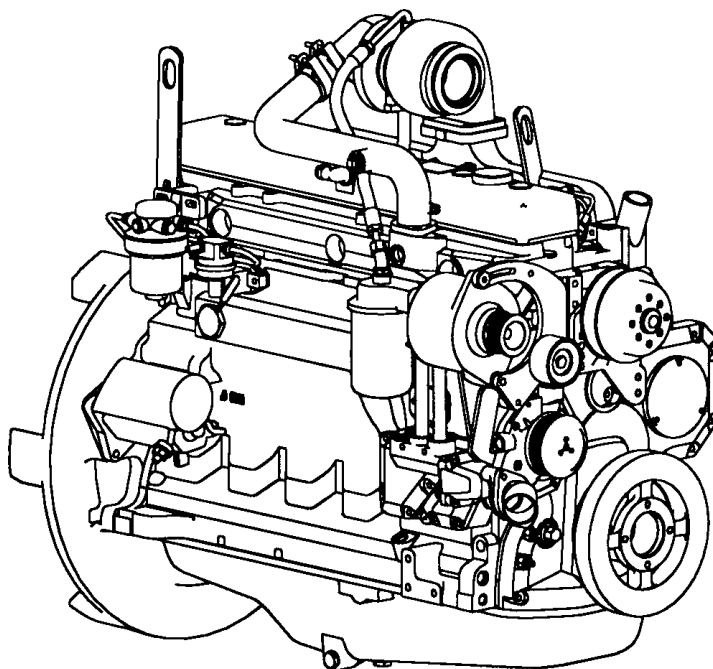


**ARMY TM 9-2815-259-24  
AIR FORCE TO 38G1-125-2  
MARINE CORPS 09249A/09246A-24**

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**TECHNICAL MANUAL**

**UNIT, DIRECT SUPPORT AND GENERAL SUPPORT  
MAINTENANCE MANUAL  
DIESEL ENGINE  
MODEL 4045TF151  
4 CYLINDER 4.5 LITER  
(NSN: 2815-01-462-2289) (EIC: N/A)**



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**DEPARTMENTS OF THE ARMY AND THE AIR FORCE  
AND HEADQUARTERS, MARINE CORPS**

**1 NOVEMBER 2000  
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Washington, DC, 1 November 2000

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## HOW TO USE THIS MANUAL

In this manual (TM 9-2815-259-24) paragraphs are underlined and sections and chapters appear in capital letters. The location of additional material that must be referenced is clearly marked. Illustrations in this text are located as close as possible to their references.

**Chapter 1 - INTRODUCTION.** This section contains general information, equipment description and data, and principles of operation for the engine.

**Chapter 2 - OPERATING INSTRUCTIONS.** This section contains functional descriptions of the engine systems and how they are connected to the end item. For operation, refer to end item operator's manual.

**Chapter 3 - UNIT MAINTENANCE INSTRUCTIONS.** This section contains troubleshooting procedures used to recognize and correct engine malfunctions at the unit level, and all maintenance procedures authorized to be performed on the engine the unit level.

**Chapter 4 - DIRECT SUPPORT MAINTENANCE INSTRUCTIONS.** This section contains direct support level troubleshooting procedures used to recognize and correct engine malfunctions at the direct support level, and all maintenance procedures authorized to be performed on the engine at the direct support level.

**Chapter 5 - GENERAL SUPPORT MAINTENANCE INSTRUCTIONS.** This section contains general support maintenance instructions which are limited to the disassembly, cleaning, inspection and assembly of components after troubleshooting has already been accomplished.

## APPENDICES.

Appendix A lists all forms, field manuals, technical manuals and miscellaneous publications referenced in this manual and should be used in conjunction with this manual.

Appendix B is the Maintenance Allocation Chart (MAC) which designates all maintenance and repair functions authorized to be performed at the different maintenance levels.

Appendix C lists the Components of End Item (COEI) and Basic Issue Items (BII) lists.

Appendix D. Refer to End Item Maintenance Manual Appendix D for lists of items authorized for use with the generator set, but not issued with it or supported by generator set engineering drawings.

Appendix E lists expendable supplies and materials required to operate and maintain the generator set. These items are authorized by CTA 50-970, Expendable Items (except medical, Class V, repair parts, and heraldic items).

Appendix F includes complete instructions for fabricating or assembling parts as required for the engine.

Appendix G provides torque limits for fasteners used in maintenance of the engine.

Appendix H lists parts that must be replaced if removed during maintenance.

## CHAPTER 1 INTRODUCTION

### Section I. GENERAL INFORMATION

#### 1.1. SCOPE.

- a. Type of Manual. This manual contains unit, direct support, and general support maintenance instructions for the Model TO4045TF151 Diesel Engine, hereafter referred to as engine. Also included are descriptions of major systems/components and their functions in relation to other systems/components.
- b. Purpose of Equipment. The engine provides a driving force for generators or other equipment requiring this size (HP rating) and compatibility.

#### 1.2. MAINTENANCE FORMS, RECORDS, AND REPORTS.

- a. Reports of Maintenance and Unsatisfactory Equipment. Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA Pam 738-750, Army Maintenance Management System (TAMMS). Air Force personnel will use AFR 66-1, Air Force Maintenance Management Policy, for maintenance reporting and TO-OO-35D54 for unsatisfactory equipment reporting.
- b. Reporting of Item and Packaging Discrepancies. Fill out and forward SF 364 (Report of Discrepancy (ROD)) as prescribed in AR 735-11-2/DLAR 414-55/SECNAVINST 4355.18/AFR 400-54/MCO 4430.3J.
- c. Transportation Discrepancy Report (TDR) (SF 361). Fill out and forward Transportation Discrepancy Report (TDR) (SF361) as prescribed in AR 55-38/NAVSUPINST 4610.33C/AFR 75-18/MCO P4610.19D/DLAR 4500.15.

#### 1.3. REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR).

Army - If your equipment 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 a SF 368 (Product Quality Deficiency Report). Mail it to us at the address below. We'll send you a reply. The fax number is 908-532-1413, DSN 992-1413. You may also e-mail your recommendations to AMSEL-LC-LEO-PUBS-CHG@cecom3.monmouth.army.mil.

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