TM 10-8400-205-23&P

TECHNICAL MANUAL

FIELD MAINTENANCE MANUAL
INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST
FOR

GENERAL REPAIR PROCEDURES FOR PROTECTIVE EQUIPMENT

HEADQUARTERS, DEPARTMENT OF THE ARMY

15 OCTOBER 2013

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

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

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.

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

EXPLANATION OF SAFETY WARNING ICONS – CONTINUED

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

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: Zero in the “Change No.” column indicates an original page or work package.

Original: 15 October 2013

TOTAL NUMBER OF PAGES FOR FRONT AND REAR MATTER IS 26 AND TOTAL NUMBER OF WORK PACKAGES IS 31, CONSISTING OF THE FOLLOWING:

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HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 15 OCTOBER 2013

TECHNICAL MANUAL

FIELD MAINTENANCE MANUAL INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST FOR

GENERAL REPAIR PROCEDURES FOR PROTECTIVE 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 TACOM Unique Logistics Support Applications (TULSA) Web site. The Internet address is https://tulsa.tacom.army.mil. Access to all applications requires CAC authentication, and you must complete the Access Request form the first time you use it. The DA Form 2028 is located under the TULSA Applications on the left-hand navigation bar. Fill out the form and click on SUBMIT. Using this form on the TULSA Web site will enable us to respond more quickly to your comments and to 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, MS 727, 6501 E. 11 Mile Road, Warren, MI 48397-5000. The e-mail address is tacomlcmc.daform2028@us.army.mil. The fax number is DSN 786-1856 or Commercial (586) 282-1856. A reply will be furnished to you.

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Chapter 5 – Supporting Information

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 provides field maintenance instructions for repairing individual protective equipment and a Repair Parts and Special Tools List (RPSTL).

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

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

CHAPTER 2 – PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS). Chapter 2 provides PMCS procedures for protective 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, expendable and durable items list, and tool identification 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 five major chapters that detail the topics mentioned above. Within each chapter are work packages covering a wide range of topics. Each work package is numbered sequentially starting at page 1. The work package has its own page numbering scheme and is independent of the page numbering used by other work packages. Each page of a work package has a page number of the 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 Field Maintenance, the table of contents indicates that information on maintenance can be found in Chapter 3. Scanning down the listings for Chapter 3, information on how to repair the ACH can be found in WP 0010, Advanced Combat Helmet Inspect, Service, Repair.

CHAPTER 1

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

INDIVIDUAL PROTECTIVE EQUIPMENT
GENERAL INFORMATION

SCOPE

Type of Manual

This technical manual provides field maintenance instructions for repairing individual protective equipment issued to U.S. Army personnel. This manual also provides a Repair Parts and Special Tools List (RPSTL), located in WP 0017 through WP 0024.

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 System - 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 follow the instructions and links below:

For ALL non-Aviation/Missile Warranty, EIR and PQDRs, submit through the Web Product Quality Deficiency Reporting (PQDR) site. The Web PQDR Web site is:
https://www.pdrep.csd.disa.mil/pdrep_files/report_tools/pqdr.htm

New accounts can be established at the following address:
https://www.pdrep.csd.disa.mil/pdrep_files/accessforms/useraccess.htm

You may also submit your information using an SF 368 (Product Quality Deficiency Report). You can send your SF 368 using e-mail, regular mail, or fax using the addresses/fax numbers specified in (DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual OR DA PAM 738-75. 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 (IAW) TM 750-244-3.

PREPARATION FOR STORAGE OR SHIPMENT

For storage and shipment of protective equipment see WP 0015.

For storage and shipment of hard armor, refer to TM 10-8470-208-24&P.

LIST OF ABBREVIATIONS AND ACRONYMS

Table 1. List of Abbreviations/Acronyms.

ABBREVIATION / ACRONYM	DEFINITION
ACH	Advanced Combat Helmet
ACU	Army Combat Uniform
APD	Army Publishing Directorate
ASB	Aviation Support Battalion
BASIC	Body Armor Set, Individual Countermine
BDU	Battle Dress Uniform
BII	Basic Issue Item
BOI	Basis of Issue
BPFS	Blast Protective Footwear System
BTU	British Thermal Unit
°C	Degrees Celsius
CAGEC	Commercial and Government Entity Code
CBRN	Chemical, Biological, Radiological, and Nuclear
CIF	Central Issue Facility
COEI	Component of End Item
CPC	Corrosion Prevention and Control
CTA	Common Table of Allowances
CVC	Combat Vehicle Crewman's
CWK	Cold Weather Kit
DA	Department of the Army
DoD	Department of Defense
DRMO	Defense Reutilization and Marketing Office
ea	Each
EIR	Equipment Improvement Recommendation
EMG	Electromagnetic Pulse
ESAPI	Enhanced Small Arms Protective Inserts
ESBI	Enhanced Side Ballistic Inserts
°F	Degrees Fahrenheit
FGC	Functional Group Code
Fig.	Figure
FM	Field Manual

Table 1. List of Abbreviations/Acronyms – Continued.

ABBREVIATION / ACRONYM	DEFINITION
ft	Foot
ft-lb	Foot/pound(s)
G	Gram
HCI	Hardness Critical Item
IAW	In Accordance With
IBA	Interceptor Body Armor
IOTV	Improved Outer Tactical Vest
K	Thousand
kg	Kilogram(s)
KW	Kilowatt(s)
l	Liter(s)
lb	Pound(s)
m, M	Meter(s)
MAC	Maintenance Allocation Chart
MOLLE	Modular Lightweight Load-Carrying Equipment
MOS	Military Occupational Specialty
MTOE	Modified Table of Organization and Equipment
NHA	Next Higher Assembly
NIIN	National Item Identification Number
No.	Number
NSN	National Stock Number
NVD	Night Vision Device
NVG	Night Vision Goggles
OCIE	Organizational Clothing and Individual Equipment
OEF	Operation Enduring Freedom
OTV	Outer Tactical Vest
Oz	Ounces
PAGST	Personnel Armor System for Ground Troops
PALS	Pouch Attachment Ladder System
PE	Polyethylene
PMCS	Preventive Maintenance Checks and Services
P/N	Part Number
PQDR	Product Quality Deficiency Report
Pr	Pair
Qty	Quantity
RH	Relative Humidity
SAPI	Small Arms Protective Inserts
SBI	Side Ballistic Inserts
SE	Set
SF	Standard Form
SMR	Source, Maintenance, and Recoverability

Table 1. List of Abbreviations/ Acronyms – Continued.

ABBREVIATION / ACRONYM	DEFINITION
SOP	Standard Operating Procedure
SPC	Side Plate Carrier
SPCS	Soldier Plate Carrier System
SRA	Specialized Repair Activity
TAMMS	The Army Maintenance Management System
TM	Technical Manual
TMDE	Test, Measurement, and Diagnostic Equipment
TOC	Table of Contents
UCP	Universal Camouflage Pattern
U/I	Unit of Issue
UOC	Usable On Code
UUT	Unit Under Test
UV	Ultra Violet
WCA	Warranty Claim Action
WP	Work Package
WT	Weight
X-LARGE	Extra Large
X-SMALL	Extra Small
XX-LARGE	Extra-Extra Large
XSAPI	X Small Arms Protective Inserts
XSBI	X Side Ballistic Inserts

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
PROTECTIVE EQUIPMENT
EQUIPMENT DESCRIPTION AND DATA

EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

This manual provides standards for the classification and repair and maintenance of protective equipment. Maintenance and repair for procedures for each type of equipment 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

HEAD PROTECTION

Combat Vehicle Crewman's (CVC) Helmet

There are three key components of the CVC helmet:

1. Helmet Shell

The model DH-132B 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 1/2- 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-132B 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

HEAD PROTECTION – CONTINUED

Personnel Armor System for Ground Troops (PASGT) Helmet

The Ground Troops'– Personnel Armor System helmet or PASGT is a rigid one-piece ballistic protective item molded of laminated Kevlar® (para-aramid synthetic fiber) 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 hook and loop 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.

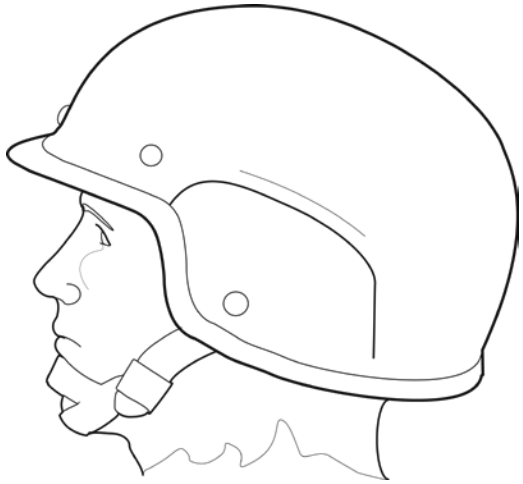


Figure 2. PASGT Helmet.

Advanced Combat Helmet (ACH)

The ACH provides ballistic and impact protection within the full spectrum of operational environments. This helmet is compatible with the current night vision devices (NVDs), communications packages, and Chemical, Biological, Radiological and Nuclear (CBRN) defense equipment and body armor.

The ACH is designed to allow maximum sensory and situational awareness for the operator. The edge cut of the shell has been reduced when compared to the Personnel Armor System for Ground Troops (PASGT) helmet. The ACH design enables better situational awareness through improved field of vision and hearing.

The helmet system consists of a shell, a suspension system (pads), a retention system (chinstrap), and could include other accessories such as helmet cover and night vision goggle (NVG) mounting bracket. Additionally, an optional ballistic nape pad and eyewear retention straps are available.

The retention system and pad suspension system provides unsurpassed balance, stability and comfort as well as impact protection throughout all operational scenarios, including static-line airborne operations.

The H-back chinstrap retention system was issued on four ACH models (Figure 3). The X-back retention system was issued on some of the Gentex helmets, but has been replaced by the universal retention system. Refer to Operator's Manual for Advanced Combat Helmet (ACH) TM 10-8470-204-10 for more information.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

HEAD PROTECTION – CONTINUED

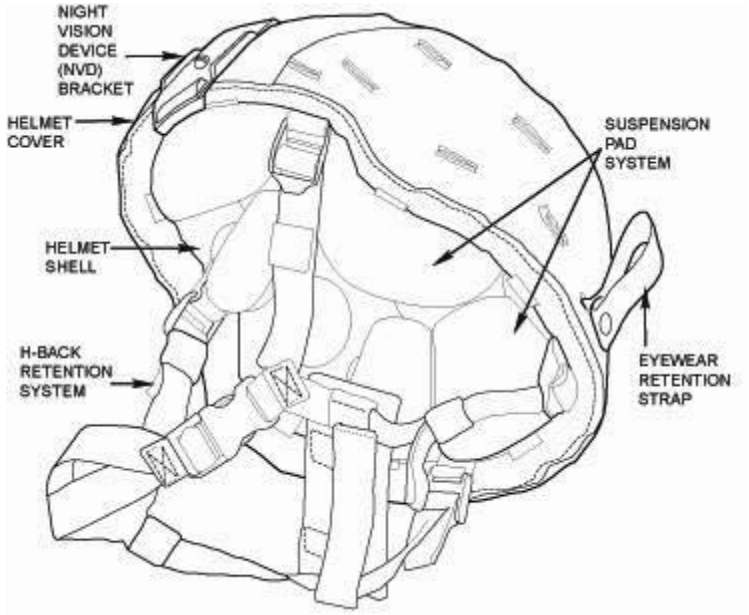


Figure 3. ACH H-Back Chinstrap Retention System.

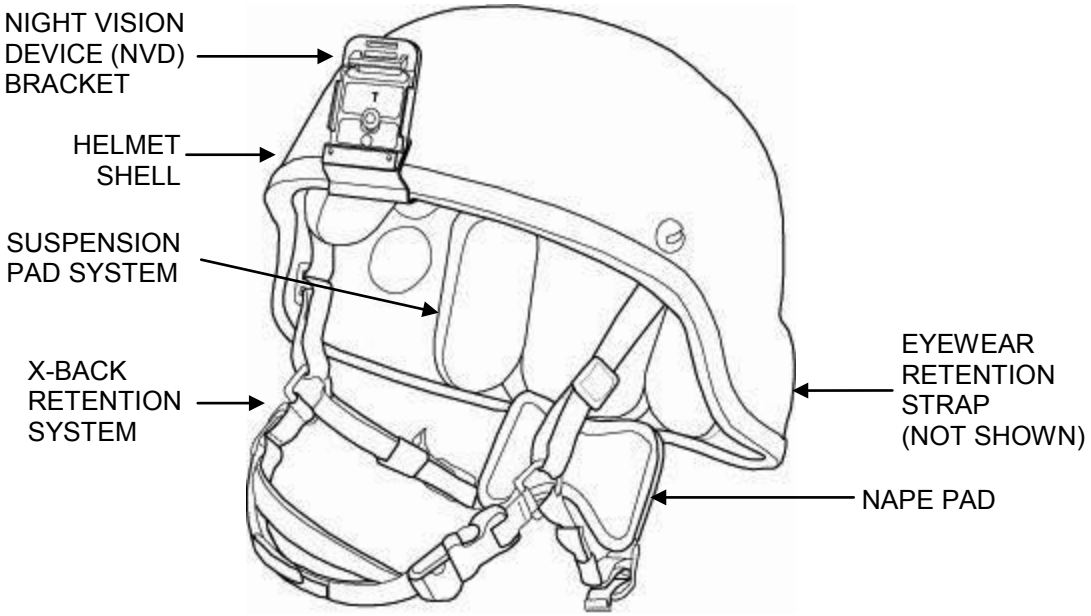


Figure 4. ACH X-Back Chinstrap Retention System.

Ballistic Nape Pad. The optional ballistic nape pad is available for increased stability and protection against fragments from ground-level threats. It is located at the base of the neck and is designed to protect against ground-level threats and provide protection against fragments, while adding stability to the helmet. It attaches to the chinstrap retention system.

When the ballistic nape pad is used on the H-back chinstrap retention system, it replaces the retention system nape pad. When the ballistic nape pad is used on the X-back retention system, it is used in addition to the retention system nape pad. For more information, see TM 10-8470-204-10.

BODY ARMOR

Combat Vehicle Crewman's (CVC) Body Armor

The CVC fragmentation protective undergarment 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 4.3 oz. 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 loop fastener, tape straps at the sides for size and comfort adjustment.

Soldier Plate Carrier System (SPCS)

The Soldier Plate Carrier System (SPCS) is a modular body armor vest consisting of a base vest, side plate carriers or cummerbunds, soft ballistic inserts and optional hard armor protective inserts. It is designed to protect the Soldier's upper torso from multiple ballistic threats and is configured to protect from potential small arms and fragmentation mission threats at a minimum system weight.

The SPCS is available in two camouflage patterns: Universal Camouflage Pattern and OEF Camouflage Pattern.

Figure 5. Soldier Plate Carrier System with Side Plate Carriers (OEF Camouflage Pattern).

1. SPCS Vest

The base vest assembly consists of a front carrier and a back carrier with a soft ballistic insert for each. The front and back carriers are connected together by either the cummerbund (cummerbund configuration), side plate carriers (side plate carrier configuration), two pairs of attachment straps (non-side plate carrier configuration). The base vest assembly is available in six sizes. The ESAPI or XSAPI hard armor protective inserts may also be used with the soft ballistic inserts in the front and back carriers.

The SPCS has a quick-release assembly designed to be used during emergency situations only (Figure 6). The quick-release strap used to activate the emergency release is located on the front carrier and is pulled to rapidly doff the vest in emergency situations such as access for medical attention or removing the SPCS to swim.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

BODY ARMOR – CONTINUED

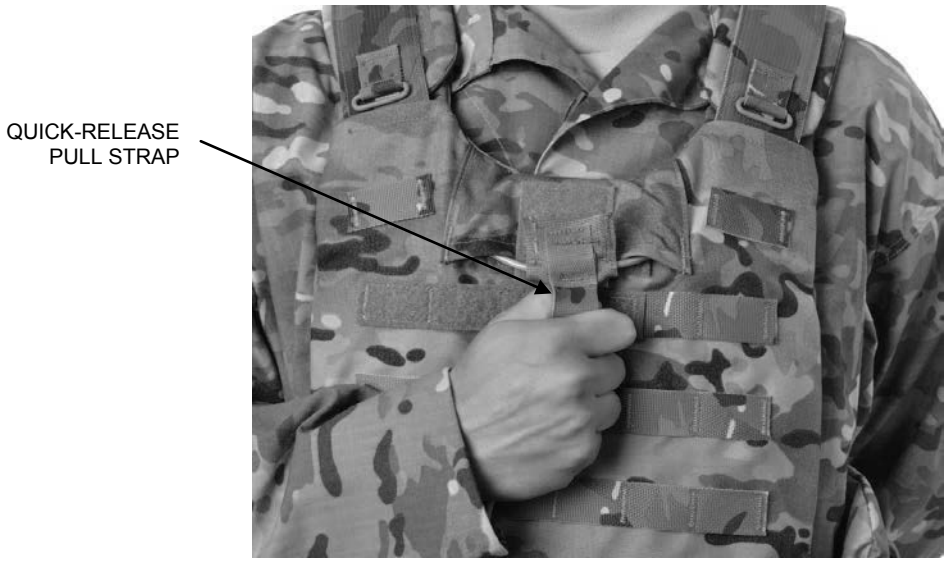


Figure 6. Emergency Quick Release.

2. SPCS Cummerbund

The cummerbund has a soft ballistic insert, and it may be used instead of the side plate carriers to connect the front and back carriers. The ESBI/XSBI hard armor protective inserts may also be used if the side plate pockets are attached to the cummerbund (Figure 9). The cummerbund is available in three sizes.

Figure 7. Back Vest Carrier with Cummerbund.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

BODY ARMOR – CONTINUED

3. SPCS Side Plate Carriers

The side plate carriers have soft ballistic inserts and are used to connect the front and back carriers. The ESBI/XSBI hard armor protective inserts may also be used with the soft ballistic inserts in the side plate carriers. The side plate carriers come in one size, and are available in two variations. One variation has a sewn-in angled webbing strap (Figure 7) and the other a removable angled webbing strap (Figure 8).

Figure 8. Side Plate Carrier with Sewn-in Angled Webbing Strap (UCP Pattern).

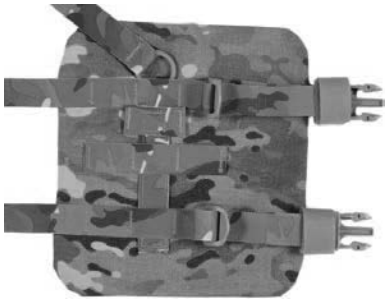


Figure 9. Side Plate Carrier with Removable Angled Webbing Strap (OEF Pattern).

4. SPCS Soft Ballistic Inserts

There are four soft ballistic inserts in each SPCS that is fitted with side plate carriers. There is one soft ballistic insert each for the front and back carriers (Figure 10) and one each for the two side plate carriers (Figure 11). If the SPCS is fitted with the cummerbund, there is a soft ballistic insert for the cummerbund (Figure 12).

Figure 10. Soft Ballistic Insert for Front or Back Carrier.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

BODY ARMOR – CONTINUED

Figure 11. Soft Ballistic Insert for Side Plate Carrier.

Figure 12. Soft Ballistic Insert for Cummerbund.

Interceptor Body Armor (IBA) System

The IBA system is issued to Soldiers in a variety of configurations. Some vests are issued with ancillary equipment while with other vests, ancillary equipment is issued separately. Therefore, the term ancillary equipment, as used in this manual, is used to describe the attachments to the base vest configuration.

The basic IBA vest comes in four configurations: the Outer Tactical Vest (OTV), the Improved Outer Tactical Vest (IOTV), the Improved Outer Tactical Vest (IOTV) Gen II, and the Improved Outer Tactical Vest (IOTV) Gen III.

All four configurations are compatible with Modular Lightweight Load-carrying Equipment (MOLLE) components. The IOTV, IOTV Gen II, and IOTV Gen III are also compatible with the NETT Warrior System.

1. Outer Tactical Vest (OTV)

The OTV is a single-piece vest that is donned and doffed in a manner similar to an Army combat uniform (ACU) blouse. It is opened and closed in the front and arms go through arm holes. Refer to Operator Manual TM 10-8470-207-10 for more information.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

BODY ARMOR – CONTINUED

The back panel of the OTV vest has an ESAPI pocket at the top (Figure 13) that can be accessed while the vest is worn. The front right panel has an ESAPI pocket that can also be accessed while the vest is worn. The front ESAPI pocket has an eject strap that allows the user to quickly eject the hard armor protective insert. The fit of the vest is adjusted using the nylon webbing at each side of the vest.

Figure 13. OTV Back View.

Ancillary equipment for the OTV includes the yoke/collar assembly, throat protector assembly, deltoid protector assembly, axillary protector assembly, and groin protector assembly. When added to the vest, these items increase the area of ballistic protection. Some items of ancillary equipment may be issued as a part of the base vest assembly, depending on the configuration.

2. Improved Outer Tactical Vest (IOTV) and Improved Outer Tactical Vest (IOTV) Gen II

The IOTV and IOTV Gen II consist of a front vest carrier and a back vest carrier connected by a cable release assembly. The IOTV and IOTV Gen II design distributes the weight of the IBA system more evenly than previous versions of the IBA. Refer to Operator Manual TM 10-8470-208-10 for more information.

Ancillary equipment for the IOTV and IOTV Gen II includes the yoke/collar assembly, deltoid protectors, groin protector, and lower back protector. When added to the vest, these items increase the area of ballistic protection.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

BODY ARMOR – CONTINUED

Some items of ancillary equipment may be issued as a part of the base vest assembly, depending on the configuration.

Figure 14. Front Carrier (IOTV Gen II Shown).

Figure 15. Back Carrier (IOTV Gen II Shown).

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

3. BODY ARMOR – CONTINUED

4. Improved Outer Tactical Vest (IOTV) Gen III

The IOTV Gen III consists of a front carrier, a back carrier, an emergency release assembly, a yoke and collar assembly, and a side plate carrier. Refer to Operator Manual TM 10-8470-210-10 for more information.

Ancillary equipment for the Gen III includes the deltoid protectors, lower back protector, and groin protector. The deltoid and lower back protectors are designed to be worn attached to the vest assembly. The groin protector is designed to be worn attached to the ACU trousers. These items increase the area of ballistic protection when worn correctly. Some ancillary equipment may be issued as a part of the base vest assembly contingent upon operations.

Figure 16. IOTV Gen III Vest Assembly.

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 vest cover, collar, anti-fragmentation trousers, helmet cover, upper and lower arm protectors, armor groin plate with carrier, and mine protective overboots, the Blast Protective Footwear System (BPFS), and a face shield. For additional information, see TM 10-8470-203-10.

Armor plates are used to achieve the highest level of fragmentation protection for the chest and groin areas. Head area protection is achieved with a combined installation of the standard Personnel Armor System for Ground Troops (PASGT) helmet or Advanced Combat Helmet (ACH) with a soft ballistic cover. The face shield does not provide the same level of protection provided by the helmet with cover. To provide optimal visual clarity, the face shield is constructed with a clear polycarbonate lens that provides reduced fragmentation protection.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

BODY ARMOR – CONTINUED

There is a range of ballistic protection for the neck, torso, arm and leg areas through the use of multiple layers of ballistic materials which form a strong yet pliable barrier against mine fragments. The feet are protected with component materials designed to deflect blast and fragments away from the feet.

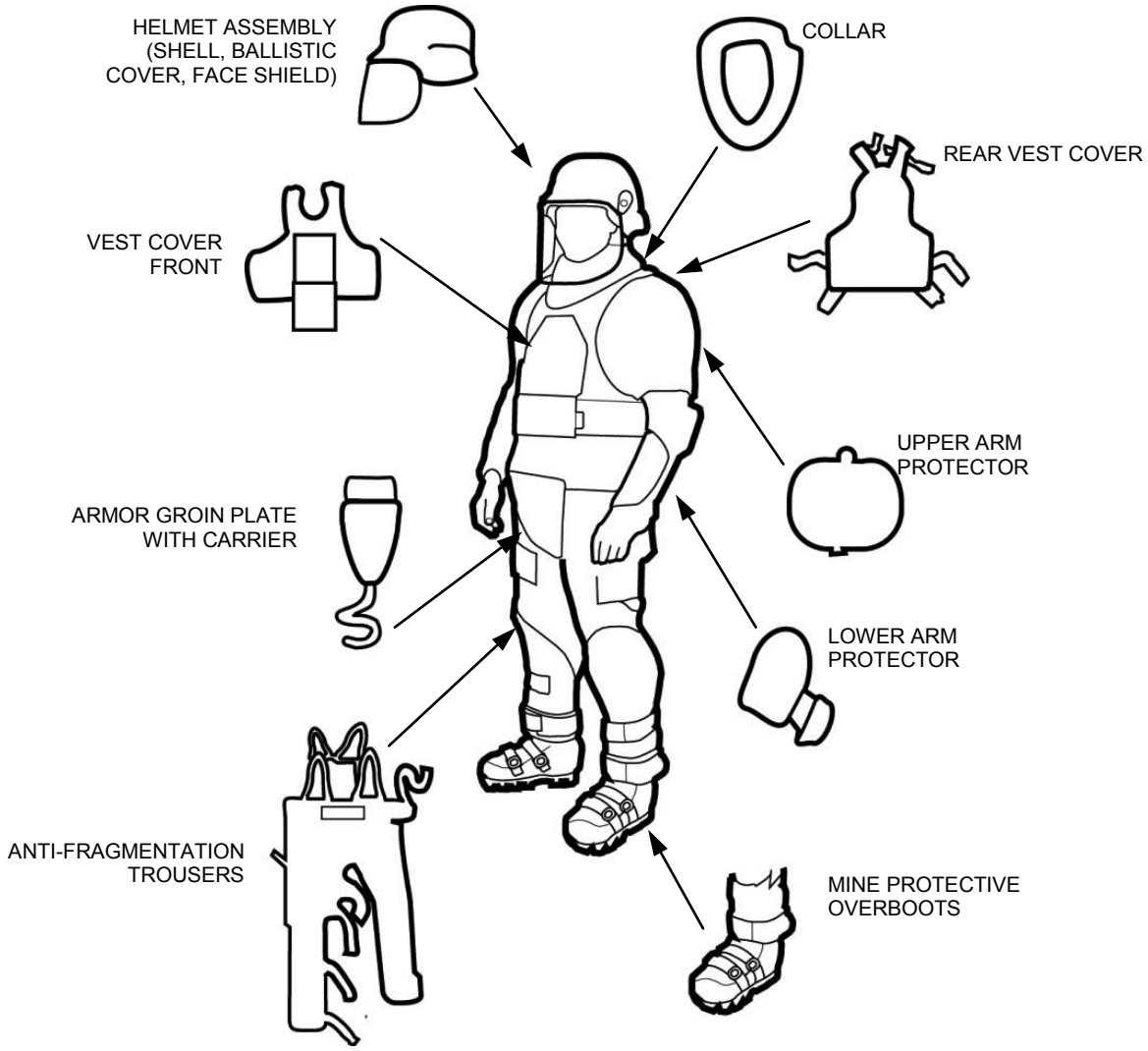


Figure 17. Components of BASIC System.

1. Ballistic Helmet Cover

The helmet cover is used over either the PASGT or ACH helmet shell.

2. Face Shield

The face shield is constructed with a clear polycarbonate lens that provides optimal visual clarity but reduced fragmentation protection. The face shield does not provide the same level of protection provided by the helmet with cover.

3. Ballistic Collar

The collar comes with the vest cover in the same three sizes, but may be mixed with other sizes to achieve the best fit.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

BODY ARMOR – CONTINUED

4. Ballistic Vest Cover

The vest cover is worn over either the PASGT vest (with the collar up) or Interceptor Body Armor, Outer Tactical Vest (OTV).

5. Ballistic Upper and Lower Arm Protectors

BASIC upper and lower arm protectors are intended to be worn over the sleeves of BDUs or over exposed arms when short sleeve garments are worn. The arm protectors are in two pieces, an upper and lower section.

6. Mine Protective Overboots

The overboots are intended to be worn over standard issue combat boots and are designed to protect against fragmentation. The protective overboat only fits over intermediate cold/wet boots that are one size smaller.

7. Ballistic Anti-Fragmentation Trousers

The protective trousers provide coverage from the upper waist to the top of the feet, with special emphasis on the groin and shin areas and are intended to be worn over a Battle Dress Uniform (BDU). The layer comprising the inner shell is camouflage green; the layer which comprises the outer shell is woodland camouflage printed.

8. Armor Groin Plate and Ballistic Carrier

The armor groin plate attaches to the outside of the vest cover, below the chest plate. The groin plate is a one size fits all item. Armor plates are used to achieve the highest level of fragmentation protection for the chest and groin areas.

9. Blast Protective Footwear System (BPFS).

The BPFS is a stand-off 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 18. Blast Protective Footwear System.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS – CONTINUED

HARD ARMOR PROTECTIVE INSERTS

There are two types of hard armor, Small Arms Protective Inserts (SAPI) and Side Ballistic Inserts (SBI). The hard armor protective inserts provide additional levels of protection to the front, back, and sides of the Soldier. All hard armor protective inserts are made of ceramic covered with a spall cover. The hard armor protective inserts are curved to fit the body and are worn with the concave side toward the body.

1. SAPI/ESAPI/XSAPI

The Small Arms Protective Inserts (SAPI), which are black, are authorized for training purposes only. They do not provide the appropriate level of ballistic protection for deploying Soldiers and shall never be issued to deploying Soldiers. These were replaced with Enhanced Small Arms Protective Inserts (ESAPI) and the X Small Arms Protective Inserts (XSAPI).

The Enhanced Small Arms Protective Inserts (ESAPI) have green covers and provide additional protection for the chest and back against 7.62 mm bullets. The X Small Arms Protective Inserts (XSAPI) have tan covers and provide greater protection than the ESAPI for the chest and back.

Exterior side Interior (concave) side

Figure 19. Exterior and Interior Sides of ESAPI.

2. ESBI/XSBI

The Enhanced Side Ballistic Inserts (ESBI) have green covers and provide side protection against 7.62 mm bullets. The X Side Ballistic Inserts (XSBI) have tan covers and provide greater side protection than the ESBI.

Exterior side Interior (concave) side

Figure 20. Exterior and Interior Sides of ESBI.

END OF WORK PACKAGE

FIELD MAINTENANCE
THEORY OF OPERATION

GENERAL INFORMATION

Soldiers are required to perform many different tasks related to their Military Occupational Specialty (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.

Different field scenarios require different levels of protection for the Soldier. Protective equipment is designed for different parts of the body or for a specific mission.

The next level of protection is hard armor protective inserts in addition to the soft ballistic inserts.

Protective equipment is designed to provide the Soldier with the ballistic and impact protection necessary for any duty, any task, and any mission. To support the Soldier, equipment must be kept in good repair or replaced as needed. On receipt of equipment, the individual components 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 INFORMATION FOR GENERAL REPAIR PROCEDURES FOR PROTECTIVE 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 protective 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.

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

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. This column contains the common name of the item to be inspected.

Procedures. This column provides a brief description of the procedures by which the checks are to be performed.

Equipment Not Ready/Available If. Indicates faults that will prevent your equipment from performing its primary mission. If you perform procedures listed in Procedure column which show faults listed in this column, do not operate the equipment. Follow standard procedures for maintaining the equipment or reporting equipment failure.

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.

Corrosion Prevention and Control (CPC) – Continued.

Plastics, composites, and rubbers can also degrade. Degradation is caused by thermal (heat), oxidation (oxygen), solvation (solvents), or photolytic (light, typically ultra-violet) 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
PROTECTIVE EQUIPMENT
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)

INITIAL SETUP:

Tools and Special Tools

N/A

Personnel Required

Non-MOS Specific

Equipment Condition

Unpacked

References

TM 10-8470-203-10
TM 10-8470-204-10
TM 10-8470-207-10
TM 10-8470-208-10
TM 10-8470-208-24&P
TM 10-8470-210-10

GENERAL

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

PMCS PROCEDURES

Table 1. Preventive Maintenance Checks and Services (PMCS) for Protective Equipment.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
			Head Protection	
1	Before After	Combat Vehicle Crewman's (CVC) Helmet	Inspect for cuts, blisters, delamination, chipped paint, pitting, indentations, damaged straps, and loose or missing hardware.	Cuts, blisters, delamination, chipped paint, pitting, indentations, damaged straps, and loose or missing hardware.
		Rubber Edging	Inspect for cuts, tears, and that edging is bonded to shell.	Cuts or tears. Edging is no longer bonded to shell.
		Foam Rubber	Inspect for tears, odor, and separation of vinyl skin.	Tears, odor, or separation of vinyl skin.
2	Before After	CVC Helmet Shell	Check for gouges, scrapes, cracks, delamination or other damage to shell. If gouges, scrapes, or damage extends below the surface (below the paint), refer to higher level maintenance for repair.	Gouges, scrapes, cracks, delamination or other damage to shell or if gouges, scrapes, or damage extends below the surface (below the paint).

PMCS PROCEDURES – CONTINUED

Table 1. Preventive Maintenance Checks and Services (PMCS) for Protective Equipment – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
Head Protection – Continued				
3	Before After	CVC 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.
4	Before After	CVC Headset-Microphone Kit	Inspect the interior of the headset microphone kit and openings in the microphone and earphones for loose or damaged parts or any dirt, fungus, or foreign matter.	Loose or damaged parts or any dirt, fungus, or foreign matter is in the headset or openings.
5	Before After	CVC Microphone Boom Assembly	Inspect for freedom of movement, damage or deformation of boom on ball joints, and damage to the microphone plastic encasement or microphone.	Movement is restricted or there is damage or deformation of boom, microphone plastic encasement, or microphone.
6	Before After	CVC Radio/ Intercom Switch Mechanical Function	Inspect for smooth and positive lever displacement function, the spring-loaded center lever returns from forward (radio) position, the rear (intercom) lock ON position, and check for physical damage to left earcup.	Lever function is not smooth and positive or any physical damage to left earcup.
7	Before After	CVC Radio/ Intercom Switch Operatioin	Verify radio and intercom microphone/earphone audio operation with switch in each of the three positions.	Switch does not function in all positions.
8	Before After	CVC Communication System Harness and Connectors	Inspect for cracked, burned, chafed, or deteriorated insulation and all connectors for interior or exterior damage.	Damage to interior or exterior connectors or cracked, burned, chafed, or deteriorated insulation.
9	Before After	CVC Clothes Clip	Inspect spring for proper spring tension and for proper alignment of retaining jaws.	Improper spring tension or misalignment of retaining jaws.
10	Before After	CVC Bail-out Connector	Inspect for proper alignment and secure non-slack connector coupling. Verify coupling hold and non-release with normal handling (under eight pounds tension).	Misalignment or insecure connector coupling.
11	Before After	Personnel Armor System for Ground Troops (PASGT) 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 (PMCS) for Protective Equipment – Continued.

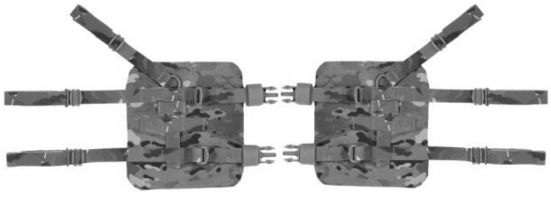
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
Head Protection – Continued				
12	Before After	PASGT Helmet Shell	Inspect for cracks, dents, fraying, and missing or damaged webbing and strap retainers.	Cracks, dents, fraying, missing or damaged webbing or strap retainers.
13	Before After	Advanced Combat Helmet (ACH)	Refer to TM 10-8470-204-10.	Refer to TM 10-8470-204-10.
14	Before After	ACH Ballistic Nape Pad	Refer to TM 10-8470-204-10.	Refer to TM 10-8470-204-10.
Body Armor				
15	Before After	Combat Vehicle Crewman's (CVC) Body Armor	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.	Ripped, torn, holes, burns, loose binding, oil, or grease. Broken zippers or damaged hook-and-loop fasteners.
16	Before After	Soldier Plate Carrier System (SPCS)	1. Inspect the interior and exterior fabric of the vest for any cuts, frays or abrasions, or any damage that may interfere with the proper function of the body armor (Figure 1).	Any cuts, frays or abrasions, or any damage that may interfere with the proper function of the body armor.

Interior and Exterior of Front Carrier Interior and Exterior of Back Carrier

Figure 1. Soldier Plate Carrier Vest.

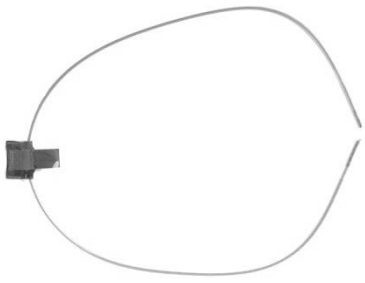
PMCS PROCEDURES – CONTINUED

Table 1. Preventive Maintenance Checks and Services (PMCS) for Protective Equipment – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
			Body Armor – Continued	
		Soldier Plate Carrier System (SPCS) – Continued.	2. Inspect the interior and exterior fabric of the vest for any dirt, stains or debris. Brush off any dirt or debris with a brush or rag.	Any petroleum-based stains.
			3. Run hands over entire surface of body armor to ensure ballistic inserts are flat. Smooth out any folds or bunching.	Cannot be flattened.
			4. Check the soft ballistic inserts & PE plastic sheet for cuts, holes, wear and tear, contamination, and damage (Figure 2).	Any damage that would interfere with the proper function or compromise the performance and/or service life of the equipment.
			 Figure 2. Polyethylene Plastic and Cummerbund Soft Ballistic Inserts, Front/Back Carrier Soft Ballistic Insert, and Side Pocket/Side Plate Carrier Soft Ballistic Insert (from left to right).	
			5. Check the security of all hook-and-loop fastener tape.	Hook-and-loop fastener tape does not function.
			6. Inspect the shoulder straps and side plate carriers or attachment straps for any cuts, frays or abrasions or any damage that may interfere with the proper function of the body armor (Figure 3).	Any cuts, frays or abrasions, or any damage that may interfere with the proper function of the body armor.
			 Figure 3. Right and Left Side Plate Carriers (Side Plate Carrier Configuration).	

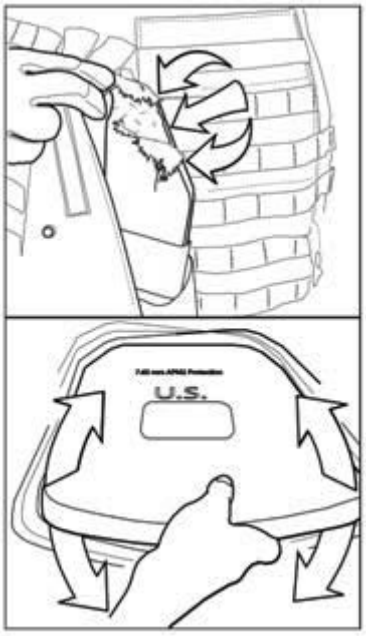
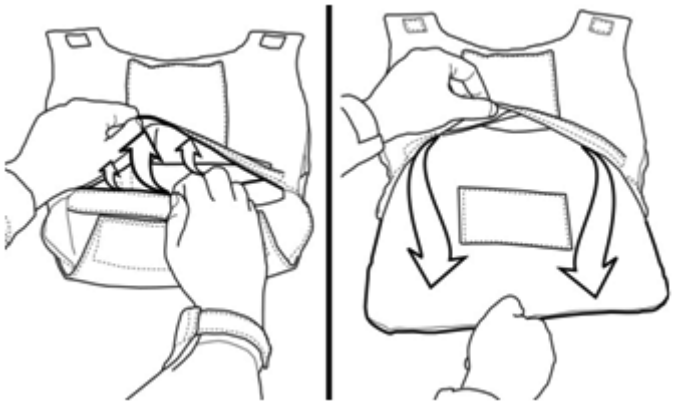
PMCS PROCEDURES – CONTINUED

Table 1. Preventive Maintenance Checks and Services (PMCS) for Protective Equipment – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
Body Armor – Continued				
		Soldier Plate Carrier System (SPCS) – Continued.	7. Inspect the cummerbund and attachment straps for any cuts, frays or abrasions or any damage that may interfere with the proper function of the body armor (Figure 4).	Any cuts, frays or abrasions, or any damage that may interfere with the proper function of the body armor.
			 Figure 4. Right and Left Cummerbund.	
			8. Inspect the four quick-release buckles for any damage that may interfere with the proper function of the body armor (Figure 5).	Any damage that may interfere with the proper function of the body armor.
			 Figure 5. Quick-Release Buckle.	
			9. Inspect the quick-release cable for any damage or kinks (Figure 6).	Any damage that may interfere with the proper function of the quick-release cable.
			 Figure 6. Quick-Release Cable.	

PMCS PROCEDURES – CONTINUED

Table 1. Preventive Maintenance Checks and Services (PMCS) for Protective Equipment – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
Body Armor – Continued				
		Soldier Plate Carrier System (SPCS) – Continued.	10. Inspect the hard armor (Figure 7) and soft ballistics (Figure 8).  Figure 7. Inspect Protective Inserts.  Figure 8. Soft Ballistic Inserts.	

PMCS PROCEDURES – CONTINUED

Table 1. Preventive Maintenance Checks and Services (PMCS) for Protective Equipment – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
Body Armor – Continued				
		Soldier Plate Carrier System (SPCS) – Continued.	11. Inventory the body armor. a. Check the data label on each component to ensure each component is in the same size or size range. b. Ensure all components required per unit SOP are present.	Item sizes are mismatched. Missing component.
17	Before After	Outer Tactical Vest (OTV)	Refer to TM 10-8470-207-10 and TM 10-8470-208-24&P.	Refer to TM 10-8470-207-10 and TM 10-8470-208-24&P.
18	Before After	Improved Outer Tactical Vest (IOTV)	Refer to TM 10-8470-208-10 and TM 10-8470-208-24&P.	Refer to TM 10-8470-208-10 and TM 10-8470-208-24&P.
19	Before After	Improved Outer Tactical Vest Gen II (IOTV Gen II)	Refer to TM 10-8470-208-10 and TM 10-8470-208-24&P.	Refer to TM 10-8470-208-10 and TM 10-8470-208-24&P.
20	Before After	Improved Outer Tactical Vest Gen III (IOTV Gen III)	Refer to TM 10-8470-210-10.	Refer to TM 10-8470-210-10.
21	Before After	Body Armor Set, Individual Countermine (BASIC)	Refer to TM 10-8470-203-10.	Refer to TM 10-8470-203-10.

PMCS PROCEDURES – CONTINUED

Table 1. Preventive Maintenance Checks and Services (PMCS) for Protective Equipment – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/AVAILABLE IF:
Hard Armor Protective Inserts				
WARNING Do not machine wash or dry the hard armor inserts. Failure to follow these instructions may degrade the ballistic protection of the hard armor inserts. **CAUTION** Do not submerge hard armor inserts in any liquid, including water. Do not use a stiff brush to clean any part of your plate carrier as this will damage the material.				
22	Before After Monthly	Hard Armor Protective Inserts (ESAPI, XSAPI, ESBI, XSBI)	Inspect hard armor inserts for damage and contamination. Refer to TM 10-8470-208-10 and TM 10-8470-208-24&P for more information.	a. Outer cover is damaged exposing the ceramic tile material. b. Plate is cracked and you hear loose pieces rattling around when shaken. c. Creaking or squeaking of ceramic tile heard when plate twisted by hand. d. Composite backing is delaminating (backing material plies are separating). e. Cracking of the ceramic tile is felt or heard as you firmly pinch the outer 1/2-inch perimeter of the plate. f. Plate has been hit by a bullet or fragment.

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 PROTECTIVE EQUIPMENT

FIELD MAINTENANCE
SERVICE UPON RECEIPT

INITIAL SETUP:

Tools and Special Tools
None Required

Personnel Required
None

Materials/Parts
None Required

References
None

There is no service upon receipt required for the equipment in this technical manual.

END OF WORK PACKAGE

FIELD MAINTENANCE

PROTECTIVE EQUIPMENT

INSPECT

INSPECT

Soldiers are required to perform many different tasks related to their Military Occupational Specialty (MOS), as well as their individual 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 item classification codes along with their 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, equipment 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 discernible and the colors are still subdued in nature.

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.
- 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.

INSPECT – CONTINUED

- Hardware. Hardware will not be bent, broken, or missing. Bright and shiny hardware will not disqualify items from a serviceable classification.

NOTE

These item classification criteria apply 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 these 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 and free from obvious stretching or creasing of leather upper. Indentations on insoles of footwear caused by minimal wear are acceptable and suitable for Code A (See Table 1). This also applies to rubber and canvas footwear and 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 4160.21-M.

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.

NOTE

Restitching of open seams is NOT to be counted as a tear with no limitation on 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. Helmet, Combat Vehicle Crewman's (K33400)
   a. Helmet shell – Inspect for cuts, blisters, delamination, chipped paint, pitting, indentations, damaged straps, and loose or missing hardware.
   b. Rubber edging – Inspect for cuts and tears and that edging is bonded to shell.
   c. Helmet liner – Inspect for torn cloth, cut or damaged parts, fraying, missing or damaged webbing and strap retainers, and 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 0008 for maintenance procedures.

INSPECT – CONTINUED

2. Cover, Helmet, Camouflage Pattern (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.
3. Personnel Armor System for Ground Troops (PASGT) Helmet (K34733)
   a. Helmet shell – Inspect for cuts, blisters, delamination, chipped paint, pitting, indentations, damaged straps, and loose or missing hardware.
   b. Rubber edging – Inspect for cuts and tears and that edging is bonded to shell.
   c. 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.

   d. Refer to WP 0009 for maintenance procedures.
4. Advanced Combat Helmet (ACH) (H53175)
   a. Helmet shell – Inspect for loose or missing hook disks, cuts, blisters, delamination, chipped paint, pitting, indentations, damaged straps, and loose or missing hardware.
   b. Rubber edging – Inspect for cuts and tears and that edging is bonded to shell.
   c. 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.

   d. Refer to WP 0010 for maintenance procedures.
5. Ballistic Nape Pad (OCP N94088; UCP DA7073)
   a. Inspect for evidence of hit by a bullet or a fragment.
   b. Sleeve – Inspect for tears, damage, discoloration, or saturation with gasoline, bleach, or lubricants.

INSPECT – CONTINUED

c. Soft armor – Inspect for bunching that cannot be flattened.

d. Hook and loop fastener – Inspect for secure fastening.

e. Elastic – Inspect for tears or damage.

Code A. See Table 1.

Code B. Complete and clean. No damage.

Code H. Unserviceable items that are obviously scrap.

f. Refer to WP 0011 for maintenance procedures.

6. Soldier Plate Carrier System (S95839 no cummerbund)

a. Inspect for missing or damaged buckles, snap fasteners, webbing, or hook-and-loop 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 without damage to the ballistic inserts, that can be cleaned and repaired economically by replacing missing or damaged cloth or webbing components.

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 WP 0013 for maintenance procedures.

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

a. Inspect for missing or damaged buckles, snap fasteners, webbing, or hook-and-loop 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 without damage to the ballistic inserts, that can be cleaned and repaired economically by replacing missing or damaged cloth or webbing components.

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 10-8470-207-10 for maintenance procedures.

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

a. Inspect for missing or damaged buckles, snap fasteners, webbing, or hook-and-loop 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 without damage to the ballistic inserts, that can be cleaned and repaired economically by replacing missing or damaged cloth or webbing components.

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.

INSPECT – CONTINUED

9. Interceptor Body Armor, Improved Outer Tactical Vest Gen II (OCP J70478; UCP B42187)
   a. Inspect for missing or damaged buckles, snap fasteners, webbing, or hook-and-loop 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 without damage to the ballistic inserts, that can be cleaned and repaired economically by replacing missing or damaged cloth or webbing components.

      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.

10. Interceptor Body Armor, Improved Outer Tactical Vest Gen III
   a. Inspect for missing or damaged buckles, snap fasteners, webbing, or hook-and-loop 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 without damage to the ballistic inserts, that can be cleaned and repaired economically by replacing missing or damaged cloth or webbing components.

      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 10-8470-210-10 for maintenance procedures.

11. Body Armor Set, Individual Countermine (BASIC) (T51606)
   a. Inspect for cuts, tears, and 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 cleaned and repaired economically by replacing missing or damaged cloth or webbing components.

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

   b. Refer to TM 10-8470-203-10 for maintenance procedures.

12. Interceptor Body Armor, Small Arms Protective Inserts (SAPI, ESAPI, and XSAPI) (J10257, J85705, and J15456)
   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.

INSPECT – CONTINUED

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 loose pieces can be heard rattling around when the SAPI is shaken; the composite back face is delaminated and the individual fabric plies 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.

13. Interceptor Body Armor, Side Ballistic Inserts (ESBI and XSBI) (J15388 and X05001)

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 loose pieces can be heard rattling around when the SAPI is shaken; the composite back face is delaminated and the individual fabric plies 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
COMBAT VEHICLE CREWMAN'S (CVC) HELMET
INSPECT, SERVICE, REPAIR

INITIAL SETUP:

Tools

Brush, Wire Scratch (WP 0031, Item 1)
Die Tool, Fastener (WP 0031, Item 2)
Pliers, Diagonal Cutting (WP 0031, Item 9)
Pliers, Lineman's (WP 0031, Item 10)
Pliers, Needle Nose (WP 0031, Item 11)
Pliers, Slip Joint (WP 0031, Item 12)
Screwdriver, Flat Tip (WP 0031, Item 14)
Screwdriver, Flat Tip, 1/4-Inch (WP 0031, Item 15)

References

WP 0005
WP 0007

Materials/Parts

Adhesive (for Edging) (WP 0030, Item 3)
Cloth, Coated, Cotton, Nylon Oxford (WP 0030, Item 10)
Detergents, General Purpose, Type I OF MIL-D-16791 (WP 0030, Item 12)
Detergent, Laundry, Powder 50-lb, Type II, of MIL-D-16791 (WP 0030, Item 13)
Edging (WP 0030, Item 14)
Enamel, Type II Forest Green (WP 0024, Item 13)
Sand, Silica: Kilndried (WP 0030, Item 32)
Soap, Saddle, Paste Form (WP 0030, Item 35)
Walnut Shell Flour, 40/1 00 Mesh (WP 0030, Item 41)

Personnel Required

Non-MOS Specific (1)

INSPECT

Perform PMCS inspection on all items in accordance with WP 0005 and determine serviceability in accordance with 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.
4. Ensure all communication components such as cords, microphone, microphone boom, connectors, and ear pads are free of any dirt or contamination.
5. Remove loose dirt with a clean, soft cloth dampened with a mild detergent solution.
6. Remove grease, fungus, or grime with a soft brush and mild detergent.
7. Hand-wash camouflage covers in warm water (about 120° F) and mild laundry detergent or machine-wash on permanent press cycle.
8. Rinse thoroughly with clean, warm water after laundering.
9. Hang and let air dry.
10. Clean the helmet liner assembly components as necessary by removing and washing the components with a mild solution of detergent and water.
11. Air dry components after washing.

END OF TASK

REPAIR

Only qualified personnel shall complete repair work. The finished CVC 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, pleated, 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.

REPAIR – CONTINUED

Helmet Shell Repair

NOTE

The helmet shell may be repaired only if defects are superficial and do not penetrate the ballistic layers. If damage extends beyond one-ply deep, then the helmet shell is not repairable.

1. Examine the inside and outside surfaces of the helmet shell for raised or abraded fibers, cuts, pitting or slight indentations. If defects are limited to the outside plies only (on the inside and outside of the shell), proceed to step 2.
2. Remove paint around the immediate area of damage carefully, ensuring that no additional fibers are raised.
3. Wipe clean with cloth to remove dirt and dust particles.
4. Apply one coat of epoxy adhesive to sufficiently cover damaged area, and let cure to manufacturer's standards.
5. After epoxy has cured, sand lightly and blend smoothly into shell.
6. Apply second coat, if required, and let cure to manufacturer's standards.
7. Sand affected area slightly before touch up painting, making sure not to cause any raised fibers.
8. Clean area with a cloth.
9. Brush on one coat of the paint.
10. 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.
11. Lightly apply a second coat of paint to cover the unpainted particles and allow the area to dry at least eight hours.

Rubber Edging Repair

Repair synthetic rubber edging by rebonding it to the edge of the helmet shell or by bonding the appropriate lengths of new edging to replace a damaged portion.

1. Examine the rubber edging for cuts, slits, and areas of non-adherence.
2. If the edging is no longer serviceable, remove the edging by using a heat gun to loosen the adhesive where the edging ends butt together at rear of helmet.
3. After 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.

REPAIR – CONTINUED

NOTE

The rubber edging is slightly longer than the periphery of the helmet.

5. Open up the new rubber edging and wind it around a cylinder to expose the inside of the channel.
6. Lightly abrade the inside of the edging with a wire brush.
7. Apply the adhesive to the edging and along the edge of the helmet.
8. When the adhesive becomes tacky, apply the edging to the helmet edge.
9. 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.
10. Cut the edging to butt the ends against each other.

Headset Component 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 because components plug together with connectors, tools are not needed to replace most parts. There is only one way that things fit together. You cannot make a mistake unless you force something into place.

Carefully identify cables during disassembly when repairing any headset component (as seen in Figure 1 for the left and right earcups) to facilitate proper reassembly.

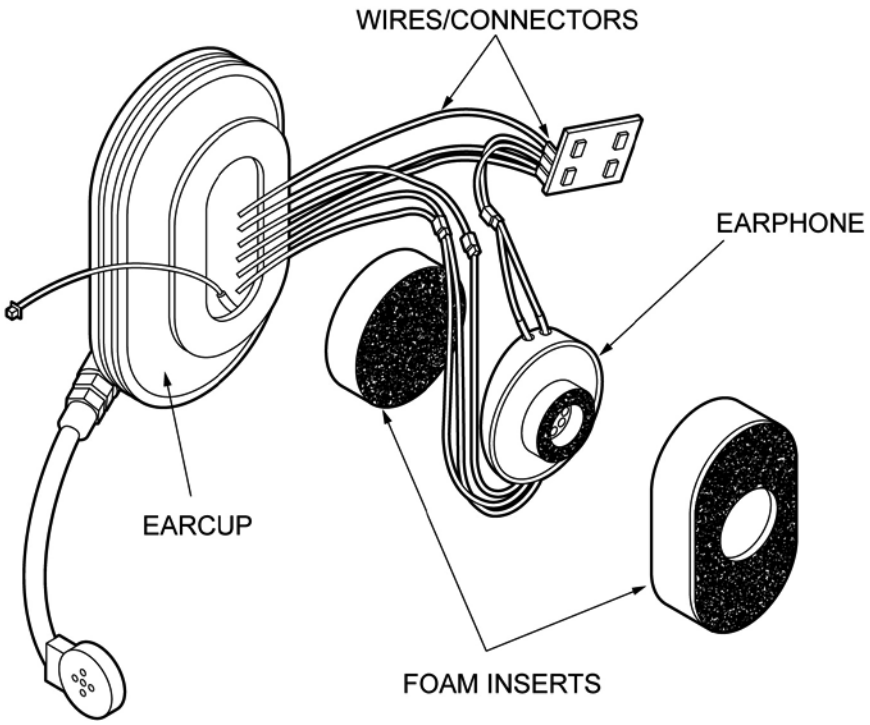


Figure 1. Headset Assembly.

All cables are color-coordinated (i.e., red to red, blue/white to blue/white, green to green, etc). Reseal all cable and switch entries after assembly with a standard, commercially available silicone sealant to preserve waterproofing and sound attenuation. This protects hearing and aids in intelligible communications.

REPAIR – CONTINUED

NOTE

Replace the earphone assembly and foam inserts in the same order as removed.

1. Take note of the order of disassembly, and remove the foam inserts from the right earcup.
2. Unplug the color-coded wires/connectors with the red and 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 hand-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 and noise cancellation characteristics.
6. Plug in the connector with the red and white wires.

Microphone/Boom Assembly Repair

1. Take note of the order of disassembly, and remove the foam inserts from the right earcup.
2. Unplug the connectors with the red and 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 hand-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 noise cancellation characteristics. Plug in the connector with the red and white wires.

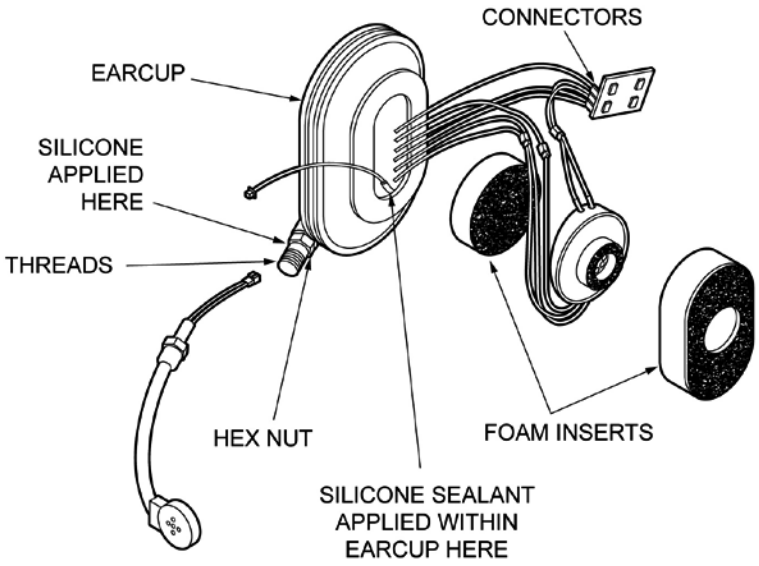


Figure 2. CVC Microphone Assembly.

REPAIR – CONTINUED

Talk-Through Switch Repair

1. Take note of the order of disassembly, and remove the foam fillers and earphone assembly from the right earcup.
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 earcup, and slide the switch out through the inside of the earcup.
4. Replace in reverse order and seal around switch with silicone on the inside of the earcup.

Talk Circuit Repair

1. Take note of the order of disassembly, 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.

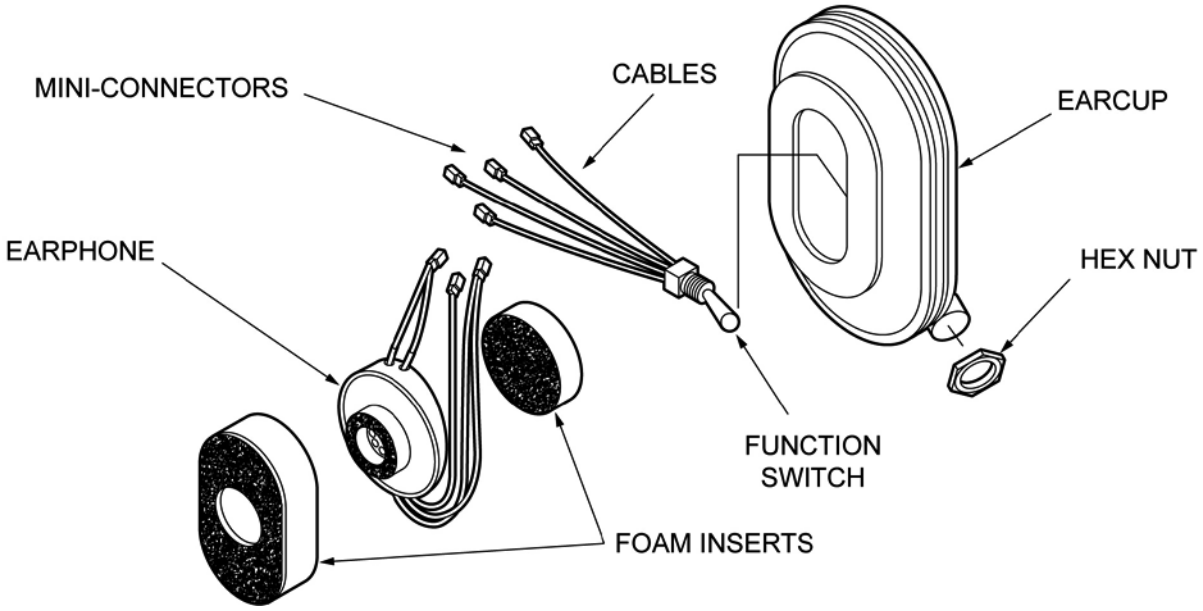


Figure 3. Talk Circuits.

REPAIR – CONTINUED

Function Switch Repair

1. When removing function switch, take note of the order of disassembly 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.
3. Remove the hex nut from the switch on the outside of the earcup, and slide the switch out through the inside of the earcup.
4. Reassemble in reverse order, and seal the switch inside the earcup with silicone sealant.

Earcup Tension/Adjustment Strap Repair

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

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.

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.

REPAIR – CONTINUED

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-loop fastener.

Upper Cable Replacement

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

Neck Cable Assembly Replacement

1. Noting the order of placement, remove all internal components from both earcups.
2. Cut the tie wrap off of both ends of the neck cable from within the earcups.
3. Cut off all mini-connectors from both ends of the neck cable from within the earcups 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 earcup. The left earcup is the side without the boom/microphone.
5. Fish the mini-connectors into the earcup. Lubricate the rubber grommet with a soapy water solution and push and twist them into the earcup holes. A small flathead screwdriver may be necessary to move the grommets.

REPAIR – CONTINUED

6. After inserting the grommets into the earcups, 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 earcup 1/4 inch past the heat shrink tubing on the cable.
7. Tightly pull a nylon tie wrap around the cable assembly on this 1/4 inch portion of the neck cable to prevent the cable from being pulled out of the earcups. Plug in all the mini-connectors.

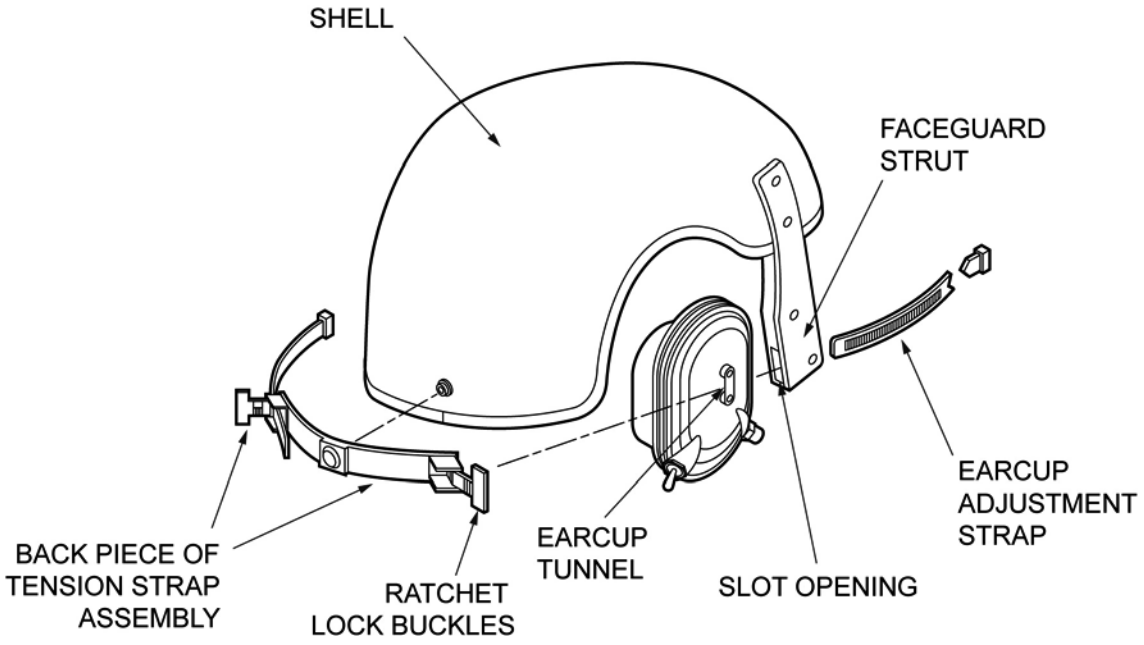


Figure 4. Headset Tension Assembly.

Faceguard Replacement

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.

REPAIR - CONTINUED

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.

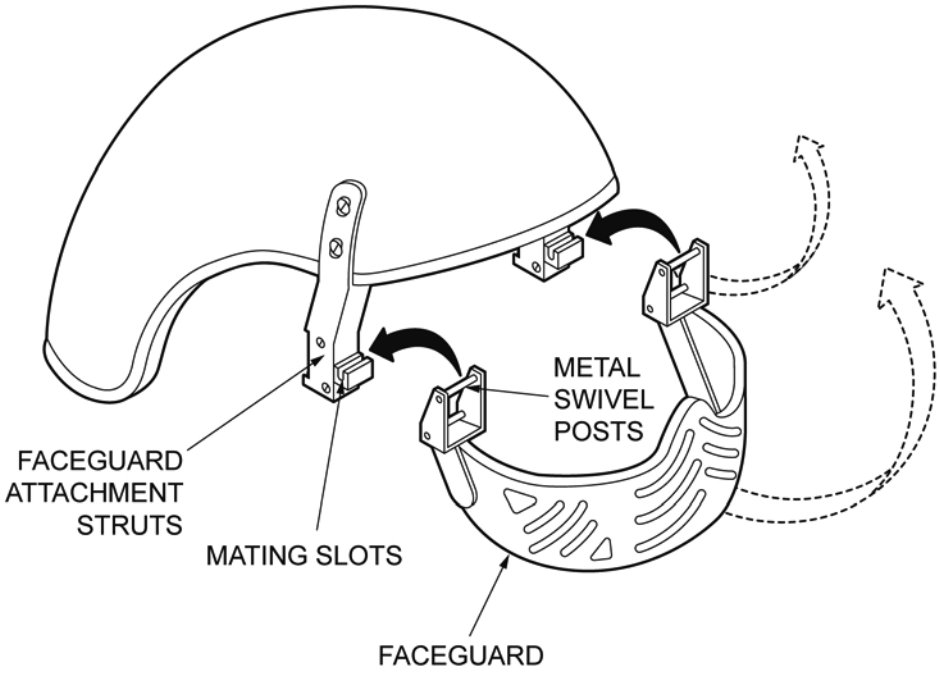


Figure 5. Faceguard Assembly.

Communication Switch and Switch Handle Replacement

NOTE

Disassemble only to the extent necessary to make the repair.

1. Remove retaining screw from switch handle and remove handle.
2. Remove earpad fillers and earphone from earcup.
3. Remove four screws from switch compartment cover inside earcup.
4. Disconnect wires from terminals on the switch cover assembly.
5. Remove switch and cover assembly.
6. Replace switch and cover assembly by reversing above procedure, being careful to install new O-rings on new switch assembly.

REPAIR – CONTINUED

Earphone Replacement

1. Remove the earpad.
2. Remove the two fillers.
3. Lift earphone from earcup.
4. Remove two set screws holding wire leads to earphone.
5. Replace earphone by reversing above procedure.

Helmet Inner Liner Replacement

1. Detach the three attachment tabs joining the inner liner to the outer shell. The attachment tabs are located at both temples and at the rear of the outer shell.
2. Separate the inner liner from the outer shell.
3. Holding the inner liner in both hands, clasp the area of either earcup so that both thumbs are near the top of the earcup. Exert pressure on the top of the earcup to push inward and earcup assembly will disengage from the inner liner.
4. Repeat step 3 for the other earcup.

Clothes Clip Assembly Replacement

1. Remove the spring tension in the clothes clip holding the clip to the rubber grommet.
2. The clip is now readily removed from the upper cord assembly.
3. Install new clothes clip by reversing the above procedure.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE

PERSONNEL ARMOR SYSTEM GROUND TROOPS (PASGT) HELMET

INSPECT, SERVICE, REPAIR

INITIAL SETUP:

Tools

Brush, Wire Scratch (WP 0031, Item 1)

Heat Gun, Electric (WP 0031, Item 6)

Knife, Hot Tip, Electric (WP 0031, Item 7)

Pliers, Slip Joint (WP 0031, Item 12)

Screwdriver, Flat Tip (WP 0031, Item 14)

Materials/Parts

Adhesive, EC 1357 (WP 0030, Item 2)

Adhesive (for Edging) (WP 0030, Item 3)

Adhesive, Paste, 2 oz. (WP 0030, Item 4)

Cloth, Coated, Cotton, Nylon Oxford (WP 0030, Item 10)

Detergent, Laundry, Powder 50-lb, Type II, of MIL-D-16791 (WP 0030, Item 13)

Emery Cloth, 120 Grit (WP 0030, Item 15)

Sand, Silica: Kilndried (WP 0030, Item 32)

Soap, Saddle, Paste Form (WP 0030, Item 35)

Walnut Shell Flour, 40/1 00 Mesh (WP 0030, Item 41)

Personnel Required

Non-MOS Specific (1)

References

WP 0005

WP 0007

INSPECT

Perform PMCS inspection on all items in accordance with WP 0005 and determine serviceability in accordance with 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. Remove any loose dirt or mud from the equipment using a soft cloth.
2. Wash the helmets 10-15 minutes in a 0.5 percent soap solution at a water temperature not to exceed 120° F (40° C).
3. Rinse them in clear warm water until soap is removed.
4. Air dry the helmet away from direct sunlight, heat, or open flames

Cleaning for Issue

CAUTION

Do not use laundry washing machines. Clean the helmet in the soak-and-wash tanks in the same manner as other lightweight load-carrying equipment.

1. Remove loose dirt or dust from the helmets using a brush, cloth, or vacuum attachment.
2. Soak helmets for at least five minutes, or longer as necessary, in a tank containing warm water.
3. Wash the helmets in a solution of Type II powdered laundry detergent, scrubbing vigorously with a soft brush, cloth, or sponge, as necessary.
4. Flush the washed equipment with clean, warm water until all cleaning solution has been rinsed out.
5. Allow the helmets to dry thoroughly at a temperature not exceeding 140°F (60°C) or air dry the equipment away from direct sunlight, heat, or open flames.

END OF TASK

REPAIR

Helmet Shell Repair

NOTE

The helmet shell may be repaired only if defects are superficial and do not penetrate the ballistic layers. If damage extends beyond one-ply deep, then the helmet shell is not repairable.

1. Remove the retention and suspension systems and chinstrap as necessary.
2. Examine the inside and outside surfaces of the helmet shell for raised or abraded fibers, cuts, pitting or slight indentations.
    a. If defects are limited to the outside plies only (on the inside and outside of the shell) and the defects are superficial and do not penetrate into the ballistic layers, the helmet may be repaired. Proceed to step 2.
    b. If damage penetrates the ballistic layers, the helmet is not repairable. Turn in the helmet.
3. Remove paint around the immediate area of damage with paint and varnish remover and a cotton cloth, ensuring that no additional fibers are raised.

REPAIR – CONTINUED

Helmet Shell Repair - Continued

4. Wipe clean with cloth to remove dirt and dust particles.
5. Apply one coat of epoxy adhesive with brush to sufficiently cover damaged area, and let cure.
6. After epoxy has cured, sand lightly with an emery cloth and blend smoothly into shell.
7. Apply second coat, if required, and allow to cure.
8. Sand area where epoxy was applied lightly with an emery cloth, making sure not to cause any raised fibers.
9. Clean sanded area with a cotton cloth.
10. Brush on one coat of the paint.
11. 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.
12. Lightly apply a second coat of paint to cover the unpainted particles and allow the area to dry at least eight hours.
13. Reinstall the retention and suspension systems as needed in accordance with Retention System and Chin Strap Replacement in this work package.

Rubber Edging Repair

1. Examine the rubber edging for cuts, slits, and areas of non-adherence.
2. If the edging is no longer serviceable, remove the edging by using a heat gun to loosen the adhesive where the edging ends butt together at rear of helmet.
3. After 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.

NOTE

The rubber edging is slightly longer than the periphery of the helmet.

5. Open up the new rubber edging and wind it around a cylinder to expose the inside of the channel.
6. Lightly abrade the inside of the edging channel with a wire brush.
7. Apply the adhesive to the edging and along the edge of the helmet.
8. When the adhesive becomes tacky, begin pressing the edging channel onto the helmet edge at the benchmark at the rear of the helmet.
9. Continue pressing the edging along the periphery of the helmet to the starting point at the rear of the helmet.
10. Cut the edging with a hot metal knife to butt the ends against each other.

REPAIR – CONTINUED

Retention System and Chinstrap Replacement

1. Remove the six mounting screws and A-nuts; remove the retention system.
2. Replace new retention 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 chinstrap.
5. Replace new chinstrap, making sure the snap fastener is on the left side of the helmet as worn.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
ADVANCED COMBAT HELMET (ACH)
INSPECT, SERVICE, REPAIR

INITIAL SETUP

Tools:

Brush, Wire Scratch (WP 0031, Item 1)

Pliers, Slip Joint (WP 0031, Item 12)

Screwdriver, Flat Tip (WP 0031, Item 14)

Materials/Parts:

Adhesive (for Edging) (WP 0030, Item 3)

Adhesive, Paste (WP 0030, Item 4)

Detergent, Laundry, Powder 50-lb, Type II, of MIL-D-16791 (WP 0030, Item 13)

Edging (WP 0030, Item 14)

Emery Cloth, 120 Grit (WP 0030, Item 15)

Enamel, Type II Forest Green (WP 0024, Item 13)

Fastener Tape, Hook (WP 0019, Item 15)

Isopropyl Alcohol (WP 0030, Item 20)

Sand, Silica: Kilndried (WP 0030, Item 32)

Soap, Saddle, Paste Form (WP 0030, Item 35)

Thread Locking Compound (WP 0030, Item 39)

Walnut Shell Flour, 40/1 00 Mesh (WP 0030, Item 41)

Personnel Required

Non-MOS Specific (1)

References

TM 10-8470-204-10

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 surface only (on the inside and outside of the shell), and the defects do not penetrate the ballistic layers, then the helmet shell can be repaired. If damage causes penetration to the ballistic layers, then the helmet shell is not repairable.

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 less than 120°F (40°C).
3. Rinse the helmets in clear water until soap is removed.
4. Allow them to air dry thoroughly in a temperature not exceeding 140°F (60°C).
5. 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 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, starting at the benchmark at the rear of the helmet.
   g. The edging should be cut so that the ends butt each other.
6. Inspect 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 the damage extends beyond one-ply deep, then the helmet shell is not repairable.
7. Inspect the helmet shell for chipped paint. Repair these places without stripping the paint from the helmet. Paint the chipped area, let dry. Repaint the helmet again except that the second coat should cover the entire outside of the helmet (including the edging).
8. Install the replacement retention system and hook disks. Replace any damaged or missing hardware (screw, nut). Install new hook disks and pads.

END OF TASK

REPAIR

NOTE

Repair is limited to minor scratches and damage. Repair cannot be made to any helmet with damage that penetrates into the ballistic layers.

1. Sand the damaged area lightly, making sure not to cause additional raising of fibers.
2. Wipe clean with cloth to remove dirt and dust particles. Isopropyl alcohol may be used on the cloth.
3. Apply one coat of epoxy adhesive to cover damaged area. Let it cure.
4. After the epoxy adhesive has cured, sand lightly and blend smoothly into shell.
5. Apply second coat of epoxy adhesive, if required, and let cure.
6. Sand the affected area lightly, wipe off any dirt or dust with a soft cloth.
7. Apply paint as described in section titled “Paint Helmet.”
8. For damage on the inside surface of the helmet shell, follow steps 1 through 6 above.

REPAIR – CONTINUED

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 the rubber edging.

1. Sand any chipped area slightly before touch-up painting, making sure not to cause any raised fibers.
2. Clean area with a cloth. Isopropyl alcohol may be used on the cloth.
3. Brush or spray on one coat of paint.
4. 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.
5. Lightly apply a second coat of coating to cover the unpainted particles and allow the area to dry at least eight hours.
6. Install retention system as described in section titled “Replace Chinstrap Retention System.”

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).
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).

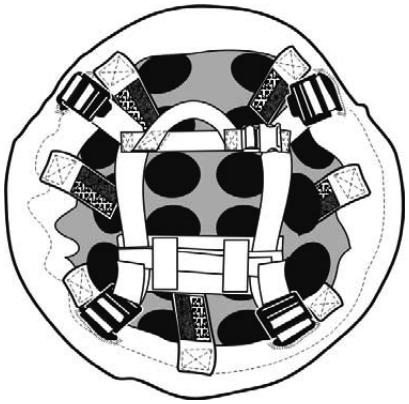


Figure 1. Chinstrap Retention System Replacement.

REPAIR – CONTINUED

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.

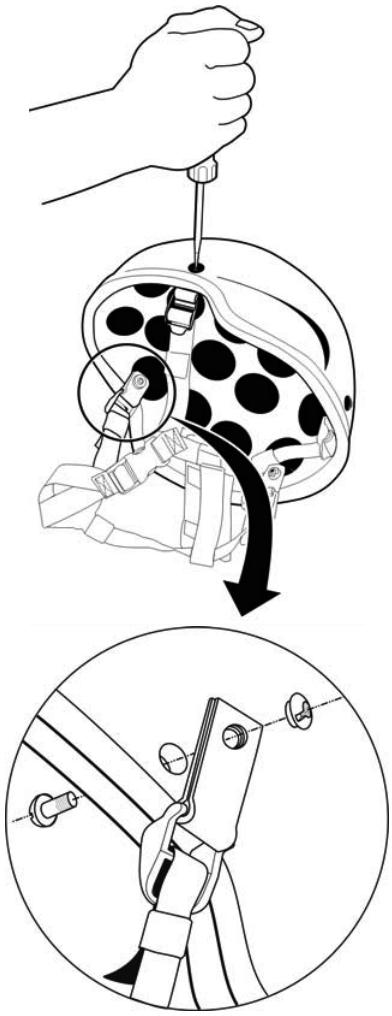


Figure 2. Chinstrap Replacement.

6. Slide elastic band over loose ends of webbing.

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).

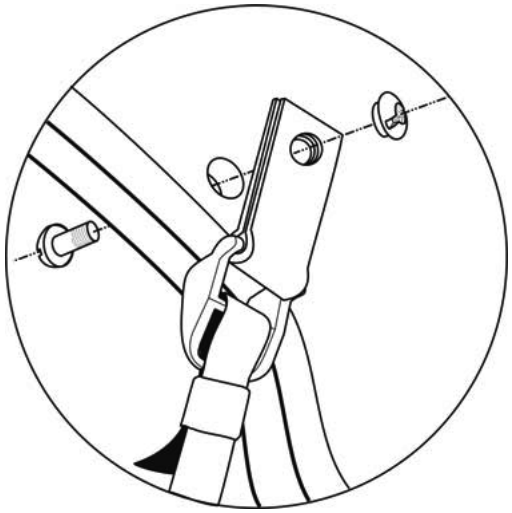


Figure 3. Hardware Replacement.

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.

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. Hook Disk Replacement.

3. If paint is removed by the disk, repaint area.
4. Clean area with Isopropyl Alcohol.
5. Remove backing from new hook disk.

REPAIR – CONTINUED

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

FIELD MAINTENANCE
BALLISTIC NAPE PAD
INSPECT, SERVICE, REPAIR

INITIAL SETUP:

Tools

Sewing Machine, Bar Tack, Industrial (WP 0031, Item 16)

Sewing Machine, Medium Duty (WP 0031, Item 25)

Shears, Tailors, 12-Inch (WP 0031, Item 27)

Ripper, Seam (WP 0031, Item 13)

Tape, Measuring (WP 0031, Item 29)

Materials/Parts

Detergent, Laundry, Powder 50-lb, Type II, of MIL-D-16791 (WP 0030, Item 13)

Tape, Textile Binding 1-inch (WP 0030, Item 38)

Thread, Nylon Type I or II, Size E or F (WP 0030, Item 40)

Thread, Polyester Core (WP 0024, Item 43)

Personnel Required

Non-MOS Specific (1)

References

WP 0005

WP 0007

FM 10-280

INSPECT

Perform PMCS inspection on all items in accordance with WP 0005 and determine serviceability in accordance with WP 0007.

END OF TASK

SERVICE

Cleaning

CAUTION

Do not starch the carrier or the ballistic insert. Do not bleach or dry clean or wash the insert.

1. Remove the ballistic insert from the carrier and mate the hook-and-loop fasteners of the carrier for washing. Wash the carrier, and wipe the surface of the insert with a damp cloth to remove any dirt or contamination.
2. Hand-wash the carrier in cold water and mild detergent.
3. Wipe the surface of the insert with a damp cloth to remove any dirt or contamination.
4. Rinse carrier thoroughly in clear, cold water after laundering. Remove all soaps and detergent. Field Laundry Procedure: Wash the carrier according to Laundry Wash Formula “I” of FM 10-280, Mobile Field Laundry, Clothing Exchange, and Bath Operations.

NOTE

If the carrier is accidentally starched, the ballistic and flame resistance can be restored by rinsing thoroughly with warm water. If the insert is accidentally bleached, turn it in for replacement.

SERVICE – CONTINUED

5. Inspect the carrier after washing, and ensure that there are no open seams, tears, or holes and that the component operates satisfactorily.
6. Inspect the insert after wiping with damp cloth, to ensure that there are no open seams, tears, or holes and that component operates 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 cannot be repaired economically and returned to acceptable condition or has large holes or tears, is severely worn or soiled, has inoperative hook-and-loop 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

NOTE

Stitching through the ballistic layers is not authorized. Repair is limited only to outer shell cover of the soft ballistic insert.

When it is necessary to repair open seams, broken stitching, damaged binding or to completely replace the binding of the soft ballistic insert, 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.

REPAIR – CONTINUED

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; for the soft ballistic inserts, stitch through all of the Kevlar plies.

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.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
COMBAT VEHICLE CREWMAN (CVC) BODY ARMOR
INSPECT, SERVICE, REPAIR

INITIAL SETUP:

Tools

Sewing Machine, Bar Tack, Industrial (WP 0031, Item 16)

Sewing Machine, Medium Duty (WP 0031, Item 25)

Personnel Required

Non-MOS Specific (1)

Materials/Parts

Cloth, Coated, Cotton, Nylon Oxford, 6.5 OZ, Quarpel Treated, Type IL (WP 0030, Item 10)

Detergent, Laundry, Powder 50-lb, Type II, of MIL-D-16791 (WP 0030, Item 13)

Soap, Saddle, Paste Form (WP 0030, Item 35)

Tape, Textile Binding 1-inch (WP 0030, Item 38)

Thread, Nylon Type I or II, Size E or F (WP 0030, Item 40)

Thread, Polyester Core (WP 0024, Item 43)

References

WP 0005

WP 0007

FM 10-280

INSPECT

Perform PMCS inspection on all items in accordance with WP 0005 and determine serviceability in accordance with WP 0007.

END OF TASK

SERVICE

Cleaning

CAUTION

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

1. Remove the ballistic inserts from the carrier and mate the hook-and-loop fasteners of the carrier for washing. Wash the carrier, and wipe the surface of the insert with a damp cloth to remove any dirt or contamination.
2. Hand wash the carrier in cold water and mild detergent.
3. Wipe the surface of the inserts with a damp cloth to remove any dirt or contamination.
4. Rinse carrier thoroughly in clear, cold water after laundering. Remove all soaps and detergent. 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 carrier according to Laundry Wash Formula “l” of FM 10-280, Mobile Field Laundry, Clothing Exchange, and Bath Operations.
5. Inspect the carrier after washing, and ensure that there are no open seams, tears, or holes and that components operate satisfactorily.
6. Inspect the inserts after wiping with damp cloth, to ensure 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 may not be considered economical to repair badly torn, worn, or damaged carriers, including replacement of hook-and-loop fasteners and elastic webbing. The criteria of repair should be less than 65 percent of the replacement acquisition cost and a residual service life of at least 50 percent.

When a carrier cannot be repaired economically and returned to acceptable condition or has large holes or tears, is severely worn or soiled, has inoperative hook-and-loop 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.

REPAIR – CONTINUED

Ballistic Insert Repair

NOTE

Stitching through the ballistic layers is not authorized. Repair is limited only to outer shell cover of the soft ballistic insert.

When it is necessary to repair open seams, broken stitching, damaged binding or to completely replace the binding of the soft ballistic insert, 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; for the soft ballistic inserts. Stitching through all of the Kevlar plies is not authorized.

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.

REPAIR – CONTINUED

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. 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

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
SOLDIER PLATE CARRIER SYSTEM (SPCS)
(CUMMERBUND CONFIGURATION, SIDE PLATE CARRIER CONFIGURATION, NON-SIDE PLATE CONFIGURATION)
INSPECT, SERVICE

INITIAL SETUP:

Tools

Dryer, Wascomat® Model (WP 0031, Item 3)
Moisture Meter, Pinless (WP 0031, Item 8)
Thermometer, Laser Infrared (WP 0031, Item 30)
Washer, High Extract (WP 0031, Item 31)

Material/Parts

Face Mask (WP 0030, Item 16)
Fastener Tape, Hook (WP 0030, Item 17)
Gloves (WP 0030, Item 18)
Lanadol® Aktiv® Detergent or equivalent (WP 0030, Item 21)
Lanadol® Avant® Detergent or equivalent (WP 0030, Item 22)
Laundry ID Tags (WP 0030, Item 23)
Plastic Bag for Storing Ballistic Inserts (WP 0030, Item 30)
Silica Gel (WP 0030, Item 33)
Staples (WP 0030, Item 36)
Tape, Pressure Sensitive Adhesive (WP 0030, Item 37)

Personnel Required

Non-MOS Specific (1)

References

WP 0005
WP 0007

INSPECT

Perform PMCS inspection on all items in accordance with WP 0005 and determine serviceability in accordance with WP 0007.

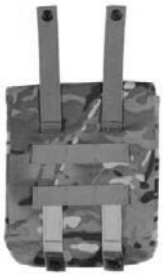
END OF TASK

SERVICE

The Soldier Plate Carrier System (SPCS) consists of 13 individual components (Table 1). Eight of these components are machine-washable using the laundry procedures in this work package. The components are identified in the Washable column in Table 1. The remaining five components (the soft ballistic inserts and the white polyethylene plastic inserts) are not machine washable.

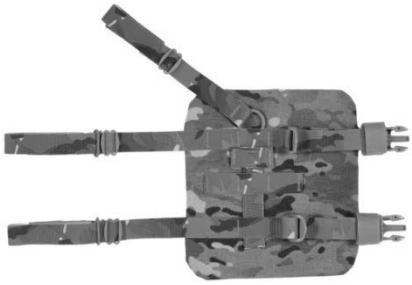
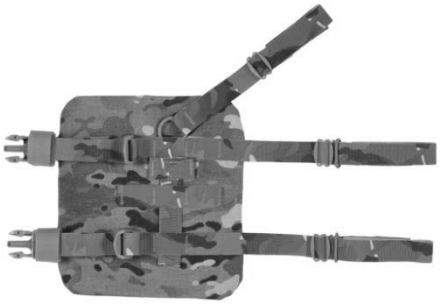
SERVICE – CONTINUED

Table 1. Soldier Plate Carrier System (SPCS) Components.

ITEM NO.	PICTURE	ITEM NAME (QUANTITY)	WASHABLE
1		Front Carrier (1)	Yes
2		Back Carrier (1)	Yes
3		Right Cummerbund (1)	Yes
4		Left Cummerbund (1)	Yes
5		Side Plate Pocket (2) (Cummerbund Configuration)	Yes

SERVICE – CONTINUED.

Table 1. Soldier Plate Carrier System (SPCS) Components – Continued.

ITEM NO.	PICTURE	ITEM NAME (QUANTITY)	WASHABLE
6		Attachment Straps (Non-Side Plate Carrier Configuration)	Yes
7		Right Side Plate Carrier (1) (Alternate Configuration)	Yes
8		Left Side Plate Carrier (1) (Alternate Configuration)	Yes
9		Soft Ballistic – Front and Back Carrier Insert (2)	No
10		Soft Ballistic – Cummerbund Insert (2)	No
11		Polyethylene Plastic Stiffener – Cummerbund Insert (2)	No

SERVICE – CONTINUED

Table 1. Soldier Plate Carrier System (SPCS) Components – Continued.

ITEM NO.	PICTURE	ITEM NAME (QUANTITY)	WASHABLE
12		Soft Ballistic – Side Plate Pocket Insert (2) (Cummerbund Configuration)	No
13		Soft Ballistic – Side Plate Carrier Insert (2) (Alternate Side Plate Carrier Configuration)	No

Remove Soft Ballistics and Plastic Inserts

WARNING

Wear suitable protective gloves and a protective face mask when handling soiled SPCSs. Failure to do so could expose personnel to unidentified contaminants.

NOTE

There are three configurations of the SPCS. The cummerbund configuration includes the cummerbund and side plate pockets, one configuration includes the side plate carriers (SPC) alone (no cummerbund or side plate pocket), and one configuration is the non-side plate carrier (straps connect the front and back carriers).

The terms interior fabric or interior surface is the side of any component of the SPCS that faces the Soldier when worn. The term exterior fabric or exterior surface is the side of any component of the SPCS that faces away from the Soldier (Figure 1).

Figure 1. Exterior and Interior of SPCS (Cummerbund Configuration).

SERVICE – CONTINUED

The terms inside surface, inside fabric or inside is the area of any SPCS component that is between the exterior and interior surfaces (Figure 2). The inside or inside surface of a SPCS component is the portion that touches the soft ballistic inserts.

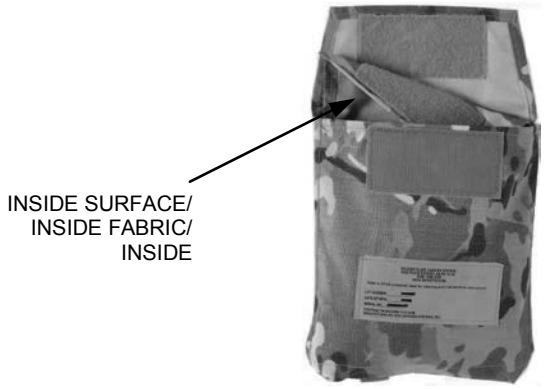


Figure 2. Inside Pocket of Side Plate Pocket.

1. Place the fully assembled SPCS on a flat surface with the front carrier facing up (Figure 3).

Figure 3. Front of Soldier Plate Carrier System.

SERVICE – CONTINUED

2. Unbuckle the cummerbunds or side plate carriers from the front carrier and flip the front carrier up to expose the interior surface of the back carrier (Figure 4).

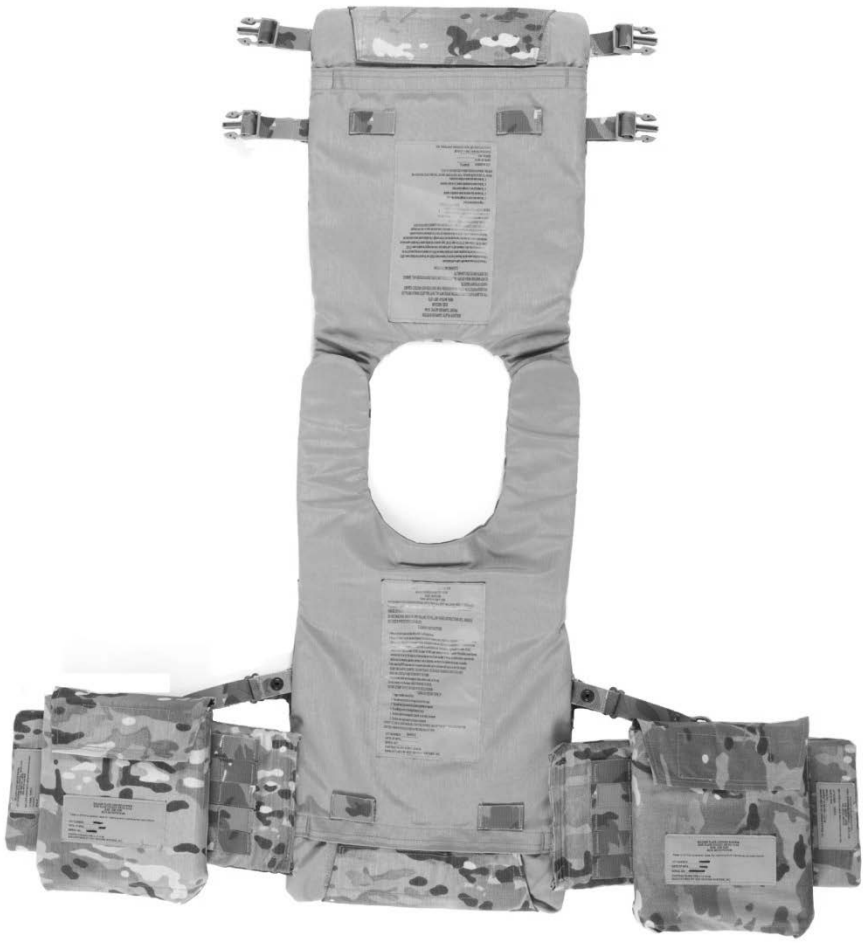


Figure 4. Interior Surface of Back Carrier (Cummerbund Configuration).

3. Separate the hook and loop fastener of the soft ballistic insert pocket on the interior of the back carrier, and remove the soft ballistic insert from the pocket (Figure 5).

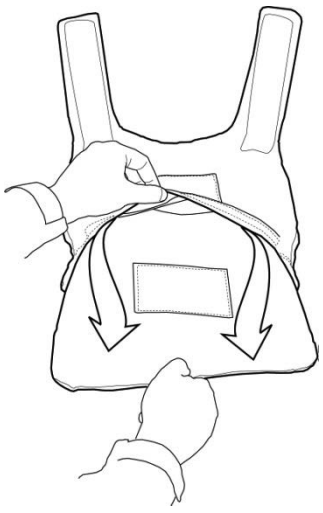


Figure 5. Soft Ballistic Insert in Back Carrier.

SERVICE – CONTINUED

4. Lift up the exterior flap of the side plate pockets or the side plate carriers (Figure 6).
5. Separate the hook and loop fastener on the interior flap of the pockets (or carriers), and remove the soft ballistic inserts.
6. Separate the hook and loop fastener on the inside edge of the cummerbunds (Figure 6), and remove the soft ballistic inserts and the plastic inserts.

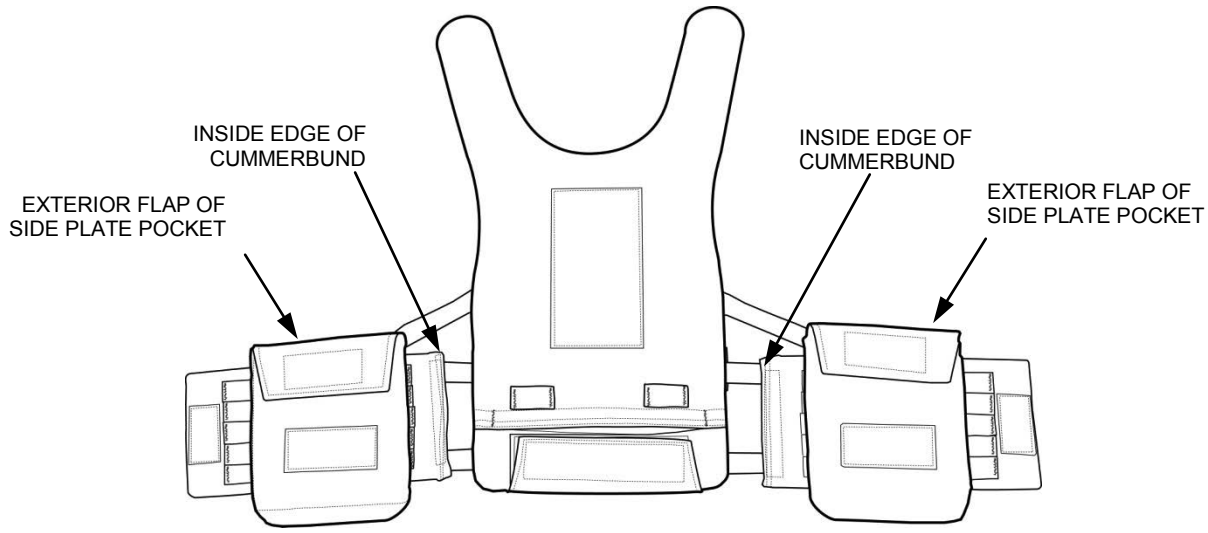


Figure 6. Back Carrier with Cummerbunds and Side Plate Pockets.

7. Separate the hook and loop fastener of the soft ballistic insert pocket on the interior of the front carrier, and remove the soft ballistic insert (Figure 7).

Figure 7. Soft Ballistic Insert in Front Carrier.

SERVICE – CONTINUED

Prepare for Cleaning

CAUTION

Ensure that the SPCS is fully assembled and tracked throughout the cleaning process. Tracking the SPCS assembly with the ballistic inserts will minimize risk of improper reassembly and reduced functionality.

1. Remove the soft ballistics and inserts from the SPCS in accordance with the previous task.
2. Inventory the SPCS and ensure that all parts listed in Table 1 are present.
3. Record the size, manufacturer, and lot number of each SPCS on the inspection ticket.

CAUTION

Use the same identification tracking number when identifying all components of the original, assembled SPCS. The inspection ticket, the plastic bag containing the non-washable components (ballistic and plastic inserts), the front carrier, and the back carrier must use the same tracking number traceable to the original SPCS assembly.

4. Examine the soft ballistics and white plastic inserts for cuts, holes and damage.
5. Tape a note to any damaged parts with details of the damage found.
6. Place the soft ballistic inserts from the front and back carriers, side plate pockets, and side plate carriers along with the plastic inserts from the cummerbunds into a polybag.
7. Label the plastic bag with the same identification tracking number as used for the carriers.
8. Pin or staple wash-resistant identification labels with the same tracking number used on the plastic bag to the Pouch Attachment Ladder System (PALS) (webbing) on the front and the back carriers (Figure 8).

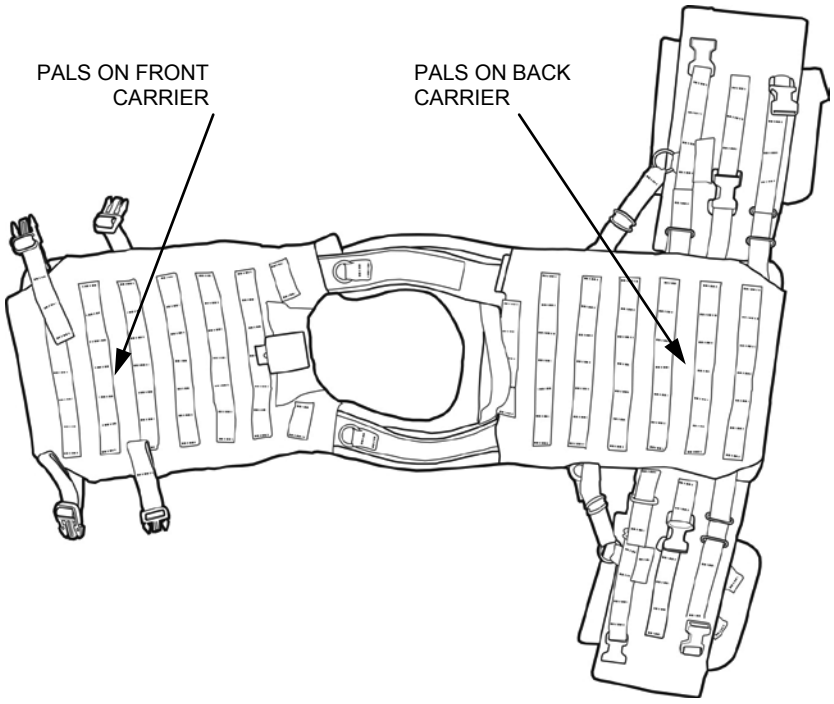


Figure 8. Location for Identification Labels.

SERVICE – CONTINUED

9. Inspect the front and back carriers, the cummerbunds, the side pockets or the side plate carriers for cuts, holes, and damage.
10. Record any damage found on an inspection ticket that has an identification tag or label with the tracking number that is traceable to the original SPCS assembly.
11. Insert the inspection ticket with the tracking number in the bag.
12. Close all hook and loop fasteners on the carriers.
13. Buckle the cummerbunds or side plate carriers to the front carrier and check the quick-release cable to ensure that all components are securely connected.
14. Wet the heavily stained and soiled areas with the undiluted spot cleaning solution (Lanadol® Avant® or equivalent).
15. Set the fully assembled SPCS aside for washing.

Washing Procedure

WARNING

Follow all cleaning instructions as written. Failure to do so could affect ballistic performance, causing injury or death.

CAUTION

Do not attempt to dye or correct the discoloration of any of its components. It is extremely important to follow the specified cleaning procedures to maintain the maximum, intended protection of the SPCS.

NOTE

The cleaning conditions below are based on the Wascomat® Model EXSM-230C washer.

Do not overload the wash cylinder. Do not exceed 62% of the rated capacity of the machine.

The maximum load for a typical 65-lb wash machine is 14 extra-small, small, or medium SPCSs, and 12 large and extra-large SPCSs.

Wash using the Wascomat® Model EXSM-230C washer or an equivalent computer-controlled, wet cleaning machine, using settings listed in Table 2 and detergents or equivalent listed in Table 3.

Table 2. Process Cycle Program.

STEP	PROCESS DESCRIPTION	TIME
0	Head	
	• Buzzer at Program End	On
	• Motor Gentle Action On Time	00:05
	• Motor Gentle Action Off Time	00:10
	• Motor Normal Action On Time	00:10
	• Motor Normal Action Off Time	00:05

SERVICE – CONTINUED

Table 2. Process Cycle Program – Continued.

STEP	PROCESS DESCRIPTION	TIME
1	Prewash (1)	
	• Wash Time (min:sec)	08:00
	• Temperature (degree C)	40
	• Temperature Hysteresis (degree C)	4
	• Max Temperature Increase Per Minute (degree C)	45
	• Second Fill Level (Scale Units: liters)	110 or 52
	• Level Hysteresis (Scale Units)	20
	• Cold Water	On
	• Hot Water	On
	• Fill G	On
	• Heat G	On
	• Wash N	On
	• Motor Speed During Filling (RPM)	24
	• Motor Speed During Heating (RPM)	24
	• Motor Speed During Wash (RPM)	24
	• Motor Acceleration (RPM/sec)	24
	• Detergent Signal 3 (AVANT® 4ml/sec)	01:30
2	Drain (1)	
	• Motor N	On
	• Drain Normal	On
	• Drain Time (min:sec)	00:40
	• Motor Speed During Drain Time (RPM)	41
	• Motor Acceleration During Drain (RPM/sec)	20
3	Spin (1)	
	• Drain Normal	On
	• Extract Time (min:sec)	00:30
	• Extract Speed (RPM)	400
4	Main Wash (1)	
	• Wash Time (min:sec)	10:00
	• Temperature (degree C)	40

SERVICE – CONTINUED

Table 2. Process Cycle Program – Continued.

STEP	PROCESS DESCRIPTION	TIME
	• Temperature Hysteresis (degree C)	4
	• Maximum Temperature Increase (per min) (degree C)	43
	• Second Fill Level (Scale Units) (Liters)	110 or 52
	• Level Hysteresis (Scale Units)	20
	• Cold Water	On
	• Hot Water	On
	• Fill G	On
	• Heat G	On
	• Wash N	On
	• Motor Speed During Filling (RPM)	24
	• Motor Speed During Heating (RPM)	24
	• Motor Speed During Wash (RPM)	24
	• Motor Acceleration (RPM/sec)	24
	• Detergent Signal 1 (AKTIV® 4ml/sec)	01:00
	• Detergent Signal 3 (AVANT® 4 ml/sec)	00:30
5	Drain (2)	
	• Motor N	On
	• Drain Normal	On
	• Drain Time (min:sec)	00:40
	• Motor Speed During Drain Time (RPM)	41
	• Motor Acceleration During Drain (RPM/sec)	20
6	Spin (2)	
	• Drain Normal	On
	• Extract Time (min:sec)	00:30
	• Extract Speed (RPM)	400
7	Main Wash (2)	
	• Wash Time (min:sec)	08:00
	• Temperature (degree C)	40
	• Temperature Hysteresis (degree C)	4
	• Max Temperature Increase (per min) (degree C)	43
	• Second Fill Level (Scale Units) (Liters)	110 or 52
	• Level Hysteresis (Scale Units)	20
	• Cold Water	On

SERVICE – CONTINUED

Table 2. Process Cycle Program - Continued.

STEP	PROCESS DESCRIPTION	TIME
	• Hot Water	On
	• Fill G	On
	• Heat G	On
	• Wash N	On
	• Motor Speed During Filling (RPM)	24
	• Motor Speed During Heating (RPM)	24
	• Motor Speed During Wash (RPM)	240
	• Motor Acceleration (RPM/sec)	24
	• Detergent Signal 1 (AKTIV® @ 4ml/sec)	01:00
	• Detergent Signal 3 (AVANT® @ 4 ml/sec)	00:30
8	Drain (3)	
	• Motor N	On
	• Drain Normal	On
	• Drain Time (min:sec)	00:40
	• Motor Speed During Drain Time (RPM)	41
	• Motor Acceleration During Drain (RPM/sec)	20
9	Spin (3)	
	• Drain Normal	On
	• Extract Time (min:sec)	00:30
	• Extract Speed (RPM)	400
10	Rinse (1)	
	• Wash Time (min:sec)	02:00
	• Temperature (degree C)	40
	• Temperature Hysteresis (degree C)	4
	• Max Temperature Increase (per min) (degree C)	43
	• Second Fill Level (Scale Units) (Liters)	141 or 95
	• Level Hysteresis (Scale Units)	35
	• Cold Water	On
	• Hot Water	On
	• Fill G	On
	• Heat G	On
	• Wash N	On
	• Motor Speed During Filling (RPM)	24

SERVICE – CONTINUED

Table 2. Process Cycle Program - Continued.

STEP	PROCESS DESCRIPTION	TIME
	• Motor Speed During Heating (RPM)	24
	• Motor Speed During Wash (RPM)	24
	• Motor Acceleration (RPM/sec)	24
11	Drain (4)	
	• Motor N	On
	• Drain Normal	On
	• Drain Time (min:sec)	00:40
	• Distribution Time (min:sec)	00:10
	• Motor Speed During Drain Time (RPM)	41
	• Motor Acceleration During Drain (RPM/sec)	20
12	Spin (4)	
	• Drain Normal	On
	• Extract Time (min:sec)	00:30
	• Extract Speed (RPM)	400
13	Rinse Repeat (2)	
	• Wash Time (min:sec)	01:00
	• Temperature (degree C)	40
	• Temperature Hysteresis (degree C)	4
	• Max Temperature Increase (per min) (degree C)	43
	• Second Fill Level (Scale Units) (Liters)	141 or 95
	• Level Hysteresis (Scale Units)	35
	• Cold Water	On
	• Fill G	On
	• Heat G	On
	• Wash N	On
	• Motor Speed During Filling (RPM)	24
	• Motor Speed During Heating (RPM)	24
	• Motor Speed During Wash (RPM)	24
	• Motor Acceleration (RPM/sec)	24
14	Drain (5)	
	• Motor G	On
	• Drain Normal	On

SERVICE – CONTINUED

Table 2. Process Cycle Program - Continued.

STEP	PROCESS DESCRIPTION	TIME
	• Drain Time (min:sec)	01:00
	• Distribution Time (min:sec)	00:20
	• Motor Speed During Drain Time (RPM)	41
	• Motor Acceleration During Drain (RPM/sec)	20
15	Spin (5)	
	Drain Normal	On
	Extract Time (min:sec)	03:00
	Extract Speed (RPM)	690
16	End	

Table 3. Examples of Wet Cleaning Detergents (or Equivalent).

MANUFACTURER	PRODUCT NAME	FUNCTION	APPLICATION STAGE	AMOUNT
Kreussler Company	Lanadol® Avant®	Pre-spotting Agent	• Prewash • Main Wash (1) • Main Wash (2)	360 ml 120 ml 120 ml
	Lanadol® Aktiv®	Detergent	• Main Wash (1) • Main Wash (2)	240 ml 240 ml

Drying Procedure

CAUTION

Overheating and over-drying the SPCS will result in damage that may not be readily apparent. Follow all directions carefully. The dryer must have proper temperature and residual moisture controls to assure conformance to the process and finished product specifications.

NOTE

Do not load dryer to more than 80 percent of rated capacity. The maximum load for a typical 75-pound drying machine is 20 extra-small, small, or medium SPCSs or 18 large or extra-large SPCSs.

1. Dry the SPCS in a drying machine capable of detecting the amount of residual moisture in the garment and capable of automatically stopping the drying cycle when the garments reach the desired residual moisture content (Wascomat® model TD75RMC or equivalent). The conditions for the drying process are located in Table 4.
2. Upon completion of drying cycle, check the garment components for residual moisture level and temperature.

CAUTION

Do not over-dry or over-heat the garment.

SERVICE – CONTINUED

3. If the residual moisture level is higher than the desirable range in Table 4, extend the drying cycle time in small increments until the desirable residual moisture conditions are met.

Table 4. Conditions for Drying Process.

CONDITION	SETTING/MEASUREMENT
Garment Residual Moisture Levels	5 – 7%
Maximum Air Temperature	180 °F
Maximum Garment Temperature	110 °F
Approximate Cycle Time	25 minutes

Post-Cleaning Inspection

1. Inspect the SPCS components for cleanliness.
2. If any of the components are not sufficiently cleaned (best commercial practices), repeat the cleaning and drying process.
3. If SPCS components are clean, allow items to acclimate in a dehumidified, climate-controlled environment (90+/-2 degrees F and less than 28 percent relative humidity (RH) until the residual moisture in the material is no more than 1 percent.
4. Once acclimated, organize the clean SPCS components with the plastic bag of soft ballistic inserts and plastic inserts that were previously set aside.
5. Check the identification tag or label for the washed component and ballistic inserts to ensure that all tracking numbers match to the original SPCS assembly.
6. Inventory all items in accordance with Table 1 to make sure there is no missing component. Note any discrepancies and/or damages on the inspection ticket.

Assembly

Assemble, rework, and inspect SPCS in accordance with these assembly procedures as needed. Do not insert any damaged or defective soft ballistics in the carriers. Place the soft ballistic that does not conform to standard between the front and back carriers.

NOTE

The term “interior fabric” or “interior surface” means the side of any component of the SPCS that faces the Soldier when worn. The term exterior fabric or exterior surface means the side of any component of the SPCS that faces away from the Soldier. The term “inside surface,” “inside fabric” or “inside” means the area of any SPCS component that is between the exterior and interior surfaces. The inside or inside surface of a SPCS component is the portion that touches the soft ballistic inserts.

Install Soft Ballistic Insert in the Front Carrier

1. Place the front carrier on a clean surface with the exterior surface facing down.
2. Open the ballistic pocket by separating the hook and loop fasteners.
3. With the label on the soft ballistic insert facing up, fold side area of the insert toward the center.

SERVICE – CONTINUED

4. Slide the soft ballistic insert into the front carrier pocket (Figure 9) and around the shoulder and neck seams, position it on top of the black foam lining.

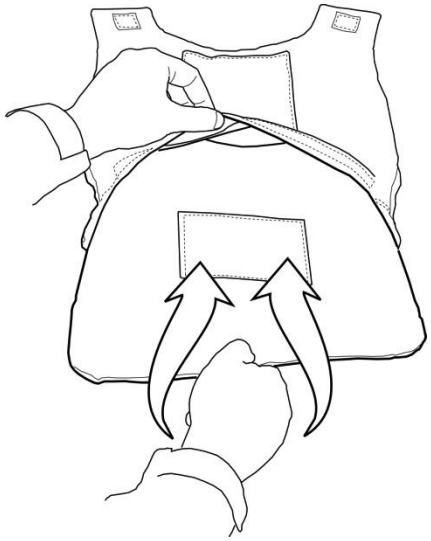


Figure 9. Install Soft Ballistic Insert in Front Carrier.

5. Unfold the soft ballistic insert, making sure that it lies flat without any fold and fills the entire front carrier.
6. Seal the hook and loop fastener on the front carrier.

Install Soft Ballistic in the Back Carrier

1. Place the back carrier on a clean surface with the exterior surface facing down.
2. Open the ballistic pocket by separating the hook and loop fastener.
3. With the label on the soft ballistic insert facing up, fold side area of the insert toward the center.
4. Slide the soft ballistic insert into the pocket of the back carrier (Figure 10).

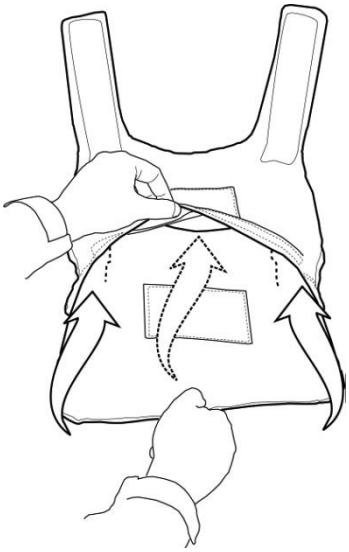


Figure 10. Install Soft Ballistic Insert in Back Carrier.

SERVICE – CONTINUED

5. Unfold the soft ballistic insert, making sure that it lies flat without any fold and fills the entire back carrier.
6. Seal the hook and loop fastener on the back carrier.

Install Soft Ballistic and Plastic Plate in the Cummerbund Outer Shell

1. Place the right cummerbund outer shell on a clean surface with the exterior surface facing down (label side facing up).
2. Open the hook and loop fastener on the end of the cummerbund outer shell.
3. Slide the soft ballistic insert into the outer shell.
4. Slide the plastic insert into the outer shell on top of the soft ballistic (Figure 11). The plastic insert is on the inside closest to the body, and the soft ballistic insert is closest to the exterior.

Figure 11. Plastic and Soft Ballistic Inserts in Cummerbund.

5. Repeat steps 1 through 4 to install the soft ballistic and plastic inserts in the left cummerbund.

Install Soft Ballistics in the Side Plate Carriers (Side Plate Carrier Configuration)

NOTE

When inserting soft ballistics and hard armor protective inserts, ensure that all labels face in the same direction as the labels on the carrier.

1. Place the side plate carrier on a flat surface with the interior side (the label side) facing up.
2. Open the flap of the pocket on the side plate carrier, and detach the hook and loop fasteners in the compartment next to the interior side.
3. Place the soft ballistic insert in the interior compartment with the label side facing the inside (Figure 12).

Figure 12. Soft Ballistic Insert in the Side Plate Carrier.

.

SERVICE – CONTINUED

4. Tuck the interior pocket flap into the interior compartment and seal the hook and loop fastener tape.
5. Close the top flap and seal the hook and loop fastener tape.
6. Repeat steps 1 through 5 for the second side plate carrier.

Install Soft Ballistic Insert in the Cummerbund Side Plate Pockets

1. Place the cummerbund side plate pocket on a clean surface with the exterior side facing down and the label side facing up.
2. Open the flap at the top of the side pocket.
3. Separate the hook and loop fastener on the inside of the side pocket.
4. Slide the soft ballistic insert with the label facing up into the inside pocket (Figure 13).

Figure13. Soft Ballistic Insert in Side Plate Pocket.

5. Tuck the inside flap into the side plate pocket, and seal the hook and loop (Figure 14).

Figure14. Soft Ballistic Insert in Side Plate Pocket.

SERVICE – CONTINUED

6. Close the top flap of the side pocket and seal the hook and loop.
7. Repeat steps 1 through 6 for the second side pocket.

Attach Side Plate Pocket to the Cummerbund

1. Position one section of the cummerbund with the data label facing up and to right. (The top of the angle strap will be at the top of the cummerbund and facing the working surface).
2. Position the long straps of the side plate pocket nearest the top and towards the middle of the cummerbund (Figure 15). The data label of the pocket should be resting on the working surface.

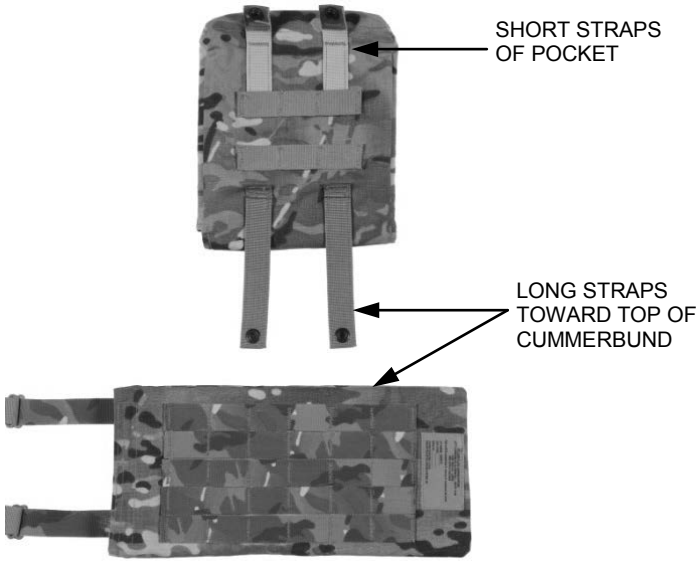


Figure 15. Side Plate Pocket for Cummerbund.

3. Working from top to bottom, insert the straps of the side plate pocket under the top row of webbing of the cummerbund, then over the adjacent row of webbing (Figure 16).

Figure 16. Weaving Straps through Webbing.

SERVICE – CONTINUED

4. Continue weaving the straps under the middle row of webbing, over the next row of webbing, and under the bottom row of webbing (Figure 17).

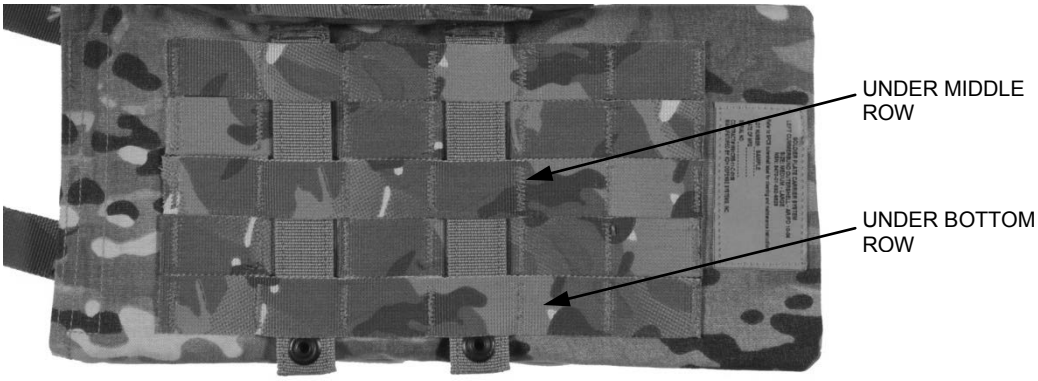


Figure 17. Side Plate Pocket Straps Fully Inserted.

5. Fold the top of the pocket in toward the cummerbund and fasten the snaps of the short pocket straps to the long pocket straps. The data labels for the pocket and the cummerbund will be facing you (Figure 18).

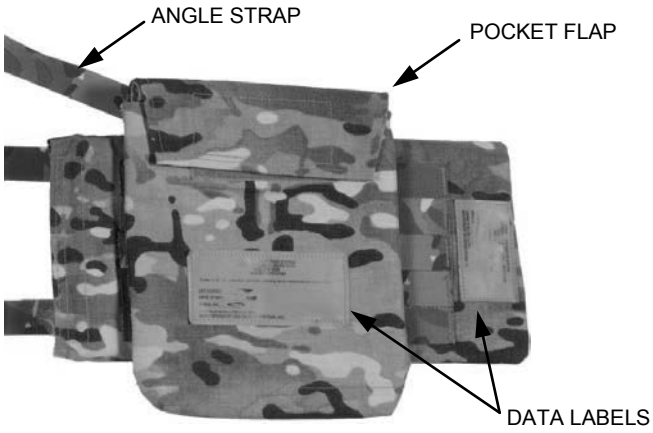


Figure 18. Data Labels Face Same Direction.

6. Position the second section of the cummerbund with the data label facing up and to the left. (The top of the angle strap will be at the top of the cummerbund and facing the work surface).

7. Repeat steps 2 through 6 for the second side pocket and section of the cummerbund.

SERVICE – CONTINUED

Attach the Angle Straps to the Cummerbund

1. Place the cummerbunds on a clean surface with the data label side down and buckle facing away from you.
2. Pinch the tabs on the angled strap together (Figure 19).

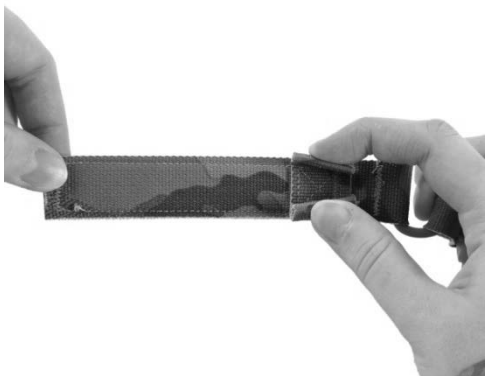


Figure 19. Angled Strap Tab Ends Pinched.

NOTE

Insert the angled strap from the left side for the right side plate carrier, and insert it from the right side for the left side plate carrier.

3. Insert the strap underneath one row of PALS webbing on the cummerbund (Figure 20).

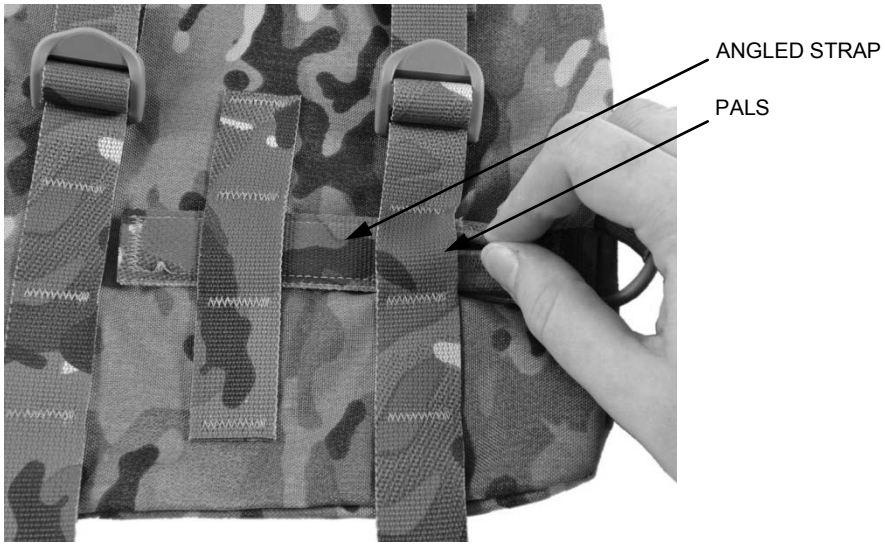


Figure 20. Angled Strap under PALS.

4. After the tabs have passed underneath the first PALS, smooth flat to secure the strap in place.

SERVICE – CONTINUED

Attach the Cummerbund to the Back Carrier (Cummerbund Configuration)

1. Place the back carrier on a flat surface with the label side facing down.
2. Position one side of the cummerbund beside the back carrier as shown in Figure 21.

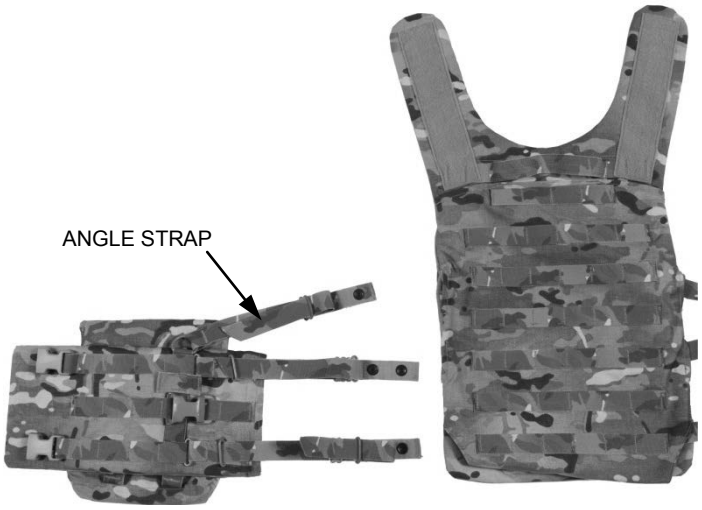


Figure 21. Assembled Cummerbund Positioned for Attachment.

3. Open the bottom flap of the back carrier.
4. Reach in the back carrier and push the D-ring out from inside the back carrier to the outside (Figure 22).

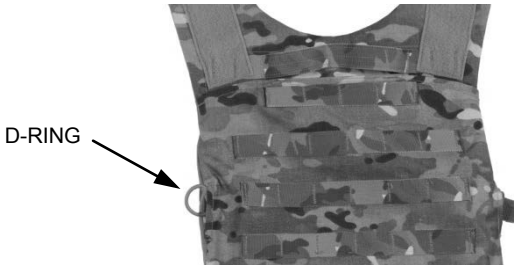


Figure 22. D-Ring on Side of Back Carrier.

5. Insert the snap end of the angle strap through the D-ring and snap the fastener closed (Figure 23).

Figure 23. Snap End of Angled Strap through D-Ring.

SERVICE – CONTINUED

6. Tuck the D-Ring back into the back carrier.
7. Insert the top strap of the cummerbund into the middle slot of the back carrier as shown in Figure 24.

Figure 24. Top Strap of Cummerbund Inserted in Back Carrier.

8. Thread the snap end through the middle metal loop on the back carrier (with the metal loop on the strap facing up) and snap it closed (Figure 25).

Figure 25. Snap End through Metal Loop.

9. Adjust the length of the strap using the tri-glide buckle if necessary.
10. Insert the lower strap of the cummerbund under the lower flap of the back carrier, as shown in Figure 26.

Figure 26. Lower Strap of Cummerbund through Metal Loop.

SERVICE – CONTINUED

11. Thread the snap end through the lower metal loop on the back carrier (with the metal loop on the strap facing up) and snap it closed.
12. Adjust the length of the strap using the tri-glide buckle if necessary.
13. Repeat steps 2 through 12 to attach the right side of the cummerbund to the back carrier.
14. Close the hook and loop fastener on the back carrier.

Figure 27. Back Carrier with Cummerbund and Side Plate Pockets Installed.

Attach the Angled Straps to the Side Plate Carriers (Side Plate Carrier Configuration)

NOTE

The angled straps of the earlier plate carriers are permanently attached to the side plate carriers. More recent plate carriers have detachable angled straps.

1. Place the side plate carriers on a clean surface, with the data label sides down and buckles facing away from you (Figure 28).

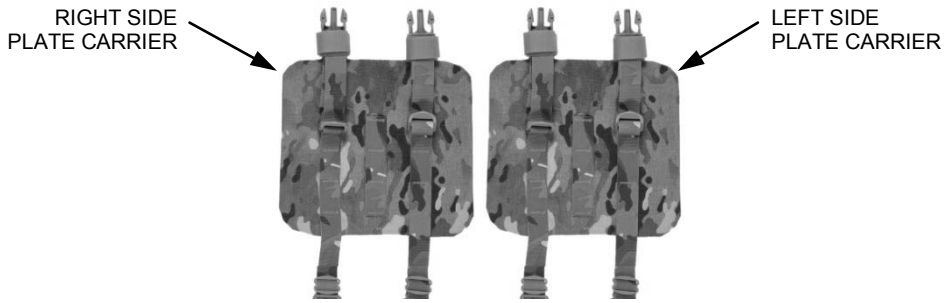


Figure 28. Side Plate Carriers Prepared for Angled Strap Insertion.

SERVICE – CONTINUED

2. Pinch the tabs on the angled strap together (Figure 29).

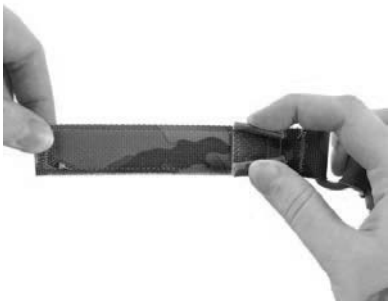


Figure 29. Angled Strap Tab Ends Pinched.

NOTE

Insert the angled strap from the left side for the right side plate carrier, and insert it from the right side for the left side plate carrier.

3. Insert the strap underneath one row of PALS webbing on the side plate carrier (Figure 30).

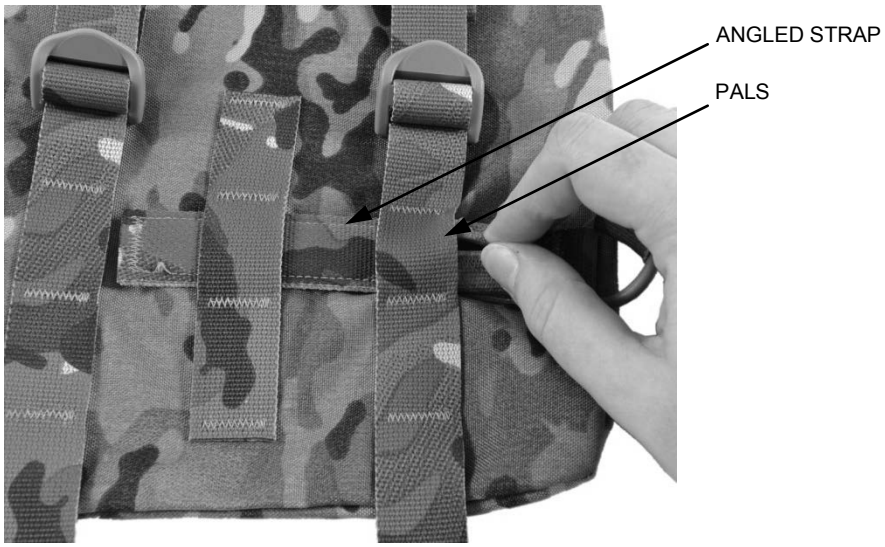


Figure 30. Angled Strap under PALS.

4. After the tabs have passed underneath the first PALS, smooth them flat to secure the strap in place (Figure 31).

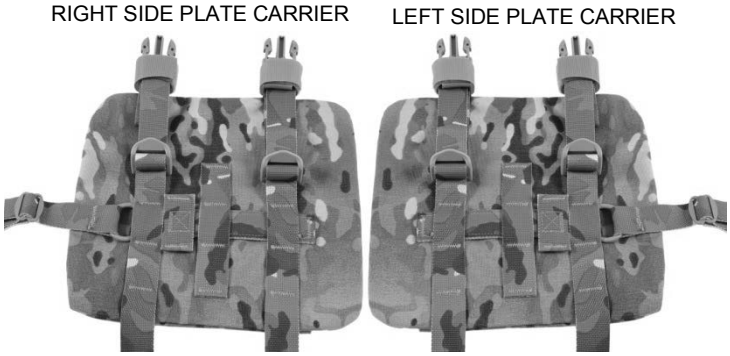


Figure 31. Angled Straps Attached Correctly.

SERVICE – CONTINUED

Attach the Side Plate Carriers to the Back Carrier (Side Plate Carrier Configuration)

NOTE

For the non-side-plate-carrier configuration, see “Attach the Cummerbund to the Front and Back Carriers” in this work package.

1. Place the back carrier down on a clean surface with the exterior surface facing up.
2. Open the cover of the back carrier by separating the hook and loop fastener on the underside of the carrier to allow access to the soldier plate carrier attachment points.
3. Reach into the back carrier and pull out the angle strap attachment D-ring (Figure 32).

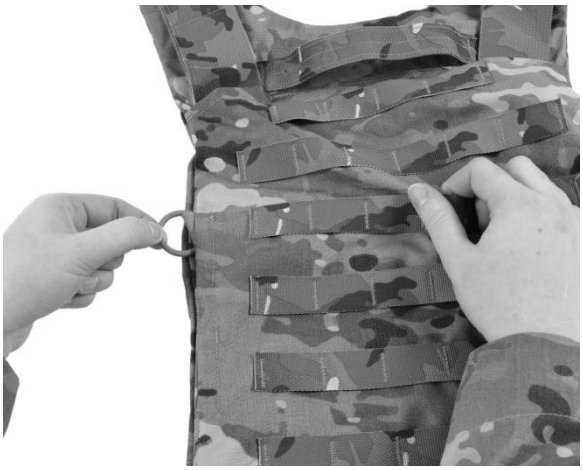


Figure 32. D-Ring for Angled SPC Strap Attachment.

4. Take the end of the angled SPC strap that has the snap on it, thread through the D-ring, and snap it closed (Figure 33).

Figure 33. Angled SPC Strap on D-Ring.

SERVICE – CONTINUED

5. Tuck any extra webbing into the back carrier slot (Figure 34).

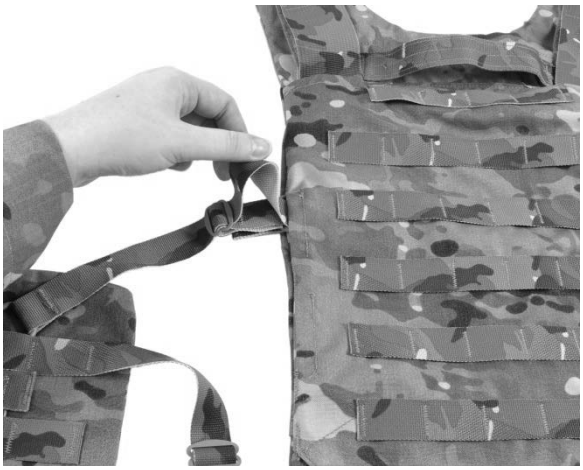


Figure 34. Extra Webbing Tucked into Back Carrier.

6. Insert the middle SPC strap into the slot on the back carrier (Figure 35).

Figure 35. Middle Strap into Middle Slot on Back Carrier.

SERVICE – CONTINUED

7. Insert the end of the middle SPC strap with the snap on it through the middle metal loop on the back carrier (with the metal loop on the strap facing up) and snap it closed (Figure 36).

Figure 36. Attach Middle Strap.

8. Adjust the length of the strap using the tri-glide buckle if necessary.
9. Insert the end of the lower SPC strap with the snap on the end through the lower metal loop on the back carrier (with the metal loop on the strap facing up) and snap it closed (Figure 37).

Figure 37. Attach Lower Strap.

10. Adjust the length of the strap using the tri-glide buckle if necessary.
11. Repeat steps 3 through 10 to attach the other side plate carrier.

SERVICE – CONTINUED

Thread Quick-Release Cable Assembly

NOTE

Check the quick-release cable assembly on the front carrier to make sure that the ends of the cable are threaded through all connecting points. Rethread the assembly if necessary.

1. If the end of the cable becomes loose during cleaning and drying, rethread the cable through all points (Figure 38).

Figure 38. Route of Quick-Release Cable (Enhanced Photo).

SERVICE – CONTINUED

2. Open the front panel of the front carrier by separating the hook and loop fastener tape to allow access to the cable release channels inside the carrier (Figure 39).

Figure 39. Front Panel of Front Carrier Open.

3. Insert the cable ends through the holes on either side of the cable release pocket (Figure 40).

Figure 40. Cable Ends through Holes in Cable Release Pocket.

SERVICE – CONTINUED

4. Pull the cables through so the pull-tab is centered on the loop fastener (Figure 41).

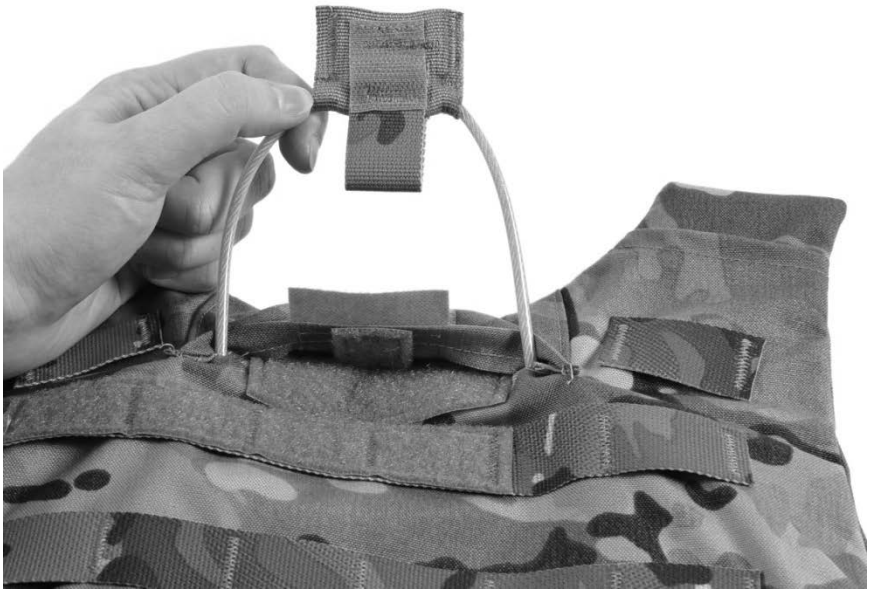


Figure 41. Pulling Both Cables through Holes.

NOTE

For the following steps, the front carrier is shown inside-out to better illustrate the procedures. During actual assembly, most of the attachment points on the front carrier are not visible. The procedures must be performed by touch.

5. Attach the shoulder straps to the front carrier:
    a. Reach into front carrier, and as the looped end of the 2-inch nylon webbing of the shoulder strap is inserted into the shoulder opening, secure it and the metal buckle (Figure 42).

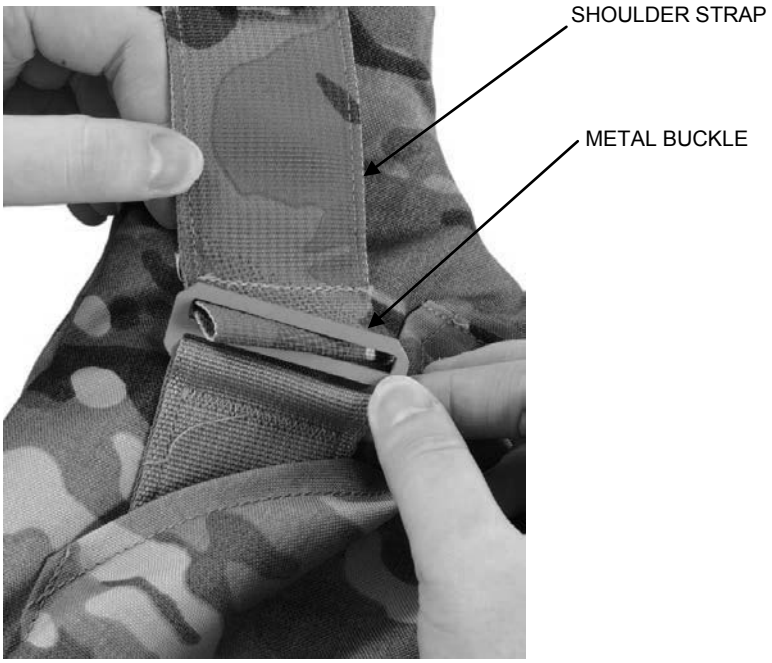


Figure 42. Shoulder Strap through Buckle on Inside of Front Carrier.

SERVICE – CONTINUED

b. Thread the release cable through the loop on the end of the shoulder strap from the center of the vest toward the outside of the vest (Figure 43).

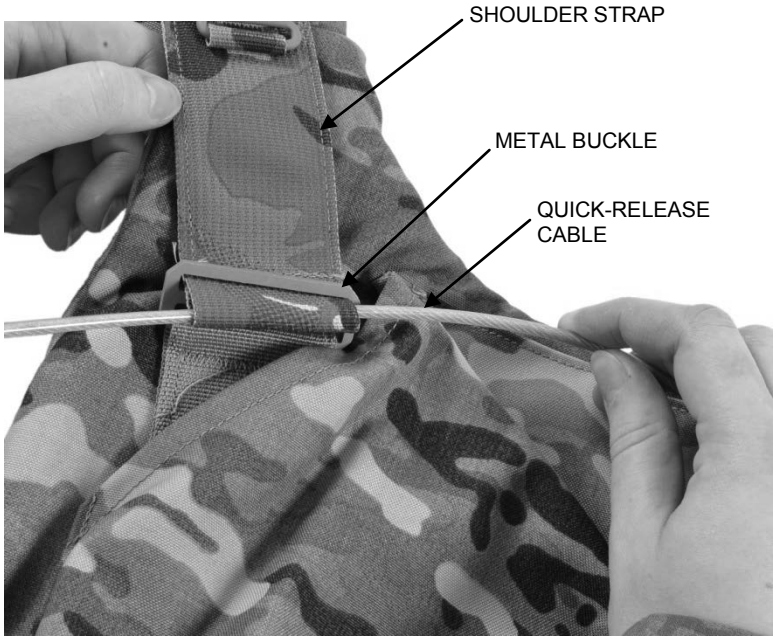


Figure 43. Thread Cable through Shoulder Strap Loop.

c. Repeat steps a and b to attach the other shoulder strap.

6. Attach the quick-release buckles:

a. Insert the nylon webbing portion of a quick-release buckle through the hole in the side of the front carrier, then through the top metal rectangular ring on inside of front carrier.

NOTE

For the side plate carrier configuration and the non-side-plate carrier configuration, use the female quick-release buckle, as shown in Figure 44.

For the cummerbund configuration, use the male quick-release buckle, as shown in Figure 44.

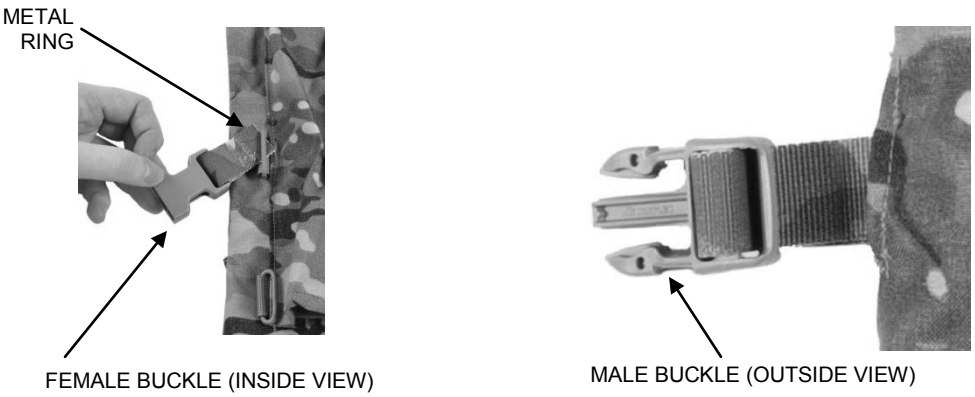


Figure 44. Quick-Release Buckle.

SERVICE – CONTINUED

b. Insert the nylon webbing portion of another quick-release buckle through the bottom metal rectangular ring.

WARNING

Ensure the quick-release cable is to the inside of the metal rectangular ring (closer to the center of the front carrier). Failure to do so could adversely affect the function of the quick-release, causing injury or death to personnel.

c. Thread the release cable through the webbing of both quick-release buckles, from the top of the vest toward the bottom.

d. Stow the cable ends inside the cable retainer channels (Figure 45).

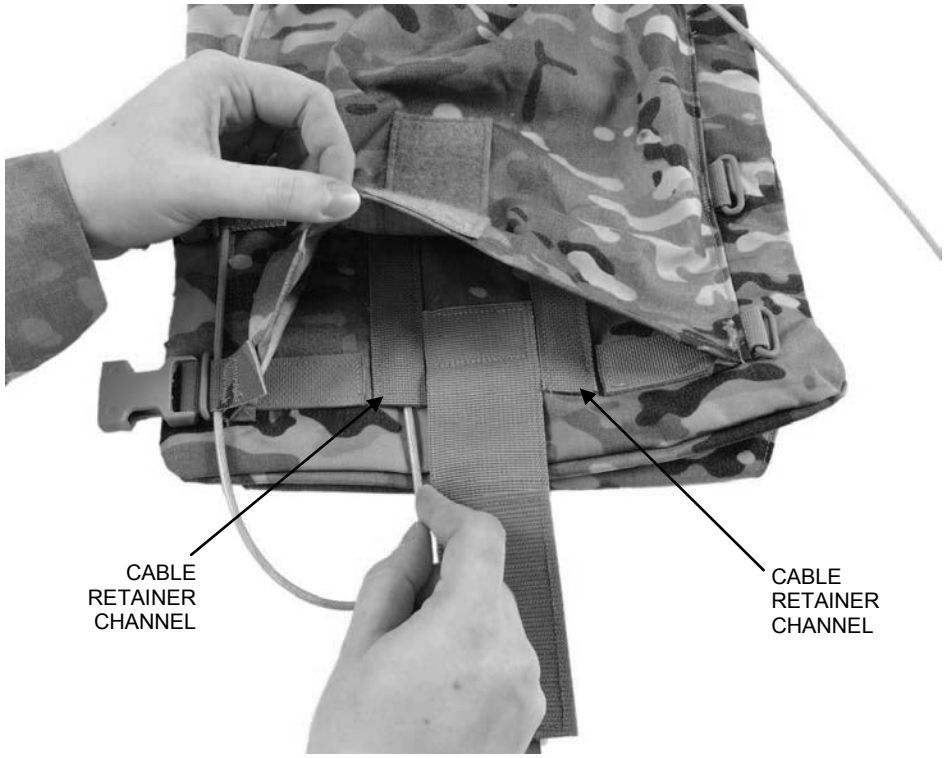


Figure 45. Cable inside Cable Retainer Channels.

7. Repeat steps a through c to attach the other two quick-release buckles and thread the quick-release cable through them.

8. Secure front carrier flap with the hook and loop fastener tape on the underside of the carrier.

SERVICE – CONTINUED

Connect the Cummerbund to the Front Carrier (Cummerbund Configuration)

1. Attach the left cummerbund to the front carrier using the quick-release buckles.
2. Attach the right cummerbund to the front carrier using the quick-release buckles.

Connect the Side Plate Carriers to the Front Carrier (Side Plate Carrier Configuration)

1. Attach the left side plate carrier to the front carrier using the quick-release buckles.
2. Attach the right side plate carrier to the front carrier using the quick-release buckles.

Packaging

1. Insert the final inspection ticket between the front and back carriers of each SPCS identifying any defective, damaged or missing component and/or defective conditions of the SPCS.
2. Note on the inspection ticket “Further Attention Needed” if any discrepancy is seen.
3. Place the assembled and inspected SPCS in the Government-furnished container.

NOTE

Do not over pack each layer to allow for air circulation inside the container.

4. Scatter two 10-gram silica gel desiccant packs in each layer of SPCS.
5. Return the cleaned soldier plate carrier systems to the Government per delivery order requirement.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
HARD ARMOR PROTECTIVE INSERTS
INSPECT, SERVICE

INITIAL SETUP:

Tools

None Required

Personnel Required

Non-MOS Specific (1)

Materials/Parts

Tape, Pressure Sensitive Adhesive (WP 0030, Item 37)

Cloth, Knit (Nylon) (WP 0024, Item 8)

Detergent, Laundry, Powder 50-lb, Type II, of MIL-D-16791 (WP 0030, Item 13)

References

TM 10-8470-208-24&P

WP 0005

WP 0007

INSPECT

Perform PMCS inspection on all items in accordance with WP 0005 and determine serviceability in accordance with WP 0007.

END OF TASK

SERVICE

Cleaning

CAUTION

Do not machine wash or dry the hard armor protective inserts. Machine washing and drying will degrade the ballistic performance of the hard armor inserts and the protection they offer.

Do not submerge the hard armor inserts in any liquid, including water.

NOTE

Never use a stiff bristle brush.

Never use any bleach, solvent or harsh detergent.

Badly soiled area may be cleaned with a damp cloth soaked with a mild detergent.

SERVICE – CONTINUED

1. Remove loose dirt and lint from the outer surface of the SAPI/SBI (Figure 1) using a cloth or soft bristle brush. Never use a stiff bristle brush.
2. Wet the SAPI/SBI in a sink or shower using warm, not hot, water.
3. Apply a mild soap or detergent to the soiled areas and scrub with a cloth or soft bristle brush.
4. Badly soiled areas may be scrubbed with mild soap or detergent.
5. Scrub only long enough to remove soil.
6. Rinse the SAPI/SBI with warm water until all suds are completely gone.
7. Let the insert dry by itself, away from heat or open flame.

Figure 1. SAPI and SBI Hard Armor Inserts.

END OF TASK

REPAIR

NOTE

Cloth backed adhesive tape is often referred to as duct tape, rigger's tape or 100 mile-per-hour tape.

Interim repairs of the SAPI/SBI outer cover can be made using cloth backed adhesive tape until it can be exchanged. This repair does help to prevent the spread of existing delamination. It is not meant as a permanent fix.

Damaged hard armor inserts must be turned in for replacement.

For additional information see TM 10-8470-208-24&P.

END OF TASK

END OF WORK PACKAGE

FIELD MAINTENANCE
PROTECTIVE EQUIPMENT
PREPARATION FOR STORAGE OR SHIPMENT

INITIAL SETUP:

Tools and Special Tools	Personnel Required
None Required	Non-MOS Specific (1)
Materials/Parts	**References**
None Required	TM 10-8470-208-24&P AR 700-15

PREPARATION FOR STORAGE

General Storage Requirements

To ensure that serviceability standards of the stored protective equipment are maintained, every effort shall be exerted to adhere to the following general storage requirements:

1. When available, a climate controlled building should be used to store protective equipment.
2. Protective equipment shall be stored in a dry, well-ventilated location and be protected from pilferage, dampness, fire, dirt, insects, rodents, and direct sunlight.
3. Protective equipment will not be stored in a manner that would prevent ventilation or interfere with light fixtures, heating vents, fire fighting devices, cooling units, exits, or fire doors in the facility.
4. Protective equipment will not be stored in direct contact with any building floor or wall. Store using bins, shelves, pallets, racks, or dunnage to provide airspace between the storage area floor and the equipment. If the pre-constructed shelving or similar storage accommodations are not available, locally fabricate storage provisions using suitable lumber or wooden boxes.
5. Store protective equipment in a cleaned and thoroughly dried condition.
6. Preserve and package all protective equipment in accordance with approved preservation requirements and in packaging that is clearly labeled and designed to prevent degradation of material.
7. Label all packaging containing protective equipment with item information, such as item description, LIN, size, camouflage pattern, NSN, supply condition code, quantity, and quality status.
8. Use material handling equipment as much as possible when lifting or moving protective equipment.
9. Periodic rotation of stock, proper housekeeping policies and strict adherence to all safety regulations shall be practiced at all times.

General Storage Inspection Requirements

1. General Information. An in-storage inspection is a physical check conducted on a random sample of protective equipment that is located in storage.

PREPARATION FOR STORAGE – CONTINUED

2. Inspection. Inspect protective equipment to ensure that it is ready for issue and that no damage or deterioration has occurred.

3. Inspect the adequacy of the storage facilities, efforts taken to control pests and rodents, and protection against unfavorable climatic conditions.

Hard Armor Protective Inserts

Refer to TM 10-8470-208-24&P for storage and shipment information for the ESAPI and ESBI hard armor inserts.

END OF TASK

PREPARATION FOR SHIPMENT

During shipment, every effort will be made to protect protective equipment from weather elements, dust, dirt, oil, grease, and acids. Vehicles used to transport protective equipment shall be inspected to ensure the items are protected from the previously cited material damaging conditions.

Protective equipment destined for domestic or overseas shipment shall be packaged and marked in accordance with AR 700-15.

END OF TASK

END OF WORK PACKAGE

CHAPTER 4

PARTS INFORMATION
FOR
GENERAL REPAIR PROCEDURES FOR PROTECTIVE 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 protective 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 00XX 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
COMBAT VEHICLE CREWMAN'S (CVC) HELMET

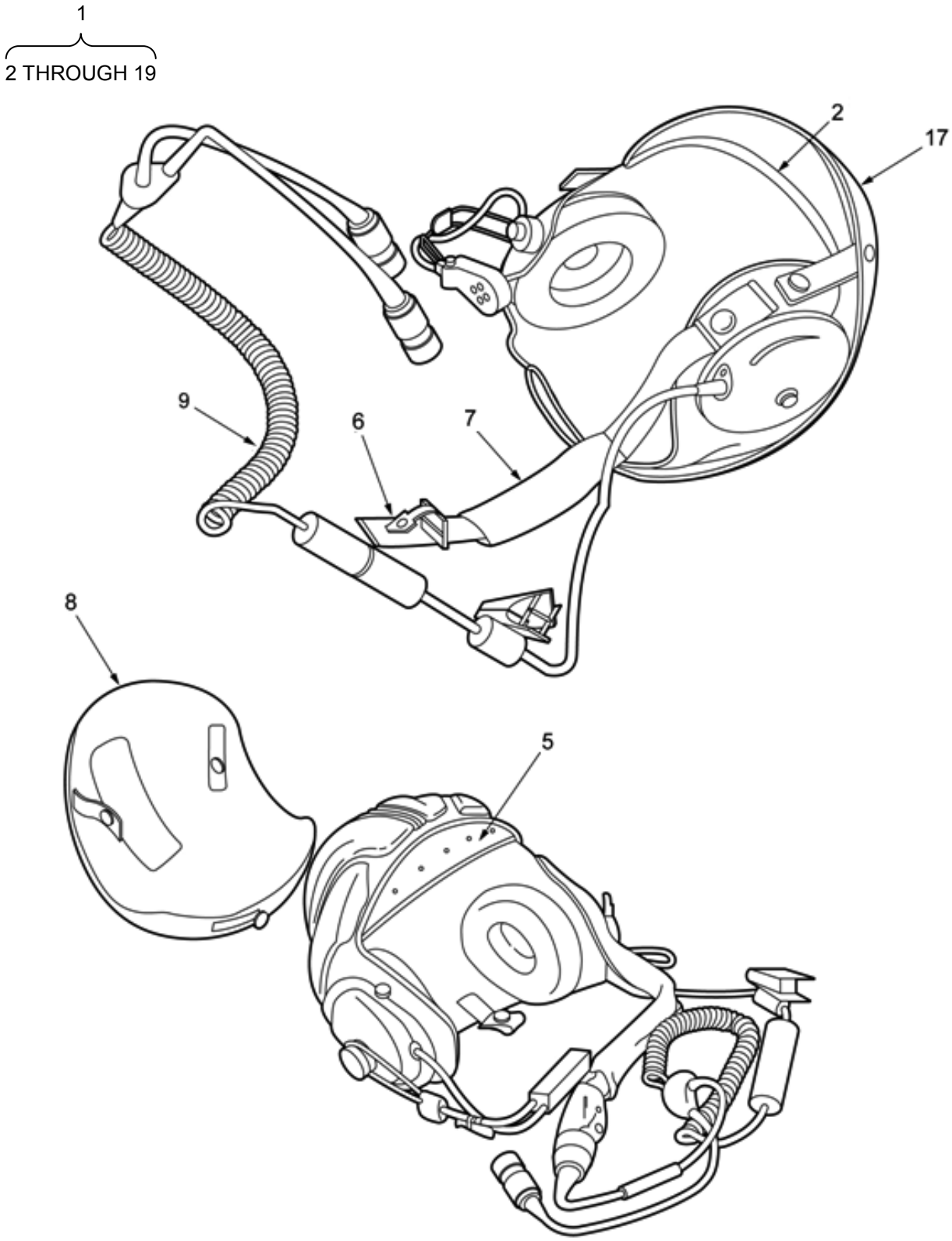


Figure 1. Combat Vehicle Crewman's (CVC) Helmet (Sheet 1 of 3).

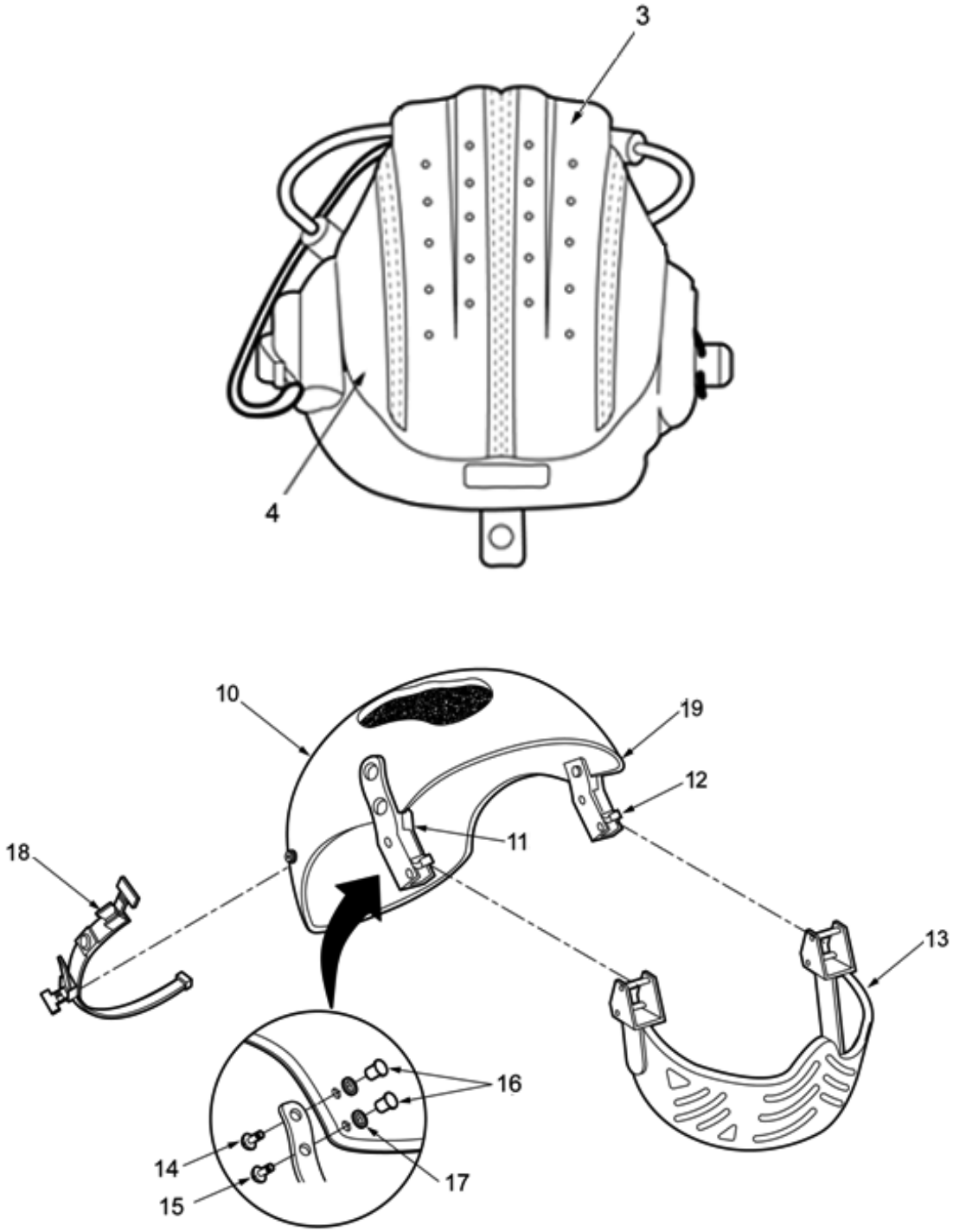


Figure 1. Combat Vehicle Crewman's (CVC) Helmet (Sheet 2 of 3).

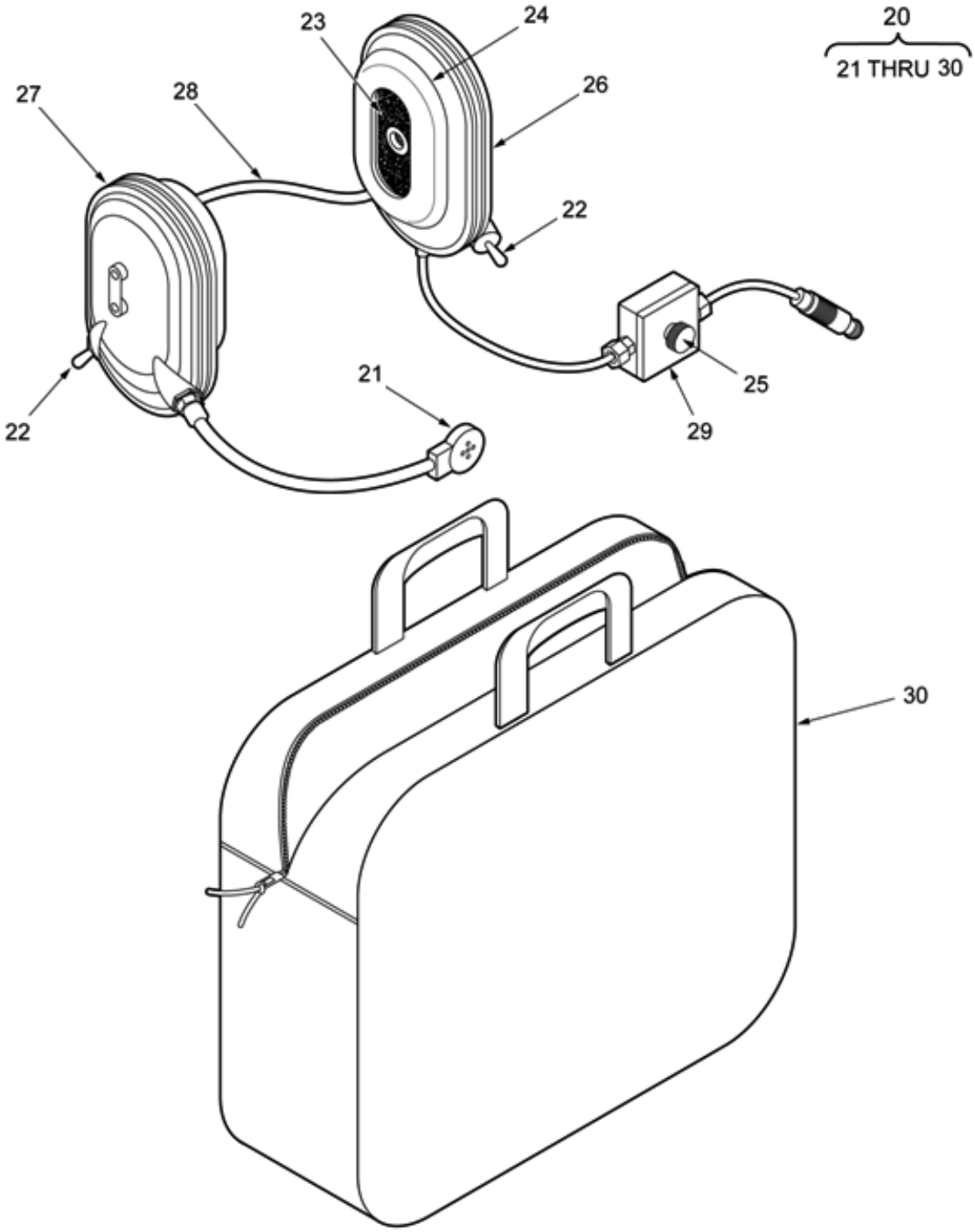


Figure 1. Combat Vehicle Crewman's (CVC) Helmet (Sheet 3 of 3).

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 01 COMBAT VEHICLE CREWMAN'S (CVC) HELMET	
					FIG. 1 COMBAT VEHICLE CREWMAN'S (CVC) HELMET	
1	PAFKK	8470-01-389-3822	81349	MIL-H-44117	HELMET, COMBAT VEHICLE CREWMAN'S (COMPLETE ASSEMBLY) (S)	1
1	PAFKK	8470-01-389-3823	81349	MIL-H-44117	HELMET, COMBAT VEHICLE CREWMAN'S (COMPLETE ASSEMBLY) (M)	1
1	PAFKK	8470-01-389-3818	81349	MIL-H-44117	HELMET, COMBAT VEHICLE CREWMAN'S (COMPLETE ASSEMBLY) (L)	1
2	PFFZZ	8415-00-134-9396	81337	8-2-602	.LINER, COMBAT VEHICLE CREWMAN'S HELMET: W/O COMMUNICATIONS SYSTEM, SIZE SMALL	1
2	PFFZZ	8415-00-134-9397	81337	8-2-602	.LINER, COMBAT VEHICLE CREWMAN'S HELMET: W/O COMMUNICATIONS SYSTEM, SIZE MEDIUM.	1
2	PFFZZ	8415-00-134-9398	81337	8-2-602	.LINER, COMBAT VEHICLE CREWMAN'S HELMET: W/O COMMUNICATIONS SYSTEM, SIZE LARGE.	1
3	PFFZZ	8415-00-163-9040	81337	8-2-617 ITEM 1, 2	.PAD SET, FITTING: COMBAT VEHICLE CREWMAN'S HELMET, CENTER, C/O LEFT SIDE AND RIGHT SIDE FOR SMALL HELMET.	1
3	PFFZZ	8415-00-163-9042	81337	8-2-617 ITEM 3, 4	.PAD SET, FITTING: COMBAT VEHICLE CREWMAN'S HELMET-CENTER, C/O LEFT SIDE AND RIGHT SIDE FOR MEDIUM HELMET.	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
4	PFFZZ	8415-00-163-9041	81337	8-2-617 ITEM 7, 8	.PAD SET, FITTING: COMBAT VEHICLE CREWMAN'S HELMET, SIDE, DO LEFT SIDE AND RIGHT SIDE FOR SMALL HELMET.	1
4	PFFZZ	8415-00-163-9043	81337	8-2-617 ITEM 9, 10	.PAD SET, FITTING: COMBAT VEHICLE CREWMAN'S HELMET, SIDE, C/O LEFT SIDE AND RIGHT SIDE FOR MEDIUM HELMET.	1
5	PFFZZ	8415-00-163-9046	81337	8-2-617 ITEM 11	.PAD, HELMET: FOR BROW, FOR ALL SIZES.	1
6	PFFZZ	8415-00-163-9052	81337	8-2-603	.STRAP ASSEMBLY, CHIN: W/O PAD	1
7	PFFZZ	8415-00-163-9048	81337	8-2-611	.PAD, CHIN STRAP: FOR ALL SIZES	1
8	PFFZZ	8470-01-259-1693	81349	MIL-H-44117	.SHELL, SMALL AND MEDIUM,	1
8	PFFZZ	8470-01-259-1694	81349	MIL-H-44117	.SHELL, LARGE,	1
9	PFFZZ	8305-00-281-8016	81349	MILC43303	.ELASTIC CORD, OD-7, CLASS 2	1
10	PFFZZ	8470-01-389-3815	81349	MIL-H-44117	CVC SHELL, INCREASED BALLISTIC (DH-132B) SIZE SMALL/MEDIUM	1
10	PFFZZ	8470-01-389-3821	81349	MIL-H-44117	CVC SHELL, INCREASED BALLISTIC (DH-132B) SIZE LARGE	1
11	PAFZZ	8470-01-467-1815	55650	1591-2	FACEGUARD STRUT, RIGHT HAND, LARGE	1
11	PAFZZ	8470-01-467-1896	55650	1590-2	FACEGUARD STRUT, RIGHT HAND, SMALL	1
12	PAFZZ	8470-01-467-1811	55650	1591-1	FACEGUARD STRUT, LEFT HAND, LARGE	1
12	PAFZZ	8470-01-467-1795	55650	1590-1	FACEGUARD STRUT, LEFT HAND SMALL	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
13	PAFZZ	8470-01-467-1550	55650	1592	FACEGUARD	1
14	PFFZZ			LOCAL PURCHASE	.UPPER SCREW, STRUT, SDS PART #R00408, #8-32 X 7/8" LONG, SLOTTED PAN HEAD MACHINE SCREW, STAINLESS STEEL, FINISH: BLACK OXIDE	2
15	PFFZZ			LOCAL PURCHASE	..LOWER SCREW, STRUT, SDS PART #R00409, #8-32 X 1" LONG, SLOTTED PAN HEAD MACHINE SCREW, STAINLESS STEEL, FINISH: BLACK OXIDE	2
16	PFFZZ			LOCAL PURCHASE	..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
17	PFFZZ			LOCAL PURCHASE	..SDS PART #R00372, WASHER, AN 960 C, DASH NO. C8, 300 SERIES, STAINLESS STEEL, 0.174" ID X 0.375" OD, FINISH: BLACK OXIDE	2
18	PAFZZ	5965-01-466-9374	55650	1580SD	.HEADSET TENSION ASSEMBLY	1
19	PAFZZ	3830-01-248-7933	64679	133604	.RUBBER EDGE, (D9307R00787) COLOR, OD	1
20	PFFZZ	5965-00-313-8958	80058	MK1697G	HEADSET AND MICROPHONE KIT	1
21	PFFZZ	5965-01-466-9380	16575	R00447	.SOUND CANCELING MICROPHONE BOOM ASSEMBLY	1
22	PFFZZ	5930-01-466-9377	16575	R00482	. TALK-THROUGH SWITCH	1
23	PFFZZ	8470-01-467-2168	3T951	R00477	. EARCUP FOAM (EARPHONE PLUG) ROO477-1	2
24	PFFZZ	8470-01-467-2162	3T951	R00445	. EARSEAL, LEFT AND RIGHT, ROO445	2

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
25	PFFZZ	5930-01-466-9375	3T951	R00481	. THREE-POSITION PUSH-TO-TALK SWITCH	1
26	PFFZZ	8470-01-467-1693	3T951	R00478-L	. EARCUP LEFT	1
27	PFFZZ	8470-01-467-2165	3T951	R00478-R	. EARCUP RIGHT	1
28	PFFZZ	5965-01-466-9372	16575	R00474	. EAR TO EAR CORD	1
29	PFFZZ	5965-01-466-9373	3T951	R00428	. BATTERY BOX, UPPER CABLE	1
30	PAFKK	8415-00-782-2989	72724	D2207	BAG CARRYING	1
					END OF FIGURE	

PARTS INFORMATION
PERSONNEL ARMOR SYSTEM FOR GROUND TROOPS (PASGT) HELMET

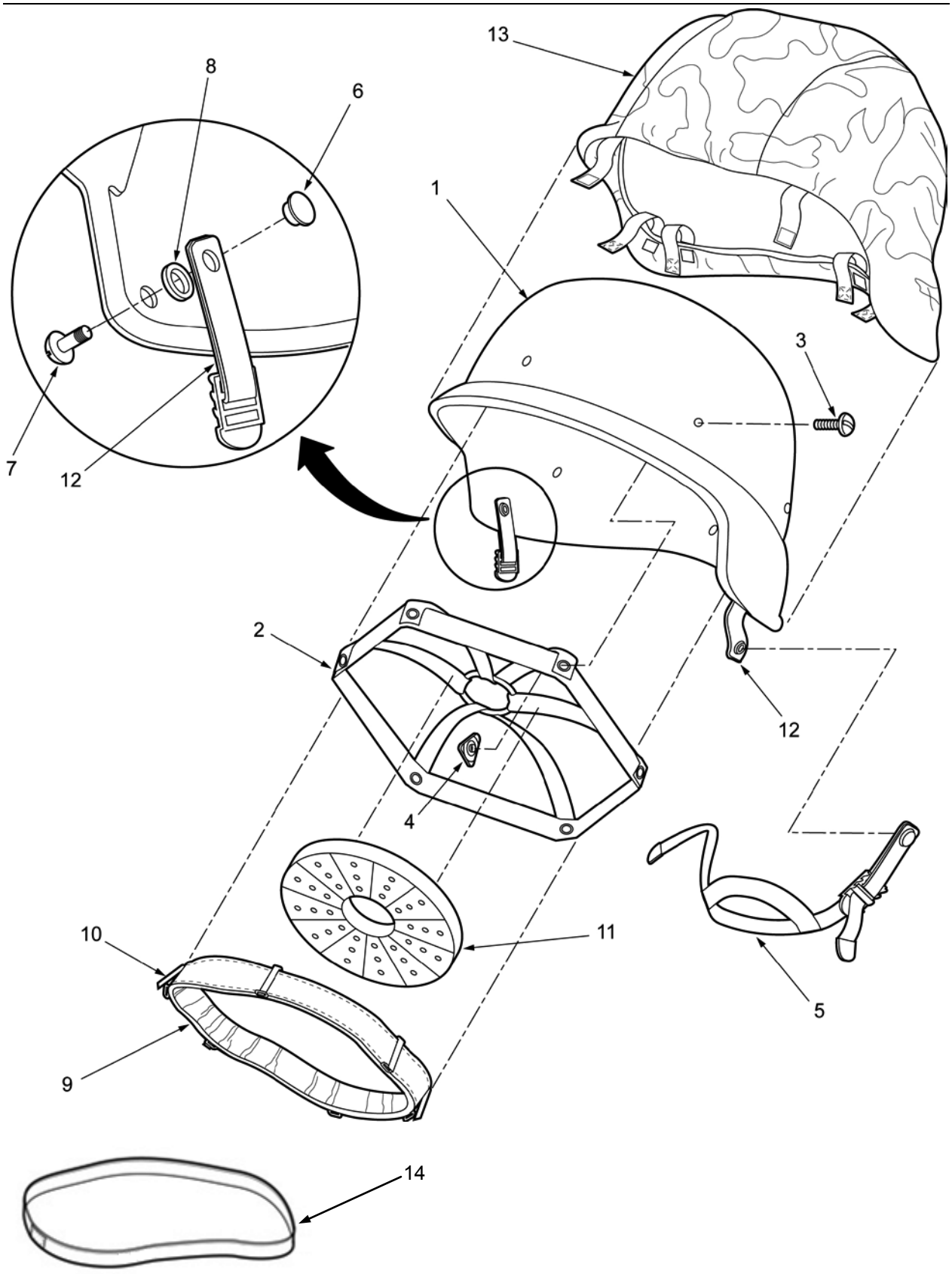


Figure 2. Personnel Armor System for Ground Troops (PASGT) Helmet.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 02 PERSONNEL ARMOR SYSTEM FOR GROUND TROOPS (PASGT) HELMET	
					FIG. 2 PERSONNEL ARMOR SYSTEM FOR GROUND TROOPS (PASGT) HELMET	
1	PZFZZ	8470-01-092-7525	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR OLIVE DRAB SIZE X-SMALL	1
1	PZFZZ	8470-01-092-7526	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR OLIVE DRAB SIZE SMALL	1
1	PZFZZ	8470-01-092-7527	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR OLIVE DRAB SIZE MEDIUM	1
1	PZFZZ	8470-01-092-7528	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR OLIVE DRAB SIZE LARGE	1
1	PZFZZ	8470-01-300-3819	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR OLIVE DRAB SIZE XLARGE	1
1	PZFZZ	8470-01-529-6502	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR FG504 SIZE XSMALL	1
1	PZFZZ	8470-01-529-6530	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR FG504 SIZE SMALL	1
1	PZFZZ	8470-01-529-6532	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR FG504 SIZE MEDIUM	1
1	PZFZZ	8470-01-529-6539	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR FG504 SIZE LARGE	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
1	PZFZZ	8470-01-529-6541	81349	MIL-H-44099	HELMET, GROUND TROOPS, PARACHUTISTS, COLOR FG504 SIZE XLARGE	1
2	PZFZZ	8470-01-092-7516	81349	MIL-S-44097	.SUSPENSION ASSEMBLY, X-SMALL	1
2	PZFZZ	8470-01-092-7517	83241	8470-01-092-7517	.SUSPENSION ASSEMBLY, SMALL	1
2	PZFZZ	8470-01-092-7518	83421	8570-01-092-7518	.SUSPENSION ASSEMBLY, MEDIUM	1
2	PZFZZ	8470-01-092-7519	83421	8470-01-092-7519	.SUSPENSION ASSEMBLY, LARGE	1
3	PZFZZ	8470-01-144-2813	81337	8-2-644-6	..SCREW	1
4	PZFZZ	8470-01-144-5368	81337	8-2-647	..A-NUT	1
5	PZFZZ	8470-01-092-7534	81337	2-1-1400	.STRAP ASSEMBLY, CHIN	1
6	PZFZZ	8470-01-144-5367	81337	8-2-647	..POST	1
7	PZFZZ	8470-01-144-2811	81337	8-2-644-5	..SCREW	1
8	PZFZZ	8470-01-144-2812	81337	8-2-644-7	..WASHER	1
9	PZFZZ	8470-01-442-1434	81349	MIL-H-44098	HEADBAND ASSEMBLY, SIZE XSMALL	1
9	PZFZZ	8470-01-092-8493	83421	8470-01-092-8493	HEADBAND ASSEMBLY, SIZE SMALL	1
10	PZFZZ	8470-01-144-2814	81337	2-1-1385	.CLIP, HEADBAND	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
11	PZFZZ	8470-01-092-8494	83421	8470-01-092-8494	PAD, GROUND TROOPS, PARACHUTISTS HELMET	1
12	PZFZZ	8470-01-092-7524	83421	8470-01-092-7524	STRAP, RETENSION, PASGT	1
13	PZFZZ	8415-01-327-4824	81349	MIL-C-44107	COVER, HELMET, CAMOUFLAGE DAYTIME DESERT, SIZE XSMALL TO SMALL	1
13	PZFZZ	8415-01-327-4825	81349	MIL-C-44107	COVER, HELMET, CAMOUFLAGE DAYTIME DESERT, SIZE MED TO LARGE	1
13	PAFZZ	8415-01-327-4826	81349	MIL-C-44107	COVER, HELMET, CAMOUFLAGE DAYTIME DESERT, X-LARGE	1
13	PZFZZ	8415-01-494-4591	81349	MIL-C-44107	COVER, HELMET, CAMOUFLAGE WHITE, SNOW, SIZE MED TO LARGE	1
13	PZFZZ	8415-01-494-4605	81349	MIL-C-44107	COVER, HELMET, CAMOUFLAGE W, SIZE XSMALL TO SMALL	1
13	PZFZZ	8415-01-092-7514	83421	8415-01-092-7514	COVER, HELMET, CAMOUFLAGE WOODLAND, SIZE XSMALL TO SMALL	1
13	PZFZZ	8415-01-092-7515	83421	8415-01-092-7515	COVER, HELMET, CAMOUFLAGE WOODLAND, MED TO LARGE	1
13	PZFZZ	8415-01-303-8945	81349	MIL-C-44107	COVER, HELMET, CAMOUFLAGE WOODLAND, XLARGE	1
14	PAFZZ	8415-01-110-9981	81348	MIL-H-44098	HEADBAND, GROUND TROOP, XLARGE	1
					END OF FIGURE	

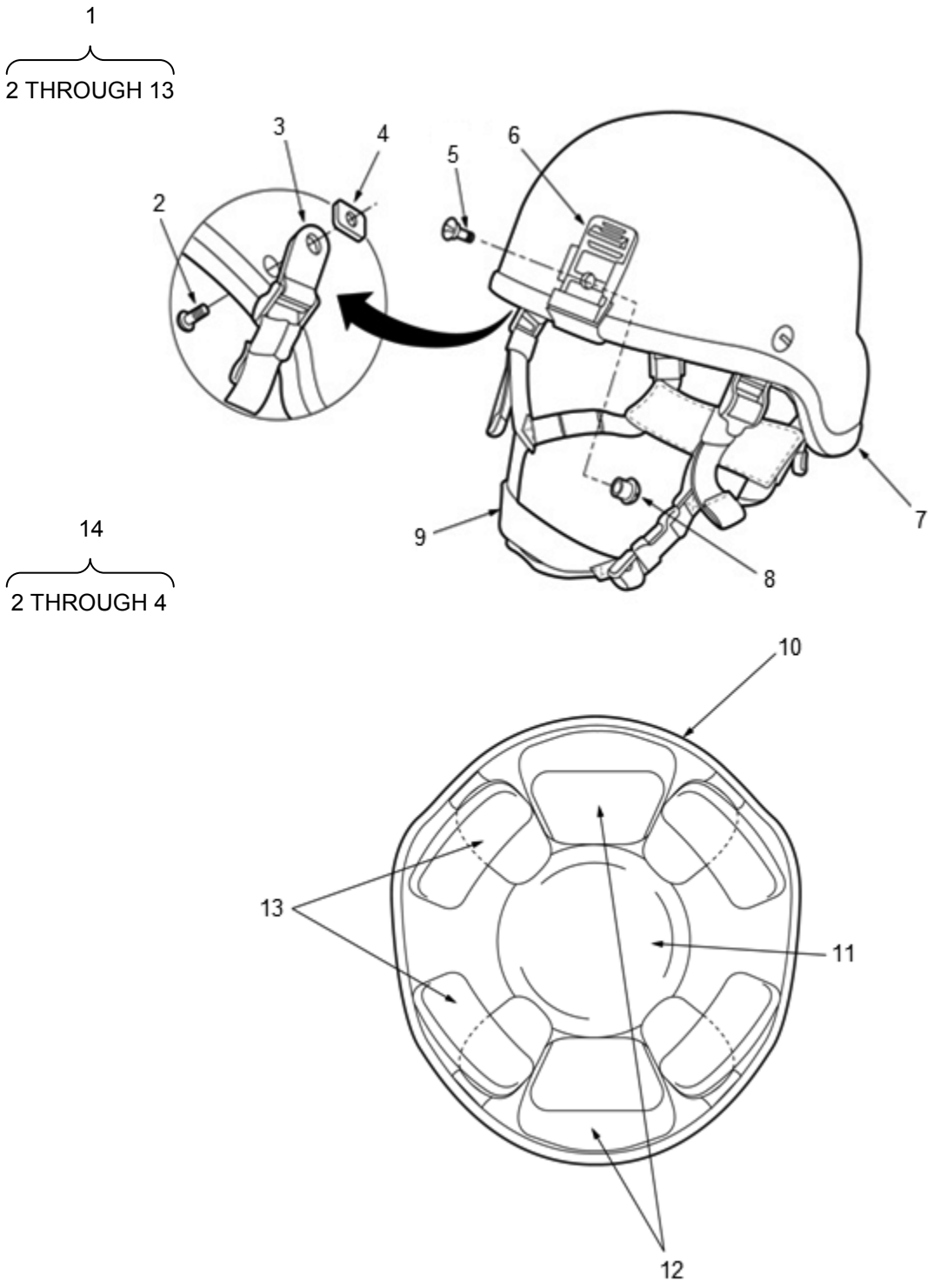


Figure 3. Advanced Combat Helmet (ACH) (Sheet 1 of 2).

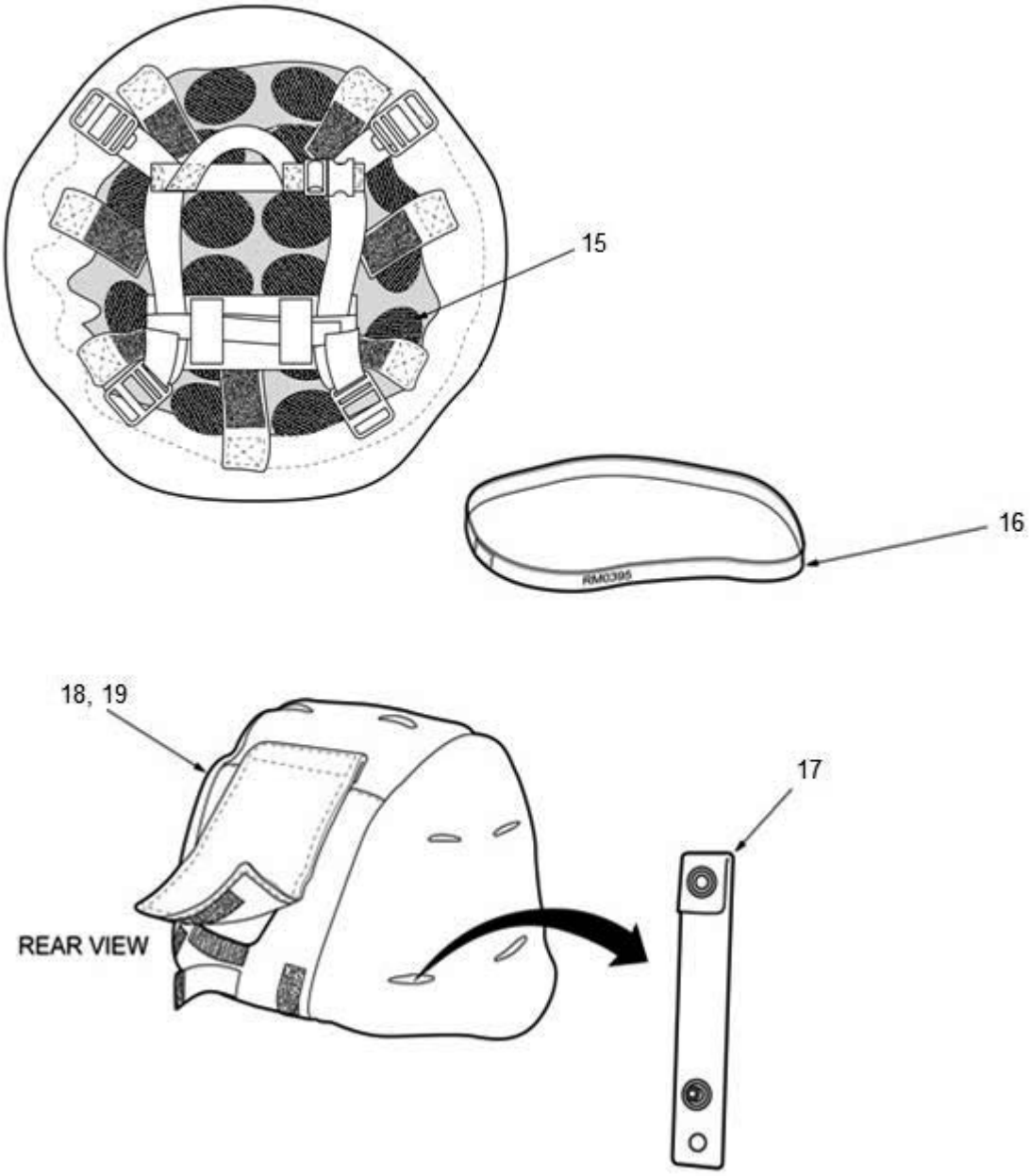


Figure 3. Advanced Combat Helmet (ACH) (Sheet 2 of 2).

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 03 ADVANCED COMBAT HELMET (ACH)	
					FIG. 3 ADVANCED COMBAT HELMET (ACH)	
1	PAFKK	8470-01-529-6302	81337	268-05	HELMET, ADVANCED COMBAT (FOLIAGE GREEN WITH ONE NVD MOUNTING HOLE) (SMALL SHELL WITH ¾" THICK (SIZE 6) PADS)	1
1	PAFKK	8470-01-529-6329	81337	268-05	HELMET, ADVANCED COMBAT (FOLIAGE GREEN WITH ONE NVD MOUNTING HOLE) (MEDIUM SHELL WITH ¾" THICK (SIZE 6) PADS)	1
1	PAFKK	8470-01-529-6344	81337	268-05	HELMET, ADVANCED COMBAT (FOLIAGE GREEN WITH ONE NVD MOUNTING HOLE) (LARGE SHELL WITH ¾" THICK (SIZE 6) PADS)	1
1	PAFKK	8470-01-558-8622	81996	07A12757-01	HELMET, ADVANCED COMBAT (FOLIAGE GREEN WITH ONE NVD MOUNTING HOLE) (EXTRA EXTRA LARGE SHELL WITH ¾" THICK (SIZE 6) PADS)	1
1	PAFKK	8470-01-506-6353	81337	239-03	HELMET, ADVANCED COMBAT (TAN WITH ONE NVD MOUNTING HOLE) (MEDIUM SHELL WITH ¾" THICK (SIZE 6) PADS)	1
1	PAFKK	8470-01-506-6356	81337	239-03	HELMET, ADVANCED COMBAT (TAN WITH ONE NVD MOUNTING HOLE) (LARGE SHELL WITH ¾" THICK (SIZE 6) PADS)	1
1	PAFKK	8470-01-529-6365	81337	268-05	HELMET, ADVANCED COMBAT (TAN WITH ONE NVD MOUNTING HOLE) (EXTRA LARGE SHELL WITH ¾" THICK (SIZE 6) PADS)	1
2	PAFZZ	8470-01-531-4268	81337	GL PD 07-19	.MOUNTING SCREW, BOX OF 50	BX
3	PAFZZ	8470-01-531-3897	81337	GL PD 07-19	.STRAP, CHIN, ATTACHMENT TAB, BOX OF 50	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
4	PZFZZ	8470-01-531-4284	81337	GL PD 07-19	.POST, HELMET, BOX OF 50	BX
5	PAFZZ	5305-00-182-9265	96906	MS51957-43B	.SCREW, MACHINE (8-32 X 3/8 -IN LONG) BOX OF 100	1
6	PAFZZ	5340-01-509-1467	80063	A3297307	.BRACKET, LEVER (NVD FRONT BRACKET ASSEMBLY)	EA
7	PZFZZ	8470-01-506-6473	81337	254-03	.EDGING	EA
8	PZFZZ	8470-01-144-5367	81337	8-2-647	.POST, HELMET (NVD FRONT BRACKET), BOX OF 50	BX
9	PAFZZ	8470-01-531-3351	3T951	2418	.STRAP, CHIN ONLY, RETENTION FG	1
10	PAFZZ	8470-01-546-9420	81337	8470-01-F01-0477	.PAD, SUSPENSION SYSTEM, ACH, FOLIAGE GREEN (SET OF SIZE 6 PADS)	EA
11	PAFZZ	8470-01-546-9415	81337	252-03	.PAD, HELMET, ARMY COMBAT, FOLIAGE GREEN (CIRCULAR CROWN PAD, SIZE 6), OBLONG/OVAL	EA
12	PAFZZ	8470-01-546-9407	81337	253-03	.PAD, HELMET, ARMY COMBAT, FOLIAGE GREEN (TRAPEZOIDAL PAD, SIZE 6)	EA
13	PAFZZ	8470-01-546-9356	81337	251-03	.PAD, HELMET, ARMY COMBAT, FOLIAGE GREEN, OBLONG/OVAL	EA
14	PZFZZ	8470-01-533-1011	81337	GL PD 07-19	.SCREW MOUNTING SET (4) ATTACH TAB (4) SCREW (4) POST	ST
15	PAFZZ	8470-01-506-6742	81337	246-03	.FASTENER TAPE, HOOK, ROLL OF 500 DISKS	RL

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
16	PAFZZ	8415-01-524-5842	81349	MIL-B-1851	.BAND, HELMET FOLIAGE GREEN	EA
17	PAFZZ	8415-01-521-8802	81337	MIL-DTL-32134	.STRAP, EYEWEAR RETENTION, FOLIAGE GREEN	PR
18	PAFKK	8415-01-521-8806	81337	552-04-S/M	.COVER, HELMET, UNIVERSAL (UNIVERSAL CAMOUFLAGE PATTERN, WITH COMMUNICATIONS POCKET, SIZE S/M)	1
18	PAFKK	8415-01-521-8808	81337	552-04-LARGE/XL	.COVER, HELMET, UNIVERSAL (UNIVERSAL CAMOUFLAGE PATTERN, WITH COMMUNICATIONS POCKET, SIZE L/XL)	1
18	PAFKK	8415-01-559-0105	81337	55204	.COVER, HELMET, UNIVERSAL (UNIVERSAL CAMOUFLAGE PATTERN, WITH COMMUNICATIONS POCKET, SIZE XXL)	1
19	PZFKK	8415-01-515-4286	81337	85-04	.COVER, HELMET, ARTIC (ACH) (WITH COMMUNICATIONS POCKET, SIZE S/M)	1
19	PZFKK	8415-01-515-4288	81337	85-04	.COVER, HELMET, ARCTIC (ACH) (WITH COMMUNICATIONS POCKET, SIZE L/XL)	1
					END OF FIGURE	

PARTS INFORMATION
BALLISTIC NAPE PAD

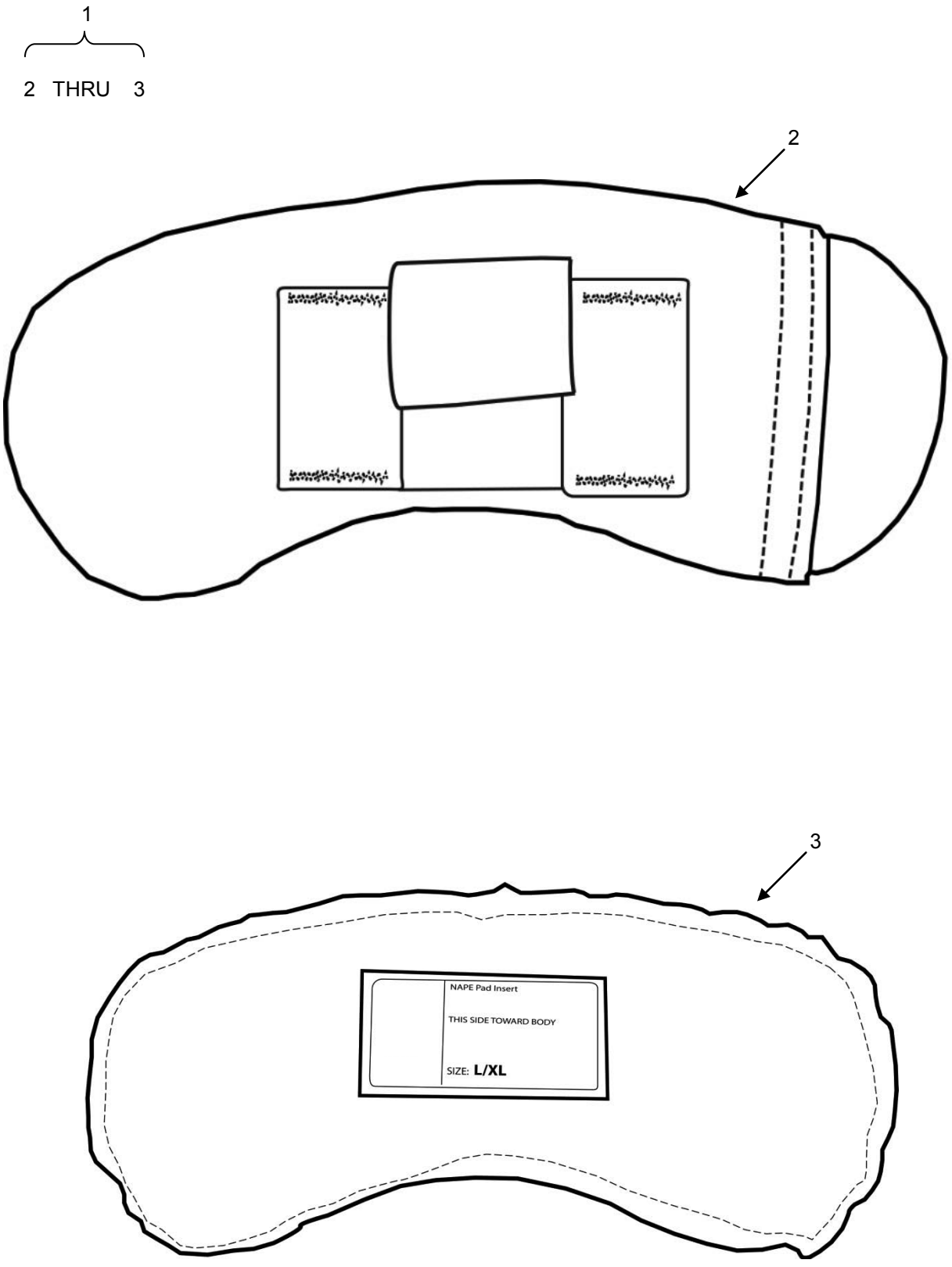


Figure 4. Ballistic Nape Pad.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 04 BALLISTIC NAPE PAD	
					FIG. 4 BALLISTIC NAPE PAD	
1	PZFKK	8415-01-552-4607	377Q0	ARM-NP1-24-000	NAPE, UNIVERSAL CAMOUFLAGE PATTERN, BALLISTIC, H STYLE ACH, S/M	1
1	PZFKK	8415-01-552-4610	377Q0	ARM-NP2-24-000	NAPE, UNIVERSAL CAMOUFLAGE PATTERN, BALLISTIC, H STYLE ACH, L/XL	1
1	PZFKK	8470-01-568-1028	377Q0	ARM-NP5-24-000	PAD, ADVANCED COMBAT HELMET NAPE , UNIVERSAL, CAMOUFLAGE, S/M/L	1
1	PZFKK	8470-01-568-1023	377Q0	ARM-NP6-24-000	PAD, ADVANCED COMBAT HELMET NAPE , UNIVERSAL, CAMOUFLAGE, XL/XXL	1
1	PZFKK	8470-01-584-1750	377Q0	ARM-NP7-24-000	NAPE PAD, HELMET, OCP, S/M/L	1
1	PZFKK	8470-01-584-1839	377Q0	ARM-NP7-24-000	NAPE PAD, HELMET, OCP, XL/XXL	1
2	PZFKK	8470-01-598-9632	81337	AR/PD 10-01	COVER,NAPE PAD,ADVANCED COMBAT HELMET, UCP (S/M/L)	1
2	PZFKK	8470-01-598-9629	81337	AR/PD 10-01	COVER,NAPE PAD,ADVANCED COMBAT HELMET, UCP (XL/XXL)	1
2	PZFKK	8470-01-598-9626	81337	AR/PD 10-01	COVER,NAPE PAD,ADVANCED COMBAT HELMET, OCP (S/M/L)	1
2	PZFKK	8470-01-598-9634	81337	AR/PD 10-01	COVER,NAPE PAD,ADVANCED COMBAT HELMET, OCP (XL/XXL)	1
3	XBFZZ	8470-01-598-9638	81337	AR/PD 10-01	BALLISTIC INSERT, NAPE PAD, ADVANCED COMBAT HELMET, (S/M/L)	1
3	XBFZZ	8470-01-598-9644	81337	AR/PD 10-01	BALLISTIC INSERT, NAPE PAD, ADVANCED COMBAT HELMET, (XL/XXL)	1
					END OF FIGURE	

PARTS INFORMATION
COMBAT VEHICLE CREWMAN'S (CVC) BODY ARMOR

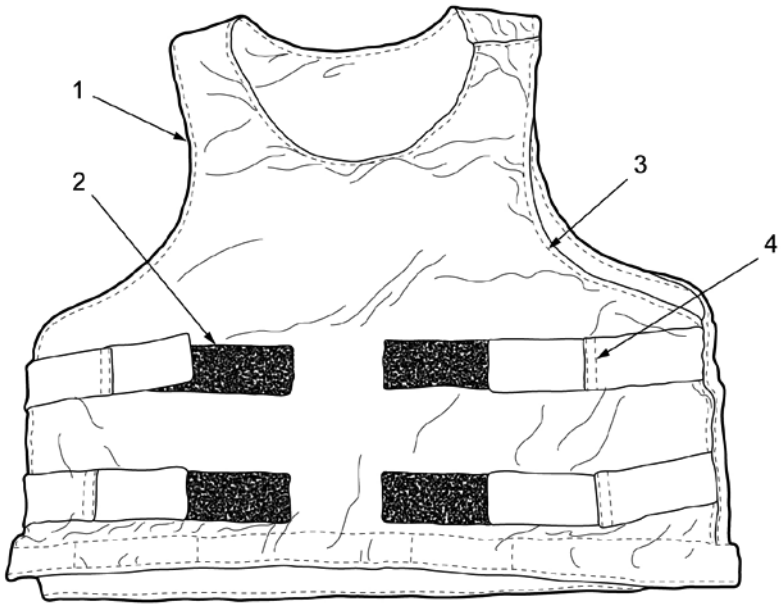


Figure 5. CVC Body Armor.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 05 COMBAT VEHICLE CREWMAN'S (CVC) BODY ARMOR	
					FIG. 5 COMBAT VEHICLE CREWMAN'S (CVC) BODY ARMOR	
1	PAFKK	8470-01-110-6102	81349	MIL-B-44194	BODY ARMOR, CVC, X-SMALL SHORT	1
1	PAFKK	8470-01-110-6103	81349	MIL-B-44194	BODY ARMOR, CVC, X-SMALL REGULAR	1
1	PAFKK	8470-01-110-6104	81349	MIL-B-44194	BODY ARMOR, CVC, SMALL REGULAR	1
1	PAFKK	8470-01-110-6105	81349	MIL-B-44194	BODY ARMOR, CVC, MEDIUM REGULAR	1
1	PAFKK	8470-01-110-6106	81349	MIL-B-44194	BODY ARMOR, CVC, LARGE REGULAR	1
1	PAFKK	8470-01-110-6107	81349	MIL-B-44194	BODY ARMOR, CVC, X-LARGE REGULAR	1
1	PAFKK	8470-01-110-6108	81349	MIL-B-44194	BODY ARMOR, CVC, SMALL LONG	1
1	PAFKK	8470-01-110-6109	81349	MIL-B-44194	BODY ARMOR, CVC, MEDIUM LONG	1
1	PAFKK	8470-01-110-6110	81349	MIL-B-44194	BODY ARMOR, CVC, LARGE LONG	1
1	PAFKK	8470-01-110-6111	81349	MIL-B-44194	BODY ARMOR, CVC, XL-LONG	1
2	PZFZZ			LOCAL PURCHASE	.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
3	PAFZZ	8310-00-405-2260	58536	A-A-50195	.THREAD, ARAMID (NOMEX), OLIVE DRAB, SHADE NO. S-1, C. A. 66022, MIL-B-43636, SIZE B	TU
4	PZFZZ	8310-00-988-1296	81349	MIL-DTL-32072	.THREAD, POLYESTER, TYPE 1, CLASS 1, SUB-CLASS A, NATURAL COLOR, V-T-285, SIZE B	TU
					END OF FIGURE	

Cummerbund Configuration

Side Plate Carrier Configuration

Non-Side Plate Carrier Configuration

Figure 6. Soldier Plate Carrier System (SPCS) (Sheet 1 of 4).

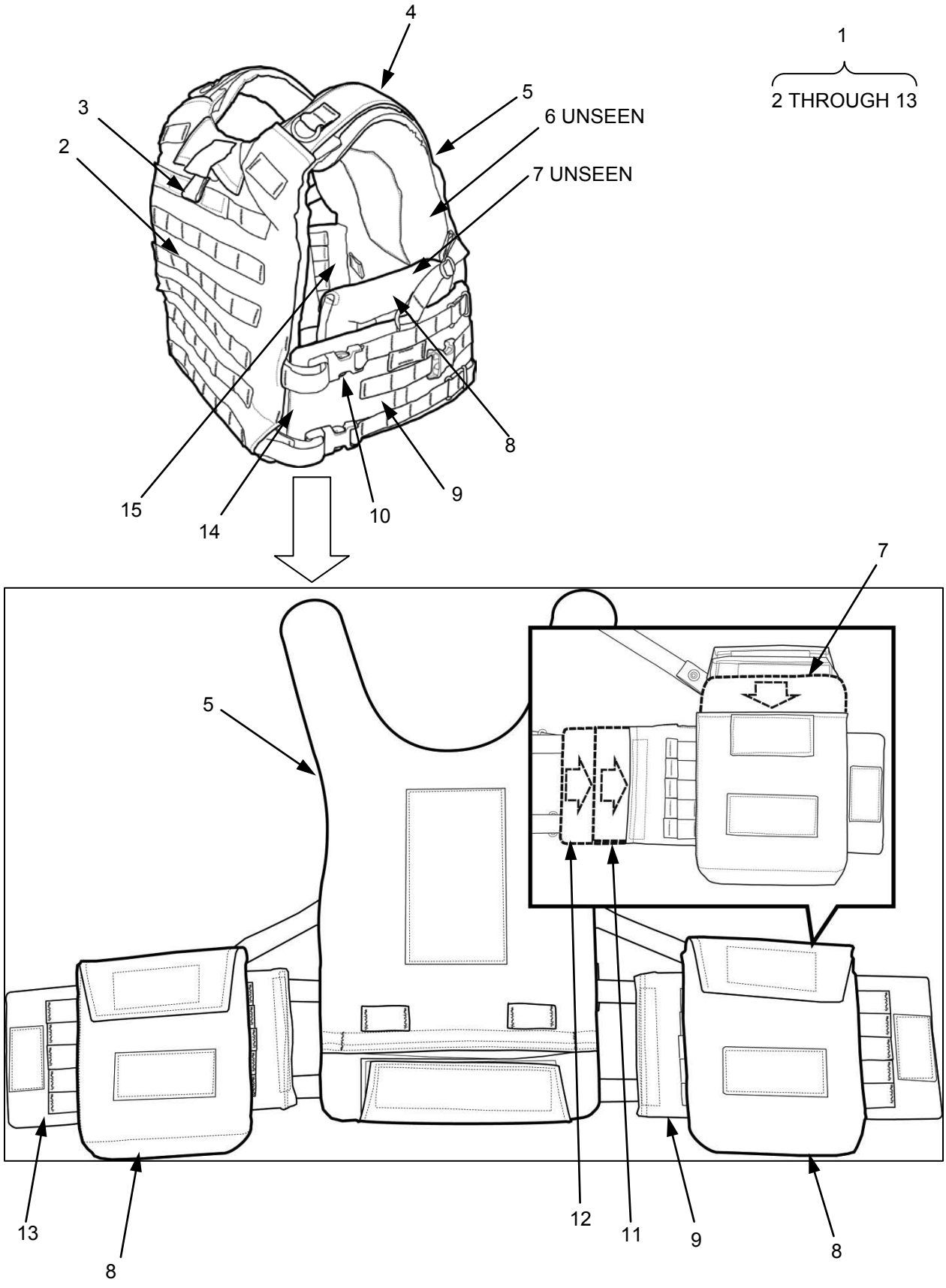


Figure 6. Soldier Plate Carrier System (SPCS) (Sheet 2 of 4).

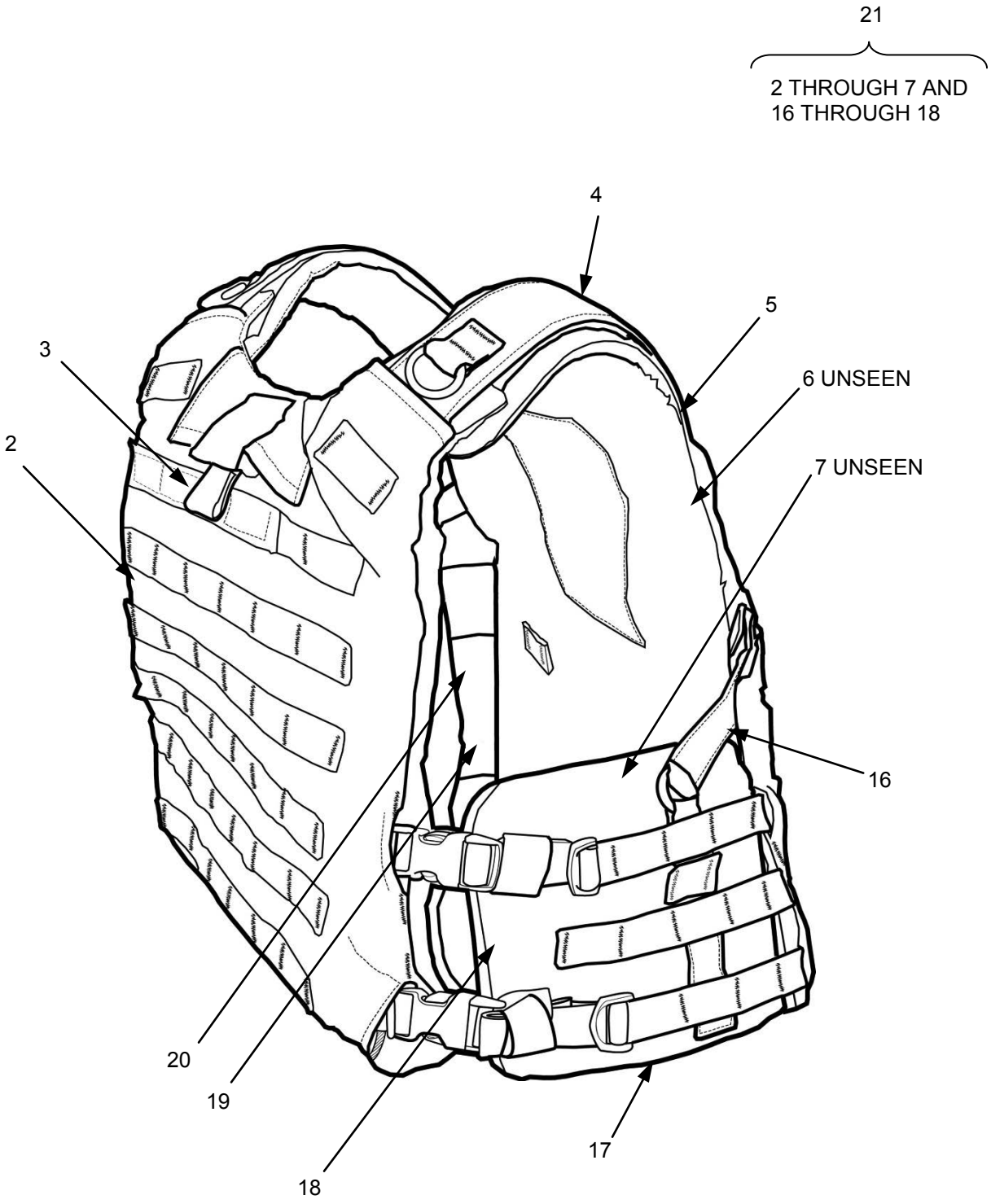


Figure 6. Soldier Plate Carrier System (SPCS) (Sheet 3 of 4).

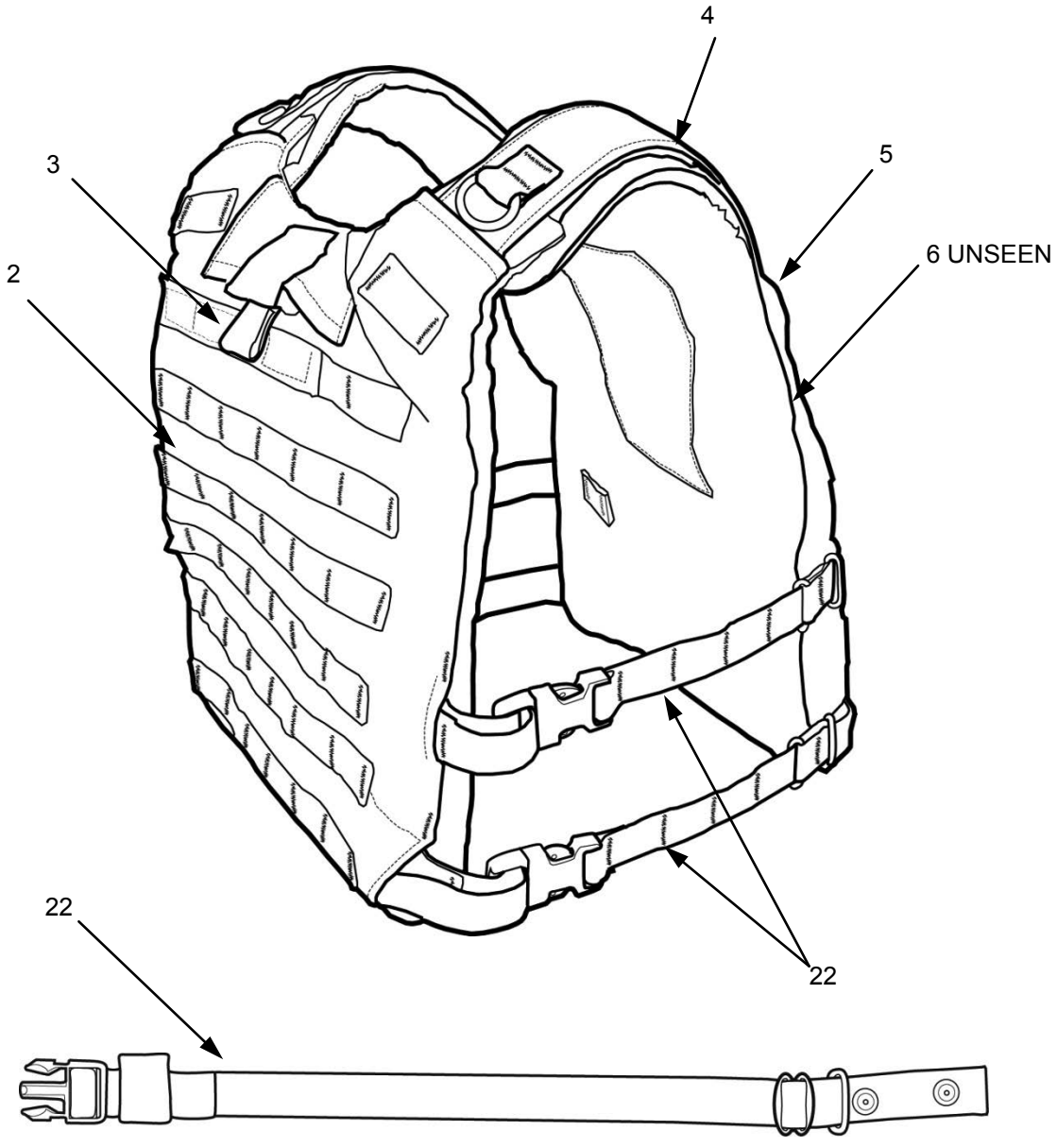


Figure 6. Soldier Plate Carrier System (SPCS) (Sheet 4 of 4).

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 06 SOLDIER PLATE CARRIER SYSTEM (SPCS)	
					FIG. 6 SOLDIER PLATE CARRIER SYSTEM (SPCS)	
1	PAFKK	8470-01-592-9461	81337	AR/PD 10-04	SPCS COMPLETE VEST (WITH CUMMERBUND) (OCP), X-SMALL	1
1	PAFKK	8470-01-592-9468	81337	AR/PD 10-04	SPCS COMPLETE VEST (WITH CUMMERBUND) (OCP), SMALL	1
1	PAFKK	8470-01-592-9479	81337	AR/PD 10-04	SPCS COMPLETE VEST (WITH CUMMERBUND) (OCP), MEDIUM	1
1	PAFKK	8470-01-592-9480	81337	AR/PD 10-04	SPCS COMPLETE VEST (WITH CUMMERBUND) (OCP), LARGE	1
1	PAFKK	8470-01-592-9484	81337	AR/PD 10-04	SPCS COMPLETE VEST (WITH CUMMERBUND) (OCP), X-LARGE	1
1	PAFKK	8470-01-592-9485	81337	AR/PD 10-04	SPCS COMPLETE VEST (WITH CUMMERBUND) (OCP), XX-LARGE	1
2	PAFKK	8470-01-587-1350	4W1N2	MTAC1-010101000-MC	FRONT CARRIER (NO BALLISTIC PANEL) (OCP), X-SMALL	1
2	PAFKK	8470-01-587-1343	4W1N2	MTAC1-010201000-MC	FRONT CARRIER (NO BALLISTIC PANEL) (OCP), SMALL	1
2	PAFKK	8470-01-587-1370	4W1N2	MTAC1-010301000-MC	FRONT CARRIER (NO BALLISTIC PANEL) (OCP), MEDIUM	1
2	PAFKK	8470-01-587-1381	4W1N2	MTAC1-010501000-MC	FRONT CARRIER (NO BALLISTIC PANEL) (OCP), LARGE	1
2	PAFKK	8470-01-587-1409	4W1N2	MTAC1-010701000-MC	FRONT CARRIER (NO BALLISTIC PANEL) (OCP), X-LARGE	1
2	PAFKK	8470-01-587-1430	4W1N2	MTAC1-011401000-MC	FRONT CARRIER (NO BALLISTIC PANEL) (OCP), XX-LARGE	1
3	PEFZZ	8305-01-588-9271	4W1N2	MTAC1-809512000-MC	QUICK-RELEASE CABLE, ONE SIZE	1
4	PEFKK	8465-01-586-8833	4W1N2	MTAC1-030103000-MC	SET, OUTER CARRIER SHOULDER STRAPS, X-SMALL	1
4	PEFKK	8465-01-586-8840	4W1N2	MTAC1-030203000-MC	SET, OUTER CARRIER SHOULDER STRAPS, SMALL	1
4	PEFKK	8465-01-586-9012	4W1N2	MTAC1-030303000-MC	SET, OUTER CARRIER SHOULDER STRAPS, MEDIUM	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
4	PEFKK	8465-01-586-9029	4W1N2	MTAC1-030503000-MC	SET, OUTER CARRIER SHOULDER STRAPS, LARGE	1
4	PEFKK	8465-01-586-9035	4W1N2	MTAC1-030603000-MC	SET, OUTER CARRIER SHOULDER STRAPS, X-LARGE	1
4	PEFKK	8465-01-586-9043	4W1N2	MTAC1-031403000-MC	SET, OUTER CARRIER SHOULDER STRAPS, XX-LARGE	1
5	PEFKK	8470-01-587-1268	4W1N2	MTAC1-010102000-MC	BACK CARRIER (NO BALLISTIC PANEL) (OCP), X-SMALL	1
5	PEFKK	8470-01-587-1275	4W1N2	MTAC1-010202000-MC	BACK CARRIER (NO BALLISTIC PANEL) (OCP), SMALL	1
5	PEFKK	8470-01-587-1285	4W1N2	MTAC1-010302000-MC	BACK CARRIER (NO BALLISTIC PANEL) (OCP), MEDIUM	1
5	PEFKK	8470-01-587-1293	4W1N2	MTAC1-010502000-MC	BACK CARRIER (NO BALLISTIC PANEL) (OCP), LARGE	1
5	PEFKK	8470-01-587-1314	4W1N2	MTAC1-010702000-MC	BACK CARRIER (NO BALLISTIC PANEL) (OCP), X-LARGE	1
5	PEFKK	8470-01-587-1325	4W1N2	MTAC1-011402000-MC	BACK CARRIER (NO BALLISTIC PANEL) (OCP), XX-LARGE	1
6	PEFZZ	8470-01-586-9146	4W1N2	MTAC1-020111007-MC	SOFT ARMOR INSERT PANEL (FRONT/BACK), X-SMALL	1
6	PEFZZ	8470-01-586-9171	4W1N2	MTAC1-020211007-MC	SOFT ARMOR INSERT PANEL (FRONT/BACK), SMALL	1
6	PEFZZ	8470-01-586-9181	4W1N2	MTAC1-020311007-MC	SOFT ARMOR INSERT PANEL (FRONT/BACK), MEDIUM	1
6	PEFZZ	8470-01-586-9691	4W1N2	MTAC1-020511007-MC	SOFT ARMOR INSERT PANEL (FRONT/BACK), LARGE	1
6	PEFZZ	8470-01-586-9690	4W1N2	MTAC1-020711007-MC	SOFT ARMOR INSERT PANEL (FRONT/BACK), X-LARGE	1
6	PEFZZ	8470-01-586-9692	4W1N2	MTAC1-020714007-MC	SOFT ARMOR INSERT PANEL (FRONT/BACK), XX-LARGE	1
7	PEFZZ	8470-01-592-9904	81337	AR/PD 10-04	SIDE BALLISTIC INSERT PANEL, ONE SIZE	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
8	PEFZZ	8470-01-598-7337	81337	AR/PD 10-04	SIDE PLATE POCKET (FOR USE WITH CUMMERBUND ONLY), ONE SIZE	1
9	PFFKK	8470-01-592-9825	81337	AR/PD 10-04	LEFT CUMMERBUND OUTERSHELL (NO BALLISTIC INSERT OR STIFFENER), X-SMALL – SMALL	1
9	PFFKK	8470-01-592-9828	81337	AR/PD 10-04	LEFT CUMMERBUND OUTERSHELL (NO BALLISTIC INSERT OR STIFFENER), MEDIUM – LARGE	1
9	PFFKK	8470-01-592-9833	81337	AR/PD 10-04	LEFT CUMMERBUND OUTERSHELL (NO BALLISTIC INSERT OR STIFFENER), X-LARGE – XX-LARGE	1
10	PEFZZ	8315-01-589-1287	4W1N2	MTAC1-769513009-MC	BUCKLES, QUICK-RELEASE CABLE (WITH WEBBING), ONE SIZE	4
11	PEFZZ	8470-01-598-7087	81337	AR/PD 10-04	CUMMERBUND PLASTIC (POLYETHYLENE) STIFFENER, X-SMALL – SMALL	1
11	PEFZZ	8470-01-598-7089	81337	AR/PD 10-04	CUMMERBUND PLASTIC (POLYETHYLENE) STIFFENER, MEDIUM – LARGE	1
11	PEFZZ	8470-01-598-7094	81337	AR/PD 10-04	CUMMERBUND PLASTIC (POLYETHYLENE) STIFFENER, X-LARGE – XX-LARGE	1
12	PEFZZ	8470-01-598-7343	81337	AR/PD 10-04	CUMMERBUND BALLISTIC PANEL, X-SMALL – SMALL	1
12	PEFZZ	8470-01-598-7345	81337	AR/PD 10-04	CUMMERBUND BALLISTIC PANEL, MEDIUM – LARGE	1
12	PEFZZ	8470-01-598-7346	81337	AR/PD 10-04	CUMMERBUND BALLISTIC PANEL, X-LARGE – XX-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	PEFKK	8470-01-592-9733	81337	AR/PD 10-04	RIGHT CUMMERBUND OUTERSHELL (NO BALLISTIC INSERT OR STIFFENER), X-SMALL – SMALL	1
13	PEFKK	8470-01-592-9740	81337	AR/PD 10-04	RIGHT CUMMERBUND OUTERSHELL (NO BALLISTIC INSERT OR STIFFENER), MEDIUM – LARGE	1
13	PEFKK	8470-01-592-9752	81337	AR/PD 10-04	RIGHT CUMMERBUND OUTERSHELL (NO BALLISTIC INSERT OR STIFFENER), X-LARGE – XX-LARGE	1
14	PEFZZ	8470-01-599-2283	81337	AR/PD 10-04	LEFT CUMMERBUND SYSTEM (INCLUDES LEFT SIDE OUTERSHELL, 1 PE STIFFENER, 1 CUMMERBUND BALLISTIC INSERT, 1 SIDE PLATE POCKET), X-SMALL – SMALL	1
14	PFFKK	8470-01-599-2284	81337	AR/PD 10-04	LEFT CUMMERBUND SYSTEM (INCLUDES LEFT SIDE OUTERSHELL, 1 PE STIFFENER, 1 CUMMERBUND BALLISTIC INSERT, 1 SIDE PLATE POCKET), MEDIUM – LARGE	1
14	PFFKK	8470-01-599-2283	81337	AR/PD 10-04	LEFT CUMMERBUND SYSTEM (INCLUDES LEFT SIDE OUTERSHELL, 1 PE STIFFENER, 1 CUMMERBUND BALLISTIC INSERT, 1 SIDE PLATE POCKET), X-LARGE – XX-LARGE	1
15	PFFKK	8470-01-599-2275	81337	AR/PD 10-04	RIGHT CUMMERBUND SYSTEM (INCLUDES RIGHT SIDE OUTERSHELL, 1 PE STIFFENER, 1 CUMMERBUND BALLISTIC INSERT, 1 SIDE PLATE POCKET), X-SMALL – SMALL	1
15	PFFKK	8470-01-599-2276	81337	AR/PD 10-04	RIGHT CUMMERBUND SYSTEM (INCLUDES RIGHT SIDE OUTERSHELL, 1 PE STIFFENER, 1 CUMMERBUND BALLISTIC INSERT, 1 SIDE PLATE POCKET), MEDIUM – LARGE	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
15	PFFKK	8470-01-599-2278	81337	AR/PD 10-04	RIGHT CUMMERBUND SYSTEM (INCLUDES RIGHT SIDE OUTERSHELL, 1 PE STIFFENER, 1 CUMMERBUND BALLISTIC INSERT, 1 SIDE PLATE POCKET), X-LARGE – XX-LARGE	1
16	PEFKK	8315-01-587-6601	4W1N2	MTAC1-039904000-MC	SET, LEFT AND RIGHT SIDE PLATE CARRIER ATTACHMENT STRAPS, ONE SIZE	1
17	PEFKK	8470-01-592-9921	81337	MTAC1-011204L001-MC	LEFT SIDE PLATE CARRIER (OUTERSHELL), X-SMALL – MEDIUM	1
17	PEFKK	8470-01-592-9925	81337	MTAC1-011304L001-MC	LEFT SIDE PLATE CARRIER (OUTERSHELL), LARGE – X-LARGE	1
17	PEFKK	8470-01-592-9938	81337	MTAC1-011404L001-MC	LEFT SIDE PLATE CARRIER (OUTERSHELL), XX-LARGE	1
18	PEFKK	8470-01-587-0500	4W1N2	MTAC1-011204L001-MC	LEFT SIDE PLATE CARRIER (WITH BALLISTIC INSERT AND SIDE PLATE CARRIER ATTACHMENT STRAPS, SET), X-SMALL – SMALL	1
18	PEFKK	8470-01-587-0974	4W1N2	MTAC1-011304L001-MC	LEFT SIDE PLATE CARRIER (WITH BALLISTIC INSERT AND SIDE PLATE CARRIER ATTACHMENT STRAPS, SET), MEDIUM – LARGE	1
18	PEFKK	8470-01-587-0985	4W1N2	MTAC1-011404L001-MC	LEFT SIDE PLATE CARRIER (WITH BALLISTIC INSERT AND SIDE PLATE CARRIER ATTACHMENT STRAPS, SET), X-LARGE – XX-LARGE	1
19	PEFKK	8470-01-593-0060	81337	MTAC1-011204R001-MC	RIGHT SIDE PLATE CARRIER (OUTERSHELL), X-SMALL – MEDIUM	1
19	PEFKK	8470-01-593-0097	81337	MTAC1-011304R001-MC	RIGHT SIDE PLATE CARRIER (OUTERSHELL), LARGE – X-LARGE	1
19	PEFKK	8470-01-593-0791	81337	MTAC1-011404R001-MC	RIGHT SIDE PLATE CARRIER (OUTERSHELL), XX-LARGE	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
20	PEFKK	8470-01-587-1020	4W1N2	MTAC1-011204R001-MC	RIGHT SIDE PLATE CARRIER (WITH BALLISTIC INSERT AND SET SIDE PLATE CARRIER ATTACHMENT STRAPS), X-SMALL – SMALL	1
20	PEFKK	8470-01-587-1022	4W1N2	MTAC1-011304R001-MC	RIGHT SIDE PLATE CARRIER (WITH BALLISTIC INSERT AND SET SIDE PLATE CARRIER ATTACHMENT STRAPS), MEDIUM – LARGE	1
20	PEFKK	8470-01-587-1024	4W1N2	MTAC1-011404R001-MC	RIGHT SIDE PLATE CARRIER (WITH BALLISTIC INSERT AND SET SIDE PLATE CARRIER ATTACHMENT STRAPS), X-LARGE – XX-LARGE	1
21	PAFKK	8470-01-580-1388	4W1N2	MTAC1-750111006-MC	SPCS COMPLETE VEST (NO CUMMERBUND) (OCP), X-SMALL	1
21	PAFKK	8470-01-580-1391	4W1N2	MTAC1-750211006-MC	SPCS COMPLETE VEST (NO CUMMERBUND) (OCP), SMALL	1
21	PAFKK	8470-01-580-1392	4W1N2	MTAC1-750311006-MC	SPCS COMPLETE VEST (NO CUMMERBUND) (OCP), MEDIUM	1
21	PAFKK	8470-01-580-1395	4W1N2	MTAC1-750511006-MC	SPCS COMPLETE VEST (NO CUMMERBUND) (OCP), LARGE	1
21	PAFKK	8470-01-580-1533	4W1N2	MTAC1-750711006-MC	SPCS COMPLETE VEST (NO CUMMERBUND) (OCP), X-LARGE	1
21	PAFKK	8470-01-584-2801	4W1N2	MTAC1-751411006-MC	SPCS COMPLETE VEST (NO CUMMERBUND) (OCP), XX-LARGE	1
22	PEFKK	8315-01-587-6560	4W1N2	MTAC1-031299004-MC	SET, ATTACHMENT STRAPS, NON-SIDE PLATE CONFIGURATION, X-SMALL – SMALL	1
22	PEFKK	8315-01-587-6570	4W1N2	MTAC1-031399004-MC	SET, ATTACHMENT STRAPS, NON-SIDE PLATE CONFIGURATION, MEDIUM – LARGE	1
22	PEFKK	8315-01-587-7032	4W1N2	MTAC1-031499004-MC	SET, ATTACHMENT STRAPS, NON-SIDE PLATE CONFIGURATION, X-LARGE – XX-LARGE	1
					END OF FIGURE	

PARTS INFORMATION
HARD ARMOR PROTECTIVE INSERTS

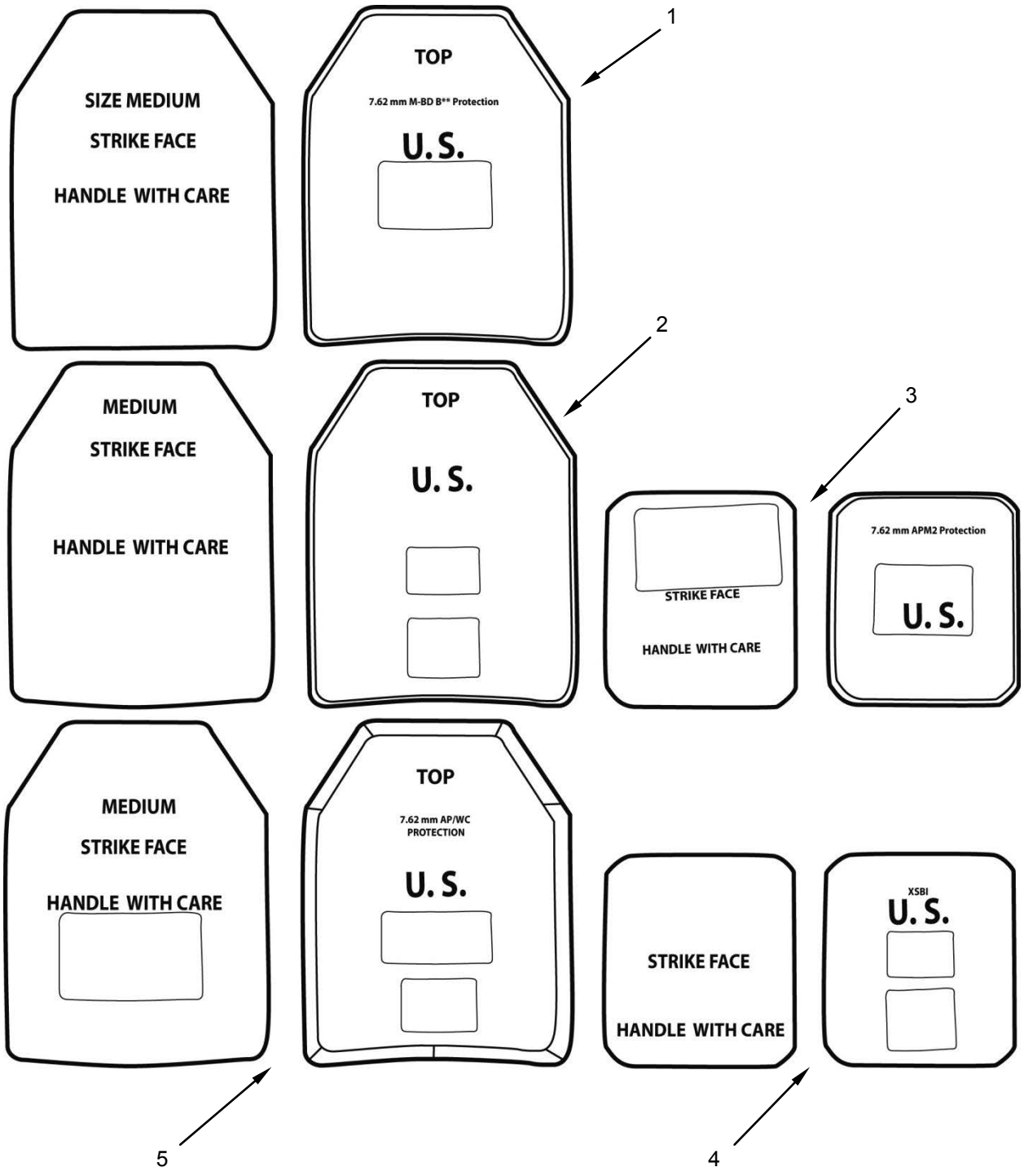


Figure 7. Hard Armor Protective Inserts.

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					GROUP 07 HARD ARMOR PROTECTIVE INSERTS	
					FIG. 7 HARD ARMOR PROTECTIVE INSERTS	
1	PZFZZ	8470-01-497-8701	81337	PD-00-03A	SMALL ARMS PROTECTIVE INSERT (SAPI) SIZE X-SMALL	1
1	PZFZZ	8470-01-497-8709	81337	PD-00-03A	SMALL ARMS PROTECTIVE INSERT (SAPI) SIZE SMALL	1
1	PZFZZ	8470-01-497-8710	81337	PD-00-03A	SMALL ARMS PROTECTIVE INSERT (SAPI) SIZE MEDIUM	1
1	PZFZZ	8470-01-497-8712	81337	PD-00-03A	SMALL ARMS PROTECTIVE INSERT (SAPI) SIZE LARGE	1
1	PZFZZ	8470-01-497-8714	81337	PD-00-03A	SMALL ARMS PROTECTIVE INSERT (SAPI) SIZE XLARGE	1
2	PAFZZ	8470-01-520-7360	81337	CO/PD 04-10	ENHANCED SMALL ARMS PROTECTIVE INSERT (ESAPI) SIZE X-SMALL	1
2	PAFZZ	8470-01-520-7370	81337	CO/PD 04-10	ENHANCED SMALL ARMS PROTECTIVE INSERT (ESAPI) SIZE SMALL	1
2	PAFZZ	8470-01-520-7373	81337	CO/PD 04-10	ENHANCED SMALL ARMS PROTECTIVE INSERT (ESAPI) SIZE MEDIUM	1
2	PAFZZ	8470-01-520-7385	81337	CO/PD 04-10	ENHANCED SMALL ARMS PROTECTIVE INSERT (ESAPI) SIZE LARGE	1
2	PAFZZ	8470-01-520-7382	81337	CO/PD 04-10	ENHANCED SMALL ARMS PROTECTIVE INSERT (ESAPI) SIZE XLARGE	1
3	PAFZZ	8470-01-536-7227	81337	CO/PD 06-20	ENHANCED SIDE BALLISTIC INSERT (ESBI) (PLATE) ONE SIZE	1

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
4	PAFZZ	8470-01-589-0176	81337	AR/PD 10-3A	X SIDE BALLISTIC INSERTS (XSBI) ONE SIZE	1
5	PAFZZ	8470-01-547-9555	81337	FQ/PD 07-03	X SMALL ARMS PROTECTIVE INSERT (XSAPI) SIZE XSMALL	1
5	PAFZZ	8470-01-547-9722	81337	FQ/PD 07-03	X SMALL ARMS PROTECTIVE INSERT (XSAPI) SIZE SMALL	1
5	PAFZZ	8470-01-547-9726	81337	FQ/PD 07-03	X SMALL ARMS PROTECTIVE INSERT (XSAPI) SIZE MEDIUM	1
5	PAFZZ	8470-01-547-9779	81337	FQ/PD 07-03	X SMALL ARMS PROTECTIVE INSERT (XSAPI) SIZE LARGE	1
5	PAFZZ	8470-01-547-9780	81337	FQ/PD 07-03	X SMALL ARMS PROTECTIVE INSERT (XSAPI) SIZE XLARGE	1
					END OF FIGURE	

FIELD MAINTENANCE
BULK MATERIAL

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
					BULK MATERIAL	
					FIG. BULK	
1	PFFZZ	8040-00-165-8614	37695	827848-7	ADHESIVE, LIQUID, MMM-A-121	AR
2	PFFZZ	8315-00-262-2784	81349	MIL-B-371	BRAID, TEXTILE, COTTON, TUBULAR FLAT, GREEN 107, TYPE VLL, CLASS 2	AR
3	PFFZZ	8315-00-641-8328	58536	A-A-55093	BRAID, TUBULAR, NYLON, OG-107, 5/16- INCH WIDTH, GREEN 107	AR
4	PFFZZ	8315-01-601-7802	3Z8V4	09148-22-21884	BUCKLE, SLIDE (BOWED, 2 INCH)	EA
5	XBFZZ	LOCAL PURCHASE	3Z8V4	08090-22-21884	BUCKLE, SLIDE (STEEL)	EA
6	PFFZZ	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
7	PFFZZ	8305-00-926-6870	81349	MIL-C-7219	CLOTH, DUCK, NYLON BASIC 7.25 OZ. SQ. YD., 43-INCH WIDTH, ARMY 106 GREEN	AR
8	PFFZZ	8305-00-350-5625	81349	MIL-C-8061	CLOTH, KNIT (NYLON)	YD
9	PZFZZ	8305-00-261-8140	81349	MIL-C--508	CLOTH, OXFORD (NYLON)	YD
10	PAFZZ	4020-00-236-1801	81349	MIL-C4-3307	CORD, FIBROUS (BRAIDED, ¼-INCH DIAMETER FOR SKI THONG REPAIR)	AR
11	XBFZZ	LOCAL PURCHASE	81348	CCC-C-419	COTTON DUCK CLOTH, DYED CCC-C419, ROO624	AR
12	XBFZZ	LOCAL PURCHASE	02768	01047-20	D-RING, METAL (1 INCH)	EA
13	PFFZZ	8010-01-123-9278	60035	MIL-E-52798A	ENAMEL, TYPE II FOREST GREEN	CN

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
14	XBFZZ	LOCAL PURCHASE	81349	MIL-DTL-43734	FABRIC (NYLON, 1000 DENIER)	YD
15	XBFZZ	LOCAL PURCHASE	81349	MIL-DTL-43734	FABRIC (NYLON, 500 DENIER)	YD
16	XBFZZ	LOCAL PURCHASE	58536	A-A-55126	FASTENER TAPE, HOOK (TYPE II, CLASS 1, 1 INCH)	YD
17	XBFZZ	LOCAL PURCHASE	58536	A-A-55126	FASTENER TAPE, HOOK (TYPE II, CLASS 1, 1.5 INCH)	YD
18	XBFZZ	LOCAL PURCHASE	58536	A-A-55126	FASTENER TAPE, HOOK (TYPE II, CLASS 1, 2 INCH)	YD
19	XBFZZ	LOCAL PURCHASE	58536	A-A-55126	FASTENER TAPE, HOOK (TYPE II, CLASS 1, 4 INCH)	YD
20	XBFZZ	LOCAL PURCHASE	58536	A-A-55126	FASTENER TAPE, LOOP (TYPE II, CLASS 1, 1 INCH)	YD
21	XBFZZ	LOCAL PURCHASE	58536	A-A-55126	FASTENER TAPE, LOOP (TYPE II, CLASS 1, 1.5 INCH)	YD
22	XBFZZ	LOCAL PURCHASE	58536	A-A-55126	FASTENER TAPE, LOOP (TYPE II, CLASS 1, 2 INCH)	YD
23	XBFZZ	LOCAL PURCHASE	58536	A-A-55126	FASTENER TAPE, LOOP (TYPE II, CLASS 1, 4 INCH)	YD
24	PFFZZ	5325-01-133-2296	81348	V-F-106	FASTENER, SLIDE, POLYESTER TYPE, TYPE 3, STYLE 1, SIZE MHS, 69-71 INCHES LENGTH, 1 INCH WIDTH	1
25	XBFZZ	LOCAL PURCHASE	57771	MIL-G-16491	GROMMET (TYPE III, CLASS 3)	EA
26	XBFZZ	LOCAL PURCHASE	57771	MIL-G-16491	GROMMET AND WASHER (TYPE III, CLASS 3)	EA
27	XBFZZ	LOCAL PURCHASE	3Z8V4	154-0100-5676	LADDERLOCK (1 INCH)	EA
28	XBFZZ	LOCAL PURCHASE	3Z8V4	104-3100	LADDERLOCK, TROVATO (1 INCH)	EA

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
29	XBFZZ	LOCAL PURCHASE	3Z8V4	111-2201-5676	LOOPLOCK	EA
30	XBFZZ	LOCAL PURCHASE	02768	01004-20	METAL LOOP (1 INCH)	EA
31	XBFZZ	LOCAL PURCHASE	81349	MIL-C-24500	POLYARAMID CLOTH, MIL-C-24500, TYPE I, COLOR OG 106	AR
32	XBFZZ	LOCAL PURCHASE	81348	L-P-378	POLYETHYLENE (.45 THICK)	SH
33	KBFZZ	LOCAL PURCHASE	3Z8V4	00022-22	SLIDE (2 INCH)	EA
34	XBFZZ	LOCAL PURCHASE	57771	MIL-F-10884	SNAP FASTENER, (BUTTON/SOCKET)	EA
35	XBFZZ	LOCAL PURCHASE	57771	MIL-F-10884F	SNAP FASTENER, (BUTTON/SOCKET)	EA
36	PFFZZ	1670-01-594-7850	85810	MIL-T-5038	TAPE, TEXTILE (BINDING TAPE 1 INCH)	YD
37	PFFZZ	8315-00-262-3375	81349	MIL-T-43566	TAPE, TEXTILE, COTTON, OD-7, TYPE I, CLASS 8, 5/8 INCH WIDTH	AR
38	PFFZZ	8310-00-187-3920	58536	A-A-52094	THREAD, COTTON, OD-S-1, C.A. 66022, TYPE I, SIZE 50,3 PLY	AR
39	PFFZZ	8310-00-187-3873	58536	A-A-52094	THREAD COTTON, OLIVE DRAB SHADE S-1, C.A. 66022, TYPE 1A3	AR
40	PFFZZ	8310-01-115-6865	81348	A-A-59826	THREAD, NYLON, TYPE I, CLASS B, SIZE F, BLACK	AR
41	XBFZZ	LOCAL PURCHASE	73441	V-T-295	THREAD (NYLON, TYPE I OR II, SIZE E)	SP
42	XBFZZ	LOCAL PURCHASE	73441	V-T-295	THREAD (NYLON, TYPE I OR II, SIZE F)	SP
43	PFFZZ	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

(1) ITEM NO.	(2) SMR CODE	(3) NSN	(4) CAGEC	(5) PART NUMBER	(6) DESCRIPTION AND USABLE ON CODE (UOC)	(7) QTY
44	PFFZZ	8310-00-988-1297	81349	V-T-285	THREAD, POLYESTER, NATURAL, WHITE, SIZE E, 3 PLY, TYPE 1, SUBCLASS B	AR
45	PFFZZ	8310-00-988-1300	81348	V-T-285	THREAD, POLYESTER, OD-S1, SIZE F, 4-PLAY, TYPE 1, SUBCLASS B	AR
46	PFFZZ	8310-00-988-1298	81348	V-T-285	THREAD, POLYESTER, OD-S1, SIZE E, 3-PLY, TYPE 1, SUBCLASS B	AR
47	XBFZZ	LOCAL PURCHASE	57771	MIL-G-16491	WASHER (TYPE III, CLASS 3)	EA
48	PAFZZ	8305-00-270-1894	81349	MIL-W-5664D	WEBBING, ELASTIC (NYLON 1 INCH)	YD
49	XBFZZ	LOCAL PURCHASE	1NBA3	MIL-W-5664	WEBBING, ELASTIC (NYLON, 4 INCH)	YD
50	PAFZZ	8305-00-260-1750	81349	MIL-W-530,	WEBBING, TEXTILE, COTTON, GENERAL PURPOSE, 1.250 INCH WIDTH, TYPE 2A, CLASS 8	AR
51	XBFZZ	LOCAL PURCHASE	85810	A-A-55301	WEBBING, TEXTILE (NYLON 1 INCH, CLASS III)	YD
52	XBFZZ	LOCAL PURCHASE	85810	MIL-W-17337	WEBBING, TEXTILE (NYLON 2 INCH)	YD
53	XBFZZ	LOCAL PURCHASE	85810	A-A-55301	WEBBING, TEXTILE (NYLON 2 INCH, CLASS III)	YD
54	XBFZZ	LOCAL PURCHASE	85810	MIL-W- 17337	WEBBING, TEXTILE (NYLON .75 INCH)	YD
55	XBFZZ	LOCAL PURCHASE	85810	MIL-W- 17337	WEBBING, TEXTILE (NYLON 1 INCH)	YD
56	XBFZZ	LOCAL PURCHASE	85810	MIL-W- 17337	WEBBING, TEXTILE (NYLON 1.5 INCH)	YD
57	XBFZZ	LOCAL PURCHASE	85810	MIL-W- 17337	WEBBING, TEXTILE (NYLON 3 INCH)	YD
					END OF FIGURE	

FIELD MAINTENANCE

NATIONAL STOCK NUMBER INDEX

STOCK NUMBER	FIG.	ITEM
8415-00-134- 9396	1	2
8415-00-134- 9397	1	2
8415-00-134- 9398	1	2
8415-00-163- 9040	1	3
8415-00-163- 9041	1	4
8415-00-163- 9042	1	3
8415-00-163- 9043	1	4
8415-00-163- 9046	1	5
8415-00-163- 9048	1	7
8415-00-163- 9052	1	6
8040-00-165- 8614	BULK	1
5305-00-182- 9265	3	5
8310-00-187- 3873	BULK	39
8310-00-187- 3920	BULK	38
4020-00-236- 1801	BULK	10
8305-00-260- 1750	BULK	50
8305-00-261- 8140	BULK	9
8315-00-262- 3375	BULK	37
8305-00-270- 1894	BULK	48
8305-00-281- 8016	1	9
5965-00-313- 8958	1	20
8305-00-350- 5625	BULK	8
8310-00-405- 2260	5	3
8315-00-641- 8328	BULK	3
8415-00-782- 2989	1	30
8305-00-926- 6870	BULK	7
8310-00-988- 1296	5	4
8310-00-988- 1297	BULK	44
8310-00-988- 1298	BULK	46
8310-00-988- 1300	BULK	45
8305-01-025- 4920	BULK	6
8310-01-066- 0973	BULK	43
8415-01-092- 7514	2	13
8415-01-092- 7515	2	13
8470-01-092- 7516	2	2
8470-01-092- 7517	2	2
8470-01-092- 7518	2	2
8470-01-092- 7519	2	2
8470-01-092- 7524	2	12
8470-01-092- 7525	2	1
8470-01-092- 7526	2	1
8470-01-092- 7527	2	1
8470-01-092- 7528	2	1
8470-01-092- 7534	2	5
8470-01-092- 8493	2	9
8470-01-092- 8494	2	11
8470-01-110- 6102	5	1
8470-01-110- 6103	5	1
8470-01-110- 6104	5	1
8470-01-110- 6105	5	1
8470-01-110- 6106	5	1
8470-01-110- 6107	5	1
8470-01-110- 6108	5	1
8470-01-110- 6109	5	1
8470-01-110- 6110	5	1
8470-01-110- 6111	5	1
8415-01-110- 9981	2	14
8310-01-115- 6865	BULK	40
8010-01-123- 9278	BULK	13
5325-01-133- 2296	BULK	24
8470-01-144- 2811	2	7
8470-01-144- 2812	2	8
8470-01-144- 2813	2	3
8470-01-144- 2814	2	10
8470-01-144- 5367	2	6
	3	8
8470-01-144- 5368	2	4
3830-01-248- 7933	1	19
8470-01-259- 1693	1	8
8470-01-259- 1694	1	8
8470-01-300- 3819	2	1
8415-01-303- 8945	2	13
8415-01-327- 4824	2	13
8415-01-327- 4825	2	13
8415-01-327- 4826	2	13
8470-01-389- 3815	1	10
8470-01-389- 3818	1	1
8470-01-389- 3821	1	10
8470-01-389- 3822	1	1
8470-01-389- 3823	1	1
8470-01-442- 1434	2	9
5965-01-466- 9372	1	28

STOCK NUMBER	FIG.	ITEM
5965-01-466-9373	1	29
5965-01-466-9374	1	18
5930-01-466-9375	1	25
5930-01-466-9377	1	22
5965-01-466-9380	1	21
8470-01-467-1550	1	13
8470-01-467-1693	1	26
8470-01-467-1795	1	12
8470-01-467-1811	1	12
8470-01-467-1815	1	11
8470-01-467-1896	1	11
8470-01-467-2162	1	24
8470-01-467-2165	1	27
8470-01-467-2168	1	23
8415-01-494-4591	2	13
8415-01-494-4605	2	13
8470-01-497-8701	7	1
8470-01-497-8709	7	1
8470-01-497-8710	7	1
8470-01-497-8712	7	1
8470-01-497-8714	7	1
8470-01-506-6353	3	1
8470-01-506-6356	3	1
8470-01-506-6473	3	7
8470-01-506-6742	3	15
5340-01-509-1467	3	6
8415-01-515-4286	3	19
8415-01-515-4288	3	19
8470-01-520-7360	7	2
8470-01-520-7370	7	2
8470-01-520-7373	7	2
8470-01-520-7382	7	2
8470-01-520-7385	7	2
8415-01-521-8802	3	17
8415-01-521-8806	3	18
8415-01-521-8808	3	18
8415-01-524-5842	3	16
8470-01-529-6302	3	1
8470-01-529-6329	3	1
8470-01-529-6344	3	1
8470-01-529-6365	3	1
8470-01-529-6502	2	1
8470-01-529-6530	2	1
8470-01-529-6532	2	1
8470-01-529-6539	2	1
8470-01-529-6541	2	1
8470-01-531-3351	3	9
8470-01-531-3897	3	3
8470-01-531-4268	3	2
8470-01-531-4284	3	4
8470-01-533-1011	3	14
8470-01-536-7227	7	3
8470-01-546-9356	3	13
8470-01-546-9407	3	12
8470-01-546-9415	3	11
8470-01-546-9420	3	10
8470-01-547-9555	7	5
8470-01-547-9722	7	5
8470-01-547-9726	7	5
8470-01-547-9779	7	5
8470-01-547-9780	7	5
8415-01-552-4607	4	1
8415-01-552-4610	4	1
8470-01-558-8622	3	1
8415-01-559-0105	3	18
8470-01-568-1023	4	1
8470-01-568-1028	4	1
8470-01-580-1388	6	21
8470-01-580-1391	6	21
8470-01-580-1392	6	21
8470-01-580-1395	6	21
8470-01-580-1533	6	21
8470-01-584-1750	4	1
8470-01-584-1839	4	1
8470-01-584-2801	6	21
8465-01-586-8833	6	4
8465-01-586-8840	6	4
8465-01-586-9012	6	4
8465-01-586-9029	6	4
8465-01-586-9035	6	4
8465-01-586-9043	6	4
8470-01-586-9146	6	6
8470-01-586-9171	6	6
8470-01-586-9181	6	6
8470-01-586-9690	6	6
8470-01-586-9691	6	6
8470-01-586-9692	6	6
8470-01-587-0500	6	18

STOCK NUMBER	FIG.	ITEM
8470-01-587- 0974	6	18
8470-01-587- 0985	6	18
8470-01-587- 1020	6	20
8470-01-587- 1022	6	20
8470-01-587- 1024	6	20
8470-01-587- 1268	6	5
8470-01-587- 1275	6	5
8470-01-587- 1285	6	5
8470-01-587- 1293	6	5
8470-01-587- 1314	6	5
8470-01-587- 1325	6	5
8470-01-587- 1343	6	2
8470-01-587- 1350	6	2
8470-01-587- 1370	6	2
8470-01-587- 1381	6	2
8470-01-587- 1409	6	2
8470-01-587- 1430	6	2
8315-01-587- 6560	6	22
8315-01-587- 6570	6	22
8315-01-587- 6601	6	16
8315-01-587- 7032	6	22
8305-01-588- 9271	6	3
8470-01-589- 0176	7	4
8315-01-589- 1287	6	10
8470-01-592- 9461	6	1
8470-01-592- 9468	6	1
8470-01-592- 9479	6	1
8470-01-592- 9480	6	1
8470-01-592- 9484	6	1
8470-01-592- 9485	6	1
8470-01-592- 9733	6	13
8470-01-592- 9740	6	13
8470-01-592- 9752	6	13
8470-01-592- 9825	6	9
8470-01-592- 9828	6	9
8470-01-592- 9833	6	9
8470-01-592- 9904	6	7
8470-01-592- 9921	6	17
8470-01-592- 9925	6	17
8470-01-592- 9938	6	17
8470-01-593- 0060	6	19
8470-01-593- 0097	6	19
8470-01-593- 0791	6	19
1670-01-594- 7850	BULK	36
8470-01-598- 7087	6	11
8470-01-598- 7089	6	11
8470-01-598- 7094	6	11
8470-01-598- 7337	6	8
8470-01-598- 7343	6	12
8470-01-598- 7345	6	12
8470-01-598- 7346	6	12
8470-01-598- 9626	4	2
8470-01-598- 9629	4	2
8470-01-598- 9632	4	2
8470-01-598- 9634	4	2
8470-01-598- 9638	4	3
8470-01-598- 9644	4	3
8470-01-599- 2275	6	15
8470-01-599- 2276	6	15
8470-01-599- 2278	6	15
8470-01-599- 2283	6	14
8470-01-599- 2284	6	14
8315-01-601- 7802	BULK	4

END WORK PACKAGE

FIELD MAINTENANCE
PART NUMBER INDEX

PART NUMBER	FIG.	ITEM
A3297307	3	6
A-A-50195	5	3
A-A-50199A	BULK	43
A-A-52094	BULK	38
	BULK	39
A-A-55093	BULK	3
A-A-55126	BULK	16
	BULK	17
	BULK	18
	BULK	19
	BULK	20
	BULK	21
	BULK	22
	BULK	23
A-A-59826	BULK	40
AR/PD 10-01	4	2
	4	3
AR/PD 10-04	6	1
	6	7
	6	8
	6	9
	6	11
	6	12
	6	13
	6	14
	6	15
AR/PD 10-3A	7	4
ARM-NP1-24-000	4	1
ARM-NP2-24-000	4	1
ARM-NP5-24-000	4	1
ARM-NP6-24-000	4	1
ARM-NP7-24-000	4	1
CCC-C-419	BULK	11
CO/PD 04-10	7	2

PART NUMBER	FIG.	ITEM
CO/PD 06-20	7	3
FQ/PD 07-03	7	5
	7	5
GL PD 07-19	3	2
	3	3
	3	4
	3	14
L-P-378	BULK	32
MIL-B-1851	3	16
MIL-B-371	BULK	2
MIL-B-44194	5	1
MIL-C-12369	BULK	6
MIL-C-24500	BULK	31
MIL-C-43303	1	9
MIL-C4-3307	BULK	10
MIL-C-44107	2	13
MIL-C--508	BULK	9
MIL-C-7219	BULK	7
MIL-C-8061	BULK	8
MIL-DTL-32072	5	4
MIL-DTL-32134	3	17
MIL-DTL-43734	BULK	14
	BULK	15
Mil-E-52798A	BULK	13
MIL-F-10884	BULK	34
MIL-F-10884F	BULK	35
MIL-G-16491	BULK	25
	BULK	26
MIL-H-44098	2	9
	2	14
MIL-H-44099	2	1
MIL-H-44117	1	1
MIL-H-44117	1	8
	1	10

PART NUMBER	FIG.	ITEM
MIL-S-44097	2	2
MIL-T-43566	BULK	37
MIL-T-5038	BULK	36
MS51957-43b	3	5
MTAC1-010101000-MC	6	2
MTAC1-010102000-MC	6	5
MTAC1-010201000-MC	6	2
MTAC1-010202000-MC	6	5
MTAC1-010301000-MC	6	2
MTAC1-010302000-MC	6	5
MTAC1-010501000-MC	6	2
MTAC1-010502000-MC	6	5
MTAC1-010701000-MC	6	2
MTAC1-010702000-MC	6	5
MTAC1-011204L001-MC	6	17
	6	18
	6	19
	6	20
MTAC1-030503000-MC	6	4
MTAC1-030603000-MC	6	4
MTAC1-031299004-MC	6	22
MTAC1-031399004-MC	6	22
MTAC1-031403000-MC	6	4
MTAC1-031499004-MC	6	22
MTAC1-039904000-MC	6	16
MTAC1-750111006-MC	6	21
MTAC1-750211006-MC	6	21
MTAC1-750311006-MC	6	21
MTAC1-750511006-MC	6	21
MTAC1-750711006-MC	6	21
MTAC1-751411006-MC	6	21
MTAC1-769513009-MC	6	10
MTAC1-809512000-MC	6	3
PD-00-03A	7	1
V-F-106	BULK	24
V-T-295	BULK	41
	BULK	42

PART NUMBER	FIG.	ITEM
MTAC1-011304L001-MC	6	17
	6	18
MTAC1-011304R001-MC	6	19
	6	20
MTAC1-011401000-MC	6	2
MTAC1-011402000-MC	6	5
MTAC1-011404L001-MC	6	17
MTAC1-011404L001-MC	6	18
MTAC1-011404R001-MC	6	19
MTAC1-011404R001-MC	6	20
MTAC1-020111007-MC	6	6
MTAC1-020311007-MC	6	6
MTAC1-020511007-MC	6	6
MTAC1-020711007-MC	6	6
MTAC1-020714007-MC	6	6
MTAC1-030103000-MC	6	4
MTAC1-030203000-MC	6	4
MTAC1-030303000-MC	6	4
A3297307	3	6
2418	3	9
55204	3	18
00022-22	BULK	33
01004-20	BULK	30
01047-20	BULK	12
07A12757-01	3	1
08090-22-21884	BULK	5
09148-22-21884	BULK	4
104-3100	BULK	28
111-2201-5676	BULK	29
154-0100-5676	BULK	27
1590-1	1	12
1590-2	1	11
1591-1	1	12
1591-2	1	11
2-1-1385	2	10
2-1-1400	2	5

PART NUMBER	FIG.	ITEM
239-03	3	1
246-03	3	15
251-03	3	13
252-03	3	11
253-03	3	12
254-03	3	7
268-05	3	1
552-04-LARGE/XL	3	18
552-04-S/M	3	18
8-2-602	1	2
8-2-603	1	6
8-2-611	1	7
8-2-617 ITEM 1, 2	1	3
8-2-617 ITEM 11	1	5
8-2-617 ITEM 3, 4	1	3
8-2-617 ITEM 7, 8	1	4
8-2-617 ITEM 9, 10	1	4
8-2-644-5	2	7
8-2-644-6	2	3
8-2-644-7	2	8
8-2-647	2	4
	2	6
	3	8
827848-7	BULK	1
8415-01-092-7514	2	13
8415-01-092-7515	2	13

END OF WORK PACKAGE

CHAPTER 5

SUPPORTING INFORMATION
FOR
GENERAL REPAIR PROCEDURES FOR PROTECTIVE EQUIPMENT

SUPPORTING INFORMATION
REFERENCES

SCOPE

This work package lists related field manuals, forms, technical manuals, and miscellaneous publications referenced.

ARMY REGULATIONS

AR 670-1	Wear and Appearance of Army Uniforms and Insignia
AR 700-15	Packaging of Materiel
AR 700-138	Army Logistics Readiness and Sustainability
AR 750-1	Army Material Maintenance Policy

DA PAMPHLETS

DA PAM 25-33	User's Guide for Army Publications and Forms
DA PAM 738-750	Functional Users Manual for the Army Maintenance Management System (TAMMS)
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	First Aid for Soldiers
FM 10-280	Mobile Field Laundry, Clothing Exchange, and Bath Operations

FORMS

DA Form 12-R	Request for Establishment of a Publications Account
DA Form 2404	Equipment Inspection and Maintenance Worksheet
SF 368	Product Quality Deficiency Report (PQDR)

TECHNICAL BULLETINS

TB 43-0002-27	Maintenance Expenditure Limits for FSC Group 84 (FSC Class 8400)
TB 43-0002-43	Maintenance Expenditure Limits for FSC Group 16 (FSC Class 1670)

TECHNICAL MANUALS

DOD 4160.21-M	Defense Materiel Disposition Manual
TM 750-244-3	Procedures for Destruction of Equipment to Prevent Enemy Use
TM 10-8400-203-23&P	Field Maintenance Manual Including Repair Parts and Special Tools List for General Repair Procedures for Individual Equipment
TM 10-8470-203-10	Operator’s Manual for Body Armor Set, Individual Countermine (BASIC)
TM 10-8470-204-10	Operator’s Manual for Advanced Combat Helmet (ACH)
TM 10-8470-207-10	Operator’s Manual for Outer Tactical Vest (OTV)
TM 10-8470-208-10	Operator’s Manual for Improved Outer Tactical Vest (IOTV) and Improved Outer Tactical Vest Gen II (IOTV Gen II)
TM 10-8470-208-24&P	Field and Sustainment Maintenance Manual Including Repair Parts and Special Tools List for Interceptor Body Armor System
TM 10-8470-210-10	Operator’s Manual for Improved Outer Tactical Vest Gen III (IOTV Gen III)

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.

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

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
PROTECTIVE EQUIPMENT
MAINTENANCE ALLOCATION CHART (MAC)

Table 1. MAC for Protective Equipment.

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL				(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT			
			CREW	MAINTAINER	BELOW DEPOT	DEPOT		
			C	F	H	D		
01	COMBAT VEHICLE CREWMAN'S (CVC) HELMET	Inspect Service Repair			0.5 1.0 1.0			A, B
02	PERSONNEL ARMOR SYSTEM FOR GROUND TROOPS (PASGT) HELMET	Inspect Service Repair			0.5 1.0 1.0			A, B
03	ADVANCED COMBAT HELMET (ACH)	Inspect Service Repair			0.5 1.0 1.0			A, B
04	BALLISTIC NAPE PAD	Inspect Repair			0.5 0.5			
05	COMBAT VEHICLE CREWMAN'S (CVC) BODY ARMOR	Inspect Service Repair			0.5 1.0 1.0			A, B
06	SOLDIER PLATE CARRIER SYSTEM (SPCS)	Inspect Service			0.5 1.0			A,B
0601	SOLDIER PLATE CARRIER SYSTEM (CUMMERBUND CONFIGURATION)	Inspect Service			0.5 1.0			A,B
0602	SOLDIER PLATE CARRIER SYSTEM (SIDE PLATE CARRIER CONFIGURATION)	Inspect Service			0.5 1.0			A,B

Table 1. MAC for Protective Equipment – Continued.

(1) GROUP NUMBER	(2) COMPONENT/ ASSEMBLY	(3) MAINTENANCE FUNCTION	(4) MAINTENANCE LEVEL				(5) TOOLS AND EQUIPMENT REFERENCE CODE	(6) REMARKS CODE
			FIELD		SUSTAINMENT			
			CREW	MAINTAINER	BELOW DEPOT	DEPOT		
			C	F	H	D		
0603	SOLDIER PLATE CARRIER SYSTEM (NON-SIDE PLATE CARRIER CONFIGURATION)	Inspect Service			0.5 1.0			A,B
07	HARD ARMOR PROTECTIVE INSERTS	Inspect Service			0.5 0.5			A,B

Table 2. Tools and Test Equipment for Protective Equipment.

(1) TOOLS OR TEST EQUIPMENT REFERENCE CODE	(2) MAINTENANCE LEVEL	(3) NOMENCLATURE	(4) NATIONAL STOCK NUMBER (NSN)	(5) TOOL NUMBER
1	F	BRUSH, WIRE SCRATCH	7920-00-282-9246	7920-00-282-9246/83421
2	F	DIE TOOL, FASTENER	5120-00-090-4412	89-1401
3	F	DRYER, WASCOMET® MODEL	LOCAL PURCHASE	TD75 RMC/2G091
4	F	GIMLET	5110-99-721-7377	NLC21005
5	F	GUN, GLUE	LOCAL PURCHASE	
6	F	HEAT GUN, ELECTRIC	4940-01-028-7493	10-106/3P7B2
7	F	KNIFE, HOT TIP, ELECTRIC	5110-00-028-9089	5110-00-028-9089/80244
8	F	MOISTURE METER, PINLESS	LOCAL PURCHASE	M0280/OLTF4
9	F	PLIERS, DIAGONAL CUTTING	5110-00-222-2708	B107.500
10	F	PLIERS, LINEMAN'S	5120-00-756-1156	B107.20
11	F	PLIERS, NEEDLE NOSE	5120-01-021-7473	B107.13
12	F	PLIERS, SLIP JOINT	5120-00-223-7396	B107.23
13	F	RIPPER, SEAM	8315-00-240-8438	638/98373
14	F	SCREWDRIVER, FLAT TIP	5120-00-596-8502	B107.600
15	F	SCREWDRIVER, FLAT-TIP, 1/4-INCH	5120-00-596-8653	B107.15
16	F	SEWING MACHINE, BARTACK, INDUSTRIAL	LOCAL PURCHASE	JUKI L-K-1900 A-HS
17	F	SEWING MACHINE, BOX X	LOCAL PURCHASE	JUKI LK-1900A-HS
18	F	SEWING MACHINE, DARNING	3530-01-177-8589	207
19	F	SEWING MACHINE, DOUBLE BOX X	LOCAL PURCHASE	JUKI LR-1900A-HS
20	F	SEWING MACHINE, DOUBLE NEEDLE	3530-00-892-4636	333RBP-6
21	F	SEWING MACHINE, HEAVY DUTY	3530-01-177-8588	733R-5
22	F	SEWING MACHINE, HEAVY DUTY, ZIG-ZAG	3530-01-181-1421	146RB-2A
23	F	SEWING MACHINE, LIGHT DUTY	3530-01-177-8590	7360R

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

(1) TOOLS OR TEST EQUIPMENT REFERENCE CODE	(2) MAINTENANCE LEVEL	(3) NOMENCLATURE	(4) NATIONAL STOCK NUMBER (NSN)	(5) TOOL NUMBER
24	F	SEWING MACHINE, LIGHT-HEAVY DUTY	3530-01-186-3079	SK6F-1
25	F	SEWING MACHINE, MEDIUM DUTY	3530-01-177-8591	255RB-3
26	F	SEWING MACHINE, ZIG-ZAG	LOCAL PURCHASE	199R-2A (90338)
27	F, H	SHEARS, TAILORS, 12 INCH	5110-00-223-6370	5110002236370
28	F	STENCIL CUTTING MACHINE, HAND OPERATED	7490-00-164-0537	R
29	F	TAPE, MEASURING	5210-00-182-4797	5210-00-182-4797
30	F	THERMOMETER, LASER INFRARED	LOCAL PURCHASE	42511/OLTF4
31	F	WASHER, HIGH EXTRACT	LOCAL PURCHASE	EXSM-230C/2G091
32	F	WRENCH, TORQUE, 0-300-INCH POUNDS	5120-00-776-1841	B107.300

Table 3. Remarks for Protective Equipment.

(1) REMARKS 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 protective 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 No. This number is assigned to the entry in the list and is referenced in the narrative instructions to identify the item (e.g., “Use brake fluid (Item 5, WP 0098 00)”).

Column (2) Level. This column identifies the lowest level of maintenance that requires the listed item (F= Maintainer or ASB).

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

Column (4) Item Name, Description, Part Number/CAGEC. This column provides the other information you need to identify the item. The last line below the description is the part number and the Commercial and Government Entity Code (CAGEC) (in parentheses).

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

Table 1. Expendable and Durable Items List.

(1) ITEM NO.	(2) LEVEL	(3) NATIONAL STOCK NUMBER (NSN)	(4) ITEM NAME, DESCRIPTION, PART NUMBER/(CAGEC)	(5) U/I
1	F	8040-00-062-4173	ADHESIVE, P/N FE-7004 A/B (92528)	KT
2	F	8040-00-165-8614	ADHESIVE, EC 1357, P/N MMM-A-121 (81348)	QT
3	F	8040-01-388-0735	ADHESIVE (FOR EDGING), P/N 40640 (05972)	BT
4	F	8040-00-162-9704	ADHESIVE, PASTE, 2 OZ., PN: DEVCON 2 TON (CLEAR EPOXY), P/N 8040-00-162-9704 (80244)	KT
5	F	8040-00-054-5023	ADHESIVE, ROOM TEMPERATURE AND INTERMEDIATE TEMPERATURE SETTING RESIN (PHENOL RESORANOL AND MELAMINE BASE) MIL-397B, P/N RS 240MD (5M413),	AR
6	F	8315-00-262-2784	BRAID, TEXTILE, COTTON, TUBULAR, FLAT, OG-107, WATER REPELLENT, 0.344 INCHES WIDE, TYPE VLL, CLASS 2, MIL-B-371 (81349)	YD
7	F	6850-01-228-7266	CLEANING COMPOUND, SOLVENT, P/N 76820 (05972)	BT
8	F	8305-00-222-2423	CLOTH, CHEESECLOTH, TYPE 1, CLASS I, P/N CCC-C-440 (81348)	YD

Table 1. Expendable and Durable Items List – Continued.

(1) ITEM NO.	(2) LEVEL	(3) NATIONAL STOCK NUMBER (NSN)	(4) ITEM NAME, DESCRIPTION, PART NUMBER/(CAGEC)	(5) U/I
9	F	3305-00-460-4200	CLOTH, COATED, BALLOON, COTTON, FOR HEAT SEAL PATCHING.TYPE I, MILC43677 (81349)	YD
10	F	8305-01-003-5435	CLOTH, COATED, COTTON, NYLON OXFORD, 6.5 OZ, QUARPEL TREATED, TYPE IL, MIL-C-43677 (81349)	YD
11	F	8305-01-115-9168	CLOTH, PARACHUTE, NYLON 1.1 OZ./YD., 36 INCH WIDTH, MIL-C-7020 (81349)	YD
12	F	7930-00-282-9699	DETERGENTS, GENERAL PURPOSE, TYPE I OF MIL-D-16791	BX
13	F	7930-00-531-9715	DETERGENTS, GENERAL PURPOSE, TYPE II OF MIL-D-16791	GL
14	F	8470-01-506-6473	EDGING, 254-03 (81337)	EA
15	F	5350-00-192-5049	EMERY CLOTH, 120 GRIT (80204), ANSI B74.18	PG
16	F	LOCAL PURCHASE	FACE MASK, 417-62466 (6M009)	PK
17	F	8470-01-506-6742	FASTENER TAPE, HOOK, 246-03 (81337)	RL
18	F	8415-01-492-0178	GLOVES, 8415-01-492-0178 (80244)	BX
19	F	5350-00-115-3297	GRAIN, ABRASIVE, P/N AD9B (90888)	BG
20	F	6810-01-075-5546	ISOPROPYL ALCOHOL, 7618-19-4 (53390)	BT
21	C, F	LOCAL PURCHASE	LANADOL® AKTIV® DETERGENT	BX
22	C, F	LOCAL PURCHASE	LANADOL® AVANT® DETERGENT	BX
23	C, F	LOCAL PURCHASE	LAUNDRY ID TAGS, P/N SML-9 (1HFY9)	BX
24	F	8030-00-174-3201	LEATHER DRESSING, MILDREW-PREVENTIVE PARANITROPHENOL, LIQUID FORM, P/N OL164 (94217)	PT
25	F	9150-00-999-7548	LUBRICANT, INTERLOCKING SLIDE FASTENER, ZIPPEREASE STICK FORM, ZE-2GOV (96980)	BX
26	F	7520-00-973-1059	MARKER, FELT TIP, BLACK, P/N 6003 (04457)	DZ
27	C, F	7930-01-045-3517	MILD DETERGENT OR SOAP, P/N 7930-01-045-3517 (83421)	BX

Table 1. Expendable and Durable Items List – Continued.

(1) ITEM NO.	(2) LEVEL	(3) NATIONAL STOCK NUMBER (NSN)	(4) ITEM NAME, DESCRIPTION, PART NUMBER/(CAGEC)	(5) U/I
28	C, F	7520-01-060-5820	PEN,BALL POINT, 7520-01-060-5820 (83421)	DZ
29	C, F	7510-00-264-4612	PENCIL,MARKING AID, YELLOW, A-A-87 (58536)	DZ
30	C, F	LOCAL PURCHASE	PLASTIC BAG FOR STORING BALLISTIC INSERTS	BX
31	F	8030-01-565-1437	PUTTY, 051144-05960 (52157)	TB
32	F	8030-00-017-9534	SAND, SILICA: KILNDRIED, 821-0024-00 (13499)	EA
33	F	6640-01-468-3557	SILICA GEL, 1194B (59590)	EA
34	C, F	8115-01-4444-0197	SLEEVE,BOX	EA
35	F	7930-00-170-5467	SOAP, SADDLE, P/N 220-16 (80244)	LB
36	F	7510-00-264-5478	STAPLES, PAPER FASTENING, P/N STCRP2115-1/4IN (08075)	BX
37	C	7510-00-266-5016	TAPE, PRESSURE SENSITIVE ADHESIVE, PPP-T-60 (81348)	RL
38	F	LOCAL PURCHASE	TAPE, TEXTILE, BINDING 1 INCH, P/N MIL-T-5038 (81349)	
39	F	8030-01-104-5392	THREAD LOCKING COMPOUND, P/N ASTM D5363 (81346)	BX
40	F	LOCAL PURCHASE	THREAD, NYLON TYPE I or II, SIZE E or F P/N V-T-295 (81348)	
41	F	LOCAL PURCHASE	WALNUT SHELL FLOUR, 40/1 00 MESH, P/N N478020 (1HFY9)	LB

END OF WORK PACKAGE

SUPPORTING INFORMATION
TOOL IDENTIFICATION LIST

INTRODUCTION

Scope

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

Explanation of Columns in the Tool Identification List

Column (1) Item No. 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 (NSN). 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	BRUSH, WIRE SCRATCH	7920-00-282-9246	7920-00-282-9246/(83421)	TM 10-8400-205-23&P
2	DIE TOOL, FASTENER	5120-00-090-4412	89-1401	TM 10-8400-205-23&P
3	DRYER, WASCOMET® MODEL	LOCAL PURCHASE	TD75 RMC/(2G091)	TM 10-8400-205-23&P
4	GIMLET	5110-99-721-7377	NLC21005	TM 10-8400-205-23&P
5	GUN, GLUE	LOCAL PURCHASE		TM 10-8400-205-23&P
6	HEAT GUN, ELECTRIC	4940-01-028-7493	10-106/(3P7B2)	TM 10-8400-205-23&P
7	KNIFE, HOT TIP, ELECTRIC	5110-00-028-9089	5110-00-028-9089/(80244)	TM 10-8400-205-23&P
8	MOISTURE METER, PINLESS	LOCAL PURCHASE	M0280/(OLTF4)	TM 10-8400-205-23&P
9	PLIERS, DIAGONAL CUTTING	5110-00-222-2708	B107.500	TM 10-8400-205-23&P
10	PLIERS, LINEMAN'S	5120-00-756-1156	B107.20	TM 10-8400-205-23&P
11	PLIERS, NEEDLE NOSE	5120-01-021-7473	B107.13	TM 10-8400-205-23&P

Table 1. Tool Identification List – Continued

(1) ITEM NO.	(2) ITEM NAME	(3) NATIONAL STOCK NUMBER (NSN)	(4) PART NUMBER/ (CAGEC)	(5) REFERENCE
12	PLIERS, SLIP JOINT	5120-00-223-7396	B107.23	TM 10-8400-205-23&P
13	RIPPER, SEAM	8315-00-240-8438	638/(98373)	TM 10-8400-205-23&P
14	SCREWDRIVER, FLAT TIP	5120-00-596-8502	B107.600	TM 10-8400-205-23&P
15	SCREWDRIVER, FLAT-TIP, 1/4-INCH	5120-00-596-8653	B107.15	TM 10-8400-205-23&P
16	SEWING MACHINE, BAR TACK, INDUSTRIAL	LOCAL PURCHASE	JUKI L-K-1900 A-HS/(8N184)	TM 10-8400-205-23&P
17	SEWING MACHINE, BOX X	LOCAL PURCHASE	JUKI LK-1900A-HS/(8N184)	TM 10-8400-205-23&P
18	SEWING MACHINE, DARNING	3530-01-177-8589	207/(120/60/1)	TM 10-8400-205-23&P
19	SEWING MACHINE, DOUBLE BOX X	LOCAL PURCHASE	UKI LR-1900A-HS/(8N184)	TM 10-8400-205-23&P
20	SEWING MACHINE, DOUBLE NEEDLE	3530-00-892-4636	339RB-4	TM 10-8400-205-23&P
21	SEWING MACHINE, HEAVY DUTY	3530-01-177-8588	733R-5	TM 10-8400-205-23&P
22	SEWING MACHINE, HEAVY DUTY, ZIG-ZAG	LOCAL PURCHASE	Consew 199R-2A	TM 10-8400-205-23&P
23	SEWING MACHINE, LIGHT DUTY	3530-01-177-8590	7360R	TM 10-8400-205-23&P
24	SEWING MACHINE, LIGHT-HEAVY DUTY	3530-01-186-3079	SK6F-1	TM 10-8400-205-23&P
25	SEWING MACHINE, MEDIUM DUTY	3530-01-177-8591	255RB-3	TM 10-8400-205-23&P
26	SEWING MACHINE, ZIG-ZAG	LOCAL PURCHASE	199R-2A/ (90338)	TM 10-8400-205-23&P
27	SHEARS, TAILORS, 12 INCH	5110-00-223-6370	5110-00-223-6370	TM 10-8400-205-23&P
28	STENCIL CUTTING MACHINE, HAND OPERATED	7490-00-164-0537	R	TM 10-8400-205-23&P
29	TAPE, MEASURING	5210-00-182-4797	5210-00-182-4797	TM 10-8400-205-23&P
30	THERMOMETER, LASER INFRARED	LOCAL PURCHASE	42511/(OLTF4)	TM 10-8400-205-23&P
31	WASHER, HIGH EXTRACT	LOCAL PURCHASE	EXSM-230C/(2G091)	TM 10-8400-205-23&P
32	WRENCH, TORQUE, 0-300-INCH POUNDS	5120-00-776-1841	B107.300	TM 10-8400-205-23&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)*
U.S. Army TACOM Life Cycle Management Command,
ATTN: AMSTA-LCL-MPP / TECH PUBS
6501 E. 11 Mile Road, Warren, MI 48397-5000

FROM: *(Activity and location) (Include ZIP Code)*
PFC JANE DOE
Co A 3RD Engineer Br.
Ft Leonard Wood, MO 63108

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

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

ITEM NO.	PAGE NO.	PARA-GRAPH	LINE NO. *	FIGURE NO.	TABLE NO.	RECOMMENDED CHANGES AND REASON *(Provide exact wording of recommended changes, if possible).*
	0036 00-2				1	*In Table 1, Sewing Machine Code Symbols, the second sewing machine code symbol should be MDZZ not MD22* *Change the manual to show Sewing Machine, Industrial: Zig-Zag; 308 stitch; medium-duty; NSN 3530-01-181-1421 as a MDZZ code symbol.*

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

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

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

TO: (*Forward direct to addressee listed in publication*)	**FROM:** (*Activity and location) (Include ZIP Code)*	**DATE**
U.S. Army TACOM Life Cycle Management Command, ATTN: AMSTA-LCL-MPP / TECH PUBS 6501 E. 11 Mile Road, Warren, MI 48397-5000	*PFC JANE DOE* *Co A 3RD Engineer Br.* *Ft Leonard Wood, MO 63108*	21 October 2003

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

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

PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION
0066 00-					4			*Callout 16 in figure 4 is pointed to a D-Ring.In the Repair Part List key for Figure 4, item 16 is called a Snap Hook. Please correct one or the other.*

PART III – REMARKS (*Any general remarks or recommendations, or suggestions for improvement of publications and blank forms. Additional blank sheets may be used if more space is needed.)*

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

RECOMMENDED CHANGES TO PUBLICATIONS AND BLANK FORMS For use of this form, see AR 25-30; the proponent agency is ODISC4.	Use Part II *(reverse)* for Repair Parts and Special Tool Lists (RPSTL) and Supply Catalogs/Supply Manuals (SC/SM).	DATE

TO: *(Forward to proponent of publication or form) (Include ZIP Code)* U.S. Army TACOM Life Cycle Management Command, ATTN: AMSTA-LCL-MPP / TECH PUBS 6501 E. 11 Mile Road, Warren, MI 48397-5000	**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 10-8400-205-23&P	15 October 2013	General Repair Procedures for Protective 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.*

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

TO: *(Forward to proponent of publication or form) (Include ZIP Code)*	**FROM:** (*Activity and location) (Include ZIP Code)*	**DATE**
U.S. Army TACOM Life Cycle Management Command, ATTN: AMSTA-LCL-MPP / TECH PUBS 6501 E. 11 Mile Road, Warren, MI 48397-5000		

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

PUBLICATION NUMBER	DATE	TITLE
TM 10-8400-205-23&P	15 October 2013	General Repair Procedures for Protective Equipment

PAGE NO.	COLM NO.	LINE NO.	NATIONAL STOCK NUMBER	REFERENCE NO.	FIGURE NO.	ITEM NO.	TOTAL NO. OF MAJOR ITEMS SUPPORTED	RECOMMENDED ACTION

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

UASPPC V3.00

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)* U.S. Army TACOM Life Cycle Management Command, ATTN: AMSTA-LCL-MPP / TECH PUBS 6501 E. 11 Mile Road, Warren, MI 48397-5000	**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 10-8400-205-23&P	15 October 2013	General Repair Procedures for Protective 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).*

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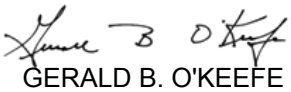
TYPED NAME, GRADE OR TITLE	TELEPHONE EXCHANGE/AUTOVON, PLUS EXTENSION	SIGNATURE

UASPPC V3.00

By Order of the Secretary of the Army:

RAYMOND T. ODIERNO
General, United States Army
Chief of Staff

Official:



GERALD B. O'KEEFE
Administrative Assistant to the
Secretary of the Army
1323204

DISTRIBUTION:

Initially published in electronic media only. If at a later date this publication is printed, it will be distributed in accordance with the initial distribution number (IDN) 258017, requirements for TM 10-8400- 205-23&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

PIN: 087523-000