TM 9-2330-376-14&P

TECHNICAL MANUAL

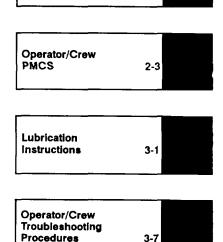
OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS)

FOR

CHASSIS, TRAILER: 5-TON, 4-WHEEL, GEMSS XM979 (NSN 2330-01-170-6747)

TRAILER, FLATBED: 5-TON, 4-WHEEL XM1061 (NSN 2330-01-207-3532) M1061A1 (NSN 2330-01-207-3533)

TRAILER, GENERAL PURPOSE, FLATBED: 7-1/2-TON XM1073 (NSN 2330-01-287-9111)



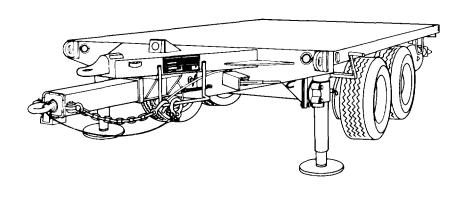
2-1

Operating

Instructions

Organizational PMCS

Repair Parts and Special Tools Lists (RPSTL)



Organizational	
Troubleshooting Procedures	4-8
Maintenance	
Allocation Chart (MAC)	B-1

This manual supersedes TM 9-2330-376-14&P, dated 30 June 1988, including all changes.

Approved for public release: distribution is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY MARCH 1992

TECHNICAL MANUAL

TM 9-2330-376-14&P

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington D. C., 31 *March* 1992

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT,
AND GENERAL SUPPORT MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS)

FOR

CHASSIS, TRAILER: 5-TON, 4-WHEEL, GEMSS
XM979 (NSN 2330-01-170-6747)

TRAILER, FLATBED: 5-TON, 4-WHEEL XM1061 (NSN 2330-01-207-3532) M1061A1 (NSN 2330-01-207-3533)

TRAILER, GENERAL PURPOSE, FLATBED: 7-1/2-TON XM1073 (NSN 2330-01-287-9111)

Current as of 27 September 1991

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, direct to: Commander, U.S. Army Tank-Automotive Command, ATTN: AMSTA-MB, Warren, MI 48397-5000. A reply will be furnished to you.

TABLE OF CONTENTS

		Page
CHAPTER 1 IN	ITRODUCTION	
Section I.	General Information	1-1
Section II.	Equipment Description and Data	1-2
Section III.	Technical Principles of Operation	1-12
CHAPTER 2 OF	PERATING INSTRUCTIONS	
Section I.	Description and Use of Operator's Controls and Indicators	2-1
Section II.	Operator/Crew Preventive Maintenance Checks and Services (PMCS)	2-3

^{*} This manual supersedes TM 9-2330-376-14&P. dated 30 June 1988, including all changes. Approved for public release distribution is unlimited.

TABLE OF CONTENTS (Con't)

		Page
Section III.	Operation Under Usual Conditions	2-9
Section IV.	Operation Under Unusual Conditions	2-19
CHAPTER 3 OF	PERATOR MAINTENANCE	
Section I.	Lubrication instructions]	3-1
Section II.	Operator/CrewTroubleshootingProcedures	3-7
Section III.	Operator Maintenance Procedures	3-12
CHAPTER 4	ORGANIZATIONAL MAINTENANCE	
Section I.	Repair Parts; Special Tools; Test, Measurement, and Diagnostic Equipment (TMDE); and Support Equipment	4-1
Section II.	Service Upon Receipt	4-2
Section III.	Organizational Preventive Maintenance Checks and Services (PMCS)	4-3
Section IV.	Organizational Troubleshooting Procedures	4-8
Section V.	General Maintenance Instructions	4-15
Section VI	Electrical System Maintenance	4-18
Section VII.	Brake System Maintenance	4-29
Section VIII.	Wheels, Hubs, and Brakedrums Maintenance	4-79
Section IX.	Frame and Towing Attachments Maintenance	4-85
Section X.	Spring Assembly Maintenance	4-96
Section XI.	Body Maintenance	4-98
Section XII.	Accessory Items Maintenance	4-99
Section XIII.	Nonelectrical Gages Maintenance	4-105
Section XIV.	Painting and identification Marking	4-108
Section XV.	Preparation for Storage or Shipment	4-110
CHAPTER 5 D	DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE	
Section I.	Axle Maintenance	5-1
Section II.	Tire Maintenance	5-11
Section III.	Frame and Towing Attachments Maintenance	5-12
Section IV.	Spring Assembly Maintenance	5-13
APPENDIX A REF	FERENCES	A-1
APPENDIX B MA	INTENANCE ALLOCATION CHART	B-1
APPENDIX C CO	MPONENTS OF END ITEM AND BASIC ISSUE ITEMS LISTS	C-1
APPENDIX D ADI	DITIONAL AUTHORIZATION LIST	D-1

TABLE OF CONTENTS (Con't)

			Illus/ Fig	Page
APPENDIX E	EXPE	NDABLE/DURABLE SUPPLIES AND MATERIALS LIST		E-1
APPENDIX F	REPA	AIR PARTS AND SPECIAL TOOLS LISTS (RPSTL)		F-1
Section I.	Iı	ntroduction		
Section II.	. F	Repair Parts List		
GRO	UP 06	ELECTRICAL SYSTEM		
	0609-	LIGHTS		1-1
		COMPOSITE LIGHT ASSEMBLY	1	1-1
	0613 -	HULL OR CHASSIS WIRING HARNESS	0	2-1
		INTERVEHICULAR CABLE ASSEMBLY	2 3	2-1 3-1
GROL	JP 11	REAR AXLE		
	1100-	REAR AXLE ASSEMBLY		4-1
		FRONT AND REAR AXLES	4	4-1
		TRUNNION AXLE	5	5-1
GROU	UP 12	BRAKES		
	1201-	HANDBRAKES		6-1
		HANDBRAKE INSTALLATION	6	6-1
	1202-	SERVICE BRAKES	_	7-1
		SERVICE BRAKE ASSEMBLY	7	7-1
		BRAKE BACKING PLATE ASSEMBLY	6 9	6-1 9-1
	1204-	HYDRAULIC BRAKE SYSTEM	9	10-1
	1204	SERVICE BRAKE HYDRAULIC COMPONENTS	10	10-1
		HYDRAULIC LINES, TUBES, AND FITTINGS (XM979 AND XM1061)	11	11-1
		HYDRAULIC LINES, TUBES, AND FITTINGS (M1061A1)	12	12-1
		HYDRAULIC LINES, TUBES, AND FITTINGS (XM1073)	13	13-1
		BRAKE ACTUATOR ASSEMBLY (XM979 AND XM1061)	14	14-1
		BRAKE ACTUATOR ASSEMBLY (XM979 AND XM1061)	15	15-1
		MASTER CYLINDER ASSEMBLY	16	16-1
	1208-	AIRBRAKE SYSTEM	47	17-1
		AIRLINES, HOSES, AND FITTINGS (XM979, XM1061, AND M1061A1)	17	17-1
		AIR LINES, HOSES, AND FITTINGS (XM1073)	18 19	18-1 19-1
		AIR RESERVOIR AND RELAY VALVE	20	20-1
		AIRBRAKE CHAMBER ASSEMBLY	21	21-1
GROL	JP 13	WHEELS AND TRACKS		
	1311-	WHEEL ASSEMBLY		22-1
	1311	DISC AND RIM, HUB, AND BRAKEDRUM	22	22-1
	1313-	TIRES, TUBES, TIRE CHAINS		23-1
	-	TIRE AND VALVE	23	23-1
GROU	JP 15 F	FRAME, TOWING ATTACHMENTS, DRAWBARS, AND ARTICULATION SYSTEM	MS	
	1501 -	FRAME ASSEMBLY		24-1
		FRAME COMPONENTS	24	24-1

TABLE OF CONTENTS (Con't)

			Illus/ Fig	Page
		03 -PINTLES AND TOWING ATTACHMENTS	25	25-1 25-1 26-1
		04 -SPAREWHEEL CARRIER AND TIRE LOCK	26	26-1 26-1 27-1
		LEVELING JACK ASSEMBLY	27	27-1
	GROUP '	16 SPRINGS AND SHOCK ABSORBERS		
	160	01 - SPRINGS	28	28-1 28-1
	GROUP	18 BODY, CAB, HOOD, AND HULL		
	180	01 - BODY, CAB, HOOD, AND HULL ASSEMBLIES	29	29-1 29-1
	GROUP	22 BODY, CHASSIS, AND HULL ACCESSORY ITEMS		
	220	02 - ACCESSORY ITEMS		30-1
	221	AND TIE-DOWNS	30	30-1 31-1
	22	DATA PLATES	31	31-1
	GROUP	47 GAGES (NONELECTRICAL), WEIGHING AND MEASURING DEVICES		
	470	O1 - INSTRUMENTS	32	32-1 32-1
	GROUP	94 REPAIR KITS		
	940	01 - REPAIR KITS	KIT	KIT-1 KIT-1
	GROUP	95 GENERAL USE STANDARDIZED PARTS		
	95	01 - BULK MATERIEL	BULK	BULK-1 BULK-1
	Section III.	Special Tools List (Not Applicable)		
	Section IV.	Cross-reference Indexes		
		National Stock Number Index		I-1 I-6 I-18
APF	PENDIX G ILLI	USTRATED LIST OF MANUFACTURED ITEMS		G-1
APF		RQUE LIMITS		H-1 Index 1
	IN	DEX		muexil

CHAPTER 1

Section I. GENERAL INFORMATION

Paragraph Title	Pa e Number
Destruction of Army Materiel to Prevent Enemy Use	1-1
Maintenance Forms, Records, and Reports	1-1
Preparation for Storage or Shipment	
Reporting Equipment Improvement Recommendations (EIRs)	1-1
Scope	1-1

1-1. **SCOPE**.

NOTE

Throughout this manual, the terms curbside and roadslde are used to describe views of the trailer. As viewed from the rear, *curbside* is the right side and *roadside* is the left side.

a. **Type of Manual.** Operator's, Organizational, Direct Support, and General Support Maintenance Manual (Including Repair Parts and Special Tools Lists).

b. Model Numbers and Equipment Names.

- (1) XM979: Chassis, Trailer, 5-Ton, 4-Wheel, Ground Emplacement Mine Scattering System (GEMSS)
- (2) XM1061: Trailer, Flatbed, 5-Ton, 4-Wheel
- (3) M1061A1: Trailer, Flatbed, 5-Ton, 4-Wheel
- (4) XM1073: Trailer, General Purpose, Flatbed,71/2-Ton
- c. Purpose of Equipment. Used to carry mounted systems over highways and cross-country.

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 MATERIEL TO PREVENT ENEMY USE.

For information on destruction of Army materiel to prevent enemy use, refer to TM 750-244-6.

1-4. PREPARATION FOR STORAGE OR SHIPMENT,

For information on preparing the trailers for storage or shipment, refer to Chapter 4, Section XV.

1-5. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIRs).

If your trailer 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. Put it on an SF Form 368 (Product *Quality Deficiency Report*). Mail it to us at: Commander, U.S. Army Tank-Automotive Command, ATTN: AMSTA-MP, Warren, MI 48397-5000. We'll send you a reply.

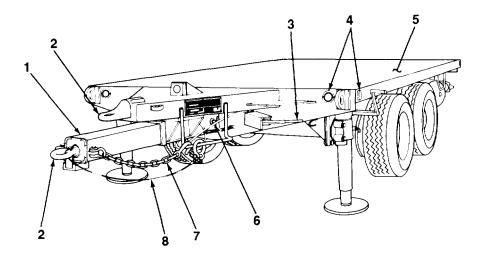
Section II. EQUIPMENT DESCRIPTION AND DATA

Paragraph Title	Page Number
Differences Between Models	1-9
Equipment Characteristics, Capabilities, and Features	1-2
Equipment Data	1-10
Location and Contents of Data Plates	1-8
Location and Description of Major Components	1-3

1-6. EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES.

- a. The XM979, XM1061, M1061A1, and XM1073 are used to carry mounted systems over highways and cross-country.
- b. The XM979, XM1061, M1061A1, and XM1073 are flatbed, tandem axle trailers with the following characteristics:
- (1) 24-volt electrical system with power supplied from the towing vehicle receptacle to operate the trailer composite lights.
- (2) All trailers have an air/hydraulic brake system which receives air pressure from the towing vehicle through intervehicular air hoses.
- (3) The XM979 and XM1061 can be towed safely by a vehicle without airbrake connections through the use of the inertia brake system.
- (4) Reach tube on the XM979, XM1061, XM1073, and, if fittied, the M1061A1 provides for tracked vehicle towing.
 - (5) Leveling jacks on the four corners of the trailers provide stability during loading and off loading.

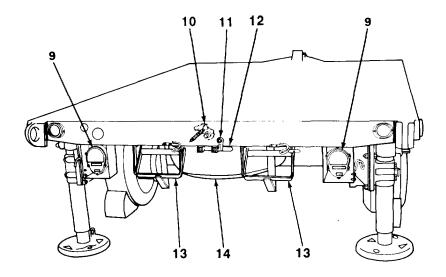
1-7. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS.



Key	Component	Description
1	Reach Tube (XM979, XM1061 ,and XM1073)	Slides forward and rearward to allow trailer to be towed by a tracked vehicle.
2	Towing Lunette	Used to couple trailer to towing vehicle pintle.
3	Handbrake Lever	Used to activate brakes when trailer is parked or stopped.
4	Reflectors	Indicate presence of trailer to other vehicles.
5	Bed	Used to carry mounted systems.
6	Pin	Locks reach tube into selected position.
7	Safety Chains	Hook to towing shackles on towing vehicle to prevent the trailer from fully breaking away.
8	Inertia Brake Actuator Emergency Brake Cable (XM979 and XM1061)	Applies emergency brakes if trailer breaks away.

TA700898

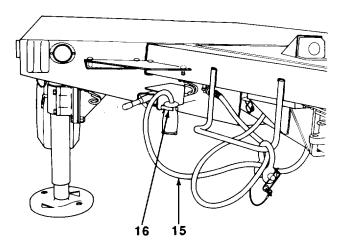
1-7. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS (Con't).



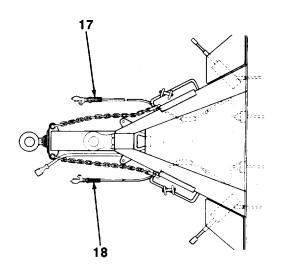
Key	Component	Description
9	Composite Lights	Consist of blackout, service, directional, and stoplights.
10	Locking Pawl	Prevents accidental lowering of spare tire.
11	Handcrank Latch	Stows spare tire carrier handcrank when not in use.
12	Handcrank	Raises and lowers spare tire.
13	Wheel Chock Holder	Stows wheel chocks when not in use.
14	Spare Tire	Mounted in spare tire carrier. Used in case of tire failure.

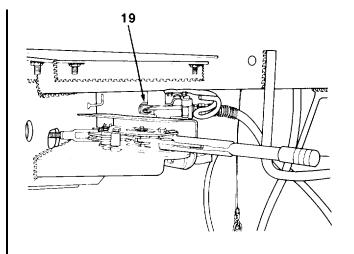
TA700899

1-7. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS (con't).



Key	Component	Description
15	Intervehicular Cable Assembly	Connects electrical power from towing vehicle to trailer composite lights.
16	Clip	Stows intervehicular cable assembly connector when not in use.





Key	Component	Description
17	Service Air Hose	Connects towing vehicle service air supply to trailer service brakes. Tagged "S".
18	Emergency Air Hose	Connects towing vehicle emergency air supply to trailer emergency brakes. Tagged "E". Brakes are actuated when emergency air hose is severed or disconnected.
19	Air Coupling Stowage Brackets	Provide stowage for trailer air couplings when not in use.

TA700900