holes, burns, grease, oil, discoloration or fading, dry rot. missing or broken snap fasteners or single cord locks (barrel locks), or damaged draw cords	Rips, tears, holes, burns, grease, oil, discoloration or fading, dry rot, missing or broken snap fasteners or single cord locks, or damaged draw cords.
18.	Before After	Canteen Cover (1-Quart)	Inspect item for damaged or missing parts. Check for rips, tears, holes, burns, grease, oil, or other contaminants.	Damaged or missing parts. Rips, tears, holes, burns, grease, oil, or other contaminants.
19.	Before After	Canteen Cover (2-Quart)	Inspect for rips, tears, holes, fraying, and loose or broken stitching. Check the outside for “D” rings (2), plastic snap fastener, pocket, hook and loop fastener tape, and metal grommet. Check the inside for damaged, loose, or fraying synthetic fur. Inspect for stains, grease, oil, or other contaminants.	Rips, tears, holes, fraying, loose or broken stitching. Missing components. Stains, grease, oil or other contaminants.

PMCS PROCEDURES – CONTINUED

Table 1. Preventive Maintenance Checks and Services for Individual Equipment – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED AND SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
20.	Before After	Camouflage Patter Helmet Cover	Inspect item for rips, tears, holes, burns, snags, discoloration, oil, grease, and other contamination.	Rips, tears, holes, burns, snags, discoloration, oil, grease or other contamination.
21.	Before After	Chemical Protective Helmet Cover	Cover for rips, tears, holes, and/or damaged elastic webbing enclosed in hem.	Rips, tears, holes, and/or damaged elastic webbing enclosed in hem.
22.	Before After	Canteen Cup	Inspect for dents, abrasions, discoloration, and cleanliness. Check to see that handle is present and operable. Check to see that rivets are secure.	Dents, abrasions, discoloration and cleanliness. Handles missing or don't work. Rivets are missing or loose.
23.	Before After	Large Combat Field Pack	Inspect for missing or damaged hardware or drawstrings. Check for rips, tears, fraying, burns, loose binding, oil, grease, and stains	Missing or damaged hardware or drawstrings. Rips, tears, fraying, burns, loose binding, oil, grease or stains.
24.	Before After	Medium Combat Field Pack	Inspect for missing or damaged hardware or drawstrings. Check for rips, tears, fraying, burns, loose binding, oil, grease, and stains.	Missing or damaged hardware or drawstrings. Rips, tears, fraying, burns, loose binding, oil, grease or stains.
25.	Before After	Chemical Protective Gloves	Inspect gloves for rips, tears, holes, and abrasions. Check to see that fingers are properly secured to glove palm and that fingertips are serviceable.	Rips, tears, holes or abrasions. Fingers are not secured to palm. Fingertips worn out.
26.	Before After	CVC Helmet	Helmet shell - Inspect for cuts, blisters, delamination, chipped paint, pitting, indentations, damaged straps, loose or missing hardware.	Cuts, blisters, delamination, chipped paint, pitting, indentations, damaged straps, loose or missing hardware.
			Rubber edging - Inspect for cuts, tears, and that edging is bonded to shell.	Cuts or tears. Edging is not longer bonded to shell.
			Helmet liner - Inspect for torn cloth, cut or damaged parts, loose or damaged straps or hardware.	Tears, cut or damaged parts, loose or damaged straps or hardware.
			Foam rubber - Inspect for tears, odor, and separation of vinyl skin.	Tears, odor or separation of vinyl skin.
27.	Before After	Ground Troops Helmet	Inspect the helmet for split or cut rubber edging, chipped paint, loose or missing hardware on suspension system or chin strap. Inspect suspension band for tears, pulled or ripped stitching, and for cleanliness.	Split or cut rubber edging, chipped paint, loose or missing hardware on suspension system or chin strap. Suspension band has tears, pulled or ripped stitching or is dirty.

PMCS PROCEDURES – CONTINUED

Table 1. Preventive Maintenance Checks and Services for Individual Equipment – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED AND SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
28.	Before After	Hood and Socks Set (ECWSS)	Inspect for rips, tears, holes, burns, grease, oil, stains, missing or broken snap fasteners or single cord locks (barrel locks), or damaged draw cords, ripped seams or loose stitching..	Rips, tears, holes, burns, grease, oil, stains, missing or broken snap fasteners or single cord locks, damaged draw cords, ripped seams or loose stitching.
29.	Before After	CVC Helmet Balaclava	Inspect for rips, tears, stains discoloration or fading and cleanliness. Check for missing opening tab and for damaged elastic cord.	Rips, tears, stains, discoloration or fading or dirty. Missing opening tab or damaged elastic cord.
30.	Before After	Sleeping Bag Hood	Inspect for rips, tears, holes, burns, grease, oil, stains, damaged hook and pile fastener tape, ripped seams or loose stitching.	Rips, tears, holes, burns, grease, oil, stains, damaged hook and pile fastener tape, ripped seams, loose stitching.
31.	Before After	Ice and Mountain Climbing Equipment	Inspect item for rips, tears, frays, burrs, edges, nicks, loose or damaged hardware, rust or corrosion, and damaged finish (chipped or scratched).	Rips, tears, frays, burrs, edges, nicks, loose or damaged hardware, rust or corrosion, damaged finish.
32.	Before After	Helmet Liner	Inspect for cracks, dents, fraying, and missing or damaged webbing and strap retainers.	Cracks, dents, fraying, missing or damaged webbing or strap retainers.
33.	Before After	Antipersonnel Mine Protective Overboots	Inspect for cuts or tears in soles or upper material.	Cuts or tears in soles or upper material.
34.	Before After	Cold Weather Mask (Green and White)	Check for rips, tears, damaged or missing straps, buckles, or snaps. Check for brittle or cracked material.	Rips, tears, damaged or missing straps, buckles or snaps. Brittle or cracked material.
35.	Before After	Sleeping Bag Mat	Inspector rips, tears, and holes. Check for presence of ties. Inspect for grease, oil, and other stains.	Rips, tears or holes. Missing ties. Grease, oil or other stains.
36.	Before After	Pneumatic Mattress	Check for rips, tears, dry rot, holes, missing plugs, or damaged air valve. Inflate the mattress and check for small tears and holes. Check to determine if the mattress has been filled with water. Inspect for seam separation and excessive delamination.	Rips, tears, dry rot, holes, missing plugs, or damaged air valve. Delamination.

PMCS PROCEDURES – CONTINUED

Table 1. Preventive Maintenance Checks and Services for Individual Equipment – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED AND SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
37.	Before After	Ski Poles	Inspect for straightness, cracks in shaft, and tip of pole. Check fasteners for serviceability and proper mounting. Inspect grip for looseness, cracks, frays, bums, tears or pieces of leather missing. Inspect basket for attachment, frays, tears, burns, cracks, and completeness of stitching. Inspector mildew, rot, or cracking.	Pole is not straight or has cracks in shaft or tip of pole. Fasteners are missing or do not function properly. Grip is loose or has cracks, frays, bums, tears or pieces of leather missing. Basket is missing or does not attach properly. Basket is damaged.
38.	Before After	Sleeping Bags	Inspect for rips, tears, holes, burns, dry rot, oil, grease, and other contaminants. Check slide fasteners for damage and freedom of movement. Assure there are no missing teeth in the zipper. Check for torn or loose tape and bead. Check snap fasteners and eyelets for damage (crushed or loose) and that they are positioned in the original location. Check the bag for loss of filling material (feathers and down). Check reinforcement tape for tears, loose ends, and loose or missing thread.	Rips, tears, holes, burns, dry rot, oil, grease or other contamination. Slide fastener is damaged or does not open/close for the entire length of the bag. Snap fasteners or eyelets are damaged, do not work or are missing. Fill material is missing. Reinforcement tape has tears, loose ends, or missing/loose threads.
39.	Before After	Sleeping Bag, ECWSS	Inspect for rips, tears, holes, burns, grease, oil, missing or broken snap fasteners and single cord locks (barrel locks), damaged slide fasteners and frayed webbing, missing or damaged draw cords, ripped seams or loose stitching.	Rips, tears, holes, burns, grease, oil, missing or broken snap fasteners or single cord locks. Damaged slide fasteners, frayed webbing, missing or damaged draw cords, ripped seams or loose stitching.
40.	Before After	Military Ski	Inspect for straightness, rough edges, cracks, holes, burns and gouges. Inspect for shape, delamination and sharpness of steel edges. Inspect for mildew, rot or cracks.	Ski is not straight. Ski has rough edges, cracks, holes, burns or gouges. Ski is misshapen or is delaminating.
41.	Before After	Magnesium Trail Snowshoe	Inspect shoes for cracks, pits, scratches, chips or burrs. Inspect plastic coated steel for cracks, tightness, unbound ends, cut or bare steel. Inspect for mildew, rot or stains.	Cracks, pits, scratches, chips or burrs. Plastic coated steel has cracks, is loose, has unbound ends, is cut or has bare steel. Mildew, rot or stains.
42.	Before After	Individual Equipment Suspenders	Inspect item for damaged or missing parts. Check for damage to metal components. Check webbing and pads for fraying, discoloration, stretched material, grease, oil, or other contamination.	Damaged or missing parts. Damage to metal components. Webbing and pads are fraying, discolored or stretched. Material has grease, oil or other contamination.

PMCS PROCEDURES – CONTINUED

Table 1. Preventive Maintenance Checks and Services for Individual Equipment – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED AND SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
43.	Before After	Body Armor (Legacy)	Inspect for rips, tears, holes, burns, loose binding, oil, or grease. Check that all zippers are serviceable and hook and loop fastener tape is undamaged.	Rips, tears, holes, burns, loose binding, oil or grease. Hook and loop fastener tape and zippers are damaged.
44.	Before After	Grenade Carrying Vest	Inspect for rips, tears, loose binding, loose or broken stitching, oil, grease, or stains. Check that hook and loop fastener tapes are undamaged. Check that all snap fasteners and other hardware are serviceable.	Rips, tears, loose binding, loose or broken stitching, oil, grease or stains. Hook and loop fastener tape is damaged or does not work. Snap fasteners are missing or do not work.
45.	Before After	Orange Safety Vest	Inspect for rips, tears, and loose or broken stitching. Inspect the body of the garment for missing or damaged reflective tape. Check for stains and peeling of lamination and that hook and loop fastener tape is serviceable.	Rips, tears or loose/broken stitching. Missing or damaged reflective tape. Stains or peeling of lamination. Hook and loop fastener tape does not work.
46.	Before After	Tactical Load Bearing Vest	Inspect for rips, tears, loose binding and loose or broken stitching, damaged drawstrings, oil, grease and stains. Check that all hook and loop fastener tapes are undamaged. Check that all plastic and metal hardware is serviceable and undamaged.	Rips, tears, loose binding or loose/broken stitching. Damaged drawstrings, oil, grease or stains. Hook and loop fastener tape is damaged. Plastic or metal hardware is damaged or missing.
47.	Before After	Anti-Frag Trousers (BASIC)	Inspect for cuts, tears, open seams in shell fabric and webbing material. Inspect ballistic inserts for damage.	Cuts, tears or open seams in shell fabric or webbing material. Ballistic inserts damaged.

MANDATORY REPLACEMENT PARTS

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

END OF WORK PACKAGE

CHAPTER 3

FIELD MAINTENANCE
FOR
GENERAL REPAIR PROCEDURES FOR INDIVIDUAL EQUIPMENT

FIELD MAINTENANCE

SERVICE UPON RECEIPT

INITIAL SETUP:

	Personnel Required
Tools and Special Tools	
	Non-MOS Specific(1)
None Required	
	References
Materials/Parts	
	WP 0005
None Required	WP 0007

SERVICE UPON RECEIPT

All OCIE gear will be thoroughly inspected upon receipt, whether new or used, IAW WP 0005, PMCS, and WP 0007, OCIE Inspection.

END OF TASK

END OF WORK PACKAGE.

FIELD MAINTENANCE

INDIVIDUAL EQUIPMENT

INSPECT

INSPECT

Soldiers are required to perform many different tasks related to their MOS, as well as each individual Soldier's responsibilities within the unit. Soldiers, therefore, require a wide variety of equipment in order to accomplish their tasks and missions. The most basic equipment issued to every Soldier is uniforms.

Uniforms are designed to provide the Soldier with comfortable, functional clothing necessary for any duty, any task, and any mission. To support the Soldier, uniforms must be kept in good repair or replaced as needed. On receipt of clothing, the individual items are inspected, assessed, and then classified for serviceability, which in turn determines the disposition of the item. Table 1 lists the classification codes along with the defining criteria.

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. 1. Items peculiar to the clothing allowance system will possess a high degree of appearance and serviceability. These items affect the personal appearance of the individual and should be in such condition as to be readily acceptable for issue and cash sale purposes. In no case should the wear expectancy be less than 75 percent of a like-new item. 2. 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 (clothing) 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 clothing or 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 clothing, i.e., mechanics, painters, construction workers, etc.

As a general guide, classification of all clothing and equipment items will be subject to the stipulations and limitations listed here.

Items of personal clothing and footwear will be classified as new only when they show no evidence of color fading, stains, uncleanliness, and/or rotting of stitching or fabric.

Each item will be complete in every detail, and all parts properly designed and attached. A new item which has been tried on for size purposes, or from which the tags have been removed, will not be classed as used; nor will such items be soiled to the extent that dry cleaning or laundering is required.

INSPECT – CONTINUED

When dry cleaning or laundering is required, garment will be reclassified from new to a used category. Only pressing of new garments or polishing of new leather footwear does not lower the classification.

NOTE

The Universal Camouflage Pattern, Woodland Temperate, Daytime Desert, and Hot Weather Camouflage Clothing and Individual Equipment items will be considered serviceable from a fading standpoint if the pattern is visually discernable and the colors are still subdued in nature.

Personal Clothing General Inspection Criteria. Items of personal clothing and footwear will require the following for classification in a serviceable category (A or B):

- Complete state of repair. All repairs necessary to render the item completely serviceable will have been made
- Cleaned. Must be in a clean (laundered, dry cleaned, or sterilized) 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.
- Buttons. Replacement buttons visible on outer garments when worn should be of a size, shape, and color like those originally affixed. Buttons which are not visible when a garment is being worn need not be specifically of the same color but should be of the same size.
- Buttonholes. Buttonholes should not be enlarged or ripped.
- Frayed Edges. No edge should appear ragged due to worn or broken threads.
- Linings. Linings in all outer garments must be in a complete state of repair. Repair may include minor patches. The patch does not have to exactly match the color of the lining, but should be reasonably similar in color.
- Patches and darns. Patches and darns should not be visible on outer dress clothing when worn.
- 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.
- Belt loops. All belt loops on trousers will be the same as on any new garment of a like make, including shade, material, and number.
- Fading, Except for those items designed as work-type garments, there should be no obvious fading.

NOTE

Fading which does not cause conspicuous deviation from original shade will be permitted for work-type garments.

- Insignia marks. Chevron, overseas service organizational shoulder, or other insignia marks, caused by fading or discoloration, will prohibit serviceable classification. Insignia marks which are not conspicuous will be permitted on work-type garments.
- Identification marks. Marks of identification include those made at issue point and those made by individuals. These should be lined out or obliterated. A mark is considered obliterated when its cancellation is readily evident.
- Spots and stains. Spots and stains should not be easily discernible at a casual glance when the garment is being worn.
- Hardware. Hardware will not be bent, broken, or missing. Bright and shiny hardware will not disqualify items from a serviceable classification.

Organizational Clothing 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 Loop Tape Fasteners. All hook and loop tape fasteners must be functional and of the correct color for the uniform. The tape shall not be frayed or worn.

INSPECT – CONTINUED

- Buttons. Replacement buttons visible on outer garments when worn should be of a size, shape, and color like those originally affixed. Buttons which are not visible when a garment is being worn need not be specifically of the same color but should be of the same size.
- Buttonholes. Buttonholes should not be enlarged or ripped.
- 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.
- Linings. Linings in all outer garments must be in a complete state of repair. Repair may include minor patches. The patch does not have to exactly match the color of the lining, but should be reasonably similar in color.
- 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.
- Belt loops. All belt loops on trousers will be the same as on any new garment of a like make, including shade, material, and number.
- 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 or obliterated. A mark is considered obliterated when its cancellation is readily evident.
- Spots and stains.
    - Items worn by individuals. Small paint, grease, or other spots or stains will be permitted if garment or other item is otherwise completely serviceable.
    - All other organizational items. 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. Bright and shiny hardware will not disqualify items from a serviceable classification.

NOTE

This item classification criteria applies to only Central Issue Facility (CIF), Organizational Clothing and Individual Equipment (OCIE) and Central Initial Issue Point. Army Military Clothing Sales stores are not affected by this item classification criteria.

- Footwear (Shoes and Boots). Shoes and Boots can be reissued if footwear is treated with a fungicidal spray designed for shoes and boots (procured locally) and is in like new condition, free from obvious stretching or creasing of leather upper. Indentations insoles of footwear causal by minimal wear is acceptable and suitable for Code A (See Table 1). This also applies to rubber and canvas footwear, men's leather ski boots.

Disposition of Distinctive Items of Uniform (AR 670-1). Decorations, badges, service awards, medals, ribbons, lapel buttons and other insignia and items of uniform, to include items cited in AR 670-1, will be mutilated to remove their distinctive characteristics prior to turn-in to the Defense Reutilization and Marketing Office (DRMO). Property will be turned in as scrap.

Items not considered distinctive will be turned in to the DRMO after the removal of distinctive buttons, insignia, and other such items, for disposition in accordance with DOD 4160.21M.

Inspection and Classification Procedures for Individual Organizational Equipment. 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.

INSPECT – CONTINUED

NOTE

Restitching of open seams 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. Bag, Barracks (B13907)

    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. No repairs authorized.

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

    b. Refer to WP 0012 for maintenance procedures.

2. Bag, Duffel (B14729)

    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. No repairs authorized.

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

    b. Refer to WP 0013 for maintenance procedures.

3. Bag, Flyers Helmet (B14797)

    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. No repairs authorized.

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

    b. No repairs authorized.

4. Bag, Stuff, ECWSS (No LIN)

    a. Inspect for rips, tears, holes, burns, grease, oil, stains, missing or broken double bar buckles and single cord locks and discoloration or fading.

    Code A. See Table 1.

    Code B. Complete and clean. No damage.

INSPECT – CONTINUED

Code F. No repairs authorized.

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

b. No repairs authorized.

5. Bag, Waterproof Clothing (B15825)

a. Inspect each item for holes, tears, separated seams, or missing tie cord. Check loops to assure they are present and serviceable. Check that item is not deteriorated. Check for oil, grease, or other soiled areas. Inspect for mildew, rot, or other deterioration.

Code A. See Table 1.

Code B. Complete and clean. No damage other than pin holes.

Code F. No repairs authorized.

Code H. Any damage other than pin holes. Any contamination that cannot be cleaned.

b. No repairs authorized.

6. Belt, Individual Equipment (B59567)

a. Inspect item for damaged or missing parts. Check for damage to metal parts. Check webbing for fraying or discoloration.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. No repairs authorized.

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

b. No repairs authorized.

7. Binding, Ski (No LIN)

a. Inspect bindings for frays, cracks, chips, burns, loose fasteners, malfunctioning springs and pivot points. Inspect for mildew, rot or cracks.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. Unserviceable items that can be repaired by replacing missing screws or damaged parts. Malfunctioning release mechanisms, springs, and pivot points are cause for salvage.

Code H. Unserviceable items that do not meet the criteria for Code F or are obviously scrap.

b. Refer to WP 0011 for maintenance procedures.

8. Binding Assembly, Snowshoe (B65807)

a. Inspect bindings for frays, burns, tears, grease, oil or stains. Check metal components for cracks or corrosion. Check for damaged or broken fasteners and loose or broken stitching.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. Unserviceable items that can be repaired attaching new webbing (minimum fraying is permissible) replacing damaged or broken fasteners. Small tears or rips (3/4 inch diameter or in length), may be replaced, no more than three per binding. Holes, rips or cracks in bottom of pivot section of the binding is cause for salvage.

Code H. Holes, rips or cracks in bottom of pivot section of the binding. Unserviceable items that are obviously scrap or cannot meet the criteria for Code F.

b. Refer to WP 0011 for maintenance procedures.

INSPECT – CONTINUED

9. Boot, Extreme Cold Weather, Black (C08119)
    a. Inspect each boot for holes, tears, separated seams, or missing tie cord. Check loops to make sure they are present and serviceable. Check for oil, grease or stains. Inspect for mildew, rot, or cracking.

       Code A. See Table 1.

       Code B. Complete and clean. No damage.

       Code F. Unserviceable items that can be repaired by replacing worn or broken laces.

       Code H. Any rips, tears, holes, cracks or other damage not otherwise specified. Any contamination that cannot be cleaned.

    b. Refer to WP 0011 for maintenance procedures.
10. Boot, Extreme Cold Weather, White (C08256)
    a. Inspect each boot for holes, tears, separated seams, or missing tie cord. Check loops to make sure they are present and serviceable. Check for oil, grease or stains. Inspect for mildew, rot, or cracking.

       Code A. See Table 1.

       Code B. Complete and clean. No damage.

       Code F. Unserviceable items that can be repaired by replacing worn or broken laces.

       Code H. Any rips, tears, holes, cracks or other damage not otherwise specified. Any contamination that cannot be cleaned.

    b. Refer to WP 0011 for maintenance procedures.
11. Carrier, Club Policy (No LIN)
    a. Inspect for loose, missing, or broken seam threads. Check snap fasteners for serviceability and proper mounting and that main body rivet assembly is not pulling through leather. Check entire body of carrier for tears, slices, cracks, or pieces of the leather missing.

       Code A. See Table 1.

       Code B. Complete, clean and undamaged except for small cuts and cracks that do not impair serviceability.

       Code F. No repairs authorized.

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

    b. This item has no repair or service procedures in this TM.
12. Carrier, Entrenching Tool (D11812)
    a. Check for missing or damaged keepers and snaps. Check for rips or tears in the flap or case.

       Code A. See Table 1.

       Code B. Complete, clean and undamaged except for small cuts and cracks that do not impair serviceability.

       Code F. No repairs authorized.

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

    b. This item has no repair or service procedures in this TM.
13. Case, Field First Aid or Compass (D64043)
    a. Inspect for rips, tears and frays.

       Code A. See Table 1.

       Code B. Complete and clean. No damage.

INSPECT – CONTINUED

Code F. No repairs authorized.

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

b. This item has no repair or service procedures in this TM.

14. Case, Handcuff Leather (D65687)

a. Inspect item for missing or damaged snaps, rips, tears, fraying, oil, grease, burns, and other contamination.

Code A. See Table 1.

Code B. Complete, clean and undamaged except for small cuts and cracks that do not impair serviceability.

Code F. No repairs authorized.

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

b. This item has no repair or service procedures in this TM.

15. Case, Small Arms Ammunition (D70550)

a. lnspect item for damaged or missing parts. Check for damaged or broken plastic flap fasteners and metal parts. Check for rips, tears, holes, burns, grease, oil or other contaminants. Check inside case for missing or damaged separation straps. Cracks or splits in the plastic stiffener in the wall of the case shall not be considered unserviceable unless the stiffener interferes with placing magazines in or taking them out of the case.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. No repairs authorized.

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

b. This item has no repair or service procedures in this TM.

16. Cover, Bivy, ECWSS (No LIN)

a. Inspect for rips, tears, holes, burns, grease, oil, discoloration or fading, dry rot. missing or broken snap fasteners or single cord locks (barrel locks), or damaged draw cords.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. Unserviceable items that can be repaired by replacing the draw cord or single cord locks (barrel locks).

Code H. Unserviceable items that do not meet the criteria for Code F or are obviously scrap.

b. Refer to WP 0009 for maintenance procedures.

17. Cover, Canteen, 1 Quart (F30391)

a. Inspect for rips, tears, frays holes, burns, grease, oil or other contaminants.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. Unserviceable items that can be repaired by replacing missing or damaged parts (cap, cap strap and cup).

Code H. Unserviceable items that do not meet the criteria for Code F or are obviously scrap.

b. This item has no repair or service procedures in this TM.

18. Cover, Canteen, 2 Quart (F30117)

INSPECT – CONTINUED

a. Inspect for rips, tears, holes, fraying, and loose or broken stitching. Check the outside for “D” rings (2), plastic snap fastener, pocket, hook and pile tape fastener, and metal grommet. Check the inside for damaged, loose, or fraying synthetic fur. Inspect for stains, grease, oil, or other contaminants.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. No repairs authorized.

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

b. This item has no repair or service procedures in this TM.

19. Cover, Helmet, Camouflage Patter (F28747)

a. Inspect item for rips, tears, holes, burns, snags, discoloration, oil, grease, and other contamination.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. No repairs authorized.

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

b. This item has no repair or service procedures in this TM.

20. Cover, Helmet, Chemical Protective (No LIN)

a. Inspect cover for rips, tears, holes, and/or damaged elastic webbing enclosed in hem.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. No repairs authorized.

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

b. Refer to WP 0016 for maintenance procedures.

21. Cup, Canteen (F54817)

a. Inspect for dents, abrasions, discoloration, and cleanliness. Check to see that handle is present and operable. Check to see that rivets are secure.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. No repairs authorized.

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

b. This item has no repair or service procedures in this TM.

22. Field Pack, Combat, Large (H39835)

a. Inspect for missing or damaged hardware or drawstrings. Check for rips, tears, fraying, burns, loose binding, oil, grease, and stains.

Code A. See Table 1.

Code B. Complete with all attached hardware, have minimal discoloration, and clean. No damage

Code F. Unserviceable items that can be repaired by replacing missing or damaged parts or hardware, or by patching holes or tears or repairing binding.

Code H. Unserviceable items that do not meet the criteria for Code F or are obviously scrap.

b. Refer to WP 0014 for maintenance procedures.

INSPECT – CONTINUED

23. Field Pack, Combat, Medium (H39835)

    a. Inspect for missing or damaged hardware or drawstrings. Check for rips, tears, fraying, burns, loose binding, oil, grease, and stains.

       Code A. See Table 1.

       Code B. Complete with all attached hardware, have minimal discoloration, and clean. No damage

       Code F. Unserviceable items that can be repaired by replacing missing or damaged parts or hardware, or by patching holes or tears or repairing binding.

       Code H. Unserviceable items that do not meet the criteria for Code F or are obviously scrap.

    b. Refer to WP 0014 for maintenance procedures.

24. Gloves, Chemical Protective (No LIN)

    a. Inspect gloves for rips, tears, holes, and abrasions. Check to see that fingers are properly secured to glove palm and that fingertips are serviceable.

       Code A. See Table 1.

       Code B. Complete and clean. No damage.

       Code F. No repairs authorized.

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

    b. Refer to WP 0016 for maintenance procedures.

25. Helmet, Combat Vehicle Crewmans (K33400)

    a. Helmet shell - Inspect for cuts, blisters, delamination, chipped paint, pitting, indentations, damaged straps, loose or missing hardware.

    b. Rubber edging - Inspect for cuts, tears, and that edging is bonded to shell.

    c. Helmet liner - Inspect for torn cloth, cut or damaged parts, loose or damaged straps or hardware.

    d. Foam rubber - Inspect for tears, odor, and separation of vinyl skin.

       Code A. See Table 1.

       Code B. Complete and clean. No damage.

       Code F. Unserviceable rubber edging that can be repaired by bonding the edging to the helmet shell edge or by bonding the appropriate length of new rubber edging to the helmet shell to replace a section of damaged edging. Maximum of three repairs per item.

       Code H. Unserviceable items that do not meet the criteria for Code F or are obviously scrap.

    e. Refer to WP 0019 for maintenance procedures.

26. Hood and Socks Set, ECWSS (No LIN)

    a. Inspect for rips, tears, holes, burns, grease, oil, stains, missing or broken snap fasteners or single cord locks (barrel locks), or damaged draw cords, ripped seams or loose stitching.

       Code A. See Table 1.

       Code B. Complete and clean. No damage.

       Code F. No repairs authorized.

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

    b. This item has no repair or service procedures in this TM.

INSPECT – CONTINUED

27. Hood, Combat Vehicle Crewmans (CVC) Balaclava (H46881)
    a. Inspect for rips, tears, stains discoloration or fading and cleanliness. Check for missing opening tab and for damaged elastic cord.

       Code A. See Table 1.

       Code B. Complete, clean and unstained. No damage. Slight fading is acceptable.

       Code F. No repairs authorized.

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

    b. This item has no repair or service procedures in this TM.
28. Hood, Sleeping Bag (No LIN)
    a. Inspect for rips, tears, holes, burns, grease, oil, stains, damaged hook and pile fastener tape, ripped seams or loose stitching.

       Code A. See Table 1.

       Code B. Complete, clean and unstained. No damage. Slight fading is acceptable.

       Code F. No repairs authorized.

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

    b. This item has no repair or service procedures in this TM.
29. Ice and Mountain Climbing Equipment (Creeper, Ice; Hammer Hand, Piton, Mountain; Piton, Mountain, Steel; Snap, Link, Mountain, Piton, Steel; Type I) (No LIN)
    a. Inspect item for rips, tears, frays, burrs, edges, nicks, loose or damaged hardware, rust or corrosion, and damaged finish (chipped or scratched).

       Code A. See Table 1.

       Code B. Complete, clean and unstained. No damage. Slight fading is acceptable. The cutting edges must be sharp and free of nicks or burrs. The color may vary slightly in shade.

       Code F. Unserviceable items that cannot be repaired by sharpening points on crampons and creepers..

       Code H. Unserviceable items that do not meet the criteria for Code F or are obviously scrap.

    b. Refer to WP 0012 for maintenance procedures.
30. Liner, Helmet (L71200)
    a. Inspect for cracks, dents, fraying, and missing or damaged webbing and strap retainers.

       Code A. See Table 1.

       Code B. Complete and clean. No damage.

       Code F. No repairs authorized.

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

    b. This item has no repair or service procedures in this TM.
31. Mask, Cold Weather, Green or White(No LIN)
    a. Check for rips, tears, damaged or missing straps, buckles, or snaps. Check for brittle or cracked material.

       Code A. See Table 1.

       Code B. Complete, clean and unstained. No damage.

       Code F. No repairs authorized.

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

INSPECT – CONTINUED

b. This item has no repair or service procedures in this TM.

32. Mat, Sleeping , Foam Rubber (No LIN)

a. Inspector rips, tears, and holes. Check for presence of ties. Inspect for grease, oil, and other stains.

Code A. See Table 1.

Code B. Complete, clean and unstained. No damage.

Code F. No repairs authorized.

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

b. This item has no repair or service procedures in this TM.

33. Mattress, Pneumatic (M17642)

a. Check for rips, tears, dry rot, holes, missing plugs, or damaged air valve. Inflate the mattress and check for small tears and holes. Check to determine if the mattress has been filled with water. Inspect for seam separation and excessive delamination.

Code A. See Table 1.

Code B. Complete, clean and unstained. No damage.

Code F. No repairs authorized.

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

b. This item has no repair or service procedures in this TM.

34. Pole, Ski (P15510)

a. Inspect for straightness, cracks in shaft, and tip of pole. Check fasteners for serviceability and proper mounting. Inspect grip for looseness, cracks, frays, bums, tears or pieces of leather missing. Inspect basket for attachment, frays, tears, burns, cracks, and completeness of stitching. Inspector mildew, rot, or cracking.

Code A. See Table 1.

Code B. Complete, clean and unstained. No damage.

Code F. Unserviceability items that can be repaired by replacing grips, leather strap, tip or basket.

Code H. Cracks, severe bends or dents or dents leading to cracks or permanent deformation is cause for salvage.

b. Refer to WP 0011 for maintenance procedures.

35. Sleeping Bag (T70930, Z74116, Z74138, T71478 T71615, T71673, T71706)

a. Inspect for rips, tears, holes, burns, dry rot, oil, grease, and other contaminants. Check slide fasteners for damage and freedom of movement. Assure there are no missing teeth in the zipper. Check for torn or loose tape and bead. Check snap fasteners and eyelets for damage (crushed or loose) and that they are positioned in the original location. Check the bag for loss of filling material (feathers and down). Check reinforcement tape for tears, loose ends, and loose or missing thread.

Code A. See Table 1.

Code B. Used items that are clean, undamaged, and have no soiled areas which make the material stiff or odor saturated.

Code F. Unserviceable items that can be repaired by:

No more than 5 repairs exceeding 2 inches in length. (Patches must be sewn.)

Repairs less than 2 inches in length are unlimited. (Patches may be applied with heat sealant material.) Glues and adhesives are strictly forbidden.

INSPECT – CONTINUED

Code H. Unserviceable items that do not meet the criteria for Code F or are obviously scrap.

b. Refer to WP 0008 for maintenance procedures.

36. Sleeping Bag, ECWSS (No LIN)

a. Inspect for rips, tears, holes, burns, grease, oil, missing or broken snap fasteners and single cord locks (barrel locks), damaged slide fasteners and frayed webbing, missing or damaged draw cords, ripped seams or loose stitching.

Code A. See Table 1.

Code B. Used items that are clean, unstained, undamaged and have no more than 10 repaired areas.

Code F. Unserviceable items that can be repaired by patching or re-stitching.

Code H. Unserviceable items that do not meet the criteria for Code F or are obviously scrap.

b. Refer to WP 0009 for maintenance procedures.

37. Ski, Military (T64512)

a. Inspect for straightness, rough edges, cracks, holes, burns and gouges. Inspect for shape, delamination and sharpness of steel edges. Inspect for mildew, rot or cracks.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. Unserviceable items that can be repaired by waxing and sharpening steel edges.

Code H. Unserviceable items that do not meet the criteria for Code F or are obviously scrap. Holes, cracks, or gouges lessening the overall stability or strength of ski is cause for salvage.

b. Refer to WP 0011 for maintenance procedures.

38. Snowshoes, Trail, Magnesium (T89527)

a. Inspect shoes for cracks, pits, scratches, chips or burrs. Inspect plastic coated steel for cracks, tightness, unbound ends, cut or bare steel. Inspect for mildew, rot or stains.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. Unserviceable items that can be repaired by restringing the plastic coated wire.

Code H. Unserviceable items that do not meet the criteria for Code F or are obviously scrap. Cracks, bends, or dents severely lessening the overall strength of shoe is cause for salvage.

b. Refer to WP 0011 for maintenance procedures.

39. Suspenders, Individual Equipment (U73323)

a. Inspect item for damaged or missing parts. Check for damage to metal components. Check webbing and pads for fraying, discoloration, stretched material, grease, oil, or other contamination.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. No repairs authorized.

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

b. Refer to WP 0014 for maintenance procedures.

40. Vest, Body Armor, Fragmentation Protective, with ¾ Collar (A92145)

INSPECT – CONTINUED

a. Inspect for rips, tears, holes, burns, loose binding, oil, or grease. Check that all zippers are serviceable and hook and pile fastener tape is undamaged.

Code A. See Table 1.

Code B. Complete, clean and having no soiled areas that make the material stiff or odor saturated. No damage.

Code F. Unserviceable items that can be laundered so that the material is pliable and odor free.

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

b. Refer to WP 0020 for maintenance procedures.

41. Vest, Grenade Carrying, M-79 (Y00790)

a. Inspect for rips, tears, loose binding, loose or broken stitching, oil, grease, or stains. Check that hook and loop fastener tapes are undamaged. Check that all snap fasteners and other hardware are serviceable.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. No repairs authorized.

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

b. Refer to WP 0014 for maintenance procedures.

42. Vest, Safety Orange (Y00950)

a. Inspect for rips, tears, and loose or broken stitching. Inspect the body of the garment for missing or damaged reflective tape. Check for stains and peeling of lamination and that hook and pile fastener tape is serviceable.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. No repairs authorized.

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

b. This item has no repair or service procedures in this TM.

43. Vest, Tactical Load Bearing (No LIN)

a. Inspect for rips, tears, loose binding and loose or broken stitching, damaged drawstrings, oil, grease and stains. Check that all hook and pile tapes are undamaged. Check that all plastic and metal hardware is serviceable and undamaged.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. No repairs authorized.

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

b. Refer to WP 0014 for maintenance procedures.

44. Trousers, Anti Fragmentation for BASIC (T51606)

a. Inspect for cuts, tears, open seams in shell fabric and webbing material. Inspect ballistic inserts for damage.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. Unserviceable items without damage to the ballistic inserts, that can be repaired by replacing missing or damaged cloth or webbing components.

INSPECT – CONTINUED

Code H. Unserviceable items that do not meet the criteria for Code F or are obviously scrap.

b. Refer to WP 0021 for maintenance procedures.

45. Interceptor Body Armor, Outer Tactical Vest (B28123)

a. Inspect for missing or damaged buckles, snap fasteners, webbing, hook and pile fastener tape. Check for rips, tears, holes, burns, loose or broken stitching, oil or grease.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. Unserviceable items that can be repaired by replacing missing or damaged buckles, snaps, velcro fasteners, webbing or outer shells or by repairing small holes, rips or tears or by restitching broken stitching or ripped seams.

Code H. Any damage to ballistic panels. Unserviceable items that do not meet the criteria for Code F or are obviously scrap.

b. Refer to TM 10-8470-208-24&P for maintenance procedures.

46. Interceptor Body Armor, Improved Outer Tactical Vest (B42187)

a. Inspect for missing or damaged buckles, snap fasteners, webbing, hook and pile fastener tape. Check for rips, tears, holes, burns, loose or broken stitching, oil or grease. Check to ensure that matched components (front and rear panels) are matched for size.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. Unserviceable items that can be repaired by replacing missing or damaged buckles, snaps, velcro fasteners, webbing or outer shells or by repairing small holes, rips or tears or by restitching broken stitching or ripped seams.

Code H. Any damage to ballistic panels. Unserviceable items that do not meet the criteria for Code F or are obviously scrap.

b. Refer to TM 10-8470-208-24&P for maintenance procedures.

47. Interceptor Body Armor, Small Arms Protective Inserts (SAPI & ESAPI) (No LIN)

a. Inspect for rips, tears, holes, cracks, loose pieces, burns, snags, oil, grease, or other contaminants.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code F. Unserviceable items that can be repaired by covering small outside cover material holes or tears with a patch of the same cover material and adhesive.

Code H. The outer cover is damaged exposing the black ceramic tile material, the SAPI is cracked and you hear loose pieces rattling around when the SAPI is shaken, the composite back face is delaminated and the individual fabric piles are separating. Unserviceable items that do not meet the criteria for Code F or are obviously scrap.

b. Refer to TM 10-8470-208-24&P for maintenance procedures.

END OF WORK PACKAGE

FIELD MAINTENANCE

SLEEPING BAGS, INTERMEDIATE COLD AND EXTREME COLD TYPE II
WATERPROOF CLOTHING BAG, FOAM SLEEPING MAT
PNEUMATIC MATTRESS, SLEEPING BAG HOOD

INSPECT, SERVICE, REPAIR

INITIAL SETUP:

Tools	Materials/Parts
Knife, Hot Metal (WP 0046, Item 9)	Fastener, Snap, Button, Style 2, (Regular Wire Spring Clamp Type). Conforming to MIL-F-10884. (WP 0024, Item 3)
Ruler, Tab, Metal, 16-inch (WP 0046, Item 19)	Webbing, Snap Reinforcement, Type II, Class-2, 1 inch wide, OD-7 (WP 0024, Item 4)
Sewing Machine, Bar Tack (WP 0046, Item 25)	Webbing, Textile, Woven Nylon, 1 inch wide, Class 2, OD-7 (WP 0024, Item 4)
Sewing Machine, Medium Duty (WP 0046, Item 34)	Thread, Polyester, Size B, Type 1, Class 1, Subclass B, Color S-1, CA 66022 (WP 0024, Item 6)
Shears, Tailors, 12-inch, (WP 0046, Item 36)	Cord, Elastic, Nylon, 3/8 inch diameter, Type II, Black (WP 0024, Item 7)
Stitch Removal Tool (WP 0046, Item 38)	Fastener, Cylinder, Spring Loaded (WP 0024, Item 8)
Tape, Measuring (WP 0046, Item 39)	Cord, Elastic, Nylon, 1/8 inch diameter, Type II, Black (WP 0024, Item 14)

Personnel Required	References
Non-MOS Specific (1)	WP 0005 WP 0007 WP 0046

INSPECT

Perform PMCS inspection on all items IAW WP 0005 and determine serviceability IAW WP 0007.

END OF TASK

INTERMEDIATE COLD AND EXTREME COLD TYPE II SLEEPING BAG SERVICE

Cleaning

Clean off mud or other foreign matter with brush, damp or dry cloth, or scrub the exceedingly dirty areas with limited amounts of water that will not saturate the insulation; then rinse off and dry.

Lubrication

Use zipper ease stick on sleeping bag slide fasteners. Apply lubricant to slide fastener and chain. This will maintain free sliding action and aid in preventing breakage of slide fastener chain.

END OF TASK

SLEEPING HOOD SERVICE

Cleaning (Handwashing)

Close fastener before washing. Wash liner by hand squeezing in lukewarm solution of laundry detergent with 1/2 to 2 ounces (14.2 to 56.7 g) per gallon of water. Rinse thoroughly in lukewarm water. Squeeze out excess water. Do not wring to dry.

Cleaning (Laundry)

Launder using a lukewarm temperature (90-100°F) (32.2-37°C) using Formula II of FM 10-280. Tumble-dry at temperature not exceeding 150°F.

END OF TASK

PNEUMATIC MATTRESSES SERVICE

Cleaning

NOTE

Do not wash items with holes or other defects which might permit entry of water into the air chamber until after such defects are repaired. Exception of this is in instances when sufficient air pressure can be maintained in the mattress during cleaning to prevent the entry of water.

When the proper Quartermaster or commercial type laundry equipment is available, tightly-stoppered and leak-free mattresses may be tumbled, using two 3-minute rinses in cold water followed by a laundry sour rinse, When this method is used, exercise care to prevent over washing or use of excessive heat. Petroleum base solvents or other cleaning compounds which may have an injurious effect on the mattresses will not be used. Cleaning will be accomplished in such manner as to insure against damage to the coating. Thoroughly clean stoppers and wing tubing with castile soap or by other antiseptic, nontoxic, and nonirritating process.

1. Place mattress requiring cleaning on a flat surface with plug tightly in place and scrub thoroughly, using water and a mild soap or detergent which will have no harmful effect on the fabric.
2. During the cleaning process, examine partially or wholly inflated items for bubbles or other indications of leaks and clearly mark such areas for repair.
3. Rinse thoroughly in clear water after scrubbing.

END OF TASK

INTERMEDIATE COLD AND EXTREME COLD TYPE II SLEEPING BAG REPAIR

Filling Material Repair

Any filling material (feathers and down) which has been lost through holes or tears will be replaced with filling material taken from sleeping bags classified as condition “H” or with material obtained which conforms to Type II of MIL-F-43097 for the intermediate cold and extreme cold.

Insert sufficient filling material to obtain about the same bulk as in adjacent undamaged channels.

Iron-on Patches

1. Cut patches to the desired size and shape such that the patch, when applied, will extend approximately 3/4 inch (1.9 CM) in all directions from the tear or damaged area. Patches will have rounded corners.
2. With the sleeping bag unzipped, place the area to be patched on a wooden or other nonmetallic surface not affected by heating or ironing.
3. Smooth out by hand. Remove any feathers on the area to be patched.
4. Pre-warm the area to be patched by pressing with a household electric dry or steam iron. Use a dry iron set at “cotton” or high as possible without scorching the fabric for about 5 seconds.
5. Immediately cover with patching material previously cut in the desired size and shape.
6. Hold the iron on the patch for about 8 seconds. Use only a slight rotating or reciprocal motion of the iron.
7. Allow to cool about 5 seconds or long enough so that the patch will not drift off when the patched bag is removed from the table. Adjust the heating, pressing, and cooling times as required for the specific iron being used.
8. Check the quantity of the adhesive bond periodically as follows and adjust heating times and temperatures of the iron accordingly.

NOTE

A bonded patch which has a lifted edge or which is suspected or found by the check test to be weakly bonded may be re-ironed, e.g., replacement is not required.

A small amount of patch adhesive strike-through is not objectionable for sleeping bag repair, provided the patch meets the check test.

9. Test a patch that has cooled for about 5 minutes by picking with the fingers at an edge of the patch until a tab 1/4-to 1/2-inch (0.635 to 1.27 CM) long is formed. Pull hard on the tab with fingers. A well-bonded tab will be difficult to peel off. This will indicate that iron adjustment and time heating the patch is adequate.
10. Replace the test patch with a new patch or re-iron the old patch.

END OF TASK

Repair of Binding Tape

1. Overlap the binding tape with new tape of same size and type, extending the new tape at least 1 inch beyond the damaged area.
2. Turn the binding edges under ½ inch (1.27 cm).
3. Using a medium-duty sewing machine, size E thread, 7-11 stitches per inch, sew 1/8 inch (0.31 75 cm) from edge of tape.
4. If the damaged area is at the face opening eyelets, remove the eyelets prior to performing the above repair. Remove and replace the eyelets as specified section Eyelet Repair.

END OF TASK

INTERMEDIATE COLD AND EXTREME COLD TYPE II SLEEPING BAG REPAIR – CONTINUED

Eyelet Repair

Eyelets may be reset using appropriate dies when damage is minor. Any eyelet that cannot be fixed by resetting must be replaced as outlined below.

1. Remove a damaged eyelet by cutting it with diagonal wire cutters. Be careful not to cut or damage the fabric, webbing or tape.
2. Without damage to the fabric, install the new eyelet (with proper sized dies) according to the original construction.

END OF TASK

Re-stitching

Re-stitch using sewing machine, thread and stitch listed in Table 1. Re-stitch directly over the original stitch pattern as closely as possible. Lock each row of stitching by backstitching at least ¾ inch (1 .905 cm). Maintain thread tension to prevent loose stitching.

Table 1. Sleeping Bag Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	TYPE	THREAD SIZE
Intermediate Cold and Extreme Cold Type II Sleeping Bags				
Binding Tape	Medium Duty	7 to 11	301	E
Binding Tape	Bar Tack	28	304	E

END OF TASK

Flap Closure Repair (Intermediate and Extreme Cold Sleeping Bags)

1. Darn any hole or tear that does not exceed ½ inch (1.27 cm) in length or diameter.
2. Patch holes or tears exceeding ½ inch in length or diameter with iron-on patch IAW section in this work package entitled Iron-on Patch.

END OF TASK

Flap Closure Snap Fastener Repair

Snap fasteners may be reset using appropriate dies. No other repair is authorized.

END OF TASK

Drawstring Casing and Drawstring Repair

Holes or tears less than ½ inch (1.27 cm) may be darned. Foot tie straps with holes or tears greater than ½ inch (1.27 cm) in length or diameter shall be replaced as follows.

1. Cut the drawstring at the edge of binding tape where it is attached to the face opening.
2. Cut a length of nylon braid 30 ± 1/2 inches (76.2 ± 1.27 cm) long and fuse cut ends.
3. Knot one end of drawstring with a figure eight knot located 3/8 to 5/8 inch (0.953 to 1.588 cm) from end.

INTERMEDIATE COLD AND EXTREME COLD TYPE II SLEEPING BAG REPAIR – CONTINUED

4. At one end of casing pass unknotted end of drawstring through opening formed by a bartack and position drawstring within the casing with the unknotted end protruding approximately two inches from other end of casing and on opposite side of bartack, i.e., not within the opening formed by the bartack.

5. Fold the end of drawstring that is unknotted under 1/2 inch and position folded end even with edge of binding tape and against end of drawstring casing.

6. Bartack or stitch through folded end of drawstring within a 1/2 inch (1.27 cm) bartack or with 3 rows of stitching.

7. Install other drawstring in the same manner except start from other end of casing.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
EXTREME COLD WEATHER SLEEP SYSTEM
INSPECT, SERVICE, REPAIR

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0046, Item 9)

Ruler, Tab, Metal, 16-inch (WP 0046, Item 19)

Sewing Machine, Bar Tack (WP 0046, Item 25)

Sewing Machine, Medium Duty (WP 0046, Item 34)

Shears, Tailors, 12-inch, (WP 0046, Item 36)

Stitch Removal Tool (WP 0046, Item 38)

Tape, Measuring (WP 0046, Item 39)

Materials/Parts

Fastener, Snap, Button, Style 2, (Regular Wire Spring Clamp Type). Conforming to MIL-F-10884. (WP 0024, Item 3)

Webbing, Snap Reinforcement, Type II, Class-2, 1 inch wide, OD-7 (WP 0024, Item 4)

Webbing, Textile, Woven Nylon, 1 inch wide, Class 2, OD-7 (WP 0024, Item 4)

Thread, Polyester, Size B, Type 1, Class 1, Subclass B, Color S-1, CA 66022 (WP 0024, Item 6)

Cord, Elastic, Nylon, 3/8 inch diameter, Type II, Black (WP 0024, Item 7)

Fastener, Cylinder, Spring Loaded (WP 0024, Item 8)

Cord, Elastic, Nylon, 1/8 inch diameter, Type II, Black (WP 0024, Item 14)

Personnel Required

Non-MOS Specific (1)

References

WP 0005
WP 0007
WP 0046

INSPECT

Perform PMCS inspection on all items IAW WP 0005 and determine serviceability IAW WP 0007.

END OF TASK

EXTREME COLD WEATHER SLEEP SYSTEM SERVICE

Cleaning

Clean off mud or other foreign matter with brush, damp or dry cloth, or scrub the exceedingly dirty areas with limited amounts of water that will not saturate the insulation; then rinse off and dry.

CAUTION

Do not starch, bleach, or dry clean. Discoloration and degradation of infrared protection capacity of the material will result.

Field Laundry

The ECWSS sleeping bag, hood and socks will be laundered using formula II of FM 10-280. Bivy Cover will be laundered using formula VIII of FM 10-280.

CAUTION

Do not starch, bleach, or dry clean. Discoloration and degradation of infrared protection capacity of the material will result.

Machine/Hand Laundering

Sleeping Bags, Hood and Socks may be machine laundered using the delicate/ gentle fabric cycle or by hand, using cold water (Up to 85° F/30°C) and cold water laundry detergent. Rinse in clean cold water. The Bivy Cover may be washed using the wash & wear/permanent press fabric cycle or by hand, using warm water (Up to 90°F/32°C) and formula VIII of FM 10-280. Rinse thoroughly in clean warm water.

CAUTION

Drying temperature for sleeping bag must not exceed 130°F (54°C). Degradation of the component materials will result.

Do not press. Degradation of the component materials will result.

Drying

Tumble dry the Hood and Socks at lowest fabric cycle delicate/gentle. Do not exceed 90°F (32°C) at no more than 2/3 capacity. Remove immediately at end of drying. Avoid over drying. To drip dry, remove from water and place on rustproof hanger. Tumble dry the Bivy Cover at low temperature (100° F/38°C) and remove immediately from dryer. Avoid over drying. To drip dry, remove from water and place on rustproof hanger.

END OF TASK

EXTREME COLD WEATHER SLEEP SYSTEM REPAIR

Filling Material Repair

The filling material (batting) of the ECWSS and ICWSS sleeping bag is so constructed that it will not separate or fall out unless tears or holes are large. If the bag lining cannot be patched as described below, the item should be classified code H.

Iron-on Patches

1. Cut patches to the desired size and shape such that the patch, when applied, will extend approximately 3/4 inch (1.9 CM) in all directions from the tear or damaged area. Patches will have rounded corners.

EXTREME COLD WEATHER SLEEP SYSTEM REPAIR – CONTINUED

2. With the sleeping bag unzipped, place the area to be patched on a wooden or other nonmetallic surface not affected by heating or ironing.
3. Smooth out by hand. Remove any feathers on the area to be patched.
4. Pre-warm the area to be patched by pressing with a household electric dry or steam iron. Use a dry iron set at “cotton” or high as possible without scorching the fabric for about 5 seconds.
5. Immediately cover with patching material previously cut in the desired size and shape.
6. Hold the iron on the patch for about 8 seconds. Use only a slight rotating or reciprocal motion of the iron.
7. Allow to cool about 5 seconds or long enough so that the patch will not drift off when the patched bag is removed from the table. Adjust the heating, pressing, and cooling times as required for the specific iron being used.
8. Check the quantity of the adhesive bond periodically as follows and adjust heating times and temperatures of the iron accordingly.

NOTE

A bonded patch which has a lifted edge or which is suspected or found by the check test to be weakly bonded may be re-ironed, e.g., replacement is not required.

A small amount of patch adhesive strike-through is not objectionable for sleeping bag repair, provided the patch meets the check test.

9. Test a patch that has cooled for about 5 minutes by picking with the fingers at an edge of the patch until a tab 1/4-to 1/2-inch (0.635 to 1.27 CM) long is formed. Pull hard on the tab with fingers. A well-bonded tab will be difficult to peel off. This will indicate that iron adjustment and time heating the patch is adequate.
10. Replace the test patch with a new patch or re-iron the old patch.

END OF TASK

Re-stitching

Re-stitch using sewing machine, thread and stitch listed in Table 1. Re-stitch directly over the original stitch pattern as closely as possible. Lock each row of stitching by backstitching at least ¾ inch (1 .905 cm). Maintain thread tension to prevent loose stitching.

Table 1. Sleeping Bag Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	TYPE	THREAD SIZE
ECWSS				
General (Sleeping Bag)	Medium Duty	7 to 11	301	E
General (Stuff Bag)	Medium Duty	8 to 12	301	E

END OF TASK

EXTREME COLD WEATHER SLEEP SYSTEM REPAIR – CONTINUED

Drawcord Repair

1. Remove defective drawcord.
2. Cut a length of drawcord.
3. Cut and sear ends.
4. Knot one end of drawcord with a figure eight knot located 3/8 to 5/8 inch (0.953 to 1.588 cm) from end.
5. At one end of casing pass unknotted end of drawstring through opening and position drawstring within the casing with the unknotted end protruding approximately two inches from other end of casing and on opposite side.
6. Knot the other end of drawcord with a figure eight knot located 3/8 to 5/8 inch (0.953 to 1.588 cm) from end.
7. If necessary, run drawcords through appropriate spring locks.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE

MODULAR SLEEP SYSTEM

INSPECT, SERVICE, REPAIR

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0105, Item 23)

Ruler, Tab, Metal, 16-inch (WP 0105, Item 44)

Sewing Machine, Bar Tack (WP 0105, Item 49)

Sewing Machine, Medium Duty (WP 0105, Item 57)

Tape, Measuring (WP 0105, Item 64)

Shears

Stitch Removal Tool

Personnel Required

Non-MOS Specific (1)

References

WP 0005

WP 0007

WP 0025

FM 10-280

Materials/Parts

Loop Tape 4-Inch, Color FG 504 (WP 0025, Item 3)

Hook Tape, 1 ½-Inch Color FG504 (WP 0025, Item 4)

Cord, Elastic, Nylon, 1/8 Inch Diameter, Type II, Black (WP 0025, Item 7)

Fastener, Cylinder, Spring Loaded (WP 0025, Item 6)

Hook Tape, 4-Inch Color UG505 (WP 0025, Item 9)

Hook Tape, 1 ½-Inch Color UG 505 (WP 0025, Item 10)

Loop Tape, 4-Inch Color UG505 (WP 0025, Item 11)

Equipment Condition

INSPECT

Perform PMCS inspection on all items IAW WP 0005 and determine serviceability IAW WP 0007.

END OF TASK

MODULAR SLEEP SYSTEM SERVICE

Cleaning

Clean off mud or other foreign matter with brush, damp or dry cloth, or scrub the exceedingly dirty areas with limited amounts of water that will not saturate the insulation; then rinse off and dry.

CAUTION

Do not starch, bleach, or dry clean. Discoloration and degradation of infrared protection capacity of the material will result.

Field Laundry

The sleeping bags will be laundered using formula II of FM 42-414. Bivy Cover will be laundered using formula VIll of FM 42-414.

CAUTION

Do not starch, bleach, or dry clean. Discoloration and degradation of infrared protection capacity of the material will result.

Machine/Hand Laundering

Sleeping Bags, may be machine laundered using the delicate/ gentle fabric cycle or by hand, using cold water (Up to 85° F/30°C) and cold water laundry detergent. Wash and rinse the bivy cover in a standard commercial washing machine at less than 100 F using low cycle. Rinse thoroughly in clean warm water.

CAUTION

Drying temperature for sleeping bag must not exceed 130°F (54°C). Degradation of the component materials will result.

Do not press. Degradation of the component materials will result.

Drying

Tumble dry the sleeping bags at lowest fabric cycle delicate/gentle. Do not exceed 90°F (32°C) at no more than 2/3 capacity. Remove immediately at end of drying. Avoid over drying. To drip dry, remove from water and place on rustproof hanger. Tumble dry the bivy cover at low temperature (100° F/38°C) and remove immediately from dryer. Avoid over drying. To drip dry, remove from water and place on rustproof hanger.

END OF TASK

MODULAR SLEEP SYSTEM REPAIR

Filling Material Repair

The filling material (batting) of the MSBS sleeping bags is so constructed that it will not separate or fall out unless tears or holes are large. If the bag lining cannot be patched as described below, the item should be classified code H.

MODULAR SLEEP SYSTEM REPAIR – CONTINUED

Iron-on Patches

1. Cut patches to the desired size and shape such that the patch, when applied, will extend approximately 3/4 inch (1.9 CM) in all directions from the tear or damaged area. Patches will have rounded corners.
2. With the sleeping bag unzipped, place the area to be patched on a wooden or other nonmetallic surface not affected by heating or ironing.
3. Smooth out by hand. Remove any feathers on the area to be patched.
4. Pre-warm the area to be patched by pressing with a household electric dry or steam iron. Use a dry iron set at “cotton” or high as possible without scorching the fabric for about 5 seconds.
5. Immediately cover with patching material previously cut in the desired size and shape.
6. Hold the iron on the patch for about 8 seconds. Use only a slight rotating or reciprocal motion of the iron.
7. Allow to cool about 5 seconds or long enough so that the patch will not drift off when the patched bag is removed from the table. Adjust the heating, pressing, and cooling times as required for the specific iron being used.
8. Check the quantity of the adhesive bond periodically as follows and adjust heating times and temperatures of the iron accordingly.

NOTE

A bonded patch which has a lifted edge or which is suspected or found by the check test to be weakly bonded may be re-ironed, e.g., replacement is not required.

A small amount of patch adhesive strike-through is not objectionable for sleeping bag repair, provided the patch meets the check test.

9. Test a patch that has cooled for about 5 minutes by picking with the fingers at an edge of the patch until a tab 1/4-to 1/2-inch (0.635 to 1.27 CM) long is formed. Pull hard on the tab with fingers. A well-bonded tab will be difficult to peel off. This will indicate that iron adjustment and time heating the patch is adequate.
10. Replace the test patch with a new patch or re-iron the old patch.

END OF TASK

MODULAR SLEEP SYSTEM REPAIR – CONTINUED

Re-stitching

CAUTION

Re-stitching of the bivy cover can only be done at the edge binding. Do not perform re-stitching on any seam where you cannot see both sides of the existing stitching.

Re-stitch using sewing machine, thread and stitch listed in Table 1. Re-stitch directly over the original stitch pattern as closely as possible. Lock each row of stitching by backstitching at least ¾ inch (1 .905 cm). Maintain thread tension to prevent loose stitching.

Table 1. Sleeping Bag Stitching Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	TYPE	THREAD SIZE
Patrol Sleeping Bag (Color FG 504)				
General Re-stitching	Medium Duty	8 to 10	301	E
Hook and Loop Tape Fastener	Medium Duty	8 to 12	301	E
Intermediate Sleeping Bag (Color UG 505)				
General Re-stitching	Medium Duty	8 to 10	301	E
Hook and Loop Tape Fastener	Medium Duty	8 to 12	301	E
Bivy Cover (Color UG 505)				
General Re-stitching	Medium Duty	8 to 10	301	E
Compression Stuff Sack (FG 504)				
General Re-stitching	Medium Duty	8 to 10	301	E

END OF TASK

MODULAR SLEEP SYSTEM REPAIR – CONTINUED

Drawcord Repair

1. Remove defective drawcord.

2. Cut a length of drawcord IAW Table 2.

3. Cut and sear ends.

4. Knot one end of drawcord with a figure eight knot located 3/8 to 5/8 inch (0.953 to 1.588 cm) from end.

5. At one end of casing pass unknotted end of drawstring through opening and position drawstring within the casing with the unknotted end protruding approximately two inches from other end of casing and on opposite side.

6. Knot the other end of drawcord with a figure eight knot located 3/8 to 5/8 inch (0.953 to 1.588 cm) from end.

7. If necessary, run drawcords through appropriate spring locks.

8. If spring locks are connected with tape, replace tape.

    a. Remove stitching holding tape in place.

    b. Measure and cut a new piece of tape the same size, type and color as the original.

    c. Sear both ends of the tape.

    d. Thread the tape through the barrel lock.

    e. Sew the tape back in the original position.

9. If one end of the drawcord is sewn in place, cut the old cord as close as possible to the seam and re-sew new cord in same position.

Table 2. Drawcord Lengths.

COMPONENT	TYPE	DIAMETER	LENGTH	COLOR
Patrol Sleeping Bag				
Hood Drawcord (Face)	Elastic	1/8	AR	FG 504
Hood Drawcord (Back to Front)	Elastic	1/8	AR	FG 504
Zipper Pulls	Static	1/8	AR	FG 504
Intermediate Sleeping Bag				
Hood Drawcord (Face)	Elastic	1/8	AR	UG 505
Hood Drawcord (Back to Front)	Elastic	1/8	AR	UG 505
Chest Collar	Elastic	1/8	AR	UG 505
Zipper Pulls	Static	1/8	AR	UG 505
Bivy Cover				
Hood Drawcord (Face)	Elastic	1/8	AR	FG 504
Zipper Pulls	Static	1/8	AR	FG 504
Compression Stuff Sack				
Zipper Pulls	Static	1/8	AR	FG 504

END OF TASK

MODULAR SLEEP SYSTEM REPAIR – CONTINUED

Hook and Loop Fastener Tape Repair

1. Remove stitching holding damaged hook and loop fastener tape to the component.
2. Cut a new piece of hook and loop fastener tape as indicated in Table 3.
3. Using the sewing machine and thread indicated in Table 1, sew the hook and loop fastener tape in the same position as the original.

Table 3. Hook and Loop Tape Fastener Information.

COMPONENT	TYPE	WIDTH (IN)	LENGTH (IN)	COLOR
Patrol Sleeping Bag				
Hood Closure, Right Side	Loop	1	4	FG 504
Hood Closure, Left Side	Hook	1	1 ½	FG 504
Intermediate Sleeping Bag				
Hood Closure, Right Side	Loop	1	4	UG 505
Hood Closure, Left Side	Hook	1	1 ½	UG 505
Chest Collar, Right Side	Loop	1	4	UG 505
Chest Collar, Left Side	Hook	1	4	UG 505
Chest Collar, Left Side	Loop	1	4	UG 505

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE

SKIS, SNOWSHOES, INSULATED BOOTS AND ACCESSORIES

INSPECT, SERVICE, TEST, REPAIR

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0046, Item 9)
Ruler, Tab, Metal, 16-inch (WP 0046, Item 19)
Sewing Machine, Bar Tack (WP 0046, Item 25)
Sewing Machine, Medium Duty (WP 0046, Item 34)
Tape, Measuring (WP 0046, Item 39)
Shears (WP 0046, Item 36)
Stitch Removal Tool (WP 0046, Item 38)

Personnel Required

Non-MOS Specific (1)

References

WP 0005
WP 0007
WP 0046
WP 0047

Materials/Parts

Screw, Tapping-FF-S-107 (WP 0026, Item 3)
Screw, Type A, Cadmium Plated, Steel, #8 X 3/8-Inch Long, Slotted, Pan Head (WP 0026, Item 3)
Screw, #12 X 5/8-Inch Long, Slotted, Flat Head (WP 0026, Item 3)
Push On Nut (WP 0026, Item 9)
Laces, Footwear, White (WP 0026, Item 15)
Wax, Ski, MIL-W-1510 (WP 0047, Item 6)
Blue-Dry Snow (WP 0047, Item 7)
Orange-Wet and Corn Snow (WP 0047, Item 8)
Red-Speed (WP 0047, Item 9)
Emery Cloth, 120 Grit (WP 0047, Item 10)
Beeswax, Technical (WP 0047, Item 28)
Wax, Paraffin, Technical (WP 0047, Item 29)

Equipment Condition

INSPECT

Perform PMCS inspection on all items IAW WP 0005 and determine serviceability IAW WP 0007.

END OF TASK

SKI SERVICE

Cleaning

Thoroughly clean each item, removing mud, dirt or other foreign matter, using brush, cloth, steel wool or other type of suitable cleaners. To clean molded leather, wipe with a moist cloth; apply saddle soap working lather well into leather, rinse with sponge and clean water, and allow to air dry. Apply in well-ventilated area and thoroughly wash hands with cool water and soap after using.

Waxing Skis

Keep the running surfaces of skis well waxed at all times. This is necessary not only to help sliding and climbing but also for waterproofing to avoid warping. Use appropriate wax, depending on type of snow on which skis are to be used. For waxing, refer to FM 31-70.

END OF TASK

SKI REPAIR

The repair of skis (Type l), snowshoes, and accessories under normal conditions is usually of an emergency type consisting of tightening and/or replacing screws, steel edge, and bindings. To facilitate repair, the following items are necessary: repair kit, ski, replacement components, and bindings.

Ski Poles

Keep the steel point of ski poles sharp by filing. Turn in damaged poles for replacement.

END OF TASK

Binding Repair

1. Use a tape to measure the ski in a straight line from the tail of the ski to the tip (Figure 1).
2. Divide the total distance in half (which gives you your center or mid-point); half of a 82 ¾-inch ski, for example, would be 41 3/8 inches. Always measure from the tail of the ski.
3. Mount the binding so that the swivel point of the toe piece is on the mid-point of the ski.

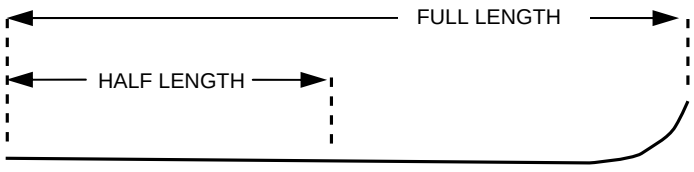

Figure 1. Finding the Ski Center.

SKI REPAIR – CONTINUED

Table 1. Ski Mid Point Chart.

SKI LENGTH	HALF LENGTH	
cm	cm	in
120	60.0	23 5/8
130	65.0	25 5/8
140	70.0	27 5/8
150	75.0	29 1/2
160	80.0	31 1/2
165	82.5	32 1/2
170	85.0	33 1/2
175	87.5	34 1/2
178	89.0	35
180	90.0	35 3/8
183	91.5	36
185	92.5	36 3/8
188	94.0	37
190	95.0	37 3/8
193	96.5	38
195	97.5	38 3/8
198	99.0	39
200	100.0	39 3/8
203	101.5	40
205	102.5	40 3/8
208	104.0	41
210	105.0	41 3/8
213	106.5	42
215	107.5	42 3/8

4. In mounting the toe piece, ensure that it is centered with the long axis of the ski.

NOTE

Swivel point of toe piece at midpoint.

8 in. from swivel point of toe piece to center of rear of front throw (large), 7 in. from swivel point of toe piece to center of rear screw of front throw (small) 8 1/4 from swivel point of toe piece to front screw of downhill cable guide Forward edge of heel plate even w/center of downhill cable guide if heel plate is large (2½" x 2¼"); 1" further rearward if small heel plate (1¼" x 2¼")

To determine a large front throw from a small front throw, measure from the front mounting holes (those nearest the tip of the ski) to the back end of the lever in the closed position. This distance is approximately 5 ½ inches for the large throw and 4 ½ inches for the small throw.

5. Use the toe piece, front throw, and cable guides (side hitches) as templates in marking holes to be drilled. Locate the binding parts as shown in Figure 2.

SKI REPAIR – CONTINUED

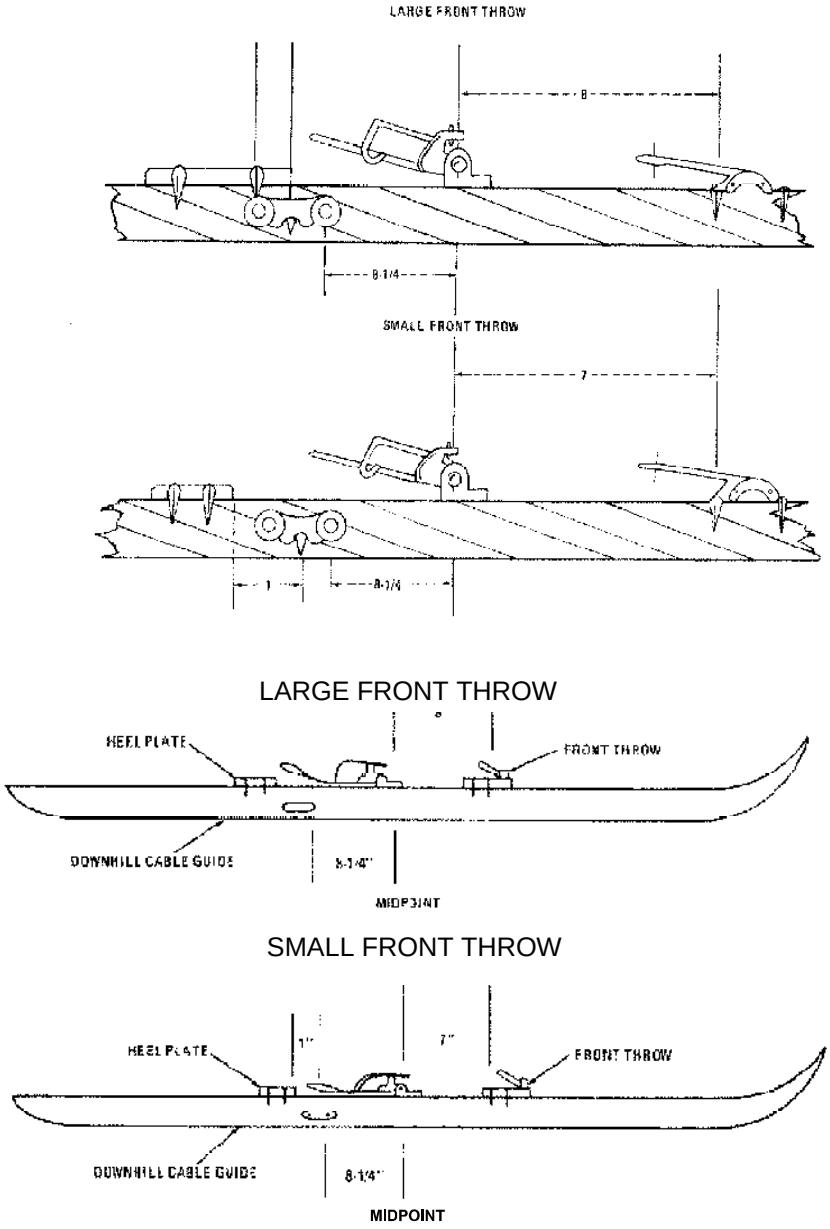

Figure 2. Binding Parts Location.

6. Center punch holes before drilling.
7. Use sharp drills to prevent walking, keep points centered, and drill at 90-degree angle to prevent oversize holes.
8. Use the right size drill for the screws used in mounting the various parts of the binding.

SKI REPAIR – CONTINUED

CAUTION

Do not use a screw which is too long; it will act as a jack and separate the various laminations or pierce the bottom. When you have a screw that is not short enough, grind the point off to the desired length. Do not force a sheet metal screw into too small a hole as it will cause the top skin to lift and not take a good seat, (skis constructed with metal top skin).

Use some form of lubricant on the screw before insertion. Wax is effective and will help seal the hole against water seepage. When installing bindings on fiberglass skis, it is imperative that holes be countersunk through the top plastic.

9. Install bindings with a high quality hardened sheet metal screws. Countersink screw hole slightly. If there were problems with the installation, go through the next steps to fix. If the installation was successful, go to step 14.
10. If a screw breaks off flush and cannot be removed with pliers, simply punch it through into the inner core of the wood or polyurethane. A new screw, usually the next larger size, can be installed in the same hole.
11. Where old shank remains imbedded, the new screw will go in slightly crooked but will still do the job.
12. If a screw breaks so that the above procedure cannot be followed, it will require moving to a new hole location. In order to avoid moving the binding and drilling all new holes, a new hole can be drilled adjacent to the plugged hole, through the toe plate into the ski. Drill the right size for screw threads then countersink to receive screw head.
13. If a screw should loosen up or strip, due to an oversize hole, use any of the following procedures:
    a. Use next larger size screw.
    b. Drill a new hole through both binding and ski.
    c. Fill hole with steel wool soaked in epoxy and insert in hole, then let cure for 24 hours.
    d. If the binding is being mounted on a ski from which a binding of another type (using a different set of drilled holes) was removed, all old holes must be filled with epoxy. This will keep water from penetrating and weakening the inner core of the ski.
14. Select proper cable size IAW Table 2.

Table 2. Cable Sizing Chart.

CABLE SIZE	MOUNTAIN BOOT SIZE	VB BOOT SIZE
Short	6 and below	
Medium	7 though 13	3 N through 14 x W
Long		

END OF TASK

SKI REPAIR – CONTINUED

Ski Pairing

Match skis in pairs for appearance, type, size, and weight. Do not remark for flexibility. On skis requiring rematching, obliterate the old pair numbers and stamp new pair numbers on each ski. Skis remaining as paired by original manufacture will retain the original numbers. Remark skis with faint paint numbering with the original numbers. Skis will have the proper size, length, pair number, and the letters US indented thereon. All remarking will be placed as an original marking in an area 8 to 11 inches (20.3 to 27.9 cm) forward of binding location point, located to read from the heel of ski.

1. Place the letters US in characters not less than 3/8 inch (0.952 cm) or more than ½ inch (1.27 cm) high.
2. Identification serial numbers will be ¼ inch (0.635 cm) high on each ski of a pair. Number pairs commencing with 0001 each year.

END OF TASK

Repair of Gouges

1. Using a scraper and 120 grit emery (aluminum-oxide abrasive) cloth, remove wax and dirt from the area to be repaired.
2. Ignite the polyethylene candle and hold the candle very close to the ski to prevent plastic from cooling and not bonding properly.
3. Let the candle drip into the gouge, filling slightly higher than the surrounding material. Allow the gouge to cool.
4. Remove excess material with a scraper and smooth the surface with emery cloth.

END OF TASK

Edge Sharpening

Sharpen the edges using a blunt mill file. Beginning at the tip of the ski and working toward the rear and with the file parallel with the side of the ski, remove only that amount of metal necessary to restore the square corner to the edge. Only in the event of local damage to the edge should any filing be done on the bottom of the edge. When the skis are not to be used for any period of time, the steel edges should receive a thin film of oil to prevent corrosion and skis stored in a dry place.

END OF TASK

BOOT REPAIR

CAUTION

The insulation must be kept absolutely dry. If the insulation becomes wet, the protection afforded the wearer will be lost and may result in frostbite or other similar injuries to the wearer.

Do not apply any all-based paint or advent-based polish to any part of the boot since paint or polish will cause the rubber to deteriorate.

Emergency repair must be made promptly to a puncture, cut, tear, or hole; if possible, within 1 hour to prevent severe damage to the insulation. If a repair kit is not available, make a temporary repair by patching the hole with a cold tire patch or with tape, such as rubber tape, friction tape, or scotch tape. Even chewing gum may serve as a temporary patch. The important thing is to seal the hole as quickly as possible so that the insulation will not get wet.

1. Clean the area to be patched.
2. Buff the area thoroughly with abrasive.
3. Tear off the end of the tube of cement and apply a coat of cement to the area to be patched; allow to dry 3 to 5 minutes.
4. Twist and tear off backing from patch. Do not touch fresh surface.
5. Press patch firmly in place.

END OF TASK

Air Release Valve Repair

The insulated boot has either a self-closing or manually-operated air release valve, which provides for equalization of air pressure within the insulation chamber when the boot is worn at a high altitude. If pressure is felt, rotate the manually operated valve stem counter-clockwise or pull the thong on the self-closing valve to release the air pressure in the boot insulation.

1. With a sharp, narrow bladed knife, make a shallow cut through the round rubber cover or patch which covers the valve assembly (Figure 3). The cut should be made at a relatively flat angle to prevent cutting through the boot.

BOOT REPAIR – CONTINUED

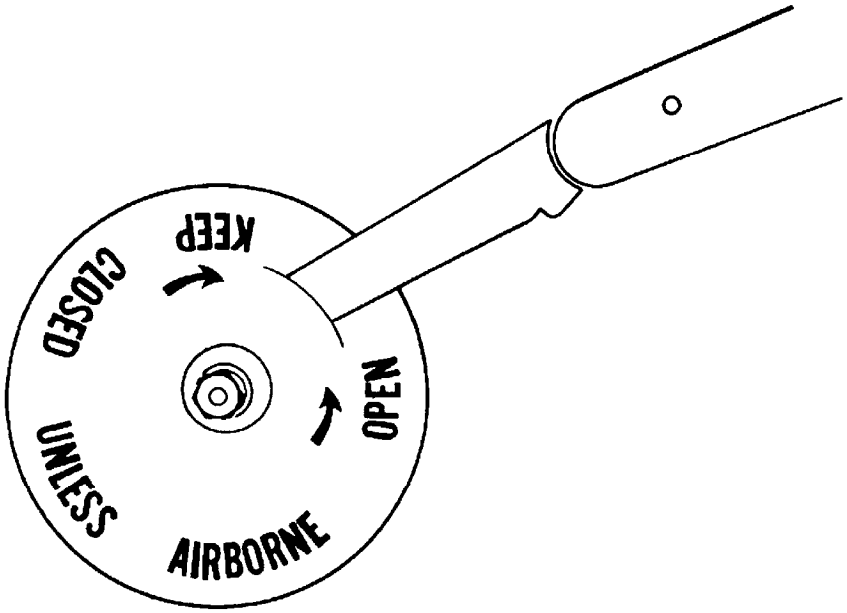

Figure 3. Cutting the Valve Assembly.

2. Completely cut around the valve assembly just inside the printed instructions, and remove the valve assembly, being careful not damage the rubber of the boot.
3. Buff the rubber area on the boot where the old valve was removed with sandpaper or wire brush.
4. Spread an even coat of Schraeder No. 338 self-vulcanizing fluid on the buffed area.
5. Allow to dry thoroughly (about 5 minutes).
6. Remove the polyethylene protective covering from the base of the new valve. Do not touch the tacky surfaces.
7. Center the new valve assembly over the buffed area and press firmly in place. Roll the edges of the valve assembly with a hand roller.
8. Apply two coats of adhesive to the exposed surface of the hinge stay that has peeled, separated, or been broken.
9. Allow each coat of adhesive to dry until it becomes tacky (about 15 minutes).
10. Press together and clamp all surfaces; allow to dry for 1 hour.

END OF TASK

BOOT REPAIR – CONTINUED

Preparation for Reissue

1. Replace worn laces.
2. Single-lace the lace through the bottom eyelet, double-lace through the second eyelet, and single-lace through the remaining eyelets.
3. Attach an instruction tag to the lace of the right boot.
4. Boots that have been prepared for reissue but are subject to temporary storage should have masking tape affixed over the valve to prevent entry of dirt, dust, and moisture, and to prevent the valve from rubbing against and abrading other boots.

END OF TASK

BOOT TEST

After the boot has been inspected and found free of defects, test the boot for leaks and excess moisture in the insulation, using the following methods:

Insulation Valve Test

Use the test set, insulated boot, AN/GSM-83 to determine whether excess moisture is in the sealed insulation area. Operating and maintenance instructions are affixed to the tester. A boot rejected by the leak tester will be discarded. A boot accepted by the leak tester will be air-leak tested.

Air-Leak Test

A boot that has been accepted by the test set, insulated boot, AN/GSM-83 will be tested on the insulated boot leak tester for leaks within the insulation area as follows:

1. Remove laces and air release valve from boot.
2. Fill tank with water to a height about 4 inches (10.2 cm) below the top surface of the boot. (Water should be added to the tank at intervals to maintain this level.) Allow sufficient time for small scattered bubbles rising from the boot interior to dissipate. These bubbles are usually caused by trapped surface air escaping and do not necessarily indicate a leak
3. Start air compressor motor.
4. Close all six petcock valves.

NOTE

The six hoses, with needles, are used only for testing the black insulated boot which has no air release valve.

5. On the right side of the excess moisture tester unit is a pressure gage, hand valve, and rubber hose. Attached to the end of the rubber hose is a plexiglass spring-loaded device, used to hold open the self-closing, air release valves so that they may be filled with air. Hold the boot in the left hand, and using the right hand, place the end of the plexiglass unit over the valve assembly, The prong on the end of this unit will engage the head of the valve. Press downward to engage the valve, and release.
6. Turn hand valve on the tester unit to allow air to go into the boot.
7. As soon as the arrow on the pressure gage reaches the red mark on the pressure gage (indicating 7 inches (178 mm) of water pressure), carefully disengage the plexiglass unit. The valve on the boot will close and the boot will have air in the insulating chamber and will be inflated slightly. Do not overfill; overfilling may damage the boot.
8. Place the boot in the water tank with the toe forward and under the toe bar to keep the boot from rising. Fill the inside of the boot with water to approximately 4 inches (10.2 cm) from the top edge of the boot. Three pairs of boots may be placed in the tank at the same time.

BOOT TEST – CONTINUED

9. Observe whether there is a continuous flow of air bubbles escaping from the outside or inside area of the boot; bubbles indicate a possible leak, Mark leak area with crayon. Small bubbles escaping from around the eyelets or edge of the boot or eyelet stay do not constitute a leak, because there is no insulation in this area. A boot with many pinhole leaks is considered beyond economic repair.
10. If there is a continuous flow of bubbles from the air release valve, replace the valve.
11. Remove the excess air in the insulation chamber of a boot to be repaired by opening the air release valve for a few seconds.
12. Boots manufactured in 1962 and after have a manually-operated screw type valve (Schraeder No. 9917). To inflate these boots, open the valve slightly and insert the end of the air hose over the valve until desired pressure is obtained. Then close the valve.

END OF WORK PACKAGE

FIELD MAINTENANCE
MOUNTAINEERING GEAR
INSPECT, SERVICE, REPAIR

INITIAL SETUP:

Tools

File, Hand, Flat (WP 0046, Item 3)

Knife, Hot Metal (WP 0046, Item 9)

Personnel Required

Non-MOS Specific (1)

Materials/Parts

Emery Cloth, 120 Grit (WP 0047, Item 10)

References

WP 0005

WP 0007

WP 0046

WP 0047

INSPECT

Perform PMCS inspection on all items IAW WP 0005 and determine serviceability IAW WP 0007.

END OF TASK

SERVICE

Marking

If stock numbers or size designation is in such a condition that it is apparent that it will not retain legibility when subject to wear after re-issue, then item in question must be renumbered.

Cleaning

CAUTION

Do not starch, bleach, or dry clean. Discoloration and degradation of infrared protection capacity of the material will result.

Clean off mud or other foreign matter with brush, damp or dry cloth.

The metal components will be brushed, sanded or ground free of burrs, edges, deep nicks or irregularities of the striking edges or face.

END OF TASK

REPAIR

Repair operations will be performed by personnel skilled in the particular trade applicable to their duties in the repair of subject items.

The metal components will be brushed, sanded or ground free of burrs, edges, deep nicks or irregularities of the striking edges or face.

The handles and shafts will be finished relatively smooth without breaks, splits or other defects which may affect serviceability of the item.

Straps will be properly constructed and attached and present a satisfactory and serviceable appearance. Hardware that is slightly corroded or rusty will be cleaned and finished without defacing the end item.

The finished item will be complete, thoroughly clean, and free from all defects which may affect the serviceability or general appearance.

Sharpen points on crampons, ice pitons, ice axe and rock and ice hammer.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
BARRACKS BAGS, DUFFEL BAGS
INSPECT, SERVICE

INITIAL SETUP:

Tools	Personnel Required
N/A	Non-MOS Specific (1)
Materials/Parts	**References**
Detergents, General Purpose, Type I of MIL-D-16791 (WP 0045, Item 19)	WP 0005
	WP 0007
Detergents, General Purpose, Type II of MIL-D-16791 (WP 0045, Item 20)	WP 0045
	FM 10-280

INSPECT

Perform PMCS inspection on all items IAW WP 0005 and determine serviceability IAW WP 0007.

END OF TASK

SERVICE

Cleaning

With a cloth or brush, thoroughly clean each item by scrubbing with mild soap and water.

Laundry

Items will be processed in Army laundry facilities in accordance with FM 10-280. When such facilities are not available, item will be laundered by contract with private industry in accordance with accepted commercial laundry practices.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE

INDIVIDUAL TACTICAL LOAD BEARING VEST
LARGE FIELD PACK WITH INTERNAL FRAME
COMBAT PATROL PACK
40MM GRENADE VEST
RUCKSACK

INSPECT, SERVICE, REPAIR

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0046, Item 9)
Ruler, Tab, Metal, 16-inch (WP 0046, Item 19)
Sewing Machine, Bartack (WP 0046, Item 25)
Sewing Machine, Medium Duty (WP 0046, Item 34)
Tape, Measuring (WP 0046, Item 39)
Shears (WP 0046, Item 36)
Stitch Removal Tool (WP 0046, Item 38)

Personnel Required

Non-MOS Specific (1)

References

WP 0005
WP 0007
WP 0045
WP 0046

Materials/Parts

Tape, Nylon, Type III, Class 2, OD-7, 1-Inch Wide (WP 0029, Item 2)
Fastener, Quick Release (WP 0029, Item 3)
Fastener, Snap, Style 2, Black Chemical Finish (WP 0029, Item 4)
Webbing, Textile, Nylon, Type III, Od-7, 1-Inch Wide (WP 0029, Item 5)
Fastener Tapes, Pile, Type II, Class 1, 1-Inch Wide (WP 0029, Item 6)
Fastener Tapes, Hook, Type II, Class 1, 1-Inch Wide (WP 0029, Item 7)
Buckle, Non-Slip, Steel, 1-Inch, Black Chemical Finish (WP 0029, Item 8)
Detergents, General Purpose, Type II of MlL-D-16791 (WP 0047, Item 20)
Tape, Nylon, Type II, Class 2, OD-7, 1 ½ Inches Wide (WP 0029, Item 9)

INSPECT

Perform PMCS inspection on all items IAW WP 0005 and determine serviceability IAW WP 0007.

END OF TASK

SERVICE

Field Cleaning

CAUTION

Do not use Chlorine Bleach, yellow soap, cleaning fluids or solvents. Such products will discolor and deteriorate component materials.

Do not launder or dry items in fixed, commercial/home laundry equipment. Material will be degraded.

1. Scrape dirt or mud from the equipment using a flat stick or a dull instrument which will not cut the fabric or webbing.
2. Remove loose dirt from soiled surfaces using a cloth or soft brush.
3. Clean the exceedingly dirty areas by wetting out the surface and applying a warm solution of Type II powdered laundry detergent per gallon (3.79 L) of water.
4. Scrub with soft brush, cloth, or sponge.
5. Flush the item thoroughly with clean, warm water until all the cleaning solution has been rinsed away.
6. Dry the item or equipment away from direct sunlight, direct heat, and open flames.

END OF TASK

Cleaning for Issue

1. The equipment will be cleaning in soak and wash tanks in the same manner as other light weight load carrying equipment. Laundry washing machines will not be used.
2. Remove loose dirt or dust from the items to be washed using a brush, cloth, or vacuum attachment.
3. Remove staves from field pack.
4. Soak items for at least five minutes or longer as necessary in a tank containing warm water.
5. Wash the items in a solution of Type II powdered laundry detergent scrubbing vigorously with a soft brush cloth or sponge as necessary.
6. Flush the washed equipment with clean, warm water until all cleaning solution has been rinsed out.
7. Air dry the equipment away from direct sunlight and heat, or open flames.

END OF TASK

GENERAL REPAIR

Restitching

Use machine stitching for all sewing. Re-sew loose, broken or defective stitches using thread specified in Table 1. Maintain proper thread tension to prevent loose stitches, backstitch breaks and ends not less than 1 inch (2.54 cm) to prevent raveling. Use the types of stitches, thread size, and stitches per inch for sewing as shown in Table 1.

Table 1. Sewing Machine and Thread Chart.

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	TYPE	THREAD SIZE
Tactical Load Bearing Vest				
General	Medium Duty	7 to 11	301	E/F
Reinforcements	Bartack	42	301	E
Large Field Pack (Internal Frame)				
General	Medium Duty	6 to 8	301	F
Reinforcements	Bartack	28 to 42	301	E
Combat Patrol Pack				
General	Medium Duty	6 to 8	301	F
Reinforcements	Bartack	28 to 42	301	E
40mm Grenade Vest				
General	Medium Duty	7 to 11	301	E/F
Reinforcements	Bartack	42	301	E
Rucksack (NO REPAIR AUTHORIZED)				

Ends of all stitching, except box and box-x, shall be backstitched or overstitched not less than 1 inch (2.54 cm) except where ends are turned under in a hem or held down by other seams or stitching. On box and box-x stitching, all ends shall be backstitched or overstitched 1/2 inch (1.27 cm) minimum. Ends of a continuous line of stitching shall overlap not less than 1/2 inch (1.27 cm).

Thread tensions shall be not less than 1/2 inch (1.27 cm). Thread tensions shall be maintained so that there will be no loose 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 stitching, the stitching shall be repaired by restarting the stitching a minimum of 1 inch (2.54 cm), or 1/2 inch (1.27 cm) for box and box-x stitching, back of the interrupted stitching.

Except for prestitching, thread breaks of two or more consecutive skipped or run-off stitches noted during inspection of the item shall be repaired by overstitching. The stitching shall start a minimum of 1 inch (2.54 cm), or 1/2 inch (1.27 cm) for box and box-x stitching, in back of defective area, continue over the defective area onto the existing stitching.

Loose or excessively tight stitching shall be repaired by removing defective stitching without damaging the materials, and restitching in the required manner.

When making above repairs, ends of stitching need not be backstitched.

GENERAL REPAIR – CONTINUED

Slide Fastener Repair

1. Replace malfunctioning or damaged slide fasteners on the field pack, as necessary.
2. Remove damaged fasteners by carefully cutting off the fastener tape 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. Attach a new fastener of appropriate length and type as specified in Table 3, using a medium duty sewing machine, size F thread and six to eight stitches per inch (2.54 cm).

END OF TASK

Snap Fastener Repair

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 fasteners will be securely clinched without cutting the adjacent material and no more than three splits shall occur in the button or eyelet barrels.

Drawcords and Cord Locks

Replace damaged, missing, or defective drawcords in lengths matching the original construction. Drawcord ends will be heat seared and knotted. Replace cord locks, as necessary. The specific lengths are listed in Table 2.

Table 2. Drawcord Lengths.

ITEM	APPLICATION	LENGTH
Vest	Width Adjustment. Side to Back Panel Connectors	*72* inch (176.40 cm)
Patrol Pack	Top Compartment	30 inch (73.50 cm)
Patrol Pack	Main Compartment (2)	21 inch (51.45 cm)
Field Pack	Harness Release Assembly	6 inch (14.70 cm)
Field Pack	Spindrift Collar Assembly	45 inches (1 10.25 cm)
Field Pack	Right Side Pocket	14 inches (34.30 cm)
Field Pack	Pocket Flap Assembly	18 inches (44.10 cm)
Field Pack	Left Side Pocket	14 inches (34.30 cm)
Field Pack	Main Frame Assembly	61 inches (149.45 cm)

END OF TASK

GENERAL REPAIR – CONTINUED

Binding Tape Repair

Overlap the binding tape using material specified in Section III; extending the new tape at least 1/2 inch (1.27 cm) beyond the damaged area. Turn the binding edges under 1/2 inch (1.27 cm) and stitch 1/8 inch (0.33 cm) in from the edge of the tape. Material lengths and widths for specific applications are listed in Table 3.

Table 3. Binding Material Lengths.

ITEM	APPLICATION	WIDTH	LENGTH
Vests	Right and left Panel Seams	1	AR
Vests	Shoulder Strap Seams	1	AR
Vests	Back Assembly	1	AR
Vest (TLB)	Pouches (Magazine and Grenade)	1	AR
Vest (Gr)	Pouches (Grenade)	1 ½	AR
Vests	D-Ring Holder	1 ½	2
Patrol Pack	Pull Tabs	3/8	6
Patrol Pack	Pocket Flaps	1	33
Field Pack	Side Pocket (Long) Assembly	1	18
Field Pack	Side Pocket (Short) Assembly	1	11 5/8
Field Pack	Spindrift Collar	1	14 ¼
Field Pack	Basket, Radio Assembly	1	22 ½
Field Pack	Rt/L Side Pocket Assembly	1	8
Field Pack	Pocket Flap	1	12 ¾

END OF TASK

Hardware Repair

Replace damaged missing, or malfunctioning D-rings, double bar, and quick release fasteners as necessary. Remove stitching holding damaged hardware or trim any raveled yarns from torn stitching, Cut appropriate webbing specified in Section III, to the length indicated. Thread hardware to be replaced through webbing. Sew webbing as in original construction and bartack as appropriate.

Replace Staves and Lower Back Pad

These items are removed by sliding the staves out of their tunnel and the webbing slots of the pad. Install serviceable items by reinstalling the staves.

END OF TASK

GENERAL REPAIR – CONTINUED

Torso Track Channel and Yoke Repair

When the yoke does not move freely along the track channel after the screws have been loosened, or is damaged so that it cannot serve its intended function, it must be replaced. To replace the torso track, remove stitching along the damaged torso track panel. Trim any raveling yarns from the field pack back panel. Stitch the new torso track to the pack back panel using type 301 stitching, size F yarn, and six to eight stitches per inch (2.54 cm). To replace the yoke, remove stitching that holds the yoke to the shoulder straps. Trim any raveling yarns from the shoulder straps. Stitch the new yoke to the shoulder straps using type 301 stitching size F yarn and six to eight stitches per inch (2.54 cm). Slide new yoke onto the track from the bottom and secure with friction screws.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE

ALL-PURPOSE LIGHTWEIGHT INDIVIDUAL CARRYING EQUIPMENT

INSPECT, SERVICE, REPAIR

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0046, Item 9)

Ruler, Tab, Metal, 16-inch (WP 0046, Item 39)

Sewing Machine, Bar Tack (WP 0046, Item 25)

Sewing Machine, Medium Duty (WP 0046, Item 34)

Tape, Measuring (WP 0046, Item 39)

Shears (WP 0046, Item 36)

Stitch Removal Tool (WP 0046, Item 38)

Detergents, General Purpose, Type II of MIL-D-16791 (WP 0047, Item 20)

Materials/Parts

Cord, Fibrous, Type II (WP 0030, Item 14)

Washer, Flat, Style A, Size 4096, Black Chemical Finish (WP 0030, Item 15)

Eyelet, Metallic, Style A, Size 4094, Black Chemical Finish (WP 0030, Item 16)

Fastener, Snap, Style 2, Black Chemical Finish (WP 0030, Item 17)

Loop, Strap Fastener, Type IV (WP 0030, Item 18)

Personnel Required

Non-MOS Specific (1)

References

WP 0005

WP 0007

WP 0030

WP 0046

WP 0047

INSPECT

Perform PMCS inspection on all items IAW WP 0005 and determine serviceability IAW WP 0007.

END OF TASK

SERVICE

Cleaning

CAUTION

Do not use Chlorine Bleach, yellow soap, cleaning fluids or solvents. Such products will discolor and deteriorate component materials.

Do not launder or dry items in fixed, commercial/home laundry equipment. Material will be degraded.

1. Scrape dirt or mud from the equipment using a flat stick or a dull instrument which will not cut the fabric or webbing.
2. Remove loose dirt from soiled surfaces using a cloth or soft brush.
3. Clean the exceedingly dirty areas by wetting out the surface and applying a warm solution of Type II powdered laundry detergent per gallon (3.79 L) of water.
4. Scrub with soft brush, cloth, or sponge.
5. Flush the item thoroughly with clean, warm water until all the cleaning solution has been rinsed away.
6. Dry the item or equipment away from direct sunlight, direct heat, and open flames.

END OF TASK

LARGE AND MEDIUM RUCK REPAIR

Restitching

Use machine stitching for all sewing. Re-sew loose, broken or defective stitches using thread specified in Table 1. Maintain proper thread tension to prevent loose stitches, backstitch breaks and ends not less than 1 inch (2.54 cm) to prevent raveling. Use the types of stitches, thread size, and stitches per inch for sewing as shown in Table 1.

Table 1. Sewing Machine and Thread Chart.

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	TYPE	THREAD SIZE
Large Ruck				
General	Medium Duty	8 to 10	301	F
Reinforcements	Bar Tack	28	301	E
Medium Ruck				
General	Medium Duty	8 to 10	301	F
Reinforcements	Bar Tack	28	301	E

Darning

Darn rips, tears, and holes in areas one inch (2.54 cm) or less in greatest dimension. There is no limit to the number of darns which may be applied.

END OF TASK

LARGE AND MEDIUM RUCK REPAIR – CONTINUED

Patching

Patch rips, tears, and holes exceeding one inch (2.54 cm) with a single patch of nylon cloth using thread as specified in Table 1.

1. Cut the patch of sufficient size to extend at least 1/2 inch (1.27 cm) beyond the hole or area to be patched, allowing for a 3/8-inch (0.952 cm) turn under.
2. Place the patch on the outside and sew it 1/8-inch (0.318 cm) from the edge of the patch.
3. Cut away the damaged area to a square or rectangular shape, depending upon the shape of the hole.
4. Turn the raw edges under 3/8-inch (0.952 cm).
5. Using a medium duty sewing machine, size F thread, 8 to 10 stitches per inch, sew 1/8-inch (0.318 cm) from the edge.

END OF TASK

Binding Tape Repair

Overlap the binding tape using nylon tape.

1. Place marks at least ½ inch (1.27 cm) from both edges of the damaged area.
2. Measure between the marks.
3. Cut a new piece of 1-inch wide nylon tape the length of the measurement in step 2.
4. Sear the cut ends of the tape.
5. Place the new tape between the marks made in step 1.
6. Turn the binding- edges under 1/2-inch (1.27 cm).
7. Using a medium duty sewing machine, size E thread, 8 to 10 stitches per inch, sew 1/8-inch (0.318 cm) in from edge of tape, with a ½-inch overstitch.

END OF TASK

Securing Strap Buckle Repair

1. Carefully cut and remove stitching for a distance of two inches (5.08 cm) from the buckle end.
2. Cut the single bottom layer of the strap webbing and discard buckle.
3. Sear cut ends of webbing.
4. Replace with new buckle.
5. Secure webbing by stitching with 1 1/2 inch (3.81 cm) three point ww stitch pattern 1/2 inch (1.27 cm) from folded webbing edge.

END OF TASK

Radio Pocket Strap Repair

1. Cut stitching which secures the strap to the pack.
2. Cut a 12-inch (30.5 cm) length of new webbing, with one end diagonally cut and sear ends.
3. Place the buckle strap in the original location and secure the webbing by stitching with one row of stitching.

END OF TASK

LARGE AND MEDIUM RUCK REPAIR – CONTINUED

Frame Buckle Chape Repair

1. Cut stitch pattern which secures the chape to the pack and discard.
2. Cut a 4-inch (10.2 cm) length of new webbing using item 27, Figure 14-7, and sear ends. If buckle is damaged discard and use item 29, Figure 14-7.
3. Fold webbing ½ and 2 ½ inches (1.27 and 6.35 cm) from one end.
4. Place the buckle chape in the original location and secure the webbing with a 1 ½ inch (3.81 cm) three point WW stitch pattern.

END OF TASK

Strap Pocket Repair

1. Replace by cutting webbing and remove from buckle and discard.
2. Cut a 14 ½-inch (36.8 cm) length of webbing.
3. Sear both ends.
4. Fold webbing 3 ¼ inches (8.26 cm) and stitch with one row 1/8 inch (0.318 cm) from edge around folded strap.
5. Install a new snap fastener (with proper sized dies) according to the original construction and locations,
6. Thread webbing through buckle as other pocket straps, double fold free end of webbing ½-inch (1.27 cm) length, and stitch with one ¾-inch (1.91 cm) bar tack or three rows of stitching in the center of the fold.

END OF TASK

Loop Chape Repair

1. Cut the webbing as close to the 1 inch (2.54 cm) reinforcement webbing as possible.
2. Cut a 5 inch (12.7 cm) length of new webbing.
3. Sear ends or replace loop.
4. Fold webbing ½ and 2 ½ inches (1.27 and 6.35 cm) from one end.
5. Place the loop chape on top of the original and secure the webbing with a 1 ½-inch (3.81 cm) three point ww stitch pattern.
6. Stitch with one 1-inch (2.54 cm) bar tack or three rows of stitching 1/8 inch (0.318 cm) from edge of 1-inch (2.54 cm) reinforcement webbing (stitching should be sewn through reinforcement webbing).

END OF TASK

Frame Tie-down Strap

1. Replace strap by carefully cutting off the webbing as close to the bar tack as possible.
2. Cut a 14 ½-inch (36.8 cm) length of new webbing with one end at an angle.
3. Fold end ½ inch (1.27 cm) and stitch with a 1 1/2 inch (3.81 cm) three-point ww stitch positioned on top of the cut original tie down strap.

END OF TASK

LARGE AND MEDIUM RUCK REPAIR – CONTINUED

D-Ring Chape Repair (Medium Ruck Only)

1. Replace by carefully cutting off the webbing as close to the bar tack as possible.
2. Cut a 3 inch (7.62 cm) length of webbing, and sear ends or replace D ring.
3. Fold webbing in half with D ring in center, place the chape on top of the original location of D ring and secure the webbing with two, 1-inch (2.54 cm) bar tacks located close to the D ring and 3/16 inch (0.476 cm) from the seared edges.

END OF TASK

Lower Equipment Hanger Repair (Medium Ruck Only)

1. Carefully cut webbing 5/8-inch (1.59 cm) from the pocket, side seam and cut stitching which secures the hanger to the pack.
2. Cut a 6 ½ inch (16.5 cm) length of webbing.
3. Sear both ends.
4. Make a mark 3 ¼ inches (8.26 cm) for the center line location. From the center line make a mark 1 ¼ inches (3.18 cm) from each side ½-inch (1.27 cm) from webbing edge. Install a new eyelet and washer (with proper sized dies).
5. Fold webbing ½ inch (1.27 cm) each end and position as in original location and stitch with a ½-inch (1.27 cm) wide box stitch on the folded ends and center of the hanger.

END OF TASK

Keeper Repair

1. Carefully cut stitching which secures the keeper to the side or bottom of the pack.
2. Cut a 2 3/8-inch (6.03 cm) length of webbing.
3. Sear both ends.
4. Fold webbing ½ inch (1.27 cm) each end and position as in original location and stitch with two, 1-inch (2.54 cm) bar tacks or three rows of stitching.

END OF TASK

Upper Equipment Hanger Repair (Medium Ruck Only)

1. Cut a length of webbing of sufficient length to overlap the stitch patterns ½ inch (1.27 cm).
2. Sear both ends.
3. Fold webbing ½ inch (1.27 cm) each end and position over damaged section and stitch with a ½- inch (1.27 cm) wide box stitch 1/8 inch (0.318 cm) from the folded ends.

END OF TASK

LARGE AND MEDIUM RUCK REPAIR – CONTINUED

Drawstring Repair

1. Remove cord from grommets and plastic clamp cord.
2. Cut a 55-inch (140 cm) (large ruck), or a 72-inch (183 cm) (medium ruck) length of cord.
3. Thread cord through the back panel center two grommets and tie with a square knot on the outside.
4. Thread each cord end through the six grommets.
5. Thread each end of cord through plastic clamp cord, tie with overhand knot and sear ends.

END OF TASK

Upper and Lower Equipment Hanger Repair (Large Ruck Only)

1. Carefully cut stitching which secures the hanger to the pack.
2. Cut a 6-inch (15.2 cm) length of webbing.
3. Sear both ends.
4. Make a mark 3 inches (7.62 cm) for the center line location. From the centerline make a mark 1 ¼ inches (3.18 cm) from each side 1/2-inch (1.27 cm) from webbing edge.
5. Install a new eyelet and washer (with proper sized dies).
6. Fold webbing 1/2 inch (1.27 cm) each end and position as in original location and stitch with two 1-inch (2.54 cm) bar tacks or three rows stitching on the folded ends and center of the hanger.

END OF TASK

FIELD PACK COVER REPAIR

Elastic Cord Repair

1. Carefully cut stitching on hem for a distance of approximately three inches (7.62 cm) and cut cord.
2. Cut a 40 inch (102 cm) length of elastic cord.
3. Dip cut ends of cord in adhesive by at least ½ inch (1.27 cm).
4. Attach heavy string to existing cord in channel and new cord with a square knot.
5. Pull existing cord and string until new cord ends are at hem opening.
6. Remove string and overlap cord ends 1 ½ inches (3.81 cm) and clamp (with proper sized dies).
7. Restitch hem as in original, overlapping stitching a minimum of 1 inch (2.54 cm).

END OF TASK

WATER CANTEEN COVER REPAIR

Repair of the water canteen cover is limited to replacement of the canteen cap, canteen cap strap, and canteen cup.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE

CHEMICAL GEAR

INSPECT, SERVICE

INITIAL SETUP:

Tools	Personnel Required
N/A	Non-MOS Specific (1)
Materials/Parts	**References**
N/A	TM 3-220 WP 0005 WP 0007

INSPECT

Perform PMCS inspection on all items IAW WP 0005 and determine serviceability IAW WP 0007.

END OF TASK

SERVICE

Cleaning. Refer to TM 3-220 for cleaning and decontamination of protective clothing ensembles.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
PERSONNEL ARMOR SYSTEM GROUND TROOPS (PASGT) HELMET
INSPECT, SERVICE, REPAIR

INITIAL SETUP:

Tools	Personnel Required
Screwdriver, Flat Tip (WP 0046, Item 23)	Non-MOS Specific (1)

Materials/Parts	References
	WP 0005
Emery Cloth, 120 Grit (WP 0047, Item 10)	WP 0007
Polyurethane Coating, MIL-C-46185 Type II, Color O.D. 34088 of FED STD 595 (WP 0047, Item 39)	WP 0032 WP 0046
Polyurethane Coating, MIL-C-46168, Color D.D. 34087 of FED STD 595 (WP 0047, Item 40)	WP 0047
Walnut Shell Flour, 40/1 00 Mesh (WP 0047, Item 41)	
Adhesive, EC 1357 (WP 0047, Item 42)	
Adhesive, Paste, 2 oz. (WP 0047, Item 43)	
Adhesive (for Edging) (WP 0047, Item 36)	

INSPECT

Perform PMCS inspection on all items IAW WP 0005 and determine serviceability IAW WP 0007.

END OF TASK

SERVICE

Field Cleaning

CAUTION

Do not use Chlorine Bleach, yellow soap, cleaning fluids or solvents. Such products will discolor and deteriorate component materials.

Do not launder or dry items in fixed, commercial/home laundry equipment. Material will be degraded.

1. Scrape dirt or mud from the equipment using a flat stick or a dull instrument which will not cut the fabric or webbing.
2. Wash the helmets 10-15 minutes in a 0.5 percent soap solution at a water temperature of 120° F (40° C).
3. Rinse them in clear warm water until soap is removed.
4. Allow them to dry thoroughly in a temperature not exceeding 140°F (60°C).

END OF TASK

Cleaning for Issue

1. The equipment will be cleaning in soak and wash tanks in the same manner as other light weight load carrying equipment. Laundry washing machines will not be used.
2. Remove loose dirt or dust from the items to be washed using a brush, cloth, or vacuum attachment.
3. Remove staves from field pack.
4. Soak items for at least five minutes or longer as necessary in a tank containing warm water.
5. Wash the items in a solution of Type II powdered laundry detergent scrubbing vigorously with a soft brush cloth or sponge as necessary.
6. Flush the washed equipment with clean, warm water until all cleaning solution has been rinsed out.
7. Air dry the equipment away from direct sunlight and heat, or open flames.

END OF TASK

Paint

1. Sand chipped area slightly before touch up painting, making sure not to cause any raised fibers.
2. Clean area with a cloth.
3. Brush on one coat of the paint.
4. Sprinkle a small amount of silica sand or walnut shell flour on the freshly painted area until the quantity of sand or walnut shell is equal to that in the original finish.
5. Lightly apply a second coat of paint to cover the unpainted particles and allow the area to dry at least eight hours.
6. Install a new suspension system and chin strap IAW section titled Suspension Line and Chin Strap Replacement.
7. Examine the inside and outside surfaces of the helmet shell for raised or abraded fibers, cuts, pitting or slight indentations. If it is determined that the above defects are limited to the outside plies only (on the inside and outside of the shell), and the defects do not extend beyond one ply deep, then the helmet shell can be repaired. If damaged extends beyond one ply deep, then the helmet shell is not serviceable. Repair of the above defects is accomplished by the following procedures:

SERVICE – CONTINUED

8. Remove paint around the immediate area of damage, making sure not to cause additional raising of fibers.
9. Wipe clear with cloth to remove dirt and dust particles.
10. Apply one coat of epoxy adhesive to sufficiently cover damaged area. Let cure.
11. After epoxy has cured, sand lightly and blend smoothly into shell.
12. Apply second coat if required.
13. Apply paint as described above.

GENERAL REPAIR

Suspension Line and Chin Strap Removal

1. Remove the six mounting screws and A-nuts; remove the suspension.
2. Replace new suspension and hardware if necessary by lining up the holes in the helmet, making sure the drawstring pull tab is at the rear of the helmet.
3. Insert the A-nut (peak of A toward the rim) through the holes and replace the six screws.
4. Remove the screws and remove the chin strap.
5. Replace new chin strap as shown making sure the snap fastener is on the left side of the helmet as worn.

END OF TASK

Rubber Edging Repair

1. Examine the rubber edging for cuts, slits, and areas of non-adherence.
2. If it is determined that the edging is no longer serviceable, then remove the edging by using a heat gun to loosen the adhesive where the edging ends butt together at rear of helmet.
3. Once one end of the edging has been loosened, grasp edging with pliers and pull edging away from helmet while still using heat gun to loosen adhesive.
4. Remove any remaining adhesive before installing new edging to helmet.
5. The rubber edging, slightly longer than the periphery of the helmet, should be opened up and wound around a cylinder so that the inside of the channel is exposed. The inside of the edging should be lightly abraded with a wire brush and the adhesive.
6. Adhesive should also be applied to the helmet edge.
7. When the adhesive becomes tacky, the edging should be applied to the helmet edge.
8. The application of the edging should start at the bench mark at the rear of the helmet and follow the periphery of the helmet completely around to the starting point at the rear of the helmet.
9. The edging should be cut so that the ends butt each other.

END OF TASK

Paint Helmet

Examine the helmet shell for chipped paint. Repair these places without stripping the paint from the helmet. Paint the helmet, except that the second coat should cover the entire outside of the helmet (including rubber edging)

1. Remove paint around the immediate area of damage, making sure not to cause additional raising of fibers.
2. Make a single cut in the blister (fabric ply) with a sharp knife sufficiently long enough to allow placing of epoxy resin under the cut ply.

GENERAL REPAIR – CONTINUED

3. Insert epoxy resin under ply in sufficient quantity to achieve a strong bond.
4. Apply pressure to defect area to ensure mating of plies.
5. After epoxy has cured, sand lightly and blend smoothly into shell.
6. Apply second coat of resin if required.
7. Apply paint.

END OF TASK

Suspension and Chin Strap Replacement

1. Examine the inside and outside surfaces of the helmet shell for delaminations. If it is determined that the defect is limited to the outside plies only (on the inside and outside of the shell), and the defect does not extend beyond one ply deep, then the helmet shell can be repaired. If damage extends beyond one ply deep then the helmet shell is not serviceable.
2. Remove paint around the immediate area of the damage, making sure not to cause additional raising of fibers.
3. Wipe dean with cloth to remove dirt and dust particles.
4. Apply one coat of epoxy adhesive under raised ply.
5. Apply pressure to defect area to ensure mating of plies.
6. After cure is achieved, sand lightly and blend smoothly into shell.
7. Apply second coat if required.
8. Apply paint.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
BALACLAVA
INSPECT, SERVICE, REPAIR

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0046, Item 9)
Ruler, Tab, Metal, 16-inch (WP 0046, Item 39)
Sewing Machine, Bar Tack (WP 0046, Item 25)
Sewing Machine, Medium Duty (WP 0046, Item 34)
Tape, Measuring (WP 0046, Item 39)
Shears (WP 0046, Item 36)

Personnel Required

Non-MOS Specific (1)

References

WP 0005
WP 0007
WP 0030

Materials/Parts

Elastic Cord, OD-7, Class 2 (WP 0033, Item 21)
Webbing, OD 106, Type II (WP 0033, Item 22)

INSPECT

Perform PMCS inspection on all items IAW WP 0005 and determine serviceability IAW WP 0007.

END OF TASK

SERVICE

Cleaning

1. Launder in accordance with FM 10-280.
2. Do not tumble dry, or wring/twist.
3. Air dry at room temperature.
4. Hand wash in warm water using mild detergent.
5. Rinse in clear warm water and hang to drip dry at room temperature.
6. Do not dry clean.

END OF TASK

REPAIR

Sewing machine repairs, stitching and re-stitching. All sewing, except emergency repair, shall be machine sewn. When ends of machine stitching type 301 are not caught in other seams or stitching, they shall be back-stitched not less than 1 inch (2.54 cm) at each break. Ends of a continuous line of stitching shall overlap not less than 1/2 inch (1.27 cm). Thread breaks (all stitch types) shall be repaired by stitching back of the break not less than 1/2 inch (1.27 cm) at end of break. Thread tension shall be properly maintained to avoid loose stitching and locks shall be imbedded in the center of the materials sewn. Thread breaks in overedge stitching shall be overlock stitched not less than 3/4 inch (1.91 cm) at each end of break. Stitch spacing used for restitching and other type of seams shall be the same as in the original construction. Seams with loose and/or weak thread shall be restitched,

Darning

Small holes or tears. Small holes or tears may be repaired by drawing the edges together and darning by hand.

END OFTASK

PULL CORD REPLACEMENT

1. Replace missing or torn pull tabs with new tabs fabricated of same materials as removed.
2. Replace missing or defective elastic cords with elastic cord as specified in Table 1.
3. Cut 18 inches
4. (44.7 cm) in length, and attach in same manner as the original: Center abutted ends of elastic cordon seam allowance at center top cover (cloth, knit aramid) and attach to cover seam allowance with a ½ inch (1 .27 cm) bar tack placed through each end of the elastic cord, The long dimension of each bar tack shall be in the length direction of the cord. Repair the stitching for the tunnel elastic, taking care not to catch elastic in stitching.
5. Cut away faded or missing instruction labels and replace with new labels in same location, using type 301 stitch and label cloth specified.

Table 1. Stitch Formations.

LOCATION	STITCH TYPE	NEEDLE	BOBBIN	STITCHES PER INCH
Bar tack-Pull tab	Bar tack	B	B	38-42 per tack
Join front and back bib at side seams	515, 516 or 519	B	B	6-10
Overedging	503 or 504	B	B	6-10
General	401	B	B	8-12
Attach label to face side of lining, attach side vent insert to side interlining, and join edge of each interlining to insert bar tack	301 or 401	B	B	8-12
Bar tack-Center interlining to center abutted ends of elastic cord on seam allowance and attach to cover seam allowance		B	B	24-28 per tack

END OF TASK

SIZING

Table 2. Sizing Chart.

AREA TO BE MEASURED	MEASUREMENT	TOLERANCE
Length*	24	+ 1 inch
Width**	9	+ 3/4 inch
Face opening***	9 1/2	+ 1/2 inch

1. Place hood face side upon a flat surface, align bottom edges of front and back of bib and butt top and bottom edges of facial opening. With hood in this position measure in a straight line from folded edge of crown at highest point to bottom of hood at lowest point on bib.
2. With hood positioned in footnote * measure across the hood in a straight line from folded edge to folded edge. The line of measurement shall be perpendicular to the length measurement and 1 /2 to 1 inch (1 .27 to 2.54 cm) below the tuck.
3. Fold hood in half lengthwise so fold runs in the length direction of the center top cover and center neck cover.
4. Place folded hood on flat surface with edges of face opening even.
5. Place one hand on neck end of face opening, holding hood against surface with other hand, slide top of hood along surface toward back of hood until curvature along the side edges of face opening approximates a straight line.
6. With hood in this position measure along the edge of face opening from fold at center neck cover to fold at center of top cover.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
ADVANCED COMBAT VEHICLE CREW HELMET
INSPECT, SERVICE, REPAIR

Tools

Die Tool, Fastener (WP 0046, Item 1)
Die, Eyelet (WP 0046, Item 2)
File, Hand, Flat (WP 0046, Item 3)
Holder, Die (WP 0046, Item 7)
Holder, Die Fastener (WP 0046, Item 8)
Pliers, Diagonal Cutting (WP 0046, Item 10)
Pliers, Lineman's (WP 0046, Item 11)
Pliers, Needle Nose (WP 0046, Item 12)
Pliers, Slip Joint (WP 0046, Item 13)
Screwdriver, Flat Tip (WP 0046, Item 23)
Screwdriver, Flat-Tip, 1/4-Inch (WP 0046, Item 24)
Ruler, Tab, Metal, 16 Inches (WP 0046, Item 19)

Personnel Required

Non-MOS Specific (1)

References

WP 0005
WP 0007
WP 0033
WP 0046
WP 0047

Materials/Parts

Refer to WP 0033 for complete parts listing.

INSPECT

Perform PMCS inspection on all items IAW WP 0005 and determine serviceability IAW WP 0007.

END OF TASK

SERVICE

General Cleaning Procedures

CAUTION

Remove batteries from the battery box before cleaning.

Do not use a pointed tool when removing foreign matter from swivel joints and moveable parts. Be careful not to puncture ear-cushioning seals.

NOTE

For saltwater operations, complete headset, including internal electronics, must be rinsed with fresh water and air-dried daily.

1. Clean the helmet shell with soap and warm water.
2. Rinse with clean water.
3. Clean the synthetic rubber edging of the shell with a clean cloth to remove dirt, dust, oil, grease, and perspiration. Ensure all communication components such as cords, microphone, microphone boom, connectors, and ear pads are free of any dirt or contamination.

SERVICE – CONTINUED

4. Remove loose dirt with a clean, soft cloth damped with a mild detergent solution.
5. Remove grease, fungus, or grime with a soft brush and mild detergent.
6. Hand wash camouflage cover in warm water (about 120° F) and mild laundry detergent or machine wash on permanent press cycle.
7. Rinse thoroughly with clean warm water after laundering.
8. Hang and let air-dry.
9. Clean the Helmet Liner Assembly Components as necessary by removing and washing the components with a mild solution of detergent and water.
10. Air dry components after washing.

END OF TASK

REPAIR

Only qualified personnel shall accomplish work. The finished ACVC components shall be complete, clean, and free from defects affecting their serviceability and appearance. Threads shall be neatly trimmed. Sealed seams shall show no leakage when tested. Seams shall not be twisted, pleaded, or puckered. Stitch tension shall be adequate, not loose or tight, with specified number of stitches per inch on major portions of seam. The material shall not be defective or damaged in any manner. The material shall not contain cuts, tears, mends, burns, needle chews or holes.

Helmet Shell Repair

Repairs the helmet shell only in accordance with WP 0018.

END OF TASK

Rubber Edging Repair

Repair synthetic rubber edging by re-bonding it to the helmet shell edge or bonding the appropriate lengths of new edging to replace a damaged portion. Roughen the surfaces before bonding adhesive edging.

END OF TASK

Repairing the headset component

When repairing any headset component (as seen below for the left and right earcups), care should be taken to identify cables during disassembly to facilitate proper reassembly. All cables are colored coordinated (I.E. Red to Red, Blue/White to Blue/White, Green to Green, etc). All cable and switch entries should be resealed after assembly with any standard commercially available silicone sealant to preserve waterproofing and the sound attenuation, which protects hearing and aid in intelligible communications (Figure 1).

SERVICE – CONTINUED

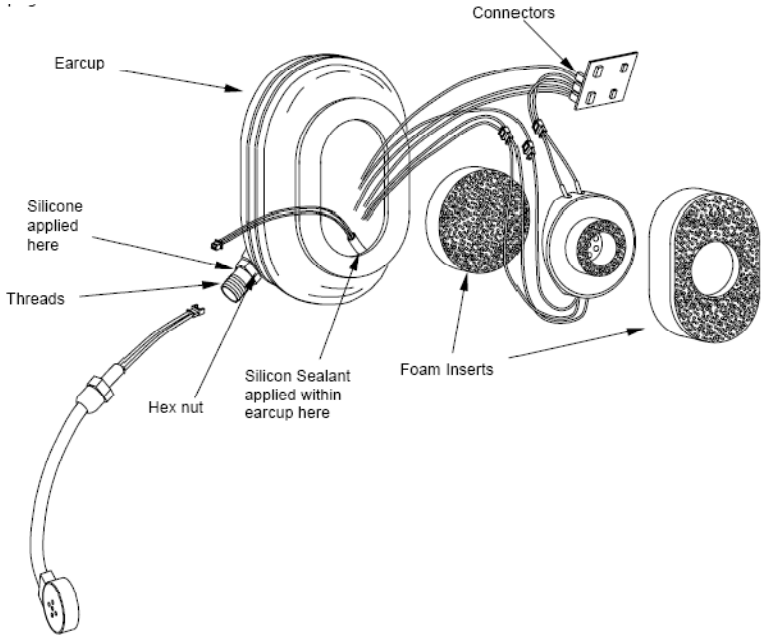

Figure 1. ACVC Microphone Assembly.

To repair the Mic/Boom Assembly, remove the foam inserts from the right earcup. Take note of the order of assembly. Unplug the connectors with the red & white wires inside the earcup and unscrew the Assembly from the outside using a wrench or pliers. Remove any sealant from the threads of the earcup and carefully hands tighten the Assembly into the earcup. Using the same removal tool, grasp the hex nut closest to the threads and tighten the Assembly into the earcup taking care not to strip the plastic threads. Seal around the Assembly from inside the cup with silicone sealant to preserve waterproof characteristics and the noise cancellation characteristics, plug in the connector with the red & white wires.

When repairing any headset component (Figure 2), care should be taken to identify cables during disassembly to facilitate proper reassembly. All cables are colored-coordinated. All cable and switch entries should be resealed after assembly with any standard commercially available silicone sealant to preserve waterproofing and the sound attenuation, which protects hearing and aid in intelligible communications. When replacing earphones simply remove the foam inserts from the earcup, taking note of the order of assembly. Unplug the color-coded wires/connectors from within and reconnect the same way. Replace the earphone assembly and foam inserts in the same order as removed.

SERVICE – CONTINUED

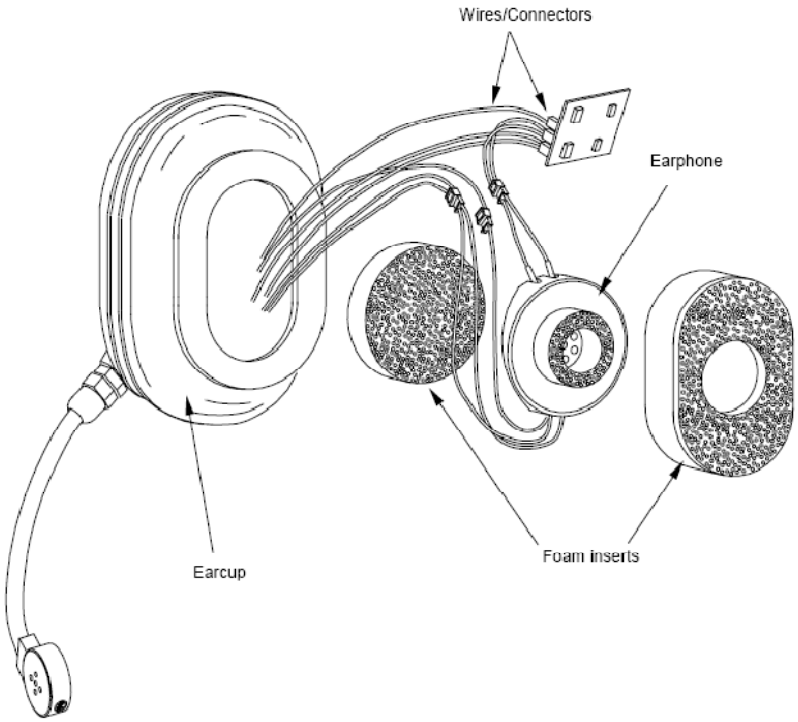

Figure 2. Headset Assembly.

END OF TASK

Repairing the Mic/Boom Assembly

1. Take note of the order of assembly, and remove the foam inserts from the right earcup.
2. Unplug the connectors with the red & white wires inside the earcup and unscrew the Assembly from the outside using a wrench or pliers.
3. Remove any sealant from the threads of the earcup and carefully hands tighten the Assembly into the earcup.
4. Using the same removal tool, grasp the hex nut closest to the threads and tighten the Assembly into the earcup taking care not to strip the plastic threads.
5. Seal around the Assembly from inside the cup with silicone sealant to preserve waterproof characteristics and the noise cancellation characteristics, plug in the connector with the red & white wires.

END OF TASK

Repairing the Talk-Through Switch

1. Taking note of the assembly order, remove the foam fillers and earphone assembly from the right ear-cup.
2. Unplug the mini connectors coming from the switch to the cables and printed circuit board.
3. Unscrew the hex nut from the outside of the ear-cup and slide the switch out thru the inside of the ear-cup.
4. Replace in reverse order and seal around switch with silicone on the inside of the ear-cup.

END OF TASK

SERVICE – CONTINUED

Repairing the Talk Circuit

1. Take note of the order of assembly and remove the foam inserts and earphone from the right earcup (Figure 3).
2. Unplug the Printed Circuit Board from the three mini-connectors.
3. Replace the Printed Circuit Board and test the talk circuit. If fault persists, remove the screen and washer from the outside front of the earcup with a small screwdriver.
4. Push the Microphone into the earcup. Remove the silicone sealant from the inside of the earcup and replace the microphone from the inside.
5. Seal the microphone in place with silicone sealant. Use a small amount of sealant around the edge of the new screen assembly packaged with the microphone and press into place on the outside of the earcup.
6. Reassemble earcup.

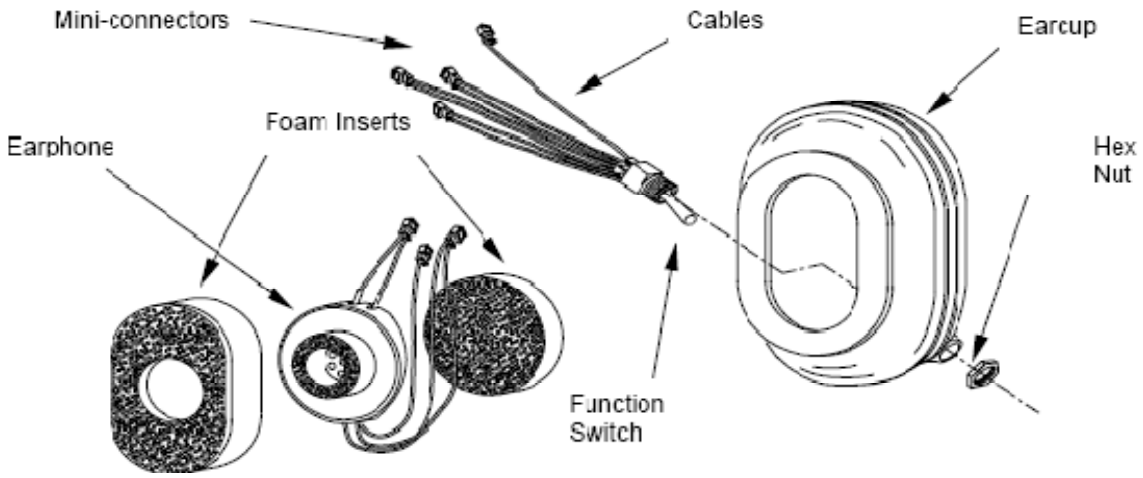

Figure 3. Talk Circuits.

END OF TASK

Repairing the Function Switch

1. When removing function switch, take note of the order of assembly and remove the foam inserts and earphone from the left earcup.
2. Unplug the mini connectors on the wires coming from the switch and the cables. Remove the hex nut from the switch on the outside of the earcup and slide the switch out through the inside of the earcup. Re-assemble in reverse order and seal the switch inside the earcup with silicone sealant.

END OF TASK

Repairing the Earcup Tension/Adjustment Strap

1. Ensure the camouflage cover is removed from shell. Open ratchet buckles on retention system, and pull adjustment straps out of ratchet buckles.
2. Fully extract adjustment strap. Perform this procedure for both sides.
3. Unsnap the back piece of the tension strap assembly. Replace damaged components as necessary. Attach right headset tension strap to faceguard attachment strut by sliding tension strap through slot opening.

SERVICE – CONTINUED

4. Slide tension strap through tunnel on ear-cup. With ratchet adjustment lock open, slide strap end through adjustment lock slightly. Close adjustment lock. Repeat procedure for other side.
5. To release, and before removing helmet, pull up on adjustment lock buckles and slide straps sufficiently back to clear ears.

END OF TASK

REPAIR

Routine maintenance involves replacing damaged earcup seals and batteries for the talk-through system, as needed. This headset and microphone kit is designed to come apart easily, and since everything plugs together with connectors, tools are not needed to replace most parts. There is only one way that things fit together. You can't make a mistake unless you force something into place.

Replacing the Camouflage Cover

1. Remove the camouflage cover by sliding headset tension adjustment straps through the rear holes of cover, and simply remove cover from helmet shell.
2. To replace camouflage cover, slide adjustment tension straps through the cover's rear holes and pull the rest of the cover over the entire helmet. Ensure the nylon elastic keeper is securing the cover to the shell.

END OF TASK

Replacing the Retention System

1. Remove impact liner assembly.
2. Starting with the right side, unscrew the retention straps from the upper inside faceguard strut while holding the outside screw in place.
3. Unscrew the retention straps from the inner backside of the helmet shell.
4. Release the ratchet buckles on the back of the helmet, and pull the adjustment straps through.
5. Push/pull the adjustment straps free, through and out of the headset tunnels and struts.
6. Remove the earcup to earcup cable from the nape strap.
7. Remove earcups from damaged retention system by pulling apart retention system cloth free from earcup notch.
8. Remove damaged retention system.
9. To install new retention system, place right earcup on top of hole opening on right side.
10. Insert edge of retention system cutout into the earcup notch.
11. While pushing up on earcup from bottom, slide remaining retention system edge into earcup notch until earcup is completely engaged.
12. Attach the retention system to helmet shell, by screwing the retention straps onto the inside of the struts, and to the inside rear of helmet shell. Repeat procedure for second earcup.
13. Slide earcup adjustment strap through the strut, through the headset tunnel and finally through the ratchet buckle in the rear.
14. Secure earcup tension adjustment strap by fastening the ratchet buckle. Repeat for opposite side.
15. Secure earcup-to-earcup cable within the nape strap by fastening the cable into the hook and pile fastener.

END OF TASK

REPAIR - CONTINUED

Replacing the Upper Cable

1. Remove the foam fillers and earphone from the left ear-cup.
2. Unplug all mini connectors leading from the upper cable. All cables are colored coordinated.
3. From the outside of the ear-cup, unscrew the two screws holding the cable into the ear-cup.
4. Replace in reverse order and seal around upper cable entry inside the ear-cup with silicone sealant.

END OF TASK

Replacing the Neck Cable Assembly

1. Noting the order of placement, remove all internal components from both ear-cups.
2. Cut the tie wrap off of both ends of the neck cable from within the ear-cups.
3. Cut off all mini connectors from both ends of the neck cable from within the ear-cups, and remove the neck cable.
4. Start inserting the new neck cable with the side showing the extra white conductor and black and orange conductors mounted on the same mini connector, into the left ear cup. The left ear cup is the side without the boom/microphone.
5. Fish the mini connectors into the ear-cup. Lubricate the rubber grommet with a soapy water solution and push and twist them into the ear cup holes. A small flathead screwdriver may be necessary to move the grommets.
6. After inserting the grommets into the ear cups, lubricate the inside of the grommets with soapy water solution and pull the cable into the grommet so that the neck cable is into the ear cup ¼ inch past the heat shrink tubing on the cable.
7. Tightly pull a nylon tie wrap around the cable assembly on this ¼ inch portion of the neck cable to prevent the cable from being pulled out of the ear cups. Plug in all the mini connectors.

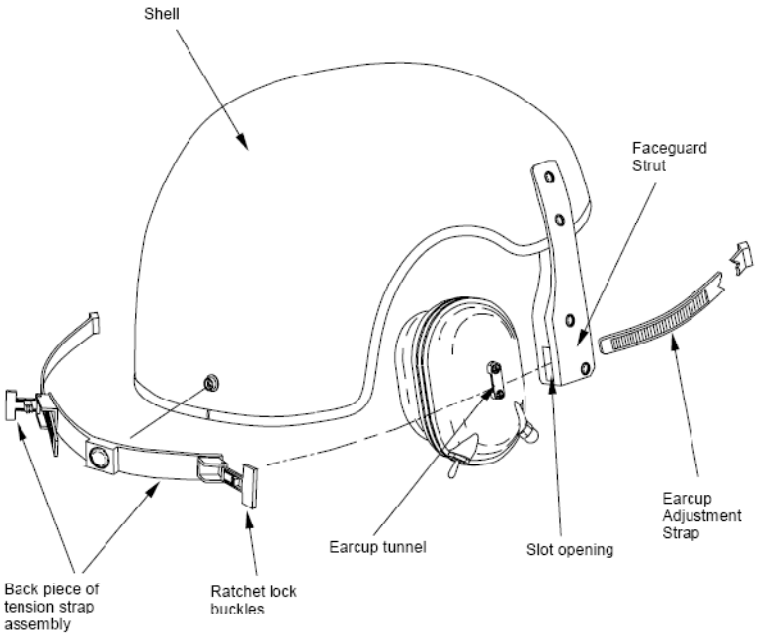

Figure 26-18. Headset Tension Assembly

Figure 4. Headset Tension Assembly.

END OF TASK

REPAIR - CONTINUED

Replacing the Faceguard

1. Remove the faceguard by flipping it up pulling it away until it is disengaged.
2. To replace the faceguard, have it in the “up” position and engage the two metal swivel posts on the faceguard to the mating slots on the faceguard attachment strut.
3. Swivel faceguard down until it engages in detents of attachment strut. Grasp the right side of the faceguard and the right struts and rotate downward and back to lock the faceguard into position. A clicking noise indicates proper engagement. Repeat for left side.

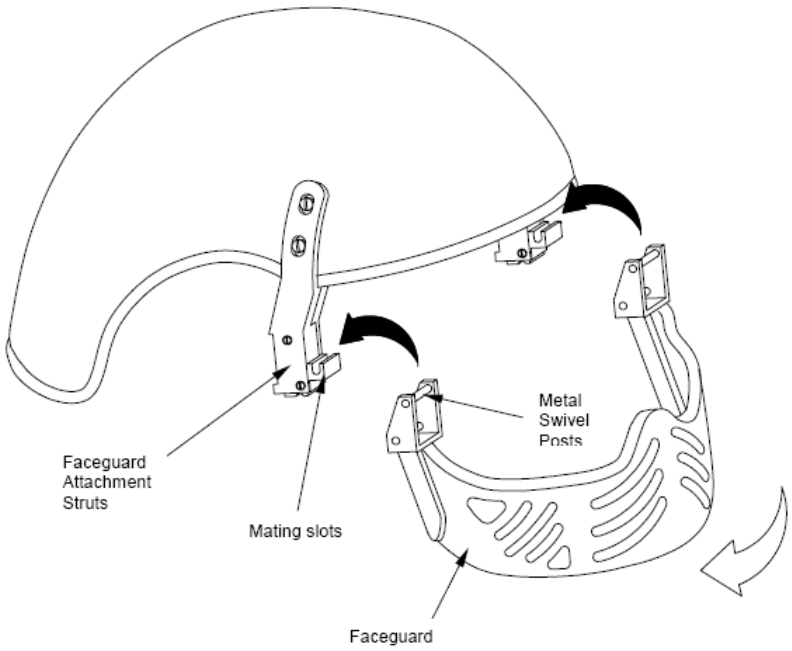

Figure 5. Faceguard Assembly.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE

CVC BODY ARMOR

SERVICE, REPAIR

INITIAL SETUP:

Tools	Personnel Required
Knife, Hot Metal (WP 0046, Item 9)	Non-MOS Specific (1)
Ruler, Tab, Metal, 16-inch (WP 0046, Item 19)	
Sewing Machine, Bar Tack (WP 0046, Item 25)	**References**
Sewing Machine, Medium Duty (WP 0046, Item 34)	WP 0005
Tape, Measuring (WP 0046, Item 39)	WP 0007
Shears (WP 0046, Item 36)	WP 0045
Stitch Removal Tool (WP 0046, Item 38)	WP 0046

INSPECT

Perform PMCS inspection on all items IAW WP 0005 and determine serviceability IAW WP 0007.

END OF TASK

SERVICE

Cleaning

CAUTION

Do not starch the carrier or the inserts. Do not bleach or dry clean the inserts.

1. Remove the ballistic inserts from the carrier and mate the hook-and-pile fasteners of the carrier for washing. Wash the carrier and the inserts separately. Wash the inserts as seldom as possible.
2. Hand wash the carrier and the inserts in warm to hot water and mild detergent.
3. Rinse thoroughly in clear warm water after laundering, Remove all soaps, alkalis and detergent or the vest will lose its ballistic or flame resistance. If the vest has accidentally been starched, its ballistic and flame resistance can be restored by rinsing thoroughly with warm water. If the inserts have been accidentally bleached, turn them in for replacement. Field Laundry Procedure: Wash the inserts and the carrier according to Laundry Wash Formula “l” of FM 10-280, Field Laundry, Bath and Clothing Exchange Operations.
4. Inspect the carrier and the inserts after washing to insure that there are no open seams, tears, or holes and that components operate satisfactorily.

END OF TASK

REPAIR

Carrier Replacement

Due to the low cost of the complete carrier, it is not considered economical to repair badly torn, worn, or damaged carriers, including replacement of hook-and-pile fasteners, and elastic webbing. When a carrier has large holes or tears, is severely worn or soiled, has inoperative hook and- pile fasteners, or has badly abraded or otherwise damaged elastic webbing, replace the entire carrier. The carrier need not be replaced for tears or holes less than 1 inch long that can be repaired by hand darning, and for open seams that can be repaired by top-stitching.

Carrier Repair

Small holes or tears. With the ballistic inserts out of the carrier, the hole or tear in the carrier may be repaired by drawing the edges together and darning by hand.

Open seams and broken stitches. When it is necessary to repair an open seam or broken stitching, use machines for all servicing except in emergency repair. Top stitch with Aramid thread conforming to MIL-T-43636, size B, color olive drab S-1, E. A. 66022, size 50 for both needle and bobbin/looper. Use stitch type 301 of Federal Standard 751 and 8 to 10 stitches per inch. Adjust the thread tension so that there will be no loose stitching or excessively tight stitching resulting in puckering of the sewn material. Backstitch thread breaks and ends of stitching by 1/2 inch (1.27 cm) minimum.

Ballistic Insert Replacement

If any insert has any hole, tear, or cut in the ballistic cloth or if the insert has lumps or other damage, replace the insert. The insert need not be replaced for open seams or tears in the binding which can be repaired by topstitching, or even if the entire binding can be replaced.

Ballistic Insert Repair

When it is necessary to repair open seams, broken stitching, damaged binding or to completely replace the binding, use machines for all servicing except in emergency repair, and follow the instructions in No. 1 and 2 below. Top-stitch with polyester thread conforming to Type 1, Class 1, Subclass A, size B, color natural of V-T-285 or nylon thread conforming to Type 1, Class A, size B, color natural of V-T-295. Adjust the thread tension so that there will be no loose stitching or excessively tight stitching resulting in puckering of the sewn material. Back-stitch thread breaks and ends of stitching by ½ inch (1.27 cm) minimum

Open Seams or Broken Stitches

Fold binding under as originally folded and top-stitch with 8 to 10 stitches per inch.

Replace Binding, Partially or Completely

To replace a section of damaged binding, cut out the damaged area or completely remove the old binding and replace it with Atlantic Bias Products Style “Polyfrost” or equal, 45° bias binding tape, 1 7/8 inch (4.77 cm) wide. Fold the binding as originally folded and top-stitch with 8 to 10 stitches per inch so that the finished binding covers 1/2 inch (1.27 cm) and stitching is 3/8 inch (0.925 cm) from the edge of the insert. Overlap ends of the binding tape 1 inch (2.54 cm) minimum, and turn under the ends of the outside tape 1/2 inch (1.27 cm) minimum.

Repair of Labels

If the label is in good condition, top-stitch the label using the appropriate thread specified in 18-6, d, 2 and 18-6, f. In the carrier, stitch only to the back inner part; in the inserts, stitch through all of the Kevlar plies.

REPAIR – CONTINUED

Replacement of Labels

If it is apparent that the stock number and size will not be legible when subjected to wear after re-issue, or if the stitching is excessively damaged, remove the old label and stitch in a new one using the appropriate thread and stitching.

Labels

Each ballistic insert shall have a combination size, identification and instruction label conforming to Type VI, Class 14 of DDD-L-20. The size and identification label shall be combined. The item description for the front insert shall be “Ballistic Insert, Front; Body Armor, Combat Vehicle Crewmen’s Fragmentation Protective Undergarment”. The item description for the back insert shall be the same as for the front except substitute “Back” for “Front”. The label shall show fastness to accelerated laundering. Contents of the size label shall be as follows for the specific size:

Table 1. Sizes for Label Markings.

SIZE	NATO SIZE	CHEST, INCHES (CM)	HEIGHT, INCHES (CM)
X-small short	4462/7686	Under 34 (86)	Under 64 (162)
X-small regular	6280/7686	Under 34 (86)	67-71 (172-180)
Small regular	6280/8697	34-38 (86-97)	Under 71 (180)
Small long	8098/8697	34-38 (86-97)	71 (180) and over
Medium regular	6280/9707	38-42 (97-107)	Under 71 (180)
Medium long	8098/9707	38-42 (97-107)	71 (180) and over
Large regular	6280/0717	42-46 (107-117)	Under 71 (180)
Large long	8098/0717	42-46 (107-117)	71 (180) and over
X-large regular	6280/1727	46-50 (117-127)	Under 71 (180)
X-large long	8098/1727	46-50 (117-127)	71 (180) and over

WASHING INSTRUCTIONS FOR BALLISTIC INSERTS

1. Wash the inserts as seldom as possible.
2. HAND WASH IN WARM TO HOT WATER AND MILD DETERGENT AND DRY lN ANY CONVENTlONAL MANNER or follow the procedures in 3 below.
3. Field Laundry Procedure: Wash the inserts according to Laundry Wash Formula “l” of FM 10-280, Field Laundry, Bath and Clothing Exchange Operations. Lightly extract, then tumble dry at 180°F (82.2°C) maximum.
4. Read the instructions on the carrier.
5. DO NOT DRY CLEAN, BLEACH OR STARCH

Figure 1. CVC Body Armor Label Wording.

REPAIR – CONTINUED

INSTRUCTIONS

1. Make sure the ballistic protective inserts are in place and are of the correct size. Two front inserts and back inserts are required.
2. Wear Armor over your T-shirt.
3. Close the body armor by overlapping the back over the front at the sides. Adjust straps by putting a little tension on the elastic and pressing the strap hook tape to the front loop tape. DO NOT KEEP THE ELASTIC STRETCHED TO ITS MAXIMUM LENGTH.
4. Washing Instructions:
   a. Remove ballistic inserts before washing the carrier. Attach the hook tape to the loop tape before washing. Wash inserts separately from the carrier and as seldom as possible.
   b. HAND WASH THE CARRIER IN WARM TO HOT WATER AND MILD DETERGENT AND DRY IN ANY CONVENTIONAL MANNER or follow the procedures in (c) below. DO NOT STARCH.
   c. Field Laundry Procedure: Wash the carrier according to Laundry Wash Formula"l" of FM 10-280, Field Laundry Bath and Clothing Exchange Operations. Lightly extract, then tumble dry at 180°F (82.2°C) maximum.
5. Read the washing instructions on the inserts.
6. Turn in your armor to supply points for exchange when:
   a. Any component is torn, damaged or missing.
   b. The fastener tapes do not hold.
   c. You cannot dean it.

Figure 2. Carrier Laundry Label Wording.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE

BASIC

SERVICE, REPAIR

INITIAL SETUP:

Tools

Knife, Hot Metal (WP 0046, Item 9)

Ruler, Tab, Metal, 16-inch (WP 0046, Item 19)

Sewing Machine, Bar Tack (WP 0046, Item 25)

Sewing Machine, Medium Duty (WP 0046, Item 34)

Shears, Tailors, 12-inch, (WP 0046, Item 36)

Stitch Removal Tool (WP 0046, Item 38)

Tape, Measuring (WP 0046, Item 39)

Personnel Required

Non-MOS Specific (1)

References

WP 0005
WP 0007
WP 0046

Materials/Parts

Fastener, Snap, Button, Style 2, (Regular Wire Spring Clamp Type). Conforming to MIL-F-10884. (WP 0024, Item 3)

Webbing, Snap Reinforcement, Type II, Class-2, 1 inch wide, OD-7 (WP 0024, Item 4)

Webbing, Textile, Woven Nylon, 1 inch wide, Class 2, OD-7 (WP 0024, Item 4)

Thread, Polyester, Size B, Type 1, Class 1, Subclass B, Color S-1, CA 66022 (WP 0024, Item 6)

Cord, Elastic, Nylon, 3/8 inch diameter, Type II, Black (WP 0024, Item 7)

Fastener, Cylinder, Spring Loaded (WP 0024, Item 8)

Equipment Condition

INSPECT

Perform PMCS inspection on all items IAW WP 0005 and determine serviceability IAW WP 0007.

END OF TASK

SERVICE

Cleaning

CAUTION

Do not use a stiff brush to dean any part of the trouser as this may damage the material. Never use bleach, dry cleaning solvents, gasoline or similar products to clean the protective trousers as this will stain and damage the materials.

1. Remove loose dirt from hook and loop fasteners and outer cover surface using a cloth or soft brush.
2. Immerse the protective trouser in warm (90° F) water.
3. Apply soap or detergent to the soiled areas and scrub with a soft brush. Badly soiled areas may be scrubbed with soap
4. Grease and oil stains may be pre-spotted with a detergent mixture and scrubbed with a soft brush. Repeat this process if stains persist.
5. Rinse all detergent out of the protective trousers with dean water.
6. Fasten shoulder straps and place on a hangar to air dry, away from heat or open flame.

END OF TASK

BASIC TROUSER REPAIR

When repairing a hole or tear 1 to 3 inches in length or diameter in the outer shell, remove the ballistic insert by opening the bottom seam and strap stitching. Repair the outer shell by machine sewing as specified in Table 1. Inspect the ballistic insert IAW PMCS procedures in WP 0005. Reinstall a serviceable ballistic insert into the repaired outer shell and machine sew as specified in Table 1.

Open seams and broken stitches in the outer shell not exceeding 3 inches in length or diameter may be repaired by machine sewing. Seam and stitching repairs may be applied to all parts of the protective trousers and must be comparable to the original construction as specified in Table 1.

Adjust thread tension so that there will be no loose stitching which could result in puckering of the sewn material. When restitching an open seam or when the thread breaks during normal stitching, backstitch not less than 3/4 inch. For stitch type illustrations refer to FED-STD-751. In general, stitching will be performed with nylon Type I, Class B conforming to V-T-285 or V-T-295. Thread size shall be as specified in Table 1.

BASIC TROUSER REPAIR – CONTINUED

Table 1. BASIC Sewing Requirements.

COMPONENT	RECOMMENDED SEWING MACHINE (CODE SYMBOL)	STITCHES PER INCH	TYPE	THREAD SIZE
BALLISTIC TROUSERS				
General	Medium Duty	8 to 10	301	E
Bar Tack	Bar Tack	28	301	E
Overedge	Medium Duty	6 to 8	502 503	E
Hook and loop fastener tape	Medium Duty	9 to 11	301	E
Overedge ballistic insert	Medium Duty	6 to 8	502 503 504 505	E/F
Sewing ballistic inserts into the shell components	Medium Duty	6 to 8	301	F
Sewing inner or outer shell	Medium Duty	9 to 11	301	E
Assemble wide and narrow upper leg and lower leg strap	Medium Duty	9 to 11	301	E
Assemble shoulder pad	Medium Duty	9 to 11	301	E

Outer Shell Replacement

The outer shell, including the hook and loop fastener tape, may be replaced it is badly tom, worn or damaged.

1. If the protective trousers exhibit holes or tears, seam openings or frayed areas larger than 3 inches, or the hook and loop fasteners are inoperative, replace the entire shell section by removing the ballistic inserts.
2. Cut material for new outer shell to dimensions specified in Table 2.
3. Sew as specified in Table 1.
4. If the outer shell is to be removed and replaced, it is important that the label containing the size, National Stock Number, and cleaning instructions be retained and stitched to the new shell.
5. Check the ballistic insert size markings for legibility and remark if necessary.
6. If the label is illegible, replace it with a new one.

BASIC TROUSER REPAIR – CONTINUED

Table 2. Cloth Measurements for Ballistic Trouser Repair.

Application	Dimension (± 1/8 Inch)	
	Length	Width
Upper Leg, Shell, Outer	36	19 1/2
Lower Leg, Shell, Outer	24 1/2	14 1/4
Crotch Protector, Shell, Outer	11 1/2	7 1/2
Waistband, Inside	9 1/2	2 1/2
Waistband, Outside	21 1/2	9 1/2
Strap, Wide, Upper Leg, Inside	6	9 1/2
Strap, Wide, Upper Leg, Outside	9 3/4	9 1/2
Strap, Narrow, Upper Leg, Inside	4 1/2	5 1/2
Strap, Narrow, Upper Leg, Outside	10 1/2	5 1/2
Strap, Lower Leg, Inside	4	5 1/2
Strap, Lower Leg, Outside	91/2	5 1/2
Shoulder Pad, Shell	10 3/4	4

END OF TASK

Hook and Loop Fastener Tape

CAUTION

Do not stitch through an insert except where it was stitched during original construction, as this may damage the material.

1. Remove the damaged hook and loop fastener tapes from the strap while avoiding damage to the strap.
2. Cut fastener tape of the type and dimensions specified in Table 3.
3. Machine stitch as specified in Table 1.

BASIC TROUSER REPAIR – CONTINUED

Table 3. Hook and Loop Fastener Tape Measurements for Ballistic Trousers.

Application	Type Tape	Dimensions (± 1/8 Inch)	
		Length	Width
Strap waistband	Hook	10	2
Strap waistband	Loop	7	2
Waistband, abdomen	Loop	10	2
Strap, upper leg, wide	Hook	6	2
Strap, upper leg, wide	Loop	10	2
Strap, upper leg, narrow	Hook	6	2
Strap, upper leg, narrow	Loop	9	2
Strap, lower leg	Hook	6	2
Strap, lower leg	Loop	9	2
Strap, groin protector	Hook	4	1 1/2

END OF TASK

Label Replacement

Each pair of protective trousers must have a combination size and instruction label. If a National Stock Number (NSN) and size designation on the label is not legible or will not retain legibility after re-issue, remove the old and install a new label, stitching in an appropriate new label as specified in Table 1. If label is missing or illegible, perform a dry weight test (adjusting to the nearest whole ounce) and refer to Table 4 for size and corresponding NSN determination. Format and content of the label is shown in Figure 1.

Table 4. Dry Weight Test.

Weight Range (pounds)	Size	NSN
13.00 to 14.25	Small	8470-01-472-3421
14.26 to 15.49	Medium	8470-01-472-3426
15.50 to 16.75	Large	8470-01-472-3427

BASIC TROUSER REPAIR – CONTINUED

BODY ARMOR, ANTI-FRAGMENTATION PROTECTIVE TROUSERS

When properly worn, this armor will provide a degree of protection to your lower limbs against the effects of fragmentation from small anti-personnel mines.

CLEANING INSTRUCTIONS

1. Remove loose dirt from hook and loop fasteners and outer cover surface using a cloth or soft brush. NEVER USE A STIFF BRISTLE BRUSH.

2. Wet the trousers in the shower or immerse in water. Use warm (90°F), not hot water.

3. Apply toilet soap or detergent to the soiled areas and scrub with soft brush. Badly soiled areas may be scrubbed with GI soap. Scrub only long enough to remove soil. NEVER USE BLEACH TO CLEAN TROUSERS.

4. Grease and soil stains may be pre-spotted with detergent mixture and scrubbed with a soft brush. It a stubborn stain persists, repeat the above procedure.

5. Rinse the trousers with water until suds are completely gone.

6. Fasten shoulder straps. Place straps on hangar and air dry. Hang the trousers to dry away from heat or open flame.

SIZE:
IN-SEAM LENGTH:
CONTRACT #:
CONTRACT MANUFACTURER:

Figure 1. Ballistic Trousers Label Data.

END OF TASK

PROTECTIVE OVERBOOTS REPAIR

The only maintenance authorized is lace replacement. Cut lace from nylon material to a minimum length of 97 inches. Sear ends and install.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE

ADVANCED COMBAT HELMET

INSPECT, SERVICE, REPAIR

INITIAL SETUP:

Tools

Tape, Measuring

Calipers, Outside (WP 0037, Item 10)

Screwdriver, Flat Tip (WP 0046, Item 23)

Personnel Required

Non-MOS Specific (1)

References

WP 0005

WP 0007

WP 0037

WP 0047

Materials/Parts

Thread Locking Compound (WP 0047, Item 31)

Polyurethane Coating, MIL-DTL-64159, Type I, Color 34094 of FED-STD-595 (WP 0047, Item 32)

Polyurethane Coating, MIL-DTL-64159, Type II, Color 34094 of FED-STD-595 (WP 0047, Item 33)

Putty (WP 0047, Item 34)

Grain, Abrasive, MIL-G-5634, Type 6 (WP 0047, Item 35)

Adhesive (for Edging) (WP 0047, Item 36)

Cleaning Compound, Solvent (WP 0047, Item 37)

Isopropyl Alcohol (WP 0047, Item 38)

Attachment Tab (WP 0037, Item 11)

Strap, Chin Only, Retention FG (WP 0037, Item 4)

Pad, Suspension System, Ach, Foliage Green (WP 0037, Item 6)

Pad, Helmet, Army Combat, Foliage Green (WP 0037, Item 7)

Pad, Helmet, Army Combat, Foliage Green (WP 0037, Item 8)

Fastener Tape, Hook (WP 0037, Item 9)

Screw Mounting (WP 0037, Item 12)

Mounting Screw (WP 0037, Item 13)

Post Mounting (WP 0037, Item 14)

Bracket, Lever (NVD Front Bracket Assembly) (WP 0037, Item 16)

Screw, Machine (8-32 X 3/8 -In Long) (WP 0037, Item 17)

Post, Helmet (NVD Front Bracket) (WP 0037, Item 18)

Strap, Eyewear Retention, Foliage Green (WP 0037, Item 19)

Edging (WP 0037, Item 21)

INSPECT

Inspect the helmet for split or cut rubber edging, chipped paint, raised or abraded fibers, cuts, delamination, blistering, pitting or slight indentations, loose or missing hardware, cut of abraded retention system webbing or damage to the pads or hook disks.

Examine the inside and outside surfaces of the helmet shell for raised or abraded fibers, cuts, pitting or slight indentations. If it is determined that the above defects are limited to the outside plies only (on the inside and outside of the shell), and the defects do not extend beyond one ply deep, then the helmet shell can be repaired. If damaged extends beyond one ply deep, then the helmet shell is not serviceable.

END OF TASK

SERVICE

1. Remove retention system and pads (See TM 10-8470-204-10).
2. Wash the helmets for 10-15 minutes in a 0.5 percent soap solution at a water temperature of 120°F (40°C). Rinse them in clear water until soap is removed. Allow them to air dry thoroughly in a temperature not exceeding 140°F (60°C).
3. Inspect the rubber edging for cuts, slits, and areas of non-adherence.
    a. If it is determined that the edging is no longer serviceable, then remove the edging by grasping edging with pliers and pull edging away from helmet; some scraping may be required.
    b. Remove any remaining adhesive before installing new edging to helmet.
    c. The edging, slightly longer than the periphery of the helmet, should be opened up and wound around a cylinder so that the inside of the channel is exposed.
    d. The inside of the edging should be lightly abraded with a wire brush and the adhesive (See Section III) applied.
    e. Adhesive should also be applied to the helmet edge.
    f. The application of the edging should start at the center of the rear of the helmet and follow the periphery of the helmet completely around to the starting at the benchmark at the rear of the helmet.
    g. The edging should be cut so that the ends abut each other.
4. Inspect the inside and outside surfaces of the helmet shell for raised or abraded fibers, cuts, pitting or slight indentations. If raised or abraded fibers, cuts, pitting or slight indentations are found, repair as described in paragraph 28-6 above.
5. Inspect the helmet shell for chipped paint. Repair these places without stripping the paint from the helmet. Using the coating (see Section III) and the procedure described in paragraph 28-6 above, repaint the helmet except that the second coat should cover the entire outside of the helmet (including the edging).
6. Install a replacement retention system and hook disks. Replace any damaged or missing hardware (screw, nut). Install new hook disks and pads.

END OF TASK

REPAIR

1. Remove sand and paint around the immediate area of damage, making sure not to cause additional raising of fibers.
2. Wipe clean with cloth to remove dirt and dust particles. Isopropyl alcohol (see Section III) may be used on the cloth.
3. Apply one coat of spot putty to cover damaged area sufficiently. Let it cure.
4. After spot putty has cured, sand lightly and blend smoothly into shell.
5. Apply second coat if required.
6. Apply paint as described in section titled Paint Helmet.
7. For damage on the inside surface of the helmet shell, follow steps 1 through 6 above.

Paint Helmet

1. Sand any chipped area slightly before touch up painting, making sure not to cause any raised fibers. Clean area with a cloth. Isopropyl alcohol may be used on the cloth.
2. Brush or spray on one coat of coating (paint).
3. Sprinkle a small amount of silica sand or walnut shell flour on the freshly coated area until the quantity of sand or walnut shell is equal to that in the original finish.
4. Lightly apply a second coat of coating to cover the unpainted particles and allow the area to dry at least eight hours.
5. Install retention system as described in section titled Replace Chinstrap Retention System.

END OF TASK

Replace Chinstrap Retention System

1. Slide elastic bands off loose ends of webbing.
2. Unthread the chinstrap retention system webbing from the buckle assembly.
3. Lay the helmet on its crown with the front of the helmet away from you (buckle is located on right side of helmet.)

REPAIR – CONTINUED

4. Drape the replacement chinstrap retention system over the helmet with the nape-strap pad facing down on the back/rear of the helmet (Figure 1).

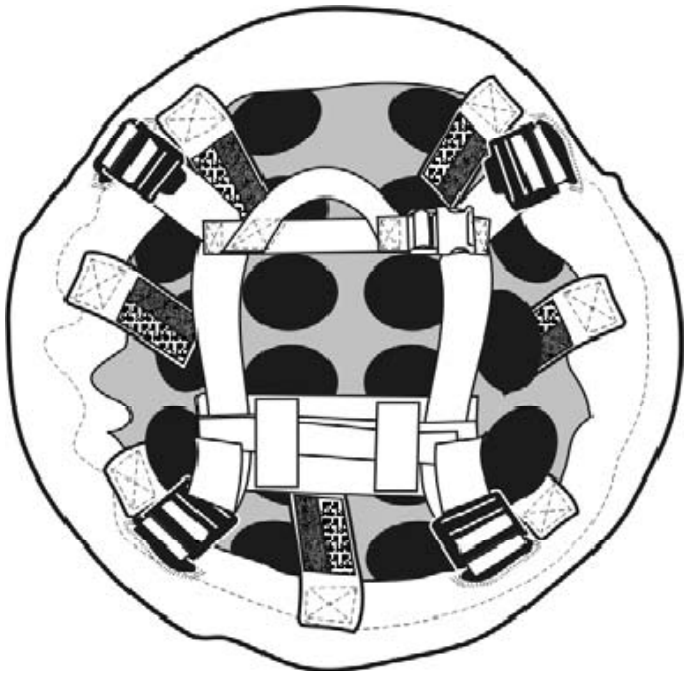

Figure 1. Chinstrap Retention System Replacement.

5. Insert and thread the four legs of the chinstrap into their corresponding buckle assemblies (Figure 2.) (See Figure 1 for assembled chinstrap retention system orientation.) Take care to ensure that webbing is not twisted.

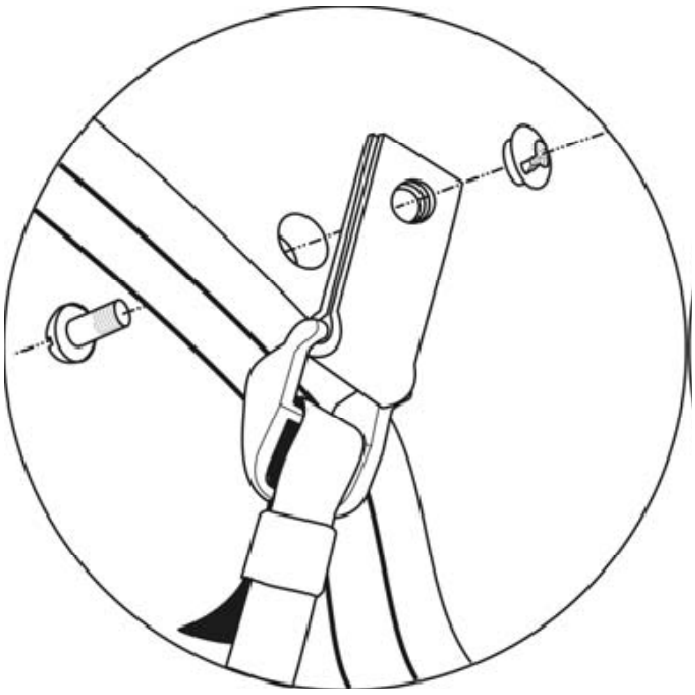

Figure 2. Hardware Replacement.

6. Slide elastic band over loose ends of webbing.

END OF TASK

REPAIR – CONTINUED

Replace Hardware

1. Remove the chinstrap retention system.
2. Remove the screw with standard flathead screwdrivers and lift the attachment tab assembly. Note orientation of the attachment tab assembly before removal (Figure 3).

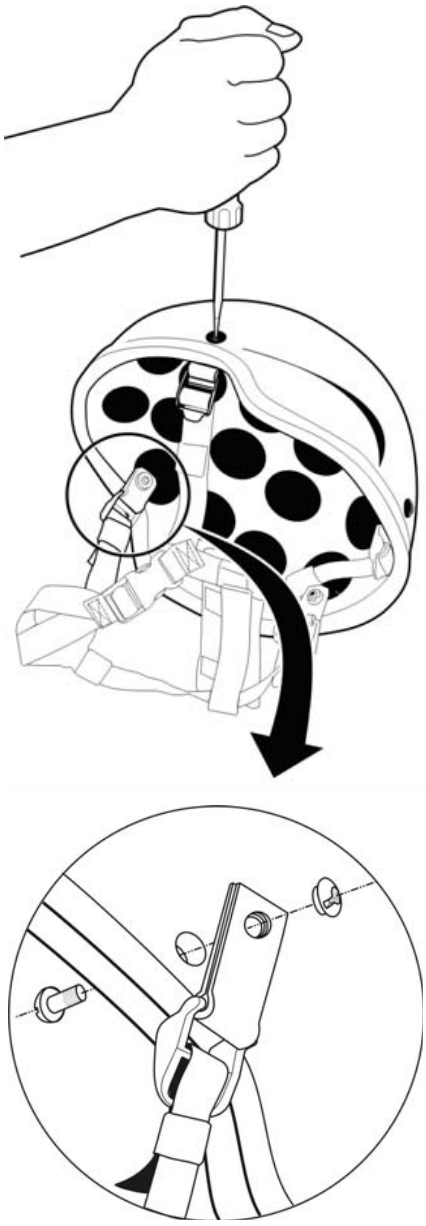

Figure 3. Replacing Hardware.

3. Install new attachment tab assembly in the same orientation as when removed. Replace screw and nut.
4. Inspect the screws to ensure tightness. If loosening persists, use the thread-locking compound.

END OF TASK

REPAIR – CONTINUED

Replacing the Hook Disk

1. Remove pad suspension system.
2. Peel up the old disk by getting under it with a knife or small screwdriver blade. Use the blade to start to lift the edge of the disk, being careful not to damage the helmet shell (Figure 4). Then peel off remainder of disk by grabbing with your fingers or pliers.

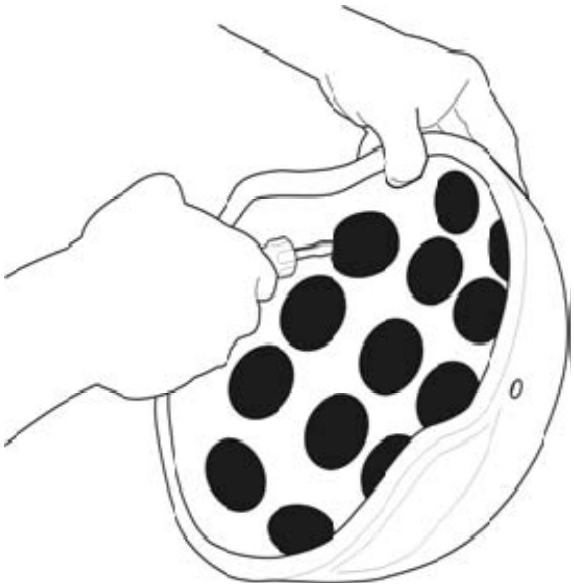

Figure 4. Removing Hook Disc.

3. If paint is removed by the disk, repaint area.
4. Clean area with Isopropyl Alcohol.
5. Remove backing from new hook disk.
6. Apply new hook disk where old disk was located. Press into place with fingers.
7. Work any air bubbles to the side of the hook disk.

END OF TASK

END OF WORK PACKAGE

CHAPTER 4

PARTS INFORMATION
FOR
GENERAL REPAIR PROCEDURES FOR INDIVIDUAL EQUIPMENT

PARTS INFORMATION

REPAIR PARTS AND SPECIAL TOOLS LIST (RPSTL)

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 of OCIE equipment. 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

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

SMR CODE (Column (2)). The SMR code containing supply/requisitioning information, maintenance level authorization criteria, and disposition instruction, as shown in the following breakout. This entry may be subdivided into 4 subentries, one for each service.

TABLE 1. SMR Code Explanation

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

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

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 MH-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 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 below.)
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, replace, 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 -	Filed 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, sub functional 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. Identification of the UOCs used in the RPSTL are:

Code	Used On
N/A	N/A

Fabrication Instructions. Bulk materials required to manufacture items are listed in the bulk material functional group of this RPSTL. Part numbers for bulk material are also referenced in the Description Column of the line item entry for the item to be manufactured/fabricated. Detailed fabrication instructions for items source coded to be manufactured or fabricated are found in WP 0087 of this technical manual.

Index Numbers. Items which have the word BULK in the figure column will have an index number shown in the item number column. This index number is a cross-reference between the NSN / Part Number (P/N) Index work packages and the bulk material list in the repair parts list work package.

HOW TO LOCATE REPAIR PARTS

1. When NSNs or 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 sub functional 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.

ABBREVIATIONS

No applicable abbreviations.

END OF WORK PACKAGE

PARTS INFORMATION

LEGACY SLEEP SYSTEMS

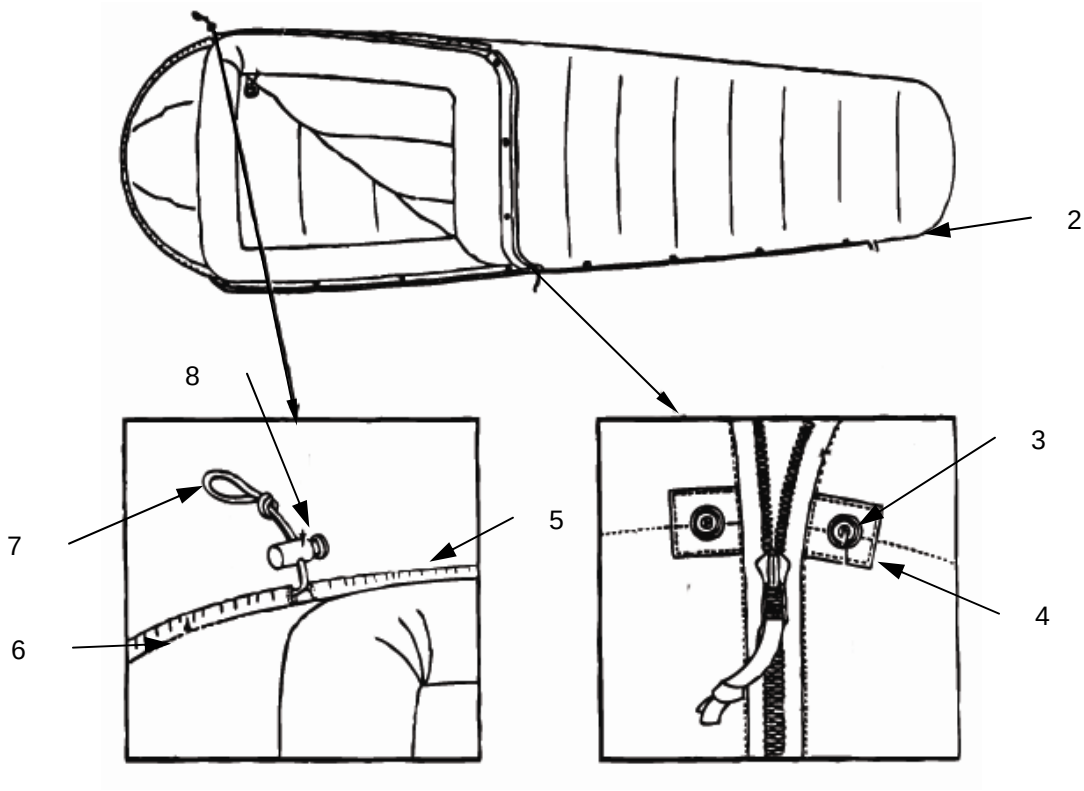

Figure 1. Legacy Sleep Systems (Sheet 1 of 3).

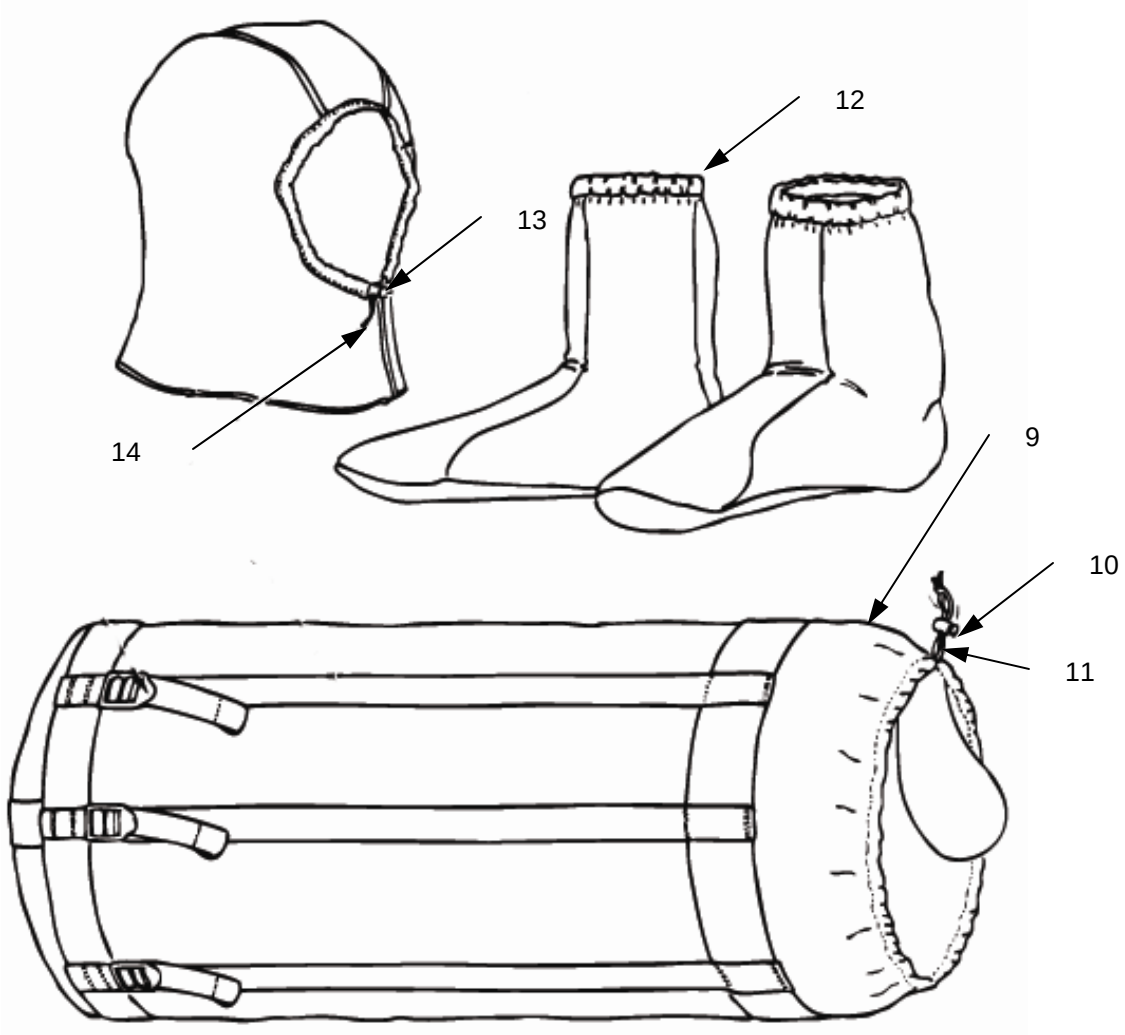

Figure 1. Legacy Sleep Systems (Sheet 2 of 3).

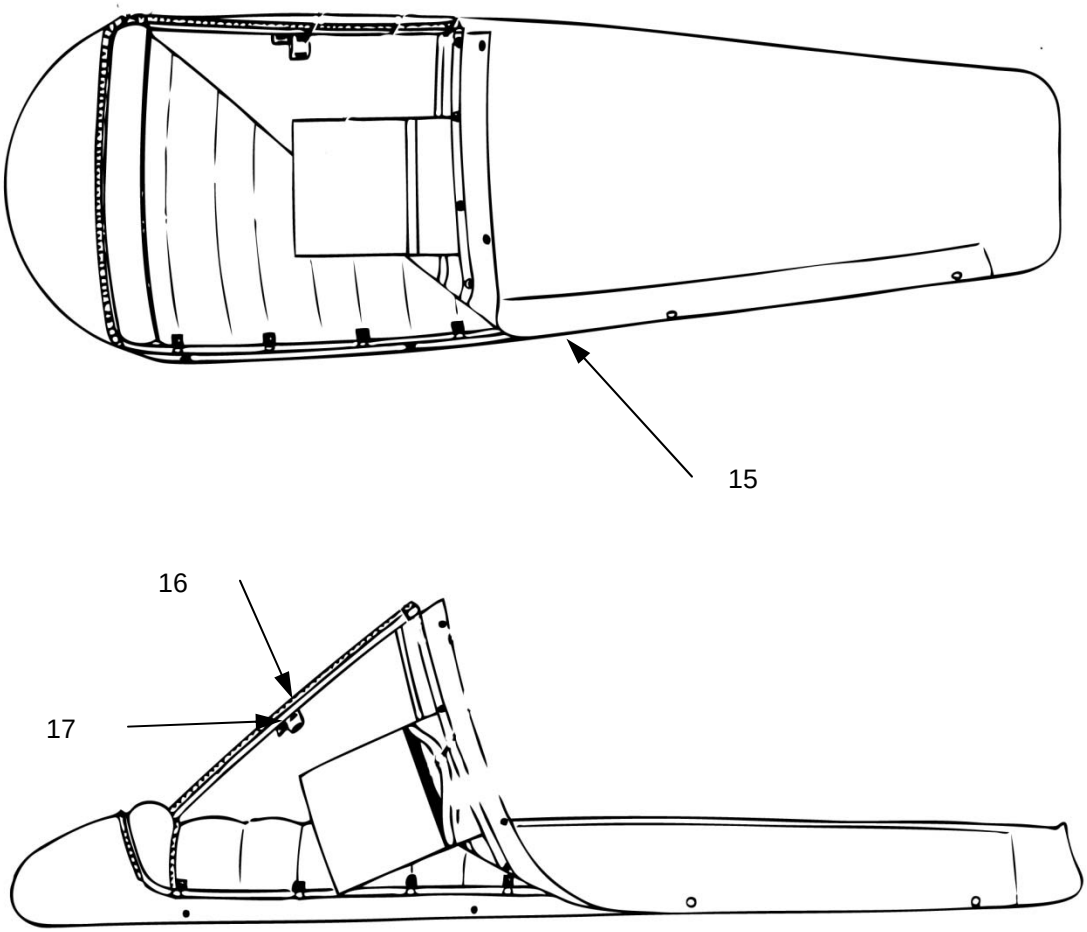

Figure 1. Legacy Sleep Systems (Sheet 3 of 3).

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 01 LEGACY SLEEP SYSTEMS	
					FIG. 1 LEGACY SLEEP SYSTEMS	
1		8465-01-306-2681	81349	MIL-S-44361	SLEEPING SYSTEM OUTFIT, EXTREME COLD WEATHER	1
2		8465-01-305-6991	81349	MIL-S-43880	.SLEEPING BAG (EXTREME COLD WEATHER)	1
3	PAFZZ	5325-00-985-6718	81349	MILF10884	..FASTENER, SNAP, BUTTON, STYLE 2, (REGULAR WIRE SPRING CLAMP TYPE). CONFORMING TO MIL-F-10884.	1
4	PAFZZ	8305-00-262-1643	81349	MILW4088	..WEBBING, SNAP REINFORCEMENT. CUT TO 1 ¼ INCHES, TYPE II, CLASS-2, 1 INCH WIDE, OD-7.	AR
5	PAFZZ	8305-00-881-0604	81349	MILW17337	..WEBBING, TEXTILE, WOVEN NYLON, CUT TO 70 ¾ INCHES, 1 INCH WIDE, CLASS 2, OD-7	AR
6	PAFZZ	8310-00-988-1298	81348	V-T-285	..THREAD, POLYESTER, SIZE B, TYPE 1, CLASS 1, SUBCLASS B, COLOR S-1, CA 66022	AR
7	PAOZZ	8305-01-068-0348	81349	MIL-C-43701	..CORD, ELASTIC, NYLON, 3/8 INCH DIAMETER, TYPE II, BLACK. CUT TO 78 INCHES	AR
8	PAOZZ	5340-01-393-4890	02768	302-0000-5614	..FASTENER, CYLINDER, SPRING LOADED	1
9		8465-01-305-4688	81349	MIL-C-44307	.CASE, SLEEPING BAG (BIVY COVER)	1
10	PAOZZ	5340-01-393-4890	02768	302-0000-5614	..FASTENER, CYLINDER, SPRING LOADED	1
11	PAOZZ	8305-01-068-0348	81349	MIL-C-43701	..CORD, ELASTIC, NYLON, 3/8 INCH DIAMETER, TYPE II, BLACK. CUT TO 78 INCHES	AR
12		8465-01-305-6359	81349	MIL-H-44308	.HOOD AND SOCKS SET, EXTREME COLD WEATHER	1
13	PAOZZ	5340-01-393-4890	02768	302-0000-5614	..FASTENER, CYLINDER, SPRING LOADED	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
14	PAFZZ	4020-00-262-2019	81349	MIL-C-5040	..CORD, ELASTIC, NYLON, 1/8 INCH DIAMETER, TYPE II, BLACK. CUT TO 38 INCHES	AR
15		8465-01-305-6360	81349	MIL-B-44306	. BAG, EXTREME COLD WEATHER SLEEPING SYSTEM	1
16	PAOZZ	5340-01-393-4890	02768	302-0000-5614	..FASTENER, CYLINDER, SPRING LOADED	1
17	PAFZZ	4020-00-262-2019	81349	MIL-C-5040	..CORD, ELASTIC, NYLON, 1/8 INCH DIAMETER, TYPE II, BLACK	AR
18		8465-01-49-0888	81349	MIL-S-44016	SLEEPING BAG (INTERMEDIATE COLD WEATHER)	1
19		8465-01-033-8057	81349	MIL-S-43880	SLEEPING BAG (EXTREME COLD WEATHER TYPE II)	1
20					.FACE OPENING CLOSURE ASSEMBLY. (MAKE FROM: BRAID, TUBULAR, NYLON, OG-107, 5/16-INCH WIDTH, GREEN 107 AND THREAD, COTTON, OD-S-1, C.A. 66022, TYPE I, SIZE 50,3 PLY)	1
21					.SNAP FASTENER RETAINER ASSEMBLY. (MAKE FROM: TAPE, TEXTILE, COTTON, OD-7, TYPE I, CLASS 8, 5/8 INCH WIDTH AND THREAD, COTTON, OD-S-1, C.A. 66022, TYPE I, SIZE 50,3 PLY)	1
22		8465-01-109-3369	81349	MIL-M-44104	MAT, SLEEPING	1
23		8465-01-136-5855	81349	MIL-M-43968	MATTRESS, PNEUMATIC	1
24		8465-00-261-6909	81349	MIL-B-3108	BAG, CLOTHING (WATERPROOF)	1
25		8465-00-518-2769	81349	MIL-H-43879	HOOD, SLEEPING BAG	1

END OF FIGURE

PARTS INFORMATION

MODULAR SLEEP SYSTEM

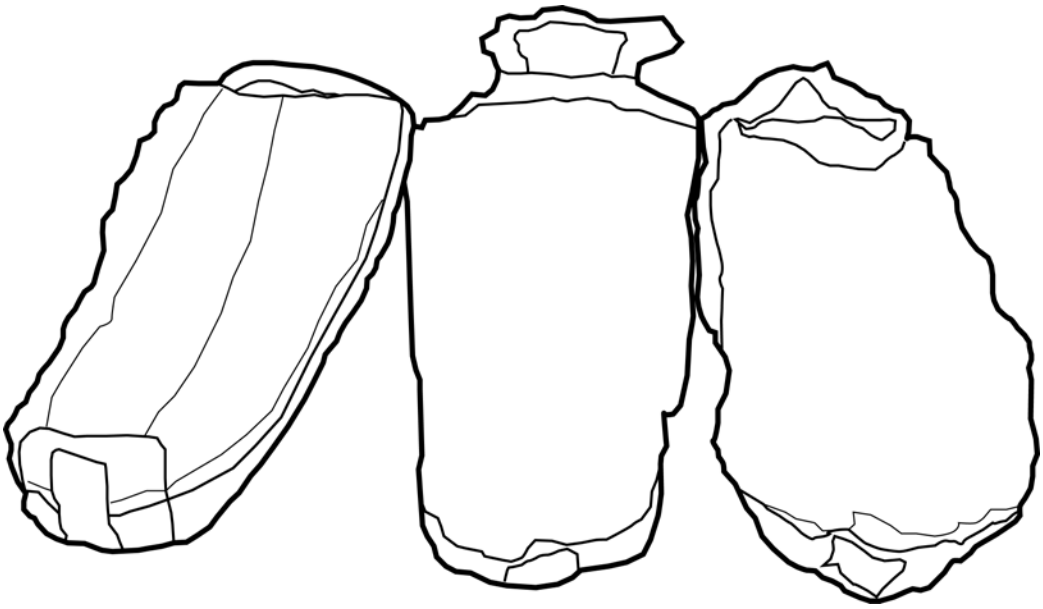

Figure 1. Modular Sleep System.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 02 MODULAR SLEEP SYSTEM **FIG. 1 MODULAR SLEEP SYSTEM**	
1		8465-01-445-6274	58536	A-A-55262	MODULAR SLEEP SYSTEM	1
2		8465-01-398-0685	58536	A-A-55262	.SLEEPING BAG, PATROL	1
3					..LOOP TAPE 4-INCH, COLOR FG 504	AR
4					..HOOK TAPE, 1 ½-INCH COLOR FG504	AR
5		4020-00-262-2019	81349	MIL-C-5040	..ZIPPER PULL, MAKE FROM: CORD, ELASTIC, NYLON, 1/8 INCH DIAMETER, TYPE II, BLACK.	AR
6	PAOZZ	5340-01-393-4890	02768	302-0000-5614	..FASTENER, CYLINDER, SPRING LOADED	1
7	PAFZZ	4020-00-262-2019	81349	MIL-C-5040	..CORD, ELASTIC, NYLON, 1/8 INCH DIAMETER, TYPE II, BLACK. CUT TO 38 INCHES	AR
8		8465-01-398-0687	58536	A-A-55262	.SLEEPING BAG, INTERMEDIATE COLD WEATHER	1
9					..HOOK TAPE, 4-INCH COLOR UG505	AR
10					..HOOK TAPE, 1 ½-INCH COLOR UG 505	AR
11					..LOOP TAPE, 4-INCH COLOR UG505	AR
12		4020-00-262-2019	81349	MIL-C-5040	..ZIPPER PULL, MAKE FROM: CORD, ELASTIC, NYLON, 1/8 INCH DIAMETER, TYPE II, BLACK.	AR
13	PAOZZ	5340-01-393-4890	02768	302-0000-5614	..FASTENER, CYLINDER, SPRING LOADED	1
14	PAFZZ	4020-00-262-2019	81349	MIL-C-5040	..CORD, ELASTIC, NYLON, 1/8 INCH DIAMETER, TYPE II, BLACK. CUT TO 38 INCHES	AR
15		8465-01-398-5428	58536	A-A-55262	.STUFF SACK, COMPRESSION	1
16	PAOZZ	5340-01-393-4890	02768	302-0000-5614	..FASTENER, CYLINDER, SPRING LOADED	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
17	PAFZZ	4020-00-262-2019	81349	MIL-C-5040	..CORD, ELASTIC, NYLON, 1/8 INCH DIAMETER, TYPE II, BLACK. CUT TO 38 INCHES	AR
18		8465-01-416-8517	99994	PD-95-04	.BIVY COVER	1
19		4020-00-262-2019	81349	MIL-C-5040	..ZIPPER PULL, MAKE FROM: CORD, ELASTIC, NYLON, 1/8 INCH DIAMETER, TYPE II, BLACK.	AR
20	PAOZZ	5340-01-393-4890	02768	302-0000-5614	..FASTENER, CYLINDER, SPRING LOADED	1
21		8465-01-393-6515	58536	A-A-55074	MAT, SLEEPING, SELF-INFLATING	1

END OF FIGURE

PARTS INFORMATION

ARCTIC GEAR

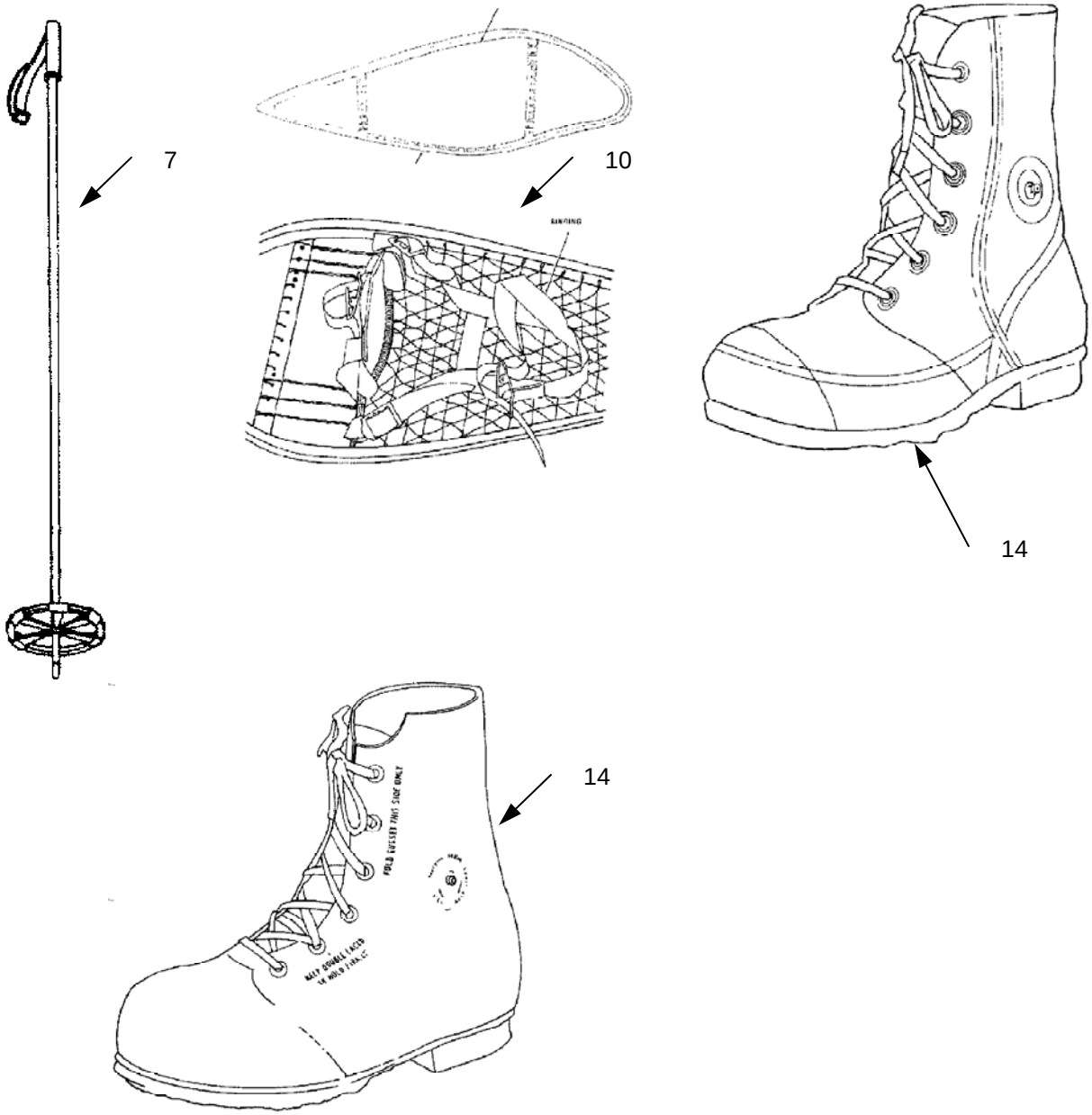

Figure 1. Arctic Gear.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 03 ARCTIC GEAR	
					FIG. 1 ARCTIC GEAR	
1		5465-01-085-1935	58230	TRUCKER MODEL	SKIS, CROSS COUNTRY	
2					BINDING, SKI (LOCAL PURCHASE: SILVRETTA ALPINE TOURING BINDING)	
3					.SCREW, TAPPING-FF-S-107	
3					.SCREW, TYPE A, CADMIUM PLATED, STEEL, #8 X 3/8-INCH LONG, SLOTTED, PAN HEAD	
3					.SCREWS, #7 X 5/8-INCH LONG, SLOTTED, ROUND HEAD	
3					.SCREW, #12 X 5/8-INCH LONG, SLOTTED, FLAT HEAD	
4		8465-00-240-2963	81349	MILR43207	.LACES, SKI REPAIR	
5		9505-00-288-6400	81346	ASTM A853	.WIRE, NON-ELECTRICAL	
6	MOOOO				.EMERGENCY THONG. (MAKE FROM: CORD, FIBROUS, 4020-00-236-1801, TWO PIECES CUT 55 INCHES LONG)	
7		8465-00-753-6145	81349	MIL-P-41806	POLE, SKI (53-INCH)	
7		8465-00-753-6142	81349	MIL-P-41806	POLE, SKI (58-INCH)	
8		8465-00-753-5962	81349	MIL-P-41806	.SNOW RING, SKI POLE	
9		5310-00-916-6660	02768	8063-37-01-0531	..PUSH ON NUT	
10		8465-00-965-2174	81349	MIL-C-1780	SNOWSHOES	
11		8465-00-965-2175	81349	MIL-B-44374	.BINDING ASSEMBLY, SNOWSHOE	
12		8430-01-056-0815	81349	MIL-B-41816	BOOTS, EXTREME COLD WEATHER, MENS, WHITE, SIZE 3N	
12		8430-01-057-3500	81349	MIL-B-41816	BOOTS, EXTREME COLD WEATHER, MENS, WHITE, SIZE 4W	
12		8430-00-655-5541	81349	MIL-B-41816	BOOTS, EXTREME COLD WEATHER, MENS, WHITE, SIZE 5N	

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
12		8430-00-823-6902	81349	MIL-B-41816	BOOTS, EXTREME COLD WEATHER, MENS, WHITE, SIZE 5XN	
13		8335-00-131-6538	81348	V-L-61	.LACES, FOOTWEAR, WHITE	
14		8430-00-823-7024	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 5XN	
14		8430-00-823-7025	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 5N	
14		8430-00-823-7026	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 5R	
14		8430-00-823-7027	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 5W	
14		8430-00-823-7028	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 5XW	
14		8430-00-823-7029	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 6XN	
14		8430-00-823-7030	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 6N	
14		8430-00-823-7031	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 6R	
14		8430-00-823-7032	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 6W	
14		8430-00-823-7033	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 6XW	
14		8430-00-823-7035	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 7N	
14		8430-00-823-7036	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 7R	
14		8430-00-823-7037	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 7W	
14		8430-00-823-7038	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 7XW	
14		8430-00-823-7039	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 8XN	
14		8430-00-823-7040	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 8N	
14		8430-00-823-7041	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 8R	
14		8430-00-823-7042	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 8W	

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
14		8430-00-823-7043	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 8XW	
14		8430-00-823-7044	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 9XN	
14		8430-00-823-7045	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 9N	
14		8430-00-823-7046	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 9R	
14		8430-00-823-7047	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 9W	
14		8430-00-823-7048	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 9XW	
14		8430-00-823-7049	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 10XN	
14		8430-00-823-7050	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 10N	
14		8430-00-823-7051	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 10R	
14		8430-00-823-7052	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 10W	
14		8430-00-823-7053	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 10XW	
14		8430-00-823-7054	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 11XN	
14		8430-00-823-7055	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 11N	
14		8430-00-823-7056	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 11R	
14		8430-00-823-7057	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 11W	
14		8430-00-823-7058	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 11XW	
14		8430-00-823-7059	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 12XN	
14		8430-00-823-7060	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 12N	
14		8430-00-823-7060	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 12N	
14		8430-00-823-7061	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 12R	

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
14		8430-00-823-7062	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 12W	
14		8430-00-823-7063	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 12XW	
14		8430-00-823-7064	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 13XN	
14		8430-00-823-7065	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 13N	
14		8430-00-823-7066	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 13R	
14		8430-00-823-7067	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 13W	
14		8430-00-823-7068	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 13XW	
14		8430-00-823-7069	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 14XN	
14		8430-00-823-7070	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 14N	
14		8430-00-823-7073	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 14R	
14		8430-00-823-7074	81349	MIL-B-41816H	BOOTS, EXTREME COLD WEATHER, MENS, BLACK, SIZE 14W	
15		8335-00-945-3969	81348	V-L-61	.LACES, FOOTWEAR, WHITE	
16		8465-01-558-9958	0CCM0	335201	SNOWSHOE, ASSAULT, MILITARY	
17					VALVE, SCREW-TYPE, MANUALLY-OPERATED, SCHRAEDER NO. 9917	
18		8465-01-558-7367		369055	TAILS, SNOWSHOE	
19		8465-01-558-6863		469030	.BINDING, ASSEMBLY, SNOWSHOE (LEFT)	
20		8465-01-558-6896		469029	.BINDING, ASSEMBLY, SNOWSHOE (RIGHT)	
21		8465-01-558-7688		469731	.KIT, CLEVIS PIN, SNOWSHOE	
					END OF FIGURE	

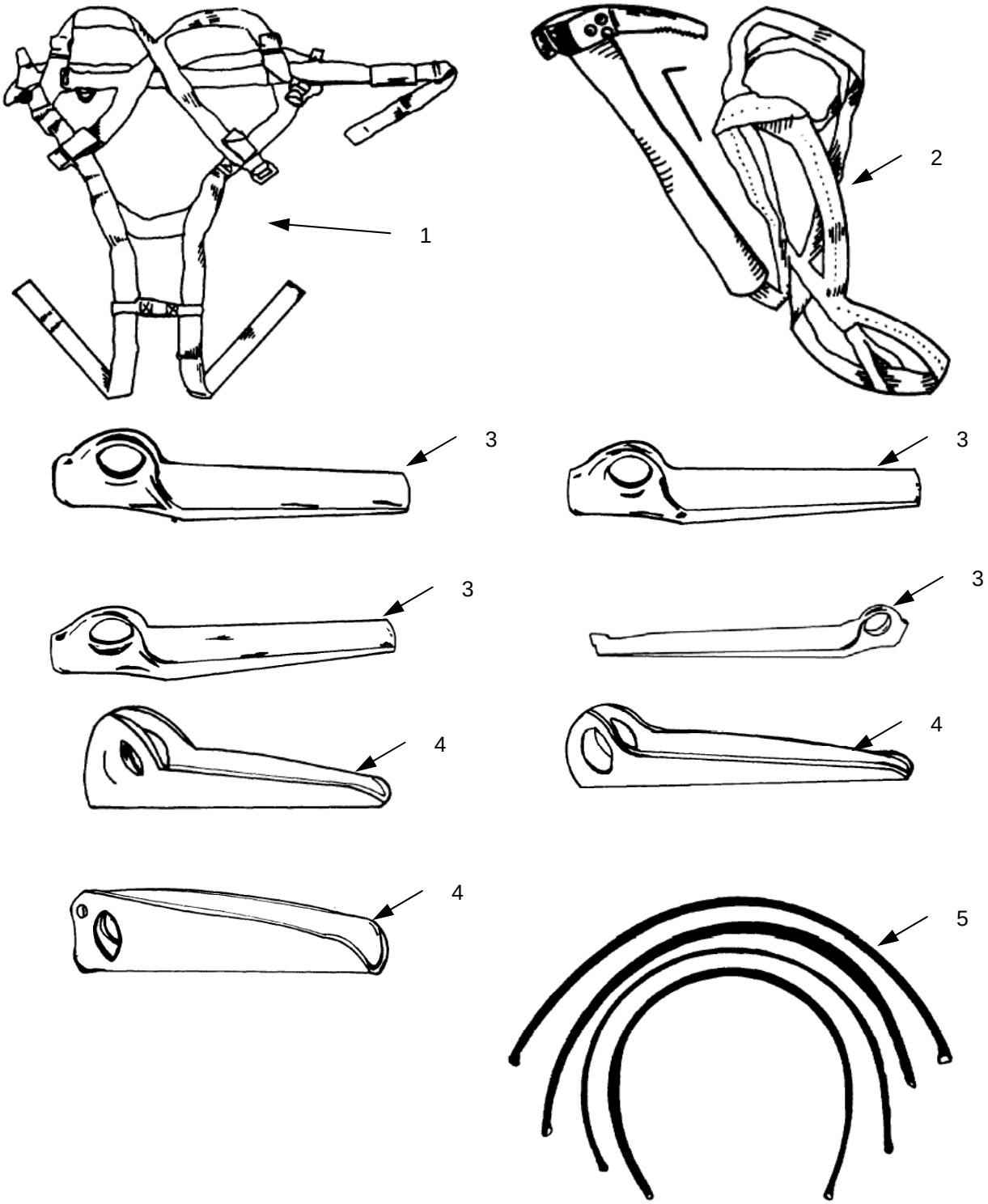

Figure 1. Mountaineering Gear (Sheet 1 of 4).

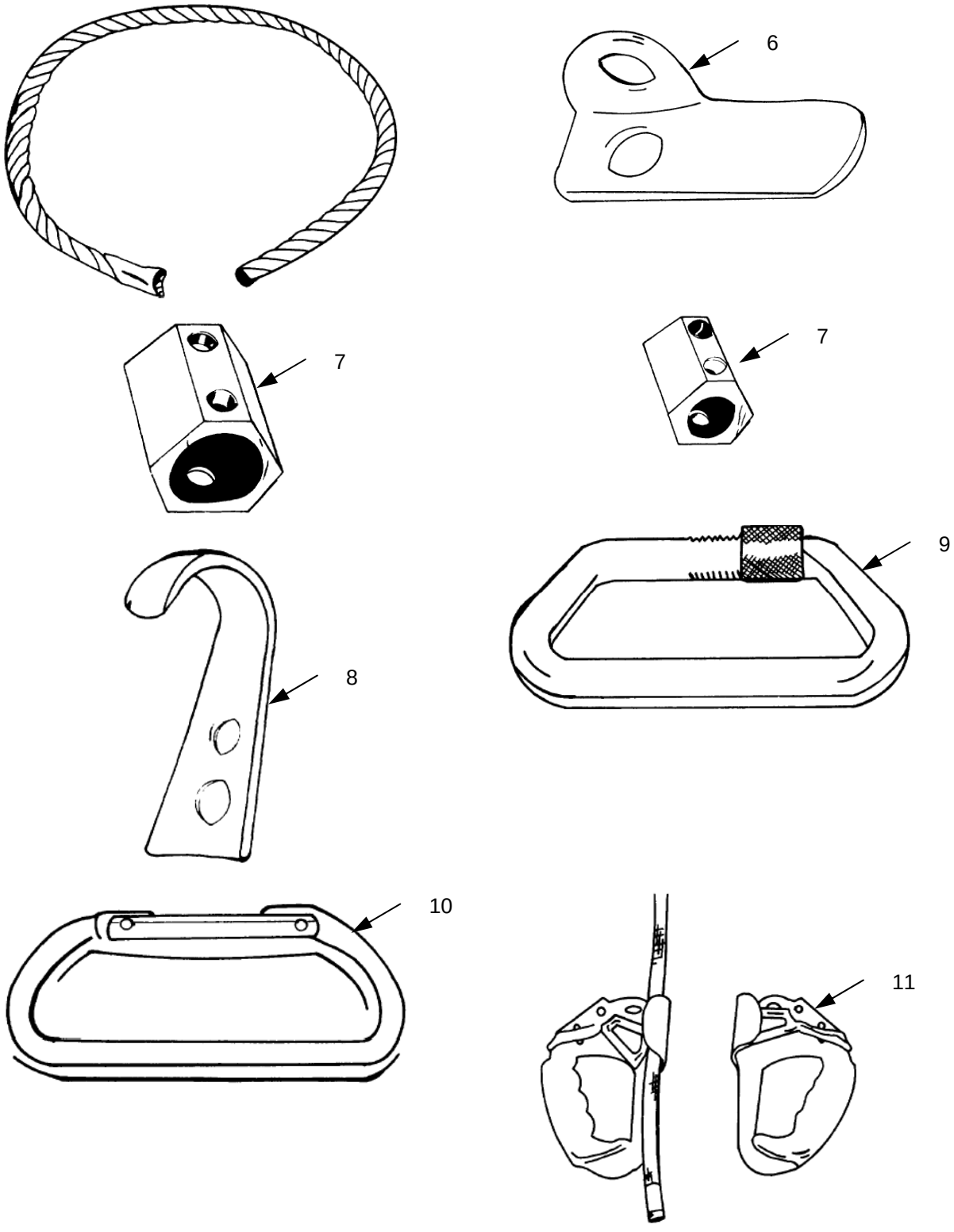

Figure 1. Mountaineering Gear (Sheet 2 of 4).

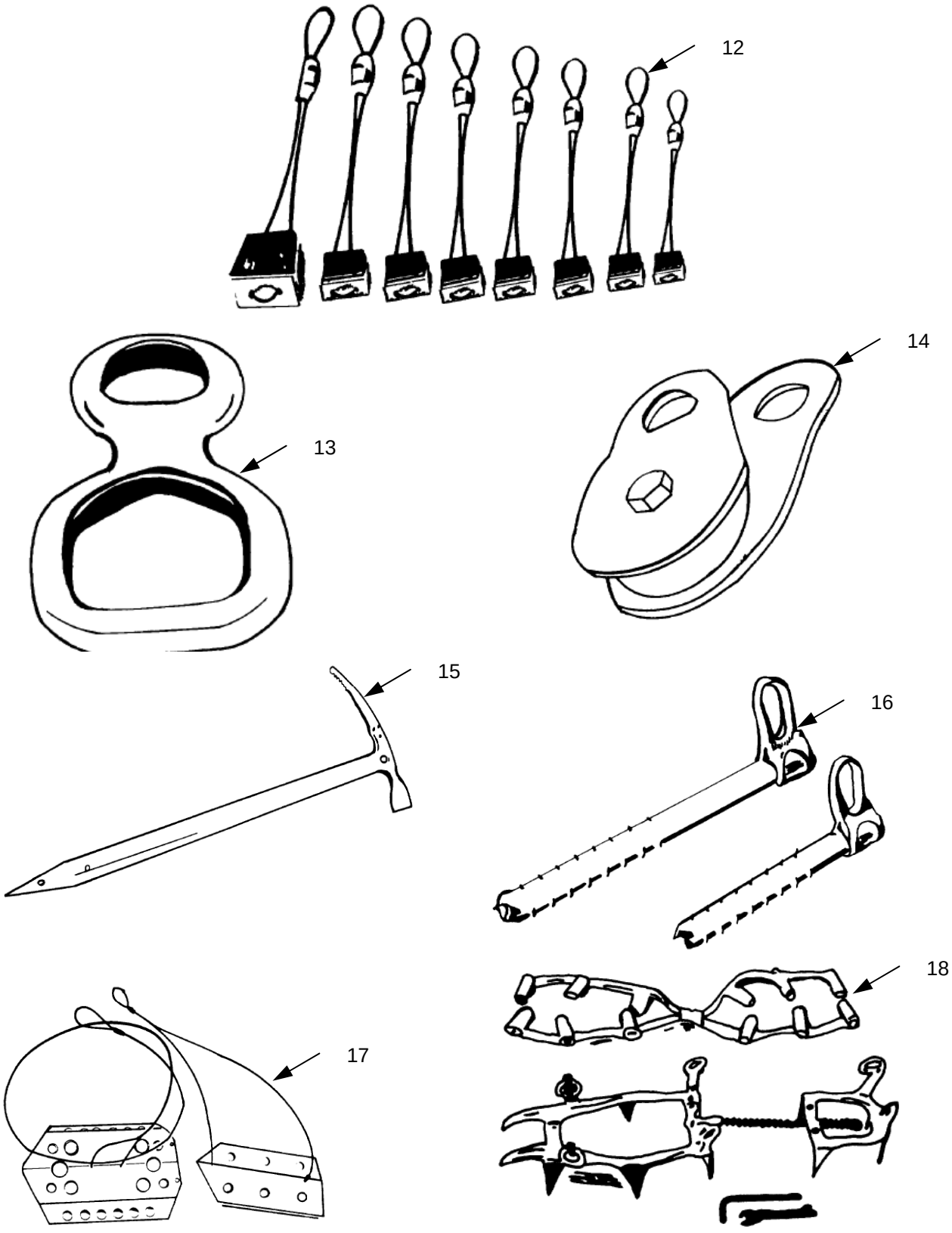

Figure 1. Mountaineering Gear (Sheet 3 of 4).

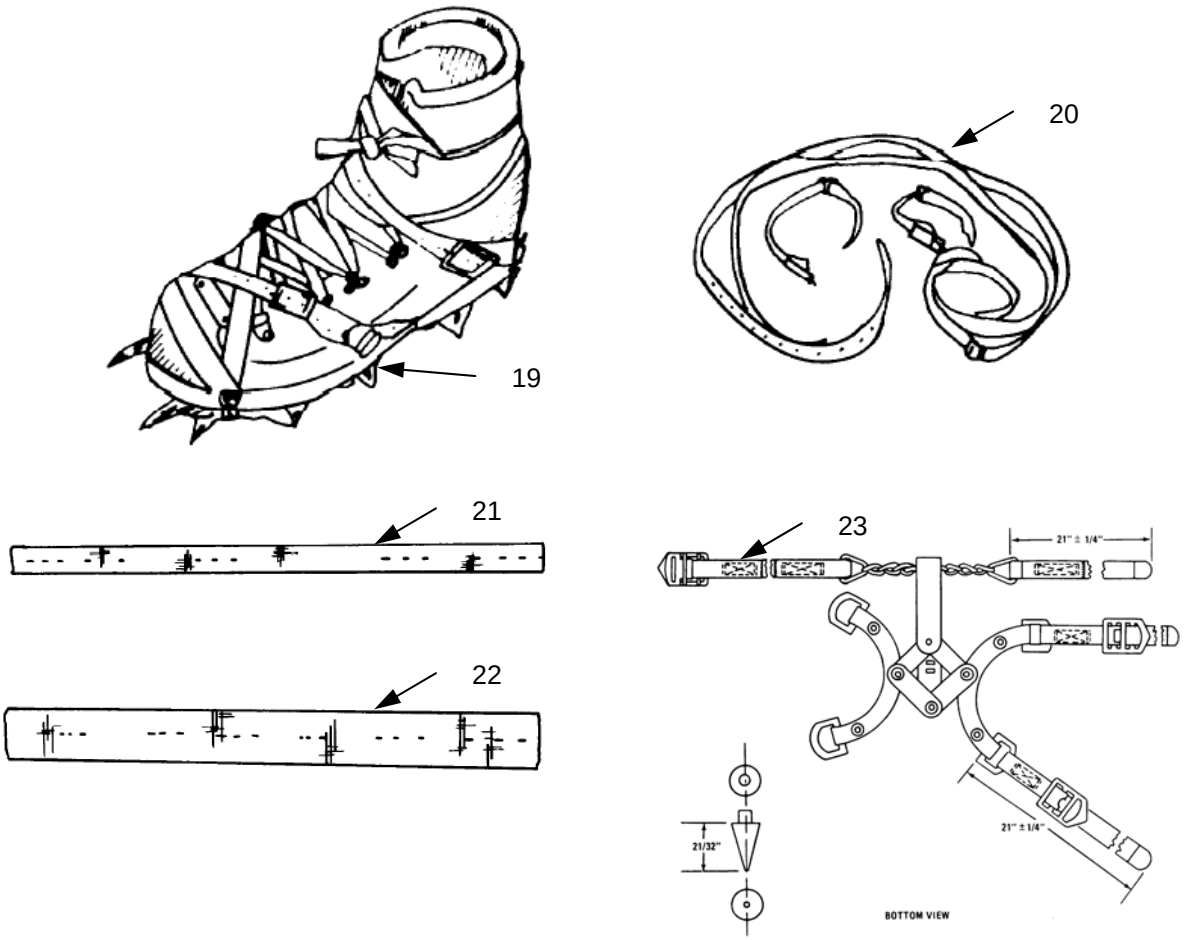

Figure 1. Mountaineering Gear (Sheet 4 of 4).

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 04 MOUNTAINEERING GEAR	
					FIG. 1 MOUNTAINEERING GEAR	
1		8465-01-319-5612	58536	A-A-50120	HARNESS, CLIMBING, MOUNTAIN	1
2		5120-01-312-7588	58536	A-A-50096	HAMMER, HAND (ROCK AND ICE)	1
3		8465-00-240-2971	58536	A-A-50111	PITON, MOUNTAIN, FLAT, TYPE I	1
3		8465-01-322-7828	16236	CS-4710-SV-0719	PITON, MOUNTAIN, FLAT, TYPE II	1
3		8465-01-322-7429	58536	A-A-50111	PITON, MOUNTAIN, FLAT, TYPE III	1
3		8465-01-322-7430	58536	A-A-50111	PITON, MOUNTAIN, FLAT, TYPE IV	1
4		8465-01-322-7426	58536	A-A-50112	PITON, ANGLE, TYPE I	1
4		8465-00-240-2975	58536	A-A-50112	PITON, ANGLE, TYPE II	1
4		8465-01-322-7427	58536	A-A-50112	PITON, ANGLE, TYPE III	1
5		4020-01-317-8183	58536	A-A-50139	ROPE, FIBROUS, KERNMANTLE, TYPE I, 7 MM X 150 FT	1
5		4020-01-317-0127	58536	A-A50139	ROPE, FIBROUS, KERNMANTLE, TYPE H, 8 MM X 150 FT	1
5		4020-01-318-9712	58536	A-A50139	ROPE, FIBROUS, KERNMANTLE, TYPE III, 9MM X 150 FT	1
5		4020-01-318-9713	58536	A-A50139	ROPE, FIBROUS, KERNMANTLE, TYPE IV, 11 MM X 165 FT	1
5		4020-01-320-4113	58536	A-A50139	ROPE, KERNMANTLE, 1 ¼-INCH BY 150 FT	1
6		8465-00-240-2972	58536	A-A-50114	PITON, MOUNTAIN KNIFEBLADE, OFFSET, TYPE I	1
6		8465-00-240-2973	58536	A-A-50114	PITON, MOUNTAIN KNIFEBLADE, OFFSET, TYPE III	1
7		8465-01-319-4687	58536	A-A-50098	STOPPER, HEXAGON, IRREGULAR, SIZE I	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
7		8465-01-319-4688	58536	A-A-50098	STOPPER, HEXAGON, IRREGULAR, SIZE IIB	1
8		8465-01-322-7431	58536	A-A-50115	PITON, MOUNTAIN CLIFFHANGER	1
9		8465-01-322-7432	58536	A-A-50041	SNAP LINK, MOUNTAIN PITON, LOCKING, TYPE II	1
10		8465-01-322-7433	58536	A-A-50041	SNAP LINK, MOUNTAIN PITON, NON-LOCKING, TYPE III	1
11		8465-01-319-4689	58536	A-A-50127	ASCENDERS, CAM ACTION	1
12		8465-01-319-4677	58536	A-A-50106	STOPPER, MOUNTAIN, WIRED, TYPE I, 0.335 IN X 0.170 IN	1
12		8465-01-319-4678	58536	A-A-50106	STOPPER, MOUNTAIN, WIRED, TYPE II 0.400 IN X 0.195 IN	1
12		8465-01-319-4679	58536	A-A-50106	STOPPER, MOUNTAIN, WIRED, TYPE III 0.475 IN X 0.238 IN	1
12		8465-01-319-4680	58536	A-A-50106	STOPPER, MOUNTAIN, WIRED, TYPE IV 0.520 IN X 0.330 IN	1
12		8465-01-319-4681	58536	A-A-50106	STOPPER, MOUNTAIN, WIRED, TYPE V 0.650 IN X 0.460 IN	1
12		8465-01-319-4682	58536	A-A-50106	STOPPER, MOUNTAIN, WIRED, TYPE VI 0.750 IN X 0.530 IN	1
12		8465-01-319-4683	58536	A-A-50106	STOPPER, MOUNTAIN, WIRED, TYPE VII 0.855 IN X 0.600 IN	1
12		8465-01-319-4684	58536	A-A-50106	STOPPER, MOUNTAIN, WIRED, TYPE VIII 1.250 IN X 0.600 IN	1
13		8465-01-319-4690	58536	A-A-50125	DESCENDER, MOUNTAIN CLIMBERS	1
14		3020-01-312-5112	58536	A-A-50097	PULLEY, GROOVE, MOUNTAIN RESCUE	1
15		5110-01-313-0197	58536	A-A-50116	AX, ICE	1
16		8465-01-322-7425	58536	A-A-50113	PITON, ICE, TYPE I 6 5/8-INCH LENGTH	1
16		8465-00-240-2974			PITON, ICE, TYPE II, 8 5/8-INCH LENGTH	1
17		8465-01-319-4685	58536	A-A-50119	ANCHOR, MOUNTAIN, SNOW, WIRED, SIZE I	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
18		8465-01-320-0887	58536	A-A-50117	CRAMPONS, MOUNTAIN, HINGED	1
19		8465-01-319-5611	58536	A-A-50121	PROTECTORS, CRAMPON	1
20		8465-01-320-0884	58536	A-A-50118	STRAP SET, CRAMPONS	1
21		8305-00-261-8582	81349	MILW5625	WEBBING, NYLON, TUBULAR, 9/16-INCH WIDE BY 75-FEET LONG	1
22		8305-00-268-2455	81349	MILW5625	WEBBING, NYLON, TUBULAR, 1-INCH WIDE BY 75-FEET LONG	1
23		8465-00-240-2953	81349	MIL-C-1476	CREEPERS, ICE	1
					END OF FIGURE	

PARTS INFORMATION

GENERAL BAGS

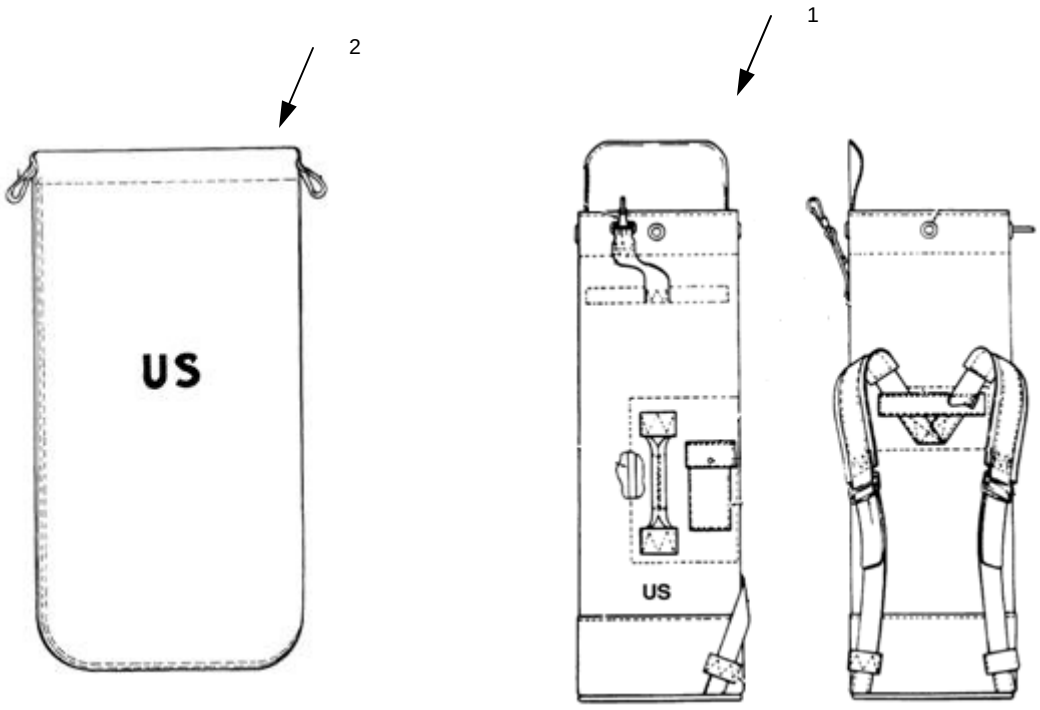

Figure 1. General Bags.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 05 GENERAL BAGS	
					FIG. 1 GENERAL BAGS	
1		8465-01-117-8699	81349	MIL-B-829	BAG, DUFFEL	1
2		8465-00-530-3692	81349	MIL-B-2378	BAG, BARRACKS	1
					END OF FIGURE	

PARTS INFORMATION

LOAD BEARING EQUIPMENT

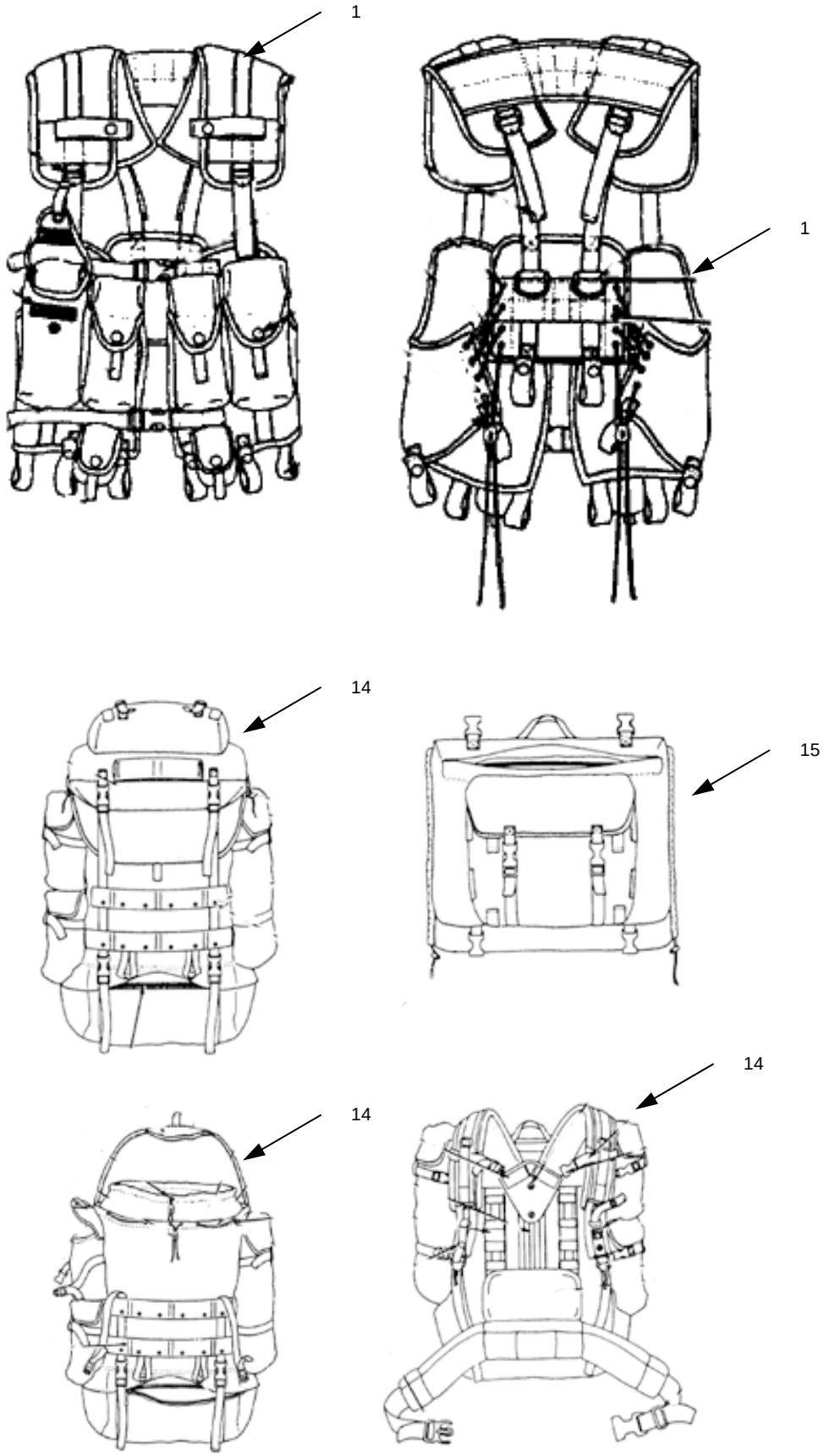

Figure 1. Load Bearing Equipment (Sheet 1 of 3).

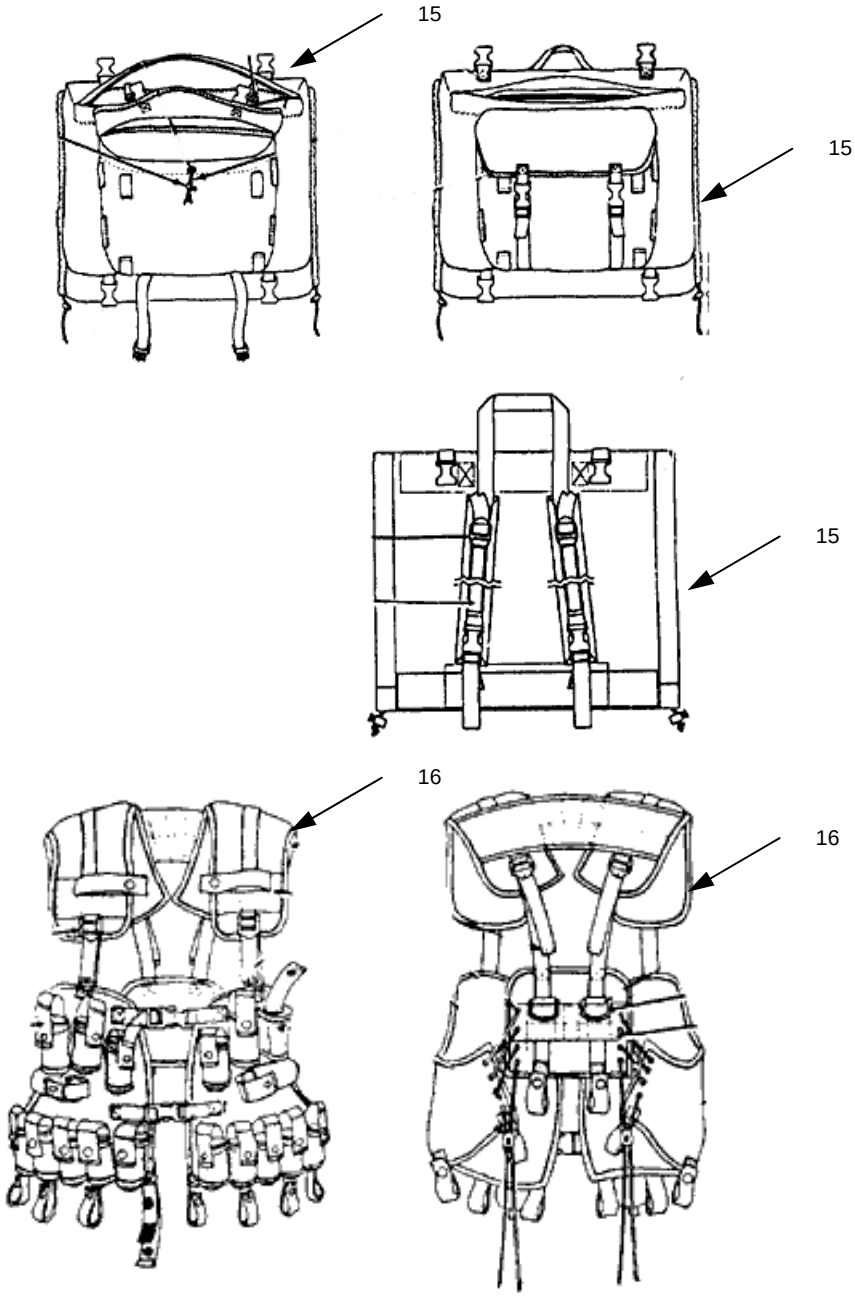

Figure 1. Load Bearing Equipment (Sheet 2 of 3).

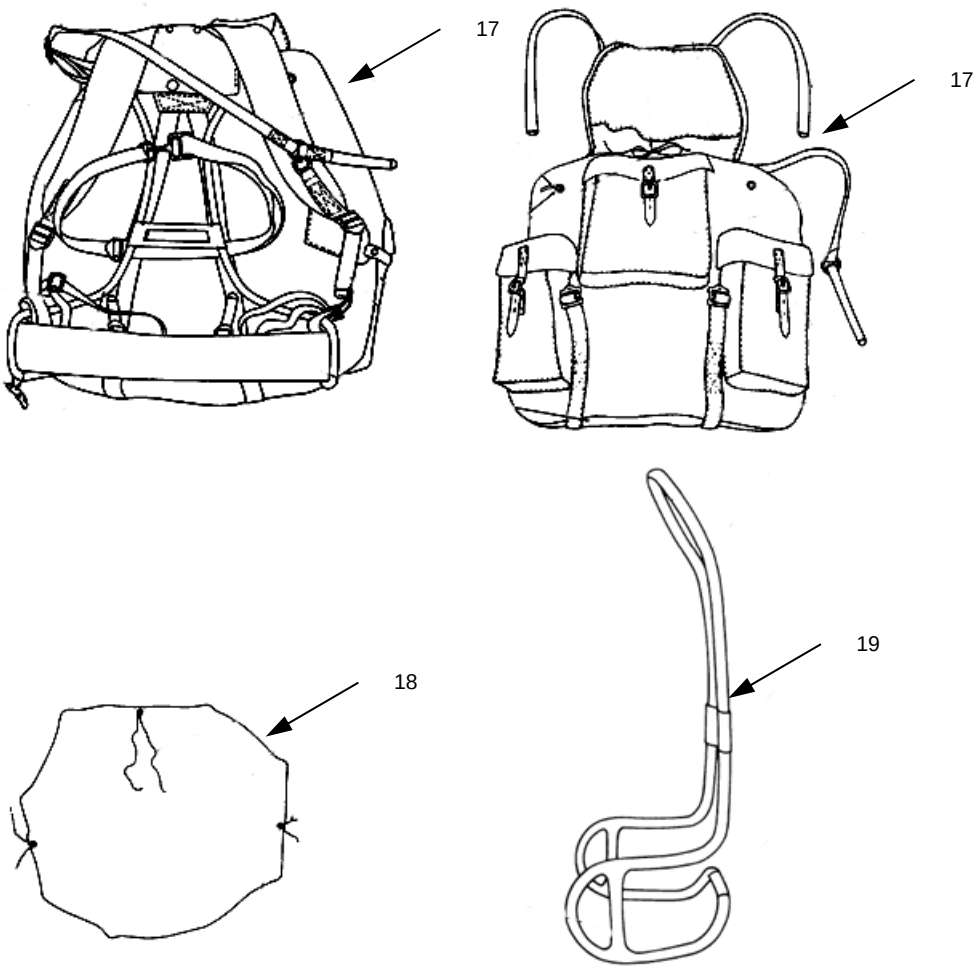

Figure 1. Load Bearing Equipment (Sheet 3 of 3).

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 06 LOAD BEARING EQUIPMENT **FIG. 1 LOAD BEARING EQUIPMENT**	
1		8415-01-296-8878	81337	2-1-1981	VEST, TACTICAL LOAD CARRYING	1
2		8315-00-935-4741		MIL-T-5038	.TAPE, NYLON, TYPE III, CLASS 2, OD-7, 1-INCH WIDE	AR
3		8465-01-286-5352	02768	SR-1	.FASTENER, QUICK RELEASE	AR
4		5325-00-985-6718		MIL-F-10884	.FASTENER, SNAP, STYLE 2, BLACK CHEMICAL FINISH	AR
5		8305-01-062-7050		MIL-W-43668	.WEBBING, TEXTILE, NYLON, TYPE III, OD-7, 1-INCH WIDE	AR
6		8315-00-106-5974		MIL-F-21840	.FASTENER TAPES, PILE, TYPE II, CLASS 1, 1-INCH WIDE (CUT TO 1 ¾ INCHES)	AR
7		8315-00-106-5973		MIL-F-21840	.FASTENER TAPES, HOOK, TYPE II, CLASS 1, 1-INCH WIDE (CUT TO 1 ¾ INCHES)	AR
8		5340-01-070-8440		MIL-B-543	.BUCKLE, NON-SLIP, STEEL, 1-INCH, BLACK CHEMICAL FINISH	AR
9		8315-01-352-9305		MIL-T-5038	.TAPE, NYLON, TYPE II, CLASS 2, OD-7, 1 ½ INCHES WIDE	AR
10		8305-00-260-6910		MIL-W-4088	.WEBBING, TEXTILE, NYLON, TYPE II, CLASS 2, OD-7, 1-INCH WIDE (CUT TO 5 ¾ INCHES OR 7 1/8 INCHES)	AR
11		4020-00-262-2019		MIL-C-5040	.CORD, NYLON, TYPE IIA	AR
12		5325-01-069-0578		MIL-E-20652	.EYELET, BRASS, BLACK	AR
13		8305-00-260-6909		MIL-W-4088	.WEBBING, TEXTILE, NYLON, TYPE II, CLASS 2, OD-7, 1-INCH WIDE (CUT TO 7 1/8 INCH)	AR
14		8465-01-286-5356	81349	MIL-F-43832	FIELD PACK (INTERNAL FRAME)	1
15		8465-01-287-8127	81349	MIL-F-44324	PACK, PATROL, COMBAT	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
16		8415-01-317-1622	81337	2-1-2143	VEST, AMMUNITION CARRYING	1
17		8465-00-935-6825	81349	MIL-F-43997	FIELD PACK	1
18		8465-00-001-6478	81349	MIL-C-43830	.COVER, FIELD PACK, CAMOUFLAGE	1
19		8465-00-558-0151	81337	2-3-81	.FRAME, FIELD PACK	1
					END OF FIGURE	

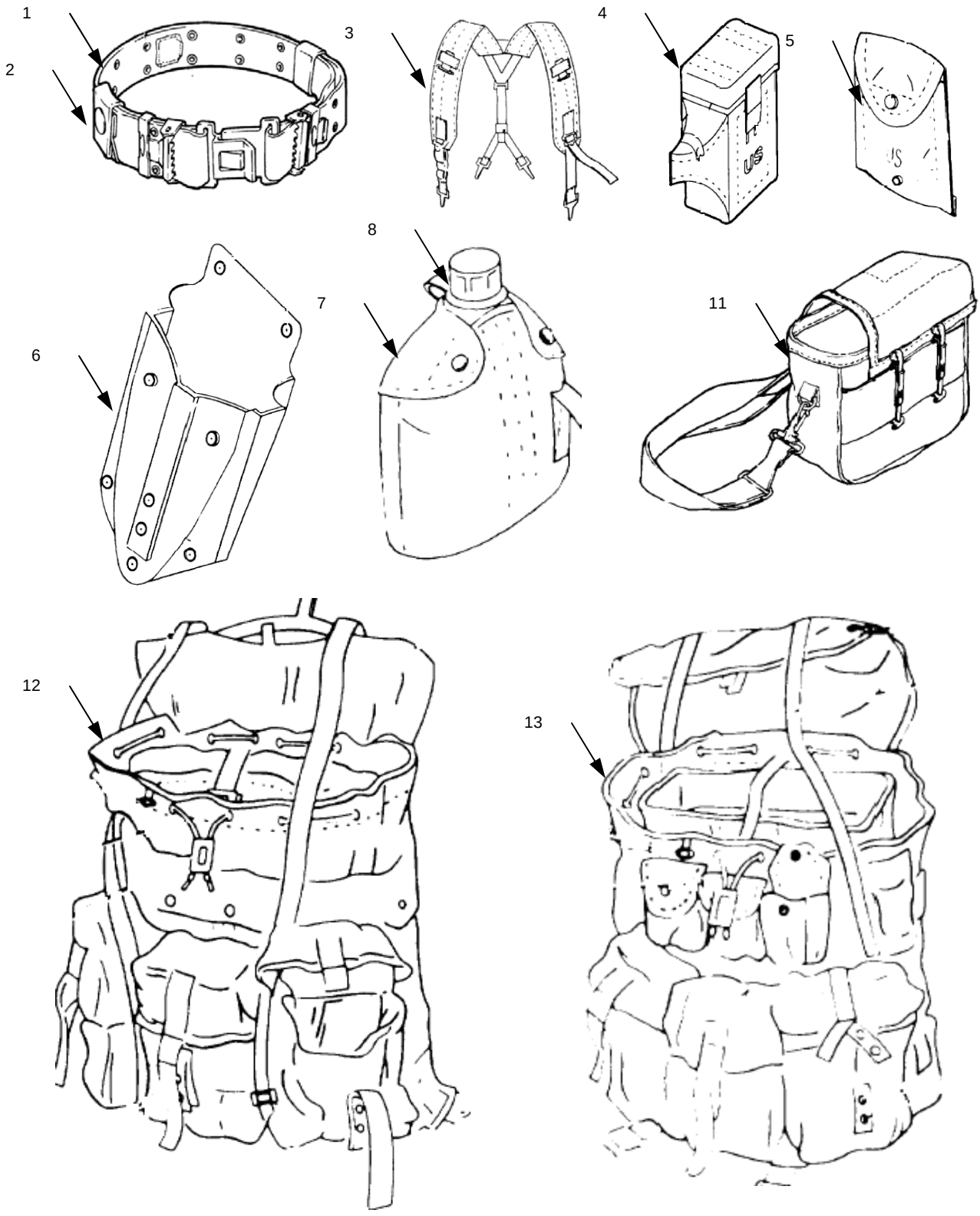

Figure 1. ALICE Gear (Sheet 1 of 2).

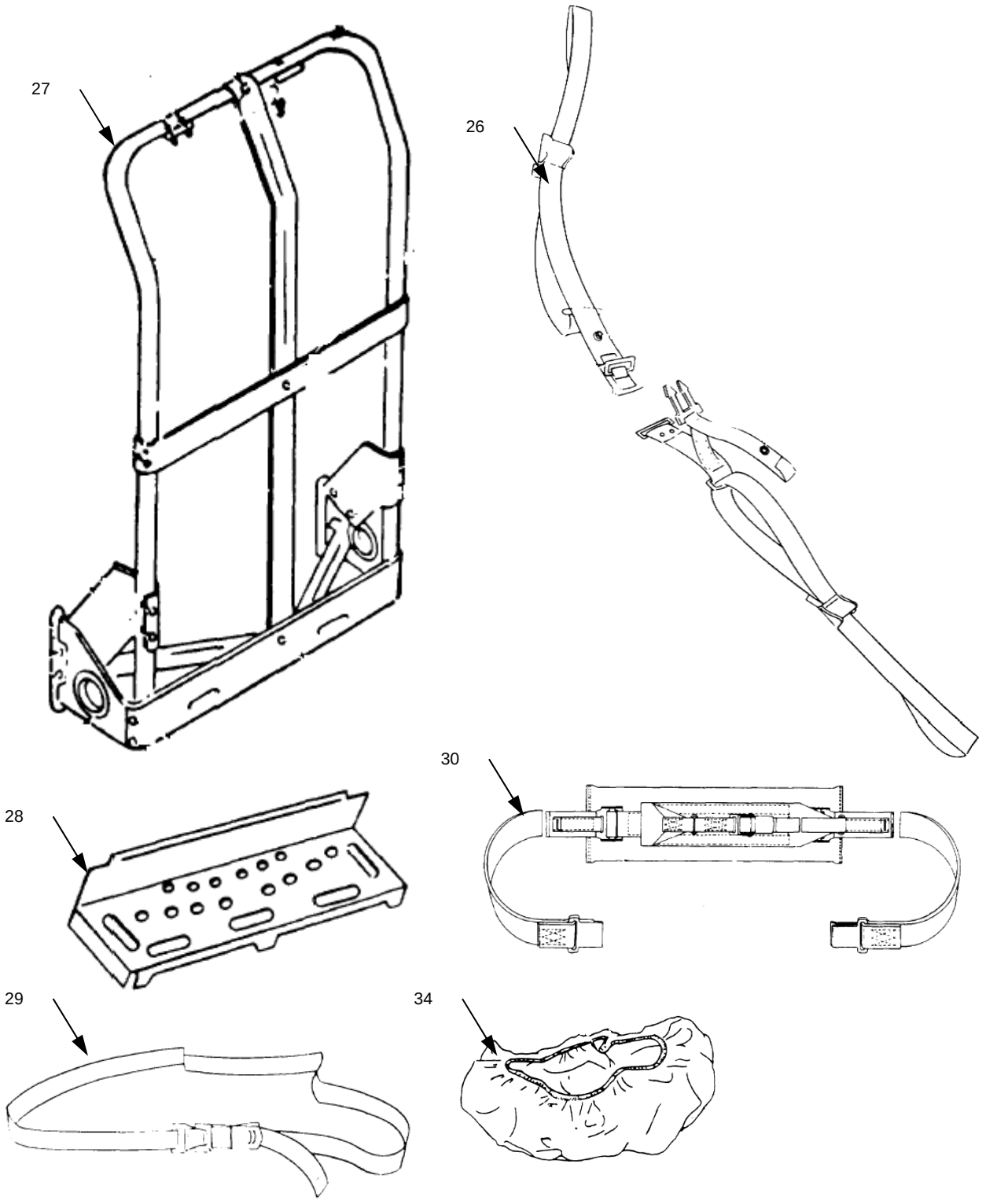

Figure 1. ALICE Gear (Sheet 2 of 2).

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 07 ALICE GEAR	
					FIG. 1 ALICE GEAR	
1		8465-01-322-1966	81349	MIL-B-43826	BELT, INDIVIDUAL EQUIPMENT (LARGE)	1
2		8465-01-322-1965	81349	MIL-B-43826	BELT, INDIVIDUAL EQUIPMENT (MEDIUM)	1
3		8465-00-001-6471	81349	MIL-S-43829	SUSPENDERS, INDIVIDUAL EQUIPMENT	1
4		8465-00-001-6482	81349	MIL-C-28981	CASE, SMALL ARMS AMMUNITION	1
5		8465-00-935-6814	81349	MILC43745	CASE, FIELD FIRST AID DRESSING – UNMOUNTED MAGNETIC COMPASS	1
6		8465-00-001-6474	81349	MIL-C-43683	CARRIER, ENTRENCHING TOOL	1
7		8465-00-860-0256	81349	MIL-C-73742	COVER, WATER CANTEEN	1
8	PAOZZ	8465-01-082-6449	81349	MIL-C-43103	.STRAP, CAP, WATER CANTEEN	1
9	PAOZZ	8465-00-930-2077	81349	MIL-C-51278	.CAP, WATER CANTEEN	1
10	PAOZZ	8465-00-165-6838	81349	MIL-C-43761	.CUP, WATER CANTEEN	1
11		8465-00-927-7485	81349	MILC43689	COVER, WATER CANTEEN (2-QUART)	1
12		8465-00-001-6480	81349	MIL-F-43833	FIELD PACK (MEDIUM, WITH LINERS)	1
13		8465-01-019-9102	81349	MIL-F-43833	FIELD PACK (MEDIUM, WITHOUT LINERS)	1
14	PAFZZ	4020-00-262-2019	81349	MIL-C-5040	.CORD, FIBROUS, TYPE II	AR
15		5310-00-209-1767	81349	MILSTD2073	.WASHER, FLAT, STYLE A, SIZE 4096, BLACK CHEMICAL FINISH	AR
16		5325-00-221-1516	19200	8460214	.EYELET, METALLIC, STYLE A, SIZE 4094, BLACK CHEMICAL FINISH	AR
17		5325-00-985-6718	81349	MILF10884	.FASTENER, SNAP, STYLE 2, BLACK CHEMICAL FINISH	AR
18		5340-00-753-5577	81349	MIL-H-9890	.LOOP, STRAP FASTENER, TYPE IV	AR

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
19		5340-01-062-6749	81349	MIL-B-543	.BUCKLE, NON-SLIP, WITH SPRING, 1 INCH, NO. 240, DULL BLACK OXIDE FINISH	AR
20	PAFZZ	5340-01-070-9440	81349	MIL-B-543	.BUCKLE, TYPE V, CLASS 3, SIZE 1	AR
21	PAFZZ	8305-01-015-9434	81349	MIL-W-4088	.WEBBING, TEXTILE, NYLON, 2 ¼-INCH WIDE, OD-7,M TYPE VIIC	AR
22	PAFZZ	8305-01-062-7050	81349	MIL-W-43668	.WEBBING, TEXTILE, NYLON, 1-INCH WIDE, OD-7, TYPE III	AR
23	PAFZZ	8315-00-935-4741	81349	MILT5038	.TAPE, TEXTILE, NYLON, 1-INCH WIDE, OD-7, TYPE III	AR
24		5365-01-063-8996	81349	MIL-R-3390	.RING, DEE, CLASS 1 OR 2, 1-INCH BY 2/3-INCH, BLACK CHEMICAL FINISH	AR
25		8465-00-001-6481	81349	MIL-F-43832	FIELD PACK (LARGE, WITH LINERS)	1
26		8465-01-019-9103	81349	MIL-F-43832	FIELD PACK (LARGE, WITHOUT LINERS)	1
27		8465-01-073-8326	81349	MIL-F-43834	FRAME, FIELD PACK	1
28		8465-00-001-6476	81349	MIL-F-43834	SHELF, CARGO SUPPORT	1
29		8465-00-269-0481	81349	MIL-S-43835	STRAP, WEBBING (WAIST)	1
30		8465-01-075-8164	81349	MIL-S-43835	STRAP, WEBBING (LOWER BACK)	1
31		8465-01-078-9282	81349	MIL-S-43835	STRAP, WEBBING (SHOULDER WITHOUT QUICK RELEASE)	1
32		8465-00-269-0482	81349	MIL-S-43835	STRAP, WEBBING (SHOULDER WITH QUICK RELEASE)	1
33		8465-00-001-6477	81349	MIL-S-43828	STRAP, WEBBING (CARGO STRAPS)	1
34		8465-00-001-6478	81349	MIL-C-43830	COVER, FIELD PACK, CAMOUFLAGE (SNOW)	1
35		8465-01-192-6616	81349	MIL-C-43830	COVER, FIELD PACK, CAMOUFLAGE (WOODLAND)	1
36		8305-01-068-0348	81349	MIL-C-43701	.CORD, ELASTIC	AR
37		5340-01-061-2893	57771	D3525	.CLAMP	AR

END OF FIGURE

PARTS INFORMATION

CHEMICAL PROTECTIVE GEAR

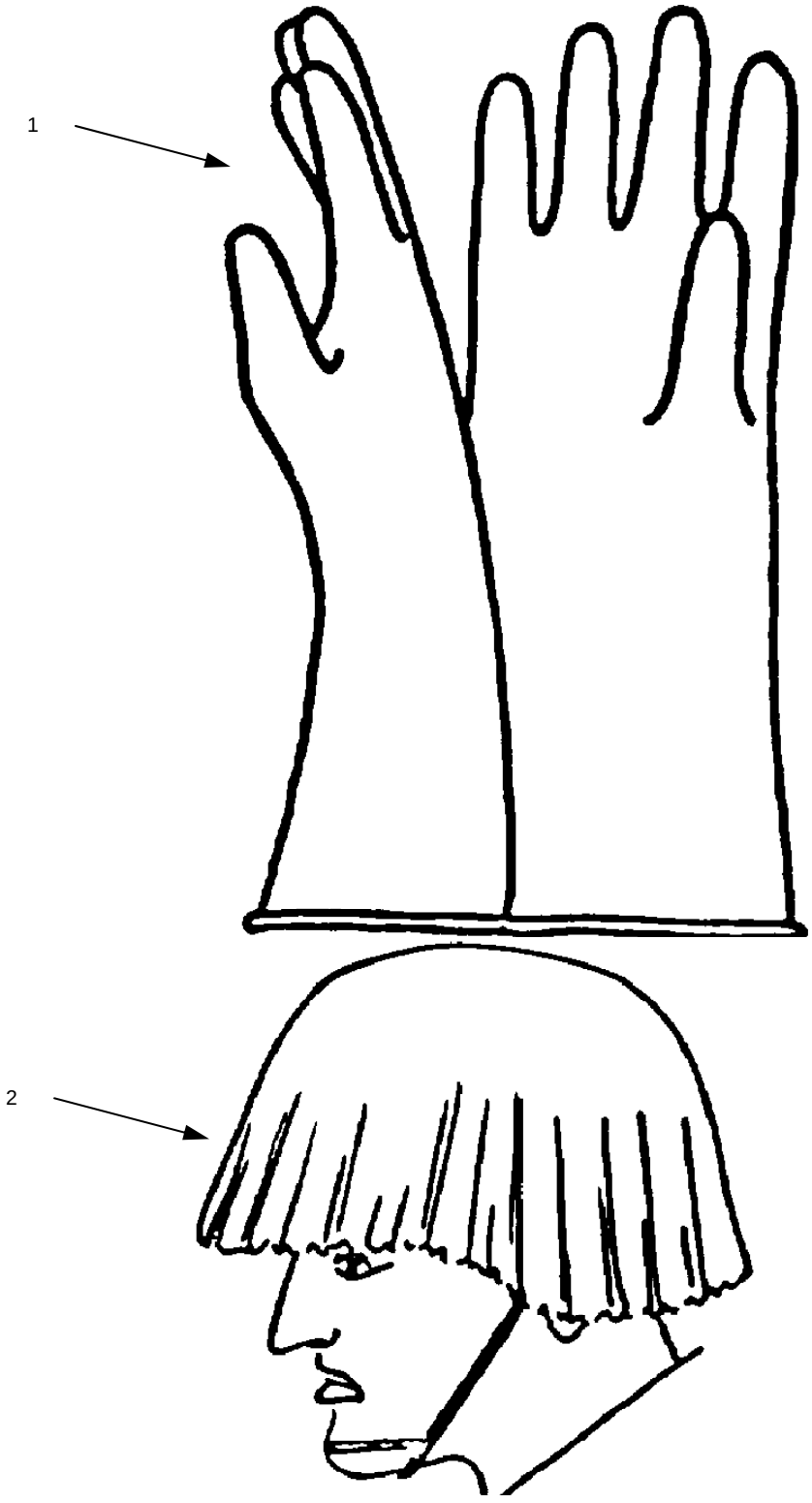

Figure 1. Chemical Protective Gear.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 08 CHEMICAL PROTECTIVE GEAR	
					FIG. 1 CHEMICAL PROTECTIVE GEAR	
1		8415-01-144-1862	81349	MIL-G-43976	GLOVE SET, CHEMICAL PROTECTIVE, SIZE XS	1
2		8415-01-033-3517	81349	MIL-G-43976	GLOVE SET, CHEMICAL PROTECTIVE, SIZE S	1
2		8415-01-033-3518	81349	MIL-G-43976	GLOVE SET, CHEMICAL PROTECTIVE, SIZE M	
2		8415-01-033-3519	81349	MIL-G-43976	GLOVE SET, CHEMICAL PROTECTIVE, SIZE L	
2		8415-01-033-3520	81349	MIL-G-43976	GLOVE SET, CHEMICAL PROTECTIVE, SIZE XL	
3		8415-00-268-8354	81349	MIL-DTL-3866	.GLOVE INSERTS, CHEMICAL PROTECTIVE, SIZE S	
3		8415-00-268-8353	81349	MIL-DTL-3866	.GLOVE INSERTS, CHEMICAL PROTECTIVE, SIZE M	
4		8415-01-111-9028	81349	MIL-C-44001	COVER, HELMET, CHEMICAL PROTECTIVE	
					END OF FIGURE	

PARTS INFORMATION

PASGT HELMET

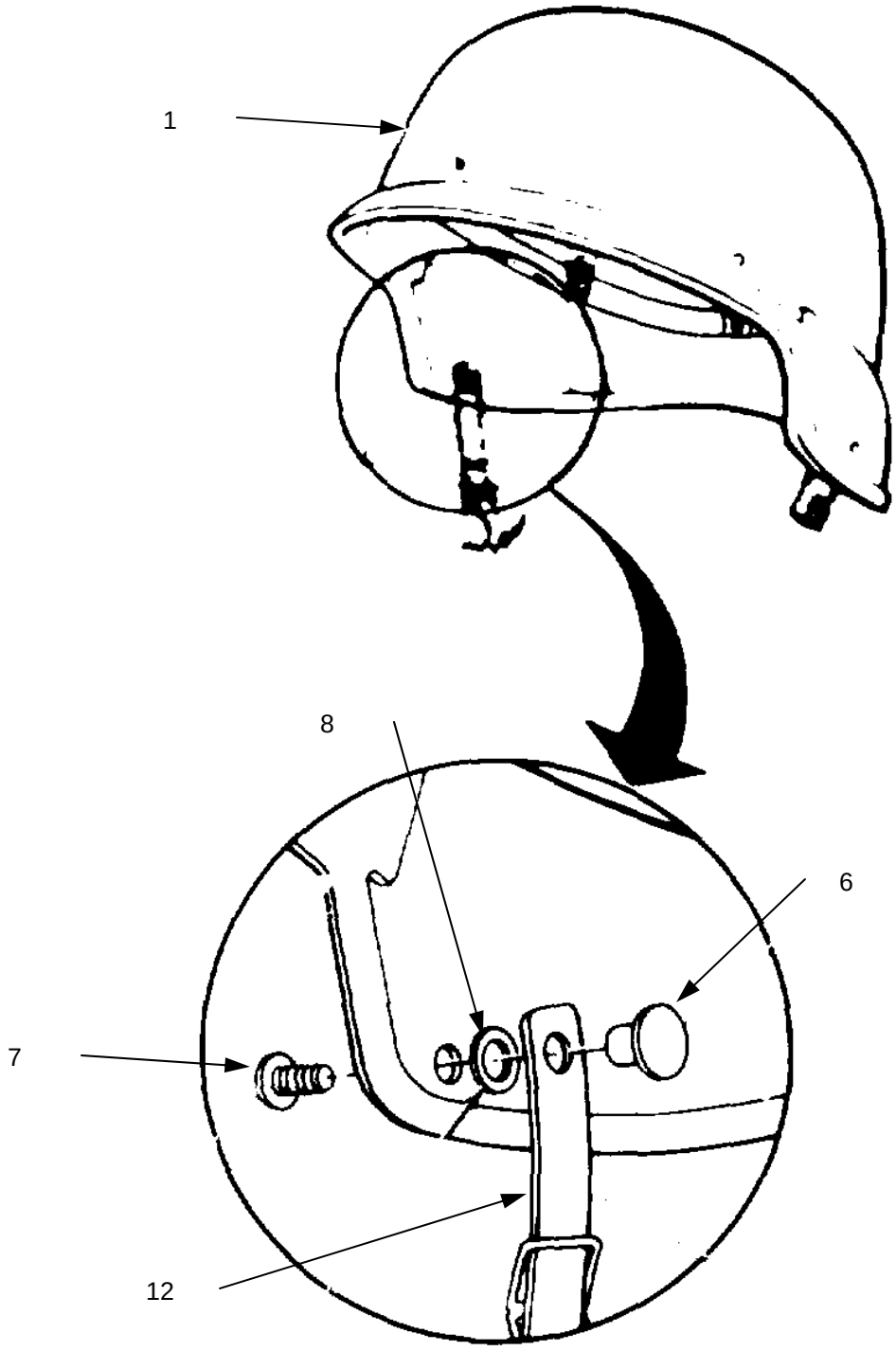

Figure 1. PASGT Helmet.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 09 PASGT HELMET	
					FIG. 1 PASGT HELMET	
1		8470-01-092-7525	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR OLIVE DRAB SIZE X-SMALL	1
1		8470-01-092-7526	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR OLIVE DRAB SIZE SMALL	1
1		8470-01-092-7527	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR OLIVE DRAB SIZE MEDIUM	1
1		8470-01-092-7528	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR OLIVE DRAB SIZE LARGE	1
1		8470-01-300-3819	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR OLIVE DRAB SIZE XLARGE	1
1		8470-01-529-6502	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR FG504 SIZE XSMALL	1
1		8470-01-529-6530	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR FG504 SIZE SMALL	1
1		8470-01-529-6532	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR FG504 SIZE MEDIUM	1
1		8470-01-529-6539	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR FG504 SIZE LARGE	1
1		8470-01-529-6541	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR FG504 SIZE XLARGE	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
2		8470-01-092-7516		8-2-644-1	.SUSPENSION ASSEMBLY, X-SMALL	1
2		8470-01-082-7517		8-2-644-1	.SUSPENSION ASSEMBLY, SMALL	1
2		8470-01-092-7518		8-2-644-1	.SUSPENSION ASSEMBLY, MEDIUM	1
2		8470-01-092-7519		8-2-644-1	.SUSPENSION ASSEMBLY, LARGE	1
3		8470-01-144-2813		8-2-644-6	..SCREW	1
4		8470-01-144-5368			..A-NUT	1
5		8470-01-092-7534		2-1-1400	.STRAP ASSEMBLY, CHIN	1
6		8470-01-144-5367		8-2-647	..POST	1
7		8470-01-144-2811			..SCREW	1
8		8470-01-144-2812			..WASHER	1
9		8470-01-442-1434			HEADBAND ASSEMBLY, SIZE XSMALL	1
9		8470-01-092-8493			HEADBAND ASSEMBLY, SIZE SMALL	1
10		8470-01-144-2814		2.1.1384-7	.CLIP	1
11		8470-01-082-8494		MIL-P-44081	PAD, GROUND TROOPS, PARACHUTISTS HELMET	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
12		8470-01-082-7524		MIL-S-44022	STRAP, RETENSION, PASGT	1
13		8415-01-327-4824			COVER, HELMET, CAMOUFLAGE DAYTIME DESERT SIZE XSMALL TO SMALL	1
13		8415-01-327-4825			COVER, HELMET, CAMOUFLAGE DAYTIME DESERT SIZE MED TO LARGE	1
13		8415-01-494-4591			COVER, HELMET, CAMOUFLAGE WHITE, SNOW, SIZE MED TO LARGE	1
13		8415-01-494-4605			COVER, HELMET, CAMOUFLAGE W, SIZE XSMALL TO SMALL	1
13		8415-01-092-7514			COVER, HELMET, CAMOUFLAGE WOODLAND, SIZE XSMALL TO SMALL	1
13		8415-01-092-7515			COVER, HELMET, CAMOUFLAGE WOODLAND, MED TO LARGE	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
13		8415-01-303-8945			COVER, HELMET, CAMOUFLAGE WOODLAND, XLARGE	1
13		8415-01-327-4825			COVER, HELMET, DESERT CAMOUFLAGE PATTERN, DAYTIME 3 COLOR, MEDIUM TO LARGE	1
13		8415-01-327-4826			COVER, HELMET, DESERT CAMOUFLAGE PATTERN, DAYTIME 3 COLOR, X-LARGE	1
14		8415-01-110-9981	81348	MIL-H-44098	HEADBAND, GROUND TROOP, XLARGE	1
					END OF FIGURE	

PARTS INFORMATION

CVC HELMET

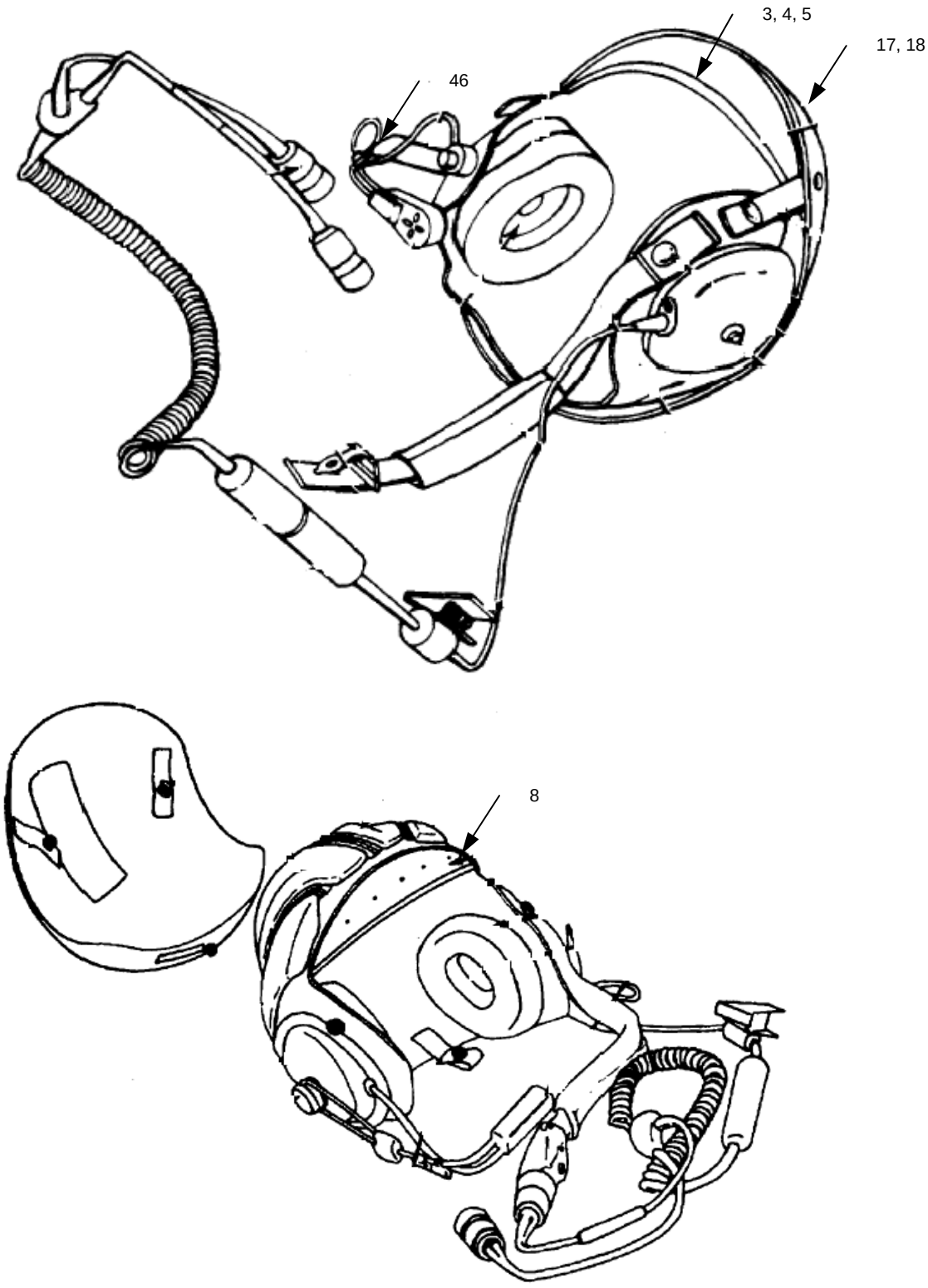

Figure 1. CVC Helmet (Sheet 1 of 4).

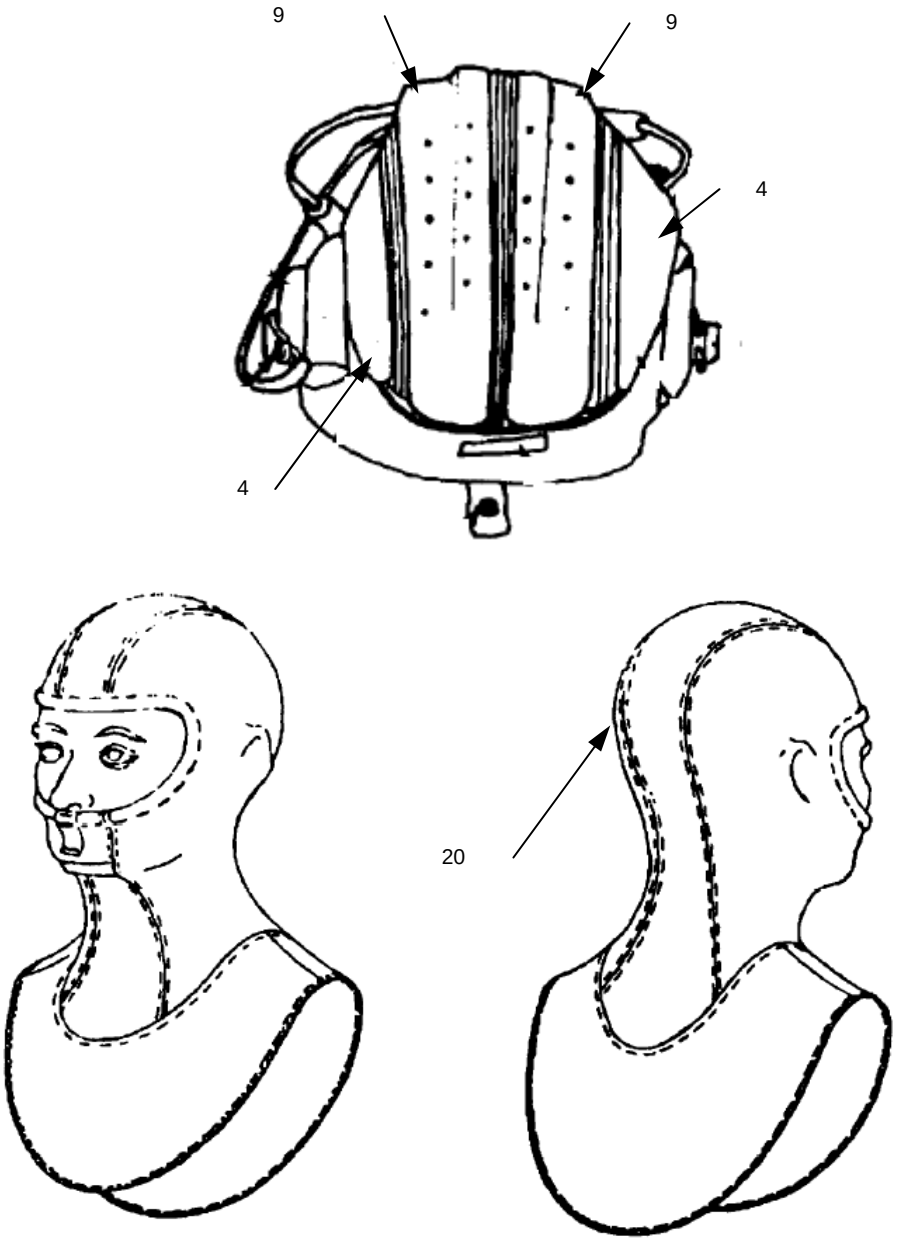

Figure 1. CVC Helmet (Sheet 2 of 4).

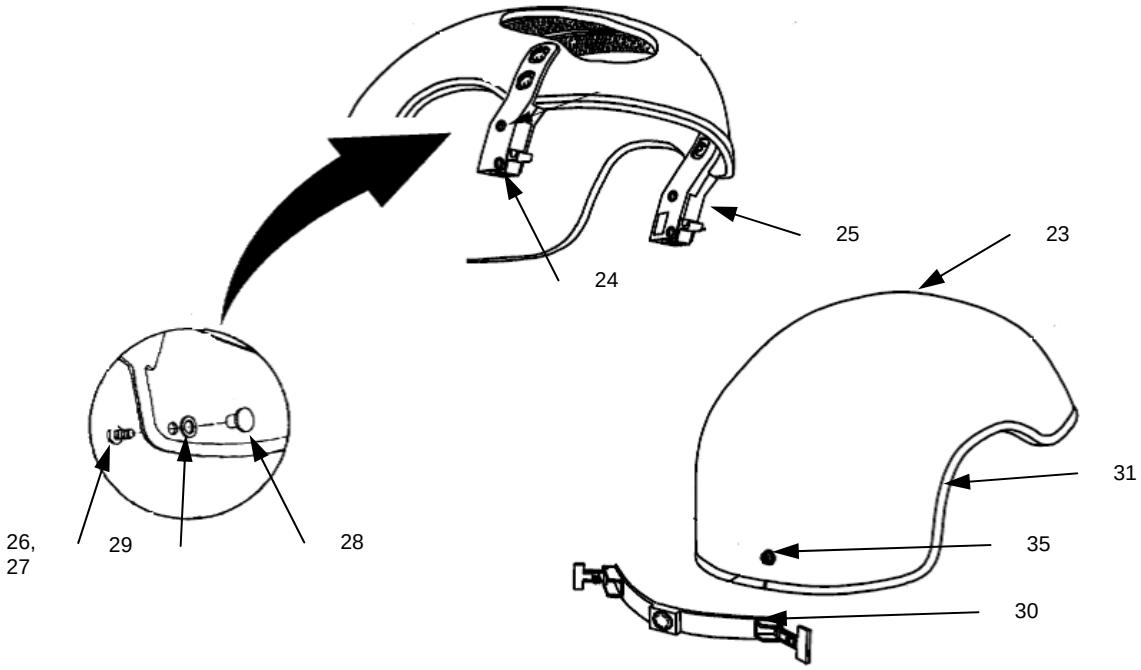

Figure 1. CVC Helmet (Sheet 3 of 4).

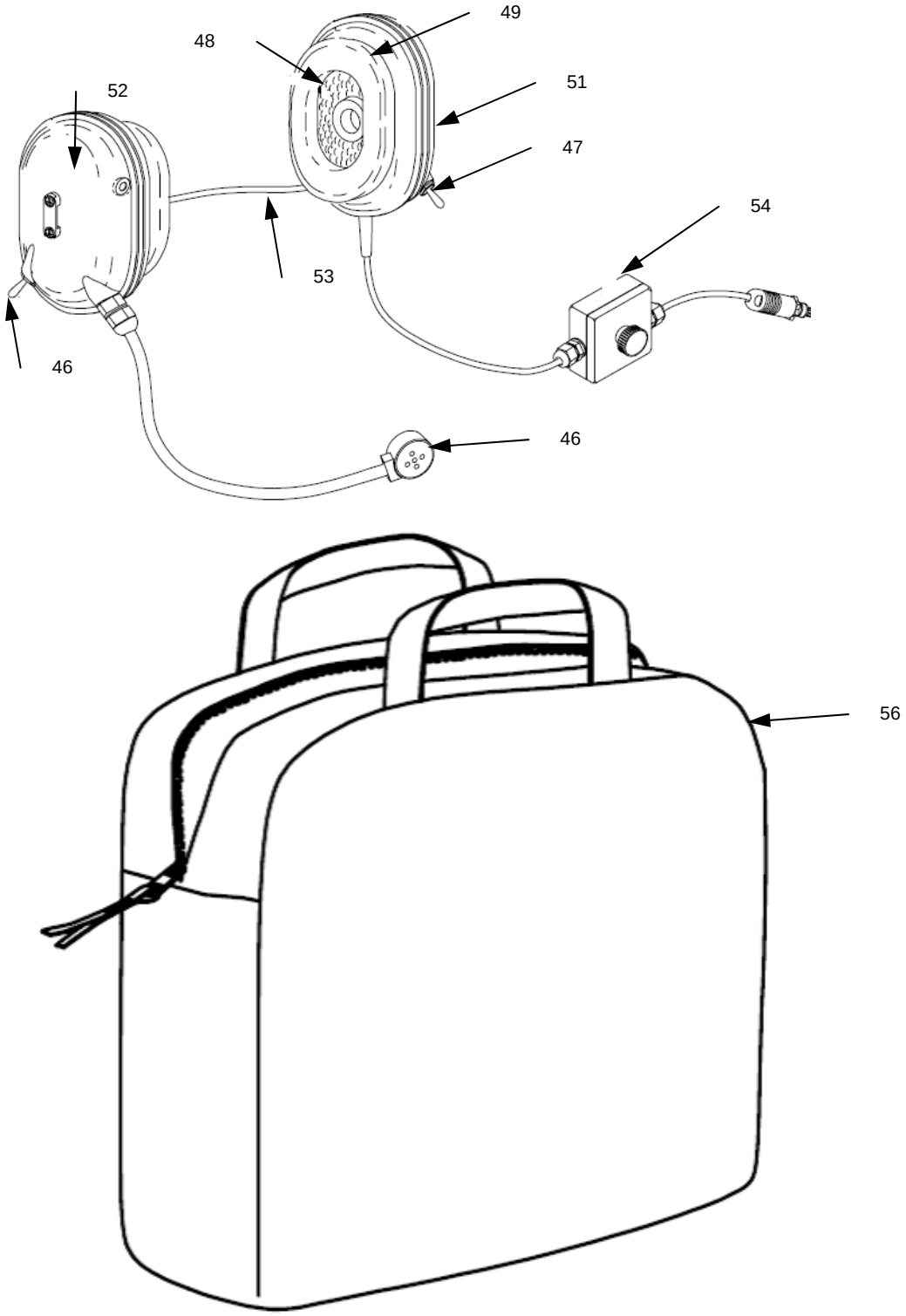

Figure 1. CVC Helmet (Sheet 4 of 4).

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 10 CVC HELMET	
					FIG. 1 CVC HELMET	
1					CVC HELMET	
2	PAOZZ	8415-01-207-1197		MIL-H-44117	.ATTACHMENT KIT, HELMET: COMBAT VEHICLE CREWMAN'S, TAB 1 EA., SCREW 1 EA., WASHER 1 EA., POST 1 EA., PAPER IDENTIFICATION AND INSTRUCTION LABEL 1 EA.	1
3	PAOZZ	8415-00-134-9396	97427	8-2-602	.LINER, COMBAT VEHICLE CREWMAN'S HELMET: W/O COMMUNICATIONS SYSTEM, SIZE SMALL	
4	PAOZZ	8415-00-134-9397	97427	8-2-602	.LINER, COMBAT VEHICLE CREWMAN'S HELMET: W/O COMMUNICATIONS SYSTEM, SIZE MEDIUM.	
5	PAOZZ	8415-00-134-9398	97427	8-2-602	.LINER, COMBAT VEHICLE CREWMAN'S HELMET: W/O COMMUNICATIONS SYSTEM, SIZE LARGE.	
6	PAOZZ	8415-00-163-9040	97427	8-2-617	.PAD SET, FITTING: COMBAT VEHICLE CREWMAN'S HELMET, CENTER, C/O LEFT SIDE AND RIGHT SIDE FOR SMALL HELMET.	
7	PAOZZ	8415-00-163-9041	97427	8-2-617	.PAD SET, FITTING: COMBAT VEHICLE CREWMAN'S HELMET, SIDE, DO LEFT SIDE AND RIGHT SIDE FOR SMALL HELMET.	
8	PAOZZ	8415-00-163-9046	97427	8-2-617	.PAD, HELMET: FOR BROW, FOR ALL SIZES.	
9	PAOZZ	8415-00-163-9042	97427	8-2-617	.PAD SET, FITTING: COMBAT VEHICLE CREWMAN'S HELMET-CENTER, C/O LEFT SIDE AND RIGHT SIDE FOR MEDIUM HELMET.	
10	PAOZZ	8415-00-163-9043	97427	8-2-617	.PAD SET, FITTING: COMBAT VEHICLE CREWMAN'S HELMET, SIDE, C/O LEFT SIDE AND RIGHT SIDE FOR MEDIUM HELMET.	

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
11	PAOZZ	8415-01-207-1196	81349	MIL-H-4417	.ATACHMENT KIT, COMBAT VEHICLE CREWMAN'S, STRIP 1 EA., ADHESIVE PACK 1 EA., PAPER IDENTIFICATION AND INSTRUCTION LABEL 1 EA.	
12	PAOZZ	8415-00-163-9044	97427	8-2-617	.PAD SET, FINING: COMBAT VEHICLE CREWMAN'S HELMET, CENTER, C/O LEFT SIDE AND RIGHT SIDE FOR LARGE HELMET.	
13	PAOZZ	8415-00-163-9045	97427	8-2-617	.PAD SET, FITTING: COMBAT VEHICLE CREWMAN'S HELMET, SIDE, C/O LEFT SIDE AND RIGHT SIDE FOR LARGE HELMET.	
14	PAOZZ	8415-00-163-9052	97427	8-2-603	.STRAP ASSEMBLY, CHIN: W/O PAD	
15	PAOZZ	8415-00-163-9048	97427	8-2-611	.PAD, CHIN STRAP: FOR ALL SIZES	
16	PAOZZ	8470-01-259-1693	97427	MIL-H-44117	.SHELL, SMALL AND MEDIUM,	
17	PAOZZ	8470-01-259-1694	97427	MIL-H-44117	.SHELL, LARGE,	
19	PAOZZ	9390-00-710-4355	19200	10515443	MOLDING, 36 IN. STRIP.	
20		8415-01-111-1159	81349	MIL-H-44265	HOOD, COMBAT VEHICLE CREWMEN'S	
21		8305-00-410-8418			.ELASTIC CORD, OD-7, CLASS 2	
22		8305-00-406-3496		MIL-DTL-43685C	.WEBBING, OG 106, TYPE II	
23		8470-01-389-3815		MIL-H-44117	CVC SHELL, INCREASED BALLISTIC (DH-132B) SIZE SMALL/MEDIUM	
23		8470-01-389-3821		MIL-H-44117	CVC SHELL, INCREASED BALLISTIC (DH-132B) SIZE LARGE	
24		8470-01-467-1815			FACEGUARD STRUT, RIGHT HAND, LARGE	
24		8470-01-467-1896			FACEGUARD STRUT, RIGHT HAND, SMALL	

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
25		8470-01-467-1811			FACEGUARD STRUT, LEFT HAND, LARGE	
25		8470-01-467-1793			FACEGUARD STRUT, LEFT HAND SMALL	
26					..UPPER SCREW, STRUT, SDS PART #R00408, #8-32 X 7/8" LONG, SLOTTED PAN HEAD MACHINE SCREW, STAINLESS STEEL, FINISH: BLACK OXIDE	2
27					..LOWER SCREW, STRUT, SDS PART #R00409, #8-32 X 1" LONG, SLOTTED PAN HEAD MACHINE SCREW, STAINLESS STEEL, FINISH: BLACK OXIDE	2
28					..SDS PART #R00350, POST, PASGT HELMET, DWG 8-2-647C, 3/6/91, TYPE 302 OR TYPE 303 STAINLESS STEEL, #8-32 UNC-28, 0.192" DIA. X 3/16" LONG	2
29					..SDS PART #R00372, WASHER, AN 960 C, DASH NO. C8, 300 SERIES, STAINLESS STEEL, 0.174" ID X 0.375" OD, FINISH: BLACK OXIDE	
30		5965-01-466-9374			.HEADSET TENSION ASSEMBLY	
31					.RUBBER EDGE, (D9307R00787) COLOR, OD	
32		8415-01-467-2216			. IMPACT LINER SPIDER, 3/8” PE FOAM, 3.5 LBS, PN F105102 (3T951)	
33		8415-01-467-2189			. IMPACT LINER CROWN PAD, ½ “ FOAM, MIL-P-15280, F105102-D, (3T951)	
34		8415-01-467-2178			. IMPACT LINER, SMALL, 3/8 “ FOAM, MIL-P-15280, F105102-C, (3T951)	
34		8415-01-467-2181			. IMPACT LINER, MEDIUM, 1/2 “ FOAM, MIL-P-15280, F105102-B, (3T951)	

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
34		8415-01-467-2183			. IMPACT LINER, LARGE, 3/4 " FOAM, MIL-P-15280, F105102-A, (3T951)	
35					.STUD 7B, MS27980-7B, MIL-F10884F, STYLE 2, FINISH 2 - BLACK	
36					. EYELET 8B, MS27980-8B, MIL-F10884F, STYLE 2, FINISH 2 - BLACK	
37					. POLYARAMID BINDING, MIL-C-24500, ROO640	
38					. BUCKLE, ¾", MIL-B-543	
39					EYELET (FEMALE COMPONENT), STIMPSON PN A3574, ROO363	
40					EYELET (MALE COMPONENT), STIMPSON PN A2617, ROO363	
41					..SOCKET, 6B, MS27980-6B, MIL-F-10884F, STYLE 2, FINISH 2 - BLACK	
42					..BUTTON, 1B, MS27980-1B, MIL-F-10884F, STYLE 2, FINISH 2 - BLACK	
43					..END CLIP, #014, MIL-C-496, ROO440	
44					..WEBBING, COTTON, 5/8", MIL-W-5665, ROO535	
45					**HEADSET AND MICROPHONE KIT**	
46		5965-01-466-9380			.SOUND CANCELING MICROPHONE BOOM ASSEMBLY	
47		5930-01-466-9377			. TALK-THROUGH SWITCH	
48		8470-01-467-2168			. EARCUP FOAM (EARPHONE PLUG) ROO477-1	

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
49		8470-01-467-2162			. EARSEAL, LEFT AND RIGHT, ROO445	
50		5930-01-466-9375			. THREE-POSITION PUSH-TO-TALK SWITCH	
51		8470-01-467-1693			. EARCUP LEFT	
52		8470-01-467-2165			. EARCUP RIGHT	
53		8470-01-467-9372			. EAR TO EAR CORD	
54		8470-01-467-9373			. BATTERY BOX, UPPER CABLE	
55		8470-01-467-1550			FACEGUARD	
56		8465-01-467-2163			BAG CARRYING	
					END OF FIGURE	

PARTS INFORMATION

CVC BODY ARMOR

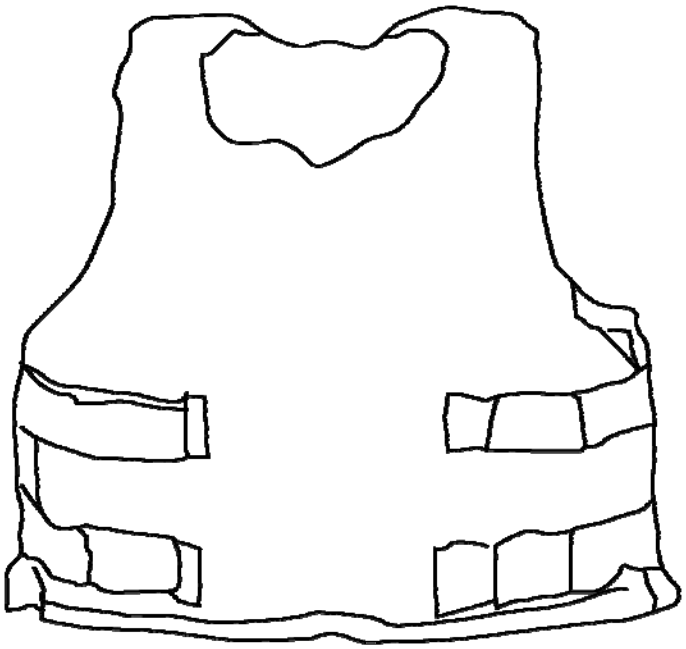

Figure 1. CVC Body Armor.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 11 CVC BODY ARMOR	
					FIG. 1 CVC BODY ARMOR	
1		8470-01-110-6102		MIL-B-44194	BODY ARMOR, CVC, X-SMALL SHORT	
1		8470-01-110-6103		MIL-B-44194	BODY ARMOR, CVC, X-SMALL REGULAR	
1		8470-01-110-6104		MIL-B-44194	BODY ARMOR, CVC, SMALL REGULAR	
1		8470-01-110-6105		MIL-B-44194	BODY ARMOR, CVC, MEDIUM REGULAR	
1		8470-01-110-6106		MIL-B-44194	BODY ARMOR, CVC, LARGE REGULAR	
1		8470-01-110-6107		MIL-B-44194	BODY ARMOR, CVC, X-LARGE REGULAR	
1		8470-01-110-6108		MIL-B-44194	BODY ARMOR, CVC, SMALL LONG	
1		8470-01-110-6109		MIL-B-44194	BODY ARMOR, CVC, MEDIUM LONG	
2		8470-01-110-6110		MIL-B-44194	BODY ARMOR, CVC, LARGE LONG	
3		8470-01-110-6111		MIL-B-44194	BODY ARMOR, CVC, XL-LONG	
4					.TAPE, BINDING, 45° BIAS-CUT POLYESTER/COTTON 50/50, 3.5-OZ/SQ YD, 76X60 MIN. TEXTURE, WHITE OR BLEACHED, ATLANTIC BIAS PRODUCTS STYLE “POLYFROST” OR EQUAL	YD
5		8310-00-405-2260			.THREAD, ARAMID (NOMEX), OLIVE DRAB, SHADE NO. S-1, C. A. 66022, MIL-B-43636, SIZE B	TU
6		8310-00-988-1296			.THREAD, POLYESTER, TYPE 1, CLASS 1, SUB-CLASS A, NATURAL COLOR, V-T-285, SIZE B	TU
					END OF FIGURE	

PARTS INFORMATION

LEGACY BODY ARMOR

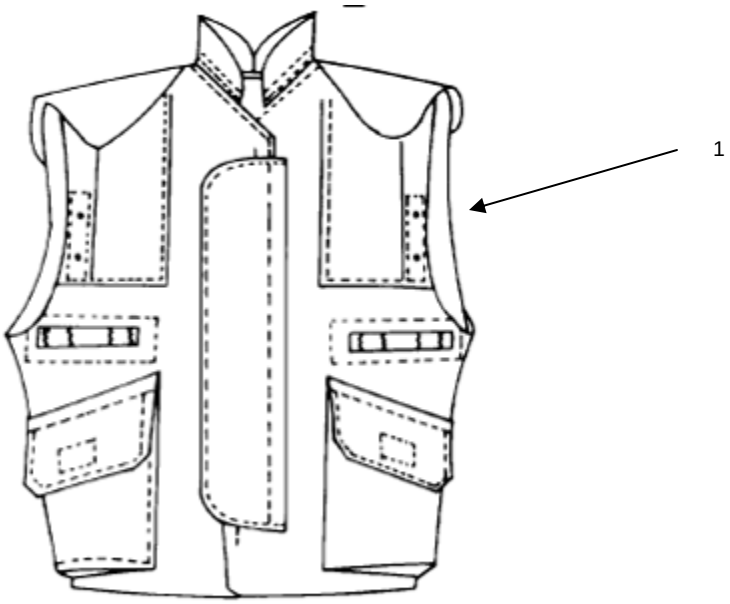

Figure 1. Legacy Body Armor.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 12 LEGACY BODY ARMOR	
					FIG. 1 LEGACY BODY ARMOR	
1		8470-01-092-8497	81349	MIL-B-44053	BODY ARMOR, FRAGMENTATION PROTECTION, SIZE X-SMALL	1
1		8470-01-092-8498	81349	MIL-B-44053	BODY ARMOR, FRAGMENTATION PROTECTION, SIZE SMALL	1
1		8470-01-092-8499	81349	MIL-B-44053	BODY ARMOR, FRAGMENTATION PROTECTION, SIZE MEDIUM	1
1		8470-01-092-8500	81349	MIL-B-44053	BODY ARMOR, FRAGMENTATION PROTECTION, SIZE LARGE	1
1		8470-01-092-8501	81349	MIL-B-44053	BODY ARMOR, FRAGMENTATION PROTECTION, SIZE X-LARGE	1
					END OF FIGURE	

PARTS INFORMATION

BASIC

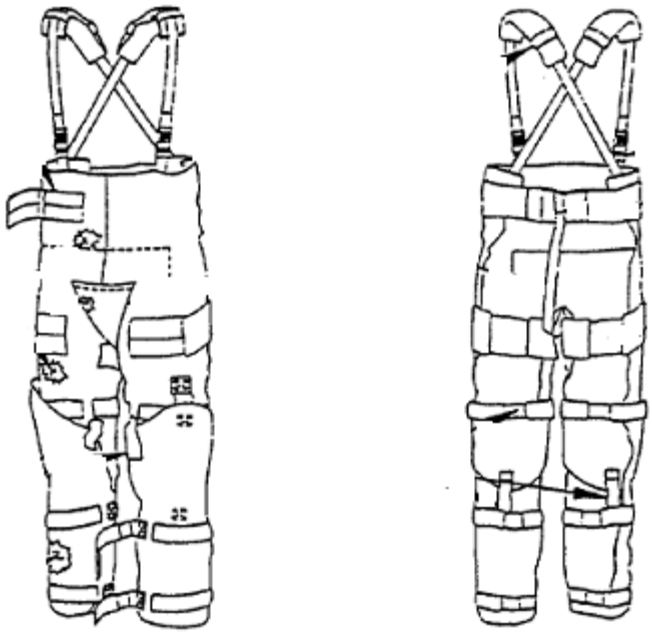

Figure 1. BASIC.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 13 BASIC	
					FIG. 1 BASIC	
1		8470-01-472-3421	4P613	CY00-004	TROUSERS, ANTI-FRAG, SIZE SMALL	1
1		8470-01-472-3426	4P613	CY00-004	TROUSERS, ANTI-FRAG, SIZE MEDIUM	1
1		8470-01-472-3427	4P613	CY00-004	TROUSERS, ANTI-FRAG, SIZE LARGE	1
1		8470-01-472-3435	4P613	CY00-004	TROUSERS, ANTI-FRAG, SIZE LARGE	1
2		6510-01-233-4413	53963	1182A	.PADDING, CAST-SPLINT, ORTHOPEDIC	AR
3		8315-00-450-9837	81349	MIL-F-21840	.FASTENER TAPE, HOOK, 2-INCH WIDE, TYPE II, CLASS 1, ARMY GREEN 106	AR
3		8315-01-111-7170	81349	MIL-F-21840	.FASTENER TAPE, HOOK, PRESSURE SENSITIVE BACKING, 2-INCH WIDE, TYPE II, CLASS 1, ARMY GREEN 106	AR
3		8415-00-448-5663	81349	MIL-F-21840	.FASTENER TAPE, HOOK, 1 ½-INCH WIDE, TYPE II, CLASS 1, ARMY GREEN 106	AR
4		8315-01-352-9304	81349	MIL-T-5038	.TAPE, TEXTILE, NYLON, 1-INCH WIDE, TYPE II, CLASS 2, OD 7	AR
5		8470-01-472-4255	4P613	CY00-003	OVERBOOT, BALLISTIC, BASIC, SIZE 5	1
5		8470-01-472-4256	4P613	CY00-003	OVERBOOT, BALLISTIC, BASIC, SIZE 6	1
5		8470-01-472-4257	4P613	CY00-003	OVERBOOT, BALLISTIC, BASIC, SIZE 7	1
5		8470-01-472-4258	4P613	CY00-003	OVERBOOT, BALLISTIC, BASIC, SIZE 8	1
5		8470-01-472-4259	4P613	CY00-003	OVERBOOT, BALLISTIC, BASIC, SIZE 9	1
5		8470-01-472-4262	4P613	CY00-003	OVERBOOT, BALLISTIC, BASIC, SIZE 10	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
5		8470-01-472-4263	4P613	CY00-003	OVERBOOT, BALLISTIC, BASIC, SIZE 11	1
5		8470-01-472-4264	4P613	CY00-003	OVERBOOT, BALLISTIC, BASIC, SIZE 12	1
6		8335-01-234-8148	81348	V-L-61	.LACES, FOOTWEAR, NYLON, BLACK, TYPE III, CLASS 1, 97 INCHES	1

END OF FIGURE

PARTS INFORMATION

ACH

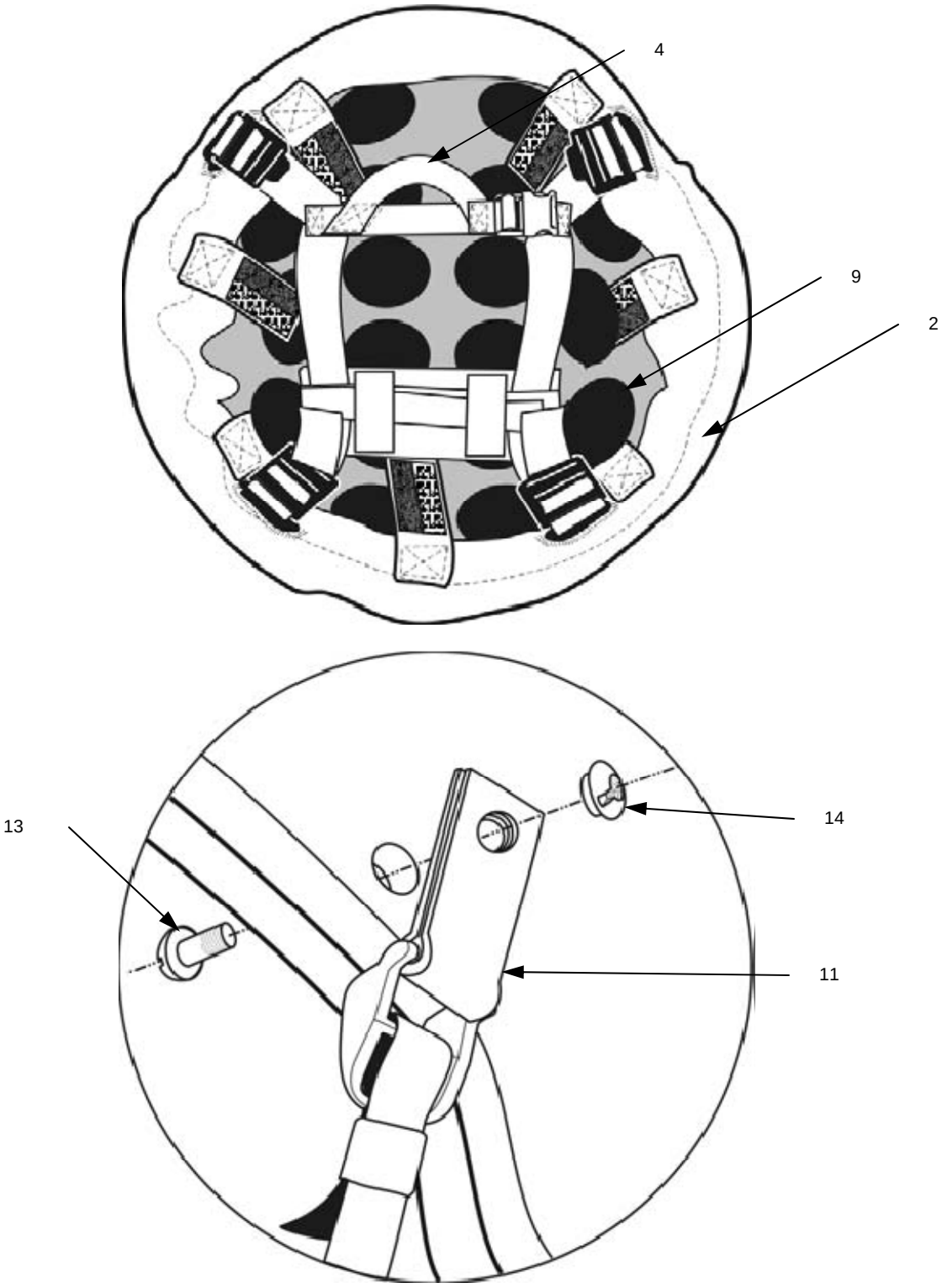

Figure 1. ACH.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 14 ACH	
					FIG. 14 ACH	
1		8470-01-529-6302			HELMET, ADVANCED COMBAT (FOLIAGE GREEN WITH ONE NVD MOUNTING HOLE) (SMALL SHELL WITH ¾" THICK (SIZE 6) PADS)	1
1		8470-01-529-6329			HELMET, ADVANCED COMBAT (FOLIAGE GREEN WITH ONE NVD MOUNTING HOLE) (MEDIUM SHELL WITH ¾" THICK (SIZE 6) PADS)	1
1		8470-01-529-6344			HELMET, ADVANCED COMBAT (FOLIAGE GREEN WITH ONE NVD MOUNTING HOLE) (LARGE SHELL WITH ¾" THICK (SIZE 6) PADS)	1
1		8470-01-558-8622			HELMET, ADVANCED COMBAT (FOLIAGE GREEN WITH ONE NVD MOUNTING HOLE) (EXTRA EXTRA LARGE SHELL WITH ¾" THICK (SIZE 6) PADS)	1
1		8470-01-506-6353			HELMET, ADVANCED COMBAT (TAN WITH ONE NVD MOUNTING HOLE) (MEDIUM SHELL WITH ¾" THICK (SIZE 6) PADS)	1
1		8470-01-506-6356			HELMET, ADVANCED COMBAT (TAN WITH ONE NVD MOUNTING HOLE) (LARGE SHELL WITH ¾" THICK (SIZE 6) PADS)	1
1		8470-01-529-6365			HELMET, ADVANCED COMBAT (TAN WITH ONE NVD MOUNTING HOLE) (EXTRA LARGE SHELL WITH ¾" THICK (SIZE 6) PADS)	1
2	PAOZZ	8415-01-521-8806			.COVER, HELMET, UNIVERSAL (FOLIAGE GREEN, WITH COMMUNICATIONS POCKET, SIZE S/M)	EA

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
2	PAOZZ	8415-01-521-8808			.COVER, HELMET, UNIVERSAL (FOLIAGE GREEN, WITH COMMUNICATIONS POCKET, SIZE L/XL)	EA
2	PAOZZ	8415-01-559-0105			.COVER, HELMET, UNIVERSAL (FOLIAGE GREEN, WITH COMMUNICATIONS POCKET, SIZE XXL)	EA
3	PAOZZ	8415-01-515-4286			.COVER, HELMET, ARTIC (ACH) (WITH COMMUNICATIONS POCKET, SIZE S/M)	EA
3	PAOZZ	8415-01-515-4288			.COVER, HELMET, ARCTIC (ACH) (WITH COMMUNICATIONS POCKET, SIZE L/XL)	EA
4	PAOZZ	8470-01-531-3351			.STRAP, CHIN ONLY, RETENTION FG	EA
5	PAOZZ	8470-01-546-9420			.PAD, SUSPENSION SYSTEM, ACH, FOLIAGE GREEN (SET OF SIZE 6 PADS)	EA
6	PAOZZ	8470-01-546-9415			.PAD, HELMET, ARMY COMBAT, FOLIAGE GREEN (CIRCULAR CROWN PAD, SIZE 6)	EA
7	PAOZZ	8470-01-546-9356			.PAD, HELMET, ARMY COMBAT, FOLIAGE GREEN	EA
8	PAOZZ	8470-01-546-9407			.PAD, HELMET, ARMY COMBAT, FOLIAGE GREEN (TRAPEZOIDAL PAD, SIZE 6)	EA
9	PAOZZ	8470-01-506-6742			.FASTENER TAPE, HOOK, ROLL OF 500 DISKS	RL
10	PAOZZ	5210-01-434-9493			.CALIPERS, OUTSIDE	EA
11	PAOZZ	8470-01-531-3897			.ATTACHMENT TAB, BOX OF 50	BX

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
12	PAOZZ	8470-01-533-1011			.SCREW MOUNTING SET (4) ATTACH TAB (4) SCREW (4) POST	ST
13	PAOZZ	8470-01-531-4268			.MOUNTING SCREW, BOX OF 50	BX
14	PAOZZ	8470-01-531-4284			.POST MOUNTING, BOX OF 50	BX
15	PAOZZ	8315-00-782-3520			.TAPE, MEASURING	EA
16	PAOZZ	5340-01-509-1467			.BRACKET, LEVER (NVD FRONT BRACKET ASSEMBLY)	EA
17	PAOZZ	5305-00-182-9265			.SCREW, MACHINE (8-32 X 3/8 -IN LONG)	HD
18	PAOZZ	8470-01-144-5367			.POST, HELMET (NVD FRONT BRACKET), BOX OF 50	BX
19	PAOZZ	8415-01-521-8802			.STRAP, EYEWEAR RETENTION, FOLIAGE GREEN	PR
20	PAOZZ	8415-01-524-5842			.BAND, HELMET FOLIAGE GREEN	EA
21	PAOZZ	8470-01-506-6473			.EDGING	EA

END OF FIGURE

PARTS INFORMATION

REPAIR KITS

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 98 REPAIR KITS	
					FIG.98 REPAIR KITS	
1		8465-01-016-4207			KIT, SKI REPAIR	
					.SCRAPER, SKI REPAIR	
					.FILE, HAND	
2		8465-01-558-6823		69071	KIT, REPAIR, SNOWSHOE	
					END OF FIGURE	

PARTS INFORMATION

BULK ITEMS

(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 ITEMS	
					FIG. 99 BULK ITEMS	
1		4020-00-236-1801	81349	MILC43307	CORD, FIBROUS (BRAIDED, ¼-INCH DIAMETER FOR SKI THONG REPAIR)	AR
2	PAFZZ	8310-00-187-3873	58536	A-A-52094	THREAD COTTON, OLIVE DRAB SHADE S-1, C.A. 66022, TYPE 1A3	AR
3	PAFZZ	8310-01-066-0973	58536	A-A-50199A	THREAD, POLYESTER CORE, COTTON-RAYON, OR POLYESTER-COVERED, OLIVE DRAB, C.A. 66022, SIZE 50, 3 PLY	AR
4		8315-00-262-3375	81349	MIL-T-43566	TAPE, TEXTILE, COTTON, OD-7, TYPE I, CLASS 8, 5/8 INCH WIDTH	AR
5	PAOZZ	8315-00-262-2784	81349	MIL-B-371	BRAID, TEXTILE, COTTON, TUBULAR FLAT, GREEN 107, TYPE VLL, CLASS 2	AR
6	PAFZZ	8315-00-253-6286		MIL-T-43566	TAPE, TEXTILE, COTTON, GENERAL PURPOSE SLIDE FASTENER ASSEMBLY, TYPE 1, CLASS 8,2.5 INCH WIDTH	AR
7	PAFZZ	8305-00-260-1750		MIL-W-530,	WEBBING, TEXTILE, COTTON, GENERAL PURPOSE, 1.250 INCH WIDTH, TYPE 2A, CLASS 8	AR
8	PAFZZ	5325-01-133-2296		V- F-106	FASTENER, SLIDE, POLYESTER TYPE, TYPE 3, STYLE 1, SIZE MHS, 69-71 INCHES LENGTH, 1 INCH WIDTH	AR
9		8315-00-641-8328	58536	A-A-55093	BRAID, TUBULAR, NYLON, OG-107, 5/16- INCH WIDTH, GREEN 107	AR

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
10	PAFZZ	8310-00-187-3920	58536	A-A-52094	THREAD, COTTON, OD-S-1, C.A. 66022, TYPE I, SIZE 50,3 PLY	AR
11	PAFZZ	8310-00-187-3873	58536	A-A-52094	THREAD COTTON, OLIVE DRAB SHADE S-1, C.A. 66022, TYPE 1A3	AR
12	PAFZZ	8310-01-066-0973	81349	MIL-T-43548	THREAD, POLYESTER CORE, COTTON-RAYON, OR POLYESTER-COVERED, OLIVE DRAB, C.A. 66022, SIZE 50, 3 PLY	AR
13	PAFZZ	8310-00-988-1297	81349	V-T-285	THREAD, POLYESTER, NATURAL, WHITE, SIZE E, 3 PLY, TYPE 1, SUBCLASS B	AR
14	PAFZZ	8305-00-926-6870	81349	MILC7219	CLOTH, DUCK, NYLON BASIC 7.25 OZ. SQ. YD., 43-INCH WIDTH, ARMY 106 GREEN	AR
15		8310-00-988-1300	81348	V-T-285	THREAD, POLYESTER, OD-S1, SIZE F, 4-PLAY, TYPE 1, SUBCLASS B	AR
16		8310-00-988-1298	81348	V-T-285	THREAD, POLYESTER, OD-S1, SIZE E, 3-PLY, TYPE 1, SUBCLASS B	AR
17		8305-01-025-4920	81349	MIL-C-12369	CLOTH, BALLISTIC, WATER REPELLENT, 48-INCH, 13 ½ TO 18 OUNCES PER SQUARE YARD, NYLON BASIC, CLASS II, ARMY GREEN 106	AR
18		8310-01-115-6865	81349	V-T-295	THREAD, NYLON, TYPE I, CLASS B, SIZE F, BLACK	AR
19	PCOZZ	8040-00-165-8614			ADHESIVE, IIQUID, MMM-A-121	AR
20	PCOFF	8010-01-123-9278			ENAMEL, FOREST GREEN, IR REFLECTIVE	AR

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
21		8010-00-753-4960			ENAMEL, GREEN; MUNSELL CO. COLOR NO. 10Y 3/3, LUSTERLESS FOR BRUSHING OR SPRAYING FED. SPEC. TT-E-527.	AR
22		8010-00-753-4961			ENAMEL, GREEN: MUNSELL CO. COLOR NO. 10Y 3/3, LUSTERLESS FOR BRUSHING OR SPRAYING FED. SPEC. TT-E-527.	AR
23		8010-00-161-7425			PRIMER COATING, FED. SPEC. TT-P-636	AR
24					SAND, SILICA: KILNDRIED, FREE OF SALTS AND DELETERIOUS MATTER, COMMERCIAL SCREEN AVERAGE NO. 70	AR
25		8010-00-111-7837			ENAMEL, GREEN; MUNSELL CO. COLOR #1OY 3/3, LUSTERLESS FOR BRUSHING OR SPRAYING. FED. SPEC. MIL-E-52798	AR
26					POLYARAMID CLOTH, MIL-C-24500, TYPE I, COLOR OG 106	AR
27					NOMEX HOOK, 3/8”, MIL-F-21840, TYPE I –6.5 MIL, (220 DENIER) CLASS 2, NON-MELTING ARAMID, COLOR: GREEN 3421	AR
28					NOMEX LOOP, 3/8”, MIL-F-21840, TYPE I –6.5 MIL, (220 DENIER) CLASS 2, NON-MELTING ARAMID, COLOR: GREEN 3421	AR
29					NOMEX WEBBING, 1”, PATTERN NO. 9650-1, BALLY RIBBON MILLS, TYPE 432, COLOR OG 106	AR
30					NOMEX WEBBING, 3/4”, PATTERN NO. 9650-3/4, BALLY RIBBON MILLS, TYPE 432, COLOR OG 106	AR

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
31					COTTON DUCK CLOTH, DYED CCC-C419, ROO624	AR
32					NOMEX THREAD, 60 TEX, A-A-50195, RO4990	AR

END OF FIGURE

PARTS INFORMATION

NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIG.	ITEM
4020-00- 236-1801	99	1
4020-00- 262-2019	1	14
4020-00- 262-2019	1	17
4020-00- 262-2019	2	5
4020-00- 262-2019	2	7
4020-00- 262-2019	2	12
4020-00- 262-2019	2	14
4020-00- 262-2019	2	17
4020-00- 262-2019	2	19
4020-00- 262-2019	6	11
4020-00- 262-2019	7	14
5305-00- 182-9265	14	17
5310-00- 209-1767	7	15
5310-00- 916-6660	3	9
5325-00- 221-1516	7	16
5325-00- 985-6718	1	3
5325-00- 985-6718	6	4
5325-00- 985-6718	7	17
5340-00- 753-5577	7	18
8010-00- 111-7837	99	25
8010-00- 161-7425	99	23
8010-00- 753-4960	99	21
8010-00- 753-4961	99	22
8040-00- 165-8614	99	19
8305-00- 260-1750	99	7
8305-00- 260-6909	6	13
8305-00- 260-6910	6	10
8305-00- 261-8582	4	21
8305-00- 262-1643	1	4
8305-00- 268-2455	4	22
8305-00- 406-3496	10	22
8305-00- 410-8418	10	21
8305-00- 881-0604	1	5
8305-00- 926-6870	99	14
8310-00- 187-3873	99	2
8310-00- 187-3873	99	11
8310-00- 187-3920	99	10
8310-00- 405-2260	11	5
8310-00- 988-1296	11	6
8310-00- 988-1297	99	13
8310-00- 988-1298	1	6
8310-00- 988-1298	99	16
8310-00- 988-1300	99	15
8315-00- 106-5973	6	7
8315-00- 106-5974	6	6
8315-00- 253-6286	99	6
8315-00- 262-2784	99	5
8315-00- 262-3375	99	4
8315-00- 450-9837	13	3
8315-00- 641-8328	99	9
8315-00- 782-3520	14	15
8315-00- 935-4741	6	2
8315-00- 935-4741	7	23
8335-00- 131-6538	3	13
8335-00- 945-3969	3	15
8415-00- 134-9396	10	3
8415-00- 134-9397	10	4
8415-00- 134-9398	10	5
8415-00- 163-9040	10	6
8415-00- 163-9041	10	7
8415-00- 163-9042	10	9
8415-00- 163-9043	10	10
8415-00- 163-9044	10	12
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8415-00- 163-9046	10	8
8415-00- 163-9048	10	15
8415-00- 163-9052	10	14
8415-00- 268-8353	8	3
8415-00- 268-8354	8	3
8415-00- 448-5663	13	3
8430-00- 655-5541	3	12
8430-00- 823-6902	3	12
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8430-00- 823-7028	3	14
8430-00- 823-7029	3	14
8430-00- 823-7030	3	14
8430-00- 823-7031	3	14

STOCK NUMBER	FIG.	ITEM
8430-00- 823-7032	3	14
8430-00- 823-7033	3	14
8430-00- 823-7035	3	14
8430-00- 823-7036	3	14
8430-00- 823-7037	3	14
8430-00- 823-7038	3	14
8430-00- 823-7039	3	14
8430-00- 823-7040	3	14
8430-00- 823-7041	3	14
8430-00- 823-7042	3	14
8430-00- 823-7043	3	14
8430-00- 823-7044	3	14
8430-00- 823-7045	3	14
8430-00- 823-7046	3	14
8430-00- 823-7047	3	14
8430-00- 823-7048	3	14
8430-00- 823-7049	3	14
8430-00- 823-7050	3	14
8430-00- 823-7051	3	14
8430-00- 823-7052	3	14
8430-00- 823-7053	3	14
8430-00- 823-7054	3	14
8430-00- 823-7055	3	14
8430-00- 823-7056	3	14
8430-00- 823-7057	3	14
8430-00- 823-7058	3	14
8430-00- 823-7059	3	14
8430-00- 823-7060	3	14
8430-00- 823-7060	3	14
8430-00- 823-7061	3	14
8430-00- 823-7062	3	14
8430-00- 823-7063	3	14
8430-00- 823-7064	3	14
8430-00- 823-7065	3	14
8430-00- 823-7066	3	14
8430-00- 823-7067	3	14
8430-00- 823-7068	3	14
8430-00- 823-7069	3	14
8430-00- 823-7070	3	14
8430-00- 823-7073	3	14
8430-00- 823-7074	3	14
8465-00- 001-6471	7	3
8465-00- 001-6474	7	6
8465-00- 001-6476	7	28
8465-00- 001-6477	7	33
8465-00- 001-6478	6	18
8465-00- 001-6478	7	34
8465-00- 001-6480	7	12
8465-00- 001-6481	7	25
8465-00- 001-6482	7	4
8465-00- 165-6838	7	10
8465-00- 240-2953	4	23
8465-00- 240-2963	3	4
8465-00- 240-2971	4	3
8465-00- 240-2972	4	6
8465-00- 240-2973	4	6
8465-00- 240-2974	4	16
8465-00- 240-2975	4	4
8465-00- 261-6909	1	24
8465-00- 269-0481	7	29
8465-00- 269-0482	7	32
8465-00- 518-2769	1	25
8465-00- 530-3692	5	2
8465-00- 558-0151	6	19
8465-00- 753-5962	3	8
8465-00- 753-6142	3	7
8465-00- 753-6145	3	7
8465-00- 860-0256	7	7
8465-00- 927-7485	7	11
8465-00- 930-2077	7	9
8465-00- 935-6814	7	5
8465-00- 935-6825	6	17
8465-00- 965-2174	3	10
8465-00- 965-2175	3	11
9390-00- 710-4355	10	19
9505-00- 288-6400	3	5
3020-01- 312-5112	4	14
4020-01- 317-0127	4	5
4020-01- 317-8183	4	5
4020-01- 318-9712	4	5
4020-01- 318-9713	4	5
4020-01- 320-4113	4	5
5110-01- 313-0197	4	15
5120-01- 312-7588	4	2
5210-01- 434-9493	14	10
5325-01- 069-0578	6	12

STOCK NUMBER	FIG.	ITEM
5325-01- 133-2296	99	8
5340-01- 061-2893	7	37
5340-01- 062-6749	7	19
5340-01- 070-8440	6	8
5340-01- 070-9440	7	20
5340-01- 393-4890	1	8
5340-01- 393-4890	1	10
5340-01- 393-4890	1	13
5340-01- 393-4890	1	16
5340-01- 393-4890	2	6
5340-01- 393-4890	2	13
5340-01- 393-4890	2	16
5340-01- 393-4890	2	20
5340-01- 509-1467	14	16
5365-01- 063-8996	7	24
5465-01- 085-1935	3	1
5930-01- 466-9375	10	50
5930-01- 466-9377	10	47
5965-01- 466-9374	10	30
5965-01- 466-9380	10	46
6510-01- 233-4413	13	2
8010-01- 123-9278	99	20
8305-01- 015-9434	7	21
8305-01- 025-4920	99	17
8305-01- 062-7050	6	5
8305-01- 062-7050	7	22
8305-01- 068-0348	1	7
8305-01- 068-0348	1	11
8305-01- 068-0348	7	36
8310-01- 066-0973	99	3
8310-01- 066-0973	99	12
8310-01- 115-6865	99	18
8315-01- 111-7170	13	3
8315-01- 352-9304	13	4
8315-01- 352-9305	6	9
8335-01- 234-8148	13	6
8415-01- 033-3517	8	2
8415-01- 033-3518	8	2
8415-01- 033-3519	8	2
8415-01- 033-3520	8	2
8415-01- 092-7514	9	13
8415-01- 092-7515	9	13
8415-01- 110-9981	9	14
8415-01- 111-1159	10	20
8415-01- 111-9028	8	4
8415-01- 144-1862	8	1
8415-01- 207-1196	10	11
8415-01- 207-1197	10	2
8415-01- 296-8878	6	1
8415-01- 303-8945	9	13
8415-01- 317-1622	6	16
8415-01- 327-4824	9	13
8415-01- 327-4825	9	13
8415-01- 327-4825	9	13
8415-01- 327-4826	9	13
8415-01- 467-2178	10	34
8415-01- 467-2181	10	34
8415-01- 467-2183	10	34
8415-01- 467-2189	10	33
8415-01- 467-2216	10	32
8415-01- 494-4591	9	13
8415-01- 494-4605	9	13
8415-01- 515-4286	14	3
8415-01- 515-4288	14	3
8415-01- 521-8802	14	19
8415-01- 521-8806	14	2
8415-01- 521-8808	14	2
8415-01- 524-5842	14	20
8415-01- 559-0105	14	2
8430-01- 056-0815	3	12
8430-01- 057-3500	3	12
8465-01- 016-4207	98	1
8465-01- 019-9102	7	13
8465-01- 019-9103	7	26
8465-01- 033-8057	1	19
8465-01- 073-8326	7	27
8465-01- 075-8164	7	30
8465-01- 078-9282	7	31
8465-01- 082-6449	7	8
8465-01- 109-3369	1	22
8465-01- 117-8699	5	1
8465-01- 136-5855	1	23
8465-01- 192-6616	7	35
8465-01- 286-5352	6	3
8465-01- 286-5356	6	14
8465-01- 287-8127	6	15

STOCK NUMBER	FIG.	ITEM
8465-01- 305-4688	1	9
8465-01- 305-6359	1	12
8465-01- 305-6360	1	15
8465-01- 305-6991	1	2
8465-01- 306-2681	1	1
8465-01- 319-4677	4	12
8465-01- 319-4678	4	12
8465-01- 319-4679	4	12
8465-01- 319-4680	4	12
8465-01- 319-4681	4	12
8465-01- 319-4682	4	12
8465-01- 319-4683	4	12
8465-01- 319-4684	4	12
8465-01- 319-4685	4	17
8465-01- 319-4687	4	7
8465-01- 319-4688	4	7
8465-01- 319-4689	4	11
8465-01- 319-4690	4	13
8465-01- 319-5611	4	19
8465-01- 319-5612	4	1
8465-01- 320-0884	4	20
8465-01- 320-0887	4	18
8465-01- 322-1965	7	2
8465-01- 322-1966	7	1
8465-01- 322-7425	4	16
8465-01- 322-7426	4	4
8465-01- 322-7427	4	4
8465-01- 322-7429	4	3
8465-01- 322-7430	4	3
8465-01- 322-7431	4	8
8465-01- 322-7432	4	9
8465-01- 322-7433	4	10
8465-01- 322-7828	4	3
8465-01- 393-6515	2	21
8465-01- 398-0685	2	2
8465-01- 398-0687	2	8
8465-01- 398-5428	2	15
8465-01- 416-8517	2	18
8465-01- 445-6274	2	1
8465-01- 467-2163	10	56
8465-01- 49- 0888	1	18
8465-01- 558-6823	98	2
8465-01- 558-6863	3	19
8465-01- 558-6896	3	20
8465-01- 558-7367	3	18
8465-01- 558-7688	3	21
8465-01- 558-9958	3	16
8470-01- 082-7517	9	2
8470-01- 082-7524	9	12
8470-01- 082-8494	9	11
8470-01- 092-7516	9	2
8470-01- 092-7518	9	2
8470-01- 092-7519	9	2
8470-01- 092-7525	9	1
8470-01- 092-7526	9	1
8470-01- 092-7527	9	1
8470-01- 092-7528	9	1
8470-01- 092-7534	9	5
8470-01- 092-8493	9	9
8470-01- 092-8497	12	1
8470-01- 092-8498	12	1
8470-01- 092-8499	12	1
8470-01- 092-8500	12	1
8470-01- 092-8501	12	1
8470-01- 110-6102	11	1
8470-01- 110-6103	11	1
8470-01- 110-6104	11	1
8470-01- 110-6105	11	1
8470-01- 110-6106	11	1
8470-01- 110-6107	11	1
8470-01- 110-6108	11	1
8470-01- 110-6109	11	1
8470-01- 110-6110	11	2
8470-01- 110-6111	11	3
8470-01- 144-2811	9	7
8470-01- 144-2812	9	8
8470-01- 144-2813	9	3
8470-01- 144-2814	9	10
8470-01- 144-5367	9	6
8470-01- 144-5367	14	18
8470-01- 144-5368	9	4
8470-01- 259-1693	10	16
8470-01- 259-1694	10	17
8470-01- 300-3819	9	1
8470-01- 389-3815	10	23
8470-01- 389-3821	10	23

STOCK NUMBER	FIG.	ITEM
8470-01- 442- 1434	9	9
8470-01- 467- 1550	10	55
8470-01- 467- 1693	10	51
8470-01- 467- 1793	10	25
8470-01- 467- 1811	10	25
8470-01- 467- 1815	10	24
8470-01- 467- 1896	10	24
8470-01- 467- 2162	10	49
8470-01- 467- 2165	10	52
8470-01- 467- 2168	10	48
8470-01- 467- 9372	10	53
8470-01- 467- 9373	10	54
8470-01- 472- 3421	13	1
8470-01- 472- 3426	13	1
8470-01- 472- 3427	13	1
8470-01- 472- 3435	13	1
8470-01- 472- 4255	13	5
8470-01- 472- 4256	13	5
8470-01- 472- 4257	13	5
8470-01- 472- 4258	13	5
8470-01- 472- 4259	13	5
8470-01- 472- 4262	13	5
8470-01- 472- 4263	13	5
8470-01- 472- 4264	13	5

STOCK NUMBER	FIG.	ITEM
8470-01- 506- 6353	14	1
8470-01- 506- 6356	14	1
8470-01- 506- 6473	14	21
8470-01- 506- 6742	14	9
8470-01- 529- 6302	14	1
8470-01- 529- 6329	14	1
8470-01- 529- 6344	14	1
8470-01- 529- 6365	14	1
8470-01- 529- 6502	9	1
8470-01- 529- 6530	9	1
8470-01- 529- 6532	9	1
8470-01- 529- 6539	9	1
8470-01- 529- 6541	9	1
8470-01- 531- 3351	14	4
8470-01- 531- 3897	14	11
8470-01- 531- 4268	14	13
8470-01- 531- 4284	14	14
8470-01- 533- 1011	14	12
8470-01- 546- 9356	14	7
8470-01- 546- 9407	14	8
8470-01- 546- 9415	14	6
8470-01- 546- 9420	14	5
8470-01- 558- 8622	14	1

PARTS INFORMATION

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A-A-50041	4	9
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A-A-50096	4	2
A-A-50097	4	14
A-A-50098	4	7
A-A-50106	4	12
A-A-50111	4	3
A-A-50112	4	4
A-A-50113	4	16
A-A-50114	4	6
A-A-50115	4	8
A-A-50116	4	15
A-A-50117	4	18
A-A-50118	4	20
A-A-50119	4	17
A-A-50120	4	1
A-A-50121	4	19
A-A-50125	4	13
A-A-50127	4	11
A-A-50139	4	5
A-A-50199A	99	3
A-A-52094	99	2
A-A-52094	99	10
A-A-52094	99	11
A-A-55074	2	21
A-A-55093	99	9
A-A-55262	2	1
A-A-55262	2	2
A-A-55262	2	8
A-A-55262	2	15
ASTM A853	3	5
CS-4710-SV-0719	4	3
CY00-003	13	5
CY00-004	13	1
D3525	7	37
MIL-B-2378	5	2
MIL-B-3108	1	24
MIL-B-371	99	5
MIL-B-41816H	3	14
MIL-B-43826	7	1
MIL-B-43826	7	2
MIL-B-44053	12	1
MIL-B-44194	11	1
MIL-B-44194	11	2
MIL-B-44194	11	3
MIL-B-44306	1	15
MIL-B-44374	3	11
MIL-B-543	6	8
MIL-B-543	7	19
MIL-B-543	7	20
MIL-B-829	5	1
MIL-C-12369	99	17
MIL-C-1476	4	23
MIL-C-1780	3	10
MIL-C-28981	7	4
MIL-C-43103	7	8
MILC43307	99	1
MIL-C-43683	7	6
MILC43689	7	11
MIL-C-43701	1	7
MIL-C-43701	1	11
MIL-C-43701	7	36
MILC43745	7	5
MIL-C-43761	7	10
MIL-C-43830	6	18
MIL-C-43830	7	34
MIL-C-43830	7	35
MIL-C-44001	8	4
MIL-C-44307	1	9
MIL-C-5040	1	14
MIL-C-5040	1	17
MIL-C-5040	2	5
MIL-C-5040	2	7
MIL-C-5040	2	12
MIL-C-5040	2	14
MIL-C-5040	2	17
MIL-C-5040	2	19
MIL-C-5040	6	11
MIL-C-5040	7	14
MIL-C-51278	7	9
MILC7219	99	14
MIL-C-73742	7	7
MIL-DTL-3866	8	3
MIL-DTL-43685C	10	22

PART NUMBER	FIG.	ITEM
MIL-E-20652	6	12
MILF10884	1	3
MILF10884	7	17
MIL-F-10884	6	4
MIL-F-21840	6	6
MIL-F-21840	6	7
MIL-F-21840	13	3
MIL-F-43832	6	14
MIL-F-43832	7	25
MIL-F-43832	7	26
MIL-F-43833	7	12
MIL-F-43833	7	13
MIL-F-43834	7	27
MIL-F-43834	7	28
MIL-F-43997	6	17
MIL-F-44324	6	15
MIL-G-43976	8	1
MIL-G-43976	8	2
MIL-H-43879	1	25
MIL-H-44098	9	14
MIL-H-44099	9	1
MIL-H-44117	10	2
MIL-H-44117	10	16
MIL-H-44117	10	17
MIL-H-44117	10	23
MIL-H-4417	10	11
MIL-H-44265	10	20
MIL-H-44308	1	12
MIL-H-9890	7	18
MIL-M-43968	1	23
MIL-M-44104	1	22
MIL-P-41806	3	7
MIL-P-41806	3	8
MIL-P-44081	9	11
MIL-R-3390	7	24
MILR43207	3	4
MIL-S-43828	7	33
MIL-S-43829	7	3
MIL-S-43835	7	29
MIL-S-43835	7	30
MIL-S-43835	7	31
MIL-S-43835	7	32
MIL-S-43880	1	2
MIL-S-43880	1	19
MIL-S-44016	1	18
MIL-S-44022	9	12

PART NUMBER	FIG.	ITEM
MIL-S-44361	1	1
MILSTD2073	7	15
MIL-T-43548	99	12
MIL-T-43566	99	4
MIL-T-43566	99	6
MILT5038	7	23
MIL-T-5038	6	2
MIL-T-5038	6	9
MIL-T-5038	13	4
MILW17337	1	5
MILW4088	1	4
MIL-W-4088	6	10
MIL-W-4088	6	13
MIL-W-4088	7	21
MIL-W-43668	6	5
MIL-W-43668	7	22
MIL-W-530,	99	7
MILW5625	4	21
MILW5625	4	22
PD-95-04	2	18
SR-1	6	3
TRUCKER MODEL	3	1
V- F-106	99	8
V-L-61	3	13
V-L-61	3	15
V-L-61	13	6
V-T-285	1	6
V-T-285	99	13
V-T-285	99	15
V-T-285	99	16
V-T-295	99	18
10515443	10	19
1182A	13	2
2.1.1384-7	9	10
2-1-1400	9	5
2-1-1981	6	1
2-1-2143	6	16
2-3-81	6	19
302-0000-5614	1	8
302-0000-5614	1	10
302-0000-5614	1	13
302-0000-5614	1	16
302-0000-5614	2	6
302-0000-5614	2	13
302-0000-5614	2	16
302-0000-5614	2	20

PART NUMBER	FIG.	ITEM
335201	3	16
369055	3	18
469029	3	20
469030	3	19
469731	3	21
69071	98	2
8063-37-01-0531	3	9
8-2-602	10	3
8-2-602	10	4
8-2-602	10	5
8-2-603	10	14
8-2-611	10	15

PART NUMBER	FIG.	ITEM
8-2-617	10	6
8-2-617	10	7
8-2-617	10	8
8-2-617	10	9
8-2-617	10	10
8-2-617	10	12
8-2-617	10	13
8-2-644-1	9	2
8-2-644-6	9	3
8-2-647	9	6
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CHAPTER 5

SUPPORTING INFORMATION FOR GENERAL REPAIR PROCEDURES FOR INDIVIDUAL EQUIPMENT

SUPPORTING INFORMATION

REFERENCES

SCOPE

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

ARMY REGULATIONS

AR 700-15	Packaging of Materiel
AR 735-11-2	Reporting of Supply Discrepancies
AR 750-1	Army Material Maintenance Policy

DA PAMPHLETS

DA PAM 25-30	Consolidated Index of Army Publications and Blank Forms
DA PAM 738-751	Functional Users Manual for The Army Maintenance Management System-Aviation (TAMMS-A)
DA PAM 750-8	The Army Maintenance Management System (TAMMS) Users Manual

FIELD MANUALS

FM 4-25.11 (FM 21-11)	First Aid for Soldiers

FORMS

DA Form 2404	Equipment Inspection & Maintenance Worksheet
SF 361	Transportation Discrepancy Report
SF 364	Report of Discrepancy (ROD)
SF 368	Product Quality Deficiency Report (PQDR)

TECHNICAL BULLETINS

TB 43-0002-27	Maintenance Expenditure Limits for FSC Group 84 (FSC Class 8400)

TECHNICAL MANUALS

TM 4700-15/1	Equipment Maintenance Forms and Procedures
TM 10-8470-203-10	Operator Manual for Advanced Combat Helmet

END OF WORK PACKAGE

SUPPORTING INFORMATION

MAINTENANCE ALLOCATION CHART (MAC)

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.

The MAC (immediately following the introduction) designates overall authority and responsibility for the performance of maintenance functions on the identified end item or component. The application of the maintenance functions to the end item or component shall be consistent with the capacities and capabilities of the designated maintenance levels, which are shown on the MAC in column (4) as:

Field – includes two 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 gagings and evaluation of cannon tubes.

2. Test. To verify serviceability by measuring the mechanical, pneumatic, hydraulic, or electrical characteristics of an item and comparing those characteristics with prescribed standards on a scheduled basis, i.e., load testing of lift devices and hydrostatic testing of pressure hoses.

3. Service. Operations required periodically to keep an item in proper operating condition, e.g., to clean (includes decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases. This includes scheduled exercising and purging of recoil mechanisms. The following are examples of service functions:

    a. Unpack. To remove 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.

INTRODUCTION – CONTINUED

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

Field:

C Crew maintenance
F Maintainer maintenance

Sustainment:

L Specialized Repair Activity (SRA)
H Below Depot Maintenance
D Depot maintenance

INTRODUCTION – CONTINUED

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 alphabetic 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 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.

END OF WORK PACKAGE

SUPPORTING INFORMATION

INDIVIDUAL EQUIPMENT
MAINTENANCE ALLOCATION CHART (MAC)

Table 1. MAC for Individual Equipment.

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL				(5) TOOLS AND EQUIPMENT REF CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT			
			CREW	MAINTAINER	BELOW DEPOT	DEPOT		
			C	F	H	D		
01	LEGACY SLEEP SYSTEMS	Service		1.0				A, B
		Inspect		1.0				
		Repair		1.0				
02	MODULAR SLEEP SYSTEM	Service		1.0				A, B
		Inspect		1.0				
		Repair		1.0				
03	ARCTIC GEAR	Service		1.0				A, B
		Inspect		1.0				
		Repair		1.0				
		Test		0.5				
04	MOUNTAINEERING GEAR	Service		1.0				A, B
		Inspect		1.0				
05	GENERAL BAGS	Service		1.0				A, B
		Inspect		1.0				
		Repair		1.0				
06	LOAD BEARING EQUIPMENT	Service		1.0				A, B
		Inspect		1.0				
		Repair		1.0				
07	ALICE GEAR	Service		1.0				A, B
		Inspect		1.0				
		Repair		1.0				
08	CHEMICAL PROTECIVE GEAR	Service		1.0				A, B
		Inspect		1.0				
09	PASGT HELMET	Service		1.0				A, B
		Inspect		1.0				
		Repair		1.0				

Table 1. MAC for Individual Equipment. – Continued

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL				(5) TOOLS AND EQUIPMENT REF CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT			
			CREW	MAINTAINER	BELOW DEPOT	DEPOT		
			C	F	H	D		
10	CVC HELMET	Service		1.0				A, B
		Inspect		1.0				
		Repair		1.0				
11	CVC BODY ARMOR	Service		1.0				A, B
		Inspect		1.0				
		Repair		1.0				
12	LEGACY BODY ARMOR	Service		1.0				A, B
		Inspect		1.0				
		Repair		1.0				
13	BASIC	Service		1.0				A, B
		Inspect		1.0				
		Repair		1.0				
14	ACH	Service		1.0				A, B
		Inspect		1.0				
		Repair		1.0				

Table 2. Tools and Test Equipment for Individual Equipment.

(1) Tools or Test Equipment	(2) Maintenance Level	(3) Nomenclature	(4) National Stock Number	(5) Tool Number
1	F, H	DIE TOOL, FASTENER	5120-00-090-4412	1401
2	F, H	DIE, EYELET	5120-00-144-2097	1442097
3	F, H	FILE, HAND, FLAT	5110-00-249-2848	A-A-2311
4	F, H	GIMLET	5110-00-725-1095	
5	F, H	GUN, GLUE	LOCAL PURCHASE	
6	F, H	HEATED BLADE CUTTER	LOCAL PURCHASE	
7	F, H	HOLDER, DIE	5120-00-357-6181	00-357-6181
8	F, H	HOLDER, DIE FASTENER	5120-00-357-6177	192
9	F, H	KNIFE, HOT METAL	LOCAL PURCHASE	
10	F, H	PLIERS, DIAGONAL CUTTING	5110-00-222-2708	220-7NS
11	F, H	PLIERS, LINEMAN'S	5120-00-756-1156	B107.20M
12	F, H	PLIERS, NEEDLE NOSE	5120-01-021-7473	B107.13M
13	F, H	PLIERS, SLIP JOINT	5120-00-223-7396	
14	F, H	PRESS, GROMMET AND EYELET, HAND OPERATED	5120-00-880-0619	M370
15	F, H	PUNCH AND DIE, GROMMET INSERTING, NO 00	5210-00-357-5753	216-00
16	F, H	PUNCH AND DIE, GROMMET INSERTING, SIZE 0	5120-00-221-1146	217-0
17	F, H	PUNCH, CUTTING, DOUBLE BOW	5110-00-180-0924	149-5/8
18	F, H	PUSH DRILL	5110-00-293-3410	
19	F, H	RULER, TAB, METAL, 16 INCHES	7510-00-173-4897	(93287)
20	F, H	SCALE (FOR BASIC WEIGHT TEST)	LOCAL PURCHASE	
21	F, H	SCALE, WEIGHING, 0-10 LB.	6670-00-240-5821	A-A-50062
22	F, H	SCISSORS, 8-INCH	LOCAL PURCHASE	
23	F, H	SCREWDRIVER, FLAT TIP	5120-00-596-8502	
24	F, H	SCREWDRIVER, FLAT-TIP, 1/4-INCH	5120-00-596-8653	B107.15
25	F, H	SEWING MACHINE, BARTACK, INDUSTRIAL	LOCAL PURCHASE	RECOMMENDED JUKI L-K-1900 A-HS (8N184)
26	F, H	SEWING MACHINE, BOX X	LOCAL PURCHASE	RECOMMENDED JUKI LK-1900A-HS (8N184)

Table 2. Tools and Test Equipment for Individual Equipment. – Continued

(1) Tools or Test Equipment	(2) Maintenance Level	(3) Nomenclature	(4) National Stock Number	(5) Tool Number
27	F, H	SEWING MACHINE, DARNING	3530-01-177-8589	207
28	F, H	SEWING MACHINE, DOUBLE BOX X	LOCAL PURCHASE	RECOMMENDED JUKI LR-1900-HS (8N184)
29	F, H	SEWING MACHINE, DOUBLE NEEDLE	3530-00-892-4636	333RBP-6
30	F, H	SEWING MACHINE, HEAVY DUTY	3530-01-177-8588	733R-5
31	F, H	SEWING MACHINE, HEAVY DUTY, ZIG-ZAG	3530-01-181-1421	146RB-2A
32	F, H	SEWING MACHINE, LIGHT DUTY	3530-01-177-8590	7360R
33	F, H	SEWING MACHINE, LIGHT-HEAVY DUTY	3530-01-186-3079	SK6F-1
34	F, H	SEWING MACHINE, MEDIUM DUTY	3530-01-177-8591	255RB-3
35	F, H	SEWING MACHINE, ZIG-ZAG	LOCAL PURCHASE	199R-2A (90338)
36	F, H	SHEARS, TAILORS, 12 INCH	5110-00-223-6370	PD5110-00-223-6370
37	F, H	STENCIL CUTTING MACHINE, HAND OPERATED	7490-00-164-0537	A-A-2722
38	F, H	STITCH REMOVAL TOOL	LOCAL PURCHASE	
39	F, H	TAPE, MEASURING	5210-00-182-4797	W9312
40	F, H	TEST SET, INSULATED, BOOT	6685-00-868-8326	ANGSM83/80058
41	F, H	TESTER, LEAK, INSULATED BOOT	3520-00-752-8472	MILT43187/81349
42	F, H	WRENCH, TORQUE, 0-300-INCH POUNDS	5120-00-776-1841	B107.14M
43	F, H	YARDSTICK, 36 INCHES	5120-00-985-6610	(7L527)

Table 3. Remarks for Individual Equipment.

(1) REMARK CODES	(2) REMARKS
A	Service is cleaning of equipment.
B	Refer to individual work package for tools requirements.

END OF WORK PACKAGE

SUPPORTING INFORMATION

EXPENDABLE AND DURABLE ITEMS LIST

INTRODUCTION

Scope

This work package lists expendable and durable items that you will need to operate and maintain the Individual Equipment. This list is for information only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, Expendable/Durable Items (Except Medical Class V Repair Parts, and Heraldic Items), or CTA 8-100, Army Medical Department Expendable/Durable Items.

Explanation of Columns in Expendable/Durable Items List

Column (1) Item Number. This number is assigned to the entry in the list and is referenced in the narrative instructions to identify the item (e.g., “Use brake fluid (Item 5, WP 0098 00)”).

Column (2) Level. This column includes the lowest level of maintenance that requires the listed item. (F= Maintainer or ASB, 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, Commercial and Government Entity Code (CAGEC), and Part Number (P/N). This column provides the other information you need to identify the item.

Column (5) Unit of Issue (U/I). Indicates the physical measurement or count of an item as issued per the National Stock Number shown in column (3).

Table 1. Expendable and Durable Items List.

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) ITEM NAME, DESCRIPTION, (CAGEC), PART NUMBER	(5) U/I
1	F, H		LEATHER DRESSING, MILDEW-PREVENTIVE PARANITROPHENOL, LIQUID FORM, FED-O-L-1 64A, AMEND 1,1 PT CAN, TYPE 1	PT
2	F, H	7930-00-170-5467	SOAP, SADDLE, PASTE FORM 1 LB CAN FED P-S 609	PT
3	F, H		ADHESIVE, ROOM TEMPERATURE AND INTERMEDIATE TEMPERATURE SETTING RESIN (PHENOL RESORANOL AND MELAMINE BASE) MIL-397B	AR
4	F, H	8010-00-160-5799	REMOVER, PAINT AND VARNISH; ORGANIC SOLVENT NON-FLAMMABLE, LIQUID 1 QT CAN, TYPE III, CLASS A SPEC. TT-R-251	LB
5	F, H	8010-00-160-5851	VARNISH, OLEORESINOUS BASE; 100%, KAURI REDUCTION; 8 HR MAX., AIR DRY HAD TIME C TO H GARDNER-HOLDT UNITS VISCOSITY; 1 QT CAN, FED TT-V-121	QT
6	F, H		WAX, SKI, MIL-W-1510, 2 OZ. TUBE	
7	F, H	9160-00-903-3999	BLUE-DRY SNOW	TUBE

Table 1. Expendable and Durable Items List – Continued.

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) ITEM NAME, DESCRIPTION, (CAGEC), PART NUMBER	(5) U/I
8	F, H	9160-00-903-8339	ORANGE-WET AND CORN SNOW	TUBE
9	F, H	9160-00-261-7462	RED-SPEED	
10	F, H	5350-00-192-5049	EMERY CLOTH, 120 GRIT	PK
11	F, H	9150-00-999-7548	LUBRICANT, INTERLOCKING SLIDE FASTENER, ZIPPEREASE STICK FORM, (96980), ZE-2GOV	BX
12	F, H	8305-01-003-5435	CLOTH, COATED, COTTON, NYLON OXFORD, 6.5 OZ, QUARPEL TREATED, TYPE IL, (81349), MIL-C-43677	YD
13	F, H	3305-00-460-4200	CLOTH, COATED, BALLOON, COTTON, FOR HEAT SEAL PATCHING.TYPE I. (81349), MILC43677	YD
14	F, H	8305-01-115-9168	CLOTH, PARACHUTE, NYLON 1.1 OZ./YD., 36 INCH WIDTH, (81349), MIL-C-7020	YD
15	F, H	8315-00-262-2784	BRAID, TEXTILE, COTTON, TUBULAR, FLAT, OG-107, WATER REPELLENT, 0.344 INCHES WIDE, TYPE VLL, CLASS 2, (81349), MIL-B-371	YD
16	F, H	8305-00-222-2423	CLOTH, CHEESECLOTH, TYPE 1, CLASS I, (CAGEC 81348), P/NCCC-C-40	
17	F, H	7930-00-252-6797	DETERGENT, LAUNDRY, POWDER 50 LB, TYPE II, OF P-D-245	
18	F, H	7930-00-234-6237	DETERGENT, DRY CLEANING SOLVENT OF A-A-50293	
19	F, H	7930-00-282-9699	DETERGENTS, GENERAL PURPOSE, TYPE I OF MIL-D-16791	
20	F, H	7930-00-531-9715	DETERGENTS, GENERAL PURPOSE, TYPE II OF MLL-D-16791	
21	F, H	8040-00-062-4173	ADHESIVE (CAGEC 92755), P/N 10C1693	
22	F, H	8030-00-174-3201	LEATHER DRESSING, MILDREW-PREVENTIVE PARANITROPHENOL, LIQUID FORM, (CAGEC 81348), P/N O-L-164	
23	F, H	7930-00-170-5467	SOAP, SADDLE (CAGEC 80244), P/N 220-16	
24	F, H	9160-00-903-3999	BLUE-DRY SNOW	
25	F, H	9160-00-903-8339	ORANGE-WET AND CORN SNOW	
26	F, H	9160-00-261-7468	RED SPEED	

Table 1. Expendable and Durable Items List – Continued.

(1) ITEM NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER	(4) ITEM NAME, DESCRIPTION, (CAGEC), PART NUMBER	(5) U/I
27	F, H		SELF-VULCANIZING FLUID, SCHRAEDER NO. 338 (LOCAL PURCHASE: SCHRAEDER AUTOMOTIVE PRODUCTS, DICKSON, TN 37055)	
28	F, H	9160-00-253-1171	BEESWAX, TECHNICAL, (CAGEC 81348), P/N C-B-191	
29	F, H	9160-00-285-2044	WAX, PARAFFIN, TECHNICAL (CAGEC 81348), P/N VVW95	
30	F, H	7520-00-973-1059	MARKER, FELT TIP, BLACK (CAGEC 81348), P/N GG-M-00114	
31	F, H	8030-01-104-5392	THREAD LOCKING COMPOUND	BX
32	F, H	8010-01-492-6637	POLYURETHANE COATING, MIL-DTL-64159, TYPE I, COLOR 34094 OF FED-STD-595 (3 PINT KIT)	KT
33	F, H	8010-01-493-3168	POLYURETHANE COATING, MIL-DTL-64159, TYPE II, COLOR 34094 OF FED-STD-595 (3 PINT KIT)	KT
34	F, H	8030-01-565-1437	PUTTY	TB
35	F, H	5350-00-115-3297	GRAIN, ABRASIVE, MIL-G-5634, TYPE 6	BG
36	F, H	8040-01-388-0735	ADHESIVE (FOR EDGING)	BT
37	F, H	6850-01-228-7266	CLEANING COMPOUND, SOLVENT	BT
38	F, H	6810-01-075-5546	ISOPROPYL ALCOHOL	BT
39	F, H	8010-01-055-2319	POLYURETHANE COATING, MIL-C-46185 TYPE II, COLOR O.D. 34088 OF FED STD 595 (1 1/4 GAL KIT)	KT
40	F, H	8010-01-144-9875	POLYURETHANE COATING, MIL-C-46168, COLOR D.D. 34087 OF FED STD 595(4 GL COMPONENT A, 1 GL COMPONENT B).	KT
41	F, H		WALNUT SHELL FLOUR, 40/1 00 MESH.	LB
42	F, H	8040-00-165-8614	ADHESIVE, EC 1357, (52152)	QT
43	F, H	8040-00-162-9704	ADHESIVE, PASTE, 2 OZ., PN: DEVCON 2 TON (CLEAR EPOXY), CAGEC 16059	KT

SUPPORTING INFORMATION

TOOL IDENTIFICATION LIST

INTRODUCTION

Scope

This work package lists all common tools and supplements and special tools/fixtures needed to maintain OCIE equipment.

Explanation of Columns in the Tool Identification List

Column (1) Item Number. This number is assigned to the entry in the list and is referenced in the initial setup to identify the item (e.g., Gun, Glue (WP 0046, Item 5)).

Column (2) Item Name. This column lists the item by noun nomenclature and other descriptive features (e.g., Gauge, belt tension).

Column (3) National Stock Number. This is the National Stock Number (NSN) assigned to the item; use it to requisition the item.

Column (4) Part Number/CAGEC. Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity) which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items. The manufacturer's Commercial and Government Entity Code (CAGEC) is also included.

Column (5) Reference. This column identifies the authorizing supply catalog or RPSTL for items listed in this work package.

Table 1. Tool Identification List.

(1) ITEM NO.	(2) ITEM NAME	(3) NATIONAL STOCK NUMBER (NSN)	(4) PART NUMBER/ CAGEC	(5) REFERENCE
1	DIE TOOL, FASTENER	5120-00-090-4412	1401	TM 10-8400-203-23&P
2	DIE, EYELET	5120-00-144-2097	1442097	TM 10-8400-203-23&P
3	FILE, HAND, FLAT	5110-00-249-2848	A-A-2311	TM 10-8400-203-23&P
4	GIMLET	5110-00-725-1095		TM 10-8400-203-23&P
5	GUN, GLUE	LOCAL PURCHASE		TM 10-8400-203-23&P
6	HEATED BLADE CUTTER	LOCAL PURCHASE		TM 10-8400-203-23&P
7	HOLDER, DIE	5120-00-357-6181	00-357-6181	TM 10-8400-203-23&P
8	HOLDER, DIE FASTENER	5120-00-357-6177	192	TM 10-8400-203-23&P
9	KNIFE, HOT METAL	LOCAL PURCHASE		TM 10-8400-203-23&P
10	PLIERS, DIAGONAL CUTTING	5110-00-222-2708	220-7NS	TM 10-8400-203-23&P
11	PLIERS, LINEMAN'S	5120-00-756-1156	B107.20M	TM 10-8400-203-23&P
12	PLIERS, NEEDLE NOSE	5120-01-021-7473	B107.13M	TM 10-8400-203-23&P

Table 1. Tool Identification List. – Continued

13	PLIERS, SLIP JOINT	5120-00-223-7396		TM 10-8400-203-23&P
14	PRESS, GROMMET AND EYELET, HAND OPERATED	5120-00-880-0619	M370	TM 10-8400-203-23&P
15	PUNCH AND DIE, GROMMET INSERTING, NO 00	5210-00-357-5753	216-00	TM 10-8400-203-23&P
16	PUNCH AND DIE, GROMMET INSERTING, SIZE 0	5120-00-221-1146	217-0	TM 10-8400-203-23&P
17	PUNCH, CUTTING, DOUBLE BOW	5110-00-180-0924	149-5/8	TM 10-8400-203-23&P
18	PUSH DRILL	5110-00-293-3410		TM 10-8400-203-23&P
19	RULER, TAB, METAL, 16 INCHES	7510-00-173-4897	(93287)	TM 10-8400-203-23&P
20	SCALE (FOR BASIC WEIGHT TEST)	LOCAL PURCHASE		TM 10-8400-203-23&P
21	SCALE, WEIGHING, 0-10 LB.	6670-00-240-5821	A-A-50062	TM 10-8400-203-23&P
22	SCISSORS, 8-INCH	LOCAL PURCHASE		TM 10-8400-203-23&P
23	SCREWDRIVER, FLAT TIP	5120-00-596-8502		TM 10-8400-203-23&P
24	SCREWDRIVER, FLAT-TIP, 1/4-INCH	5120-00-596-8653	B107.15	TM 10-8400-203-23&P
25	SEWING MACHINE, BAR TACK, INDUSTRIAL	LOCAL PURCHASE	RECOMMENDED JUKI L-K-1900 A-HS (8N184)	TM 10-8400-203-23&P
26	SEWING MACHINE, BOX X	LOCAL PURCHASE	RECOMMENDED JUKI LK-1900A-HS (8N184)	TM 10-8400-203-23&P
27	SEWING MACHINE, DARNING	3530-01-177-8589	207	TM 10-8400-203-23&P
28	SEWING MACHINE, DOUBLE BOX X	LOCAL PURCHASE	RECOMMENDED JUKI LR-1900-HS (8N184)	TM 10-8400-203-23&P
29	SEWING MACHINE, DOUBLE NEEDLE	3530-00-892-4636	333RBP-6	TM 10-8400-203-23&P
30	SEWING MACHINE, HEAVY DUTY	3530-01-177-8588	733R-5	TM 10-8400-203-23&P
31	SEWING MACHINE, HEAVY DUTY, ZIG-ZAG	3530-01-181-1421	146RB-2A	TM 10-8400-203-23&P
32	SEWING MACHINE, LIGHT DUTY	3530-01-177-8590	7360R	TM 10-8400-203-23&P

Table 1. Tool Identification List. – Continued

33	SEWING MACHINE, LIGHT-HEAVY DUTY	3530-01-186-3079	SK6F-1	TM 10-8400-203-23&P
34	SEWING MACHINE, MEDIUM DUTY	3530-01-177-8591	255RB-3	TM 10-8400-203-23&P
35	SEWING MACHINE, ZIG-ZAG	LOCAL PURCHASE	199R-2A (90338)	TM 10-8400-203-23&P
36	SHEARS, TAILORS, 12 INCH	5110-00-223-6370	PD5110-00-223-6370	TM 10-8400-203-23&P
37	STENCIL CUTTING MACHINE, HAND OPERATED	7490-00-164-0537	A-A-2722	TM 10-8400-203-23&P
38	STITCH REMOVAL TOOL	LOCAL PURCHASE		TM 10-8400-203-23&P
39	TAPE, MEASURING	5210-00-182-4797	W9312	TM 10-8400-203-23&P
40	TEST SET, INSULATED, BOOT	6685-00-868-8326	ANGSM83/80058	TM 10-8400-203-23&P
41	TESTER, LEAK, INSULATED BOOT	3520-00-752-8472	MILT43187/81349	TM 10-8400-203-23&P
42	WRENCH, TORQUE, 0-300-INCH POUNDS	5120-00-776-1841	B107.14M	TM 10-8400-203-23&P
43	YARDSTICK, 36 INCHES	5120-00-985-6610	(7L527)	TM 10-8400-203-23&P

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-LC-SECT
15 KANSAS ST
NATICK, MA 01760-5052

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 10-1670-296-23&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-LC-SECT 15 KANSAS ST NATICK, MA 01760-5052	*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 10-1670-296-23&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 10-8400-203-23&P	24 MAY 2010	Field Maintenance Manual Including Repair Parts and Special Tools List for General Repair Procedures for Individual Equipment

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.*

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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

PUBLICATION NUMBER	DATE	TITLE
TM 10-8400-203-23&P	24 MAY 2010	Field Maintenance Manual Including Repair Parts and Special Tools List for General Repair Procedures for Individual Equipment

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RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS

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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
1013303

DISTRIBUTION:

To be distributed in accordance with initial distribution number (IDN) 253995 requirements for TM 10-8400-203-23&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

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