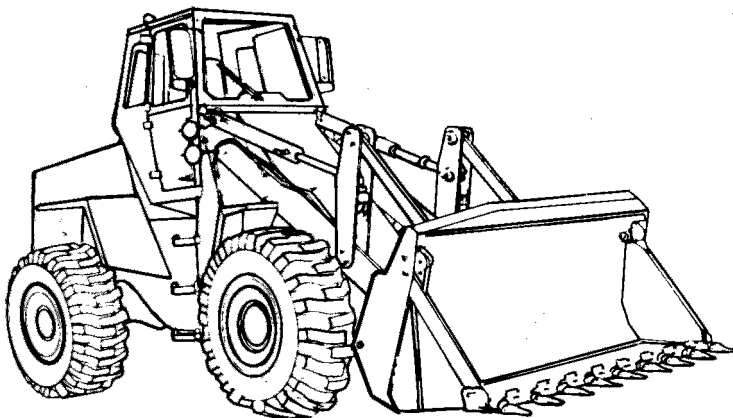


**TECHNICAL MANUAL
ORGANIZATIONAL MAINTENANCE**



**LOADER, SCOOP TYPE, DED
4x4, ARTICULATED FRAME STEER,
2-1/2 CUBIC YARD
(J.I.CASE MODEL MW24C)
(NSN 3805-01-150-4814)**

TABLE OF CONTENTS
PAGE i

HOW TO USE THIS MANUAL
PAGE iii

**EQUIPMENT DESCRIPTION
AND DATA** PAGE 1-4

PRINCIPLES OF OPERATION
PAGE 1-15

**PREVENTIVE MAINTENANCE CHECKS
AND SERVICES** PAGE 2-6

**TROUBLESHOOTING SYMPTOM
INDEX** PAGE 3-1

REFERENCES
PAGE A-1

MAINTENANCE ALLOCATION CHART
PAGE B-1

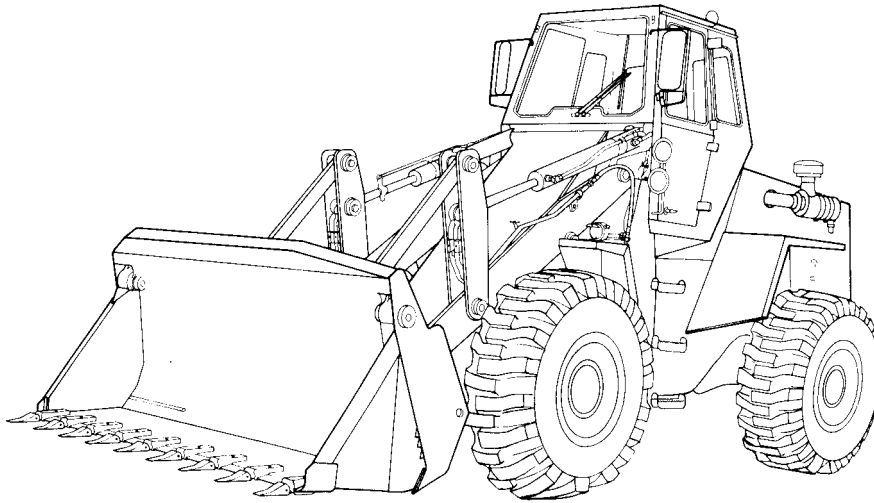
**EXPENDABLE/DURABLE SUPPLIES
AND MATERIALS LIST** PAGE C-1

MANUFACTURED ITEMS LIST
PAGE D-1

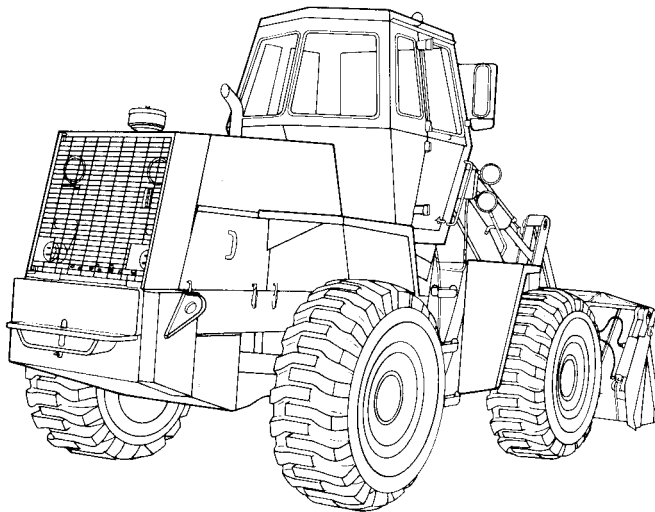
**HYDRAULIC, PNEUMATIC, AND
ELECTRICAL DIAGRAMS** PAGE E-1

ALPHABETICAL INDEX
PAGE INDEX 1

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Left Front View



Right Rear View

MW24C Loader

Technical Manual
TM5-3805-262-20

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C. 1 SEP 87

ORGANIZATIONAL MAINTENANCE MANUAL

LOADER, SCOOP TYPE, DED, 4 X 4, ARTICULATED FRAME STEER,
2-1/2 CUBIC YARD
(J.I.CASE MODEL MW24C)
(NSN 3805-01-150-4814)

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, US Army Tank-Automotive Command, ATTN: AMSTA-MB, Warren, MI 48397-5000. A reply will be furnished you.

TABLE OF CONTENTS

	Page
CHAPTER 1 INTRODUCTION	1-1
Chapter Overview	1-1
Section I General Information	1-1
Section II Equipment Description and Data	1-4
Section III Principles of Operation	1-15
CHAPTER 2 MW24C LOADER MAINTENANCE	2-1
Chapter Overview	2-1
Section I Service Upon Receipt	2-1
Section II Preventive Maintenance Checks and Services (PMCS)	2-6
Section III Movement to a New Work Site	2-11
CHAPTER 3 TROUBLESHOOTING	3-1
Chapter Overview	3-1
Section I Troubleshooting Symptom Index	3-1
Section II Troubleshooting	3-6
Section III Troubleshooting using STE/ICE (Simplified Test Equipment for Internal Combustion Engines)	3-200
CHAPTER 4 ENGINE, FUEL, EXHAUST, AND COOLING SYSTEMS MAINTENANCE	4-1
Chapter Overview	4-1
CHAPTER 5 ELECTRICAL SYSTEM MAINTENANCE	5-1
Chapter Overview	5-1
CHAPTER 6 POWER TRAIN MAINTENANCE	6-1
Chapter Overview	6-1

* This technical manual, in combination with TM 5-3805-262 series (-10, -24P, and -34) supersedes TM 5-3805-262-14&P-1 and TM 5-3805-262-14&P-2 in its entirety.

TABLE OF CONTENTS

		Page
CHAPTER 7	BRAKE SYSTEM MAINTENANCE	7-1
	Chapter Overview	7-1
CHAPTER 8	WHEELS AND STEERING SYSTEM MAINTENANCE	8-1
	Chapter Overview	8-1
CHAPTER 9	FRAME AND TOWING ATTACHMENTS AND BODY AND CAB MAINTENANCE ..	9-1
	Chapter Overview	9-1
CHAPTER 10	ACCESSORY ITEMS AND DATA PLATES MAINTENANCE	10-1
	Chapter Overview	10-1
CHAPTER 11	HYDRAULIC SYSTEM MAINTENANCE	11-1
	Chapter Overview	11-1
CHAPTER 12	SIGNALING DEVICES AND LOADER BUCKET ASSEMBLY MAINTENANCE ...	12-1
	Chapter Overview	12-1
APPENDIX A	REFERENCES	A-1
APPENDIX B	MAINTENANCE ALLOCATION CHART 	B-1
APPENDIX C	EXPENDABLE/DURABLE SUPPLIES AND MATERIALS LIST 	C-1
APPENDIX D	MANUFACTURED ITEMS LIST	D-1
APPENDIX E	HYDRAULIC, PNEUMATIC, AND ELECTRICAL DIAGRAMS	E-1
APPENDIX F	TORQUE LIMITS	F-1
APPENDIX G	METRIC CONVERSIONS	G-1
	GLOSSARY	Glossary 1
	ALPHABETICAL INDEX	Index 1

HOW TO USE THIS MANUAL

This manual is designed to help you operate and maintain the MW24C loader. It's divided into chapters, sections, and appendices. Chapter 1 contains general information, equipment description and data, and principles of operation of the loader. Chapter 2 contains data applicable to service to be performed on receipt of the loader, FMCS, and procedures to be followed when moving to a new work site. Chapter 3 contains troubleshooting information consisting of a symptom index and detailed troubleshooting procedures. Chapters 4 through 12 contain detailed maintenance procedures.

Appendices contain supplemental information which you require to maintain the loader.

Procedures in this manual tell you several things:

..... how to perform your PMCS and how often
 what tools you need to perform the job
 materials or parts required
 what condition the loader is to be in before work is started.

In addition to the text, you'll have either an assembled view or an exploded view illustration of the associated parts. Sometimes, the illustration will be keyed by an arrow to an overall view of the loader to help you determine the approximate location of the parts. The illustration is keyed to the text by numbers and shows you how to take the part off and put it on.

The following problem will show you some of the features of this manual:

PROBLEM

An operator brings his loader into the shop with an engine problem: The engine stalls frequently or doesn't develop full power. The best way to solve his problem is by using your manual. This is what you do:

1. How do you start?

Look at the cover of the manual.

On the cover you'll find a listing for TROUBLESHOOTING SYMPTOM INDEX. It tells you to go to page 3-1. To find page 3-1 fast, open the manual by using the black tab that lines up with the listing on the cover.

2. What kind of problem do you have?

Find it in the symptom index.

The symptom index is a list of problems covered by the section. It tells you that your problem "engine stalls frequently or doesn't develop full power" is covered in paragraph 3-4 MALFUNCTION entry number 6 on page 3-23. Directly beneath the MALFUNCTION entry number you'll also see a number enclosed in parentheses. This number refers to the paragraph and MALFUNCTION entry number where troubleshooting your problem is also covered using STE/ICE equipment if available. This troubleshooting using STE/ICE is covered on page 3-225.

HOW TO USE THIS MANUAL (CONT)

3. How do you determine what is causing the problem?

Go to page 3-23 or page 3-225 if you have STE/ICE, MALFUNCTION entry number 6.

There you'll find the troubleshooting procedures you'll need. The procedure has columns with the headings MALFUNCTION, TEST OR INSPECTION, and CORRECTIVE ACTION. Starting at step 1, read the procedure. Each step tells you what to do and what to look for. Follow the steps, in order, until you find your problem. When you find the problem, the CORRECTIVE ACTION column will tell you how to fix it.

4. Let's assume you've found that the air compressor is bad causing excessive drag on the engine. The procedure tells you to go to page 7-88. The procedure contains all the information you need to replace the air compressor. First check the introductory material. It tells what you'll need before you start the job. Within the detailed procedural text are illustrations showing you how to take out the air compressor and how to put it back in.

5. If on the other hand, you know what the problem is and its cause, refer to the alphabetical index located at the rear of this manual and find the name of the part to be replaced and its page number where maintenance procedures will be found. For example, the engine is overheating and on filling the radiator with water you see that water is pouring out the bottom radiator hose indicating that the hose requires replacement. Referring to the alphabetical index under the listing hoses, cooling system, page 4-74 is referenced. Turn to this page for hose removal procedure and following page(s) for installation procedure.

This manual has been designed so that you can quickly locate data you are looking for. Either look in the ALPHABETICAL INDEX for the subject matter, refer to the front cover index, table of contents, chapter index, or section index to locate the data.

CHAPTER 1

INTRODUCTION

CHAPTER OVERVIEW

The purpose of this chapter is to provide you with standard data required in all manuals, to familiarize you with the purpose and capabilities of the vehicle and to give you a brief description of its different systems and components.

Index

Section	Title	Page
I	General Information	1-1
II	Equipment Description and Data	1-4
III	Principles of Operation	1-15

Section I. GENERAL INFORMATION

Para	Para
Scope 1-1	Reporting Equipment Improvement Recommendations (EIR) 1-7
Maintenance Forms, Records, and Reports 1-2	Warranty Information 1-8
Destruction of Army Materiel to Prevent Enemy Use 1-3	Orientation 1-9
Preparation for Storage or Shipment 1-4	Common Tools and Equipment 1-10
Quality Assurance/Quality Control (QA/QC) 1-5	Special Tools, TMDE, and Support Equipment 1-11
Official Names and Nomenclature . . 1-6	Repair Parts 1-12
	Modification. 1-12.1

NOTE

The equipment described herein is non-metric and does not require metric common or special tools; therefore, metric units are not supplied. Tactical instructions for sake of clarity will also remain non-metric.

1-1. SCOPE

- a. Type of Manual. Organizational Maintenance Manual.
- b. Model Number and Equipment Name. MW24C 2-1/2 Cubic Yard Articulated Frame Steering 4 by 4 Diesel Engine Driven Scoop Type Loader.
- c. Purpose of Equipment. Loading trucks from stockpiles, stockpiling materiel, and excavating undisturbed and compacted soil. Unit also used as a clamshell to handle irregular shaped objects, as a dozer for general bulldozer work, and as a scraper.

1-2. 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).

1-3. DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Refer to TM 750-244-6.

1-4. PREPARATION FOR STORAGE OR SHIPMENT

Refer to TM 5-3805-262-10 for preparation for storage and page 2-13 of this manual for preparation for air transport instructions.

1-5. QUALITY ASSURANCE/QUALITY CONTROL

Quality assurance and quality control shall be in accordance with MIL-STD-109 and MIL-M-38784.

1-6. OFFICIAL NAMES AND NOMENCLATURE

The nomenclature, names, and designations used in this manual are in accordance with MIL-HDBK-63038-2 .

1-7. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your MW24C loader 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. Put it on an SF 368 (Quality Deficiency Report). Mail it to us at: Commander, US Army Tank-Automotive Command, ATTN: AMSTA-MV, Warren, MI 48397-5000. We'll send you a reply.

1-8. WARRANTY INFORMATION

The MW24C loader is warranted by J.I. Case Company, Racine, Wisconsin for 15 months or 1500 hours of operation, whichever occurs first. Warranty starts on the date found on DA Form 2408-9 in the logbook and/or the equipment warranty data plate. Report all defects in material or workmanship to your supervisor who will take appropriate action.

1-9. ORIENTATION

The loader bucket is mounted at the front of the MW24C and the engine faces the rear. Controls for operating the bucket (lift, tilt, clam) are located to the right when you are sitting in the operator's seat. All references to right, left, front, or rear are from your viewpoint when you're sitting in the operator's seat.

1-10. COMMON TOOLS AND EQUIPMENT

For authorized common tools and equipment refer to the Modified Table of Organization and Equipment (MTOE) applicable to your unit.

1-11. SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT

No special tools are required. Tools, TMDE, and support equipment are listed in Section III of Appendix C.

1-12. REPAIR PARTS

Repair parts are listed and illustrated in the repair parts and special tools list TM 5-3805-262-24P covering organizational, direct support, and general support parts for the MW24C loader.

1-12.1 MODIFICATIONS

Refer to DAPAM 310-1 and DA PAM750-10 for all published Modification Work Orders which apply to the MW24C Scoop Loader. Refer to Department of the Army Modification Work Order MW05-3805-262-25-001 (effective 1988) for Installation of Alcohol Evaporator.