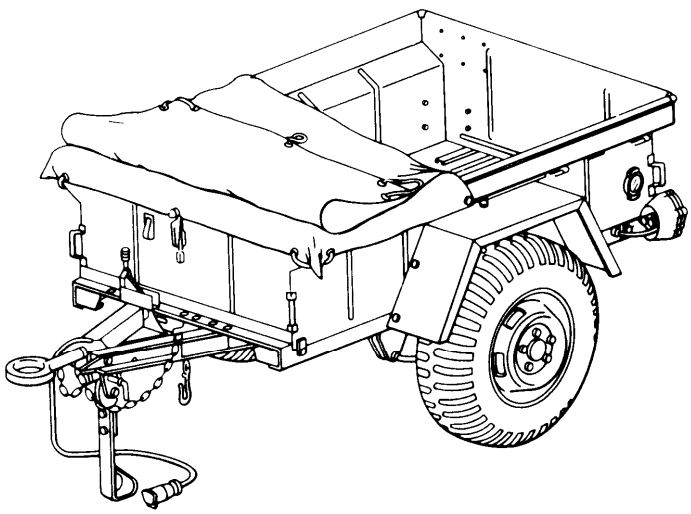
TM 9-2330-251-14&P

TECHNICAL MANUAL

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

FOR

TRAILER, CARGO: I/4-TON, 2-WHEEL
M416 (NSN 2330-00-706-5495)
AND
M416A1 (NSN 2330-01-046-2855)



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This manual supersedes TM 9-2330-251-14&P, dated 25 October 1985.

Approved for public release; distribution Is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

SEPTEMBER 1990

TECHNICAL MANUAL

TM 9-2330-251-14&P

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington *D.C.,4September 1990*

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

for

TRAILER, CARGO: 1/4-TON, 2-WHEEL M416 (NSN 2330-00-706-5495) AND M416A1 (NSN 2330-01-046-2855)

Current as of 5 January 1990

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 B/ank 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, Ml 48397-5000. A reply will be furnished to you.

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CHAPTER 1
INTRODUCTION

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1-1. SCOPE.

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

b. Equipment Name and Model Numbers. Trailer, Cargo: ¼-Ton, 2-Wheel, M416 and M416A1.

c. Purpose of Equipment. Used to carry a maximum load of 500 1b (227 kg) both cross-country and highway.

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 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 XIV.

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 or performance. Put it on an SF 368 *(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

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

a. Characteristics.

(1) Watertight body will float the trailer and payload during fording.

(2) Two drain valves, one in the left front and one in the right rear of floor, allow water to be drained from the trailer cargo body.

(3) Two-wheel single axle with multi-leaf spring suspension.

(4) Retractable landing leg supports front of the trailer when uncoupled from the towing vehicle,

(5) Manually operated parking brake.

(6) Operates on 24-volt electrical system.

(7) Automatic emergency braking if M416A1 trailer breaks away from the towing vehicle,

b. Capabilities and Features.

(1) Maximum payload (cross-country and highway): 500 lb (227 kg).

(2) Angle of departure: 20°.

(3) Towing vehicle: ¼- or ¾-ton utility truck.

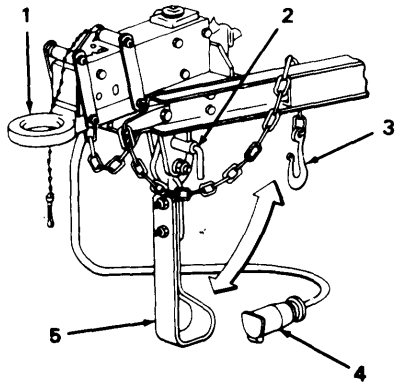
(4) Towing speeds (maximum):

(a) Highway: 55 mi/h (88 km/h)

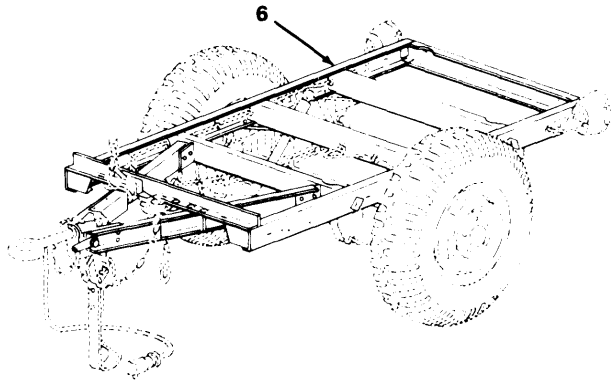
(b) Improved roads: 50mi/h (80 km/h)

(c) Cross-country: 30mi/h (48 km/h)

1-7. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS,



Key	Component	Description
1	Drawbar Coupler	Connects to the towing vehicle pintle hook.
2	Lockpin	Locks the landing leg in up or down position.
3	Safety Chains	Hook to eyebolts on the towing vehicle to prevent the trailer from fully breaking away.
4	Intervehicular Cable	Provides connection between the towing vehicle and trailer electrical system.
5	Landing Leg	Supports front of trailer when not coupled to the towing vehicle.



Key	Component	Description
6	Frame	Welded assembly made of two pressed-steel siderails, reinforced by four pressed-steel crossmembers.

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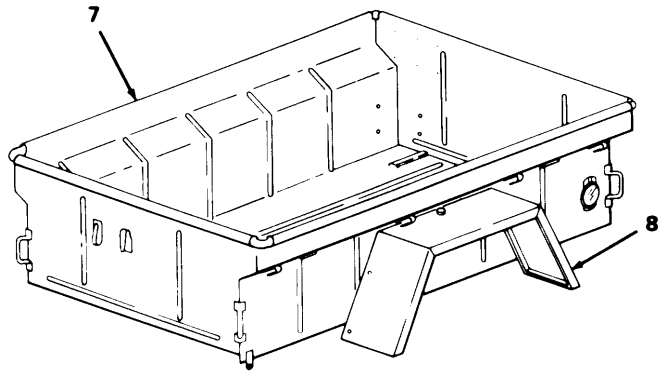
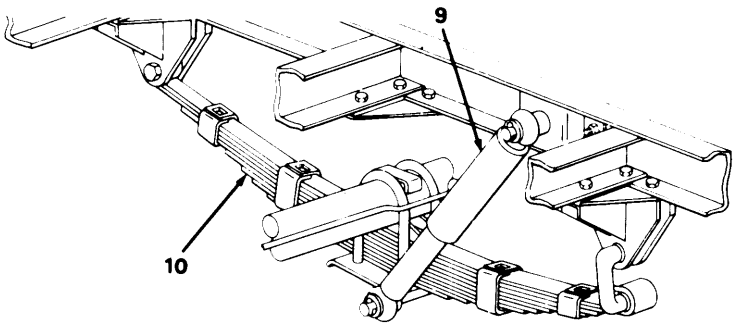
1-7. LOCATION AND DESCRIPTION OF MAJOR COMPONENTS (Con't).



Key	Component	Description
7	Cargo Body	Watertight, one-piece welded assembly. Allows the trailer and load to float during fording operations.
8	Fender	Protects personnel, cargo, and towing vehicle from mud, rocks, and debris that may be thrown from the trailer tires during operation.



Key	Component	Description
9	Shock Absorbers	Support weight of the trailer and cushion road shock.
10	Springs	Multi-leaf construction support weight of the trailer.

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