

**TECHNICAL MANUAL  
 MAINTENANCE INSTRUCTIONS  
 ORGANIZATIONAL MAINTENANCE**

**M977 SERIES 8 x 8 HEAVY  
 EXPANDED MOBILITY  
 TACTICAL TRUCKS (HEMTT)**

MODEL	NSN
TRUCK, CARGO, WITH WINCH M977	2320-01-097-0260
TRUCK, CARGO, WITHOUT WINCH M977	2320-01-099-6426
TRUCK, TANK, FUEL, WITH WINCH M978	2320-01-097-0249
TRUCK, TANK, FUEL, WITHOUT WINCH M978	2320-01-100-7672
TRUCK, TRACTOR, WITH WINCH, WITHOUT CRANE M983	2320-01-097-0247
TRUCK, TRACTOR, WITH WINCH, WITH CRANE M983	2320-01-099-6421
TRUCK, WRECKER-RECOVERY M984	2320-01-097-0248
TRUCK, WRECKER-RECOVERY M984E1	2320-01-195-7641
TRUCK, CARGO, WITH WINCH M985	2320-01-097-0261
TRUCK, CARGO, WITHOUT WINCH M985	2320-01-100-7673
TRUCK, CARGO, WITH WINCH M985E1	2320-01-194-7032
TRUCK, CARGO, WITHOUT WINCH M985E1	2320-01-194-7031

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**HEADQUARTERS, DEPARTMENT OF THE ARMY**

**TABLE OF CONTENTS  
 PAGE i**

**INTRODUCTION  
 PAGE 1-1**

**EQUIPMENT DESCRIPTION  
 AND DATA  
 PAGE 1-10**

**VEHICLE MAINTENANCE  
 PAGE 2-1**

**PREVENTIVE MAINTENANCE  
 CHECKS AND SERVICES  
 PAGE 2-3**

**TROUBLESHOOTING  
 PAGE 2-39**

**MAINTENANCE PROCEDURES  
 PAGE 2-284**

**ENGINE MAINTENANCE  
 PAGE 3-1**

**FUEL SYSTEM  
 MAINTENANCE  
 PAGE 4-1**

**EXHAUST SYSTEM  
 MAINTENANCE  
 PAGE 5-1**

**COOLING SYSTEM  
 MAINTENANCE  
 PAGE 6-1**

**ELECTRICAL SYSTEM  
 MAINTENANCE  
 PAGE 7-1**

**ALPHABETICAL  
 INDEX  
 PAGE INDEX 1**

**APRIL 1987**

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TRUCK, TRACTOR, WITH WINCH, WITH CRANE, M983	2320-01-099-6421
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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.

**TABLE OF CONTENTS**

	<b>Page</b>
HOW TO USE THIS MANUAL .....	vii
CHAPTER 1 <b>INTRODUCTION</b> .....	1-1
Section I General Information .....	1-1
Section II <b>Equipment Description and Data</b> .....	1-10
Section III Principles of Operation .....	1-12

TABLE OF CONTENTS (CONT)

	Page
CHAPTER 2: <b>VEHICLE MAINTENANCE</b> .....	2-1
Section I Introduction .....	2-1
Section II Repair Parts, Special Tools, and Test, Measurement, and Diagnostic Equipment .....	2-1
Section III Service Upon Receipt. ....	2-2
Section IV Preventive Maintenance Checks and Services. ....	2-3
Section V <b>Troubleshooting</b> .....	2-50
Section VI <b>Maintenance Procedures</b> .....	2-334
Section VII <b>Preparation for Storage or Shipment</b> .....	2-340
CHAPTER 3: <b>ENGINE MAINTENANCE</b> .....	3-1
Section I Introduction .....	3-1
Section II Engine Assembly. ....	3-1
Section III Engine Lubrication Systems .....	3-8
CHAPTER 4: <b>FUEL SYSTEM MAINTENANCE</b> .....	4-1
Section I Introduction .....	4-1
Section II Air Cleaner .....	4-2
Section III Fuel Tank and Lines. ....	4-16
Section IV Engine Stop Solenoid .....	4-31
Section V Fuel Filters .....	4-32
Section VI Engine Starting Aid .....	4-43
Section-VII Throttle Controls .....	4-47
CHAPTER 5: <b>EXHAUST SYSTEM MAINTENANCE</b> .....	5-1
Section I Introduction .....	5-1
Section II Muffler.....	5-1
CHAPTER 6: <b>COOLING SYSTEM MAINTENANCE</b> .....	6-1
Section I Introduction .....	6-1
Section II Radiator.....	6-2
Section III Thermostats. ....	6-23
Section IV Fan.....	6-36
CHAPTER 7: <b>ELECTRICAL SYSTEM MAINTENANCE</b> .....	7-1
Section I Introduction .....	7-3
Section II Alternator and Voltage Regulator .....	7-3
Section III Starter .....	7-11
Section IV Engine Safety Controls. ....	7-15
Section V Instrument and Control Panels .....	7-76
Section VI Junction Boxes .....	7-142
Section VII Miscellaneous Switches .....	7-166
Section VIII Lights.....	7-185
Section IX Sending Units and Warning Systems. ....	7-261
Section X Batteries and Battery Box .....	7-298
Section XI Chassis Wiring Components. ....	7-320.3
CHAPTER 8 TRANSMISSION MAINTENANCE .....	8-1
Section I Introduction .....	8-1
Section II Shift Control .....	8-1
Section III Transmission.. ....	8-10
Section IV Filter .....	8-16

## TABLE OF CONTENTS (CONT)

	<b>Page</b>
CHAPTER 9	TRANSFER CASE AND PROPELLER SHAFT MAINTENANCE ..... 9-1
Section I	Introduction ..... 9-1
Section II	Transfer Case ..... 9-1
Section III	Propeller Shafts and Universal Joints ..... 9-24
CHAPTER 10	AXLE MAINTENANCE ..... 10-1
Section I	Introduction ..... 10-1
Section II	Front Axles ..... 10-1
Section III	Rear Axle Shafts ..... 10-7
CHAPTER 11	BRAKE AND AIR SYSTEM MAINTENANCE ..... 11-1
Section I	Introduction ..... 11-2
Section II	Brakes ..... 11-2
Section III	Brake System Valves ..... 11-31
Section IV	Air Dryer ..... 11-74
Section V	Air Reservoirs and Manifolds ..... 11-90
Section VI	Transfer Case Lockup Valve ..... 11-111
Section VII	Air-hoses.. ..... 11-146
Section VIII	Air Governor and Compressor ..... 11-161
Section IX	Trailer Connection System ..... 11-172
CHAPTER 12	WHEEL MAINTENANCE ..... 12-1
Section I	Introduction ..... 12-1
Section II	Hub and Drum ..... 12-1
Section III	Wheel/Tire Assembly ..... 12-24
CHAPTER 13	STEERING SYSTEM ..... 13-1
Section I	Introduction ..... 13-1
Section II	Steering Wheel and Linkage ..... 13-1
Section III	Hydraulic Reservoir and Hoses ..... 13-18
CHAPTER 14	FRAME, AND TIRE CARRIER MAINTENANCE..... 14-1
Section I	Introduction ..... 14-1
Section II	Decking, Skid Plate, and Frame Attachments..... 14-2
Section III	Catwalks and Generator Mount..... 14-20
Section IV	Towing and Retriever System ..... 14-26
Section V	Tire Carrier and Fifth Wheel ..... 14-33
CHAPTER 15	SUSPENSION MAINTENANCE ..... 15-1
Section I	Introduction ..... 15-1
Section II	Shock Absorbers and Torque Rods ..... 15-1
CHAPTER 16	CAB AND BODY MAINTENANCE ..... 16-1
Section I	Introduction ..... 16-2
Section II	Cab, Doors, and Engine Covers ..... 16-2
Section III	Splash Guards, Fenders, and Mudflaps ..... 16-46
Section IV	Seats..... 16-131
Section V	Stowage Boxes ..... 16-114
Section VI	Cable Reels and Hose Reels ..... 16-186
Section VII	Cargo Body ..... 16-166
Section VIII	Tanker Body ..... 16-189
Section IX	Wrecker Body ..... 16-210

TABLE OF CONTENTS (CONT)

CHAPTER 17 WINCHES, CRANES, AND POWER TAKEOFF MAINTENANCE ..... 17-1

    Section I Introduction ..... 17-1

    Section II Cable Tensioners and Guides ..... 17-2

    Section III Winches ..... 17-48

    Section IV Cranes ..... 17-69

    Section V Winch and Crane Controls ..... 17-104

    Section VI Power Takeoff ..... 17-132

    Section VII Outriggers and Outrigger Controls ..... 17-152

CHAPTER 18 BODY ACCESSORY ITEMS ..... 18-1

    Section I Introduction ..... 18-1

    Section II Windshield Wiper/Washer Maintenance ..... 18-2

    Section III Safety Accessories ..... 18-13

    Section IV Fuel hoses, Nozzles, and Control Valves ..... 18-30

    Section V Heater and Defroster ..... 18-38

CHAPTER 19 HYDRAULIC SYSTEM MAINTENANCE ..... 19-1

    Section I Introduction ..... 19-1

    Section II Hydraulic Hand Pump ..... 19-2

    Section III Hydraulic Control Valves ..... 19-5

    Section IV Hydraulic Lines and Fluid Filter ..... 19-49

CHAPTER 20 ARCTIC KIT MAINTENANCE ..... 20-1

    Section I Introduction ..... 20-1

    Section II Arctic Heater Kit ..... 20-1

CHAPTER 21 ARMAMENT EQUIPMENT MAINTENANCE ..... 21-1

    Section I Introduction ..... 21-1

    Section II Armament ..... 21-1

CHAPTER 22 NON-ELECTRICAL GAGE MAINTENANCE ..... 22-1

    Section I Introduction ..... 22-1

    Section II Gages ..... 22-1

CHAPTER 23 FILTER-SEPARATOR MAINTENANCE ..... 23-1

    Section I Introduction ..... 23-1

    Section II Filter-Separator ..... 23-1

CHAPTER 24 RADIO KIT MAINTENANCE ..... 24-1

    Section I Introduction ..... 24-1

    Section II Radio Kit ..... 24-1

CHAPTER 25 M978 TANKER MAINTENANCE ..... 25-1

    Section I Introduction ..... 25-1

    Section II Service and Inspection ..... 25-2

    Section III Tubing, Pumps, and Air Eliminator ..... 25-14

    Section IV Piping and Valves ..... 25-50

TABLE OF CONTENTS (CONT)

	<b>Page</b>
CHAPTER 26 CHEMICAL, BIOLOGICAL, AND RADIOLOGICAL (CBR) EQUIPMENT MAINTENANCE . . . . .	26-1
Section I Introduction . . . . .	26-1
Section II Chemical, Biological, and Radiological Equipment . . . . .	26-1
CHAPTER 27 M983 AUXILIARY ELECTRICAL POWER SYSTEM MAINTENANCE . . . . .	27-1
Section I Introduction . . . . .	27-1
Section II Auxiliary Electrical Power System . . . . .	27-1
APPENDIXES	
A REFERENCES . . . . .	A-1
B MAINTENANCE ALLOCATION CHART . . . . .	B-1
C EXPENDABLE SUPPLIES AND MATERIALS . . . . .	C-1
D PREPARATION FOR TOWING . . . . .	D-1
E TORQUE LIMITS . . . . .	E-1
F ILLUSTRATED LIST OF MANUFACTURED ITEMS . . . . .	F-1
INDEX . . . . .	Index 1

LIST OF ILLUSTRATIONS

Figure	Title	Page
1-1	M977 Cargo Vehicle . . . . .	1-2
1-2	M978 Fuel Tanker Vehicle . . . . .	1-3
1-3	M983 Tractor Vehicle with Material Handling Crane . . . . .	1-4
1-4	M983 Tractor Vehicle Without Crane.. . . .	1-5
1-5	M984 Wrecker-Recovery Vehicle . . . . .	1-6
1-6	M984E1 Wrecker-Recovery Vehicle . . . . .	1-7
1-7	M985 Cargo Vehicle . . . . .	1-8
1-8	M985E1 Cargo Vehicle . . . . .	1-9
1-9	Power Train . . . . .	1-13
1-10	Air Intake System . . . . .	1-14
1-11	Fuel System . . . . .	1-14
1-12	Cooling System . . . . .	1-15
1-13	Electrical System . . . . .	1-15
1-14	Air System . . . . .	1-17
1-15	Hydraulic System . . . . .	1-18
1-16	Steering System . . . . .	1-19
1-17	Self-Recovery Winch . . . . .	1-20
1-18	Cranes . . . . .	1-21
1-19	Recovery Winch (M984 and M984E1 Only) . . . . .	1-22
1-20	Wheels and Tires . . . . .	1-23
1-21	Tanker Equipment . . . . .	1-24
2-1	STE/ICE Connector . . . . .	2-2
2-2	Circuit Breakers (Center Console) . . . . .	2-40
2-3	M985E1 HIGH IDLE Wiring Diagram . . . . .	2-63
2-4	M984 HIGH IDLE Wiring Diagram . . . . .	2-64
2-5	M984 HIGH IDLE Control Assembly . . . . .	2-70
2-6	M985E1 HIGH IDLE Control Assembly . . . . .	2-71
2-7	Winch Controller Wiring Diagram . . . . .	2-101
2-8	Winch Controller Wiring Diagram . . . . .	2-131
2-9	Remote Controller Electrical Schematic (M977, M985) . . . . .	2-163
2-10	Remote Controller Wiring Diagram (M977, M985) . . . . .	2-164
2-11	Tanker Component Identification . . . . .	2-166
2-12	Tanker Fuel System Functional Diagram . . . . .	2-167
2-13	Taker Operation Functional Diagram. . . . .	2-168
2-14	Tanker Fuel System Schematic. . . . .	2-180

LIST OF ILLUSTRATIONS (CONT)

Figure	Title	Page
2 - 1 5	Wiring Diagram-Engine Heater Model CP3050A (24 Volt) . . . . .	2 - 2 1 4
2 - 1 6	Wiring Diagram-Personnel Heater Model AP3050-24FB . . . . .	2 - 2 2 3
2 - 1 7	STE/ICE Vehicle Test . . . . .	2 - 2 3 3
2 - 1 8	Relationship of GO, NO-GO Tests . . . . .	2 - 2 3 5
2 - 1 9	STE/ICE System . . . . .	2 - 2 3 6
2 - 2 0	VTM Controls and Readout Display . . . . .	2 - 2 3 7
2 - 2 1	Cable Assemblies . . . . .	2 - 2 3 9
2 - 2 2	Connector Key Location . . . . .	2 - 2 3 9
2 - 2 3	Transducer Kit . . . . .	2 - 2 4 0
7 - 1	ENGINE HIGH IDLE Box Assembly Wiring Diagram (M977, M985) . . . . .	7 - 3 0
7 - 2	Main Overload Switch Wiring. . . . .	7 - 1 7 2
7 - 3	Reduced Overload and Mast Overload Switch Wiring . . . . .	7 - 1 7 3
7 - 4	Electrical Conduit Tubing. . . . .	7 - 1 8 0
9 - 1	Capscrew Torque Limits . . . . .	9 - 2 5
1 1 - 1	Engine Airhoses . . . . .	1 1 - 1 4 1
1 1 - 2	Wiper and Air Horn Hoses. . . . .	1 1 - 1 4 3
1 1 - 3	Chassis Airhoses . . . . .	1 1 - 1 4 5
1 1 - 4	Brake Airhoses . . . . .	1 1 - 1 4 9
1 1 - 5	Cab Airhoses . . . . .	1 1 - 1 5 1
1 1 - 6	Air Manifold No. 4 . . . . .	1 1 - 1 5 2
1 9 - 1	Typical Hydraulic Line Brackets . . . . .	1 9 - 4 7
1 9 - 2	Hydraulic Lines-M977, M985 Without Winch . . . . .	1 9 - 4 9
1 9 - 3	Hydraulic Lines-M977, M985 With Winch . . . . .	1 9 - 5 1
1 9 - 4	Hydraulic Lines-M983 With Crane . . . . .	1 9 - 5 3
1 9 - 5	Hydraulic Lines-M983 Without Crane . . . . .	1 9 - 5 5
1 9 - 6	Hydraulic Lines-M978 With Winch . . . . .	1 9 - 5 7
1 9 - 7	Hydraulic Lines-M978 Without Winch . . . . .	1 9 - 5 9
1 9 - 8	Hydraulic Lines-M985E1 Without Winch . . . . .	1 9 - 6 1
1 9 - 9	Hydraulic Lines-M985E1 With Winch . . . . .	1 9 - 6 3
1 9 - 1 0	Hydraulic Lines-M984 . . . . .	1 9 - 6 5
1 9 - 1 1	Hydraulic Lines-M984E1 . . . . .	1 9 - 6 7
2 5 - 1	Tanker External Components . . . . .	2 5 - 2
2 5 - 2	Tanker Filter and Manual Dispensing Components . . . . .	2 5 - 3
2 5 - 3	Tanker Dispensing Valves. . . . .	2 5 - 3
2 5 - 4	Tanker Loading and Servicing Components . . . . .	2 5 - 4
2 5 - 5	Tanker Module Tubing . . . . .	2 5 - 1 7
2 5 - 6	Tanker Piping . . . . .	2 5 - 5 6
2 5 - 7	Tanker Piping Brackets . . . . .	25-61
F - 1	Cable Assembly . . . . .	F-10
F - 2	Chains . . . . .	F-12
F - 3	Wire Assembly . . . . .	F-13
F - 4	Hose Assembly . . . . .	F-16
F - 5	Channel . . . . .	F-21
F - 6	Looms and Sleeving . . . . .	F-22
F - 7	Strap Liner . . . . .	F-23
F - 8	Seals and Weatherstrip . . . . .	F-23
F - 9	Tubing . . . . .	F-24
F - 1 0	Gasket Strip . . . . .	F-26
F - 1 1	Cord Assembly . . . . .	F-26
F - 1 2	Quickedge Molding . . . . .	F-27
F - 1 3	Fasteners . . . . .	F-27
F - 1 4	Roof Tape . . . . .	F-28
F - 1 5	1350860W Wire Harness Assembly . . . . .	F-29
F - 1 6	1354460W Wire Harness Assembly . . . . .	F-29
F - 1 7	1353360W Wire Assembly. . . . .	F-30
F - 1 8	1358560W Wire Assembly. . . . .	F-30
F O - 1	Electrical Schematic . . . . .	FP-1
F O - 2	Air Schematic . . . . .	FP-5
F O - 3	Hydraulic Schematic . . . . .	FP-7

## LIST OF TABLES

Number	Title	Page
1-1	Nomenclature Cross-Reference . . . . .	1-9
1-2	Principal Differences Between Models . . . . .	1-11
1-3	Significant Hazards and Safety Recommendations . . . . .	1-12
2-1	M977 through M985E1 Organizational Preventive Maintenance Checks and Services. . . . .	2-5
2-2	M977 and M985 Organizational Preventive Maintenance Checks and Services . . . . .	2-26
2-3	M978 Organizational Preventive Maintenance Checks and Services . . . . .	2-28
2-4	M983 Organizational Preventive Maintenance Checks and Services . . . . .	2-29
2-5	M984 Organizational Preventive Maintenance Checks and Services . . . . .	2-31
2-5.1	M984E1 Organizational Preventive Maintenance Checks and Services . . . . .	2-32.1
2-6	Auxiliary Equipment Organizational Preventive Maintenance Checks and Services . . . . .	2-33
2-7	System Symptom Index . . . . .	2-40
2-8	Troubleshooting Subject Index . . . . .	2-44
2-9	Troubleshooting . . . . .	2-48
2-10	Engine GO Chain Index. Combined Mode . . . . .	2-232
2-11	Engine NO-GO Chain Index. Combined Mode . . . . .	2-232
2-12	Status Readout . . . . .	2-241
2-13	Prompting Messages . . . . .	2-242
2-14	Error Readouts . . . . .	2-244
2-15	Transducer ID Numbers . . . . .	2-245
7-1	Tanker Conduit Tubing . . . . .	7-179
11-1	Engine Hose Index . . . . .	11-140
11-2	Wiper and Air Horn Hoses. . . . .	11-142
11-3	Chassis Airhoses . . . . .	11-145
11-4	Brake Airhoses . . . . .	11-149
11-5	Cab Airhoses . . . . .	11-151
19-1	Hydraulic Line Index for M977, M985 Without Winch . . . . .	19-48
19-2	Hydraulic Line Index for M977, M985 With Winch . . . . .	19-50
19-3	Hydraulic Line Index for M983 With Crane . . . . .	19-52
19-4	Hydraulic Line Index for M983 Without Crane . . . . .	19-54
19-5	Hydraulic Line Index for M978 With Winch . . . . .	19-56
19-6	Hydraulic Line Index for M978 Without Winch . . . . .	19-58
19-7	Hydraulic Line Index for M985E1 Without Winch . . . . .	19-60
19-8	Hydraulic Line Index for M985E1 With Winch . . . . .	19-62
19-9	Hydraulic Line Index for M984 . . . . .	19-64
19-10	Hydraulic Line Index for M984E1 . . . . .	19-66
25-1	Tanker Module Tubing . . . . .	25-16
25-2	Tanker Piping . . . . .	25-54
F-1	Cable and Cable Assemblies. . . . .	F-11
F-2	Chains . . . . .	F-12
F-3	Wire and Wire Assemblies. . . . .	F-13
F-4	Hose and Hose Assemblies. . . . .	F-16
F-5	Channel . . . . .	F-21
F-6	Looms and Sleeving . . . . .	F-22
F-7	Strap Liner . . . . .	F-23
F-8	Seals and Weatherstrip . . . . .	F-23
F-9	Tubing . . . . .	F-24
F-10	Gasket Strip . . . . .	F-26
F-11	Cord and Cord Assemblies . . . . .	F-26
F-12	Quickedge Molding . . . . .	F-27
F-13	Fasteners . . . . .	F-27
F-14	Roof Tape . . . . .	F-28

### HOW TO USE THIS MANUAL

This manual is designed to help maintain the M977 series vehicles. In addition to this manual TM 9-2320-354-24&P provides additional unique maintenance instructions for the M984 with HIAB 8109



crane and TM 9-2320-355-24&P provides additional unique maintenance instructions for the M985E1 with HIAB 8108 crane. 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, guidelines to reading the Maintenance Allocation Chart (MAC), a list of expendable supplies and materials, towing procedures, and torque values.
  - Subject headings and certain other essential information are printed in bold type throughout the manual to make them more visible.
- Ž The maintenance tasks describe what must 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.

The manual is divided into chapters containing organizational 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.
- How long the job will take.
- 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 you how to take the part off and put it on. Cleaning and inspection procedures are also included when required. The following problem will describe some of the features of this manual.

#### PROBLEM

The vehicle operator brings vehicle into the shop with a problem. Whenever the vehicle is started, the green needle on the air pressure gage stays below 60 psi (414 kPa) for a long time, but the red needle reaches 120 psi (827 kPa) in about two minutes.

##### 1. How do you start?

**Look at the cover of the manual.**

On the cover is a listing of different sections in the manual. It will be necessary to troubleshoot the problem to find the cause, so the Troubleshooting section will be needed. Open the manual to the page stated on the cover, or to find the Troubleshooting section fast, bend the pages slightly and line up the troubleshooting block on the cover with the black tab on the pages. The manual will be opened to Section V of Chapter 2, Troubleshooting.

##### 2. What kind of problem is it?

**Find it *in* the symptom index.**

There are two symptom indexes in the Troubleshooting section. One is arranged alphabetically by *system symptom* and the other is arranged alphabetically by *subject/symptom*. The symptom causing the problem might be in the System Symptom Index under Air System, Dual Air Brake System, or Electrical System. In the Subject/Symptom Index, it might be under Air, Brakes, or Pressure. When the symptom to the problem is found, go to the troubleshooting procedure page listed for that symptom.

##### 3. How can the cause of the problem be determined?

**Go to page 2-93.**

Troubleshooting for NOISY COMPRESSOR OPERATION is on that page. The troubleshooting procedures have columns with the headings: MALFUNCTION, TEST OR INSPECTION, and CORRECTIVE ACTION. Starting at step 1, read the procedure. Each step describes what to do and what to look for. Follow the steps, in order, to troubleshoot the symptom until the problem is found. When the problem is found, the CORRECTIVE ACTION column will describe how to fix it.

##### 4. Let's assume it was determined that the air compressor is bad. The replacement is in paragraph 11-38.

The procedure contains all the information needed to replace the air compressor. First check the introductory material. It tells what will be needed before starting the job. Following the introductory material is an exploded-view illustration and step-by-step instructions which show how to remove and install the air compressor.

#### 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.