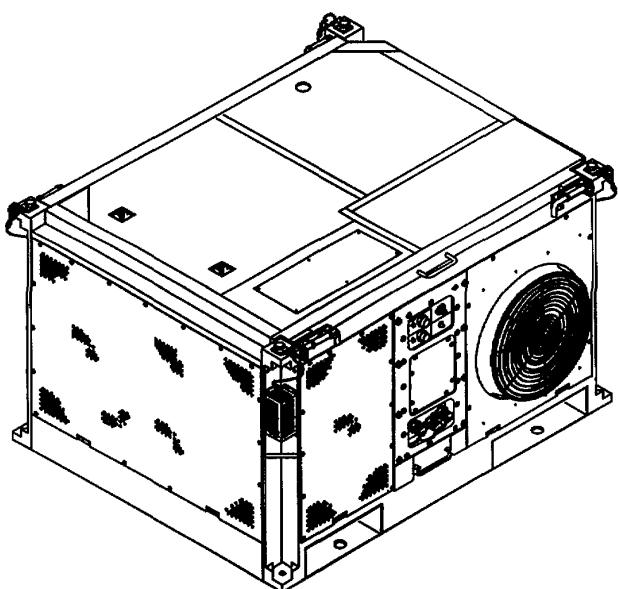


TECHNICAL MANUAL

**OPERATOR, UNIT, DIRECT SUPPORT AND
GENERAL SUPPORT MAINTENANCE MANUAL**

**FIELD DEPLOYABLE
ENVIRONMENTAL CONTROL UNIT**

**MODELS FDECU-2, FDECU-3, AND FDECU-4
(NSN 4120-01-449-0459)**



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**HEADQUARTERS
DEPARTMENT OF THE ARMY AND THE AIR FORCE
WASHINGTON D.C., 1 MAY 2000**

TECHNICAL MANUAL

**OPERATOR, UNIT, DIRECT SUPPORT AND GENERAL SUPPORT
MAINTENANCE MANUAL**

**FIELD DEPLOYABLE ENVIRONMENTAL CONTROL UNIT,
MODELS FDECU-2, MODEL FDECU-3, AND FDECU-4 (NSN 4120-01-449-0459)**

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 back of this manual direct to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: AMSEL-LC-LEO-D-CS-CFO, Fort Monmouth, New Jersey 07703-5006. The fax number is 732-532-1413, DSN 992-1413. You may also e-mail your recommendations to AMSEL-LC-LEO-PUBS-CHG@mail1.monmouth.army.mil

For Air Force, submit AFTO Form 22 (Technical Order System Publication Improvement Report and Reply) in accordance with paragraph 6-5, Section VI, TO 00-5-1. Forward direct to prime ALC/MST.

In either case a reply will be furnished directly to you.

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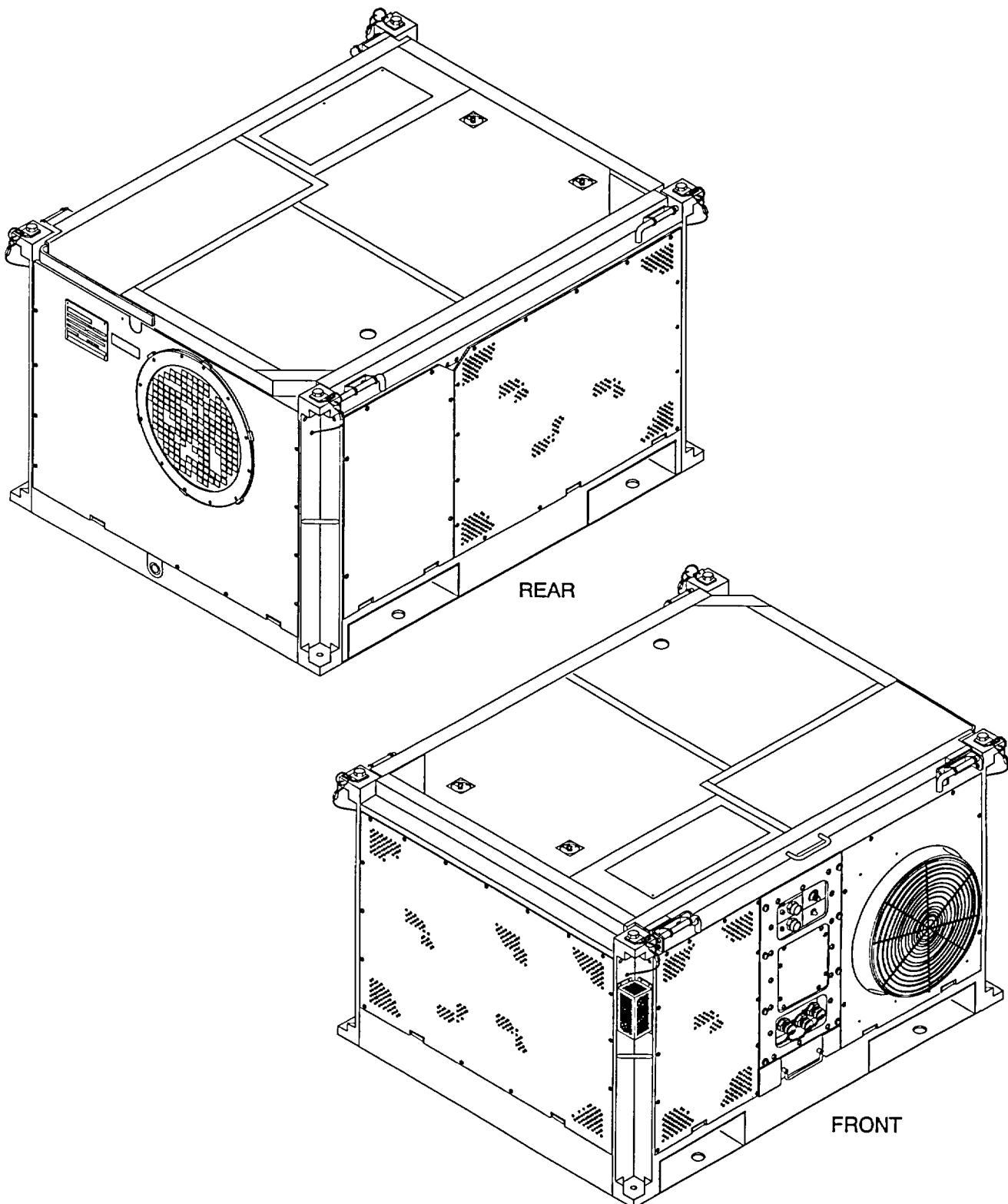


Figure 1-1. Field Deployable Environmental Control Unit (FDECU).

CHAPTER 1 INTRODUCTION

Section I. GENERAL INFORMATION

1.1 SCOPE. This technical manual is arranged to provide necessary information to operator, unit, direct support and general support maintenance personnel for use when operating and maintaining the Keco Industries model FDECU-2, FDECU-3, and FDECU-4 Field Deployable Environmental Control Units (FDECU). The FDECU is intended to provide cooled and dehumidified air, or heated air, through flexible ducts into various types of portable shelters or vans in accordance with electronic and personnel requirements.

NOTE

The FDECU-2 uses two compressor crankcase heaters that are wrapped around the compressor and a compressor warm up indicator light on each of the control panels to indicate heater operation. Units after the FDECU-2 do not have compressor crankcase heaters or compressor warm up indicator lights.

1.2 MAINTENANCE FORMS, RECORDS, AND REPORTS.

1.2.1 Reports of Maintenance and Unsatisfactory Equipment. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750, as contained in Maintenance Management Update. Air Force personnel will use AFR 66-1 for maintenance reporting and TO-00-35D54 for unsatisfactory equipment reporting.

1.2.2 Reporting of Item and Packaging Discrepancies. Fill out and forward SF 364 (Report of Discrepancy (ROD)) as prescribed in AR 735-11-2. Air Force personnel will use AFR 400-54.

1.2.3 Transportation Discrepancy Report (TDR) (SF 361). Fill out and forward Transportation Discrepancy Report (TDR) (SF 361) as prescribed in AR 55-38. Air Force personnel will use AFR 75-18.

1.3 DESTRUCTION OF ARMY MATERIAL TO PREVENT ENEMY USE. Refer to TM 750-244-3 for necessary instructions for destruction of equipment to prevent enemy use. Destruction of Army electronics materiel to prevent enemy use shall be in accordance with TM 750-244-2.

1.4 PREPARATION FOR STORAGE OR SHIPMENT. Procedures for preparing the FDECU for storage or shipment, including packaging and administrative storage, are contained in Chapter 4, Section V of this manual.

1.5 REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR).

1.5.1 Army. If your 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 or performance. Put it on an SF 368 (Product Quality Deficiency Report). Mail it to: Commander, US Army Communications-Electronics Command and Fort Monmouth, ATTN: AMSEL-LC-LEO-D-CS-CFO, Fort Monmouth, New Jersey 07703-5000. We'll send you a reply.

1.5.2 Air Force. Air Force personnel are encouraged to submit EIR's in accordance with AFR 900-4.