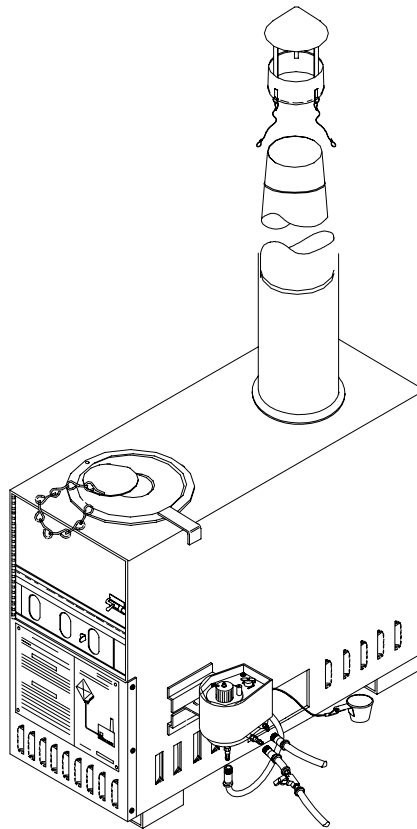


TECHNICAL MANUAL

OPERATOR'S AND ORGANIZATIONAL
MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND
SPECIAL TOOLS LISTS)

SPACE HEATER ARCTIC
(NSN 4520-01-444-2375)



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HEADQUARTERS, DEPARTMENT OF THE ARMY

01 DECEMBER 2001

TECHNICAL MANUAL

OPERATOR'S AND ORGANIZATIONAL MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS)

SPACE HEATER ARCTIC (SHA)

(NSN 4520-01-444-2375)

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter together with DA Form 2028 (Recommended Changes to Publications and Blank Forms), located in the back of this manual, directly to: Commander, U.S. Army Soldier and Biological Chemical Command, ATTN: AMSSB-RIM-E(N), Kansas Street, Natick, MA 01760-5052. You may also send in your recommended changes via electronic mail directly to amssb-rim-e@natick-amed02.army.mil. A reply will be furnished to you. Instructions for sending an electronic 2028 may be found at the back of this manual immediately preceding the hard copy 2028.

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TM 10-4520-261-12&P

HOW TO USE THIS MANUAL

This Manual contains General Information, Operating Instructions, Operator Preventive Maintenance Checks and Services (PCMS), Troubleshooting, and Maintenance/Repair instructions for the Space Heater Arctic (SHA).

Chapter 1 contains introductory information on the SHA and its associated equipment as well as a Theory of Operation. Chapter 2 includes operating instructions under usual and unusual conditions. Chapter 3 contents include operator troubleshooting, PMCS, and service procedures. Chapter 4 contains Unit Maintenance instructions. Chapter 6 contains references and other supporting information. Chapter 6 also includes the Repair Parts and Special Tools List (RPSTL) which identifies those parts or tools which are unique to the operation and maintenance of this equipment.

Manual Organization and Page Numbering System. The Manual is divided into six major chapters that detail the topics mentioned above. Within each chapter are work packages covering a wide range of topics. Each work package is numbered sequentially starting at page 1. The work package has its own page numbering scheme and is independent of the page numbering used by other work packages. Each page of a work package has a page number of the form XXXX YY-ZZ where XXXX is the work package number (e.g. 0010 is work package 10) and YY is the revision number for that work package and ZZ represents the number of the page within that work package. A page number such as 0010 00-1/2 blank means that page 1 contains information but page 2 of that work package has been intentionally left blank.

Finding Information. The Table of Contents permits the reader to find information in the manual quickly. The reader should start here first when looking for a specific topic. The Table of Contents lists the topics contained within each chapter and the Work Package Sequence Number where it can be found.

Example: If the reader were looking for instructions on "Preventive Maintenance Checks and Services", which is a Operator Maintenance topic, the Table of Contents indicates that Operator Maintenance information can be found in Chapter 3. Scanning down the listings for Chapter 3, "Preventive Maintenance Checks and Services" information can be found in WP 0010 00 (i.e. Work Package 10).

An Alphabetical Index can be found at the back of the Manual, and lists specific topics with the corresponding work package.

CHAPTER 1

**INTRODUCTION
TO SPACE HEATER ARCTIC
(SHA)**

**SPACE HEATER ARCTIC (SHA)
GENERAL INFORMATION**

0001 00

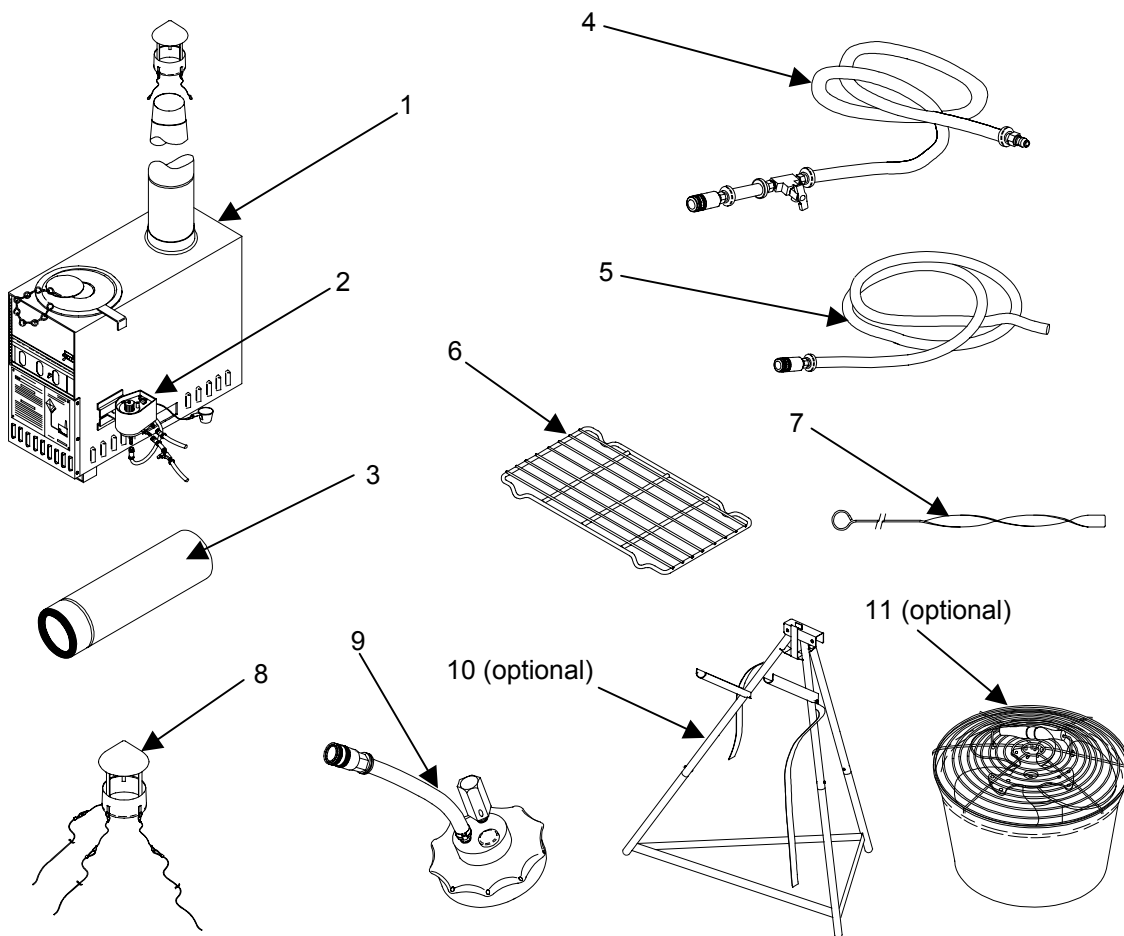
SCOPE

This Technical Manual contains instructions for the operation as well as preventive and corrective maintenance for the Space Heater Arctic (SHA) (1) and its associated components consisting of a Fuel Flow Control Valve (2), Nested Stack Assembly (3), Fuel Supply Hose (4), Fuel Overflow Hose (5), Solid Fuel Grate (6), Cleaning Tool (7), Stack Cap (8), Gravity Feed Adaptor (9), Fuel Can Stand (optional, refer to AAL) (10) and Thermoelectric Fan (optional, refer to AAL) (11). The SHA is fielded as a safe and versatile heat source for the Army=s field operations.

Type of Manual: Operator=s and Unit Maintenance.

Model Number and Equipment Name: Space Heater Arctic (SHA), NSN 4520-01-444-2375

Purpose of Equipment: The SHA provides heat in a range from 15,000 to 25,000 BTU/hour. It is designed to be used in small to medium size shelters in moderate to arctic conditions. The SHA operates with various types of liquid or solid fuel.



**SPACE HEATER ARCTIC (SHA)
GENERAL INFORMATION**

0001 00

MAINTENANCE FORMS RECORDS AND REPORTS.

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 738-750, Functional Users Manual for The Army Maintenance Management System (TAMMS) (Maintenance Management Update).

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIRs).

If your SHA 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. Put it on an SF368 Product Quality Deficiency Report. Mail it to: Commander U.S. Army Soldier and Biological Chemical Command; ATTN: AMSSC-I-LO, Kansas St. Natick MA 01760-5052. We will send you a reply.

CORROSION PREVENTION AND CONTROL (CPC).

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

While corrosion is typically associated with rusting of metals, it can also include deterioration of other materials, such as rubber or plastic. Unusual cracking, softening, swelling or breaking of these materials may be a corrosion problem.

If a corrosion problem is identified, it can be reported using SF 368, Product Quality Deficiency Report. Use of key words such as Acorrosion, Arust, Adeterioration or Acracking will ensure that the information is identified as a CPC problem. This form should be submitted to the address specified in DA Pam 738-750.

DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE.

For procedures to destroy this equipment to prevent its use by the enemy, refer to TM 750-244-2, Procedures for Destruction of Material to Prevent Enemy Use.

NOMENCLATURE CROSS-REFERENCE LIST.

Common Name	Official Name
SHA	Space Heater Arctic
Fuel Adjustment Knob	Metering Knob
Fuel Selector Switch	Fuel Switch
Fuel Flow Control Valve	Fuel Flow Control