

DEPARTMENT OF THE ARMY  
TECHNICAL MANUAL

TM 9-8218

(FORMERLY TM 9-881)

DEPARTMENT OF THE AIR  
FORCE TECHNICAL ORDER

T019-75AB-65

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2-TON 4-WHEEL  
**DIRECTOR  
TRAILERS**  
M13, M14, AND M22 AND  
2-TON 4-WHEEL  
**GENERATOR  
TRAILERS**  
M7 AND M18



*DEPARTMENTS OF THE ARMY AND THE AIR FORCE*

*DECEMBER 1953*

TM 9-8218  
TO 36A11-1-291  
C 1

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

DEPARTMENT OF THE AIR FORCE TECHNICAL ORDER

2-TON 4-WHEEL DIRECTOR TRAILERS  
M13, M14, AND M22 AND 2-TON 4-WHEEL  
GENERATOR TRAILERS M7 AND M18

TM 9-8218  
TO 36A11-1-291  
CHANGES No. 1

DEPARTMENTS OF THE ARMY AND  
THE AIR FORCE  
WASHINGTON 25, D. C., 13 December 1957

TM 9-8218/TO 36A11-1-291, 3 December 1953, is changed as follows:

**52. General Lubrication Instructions**

\* \* \* \* \*

*c. Points of Application.*

\* \* \* \* \*

(3) Clean and lubricate unsealed bearings as follows:

\* \* \* \* \*

(c) (Superseded) Before installing bearing cone and roller assemblies in wheel hubs, coat the entire inner surface of the hub with a thin layer of lubricant (GAA) (not over 1/16 in.) to prevent rusting. Before installing wheel hubs on axle spindles, carefully inspect grease retainers. Particular attention must be given to the leather insert to make sure there are no frayed edges, breaks, or splits and that it is not worn thin; replace seals or retainers as necessary. Apply a thin coat of lubricant (GAA) (not over 1/16 in.) to the spindle and hub caps. Do not fill hub caps to serve as grease cups under any circumstances.

*Note.* For normal operation, lubricate wheel bearings at interval specified on lubrication order.

\* \* \* \* \*

[AG 451.3 (3 Dec 57)]

*This manual correct to 5 June 1953*

**\*TM 9-8218/TO 19-75AB-65**

TECHNICAL MANUAL }  
 No. 9-8218 }  
 TECHNICAL ORDER }  
 No. 19-75AB-65 }

DEPARTMENTS OF THE ARMY AND  
 THE AIR FORCE  
 WASHINGTON 25, D. C., 3 December 1953.

**2-TON 4-WHEEL DIRECTOR TRAILERS M13, M14, AND M22,  
 AND 2-TON 4-WHEEL GENERATOR TRAILERS M7 AND  
 M18**

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\*This manual supersedes TM 9-881, 22 December 1944; TB ORD FE 4, 1 June 1944; and those portions of SB 9-88, 24 August 1948, pertaining to the matériel covered herein.

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## CHAPTER 1

### INTRODUCTION

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#### Section I. GENERAL

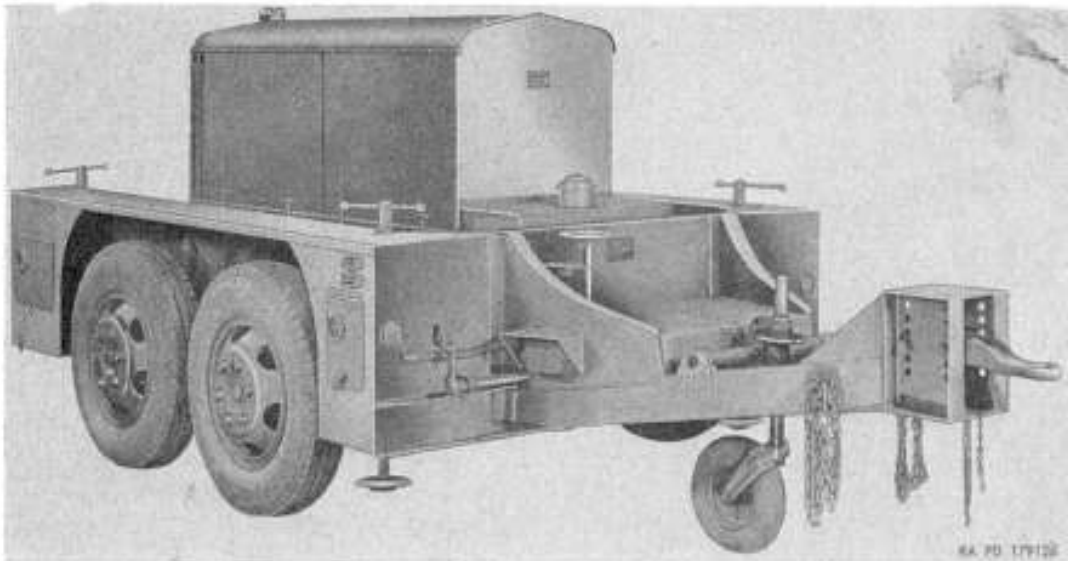
##### 1. Scope

*a.* This manual contains instructions for operation and organizational maintenance of 2-ton 4-wheel director trailers M13, M14, and M22 and the 2-ton 4-wheel generator trailers M7 and M18 (figs. 1 through 9) for the using organization, and instructions for field and depot maintenance for ordnance maintenance personnel.

*b.* The appendix contains a list of current references, including supply catalogs, forms, technical manuals, and other available publications applicable to the materiel.

*c.* This manual differs from TM 9-881, dated 22 December 1944 as follows:

- (1) Deletes reference to mount trailer M17 and machine gun carriage M51.
- (2) Revises information:
  - (*a*) Trouble shooting.
  - (*b*) Preventive maintenance.



*Figure 1. Three-quarter front view of generator trailer M7 with generator installed (Brill).*

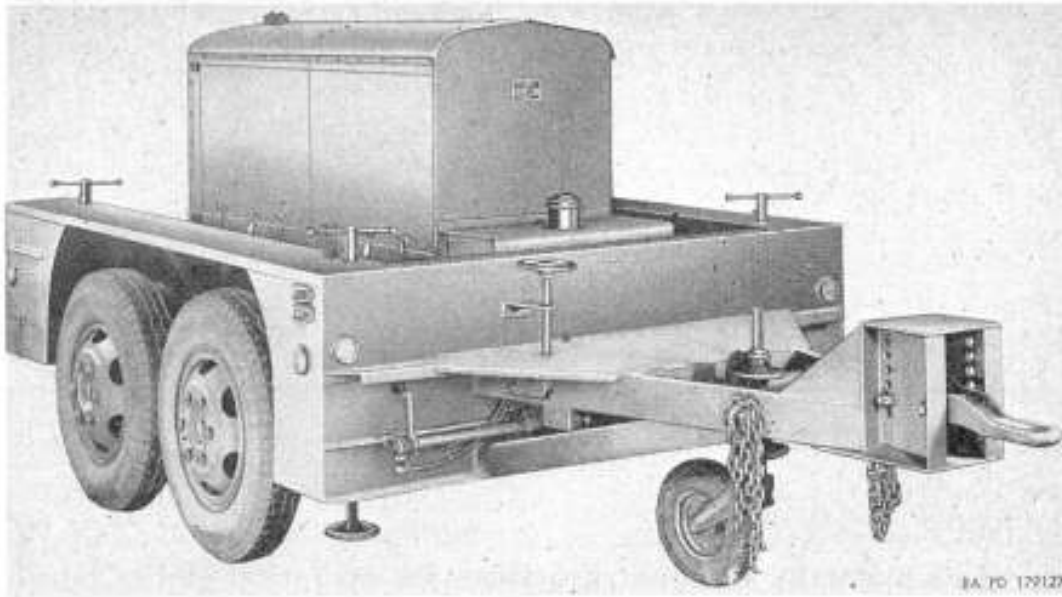


Figure 2. Three-quarter front view of generator trailer M7 with generator installed (Fruehauf).

- (c) Serviceability standards.
- (d) Lubrication.
- (e) Trailer equipment.
- (f) Winterization.
- (g) Personnel heater.
- (h) Rocker arm rebuild.

## 2. Maintenance Allocation

*a. Organizational Maintenance Allocation.* In general, the prescribed organizational maintenance responsibilities will apply as

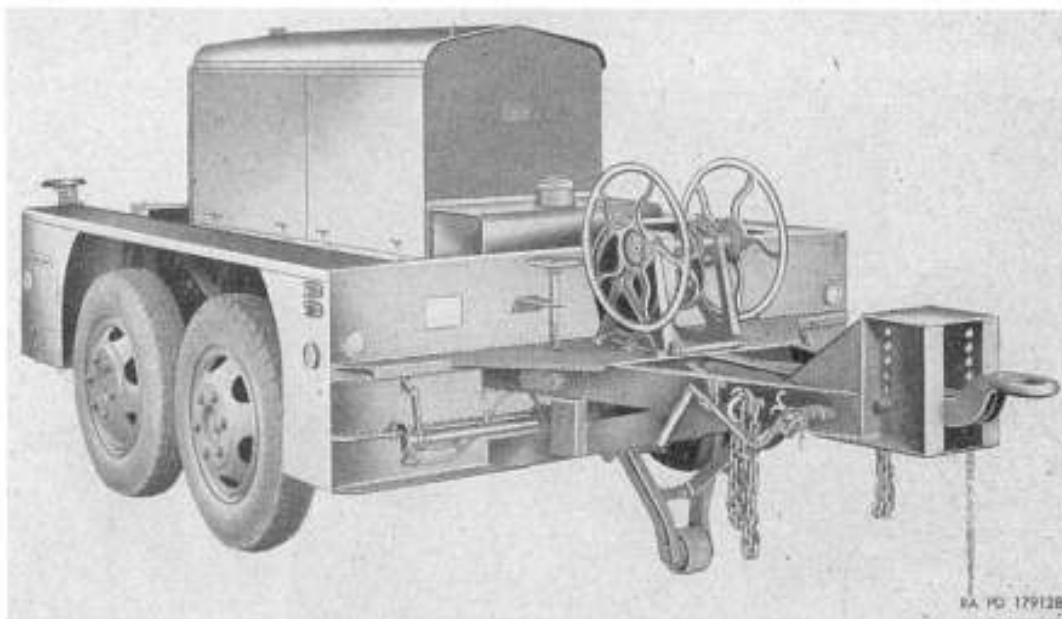
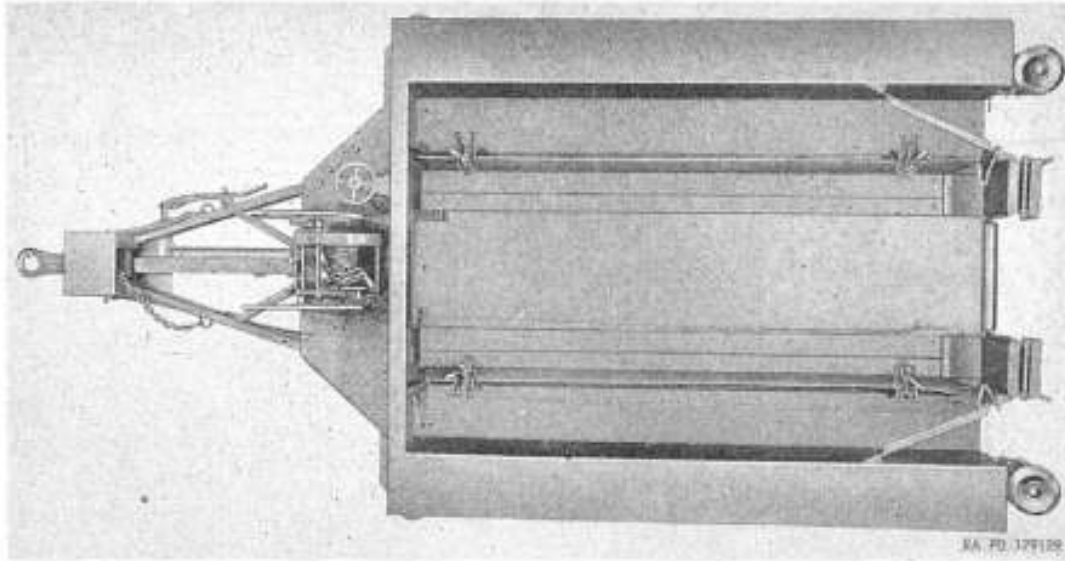


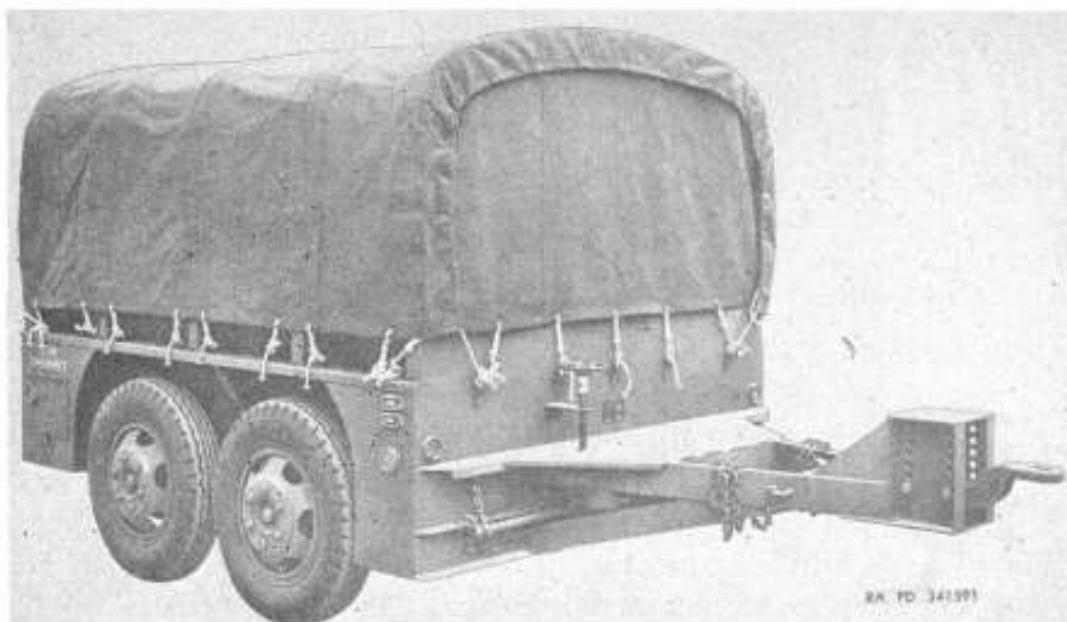
Figure 3. Three-quarter front view of generator trailer M18 with generator installed.



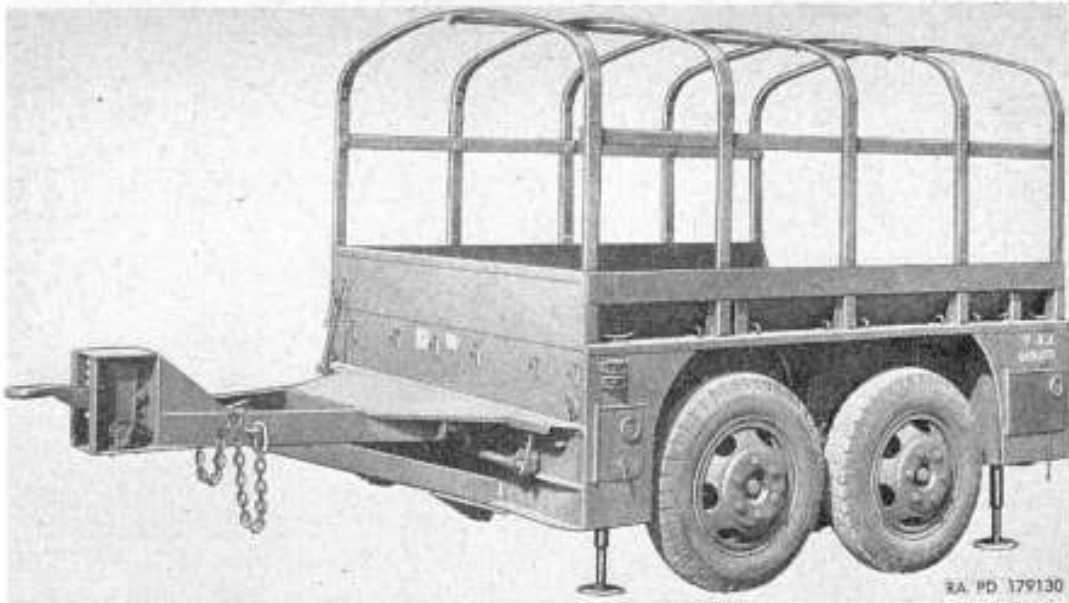
*Figure 4. Top view of generator trailer M18.*

reflected in the allocation of tools and spare parts in the appropriate column of the current ORD 7 supply manual pertaining to this materiel and in accordance with the extent of disassembly prescribed in this manual for the purpose of cleaning, lubricating, or replacing authorized spare parts. In all cases where the nature of the repair, modification, or adjustment is beyond the scope or facilities of the using organization, the supporting ordnance maintenance unit should be informed so that trained personnel with suitable tools and equipment may be provided or other proper instructions issued.

*Note.* In cases of emergency and with prior approval of the supporting ordnance officer, the using organization may replace a certain assembly, such as the hand winch, which is normally replaced by ordnance maintenance units. Re-



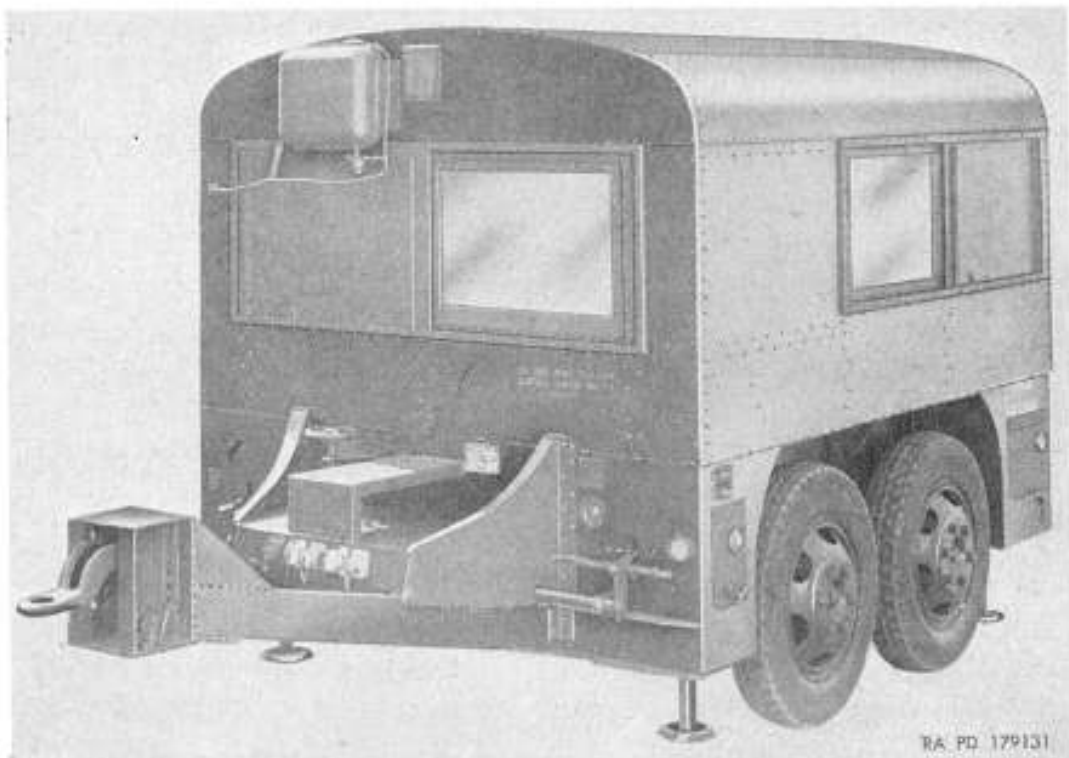
*Figure 5. Three-quarter front view of director trailer M13 with tarpaulin installed (Brill).*



*Figure 6. Three-quarter front view of director trailer M13 with tarpaulin removed (Fruchauf).*

placement assemblies, necessary tools not carried by the using organization, special instructions regarding the assembly and associated accessories, etc., may be obtained from the supporting ordnance maintenance unit.

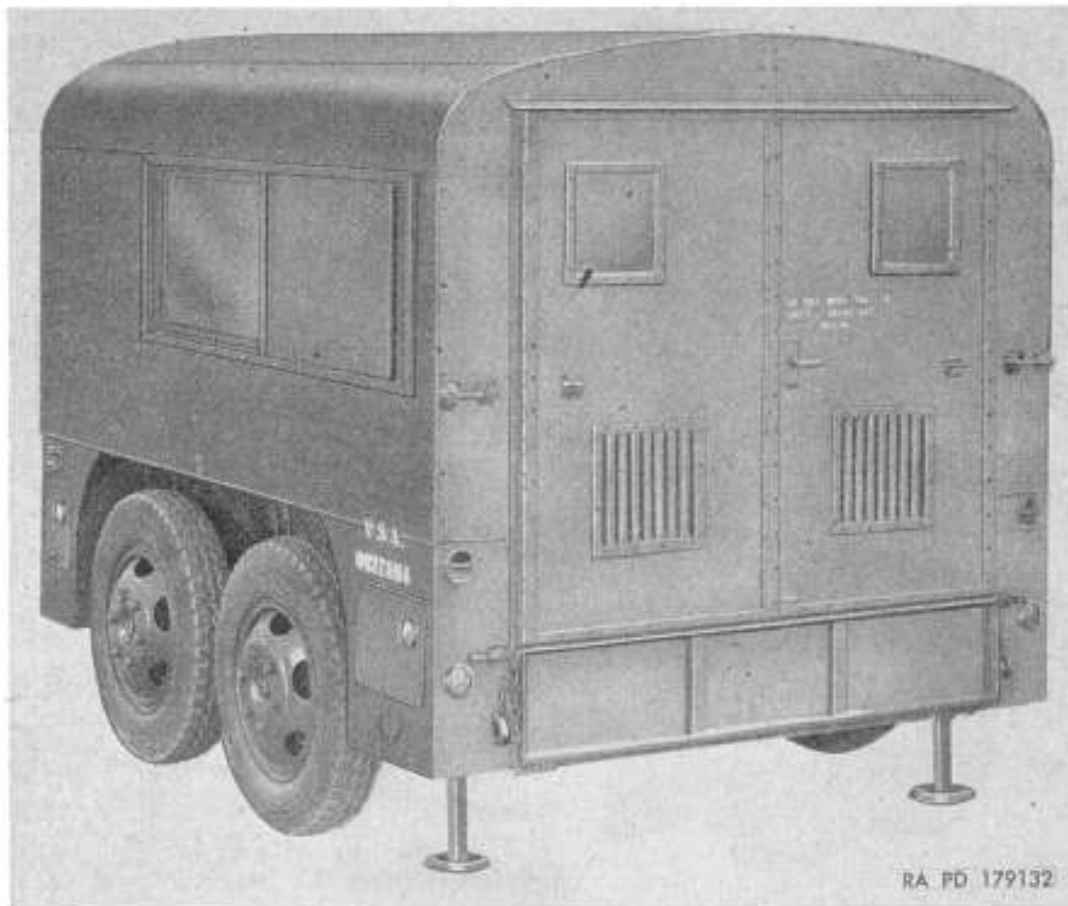
*b. Field and Depot Maintenance Allocation.* The publication herein of instructions for complete disassembly and rebuild is not to be construed as authority for the performance by field maintenance units of those functions which are restricted to depots and arsenals.



*Figure 7. Three-quarter front view of director trailer M14.*



In general, the prescribed maintenance responsibilities will apply as reflected in the allocation of maintenance parts listed in the field and depot maintenance columns of the current ORD 8 supply manual pertaining to this materiel. (When an ORD 8 supply manual is not available, the field and depot maintenance allocation may be determined in accordance with chapter 4 of this publication.) Instructions for depot maintenance are to be used by maintenance companies



*Figure 8. Three-quarter rear view of director trailer M14.*

in the field only when the tactical situation makes the repair functions imperative. Supply of parts listed in the depot stock guide column of ORD 8 supply manuals will be made to field maintenance only when the emergency nature of the maintenance to be performed has been certified by a responsible officer of the requisitioning organization.

### **3. Forms, Records, and Reports**

*a. General.* Responsibility for the proper execution of forms, records, and reports rests upon the officers of all units maintaining this equipment. However, the value of accurate records must be fully appreciated by all persons responsible for their compilation, maintenance, and use. Records, reports, and authorized forms are normally utilized to indicate the type, quantity, and condition of materiel

to be inspected, to be repaired, or to be used in repair. Properly executed forms convey authorization and serve as records for repair or replacement of materiel in the hands of troops and for delivery of materiel requiring further repair to ordnance shops in arsenals, depots, etc. The forms, records, and reports establish the work required, the progress of the work within the shops, and the status of the materiel upon completion of its repair.

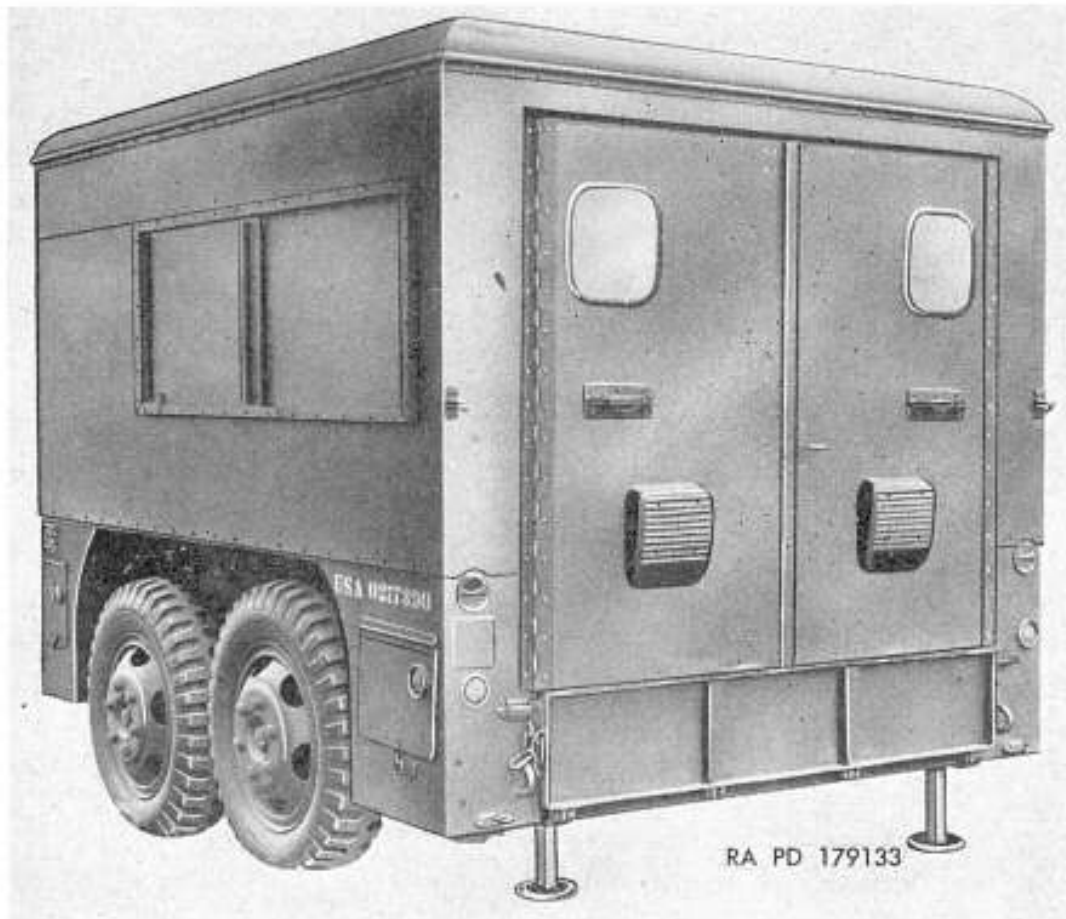


Figure 9. Three-quarter rear view of director trailer M22.

*b. Authorized Forms.* The forms generally applicable to units operating and maintaining this equipment are listed in the appendix. For a current and complete listing of all forms, refer to current SR 310-20-6. For instructions on use of these forms, refer to FM 9-10.

*c. Field Report of Accidents.* The reports necessary to comply with the requirements of the Army safety program are prescribed in detail in the SR 385-10-40 series of special regulations. These reports are required whenever accidents involving injury to personnel or damage to materiel occur.

*d. Report of Unsatisfactory Equipment or Materials.* Any suggestions for improvement in design and maintenance of equipment and spare parts, safety and efficiency of operation, or pertaining to the application of prescribed petroleum fuel, lubricants, and/or preserv-