

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

TECHNICAL MANUAL

OPERATOR AND ORGANIZATIONAL

MAINTENANCE MANUAL

PUMP, CENTRIFUGAL, SELF-PRIMING,
GASOLINE ENGINE DRIVEN, WHEEL MOUNTED,
6-INCH, 1500 GPM CAPACITY AT 60 FOOT HEAD
(PEABODY BARNES, INC: MODEL US90CCG-1)

NSN 4320-00-490-1859

This copy is a reprint which includes current pages from change 1.

HEADQUARTERS, DEPARTMENT OF THE ARMY

MARCH 1975

TECHNICAL MANUAL }
No. 5-4320-234-12

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 21 March 1975

OPERATOR AND ORGANIZATIONAL MAINTENANCE MANUAL

PUMP, CENTRIFUGAL, SELF-PRIMING, GASOLINE ENGINE DRIVEN, WHEEL MOUNTED, 6-INCH, 1500 GPM CAPACITY AT 60 FOOT HEAD (PEABODY BARNES, INC. MODEL US90CCG-1)

NSN 4320-00-490-1859

		Paragraph	Page
CHAPTER	1. INTRODUCTION		
Section	I. General	1-1	1-1
	II. Description and data	1-7	1-1
CHAPTER	2. OPERATING INSTRUCTIONS		
Section	I. Operating procedures	2-1	2-1
	II. Operation under unusual conditions	2-6	2-6
CHAPTER	3. OPERATOR/CREW MAINTENANCE INSTRUCTIONS		
Section	I. Lubrication instructions	3-1	3-1
	II. Preventive maintenance checks and services	3-5	3-6
	III. Troubleshooting	3-7	3-8
	IV. Maintenance procedures	3-9	3-10
CHAPTER	4. ORGANIZATIONAL MAINTENANCE INSTRUCTIONS		
Section	I. Service upon receipt of materiel	4-1	4-1
	II. Movement to a new worksite	4-3	4-3
	III. Repair parts, special tools, and equipment	4-5	4-3
	IV. Lubrication instructions	4-8	4-4
	V. Preventive maintenance checks and services	4-10	4-4
	VI. Troubleshooting	4-12	4-5
	VII. Radio interference suppression	4-14	4-11
	VIII. Maintenance of air cleaner, exhaust system, and engine housing	4-16	4-11
	IX. Maintenance of fuel system	4-20	4-16
	X. Maintenance of cooling system	4-28	4-26
	XI. Maintenance of ignition system	4-33	4-33
	XII. Maintenance of electrical system	4-36	4-39
	XIII. Maintenance of controls and instruments	4-43	4-45
	XIV. Maintenance of pump	4-48	4-52
	XV. Maintenance of wheels	4-50	4-54
	XVI. Maintenance of chassis components	4-53	4-56
APPENDIX	A. REFERENCES		A-1
	B. MAINTENANCE ALLOCATION CHART		B-1
INDEX			I-1

LIST OF ILLUSTRATIONS

<i>Number</i>	<i>Title</i>	<i>Page</i>
1-1	Centrifugal pump, left rear view.....	1-2
1-2	Centrifugal pump, right front view.....	1-3
1-3	Data plates.....	1-4
1-4	Wiring diagram.....	1-6
2-1	Control panel controls and instruments.....	2-2
2-2	Miscellaneous controls and indicators.....	2-3
2-3	Fuel tank and related parts.....	2-4
3-1	Lubrication order.....	3-2
3-2	Left side of engine housing showing drains and battery charging receptacle.....	3-4
3-3	Left side of engine showing components.....	3-5
3-4	Oil filter, exploded view.....	3-6
3-5	Air cleaner, exploded view.....	3-10
3-6	Fuel strainer, exploded view.....	3-12
4-1	Front chassis leg.....	4-2
4-2	Rear chassis stand.....	4-2
4-3	Cylinder head bolt tightening sequence.....	4-3
4-4	Air cleaner and piping, exploded view.....	4-12
4-5	Muffler and related parts, exploded view.....	4-13
4-6	Engine housing, exploded view.....	4-14
4-7	Right side of engine, identifying components.....	4-16
4-8	Fuel tank and valve, exploded view.....	4-18
4-9	Fuel system components, exploded view.....	4-19
4-10	Carburetor, showing adjustment points.....	4-21
4-11	Intake and exhaust manifolds and emission controls, exploded view.....	4-23
4-12	Magneto and governor installation.....	4-25
4-13	Reverse-flushing the radiator.....	4-27
4-14	Reverse-flushing the engine block.....	4-27
4-15	Thermostat, outlet elbow, coolant and oil cooler lines and fittings, exploded view.....	4-28
4-16	Alternator mounting.....	4-30
4-17	Water pump and cooling fan, exploded view.....	4-31
4-18	Radiator and related parts, exploded view.....	4-32
4-19	Ignition system, exploded view.....	4-34
4-20	Magneto-to-spark plug connections.....	4-35
4-21	Magneto breaker points, exploded view.....	4-36
4-22	Engine timing marks.....	4-38
4-23	Timing marks on timing gear and governor drive gear.....	4-39
4-24	Batteries, battery box, and cables, exploded view.....	4-40
4-25	Battery charging system, exploded view.....	4-42
4-26	Starting motor mounting, exploded view.....	4-44
4-27	Control panel engine controls and instruments, exploded view.....	4-46
4-28	Engine overspeed governor and related parts, exploded view.....	4-48
4-29	Engine overspeed governor, showing adjusting points.....	4-49
4-30	Suction and discharge gages, lines, and fittings, exploded view.....	4-51
4-31	Suction and discharge assemblies, exploded view.....	4-53
4-32	Wheel assembly, exploded view.....	4-55
4-33	Tool box, exploded view.....	4-57
4-34	Lights and wiring harness, exploded view.....	4-58
4-35	Chassis frame miscellaneous parts.....	4-59

CHAPTER 1

INTRODUCTION

Section I. GENERAL

1-1. Scope

This manual is for your use in operating and maintaining the Pump, Centrifugal, Self-priming, Gasoline Engine Driven, Wheel Mounted, 6-Inch, 1500 GPM Capacity at 60 Foot Head (Peabody Barnes, Inc. Model US9OCCG-1).

1-2. Maintenance Forms and Records

Maintenance forms, records, and reports that you are required to use are DA Form 2400, 2401, 2402, 2404 and 314 (see TM 38-750).

1-3. Reporting of Errors

You can help to improve this manual by calling attention to errors and by recommending improvements. Your letter, DA Form 2028, (Recommended Changes to Publications), and/or DA Form 2028-2 (Recommended Changes to Equipment Technical Manuals), may be used. Copies of DA Form 2028-2 are attached in the

back of the manual for your use. Please mail your recommended changes directly to Commander, U. S. Army Troop Support Command, ATTN: AMSTS-MPP, 4300 Goodfellow Blvd., St. Louis, MO 63120. A reply will be furnished directly to you.

1-4. Equipment Serviceability Criteria

This equipment is not covered by an ESC.

1-5. Destruction of Army Materiel to Prevent Enemy Use

For instructions regarding destruction of equipment to prevent enemy use, refer to TM 750244-3.

1-6. Administrative Storage

You must prepare the pump assembly for storage according to procedures given in TM 740-90-1.

SECTION II. DESCRIPTION AND DATA

1-7. Description

a. Centrifugal Pump, Model US9OCCG-1, consists primarily of a gasoline engine and a wheel mounted

centrifugal pump. The torque from the engine is transferred to the pump through an intermediate shaft and flexible coupling.

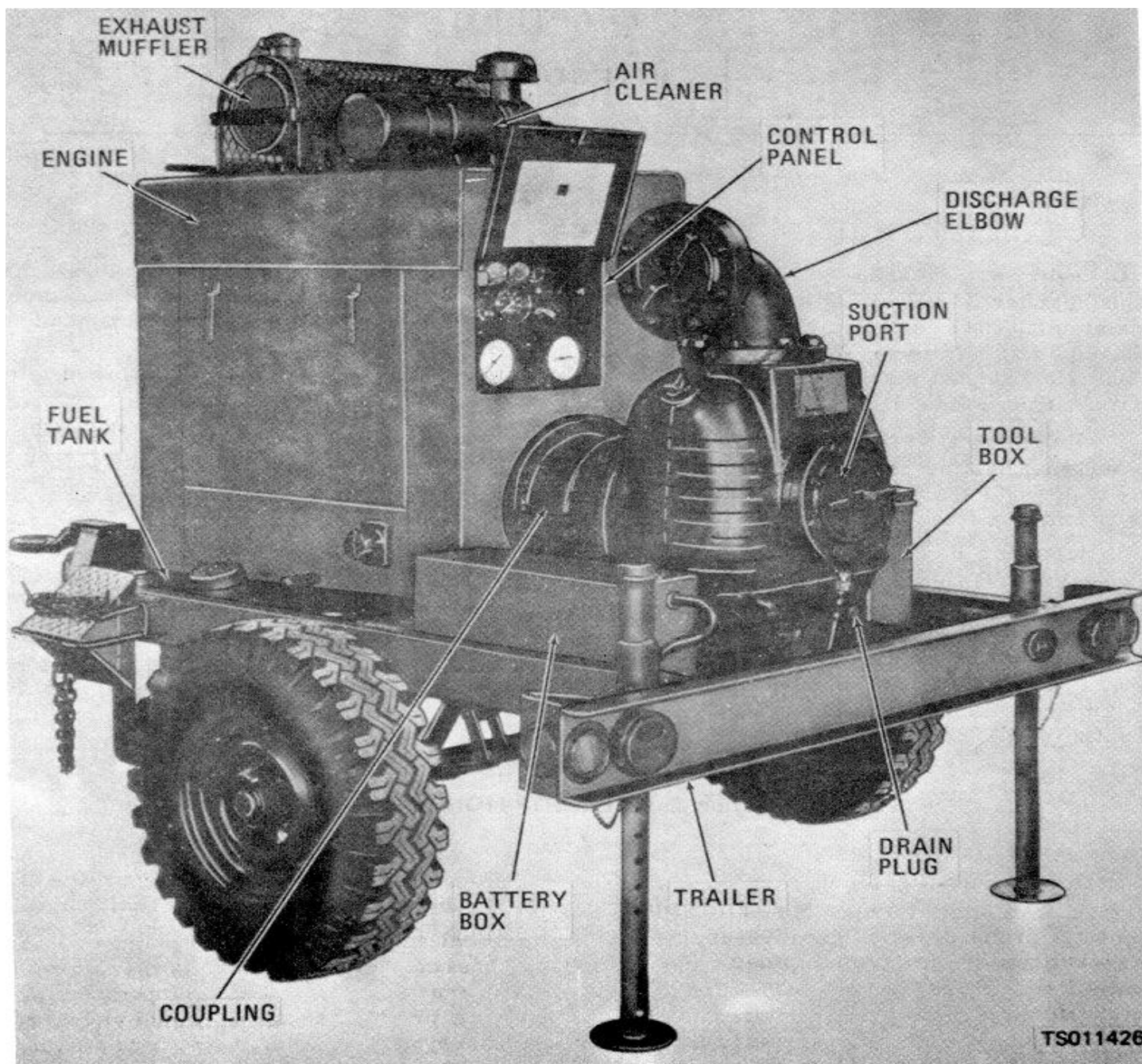


Figure 1-1. Centrifugal pump, left rear view.