TM 10-1080-256-10

TECHNICAL MANUAL

OPERATOR MANUAL
FOR

ULTRA LIGHTWEIGHT CAMOUFLAGE NET SYSTEMS (ULCANS)
INCREMENT I
WOODLAND R/S
(NSN 1080-01-677-6912)
WOODLAND R/T
(NSN 1080-01-677-6918)
DESERT/URBAN R/S
(NSN 1080-01-682-4997)
DESERT/URBAN R/T
(NSN 1080-01-682-5467)
SNOW/ALPINE R/S
(NSN 1080-01-682-5481)
SNOW/ALPINE R/T
(NSN 1080-01-682-5498)

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HEADQUARTERS, DEPARTMENT OF THE ARMY

10 MARCH 2020

WARNING SUMMARY

The following are general safety precautions and instructions that people must understand and apply during phases of operation of the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I. Proper adherence to these instructions will ensure personal safety and the protection of property.

FIRST AID DATA

Refer to FIRST AID, TC 4-02.1, C2 for situations requiring urgent or immediate medical attention by non-medical personnel.

EXPLANATION OF SAFETY WARNING ICONS



EYE PROTECTION – Person with goggles shows that the material will injure the eyes.



FIRE – Flame shows that a material may ignite and cause burns.



HELMET PROTECTION – Arrow bouncing off head with helmet shows that falling parts present a danger.



HOT AREA – Hand over object radiating heat shows that part is hot and can burn.



SHARP OBJECT – Pointed object in hand shows that a sharp object presents a danger to limb.



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

WARNING SUMMARY – (Continued)

WARNING DESCRIPTIONS

WARNING



To prevent personal injury, secure dog tags, remove jewelry, individual equipment, and clothing items that can become snagged during deployment or striking of ULCANS Increment I screens. Failure to observe this warning can result in severe injury, loss of limb, or death from falling.

WARNING



ULCANS Increment I tent pins may present a trip hazard. Drive tent pins deeply to minimize area protruding above ground. Select an area without tent pins for entry/egress through the screen.

WARNING



To prevent personal injury, a minimum of a two-person lift is required for both the ULCANS Increment I screen system and the support system storage/transport containers. Components may increase in weight due to trapped or absorbed water. Use additional personnel as needed.

WARNING



Volatile fuels and vehicle exhaust can create a fire hazard and can cause explosions. These hazards are always present but most prevalent during hot weather. When volatile fuels or vehicle exhaust are present under ULCANS Increment I, steps will be undertaken to insure adequate ventilation of the camouflaged area.

WARNING



Personnel are subject to being burned by hot components and exhausts if deployment of the ULCANS Increment I is attempted with the equipment's engine running or immediately after the engine is turned off. A cool down period shall be observed prior to ULCANS Increment I deployment except in emergency conditions; then wear hand protection and exercise extreme caution when working in area of hot components.

WARNING SUMMARY – (Continued)

WARNING



Climbing on and around the equipment to deploy ULCANS Increment I can pose a fall hazard. Extreme caution shall be observed to avoid slippery or uneven surfaces and other trip hazards. Use handhold when provided and ladders when available.

WARNING



Particles of dirt and debris carried by netting/garnish can be scraped off and fall into the operator's eyes when looking upward during setup and takedown of ULCANS Increment I. Eye protection is required during setup and takedown operations of ULCANS Increment I.

WARNING



Combustion by-products of ULCANS Increment I can be toxic. Evacuate the area and stay out of the path of smoke if ULCANS Increment I systems are exposed to fire. Self-contained breathing apparatus is required when fighting ULCANS Increment I fire.

WARNING



It is recommended that gloves be worn at all times when working with ULCANS Increment I. The gripping surface of the shape disruptor can cause skin abrasions.

WARNING



Debris or equipment caught in netting system can fall from net while being deployed and injure personnel. Wear head gear while deploying ULCANS Increment I to prevent injury.

List of Effective Pages/Work Packages

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

Date of issue for original manual is:

Original 10 March 2020

THE TOTAL NUMBER OF PAGES FOR FRONT AND REAR MATTER IS 30 AND THE TOTAL NUMBER OF WORK PACKAGES IS 43, CONSISTING OF THE FOLLOWING:

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WP 0020 (2 pgs)	0	Back cover	0

HEADQUARTERS,
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 10 MARCH 2020

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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 Tank-automotive and Armaments Command, ATTN: AMTA-LCL-IMP/TECH PUBS, MS 727, 6501 E. 11 Mile Road, Detroit Arsenal, MI. The e-mail address is usarmy.detroit.tacom.mbx.ilsc-tech-pubs@mail.mil. The fax number is DSN 786-1856 or Commercial (586) 282-1856. A reply will be furnished to you.

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HOW TO USE THIS MANUAL

HOW TO USE THIS MANUAL

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FRONT MATTER

The front matter includes such items as the Warning Summary, List of Effective Pages/Work Packages, Table of Contents, and How To Use This Manual.

Warning Summary

The warning summary provides first aid data and explanations of all general safety warning icons used in the manual. It also provides descriptions of the general safety warnings that have major impact throughout the manual.

List of Effective Pages

The list of effective pages/work packages provides a consolidated list of all work packages in the manual and the pages within those work packages. The list also will identify effective changes against the individual pages.

Table of Contents

The table of contents is a sequential listing of all subject topics, figures, and tables in the manual. This listing is separated by Chapter and Work Package.

How to Use This Manual

How to use this manual section provides general information about the separate sections of the manual and how to access the information.

CHAPTERS AND WORK PACKAGES

Chapter 1 - General Information, Equipment Description, and Theory of Operation

This chapter provides the user with a physical and functional description of the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I.

Chapter 2 - Operator Instructions

This chapter provides detailed instructions for operating the ULCANS Increment I.

Chapter 3 - Troubleshooting Procedures

This chapter provides detailed instructions for troubleshooting. Refer to Troubleshooting Introduction (WP 0013) for information on how to use troubleshooting procedures. Once you are familiar with how troubleshooting works, refer to the index of malfunctions (WP 0014) to troubleshoot.

HOW TO USE THIS MANUAL – (Continued)

Chapter 4 - PMCS Maintenance Instructions

This chapter provides detailed instructions for PMCS related activities. PMCS chapter contains the PMCS Introduction work package and the PMCS instruction work package.

Chapter 5 - Maintenance Instructions

This chapter provides maintenance procedures for the ULCANS Increment I by personnel.

Chapter 6 - Destruction of Equipment to Prevent Enemy Use

This chapter provides procedures for the intentional destruction of the ULCANS Increment I by personnel. Included in this chapter are instructions for reporting the destruction of the ULCANS Increment I.

Chapter 7 - Supporting Information

This chapter provides information to support all procedures in the manual. Included are a list of reference material, Components of End Items (COEI) and Basic Issue Items (BII) Lists, Expendable and Durable Items List, Mandatory Replacement Parts List and Critical Safety Items List.

Work Packages

The Work Packages (WP) contain information pertinent to the performance of specific tasks. Each WP is maintained as a separate entity. The WPs are grouped into Chapters based on overall content. WPs are arranged in numerical sequence regardless of chapter division. The chapter divisions and the WPs contained within the chapters are listed in the Table of Contents.

FINDING INSTRUCTIONS YOU NEED

Primary Paragraph Headings

Primary paragraphs are flush left with bold title and capital case. Primary paragraphs present major ideas and can be broken down into two or more subparagraphs. Primary paragraphs titles are on a separate line and have a blank line between the title and text that follows.

Subparagraph Level 1 Headings

Level 1 subparagraphs are flush left with bold title and in title case (initial letter of heading are capitalized). These paragraphs always relate to and are subordinate to the most recent primary paragraph heading. Level 1 subparagraphs present ideas and can be broken down into two or more subparagraphs. Level 1 subparagraphs titles are on a separate line and have a blank line between the title and text that follows.

Subparagraph Level 2 Headings

Level 2 subparagraphs are flush left with bold title and in title case (initial letter of heading are capitalized) and end with a period. These paragraphs always relate to and are subordinate to the most recent Level 1 subparagraph heading. Level 2 subparagraphs present ideas and can be broken down into two or more subparagraphs. Level 2 subparagraphs titles are on the same line as the text that follows.

Figures

Figures are numbered, titled, and listed in the table of contents under the chapter and WP they appear.

Tables

Tables are numbered, titled, and listed in the table of contents under the chapter and WP they appear.

Troubleshooting

Troubleshooting is accomplished using corrective actions to fix specific malfunctions that are indicated by symptoms the system presents. There are more details about how to use these procedures in WP 0013.

CHAPTER 1

GENERAL INFORMATION, EQUIPMENT DESCRIPTION AND THEORY OF OPERATION

FOR

ULTRA LIGHTWEIGHT CAMOUFLAGE NET SYSTEMS (ULCANS) INCREMENT I

OPERATOR

GENERAL INFORMATION

SCOPE

TYPE OF MANUAL

This manual provides operating instructions and crew maintenance procedures for use with the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I.

MODEL NUMBER AND EQUIPMENT NAME

FP-NET-N03-3093 CAMOUFLAGE NET SYSTEM, GENERAL PURPOSE / (R/S), ULCANS Increment I, WOODLAND

FP-NET-N02-2093 CAMOUFLAGE NET SYSTEM, COMMUNICATIONS / (R/T), ULCANS Increment I, WOODLAND

FP-NET-N03-3077 CAMOUFLAGE NET SYSTEM, GENERAL PURPOSE / (R/S), ULCANS Increment I, DESERT/URBAN

FP-NET-N02-2054 CAMOUFLAGE NET SYSTEM, COMMUNICATIONS / (R/T), ULCANS Increment I, DESERT/URBAN

FP-NET-N03-3078 CAMOUFLAGE NET SYSTEM, GENERAL PURPOSE / (R/S), ULCANS Increment I, SNOW/ALPINE

FP-NET-N02-2055 CAMOUFLAGE NET SYSTEM, COMMUNICATIONS / (R/T), ULCANS Increment I, SNOW/ALPINE

PURPOSE OF EQUIPMENT

ULCANS Increment I is a 2D reversible, multi-spectral, camouflage system that is quickly and easily erected and disassembled by dismounted personnel to conceal stationary vehicles, weapons systems, personnel, and equipment. ULCANS Increment I is an all-weather modular concealment system providing visual, near IR, shortwave IR, thermal, and radar signature reduction. The system is designed for easy, rapid deployment and recovery and is operator repairable and maintainable.

The system provides forces the ability to reduce probability of detection while conducting combat operations worldwide. Hostile forces throughout the world have the ability to detect, gather intelligence, and target friendly forces via visual, electro-optic, radar, and thermal signatures. ULCANS Increment I provides the capability for personnel, weapons systems, vehicles, tactical operation centers, aircraft, logistics systems, and other tactical equipment to avoid these detection methods on the battlefield in every environment.

The screens are made of a synthetic, ultra lightweight, water-repellent material. It is of snag resistant construction and is operator repairable and maintainable. It is designed for easy, rapid deployment and recovery by a minimum of two (four for larger multi-screen setup) soldiers. The service life of ULCANS Increment I is estimated to be two years of service (112 erect/strke cycles) or 10 years in storage.

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 750-8, The Army Maintenance Management System (TAMMS) Users Manual; DA PAM 738-751, Functional Users Manual for the Army Maintenance Management Systems - Aviation (TAMMS-A); or AR 700-138, Army Logistics Readiness and Sustainability.

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your ULCANS Increment I needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance. All non-Aviation/Missile EIRs and PQDRs must be submitted through the Product Data Reporting and Evaluation Program (PDREP) Web site. The PDREP site is: https://www.pdrep.csd.disa.mil/ . If you do not have internet access, you may submit your information using an SF 368 (Product Quality Deficiency Report). You can send your

SF 368 using email, regular mail, or fax using the addresses/fax numbers specified in DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual. We will send you a reply.

CORROSION PREVENTION AND CONTROL (CPC)

Corrosion prevention and control of Army material 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. The term “corrosion” means the deterioration of a material or its properties due to a reaction of that material with its chemical environment. 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 (also considered to be corrosion based on the above definition of corrosion). Degradation is caused by thermal (heat), oxidation (oxygen), solvation (solvents), or photolytic (light, typically ultraviolet) processes. The most common exposures are excessive heat or light. Damage from these processes will appear as cracking, softening, swelling, and/or breaking. The US Army has defined the following nine (9) forms of corrosion used to evaluate the deterioration of metals. These shall be used when evaluating and documenting corrosion.

UNIFORM (or general attack) : Affects a large area of exposed metal surface, like rust on steel or tarnish on silver. It gradually reduces the thickness of the metal until it fails.

CREVICE : Occurs in crevices created by rubber seals, gaskets, bolt heads, lap joints, dirt or other surface deposits. It will develop anywhere moisture or other corrosive agents are trapped and unable to drain or evaporate.

SELECTIVE LEACHING : One element, usually the anodic element of an alloy, corrodes away, leaving the cathodic element. This can create holes in metal.

INTERGRANULAR : Metal deterioration caused by corrosion on the bonds between or across the grain boundaries of the metal. The metal will appear to be peeling off in sheets, flaking, or being pushed apart by layers. A particular type of intergranular corrosion is exfoliation.

PITTING : This can result from conditions similar to those for crevice corrosion. Pits can develop on various materials due to their composition. Rifle boxes are big victims of pitting.

EROSION : Results when a moving fluid (liquid or gas) flows across a metal surface, particularly when solid particles are present in the fluid. Corrosion actually occurs on the surface of the metal, but the moving fluid washes away the corrosion and exposes a new metal surface, which also corrodes.

FRETTING : Occurs as a result of small, repetitive movements (e.g., vibration) between two surfaces in contact with each other. It’s usually identified by a black powder corrosion product or pits on the surface.

GALVANIC : Occurs when two different types of metal come in contact with each other, like steel bolts on aluminum, for example. This is a common problem on aircraft because of their mix of metals.

STRESS : Term used to describe corrosion cracking and corrosion fatigue.

Where an item is not ready/available due to one of these forms of corrosion, it shall be recorded as a corrosion failure in the inspection record and the appropriate code (170) for corrosion shall be used when requesting/performing maintenance.

If a corrosion problem is identified, it can be reported as an EIR or PQDR. Use of key words such as “corrosion”, “rust”, “deterioration”, or “cracking” will ensure that the information is identified as a CPC problem. 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 MATERIAL TO PREVENT ENEMY USE

Destruction of Army materiel to prevent enemy use shall be in accordance with TM 750-244-3. Refer to Chapter 6 of this manual for specific requirements and procedures to destroy the ULCANS Increment I.

PREPARATION FOR SHIPPING OR STORAGE

Refer to WP 0028 for specific procedures for storing and shipping the ULCANS Increment I.

TRANSPORTABILITY GUIDANCE

Refer to WP 0028 for specific procedures for transporting the ULCANS Increment I.

NOMENCLATURE CROSS-REFERENCE LIST

Common Name	Official Nomenclature
Repair Kit	Repair Kit, Camouflage Net Set
Screen Carrying Case	Bag, Camouflage Net
Key	Wrench, Spanner
Support System Carrying Case	Bag, Camouflage Net, Support

LIST OF ABBREVIATIONS/ACRONYMS

Acronym/Abbreviation	Meaning
AAL	Additional Authorization List
AR	Army Regulation
BII	Basic Issue Item
CAGEC	Commercial and Government Entity Code
cm	Centimeter
COEI	Components of End Item
CPC	Corrosion Prevention and Control
°	Degrees
DA	Department of the Army
EIR	Equipment Improvement Recommendations
ft	foot
ft²	Square Feet
ft³	Cubic Feet
H	Height
in	Inch
kg	Kilogram
L	Length
lb	Pound
m	Meter
m²	Square Meters
MTOE	Modified Table of Organization and Equipment
NMC	Not Mission Capable
NSN	National Stock Number
P/N	Part Number
PDREP	Product Data Reporting and Evaluation Program
PMCS	Preventive Maintenance Checks and Services
R/S	Radar Scattering
R/T	Radar Transparent
SF	Standard Form
TAMMS	The Army Maintenance Management System
TM	Technical Manual
TOE	Table of Organization and Equipment
U/I	Unit of Issue
ULCANS	Ultra Lightweight Camouflage Net Systems
W, w	Width
WP	Work Package

END OF WORK PACKAGE

OPERATOR

EQUIPMENT DESCRIPTION AND DATA WORK PACKAGE

EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES

CHARACTERISTICS

The Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I is highly portable with all components for a single system located in carrying cases, each case weighing a maximum of 74 lbs (33.6 kgs) (refer to Table 1 for specific weights). The ULCANS Increment I is available in multiple variants to improve the survivability of all vehicles and systems in the operational force and conceal them from detection by the enemy in any operating environment. Any number of screens can be joined together to provide cover for a large area of concealment. Refer WP 0005 for typical ULCANS Increment I applications.

There are two types of systems: Type 1, General Purpose (R/S) and Type 2, Communications (R/T). Type I systems provide 2-96 GHz radar scattering protection. The R/S screens should never be used to camouflage active communications equipment. Communications equipment should protrude through camouflage screens. If the R/S ULCANS Increment I is placed over active radar equipment it will interfere with the operation of radar equipment it is concealing.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

ULCANS INCREMENT I

ULCANS Increment I (Figure 1) consists of two major subsystems: the screen system and the support system. Each subsystem is stored and transported in its own carrying case.

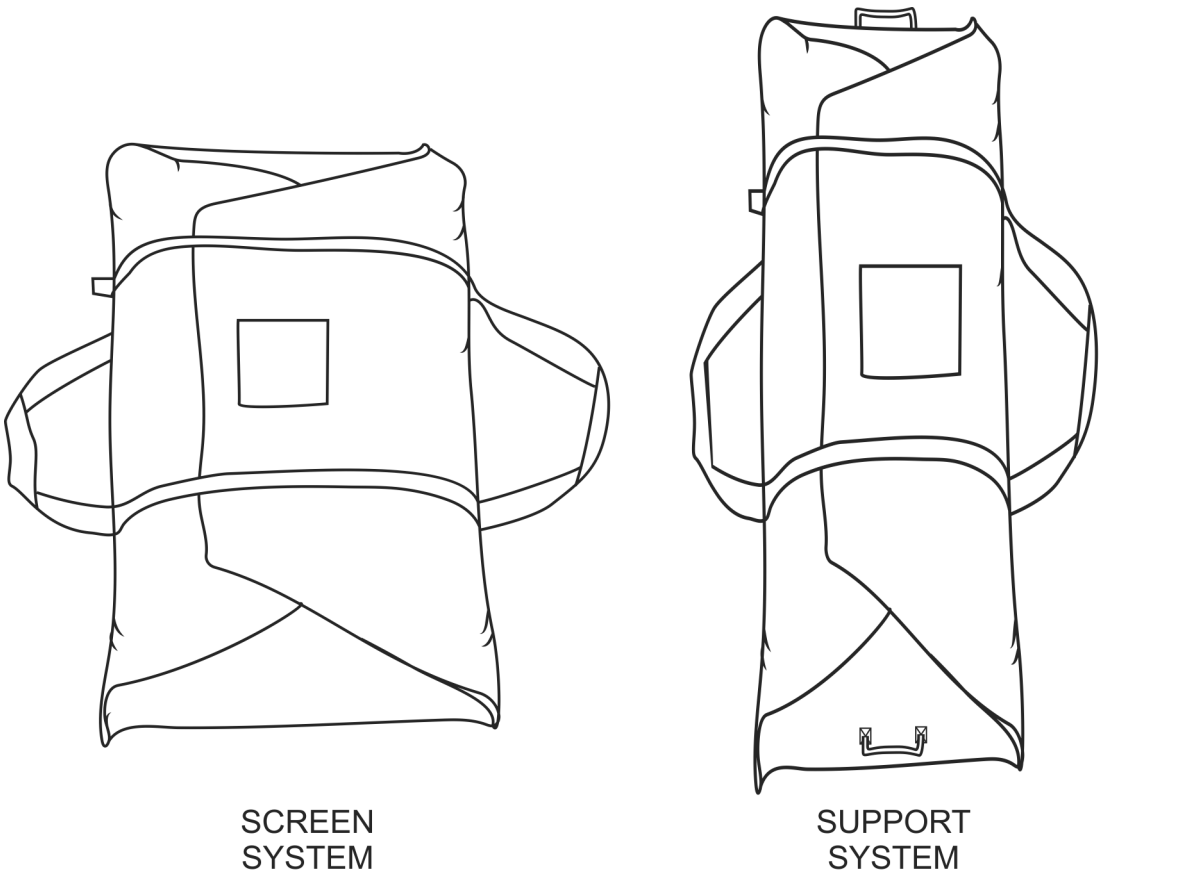


Figure 1. ULCANS Increment I.

MODULAR SCREEN SYSTEM

The modular camouflage screen system consists of the following items:

- 1 ea. Hexagon screen.
- 1 ea. Rhombic screen.
- 1 ea. Screen carrying sase.
- 1 ea. Repair kit.
- 1 ea. Technical manual.
- 1 ea. Graphic training aid.

HEXAGON SCREEN

The hexagon screen is a six-sided camouflage screen in the shape of a hexagon. The screen has quick connection system on the outer edges of the screen used to connect multiple screens together. The screen contains identification tags (Figure 2, Item 2) that will inform whether it is a type I or type II system. The system also has an edge band (Figure 2, Item 1). If the system is Type 1, General Purpose (R/S) it will have a camouflage edge band. If the system if Type 1, Communications (R/T) it will have a solid color edge band.

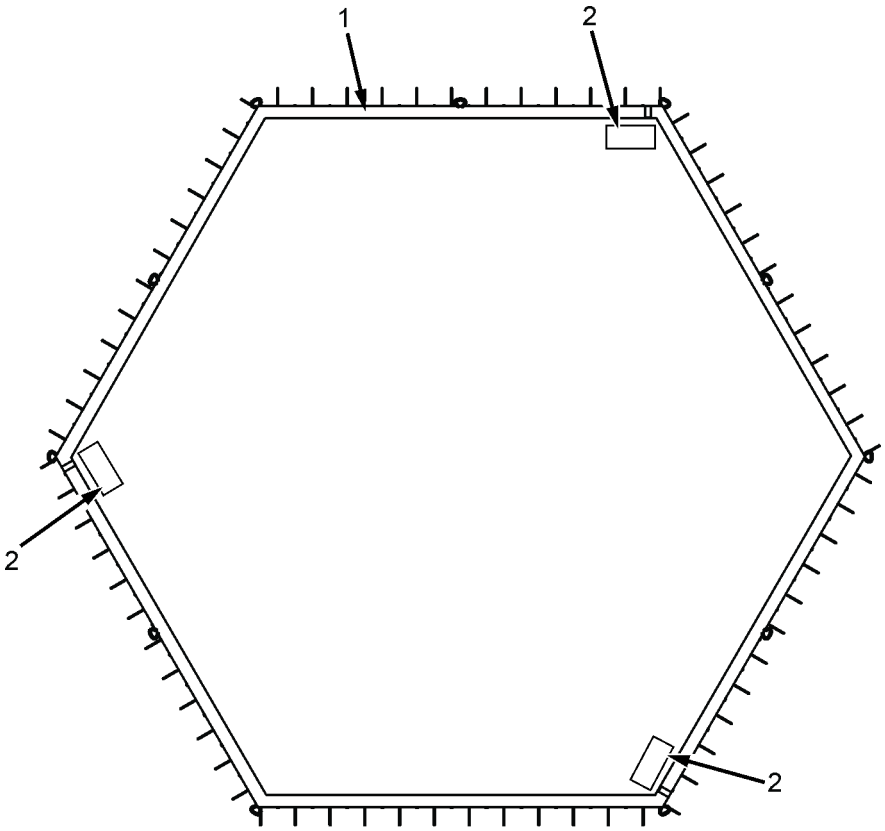


Figure 2. Hexagon Screen.

RHOMBIC SCREEN

The rhombic screen is a four sided camouflage screen in the shape of a diamond. The screen has quick connection system on the outer edges of the screen used to connect multiple screens together. The screen contains identification tags (Figure 3, Item 1) that will inform whether it is a type I or type II system. The system also has an edge band (Figure 3, Item 2). If the system is Type 1, General Purpose (R/S) it will have a camouflage edge band. If the system if Type 1, Communications (R/T) it will have a solid color edge band.

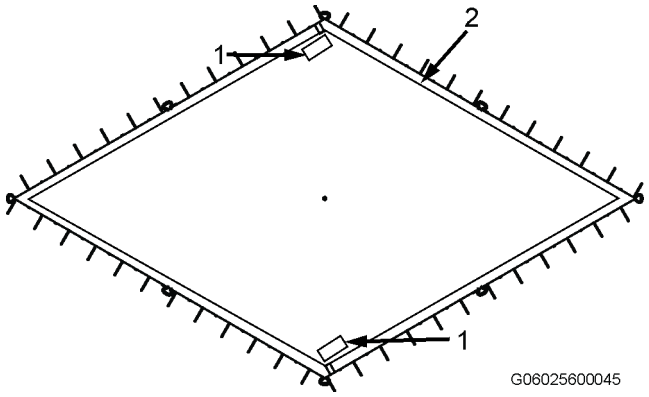


Figure 3. Rhombic Screen.

REPAIR KIT

A repair kit (Figure 4) is furnished to make field repairs of the ULCANS Increment I screens and return the system to a serviceable condition. The repair material in the kit is the same color class as the screen system. The repair kit is stored in a pocket inside the screen system bag and consists of the following items:

- Repair kit bag (Figure 4, Item 1).
- 300 ea. Cable ties (Figure 4, Item 2).
- 25 ft² Screen repair material (Figure 4, Item 3).

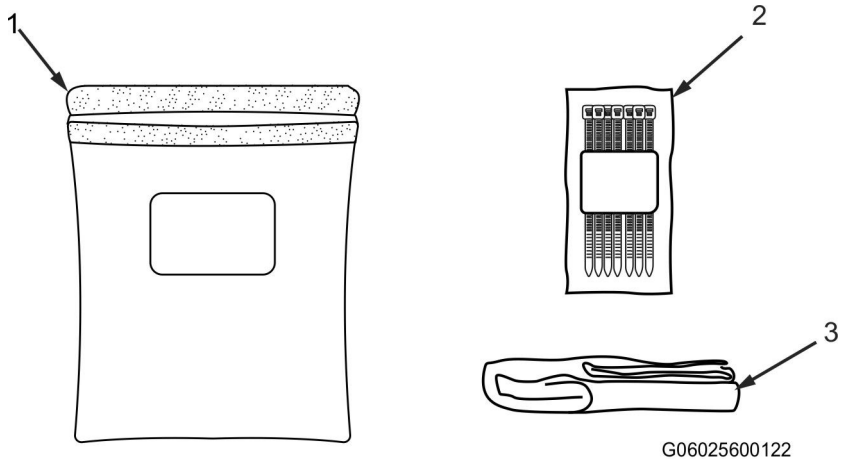


Figure 4. Repair Kit.

TECHNICAL MANUAL AND GRAPHIC TRAINING AID

A copy of this TM and a graphic training aid will be stored in a pocket inside the screen system bag.

SCREEN CARRYING CASE

The carrying case allows for storage and transport of the screen system. The case is color coded to the screen system and an identification tag on the case identifies the type and class of the screen system held by carrying case. Class 1, Woodland uses a green carrying case, Class 2, Desert/Urban uses a tan carrying case, and Class 3, Snow/Alpine uses a grey carrying case.

SUPPORT SYSTEM

The support system (Figure 5) provides space between the modular camouflage screen system and the equipment being concealed, and breaks up the visible outline of the equipment. A single support system weighs approximately 74 lb (33.6 kg) and can camouflage up to 13.77 ft (4.2 m) high and consists of the following items:

- 1 ea. Support system carrying bag (Figure 5, Item 2).
- 5 ea. 13.77 ft (4.2 m) Telescopic support poles with integral shape disruptor (Figure 5, Item 1).
- 1 ea. Tent pin carry case (Figure 5, Item 4).
- 20 ea. Tent pins (Figure 5, Item 6).
- 1 ea. Hammer (Figure 5, Item 5).
- 1 ea. Spanner wrench (Figure 5, Item 3).

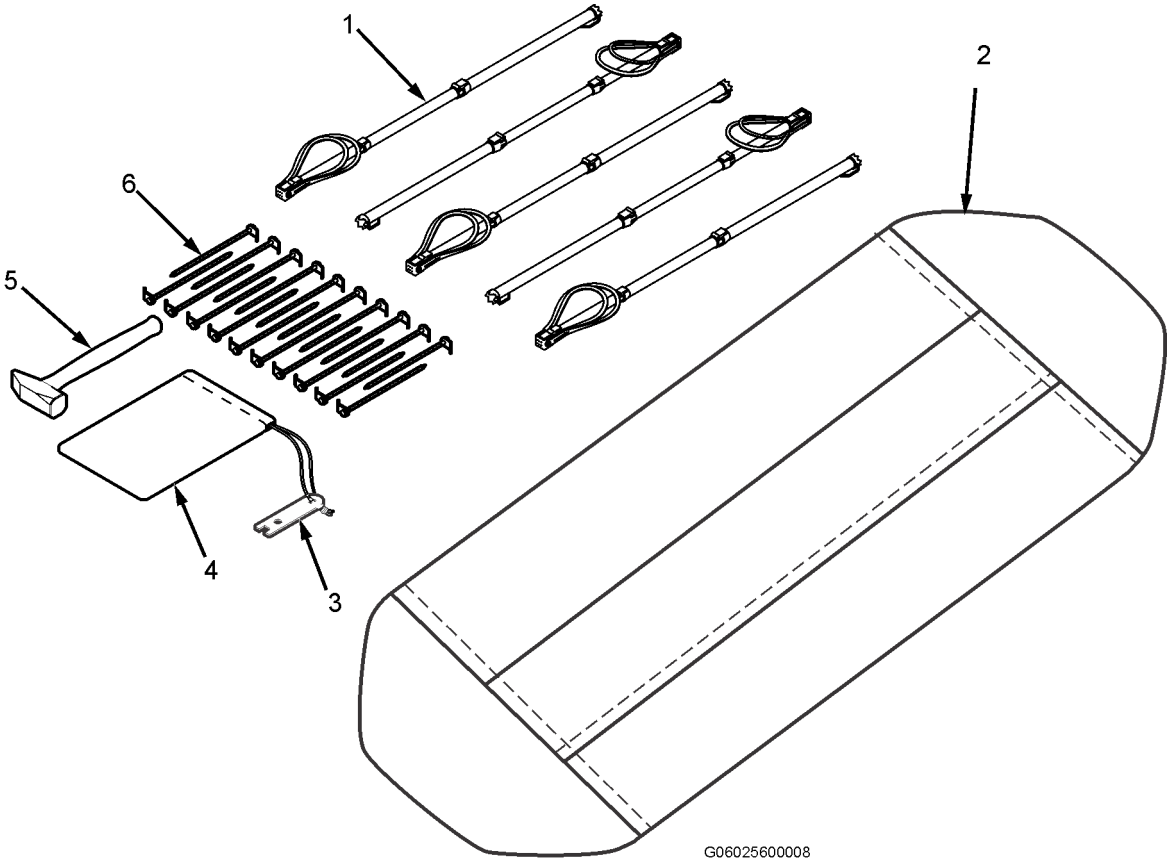


Figure 5. Support System.

TELESCOPIC SUPPORT POLES

The telescopic support poles (Figure 6, Item 3) are 5.4 ft (1.6 m) when collapsed and 13.77 ft (4.2 m) when extended. They have an integral shape distruptor (Figure 6, Item 1) that breaks up the geometric shapes of the screens to allow for better camouflage in your environment. The poles are adjusted using an integral clamp (Figure 6, Item 2).

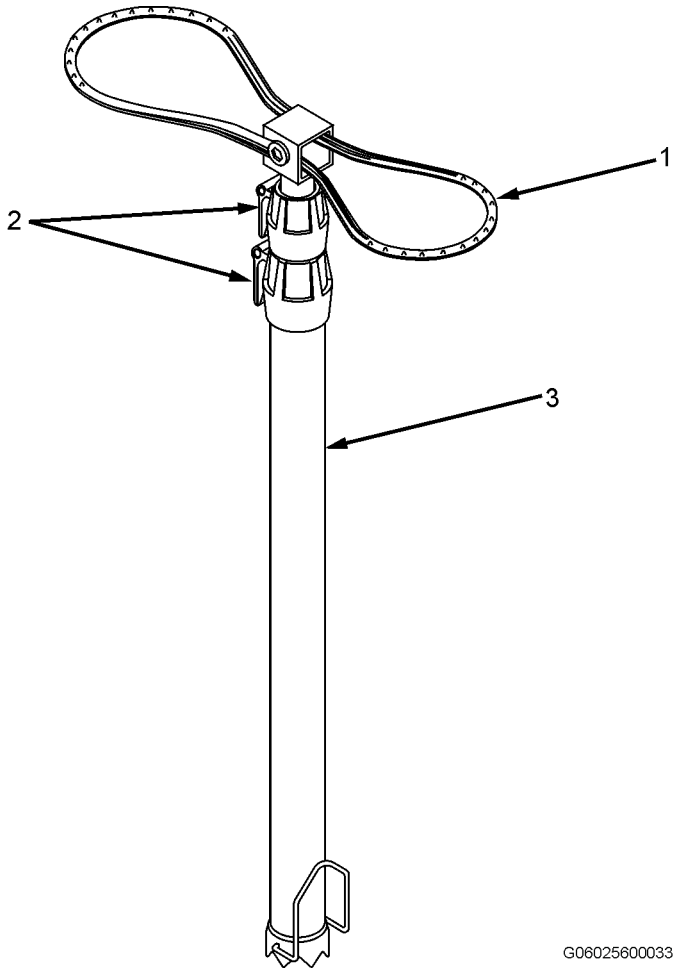


Figure 6. Telescopic Support Poles.

EQUIPMENT DIFFERENCES

To reduce visual detection in varying operating environments, the ULCANS Increment I is produced in three different color pattern combinations. These patterns are reversible and are arranged in the most likely combinations required by a deploying force. The pattern combinations include light and dark woodland patterns, desert and urban patterns and snow and alpine patterns. Each of the different color combination variants is produced with Radar Scattering (R/S) capabilities or Radar Transparent (R/T) capabilities.

There are no visual differences between R/S screens and R/T screens. When two or more screens are joined together, ensure that the screens are of the same type by checking the screen identification tag (Figure 7) located at every other corner of each screen (Figure 2, Item 1), (Figure 3, Item 1).

Type I, R/S, ULCANS Increment I shall be used for general purpose, radar scattering concealment of ground, non-radar equipment, tactical systems. Type I systems provide 2-96 GHz radar scattering protection. The R/S screens should never be used to camouflage active radar transmitters, receivers, or whip antennas. Whip antennas should protrude through camouflage screens. If the R/S ULCANS Increment I is placed over active radar equipment it will interfere with the operation of radar equipment it is concealing.

Type II, R/T, ULCANS Increment I shall be used for communications, radar transparency, concealment of ground radar equipment.

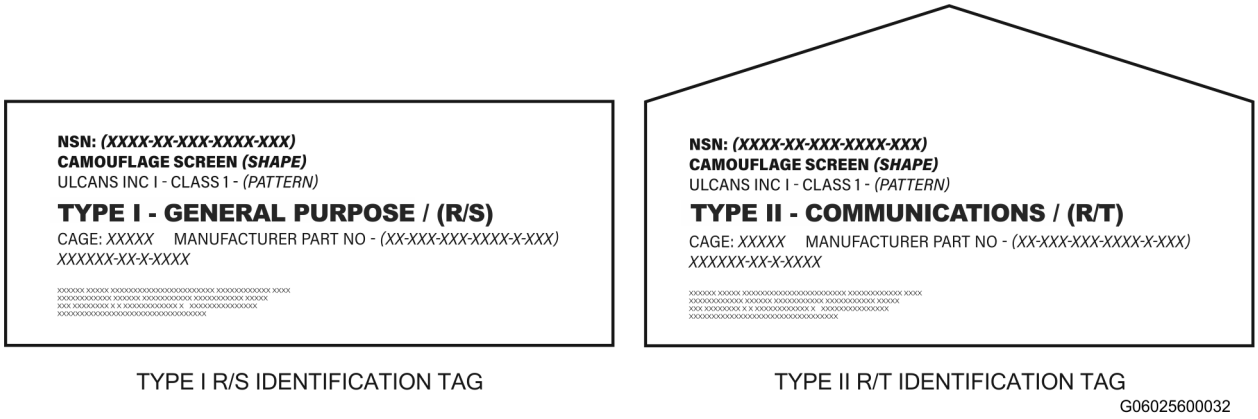


Figure 7. ULCANS Increment I Camouflage Screen System Identification Tags.

EQUIPMENT DATA

Table 1. Equipment Data.

SCREEN TYPE	DIMENSIONS	WEIGHT
Class 1, Type I or II		
Light/Dark Woodland, Modular Camouflage Screen System	7.2 ft³ (0.2 m³)	68.5 lb (31.1 kg)
Hexagon Screen	34.2 ft (10.4 m) x 27.8 ft (8.4 m)	44.5 lb (20.1 kg)
Rhombic Screen	16 ft (4.8 m) x 27.8 ft (8.4 m)	16 lb (7.2 kg)
Repair Kit		3 lb (1.3 kg)
Technical Manual		
Graphic Training Aid		
Carrying Case, Screen System		5 lb (2.2 kg)
Class 2, Type I or II		
Desert/Urban, Modular Camouflage Screen System	7.2 ft³ (0.2 m³)	69 lb (31.2 kg)
Hexagon Screen	34.2 ft (10.4 m) x 27.8 ft (8.4 m)	45 lb (20.4 kg)
Rhombic Screen	16 ft (4.8 m) x 27.8 ft (8.4 m)	16 lb (7.2 kg)
Repair Kit		3 lb (1.3 kg)
Technical Manual		
Graphic Training Aid		
Carrying Case, Screen System		5 lb (2.2 kg)
Class 3, Type I or II		
Snow/Alpine, Modular Camouflage Screen System	7.2 ft³ (0.2 m³)	74 lb (35.6 kg)
Hexagon Screen	34.2 ft (10.4 m) x 27.8 ft (8.4 m)	51.5 lb (23.4 kg)
Rhombic Screen	16 ft (4.8 m) x 27.8 ft (8.4 m)	18 lb (8.2 kg)
Repair Kit		3.6 lb (1.6 kg)
Technical Manual		
Graphic Training Aid		
Carrying Case, Screen System		5 lb (2.2 kg)
Support System		50 lb (22.7 kg)
5 ea. 5.4 - 13.8 ft Telescopic Support Pole	5.4 ft (1.65 m) - 13.8 ft (4.2 m) x 9.44 in (24 cm) - 28.35 in (72 cm)	6.5 lb (2.9 kg)(ea) 32.5 lb(total)(14.9 kg)
20 ea. Tent Pin	12 in (30.5 cm) x 1.75 in (4.4 cm)	0.4 lb (0.2 kg)(ea) 8 lb (3.6 kg)(total)
Hammer	12 in (30.5 cm) x 4.6 in (11.7 cm)	5 lb (2.3 kg)(total)
Wrench, Spanner	1.7 in (4.3 cm) x 1.8 in (4.5 cm)	1.6 oz (45.4 g)(total)
Carrying Case, Screen System		6.4 lb (2.9 kg)

END OF WORK PACKAGE

OPERATOR

THEORY OF OPERATION

INTRODUCTION

This work package provides theory of operation of how systems and components of the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I work together. A functional description is provided for each system.

Modular Camouflage Screen System

To prevent detection, recognition and identification of military hardware by an enemy using visual, infrared (IR), thermal, or radar devices, ULCANS Increment I can be temporarily placed over halted vehicles, weapons and materials and over semi-permanent positions and installations.

Radar/Thermal Signature Detection

ULCANS Increment I is manufactured in two types of screen netting: Type I General Purpose (R/S) and Type II Communications / (R/T). Both types of netting are manufactured to reduce thermal signatures of personnel and equipment it conceals. Type I netting is manufactured to reduce radar signatures of personnel and equipment it conceals. The combination of radar disrupting properties imbedded in the netting and the irregular shape of the netting provide Type I R/S systems protection against detection by radar frequencies in the 2-96 GHz range.

Because Type I, R/S, ULCANS Increment I interferes with radar transmissions and radio equipment, Type I, R/S, ULCANS Increment I cannot be used for concealment of operating ground radar equipment. If a vehicle is being concealed by an R/S screen the vehicle's whip antennas should protrude through camouflage screens. Refer to Table 1 for types of ULCANS Increment I screens.

ULCANS Increment I variants covered by this manual include the following types:

Table 1. ULCANS Increment I Type of Screens.

Screen Type	Radar/Thermal Protection
I	General Purpose / (R/S)
II	Communications / (R/T)

Visual Detection

ULCANS Increment I reduces opportunity for visual detection by providing environment specific camouflage screening over vehicles and equipment. The class of screening material specifies color combinations of screen. Each screen net is printed with two different camouflage patterns which allows the screen to be reversed as operating forces move between different environments. Refer to Table 2 for classification and color combinations of ULCANS Increment I screens.

ULCANS Increment I variants covered by this manual include the following classes:

Table 2. ULCANS Increment I Classification of Screens.

Screen Class	Color Combination
1	Light Woodland/Dark Woodland
2	Desert/Urban
3	Snow/Alpine

Non Standard Concealment

ULCANS Increment I can also be used as an aid in the concealment of permanent prominent objects and objects in a fixed pattern or array which present obvious targets. However, permanent installation camouflage will usually require construction of concealment features (false roofs, dummy buildings, garnished wire nestings, etc.).

Multiple Screen Assembly

ULCANS Increment I is modular system designed so that multiple screens can be joined in varying patterns to cover various positions and equipment. The shapes of the netting screens allow for quick assembly in many different configurations. The different configurations allow for many different systems to be concealed. The universal nature of the camouflage patterns ensures that screen positioning for pattern matching is not necessary.

For consistent and effective concealment and detection reduction only join screen nets of the same type and classification.

Support System

The screen support system provides two essential benefits to the screen netting: elevation and shape disruption.

Elevation

Support poles aid effective concealment of vehicles, weapons, or other semi-permanent objects by elevating the netting to provide a minimum space of 2 ft (0.6 m) between the screen and the top of the equipment being concealed. Netting can contact part of the equipment if the equipment is used as part of the shape disruption. Under no circumstances should screens be draped over equipment being concealed without support poles deployed. The support poles and integral shape disruptors must be used at all times. If support poles are not used the screen will show the outline and thermal signature of the equipment being concealed and will allow recognition by enemy forces, thus defeating the purpose of camouflage.

Shape Disruption

To disrupt the shape of the screen concealing the equipment, shape disruptors are installed at the top of the support poles. Support poles can be positioned underneath the screens, at various positions and heights. When properly positioned, the screens slope outward as much as possible, avoiding vertical sides, pulling edges of the screen to the ground all the way around the net system.

Entry/Egress From ULCANS Increment I

Entry/egress from under ULCANS Increment I is created as required using seams between individual netting screens. For personnel entry/egress a seam is tied off approximately 4 ft (1.21 m) from the ground and closed with tent pins at each side of the seam. Personnel loosen the tent pin strap and fold the seam back to enter or exit.

For vehicle entry/egress a seam is placed in front of the concealed vehicle, the vehicle can exit quickly by untying the seam and folding back the camouflage screen enough to let the vehicle pass through. For large vehicles, if necessary, personnel may raise and hold extra pole segments, each with shape disruptors, to provide necessary clearance for the vehicle to enter or exit.

END OF WORK PACKAGE

CHAPTER 2

OPERATOR INSTRUCTIONS

FOR

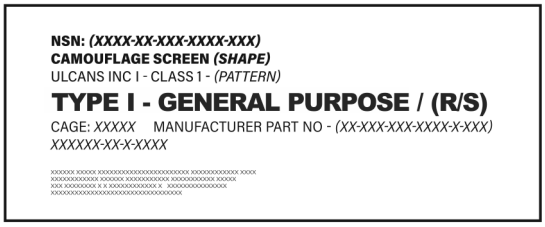
ULTRA LIGHTWEIGHT CAMOUFLAGE NET SYSTEMS (ULCANS) INCREMENT I

OPERATOR INSTRUCTIONS

DESCRIPTION AND USE OF OPERATOR CONTROLS AND INDICATORS

INTRODUCTION

This work package provides the descriptions of the two Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I identification tags: Type I and Type II. Personnel operating the ULCANS Increment I should know the meaning of these tags.

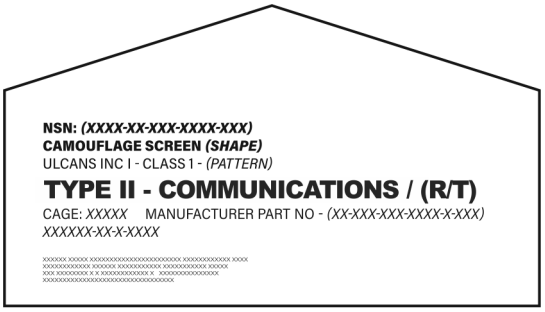


TYPE I IDENTIFICATION TAG

Figure 1. Type I Identification Tag.

TYPE I IDENTIFICATION TAG

Type I, R/S, ULCANS Increment I shall be used for general purpose, radar scattering concealment of non-radar, ground equipment, and tactical systems.



TYPE II IDENTIFICATION TAG

Figure 2. Type II Identification Tag.

TYPE II IDENTIFICATION TAG

Type II, R/T, ULCANS Increment I shall be used for communications, radar transparency, and concealment of ground radar equipment.

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

OPERATION UNDER USUAL CONDITIONS
ASSEMBLY AND PREPARATION FOR USE

INITIAL SETUP:

Materials
Gloves, Men's and Women's (WP 0041, Item 2)

Personnel Required
MOS Non-Specific - 2

References
WP 0004
WP 0008
WP 0009
WP 0010

Equipment Condition
Equipment stowed in carry case

ASSEMBLY AND PREPARATION FOR USE

Typical ULCANS Increment I Applications

The Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I can be used to conceal military target signatures of weapons, vehicles, and semi-permanent positions in situations where natural cover or concealment may be absent or inadequate. Any number of screens can be joined together to provide cover for a large area of concealment. For typical ULCANS Increment I applications, refer to Figure 1. This procedure must be performed prior to fielding. Because of the expeditionary nature of ULCANS Increment I, the system must be prepared for deployment prior to use in the field. You will not have time to open boxes, unfold, and refold this system prior to set up.

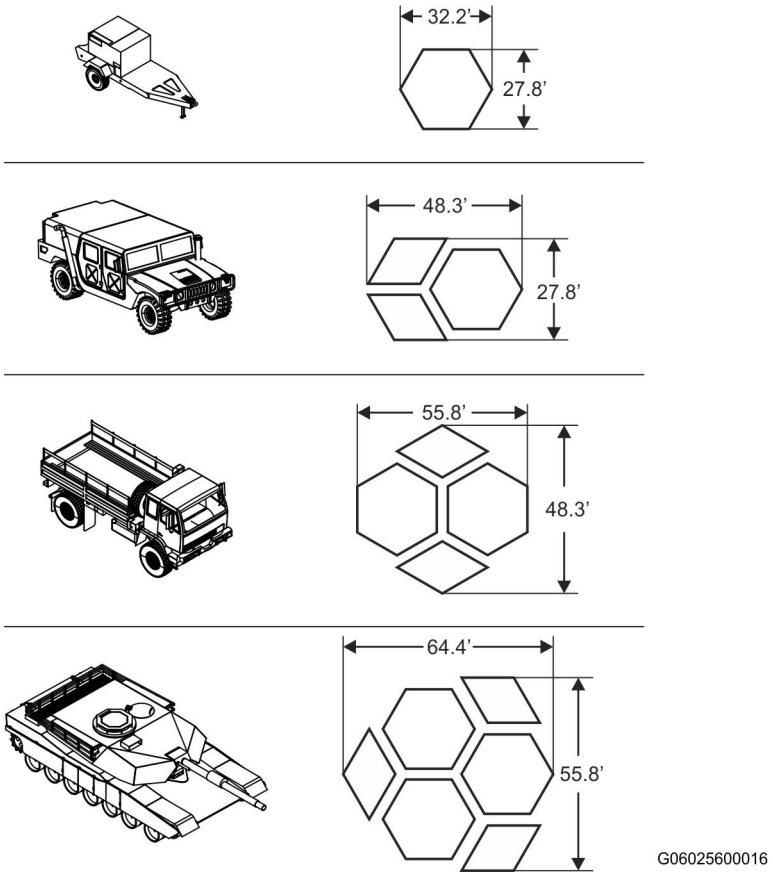
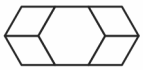
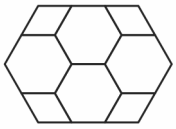
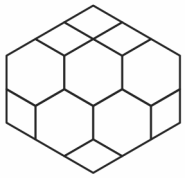
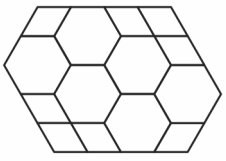


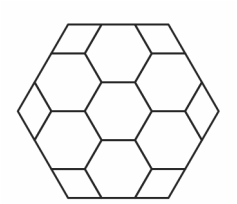
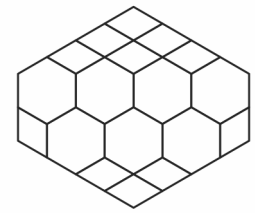
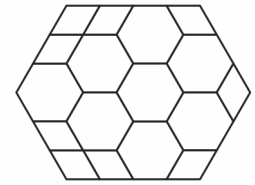
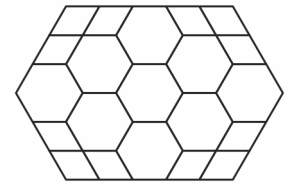
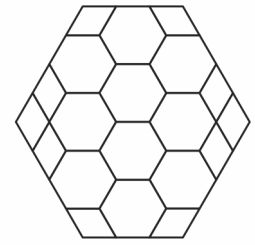
Figure 1. Typical ULCANS Increment I Applications.

TYPICAL ULCANS INCREMENT I CONFIGURATIONS

For common arrangements of camouflage screens refer to Table 1. Table 1 identifies length, width and square footage of assembled screens. You must determine the correct number of systems necessary prior to creating net assemblies and refolding for field deployment.

Table 1. Typical ULCANS Increment I Configurations.

Configuration Name	Image	Hexagon	Rhombus	Length FT	Width FT	Area SQ FT
0A		0	1	27.8	16.1	224.5
0B		0	2	40.2	13.9	449.0
1A		1	0	32.2	27.8	673.6
1B		1	2	48.3	27.8	1122.6
1C		1	4	64.4	27.8	1571.7
2		2	2	55.8	48.3	1796.2
3		3	3	64.4	55.8	2694.3
4		4	4	80.5	55.8	3592.4
5		5	6	83.7	80.5	4715.0
6		6	8	104.7	69.7	5837.6

Configuration Name	Image	Hexagon	Rhombus	Length FT	Width FT	Area SQ FT
7A		7	6	96.6	83.7	6062.1
7B		7	11	111.6	96.9	7184.7
8		8	9	112.7	83.7	7409.2
9		9	12	128.8	83.7	8756.4
10		10	10	112.7	111.6	8980.9

MODULAR CAMOUFLAGE SCREEN SIZE CALCULATION

To determine number of screens required for concealment, screen width (measurement A) and screen length (measurement B) must be calculated. To calculate required dimensions of camouflage screen, perform the following steps.

NOTE

Calculation formulas are based on height (H), width (W), and length (L), in feet, of equipment or object being concealed. 2 ft must be added to the height (H) measurement to account for overhead clearance from concealed object to netting screen.

1. Measure height (H), width (W), and length (L) of equipment or object to be concealed. Measurements must be in feet (ft). Any part of the object that falls within the slope of about 45° can be disregarded in determining length or width. A slope of about 45° gives maximum effectiveness in camouflage.

   Example: Object to be concealed is 8 ft in height by 10 ft wide by 25 ft long.
2. Calculate measurement A using formula, A = 2(height + 2 ft) + width + 5 ft.

   Formula: A = 2(H + 2 ft) + W + 5 ft = 35 ft

   Example: A = 2(8 ft + 2 ft) + 10 ft + 5 ft = 35 ft
3. Calculate measurement B using formula, B = 2(height + 2 ft) + length + 5 ft.

   Formula: B = 2(H + 2 ft) + L + 5 ft = 50 ft

   Example: B = 2(8 ft + 2 ft) + 25 ft + 5 ft = 50 ft
4. Find measurement A on chart in Figure 2.
5. Find measurement B on chart in Figure 2.
6. At intersection of measurements A and B on chart, locate nearest size of screen above that point. Round up if necessary. Keep in mind that formulas and chart are guides and selection of screens and combinations must be tailored to individual situations.

   Example: Intersection of A = 35 and B = 50 on chart fits within the coverage of a two screen configuration.
7. Refer to Table 1 and Figure 1 for potential configurations of screens based on calculations and data from Figure 2.

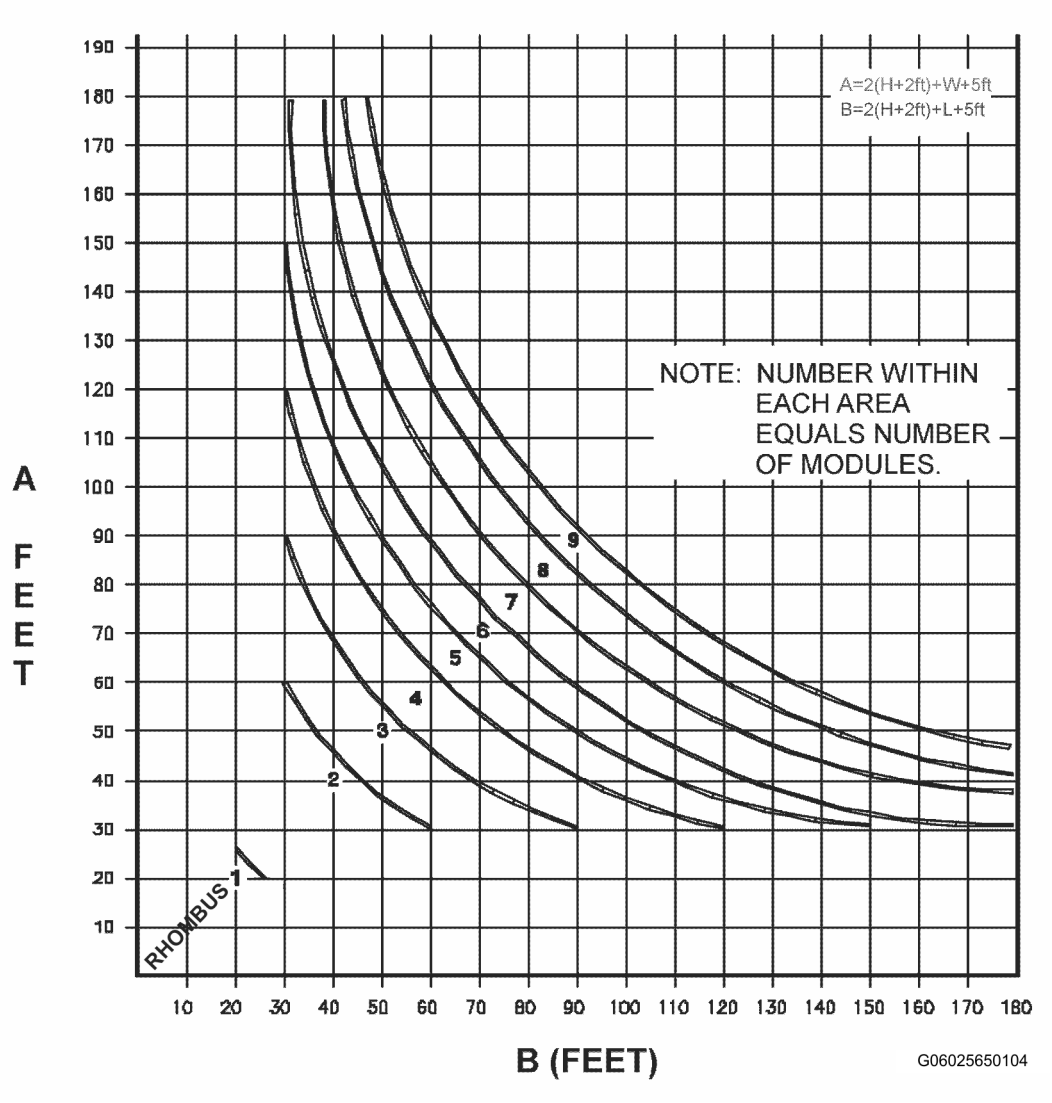


Figure 2. Screen Assembly Size Calculation Chart.

UNPACKING AND INVENTORY

After determining the required number of screens in the prior section (MODULAR CAMOUFLAGE SCREEN SIZE CALCULATION), unpack ULCANS Increment I and perform the following steps:

1. Open ULCANS Increment I and remove components from their individual packaging.
2. Ensure you have the correct number of the following components:
   a. Screen system
      (1) 1 ea. Hexagon screen.
      (2) 1 ea. Rhombic screen.
      (3) 1 ea. Repair kit.
         (a) 25 ft² ea. Screen repair material.
         (b) 300 ea. Cable ties.
      (4) 1 ea. Technical manual.
      (5) 1 ea. Graphic training aid.
      (6) 1 ea. Screen system carrying case (color varies based on system: Woodland, Desert/Urban, Snow/Alpine).
   b. Support system
      (1) 5 ea. Support poles
      (2) 1 ea. Hand hammer
      (3) 20 ea. Tent pins
      (4) 1 ea. Tent component case
      (5) 1 ea. Camouflage support bag
      (6) 1 ea. Spanner wrench
   c. If any items are missing, notify supervisor.
3. Ensure all netting screens to be assembled into a single system are of same type and class. Refer to WP 0004, Description and Use of Operator Controls and Indicators.
4. Retain system carrying cases and unused system components for future use.
5. Fold individual screens IAW WP 0008 (Hexagon) or WP 0009 (Rhombic) if you are not constructing a screen assembly.

MODULAR CAMOUFLAGE SCREEN ASSEMBLY

WARNING

Do not assemble Communications (R/T) screens with General Purpose (R/S) screens. Failure to assemble proper type of screens together may result in detection by enemy forces and provide a target for their armament. Failure to follow this warning could result in serious injury or death to personnel.

CAUTION

Ensure ground is free of rocks, debris, or other sharp objects that could damage modular camouflage screen during assembly.

NOTE

ULCANS Increment I is designed so that when joining multiple screens, pattern continuity is always maintained. Screen positioning for pattern matching is not necessary.

All screens must be assembled prior to fielding. This will allow for ULCANS Increment I to be quickly deployed in a hostile environment.

1. Spread screens to be joined over level ground.
2. Arrange screens in proper order to be assembled as determined IAW the Typical ULCANS Increment I Configurations section in this WP:
   a. Place appropriate screen (Figure 3, Item 1) at corner of determined pattern.
   b. Place adjoining screen (Figure 3, Item 2) next to first screen in determined pattern.
   c. Continue until all screens are placed.

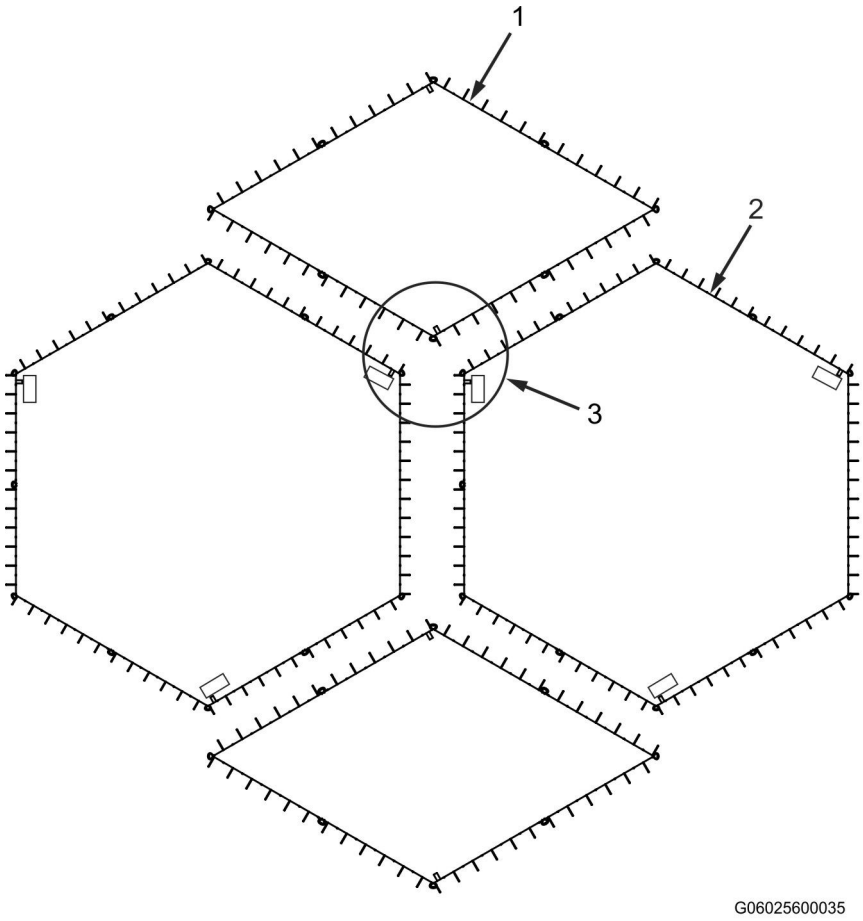


Figure 3. Screen Assembly.

NOTE

Start at an intersection (Figure 3, Item 3) and work outward when connecting screens together. This will ensure screens are aligned on all connected sides, knots are tied at ground level, and will prevent gaps in completed net system.

Avoid having knots high off the ground or in the center of a screen which can make the quick separation of multiple screens difficult.

3. Connect screens as follows:
   a. Place large loop on first screen through small loop on second screen (Figure 4).

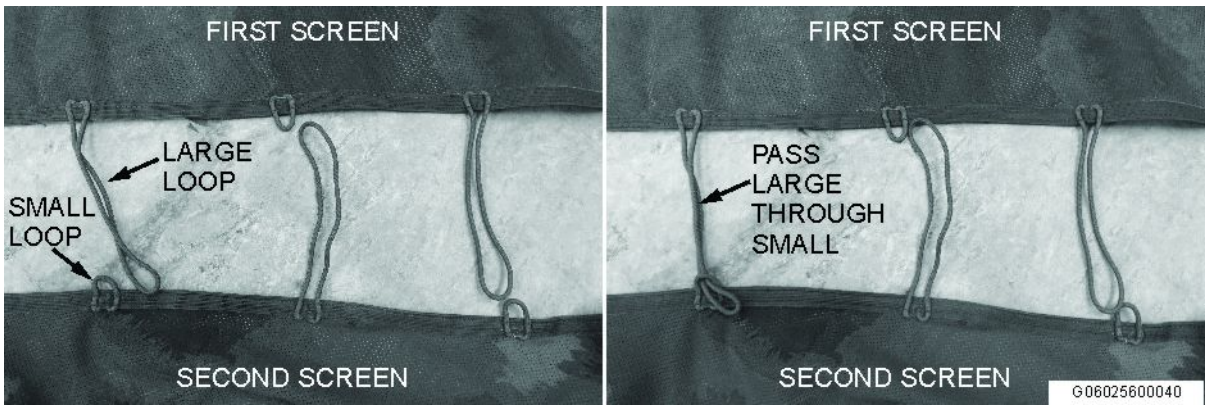


Figure 4. Lacing Start.

b. Pass next large loop on second screen through large loop on first screen (Figure 5).
c. Pass large loop on second screen through next small loop on first screen (Figure 5).
d. Repeat steps Steps 3a–c until all becket loops have been joined to the edge of the screen assembly.

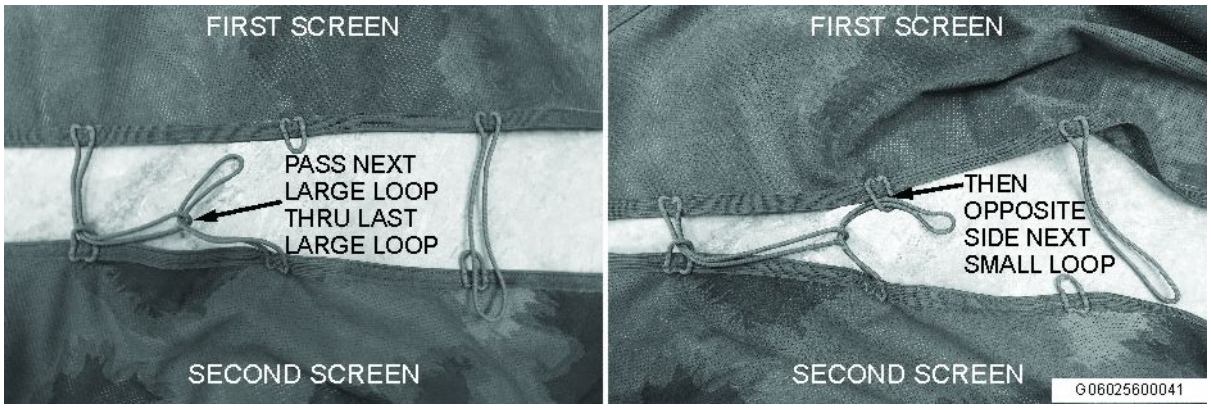


Figure 5. Lacing Continued.

NOTE

Avoid having knots high off the ground or in the center of a screen which can make the quick separation of multiple screens difficult.

e. Secure the seam by tying a knot (Figure 6, Item 1) in the last loop on the seam.

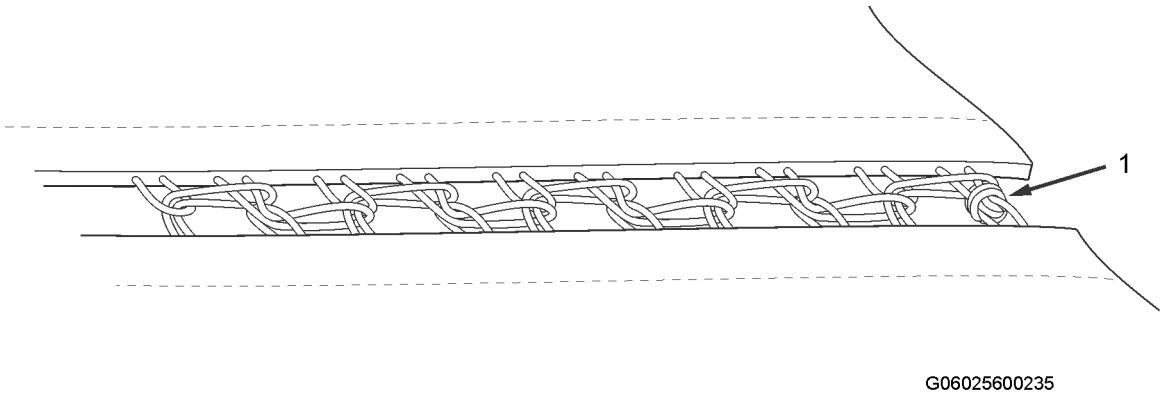


Figure 6. Becket Lacing.

4. Repeat this procedure until entire modular camouflage screen assembly is constructed.
5. Fold or roll screen assemblies IAW WP 0010.

END OF TASK

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

OPERATION UNDER USUAL CONDITIONS
OPERATING PROCEDURES
DEPLOYMENT

INITIAL SETUP:

Tools
Hammer, Hand (WP 0034, Item 1, Table 2)

Materials
Gloves, Men's and Women's (WP 0041, Item 2)
Helmet, Advanced Combat (WP 0041, Item 3)
Spectacles, Industrial (WP 0041, Item 4)

Personnel Required
MOS Non-Specific - 2

Equipment Condition
ULCANS Increment I properly packed (WP 0008, WP 0009, or WP 0010).

OPERATING PROCEDURES

Location

Choosing the right location to camouflage equipment is a complex combat doctrine which is too complex to address in this manual. However, minimally ensure that the location for concealment takes into consideration the concealed equipment's operational requirements and the physical and geographical features of the area, such as:

1. The platform and the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I should assimilate in the surrounding as much as possible so that the location of the concealed equipment and ULCANS Increment I should not stand out as a foreign object in the surrounding area.
2. Use the geographical characteristics of the surrounding environment to help assimilate the ULCANS Increment I (e.g. locating the ULCANS Increment I under/near-by trees or hills).
3. Do not locate the equipment to be concealed and ULCANS Increment I on the top of a ridge to avoid creating a silhouette on the skyline.

Deployment

1. Position ULCANS Increment I support system carrying case at appropriate location near equipment being concealed.

WARNING



Personnel can be burned by hot components and exhausts if deployment of the ULCANS Increment I is attempted with the equipment's engine running or immediately after the engine is turned off. A cool down period shall be observed prior to ULCANS Increment I deployment except in emergency conditions. Wear hand protection and exercise extreme caution when working in area of hot components. If injury occurs, seek medical attention immediately.

Climbing on and around the equipment to deploy ULCANS Increment I can pose a fall hazard. Extreme caution shall be observed to avoid slippery or uneven surfaces and other trip hazards. Use handholds when provided and ladders when available. If injury occurs, seek medical attention immediately.

2. Ensure equipment is safe to climb on. Retract or disengage any extruding pointed objects or accessories such as mirrors, bumpers, antennas, mounted armament, poles, stakes, beams, etc.

NOTE

When positioning screen assemblies on equipment orient a seam in front of vehicles to allow egress and entry of the vehicle.

3. Position the assembled ULCANS Increment I (Figure 1, Item 1) on top of the equipment or object to be concealed. ULCANS Increment I should be oriented so that a seam location can be utilized at the outside edge for an entry/egress doorway for equipment, vehicles or personnel, as required. ULCANS Increment I should also be oriented along the length of the equipment (Figure 1) so the screens can be unfolded or unrolled along the length of the equipment.
4. Position support poles (Figure 1, Item 2) around equipment.
5. Unfold/unroll ULCANS Increment I from the center of the equipment towards the front and rear of the equipment.

NOTE

Quantity and position of poles will be dictated by application.

6. Adjust the ULCANS Increment I so that it is centered on the equipment with the same length netting at both ends of the equipment.

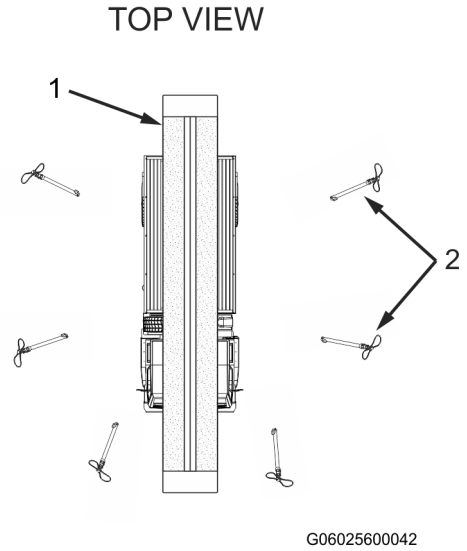


Figure 1. Positioning Screen Assembly On Equipment.

7. Unfold/unroll the ULCANS Increment I from the center of the equipment towards the sides of the equipment.
8. Stretch the edges of the ULCANS Increment I, at the outer corners (Figure 2, Item 1), away from the equipment.

WARNING



ULCANS Increment I tent pins may present a trip hazard. Drive tent pins deeply to minimize area protruding above ground. Keep tent pins away from walking paths. Failure to follow this warning can result to injury to personnel. If injury occurs, seek medical attention immediately.

CAUTION

Do not step on ULCANS Increment I. Stepping on the net may result in tears or holes.

NOTE

To ensure better grip, the tent pins should be hammered into the ground at a 45° angle, which would be perpendicular to the net, rather than perpendicular to the ground.

9. Insert tent pins (Figure 2, Item 3) through the loops in the ULCANS Increment I' edges at the outer corners (Figure 2, Item 1) and hammer tent pins into the ground.

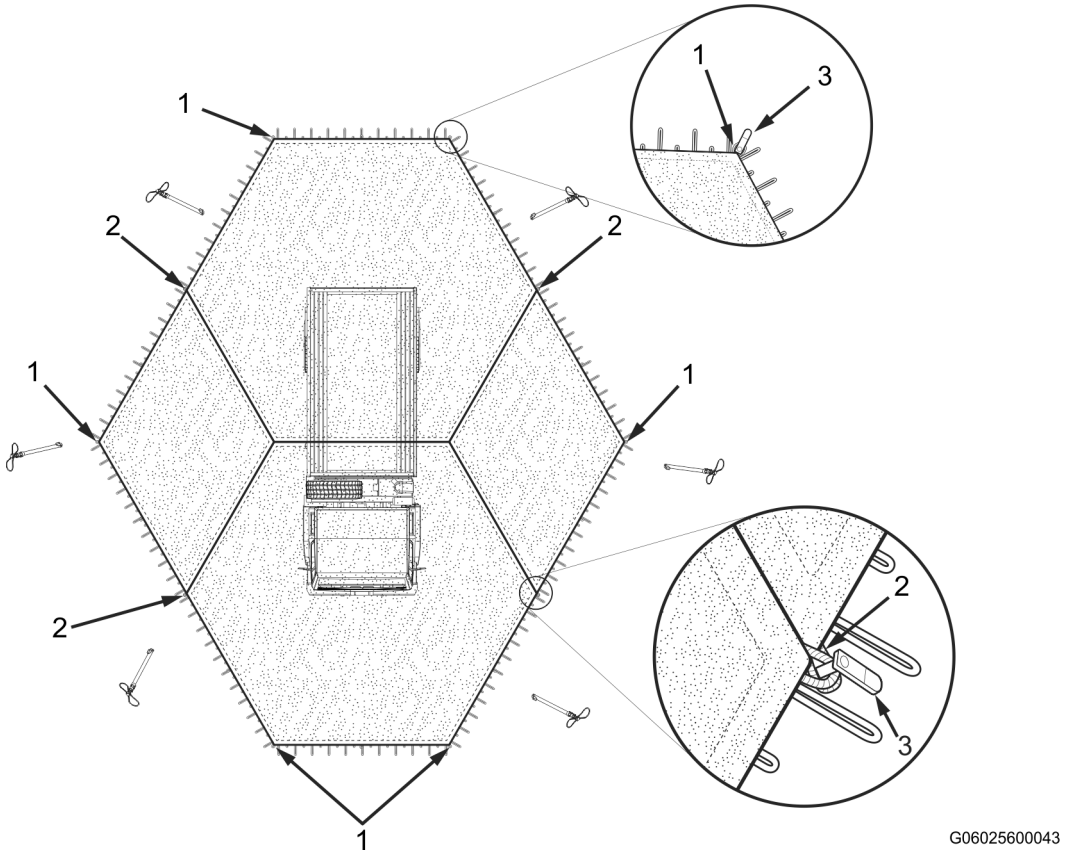


Figure 2. Staking ULCANS Increment I.

10. Position antennas through the ULCANS Increment I as required. Where possible, use seams between screens as penetration point for antennas.

WARNING



Shape disruptors have pointed spikes on top of the head and can cause abrasions or cuts on exposed skin. Wear gloves to protect hands while handling shape disruptors. If injury occurs, seek medical attention immediately.

NOTE

The support poles should break the shape of the equipment and provide approximately 2 ft (0.6 m) of clearance between the ULCANS Increment I and the equipment.

11. Lift the assembled netting edges at four corners of equipment using support poles.

WARNING



Pinch points exist in areas where telescoping sections of poles meet. Wear gloves to protect hands while extending poles. If injury occurs, seek medical attention immediately.

12. Extend each support pole as follows:
    a. Move handle (Figure 3, Item 1) to open (UP) position (Figure 3, Item 2).

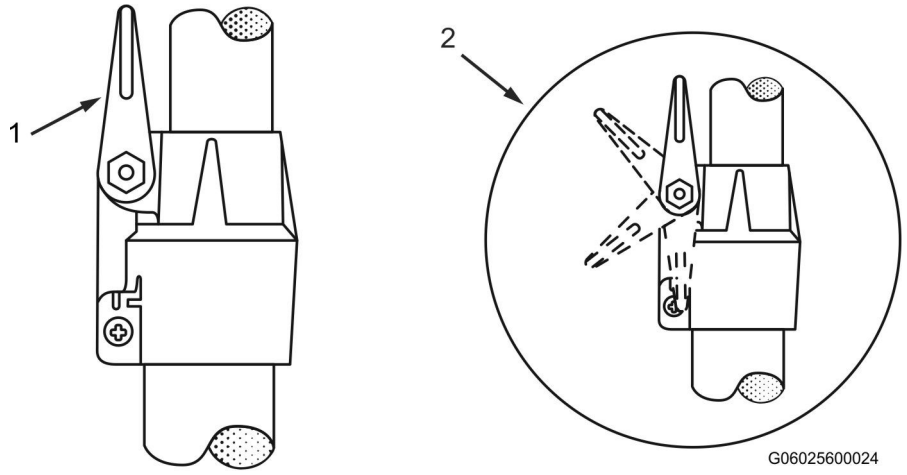


Figure 3. Unlock Support Pole Section.

b. Extend section of support pole (Figure 4, Item 1) as far as necessary.

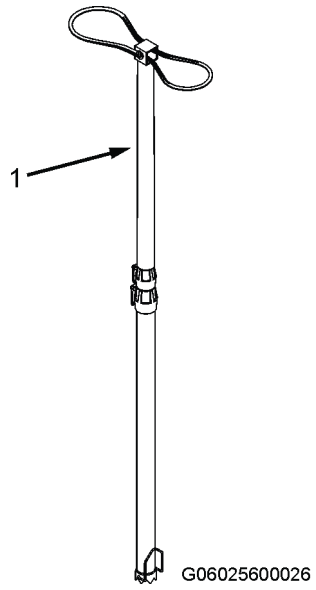


Figure 4. Extend Support Pole Section.

c. Rotate handle (Figure 5, Item 1) to closed (DOWN) position (Figure 5, Item 2).

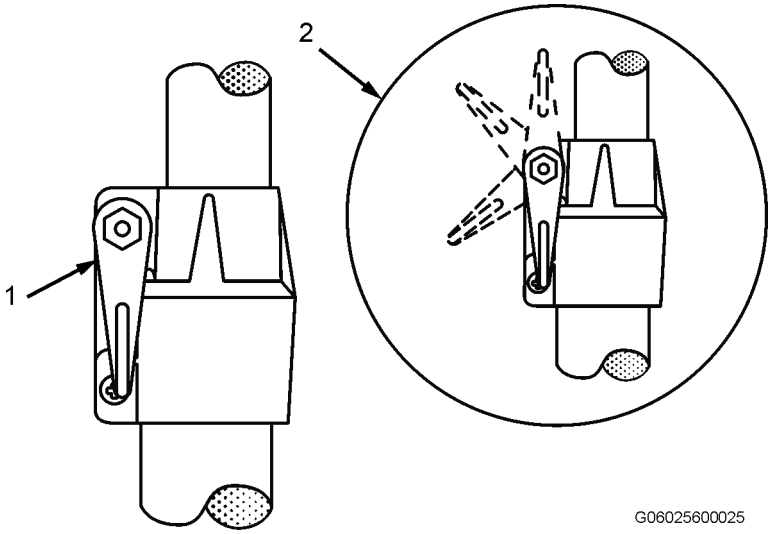


Figure 5. Lock Support Pole Section.

d. Repeat Steps 12a–c as necessary, for each pole section.

NOTE

When possible, avoid vertical sides when positioning shape disruptors. Slope sides outward as much as possible, pulling edges of the ULCANS Increment I to the ground all the way around the net system. Poles should be installed firmly to maintain support in windy/blustery conditions.

Support poles and tent pins may need several adjustments in order to achieve proper screen tension and to create an asymmetrical or irregular silhouette for optimal concealment.

13. Lift the ULCANS Increment I with remaining support poles, with disruptor heads, into position to create a non-uniform shape and provide approximately 2 ft (0.6 m) of clearance between ULCANS Increment I and equipment.
14. If necessary, secure support pole to ground as follows:
    a. Ensure foot of support pole is firmly positioned.
    b. Unfold support pole tent pin loop and secure with tent pin.
15. Insert remaining ground tent pins through the loops in the inner joined edges (Figure 2, Item 2) of the ULCANS Increment I and hammer tent pins into the ground. Reposition tent pins as required to keep ULCANS Increment I tight.

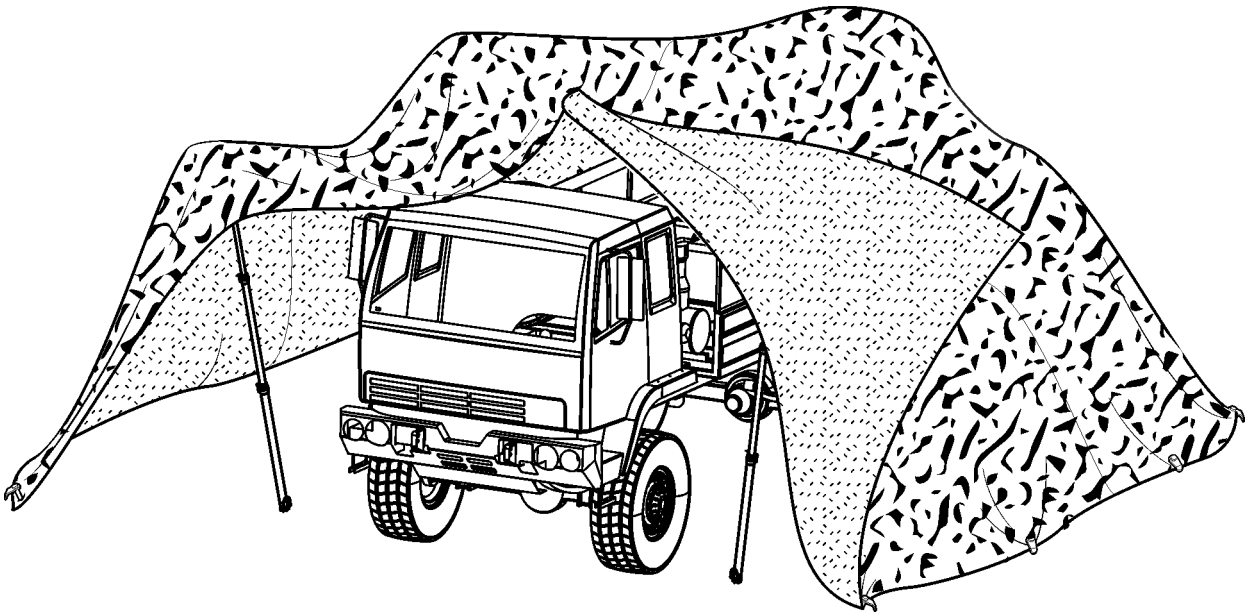
ULCANS Increment I Entry/Egress Doorway

1. To make a personnel entry/egress doorway in the ULCANS Increment I perform the following steps:
   a. Untie the becket seam at ground edge.
   b. Tie off a becket seam at the top of proposed doorway approximately 4 ft from the ground.
   c. Position tent pins at the ends of the becket seams so that the seam will remain closed when not in use.
   d. To use the doorway personnel may loosen a tent pin strap and fold the seam back to enter or exit.
   e. After passing through the doorway ensure to replace the screen and tent pin strap after use.
2. To make a vehicle entry/egress doorway in the ULCANS Increment I perform the following steps (Figure 6):
   a. Untie becket seam enough to let vehicle pass through.
   b. Tie off a becket seam at top of proposed doorway approximately four feet from top of vehicle.
   c. Fold back camouflage screen to avoid snagging on vehicle.

CAUTION

To prevent damage to equipment, remove any tent pins in the vehicle's pathway.

   d. Reposition support poles and shape disruptors as necessary to allow for vehicle exit. If necessary, personnel may raise and hold the poles to provide sufficient clearance for the vehicle to enter or exit.



G06025650110

Figure 6. Vehicle Entry/Egress Doorway.

END OF TASK

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

OPERATION UNDER USUAL CONDITIONS
PREPARATION FOR MOVEMENT

INITIAL SETUP:

Materials
Gloves, Men's and Women's (WP 0041, Item 2)
Helmet, Advanced Combat (WP 0041, Item 3)
Spectacles, Industrial (WP 0041, Item 4)

Personnel Required
MOS Non-Specific - 2

References
WP 0008
WP 0009
WP 0010
WP 0025

Equipment Condition
ULCANS Increment I deployed (WP 0006).

PREPARATION FOR MOVEMENT

Retrieval

1. As applicable, remove all equipment from under the ULCANS Increment I area.
2. Remove any tent pin securing telescopic pole to the ground.

WARNING



Pinch points exist in areas where telescoping sections of poles meet. Wear gloves to protect hands while collapsing poles. Failure to follow this warning can result in injury to personnel.

3. Move the handle (Figure 1, Item 1) to the open (UP) position (Figure 1, Item 2) on the highest locking mechanism and slide the telescopic section (Figure 1, Item 1) into the base of the pole.

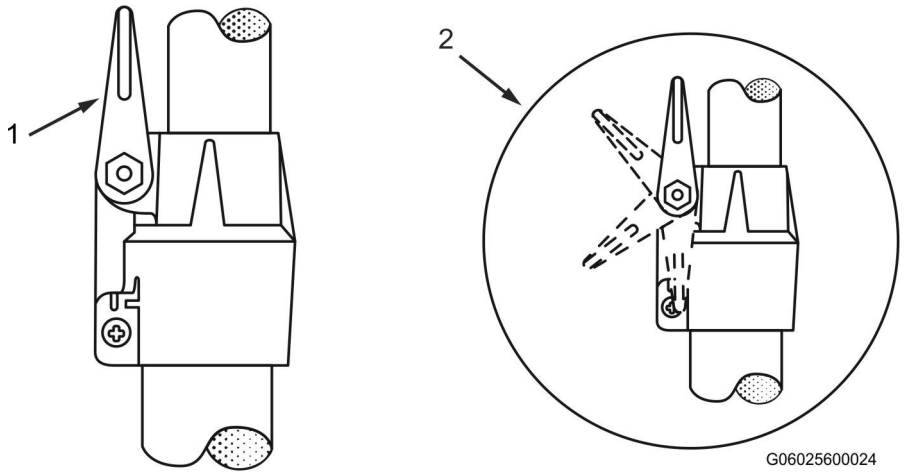


Figure 1. Telescopic Pole.

4. Move the handle (Figure 2, Item 1) to the closed (down) position (Figure 2, Item 2) on the same locking mechanism.

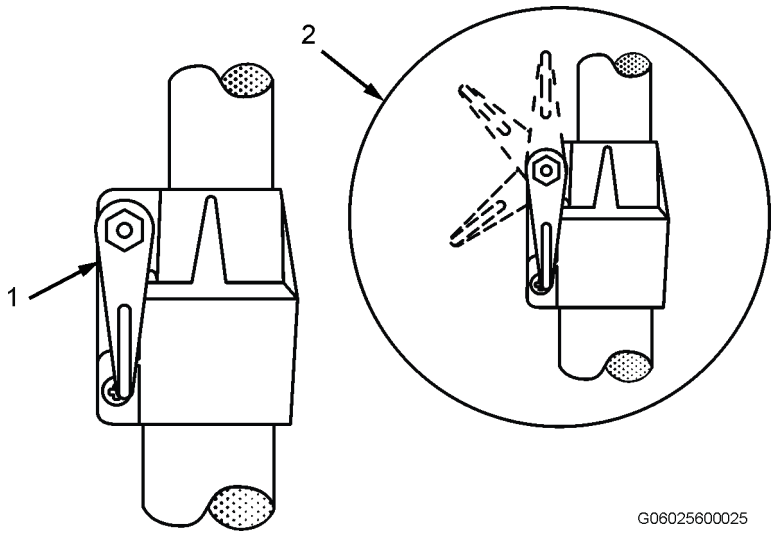


Figure 2. Handle in Closed Position.

5. Repeat steps 3-4 until pole is completely collapsed.
6. Fold the top of the shape disruptor towards the locking mechanism handles until it is flush against the poles.
7. Inspect support poles for visible damage. Set aside damaged poles for further inspection.
8. Wipe mud/dirt from support poles before stowing.
9. Stow telescopic poles (Figure 3, Item 3) in support system carrying bag (Figure 3, Item 5) using an alternating pattern.
10. Remove all tent pins securing the ULCANS Increment I.
11. Wipe mud/dirt from tent pins before stowing.
12. Attach spanner wrench (Figure 3, Item 3) to tent pin carrying case (Figure 3, Item 4).
13. Place tent pins (Figure 3, Item 6) in tent pin carrying case (Figure 3, Item 4).
14. Place tent pin carrying case (Figure 3, Item 4) in support system bag (Figure 3, Item 2).
15. Place hammer (Figure 3, Item 5) in support system bag (Figure 3, Item 2).
16. Close and secure support system bag.
17. Spread ULCANS over level ground site free of large rocks, sharp objects, and debris.
18. Remove leaves, twigs, dirt, or other foreign objects from ULCANS Increment I screens.

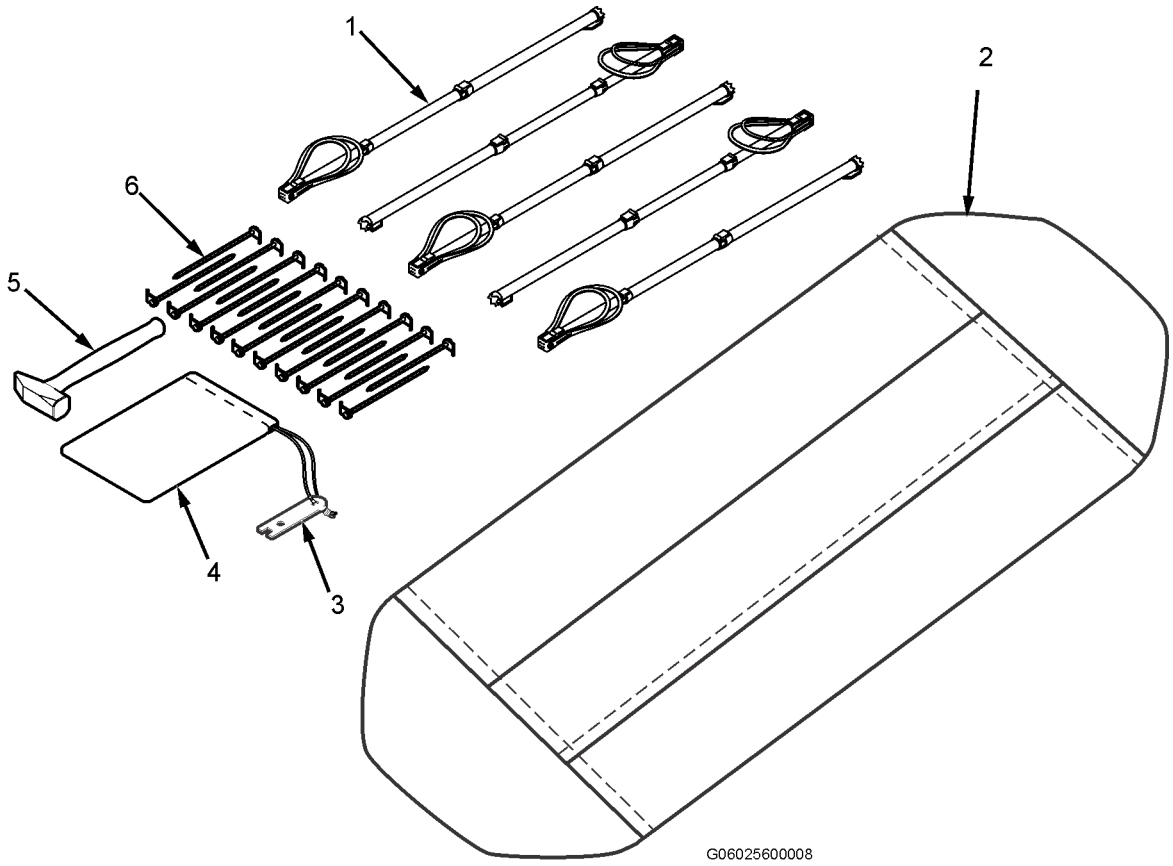


Figure 3. Support System.

19. Repair screens as necessary, if time permits in accordance with WP 0025.
20. Roll or fold screens or net assembly IAW WP 0008, WP 0009, or WP 0010.

END OF TASK

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

OPERATION UNDER USUAL CONDITIONS
PREPARATION FOR MOVEMENT
FOLD HEXAGON SCREEN

INITIAL SETUP:

Materials
Gloves, Men's and Women's (WP 0041, Item 2)

References
WP 0002

Personnel Required
MOS Non-Specific - 2

Equipment Condition
Equipment prepared for movement (WP 0007).

PREPARATION FOR MOVEMENT

Hexagon Screen Fold Procedure

1. Spread hexagon screen (Figure 1, Item 1) on flat ground free of large rocks, sharp objects, and debris.

NOTE

To ensure rapid deployment in the field, ensure that the class of camouflage to be used is on the inside of the fold. This will ensure that the correct class is showing when unfolded.

2. Fold screen in half along long axis (Figure 1, Item 2).
3. Position one person at each corner of folded edge.
4. Make three complete folds as follows:
   a. Locate gap between loops.
   b. Count three gaps from corner.
   c. Position hand closest to long axis (Figure 1, Item 2) on screen after third gap (Figure 1, Item 3).
   d. Count three additional gaps on fabric edge.
   e. Grasp both layers of screen after sixth gap (Figure 1, Item 4).

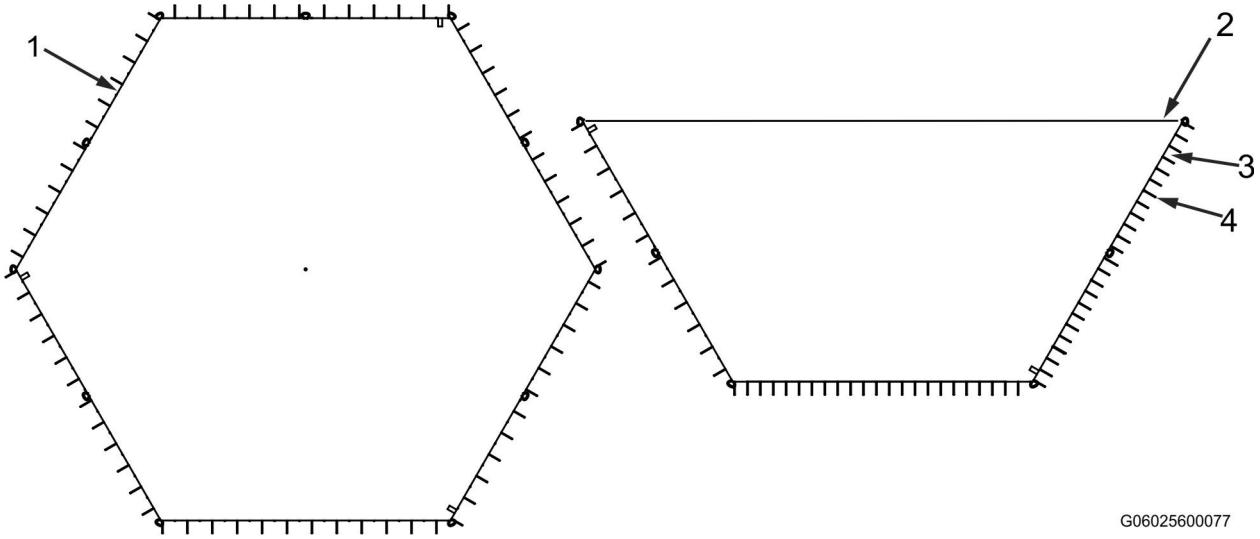


Figure 1. Hexagon Screen First Fold.

f. Lift and fold fabric (Figure 2, Item 1) until fabric in hand (Figure 2, Item 3) is aligned to long edge of screen (Figure 2, Item 2).
g. Straighten and tuck any loose fabric.
h. Move towards center of screen

5. Fold remaining screen to center. This should give you two long parallel sides.

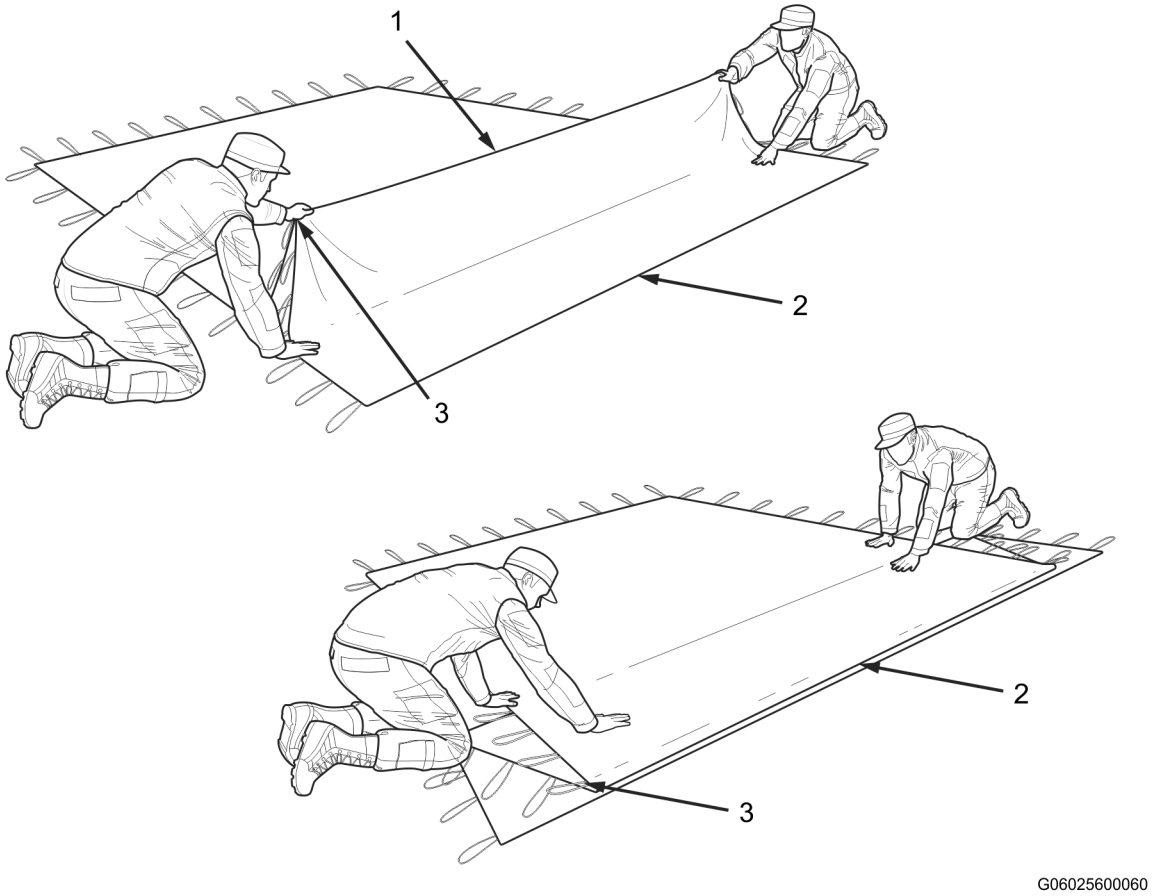


Figure 2. Folding Hexagon Screen.

6. Move to narrow ends of folded screen.
7. At each end of screen:
   a. Indentify V-shape (Figure 3, Item 1) in folded pattern of screen.
   b. Count two V-shaped folds.
   c. Fold screen at second V (Figure 3, Item 2).
8. Continue folding until only one fold remains (Figure 3, Item 3).
9. Tuck angled end of screen and complete last fold (Figure 3, Item 4).

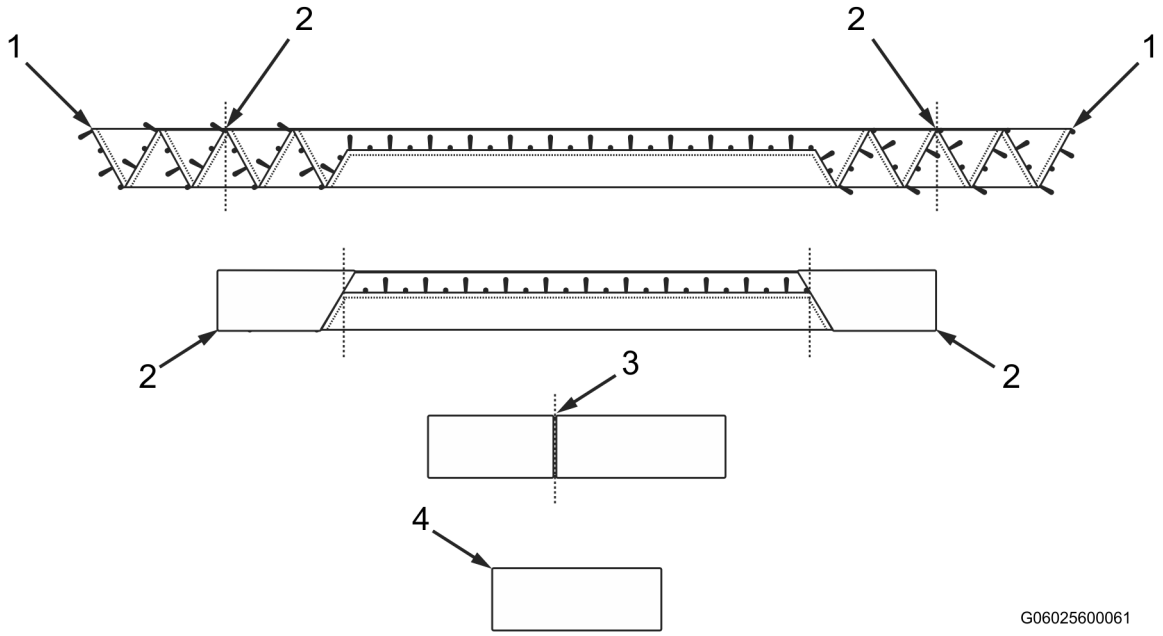


Figure 3. Hexagon Screen Folds.

10. Secure folded screen in ULCANS Increment I carrying case with all other components of the ULCANS Increment I. Use inventory list to ensure all components are present IAW WP 0002.

END OF TASK

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

OPERATION UNDER USUAL CONDITIONS
PREPARATION FOR MOVEMENT
FOLD RHOMBIC SCREEN

INITIAL SETUP:

Materials
Gloves, Men's and Women's (WP 0041, Item 2)

References
WP 0002

Personnel Required
MOS Non-Specific - 2

Equipment Condition
Retrieval procedure completed (WP 0007).

PREPARATION FOR MOVEMENT

Rhombic Screen Fold Procedure

1. Spread the rhombic screen (Figure 1, Item 1) on flat ground free of large rocks, sharp objects, and debris.

NOTE

To ensure rapid deployment in the field, ensure that the class of camouflage to be used is on the inside of the fold. This will ensure that the correct class is showing when unfolded.

2. Fold screen in half along long axis (Figure 1, Item 4).
3. Position one person at each corner of folded screen.
4. Make two complete folds as follows:
   a. Locate gap between loops.
   b. Count four gaps from corner on fabric edge.
   c. Position hand closest to long axis (Figure 1, Item 4) on screen after fourth gap (Figure 1, Item 2).
   d. Count four additional gaps on the fabric edge.
   e. Grasp both layers of screen after eigth gap (Figure 1, Item 3).

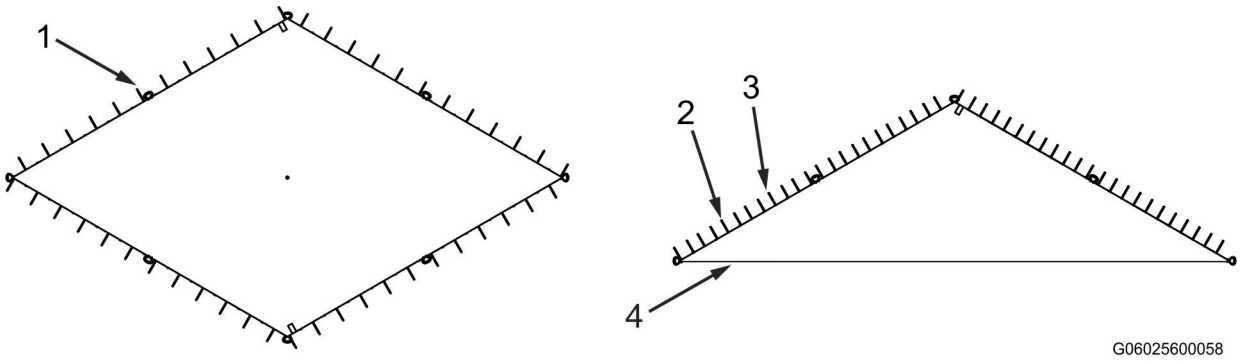


Figure 1. Rhombic Screen First Fold.

f. Lift and fold fabric (Figure 2, Item 1) until fabric in hand (Figure 2, Item 3) is aligned to long edge of screen (Figure 2, Item 2).
g. Straighten and tuck any loose fabric.
h. Move towards center of screen

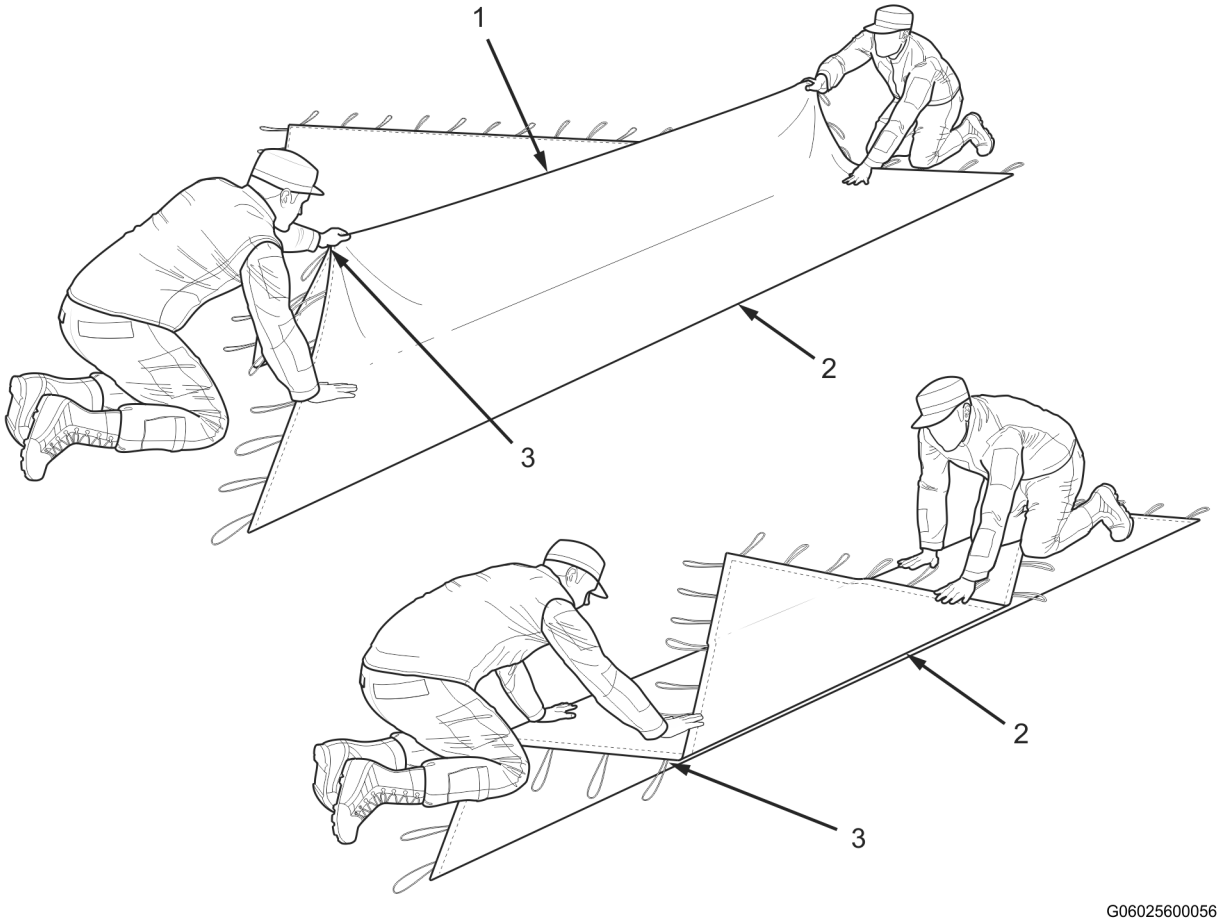


Figure 2. Folding Rhombic Screen.

5. Fold remaining screen to opposite edge. This should give you two long parallel sides.
6. Move to each narrow end of folded screen (Figure 3, Item 1).
7. Fold angled screen end to create 90-degree corner at each end of screen.
8. Locate triangle pattern in screen fold.
9. Fold screen at peak of triangle (Figure 3, Item 2).
10. Continue folding until both sides meet in the center (Figure 3, Item 3).
11. Fold one side over the other (Figure 3, Item 4).
12. Secure folded screen in ULCANS Increment I carrying case with all other components of the ULCANS Increment I. Use inventory list to ensure all components are present IAW WP 0002.

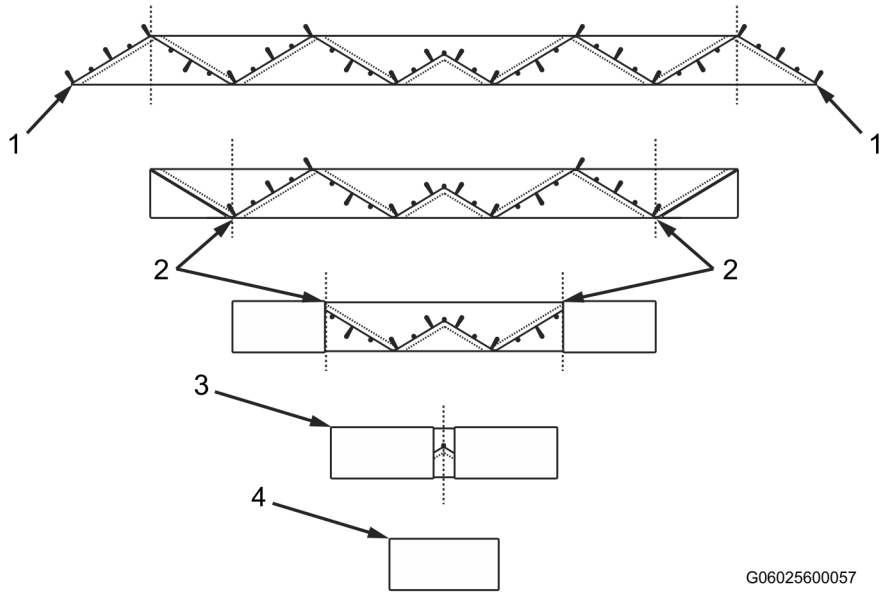


Figure 3. Rhombic Screen Folds.

END OF TASK

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

OPERATION UNDER USUAL CONDITIONS
PREPARATION FOR MOVEMENT
ROLL, FOLD NET ASSEMBLY

INITIAL SETUP:

Materials
Gloves, Men's and Women's (WP 0041, Item 2)

Personnel Required
MOS Non-Specific - 2

Equipment Condition
Assembly and Preparation For Use completed (WP 0005).
Retrieval procedure completed (WP 0007).

PREPARATION FOR MOVEMENT

Net Assembly Roll Procedure

NOTE

This WP describes two procedures for the net assembly: roll and fold. Depending on the size and configuration of the net assembly, one procedure may be more effective than the other.

These procedures are for multiple screen configurations. Some changes may be needed to fit the exact system you are using.

1. Spread net assembly (Figure 1, Item 1) on flat surface free of large rocks, sharp objects, and debris.
2. Fold outermost edge (Figure 1, Item 2) of net assembly 3/4 of the way (Figure 1, Item 5) across net assembly.
3. Fold overlapping edge (Figure 1, Item 3) of net assembly back over itself until even with outer edge (Figure 1, Item 4). This should create a long, straight, edge on one side end of net assembly.

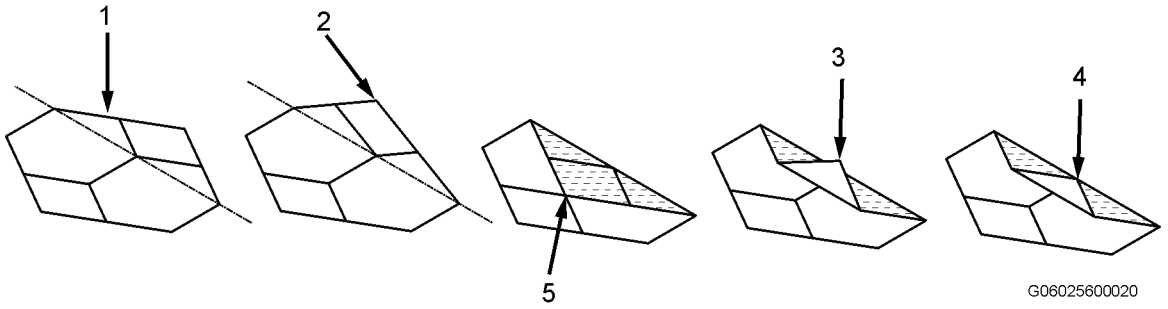


Figure 1. First Fold - Roll Method.

4. Repeat Steps 1–3 for the opposite side of the net assembly. When this step is completed you should have a long rectangle (Figure 2).

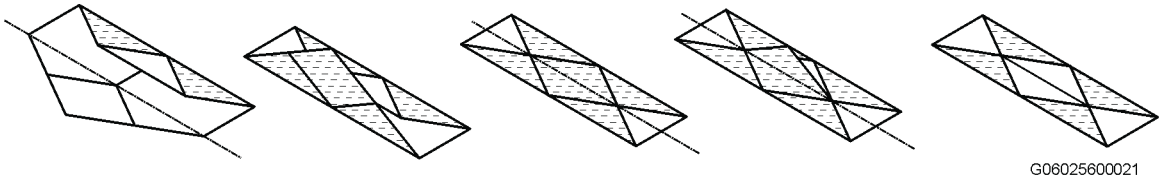


Figure 2. Second Fold - Roll Method.

NOTE

Ensure net is taut and reroll any loose segments.

5. Roll both ends of net assembly towards center line (Figure 3).

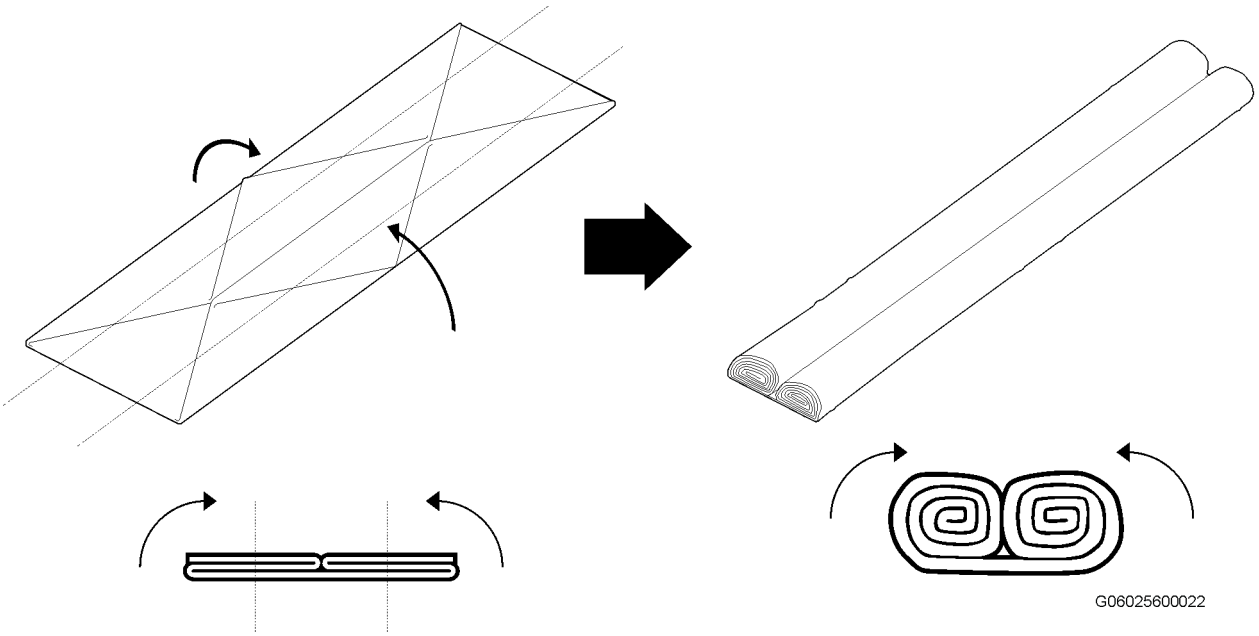


Figure 3. Roll Sides Inward.

6. Roll both ends of the net assembly towards the center line until flush with opposing side (Figure 4).

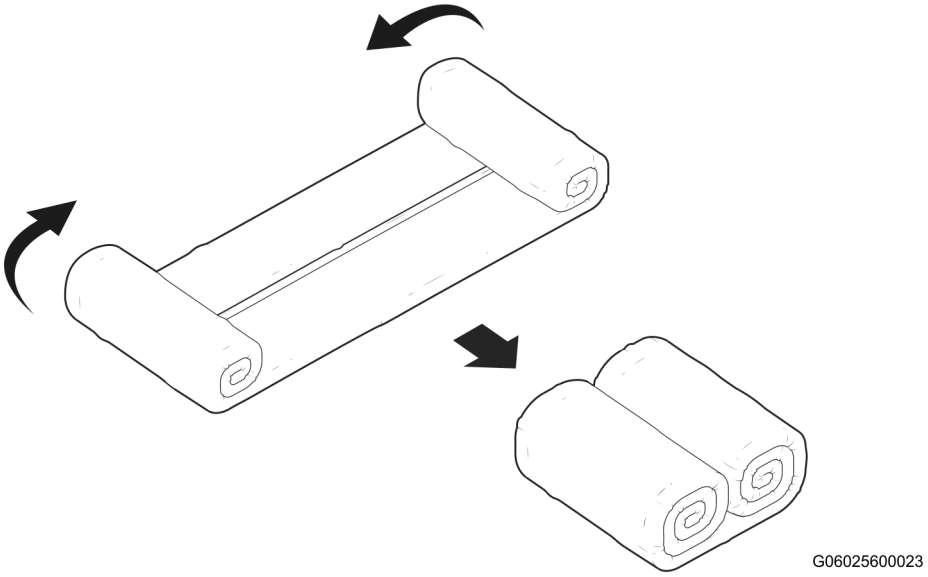


Figure 4. Roll Ends Inward.

7. Secure the rolled net assembly.

END OF TASK

PREPARATION FOR MOVEMENT

Net Assembly Fold Procedure

NOTE

This WP describes two procedures for the net assembly: roll and fold. Depending on the size and configuration of the net, one procedure may be more effective than the other.

These procedures are for multiple screen configurations. Some changes may be needed to fit the exact system you are using.

1. Spread the net assembly (Figure 5, Item 1) on a flat surface free of large rocks, sharp objects and debris.
2. Fold the outermost edge (Figure 5, Item 2) of the net assembly 3/4 of the way (Figure 5, Item 5) across the net assembly.
3. Fold the overlapping edge (Figure 5, Item 3) of the net assembly back over itself until even (Figure 5, Item 4). This should create a straight folded end of the net assembly.

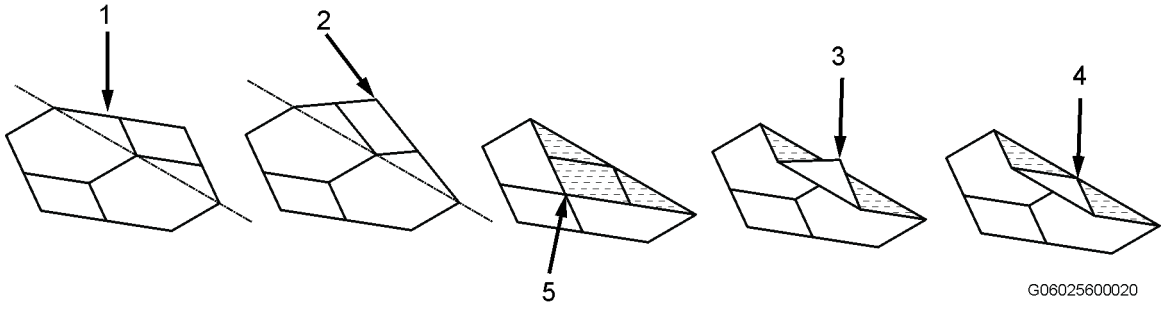


Figure 5. First Fold - Fold Method.

4. Repeat Steps 1–3 for the opposite side of the net assembly. When this step is completed you should have a long rectangle (Figure 6).

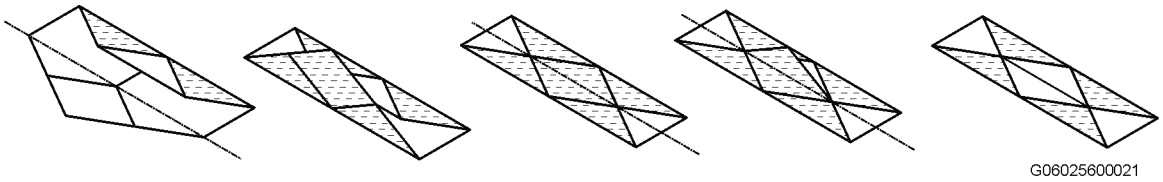


Figure 6. Second Fold - Fold Method.

5. Starting at one end of the net assembly, fold in standard accordion fold (Figure 7, Item 1) until both sides meet in the center (Figure 7, Item 2).
6. Once you have folded to the center of the net assembly, repeat this process on the other end of the net assembly.

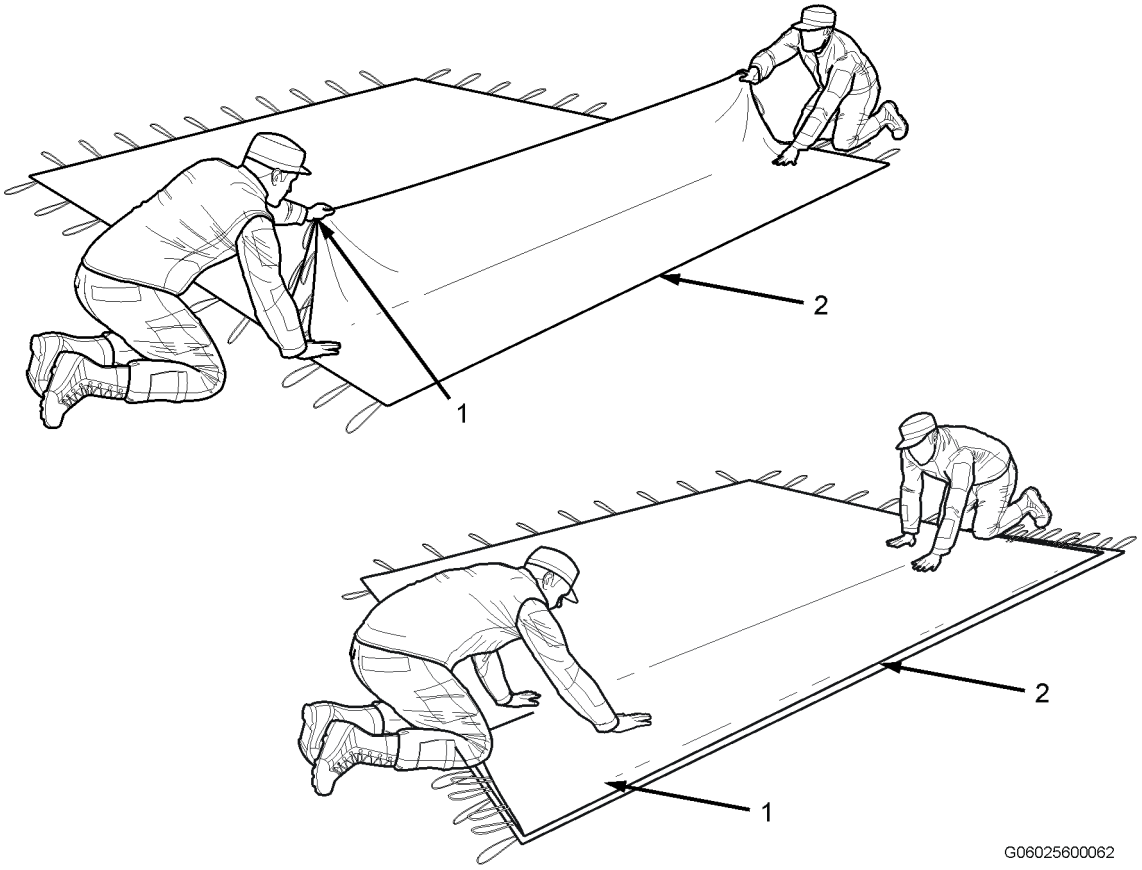


Figure 7. Accordion Folding Net Assembly.

7. Fold ends (Figure 8, Item 1) of the folded net assembly towards the center as depicted in Figure 8.
8. Secure folded net assembly.

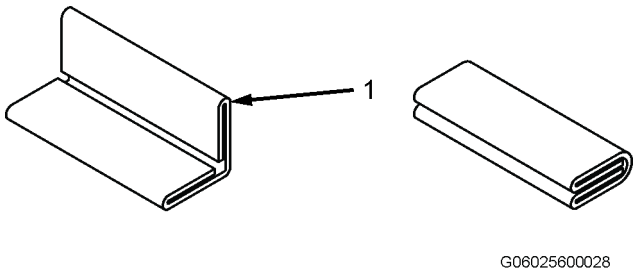


Figure 8. Folding Net Assembly.

END OF TASK

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

OPERATION UNDER UNUSUAL CONDITIONS

INITIAL SETUP:

Tools
Hammer, Hand (WP 0034, Item 1, Table 2)

Materials
Gloves, Men's and Women's (WP 0041, Item 2)
Helmet, Advanced Combat (WP 0041, Item 3)
Spectacles, Industrial (WP 0041, Item 4)

Personnel Required
MOS Non-Specific - 2

Equipment Condition
ULCANS Increment I deployed (WP 0006).

UNUSUAL ENVIRONMENT/WEATHER

General

Use this work package for further instruction if operating under unusual conditions. Read all sections that apply to the conditions to which the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I will be exposed.

Unusual Conditions

Unusual conditions include severe weather, such as:

- Extreme Winds
- Rain and/or Sleet
- Snow

Operation in Extreme Wind

When high winds in excess of 46 mi/h (74.03 km/h) are occurring or are expected, the ULCANS Increment I should be lowered and secured. During gusty windy conditions frequent checks should be made to ensure that tent pins and tiedown points remain secure to prevent billowing and sagging. Add additional support poles as necessary to maintain system integrity.

Operation in Rainy and/or Sleet Conditions

Add additional support poles as necessary to maintain system integrity.

Operation in Snow

During snowy conditions (no more than 3 in (.07 m) of heavy snow or 7 in (.18 m) of light snow), more frequent checks should be made for signs of stress or strain. Add additional support poles as necessary to maintain system integrity.

END OF TASK

END OF WORK PACKAGE

OPERATOR INSTRUCTIONS

EMERGENCY PROCEDURES
EMERGENCY RETRIEVAL

INITIAL SETUP:

Materials
Gloves, Men's and Women's (WP 0041, Item 2)
Helmet, Advanced Combat (WP 0041, Item 3)
Spectacles, Industrial (WP 0041, Item 4)

Personnel Required
MOS Non-Specific - 2

References
WP 0007

Equipment Condition
ULCANS Increment I deployed (WP 0006).

WARNING



Pinch points exist in areas where telescoping sections of poles meet. Wear gloves to protect hands while collapsing poles.

NOTE

The intent of this procedure is to quickly pack the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I in the event of an emergency. If you are not in an emergency refer to WP 0007 for the proper retrieval procedure.

On large equipment such as trucks, tanks, missile systems, radar, etc. it may be easier to keep ULCANS Increment I pre-attached, rolled, and secured to top or side of vehicle.

Do not disassemble any net assemblies during this procedure.

1. Collapse poles by unlocking (Figure 1, Item 2) handles (Figure 1, Item 1) and sliding pole section into pole base.

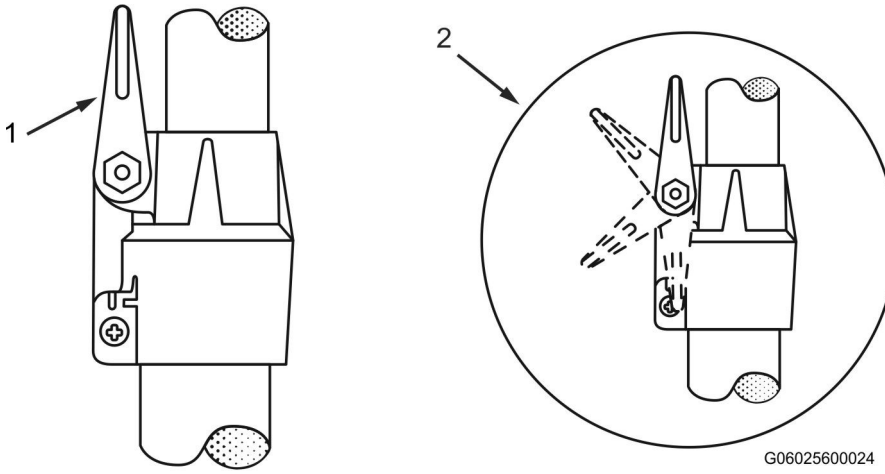


Figure 1. Unlock Support Pole Section.

2. Place support poles in support system storage bag or on equipment.
3. Remove tent pins from net system and place in support system storage bag.

4. Bundle net system to center of equipment or place in equipment as applicable.
5. Secure bundled net system to equipment as needed.

END OF WORK PACKAGE

CHAPTER 3

TROUBLESHOOTING PROCEDURES

FOR

ULTRA LIGHTWEIGHT CAMOUFLAGE NET SYSTEMS (ULCANS) INCREMENT I

OPERATOR TROUBLESHOOTING

TROUBLESHOOTING INTRODUCTION

GENERAL

The troubleshooting procedures contained in Chapter 3 lists the symptoms, malfunctions, and corrective actions required to return the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I to normal operation. Perform the steps in the order they appear in the work packages.

DO NOT START THE TASK UNTIL: You understand the task. You understand what you are to do. You understand what is needed to do the work. You have the things you need.

All UCLANS fault conditions can be found in the troubleshooting index work package. The reader will be directed to the appropriate work package to begin the troubleshooting process. The fault condition will be listed in the work package as a symptom with one or more possible malfunctions. Each malfunction will have one or more corrective actions to be performed. After each corrective action is completed, attempt to operate the equipment to see if the fault is corrected.

The troubleshooting index is listed alphabetically by symptom.

The troubleshooting index lists common malfunctions that may occur during ULCANS Increment I inspection and operation. Find the malfunction to be addressed and go to the indicated troubleshooting work package. The troubleshooting index cannot list all malfunctions that may occur, all tests or inspections needed to find the fault, nor all actions required to correct the fault. If the existing malfunction is not listed, or cannot be corrected through this troubleshooting index, notify the next higher level of maintenance.

An example of the troubleshooting process is shown below. The symptom describes the problem being experienced. The malfunction is the cause of the symptom starting with the most likely cause or most easily remedied. Further malfunctions will describe alternate fault conditions. The corrective action shows the steps required to correct each malfunction.

SYMPTOM

Single screen not providing accurate coverage.

MALFUNCTION

Wrong screen selected for item being protected.

CORRECTIVE ACTION

STEP 1. Compare the selected screen to the recommended screen for the coverage area listed in Table 1 in WP 0005.

a. If the wrong screen is selected, replace screen IAW WP 0026 with correct screen identified in WP 0005.

b. If the correct screen is selected, continue troubleshooting.

TROUBLESHOOTING INDEX

The troubleshooting index lists common malfunctions that may occur during ULCANS Increment I inspection and operation. Find the malfunction to be eliminated and go to the indicated troubleshooting paragraph that follows. The index cannot list all malfunctions that may occur, all tests or inspections needed to find the fault, nor all actions required to correct the fault. If the existing malfunction is not listed, or cannot be corrected through this troubleshooting index, notify your supervisor.

END OF WORK PACKAGE

OPERATOR TROUBLESHOOTING

TROUBLESHOOTING INDEX

GENERAL

This chapter provides operator maintenance information and includes troubleshooting maintenance procedures. Troubleshooting instructions covered in this section are unique to the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I.

The troubleshooting index lists common malfunctions that may occur during ULCANS Increment I inspection and operation. Find the malfunction to be eliminated and go to the indicated troubleshooting work package that follows. The index cannot list all malfunctions that may occur, all tests or inspections needed to find the fault, nor all actions required to correct the fault. If the existing malfunction is not listed, or cannot be corrected through this troubleshooting index, notify your supervisor.

TROUBLESHOOTING INDEX

	Malfunction/Symptom	Troubleshooting Procedure
	ULCANS Increment I	
1.	Single screen not providing adequate coverage	WP 0015
2.	Net assembly not providing adequate coverage	WP 0016
3.	Support pole will not stay extended	WP 0017
4.	Shape disruptor will not stay secured	WP 0018
5.	Support pole will not stay secured	WP 0019

END OF WORK PACKAGE

OPERATOR TROUBLESHOOTING

SINGLE SCREEN NOT PROVIDING ADEQUATE COVERAGE

INITIAL SETUP:

Tools
Hammer, Hand (WP 0034, Item 1, Table 2)

Personnel Required
MOS Non-specific - 2

References
WP 0005
WP 0025
WP 0026

Equipment Condition
ULCANS Increment I deployed (WP 0006).

TROUBLESHOOTING PROCEDURE

SYMPTOM

Single screen not providing adequate coverage.

MALFUNCTION

Wrong screen selected for item being protected

CORRECTIVE ACTION

STEP 1. Compare selected screen to recommended screen for coverage area listed in Table 1 in WP 0005.

a. If wrong screen is selected, reassemble screen IAW WP 0005.
b. If correct screen is selected, continue troubleshooting.

MALFUNCTION

Tent pins and/or support poles not properly placed

CORRECTIVE ACTION

STEP 1. Check tent pin placement. Screen must be tight, creating smooth lines in fabric.

a. If screen fabric is loose, adjust tent pin placement to tighten fabric.
b. If tent pin cannot be placed to create tension due to rocks, trees, or other obstructions, reposition tent pin where possible and use cord, rope, or twine to attach tent pin to screen loop.

STEP 2. Check support pole placement. Screen must be tight, creating smooth lines in fabric.

a. If screen fabric is loose, adjust support pole placement or height to tighten fabric.
b. If support pole cannot be placed to create tension due to rocky soil, reposition or use tent pins to secure support pole.

MALFUNCTION

Screen is damaged

CORRECTIVE ACTION

STEP 1. Visually inspect screen for damage such as cuts and tears.

a. If screen is cut or torn, repair IAW WP 0025.
b. If screen cannot be repaired, replace IAW WP 0026.

END OF WORK PACKAGE

OPERATOR TROUBLESHOOTING

NET ASSEMBLY NOT PROVIDING ADEQUATE COVERAGE

INITIAL SETUP:

Tools
Hammer, Hand (WP 0034, Item 1, Table 2)

Personnel Required
MOS Non-specific - 2

References
WP 0005
WP 0007
WP 0025
WP 0026

Equipment Condition
ULCANS Increment I deployed (WP 0006).

TROUBLESHOOTING PROCEDURE

SYMPTOM

Net assembly not providing adequate coverage.

MALFUNCTION

Net assembly is improperly assembled.

CORRECTIVE ACTION

STEP 1. Ensure all becket loops are tight and secured with knot.

a. If becket loops are not tight and secured with knot, tighten and secure with knot IAW WP 0005.

b. If becket loops are tight and secured with knot, continue troubleshooting.

STEP 2. Ensure layout of screen modules matches appropriate pattern IAW WP 0005.

a. If layout of screen modules do not match appropriate pattern IAW WP 0005:

(1) Disassemble net assembly IAW WP 0007.

(2) Determine correct pattern IAW WP 0005.

(3) Assemble net assembly IAW WP 0005.

b. If layout of screen modules matches appropriate pattern, continue troubleshooting.

MALFUNCTION

Tent pins and/or support poles not properly placed.

CORRECTIVE ACTION

STEP 1. Check tent pin placement. Screen must be tight, creating smooth lines in fabric.

a. If screen fabric is loose, adjust tent pin placement to tighten fabric.

b. If tent pin cannot be placed to create tension due to rocks, trees, or other obstructions, reposition tent pin where possible and use cord, rope, or twine to attach tent pin to screen loop.

STEP 2. Check support pole placement. Screen must be tight, creating smooth lines in fabric.

a. If screen fabric is loose, adjust support pole placement or height to tighten fabric.

b. If support pole cannot be placed to create tension due to rocky soil, reposition or use tent pins to secure support pole.

MALFUNCTION

Net assembly is damaged

CORRECTIVE ACTION

STEP 1. Visually inspect individual screens for damage such as cuts and tears.

a. If screen is damaged, repair IAW WP 0025.

b. If screen cannot be repaired, replace IAW WP 0026.

END OF WORK PACKAGE

OPERATOR TROUBLESHOOTING

SUPPORT POLE WILL NOT STAY EXTENDED

INITIAL SETUP:

Tools
Wrench, Spanner (WP 0034, Item 12, Table 1)

Materials
Gloves, Men's and Women's (WP 0041, Item 2)
Helmet, Advanced Combat (WP 0041, Item 3)
Spectacles, Industrial (WP 0041, Item 4)

Personnel Required
MOS Non-specific

References
WP 0027

Equipment Condition
ULCANS Increment I deployed (WP 0006).

TROUBLESHOOTING PROCEDURE

SYMPTOM

Support pole will not stay extended.

MALFUNCTION

Locking mechanism not fully closed.

CORRECTIVE ACTION

STEP 1. Visually inspect the locking mechanism handle to determine if it is in the open (UP) (Figure 1, Item 1) or closed (DOWN) (Figure 1, Item 2) position.

a. If the locking mechanism handle is in the open position, close it by moving it down.
b. If the locking mechanism handle is in the closed position, continue troubleshooting.

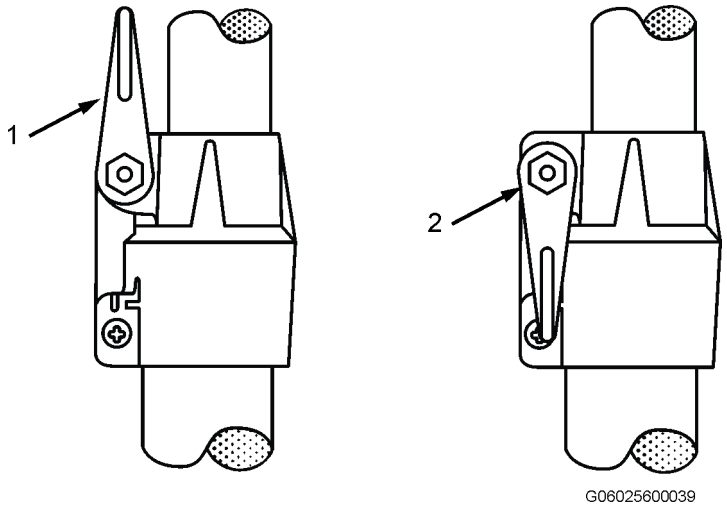


Figure 1. Locking Mechanism.

MALFUNCTION

Locking mechanism loose.

CORRECTIVE ACTION

STEP 1. Visually inspect the nut (Figure 2, Item 2) on the opposite side of the handle on the locking mechanism.

a. If the nut is loose, tighten using the spanner wrench (Figure 2, Item 1) provided with the system in the following method:
(1) Turn nut 1/6 turn counterclockwise to tighten.
(2) If nut is not tight enough to secure pole section, continue in increments of 1/6 until tight.
(3) If nut does not tighten enough to secure pole section, replace pole IAW WP 0027.

b. If the nut is not loose, continue troubleshooting.

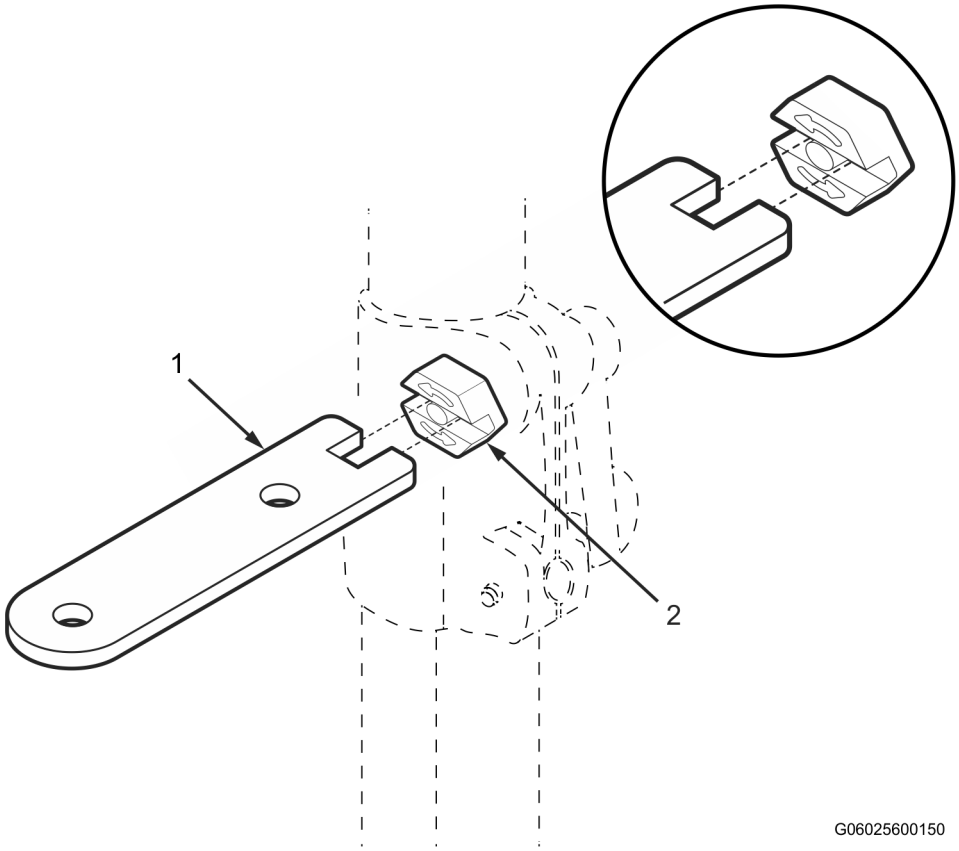


Figure 2. Locking Mechanism Adjustment.

MALFUNCTION

Locking mechanism broken.

CORRECTIVE ACTION

STEP 1. Visually inspect the offending locking mechanism for damage that would prevent proper function such as cracks, chips, or gouges.

a. If damage is present, replace support pole IAW WP 0027.

b. If the pole is not damaged, troubleshooting is complete.

END OF WORK PACKAGE

OPERATOR TROUBLESHOOTING

SHAPE DISRUPTOR WILL NOT STAY SECURED

INITIAL SETUP:

Tools
Hammer, Hand (WP 0034, Item 1, Table 2)

Materials
Gloves, Men's and Women's (WP 0041, Item 2)
Helmet, Advanced Combat (WP 0041, Item 3)
Spectacles, Industrial (WP 0041, Item 4)

Personnel Required
MOS Non-specific

References
WP 0027

Equipment Condition
ULCANS Increment I deployed (WP 0006).

TROUBLESHOOTING PROCEDURE

SYMPTOM

Shape disruptor will not stay secured.

MALFUNCTION

Tent pins and/or support poles not properly placed.

CORRECTIVE ACTION

STEP 1. Check tent pin placement. Screen must be tight, creating smooth lines in fabric.

a. If screen fabric is loose, adjust tent pin placement to tighten fabric.
b. If tent pin cannot be placed to create tension due to rocks, trees, or other obstructions, reposition tent pin where possible and use cord, rope, or twine to attach tent pin to screen loop.

STEP 2. Check support pole placement. Screen must be tight, creating smooth lines in fabric.

a. If screen fabric is loose, adjust support pole placement or height to tighten fabric.
b. If support pole cannot be placed to create tension due to rocky soil, reposition or use tent pins to secure support pole.

MALFUNCTION

Shape disruptor damaged.

CORRECTIVE ACTION

STEP 1. Visually inspect the shape disruptor (Figure 1, Item 1) for damage such as cracks, missing pieces, or missing nubs.

a. If the shape disruptor is damaged, replace support pole IAW WP 0027.
b. If the shape disruptor is not damaged or missing hardware, continue troubleshooting.

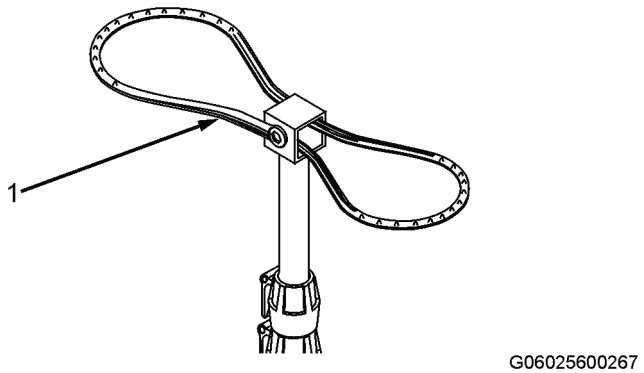


Figure 1. Shape Disruptor.

MALFUNCTION

Support pole damaged.

CORRECTIVE ACTION

STEP 1. Visually inspect support pole foot (Figure 2, Item 1) for damage like cracks, gouges, and missing components.

STEP 2. If the support pole is damaged, replace pole IAW WP 0027.

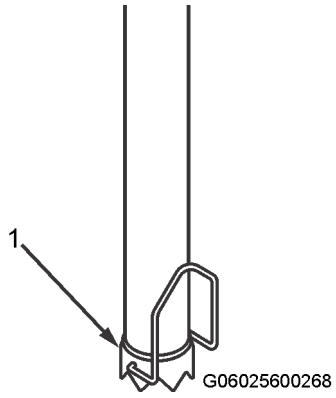


Figure 2. Support Pole Foot.

END OF WORK PACKAGE

OPERATOR TROUBLESHOOTING

SUPPORT POLE WILL NOT STAY SECURED

INITIAL SETUP:

Tools
Hammer, Hand (WP 0034, Item 1, Table 2)

Materials
Gloves, Men's and Women's (WP 0041, Item 2)
Helmet, Advanced Combat (WP 0041, Item 3)
Spectacles, Industrial (WP 0041, Item 4)

Personnel Required
MOS Non-specific

References
WP 0027

Equipment Condition
ULCANS Increment I deployed (WP 0006).

TROUBLESHOOTING PROCEDURE

SYMPTOM

Support pole will not stay secured.

MALFUNCTION

Tent pins and/or support poles not properly placed.

CORRECTIVE ACTION

STEP 1. Check tent pin placement. Screen must be tight, creating smooth lines in fabric.

a. If screen fabric is loose, adjust tent pin placement to tighten fabric.
b. If tent pin cannot be placed to create tension due to rocks, trees, or other obstructions, reposition tent pin where possible and use cord, rope, or twine to attach tent pin to screen loop.

STEP 2. Check support pole placement. Screen must be tight, creating smooth lines in fabric.

a. If screen fabric is loose, adjust support pole placement or height to tighten fabric.
b. If support pole cannot be placed to create tension due to rocky soil, reposition or use tent pins to secure support pole.

MALFUNCTION

Support pole damaged.

CORRECTIVE ACTION

STEP 1. Visually inspect foot of support pole (Figure 1, Item 1) for damage like cracks, gouges, and missing components.

STEP 2. If the support pole is damaged, replace pole IAW WP 0027.

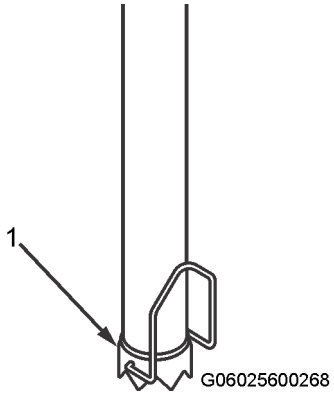


Figure 1. Support Pole Foot.

END OF WORK PACKAGE

CHAPTER 4

MAINTENANCE INSTRUCTIONS

FOR

ULTRA LIGHTWEIGHT CAMOUFLAGE NET SYSTEMS (ULCANS) INCREMENT I

OPERATOR MAINTENANCE

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) INTRODUCTION

GENERAL

Preventive Maintenance Checks and Services (PMCS) are performed to keep the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I in operating condition. The checks are used to find, correct, or report problems. Operators are to do the PMCS jobs as shown in the PMCS tables. PMCS is done every day the ULCANS Increment I is deployed using the PMCS tables. Pay attention to WARNING and CAUTION statements. A WARNING means someone could be hurt. A CAUTION means equipment could be damaged.

EXPLANATION OF PMCS TABLE ENTRIES

Item Number Column

Numbers in this column are for reference. When completing DA FORM 2404 (Equipment Inspection and Maintenance Worksheet), include the Item Number for the Check/Service indicating a fault. Item Numbers also appear in the order that you must perform Checks and Services for the intervals listed.

Interval Column

This column tells you when you must perform the procedure in the procedure column. Intervals are divided as follows:

1. Before. Procedures must be performed before you deploy the ULCANS Increment I.
2. During. Procedures must be performed during operation of the ULCANS Increment I.
3. After. Procedures must be performed immediately after you have retrieved the ULCANS Increment I.

Item to Be Inspected Column

Indicates items and components to be inspected.

Procedure Column

Indicates the procedure by which the check or service is to be performed. Tolerances, adjustment limits, and instrument readings are included as applicable. When replacement or repair of a component is required, the procedures column will direct personnel to the appropriate task.

Not Mission Capable (NMC) If

If failing a PMCS item causes a not mission capable status for the ULCANS Increment I, a brief statement shall be provided to detail the condition that would cause the equipment to be less than fully ready to perform its assigned mission. If the entry in the procedure column contains detailed steps, the NMC statement will be placed opposite the applicable step.

INSPECTION

Look for signs of a problem or trouble. Senses help here. You can feel, smell, hear, or see many problems. Be alert when on the ULCANS Increment I.

Inspect to see if items are in good condition. Are they correctly assembled, stowed, secured, excessively worn, leaking, corroded, or properly lubricated? Correct any problems found or notify Field Maintenance.

GENERAL CHECKS

There are some common items to check all over the ULCANS Increment I. These include the following:

1. Screen Modules
2. Support System

CORROSION PREVENTION AND CONTROL (CPC)

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

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

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

SF Form 368, Product Quality Deficiency Report, should be submitted to the address specified in DA PAM 750-8, The Army Maintenance Management System (TAMMS) Users Manual. Refer to WP 0001.

END OF WORK PACKAGE

OPERATOR MAINTENANCE

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) BEFORE

INITIAL SETUP:

Personnel Required
MOS Non-specific

References
WP 0005
WP 0008
WP 0009
WP 0010
WP 0017
WP 0018
WP 0025
WP 0026
WP 0027
WP 0034

Equipment Condition
ULCANS Increment I prepared for use (WP 0007).

Table 1. Operator Before Preventive Maintenance Checks And Services

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY AVAILABLE IF:
1	Before	ULCANS Increment I	1. Inventory contents of modular screen system carrying case IAW WP 0034. 2. Inventory contents of support system carrying case IAW WP 0034. 3. Ensure the ULCANS Increment I is packed in the proper deployment configuration IAW WP 0008, WP 0009, or WP 0010.	Modular screen system not complete.
2	Before	Support poles	1. Inspect support pole tubes (Figure 1, Item 3) for damage.	Support pole tubes are damaged. Replace IAW WP 0027.
			2. Ensure the foot (Figure 1, Item 5) of the support pole is secure and undamaged.	Support pole foot is damaged. Replace IAW WP 0027.
			3. Ensure the grounding loop (Figure 1, Item 4) of the support pole is secure, rotates freely, and has no damage.	Support pole grounding loop does not rotate or is damaged. Replace IAW WP 0027.
			4. Ensure the locking mechanisms (Figure 1, Item 2) are functional.	Locking mechanism doesn't keep support pole locked. Troubleshoot IAW WP 0017.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY AVAILABLE IF:
			5. Ensure the shape disruptors (Figure 1, Item 1) are moveable and are not damaged.	Shape disruptors will not move, Troubleshoot IAW WP 0018. Shape disruptor is damaged. Replace IAW WP 0027.

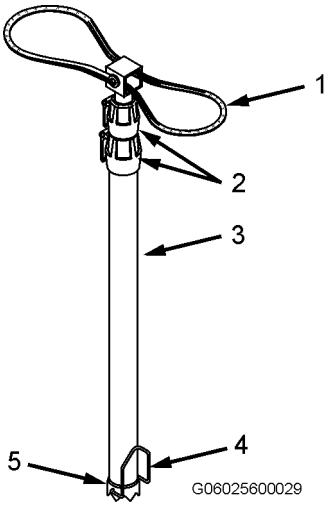
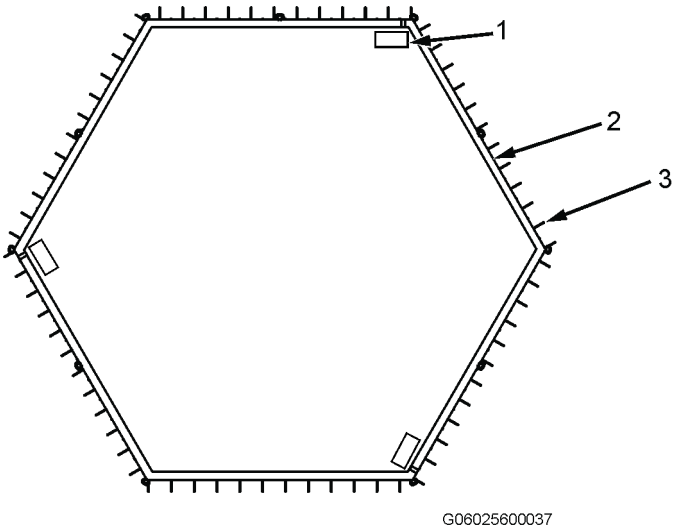


Figure 1. Support Pole.

3	Before	Individual screen module	1. Inspect screen module (Figure 2, Item 2) for fabric damage or lack of structural integrity.	Equipment is damaged beyond repair or net has lost structural integrity. Replace screen module IAW WP 0026. Screen module has one or more tears or holes. Repair screen module IAW WP 0025.
			2. Inspect screen module for damaged becket loops (Figure 2, Item 3) and grounding loops.	Becket loops or grounding loops are damaged. Repair loops IAW WP 0025. Three consecutive becket loops are missing. Replace screen module IAW WP 0026.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY AVAILABLE IF:
			3. Inspect identification tags (Figure 2, Item 1) to ensure they are present and readable.	Identification tags are not present. Replace screen module IAW WP 0026.
			 **Figure 2. Screen Module.**	
4	Before	Net assembly	1. Ensure that net assembly is properly assembled IAW WP 0005.	Net assembly improperly assembled.
			2. Ensure all becket loops are properly connected and secured with a knot.	Becket loops are not properly connected or secured.

END OF WORK PACKAGE

OPERATOR MAINTENANCE

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) DURING

INITIAL SETUP:

Tools
Hammer, Hand (WP 0034, Item 1, Table 2)

Equipment Condition
ULCANS Increment I prepared for use (WP 0006).

Personnel Required
MOS Non-specific

Table 1. Operator During Preventive Maintenance Checks And Services

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY AVAILABLE IF:
1	During	Net assembly	1. Ensure that tent pins and tie down points remain secure.	Tent pins and/or tie down points are loose.
			2. Ensure becket loops are secure.	Becket loops are not secure or are damaged. More than one becket loop in a row missing.
			3. Clear any accumlated rain, snow, damp leaves, or other environmental hazards as applicable.	Rain, snow, damp leaves, or other environmental hazards are present and readable.
			4. Confirm camouflage pattern matches the other screens in the net assembly.	Camouflage pattern is mismatched, increasing visual detectability of equipment.
			5. Confirm screen type matches the other screens in the net assembly.	Screen type is mismatched, increasing radar detectability of equipment.
			6. Confirm there are no gaps of 6 in (15.24 cm) or more in seams of joined screens.	Gaps are present increasing detectability of heat or radar signature.

END OF WORK PACKAGE

OPERATOR MAINTENANCE

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)
AFTER

INITIAL SETUP:

Personnel Required
MOS Non-specific

References
WP 0024
WP 0025

Equipment Condition
ULCANS Increment I prepared for use (WP 0006).

Table 1. Operator AFTER Preventive Maintenance Checks And Services

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY AVAILABLE IF:
1	After	Screen Module/Net Assembly	Inspect screens for debris, sticks, grass, leaves, etc., and remove debris as required.	Equipment is damaged or dirty. Clean IAW WP 0024. Repair IAW WP 0025.
2	After	Support System	Inspect support system components for damage and debris. Repair or replace components as required.	Equipment is damaged or dirty. Clean IAW WP 0024. Repair IAW WP 0025.

END OF WORK PACKAGE

CHAPTER 5

MAINTENANCE INSTRUCTIONS

FOR

ULTRA LIGHTWEIGHT CAMOUFLAGE NET SYSTEMS (ULCANS) INCREMENT I

OPERATOR MAINTENANCE

ULCANS INCREMENT I, CLEAN

INITIAL SETUP:

Materials
Drum, Shipping and Storage - 2 (WP 0041, Item 1)

Personnel Required
MOS Non-Specific - 2

References
WP 0008
WP 0009

Equipment Condition
ULCANS Increment I prepared for movement (WP 0007).

CLEAN

Screen Modules

1. Fill two containers which will hold a screen module (such as 55-gallon drums) with water, preferably warm if available.
2. Place the screen module into water. Agitate the screen to remove dirt and any foreign matter.
3. When the screen is clean, remove it from dirty water and place into container with clean rinse water and agitate.
4. After rinsing hang screen to dry.

CAUTION

Ensure screen is dry before re-packaging to prevent mildew. Failure to do this can cause equipment to degrade.

5. Fold screen module in accordance with WP 0008 or WP 0009 depending on the shape of your screen module, and stow in screen system carrying case.

Support System

To clean support system components, wipe components clean before storing.

END OF TASK

END OF WORK PACKAGE

OPERATOR MAINTENANCE

SCREEN, REPAIR

INITIAL SETUP:

Tools
Repair Kit (WP 0034)

Personnel Required
MOS Non-specific

Equipment Condition
ULCANS Increment I prepared for use (WP 0006).

INTRODUCTION

This work package describes two procedures for repairing the screen. For small cuts or tears, use the Repair Using Cable Ties procedure. For large tears or holes, use the Repair Using Repair Fabric procedure.

REPAIR

Repair Using Cable Ties

1. Remove any ragged or tattered material from damaged area of screen.
2. Ensure area to be repaired is clean and free of debris.
3. Starting at one end of tear, push cable tie through net material approximately 1 in (2.54 cm) from edge of tear in material.
4. Position cable tie perpendicular to tear and push through net material 1 in (2.54 cm) from edge of other side of tear.
5. Close cable tie and tighten. Ensure mated material is tightly secured to prevent loose material or gaps at adjoining seams.
6. Repeat Steps 3–5, placing cable ties parallel to each other 1 in (2.54 cm) apart until tear is sealed.

WARNING



Use care when using sharp tools. Wear gloves to protect hands while cutting. If injury occurs, seek medical attention immediately.

7. Cut off excess ends of cable ties.

Repair Using Repair Material

1. Remove any ragged or tattered material from damaged area of screen.
2. Ensure area to be repaired is clean and free of debris.
3. Select a piece of camouflage screen material from the screen repair kit that blends in well with the surrounding area being replaced and is of the correct type and class.

WARNING



Use care when using sharp tools. Wear gloves to protect hands while cutting. If injury occurs, seek medical attention immediately.

NOTE

It is recommended that the piece of repair material be slightly larger than the area to be repaired.

4. Cut repair material (Figure 1, Item 1) to appropriate size.

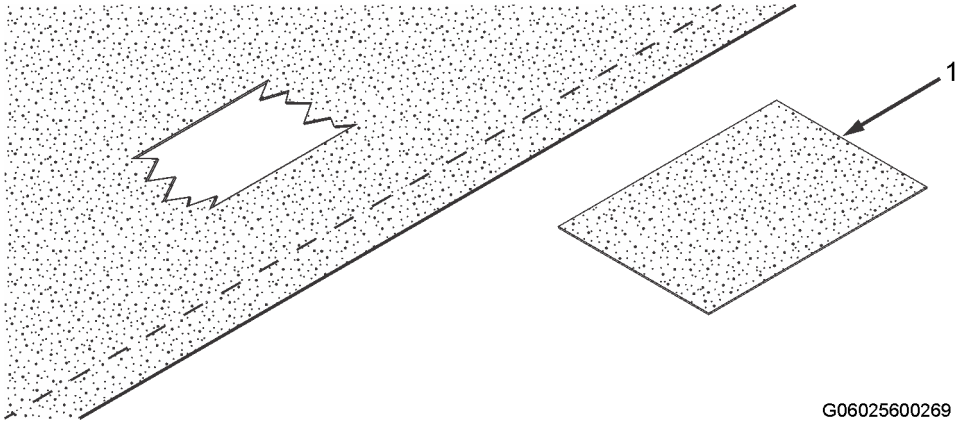


Figure 1. Screen Tear and Repair Material.

NOTE

If cable ties are not available, secure screen repair materials using twine, cord, string, or lightweight rope.

5. Position repair material over damaged screen with matching camouflage pattern facing up.

NOTE

Apply cable ties approximately 1 in (2.54 cm) apart and 1 in (2.54 cm) away from edge of tear in material (Figure 2).

6. Attach repair material to existing screen using cable ties IAW the Repair Using Cable Ties procedure in this WP. Ensure mated material is tightly secured to prevent loose material or gaps at adjoining seams.

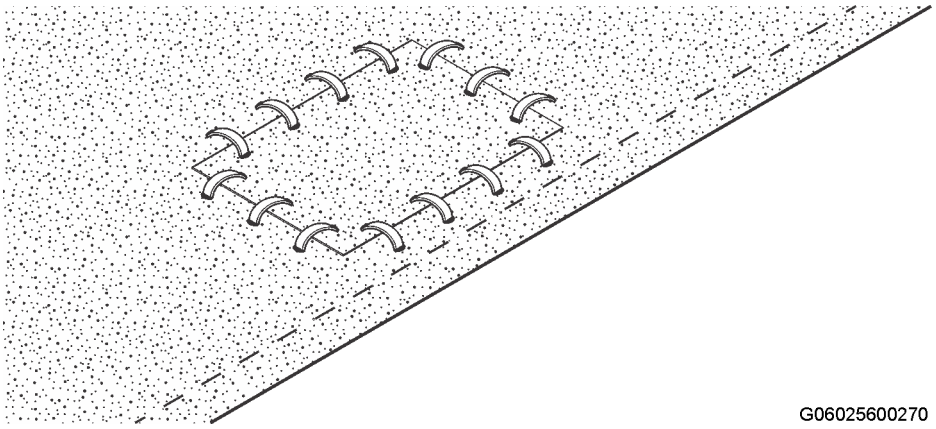


Figure 2. Screen Repair.

Becket Loop Repair

NOTE

A missing or broken becket loop may be bypassed when multiple screens are being assembled by looping through the next available becket loop. However, it is recommended that when more than one becket loop in a row is missing or broken, they should should be replaced using any available piece of tie material such as cable ties, twine, cord, string, etc.

If three or more of the same kind of loops (short, long) in a row are damaged or missing, replace screen.

END OF TASK

END OF WORK PACKAGE

OPERATOR MAINTENANCE

SCREEN, REPLACE

INITIAL SETUP:

Tools
Hammer, Hand (WP 0034, Item 1, Table 2)

Materials
Screen, Camouflage, Hexagon, General Purpose / (R/S), ULCANS I, Woodland (WP 0034, Item 9, Table 1)
Screen, Camouflage, Rhombic, General Purpose / (R/S), ULCANS I, Woodland (WP 0034, Item 10, Table 1)
Screen, Camouflage, Hexagon, Communications / (R/T), ULCANS I, Woodland (WP 0035, Item 9, Table 1)
Screen, Camouflage, Rhombic, Communications / (R/T), ULCANS I, Woodland (WP 0035, Item 10, Table 1)
Screen, Camouflage, Hexagon, General Purpose / (R/S), ULCANS I, Desert/Urban (WP 0036, Item 9, Table 1)
Screen, Camouflage, Rhombic, General Purpose / (R/S), ULCANS I, Desert/Urban (WP 0036, Item 10, Table 1)
Screen, Camouflage, Hexagon, Communications / (R/T), ULCANS I, Desert/Urban (WP 0037, Item 9, Table 1)
Screen, Camouflage, Rhombic, Communications / (R/T), ULCANS I, Desert/Urban (WP 0037, Item 10, Table 1)
Screen, Camouflage, Hexagon, General Purpose / (R/S), ULCANS I, Snow/Alpine (WP 0038, Item 9, Table 1)
Screen, Camouflage, Rhombic, General Purpose / (R/S), ULCANS I, Snow/Alpine (WP 0038, Item 10, Table 1)
Screen, Camouflage, Hexagon, Communications / (R/T), ULCANS I, Snow/Alpine (WP 0039, Item 9, Table 1)
Screen, Camouflage, Rhombic, Communications / (R/T), ULCANS I, Snow/Alpine (WP 0039, Item 10, Table 1)
Gloves, Men's and Women's (WP 0041, Item 2)
Helmet, Advanced Combat (WP 0041, Item 3)
Spectacles, Industrial (WP 0041, Item 4)

Personnel Required
MOS Non-specific - 2

Equipment Condition
ULCANS Increment I prepared for use (WP 0006).

REPLACE

WARNING



Pinch points exist in areas where telescoping sections of poles meet. Wear gloves to protect hands while collapsing poles. If injury occurs, seek medical attention immediately.

NOTE

The intent of this procedure is to replace screens that are part of a net assembly. Ensure that the defective screen is accessible. If the screen assembly is damaged to the point where it would need to be removed to replace individual screens, you must get a replacement net assembly to allow for camouflage to be maintained. Do not remove the net assembly without being able to install another net assembly immediately.

1. If necessary, remove any support poles (Figure 1, Item 1) or tent pins (Figure 1, Item 2) supporting the screen that may interfere with screen replacement.

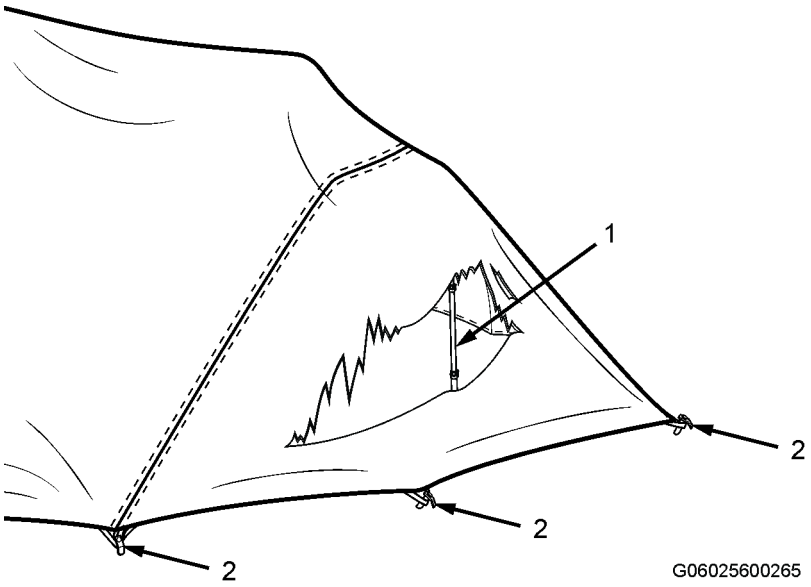


Figure 1. Defective Screen.

NOTE

Before removing defective screen, take note of screen orientation using screen seams as a guide. Orienting the replacement screen to match the defective screen will prevent misalignment.

2. Unlace any becket lacing (Figure 2, Item 1) securing defective screen to adjacent screens.

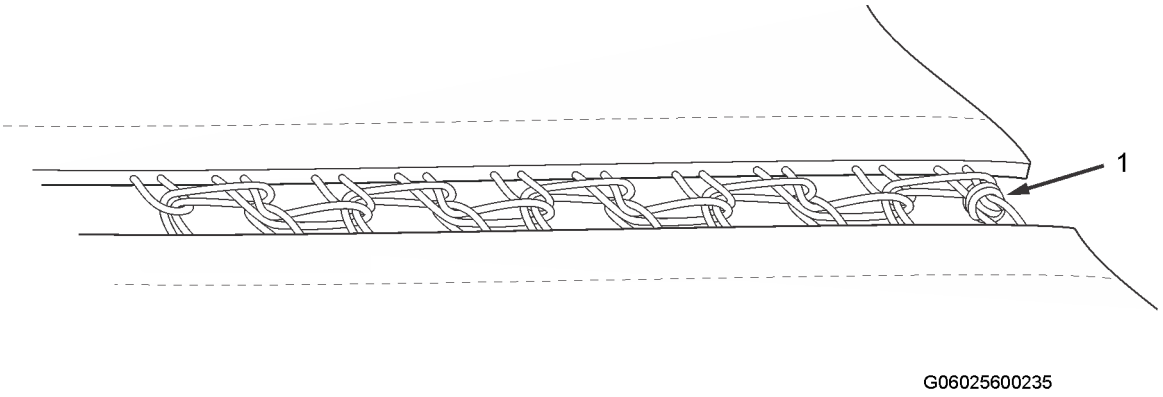


Figure 2. Unlace Becket Lacing.

3. Discard defective screen.
4. Install a replacement screen and begin becket lacing at the inner joined seam (Figure 3, Item 3) using the following steps:
   a. Place appropriate screen in the same orientation as the defective screen (Figure 3, Item 1) at corner of determined pattern.
   b. Place adjoining screen (Figure 3, Item 2) next to first screen in determined pattern.

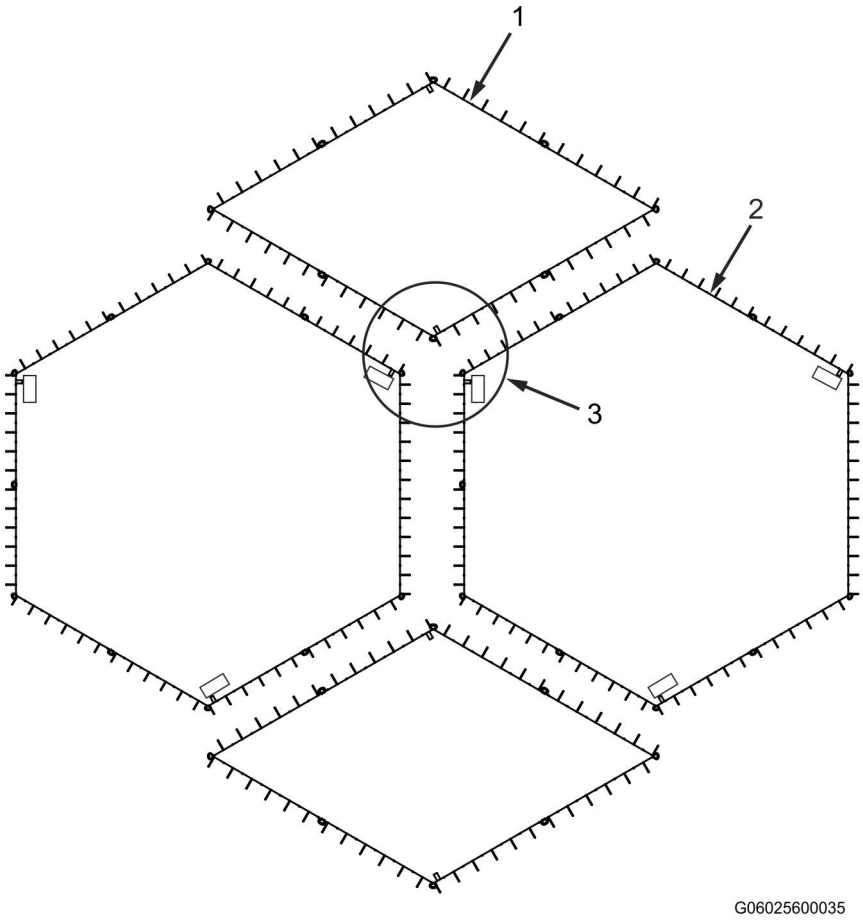


Figure 3. Screen Assembly.

c. Take the first large becket loop on first screen and pass it through the first small becket loop on the second screen (Figure 4).

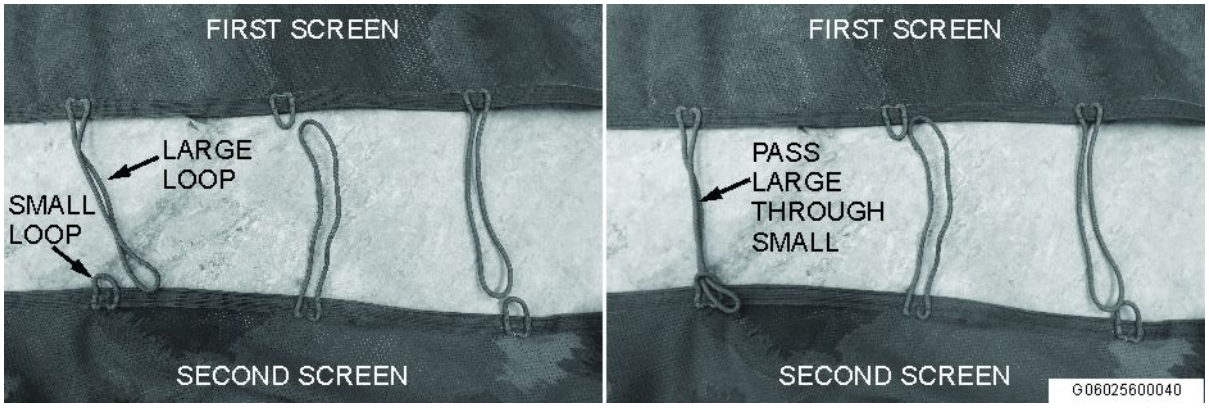


Figure 4. Becket Lacing Loops.

d. Pass the first large loop on the opposing screen and pass it through end of the large loop on the first screen (Figure 5).
e. Pass the large loop through the first small loop on the first screen (Figure 5).
f. Repeat steps Steps 4c–e until all becket loops have been joined to the edge of the screen assembly.

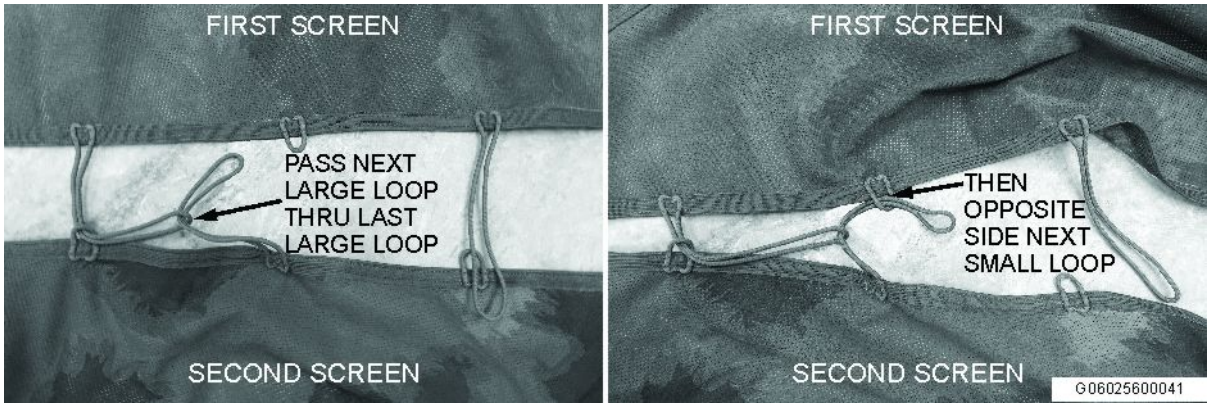


Figure 5. Becket Lacing.

NOTE

Avoid having knots high off the ground or in the center of a screen which can make the quick separation of multiple screens difficult.

g. Secure the seam by tying a knot (Figure 6, Item 1) in the last becket loop in the seam.

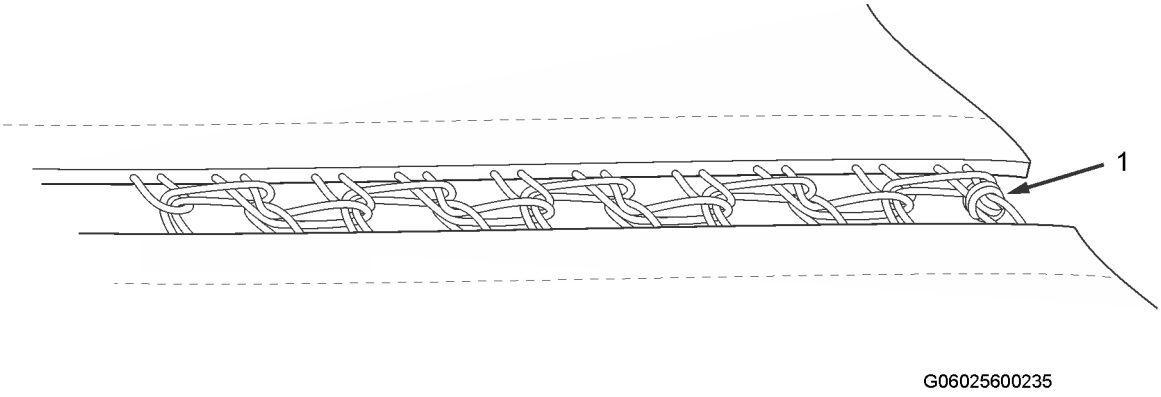


Figure 6. Becket Lacing Knot.

5. Secure replacement screen to the ground using tent pins.
6. Break the form of the screen using a support pole.

END OF TASK

END OF WORK PACKAGE

OPERATOR MAINTENANCE

SUPPORT POLE, REPLACE

INITIAL SETUP:

Tools
Hammer, Hand (WP 0034, Item 1, Table 2)

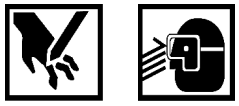
Materials
Pole, Support Telescopic, 5.4 to 13.8 ft (WP 0034, Item 7, Table 1)
Gloves, Men's and Women's (WP 0041, Item 2)
Helmet, Advanced Combat (WP 0041, Item 3)
Spectacles, Industrial (WP 0041, Item 4)

Personnel Required
MOS Non-specific

Equipment Condition
ULCANS Increment I prepared for use (WP 0006).

REPLACE

WARNING



Pinch points exist in areas where telescoping sections of poles meet. Wear gloves to protect hands while collapsing poles. If injury occurs, seek medical attention immediately.

Equipment and/or foliage may be resting on or get caught in Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I during use. Wear a helmet and eye protection when erecting, striking, or moving ULCANS Increment I. Failure to follow warning may result in damage to equipment or injury to personnel.

1. If necessary, remove tent pin (Figure 1, Item 1) securing support pole (Figure 1, Item 2) to ground.

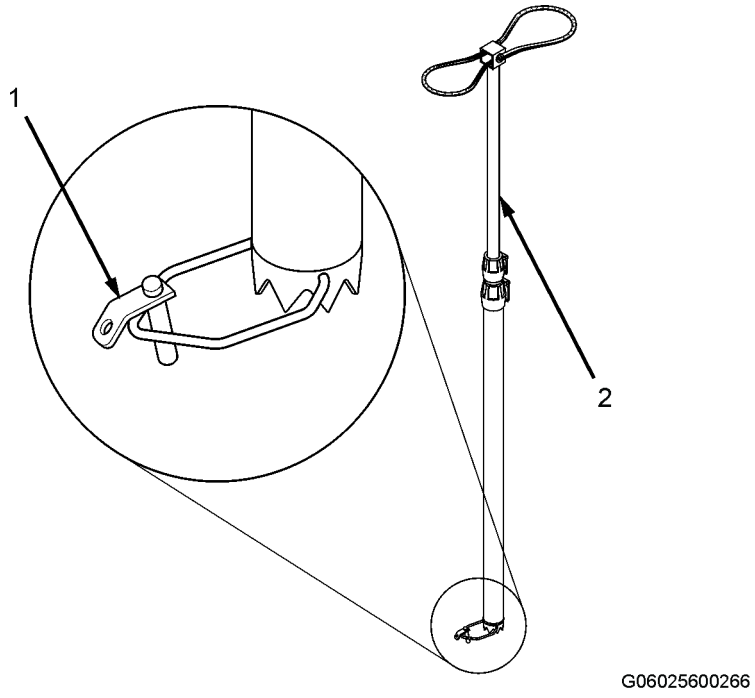


Figure 1. Remove Tent Pin.

2. Move handle (Figure 2, Item 1) to open (UP) position on lowest locking mechanism.
3. Slide telescopic section (Figure 2, Item 2) into base of pole.

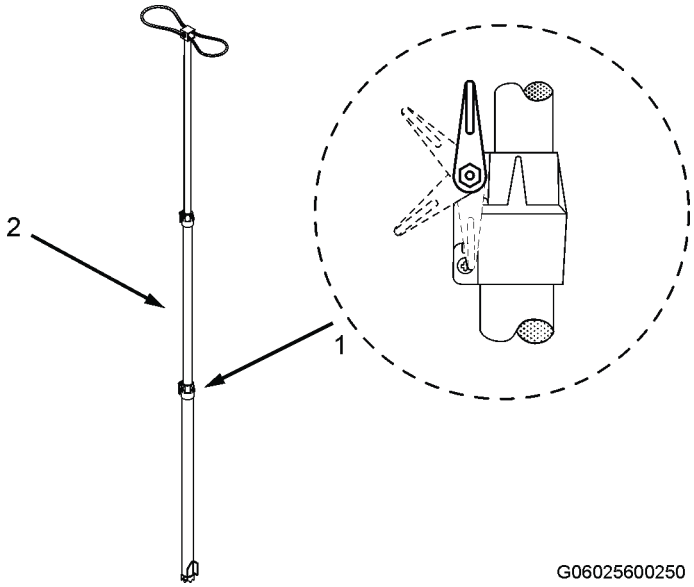


Figure 2. Unlock and Collapse Lowest Support Pole Section.

4. Move handle (Figure 3, Item 1) to closed (down) position on same locking mechanism.

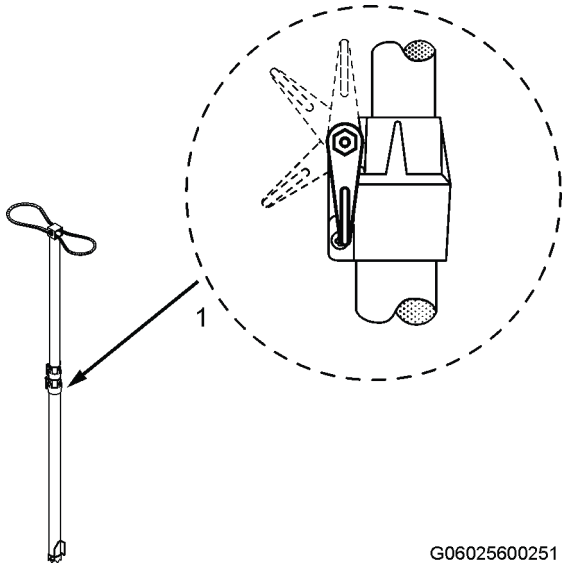


Figure 3. Lowest Support Pole Section Locked.

5. If necessary:
   a. Move handle (Figure 4, Item 1) on next lowest locking mechanism to open (UP) position.
   b. Slide telescopic section (Figure 4, Item 2) into base of pole.

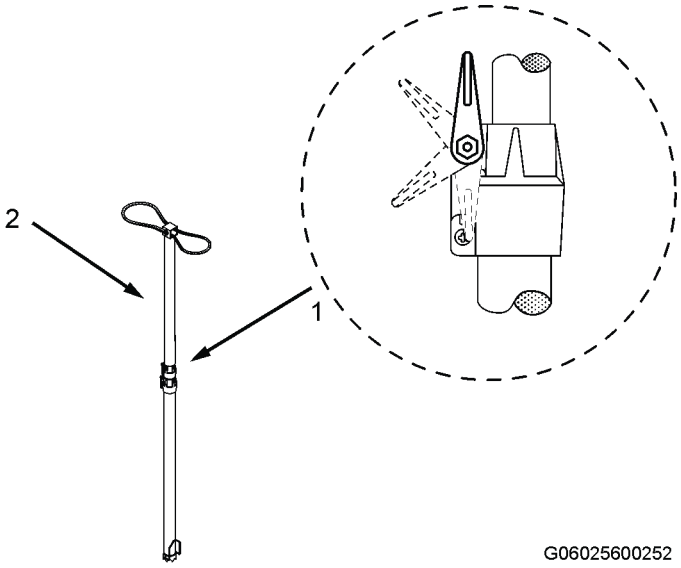


Figure 4. Unlock and Collapse Highest Support Pole Section.

   c. Move handle (Figure 5, Item 1) to closed (down) position on same locking mechanism.

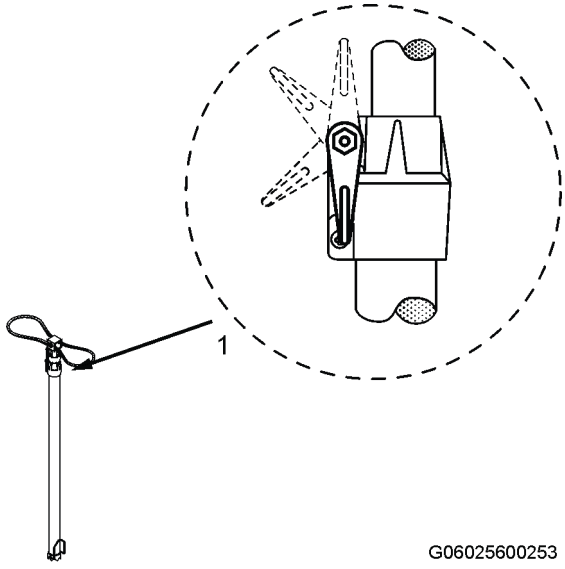


Figure 5. Highest Support Pole Section Locked.

6. Fold top of shape disruptor towards locking mechanism handles until it is flush against poles (Figure 6).

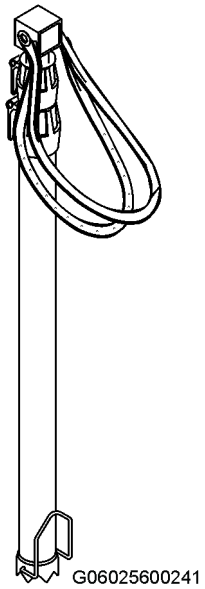


Figure 6. Shape Disruptor in Closed Position.

7. Discard defective support pole.
8. Position a replacement support pole on ground.
9. If necessary, secure to ground using a tent pin.
10. Fold open shape disruptor until perpendicular to support pole (Figure 7).

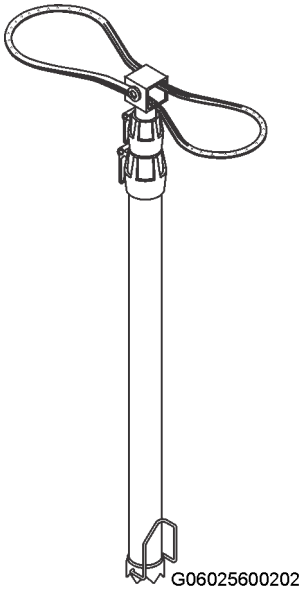


Figure 7. Shape Disruptor in Open Position.

11. Move handle (Figure 8, Item 1) on higher locking mechanism to open (UP) position.
12. Extend telescopic section (Figure 8, Item 2) away from base of pole.

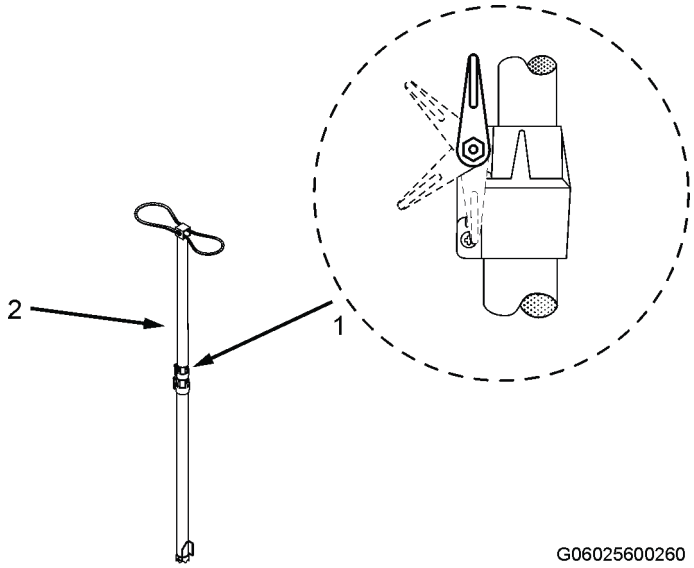


Figure 8. Unlock and Extend Highest Support Pole Section.

13. Move handle to closed (Figure 9, Item 1) (down) position on same locking mechanism.

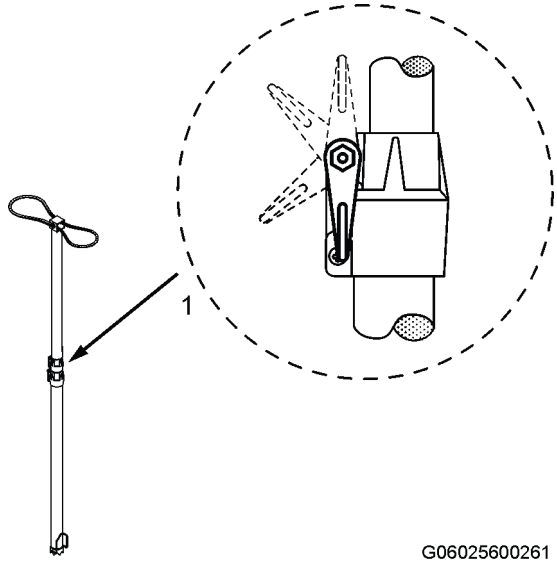


Figure 9. Lock Highest Support Pole Section.

14. If necessary:
    a. Move handle (Figure 10, Item 1) to open (UP) position on lowest locking mechanism (Figure 10, Item 2).
    b. Extend telescopic section away from base of pole.

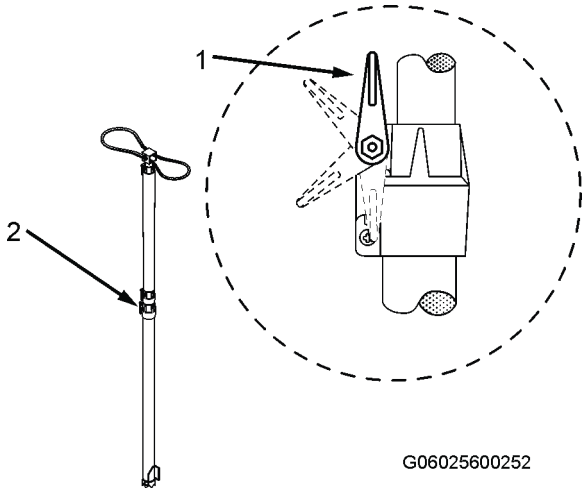


Figure 10. Unlock and Extend Lowest Support Pole Section.

    c. Move handle (Figure 11, Item 1) to closed (down) position on same locking mechanism.

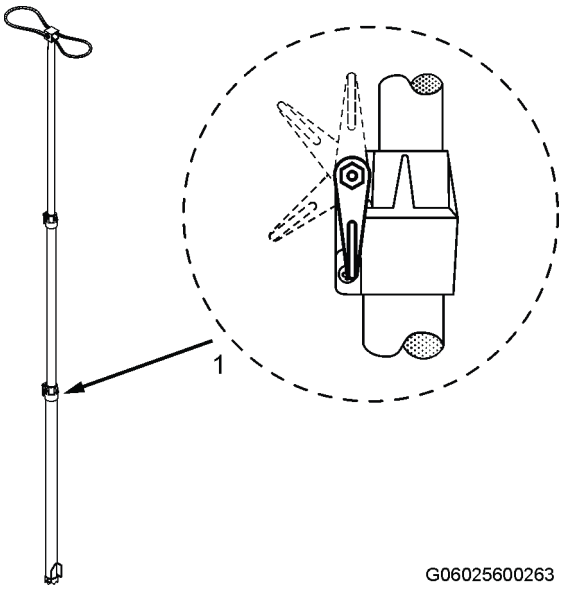


Figure 11. Lock Lowest Support Pole Section.

END OF TASK

END OF WORK PACKAGE

OPERATOR MAINTENANCE

PREPARATION FOR STORAGE

INITIAL SETUP:

Materials
Gloves, Men's and Women's (WP 0041, Item 2)
Helmet, Advanced Combat (WP 0041, Item 3)
Spectacles, Industrial (WP 0041, Item 4)

Personnel Required
MOS Non-specific - 2

References
AR 750-1
DA PAM 738-751
WP 0007

Equipment Condition
ULCANS Increment I prepared for use (WP 0006).

PREPARATION FOR STORAGE

Prepare ULCANS Increment I

Prepare Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I for storage IAW WP 0007

Storage Criteria

Administrative storage of ULCANS Increment I will be accomplished in accordance with AR 750-1, and the considerations listed below.

Storage Considerations

General Storage Considerations. To ensure that serviceability standards of ULCANS Increment I are maintained, adherence to the following guidelines is recommended:

ULCANS Increment I components do not require co-location when storing.

ULCANS Increment I screen systems and support systems can be stacked during storage, but no greater than six systems high without additional securing methods.

ULCANS Increment I components must be stored in bags provided. Do not remove items from bags for storage.

When available, a climate controlled building should be used to store ULCANS Increment I.

ULCANS Increment I will be stored in a dry, well-ventilated location and protected from pilferage, dampness, fire, dirt, insects, rodents, and direct sunlight.

ULCANS Increment I will not be stored in a manner that which would prevent ventilation or interfere with light fixtures, heating vents, fire fighting devices, cooling units, exits, or fire doors.

ULCANS Increment I will be marked, segregated, and located for accessibility and easy identification.

ULCANS Increment I will not be stored in a damaged, dirty, damp condition, or direct contact with any building floor or wall. Storage will be accomplished using bins, shelves, pallets, racks, or dunnage to provide airspace between the storage area floor and the equipment. If the pre-constructed shelving or similar storage accommodations are not available, locally fabricate storage provisions using suitable lumber or wooden boxes.

All available material handling equipment should be used as much as possible in the handling of ULCANS Increment I.

Periodic rotation of stock, conversion of available space, proper housekeeping policies, and strict adherence to all safety regulations will be practiced at all times.

END OF TASK

END OF WORK PACKAGE

OPERATOR MAINTENANCE

PREPARATION FOR SHIPMENT

INITIAL SETUP:

Materials
Gloves, Men's and Women's (WP 0041, Item 2)
Helmet, Advanced Combat (WP 0041, Item 3)
Spectacles, Industrial (WP 0041, Item 4)

Personnel Required
MOS Non-specific - 2

References
AR 750-1
DA PAM 738-751
WP 0007

Equipment Condition
ULCANS Increment I prepared for use (WP 0006).

PREPARATION FOR SHIPMENT

Initial Shipment

The initial packaging and shipping of ULCANS Increment I are the responsibility of item manufacturers, who are required to comply with federal and military packing specifications, as stipulated in contractual agreements. ULCANS Increment I are normally shipped to depot activities, by domestic freight or parcel post, and packed to comply with overseas shipping requirements. Except for those systems that are unpackaged and subjected to random inspections or testing by depot activity, ULCANS Increment I received by a using unit will be contained in the original packaging materials.

Shipping Between Maintenance Activities

The shipping of ULCANS Increment I between activities will be accomplished on a signature verification basis using whatever means of military transportation is available. Used ULCANS Increment I and other items will be tagged in accordance with DA PAM 738-751, and rolled, folded, or placed loosely in a pack, bag, or other suitable container, as required. Unused ULCANS Increment I will be transported in original shipping containers. During shipment, every effort will be made to protect ULCANS Increment I from weather elements, dust, dirt, oil, grease, and acids. Vehicles used to transport ULCANS Increment I will be inspected to ensure the items are protected from the previously cited material damaging conditions.

END OF TASK

END OF WORK PACKAGE

OPERATOR MAINTENANCE

PREPARATION FOR TRANSPORT

INITIAL SETUP:

Materials
Not Applicable

Equipment Condition
Not Applicable

Personnel Required
Not Applicable

TRANSPORT

There are no requirements related to transport of ULCANS Increment I.

END OF TASK

END OF WORK PACKAGE

CHAPTER 6

DESTRUCTION OF EQUIPMENT TO PREVENT ENEMY USE

FOR

ULTRA LIGHTWEIGHT CAMOUFLAGE NET SYSTEMS (ULCANS) INCREMENT I

OPERATOR DESTRUCTION

DESTRUCTION OF EQUIPMENT TO PREVENT ENEMY USE INTRODUCTION

AUTHORITY TO DESTROY

Authorization. Only division or higher commanders have the authority to order destruction of equipment. They may however, delegate this authority to subordinate commanders when the situation demands it.

REPORTING DESTRUCTION

Report any destruction activity through command channels.

GENERAL DESTRUCTION INFORMATION

The Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I does not contain classified equipment. Refer to the Procedures for "Destruction of Equipment to Prevent Enemy Use" TM 750-244-3 for additional guidance.

DEGREE OF DESTRUCTION

Methods of Destruction. Choose methods of destruction which will cause such damage that it will be impossible to restore the equipment to a usable condition within the combat zone.

Classified Equipment. Classified equipment must be destroyed to such a degree as to prevent duplication by, or revealing means of operation or function to the enemy.

Associated Classified Documents. Any classified documents, notes, instructions, or other written material pertaining to function, operation, maintenance, or employment, including drawings or parts lists, must be destroyed in a manner to render them useless to the enemy.

END OF WORK PACKAGE

OPERATOR DESTRUCTION

DESTRUCTION OF EQUIPMENT TO PREVENT ENEMY USE PROCEDURES

INITIAL SETUP:

Personnel Required
MOS Non-specific - 2

Equipment Condition
ULCANS Increment I deployed (WP 0006).

References
WP 0007

DESTRUCTION BY FIRE PROCEDURES

WARNING



Destruction of equipment by fire is dangerous and should only be performed IAW unit SOP. Take care when handling flammable materials and follow all recommended safety guidelines for the flammables you are using. Failure to comply will result in permanent injury or death.

1. Remove ULCANS Increment I screen IAW WP 0007.
2. Position ULCANS Increment I screens in a pile.
3. Cover screens with flammable fuel or place incendiary device in center of screen pile.
4. Ignite fuel or incendiary device.
5. Allow fire to consume screens. Some manipulation of the screens may be required.
6. Check material for screen remains that could still be used by the enemy.
7. Repeat this procedure as necessary until all screen parts are unusable.

DESTRUCTION BY MECHANICAL DEVICES

1. Remove ULCANS Increment I screen IAW WP 0007.
2. Rip, tear, or cut ULCANS Increment I screens.

DESTRUCTION BY NATURAL SURROUNDINGS

1. Remove ULCANS Increment I screen IAW WP 0007.
2. Dig a hole.
3. Position ULCANS Increment I screens in hole.
4. Fill hole and cover with natural material to prevent location by enemy.

END OF WORK PACKAGE

CHAPTER 7

SUPPORTING INFORMATION

FOR

ULTRA LIGHTWEIGHT CAMOUFLAGE NET SYSTEMS (ULCANS) INCREMENT I

OPERATOR

REFERENCES

SCOPE

This appendix lists all field manuals, forms, technical manuals and miscellaneous publications referenced in this manual.

ARMY REGULATIONS

AR 700-138	Army Logistics Readiness and Sustainability
AR 750-1	Army Materiel Maintenance Policy

COMMON TABLE OF ALLOWANCES

CTA 8-100	Army Medical Department Expendable/Durable Items
CTA 50-970	Expendable/Durable Items (Except: Medical, Class V, Repair Parts, and Heraldic Items)

DA PAMPHLETS

DA PAM 738-751	Functional User Manual for the Army Maintenance Management System - Aviation
DA PAM 750-8	The Army Maintenance Management System (TAMMS) Users Manual

FORMS

DA Form 2028	Recommended Changes to Publications and Blank Forms
SF 368	Product Quality Deficiency Report

TECHNICAL MANUALS

TM 750-244-3	Procedures for Destruction of Equipment to Prevent Enemy Use

TRAINING CIRCULARS

TC 4-02.1, C2	First Aid

END OF WORK PACKAGE

OPERATOR

COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LIST
WOODLAND TYPE I GENERAL PURPOSE / (R/S)

INTRODUCTION

Scope

This work package lists COEI and BII for the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I to help you inventory items for safe and efficient operation of the equipment.

General

The COEI and BII information is divided into the following lists.

Components of End Item (COEI). This list is for information purposes only and is not authority to requisition replacements. These items are part of the ULCANS Increment I. As part of the end item, these must be with the end item whenever it is issued or transferred between property accounts. Items of COEI are removed and separately packaged for transportation or shipment only when necessary. Illustrations are furnished to help you find and identify the items.

Basic Issue Items (BII). These essential items are required to place the ULCANS Increment I in operation, to operate it, and to do emergency repairs. Although shipped separately packaged, BII must be with the ULCANS Increment I during operation and when it is transferred between property accounts. Listing these items is your authority to request/requisition them for replacement based on authorization of the end item by the TOE/MTOE. Illustrations are furnished to help you find and identify the items.

Explanation of Columns

Column (1) Item Number: Gives you the number of the item illustrated.

Column (2) National Stock Number (NSN): Identifies the stock number of the item to be used for requisitioning purposes.

Column (3) Description, CAGEC, and Part Number: Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The stowage location of COEI and BII is also included in this column. The last line below the description is the CAGEC (Commercial and Government Entity Code) (in parentheses) and the part number.

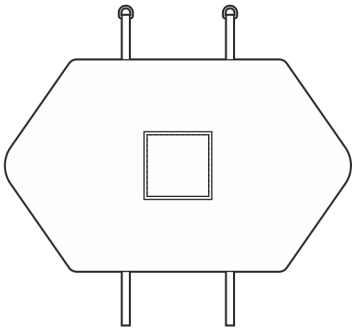
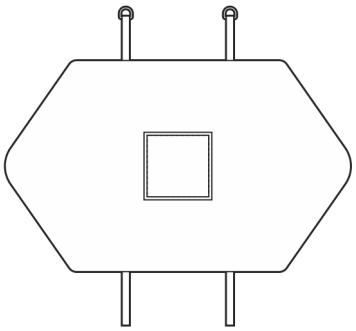
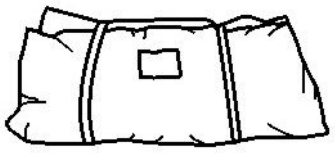
Column (4) Usable on Code: Gives you a code if the item you need is not the same for different models of equipment.

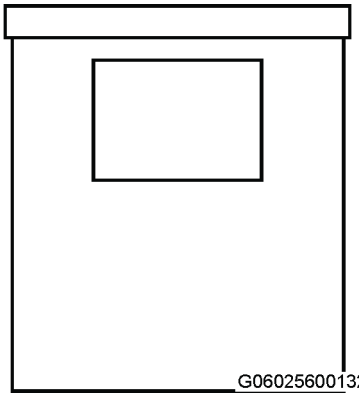
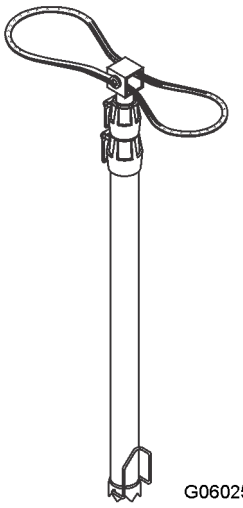
CODE	USED ON
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HAT	Desert/Urban, Type I General Purpose / (R/S) (WP 0035)
HAU	Snow/Alpine, Type I General Purpose / (R/S) (WP 0036)
HAV	Woodland, Type II Communications / (R/T) (WP 0037)
HAW	Desert/Urban, Type II Communications / (R/T) (WP 0038)
HAX	Snow/Alpine, Type II Communications / (R/T) (WP 0039)

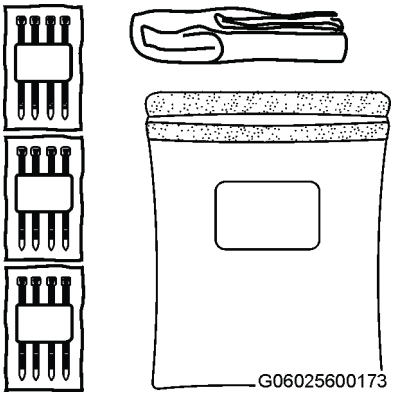
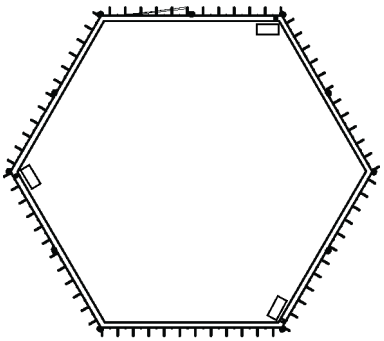
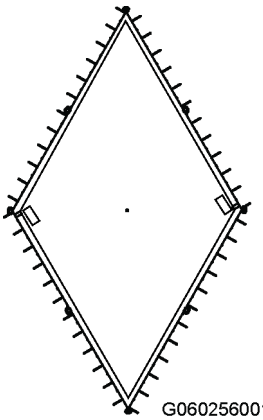
Column (5)U/I: Unit of Issue (U/I) indicates the physical measurement or count of the item as issued per the National Stock Number shown in column (2).

Column (6)Qty Rqr: Indicates the quantity required.

Table 1. Components of End Item List

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
1	1080-01-682-2085  G06025600053	BAG, CAMOUFLAGE NET, SUPPORT ULCANS I (part of 13): ULA311 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
2	1080-01-682-2245  G06025600053	BAG, CAMOUFLAGE NET, ULCANS I, WOODLAND (part of 3): INULCSCBWLDRS (1M877)	HAS	EA	1
3	1080–01–682–2070  G06025600050	CAMOUFLAGE SCREENING SYSTEM, GENERAL PURPOSE / (R/S), ULCANS I, WOODLAND: (includes: items 2, 8, 9, 10) INULCSCSWLDRS (8C3W9)	HAS	EA	1

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
4	8340–01–684–8600  G06025600132	CASE, TENT COMPONENT KIT (part of 13): INULCSTB (1M877)	HAS, HAT, HAU, HAV ,HAW ,HAX	EA	1
5	1080–01–685–3227 	CLOTH, CAMOUFLAGE PATTERN, RADAR SCATTERING, ULCANS I REPAIR FABRIC, WOODLAND (part of 8): FP-NET-N03-3093-REP (8C3W9)	HAS	EA	1
6	8340–01–684–8650  G06025600007	PIN, TENT (part of 13): ULP900 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	20
7	1080-01-682-2103  G06025600055	POLE, SUPPORT TELESCOPIC, 5.4 to 13.8 ft (part of 13): CNSU-3/44.30id26-OGREEN6014-PpKkSmL (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	5

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
8	1080-01-682-2272  G06025600173	REPAIR KIT, CAMOUFLAGE NET SET, GENERAL PURPOSE / (R/S), ULCANS I, WOODLAND (part of 3): (includes 5 and 8) INULCRKWLDRS (8C3W9)	HAS	EA	1
9	1080-01-682-2308  G06025600171	SCREEN, CAMOUFLAGE, HEXAGON, GENERAL PURPOSE / (R/S), ULCANS I, WOODLAND (part of 3): FP-NET-N03-3093-HEX (8C3W9)	HAS	EA	1
10	1080-01-682-2302  G06025600170	SCREEN, CAMOUFLAGE, RHOMBIC, GENERAL PURPOSE / (R/S), ULCANS I, WOODLAND (part of 3): FP-NET-N03-3093-RHO (8C3W9)	HAS	EA	1

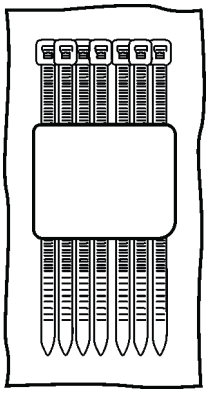
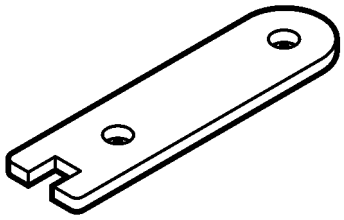
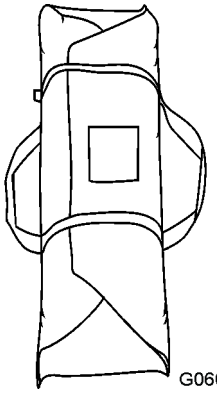
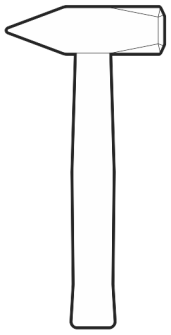
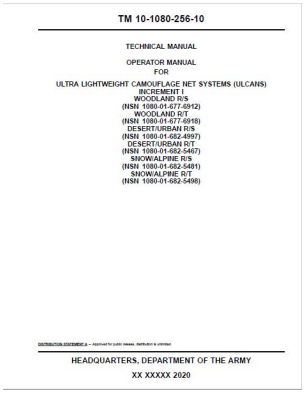
(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
11	5975-01-682-2215 	STRAP, TIE DOWN, ELECTRICAL COMPONENTS, 7-INCH GREEN (PART OF 8): AL-07-50-45-300 (1M877)	HAS, HAV	EA	1
12	5120–01–685–5649  G06025600264	WRENCH, SPANNER (part of 13): 40044046 (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
13	1080-01-682-2230  G06025600005	SUPPORT, CAMOUFLAGE SCREENING SYSTEM, ULCANS I: (includes: items 1, 4, 6, 7, 11) A1-ULCSS (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1

Table 2. Basic Issue Items List

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
1	5120–00–900–6103  G06025600006	HAMMER, HAND (stowed in support system carrying case): 11037 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
2	 TM 10-1080-256-10 TECHNICAL MANUAL OPERATOR MANUAL FOR ULTRA LIGHTWEIGHT CAMOUFLAGE NET SYSTEMS (ULCANS) INCREMENT I WOODLAND R/S (NSN 1080-01-677-6912) WOODLAND R/T (NSN 1080-01-677-6918) DESERT/URBAN R/S (NSN 1080-01-682-4997) DESERT/URBAN R/T (NSN 1080-01-682-5467) SNOW/ALPINE R/S (NSN 1080-01-682-5491) SNOW/ALPINE R/T (NSN 1080-01-682-5498) HEADQUARTERS, DEPARTMENT OF THE ARMY XX XXXXX 2020	TECHNICAL MANUAL TM 10-1080-256-10 (stowed in screen system carrying case): TY25326 (OXWZ3)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1

END OF WORK PACKAGE

OPERATOR

COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LIST
DESERT/URBAN TYPE I GENERAL PURPOSE / (R/S)

INTRODUCTION

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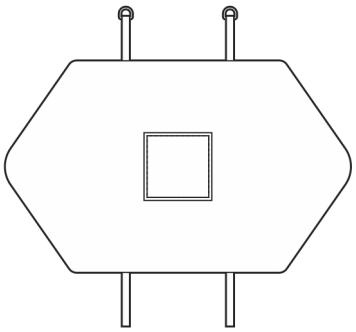
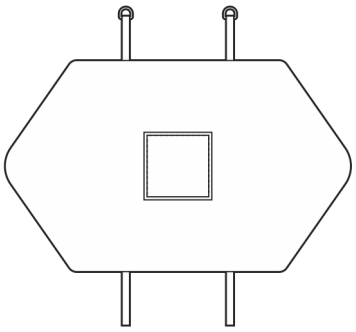
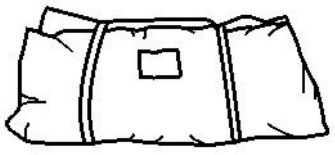
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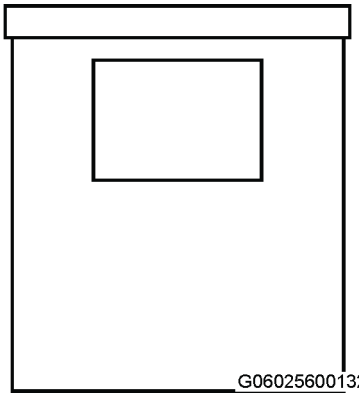
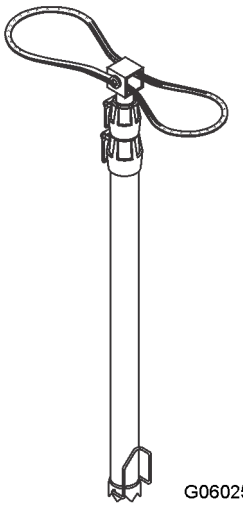
CODE	USED ON
HAS	Woodland, Type I General Purpose / (R/S) (WP 0034)
HAT	Desert/Urban, Type I General Purpose / (R/S) (this WP)
HAU	Snow/Alpine, Type I General Purpose / (R/S) (WP 0036)
HAV	Woodland, Type II Communications / (R/T) (WP 0037)
HAW	Desert/Urban, Type II Communications / (R/T) (WP 0038)
HAX	Snow/Alpine, Type II Communications / (R/T) (WP 0039)

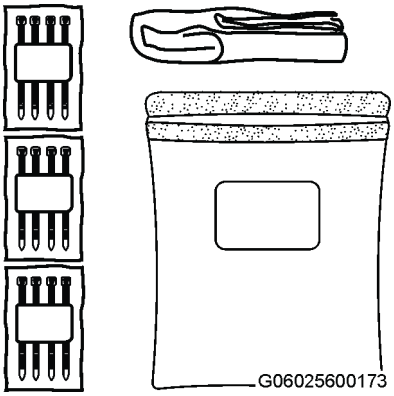
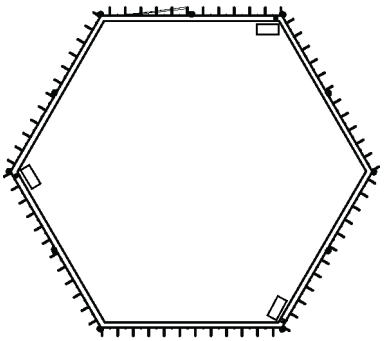
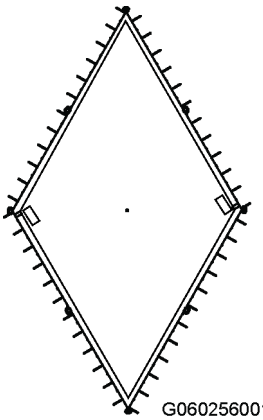
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1	1080-01-682-2085  G06025600053	BAG, CAMOUFLAGE NET, SUPPORT ULCANS I (part of 13): ULA311 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
2	1080–01–682–5760  G06025600053	BAG, CAMOUFLAGE NET, ULCANS I, DESERT/URBAN (part of 3): INULCSCBDURS (1M877)	HAT	EA	1
3	1080-01-682-5754  G06025600050	CAMOUFLAGE SCREENING SYSTEM, COMMUNICATIONS / (R/S), ULCANS I, DESERT/URBAN: (includes: items 2, 8, 9, 10) INULCSCSDURS (8C3W9)	HAT	EA	1

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
4	8340–01–684–8600  G06025600132	CASE, TENT COMPONENT KIT (part of 13): INULCSTB (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
5	1080–01–685–3765 	CLOTH, CAMOUFLAGE PATTERN, RADAR TRANSPARENT, ULCANS I REPAIR FABRIC, WOODLAND (part of 8): FP-NET-N02-2093-REP (8C3W9)	HAT	EA	1
6	8340–01–684–8650  G06025600007	PIN, TENT (part of 13): ULP900 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	20
7	1080-01-682-2103  G06025600055	POLE, SUPPORT TELESCOPIC, 5.4 to 13.8 ft (part of 13): CNSU-3/44.30id26-OGREEN6014-PpKkSmL (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	5

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
8	1080-01-682-5583  G06025600173	REPAIR KIT, CAMOUFLAGE NET SET, COMMUNICATIONS / (R/T), ULCANS I, DESERT/URBAN (part of 3): (includes 5 and 8) INULCRKDURS (8C3W9)	HAT	EA	1
9	1080-01-682-5572  G06025600171	SCREEN, CAMOUFLAGE, HEXAGON, COMMUNICATIONS / (R/T), ULCANS I, DESERT/URBAN (part of 3): FP-NET-N03-3077-HEX (8C3W9)	HAT	EA	1
10	1080-01-682-5556  G06025600170	SCREEN, CAMOUFLAGE, RHOMBIC, COMMUNICATIONS / (R/T), ULCANS I, DESERT/URBAN (part of 3): FP-NET-N03-3077-RHO (8C3W9)	HAT	EA	1

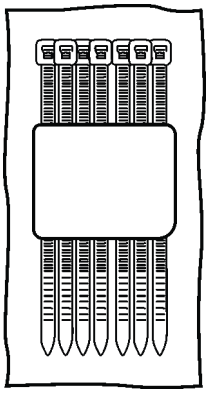
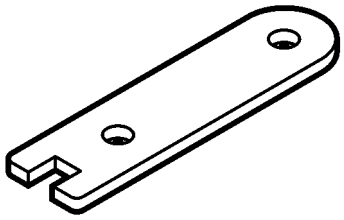
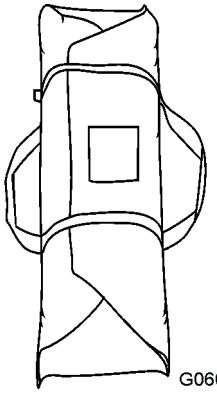
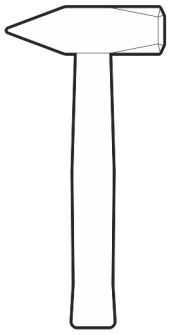
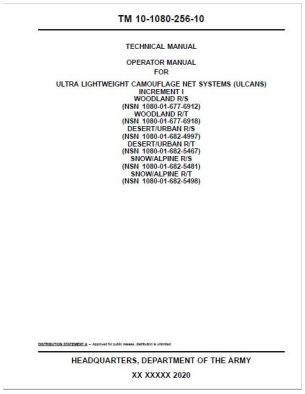
(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
11	5975-01-683-3204 	STRAP, TIE DOWN, ELECTRICAL COMPONENTS, 7-INCH TAN (PART OF 8): AL-07-50-9-C (1M877)	HAT, HAW	EA	1
12	5120–01–685–5649  G06025600264	WRENCH, SPANNER (part of 13): 40044046 (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
13	1080-01-682-2230  G06025600005	SUPPORT, CAMOUFLAGE SCREENING SYSTEM, ULCANS I: (includes: items 1, 4, 6, 7, 11) A1-ULCSS (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1

Table 2. Basic Issue Items List

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
1	5120–00–900–6103  G06025600006	HAMMER, HAND (stowed in screen system carrying case): 11037 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
2	 TM 10-1080-256-10 TECHNICAL MANUAL OPERATOR MANUAL FOR ULTRA LIGHTWEIGHT CAMOUFLAGE NET SYSTEMS (ULCANS) INCREMENT I WOODLAND R/S (NSN 1080-01-677-6912) WOODLAND R/T (NSN 1080-01-677-6918) DESERT/URBAN R/S (NSN 1080-01-682-4997) DESERT/URBAN R/T (NSN 1080-01-682-5467) SNOW/ALPINE R/S (NSN 1080-01-682-5491) SNOW/ALPINE R/T (NSN 1080-01-682-5498) HEADQUARTERS, DEPARTMENT OF THE ARMY XX XXXXX 2020	TECHNICAL MANUAL TM 10-1080-256-10 (stowed in screen system carrying case): TY25326 (OXWZ3)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1

END OF WORK PACKAGE

OPERATOR

COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LIST
SNOW/ALPINE TYPE I GENERAL PURPOSE / (R/S)

INTRODUCTION

Scope

This work package lists COEI and BII for the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I to help you inventory items for safe and efficient operation of the equipment.

General

The COEI and BII information is divided into the following lists.

Components of End Item (COEI). This list is for information purposes only and is not authority to requisition replacements. These items are part of the ULCANS Increment I. As part of the end item, these must be with the end item whenever it is issued or transferred between property accounts. Items of COEI are removed and separately packaged for transportation or shipment only when necessary. Illustrations are furnished to help you find and identify the items.

Basic Issue Items (BII). These essential items are required to place the ULCANS Increment I in operation, to operate it, and to do emergency repairs. Although shipped separately packaged, BII must be with the ULCANS Increment I during operation and when it is transferred between property accounts. Listing these items is your authority to request/requisition them for replacement based on authorization of the end item by the TOE/MTOE. Illustrations are furnished to help you find and identify the items.

Explanation of Columns

Column (1) Illus Number: Gives you the number of the item illustrated.

Column (2) National Stock Number (NSN): Identifies the stock number of the item to be used for requisitioning purposes.

Column (3) Description, CAGEC, and Part Number: Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The stowage location of COEI and BII is also included in this column. The last line below the description is the CAGEC (Commercial and Government Entity Code) (in parentheses) and the part number.

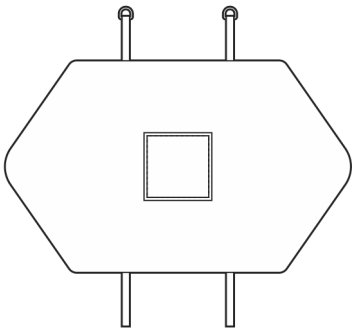
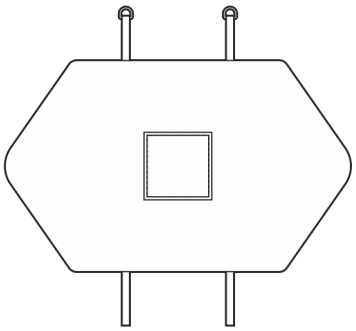
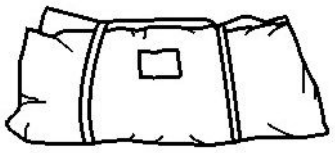
Column (4) Usable on Code: Gives you a code if the item you need is not the same for different models of equipment.

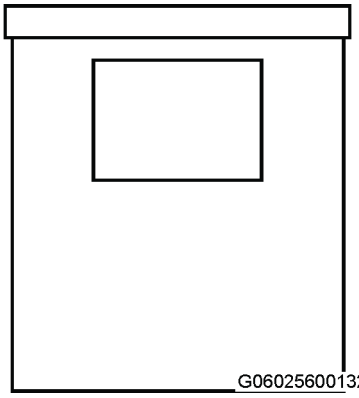
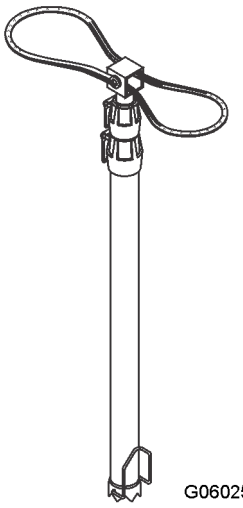
CODE	USED ON
HAS	Woodland, Type I General Purpose / (R/S) (WP 0034)
HAT	Desert/Urban, Type I General Purpose / (R/S) (WP 0035)
HAU	Snow/Alpine, Type I General Purpose / (R/S) (this WP)
HAV	Woodland, Type II Communications / (R/T) (WP 0037)
HAW	Desert/Urban, Type II Communications / (R/T) (WP 0038)
HAX	Snow/Alpine, Type II Communications / (R/T) (WP 0039)

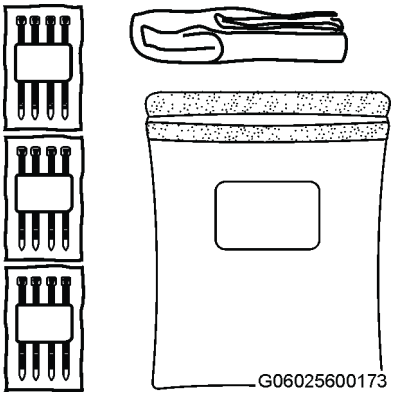
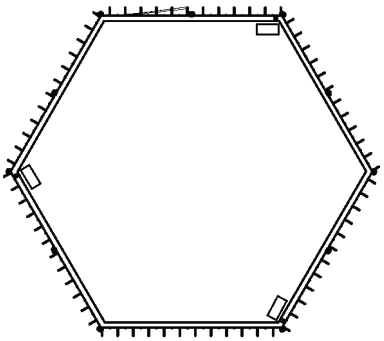
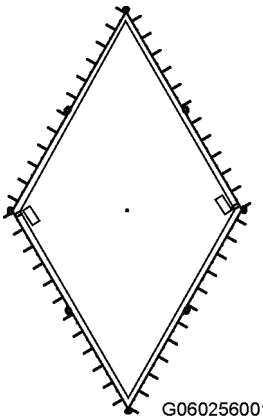
Column (5) U/I: Unit of Issue (U/I) indicates the physical measurement or count of the item as issued per the National Stock Number shown in column (2).

Column (6) Qty Rqr: Indicates the quantity required.

Table 1. Components of End Item List

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
1	1080-01-682-2085  G06025600053	BAG, CAMOUFLAGE NET, SUPPORT ULCANS I (part of 13): ULA311 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
2	1080-01-682-5937  G06025600053	BAG, CAMOUFLAGE NET, ULCANS I, SNOW/ALPINE (part of 3): INULCSCBSARS (1M877)	HAU	EA	1
3	1080-01-682-5929  G06025600050	CAMOUFLAGE SCREENING SYSTEM, GENERAL PURPOSE / (R/S), ULCANS I, SNOW/ALPINE: (includes: items 2, 8, 9, 10) INULCSCSSARS (8C3W9)	HAU	EA	1

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
4	8340–01–684–8600  G06025600132	CASE, TENT COMPONENT KIT (part of 11): INULCSTB (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
5	1080–01–685–3481 	CLOTH, CAMOUFLAGE PATTERN, RADAR SCATTERING, ULCANS I REPAIR FABRIC, SNOW/ALPINE (part of 8): FP-NET-N03-3078-REP (8C3W9)	HAU	EA	1
6	8340–01–684–8650  G06025600007	PIN, TENT (part of 11): ULP900 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	20
7	1080-01-682-2103  G06025600055	POLE, SUPPORT TELESCOPIC, 5.4 to 13.8 ft (part of 11): CNSU-3/44.30id26-OGREEN6014-PpKkSmL (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	5

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
8	1080–01–682–5974  G06025600173	REPAIR KIT, CAMOUFLAGE NET SET, GENERAL PURPOSE / (R/S), ULCANS I, SNOW/ALPINE (part of 3): (includes 5 and 8) INULCRKSARS (8C3W9)	HAU	EA	1
9	1080-01-682-5961  G06025600171	SCREEN, CAMOUFLAGE, HEXAGON, GENERAL PURPOSE / (R/S), ULCANS I, SNOW/ALPINE (part of 3): FP-NET-N03-3078-HEX (8C3W9)	HAU	EA	1
10	1080-01-682-5954  G06025600170	SCREEN, CAMOUFLAGE, RHOMBIC, GENERAL PURPOSE / (R/S), ULCANS I, SNOW/ALPINE (part of 3): FP-NET-N03-3078-RHO (8C3W9)	HAU	EA	1

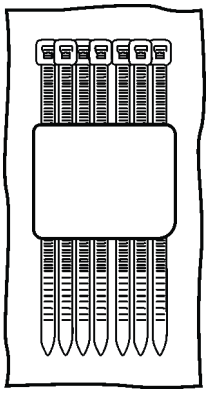
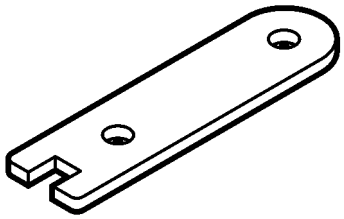
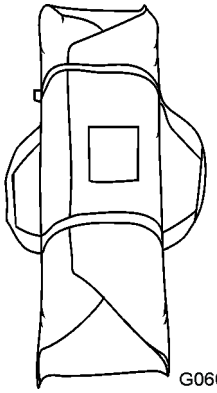
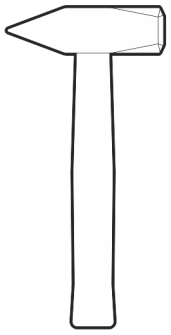
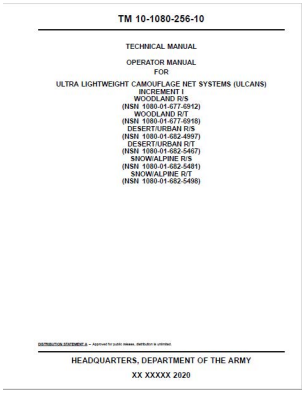
(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
11	5975-01-683-3213 	STRAP, TIE DOWN, ELECTRICAL COMPONENTS, 7-INCH GREY (PART OF 8): AL-07-50-47-C (1M877)	HAU, HAX	EA	1
12	5120–01–685–5649  G06025600264	WRENCH, SPANNER (part of 11): 40044046 (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
13	1080-01-682-2230  G06025600005	SUPPORT, CAMOUFLAGE SCREENING SYSTEM, ULCANS I: (includes: items 1, 4, 6, 7, 11) A1-ULCSS (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1

Table 2. Basic Issue Items List

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
1	5120–00–900–6103  G06025600006	HAMMER, HAND (stowed in screen system carrying case): 11037 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
2		TECHNICAL MANUAL TM 10-1080-256-10 (stowed in screen system carrying case): TY25326 (OXWZ3)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1

END OF WORK PACKAGE

OPERATOR

COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LIST
WOODLAND TYPE II COMMUNICATIONS / (R/T)

INTRODUCTION

Scope

This work package lists COEI and BII for the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I to help you inventory items for safe and efficient operation of the equipment.

General

The COEI and BII information is divided into the following lists.

Components of End Item (COEI). This list is for information purposes only and is not authority to requisition replacements. These items are part of the ULCANS Increment I. As part of the end item, these must be with the end item whenever it is issued or transferred between property accounts. Items of COEI are removed and separately packaged for transportation or shipment only when necessary. Illustrations are furnished to help you find and identify the items.

Basic Issue Items (BII). These essential items are required to place the ULCANS Increment I in operation, to operate it, and to do emergency repairs. Although shipped separately packaged, BII must be with the ULCANS Increment I during operation and when it is transferred between property accounts. Listing these items is your authority to request/requisition them for replacement based on authorization of the end item by the TOE/MTOE. Illustrations are furnished to help you find and identify the items.

Explanation of Columns

Column (1) Illus Number: Gives you the number of the item illustrated.

Column (2) National Stock Number (NSN): Identifies the stock number of the item to be used for requisitioning purposes.

Column (3) Description, CAGEC, and Part Number: Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The stowage location of COEI and BII is also included in this column. The last line below the description is the CAGEC (Commercial and Government Entity Code) (in parentheses) and the part number.

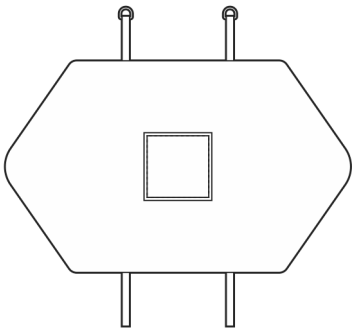
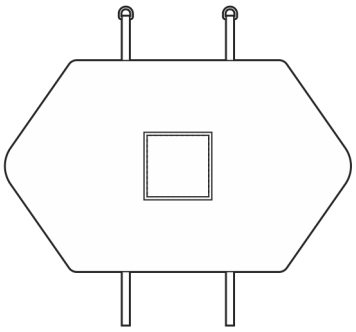
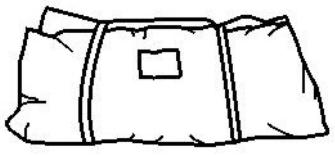
Column (4) Usable on Code: Gives you a code if the item you need is not the same for different models of equipment.

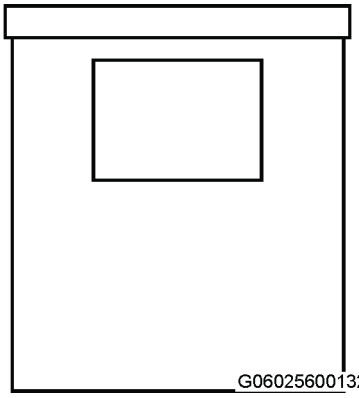
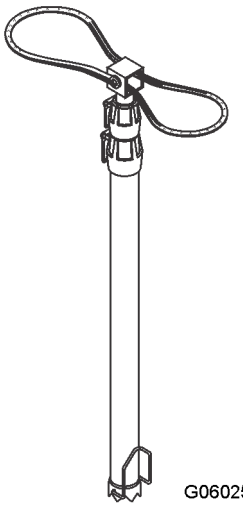
CODE	USED ON
HAS	Woodland, Type I General Purpose / (R/S) (WP 0034)
HAT	Desert/Urban, Type I General Purpose / (R/S) (WP 0035)
HAU	Snow/Alpine, Type I General Purpose / (R/S) (WP 0036)
HAV	Woodland, Type II Communications / (R/T) (this WP)
HAW	Desert/Urban, Type II Communications / (R/T) (WP 0038)
HAX	Snow/Alpine (S/A), Type II Communications / (R/T) (WP 0039)

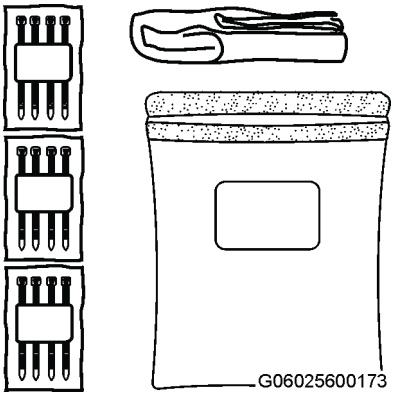
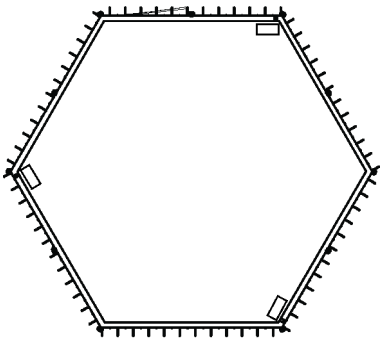
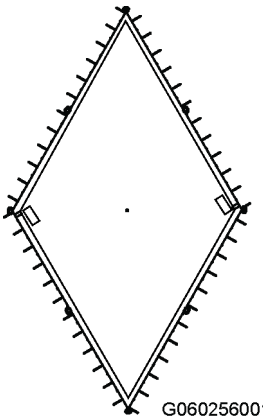
Column (5) U/I: Unit of Issue (U/I) indicates the physical measurement or count of the item as issued per the National Stock Number shown in column (2).

Column (6) Qty Rqr: Indicates the quantity required.

Table 1. Components of End Item List

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
1	1080-01-682-2085  G06025600053	BAG, CAMOUFLAGE NET, SUPPORT ULCANS I (part of 13): ULA311 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
2	1080-01-682-2278  G06025600053	BAG, CAMOUFLAGE NET, ULCANS I, WOODLAND (part of 3): INULCSCBWLDRT (1M877)	HAV	EA	1
3	1080-01-682–5634  G06025600050	CAMOUFLAGE SCREENING SYSTEM, COMMUNICATIONS / (R/T), ULCANS I, WOODLAND: (includes: items 2, 8, 9, 10) INULCSCSWLDRT (8C3W9)	HAV	EA	1

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
4	8340–01–684–8600  G06025600132	CASE, TENT COMPONENT KIT (part of 11): INULCSTB (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
5	1080–01–685–3760 	CLOTH, CAMOUFLAGE PATTERN, RADAR TRANSPARENT, ULCANS I REPAIR FABRIC, WOODLAND (part of 8): FP-NET-N02-2093-REP (8C3W9)	HAV	EA	1
6	8340–01–684–8650  G06025600007	PIN, TENT (part of 11): ULP900 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	20
7	1080-01-682-2103  G06025600055	POLE, SUPPORT TELESCOPIC, 5.4 to 13.8 ft (part of 11): CNSU-3/44.30id26-OGREEN6014-PpKkSmL (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	5

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
8	1080-01-682-2286  G06025600173	REPAIR KIT, CAMOUFLAGE NET SET, COMMUNICATIONS / (R/T), ULCANS I, WOODLAND (part of 3): (includes 5 and 8) INULCRKWLDRT (8C3W9)	HAV	EA	1
9	1080-01-682-2317  G06025600171	SCREEN, CAMOUFLAGE, HEXAGON, COMMUNICATIONS / (R/T), ULCANS I, WOODLAND (part of 3): FP-NET-N02-2093-HEX (8C3W9)	HAV	EA	1
10	1080-01-682-2312  G06025600170	SCREEN, CAMOUFLAGE, RHOMBIC, COMMUNICATIONS / (R/T), ULCANS I, WOODLAND (part of 3): FP-NET-N02-2093-RHO (8C3W9)	HAV	EA	1

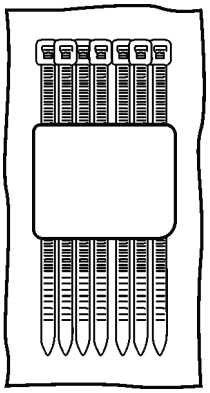
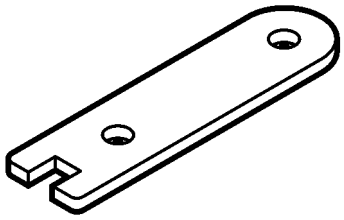
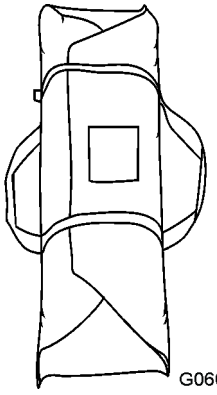
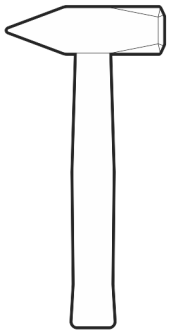
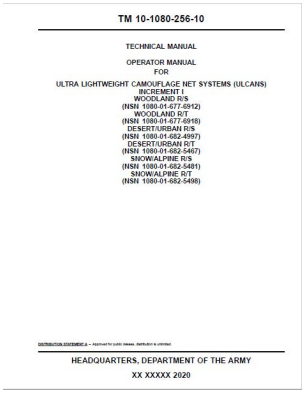
(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
11	5975-01-682-2215 	STRAP, TIE DOWN, ELECTRICAL COMPONENTS, 7-INCH GREEN (PART OF 8): AL-07-50-45-300 (1M877)	HAS, HAV	EA	1
12	5120–01–685–5649  G06025600264	WRENCH, SPANNER (part of 11): 40044046 (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
13	1080-01-682-2230  G06025600005	SUPPORT, CAMOUFLAGE SCREENING SYSTEM, ULCANS I: (includes: items 1, 4, 6, 7, 11) A1-ULCSS (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1

Table 2. Basic Issue Items List

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
1	5120–00–900–6103  G06025600006	HAMMER, HAND (stowed in screen system carrying case): 11037 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
2	 TM 10-1080-256-10 TECHNICAL MANUAL OPERATOR MANUAL FOR ULTRA LIGHTWEIGHT CAMOUFLAGE NET SYSTEMS (ULCANS) INCREMENT I WOODLAND R/S (NSN 1080-01-677-6912) WOODLAND R/T (NSN 1080-01-677-6918) DESERT/URBAN R/S (NSN 1080-01-682-4997) DESERT/URBAN R/T (NSN 1080-01-682-5467) SNOW/ALPINE R/S (NSN 1080-01-682-5491) SNOW/ALPINE R/T (NSN 1080-01-682-5498) HEADQUARTERS, DEPARTMENT OF THE ARMY XX XXXXX 2020	TECHNICAL MANUAL TM 10-1080-256-10 (stowed in screen system carrying case): TY25326 (OXWZ3)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1

END OF WORK PACKAGE

OPERATOR

COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LIST
DESERT/URBAN TYPE II COMMUNICATIONS / (R/T)

INTRODUCTION

Scope

This work package lists COEI and BII for the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I to help you inventory items for safe and efficient operation of the equipment.

General

The COEI and BII information is divided into the following lists.

Components of End Item (COEI). This list is for information purposes only and is not authority to requisition replacements. These items are part of the ULCANS Increment I. As part of the end item, these must be with the end item whenever it is issued or transferred between property accounts. Items of COEI are removed and separately packaged for transportation or shipment only when necessary. Illustrations are furnished to help you find and identify the items.

Basic Issue Items (BII). These essential items are required to place the ULCANS Increment I in operation, to operate it, and to do emergency repairs. Although shipped separately packaged, BII must be with the ULCANS Increment I during operation and when it is transferred between property accounts. Listing these items is your authority to request/requisition them for replacement based on authorization of the end item by the TOE/MTOE. Illustrations are furnished to help you find and identify the items.

Explanation of Columns

Column (1) Illus Number: Gives you the number of the item illustrated.

Column (2) National Stock Number (NSN): Identifies the stock number of the item to be used for requisitioning purposes.

Column (3) Description, CAGEC, and Part Number: Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The stowage location of COEI and BII is also included in this column. The last line below the description is the CAGEC (Commercial and Government Entity Code) (in parentheses) and the part number.

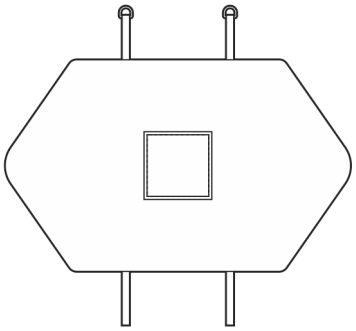
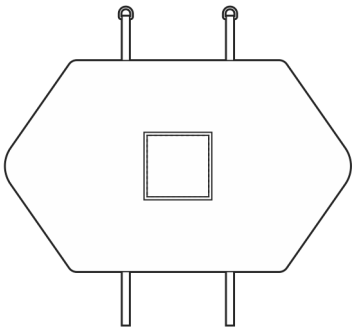
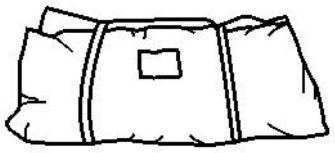
Column (4) Usable on Code: Gives you a code if the item you need is not the same for different models of equipment.

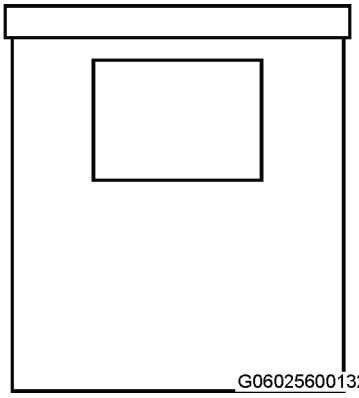
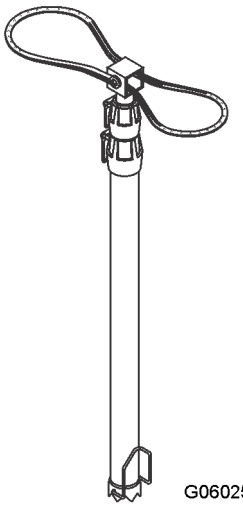
CODE	USED ON
HAS	Woodland, Type I General Purpose / (R/S) (WP 0034)
HAT	Desert/Urban, Type I General Purpose / (R/S) (WP 0035)
HAU	Snow/Alpine, Type I General Purpose / (R/S) (WP 0036)
HAV	Woodland, Type II Communications / (R/T) (WP 0037)
HAW	Desert/Urban, Type II Communications / (R/T) (this WP)
HAX	Snow/Alpine, Type II Communications / (R/T) (WP 0039)

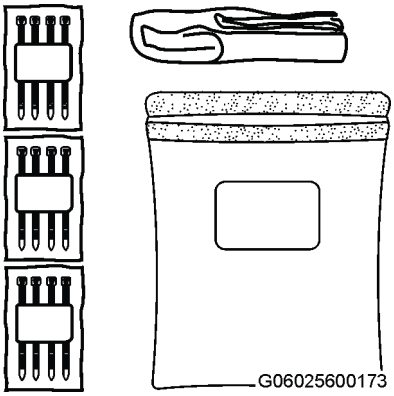
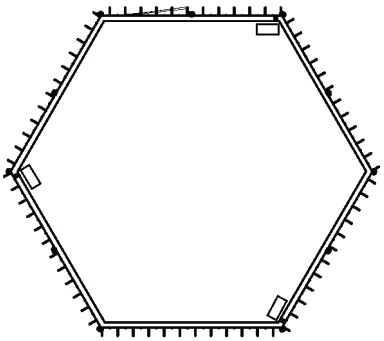
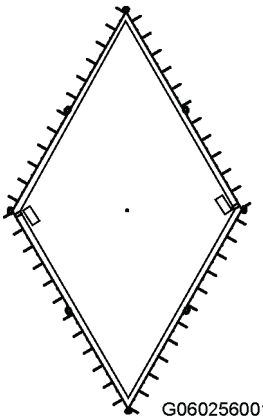
Column (5) U/I: Unit of Issue (U/I) indicates the physical measurement or count of the item as issued per the National Stock Number shown in column (2).

Column (6) Qty Rqr: Indicates the quantity required.

Table 1. Components of End Item List

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
1	1080-01-682-2085  G06025600053	BAG, CAMOUFLAGE NET, SUPPORT ULCANS I (part of 13): ULA311 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
2	1080-01-682-5785  G06025600053	BAG, CAMOUFLAGE NET, ULCANS I, DESERT/URBAN (part of 3): INULCSCBDURT (1M877)	HAW	EA	1
3	1080-01-682-5775  G06025600050	CAMOUFLAGE SCREENING SYSTEM, GENERAL PURPOSE / (R/T), ULCANS I, DESERT/URBAN: (includes: items 2, 8, 9, 10) INULCSCSDURT (8C3W9)	HAW	EA	1

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
4	8340–01–684–8600  G06025600132	CASE, TENT COMPONENT KIT (part of 11): INULCSTB (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
5	1080–01–685–3690 	CLOTH, CAMOUFLAGE PATTERN, RADAR TRANSPARENT, ULCANS I REPAIR FABRIC, DESERT/URBAN (part of 8): FP-NET-N02-2054-REP (8C3W9)	HAW	EA	1
6	8340–01–684–8650  G06025600007	PIN, TENT (part of 11): ULP900 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	20
7	1080-01-682-2103  G06025600055	POLE, SUPPORT TELESCOPIC, 5.4 to 13.8 ft (part of 11): CNSU-3/44.30id26-OGREEN6014-PpKkSmL (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	5

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
8	1080-01-682-5902  G06025600173	REPAIR KIT, CAMOUFLAGE NET SET, GENERAL PURPOSE / (R/S), ULCANS I, DESERT/URBAN (part of 3): (includes 5 and 8) INULCRKDURT (8C3W9)	HAW	EA	1
9	1080-01-682-5822  G06025600171	SCREEN, CAMOUFLAGE, HEXAGON, GENERAL PURPOSE / (R/S), ULCANS I, DESERT/URBAN (part of 3): FP-NET-N02-2054-HEX (8C3W9)	HAW	EA	1
10	1080-01-682-5809  G06025600170	SCREEN, CAMOUFLAGE, RHOMBIC, GENERAL PURPOSE / (R/S), ULCANS I, DESERT/URBAN (part of 3): FP-NET-N02-2054-RHO (8C3W9)	HAW	EA	1

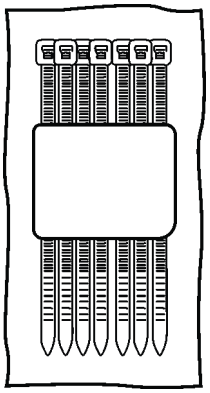
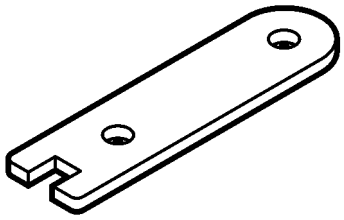
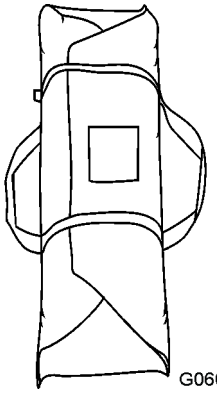
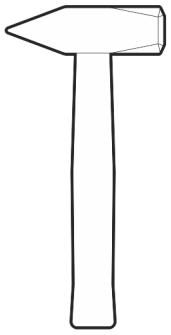
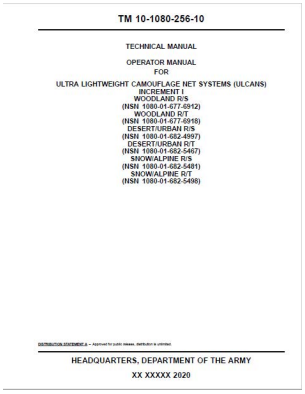
(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
11	5975-01-683-3204 	STRAP, TIE DOWN, ELECTRICAL COMPONENTS, 7-INCH TAN (PART OF 8): AL-07-50-9-C (1M877)	HAT, HAW	EA	1
12	5120–01–685–5649  G06025600264	WRENCH, SPANNER (part of 11): 40044046 (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
13	1080-01-682-2230  G06025600005	SUPPORT, CAMOUFLAGE SCREENING SYSTEM, ULCANS I: (includes: items 1, 4, 6, 7, 11) A1-ULCSS (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1

Table 2. Basic Issue Items List

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
1	5120–00–900–6103  G06025600006	HAMMER, HAND (stowed in screen system carrying case): 11037 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
2		TECHNICAL MANUAL TM 10-1080-256-10 (stowed in screen system carrying case): TY25326 (OXWZ3)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1

END OF WORK PACKAGE

OPERATOR

COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LIST
SNOW/ALPINE TYPE II COMMUNICATIONS / (R/T)

INTRODUCTION

Scope

This work package lists COEI and BII for the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I to help you inventory items for safe and efficient operation of the equipment.

General

The COEI and BII information is divided into the following lists.

Components of End Item (COEI). This list is for information purposes only and is not authority to requisition replacements. These items are part of the ULCANS Increment I. As part of the end item, these must be with the end item whenever it is issued or transferred between property accounts. Items of COEI are removed and separately packaged for transportation or shipment only when necessary. Illustrations are furnished to help you find and identify the items.

Basic Issue Items (BII). These essential items are required to place the ULCANS Increment I in operation, to operate it, and to do emergency repairs. Although shipped separately packaged, BII must be with the ULCANS Increment I during operation and when it is transferred between property accounts. Listing these items is your authority to request/requisition them for replacement based on authorization of the end item by the TOE/MTOE. Illustrations are furnished to help you find and identify the items.

Explanation of Columns

Column (1) Item Number: Gives you the number of the item illustrated.

Column (2) National Stock Number (NSN): Identifies the stock number of the item to be used for requisitioning purposes.

Column (3) Description, CAGEC, and Part Number: Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The stowage location of COEI and BII is also included in this column. The last line below the description is the CAGEC (Commercial and Government Entity Code) (in parentheses) and the part number.

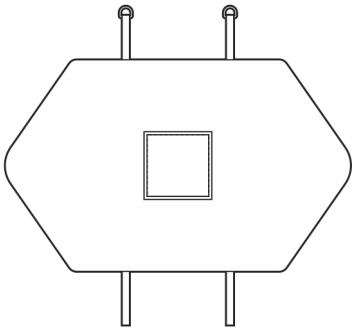
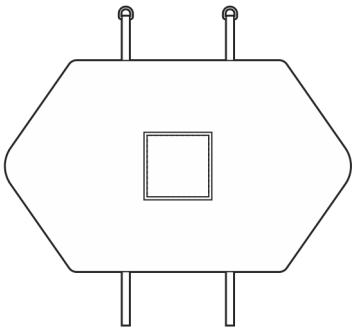
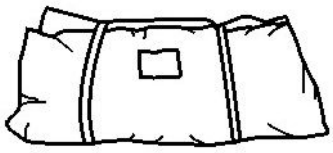
Column (4) Usable on Code: Gives you a code if the item you need is not the same for different models of equipment.

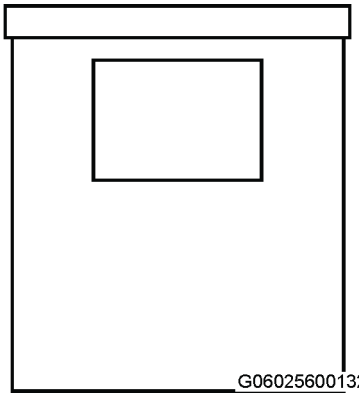
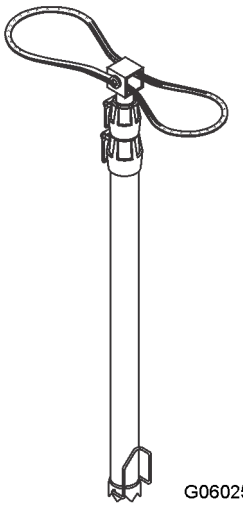
CODE	USED ON
HAS	Woodland, Type I General Purpose / (R/S) (WP 0034)
HAT	Desert/Urban, Type I General Purpose / (R/S) (WP 0035)
HAU	Snow/Alpine, Type I General Purpose / (R/S) (WP 0036)
HAV	Woodland, Type II Communications / (R/T) (WP 0037)
HAW	Desert/Urban, Type II Communications / (R/T) (WP 0038)
HAX	Snow/Alpine, Type II Communications / (R/T) (this WP)

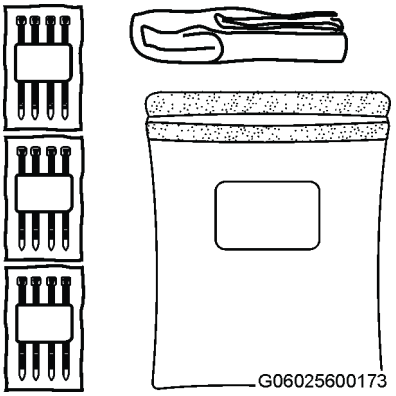
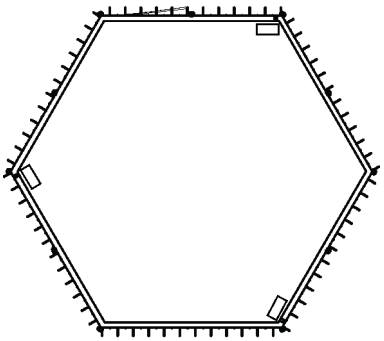
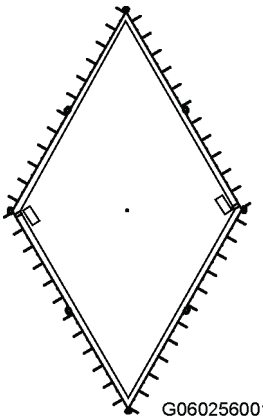
Column (5) U/I: Unit of Issue (U/I) indicates the physical measurement or count of the item as issued per the National Stock Number shown in column (2).

Column (6) Qty Rqr: Indicates the quantity required.

Table 1. Components of End Item List

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
1	1080-01-682-2085  G06025600053	BAG, CAMOUFLAGE NET, SUPPORT ULCANS I (part of 13): ULA311 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
2	1080-01-682-4937  G06025600053	BAG, CAMOUFLAGE NET, ULCANS I, SNOW/ALPINE (part of 3): INULCSCBSART (1M877)	HAX	EA	1
3	1080-01-682-4899  G06025600050	CAMOUFLAGE SCREENING SYSTEM, COMMUNICATIONS / (R/T), ULCANS I, SNOW/ALPINE: (includes: items 2, 8, 9, 10) INULCSCSSART (8C3W9)	HAX	EA	1

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
4	8340–01–684–8600  G06025600132	CASE, TENT COMPONENT KIT (part of 11): INULCSTB (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
5	1080–01–685–3769 	CLOTH, CAMOUFLAGE PATTERN, RADAR TRANSPARENT, ULCANS I REPAIR FABRIC, SNOW/ALPINE (part of 8): FP-NET-N02-2055-REP (8C3W9)	HAX	EA	1
6	8340–01–684–8650  G06025600007	PIN, TENT (part of 11): ULP900 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	20
7	1080-01-682-2103  G06025600055	POLE, SUPPORT TELESCOPIC, 5.4 to 13.8 ft (part of 11): CNSU-3/44.30id26-OGREEN6014-PpKkSmL (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	5

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
8	1080-01-682-4963  G06025600173	REPAIR KIT, CAMOUFLAGE NET SET, COMMUNICATIONS / (R/T), ULCANS I, SNOW/ALPINE (part of 3): (includes 5 and 8) INULCRKSART (8C3W9)	HAX	EA	1
9	1080-01-682-4947  G06025600171	SCREEN, CAMOUFLAGE, HEXAGON, COMMUNICATIONS / (R/T), ULCANS I, SNOW/ALPINE (part of 3): FP-NET-N02-2055-HEX (8C3W9)	HAX	EA	1
10	1080-01-682-4943  G06025600170	SCREEN, CAMOUFLAGE, RHOMBIC, COMMUNICATIONS / (R/T), ULCANS I, SNOW/ALPINE (part of 3): FP-NET-N02-2055-RHO (8C3W9)	HAX	EA	1

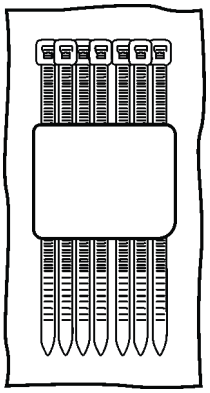
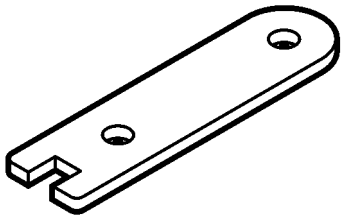
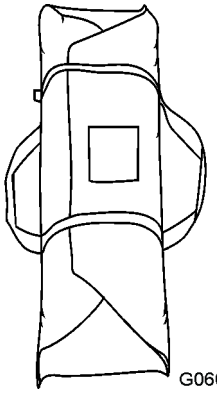
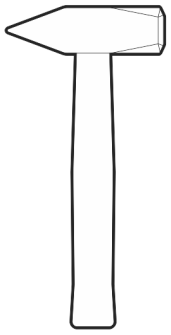
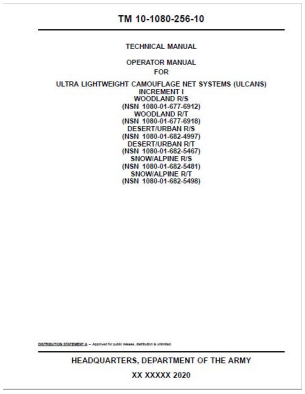
(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
11	5975-01-683–3213 	STRAP, TIE DOWN, ELECTRICAL COMPONENTS, 7-INCH GREY (PART OF 8): AL-07–50–47–C (1M877)	HAU, HAX	EA	1
12	5120–01–685–5649  G06025600264	WRENCH, SPANNER (part of 11): 40044046 (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
13	1080-01-682-2230  G06025600005	SUPPORT, CAMOUFLAGE SCREENING SYSTEM, ULCANS I: (includes: items 1, 4, 6, 7, 11) A1-ULCSS (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1

Table 2. Basic Issue Items List

(1) ITEM NUMBER	(2) NATIONAL STOCK NUMBER (NSN) AND ILLUSTRATION	(3) DESCRIPTION, PART NUMBER/(CAGEC)	(4) USABLE ON CODE	(5) U/I	(6) QTY RQR
1	5120–00–900–6103  G06025600006	HAMMER, HAND (stowed in screen system carrying case): 11037 (1M877)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
2		TECHNICAL MANUAL TM 10-1080-256-10 (stowed in screen system carrying case): TY25326 (OXWZ3)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1

END OF WORK PACKAGE

OPERATOR

ADDITIONAL AUTHORIZATION LIST (AAL)

ADDITIONAL AUTHORIZATION LIST (AAL) INTRODUCTION

Scope

This work package lists additional items you are authorized for the support of the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I.

General

This list identifies items that do not have to accompany the ULCANS Increment I and that do not have to be turned in with it. These items are all authorized to you by CTA, MTOE, TDA, or JTA.

Explanation of Columns in the AAL

Column (1) NATIONAL STOCK NUMBER (NSN). Identifies the stock number of the item to be used for requisitioning purposes.

Column (2) DESCRIPTION, PART NUMBER/(CAGEC). Identifies the Federal item name (in all capital letters) followed by a minimum description when needed. The last line below the description is the part number and the Commercial and Government Entity Code (CAGEC) (in parentheses).

Column (3) USABLE ON CODE. When applicable, gives you a code if the item you need is not the same for different models of equipment.

Column (4) U/I. Unit of Issue (U/I) indicates the physical measurement or count of the item as issued per the National Stock Number shown in column (1).

Column (5) QTY RECM. Indicates the quantity recommended.

Table 1. Additional Authorization List

(1) NATIONAL STOCK NUMBER (NSN)	(2) DESCRIPTION, PART NUMBER/(CAGEC)	(3) USABLE ON CODE	(4) U/I	(5) QTY RECM
1080-01-682-2097	Pole, Support Telescopic, 5.9 FT to 19.7 FT (1.6 m to 6 m) : CNSU-4/51.30ID26-OGREEN6014-PPKK (8C3W9)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1
3990-01-347-2629	Tie Down, Cargo, Vehicle: 2907000 (64559)	HAS, HAT, HAU, HAV, HAW, HAX	EA	1

END OF WORK PACKAGE

OPERATOR

EXPENDABLE AND DURABLE ITEMS LIST

INTRODUCTION

Scope

This work package lists expendable and durable items that you will need to operate and maintain the Ultra Lightweight Camouflage Net Systems (ULCANS) Increment I. This list is for information only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, Expendable/Durable items (except Medical, Class V, Repair Parts, and Heraldic items), CTA-50-909, Field and Garrison Furnishings and Equipment, or CTA 8-100, Army Medical Department Expendable/Durable items.

Explanation of Columns

Column (1) — Item Number. This number is assigned to the entry in the list and is referenced in the narrative instructions to identify the item.

Column (2) — Level. This column identifies the lowest level of maintenance that requires the listed item: C = Operator/Crew.

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

Column (4) — Item Name, Description, Commercial and Government Entity Code (CAGEC), and Part Number (P/N). This column provides the other information you need to identify the item.

Column (5) — 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 NUMBER	(2) LEVEL	(3) NATIONAL STOCK NUMBER (NSN)	(4) ITEM NAME, DESCRIPTION, PART NUMBER AND (CAGEC)	(5) U/I
1	C	8110-00-292-9783	DRUM, SHIPPING AND STORAGE: 110811 (6ALP9)	EA
2	C		GLOVES, MEN'S and WOMEN'S (STANDARD ISSUE): Various (58536)	EA
3	C		HELMET, ADVANCED COMBAT (STANDARD ISSUE): Various (81337)	EA
4	C	4240-01-630-7802	SPECTACLES, INDUSTRIAL: CH4701 (0S7V7)	EA

END OF WORK PACKAGE

OPERATOR

MANDATORY REPLACEMENT PARTS

INTRODUCTION

There are no mandatory replacement parts for the ULCANS, Increment I.

END OF WORK PACKAGE

OPERATOR

CRITICAL SAFETY ITEMS

INTRODUCTION

There are no critical safety items for the ULCANS, Increment I.

END OF WORK PACKAGE

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

INSTRUCTIONS FOR SUBMITTING THE DA FORM 2028

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TO: *(Forward to proponent of publication or form) (Include ZIP Code)*	**FROM:** *(Activity and location) (Include ZIP Code)*
US Army Tank-automotive and Armaments Command (TACOM) ATTN: AMTA-LCL-IMP/TECH PUBS MS 727 6501 E. 11 Mile Road, Detroit Arsenal, MI 48397-5000 usarmy.detroit.tacom.mbx.ilsc-tech-pubs@mail.mil	Your mailing address

PART I - ALL PUBLICATIONS (EXCEPT RPSTL) AND BLANK FORMS

PUBLICATION/FORM NUMBER, CHANGE NUMBER *(If applicable)*	PUBLICATION/ FORM DATE	TITLE
TM Number	Date of the TM	Title of the TM

For each comment, include as applicable: ***Comment number, work package number or data module code, page number, paragraph number, figure number, table number, recommended change, and reason for change.***

0007-3: Figure 2, Item 9 should show a lock washer. Currently shows a flat washer.

0018-2: Cleaning and inspection, Step 6, reference to governor support pin (14) is wrong reference. Reference should be changed to (12).

SAMPLE

TYPED NAME, GRADE/RANK, POSITION TITLE, E-MAIL ADDRESS	TELEPHONE NUMBER/DSN/ EXTENSION	SIGNATURE
Your Name	Your phone number	

TO: *(Forward to proponent of publication or form) (Include ZIP Code)*	**FROM:** *Activity and location) (Include ZIP Code)*	**DATE:**
US Army Tank-automotive and Armaments Command (TACOM) ATTN: AMTA-LCL-IMP/TECH PUBS MS 727 6501 E. 11 Mile Road, Detroit Arsenal, MI 48397-5000	Your mailing address	Date form filled out

PART II - REPAIR PARTS AND SPECIAL TOOLS LISTS

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SAMPLE

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, AND E-MAIL ADDRESS	TELEPHONE NUMBER/DSN/ EXTENSION	SIGNATURE
Your name	Your phone number	

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PUBLICATION/FORM NUMBER, CHANGE NUMBER *(If applicable)*	PUBLICATION/ FORM DATE	TITLE
TM 10-1080-256-10	10 March 2020	OPERATOR MANUAL FOR ULTRA LIGHTWEIGHT CAMOUFLAGE NET SYSTEMS (ULCANS) INCREMENT I

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TM 10-1080-256-10

10 MARCH 2020

By Order of the Secretary of the Army:

JAMES C. MCCONVILLE
General, United States Army
Chief of Staff

Official:

KATHLEEN S. MILLER
Administrative Assistant
to the Secretary of the Army
2001454

DISTRIBUTION:

Initially published in electronic media only. When funds become available, this publication will be distributed in accordance with the initial distribution number (IDN) 258176 requirements for TM 10-1080-256-10.

THE METRIC SYSTEM AND EQUIVALENTS

Linear measure

1 centimeter = 10 millimeters = 0.01 meters = 0.3937 inches
1 meter = 100 centimeters = 1000 millimeters = 39.37 inches
1 kilometer = 1000 meters = 0.621 miles

Weights

1 gram = 0.001 kilograms = 1000 milligrams = 0.035 ounces
1 kilogram = 1000 grams = 2.2 pounds
1 metric ton = 1000 kilograms = 1 megagram = 1.1 short tons

Liquid measure

1 milliliter = 0.001 liters = 0.0338 fluid ounces
1 liter = 1000 milliliters = 33.82 fluid ounces

Square measure

1 square (sq) centimeter = 100 sq millimeters = 0.155 sq inches
1 sq meter = 10,000 sq centimeters = 10.76 sq feet
1 sq kilometer = 1,000,000 sq meters = 0.0386 sq miles

Cubic measure

1 cubic (cu) centimeter = 1,000 cu millimeters = 0.06 cu inches
1 cu meter = 1,000,000 cu centimeters = 35.31 cu feet

Temperature

1.8 °C +32 = °F
5/9 (°F - 32) = °C
32 °F (degrees Fahrenheit) is equivalent to 0 °C (degrees Celsius)
90 °F is equivalent to 32.2 °C
212 °F is equivalent to 100 °C

APPROXIMATE CONVERSION FACTORS

To change	to	multiply by
inches (in)	centimeters (cm)	2.540
feet (ft)	meters (m)	0.305
yards (yd)	meters	0.914
miles (mi)	kilometers (km)	1.609
sq inches (in^2)	sq centimeters (cm^2)	6.451
sq feet (ft^2)	sq meters (m^2)	0.093
sq yards (yd^2)	sq meters	0.836
sq miles (mi^2)	sq kilometers (km^2)	2.590
acres (ac)	sq hectometers (hm^2)	0.405
cubic feet (ft^3)	cubic meters (m^3)	0.028
cubic yards (yd^3)	cubic meters	0.765
fluid ounces (fl oz)	milliliters (mL)	29.573
pints (pt)	liters (L)	0.473
quarts (qt)	liters	0.946
gallons (gal)	liters	3.785
ounces (oz)	grams (g)	28.349
pounds (lb)	kilograms (kg)	0.454
short tons (ton)	metric tons (t)	0.907
pound-feet (lbf·ft)	newton-meters (N·m)	1.356
pound-force (lbf)	kilonewtons (kN)	0.0044
pounds/sq inch (psi)	kilopascals (kPa)	6.895
miles/hour (mph)	kilometers/hour (km/h)	1.609
miles/hour	knots (kn)	0.869

To change	to	multiply by
centimeters	inches	0.394
meters	feet	3.280
meters	yards	1.094
kilometers	miles	0.621
sq centimeters	sq inches	0.155
sq meters	sq feet	10.764
sq meters	sq yards	1.196
sq kilometers	sq miles	0.386
sq hectometers	acres	2.471
cubic meters	cubic feet	35.315
cubic meters	cubic yards	1.308
milliliters	fluid ounces	0.034
liters	pints	2.113
liters	quarts	1.057
liters	gallons	0.264
grams	ounces	0.035
kilograms	pounds	2.205
metric tons	short tons	1.102
newton-meters	pound-feet	0.738
kilonewtons	pound-force	224.8
kilopascals	pounds/sq inch	0.145
kilometers/hour	miles/hour	0.621
knots	miles/hour	1.151

PIN: 107355-000