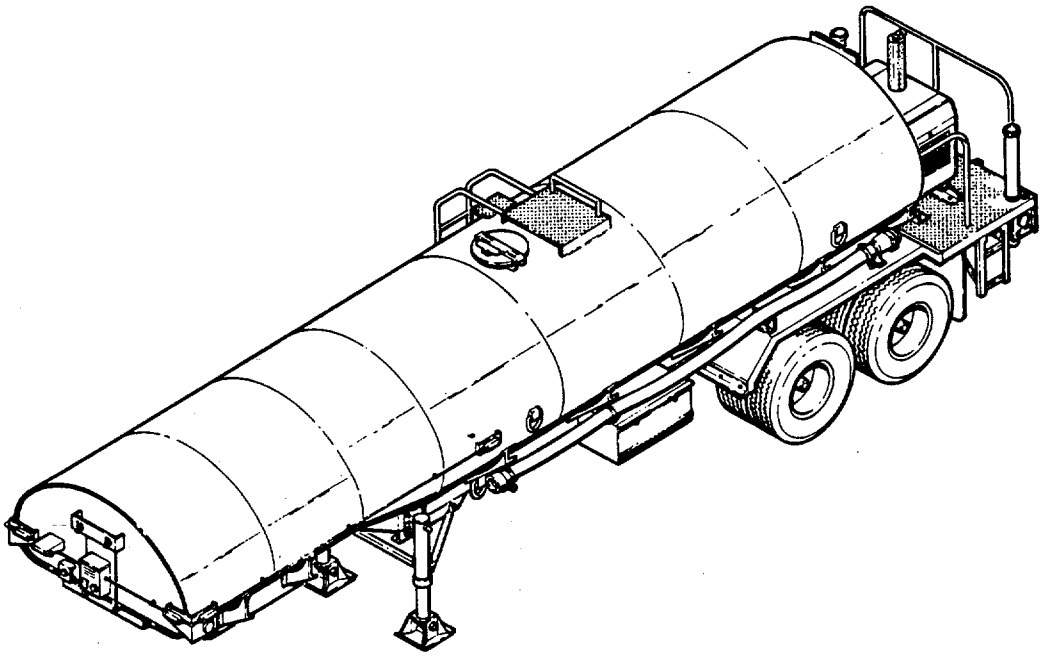
TECHNICAL MANUAL
OPERATOR'S, UNIT, DIRECT SUPPORT, AND
GENERAL SUPPORT MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS)

FOR

DISTRIBUTOR, WATER, SEMITRAILER MOUNTED
6000 GALLON, MACLEOD MODEL WD6S
(NSN 3825-01-065-6221)



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DEPARTMENT OF THE ARMY
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OPERATOR'S, UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS) FOR DISTRIBUTOR, WATER, SEMITRAILER MOUNTED 6000 GALLON, MACLEOD MODEL WD6S NSN 3825-01-065-6221

Current as of 17 August 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 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.

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CHAPTER 1
INTRODUCTION

Section I. GENERAL INFORMATION

1-1. DESCRIPTION.

a. The 6000 Gallon, Semitrailer Mounted Water Distributor (Model WD6S) is designed to spray large quantities of water over a wide area. It can be used in fire fighting operations. It is equipped with a Marlow 4CF pump which is driven by a Perkins 4.108 diesel engine.

b. The water distributor has its tank mounted on a main frame to which the springs and tandem axle are attached. The tank is elliptical with surge plates on 4 ft. (1.2 m) centers. The inside of the tank is coated with asphalt to prevent corrosion. The tank has a 20 in. (50.8 cm) diameter manhole to allow for intake of water, inspection, cleaning, and repair of tank. A ladder is provided to allow personnel to access the manhole.

c. The water pumping system is powered by a Perkins 4.108 liquid-cooled, diesel engine located at the rear of the water distributor. The centrifugal pump is self-priming, and after initial filling has a pumping capacity of 600 gpm (2271 1pm) at 40 psi (276 kPa). The spray system has two fan-type nozzles that will deliver water 35 ft. (10.7 m) to each side of the centerline of the water distributor.

d. A unique feature of the water distributor is that it can be operated by the tractor operator from an auxiliary control box panel. The auxiliary control box can be removed from the tractor and stored on the water distributor when the units are separated.

e. The water distributor has a fifth wheel height of 62 in. (157.5 cm), which makes it compatible with the *M123AlC, 10* Ton, *6X6 Truck,* Tractor; the *XM920; and* the XM916.

f. The water distributor has a fire fighting capability and is equipped with a 1.5 in. (3.8 cm) fire hose and nozzle.

1-2. OPERATIONAL CONCEPT.

The water distributor is designed to be used in support of road, airfield, and berm construction, dust control, soil stabilization, and firefighting.

1-3. PERSONNEL.

MOS requirements are as follows:

a. Operator. MOS 62J20, General Construction Machine Operator.

b. Unit Maintenance. MOS 62B20, Construction Equipment Repairman.

c. Direct Support and General Support Maintenance.

(1) MOS 62B30, Construction Equipment Repairman.

(2) MOS 63G20, Fuel and Electrical Systems Repairman.

(3) MOS 44B20, Metal Body Repairman.

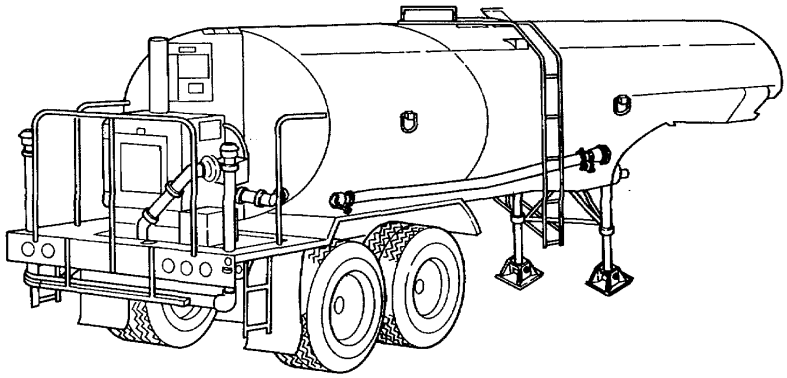

Figure 1-1. Water Distributor.

1-4. MAINTENANCE CONCEPT.

The water distributor does not require any new or special maintenance considerations. All maintenance functions can be accomplished within the current maintenance concepts established for construction equipment.

a. Operator/Crew Maintenance. Operator and crew maintenance is limited to daily preventive maintenance checks and services.

b. Unit Maintenance. Unit maintenance consists of scheduled preventive maintenance checks and services, minor repairs, and adjustments.

c. Direct Support Maintenance. Direct support maintenance consists of repairs on-site or in a direct support unit shop. Repairs are accomplished with a mini- mum of tools and test equipment. The assemblies and end items are repaired and returned to their users.

d. General Support Maintenance. General sup- port maintenance overhauls selected assemblies and re- pairs items designated by the area support command for return to stock.

e. Depot Maintenance. Depot maintenance overhauls end items and selected major assemblies when they are required to satisfy overall Army requirements. Overhaul of the end item may also be performed by contract with the manufacturer.

1-5. MAINTENANCE ALLOCATION CHART (MAC).

a. Maintenance will be performed as necessary by the category indicated in the Maintenance Allocation Chart (MAC) (Appendix B) to retain or restore service- ability. All authorized maintenance within the capability of a using organization will be accomplished before refer- ring the item to support maintenance.

b. Higher categories will perform the maintenance functions of lower categories when required or directed by the appropriate commanders.

c. Using and support units may exceed their authorized scope and functions in the MAC when approval is granted by the next higher support maintenance commander.

1-6. REPORTING EQUIPMENT IM- PROVEMENT RECOMMENDATIONS (EIRs).

If your water distributor 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.

1-7. SHIPMENT AND STORAGE.

Refer to TB 740-97-2 for procedures covering preservation of equipment for shipment and storage.

1-8. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE.

Refer to TM 750-244-6 for procedures covering destruction of Army equipment to prevent enemy use.

1-9. BASIC ISSUE ITEMS LIST (BIIL).

Refer to Appendix C for a list of items that accompany the end item or are required for operation or operator maintenance.

1-10. EXPENDABLE/DURABLE SUPPLIES AND MATERIALS LIST.

Refer to Appendix D for expendable/durable supplies and materials required for initial operation.

1-11. SPECIAL TOOLS AND EQUIPMENT.

No special tools or equipment are required.

1-12. 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).*

1-13. FABRICATION OF WIRE AND HOSE ASSEMBLIES.

Refer to Appendix E for fabrication instructions.

1-14. MAINTENANCE EXPENDITURE LIMITS.

The average life expectancy for the water distributor is 15 years.