

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

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TECHNICAL MANUAL

OPERATOR AND ORGANIZATIONAL

MAINTENANCE MANUAL

MIXER, CONCRETE, 4 WHEEL TRAILER MOUNTED,

GASOLINE ENGINE DRIVEN, NON TILT, 16 CU. FT.

(T. L. SMITH COMPANY MODEL 499A)

FSN 3895-444-1531

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	Paragraph	Page
CHAPTER 1. INTRODUCTION		
Section I. General .....	1-1, 1-2	1-1
II. Description and Data .....	1-3	1-1
CHAPTER 2. OPERATING INSTRUCTIONS		
Section I. Service upon receipt of material .....	2-1, 2-2	2-1
II. Movement to a new work site .....	2-3, 2-4	2-2
III. Controls and instruments .....	2-5, 2-6	2-3
IV. Operation under usual conditions .....	2-7—2-10	2-4
V. Operation under unusual conditions .....	2-1—2-15	2-5
CHAPTER 3. OPERATOR/CREW MAINTENANCE INSTRUCTIONS		
Section I. Basic issue items.....	3-1	3-1
II. Lubrication instructions .....	3-2, 3-3	3-1
III. Preventive maintenance checks and services .....	3-4, 3-4.1	3-1
IV. Troubleshooting.....	3-5	3-3
V. Operator's maintenance.....	3-6—3-11	3-3
CHAPTER 4. ORGANIZATIONAL MAINTENANCE INSTRUCTIONS		
Section I. Service upon receipt of material .....	4-1	4-1
II. Repair parts, special tools and equipment .....	4-2, 4-3	4-3
III. Preventive maintenance checks and services .....	4-5, 4-5-1	4-3
IV. Troubleshooting.....	4-6	4-4
V. Radio interference suppression.....	4-7, 4-8	4-6
VI. Engine muffler, housing, flywheel, and valve tappets .....	4-10—4-14	4-7
VII. Upper and lower manifolds .....	4-15—4-17	4-9
VIII. Cooling system .....	4-18, 4-19	4-10
IX. Electrical system .....	4-20—4-26	4-11
X. Fuel system .....	4-27—4-32	4-15
XI. Lubrication system .....	4-33—4-36	4-18
XII. Engine control, meters, and gauges .....	4-37—4-45	4-19
XIII. Clutch assembly .....	4-46, 4-47	4-21
XIV. Water system .....	4-48—4-51	4-21
XV. Hoist cable .....	4-52	4-23
XVI. Hauling stub safety chain .....	4-53	4-23
XVII. Wheel assembly.....	4-54	4-25
CHAPTER 5. ADMINISTRATIVE STORAGE		
APPENDIX A. REFERENCES .....		A-1
B. MAINTENANCE ALLOCATION CHART .....		B-1
C. BASIC ISSUE ITEMS LIST AND ITEMS TROOP INSTALLED OR AUTHORIZED		C-1
INDEX .....		I-1

## LIST OF ILLUSTRATIONS

<b>Number</b>	<b>Title</b>	<b>Page</b>
1-1	Concrete mixer left front $\frac{3}{4}$ view .....	1-2
1-2	Concrete mixer right rear $\frac{3}{4}$ view .....	1-3
1-3	Wiring diagram .....	1-5
2-1	Axle spring adjusting screw .....	2-1
2-2	Hauling stub .....	2-2
2-3	Skip hook .....	2-2
2-4	Water valve wrench retainer .....	2-2
2-5A	Engine gauges, meters and controls .....	2-3
2-5B	Master clutch .....	2-3
2-5C	Discharge spout hand wheel .....	2-3
2-5D	Skip controls .....	2-3
2-5E	Water gauge .....	2-3
2-5F	Water valve wrench .....	2-3
2-6	Magneto ground switch .....	2-4
2-7	Hand crank .....	2-4
3-1	Fuel tank service .....	3-3
3-2	Fuel strainer service .....	3-4
3-3	Oil filter breather service .....	3-4
3-4	Battery service .....	3-5
4-1	Drum drain plug .....	4-1
4-2	Water tank drain plug .....	4-1
4-3	Water pump drain plug .....	4-1
4-4	Engine crankcase drain plug .....	4-1
4-5	Belt guard removal .....	4-2
4-6	Hoist drive belts installation .....	4-2
4-7	Pump belt installation .....	4-2
4-8	Fire extinguisher installation .....	4-2
4-9A	Engine muffler, top canopy, side doors and front panel removal .....	4-7
4-9B	Front panel removal .....	4-7
4-10	Flywheel and flywheel shroud removal .....	4-8
4-11	Valve tappet cover .....	4-9
4-12	Valve tappet adjustment .....	4-9
4-13	Upper and lower manifolds removal .....	4-9
4-14	Cylinder air shrouds, exploded view .....	4-11
4-15	Batteries and cables removal .....	4-12
4-16A	Battery box removal .....	4-12
4-16B	Battery box removal .....	4-12
4-17	Starting motor removal .....	4-13
4-18	Magneto removal .....	4-13
4-19	Magneto contact points, replacement adjustment .....	4-14
4-20	Magneto timing .....	4-14
4-21	Spark plugs and leads removal .....	4-15
4-22	Hi-Temp safety switch and lead removal .....	4-15
4-23	Air cleaner removal .....	4-16
4-24	Air cleaner, oil cup removal .....	4-16
4-25	Fuel strainer removal .....	4-17
4-26	Carburetor removal.....	4-17
4-27	Fuel level sending unit removal .....	4-18
4-28	Fuel tank removal .....	4-18
4-29	Oil filter removal .....	4-18
4-30	Oil filler cap .....	4-19
4-31	Oil filler tube strainer removal .....	4-19
4-32	Choke control removal .....	4-19
4-33	Governor control removal .....	4-20
4-34	Meters and gauges removal.....	4-20
4-35	Clutch adjustment .....	4-21
4-36	Pump belt removal .....	4-22
4-37	Pump removal .....	4-22
4-38	Three-Way valve removal .....	4-22
4-39A	Hoist cable removal .....	4-23
4-39B	Hoist cable removal.....	4-23
4-40	Hauling stub safety chain removal .....	4-24

## CHAPTER 1 INTRODUCTION

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### Section I. GENERAL

#### 1-1. Scope

- a. These instructions are published for the use of the personnel to whom the mixer is issued. They provide information on the operation and organizational maintenance of the equipment.
- b. Appendix A contains a list of publications applicable to this manual. Appendix B contains the maintenance allocation chart. Appendix C contains the list of basic issue items list, items-troop installed or authorized.

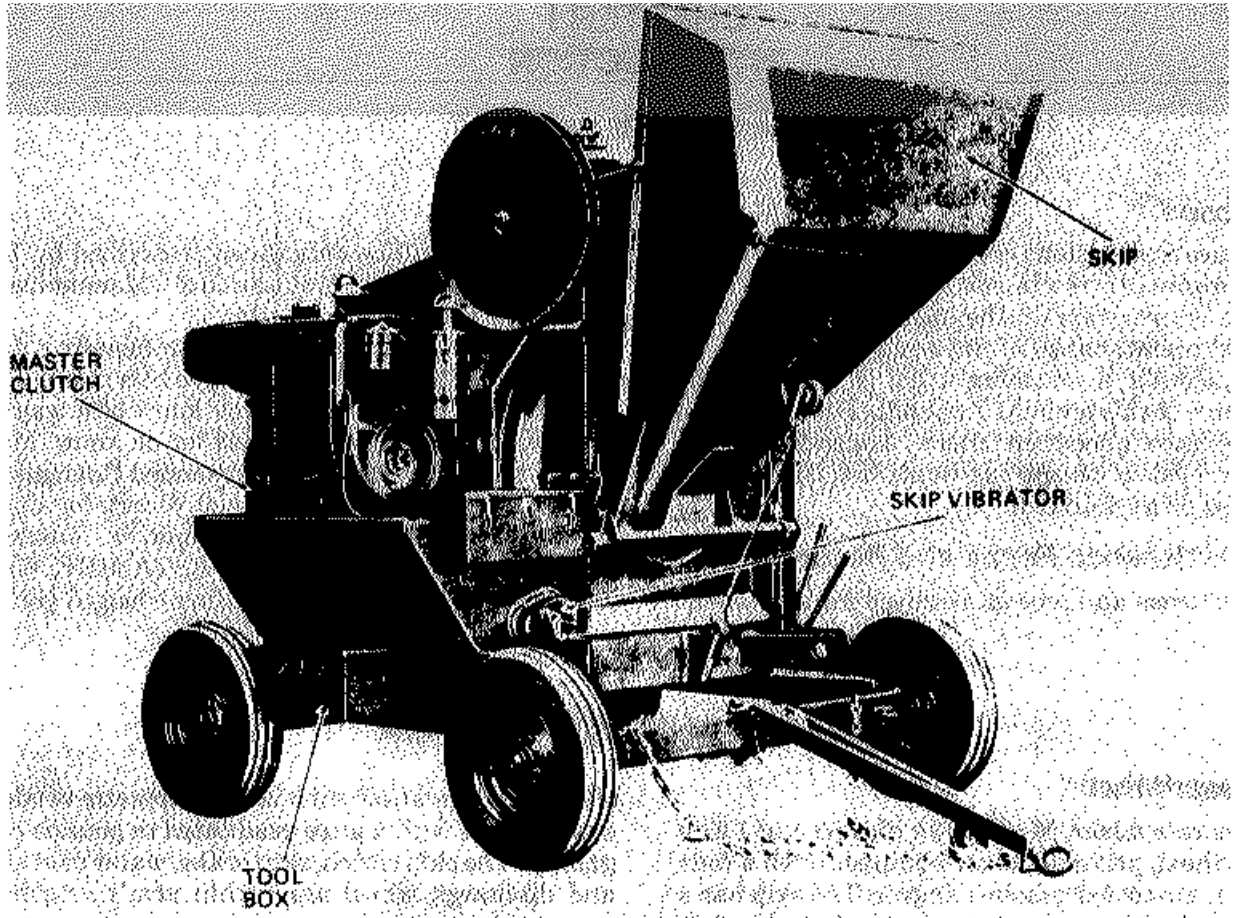
#### 1-2. Maintenance Forms and Records

- a. DA forms and procedures used for equipment maintenance will be only those prescribed by TM 38-750, The Army Maintenance Management System (TAMMS).
- b. 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 or DA 2028 (Recommended Changes to Publications and Blank Forms) direct to: Commander, US Army Tank-Automotive Materiel Readiness Command, ATTN: DRSTA-MBP, Warren, MI 48090. A reply will be furnished to you.

### Section II. DESCRIPTION AND DATA

#### 1-3. Description

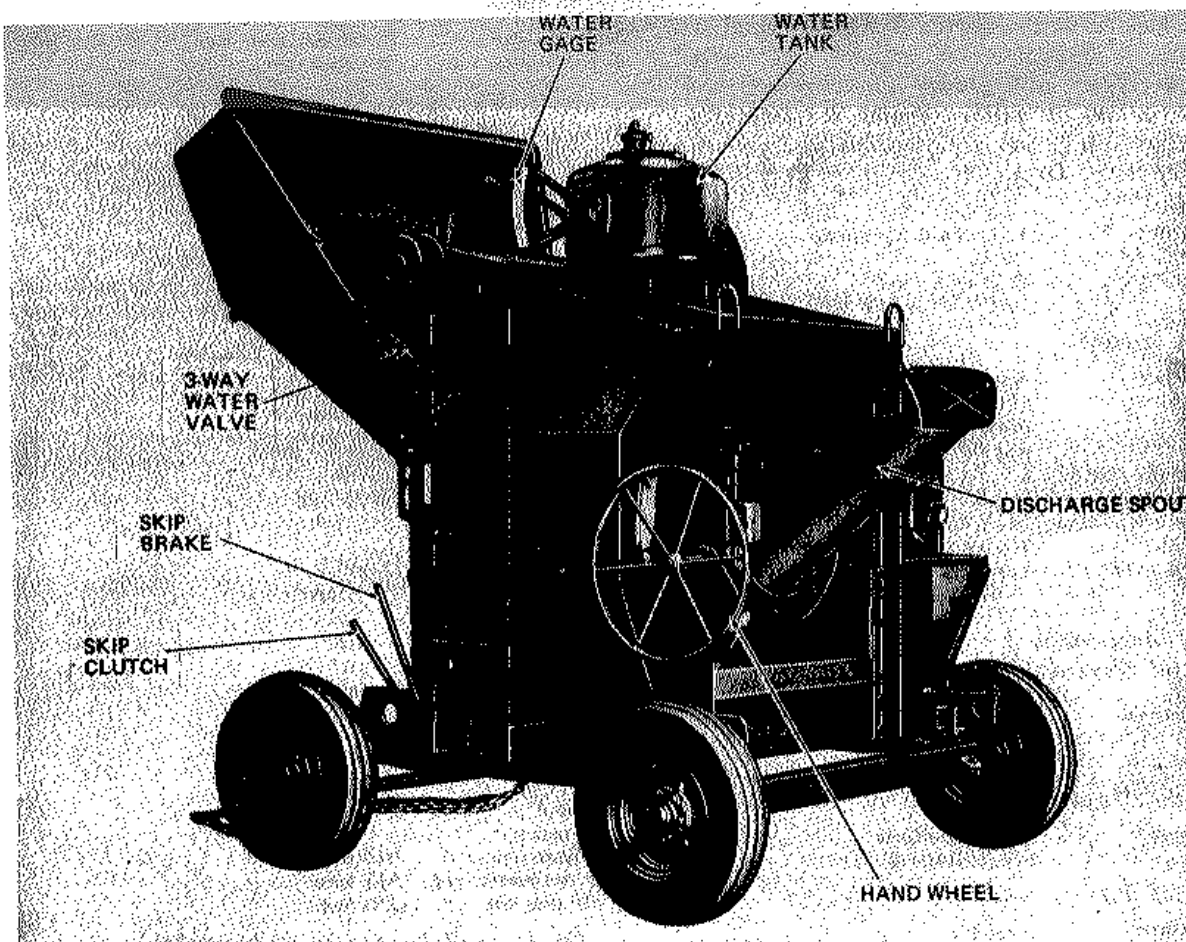
The concrete mixer, Model 499A (fig. 1-1 and 1-2) is a four wheel, portable mixer equipped with a four cylinder, air-cooled gasoline engine. The skip has a closed end with an arched cover plate for fast charging. The water tank is an automatic vertical siphon type with a gauge graduated in pounds and gallons. The skip clutch, skip brake, water controls, and discharge wheel are within arm's length of operator.



ME3895-342-12/1-1

Figure 1-1. Concrete mixer, left front three-quarter view.

Change 2 1-2



ME3895-342-12/1-2

Figure 1-2. Concrete mixer. Right rear three-quarter view.

#### 1-4. Differences Between Models

This manual covers only the T. L. Smith Company Concrete Mixer, Model 499A. No differences exist within the serial number range covered in this manual. The serial number range covered in this manual is: 76900 to 77058.

#### 1-5. Identification and Instruction Plates and Tabulated Data

##### a. Identification and Instruction Plates.

(1) *U. S. Army identification plate.* This plate is located on the rear motor support end. It gives the manufacturer, nomenclature, contract number, model and serial numbers, dimensions, federal stock number, weights, manufacturing date and warranty.

(2) *Transportation plate.* This plate is located on the rear motor support end. It gives nomenclature, dimensions, center of gravity, lifting lug and tie down lug locations.

(3) *Operating and lubrication instruction plate.* This plate is located on the rear motor support end. It gives general operating and lubrication instructions.

(4) *Water valve and skip control instruction plate.* This plate is located on the side of the mixer just to the left of the ladder. It shows lever positions for operating the water valve, the skip clutch and the brake.

(5) *Master clutch plate (for engine).* This plate is located on the engine belt guard. It shows lever positions for engaging the master clutch.