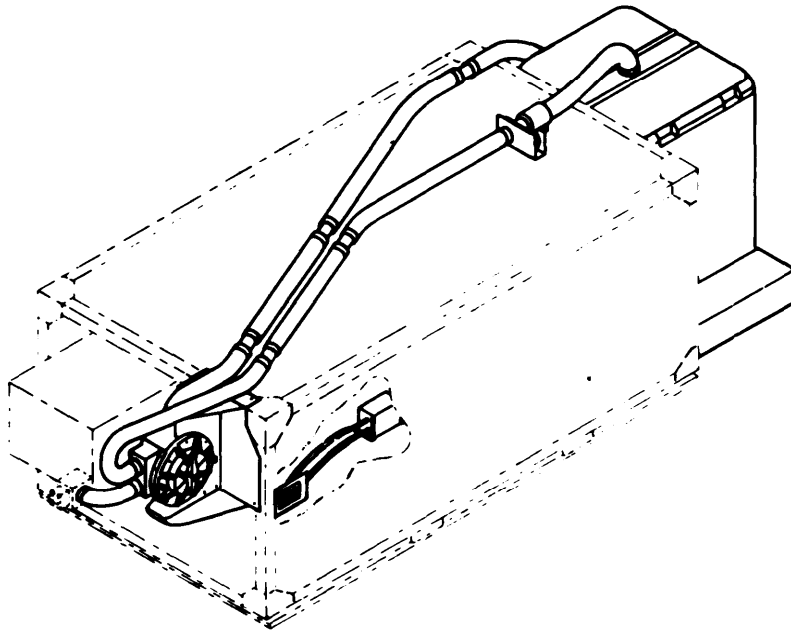


TECHNICAL MANUAL
ORGANIZATIONAL MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LIST)



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**COLLECTIVE PROTECTION EQUIPMENT, AIR DEFENSE COMMAND
AND CONTROL SYSTEM, AN/TSQ-73
CONSISTING OF**

**ENTRANCE, PROTECTIVE, PRESSURIZED, COLLAPSIBLE, M12
(NSN 4240-01-048-2923);**

**FILTER UNIT, GAS-PARTICULATE, 200 CFM, 208 V, 400 Hz, M56
(NSN 4240-00-237-0227);**

AND

**INSTALLATION KIT, CBR, PROTECTIVE EQUIPMENT, AN/TSQ-73, M263
(NSN 4240-01-063-7679)**

**HEADQUARTERS, DEPARTMENT OF THE ARMY
22 JANUARY 1981**

This copy is a reprint which includes current pages from Change 1.

TECHNICAL MANUAL }
 NO. 3-4240-286-20&P }

HEADQUARTERS
 DEPARTMENT OF THE ARMY
 Washington, DC, 22 January 1981

Organizational Maintenance Manual
 (Including Repair Parts and Special Tools List)
**COLLECTIVE PROTECTION EQUIPMENT, AIR DEFENSE COMMAND
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Current as of 25 April 1980

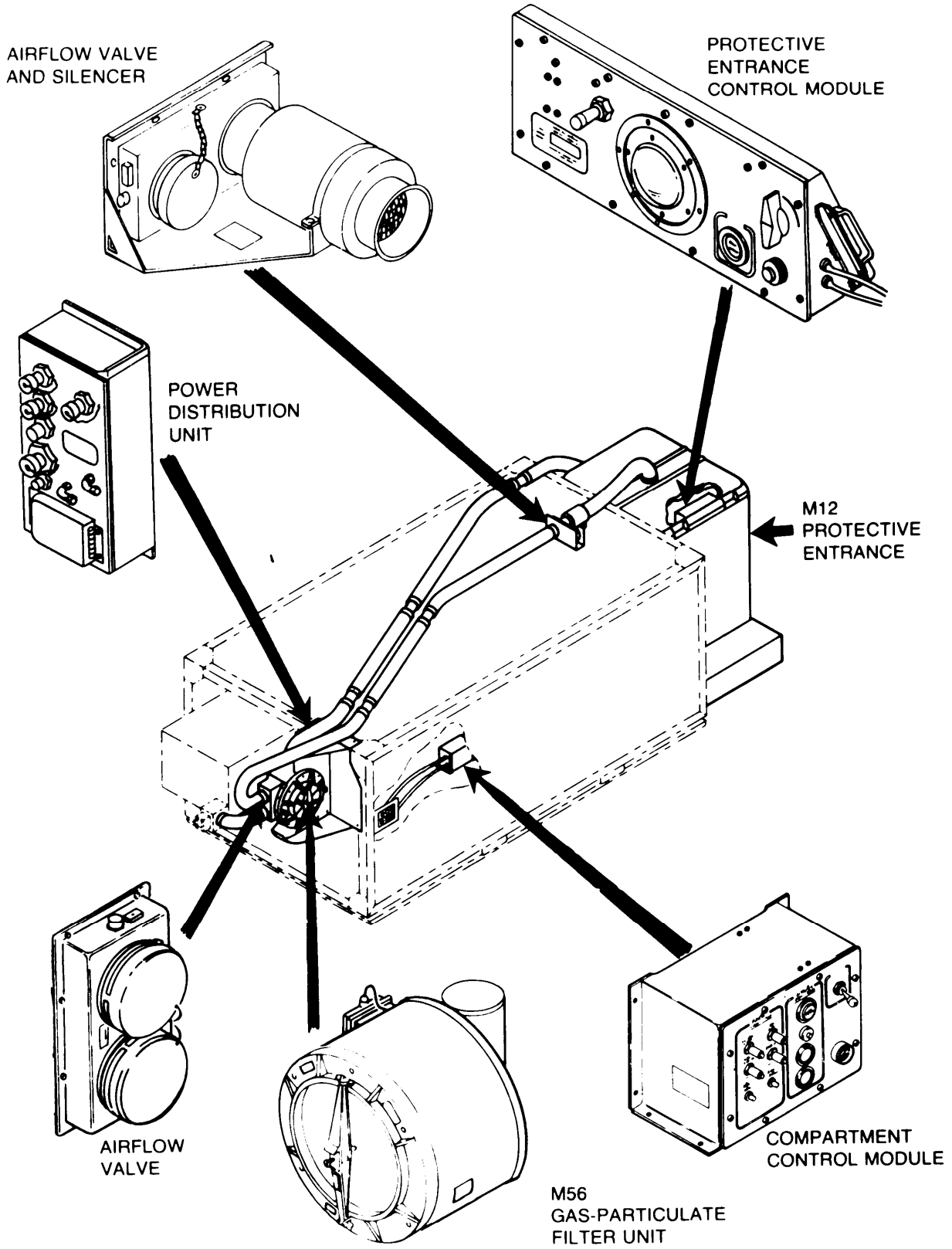
REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to: Commander, US Army Armament Materiel Readiness Command, ATTN: DRSAR-MAS-C, Aberdeen Proving Ground, MD 21010. A reply will be furnished to you.

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CHAPTER 1 INTRODUCTION

CHAPTER OVERVIEW

This chapter contains general information and equipment data for your collective protection equipment for AN/TSQ-73.

Section I. GENERAL INFORMATION

1-1. SCOPE.

- a. *Type of Manual:* Organizational Maintenance, including the Repair Parts and Special Tools List.
- b. *Model Numbers and Equipment Names:* The Collective Protection Equipment, Air Defense Command and Control System, AN/TSQ-73 consists of
 - M12 Protective Entrance
 - M56 Gas-Particulate Filter Unit
 - M263 Installation Kit
- c. *Purpose of Equipment:* Provides filtered air under positive pressure to the M12 Protective Entrance and to the AN/TSQ-73 shelter.

1-2. MAINTENANCE FORMS AND RECORDS.

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by TM 38-750, The Army Maintenance Management System.

1-3. DESTRUCTION OF MATERIEL TO PREVENT ENEMY USE. Refer to TM 43-0002-31, Destruction of Chemical Weapons and Defense Equipment to Prevent Enemy Use.

1-4. PREPARATION FOR STORAGE OR SHIPMENT. Refer to TM 9-1430-651-12.

1-5. NOMENCLATURE CROSS-REFERENCE LIST. This listing includes nomenclature cross-references used in this manual.

<i>Common Name</i>	<i>Official Nomenclature</i>
M12 Protective Entrance	Entrance, Protective, Pressurized, Collapsible, M12

<i>Common Name</i>	<i>Official Nomenclature</i>
M56 Gas-Particulate Filter Unit	Filter Unit, Gas-Particulate, 200 CFM, 208 V, 400 Hz, M56
M263 Installation Kit	Installation Kit, M263
Cable C5-19-6170-40	Cable Assembly, Special Purpose Electrical, C5-19-6170-40
Cable C5-19-6162-10	Cable Assembly, Special Purpose Electrical, C5-19-6162-10
Cable C5-19-6170-10	Cable Assembly, Special Purpose Electrical, C5-19-6170-10
Cable C5-19-6160-40	Cable Assembly, Special Purpose Electrical, C5-19-6160-40
Cable C5-19-6160-50	Cable Assembly, Special Purpose Electrical, C5-19-6160-50
Cable C5-19-6684	Cable Assembly, Special Purpose Electrical, C5-19-6684

1-6. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR). If your collective protection equipment 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. Tell us why a procedure is hard to perform. Put it on an SF 368 (Quality Deficiency Report). Mail it to us at Commander, US Army Armament Materiel Readiness Command, ATTN: DRSAR-MAP-A, Aberdeen Proving Ground, MD 21010. We'll send you a reply.

Section II. EQUIPMENT DESCRIPTION AND DATA

1-7. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES.

Characteristics

- The CPE is designed to operate in a chemical/biological agent contaminated zone.
- The filter unit provides filtered air under positive pressure to the M 12 Protective Entrance and to the AN/TSQ-73 shelter.
- Positive pressure prevents dangerous amounts of chemical and biological (CB) agents from entering the protected area.
- The M12 Protective Entrance, while under positive pressure, allows personnel to enter or leave without loss of positive pressure protection in the AN/TSQ-73 shelter.

Capabilities and Features

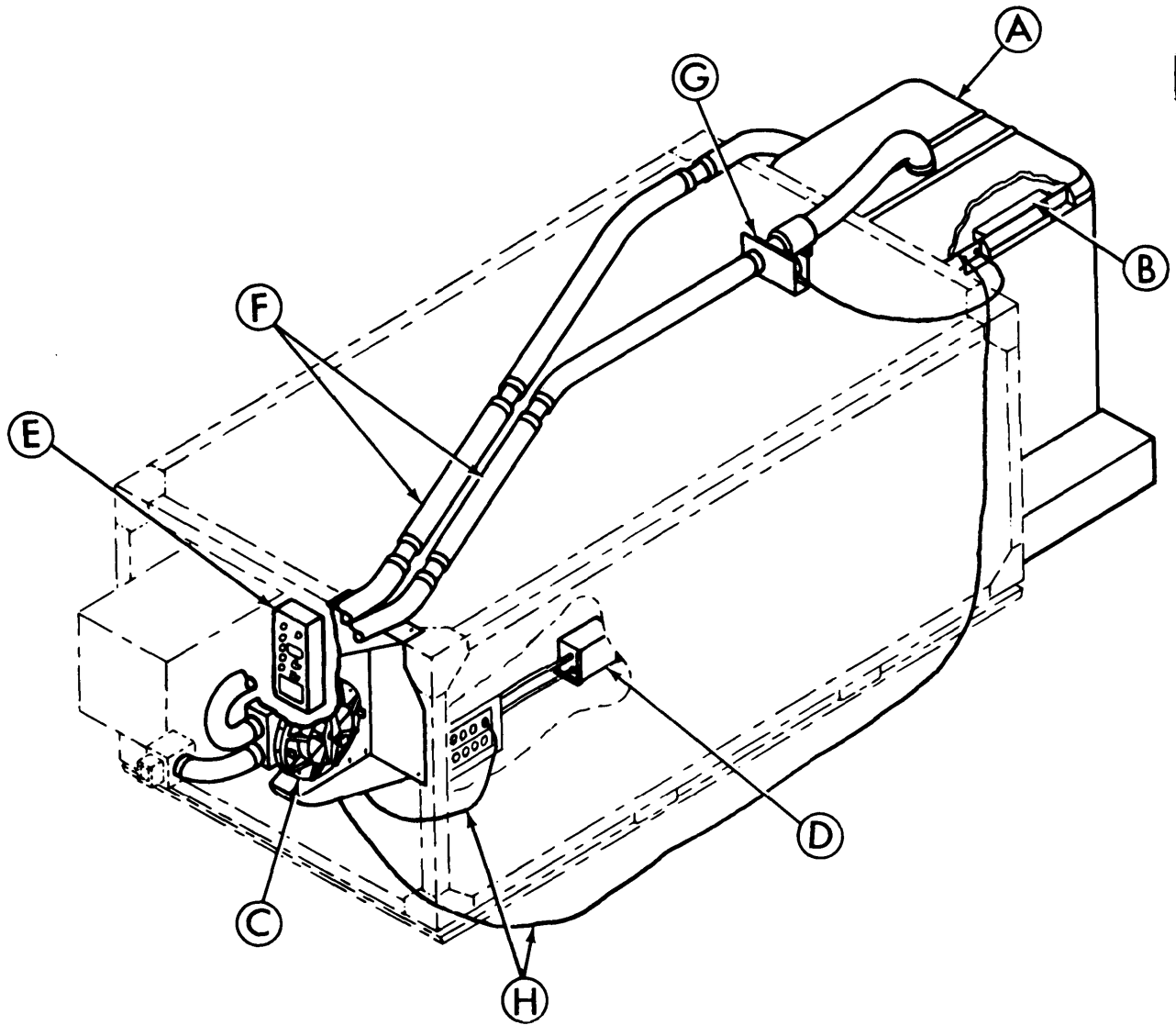
- Control modules are provided for both the M12 Protective Entrance and the AN/TSQ-73 shelter.
- Major components of the collective protection equipment (CPE) may be attached or detached from the AN/TSQ-73 shelter without affecting the operation of the shelter.
- Modular design of CPE permits:
 - a. Easy access to the major components for servicing and maintenance.
 - b. Quick replacement of malfunctioning components.

1-8. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.

- (A)** PROTECTIVE ENTRANCE. Consists of:
 - Shell assembly, which is in two halves, forms the roof and floor.
 - Door assembly, when fully extended, provides for entering and leaving the protective entrance. The door frame supports the front of the protective entrance.
 - Two support assemblies, when fully extended, form rigid poles between the roof

and the floor of the shell assembly. The support assemblies are located at the rear of the protective entrance.

- An impermeable fabric assembly is attached to the two halves of the shell assembly. When the fabric is fully extended, it forms the walls of the protective entrance.
- (B)** PROTECTIVE ENTRANCE CONTROL MODULE. Mounted in the roof of the shell assembly, provides white/or black-out red light, purge timing and low pressure warning for the protective entrance.
- (C)** GAS-PARTICULATE FILTER UNIT. The filter unit housing contains the main fan, the gas filter, and the particulate filter. Inner and outer access covers permit changing the filters.
 - The airflow valve, attached to the outside of the filter unit housing, controls the airflow between the filter unit, the shelter, and the protective entrance.
- (D)** COMPARTMENT CONTROL MODULE. Mounts inside the shelter and contains controls and indicators to operate the collective protection equipment.
- (E)** POWER DISTRIBUTION UNIT. Mounts on the outside of the shelter below the filter unit. It serves as the electrical power distribution center for the collective protection equipment.
- (F)** AIRDUCT HOSE. Large diameter (6") impermeable fabric hose, in 6 foot sections, connects filter unit, shelter, and protective entrance for filtered and return air circulation.
- (G)** AIRFLOW VALVE AND SILENCER. Adjusts and silences the flow of filtered air to the protective entrance. The valve is controlled by the protective entrance control module.
- (H)** SPECIAL PURPOSE ELECTRICAL CABLES. Six cables route electrical power and electrical operating signals between the filter unit, power distribution unit, compartment control module, protective entrance, and valve and silencer assembly. (Not all cables are shown.)



MAJOR COMPONENTS

1-9. IDENTIFICATION, INSTRUCTION, AND WARNING PLATES.

