TECHNICAL MANUAL

OPERATOR, ORGANIZATIONAL, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL

SEMITRAILER, STAKE: 12-TON, 4-WHEEL,
M127 (2330-00-797-9207), M127A1 (2330-00-048-7743),
M127A1C (2330-00-752-9750) AND
M127A2C (2330-00-788-6299)

INTRODUCTION 1-1

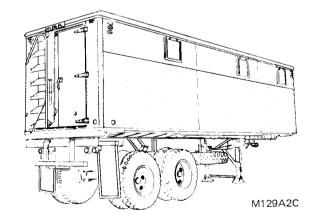
OPERATING 2-1 INSTRUCTIONS

SEMITRAILER, VAN: CARGO, 12-TON, 4-WHEEL, M128A1 (2330-00-679-5581), M128A1C (2330-00-752-9751), AND M128A2C (2330-00-788-6296)

OPERATOR 3-1
MAINTENANCE
INSTRUCTIONS

SEMITRAILER, VAN: SUPPLY, 12-TON, 4-WHEEL, M129A1 (2330-00-629-1673), M129A1C (2330-00-752-9752), AND M129A2C (2330-00-788-6289)

ORGANIZATIONAL 4-1
MAINTENANCE
INSTRUCTIONS



DIRECT SUPPORT AND 5-1
GENERAL SUPPORT
MAINTENANCE
INSTRUCTIONS

HEADQUARTERS, DEPARTMENT OF THE ARMY
FEBRUARY 1983

HEADQUARTERS DEPARTMENT OF THE ARMY Washington, D.C. 18 February 1983

OPERATOR, ORGANIZATIONAL, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL

SEMITRAILER, STAKE: 12-TON, 4-WHEEL, M127 (2330-00-797-9207), M127A1 (2330-00-048-7743), M127A1C (2330-00-752-9750, AND M127A2C (2330-00-788-6299)

SEMITRAILER, VAN: CARGO, 12-TON, 4-WHEEL, M128A1 (2330-00-679-5581), M128A1C (2330-00-752-9751), AND M128A2C (2330-00-788-6296)

SEMITRAILER, VAN: SUPPLY, 12-TON, 4-WHEEL, M129A1 (2330-00-629-1673), M129A1C (2330-00-752-9752), AND M129A2C (2330-00-788-6289)

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of away 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 Tank-Automotive Command, ATTN: DRSTA-MB, Warren, MI 48090. A reply will be furnished to you.

		Page
CHAPTER 1.	INTRODUCTION	1-1
Section I. Section II.	General Information Equipment Description Data	1-1 1-9
CHAPTER 2.	OPERATING INSTRUCTIONS	2-1
Section I. Section II. Section III. Section IV.	Description and Use of Operator's Controls and Indicators Operator/Crew, Preventive Maintenance Checks and Services (PMCS) Operation Under Usual Conditions Operation Under Unusual Conditions	2-1 2-22 2-33 2-42

^{*}This manual supersedes TM 9-2330-207-14, 22 June 1961, including all changes.

			Page
CHAPTER	3.	OPERATOR MAINTENANCE INSTRUCTIONS	3-1
Section Section	I. II.	Operator Troubleshooting Procedures Maintenance Procedures	3-1 3-5
CHAPTER Secti	4.	ORGANIZATIONAL MAINTENANCE INSTRUCTIONS	4-1
Section Section Section Section Section Section Section Section V Section	IX. X. XI. KII. (III.	Lubrication Instructions Repair Parts, Special Tools, TMDE, And Support Equipment Service Upon Receipt of Materiel Organizational Preventive Maintenance Checks and Services (PMCS) Organizational Troubleshooting Procedures Maintenance of Electrical System Wheels, Hubs and Drums Axles Brakes Spare Tire Carrier Landing Leg Springs and Shock Absorbers Body Miscellaneous Body Accessories Maintenance Under Unusual Conditions	4-1 4-5 4-7 4-8 4-11 4-21 4-54 4-58 4-82 4-85 4-96 4-114 4-115
CHAPTER	5.	DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE INSTRUCTIONS	5-1
Section Section Section	V.	Repair Parts, Special Tools, TMDE And Support Equipment Repair and Rebuild of Brakes Repair of Brake Drums Repair of Torque Rods Repair of Body Repair Standards Repair and Rebuild of Wood Decking (Floor Boards)	5-1 5-3 5-9 5-9 5-10 5-16 5-18
CHAPTER	6.	PREPARATION FOR STORAGE OR SHIPMENT	6-1
Section Section	1. II.	Preparation For Storage Preparation For Shipment	6-1 6-2
APPENDIX APPENDIX APPENDIX APPENDIX APPENDIX APPENDIX INDEX	B. C. D. E.	REFERENCES MAINTENANCE ALLOCATION CHART EXPENDABLE SUPPLIES AND MATERIALS LIST TORQUE LIMITS COMPONENTS OF END ITEMS AND BASIC ISSUE ITEMS LISTS ADDITIONAL AUTHORIZATION LISTS	

CHAPTER 1 INTRODUCTION

Section I. GENERAL INFORMATION

	Page		Page
Scope	1-7	Preparation for Storage or Shipment	1-8
Maintenance Forms and Records	1-7	Reporting Equipment Recommendations	s 1-8
Destruction of Army Materiel to		Nomenclature Cross-Reference	1-8
Prevent Enemy Use	1-8		

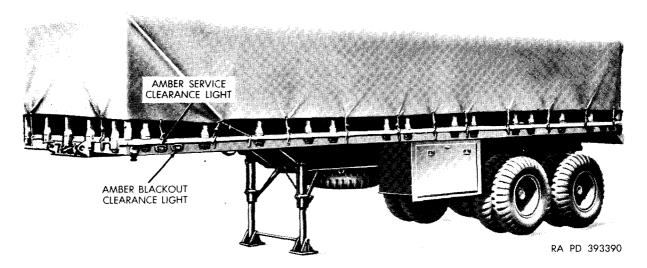


Figure 1-1. Semitrailer, stake, M127 with paulin, left front view

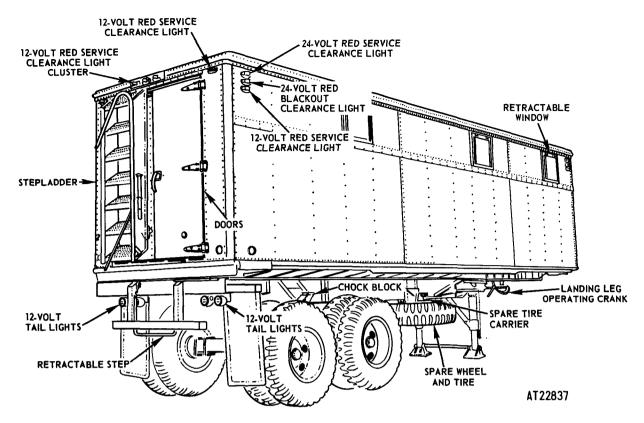


Figure 1-12. Semitrailer, supply van, M129A2C, right rear view

1-1. SCOPE

- a. Type of Manual. Operator, Organizational, Direct Support and General Support Maintenance Manual.
- b. Model Numbers and Equipment Names.

Model No.

Semitrailer, Stake: 12-ton, 4-wheel Semitrailer, Van: cargo, 12-ton, 4-wheel Semitrailer, Van: supply, 12-ton, 4-wheel M127, M127AI, M127A1C, M127A2C M128A1, M128A1C, M128A2C M129A1, M129A1C, M129A2C M129A2C (Kasel Model)

- c. <u>Purpose of Equipment.</u> The semitrailers are intended for use in transporting military supplies and general cargo.
- <u>d. Special Limitations.</u> Do not exceed the load and speed limitation of the semitrailer. The semitrailer is designed to be towed over smooth, hard-surfaced roads with loads up to 18-tons at speeds as high as 50 mph. It can also be towed over unimproved roads, trails, and open rolling terrain with loads up to 12-tons at a sustained speed of 20 mph. The semitrailer should be operated only after being serviced and equipped for existing climatic conditions.

1-2. MAINTENANCE FORMS AND RECORDS

Department of the Army forms and procedures used for equipment maintenance will be prescribed by TM 38-750, the Army Maintenance Management System (TAMMS).

1-3. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Refer to TM 750-244-6, Procedures for Destruction of Equipment to Prevent Enemy Use (U.S. Army Tank-Automotive Command).

1-4. PREPARATION FOR STORAGE OR SHIPMENT

See Chapter 6 for storage and shipment information.

1-5. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your semitrailer 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 SF368 (Quality Deficiency Report). Mail it to us at: Commanding General, U.S. Army Tank-Automotive Command, Attn: DRSTA-MP, Warren, Michigan 48090. We'll send you a reply.

1-6. NOMENCLATURE CROSS-REFERENCE

Common Name Official Nomenclature

Semitrailer (M127 Series)
Semitrailer, Stake: 12-Ton, 4-Wheel
Semitrailer (M128 Series)
Semitrailer, Van: Cargo, 12-Ton, 4-Wheel
Semitrailer, Van: Supply, 12-Ton, 4-Wheel

Section II. EQUIPMENT DESCRIPTION DATA

	Page		Page
Purpose, Capabilities and Features	1-9	Equipment Data	1-11
Differences Between Models	1-10	Location and Description of Major	
		Components	1-15

1-7. PURPOSE, CAPABILITIES AND FEATURES

- a. Purpose. The Semitrailer is a supply and general cargo hauling trailer in various models.
 - .M127 Series stake semitrailer (hauls breakbulk cargo)
 - . M128 Series cargo van
 - . M129 Series supply van

b. Capabilities.

- (1) Each semitrailer or chassis is to be towed by a 5-ton, 6X6 truck tractor M52 or similar vehicle equipped with fifth wheel, air supply, and a 24-volt electrical system.
- (2) If a 24-volt electrical system is not available, an alternate towing vehicle with a 12-volt electrical system may be used.

c. Features (All Models).

- (1) General Features of All Models.
 - (a) 12-ton, 4-wheel.
 - (b) Cross-country payload 24,000 lbs at 20 mph.
 - (c) Highway payload 24,000 lbs at 50 mph.
 - (d) Fifth wheel plate and king pin coupling.
 - (e) Two rear axles on leaf-spring suspension.
 - (f) Foot-type retractable landing legs, for front end support.

 - g) Spare tire on winch-type spare tire carrier.
 (h) Chock blocks for parking, chained to chassis.
 - (i) Two float pads, for landing leg on soft ground.
 - (j) Towing vehicle supplies brake air pressure and control of brakes.
 - (k) Chassis frame welded into single integral unit.
- (2) Semitrailer M127, M127A1, M17A1C and M127A2C Special Features.
 - (a) 12-ton, 4-wheel, stake semitrailer.
 - (b) Stake pockets located on the outside of the side rails and on the front and rear crossmembers.
 - (c) Thirteen sections of removable body panels; one on front, two on rear, and five on each side.
 - (d) Clearance lights located on the front and back portion of each side of the semitrailer are supplied with current and operated from the towing vehicle.
 - (e) Hardwood floor fastened directly to body frame.
 - (f) Tool box beneath body frame; left side of semitrailer.
 - (a) Equipped with rectangular paulin designed to cover areas enclosed by panels.
- (3) Semitrailer M128A1, M128A1C and M128A2C Special Features.
 - (a) 12-ton 4-wheel, cargo van semitrailer.
 - (b) Used as a cargo carrier.
 - (c) Body does not have windows or ventilation openings other than ventilation fan.
 - (d) 12-volt and 24-volt electrical system.