

TM 5-9352

WAR DEPARTMENT TECHNICAL MANUAL

SHOP, ENGINEER MOTORIZED GENERAL PURPOSE REPAIR



MAINTENANCE INSTRUCTIONS

WAR DEPARTMENT

WASHINGTON 25, D. C., *28 February 1944*

TM 5-9352, Shop, Engineer, Motorized, General Purpose Repair, is published for the information and guidance of all concerned.

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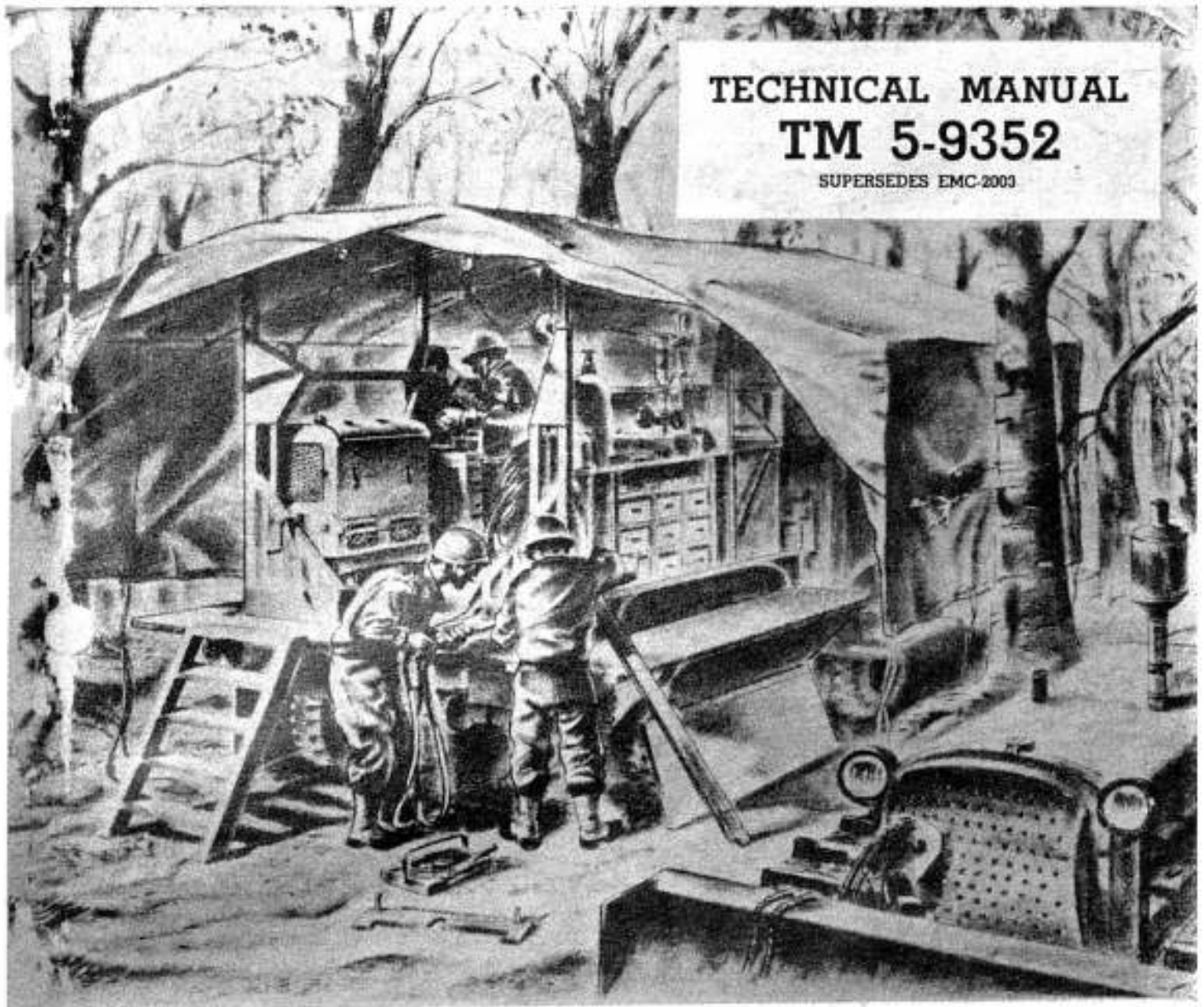
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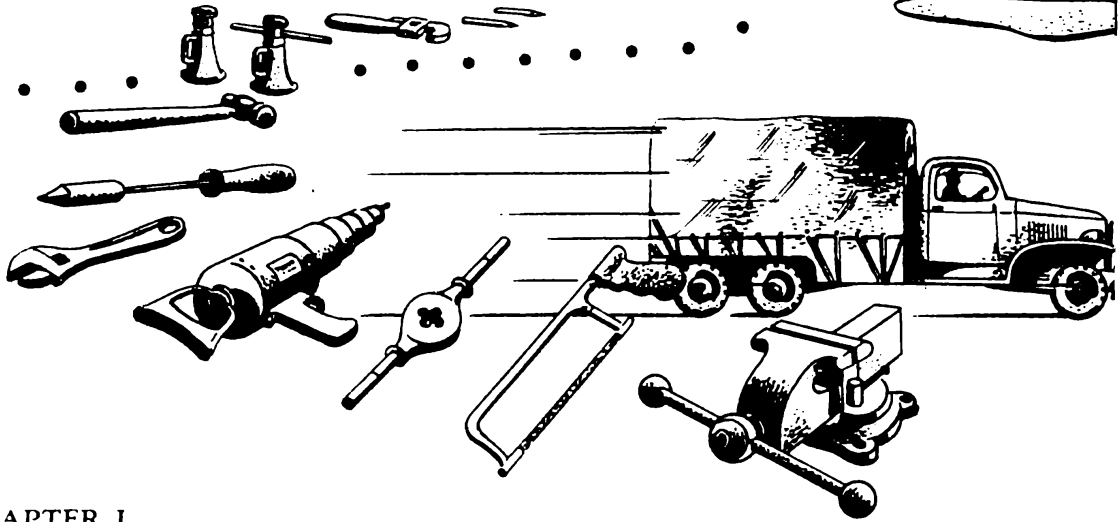
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INTRODUCTION



CHAPTER I

1. PURPOSE OF MANUAL.—*a. Message to Engineer Mechanics.*—

Much of the power and effectiveness of the Corps of Engineers depends upon you. Upon you, Engineer shop truck mechanics, your attitude toward your work, the way you use the tools on this shop, and your ability to keep Engineer equipment rolling, depends the ability of Engineer troops to perform their mission. This manual deals with a specific, mobile Engineer maintenance shop. Consider that this shop provides *your* tools of war. Consider that this manual shows you *how to use those tools* to best advantage. Consider that every man in your organization, and in others too, will carry on better, if your maintenance efficiency is increased just 10 per cent by something you learn from this manual. Think of your work in this way, study this manual intensively, thoroughly understand the use of the tools on your shop truck, and you will be proud of your assigned maintenance job.

b. Coverage.—This manual describes the care and use of tools and equipment of the Shop, Engineer, Motorized, General Purpose, hereafter referred to as the General Purpose shop truck. Information is provided on both familiar and unfamiliar tools. There are right and wrong, efficient and inefficient ways of using even the simplest tools. Do not assume that you know everything about a tool just because you recognize it. Study and follow hints given in this manual, with particular emphasis on the purpose and use of the specially designed tools which are provided for specific tasks.

Introduction

2. OTHER AVAILABLE MANUALS.—*a. Manuals on the Shop Truck.*— In addition to this manual, special instructions provided by tool manufacturers are packed with many units of equipment on the shop. Study them carefully. See that they are kept clean and readily available for immediate use. To prevent loss, keep them assembled in a designated place and under lock and key when not in use. These manuals are particularly valuable when it becomes necessary to repair your own tools or to order spare parts for equipment on the shop.

b. Engineer Maintenance Publications.—Be sure to have available a copy of the Section of the ASF Engineer Supply Catalog, "Catalog of Parts Supply and Maintenance Publications for Corps of Engineers equipment". (This information, first published as Section PB-1 of Part III, Corps of Engineers Supply Catalog, henceforth will be incorporated in Section ENG 2, ASF Engineer Supply Catalog.) If you do not find a copy of PB-1 (or ENG 2, when its availability is announced) on your shop, request one from the Engineer Field Maintenance Office, (Maintenance Division, Military Supply, OCE), P. O. Box 1679, Columbus, Ohio, through appropriate channels. Section PB-1 lists Corps of Engineers equipment in alphabetical order and shows for each piece of equipment the number of the Technical Manual, the applicable section of Part III of the Corps of Engineers Supply Catalog or the ASF Engineer Supply Catalog, the applicable Lubrication Guide, and any other publication relating to the equipment.

c. Ordering Spare Parts.—If you have equipment to repair, and you find that you do not have sufficient information to enable you to make the needed repairs, consult the publication which will give you the required information. When spare parts must be requisitioned from depots, be sure to get the correct nomenclature and manufacturer's part number from the technical manual for the particular machine concerned.

d. General Manuals.—There are additional general manuals which may prove of value to shop mechanics. These are listed in Field Manual FM 21-6, and can be requisitioned through appropriate channels. Some of these manuals are the following:

TM 1-422, Grinding Machines; Air Corps, Nov. 26, 1940. This manual covers general grinding machines and wheels and their uses, and in addition includes a section on polishing, buffing, and lapping.

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TM 1-430, *Welding; Air Corps, Feb. 20, 1941*. This book very completely covers oxyacetylene welding and cutting operations. There are also sections on electric arc and electric resistance welding.

TM 10-440, *The Blacksmith and the Welder; Quartermaster, June 16, 1941*. This manual covers general blacksmithing, gas welding and cutting, and a complete section on electric arc welding.

TM 10-445, *The Machinist; Quartermaster, Nov. 12, 1941*. This very excellent manual outlines the complete work of the machinist, including all bench and power tool operations, together with a section on layout work and precision measurement. The power tools covered are drill press, screw cutting engine lathe, milling machine, shaper, grinder, and power hacksaw.

TM 10-450, *Sheet Metal Work, Body, Fender, and Radiator Repairs; Quartermaster, Nov. 21, 1941*. This manual is included because of the excellent section on body and fender, and radiator repairs.

TM 10-540, *Automotive Lubrication; Quartermaster, Dec. 26, 1940*. This manual covers the theory, sources, types, properties, characteristics, and problems of automotive lubrication and includes the selection and use of lubricants on the various important assemblies of automotive equipment.

TM 10-570, *The Internal Combustion Engine; Quartermaster, July 4, 1941*. The principal types and functions of internal combustion engines, together with lubrication and cooling are completely covered in this work.

TM 10-575, *Diesel Engines and Fuel; Quartermaster, July 25, 1941*. A complete treatment of diesel fundamentals and principles is included and should be mastered by all personnel concerned with diesel maintenance.

TM 10-580, *Automotive Electricity; Quartermaster, Jan. 29, 1941*. This work covers basic and simplified principles of electricity and magnetism, battery and magneto ignition, starting and generating systems, lighting systems, and other important electrical units.

TM 10-590, *Hand, Measuring, and Power Tools; Quartermaster, May 26, 1941*. This manual should certainly be included in any organization library where maintenance is to be performed. The use and care of all hand tools, measuring tools, and the more important power tools are thoroughly and graphically covered in this work.