FIELD AND DEPOT MAINTENANCE MANUAL

WATER PURIFICATION UNIT

BASE MOUNTED; ELECTRIC DRIVE, AC 120/208 VOLT, SINGLE PHASE AND 3 PHASE, 60 CYCLE; 3000 GALLONS PER HOUR

(MET-PRO MODEL 3000-2700A)

FSN 4610-857-0330
CHAPTER 1
INTRODUCTION

Section I. GENERAL

1. Scope
   a. These instructions are published for the use of field and depot maintenance personnel maintaining the Met-Pro Model 3000-2700A Water Purification Unit. They provide information on the maintenance of the equipment which is beyond the scope of the tools, equipment, personnel, or supplies normally available to using organizations.

   b. Appendix I contains a list of publications applicable to this manual. The maintenance allocation chart is located in TM 5-4610-20520.

   c. Numbers in parentheses on illustrations indicate quantity.

   d. Report all deficiencies in this manual on DA Form 2028. Submit recommendations for changes, additions, or deletions to the Commanding Officer, U.S. Army Mobility Support Center, ATTN: SMOMS-MM, P. O. Box 119, Columbus, Ohio 43216. Direct communication is authorized.

   e. Report unsatisfactory equipment performance and suggestions for equipment improvement as specified in TM 38-750.

2. Record and Report Forms

For record and report forms applicable to field and depot maintenance, refer to TM 38-750.

Section II. DESCRIPTION AND DATA

3. Description

A general description of the water purification unit, the location and description of the identification and instruction plates, and information on the difference in models are contained in TM 5-4610-205-10. A more detailed description of the components is contained in TM 5-4610-205-20. The repair and maintenance instructions are described in appropriate sections of this manual.

4. Tabulated Data
   a. Agitator Drive Motor.

   Make ........................................... Kingston and Conley
   Model ........................................... 40A545211
   Stator:
       Number of poles .......................... 4
       Number of slots .......................... 36
       Number of coils .......................... 36
       Coil span ................................. 7 teeth
       Number of coils .......................... 9
       Turns per coil ............................ 22
       Wire size .................................. 21, one strand
       Type of wire .............................. Triple formvar
       Winding connection ..................... WYE, Poles in series diagram.
       Insulation materials .................... Class A

   Dipping compounds,.................Oil modified phenolic
   include fungus treatment ..........varnish (Class F).
   Dipping and baking ....................Immersion procedure.
   Resistance values of ...............STD Hipot 2,250 volts
   for coil groups. .........................20 sec.

   b Filter Pump Motors.

   Make Doerr Electric
   Model 62755CY
   Stator:
       Number of poles .......................... 4
       Number of slots .......................... 24
       Number of coils .......................... 24
       Coil span ................................. 7 teeth
       Number of coils .......................... 3
       Turns per coil ............................ 31
       Wire size .................................. 1-21, 1-22
       Type of wire .............................. Heavy formvar
       Winding connection diagram .......... A 2067 gram.
       Insulation materials ...................Class A
       Dipping compounds, include ..........MIL-V-1137 type M,
       fungus treatment ....................... grade CB