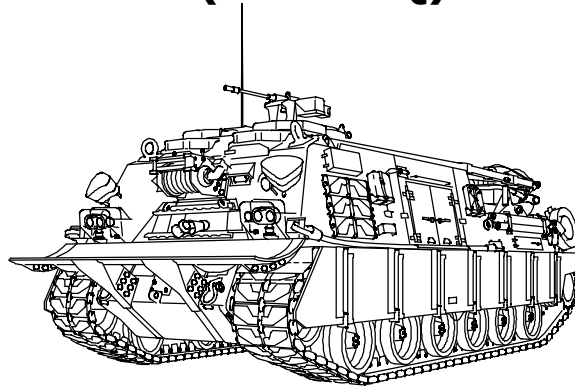


TECHNICAL MANUAL

**DIRECT SUPPORT AND GENERAL
SUPPORT MAINTENANCE MANUAL**

FOR

**RECOVERY VEHICLE, HEAVY,
FULL-TRACKED: M88A2
(NSN 2350-01-390-4683)
(EIC: ACQ)**



This manual supercedes TM 9-2350-292-34 dated 1 October 2000.
Distribution Statement A: Approved for public release; distribution is unlimited.

HEADQUARTERS
DEPARTMENT OF THE ARMY
U.S. MARINE CORPS
WASHINGTON, D.C. 01 JANUARY 2002

TECHNICAL MANUAL

DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL FOR RECOVERY VEHICLE, HEAVY FULL TRACKED: M88A2 (NSN 2350-01-390-4683) (EIC: ACQ)

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TABLE OF CONTENTS

WP Sequence No.

WARNING SUMMARY

HOW TO USE THIS MANUAL

General Information 0001 00

CHAPTER 1 – DESCRIPTION AND THEORY OF OPERATION

Equipment Description and Data 0002 00

Principles of Operation 0003 00

CHAPTER 2 – TROUBLESHOOTING PROCEDURES

Troubleshooting Instructions and Quick Guide to Troubleshooting (Symptom/Malfunction) Index ... 0004 00

Engine Overview 0005 00

Engine Cranks But Will Not Start in Cold Weather 0006 00

Engine Has Low Stall RPM, Does Not Develop Full Power, and Has Excessive Smoke From One
or Both Banks of Cylinders 0007 00

Engine Has Low Stall RPM, Does Not Develop Full Power, But Exhaust Smoke is Normal 0008 00

Engine Has Excessive White Smoke 0009 00

Hydraulics System Overview 0010 00

Main Hydraulics System Fails to Operate (No Components Function). Main Hydraulic Pump Fails
to Engage 0011 00

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TABLE OF CONTENTS – ContinuedWP Sequence No.**CHAPTER 2 – TROUBLESHOOTING PROCEDURES – Continued**

Main Hydraulics Pump Fails to Disengage	0012 00
Main Hydraulics System is Noisy	0013 00
Main Winch Fails to Operate	0014 00
Main Winch Operates Slowly or Lacks Power	0015 00
Main Winch Inhauls But Will Not Payout	0016 00
Main Winch Will Payout But Will Not Inhaul	0017 00
Main Winch Will Not Hold Load	0018 00
Main Winch Power is Not Reduced When Winch Override Switch is in Override Position	0019 00
Main Winch Level Winder Fails to Operate	0020 00
Auxiliary Winch Fails to Operate	0021 00
Auxiliary Winch Will Payout But Will Not Inhaul	0022 00
Auxiliary Winch Will Inhaul But Will Not Payout	0023 00
Auxiliary Winch Creeps in Either Direction With Control Handle in Neutral	0024 00
Spade Fails to Operate	0025 00
Spade Will Not Hold Position	0026 00
Hoist Boom Fails to Operate or Only Operates Partially	0027 00
Hoist Boom Will Not Hold in Any Position (Hoist Boom Creeps)	0028 00
Hoist Boom Live Operation Does Not Function (Hoist Boom Will Not Stop Automatically, Stayline Cables Go Slack During Operation or Hoist Boom Can Be Stowed Without Activating the Hoist Boom Safety Valve Control Lever)	0029 00
Hoist Winch Fails to Operate	0030 00
Hoist Winch Will Raise But Will Not Lower	0031 00
Hoist Winch Will Lower But Will Not Raise	0032 00
Hoist Winch Creeps With Control in Neutral	0033 00
Auxiliary Hydraulics System Fails to Operate or Does Not Develop Sufficient Pressure	0034 00

CHAPTER 3 – GENERAL MAINTENANCE

General Maintenance Instructions	0035 00
--	---------

CHAPTER 4 – POWERPACK

Removal and Installation of Engine and Transmission and Related Components	0036 00
Separation of Engine and Transmission Assemblies	0037 00

CHAPTER 5 – FUEL SYSTEM

Electrical Fuel Pump Repair	0038 00
Right Fuel Tank Replacement	0039 00
Left Fuel Tank Replacement	0040 00
Front Fuel Tank Replacement	0041 00
Fuel Tank Repair	0042 00

CHAPTER 6 – ELECTRICAL SYSTEM

Wiring Harness and Cable Repair	0043 00
---------------------------------------	---------

CHAPTER 7 – TRANSMISSION

Transmission Control Assembly Repair	0044 00
--	---------

CHAPTER 8 – WINCHES, SPADE AND HOIST BOOM

Hoist Winch Assembly and Supports Replacement	0045 00
Hoist Winch Hydraulic Motor Replacement	0046 00
Main Winch Replacement	0047 00
Main Winch Repair	0048 00
Main Winch Layer Sensor Adjustment	0049 00
Main Winch Side Mounting Brackets Replacement	0050 00

TABLE OF CONTENTS – ContinuedWP Sequence No.**CHAPTER 8 – WINCHES, SPADE AND HOIST BOOM – Continued**

Main Winch Roller Spring Assembly Replacement	0051 00
Main Winch Upper Roller Replacement	0052 00
Main Winch Lower Roller Replacement	0053 00
Main Winch Manifold, Tubes, Fittings, and Flange Replacement	0054 00
Level Winder Hydraulic Cylinder Replacement	0055 00
Level Winder Control Valve Replacement	0056 00
Level Winder Check Valve Replacement	0057 00
Roller Mounting Bracket Replacement	0058 00
Level Winder Plate Assembly Replacement	0059 00
Auxiliary Winch Assembly Repair	0060 00
Spade Lock Assembly Repair	0061 00
Spade Cylinder and Link Replacement	0062 00
Main Winch and Spade Hydraulic Hoses, Fittings, Adapters, and Valve Assemblies Replacement ..	0063 00
Hoist Boom Assembly Replacement	0064 00
Hoist Boom Actuating Cylinder and Boom Foot Boot Replacement	0065 00
Stayline Actuating Cylinder Replacement	0066 00
Boom Lever Replacement	0067 00

CHAPTER 9 – SPECIAL PURPOSE KITS

Bilge Pump Assembly Repair	0068 00
----------------------------------	---------

CHAPTER 10 – HYDRAULIC SYSTEM

Main Hydraulic Pump Support Replacement	0069 00
Power Take-off (PTO) Shaft Repair	0070 00
Main Hydraulic Pump Assembly Repair	0071 00
Main/Hoist Winch Directional Control Valve Assembly Repair	0072 00
Main Winch Power Reduction Manifold Assembly Repair	0073 00
Hydraulic Control Valve Manifold Assembly Repair	0074 00
RV2 Relief Valve Adjustment	0075 00
Load Test	0076 00
Boom Limit Valve Repair	0077 00
Hydraulic Reservoir Assembly Repair	0078 00

CHAPTER 11 – AUXILIARY GENERATOR AND ENGINE AND CONTROLS (APU)

Auxiliary Power Unit Engine Replacement	0079 00
Auxiliary Power Unit Engine Replacement (HATZ)	0080 00
Auxiliary Power Unit Chain Case, Chain, and Sprockets Repair	0081 00
Auxiliary Power Unit Chain Case, Chain, and Sprockets Repair (HATZ)	0082 00

CHAPTER 12 – CHEMICAL, BIOLOGICAL AND RADIOLOGICAL (CBR) EQUIPMENT

M2A2 Air Purifier Repair	0083 00
Air Purifier Control Unit Enclosure Assembly Repair	0084 00

CHAPTER 13 – WHEELS AND TRACKS

Adjusting Link and Components (New Configuration) Repair	0085 00
--	---------

CHAPTER 14 – SUPPORTING INFORMATION

References	0086 00
Expandable and Durable Items List	0087 00
Manufactured Items List	0088 00
Torque Limits	0089 00
Tool Identification List	0090 00
Mandatory Replacement Parts List	0091 00

TABLE OF CONTENTS – Continued

ALPHABETICAL INDEX	INDEX-1
ELECTRICAL SCHEMATICS	FP-1
HYDRAULIC SCHEMATICS	FP-23

HOW TO USE THIS MANUAL

This manual was designed to provide you with the information you will need to perform DS/GS maintenance on the M88A2 HRV.

The information contained in this manual is presented in chapters and work packages. Each chapter is divided into work packages to cover the replacement and repair of the M88A2 HRV and its components. Where references are made to tables, figures, and work packages, refer to those portions of the text.

To find information relating to a specific component or system:

- Determine the specific name or function of the component/system.
- Find the name or function in the Index Listing, located in the back of this manual.
- Refer to appropriate work package(s) called out in the Index Listing.

To find information pertaining to a broader range of information (such as engine troubleshooting, component repair, and component descriptions):

- Identify the desired topic.
- Find the general topic in the Table of Contents, located in the front of this manual.
- Refer to appropriate work package(s) called out in the Table of Contents.

IMPORTANT

You must read and understand this manual BEFORE working on the M88A2 HRV.

MAINTENANCE

Maintenance procedures are to be performed in the sequence shown in the text and illustrations. Step 1 must be performed before step 2 and so on.

Equipment illustrations use numbers to identify parts of the system/components.

Throughout this manual the words WARNING, CAUTION, and NOTE will appear. There is a reason for every one of them.

GENERAL INFORMATION

0001 00

THIS WORK PACKAGE COVERS:

General Information

SCOPE

Type of manual: Direct Support and General Support Maintenance.

Model number and equipment name: M88A2, Recovery Vehicle, Heavy.

Purpose of equipment: To provide for battlefield recovery (hoist/winch/tow) of vehicles up to and including the M1 series tank.

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) as contained in the Maintenance Management Update.

Accidents involving injury to personnel or damage to materiel will be reported on DA Form 285 (Accident Reporting) in accordance with AR 385-40.

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS

If your M88A2 HRV needs improvement, let us know. Send us an Equipment Improvement Recommendation (EIR). You, the user, are the only one who can tell us what you don't like about our 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 the address specified in DA PAM 738-750.

CORROSION PREVENTION AND CONTROL

Corrosion Prevention and Control (CPC) of Army materiel is a continuing concern. It is important that any corrosion problem with the HRV be reported so that improvements can be made to prevent the problem in the future. While corrosion is typically associated with rusting of metals, it can also include deterioration of other materials such as rubber and plastic. Unusual cracking, softening, swelling, or breaking of these materials may be a corrosion problem. If a corrosion problem is identified, it can be reported using SF 368, (Product Quality Deficiency Report). Use of keywords such as "corrosion", "rust", "deterioration", or "cracking" will ensure that the information is identified as a CPC problem. SF 368 should be submitted to the address specified in DA PAM 738-750.

DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE

Refer to TM 750-244-6 for procedures on how to destroy the M88A2 HRV.

Below are some general guidelines to follow in destruction of equipment to prevent enemy use.

Destruction of the vehicle and equipment, when subject to capture or abandonment in a combat zone, will be undertaken only when such action is necessary in accordance with orders of, or policy established by, the Army commander.

In general, destruction of essential parts, followed by burning, will usually be sufficient to render the vehicle, and equipment useless. Time is usually critical.

Materiel must be damaged so that it cannot be restored to usable condition by either repair or cannibalization. If lack of time or personnel prevents destruction of all parts, give priority to destruction of parts hardest to replace. It is important that the same parts be destroyed on all vehicles to prevent construction of one complete vehicle from several damaged ones.

The procedure outlined below requires the use of demolition materials and explosives which normally may not be authorized items of issue to the using organization. The issue of these and related materials, and conditions under which destruction will be effected, are command decisions in each case, according to the tactical situation.

GENERAL INFORMATION - CONTINUED

0001 00

DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE - CONTINUED

Varying degrees of damage to the armament and other equipment may be expected during destruction of the vehicle as outlined below:

1. Remove and empty portable fire extinguishers and discharge the fixed fire extinguisher system.
2. Smash all vital elements such as auxiliary power unit, batteries, switches, instruments, hydraulic valves, coupling devices, mechanical transmission, hydraulic pumps, and all accessible engine and transmission components. Slash hydraulic lines, electrical cables and harnesses.
3. Drain fuel and hydraulic oil tanks or puncture them as near the bottom as possible.
4. For the engine compartment, transmission, tracks, winches, and boom, prepare eleven, 2-pound demolition charges. Use 1-pound TNT blocks or equivalent together with the necessary detonating cord to make up the required charges. Place the required charges as follows:

Set the first charge on the accessory drive housing at the forward end of the engine.

Set the second and third charges on the engine, one on the left side and one on the right side.

Set the fourth charge between the engine and transmission.

Set the fifth and sixth charges on the track drive sprockets, one on the left side and one on the right side.

Set the seventh charge on the main winch motor.

Set the eighth and ninth charges on the hoisting boom at the boom crankarms, one on the left side and one on the right side.

Set the tenth and eleventh charges on the hoisting boom stayline crankarms, one on the left side and one on the right side.

Connect all eleven charges for simultaneous detonation with detonating cord.

5. Provide for dual priming to minimize the possibility of a misfire. For complete details on the use of demolition materials and methods of priming and detonating demolition charges, refer to FM 5-250. Training and careful planning are essential. The danger area is estimated to be 500 yards; elapsed time is approximately 10 minutes.

PREPARATION FOR STORAGE OR SHIPMENT

Refer to TM 9-2350-292-20-2 for the requirements for Administrative Storage and requirements for vehicle shipment.

WARRANTY INFORMATION

Refer to TB 9-2350-292-15 for warranty information pertaining to the M88A2 HRV.

GENERAL INFORMATION - CONTINUED

0001 00

NOMENCLATURE CROSS-REFERENCE LIST

Nomenclature in this manual was chosen in accordance with the terms used for provisioning as they appear in the Repair Parts and Special Tools List (RPSTL) and Maintenance Allocation Chart (MAC).

A few tools and components are, however, referred to by names more common than those in the RPSTL. In many cases the more common name is a shorter name for the same component.

<u>OFFICIAL PROVISIONING NOMENCLATURE</u>	<u>MORE COMMON NAME</u>
Cable assembly	Wiring harness
Gauge rod	Dipstick, Bayonet gauge
Safety wire	Lockwire
Socket head screw key	Hex key

LIST OF ABBREVIATIONS

AAL	Additional Authorized List
AOAP	Army Oil Analysis Program
ATE	Automatic Test Equipment
BDAR	Battlefield Damage Assessment and Repair
BII	Basic Issue Item
_C	Degree Centigrade
CAGEC	Contract and Government Entity Code
CAM	Chemical Agent Monitor
CAR	Corrective Action Report
CARC	Chemical Agent Resistant Coating
CCW	Counterclockwise
CM	Centimeters
COEI	Component Of End Item
CPC	Corrosion Prevention and Control
CTA	Common Table of Allowances
CW	Clockwise
DC	Direct Current
DCA	Diagnostic Connector Assembly
DMWR	Depot Maintenance Work Order
DOD	Department of Defense
DS	Direct Support
EIR	Equipment Improvement Recommendation
_F	Degree Fahrenheit
FMC	Fully Mission Capable
FOV	Family of Vehicles
FRH	Fire Resistant, Rust Inhibited Hydraulic Fluid
FWD	Forward
GND	Ground
GS	General Support
HRV	Heavy Recovery Vehicle
KG	Kilogram
KPH	Kilometer Per Hour

GENERAL INFORMATION - CONTINUED

0001 00

LIST OF ABBREVIATIONS - CONTINUED

L	Liter
LRU	Line Replaceable Unit
M	Meter
MM	Milimeter
MAC	Maintenance Allocation Chart
MAX	Maximum
MIN	Minimum
MOS	Military Occupational Specialties
MPH	Miles Per Hour
MTOE	Modified Table of Organization and Equipment
N	Neutral
NBC	Nuclear, Biological, Chemical
NSN	National Stock Number
PMCS	Preventative Maintenance Checks and Services
PSI	Pounds Per Square Inch
PWR	Power
QA	Quality Assurance
QDR	Quality Deficiency Report
R	Reverse
RPM	Revolutions Per Minute
RPSTL	Repair Parts and Special Tools List
SPORT	Soldier's Portable On-system Repair Tool
STE	Special Test Equipment
STE/ICE-R	Simplified Test Equipment for Internal Combustion Engines Reprogrammable
TB	Technical Bulletin
TM	Technical Manual
TAMMS	The Army Maintenance Management System
TMDE	Test, Measurement, Diagnostic Equipment
TOE	Tables of Equipment
VIS	Vehicle Intercommunications System

QUALITY ASSURANCE (QA)

No particular quality assurance manual pertains specifically to the M88A2 HRV.

Defective material received through the supply system should be reported on Quality Deficiency Report (QDR) SF 368. Instructions for preparing QDR's are provided in AR 702-7, Reporting of Quality Deficiency Data. QDR's should be mailed directly to:

Commander
U.S. Army Tank-automotive and Armament Command
ATTN: AMSTA-QRT
Warren, MI 48397-5000

A reply will be furnished directly to you.

GENERAL INFORMATION - CONTINUED

0001 00**COMMON TOOLS AND EQUIPMENT**

For authorized common tools and equipment, refer to the Modified Table of Organization and Equipment (MTOE), CTA 50-970; or CTA 8-100, as applicable to your unit.

The tool kit (box) assigned to the mechanic (on a 1-per-mechanic-by MOS basis) shall be identified in the individual maintenance work package by nomenclature, item number and work package. No tool in the kit shall be further identified. Other tools required for performance of all tasks for the maintenance levels covered in the manual shall be identified in the setup and shall be referenced to the Tool identification List, WP 0090 00. "Other tools" includes tools which are part of the components of shop sets authorized to section/teams; tools authorized by RPSTL and CTA 50-970; special and fabricated tools; and items of TMDE.

SPECIAL TOOLS, TMDE, AND SUPPORT EQUIPMENT

Special tools and equipment listed and illustrated in TM 9-2350-292-24P are the only special tools and equipment necessary to perform operations described in this manual. TM 9-2350-292-24P is the authority for requisitioning special tools and equipment for supporting maintenance use. All special tools required in this technical manual are listed in WP 0090 00 of this manual. Fabricated tools are identified in the initial setup; manufacturing instructions for fabricated tools are found in WP 0088 00.

REPAIR PARTS

Repair parts are listed and illustrated in the repair parts and special tools list covering direct support general support maintenance for this equipment (TM 9-2350-292-24P). All mandatory replacement parts identified in the initial setup are listed in WP 0091 00 of this manual.

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END OF TASK

CHAPTER 1

DESCRIPTION AND THEORY OF OPERATION

EQUIPMENT DESCRIPTION AND DATA

0002 00

THIS WORK PACKAGE COVERS:

Equipment Description and Data

EQUIPMENT CHARACTERISTICS, CAPABILITIES AND FEATURES

Characteristics – Refer to TM 9-2350-292-10 for Characteristics of the M88A2 HRV.

Capabilities and Features – Refer to TM 9-2350-292-10 for Capabilities and Features of the M88A2 HRV.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

Refer to TM 9-2350-292-10 for Location and Description of Major Components of the M88A2 HRV.

DIFFERENCES BETWEEN MODELS

There is currently only one model of the M88A2 HRV.

EQUIPMENT DATA

Refer to TM 9-2350-292-10 and TM 9-2350-292-20-1 for Equipment Data relative to the M88A2 HRV.

END OF TASK

PRINCIPLES OF OPERATION

0003 00

THIS WORK PACKAGE COVERS:

Principles of Operations

EQUIPMENT OPERATION AND DESCRIPTION

Refer to TM 9-2350-292-10 and TM 9-2350-292-20-1 for Equipment Operation and Description of the M88A2 HRV.

END OF TASK

CHAPTER 2

TROUBLESHOOTING PROCEDURES

**TROUBLESHOOTING INSTRUCTIONS AND QUICK GUIDE TO
TROUBLESHOOTING (SYMPTOM/MALFUNCTION) INDEX**

0004 00**THIS WORK PACKAGE COVERS:**

Troubleshooting Instructions, Troubleshooting Sample, and Quick Guide to Troubleshooting (Symptom/Malfunction) Index

TROUBLESHOOTING INSTRUCTIONS

This work package contains a "Quick Guide to Troubleshooting (Symptom/Malfunction) Index". The "Quick Guide to Troubleshooting (Symptom/Malfunction) Index" is the master reference table for locating troubleshooting information. The guide contains a list of various malfunctions which may occur during operation or inspection and provides a reference to the troubleshooting information or a solution. The troubleshooting work packages provide function description and step-by-step instructions for isolating and correcting malfunctions. Remember, troubleshooting should always be performed with common sense and two personnel.

WARNING

Throughout troubleshooting of the electrical system or electrical components, be certain vehicle MASTER switch is OFF between every step unless otherwise directed. Remove all jewelry and metal objects when working on the electrical system to prevent injury due to electrical shock.

Electrical troubleshooting in this chapter provides schematic diagrams and pictorial diagrams to give insight to the harnesses involved. Refer to the electrical schematics (FP-1 through FP-21) when performing the troubleshooting on the electrical system.

When troubleshooting any electrical system or component, exercise extreme care to prevent electrical shock.

TROUBLESHOOTING INSTRUCTIONS AND QUICK GUIDE TO TROUBLESHOOTING (SYMPTOM/MALFUNCTION) INDEX – CONTINUED

0004 00

TROUBLESHOOTING SAMPLE

To effectively troubleshoot the M88A2 HRV, follow these steps:

- a Determine the symptom.
- b Locate the symptom (1) in the Quick Guide to Troubleshooting (Symptom/Malfunction) Index.
- c Locate the troubleshooting work package (2) for your symptom.
- d Turn to the procedure (3) identified in the Quick Guide to Troubleshooting (Symptom/Malfunction) Index.
- e Study the function description, pictorial view, and/or schematic located in the particular system overview work package.
- f Perform the corrective action (4) as required by troubleshooting procedure (3).
- g Verify that the corrective action eliminated the symptom.

QUICK GUIDE TO TROUBLESHOOTING (SYMPTOM/MALFUNCTION) INDEX -CONTINUED

SYMPTOM ← 1	ACTION OR WP REF
BILGE PUMP	
BILGE PUMP FAILS TO OPERATE.	WP 0030 00 ← 2

BILGE PUMP FAILS TO OPERATE ← 3

0030 00

THIS WORK PACKAGE COVERS:

Bilge Pump Fails to Operate.

INITIAL SETUP:

Tools and special Tools

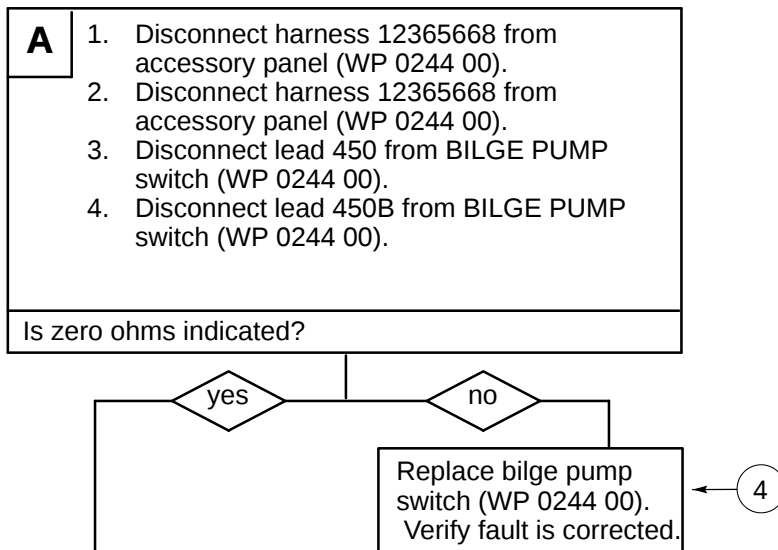
General mechanic's tool kit (item 1, WP 0717 00)
Multimeter (item 84, WP 0717 00)

Equipment Conditions

Vehicle MASTER switch OFF (TM 9-2350-292-10)

Personnel Required

Three



**TROUBLESHOOTING INSTRUCTIONS AND QUICK GUIDE TO
TROUBLESHOOTING (SYMPTOM/MALFUNCTION) INDEX – CONTINUED**

0004 00

QUICK GUIDE TO TROUBLESHOOTING (SYMPTOM/MALFUNCTION) INDEX.

SYMPTOM	ACTION OR WP REF
AUXILIARY POWER UNIT	
AUXILIARY POWER UNIT FAILS TO KEEP RUNNING.	TM 9-2815-221-34&P
AUXILIARY POWER UNIT ENGINE OVERHEATING.	Perform oil cooler and cylinder air housing repair IAW TM 9-2815-221-34&P
AUXILIARY POWER UNIT ENGINE HARD TO START IN COLD WEATHER.	Perform manifold heater test and glow plug test IAW TM 9-2815-221-34&P
AUXILIARY POWER UNIT ENGINE FAILS TO START.	TM 9-2815-221-34&P
AUXILIARY POWER UNIT ENGINE IS HARD TO START.	TM 9-2815-221-34&P
AUXILIARY POWER UNIT ENGINE MISFIRES.	TM 9-2815-221-34&P
AUXILIARY POWER UNIT ENGINE LACKS POWER.	TM 9-2815-221-34&P
AUXILIARY POWER UNIT ENGINE DISCHARGES BLACK SMOKE.	TM 9-2815-221-34&P
AUXILIARY POWER UNIT ENGINE KNOCKS.	TM 9-2815-221-34&P
AUXILIARY POWER UNIT ENGINE USES EXCESSIVE OIL.	TM 9-2815-221-34&P
AUXILIARY POWER UNIT HIGH AIR TEMPERATURE INDICATOR IS LIT.	See auxiliary power unit engine overheating
AUXILIARY POWER UNIT LOW OIL PRESSURE INDICATOR IS LIT.	TM 9-2815-221-34&P
AUXILIARY POWER UNIT OIL PRESSURE GAUGE INDICATES OIL PRESSURE TOO HIGH OR TOO LOW.	TM 9-2815-221-34&P
BATT/GEN GAUGE READS IN YELLOW OR LOWER RED REGION WITH APU RUNNING AND APU GEN SWITCH ON.	TM 9-2815-221-34&P
APU CONTROL BOX HIGH AIR TEMP INDICATOR DOES NOT LIGHT WHEN APU ENGINE OVERHEATS.	TM 9-2815-221-34&P
APU CONTROL BOX LOW OIL PRESSURE INDICATOR DOES NOT LIGHT WHEN APU OIL PRESSURE IS LOW.	TM 9-2815-221-34&P
APU CONTROL BOX OIL PRESSURE GAUGE READS ZERO WITH APU ENGINE RUNNING.	Replace APU oil pressure sending unit TM 9-2815-221-34&P
AUXILIARY POWER UNIT (HATZ)	
AUXILIARY POWER UNIT FAILS TO KEEP RUNNING.	TM 9-2815-250-24&P
AUXILIARY POWER UNIT ENGINE HARD TO START IN COLD WEATHER.	TM 9-2815-250-24&P
BATT/GEN GAUGE READS IN YELLOW OR LOWER RED WITH APU RUNNING AND APU GEN SWITCH ON.	TM 9-2815-250-24&P
APU CONTROL BOX HIGH AIR TEMP INDICATOR DOES NOT LIGHT.	TM 9-2815-250-24&P
BILGE PUMP	
BILGE PUMP FAILS TO OPERATE.	WP 0068 00

TROUBLESHOOTING INSTRUCTIONS AND QUICK GUIDE TO TROUBLESHOOTING (SYMPTOM/MALFUNCTION) INDEX – CONTINUED

0004 00

QUICK GUIDE TO TROUBLESHOOTING (SYMPTOM/MALFUNCTION) INDEX – Continued

DRIVER'S CONTROLS	
VEHICLE WILL NOT STEER OR WILL ONLY STEER IN ONE DIRECTION.	TM 9-2520-215-34
ENGINE DOES NOT RESPOND PROPERLY TO THROTTLE CONTROLS.	TM 9-2815-247-34
ENGINE	
ENGINE CRANKS AT NORMAL SPEED BUT WILL NOT START.	TM 9-2815-247-34
ENGINE CRANKS BUT WILL NOT START IN COLD WEATHER.	WP 0006 00
ENGINE FAILS TO SHUT OFF WHEN FUEL SHUTOFF SWITCH IS ACTIVATED.	TM 9-2815-247-34
ENGINE HAS LOW STALL RPM, DOES NOT DEVELOP FULL POWER, AND HAS EXCESSIVE SMOKE FROM ONE OR BOTH BANKS OF CYLINDERS.	WP 0007 00
ENGINE HAS LOW STALL RPM, DOES NOT DEVELOP FULL POWER, BUT EXHAUST SMOKE IS NORMAL.	WP 0008 00
ENGINE HAS EXCESSIVE WHITE SMOKE.	WP 0009 00
ENGINE RUNS ROUGH OR MISFIRES AND/OR KNOCKS.	TM 9-2815-247-34
ENGINE USES EXCESSIVE FUEL.	TM 9-2815-247-34
ENGINE HAS LOW POWER AND EXCESSIVE BLACK SMOKE.	TM 9-2815-247-34
ENGINE OVERSPEEDS.	TM 9-2815-247-34
HYDRAULICS SYSTEM	
MAIN HYDRAULICS SYSTEM OIL PRESSURE IS INSUFFICIENT.	Replace front pump WP 0071 00
MAIN HYDRAULICS SYSTEM FAILS TO OPERATE (NO COMPONENTS FUNCTION). MAIN HYDRAULIC PUMP FAILS TO ENGAGE.	WP 0011 00
MAIN HYDRAULICS PUMP FAILS TO DISENGAGE.	WP 0012 00
MAIN HYDRAULICS SYSTEM IS NOISY.	WP 0013 00
MAIN WINCH BRAKE FAILS TO RELEASE.	Replace main winch WP 0053 00
MAIN WINCH FAILS TO OPERATE.	WP 0014 00
MAIN WINCH OPERATES SLOWLY OR LACKS POWER.	WP 0015 00
MAIN WINCH INHAULS BUT WILL NOT PAYOUT.	WP 0016 00
MAIN WINCH WILL PAYOUT BUT WILL NOT INHAUL.	WP 0017 00
MAIN WINCH WILL NOT HOLD LOAD.	WP 0018 00
MAIN WINCH POWER IS NOT REDUCED WHEN WINCH OVERRIDE SWITCH IS IN OVERRIDE POSITION	WP 0019 00
MAIN WINCH LEVEL WINDER FAILS TO OPERATE.	WP 0020 00
MAIN WINCH CREEPS WITH CONTROL LEVER IN NEUTRAL POSITION.	Replace main winch pilot valve WP 0074 00
AUXILIARY WINCH FAILS TO OPERATE.	WP 0021 00
AUXILIARY WINCH WILL PAYOUT BUT WILL NOT INHAUL.	WP 0022 00

**TROUBLESHOOTING INSTRUCTIONS AND QUICK GUIDE TO
TROUBLESHOOTING (SYMPTOM/MALFUNCTION) INDEX – CONTINUED**

0004 00

QUICK GUIDE TO TROUBLESHOOTING (SYMPTOM/MALFUNCTION) INDEX – Continued

HYDRAULICS SYSTEM - CONTINUED	
AUXILIARY WINCH WILL INHAUL BUT WILL NOT PAYOUT.	WP 0023 00
AUXILIARY WINCH CREEPS IN EITHER DIRECTION WITH CONTROL HANDLE IN NEUTRAL.	WP 0024 00
SPADE FAILS TO OPERATE.	WP 0025 00
SPADE WILL NOT HOLD POSITION.	WP 0026 00
HOIST BOOM FAILS TO OPERATE OR ONLY OPERATES PARTIALLY.	WP 0027 00
HOIST BOOM WILL NOT HOLD IN ANY POSITION (HOIST BOOM CREEPS).	WP 0028 00
HOIST BOOM LIVE OPERATION DOES NOT FUNCTION (HOIST BOOM WILL NOT STOP AUTOMATICALLY, STAYLINE CABLES GO SLACK DURING OPERATION OR HOIST BOOM CAN BE STOWED WITHOUT ACTIVATING THE HOIST BOOM SAFETY VALVE CONTROL LEVER).	WP 0029 00
HOIST WINCH FAILS TO OPERATE.	WP 0030 00
HOIST WINCH WILL RAISE BUT WILL NOT LOWER.	WP 0031 00
HOIST WINCH WILL LOWER BUT WILL NOT RAISE.	WP 0032 00
HOIST WINCH CREEPS WITH CONTROL IN NEUTRAL.	WP 0033 00
HOIST WINCH WILL NOT HOLD LOAD.	Replace hoist winch WP 0045 00. Verify fault is corrected.
AUXILIARY HYDRAULICS SYSTEM FAILS TO OPERATE OR DOES NOT DEVELOP SUFFICIENT PRESSURE.	WP 0034 00
MASTER RELAY AND SLAVE RECEPTACLE	
NO POWER AT SLAVE RECEPTACLE.	Repair or replace leads 49 in harness 3W214 (TM 9-2350-292-20) or WP 0043 00
MONITORING SYSTEM	
TIME TOTALIZING METER FAILS TO OPERATE (Replace time totalizing meter).	TM 9-2815-247-34
POWER TAKEOFF ELECTRICAL SYSTEM	
PTO CLUTCH DOES NOT ENGAGE, INDICATOR IS NOT LIT AND GOVERNOR DOES NOT OPERATE PROPERLY (Replace engine governor solenoid).	TM 9-2815-247-34
RADIO INTERFERENCE SYSTEM	
EXCESSIVE INTERFERENCE. MAIN ENGINE AND APU NOT RUNNING.	Notify Commo
EXCESSIVE INTERFERENCE WITH APU RUNNING AND APU GENERATOR SWITCH ON. MAIN ENGINE IS OFF AND VEHICLE IS STATIONARY.	Notify Commo
EXCESSIVE INTERFERENCE WHEN VEHICLE IS TRAVELING	Notify Commo
TRANSMISSION	
VEHICLE STEERS BUT WILL NOT DRIVE ANY RANGE (TRANSMISSION WILL NOT OPERATE IN ANY RANGE).	TM 9-2520-215-34

END OF TASK