

TECHNICAL MANUAL

**ORGANIZATIONAL MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS LIST**

FOR THE

**WATER PURIFICATION UNIT, VAN-TYPE BODY
MOUNTED, ELECTRIC DRIVEN, AC 115/208 V,
SINGLE AND 3-PHASE, 60 HERTZ, 1/20 TO
2 HP, 3000 GPH (MET-PRO MODEL 3000 V)
NSN 4610-00-168-1799**

This manual supersedes TM 5-4610-223-20P, 1 December 1971, including all changes.

**HEADQUARTERS, DEPARTMENT OF THE ARMY
15 FEBRUARY 1983**

TECHNICAL MANUAL

NO. 5-4610-223-20P

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 15 February 1983

ORGANIZATIONAL MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS LIST

FOR THE

WATER PURIFICATION UNIT, VAN-TYPE BODY
MOUNTED, ELECTRIC DRIVEN, AC 115/208 V,
SINGLE AND 3-PHASE, 60 HERTZ, 1/20 TO
2 HP, 3000 GPH (MET-PRO MODEL 3000 V)
NSN 4610-00-168-1799

Current as of 17 September 1982

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistake 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 Troop Support and Aviation Materiel Readiness Command, ATTN: DRSTS-MPSD, 4300 Good fellow Blvd., St. Louis, MO 63120. A reply will be furnished directly to you.

TABLE OF CONTENTS

	Page	Illus Figure
Section I. INTRODUCTION.....	1	
II. REPAIR PARTS LIST..	7	
Group 01. Fuel System		
Personnel Heater External Fuel Lines and Pump	7	1
Personnel Heater Fuel Lines to Heater	9	2
02. Electrical System		
Power and Pump Cable Cover Components.....	11	3
Van Body Dome Light Assembly	13	4
Tail Lights and Electrical Connectors Mounting Hardware.	15	5
Red Marker Clearance and Service Lights.....	17	6
Amber Marker Clearance and Service Lights.....	19	7
03. Body and Door Components		
Accessory Storage Chest Assembly	21	8
Leveling Jack Assembly	23	9
Van Body Right Side Stationary Window	25	10
Bonnet Doors	27	11
Door Locks, Right Side and Rear Doors	29	12
Right Side Door.....	31	13
Door, Left, Rear	33	14
Door Checks, Right Side Door and Rear Doors	35	15
Upper and Lower Left Side Doors and Red Reflectors	37	16

Table of Contents (Con't)

		Page	Illus Figure
Group 03. (Con't)	Right Rear Door.	39	17
	Left Side Door Counterbalance	41	18
	Upper Left Side Door and Roof Hatch Assembly	43	19
	Van Body to Chassis Mounting, Springs and Hardware	45	20
	Van Body to Chassis Mounting Hardware	47	21
	Tank Mounting Extension Legs, Hardware.....	49	22
	Influent Tank Bridge Rails	51	23
	Drain Plug and Body Holdown Hardware	53	24
	Jack Assembly Storage Box.....	55	25
	Personnel Heater Exhaust.....	57	26
	Personnel Heater Hood, thermostat.....	59	27
04.	Electrical Equipment, Motors, Piping		
	Grounding Terminated Load, Amber Reflectors and ID Plate.	61	28
	Erdlator Motor Assembly	63	29
	Erdlator Agitator Sliding Motor Base.....	65	30
	Slurry Feeder Motor Assembly	67	31
	Cabinet Assembly and Electrical Equipment	69	32
	Motor Starter, Exploded View.....	71	33
	Cabinet, Electrical Equipment	73	34
	Low Water Warning Indicator Light	75	35
	Receptacle Box Assembly.....	77	36
	Cabinet to Filter Pump Cables.....	79	37
	Cable Assembly, Electrical Cabinet.....	81	38
	Van Body Electrical Installation	83	39
	Low Water Level Alarm Switch.....	85	40
	Filter Gage Lines.....	87	41
	Filter Gage	89	42
	Raw Water Indicators and Erdlator Piping	91	43
	Raw Water Sight Indicator.....	93	44
	Raw Water Flow Indicator	95	45
	Filter Assembly, Cover, Air Release and Over Flow Valves.....	97	46
	Filter Element and Influent Valve Plug	99	47
	Filter Assembly, Main Housing	101	48
	Filter Element Assembly	103	49
	Air Release Valve	105	50
	Air Release Valve Tubing.....	107	51
	Filtered Water Piping from Filters to Flow Control Assembly	109	52
05.	Filter and Water Piping		
	Coagulated Water Piping from Discharge to Filters	111	53
	Raw Water Piping form Van Body and	113	54
	Slurry Feeder to Erdlator Piping		
	Filtered Water Piping to Slurry Feeder	115	55
	Filtered Water Piping from Flow Control.....	117	56
	Valve to Outside Van Body		
	Raw Water Piping between Inlet Hose and Top of Erdlator.....	119	57
	Raw Water Erdlator Piping	121	58
06.	Erdlator Components		
	Erdlator Agitator Drive Shaft	123	59
	Erdlator Agitator Speed Reducer and Couplings.....	125	60
	Erdlator Agitator Speed Reducer Assembly.....	127	61

Table of Contents (Con't)

		Page	Illus Figure
Group 06. (Con't)	Erdlator Agitator Speed Reducer Mounting Assembly.....	129	62
	Erdlator Agitator Motor Mounting Assembly.....	131	63
	Erdlator Agitator Shaft and Disk	133	64
	Erdlator Tank, Effluent Launder and Down Conier Tube.....	135	65
	Erdlator Tank Support Bracket and Hose Clamps.....	137	66
07.	Chemical Solution Feeder, Tubing		
	Chemical Tubing, Left Side of Slurry Feeder.....	139	67
	Chemical Tubing from Diatomic Tank to Erdlator Tank	141	68
	Chemical Tubing from Diatomic Tank to Wet Well	143	69
	Chemical Tubing, Right Side to Slurry Feeder.....	141	70
	Chemical Solution Feeder, Controls	147	71
	Chemical Solution Feeder, Housing Assembly	149	72
	Chemical Solution Feeder, Gearing	151	73
08.	Slurry Agitator and Feeder		
	Slurry Feeder Speed Reducer Gear Assembly	153	74
	Slurry Feeder Chain Tightener Assembly	155	75
	Slurry Feeder Speed Reducer Assembly	157	76
	Slurry Feeder Waste Water Valve and Hardware	159	77
	Slurry Agitator and Feeder, Metering Assembly.....	161	78
	Slurry Agitator and Feeder, Clutch Assembly	163	79
	Slurry Feeder Housing.....	165	80
	Slurry Feeder Support and Chemical Tank.....	167	81
09.	Waste Water Tank, Piping		
	Sludge Contractor Tank Draw-Off	169	82
	Waste Water Tank	171	83
	Waste Water Piping from Sludge Contractor to Waste Water Tank.....	173	84
	Waste Water Piping between Contractor, Waste	175	85
	Water Tank, Diatomic Filters and Van Body Outlet		
	Waste Water Piping between Erdlator, Wet Well	177	86
	Tank and Van Body Outlet		
	Coagulated Water Piping	179	87
	Coagulated Water Piping from Wet Well to Filter Pumps.....	181	88
	Coagulated Water Piping from Filter Plug Valve to Wet Well.....	183	89
	Coagulated Water Piping from Filter Pumps to Influent Valve.. ..	185	90
10.	Float, Influent and Effluent Valve		
	Low Water Level Alarm Float	187	91
	Float Valve.....	189	92
	Influent Valve Assembly.....	191	93
	Valve Assembly, Effluent Plug	193	94
11.	Flow Control Valve		
	Adjustable Flow Control Valve Assembly.....	195	95
12.	Dilution Diatomic Tank, Body Water		
	Dilution Diatomic Tank Assembly	197	96
	Van Body Water Inlets and Outlets.....	199	97

Table of Contents (Con't)

Group 13.	Pumps		
	Filter Pump and Motor Mounting	201	98
	Filter Pump and Motor Assembly.....	203	99
	Chemical Solution Pump Assembly	205	100
14.	Presision Leveling Devices		
	Van Body Level Assembly.....	207	101
15.	Special Purpose Kits		
	Front Vehicle Lifting Kit.....	209	102
	Rear Vehicle Lifting Kit.....	211	103
16.	Bulk Material	212	
Section III.	SPECIAL TOOLS LIST (Not Applicable)		
IV.	NATIONAL STOCK NUMBER AND PART	215	
	NUMBER INDEX		

Section I. INTRODUCTION

1. Scope. This manual lists spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE), and other special support equipment required for performance of organizational maintenance of the Water Purification Unit. It authorizes the requisitioning and issue of spares and repair parts as indicated by the source and maintenance codes.

2. General. This Repair Parts and Special Tools List is divided into the following sections:

a. Section II. Repair Parts List. A list of spares and repair parts authorized for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in numeric sequence, with the parts in each group listed in figure and item number sequence.

b. Section III. Special Tools List. A list of special tools, special TMDE, and other special support equipment authorized for the performance of maintenance. (Not Applicable).

c. Section IV. National Stock Number and Part Number Index. A list, in National item identification Number (NIIN) sequence, of all National Stock Numbers (NSN) appearing in the listing, followed by a list in alphanumeric sequence, of all part numbers appearing in the listings. National Stock Numbers and part numbers are cross-referenced to each illustration figure and item number appearance. This index is followed by a cross-reference designators to figure and item numbers.

3. Explanation of Columns.

a. illustration. This column is divided as follows:

(1) Figure Number. Indicates the figure number of the illustration on which the item is shown.

(2) Item Number. The number used to identify each item called out in the illustration.

b. Source, Maintenance and Recoverability (SMR) Codes.

(1) Source Code. Source codes indicate the manner of acquiring support items for maintenance, repair, or overhaul of end items.

Source codes are entered in the first and second positions of the Uniform SMR Code format as follows:

Code	Definition
PA	Item procured and stocked for anticipated or known usage.
PB	Item procured and stocked for insurance purposes because essentially dictates that a minimum quantity be available in the supply system.
PC	Item procured and stocked and which otherwise would be coded PA except that it is deteriorative in nature.
PD	Support item, excluding support equipment, procured for initial issue or outfitting and stocked only for subsequent or additional initial issues or outfittings. Not subject to automatic replenishment.
PE	Support equipment procured and stocked for initial issue or outfitting to specified maintenance repair activities.
PF	Support equipment which will not be stocked but which will be centrally procured on demand.
PG	Item procured and stocked to provide for sustained support for the life of the equipment. It is applied to an item peculiar to the equipment which, because of probable discontinuance or shutdown of production facilities, would prove uneconomical to reproduce at a later time.
KD	An item of a depot overhaul/repair kit and not purchased separately. Depot kit defined as a kit that provides items required at the time of overhaul or repair.
KF	An item of a maintenance kit and not purchased separately. Maintenance kit defined as a kit that provides an item that can be replaced at organizational or intermediate levels of maintenance.
KB	Item included in both a depot over-haul/repair kit and a maintenance kit.