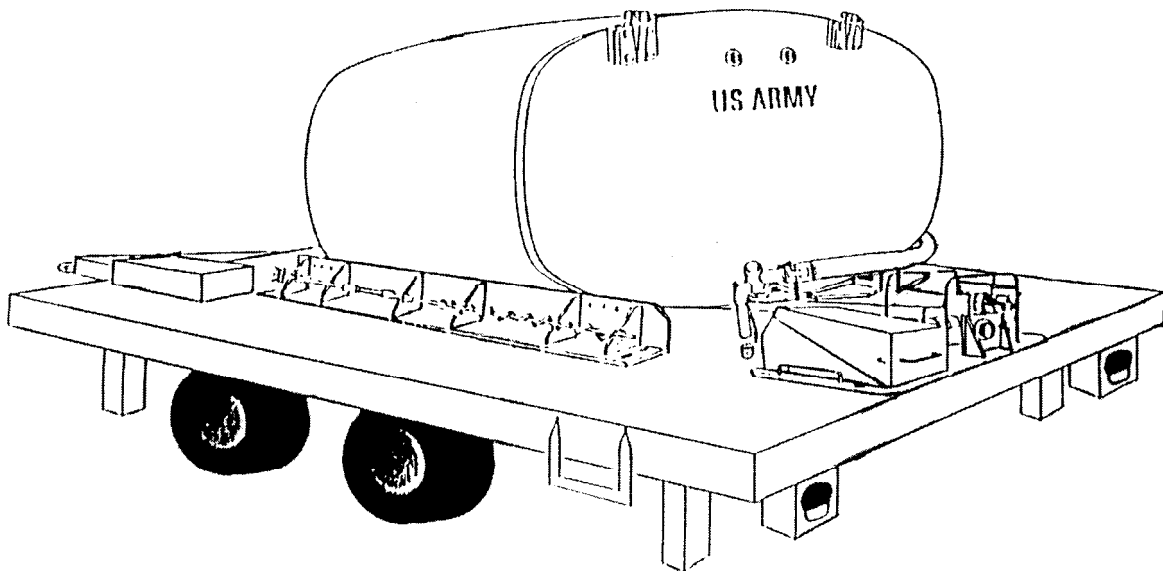


Technical Manual

**OPERATOR'S AND UNIT MAINTENANCE
MANUAL AND REPAIR PARTS AND
SPECIAL TOOLS LIST**

FOR

**TANK, UNIT, 500 GALLON
(P/N 13226E2146), LIQUID DISPENSING
FOR TRAILER (M1061A1) MOUNTING
(NSN 4930-01-370-6079)**



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HEADQUARTERS, DEPARTMENT OF THE ARMY

21 JUNE 1999

TECHNICAL MANUAL

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DEPARTMENT OF THE ARMY
WASHINGTON, D.C. 21 June 1999

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REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

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CHAPTER 1

INTRODUCTION

Section I. GENERAL INFORMATION

1-1. Scope. This is an operator and unit maintenance level manual, including Repair Parts and Special Tools List. This manual supports the trailer mounted Low Profile 500-gallon liquid dispensing tank unit, which is a portable storage tank used for transporting and dispensing liquid petroleum products.

1-2. Maintenance Forms and Records. 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. Reporting Equipment Improvement Recommendations (EIRS). If your unit needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you do not like about your equipment. Let us know why you do not like the design, put it on a SF 368 (Quality Deficiency Report). Mail it to Commander, U.S. Army Tank-Automotive and Armaments Command, ATTN: AMSTA-TR-E/MPA, Warren, Mi. 48397-5000. A reply will be mailed to you.

1-4. Destruction of Army Materiel to Prevent Enemy Use. Refer to TM 750-244-3, Procedures for Destruction of Equipment to Prevent Enemy Use.

1-5. Administrative Storage of Equipment.

a. Placement of equipment in administrative storage should be for short periods of time when a shortage of maintenance effort exists. Items should be in mission readiness within 24 hours or time factors as determined by the directing authority. During the storage period appropriate maintenance records will be kept.

b. Before placing equipment in administrative storage, current preventive maintenance checks and services should be completed, shortcomings and deficiencies should be corrected, and all existing modification work orders should be applied.

c. Storage site selection. Inside storage is preferred for items selected for administrative storage. If an inside storage facility is not available, any type or style container is suitable providing it gives complete shelter from the elements.

d. Refer to Chapter 4, Section VI, paragraph 4-16 For procedures to move equipment to a new worksite.

Section II. EQUIPMENT DESCRIPTION

1-6. Equipment Characteristics, Capabilities and Features.

a. Portable storage 500-gallon tank, equipped with skids, used for transporting and storing liquid petroleum products. Tank assembly is welded and fabricated from aluminum.

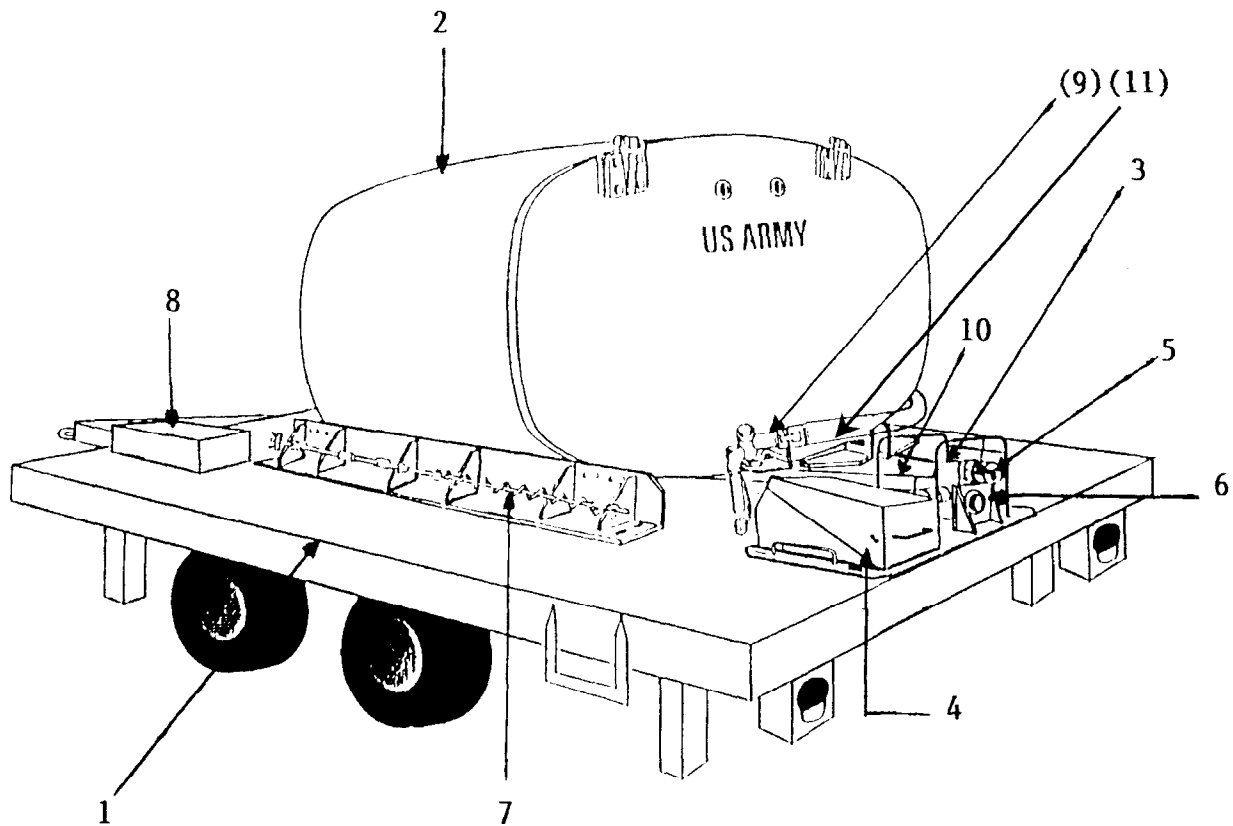
b. Modified M1061A1 series trailer used to transport various equipment.

c. Lifting eyes on top of tank facilitates loading onto the trailer.

- d. Holddown Assembly consists of two tank mounting angles, four end angle brackets, two adapter clamp assemblies, two adapter sockets, and adjustable turnbuckles for securing tank to the trailer.
- e. Tank is filled and dispenses through the Bottom Loading Valve at bottom of tank and fuel manifold at rear of trailer. Automatic fuel shut-off during bottom loading refilling.
- f. Control Box Assembly is equipped with ON/OFF tank valve operating levers and a fuel manifold used to control refilling tank or dispensing liquid product operations.

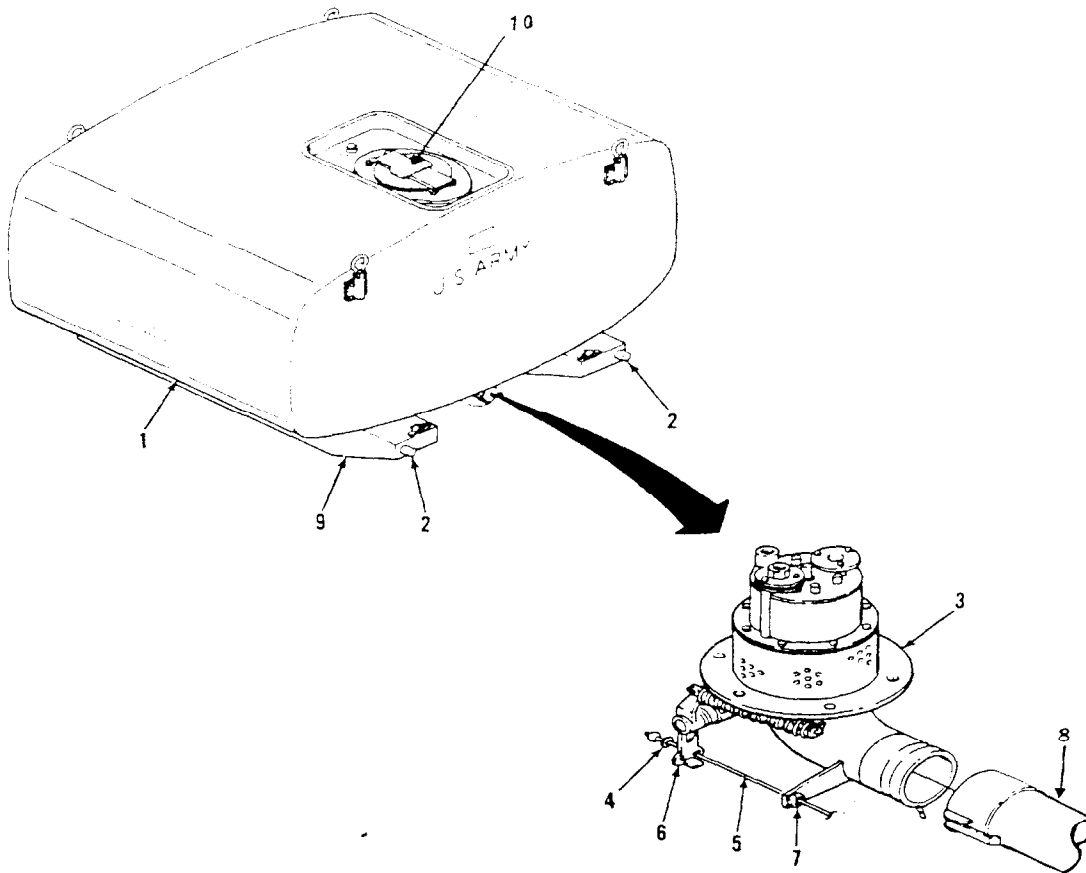
1-7. Location and Description of Major Components.

- a. **Trailer.** The 5-ton Trailer M1061A1 (1, Figure 1-1) is use for transporting various equipment. In this application the trailer provides support for the 500-gallon fuel tank.
- b. **Tank.** Low Profile 500-gallon tank (2, Figure 1-1) is used for transporting petroleum products and dispensing those products.
- c. **Skids.** The Skids (9, Figure 1-2) are used to stabilize and mount the Tank Unit Assembly.
- d. **Manhole Cover.** Cover (10, Figure 1-2) can be opened if the tank is to be filled through the manhole.
- e. **Control Box Assembly.** The Control Box Assembly (4, Figure 1-1) is used to control gravity force fuel flow during refilling tank and liquid dispensing operations. Only one lever will be connected/used in this application.
- f. **Manual Cable.** The Manual Cable (5, Figure 1-2) transfers the motion of the operating lever to operate the tank bottom loading valve (3, Figure 1-2) on the tank (1, Figure 1-2).
- g. **Bottom Loading Valves.** The fuel tank is equipped with a bottom loading valve (3, Figure 1-2). The unit is equipped with a fuel manifold (3, Figure 1-1) on the rear of the trailer. Refilled through either the bottom loading valve (5, Figure 1-1), or bottom loading port (6, Figure 1-1) at the Fuel Manifold (3, Figure 1-1) and the tank bottom loading valve (3, Figure 1-2). As the tank is being refilled all three will open automatically when fuel pressure is applied. The tank bottom loading valve (3, Figure 1-2) closes automatically by the jet level sensor when the tank is full. The others are closed when refilling fuel pressure is released.
- h. **Grounding Rod.** The grounding rod (7, Figure 1-1) is pre-attached to the tank by a strap.
- i. **Hose and Dispensing Nozzle.** Transfer Hose (10, Figure 1-1) (8, Figure 1-2) connects at one end to the tank bottom loading valve (3, Figure 1-2), the other end to the dispensing units fuel manifold. Dispensing Hose (11, Figure 1-1) and nozzle (9) are stowed, as shown, when not conducting dispensing operations.
- j. **Tool Boxes.** The Tool Boxes (8, Figure 1-1) provide storage area for accessories and/or tools.



- | | |
|--------------------------------|--------------------------|
| 1. Trailer | 6. Bottom Loading Port |
| 3. Tank | 7. Grounding Rod w/strap |
| 3. Unit Fuel Manifold Assembly | 8. Storage Box |
| 4. Control Box Assembly | 9. Nozzle |
| 5. Unit Bottom Loading Valve | 10. Hose. Transfer |
| 11. Hose. Dispensing | |

Figure 1-1 " Frailer Mounted Liquid Dispensing Tank Unit Assembly "



- | | |
|------------------------------|------------------------------------|
| 1. Tank | 6. Tank Bottom Loading Valve Lever |
| 2. Interlocks | 7. Bushing, Cable Guide |
| 3. Tank Bottom Loading Valve | 8. Hose, Transfer |
| 4. Cable Washer | 9. Skids |
| 5. Cable Assembly | 10. Manhole Assembly |

Figure I-2 " Tank Assembly Dispensing "

k. Interlocks. The male interlocks are secured by clamping adapters (23 and 24, Figure 1-3) and socket adapters (20, Figure 1-3) at the female end.

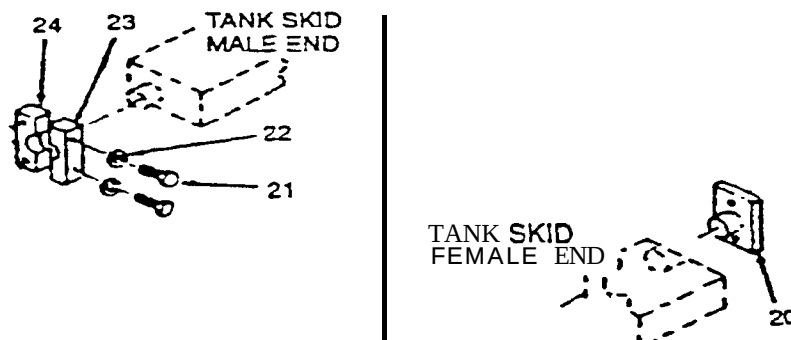


Figure I-i " Angle and Bracket Assemblies "