

**DIRECT SUPPORT AND
GENERAL SUPPORT
MAINTENACE MANUAL
(INCLUDING REPAIR PARTS AND
SPECIAL TOOLS LIST)**

**ENGINE, DIESEL:
8-CYLINDER
TURBOCHARGED,
DETROIT DIESEL
CORPORATION
MODEL 8V92TA
NSN 2815-01-257-3879**

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**TABLE OF CONTENTS
PAGE i**

**INTRODUCTION
PAGE vi**

**EQUIPMENT DESCRIPTION
PAGE 1-1**

**MAINTENANCE
INSTRUCTIONS
PAGE 2-1**

**TROUBLESHOOTING
PAGE 2-7**

**APPENDIX A
REFERENCES
PAGE A-1**

**APPENDIX C
EXPENDABLE SUPPLIES AND
MATERIALS LIST
PAGE C-1**

**APPENDIX D
ILLUSTRATED LIST OF
MANUFACTURED ITEMS
PAGE D-1**

**APPENDIX E
TORQUE LIMITS
PAGE E-1**

**ALPHABETICAL
INDEX
PAGE INDEX 1**

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL

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DETROIT DIESEL CORPORATION MODEL 8V92TA
NSN 2815-01-257-3879**

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M983 with crane and M985E1 without winch are no longer in the fleet. Ignore all references to these vehicles. The M984E1 and M984A1 are the same vehicle. All references to M984E1 shall be interpreted as the M984A1 model.

Repair Parts and Special Tools List for the engine, Diesel: 8-Cylinder, Turbocharged Detroit Diesel Corporation Model 8V92TA (NSN 2815-01-257-3879) can be found in TM 9-2320-279-24P.

TABLE OF CONTENTS

	Page
HOW TO USE THIS MANUAL	vii
CHAPTER 1 INTRODUCTION	1-1
Section I Equipment and Maintenance Reports	1-1
Section II Equipment Description	1-3
Section III Principles of Operation	1-7
CHAPTER 2 MAINTENANCE INSTRUCTIONS	2-1
Section I General Information	2-1
Section II Repair Parts and Special Tools	2-1
Section III General Maintenance Practices	2-1
Section IV Organization of Maintenance Procedures	2-4
Section V Troubleshooting	2-7
CHAPTER 3 ENGINE BLOCK AND CYLINDER HEAD MAINTENANCE	3-1
Section I Information	3-1
Section II Engine Block Assembly	3-2
Section III Cylinder Head Assembly	3-38

	Page
CHAPTER 4 CRANKSHAFT MAINTENANCE	4-1
Section I Introduction	4-1
Section II Crankshaft Assembly	4-1
CHAPTER 5 FLEXPATE AND FLYWHEEL HOUSING MAINTENANCE	5-1
Section I Introduction	5-1
Section II Flexplate and Flywheel Housing Assembly	5-1
CHAPTER 6 PISTON AND CONNECTING ROD MAINTENANCE	6-1
Section I Introduction	6-1
Section II Piston and Connecting Rod	6-1
CHAPTER 7 VALVE MECHANISM MAINTENANCE	7-1
Section I Introduction	7-1
Section II Valve Mechanisms	7-1
CHAPTER 8 OIL SYSTEM MAINTENANCE	8-1
Section I Introduction	8-1
Section II Oil System	8-1
CHAPTER 9 EXHAUST MANIFOLD MAINTENANCE	9-1
Section I Introduction	9-1
Section II Exhaust Manifold Assembly	9-1
CHAPTER 10 BLOWER AND WATER PUMP DRIVES MAINTENANCE	10-1
Section I Introduction	10-1
Section II Blower Drive Assembly	10-1
Section III Water Pump Drive Assembly	10-12
CHAPTER 11 ENGINE BRAKE RETARDER MAINTENANCE	11-1
Section I Introduction	11-1
Section II Engine Brake Retarder Assembly	11-1
CHAPTER 12 FUEL INJECTOR MAINTENANCE	12-1
Section I Introduction	12-1
Section II Fuel Injector Assembly	12-1
CHAPTER 13 FUEL SYSTEM MAINTENANCE	13-1
Section I Introduction	13-1
Section II Fuel System	13-1
CHAPTER 14 BLOWER AND TURBOCHARGER MAINTENANCE	14-1
Section I Introduction	14-1
Section II Blower Assembly	14-1
Section III Turbocharger Assembly	14-36
CHAPTER 15 ENGINE GOVERNOR MAINTENANCE	15-1
Section I Introduction	15-1
Section II Engine Governor	15-1

CHAPTER 16	AFTERCOOLER MAINTENANCE	16-1
Section I	Introduction	16-1
Section I	Introduction	16-1
Section II	Aftercooler Assembly	17-1
CHAPTER 17	WATER PUMP MAINTENANCE	17-1
Section I	Introduction	18-1
Section II	Water Pump Assembly	18-1
CHAPTER 18	FAN CLUTCH MAINTENANCE	18-1
Section I	Introduction	18-1
Section II	Fan Clutch Assembly	18-1
CHAPTER 19	ENGINE TUNE-UP	19-1
Section I	Introduction	19-1
Section II	Engine Tune-Up Adjustments	19-1
APPENDIXES		
A	REFERENCES	A-1
B	Deleted
C	EXPENDABLE SUPPLIES AND MATERIALS	C-1
Section I	Introduction	C-1
Section II	Expendable Supplies and Materials List.....	C-2
D	ILLUSTRATED LIST OF MANUFACTURED ITEMS.....	D-1
Section I	Introduction	D-1
Section II	Manufactured Items Part Number Index.....	D-1
Section III	Manufactured Items Illustrations.....	D-2
E	TORQUE LIMITS	E-1
Index	Index 1

LIST OF ILLUSTRATIONS

Figure	Title	Page
1-1	Engine Components	1-4
D-1	Bearing Shell Remover (P/N 2BG623)	D-2
D-2	Lifting Eyes (P/N 2BH944)	D-3
D-3	Retaining Ring Pliers (P/N 2BH945)	D-4
D-4	Turbocharger Holding Fixture (P/N 2SK742)	D-5
D-5	Hose(P/N 21021Fx24)	D-6
D-6	Wire Assembly(P/N 25351Fx7w).....	D-6
D-7	Wear Sleeve Installation Tool.....	D-7
D-8	Feeler Gage [0.004 in.(0.102 mm), 0.005 in. (0.127 mm), 0.017 in. (0.432 mm)]......	D-9

HOW TO USE THIS MANUAL

This manual is designed to help maintain the M977 series 8V92TA Diesel Engine. Listed below are some of the special features which have been put in to help locate and use needed information.

- The front cover index provides a quick reference to chapters and sections that will be used often.
- The appendixes are located at the end of the manual. They contain a reference guide to other manuals, a list of expendable supplies and materials, a manufactured items list, and tables for torque values.
- Subject headings and certain other essential information are printed in bold type throughout the manual to make them more visible.
- The maintenance tasks describe what has to be done to the vehicle before starting the task, and what must be done to return the vehicle to operating condition after the task is finished.
- Instructions are provided in paragraph 2-8 for a complete teardown/buildup of the engine in disassembly/reassembly sequence.
- Certain parts with wear limitations may be checked by referring to the Cleaning/Inspection portion of the task. If the measurement falls within wear limits, it may not be necessary to remove/replace.

The manual is divided into chapters containing direct support and general support maintenance procedures. These procedures describe a number of things such as:

- What will be needed to do the job.
- If any assistance will be needed.
- Important safety precautions.

In addition to the text, there will be an exploded-view illustration of most steps. This illustration is keyed to the text and shows how to take the part off and put it on. Cleaning and inspection procedures are also included when required.

FOLLOW THESE GUIDELINES WHEN USING THIS MANUAL:

- Become familiar with the entire maintenance procedure before beginning a maintenance task.
- Read all WARNINGS and CAUTIONS before performing any procedures.

CHAPTER 1 INTRODUCTION

	Para	Page
Contents		
Scope	1-1	1-1
Maintenance Forms, Records, and Reports	1-2	1-1
Destruction of Army Material to Prevent Enemy Use.....	1-3	1-1
Preparation for Storage or Shipment	1-4	1-2
Nomenclature Cross-Reference	1-5	1-2
Reporting Equipment Improvement Recommendations (EAR)	1-6	1-2
Equipment Improvement Report and Maintenance Digest (EIR MD) and Equipment Improvement Report and Maintenance Summary (EIR MS)	1-7	1-2
Warranty Information	1-8	1-2
Metric System	1-9	1-2
Equipment Characteristics, Capabilities, and Features	1-10	1-3
Location and Description of Components	1-11	1-3
Equipment Data	1-12	1-7
Principles of Operation	1-13	1-7

Section 1. EQUIPMENT AND MAINTENANCE REPORTS

Maintenance Information

1-1. SCOPE. The purpose of this chapter is to provide general information, equipment description, and principles of operation for the M977 series 8V92TA diesel engine.

a. Type of Manual. Direct Support and General Support Maintenance Manual with Repair Parts and Special Tools List (RPSTL) for the M977 series Heavy Expanded Mobility Tactical Truck (HEMTT) 8V92TA diesel engine.

b. Model Number and Equipment Name. 8V92TA Diesel Engine.

c. Purpose of Equipment. The 8V92TA engine powers the M977 series vehicles used by the U.S. Army.

d. Manual Content. This manual provides Direct Support and General Support Maintenance instructions for the M977 series 8V92TA engine. These instructions include procedures for disassembly, cleaning, repair, test, and adjustment as authorized by the Maintenance Allocation Chart. The procedures covered are beyond the scope of tools, equipment, and supplies normally available to operators and organizational maintenance personnel.

This manual also includes the Repair Parts and Special Tools List (RPSTL) for the M977 series 8V92TA engine. Direct Support and General Support Maintenance personnel will request repair parts as necessary from this RPSTL. The Source, Maintenance, and Recoverability (SMR) codes assigned to each part govern the requisition and disposition of the part. In addition to repair parts, all special tools used in engine maintenance are listed. These special tools are all tools required by the maintenance instructions which are not in U.S. Army supply catalogs for shop equipment and tool sets.

1-2. MAINTENANCE FORMS, RECORDS, AND REPORTS. Department of Army forms and procedures used for equipment maintenance will be as specified in the latest edition of DA PAM 738-750, The Army Maintenance Management System (TAMMS),

1-3. DESTRUCTION OF ARMY MATERIAL TO PREVENT ENEMY USE. Command decision, according to the tactical situation, will determine when the destruction of the M977 series 8V92TA engine will be accomplished. A destruction plan will be prepared by the using organization unless one has been prepared by a higher authority. For general destruction procedures for this equipment, refer to TM 750-244-6, Procedures for Destruction of Tank-Automotive Equipment to Prevent Enemy Use (U.S. Army Tank-Automotive Command).