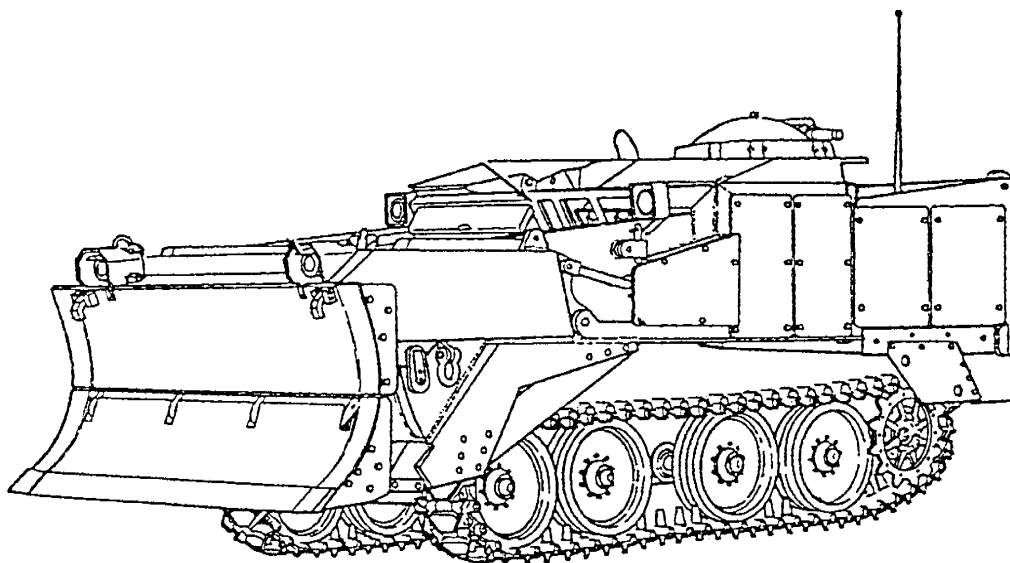


TM 5-2350-262-24P*

TECHNICAL MANUAL

**UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS LIST
(INCLUDING DEPOT MAINTENANCE REPAIR PARTS)
FOR ARMORED COMBAT EARTHMOVER
(ACE), M9
(NSN 2350-00-808-7100)**



*This publication supersedes TM 5-2350-262-24P dated March 1997.

Approved for public release; distribution is unlimited.

**HEADQUARTERS, DEPARTMENT OF THE ARMY
MARCH 2000**

**UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS LIST
(INCLUDING DEPOT MAINTENANCE REPAIR PARTS)
FOR ARMORED COMBAT EARTHMOVER
(ACE), M9
(NSN 2350-00-808-7100)**

Current as of: 12 January 2000

REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS
You can improve this manual. If you find any mistakes, or if you know of a way to improve the procedures, please let us know. Submit your DA Form 2028-2 (Recommended Changes to Equipment Technical Publications), through the Internet, on the Army Electronic Product Support (AEPS) website. The Internet address is http://aeeps.ria.army.mil. If you need a password, scroll down and click on "ACCESS REQUEST FORM". The DA Form 2028 is located in the ON LINE FORMS PROCESSING section of the AEPS. Fill out the form and click on SUBMIT. Using this form on the ADPS will enable us to respond quicker to your comments and better manage the DA Form 2028 program. You may also mail, fax, or email your letter, DA Form 2028, or DA Form 2028-2 direct to: Commander, U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-AC-NML, Rock Island, IL 61299-7630. The email address is amsta-ac-nml@ria.army.mil. The fax number is DSN 793-0726 or Commercial (309) 782-0726.

TABLE OF CONTENTS

	Page	Illus Figure
INTRODUCTION	1	
REPAIR PARTS LIST WORK PACKAGE		
GROUP AA Accelerator Installation		
AA Accelerator Linkage	1-1	1
GROUP AB Air System Installation		
AB Air Brake Lines and Fittings	2-1	2
AB Service Brake Valve, Air Compressor Governor, and Related Parts	3-1	3
AB Air Reservoir and Related Parts	4-1	4
AB Trailer Brake Valve and Connectors	5-1	5
GROUP AD Armor Installation		
AD Armor Plates and Mounting Hardware	6-1	6
GROUP AF Brake Control Installation		
AF Parking Brake Lever and Linkage	7-1	7
AF Parking Brake Cable - Updated Configuration	8-1	8

*This publication supersedes TM 5-2350-262-24P dated 7 March 1997

TABLE OF CONTENTS (Continued)

	Page	Illus Figure
Group AJ		
Electrical Installation		
AJ Wiring Harness and Electrical Lead Installation	9-1	9
AJ Rear Wiring Harness, 12369102, and Mounting Hardware	10-1	10
AJ Hull Wiring Harness - Headlight Intermediate - 13214E2267, and Mounting Hardware	11-1	11
AJ Apron Wiring Harness - 13214E2064	12-1	12
AJ Headlight Wiring Harness - 13211E9059	13-1	13
AJ Battery Wiring Harness - 12355285, and Mounting Hardware	14-1	14
AJ High/Low Ventilation Wiring Harnesses - 12357205 and 12357204	15-1	15
AJ Control Wiring Harness - 12357211, and Mounting Hardware	16-1	16
AJ Headlight Beam Select Switch and Resistor Assembly	17-1	17
AJ Trailer Receptacle, Stoplight Switch, and Sending Units	18-1	18
AJ Batteries, Box, and Related Parts	19-1	19
AJ Battery Leads and Terminals	20-1	20
AJ Instrument Panel and Mounting Brackets	21-1	21
AJ Instrument Panel Assembly - 12369101	22-1	22
AJ Instrument Panel Lamps and Indicators - 12369101	23-1	23
AJ Gauge Panel and Data Plates	24-1	24
AJ Gauge Panel Assembly - 12357146	25-1	25
AJ Driver's Compartment Miscellaneous Electrical Components	26-1	26
AJ Control Wiring Harness Sending Units	27-1	27
AJ Engine Wiring Harness and Lead Installation	28-1	28
AJ Engine Wiring Harness - 12412174, and Mounting Hardware	29-1	29
AJ Engine Wiring Harness Sending Units and Connector	30-1	30
AJ Master Relay, Slave Receptacle, STE/ICE-R Shunt, and Mounting Hardware	31-1	31
AJ Headlight Base Assembly	32-1	32
AJ Headlight Assembly - MS53022-1	33-1	33
AJ Headlight, Stoplight-Taillight, Domelight, and Floodlights Installation	34-1	34
AJ Domelight Assembly - MS51073-1	35-1	35
AJ Stoplight-Taillight Assembly - EO19522	36-1	36
AJ Smoke Grenade Launcher Wiring Harness Installation	37-1	37
AJ Discharger Wiring Harness - 12325765, and Mounting Hardware	38-1	38
AJ Arming/Firing Unit Wiring Harness - 12325747, and Mounting Hardware	39-1	39
AJ STE/ICE-R Resistor Box and Mounting Parts	40-1	40
AJ STE/ICE-R Resistor Box Wiring Harness - 12355487	41-1	41
AJ Track Adjuster Suspension Control Assembly and Wiring Harnesses (NEW PRODUCTION)	42-1	42
AJ Track Adjuster Switches (NEW PRODUCTION)	43-1	43

TABLE OF CONTENTS (Continued)

		Page	Illus Figure
Group AL	Fire Extinguisher Installation		
AL	Fixed Fire Extinguisher Lines and Fittings	44-1	44
AL	Fixed Fire Extinguisher Lines and Fittings (NEW PRODUCTION)	45-1	45
AL	Fire Extinguisher Cylinder Assembly	46-1	46
AL	Portable Fire Extinguisher, Dry Powder	47-1	47
Group AM	Fuel System Installation		
AM	Fuel System Lines and Fittings	48-1	48
AM	Fuel Tank Assembly and Related Parts	49-1	49
AM	Fuel Filter and Mounting Parts	50-1	50
Group AN	Heater and Ventilation Installation		
AN	Heater Assembly and Related Parts	51-1	51
AN	Heater Assembly	52-1	52
AN	Driver's Ventilation Fan Installation	53-1	53
Group AP	Hull Assembly		
AP	Apron, Dozer, and Blade Assembly Installation	54-1	54
AP	Ejector Assembly	55-1	55
AP	Bowl Cutting Edges and Debris Shield	56-1	56
AP	Hydraulic Apron Cylinder Assembly and Attaching Hardware	57-1	57
AP	Hydraulic Ejector Cylinder Assembly and Attaching Hardware	58-1	58
AP	Driver's Hatch and Latch Installation	59-1	59
AP	Driver's Hatch Assembly - 12362200	60-1	60
AP	Inclinometers	61-1	61
AP	Miscellaneous Armor Plates and Attaching Parts	62-1	62
AP	Miscellaneous Armor Plates and Attaching Parts	63-1	63
AP	Miscellaneous Armor Plates and Attaching Parts	64-1	64
AP	Miscellaneous Armor Plates and Attaching Parts	65-1	65
AP	Brackets and Supports	66-1	66
AP	Brackets and Supports	67-1	67
AP	Floors	68-1	68
AP	Track Retainers and Wear Plates	69-1	69
AP	Shackles	70-1	70
AP	Pintle Hook Assembly and Related Parts	71-1	71
AP	Hull Access Covers	72-1	72
AP	Hull Access Covers (NEW PRODUCTION)	73-1	73
AP	Ejector Bowl Access Cover Installation	74-1	74
AP	Thread Inserts	75-1	75
AP	Actuator Mounting Rings	76-1	76
AP	Protective Plates (OLD PRODUCTION ONLY)	77-1	77
AP	Rear Bump Stop, Hull Drain Valve, and Mounting Hardware	78-1	78
AP	Data Plates	79-1	79

TABLE OF CONTENTS (Continued)

		Page	Illus Figure
Group AQ	Hydraulic Control Installation		
AQ	Hydraulic Control Levers and Linkage	80-1	80
AQ	Hydraulic Control Levers and Linkage	81-1	81
AQ	Hydraulic Control Levers and Linkage	82-1	82
Group AR	Hydraulic Installation		
AR	Hydraulic Hoses and Clamps	83-1	83
AR	Hydraulic Hoses and Clamps (NEW PRODUCTION)	84-1	84
AR	Hydraulic Hoses and Clamps	85-1	85
AR	Hydraulic Hoses and Clamps	86-1	86
AR	Hydraulic Fittings and Attaching Hardware	87-1	87
AR	Hydraulic Fittings and Attaching Hardware	88-1	88
AR	Hydraulic Fittings and Attaching Hardware	89-1	89
AR	Hydraulic Tubes and Fittings	90-1	90
AR	Hydraulic Tubes and Fittings	91-1	91
AR	Hydraulic Tubes and Fittings	92-1	92
AR	Hydraulic Tubes and Fittings	93-1	93
AR	Hydraulic Manifolds and Mounting Parts	94-1	94
AR	Main Accumulator Assembly and Mounting Parts	95-1	95
AR	Accumulator Charge and Gauge Assembly	96-1	96
AR	Hydraulic Filters	97-1	97
AR	Hydraulic Return Line Filter	98-1	98
AR	Hydraulic Return Line Filter (NEW PRODUCTION)	99-1	99
AR	Hydraulic Tank Assembly and Installation	100-1	100
AR	Compensating Pump Assembly and Installation	101-1	101
AR	Main Hydraulic Pump Assembly and Mounting Parts	102-1	102
AR	Hydraulic Control Valve Bank Installation	103-1	103
AR	Valve Bank Lines and Fittings	104-1	104
AR	Directional Control Valve Bank Assembly	105-1	105
AR	Seal and Spool Wiper Kit	106-1	106
AR	Sprung-Unsprung Valve Assembly	107-1	107
AR	Track Adjuster Manifold Assembly (NEW PRODUCTION)	108-1	108
AR	Track Adjuster Manifold Hydraulic Hoses (NEW PRODUCTION)	109-1	109
Group AU	Powertrain Installation		
AU	Power Package Mountings and Braces	110-1	110
AU	Starter and Mounting Parts	111-1	111
AU	Alternator and Related Parts	112-1	112
AU	Alternator Brackets, Tensioner, and Related Parts	113-1	113
AU	Fuel Pump Shutdown Valve and Mounting Parts	114-1	114
AU	Engine Oil Cooler Bypass and Level Indicator	115-1	115
AU	Oil Pan	116-1	116
AU	Engine Coolant Hoses and Clamps	117-1	117

TABLE OF CONTENTS (Continued)

	Page	Illus Figure
AU Transmission Oil Cooler With Engine Coolant Thermostats	118-1	118
AU Transmission Oil Cooler Mounting Brackets and Related Parts	119-1	119
AU Belts, Coolant Pump, and Crankshaft Pulleys	120-1	120
AU Cylinder Head Covers	121-1	121
AU Engine Data Plates	122-1	122
AU Air Cleaner, Hoses, and Related Parts	123-1	123
AU Muffler and Related Parts	124-1	124
AU Engine Starting Aid	125-1	125
AU Engine Oil Filter	126-1	126
AU Power Package - Coolant Hoses and Clamps	127-1	127
AU Power Package - External Oil Lines	128-1	128
AU Power Package - External Oil Lines (Updated Configurations)	129-1	129
AU Fan and Related Parts	130-1	130
AU Fan Assembly - 40430-2	131-1	131
AU Fan Tensioner Assembly	132-1	132
AU Radiator and Attaching Parts	133-1	133
AU Transfer Case Installation	134-1	134
AU Transfer Case Oil Lines and Fittings	135-1	135
AU Transfer Case Assembly - 13211E8750	136-1	136
AU Transfer Case Thread Inserts	137-1	137
AU Scavenger Pump and Mounting Parts	138-1	138
AU Scavenger Pump Oil Filter and Mounting Parts	139-1	139
AU Hydraulic Shift Control Lines and Fittings	140-1	140
AU Hydraulic Shift Control Valve and Neutral Start Switch	141-1	141
AU Transmission with Container	142-1	142
AU Transmission Container Assembly - 12379392	143-1	143
AU Transmission Case and Oil Lines Assembly	144-1	144
AU Transmission Shafts, Gears, and Supports	145-1	145
AU Transmission Output Flange, Clutch Cover, and Oil Sump	146-1	146
AU Transmission Control Valve Installation	147-1	147
AU Transmission Control Valve Assembly	148-1	148
AU Transmission 1st and 2nd Forward/Reverse Clutch Assemblies and Gears	149-1	149
AU Transmission 3rd and 4th High/Low Clutch Assemblies	150-1	150
AU Transmission 5th and 6th Clutch Assemblies	151-1	151
AU Transmission Torque Converter Shafts and Housing	152-1	152
AU Transmission Torque Converter	153-1	153
AU Transmission Charging Pump and Related Parts	154-1	154
AU Transmission (Powertrain) Oil Hoses, Lines, and Fittings	155-1	155
AU Transmission (Power Package) Oil Hoses, Lines, and Fittings	156-1	156
AU Transmission Oil Filter and Mounting Parts	157-1	157
AU Propeller Shaft	158-1	158

TABLE OF CONTENTS (Continued)

		Page	Illus Figure
	AU Steer Unit with Container	159-1	159
	AU Steer Unit Container Assembly - 12379400	160-1	160
	AU Steer Unit Filler Neck and Strainer	161-1	161
	AU Steer Unit Valves and Related Parts	162-1	162
	AU Steer Unit Control Valve Assembly	163-1	163
	AU Steer Unit Final Drive Couplings and End Covers	164-1	164
	AU Steer Unit Brake Levers and Related Parts	165-1	165
	AU Steer Unit Oil Pump and Related Parts	166-1	166
	AU Steer Unit Shafts and Related Parts	167-1	167
	AU Steer Unit Left and Right Clutches	168-1	168
	AU Steer Unit, Lines, Fittings, and Rear Breather	169-1	169
	AU Steer Unit Mounting Parts	170-1	170
	AU Steering Wheel and Linkage	171-1	171
	AU Steering Selector Lever, Linkage, and Data Plates	172-1	172
	AU Shifting Lever and Linkage	173-1	173
	AU Final Drive Oil Breather Lines and Fittings	174-1	174
	AU Final Drive Fluid Level Indicator	175-1	175
	AU Final Drives Installation	176-1	176
	AU Final Drive Assembly	177-1	177
	AU Drive Sprocket	178-1	178
	AU Roadwheel	179-1	179
	AU Track Shoe Assembly	180-1	180
Group AV	Air Purifier Installation		
	AV Air Purifier Installation	181-1	181
	AV Air Purifier Installation - MCS Equipped	182-1	182
	AV Air Purifier Heater Assembly	183-1	183
	AV M2A2 Air Purifier/Precleaner Assembly	184-1	184
Group AW	Radio Equipment Installation		
	AW Radio Equipment Installation	185-1	185
	AW Radio Box Wiring Harness - 12357230	186-1	186
Group AX	Seat Installation		
	AX Seat Installation	187-1	187
Group A2	Stowage Installation		
	A2 Stowage Installation - 1	188-1	188
	A2 Stowage Installation - 2	189-1	189
Group A3	Suspension Installation		
	A3 Corner Actuator with Container and Mounting Hardware	190-1	190
	A3 Corner/Intermediate Actuator Container Assembly - 12379370	191-1	191

TABLE OF CONTENTS (Continued)

		Page	Illus Figure
	A3 Corner Actuator 1L Packing, Plugs, and Mounting Hardware	192-1	192
	A3 Corner Actuator Assembly - 13204E2560	193-1	193
	A3 Corner Actuator - Manifold	194-1	194
	A3 Accumulator Assembly and Mounting Parts	195-1	195
	A3 Intermediate Actuator with Container	196-1	196
	A3 Intermediate Actuator Assembly - 13204E2561	197-1	197
	A3 Roadwheel Arm, Seals, and Mounting Hardware	198-1	198
	A3 Roadwheel Arm Assembly	199-1	199
	A3 Track Adjusting Cylinder Mounting Hardware	200-1	200
	A3 Track Adjusting Cylinder Assembly	201-1	201
	A3 Front Bump Stop and Related Parts	202-1	202
	A3 Bump Stop Cylinder Assembly - 12325845	203-1	203
Group A5	Winch Installation		
	A5 Winch Installation	204-1	204
	A5 Winch Shift Control Assembly	205-1	205
	A5 Winch Assembly - 7D3-05815	206-1	206
Group A6	Special Purpose Kits		
	A6 Winch (Removed) Hull Cover	207-1	207
	A6 Ripper Blade Assembly	208-1	208
	A6 MCS Unit, Enclosure, and Mounting Hardware	209-1	209
	A6 MCS Armor Enclosure and Related Parts	210-1	210
	A6 MCS Components	211-1	211
	A6 MCS Compressor Assembly	212-1	212
	A6 MCS Electrical Box Assembly	213-1	213
	A6 MCS Heater, Evaporator Fan, Delta Pressure Switch, Low Temperature Switch, and Related Parts	214-1	214
	A6 MCS NBC Filter Box and Accessories	215-1	215
	A6 MCS Dump Valve, Interface Plate, Lifting Cables, and Related Parts	216-1	216
	A6 Electronic Magnetic Interference (EMI), Control Box, and Related Parts	217-1	217
	A6 MCS Control Box Assembly	218-1	218
	A6 MCS Electronic Magnetic Interference (EMI) Box Assembly	219-1	219
Group A7	Bulk Items		
	A7 Bulk Materials List (Not Illustrated)	Bulk-1	Bulk
Group BB2	Repair Parts Kits		
	BB2 Repair Parts Kits (Not Illustrated)	Kit-1	Kit

TABLE OF CONTENTS (Continued)

	Page	Illus Figure
SPECIAL TOOLS LIST WORK LIST		
Group AY	Support Equipment and Special Tools	
AY	Special Tools 220-1	220
AY	Special Tools, Unit Level 221-1	221
AY	Special Tools, Direct Support Level 222-1	222
AY	Special Tools, General Support Level 223-1	223
AY	Parts Kit, Hydraulic Troubleshooting - 5705562 224-1	224
AY	Socket Set, Socket Wrench - 208FA 225-1	225
AY	Wrench Set, Open End - 5705565 226-1	226
AY	Wrench Set, Crowfoot - 5705566 227-1	227
AY	Kit, Thread Insert - K4-621-621L 228-1	228
AY	Drill Set, Twist (Cobalt) - DBC229 229-1	229
CORSS REFERENCES INDEXES WORK PACKAGE		
	National Stock Number (NSN) Index Work Package I-1	
	Part Number (PIN) Index Work Package I-45	

INTRODUCTION

1. SCOPE.

This RPSTL lists and authorizes spares and repair parts, special tools, special Test, Measurement and Diagnostic Equipment (TMDE), and other special support equipment required for performance of Unit, Direct Support, and General Support maintenance of the Armored Combat Earthmover, M9 (including depot maintenance spares and repair parts). It authorizes the requisitioning, issue, and disposition of spares, repair parts, and special tools as indicated by the Source, Maintenance and Recoverability (SMR) codes.

2. GENERAL.

In addition to the Introduction work package, this RPSTL is divided into the following work packages:

- a. *Repair Parts List Work Package.*** Work packages containing lists of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. These work packages also include parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Sending units, brackets, filters, and bolts shall be listed with the component they mount on. Bulk materials are listed by item name in FIG. BULK at the end of the work packages. Repair parts kits are listed separately in their own functional group and work package. Repair parts for reparable special tools are also listed in a separate work package. Items listed are shown on the associated illustrations.
- b. *Special Tools List Work Package.*** Work packages containing lists of special tools, special TMDE, and special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in the DESCRIPTION AND USABLE ON CODE (UOC) column). Tools that are components of common tool sets and/or Class VII are not listed.
- c. *Cross Reference Indexes Work Package.*** There are two cross-reference indexes work packages in this RPSTL: The National Stock Number (NSN) Index work package and the Part Number (P/N) Index work package. The NSN Index work package refers you to the figure and item number. The P/N Index work package refers you to the figure and item number.

3. EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGE.

- a. *Item No. [Column (1)].*** Indicates the number used to identify items called out in the illustration.