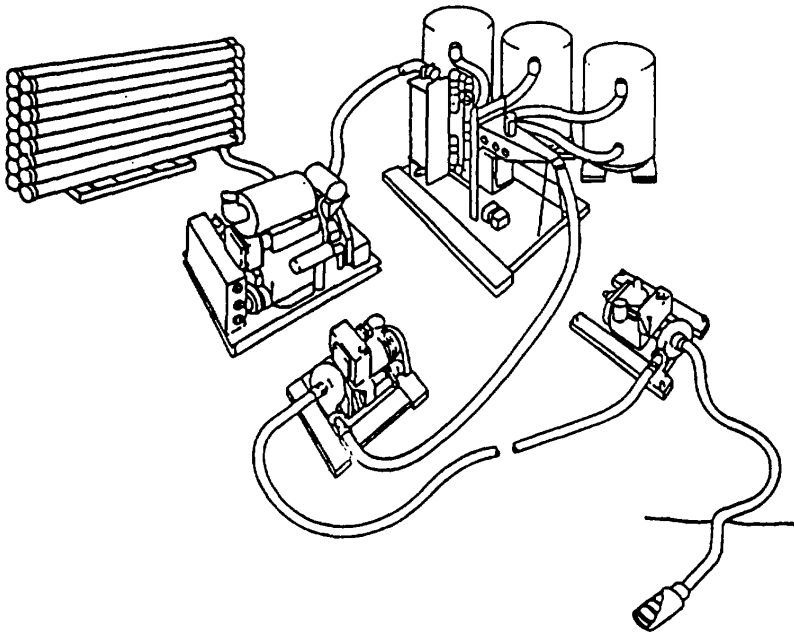


**ORGANIZATIONAL, DIRECT SUPPORT,
AND GENERAL SUPPORT MAINTENANCE MANUAL**



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**WATER PURIFICATION UNIT, REVERSE OSMOSIS,
150,000 GPD, SKID-MOUNTED, MODEL PD 81146
(4610-01-121-0161)**

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HEADQUARTERS, DEPARTMENT OF THE ARMY

24 APRIL 1991

TECHNICAL MANUAL

NO. 10-4610-229-24

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC., 24 April 1991

Organizational, Direct Support, and General Support
Maintenance Manual

WATER PURIFICATION UNIT, REVERSE OSMOSIS,
160,000 GPD, MODEL PD 81146
NSN 4610-01-1214-0161

Approved for public release; distribution is unlimited

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 directly to: US Army Troop Support Command, ATTN: AMSTR-MMTS, 4300 Goodfellow Blvd., St. Louis, MO 63120-1798. A reply will be furnished directly to you.

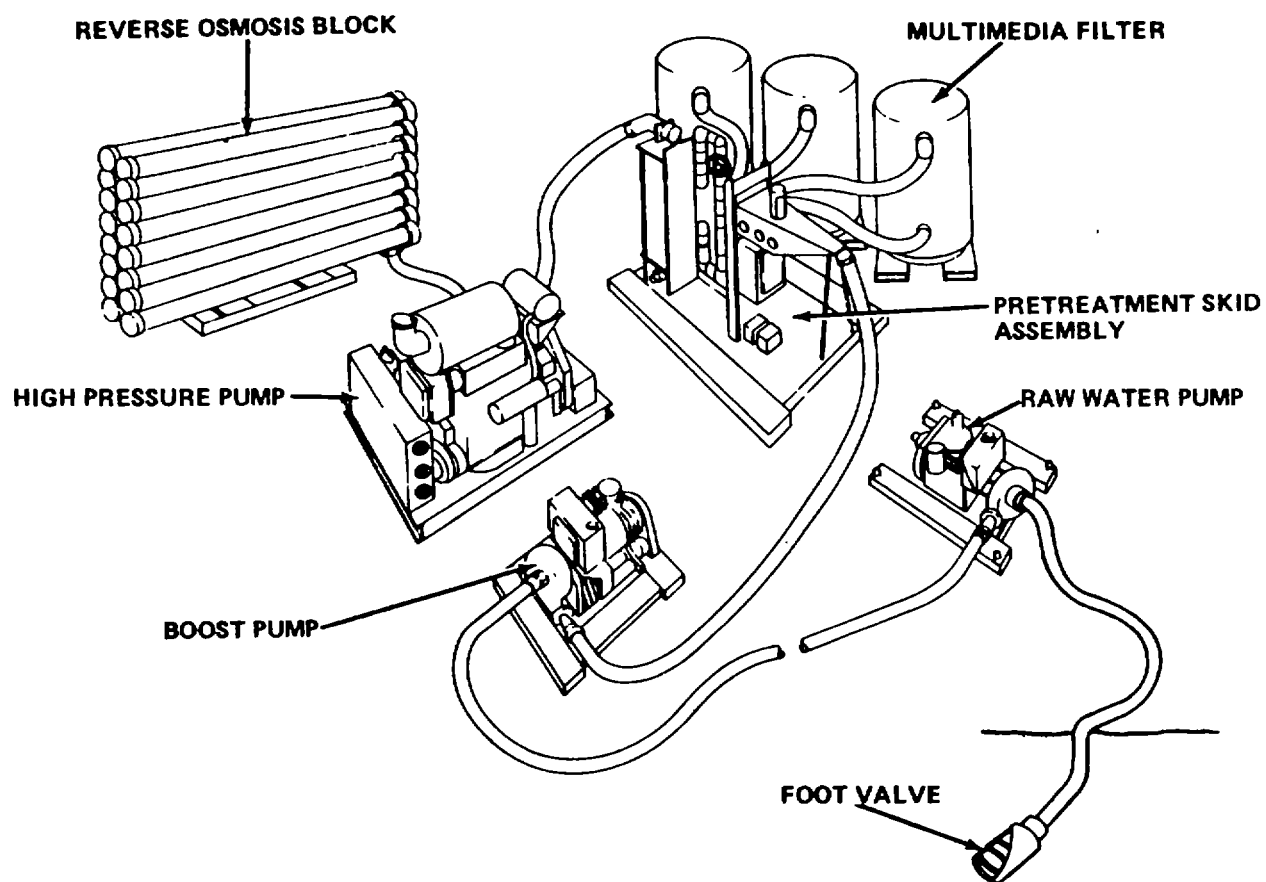
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*This manual supersedes TM 5-4610-229-24, dated 13 June 1986, including all changes.

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REVERSE OSMOSIS WATER PURIFICATION UNIT

CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

1-1. SCOPE. This manual contains instructions for organizational, direct support, and general support maintenance of the Skid-Mounted 150,000 GPD Reverse Osmosis Water Purification Unit (ROWPU), Model PD 81146. It produces drinking water from contaminated sources. ROWPU is not intended for use at temperatures below 32°F (0°C) or above 120°F (49°C).

1-2. 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, The Army Maintenance Management System (TAMMS).

1-3. DESTRUCTION OF ARMY MATERIAL TO PREVENT ENEMY USE. To prevent enemy use of the ROWPU, follow instructions contained in TM 750-244-3, Procedures for Destruction of Equipment to Prevent Enemy Use.

1-4. PREPARATION FOR STORAGE OR SHIPMENT. See paragraph 2-124 for instructions for storage or shipment.

1-5. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS. If your ROWPU 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 (Quality Deficiency Report). Mail it to us at: Commander, U.S. Army Troop Support Command, Attention: AMSTR-MOF, 4300 Goodfellow Boulevard, St. Louis, MO 63120-1798. We'll send you a reply.

1-6. GLOSSARY.

Brine	Waste product, containing salt or other particles, that is separated from drinking water during the reverse osmosis process.
Cavitation	Collapse in hoseline caused by vacuum in liquid flowing through hoseline.
Membrane	Barrier that allows brine to pass from drinking water and forms a wall between the two liquids.
Multimedia	Filtering system made of sand, gravel, and other granulated substances.